FINAL
2022 LONG TERM MONITORING OF LANDFILL AREAS OF CONCERN
FORMER GRIFFISS AIR FORCE BASE
ROME, NEW YORK

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INTRODUCTION AND OBJECTIVES

Bhate Environmental Associates, Inc. (Bhate), in association with Environmental Chemical Corporation (ECC), was retained by the Air Force Civil Engineer Center (AFCEC) under Contract Number FA8903-20-D-0001 to perform long term monitoring (LTM) activities at the former Griffiss Air Force Base (AFB). This annual reporting has been prepared for the former Griffiss AFB landfill areas of concern (AOCs) to document LTM completed at these landfills during calendar year 2022. Locations of the Former Griffiss AFB and the five landfill AOCs are presented on **Attachment 1 - Figure 1** and include:

- LF001 – Landfill 1 AOC
- LF002 – Landfill 2/3 AOC
- LF003 – Landfill 7 AOC
- LF007 – Landfill 5 AOC
- LF009 – Landfill 6 AOC

In accordance with the New York Codes of Rules and Regulations (NYCRR) Title 6, Part 360 Regulations (6 NYCRR Part 360) New York State Department of Environmental Conservation [NYSDEC], December 2016) an LTM program was developed for each landfill AOC. The selected presumptive remedy alternatives, as described in their associated Records of Decision (RODs), were implemented at former Griffiss AFB landfills. These presumptive remedies include the use of engineering controls, institutional controls (ICs), and monitoring.

Per 6 NYCRR Part 360 requirements, the gas monitoring points at LF001, LF002, and LF009 must be maintained and sampled during the post-closure period for a minimum of 30 years. Since each of these landfills has been monitored for over 5 years, modifications to sampling and analysis requirements may be requested. Under 6 NYCRR Part 360, the concentration of methane and other explosive gases generated by the facility must not exceed 25 percent (%) of the lower explosive limit (LEL) for gases in structures on or off-site, excluding gas control or recovery system components; and the LEL for the gases at or beyond the property boundary. Therefore, further optimization or removal of a probe or vent from the monitoring program, is based upon four consecutive years of minimal or no LEL detections.

LF001 – LANDFILL 1 AOC

LF001 (Landfill 1 AOC) is in the northern portion of the former Griffiss AFB and is approximately 22 acres in size. **Attachment 1 - Figure 2** presents the LF001 (Landfill 1 AOC) site map, including the locations of gas monitoring probes (identified by "GMP") and gas vents (identified by "VENT"). The wastes disposed within LF001 consisted of general refuse, hard-fill, and boiler ash, buried using trench and cover methods. An estimated 90,000 to 100,000 cubic yards (CY) of wastes were disposed at the site from 1960 to 1973. Groundwater flow rate at LF001 is approximately 2,000 feet per year, and groundwater flows to the southwest (FPM Remediations, Inc. [FPM]/CAPE, December 2015). The ROD for LF001 was signed by the United States Environmental Protection Agency (USEPA) on June 5, 2000 (Air Force Real Property Agency [AFRPA], February 2000). The landfill was re-graded and capped in 2003. The cap components include a gas venting layer, a low-permeability layer, drainage layer, barrier protection layer, and a topsoil layer. The Final Amendment to the ROD for LF001 was signed by the USEPA on September 25, 2009 (AFRPA, September 2009). The remedial action objectives (RAOs) for LF001 (Landfill 1 AOC) are:

- Consolidation of various debris and waste areas into the main landfill boundary to reduce the area to be capped and the potential for nearby wildlife and human populations to be exposed to the landfill mass
- Significantly reduce infiltration of rainwater and snow-melt water through the landfill mass to minimize the potential for leachate generation and groundwater contamination
- Monitoring the groundwater and stream environment (which may include, but not necessarily limited to, sediment, surface water, and biota) downgradient of the site to evaluate the effectiveness of the presumptive remedy

Landfill Inspections

Since April 2005, landfill inspections and cover maintenance have been performed at LF001 (Landfill 1 AOC). Inspections and maintenance were optimized following the Spring 2010 monitoring event and are now conducted on a semi-annual basis (Spring and Fall) with annual landfill cover mowing and gas monitoring performed in the Fall. Land Use Controls (LUCs)/ICs were implemented in accordance with the ROD and are verified annually as part of the landfill cover inspection program.

During the current reporting period, landfill inspections were performed on June 3, 2022 (Spring inspection) and October 6 and 15, 2022 (Fall inspection). The locations and orientations of

photographs taken during the two LF001 inspections are presented on **Attachment 1 - Figure 2**. Landfill gas monitoring results for the current and prior three years are presented in **Attachment 2 – Table 1**. Historical landfill gas monitoring results are presented in **Appendix A**. Landfill inspection reports are presented in **Attachment 3**.

During the Spring inspection, the LF1GV-27 turbine was observed to be non-operational due to rusting and was cleaned and lubricated. Animal nesting activity was observed in the LV1GV-29 turbine and cleared. Numerous vent turbines, although not seized, were not rotating freely despite windy conditions and were subsequently lubricated. No animal burrows or cap damage were observed during either Spring or Fall 2022 inspection events. Turbines were functional during the Fall 2022 inspection.

Landfill Gas Monitoring

Landfill gas monitoring is performed at LF001 (Landfill 1 AOC) to identify the presence and concentration of methane at or near the landfill. There were originally 31 gas vents and 18 gas monitoring points installed when the landfill was capped. One vent, LF1GV-23, was abandoned in 2005 during installation of the passive gas trench (AFRPA, April 2010). Seven vents, LF1GV-15, -16, -26, and -28 through -31, were previously removed from the monitoring program after four consecutive years of minimal or no LEL detections. Installation of two gas monitoring points (LF1GMP-05 and LF1GMP-07) was not completed due to high water table levels (FPM, January 2005).Landfill gas monitoring was conducted on October 15, 2022 at the following 23 remaining vents (LF1GV-01 through -14, -17 through -22, -24, -25, and -27) and 9 gas monitoring probes (LF1GMP-01 through -04, -06, -09, -10, -13, and -16) (**Attachment 2 - Table 1**). In the 2021 LTM of Landfill AOC reporting (Bhate, December 2022), LF1GV-24, LF1GV-27, LF1GMP-13, and LF1GMP-16 were recommended for removal from the monitoring program. However, the 2021 reporting was finalized after the Fall gas sampling at LF001 was conducted and as such, these points were monitored in 2022 to maintain compliance.

During the Fall 2022 LTM, methane concentrations exceeded 100% of the LEL of 5% at 10 of the 23 gas vents. Methane concentrations at the remaining gas vents ranged from 0% to 61% of the LEL. Methane concentrations at LF1GV-24 have been measured at either 0% or <0.1% of the LEL for the previous six annual gas monitoring events and the 2022 event (**Appendix A**). Although previous methane concentrations at LF1GV-27 had previously been reported at either 0% or <0.1% LEL for the previous six annual gas monitoring events (2016 through 2021) and had been recommended for removal from the program, the measured methane concentration in 2022 exceeded 100% of the LEL.

Methane concentrations exceeded 100% of the LEL of 5% at 7 of the 9 gas monitoring probes: LF1GMP-01, LF1GMP-02, LF1GMP-03, LF1GMP-04, LF1GMP-06, LF1GMP-09, and LF1GMP-10. These probes are located south, west, and north of the landfill boundary (**Attachment 1 - Figure 2**). Methane concentrations at the two remaining gas monitoring probes (LF1GMP-13 and LF1GMP-16) were measured at 0% during the annual monitoring event and have been measured at either 0% or <0.1% of the LEL for the past five annual gas monitoring events (**Appendix A**).

Groundwater and Surface Water Sampling

Water samples are collected biennially from select locations at LF001 (Landfill 1 AOC). In December 2022, water samples were collected from 7 groundwater monitoring wells and 3 surface water locations as part of the biennial sampling. Field forms are presented in **Attachment 4**. Samples were also scheduled to be collected from monitoring well LF1MW-5, however, field personnel were unable to access the well due to a damaged lock.

Depth to water was measured in each well before purging. Water samples were collected in laboratory provided containers, immediately packed on ice, and shipped to SGS, Orlando, Florida for analysis of volatile organic compounds (VOCs) using USEPA Method SW8260B and leachate indicators. Groundwater quality assurance/quality control (QA/QC) samples, including duplicate samples and trip-blanks, were collected to document QA/QC procedures. Laboratory analytical reports and Data Validation Reports are included in **Attachment 5**.

Groundwater and surface water analytical results for the chemicals of concern were compared to the screening criteria found in 6 NYCRR Section 703.5 *Water Quality Standards Surface Waters and Groundwater,* Table 1 and the Division of Water Technical and Operational Guidance Series (1.1.1) Table 1 (NYSDEC, June 1998).

Groundwater and Surface Water Analytical Results

Sampling results for selected VOC analytes, leachate indicators, and their corresponding concentrations and screening criteria exceedances for groundwater and surface water samples are presented in **Attachment 2 - Table 2**. The reported concentrations of VOCs at all groundwater and surface water sampling locations were below screening criteria.

The leachate parameter "color" is measured in platinum-cobalt units (PCU) and was reported at the screening criteria of 15 PCU at LF1MW-103 and MWSAR03. Color was reported in exceedance of screening criteria in the samples taken from the remaining monitoring wells and surface water locations sampled in December 2022. The exceeding values ranged from 45 PCU to 200 PCU, which are within the range of the previously reported values for color (FPM/CAPE, December 2015). Ammonia was reported at a concentration above the screening level (2 mg/L) at LF1MW-103 (12.3 mg/L). Total dissolved solids (TDS) were reported in exceedance of the screening standard (500 mg/L) at LF1P-2 (528 mg/L).

Beaver Activities

Beaver removal was conducted in July 2020. During the May 2021 inspection, beaver activity was present at the site. Breaches to the beaver dam made by the beaver control subcontractor in 2020 were found to have been repaired and the pond had refilled. During the 2022 landfill inspections, the beaver pond was full, with signs of an active beaver population and a wide variety of wildlife.

Conclusions and Recommendations

The 2022 inspections did not identify any major deficiencies that would jeopardize the integrity of the cover, and there is optimal vegetation cover present on the cap. Based on the *Final Basewide Uniform Federal Policy – Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York* (UFP-QAPP) (Bhate, April 2022), it is recommended that

the frequency of landfill cap inspections continue semi-annually with a limited landfill inspection in the Spring and the more comprehensive inspection in the Fall to correlate with annual mowing and landfill gas monitoring. To address the maintenance and repair items identified in 2022, the following activities are recommended to be performed in 2023:

- Landfill gas vents will be serviced, repaired, or replaced as needed
- The damaged lock at LF1MW-5 will be replaced

Based on historical landfill gas monitoring coupled with the 2022 gas monitoring results, the passive gas trench along the northwest side of the landfill is operating properly. Methane concentrations at LF1GMP-13, LF1GMP-16, and LF1GV-24 have been measured at 0% or <0.1% LEL for four consecutive events and are recommended for removal from the monitoring plan starting in 2023.

Gas vent LF1GV-27, previously recommended for removal from the sampling plan, will be retained based on the 2022 methane concentration measured over the LEL. Based upon historical data (FPM/CAPE, December 2015) coupled with the Fall 2022 readings, Bhate recommends that landfill gas monitoring for the Fall of 2023 event include the following locations: LF1GMP-01 to -04, -06, -09, -10, LF1GV-01 to -14, -17 to -22, -25, and -27.

Measures to remove beaver activities along Six Mile Creek at the toe of the landfill were undertaken in July 2020 to regain access to LF1MW-6. Beavers re- colonized the area by May 2021 and was ongoing throughout the majority of 2022. The nearby waterways and connecting streams have significant beaver populations, making rapid recolonization of the area the likely outcome of any further attempts at removal. Beaver removal from the habitat does not appear to present a lasting solution and further attempts to trap or kill the beavers are not recommended. Field personnel were able to access LF1MW-6 during the December 2022 sampling event when water levels were near their annual minimum and much of the vegetation was dead for the season. It is therefore recommended that any future sampling activity at LF001 be conducted during the winter months to ensure the greatest chances of successfully accessing all the sampling locations.

Based on historical and current groundwater and surface water monitoring, biennial sampling should continue in 2024 and then be reduced to occur every five years. This will synchronize groundwater/surface water monitoring activities with the other landfills and with the CERCLA Five-Year Review process.

LF002 – LANDFILL 2/3 AOC

LF002 (Landfill 2/3 AOC) is in the northeastern portion of the former Griffiss AFB and is approximately 13 acres in size. **Attachment 1 - Figure 3** presents the LF002 (Landfill 2/3 AOC) site map, including the locations of gas monitoring probes (identified by “GMP”) and gas vents (identified by “VENT”). The wastes at LF002 consisted of hard-fill in the southern portion of Landfill 2, on-board aircraft wastes in the northern portion of Landfill 2 and approximately 1 ton of wetted and double-bagged asbestos waste in Landfill 3, located in the eastern portion of Landfill 2. The ROD for LF002 (AFRPA, March 2000) was signed by the USEPA on June 5, 2000. The landfill was re-graded and capped during the Summer of 2003. The cap components include a gas

venting layer, a low-permeability layer, drainage layer, barrier protection layer, and a topsoil layer. The RAOs for LF002 (Landfill 2/3 AOC) are:

- Consolidation of various debris and waste areas into the main landfill boundary to reduce the area to be capped and the potential for nearby wildlife and human populations to be exposed to the landfill mass
- Significantly reduce infiltration of rainwater and snow-melt water through the landfill mass to minimize the potential for leachate generation and groundwater contamination
- Monitoring the groundwater and stream environment (which may include, but not necessarily limited to, sediment, surface water, and biota) downgradient of the site
- Implementation of ICs in the form of deed restrictions of the main landfill boundary to prohibit use of the area and groundwater

Landfill Inspections

Since April 2005, landfill inspections and cover maintenance have been performed at LF002 (Landfill 2/3 AOC). Inspections and maintenance were conducted on a quarterly basis and optimized following the Spring 2010 sampling event to a semi-annual basis. Landfill cover mowing is conducted on an annual basis (Fall). LUCs/ICs have been implemented by the ROD and are verified annually as part of the landfill cover inspection program.

During the reporting period, landfill inspections were performed at LF002 on June 3, 2022 (Spring inspection), and October 15, 2022 (Fall inspection). The location and orientation of photographs taken during the LF002 inspections are presented on **Attachment 1 - Figure 3**. Landfill gas monitoring results for the current and prior three years are presented in **Attachment 2 – Table 3**. Historical landfill gas monitoring results are presented in **Appendix A**. Landfill inspection reports are presented in **Attachment 3**. No inoperable gas vent turbines, animal burrows, or cap damage were observed during either Spring or Fall 2022 inspection events.

Landfill Gas Monitoring

Landfill gas monitoring is performed at LF002 (Landfill 2/3 AOC) to identify the presence and concentration of methane at or near the landfill. Based upon historical data, LF2GMP-03, LF2VENT-02, and LF2VENT-08 were eliminated from future monitoring and have not been monitored since 2018. In the 2021 LTM of Landfill AOCs, it was recommended that landfill gas monitoring cease at the following locations: LF2GMP-06, LF2GMP-08, LF2VENT-01, LF2VENT-07, LF2VENT-13, and LF2VENT-14. However, the 2021 reporting was finalized after the Fall gas sampling at LF002 was conducted and as such, these points were monitored in 2022 to maintain compliance.

Landfill gas monitoring was conducted on October 15, 2022 at four gas monitoring probes (LF2GMP-02, -05, -06, and -08) and eight landfill gas vents (LF2VENT-01, -04, -05, -06, -07, -12, -13, and -14) (**Attachment 2 - Table 3**). Results from the gas monitoring events at LF002 (Landfill 2/3 AOC) indicate methane concentrations measured at 3 of the 4 monitoring probes were 0% of the LEL while at LF2GMP-02 the concentration was measured at 8% of the LEL. Methane detections were reported at 4 of the 8 the landfill gas vents: LF2VENT-04 at 13%, LF2VENT-05 at 12%, LF2VENT-07 at 6%, and LF2VENT-12 at 21%.

Groundwater and Surface Water Sampling

Water samples are collected every 5 years from select locations at LF002 (Landfill 2/3 AOC). The last sampling event was conducted in May 2019 and the next sampling event is planned for 2024.

Conclusions and Recommendations

The 2022 inspections did not identify any major deficiencies that would jeopardize the integrity of the cover and there is optimal vegetation cover present on the cap. Removal of any downed trees and dead branches that have fallen on the fence line will continue during 2023 inspections.

Based on the *Final UFP-QAPP* (Bhate, April 2022), it is recommended that the landfill inspection frequency continue semi-annually with a limited landfill inspection in the Spring and the more comprehensive inspection in the Fall to correlate with annual mowing and landfill gas monitoring. Results from the gas sampling events at LF002 (Landfill 2/3 AOC) continue to show site-wide stabilization of methane concentrations.

Based upon historical data and Fall 2022 readings, it is recommended that landfill gas monitoring cease at the following locations: LF2GMP-05, LF2GMP-06, LF2GMP-08, LF2VENT-01, LF2VENT-13, and LF2VENT-14. Abandonment of existing vents and GMPs is not recommended in the event future monitoring becomes necessary. Based upon historical data (FPM/CAPE, December 2015) coupled with the Fall 2022 readings, Bhate recommends that landfill gas monitoring for the Fall of 2023 event include the following locations: LF2GMP-02, LF2VENT-04 to -07, and -12.

LF003 – LANDFILL 7 AOC AND LF007 – LANDFILL 5 AOC

LF003 (Landfill 7 AOC), active from 1950 through 1954 is northeast of Runway 15/33 in the northeastern portion of the former Griffiss AFB and is approximately 11 acres in size. **Attachment 1 - Figure 4** presents the LF003 (Landfill 7 AOC) site map. The wastes disposed of at this landfill consisted of domestic refuse, solid waste, liquid wastes, petroleum products, and miscellaneous base operations waste (such as airplane parts). Waste was placed into four trenches in the landfill area and subsequently burned. The ROD for LF003 (Landfill 7 AOC) (AFRPA, March 2000) was signed by the USEPA on June 6, 2000. The landfill was re-graded and capped in 2002. The landfill was capped with an 18-inch low permeability soil layer, covered by a 6-inch layer of topsoil, and seeded with grass (FPM/CAPE, December 2015). The RAOs for LF003 (Landfill 7 AOC) are:

- Consolidation of various debris and waste areas into the main landfill boundary to reduce the area to be capped and the potential for nearby wildlife and human populations to be exposed to the landfill mass
- Significantly reduce infiltration of rainwater and snow-melt water through the landfill mass to minimize the potential for leachate generation and groundwater contamination
- Monitoring the groundwater and stream environment (which may include, but not necessarily limited to, sediment, surface water, and biota) downgradient of the site
- Implementation of ICs in the form of deed restrictions of the main landfill boundary to prohibit use of the area and groundwater

LF007 (Landfill 5 AOC) is in the south-central portion of the former Griffiss AFB and is approximately 4 acres in size. **Attachment 1 - Figure 5** presents the LF007 (Landfill 5 AOC) site

map. The waste at LF007 consisted of domestic wastes, reportedly having been burned and then buried. Approximately 18,000 CY of wastes were disposed of at the site from 1950 through 1960. The ROD for LF007 (AFRPA, March 2000) was signed by the USEPA on June 5, 2000. The landfill was re-graded and capped in 2002. The cap components include a low-permeability layer, drainage layer, barrier protection layer, and a topsoil layer. The RAOs for LF007 (Landfill 5 AOC) are:

- Consolidation of various debris and waste areas into the main landfill boundary to reduce the area to be capped and the potential for nearby wildlife and human populations to be exposed to the landfill mass
- Reduce infiltration of rainwater and snow-melt water through the landfill mass to minimize the potential for leachate generation and groundwater contamination
- Monitoring the groundwater and stream environment (which may include, but not necessarily limited to, sediment, surface water, and biota) downgradient of the site
- Implementation of ICs in the form of deed restrictions of the main landfill boundary to prohibit use of the area and groundwater

Landfill Gas Monitoring

Landfill gas monitoring is not required at LF003 (Landfill 7 AOC) or LF007 (Landfill 5 AOC).

Landfill Inspections

Since September 2003, landfill inspections and cover maintenance have been performed at LF003 (Landfill 7 AOC) and LF007 (Landfill 5 AOC). Inspections and maintenance were conducted on a quarterly basis and optimized following the Spring 2010 sampling event to a semi-annual basis. Landfill cover mowing is conducted on an annual basis (Fall). LUCs/ICs have been implemented by the ROD and are verified annually as part of the landfill cover inspection program.

During the reporting period, landfill inspections were performed at LF003 on June 6, 2022 (Spring inspection), and October 18, 2022 (Fall inspection). The landfill inspections at LF007 were performed on June 2, 2022 (Spring inspection), and October 17, 2022 (Fall inspection). The location and orientation of photographs taken during the LF003 and LF007 inspections are presented on **Figure 4** and **Figure 5**, respectively, within **Attachment 1**. Landfill inspection reports are presented in **Attachment 3**. The following minor issues were noted during the 2022 inspection events at LF003 and LF007:

- Minor signage repairs to two signs on the North and Northwest side of LF003 were made during the inspections.
- At LF007, monitoring well LF5MW-3 was inaccessible due to densely overgrown tall vegetation.

Groundwater and Surface Water Sampling

Water samples are collected every 5 years from select locations at LF003 (Landfill 7 AOC) and LF007 (Landfill 5 AOC). The last sampling event at each landfill was in 2019 and the next sampling event is planned for 2024.

Conclusions and Recommendations

The 2022 inspections did not identify any major deficiencies that would jeopardize the integrity of the cover at either landfill and there is optimal vegetation cover present on the caps at both LF003 and LF007. Vegetation should be cleared to regain access to LF5MW-3.

Based on the *Final UFP-QAPP* (Bhate, April 2022), it is recommended that the frequency continue semi-annually with a limited landfill inspection in the Spring and the more comprehensive inspection in the Fall to coincide with annual mowing at both LF003 and LF007.

LF009 – LANDFILL 6 AOC

LF009 (Landfill 6 AOC) is near the southern boundary of the base and is approximately 15.7 acres in size. **Attachment 1 - Figure 6** presents the LF009 (Landfill 6 AOC) site map, including the locations of gas monitoring probes (identified by "GMP") and gas vents (identified by "VENT"). The wastes disposed at the landfill include general refuse and hard-fill that was buried and some of which was burned at the site. An estimated 38,000 to 62,000 CY of wastes were disposed at the site from 1955 to 1959. During the 1980s, although the landfill was no longer active, an unknown quantity of fuel-contaminated soil from the tank excavations at Tank Farms 1 and 3 was disposed of in the southern portion of LF009 (Landfill 6 AOC). In 1986, a clay cap was constructed over the fuel-contaminated soils area. The ROD (AFRPA, February 2001) for LF009 was signed by the USEPA on June 7, 2001. The cap was completed in 2004. The cap components include a gas venting layer, a 12-inch low-permeability layer, drainage layer, barrier protection layer, at least 6-inches of topsoil and seeded with grass (FPM/CAPE, December 2015). The RAOs for LF009 (Landfill 6 AOC) are:

- Consolidation of various debris and waste areas into the main landfill boundary to reduce the area to be capped and the potential for nearby wildlife and human populations to be exposed to the landfill mass
- Significantly reduce infiltration of rainwater and snow-melt water through the landfill mass to minimize the potential for leachate generation and groundwater contamination
- Monitoring the groundwater and stream environment (which may include, but not necessarily limited to, sediment, surface water, and biota) downgradient of the site to evaluate the effectiveness of the presumptive remedy
- Implementation of ICs in the form of deed restrictions within the main landfill boundary and for the affected groundwater to prohibit use of the area and groundwater

Site SD052-02 borders LF009 (Landfill 6 AOC) to the north (**Attachment 1 - Figure 6**) and is associated with a groundwater contaminant plume that is located downgradient of former maintenance facilities in Buildings 774 and 776, and former fuel pump house Building 775. Site SD052-04 is the LF009 (Landfill 6 AOC) trichloroethene (TCE) site plume, located immediately downgradient to the south of LF009 (Landfill 6 AOC). The most contaminated portion of the plume is located southwest of the landfill beneath the floodplain of Three Mile Creek. Monitoring of chlorinated VOCs in groundwater at LF009 (Landfill 6 AOC) is completed as part of remedial efforts at Site SD052-04. The approximate groundwater flow direction is shown with an arrow pointing southwest on **Attachment 1 - Figure 6**. This direction is a change from past long-term monitoring reports that have shown multiple flow directions across the landfill. Those varying directional arrows appeared to show topographical surface water flow across the landfill and not

groundwater flow which should be predominantly one direction. **Attachment 1 - Figure 6** reflects the generalized groundwater flow from Site SD052-02, which is just upgradient of the landfill.

Landfill Inspections

Landfill inspections and cover maintenance have been performed at the site since 2006. Inspections and maintenance were conducted on a quarterly basis and optimized following the Spring 2010 sampling event to a semi-annual basis. Landfill cover mowing is conducted on an annual basis (Fall). LUCs/ICs have been implemented by the ROD and are verified annually as part of the landfill cover inspection program.

During the reporting period, landfill inspections were performed on June 3, 2022 (Spring inspection) and October 18, 2022 (Fall inspection). The location and orientations of photographs taken during the 2022 inspections are presented on **Attachment 1 – Figure 6**. Landfill gas monitoring results for the current and prior three years are presented in **Attachment 2 – Table 4**. Historical landfill gas monitoring results are presented in **Appendix A**. Landfill inspection reports are presented in **Attachment 3**. No inoperable gas vent turbines, animal burrows, or cap damage were observed during either Spring or Fall 2022 inspection events

Landfill Gas Monitoring

Landfill gas monitoring has been performed at the site to identify the presence and concentration of methane at or near the landfill. On October 18, 2022, 3 gas vents were monitored: LF6VENT-02, LF6VENT-04, and LF6VENT-06 (**Attachment 2 - Table 4**). The monitoring schedule included LF6VENT-03, but it was found to have been knocked over or fallen over at the time of the monitoring. The vent was stood back up at the correct location; however, field personnel were unable to fully remove the soil before it was reattached to the subsurface polyvinyl chloride coupler. Methane measurements were 0% of the LEL at each of the 3 vents that were monitored. Methane concentrations were measured at 0% at LF6VENT-02, LV6VENT-04, and LF6VENT-06. Methane concentrations at LF6VENT-06 have been measured at either 0% or <0.1% of the LEL for the past five annual gas monitoring events.

Groundwater, Leachate, and Surface Water Sampling

Water samples are collected every 5 years from select locations at LF009 (Landfill 6 AOC). The last sampling event was in 2019 and the next sampling event is planned for 2024.

Conclusions and Recommendations

The inspections did not identify any major deficiencies that would jeopardize the integrity of the cover, and there is optimal vegetation cover on the cap. Based on the *Final UFP-QAPP* (Bhate, April 2022), it is recommended that the frequency continue semi-annually with a limited landfill inspection in the Spring and the more comprehensive inspection in the Fall to correlate with annual mowing and landfill gas monitoring. Landfill gas monitoring from 2011 to 2022 shows that methane levels were stable or absent at monitored gas probes. Given that methane concentrations at LF6VENT-06 have been measured at 0% or <0.1% LEL for five consecutive events, it is recommended that the location be removed from the sampling plan.

Based upon historical data (FPM/CAPE, December 2015) coupled with the Fall 2022 readings, Bhate recommends that landfill gas monitoring for the Fall of 2023 event include the following

three locations: LF6VENT-02, -03, and -04. A complete repair of LF6VENT-03 should occur during the Spring 2023 inspection to facilitate monitoring during the Fall 2023 inspection.

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NYSDEC. June 1998. *Division of Water Technical and Operational Guidance Series (1.1.1) Table 1*

NYSDEC. December 2016. *Title 6 of the Codes, Rules and Regulations of New York Subpart 360-2 Landfills*

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ATTACHMENT 1 – FIGURES

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Former Griffiss Air Force Base
Landfill AOC Sites Location Map

Figure 1

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO: MSC2021.0012.2007.0002

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LF001 (Landfill 1 AOC) 2022 Inspections

Figure 2

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO: MSC2021.0012.2007.0002

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Passive Gas Collection Trench Location

Pistol Range

Approximate Direction of Groundwater Flow

NEADS

Gulf Road

Perimeter Road

Six Mile Creek

Intermittent Stream

Intermittent Stream

LF001

F10C

F10B

F10C-2

A1A

SS062

MWSAR03

VENT-01 VENT-02 VENT-03 VENT-04 VENT-05 VENT-06 VENT-07 VENT-08 VENT-09 VENT-10 VENT-11 VENT-12 VENT-13 VENT-14 VENT-15 VENT-16 VENT-17 VENT-18 VENT-19 VENT-20 VENT-21 VENT-22 VENT-24 VENT-25 VENT-26 VENT-27 VENT-28 VENT-29 VENT-30 VENT-31

GMP-01 GMP-02 GMP-03 GMP-04 GMP-06 GMP-08 GMP-09 GMP-10 GMP-11 GMP-12 GMP-13 GMP-14 GMP-15 GMP-16 GMP-17 GMP-18 GMP-19 GMP-20

LF1SW-1 LF1SW-2SMC *S10* LF1SW-3

LF1MW-5 LF1MW-6 LF1MW-11 LF1MW-13 LF1MW-103

LF1P-2 LF1P-5

SEEP-1 SEEP-2 SEEP-3

F1 F2 F3 F4 F5 F6 F7 F9 F10 F11 F12 F13 F14/F15/F16 F17 F18 F19 F20

S1 S2/F8 S3 S4/S5 S6 S7 S8 S9 S10

5936 5950 6028 0854 6025 0738 0900 0901 0902 0903 0904 0905 0906 0907 0930 0912 0913

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 150 300 600 Feet

Legend:

- VENT-03 — Vent and GMP Locations Monitored during Fall 2022 Event
- LF1MW-5 — Groundwater and Surface Water Sample Locations Monitored during 2022 Events
- Monitoring Well Location
- Surface Water Sample Location
- Gas Monitoring Probe Location
- Gas Vent Location
- Design Drainage Outfall Location
- Photo Orientation
- Installation Restoration Program (IRP) Area
- Base Boundary
- Parcel Boundary
- 5657 — Building Number
- Wetland Area
- Rich Sloping Fen
- Surface Water Location

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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LF002 (Landfill 2/3 AOC) 2022 Inspections

Figure 3

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO: MSC2021.0012.2007.0002

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GMP-03 F5 S2 F4 VENT-01 S4 S3 S5 VENT-02 GMP-04 GMP-08 F9 S8 S7 LF2MW-14 GMP-05 S9 S10 GMP-09 F10 F8 S6/F6 F7 VENT-04 VENT-03 VENT-05 VENT-07 VENT-14 VENT-13 GMP-02 LF2SW-3 LF2MW2-1 GMP-01 S1/F1/F2 VENT-10 VENT-11 VENT-12 VENT-06 GMP-06 LF2MW-13 LF2MW-4 VENT-09 VENT-08 S12 F3 LF2SW-2 GMP-07 S11 LF2MW-12 LF2MW-100 LF2SW-1 LF002 A6 A1A AFRL 7 N0797 0762 Perimeter Road Approximate Direction of Groundwater Flow

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 100 200 400 Feet

Legend:

- VENT-12 — Vent and GMP Locations Monitored during Fall 2022 Event
- Monitoring Well Location
- Surface Water Sample Location
- Gas Monitoring Probe Location
- Gas Vent Location
- Photo Orientation
- Installation Restoration Program (IRP) Area
- Base Boundary
- Parcel Boundary
- 5657 — Building Number
- Wetland Area

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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F10B

Pond

Pond

S9

S8

LF7WL-4

LF7MW-27

5960

Approximate Direction of Groundwater Flow

S7

LF003

LF7MW-29

0802

F3/S5

S6

F1

S4/F2

Perimeter Road

S10

LF7MW-22

LF7WL-3

LF7MW-100

LF7MW-26

5945

S2/S3

LF7MW-28

A6

LF003

A1A

F4

S11/F5

S1

LF7MW-30

LF7MW-23

6235

5986

6242

5985

5525

A1A

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 100 200 400 Feet

Legend:
- Monitoring Well Location
- Surface Water Sample Location
- Photo Orientation
- Installation Restoration Program (IRP) Area
- Base Boundary
- Parcel Boundary
- 5657 Building Number
- Culvert / Stormwater Drain
- Wetland Area
- Surface Water Location

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

LF003 (Landfill 7 AOC) 2022 Inspections

Figure 4

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO: MSC2021.0012. 2007.0002

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LF007 (Landfill 5 AOC) 2022 Inspections

Figure 5

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO: MSC2021.0012.2007.0002

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F2A
F11C
F11B
F11A
F11Da
NEADS
LF007
0700
Perimeter Road
Three Mile Creek
Approximate Direction of Groundwater Flow
S1
S2/S3/F1
F5
S5
F6
S6
S7
S8
S9
S10/F4
S4/F3
F2
S11
LF5MW-1A
LF5MW-3
LF5MW-100R
LF5MW-4
LF5MW-5
MW49D07
LF5SW-1
LF5SW-2
LF5SW-3

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 50 100 200 Feet

Legend:
- Monitoring Well Location
- Surface Water Sample Location
- Photo Orientation
- Installation Restoration Program (IRP) Area
- Parcel Boundary
- 5657 Building Number
- Wetland Area
- Surface Water Location

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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LF009 (Landfill 6 AOC) 2022 Inspections

Figure 6

2022 Long Term Monitoring of Landfill Areas of Concern
Former Griffiss Air Force Base, Rome, New York

DRAWN BY: MRM/CM

DATE: 5/10/2023

SCALE: As Shown

PROJECT NO.: MSC2021.0012.2007.0002

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F11Da
F11
F11A
F11B
F11Db
F2C
F2D
F4Ca
F4A
F4B
F6B-7
0774
0776
0777
5660
0778
0780
0788
0796
SD052-02
SD052-04
LF009
775VMW-18R
F7/F8
F6
GMP-02
VENT-01
GMP-03
GMP-15 SD
VENT-02
GMP-01
F9/F10
VENT-03
VENT-04
S5/S6
VENT-06
GMP-04
VENT-07
F5
GMP-16 SD
F12
VENT-05
LF6MW-1
GMP-12
GMP-05
LF6VMW-25
S7
VENT-08
F4
TMCMW-9
GMP-13
GMP-17 SD
LF6W-1
LF6VMW-24
VENT-09
Approximate Direction of Groundwater Flow (Based on SD052-02 data)
F3
LF6MW-12
LF6VMW-23
LF6/TMCSW-1
GMP-06
VENT-10
VENT-11
LF6VMW-22
GMP-11
LF6VMW-26
LF6VMW-10R2
F1/F2
LF6VMW-21
VENT-13
VENT-14
GMP-07
LF6VMW-17S
VENT-12
Perimeter Road
LF6/TMCSW-2
LF6VMW-17D
S4
LF6LH-2
VENT-15
S1
VENT-16
LF6-SW1 PM
GMP-10
GMP-08
LF6VMW-20
LF6VMW-18
GMP-09
S3
S2
LF6VMW-19
Three Mile Creek
TMC-USGS-2
LF6LH-1
LF6/TMCSW-3

Notes:
This information is depicted to provide visual aid within the context of this document and should not be used as a sole reference in precise dimensioning of features indicated. Please verify the location of all features including underground and aboveground utilities prior to conducting any subsurface exploration or site assessment.

0 100 200 400 Feet

Legend:

- VENT-02 — Vent Locations Monitored during Fall 2022 Event
- Monitoring Well Location
- Surface Water Sample Location
- Gas Monitoring Probe Location
- Gas Vent Location
- Leachate Sampling Location
- Design Drainage Outfall Location
- Photo Orientation
- Installation Restoration Program (IRP) Area
- Base Boundary
- Parcel Boundary
- 5657 — Building Number
- Wetland Area
- Surface Water Location

Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

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ATTACHMENT 2 – TABLES

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Table 1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2019-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2019				September 2020					December 2021					October 2022				
	Barometric Pressure (in.) = 29.34 - 29.38				Barometric Pressure (in.) = 30.0 - 30.3					Barometric Pressure (in.) = 30.0 - 30.1					Barometric Pressure (in.) = 29.99 on 10/6 and 29.89 on 10/15				
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF1GMP-01	3.0	<0.1	21.0	0.1	0.5	3.5	7.7	5	130.2	0	>5	8.5	0	49.6	0.0	Over	3.3	0	20.7
LF1GMP-02	<100	23.4	8.9	5.6	0	>5	12.7	0	39.3	0	>5	9.3	0	8.3	0.0	Over	13.9	0	8.7
LF1GMP-03	2.0	<0.1	21.2	0.0	0.5	4.4	7.2	5	6	0	>5	19.3	0	5.6	0.0	Over	1.6	0	1.4
LF1GMP-04	<100	56.2	2.6	5.6	0	2.8	3.2	12	0	0	0	20.9	0	0	0.0	Over	1.3	0	2.0
LF1GMP-06	<100	24.6	8.2	4.7	0	>5	18.1	0	0	0	0	20.3	0	0	0.0	Over	10.1	0	0.4
LF1GMP-09	7	0.3	20.6	0.2	0	4.2	12.1	3	18.6	0	0	20.9	0	0	0.0	Over	12.1	0	2.5
LF1GMP-10	2.0	<0.1	20.8	0.0	0	>5	3.6	8	5.1	0	0	20.9	0	0.1	0.0	Over	1.6	0	2.1
LF1GMP-13	1	<0.1	19.2	1.4	0.5	0	21.2	0	0	0	0	20.9	0	0	0.0	0	19.1	0	0.0
LF1GMP-16	2	<0.1	21	0.0	0	0	20.9	0	0	0	0	19.2	0	0	0.0	0	19.4	0	0.0
LF1GV-01	2	<0.1	21.3	0.0	0	>5	20.8	0	0	0	0	20.9	0	0	0.0	Over	13.9	0	0.0
LF1GV-02	2	<0.1	21.2	0.0	0	>5	18.4	0	0	0	0	20.9	0	0	0.0	30	17.4	0	0.0
LF1GV-03	2	<0.1	21.2	0.0	0	>5	19.2	0	0	0	0	20.9	0	0.1	0.0	30	18.1	0	0.0
LF1GV-04	2	<0.1	21.0	0.0	0	3.2	19.1	0	0	0	0	20.9	0	0.1	0.0	6	16.7	0	0.0
LF1GV-05	2	<0.1	21.1	0.0	0	>5	16.1	0	0	0	0	20.9	0	0	0.0	Over	12.6	0	0.0
LF1GV-06	2	<0.1	20.9	0.0	0	>5	18.4	0	0.9	0	0	20.9	0	0.1	0.0	51	10.1	0	0.1
LF1GV-07	2	<0.1	21.1	0.0	0	>5	21.2	0	0	0	0	20.9	0	0	0.0	39	19.6	0	0.0
LF1GV-08	2	<0.1	21.1	0.0	0	>5	15.6	0	3.5	0	0	20.9	0	0	0.0	Over	17.0	0	0.8
LF1GV-09	2	<0.1	20.9	0.0	0	>5	15.5	0	0	0	0	20.9	0	0.1	0.0	30	18.3	0	1.0
LF1GV-10	2	<0.1	21.1	0.0	0	>5	14	0	0	0	0	20.9	0	0	0.0	Over	15.8	0	0.0
LF1GV-11	2	<0.1	21.1	0.0	0	3.0	20.8	0	0	0	0	20.9	0	0	0.0	53	18.1	0	0.6
LF1GV-12	2	<0.1	20.9	0.0	0	>5	18.9	0	0	0	0	20.9	0	0	0.0	0	19.6	0	0.0
LF1GV-13	2	<0.1	21.1	0.0	0	>5	18.9	0	0	0	0	20.9	0	0	0.0	Over	19.3	0	0.2
LF1GV-14	2	<0.1	21.1	0.0	0	3.5	20.3	0	0	0	0	20.9	0	0	0.0	61	18.7	0	0.0
LF1GV-17	2	<0.1	21.1	0.0	0	>5	20.4	0	0	0	0	20.9	0	0	0.0	Over	17.2	0	0.0
LF1GV-18	2	<0.1	21.1	0.0	0	4.7	20.4	0	0	0	0	20.9	0	0	0.0	46	18.1	0	0.0
LF1GV-19	2	<0.1	21.00	0.0	0	>5	17.7	0	0	0	0	20.9	0	0	0.0	47	17.2	0	0.0
LF1GV-20	2	<0.1	20.9	0.0	0	3.7	18.8	0	0	0	0	20.9	0	0	0.0	Over	13.0	0	0.1
LF1GV-21	2	<0.1	21.0	0.0	0	4.6	20.9	0	0	0	0	20.9	0	0	0.0	Over	16.8	0	0.0
LF1GV-22	2	<0.1	21.2	0.0	0	3.5	20.9	0	0	0	0	20.9	0	0	0.0	Over	16.2	0	0.0
LF1GV-24	2	<0.1	21.2	0.0	0	0	21.8	0	0	0	0	20.9	0	0	0.0	0	18.2	0	0.0
LF1GV-25	2	<0.1	21.1	0.0	0	0.9	20.9	0	0	0	0	20.9	0	0	0.0	4	20.7	0	0.2
LF1GV-27	2	<0.1	21.1	0.0	0	0	21.7	0	0.4	0	0	20.9	0	0	0.0	Over	11.0	0	0.5

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

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Table 2
LF001 (Landfill 1 AOC) Groundwater and Surface Water Sampling Results 2022
Former Griffiss Air Force Base
Rome, New York

Location Identification:	NYSDEC Class GA Ground-water Standards	LF1MW-13		LF1MW-6	LF1P-2	LF1P-5	MWSAR03	LF1MW-103	LF1MW-11	LF1SW-1	LF1SW-2SMC	LF1SW-3
Date of Collection:		12/6/2022				12/7/2022				12/5/2022		
Sample Identification:		LF1MW-13_1222	LF1MW-13_1222-A	LF1MW-6_1222	LF1P-2_1222	LF1P-5_1222	MWSAR03_1222	LF1MW-103_1222	LF1MW-11_1222	LF1SW-1_1222	LF1SW-2SMC_1222	LF1SW-3_1222
Laboratory Data Package:		FC1065				FC1116				FC1020		
Volatile organic compounds (µg/L)												
1,1,1-Trichloroethane	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,1,2-Trichloroethane	1	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,2,3-Trichlorobenzene	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
1,2,4-Trichlorobenzene	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
1,2,4-Trimethylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,2-Dibromo-3-chloropropane	0.04	2.00 U	2.00 U	2.00 U	2.00 UJ	NA	2.00 U	NA	NA	2.00 U	2.00 UJ	2.00 U
1,2-Dibromoethane	0.0006	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
1,2-Dichlorobenzene	3	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,2-Dichloroethane	0.6	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,3,5-Trimethylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,3-Dichlorobenzene	3	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
1,4-Dichlorobenzene	3	0.500 U	0.500 U	0.500 U	**1.30 J**	NA	0.500 U	NA	NA	0.500 U	**0.940 J**	0.500 U
Acetone	50	20.0 U	20.0 U	20.0 U	20.0 UJ	NA	20.0 U	NA	NA	20.0 U	20.0 UJ	20.0 U
Benzene	1	0.500 U	0.500 U	0.500 U	**0.330 J**	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Bromodichloromethane	50	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Bromoform	50	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Carbon disulfide	60	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
Chlorobenzene	5*	0.500 U	0.500 U	0.500 U	**0.890 J**	NA	0.500 U	NA	NA	**0.380 J**	**0.480 J**	0.500 U
Chloroethane	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
Chloroform	7	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Chloromethane	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
cis-1,2-Dichloroethene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Cumene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Dichlorodifluoromethane	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
Ethylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
m,p-Xylene	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
Methylene chloride	5*	4.00 U	4.00 U	4.00 U	4.00 UJ	NA	4.00 U	NA	NA	4.00 U	4.00 UJ	4.00 U
Naphthalene	10	2.00 U	2.00 U	2.00 U	2.00 UJ	NA	2.00 U	NA	NA	2.00 U	2.00 UJ	2.00 U
n-Propylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
o-Xylene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
p-Cymene (p-Isopropyltoluene)	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
sec-Butylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
tert-Butylbenzene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Tetrachloroethene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Toluene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Trichloroethene	5*	0.500 U	0.500 U	0.500 U	0.500 UJ	NA	0.500 U	NA	NA	0.500 U	0.500 UJ	0.500 U
Trichlorofluoromethane	5*	1.00 U	1.00 U	1.00 U	1.00 UJ	NA	1.00 U	NA	NA	1.00 U	1.00 UJ	1.00 U
Vinyl chloride	2	**0.490 J**	0.500 U	0.500 U	0.500 UJ	NA	**0.480 J**	NA	NA	0.500 U	0.500 UJ	0.500 U
Leachate Indicators (mg/L)												
Alkalinity, Total (as $CaCO_3$)	NV	**220**	**222**	**260**	**493**	**377**	**110**	**112**	**382**	**366**	**335**	**57**
Ammonia	2	**0.199**	**0.222**	**0.42**	**1.52**	**0.751**	**0.234**	**12.3**	**1.5**	0.0750 U	**0.478**	0.0750 U
Biochemical Oxygen Demand, 5-Day	NV	4.00 U	4.00 U	4.00 U	**8.7**	**5.8**	12.0 U	4.00 U	**13.1**	4.00 UJ	4.00 UJ	4.00 UJ
Boron	1	**0.0637 J**	**0.0578 J**	**0.0601 J**	**0.111 J**	**0.0535 J**	0.100 U	**0.223**	**0.0504 J**	**0.0402 J**	**0.0449 J**	0.1 U
Bromide	2	**0.180 J**	**0.180 J**	**0.230 J**	**0.630 J**	**0.200 J**	**0.150 J**	**0.240 J**	**0.180 J**	**0.130 J**	**0.190 J**	0.250 U
Chemical Oxygen Demand	NV	**9.80 J**	**9.80 J**	10.0 U	**12.3 J**	**22.1**	**12.3 J**	**9.80 J**	**9.80 J**	**7.50 J**	**25**	**15.0 J**
Chloride	250	**6.9**	**7**	**18.2**	**13.1**	**7.6**	**5.7**	**12.6**	**3.5**	**2.9**	**9.3**	**4.8**
Fluoride	1.5	**0.130 J**	**0.140 J**	**0.110 J**	**0.440 J**	0.100 U	0.100 U	**0.850 J**	**0.0650 J**	0.200 U	0.200 U	0.200 U
Hardness (as $CaCO_3$)	NV	**200**	**193**	**210**	**419**	**370**	**49.2**	**6.90 J**	**370**	**368**	**358**	**56.5**
Nitrate (as N)	10	**0.0500 J**	**0.0520 J**	0.0500 U	0.250 U	**0.0530 J**	0.0500 U	**0.43**	**0.0460 J**	**0.0520 J**	**0.0700 J**	**0.0980 J**
Nitrite (as N)	1	0.0500 U	0.0500 U	0.0500 U	0.250 U	0.0500 U	0.0500 U	**0.0850 J**	0.0500 U	0.0500 U	0.0500 U	0.0500 U
Total Kjeldahl Nitrogen	NV	**0.785 J**	**0.378 J**	**0.552 J**	**1.85**	**0.966**	**0.330 J**	**13.3**	**2.11**	**0.205 J**	**1.07**	**0.248 J**
Phenolics, Total Recoverable	1	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U	0.0200 U
Phosphorus, Total Orthophosphate (as PO_4)	NV	**0.0470 J**	**0.0620 J**	**0.0320 J**	**0.0420 J**	**0.0370 J**	**0.0270 J**	**0.0620 J**	**0.0320 J**	0.0400 U	0.0400 U	0.0400 U
Sulfate	250	**2.1**	**2.5**	1.00 U	5.00 U	1.00 U	1.00 U	**30.0 J**	1.00 U	**2.6**	**0.870 J**	**3.8**
Total Dissolved Solids	500	**266**	**254 J**	**324**	**528**	**428**	**156**	**404**	**456**	**442**	**474**	**140**
Total Organic Carbon	NV	**2**	**2**	**0.670 J**	**1.70 J**	**2.4**	**1.20 J**	**1.70 J**	**6.4**	**2.10 J**	**3.20 J**	**4.9**
Color (reported in PCU)	15	**100 J**	**150 J**	**50**	**125**	**200**	**15**	**15**	**150**	**60**	**45**	**70**

Notes:

Results are compared to the New York Codes, Rules, and Regulations Title 6 Part 703.5 Water Quality Standards Surface Waters and Groundwater, Table 1, Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values.

* - The principal organic contaminant standard for groundwater of 5 µg/L applies to this substance.

Bold values are detected results

Highlighted values exceed the screening criteria

µg/L - micrograms per Liter

mg/L - mlligrams per Liter

$CaCO_3$ - calcium carbonate

N - nitrogen

NA - Not Analyzed

NV - No Value

PCU - Platinum-Cobalt Units

PO_4 - phosphate

U - not detected, value presented is the limit of detection (LOD)

J - estimated, the analyte was positively identified; the quantitation is an estimation

UJ - The analyte was not detected; however the result is estimated because of discrepancies in meeting certain analyte-specific quality control criteria

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Table 3
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2019-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2019				September 2020					December 2021					October 2022				
	Barometric Pressure (in.) = 29.22 - 29.25				Barometric Pressure (in.) = 30.0 - 30.3					Barometric Pressure (in.) = 30.1 - 30.1					Barometric Pressure (in.) = 29.84				
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF2GMP-02	17	0.8	18.7	1.7	0	1.85	15.3	1	0	0	0	20.0	0	0.1	0.0	8	19.9	0	0.0
LF2GMP-05	73	3.6	13.6	3.0	0	0	20.6	0	0.1	0	0	19.1	0	0	0.0	0	11.0	0	0.0
LF2GMP-06	2	<0.1	21.1	0.0	0	0	20.5	0	0	0	0	20.4	0	0	0.0	0	18.7	0	0.0
LF2GMP-08	2	<0.1	20.5	0.8	0	0	20.9	0	0	0	0	20.3	0	0	0.0	0	20.2	0	0.0
LF2VENT-01	2	<0.1	20.6	0.0	0	0	19.9	0	0	0	0	20.9	0	0	0.0	0	19.2	0	0.0
LF2VENT-04	31	1.5	20.1	0.9	0	0.6	16.1	0	3.8	0	0	20.9	0	0	0.0	13	20.1	0	0.1
LF2VENT-05	43	2.2	19.0	1.8	0.5	>5	14.5	2	2.0	0	8.0	20.9	0	0	0.0	12	20.9	0	0.1
LF2VENT-06	8	0.4	20.8	0.1	1.0	>5	17.4	0	0.6	0	0	20.9	0	0	0.0	0	20.9	0	0.0
LF2VENT-07	2	<0.1	20.8	0.0	0	0	16.7	0	0.1	0	0	20.9	0	0	0.0	6	19.9	0	0.0
LF2VENT-12	7	0.3	20.6	0.2	0	>5	15.5	0	0	0	0	20.9	0	0	0.0	21	17.1	0	0.0
LF2VENT-13	2	<0.1	20.6	0.0	0	0	18.2	0	0.1	0	0	20.9	0	0.1	0.0	0	20.3	0	0.0
LF2VENT-14	2	<0.1	20.8	0.0	0	0	20.2	0	0	0	0	20.9	0	0	0.0	0	20.9	0	0.0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

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Table 4
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2019-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2019				September 2020					December 2021					October 2022				
	Barometric Pressure (in.) = 29.38				Barometric Pressure (in.) = 30.0 - 30.3					Barometric Pressure (in.) = 29.7 - 29.8					Barometric Pressure (in.) = 29.89				
Sample Location	**LEL (%)**	**Methane (%)**	**Oxygen (%)**	**Carbon Dioxide (%)**	**Hydrogen Sulfide (ppm)**	**Methane (%)**	**Oxygen (%)**	**Carbon Monoxide (ppm)**	**VOC (ppm)**	**Hydrogen Sulfide (ppm)**	**Methane (%)**	**Oxygen (%)**	**Carbon Monoxide (ppm)**	**VOC (ppm)**	**Hydrogen Sulfide (ppm)**	**Methane (%)**	**Oxygen (%)**	**Carbon Monoxide (ppm)**	**VOC (ppm)**
LF6VENT-02	2	<0.1	20.8	0.0	0	2.6	12.5	0	0	0	18.0	8.3	0	0.4	0	0	20.9	0	0
LF6VENT-03	2	<0.1	20.6	0.0	0	0.75	13.1	0	0	0	0	20.9	0	0	down	down	down	down	down
LF6VENT-04	2	<0.1	20.7	0.0	0	4.35	18.4	0	0	0	8.0	11.9	0	0.2	0	0	20.9	0	0

Notes:
NI = Not Installed
NS = Not Sampled
- - = Not Monitored
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

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ATTACHMENT 3 – LANDFILL INSPECTION REPORTS

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Attachment 3-1 Spring 2022 Landfill Inspection Reports

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LANDFILL: LF001
INSPECTION REPORT

2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Spring Response to Storm Event? No
Date of Inspection: 10/3/2022
Personnel Present: J. Dunwud, A. Torres
Weather Conditions: 63°F mostly sunny

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good

Leachate Breakouts: good

Vectors: none

Drainage: good

Institutional Controls: good

Monitoring Wells: redid visibility markers

Gas Probes: redid visibility markers

Gas Vents: Steady breeze occuring and most turbins are not spinning
Vent 29 - Branches overgrown, nest inside turbin
vent 27 - turbin rusted

Security Fencing/Gates: good

Comments/Follow Up Needs:
Beaver pond still present with active wildlife

LANDFILL: LF002
INSPECTION REPORT

2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Spring Response to Storm Event? No
Date of Inspection: ~~4~~ 4/3/2022
Personnel Present: A. Torres, J. Dawud
Weather Conditions: 48°F partly cloudy

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good

Leachate Breakouts: N/A

Vectors: none

Drainage: good

Institutional Controls: good

Monitoring Wells: ~~&~~ ~~redid reflective markers~~ good

Gas Probes: ~~good~~ redid reflective markers

Gas Vents: some turbins not spinning during wind

Security Fencing/Gates: trees fallen over on fencing

Comments/Follow Up Needs:

Large trees and limbs fallen onto fence line that cannot be removed with hand tools

LANDFILL: LF003
INSPECTION REPORT

2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Spring Response to Storm Event? No

Date of Inspection: 6/6/2022

Personnel Present: A Torres J. Dwood

Weather Conditions: 64°F cloudy

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity:

Slopes: good

Cover Vegetation: good

Leachate Breakouts: N/A

Vectors: none

Drainage: good

Institutional Controls: good

Monitoring Wells: good

Gas Probes: N/A

Gas Vents: N/A

Security Fencing/Gates: good

Comments/Follow Up Needs:

Signage on northern end of LF needs to be repaired/put back up

Signage on ~~southern~~ southwestern end of LF needs to be repaired/put back up

LANDFILL: LF007
INSPECTION REPORT

2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Spring Response to Storm Event? No

Date of Inspection: 4/2/2022

Personnel Present: J. Dawud, A. Torres

Weather Conditions: 70°F partly cloudy

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good

Leachate Breakouts: N/A

Vectors: none

Drainage: good

Institutional Controls: good

Monitoring Wells: good

Gas Probes: N/A

Gas Vents: N/A

Security Fencing/Gates: Access gate broken, post rotted out

Comments/Follow Up Needs:

LANDFILL: LF009
INSPECTION REPORT

2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Spring Response to Storm Event? NO

Date of Inspection: 6/3/2022

Personnel Present: J. Dawud, A. Torres

Weather Conditions: 67°F cloudy

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good

Leachate Breakouts: good

Vectors: none

Drainage: good

Institutional Controls: good

Monitoring Wells: redid reflective markers

Gas Probes: redid reflective markers

Gas Vents: vent-03 bent

Security Fencing/Gates: good

one sign found on ground. returning

Comments/Follow Up Needs:

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LF001 – Spring 2022

South of GMP-14, facing North. (S1)



Near GMP-06, facing South. (S2)



LF001 – Spring 2022

South of GMP-06, facing North. (S3)



VENT-30, facing North. (S4)



LF001 – Spring 2022

VENT-30, facing North. (S5)



VENT-27, facing North. (S6)



LF001 – Spring 2022

Northwest end of landfill, facing East. (S7)



SW of LF1-P2, facing Northeast to LF1MW-103. (S8)



LF001 – Spring 2022

Six-Mile Creek, facing North to beaver pond. (S9)



Near LF1GMP-10, facing North. (S10)



LF002 – Spring 2022

West of GMP-01, facing East. (S1)



North end of landfill, facing East. (S2)



LF002 – Spring 2022

Near GMP-03, facing North. Downed limbs on fence line. (S3)



Near GMP-03, facing Northeast. Downed limbs on fence line. (S4)



LF002 – Spring 2022

North end of landfill, facing North. (S5)



At VENT-05, facing Southwest. (S6)



LF002 – Spring 2022

Near GMP-08, facing North. (S7)



Near GMP-08, facing North. (S8)



LF002 – Spring 2022

Northeast corner of landfill, facing Southwest along fence line. (S9)



Northeast corner of landfill, facing East. (S10)



LF002 – Spring 2022

Near GMP-07, facing Southeast.
(S11)



Near VENT-08, facing Northeast.
(S12)



LF003 – Spring 2022

East corner of landfill, facing Northwest. (S1)



Northeast edge of landfill, facing Southwest. (S2)



LF003 – Spring 2022

Northeast edge of landfill, facing Southwest. (S3)



Between cells, facing South. (S4)



LF003 – Spring 2022

Between cells, facing Northwest.
(S5)



Between cells, facing Southeast.
(S6)



LF003 – Spring 2022

Northeast edge of landfill, facing Northeast. (S7)



Northwest edge of landfill, facing South. (S8)



LF003 – Spring 2022

Northwest edge of landfill, facing South. (S9)



Southwest edge of landfill, facing Northeast. (S10)



LF003 – Spring 2022

Near LF7MW-30, facing East.
(S11)



LF007 – Spring 2022

Defunct gate and new access road, facing Southeast. (S1)



Defunct gate, facing Southeast. (S2)



LF007 – Spring 2022

Defunct gate. (S3)



North edge of landfill, facing Southwest. (S4)



LF007 – Spring 2022

Northwest side of landfill, facing Southeast. (S5)



Southwest side of landfill, facing Northeast. (S6)



LF007 – Spring 2022

Near LF5MW-100R, facing Southwest. (S7)



Near LF5MW-4, facing South. (S8)



LF007 – Spring 2022

LF5MW-5, facing South. (S9)



Northeast side of landfill, facing Northwest. (S10)



LF007 – Spring

South of LF5MW-1A, facing Northeast.
(S11)



LF009 – Spring 2022

South of LF6VMW-17D. (S1)



Southeast of LF6VMW-20 facing Northwest. (S2)



LF009 – Spring 2022

Near LF6VMW-20 facing West. (S3)



Near GMP-07 facing West. (S4)



LF009 – Spring 2022

VENT-03 facing East. (S5)



VENT-03. (S6)



LF009 – Spring 2022

Near GMP-13 facing Northwest. (S7)



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Attachment 3-2 Fall 2022 Landfill Inspection Reports

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LANDFILL: LF001
INSPECTION REPORT

Fall 2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Fall
Response to Storm Event? NO
Date of Inspection: 10/6/22 & 10/15/2022
Personnel Present: J. Dawud

Weather Conditions: 60s sunny / Partly cloudy

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good, recently mowed

Leachate Breakouts: good

Vectors: significant burrowing not observed

Drainage: good (heavy rain on 10/13 had drained OK)

Institutional Controls: good

Monitoring Wells: good - 3 wells in beaver/swamp area some are very difficult to access not accessible

Gas Probes: LFIGMP-8 was struck by mower. Severed damage

Gas Vents: Many vents not turning even in higher wind gusts

Security Fencing/Gates: good

Comments/Follow Up Needs: replace or repair turbines

LANDFILL: LF002
INSPECTION REPORT

Fall 2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Fall
Response to Storm Event? No
Date of Inspection: 10/15/2022
Personnel Present: J. Dawud
Weather Conditions: 66°F, cloudy, light to mod wind. 29.84 in Hg

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity: good

Slopes: good

Cover Vegetation: good

Leachate Breakouts: NA

Vectors: no signs of digging/burrowing

Drainage: good

Institutional Controls: good

Monitoring Wells: good.

Gas Probes: GMP-02 had no lock, one was added. GMP-05 lock replaced

Gas Vents: All in good condition, turbines spinning.

Security Fencing/Gates: downed trees & limbs still across fences.

Comments/Follow Up Needs: Hunter stand on other side of fence near GMP-01 is still present.

LANDFILL: LF003
INSPECTION REPORT

Fall 2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Fall Response to Storm Event? No

Date of Inspection: 10/18/22

Personnel Present: J. Daniel & T. Calhoun

Weather Conditions: Cloudy 20% ch. rain, 48°F

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity:
good

Slopes:
good

Cover Vegetation:
good - mowed last week

Leachate Breakouts:
—

Vectors:
No signs of burrowing observed

Drainage:
good

Institutional Controls:
good - [redacted] stood 2 signs back into new holes

Monitoring Wells:
Minor repairs made - all wells located

Gas Probes:
N A

Gas Vents:
N A

Security Fencing/Gates:
good - minor sign repairs on two signs

Comments/Follow Up Needs:
None

LANDFILL: LF007
INSPECTION REPORT

Fall 2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Fall Response to Storm Event? No

Date of Inspection: 10/17/22

Personnel Present: J. Dawud

Weather Conditions: Overcast 60% chance rain. 48°F

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity:
good

Slopes:
good

Cover Vegetation:
good. - Mowed last week

Leachate Breakouts:
—

Vectors:
good - no signs of burrowing

Drainage:
good

Institutional Controls:
good

Monitoring Wells:
LF5MW-3 had lots of overgrown vegetation blocking the way. Need machete to clear

Gas Probes:
—

Gas Vents:
—

Security Fencing/Gates:

Comments/Follow Up Needs:
—

LANDFILL: LF009
INSPECTION REPORT

Fall 2022

FORMER GRIFFISS AIR FORCE BASE

Type of Inspection: Fall Response to Storm Event? No

Date of Inspection: 10/18/22

Personnel Present: J. Dawud & T. Calhoun

Weather Conditions: cloudy, 20% ch. rain, light wind, 48°F

INSPECTION ITEMS COMMENTS/NEED FOR ACTION

Soil Cover Integrity:
good

Slopes:
good

Cover Vegetation:
good - mowed recently

Leachate Breakouts:
good

Vectors:
Burrowing at Vent-03, vent-03 is down

Drainage:
good

Institutional Controls:
good

Monitoring Wells:
good - Brush cleared

Gas Probes:
good - Brush cleared

Gas Vents:
good except Vent-03 is down. T.C attempted to dig out and replace. Full repair/reinstall is needed.

Security Fencing/Gates:
good

Comments/Follow Up Needs:
repair vent-03

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LF001 – Fall 2022

Near GMP-10, facing East. (F1)



Near GMP-10, facing West. (F2)



LF001 – Fall 2022

Near GMP-01, facing East. (F3)



Near GMP-01, facing North. (F4)



LF001 – Fall 2022

At VENT-14, facing South. (F5)



North of VENT-13, facing South. (F6)



LF001 – Fall 2022

North edge, Eastern cap breakout. (F7)



GMP-06, before brush removal. (F8)



LF001 – Fall 2022

GMP-12. (F9)



At VENT-17, facing Northeast. (F10)



LF001 – Fall 2022

At VENT-17, facing South. (F11)



Near VENT-20, facing East. (F12)



LF001 – Fall 2022

At Southeast corner, facing North. (F13)



GMP-08, damaged. (F14)



LF001 – Fall 2022

GMP-08, damaged. (F15)



GMP-08, damaged. (F16)



LF001 – Fall 2022

GMP-14. (F17)



GMP-13. (F18)



LF001 – Fall 2022

Near GMP-14, sign after being re-bolted. (F19)



GMP-15, before clearing vegetation. (F20)



LF002 – Fall 2022

GMP-01. (F1)

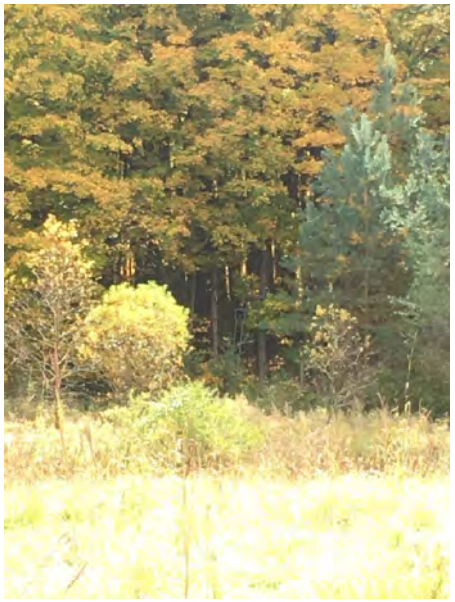


At GMP-01, facing East. (F2)



LF002 – Fall 2022

At VENT-08, facing Southeast, tree stand still present. (F3)



At VENT-01, facing Southeast. (F4)



LF002 – Fall 2022

GMP-03. (F5)



At VENT-05, facing Southwest. (F6)



LF002 – Fall 2022

At VENT-05, facing Northwest. (F7)



GMP-05. (F8)



LF002 – Fall 2022

GMP-08. (F9)



GMP-09. (F10)



LF003 – Fall 2022

Between cells near road, facing West. (F1)



Between cells near road, facing South. (F2)



LF003 – Fall 2022

Between cells near road, facing Northwest. (F3)



Near LF7MW-30, facing North. (F4)



LF003 – Fall 2022

Near LF7MW-30, facing West. (F5)



LF007 – Fall 2022

At entry road, facing Southeast. (F1)



Near LF5MW-1A, facing South. (F2)



LF007 – Fall 2022

Near LF5MW-1A, facing Southwest. (F3)



Near LF5MW-1A, facing Northwest. (F4)



LF007 – Fall 2022

Northwest corner, facing East. (F5)



Northwest corner, facing South. (F6)



LF009 – Fall 2022

At GMP-07, facing Southwest. (F1)



GMP-07. (F2)



LF009 – Fall 2022

GMP-06, before clearing brush. (F3)



GMP-05. (F4)



LF009 – Fall 2022

Near GMP-04, facing South. (F5)



Near 775VMW-18R, facing Southeast. (F6)



LF009 – Fall 2022

At GMP-03, facing Southwest. (F7)



GMP-03, before clearing vegetation. (F8)



LF009 – Fall 2022

VENT-03, has fallen. (F9)



VENT-03, no nipple found. (F10)



LF009 – Fall 2022

GMP-01. (F11)



GMP-12. (F12)



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ATTACHMENT 4 – FIELD FORMS

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bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1SW-1	Date: 12/5/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: -	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): Surface Water	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): -
	Total Well Depth (ft) (C): -	Water Column Thickness (ft) (C-B): -	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 43°F Cloudy	Well Condition: -	Comments: None

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/5/22	1630	NA	NA	NA	6.85	6.35	0.727	5.33	10.6	123	None

Colorimeter Results				
Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~ BP	poly 1L	None	N	-	Anions/Alkalinity
1	~~500 mL~~ BP amber poly	250 mL	H2SO4		-	BP ~~TKN~~/Ammonia CCO
~~2~~ 1	~~500 mL~~ BP	amber 40 mL	~~H2SO4~~	HCl	-	BP ~~COD~~/TOC
~~2~~ BP 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~ BP	poly 250mL	~~None~~ BP H2SO4		-	BP ~~TDS~~ TKN
1	250 mL	poly	None		-	BP ~~Color~~ OPO4
Sample ID: LF1SW-1-1222				Sample Time: 1630		

1	~~250~~ mL	poly	HNO3	-	Boron/~~Hardness~~ BP
3	40 mL	glass vial	HCl	-	VOCs
1	250mL	poly	HNO3		Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: ~~LF1SW-25MC~~ LF1SW-2SMC	Date: 12/5/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: -	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): Surface Water	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): -
	Total Well Depth (ft) (C): -	Water Column Thickness (ft) (C-B): -	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 43°F Cloudy	Well Condition: -	Comments: None

CASING INFO										
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/5/22	1600	NA	NA	NA	5.75	6.12	0.633	8.45	62.0	121	None

Colorimeter Results				
Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~ BP	poly 1 Liter	None	N	-	Anions/Alkalinity
1	~~500 mL~~ BP ~~amber~~ poly	250mL	H2SO4		-	BP ~~TKN~~/Ammonia/COD
~~2~~ 1	~~500 mL~~ BP	amber 40mL	~~H2SO4~~ HCl		-	BP ~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~ BP	poly 250mL	~~None~~ H2SO4		-	BP ~~TDS~~ TKN
1	250 mL	poly	None		-	BP ~~Color~~ OPO4
Sample ID: LF1SW-25MC-1222				Sample Time: 1600		
1	~~250~~ mL	poly	HNO3		-	Boron/~~Hardness~~ BP
3	40 mL	glass vial	HCl		-	VOCs
1	250mL	poly	HNO3		-	Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1SW-3	Date: 12/5/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: -	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): Surface Water	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): -
	Total Well Depth (ft) (C): -	Water Column Thickness (ft) (C-B): -	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 43°F Cloudy	Well Condition: -	Comments: None

CASING INFO										
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/5/22	1530	NA	NA	NA	8.22	5.38	0.182	9.26	0.0	129	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia / COD
1	~~500 mL~~	amber 40mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OPO4

Sample ID: LF1SW-3-1222 — Sample Time: 1530

1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl		-	VOCs
1	250mL	poly	HNO_3		-	Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-6	Date: 12/6/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 4" PVC SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 2.03
	Total Well Depth (ft) (C): 16.53	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 45°F	Well Condition: Good	Comments: None

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ BP Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/6/22	1335	2.15	1.5	300	9.96	6.03	0.556	22.28	46.6	2	None
12/6/22	1340	2.15	3	300	10.11	6.11	0.556	10.14	29.2	-7	None
	1345	2.15	4.5	300	10.19	6.14	0.556	1.59	24.1	-15	None
	1350	2.15	6	300	10.20	6.19	0.557	0.91	16.0	-24	None
	1355	2.15	7.5	300	10.25	6.21	0.556	0.54	12.4	-28	None
	1400	2.15	9	300	10.20	6.21	0.557	0.51	8.2	-31	None
	1405	2.15	10.5	300	10.23	6.23	0.557	0.48	9.8	-33	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~ BP	poly 1 Liter	None	N	-	Anions/Alkalinity
1	~~500 mL~~ BP	~~amber~~ BP poly 250mL	H2SO4		-	~~TKN~~/Ammonia/COD
2	~~500 mL~~ BP	amber 40mL	~~H2SO4~~ HCl		-	3 ~~COD~~/TOC
BP ~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1L~~ BP	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OPO4
Sample ID: LF1MW-6-1222				Sample Time: 1410		
1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl		-	VOCs
1	250mL	Poly	HNO3		-	Hardness

Note: well not sampled in 2020

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1P-2	Date: 12/6/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 4" PVC SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 5.10
	Total Well Depth (ft) (C): 14.52	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 45°F	Well Condition: Good	Comments: Tubing in well

CASING INFO											
Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/6/22	1215	5.32	1	200	10.69	5.58	0.997	20.58	210	19	None
	1220	5.35	2	200	10.99	5.64	0.992	2.01	71.0	3	None
	1225	5.35	3	200	11.11	5.66	0.985	1.12	40.2	-15	None
	1230	5.35	4	200	11.15	5.66	0.984	0.83	31.9	-20	None
	1235	5.35	5	200	11.18	5.67	0.983	0.76	30.1	-23	None
	1240	5.35	6	200	11.21	5.67	0.981	0.73	27.2	-25	None
↓	1245	5.35	7	200	11.17	5.67	0.981	0.71	29.3	-27	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia COD
1	~~500 mL~~	amber 40mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None	↓	-	~~Color~~ OPO4
Sample ID: LF1P-2-1222				Sample Time: 1250		
1	~~250~~mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl	↓	-	VOCs
1	250mL	poly	HNO3		-	Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-13	Date: 12/6/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 2" Metal SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 6.60
	Total Well Depth (ft) (C): ~~21~~ 21.03	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 45°F	Well Condition: Good	Comments: Field Dup

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/6/22	0940	6.72	1.5	300	10.52	6.27	0.514	4.05	306	23	None
	0945	6.72	3	300	11.09	6.01	0.515	1.09	210	-1	None
	0950	6.73	4.5	300	11.25	5.90	0.515	0.89	150	-29	None
	0955	6.73	6	300	11.30	5.82	0.516	0.75	117	-39	None
	1000	6.74	7.5	300	11.36	5.75	0.516	0.67	100	-59	None
	1005	6.75	9	300	11.35	5.72	0.516	0.64	106	-62	None
	1010	6.75	10.5	300	11.38	5.70	0.516	0.64	108	-64	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
2	~~250 mL~~	poly 1L	None	N	-	Anions/Alkalinity
~~2~~	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia/COD
~~4~~	~~500 mL~~	amber 40mL	~~H2SO4~~	HCl	-	~~COD~~/TOC
~~8~~ 22	1 L	poly	None		-	BOD
2	250 mL	amber	H2SO4		-	Phenolics
2	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
2	250 mL	poly	None		-	~~Color~~ OPO4
Sample ID: LF1MW-13-1222 and FD				Sample Time: 1015		
LF1MW-13-1222-a 2	500 mL	poly	HNO3	N	-	Boron/~~Hardness~~
6	40 mL	glass vial	HCl		-	VOCs
2	250 mL	poly	HNO3		-	Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-103	Date: 12/7/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 2" Metal SV	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 8.50
	Total Well Depth (ft) (C): 35.30	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 50°F	Well Condition: Good	Comments: ~~Field Dup~~ BP None

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ BP Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/7/22	1040	8.50	1.5	300	12.14	7.45	0.604	7.01	6.4	-140	None
	1045	8.50	3	300	12.25	8.59	0.614	6.23	5.1	-100	None
	1050	8.50	4.5	300	12.29	9.02	0.615	5.55	3.0	-80	None
	1055	8.50	6	300	12.30	9.17	0.616	5.21	1.4	-74	None
	1100	8.50	7.5	300	12.31	9.21	0.616	5.17	0.8	-68	None
	1105	8.50	9	300	12.32	9.26	0.616	5.15	0.4	-62	None
	1110	8.50	10.5	300	12.32	9.26	0.616	5.13	0.5	-60	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia/COD
~~2~~	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
BP ~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OP04
Sample ID: LF1MW-103-1222 ~~LF1MW-103-1222-D~~ BP					Sample Time: 1015	

2nd Field Duplicate not needed since only 10 samples transported (could not access 2 well(s))

1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
1	250mL	poly	HNO3	N	-	Hardness

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: MWSAR03	Date: 12/7/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 2" PVC SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 20.11
	Total Well Depth (ft) (C): 24.88	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: light Rain 50°F	Well Condition: Good	Comments: Bladder pump in well

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/7/22	0845	19.87	1	200	12.05	6.41	0.451	11.00	102	64	None
	0850	19.92	2	200	12.31	6.11	0.400	1.96	50.9	21	None
	0855	19.94	3	200	12.37	5.81	0.331	1.02	25.1	1	None
	0900	19.97	4	200	12.40	5.60	0.321	0.95	17.8	-5	None
	0905	19.98	5	200	12.42	5.52	0.313	0.90	15.9	-12	None
	0910	20.00	6	200	12.47	5.51	0.310	0.86	13.1	-15	None
↓	0915	20.01	7	200	12.45	5.48	~~0.317~~ BP 0.308	0.87	14.5	-17	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers	Volume	Type	Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 Liter	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia (COD
2	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OPO4

Sample ID: MWSAR03-1222 — Sample Time: 0920

1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl	↓	-	VOCs
1	250	Poly	HNO3		-	Hardness

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1P-5	Date: 12/7/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 4" PVC SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 4.83
	Total Well Depth (ft) (C): 20.68	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 50°F	Well Condition: Good	Comments: bladder pump material in well

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/7/22	1425	20.71	1	200	11.92	6.36	0.805	15.71	110	18	None
	1430	20.71	2	200	11.85	6.21	0.801	2.42	56	-1	None
	1435	20.71	3	200	11.81	6.17	0.799	1.99	31	-25	None
	1440	20.71	4	200	11.81	6.16	0.798	1.87	20	-47	None
	1445	20.71	5	200	11.80	6.15	0.799	1.78	14.3	-59	None
	1450	20.71	6	200	11.80	6.14	0.800	1.79	11.0	-61	None
	1455	20.71	7	200	11.79	6.14	0.799	1.81	9.2	-63	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia/COD
2	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OPO4

Sample ID: LF1P-5-1222 — Sample Time: 1500

1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
1	250mL	poly	HNO3	N	-	Hardness

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-11	Date: 12/7/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): 2" ~~PVC~~ SS Metal	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B): 2.72
	Total Well Depth (ft) (C): 15.29	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: Rain 50°F	Well Condition: Good	Comments: None

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed ~~(Gals)~~ Liters	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/7/22	1255	15.29	1.5	300	12.04	8.35	0.772	17.04	41.9	-5	None
	1300	15.29	3	300	~~8.35~~ 11.70	8.00	0.780	3.02	40.5	-29	None
	1305	15.31	4.5	300	~~5~~ 11.61	7.01	0.786	1.11	59.6	-44	None
	1310	15.31	6	300	~~0.772~~ 11.51	6.66	0.788	0.90	67.8	-58	None
	1315	15.31	7.5	300	11.55	6.40	0.788	0.80	63.2	-61	None
	1320	15.31	9	300	11.50	6.32	0.789	0.76	64.6	-65	None
	1325	15.31	10.5	300	11.51	6.30	0.788	0.73	66.0	-67	None

Colorimeter Results

Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia/COD
~~2~~ 1	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None		-	~~Color~~ OPO4

Sample ID: LF1MW-11-1222 — Sample Time: 1330

1	~~250~~ mL	poly	HNO3	-	Boron/~~Hardness~~
1	250mL	poly	HNO3	-	Hardness

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GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-5	Date: 12/6/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in): SU	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B):
	Total Well Depth (ft) (C):	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather: 45°F Rain	Well Condition: Need bolt cutters for lock	Comments: Could not open lock

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
12/6/22	1530		Could not open lock w/ key. WD40 did not help.								

Colorimeter Results				
Time	Analyte	Dilution	Result	Units

Conversions	Stabilization Criteria			
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%
	Cond	+/- 10%	ORP	+/- 10

No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia (COD)
~~1~~ 2	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
~~2~~ 1	1 L	poly	None		-	BOD
1	250 mL	amber	H2SO4		-	Phenolics
1	~~1 L~~	poly 250mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1	250 mL	poly	None	↓	-	~~Color~~ OPO4
Sample ID: LF1MW-5-1222				Sample Time:		
1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl	↓	-	VOCs
1	250mL	poly	HNO3		-	Hardness

bhate

GROUNDWATER SAMPLE COLLECTION FORM

LOCATION	Site: Landfill-1	Location ID: LF1MW-1R	Date: 12/7/22
	Project Name: Former Griffiss AFB	Project No./Phase: -	Recorded By: B. Pollard
EQUIPMENT	Pump Type/ID#: Geotech Geopump 2	Water Quality Meter/ID#: Horiba U-52	PID Type/ID#: -
	Water Level Indicator Type/ID#: Solinst	Other Equipment/ID#: -	Decon Method: Water, Simple Green
	Tubing Type/Diameter (in): -	Other Equipment/ID#: -	PPE: Level D
WELL INFO	Casing Type / ID (in):	Unit Casing Volume (gal/lin ft) (A): -	Initial Depth to Water (ft) (B):
	Total Well Depth (ft) (C):	Water Column Thickness (ft) (C-B):	Well Volume (gal) (A*(C-B)): -
	Ambient PID (ppm): -	Well Mouth PID (ppm): -	System Volume (gal): -
	Weather:	Well Condition:	Comments: Could not find well

CASING INFO	Casing ID (in)	0.5	0.75	1.0	1.5	2.0	3.0	4.0	5.0	6.0	8.0
	Unit Casing Volume (gal/lin ft)	0.016	0.020	0.043	0.103	0.160	0.378	0.652	1.03	1.48	2.57

DATE	TIME (24 Hr)	Water Level (BTOC)	Volume Removed (Gals)	Pumping Rate (ml/min)	Temp (C)	pH	Cond (mS/cm)	DO (mg/l)	Turb (NTU)	ORP (mV)	Remarks (odor, clarity, etc.)
			Could not find well								

Colorimeter Results					No. Containers/Volume/Type			Preserv.	Filter (Y/N)	Method	Parameter(s)
Time	Analyte	Dilution	Result	Units	1	~~250 mL~~	poly 1 L	None	N	-	Anions/Alkalinity
					1	~~500 mL~~	~~amber~~ poly 250mL	H2SO4		-	~~TKN~~/Ammonia COD
					2	~~500 mL~~	amber 40 mL	~~H2SO4~~ HCl		-	~~COD~~/TOC
					8 ~~2~~ 1	1 L	poly	None		-	BOD
Conversions	Stabilization Criteria				1	250 mL	amber	H2SO4		-	Phenolics
1 L = 0.26 gals	Temp	+/- 10%	DO	+/- 10%	1	~~1 L~~	poly 250 mL	~~None~~ H2SO4		-	~~TDS~~ TKN
1 gal = 3.79 L	pH	+/- 0.1	Turb	+/- 10%	1	250 mL	poly	None		-	~~Color~~ OPO4
	Cond	+/- 10%	ORP	+/- 10	Sample ID: LF1MW-1R-1222				Sample Time:		

Note: well not sampled in 2020

1	~~250~~ mL	poly	HNO3	N	-	Boron/~~Hardness~~
3	40 mL	glass vial	HCl		-	VOCs
1	250mL	poly	HNO3		-	Hardness

ATTACHMENT 5 – ANALYTICAL REPORTS AND DATA VALIDATION REPORTS

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The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Bhate Environmental

Griffiss AFB; Rome, NY

GRFIS-BECOS

SGS Job Number: FC1020

Sampling Date: 12/05/22



Report to:

Bhate Environmental
1608 13th Ave S Suite 300
Birmingham, AL 35205
dbadio@bhate.com

ATTN: David Badio

Total number of pages in report: **1011**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Ariel Hartney 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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SGS North America Inc.

Sample Summary

Bhate Environmental

Job No: FC1020

Griffiss AFB; Rome, NY
Project No: GRFIS-BECOS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC1020-1	12/05/22	16:30	BP	12/06/22	AQ	Surface Water	LF1SW-1-1222
FC1020-2	12/05/22	15:30	BP	12/06/22	AQ	Surface Water	LF1SW-3-1222
FC1020-3	12/05/22	16:00	BP	12/06/22	AQ	Surface Water	LF1SW-25MC-1222
FC1020-4	12/05/22	07:30	BP	12/06/22	AQ	Surface Water	LF1-TB-120522

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FC1020

Site: Griffiss AFB; Rome, NY **Report Date** 12/22/2022 10:26:16

On 12/06/2022, 4 Samples were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 2.4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC1020 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1P3648

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1293-8MS, FC1293-8MSD were used as the QC samples indicated.
- FC1020-4: Sample vial(s) contained significant headspace.

Matrix: AQ **Batch ID:** V5E1624

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- FC1020-3: Sample vial(s) contained bubbles greater than 6mm.
- V5E1624-BS: No MSD available for this run.

Matrix: AQ **Batch ID:** VO2867

- All samples were analyzed within the recommended method holding time.
- Samples FC1020-3MS, FC1020-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- RPD for MSD for Methyl Bromide is outside control limits for sample FC1020-3MSD. Probable cause is due to sample non-homogeneity.
- FC1020-3: RR@1x, DCFM ICV low DoD
- FC1020-3 for Dichlorodifluoromethane: Associated ICV outside DOD QSM control limits low.

Matrix: AQ **Batch ID:** VY2765

- All samples were analyzed within the recommended method holding time.
- Samples FC1005-3MS, FC1005-3MSD were used as the QC samples indicated.
- All method blanks for this batch meet method specific criteria.
- Matrix Spike Recoveries for 1,2,4-Trimethylbenzene, Methyl Bromide are outside control limits. Probable cause is due to matrix interference.
- Matrix Spike Duplicate Recovery for Methyl Bromide is outside control limits. Probable cause is due to matrix interference.
- FC1020-1 and FC1020-2 for Chloroethane: Associated CCV outside of DOD QSM control limits high, sample is ND.
- FC1020-2: Sample was treated with an anti-foaming agent.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP41622

- All samples were digested within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1201-4FDUP, FC1201-4FMS, FC1201-4FMSD, FC1201-4FPS, FC1201-4FSDL were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP38275

- All samples were prepped within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1015-1MS, FC1015-1MSD were used as the QC samples for Bromide, Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Bromide, Fluoride.
- Matrix Spike Recovery for Fluoride is outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP38273

- All samples were prepped within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1014-4FMSD, FC1014-4FMS were used as the QC samples for Phosphate, Ortho.
- Matrix Spike Recovery for Phosphate, Ortho is outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method SM19 2340B

Matrix: AQ **Batch ID:** R58643

- FC1020-1 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58644

- FC1020-2 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58645

- FC1020-3 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

General Chemistry By Method SM2120 B-11

Matrix: AQ **Batch ID:** GN92938

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample FC1020-1DUP was used as the QC samples for Color, Apparent.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN92993

- Sample FC1070-1DUP was used as the QC samples for Alkalinity, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN92953

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample FC1015-1DUP was used as the QC samples for Solids, Total Dissolved.

General Chemistry By Method SM5210 B-11

Matrix: AQ **Batch ID:** GP38277

- All samples were prepped within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample FC1014-1DUP was used as the QC samples for BOD, 5 Day.
- RPD for Duplicate for BOD, 5 Day is outside control limits for sample GP38277-D1. RPD acceptable due to low duplicate and sample concentrations.
- FC1020-1 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria
- FC1020-2 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria
- FC1020-3 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria

General Chemistry By Method SM5220 C-11

Matrix: AQ **Batch ID:** GP38274

- All samples were prepped within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1020-1MS, FC1020-1MSD were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ **Batch ID:** GP38294

- All samples were prepped within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Samples FC1123-1MS, FC1123-1MSD were used as the QC samples for Total Organic Carbon.
- FC1020-1 for Total Organic Carbon: Sample was not preserved to a pH < 2.
- FC1020-3 for Total Organic Carbon: Sample was not preserved to a pH < 2.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Gabriela Benitez, QA Coordinator *(Signature on File)*

Summary of Hits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FC1020-1	**LF1SW-1-1222**					
Chlorobenzene		0.38 J	1.0	0.50	ug/l	SW846 8260D
Calcium		131000	1000	100	ug/l	SW846 6010D
Magnesium		9990	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		366	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.13 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		7.5 J	20	10	mg/l	SM5220 C-11
Chloride		2.9	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		60	10	10	CU	SM2120 B-11
Fluoride		0.11 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		368	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.052 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		442	50	50	mg/l	SM2540 C-11
Sulfate		2.6	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon [b]		2.1	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1020-2	**LF1SW-3-1222**					
Calcium		19600	1000	100	ug/l	SW846 6010D
Magnesium		1830 J	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		57.0	5.0	2.5	mg/l	SM2320 B-11
Chemical Oxygen Demand		15.0 J	20	10	mg/l	SM5220 C-11
Chloride		4.8	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		70	10	10	CU	SM2120 B-11
Fluoride		0.10 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		56.5	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.098 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		140	50	50	mg/l	SM2540 C-11
Sulfate		3.8	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		4.9	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1020-3	**LF1SW-25MC-1222**					
Chlorobenzene [c]		0.48 J	1.0	0.50	ug/l	SW846 8260D
1,4-Dichlorobenzene [c]		0.94 J	1.0	0.50	ug/l	SW846 8260D
Calcium		128000	1000	100	ug/l	SW846 6010D
Magnesium		9340	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		335	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.19 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		25.0	20	10	mg/l	SM5220 C-11
Chloride		9.3	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		45	5	5	CU	SM2120 B-11
Fluoride		0.12 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		358	23	0.66	mg/l	SM19 2340B

Summary of Hits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Nitrogen, Nitrate		0.070 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Solids, Total Dissolved		474	50	50	mg/l	SM2540 C-11
Sulfate		0.87 J	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon [b]		3.2	2.0	1.0	mg/l	SM5310 B-11/SW9060A

FC1020-4 **LF1-TB-120522**

No hits reported in this sample.

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Sample was not preserved to a pH < 2.
(c) RR@1x, DCFM ICV low DoD

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID:	LF1SW-1-1222		
Lab Sample ID:	FC1020-1	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	Y66626.D	1	12/09/22 18:05	JL	n/a	n/a	VY2765
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.38	1.0	0.50	0.20	ug/l	J
75-00-3	Chloroethane [a]	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1SW-1-1222
Lab Sample ID: FC1020-1
Matrix: AQ - Surface Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		83-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1SW-1-1222		
Lab Sample ID:	FC1020-1	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	105%		83-118%

(a) Associated CCV outside of DOD QSM control limits high, sample is ND.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1SW-1-1222
Lab Sample ID: FC1020-1
Matrix: AQ - Surface Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	131000	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	9990	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41622

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	LF1SW-1-1222		
Lab Sample ID:	FC1020-1	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
		Percent Solids:	n/a
Project:	Griffiss AFB; Rome, NY		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	366	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.13 J	0.50	0.25	0.12	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	7.5 J	20	10	5.3	mg/l	1	12/08/22 10:00	FN	SM5220 C-11
Chloride	2.9	2.0	1.0	0.80	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Color, Apparent	60	10	10	10	CU	2	12/06/22 11:45	JB	SM2120 B-11
Fluoride	0.11 J	0.20	0.10	0.060	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	368	23	0.66	0.27	mg/l	1	12/20/22 17:26	LM	SM19 2340B
Nitrogen, Nitrate	0.052 J	0.10	0.050	0.040	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.040 U	0.10	0.040	0.019	mg/l	1	12/06/22 14:45	ST	EPA 365.3
Solids, Total Dissolved	442	50	50	50	mg/l	1	12/07/22 16:26	BW	SM2540 C-11
Sulfate	2.6	2.0	1.0	0.60	mg/l	1	12/06/22 17:29	JB	EPA 300/SW846 9056A
Total Organic Carbon [d]	2.1	2.0	1.0	0.54	mg/l	1	12/12/22 20:31	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(d) Sample was not preserved to a pH < 2.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	LF1SW-3-1222		
Lab Sample ID:	FC1020-2	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	Y66627.D	1	12/09/22 18:30	JL	n/a	n/a	VY2765
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane [b]	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1SW-3-1222
Lab Sample ID: FC1020-2
Matrix: AQ - Surface Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1SW-3-1222		
Lab Sample ID:	FC1020-2	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Sample was treated with an anti-foaming agent.
(b) Associated CCV outside of DOD QSM control limits high, sample is ND.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1SW-3-1222
Lab Sample ID: FC1020-2
Matrix: AQ - Surface Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	19600	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	1830 J	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41622

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1SW-3-1222
Lab Sample ID: FC1020-2
Matrix: AQ - Surface Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	57.0	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.25 U	0.50	0.25	0.12	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	15.0 J	20	10	5.3	mg/l	1	12/08/22 10:00	FN	SM5220 C-11
Chloride	4.8	2.0	1.0	0.80	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Color, Apparent	70	10	10	10	CU	2	12/06/22 11:45	JB	SM2120 B-11
Fluoride	0.10 J	0.20	0.10	0.060	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	56.5	23	0.66	0.27	mg/l	1	12/20/22 17:31	LM	SM19 2340B
Nitrogen, Nitrate	0.098 J	0.10	0.050	0.040	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.040 U	0.10	0.040	0.019	mg/l	1	12/06/22 14:45	ST	EPA 365.3
Solids, Total Dissolved	140	50	50	50	mg/l	1	12/07/22 16:26	BW	SM2540 C-11
Sulfate	3.8	2.0	1.0	0.60	mg/l	1	12/06/22 17:50	JB	EPA 300/SW846 9056A
Total Organic Carbon	4.9	2.0	1.0	0.54	mg/l	1	12/12/22 20:53	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	LF1SW-25MC-1222		
Lab Sample ID:	FC1020-3	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	O72928.D	1	12/09/22 14:30	AL	n/a	n/a	VO2867
Run #2 [b]	5E36136.D	1	12/14/22 17:28	CF	n/a	n/a	V5E1624

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.48	1.0	0.50	0.20	ug/l	J
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane [c]	1.0 U	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.94	1.0	0.50	0.26	ug/l	J
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1SW-25MC-1222		
Lab Sample ID:	FC1020-3	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	102%	83-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1SW-25MC-1222		
Lab Sample ID:	FC1020-3	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	100%	79-125%
2037-26-5	Toluene-D8	109%	100%	85-112%
460-00-4	4-Bromofluorobenzene	100%	103%	83-118%

(a) RR@1x, DCFM ICV low DoD
(b) Sample vial(s) contained bubbles greater than 6mm.
(c) Associated ICV outside DOD QSM control limits low.

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1SW-25MC-1222
Lab Sample ID: FC1020-3
Matrix: AQ - Surface Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	128000	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	9340	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41622

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1SW-25MC-1222
Lab Sample ID: FC1020-3
Matrix: AQ - Surface Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	335	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.19 J	0.50	0.25	0.12	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	25.0	20	10	5.3	mg/l	1	12/08/22 10:00	FN	SM5220 C-11
Chloride	9.3	2.0	1.0	0.80	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Color, Apparent	45	5	5	5	CU	1	12/06/22 11:45	JB	SM2120 B-11
Fluoride	0.12 J	0.20	0.10	0.060	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	358	23	0.66	0.27	mg/l	1	12/20/22 17:36	LM	SM19 2340B
Nitrogen, Nitrate	0.070 J	0.10	0.050	0.040	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.040 U	0.10	0.040	0.019	mg/l	1	12/06/22 14:45	ST	EPA 365.3
Solids, Total Dissolved	474	50	50	50	mg/l	1	12/07/22 16:26	BW	SM2540 C-11
Sulfate	0.87 J	2.0	1.0	0.60	mg/l	1	12/06/22 18:11	JB	EPA 300/SW846 9056A
Total Organic Carbon [d]	3.2	2.0	1.0	0.54	mg/l	1	12/12/22 21:16	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(d) Sample was not preserved to a pH < 2.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID: LF1-TB-120522
Lab Sample ID: FC1020-4
Matrix: AQ - Surface Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/05/22
Date Received: 12/06/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72927.D	1	12/09/22 14:05	AL	n/a	n/a	VO2867
Run #2 [a]	1P96418.D	1	12/16/22 11:16	CF	n/a	n/a	V1P3648

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [b]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1-TB-120522		
Lab Sample ID:	FC1020-4	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	106%	83-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1-TB-120522		
Lab Sample ID:	FC1020-4	**Date Sampled:**	12/05/22
Matrix:	AQ - Surface Water	**Date Received:**	12/06/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	99%	109%	79-125%
2037-26-5	Toluene-D8	108%	93%	85-112%
460-00-4	4-Bromofluorobenzene	103%	102%	83-118%

(a) Sample vial(s) contained significant headspace.
(b) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Parameter Certification Exceptions

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
BOD, 5 Day		**SM5210 B-11**	AQ	SGS is not certified for this parameter.
Chemical Oxygen Demand		**SM5220 C-11**	AQ	SGS is not certified for this parameter.
Color, Apparent		**SM2120 B-11**	AQ	SGS is not certified for this parameter.

FC1020

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

Custody Seal #: 8819

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # SKIFF #

Client / Reporting Information

Company Name: Bhate
Address: 445 Union Blvd, Ste 129 Lakewood CO 80228
City: Lakewood State: CO Zip: 80228
Project Contact: Frank Gardner Email:
Phone #: 720-463-3903
Sampler(s) Name(s) (Printed)
Sampler 1: B Pollard Sampler 2:

Project Information

Project Name: Former Griffiss AFB NE BECOS
Street ← SAME →
City State
Project # GRFIS-BECOS
Fax #
Client Purchase Order #

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NAOH+ZNAC	DI WATER	MEOH	AMN / COD	B	BOD	COD	PN	SO4, NO3, NO2, CHL, PO4, TDS, CO	AIK, F	THM	TOC	xHRDCALC	VOCs (V8260)	LAB USE ONLY
1	LF1SW-1-1222	12/5/22	1630	BP	SW	13	0	3	5	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	X	X	
2	LF1SW-3-1222	12/5/22	1530	BP	SW	13	0	3	5	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	X	X	
3	LF1SW-25MC-1222	12/5/22	1600	BP	SW	13	0	3	5	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	X	X	
4	LF1-TB-120522	12/5/22	0730	BP	LIQ	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT SM
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1 B Pollard/Bhate (FCC)	12/5/22 1800	2 FedEx	3		4 12/6/22 920
Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
5		6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.2 CFM

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

5.2 5

FC1020: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC1020 **Client:** BHATE **Project:** FORMER GRIFFIS AFB NE BECOS

Date / Time Received: 12/6/2022 9:30:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 5700 7357 2204

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (2.2);

Cooler Temps (Corrected) °C: Cooler 1: (2.4);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☑	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SAMUELM Date: 12/6/2022 9:30:00 AM Reviewer: _____ Date: _____

FC1020: Chain of Custody
Page 2 of 2

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V1P3648	SW846 8260D						
V1P3648-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	103	%	32-152
V1P3648-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	110	%	80-119
V1P3648-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	112	%	81-118
V1P3648-BS	2037-26-5	Toluene-D8	BSP	SURR	97	%	89-112
V1P3648-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	105	%	85-114
FC1293-8MS*	75-71-8	Dichlorodifluoromethane	MS	REC	122	%	32-152
FC1293-8MS*	1868-53-7	Dibromofluoromethane	MS	SURR	113	%	80-119
FC1293-8MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	126	%	81-118
FC1293-8MS*	2037-26-5	Toluene-D8	MS	SURR	94	%	89-112
FC1293-8MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	99	%	85-114
FC1293-8MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	119	%	32-152
FC1293-8MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	3	%	20
FC1293-8MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	113	%	80-119
FC1293-8MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	121	%	81-118
FC1293-8MSD*	2037-26-5	Toluene-D8	MSD	SURR	95	%	89-112
FC1293-8MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	99	%	85-114
V1P3648-MB	1868-53-7	Dibromofluoromethane	MB	SURR	106	%	80-119
V1P3648-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	109	%	81-118
V1P3648-MB	2037-26-5	Toluene-D8	MB	SURR	94	%	89-112
V1P3648-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	85-114
FC1020-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	106	%	80-119
FC1020-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	109	%	81-118
FC1020-4	2037-26-5	Toluene-D8	SAMP	SURR	93	%	89-112
FC1020-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
V5E1624	SW846 8260D						
V5E1624-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	103	%	80-119
V5E1624-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	104	%	81-118
V5E1624-BS	2037-26-5	Toluene-D8	BSP	SURR	97	%	89-112
V5E1624-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	99	%	85-114
FC1262-2MS*	1868-53-7	Dibromofluoromethane	MS	SURR	101	%	80-119
FC1262-2MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	99	%	81-118
FC1262-2MS*	2037-26-5	Toluene-D8	MS	SURR	95	%	89-112
FC1262-2MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	99	%	85-114
V5E1624-MB	1868-53-7	Dibromofluoromethane	MB	SURR	101	%	80-119
V5E1624-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	100	%	81-118
V5E1624-MB	2037-26-5	Toluene-D8	MB	SURR	98	%	89-112
V5E1624-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	85-114
FC1020-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	102	%	80-119
FC1020-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	100	%	81-118
FC1020-3	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	103	%	85-114
VO2867	SW846 8260D						
VO2867-BS	67-64-1	Acetone	BSP	REC	87	%	39-160
VO2867-BS	71-43-2	Benzene	BSP	REC	86	%	79-120
VO2867-BS	108-86-1	Bromobenzene	BSP	REC	96	%	80-120
VO2867-BS	74-97-5	Bromochloromethane	BSP	REC	92	%	78-123
VO2867-BS	75-27-4	Bromodichloromethane	BSP	REC	91	%	79-125
VO2867-BS	75-25-2	Bromoform	BSP	REC	109	%	66-130
VO2867-BS	78-93-3	2-Butanone (MEK)	BSP	REC	94	%	56-143
VO2867-BS	104-51-8	n-Butylbenzene	BSP	REC	107	%	75-128
VO2867-BS	135-98-8	sec-Butylbenzene	BSP	REC	115	%	77-126
VO2867-BS	98-06-6	tert-Butylbenzene	BSP	REC	105	%	78-124
VO2867-BS	75-15-0	Carbon Disulfide	BSP	REC	92	%	64-133
VO2867-BS	56-23-5	Carbon Tetrachloride	BSP	REC	97	%	72-136
VO2867-BS	108-90-7	Chlorobenzene	BSP	REC	98	%	82-118
VO2867-BS	75-00-3	Chloroethane	BSP	REC	87	%	60-138
VO2867-BS	67-66-3	Chloroform	BSP	REC	85	%	79-124
VO2867-BS	95-49-8	o-Chlorotoluene	BSP	REC	105	%	79-122
VO2867-BS	106-43-4	p-Chlorotoluene	BSP	REC	105	%	78-122
VO2867-BS	124-48-1	Dibromochloromethane	BSP	REC	103	%	74-126
VO2867-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	106	%	62-128
VO2867-BS	106-93-4	1,2-Dibromoethane	BSP	REC	98	%	77-121
VO2867-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	72	%	32-152
VO2867-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	101	%	80-119
VO2867-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	104	%	80-119
VO2867-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	102	%	79-118
VO2867-BS	75-34-3	1,1-Dichloroethane	BSP	REC	88	%	77-125
VO2867-BS	107-06-2	1,2-Dichloroethane	BSP	REC	84	%	73-128
VO2867-BS	75-35-4	1,1-Dichloroethylene	BSP	REC	85	%	71-131
VO2867-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	87	%	78-123
VO2867-BS	156-60-5	trans-1,2-Dichloroethylene	BSP	REC	85	%	75-124
VO2867-BS	540-59-0	1,2-Dichloroethene (total)	BSP	REC	86	%	79-121
VO2867-BS	78-87-5	1,2-Dichloropropane	BSP	REC	82	%	78-122
VO2867-BS	142-28-9	1,3-Dichloropropane	BSP	REC	90	%	80-119
VO2867-BS	594-20-7	2,2-Dichloropropane	BSP	REC	86	%	60-139
VO2867-BS	563-58-6	1,1-Dichloropropene	BSP	REC	87	%	79-125
VO2867-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	88	%	75-124
VO2867-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	108	%	73-127
VO2867-BS	100-41-4	Ethylbenzene	BSP	REC	98	%	79-121
VO2867-BS	87-68-3	Hexachlorobutadiene	BSP	REC	104	%	66-134
VO2867-BS	591-78-6	2-Hexanone	BSP	REC	105	%	57-139
VO2867-BS	98-82-8	Isopropylbenzene	BSP	REC	102	%	72-131
VO2867-BS	99-87-6	p-Isopropyltoluene	BSP	REC	112	%	77-127

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VO2867-BS	74-83-9	Methyl Bromide	BSP	REC	89	%	53-141
VO2867-BS	74-87-3	Methyl Chloride	BSP	REC	80	%	50-139
VO2867-BS	74-95-3	Methylene Bromide	BSP	REC	83	%	79-123
VO2867-BS	75-09-2	Methylene Chloride	BSP	REC	82	%	74-124
VO2867-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	103	%	67-130
VO2867-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	84	%	71-124
VO2867-BS	91-20-3	Naphthalene	BSP	REC	102	%	61-128
VO2867-BS	103-65-1	n-Propylbenzene	BSP	REC	108	%	76-126
VO2867-BS	100-42-5	Styrene	BSP	REC	102	%	78-123
VO2867-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	108	%	78-124
VO2867-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	105	%	71-121
VO2867-BS	127-18-4	Tetrachloroethylene	BSP	REC	99	%	74-129
VO2867-BS	108-88-3	Toluene	BSP	REC	97	%	80-121
VO2867-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	99	%	69-129
VO2867-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	101	%	69-130
VO2867-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	93	%	74-131
VO2867-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	98	%	80-119
VO2867-BS	79-01-6	Trichloroethylene	BSP	REC	87	%	79-123
VO2867-BS	75-69-4	Trichlorofluoromethane	BSP	REC	90	%	65-141
VO2867-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	97	%	73-122
VO2867-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	106	%	76-124
VO2867-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	103	%	75-124
VO2867-BS	108-05-4	Vinyl Acetate	BSP	REC	107	%	54-146
VO2867-BS	75-01-4	Vinyl Chloride	BSP	REC	91	%	58-137
VO2867-BS		m,p-Xylene	BSP	REC	99	%	80-121
VO2867-BS	95-47-6	o-Xylene	BSP	REC	100	%	78-122
VO2867-BS	1330-20-7	Xylene (total)	BSP	REC	99	%	79-121
VO2867-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	97	%	80-119
VO2867-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	101	%	81-118
VO2867-BS	2037-26-5	Toluene-D8	BSP	SURR	106	%	89-112
VO2867-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	99	%	85-114
FC1020-3MS	67-64-1	Acetone	MS	REC	84	%	39-160
FC1020-3MS	71-43-2	Benzene	MS	REC	85	%	79-120
FC1020-3MS	108-86-1	Bromobenzene	MS	REC	91	%	80-120
FC1020-3MS	74-97-5	Bromochloromethane	MS	REC	87	%	78-123
FC1020-3MS	75-27-4	Bromodichloromethane	MS	REC	85	%	79-125
FC1020-3MS	75-25-2	Bromoform	MS	REC	90	%	66-130
FC1020-3MS	78-93-3	2-Butanone (MEK)	MS	REC	87	%	56-143
FC1020-3MS	104-51-8	n-Butylbenzene	MS	REC	95	%	75-128
FC1020-3MS	135-98-8	sec-Butylbenzene	MS	REC	106	%	77-126
FC1020-3MS	98-06-6	tert-Butylbenzene	MS	REC	98	%	78-124
FC1020-3MS	75-15-0	Carbon Disulfide	MS	REC	88	%	64-133
FC1020-3MS	56-23-5	Carbon Tetrachloride	MS	REC	89	%	72-136
FC1020-3MS	108-90-7	Chlorobenzene	MS	REC	94	%	82-118
FC1020-3MS	75-00-3	Chloroethane	MS	REC	85	%	60-138

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MS	67-66-3	Chloroform	MS	REC	84	%	79-124
FC1020-3MS	95-49-8	o-Chlorotoluene	MS	REC	98	%	79-122
FC1020-3MS	106-43-4	p-Chlorotoluene	MS	REC	98	%	78-122
FC1020-3MS	124-48-1	Dibromochloromethane	MS	REC	93	%	74-126
FC1020-3MS	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	90	%	62-128
FC1020-3MS	106-93-4	1,2-Dibromoethane	MS	REC	91	%	77-121
FC1020-3MS	75-71-8	Dichlorodifluoromethane	MS	REC	68	%	32-152
FC1020-3MS	95-50-1	1,2-Dichlorobenzene	MS	REC	96	%	80-119
FC1020-3MS	541-73-1	1,3-Dichlorobenzene	MS	REC	98	%	80-119
FC1020-3MS	106-46-7	1,4-Dichlorobenzene	MS	REC	95	%	79-118
FC1020-3MS	75-34-3	1,1-Dichloroethane	MS	REC	86	%	77-125
FC1020-3MS	107-06-2	1,2-Dichloroethane	MS	REC	80	%	73-128
FC1020-3MS	75-35-4	1,1-Dichloroethylene	MS	REC	82	%	71-131
FC1020-3MS	156-59-2	cis-1,2-Dichloroethylene	MS	REC	84	%	78-123
FC1020-3MS	156-60-5	trans-1,2-Dichloroethylene	MS	REC	82	%	75-124
FC1020-3MS	540-59-0	1,2-Dichloroethene (total)	MS	REC	83	%	79-121
FC1020-3MS	78-87-5	1,2-Dichloropropane	MS	REC	81	%	78-122
FC1020-3MS	142-28-9	1,3-Dichloropropane	MS	REC	84	%	80-119
FC1020-3MS	594-20-7	2,2-Dichloropropane	MS	REC	74	%	60-139
FC1020-3MS	563-58-6	1,1-Dichloropropene	MS	REC	84	%	79-125
FC1020-3MS	10061-01-5	cis-1,3-Dichloropropene	MS	REC	80	%	75-124
FC1020-3MS	10061-02-6	trans-1,3-Dichloropropene	MS	REC	96	%	73-127
FC1020-3MS	100-41-4	Ethylbenzene	MS	REC	94	%	79-121
FC1020-3MS	87-68-3	Hexachlorobutadiene	MS	REC	85	%	66-134
FC1020-3MS	591-78-6	2-Hexanone	MS	REC	92	%	57-139
FC1020-3MS	98-82-8	Isopropylbenzene	MS	REC	97	%	72-131
FC1020-3MS	99-87-6	p-Isopropyltoluene	MS	REC	102	%	77-127
FC1020-3MS	74-83-9	Methyl Bromide	MS	REC	68	%	53-141
FC1020-3MS	74-87-3	Methyl Chloride	MS	REC	78	%	50-139
FC1020-3MS	74-95-3	Methylene Bromide	MS	REC	81	%	79-123
FC1020-3MS	75-09-2	Methylene Chloride	MS	REC	84	%	74-124
FC1020-3MS	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	90	%	67-130
FC1020-3MS	1634-04-4	Methyl Tert Butyl Ether	MS	REC	79	%	71-124
FC1020-3MS	91-20-3	Naphthalene	MS	REC	89	%	61-128
FC1020-3MS	103-65-1	n-Propylbenzene	MS	REC	99	%	76-126
FC1020-3MS	100-42-5	Styrene	MS	REC	96	%	78-123
FC1020-3MS	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	98	%	78-124
FC1020-3MS	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	96	%	71-121
FC1020-3MS	127-18-4	Tetrachloroethylene	MS	REC	91	%	74-129
FC1020-3MS	108-88-3	Toluene	MS	REC	91	%	80-121
FC1020-3MS	87-61-6	1,2,3-Trichlorobenzene	MS	REC	86	%	69-129
FC1020-3MS	120-82-1	1,2,4-Trichlorobenzene	MS	REC	85	%	69-130
FC1020-3MS	71-55-6	1,1,1-Trichloroethane	MS	REC	87	%	74-131
FC1020-3MS	79-00-5	1,1,2-Trichloroethane	MS	REC	94	%	80-119
FC1020-3MS	79-01-6	Trichloroethylene	MS	REC	85	%	79-123

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MS	75-69-4	Trichlorofluoromethane	MS	REC	86	%	65-141
FC1020-3MS	96-18-4	1,2,3-Trichloropropane	MS	REC	87	%	73-122
FC1020-3MS	95-63-6	1,2,4-Trimethylbenzene	MS	REC	99	%	76-124
FC1020-3MS	108-67-8	1,3,5-Trimethylbenzene	MS	REC	97	%	75-124
FC1020-3MS	108-05-4	Vinyl Acetate	MS	REC	102	%	54-146
FC1020-3MS	75-01-4	Vinyl Chloride	MS	REC	90	%	58-137
FC1020-3MS		m,p-Xylene	MS	REC	94	%	80-121
FC1020-3MS	95-47-6	o-Xylene	MS	REC	94	%	78-122
FC1020-3MS	1330-20-7	Xylene (total)	MS	REC	94	%	79-121
FC1020-3MS	1868-53-7	Dibromofluoromethane	MS	SURR	96	%	80-119
FC1020-3MS	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	98	%	81-118
FC1020-3MS	2037-26-5	Toluene-D8	MS	SURR	102	%	89-112
FC1020-3MS	460-00-4	4-Bromofluorobenzene	MS	SURR	95	%	85-114
FC1020-3MSD	67-64-1	Acetone	MSD	REC	82	%	39-160
FC1020-3MSD	67-64-1	Acetone	MSD	RPD	2	%	20
FC1020-3MSD	71-43-2	Benzene	MSD	REC	86	%	79-120
FC1020-3MSD	71-43-2	Benzene	MSD	RPD	1	%	20
FC1020-3MSD	108-86-1	Bromobenzene	MSD	REC	95	%	80-120
FC1020-3MSD	108-86-1	Bromobenzene	MSD	RPD	4	%	20
FC1020-3MSD	74-97-5	Bromochloromethane	MSD	REC	90	%	78-123
FC1020-3MSD	74-97-5	Bromochloromethane	MSD	RPD	3	%	20
FC1020-3MSD	75-27-4	Bromodichloromethane	MSD	REC	88	%	79-125
FC1020-3MSD	75-27-4	Bromodichloromethane	MSD	RPD	4	%	20
FC1020-3MSD	75-25-2	Bromoform	MSD	REC	96	%	66-130
FC1020-3MSD	75-25-2	Bromoform	MSD	RPD	7	%	20
FC1020-3MSD	78-93-3	2-Butanone (MEK)	MSD	REC	87	%	56-143
FC1020-3MSD	78-93-3	2-Butanone (MEK)	MSD	RPD	0	%	20
FC1020-3MSD	104-51-8	n-Butylbenzene	MSD	REC	100	%	75-128
FC1020-3MSD	104-51-8	n-Butylbenzene	MSD	RPD	5	%	20
FC1020-3MSD	135-98-8	sec-Butylbenzene	MSD	REC	111	%	77-126
FC1020-3MSD	135-98-8	sec-Butylbenzene	MSD	RPD	4	%	20
FC1020-3MSD	98-06-6	tert-Butylbenzene	MSD	REC	103	%	78-124
FC1020-3MSD	98-06-6	tert-Butylbenzene	MSD	RPD	6	%	20
FC1020-3MSD	75-15-0	Carbon Disulfide	MSD	REC	91	%	64-133
FC1020-3MSD	75-15-0	Carbon Disulfide	MSD	RPD	4	%	20
FC1020-3MSD	56-23-5	Carbon Tetrachloride	MSD	REC	95	%	72-136
FC1020-3MSD	56-23-5	Carbon Tetrachloride	MSD	RPD	7	%	20
FC1020-3MSD	108-90-7	Chlorobenzene	MSD	REC	94	%	82-118
FC1020-3MSD	108-90-7	Chlorobenzene	MSD	RPD	0	%	20
FC1020-3MSD	75-00-3	Chloroethane	MSD	REC	97	%	60-138
FC1020-3MSD	75-00-3	Chloroethane	MSD	RPD	13	%	20
FC1020-3MSD	67-66-3	Chloroform	MSD	REC	85	%	79-124
FC1020-3MSD	67-66-3	Chloroform	MSD	RPD	1	%	20
FC1020-3MSD	95-49-8	o-Chlorotoluene	MSD	REC	103	%	79-122
FC1020-3MSD	95-49-8	o-Chlorotoluene	MSD	RPD	6	%	20

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD	106-43-4	p-Chlorotoluene	MSD	REC	103	%	78-122
FC1020-3MSD	106-43-4	p-Chlorotoluene	MSD	RPD	6	%	20
FC1020-3MSD	124-48-1	Dibromochloromethane	MSD	REC	94	%	74-126
FC1020-3MSD	124-48-1	Dibromochloromethane	MSD	RPD	2	%	20
FC1020-3MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	95	%	62-128
FC1020-3MSD	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	5	%	20
FC1020-3MSD	106-93-4	1,2-Dibromoethane	MSD	REC	92	%	77-121
FC1020-3MSD	106-93-4	1,2-Dibromoethane	MSD	RPD	1	%	20
FC1020-3MSD	75-71-8	Dichlorodifluoromethane	MSD	REC	76	%	32-152
FC1020-3MSD	75-71-8	Dichlorodifluoromethane	MSD	RPD	12	%	20
FC1020-3MSD	95-50-1	1,2-Dichlorobenzene	MSD	REC	100	%	80-119
FC1020-3MSD	95-50-1	1,2-Dichlorobenzene	MSD	RPD	4	%	20
FC1020-3MSD	541-73-1	1,3-Dichlorobenzene	MSD	REC	102	%	80-119
FC1020-3MSD	541-73-1	1,3-Dichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD	106-46-7	1,4-Dichlorobenzene	MSD	REC	100	%	79-118
FC1020-3MSD	106-46-7	1,4-Dichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD	75-34-3	1,1-Dichloroethane	MSD	REC	87	%	77-125
FC1020-3MSD	75-34-3	1,1-Dichloroethane	MSD	RPD	1	%	20
FC1020-3MSD	107-06-2	1,2-Dichloroethane	MSD	REC	81	%	73-128
FC1020-3MSD	107-06-2	1,2-Dichloroethane	MSD	RPD	1	%	20
FC1020-3MSD	75-35-4	1,1-Dichloroethylene	MSD	REC	83	%	71-131
FC1020-3MSD	75-35-4	1,1-Dichloroethylene	MSD	RPD	2	%	20
FC1020-3MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	87	%	78-123
FC1020-3MSD	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FC1020-3MSD	156-60-5	trans-1,2-Dichloroethylene	MSD	REC	82	%	75-124
FC1020-3MSD	156-60-5	trans-1,2-Dichloroethylene	MSD	RPD	1	%	20
FC1020-3MSD	540-59-0	1,2-Dichloroethene (total)	MSD	REC	85	%	79-121
FC1020-3MSD	540-59-0	1,2-Dichloroethene (total)	MSD	RPD	2	%	20
FC1020-3MSD	78-87-5	1,2-Dichloropropane	MSD	REC	81	%	78-122
FC1020-3MSD	78-87-5	1,2-Dichloropropane	MSD	RPD	0	%	20
FC1020-3MSD	142-28-9	1,3-Dichloropropane	MSD	REC	85	%	80-119
FC1020-3MSD	142-28-9	1,3-Dichloropropane	MSD	RPD	1	%	20
FC1020-3MSD	594-20-7	2,2-Dichloropropane	MSD	REC	77	%	60-139
FC1020-3MSD	594-20-7	2,2-Dichloropropane	MSD	RPD	5	%	20
FC1020-3MSD	563-58-6	1,1-Dichloropropene	MSD	REC	84	%	79-125
FC1020-3MSD	563-58-6	1,1-Dichloropropene	MSD	RPD	0	%	20
FC1020-3MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	81	%	75-124
FC1020-3MSD	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	1	%	20
FC1020-3MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	99	%	73-127
FC1020-3MSD	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	3	%	20
FC1020-3MSD	100-41-4	Ethylbenzene	MSD	REC	94	%	79-121
FC1020-3MSD	100-41-4	Ethylbenzene	MSD	RPD	1	%	20
FC1020-3MSD	87-68-3	Hexachlorobutadiene	MSD	REC	90	%	66-134
FC1020-3MSD	87-68-3	Hexachlorobutadiene	MSD	RPD	6	%	20
FC1020-3MSD	591-78-6	2-Hexanone	MSD	REC	94	%	57-139

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD	591-78-6	2-Hexanone	MSD	RPD	2	%	20
FC1020-3MSD	98-82-8	Isopropylbenzene	MSD	REC	98	%	72-131
FC1020-3MSD	98-82-8	Isopropylbenzene	MSD	RPD	1	%	20
FC1020-3MSD	99-87-6	p-Isopropyltoluene	MSD	REC	108	%	77-127
FC1020-3MSD	99-87-6	p-Isopropyltoluene	MSD	RPD	5	%	20
FC1020-3MSD	74-83-9	Methyl Bromide	MSD	REC	86	%	53-141
FC1020-3MSD	74-83-9	Methyl Bromide	MSD	RPD	24	%	20
FC1020-3MSD	74-87-3	Methyl Chloride	MSD	REC	88	%	50-139
FC1020-3MSD	74-87-3	Methyl Chloride	MSD	RPD	12	%	20
FC1020-3MSD	74-95-3	Methylene Bromide	MSD	REC	82	%	79-123
FC1020-3MSD	74-95-3	Methylene Bromide	MSD	RPD	1	%	20
FC1020-3MSD	75-09-2	Methylene Chloride	MSD	REC	85	%	74-124
FC1020-3MSD	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FC1020-3MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	92	%	67-130
FC1020-3MSD	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	2	%	20
FC1020-3MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	82	%	71-124
FC1020-3MSD	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	4	%	20
FC1020-3MSD	91-20-3	Naphthalene	MSD	REC	94	%	61-128
FC1020-3MSD	91-20-3	Naphthalene	MSD	RPD	6	%	20
FC1020-3MSD	103-65-1	n-Propylbenzene	MSD	REC	105	%	76-126
FC1020-3MSD	103-65-1	n-Propylbenzene	MSD	RPD	5	%	20
FC1020-3MSD	100-42-5	Styrene	MSD	REC	97	%	78-123
FC1020-3MSD	100-42-5	Styrene	MSD	RPD	1	%	20
FC1020-3MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	101	%	78-124
FC1020-3MSD	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	2	%	20
FC1020-3MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	99	%	71-121
FC1020-3MSD	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	3	%	20
FC1020-3MSD	127-18-4	Tetrachloroethylene	MSD	REC	93	%	74-129
FC1020-3MSD	127-18-4	Tetrachloroethylene	MSD	RPD	2	%	20
FC1020-3MSD	108-88-3	Toluene	MSD	REC	93	%	80-121
FC1020-3MSD	108-88-3	Toluene	MSD	RPD	2	%	20
FC1020-3MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	91	%	69-129
FC1020-3MSD	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	92	%	69-130
FC1020-3MSD	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	8	%	20
FC1020-3MSD	71-55-6	1,1,1-Trichloroethane	MSD	REC	90	%	74-131
FC1020-3MSD	71-55-6	1,1,1-Trichloroethane	MSD	RPD	3	%	20
FC1020-3MSD	79-00-5	1,1,2-Trichloroethane	MSD	REC	94	%	80-119
FC1020-3MSD	79-00-5	1,1,2-Trichloroethane	MSD	RPD	1	%	20
FC1020-3MSD	79-01-6	Trichloroethylene	MSD	REC	86	%	79-123
FC1020-3MSD	79-01-6	Trichloroethylene	MSD	RPD	1	%	20
FC1020-3MSD	75-69-4	Trichlorofluoromethane	MSD	REC	96	%	65-141
FC1020-3MSD	75-69-4	Trichlorofluoromethane	MSD	RPD	11	%	20
FC1020-3MSD	96-18-4	1,2,3-Trichloropropane	MSD	REC	94	%	73-122
FC1020-3MSD	96-18-4	1,2,3-Trichloropropane	MSD	RPD	7	%	20

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	105	%	76-124
FC1020-3MSD	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	5	%	20
FC1020-3MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	102	%	75-124
FC1020-3MSD	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	5	%	20
FC1020-3MSD	108-05-4	Vinyl Acetate	MSD	REC	104	%	54-146
FC1020-3MSD	108-05-4	Vinyl Acetate	MSD	RPD	2	%	20
FC1020-3MSD	75-01-4	Vinyl Chloride	MSD	REC	101	%	58-137
FC1020-3MSD	75-01-4	Vinyl Chloride	MSD	RPD	12	%	20
FC1020-3MSD		m,p-Xylene	MSD	REC	95	%	80-121
FC1020-3MSD		m,p-Xylene	MSD	RPD	1	%	20
FC1020-3MSD	95-47-6	o-Xylene	MSD	REC	96	%	78-122
FC1020-3MSD	95-47-6	o-Xylene	MSD	RPD	2	%	20
FC1020-3MSD	1330-20-7	Xylene (total)	MSD	REC	95	%	79-121
FC1020-3MSD	1330-20-7	Xylene (total)	MSD	RPD	1	%	20
FC1020-3MSD	1868-53-7	Dibromofluoromethane	MSD	SURR	97	%	80-119
FC1020-3MSD	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	97	%	81-118
FC1020-3MSD	2037-26-5	Toluene-D8	MSD	SURR	103	%	89-112
FC1020-3MSD	460-00-4	4-Bromofluorobenzene	MSD	SURR	99	%	85-114
VO2867-MB	1868-53-7	Dibromofluoromethane	MB	SURR	94	%	80-119
VO2867-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	102	%	81-118
VO2867-MB	2037-26-5	Toluene-D8	MB	SURR	108	%	89-112
VO2867-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	98	%	85-114
FC1020-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	93	%	80-119
FC1020-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	102	%	81-118
FC1020-3	2037-26-5	Toluene-D8	SAMP	SURR	109	%	89-112
FC1020-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
FC1020-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	94	%	80-119
FC1020-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	99	%	81-118
FC1020-4	2037-26-5	Toluene-D8	SAMP	SURR	108	%	89-112
FC1020-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	103	%	85-114
VY2765	SW846 8260D						
VY2765-BS	67-64-1	Acetone	BSP	REC	98	%	39-160
VY2765-BS	71-43-2	Benzene	BSP	REC	104	%	79-120
VY2765-BS	108-86-1	Bromobenzene	BSP	REC	100	%	80-120
VY2765-BS	74-97-5	Bromochloromethane	BSP	REC	108	%	78-123
VY2765-BS	75-27-4	Bromodichloromethane	BSP	REC	105	%	79-125
VY2765-BS	75-25-2	Bromoform	BSP	REC	103	%	66-130
VY2765-BS	78-93-3	2-Butanone (MEK)	BSP	REC	93	%	56-143
VY2765-BS	104-51-8	n-Butylbenzene	BSP	REC	99	%	75-128
VY2765-BS	135-98-8	sec-Butylbenzene	BSP	REC	112	%	77-126
VY2765-BS	98-06-6	tert-Butylbenzene	BSP	REC	103	%	78-124
VY2765-BS	75-15-0	Carbon Disulfide	BSP	REC	108	%	64-133
VY2765-BS	56-23-5	Carbon Tetrachloride	BSP	REC	118	%	72-136

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VY2765-BS	108-90-7	Chlorobenzene	BSP	REC	104	%	82-118
VY2765-BS	75-00-3	Chloroethane	BSP	REC	108	%	60-138
VY2765-BS	67-66-3	Chloroform	BSP	REC	104	%	79-124
VY2765-BS	95-49-8	o-Chlorotoluene	BSP	REC	106	%	79-122
VY2765-BS	106-43-4	p-Chlorotoluene	BSP	REC	103	%	78-122
VY2765-BS	124-48-1	Dibromochloromethane	BSP	REC	101	%	74-126
VY2765-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	96	%	62-128
VY2765-BS	106-93-4	1,2-Dibromoethane	BSP	REC	105	%	77-121
VY2765-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	92	%	32-152
VY2765-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	101	%	80-119
VY2765-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	106	%	80-119
VY2765-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	99	%	79-118
VY2765-BS	75-34-3	1,1-Dichloroethane	BSP	REC	111	%	77-125
VY2765-BS	107-06-2	1,2-Dichloroethane	BSP	REC	98	%	73-128
VY2765-BS	75-35-4	1,1-Dichloroethylene	BSP	REC	117	%	71-131
VY2765-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	107	%	78-123
VY2765-BS	156-60-5	trans-1,2-Dichloroethylene	BSP	REC	110	%	75-124
VY2765-BS	540-59-0	1,2-Dichloroethene (total)	BSP	REC	109	%	79-121
VY2765-BS	78-87-5	1,2-Dichloropropane	BSP	REC	101	%	78-122
VY2765-BS	142-28-9	1,3-Dichloropropane	BSP	REC	94	%	80-119
VY2765-BS	594-20-7	2,2-Dichloropropane	BSP	REC	106	%	60-139
VY2765-BS	563-58-6	1,1-Dichloropropene	BSP	REC	114	%	79-125
VY2765-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	106	%	75-124
VY2765-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	118	%	73-127
VY2765-BS	100-41-4	Ethylbenzene	BSP	REC	103	%	79-121
VY2765-BS	87-68-3	Hexachlorobutadiene	BSP	REC	115	%	66-134
VY2765-BS	591-78-6	2-Hexanone	BSP	REC	92	%	57-139
VY2765-BS	98-82-8	Isopropylbenzene	BSP	REC	107	%	72-131
VY2765-BS	99-87-6	p-Isopropyltoluene	BSP	REC	111	%	77-127
VY2765-BS	74-83-9	Methyl Bromide	BSP	REC	90	%	53-141
VY2765-BS	74-87-3	Methyl Chloride	BSP	REC	94	%	50-139
VY2765-BS	74-95-3	Methylene Bromide	BSP	REC	103	%	79-123
VY2765-BS	75-09-2	Methylene Chloride	BSP	REC	95	%	74-124
VY2765-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	96	%	67-130
VY2765-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	99	%	71-124
VY2765-BS	91-20-3	Naphthalene	BSP	REC	102	%	61-128
VY2765-BS	103-65-1	n-Propylbenzene	BSP	REC	108	%	76-126
VY2765-BS	100-42-5	Styrene	BSP	REC	104	%	78-123
VY2765-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	112	%	78-124
VY2765-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	102	%	71-121
VY2765-BS	127-18-4	Tetrachloroethylene	BSP	REC	110	%	74-129
VY2765-BS	108-88-3	Toluene	BSP	REC	106	%	80-121
VY2765-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	103	%	69-129
VY2765-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	98	%	69-130
VY2765-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	115	%	74-131

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VY2765-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	103	%	80-119
VY2765-BS	79-01-6	Trichloroethylene	BSP	REC	104	%	79-123
VY2765-BS	75-69-4	Trichlorofluoromethane	BSP	REC	114	%	65-141
VY2765-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	92	%	73-122
VY2765-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	108	%	76-124
VY2765-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	102	%	75-124
VY2765-BS	108-05-4	Vinyl Acetate	BSP	REC	111	%	54-146
VY2765-BS	75-01-4	Vinyl Chloride	BSP	REC	98	%	58-137
VY2765-BS		m,p-Xylene	BSP	REC	104	%	80-121
VY2765-BS	95-47-6	o-Xylene	BSP	REC	105	%	78-122
VY2765-BS	1330-20-7	Xylene (total)	BSP	REC	104	%	79-121
VY2765-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	98	%	80-119
VY2765-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	99	%	81-118
VY2765-BS	2037-26-5	Toluene-D8	BSP	SURR	102	%	89-112
VY2765-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	103	%	85-114
FC1005-3MS*	67-64-1	Acetone	MS	REC	89	%	39-160
FC1005-3MS*	71-43-2	Benzene	MS	REC	93	%	79-120
FC1005-3MS*	108-86-1	Bromobenzene	MS	REC	92	%	80-120
FC1005-3MS*	74-97-5	Bromochloromethane	MS	REC	94	%	78-123
FC1005-3MS*	75-27-4	Bromodichloromethane	MS	REC	91	%	79-125
FC1005-3MS*	75-25-2	Bromoform	MS	REC	88	%	66-130
FC1005-3MS*	78-93-3	2-Butanone (MEK)	MS	REC	92	%	56-143
FC1005-3MS*	104-51-8	n-Butylbenzene	MS	REC	87	%	75-128
FC1005-3MS*	135-98-8	sec-Butylbenzene	MS	REC	104	%	77-126
FC1005-3MS*	98-06-6	tert-Butylbenzene	MS	REC	100	%	78-124
FC1005-3MS*	75-15-0	Carbon Disulfide	MS	REC	101	%	64-133
FC1005-3MS*	56-23-5	Carbon Tetrachloride	MS	REC	98	%	72-136
FC1005-3MS*	108-90-7	Chlorobenzene	MS	REC	96	%	82-118
FC1005-3MS*	75-00-3	Chloroethane	MS	REC	99	%	60-138
FC1005-3MS*	67-66-3	Chloroform	MS	REC	94	%	79-124
FC1005-3MS*	95-49-8	o-Chlorotoluene	MS	REC	103	%	79-122
FC1005-3MS*	106-43-4	p-Chlorotoluene	MS	REC	98	%	78-122
FC1005-3MS*	124-48-1	Dibromochloromethane	MS	REC	92	%	74-126
FC1005-3MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	85	%	62-128
FC1005-3MS*	106-93-4	1,2-Dibromoethane	MS	REC	96	%	77-121
FC1005-3MS*	75-71-8	Dichlorodifluoromethane	MS	REC	102	%	32-152
FC1005-3MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	94	%	80-119
FC1005-3MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	96	%	80-119
FC1005-3MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	91	%	79-118
FC1005-3MS*	75-34-3	1,1-Dichloroethane	MS	REC	98	%	77-125
FC1005-3MS*	107-06-2	1,2-Dichloroethane	MS	REC	90	%	73-128
FC1005-3MS*	75-35-4	1,1-Dichloroethylene	MS	REC	99	%	71-131
FC1005-3MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	95	%	78-123
FC1005-3MS*	156-60-5	trans-1,2-Dichloroethylene	MS	REC	96	%	75-124
FC1005-3MS*	540-59-0	1,2-Dichloroethene (total)	MS	REC	95	%	79-121

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1005-3MS*	78-87-5	1,2-Dichloropropane	MS	REC	90	%	78-122
FC1005-3MS*	142-28-9	1,3-Dichloropropane	MS	REC	89	%	80-119
FC1005-3MS*	594-20-7	2,2-Dichloropropane	MS	REC	90	%	60-139
FC1005-3MS*	563-58-6	1,1-Dichloropropene	MS	REC	98	%	79-125
FC1005-3MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	89	%	75-124
FC1005-3MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	106	%	73-127
FC1005-3MS*	100-41-4	Ethylbenzene	MS	REC	106	%	79-121
FC1005-3MS*	87-68-3	Hexachlorobutadiene	MS	REC	93	%	66-134
FC1005-3MS*	591-78-6	2-Hexanone	MS	REC	96	%	57-139
FC1005-3MS*	98-82-8	Isopropylbenzene	MS	REC	101	%	72-131
FC1005-3MS*	99-87-6	p-Isopropyltoluene	MS	REC	101	%	77-127
FC1005-3MS*	74-83-9	Methyl Bromide	MS	REC	49	%	53-141
FC1005-3MS*	74-87-3	Methyl Chloride	MS	REC	98	%	50-139
FC1005-3MS*	74-95-3	Methylene Bromide	MS	REC	91	%	79-123
FC1005-3MS*	75-09-2	Methylene Chloride	MS	REC	82	%	74-124
FC1005-3MS*	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	100	%	67-130
FC1005-3MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	90	%	71-124
FC1005-3MS*	91-20-3	Naphthalene	MS	REC	102	%	61-128
FC1005-3MS*	103-65-1	n-Propylbenzene	MS	REC	106	%	76-126
FC1005-3MS*	100-42-5	Styrene	MS	REC	99	%	78-123
FC1005-3MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	100	%	78-124
FC1005-3MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	100	%	71-121
FC1005-3MS*	127-18-4	Tetrachloroethylene	MS	REC	93	%	74-129
FC1005-3MS*	108-88-3	Toluene	MS	REC	112	%	80-121
FC1005-3MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	90	%	69-129
FC1005-3MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	90	%	69-130
FC1005-3MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	98	%	74-131
FC1005-3MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	103	%	80-119
FC1005-3MS*	79-01-6	Trichloroethylene	MS	REC	91	%	79-123
FC1005-3MS*	75-69-4	Trichlorofluoromethane	MS	REC	122	%	65-141
FC1005-3MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	88	%	73-122
FC1005-3MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	123	%	76-124
FC1005-3MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	103	%	75-124
FC1005-3MS*	108-05-4	Vinyl Acetate	MS	REC	114	%	54-146
FC1005-3MS*	75-01-4	Vinyl Chloride	MS	REC	111	%	58-137
FC1005-3MS*		m,p-Xylene	MS	REC	113	%	80-121
FC1005-3MS*	95-47-6	o-Xylene	MS	REC	112	%	78-122
FC1005-3MS*	1330-20-7	Xylene (total)	MS	REC	113	%	79-121
FC1005-3MS*	1868-53-7	Dibromofluoromethane	MS	SURR	96	%	80-119
FC1005-3MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	103	%	81-118
FC1005-3MS*	2037-26-5	Toluene-D8	MS	SURR	101	%	89-112
FC1005-3MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	102	%	85-114
FC1005-3MSD*	67-64-1	Acetone	MSD	REC	91	%	39-160
FC1005-3MSD*	67-64-1	Acetone	MSD	RPD	3	%	20
FC1005-3MSD*	71-43-2	Benzene	MSD	REC	90	%	79-120

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1005-3MSD*	71-43-2	Benzene	MSD	RPD	4	%	20
FC1005-3MSD*	108-86-1	Bromobenzene	MSD	REC	89	%	80-120
FC1005-3MSD*	108-86-1	Bromobenzene	MSD	RPD	3	%	20
FC1005-3MSD*	74-97-5	Bromochloromethane	MSD	REC	97	%	78-123
FC1005-3MSD*	74-97-5	Bromochloromethane	MSD	RPD	3	%	20
FC1005-3MSD*	75-27-4	Bromodichloromethane	MSD	REC	91	%	79-125
FC1005-3MSD*	75-27-4	Bromodichloromethane	MSD	RPD	0	%	20
FC1005-3MSD*	75-25-2	Bromoform	MSD	REC	87	%	66-130
FC1005-3MSD*	75-25-2	Bromoform	MSD	RPD	2	%	20
FC1005-3MSD*	78-93-3	2-Butanone (MEK)	MSD	REC	94	%	56-143
FC1005-3MSD*	78-93-3	2-Butanone (MEK)	MSD	RPD	2	%	20
FC1005-3MSD*	104-51-8	n-Butylbenzene	MSD	REC	89	%	75-128
FC1005-3MSD*	104-51-8	n-Butylbenzene	MSD	RPD	2	%	20
FC1005-3MSD*	135-98-8	sec-Butylbenzene	MSD	REC	104	%	77-126
FC1005-3MSD*	135-98-8	sec-Butylbenzene	MSD	RPD	0	%	20
FC1005-3MSD*	98-06-6	tert-Butylbenzene	MSD	REC	99	%	78-124
FC1005-3MSD*	98-06-6	tert-Butylbenzene	MSD	RPD	1	%	20
FC1005-3MSD*	75-15-0	Carbon Disulfide	MSD	REC	98	%	64-133
FC1005-3MSD*	75-15-0	Carbon Disulfide	MSD	RPD	2	%	20
FC1005-3MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	98	%	72-136
FC1005-3MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	0	%	20
FC1005-3MSD*	108-90-7	Chlorobenzene	MSD	REC	95	%	82-118
FC1005-3MSD*	108-90-7	Chlorobenzene	MSD	RPD	1	%	20
FC1005-3MSD*	75-00-3	Chloroethane	MSD	REC	94	%	60-138
FC1005-3MSD*	75-00-3	Chloroethane	MSD	RPD	6	%	20
FC1005-3MSD*	67-66-3	Chloroform	MSD	REC	88	%	79-124
FC1005-3MSD*	67-66-3	Chloroform	MSD	RPD	6	%	20
FC1005-3MSD*	95-49-8	o-Chlorotoluene	MSD	REC	100	%	79-122
FC1005-3MSD*	95-49-8	o-Chlorotoluene	MSD	RPD	3	%	20
FC1005-3MSD*	106-43-4	p-Chlorotoluene	MSD	REC	98	%	78-122
FC1005-3MSD*	106-43-4	p-Chlorotoluene	MSD	RPD	0	%	20
FC1005-3MSD*	124-48-1	Dibromochloromethane	MSD	REC	86	%	74-126
FC1005-3MSD*	124-48-1	Dibromochloromethane	MSD	RPD	7	%	20
FC1005-3MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	89	%	62-128
FC1005-3MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	4	%	20
FC1005-3MSD*	106-93-4	1,2-Dibromoethane	MSD	REC	91	%	77-121
FC1005-3MSD*	106-93-4	1,2-Dibromoethane	MSD	RPD	6	%	20
FC1005-3MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	89	%	32-152
FC1005-3MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	14	%	20
FC1005-3MSD*	95-50-1	1,2-Dichlorobenzene	MSD	REC	91	%	80-119
FC1005-3MSD*	95-50-1	1,2-Dichlorobenzene	MSD	RPD	3	%	20
FC1005-3MSD*	541-73-1	1,3-Dichlorobenzene	MSD	REC	95	%	80-119
FC1005-3MSD*	541-73-1	1,3-Dichlorobenzene	MSD	RPD	1	%	20
FC1005-3MSD*	106-46-7	1,4-Dichlorobenzene	MSD	REC	91	%	79-118
FC1005-3MSD*	106-46-7	1,4-Dichlorobenzene	MSD	RPD	0	%	20

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1005-3MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	97	%	77-125
FC1005-3MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	2	%	20
FC1005-3MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	89	%	73-128
FC1005-3MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	1	%	20
FC1005-3MSD*	75-35-4	1,1-Dichloroethylene	MSD	REC	97	%	71-131
FC1005-3MSD*	75-35-4	1,1-Dichloroethylene	MSD	RPD	2	%	20
FC1005-3MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	92	%	78-123
FC1005-3MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	3	%	20
FC1005-3MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	REC	96	%	75-124
FC1005-3MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	RPD	0	%	20
FC1005-3MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	REC	94	%	79-121
FC1005-3MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	RPD	1	%	20
FC1005-3MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	87	%	78-122
FC1005-3MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	4	%	20
FC1005-3MSD*	142-28-9	1,3-Dichloropropane	MSD	REC	87	%	80-119
FC1005-3MSD*	142-28-9	1,3-Dichloropropane	MSD	RPD	2	%	20
FC1005-3MSD*	594-20-7	2,2-Dichloropropane	MSD	REC	87	%	60-139
FC1005-3MSD*	594-20-7	2,2-Dichloropropane	MSD	RPD	4	%	20
FC1005-3MSD*	563-58-6	1,1-Dichloropropene	MSD	REC	96	%	79-125
FC1005-3MSD*	563-58-6	1,1-Dichloropropene	MSD	RPD	2	%	20
FC1005-3MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	87	%	75-124
FC1005-3MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	2	%	20
FC1005-3MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	104	%	73-127
FC1005-3MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	3	%	20
FC1005-3MSD*	100-41-4	Ethylbenzene	MSD	REC	97	%	79-121
FC1005-3MSD*	100-41-4	Ethylbenzene	MSD	RPD	9	%	20
FC1005-3MSD*	87-68-3	Hexachlorobutadiene	MSD	REC	89	%	66-134
FC1005-3MSD*	87-68-3	Hexachlorobutadiene	MSD	RPD	4	%	20
FC1005-3MSD*	591-78-6	2-Hexanone	MSD	REC	100	%	57-139
FC1005-3MSD*	591-78-6	2-Hexanone	MSD	RPD	4	%	20
FC1005-3MSD*	98-82-8	Isopropylbenzene	MSD	REC	96	%	72-131
FC1005-3MSD*	98-82-8	Isopropylbenzene	MSD	RPD	5	%	20
FC1005-3MSD*	99-87-6	p-Isopropyltoluene	MSD	REC	101	%	77-127
FC1005-3MSD*	99-87-6	p-Isopropyltoluene	MSD	RPD	0	%	20
FC1005-3MSD*	74-83-9	Methyl Bromide	MSD	REC	58	%	53-141
FC1005-3MSD*	74-83-9	Methyl Bromide	MSD	RPD	17	%	20
FC1005-3MSD*	74-87-3	Methyl Chloride	MSD	REC	85	%	50-139
FC1005-3MSD*	74-87-3	Methyl Chloride	MSD	RPD	14	%	20
FC1005-3MSD*	74-95-3	Methylene Bromide	MSD	REC	84	%	79-123
FC1005-3MSD*	74-95-3	Methylene Bromide	MSD	RPD	8	%	20
FC1005-3MSD*	75-09-2	Methylene Chloride	MSD	REC	81	%	74-124
FC1005-3MSD*	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FC1005-3MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	104	%	67-130
FC1005-3MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	4	%	20
FC1005-3MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	90	%	71-124

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1005-3MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	0	%	20
FC1005-3MSD*	91-20-3	Naphthalene	MSD	REC	94	%	61-128
FC1005-3MSD*	91-20-3	Naphthalene	MSD	RPD	8	%	20
FC1005-3MSD*	103-65-1	n-Propylbenzene	MSD	REC	104	%	76-126
FC1005-3MSD*	103-65-1	n-Propylbenzene	MSD	RPD	2	%	20
FC1005-3MSD*	100-42-5	Styrene	MSD	REC	94	%	78-123
FC1005-3MSD*	100-42-5	Styrene	MSD	RPD	5	%	20
FC1005-3MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	98	%	78-124
FC1005-3MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	3	%	20
FC1005-3MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	98	%	71-121
FC1005-3MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	2	%	20
FC1005-3MSD*	127-18-4	Tetrachloroethylene	MSD	REC	88	%	74-129
FC1005-3MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	5	%	20
FC1005-3MSD*	108-88-3	Toluene	MSD	REC	98	%	80-121
FC1005-3MSD*	108-88-3	Toluene	MSD	RPD	13	%	20
FC1005-3MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	88	%	69-129
FC1005-3MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	3	%	20
FC1005-3MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	89	%	69-130
FC1005-3MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	1	%	20
FC1005-3MSD*	71-55-6	1,1,1-Trichloroethane	MSD	REC	98	%	74-131
FC1005-3MSD*	71-55-6	1,1,1-Trichloroethane	MSD	RPD	0	%	20
FC1005-3MSD*	79-00-5	1,1,2-Trichloroethane	MSD	REC	97	%	80-119
FC1005-3MSD*	79-00-5	1,1,2-Trichloroethane	MSD	RPD	5	%	20
FC1005-3MSD*	79-01-6	Trichloroethylene	MSD	REC	88	%	79-123
FC1005-3MSD*	79-01-6	Trichloroethylene	MSD	RPD	3	%	20
FC1005-3MSD*	75-69-4	Trichlorofluoromethane	MSD	REC	108	%	65-141
FC1005-3MSD*	75-69-4	Trichlorofluoromethane	MSD	RPD	11	%	20
FC1005-3MSD*	96-18-4	1,2,3-Trichloropropane	MSD	REC	88	%	73-122
FC1005-3MSD*	96-18-4	1,2,3-Trichloropropane	MSD	RPD	0	%	20
FC1005-3MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	108	%	76-124
FC1005-3MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	12	%	20
FC1005-3MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	99	%	75-124
FC1005-3MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	4	%	20
FC1005-3MSD*	108-05-4	Vinyl Acetate	MSD	REC	106	%	54-146
FC1005-3MSD*	108-05-4	Vinyl Acetate	MSD	RPD	8	%	20
FC1005-3MSD*	75-01-4	Vinyl Chloride	MSD	REC	93	%	58-137
FC1005-3MSD*	75-01-4	Vinyl Chloride	MSD	RPD	18	%	20
FC1005-3MSD*		m,p-Xylene	MSD	REC	100	%	80-121
FC1005-3MSD*		m,p-Xylene	MSD	RPD	12	%	20
FC1005-3MSD*	95-47-6	o-Xylene	MSD	REC	98	%	78-122
FC1005-3MSD*	95-47-6	o-Xylene	MSD	RPD	13	%	20
FC1005-3MSD*	1330-20-7	Xylene (total)	MSD	REC	99	%	79-121
FC1005-3MSD*	1330-20-7	Xylene (total)	MSD	RPD	12	%	20
FC1005-3MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	97	%	80-119
FC1005-3MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	101	%	81-118

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1005-3MSD*	2037-26-5	Toluene-D8	MSD	SURR	101	%	89-112
FC1005-3MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	101	%	85-114
VY2765-MB	1868-53-7	Dibromofluoromethane	MB	SURR	98	%	80-119
VY2765-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	105	%	81-118
VY2765-MB	2037-26-5	Toluene-D8	MB	SURR	102	%	89-112
VY2765-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	107	%	85-114
FC1020-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	97	%	80-119
FC1020-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	102	%	81-118
FC1020-1	2037-26-5	Toluene-D8	SAMP	SURR	103	%	89-112
FC1020-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	105	%	85-114
FC1020-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	101	%	80-119
FC1020-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	106	%	81-118
FC1020-2	2037-26-5	Toluene-D8	SAMP	SURR	100	%	89-112
FC1020-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	108	%	85-114
MP41622	SW846 6010D						
MP41622-B1	7440-70-2	Calcium	BSP	REC	101.2	%	87-113
MP41622-B1	7439-95-4	Magnesium	BSP	REC	102.4	%	85-113
MP41622-S1*	7440-70-2	Calcium	MS	REC	108.4	%	87-113
MP41622-S1*	7439-95-4	Magnesium	MS	REC	104.9	%	85-113
MP41622-S2*	7440-70-2	Calcium	MSD	REC	97.6	%	87-113
MP41622-S2*	7440-70-2	Calcium	MSD	RPD	3.5	%	20
MP41622-S2*	7439-95-4	Magnesium	MSD	REC	99.7	%	85-113
MP41622-S2*	7439-95-4	Magnesium	MSD	RPD	4	%	20
MP41622-D1*	7440-70-2	Calcium	DUP	RPD	3.7	%	20
MP41622-D1*	7439-95-4	Magnesium	DUP	RPD	4.5	%	20
GP38275	EPA 300/SW846 9056A						
GP38275-B1	16984-48-8	Fluoride	BSP	REC	101.2	%	88-112
GP38275-B1	16887-00-6	Chloride	BSP	REC	96.4	%	87-111
GP38275-B1	14797-65-0	Nitrogen, Nitrite	BSP	REC	105.2	%	87-111
GP38275-B1	24959-67-9	Bromide	BSP	REC	95.3	%	91-110
GP38275-B1	14797-55-8	Nitrogen, Nitrate	BSP	REC	98.8	%	88-111
GP38275-B1	14808-79-8	Sulfate	BSP	REC	93.4	%	87-112
GP38275-S1*	16984-48-8	Fluoride	MS	REC	89.2 [a]	%	88-112
GP38275-S1*	16887-00-6	Chloride	MS	REC	97	%	87-111
GP38275-S1*	14797-65-0	Nitrogen, Nitrite	MS	REC	108	%	87-111
GP38275-S1*	24959-67-9	Bromide	MS	REC	94	%	91-110
GP38275-S1*	14797-55-8	Nitrogen, Nitrate	MS	REC	100	%	88-111
GP38275-S1*	14808-79-8	Sulfate	MS	REC	91	%	87-112
GP38275-S2*	16984-48-8	Fluoride	MSD	RPD	0	%	15
GP38275-S2*	16984-48-8	Fluoride	MSD	REC	89.2	%	88-112
GP38275-S2*	16887-00-6	Chloride	MSD	RPD	.4	%	15

* Sample used for QC is not from job FC1020

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1020
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/05/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
GP38275-S2*	16887-00-6	Chloride	MSD	REC	97.4	%	87-111
GP38275-S2*	14797-65-0	Nitrogen, Nitrite	MSD	RPD	0	%	15
GP38275-S2*	14797-65-0	Nitrogen, Nitrite	MSD	REC	108	%	87-111
GP38275-S2*	24959-67-9	Bromide	MSD	RPD	1.1	%	15
GP38275-S2*	24959-67-9	Bromide	MSD	REC	95	%	91-110
GP38275-S2*	14797-55-8	Nitrogen, Nitrate	MSD	RPD	0	%	15
GP38275-S2*	14797-55-8	Nitrogen, Nitrate	MSD	REC	100	%	88-111
GP38275-S2*	14808-79-8	Sulfate	MSD	RPD	.4	%	15
GP38275-S2*	14808-79-8	Sulfate	MSD	REC	91.4	%	87-112

(a) Spike recovery indicates possible matrix interference.

* Sample used for QC is not from job FC1020

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-MB	Y66609.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-MB	Y66609.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-MB	Y66609.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	105%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	107%	83-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	2.59	31	ug/l	JN
556-67-2	Cyclotetrasiloxane, octamethyl-	12.79	220	ug/l	JN
3789-85-3	Benzoic acid, 2-[(trimethylsilyl)oxy]-,	14.01	100	ug/l	JN
6787-10-6	Trimethylsilyl ether of glycerol	15.14	14	ug/l	JN
	Total TIC, Volatile		334	ug/l	J

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%
2037-26-5	Toluene-D8	108%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	2.42	35	ug/l	JN
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1624-MB	5E36119.D	1	12/14/22	CF	n/a	n/a	V5E1624

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

FC1020-3

CAS No.	Compound	Result	RL	MDL	Units	Q

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Method Blank Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1P3648-MB	1P96414.D	1	12/16/22	CF	n/a	n/a	V1P3648

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

FC1020-4

CAS No.	Compound	Result	RL	MDL	Units	Q
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	79-125%
2037-26-5	Toluene-D8	94%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-BS	Y66606.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	122	98	50-147
71-43-2	Benzene	25	26.0	104	81-122
108-86-1	Bromobenzene	25	24.9	100	80-121
74-97-5	Bromochloromethane	25	26.9	108	76-123
75-27-4	Bromodichloromethane	25	26.3	105	79-123
75-25-2	Bromoform	25	25.8	103	66-123
78-93-3	2-Butanone (MEK)	125	116	93	56-143
104-51-8	n-Butylbenzene	25	24.8	99	79-126
135-98-8	sec-Butylbenzene	25	27.9	112	83-133
98-06-6	tert-Butylbenzene	25	25.8	103	80-133
75-15-0	Carbon Disulfide	25	27.1	108	66-148
56-23-5	Carbon Tetrachloride	25	29.4	118	76-136
108-90-7	Chlorobenzene	25	26.1	104	82-124
75-00-3	Chloroethane	25	27.1	108	62-144
67-66-3	Chloroform	25	26.0	104	80-124
95-49-8	o-Chlorotoluene	25	26.4	106	81-127
106-43-4	p-Chlorotoluene	25	25.8	103	83-130
124-48-1	Dibromochloromethane	25	25.2	101	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	23.9	96	64-123
106-93-4	1,2-Dibromoethane	25	26.2	105	75-120
75-71-8	Dichlorodifluoromethane	25	23.1	92	42-167
95-50-1	1,2-Dichlorobenzene	25	25.2	101	82-124
541-73-1	1,3-Dichlorobenzene	25	26.5	106	84-125
106-46-7	1,4-Dichlorobenzene	25	24.8	99	78-120
75-34-3	1,1-Dichloroethane	25	27.7	111	81-122
107-06-2	1,2-Dichloroethane	25	24.4	98	75-125
75-35-4	1,1-Dichloroethylene	25	29.3	117	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.8	107	78-120
156-60-5	trans-1,2-Dichloroethylene	25	27.6	110	76-127
540-59-0	1,2-Dichloroethene (total)	50	54.4	109	77-122
78-87-5	1,2-Dichloropropane	25	25.3	101	76-124
142-28-9	1,3-Dichloropropane	25	23.5	94	80-118
594-20-7	2,2-Dichloropropane	25	26.5	106	74-139
563-58-6	1,1-Dichloropropene	25	28.6	114	79-131
10061-01-5	cis-1,3-Dichloropropene	25	26.6	106	75-118
10061-02-6	trans-1,3-Dichloropropene	25	29.5	118	80-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-BS	Y66606.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	25	25.8	103	81-121
87-68-3	Hexachlorobutadiene	25	28.8	115	75-142
591-78-6	2-Hexanone	125	115	92	61-129
98-82-8	Isopropylbenzene	25	26.8	107	83-132
99-87-6	p-Isopropyltoluene	25	27.7	111	79-130
74-83-9	Methyl Bromide	25	22.6	90	59-143
74-87-3	Methyl Chloride	25	23.4	94	50-159
74-95-3	Methylene Bromide	25	25.7	103	78-119
75-09-2	Methylene Chloride	25	23.8	95	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	120	96	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.8	99	72-117
91-20-3	Naphthalene	25	25.5	102	63-132
103-65-1	n-Propylbenzene	25	27.0	108	82-133
100-42-5	Styrene	25	25.9	104	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	28.0	112	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	25.6	102	72-120
127-18-4	Tetrachloroethylene	25	27.6	110	76-135
108-88-3	Toluene	25	26.4	106	80-120
87-61-6	1,2,3-Trichlorobenzene	25	25.7	103	68-131
120-82-1	1,2,4-Trichlorobenzene	25	24.6	98	73-129
71-55-6	1,1,1-Trichloroethane	25	28.8	115	75-130
79-00-5	1,1,2-Trichloroethane	25	25.8	103	76-119
79-01-6	Trichloroethylene	25	26.0	104	81-126
75-69-4	Trichlorofluoromethane	25	28.5	114	71-156
96-18-4	1,2,3-Trichloropropane	25	22.9	92	77-120
95-63-6	1,2,4-Trimethylbenzene	25	27.0	108	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.6	102	79-120
108-05-4	Vinyl Acetate	125	139	111	43-154
75-01-4	Vinyl Chloride	25	24.4	98	69-159
	m,p-Xylene	50	51.8	104	79-126
95-47-6	o-Xylene	25	26.2	105	80-127
1330-20-7	Xylene (total)	75	78.0	104	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VY2765-BS	Y66606.D	1	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	109	87	50-147
71-43-2	Benzene	25	21.5	86	81-122
108-86-1	Bromobenzene	25	24.1	96	80-121
74-97-5	Bromochloromethane	25	22.9	92	76-123
75-27-4	Bromodichloromethane	25	22.7	91	79-123
75-25-2	Bromoform	25	27.3	109	66-123
78-93-3	2-Butanone (MEK)	125	117	94	56-143
104-51-8	n-Butylbenzene	25	26.7	107	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	26.3	105	80-133
75-15-0	Carbon Disulfide	25	23.0	92	66-148
56-23-5	Carbon Tetrachloride	25	24.3	97	76-136
108-90-7	Chlorobenzene	25	24.4	98	82-124
75-00-3	Chloroethane	25	21.8	87	62-144
67-66-3	Chloroform	25	21.3	85	80-124
95-49-8	o-Chlorotoluene	25	26.2	105	81-127
106-43-4	p-Chlorotoluene	25	26.2	105	83-130
124-48-1	Dibromochloromethane	25	25.8	103	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	26.5	106	64-123
106-93-4	1,2-Dibromoethane	25	24.6	98	75-120
75-71-8	Dichlorodifluoromethane	25	18.1	72	42-167
95-50-1	1,2-Dichlorobenzene	25	25.2	101	82-124
541-73-1	1,3-Dichlorobenzene	25	26.1	104	84-125
106-46-7	1,4-Dichlorobenzene	25	25.4	102	78-120
75-34-3	1,1-Dichloroethane	25	22.0	88	81-122
107-06-2	1,2-Dichloroethane	25	20.9	84	75-125
75-35-4	1,1-Dichloroethylene	25	21.3	85	78-137
156-59-2	cis-1,2-Dichloroethylene	25	21.8	87	78-120
156-60-5	trans-1,2-Dichloroethylene	25	21.3	85	76-127
540-59-0	1,2-Dichloroethene (total)	50	43.1	86	77-122
78-87-5	1,2-Dichloropropane	25	20.5	82	76-124
142-28-9	1,3-Dichloropropane	25	22.4	90	80-118
594-20-7	2,2-Dichloropropane	25	21.6	86	74-139
563-58-6	1,1-Dichloropropene	25	21.7	87	79-131
10061-01-5	cis-1,3-Dichloropropene	25	22.1	88	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.0	108	80-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	25	24.6	98	81-121
87-68-3	Hexachlorobutadiene	25	26.0	104	75-142
591-78-6	2-Hexanone	125	131	105	61-129
98-82-8	Isopropylbenzene	25	25.6	102	83-132
99-87-6	p-Isopropyltoluene	25	27.9	112	79-130
74-83-9	Methyl Bromide	25	22.3	89	59-143
74-87-3	Methyl Chloride	25	20.0	80	50-159
74-95-3	Methylene Bromide	25	20.8	83	78-119
75-09-2	Methylene Chloride	25	20.5	82	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	129	103	66-122
1634-04-4	Methyl Tert Butyl Ether	25	21.0	84	72-117
91-20-3	Naphthalene	25	25.4	102	63-132
103-65-1	n-Propylbenzene	25	26.9	108	82-133
100-42-5	Styrene	25	25.5	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.0	108	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	72-120
127-18-4	Tetrachloroethylene	25	24.8	99	76-135
108-88-3	Toluene	25	24.2	97	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.7	99	68-131
120-82-1	1,2,4-Trichlorobenzene	25	25.3	101	73-129
71-55-6	1,1,1-Trichloroethane	25	23.3	93	75-130
79-00-5	1,1,2-Trichloroethane	25	24.5	98	76-119
79-01-6	Trichloroethylene	25	21.8	87	81-126
75-69-4	Trichlorofluoromethane	25	22.4	90	71-156
96-18-4	1,2,3-Trichloropropane	25	24.2	97	77-120
95-63-6	1,2,4-Trimethylbenzene	25	26.6	106	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.8	103	79-120
108-05-4	Vinyl Acetate	125	134	107	43-154
75-01-4	Vinyl Chloride	25	22.7	91	69-159
	m,p-Xylene	50	49.6	99	79-126
95-47-6	o-Xylene	25	25.1	100	80-127
1330-20-7	Xylene (total)	75	74.6	99	80-126

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	106%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1624-BS [a]	5E36116.D	1	12/14/22	CF	n/a	n/a	V5E1624

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

FC1020-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

(a) No MSD available for this run.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1P3648-BS	1P96410.D	1	12/16/22	CF	n/a	n/a	V1P3648

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

FC1020-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-71-8	Dichlorodifluoromethane	25	25.8	103	42-167

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	110%	83-118%
17060-07-0	1,2-Dichloroethane-D4	112%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1262-2MS	5E36141.D	10	12/14/22	CF	n/a	n/a	V5E1624
FC1262-2	5E36133.D	2	12/14/22	CF	n/a	n/a	V5E1624

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

FC1020-3

CAS No.	Compound	FC1262-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits

CAS No.	Surrogate Recoveries	MS	FC1262-2	Limits
1868-53-7	Dibromofluoromethane	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	79-125%
2037-26-5	Toluene-D8	95%	96%	85-112%
460-00-4	4-Bromofluorobenzene	99%	104%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1005-3MS	Y66630.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3MSD	Y66631.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3	Y66628.D	2	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	FC1005-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		1250	1110	89	1250	1140	91	3	50-147/21
71-43-2	Benzene	ND		250	233	93	250	224	90	4	81-122/14
108-86-1	Bromobenzene	ND		250	229	92	250	223	89	3	80-121/14
74-97-5	Bromochloromethane	ND		250	235	94	250	242	97	3	76-123/14
75-27-4	Bromodichloromethane	ND		250	227	91	250	227	91	0	79-123/19
75-25-2	Bromoform	ND		250	221	88	250	217	87	2	66-123/21
78-93-3	2-Butanone (MEK)	ND		1250	1150	92	1250	1170	94	2	56-143/18
104-51-8	n-Butylbenzene	ND		250	218	87	250	223	89	2	79-126/16
135-98-8	sec-Butylbenzene	ND		250	259	104	250	259	104	0	83-133/16
98-06-6	tert-Butylbenzene	ND		250	249	100	250	247	99	1	80-133/16
75-15-0	Carbon Disulfide	ND		250	252	101	250	246	98	2	66-148/23
56-23-5	Carbon Tetrachloride	ND		250	246	98	250	245	98	0	76-136/23
108-90-7	Chlorobenzene	ND		250	240	96	250	238	95	1	82-124/14
75-00-3	Chloroethane	ND		250	248	99	250	234	94	6	62-144/20
67-66-3	Chloroform	ND		250	234	94	250	221	88	6	80-124/15
95-49-8	o-Chlorotoluene	ND		250	257	103	250	250	100	3	81-127/15
106-43-4	p-Chlorotoluene	ND		250	245	98	250	244	98	0	83-130/15
124-48-1	Dibromochloromethane	ND		250	229	92	250	214	86	7	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		250	213	85	250	222	89	4	64-123/18
106-93-4	1,2-Dibromoethane	ND		250	241	96	250	227	91	6	75-120/13
75-71-8	Dichlorodifluoromethane	ND		250	256	102	250	222	89	14	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		250	234	94	250	227	91	3	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		250	240	96	250	237	95	1	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		250	228	91	250	228	91	0	78-120/15
75-34-3	1,1-Dichloroethane	ND		250	246	98	250	242	97	2	81-122/15
107-06-2	1,2-Dichloroethane	ND		250	224	90	250	222	89	1	75-125/14
75-35-4	1,1-Dichloroethylene	ND		250	247	99	250	243	97	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		250	238	95	250	231	92	3	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		250	239	96	250	239	96	0	76-127/17
540-59-0	1,2-Dichloroethene (total)	ND		500	477	95	500	471	94	1	77-122/15
78-87-5	1,2-Dichloropropane	ND		250	226	90	250	217	87	4	76-124/14
142-28-9	1,3-Dichloropropane	ND		250	223	89	250	218	87	2	80-118/13
594-20-7	2,2-Dichloropropane	ND		250	226	90	250	217	87	4	74-139/17
563-58-6	1,1-Dichloropropene	ND		250	245	98	250	240	96	2	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		250	222	89	250	217	87	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		250	266	106	250	259	104	3	80-120/22

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1005-3MS	Y66630.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3MSD	Y66631.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3	Y66628.D	2	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Compound	FC1005-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND		250	266	106	250	243	97	9	81-121/14
87-68-3	Hexachlorobutadiene	ND		250	233	93	250	223	89	4	75-142/19
591-78-6	2-Hexanone	ND		1250	1200	96	1250	1250	100	4	61-129/18
98-82-8	Isopropylbenzene	ND		250	253	101	250	241	96	5	83-132/15
99-87-6	p-Isopropyltoluene	ND		250	252	101	250	252	101	0	79-130/16
74-83-9	Methyl Bromide	ND		250	123	49*	250	146	58*	17	59-143/19
74-87-3	Methyl Chloride	ND		250	245	98	250	213	85	14	50-159/19
74-95-3	Methylene Bromide	ND		250	228	91	250	211	84	8	78-119/14
75-09-2	Methylene Chloride	ND		250	206	82	250	203	81	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		1250	1250	100	1250	1300	104	4	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		250	224	90	250	224	90	0	72-117/14
91-20-3	Naphthalene	ND		250	254	102	250	234	94	8	63-132/25
103-65-1	n-Propylbenzene	ND		250	266	106	250	260	104	2	82-133/15
100-42-5	Styrene	ND		250	248	99	250	236	94	5	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		250	251	100	250	244	98	3	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		250	249	100	250	245	98	2	72-120/14
127-18-4	Tetrachloroethylene	ND		250	232	93	250	221	88	5	76-135/16
108-88-3	Toluene	ND		250	279	112	250	246	98	13	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		250	225	90	250	219	88	3	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		250	226	90	250	223	89	1	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		250	244	98	250	245	98	0	75-130/16
79-00-5	1,1,2-Trichloroethane	87.9		250	346	103	250	330	97	5	76-119/14
79-01-6	Trichloroethylene	ND		250	227	91	250	221	88	3	81-126/15
75-69-4	Trichlorofluoromethane	ND		250	304	122	250	271	108	11	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		250	220	88	250	221	88	0	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		250	307	123*	250	271	108	12	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		250	257	103	250	247	99	4	79-120/19
108-05-4	Vinyl Acetate	ND		1250	1430	114	1250	1320	106	8	43-154/14
75-01-4	Vinyl Chloride	ND		250	278	111	250	233	93	18	69-159/18
	m,p-Xylene	ND		500	564	113	500	499	100	12	79-126/15
95-47-6	o-Xylene	ND		250	280	112	250	246	98	13	80-127/14
1330-20-7	Xylene (total)	ND		750	844	113	750	745	99	12	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1005-3MS	Y66630.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3MSD	Y66631.D	10	12/09/22	JL	n/a	n/a	VY2765
FC1005-3	Y66628.D	2	12/09/22	JL	n/a	n/a	VY2765

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

FC1020-1, FC1020-2

CAS No.	Surrogate Recoveries	MS	MSD	FC1005-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	101%	103%	79-125%
2037-26-5	Toluene-D8	101%	101%	103%	85-112%
460-00-4	4-Bromofluorobenzene	102%	101%	105%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	FC1020-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		625	527	84	625	515	82	2	50-147/21
71-43-2	Benzene	1.0 U		125	106	85	125	107	86	1	81-122/14
108-86-1	Bromobenzene	1.0 U		125	114	91	125	119	95	4	80-121/14
74-97-5	Bromochloromethane	1.0 U		125	109	87	125	112	90	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U		125	106	85	125	110	88	4	79-123/19
75-25-2	Bromoform	1.0 U		125	112	90	125	120	96	7	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U		625	546	87	625	546	87	0	56-143/18
104-51-8	n-Butylbenzene	1.0 U		125	119	95	125	125	100	5	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		125	133	106	125	139	111	4	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		125	122	98	125	129	103	6	80-133/16
75-15-0	Carbon Disulfide	2.0 U		125	110	88	125	114	91	4	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U		125	111	89	125	119	95	7	76-136/23
108-90-7	Chlorobenzene	0.48	J	125	118	94	125	118	94	0	82-124/14
75-00-3	Chloroethane	2.0 U		125	106	85	125	121	97	13	62-144/20
67-66-3	Chloroform	1.0 U		125	105	84	125	106	85	1	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		125	122	98	125	129	103	6	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		125	122	98	125	129	103	6	83-130/15
124-48-1	Dibromochloromethane	1.0 U		125	116	93	125	118	94	2	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U		125	113	90	125	119	95	5	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U		125	114	91	125	115	92	1	75-120/13
75-71-8	Dichlorodifluoromethane	2.0 U		125	84.4	68	125	95.5	76	12	42-167/19
95-50-1	1,2-Dichlorobenzene	1.0 U		125	120	96	125	125	100	4	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U		125	122	98	125	128	102	5	84-125/14
106-46-7	1,4-Dichlorobenzene	0.94	J	125	120	95	125	126	100	5	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U		125	108	86	125	109	87	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U		125	100	80	125	101	81	1	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U		125	102	82	125	104	83	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U		125	105	84	125	109	87	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		125	102	82	125	103	82	1	76-127/17
540-59-0	1,2-Dichloroethene (total)	2.0 U		250	207	83	250	212	85	2	77-122/15
78-87-5	1,2-Dichloropropane	1.0 U		125	101	81	125	101	81	0	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		125	105	84	125	106	85	1	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		125	92.0	74	125	96.6	77	5	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U		125	105	84	125	105	84	0	79-131/16
10061-01-5	cis-1,3-Dichloropropene	1.0 U		125	100	80	125	101	81	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U		125	120	96	125	124	99	3	80-120/22

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Compound	FC1020-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	1.0 U		125	117	94	125	118	94	1	81-121/14
87-68-3	Hexachlorobutadiene	2.0 U		125	106	85	125	113	90	6	75-142/19
591-78-6	2-Hexanone	10 U		625	573	92	625	586	94	2	61-129/18
98-82-8	Isopropylbenzene	1.0 U		125	121	97	125	122	98	1	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		125	128	102	125	135	108	5	79-130/16
74-83-9	Methyl Bromide	5.0 U		125	85.2	68	125	108	86	24*	59-143/19
74-87-3	Methyl Chloride	2.0 U		125	97.6	78	125	110	88	12	50-159/19
74-95-3	Methylene Bromide	2.0 U		125	101	81	125	102	82	1	78-119/14
75-09-2	Methylene Chloride	5.0 U		125	105	84	125	106	85	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U		625	565	90	625	576	92	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U		125	98.3	79	125	102	82	4	72-117/14
91-20-3	Naphthalene	5.0 U		125	111	89	125	118	94	6	63-132/25
103-65-1	n-Propylbenzene	1.0 U		125	124	99	125	131	105	5	82-133/15
100-42-5	Styrene	1.0 U		125	120	96	125	121	97	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		125	123	98	125	126	101	2	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		125	120	96	125	124	99	3	72-120/14
127-18-4	Tetrachloroethylene	1.0 U		125	114	91	125	116	93	2	76-135/16
108-88-3	Toluene	1.0 U		125	114	91	125	116	93	2	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0 U		125	108	86	125	114	91	5	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0 U		125	106	85	125	115	92	8	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U		125	109	87	125	112	90	3	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U		125	117	94	125	118	94	1	76-119/14
79-01-6	Trichloroethylene	1.0 U		125	106	85	125	107	86	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		125	107	86	125	120	96	11	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U		125	109	87	125	117	94	7	77-120/16
95-63-6	1,2,4-Trimethylbenzene	1.0 U		125	124	99	125	131	105	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.0 U		125	121	97	125	127	102	5	79-120/19
108-05-4	Vinyl Acetate	10 U		625	638	102	625	653	104	2	43-154/14
75-01-4	Vinyl Chloride	1.0 U		125	112	90	125	126	101	12	69-159/18
	m,p-Xylene	2.0 U		250	235	94	250	237	95	1	79-126/15
95-47-6	o-Xylene	1.0 U		125	118	94	125	120	96	2	80-127/14
1330-20-7	Xylene (total)	3.0 U		375	352	94	375	357	95	1	80-126/15

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1020-3, FC1020-4

CAS No.	Surrogate Recoveries	MS	MSD	FC1020-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	97%	102%	79-125%
2037-26-5	Toluene-D8	102%	103%	109%	85-112%
460-00-4	4-Bromofluorobenzene	95%	99%	100%	83-118%

(a) RR@1x, DCFM ICV low DoD

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1293-8MS	1P96448.D	5	12/16/22	CF	n/a	n/a	V1P3648
FC1293-8MSD	1P96450.D	5	12/16/22	CF	n/a	n/a	V1P3648
FC1293-8	1P96444.D	5	12/16/22	CF	n/a	n/a	V1P3648

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

FC1020-4

CAS No.	Compound	FC1293-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-71-8	Dichlorodifluoromethane	ND		125	153	122	125	149	119	3	42-167/19

CAS No.	Surrogate Recoveries	MS	MSD	FC1293-8	Limits
1868-53-7	Dibromofluoromethane	113%	113%	114%	83-118%
17060-07-0	1,2-Dichloroethane-D4	126%*	121%	124%	79-125%
2037-26-5	Toluene-D8	94%	95%	95%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	103%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-BFB
Lab File ID: 1P96320.D
Instrument ID: GCMS1P
Injection Date: 12/14/22
Injection Time: 10:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	41333	17.4		Pass
75	30.0 - 60.0% of mass 95	120613	50.9		Pass
95	Base peak, 100% relative abundance	236949	100.0		Pass
96	5.0 - 9.0% of mass 95	16014	6.76		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	167168	70.6		Pass
175	5.0 - 9.0% of mass 174	12628	5.33	(7.55) [a]	Pass
176	95.0 - 101.0% of mass 174	160480	67.7	(96.0) [a]	Pass
177	5.0 - 9.0% of mass 176	10084	4.26	(6.28) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1P3646-IC3646	1P96320.D	12/14/22	10:15	00:00	Initial cal 1
V1P3646-IC3646	1P96322.D	12/14/22	10:47	00:32	Initial cal 2
V1P3646-IC3646	1P96324.D	12/14/22	11:19	01:04	Initial cal 3
V1P3646-IC3646	1P96326.D	12/14/22	11:51	01:36	Initial cal 4
V1P3646-ICC3646	1P96328.D	12/14/22	12:22	02:07	Initial cal 5
V1P3646-IC3646	1P96330.D	12/14/22	12:54	02:39	Initial cal 6
V1P3646-IC3646	1P96332.D	12/14/22	13:26	03:11	Initial cal 7
V1P3646-ICV3646	1P96336.D	12/14/22	14:40	04:25	Initial cal verification 5
V1P3646-CC3646	1P96336A.D	12/14/22	14:40	04:25	Continuing cal 5
V1P3646-BS	1P96338.D	12/14/22	15:12	04:57	Blank Spike
V1P3646-MB	1P96342.D	12/14/22	16:15	06:00	Method Blank
ZZZZZZ	1P96344.D	12/14/22	16:47	06:32	(unrelated sample)
ZZZZZZ	1P96346.D	12/14/22	17:19	07:04	(unrelated sample)
ZZZZZZ	1P96348.D	12/14/22	17:51	07:36	(unrelated sample)
ZZZZZZ	1P96350.D	12/14/22	18:23	08:08	(unrelated sample)
ZZZZZZ	1P96352.D	12/14/22	18:54	08:39	(unrelated sample)
ZZZZZZ	1P96354.D	12/14/22	19:26	09:11	(unrelated sample)
ZZZZZZ	1P96356.D	12/14/22	19:58	09:43	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-BFB
Lab File ID: 1P96408.D
Instrument ID: GCMS1P
Injection Date: 12/16/22
Injection Time: 08:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	39106	18.3		Pass
75	30.0 - 60.0% of mass 95	114645	53.7		Pass
95	Base peak, 100% relative abundance	213610	100.0		Pass
96	5.0 - 9.0% of mass 95	14372	6.73		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	151421	70.9		Pass
175	5.0 - 9.0% of mass 174	12095	5.66	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	144789	67.8	(95.6) [a]	Pass
177	5.0 - 9.0% of mass 176	9993	4.68	(6.90) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1P3648-CC3646	1P96408.D	12/16/22	08:38	00:00	Continuing cal 5
V1P3648-BS	1P96410.D	12/16/22	09:09	00:31	Blank Spike
V1P3648-MB	1P96414.D	12/16/22	10:12	01:34	Method Blank
ZZZZZZ	1P96416.D	12/16/22	10:44	02:06	(unrelated sample)
FC1020-4	1P96418.D	12/16/22	11:16	02:38	LF1-TB-120522
ZZZZZZ	1P96420.D	12/16/22	11:48	03:10	(unrelated sample)
ZZZZZZ	1P96422.D	12/16/22	12:19	03:41	(unrelated sample)
ZZZZZZ	1P96424.D	12/16/22	12:51	04:13	(unrelated sample)
ZZZZZZ	1P96426.D	12/16/22	13:23	04:45	(unrelated sample)
ZZZZZZ	1P96428.D	12/16/22	13:55	05:17	(unrelated sample)
ZZZZZZ	1P96430.D	12/16/22	14:26	05:48	(unrelated sample)
ZZZZZZ	1P96432.D	12/16/22	14:59	06:21	(unrelated sample)
ZZZZZZ	1P96434.D	12/16/22	15:31	06:53	(unrelated sample)
ZZZZZZ	1P96436.D	12/16/22	16:02	07:24	(unrelated sample)
ZZZZZZ	1P96438.D	12/16/22	16:34	07:56	(unrelated sample)
ZZZZZZ	1P96440.D	12/16/22	17:05	08:27	(unrelated sample)
ZZZZZZ	1P96442.D	12/16/22	17:38	09:00	(unrelated sample)
FC1293-8	1P96444.D	12/16/22	18:09	09:31	(used for QC only; not part of job FC1020)
ZZZZZZ	1P96446.D	12/16/22	18:41	10:03	(unrelated sample)
FC1293-8MS	1P96448.D	12/16/22	19:12	10:34	Matrix Spike
FC1293-8MSD	1P96450.D	12/16/22	19:44	11:06	Matrix Spike Duplicate
V1P3648-ECC3646	1P96452.D	12/16/22	20:16	11:38	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-BFB
Lab File ID: 5E35978.D
Instrument ID: GCMS5E
Injection Date: 12/08/22
Injection Time: 10:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13727	25.3		Pass
75	30.0 - 60.0% of mass 95	29731	54.8		Pass
95	Base peak, 100% relative abundance	54288	100.0		Pass
96	5.0 - 9.0% of mass 95	3641	6.71		Pass
173	Less than 2.0% of mass 174	617	1.14	(1.28) [a]	Pass
174	50.0 - 100.0% of mass 95	48392	89.1		Pass
175	5.0 - 9.0% of mass 174	3371	6.21	(6.97) [a]	Pass
176	95.0 - 101.0% of mass 174	46675	86.0	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	3157	5.82	(6.76) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1617-IC1617	5E35978.D	12/08/22	10:48	00:00	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22	11:33	00:45	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22	11:56	01:08	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22	12:19	01:31	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22	12:42	01:54	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22	13:05	02:17	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22	14:00	03:12	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22	15:25	04:37	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22	15:25	04:37	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22	16:06	05:18	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22	16:06	05:18	Blank Spike
V5E1617-MB	5E35990.D	12/08/22	17:39	06:51	Method Blank
ZZZZZZ	5E35991.D	12/08/22	18:02	07:14	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22	18:25	07:37	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22	18:48	08:00	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22	19:11	08:23	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22	19:34	08:46	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22	19:58	09:10	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22	20:21	09:33	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22	20:44	09:56	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-BFB
Lab File ID: 5E36114.D
Instrument ID: GCMS5E
Injection Date: 12/14/22
Injection Time: 09:00

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14158	25.3		Pass
75	30.0 - 60.0% of mass 95	29197	52.2		Pass
95	Base peak, 100% relative abundance	55880	100.0		Pass
96	5.0 - 9.0% of mass 95	3670	6.57		Pass
173	Less than 2.0% of mass 174	638	1.14	(1.29) [a]	Pass
174	50.0 - 100.0% of mass 95	49485	88.6		Pass
175	5.0 - 9.0% of mass 174	3732	6.68	(7.54) [a]	Pass
176	95.0 - 101.0% of mass 174	48208	86.3	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	3014	5.39	(6.25) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1624-CC1617	5E36115.D	12/14/22	09:23	00:23	Continuing cal 5
V5E1624-BS	5E36116.D	12/14/22	09:45	00:45	Blank Spike
V5E1624-MB	5E36119.D	12/14/22	10:55	01:55	Method Blank
ZZZZZZ	5E36120.D	12/14/22	11:18	02:18	(unrelated sample)
ZZZZZZ	5E36121.D	12/14/22	11:41	02:41	(unrelated sample)
ZZZZZZ	5E36122.D	12/14/22	12:04	03:04	(unrelated sample)
ZZZZZZ	5E36123.D	12/14/22	12:28	03:28	(unrelated sample)
ZZZZZZ	5E36124.D	12/14/22	12:51	03:51	(unrelated sample)
ZZZZZZ	5E36125.D	12/14/22	13:14	04:14	(unrelated sample)
ZZZZZZ	5E36126.D	12/14/22	13:37	04:37	(unrelated sample)
ZZZZZZ	5E36127.D	12/14/22	14:00	05:00	(unrelated sample)
ZZZZZZ	5E36128.D	12/14/22	14:23	05:23	(unrelated sample)
ZZZZZZ	5E36129.D	12/14/22	14:46	05:46	(unrelated sample)
ZZZZZZ	5E36130.D	12/14/22	15:09	06:09	(unrelated sample)
ZZZZZZ	5E36131.D	12/14/22	15:32	06:32	(unrelated sample)
ZZZZZZ	5E36132.D	12/14/22	15:55	06:55	(unrelated sample)
FC1262-2	5E36133.D	12/14/22	16:19	07:19	(used for QC only; not part of job FC1020)
ZZZZZZ	5E36134.D	12/14/22	16:42	07:42	(unrelated sample)
FC1020-3	5E36136.D	12/14/22	17:28	08:28	LF1SW-25MC-1222
ZZZZZZ	5E36137.D	12/14/22	17:51	08:51	(unrelated sample)
ZZZZZZ	5E36138.D	12/14/22	18:14	09:14	(unrelated sample)
ZZZZZZ	5E36139.D	12/14/22	18:37	09:37	(unrelated sample)
ZZZZZZ	5E36140.D	12/14/22	19:00	10:00	(unrelated sample)
FC1262-2MS	5E36141.D	12/14/22	19:24	10:24	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	V5E1624-BFB	**Injection Date:**	12/14/22
Lab File ID:	5E36114.D	**Injection Time:**	09:00
Instrument ID:	GCMS5E		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1624-ECC1617	5E36143.D	12/14/22	20:08	11:08	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-BFB
Lab File ID: O72889.D
Instrument ID: GCMSO
Injection Date: 12/08/22
Injection Time: 09:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	37693	20.6		Pass
75	30.0 - 60.0% of mass 95	90992	49.6		Pass
95	Base peak, 100% relative abundance	183381	100.0		Pass
96	5.0 - 9.0% of mass 95	12483	6.81		Pass
173	Less than 2.0% of mass 174	1006	0.55	(0.63) [a]	Pass
174	50.0 - 100.0% of mass 95	160725	87.6		Pass
175	5.0 - 9.0% of mass 174	11036	6.02	(6.87) [a]	Pass
176	95.0 - 101.0% of mass 174	157312	85.8	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10341	5.64	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2866-IC2866	O72890.D	12/08/22	09:56	00:25	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22	10:20	00:49	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22	10:45	01:14	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22	11:10	01:39	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22	11:35	02:04	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22	12:00	02:29	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22	12:25	02:54	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22	13:16	03:45	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22	13:16	03:45	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22	13:59	04:28	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22	13:59	04:28	Blank Spike
VO2866-MB	O72901.D	12/08/22	15:38	06:07	Method Blank
ZZZZZZ	O72902.D	12/08/22	16:02	06:31	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22	16:27	06:56	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22	16:52	07:21	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22	17:17	07:46	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22	17:42	08:11	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22	18:07	08:36	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22	18:32	09:01	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22	18:57	09:26	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22	19:22	09:51	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22	19:46	10:15	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22	20:11	10:40	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22	20:36	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2866-BFB	**Injection Date:**	12/08/22
Lab File ID:	O72889.D	**Injection Time:**	09:31
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	O72914.D	12/08/22	21:01	11:30	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22	21:26	11:55	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-BFB
Lab File ID: O72918.D
Instrument ID: GCMSO
Injection Date: 12/09/22
Injection Time: 10:04

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30195	20.1		Pass
75	30.0 - 60.0% of mass 95	75067	50.0		Pass
95	Base peak, 100% relative abundance	150101	100.0		Pass
96	5.0 - 9.0% of mass 95	9536	6.35		Pass
173	Less than 2.0% of mass 174	723	0.48	(0.55) [a]	Pass
174	50.0 - 100.0% of mass 95	132325	88.2		Pass
175	5.0 - 9.0% of mass 174	9314	6.21	(7.04) [a]	Pass
176	95.0 - 101.0% of mass 174	128771	85.8	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	8562	5.70	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2867-CC2866	O72918.D	12/09/22	10:04	00:00	Continuing cal 5
VO2867-BS	O72921.D	12/09/22	11:36	01:32	Blank Spike
VO2867-MB	O72923.D	12/09/22	12:26	02:22	Method Blank
ZZZZZZ	O72924.D	12/09/22	12:51	02:47	(unrelated sample)
ZZZZZZ	O72925.D	12/09/22	13:16	03:12	(unrelated sample)
ZZZZZZ	O72926.D	12/09/22	13:41	03:37	(unrelated sample)
FC1020-4	O72927.D	12/09/22	14:05	04:01	LF1-TB-120522
FC1020-3	O72928.D	12/09/22	14:30	04:26	LF1SW-25MC-1222
ZZZZZZ	O72929.D	12/09/22	14:55	04:51	(unrelated sample)
ZZZZZZ	O72930.D	12/09/22	15:20	05:16	(unrelated sample)
ZZZZZZ	O72931.D	12/09/22	15:45	05:41	(unrelated sample)
ZZZZZZ	O72932.D	12/09/22	16:10	06:06	(unrelated sample)
ZZZZZZ	O72933.D	12/09/22	16:35	06:31	(unrelated sample)
ZZZZZZ	O72934.D	12/09/22	17:00	06:56	(unrelated sample)
ZZZZZZ	O72935.D	12/09/22	17:25	07:21	(unrelated sample)
ZZZZZZ	O72936.D	12/09/22	17:50	07:46	(unrelated sample)
ZZZZZZ	O72937.D	12/09/22	18:14	08:10	(unrelated sample)
ZZZZZZ	O72938.D	12/09/22	18:39	08:35	(unrelated sample)
ZZZZZZ	O72939.D	12/09/22	19:04	09:00	(unrelated sample)
ZZZZZZ	O72940.D	12/09/22	19:29	09:25	(unrelated sample)
ZZZZZZ	O72941.D	12/09/22	19:54	09:50	(unrelated sample)
ZZZZZZ	O72942.D	12/09/22	20:19	10:15	(unrelated sample)
ZZZZZZ	O72943.D	12/09/22	20:44	10:40	(unrelated sample)
FC1020-3MS	O72944.D	12/09/22	21:09	11:05	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2867-BFB	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FC1020-3MSD	O72945.D	12/09/22	21:34	11:30	Matrix Spike Duplicate
VO2867-ECC2866	O72946.D	12/09/22	21:59	11:55	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-BFB
Lab File ID: Y66384.D
Instrument ID: GCMSY
Injection Date: 12/02/22
Injection Time: 12:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30248	19.3		Pass
75	30.0 - 60.0% of mass 95	74573	47.5		Pass
95	Base peak, 100% relative abundance	157104	100.0		Pass
96	5.0 - 9.0% of mass 95	10867	6.92		Pass
173	Less than 2.0% of mass 174	755	0.48	(0.61) [a]	Pass
174	50.0 - 100.0% of mass 95	124333	79.1		Pass
175	5.0 - 9.0% of mass 174	8455	5.38	(6.80) [a]	Pass
176	95.0 - 101.0% of mass 174	119541	76.1	(96.1) [a]	Pass
177	5.0 - 9.0% of mass 176	7681	4.89	(6.43) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY2755-IC2755	Y66385.D	12/02/22	14:05	01:50	Initial cal 1
VY2755-IC2755	Y66386.D	12/02/22	14:28	02:13	Initial cal 2
VY2755-IC2755	Y66387.D	12/02/22	14:53	02:38	Initial cal 3
VY2755-IC2755	Y66388.D	12/02/22	15:17	03:02	Initial cal 4
VY2755-ICC2755	Y66389.D	12/02/22	15:41	03:26	Initial cal 5
VY2755-IC2755	Y66390.D	12/02/22	16:05	03:50	Initial cal 6
VY2755-IC2755	Y66391.D	12/02/22	16:29	04:14	Initial cal 7
VY2755-ICV2755	Y66393.D	12/02/22	17:17	05:02	Initial cal verification 5
VY2755-ICV2755	Y66394.D	12/02/22	17:41	05:26	Initial cal verification 4

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-BFB
Lab File ID: Y66605.D
Instrument ID: GCMSY
Injection Date: 12/09/22
Injection Time: 09:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	28224	19.5		Pass
75	30.0 - 60.0% of mass 95	69096	47.8		Pass
95	Base peak, 100% relative abundance	144507	100.0		Pass
96	5.0 - 9.0% of mass 95	9274	6.42		Pass
173	Less than 2.0% of mass 174	680	0.47	(0.57) [a]	Pass
174	50.0 - 100.0% of mass 95	118787	82.2		Pass
175	5.0 - 9.0% of mass 174	8353	5.78	(7.03) [a]	Pass
176	95.0 - 101.0% of mass 174	115611	80.0	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	6635	4.59	(5.74) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY2765-CC2755	Y66605.D	12/09/22	09:38	00:00	Continuing cal 5
VY2765-BS	Y66606.D	12/09/22	10:02	00:24	Blank Spike
VY2767-BS	Y66606.D	12/09/22	10:02	00:24	Blank Spike
VY2767-MB	Y66608.D	12/09/22	10:50	01:12	Method Blank
VY2765-MB	Y66609.D	12/09/22	11:14	01:36	Method Blank
ZZZZZZ	Y66610.D	12/09/22	11:38	02:00	(unrelated sample)
ZZZZZZ	Y66611.D	12/09/22	12:03	02:25	(unrelated sample)
ZZZZZZ	Y66612.D	12/09/22	12:27	02:49	(unrelated sample)
ZZZZZZ	Y66613.D	12/09/22	12:52	03:14	(unrelated sample)
ZZZZZZ	Y66614.D	12/09/22	13:16	03:38	(unrelated sample)
ZZZZZZ	Y66616.D	12/09/22	14:04	04:26	(unrelated sample)
ZZZZZZ	Y66621.D	12/09/22	16:05	06:27	(unrelated sample)
ZZZZZZ	Y66622.D	12/09/22	16:29	06:51	(unrelated sample)
ZZZZZZ	Y66623.D	12/09/22	16:53	07:15	(unrelated sample)
ZZZZZZ	Y66624.D	12/09/22	17:17	07:39	(unrelated sample)
ZZZZZZ	Y66625.D	12/09/22	17:41	08:03	(unrelated sample)
FC1020-1	Y66626.D	12/09/22	18:05	08:27	LF1SW-1-1222
FC1020-2	Y66627.D	12/09/22	18:30	08:52	LF1SW-3-1222
FC1005-3	Y66628.D	12/09/22	18:54	09:16	(used for QC only; not part of job FC1020)
FC832-1	Y66629.D	12/09/22	19:18	09:40	(used for QC only; not part of job FC1020)
FC1005-3MS	Y66630.D	12/09/22	19:43	10:05	Matrix Spike
FC1005-3MSD	Y66631.D	12/09/22	20:07	10:29	Matrix Spike Duplicate
FC832-1MS	Y66632.D	12/09/22	20:31	10:53	Matrix Spike
FC832-1MSD	Y66633.D	12/09/22	20:55	11:17	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VY2765-BFB	**Injection Date:**	12/09/22
Lab File ID:	Y66605.D	**Injection Time:**	09:38
Instrument ID:	GCMSY		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VY2765-ECC2755	Y66634.D	12/09/22	21:19	11:41	Ending cal 5

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V1P3648-CC3646	**Injection Date:**	12/16/22
Lab File ID:	1P96408.D	**Injection Time:**	08:38
Instrument ID:	GCMS1P	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	1071093	3.72	696900	5.64	318071	7.33
Check Std [b]	755003	3.72	532359	5.64	263676	7.33
Upper Limit [c]	1510006	3.89	1064718	5.81	527352	7.50
Lower Limit [d]	377502	3.55	266180	5.47	131838	7.16

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V1P3648-BS	796487	3.71	564877	5.64	270339	7.33
V1P3648-MB	815536	3.72	580754	5.64	266440	7.33
ZZZZZZ	802608	3.71	565816	5.64	257466	7.33
FC1020-4 [e]	808531	3.72	570878	5.64	261893	7.33
ZZZZZZ	774210	3.71	551153	5.64	245191	7.33
ZZZZZZ	764953	3.72	545487	5.64	242109	7.33
ZZZZZZ	734057	3.71	519956	5.64	229956	7.33
ZZZZZZ	702518	3.72	500401	5.64	223242	7.33
ZZZZZZ	676236	3.72	476889	5.64	214273	7.33
ZZZZZZ	667251	3.72	475906	5.64	212921	7.33
ZZZZZZ	640772	3.72	461905	5.64	208685	7.33
ZZZZZZ	618693	3.72	447056	5.64	201479	7.33
ZZZZZZ	617231	3.71	440832	5.64	195556	7.33
ZZZZZZ	603413	3.72	428985	5.64	191348	7.33
ZZZZZZ	606516	3.72	421996	5.64	199210	7.33
ZZZZZZ	600929	3.71	429788	5.64	191731	7.33
FC1293-8	601473	3.72	423574	5.64	191033	7.33
ZZZZZZ	585989	3.72	418022	5.64	188921	7.33
FC1293-8MS	593629	3.72	430131	5.64	209762	7.33
FC1293-8MSD	629183	3.71	452447	5.64	220992	7.33
V1P3648-ECC3646	667085	3.72	473097	5.64	233066	7.33

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: V1P3646-ICC3646 1P96328.D 12/14/22 12:22
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Sample vial(s) contained significant headspace.

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V5E1624-CC1617	**Injection Date:**	12/14/22
Lab File ID:	5E36115.D	**Injection Time:**	09:23
Instrument ID:	GCMS5E	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	367847	8.95	264640	12.11	129127	14.47
Check Std [b]	334654	8.95	249700	12.11	125334	14.47
Upper Limit [c]	669308	9.12	499400	12.28	250668	14.64
Lower Limit [d]	167327	8.78	124850	11.94	62667	14.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5E1624-BS [e]	336581	8.95	249054	12.11	121964	14.47
V5E1624-MB	294774	8.95	217534	12.11	101684	14.47
ZZZZZZ	284940	8.95	209892	12.11	98296	14.47
ZZZZZZ	293494	8.95	213389	12.11	100575	14.47
ZZZZZZ	289641	8.95	213660	12.12	98241	14.47
ZZZZZZ	299627	8.95	220862	12.11	103482	14.47
ZZZZZZ	294994	8.95	215341	12.11	100296	14.47
ZZZZZZ	288644	8.95	211806	12.11	97405	14.47
ZZZZZZ	278285	8.95	207276	12.12	96740	14.47
ZZZZZZ	278142	8.95	206033	12.12	94558	14.47
ZZZZZZ	281093	8.95	208338	12.11	95937	14.47
ZZZZZZ	278883	8.95	207563	12.11	96589	14.47
ZZZZZZ	280476	8.95	204917	12.11	95602	14.47
ZZZZZZ	274894	8.95	204110	12.12	95770	14.47
ZZZZZZ	279530	8.95	222302	12.11	111111	14.47
FC1262-2	289018	8.95	213969	12.11	97750	14.47
ZZZZZZ	282909	8.95	210094	12.11	97951	14.47
FC1020-3 [f]	278388	8.95	206390	12.11	96779	14.47
ZZZZZZ	276160	8.95	205788	12.12	94175	14.47
ZZZZZZ	274743	8.95	204687	12.12	95971	14.47
ZZZZZZ	283077	8.95	211454	12.11	98015	14.47
ZZZZZZ	276672	8.95	201624	12.11	95376	14.47
FC1262-2MS	299718	8.95	223388	12.11	110133	14.47
V5E1624-ECC1617	317052	8.95	239839	12.11	119104	14.47

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: V5E1617-ICC1617 5E35982.D 12/08/22 12:42
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V5E1624-CC1617	**Injection Date:**	12/14/22
Lab File ID:	5E36115.D	**Injection Time:**	09:23
Instrument ID:	GCMS5E	**Method:**	SW846 8260D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT

(e) No MSD available for this run.
(f) Sample vial(s) contained bubbles greater than 6mm.

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VO2867-CC2866	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	828618	8.55	603499	11.72	216353	14.10
Check Std [b]	851463	8.55	590347	11.72	222946	14.10
Upper Limit [c]	1702926	8.72	1180694	11.89	445892	14.27
Lower Limit [d]	425732	8.38	295174	11.55	111473	13.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VO2867-MB	797478	8.55	522651	11.72	179709	14.10
ZZZZZZ	784382	8.55	520176	11.72	167074	14.10
ZZZZZZ	797518	8.55	543913	11.72	192853	14.10
ZZZZZZ	774379	8.55	515462	11.73	164036	14.10
FC1020-4	775010	8.55	514258	11.73	163002	14.10
FC1020-3 [e]	740723	8.55	483913	11.72	161023	14.10
ZZZZZZ	756937	8.55	511960	11.73	165986	14.10
ZZZZZZ	716790	8.55	474905	11.73	144112	14.10
ZZZZZZ	734384	8.55	491413	11.72	156896	14.10
ZZZZZZ	735570	8.55	501653	11.72	165779	14.10
ZZZZZZ	767956	8.55	551250	11.72	237013	14.10
ZZZZZZ	726068	8.55	497380	11.73	178976	14.10
ZZZZZZ	720362	8.55	476996	11.72	156730	14.10
ZZZZZZ	716094	8.55	476465	11.72	149943	14.10
ZZZZZZ	710803	8.55	472615	11.73	149220	14.10
ZZZZZZ	701225	8.55	468492	11.72	143864	14.10
ZZZZZZ	683818	8.55	451230	11.73	137950	14.10
ZZZZZZ	689183	8.55	452361	11.72	138047	14.10
ZZZZZZ	719751	8.55	493775	11.72	163134	14.10
ZZZZZZ	676373	8.55	457105	11.73	157249	14.10
ZZZZZZ	677233	8.55	448448	11.72	145285	14.10
FC1020-3MS	747271	8.55	516767	11.73	185563	14.10
FC1020-3MSD	774006	8.55	533318	11.73	183628	14.10
VO2867-ECC2866	786853	8.55	570626	11.73	237879	14.10

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: VO2866-ICC2866 O72894.D 12/08/22 11:35
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VO2867-CC2866	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO	**Method:**	SW846 8260D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT

(e) RR@1x, DCFM ICV low DoD

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VY2765-CC2755	**Injection Date:**	12/09/22
Lab File ID:	Y66605.D	**Injection Time:**	09:38
Instrument ID:	GCMSY	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	895867	9.50	655308	12.15	313280	13.77
Check Std [b]	651561	9.50	463146	12.15	221157	13.77
Upper Limit [c]	1303122	9.67	926292	12.32	442314	13.94
Lower Limit [d]	325781	9.33	231573	11.98	110579	13.60

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VY2765-BS	667893	9.49	476670	12.15	223325	13.77
VY2767-BS	667893	9.49	476670	12.15	223325	13.77
VY2767-MB [e]	583614	9.50	415790	12.15	191063	13.77
VY2765-MB	579704	9.50	414034	12.15	189705	13.77
ZZZZZZ	581053	9.50	405328	12.15	186884	13.77
ZZZZZZ	552986	9.50	386578	12.15	173356	13.77
ZZZZZZ	544264	9.50	384251	12.15	172693	13.77
ZZZZZZ	546562	9.50	390007	12.15	172203	13.77
ZZZZZZ	538040	9.50	387948	12.15	177515	13.77
ZZZZZZ	536120	9.49	378280	12.15	172427	13.77
ZZZZZZ	541935	9.50	389803	12.15	181986	13.77
ZZZZZZ	542652	9.50	388201	12.15	177744	13.77
ZZZZZZ	538982	9.50	386958	12.15	177889	13.77
ZZZZZZ	547835	9.50	384907	12.15	180048	13.77
ZZZZZZ	525516	9.50	373000	12.15	170648	13.77
FC1020-1	511582	9.50	363266	12.15	160830	13.77
FC1020-2 [e]	509360	9.50	372009	12.15	172259	13.77
FC1005-3	513933	9.50	368583	12.15	166103	13.77
FC832-1	730437	9.50	554339	12.15	1238*	13.93
FC1005-3MS	837868	9.50	590606	12.15	267786	13.77
FC1005-3MSD	845495	9.50	595514	12.15	266516	13.77
FC832-1MS [e]	1284190	9.50	765891	12.15	40587*	13.83
FC832-1MSD [e]	1362930*	9.49	805797	12.15	27644*	13.83
VY2765-ECC2755	1143089	9.50	791862	12.15	355077	13.77

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: VY2755-ICC2755 Y66389.D 12/02/22 15:41
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VY2765-CC2755	**Injection Date:**	12/09/22
Lab File ID:	Y66605.D	**Injection Time:**	09:38
Instrument ID:	GCMSY	**Method:**	SW846 8260D

Lab	IS 1		IS 2		IS 3	
Sample ID	**AREA**	**RT**	**AREA**	**RT**	**AREA**	**RT**

(e) Sample was treated with an anti-foaming agent.

Surrogate Recovery Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FC1020-1	Y66626.D	97	102	103	105
FC1020-2	Y66627.D	101	106	100	108
FC1020-3	5E36136.D	102	100	100	103
FC1020-3	O72928.D	93	102	109	100
FC1020-4	1P96418.D	106	109	93	102
FC1020-4	O72927.D	94	99	108	103
FC1005-3MS	Y66630.D	96	103	101	102
FC1005-3MSD	Y66631.D	97	101	101	101
FC1020-3MS	O72944.D	96	98	102	95
FC1020-3MSD	O72945.D	97	97	103	99
FC1262-2MS	5E36141.D	101	99	95	99
FC1293-8MS	1P96448.D	113	126*	94	99
FC1293-8MSD	1P96450.D	113	121	95	99
V1P3648-BS	1P96410.D	110	112	97	105
V1P3648-MB	1P96414.D	106	109	94	101
V5E1624-BS	5E36116.D	103	104	97	99
V5E1624-MB	5E36119.D	101	100	98	101
VO2867-BS	O72921.D	97	101	106	99
VO2867-MB	O72923.D	94	102	108	98
VY2765-BS	Y66606.D	98	99	102	103
VY2765-MB	Y66609.D	98	105	102	107

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICC3646
Lab FileID: 1P96328.D

Response Factor Report MSVOA13

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Calibration Files
1 =1P96320.D 2 =1P96322.D 3 =1P96324.D 4 =1P96326.D
5 =1P96328.D 6 =1P96330.D 7 =1P96332.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.176	0.246	0.252	0.245	0.220	0.254	0.251	0.235	12.20
3)P Chloromethane	0.183	0.244	0.245	0.218	0.211	0.240	0.231	0.225	9.98
4) 1,3-butadiene	0.172	0.138	0.164	0.159	0.157	0.191	0.175	0.165	10.02
5)C Vinyl Chloride	0.137	0.195	0.207	0.193	0.187	0.229	0.213	0.194	15.00
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9958									
Response Ratio = 0.00000 + 0.19112 *A + 0.01392 *A^2									
6) Bromomethane	0.083	0.077	0.072	0.067	0.059	0.067	0.068	0.071	10.98
7) Chloroethane	0.061	0.074	0.077	0.077	0.069	0.078	0.075	0.073	8.35
8) Trichlorofluorome	0.221	0.265	0.258	0.253	0.210	0.202	0.146	0.222	18.70
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9965									
Response Ratio = 0.00000 + 0.27457 *A + -0.06159 *A^2									
9) Ethyl Ether	0.122	0.155	0.159	0.176	0.150	0.144	0.121	0.147	13.55
10) Ethanol	0.009	0.005	0.006	0.005	0.004	0.004	0.004	0.005	36.40
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9941									
Response Ratio = 0.00000 + 0.00538 *A + -0.00004 *A^2									
11) 1,2-Dichlorotrifl	0.226	0.218	0.215	0.251	0.223	0.242	0.224	0.229	5.77
12)C 1,1-Dichloroethen	0.292	0.258	0.274	0.320	0.284	0.308	0.282	0.288	7.18
13) Freon 113	0.175	0.169	0.169	0.197	0.186	0.200	0.192	0.184	7.10
14) Carbon Disulfide	0.533	0.435	0.462	0.550	0.493	0.530	0.498	0.500	8.23
15) Iodomethane	0.104	0.088	0.105	0.133	0.129	0.146	0.131	0.119	17.22
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9938									
Response Ratio = 0.00000 + 0.12413 *A + 0.00647 *A^2									
16) Acrolein	0.055	0.067	0.062	0.070	0.061	0.063	0.059	0.063	7.87
17) Allyl chloride	0.358	0.265	0.305	0.304	0.284	0.283	0.252	0.293	11.86
18) Methylene Chlorid	0.401	0.239	0.243	0.259	0.234	0.231	0.217	0.261	24.30
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985									
Response Ratio = 0.00000 + 0.25848 *A + -0.02075 *A^2									
19) Acetone	0.183	0.133	0.120	0.121	0.113	0.112	0.107	0.127	20.58
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994									
Response Ratio = 0.00000 + 0.12481 *A + -0.00186 *A^2									
20) Methyl acetate	0.257	0.234	0.256	0.295	0.263	0.257	0.241	0.258	7.50
21) trans-1,2-Dichlor	0.295	0.257	0.278	0.309	0.288	0.293	0.279	0.286	5.68
22) Hexane	0.163	0.137	0.136	0.169	0.160	0.163	0.161	0.155	8.73
23) Methyl Tert Butyl	0.586	0.568	0.657	0.732	0.691	0.711	0.685	0.661	9.39
24) Tert Butyl Alcoho	0.059	0.055	0.060	0.069	0.064	0.066	0.064	0.062	7.52
25) Acetonitrile	0.082	0.046	0.052	0.044	0.042	0.037		0.051	31.87
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9975									
Response Ratio = 0.00000 + 0.05094 *A + -0.00103 *A^2									

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
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26)	Di-isopropyl ethe	0.540	0.529	0.594	0.699	0.652	0.652	0.625	0.613	10.16
27)	Chloroprene	0.982	0.826	0.902	0.948	0.895	0.875	0.845	0.896	6.12
28)P	1,1-Dichloroethan	0.341	0.340	0.367	0.402	0.366	0.373	0.351	0.363	5.91
29)	Acrylonitrile	0.126	0.106	0.115	0.124	0.116	0.112	0.108	0.115	6.67
30)	ETBE	0.549	0.568	0.619	0.695	0.658	0.669	0.650	0.630	8.57
31)	Vinyl acetate	0.422	0.389	0.429	0.486	0.462	0.434	0.423	0.435	7.13
32)	cis-1,2-Dichloroe	0.209	0.189	0.213	0.230	0.217	0.221	0.217	0.214	6.03
33)	2,2-Dichloropropa	0.315	0.289	0.326	0.362	0.338	0.376	0.364	0.338	9.19
34)	Bromochloromethan	0.093	0.081	0.086	0.095	0.085	0.088	0.085	0.087	5.50
35)	Cyclohexane	0.275	0.253	0.286	0.341	0.329	0.333	0.333	0.307	11.42
36)C	Chloroform	0.384	0.336	0.370	0.407	0.375	0.392	0.376	0.377	5.85
37)	Ethyl acetate	0.330	0.290	0.314	0.352	0.336	0.318	0.309	0.321	6.24
38)	Tetrahydrofuran	0.139	0.110	0.132	0.139	0.134	0.125	0.120	0.129	8.31
39)S	Dibromofluorometh	0.221	0.222	0.231	0.224	0.222	0.234	0.221	0.225	2.31
40)	Carbon Tetrachlor	0.274	0.245	0.260	0.296	0.276	0.309	0.305	0.281	8.50
41)	1,1,1-Trichloroet	0.303	0.302	0.328	0.361	0.335	0.362	0.355	0.335	7.70
42)	2-Butanone	0.287	0.240	0.214	0.217	0.207	0.195	0.190	0.222	14.96

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22411 *A + -0.00361 *A^2

43)	1,1-Dichloroprope	0.268	0.248	0.277	0.312	0.292	0.309	0.304	0.287	8.33
44)	tert-Butyl format	0.137	0.186	0.178	0.205	0.190			0.179	14.13
45)	Propionitrile	0.077	0.059	0.066	0.060	0.058	0.054	0.051	0.061	13.91
46)	Methacrylonitrile	0.241	0.189	0.217	0.196	0.187	0.166	0.154	0.193	15.15

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992
Response Ratio = 0.00000 + 0.20967 *A + -0.00285 *A^2

47)	Benzene	0.891	0.783	0.852	0.894	0.815	0.769	0.719	0.818	7.99
48)	TAME	0.542	0.546	0.597	0.664	0.645	0.644	0.641	0.611	8.25
49)S	1,2-Dichloroethan	0.301	0.306	0.308	0.303	0.302	0.312	0.297	0.304	1.54
50)	Isobutyl alcohol	0.024	0.020	0.024	0.024	0.024	0.021	0.020	0.023	8.18
51)	1,2-Dichloroethan	0.312	0.270	0.296	0.314	0.291	0.307	0.295	0.298	5.07
52)	Tert Amyl Alcohol	0.041	0.042	0.046	0.055	0.054	0.053	0.054	0.049	11.89
53)	Trichloroethene	0.238	0.195	0.205	0.230	0.215	0.220	0.222	0.218	6.59
54)	Methylcyclohexane	0.283	0.252	0.269	0.322	0.317	0.334	0.339	0.302	11.31
55)	Dibromomethane	0.126	0.104	0.114	0.129	0.122	0.124	0.122	0.120	6.92
56)C	1,2-Dichloropropa	0.193	0.180	0.199	0.223	0.211	0.209	0.214	0.204	7.09
57)	Bromodichlorometh	0.241	0.220	0.239	0.270	0.262	0.278	0.272	0.255	8.40
58)	Methyl methacryla	0.234	0.178	0.210	0.229	0.237	0.235	0.237	0.223	9.79
59)	1,4-Dioxane	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.004	19.36

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9966
Response Ratio = 0.00000 + 0.00462 *A + 0.00001 *A^2

60)	2-Chloroethyl vin	0.103	0.160	0.150	0.170	0.156	0.149	0.146	0.148	14.59
61)	cis-1,3-Dichlorop	0.274	0.271	0.309	0.349	0.331	0.345	0.342	0.317	10.49
62) I	Chlorobenzene-d5	----------	----------	----------	ISTD	----------	----------	----------	----------	----------
63)S	Toluene-d8	1.392	1.409	1.406	1.412	1.475	1.467	1.520	1.440	3.31
64)C	Toluene	1.290	1.189	1.233	1.389	1.380	1.348	1.379	1.315	6.04
65)	2-Nitropropane	0.110	0.106	0.115	0.142	0.140	0.137	0.145	0.128	13.04
66)	4-Methyl-2-pentan	0.608	0.575	0.513	0.518	0.530	0.457	0.472	0.525	10.14
67)	trans-1,3-Dichlor	0.360	0.365	0.390	0.451	0.446	0.445	0.453	0.416	10.19
68)	Tetrachloroethene	0.302	0.266	0.283	0.307	0.308	0.309	0.321	0.300	6.18
69)	Ethyl methacrylat	0.357	0.356	0.439	0.440	0.483	0.458	0.477	0.430	12.28
70)	1,1,2-Trichloroet	0.204	0.211	0.211	0.237	0.234	0.218	0.227	0.220	5.83
71)	Dibromochlorometh	0.221	0.198	0.234	0.276	0.278	0.285	0.293	0.255	14.49
72)	1,3-Dichloropropa	0.464	0.435	0.469	0.531	0.520	0.507	0.513	0.491	7.20
73)	1,2-Dibromoethane	0.247	0.231	0.255	0.287	0.274	0.282	0.290	0.267	8.51
74)	3,3-dimethyl-1-bu	0.043	0.068	0.066	0.084	0.076	0.074	0.073	0.069	18.63

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9978

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V1P3646-ICC3646
Lab FileID: 1P96328.D

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              Response Ratio = 0.00000 + 0.07660 *A + -0.00004 *A^2

 75)  2-hexanone         0.484 0.556 0.505 0.547 0.494 0.458 0.445 0.498   8.38
 76)  1-Chlorohexane     0.434 0.338 0.362 0.432 0.398 0.390 0.412 0.395   8.90
 77)C Ethylbenzene       1.363 1.225 1.315 1.496 1.375 1.418 1.421 1.373   6.30
 78)P Chlorobenzene      0.787 0.671 0.707 0.777 0.730 0.724 0.741 0.734   5.40
 79)  1,1,1,2-Tetrachlo 0.242 0.228 0.252 0.278 0.268 0.283 0.285 0.262   8.39
 80)  m,p-Xylene         0.919 0.909 0.993 1.139 1.076 1.102 1.108 1.035   9.13
 81)  o-Xylene           0.847 0.850 0.940 1.099 1.068 1.121 1.137 1.009  12.58
 82)  Styrene            0.528 0.567 0.666 0.825 0.800 0.822 0.833 0.720  18.25
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.73897 *A + 0.05221 *A^2

 83)P Bromoform          0.114 0.113 0.140 0.166 0.168 0.182 0.191 0.153  20.52
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.14599 *A + 0.02361 *A^2

 84)  Isopropylbenzene  0.825 0.930 1.073 1.280 1.233 1.279 1.300 1.132  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
               Response Ratio = 0.00000 + 1.15327 *A + 0.08019 *A^2


 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 0.811 0.812 0.811 0.785 0.801 0.826 0.833 0.811   1.92
 87)  cis-1,4-Dichloro- 0.360 0.289 0.335 0.326 0.326 0.327 0.341 0.329   6.51
 88)  n-Propylbenzene   2.793 2.705 2.968 3.359 3.233 3.234 3.310 3.086   8.50
 89)  Bromobenzene      0.722 0.602 0.620 0.652 0.640 0.639 0.651 0.647   5.83
 90)P 1,1,2,2-Tetrachlo 0.894 0.806 0.859 0.942 0.906 0.876 0.886 0.882   4.78
 91)  1,3,5-Trimethylbe 1.614 1.766 2.008 2.285 2.178 2.230 2.267 2.050  12.97
 92)  2-Chlorotoluene   1.699 1.641 1.777 2.016 1.907 1.942 1.980 1.852   7.88
 93)  trans-1,4-Dichlor 0.242 0.284 0.306 0.356 0.342 0.345 0.354 0.318  13.50
 94)  1,2,3-Trichloropr 0.297 0.312 0.313 0.335 0.318 0.317 0.321 0.316   3.51
 95)  Cyclohexanone     0.039 0.042 0.047 0.058 0.056 0.055 0.054 0.050  14.78
 96)  4-Chlorotoluene   1.731 1.718 1.975 2.129 2.007 2.057 2.072 1.956   8.47
 97)  tert-Butylbenzene 0.918 0.966 1.103 1.293 1.221 1.277 1.306 1.155  13.95
 98)  a-Methyl styrene                                                  0.000  -1.00
 99)  1,2,4-Trimethylbe 1.398 1.597 1.879 2.158 2.056 2.164 2.254 1.929  16.71
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 1.92184 *A + 0.17056 *A^2

100)  Pentachloroethane 0.338 0.315 0.352 0.348 0.337 0.357 0.368 0.345   4.90
101)  sec-Butylbenzene  1.774 1.845 2.124 2.481 2.384 2.451 2.551 2.230  14.26
102)  4-Isopropyltoluen 1.415 1.454 1.784 2.170 2.107 2.199 2.278 1.915  18.98
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
               Response Ratio = 0.00000 + 1.91353 *A + 0.19253 *A^2

103)  1,3-Dichlorobenze 1.130 1.049 1.116 1.210 1.136 1.156 1.176 1.139   4.45
104)  1,2,3-Trimethylbe 1.783 1.693 1.850 2.136 2.081 2.099 2.178 1.974   9.82
105)  1,4-Dichlorobenze 1.269 1.088 1.143 1.233 1.180 1.172 1.194 1.182   4.98
106)  n-Butylbenzene    0.755 0.757 0.891 1.061 1.046 1.064 1.113 0.955  15.97
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.95116 *A + 0.08371 *A^2

107)  Benzyl Chloride   0.260 0.234 0.276 0.347 0.362 0.380 0.398 0.322  20.02
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9983
               Response Ratio = 0.00000 + 0.30710 *A + 0.04832 *A^2

108)  1,2-Dichlorobenze 1.059 0.979 1.030 1.130 1.074 1.102 1.136 1.073   5.24
109)  1,2-Dibromo-3-Chl 0.237 0.179 0.203 0.251 0.247 0.265 0.276 0.237  14.56
110)  Hexachlorobutadie 0.264 0.216 0.256 0.282 0.273 0.296 0.302 0.270  10.73
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Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICC3646
Lab FileID: 1P96328.D

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111)  1,2,4-Trichlorobe 0.441 0.425 0.518 0.619 0.602 0.674 0.699 0.568  19.20
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.53683 *A + 0.08593 *A^2

112)  Naphthalene       1.327 1.311 1.583 2.072 2.125 2.395 2.520 1.905  26.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 1.74870 *A + 0.40915 *A^2

113)  1,2,3-Trichlorobe 0.492 0.455 0.530 0.622 0.602 0.651 0.679 0.576  14.67
 ----------------------------------------------------------------------------
 (#) = Out of Range

          V1P_2022-12-14.M        Wed Dec 14 15:37:06 2022
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Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-14\1P96336.D Vial: 10
Acq On : 14 Dec 2022 2:40 pm Operator: courtnef
Sample : ICV3646-5 Inst : MSVOA13
Misc : MS52806,V1P3646,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	94	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.222	5.5	95	0.00	1.12
3 P	Chloromethane	0.225	0.231	-2.7	103	0.00	1.24
4	1,3-butadiene	0.165	0.189	-14.5	113	0.00	1.31
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	41.376	-3.4	105	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.067	5.6	106	0.00	1.50
7	Chloroethane	0.073	0.081	-11.0	109	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	40.332	-0.8	101	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.137	6.8	85	0.00	1.87
		Amount	Calc.	%Drift			
10	Ethanol	800.000	746.461	6.7	96	0.00	1.97
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.225	1.7	94	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.282	2.1	93	0.00	1.97
13	Freon 113	0.184	0.180	2.2	91	0.00	2.01
14	Carbon Disulfide	0.500	0.520	-4.0	99	0.00	1.99
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	36.776	8.1	86	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.055	12.7	84	0.00	2.15
17	Allyl chloride	0.293	0.292	0.3	96	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	35.689	10.8	87	0.00	2.30
19	Acetone	200.000	196.551	1.7	96	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.261	-1.2	93	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.279	2.4	91	0.00	2.40
22	Hexane	0.155	0.153	1.3	90	0.00	2.46

Initial Calibration Verification

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Account: BHATALB Bhate Environmental
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			Amount	Calc.	%Drift			
23		Methyl Tert Butyl Ether	0.661	0.682	-3.2	93	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.067	-8.1	98	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	322.180	19.5	80	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.641	-4.6	92	0.00	2.68
27		Chloroprene	0.896	0.957	-6.8	100	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.368	-1.4	94	0.00	2.72
29		Acrylonitrile	0.115	0.124	-7.8	100	0.00	2.73
30		ETBE	0.630	0.637	-1.1	91	0.00	2.88
31		Vinyl acetate	0.435	0.518	-19.1	105	0.00	2.86
32		cis-1,2-Dichloroethene	0.214	0.213	0.5	92	0.00	3.01
33		2,2-Dichloropropane	0.338	0.325	3.8	90	0.00	3.08
34		Bromochloromethane	0.087	0.088	-1.1	97	0.00	3.12
35		Cyclohexane	0.307	0.326	-6.2	93	0.00	3.16
36	C	Chloroform	0.377	0.373	1.1	93	0.00	3.16
37		Ethyl acetate	0.321	0.343	-6.9	96	0.00	3.22
38		Tetrahydrofuran	0.129	0.125	3.1	87	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.228	-1.3	96	0.00	3.26
40		Carbon Tetrachloride	0.281	0.280	0.4	95	0.00	3.27
41		1,1,1-Trichloroethane	0.335	0.339	-1.2	95	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	184.381	7.8	88	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.285	0.7	91	0.00	3.36
44		tert-Butyl formate	0.179	0.146	18.4	72	0.00	3.40
45		Propionitrile	0.061	0.053	13.1	85	0.00	3.46
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	358.217	10.4	85	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.775	5.3	89	0.00	3.49
48		TAME	0.611	0.621	-1.6	90	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.295	3.0	91	0.00	3.55
50		Isobutyl alcohol	0.023	0.021	8.7	81	0.00	3.60
51		1,2-Dichloroethane	0.298	0.284	4.7	91	0.00	3.58
52		Tert Amyl Alcohol	0.049	0.052	-6.1	92	0.00	3.65
53		Trichloroethene	0.218	0.212	2.8	92	0.00	3.82
54		Methylcyclohexane	0.302	0.316	-4.6	93	0.00	3.84
55		Dibromomethane	0.120	0.116	3.3	89	0.00	4.04
56	C	1,2-Dichloropropane	0.204	0.195	4.4	87	0.00	4.10
57		Bromodichloromethane	0.255	0.266	-4.3	95	0.00	4.14
58		Methyl methacrylate	0.223	0.232	-4.0	91	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	891.182	-11.4	101	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.156	-5.4	94	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.324	-2.2	92	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00	5.64
63	S	Toluene-d8	1.440	1.472	-2.2	97	0.00	4.65
64	C	Toluene	1.315	1.290	1.9	91	0.00	4.68
65		2-Nitropropane	0.128	0.138	-7.8	96	0.00	4.77

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

66		4-Methyl-2-pentanone	0.525	0.463	11.8	85	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.449	-7.9	98	0.00	4.91
68		Tetrachloroethene	0.300	0.306	-2.0	96	0.00	4.93
69		Ethyl methacrylate	0.430	0.422	1.9	85	0.00	5.03
70		1,1,2-Trichloroethane	0.220	0.216	1.8	90	0.00	5.01
71		Dibromochloromethane	0.255	0.262	-2.7	92	0.00	5.14
72		1,3-Dichloropropane	0.491	0.463	5.7	87	0.00	5.19
73		1,2-Dibromoethane	0.267	0.275	-3.0	97	0.00	5.29
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1992.704	0.4	96	0.00	5.43
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.498	0.470	5.6	92	0.00	5.43
76		1-Chlorohexane	0.395	0.409	-3.5	100	0.00	5.65
77	C	Ethylbenzene	1.373	1.359	1.0	96	0.00	5.68
78	P	Chlorobenzene	0.734	0.719	2.0	96	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.274	-4.6	99	0.00	5.69
80		m,p-Xylene	1.035	1.075	-3.9	97	0.00	5.78
81		o-Xylene	1.009	1.102	-9.2	100	0.00	6.07
			Amount	Calc.	%Drift			
82		Styrene	40.000	41.456	-3.6	98	0.00	6.11
83	P	Bromoform	40.000	41.682	-4.2	100	0.00	6.11
84		Isopropylbenzene	40.000	41.251	-3.1	99	0.00	6.30
			AvgRF	CCRF	%Dev			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.833	-2.7	104	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.284	13.7	87	0.00	6.52
88		n-Propylbenzene	3.086	3.174	-2.9	98	0.00	6.60
89		Bromobenzene	0.647	0.603	6.8	94	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.840	4.8	93	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.142	-4.5	99	0.00	6.75
92		2-Chlorotoluene	1.852	1.883	-1.7	99	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.347	-9.1	102	0.00	6.75
94		1,2,3-Trichloropropane	0.316	0.297	6.0	94	0.00	6.72
95		Cyclohexanone	0.050	0.056	-12.0	99	0.00	6.74
96		4-Chlorotoluene	1.956	2.010	-2.8	100	0.00	6.83
97		tert-Butylbenzene	1.155	1.249	-8.1	102	0.00	6.99
98		a-Methyl styrene		----------NA----------				
			Amount	Calc.	%Drift			
99		1,2,4-Trimethylbenzene	40.000	40.992	-2.5	103	0.00	7.04
			AvgRF	CCRF	%Dev			
100		Pentachloroethane	0.345	0.361	-4.6	107	0.00	6.99
101		sec-Butylbenzene	2.230	2.485	-11.4	104	0.00	7.13
			Amount	Calc.	%Drift			
102		4-Isopropyltoluene	40.000	42.661	-6.7	105	0.00	7.24
			AvgRF	CCRF	%Dev			
103		1,3-Dichlorobenzene	1.139	1.149	-0.9	101	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	2.154	-9.1	104	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.162	1.7	99	0.00	7.34
			Amount	Calc.	%Drift			
106		n-Butylbenzene	40.000	38.277	4.3	93	0.00	7.55

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

107	Benzyl Chloride	40.000	41.245	-3.1	99	0.00	7.52
	----------	AvgRF	CCRF	%Dev	----------		
108	1,2-Dichlorobenzene	1.073	1.091	-1.7	102	0.00	7.65
109	1,2-Dibromo-3-Chloropropa	0.237	0.234	1.3	95	0.00	8.20
110	Hexachlorobutadiene	0.270	0.265	1.9	97	0.00	8.68
	----------	Amount	Calc.	%Drift	----------		
111	1,2,4-Trichlorobenzene	40.000	41.617	-4.0	105	0.00	8.68
112	Naphthalene	40.000	41.874	-4.7	103	0.00	8.88
	----------	AvgRF	CCRF	%Dev	----------		
113	1,2,3-Trichlorobenzene	0.576	0.620	-7.6	103	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Wed Dec 14 15:36:57 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-16\1P96408.D Vial: 2
Acq On : 16 Dec 2022 8:38 am Operator: courtnef
Sample : CC3646-5 Inst : MSVOA13
Misc : MS52806,V1P3648,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	70	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.254	-8.1	81	0.00	1.12
3 P	Chloromethane	0.225	0.205	8.9	69	0.00	1.24
4	1,3-butadiene	0.165	0.152	7.9	68	0.00	1.32
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	34.992	12.5	66	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.075	-5.6	89	0.00	1.50
7	Chloroethane	0.073	0.089	-21.9#	90	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	51.128	-27.8#	91	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.167	-13.6	78	0.00	1.87
		Amount	Calc.	%Drift			
10	Ethanol	800.000	835.537	-4.4	80	0.00	1.97
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.256	-11.8	81	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.340	-18.1	84	0.00	1.97
13	Freon 113	0.184	0.210	-14.1	80	0.00	2.01
14	Carbon Disulfide	0.500	0.558	-11.6	80	0.00	2.00
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	53.637	-34.1#	96	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.068	-7.9	78	0.00	2.15
17	Allyl chloride	0.293	0.294	-0.3	73	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	41.412	-3.5	75	0.00	2.29
19	Acetone	200.000	212.677	-6.3	78	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.262	-1.6	70	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.314	-9.8	77	0.00	2.40
22	Hexane	0.155	0.158	-1.9	70	0.00	2.46

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

23		Methyl Tert Butyl Ether	0.661	0.754	-14.1	77	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.070	-12.9	77	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	346.445	13.4	64	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.636	-3.8	69	0.00	2.68
27		Chloroprene	0.896	0.925	-3.2	73	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.390	-7.4	75	0.00	2.72
29		Acrylonitrile	0.115	0.119	-3.5	73	0.00	2.72
30		ETBE	0.630	0.687	-9.0	74	0.00	2.88
31		Vinyl acetate	0.435	0.452	-3.9	69	0.00	2.85
32		cis-1,2-Dichloroethene	0.214	0.228	-6.5	74	0.00	3.02
33		2,2-Dichloropropane	0.338	0.407	-20.4#	85	0.00	3.08
34		Bromochloromethane	0.087	0.097	-11.5	80	0.00	3.12
35		Cyclohexane	0.307	0.322	-4.9	69	0.00	3.16
36	C	Chloroform	0.377	0.426	-13.0	80	0.00	3.16
37		Ethyl acetate	0.321	0.332	-3.4	70	0.00	3.22
38		Tetrahydrofuran	0.129	0.122	5.4	64	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.249	-10.7	79	0.00	3.26
40		Carbon Tetrachloride	0.281	0.339	-20.6#	86	0.00	3.26
41		1,1,1-Trichloroethane	0.335	0.400	-19.4	84	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	188.103	5.9	67	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.324	-12.9	78	0.00	3.36
44		tert-Butyl formate	0.179	0.208	-16.2	77	0.00	3.40
45		Propionitrile	0.061	0.056	8.2	67	0.00	3.45
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	372.132	7.0	66	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.820	-0.2	71	0.00	3.49
48		TAME	0.611	0.667	-9.2	73	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.344	-13.2	80	0.00	3.55
50		Isobutyl alcohol	0.023	0.021	8.7	61	0.00	3.59
51		1,2-Dichloroethane	0.298	0.337	-13.1	82	0.00	3.59
52		Tert Amyl Alcohol	0.049	0.054	-10.2	71	0.00	3.65
53		Trichloroethene	0.218	0.234	-7.3	77	0.00	3.82
54		Methylcyclohexane	0.302	0.319	-5.6	71	0.00	3.84
55		Dibromomethane	0.120	0.132	-10.0	76	0.00	4.05
56	C	1,2-Dichloropropane	0.204	0.210	-2.9	70	0.00	4.10
57		Bromodichloromethane	0.255	0.288	-12.9	78	0.00	4.14
58		Methyl methacrylate	0.223	0.236	-5.8	70	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	858.490	-7.3	73	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.156	-5.4	71	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.354	-11.7	75	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	76	0.00	5.64
63	S	Toluene-d8	1.440	1.412	1.9	73	0.00	4.64
64	C	Toluene	1.315	1.300	1.1	72	0.00	4.68
65		2-Nitropropane	0.128	0.147	-14.8	80	0.00	4.77

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

66		4-Methyl-2-pentanone	0.525	0.447	14.9	64	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.445	-7.0	76	0.00	4.91
68		Tetrachloroethene	0.300	0.319	-6.3	79	0.00	4.93
69		Ethyl methacrylate	0.430	0.438	-1.9	69	0.00	5.03
70		1,1,2-Trichloroethane	0.220	0.218	0.9	71	0.00	5.02
71		Dibromochloromethane	0.255	0.288	-12.9	79	0.00	5.14
72		1,3-Dichloropropane	0.491	0.496	-1.0	73	0.00	5.19
73		1,2-Dibromoethane	0.267	0.279	-4.5	78	0.00	5.29
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1938.280	3.1	73	0.00	5.43
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.498	0.460	7.6	71	0.00	5.43
76		1-Chlorohexane	0.395	0.393	0.5	75	0.00	5.65
77	C	Ethylbenzene	1.373	1.358	1.1	75	0.00	5.68
78	P	Chlorobenzene	0.734	0.723	1.5	76	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.287	-9.5	82	0.00	5.69
80		m,p-Xylene	1.035	1.086	-4.9	77	0.00	5.78
81		o-Xylene	1.009	1.068	-5.8	76	0.00	6.07
			Amount	Calc.	%Drift			
82		Styrene	40.000	40.634	-1.6	76	0.00	6.11
83	P	Bromoform	40.000	43.434	-8.6	82	0.00	6.11
84		Isopropylbenzene	40.000	41.120	-2.8	78	0.00	6.30
			AvgRF	CCRF	%Dev			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.821	-1.2	85	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.284	13.7	72	0.00	6.52
88		n-Propylbenzene	3.086	2.984	3.3	77	0.00	6.60
89		Bromobenzene	0.647	0.629	2.8	81	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.784	11.1	72	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.122	-3.5	81	0.00	6.75
92		2-Chlorotoluene	1.852	1.805	2.5	78	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.311	2.2	75	0.00	6.75
94		1,2,3-Trichloropropane	0.316	0.305	3.5	79	0.00	6.72
95		Cyclohexanone	0.050	0.048	4.0	70	0.00	6.74
96		4-Chlorotoluene	1.956	1.907	2.5	79	0.00	6.83
97		tert-Butylbenzene	1.155	1.201	-4.0	82	0.00	6.99
98		a-Methyl styrene		----------NA----------				
			Amount	Calc.	%Drift			
99		1,2,4-Trimethylbenzene	40.000	38.362	4.1	79	0.00	7.04
			AvgRF	CCRF	%Dev			
100		Pentachloroethane	0.345	0.339	1.7	83	0.00	6.99
101		sec-Butylbenzene	2.230	2.230	0.0	78	0.00	7.13
			Amount	Calc.	%Drift			
102		4-Isopropyltoluene	40.000	38.678	3.3	78	0.00	7.24
			AvgRF	CCRF	%Dev			
103		1,3-Dichlorobenzene	1.139	1.078	5.4	79	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	1.952	1.1	78	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.113	5.8	78	0.00	7.34
			Amount	Calc.	%Drift			
106		n-Butylbenzene	40.000	37.658	5.9	76	0.00	7.55

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

107	Benzyl Chloride	40.000	38.972	2.6	77	0.00	7.52
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.073	1.027	4.3	79	0.00	7.64
109	1,2-Dibromo-3-Chloropropa	0.237	0.250	-5.5	84	0.00	8.20
110	Hexachlorobutadiene	0.270	0.285	-5.6	86	0.00	8.68
		Amount	Calc.	%Drift			
111	1,2,4-Trichlorobenzene	40.000	40.529	-1.3	85	0.00	8.68
112	Naphthalene	40.000	39.125	2.2	79	0.00	8.88
		AvgRF	CCRF	%Dev			
113	1,2,3-Trichlorobenzene	0.576	0.610	-5.9	84	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Fri Dec 16 08:55:38 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

Evaluate Continuing Calibration Report

Data File : C:\Users\Organics\Desktop\P\1P96452.D Vial: 24
Acq On : 16 Dec 2022 8:16 pm Operator: courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\Users\Organic...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	62	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.269	-14.5	76	0.00	1.12
3 P	Chloromethane	0.225	0.197	12.4	58	0.00	1.24
4	1,3-butadiene	0.165	0.151	8.5	60	0.00	1.32
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	35.057	12.4	59	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.074	-4.2	77	0.00	1.50
7	Chloroethane	0.073	0.100	-37.0	90	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	62.670	-56.7#	92	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.170	-15.6	70	0.00	1.88
		Amount	Calc.	%Drift			
10	Ethanol	800.000	896.594	-12.1	75	0.00	1.96
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.255	-11.4	71	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.341	-18.4	75	0.00	1.97
13	Freon 113	0.184	0.215	-16.8	72	0.00	2.01
14	Carbon Disulfide	0.500	0.534	-6.8	67	0.00	2.00
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	50.602	-26.5	80	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.062	1.6	63	0.00	2.15
17	Allyl chloride	0.293	0.275	6.1	60	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	40.544	-1.4	65	0.00	2.29
19	Acetone	200.000	212.505	-6.3	69	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.255	1.2	60	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.309	-8.0	67	0.00	2.40
22	Hexane	0.155	0.148	4.5	58	0.00	2.46

Continuing Calibration Summary

Job Number: FC1020 **Sample:** V1P3648-ECC3646
Account: BHATALB Bhate Environmental **Lab FileID:** 1P96452.D
Project: Griffiss AFB; Rome, NY

23		Methyl Tert Butyl Ether	0.661	0.776	-17.4	70	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.073	-17.7	70	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	323.393	19.2	53	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.616	-0.5	59	0.00	2.68
27		Chloroprene	0.896	0.912	-1.8	63	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.390	-7.4	66	0.00	2.72
29		Acrylonitrile	0.115	0.118	-2.6	63	0.00	2.72
30		ETBE	0.630	0.710	-12.7	67	0.00	2.88
31		Vinyl acetate	0.435	0.441	-1.4	59	0.00	2.86
32		cis-1,2-Dichloroethene	0.214	0.228	-6.5	66	0.00	3.02
33		2,2-Dichloropropane	0.338	0.377	-11.5	69	0.00	3.08
34		Bromochloromethane	0.087	0.093	-6.9	68	0.00	3.13
35		Cyclohexane	0.307	0.318	-3.6	60	0.00	3.16
36	C	Chloroform	0.377	0.440	-16.7	73	0.00	3.16
37		Ethyl acetate	0.321	0.322	-0.3	60	0.00	3.22
38		Tetrahydrofuran	0.129	0.121	6.2	56	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.252	-12.0	71	0.00	3.26
40		Carbon Tetrachloride	0.281	0.354	-26.0	80	0.00	3.26
41		1,1,1-Trichloroethane	0.335	0.420	-25.4	78	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	185.430	7.3	59	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.322	-12.2	69	0.00	3.36
44		tert-Butyl formate	0.179	0.211	-17.9	69	0.00	3.40
45		Propionitrile	0.061	0.055	9.8	58	0.00	3.45
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	371.414	7.1	58	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.815	0.4	62	0.00	3.49
48		TAME	0.611	0.678	-11.0	65	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.366	-20.4	76	0.00	3.55
50		Isobutyl alcohol	0.023	0.022	4.3	56	0.00	3.59
51		1,2-Dichloroethane	0.298	0.361	-21.1	77	0.00	3.59
52		Tert Amyl Alcohol	0.049	0.054	-10.2	63	0.00	3.65
53		Trichloroethene	0.218	0.232	-6.4	67	0.00	3.82
54		Methylcyclohexane	0.302	0.319	-5.6	63	0.00	3.84
55		Dibromomethane	0.120	0.135	-12.5	69	0.00	4.05
56	C	1,2-Dichloropropane	0.204	0.204	0.0	60	0.00	4.10
57		Bromodichloromethane	0.255	0.300	-17.6	71	0.00	4.14
58		Methyl methacrylate	0.223	0.230	-3.1	60	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	869.278	-8.7	66	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.154	-4.1	61	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.345	-8.8	65	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	68	0.00	5.64
63	S	Toluene-d8	1.440	1.419	1.5	65	0.00	4.64
64	C	Toluene	1.315	1.277	2.9	63	0.00	4.68
65		2-Nitropropane	0.128	0.155	-21.1	75	0.00	4.77

Continuing Calibration Summary

Job Number: FC1020 **Sample:** V1P3648-ECC3646
Account: BHATALB Bhate Environmental **Lab FileID:** 1P96452.D
Project: Griffiss AFB; Rome, NY

66		4-Methyl-2-pentanone	0.525	0.439	16.4	56	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.446	-7.2	68	0.00	4.91
68		Tetrachloroethene	0.300	0.331	-10.3	73	0.00	4.94
69		Ethyl methacrylate	0.430	0.418	2.8	59	0.00	5.02
70		1,1,2-Trichloroethane	0.220	0.213	3.2	62	0.00	5.01
71		Dibromochloromethane	0.255	0.290	-13.7	71	0.00	5.14
72		1,3-Dichloropropane	0.491	0.494	-0.6	64	0.00	5.19
73		1,2-Dibromoethane	0.267	0.277	-3.7	69	0.00	5.29
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1923.490	3.8	65	0.00	5.43
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.498	0.458	8.0	63	0.00	5.43
76		1-Chlorohexane	0.395	0.395	0.0	67	0.00	5.65
77	C	Ethylbenzene	1.373	1.362	0.8	67	0.00	5.68
78	P	Chlorobenzene	0.734	0.712	3.0	66	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.296	-13.0	75	0.00	5.69
80		m,p-Xylene	1.035	1.089	-5.2	69	0.00	5.78
81		o-Xylene	1.009	1.073	-6.3	68	0.00	6.08
			Amount	Calc.	%Drift			
82		Styrene	40.000	39.232	1.9	65	0.00	6.11
83	P	Bromoform	40.000	42.013	-5.0	70	0.00	6.11
84		Isopropylbenzene	40.000	40.893	-2.2	69	0.00	6.31
			AvgRF	CCRF	%Dev			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.814	-0.4	74	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.281	14.6	63	0.00	6.53
88		n-Propylbenzene	3.086	2.925	5.2	66	0.00	6.60
89		Bromobenzene	0.647	0.597	7.7	68	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.773	12.4	63	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.086	-1.8	70	0.00	6.76
92		2-Chlorotoluene	1.852	1.796	3.0	69	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.311	2.2	67	0.00	6.76
94		1,2,3-Trichloropropane	0.316	0.312	1.3	72	0.00	6.72
95		Cyclohexanone	0.050	0.050	0.0	65	0.00	6.74
96		4-Chlorotoluene	1.956	1.870	4.4	68	0.00	6.83
97		tert-Butylbenzene	1.155	1.233	-6.8	74	0.00	6.99
98		a-Methyl styrene	0.000	0.000	0.0	0#	-0.10	7.04
			Amount	Calc.	%Drift			
99		1,2,4-Trimethylbenzene	40.000	38.690	3.3	71	0.00	7.04
			AvgRF	CCRF	%Dev			
100		Pentachloroethane	0.345	0.308	10.7	67	0.00	6.99
101		sec-Butylbenzene	2.230	2.200	1.3	68	0.00	7.13
			Amount	Calc.	%Drift			
102		4-Isopropyltoluene	40.000	38.597	3.5	69	0.00	7.24
			AvgRF	CCRF	%Dev			
103		1,3-Dichlorobenzene	1.139	1.079	5.3	70	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	1.954	1.0	69	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.092	7.6	68	0.00	7.34
			Amount	Calc.	%Drift			
106		n-Butylbenzene	40.000	36.818	8.0	65	0.00	7.56

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

107	Benzyl Chloride	40.000	32.017	20.0	55	0.00	7.52
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.073	1.021	4.8	70	0.00	7.65
109	1,2-Dibromo-3-Chloropropa	0.237	0.255	-7.6	76	0.00	8.20
110	Hexachlorobutadiene	0.270	0.283	-4.8	76	0.00	8.69
		Amount	Calc.	%Drift			
111	1,2,4-Trichlorobenzene	40.000	40.075	-0.2	74	0.00	8.68
112	Naphthalene	40.000	38.517	3.7	69	0.00	8.88
		AvgRF	CCRF	%Dev			
113	1,2,3-Trichlorobenzene	0.576	0.587	-1.9	71	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Mon Dec 19 08:54:12 2022

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

Response Factor Report MSVOA20

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Calibration Files
1 =5E35978.D 2 =5E35979.D 3 =5E35980.D 4 =5E35981.D
5 =5E35982.D 6 =5E35983.D 7 =5E35984.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.331	0.277	0.321	0.304	0.286	0.316	0.302	0.305	6.29
3)P Chloromethane	0.277	0.279	0.315	0.287	0.284	0.296	0.311	0.293	5.20
4)C Vinyl Chloride	0.288	0.298	0.338	0.305	0.304	0.317	0.325	0.311	5.56
5) 1,3-Butadiene	0.210	0.209	0.205	0.200	0.185	0.208	0.175	0.199	6.80
6) Bromomethane	0.140	0.134	0.162	0.162	0.164	0.184	0.194	0.163	13.12
7) Chloroethane	0.191	0.185	0.220	0.224	0.255	0.452	0.524	0.293	46.73
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9954									
Response Ratio = 0.00000 + 0.13976 *A + 0.19750 *A^2									
8) Trichlorofluorome	0.364	0.341	0.394	0.380	0.371	0.395	0.386	0.376	5.06
9) Ethyl Ether	0.189	0.232	0.205	0.230	0.228	0.240	0.224	0.221	7.98
10) Ethanol			0.000	0.002	0.002	0.002	0.003	0.002	46.39
11) 1,2-Dichlorotrifl	0.266	0.318	0.306	0.334	0.319	0.349	0.319	0.316	8.20
12)C 1,1-Dichloroethen	0.347	0.392	0.371	0.416	0.403	0.428	0.396	0.393	6.95
13) Freon 113	0.245	0.273	0.250	0.275	0.262	0.295	0.256	0.265	6.50
14) Carbon Disulfide	0.751	0.779	0.691	0.751	0.723	0.770	0.711	0.740	4.34
15) Iodomethane	0.193	0.285	0.326	0.376	0.384	0.392	0.382	0.334	21.90
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9986									
Response Ratio = 0.00000 + 0.35603 *A + 0.01713 *A^2									
16) Acrolein	0.036	0.043	0.047	0.052	0.052	0.054	0.049	0.048	13.24
17) Allyl chloride	0.273	0.258	0.265	0.283	0.266	0.283	0.267	0.271	3.48
18) Methylene Chlorid	0.563	0.431	0.365	0.367	0.360	0.359	0.332	0.397	19.95
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991									
Response Ratio = 0.00000 + 0.39060 *A + -0.02825 *A^2									
19) Acetone	0.112	0.071	0.078	0.082	0.072	0.074	0.070	0.080	18.38
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981									
Response Ratio = 0.00000 + 0.08034 *A + -0.00105 *A^2									
20) Methyl acetate	0.126	0.138	0.148	0.162	0.166	0.170	0.159	0.153	10.60
21) trans-1,2-Dichlor	0.323	0.363	0.336	0.385	0.372	0.400	0.377	0.365	7.38
22) Hexane	0.183	0.215	0.220	0.239	0.234	0.222	0.221	0.219	8.16
23) Methyl Tert Butyl	0.614	0.717	0.700	0.773	0.757	0.798	0.740	0.728	8.27
24) Acetonitrile	0.027	0.021	0.025	0.026	0.024	0.025	0.025	0.025	7.24
25) Di-isopropyl ethe	0.630	0.686	0.669	0.728	0.724	0.750	0.707	0.699	5.81
26) Chloroprene	0.321	0.317	0.327	0.335	0.322	0.348	0.322	0.328	3.23
27)P 1,1-Dichloroethan	0.468	0.467	0.448	0.504	0.496	0.519	0.487	0.484	5.07
28) Acrylonitrile	0.065	0.088	0.103	0.091	0.096	0.100	0.098	0.091	14.16
29) ETBE	0.689	0.767	0.769	0.862	0.842	0.885	0.844	0.808	8.56
30) Tert Butyl Alcoho	0.024	0.028	0.037	0.039	0.038	0.038	0.032	0.034	17.30
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9961									
Response Ratio = 0.00000 + 0.03967 *A + -0.00030 *A^2									
31) Vinyl acetate	0.367	0.450	0.474	0.467	0.498	0.537	0.536	0.476	12.26

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

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32)  cis-1,2-Dichloroe 0.230 0.264 0.263 0.275 0.275 0.291 0.271 0.267   7.01
33)  2,2-Dichloropropa 0.340 0.395 0.373 0.394 0.396 0.418 0.390 0.387   6.29
34)  Bromochloromethan 0.093 0.134 0.123 0.147 0.139 0.143 0.130 0.130  13.97
35)  Cyclohexane       0.374 0.420 0.423 0.449 0.426 0.484 0.423 0.429   7.72
36)C Chloroform        0.430 0.497 0.438 0.487 0.480 0.500 0.464 0.471   5.91
37)  Ethyl acetate     0.203 0.215 0.246 0.232 0.249 0.258 0.241 0.235   8.39
38)  Tetrahydrofuran         0.069 0.079 0.080 0.071 0.075 0.065 0.073   8.07
39)S Dibromofluorometh 0.277 0.276 0.281 0.271 0.275 0.278 0.281 0.277   1.23
40)  Carbon Tetrachlor 0.285 0.353 0.321 0.359 0.353 0.385 0.348 0.343   9.27
41)  1,1,1-Trichloroet 0.336 0.391 0.383 0.412 0.403 0.427 0.393 0.392   7.33
42)  2-Butanone        0.135 0.102 0.114 0.128 0.117 0.122 0.107 0.118   9.70
43)  1,1-Dichloroprope 0.316 0.348 0.338 0.369 0.360 0.385 0.357 0.353   6.29
44)  tert-Butyl format 0.097 0.099 0.105 0.107 0.109             0.103   4.96
45)  Propionitrile     0.028 0.035 0.041 0.043 0.044 0.046 0.042 0.040  15.30
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
              Response Ratio = 0.00000 + 0.04328 *A + -0.00001 *A^2

46)  Methacrylonitrile 0.143 0.124 0.140 0.150 0.149 0.157 0.148 0.145   7.22
47)  Benzene           0.963 1.017 0.962 1.051 1.030 1.074 1.002 1.014   4.17
48)  TAME              0.583 0.695 0.688 0.763 0.763 0.808 0.751 0.722  10.26
49)S 1,2-Dichloroethan 0.312 0.316 0.322 0.317 0.320 0.319 0.321 0.318   1.03
50)  1,2-Dichloroethan 0.370 0.365 0.364 0.407 0.397 0.412 0.380 0.385   5.25
51)  tert Amyl alcohol 0.013 0.020 0.023 0.028 0.027 0.028 0.023 0.023  23.66
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9944
              Response Ratio = 0.00000 + 0.02728 *A + -0.00014 *A^2

52)  Trichloroethene   0.240 0.268 0.257 0.285 0.278 0.294 0.277 0.271   6.62
53)  Methylcyclohexane 0.372 0.384 0.400 0.458 0.441 0.507 0.433 0.428  10.94
54)  Dibromomethane    0.141 0.176 0.176 0.190 0.188 0.196 0.183 0.179  10.01
55)C 1,2-Dichloropropa 0.180 0.271 0.277 0.291 0.286 0.301 0.279 0.269  15.03
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
              Response Ratio = 0.00000 + 0.28965 *A + -0.00217 *A^2

56)  Bromodichlorometh 0.281 0.323 0.321 0.365 0.366 0.379 0.354 0.341  10.12
57)  Methyl methacryla 0.113 0.161 0.190 0.211 0.211 0.220 0.199 0.186  20.19
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
              Response Ratio = 0.00000 + 0.20724 *A + -0.00060 *A^2

58)  1,4-Dioxane             0.002 0.002 0.003 0.003 0.003 0.003 0.002  12.74
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.00235 *A + 0.00001 *A^2

59)  2-Chloroethyl vin 0.128 0.143 0.165 0.167 0.171 0.178 0.146 0.157  11.51
60)  cis-1,3-Dichlorop 0.287 0.385 0.354 0.411 0.412 0.438 0.408 0.385  13.12

61) I   Chlorobenzene-d5      ----------------ISTD--------------------
62)S Toluene-d8        1.390 1.373 1.379 1.382 1.345 1.357 1.326 1.365   1.69
63)C Toluene           1.360 1.509 1.433 1.554 1.493 1.571 1.425 1.478   5.11
64)  Isobutyl alcohol  0.013 0.013 0.014 0.015 0.014 0.015 0.013 0.014   6.92
65)  2-Nitropropane    0.072 0.093 0.096 0.112 0.112 0.118 0.103 0.101  15.36
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9959
              Response Ratio = 0.00000 + 0.11190 *A + -0.00044 *A^2

66)  4-Methyl-2-pentan 0.424 0.339 0.378 0.427 0.375 0.399 0.345 0.384   9.08
67)  trans-1,3-Dichlor 0.337 0.448 0.453 0.512 0.512 0.541 0.503 0.472  14.48
68)  Tetrachloroethene 0.288 0.368 0.358 0.391 0.375 0.397 0.365 0.363   9.91
69)  Ethyl methacrylat 0.279 0.364 0.426 0.477 0.469 0.495 0.458 0.424  18.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9979
              Response Ratio = 0.00000 + 0.45917 *A + 0.00655 *A^2
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Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

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 70)  1,1,2-Trichloroet 0.244 0.297 0.283 0.304 0.301 0.305 0.276 0.287   7.67
 71)  Dibromochlorometh 0.273 0.365 0.350 0.405 0.409 0.422 0.393 0.374  13.72
 72)  1,3-Dichloropropa 0.495 0.580 0.548 0.620 0.593 0.613 0.559 0.573   7.56
 73)  1,2-Dibromoethane 0.264 0.341 0.329 0.376 0.376 0.387 0.350 0.346  12.09
 74)  3,3-Dimethyl-1-bu 0.026 0.028 0.035 0.037 0.038 0.040 0.035 0.034  15.39
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9952
               Response Ratio = 0.00000 + 0.03777 *A + -0.00002 *A^2

 75)  2-hexanone        0.276 0.224 0.261 0.297 0.270 0.277 0.242 0.264   9.22
 76)  1-Chlorohexane    0.383 0.486 0.467 0.523 0.518 0.553 0.486 0.488  11.16
 77)C Ethylbenzene      1.642 1.739 1.594 1.729 1.709 1.793 1.635 1.692   4.14
 78)P Chlorobenzene     0.908 0.985 0.925 1.035 1.003 1.049 0.965 0.981   5.39
 79)  1,1,1,2-Tetrachlo 0.279 0.335 0.316 0.364 0.358 0.372 0.339 0.338   9.48
 80)  m,p-Xylene        1.079 1.273 1.184 1.317 1.303 1.367 1.261 1.255   7.61
 81)  o-Xylene          0.993 1.197 1.152 1.283 1.251 1.307 1.198 1.197   8.76
 82)  Styrene           0.670 0.906 0.869 1.003 0.986 1.040 0.963 0.919  13.51
 83)P Bromoform         0.138 0.212 0.207 0.241 0.248 0.265 0.244 0.222  19.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.23635 *A + 0.00810 *A^2

 84)  Isopropylbenzene  1.302 1.604 1.487 1.620 1.615 1.694 1.543 1.552   8.24

 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 0.872 0.858 0.854 0.814 0.814 0.816 0.795 0.832   3.47
 87)  cis-1,4-Dichloro- 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 88)  n-Propylbenzene   3.516 4.066 3.899 4.222 4.148 4.267 3.796 3.988   6.73
 89)  Bromobenzene      0.652 0.805 0.762 0.809 0.819 0.825 0.759 0.776   7.79
 90)P 1,1,2,2-Tetrachlo 0.918 0.938 0.946 1.039 1.033 1.038 0.910 0.975   6.09
 91)  1,3,5-Trimethylbe 2.213 2.653 2.503 2.737 2.760 2.900 2.630 2.628   8.39
 92)  2-Chlorotoluene   2.333 2.538 2.273 2.521 2.510 2.588 2.370 2.448   4.91
 93)  trans-1,4-Dichlor 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 94)  1,2,3-Trichloropr 0.150 0.263 0.254 0.284 0.284 0.294 0.250 0.254  19.32
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9964
               Response Ratio = 0.00000 + 0.29199 *A + -0.01507 *A^2

 95)  Cyclohexanone           0.018 0.023 0.026 0.026 0.026 0.026 0.024  12.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.02412 *A + 0.00026 *A^2

 96)  4-Chlorotoluene   2.020 2.254 2.088 2.253 2.225 2.312 2.105 2.179   4.96
 97)  a-Methyl styrene                                           0.000  -1.00
 98)  tert-Butylbenzene 1.282 1.483 1.365 1.473 1.463 1.515 1.361 1.420   5.98
 99)  1,2,4-Trimethylbe 2.105 2.494 2.410 2.704 2.715 2.845 2.556 2.547   9.60
100)  Pentachloroethane 0.449 0.404 0.451 0.484 0.477 0.491 0.454 0.459   6.45
101)  sec-Butylbenzene  2.827 3.225 3.073 3.438 3.391 3.544 3.120 3.231   7.65
102)  4-Isopropyltoluen 2.379 2.788 2.683 3.018 3.012 3.158 2.788 2.832   9.17
103)  1,3-Dichlorobenze 1.257 1.420 1.429 1.518 1.514 1.579 1.426 1.449   7.15
104)  1,2,3-Trimethylbe 2.110 2.571 2.480 2.701 2.740 2.825 2.572 2.571   9.13
105)  1,4-Dichlorobenze 1.442 1.604 1.526 1.651 1.619 1.710 1.545 1.585   5.58
106)  n-Butylbenzene    1.156 1.491 1.422 1.584 1.646 1.724 1.490 1.502  12.25
107)  Benzyl Chloride   0.156 0.228 0.269 0.333 0.354 0.389       0.288  30.26
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
               Response Ratio = 0.00000 + 0.27006 *A + 0.08940 *A^2
```

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

```
108)  1,2-Dichlorobenze 1.278 1.359 1.327 1.442 1.462 1.496 1.345 1.387   5.78
109)  1,2-Dibromo-3-Chl 0.039 0.120 0.129 0.151 0.155 0.160 0.135 0.127  32.52
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9950
               Response Ratio = 0.00000 + 0.15234 *A + -0.00464 *A^2

110)  Hexachlorobutadie 0.242 0.326 0.300 0.310 0.307 0.311 0.256 0.293  10.64
111)  1,2,4-Trichlorobe 0.641 0.796 0.745 0.818 0.826 0.843 0.741 0.773   9.09
112)  Naphthalene       1.533 2.047 2.118 2.334 2.372 2.401 2.013 2.117  14.30
113)  1,2,3-Trichlorobe 0.545 0.639 0.653 0.701 0.703 0.711 0.608 0.651   9.30
 ----------------------------------------------------------------------------
 (#) = Out of Range

          appIX12-08-2022_.M        Thu Dec 08 16:36:18 2022
```

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35986.D Vial: 10
Acq On : 8 Dec 2022 3:25 pm Operator: courtnef
Sample : ICV1617-5 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	101	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.263	13.8	93	0.00	2.85
3	P	Chloromethane	0.293	0.275	6.1	98	0.00	3.22
4	C	Vinyl Chloride	0.311	0.307	1.3	102	0.00	3.37
5		1,3-Butadiene	0.199	0.223	-12.1	122	0.00	3.40
6		Bromomethane	0.163	0.175	-7.4	108	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	47.808	-19.5	156	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.396	-5.3	108	0.00	4.38
9		Ethyl Ether	0.221	0.218	1.4	97	0.00	4.87
10		Ethanol	0.002	0.002	0.0	95	0.02	5.12
11		1,2-Dichlorotrifluoroetha	0.316	0.313	0.9	99	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.374	4.8	94	0.00	5.16
13		Freon 113	0.265	0.249	6.0	96	0.00	5.22
14		Carbon Disulfide	0.740	0.738	0.3	103	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	38.031	4.9	93	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.048	0.0	93	0.00	5.63
17		Allyl chloride	0.271	0.275	-1.5	105	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	34.555	13.6	90	0.00	5.96
19		Acetone	200.000	189.683	5.2	101	0.00	6.01
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.165	-7.8	101	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.354	3.0	96	0.00	6.17
22		Hexane	0.219	0.229	-4.6	99	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.746	-2.5	100	0.00	6.29
24		Acetonitrile	0.025	0.024	4.0	100	0.00	6.62
25		Di-isopropyl ether	0.699	0.728	-4.1	102	0.00	6.76
26		Chloroprene	0.328	0.358	-9.1	112	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.487	-0.6	99	0.00	6.94
28		Acrylonitrile	0.091	0.103	-13.2	109	0.00	6.99
29		ETBE	0.808	0.820	-1.5	99	0.00	7.20

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	369.770	7.6	92	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate			NA			
32		cis-1,2-Dichloroethene	0.267	0.272	-1.9	100	0.00	7.58
33		2,2-Dichloropropane	0.387	0.356	8.0	91	0.00	7.70
34		Bromochloromethane	0.130	0.140	-7.7	102	0.00	7.81
35		Cyclohexane	0.429	0.442	-3.0	105	0.00	7.82
36	C	Chloroform	0.471	0.461	2.1	97	0.00	7.87
37		Ethyl acetate	0.235	0.267	-13.6	109	0.00	7.98
38		Tetrahydrofuran	0.073	0.072	1.4	103	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.277	0.0	102	0.00	8.08
40		Carbon Tetrachloride	0.343	0.342	0.3	98	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.391	0.3	98	0.00	8.12
42		2-Butanone	0.118	0.114	3.4	99	0.00	8.20
43		1,1-Dichloropropene	0.353	0.341	3.4	96	0.00	8.26
44		tert-Butyl formate	0.103	0.084	18.4	78	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	393.496	1.6	98	0.00	8.54
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.156	-7.6	106	0.00	8.55
47		Benzene	1.014	0.985	2.9	97	0.00	8.52
48		TAME	0.722	0.764	-5.8	101	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.314	1.3	99	0.00	8.66
50		1,2-Dichloroethane	0.385	0.377	2.1	96	0.00	8.73
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	411.326	-2.8	100	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.270	0.4	98	0.00	9.13
53		Methylcyclohexane	0.428	0.452	-5.6	104	0.00	9.13
54		Dibromomethane	0.179	0.177	1.1	95	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	37.212	7.0	95	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.362	-6.2	100	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	41.939	-4.8	104	0.00	9.84
58		1,4-Dioxane	800.000	891.935	-11.5	111	0.00	9.93
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.164	-4.5	97	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.405	-5.2	100	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	12.12
62	S	Toluene-d8	1.365	1.348	1.2	101	0.00	10.54
63	C	Toluene	1.478	1.470	0.5	99	0.00	10.60
64		Isobutyl alcohol	0.014	0.015	-7.1	103	0.00	8.68
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	203.716	-1.9	101	0.00	10.83
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

66		4-Methyl-2-pentanone	0.384	0.364	5.2	98	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.539	-14.2	106	0.00	11.00
68		Tetrachloroethene	0.363	0.370	-1.9	100	0.00	11.00
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	38.346	4.1	96	0.00	11.10
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.287	0.294	-2.4	99	0.00	11.16
71		Dibromochloromethane	0.374	0.387	-3.5	96	0.00	11.36
72		1,3-Dichloropropane	0.573	0.550	4.0	94	0.00	11.45
73		1,2-Dibromoethane	0.346	0.362	-4.6	97	0.00	11.62
			Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1822.705	8.9	90	0.00	11.71
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.264	0.255	3.4	95	0.00	11.77
76		1-Chlorohexane	0.488	0.527	-8.0	103	0.00	12.06
77	C	Ethylbenzene	1.692	1.684	0.5	100	0.00	12.12
78	P	Chlorobenzene	0.981	0.990	-0.9	100	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.356	-5.3	101	0.00	12.18
80		m,p-Xylene	1.255	1.274	-1.5	99	0.00	12.26
81		o-Xylene	1.197	1.273	-6.3	103	0.00	12.71
82		Styrene	0.919	0.977	-6.3	100	0.00	12.76
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	41.573	-3.9	103	0.00	12.82
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.552	1.607	-3.5	101	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.843	-1.3	104	0.00	13.33
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	43.242	-8.1	102	0.00	13.68
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	3.988	4.158	-4.3	101	0.00	13.43
89		Bromobenzene	0.776	0.775	0.1	95	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.008	-3.4	98	0.00	13.50
91		1,3,5-Trimethylbenzene	2.628	2.734	-4.0	99	0.00	13.61
92		2-Chlorotoluene	2.448	2.476	-1.1	99	0.00	13.62
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	43.242	-8.1	102	0.00	13.68
94		1,2,3-Trichloropropane	40.000	37.558	6.1	93	0.00	13.66
95		Cyclohexanone	200.000	234.198	-17.1	114	0.00	13.74
			AvgRF	CCRF	%Dev			
96		4-Chlorotoluene	2.179	2.244	-3.0	101	0.00	13.79
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene	1.420	1.461	-2.9	100	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.777	-9.0	103	0.00	14.02
100		Pentachloroethane	0.459	0.493	-7.4	104	0.00	14.01
101		sec-Butylbenzene	3.231	3.577	-10.7	106	0.00	14.13
102		4-Isopropyltoluene	2.832	3.099	-9.4	103	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.579	-9.0	105	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.956	-15.0	108	0.00	14.47

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

105	1,4-Dichlorobenzene	1.585	1.644	-3.7	102	0.00	14.49
106	n-Butylbenzene	1.502	1.565	-4.2	95	0.00	14.69
		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	41.057	-2.6	100	0.00	14.71
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.387	1.474	-6.3	101	0.00	14.90
		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	39.855	0.4	96	0.00	15.63
		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.293	0.292	0.3	96	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.835	-8.0	101	0.00	16.22
112	Naphthalene	2.117	2.360	-11.5	100	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.699	-7.4	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0

5E35982.D appIX12-08-2022_.M Thu Dec 08 16:35:37 2022

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35987.D Vial: 11
Acq On : 8 Dec 2022 4:06 pm Operator: courtnef
Sample : ICV1617-4 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	111	0.00	8.95
2		Dichlorodifluoromethane		----------	NA	----------		
3	P	Chloromethane		----------	NA	----------		
4	C	Vinyl Chloride		----------	NA	----------		
5		1,3-Butadiene		----------	NA	----------		
6		Bromomethane		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
7		Chloroethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
8		Trichlorofluoromethane		----------	NA	----------		
9		Ethyl Ether		----------	NA	----------		
10		Ethanol		----------	NA	----------		
11		1,2-Dichlorotrifluoroetha		----------	NA	----------		
12	C	1,1-Dichloroethene		----------	NA	----------		
13		Freon 113		----------	NA	----------		
14		Carbon Disulfide		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
16		Acrolein		----------	NA	----------		
17		Allyl chloride		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------	NA	----------		
19		Acetone		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------	NA	----------		
21		trans-1,2-Dichloroethene		----------	NA	----------		
22		Hexane		----------	NA	----------		
23		Methyl Tert Butyl Ether		----------	NA	----------		
24		Acetonitrile		----------	NA	----------		
25		Di-isopropyl ether		----------	NA	----------		
26		Chloroprene		----------	NA	----------		
27	P	1,1-Dichloroethane		----------	NA	----------		
28		Acrylonitrile		----------	NA	----------		
29		ETBE		----------	NA	----------		

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol		NA				
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.510	-7.1	121	0.00	7.21
32		cis-1,2-Dichloroethene		NA				
33		2,2-Dichloropropane		NA				
34		Bromochloromethane		NA				
35		Cyclohexane		NA				
36	C	Chloroform		NA				
37		Ethyl acetate		NA				
38		Tetrahydrofuran		NA				
39	S	Dibromofluoromethane	0.277	0.280	-1.1	114	0.00	8.08
40		Carbon Tetrachloride		NA				
41		1,1,1-Trichloroethane		NA				
42		2-Butanone		NA				
43		1,1-Dichloropropene		NA				
44		tert-Butyl formate		NA				
			Amount	Calc.	%Drift			
45		Propionitrile		NA				
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile		NA				
47		Benzene		NA				
48		TAME		NA				
49	S	1,2-Dichloroethane-d4	0.318	0.328	-3.1	115	0.00	8.66
50		1,2-Dichloroethane		NA				
			Amount	Calc.	%Drift			
51		tert Amyl alcohol		NA				
			AvgRF	CCRF	%Dev			
52		Trichloroethene		NA				
53		Methylcyclohexane		NA				
54		Dibromomethane		NA				
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane		NA				
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane		NA				
			Amount	Calc.	%Drift			
57		Methyl methacrylate		NA				
58		1,4-Dioxane		NA				
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether		NA				
60		cis-1,3-Dichloropropene		NA				
61	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	12.12
62	S	Toluene-d8	1.365	1.392	-2.0	111	0.00	10.54
63	C	Toluene		NA				
64		Isobutyl alcohol		NA				
			Amount	Calc.	%Drift			
65		2-Nitropropane		NA				
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

66		4-Methyl-2-pentanone		----------NA----------				
67		trans-1,3-Dichloropropene		----------NA----------				
68		Tetrachloroethene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
69		Ethyl methacrylate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
70		1,1,2-Trichloroethane		----------NA----------				
71		Dibromochloromethane		----------NA----------				
72		1,3-Dichloropropane		----------NA----------				
73		1,2-Dibromoethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
74		3,3-Dimethyl-1-butanol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
75		2-hexanone		----------NA----------				
76		1-Chlorohexane		----------NA----------				
77	C	Ethylbenzene		----------NA----------				
78	P	Chlorobenzene		----------NA----------				
79		1,1,1,2-Tetrachloroethane		----------NA----------				
80		m,p-Xylene		----------NA----------				
81		o-Xylene		----------NA----------				
82		Styrene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
83	P	Bromoform		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
84		Isopropylbenzene		----------NA----------				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.853	-2.5	112	0.00	13.33
		----------	Amount	Calc.	%Drift	----------		
87		cis-1,4-Dichloro-2-butene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
88		n-Propylbenzene		----------NA----------				
89		Bromobenzene		----------NA----------				
90	P	1,1,2,2-Tetrachloroethane		----------NA----------				
91		1,3,5-Trimethylbenzene		----------NA----------				
92		2-Chlorotoluene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
93		trans-1,4-Dichloro-2-Bute		----------NA----------				
94		1,2,3-Trichloropropane		----------NA----------				
95		Cyclohexanone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
96		4-Chlorotoluene		----------NA----------				
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene		----------NA----------				
99		1,2,4-Trimethylbenzene		----------NA----------				
100		Pentachloroethane		----------NA----------				
101		sec-Butylbenzene		----------NA----------				
102		4-Isopropyltoluene		----------NA----------				
103		1,3-Dichlorobenzene		----------NA----------				
104		1,2,3-Trimethylbenzene		----------NA----------				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

105	1,4-Dichlorobenzene			NA	
106	n-Butylbenzene			NA	
		Amount	Calc.	%Drift	
107	Benzyl Chloride			NA	
		AvgRF	CCRF	%Dev	
108	1,2-Dichlorobenzene			NA	
		Amount	Calc.	%Drift	
109	1,2-Dibromo-3-Chloropropa			NA	
		AvgRF	CCRF	%Dev	
110	Hexachlorobutadiene			NA	
111	1,2,4-Trichlorobenzene			NA	
112	Naphthalene			NA	
113	1,2,3-Trichlorobenzene			NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
5E35981.D appIX12-08-2022_.M Thu Dec 08 16:36:09 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-14-2022\5E36115.D Vial: 2
Acq On : 14 Dec 2022 9:23 am Operator: courtnef
Sample : CC1617-5 Inst : MSVOA20
Misc : MS52751,V5E1624,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	91	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.307	-0.7	98	0.00	2.85
3	P	Chloromethane	0.293	0.286	2.4	92	0.00	3.22
4	C	Vinyl Chloride	0.311	0.326	-4.8	98	0.00	3.37
5		1,3-Butadiene	0.199	0.219	-10.1	108	0.00	3.40
6		Bromomethane	0.163	0.127	22.1#	70	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	34.042	14.9	83	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.424	-12.8	104	0.00	4.39
9		Ethyl Ether	0.221	0.246	-11.3	98	0.00	4.87
10		Ethanol	0.002	0.001	50.0#	78	0.01	5.11
11		1,2-Dichlorotrifluoroetha	0.316	0.360	-13.9	103	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.443	-12.7	100	0.00	5.16
13		Freon 113	0.265	0.293	-10.6	102	0.00	5.22
14		Carbon Disulfide	0.740	0.802	-8.4	101	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	13.226	66.9#	28	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.050	-4.2	88	0.00	5.63
17		Allyl chloride	0.271	0.290	-7.0	99	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	41.414	-3.5	96	0.00	5.96
19		Acetone	200.000	191.695	4.2	92	0.00	6.01
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.171	-11.8	94	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.412	-12.9	101	0.00	6.17
22		Hexane	0.219	0.253	-15.5	98	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.804	-10.4	97	0.00	6.29
24		Acetonitrile	0.025	0.024	4.0	92	0.00	6.62
25		Di-isopropyl ether	0.699	0.756	-8.2	95	0.00	6.75
26		Chloroprene	0.328	0.350	-6.7	99	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.538	-11.2	99	0.00	6.94
28		Acrylonitrile	0.091	0.100	-9.9	95	0.00	6.99
29		ETBE	0.808	0.891	-10.3	96	0.00	7.19

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	320.688	19.8	72	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.546	-14.7	100	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.295	-10.5	98	0.00	7.58
33		2,2-Dichloropropane	0.387	0.431	-11.4	99	0.00	7.71
34		Bromochloromethane	0.130	0.139	-6.9	91	0.00	7.81
35		Cyclohexane	0.429	0.474	-10.5	101	0.00	7.82
36	C	Chloroform	0.471	0.505	-7.2	96	0.00	7.87
37		Ethyl acetate	0.235	0.259	-10.2	95	0.00	7.98
38		Tetrahydrofuran	0.073	0.070	4.1	90	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.279	-0.7	92	0.00	8.07
40		Carbon Tetrachloride	0.343	0.396	-15.5	102	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.442	-12.8	100	0.00	8.12
42		2-Butanone	0.118	0.116	1.7	90	0.00	8.20
43		1,1-Dichloropropene	0.353	0.392	-11.0	99	0.00	8.26
44		tert-Butyl formate	0.103	0.120	-16.5	100	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	405.712	-1.4	90	0.00	8.53
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.168	-15.9	103	0.00	8.55
47		Benzene	1.014	1.091	-7.6	96	0.00	8.52
48		TAME	0.722	0.811	-12.3	97	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.313	1.6	89	0.00	8.66
50		1,2-Dichloroethane	0.385	0.429	-11.4	98	0.00	8.74
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	393.299	1.7	86	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.302	-11.4	99	0.00	9.13
53		Methylcyclohexane	0.428	0.480	-12.1	99	0.00	9.13
54		Dibromomethane	0.179	0.199	-11.2	96	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	42.744	-6.9	98	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.384	-12.6	95	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	40.650	-1.6	91	0.00	9.84
58		1,4-Dioxane	800.000	664.003	17.0	73	0.00	9.91
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.143	8.9	76	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.442	-14.8	98	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00	12.11
62	S	Toluene-d8	1.365	1.308	4.2	92	0.00	10.54
63	C	Toluene	1.478	1.557	-5.3	98	0.00	10.60
64		Isobutyl alcohol	0.014	0.013	7.1	86	0.00	8.67
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	207.533	-3.8	96	0.00	10.83
			AvgRF	CCRF	%Dev			

Continuing Calibration Summary

Job Number: FC1020 **Sample:** V5E1624-CC1617
Account: BHATALB Bhate Environmental **Lab FileID:** 5E36115.D
Project: Griffiss AFB; Rome, NY

66		4-Methyl-2-pentanone	0.384	0.368	4.2	93	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.530	-12.3	98	0.00	11.00
68		Tetrachloroethene	0.363	0.402	-10.7	101	0.00	11.00
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	39.600	1.0	92	0.00	11.10
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.287	0.307	-7.0	96	0.00	11.16
71		Dibromochloromethane	0.374	0.427	-14.2	99	0.00	11.36
72		1,3-Dichloropropane	0.573	0.609	-6.3	97	0.00	11.45
73		1,2-Dibromoethane	0.346	0.383	-10.7	96	0.00	11.62
			Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1859.490	7.0	86	0.00	11.71
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.264	0.262	0.8	91	0.00	11.76
76		1-Chlorohexane	0.488	0.534	-9.4	97	0.00	12.05
77	C	Ethylbenzene	1.692	1.782	-5.3	98	0.00	12.12
78	P	Chlorobenzene	0.981	1.045	-6.5	98	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.380	-12.4	100	0.00	12.18
80		m,p-Xylene	1.255	1.350	-7.6	98	0.00	12.26
81		o-Xylene	1.197	1.299	-8.5	98	0.00	12.71
82		Styrene	0.919	1.021	-11.1	98	0.00	12.76
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	41.801	-4.5	97	0.00	12.82
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.552	1.712	-10.3	100	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.801	3.7	96	0.00	13.33
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	35.857	10.4	82	0.00	13.68
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	3.988	4.169	-4.5	98	0.00	13.43
89		Bromobenzene	0.776	0.827	-6.6	98	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.017	-4.3	96	0.00	13.50
91		1,3,5-Trimethylbenzene	2.628	2.796	-6.4	98	0.00	13.61
92		2-Chlorotoluene	2.448	2.527	-3.2	98	0.00	13.62
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	35.857	10.4	82	0.00	13.68
94		1,2,3-Trichloropropane	40.000	40.055	-0.1	96	0.00	13.66
95		Cyclohexanone	200.000	190.455	4.8	89	0.00	13.74
			AvgRF	CCRF	%Dev			
96		4-Chlorotoluene	2.179	2.252	-3.4	98	0.00	13.79
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene	1.420	1.484	-4.5	98	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.731	-7.2	98	0.00	14.02
100		Pentachloroethane	0.459	0.474	-3.3	97	0.00	14.01
101		sec-Butylbenzene	3.231	3.526	-9.1	101	0.00	14.13
102		4-Isopropyltoluene	2.832	3.136	-10.7	101	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.578	-8.9	101	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.791	-8.6	99	0.00	14.47

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

105	1,4-Dichlorobenzene	1.585	1.686	-6.4	101	0.00	14.49
106	n-Butylbenzene	1.502	1.653	-10.1	97	0.00	14.68
		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	40.558	-1.4	95	0.00	14.71
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.387	1.499	-8.1	100	0.00	14.90
		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	38.674	3.3	90	0.00	15.63
		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.293	0.324	-10.6	102	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.859	-11.1	101	0.00	16.22
112	Naphthalene	2.117	2.316	-9.4	95	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.725	-11.4	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Wed Dec 14 10:04:22 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-ECC1617
Lab FileID: 5E36143.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...022\v5e1624\5E36143.d Vial: 30
Acq On : 14 Dec 2022 8:08 pm Operator: courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	86	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.281	7.9	85	0.00	2.85
3	P	Chloromethane	0.293	0.264	9.9	80	0.00	3.22
4	C	Vinyl Chloride	0.311	0.305	1.9	87	0.00	3.37
5		1,3-Butadiene	0.199	0.221	-11.1	103	0.00	3.40
6		Bromomethane	0.163	0.107	34.4	56	0.00	3.94
			True	Calc.	% Drift			
7		Chloroethane	40.000	37.691	5.8	92	0.00	4.15
			AvgRF	CCRF	% Dev			
8		Trichlorofluoromethane	0.376	0.392	-4.3	91	0.00	4.38
9		Ethyl Ether	0.221	0.236	-6.8	89	0.00	4.87
10		Ethanol	0.002	0.002	0.0	126	0.00	5.10
11		1,2-Dichlorotrifluoroetha	0.316	0.342	-8.2	93	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.419	-6.6	90	0.00	5.16
13		Freon 113	0.265	0.271	-2.3	89	0.00	5.22
14		Carbon Disulfide	0.740	0.715	3.4	85	0.00	5.21
			True	Calc.	% Drift			
15		Iodomethane	40.000	15.367	61.6#	31	0.00	5.37
			AvgRF	CCRF	% Dev			
16		Acrolein	0.048	0.049	-2.1	82	0.00	5.63
17		Allyl chloride	0.271	0.267	1.5	87	0.00	5.82
			True	Calc.	% Drift			
18		Methylene Chloride	40.000	40.189	-0.5	89	0.00	5.96
19		Acetone	200.000	189.030	5.5	86	0.00	6.02
			AvgRF	CCRF	% Dev			
20		Methyl acetate	0.153	0.176	-15.0	91	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.389	-6.6	90	0.00	6.17
22		Hexane	0.219	0.227	-3.7	84	0.00	6.27
23		Methyl Tert Butyl Ether	0.728	0.774	-6.3	88	0.00	6.29
24		Acetonitrile	0.025	0.026	-4.0	91	0.00	6.61
25		Di-isopropyl ether	0.699	0.718	-2.7	85	0.00	6.75
26		Chloroprene	0.328	0.332	-1.2	89	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.504	-4.1	88	0.00	6.94
28		Acrylonitrile	0.091	0.101	-11.0	90	0.00	7.00
29		ETBE	0.808	0.857	-6.1	88	0.00	7.20

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-ECC1617
Lab FileID: 5E36143.D

			True	Calc.	% Drift			
30		Tert Butyl Alcohol	400.000	360.705	9.8	77	0.00	6.40
			AvgRF	CCRF	% Dev			
31		Vinyl acetate	0.476	0.515	-8.2	89	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.284	-6.4	89	0.00	7.58
33		2,2-Dichloropropane	0.387	0.360	7.0	78	0.00	7.70
34		Bromochloromethane	0.130	0.138	-6.2	85	0.00	7.81
35		Cyclohexane	0.429	0.448	-4.4	91	0.00	7.82
36	C	Chloroform	0.471	0.491	-4.2	88	0.00	7.87
37		Ethyl acetate	0.235	0.261	-11.1	91	0.00	7.98
38		Tetrahydrofuran	0.073	0.071	2.7	87	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.277	0.0	87	0.00	8.08
40		Carbon Tetrachloride	0.343	0.367	-7.0	90	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.419	-6.9	90	0.00	8.12
42		2-Butanone	0.118	0.116	1.7	85	0.00	8.20
43		1,1-Dichloropropene	0.353	0.367	-4.0	88	0.00	8.26
44		tert-Butyl formate	0.103	0.111	-7.8	87	0.00	8.35
			True	Calc.	% Drift			
45		Propionitrile	400.000	427.650	-6.9	90	0.00	8.54
			AvgRF	CCRF	% Dev			
46		Methacrylonitrile	0.145	0.170	-17.2	98	0.00	8.55
47		Benzene	1.014	1.039	-2.5	87	0.00	8.52
48		TAME	0.722	0.781	-8.2	88	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.318	0.0	86	0.00	8.66
50		1,2-Dichloroethane	0.385	0.419	-8.8	91	0.00	8.74
			True	Calc.	% Drift			
51		tert Amyl alcohol	400.000	447.400	-11.8	93	0.00	8.79
			AvgRF	CCRF	% Dev			
52		Trichloroethene	0.271	0.290	-7.0	90	0.00	9.13
53		Methylcyclohexane	0.428	0.455	-6.3	89	0.00	9.13
54		Dibromomethane	0.179	0.191	-6.7	88	0.00	9.58
			True	Calc.	% Drift			
55	C	1,2-Dichloropropane	40.000	40.758	-1.9	88	0.00	9.67
			AvgRF	CCRF	% Dev			
56		Bromodichloromethane	0.341	0.366	-7.3	86	0.00	9.72
			True	Calc.	% Drift			
57		Methyl methacrylate	40.000	42.103	-5.3	89	0.00	9.84
58		1,4-Dioxane	800.000	888.379	-11.0	94	0.00	9.93
			AvgRF	CCRF	% Dev			
59		2-Chloroethyl vinyl ether	0.157	0.139	11.5	70	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.410	-6.5	86	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00	12.11
62	S	Toluene-d8	1.365	1.292	5.3	87	0.00	10.54
63	C	Toluene	1.478	1.446	2.2	88	0.00	10.60
64		Isobutyl alcohol	0.014	0.014	0.0	91	0.00	8.68
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	210.963	-5.5	94	0.00	10.83
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1020 **Sample:** V5E1624-ECC1617
Account: BHATALB Bhate Environmental **Lab FileID:** 5E36143.D
Project: Griffiss AFB; Rome, NY

66		4-Methyl-2-pentanone	0.384	0.366	4.7	88	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.480	-1.7	85	0.00	11.00
68		Tetrachloroethene	0.363	0.390	-7.4	94	0.00	11.00
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	38.564	3.6	86	0.00	11.10
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.287	0.298	-3.8	90	0.00	11.16
71		Dibromochloromethane	0.374	0.400	-7.0	89	0.00	11.36
72		1,3-Dichloropropane	0.573	0.580	-1.2	89	0.00	11.45
73		1,2-Dibromoethane	0.346	0.369	-6.6	89	0.00	11.63
			True	Calc.	% Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1992.519	0.4	88	0.00	11.71
			AvgRF	CCRF	% Dev			
75		2-hexanone	0.264	0.256	3.0	86	0.00	11.77
76		1-Chlorohexane	0.488	0.493	-1.0	86	0.00	12.06
77	C	Ethylbenzene	1.692	1.651	2.4	88	0.00	12.12
78	P	Chlorobenzene	0.981	0.986	-0.5	89	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.354	-4.7	90	0.00	12.18
80		m,p-Xylene	1.255	1.257	-0.2	87	0.00	12.26
81		o-Xylene	1.197	1.212	-1.3	88	0.00	12.71
82		Styrene	0.919	0.969	-5.4	89	0.00	12.76
			True	Calc.	% Drift			
83	P	Bromoform	40.000	38.704	3.2	86	0.00	12.82
			AvgRF	CCRF	% Dev			
84		Isopropylbenzene	1.552	1.604	-3.4	90	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.803	3.5	91	0.00	13.33
			True	Calc.	% Drift			
87		cis-1,4-Dichloro-2-butene	40.000	32.004	20.0	70	0.00	13.68
			AvgRF	CCRF	% Dev			
88		n-Propylbenzene	3.988	4.022	-0.9	89	0.00	13.43
89		Bromobenzene	0.776	0.794	-2.3	89	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.032	-5.8	92	0.00	13.49
91		1,3,5-Trimethylbenzene	2.628	2.648	-0.8	88	0.00	13.61
92		2-Chlorotoluene	2.448	2.400	2.0	88	0.00	13.62
			True	Calc.	% Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	32.004	20.0	70	0.00	13.68
94		1,2,3-Trichloropropane	40.000	41.909	-4.8	95	0.00	13.66
95		Cyclohexanone	200.000	229.396	-14.7	103	0.00	13.74
			AvgRF	CCRF	% Dev			
96		4-Chlorotoluene	2.179	2.118	2.8	88	0.00	13.79
97		a-Methyl styrene	0.000	0.001	0.0	0#	0.00	10.96
98		tert-Butylbenzene	1.420	1.436	-1.1	91	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.646	-3.9	90	0.00	14.02
100		Pentachloroethane	0.459	0.438	4.6	85	0.00	14.01
101		sec-Butylbenzene	3.231	3.360	-4.0	91	0.00	14.13
102		4-Isopropyltoluene	2.832	2.945	-4.0	90	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.514	-4.5	92	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.660	-3.5	90	0.00	14.47

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-ECC1617
Lab FileID: 5E36143.D

105	1,4-Dichlorobenzene	1.585	1.626	-2.6	93	0.00	14.49
106	n-Butylbenzene	1.502	1.559	-3.8	87	0.00	14.68
	----------	True	Calc.	% Drift	----------		
107	Benzyl Chloride	40.000	32.717	18.2	70	0.00	14.71
	----------	AvgRF	CCRF	% Dev	----------		
108	1,2-Dichlorobenzene	1.387	1.450	-4.5	91	0.00	14.90
	----------	True	Calc.	% Drift	----------		
109	1,2-Dibromo-3-Chloropropa	40.000	41.179	-2.9	91	0.00	15.63
	----------	AvgRF	CCRF	% Dev	----------		
110	Hexachlorobutadiene	0.293	0.307	-4.8	92	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.840	-8.7	94	0.00	16.22
112	Naphthalene	2.117	2.391	-12.9	93	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.743	-14.1	97	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Thu Dec 15 03:58:16 2022

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Calibration Files
1 =O72890.D 2 =O72891.D 3 =O72892.D 4 =O72893.D
5 =O72894.D 6 =O72895.D 7 =O72896.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.282	0.332	0.323	0.373	0.399	0.365	0.380	0.351	11.46
3)P Chloromethane	0.250	0.291	0.275	0.327	0.354	0.317	0.339	0.308	12.07
4) 1,3-butadiene	0.329	0.357	0.319	0.272	0.294	0.296	0.294	0.309	9.14
5)C Vinyl Chloride	0.240	0.298	0.292	0.333	0.361	0.321	0.330	0.311	12.48
6) Bromomethane	0.066	0.102	0.109	0.140	0.153	0.149	0.166	0.126	27.97
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977									
Response Ratio = 0.00000 + 0.12316 *A + 0.02148 *A^2									
7) Chloroethane	0.114	0.169	0.167	0.194	0.206	0.179	0.183	0.173	16.95
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9973									
Response Ratio = 0.00000 + 0.19140 *A + -0.00441 *A^2									
8) Trichlorofluorome	0.319	0.426	0.408	0.476	0.525	0.488	0.500	0.449	15.70
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.46750 *A + 0.01833 *A^2									
9) Ethyl Ether	0.235	0.236	0.222	0.227	0.220	0.233	0.240	0.231	3.23
10) Ethanol			0.001	0.001	0.001	0.001	0.001	0.001	10.56
11) 1,2-Dichlorotrifl	0.392	0.359	0.337	0.341	0.330	0.351	0.356	0.352	5.79
12)C 1,1-Dichloroethen	0.466	0.433	0.410	0.421	0.410	0.441	0.451	0.433	4.90
13) Freon 113	0.337	0.299	0.284	0.284	0.269	0.294	0.294	0.295	7.18
14) Carbon Disulfide	0.994	0.866	0.798	0.796	0.766	0.807	0.821	0.835	9.15
15) Iodomethane		0.025	0.035	0.078	0.128	0.183	0.225	0.112	72.18
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9968									
Response Ratio = 0.00000 + 0.03946 *A + 0.09562 *A^2									
16) Acrolein	0.031	0.048	0.055	0.045	0.049	0.046	0.047	0.046	15.66
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.04847 *A + -0.00016 *A^2									
17) Allyl chloride	0.325	0.389	0.388	0.351	0.394	0.416	0.440	0.386	9.91
18) Methylene Chlorid	0.950	0.508	0.412	0.395	0.377	0.393	0.400	0.491	42.19
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9976									
Response Ratio = 0.00000 + 0.41242 *A + -0.01007 *A^2									
19) Acetone	0.106	0.088	0.070	0.066	0.069	0.067	0.067	0.076	19.74
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.07138 *A + -0.00047 *A^2									
20) Methyl acetate	0.186	0.185	0.165	0.179	0.178	0.192	0.196	0.183	5.55
21) trans-1,2-Dichlor	0.443	0.422	0.402	0.409	0.397	0.423	0.435	0.419	4.05
22) Hexane	0.230	0.195	0.187	0.182	0.191	0.198	0.194	0.197	8.03
23) Methyl Tert Butyl	0.824	0.789	0.723	0.745	0.728	0.777	0.803	0.770	5.02
24) Tert Butyl Alcoho	0.010	0.018	0.014	0.016	0.016	0.018	0.016	0.015	17.38
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9957									

Initial Calibration Summary

Job Number: FC1020 **Sample:** VO2866-ICC2866
Account: BHATALB Bhate Environmental **Lab FileID:** O72894.D
Project: Griffiss AFB; Rome, NY

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              Response Ratio = 0.00000 + 0.01610 *A + 0.00002 *A^2

25)  Acetonitrile      0.030 0.031 0.029 0.026 0.028 0.028 0.027 0.028   6.22
26)  Di-isopropyl ethe 1.003 0.943 0.894 0.918 0.885 0.950 0.976 0.938   4.56
27)  Chloroprene       0.272 0.347 0.343 0.321 0.359 0.381 0.401 0.346  12.12
28)P 1,1-Dichloroethan 0.564 0.514 0.481 0.497 0.476 0.507 0.516 0.508   5.75
29)  Acrylonitrile     0.099 0.079 0.077 0.075 0.077 0.075 0.077 0.080  10.76
30)  ETBE              0.850 0.792 0.768 0.818 0.814 0.889 0.922 0.836   6.49
31)  Vinyl acetate     0.497 0.434 0.469 0.520 0.580 0.596 0.634 0.533  13.63
32)  cis-1,2-Dichloroe 0.336 0.315 0.295 0.296 0.282 0.299 0.304 0.304   5.66
33)  2,2-Dichloropropa 0.327 0.327 0.323 0.350 0.361 0.399 0.419 0.358  10.57
34)  Bromochloromethan 0.171 0.158 0.159 0.162 0.154 0.163 0.164 0.162   3.32
35)  Cyclohexane       0.455 0.450 0.412 0.421 0.419 0.446 0.453 0.437   4.22
36)C Chloroform        0.585 0.547 0.521 0.520 0.498 0.526 0.539 0.534   5.11
37)  Ethyl acetate     0.282 0.218 0.220 0.230 0.247 0.244 0.257 0.242   9.34
38)  Tetrahydrofuran   0.081 0.086 0.066 0.071 0.068 0.071 0.071 0.073   9.85
39)S Dibromofluorometh 0.275 0.282 0.276 0.279 0.280 0.282 0.283 0.280   1.09
40)  Carbon Tetrachlor 0.299 0.281 0.273 0.301 0.313 0.354 0.379 0.314  12.30
41)  1,1,1-Trichloroet 0.430 0.406 0.394 0.414 0.411 0.448 0.466 0.424   6.00
42)  2-Butanone        0.105 0.112 0.107 0.109 0.112 0.111 0.113 0.110   2.73
43)  1,1-Dichloroprope 0.431 0.399 0.373 0.379 0.367 0.390 0.397 0.391   5.49
44)  tert-Butyl format 0.059 0.099 0.129 0.125 0.155 0.163 0.181 0.130  31.97
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.11749 *A + 0.00645 *A^2

45)  Propionitrile     0.027 0.034 0.035 0.033 0.036 0.036 0.035 0.034   9.33
46)  Methacrylonitrile 0.173 0.210 0.196 0.184 0.205 0.204 0.206 0.197   6.94
47)  Benzene           1.263 1.138 1.084 1.084 1.033 1.106 1.123 1.119   6.45
48)  TAME              0.716 0.712 0.685 0.721 0.704 0.751 0.778 0.724   4.29
49)  Isobutyl alcohol  0.015 0.005 0.005 0.005 0.007 0.008 0.007 0.008  48.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9927
              Response Ratio = 0.00000 + 0.00692 *A + 0.00001 *A^2

50)S 1,2-Dichloroethan 0.259 0.277 0.252 0.252 0.260 0.255 0.260 0.259   3.23
51)  1,2-Dichloroethan 0.501 0.465 0.434 0.441 0.428 0.456 0.460 0.455   5.37
52)  Tert Amyl Alcohol 0.005 0.013 0.008 0.011 0.011 0.013 0.012 0.011  28.67
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9939
              Response Ratio = 0.00000 + 0.01072 *A + 0.00009 *A^2

53)  Trichloroethene   0.377 0.318 0.302 0.303 0.292 0.309 0.314 0.316   8.81
54)  Methylcyclohexane 0.438 0.423 0.386 0.396 0.391 0.415 0.415 0.409   4.62
55)  Dibromomethane    0.230 0.207 0.202 0.202 0.192 0.203 0.206 0.206   5.66
56)C 1,2-Dichloropropa 0.320 0.295 0.279 0.284 0.275 0.291 0.297 0.292   5.19
57)  Bromodichlorometh 0.357 0.344 0.331 0.364 0.354 0.389 0.407 0.364   7.13
58)  Methyl methacryla 0.112 0.194 0.201 0.201 0.237 0.243 0.260 0.207  23.60
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
              Response Ratio = 0.00000 + 0.19627 *A + 0.03295 *A^2

59)  1,4-Dioxane             0.003 0.002 0.002 0.002 0.002       0.002  13.99
60)  2-Chloroethyl vin 0.134 0.196 0.225 0.189 0.205 0.192 0.198 0.191  14.65
61)  cis-1,3-Dichlorop 0.346 0.375 0.384 0.409 0.404 0.444 0.457 0.403   9.65

62) I   Chlorobenzene-d5      ----------------ISTD--------------------
63)S Toluene-d8        1.335 1.324 1.348 1.333 1.358 1.333 1.363 1.342   1.07
64)C Toluene           1.789 1.626 1.539 1.529 1.508 1.562 1.643 1.600   6.08
65)  2-Nitropropane    0.028 0.038 0.030 0.036 0.040 0.048 0.057 0.039  25.12
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.02908 *A + 0.00272 *A^2

66)  4-Methyl-2-pentan 0.286 0.374 0.353 0.349 0.378 0.369 0.395 0.358   9.86
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Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

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 67)  trans-1,3-Dichlor 0.382 0.393 0.412 0.464 0.492 0.537 0.573 0.465  15.84
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.42070 *A + 0.07857 *A^2

 68)  Tetrachloroethene 0.494 0.458 0.441 0.431 0.435 0.445 0.467 0.453   4.85
 69)  Ethyl methacrylat 0.166 0.284 0.328 0.345 0.430 0.442 0.484 0.354  30.79
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.32644 *A + 0.08142 *A^2

 70)  1,1,2-Trichloroet 0.318 0.321 0.297 0.302 0.297 0.304 0.319 0.308   3.50
 71)  Dibromochlorometh 0.275 0.326 0.316 0.360 0.381 0.421 0.457 0.362  17.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.32195 *A + 0.06866 *A^2

 72)  1,3-Dichloropropa 0.669 0.651 0.598 0.597 0.591 0.605 0.638 0.621   4.97
 73)  1,2-Dibromoethane 0.350 0.382 0.359 0.367 0.363 0.377 0.397 0.371   4.26
 74)  3,3-dimethyl-1-bu 0.007 0.007 0.009 0.010 0.014 0.016 0.018 0.011  36.81
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9977
               Response Ratio = 0.00000 + 0.00882 *A + 0.00009 *A^2

 75)  2-hexanone        0.177 0.238 0.236 0.236 0.257 0.250 0.267 0.237  12.22
 76)  1-Chlorohexane    0.452 0.448 0.435 0.437 0.449 0.463 0.486 0.453   3.83
 77)C Ethylbenzene      1.991 1.807 1.707 1.732 1.728 1.787 1.862 1.802   5.50
 78)P Chlorobenzene     1.198 1.099 1.036 1.036 1.026 1.064 1.105 1.081   5.59
 79)  1,1,1,2-Tetrachlo 0.251 0.287 0.296 0.325 0.342 0.372 0.399 0.324  15.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.29572 *A + 0.05255 *A^2

 80)  m,p-Xylene        1.386 1.368 1.320 1.347 1.339 1.411 1.465 1.377   3.60
 81)  o-Xylene          1.393 1.345 1.299 1.306 1.314 1.365 1.440 1.352   3.83
 82)  Styrene           0.804 0.974 0.963 1.019 1.028 1.076 1.130 0.999  10.38
 83)P Bromoform         0.130 0.170 0.164 0.202 0.221 0.252 0.278 0.202  25.76
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.17211 *A + 0.05431 *A^2

 84)  Isopropylbenzene  1.580 1.602 1.545 1.566 1.561 1.617 1.691 1.594   3.07

 85) I   1,4-Dichlorobenzene-d ----------------ISTD---------------------
 86)S 4-Bromofluorobenz 1.007 0.926 1.031 0.997 1.008 0.973 1.015 0.994   3.51
 87)  cis-1,4-Dichloro- 0.164 0.247 0.301 0.293 0.376 0.369 0.436 0.312  29.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.27417 *A + 0.07945 *A^2

 88)  n-Propylbenzene   5.380 4.523 5.090 4.939 5.238 5.205 5.848 5.174   7.84
 89)  Bromobenzene      1.398 1.190 1.286 1.254 1.302 1.263 1.418 1.301   6.22
 90)P 1,1,2,2-Tetrachlo 1.181 1.245 1.170 1.177 1.221 1.187 1.330 1.216   4.70
 91)  1,3,5-Trimethylbe 3.578 3.115 3.577 3.560 3.733 3.766 4.232 3.652   9.11
 92)  2-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 93)  trans-1,4-Dichlor 0.218 0.244 0.246 0.273 0.300 0.299 0.356 0.277  16.67
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
               Response Ratio = 0.00000 + 0.24071 *A + 0.05475 *A^2

 94)  1,2,3-Trichloropr 0.377 0.363 0.358 0.345 0.361 0.350 0.391 0.364   4.31
 95)  Cyclohexanone           0.018 0.023 0.022 0.025 0.022 0.019 0.022  10.98
 96)  4-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 97)  tert-Butylbenzene 2.152 1.777 1.986 1.930 2.032 2.024 2.279 2.026   7.87
 98)  a-Methyl styrene                                               0.000  -1.00
 99)  1,2,4-Trimethylbe 3.509 3.111 3.512 3.455 3.651 3.624 4.084 3.564   8.14
100)  Pentachloroethane 0.205 0.305 0.429 0.435 0.586 0.608 0.725 0.470  38.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
```

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

```
                Response Ratio = 0.00000 + 0.38525 *A + 0.17005 *A^2

101)  sec-Butylbenzene  4.194 3.607 4.037 3.909 4.082 4.042 4.503 4.053   6.71
102)  4-Isopropyltoluen 3.416 3.053 3.467 3.437 3.612 3.582 4.015 3.512   8.18
103)  1,3-Dichlorobenze 2.447 2.115 2.201 2.172 2.253 2.195 2.457 2.263   6.00
104)  1,2,3-Trimethylbe 3.628 3.219 3.565 3.527 3.698 3.709 4.162 3.644   7.74
105)  1,4-Dichlorobenze 2.707 2.216 2.400 2.280 2.382 2.329 2.592 2.415   7.23
106)  n-Butylbenzene    1.702 1.635 1.813 1.810 1.929 1.951 2.193 1.862   9.91
107)  Benzyl Chloride   0.137 0.161 0.193 0.263 0.321 0.365 0.453 0.271  42.79
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
                Response Ratio = 0.00000 + 0.19284 *A + 0.12965 *A^2

108)  1,2-Dichlorobenze 2.327 2.082 2.146 2.100 2.191 2.139 2.388 2.196   5.31
109)  1,2-Dibromo-3-Chl 0.071 0.137 0.137 0.156 0.174 0.188 0.218 0.155  30.12
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
                Response Ratio = 0.00000 + 0.13382 *A + 0.04157 *A^2

110)  Hexachlorobutadie 0.531 0.435 0.459 0.448 0.472 0.464 0.538 0.478   8.41
111)  1,2,4-Trichlorobe 1.372 1.233 1.282 1.296 1.373 1.360 1.553 1.353   7.62
112)  Naphthalene       3.178 3.327 3.175 3.273 3.415 3.404 3.865 3.377   6.99
113)  1,2,3-Trichlorobe 1.305 1.198 1.190 1.190 1.248 1.240 1.418 1.255   6.60
 ----------------------------------------------------------------------------
 (#) = Out of Range

           VO_12-08-2022.M        Thu Dec 08 15:43:02 2022
```

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72898.D Vial: 10
Acq On : 8 Dec 2022 1:16 pm Operator: adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	110	0.00	8.55
2	Dichlorodifluoromethane		----------NA----------				
3 P	Chloromethane	0.308	0.259	15.9	80	0.00	3.01
4	1,3-butadiene	0.309	0.324	-4.9	121	0.00	3.18
5 C	Vinyl Chloride	0.311	0.270	13.2	82	0.00	3.15
	----------	Amount	Calc.	%Drift	----------		
6	Bromomethane	40.000	38.177	4.6	95	0.00	3.68
7	Chloroethane	40.000	34.583	13.5	87	0.00	3.88
8	Trichlorofluoromethane	40.000	35.132	12.2	88	0.00	4.10
	----------	AvgRF	CCRF	%Dev	----------		
9	Ethyl Ether	0.231	0.211	8.7	105	0.00	4.55
10	Ethanol	0.001	0.001	0.0	83	0.00	4.77
11	1,2-Dichlorotrifluoroetha	0.352	0.310	11.9	103	0.00	4.82
12 C	1,1-Dichloroethene	0.433	0.376	13.2	100	0.00	4.82
13	Freon 113	0.295	0.245	16.9	100	0.00	4.88
14	Carbon Disulfide	0.835	0.763	8.6	109	0.00	4.86
	----------	Amount	Calc.	%Drift	----------		
15	Iodomethane	40.000	36.923	7.7	87	0.00	5.02
16	Acrolein	200.000	170.858	14.6	91	0.00	5.27
	----------	AvgRF	CCRF	%Dev	----------		
17	Allyl chloride	0.386	0.412	-6.7	115	0.00	5.45
	----------	Amount	Calc.	%Drift	----------		
18	Methylene Chloride	40.000	35.648	10.9	105	0.00	5.59
19	Acetone	200.000	192.124	3.9	107	0.00	5.65
	----------	AvgRF	CCRF	%Dev	----------		
20	Methyl acetate	0.183	0.186	-1.6	114	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.374	10.7	103	0.00	5.79
22	Hexane	0.197	0.180	8.6	103	0.00	5.88
23	Methyl Tert Butyl Ether	0.770	0.723	6.1	109	0.00	5.92
	----------	Amount	Calc.	%Drift	----------		
24	Tert Butyl Alcohol	400.000	389.813	2.5	109	0.00	6.02
	----------	AvgRF	CCRF	%Dev	----------		
25	Acetonitrile	0.028	0.025	10.7	95	0.00	6.23
26	Di-isopropyl ether	0.938	0.913	2.7	113	0.00	6.37

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

27		Chloroprene	0.346	0.402	-16.2	123	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.476	6.3	110	0.00	6.54
29		Acrylonitrile	0.080	0.074	7.5	105	0.00	6.60
30		ETBE	0.836	0.819	2.0	110	0.00	6.80
31		Vinyl acetate	0.533	0.632	-18.6	119	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.281	7.6	109	0.00	7.18
33		2,2-Dichloropropane	0.358	0.341	4.7	103	0.00	7.30
34		Bromochloromethane	0.162	0.155	4.3	110	0.00	7.40
35		Cyclohexane	0.437	0.415	5.0	108	0.00	7.41
36	C	Chloroform	0.534	0.484	9.4	106	0.00	7.48
37		Ethyl acetate	0.242	0.244	-0.8	108	0.00	7.59
38		Tetrahydrofuran	0.073	0.072	1.4	116	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.278	0.7	109	0.00	7.68
40		Carbon Tetrachloride	0.314	0.307	2.2	107	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.403	5.0	107	0.00	7.71
42		2-Butanone	0.110	0.108	1.8	106	0.00	7.81
43		1,1-Dichloropropene	0.391	0.343	12.3	102	0.00	7.85
			Amount	Calc.	%Drift			
44		tert-Butyl formate	200.000	162.330	18.8	79	0.00	7.96
			AvgRF	CCRF	%Dev			
45		Propionitrile	0.034	0.033	2.9	100	0.00	8.14
46		Methacrylonitrile	0.197	0.196	0.5	104	0.00	8.16
47		Benzene	1.119	0.994	11.2	105	0.00	8.12
48		TAME	0.724	0.713	1.5	111	0.00	8.21
			Amount	Calc.	%Drift			
49		Isobutyl alcohol	800.000	717.414	10.3	95	0.00	8.30
			AvgRF	CCRF	%Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.262	-1.2	111	0.00	8.26
51		1,2-Dichloroethane	0.455	0.419	7.9	107	0.00	8.34
			Amount	Calc.	%Drift			
52		Tert Amyl Alcohol	400.000	392.452	1.9	107	0.00	8.40
			AvgRF	CCRF	%Dev			
53		Trichloroethene	0.316	0.280	11.4	105	0.00	8.73
54		Methylcyclohexane	0.409	0.386	5.6	108	0.00	8.73
55		Dibromomethane	0.206	0.184	10.7	105	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.259	11.3	103	0.00	9.27
57		Bromodichloromethane	0.364	0.360	1.1	111	0.00	9.33
			Amount	Calc.	%Drift			
58		Methyl methacrylate	40.000	44.369	-10.9	116	0.00	9.46
			AvgRF	CCRF	%Dev			
59		1,4-Dioxane		----------NA----------				
60		2-Chloroethyl vinyl ether	0.191	0.191	0.0	102	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.397	1.5	107	0.00	9.96
62	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	11.72
63	S	Toluene-d8	1.342	1.382	-3.0	109	0.00	10.15
64	C	Toluene	1.600	1.504	6.0	106	0.00	10.21
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	194.033	3.0	104	0.00	10.44
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: VO2866-ICV2866
Lab FileID: O72898.D

66		4-Methyl-2-pentanone	0.358	0.366	-2.2	103	0.00	10.56
			Amount	Calc.	%Drift			
67		trans-1,3-Dichloropropene	40.000	44.217	-10.5	117	0.00	10.62
			AvgRF	CCRF	%Dev			
68		Tetrachloroethene	0.453	0.433	4.4	106	0.00	10.60
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	42.379	-5.9	104	0.00	10.73
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.308	0.305	1.0	109	0.00	10.78
			Amount	Calc.	%Drift			
71		Dibromochloromethane	40.000	40.761	-1.9	108	0.00	10.97
			AvgRF	CCRF	%Dev			
72		1,3-Dichloropropane	0.621	0.562	9.5	101	0.00	11.07
73		1,2-Dibromoethane	0.371	0.366	1.3	107	0.00	11.23
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1934.383	3.3	93	0.00	11.34
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.237	0.248	-4.6	103	0.00	11.40
76		1-Chlorohexane	0.453	0.467	-3.1	111	0.00	11.68
77	C	Ethylbenzene	1.802	1.738	3.6	107	0.00	11.74
78	P	Chlorobenzene	1.081	1.040	3.8	108	0.00	11.74
			Amount	Calc.	%Drift			
79		1,1,1,2-Tetrachloroethane	40.000	41.810	-4.5	111	0.00	11.79
			AvgRF	CCRF	%Dev			
80		m,p-Xylene	1.377	1.355	1.6	108	0.00	11.88
81		o-Xylene	1.352	1.358	-0.4	110	0.00	12.32
82		Styrene	0.999	1.036	-3.7	107	0.00	12.38
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	42.906	-7.3	113	0.00	12.43
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.594	1.595	-0.1	109	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	1.028	-3.4	107	0.00	12.94
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	41.553	-3.9	99	0.00	12.99
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	5.174	5.413	-4.6	108	0.00	13.05
89		Bromobenzene	1.301	1.270	2.4	102	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.270	-4.4	109	0.00	13.13
91		1,3,5-Trimethylbenzene	3.652	3.779	-3.5	106	0.00	13.24
92		2-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	45.969	-14.9	117	0.00	13.31

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

		AvgRF	CCRF	%Dev			
94	1,2,3-Trichloropropane	0.364	0.342	6.0	99	0.00	13.29
95	Cyclohexanone	0.022	0.021	4.5	87	0.00	13.35
96	4-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
97	tert-Butylbenzene	2.026	2.118	-4.5	109	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.779	-6.0	108	0.00	13.65
		Amount	Calc.	%Drift			
100	Pentachloroethane	40.000	46.781	-17.0	114	0.00	13.63
		AvgRF	CCRF	%Dev			
101	sec-Butylbenzene	4.053	4.413	-8.9	113	0.00	13.76
102	4-Isopropyltoluene	3.512	3.802	-8.3	110	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.358	-4.2	110	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	4.097	-12.4	116	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.444	-1.2	107	0.00	14.11
106	n-Butylbenzene	1.862	1.928	-3.5	105	0.00	14.33
		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	46.210	-15.5	118	0.00	14.35
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	2.196	2.254	-2.6	108	0.00	14.54
		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	41.952	-4.9	107	0.00	15.29
		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.478	0.467	2.3	104	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.412	-4.4	108	0.00	15.89
112	Naphthalene	3.377	3.558	-5.4	109	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.295	-3.2	109	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Thu Dec 08 15:41:55 2022

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72899.D Vial: 11
Acq On : 8 Dec 2022 1:59 pm Operator: adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	108	0.00	8.55
2		Dichlorodifluoromethane	0.351	0.273	22.2#	79	0.00	2.69
3	P	Chloromethane		----------NA----------				
4		1,3-butadiene		----------NA----------				
5	C	Vinyl Chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
6		Bromomethane		----------NA----------				
7		Chloroethane		----------NA----------				
8		Trichlorofluoromethane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
9		Ethyl Ether		----------NA----------				
10		Ethanol		----------NA----------				
11		1,2-Dichlorotrifluoroetha		----------NA----------				
12	C	1,1-Dichloroethene		----------NA----------				
13		Freon 113		----------NA----------				
14		Carbon Disulfide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------NA----------				
16		Acrolein		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
17		Allyl chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------NA----------				
19		Acetone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------NA----------				
21		trans-1,2-Dichloroethene		----------NA----------				
22		Hexane		----------NA----------				
23		Methyl Tert Butyl Ether		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
24		Tert Butyl Alcohol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
25		Acetonitrile		----------NA----------				
26		Di-isopropyl ether		----------NA----------				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

27		Chloroprene		----------NA----------					
28	P	1,1-Dichloroethane		----------NA----------					
29		Acrylonitrile		----------NA----------					
30		ETBE		----------NA----------					
31		Vinyl acetate		----------NA----------					
32		cis-1,2-Dichloroethene		----------NA----------					
33		2,2-Dichloropropane		----------NA----------					
34		Bromochloromethane		----------NA----------					
35		Cyclohexane		----------NA----------					
36	C	Chloroform		----------NA----------					
37		Ethyl acetate		----------NA----------					
38		Tetrahydrofuran		----------NA----------					
39	S	Dibromofluoromethane	0.280	0.279	0.4	108	0.00	7.68	
40		Carbon Tetrachloride		----------NA----------					
41		1,1,1-Trichloroethane		----------NA----------					
42		2-Butanone		----------NA----------					
43		1,1-Dichloropropene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
44		tert-Butyl formate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
45		Propionitrile		----------NA----------					
46		Methacrylonitrile		----------NA----------					
47		Benzene		----------NA----------					
48		TAME		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
49		Isobutyl alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
50	S	1,2-Dichloroethane-d4	0.259	0.254	1.9	109	0.00	8.26	
51		1,2-Dichloroethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
52		Tert Amyl Alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
53		Trichloroethene		----------NA----------					
54		Methylcyclohexane		----------NA----------					
55		Dibromomethane		----------NA----------					
56	C	1,2-Dichloropropane		----------NA----------					
57		Bromodichloromethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
58		Methyl methacrylate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
59		1,4-Dioxane	0.002	0.002	0.0	83	0.00	9.54	
60		2-Chloroethyl vinyl ether		----------NA----------					
61		cis-1,3-Dichloropropene		----------NA----------					
62	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	11.72	
63	S	Toluene-d8	1.342	1.390	-3.6	105	0.00	10.15	
64	C	Toluene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
65		2-Nitropropane		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

66		4-Methyl-2-pentanone		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
67		trans-1,3-Dichloropropene		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
68		Tetrachloroethene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
69		Ethyl methacrylate		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
70		1,1,2-Trichloroethane		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
71		Dibromochloromethane		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
72		1,3-Dichloropropane		----------NA----------				
73		1,2-Dibromoethane		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
74		3,3-dimethyl-1-butanol		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
75		2-hexanone		----------NA----------				
76		1-Chlorohexane		----------NA----------				
77	C	Ethylbenzene		----------NA----------				
78	P	Chlorobenzene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
79		1,1,1,2-Tetrachloroethane		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
80		m,p-Xylene		----------NA----------				
81		o-Xylene		----------NA----------				
82		Styrene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
83	P	Bromoform		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
84		Isopropylbenzene		----------NA----------				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.988	0.6	100	0.00	12.94
		---------- Amount	Calc.	%Drift	----------			
87		cis-1,4-Dichloro-2-butene		----------NA----------				
		---------- AvgRF	CCRF	%Dev	----------			
88		n-Propylbenzene		----------NA----------				
89		Bromobenzene		----------NA----------				
90	P	1,1,2,2-Tetrachloroethane		----------NA----------				
91		1,3,5-Trimethylbenzene		----------NA----------				
92		2-Chlorotoluene		----------NA----------				
		---------- Amount	Calc.	%Drift	----------			
93		trans-1,4-Dichloro-2-Bute		----------NA----------				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

		AvgRF	CCRF	%Dev
94	1,2,3-Trichloropropane		NA	
95	Cyclohexanone		NA	
96	4-Chlorotoluene		NA	
97	tert-Butylbenzene		NA	
98	a-Methyl styrene		NA	
99	1,2,4-Trimethylbenzene		NA	

		Amount	Calc.	%Drift
100	Pentachloroethane		NA	

		AvgRF	CCRF	%Dev
101	sec-Butylbenzene		NA	
102	4-Isopropyltoluene		NA	
103	1,3-Dichlorobenzene		NA	
104	1,2,3-Trimethylbenzene		NA	
105	1,4-Dichlorobenzene		NA	
106	n-Butylbenzene		NA	

		Amount	Calc.	%Drift
107	Benzyl Chloride		NA	

		AvgRF	CCRF	%Dev
108	1,2-Dichlorobenzene		NA	

		Amount	Calc.	%Drift
109	1,2-Dibromo-3-Chloropropa		NA	

		AvgRF	CCRF	%Dev
110	Hexachlorobutadiene		NA	
111	1,2,4-Trichlorobenzene		NA	
112	Naphthalene		NA	
113	1,2,3-Trichlorobenzene		NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
O72893.D VO_12-08-2022.M Thu Dec 08 15:42:40 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...-2022\VO2867\O72918.d Vial: 3
Acq On : 9 Dec 2022 10:04 am Operator: adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS52925,VO2867,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	103	0.00	8.55
2	Dichlorodifluoromethane	0.351	0.320	8.8	82	0.00	2.69
3 P	Chloromethane	0.308	0.288	6.5	84	0.01	3.03
4	1,3-butadiene	0.309	0.290	6.1	101	0.01	3.20
5 C	Vinyl Chloride	0.311	0.308	1.0	88	0.00	3.16
		True	Calc.	% Drift			
6	Bromomethane	40.000	34.549	13.6	80	0.00	3.68
7	Chloroethane	40.000	37.123	7.2	87	0.01	3.89
8	Trichlorofluoromethane	40.000	35.782	10.5	84	0.00	4.10
		AvgRF	CCRF	% Dev			
9	Ethyl Ether	0.231	0.214	7.4	100	0.00	4.56
10	Ethanol	0.001	0.001	0.0	64	0.00	4.78
11	1,2-Dichlorotrifluoroetha	0.352	0.316	10.2	99	0.00	4.83
12 C	1,1-Dichloroethene	0.433	0.392	9.5	98	0.00	4.83
13	Freon 113	0.295	0.257	12.9	98	0.00	4.88
14	Carbon Disulfide	0.835	0.744	10.9	100	0.00	4.87
		True	Calc.	% Drift			
15	Iodomethane	40.000	43.426	-8.6	106	0.00	5.03
16	Acrolein	200.000	180.589	9.7	90	0.00	5.28
		AvgRF	CCRF	% Dev			
17	Allyl chloride	0.386	0.361	6.5	94	0.00	5.46
		True	Calc.	% Drift			
18	Methylene Chloride	40.000	36.124	9.7	100	0.00	5.59
19	Acetone	200.000	171.237	14.4	89	0.00	5.66
		AvgRF	CCRF	% Dev			
20	Methyl acetate	0.183	0.176	3.8	101	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.382	8.8	99	0.00	5.80
22	Hexane	0.197	0.184	6.6	99	0.00	5.89
23	Methyl Tert Butyl Ether	0.770	0.699	9.2	99	0.00	5.92
		True	Calc.	% Drift			
24	Tert Butyl Alcohol	400.000	317.168	20.7#	83	0.00	6.03
		AvgRF	CCRF	% Dev			
25	Acetonitrile	0.028	0.024	14.3	88	0.00	6.23
26	Di-isopropyl ether	0.938	0.853	9.1	99	0.00	6.37

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

27		Chloroprene	0.346	0.330	4.6	95	0.00	6.52
28	P	1,1-Dichloroethane	0.508	0.460	9.4	99	0.00	6.54
29		Acrylonitrile	0.080	0.071	11.3	95	0.00	6.60
30		ETBE	0.836	0.762	8.9	96	0.00	6.80
31		Vinyl acetate	0.533	0.541	-1.5	96	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.278	8.6	101	0.00	7.18
33		2,2-Dichloropropane	0.358	0.331	7.5	94	0.00	7.30
34		Bromochloromethane	0.162	0.151	6.8	101	0.00	7.40
35		Cyclohexane	0.437	0.396	9.4	97	0.00	7.41
36	C	Chloroform	0.534	0.484	9.4	100	0.00	7.48
37		Ethyl acetate	0.242	0.230	5.0	96	0.00	7.59
38		Tetrahydrofuran	0.073	0.065	11.0	97	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.275	1.8	101	0.00	7.68
40		Carbon Tetrachloride	0.314	0.317	-1.0	104	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.401	5.4	100	0.00	7.72
42		2-Butanone	0.110	0.104	5.5	96	0.00	7.81
43		1,1-Dichloropropene	0.391	0.354	9.5	99	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	185.717	7.1	87	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.030	11.8	85	0.00	8.14
46		Methacrylonitrile	0.197	0.198	-0.5	99	0.00	8.16
47		Benzene	1.119	1.027	8.2	102	0.00	8.12
48		TAME	0.724	0.676	6.6	99	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	679.606	15.0	85	0.00	8.30
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.264	-1.9	104	0.00	8.26
51		1,2-Dichloroethane	0.455	0.411	9.7	99	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	355.030	11.2	91	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.283	10.4	100	0.00	8.73
54		Methylcyclohexane	0.409	0.376	8.1	99	0.00	8.73
55		Dibromomethane	0.206	0.192	6.8	103	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.266	8.9	100	0.00	9.27
57		Bromodichloromethane	0.364	0.358	1.6	104	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	39.961	0.1	97	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.001	50.0#	65	0.00	9.54
60		2-Chloroethyl vinyl ether	0.191	0.187	2.1	93	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.401	0.5	102	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	11.72
63	S	Toluene-d8	1.342	1.371	-2.2	99	0.00	10.15
64	C	Toluene	1.600	1.578	1.4	102	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	272.368	-36.2#	148	0.00	10.44
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

			True	Calc.	% Drift			
66		4-Methyl-2-pentanone	0.358	0.383	-7.0	99	0.00	10.56
			True	Calc.	% Drift			
67		trans-1,3-Dichloropropene	40.000	41.940	-4.8	101	0.00	10.62
			AvgRF	CCRF	% Dev			
68		Tetrachloroethene	0.453	0.446	1.5	100	0.00	10.60
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	43.954	-9.9	99	0.00	10.73
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.308	0.314	-1.9	103	0.00	10.78
			True	Calc.	% Drift			
71		Dibromochloromethane	40.000	44.127	-10.3	108	0.00	10.97
			AvgRF	CCRF	% Dev			
72		1,3-Dichloropropane	0.621	0.615	1.0	102	0.00	11.06
73		1,2-Dibromoethane	0.371	0.387	-4.3	104	0.00	11.23
			True	Calc.	% Drift			
74		3,3-dimethyl-1-butanol	2000.000	2064.061	-3.2	93	0.00	11.34
			AvgRF	CCRF	% Dev			
75		2-hexanone	0.237	0.257	-8.4	98	0.00	11.39
76		1-Chlorohexane	0.453	0.456	-0.7	99	0.00	11.68
77	C	Ethylbenzene	1.802	1.788	0.8	101	0.00	11.74
78	P	Chlorobenzene	1.081	1.073	0.7	102	0.00	11.74
			True	Calc.	% Drift			
79		1,1,1,2-Tetrachloroethane	40.000	43.320	-8.3	106	0.00	11.79
			AvgRF	CCRF	% Dev			
80		m,p-Xylene	1.377	1.390	-0.9	101	0.00	11.88
81		o-Xylene	1.352	1.351	0.1	101	0.00	12.32
82		Styrene	0.999	1.070	-7.1	102	0.00	12.38
			True	Calc.	% Drift			
83	P	Bromoform	40.000	46.019	-15.0	113	0.00	12.43
			AvgRF	CCRF	% Dev			
84		Isopropylbenzene	1.594	1.608	-0.9	101	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.960	3.4	98	0.00	12.94
			True	Calc.	% Drift			
87		cis-1,4-Dichloro-2-butene	40.000	42.034	-5.1	98	0.00	12.99
			AvgRF	CCRF	% Dev			
88		n-Propylbenzene	5.174	5.166	0.2	102	0.00	13.05
89		Bromobenzene	1.301	1.276	1.9	101	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.249	-2.7	105	0.00	13.12
91		1,3,5-Trimethylbenzene	3.652	3.667	-0.4	101	0.00	13.24
92		2-Chlorotoluene	3.256	3.203	1.6	101	0.00	13.41
			True	Calc.	% Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	42.547	-6.4	105	0.00	13.31

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.362	0.5	103	0.00	13.29
95	Cyclohexanone	0.022	0.017	22.7#	70	0.00	13.35
96	4-Chlorotoluene	3.256	3.203	1.6	101	0.00	13.41
97	tert-Butylbenzene	2.026	1.962	3.2	99	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.584	-0.6	101	0.00	13.65

		True	Calc.	% Drift			
100	Pentachloroethane	40.000	44.549	-11.4	105	0.00	13.63

		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	4.036	0.4	102	0.00	13.76
102	4-Isopropyltoluene	3.512	3.568	-1.6	102	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.209	2.4	101	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.659	-0.4	102	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.364	2.1	102	0.00	14.11
106	n-Butylbenzene	1.862	1.916	-2.9	102	0.00	14.33

		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	43.854	-9.6	108	0.00	14.35

		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	2.136	2.7	100	0.00	14.54

		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	43.479	-8.7	110	0.00	15.29

		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.447	6.5	98	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.340	1.0	101	0.00	15.89
112	Naphthalene	3.377	3.418	-1.2	103	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.215	3.2	100	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Sun Dec 11 13:57:21 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...-2022\VO2867\O72946.d Vial: 31
Acq On : 9 Dec 2022 9:59 pm Operator: adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS52925,VO2867,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	95	0.00	8.55
2	Dichlorodifluoromethane	0.351	0.312	11.1	74	0.00	2.69
3 P	Chloromethane	0.308	0.292	5.2	78	0.00	3.02
4	1,3-butadiene	0.309	0.324	-4.9	104	0.00	3.19
5 C	Vinyl Chloride	0.311	0.310	0.3	81	0.00	3.16
		True	Calc.	% Drift			
6	Bromomethane	40.000	35.063	12.3	75	0.00	3.68
7	Chloroethane	40.000	38.310	4.2	83	0.00	3.89
8	Trichlorofluoromethane	40.000	35.383	11.5	77	0.00	4.10
		AvgRF	CCRF	% Dev			
9	Ethyl Ether	0.231	0.215	6.9	93	0.00	4.56
10	Ethanol	0.001	0.001	0.0	105	0.00	4.78
11	1,2-Dichlorotrifluoroetha	0.352	0.322	8.5	93	0.00	4.82
12 C	1,1-Dichloroethene	0.433	0.389	10.2	90	0.00	4.83
13	Freon 113	0.295	0.267	9.5	94	0.00	4.88
14	Carbon Disulfide	0.835	0.742	11.1	92	0.00	4.87
		True	Calc.	% Drift			
15	Iodomethane	40.000	50.959	-27.4	129	0.00	5.03
16	Acrolein	200.000	169.244	15.4	78	0.00	5.28
		AvgRF	CCRF	% Dev			
17	Allyl chloride	0.386	0.372	3.6	90	0.00	5.46
		True	Calc.	% Drift			
18	Methylene Chloride	40.000	37.523	6.2	96	0.00	5.59
19	Acetone	200.000	199.210	0.4	96	0.00	5.65
		AvgRF	CCRF	% Dev			
20	Methyl acetate	0.183	0.190	-3.8	101	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.379	9.5	91	0.00	5.80
22	Hexane	0.197	0.174	11.7	86	0.00	5.89
23	Methyl Tert Butyl Ether	0.770	0.703	8.7	92	0.00	5.92
		True	Calc.	% Drift			
24	Tert Butyl Alcohol	400.000	411.142	-2.8	100	0.00	6.03
		AvgRF	CCRF	% Dev			
25	Acetonitrile	0.028	0.027	3.6	90	0.00	6.23
26	Di-isopropyl ether	0.938	0.859	8.4	92	0.00	6.37

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
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27		Chloroprene	0.346	0.333	3.8	88	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.466	8.3	93	0.00	6.54
29		Acrylonitrile	0.080	0.068	15.0	84	0.00	6.60
30		ETBE	0.836	0.782	6.5	91	0.00	6.80
31		Vinyl acetate	0.533	0.492	7.7	81	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.278	8.6	94	0.00	7.18
33		2,2-Dichloropropane	0.358	0.314	12.3	83	0.00	7.30
34		Bromochloromethane	0.162	0.151	6.8	93	0.00	7.40
35		Cyclohexane	0.437	0.397	9.2	90	0.00	7.41
36	C	Chloroform	0.534	0.481	9.9	92	0.00	7.48
37		Ethyl acetate	0.242	0.217	10.3	84	0.00	7.59
38		Tetrahydrofuran	0.073	0.068	6.8	94	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.275	1.8	93	0.00	7.68
40		Carbon Tetrachloride	0.314	0.314	0.0	95	0.00	7.65
41		1,1,1-Trichloroethane	0.424	0.398	6.1	92	0.00	7.72
42		2-Butanone	0.110	0.116	-5.5	99	0.00	7.81
43		1,1-Dichloropropene	0.391	0.354	9.5	92	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	186.056	7.0	81	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.036	-5.9	93	0.00	8.14
46		Methacrylonitrile	0.197	0.200	-1.5	93	0.00	8.16
47		Benzene	1.119	1.037	7.3	95	0.00	8.12
48		TAME	0.724	0.683	5.7	92	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	886.798	-10.8	102	0.00	8.30
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.260	-0.4	95	0.00	8.26
51		1,2-Dichloroethane	0.455	0.409	10.1	91	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	420.974	-5.2	100	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.283	10.4	92	0.00	8.73
54		Methylcyclohexane	0.409	0.377	7.8	92	0.00	8.73
55		Dibromomethane	0.206	0.189	8.3	94	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.269	7.9	93	0.00	9.28
57		Bromodichloromethane	0.364	0.343	5.8	92	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	40.530	-1.3	91	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.002	0.0	94	0.00	9.54
60		2-Chloroethyl vinyl ether	0.191	0.182	4.7	84	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.388	3.7	91	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00	11.73
63	S	Toluene-d8	1.342	1.334	0.6	93	0.00	10.15
64	C	Toluene	1.600	1.520	5.0	95	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	216.579	-8.3	106	0.00	10.45
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

66		4-Methyl-2-pentanone	0.358	0.396	-10.6	99	0.00	10.56
		----------	True	Calc.	% Drift	----------		
67		trans-1,3-Dichloropropene	40.000	39.750	0.6	92	0.00	10.62
		----------	AvgRF	CCRF	% Dev	----------		
68		Tetrachloroethene	0.453	0.450	0.7	98	0.00	10.60
		----------	True	Calc.	% Drift	----------		
69		Ethyl methacrylate	40.000	43.016	-7.5	94	0.00	10.73
		----------	AvgRF	CCRF	% Dev	----------		
70		1,1,2-Trichloroethane	0.308	0.301	2.3	96	0.00	10.78
		----------	True	Calc.	% Drift	----------		
71		Dibromochloromethane	40.000	40.610	-1.5	95	0.00	10.97
		----------	AvgRF	CCRF	% Dev	----------		
72		1,3-Dichloropropane	0.621	0.585	5.8	93	0.00	11.07
73		1,2-Dibromoethane	0.371	0.363	2.2	95	0.00	11.23
		----------	True	Calc.	% Drift	----------		
74		3,3-dimethyl-1-butanol	2000.000	2391.213	-19.6	109	0.00	11.34
		----------	AvgRF	CCRF	% Dev	----------		
75		2-hexanone	0.237	0.270	-13.9	99	0.00	11.40
76		1-Chlorohexane	0.453	0.433	4.4	91	0.00	11.68
77	C	Ethylbenzene	1.802	1.713	4.9	94	0.00	11.74
78	P	Chlorobenzene	1.081	1.024	5.3	94	0.00	11.74
		----------	True	Calc.	% Drift	----------		
79		1,1,1,2-Tetrachloroethane	40.000	40.813	-2.0	96	0.00	11.79
		----------	AvgRF	CCRF	% Dev	----------		
80		m,p-Xylene	1.377	1.327	3.6	94	0.00	11.88
81		o-Xylene	1.352	1.277	5.5	92	0.00	12.32
82		Styrene	0.999	1.016	-1.7	93	0.00	12.38
		----------	True	Calc.	% Drift	----------		
83	P	Bromoform	40.000	40.397	-1.0	94	0.00	12.43
		----------	AvgRF	CCRF	% Dev	----------		
84		Isopropylbenzene	1.594	1.543	3.2	93	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.886	10.9	97	0.00	12.94
		----------	True	Calc.	% Drift	----------		
87		cis-1,4-Dichloro-2-butene	40.000	33.990	15.0	82	0.00	12.99
		----------	AvgRF	CCRF	% Dev	----------		
88		n-Propylbenzene	5.174	4.411	14.7	93	0.00	13.05
89		Bromobenzene	1.301	1.090	16.2	92	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.066	12.3	96	0.00	13.12
91		1,3,5-Trimethylbenzene	3.652	3.128	14.3	92	0.00	13.24
92		2-Chlorotoluene	3.256	2.772	14.9	93	0.00	13.41
		----------	True	Calc.	% Drift	----------		
93		trans-1,4-Dichloro-2-Bute	40.000	33.485	16.3	85	0.00	13.31

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
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		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.306	15.9	93	0.00	13.29
95	Cyclohexanone	0.022	0.019	13.6	84	0.00	13.35
96	4-Chlorotoluene	3.256	2.772	14.9	93	0.00	13.41
97	tert-Butylbenzene	2.026	1.698	16.2	92	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.076	13.7	93	0.00	13.65
		True	Calc.	% Drift			
100	Pentachloroethane	40.000	35.977	10.1	86	0.00	13.63
		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	3.446	15.0	93	0.00	13.76
102	4-Isopropyltoluene	3.512	3.006	14.4	91	0.00	13.90
103	1,3-Dichlorobenzene	2.263	1.907	15.7	93	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.126	14.2	93	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.022	16.3	93	0.00	14.11
106	n-Butylbenzene	1.862	1.588	14.7	91	0.00	14.33
		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	33.778	15.6	81	0.00	14.35
		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	1.847	15.9	93	0.00	14.54
		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	36.206	9.5	94	0.00	15.29
		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.362	24.3	84	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.090	19.4	87	0.00	15.89
112	Naphthalene	3.377	2.872	15.0	92	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.001	20.2	88	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Sun Dec 11 14:20:43 2022

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICC2755
Lab FileID: Y66389.D

Response Factor Report MSVOA14-Y

Method : C:\msdchem\1\MET...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration

Calibration Files
1 =Y66385.D 2 =Y66386.D 3 =Y66387.D 4 =Y66388.D
5 =Y66389.D 6 =Y66390.D 7 =Y66391.D

	Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I	Fluorobenzene	----------ISTD----------								
2)	Dichlorodifluorom	0.264	0.270	0.237	0.254	0.238	0.245	0.229	0.248	6.06
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992									
	Response Ratio = 0.00000 + 0.25472 *A + -0.01168 *A^2									
3)	Acrolein	0.040	0.067	0.066	0.065	0.064	0.065	0.066	0.062	15.43
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995									
	Response Ratio = 0.00000 + 0.06352 *A + 0.00026 *A^2									
4)P	Chloromethane	0.470	0.353	0.306	0.345	0.323	0.328	0.327	0.350	15.66
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991									
	Response Ratio = 0.00000 + 0.33462 *A + -0.00422 *A^2									
5)	1,3-butadiene	0.305	0.318	0.277	0.262	0.267	0.255	0.248	0.276	9.49
6)C	Vinyl Chloride	0.344	0.310	0.257	0.301	0.282	0.293	0.293	0.297	8.91
7)	Bromomethane	0.224	0.149	0.130	0.134	0.133	0.142	0.136	0.150	22.24
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9988									
	Response Ratio = 0.00000 + 0.13722 *A + 0.00015 *A^2									
8)	Chloroethane	0.226	0.174	0.172	0.141	0.124	0.122	0.112	0.153	26.41
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9984									
	Response Ratio = 0.00000 + 0.14367 *A + -0.01590 *A^2									
9)	Trichlorofluorome	0.338	0.311	0.262	0.309	0.282	0.321	0.213	0.291	14.65
10)	Ethyl Ether	0.226	0.218	0.284	0.260	0.227	0.228	0.239	0.240	9.79
11)	Ethanol			0.005	0.006	0.007	0.008	0.008	0.008	0.007	15.79
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
	Response Ratio = 0.00000 + 0.00676 *A + 0.00003 *A^2									
12)	1,2-Dichlorotrifl	0.240	0.260	0.318	0.301	0.252	0.256	0.255	0.269	10.77
13)C	1,1-Dichloroethen	0.351	0.319	0.396	0.375	0.313	0.333	0.337	0.346	8.65
14)	Freon 113	0.168	0.217	0.260	0.238	0.197	0.205	0.196	0.212	14.17
15)	Carbon Disulfide	0.670	0.566	0.667	0.664	0.574	0.616	0.626	0.626	6.97
16)	Iodomethane	0.115	0.110	0.157	0.198	0.192	0.206	0.208	0.170	25.04
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9971									
	Response Ratio = 0.00000 + 0.17172 *A + 0.02031 *A^2									
17)	Allyl chloride	0.342	0.320	0.269	0.316	0.346	0.355	0.343	0.327	8.95
18)	Methylene Chlorid	0.973	0.440	0.472	0.410	0.352	0.349	0.348	0.478	46.88
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9952									
	Response Ratio = 0.00000 + 0.42651 *A + -0.04525 *A^2									
19)	Acetone	0.132	0.119	0.142	0.147	0.150	0.143	0.146	0.140	7.67
20)	Methyl acetate	0.220	0.233	0.321	0.321	0.288	0.297	0.304	0.283	14.37
21)	trans-1,2-Dichlor	0.312	0.308	0.374	0.374	0.326	0.335	0.340	0.338	7.99
22)	Hexane	0.148	0.175	0.202	0.197	0.148	0.158	0.151	0.169	13.82

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICC2755
Lab FileID: Y66389.D

23)	Methyl Tert Butyl	0.722	0.674	0.861	0.789	0.713	0.725	0.726	0.744	8.28
24)	Tert Butyl Alcoho	0.075	0.058	0.074	0.078	0.074	0.079	0.084	0.075	10.77
25)	Acetonitrile	0.122	0.049	0.052	0.058	0.061	0.062	0.063	0.067	37.39

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9965
Response Ratio = 0.00000 + 0.05703 *A + 0.00031 *A^2

26)	Di-isopropyl ethe	0.778	0.757	0.975	0.919	0.825	0.845	0.846	0.849	8.97
27)	Chloroprene	0.233	0.305	0.256	0.292	0.315	0.315	0.330	0.292	12.00
28)P	1,1-Dichloroethan	0.443	0.421	0.516	0.496	0.432	0.446	0.442	0.457	7.72
29)	Acrylonitrile	0.109	0.120	0.156	0.143	0.147	0.146	0.152	0.139	12.65
30)	ETBE	0.754	0.706	0.870	0.891	0.798	0.825	0.872	0.817	8.37
31)	Vinyl acetate	0.356	0.448	0.666	0.594	0.610	0.632	0.664	0.567	20.94

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9983
Response Ratio = 0.00000 + 0.56880 *A + 0.00949 *A^2

32)	cis-1,2-Dichloroe	0.246	0.255	0.321	0.299	0.264	0.264	0.266	0.274	9.68
33)	2,2-Dichloropropa	0.292	0.308	0.367	0.368	0.321	0.334	0.340	0.333	8.49
34)	Bromochloromethan	0.094	0.117	0.140	0.128	0.112	0.110	0.109	0.116	12.80
35)	Cyclohexane	0.332	0.435	0.473	0.493	0.398	0.423	0.411	0.424	12.44
36)C	Chloroform	0.444	0.401	0.504	0.457	0.399	0.407	0.405	0.431	9.16
37)	Ethyl acetate	0.375	0.318	0.492	0.413	0.415	0.412	0.409	0.405	12.89
38)	Tetrahydrofuran	0.256	0.148	0.184	0.179	0.159	0.160	0.160	0.178	20.60

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977
Response Ratio = 0.00000 + 0.17323 *A + -0.00739 *A^2

39)S	Dibromofluorometh	0.211	0.205	0.214	0.211	0.209	0.207	0.202	0.209	1.93
40)	Carbon Tetrachlor	0.223	0.273	0.304	0.297	0.249	0.265	0.264	0.268	10.31
41)	1,1,1-Trichloroet	0.319	0.347	0.421	0.413	0.344	0.347	0.350	0.363	10.58
42)	2-Butanone	0.105	0.198	0.219	0.237	0.246	0.239	0.245	0.213	23.78

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 0.22663 *A + 0.00194 *A^2

43)	1,1-Dichloroprope	0.286	0.306	0.378	0.374	0.321	0.326	0.323	0.331	10.20
44)	tert-Butyl format	0.138	0.192	0.173	0.171	0.163	0.182	0.193	0.173	10.95

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.15472 *A + 0.00379 *A^2

45)	Propionitrile	0.065	0.067	0.057	0.072	0.078	0.080	0.085	0.072	13.30
46)	Methacrylonitrile	0.229	0.214	0.192	0.226	0.250	0.264	0.270	0.235	11.89
47)	Benzene	1.044	1.078	1.260	1.205	1.018	1.060	1.064	1.104	8.24
48)	TAME	0.683	0.623	0.815	0.781	0.704	0.748	0.764	0.731	8.97
49)S	1,2-Dichloroethan	0.261	0.256	0.260	0.258	0.264	0.268	0.263	0.261	1.54
50)	Isobutyl Alcohol	0.014	0.015	0.015	0.018	0.022	0.024	0.025	0.019	24.46

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9967
Response Ratio = 0.00000 + 0.01706 *A + 0.00021 *A^2

51)	1,2-Dichloroethan	0.413	0.338	0.416	0.383	0.353	0.359	0.363	0.375	8.05
52)	Tert Amyl Alcohol	0.051	0.051	0.064	0.068	0.066	0.074	0.079	0.065	16.51

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 0.05987 *A + 0.00096 *A^2

53)	Trichloroethene	0.324	0.266	0.311	0.284	0.258	0.268	0.264	0.282	9.11
54)	Methylcyclohexane	0.266	0.377	0.418	0.433	0.351	0.378	0.369	0.370	14.63
55)	Dibromomethane	0.152	0.133	0.168	0.166	0.142	0.145	0.147	0.150	8.45
56)C	1,2-Dichloropropa	0.274	0.253	0.309	0.295	0.266	0.268	0.270	0.276	6.97
57)	Bromodichlorometh	0.274	0.262	0.330	0.319	0.280	0.294	0.299	0.294	8.29
58)	Methyl methacryla	0.259	0.203	0.253	0.282	0.301	0.317	0.269	15.11	

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981
Response Ratio = 0.00000 + 0.23702 *A + 0.04203 *A^2

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICC2755
Lab FileID: Y66389.D

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59)  1,4-Dioxane       0.006 0.006 0.008 0.008 0.007 0.007 0.007 0.007  11.30
60)  2-Chloroethyl vin 0.138 0.195 0.187 0.178 0.163 0.173 0.175 0.173  10.65
61)  cis-1,3-Dichlorop 0.331 0.324 0.422 0.412 0.371 0.395 0.397 0.379  10.13

62) I   Chlorobenzene-d5      ----------------ISTD--------------------
63)S Toluene-d8        1.332 1.338 1.325 1.315 1.298 1.259 1.244 1.302   2.81
64)C Toluene           1.776 1.558 1.863 1.761 1.529 1.551 1.583 1.660   8.17
65)  2-Nitropropane    0.104 0.100 0.139 0.150 0.141 0.148 0.157 0.134  17.11
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9983
              Response Ratio = 0.00000 + 0.13262 *A + 0.00239 *A^2

66)  4-Methyl-2-pentan 0.406 0.566 0.611 0.651 0.683 0.687 0.719 0.618  17.25
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
              Response Ratio = 0.00000 + 0.61812 *A + 0.01034 *A^2

67)  trans-1,3-Dichlor 0.373 0.386 0.500 0.497 0.456             0.442  13.65
68)  Tetrachloroethene 0.381 0.392 0.450 0.423 0.365 0.375 0.378 0.395   7.77
69)  Ethyl methacrylat 0.324 0.395 0.390 0.481 0.529 0.559 0.589 0.467  21.22
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
              Response Ratio = 0.00000 + 0.43763 *A + 0.07978 *A^2

70)  1,1,2-Trichloroet 0.279 0.254 0.314 0.307 0.266 0.269 0.275 0.281   7.88
71)  Dibromochlorometh 0.282 0.274 0.356 0.355 0.310 0.318 0.329 0.318  10.12
72)  1,3-Dichloropropa 0.631 0.571 0.708 0.669 0.577 0.576 0.590 0.617   8.70
73)  1,2-Dibromoethane 0.326 0.280 0.386 0.369 0.324 0.324 0.331 0.334  10.31
74)  3,3-dimethyl-1-bu 0.072 0.105 0.105 0.114 0.124 0.145 0.145 0.116  22.02
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
              Response Ratio = 0.00000 + 0.10739 *A + 0.00042 *A^2

75)  2-hexanone        0.268 0.453 0.491 0.519 0.561 0.804 0.821 0.560  35.03
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9953
              Response Ratio = 0.00000 + 0.44040 *A + 0.04099 *A^2

76)  1-Chlorohexane    0.339 0.403 0.492 0.503 0.423 0.461 0.459 0.440  12.88
77)C Ethylbenzene      1.963 1.730 2.054 1.956 1.751 1.853 1.910 1.888   6.24
78)P Chlorobenzene     1.032 0.961 1.132 1.094 0.957 1.000 1.021 1.028   6.35
79)  1,1,1,2-Tetrachlo 0.258 0.289 0.367 0.360 0.313 0.329 0.333 0.321  11.94
80)  m,p-Xylene        1.379 1.301 1.574 1.531 1.363 1.458 1.521 1.447   7.01
81)  o-Xylene          1.268 1.286 1.584 1.514 1.321 1.392 1.441 1.401   8.51
82)  Styrene           0.770 0.820 1.108 1.140 1.057 1.139 1.181 1.031  16.10
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9986
              Response Ratio = 0.00000 + 1.02716 *A + 0.07748 *A^2

83)P Bromoform         0.176 0.154 0.206 0.219 0.202 0.220 0.235 0.202  13.88
84)  Isopropylbenzene  1.511 1.517 1.795 1.781 1.528 1.660 1.736 1.647   7.75

85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
86)S 4-Bromofluorobenz 0.770 0.790 0.786 0.776 0.754 0.746 0.742 0.766   2.50
87)  cis-1,4-Dichloro- 0.256 0.266 0.258 0.313 0.325 0.349 0.343 0.301  13.48
88)  n-Propylbenzene   4.032 3.844 4.731 4.563 3.877 4.132 4.283 4.209   8.02
89)  Bromobenzene      0.949 0.816 1.060 0.936 0.830 0.838 0.853 0.897   9.87
90)P 1,1,2,2-Tetrachlo 0.957 1.030 1.318 1.206 1.101 1.132 1.194 1.134  10.54
91)  1,3,5-Trimethylbe 2.652 2.714 3.360 3.215 2.746 2.893 3.001 2.940   9.10
92)  2-Chlorotoluene   2.505 2.624 3.234 3.066 2.657 2.800 2.852 2.820   9.13
93)  trans-1,4-Dichlor 0.227 0.193 0.249 0.289 0.276 0.293 0.301 0.261  15.25
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
              Response Ratio = 0.00000 + 0.25682 *A + 0.02352 *A^2

94)  1,2,3-Trichloropr 0.436 0.337 0.459 0.408 0.366 0.375 0.388 0.396  10.63
95)  Cyclohexanone     0.090 0.082 0.103 0.094 0.101 0.096 0.096 0.095   7.49
```

Initial Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICC2755
Lab FileID: Y66389.D

96)	4-Chlorotoluene	2.738	2.400	2.932	2.783	2.461	2.541	2.672	2.647	7.16
97)	tert-Butylbenzene	1.647	1.433	1.700	1.665	1.384	1.505	1.537	1.553	7.83
98)	1,2,4-Trimethylbe	2.733	2.694	3.308	3.248	2.798	2.970	3.017	2.967	8.20
99)	Pentachloroethane	0.359	0.409	0.338	0.384	0.409	0.427	0.434	0.394	9.01
100)	sec-Butylbenzene	3.229	3.093	3.552	3.529	2.971	3.199	3.232	3.258	6.56
101)	4-Isopropyltoluen	2.722	2.687	3.175	3.107	2.654	2.845	2.920	2.873	7.16
102)	1,3-Dichlorobenze	1.675	1.494	1.828	1.749	1.508	1.554	1.595	1.629	7.75
103)	1,2,3-Trimethylbe	2.869	2.718	3.359	3.240	2.827	2.917	3.006	2.991	7.71
104)	1,4-Dichlorobenze	2.000	1.574	1.955	1.866	1.585	1.655	1.686	1.760	10.07
105)	n-Butylbenzene	1.476	1.476	1.748	1.571	1.329	1.410	1.468	1.497	8.88
106)	Benzyl Chloride	0.194	0.290	0.402	0.430	0.435	0.481	0.508	0.392	28.46

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991
Response Ratio = 0.00000 + 0.37888 *A + 0.06731 *A^2

107)	1,2-Dichlorobenze	1.736	1.486	1.786	1.674	1.491	1.543	1.600	1.617	7.35
108)	1,2-Dibromo-3-Chl	0.223	0.194	0.277	0.265	0.263	0.268	0.281	0.253	12.66
109)	Hexachlorobutadie	0.356	0.322	0.364	0.364	0.288	0.313	0.308	0.331	9.25
110)	1,2,4-Trichlorobe	1.088	0.889	1.106	1.060	0.913	0.927	0.895	0.983	9.89
111)	Naphthalene	3.600	3.123	4.160	3.927	3.521	3.576	3.657	3.652	8.94
112)	1,2,3-Trichlorobe	0.968	0.898	1.088	1.039	0.860	0.880	0.863	0.943	9.69

(#) = Out of Range

APPIX_12-02-2022_Y.M Mon Dec 05 09:49:40 2022

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICV2755
Lab FileID: Y66393.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-02\Y66393.D Vial: 10
Acq On : 2 Dec 2022 5:17 pm Operator: joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\MET...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Dec 05 09:38:57 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	116	0.00	9.50
	Amount	Calc.	%Drift				
2	Dichlorodifluoromethane		NA				
3	Acrolein	200.000	185.361	7.3	109	0.00	5.58
4 P	Chloromethane	40.000	32.994	17.5	98	0.00	3.18
	AvgRF	CCRF	%Dev				
5	1,3-butadiene	0.276	0.286	-3.6	124	0.00	3.34
6 C	Vinyl Chloride	0.297	0.254	14.5	104	0.00	3.32
	Amount	Calc.	%Drift				
7	Bromomethane	40.000	36.455	8.9	109	0.00	3.83
8	Chloroethane		NA				
	AvgRF	CCRF	%Dev				
9	Trichlorofluoromethane	0.291	0.285	2.1	117	0.00	4.24
10	Ethyl Ether	0.240	0.209	12.9	106	0.00	4.75
	Amount	Calc.	%Drift				
11	Ethanol	800.000	791.183	1.1	111	0.02	5.02
	AvgRF	CCRF	%Dev				
12	1,2-Dichlorotrifluoroetha	0.269	0.237	11.9	109	0.00	5.04
13 C	1,1-Dichloroethene	0.346	0.313	9.5	116	0.00	5.05
14	Freon 113	0.212	0.175	17.5	103	0.00	5.11
15	Carbon Disulfide	0.626	0.538	14.1	109	0.00	5.10
	Amount	Calc.	%Drift				
16	Iodomethane		NA				
	AvgRF	CCRF	%Dev				
17	Allyl chloride	0.327	0.339	-3.7	114	0.00	5.79
	Amount	Calc.	%Drift				
18	Methylene Chloride	40.000	32.633	18.4	107	0.00	5.96
	AvgRF	CCRF	%Dev				
19	Acetone	0.140	0.140	0.0	109	0.00	6.04
20	Methyl acetate	0.283	0.288	-1.8	116	0.00	6.23
21	trans-1,2-Dichloroethene	0.338	0.313	7.4	111	0.00	6.22
22	Hexane	0.169	0.151	10.7	118	0.00	6.33

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
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Sample: VY2755-ICV2755
Lab FileID: Y66393.D

23		Methyl Tert Butyl Ether	0.744	0.670	9.9	109	0.00	6.38
24		Tert Butyl Alcohol	0.075	0.076	-1.3	119	0.01	6.55
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	385.448	3.6	109	0.00	6.78
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.849	0.780	8.1	110	0.00	6.99
27		Chloroprene	0.292	0.340	-16.4	125	0.00	7.17
28	P	1,1-Dichloroethane	0.457	0.434	5.0	116	0.00	7.22
29		Acrylonitrile	0.139	0.063	54.7#	49#	0.00	7.30
30		ETBE	0.817	0.719	12.0	104	0.00	7.58
			Amount	Calc.	%Drift			
31		Vinyl acetate	200.000	212.398	-6.2	123	0.00	7.60
			AvgRF	CCRF	%Dev			
32		cis-1,2-Dichloroethene	0.274	0.257	6.2	113	0.00	8.03
33		2,2-Dichloropropane	0.333	0.294	11.7	106	0.00	8.17
34		Bromochloromethane	0.116	0.107	7.8	111	0.00	8.29
35		Cyclohexane	0.424	0.394	7.1	115	0.00	8.29
36	C	Chloroform	0.431	0.391	9.3	114	0.00	8.38
37		Ethyl acetate	0.405	0.412	-1.7	115	0.00	8.51
			Amount	Calc.	%Drift			
38		Tetrahydrofuran	40.000	38.560	3.6	118	0.00	8.59
			AvgRF	CCRF	%Dev			
39	S	Dibromofluoromethane	0.209	0.199	4.8	111	0.00	8.60
40		Carbon Tetrachloride	0.268	0.245	8.6	114	0.00	8.55
41		1,1,1-Trichloroethane	0.363	0.334	8.0	113	0.00	8.63
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	189.524	5.2	104	0.00	8.74
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.331	0.297	10.3	107	0.00	8.78
			Amount	Calc.	%Drift			
44		tert-Butyl formate			NA			
			AvgRF	CCRF	%Dev			
45		Propionitrile	0.072	0.072	0.0	107	0.00	9.08
46		Methacrylonitrile	0.235	0.240	-2.1	111	0.00	9.10
47		Benzene	1.104	0.988	10.5	113	0.00	9.06
48		TAME	0.731	0.726	0.7	120	0.00	9.17
49	S	1,2-Dichloroethane-d4	0.261	0.270	-3.4	119	0.00	9.21
			Amount	Calc.	%Drift			
50		Isobutyl Alcohol	800.000	857.245	-7.2	117	0.00	9.27
			AvgRF	CCRF	%Dev			
51		1,2-Dichloroethane	0.375	0.344	8.3	113	0.00	9.28
			Amount	Calc.	%Drift			
52		Tert Amyl Alcohol	400.000	424.834	-6.2	126	0.00	9.38
			AvgRF	CCRF	%Dev			
53		Trichloroethene	0.282	0.247	12.4	111	0.00	9.67
54		Methylcyclohexane	0.370	0.362	2.2	120	0.00	9.66

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: VY2755-ICV2755
Lab FileID: Y66393.D

55		Dibromomethane	0.150	0.134	10.7	109	0.00	10.09
56	C	1,2-Dichloropropane	0.276	0.246	10.9	107	0.00	10.17
57		Bromodichloromethane	0.294	0.282	4.1	117	0.00	10.23
			Amount	Calc.	%Drift			
58		Methyl methacrylate	40.000	44.503	-11.3	125	0.00	10.34
			AvgRF	CCRF	%Dev			
59		1,4-Dioxane	0.007	0.008	-14.3	122	0.00	10.40
60		2-Chloroethyl vinyl ether	0.173	0.173	0.0	123	0.00	10.71
61		cis-1,3-Dichloropropene	0.379	0.358	5.5	112	0.00	10.78
62	I	Chlorobenzene-d5	1.000	1.000	0.0	115	0.00	12.15
63	S	Toluene-d8	1.302	1.289	1.0	114	0.00	10.93
64	C	Toluene	1.660	1.506	9.3	113	0.00	10.98
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	207.364	-3.7	121	0.00	11.17
66		4-Methyl-2-pentanone	200.000	191.843	4.1	106	0.00	11.26
			AvgRF	CCRF	%Dev			
67		trans-1,3-Dichloropropene	0.442	0.489	-10.6	123	0.00	11.31
68		Tetrachloroethene	0.395	0.357	9.6	112	0.00	11.30
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	39.998	0.0	109	0.00	11.40
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.281	0.266	5.3	115	0.00	11.44
71		Dibromochloromethane	0.318	0.301	5.3	112	0.00	11.59
72		1,3-Dichloropropane	0.617	0.545	11.7	109	0.00	11.66
73		1,2-Dibromoethane	0.334	0.314	6.0	111	0.00	11.78
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	2033.896	-1.7	117	0.00	11.87
75		2-hexanone	200.000	175.989	12.0	105	0.00	11.90
			AvgRF	CCRF	%Dev			
76		1-Chlorohexane	0.440	0.444	-0.9	121	0.00	12.11
77	C	Ethylbenzene	1.888	1.747	7.5	115	0.00	12.16
78	P	Chlorobenzene	1.028	0.949	7.7	114	0.00	12.16
79		1,1,1,2-Tetrachloroethane	0.321	0.319	0.6	117	0.00	12.20
80		m,p-Xylene	1.447	1.371	5.3	116	0.00	12.25
81		o-Xylene	1.401	1.335	4.7	116	0.00	12.57
			Amount	Calc.	%Drift			
82		Styrene	40.000	38.261	4.3	113	0.00	12.61
			AvgRF	CCRF	%Dev			
83	P	Bromoform	0.202	0.209	-3.5	119	0.00	12.66
84		Isopropylbenzene	1.647	1.571	4.6	118	0.00	12.78
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	116	0.00	13.77
86	S	4-Bromofluorobenzene	0.766	0.744	2.9	115	0.00	13.01
87		cis-1,4-Dichloro-2-butene	0.301	0.310	-3.0	111	0.00	13.03
88		n-Propylbenzene	4.209	3.964	5.8	119	0.00	13.06
89		Bromobenzene	0.897	0.775	13.6	108	0.00	13.09
90	P	1,1,2,2-Tetrachloroethane	1.134	1.114	1.8	117	0.00	13.12
91		1,3,5-Trimethylbenzene	2.940	2.728	7.2	115	0.00	13.18
92		2-Chlorotoluene	2.820	2.696	4.4	118	0.00	13.20

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICV2755
Lab FileID: Y66393.D

		Amount	Calc.	%Drift			
93	trans-1,4-Dichloro-2-Bute	40.000	40.656	-1.6	118	0.00	13.24

		AvgRF	CCRF	%Dev			
94	1,2,3-Trichloropropane	0.396	0.341	13.9	108	0.00	13.23
95	Cyclohexanone	0.095	0.080	15.8	92	0.00	13.29
96	4-Chlorotoluene	2.647	2.461	7.0	116	0.00	13.31
97	tert-Butylbenzene	1.553	1.427	8.1	120	0.00	13.41
98	1,2,4-Trimethylbenzene	2.967	2.861	3.6	119	0.00	13.45
99	Pentachloroethane	0.394	0.420	-6.6	119	0.00	13.46
100	sec-Butylbenzene	3.258	3.168	2.8	124	0.00	13.53
101	4-Isopropyltoluene	2.873	2.834	1.4	124	0.00	13.61
102	1,3-Dichlorobenzene	1.629	1.518	6.8	117	0.00	13.73
103	1,2,3-Trimethylbenzene	2.991	3.057	-2.2	126	0.00	13.76
104	1,4-Dichlorobenzene	1.760	1.615	8.2	118	0.00	13.78
105	n-Butylbenzene	1.497	1.297	13.4	113	0.00	13.90

		Amount	Calc.	%Drift			
106	Benzyl Chloride	40.000	38.073	4.8	109	0.00	13.93

		AvgRF	CCRF	%Dev			
107	1,2-Dichlorobenzene	1.617	1.493	7.7	116	0.00	14.07
108	1,2-Dibromo-3-Chloropropa	0.253	0.258	-2.0	114	0.00	14.60
109	Hexachlorobutadiene	0.331	0.296	10.6	120	0.00	15.00
110	1,2,4-Trichlorobenzene	0.983	0.887	9.8	113	0.00	15.06
111	Naphthalene	3.652	3.483	4.6	115	0.00	15.31
112	1,2,3-Trichlorobenzene	0.943	0.849	10.0	115	0.00	15.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y66389.D APPIX_12-02-2022_Y.M Mon Dec 05 09:46:05 2022

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICV2755
Lab FileID: Y66394.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-02\Y66394.D Vial: 11
Acq On : 2 Dec 2022 5:41 pm Operator: joannel
Sample : ICV2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\MET...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Mon Dec 05 09:38:57 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF / Amount	CCRF / Calc.	%Dev / %Drift	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	126	0.00	9.50
	Amount / Calc. / %Drift						
2	Dichlorodifluoromethane	25.000	21.406	14.4	106	0.00	2.85
3	Acrolein		NA				
4 P	Chloromethane		NA				
	AvgRF / CCRF / %Dev						
5	1,3-butadiene		NA				
6 C	Vinyl Chloride		NA				
	Amount / Calc. / %Drift						
7	Bromomethane		NA				
8	Chloroethane	25.000	20.275	18.9	100	0.00	4.03
	AvgRF / CCRF / %Dev						
9	Trichlorofluoromethane		NA				
10	Ethyl Ether		NA				
	Amount / Calc. / %Drift						
11	Ethanol		NA				
	AvgRF / CCRF / %Dev						
12	1,2-Dichlorotrifluoroetha		NA				
13 C	1,1-Dichloroethene		NA				
14	Freon 113		NA				
15	Carbon Disulfide		NA				
	Amount / Calc. / %Drift						
16	Iodomethane	25.000	21.277	14.9	98	0.00	5.28
	AvgRF / CCRF / %Dev						
17	Allyl chloride		NA				
	Amount / Calc. / %Drift						
18	Methylene Chloride		NA				
	AvgRF / CCRF / %Dev						
19	Acetone		NA				
20	Methyl acetate		NA				
21	trans-1,2-Dichloroethene		NA				
22	Hexane		NA				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
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Sample: VY2755-ICV2755
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23		Methyl Tert Butyl Ether			NA				
24		Tert Butyl Alcohol			NA				
			Amount	Calc.	%Drift				
25		Acetonitrile			NA				
			AvgRF	CCRF	%Dev				
26		Di-isopropyl ether			NA				
27		Chloroprene			NA				
28	P	1,1-Dichloroethane			NA				
29		Acrylonitrile			NA				
30		ETBE			NA				
			Amount	Calc.	%Drift				
31		Vinyl acetate			NA				
			AvgRF	CCRF	%Dev				
32		cis-1,2-Dichloroethene			NA				
33		2,2-Dichloropropane			NA				
34		Bromochloromethane			NA				
35		Cyclohexane			NA				
36	C	Chloroform			NA				
37		Ethyl acetate			NA				
			Amount	Calc.	%Drift				
38		Tetrahydrofuran			NA				
			AvgRF	CCRF	%Dev				
39	S	Dibromofluoromethane	0.209	0.200	4.3	120	0.00	8.60	
40		Carbon Tetrachloride			NA				
41		1,1,1-Trichloroethane			NA				
			Amount	Calc.	%Drift				
42		2-Butanone			NA				
			AvgRF	CCRF	%Dev				
43		1,1-Dichloropropene			NA				
			Amount	Calc.	%Drift				
44		tert-Butyl formate	125.000	102.264	18.2	98	0.00	8.90	
			AvgRF	CCRF	%Dev				
45		Propionitrile			NA				
46		Methacrylonitrile			NA				
47		Benzene			NA				
48		TAME			NA				
49	S	1,2-Dichloroethane-d4	0.261	0.261	0.0	128	0.00	9.21	
			Amount	Calc.	%Drift				
50		Isobutyl Alcohol			NA				
			AvgRF	CCRF	%Dev				
51		1,2-Dichloroethane			NA				
			Amount	Calc.	%Drift				
52		Tert Amyl Alcohol			NA				
			AvgRF	CCRF	%Dev				
53		Trichloroethene			NA				
54		Methylcyclohexane			NA				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICV2755
Lab FileID: Y66394.D

55		Dibromomethane			----------NA----------				
56	C	1,2-Dichloropropane			----------NA----------				
57		Bromodichloromethane			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
58		Methyl methacrylate			----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------			
59		1,4-Dioxane			----------NA----------				
60		2-Chloroethyl vinyl ether			----------NA----------				
61		cis-1,3-Dichloropropene			----------NA----------				
62	I	Chlorobenzene-d5	1.000	1.000	0.0	124	0.00	12.15	
63	S	Toluene-d8	1.302	1.318	-1.2	124	0.00	10.93	
64	C	Toluene			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
65		2-Nitropropane			----------NA----------				
66		4-Methyl-2-pentanone			----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------			
67		trans-1,3-Dichloropropene			----------NA----------				
68		Tetrachloroethene			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
69		Ethyl methacrylate			----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------			
70		1,1,2-Trichloroethane			----------NA----------				
71		Dibromochloromethane			----------NA----------				
72		1,3-Dichloropropane			----------NA----------				
73		1,2-Dibromoethane			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
74		3,3-dimethyl-1-butanol			----------NA----------				
75		2-hexanone			----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------			
76		1-Chlorohexane			----------NA----------				
77	C	Ethylbenzene			----------NA----------				
78	P	Chlorobenzene			----------NA----------				
79		1,1,1,2-Tetrachloroethane			----------NA----------				
80		m,p-Xylene			----------NA----------				
81		o-Xylene			----------NA----------				
		----------	Amount	Calc.	%Drift	----------			
82		Styrene			----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------			
83	P	Bromoform			----------NA----------				
84		Isopropylbenzene			----------NA----------				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	126	0.00	13.77	
86	S	4-Bromofluorobenzene	0.766	0.755	1.4	123	0.00	13.01	
87		cis-1,4-Dichloro-2-butene			----------NA----------				
88		n-Propylbenzene			----------NA----------				
89		Bromobenzene			----------NA----------				
90	P	1,1,2,2-Tetrachloroethane			----------NA----------				
91		1,3,5-Trimethylbenzene			----------NA----------				
92		2-Chlorotoluene			----------NA----------				

Initial Calibration Verification

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2755-ICV2755
Lab FileID: Y66394.D

		Amount	Calc.	%Drift
93	trans-1,4-Dichloro-2-Bute		NA	

		AvgRF	CCRF	%Dev
94	1,2,3-Trichloropropane		NA	
95	Cyclohexanone		NA	
96	4-Chlorotoluene		NA	
97	tert-Butylbenzene		NA	
98	1,2,4-Trimethylbenzene		NA	
99	Pentachloroethane		NA	
100	sec-Butylbenzene		NA	
101	4-Isopropyltoluene		NA	
102	1,3-Dichlorobenzene		NA	
103	1,2,3-Trimethylbenzene		NA	
104	1,4-Dichlorobenzene		NA	
105	n-Butylbenzene		NA	

		Amount	Calc.	%Drift
106	Benzyl Chloride		NA	

		AvgRF	CCRF	%Dev
107	1,2-Dichlorobenzene		NA	
108	1,2-Dibromo-3-Chloropropa		NA	
109	Hexachlorobutadiene		NA	
110	1,2,4-Trichlorobenzene		NA	
111	Naphthalene		NA	
112	1,2,3-Trichlorobenzene		NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
Y66388.D APPIX_12-02-2022_Y.M Mon Dec 05 09:49:15 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-CC2755
Lab FileID: Y66605.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...22\VY2765-67\Y66605.D Vial: 2
Acq On : 9 Dec 2022 9:38 am Operator: joannel
Sample : CC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2765,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\met...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Fri Sep 14 08:38:11 2018
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	73	0.00	9.50
	---------- True	Calc.	% Drift	----------			
2	Dichlorodifluoromethane	40.000	47.206	-18.0	88	0.00	2.85
3	Acrolein	200.000	189.041	5.5	70	0.00	5.58
4 P	Chloromethane	40.000	41.828	-4.6	78	0.00	3.18
	---------- AvgRF	CCRF	% Dev	----------			
5	1,3-butadiene	0.276	0.310	-12.3	84	0.00	3.34
6 C	Vinyl Chloride	0.297	0.311	-4.7	80	0.00	3.31
	---------- True	Calc.	% Drift	----------			
7	Bromomethane	40.000	34.960	12.6	65	0.00	3.83
8	Chloroethane	40.000	51.451	-28.6#	96	0.00	4.03
	---------- AvgRF	CCRF	% Dev	----------			
9	Trichlorofluoromethane	0.291	0.329	-13.1	85	0.00	4.24
10	Ethyl Ether	0.240	0.237	1.3	76	0.00	4.75
	---------- True	Calc.	% Drift	----------			
11	Ethanol	800.000	797.748	0.3	70	0.00	5.01
	---------- AvgRF	CCRF	% Dev	----------			
12	1,2-Dichlorotrifluoroetha	0.269	0.279	-3.7	81	0.00	5.04
13 C	1,1-Dichloroethene	0.346	0.346	0.0	80	0.00	5.05
14	Freon 113	0.212	0.222	-4.7	82	0.00	5.10
15	Carbon Disulfide	0.626	0.631	-0.8	80	0.00	5.10
	---------- True	Calc.	% Drift	----------			
16	Iodomethane	40.000	34.640	13.4	61	0.00	5.28
	---------- AvgRF	CCRF	% Dev	----------			
17	Allyl chloride	0.327	0.353	-8.0	74	0.00	5.79
	---------- True	Calc.	% Drift	----------			
18	Methylene Chloride	40.000	37.741	5.6	77	0.00	5.96
	---------- AvgRF	CCRF	% Dev	----------			
19	Acetone	0.140	0.144	-2.9	70	0.00	6.03
20	Methyl acetate	0.283	0.297	-4.9	75	0.00	6.22
21	trans-1,2-Dichloroethene	0.338	0.354	-4.7	79	0.00	6.22
22	Hexane	0.169	0.177	-4.7	87	0.00	6.33

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-CC2755
Lab FileID: Y66605.D

23		Methyl Tert Butyl Ether	0.744	0.728	2.2	74	0.00	6.38
24		Tert Butyl Alcohol	0.075	0.072	4.0	70	0.00	6.53
			True	Calc.	% Drift			
25		Acetonitrile	400.000	397.244	0.7	70	0.00	6.78
			AvgRF	CCRF	% Dev			
26		Di-isopropyl ether	0.849	0.861	-1.4	76	0.00	6.98
27		Chloroprene	0.292	0.313	-7.2	72	0.00	7.17
28	P	1,1-Dichloroethane	0.457	0.462	-1.1	78	0.00	7.22
29		Acrylonitrile	0.139	0.144	-3.6	71	0.00	7.29
30		ETBE	0.817	0.812	0.6	74	0.00	7.57
			True	Calc.	% Drift			
31		Vinyl acetate	200.000	200.259	-0.1	72	0.00	7.60
			AvgRF	CCRF	% Dev			
32		cis-1,2-Dichloroethene	0.274	0.277	-1.1	76	0.00	8.02
33		2,2-Dichloropropane	0.333	0.352	-5.7	80	0.00	8.16
34		Bromochloromethane	0.116	0.116	0.0	75	0.00	8.29
35		Cyclohexane	0.424	0.451	-6.4	82	0.00	8.29
36	C	Chloroform	0.431	0.425	1.4	77	0.00	8.38
37		Ethyl acetate	0.405	0.415	-2.5	73	0.00	8.51
			True	Calc.	% Drift			
38		Tetrahydrofuran	40.000	38.683	3.3	74	0.00	8.58
			AvgRF	CCRF	% Dev			
39	S	Dibromofluoromethane	0.209	0.215	-2.9	75	0.00	8.60
40		Carbon Tetrachloride	0.268	0.283	-5.6	83	0.00	8.55
41		1,1,1-Trichloroethane	0.363	0.381	-5.0	81	0.00	8.63
			True	Calc.	% Drift			
42		2-Butanone	200.000	201.893	-0.9	70	0.00	8.74
			AvgRF	CCRF	% Dev			
43		1,1-Dichloropropene	0.331	0.341	-3.0	77	0.00	8.78
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	208.479	-4.2	79	0.00	8.89
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.072	0.070	2.8	66	0.00	9.08
46		Methacrylonitrile	0.235	0.239	-1.7	70	0.00	9.10
47		Benzene	1.104	1.086	1.6	78	0.00	9.06
48		TAME	0.731	0.705	3.6	73	0.00	9.17
49	S	1,2-Dichloroethane-d4	0.261	0.259	0.8	71	0.00	9.20
			True	Calc.	% Drift			
50		Isobutyl Alcohol	800.000	794.052	0.7	67	0.00	9.27
			AvgRF	CCRF	% Dev			
51		1,2-Dichloroethane	0.375	0.362	3.5	75	0.00	9.28
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	370.081	7.5	68	0.00	9.37
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.282	0.276	2.1	78	0.00	9.67
54		Methylcyclohexane	0.370	0.389	-5.1	81	0.00	9.66

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-CC2755
Lab FileID: Y66605.D

55		Dibromomethane	0.150	0.151	-0.7	78	0.00	10.09
56	C	1,2-Dichloropropane	0.276	0.275	0.4	75	0.00	10.17
57		Bromodichloromethane	0.294	0.298	-1.4	77	0.00	10.23
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	41.104	-2.8	72	0.00	10.34
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.007	0.007	0.0	69	0.00	10.40
60		2-Chloroethyl vinyl ether	0.173	0.174	-0.6	77	0.00	10.71
61		cis-1,3-Dichloropropene	0.379	0.394	-4.0	77	0.00	10.78
62	I	Chlorobenzene-d5	1.000	1.000	0.0	71	0.00	12.15
63	S	Toluene-d8	1.302	1.358	-4.3	74	0.00	10.93
64	C	Toluene	1.660	1.653	0.4	76	0.00	10.97
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	197.624	1.2	70	0.00	11.17
66		4-Methyl-2-pentanone	200.000	203.550	-1.8	69	0.00	11.26
			AvgRF	CCRF	% Dev			
67		trans-1,3-Dichloropropene	0.442	0.487	-10.2	76	0.00	11.31
68		Tetrachloroethene	0.395	0.409	-3.5	79	0.00	11.30
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	40.979	-2.4	69	0.00	11.39
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.281	0.290	-3.2	77	0.00	11.44
71		Dibromochloromethane	0.318	0.331	-4.1	75	0.00	11.59
72		1,3-Dichloropropane	0.617	0.615	0.3	75	0.00	11.66
73		1,2-Dibromoethane	0.334	0.345	-3.3	75	0.00	11.78
			True	Calc.	% Drift			
74		3,3-dimethyl-1-butanol	2000.000	2016.146	-0.8	71	0.00	11.87
75		2-hexanone	200.000	185.204	7.4	69	0.00	11.90
			AvgRF	CCRF	% Dev			
76		1-Chlorohexane	0.440	0.476	-8.2	79	0.00	12.11
77	C	Ethylbenzene	1.888	1.859	1.5	75	0.00	12.15
78	P	Chlorobenzene	1.028	1.026	0.2	76	0.00	12.16
79		1,1,1,2-Tetrachloroethane	0.321	0.343	-6.9	77	0.00	12.20
80		m,p-Xylene	1.447	1.431	1.1	74	0.00	12.26
81		o-Xylene	1.401	1.403	-0.1	75	0.00	12.57
			True	Calc.	% Drift			
82		Styrene	40.000	40.166	-0.4	73	0.00	12.60
			AvgRF	CCRF	% Dev			
83	P	Bromoform	0.202	0.209	-3.5	73	0.00	12.66
84		Isopropylbenzene	1.647	1.649	-0.1	76	0.00	12.78
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.00	13.77
86	S	4-Bromofluorobenzene	0.766	0.768	-0.3	72	0.00	13.01
87		cis-1,4-Dichloro-2-butene	0.301	0.240	20.3#	52	0.00	13.03
88		n-Propylbenzene	4.209	4.224	-0.4	77	0.00	13.06
89		Bromobenzene	0.897	0.880	1.9	75	0.00	13.10
90	P	1,1,2,2-Tetrachloroethane	1.134	1.147	-1.1	74	0.00	13.12
91		1,3,5-Trimethylbenzene	2.940	2.932	0.3	75	0.00	13.18
92		2-Chlorotoluene	2.820	2.836	-0.6	75	0.00	13.20

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-CC2755
Lab FileID: Y66605.D

		True	Calc.	% Drift			
93	trans-1,4-Dichloro-2-Bute	40.000	30.583	23.5#	53	0.00	13.24

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.396	0.389	1.8	75	0.00	13.23
95	Cyclohexanone	0.095	0.094	1.1	66	0.00	13.29
96	4-Chlorotoluene	2.647	2.640	0.3	76	0.00	13.31
97	tert-Butylbenzene	1.553	1.474	5.1	75	0.00	13.41
98	1,2,4-Trimethylbenzene	2.967	2.941	0.9	74	0.00	13.45
99	Pentachloroethane	0.394	0.417	-5.8	72	0.00	13.46
100	sec-Butylbenzene	3.258	3.204	1.7	76	0.00	13.53
101	4-Isopropyltoluene	2.873	2.823	1.7	75	0.00	13.61
102	1,3-Dichlorobenzene	1.629	1.619	0.6	76	0.00	13.72
103	1,2,3-Trimethylbenzene	2.991	2.947	1.5	74	0.00	13.76
104	1,4-Dichlorobenzene	1.760	1.686	4.2	75	0.00	13.78
105	n-Butylbenzene	1.497	1.407	6.0	75	0.00	13.89

		True	Calc.	% Drift			
106	Benzyl Chloride	40.000	41.908	-4.8	74	0.00	13.93

		AvgRF	CCRF	% Dev			
107	1,2-Dichlorobenzene	1.617	1.583	2.1	75	0.00	14.07
108	1,2-Dibromo-3-Chloropropa	0.253	0.253	0.0	68	0.00	14.60
109	Hexachlorobutadiene	0.331	0.333	-0.6	82	0.00	15.00
110	1,2,4-Trichlorobenzene	0.983	0.979	0.4	76	0.00	15.06
111	Naphthalene	3.652	3.662	-0.3	73	0.00	15.31
112	1,2,3-Trichlorobenzene	0.943	0.967	-2.5	79	0.00	15.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Y66389.D APPIX_12-02-2022_Y.M Sun Dec 11 20:58:31 2022

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-ECC2755
Lab FileID: Y66634.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...22\VY2765-67\Y66634.D Vial: 31
Acq On : 9 Dec 2022 9:19 pm Operator: joannel
Sample : ECC2755-5 Inst : MSVOA14-Y
Misc : MS52974,VY2765,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\met...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Fri Sep 14 08:38:11 2018
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	128	0.00	9.50
	---------- True	Calc.	% Drift	----------			
2	Dichlorodifluoromethane	40.000	50.429	-26.1	164	0.00	2.85
3	Acrolein	200.000	181.050	9.5	117	0.00	5.58
4 P	Chloromethane	40.000	44.224	-10.6	145	0.00	3.18
	---------- AvgRF	CCRF	% Dev	----------			
5	1,3-butadiene	0.276	0.295	-6.9	141	0.00	3.34
6 C	Vinyl Chloride	0.297	0.321	-8.1	145	0.00	3.32
	---------- True	Calc.	% Drift	----------			
7	Bromomethane	40.000	33.932	15.2	111	0.00	3.83
8	Chloroethane	40.000	34.826	12.9	119	0.00	4.03
	---------- AvgRF	CCRF	% Dev	----------			
9	Trichlorofluoromethane	0.291	0.343	-17.9	155	0.00	4.24
10	Ethyl Ether	0.240	0.251	-4.6	141	0.00	4.75
	---------- True	Calc.	% Drift	----------			
11	Ethanol	800.000	837.660	-4.7	130	0.00	5.00
	---------- AvgRF	CCRF	% Dev	----------			
12	1,2-Dichlorotrifluoroetha	0.269	0.299	-11.2	152	0.00	5.04
13 C	1,1-Dichloroethene	0.346	0.385	-11.3	157	0.00	5.05
14	Freon 113	0.212	0.223	-5.2	144	0.00	5.11
15	Carbon Disulfide	0.626	0.716	-14.4	159	0.00	5.10
	---------- True	Calc.	% Drift	----------			
16	Iodomethane	40.000	34.874	12.8	108	0.00	5.28
	---------- AvgRF	CCRF	% Dev	----------			
17	Allyl chloride	0.327	0.364	-11.3	134	0.00	5.79
	---------- True	Calc.	% Drift	----------			
18	Methylene Chloride	40.000	37.242	6.9	133	0.00	5.96
	---------- AvgRF	CCRF	% Dev	----------			
19	Acetone	0.140	0.128	8.6	109	0.00	6.04
20	Methyl acetate	0.283	0.291	-2.8	129	0.00	6.22
21	trans-1,2-Dichloroethene	0.338	0.376	-11.2	147	0.00	6.22
22	Hexane	0.169	0.159	5.9	137	0.00	6.33

Continuing Calibration Summary

Job Number: FC1020 **Sample:** VY2765-ECC2755
Account: BHATALB Bhate Environmental **Lab FileID:** Y66634.D
Project: Griffiss AFB; Rome, NY

23		Methyl Tert Butyl Ether	0.744	0.784	-5.4	140	0.00	6.38
24		Tert Butyl Alcohol	0.075	0.075	0.0	128	0.00	6.53
			True	Calc.	% Drift			
25		Acetonitrile	400.000	373.511	6.6	116	0.00	6.78
			AvgRF	CCRF	% Dev			
26		Di-isopropyl ether	0.849	0.887	-4.5	137	0.00	6.98
27		Chloroprene	0.292	0.331	-13.4	134	0.00	7.17
28	P	1,1-Dichloroethane	0.457	0.489	-7.0	144	0.00	7.21
29		Acrylonitrile	0.139	0.141	-1.4	123	0.00	7.29
30		ETBE	0.817	0.853	-4.4	136	0.00	7.57
			True	Calc.	% Drift			
31		Vinyl acetate	200.000	190.705	4.6	121	0.00	7.60
			AvgRF	CCRF	% Dev			
32		cis-1,2-Dichloroethene	0.274	0.291	-6.2	141	0.00	8.02
33		2,2-Dichloropropane	0.333	0.336	-0.9	133	0.00	8.16
34		Bromochloromethane	0.116	0.120	-3.4	136	0.00	8.29
35		Cyclohexane	0.424	0.452	-6.6	145	0.00	8.29
36	C	Chloroform	0.431	0.441	-2.3	141	0.00	8.38
37		Ethyl acetate	0.405	0.398	1.7	122	0.00	8.51
			True	Calc.	% Drift			
38		Tetrahydrofuran	40.000	38.550	3.6	130	0.00	8.58
			AvgRF	CCRF	% Dev			
39	S	Dibromofluoromethane	0.209	0.211	-1.0	129	0.00	8.60
40		Carbon Tetrachloride	0.268	0.300	-11.9	154	0.00	8.55
41		1,1,1-Trichloroethane	0.363	0.399	-9.9	148	0.00	8.63
			True	Calc.	% Drift			
42		2-Butanone	200.000	185.848	7.1	113	0.00	8.74
			AvgRF	CCRF	% Dev			
43		1,1-Dichloropropene	0.331	0.358	-8.2	143	0.00	8.78
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	218.432	-9.2	146	0.00	8.89
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.072	0.068	5.6	112	0.00	9.08
46		Methacrylonitrile	0.235	0.221	6.0	113	0.00	9.10
47		Benzene	1.104	1.129	-2.3	141	0.00	9.06
48		TAME	0.731	0.749	-2.5	136	0.00	9.17
49	S	1,2-Dichloroethane-d4	0.261	0.259	0.8	126	0.00	9.21
			True	Calc.	% Drift			
50		Isobutyl Alcohol	800.000	757.471	5.3	111	0.00	9.27
			AvgRF	CCRF	% Dev			
51		1,2-Dichloroethane	0.375	0.356	5.1	129	0.00	9.28
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	384.023	4.0	124	0.00	9.38
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.282	0.287	-1.8	142	0.00	9.67
54		Methylcyclohexane	0.370	0.380	-2.7	138	0.00	9.66

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-ECC2755
Lab FileID: Y66634.D

55		Dibromomethane	0.150	0.151	-0.7	136	0.00	10.09
56	C	1,2-Dichloropropane	0.276	0.290	-5.1	139	0.00	10.17
57		Bromodichloromethane	0.294	0.310	-5.4	141	0.00	10.23
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	41.259	-3.1	127	0.00	10.34
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.007	0.007	0.0	120	0.00	10.40
60		2-Chloroethyl vinyl ether	0.173	0.176	-1.7	137	0.00	10.71
61		cis-1,3-Dichloropropene	0.379	0.405	-6.9	139	0.00	10.78
62	I	Chlorobenzene-d5	1.000	1.000	0.0	121	0.00	12.15
63	S	Toluene-d8	1.302	1.378	-5.8	128	0.00	10.93
64	C	Toluene	1.660	1.961	-18.1	155	0.00	10.98
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	190.583	4.7	116	0.00	11.17
66		4-Methyl-2-pentanone	200.000	194.894	2.6	113	0.00	11.26
			AvgRF	CCRF	% Dev			
67		trans-1,3-Dichloropropene	0.442	0.509	-15.2	135	0.00	11.31
68		Tetrachloroethene	0.395	0.417	-5.6	138	0.00	11.30
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	44.047	-10.1	128	0.00	11.40
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.281	0.294	-4.6	134	0.00	11.44
71		Dibromochloromethane	0.318	0.341	-7.2	133	0.00	11.59
72		1,3-Dichloropropane	0.617	0.647	-4.9	135	0.00	11.66
73		1,2-Dibromoethane	0.334	0.364	-9.0	136	0.00	11.78
			True	Calc.	% Drift			
74		3,3-dimethyl-1-butanol	2000.000	1946.191	2.7	117	0.00	11.87
75		2-hexanone	200.000	169.653	15.2	106	0.00	11.90
			AvgRF	CCRF	% Dev			
76		1-Chlorohexane	0.440	0.483	-9.8	138	0.00	12.11
77	C	Ethylbenzene	1.888	1.989	-5.3	137	0.00	12.16
78	P	Chlorobenzene	1.028	1.035	-0.7	131	0.00	12.16
79		1,1,1,2-Tetrachloroethane	0.321	0.357	-11.2	138	0.00	12.20
80		m,p-Xylene	1.447	1.644	-13.6	146	0.00	12.25
81		o-Xylene	1.401	1.582	-12.9	145	0.00	12.57
			True	Calc.	% Drift			
82		Styrene	40.000	41.424	-3.6	129	0.00	12.61
			AvgRF	CCRF	% Dev			
83	P	Bromoform	0.202	0.215	-6.4	129	0.00	12.66
84		Isopropylbenzene	1.647	1.708	-3.7	135	0.00	12.78
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00	13.77
86	S	4-Bromofluorobenzene	0.766	0.789	-3.0	119	0.00	13.01
87		cis-1,4-Dichloro-2-butene	0.301	0.241	19.9	84	0.00	13.03
88		n-Propylbenzene	4.209	4.606	-9.4	135	0.00	13.06
89		Bromobenzene	0.897	0.936	-4.3	128	0.00	13.10
90	P	1,1,2,2-Tetrachloroethane	1.134	1.235	-8.9	127	0.00	13.12
91		1,3,5-Trimethylbenzene	2.940	3.293	-12.0	136	0.00	13.18
92		2-Chlorotoluene	2.820	3.091	-9.6	132	0.00	13.20

Continuing Calibration Summary

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VY2765-ECC2755
Lab FileID: Y66634.D

		True	Calc.	% Drift			
93	trans-1,4-Dichloro-2-Bute	40.000	31.978	20.1	89	0.00	13.24

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.396	0.422	-6.6	131	0.00	13.23
95	Cyclohexanone	0.095	0.095	0.0	107	0.00	13.29
96	4-Chlorotoluene	2.647	2.798	-5.7	129	0.00	13.31
97	tert-Butylbenzene	1.553	1.603	-3.2	131	0.00	13.41
98	1,2,4-Trimethylbenzene	2.967	3.728	-25.6	151	0.00	13.45
99	Pentachloroethane	0.394	0.387	1.8	107	0.00	13.46
100	sec-Butylbenzene	3.258	3.331	-2.2	127	0.00	13.53
101	4-Isopropyltoluene	2.873	2.951	-2.7	126	0.00	13.61
102	1,3-Dichlorobenzene	1.629	1.654	-1.5	124	0.00	13.73
103	1,2,3-Trimethylbenzene	2.991	3.193	-6.8	128	0.00	13.76
104	1,4-Dichlorobenzene	1.760	1.720	2.3	123	0.00	13.78
105	n-Butylbenzene	1.497	1.443	3.6	123	0.00	13.90

		True	Calc.	% Drift			
106	Benzyl Chloride	40.000	36.481	8.8	102	0.00	13.93

		AvgRF	CCRF	% Dev			
107	1,2-Dichlorobenzene	1.617	1.636	-1.2	124	0.00	14.07
108	1,2-Dibromo-3-Chloropropa	0.253	0.285	-12.6	123	0.00	14.59
109	Hexachlorobutadiene	0.331	0.314	5.1	123	0.00	15.00
110	1,2,4-Trichlorobenzene	0.983	0.922	6.2	115	0.00	15.06
111	Naphthalene	3.652	4.314	-18.1	139	0.00	15.31
112	1,2,3-Trichlorobenzene	0.943	0.916	2.9	121	0.00	15.45

(#) = Out of Range SPCC's out = 0 CCC's out = 0
Y66389.D APPIX_12-02-2022_Y.M Sun Dec 11 21:54:41 2022

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V1P3646 **Method:** SW846 8260D **Instrument ID:** GCMS1P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1P3646-BFB	1P96320.D	12/14/22 10:15	n/a	BFB Tune
V1P3646-IC3646	1P96320.D	12/14/22 10:15	n/a	Initial cal 1
V1P3646-IC3646	1P96322.D	12/14/22 10:47	n/a	Initial cal 2
V1P3646-IC3646	1P96324.D	12/14/22 11:19	n/a	Initial cal 3
V1P3646-IC3646	1P96326.D	12/14/22 11:51	n/a	Initial cal 4
V1P3646-ICC3646	1P96328.D	12/14/22 12:22	n/a	Initial cal 5
V1P3646-IC3646	1P96330.D	12/14/22 12:54	n/a	Initial cal 6
V1P3646-IC3646	1P96332.D	12/14/22 13:26	n/a	Initial cal 7
V1P3646-ICV3646	1P96336.D	12/14/22 14:40	n/a	Initial cal verification 5
V1P3646-CC3646	1P96336A.D	12/14/22 14:40	n/a	Continuing cal 5
V1P3646-BS	1P96338.D	12/14/22 15:12	n/a	Blank Spike
V1P3646-MB	1P96342.D	12/14/22 16:15	n/a	Method Blank
ZZZZZZ	1P96344.D	12/14/22 16:47	n/a	(unrelated sample)
ZZZZZZ	1P96346.D	12/14/22 17:19	n/a	(unrelated sample)
ZZZZZZ	1P96348.D	12/14/22 17:51	n/a	(unrelated sample)
ZZZZZZ	1P96350.D	12/14/22 18:23	n/a	(unrelated sample)
ZZZZZZ	1P96352.D	12/14/22 18:54	n/a	(unrelated sample)
ZZZZZZ	1P96354.D	12/14/22 19:26	n/a	(unrelated sample)
ZZZZZZ	1P96356.D	12/14/22 19:58	n/a	(unrelated sample)

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V1P3648	**Method:** SW846 8260D	**Instrument ID:** GCMS1P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1P3648-BFB	1P96408.D	12/16/22 08:38	n/a	BFB Tune
V1P3648-CC3646	1P96408.D	12/16/22 08:38	n/a	Continuing cal 5
V1P3648-BS	1P96410.D	12/16/22 09:09	n/a	Blank Spike
V1P3648-MB	1P96414.D	12/16/22 10:12	n/a	Method Blank
ZZZZZZ	1P96416.D	12/16/22 10:44	n/a	(unrelated sample)
FC1020-4	1P96418.D	12/16/22 11:16	n/a	LF1-TB-120522
ZZZZZZ	1P96420.D	12/16/22 11:48	n/a	(unrelated sample)
ZZZZZZ	1P96422.D	12/16/22 12:19	n/a	(unrelated sample)
ZZZZZZ	1P96424.D	12/16/22 12:51	n/a	(unrelated sample)
ZZZZZZ	1P96426.D	12/16/22 13:23	n/a	(unrelated sample)
ZZZZZZ	1P96428.D	12/16/22 13:55	n/a	(unrelated sample)
ZZZZZZ	1P96430.D	12/16/22 14:26	n/a	(unrelated sample)
ZZZZZZ	1P96432.D	12/16/22 14:59	n/a	(unrelated sample)
ZZZZZZ	1P96434.D	12/16/22 15:31	n/a	(unrelated sample)
ZZZZZZ	1P96436.D	12/16/22 16:02	n/a	(unrelated sample)
ZZZZZZ	1P96438.D	12/16/22 16:34	n/a	(unrelated sample)
ZZZZZZ	1P96440.D	12/16/22 17:05	n/a	(unrelated sample)
ZZZZZZ	1P96442.D	12/16/22 17:38	n/a	(unrelated sample)
FC1293-8	1P96444.D	12/16/22 18:09	n/a	(used for QC only; not part of job FC1020)
ZZZZZZ	1P96446.D	12/16/22 18:41	n/a	(unrelated sample)
FC1293-8MS	1P96448.D	12/16/22 19:12	n/a	Matrix Spike
FC1293-8MSD	1P96450.D	12/16/22 19:44	n/a	Matrix Spike Duplicate
V1P3648-ECC3646	1P96452.D	12/16/22 20:16	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1617 **Method:** SW846 8260D **Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1617-BFB	5E35978.D	12/08/22 10:48	n/a	BFB Tune
V5E1617-IC1617	5E35978.D	12/08/22 10:48	n/a	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22 11:33	n/a	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22 11:56	n/a	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22 12:19	n/a	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22 12:42	n/a	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22 13:05	n/a	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22 14:00	n/a	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22 15:25	n/a	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22 15:25	n/a	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22 16:06	n/a	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22 16:06	n/a	Blank Spike
V5E1617-MB	5E35990.D	12/08/22 17:39	n/a	Method Blank
ZZZZZZ	5E35991.D	12/08/22 18:02	n/a	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22 18:25	n/a	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22 18:48	n/a	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22 19:11	n/a	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22 19:34	n/a	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22 19:58	n/a	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22 20:21	n/a	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22 20:44	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1624 **Method:** SW846 8260D **Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1624-BFB	5E36114.D	12/14/22 09:00	n/a	BFB Tune
V5E1624-CC1617	5E36115.D	12/14/22 09:23	n/a	Continuing cal 5
V5E1624-BS	5E36116.D	12/14/22 09:45	n/a	Blank Spike
V5E1624-MB	5E36119.D	12/14/22 10:55	n/a	Method Blank
ZZZZZZ	5E36120.D	12/14/22 11:18	n/a	(unrelated sample)
ZZZZZZ	5E36121.D	12/14/22 11:41	n/a	(unrelated sample)
ZZZZZZ	5E36122.D	12/14/22 12:04	n/a	(unrelated sample)
ZZZZZZ	5E36123.D	12/14/22 12:28	n/a	(unrelated sample)
ZZZZZZ	5E36124.D	12/14/22 12:51	n/a	(unrelated sample)
ZZZZZZ	5E36125.D	12/14/22 13:14	n/a	(unrelated sample)
ZZZZZZ	5E36126.D	12/14/22 13:37	n/a	(unrelated sample)
ZZZZZZ	5E36127.D	12/14/22 14:00	n/a	(unrelated sample)
ZZZZZZ	5E36128.D	12/14/22 14:23	n/a	(unrelated sample)
ZZZZZZ	5E36129.D	12/14/22 14:46	n/a	(unrelated sample)
ZZZZZZ	5E36130.D	12/14/22 15:09	n/a	(unrelated sample)
ZZZZZZ	5E36131.D	12/14/22 15:32	n/a	(unrelated sample)
ZZZZZZ	5E36132.D	12/14/22 15:55	n/a	(unrelated sample)
FC1262-2	5E36133.D	12/14/22 16:19	n/a	(used for QC only; not part of job FC1020)
ZZZZZZ	5E36134.D	12/14/22 16:42	n/a	(unrelated sample)
FC1020-3	5E36136.D	12/14/22 17:28	n/a	LF1SW-25MC-1222
ZZZZZZ	5E36137.D	12/14/22 17:51	n/a	(unrelated sample)
ZZZZZZ	5E36138.D	12/14/22 18:14	n/a	(unrelated sample)
ZZZZZZ	5E36139.D	12/14/22 18:37	n/a	(unrelated sample)
ZZZZZZ	5E36140.D	12/14/22 19:00	n/a	(unrelated sample)
FC1262-2MS	5E36141.D	12/14/22 19:24	n/a	Matrix Spike
V5E1624-ECC1617	5E36143.D	12/14/22 20:08	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2866 **Method:** SW846 8260D **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2866-BFB	O72889.D	12/08/22 09:31	n/a	BFB Tune
VO2866-IC2866	O72890.D	12/08/22 09:56	n/a	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22 10:20	n/a	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22 10:45	n/a	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22 11:10	n/a	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22 11:35	n/a	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22 12:00	n/a	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22 12:25	n/a	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22 13:16	n/a	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22 13:16	n/a	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22 13:59	n/a	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22 13:59	n/a	Blank Spike
VO2866-MB	O72901.D	12/08/22 15:38	n/a	Method Blank
ZZZZZZ	O72902.D	12/08/22 16:02	n/a	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22 16:27	n/a	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22 16:52	n/a	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22 17:17	n/a	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22 17:42	n/a	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22 18:07	n/a	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22 18:32	n/a	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22 18:57	n/a	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22 19:22	n/a	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22 19:46	n/a	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22 20:11	n/a	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22 20:36	n/a	(unrelated sample)
ZZZZZZ	O72914.D	12/08/22 21:01	n/a	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22 21:26	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2867 **Method:** SW846 8260D **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2867-BFB	O72918.D	12/09/22 10:04	n/a	BFB Tune
VO2867-CC2866	O72918.D	12/09/22 10:04	n/a	Continuing cal 5
VO2867-BS	O72921.D	12/09/22 11:36	n/a	Blank Spike
VO2867-MB	O72923.D	12/09/22 12:26	n/a	Method Blank
ZZZZZZ	O72924.D	12/09/22 12:51	n/a	(unrelated sample)
ZZZZZZ	O72925.D	12/09/22 13:16	n/a	(unrelated sample)
ZZZZZZ	O72926.D	12/09/22 13:41	n/a	(unrelated sample)
FC1020-4	O72927.D	12/09/22 14:05	n/a	LF1-TB-120522
FC1020-3	O72928.D	12/09/22 14:30	n/a	LF1SW-25MC-1222
ZZZZZZ	O72929.D	12/09/22 14:55	n/a	(unrelated sample)
ZZZZZZ	O72930.D	12/09/22 15:20	n/a	(unrelated sample)
ZZZZZZ	O72931.D	12/09/22 15:45	n/a	(unrelated sample)
ZZZZZZ	O72932.D	12/09/22 16:10	n/a	(unrelated sample)
ZZZZZZ	O72933.D	12/09/22 16:35	n/a	(unrelated sample)
ZZZZZZ	O72934.D	12/09/22 17:00	n/a	(unrelated sample)
ZZZZZZ	O72935.D	12/09/22 17:25	n/a	(unrelated sample)
ZZZZZZ	O72936.D	12/09/22 17:50	n/a	(unrelated sample)
ZZZZZZ	O72937.D	12/09/22 18:14	n/a	(unrelated sample)
ZZZZZZ	O72938.D	12/09/22 18:39	n/a	(unrelated sample)
ZZZZZZ	O72939.D	12/09/22 19:04	n/a	(unrelated sample)
ZZZZZZ	O72940.D	12/09/22 19:29	n/a	(unrelated sample)
ZZZZZZ	O72941.D	12/09/22 19:54	n/a	(unrelated sample)
ZZZZZZ	O72942.D	12/09/22 20:19	n/a	(unrelated sample)
ZZZZZZ	O72943.D	12/09/22 20:44	n/a	(unrelated sample)
FC1020-3MS	O72944.D	12/09/22 21:09	n/a	Matrix Spike
FC1020-3MSD	O72945.D	12/09/22 21:34	n/a	Matrix Spike Duplicate
VO2867-ECC2866	O72946.D	12/09/22 21:59	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VY2755 **Method:** SW846 8260D **Instrument ID:** GCMSY

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VY2755-BFB	Y66384.D	12/02/22 12:15	n/a	BFB Tune
VY2755-IC2755	Y66385.D	12/02/22 14:05	n/a	Initial cal 1
VY2755-IC2755	Y66386.D	12/02/22 14:28	n/a	Initial cal 2
VY2755-IC2755	Y66387.D	12/02/22 14:53	n/a	Initial cal 3
VY2755-IC2755	Y66388.D	12/02/22 15:17	n/a	Initial cal 4
VY2755-ICC2755	Y66389.D	12/02/22 15:41	n/a	Initial cal 5
VY2755-IC2755	Y66390.D	12/02/22 16:05	n/a	Initial cal 6
VY2755-IC2755	Y66391.D	12/02/22 16:29	n/a	Initial cal 7
VY2755-ICV2755	Y66393.D	12/02/22 17:17	n/a	Initial cal verification 5
VY2755-ICV2755	Y66394.D	12/02/22 17:41	n/a	Initial cal verification 4

Run Sequence Report

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VY2765	**Method:** SW846 8260D	**Instrument ID:** GCMSY

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VY2765-BFB	Y66605.D	12/09/22 09:38	n/a	BFB Tune
VY2765-CC2755	Y66605.D	12/09/22 09:38	n/a	Continuing cal 5
VY2765-BS	Y66606.D	12/09/22 10:02	n/a	Blank Spike
VY2765-MB	Y66609.D	12/09/22 11:14	n/a	Method Blank
ZZZZZZ	Y66610.D	12/09/22 11:38	n/a	(unrelated sample)
ZZZZZZ	Y66611.D	12/09/22 12:03	n/a	(unrelated sample)
ZZZZZZ	Y66612.D	12/09/22 12:27	n/a	(unrelated sample)
ZZZZZZ	Y66613.D	12/09/22 12:52	n/a	(unrelated sample)
ZZZZZZ	Y66614.D	12/09/22 13:16	n/a	(unrelated sample)
ZZZZZZ	Y66616.D	12/09/22 14:04	n/a	(unrelated sample)
ZZZZZZ	Y66621.D	12/09/22 16:05	n/a	(unrelated sample)
ZZZZZZ	Y66622.D	12/09/22 16:29	n/a	(unrelated sample)
ZZZZZZ	Y66623.D	12/09/22 16:53	n/a	(unrelated sample)
ZZZZZZ	Y66624.D	12/09/22 17:17	n/a	(unrelated sample)
ZZZZZZ	Y66625.D	12/09/22 17:41	n/a	(unrelated sample)
FC1020-1	Y66626.D	12/09/22 18:05	n/a	LF1SW-1-1222
FC1020-2	Y66627.D	12/09/22 18:30	n/a	LF1SW-3-1222
FC1005-3	Y66628.D	12/09/22 18:54	n/a	(used for QC only; not part of job FC1020)
FC1005-3MS	Y66630.D	12/09/22 19:43	n/a	Matrix Spike
FC1005-3MSD	Y66631.D	12/09/22 20:07	n/a	Matrix Spike Duplicate
VY2765-ECC2755	Y66634.D	12/09/22 21:19	n/a	Ending cal 5

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66626.D
Acq On : 9 Dec 2022 6:05 pm
Operator : joannel
Sample : FC1020-1
Misc : MS52974,VY2765,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 11 21:36:08 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

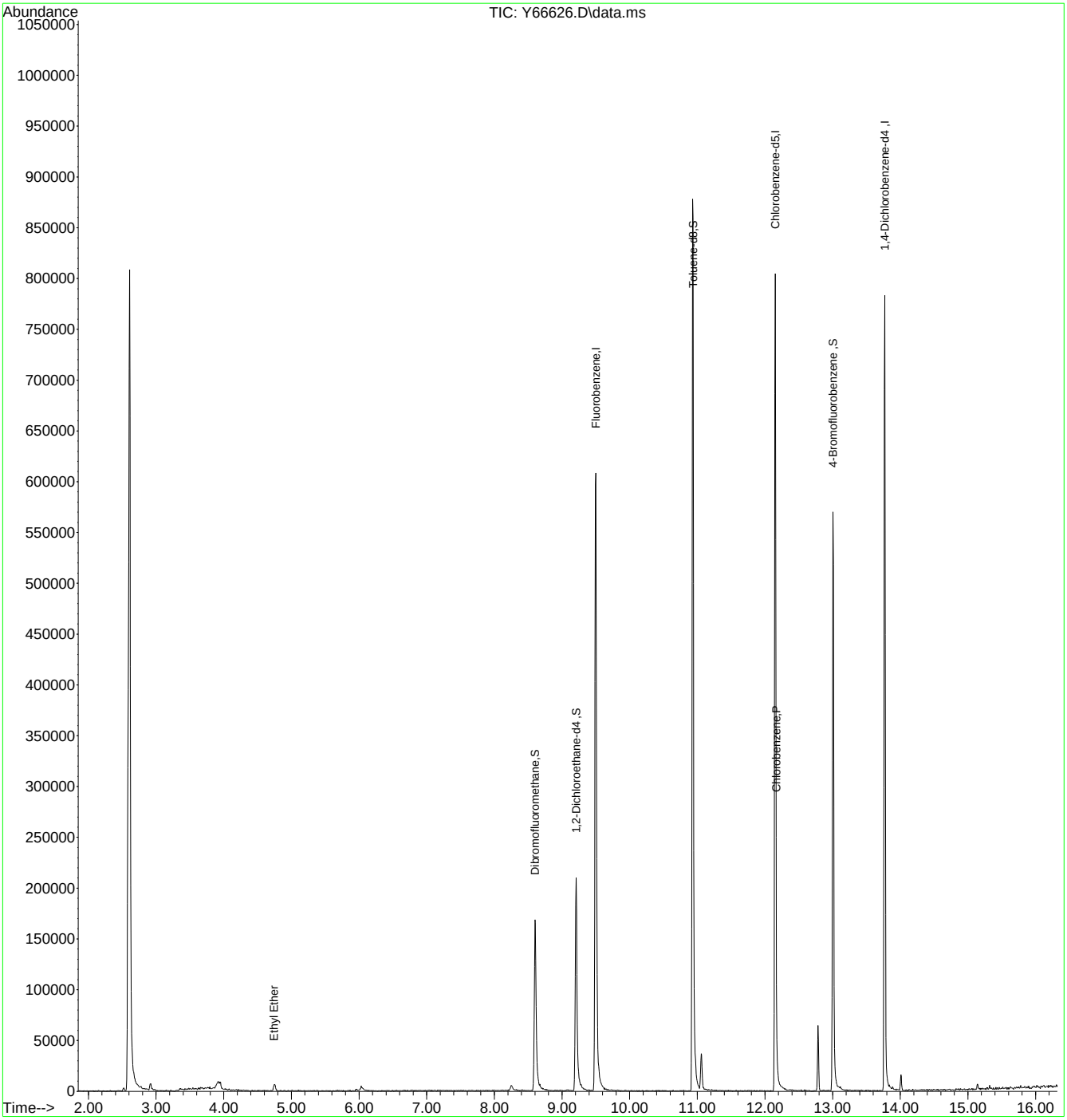
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.500	96	511582	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.153	117	363266	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.771	152	160830	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.600	113	103738	48.59	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.18%			
49) 1,2-Dichloroethane-d4	9.208	65	135773	50.78	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.56%			
63) Toluene-d8	10.936	98	485881	51.38	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.76%			
86) 4-Bromofluorobenzene	13.004	174	129835	52.67	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.34%			
Target Compounds						Qvalue
10) Ethyl Ether	4.743	59	4117	1.67	ug/L #	75
78) Chlorobenzene	12.165	112	2856	0.38	ug/L	86

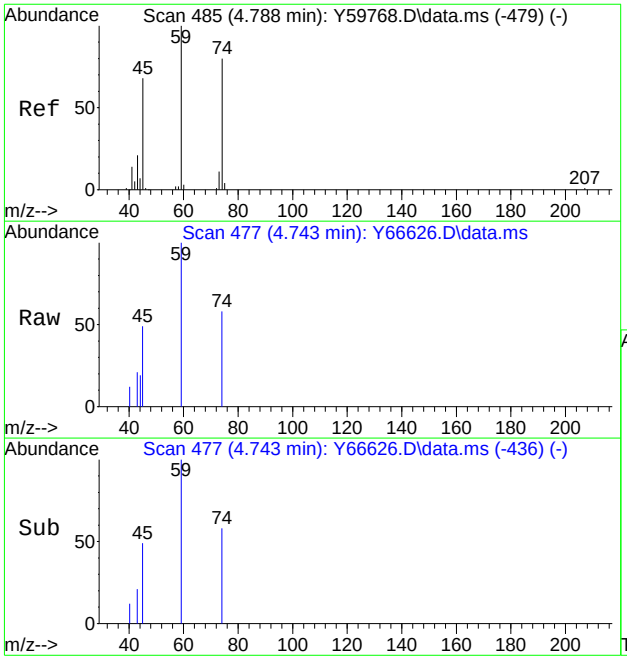
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66626.D
Acq On : 9 Dec 2022 6:05 pm
Operator : joannel
Sample : FC1020-1
Misc : MS52974,VY2765,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Dec 11 21:36:08 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

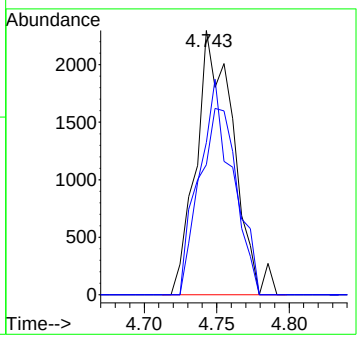


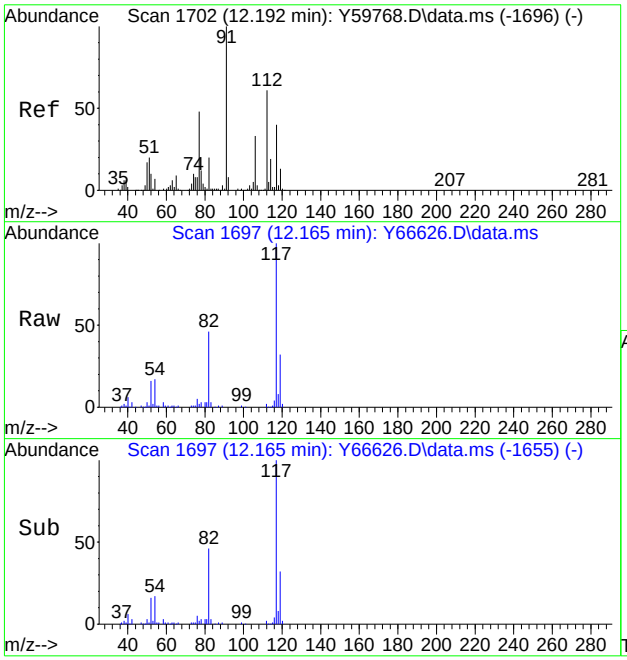


#10
Ethyl Ether
Concen: 1.67 ug/L
RT: 4.743 min Scan# 477
Delta R.T. -0.003 min
Lab File: Y66626.D
Acq: 9 Dec 2022 6:05 pm

Tgt Ion: 59 Resp: 4117

Ion	Ratio	Lower	Upper
59	100		
45	49.2	56.0	96.0#
74	57.6	53.2	93.2

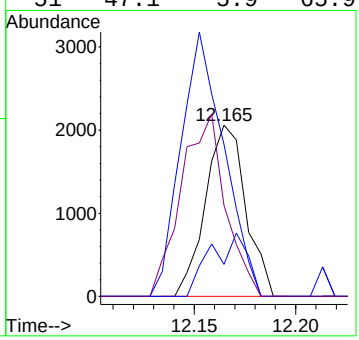




#78
Chlorobenzene
Concen: 0.38 ug/L
RT: 12.165 min Scan# 1697
Delta R.T. 0.003 min
Lab File: Y66626.D
Acq: 9 Dec 2022 6:05 pm

Tgt Ion:112 Resp: 2856

Ion	Ratio	Lower	Upper
112	100		
77	78.9	43.2	103.2
114	16.7	0.6	60.6
51	47.1	5.9	65.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66627.D
Acq On : 9 Dec 2022 6:30 pm
Operator : joannel
Sample : FC1020-2
Misc : MS52974,VY2765,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 11 21:36:44 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

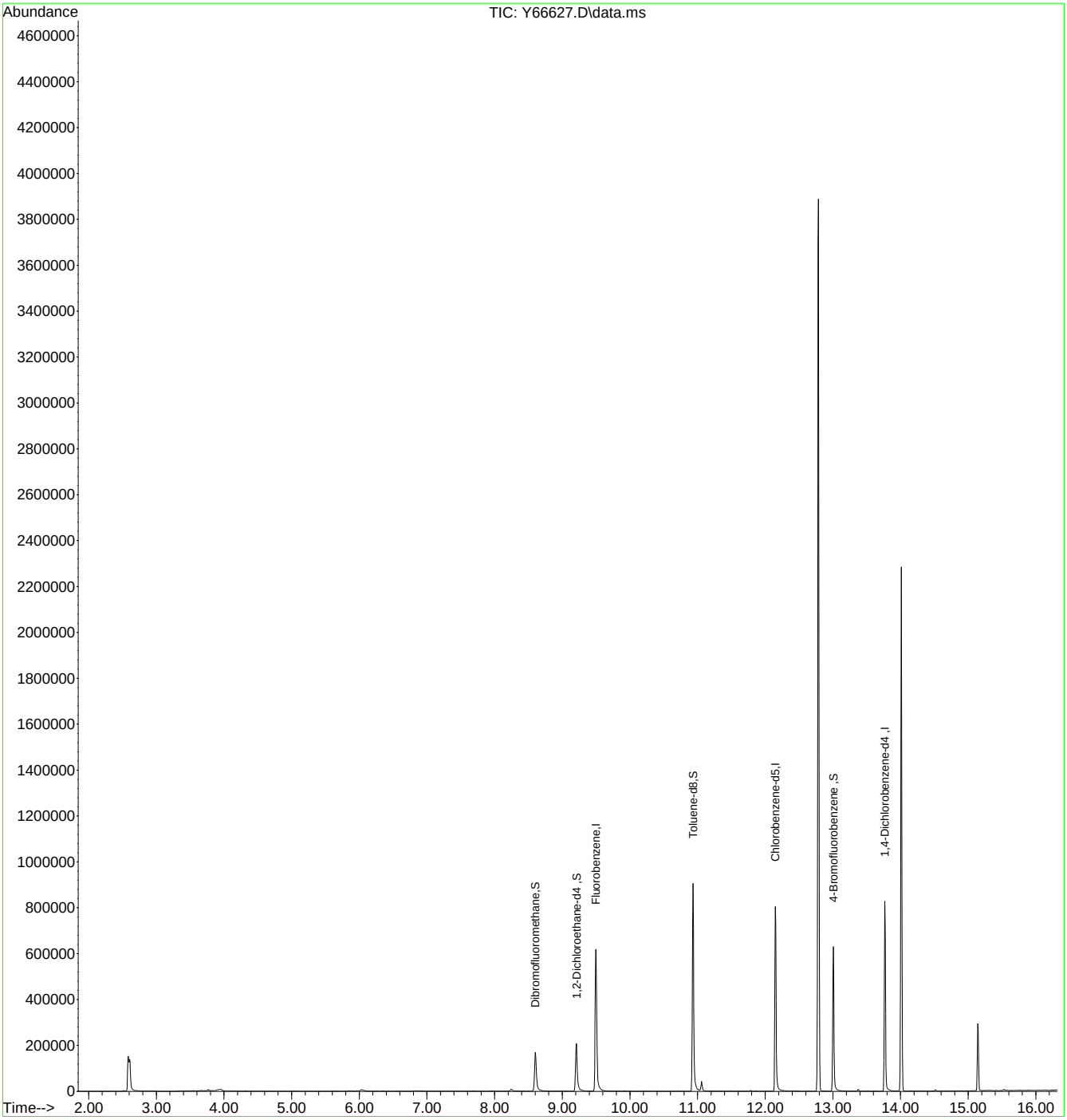
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.496	96	509360	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.149	117	372009	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.767	152	172259	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.602	113	107406	50.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.06%			
49) 1,2-Dichloroethane-d4	9.211	65	140456	52.76	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 105.52%			
63) Toluene-d8	10.932	98	485630	50.15	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.30%			
86) 4-Bromofluorobenzene	13.007	174	142273	53.89	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.78%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66627.D
Acq On : 9 Dec 2022 6:30 pm
Operator : joannel
Sample : FC1020-2
Misc : MS52974,VY2765,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Dec 11 21:36:44 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36136.d
Acq On : 14 Dec 2022 5:28 pm
Operator : courtnef
Sample : FC1020-3 Inst : MSVOA20
Misc : MS52980,V5E1624,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 03:51:18 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

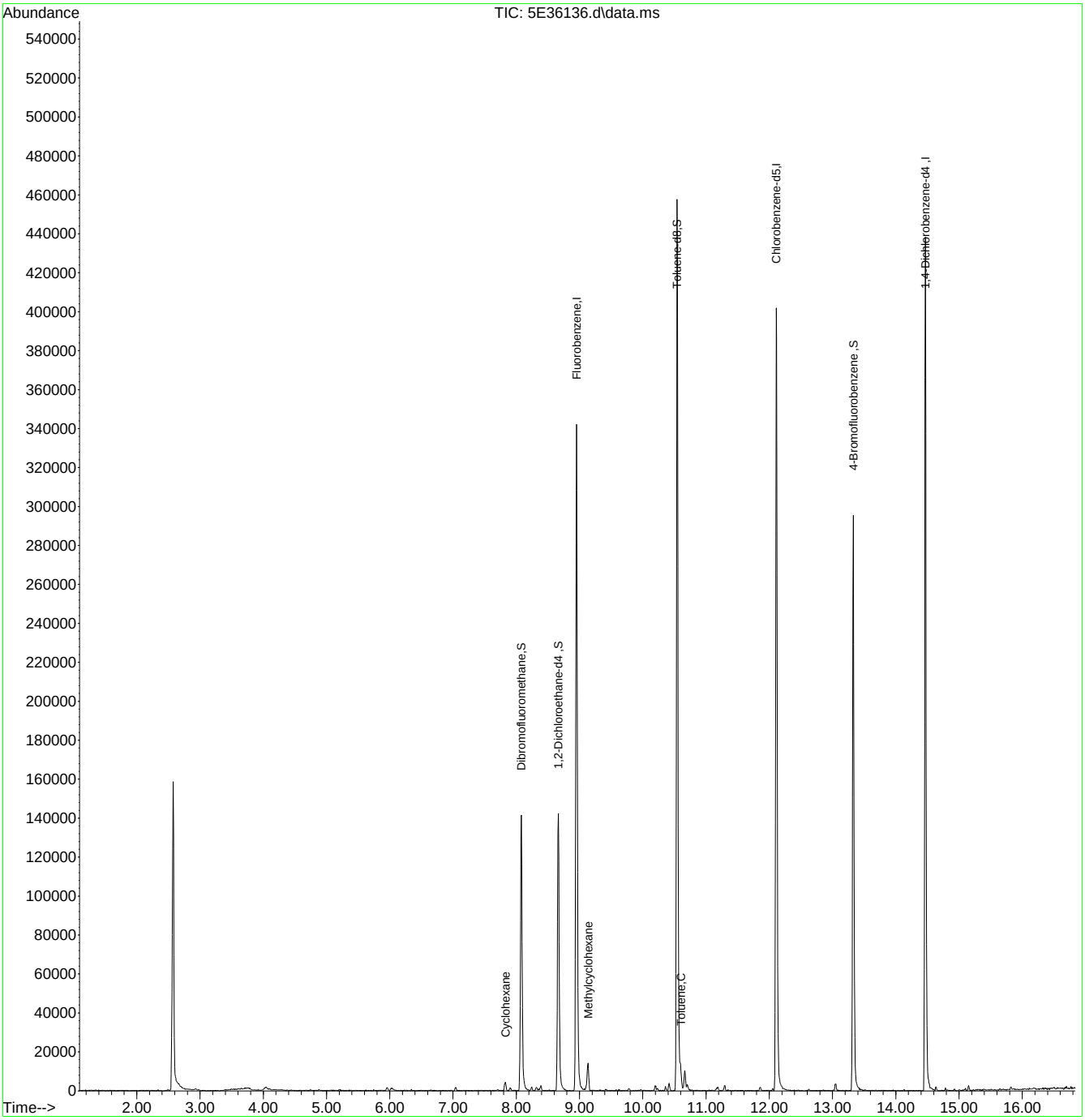
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	278388	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	206390	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	96779	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	78754	51.06	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.12%			
49) 1,2-Dichloroethane-d4	8.665	65	88749	50.11	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.22%			
62) Toluene-d8	10.542	98	282127	50.09	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.18%			
86) 4-Bromofluorobenzene	13.328	95	82720	51.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.76%			
Target Compounds						Qvalue
35) Cyclohexane	7.829	56	2362	0.99	ug/L	90
53) Methylcyclohexane	9.134	83	4831	2.03	ug/L	93
63) Toluene	10.603	91	681	0.11	ug/L	72

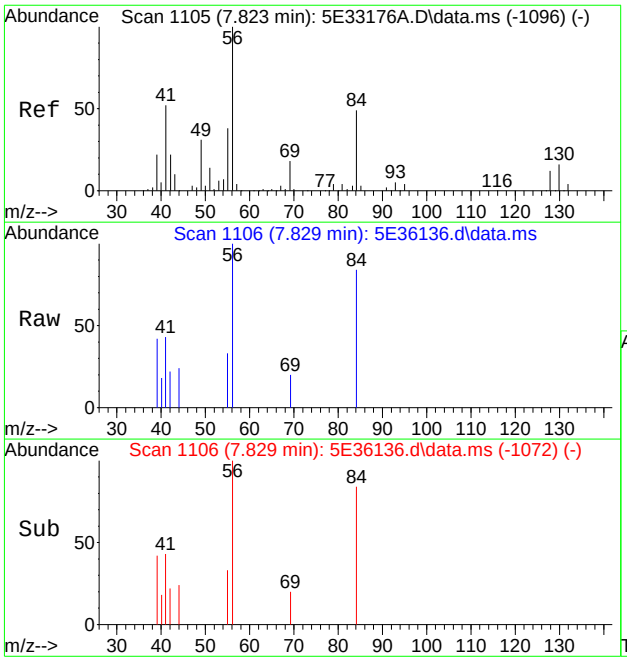
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36136.d
Acq On : 14 Dec 2022 5:28 pm
Operator : courtnef
Sample : FC1020-3 Inst : MSVOA20
Misc : MS52980,V5E1624,,,,,
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 03:51:18 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

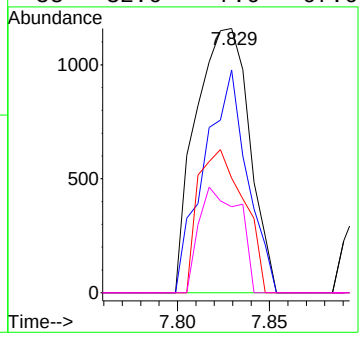


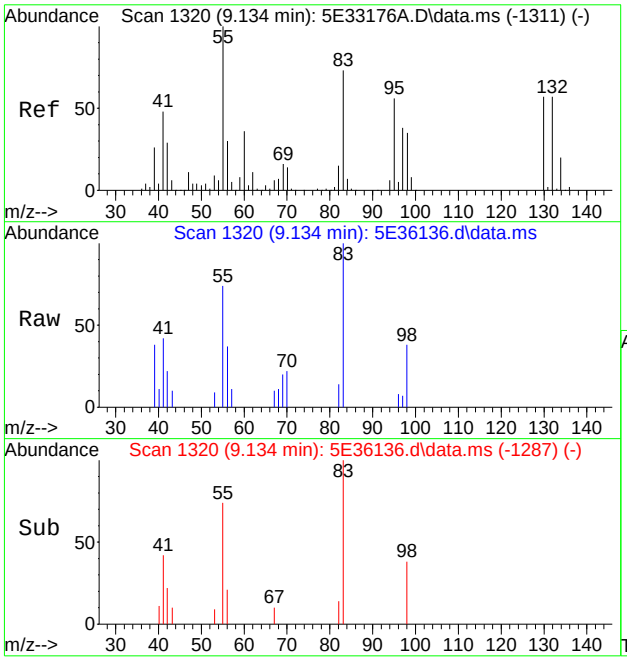


#35
Cyclohexane
Concen: 0.99 ug/L
RT: 7.829 min Scan# 1106
Delta R.T. 0.006 min
Lab File: 5E36136.d
Acq: 14 Dec 2022 5:28 pm

Tgt Ion: 56 Resp: 2362

Ion	Ratio	Lower	Upper
56	100		
84	84.2	59.1	119.1
41	43.4	27.6	87.6
55	32.6	7.6	67.6

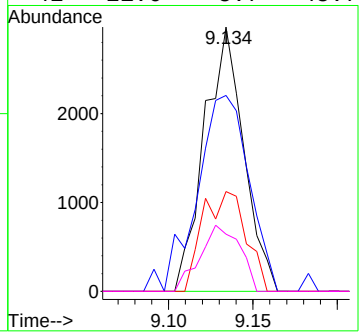


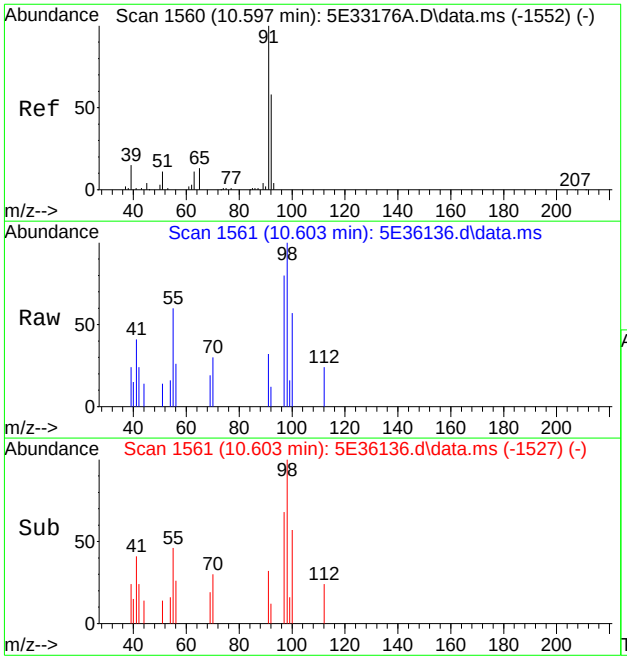


#53
Methylcyclohexane
Concen: 2.03 ug/L
RT: 9.134 min Scan# 1320
Delta R.T. 0.000 min
Lab File: 5E36136.d
Acq: 14 Dec 2022 5:28 pm

Tgt Ion: 83 Resp: 4831

Ion	Ratio	Lower	Upper
83	100		
55	74.1	56.7	96.7
98	37.7	26.7	66.7
42	21.6	5.7	45.7

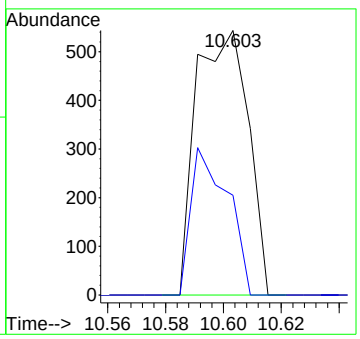




#63
Toluene
Concen: 0.11 ug/L
RT: 10.603 min Scan# 1561
Delta R.T. 0.006 min
Lab File: 5E36136.d
Acq: 14 Dec 2022 5:28 pm

Tgt Ion: 91 Resp: 681

Ion	Ratio	Lower	Upper
91	100		
92	37.7	28.3	88.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72928.d
Acq On : 9 Dec 2022 2:30 pm
Operator : adelardl
Sample : FC1020-3
Misc : MS52980,VO2867,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 11 14:04:23 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

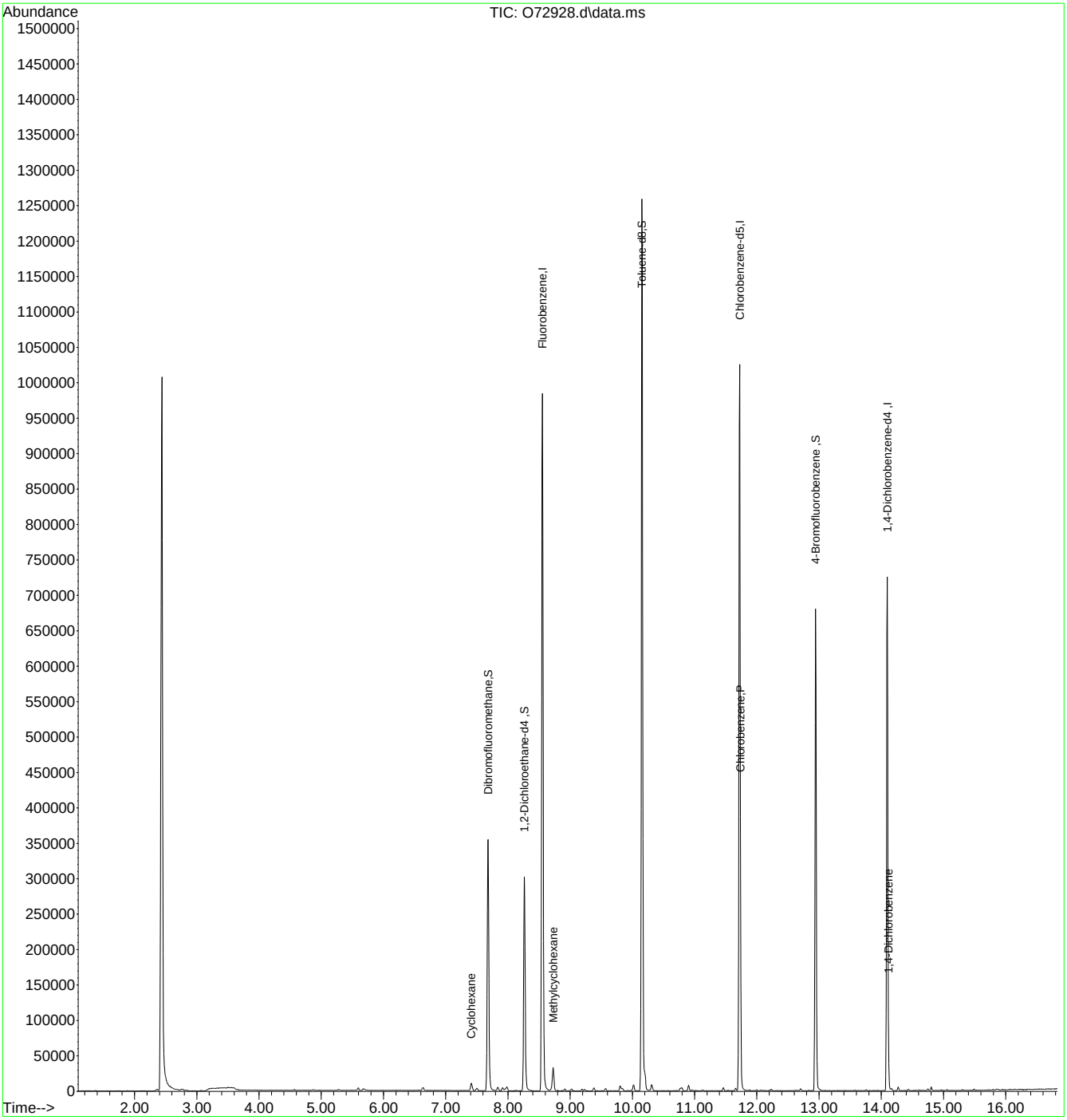
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	740723	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	483913	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	161023	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.683	113	193071	46.60	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.20%			
50) 1,2-Dichloroethane-d4	8.262	65	196473	51.17	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.34%			
63) Toluene-d8	10.152	98	709957	54.66	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.32%			
86) 4-Bromofluorobenzene	12.944	174	159936	49.97	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.94%			
Target Compounds						Qvalue
35) Cyclohexane	7.409	56	5112	0.79	ug/L	95
54) Methylcyclohexane	8.725	83	11095	1.83	ug/L	95
78) Chlorobenzene	11.737	112	5031	0.48	ug/L	79
105) 1,4-Dichlorobenzene	14.115	146	7336	0.94	ug/L	83

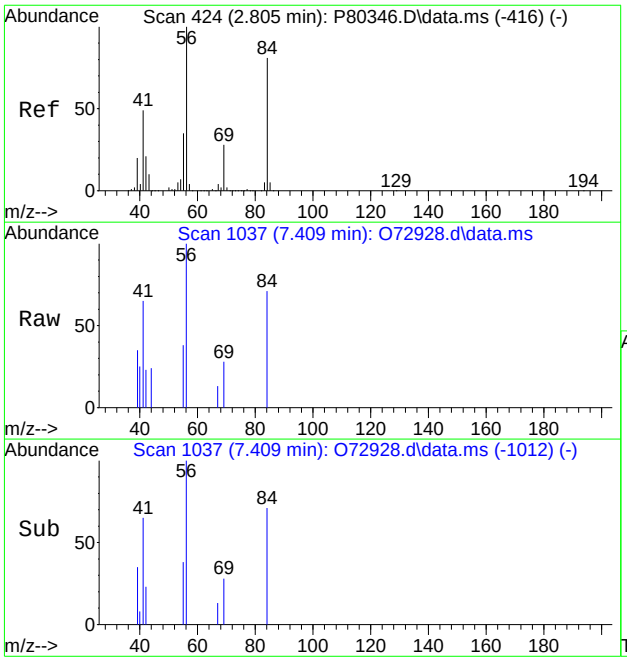
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72928.d
Acq On : 9 Dec 2022 2:30 pm
Operator : adelardl
Sample : FC1020-3
Misc : MS52980,VO2867,,,,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Dec 11 14:04:23 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

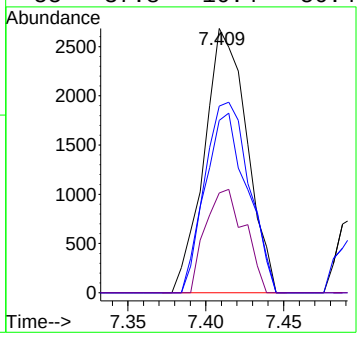


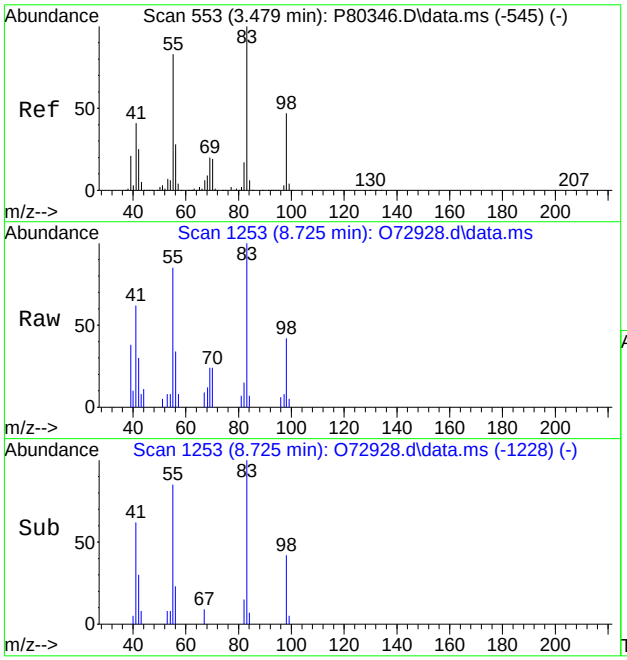


#35
Cyclohexane
Concen: 0.79 ug/L
RT: 7.409 min Scan# 1037
Delta R.T. -0.000 min
Lab File: O72928.d
Acq: 9 Dec 2022 2:30 pm

Tgt Ion: 56 Resp: 5112

Ion	Ratio	Lower	Upper
56	100		
84	70.6	60.2	100.2
41	65.2	45.1	85.1
55	37.8	16.4	56.4

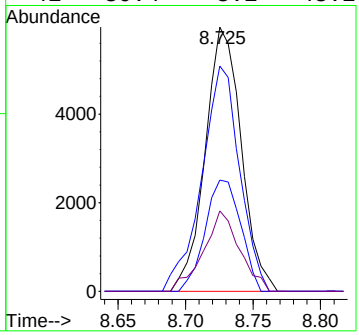


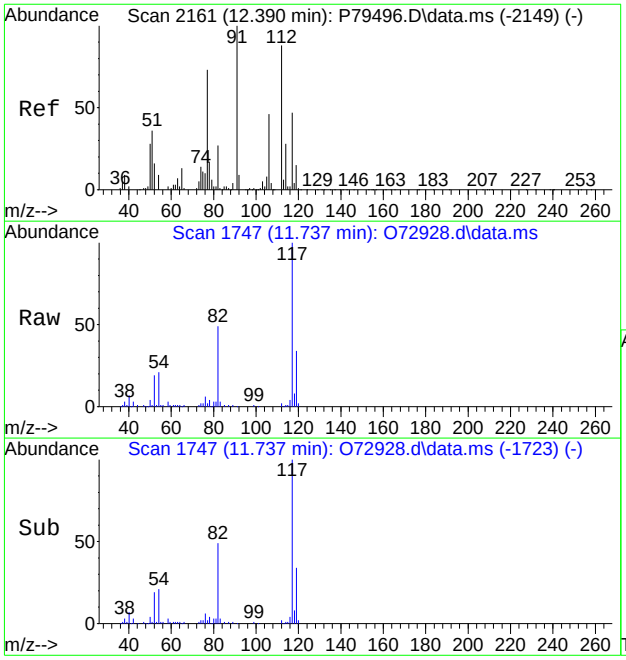


#54
Methylcyclohexane
Concen: 1.83 ug/L
RT: 8.725 min Scan# 1253
Delta R.T. -0.001 min
Lab File: O72928.d
Acq: 9 Dec 2022 2:30 pm

Tgt Ion: 83 Resp: 11095

Ion	Ratio	Lower	Upper
83	100		
55	85.2	60.7	100.7
98	42.1	25.3	65.3
42	30.4	8.2	48.2

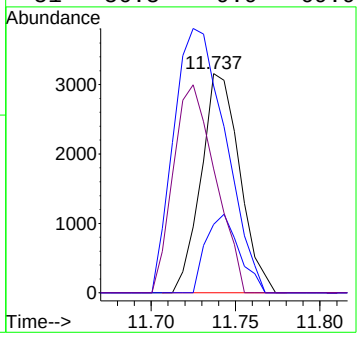


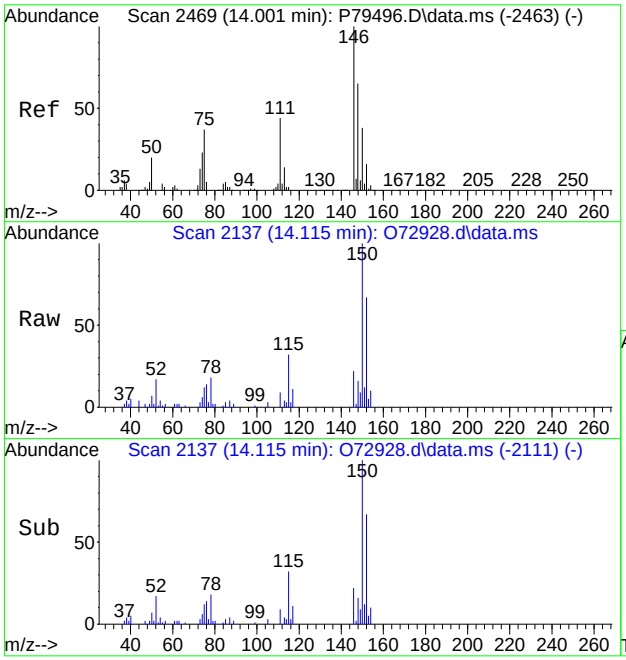


#78
Chlorobenzene
Concen: 0.48 ug/L
RT: 11.737 min Scan# 1747
Delta R.T. -0.006 min
Lab File: O72928.d
Acq: 9 Dec 2022 2:30 pm

Tgt Ion:112 Resp: 5031

Ion	Ratio	Lower	Upper
112	100		
77	94.3	41.8	101.8
114	31.3	2.3	62.3
51	56.5	9.9	69.9

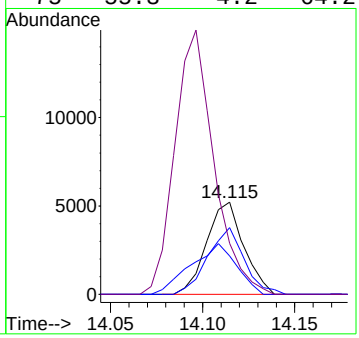




#105
1,4-Dichlorobenzene
Concen: 0.94 ug/L
RT: 14.115 min Scan# 2137
Delta R.T. 0.006 min
Lab File: O72928.d
Acq: 9 Dec 2022 2:30 pm

Tgt Ion:146 Resp: 7336

Ion	Ratio	Lower	Upper
146	100		
111	41.8	7.3	67.3
148	72.4	32.6	92.6
75	55.3	4.2	64.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96418.D
Acq On : 16 Dec 2022 11:16 am
Operator : courtnef
Sample : FC1020-4 Inst : MSVOA13
Misc : MS52980,V1P3648,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:41:14 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

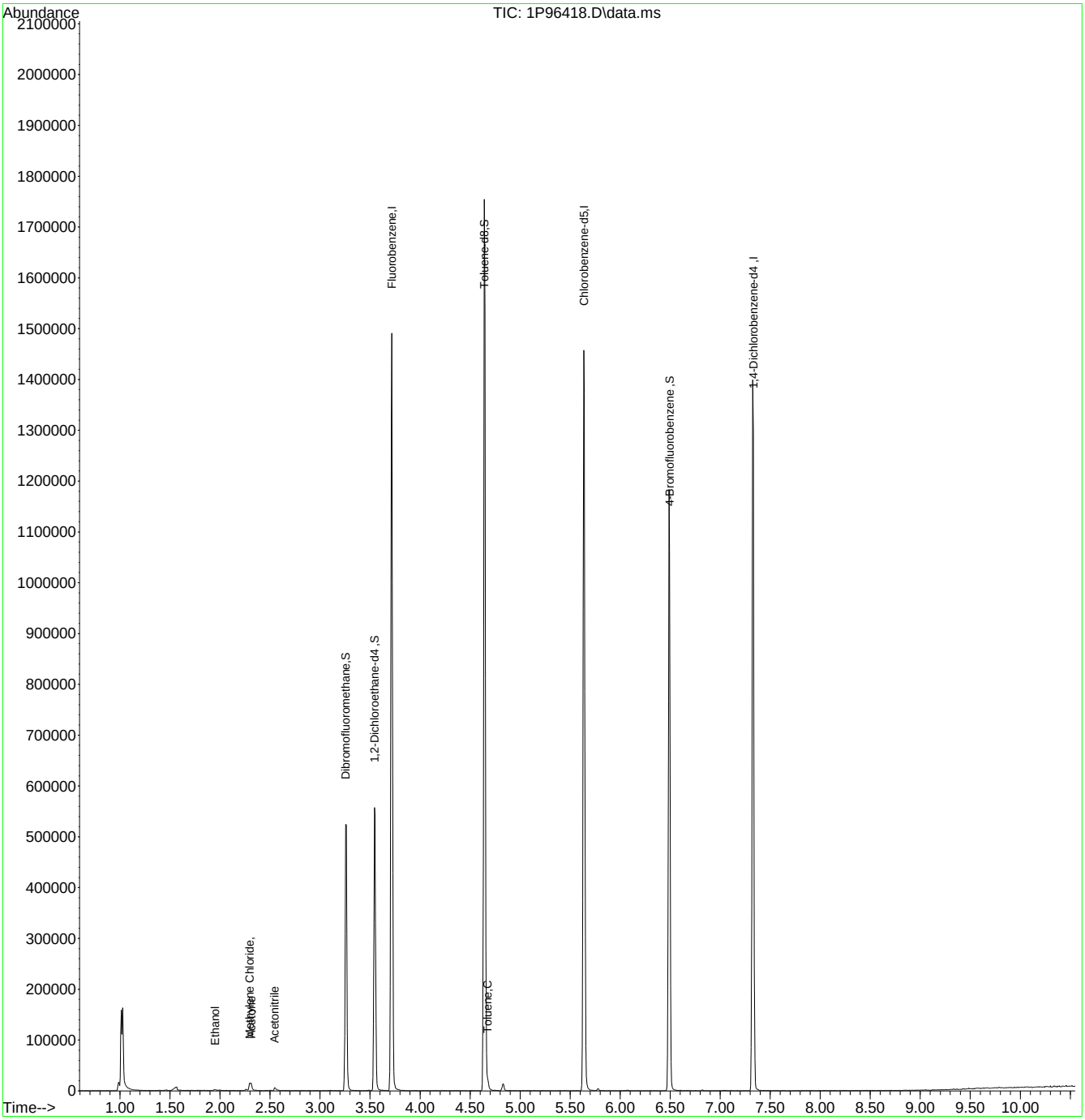
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.717	96	808531	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.636	117	570878	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.331	152	261893	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.257	113	191880	52.75	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.50%			
49) 1,2-Dichloroethane-d4	3.544	65	269091	54.72	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.44%			
63) Toluene-d8	4.643	98	767273	46.66	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 93.32%			
86) 4-Bromofluorobenzene	6.494	174	217469	51.18	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.36%			
Target Compounds						Qvalue
10) Ethanol	1.949	45	2115	24.43	ug/L	79
18) Methylene Chloride	2.294	49	4639	1.11	ug/L	93
19) Acetone	2.310	43	10695	5.31	ug/L	88
25) Acetonitrile	2.545	41	5481	6.67	ug/L	98
64) Toluene	4.674	91	6168	0.41	ug/L	96

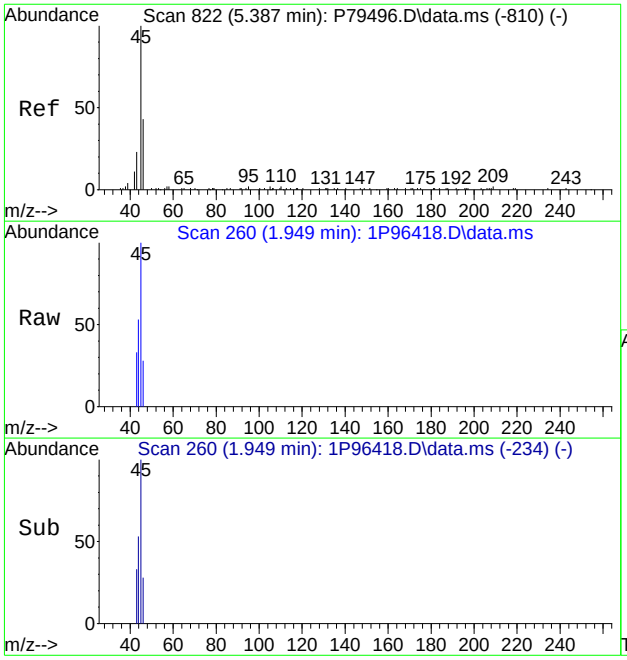
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96418.D
Acq On : 16 Dec 2022 11:16 am
Operator : courtnef
Sample : FC1020-4 Inst : MSVOA13
Misc : MS52980,V1P3648,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:41:14 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

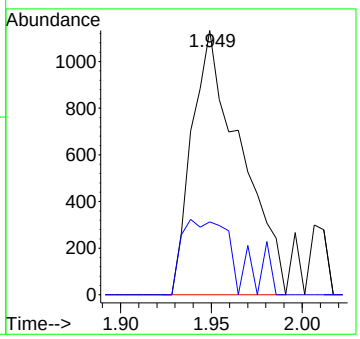


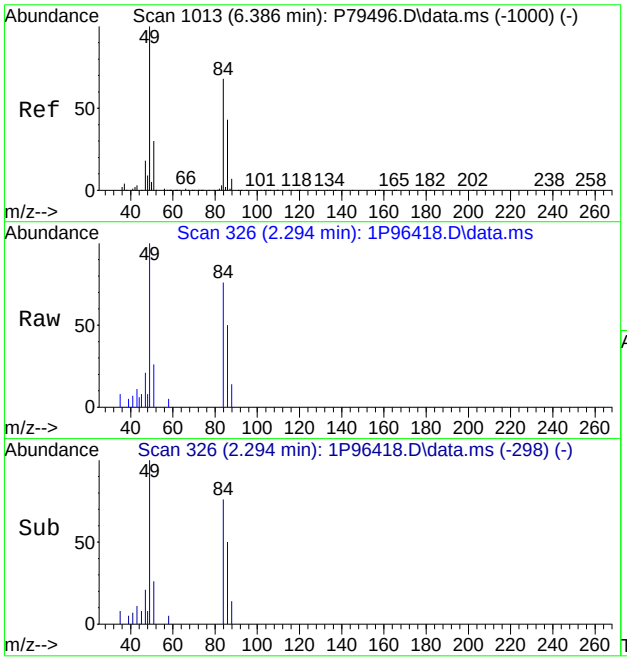


#10
Ethanol
Concen: 24.43 ug/L
RT: 1.949 min Scan# 260
Delta R.T. -0.014 min
Lab File: 1P96418.D
Acq: 16 Dec 2022 11:16 am

Tgt Ion: 45 Resp: 2115

Ion	Ratio	Lower	Upper
45	100		
46	27.6	21.0	61.0

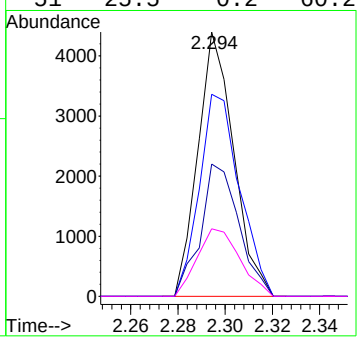


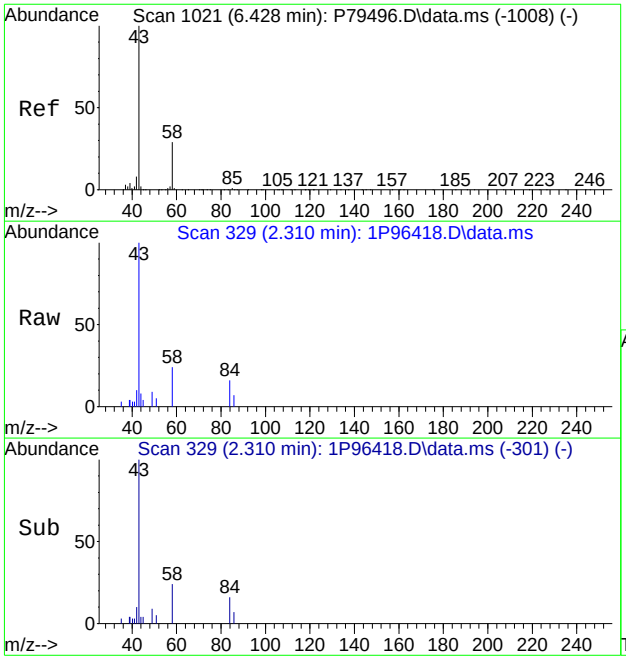


#18
Methylene Chloride
Concen: 1.11 ug/L
RT: 2.294 min Scan# 326
Delta R.T. -0.004 min
Lab File: 1P96418.D
Acq: 16 Dec 2022 11:16 am

Tgt Ion: 49 Resp: 4639

Ion	Ratio	Lower	Upper
49	100		
84	76.4	53.9	113.9
86	50.0	23.4	83.4
51	25.5	0.2	60.2

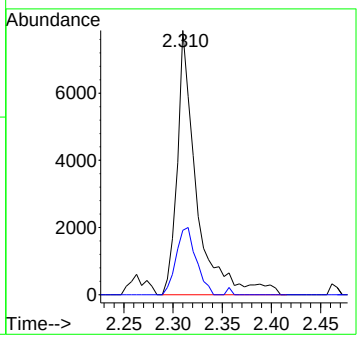


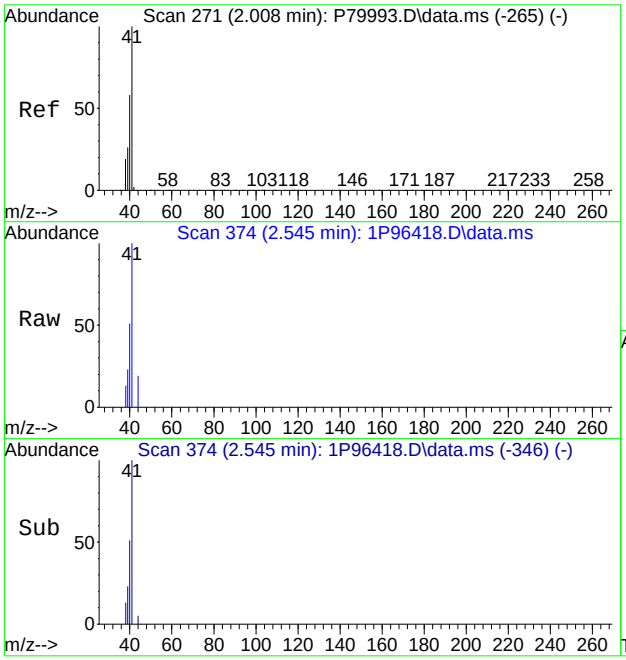


#19
Acetone
Concen: 5.31 ug/L
RT: 2.310 min Scan# 329
Delta R.T. -0.003 min
Lab File: 1P96418.D
Acq: 16 Dec 2022 11:16 am

Tgt Ion: 43 Resp: 10695

Ion	Ratio	Lower	Upper
43	100		
58	24.4	1.1	61.1

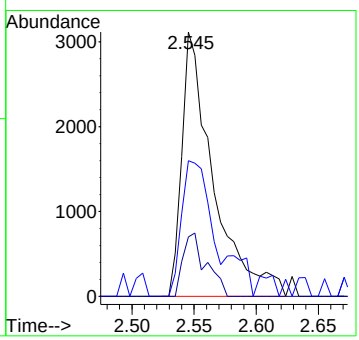


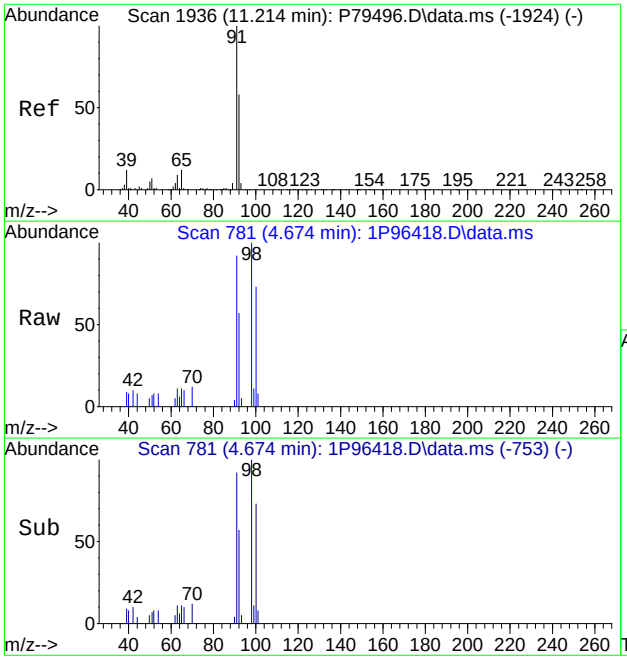


#25
Acetonitrile
Concen: 6.67 ug/L
RT: 2.545 min Scan# 374
Delta R.T. -0.004 min
Lab File: 1P96418.D
Acq: 16 Dec 2022 11:16 am

Tgt Ion: 41 Resp: 5481

Ion	Ratio	Lower	Upper
41	100		
40	51.3	31.5	71.5
39	22.5	0.0	39.8

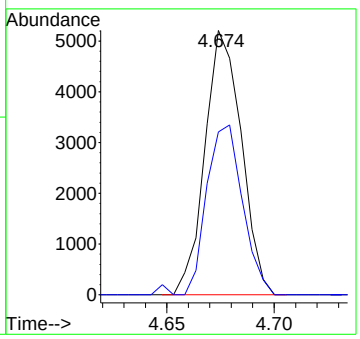




#64
Toluene
Concen: 0.41 ug/L
RT: 4.674 min Scan# 781
Delta R.T. -0.004 min
Lab File: 1P96418.D
Acq: 16 Dec 2022 11:16 am

Tgt Ion: 91 Resp: 6168

Ion	Ratio	Lower	Upper
91	100		
92	61.6	28.5	88.5



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72927.d
Acq On : 9 Dec 2022 2:05 pm
Operator : adelardl
Sample : FC1020-4
Misc : MS52980,VO2867,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 11 14:03:52 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

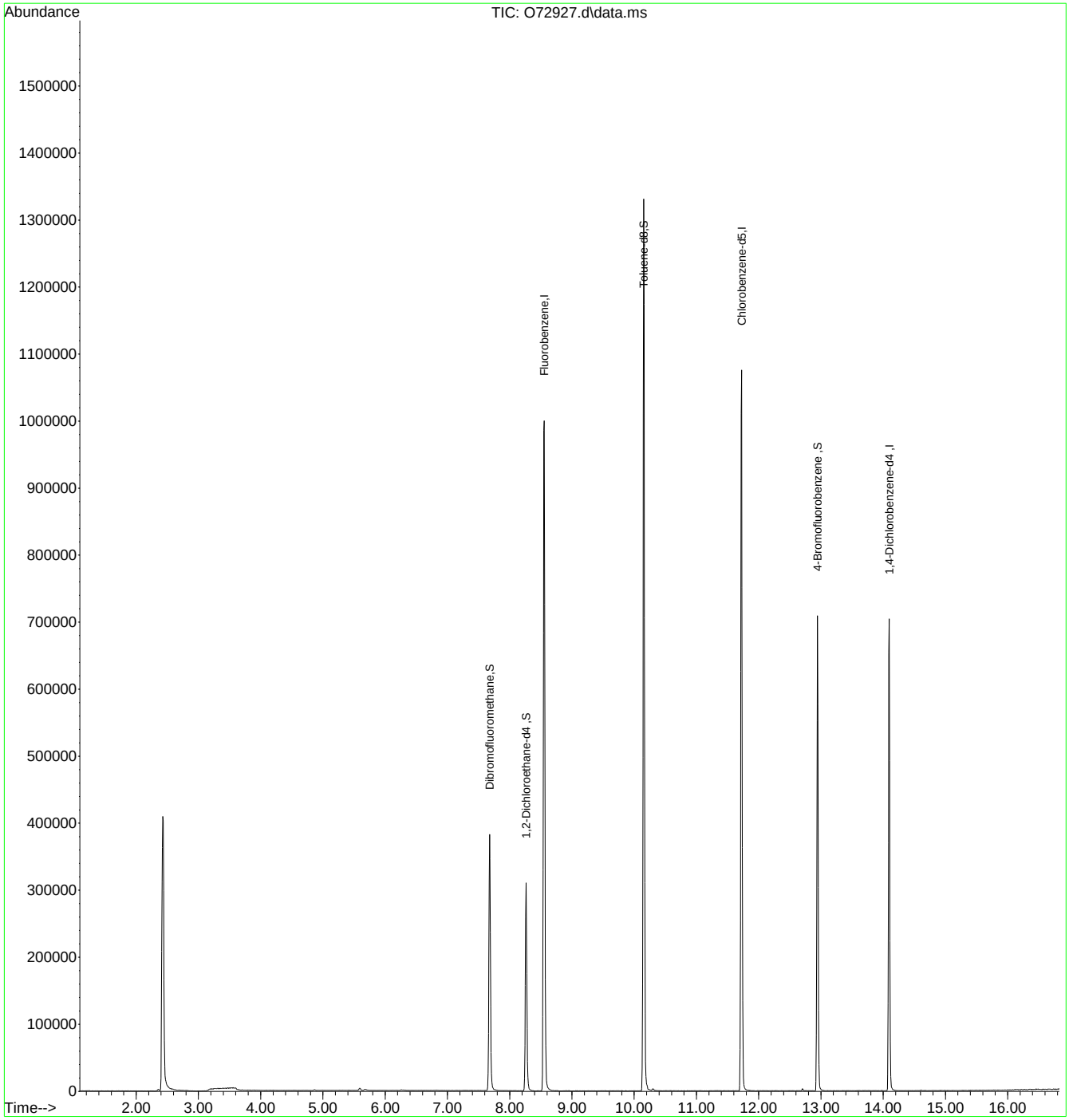
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	775010	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	514258	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	163002	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	203256	46.89	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.78%			
50) 1,2-Dichloroethane-d4	8.262	65	199277	49.61	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.22%			
63) Toluene-d8	10.152	98	745463	54.01	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 108.02%			
86) 4-Bromofluorobenzene	12.944	174	166295	51.32	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.64%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72927.d
Acq On : 9 Dec 2022 2:05 pm
Operator : adelardl
Sample : FC1020-4
Misc : MS52980,VO2867,,,,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Dec 11 14:03:52 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Quantitation Report (LSC Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-09\
Data File : Y66609.D
Acq On : 9 Dec 2022 11:14 am
Operator : joannel
Sample : MB Inst : MSVOA14-Y
Misc : MS52940,VY2767,,,,,10
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 12 11:17:15 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_11-11-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 11 14:12:42 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.496	96	579704	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.148	117	414034	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.766	152	189705	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.602	113	118074	46.03	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.06%			
49) 1,2-Dichloroethane-d4	9.210	65	158817	54.55	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.10%			
63) Toluene-d8	10.932	98	548990	51.45	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.90%			
86) 4-Bromofluorobenzene	13.006	174	155455	51.09	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.18%			

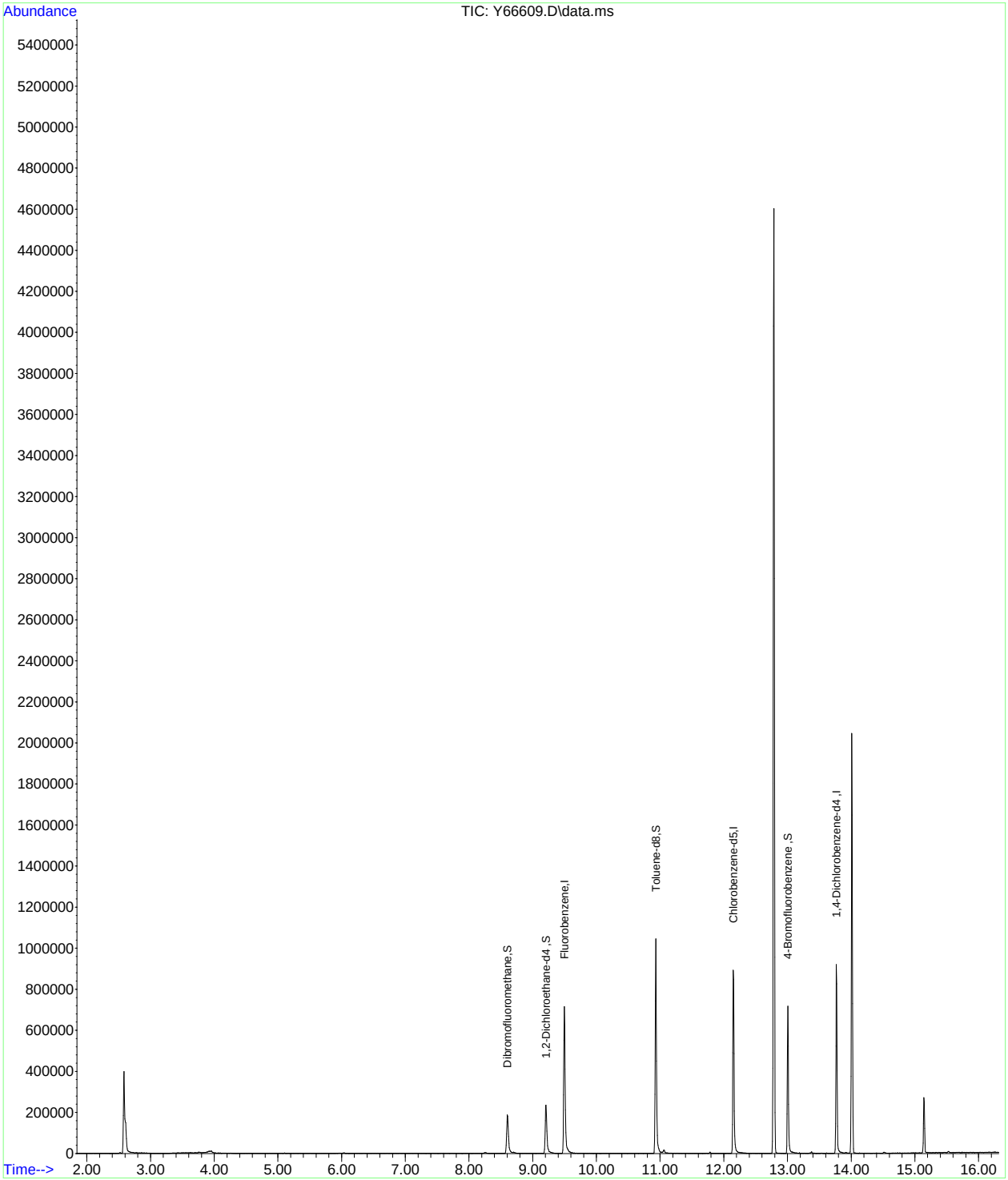
Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (LSC Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-09\
Data File : Y66609.D
Acq On : 9 Dec 2022 11:14 am
Operator : joannel
Sample : MB Inst : MSVOA14-Y
Misc : MS52940,VY2767,,,,,10
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 12 11:17:15 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_11-11-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 11 14:12:42 2022
Response via : Initial Calibration



Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72923.d
Acq On : 9 Dec 2022 12:26 pm
Operator : adelardl
Sample : MB
Misc : MS52925,VO2867,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 11 14:02:28 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

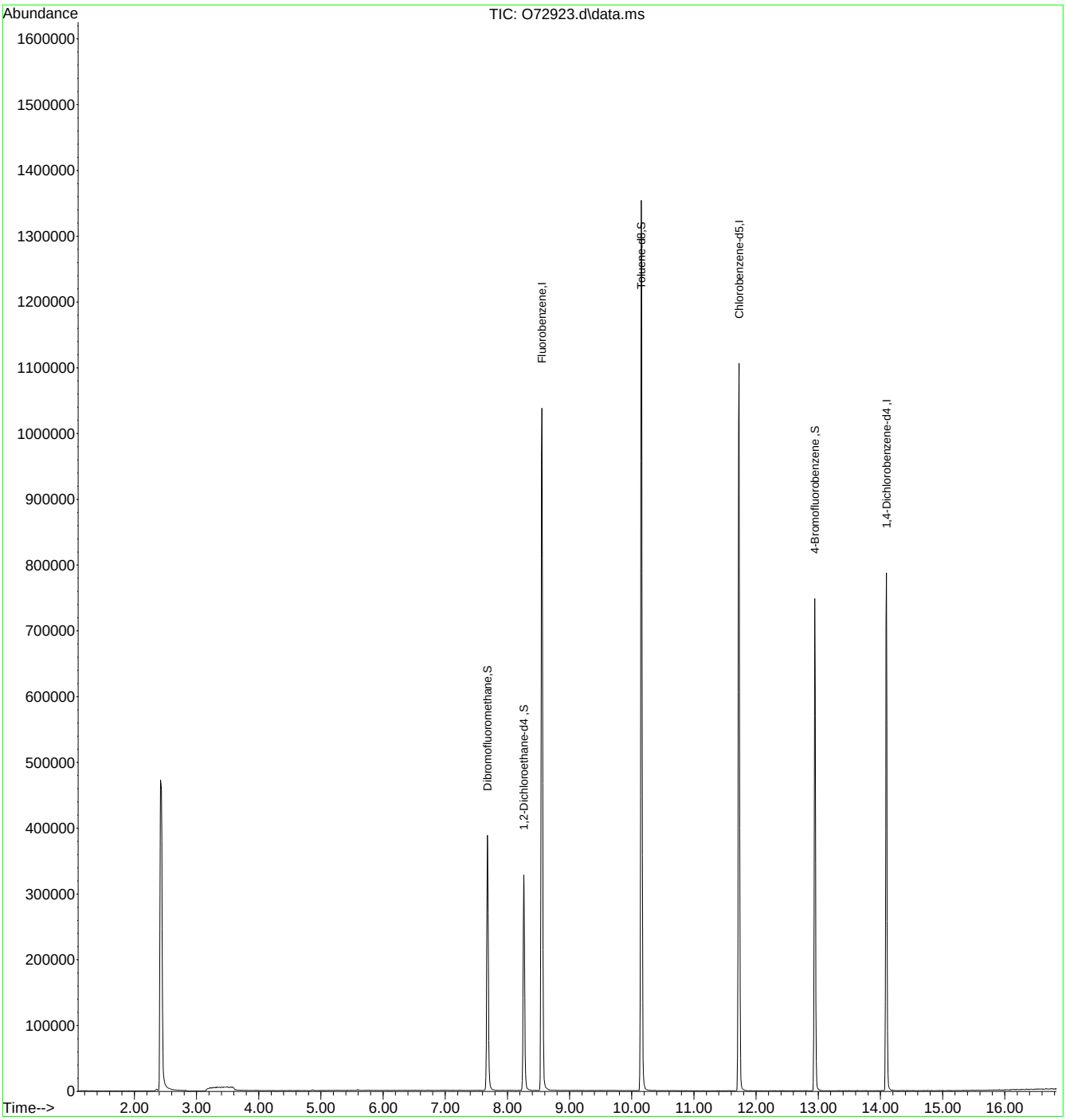
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	797478	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	522651	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	179709	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	210696	47.23	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.46%			
50) 1,2-Dichloroethane-d4	8.262	65	211632	51.20	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.40%			
63) Toluene-d8	10.152	98	758916	54.10	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 108.20%			
86) 4-Bromofluorobenzene	12.944	174	175605	49.16	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.32%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT/LSC Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72923.d
Acq On : 9 Dec 2022 12:26 pm
Operator : adelardl
Sample : MB
Misc : MS52925,VO2867,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 11 14:02:28 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36119.d
Acq On : 14 Dec 2022 10:55 am
Operator : courtnef
Sample : MB Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 03:31:57 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

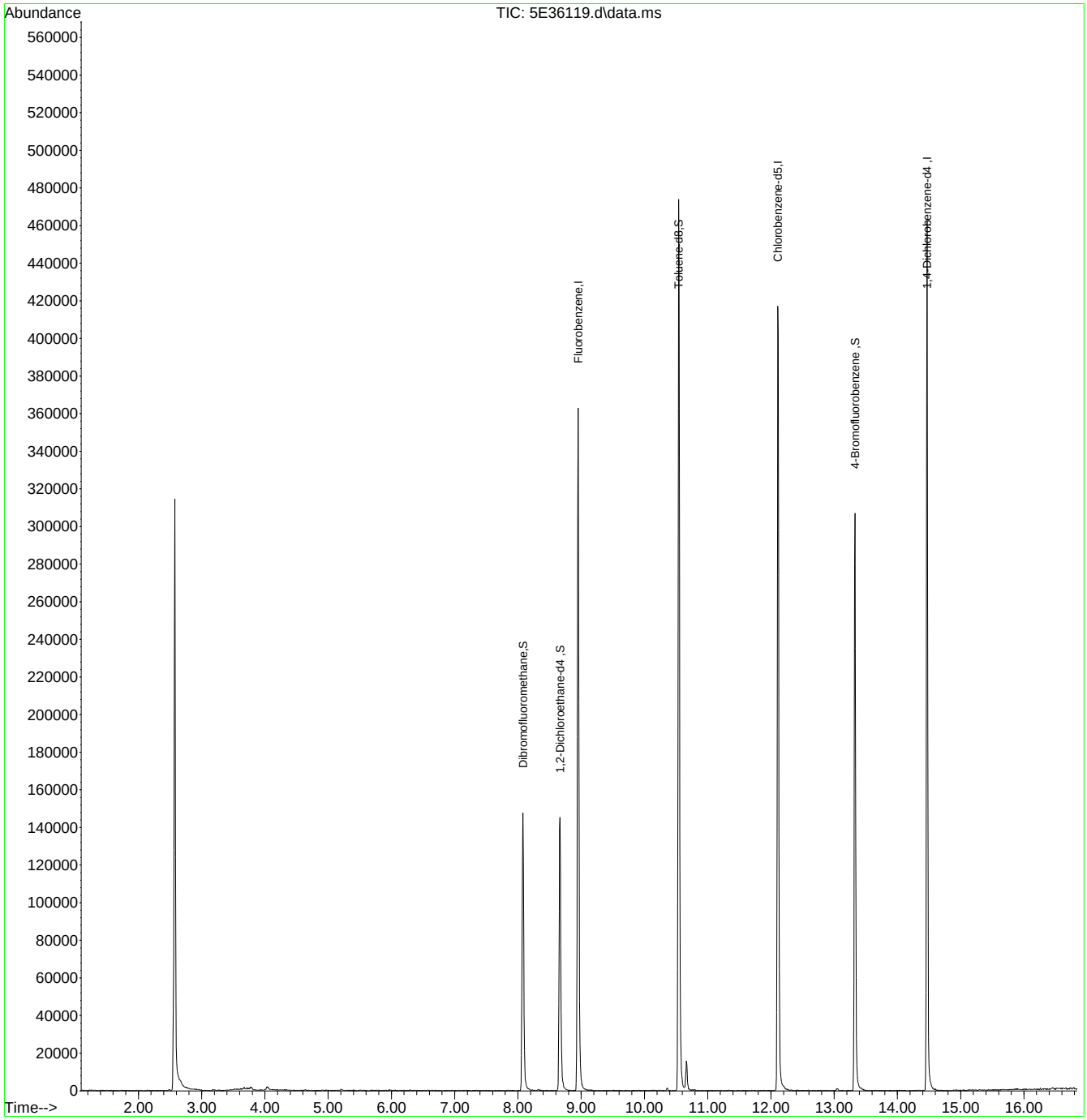
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	294774	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	217534	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	101684	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	82741	50.66	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.32%			
49) 1,2-Dichloroethane-d4	8.665	65	93857	50.05	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.10%			
62) Toluene-d8	10.542	98	290489	48.93	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 97.86%			
86) 4-Bromofluorobenzene	13.328	95	85734	50.69	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.38%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36119.d
Acq On : 14 Dec 2022 10:55 am
Operator : courtnef
Sample : MB Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 03:31:57 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96414.D
Acq On : 16 Dec 2022 10:12 am
Operator : courtnef
Sample : MB Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:39:56 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

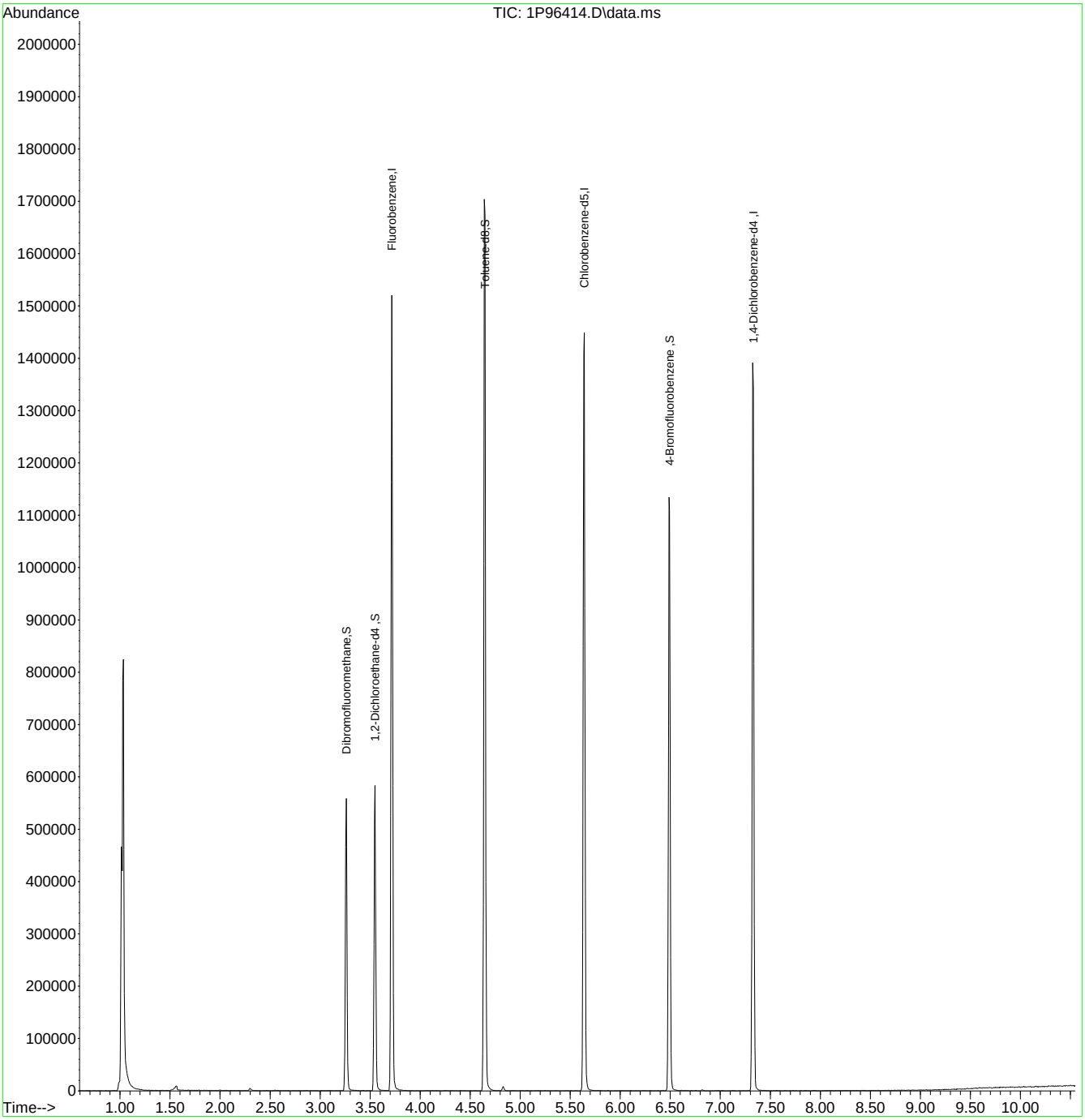
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	815536	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.641	117	580754	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	266440	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	194514	53.02	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.04%			
49) 1,2-Dichloroethane-d4	3.549	65	269225	54.27	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 108.54%			
63) Toluene-d8	4.647	98	784093	46.87	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 93.74%			
86) 4-Bromofluorobenzene	6.493	174	217577	50.33	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.66%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96414.D
Acq On : 16 Dec 2022 10:12 am
Operator : courtnef
Sample : MB Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:39:56 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/12/22 02:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52940,VY2767,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:57:47 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.494	96	667893	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.152	117	476670	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.771	152	223325	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.600	113	137179	49.22	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.44%			
49) 1,2-Dichloroethane-d4	9.208	65	172344	49.37	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.74%			
63) Toluene-d8	10.930	98	630521	50.81	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.62%			
86) 4-Bromofluorobenzene	13.004	174	176519	51.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.14%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.851	85	77041	23.13	ug/L	100
3) Acrolein	5.576	56	85028	99.40	ug/L	94
4) Chloromethane	3.173	50	103829	23.37	ug/L	99
5) 1,3-butadiene	3.344	39	127020	34.46	ug/L	95
6) Vinyl Chloride	3.313	62	96864	24.42	ug/L	97
7) Bromomethane	3.836	94	41499	22.63	ug/L	99
8) Chloroethane	4.031	64	48875	27.09	ug/L	92
9) Trichlorofluoromethane	4.244	101	110874	28.51	ug/L	90
10) Ethyl Ether	4.749	59	76577	23.86	ug/L	95
11) Ethanol	4.998	45	47069	496.25	ug/L	97
12) 1,2-Dichlorotrifluoroe...	5.041	67	98064	27.32	ug/L	95
13) 1,1-Dichloroethene	5.047	61	135288	29.26	ug/L	96
14) Freon 113	5.108	101	83618	29.58	ug/L	92
15) Carbon Disulfide	5.102	76	226531	27.09	ug/L	99
16) Iodomethane	5.278	142	45363	18.93	ug/L	98
17) Allyl chloride	5.789	41	125071	28.61	ug/L	96
18) Methylene Chloride	5.959	49	128498	23.75	ug/L	95
19) Acetone	6.039	43	228503	122.49	ug/L	98
20) Methyl acetate	6.227	43	503132	132.86	ug/L	99
21) trans-1,2-Dichloroethene	6.215	61	124589	27.56	ug/L	95
22) Hexane	6.331	56	70046m	31.12	ug/L	
23) Methyl Tert Butyl Ether	6.379	73	246190	24.76	ug/L	85
24) Tert Butyl Alcohol	6.531	59	236289	237.13	ug/L	93
25) Acetonitrile	6.787	41	168350	216.00	ug/L	97
26) Di-isopropyl ether	6.988	45	299152	26.37	ug/L	98
27) Chloroprene	7.176	53	119198	30.54	ug/L	97
28) 1,1-Dichloroethane	7.213	63	168887	27.68	ug/L	96
29) Acrylonitrile	7.298	53	232411	125.29	ug/L	92
30) ETBE	7.578	59	267266	24.50	ug/L	96
31) Vinyl acetate	7.602	43	1104646	138.94	ug/L	99
32) cis-1,2-Dichloroethene	8.028	96	97969	26.79	ug/L	92
33) 2,2-Dichloropropane	8.162	77	118076	26.55	ug/L	94
34) Bromochloromethane	8.289	128	41632	26.93	ug/L	95
35) Cyclohexane	8.296	56	175603	31.04	ug/L	96
36) Chloroform	8.375	83	149706	26.01	ug/L	97
37) Ethyl acetate	8.515	43	680974	125.88	ug/L	99
38) Tetrahydrofuran	8.588	42	57711	25.49	ug/L	98
40) Carbon Tetrachloride	8.551	117	105130	29.40	ug/L	98
41) 1,1,1-Trichloroethane	8.630	97	139808	28.83	ug/L	98
42) 2-Butanone	8.746	43	357132	115.69	ug/L	99
43) 1,1-Dichloropropene	8.782	75	126103	28.55	ug/L	96
44) tert-Butyl formate	8.892	59	197790	91.59	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52940,VY2767,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:57:47 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Propionitrile	9.080	54	221969	230.65	ug/L		92
46) Methacrylonitrile	9.099	41	741068	236.09	ug/L		99
47) Benzene	9.056	78	383249	25.98	ug/L		99
48) TAME	9.165	73	251695	25.77	ug/L		98
50) Isobutyl Alcohol	9.269	42	116890	460.65	ug/L		96
51) 1,2-Dichloroethane	9.281	62	122228	24.40	ug/L		97
52) Tert Amyl Alcohol	9.372	59	197206m	229.69	ug/L		
53) Trichloroethene	9.670	95	97924	25.98	ug/L		96
54) Methylcyclohexane	9.664	83	154959	31.35	ug/L		99
55) Dibromomethane	10.090	93	51591	25.70	ug/L		96
56) 1,2-Dichloropropane	10.169	63	93536	25.34	ug/L		95
57) Bromodichloromethane	10.230	83	103196	26.25	ug/L		93
58) Methyl methacrylate	10.346	41	88484	25.62	ug/L		98
59) 1,4-Dioxane	10.406	88	50371	526.96	ug/L		99
60) 2-Chloroethyl vinyl ether	10.705	63	261932	113.53	ug/L		97
61) cis-1,3-Dichloropropene	10.778	75	134716	26.63	ug/L		95
64) Toluene	10.978	91	418258	26.43	ug/L		100
65) 2-Nitropropane	11.167	41	165612	125.33	ug/L		93
66) 4-Methyl-2-pentanone	11.264	43	736358	120.13	ug/L		99
67) trans-1,3-Dichloropropene	11.307	75	124397	29.49	ug/L		96
68) Tetrachloroethene	11.301	166	103875	27.59	ug/L		96
69) Ethyl methacrylate	11.398	69	108180	23.85	ug/L		94
70) 1,1,2-Trichloroethane	11.441	83	68959	25.79	ug/L		97
71) Dibromochloromethane	11.593	129	76149	25.15	ug/L		98
72) 1,3-Dichloropropane	11.660	76	138465	23.53	ug/L		97
73) 1,2-Dibromoethane	11.787	107	83548	26.21	ug/L		99
74) 3,3-dimethyl-1-butanol	11.867	57	1089263m	988.21	ug/L		
75) 2-hexanone	11.897	43	588331	115.36	ug/L		98
76) 1-Chlorohexane	12.110	91	126336	30.13	ug/L		97
77) Ethylbenzene	12.159	91	465069	25.84	ug/L		96
78) Chlorobenzene	12.165	112	255572	26.07	ug/L		95
79) 1,1,1,2-Tetrachloroethane	12.201	131	85797	28.00	ug/L		96
80) m,p-Xylene	12.256	91	714235	51.79	ug/L		96
81) o-Xylene	12.572	91	350095	26.22	ug/L		99
82) Styrene	12.609	104	263118	25.86	ug/L		99
83) Bromoform	12.663	173	49675	25.81	ug/L		95
84) Isopropylbenzene	12.779	105	420949	26.81	ug/L		97
87) cis-1,4-Dichloro-2-butene	13.028	53	19229	14.28	ug/L	#	71
88) n-Propylbenzene	13.065	91	507928	27.02	ug/L		98
89) Bromobenzene	13.095	156	99651	24.86	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.120	83	129848	25.63	ug/L		97
91) 1,3,5-Trimethylbenzene	13.181	105	336070	25.59	ug/L		98
92) 2-Chlorotoluene	13.205	91	332962	26.44	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.235	53	23941	20.13	ug/L	#	14
94) 1,2,3-Trichloropropane	13.229	110	40529	22.94	ug/L		94
95) Cyclohexanone	13.290	55	39727	94.09	ug/L		95
96) 4-Chlorotoluene	13.314	91	304911	25.79	ug/L		98
97) tert-Butylbenzene	13.412	91	179276	25.85	ug/L		97
98) 1,2,4-Trimethylbenzene	13.454	105	357612	26.99	ug/L		99
99) Pentachloroethane	13.460	167	48185	27.36	ug/L		87
100) sec-Butylbenzene	13.527	105	405554	27.87	ug/L		99
101) 4-Isopropyltoluene	13.612	119	355606	27.71	ug/L		99
102) 1,3-Dichlorobenzene	13.722	146	193036	26.53	ug/L		98
103) 1,2,3-Trimethylbenzene	13.758	105	369292	27.64	ug/L		96
104) 1,4-Dichlorobenzene	13.783	146	195124	24.82	ug/L		96
105) n-Butylbenzene	13.898	92	165887	24.81	ug/L		97
106) Benzyl Chloride	13.929	126	42568	23.24	ug/L	#	89
107) 1,2-Dichlorobenzene	14.069	146	181766	25.17	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52940,VY2767,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:57:47 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dibromo-3-Chloropr...	14.598	75	26967	23.85	ug/L	94
109) Hexachlorobutadiene	15.006	225	42505	28.78	ug/L	97
110) 1,2,4-Trichlorobenzene	15.060	180	107894	24.58	ug/L	91
111) Naphthalene	15.310	128	416303	25.52	ug/L	99
112) 1,2,3-Trichlorobenzene	15.456	180	108203	25.70	ug/L	95

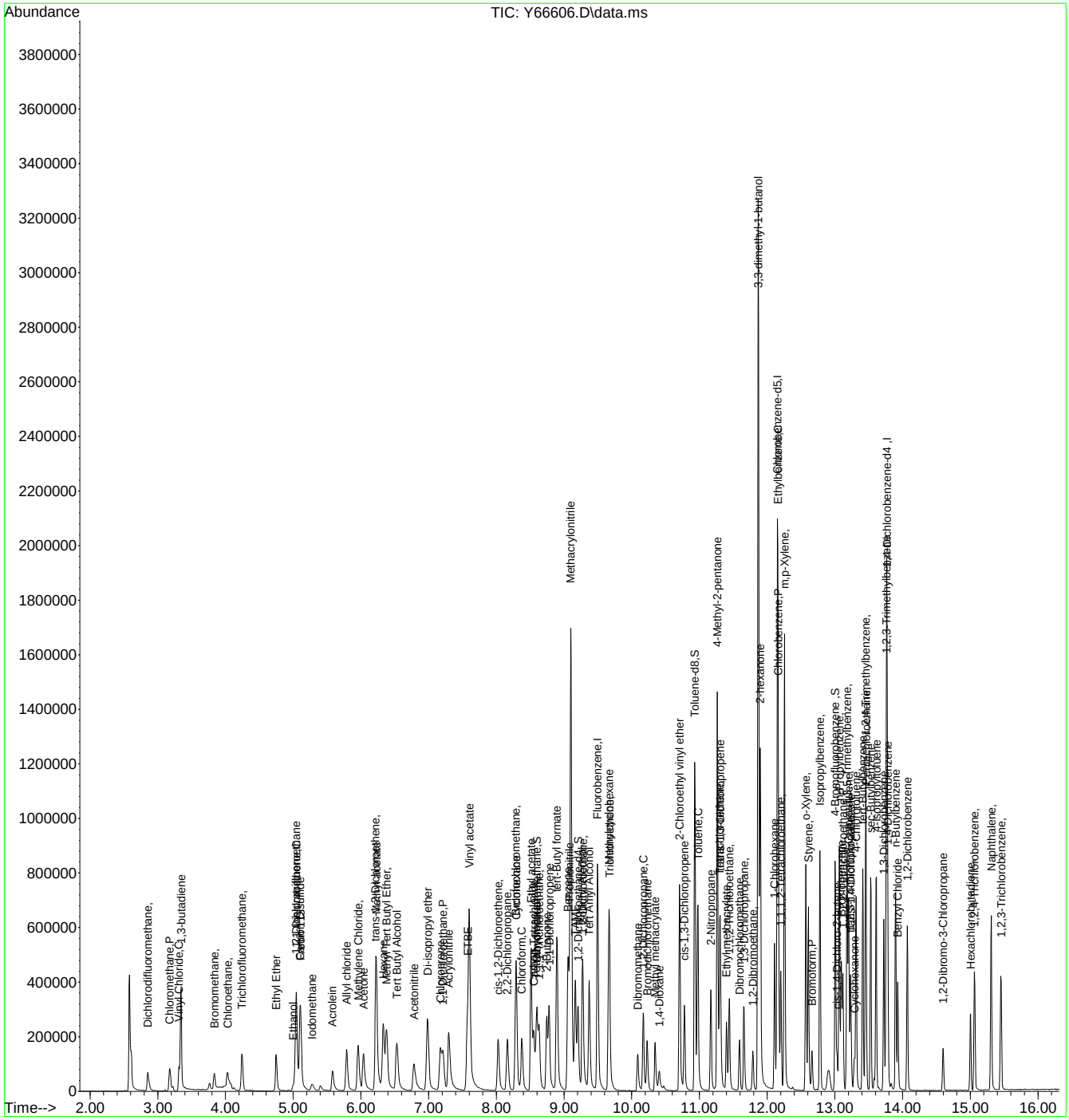
(#) = qualifier out of range (m) = manual integration (+) = signals summed

7.3.1
7

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52940,VY2767,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:57:47 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Manual Integration Approval Summary

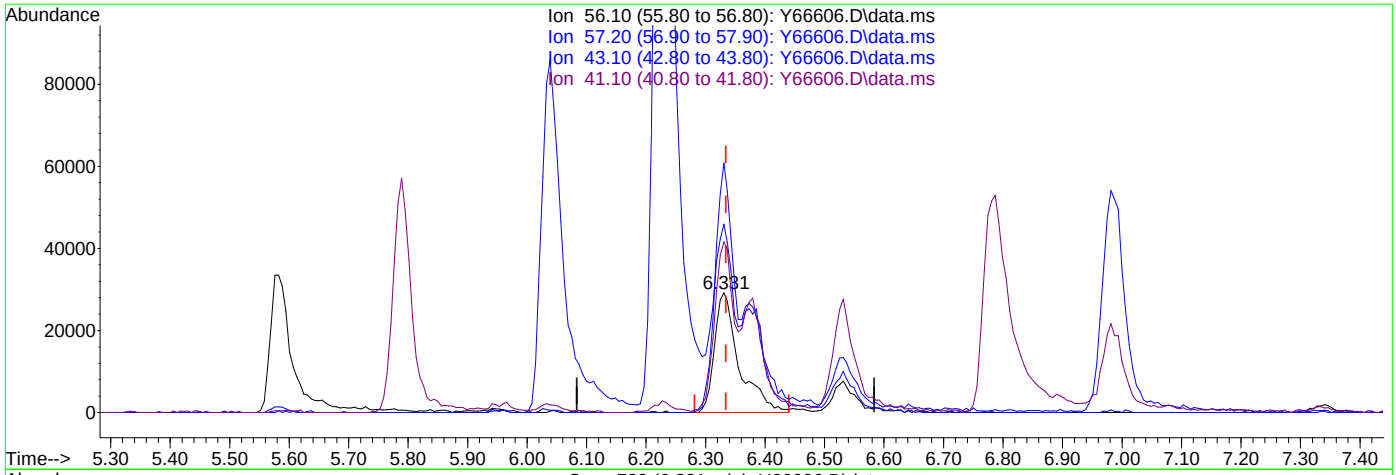
Sample Number: VY2765-BS
Lab FileID: Y66606.D
Injection Time: 12/09/22 10:02
Method: SW846 8260D
Analyst approved: 12/11/22 21:02 Celine Celis
Supervisor approved: 12/12/22 02:53 Jennifer Fereira

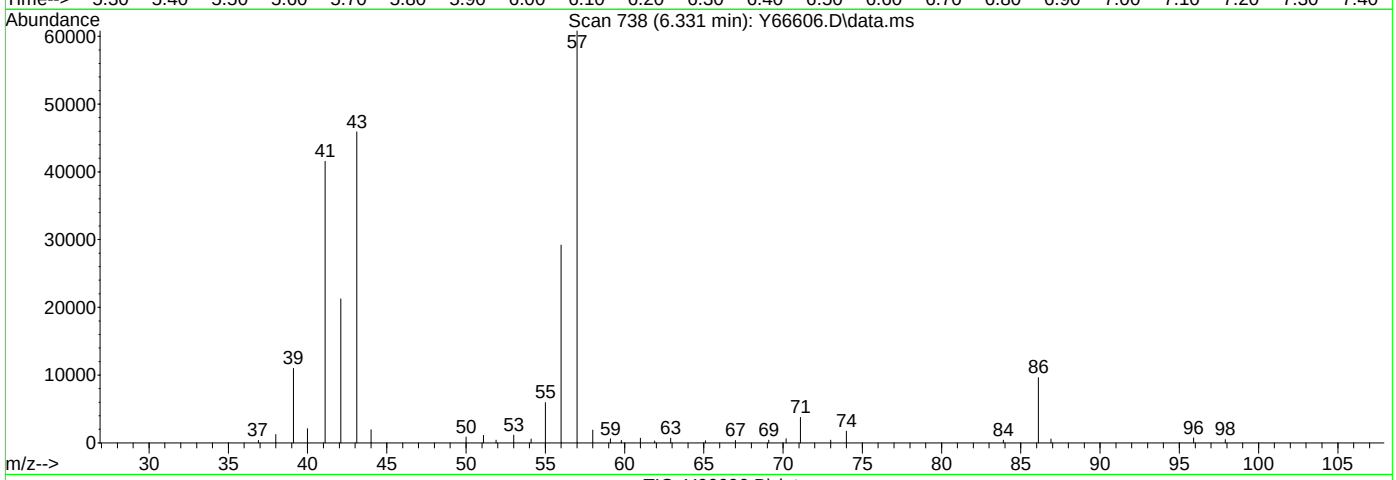
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(22) Hexane

6.331min (-0.003) 37.68ug/L

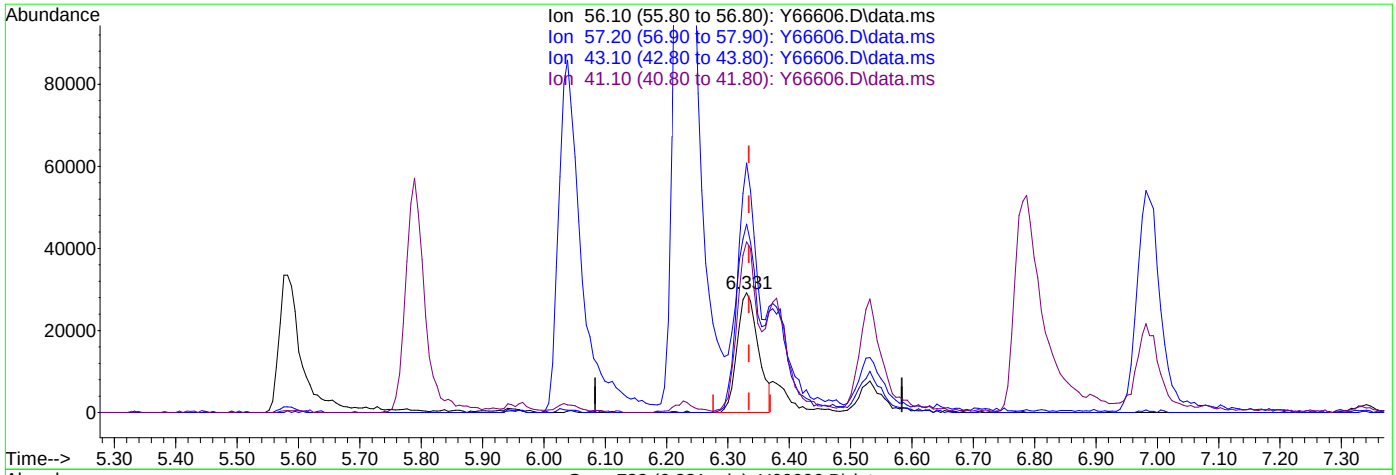
response 84824

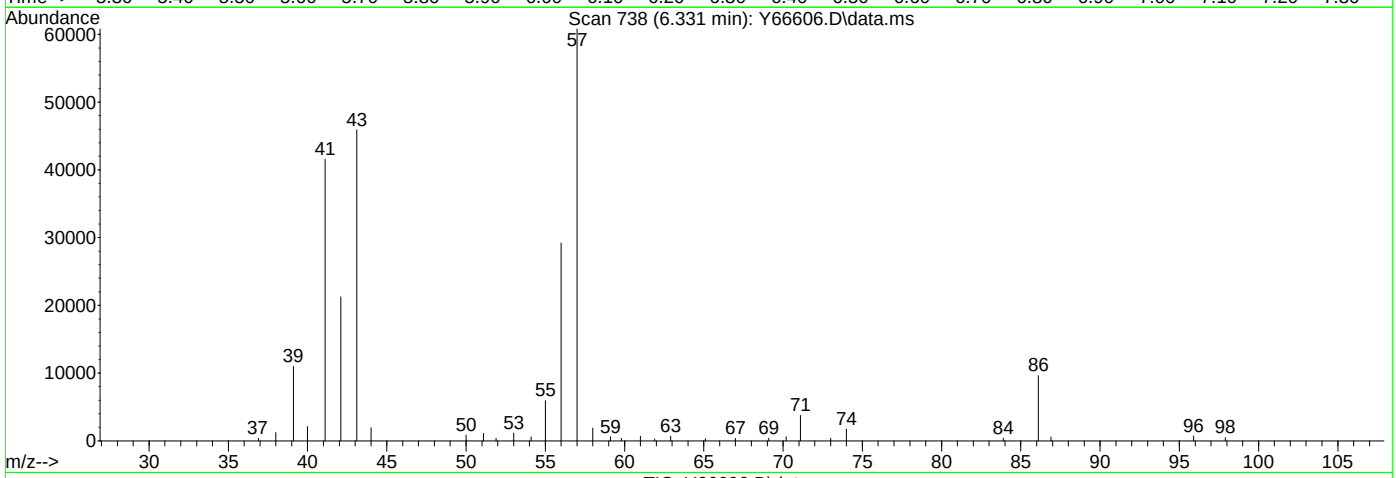
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	207.50
43.10	148.00	146.15
41.10	134.50	140.21

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(22) Hexane

6.331min (-0.003) 31.12ug/L m

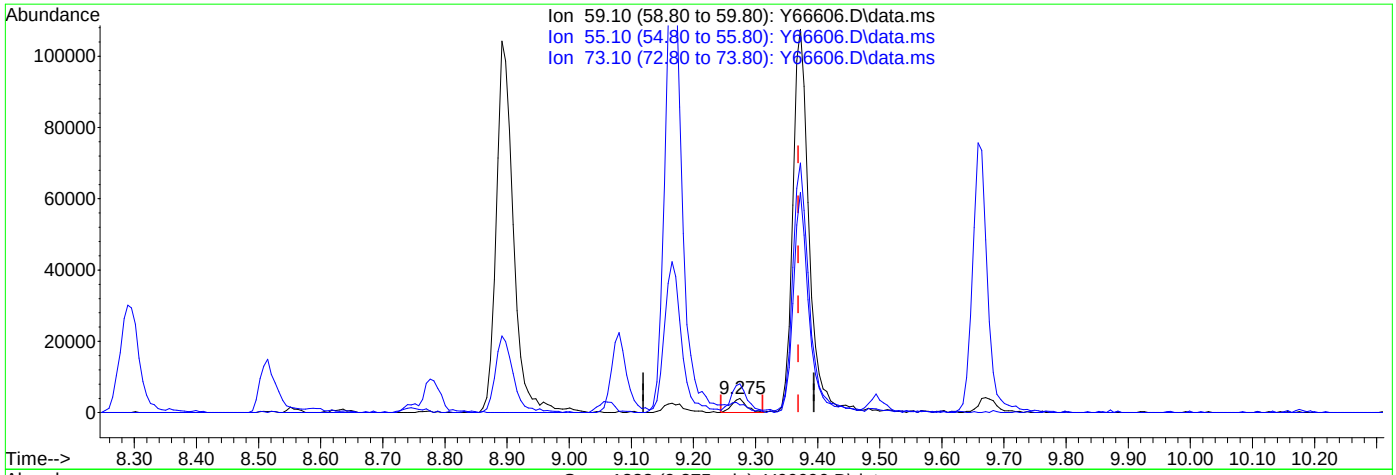
response 70046

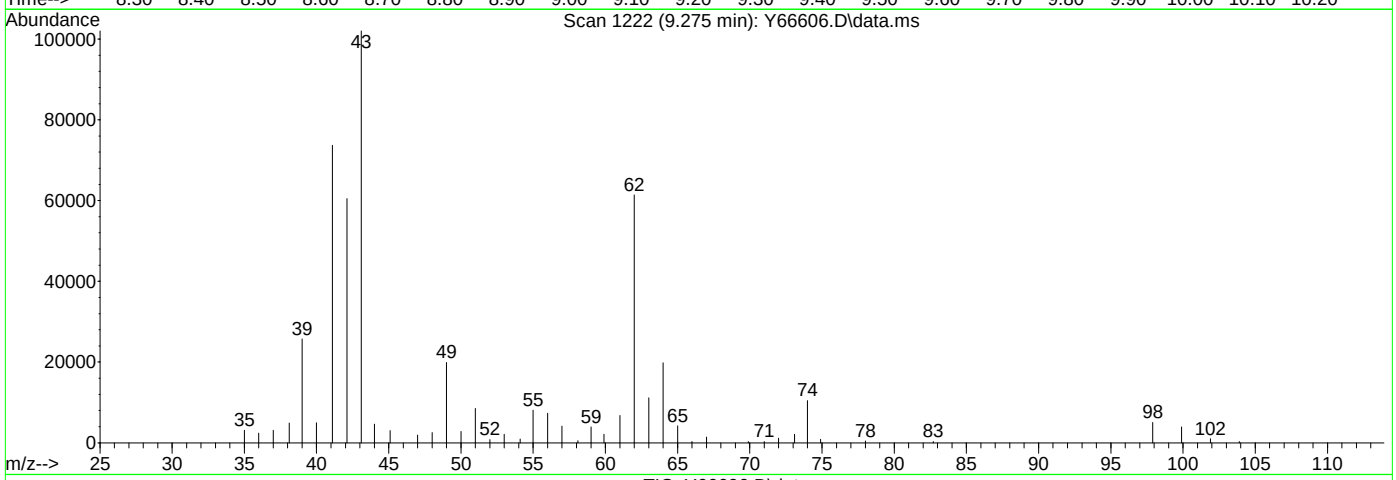
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	208.42
43.10	148.00	157.26
41.10	134.50	142.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(52) Tert Amyl Alcohol

9.275min (-0.094) 8.02ug/L

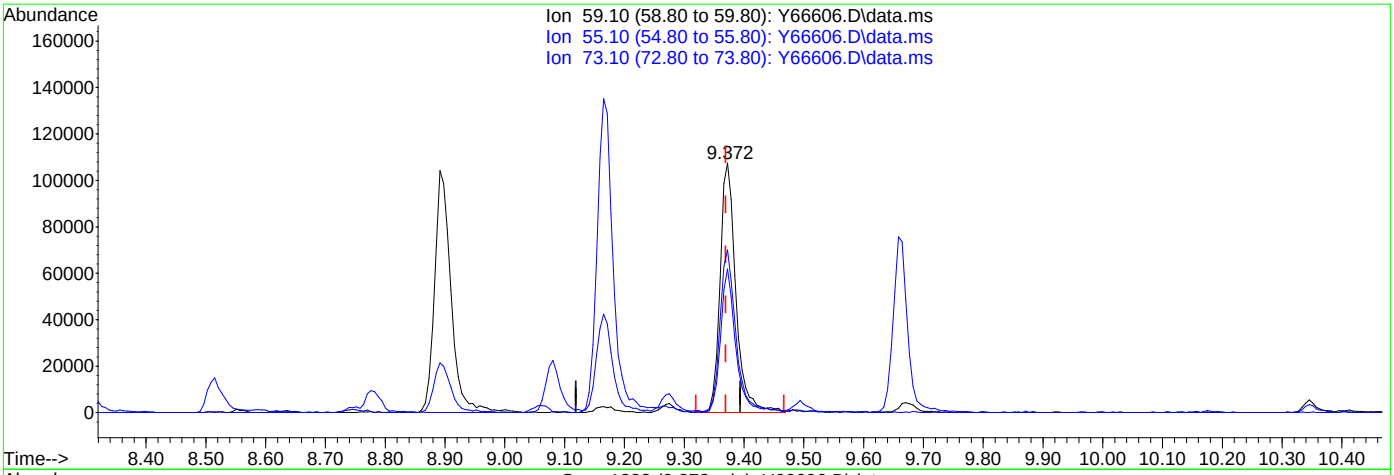
response 6428

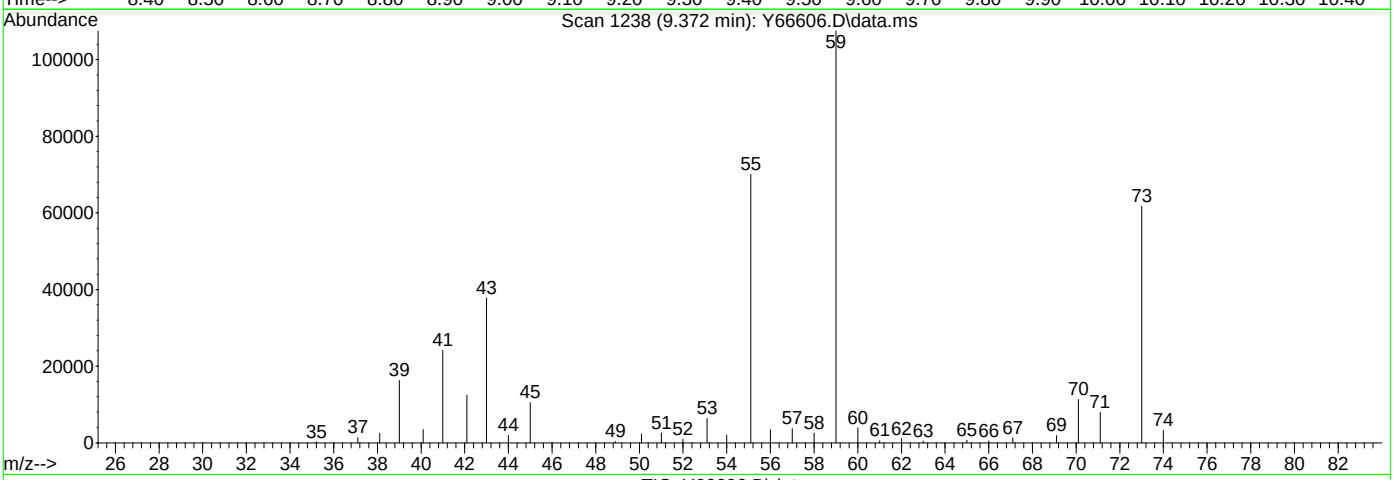
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	188.11#
73.10	54.90	45.41
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(52) Tert Amyl Alcohol

9.372min (+0.003) 229.69ug/L m

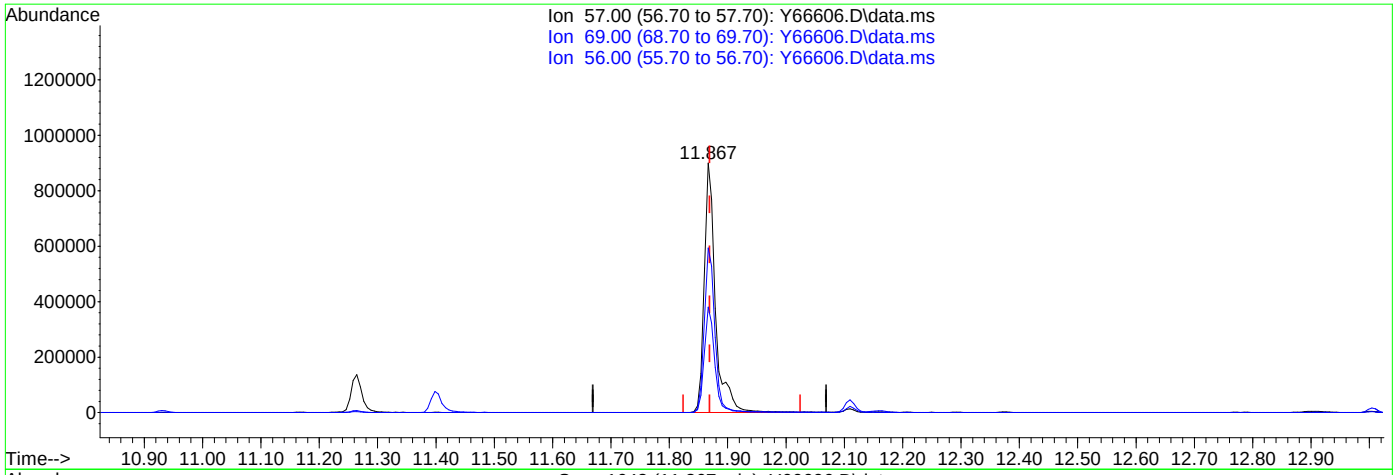
response 197206

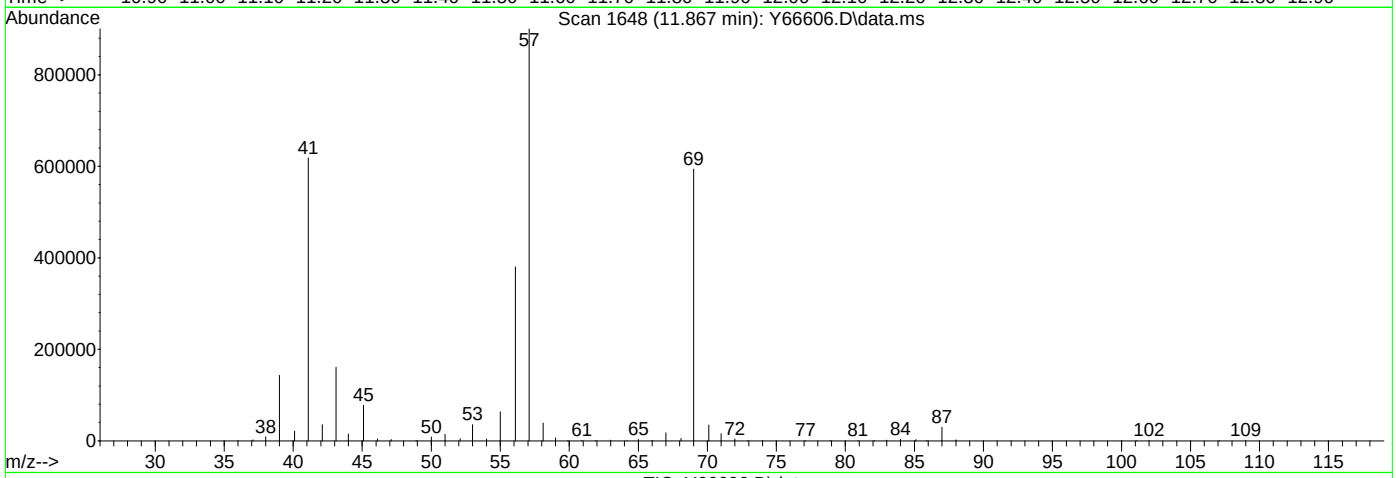
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	65.16
73.10	54.90	57.47
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.867min (-0.002) 1098.28ug/L

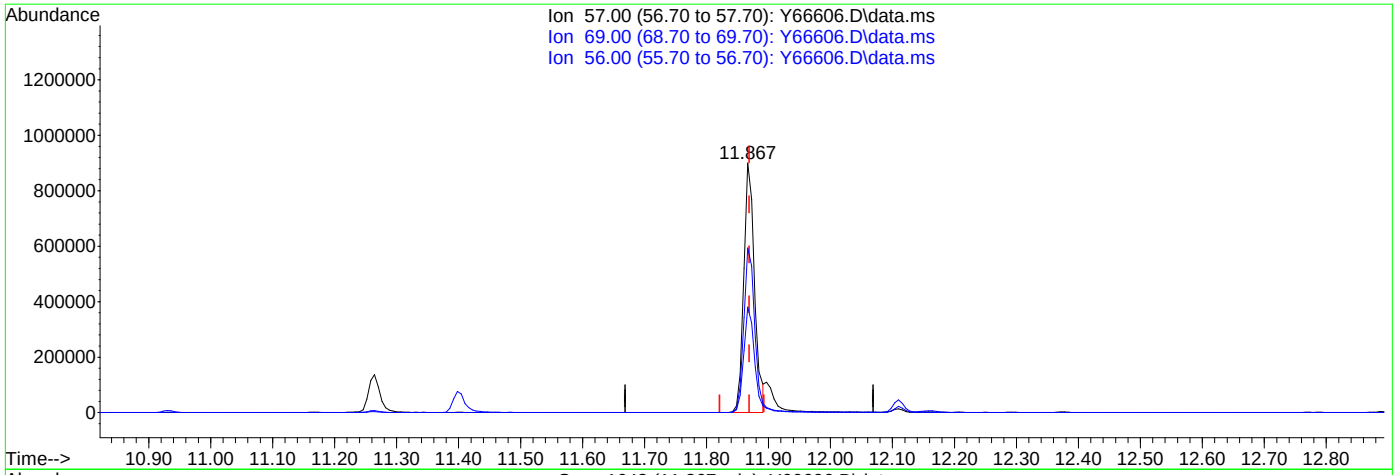
response 1220186

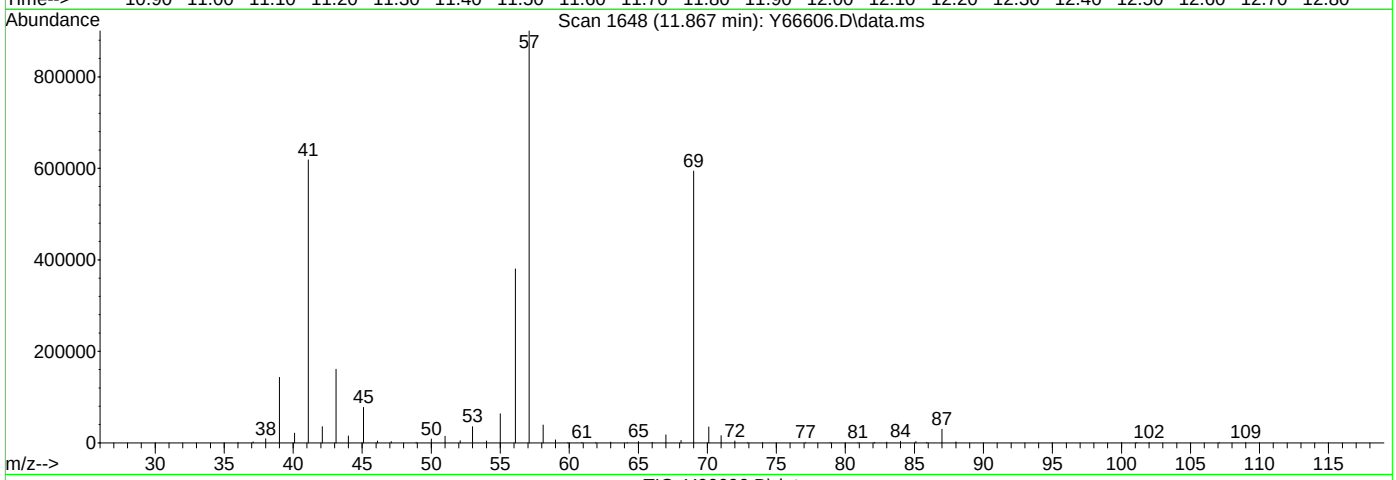
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.87
56.00	40.70	42.24
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66606.D
Acq On : 9 Dec 2022 10:02 am
Operator : joannel
Sample : BS
Misc : MS52862,VY2765,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 20:49:41 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66606.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.867min (-0.002) 988.21ug/L m

response 1089263

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.93
56.00	40.70	42.24
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/14/22 00:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:55:05 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.549	96	844259	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	565648	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	200688	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	228407	48.37	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.74%			
50) 1,2-Dichloroethane-d4	8.262	65	220743	50.44	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.88%			
63) Toluene-d8	10.152	98	807754	53.21	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 106.42%			
86) 4-Bromofluorobenzene	12.944	174	197365	49.47	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	107264	18.12	ug/L	96
3) Chloromethane	3.019	50	103822	20.00	ug/L	99
4) 1,3-butadiene	3.184	39	161268	30.93	ug/L	97
5) Vinyl Chloride	3.154	62	118902	22.66	ug/L	99
6) Bromomethane	3.678	94	49921	22.28	ug/L	98
7) Chloroethane	3.879	64	69772	21.81	ug/L	97
8) Trichlorofluoromethane	4.098	101	180079	22.42	ug/L	98
9) Ethyl Ether	4.550	59	80935	20.79	ug/L	98
10) Ethanol	4.775	45	7857	437.16	ug/L	93
11) 1,2-Dichlorotrifluoroe...	4.824	67	133723	22.48	ug/L	99
12) 1,1-Dichloroethene	4.824	61	155865	21.32	ug/L	99
13) Freon 113	4.879	101	115638	23.25	ug/L	98
14) Carbon Disulfide	4.861	76	324844	23.03	ug/L	100
15) Iodomethane	5.019	142	43668	27.88	ug/L	94
16) Acrolein	5.275	56	78941	97.07	ug/L	99
17) Allyl chloride	5.452	41	159976	24.53	ug/L	99
18) Methylene Chloride	5.586	49	141490	20.52	ug/L	99
19) Acetone	5.653	43	129285	108.81	ug/L	97
20) Methyl acetate	5.805	43	361194	116.95	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	150581	21.30	ug/L	96
22) Hexane	5.885	56	81505m	24.55	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	272683	20.97	ug/L	99
24) Tert Butyl Alcohol	6.025	59	61489	224.71	ug/L	98
25) Acetonitrile	6.232	41	97688	203.99	ug/L	97
26) Di-isopropyl ether	6.366	45	343535	21.69	ug/L	100
27) Chloroprene	6.513	53	159427	27.28	ug/L	99
28) 1,1-Dichloroethane	6.543	63	189125	22.05	ug/L	98
29) Acrylonitrile	6.604	52	148148	109.71	ug/L	97
30) ETBE	6.799	59	297908	21.10	ug/L	99
31) Vinyl acetate	6.817	43	1205857	133.97	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	111890	21.80	ug/L	98
33) 2,2-Dichloropropane	7.299	77	130715	21.62	ug/L	98
34) Bromochloromethane	7.403	128	62549	22.90	ug/L	96
35) Cyclohexane	7.409	56	182707	24.78	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:55:05 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	192375	21.35	ug/L	97
37) Ethyl acetate	7.586	43	482718	117.95	ug/L	99
38) Tetrahydrofuran	7.671	42	26986	21.75	ug/L	98
40) Carbon Tetrachloride	7.640	117	129093	24.34	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	166488	23.25	ug/L	99
42) 2-Butanone	7.811	43	216381	116.86	ug/L	95
43) 1,1-Dichloropropene	7.848	75	143336	21.71	ug/L	98
44) tert-Butyl formate	7.957	59	190134	87.45	ug/L	91
45) Propionitrile	8.140	54	131392	230.16	ug/L	92
46) Methacrylonitrile	8.159	41	776998	233.83	ug/L	99
47) Benzene	8.116	78	405445	21.46	ug/L	99
48) TAME	8.214	73	266341	21.79	ug/L	98
49) Isobutyl alcohol	8.299	43	49576m	420.27	ug/L	
51) 1,2-Dichloroethane	8.335	62	160380	20.88	ug/L	99
52) Tert Amyl Alcohol	8.402	59	41576	221.15	ug/L	93
53) Trichloroethene	8.732	95	116556	21.82	ug/L	96
54) Methylcyclohexane	8.726	83	176340	25.52	ug/L	97
55) Dibromomethane	9.177	93	72487	20.83	ug/L	98
56) 1,2-Dichloropropane	9.274	63	100867	20.48	ug/L	99
57) Bromodichloromethane	9.329	83	139493	22.71	ug/L	98
58) Methyl methacrylate	9.457	41	92778	25.77	ug/L	98
59) 1,4-Dioxane	9.536	88	11451	334.99	ug/L	90
60) 2-Chloroethyl vinyl ether	9.878	63	376485	116.48	ug/L	99
61) cis-1,3-Dichloropropene	9.963	75	150491	22.13	ug/L	95
64) Toluene	10.207	91	437750	24.19	ug/L	98
65) 2-Nitropropane	10.445	41	64217	151.95	ug/L	100
66) 4-Methyl-2-pentanone	10.561	43	521919	129.01	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	141561	27.02	ug/L	89
68) Tetrachloroethene	10.603	166	127192	24.81	ug/L	99
69) Ethyl methacrylate	10.731	69	110233	26.38	ug/L	98
70) 1,1,2-Trichloroethane	10.780	83	85266	24.45	ug/L	99
71) Dibromochloromethane	10.969	129	104429	25.83	ug/L	96
72) 1,3-Dichloropropane	11.067	76	157499	22.41	ug/L	99
73) 1,2-Dibromoethane	11.231	107	103395	24.64	ug/L	99
74) 3,3-dimethyl-1-butanol	11.341	57	164138	1296.58	ug/L	100
75) 2-hexanone	11.396	43	350921	130.84	ug/L	99
76) 1-Chlorohexane	11.682	91	140877m	27.50	ug/L	
77) Ethylbenzene	11.743	91	501903	24.62	ug/L	100
78) Chlorobenzene	11.743	112	298272	24.40	ug/L	100
79) 1,1,1,2-Tetrachloroethane	11.792	131	98841	26.96	ug/L	97
80) m,p-Xylene	11.884	91	772165	49.57	ug/L	98
81) o-Xylene	12.322	91	383263	25.07	ug/L	100
82) Styrene	12.377	104	288330	25.50	ug/L	99
83) Bromoform	12.432	173	62392	27.33	ug/L	98
84) Isopropylbenzene	12.627	105	462457	25.64	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	32927	26.00	ug/L	96
88) n-Propylbenzene	13.048	91	558001	26.87	ug/L	98
89) Bromobenzene	13.066	156	125860	24.10	ug/L	99
90) 1,1,2,2-Tetrachloroethane	13.121	83	127872	26.20	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	378512	25.83	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:55:05 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

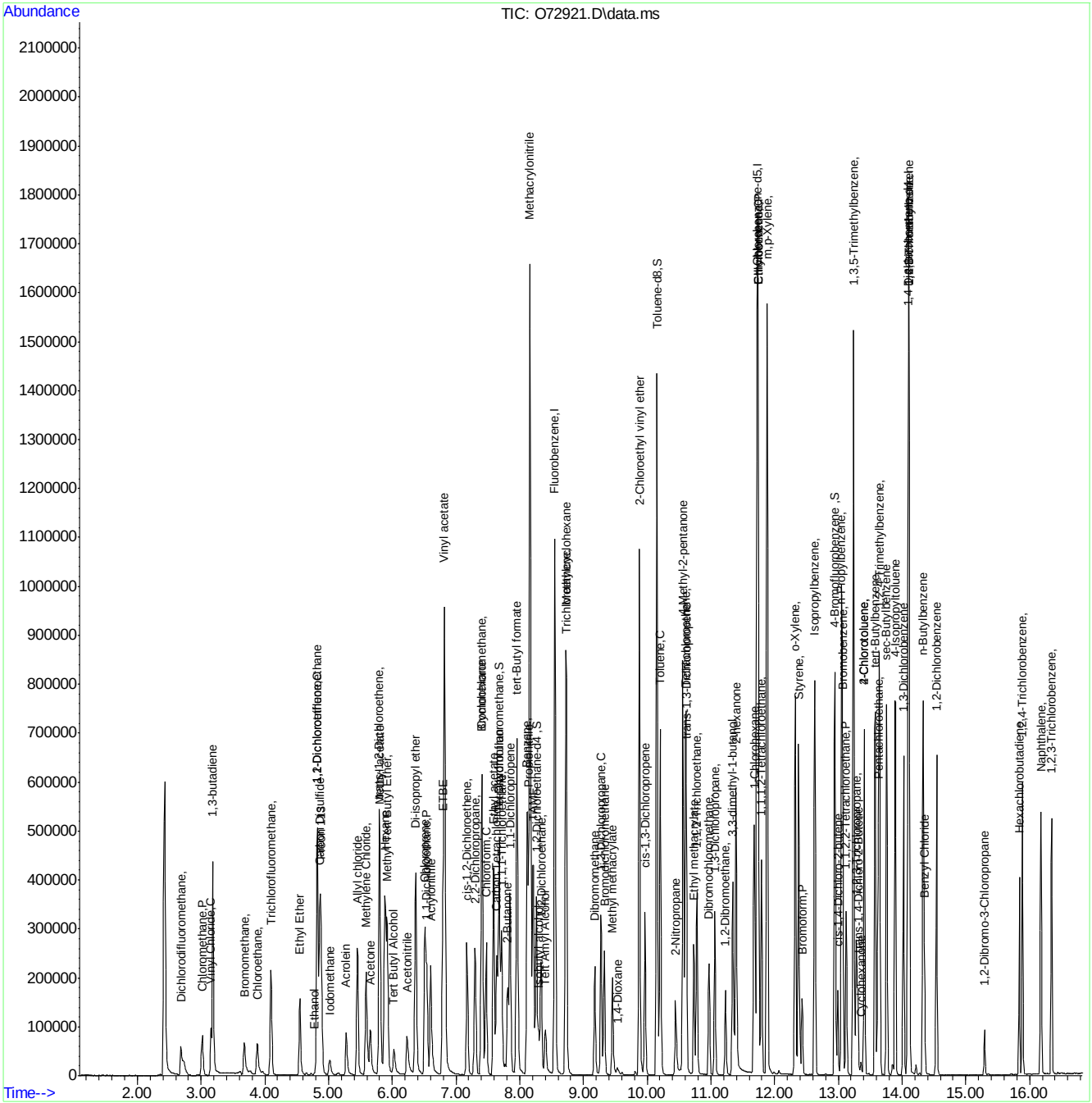
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.408	91	342200	26.18	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	31827	29.09	ug/L	#	87
94) 1,2,3-Trichloropropane	13.286	110	35270	24.16	ug/L		96
95) Cyclohexanone	13.353	55	10840	125.01	ug/L		96
96) 4-Chlorotoluene	13.408	91	342200	26.18	ug/L		99
97) tert-Butylbenzene	13.578	91	213916	26.31	ug/L		99
99) 1,2,4-Trimethylbenzene	13.645	105	380038	26.57	ug/L		100
100) Pentachloroethane	13.627	167	59740	30.45	ug/L		94
101) sec-Butylbenzene	13.755	105	467871	28.76	ug/L		99
102) 4-Isopropyltoluene	13.895	119	393336	27.91	ug/L		99
103) 1,3-Dichlorobenzene	14.023	146	236933	26.09	ug/L		99
104) 1,2,3-Trimethylbenzene	14.109	105	405701	27.74	ug/L		99
105) 1,4-Dichlorobenzene	14.109	146	246065	25.39	ug/L		99
106) n-Butylbenzene	14.328	92	199896	26.75	ug/L		99
107) Benzyl Chloride	14.353	126	30525	28.51	ug/L		95
108) 1,2-Dichlorobenzene	14.542	146	222422	25.23	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	16606	26.54	ug/L		93
110) Hexachlorobutadiene	15.840	225	49898	26.00	ug/L		99
111) 1,2,4-Trichlorobenzene	15.889	180	137611	25.35	ug/L		99
112) Naphthalene	16.181	128	344076	25.39	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	124360	24.68	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:55:05 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

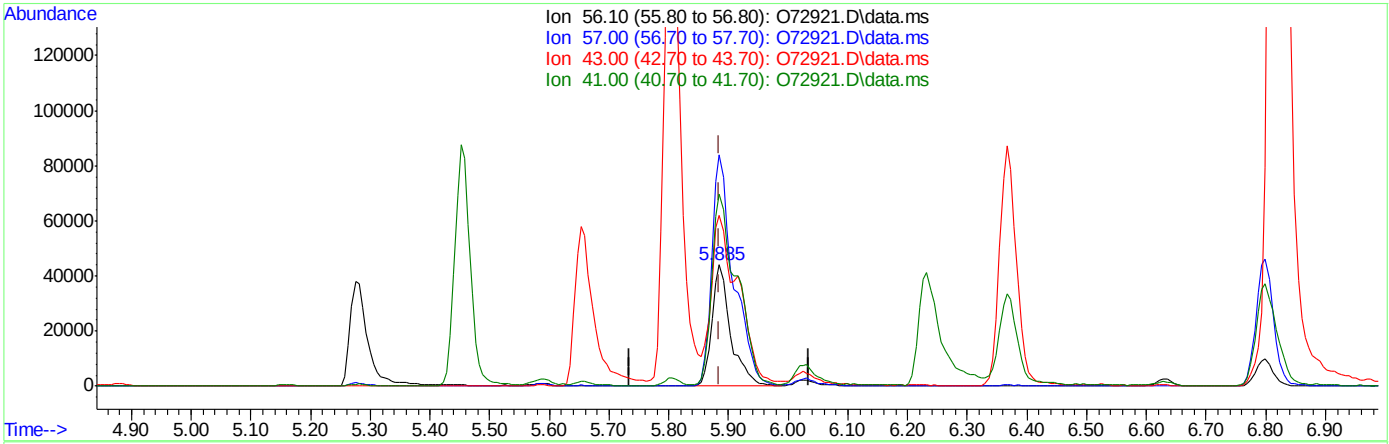
Sample Number: VO2867-BS
Lab FileID: O72921.D
Injection Time: 12/09/22 11:36
Method: SW846 8260D
Analyst approved: 12/09/22 11:54 Adelard Lefebvre
Supervisor approved: 12/14/22 00:08 Jennifer Fereira

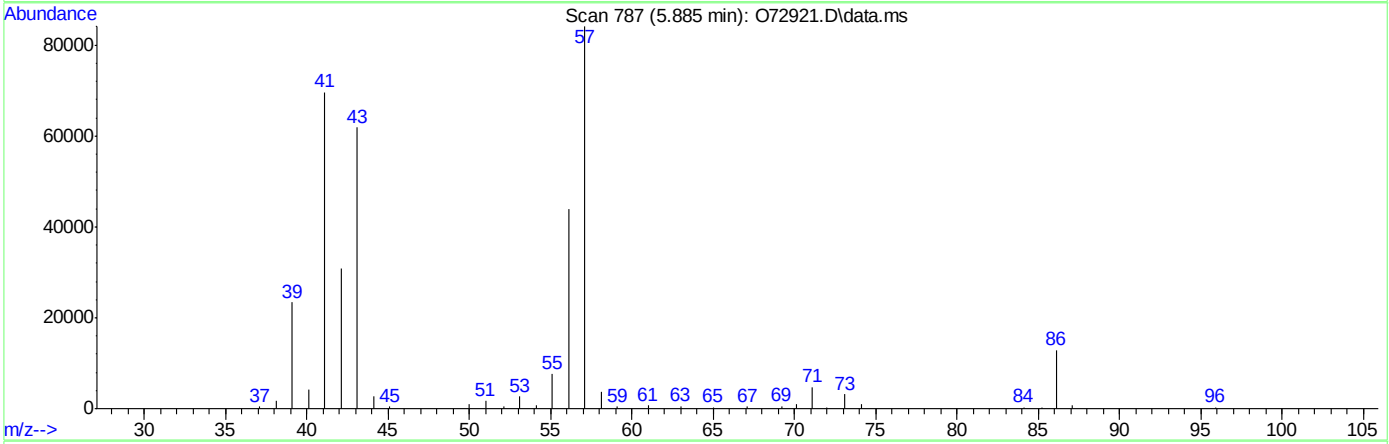
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(22) Hexane

5.885min (-0.000) 28.56ug/L

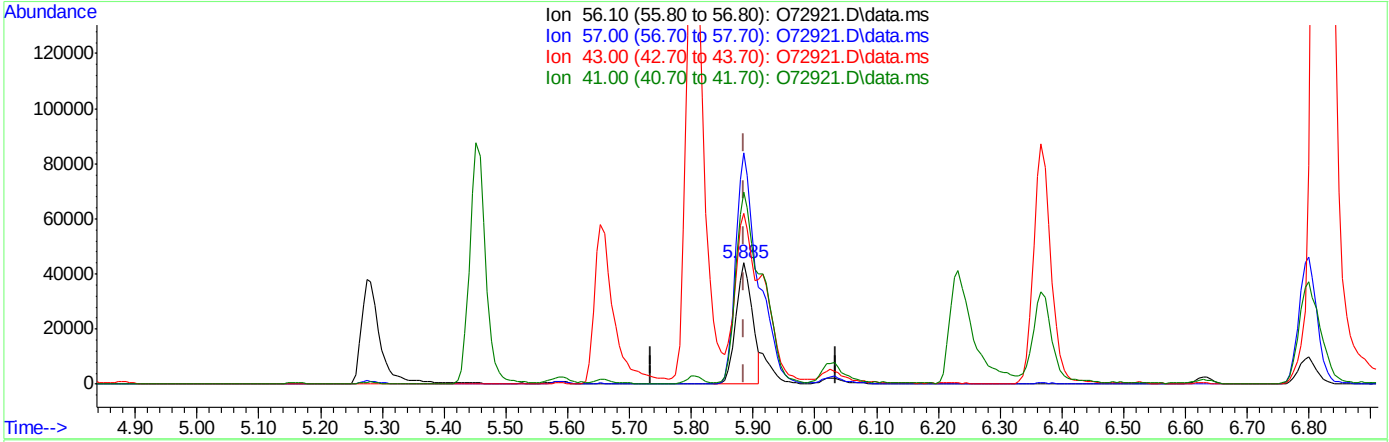
response 94823

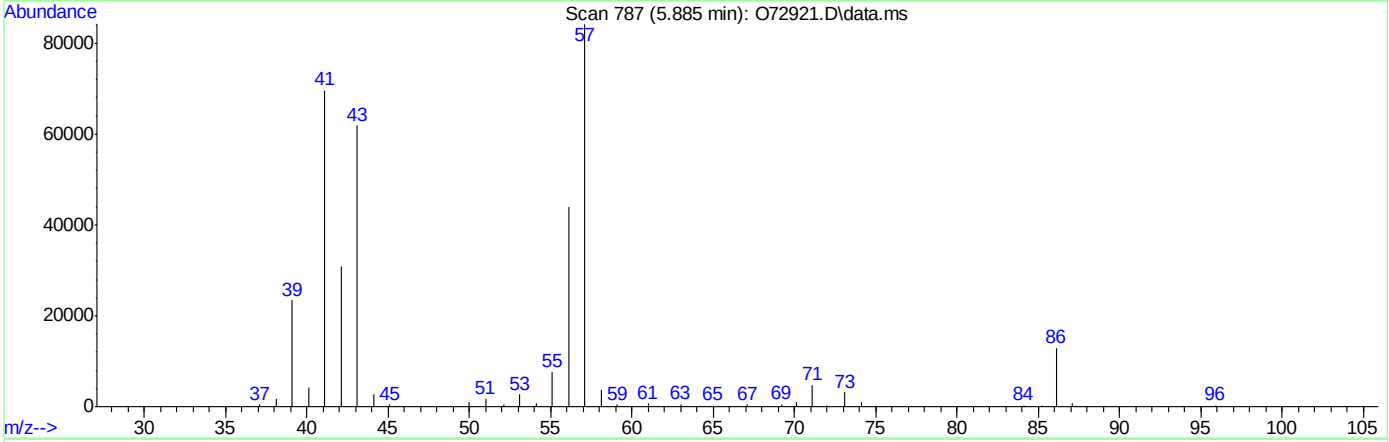
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	191.08
43.00	143.30	136.31
41.00	165.60	156.77

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(22) Hexane

5.885min (-0.000) 24.55ug/L m

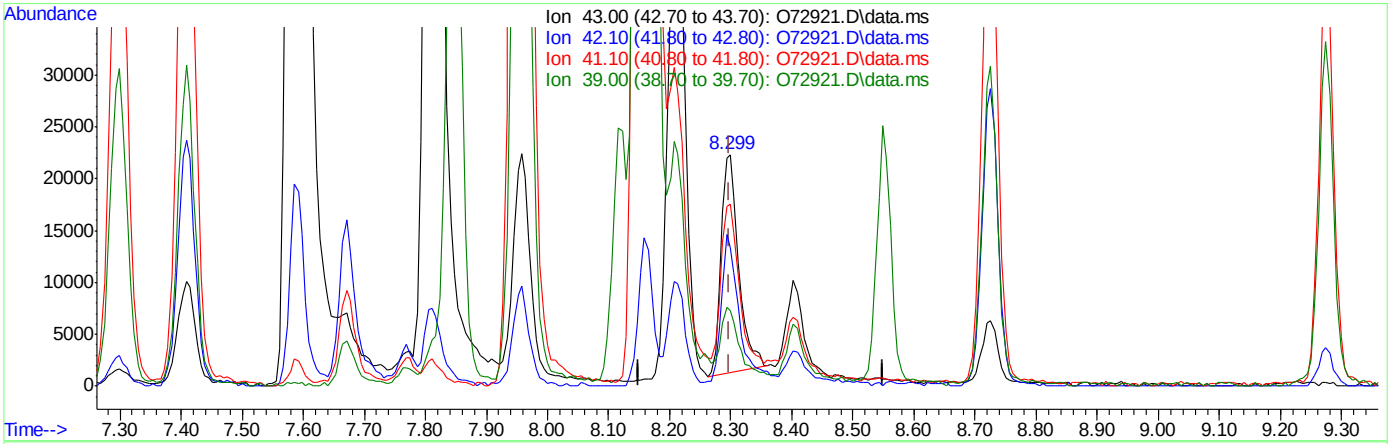
response 81505

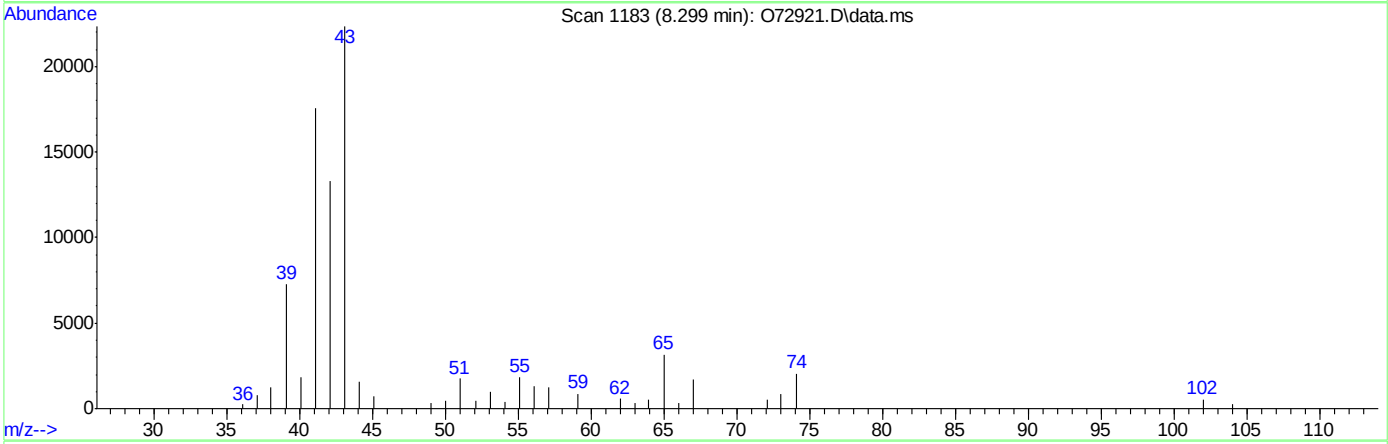
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	191.08
43.00	143.30	140.59
41.00	165.60	158.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 355.47ug/L

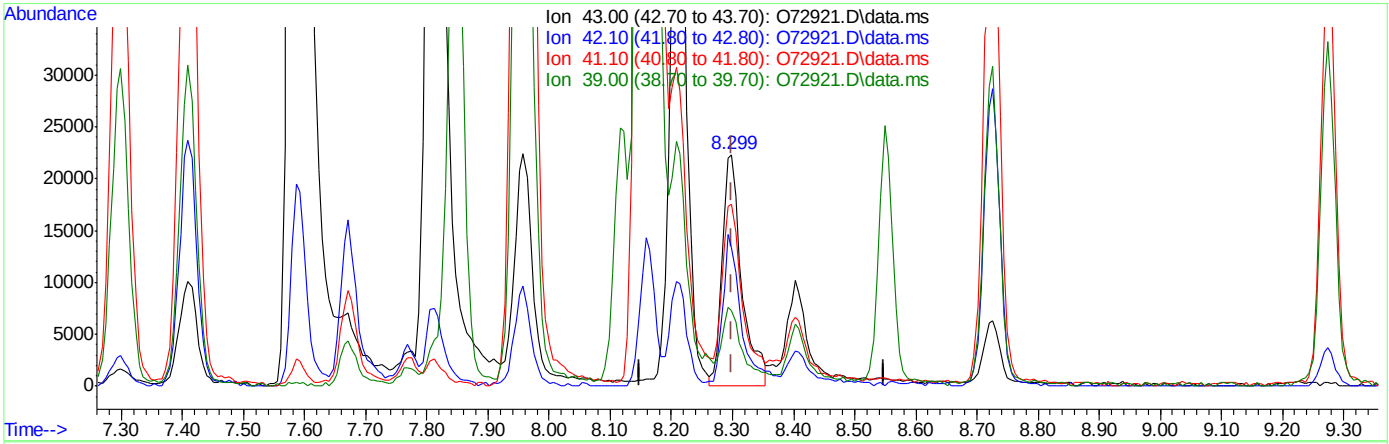
response 41867

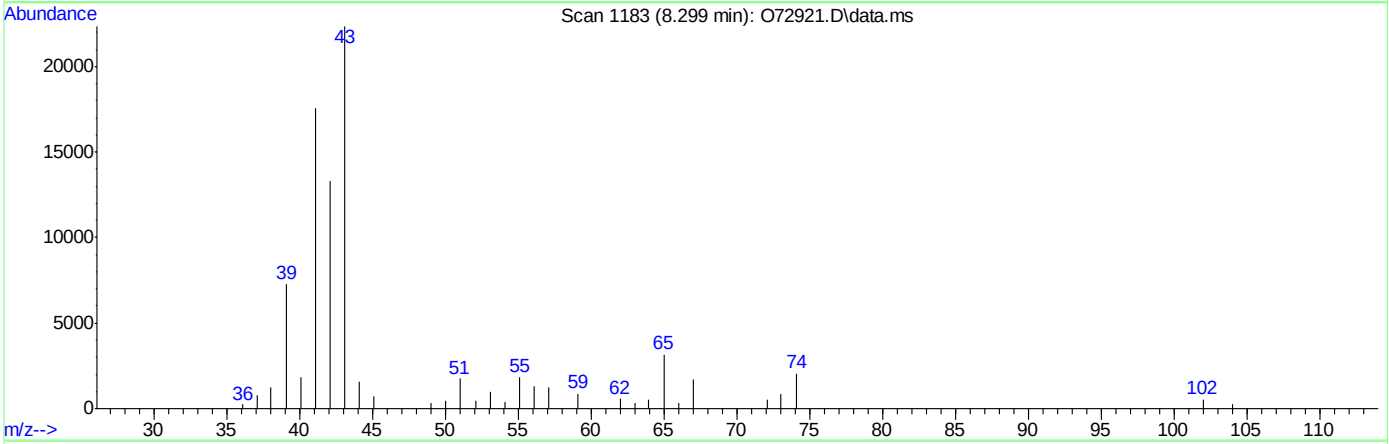
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	59.57
41.10	73.80	69.89
39.00	31.30	28.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 420.27ug/L m

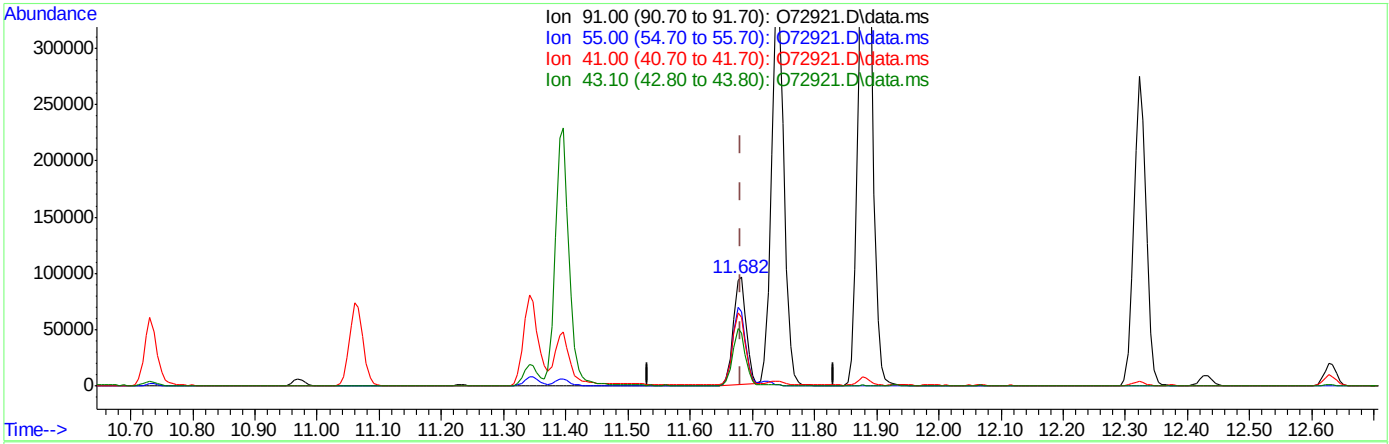
response 49576

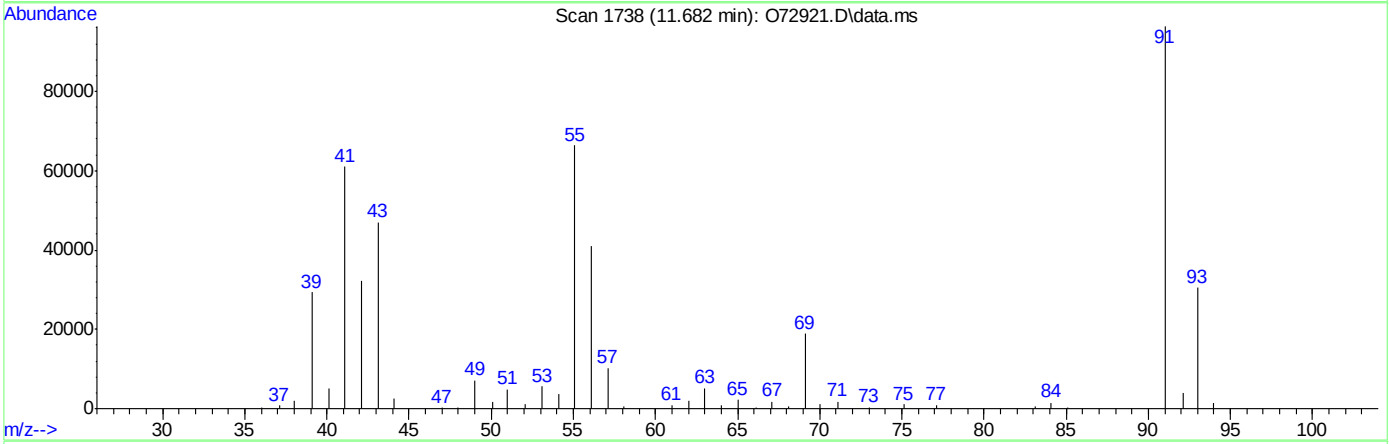
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	59.55
41.10	73.80	78.60
39.00	31.30	32.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 26.50ug/L

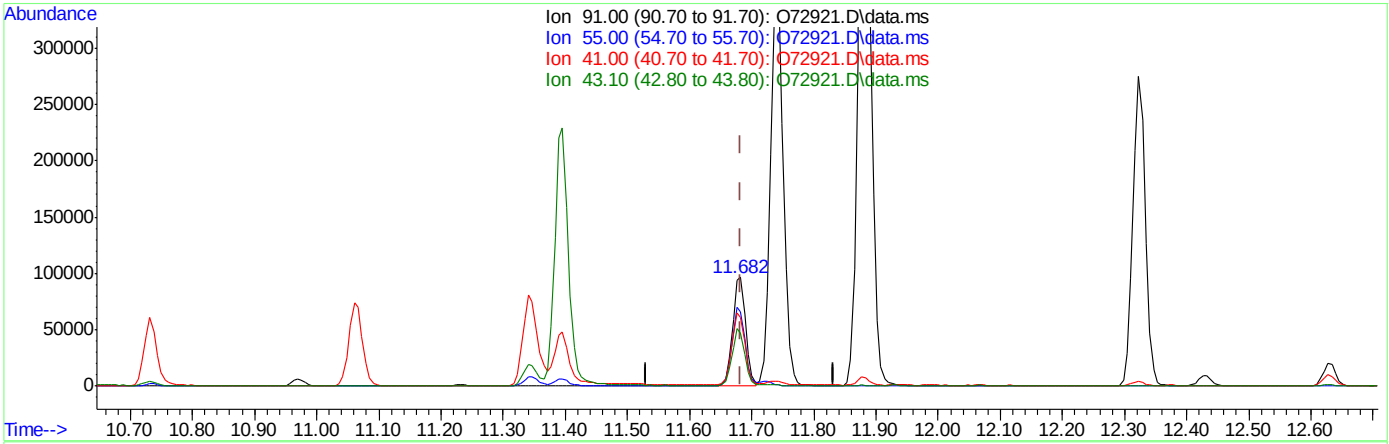
response 135765

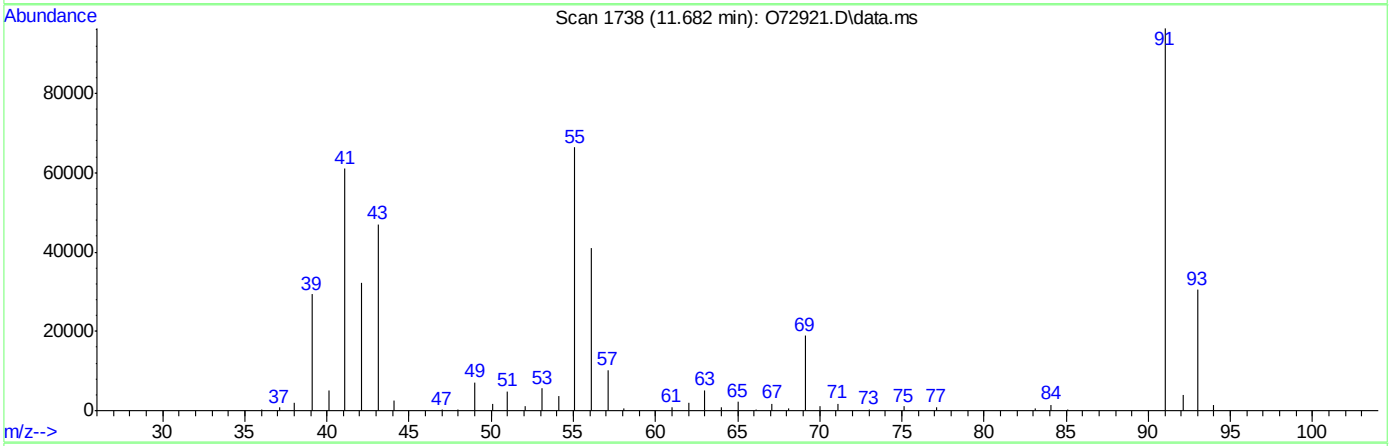
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	68.46
41.00	64.60	61.96
43.10	48.40	48.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-09\
Data File : O72921.D
Acq On : 9 Dec 2022 11:36 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS52925,VO2867,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 09 11:53:43 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72921.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 27.50ug/L m

response 140877

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	68.79
41.00	64.60	63.29
43.10	48.40	48.78

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36116.D
Acq On : 14 Dec 2022 9:45 am
Operator : courtnef
Sample : BS
Misc : MS52751,V5E1624,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 10:03:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	336581	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	249054	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	121964	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	95728	51.33	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.66%			
49) 1,2-Dichloroethane-d4	8.665	65	111135	51.90	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.80%			
62) Toluene-d8	10.542	98	329213	48.44	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 96.88%			
86) 4-Bromofluorobenzene	13.328	95	100566	49.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.14%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	51976	25.29	ug/L	99
3) Chloromethane	3.215	50	44459	22.56	ug/L	99
4) Vinyl Chloride	3.367	62	53230	25.43	ug/L	97
5) 1,3-Butadiene	3.404	39	45727	34.17	ug/L	94
6) Bromomethane	3.940	94	18064	16.47	ug/L	92
7) Chloroethane	4.153	64	40873	25.32	ug/L	95
8) Trichlorofluoromethane	4.385	101	74563	29.46	ug/L	95
9) Ethyl Ether	4.867	59	37617	25.27	ug/L	92
10) Ethanol	5.098	45	5214	438.24	ug/L	86
11) 1,2-Dichlorotrifluoroe...	5.153	67	56916	26.77	ug/L	97
12) 1,1-Dichloroethene	5.159	61	66654	25.18	ug/L	97
13) Freon 113	5.220	101	48542	27.21	ug/L	94
14) Carbon Disulfide	5.208	76	132629	26.64	ug/L	100
15) Iodomethane	5.373	142	16610	6.88	ug/L	95
16) Acrolein	5.629	56	36781	115.00	ug/L	96
17) Allyl chloride	5.818	41	49058	26.93	ug/L	98
18) Methylene Chloride	5.958	49	57339	22.54	ug/L	96
19) Acetone	6.019	43	56646	107.78	ug/L	100
20) Methyl acetate	6.171	43	138786	134.90	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	62067	25.25	ug/L	97
22) Hexane	6.263	56	45420	30.77	ug/L	96
23) Methyl Tert Butyl Ether	6.293	73	122274	24.94	ug/L	96
24) Acetonitrile	6.616	41	40932	243.47	ug/L	89
25) Di-isopropyl ether	6.750	45	117618	24.99	ug/L	96
26) Chloroprene	6.909	53	63896	28.98	ug/L	96
27) 1,1-Dichloroethane	6.939	63	82247	25.24	ug/L	100
28) Acrylonitrile	7.000	53	89968	146.10	ug/L	96
29) ETBE	7.195	59	134299	24.68	ug/L	98
30) Tert Butyl Alcohol	6.391	59	51569	198.99	ug/L	97
31) Vinyl acetate	7.214	43	527611	164.83	ug/L	98
32) cis-1,2-Dichloroethene	7.580	96	46652	25.96	ug/L	97
33) 2,2-Dichloropropane	7.708	77	63122	24.24	ug/L	95
34) Bromochloromethane	7.805	128	22160	25.34	ug/L	97
35) Cyclohexane	7.823	56	84808	29.40	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36116.D
Acq On : 14 Dec 2022 9:45 am
Operator : courtnef
Sample : BS
Misc : MS52751,V5E1624,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 10:03:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.872	83	78035	24.62	ug/L		99
37) Ethyl acetate	7.976	43	233837	147.95	ug/L		99
38) Tetrahydrofuran	8.067	42	13513	27.49	ug/L		92
40) Carbon Tetrachloride	8.049	117	60623	26.22	ug/L		97
41) 1,1,1-Trichloroethane	8.122	97	69882	26.47	ug/L		98
42) 2-Butanone	8.201	43	85767	108.00	ug/L		98
43) 1,1-Dichloropropene	8.256	75	60695	25.52	ug/L		98
44) tert-Butyl formate	8.354	59	139234	200.12	ug/L		100
45) Propionitrile	8.531	54	69400	238.58	ug/L		98
46) Methacrylonitrile	8.555	41	259452	266.58	ug/L		98
47) Benzene	8.524	78	165615	24.26	ug/L		98
48) TAME	8.604	73	123645	25.46	ug/L		99
50) 1,2-Dichloroethane	8.738	62	64021	24.69	ug/L		99
51) tert Amyl alcohol	8.787	59	42218	235.62	ug/L		95
52) Trichloroethene	9.134	95	46815	25.63	ug/L		96
53) Methylcyclohexane	9.134	83	88848	30.86	ug/L		97
54) Dibromomethane	9.579	93	29037	24.15	ug/L		97
55) 1,2-Dichloropropane	9.671	63	44592	22.95	ug/L		96
56) Bromodichloromethane	9.719	83	58489	25.46	ug/L		96
57) Methyl methacrylate	9.835	41	36011	25.85	ug/L		98
58) 1,4-Dioxane	9.921	88	8023	489.76	ug/L		84
59) 2-Chloroethyl vinyl ether	10.256	63	114126	108.16	ug/L		99
60) cis-1,3-Dichloropropene	10.353	75	64961	25.07	ug/L		95
63) Toluene	10.597	91	178725	24.28	ug/L		98
64) Isobutyl alcohol	8.677	43	32564	464.79	ug/L		95
65) 2-Nitropropane	10.829	41	67463	122.22	ug/L		96
66) 4-Methyl-2-pentanone	10.939	43	193065	100.97	ug/L		99
67) trans-1,3-Dichloropropene	10.993	75	62067	26.38	ug/L		91
68) Tetrachloroethene	11.000	166	46487	25.68	ug/L		99
69) Ethyl methacrylate	11.103	69	50104	21.77	ug/L		95
70) 1,1,2-Trichloroethane	11.164	83	34913	24.40	ug/L		93
71) Dibromochloromethane	11.359	129	45422	24.39	ug/L		96
72) 1,3-Dichloropropane	11.451	76	63582	22.29	ug/L		99
73) 1,2-Dibromoethane	11.621	107	43684	25.33	ug/L		98
74) 3,3-Dimethyl-1-butanol	11.707	57	189385	1014.98	ug/L		99
75) 2-hexanone	11.762	43	137413	104.49	ug/L		98
76) 1-Chlorohexane	12.054	91	66180	27.23	ug/L		92
77) Ethylbenzene	12.121	91	204358	24.25	ug/L		99
78) Chlorobenzene	12.127	112	118221	24.18	ug/L		97
79) 1,1,1,2-Tetrachloroethane	12.176	131	41715	24.81	ug/L		96
80) m,p-Xylene	12.262	91	299917	47.98	ug/L		97
81) o-Xylene	12.707	91	150295	25.20	ug/L		98
82) Styrene	12.755	104	112285	24.52	ug/L		98
83) Bromoform	12.822	173	28363	23.71	ug/L		96
84) Isopropylbenzene	13.005	105	195746	25.32	ug/L		99
87) cis-1,4-Dichloro-2-butene	13.682	53	13319	22.43	ug/L	#	77
88) n-Propylbenzene	13.426	91	246230	25.31	ug/L		99
89) Bromobenzene	13.456	156	44785	23.66	ug/L		99
90) 1,1,2,2-Tetrachloroethane	13.493	83	57631	24.24	ug/L		99
91) 1,3,5-Trimethylbenzene	13.609	105	156450	24.41	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36116.D
Acq On : 14 Dec 2022 9:45 am
Operator : courtnef
Sample : BS
Misc : MS52751,V5E1624,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 10:03:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

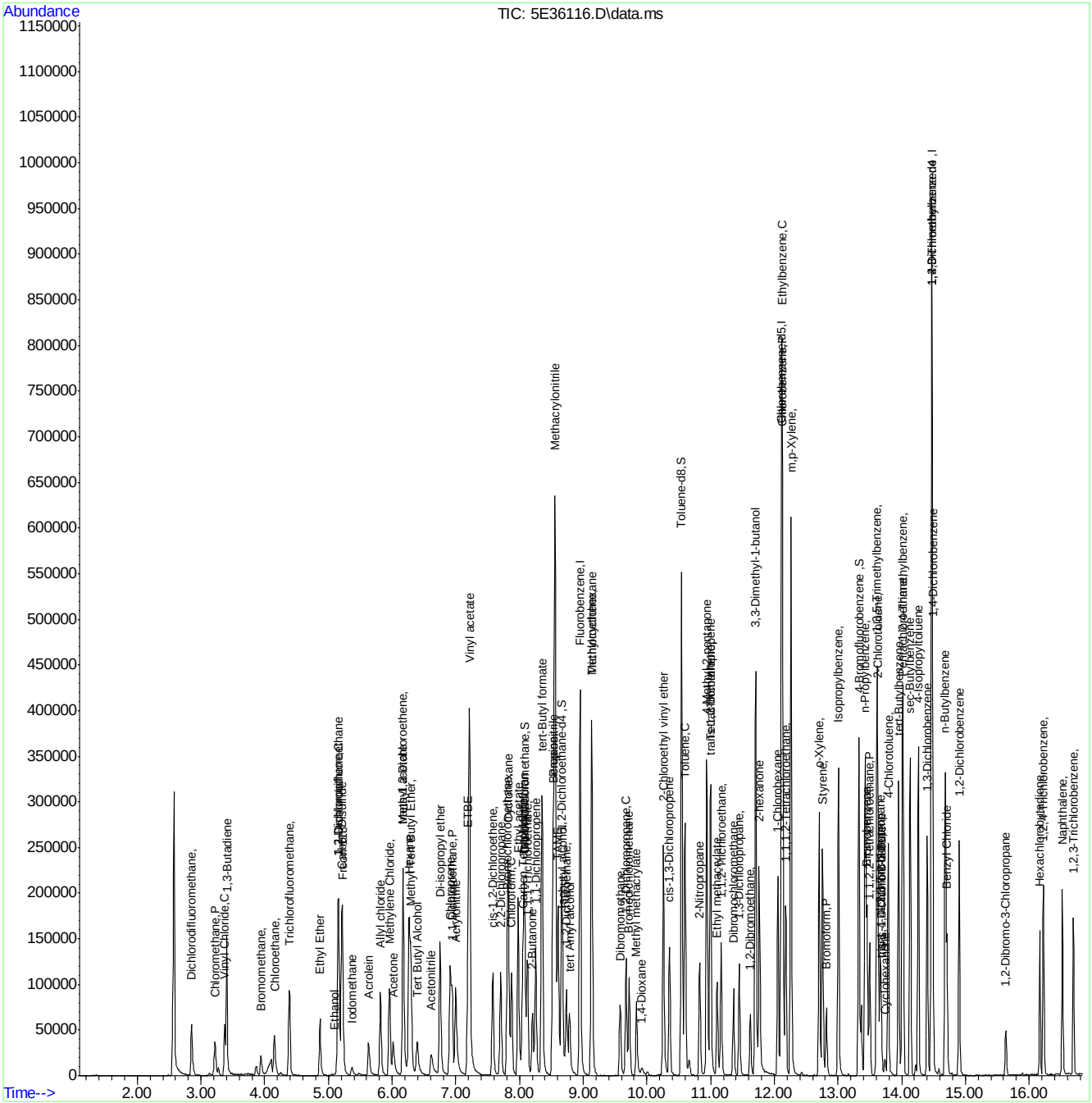
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	144747	24.24	ug/L		98
93)	trans-1,4-Dichloro-2-B...	13.682	53	13319	22.43	ug/L	#	77
94)	1,2,3-Trichloropropane	13.664	110	15554	22.35	ug/L		94
95)	Cyclohexanone	13.737	55	7076	117.30	ug/L		96
96)	4-Chlorotoluene	13.792	91	127340	23.95	ug/L		98
98)	tert-Butylbenzene	13.950	91	87660	25.30	ug/L		98
99)	1,2,4-Trimethylbenzene	14.017	105	158607	25.53	ug/L		98
100)	Pentachloroethane	14.011	167	27215	24.33	ug/L		93
101)	sec-Butylbenzene	14.133	105	214369	27.20	ug/L		99
102)	4-Isopropyltoluene	14.261	119	181497	26.27	ug/L		98
103)	1,3-Dichlorobenzene	14.401	146	90194	25.52	ug/L		97
104)	1,2,3-Trimethylbenzene	14.475	105	167828	26.76	ug/L		98
105)	1,4-Dichlorobenzene	14.487	146	95299	24.65	ug/L		98
106)	n-Butylbenzene	14.682	92	92544	25.26	ug/L		99
107)	Benzyl Chloride	14.712	126	18782	24.53	ug/L		94
108)	1,2-Dichlorobenzene	14.901	146	84517	24.98	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	15.633	75	8815	24.08	ug/L		95
110)	Hexachlorobutadiene	16.169	225	18658	26.10	ug/L		97
111)	1,2,4-Trichlorobenzene	16.224	180	48665	25.81	ug/L		98
112)	Naphthalene	16.523	128	132419	25.64	ug/L		99
113)	1,2,3-Trichlorobenzene	16.694	180	41273	25.98	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36116.D
Acq On : 14 Dec 2022 9:45 am
Operator : courtnef
Sample : BS
Misc : MS52751,V5E1624,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 10:03:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/19/22 14:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:33:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	3.714	96	796487	50.00	ug/L		0.00
62) Chlorobenzene-d5	5.639	117	564877	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	7.328	152	270339	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	3.259	113	196866	54.94	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 109.88%				
49) 1,2-Dichloroethane-d4	3.547	65	270923	55.92	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.84%				
63) Toluene-d8	4.645	98	791585	48.65	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 97.30%				
86) 4-Bromofluorobenzene	6.492	174	231250	52.72	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.44%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.120	85	96346	25.75	ug/L		98
3) Chloromethane	1.246	50	70290	19.65	ug/L		94
4) 1,3-butadiene	1.314	39	71655	27.22	ug/L		100
5) Vinyl Chloride	1.303	62	72308	22.98	ug/L		99
6) Bromomethane	1.507	94	26930	23.97	ug/L		97
7) Chloroethane	1.580	64	37045	31.80	ug/L		98
8) Trichlorofluoromethane	1.669	101	116080	30.79	ug/L		97
9) Ethyl Ether	1.873	59	58384	24.96	ug/L		94
10) Ethanol	1.957	45	34915	438.44	ug/L		91
11) 1,2-Dichlorotrifluoroe...	1.973	67	93782	25.76	ug/L		97
12) 1,1-Dichloroethene	1.978	61	120002	26.14	ug/L		96
13) Freon 113	2.009	101	79835	27.26	ug/L		96
14) Carbon Disulfide	1.999	76	215899	27.10	ug/L		98
15) Iodomethane	2.056	142	57287	28.15	ug/L		98
16) Acrolein	2.151	56	99294	99.71	ug/L		99
17) Allyl chloride	2.245	41	111549	23.90	ug/L		92
18) Methylene Chloride	2.297	49	83216	20.91	ug/L		98
19) Acetone	2.313	43	225293	117.42	ug/L		98
20) Methyl acetate	2.391	43	478400	116.59	ug/L		95
21) trans-1,2-Dichloroethene	2.396	61	114912	25.26	ug/L		98
22) Hexane	2.464	56	67112	27.10	ug/L	#	90
23) Methyl Tert Butyl Ether	2.470	73	269986	25.63	ug/L		92
24) Tert Butyl Alcohol	2.506	59	261522	263.06	ug/L		99
25) Acetonitrile	2.548	41	128108	169.46	ug/L		98
26) Di-isopropyl ether	2.684	45	234084	23.98	ug/L		96
27) Chloroprene	2.726	53	370073	25.93	ug/L		94
28) 1,1-Dichloroethane	2.726	63	148334	25.65	ug/L		99
29) Acrylonitrile	2.726	52	234549	127.84	ug/L		98
30) ETBE	2.877	59	244888	24.41	ug/L		98
31) Vinyl acetate	2.857	43	963639	139.05	ug/L		98
32) cis-1,2-Dichloroethene	3.019	96	85409	25.08	ug/L		98
33) 2,2-Dichloropropane	3.081	77	143530	26.62	ug/L		99
34) Bromochloromethane	3.123	128	35413	25.45	ug/L		89
35) Cyclohexane	3.160	56	136629	27.93	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:33:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	3.165	83	154860	25.77	ug/L	100
37) Ethyl acetate	3.223	43	644515	125.90	ug/L	100
38) Tetrahydrofuran	3.259	42	47573	23.22	ug/L	96
40) Carbon Tetrachloride	3.265	117	128352m	28.68	ug/L	
41) 1,1,1-Trichloroethane	3.291	97	150129	28.13	ug/L	98
42) 2-Butanone	3.312	43	366294	106.24	ug/L	96
43) 1,1-Dichloropropene	3.359	75	119678	26.16	ug/L	96
44) tert-Butyl formate	3.406	59	306449	107.37	ug/L	96
45) Propionitrile	3.458	54	196625	203.42	ug/L	97
46) Methacrylonitrile	3.479	41	650163	206.22	ug/L	97
47) Benzene	3.489	78	314563	24.15	ug/L	96
48) TAME	3.563	73	243481	25.01	ug/L	99
50) Isobutyl alcohol	3.589	43	149311m	414.10	ug/L	
51) 1,2-Dichloroethane	3.584	62	120375	25.38	ug/L	94
52) Tert Amyl Alcohol	3.652	59	193850	246.86	ug/L	98
53) Trichloroethene	3.824	95	85887	24.75	ug/L	93
54) Methylcyclohexane	3.840	83	140562	29.22	ug/L	99
55) Dibromomethane	4.044	93	45631	23.85	ug/L	98
56) 1,2-Dichloropropane	4.107	63	72784	22.37	ug/L	95
57) Bromodichloromethane	4.143	83	106642	26.30	ug/L	99
58) Methyl methacrylate	4.232	41	85578	24.09	ug/L	98
59) 1,4-Dioxane	4.258	88	39790	534.06	ug/L	89
60) 2-Chloroethyl vinyl ether	4.473	63	304987	129.61	ug/L	98
61) cis-1,3-Dichloropropene	4.520	75	124847	24.70	ug/L	99
64) Toluene	4.677	91	338994	22.81	ug/L	99
65) 2-Nitropropane	4.771	41	180615	124.93	ug/L	98
66) 4-Methyl-2-pentanone	4.886	43	573461	96.69	ug/L	98
67) trans-1,3-Dichloropropene	4.917	75	120385	25.64	ug/L	83
68) Tetrachloroethene	4.933	166	86735	25.63	ug/L	98
69) Ethyl methacrylate	5.027	69	103127	21.24	ug/L	94
70) 1,1,2-Trichloroethane	5.017	83	55464	22.30	ug/L	94
71) Dibromochloromethane	5.142	129	69727	24.20	ug/L	97
72) 1,3-Dichloropropane	5.189	76	117759	21.23	ug/L	97
73) 1,2-Dibromoethane	5.294	107	71058	23.58	ug/L	99
74) 3,3-dimethyl-1-butanol	5.425	57	901033	1051.28	ug/L	98
75) 2-hexanone	5.430	43	591719	105.11	ug/L	90
76) 1-Chlorohexane	5.644	91	107354m	24.04	ug/L	
77) Ethylbenzene	5.681	91	362777	23.38	ug/L	98
78) Chlorobenzene	5.649	112	190218	22.94	ug/L	97
79) 1,1,1,2-Tetrachloroethane	5.691	131	74426	25.11	ug/L	96
80) m,p-Xylene	5.780	91	570199	48.76	ug/L	99
81) o-Xylene	6.073	91	286055	25.10	ug/L	96
82) Styrene	6.104	104	202557	23.48	ug/L	99
83) Bromoform	6.115	173	45695	25.59	ug/L	95
84) Isopropylbenzene	6.303	105	331672	24.61	ug/L	98
87) cis-1,4-Dichloro-2-butene	6.523	53	33057	18.58	ug/L	86
88) n-Propylbenzene	6.607	91	392042	23.50	ug/L	96
89) Bromobenzene	6.565	156	75591	21.61	ug/L	96
90) 1,1,2,2-Tetrachloroethane	6.627	83	98941	20.76	ug/L	98
91) 1,3,5-Trimethylbenzene	6.753	105	270744	24.43	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:33:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

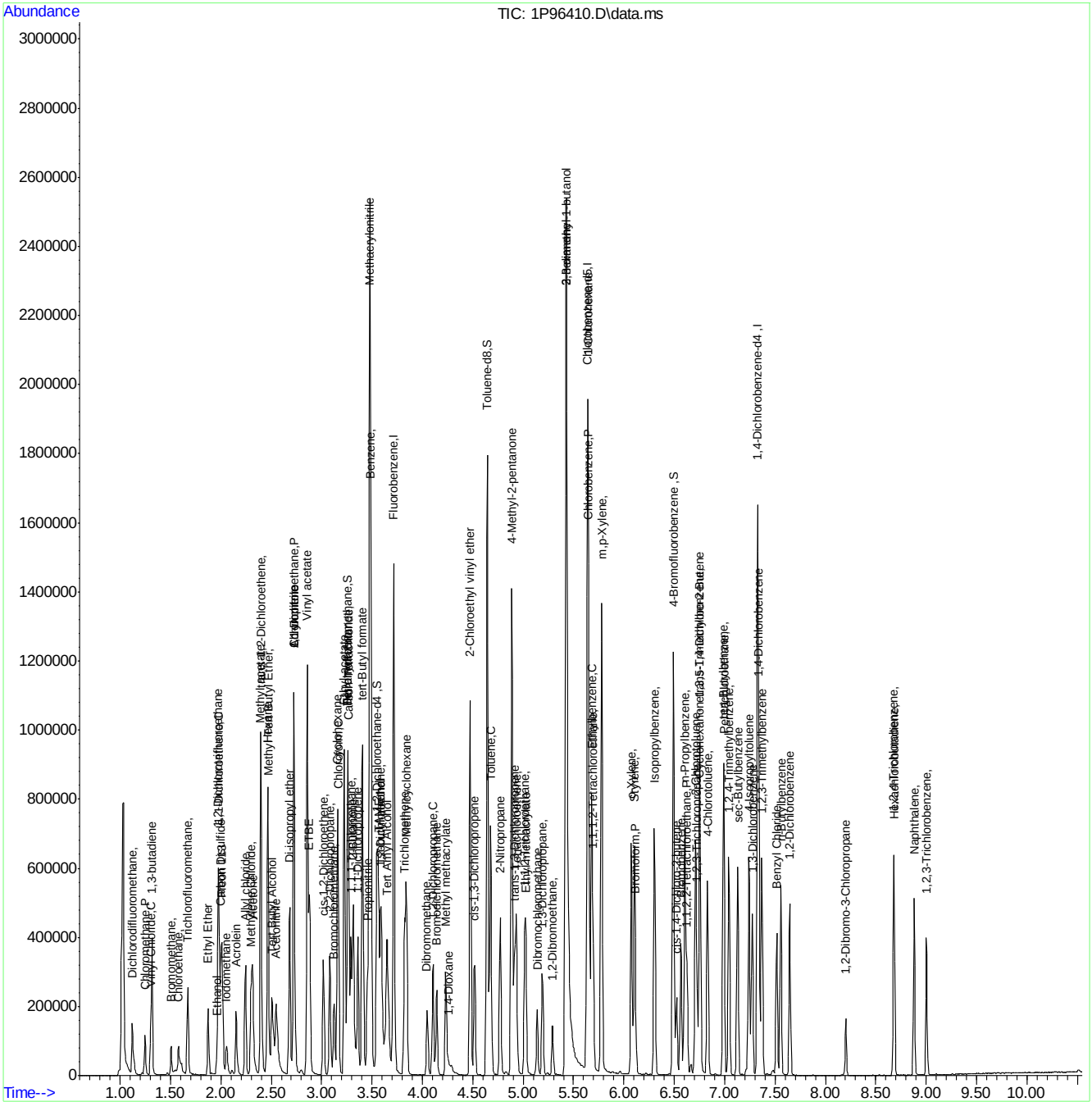
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.711	91	233835	23.35	ug/L		99
93)	trans-1,4-Dichloro-2-B...	6.753	53	40463	23.51	ug/L		93
94)	1,2,3-Trichloropropane	6.722	110	35773	20.92	ug/L		97
95)	Cyclohexanone	6.748	55	30398	111.99	ug/L		95
96)	4-Chlorotoluene	6.831	91	246013	23.27	ug/L		96
97)	tert-Butylbenzene	6.988	91	157367	25.20	ug/L		97
99)	1,2,4-Trimethylbenzene	7.041	105	252089	23.30	ug/L		98
100)	Pentachloroethane	6.994	167	44111	23.64	ug/L	#	84
101)	sec-Butylbenzene	7.130	105	306846	25.45	ug/L		99
102)	4-Isopropyltoluene	7.239	119	271177	24.96	ug/L		98
103)	1,3-Dichlorobenzene	7.276	146	141932	23.05	ug/L		98
104)	1,2,3-Trimethylbenzene	7.370	105	262605	24.60	ug/L		99
105)	1,4-Dichlorobenzene	7.339	146	141659	22.16	ug/L		97
106)	n-Butylbenzene	7.558	92	116660	21.84	ug/L		96
107)	Benzyl Chloride	7.517	126	40280	22.65	ug/L	#	92
108)	1,2-Dichlorobenzene	7.647	146	130758	22.55	ug/L		97
109)	1,2-Dibromo-3-Chloropr...	8.202	75	28540	22.30	ug/L		94
110)	Hexachlorobutadiene	8.683	225	36583	25.08	ug/L		99
111)	1,2,4-Trichlorobenzene	8.678	180	75451	24.13	ug/L		96
112)	Naphthalene	8.882	128	240455	22.96	ug/L		99
113)	1,2,3-Trichlorobenzene	9.002	180	72698	23.36	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:33:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3648-BS
Lab FileID: 1P96410.D
Injection Time: 12/16/22 09:09

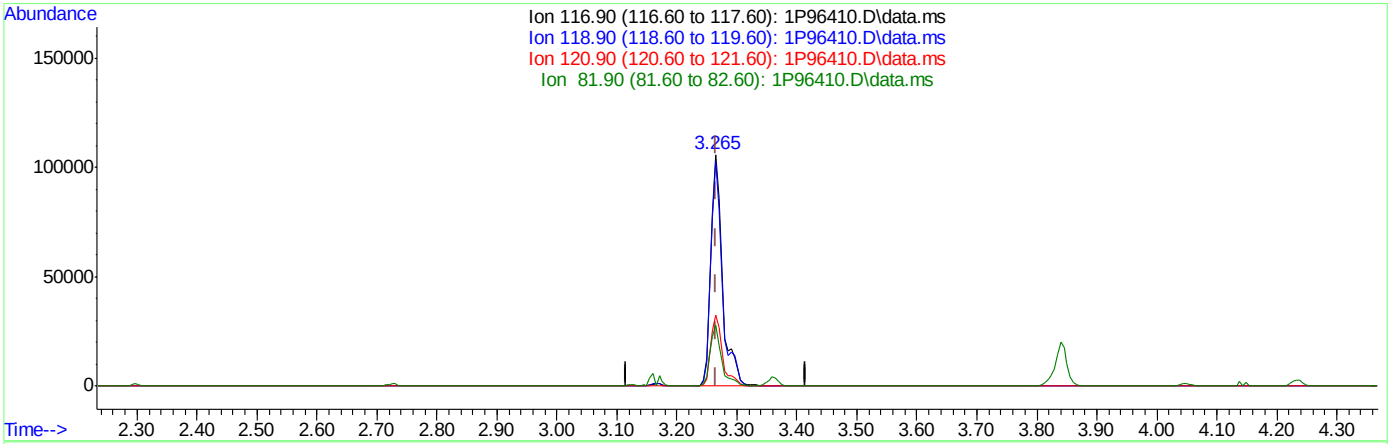
Method: SW846 8260D
Analyst approved: 12/16/22 09:34 Courtney Failla
Supervisor approved: 12/19/22 14:53 Karen Watson

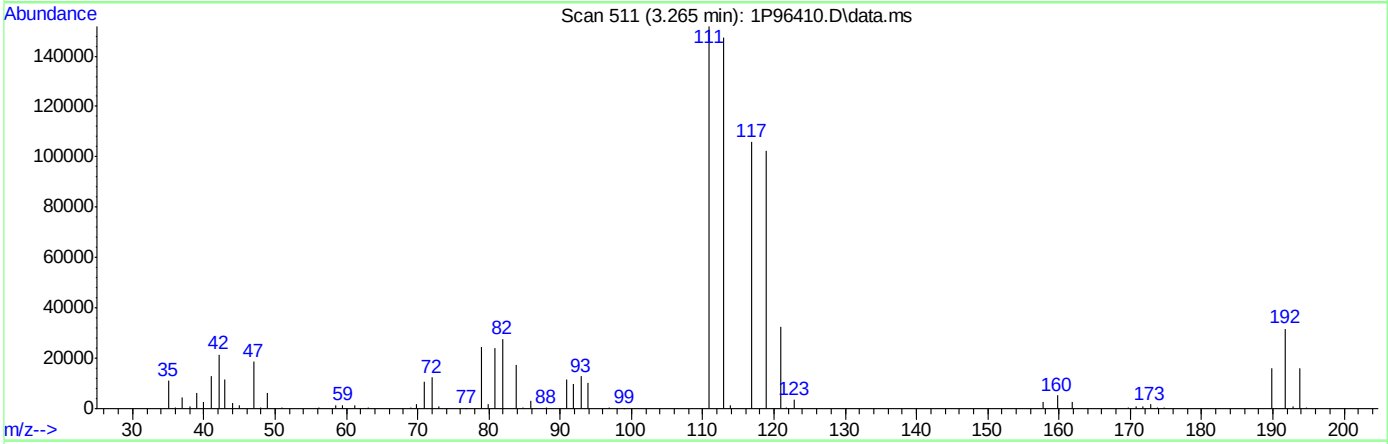
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.64	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(40) Carbon Tetrachloride ( )

3.265min (-0.001) 31.83ug/L

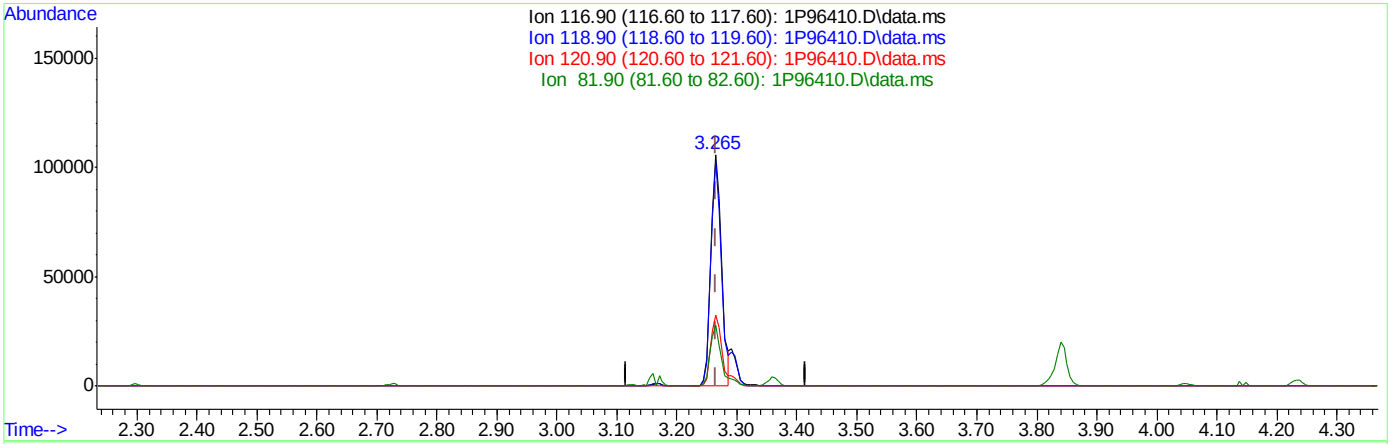
response 142428

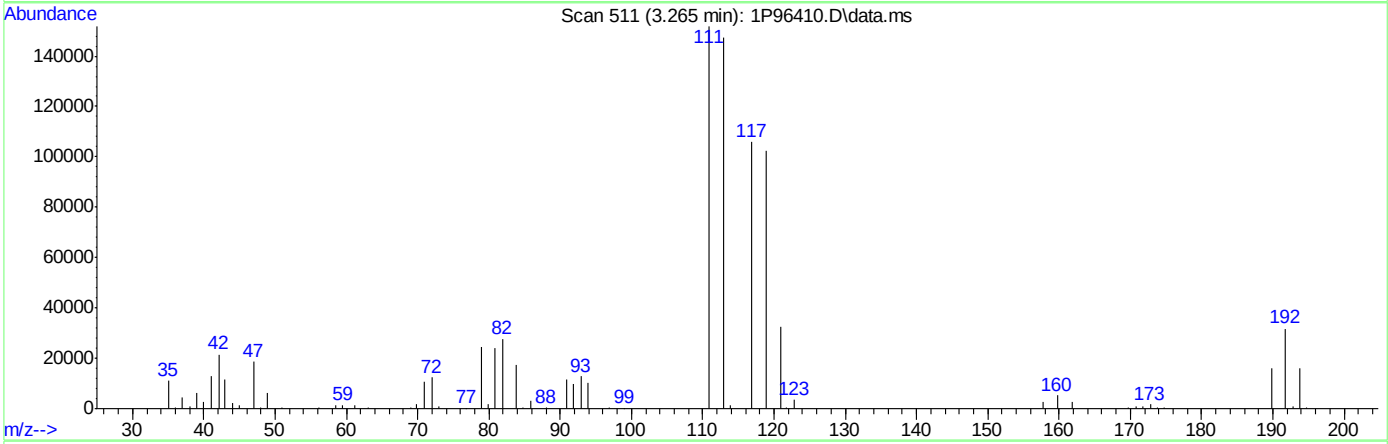
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	96.80
120.90	30.60	30.86
81.90	24.90	26.26

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(40) Carbon Tetrachloride ( )

3.265min (-0.001) 28.68ug/L m

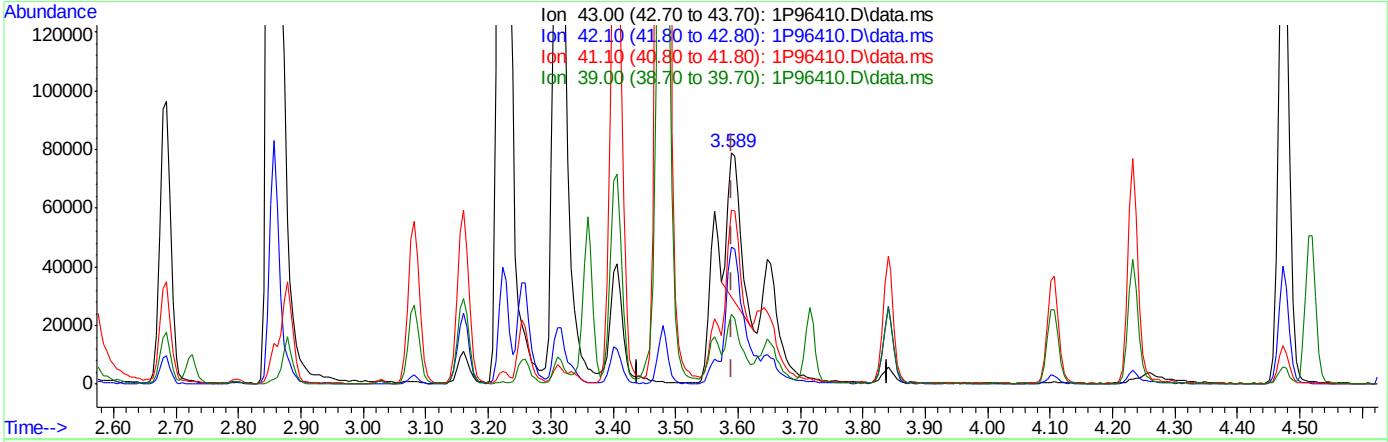
response 128352

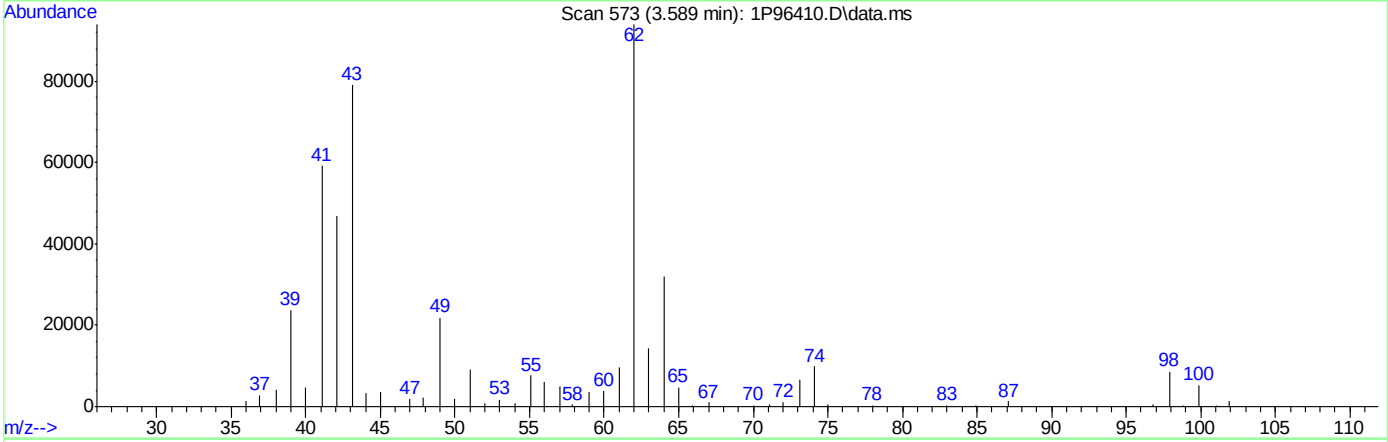
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	96.80
120.90	30.60	30.86
81.90	24.90	26.26

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(50) Isobutyl alcohol

3.589min (-0.001) 187.18ug/L

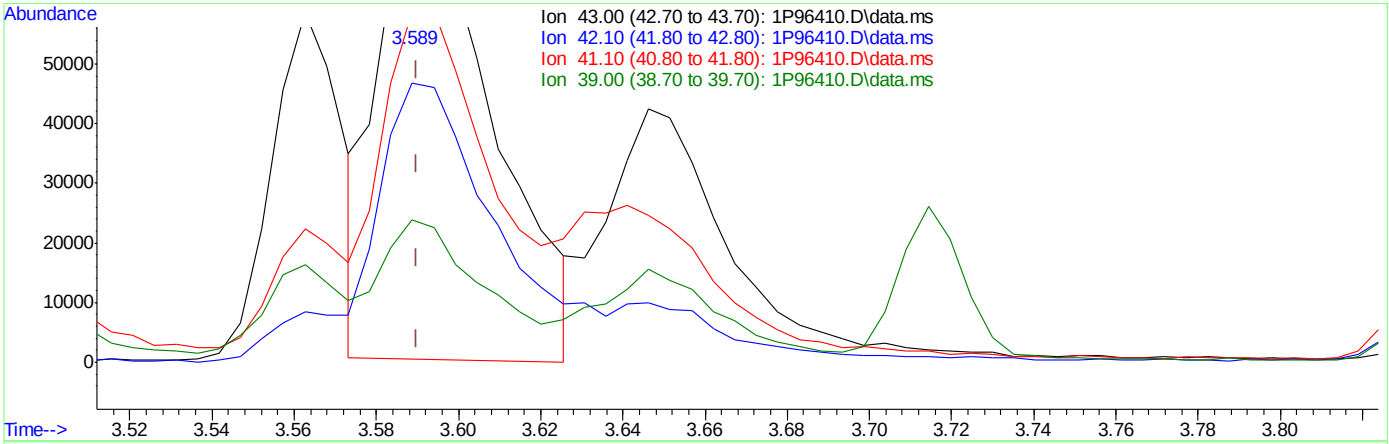
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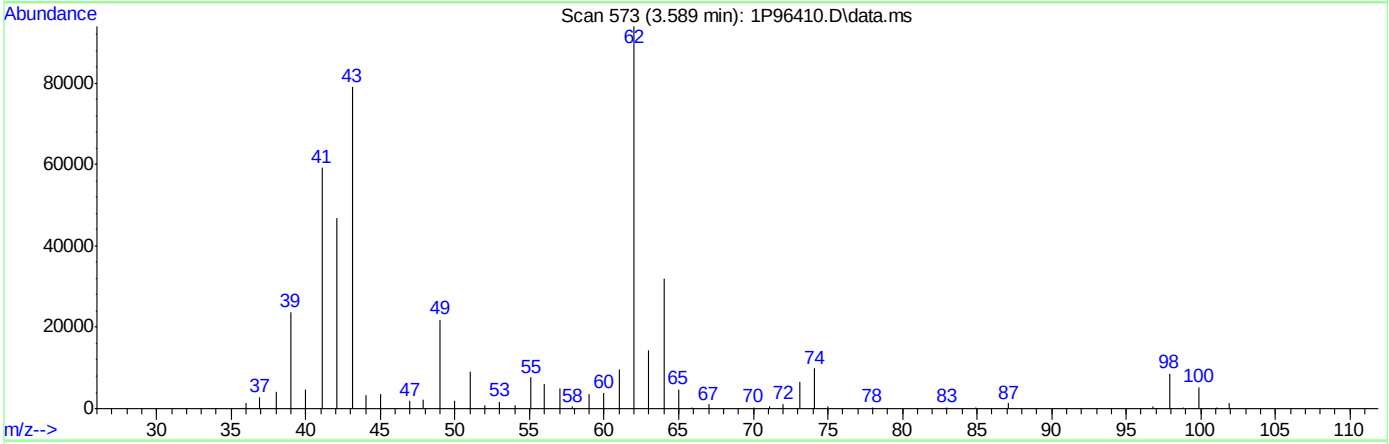
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	63.74
41.10	71.10	69.52
39.00	23.40	27.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(50) Isobutyl alcohol

3.589min (-0.001) 414.10ug/L m

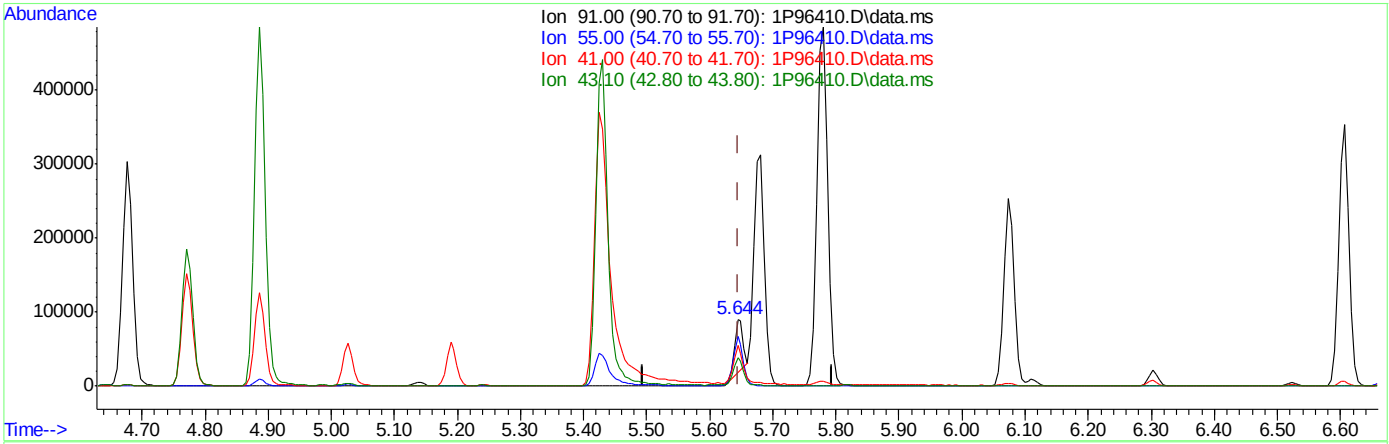
response 149311

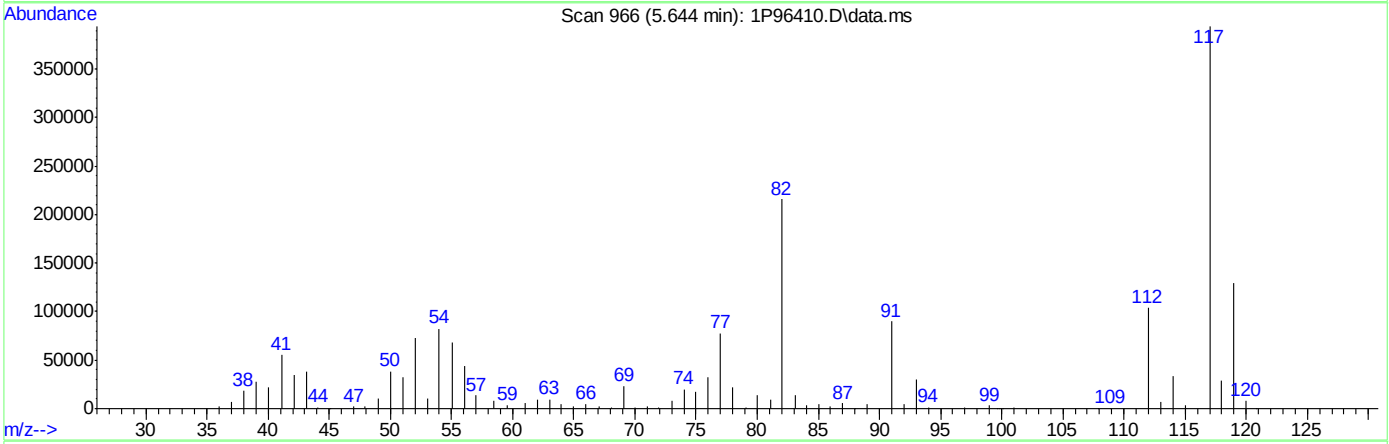
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.16
41.10	71.10	74.94
39.00	23.40	30.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(76) 1-Chlorohexane

5.644min (-0.001) 16.43ug/L

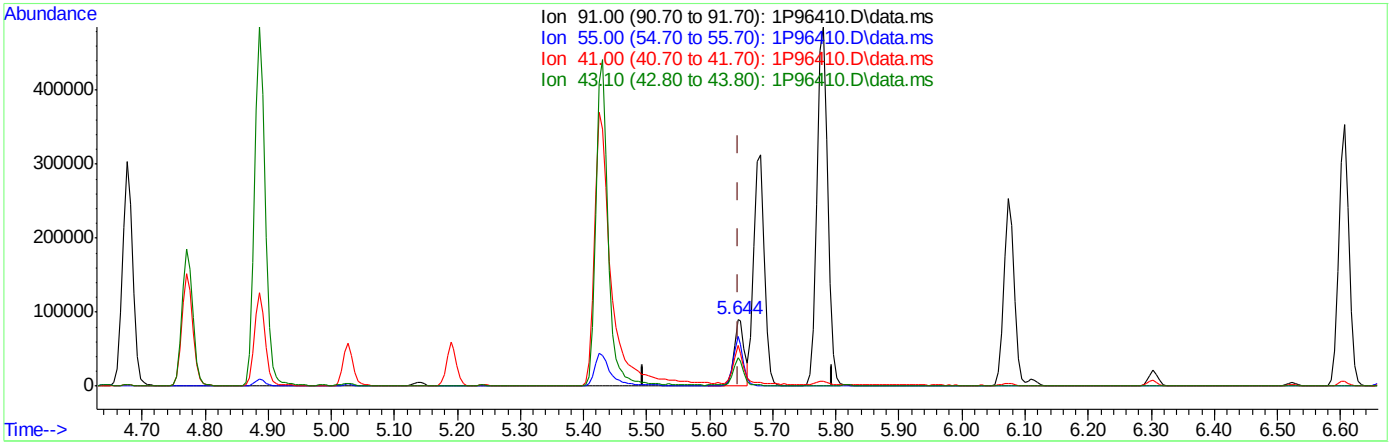
response 73374

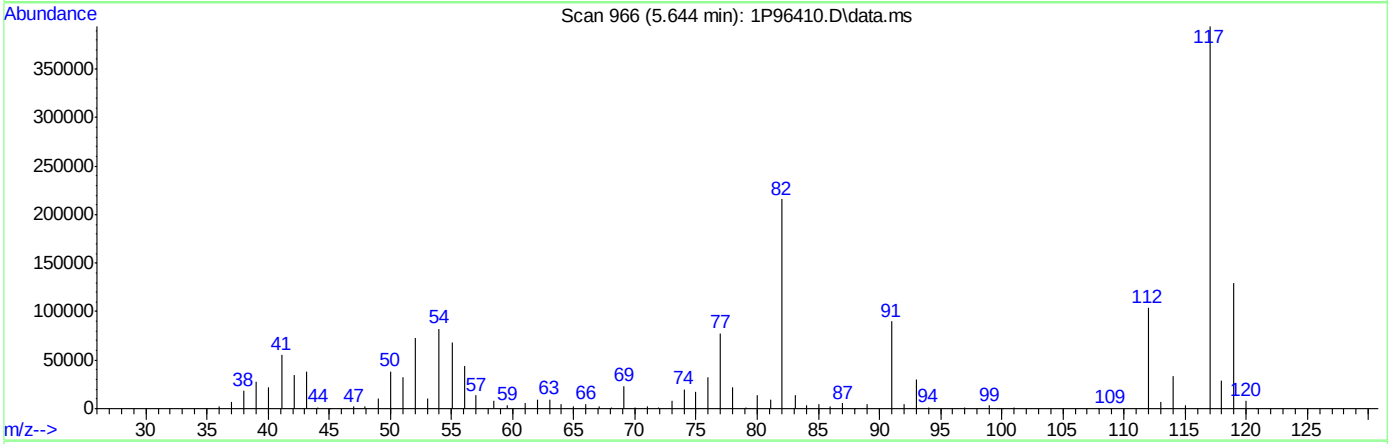
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	71.92
41.00	56.40	55.25
43.10	47.80	40.82

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96410.D
Acq On : 16 Dec 2022 9:09 am
Operator : courtnef
Sample : BS
Misc : MS52806,V1P3648,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 16 09:31:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96410.D\data.ms

(76) 1-Chlorohexane

5.644min (-0.001) 24.04ug/L m

response 107354

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	75.26
41.00	56.40	61.53
43.10	47.80	42.87

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/12/22 02:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 21:47:50 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.496	96	837868	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.148	117	590606	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.767	152	267786	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.602	113	168623	48.23	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.46%			
49) 1,2-Dichloroethane-d4	9.204	65	224533	51.27	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.54%			
63) Toluene-d8	10.932	98	774000	50.34	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.68%			
86) 4-Bromofluorobenzene	13.006	174	209205	50.97	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.853	85	106904	25.65	ug/L	98
3) Acrolein	5.578	56	103371	96.36	ug/L	99
4) Chloromethane	3.175	50	136658	24.52	ug/L	97
5) 1,3-butadiene	3.340	39	170733	36.92	ug/L	100
6) Vinyl Chloride	3.315	62	138515	27.83	ug/L	98
7) Bromomethane	3.832	94	28366	12.33	ug/L	86
8) Chloroethane	4.027	64	56434	24.80	ug/L	92
9) Trichlorofluoromethane	4.246	101	148359	30.41	ug/L	99
10) Ethyl Ether	4.751	59	94660	23.51	ug/L	97
11) Ethanol	5.000	45	55028	463.91	ug/L	93
12) 1,2-Dichlorotrifluoroe...	5.037	67	120490	26.76	ug/L	91
13) 1,1-Dichloroethene	5.049	61	143392	24.72	ug/L	93
14) Freon 113	5.110	101	95846	27.02	ug/L	95
15) Carbon Disulfide	5.104	76	264753	25.23	ug/L	99
16) Iodomethane	5.274	142	24103	8.22	ug/L	93
17) Allyl chloride	5.791	41	151691	27.66	ug/L	97
18) Methylene Chloride	5.955	49	141049	20.64	ug/L	93
19) Acetone	6.035	43	259707	110.97	ug/L	99
20) Methyl acetate	6.229	43	577612	121.59	ug/L	99
21) trans-1,2-Dichloroethene	6.217	61	135255	23.85	ug/L	93
22) Hexane	6.333	56	78417m	27.77	ug/L	
23) Methyl Tert Butyl Ether	6.381	73	279783	22.43	ug/L	91
24) Tert Butyl Alcohol	6.527	59	290997	232.79	ug/L	96
25) Acetonitrile	6.783	41	213151	217.95	ug/L	96
26) Di-isopropyl ether	6.984	45	357058	25.09	ug/L	100
27) Chloroprene	7.178	53	145319	29.68	ug/L	97
28) 1,1-Dichloroethane	7.209	63	188493	24.63	ug/L	96
29) Acrylonitrile	7.300	53	283137	121.67	ug/L	96
30) ETBE	7.574	59	322738	23.59	ug/L	99
31) Vinyl acetate	7.598	43	1423602	142.57	ug/L	99
32) cis-1,2-Dichloroethene	8.030	96	109283	23.82	ug/L	95
33) 2,2-Dichloropropane	8.164	77	126293	22.64	ug/L	97
34) Bromochloromethane	8.291	128	45534	23.48	ug/L	88
35) Cyclohexane	8.291	56	206000	29.02	ug/L	95
36) Chloroform	8.383	83	168780	23.37	ug/L	95
37) Ethyl acetate	8.511	43	837537	123.41	ug/L	99
38) Tetrahydrofuran	8.590	42	68933	24.25	ug/L	99
40) Carbon Tetrachloride	8.553	117	110443	24.62	ug/L	93
41) 1,1,1-Trichloroethane	8.632	97	148508	24.41	ug/L	95
42) 2-Butanone	8.742	43	443878	114.64	ug/L	100
43) 1,1-Dichloropropene	8.778	75	135894	24.53	ug/L	96
44) tert-Butyl formate	8.900	59	235614	87.15	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 21:47:50 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Propionitrile	9.082	54	263079	217.91	ug/L		89
46) Methacrylonitrile	9.101	41	914759	232.31	ug/L		99
47) Benzene	9.058	78	430849	23.29	ug/L		98
48) TAME	9.168	73	287314	23.45	ug/L		97
50) Isobutyl Alcohol	9.271	42	147811	463.99	ug/L		97
51) 1,2-Dichloroethane	9.277	62	140736	22.40	ug/L		96
52) Tert Amyl Alcohol	9.374	59	233103m	217.23	ug/L		
53) Trichloroethene	9.672	95	107531	22.74	ug/L		95
54) Methylcyclohexane	9.660	83	187617	30.26	ug/L		92
55) Dibromomethane	10.086	93	57314	22.76	ug/L		91
56) 1,2-Dichloropropane	10.171	63	104759	22.63	ug/L		97
57) Bromodichloromethane	10.226	83	111920	22.70	ug/L		97
58) Methyl methacrylate	10.342	41	111057	25.63	ug/L		95
59) 1,4-Dioxane	10.409	88	56848	474.07	ug/L		95
60) 2-Chloroethyl vinyl ether	10.719	63	1593	0.55	ug/L	#	69
61) cis-1,3-Dichloropropene	10.780	75	140620	22.16	ug/L		96
64) Toluene	10.974	91	546182	27.86	ug/L		99
65) 2-Nitropropane	11.169	41	175896	108.07	ug/L		95
66) 4-Methyl-2-pentanone	11.260	43	950538	124.97	ug/L		98
67) trans-1,3-Dichloropropene	11.309	75	139252	26.64	ug/L		98
68) Tetrachloroethene	11.303	166	108260	23.21	ug/L		96
69) Ethyl methacrylate	11.400	69	137239	24.38	ug/L		95
70) 1,1,2-Trichloroethane	11.443	83	114599	34.58	ug/L		98
71) Dibromochloromethane	11.595	129	85728	22.85	ug/L		93
72) 1,3-Dichloropropane	11.656	76	162989	22.35	ug/L		98
73) 1,2-Dibromoethane	11.789	107	95365	24.15	ug/L		98
74) 3,3-dimethyl-1-butanol	11.869	57	1613728m	1166.60	ug/L		
75) 2-hexanone	11.899	43	759939	119.50	ug/L		98
76) 1-Chlorohexane	12.112	91	146275	28.16	ug/L		93
77) Ethylbenzene	12.155	91	593974	26.63	ug/L		99
78) Chlorobenzene	12.167	112	290936	23.95	ug/L		92
79) 1,1,1,2-Tetrachloroethane	12.203	131	95387	25.13	ug/L		98
80) m,p-Xylene	12.258	91	964379	56.44	ug/L		98
81) o-Xylene	12.574	91	462555	27.96	ug/L		99
82) Styrene	12.611	104	311971	24.79	ug/L		98
83) Bromoform	12.666	173	52693	22.09	ug/L		98
84) Isopropylbenzene	12.781	105	491742	25.28	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.031	53	19056	11.80	ug/L	#	84
88) n-Propylbenzene	13.067	91	598888	26.57	ug/L		99
89) Bromobenzene	13.097	156	110243	22.94	ug/L		93
90) 1,1,2,2-Tetrachloroethane	13.122	83	151501	24.94	ug/L		99
91) 1,3,5-Trimethylbenzene	13.177	105	405024	25.72	ug/L		99
92) 2-Chlorotoluene	13.201	91	387958	25.69	ug/L		97
93) trans-1,4-Dichloro-2-B...	13.237	53	22371	15.81	ug/L	#	38
94) 1,2,3-Trichloropropane	13.231	110	46596	21.99	ug/L		85
95) Cyclohexanone	13.286	55	46620	92.08	ug/L		94
96) 4-Chlorotoluene	13.316	91	347243	24.50	ug/L		96
97) tert-Butylbenzene	13.414	91	207119	24.90	ug/L		96
98) 1,2,4-Trimethylbenzene	13.456	105	488218	30.73	ug/L		95
99) Pentachloroethane	13.462	167	58789	27.84	ug/L		92
100) sec-Butylbenzene	13.529	105	451951	25.90	ug/L		98
101) 4-Isopropyltoluene	13.608	119	387984	25.22	ug/L		97
102) 1,3-Dichlorobenzene	13.724	146	209028	23.96	ug/L		97
103) 1,2,3-Trimethylbenzene	13.761	105	444971	27.78	ug/L		99
104) 1,4-Dichlorobenzene	13.779	146	214590	22.76	ug/L		96
105) n-Butylbenzene	13.894	92	174984	21.82	ug/L		94
106) Benzyl Chloride	13.931	126	48339	22.09	ug/L		99
107) 1,2-Dichlorobenzene	14.071	146	202368	23.37	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 21:47:50 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

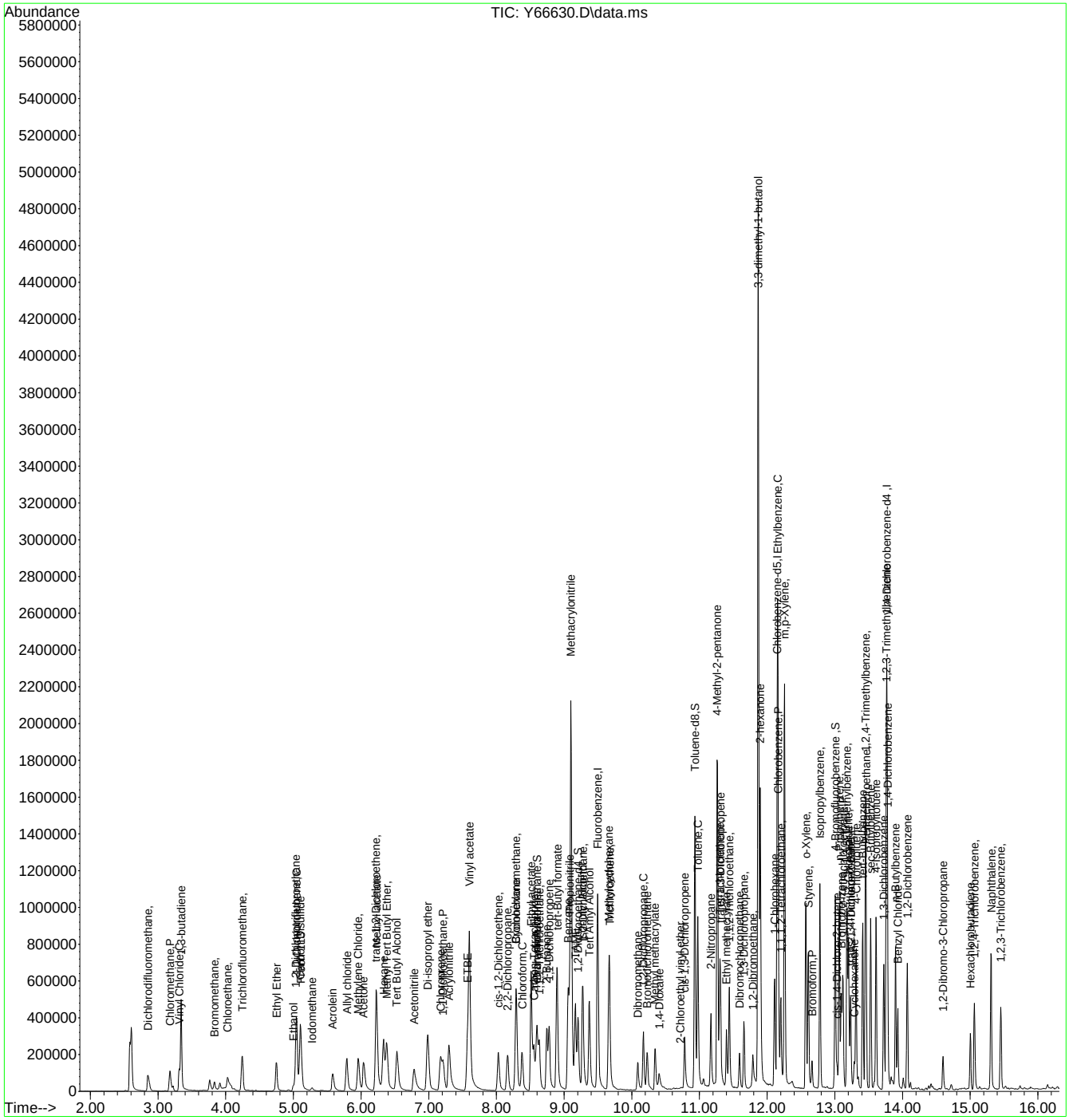
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dibromo-3-Chloropr...	14.600	75	28876	21.30	ug/L	84
109) Hexachlorobutadiene	15.002	225	41285	23.31	ug/L	94
110) 1,2,4-Trichlorobenzene	15.062	180	118806	22.58	ug/L	99
111) Naphthalene	15.312	128	496666	25.39	ug/L	100
112) 1,2,3-Trichlorobenzene	15.452	180	113794	22.54	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 21:47:50 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Manual Integration Approval Summary

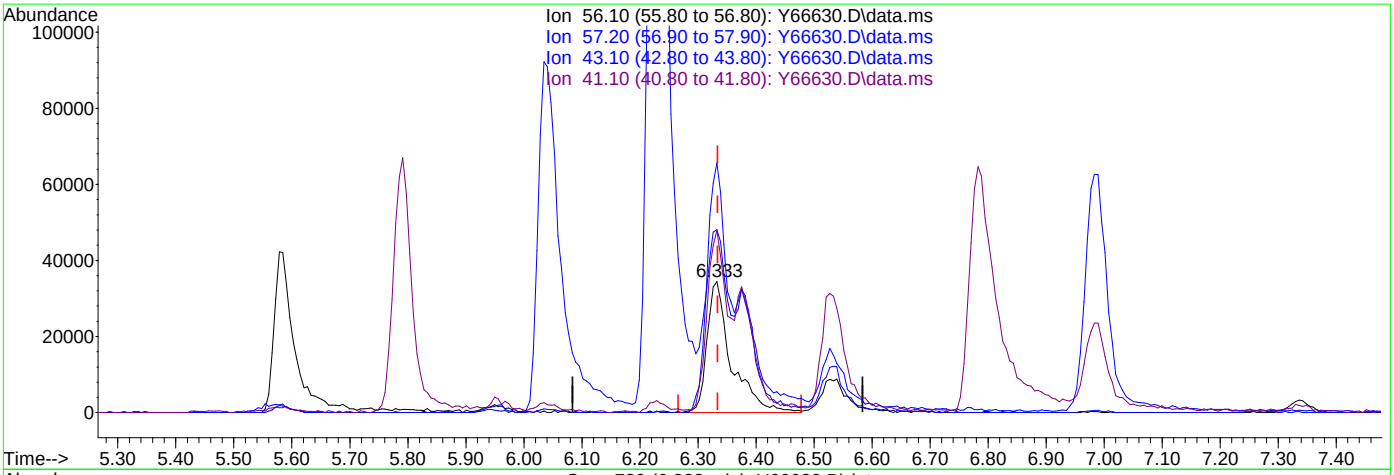
Sample Number: FC1005-3MS
Lab FileID: Y66630.D
Injection Time: 12/09/22 19:43
Method: SW846 8260D
Analyst approved: 12/11/22 21:56 Celine Celis
Supervisor approved: 12/12/22 02:53 Jennifer Fereira

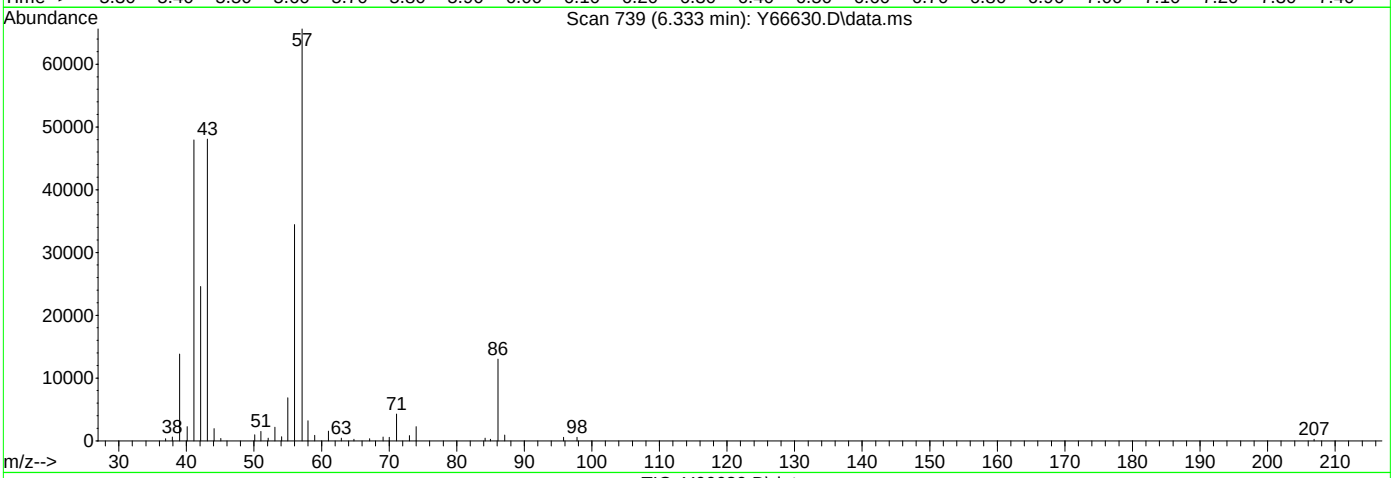
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(22) Hexane

6.333min (-0.001) 35.71ug/L

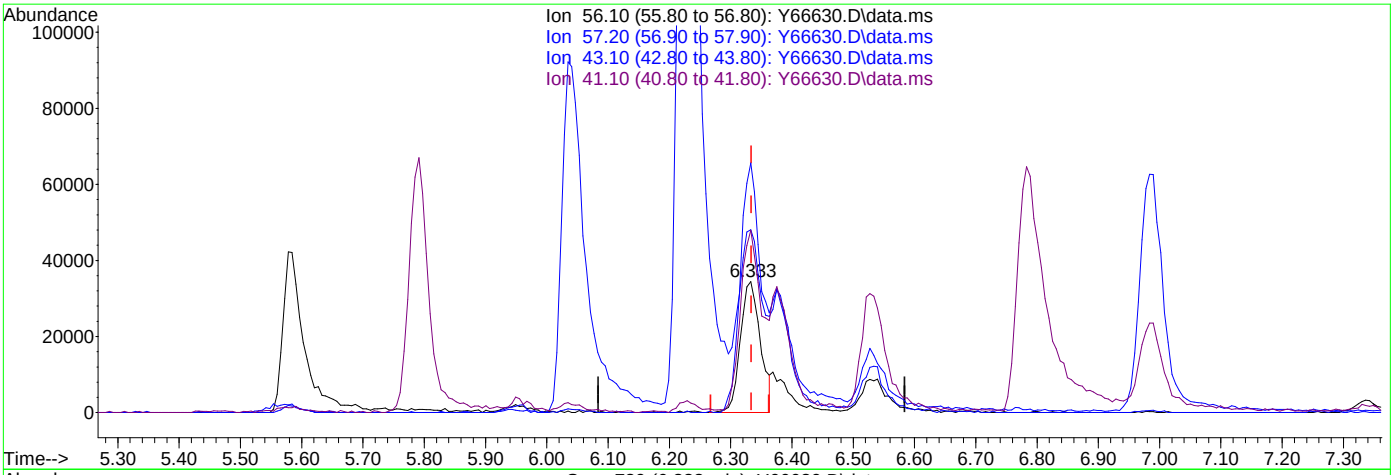
response 100832

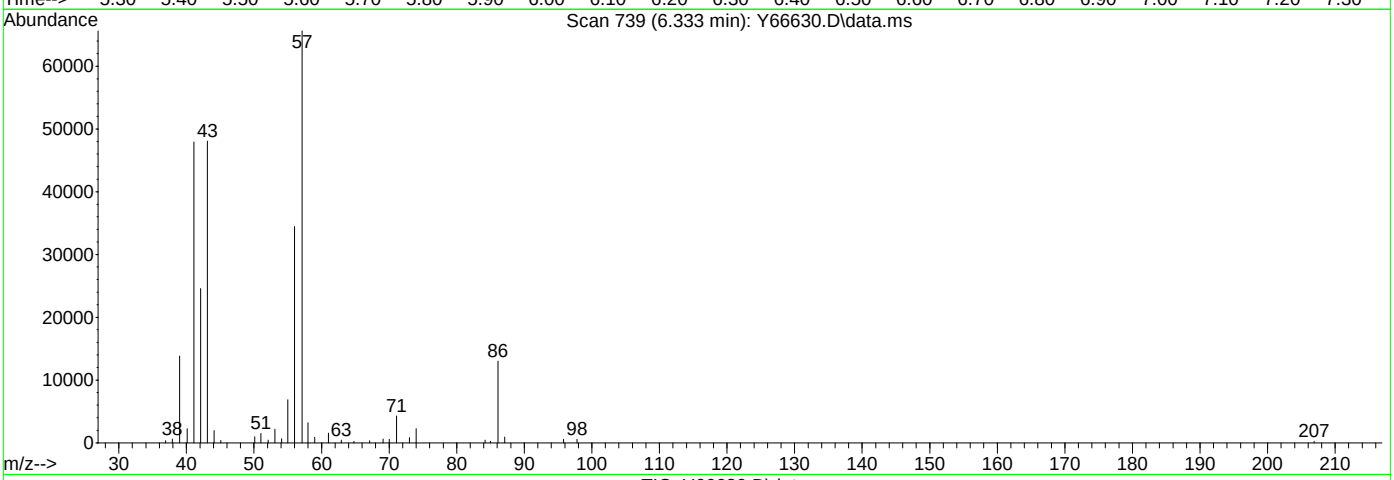
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	189.72
43.10	148.00	128.82
41.10	134.50	136.34

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(22) Hexane

6.333min (-0.001) 27.77ug/L m

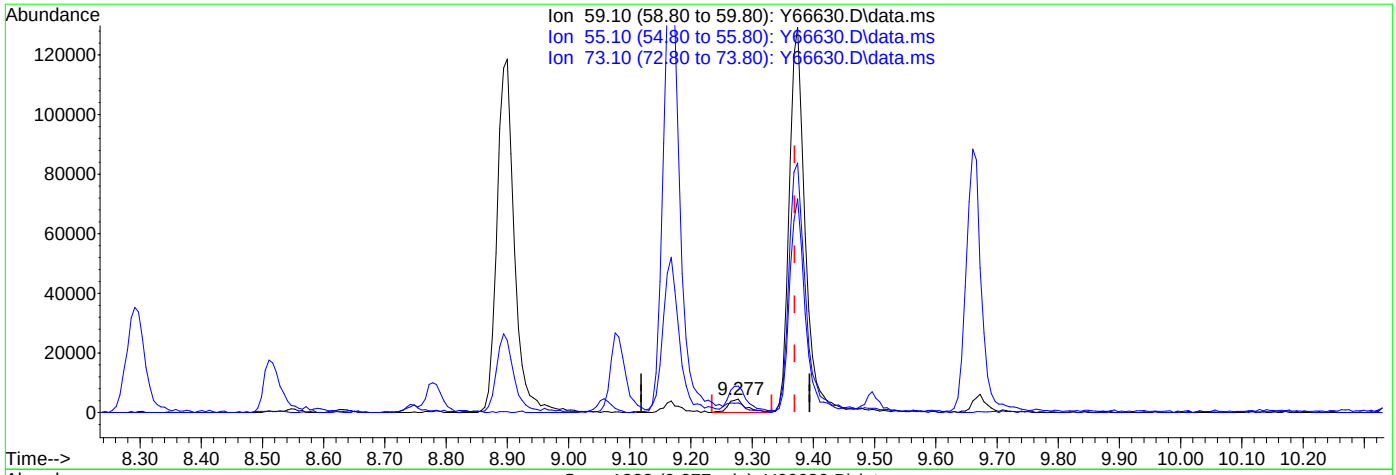
response 78417

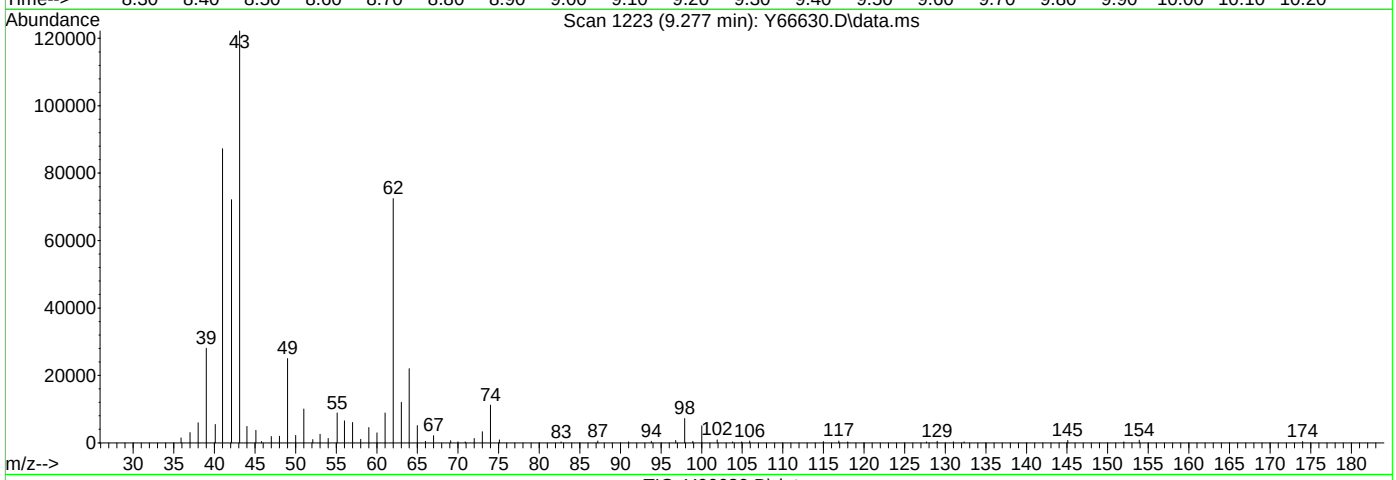
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	190.59
43.10	148.00	139.61
41.10	134.50	139.21

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(52) Tert Amyl Alcohol

9.277min (-0.092) 9.22ug/L

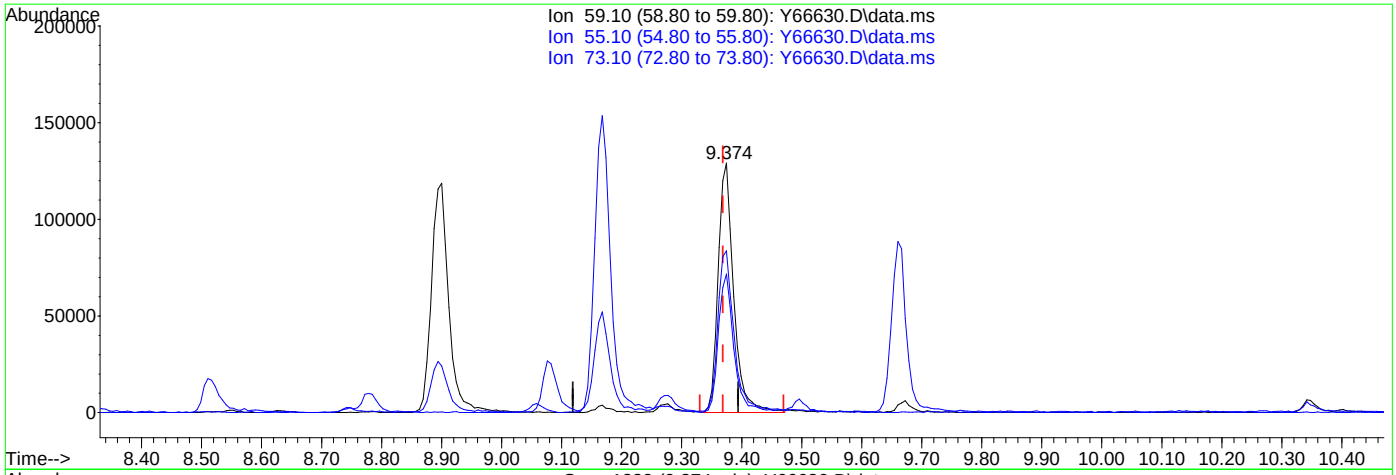
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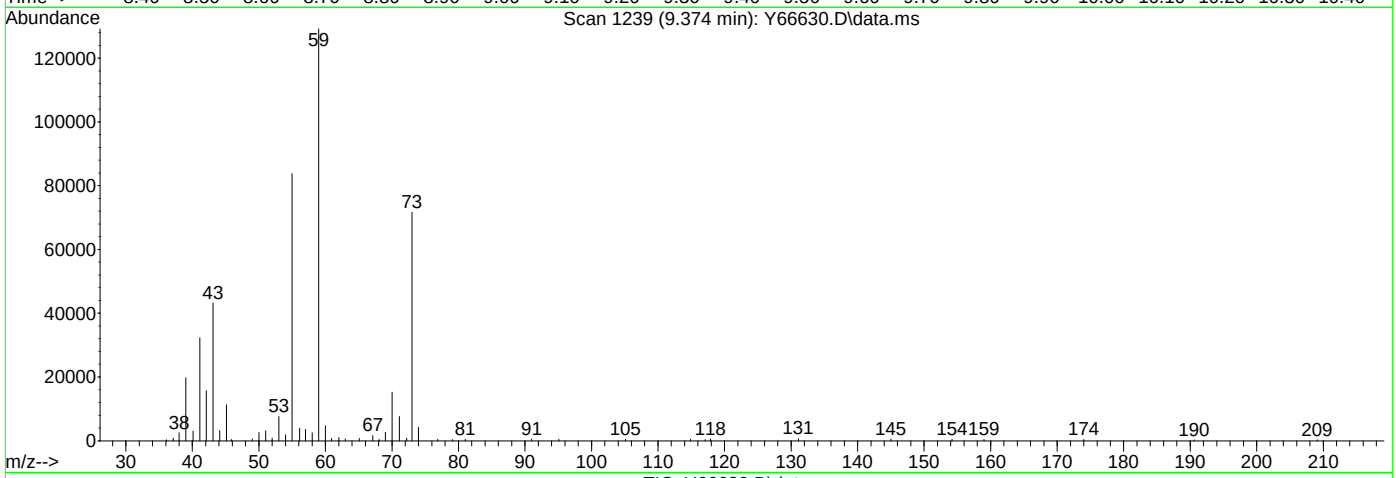
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	179.05#
73.10	54.90	72.36
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(52) Tert Amyl Alcohol

9.374min (+0.005) 217.23ug/L m

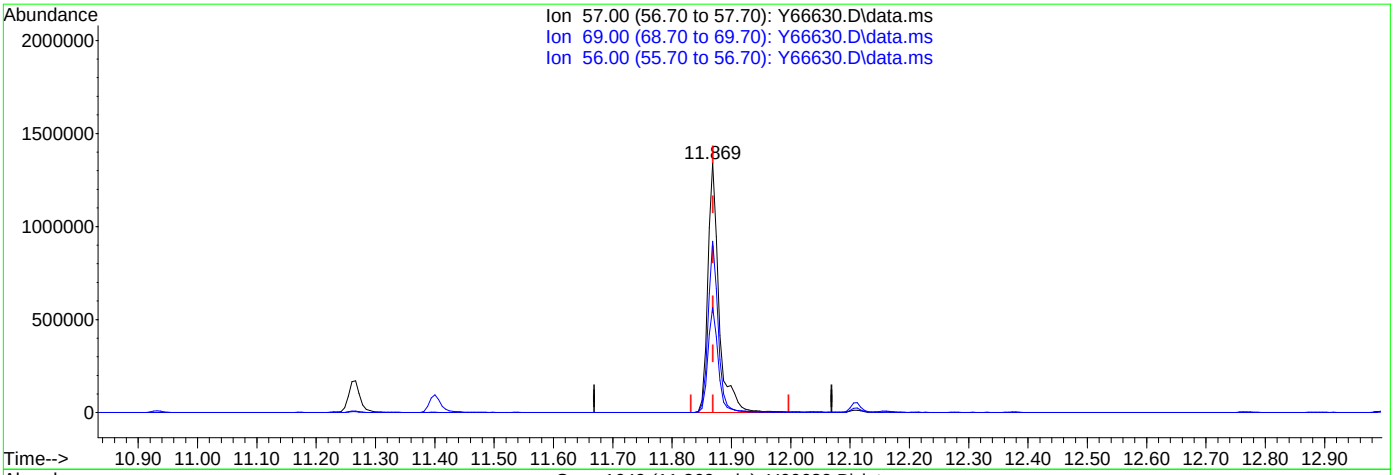
response 233103

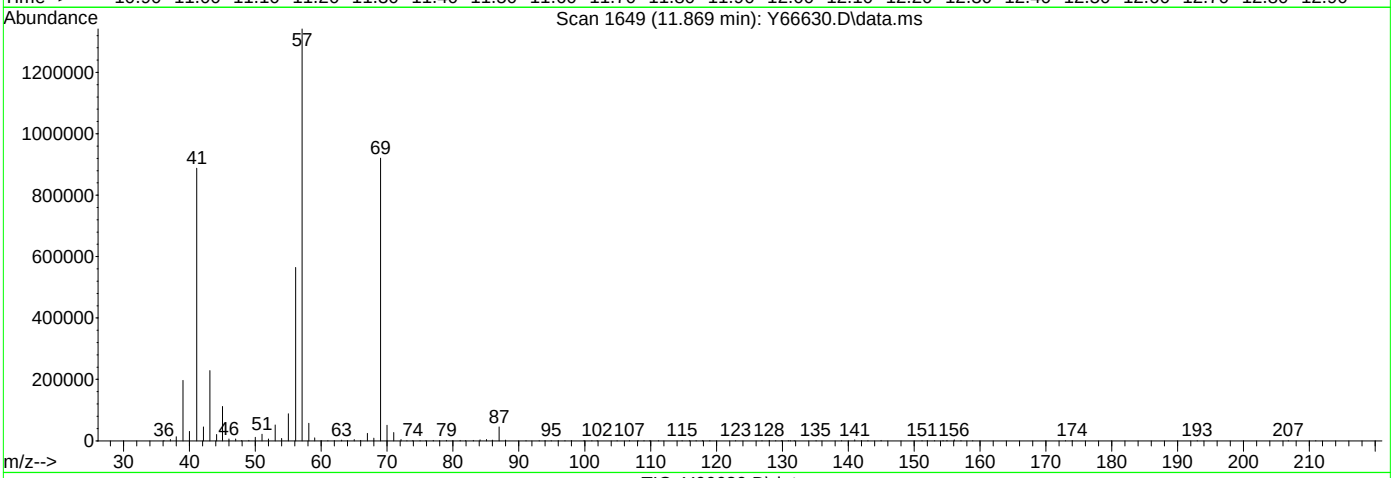
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	64.84
73.10	54.90	55.51
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 1270.51ug/L

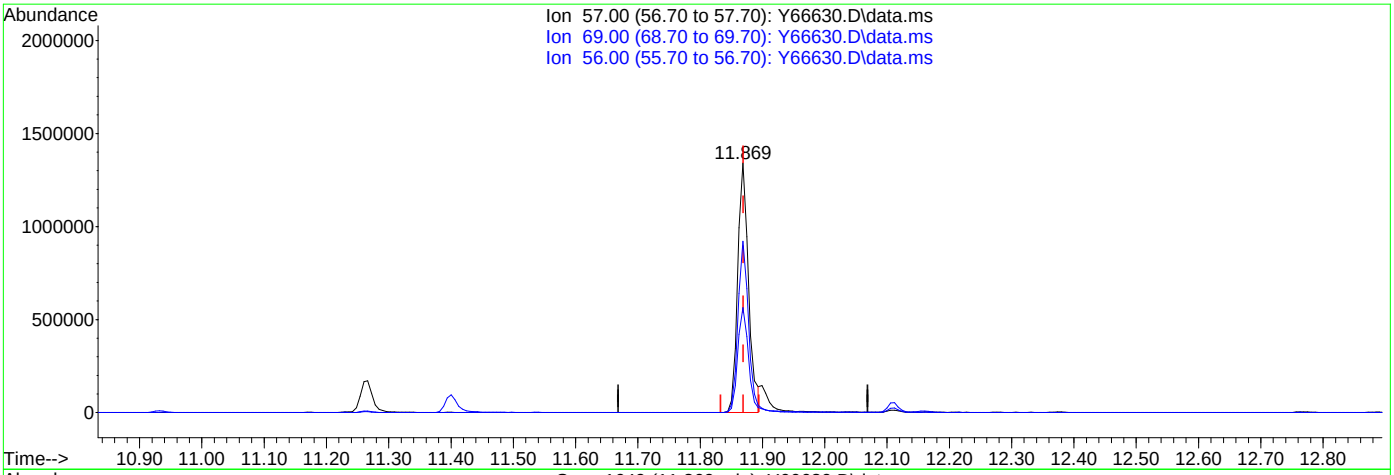
response 1770455

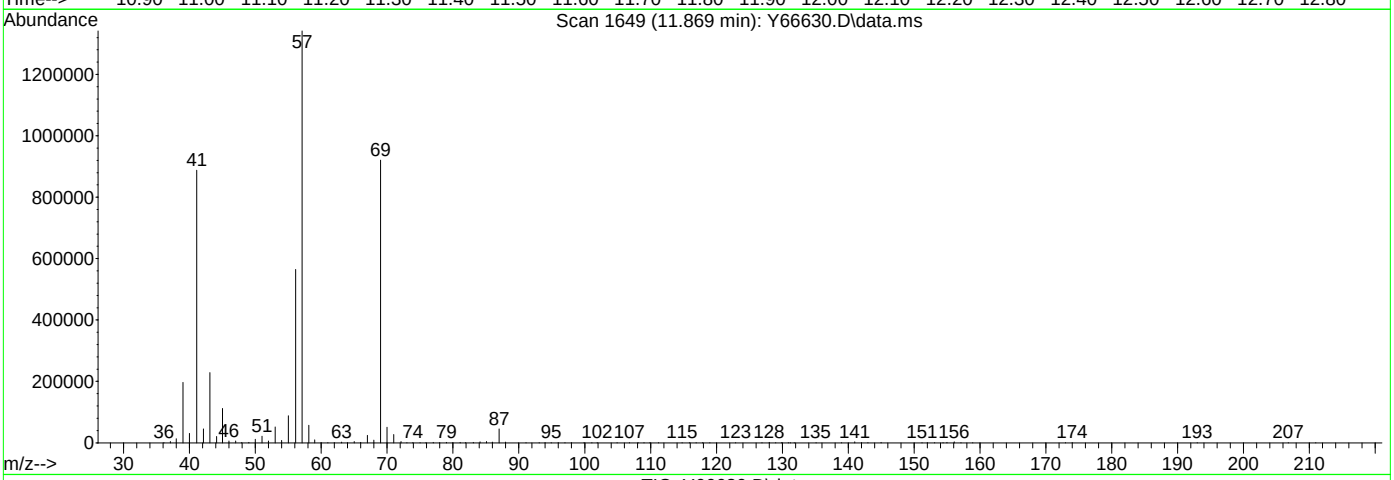
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	68.55
56.00	40.70	42.04
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66630.D
Acq On : 9 Dec 2022 7:43 pm
Operator : joannel
Sample : FC1005-3MS 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Dec 11 20:50:53 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66630.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 1166.60ug/L m

response 1613728

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	68.59
56.00	40.70	42.05
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/12/22 02:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 21:49:18 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.499	96	845495	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.152	117	595514	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.770	152	266516	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.599	113	170623	48.36	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.72%			
49) 1,2-Dichloroethane-d4	9.207	65	222287	50.30	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.60%			
63) Toluene-d8	10.935	98	782633	50.49	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.98%			
86) 4-Bromofluorobenzene	13.010	174	206821	50.63	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.850	85	93566	22.17	ug/L	95
3) Acrolein	5.582	56	102460	94.66	ug/L	92
4) Chloromethane	3.173	50	120078	21.34	ug/L	100
5) 1,3-butadiene	3.343	39	167523	35.90	ug/L	97
6) Vinyl Chloride	3.313	62	117161	23.33	ug/L	99
7) Bromomethane	3.836	94	33958	14.63	ug/L	95
8) Chloroethane	4.030	64	53976	23.43	ug/L	89
9) Trichlorofluoromethane	4.243	101	133461	27.11	ug/L	96
10) Ethyl Ether	4.748	59	90016	22.16	ug/L	97
11) Ethanol	4.998	45	50934	427.04	ug/L	97
12) 1,2-Dichlorotrifluoroe...	5.040	67	110464	24.31	ug/L	96
13) 1,1-Dichloroethene	5.046	61	142245	24.30	ug/L	91
14) Freon 113	5.113	101	90189	25.20	ug/L	89
15) Carbon Disulfide	5.101	76	260170	24.57	ug/L	98
16) Iodomethane	5.278	142	41439	13.82	ug/L	93
17) Allyl chloride	5.789	41	152877	27.62	ug/L	96
18) Methylene Chloride	5.959	49	140299	20.33	ug/L	96
19) Acetone	6.038	43	270229	114.43	ug/L	99
20) Methyl acetate	6.227	43	544366	113.55	ug/L	98
21) trans-1,2-Dichloroethene	6.220	61	136920	23.93	ug/L	97
22) Hexane	6.330	56	74207m	26.04	ug/L	
23) Methyl Tert Butyl Ether	6.379	73	281876	22.40	ug/L	92
24) Tert Butyl Alcohol	6.531	59	281352	223.04	ug/L	94
25) Acetonitrile	6.780	41	209220	212.13	ug/L	94
26) Di-isopropyl ether	6.987	45	350662	24.42	ug/L	99
27) Chloroprene	7.176	53	149991	30.35	ug/L	99
28) 1,1-Dichloroethane	7.212	63	187169	24.24	ug/L	96
29) Acrylonitrile	7.303	53	251980	107.31	ug/L	97
30) ETBE	7.577	59	312568	22.64	ug/L	98
31) Vinyl acetate	7.601	43	1323351	131.79	ug/L	99
32) cis-1,2-Dichloroethene	8.027	96	107046	23.13	ug/L	90
33) 2,2-Dichloropropane	8.167	77	122126	21.69	ug/L	97
34) Bromochloromethane	8.289	128	47404	24.23	ug/L	90
35) Cyclohexane	8.295	56	199678	27.88	ug/L	99
36) Chloroform	8.380	83	161046	22.10	ug/L	95
37) Ethyl acetate	8.514	43	761049	111.13	ug/L	99
38) Tetrahydrofuran	8.581	42	63431	22.07	ug/L	99
40) Carbon Tetrachloride	8.550	117	111078	24.54	ug/L	98
41) 1,1,1-Trichloroethane	8.636	97	150159	24.46	ug/L	96
42) 2-Butanone	8.745	43	456408	116.77	ug/L	100
43) 1,1-Dichloropropene	8.776	75	134183	24.00	ug/L	97
44) tert-Butyl formate	8.897	59	252201	92.22	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 21:49:18 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	Propionitrile	9.080	54	261888	214.97	ug/L		95
46)	Methacrylonitrile	9.104	41	909778	228.96	ug/L		99
47)	Benzene	9.055	78	417724	22.37	ug/L		98
48)	TAME	9.165	73	284528	23.01	ug/L		95
50)	Isobutyl Alcohol	9.268	42	143221	447.19	ug/L		99
51)	1,2-Dichloroethane	9.280	62	140590	22.17	ug/L		98
52)	Tert Amyl Alcohol	9.372	59	229966m	212.67	ug/L		
53)	Trichloroethene	9.670	95	105338	22.08	ug/L		94
54)	Methylcyclohexane	9.664	83	177004	28.29	ug/L		96
55)	Dibromomethane	10.090	93	53697	21.13	ug/L		96
56)	1,2-Dichloropropane	10.175	63	101609	21.75	ug/L		97
57)	Bromodichloromethane	10.229	83	113085	22.73	ug/L		98
58)	Methyl methacrylate	10.345	41	108185	24.81	ug/L		95
59)	1,4-Dioxane	10.406	88	54227	448.14	ug/L		91
60)	2-Chloroethyl vinyl ether	10.716	63	1177	0.40	ug/L	#	37
61)	cis-1,3-Dichloropropene	10.783	75	139139	21.73	ug/L		98
64)	Toluene	10.978	91	486845	24.62	ug/L		96
65)	2-Nitropropane	11.166	41	180380	109.85	ug/L		95
66)	4-Methyl-2-pentanone	11.264	43	1001192	130.32	ug/L		99
67)	trans-1,3-Dichloropropene	11.312	75	136673	25.93	ug/L	#	79
68)	Tetrachloroethene	11.300	166	104092	22.13	ug/L		96
69)	Ethyl methacrylate	11.397	69	135239	23.87	ug/L		95
70)	1,1,2-Trichloroethane	11.440	83	110414	33.05	ug/L		93
71)	Dibromochloromethane	11.592	129	80986	21.41	ug/L		93
72)	1,3-Dichloropropane	11.659	76	160011	21.76	ug/L		99
73)	1,2-Dibromoethane	11.787	107	90296	22.68	ug/L		98
74)	3,3-dimethyl-1-butanol	11.866	57	1667375m	1193.19	ug/L		
75)	2-hexanone	11.896	43	806642	124.80	ug/L		98
76)	1-Chlorohexane	12.109	91	145848	27.84	ug/L		97
77)	Ethylbenzene	12.158	91	545488	24.26	ug/L		97
78)	Chlorobenzene	12.164	112	292014	23.84	ug/L		95
79)	1,1,1,2-Tetrachloroethane	12.201	131	93407	24.40	ug/L		96
80)	m,p-Xylene	12.255	91	860095	49.92	ug/L		98
81)	o-Xylene	12.572	91	409926	24.57	ug/L		100
82)	Styrene	12.608	104	299203	23.62	ug/L		97
83)	Bromoform	12.663	173	52136	21.68	ug/L		97
84)	Isopropylbenzene	12.778	105	472576	24.09	ug/L		98
87)	cis-1,4-Dichloro-2-butene	13.034	53	24282	15.11	ug/L	#	68
88)	n-Propylbenzene	13.064	91	583549	26.01	ug/L		98
89)	Bromobenzene	13.095	156	106717	22.31	ug/L		99
90)	1,1,2,2-Tetrachloroethane	13.119	83	148141	24.51	ug/L		98
91)	1,3,5-Trimethylbenzene	13.180	105	387470	24.72	ug/L		100
92)	2-Chlorotoluene	13.204	91	375965	25.02	ug/L		97
93)	trans-1,4-Dichloro-2-B...	13.241	53	22716	16.12	ug/L		97
94)	1,2,3-Trichloropropane	13.235	110	46597	22.10	ug/L		93
95)	Cyclohexanone	13.289	55	42515	84.37	ug/L		92
96)	4-Chlorotoluene	13.314	91	343874	24.38	ug/L		99
97)	tert-Butylbenzene	13.411	91	204397	24.69	ug/L		96
98)	1,2,4-Trimethylbenzene	13.454	105	428880	27.12	ug/L		98
99)	Pentachloroethane	13.460	167	58740	27.95	ug/L	#	83
100)	sec-Butylbenzene	13.533	105	449349	25.88	ug/L		99
101)	4-Isopropyltoluene	13.612	119	385401	25.17	ug/L		97
102)	1,3-Dichlorobenzene	13.721	146	205467	23.66	ug/L		96
103)	1,2,3-Trimethylbenzene	13.758	105	426330	26.74	ug/L		98
104)	1,4-Dichlorobenzene	13.782	146	214063	22.82	ug/L		98
105)	n-Butylbenzene	13.898	92	177831	22.29	ug/L		99
106)	Benzyl Chloride	13.934	126	45429	20.94	ug/L		94
107)	1,2-Dichlorobenzene	14.068	146	195456	22.68	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 21:49:18 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

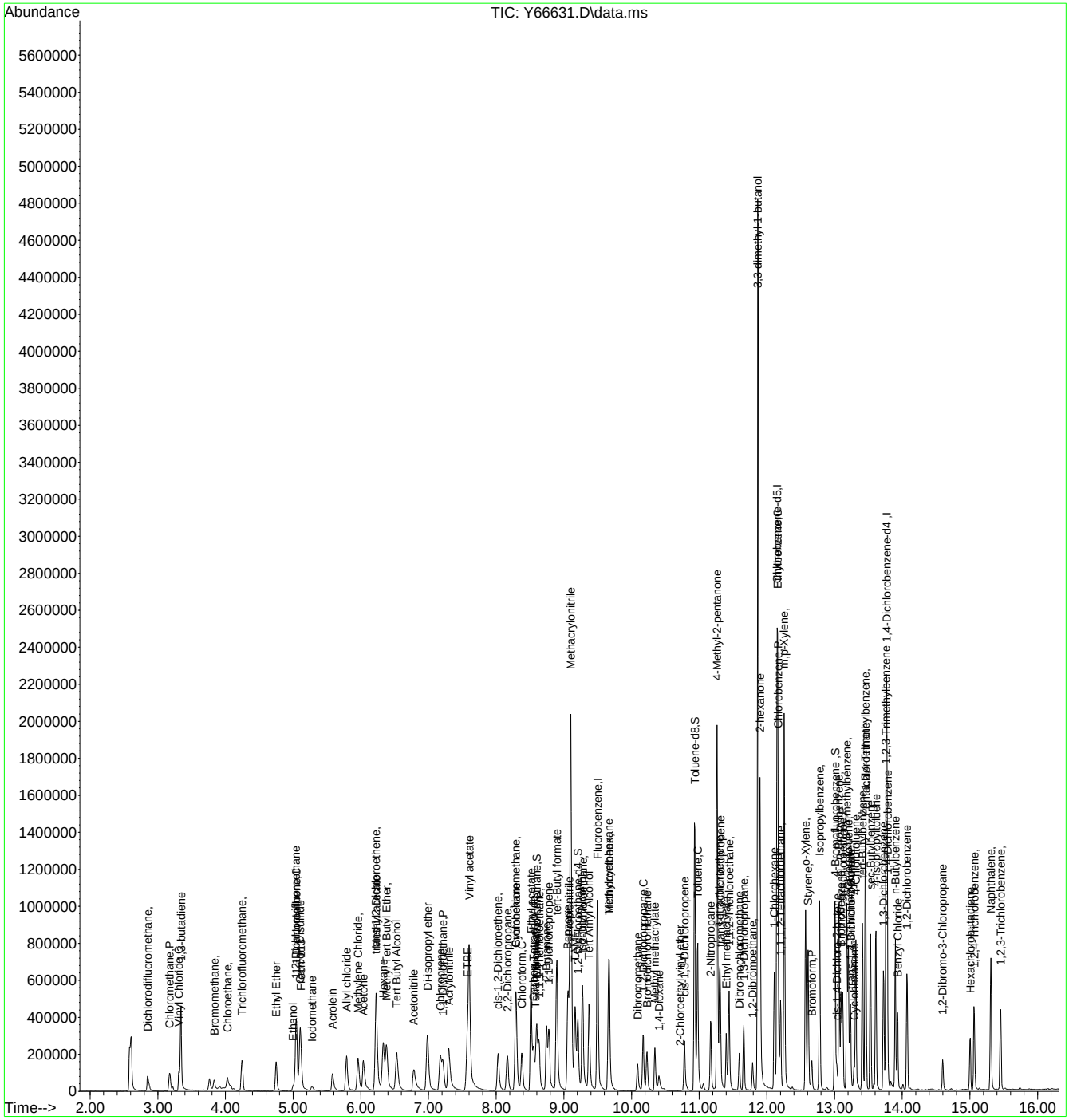
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dibromo-3-Chloropr...	14.597	75	29937	22.19	ug/L	96
109) Hexachlorobutadiene	15.005	225	39309	22.30	ug/L	90
110) 1,2,4-Trichlorobenzene	15.066	180	116886	22.32	ug/L	99
111) Naphthalene	15.309	128	455872	23.42	ug/L	99
112) 1,2,3-Trichlorobenzene	15.455	180	110016	21.90	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 21:49:18 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Manual Integration Approval Summary

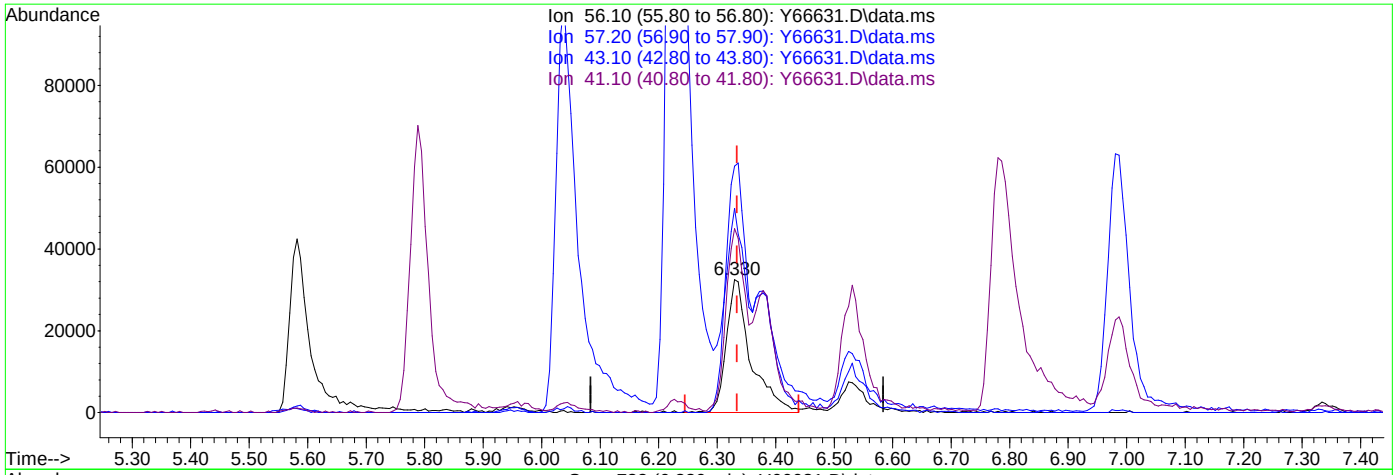
Sample Number: FC1005-3MSD
Lab FileID: Y66631.D
Injection Time: 12/09/22 20:07
Method: SW846 8260D
Analyst approved: 12/11/22 21:56 Celine Celis
Supervisor approved: 12/12/22 02:53 Jennifer Fereira

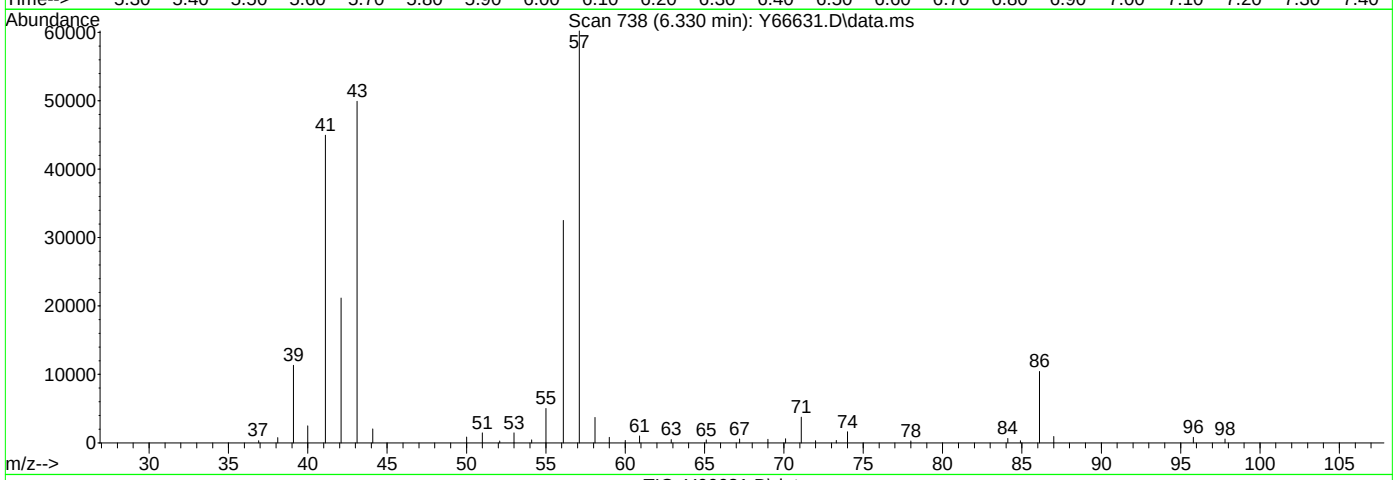
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(22) Hexane

6.330min (-0.004) 33.26ug/L

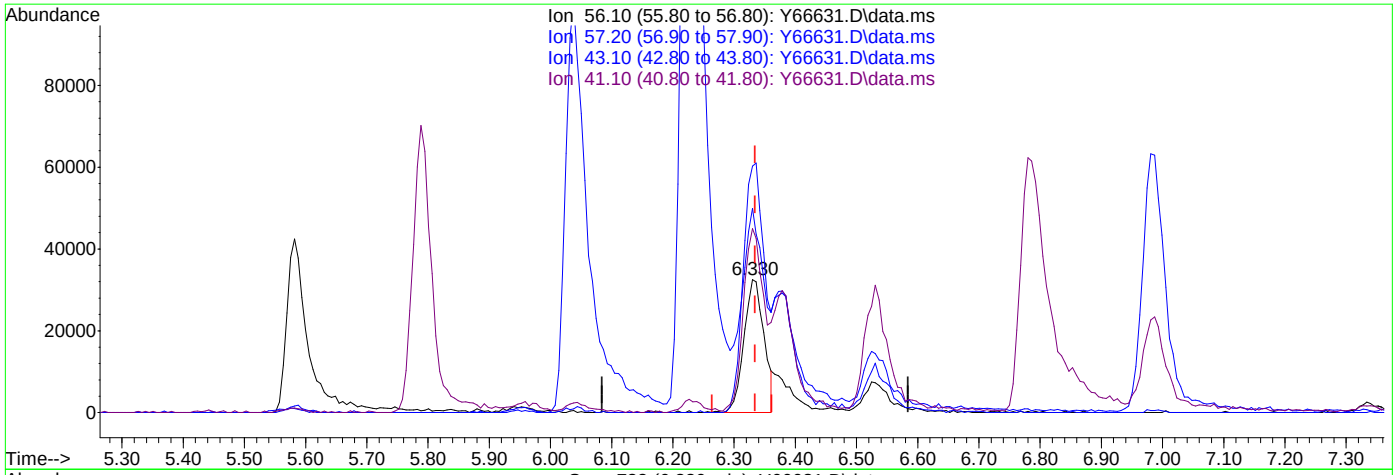
response 94794

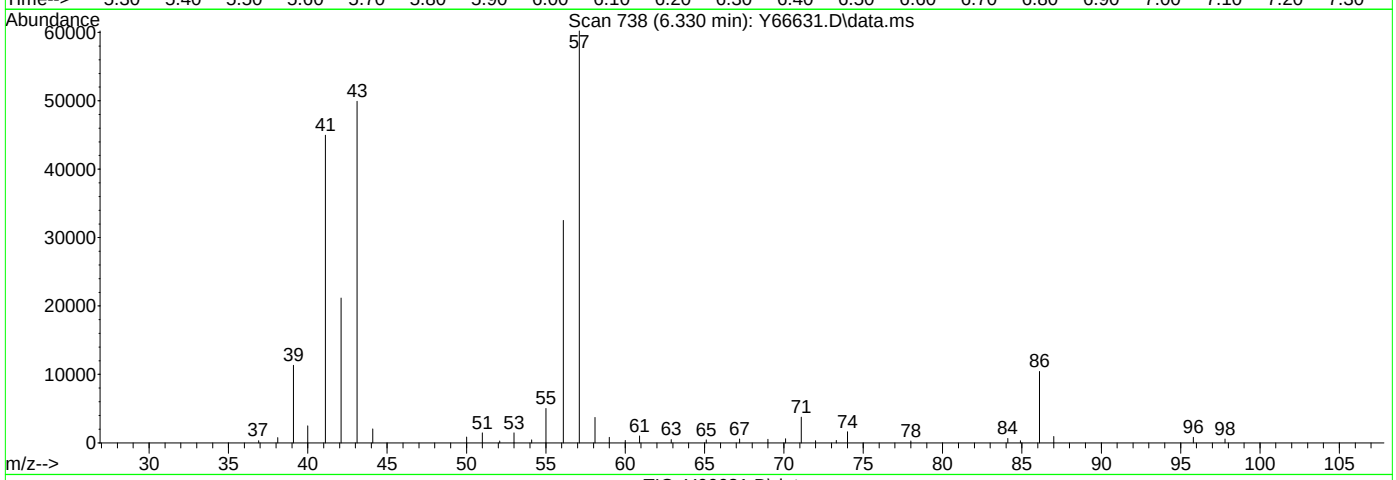
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	183.91
43.10	148.00	137.42
41.10	134.50	131.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(22) Hexane

6.330min (-0.004) 26.04ug/L m

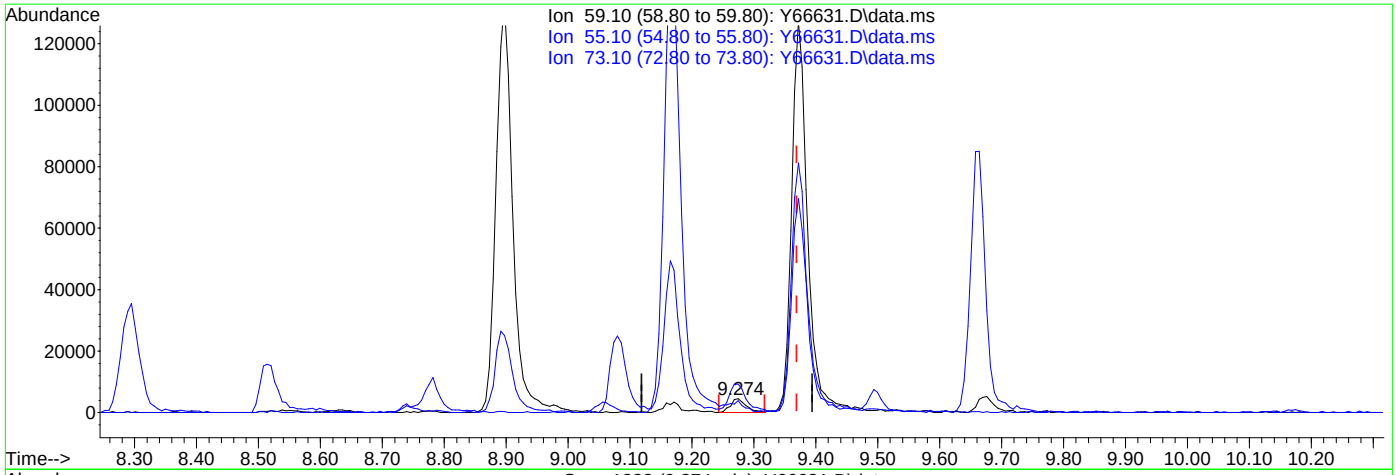
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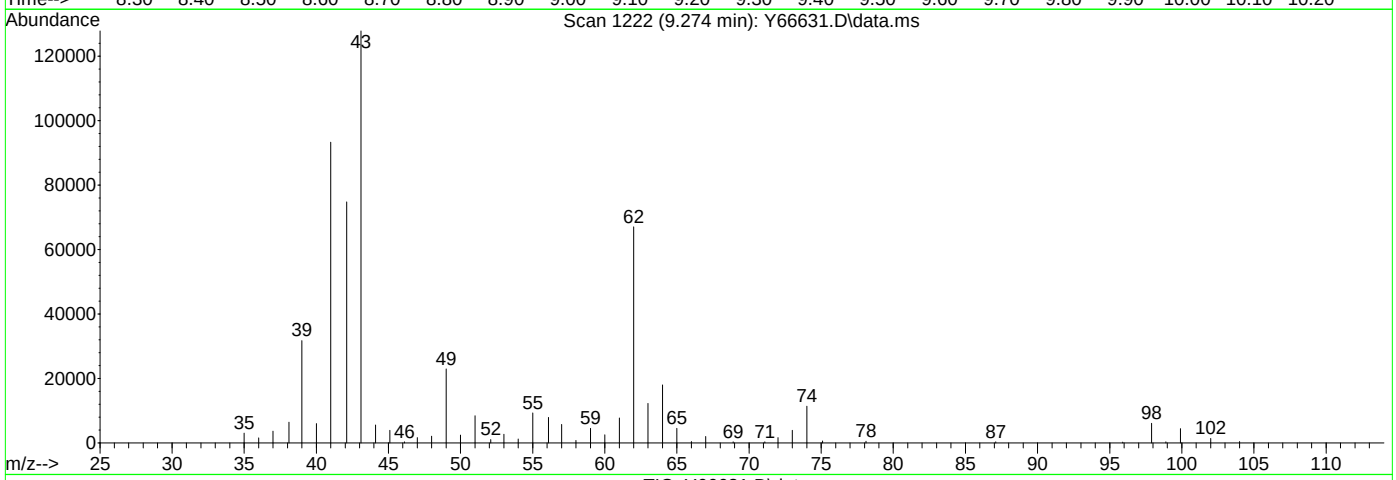
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	185.17
43.10	148.00	153.49
41.10	134.50	138.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(52) Tert Amyl Alcohol

9.274min (-0.095) 7.83ug/L

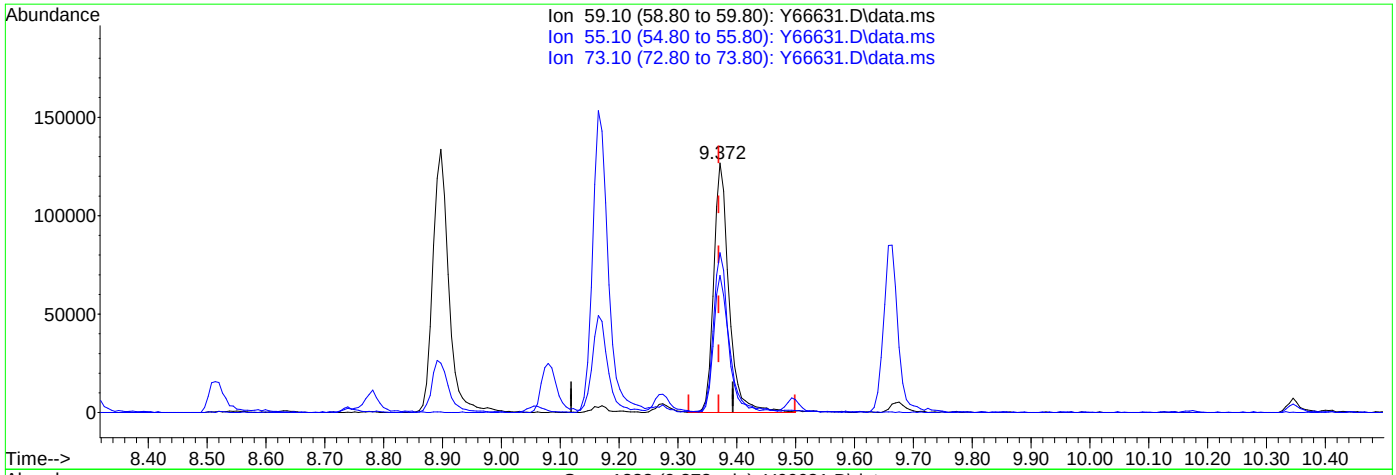
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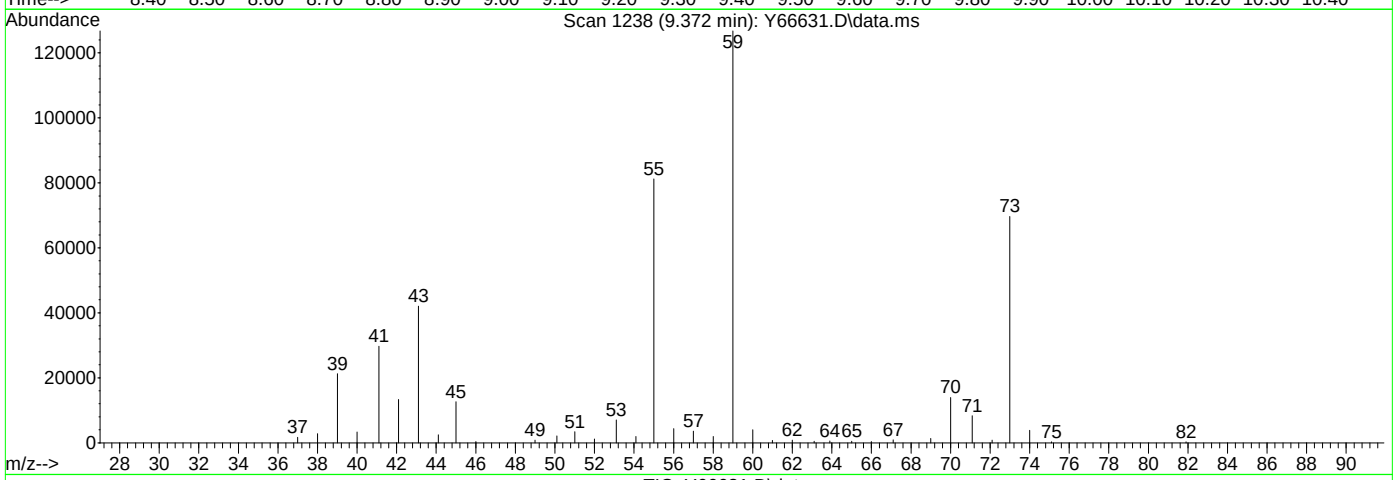
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	182.94#
73.10	54.90	74.95
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(52) Tert Amyl Alcohol

9.372min (+0.003) 212.67ug/L m

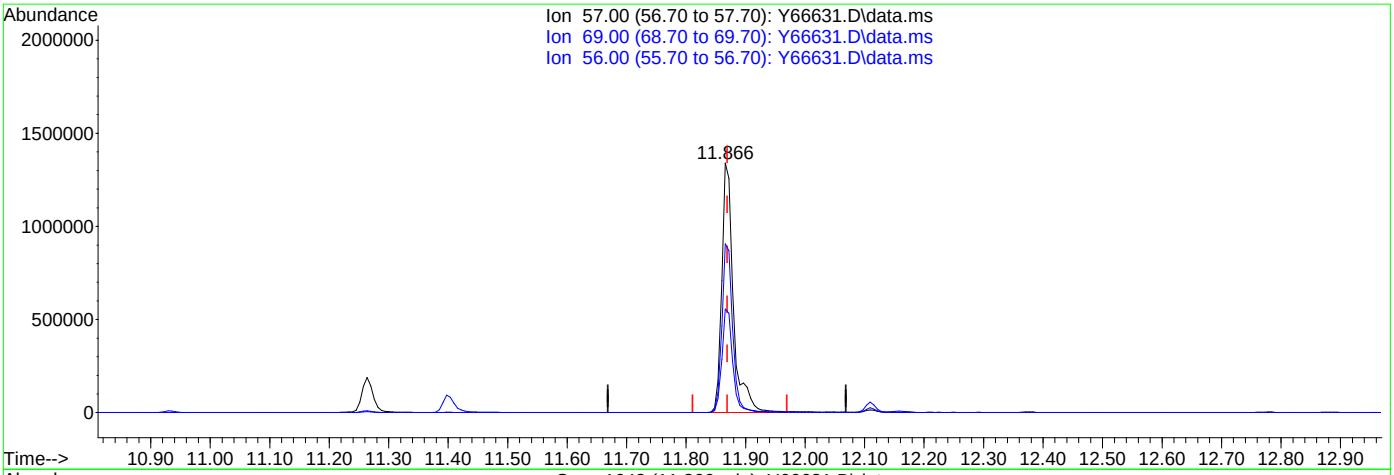
response 229966

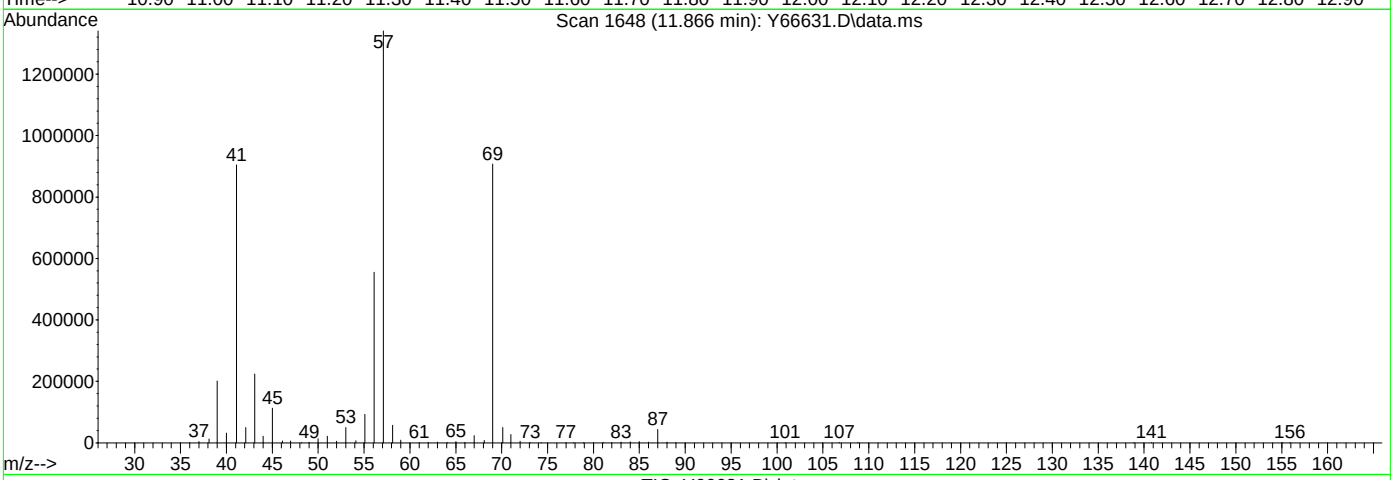
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	64.06
73.10	54.90	54.93
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.866min (-0.003) 1312.82ug/L

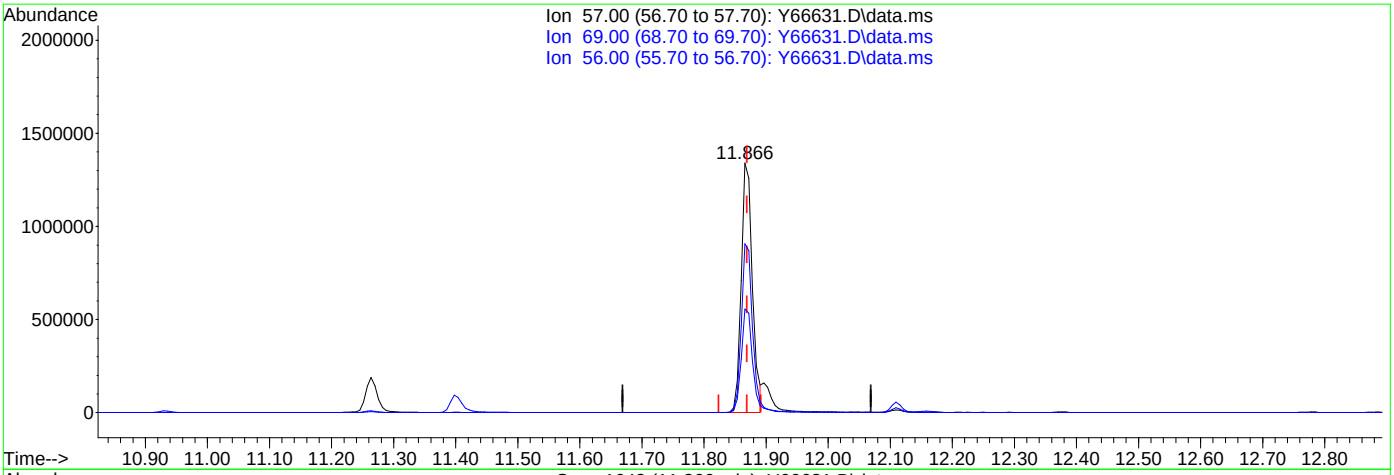
response 1850128

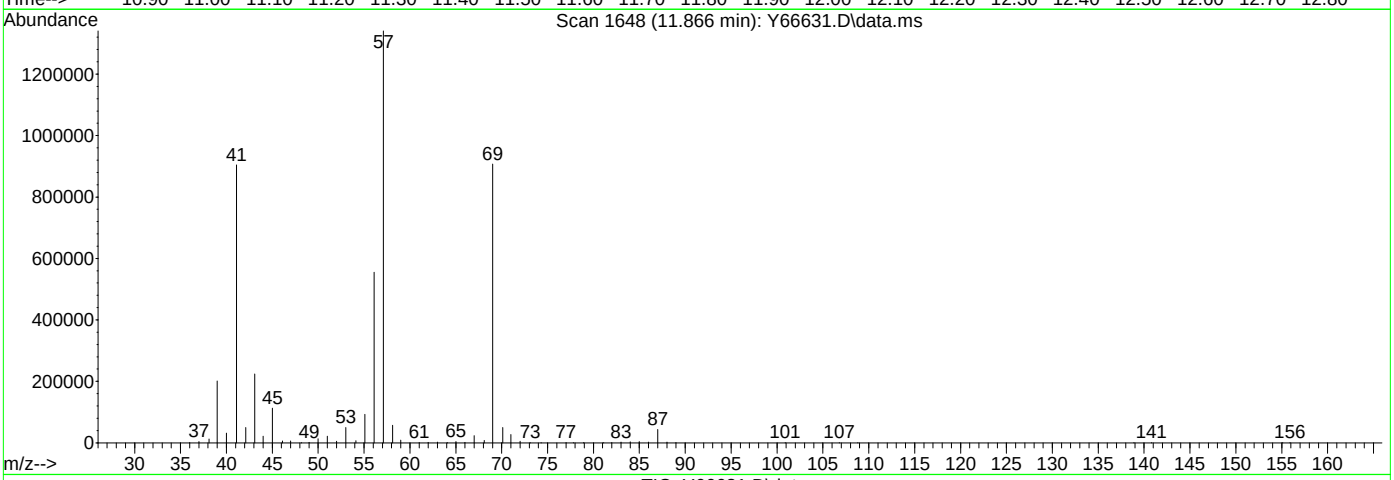
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	67.65
56.00	40.70	41.42
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66631.D
Acq On : 9 Dec 2022 8:07 pm
Operator : joannel
Sample : FC1005-3MSD 10X
Misc : MS52972,VY2765,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Dec 11 20:50:56 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66631.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.866min (-0.003) 1193.19ug/L m

response 1667375

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	67.65
56.00	40.70	41.42
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira
12/14/22 00:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 14:16:02 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	747271	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	516767	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	185563	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	201408	48.19	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	96.38%		
50) 1,2-Dichloroethane-d4	8.262	65	189271	48.86	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery =	97.72%		
63) Toluene-d8	10.152	98	710404	51.22	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery =	102.44%		
86) 4-Bromofluorobenzene	12.944	174	176122	47.75	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	95.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	88385	16.87	ug/L	99
3) Chloromethane	3.019	50	89731	19.52	ug/L	100
4) 1,3-butadiene	3.190	39	155139	33.62	ug/L	97
5) Vinyl Chloride	3.160	62	103691	22.32	ug/L	100
6) Bromomethane	3.684	94	33245	17.05	ug/L	97
7) Chloroethane	3.885	64	60119	21.22	ug/L	98
8) Trichlorofluoromethane	4.105	101	152013	21.40	ug/L	96
9) Ethyl Ether	4.556	59	69527	20.18	ug/L	98
10) Ethanol	4.787	45	6427	404.01	ug/L	95
11) 1,2-Dichlorotrifluoroe...	4.830	67	115567	21.95	ug/L	98
12) 1,1-Dichloroethene	4.830	61	131507	20.32	ug/L	97
13) Freon 113	4.885	101	95044	21.59	ug/L	97
14) Carbon Disulfide	4.867	76	274570	21.99	ug/L	99
15) Iodomethane	5.025	142	29920	23.64	ug/L	97
16) Acrolein	5.281	56	63549	88.23	ug/L	100
17) Allyl chloride	5.458	41	133797	23.18	ug/L	98
18) Methylene Chloride	5.592	49	128160	21.01	ug/L	96
19) Acetone	5.659	43	110952	105.46	ug/L	98
20) Methyl acetate	5.812	43	296137	108.33	ug/L	98
21) trans-1,2-Dichloroethene	5.799	61	127583	20.39	ug/L	98
22) Hexane	5.891	56	66261m	22.55	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	226312	19.66	ug/L	99
24) Tert Butyl Alcohol	6.031	59	47028	194.33	ug/L	90
25) Acetonitrile	6.232	41	88576	208.97	ug/L	96
26) Di-isopropyl ether	6.372	45	293413	20.93	ug/L	98
27) Chloroprene	6.519	53	136131	26.32	ug/L	97
28) 1,1-Dichloroethane	6.543	63	164238	21.63	ug/L	100
29) Acrylonitrile	6.610	52	127934	107.03	ug/L	97
30) ETBE	6.799	59	249471	19.96	ug/L	98
31) Vinyl acetate	6.824	43	1015972	127.53	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	95725	21.07	ug/L	97
33) 2,2-Dichloropropane	7.299	77	98510	18.41	ug/L	98
34) Bromochloromethane	7.409	128	52795	21.84	ug/L	96
35) Cyclohexane	7.415	56	157052	24.06	ug/L	97
36) Chloroform	7.476	83	167375	20.98	ug/L	98
37) Ethyl acetate	7.592	43	394583	108.93	ug/L	99
38) Tetrahydrofuran	7.677	42	24658	22.45	ug/L	96
40) Carbon Tetrachloride	7.647	117	104350	22.23	ug/L	99
41) 1,1,1-Trichloroethane	7.720	97	138365	21.83	ug/L	97
42) 2-Butanone	7.817	43	178944	109.19	ug/L	98
43) 1,1-Dichloropropene	7.848	75	122403	20.95	ug/L	98
44) tert-Butyl formate	7.964	59	101233	54.40	ug/L #	85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 14:16:02 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Propionitrile	8.146	54	104060	205.94	ug/L		85
46) Methacrylonitrile	8.165	41	648011	220.33	ug/L		99
47) Benzene	8.122	78	354642	21.21	ug/L		99
48) TAME	8.214	73	222089	20.53	ug/L		96
49) Isobutyl alcohol	8.299	43	39643m	380.05	ug/L		
51) 1,2-Dichloroethane	8.335	62	136613	20.09	ug/L		97
52) Tert Amyl Alcohol	8.409	59	31299	189.11	ug/L		88
53) Trichloroethene	8.732	95	100696	21.29	ug/L		98
54) Methylcyclohexane	8.726	83	149075	24.37	ug/L		99
55) Dibromomethane	9.177	93	62148	20.18	ug/L		97
56) 1,2-Dichloropropane	9.280	63	87863	20.15	ug/L		99
57) Bromodichloromethane	9.329	83	115381	21.23	ug/L		99
58) Methyl methacrylate	9.457	41	74232	23.46	ug/L		99
59) 1,4-Dioxane	9.536	88	10179	336.43	ug/L		90
61) cis-1,3-Dichloropropene	9.969	75	120781	20.07	ug/L		99
64) Toluene	10.207	91	377142	22.81	ug/L		100
65) 2-Nitropropane	10.445	41	42027	115.04	ug/L		94
66) 4-Methyl-2-pentanone	10.567	43	417504	112.96	ug/L		98
67) trans-1,3-Dichloropropene	10.616	75	114209	24.10	ug/L		90
68) Tetrachloroethene	10.609	166	107032	22.86	ug/L		96
69) Ethyl methacrylate	10.731	69	90832	24.04	ug/L		98
70) 1,1,2-Trichloroethane	10.780	83	74745	23.46	ug/L		98
71) Dibromochloromethane	10.969	129	85025	23.25	ug/L		94
72) 1,3-Dichloropropane	11.067	76	135251	21.06	ug/L		99
73) 1,2-Dibromoethane	11.231	107	87221	22.75	ug/L		99
74) 3,3-dimethyl-1-butanol	11.341	57	131153	1159.87	ug/L		97
75) 2-hexanone	11.396	43	280823	114.60	ug/L		100
76) 1-Chlorohexane	11.682	91	116929m	24.98	ug/L		
77) Ethylbenzene	11.743	91	435166	23.37	ug/L		99
78) Chlorobenzene	11.743	112	263102	23.56	ug/L		98
79) 1,1,1,2-Tetrachloroethane	11.792	131	81549	24.54	ug/L		98
80) m,p-Xylene	11.884	91	667857	46.93	ug/L		99
81) o-Xylene	12.323	91	328789	23.54	ug/L		99
82) Styrene	12.377	104	248387	24.05	ug/L		98
83) Bromoform	12.432	173	45547	22.43	ug/L		97
84) Isopropylbenzene	12.633	105	398931	24.21	ug/L		98
87) cis-1,4-Dichloro-2-butene	12.993	53	23403	20.55	ug/L		93
88) n-Propylbenzene	13.054	91	476670	24.82	ug/L		100
89) Bromobenzene	13.066	156	109661	22.71	ug/L		99
90) 1,1,2,2-Tetrachloroethane	13.121	83	108511	24.05	ug/L		99
91) 1,3,5-Trimethylbenzene	13.237	105	327322	24.15	ug/L		99
92) 2-Chlorotoluene	13.408	91	295682	24.47	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	22915	23.20	ug/L	#	87
94) 1,2,3-Trichloropropane	13.286	110	29457	21.83	ug/L		95
95) Cyclohexanone	13.353	55	8401	104.78	ug/L		94
96) 4-Chlorotoluene	13.408	91	295682	24.47	ug/L		99
97) tert-Butylbenzene	13.578	91	183815	24.45	ug/L		98
99) 1,2,4-Trimethylbenzene	13.645	105	329040	24.88	ug/L		99
100) Pentachloroethane	13.627	167	49505	27.80	ug/L		99
101) sec-Butylbenzene	13.761	105	399354	26.55	ug/L		99
102) 4-Isopropyltoluene	13.895	119	334451	25.66	ug/L		100
103) 1,3-Dichlorobenzene	14.023	146	205076	24.42	ug/L		99
104) 1,2,3-Trimethylbenzene	14.109	105	355245	26.27	ug/L		99
105) 1,4-Dichlorobenzene	14.109	146	215924	24.09	ug/L		98
106) n-Butylbenzene	14.328	92	164044	23.74	ug/L		98
107) Benzyl Chloride	14.353	126	20037	21.68	ug/L	#	92
108) 1,2-Dichlorobenzene	14.542	146	195153	23.94	ug/L		98
109) 1,2-Dibromo-3-Chloropr...	15.291	75	12846	22.67	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 14:16:02 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

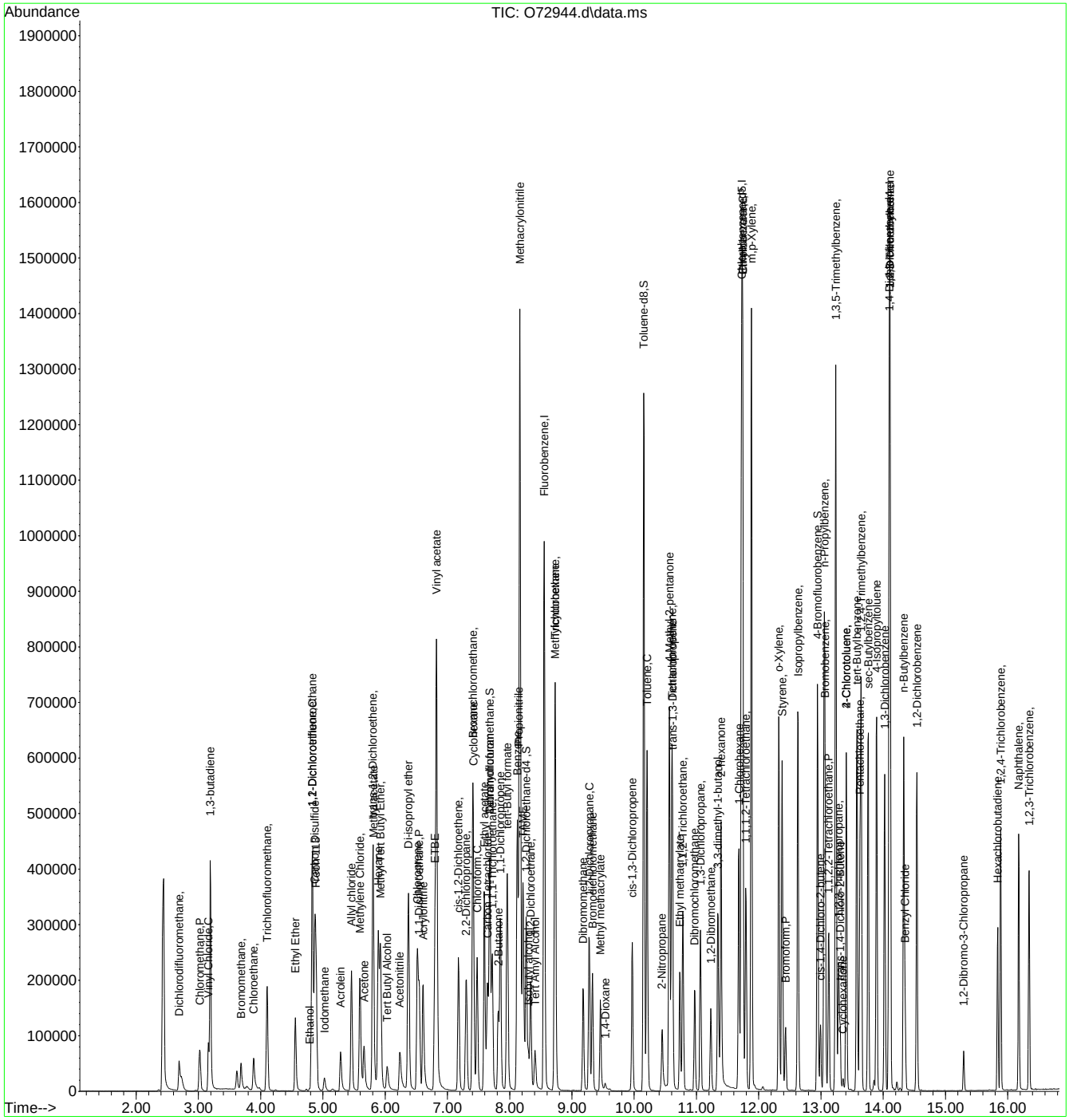
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) Hexachlorobutadiene	15.840	225	37696	21.24	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	106916	21.30	ug/L	93
112) Naphthalene	16.175	128	277143	22.11	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	100549	21.58	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 14:16:02 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FC1020-3MS
Lab FileID: O72944.D
Injection Time: 12/09/22 21:09

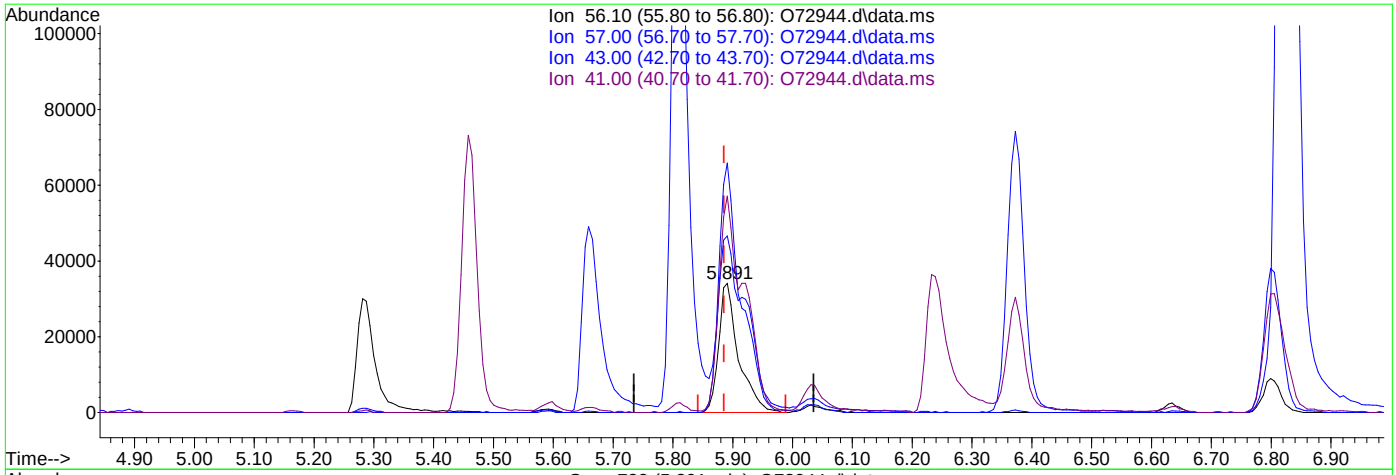
Method: SW846 8260D
Analyst approved: 12/11/22 14:30 Celine Celis
Supervisor approved: 12/14/22 00:08 Jennifer Fereira

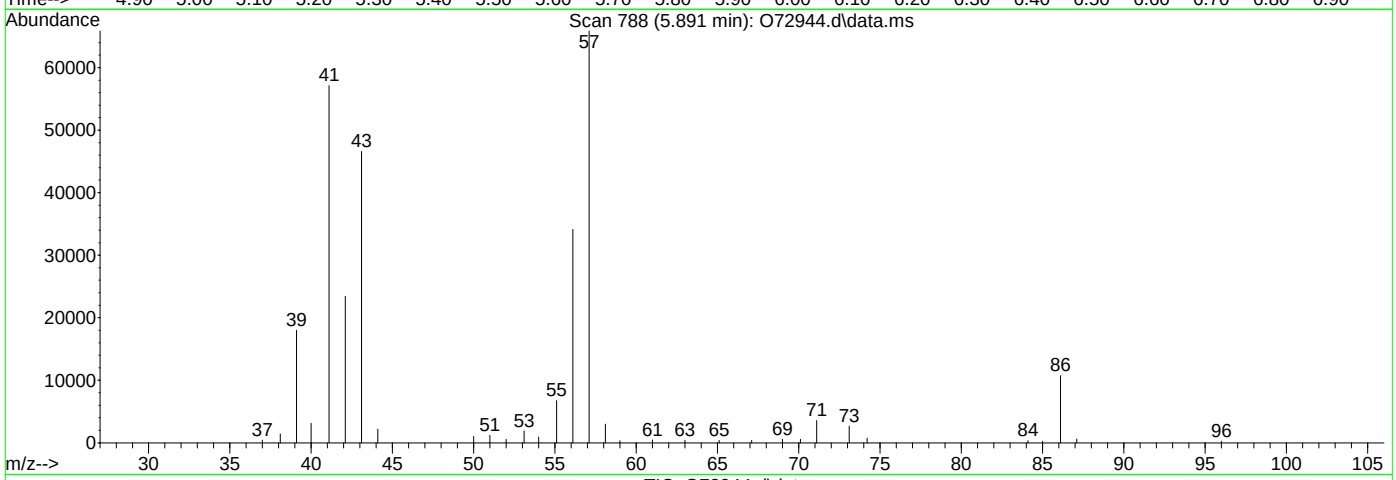
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 13:47:58 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(22) Hexane

5.891min (+0.006) 26.91ug/L

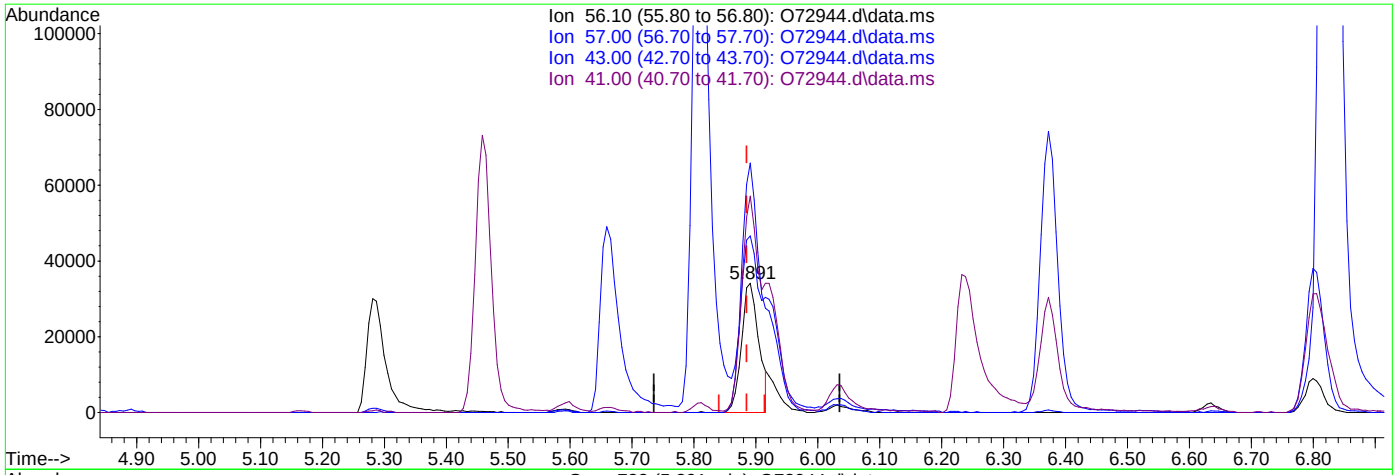
response 79073

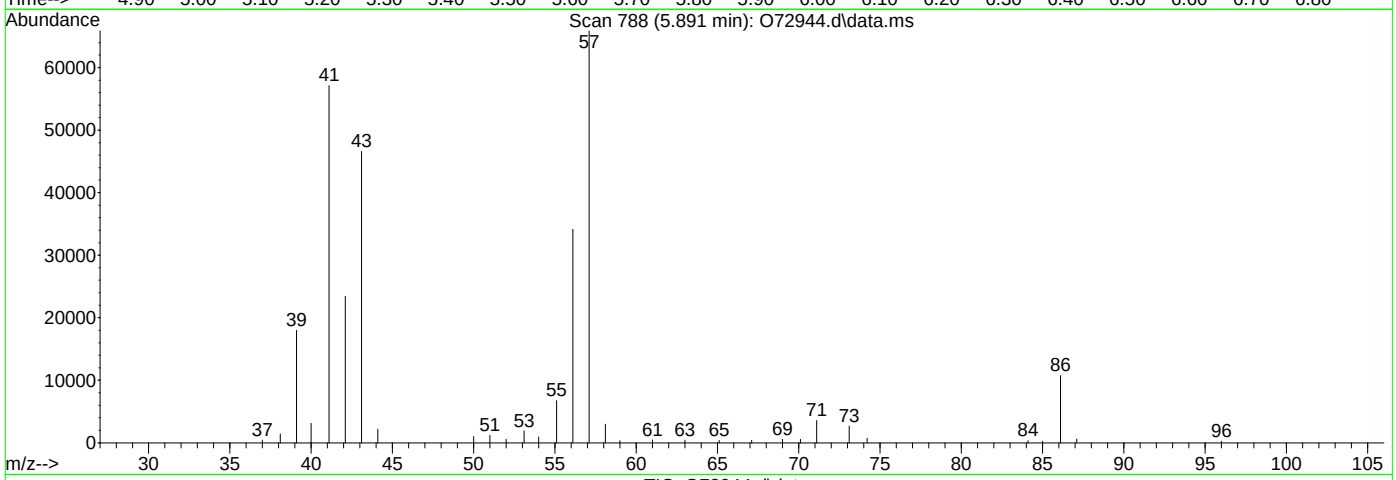
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	193.15
43.00	143.30	132.49
41.00	165.60	166.04

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 13:47:58 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(22) Hexane

5.891min (+0.006) 22.55ug/L m

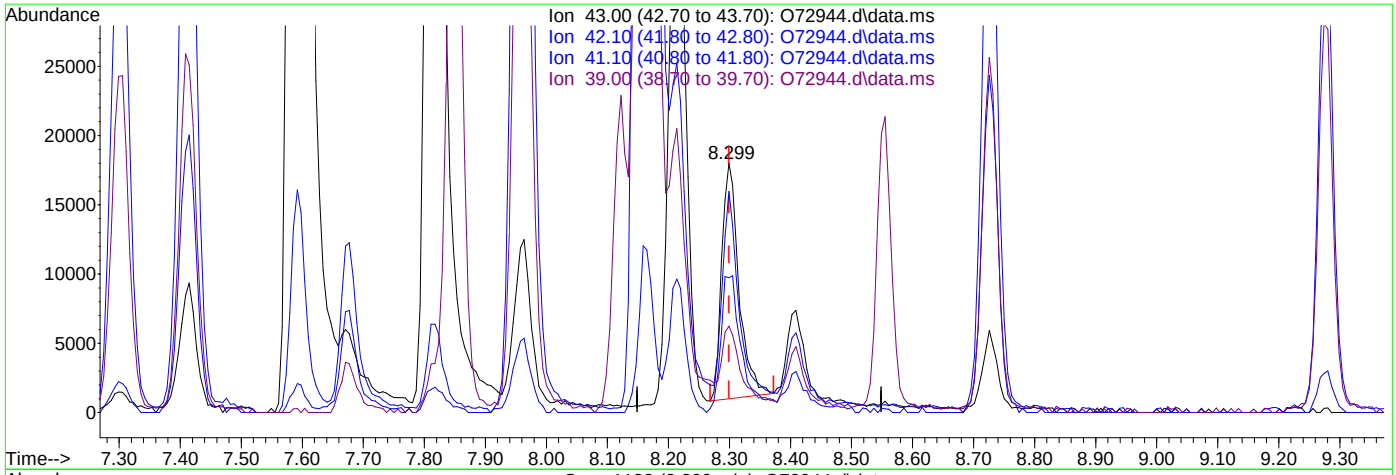
response 66261

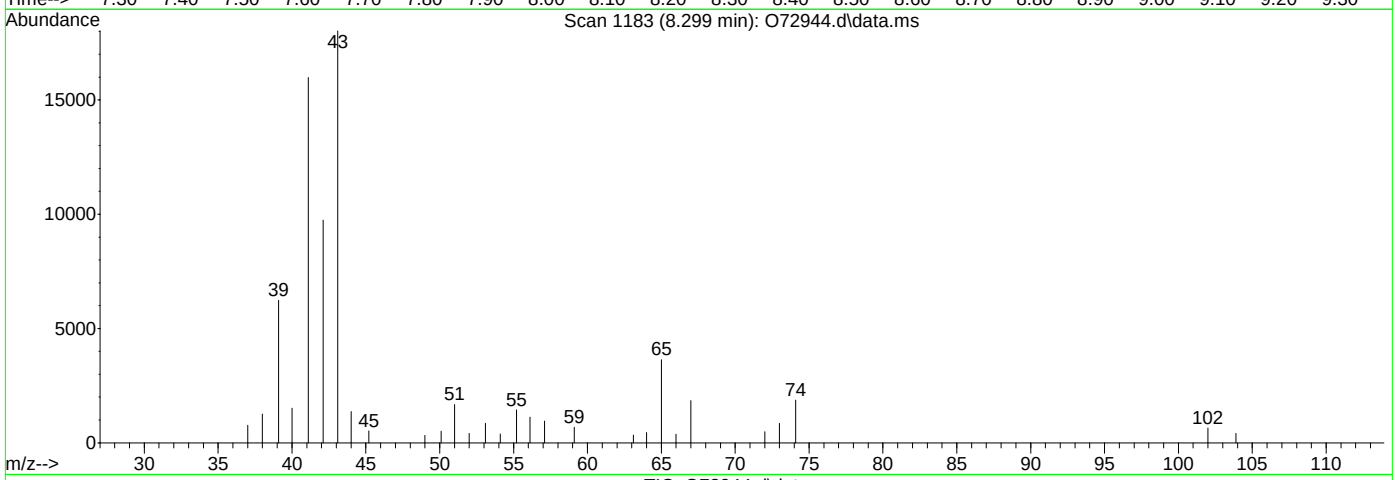
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	193.15
43.00	143.30	136.66
41.00	165.60	167.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 13:47:58 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 319.03ug/L

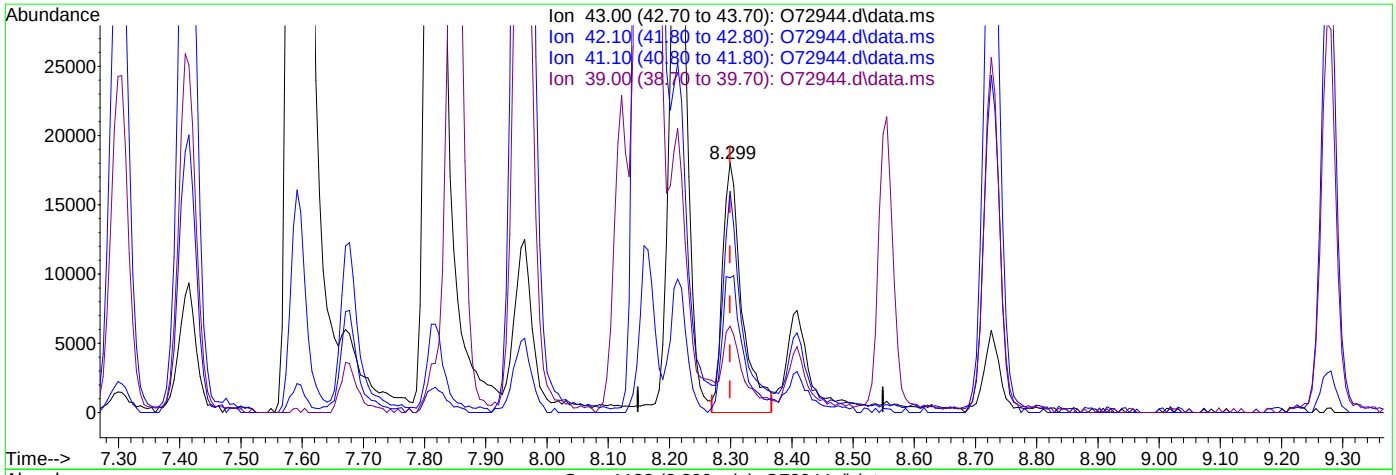
response 33229

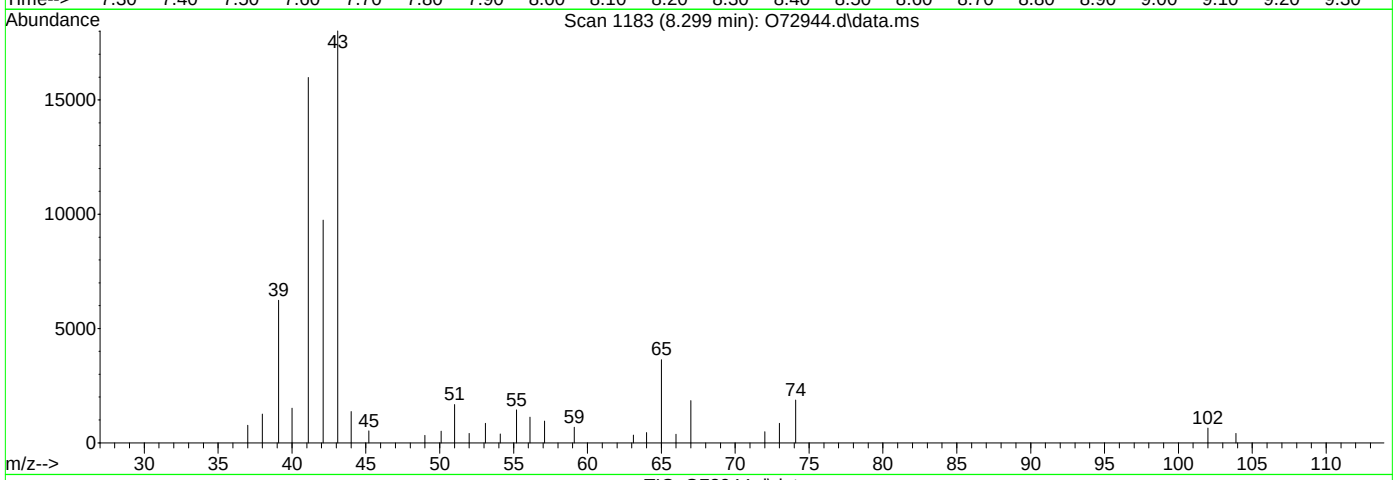
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	55.04
41.10	73.80	84.40
39.00	31.30	31.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 13:47:58 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 380.05ug/L m

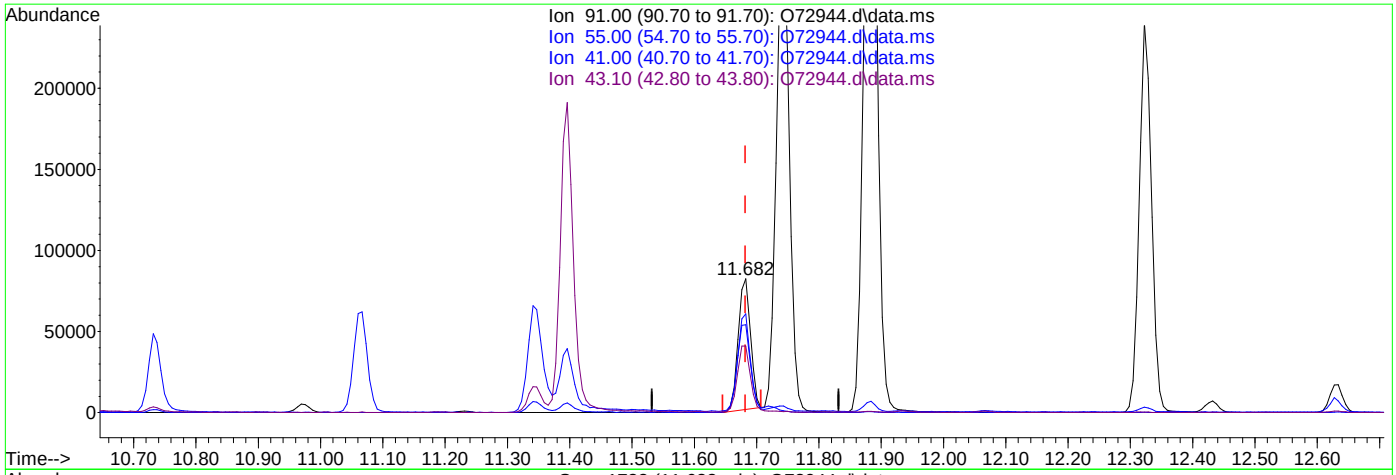
response 39643

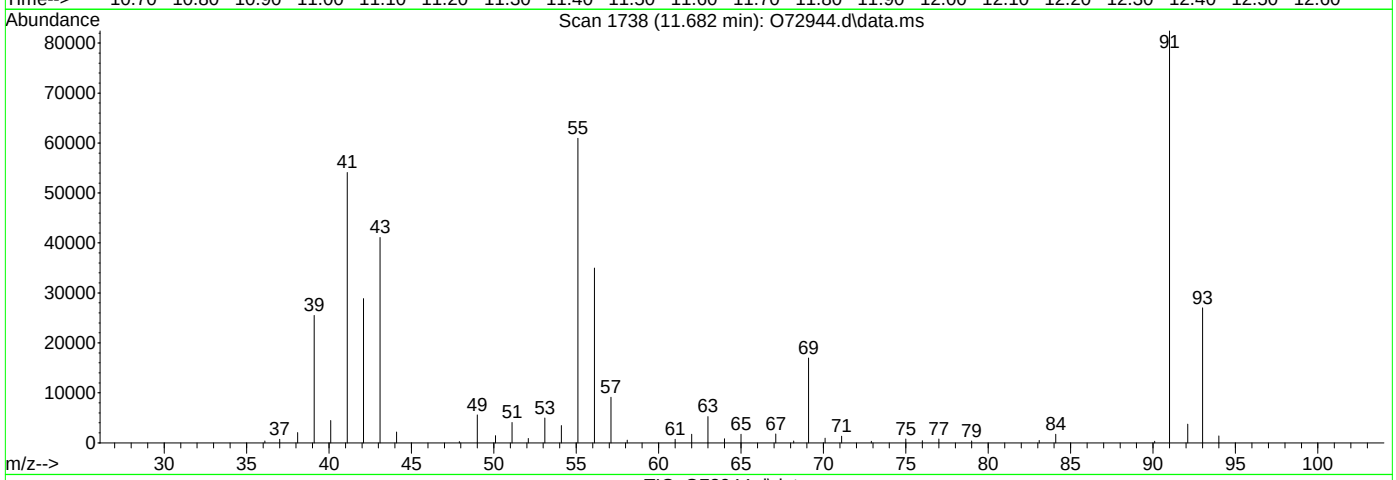
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	54.08
41.10	73.80	88.64
39.00	31.30	34.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 13:47:58 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 23.74ug/L

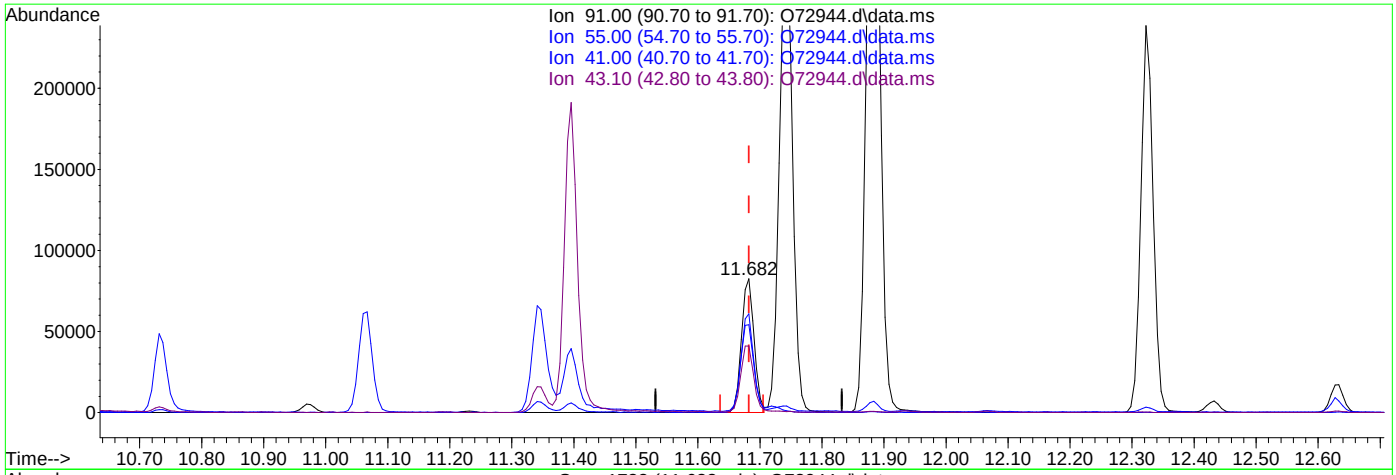
response 111129

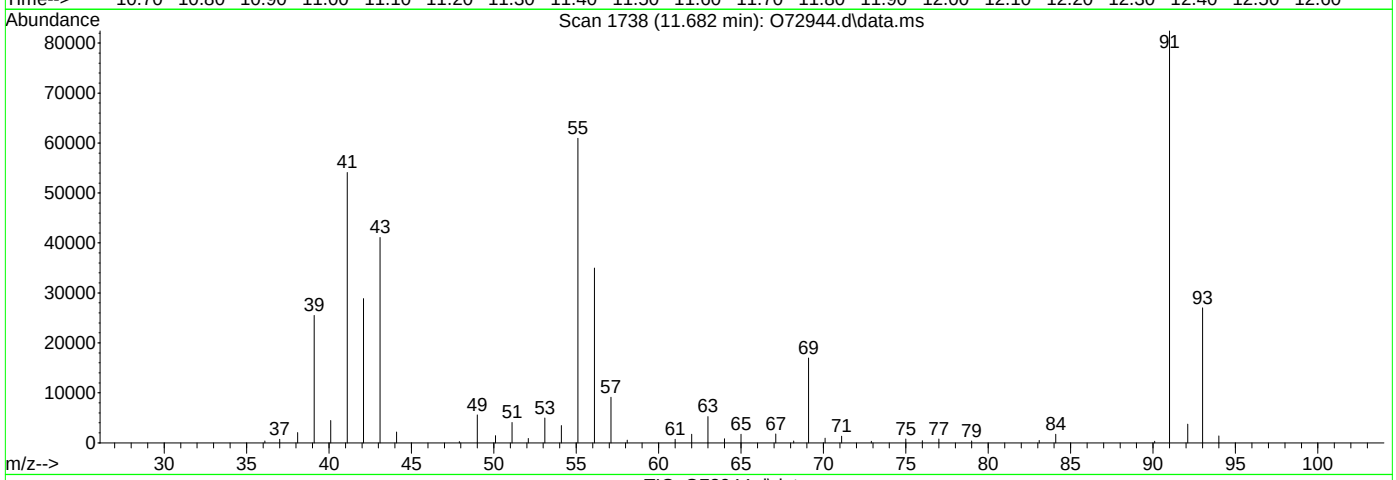
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	73.58
41.00	64.60	64.35
43.10	48.40	49.30

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72944.d
Acq On : 9 Dec 2022 9:09 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Dec 11 14:16:02 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72944.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 24.98ug/L m

response 116929

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	73.88
41.00	64.60	65.62
43.10	48.40	49.83

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira
12/14/22 00:08

Quantitation Report (QT Reviewed)

Data Path : C:\Users\Organics\Desktop\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MSD 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 14:18:08 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	774006	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	533318	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	183628	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	209480	48.39	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	96.78%		
50) 1,2-Dichloroethane-d4	8.262	65	194955	48.59	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery =	97.18%		
63) Toluene-d8	10.152	98	740032	51.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery =	103.40%		
86) 4-Bromofluorobenzene	12.944	174	181104	49.61	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	99.22%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	103601	19.09	ug/L	98
3) Chloromethane	3.019	50	104882	22.03	ug/L	98
4) 1,3-butadiene	3.184	39	159988	33.47	ug/L	100
5) Vinyl Chloride	3.154	62	120769	25.10	ug/L	95
6) Bromomethane	3.678	94	44153	21.54	ug/L	96
7) Chloroethane	3.879	64	70934	24.21	ug/L	98
8) Trichlorofluoromethane	4.098	101	176842	23.98	ug/L	97
9) Ethyl Ether	4.550	59	73193	20.51	ug/L	97
10) Ethanol	4.781	45	6785	411.78	ug/L	86
11) 1,2-Dichlorotrifluoroe...	4.824	67	120875	22.16	ug/L	97
12) 1,1-Dichloroethene	4.824	61	138890	20.72	ug/L	97
13) Freon 113	4.879	101	101741	22.31	ug/L	97
14) Carbon Disulfide	4.861	76	293900	22.72	ug/L	100
15) Iodomethane	5.019	142	48370	31.40	ug/L	94
16) Acrolein	5.281	56	67201	90.09	ug/L	99
17) Allyl chloride	5.452	41	141903	23.74	ug/L	99
18) Methylene Chloride	5.586	49	133408	21.11	ug/L	97
19) Acetone	5.653	43	112327	103.04	ug/L	99
20) Methyl acetate	5.805	43	309141	109.18	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	133588	20.61	ug/L	95
22) Hexane	5.885	56	70721m	23.24	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	242492	20.34	ug/L	98
24) Tert Butyl Alcohol	6.025	59	56013	223.29	ug/L	95
25) Acetonitrile	6.232	41	87360	198.98	ug/L	98
26) Di-isopropyl ether	6.366	45	310919	21.41	ug/L	100
27) Chloroprene	6.513	53	144262	26.93	ug/L	99
28) 1,1-Dichloroethane	6.543	63	171348	21.79	ug/L	98
29) Acrylonitrile	6.604	52	126957	102.55	ug/L	99
30) ETBE	6.799	59	267850	20.69	ug/L	99
31) Vinyl acetate	6.824	43	1078019	130.64	ug/L	99
32) cis-1,2-Dichloroethene	7.177	96	102235	21.73	ug/L	97
33) 2,2-Dichloropropane	7.299	77	107094	19.32	ug/L	98
34) Bromochloromethane	7.403	128	55978	22.36	ug/L	98
35) Cyclohexane	7.409	56	166278	24.60	ug/L	98
36) Chloroform	7.476	83	174855	21.16	ug/L	98
37) Ethyl acetate	7.592	43	416486	111.00	ug/L	100
38) Tetrahydrofuran	7.671	42	26043	22.90	ug/L	97
40) Carbon Tetrachloride	7.640	117	115682	23.79	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	147383	22.45	ug/L	99
42) 2-Butanone	7.811	43	185467	109.26	ug/L	98
43) 1,1-Dichloropropene	7.848	75	126859	20.96	ug/L	98
44) tert-Butyl formate	7.957	59	105000	54.47	ug/L	87

Quantitation Report (QT Reviewed)

Data Path : C:\Users\Organics\Desktop\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MSD 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 14:18:08 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Propionitrile	8.140	54	115027	219.78	ug/L		96
46) Methacrylonitrile	8.159	41	670730	220.17	ug/L		99
47) Benzene	8.122	78	371146	21.43	ug/L		100
48) TAME	8.213	73	235244	20.99	ug/L		97
49) Isobutyl alcohol	8.299	43	45407m	419.87	ug/L		
51) 1,2-Dichloroethane	8.335	62	142750	20.27	ug/L		98
52) Tert Amyl Alcohol	8.402	59	35095	204.20	ug/L		89
53) Trichloroethene	8.732	95	104390	21.31	ug/L		97
54) Methylcyclohexane	8.726	83	154820	24.44	ug/L		99
55) Dibromomethane	9.177	93	64899	20.34	ug/L		99
56) 1,2-Dichloropropane	9.274	63	91431	20.25	ug/L		97
57) Bromodichloromethane	9.329	83	123615	21.96	ug/L		99
58) Methyl methacrylate	9.457	41	79069	24.08	ug/L		99
59) 1,4-Dioxane	9.536	88	11248	358.92	ug/L		89
61) cis-1,3-Dichloropropene	9.969	75	126421	20.28	ug/L		97
64) Toluene	10.207	91	396905	23.26	ug/L		98
65) 2-Nitropropane	10.445	41	46229	121.42	ug/L		97
66) 4-Methyl-2-pentanone	10.561	43	439413	115.20	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	121658	24.81	ug/L		89
68) Tetrachloroethene	10.603	166	111695	23.11	ug/L		98
69) Ethyl methacrylate	10.731	69	95920	24.54	ug/L		99
70) 1,1,2-Trichloroethane	10.780	83	77391	23.54	ug/L		97
71) Dibromochloromethane	10.975	129	89322	23.63	ug/L		96
72) 1,3-Dichloropropane	11.060	76	141097	21.29	ug/L		98
73) 1,2-Dibromoethane	11.231	107	91051	23.01	ug/L		99
74) 3,3-dimethyl-1-butanol	11.341	57	148372	1252.16	ug/L		96
75) 2-hexanone	11.396	43	296227	117.14	ug/L		98
76) 1-Chlorohexane	11.682	91	123185m	25.50	ug/L		
77) Ethylbenzene	11.743	91	454949	23.67	ug/L		100
78) Chlorobenzene	11.743	112	271403	23.55	ug/L		99
79) 1,1,1,2-Tetrachloroethane	11.792	131	86324	25.12	ug/L		96
80) m,p-Xylene	11.884	91	696943	47.46	ug/L		98
81) o-Xylene	12.322	91	344734	23.91	ug/L		99
82) Styrene	12.377	104	258393	24.24	ug/L		100
83) Bromoform	12.432	173	50622	23.95	ug/L		99
84) Isopropylbenzene	12.627	105	415012	24.40	ug/L		99
87) cis-1,4-Dichloro-2-butene	12.993	53	25021	22.04	ug/L		91
88) n-Propylbenzene	13.048	91	496864	26.15	ug/L		98
89) Bromobenzene	13.066	156	114027	23.86	ug/L		99
90) 1,1,2,2-Tetrachloroethane	13.127	83	110710	24.79	ug/L		99
91) 1,3,5-Trimethylbenzene	13.237	105	340974	25.43	ug/L		99
92) 2-Chlorotoluene	13.408	91	308558	25.80	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	24243	24.66	ug/L		89
94) 1,2,3-Trichloropropane	13.286	110	31307	23.44	ug/L		98
95) Cyclohexanone	13.353	55	8811	111.06	ug/L		92
96) 4-Chlorotoluene	13.408	91	308558	25.80	ug/L		99
97) tert-Butylbenzene	13.578	91	191719	25.77	ug/L		97
99) 1,2,4-Trimethylbenzene	13.645	105	342448	26.17	ug/L		100
100) Pentachloroethane	13.627	167	52772	29.58	ug/L		95
101) sec-Butylbenzene	13.761	105	414188	27.82	ug/L		99
102) 4-Isopropyltoluene	13.895	119	348223	27.00	ug/L		99
103) 1,3-Dichlorobenzene	14.023	146	212524	25.57	ug/L		98
104) 1,2,3-Trimethylbenzene	14.109	105	365648	27.32	ug/L		98
105) 1,4-Dichlorobenzene	14.109	146	223842	25.24	ug/L		98
106) n-Butylbenzene	14.328	92	170621	24.95	ug/L		99
107) Benzyl Chloride	14.353	126	21687	23.31	ug/L	#	90
108) 1,2-Dichlorobenzene	14.542	146	201202	24.94	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	13387	23.74	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\Users\Organics\Desktop\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MSD 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 14:18:08 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

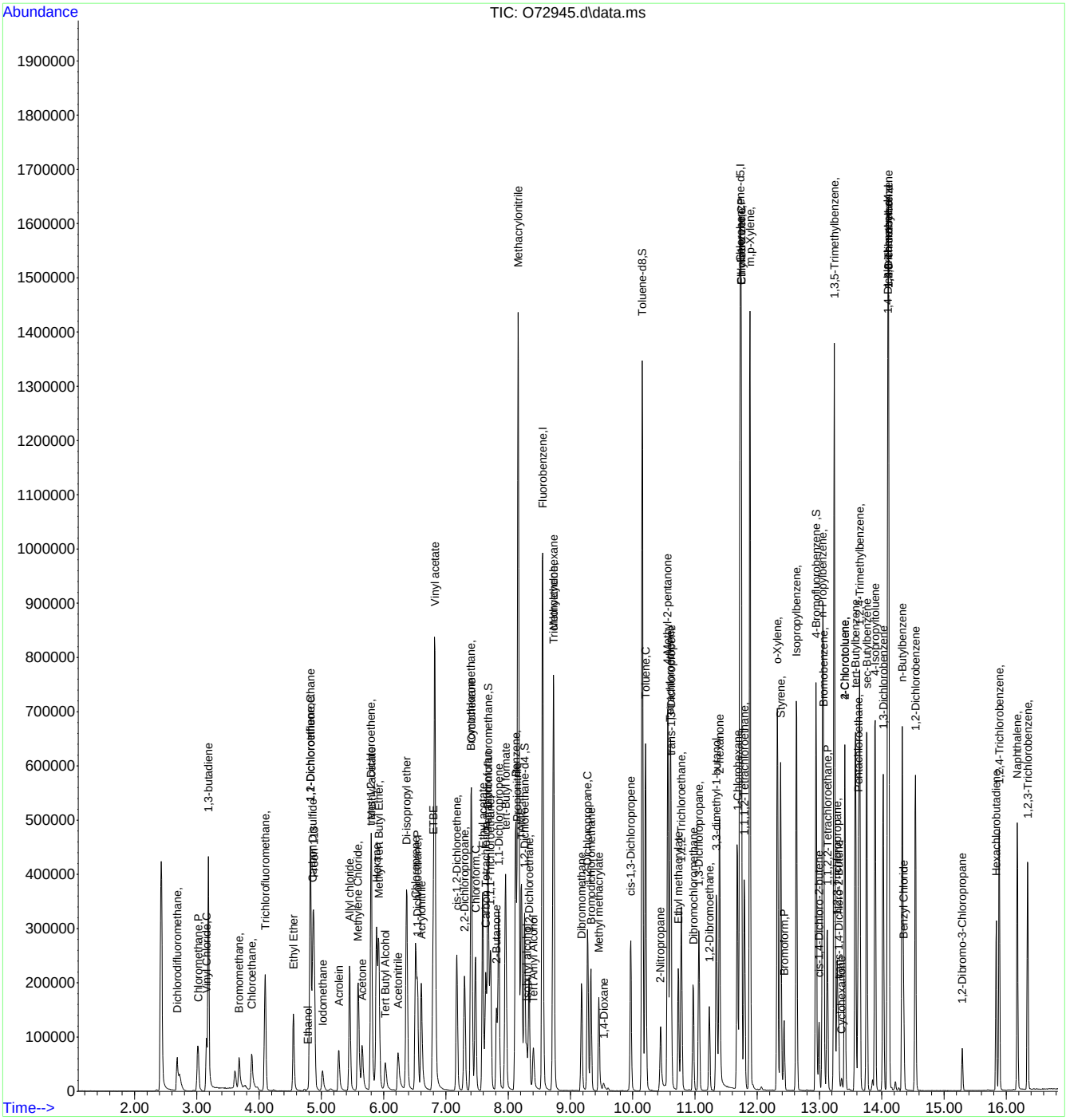
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
110) Hexachlorobutadiene	15.840	225	39620	22.56	ug/L	97
111) 1,2,4-Trichlorobenzene	15.889	180	114157	22.98	ug/L	99
112) Naphthalene	16.175	128	293296	23.65	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	105525	22.89	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\Users\Organics\Desktop\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MSD 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 14:18:08 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

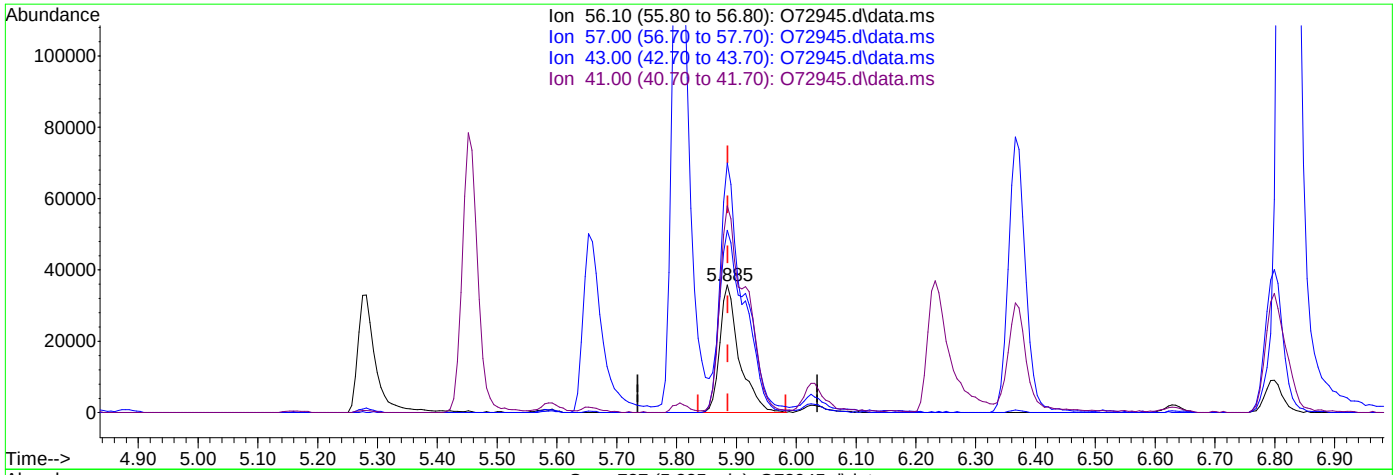
Sample Number: FC1020-3MSD
Lab FileID: O72945.D
Injection Time: 12/09/22 21:34
Method: SW846 8260D
Analyst approved: 12/13/22 09:31 Adelard Lefebvre
Supervisor approved: 12/14/22 00:08 Jennifer Fereira

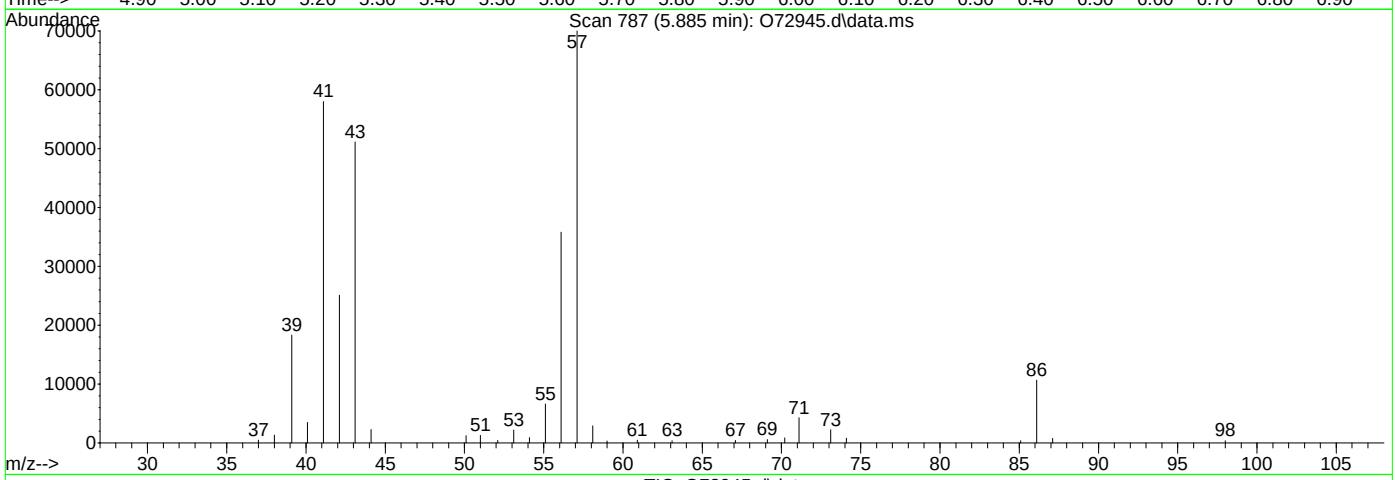
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(22) Hexane

5.885min (-0.000) 26.59ug/L

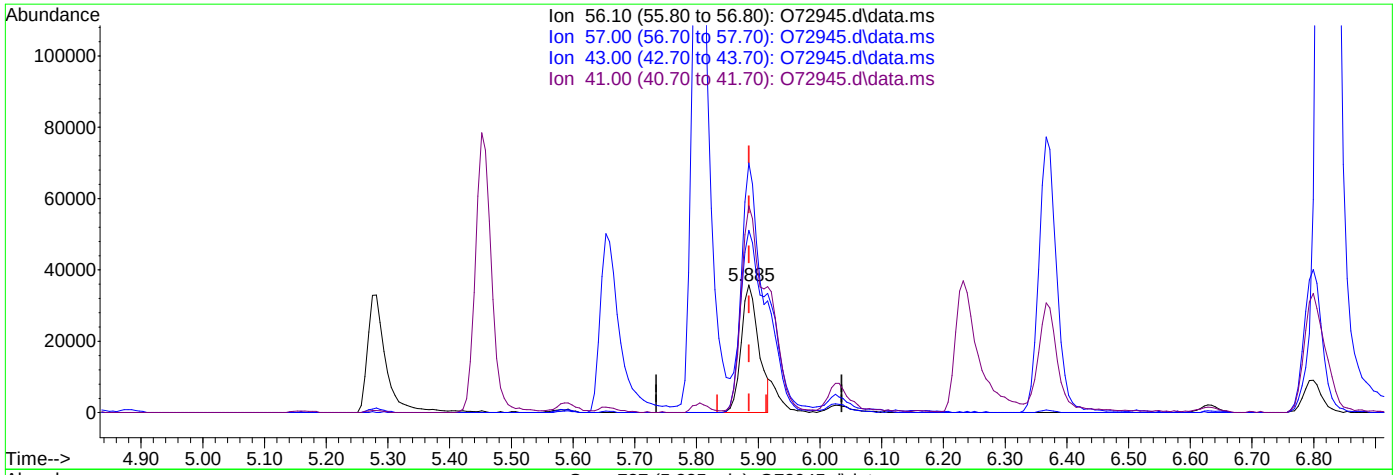
response 80931

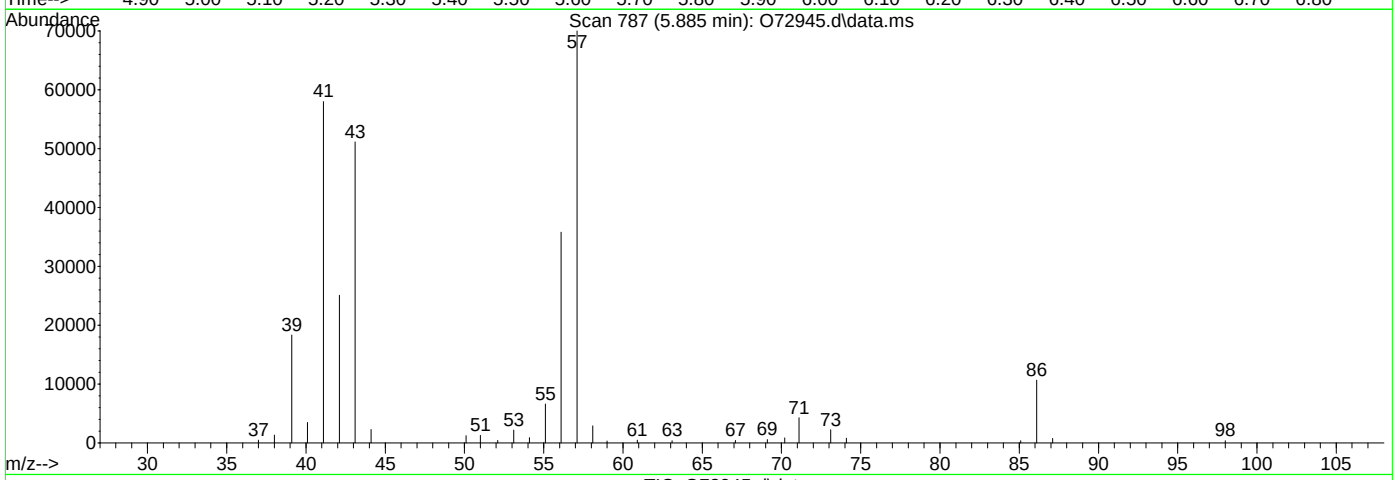
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	195.55
43.00	143.30	138.08
41.00	165.60	160.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(22) Hexane

5.885min (-0.000) 23.24ug/L m

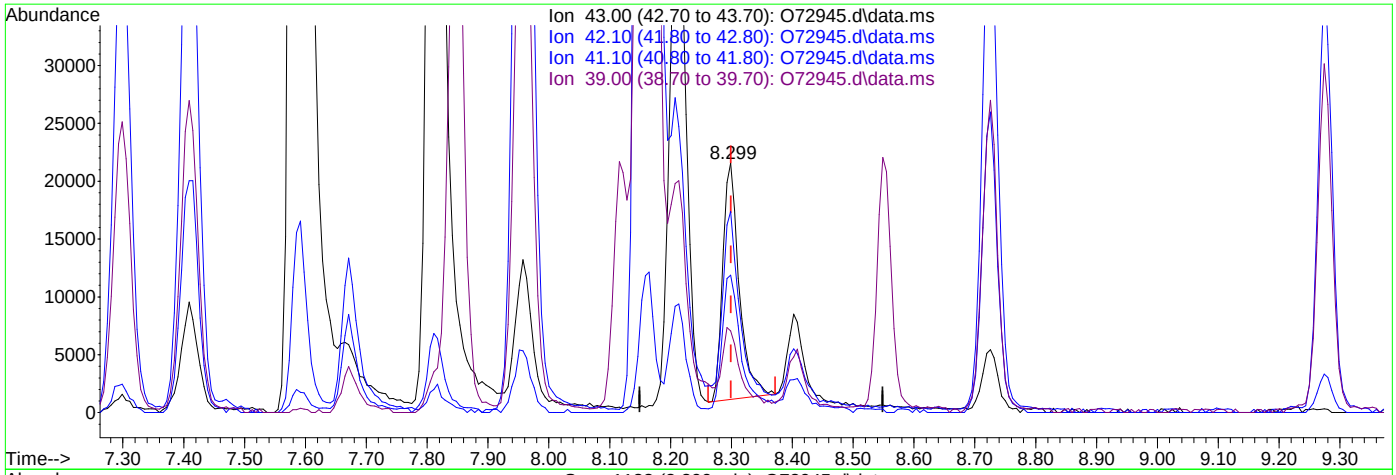
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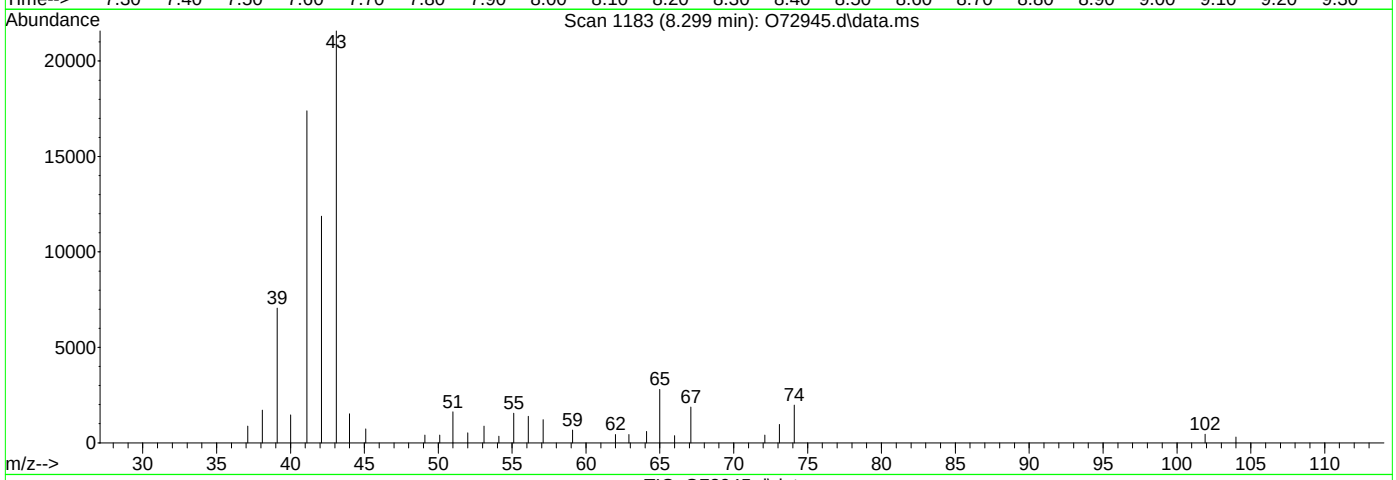
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	195.55
43.00	143.30	142.75
41.00	165.60	161.92

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 355.79ug/L

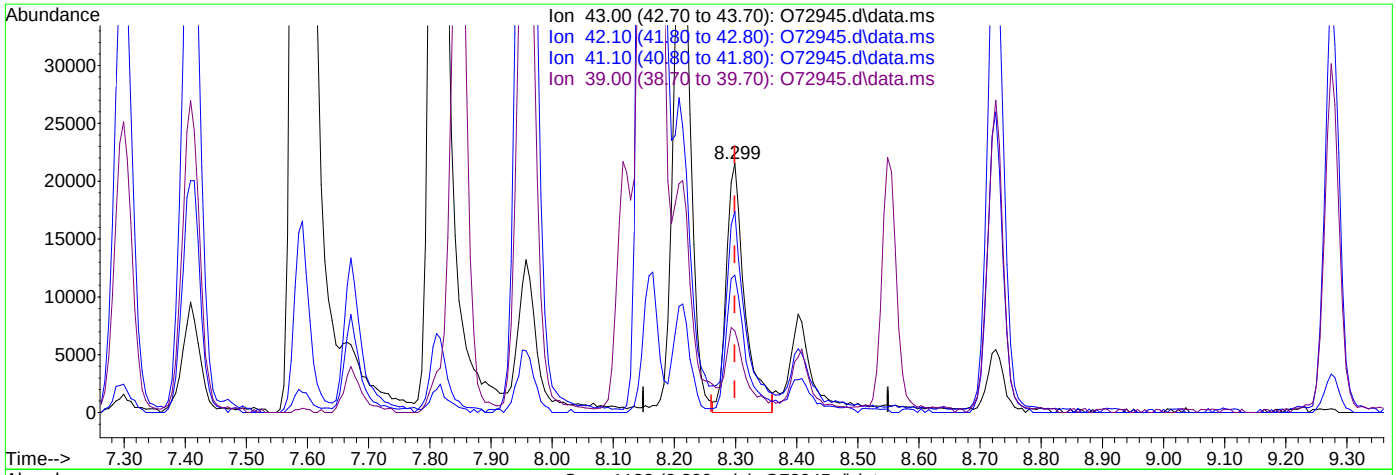
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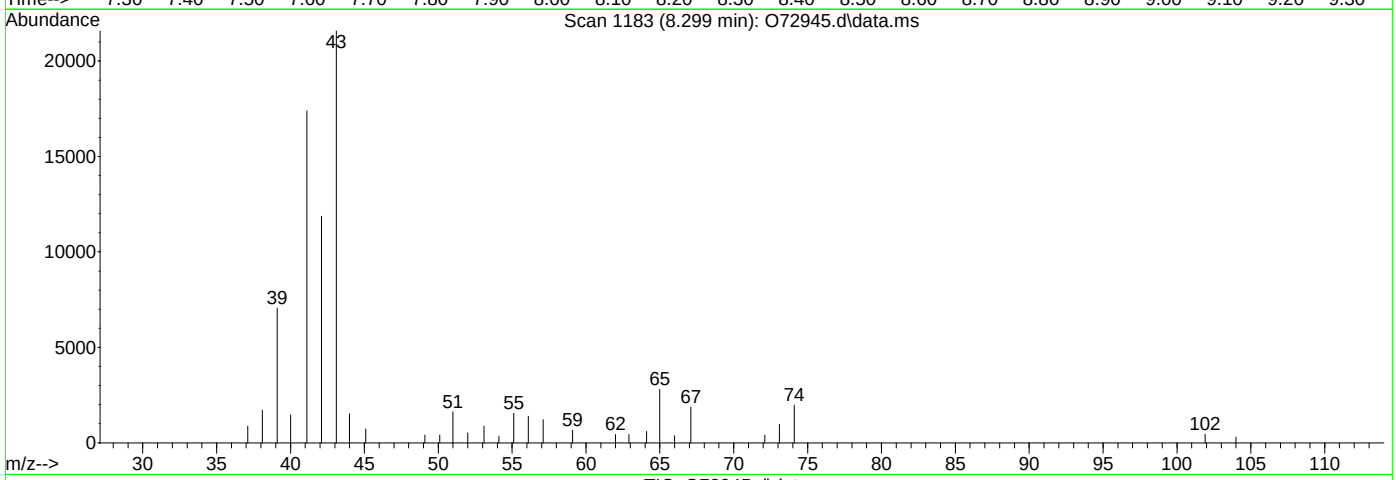
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	55.90
41.10	73.80	76.67
39.00	31.30	29.78

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 419.87ug/L m

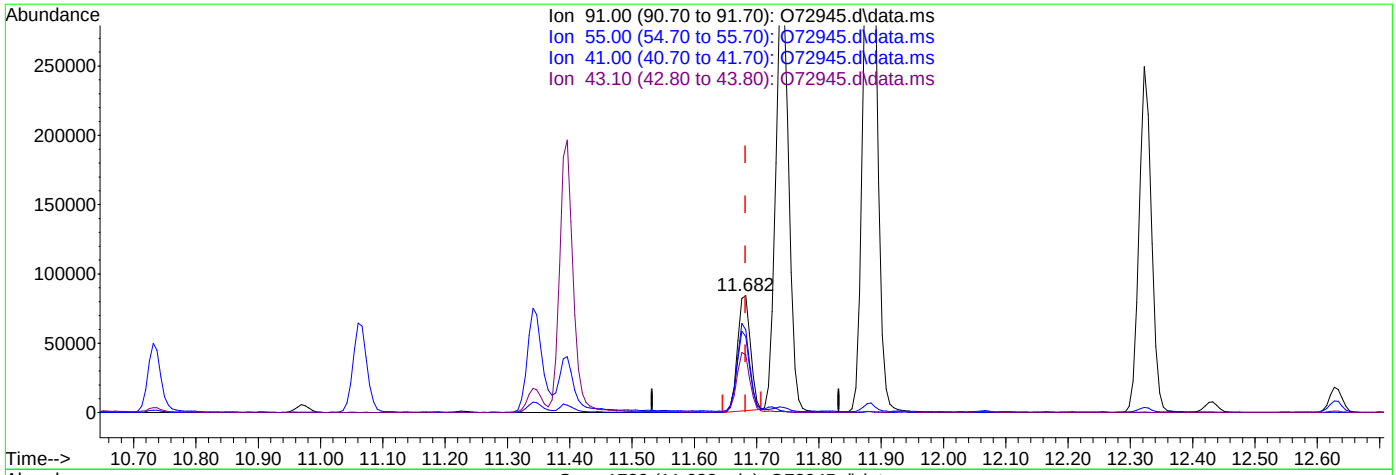
response 45407

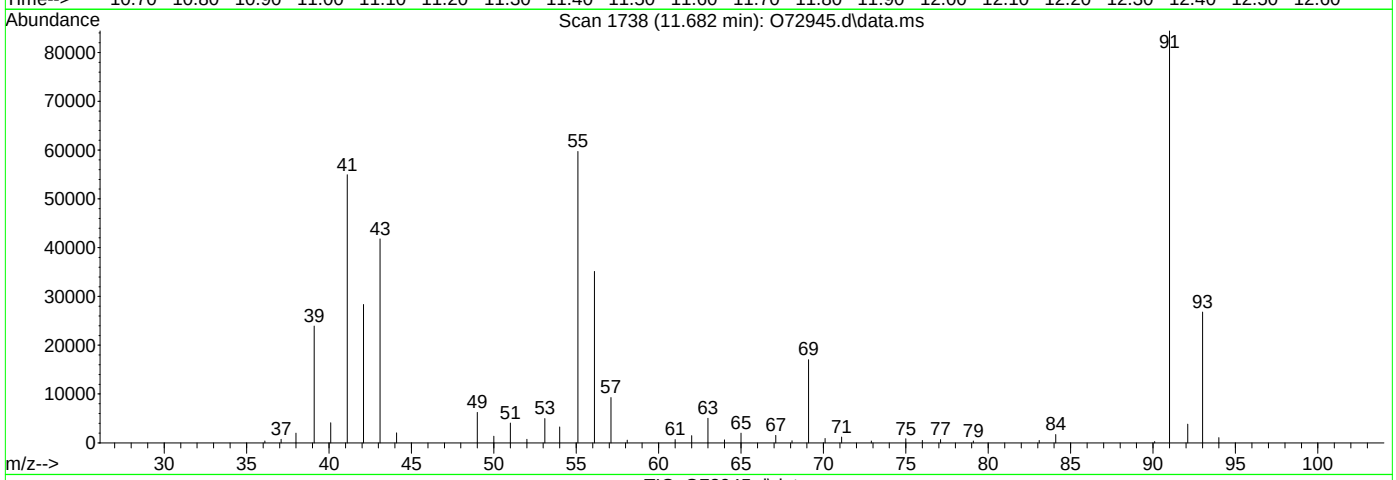
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	55.04
41.10	73.80	80.58
39.00	31.30	32.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 24.60ug/L

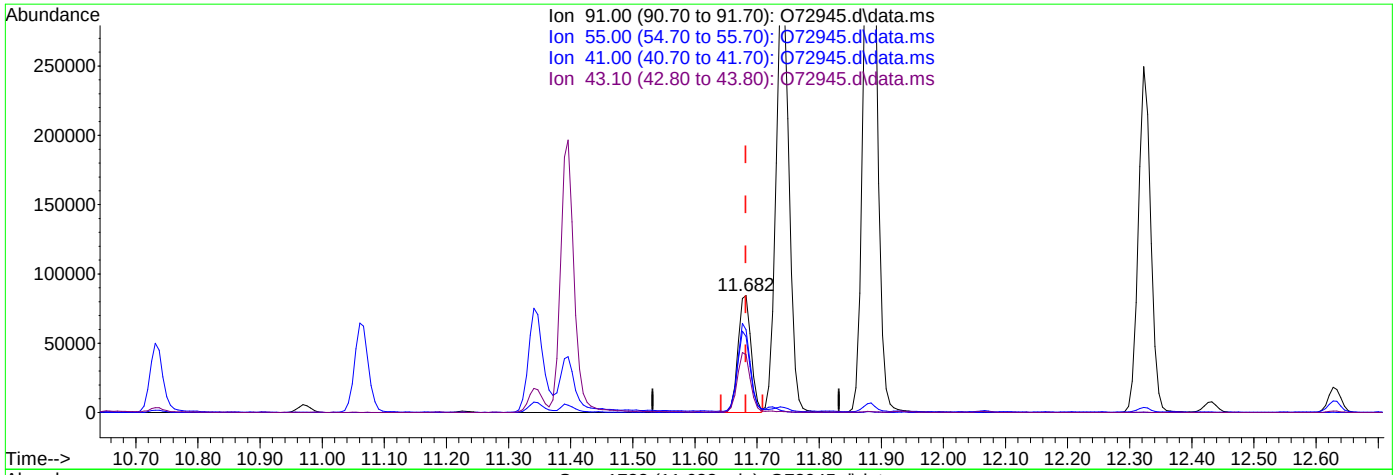
response 118850

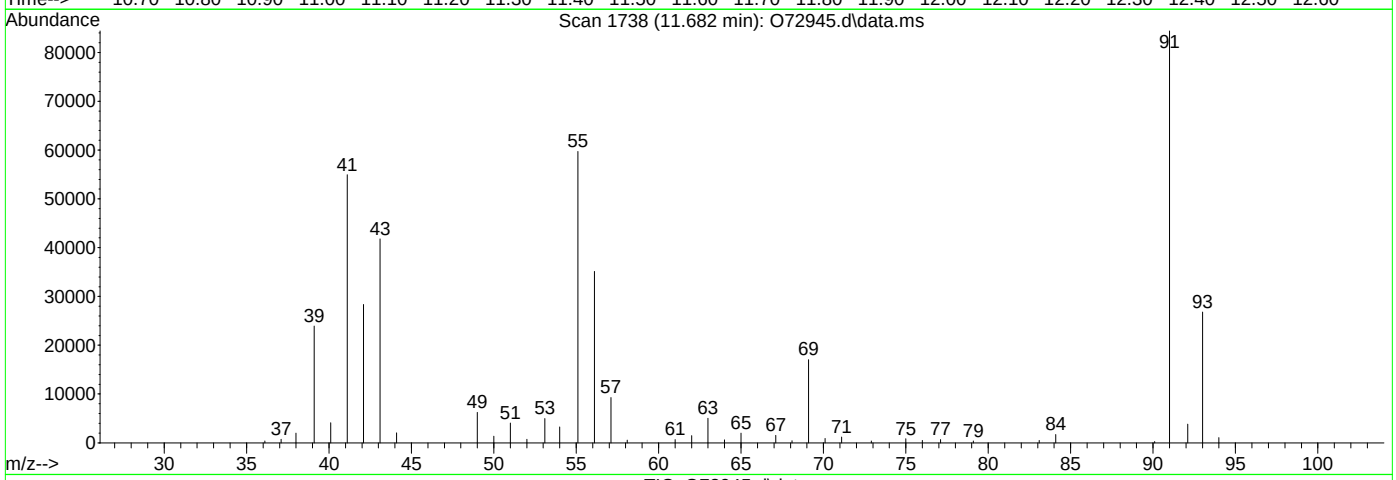
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	70.38
41.00	64.60	63.90
43.10	48.40	48.81

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72945.d
Acq On : 9 Dec 2022 9:34 pm
Operator : adelardl
Sample : FC1020-3MS 5X
Misc : MS52925,VO2867,,,,,5
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Dec 11 13:48:01 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72945.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 25.50ug/L m

response 123185

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	70.73
41.00	64.60	65.04
43.10	48.40	49.46

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36141.d
Acq On : 14 Dec 2022 7:24 pm
Operator : courtnef
Sample : FC1262-2MS, 10X Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:22 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	299718	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	223388	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	110133	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	83750	50.43	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.86%			
49) 1,2-Dichloroethane-d4	8.665	65	94802	49.72	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.44%			
62) Toluene-d8	10.542	98	290765	47.69	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.38%			
86) 4-Bromofluorobenzene	13.328	95	90300	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	45277	24.74	ug/L	95
3) Chloromethane	3.221	50	40766	23.23	ug/L	96
4) Vinyl Chloride	3.373	62	46218	24.80	ug/L	98
5) 1,3-Butadiene	3.403	39	44045	36.97	ug/L	97
6) Bromomethane	3.940	94	9751	9.98	ug/L	92
7) Chloroethane	4.153	64	39907	27.01	ug/L	97
8) Trichlorofluoromethane	4.385	101	66303	29.42	ug/L	99
9) Ethyl Ether	4.873	59	32205	24.30	ug/L	95
10) Ethanol	5.098	45	5044	476.09	ug/L	68
11) 1,2-Dichlorotrifluoroe...	5.153	67	52509	27.73	ug/L	97
12) 1,1-Dichloroethene	5.159	61	60549	25.69	ug/L	96
13) Freon 113	5.214	101	44057	27.73	ug/L	98
14) Carbon Disulfide	5.208	76	111372	25.12	ug/L	100
15) Iodomethane	5.367	142	14165	6.60	ug/L	94
16) Acrolein	5.629	56	26338	92.47	ug/L	93
17) Allyl chloride	5.818	41	41797	25.76	ug/L	99
18) Methylene Chloride	5.958	49	48596	21.42	ug/L	97
19) Acetone	6.019	43	51141	109.32	ug/L	97
20) Methyl acetate	6.171	43	125325	136.80	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	56175	25.66	ug/L	97
22) Hexane	6.269	56	38820	29.53	ug/L	95
23) Methyl Tert Butyl Ether	6.293	73	108891	24.94	ug/L	99
24) Acetonitrile	6.616	41	35443	236.75	ug/L	95
25) Di-isopropyl ether	6.756	45	104092	24.84	ug/L	100
26) Chloroprene	6.909	53	56034	28.54	ug/L	95
27) 1,1-Dichloroethane	6.939	63	75412	25.99	ug/L	98
28) Acrylonitrile	7.000	53	72269	131.79	ug/L	99
29) ETBE	7.195	59	117520	24.26	ug/L	96
30) Tert Butyl Alcohol	6.397	59	52669	229.29	ug/L	97
31) Vinyl acetate	7.214	43	424498	148.93	ug/L	99
32) cis-1,2-Dichloroethene	7.580	96	41329	25.82	ug/L	97
33) 2,2-Dichloropropane	7.708	77	51746	22.32	ug/L	97
34) Bromochloromethane	7.811	128	20422	26.23	ug/L	96
35) Cyclohexane	7.823	56	77045	30.00	ug/L	98
36) Chloroform	7.878	83	71059	25.17	ug/L	99
37) Ethyl acetate	7.976	43	192335	136.66	ug/L	99
38) Tetrahydrofuran	8.073	42	12659	28.92	ug/L	92
40) Carbon Tetrachloride	8.049	117	55601	27.00	ug/L	97
41) 1,1,1-Trichloroethane	8.122	97	62443	26.56	ug/L	96
42) 2-Butanone	8.201	43	80968	114.49	ug/L	91
43) 1,1-Dichloropropene	8.256	75	53609	25.31	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36141.d
Acq On : 14 Dec 2022 7:24 pm
Operator : courtnef
Sample : FC1262-2MS, 10X Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:22 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tert-Butyl formate	8.354	59	112930	182.28	ug/L		96
45) Propionitrile	8.537	54	65541	253.05	ug/L		97
46) Methacrylonitrile	8.555	41	234307	270.35	ug/L		99
47) Benzene	8.524	78	160729	26.44	ug/L		99
48) TAME	8.604	73	108329	25.05	ug/L		96
50) 1,2-Dichloroethane	8.738	62	57863	25.06	ug/L		98
51) tert Amyl alcohol	8.787	59	39826	249.99	ug/L		94
52) Trichloroethene	9.134	95	42949	26.40	ug/L		96
53) Methylcyclohexane	9.128	83	79347	30.95	ug/L		99
54) Dibromomethane	9.579	93	26759	25.00	ug/L		96
55) 1,2-Dichloropropane	9.671	63	40638	23.49	ug/L		95
56) Bromodichloromethane	9.719	83	51086	24.97	ug/L		99
57) Methyl methacrylate	9.835	41	31779	25.62	ug/L		93
58) 1,4-Dioxane	9.921	88	8170	557.41	ug/L		95
59) 2-Chloroethyl vinyl ether	10.256	63	1468	1.56	ug/L		83
60) cis-1,3-Dichloropropene	10.359	75	53907	23.36	ug/L		98
63) Toluene	10.597	91	159902	24.22	ug/L		98
64) Isobutyl alcohol	8.677	43	29739	473.24	ug/L		93
65) 2-Nitropropane	10.829	41	58227	117.56	ug/L		98
66) 4-Methyl-2-pentanone	10.939	43	194703	113.52	ug/L		98
67) trans-1,3-Dichloropropene	11.000	75	50614	23.99	ug/L		88
68) Tetrachloroethene	11.000	166	40905	25.19	ug/L		96
69) Ethyl methacrylate	11.103	69	42841	20.76	ug/L		98
70) 1,1,2-Trichloroethane	11.164	83	31586	24.61	ug/L		98
71) Dibromochloromethane	11.359	129	37362	22.37	ug/L		94
72) 1,3-Dichloropropane	11.451	76	58479	22.86	ug/L		98
73) 1,2-Dibromoethane	11.628	107	38438	24.85	ug/L		98
74) 3,3-Dimethyl-1-butanol	11.707	57	201086	1203.35	ug/L		99
75) 2-hexanone	11.768	43	135040	114.48	ug/L		99
76) 1-Chlorohexane	12.054	91	58245	26.72	ug/L		92
77) Ethylbenzene	12.121	91	188807	24.98	ug/L		98
78) Chlorobenzene	12.127	112	105750	24.12	ug/L		98
79) 1,1,1,2-Tetrachloroethane	12.176	131	38398	25.46	ug/L		96
80) m,p-Xylene	12.262	91	271830	48.49	ug/L		100
81) o-Xylene	12.707	91	133002	24.87	ug/L		99
82) Styrene	12.755	104	101953	24.82	ug/L		98
83) Bromoform	12.816	173	20850	19.48	ug/L		97
84) Isopropylbenzene	13.005	105	177473	25.59	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	8405	15.60	ug/L	#	86
88) n-Propylbenzene	13.426	91	221317	25.20	ug/L		97
89) Bromobenzene	13.456	156	41247	24.14	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.493	83	54122	25.21	ug/L		99
91) 1,3,5-Trimethylbenzene	13.609	105	142285	24.58	ug/L		98
92) 2-Chlorotoluene	13.621	91	133780	24.81	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.682	53	8405	15.60	ug/L	#	83
94) 1,2,3-Trichloropropane	13.664	110	14342	22.84	ug/L		93
95) Cyclohexanone	13.737	55	6818	124.96	ug/L		94
96) 4-Chlorotoluene	13.786	91	116359	24.24	ug/L		99
98) tert-Butylbenzene	13.950	91	77889	24.90	ug/L		98
99) 1,2,4-Trimethylbenzene	14.017	105	142418	25.38	ug/L		100
100) Pentachloroethane	14.005	167	24426	24.18	ug/L		98
101) sec-Butylbenzene	14.133	105	190814	26.81	ug/L		98
102) 4-Isopropyltoluene	14.261	119	164032	26.29	ug/L		98
103) 1,3-Dichlorobenzene	14.401	146	81242	25.46	ug/L		97
104) 1,2,3-Trimethylbenzene	14.475	105	152793	26.98	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	86612	24.80	ug/L		99
106) n-Butylbenzene	14.682	92	82204	24.85	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36141.d
Acq On : 14 Dec 2022 7:24 pm
Operator : courtnef
Sample : FC1262-2MS, 10X Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:22 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

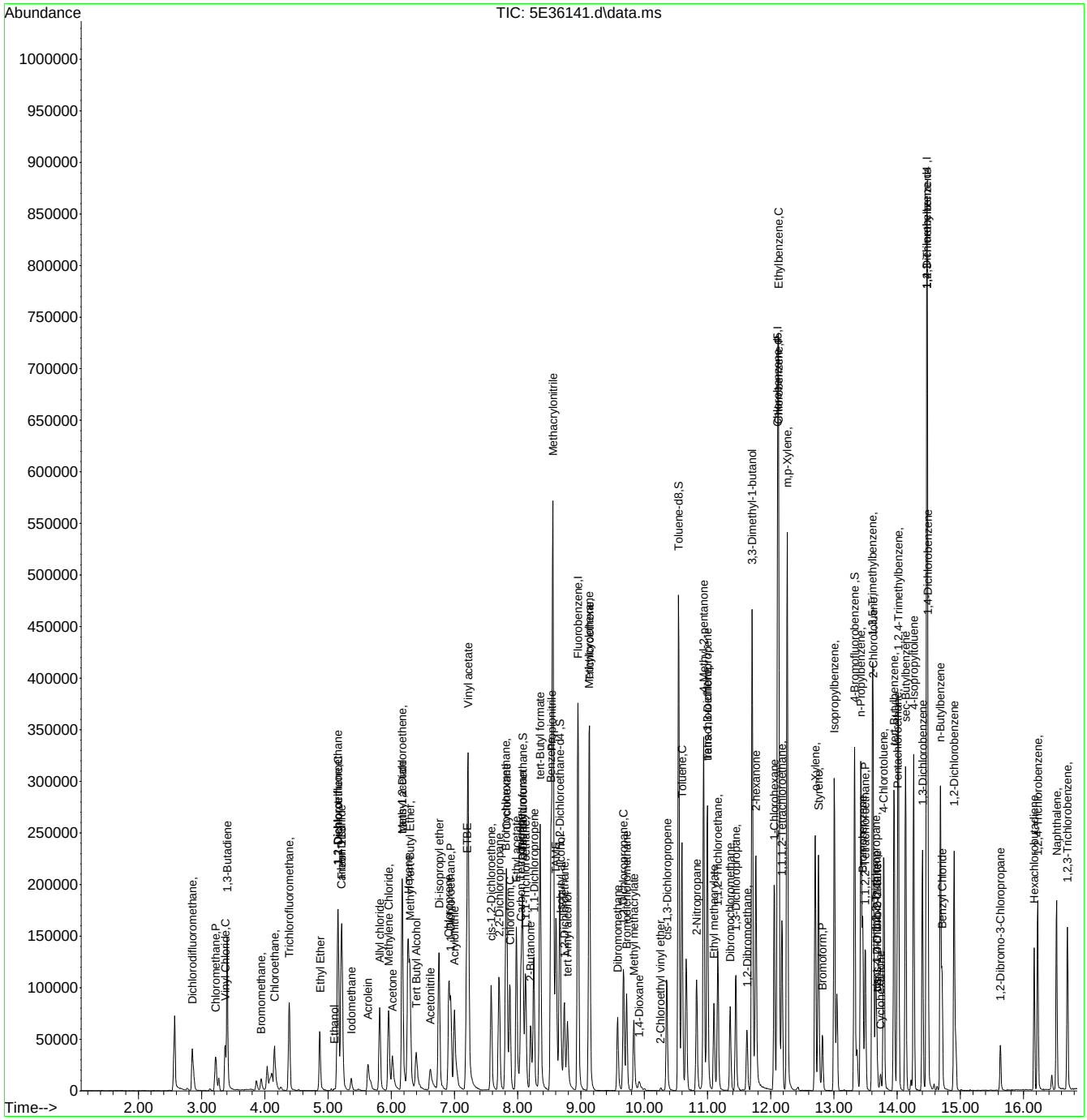
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Benzyl Chloride	14.712	126	13089	19.49	ug/L	93
108) 1,2-Dichlorobenzene	14.901	146	77698	25.43	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.633	75	7266	21.95	ug/L	98
110) Hexachlorobutadiene	16.169	225	16575	25.68	ug/L	95
111) 1,2,4-Trichlorobenzene	16.224	180	44495	26.13	ug/L	98
112) Naphthalene	16.523	128	121796	26.12	ug/L	99
113) 1,2,3-Trichlorobenzene	16.694	180	37687	26.27	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36141.d
Acq On : 14 Dec 2022 7:24 pm
Operator : courtnef
Sample : FC1262-2MS, 10X Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:22 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/19/22 14:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:11:47 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	593629	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.641	117	430131	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	209762	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	151534	56.74	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 113.48%			
49) 1,2-Dichloroethane-d4	3.549	65	226687	62.78	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 125.56%#			
63) Toluene-d8	4.647	98	581427	46.93	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 93.86%			
86) 4-Bromofluorobenzene	6.493	174	167685	49.27	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.54%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.122	85	85440	30.64	ug/L	98
3) Chloromethane	1.248	50	58210	21.84	ug/L	98
4) 1,3-butadiene	1.316	39	51231	26.11	ug/L	98
5) Vinyl Chloride	1.305	62	60662	25.77	ug/L	99
6) Bromomethane	1.509	94	16572	19.79	ug/L	95
7) Chloroethane	1.582	64	34304	39.51	ug/L	97
8) Trichlorofluoromethane	1.671	101	113019	42.94	ug/L	99
9) Ethyl Ether	1.875	59	43032	24.68	ug/L	96
10) Ethanol	1.964	45	15269	249.16	ug/L	100
11) 1,2-Dichlorotrifluoroe...	1.975	67	71981	26.53	ug/L	98
12) 1,1-Dichloroethene	1.980	61	281918	82.40	ug/L	91
13) Freon 113	2.011	101	61166	28.02	ug/L	95
14) Carbon Disulfide	2.001	76	154421	26.00	ug/L	98
15) Iodomethane	2.058	142	30896	20.53	ug/L	83
16) Acrolein	2.152	56	77308	104.16	ug/L	98
17) Allyl chloride	2.247	41	78679	22.62	ug/L	86
18) Methylene Chloride	2.299	49	62648	21.13	ug/L	97
19) Acetone	2.315	43	175431	122.89	ug/L	94
20) Methyl acetate	2.393	43	350875	114.73	ug/L	95
21) trans-1,2-Dichloroethene	2.398	61	82993	24.48	ug/L	98
22) Hexane	2.466	56	44770	24.25	ug/L #	89
23) Methyl Tert Butyl Ether	2.466	73	199995	25.47	ug/L	83
24) Tert Butyl Alcohol	2.508	59	212613	286.94	ug/L	97
25) Acetonitrile	2.550	41	96120	170.68	ug/L	97
26) Di-isopropyl ether	2.681	45	162216	22.29	ug/L	96
27) Chloroprene	2.723	53	270889	25.46	ug/L	92
28) 1,1-Dichloroethane	2.728	63	127111	29.49	ug/L	99
29) Acrylonitrile	2.728	52	170997	125.05	ug/L	98
30) ETBE	2.879	59	182750	24.44	ug/L	99
31) Vinyl acetate	2.859	43	705935	136.67	ug/L	96
32) cis-1,2-Dichloroethene	3.021	96	65652	25.87	ug/L	98
33) 2,2-Dichloropropane	3.083	77	97713	24.32	ug/L	98
34) Bromochloromethane	3.125	128	26965	26.00	ug/L #	82
35) Cyclohexane	3.162	56	92669	25.42	ug/L	93
36) Chloroform	3.167	83	117251	26.18	ug/L	96
37) Ethyl acetate	3.225	43	460250	120.63	ug/L	99
38) Tetrahydrofuran	3.256	42	33712	22.08	ug/L	91
40) Carbon Tetrachloride	3.266	117	97130m	29.12	ug/L	
41) 1,1,1-Trichloroethane	3.293	97	118717	29.84	ug/L	98
42) 2-Butanone	3.314	43	264600	102.85	ug/L	96
43) 1,1-Dichloropropene	3.361	75	85358	25.04	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:11:47 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tert-Butyl formate	3.408	59	116562	54.79	ug/L		96
45) Propionitrile	3.455	54	149951	208.14	ug/L		97
46) Methacrylonitrile	3.481	41	492745	209.92	ug/L		94
47) Benzene	3.491	78	225039	23.18	ug/L		92
48) TAME	3.565	73	172963	23.84	ug/L		99
50) Isobutyl alcohol	3.591	43	109371m	406.99	ug/L		
51) 1,2-Dichloroethane	3.586	62	98868	27.97	ug/L		94
52) Tert Amyl Alcohol	3.648	59	137012	234.10	ug/L		95
53) Trichloroethene	3.821	95	65852	25.46	ug/L		100
54) Methylcyclohexane	3.842	83	95374	26.60	ug/L		98
55) Dibromomethane	4.046	93	33976	23.83	ug/L		94
56) 1,2-Dichloropropane	4.103	63	51315	21.16	ug/L		90
57) Bromodichloromethane	4.145	83	80309	26.57	ug/L		99
58) Methyl methacrylate	4.234	41	61667	23.30	ug/L		95
59) 1,4-Dioxane	4.260	88	27433	494.46	ug/L		99
61) cis-1,3-Dichloropropene	4.516	75	81859	21.73	ug/L		95
64) Toluene	4.679	91	242417	21.42	ug/L		99
65) 2-Nitropropane	4.773	41	146975	133.50	ug/L		95
66) 4-Methyl-2-pentanone	4.888	43	422606	93.58	ug/L		96
67) trans-1,3-Dichloropropene	4.914	75	87018	24.34	ug/L	#	79
68) Tetrachloroethene	4.935	166	57636	22.37	ug/L		95
69) Ethyl methacrylate	5.029	69	72694	19.66	ug/L		92
70) 1,1,2-Trichloroethane	5.013	83	40294	21.27	ug/L		91
71) Dibromochloromethane	5.139	129	51668	23.55	ug/L		97
72) 1,3-Dichloropropane	5.191	76	84013	19.89	ug/L		97
73) 1,2-Dibromoethane	5.291	107	50919	22.19	ug/L		95
74) 3,3-dimethyl-1-butanol	5.427	57	676489	1036.41	ug/L		96
75) 2-hexanone	5.427	43	448923	104.72	ug/L		92
76) 1-Chlorohexane	5.646	91	77822m	22.89	ug/L		
77) Ethylbenzene	5.678	91	264322	22.37	ug/L		99
78) Chlorobenzene	5.651	112	139767	22.14	ug/L		96
79) 1,1,1,2-Tetrachloroethane	5.693	131	55449	24.57	ug/L		98
80) m,p-Xylene	5.777	91	417161	46.85	ug/L		97
81) o-Xylene	6.075	91	209144	24.10	ug/L		95
82) Styrene	6.106	104	140759	21.49	ug/L		97
83) Bromoform	6.117	173	32969	24.33	ug/L		98
84) Isopropylbenzene	6.305	105	235346	22.99	ug/L		98
87) cis-1,4-Dichloro-2-butene	6.525	53	24059	17.42	ug/L	#	82
88) n-Propylbenzene	6.603	91	279034	21.55	ug/L		99
89) Bromobenzene	6.567	156	52866	19.48	ug/L		96
90) 1,1,2,2-Tetrachloroethane	6.624	83	73373	19.84	ug/L		95
91) 1,3,5-Trimethylbenzene	6.755	105	193306	22.48	ug/L		94
92) 2-Chlorotoluene	6.708	91	169475	21.81	ug/L		98
93) trans-1,4-Dichloro-2-B...	6.755	53	30887	23.13	ug/L	#	84
94) 1,2,3-Trichloropropane	6.718	110	28801	21.71	ug/L		98
95) Cyclohexanone	6.750	55	21847	103.73	ug/L		96
96) 4-Chlorotoluene	6.828	91	181416	22.11	ug/L		97
97) tert-Butylbenzene	6.990	91	115954	23.93	ug/L		96
99) 1,2,4-Trimethylbenzene	7.043	105	185332	22.12	ug/L		99
100) Pentachloroethane	6.990	167	34931	24.13	ug/L	#	83
101) sec-Butylbenzene	7.126	105	220191	23.53	ug/L		97
102) 4-Isopropyltoluene	7.241	119	193366	23.02	ug/L		96
103) 1,3-Dichlorobenzene	7.273	146	102466	21.44	ug/L		95
104) 1,2,3-Trimethylbenzene	7.367	105	196846	23.76	ug/L		98
105) 1,4-Dichlorobenzene	7.341	146	103056	20.77	ug/L		96
106) n-Butylbenzene	7.555	92	82092	19.88	ug/L		98
107) Benzyl Chloride	7.519	126	23639	17.40	ug/L	#	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:11:47 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

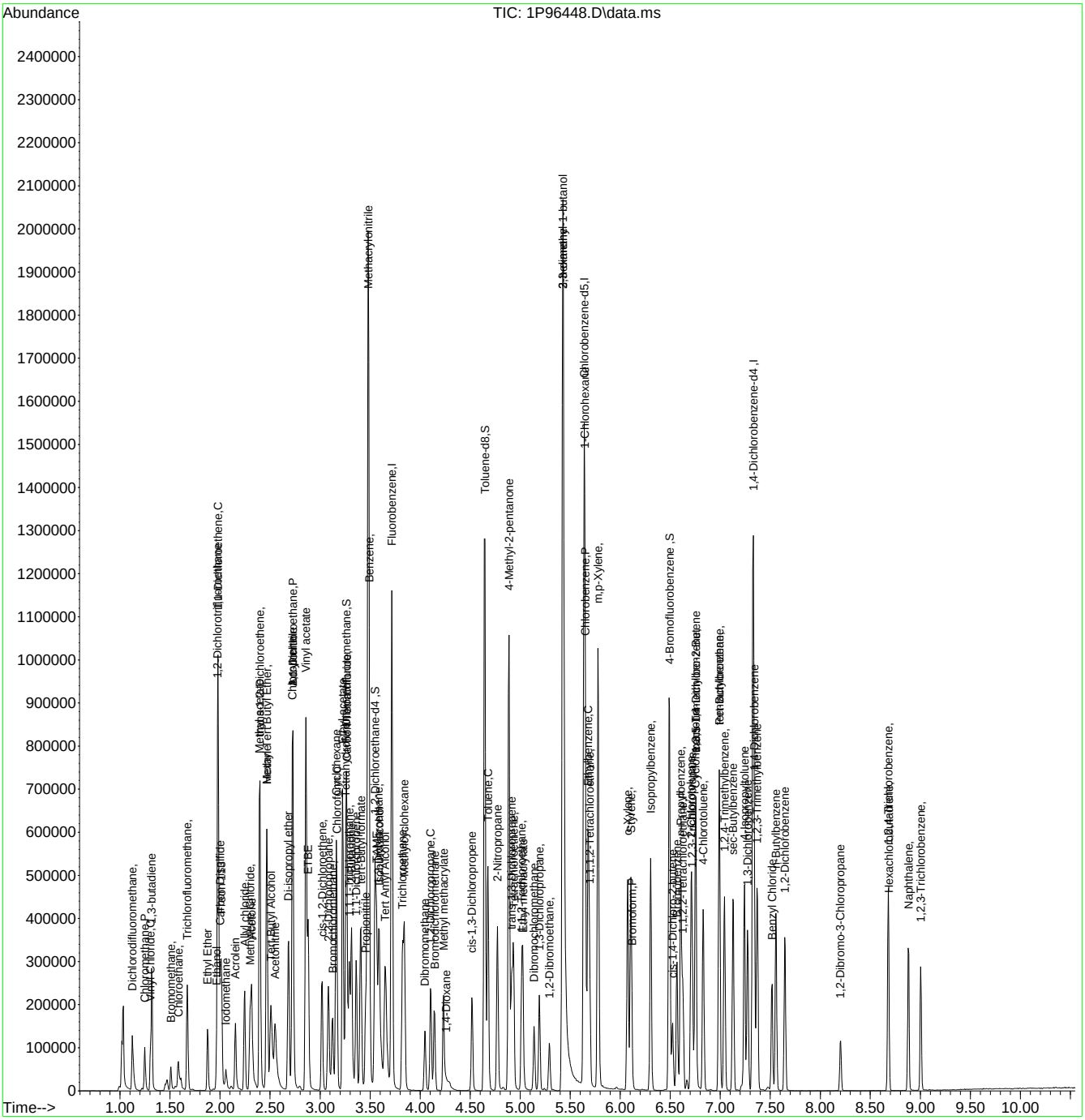
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dichlorobenzene	7.644	146	95995	21.33	ug/L	96
109) 1,2-Dibromo-3-Chloropr...	8.198	75	22086	22.24	ug/L	77
110) Hexachlorobutadiene	8.685	225	25293	22.35	ug/L	92
111) 1,2,4-Trichlorobenzene	8.680	180	48555	20.25	ug/L	97
112) Naphthalene	8.884	128	160741	20.03	ug/L	100
113) 1,2,3-Trichlorobenzene	9.004	180	50013	20.71	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:11:47 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FC1293-8MS
Lab FileID: 1P96448.D
Injection Time: 12/16/22 19:12

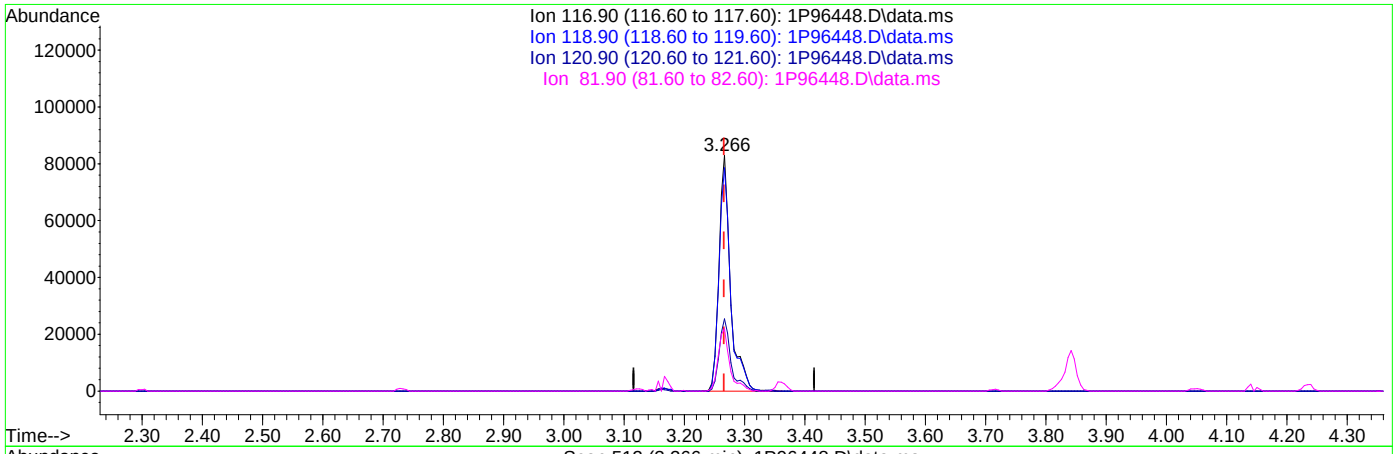
Method: SW846 8260D
Analyst approved: 12/19/22 08:54 Courtney Failla
Supervisor approved: 12/19/22 14:53 Karen Watson

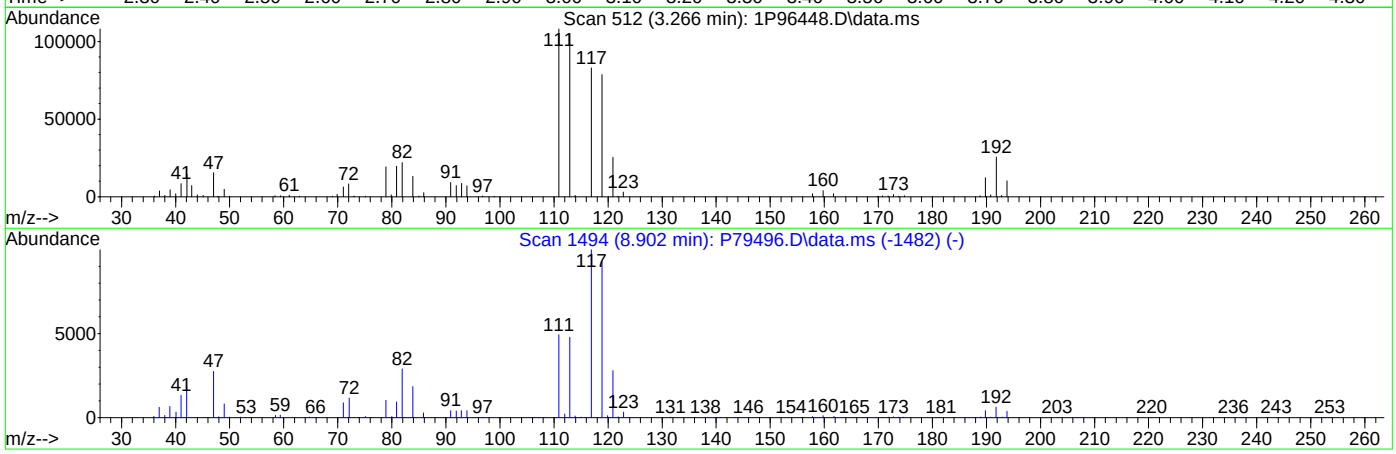
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.27	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96448.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.001) 33.14ug/L

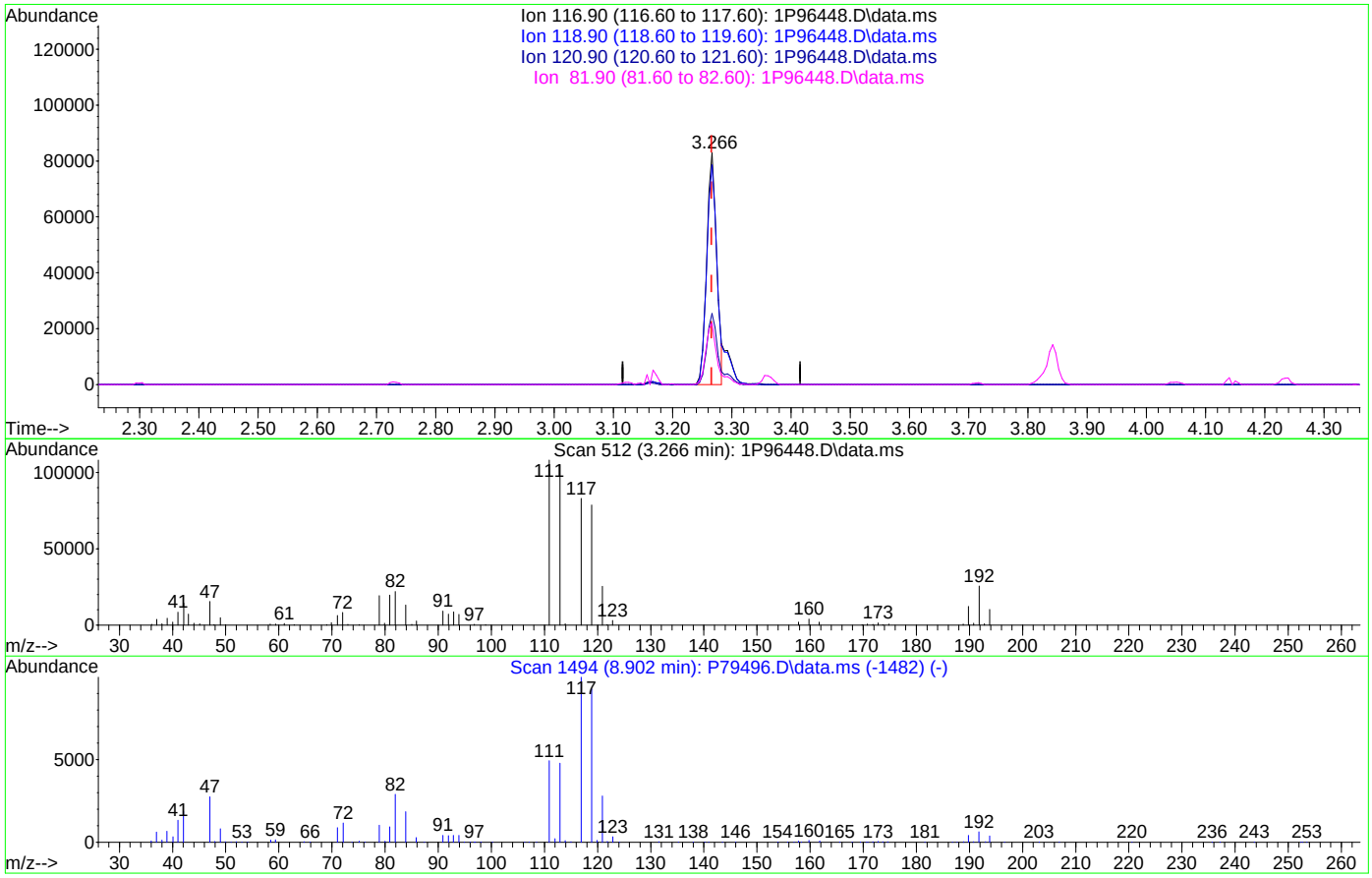
response 110518

Ion	Exp%	Act%
116.90	100	100
118.90	96.00	94.72
120.90	30.60	30.62
81.90	24.90	26.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



TIC: 1P96448.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.001) 29.12ug/L m

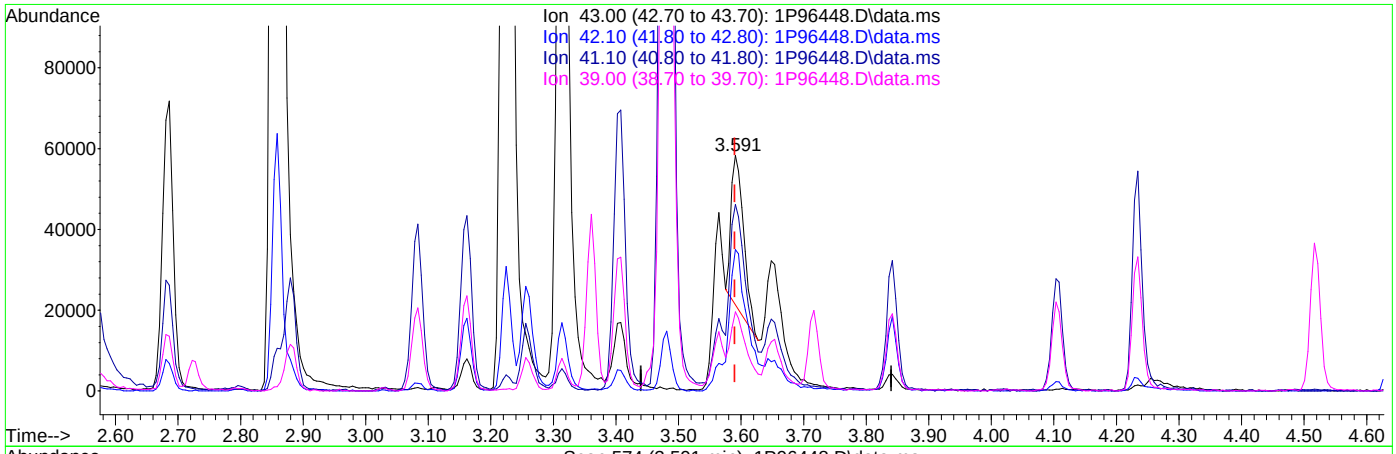
response 97130

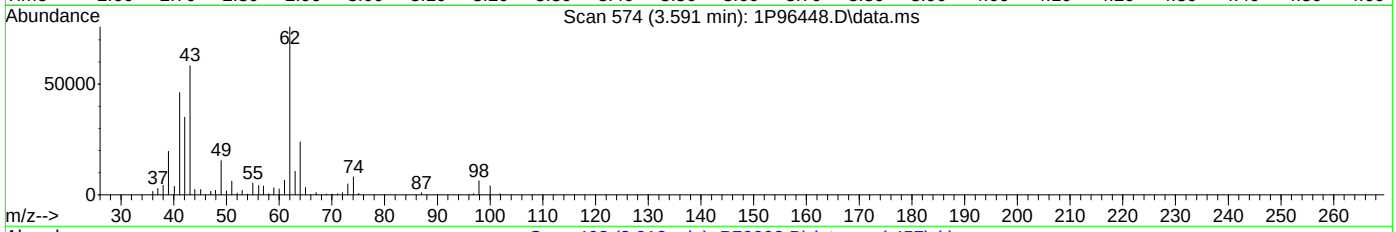
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	94.72
120.90	30.60	30.62
81.90	24.90	26.50

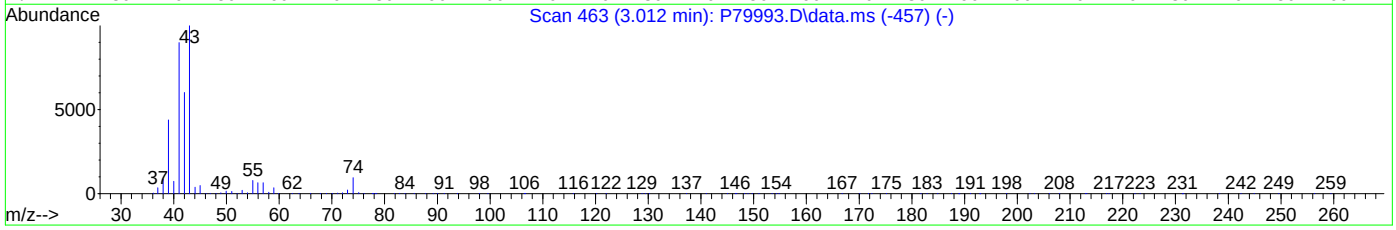
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96448.D\data.ms

(50) Isobutyl alcohol

3.591min (+0.001) 186.99ug/L

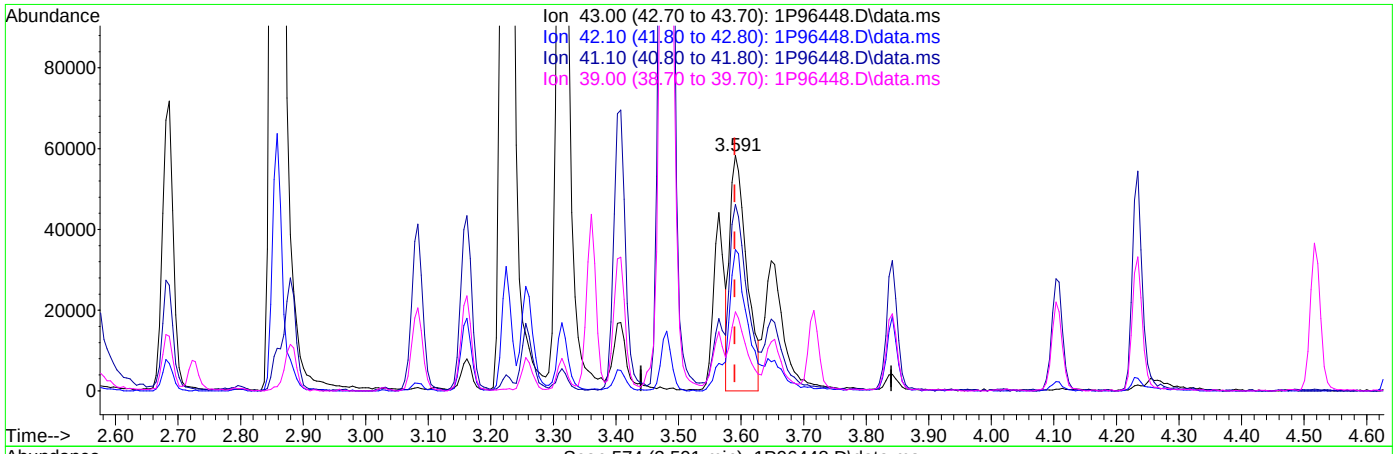
response 50251

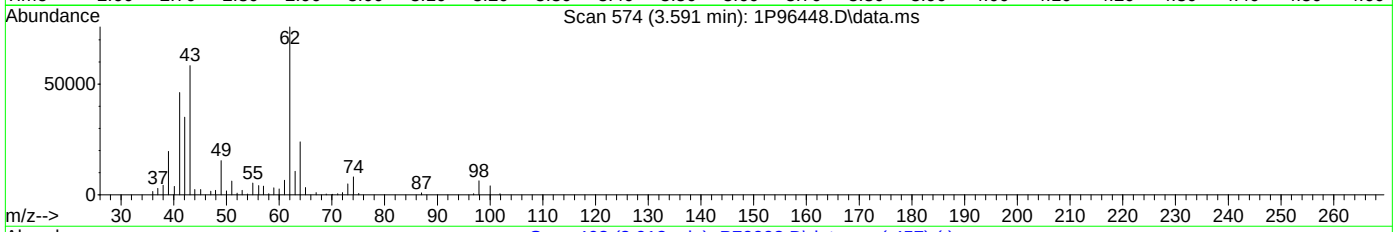
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	61.64
41.10	71.10	79.66
39.00	23.40	33.64

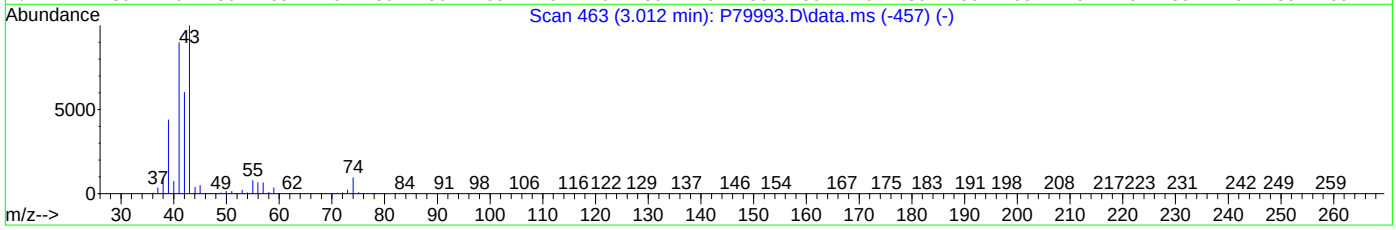
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96448.D\data.ms

(50) Isobutyl alcohol

3.591min (+0.001) 406.99ug/L m

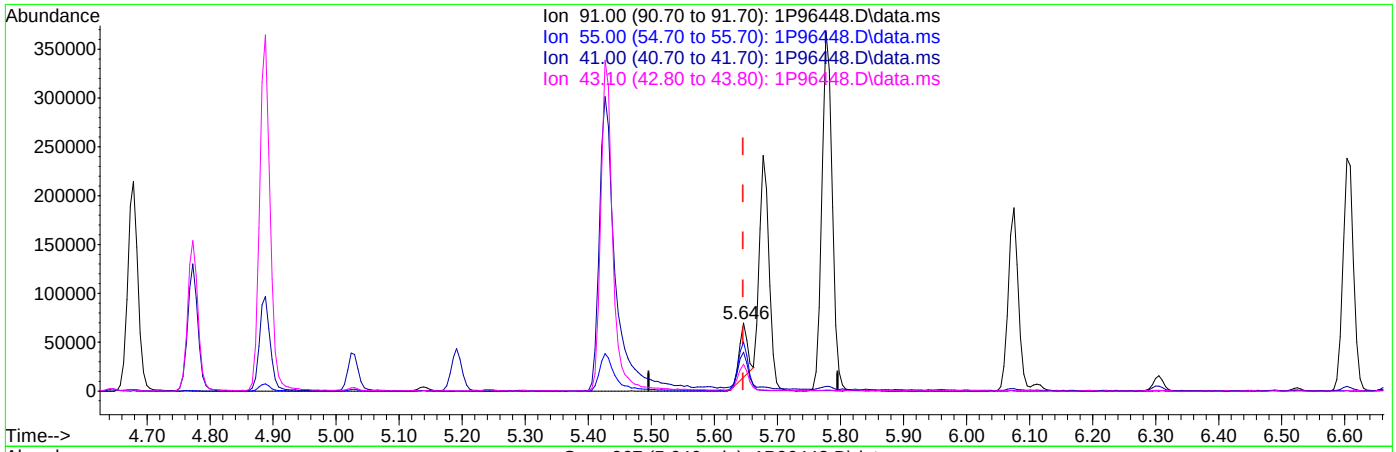
response 109371

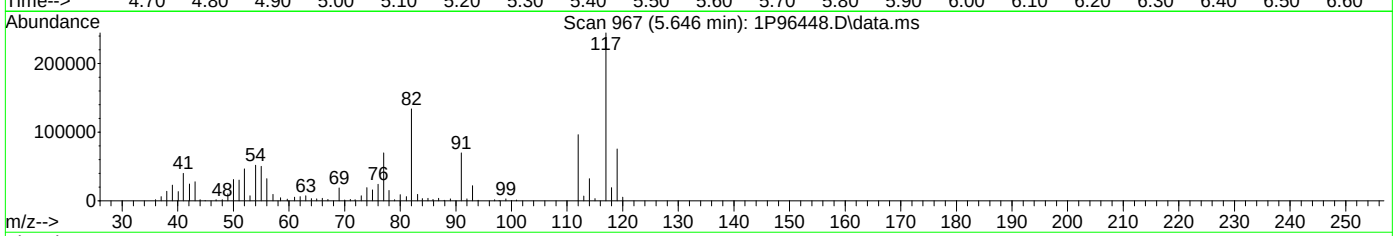
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	60.00
41.10	71.10	79.22
39.00	23.40	33.59

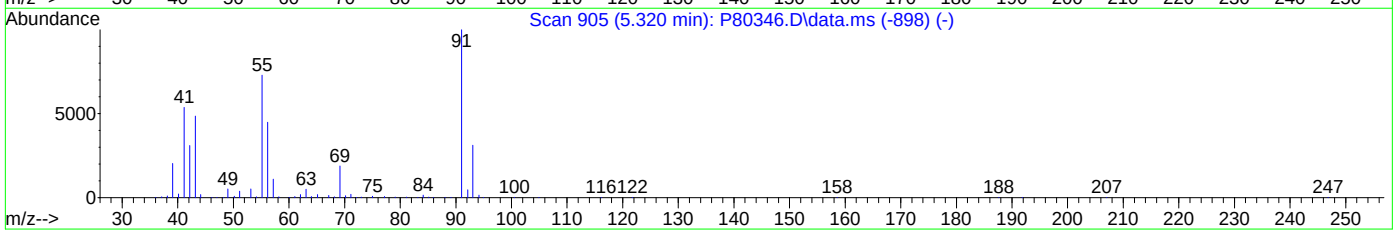
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96448.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.001) 14.84ug/L

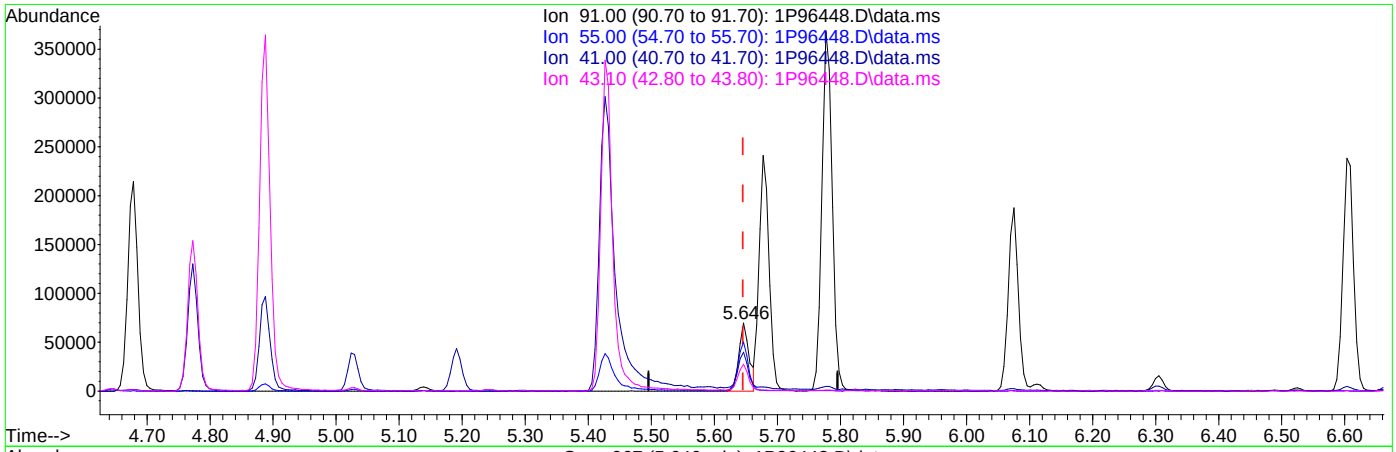
response 50460

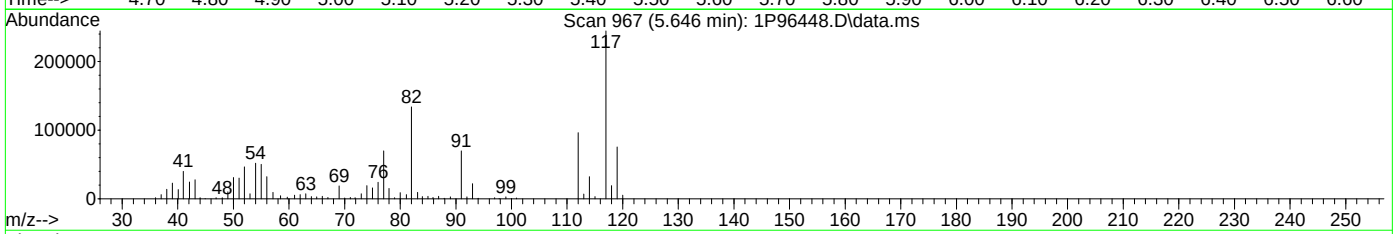
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	70.12
41.00	56.40	52.12
43.10	47.80	37.95

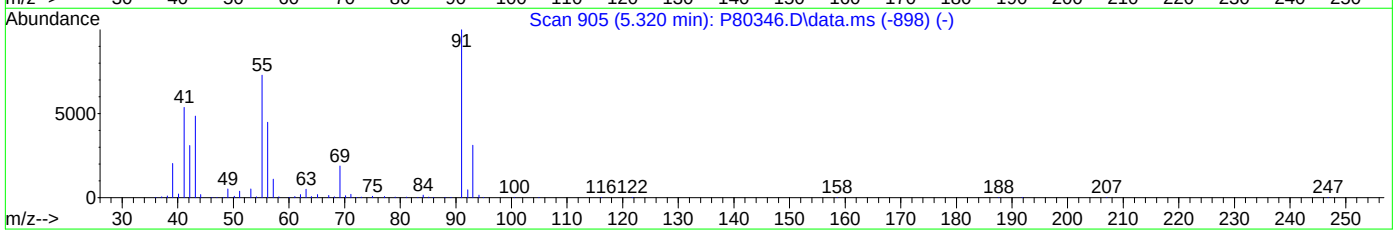
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96448.D
Acq On : 16 Dec 2022 7:12 pm
Operator : courtnef
Sample : FC1293-8MS, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:22 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96448.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.001) 22.89ug/L m

response 77822

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	72.07
41.00	56.40	57.28
43.10	47.80	39.41

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/19/22 14:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:12:38 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.713	96	629183	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.638	117	452447	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.328	152	220992	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.258	113	159674	56.41	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 112.82%			
49) 1,2-Dichloroethane-d4	3.546	65	231866	60.59	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 121.18%			
63) Toluene-d8	4.644	98	620367	47.60	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.20%			
86) 4-Bromofluorobenzene	6.491	174	177978	49.64	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.28%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.119	85	87952	29.76	ug/L	96
3) Chloromethane	1.245	50	61548	21.78	ug/L	96
4) 1,3-butadiene	1.313	39	57002	27.41	ug/L	99
5) Vinyl Chloride	1.302	62	66026	26.44	ug/L	96
6) Bromomethane	1.506	94	20500	23.10	ug/L	98
7) Chloroethane	1.580	64	35675	38.77	ug/L	98
8) Trichlorofluoromethane	1.669	101	115981	41.17	ug/L	97
9) Ethyl Ether	1.872	59	47185	25.54	ug/L	98
10) Ethanol	1.961	45	28828	459.96	ug/L	85
11) 1,2-Dichlorotrifluoroe...	1.972	67	74335	25.85	ug/L	96
12) 1,1-Dichloroethene	1.977	61	294849	81.31	ug/L	93
13) Freon 113	2.008	101	64708	27.97	ug/L	95
14) Carbon Disulfide	1.998	76	161905	25.72	ug/L	97
15) Iodomethane	2.056	142	42610	26.54	ug/L	93
16) Acrolein	2.150	56	78310	99.55	ug/L	97
17) Allyl chloride	2.244	41	83173	22.56	ug/L	88
18) Methylene Chloride	2.296	49	64600	20.54	ug/L	97
19) Acetone	2.312	43	181002	119.50	ug/L	95
20) Methyl acetate	2.396	43	368916	113.81	ug/L	91
21) trans-1,2-Dichloroethene	2.401	61	87004	24.21	ug/L	97
22) Hexane	2.463	56	46549	23.79	ug/L #	91
23) Methyl Tert Butyl Ether	2.469	73	211212	25.38	ug/L	94
24) Tert Butyl Alcohol	2.505	59	232461	296.00	ug/L	98
25) Acetonitrile	2.547	41	99369	166.16	ug/L	96
26) Di-isopropyl ether	2.683	45	173814	22.54	ug/L	93
27) Chloroprene	2.725	53	292988	25.99	ug/L	95
28) 1,1-Dichloroethane	2.725	63	132850	29.08	ug/L	98
29) Acrylonitrile	2.725	52	185042	127.67	ug/L	94
30) ETBE	2.877	59	190387	24.02	ug/L	98
31) Vinyl acetate	2.856	43	777071	141.94	ug/L	96
32) cis-1,2-Dichloroethene	3.018	96	72005	26.77	ug/L	95
33) 2,2-Dichloropropane	3.081	77	103536	24.31	ug/L	97
34) Bromochloromethane	3.123	128	28031	25.50	ug/L	90
35) Cyclohexane	3.159	56	99815	25.83	ug/L	94
36) Chloroform	3.164	83	123716	26.06	ug/L	98
37) Ethyl acetate	3.222	43	502626	124.29	ug/L	99
38) Tetrahydrofuran	3.258	42	33301	20.58	ug/L	93
40) Carbon Tetrachloride	3.264	117	104647m	29.60	ug/L	
41) 1,1,1-Trichloroethane	3.290	97	124055	29.42	ug/L	99
42) 2-Butanone	3.311	43	273360	100.16	ug/L	96
43) 1,1-Dichloropropene	3.358	75	90832	25.14	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:12:38 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tert-Butyl formate	3.405	59	120219	53.32	ug/L		95
45) Propionitrile	3.457	54	157002	205.62	ug/L		97
46) Methacrylonitrile	3.478	41	527935	212.35	ug/L		96
47) Benzene	3.489	78	239388	23.27	ug/L		95
48) TAME	3.562	73	183609	23.87	ug/L		97
50) Isobutyl alcohol	3.593	43	123298m	432.88	ug/L		
51) 1,2-Dichloroethane	3.588	62	103061	27.51	ug/L		94
52) Tert Amyl Alcohol	3.651	59	146557	236.26	ug/L		99
53) Trichloroethene	3.823	95	67931	24.78	ug/L		92
54) Methylcyclohexane	3.839	83	100871	26.54	ug/L		99
55) Dibromomethane	4.048	93	35675	23.60	ug/L		88
56) 1,2-Dichloropropane	4.106	63	55231	21.49	ug/L		91
57) Bromodichloromethane	4.142	83	84003	26.22	ug/L		96
58) Methyl methacrylate	4.231	41	66686	23.77	ug/L		96
59) 1,4-Dioxane	4.257	88	30025	510.42	ug/L		96
61) cis-1,3-Dichloropropene	4.519	75	87340	21.87	ug/L		98
64) Toluene	4.676	91	260547	21.89	ug/L		100
65) 2-Nitropropane	4.770	41	155408	134.20	ug/L		98
66) 4-Methyl-2-pentanone	4.885	43	440543	92.74	ug/L		97
67) trans-1,3-Dichloropropene	4.916	75	92452	24.58	ug/L	#	82
68) Tetrachloroethene	4.932	166	62742	23.15	ug/L		95
69) Ethyl methacrylate	5.026	69	81382	20.92	ug/L		93
70) 1,1,2-Trichloroethane	5.016	83	43265	21.71	ug/L		92
71) Dibromochloromethane	5.141	129	55173	23.90	ug/L		100
72) 1,3-Dichloropropane	5.194	76	90290	20.32	ug/L		99
73) 1,2-Dibromoethane	5.293	107	52608	21.80	ug/L		98
74) 3,3-dimethyl-1-butanol	5.424	57	735572	1071.69	ug/L		97
75) 2-hexanone	5.429	43	463087	102.70	ug/L		92
76) 1-Chlorohexane	5.649	91	78702m	22.01	ug/L		
77) Ethylbenzene	5.680	91	281340	22.64	ug/L		98
78) Chlorobenzene	5.649	112	148896	22.42	ug/L		96
79) 1,1,1,2-Tetrachloroethane	5.696	131	58553	24.66	ug/L		93
80) m,p-Xylene	5.779	91	439140	46.89	ug/L		98
81) o-Xylene	6.072	91	221670	24.28	ug/L		96
82) Styrene	6.104	104	153242	22.22	ug/L		98
83) Bromoform	6.114	173	34071	23.94	ug/L		96
84) Isopropylbenzene	6.302	105	250916	23.29	ug/L		97
87) cis-1,4-Dichloro-2-butene	6.522	53	25089	17.25	ug/L		88
88) n-Propylbenzene	6.606	91	299052	21.93	ug/L		99
89) Bromobenzene	6.569	156	57024	19.95	ug/L		88
90) 1,1,2,2-Tetrachloroethane	6.627	83	75092	19.27	ug/L		96
91) 1,3,5-Trimethylbenzene	6.752	105	203341	22.44	ug/L		96
92) 2-Chlorotoluene	6.710	91	180992	22.11	ug/L		99
93) trans-1,4-Dichloro-2-B...	6.757	53	31602	22.46	ug/L		88
94) 1,2,3-Trichloropropane	6.721	110	29371	21.01	ug/L		97
95) Cyclohexanone	6.747	55	23095	104.08	ug/L		93
96) 4-Chlorotoluene	6.831	91	185080	21.41	ug/L		94
97) tert-Butylbenzene	6.988	91	122971	24.09	ug/L		95
99) 1,2,4-Trimethylbenzene	7.040	105	196585	22.26	ug/L		96
100) Pentachloroethane	6.993	167	37333	24.47	ug/L	#	70
101) sec-Butylbenzene	7.129	105	229363	23.27	ug/L		99
102) 4-Isopropyltoluene	7.244	119	203866	23.04	ug/L		99
103) 1,3-Dichlorobenzene	7.275	146	108075	21.47	ug/L		98
104) 1,2,3-Trimethylbenzene	7.369	105	205974	23.60	ug/L		100
105) 1,4-Dichlorobenzene	7.338	146	109833	21.01	ug/L		93
106) n-Butylbenzene	7.558	92	85361	19.63	ug/L		96
107) Benzyl Chloride	7.516	126	25916	18.07	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:12:38 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

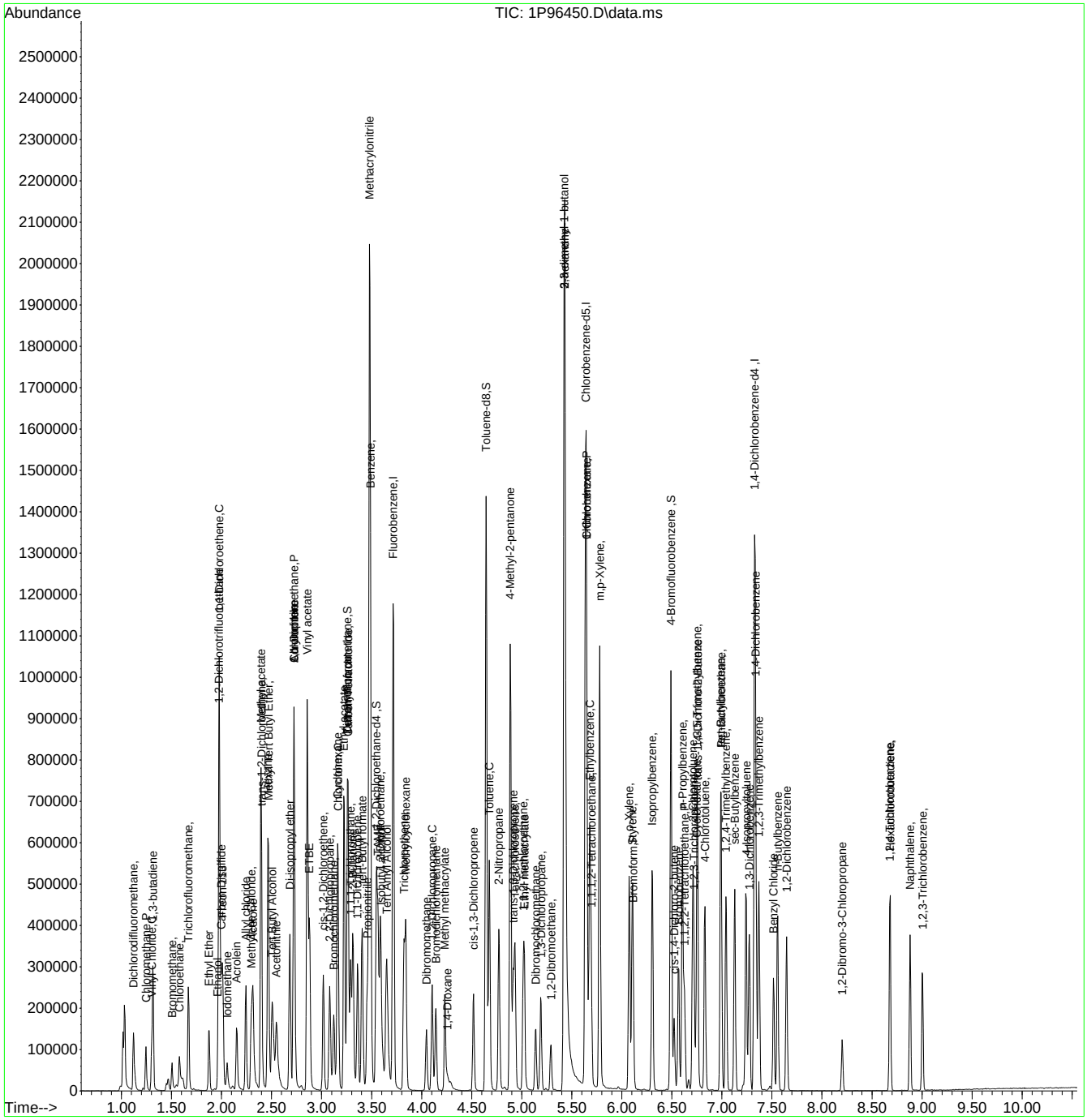
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dichlorobenzene	7.647	146	97505	20.57	ug/L	95
109) 1,2-Dibromo-3-Chloropr...	8.201	75	22069	21.09	ug/L	84
110) Hexachlorobutadiene	8.682	225	26361	22.11	ug/L	92
111) 1,2,4-Trichlorobenzene	8.677	180	51853	20.51	ug/L	96
112) Naphthalene	8.881	128	172720	20.40	ug/L	98
113) 1,2,3-Trichlorobenzene	9.006	180	54200	21.30	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:12:38 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: FC1293-8MSD
Lab FileID: 1P96450.D
Injection Time: 12/16/22 19:44

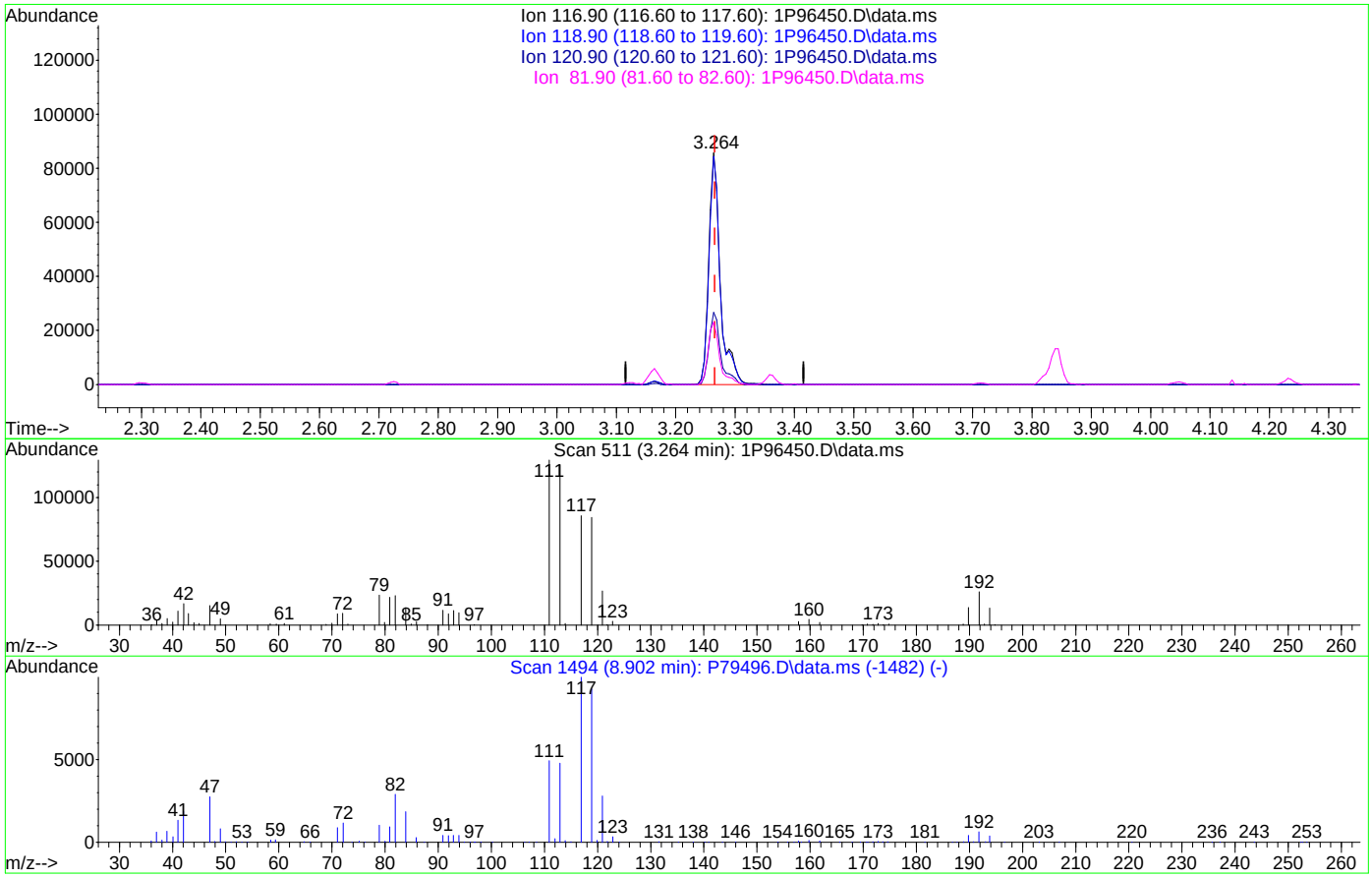
Method: SW846 8260D
Analyst approved: 12/19/22 08:54 Courtney Failla
Supervisor approved: 12/19/22 14:53 Karen Watson

Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



TIC: 1P96450.D\data.ms

(40) Carbon Tetrachloride ( )

3.264min (-0.002) 32.94ug/L

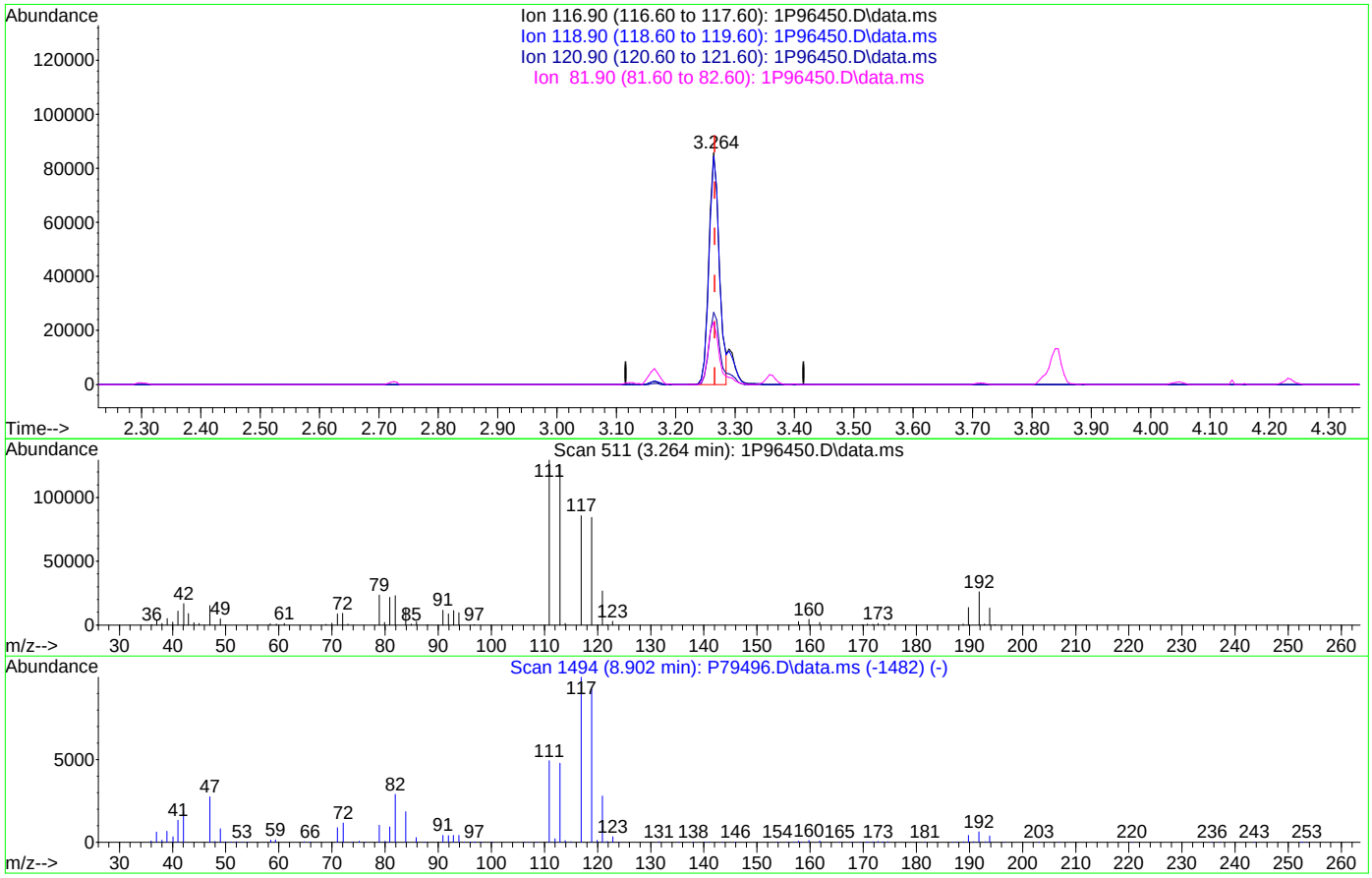
response 116427

Ion	Exp%	Act%
116.90	100	100
118.90	96.00	98.46
120.90	30.60	31.13
81.90	24.90	26.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



TIC: 1P96450.D\data.ms

(40) Carbon Tetrachloride ( )

3.264min (-0.002) 29.60ug/L m

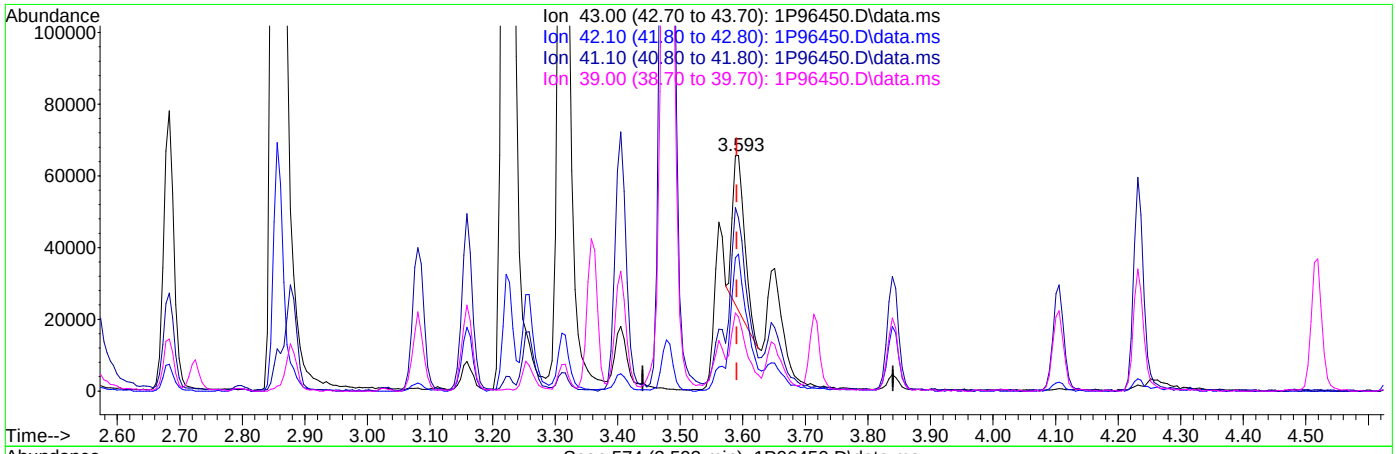
response 104647

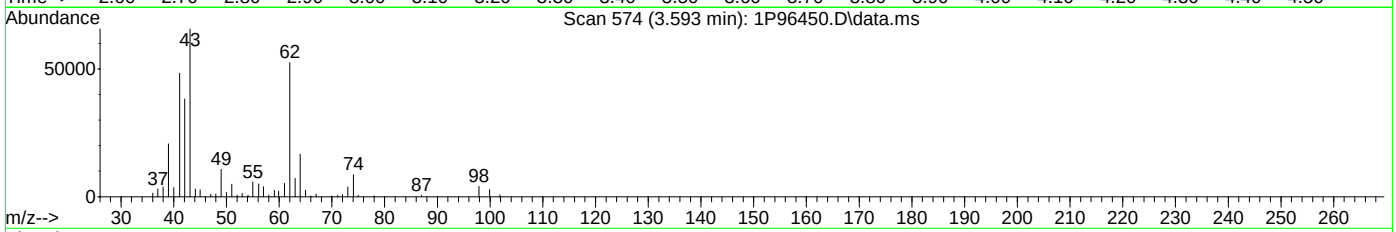
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	98.46
120.90	30.60	31.13
81.90	24.90	26.86

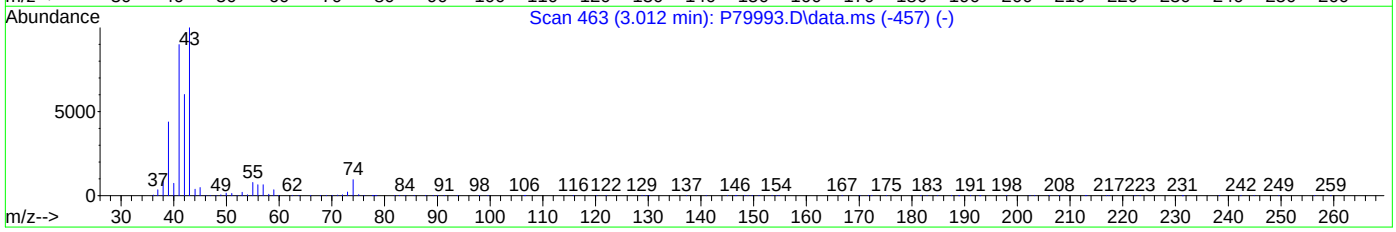
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96450.D\data.ms

(50) Isobutyl alcohol

3.593min (+0.003) 193.11ug/L

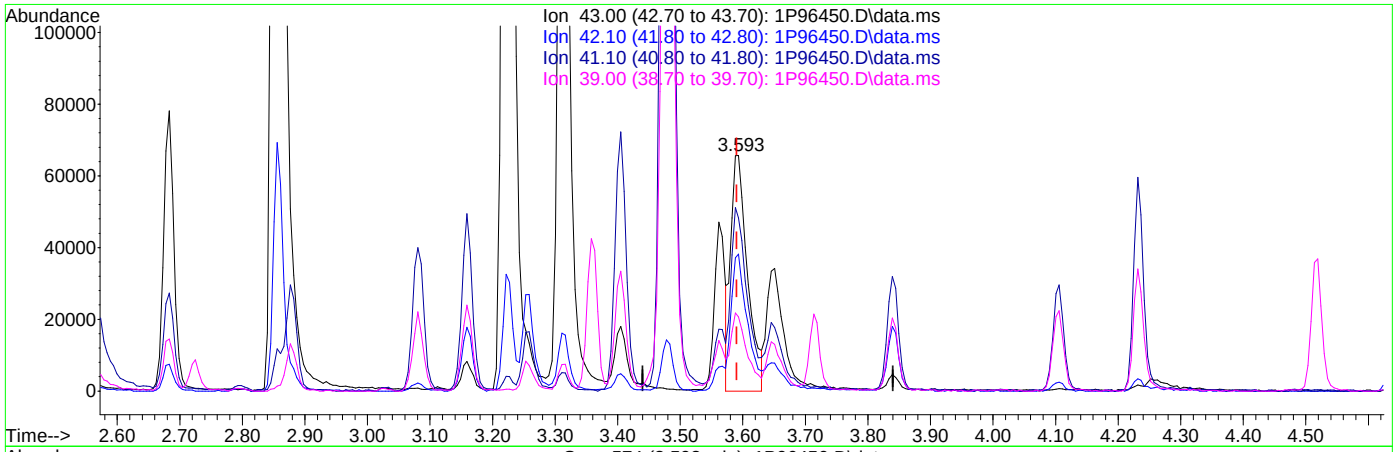
response 55003

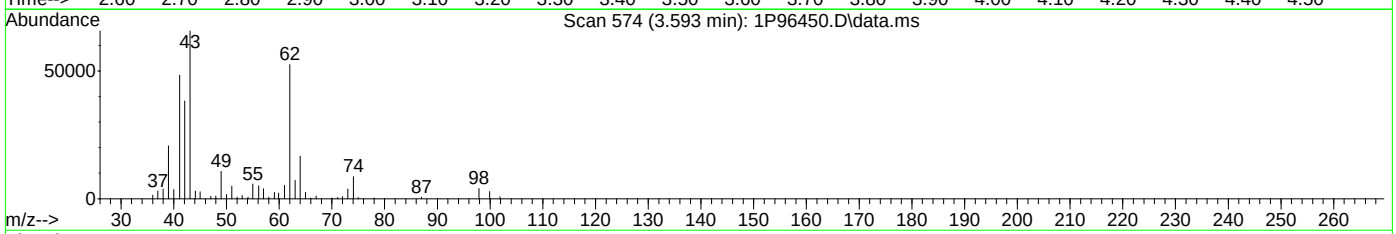
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.70
41.10	71.10	72.57
39.00	23.40	29.95

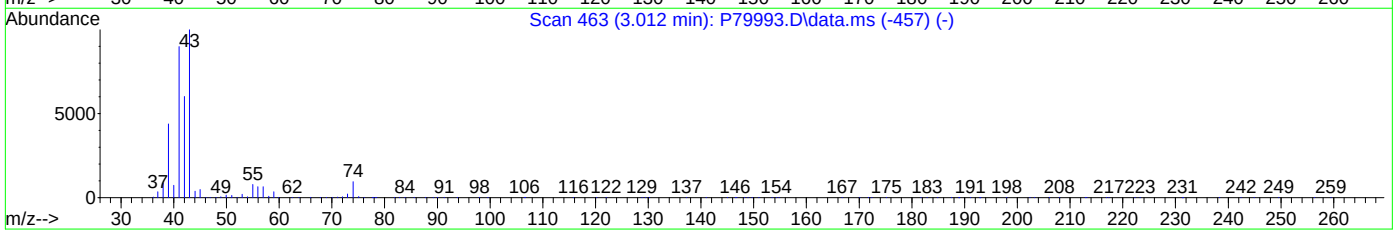
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96450.D\data.ms

(50) Isobutyl alcohol

3.593min (+0.003) 432.88ug/L m

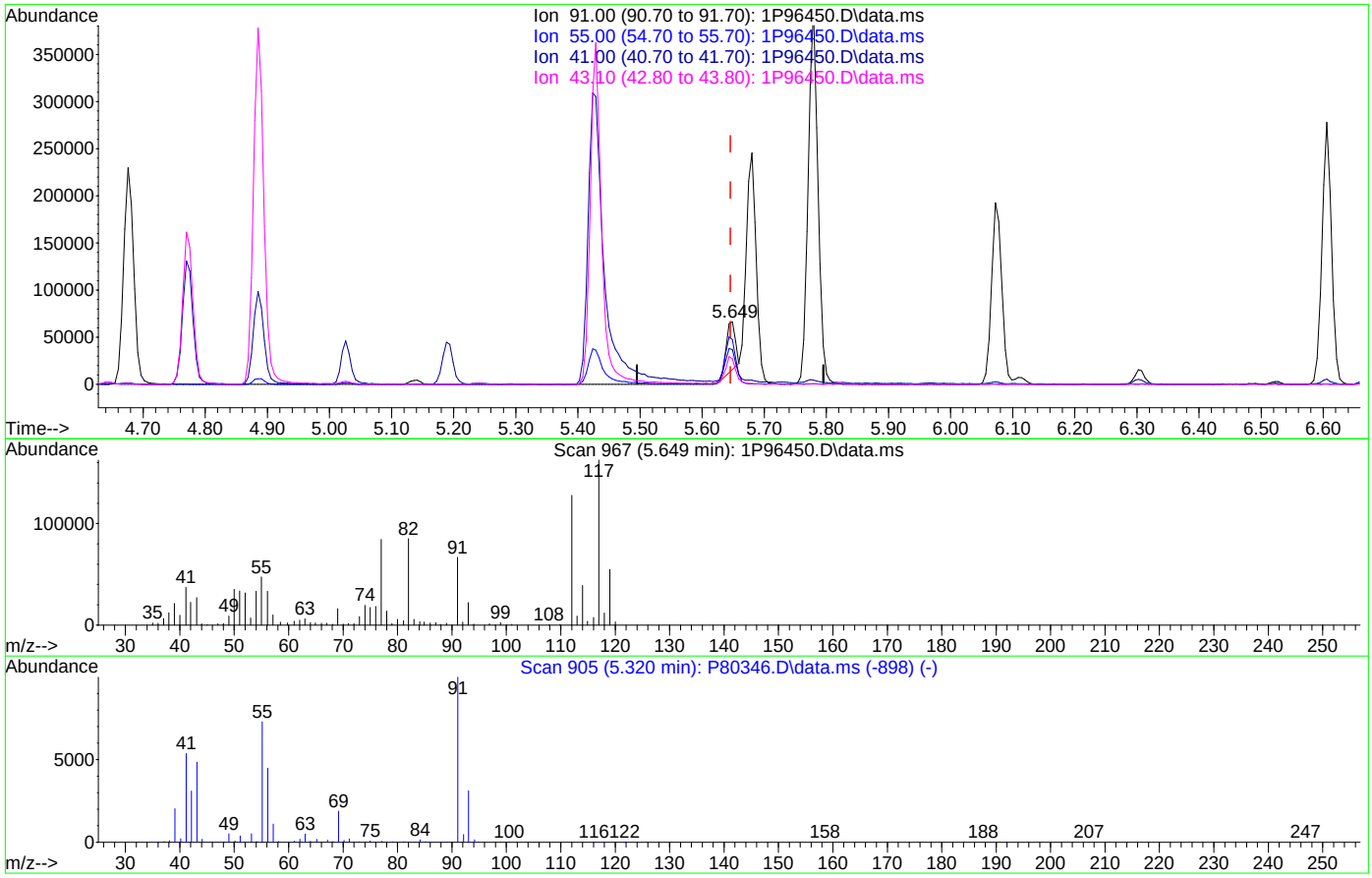
response 123298

Ion	Exp%	Act%
43.00	100	100
42.10	58.50	58.17
41.10	71.10	73.51
39.00	23.40	31.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



TIC: 1P96450.D\data.ms

(76) 1-Chlorohexane

5.649min (+0.003) 15.38ug/L

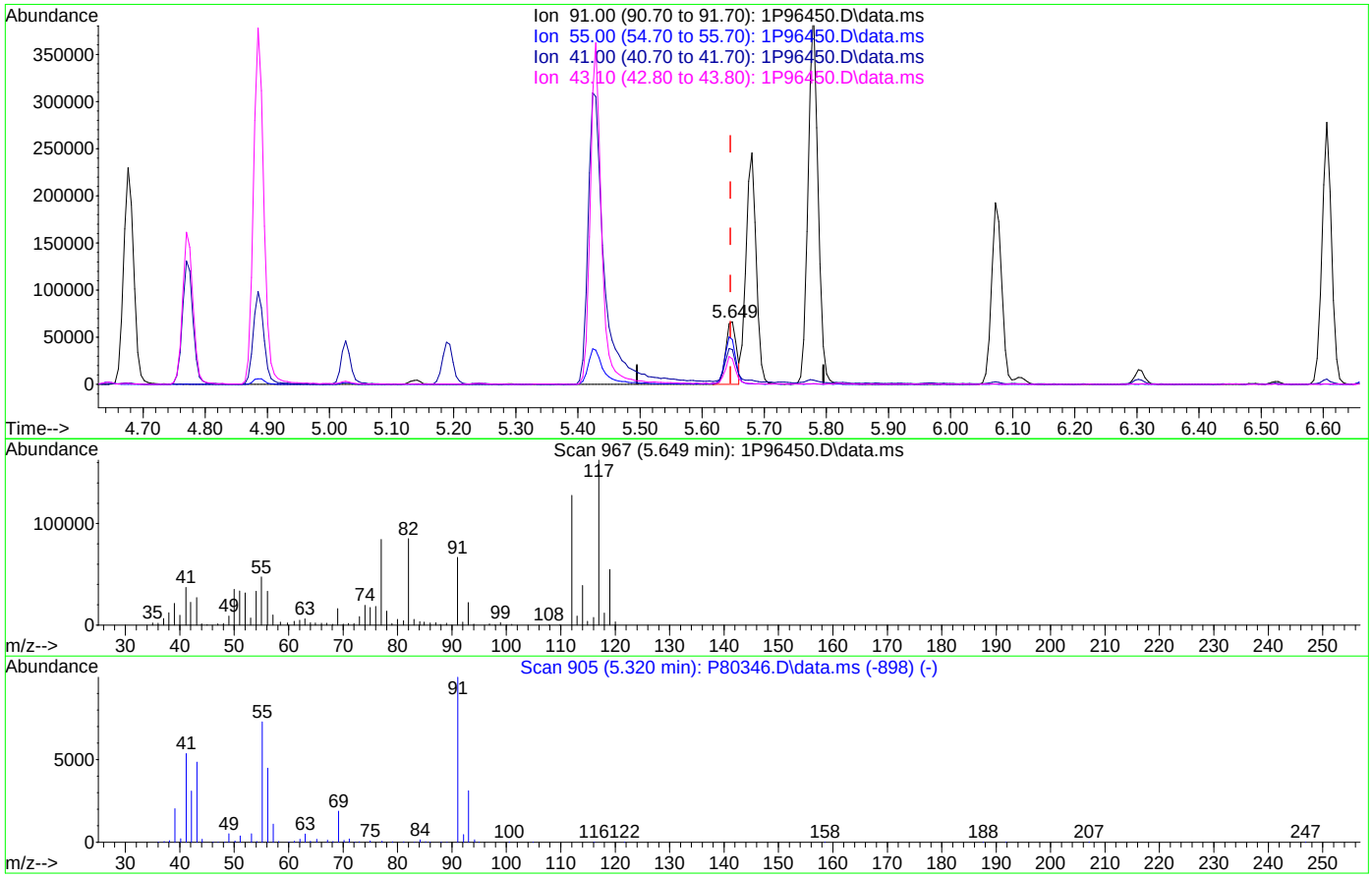
response 55006

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	67.26
41.00	56.40	50.25
43.10	47.80	38.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96450.D
Acq On : 16 Dec 2022 7:44 pm
Operator : courtnef
Sample : FC1293-8MSD, 5X Inst : MSVOA13
Misc : MS53019,V1P3648,,,,,5
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:28 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



TIC: 1P96450.D\data.ms

(76) 1-Chlorohexane

5.649min (+0.003) 22.01ug/L m

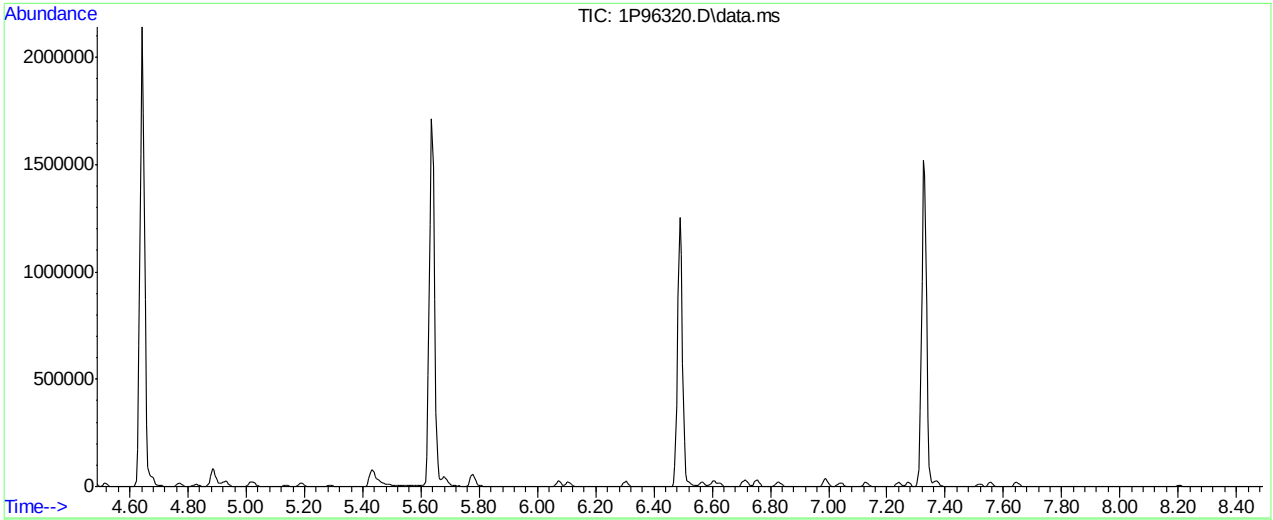
response 78702

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	71.16
41.00	56.40	55.57
43.10	47.80	40.63

Methods: SW-846 8260B

Data File : C:\msdchem\1\DATA\2022-12-14\1P96320.D Vial: 2
Acq On : 14 Dec 2022 10:15 am Operator: courtnef
Sample : BFB Inst : MSVOA13
Misc : MS52806,V1P3646,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B



AutoFind: Scans 1127, 1128, 1129; Background Corrected with Scan 1120

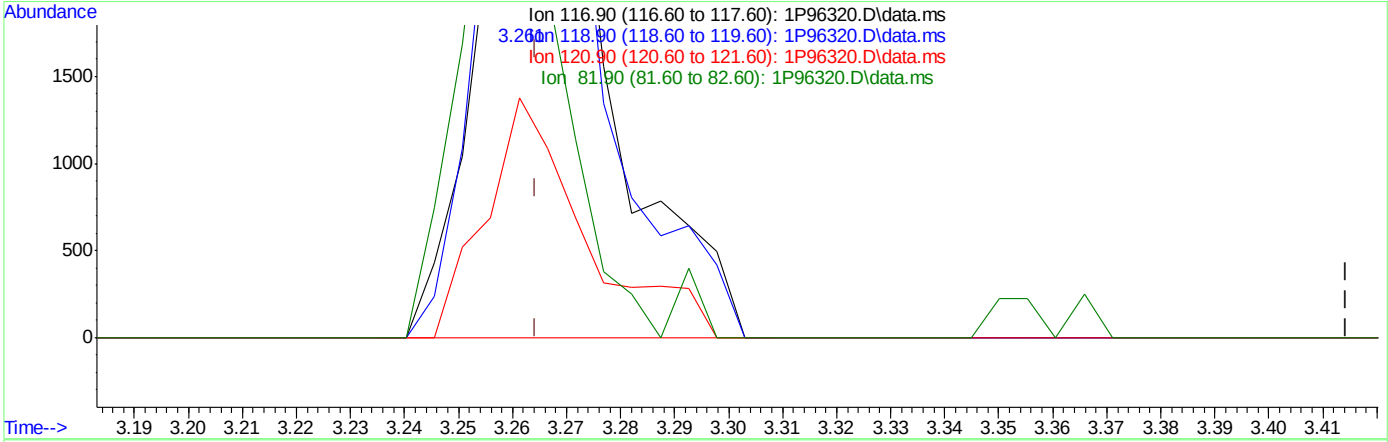
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	17.4	41333	PASS
75	95	30	60	50.9	120613	PASS
95	95	100	100	100.0	236949	PASS
96	95	5	9	6.8	16014	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.6	167168	PASS
175	174	5	9	7.6	12628	PASS
176	174	95	101	96.0	160480	PASS
177	176	5	9	6.3	10084	PASS

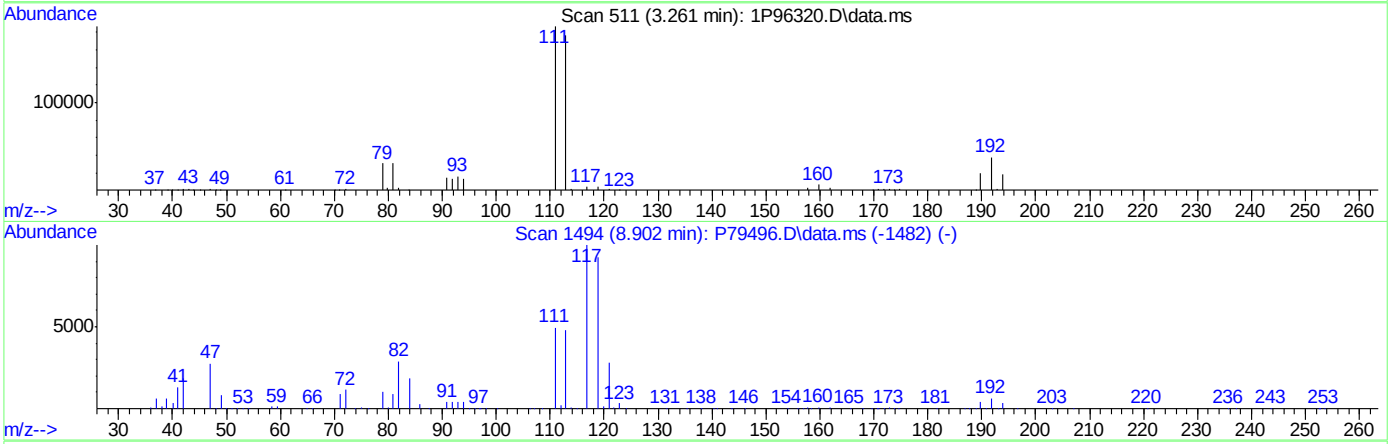
1P96320.D V1P_2022-12-14.M Wed Dec 14 10:38:43 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.003) 1.45ug/L

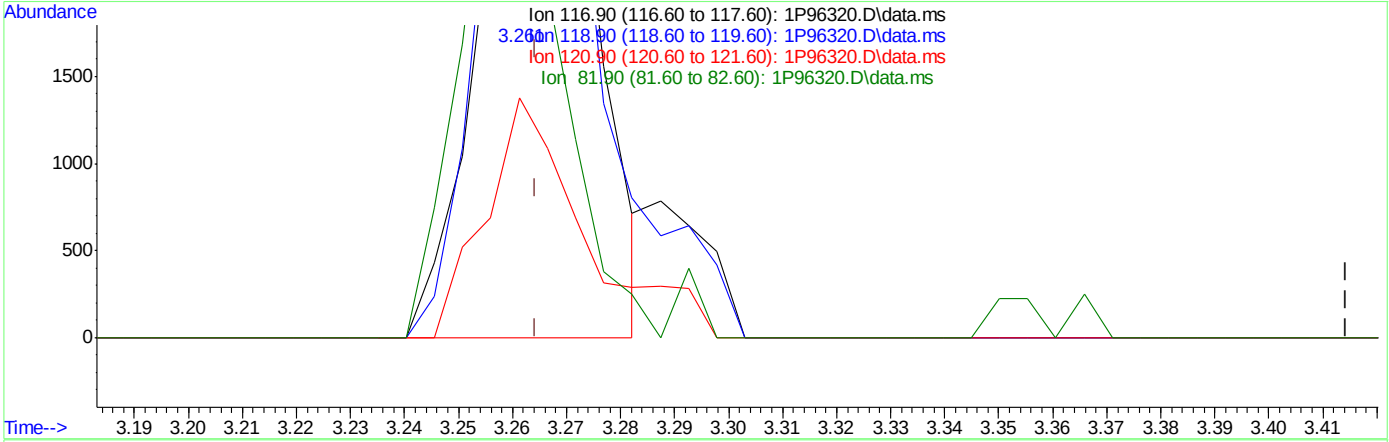
response 5943

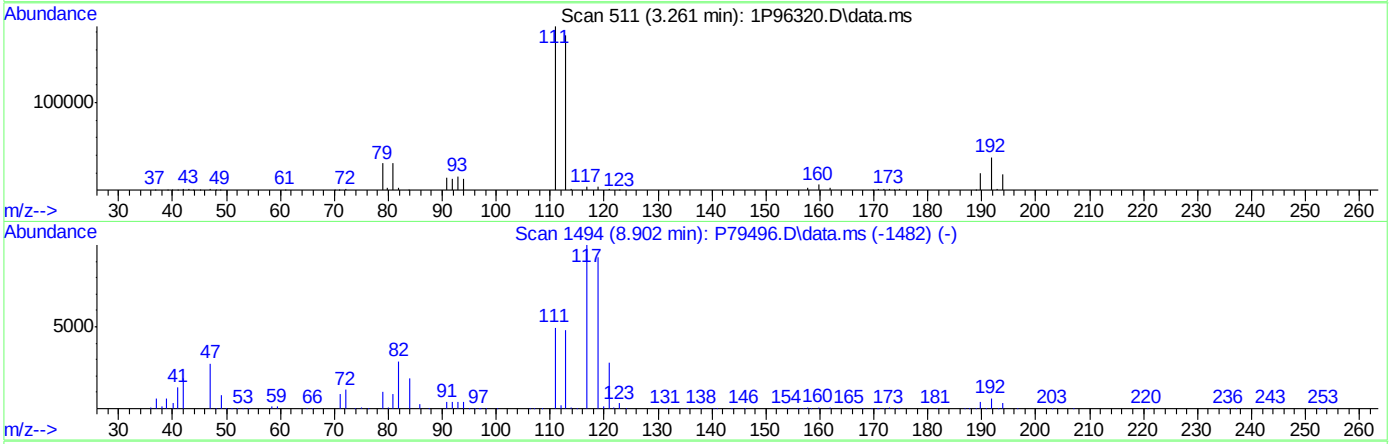
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	97.36
120.90	31.00	34.27
81.90	30.20	74.71#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.003) 1.30ug/L m

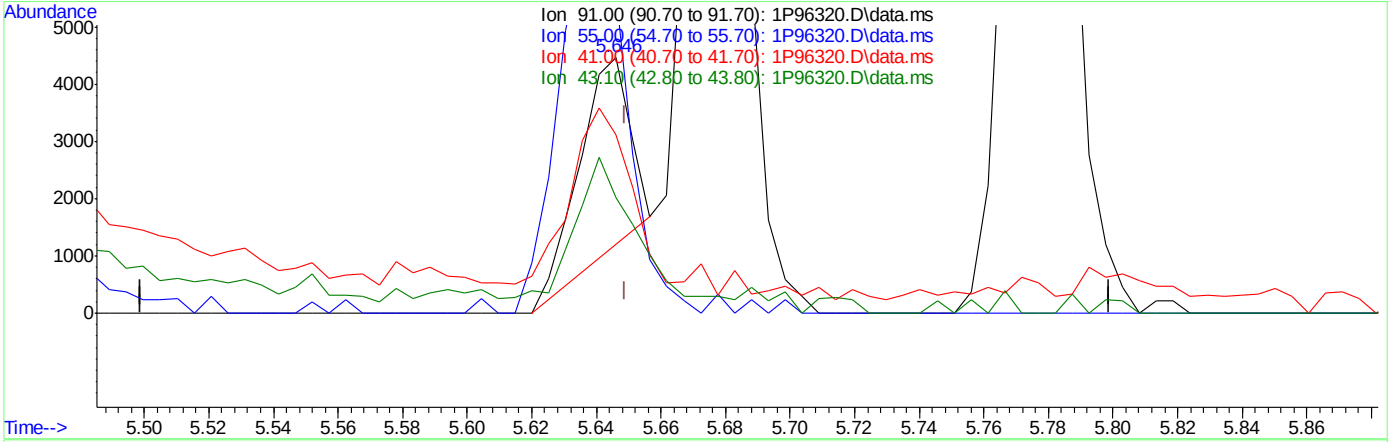
response 5341

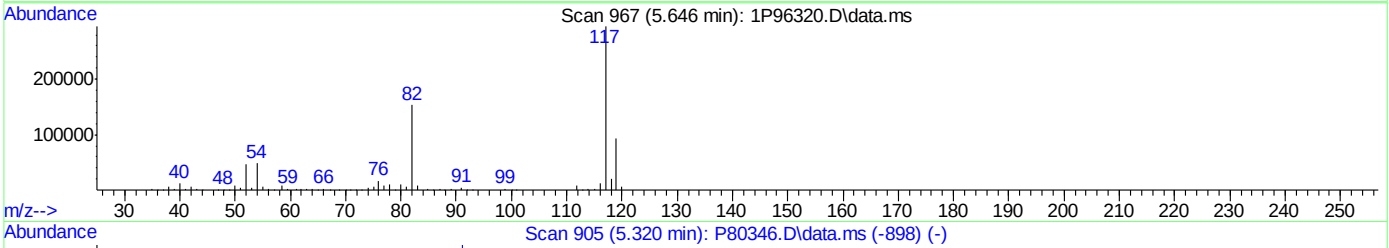
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	97.36
120.90	31.00	34.27
81.90	30.20	74.71#

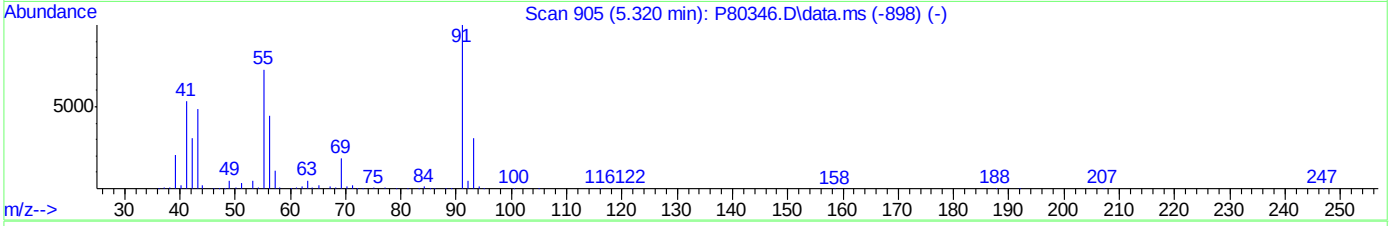
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 0.73ug/L

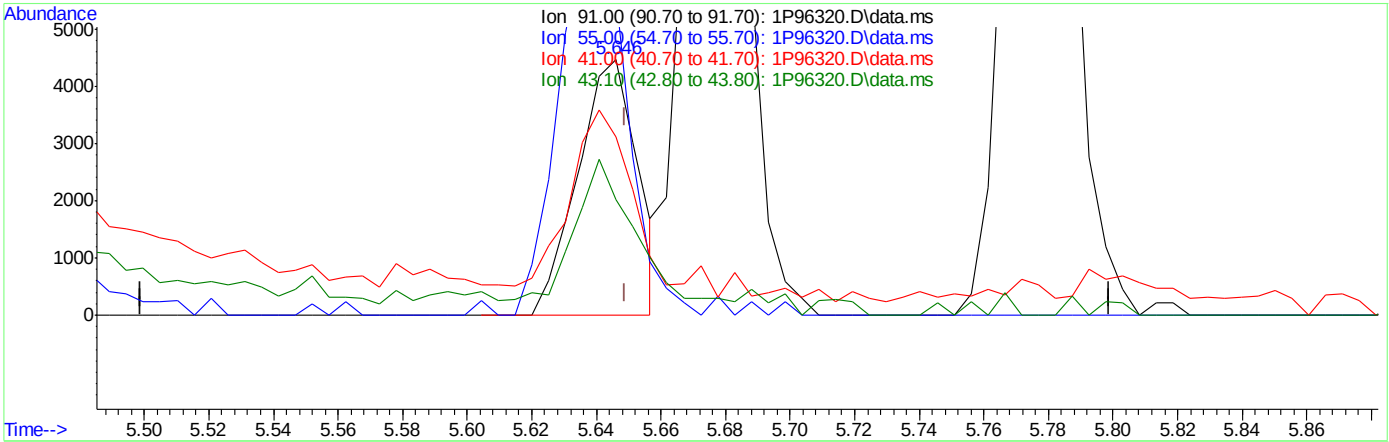
response 3904

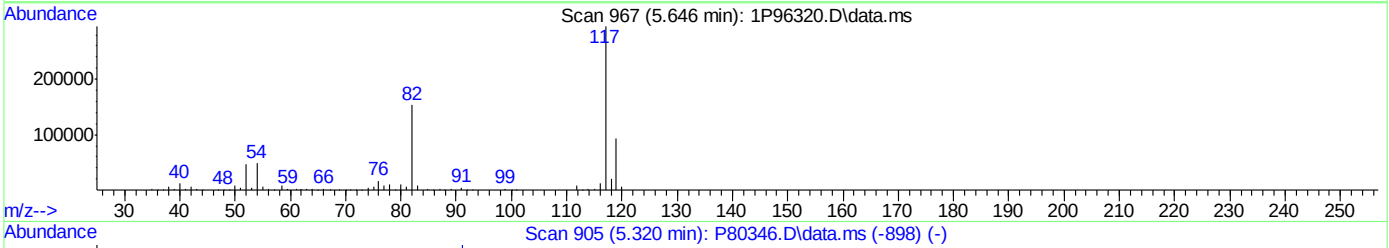
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	103.85#
41.00	62.10	55.02
43.10	50.00	36.25

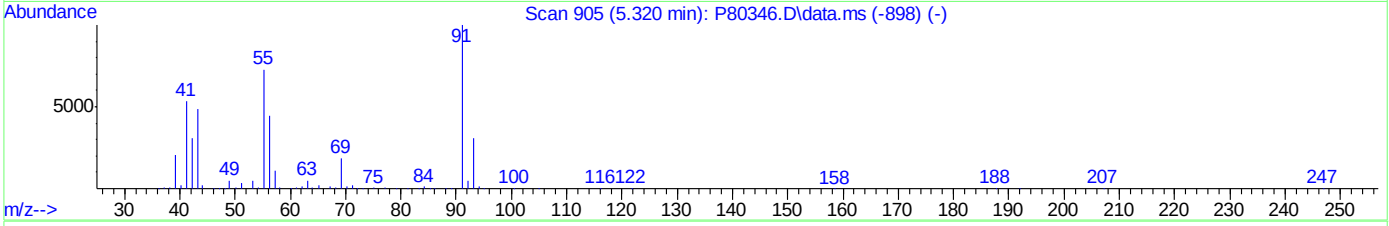
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 1.08ug/L m

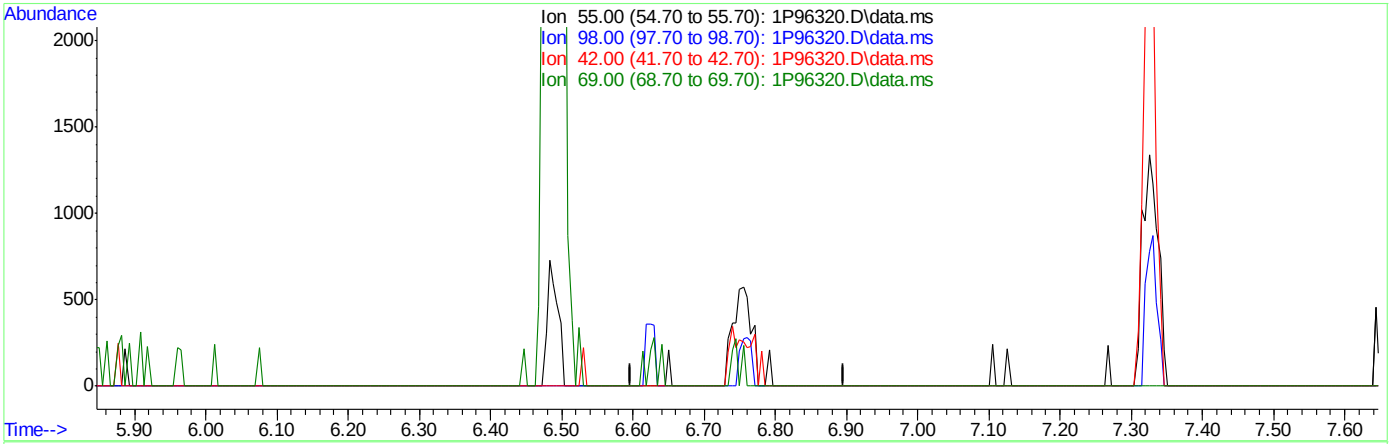
response 5758

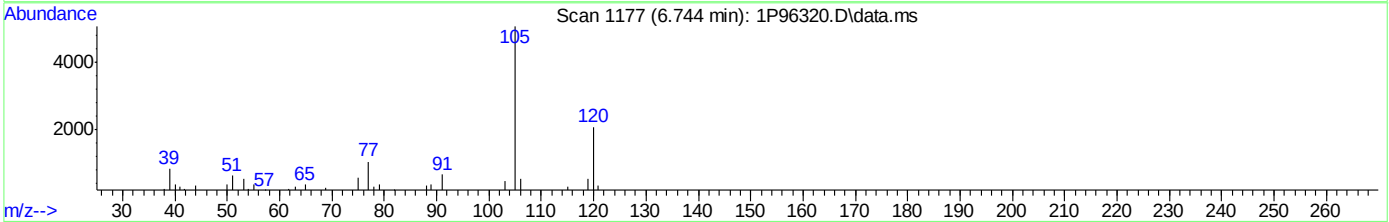
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	123.63#
41.00	62.10	69.69
43.10	50.00	44.98

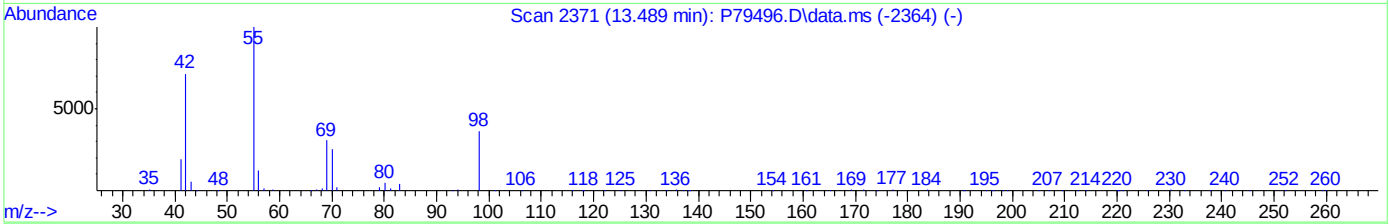
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(95) Cyclohexanone

6.747min (-6.747) 0.00ug/L

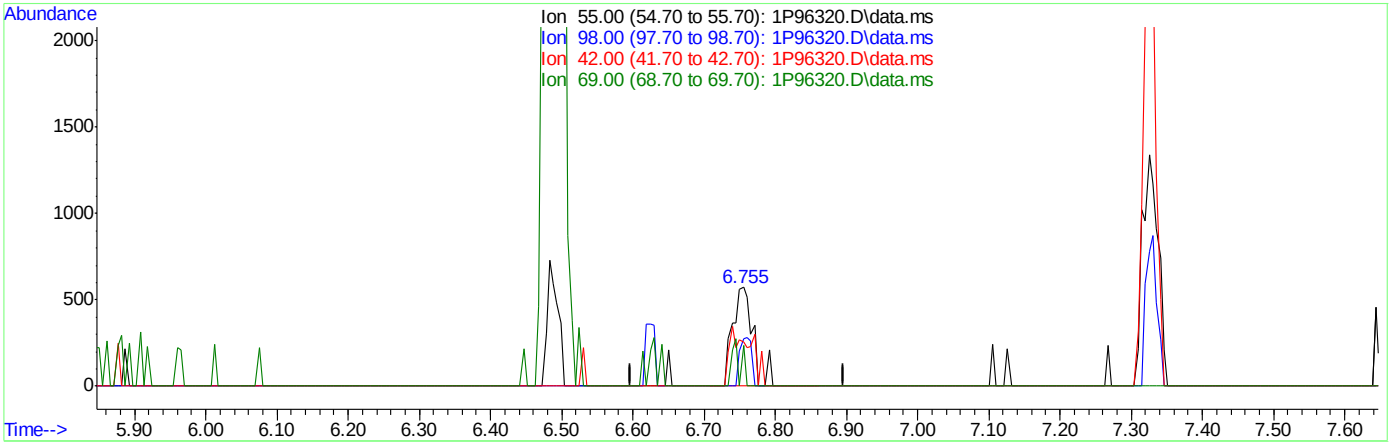
response 0

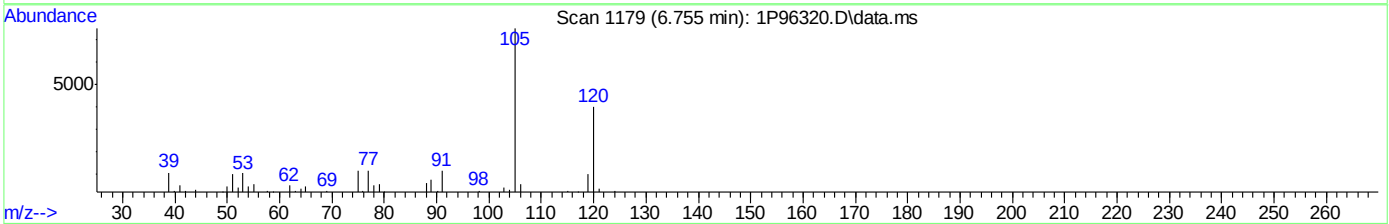
Ion	Exp%	Act%
55.00	100	0.00
98.00	45.70	0.00#
42.00	75.30	0.00#
69.00	32.20	0.00#

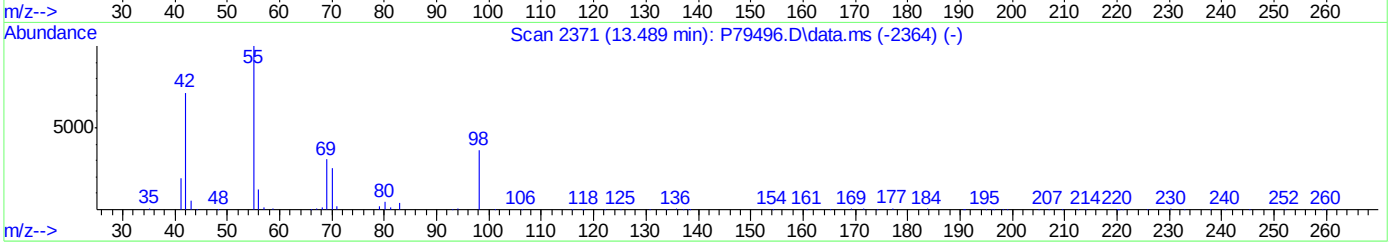
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(95) Cyclohexanone

6.755min (+0.008) 2.93ug/L m

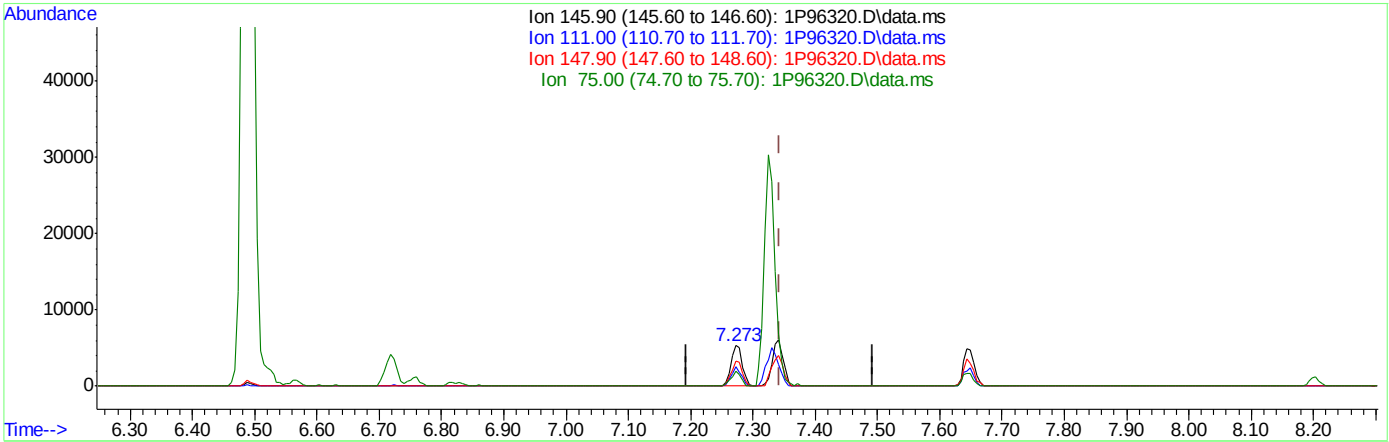
response 1103

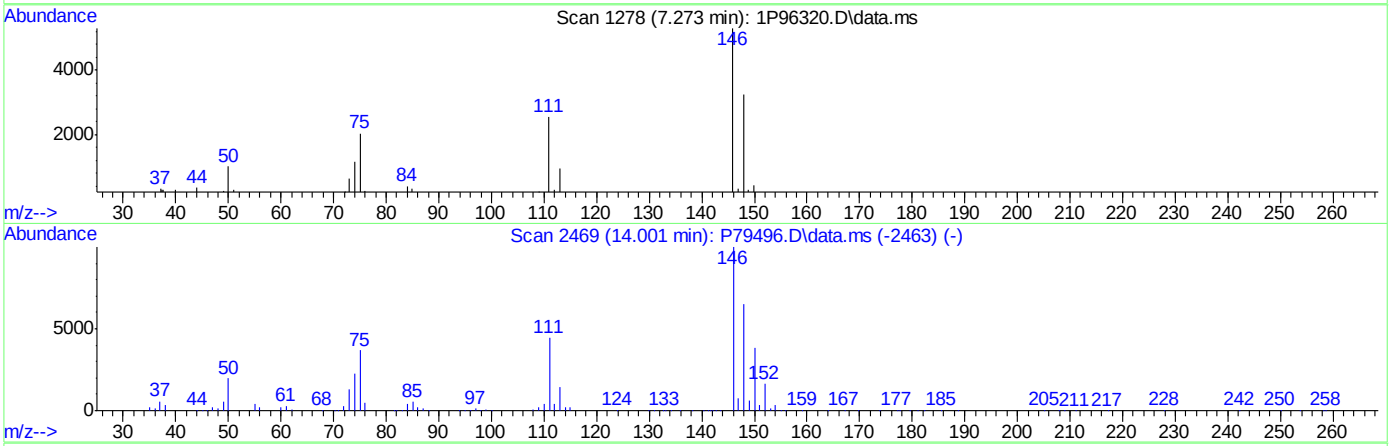
Ion	Exp%	Act%
55.00	100	100
98.00	45.70	48.34
42.00	75.30	45.01#
69.00	32.20	41.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(105) 1,4-Dichlorobenzene

7.273min (-0.071) 0.96ug/L

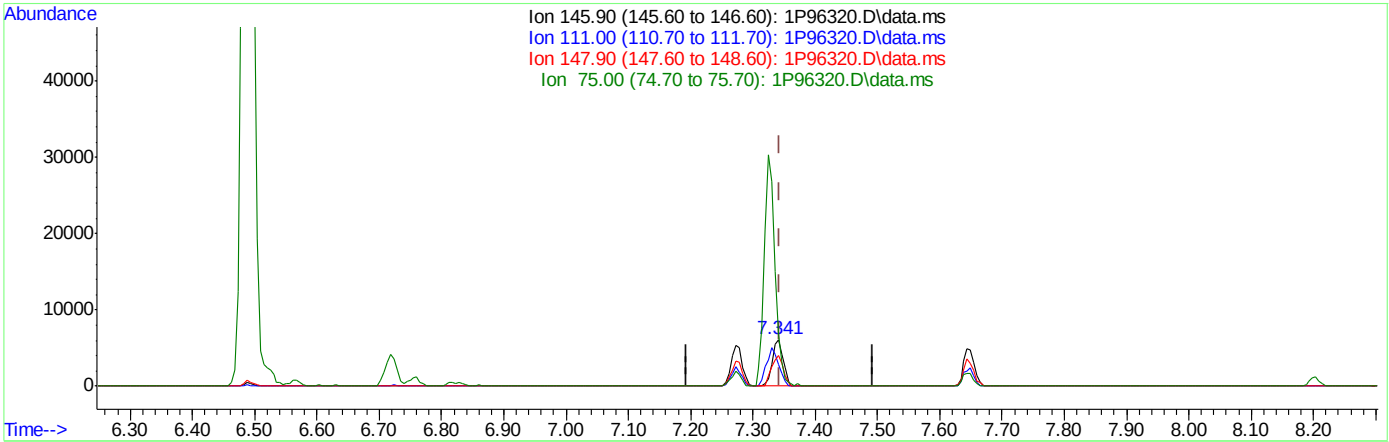
response 6390

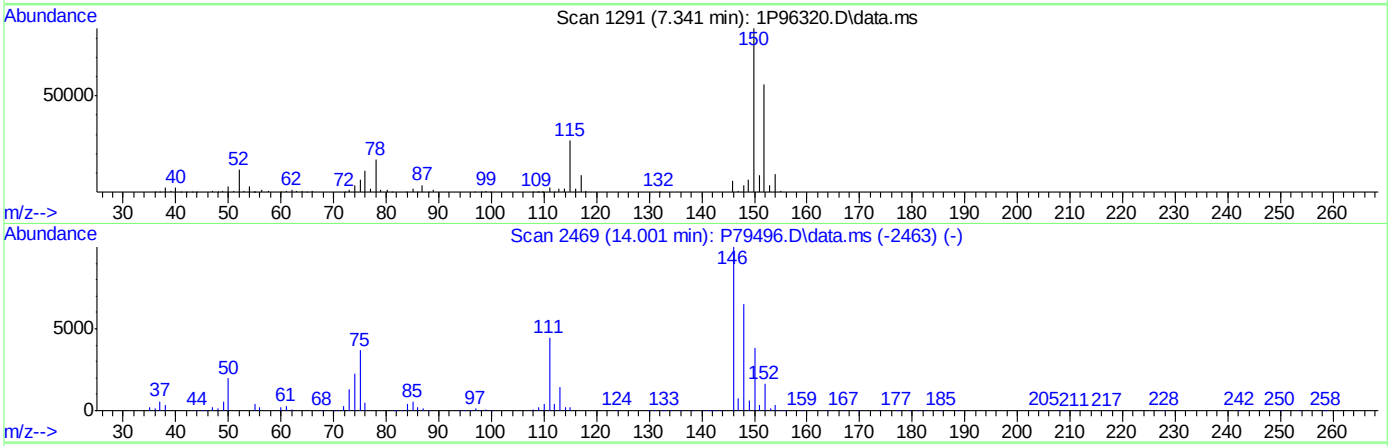
Ion	Exp%	Act%
145.90	100	100
111.00	41.50	47.87
147.90	62.70	61.26
75.00	38.50	38.32

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(105) 1,4-Dichlorobenzene

7.341min (-0.003) 1.08ug/L m

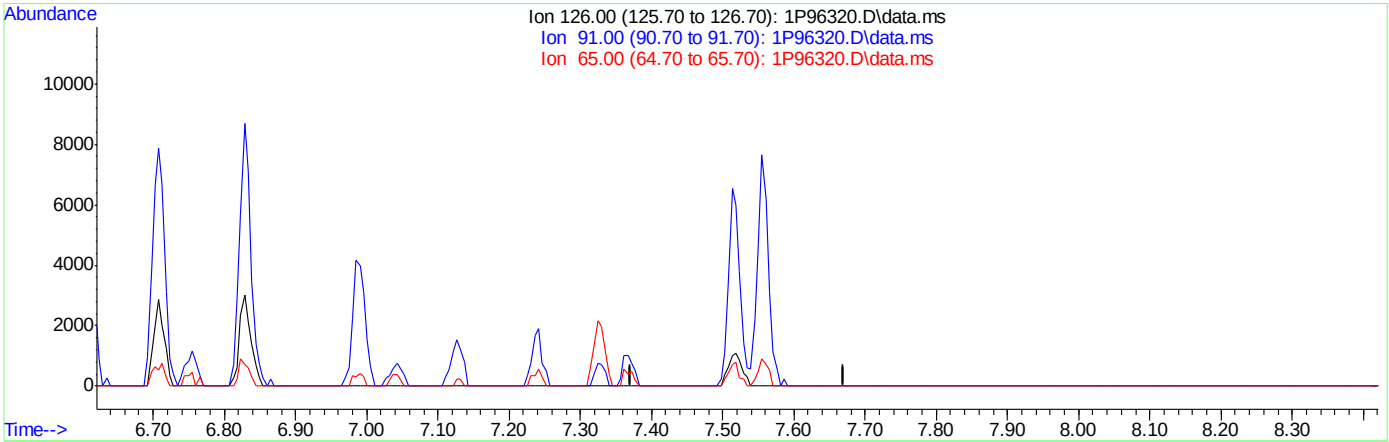
response 7171

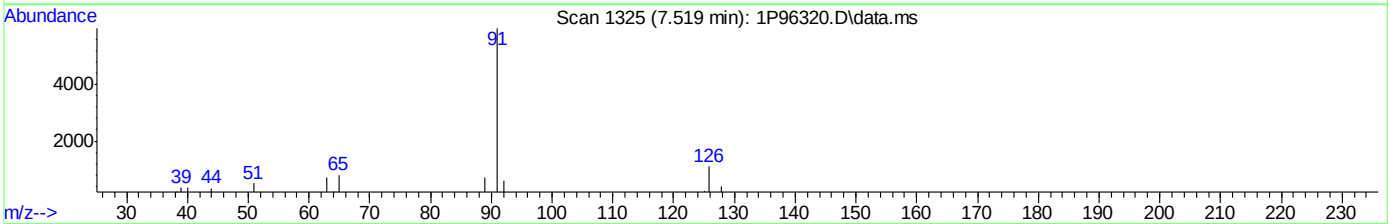
Ion	Exp%	Act%
145.90	100	100
111.00	41.50	46.19
147.90	62.70	65.42
75.00	38.50	111.61#

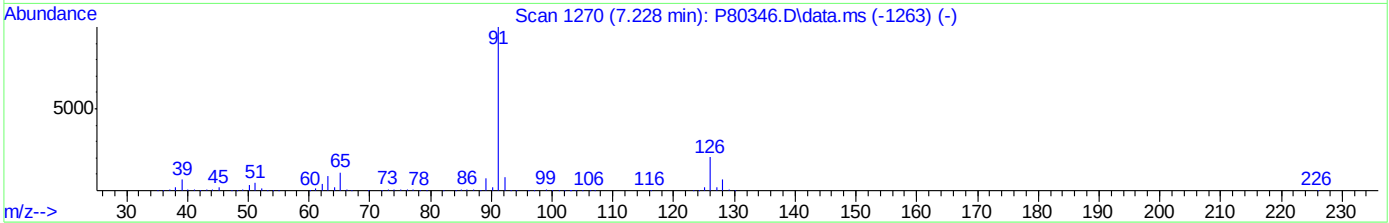
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(107) Benzyl Chloride

7.521min (-7.521) 0.00ug/L

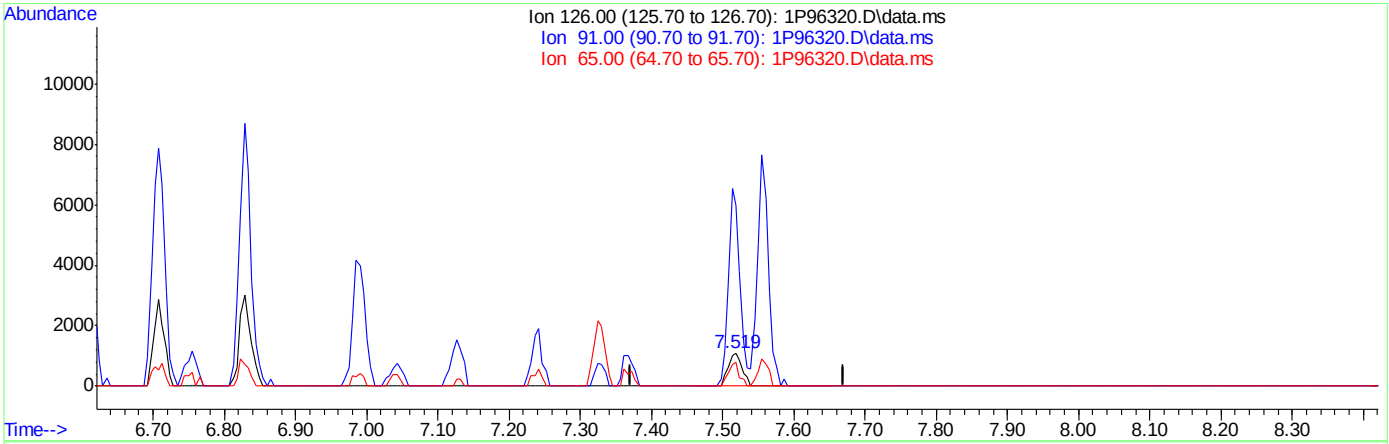
response 0

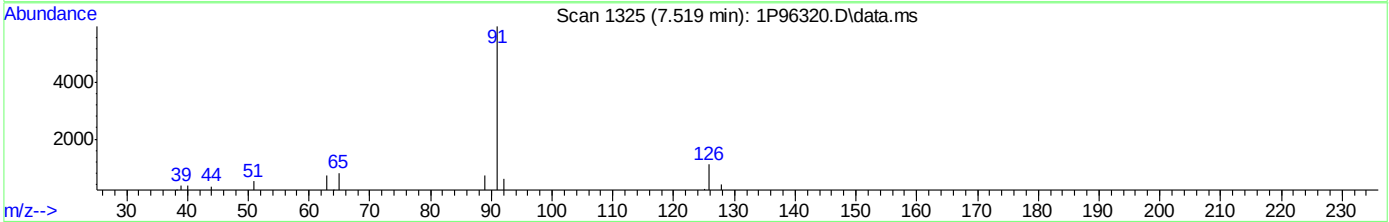
Ion	Exp%	Act%
126.00	100	0.00
91.00	526.60	0.00#
65.00	61.30	0.00#
0.00	0.00	0.00

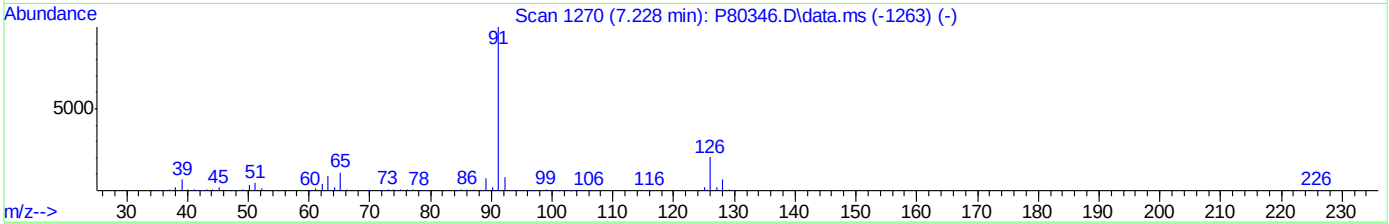
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(107) Benzyl Chloride

7.519min (-0.002) 1.07ug/L m

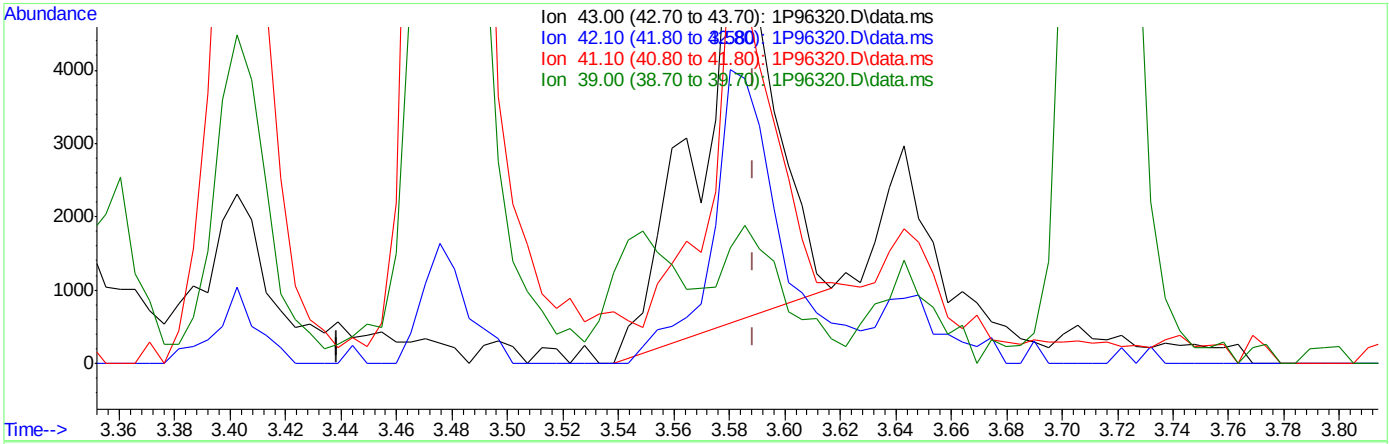
response 1471

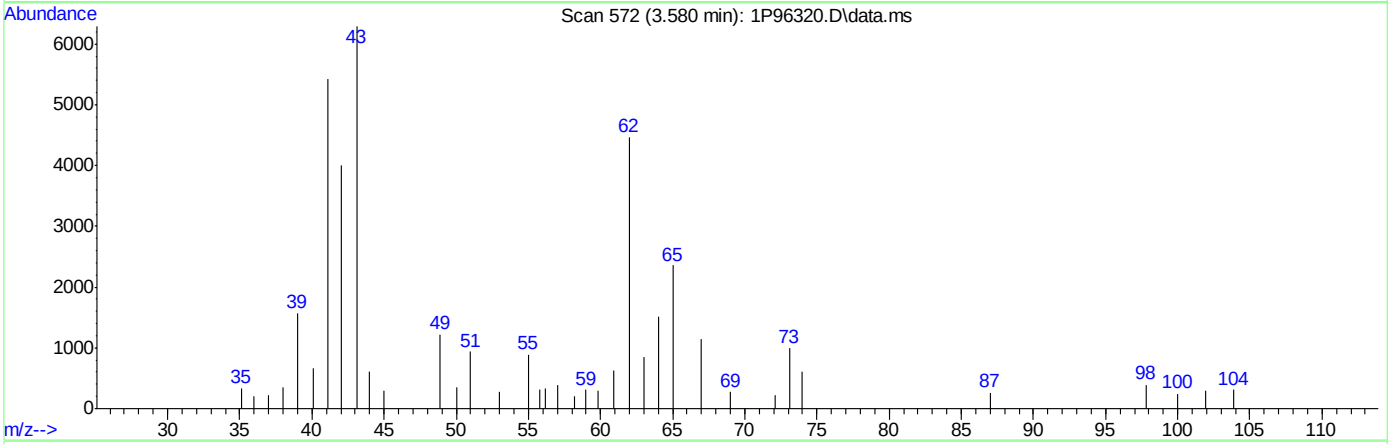
Ion	Exp%	Act%
126.00	100	100
91.00	526.60	544.44
65.00	61.30	72.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(50) Isobutyl alcohol

3.580min (-0.008) 15.40ug/L

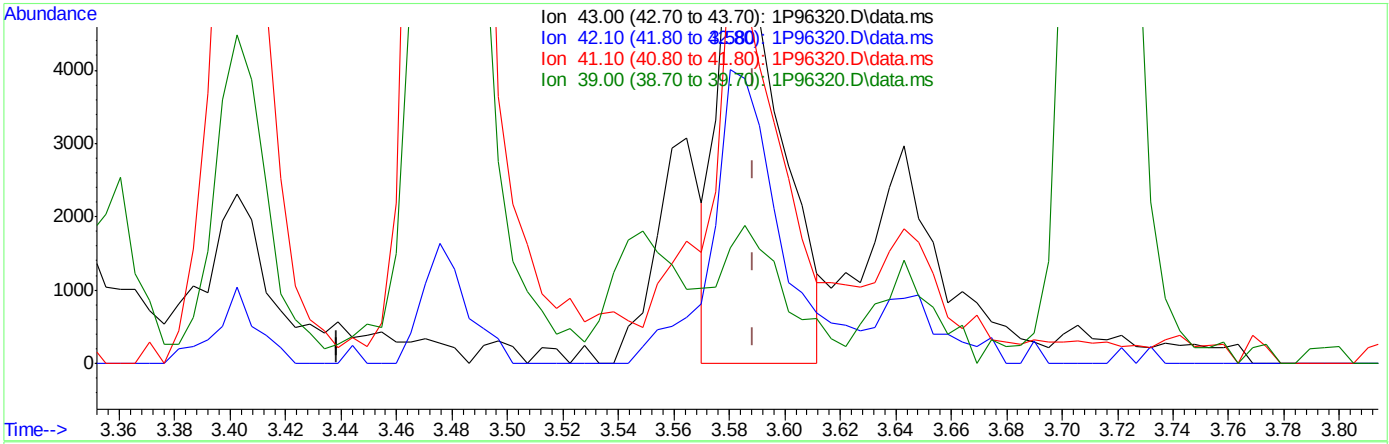
response 10571

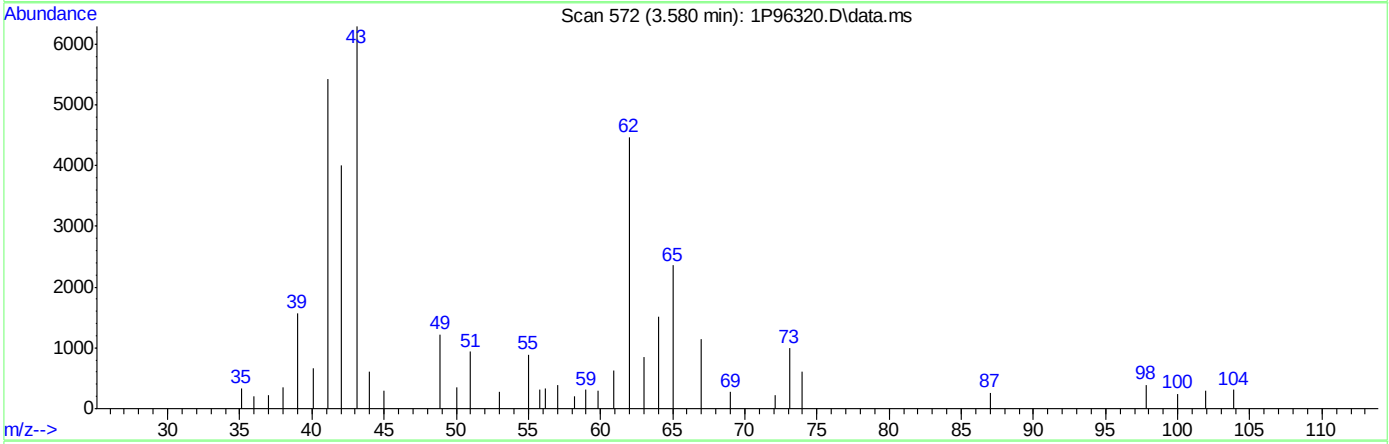
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	63.78
41.10	71.40	75.00
39.00	26.20	19.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(50) Isobutyl alcohol

3.580min (-0.008) 13.36ug/L m

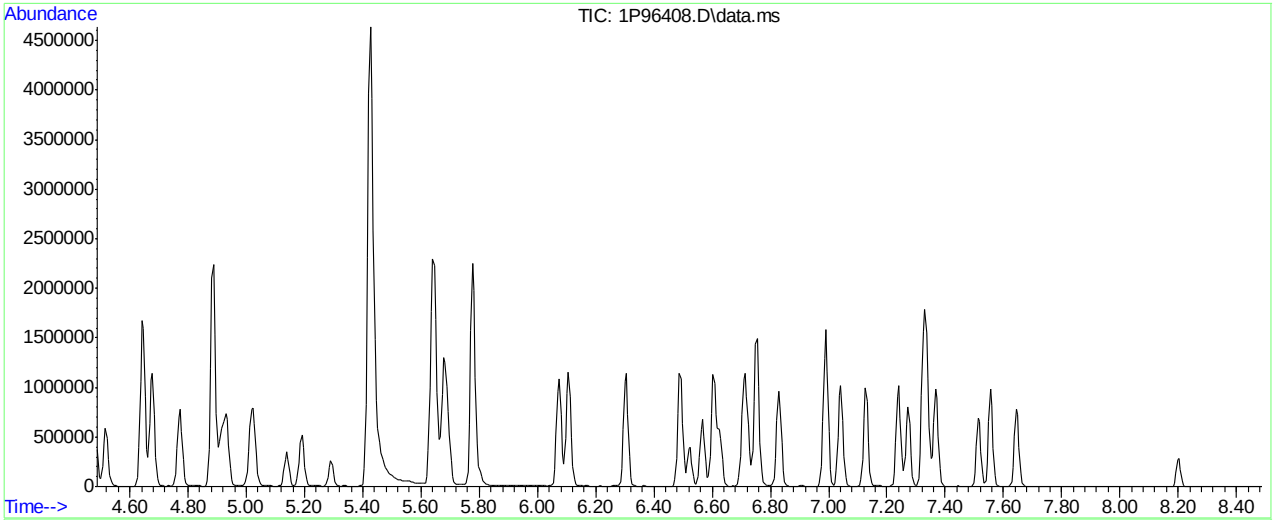
response 9172

Ion	Exp%	Act%
43.00	100	100
42.10	59.60	63.78
41.10	71.40	86.13
39.00	26.20	25.00

Methods: SW-846 8260B

```
Data File : C:\msdchem\1\DATA\2022-12-16\1P96408.D       Vial: 2
Acq On    : 16 Dec 2022   8:38 am                    Operator: courtnef
Sample    : BFB                                     Inst    : MSVOA13
Misc      : MS52806,V1P3648,,,,,                    Multiplr: 1.00
MS Integration Params: big.p

Method    : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title     : SW-846 Method 5035A/8260B
```



AutoFind: Scans 1127, 1128, 1129; Background Corrected with Scan 1121

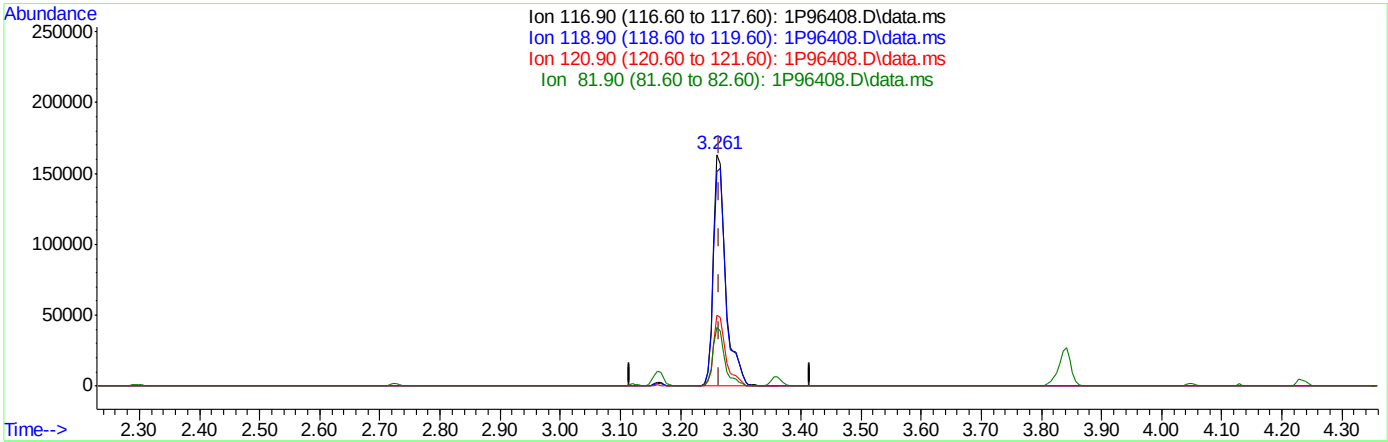
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	39106	PASS
75	95	30	60	53.7	114645	PASS
95	95	100	100	100.0	213610	PASS
96	95	5	9	6.7	14372	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	70.9	151421	PASS
175	174	5	9	8.0	12095	PASS
176	174	95	101	95.6	144789	PASS
177	176	5	9	6.9	9993	PASS

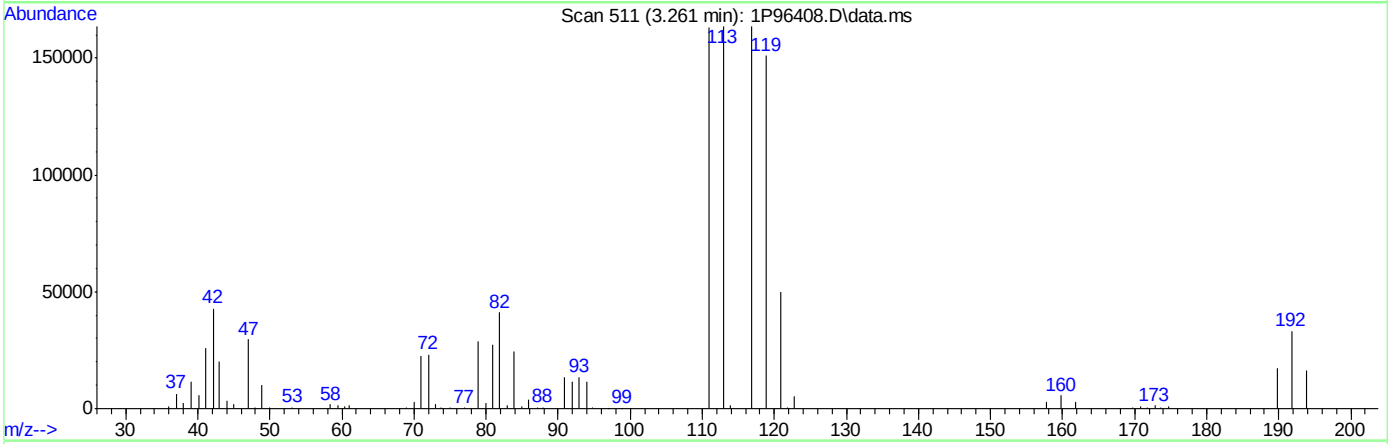
1P96408.D V1P_2022-12-14.M Fri Dec 16 08:55:04 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.005) 54.28ug/L

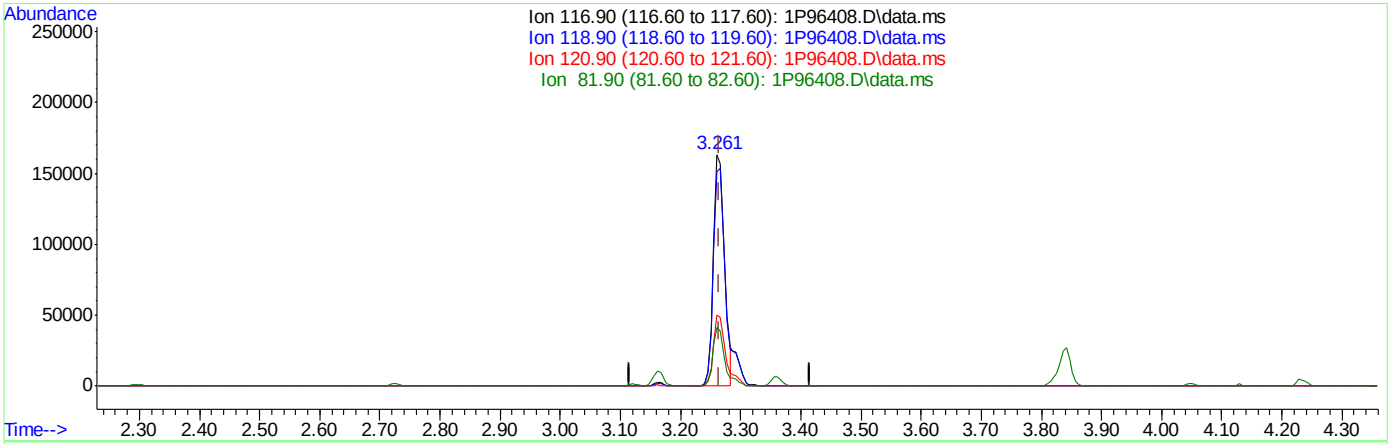
response 230262

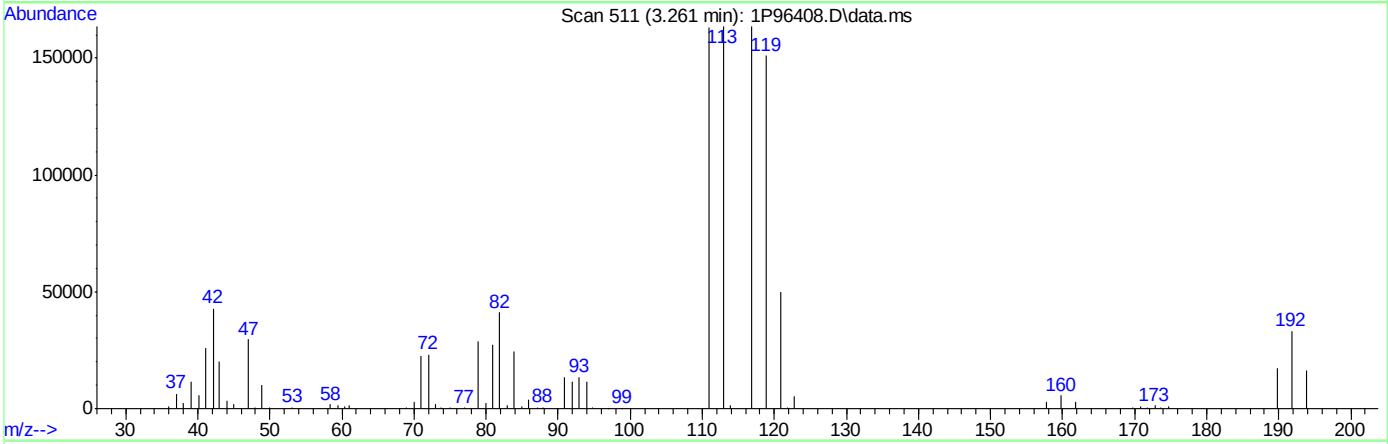
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	92.48
120.90	30.60	30.47
81.90	24.90	25.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.005) 48.29ug/L m

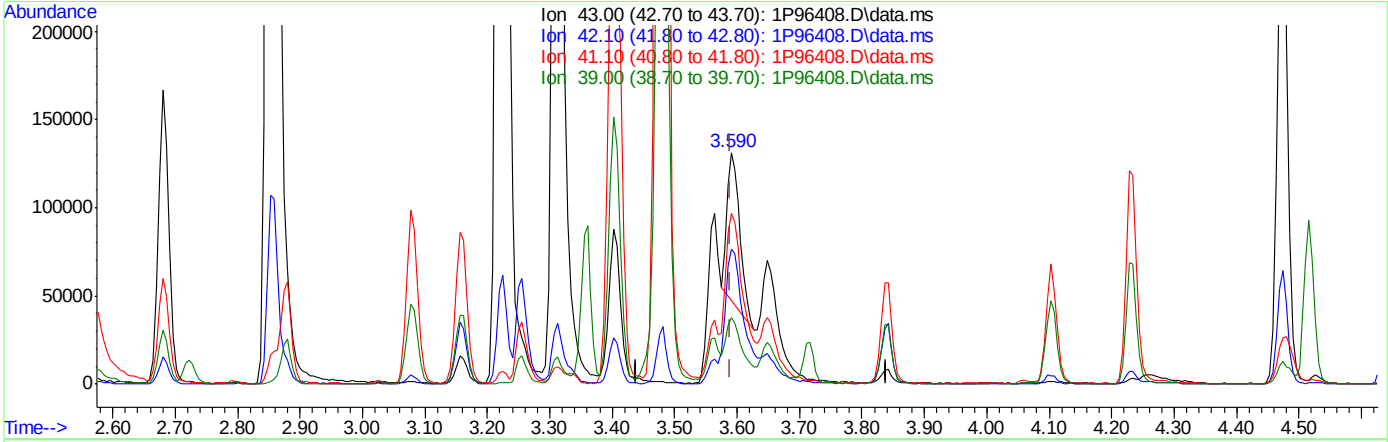
response 204828

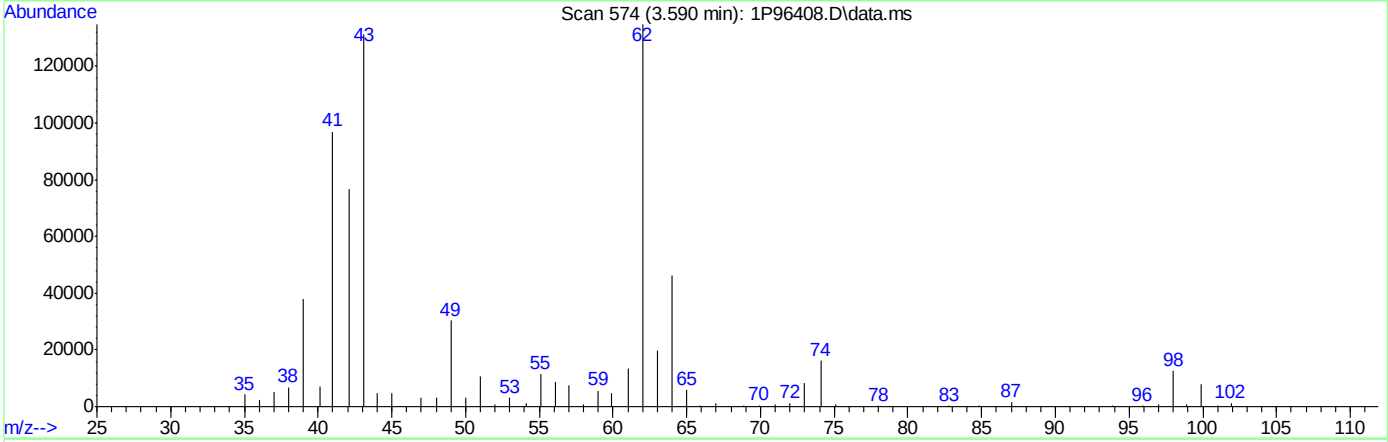
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	92.48
120.90	30.60	30.47
81.90	24.90	25.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.000) 343.30ug/L

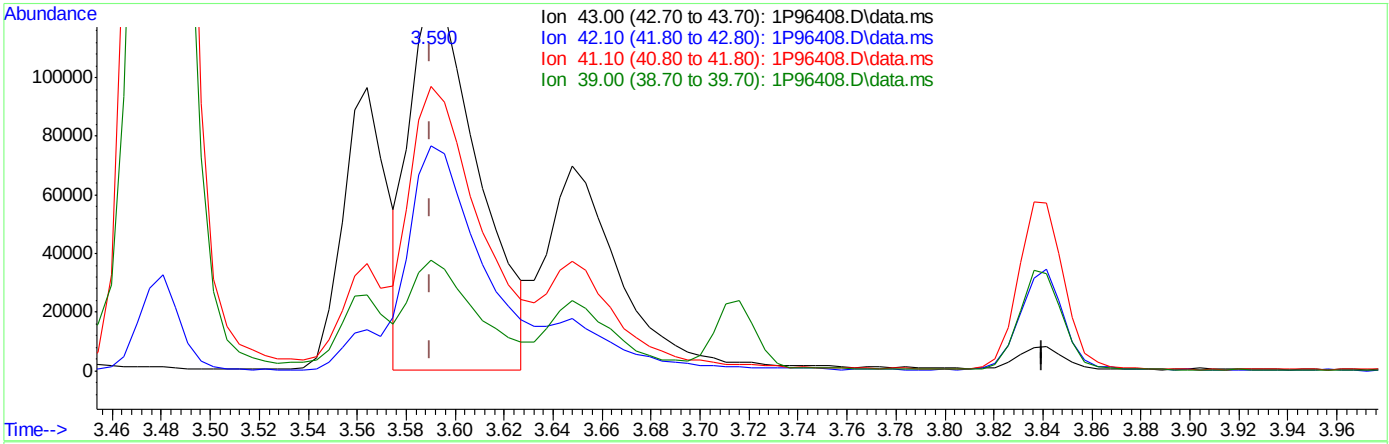
response 117336

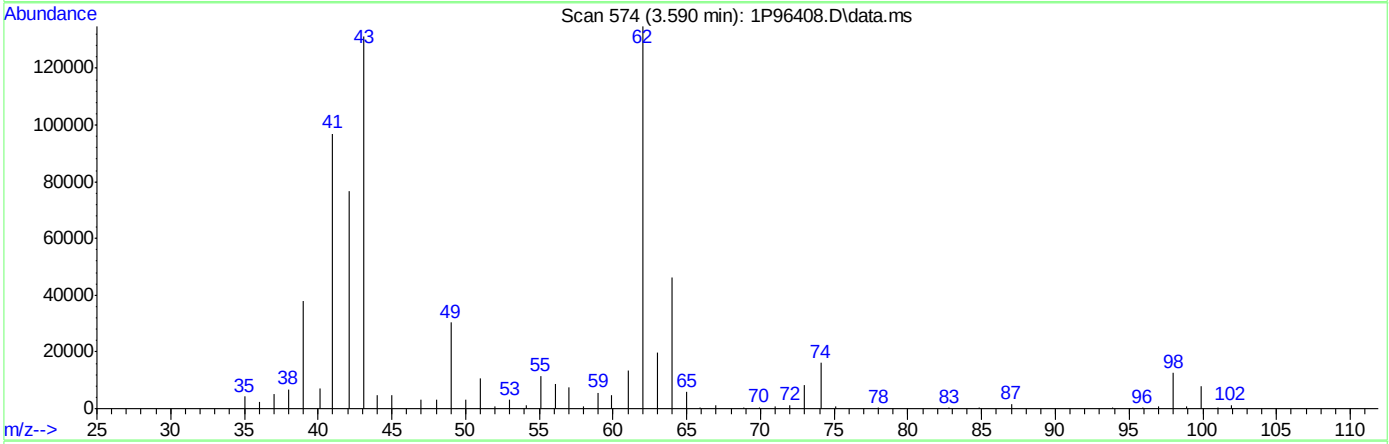
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.06
41.10	71.10	72.41
39.00	23.40	27.77

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.000) 734.69ug/L m

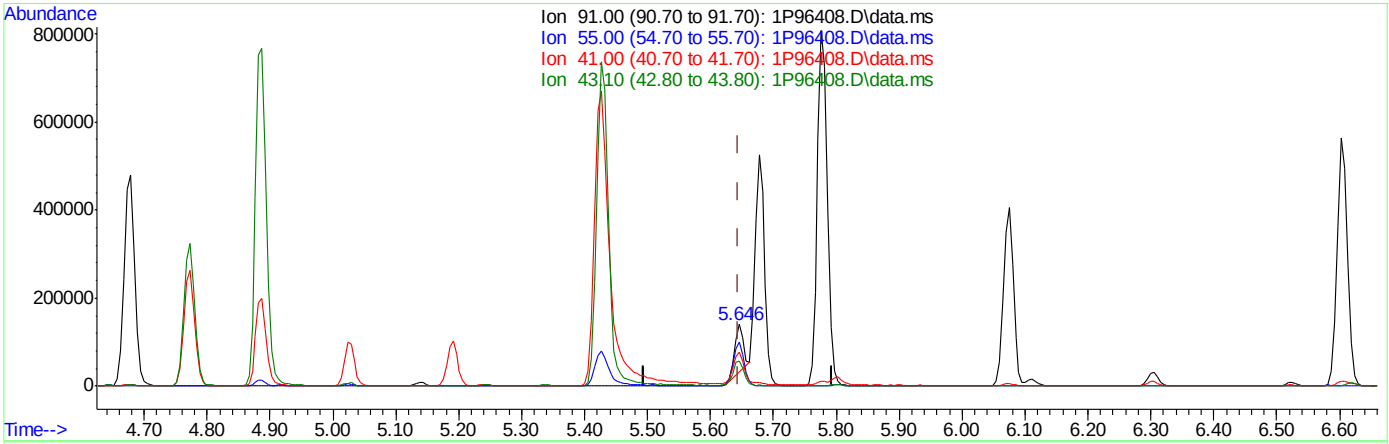
response 251109

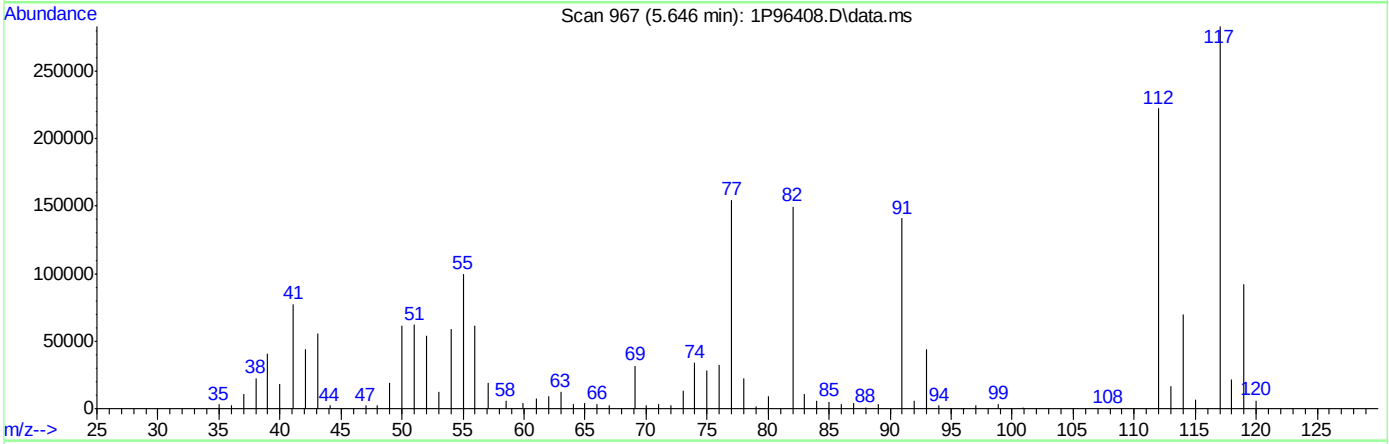
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	58.44
41.10	71.10	73.84
39.00	23.40	28.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.000) 24.68ug/L

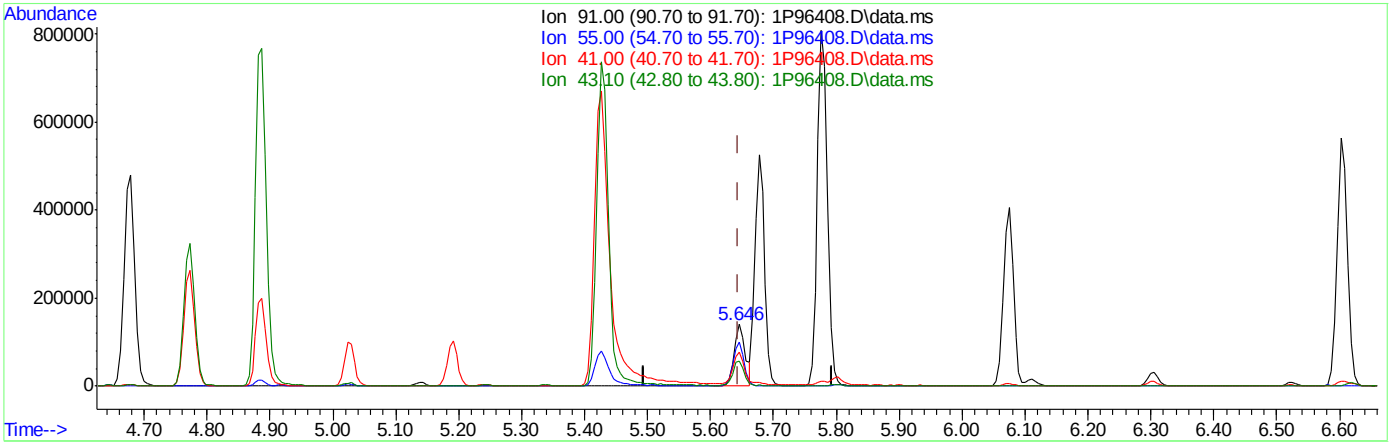
response 103857

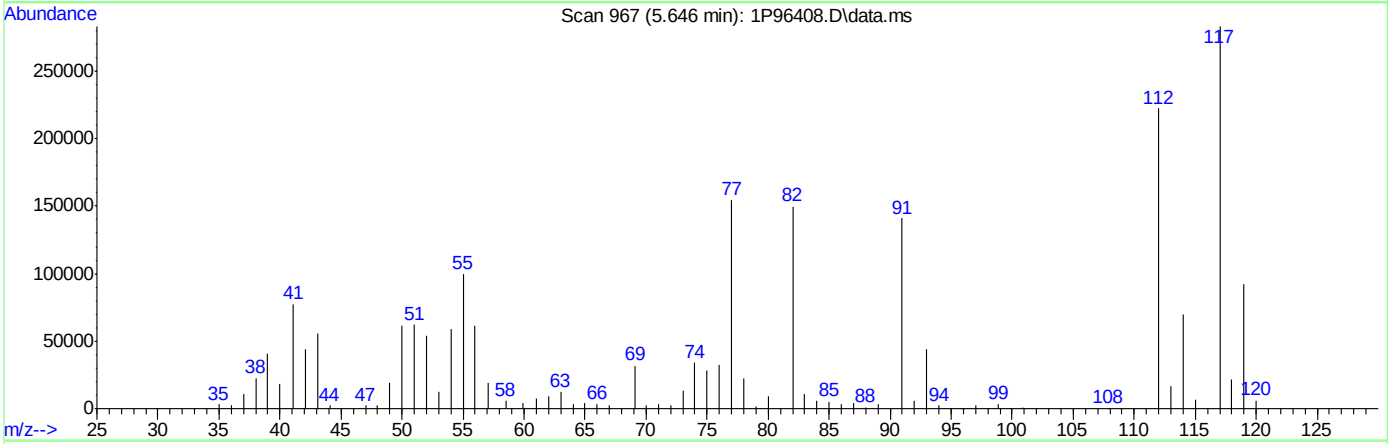
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	68.81
41.00	56.40	50.06
43.10	47.80	38.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.000) 39.78ug/L m

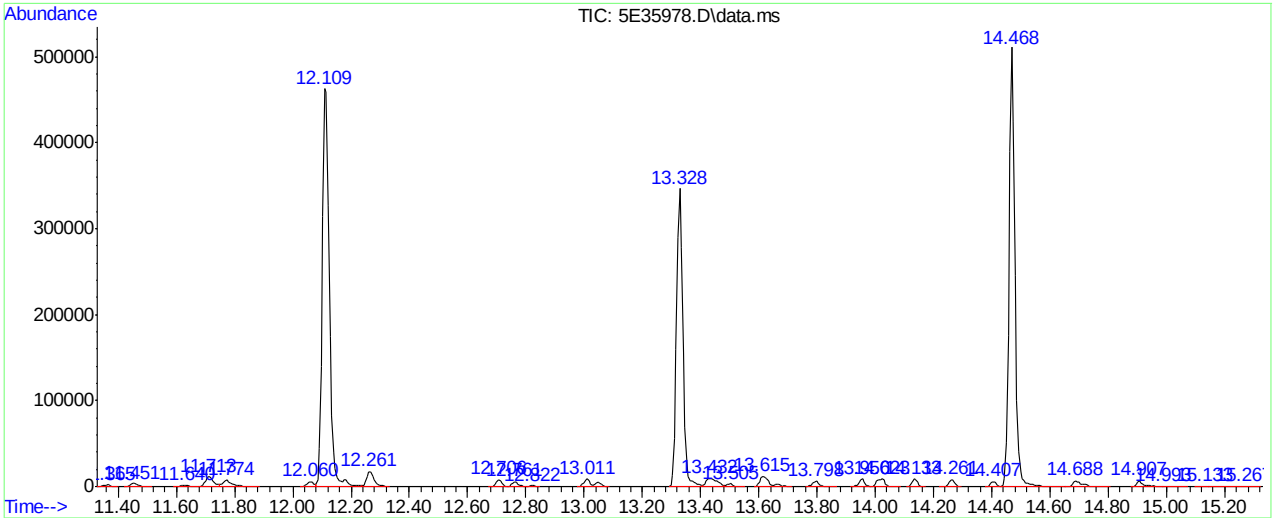
response 167390

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	71.03
41.00	56.40	55.05
43.10	47.80	39.74

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\12-08-2022\5E35978.D Vial: 2
Acq On : 8 Dec 2022 10:48 am Operator: courtnef
Sample : BFB Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624



AutoFind: Scans 2007, 2008, 2009; Background Corrected with Scan 2000

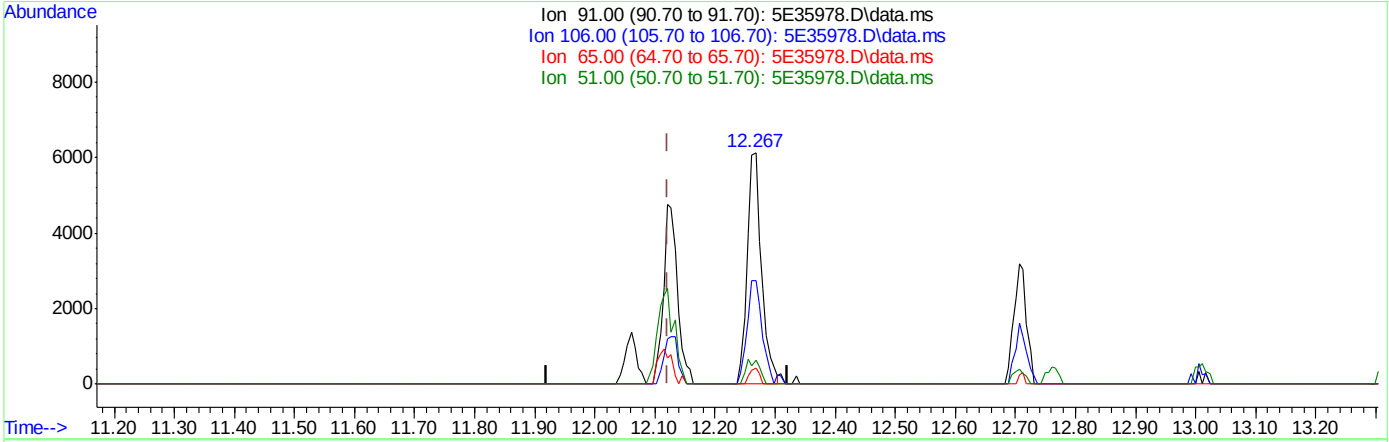
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.3	13727	PASS
75	95	30	60	54.8	29731	PASS
95	95	100	100	100.0	54288	PASS
96	95	5	9	6.7	3641	PASS
173	174	0.00	2	1.3	617	PASS
174	95	50	100	89.1	48392	PASS
175	174	5	9	7.0	3371	PASS
176	174	95	101	96.5	46675	PASS
177	176	5	9	6.8	3157	PASS

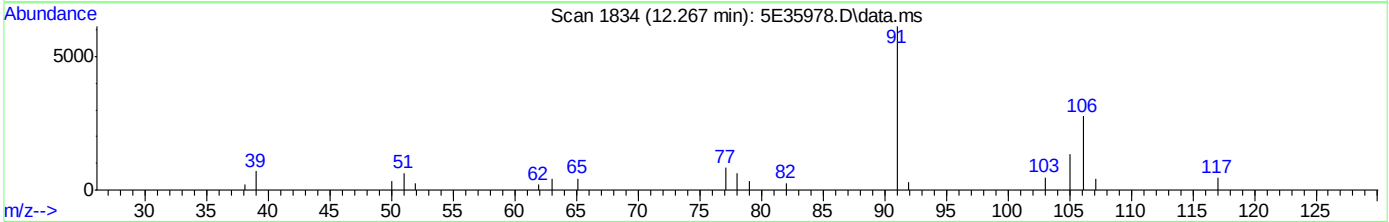
5E35978.D appIX12-08-2022_.M Thu Dec 08 12:25:54 2022

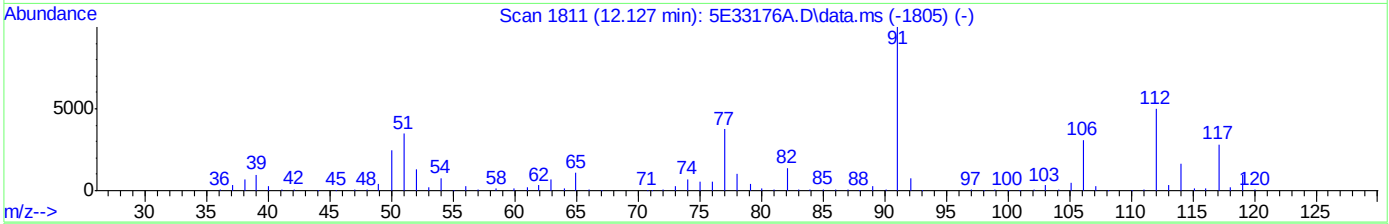
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.267min (+0.146) 1.29ug/L

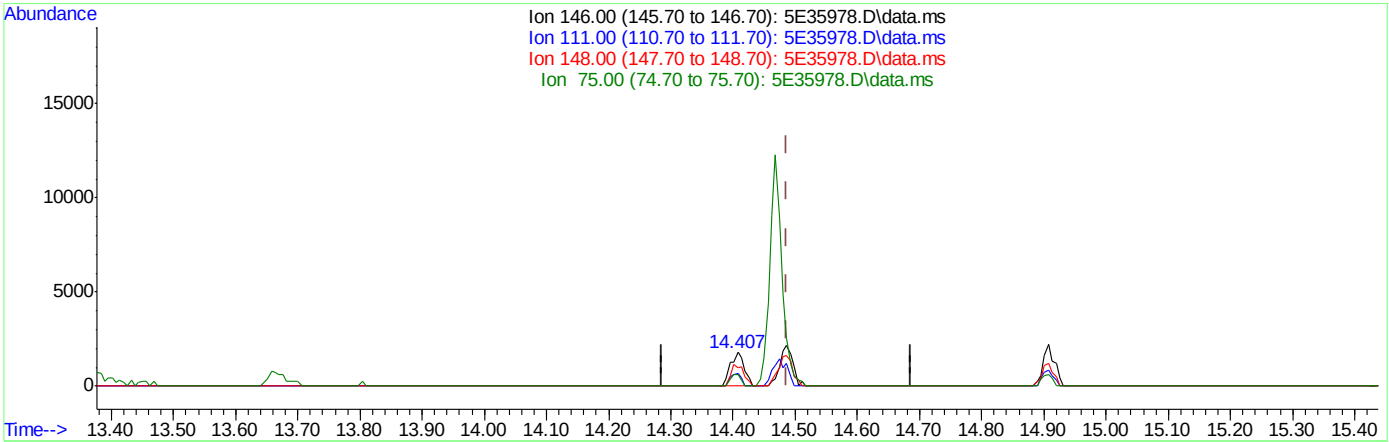
response 10050

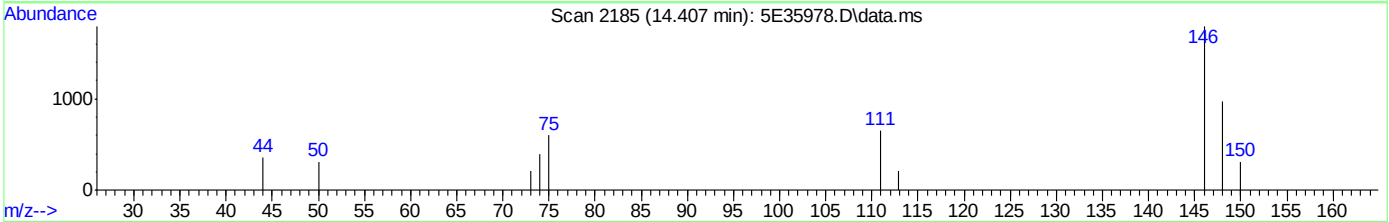
Ion	Exp%	Act%
91.00	100	100
106.00	31.60	44.90
65.00	8.20	6.96
51.00	19.20	10.48

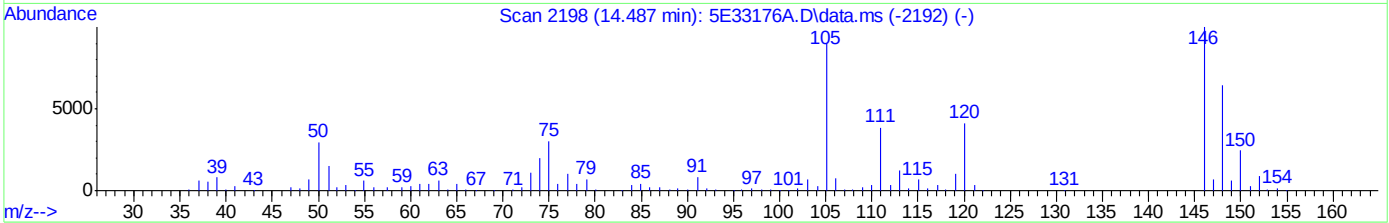
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.407min (-0.080) 0.74ug/L

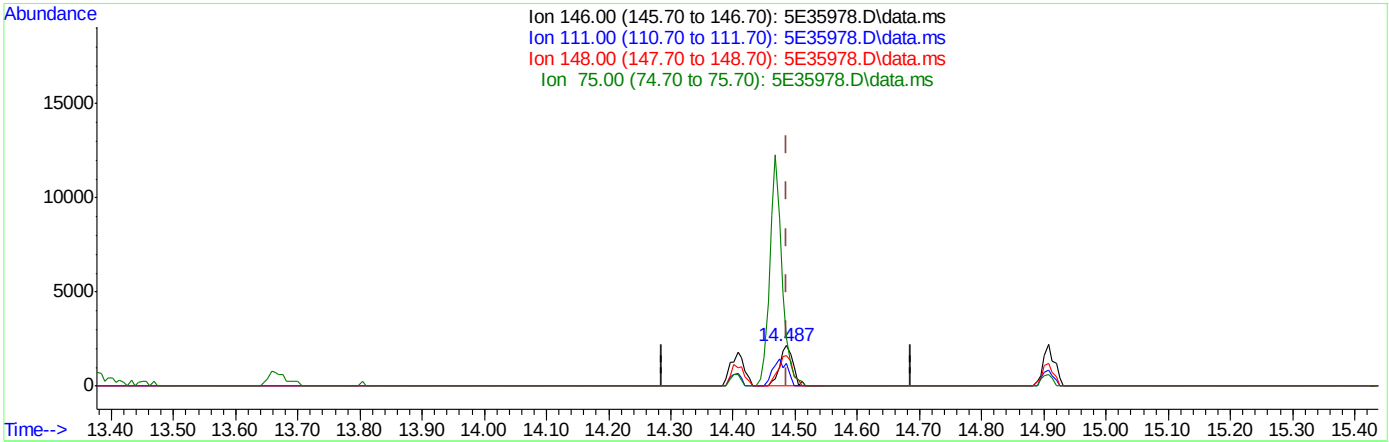
response 2749

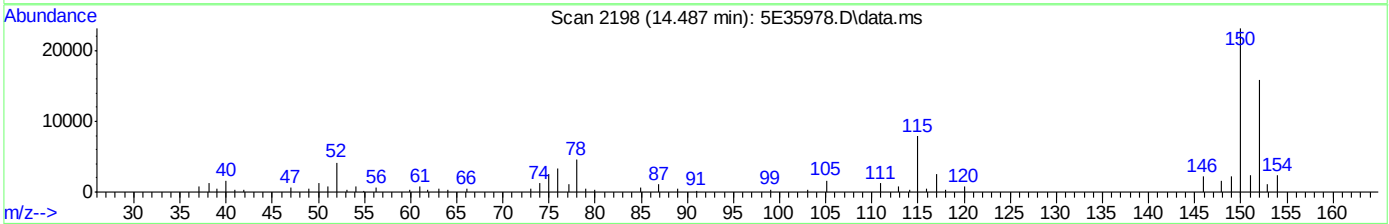
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	36.53
148.00	63.20	53.90
75.00	24.70	33.57

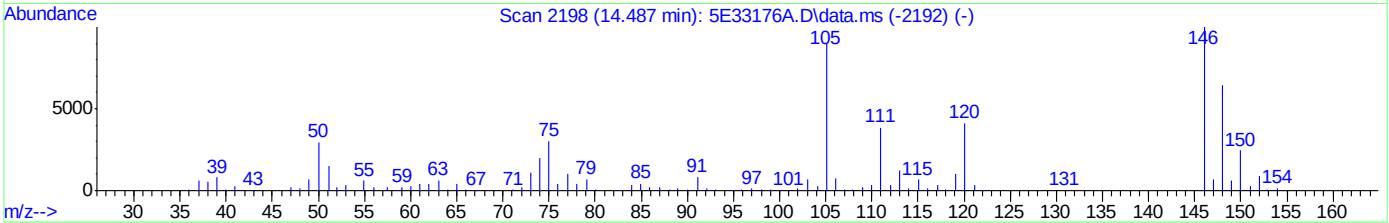
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.487min (-0.000) 0.85ug/L m

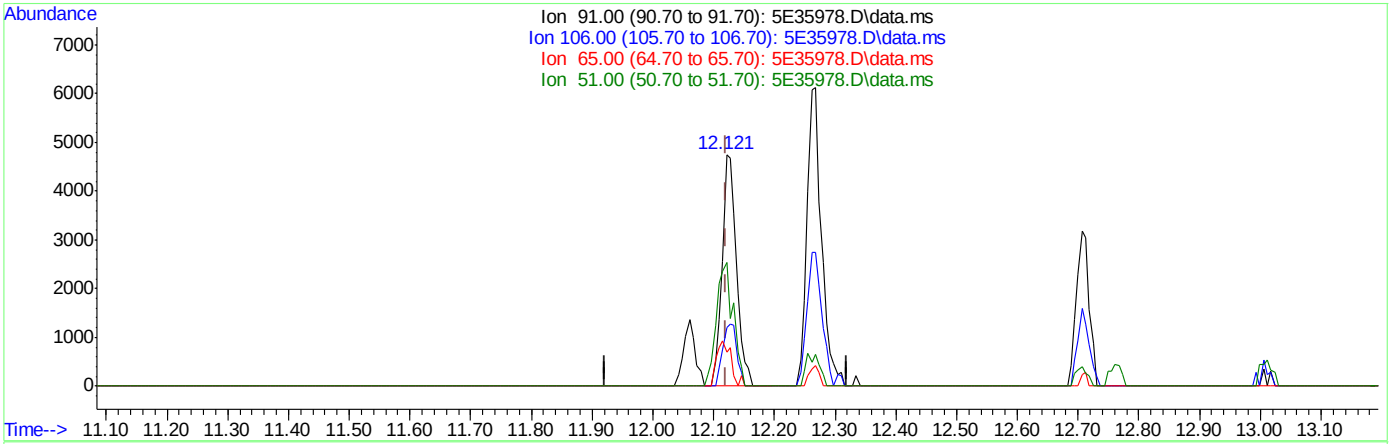
response 3153

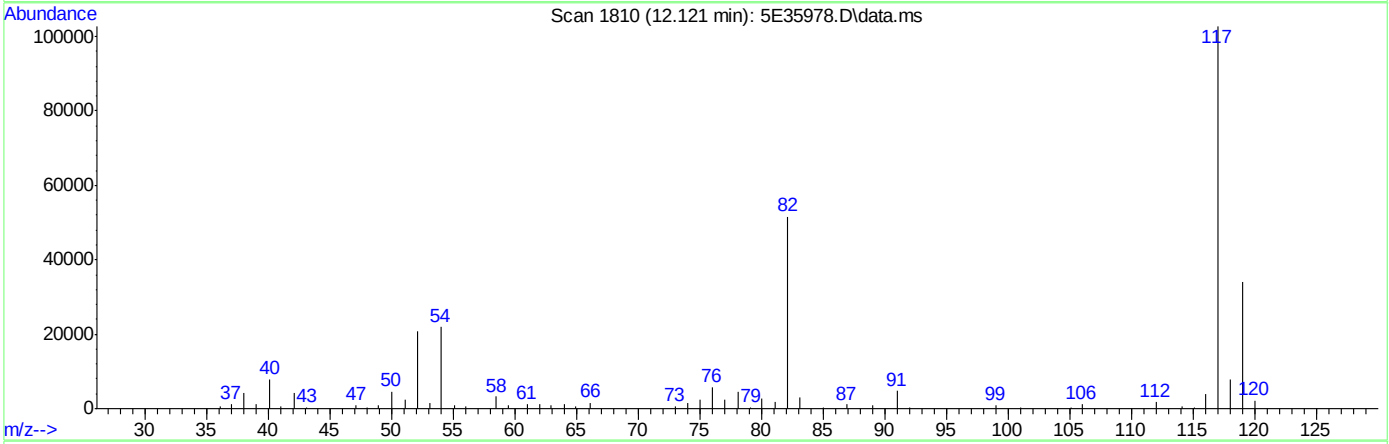
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	56.27
148.00	63.20	76.39
75.00	24.70	120.21#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.121min (+0.000) 0.99ug/L m

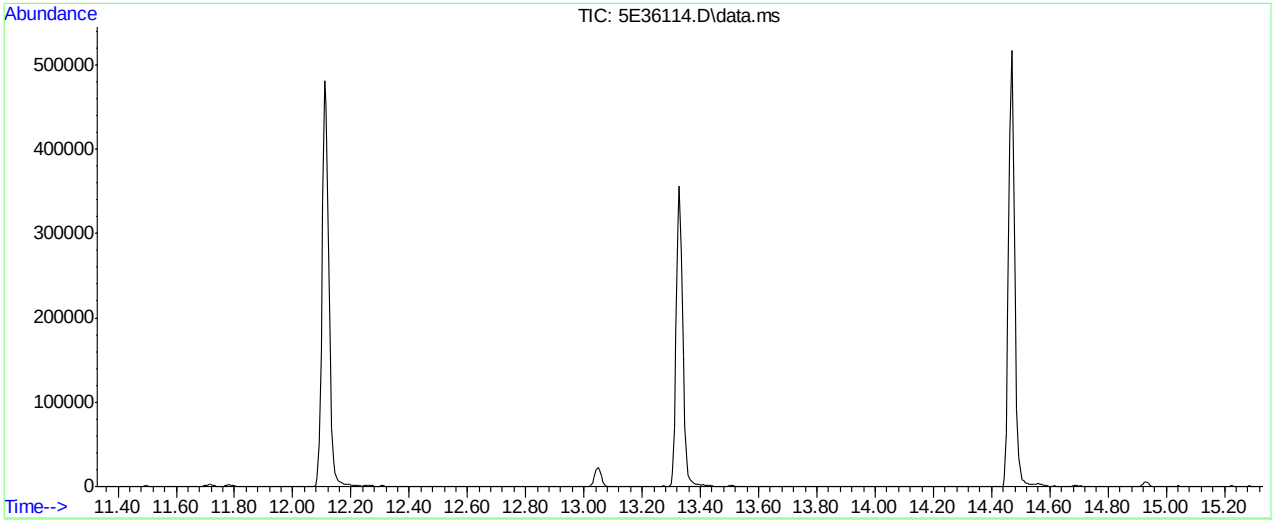
response 7721

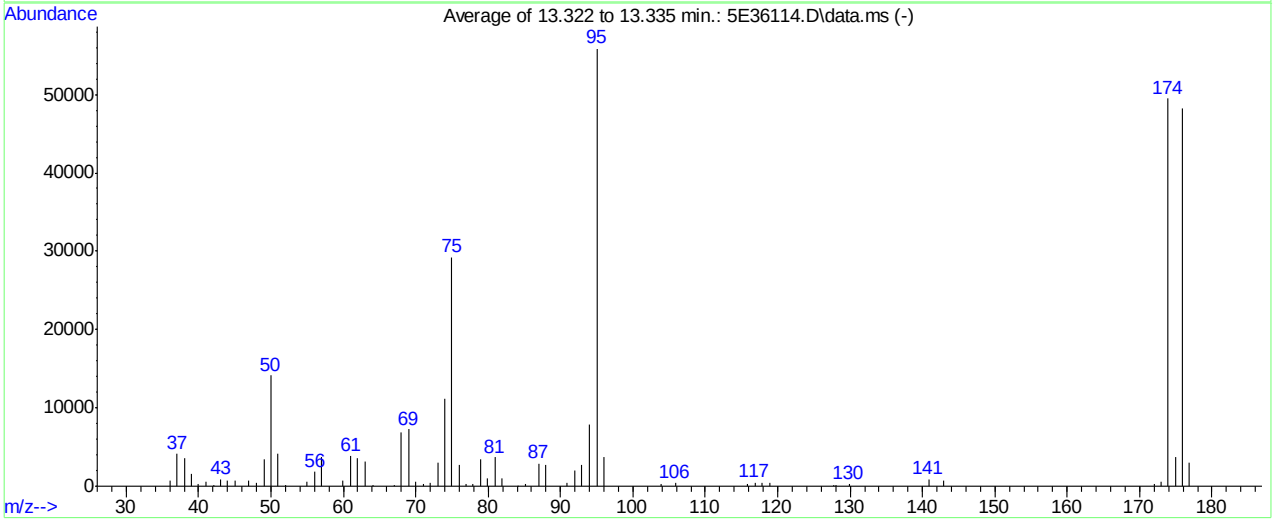
Ion	Exp%	Act%
91.00	100	100
106.00	31.60	25.44
65.00	8.20	14.79
51.00	19.20	53.21#

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\12-14-2022\5E36114.D Vial: 1
Acq On : 14 Dec 2022 9:00 am Operator: courtnef
Sample : BFB Inst : MSVOA20
Misc : MS52751,V5E1624,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624





AutoFind: Scans 2007, 2008, 2009; Background Corrected with Scan 2000

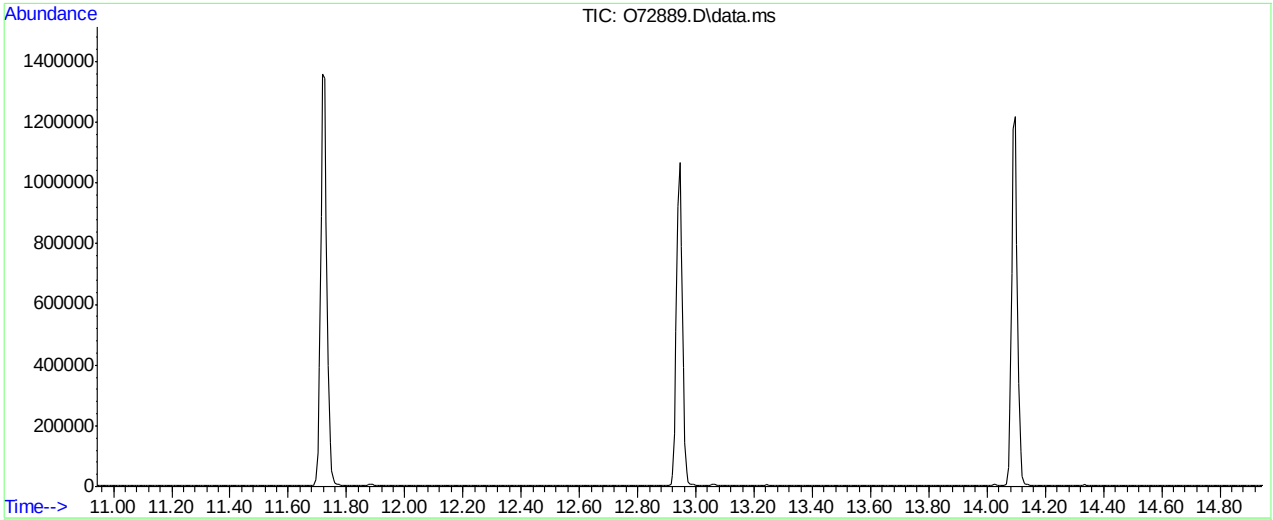
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.3	14158	PASS
75	95	30	60	52.2	29197	PASS
95	95	100	100	100.0	55880	PASS
96	95	5	9	6.6	3670	PASS
173	174	0.00	2	1.3	638	PASS
174	95	50	100	88.6	49485	PASS
175	174	5	9	7.5	3732	PASS
176	174	95	101	97.4	48208	PASS
177	176	5	9	6.3	3014	PASS

5E36114.D appIX12-08-2022_.M Wed Dec 14 10:05:09 2022

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\2022-12-08\O72889.D Vial: 1
Acq On : 8 Dec 2022 9:31 am Operator: adelardl
Sample : BFB Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B



AutoFind: Scans 1944, 1945, 1946; Background Corrected with Scan 1937

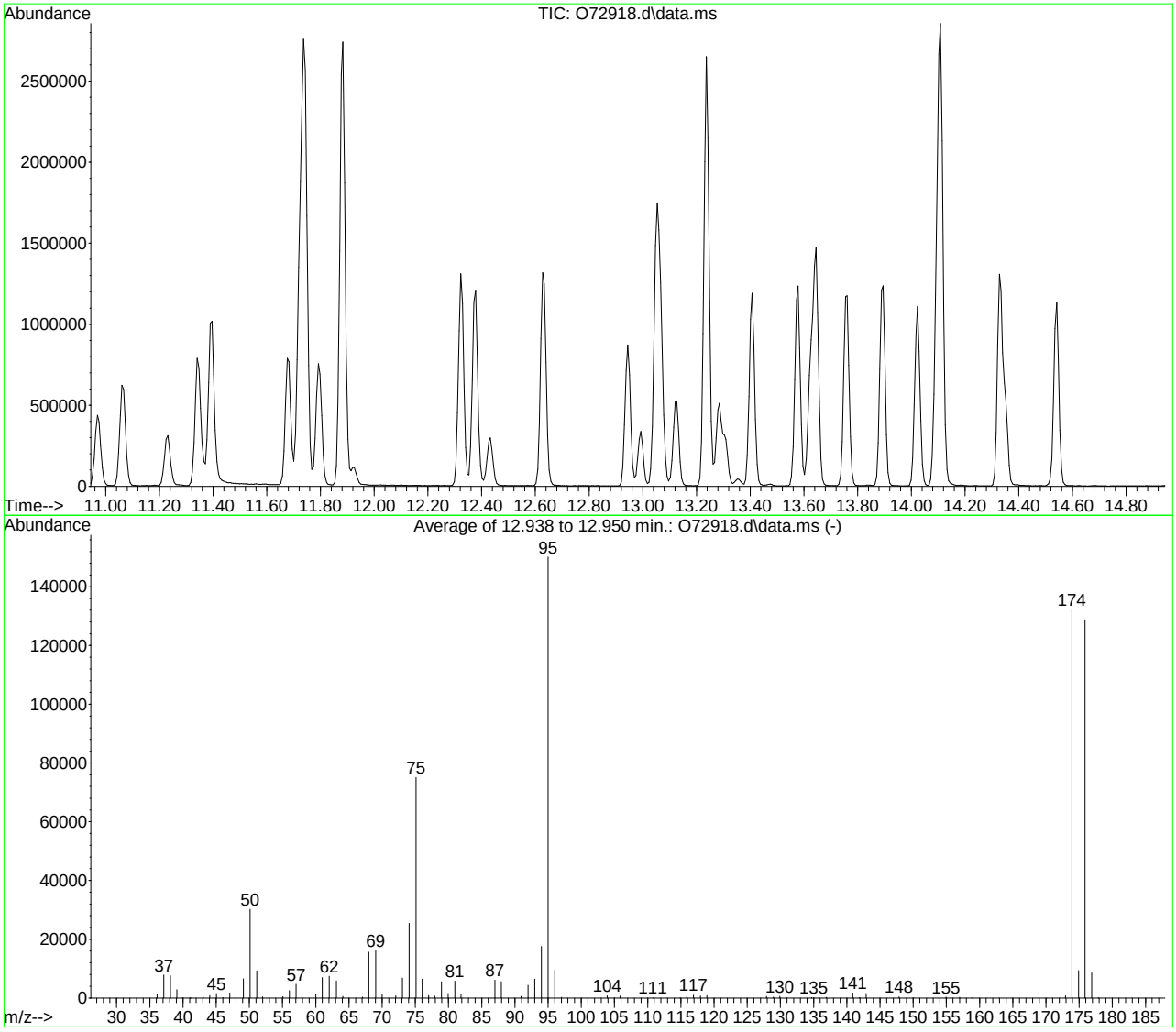
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	37693	PASS
75	95	30	60	49.6	90992	PASS
95	95	100	100	100.0	183381	PASS
96	95	5	9	6.8	12483	PASS
173	174	0.00	2	0.6	1006	PASS
174	95	50	100	87.6	160725	PASS
175	174	5	9	6.9	11036	PASS
176	174	95	101	97.9	157312	PASS
177	176	5	9	6.6	10341	PASS

O72889.D VO_12-08-2022.M Thu Dec 08 15:34:22 2022

Methods: SW-846 8260B

```
Data File : C:\msdchem\1\data\ce...-2022\VO2867\O72918.d Vial: 3
Acq On    :  9 Dec 2022  10:04 am                    Operator: adelardl
Sample    : BFB                                      Inst    : MSVOA12
Misc      : MS52925,VO2867,,,,,                      Multiplr: 1.00
MS Integration Params: big.p

Method    : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title     : SW-846 Method 5035A/8260B
```



AutoFind: Scans 1944, 1945, 1946; Background Corrected with Scan 1937

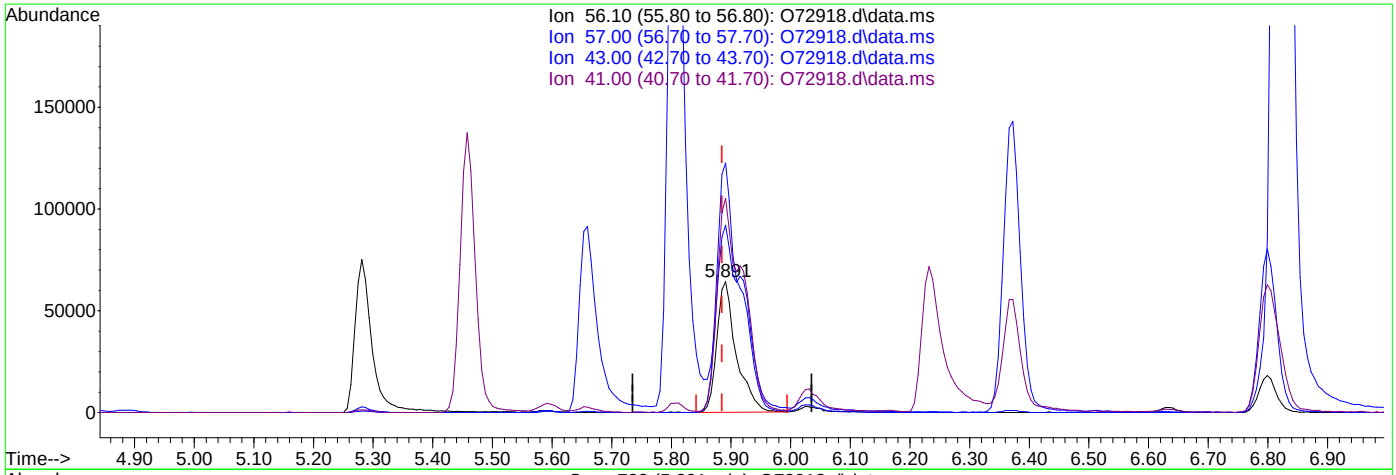
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.1	30195	PASS
75	95	30	60	50.0	75067	PASS
95	95	100	100	100.0	150101	PASS
96	95	5	9	6.4	9536	PASS
173	174	0.00	2	0.5	723	PASS
174	95	50	100	88.2	132325	PASS
175	174	5	9	7.0	9314	PASS
176	174	95	101	97.3	128771	PASS
177	176	5	9	6.6	8562	PASS

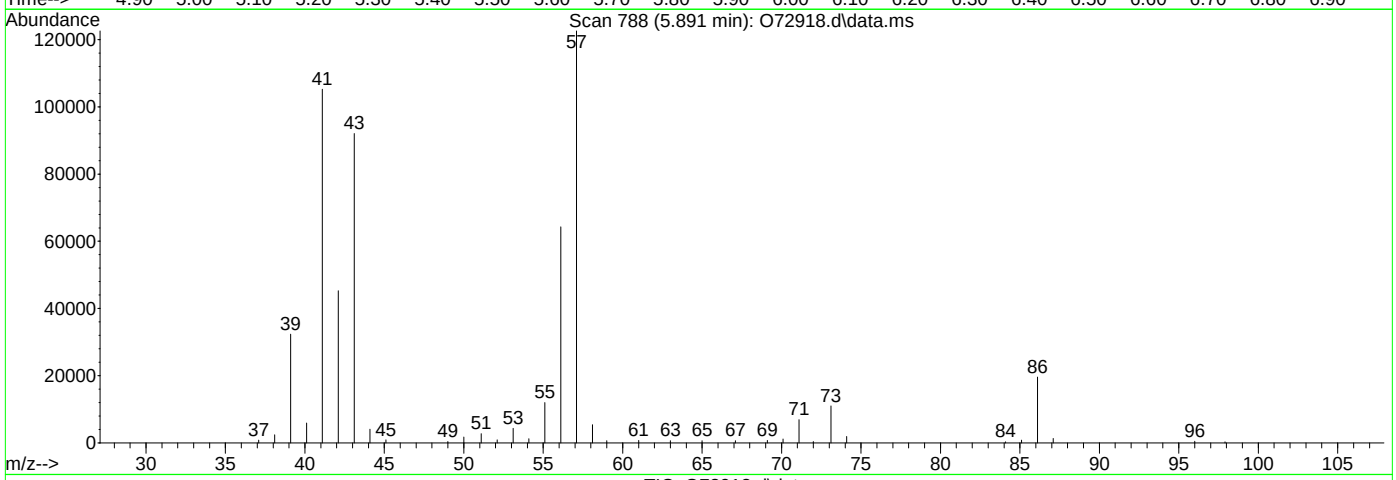
O72918.d VO_12-08-2022.M Sun Dec 11 13:50:29 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(22) Hexane

5.891min (+0.006) 43.71ug/L

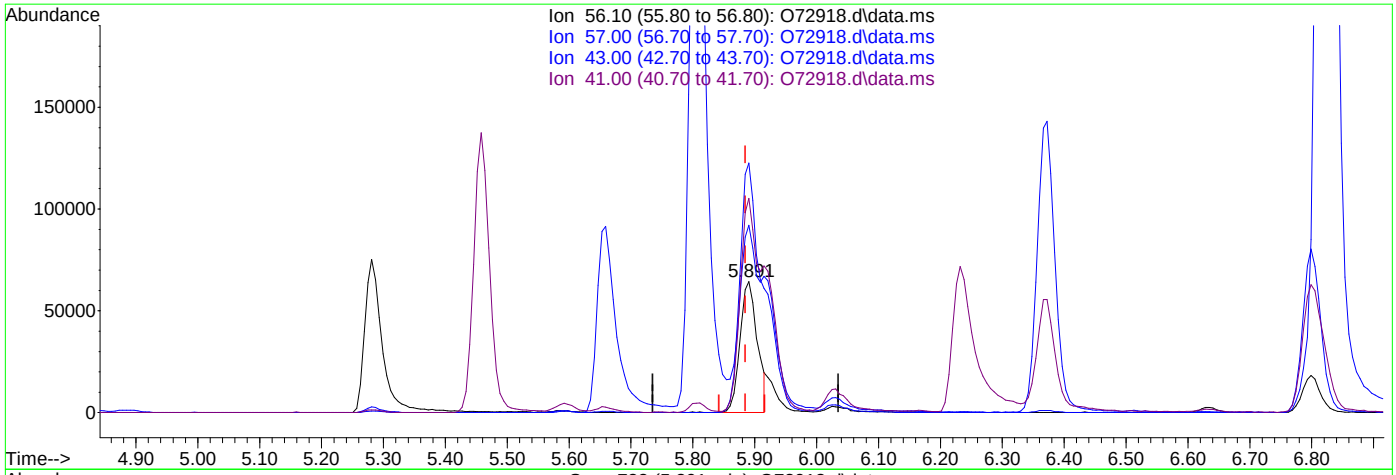
response 146356

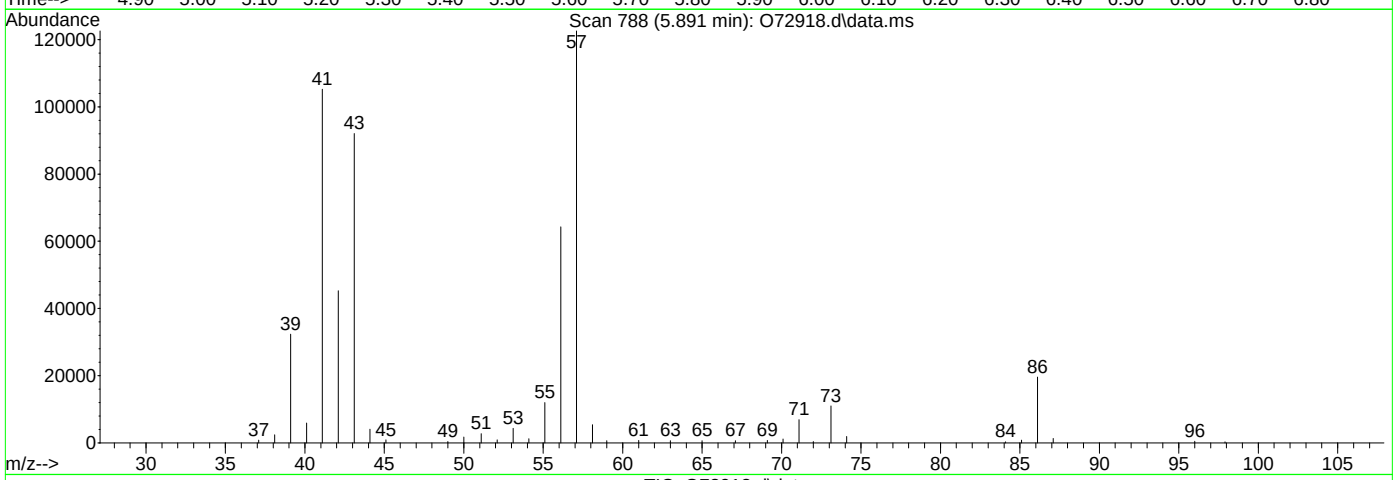
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	190.70
43.00	143.30	139.29
41.00	165.60	162.74

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(22) Hexane

5.891min (+0.006) 37.53ug/L m

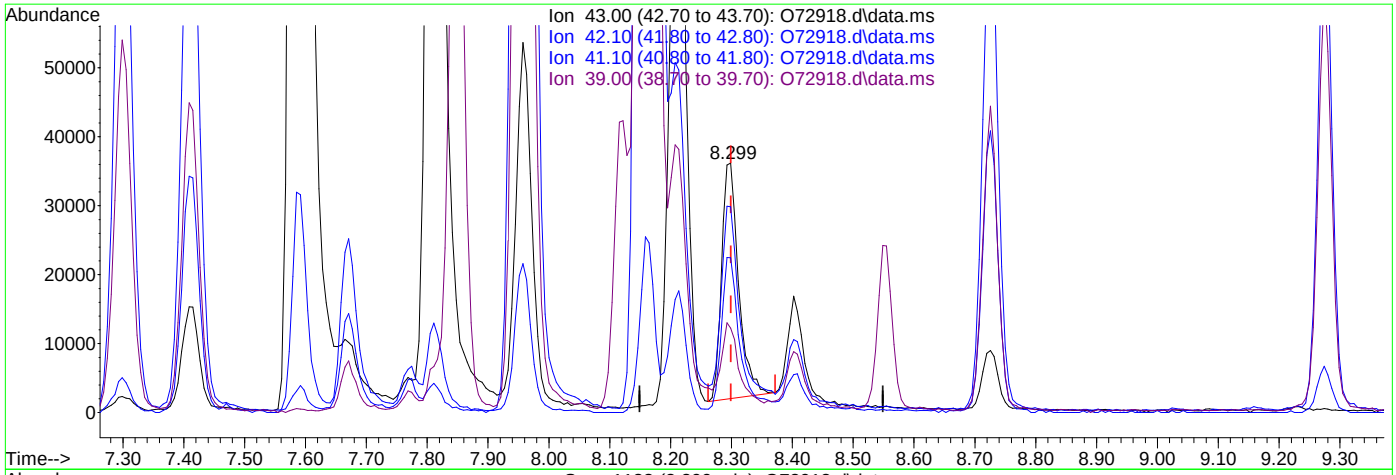
response 125662

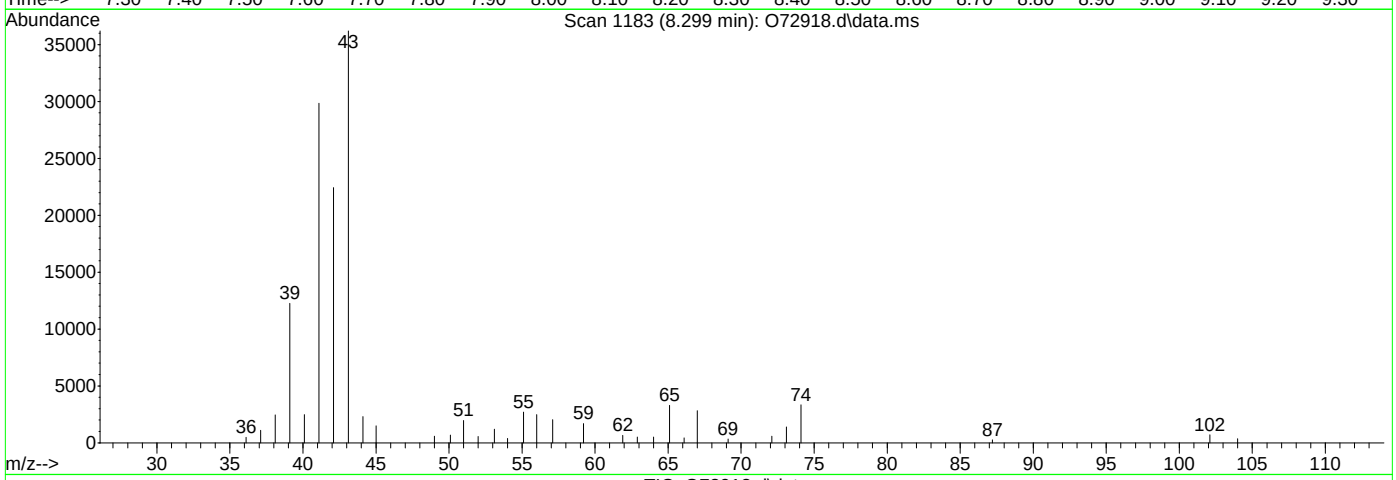
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	190.70
43.00	143.30	143.10
41.00	165.60	163.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 557.14ug/L

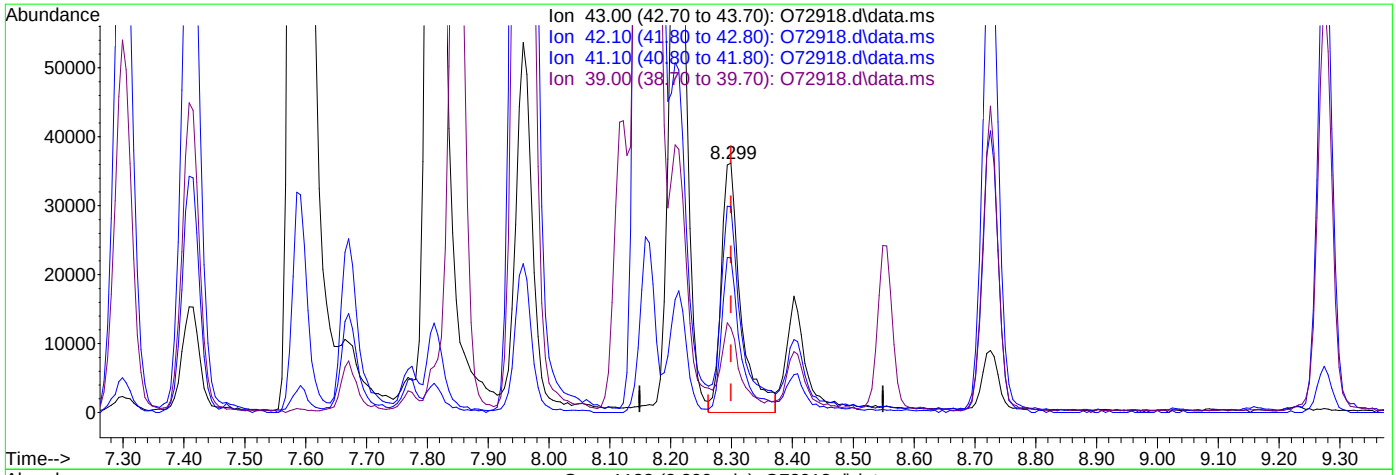
response 66501

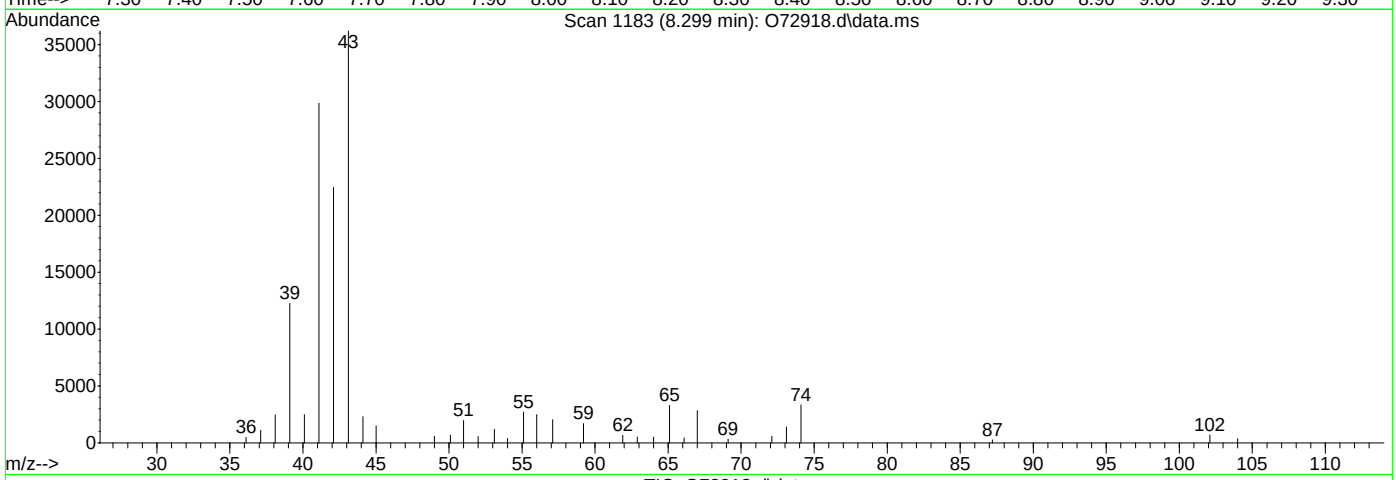
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	63.38
41.10	73.80	78.49
39.00	31.30	30.56

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 679.61ug/L m

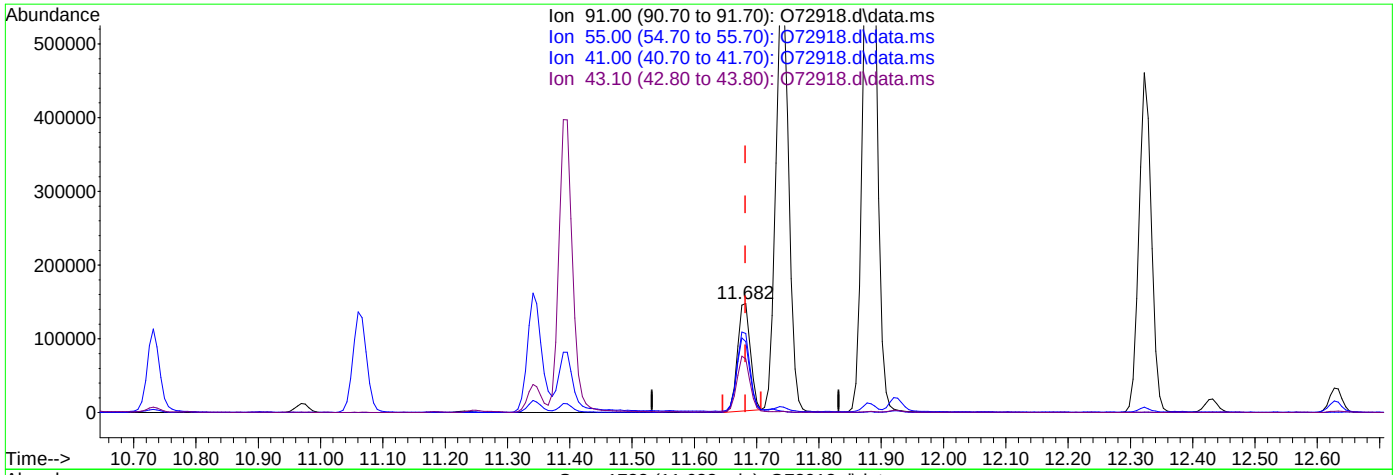
response 81357

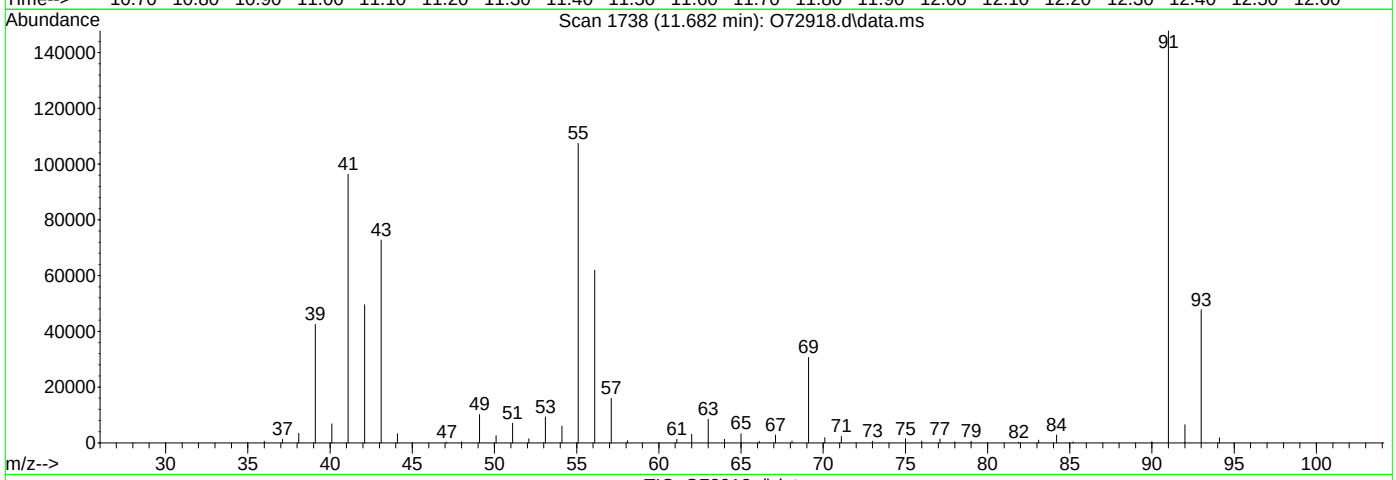
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	61.96
41.10	73.80	82.39
39.00	31.30	33.82

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 38.94ug/L

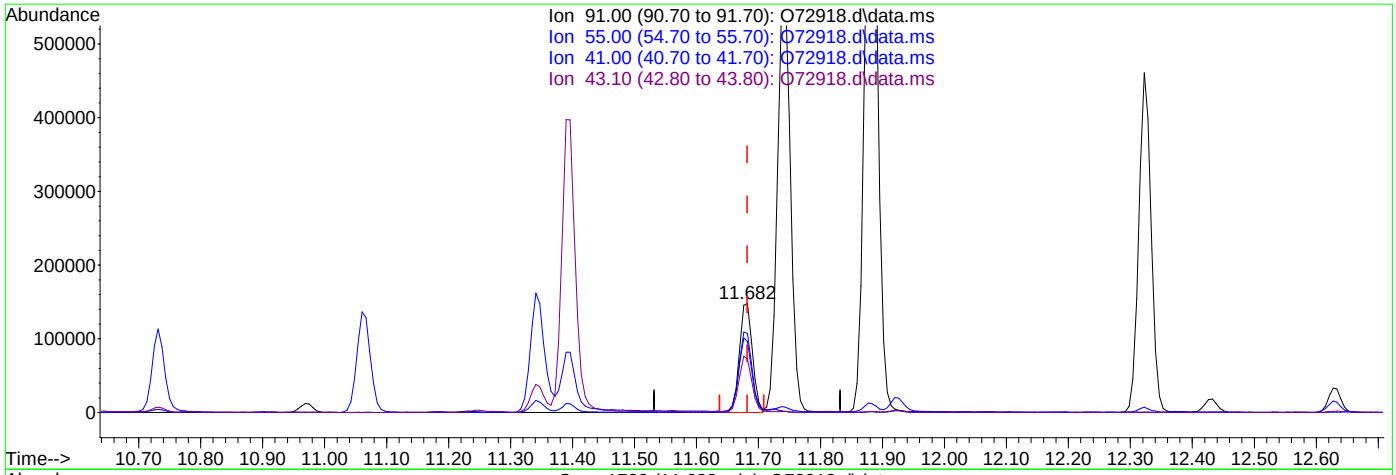
response 208231

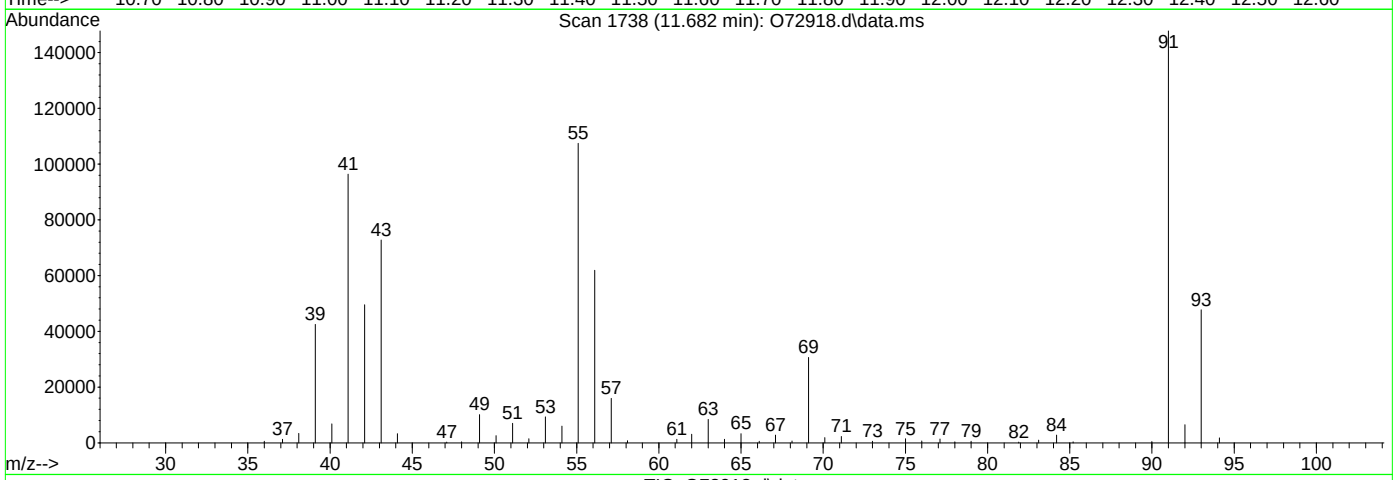
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.31
41.00	64.60	63.90
43.10	48.40	48.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(76) 1-Chlorohexane

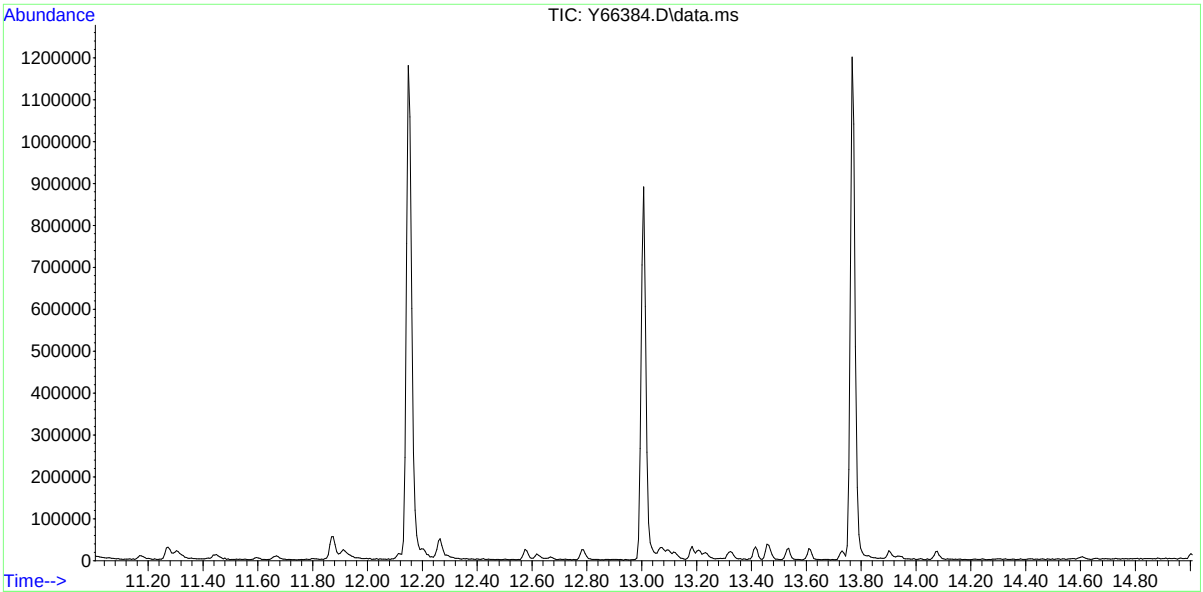
11.682min (+0.000) 40.31ug/L m

response 215548

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.72
41.00	64.60	65.18
43.10	48.40	49.20

Methods: SW-846 8260B
Data File : C:\msdchem\1\DATA\2022-12-02\Y66384.D Vial: 3
Acq On : 2 Dec 2022 12:15 pm Operator: adelardl
Sample : BFB Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\MET...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B



AutoFind: Scans 1835, 1836, 1837; Background Corrected with Scan 1828

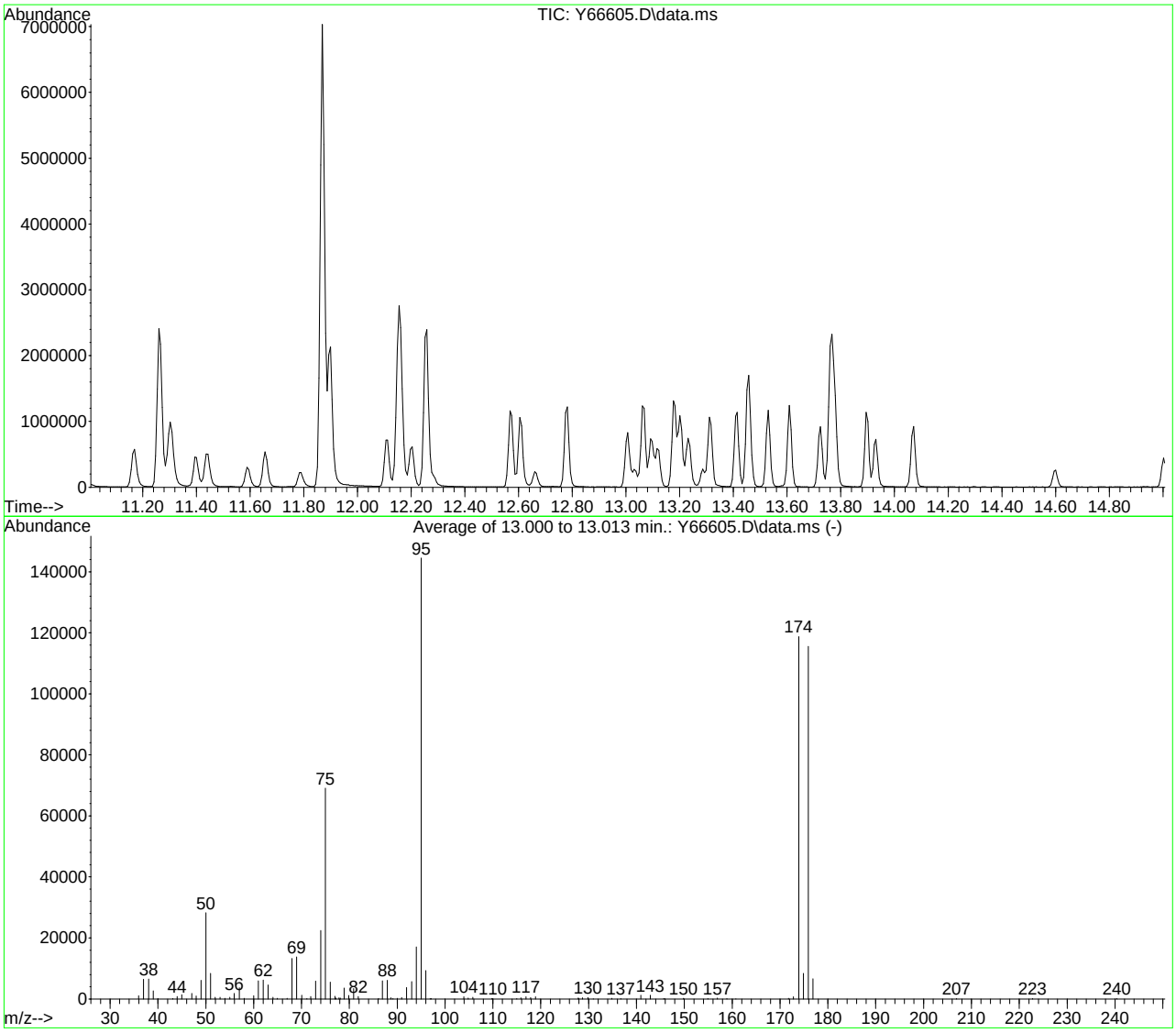
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.3	30248	PASS
75	95	30	60	47.5	74573	PASS
95	95	100	100	100.0	157104	PASS
96	95	5	9	6.9	10867	PASS
173	174	0.00	2	0.6	755	PASS
174	95	50	100	79.1	124333	PASS
175	174	5	9	6.8	8455	PASS
176	174	95	101	96.1	119541	PASS
177	176	5	9	6.4	7681	PASS

Y66384.D APPIX_12-02-2022_Y.M Mon Dec 05 09:45:15 2022

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\ce...22\VY2765-67\Y66605.D Vial: 2
Acq On : 9 Dec 2022 9:38 am Operator: joannel
Sample : BFB Inst : MSVOA14-Y
Misc : MS52862,VY2765,,,,, Multiplr: 1.00
MS Integration Params: med.p

Method : C:\msdchem\1\met...X_12-02-2022_Y.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B



AutoFind: Scans 1835, 1836, 1837; Background Corrected with Scan 1829

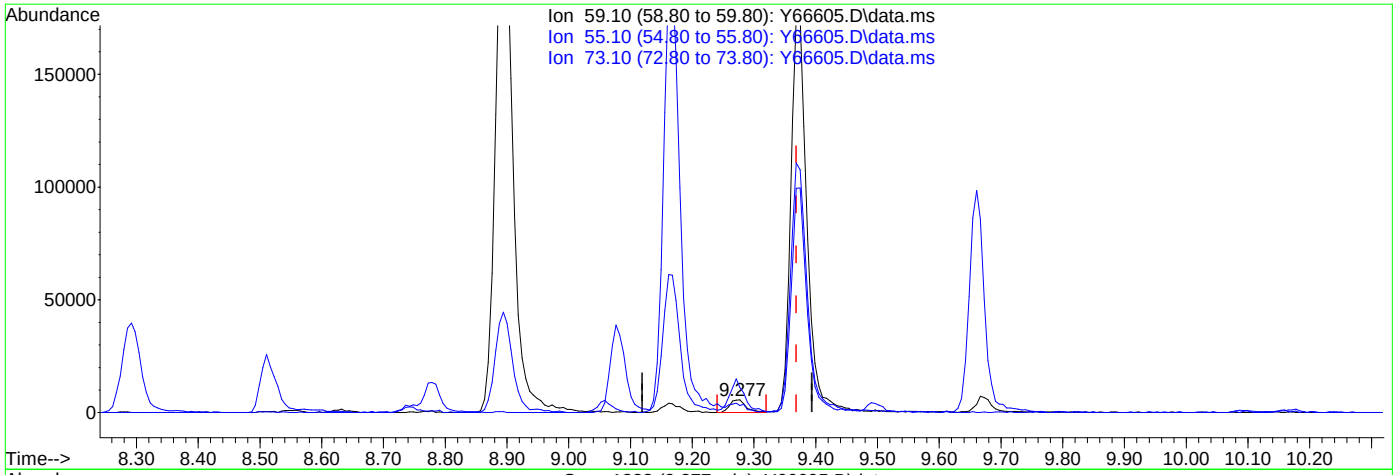
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.5	28224	PASS
75	95	30	60	47.8	69096	PASS
95	95	100	100	100.0	144507	PASS
96	95	5	9	6.4	9274	PASS
173	174	0.00	2	0.6	680	PASS
174	95	50	100	82.2	118787	PASS
175	174	5	9	7.0	8353	PASS
176	174	95	101	97.3	115611	PASS
177	176	5	9	5.7	6635	PASS

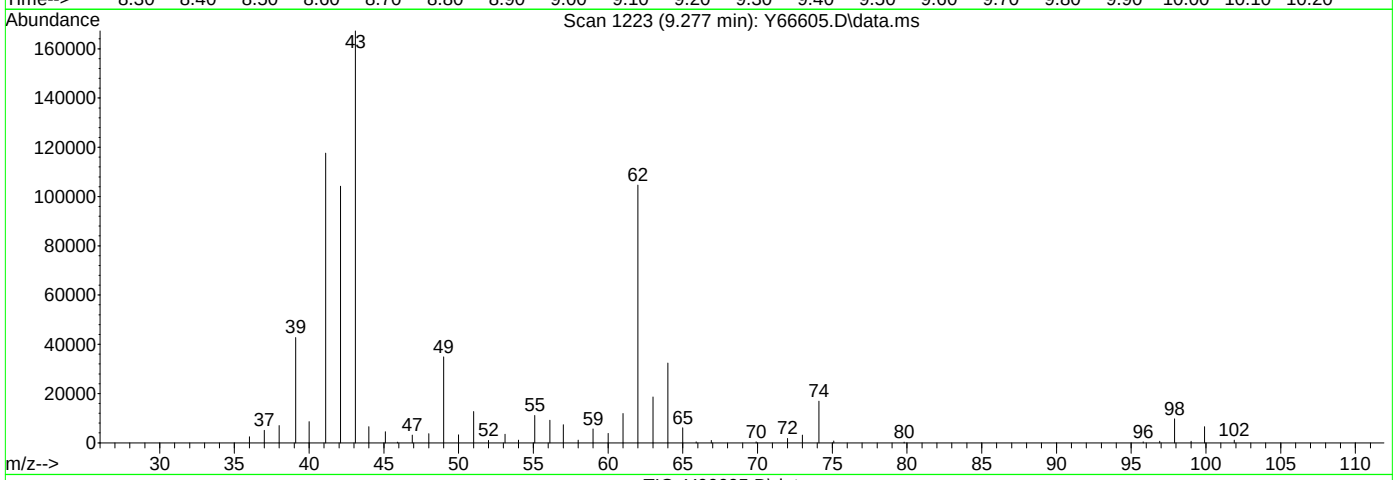
Y66605.D APPIX_12-02-2022_Y.M Sun Dec 11 20:54:23 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(52) Tert Amyl Alcohol

9.277min (-0.092) 13.67ug/L

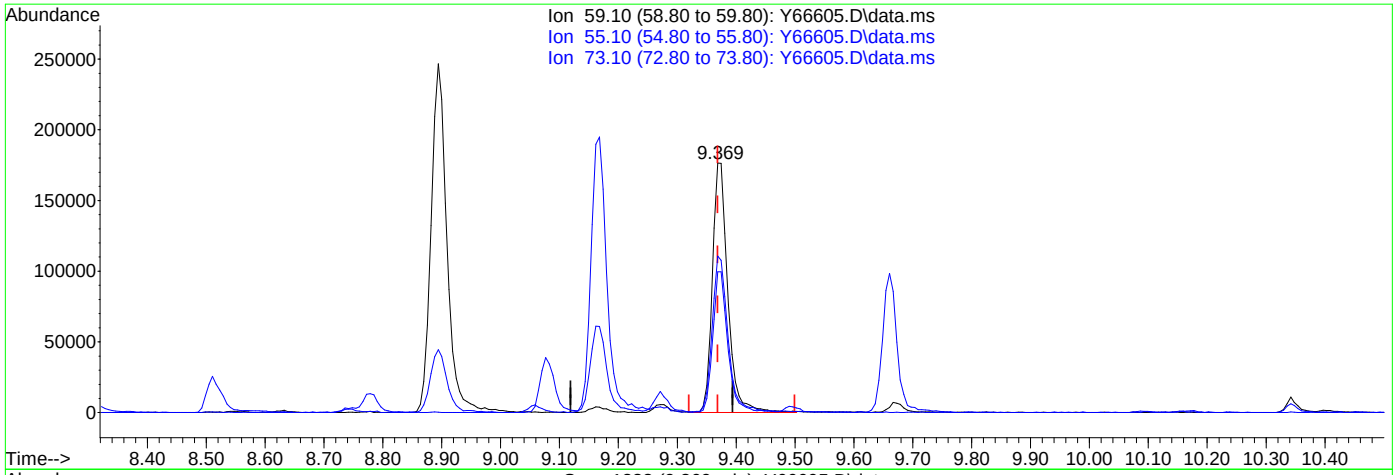
response 10715

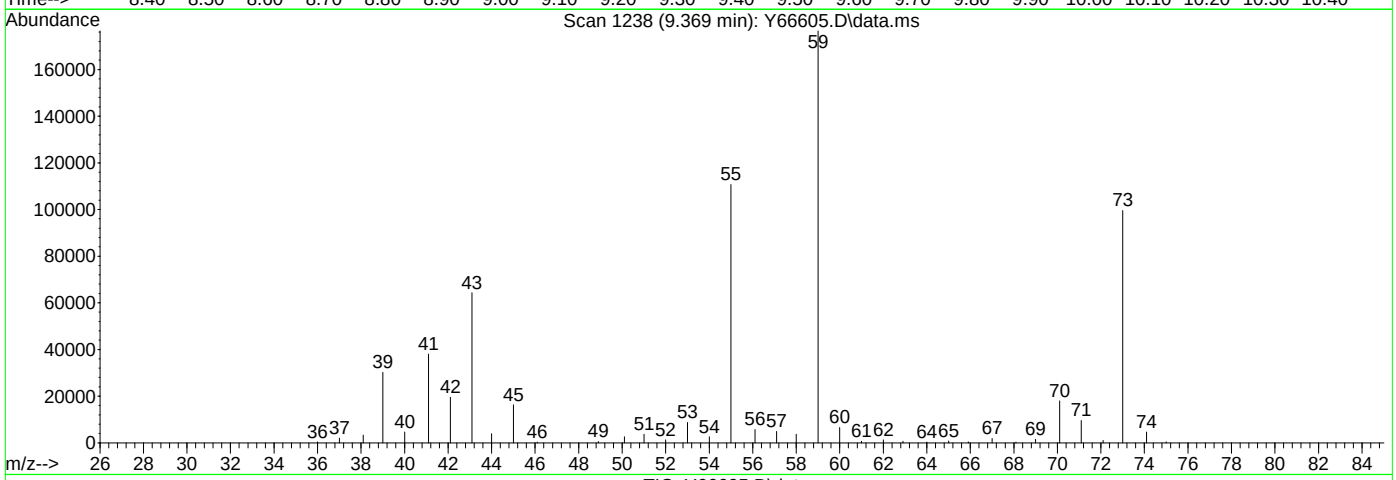
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	191.55#
73.10	54.90	45.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(52) Tert Amyl Alcohol

9.369min (-0.000) 370.08ug/L m

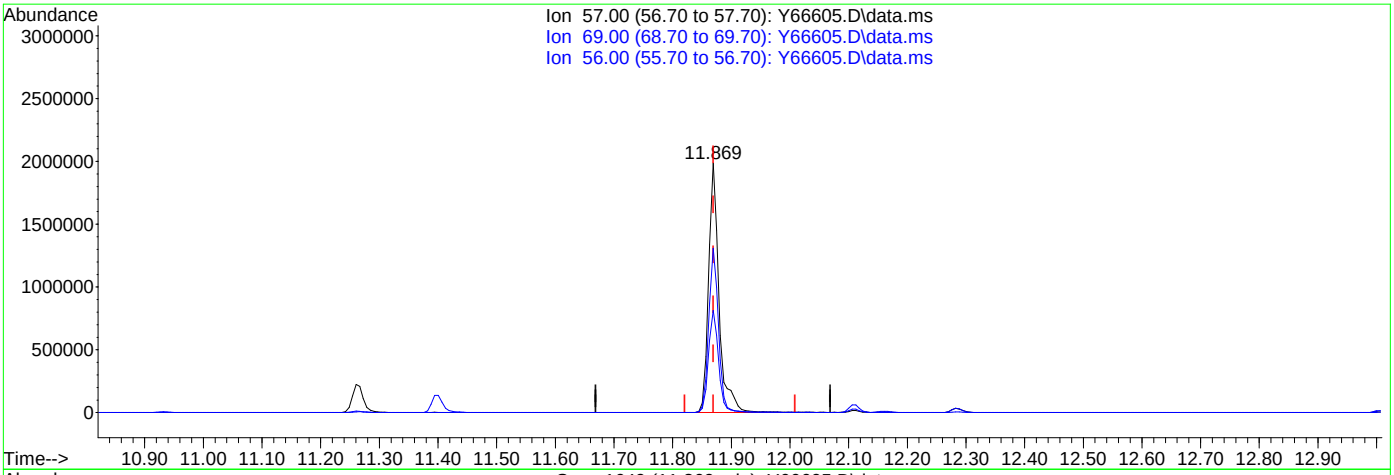
response 322953

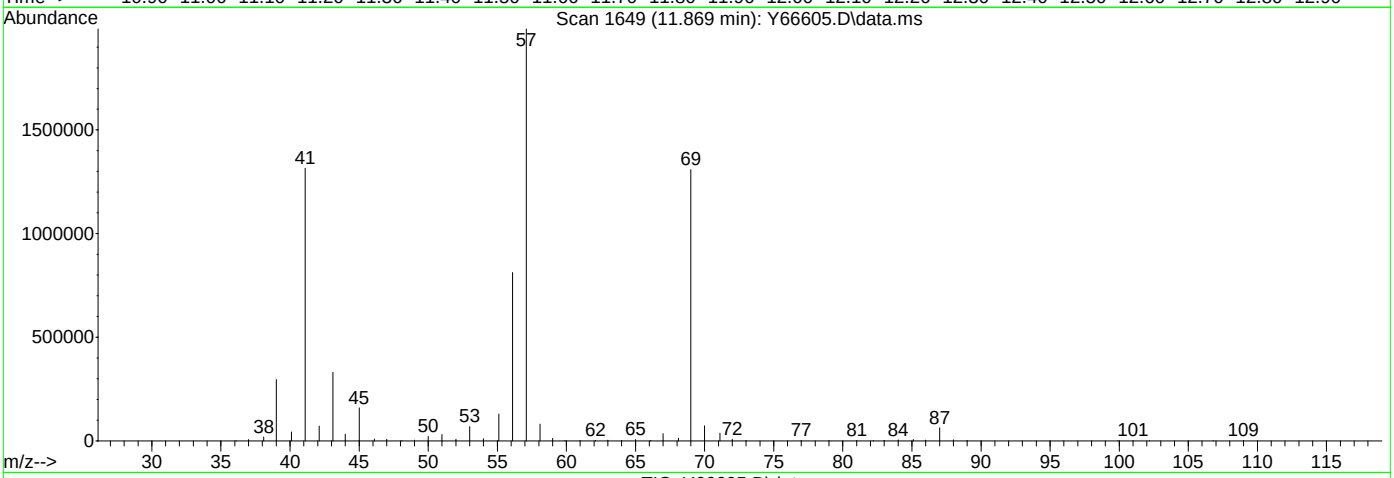
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	62.70
73.10	54.90	56.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 2145.94ug/L

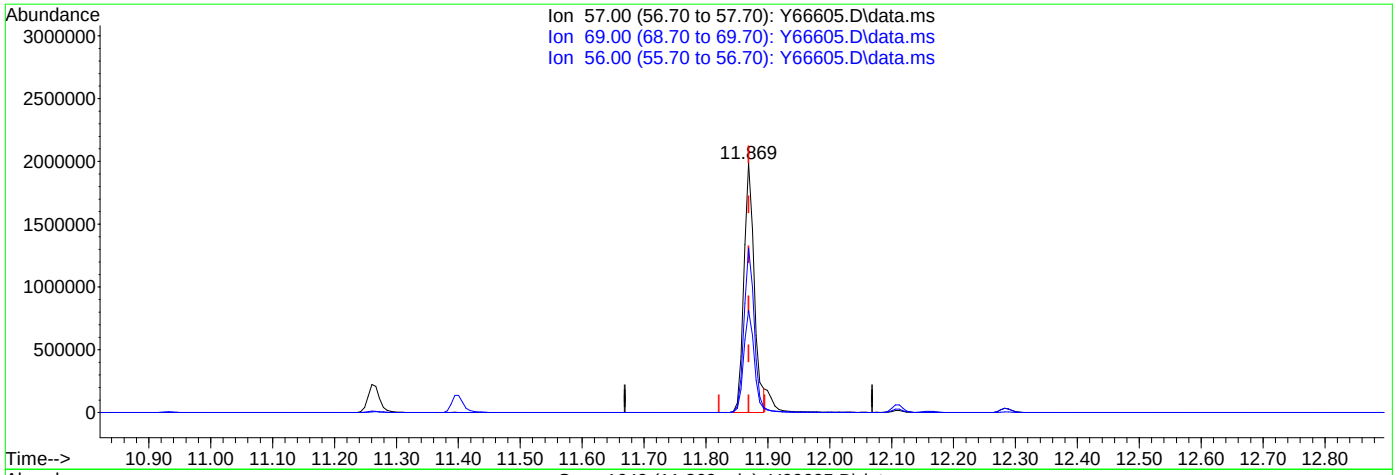
response 2489994

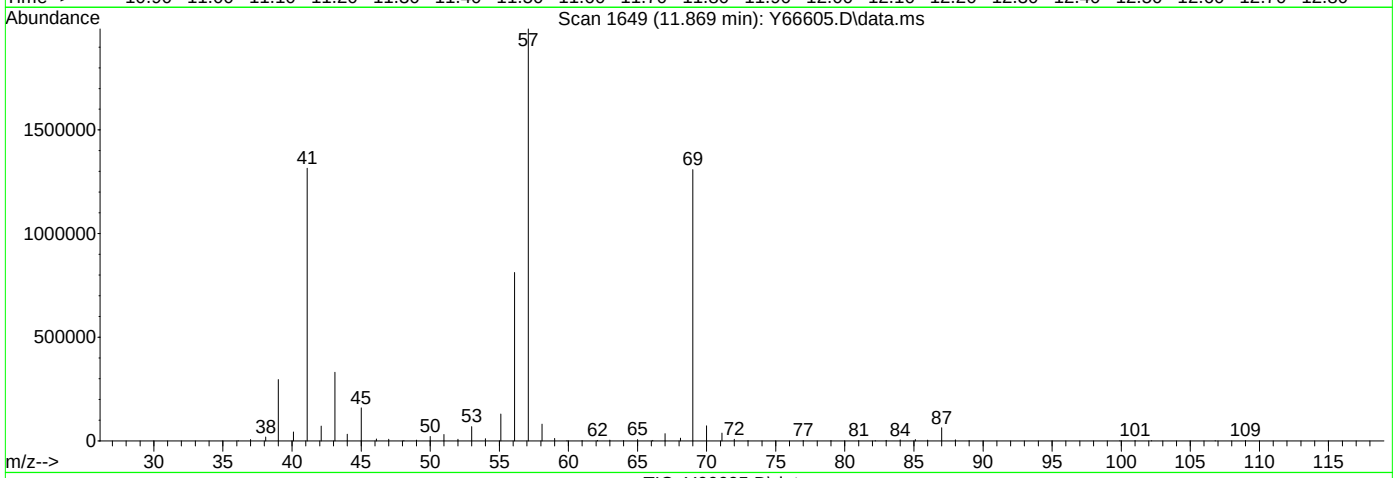
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.75
56.00	40.70	40.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 2016.15ug/L m

response 2319192

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.83
56.00	40.70	40.86
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:45 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	3.716	96	975009	50.00	ug/L		0.00
62) Chlorobenzene-d5	5.636	117	664047	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	282629	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	3.256	113	215712	53.06	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.12%				
49) 1,2-Dichloroethane-d4	3.544	65	293834	50.15	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.30%				
63) Toluene-d8	4.642	98	924554	47.45	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 94.90%				
86) 4-Bromofluorobenzene	6.488	174	229198	53.09	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.18%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.122	85	3423	0.99	ug/L		89
3) Chloromethane	1.248	50	3573	0.75	ug/L		85
4) 1,3-butadiene	1.316	39	3361	0.72	ug/L		97
5) Vinyl Chloride	1.300	62	2663	0.62	ug/L		99
6) Bromomethane	1.504	94	1619	3.04	ug/L		86
7) Chloroethane	1.582	64	1191	0.83	ug/L		81
8) Trichlorofluoromethane	1.676	101	4305	0.80	ug/L		82
9) Ethyl Ether	1.870	59	2377	0.57	ug/L		88
10) Ethanol	1.943	45	3647	25.13	ug/L		82
11) 1,2-Dichlorotrifluoroe...	1.969	67	4405	0.94	ug/L		97
12) 1,1-Dichloroethene	1.980	61	5685	1.02	ug/L		98
13) Freon 113	2.011	101	3406	1.06	ug/L	#	87
14) Carbon Disulfide	2.001	76	10389	0.98	ug/L		92
15) Iodomethane	2.058	142	2028	3.94	ug/L		89
16) Acrolein	2.147	56	5366	4.35	ug/L		97
17) Allyl chloride	2.241	41	6990	1.54	ug/L		94
18) Methylene Chloride	2.299	49	7824	1.39	ug/L		90
19) Acetone	2.309	43	17859	6.73	ug/L		94
20) Methyl acetate	2.393	43	25024	4.34	ug/L		96
21) trans-1,2-Dichloroethene	2.398	61	5747	1.07	ug/L		96
22) Hexane	2.466	56	3179	1.08	ug/L	#	76
23) Methyl Tert Butyl Ether	2.466	73	11430	0.91	ug/L		93
24) Tert Butyl Alcohol	2.498	59	11576	8.68	ug/L	#	69
25) Acetonitrile	2.545	41	15946	17.11	ug/L		98
26) Di-isopropyl ether	2.681	45	10531	0.81	ug/L		93
27) Chloroprene	2.723	53	19149	0.98	ug/L		98
28) 1,1-Dichloroethane	2.723	63	6655	0.97	ug/L		97
29) Acrylonitrile	2.723	52	12325	4.77	ug/L		96
30) ETBE	2.879	59	10703	0.84	ug/L		96
31) Vinyl acetate	2.858	43	41157	4.17	ug/L		98
32) cis-1,2-Dichloroethene	3.021	96	4080	1.07	ug/L		89
33) 2,2-Dichloropropane	3.078	77	6143	1.08	ug/L		91
34) Bromochloromethane	3.120	128	1806	1.18	ug/L	#	81
35) Cyclohexane	3.157	56	5359	0.86	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:45 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.162	83	7495	1.10	ug/L		95
37) Ethyl acetate	3.225	43	32195	4.54	ug/L		98
38) Tetrahydrofuran	3.251	42	2717	0.97	ug/L		87
40) Carbon Tetrachloride	3.261	117	5341m	1.30	ug/L		
41) 1,1,1-Trichloroethane	3.287	97	5901	1.04	ug/L		92
42) 2-Butanone	3.313	43	27996	6.65	ug/L		96
43) 1,1-Dichloropropene	3.361	75	5220	1.00	ug/L		95
44) tert-Butyl formate	3.402	59	13397	4.51	ug/L		95
45) Propionitrile	3.455	54	14968	13.32	ug/L		97
46) Methacrylonitrile	3.476	41	46933	11.63	ug/L		93
47) Benzene	3.491	78	17369	1.04	ug/L		95
48) TAME	3.565	73	10563	0.89	ug/L		90
50) Isobutyl alcohol	3.580	43	9172m	13.36	ug/L		
51) 1,2-Dichloroethane	3.585	62	6076	1.09	ug/L		90
52) Tert Amyl Alcohol	3.648	59	8009	7.73	ug/L		93
53) Trichloroethene	3.821	95	4633	1.18	ug/L		90
54) Methylcyclohexane	3.837	83	5511	0.99	ug/L		93
55) Dibromomethane	4.046	93	2452	1.10	ug/L		82
56) 1,2-Dichloropropane	4.103	63	3768	0.96	ug/L		96
57) Bromodichloromethane	4.140	83	4699	1.13	ug/L		90
58) Methyl methacrylate	4.234	41	4559	1.01	ug/L		91
59) 1,4-Dioxane	4.255	88	1198	13.24	ug/L		61
60) 2-Chloroethyl vinyl ether	4.475	63	9997	9.39	ug/L		88
61) cis-1,3-Dichloropropene	4.516	75	5344	0.97	ug/L		87
64) Toluene	4.673	91	17127	0.98	ug/L		98
65) 2-Nitropropane	4.767	41	7320	4.35	ug/L		88
66) 4-Methyl-2-pentanone	4.883	43	40387	5.40	ug/L		96
67) trans-1,3-Dichloropropene	4.914	75	4780	0.94	ug/L		88
68) Tetrachloroethene	4.935	166	4008	1.17	ug/L		93
69) Ethyl methacrylate	5.024	69	4746	0.87	ug/L		95
70) 1,1,2-Trichloroethane	5.013	83	2705	0.90	ug/L		81
71) Dibromochloromethane	5.139	129	2940	1.13	ug/L		98
72) 1,3-Dichloropropane	5.191	76	6166	0.92	ug/L		94
73) 1,2-Dibromoethane	5.290	107	3281	0.97	ug/L		89
74) 3,3-dimethyl-1-butanol	5.432	57	28615	25.54	ug/L		96
75) 2-hexanone	5.432	43	32122	3.85	ug/L	#	62
76) 1-Chlorohexane	5.646	91	5758m	1.08	ug/L		
77) Ethylbenzene	5.678	91	18097	0.99	ug/L		98
78) Chlorobenzene	5.651	112	10447	1.06	ug/L		96
79) 1,1,1,2-Tetrachloroethane	5.688	131	3211	1.08	ug/L		76
80) m,p-Xylene	5.777	91	24402	1.72	ug/L		93
81) o-Xylene	6.070	91	11249	0.80	ug/L		93
82) Styrene	6.106	104	7016	0.71	ug/L		96
83) Bromoform	6.112	173	1519	1.21	ug/L		93
84) Isopropylbenzene	6.305	105	10958	0.71	ug/L		97
87) cis-1,4-Dichloro-2-butene	6.525	53	2035	1.24	ug/L	#	81
88) n-Propylbenzene	6.603	91	15790	0.82	ug/L		95
89) Bromobenzene	6.567	156	4083	1.17	ug/L	#	78
90) 1,1,2,2-Tetrachloroethane	6.624	83	5055	0.93	ug/L		95
91) 1,3,5-Trimethylbenzene	6.755	105	9122	0.71	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:45 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

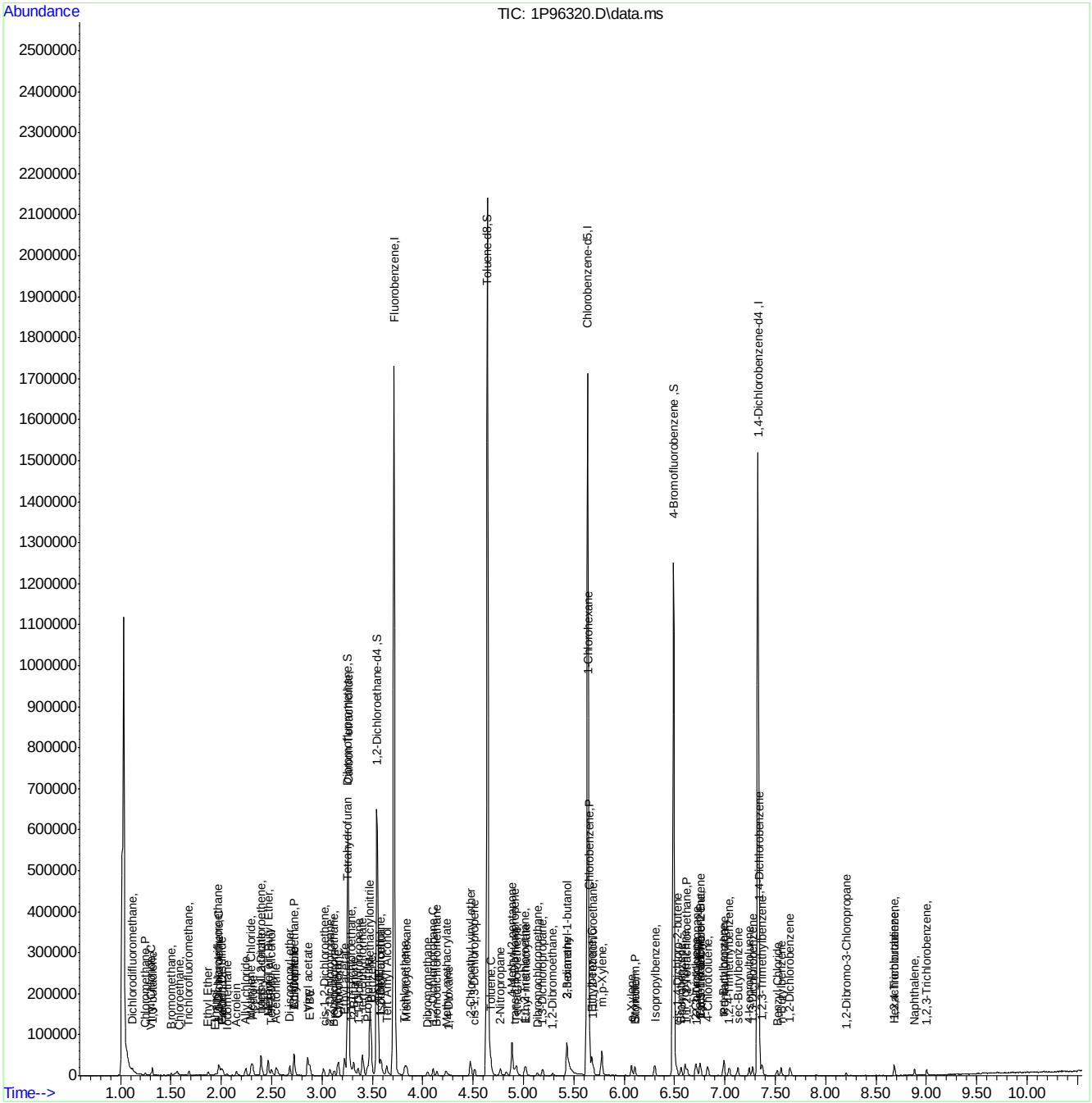
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	6.708	91	9604	0.83	ug/L		90
93) trans-1,4-Dichloro-2-B...	6.755	53	1366	0.70	ug/L		88
94) 1,2,3-Trichloropropane	6.724	110	1681	0.88	ug/L		93
95) Cyclohexanone	6.755	55	1103m	2.93	ug/L		
96) 4-Chlorotoluene	6.828	91	9782	0.81	ug/L		91
97) tert-Butylbenzene	6.985	91	5188	0.71	ug/L		92
99) 1,2,4-Trimethylbenzene	7.043	105	7905	0.63	ug/L		94
100) Pentachloroethane	6.990	167	1910	1.35	ug/L	#	16
101) sec-Butylbenzene	7.126	105	10029	0.71	ug/L		98
102) 4-Isopropyltoluene	7.241	119	8001	0.68	ug/L		97
103) 1,3-Dichlorobenzene	7.273	146	6390	1.00	ug/L		95
104) 1,2,3-Trimethylbenzene	7.367	105	10080	0.81	ug/L		98
105) 1,4-Dichlorobenzene	7.341	146	7171m	1.08	ug/L		
106) n-Butylbenzene	7.555	92	4270	0.70	ug/L		82
107) Benzyl Chloride	7.519	126	1471m	1.07	ug/L		
108) 1,2-Dichlorobenzene	7.644	146	5988	1.00	ug/L		94
109) 1,2-Dibromo-3-Chloropr...	8.204	75	1338	1.10	ug/L		84
110) Hexachlorobutadiene	8.685	225	1490	1.35	ug/L		92
111) 1,2,4-Trichlorobenzene	8.680	180	2491	0.76	ug/L		80
112) Naphthalene	8.884	128	7500	0.52	ug/L		96
113) 1,2,3-Trichlorobenzene	9.004	180	2779	0.92	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:45 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

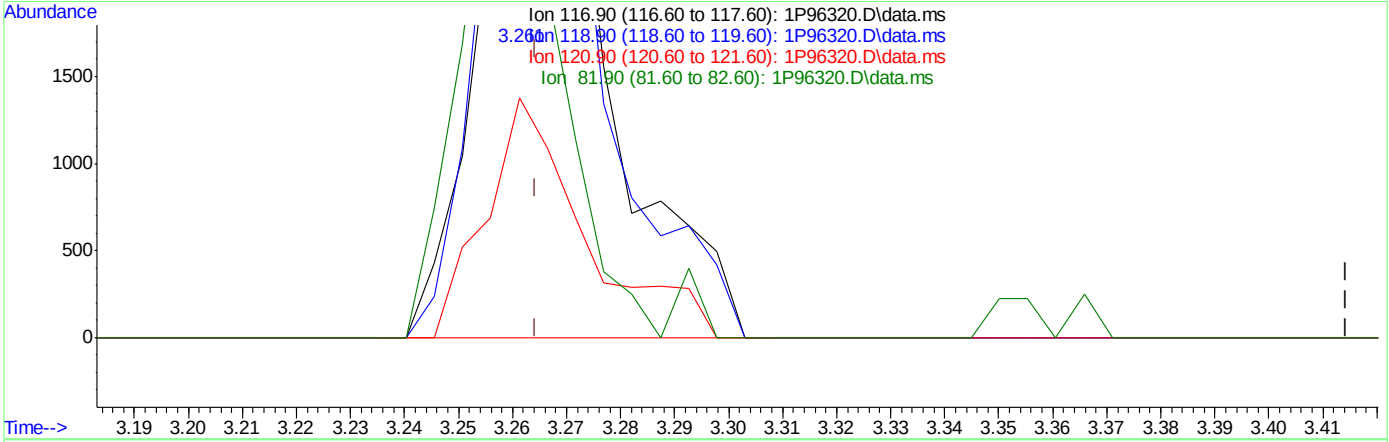
Sample Number: V1P3646-IC3646
Lab FileID: 1P96320.D
Injection Time: 12/14/22 10:15
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

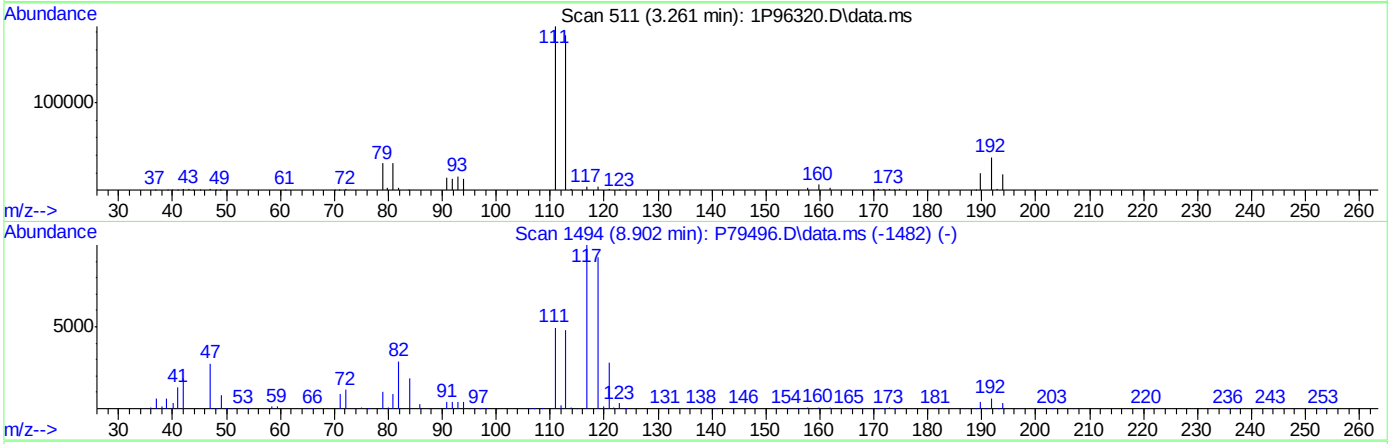
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.58	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration
Cyclohexanone	108-94-1		6.75	Missed peak
1,4-Dichlorobenzene	106-46-7		7.34	Missed peak
Benzyl Chloride	100-44-7		7.52	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.003) 1.45ug/L

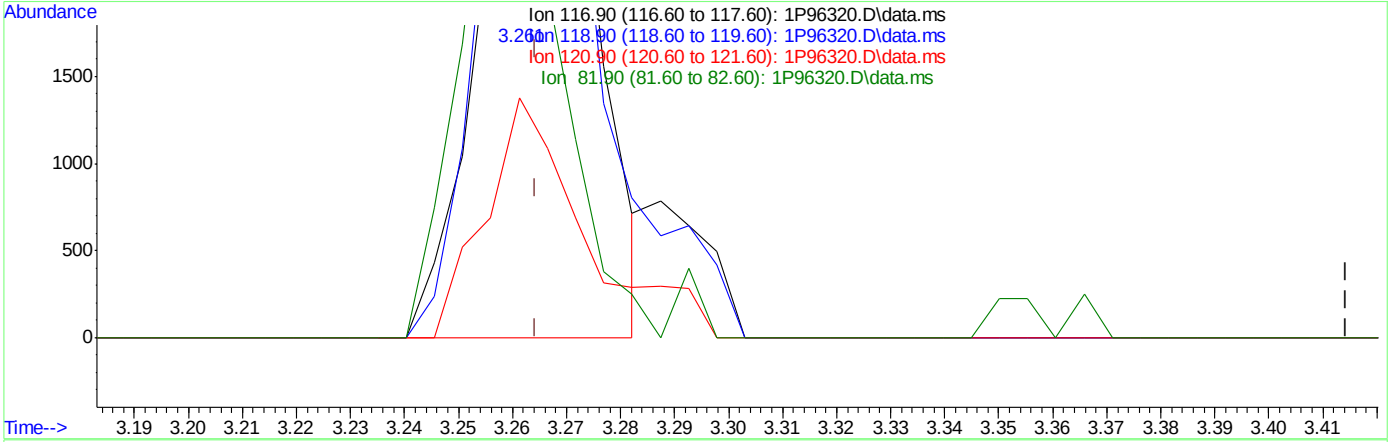
response 5943

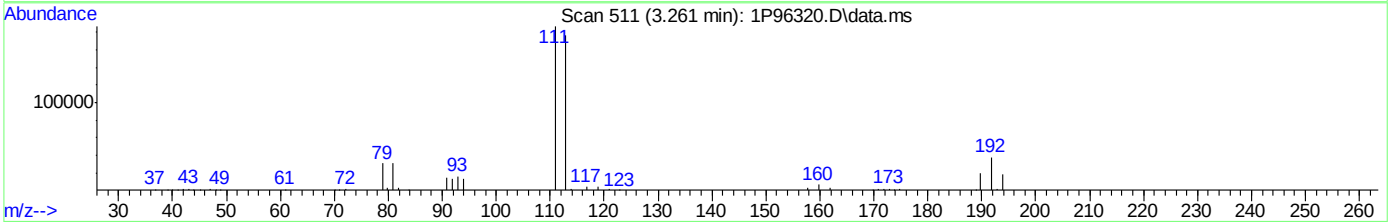
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	97.36
120.90	31.00	34.27
81.90	30.20	74.71#

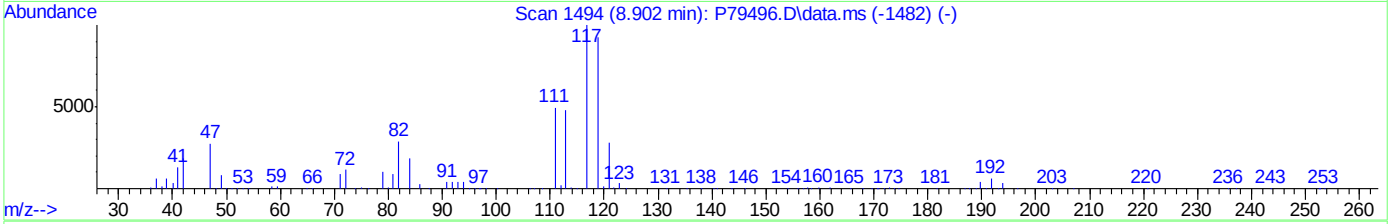
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.003) 1.30ug/L m

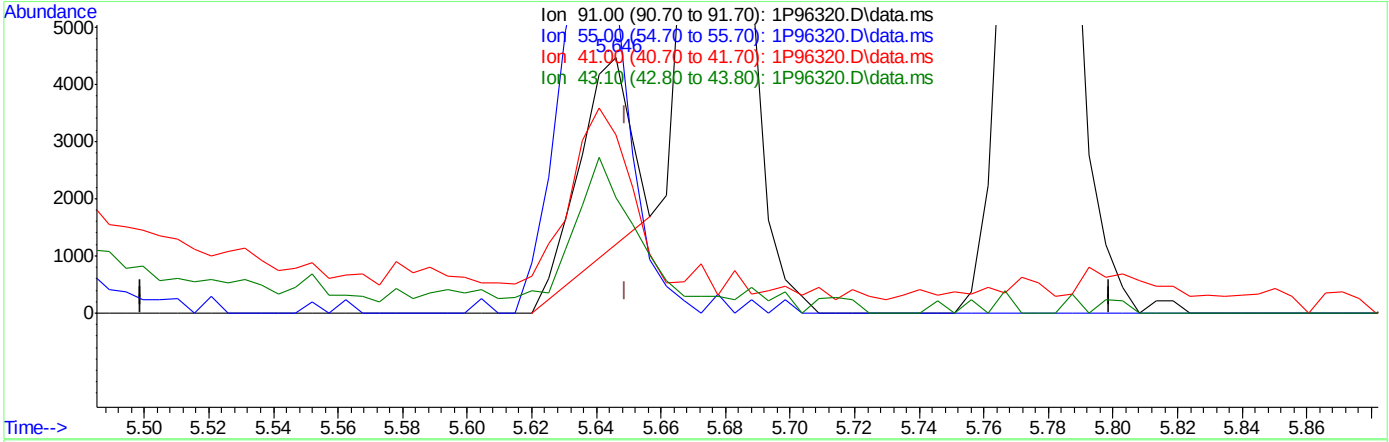
response 5341

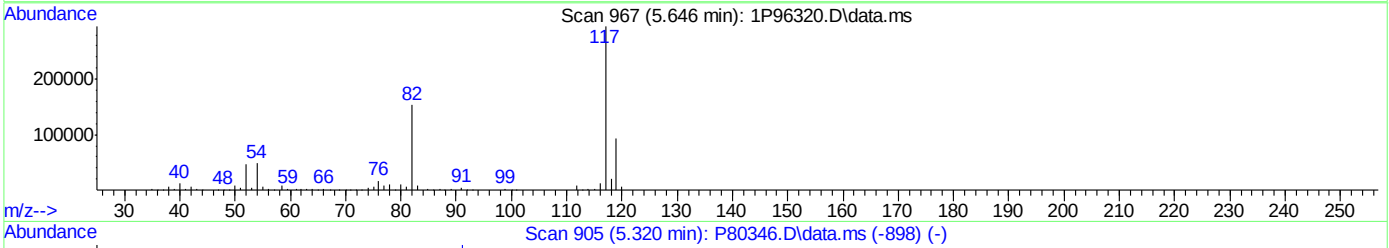
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	97.36
120.90	31.00	34.27
81.90	30.20	74.71#

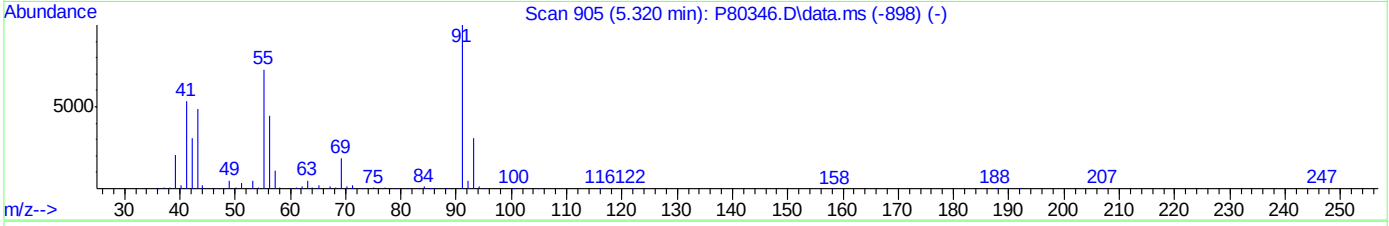
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 0.73ug/L

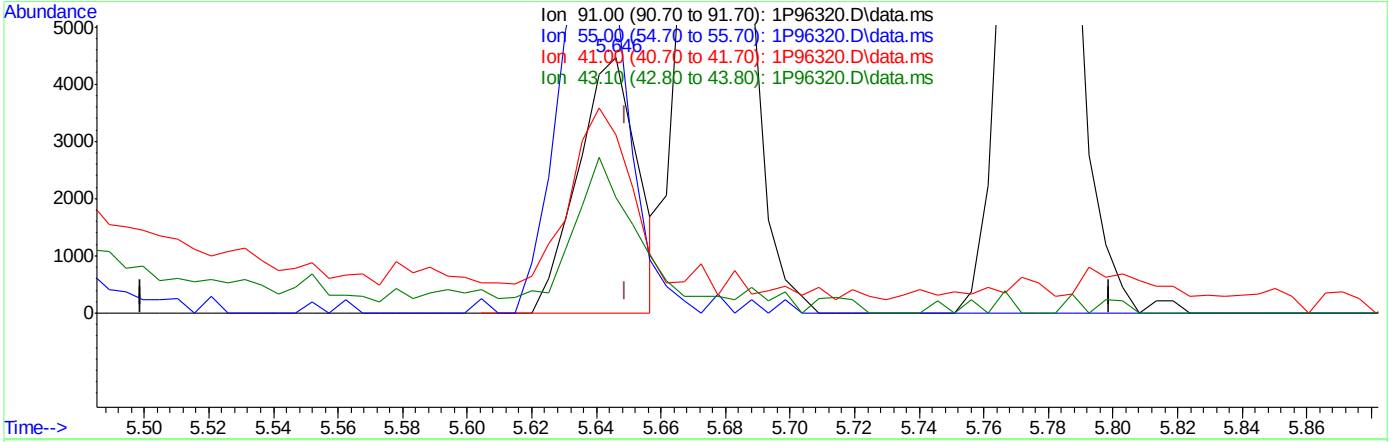
response 3904

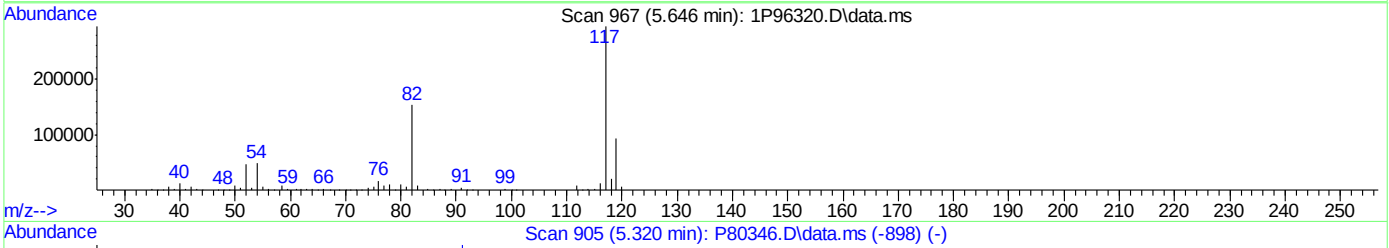
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	103.85#
41.00	62.10	55.02
43.10	50.00	36.25

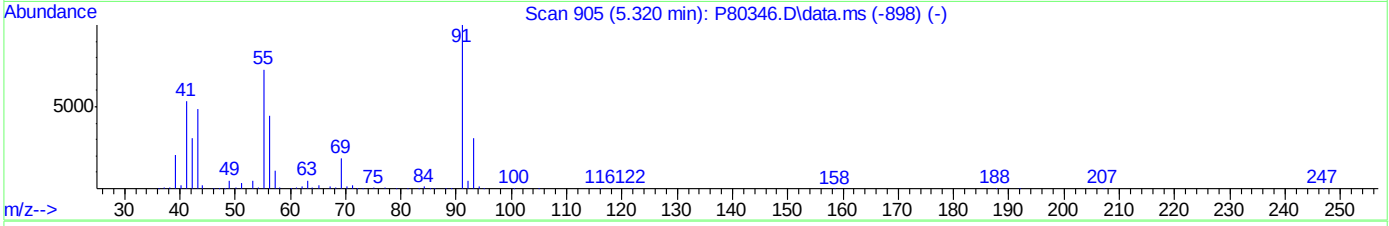
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 1.08ug/L m

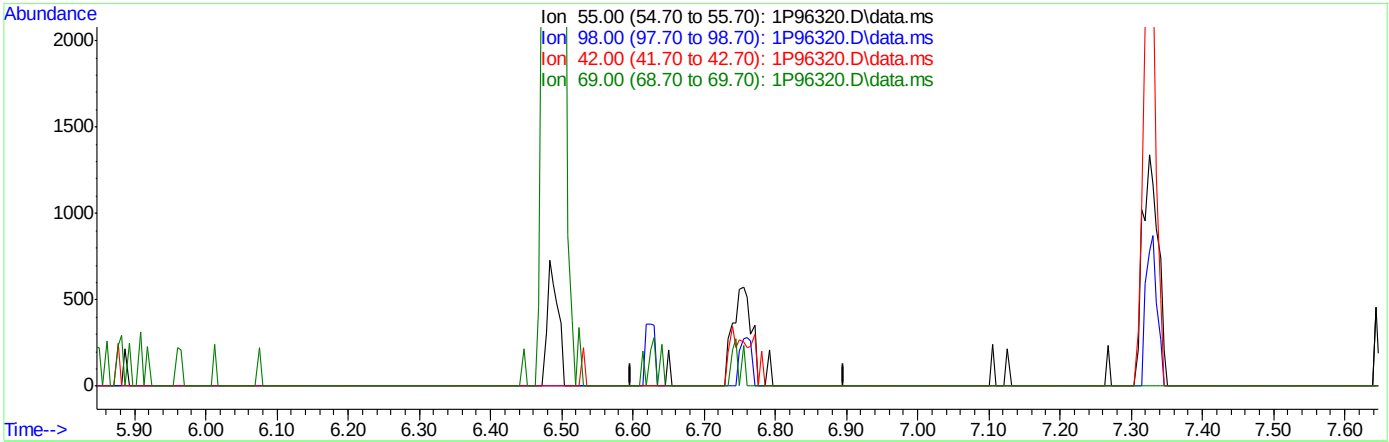
response 5758

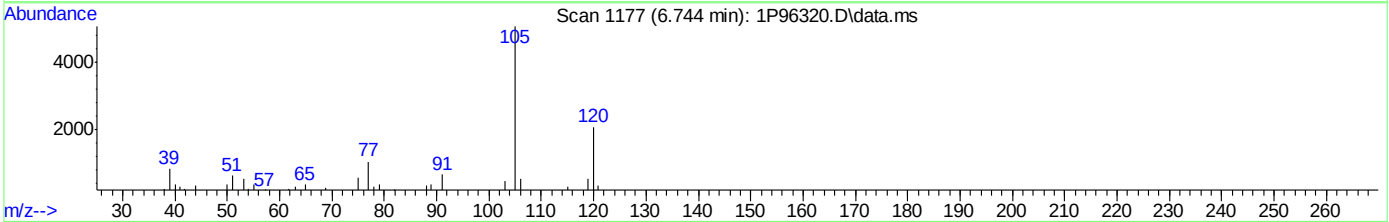
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	123.63#
41.00	62.10	69.69
43.10	50.00	44.98

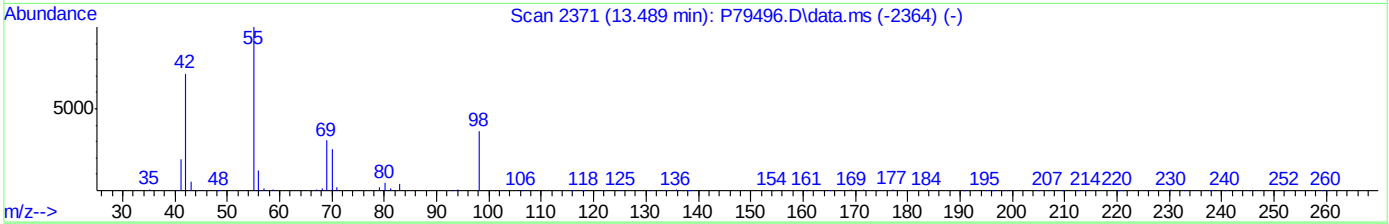
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(95) Cyclohexanone

6.747min (-6.747) 0.00ug/L

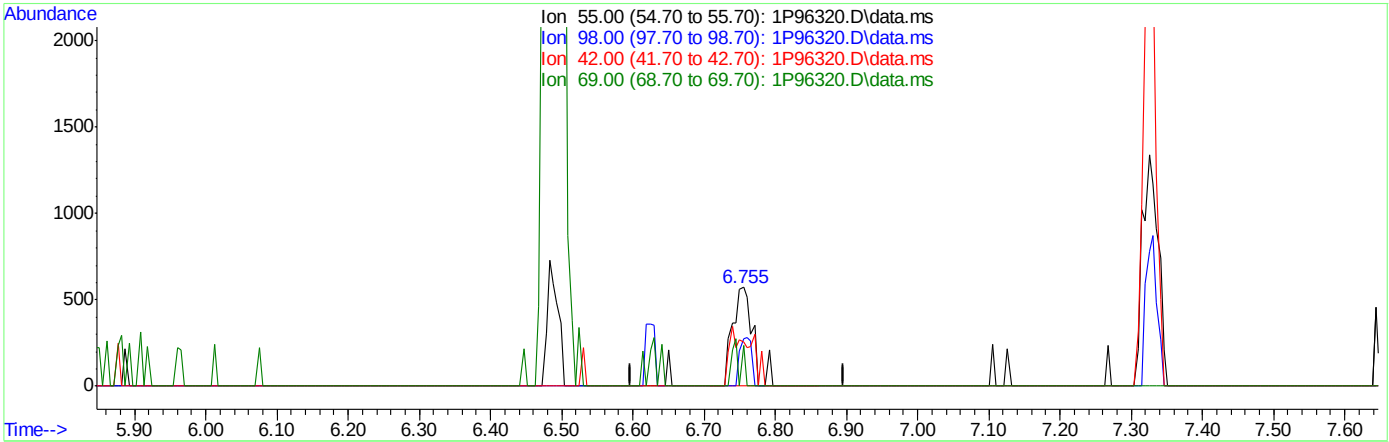
response 0

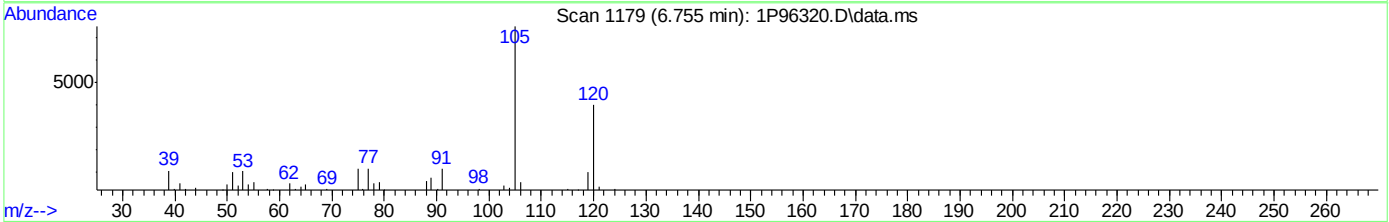
Ion	Exp%	Act%
55.00	100	0.00
98.00	45.70	0.00#
42.00	75.30	0.00#
69.00	32.20	0.00#

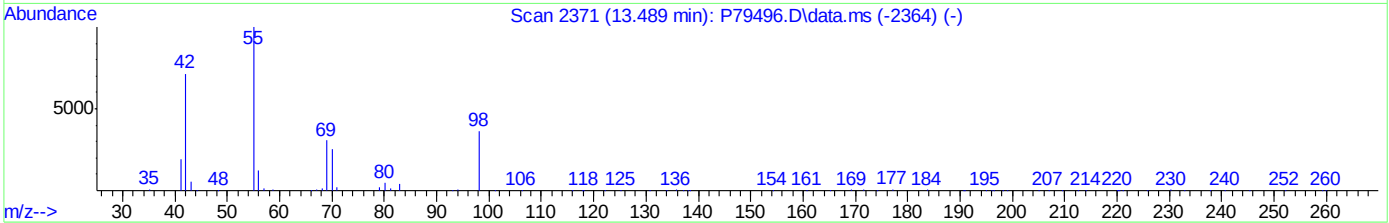
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(95) Cyclohexanone

6.755min (+0.008) 2.93ug/L m

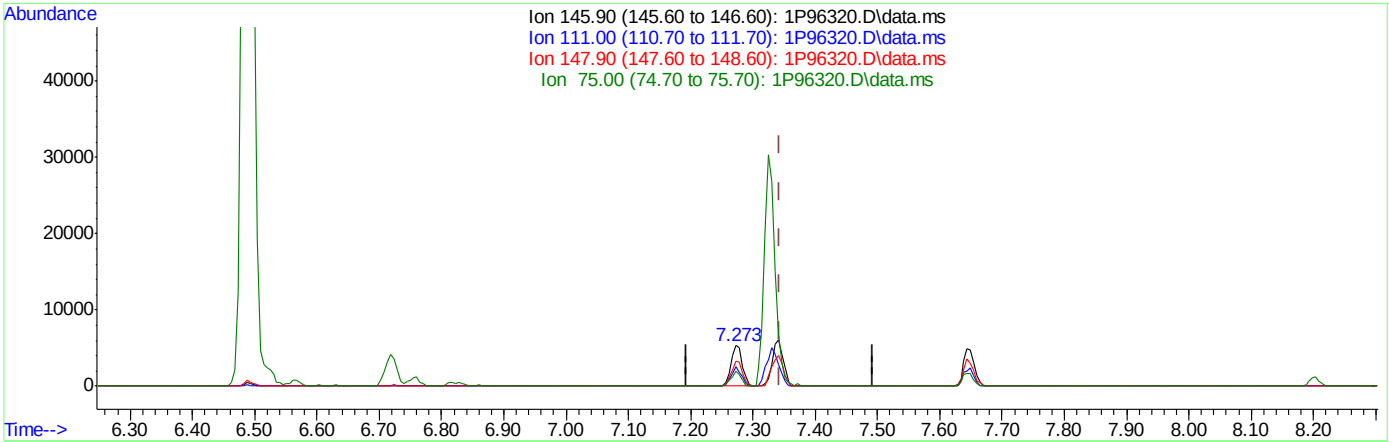
response 1103

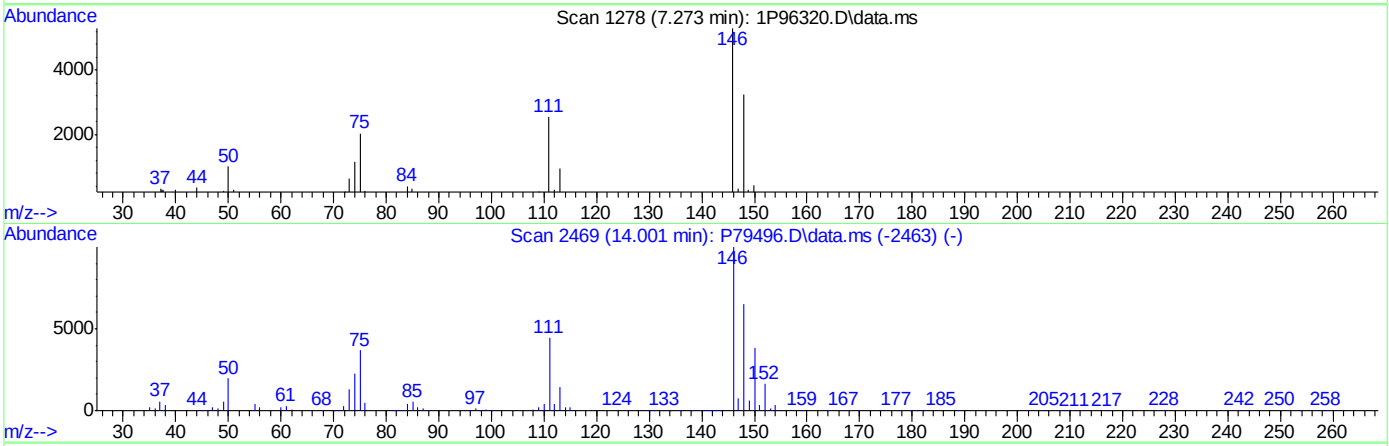
Ion	Exp%	Act%
55.00	100	100
98.00	45.70	48.34
42.00	75.30	45.01#
69.00	32.20	41.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(105) 1,4-Dichlorobenzene

7.273min (-0.071) 0.96ug/L

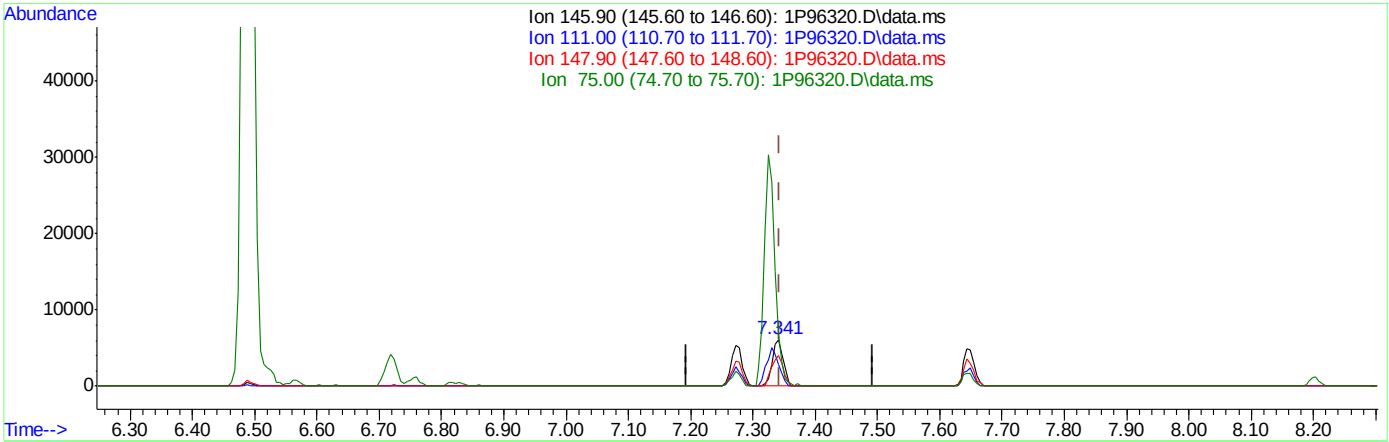
response 6390

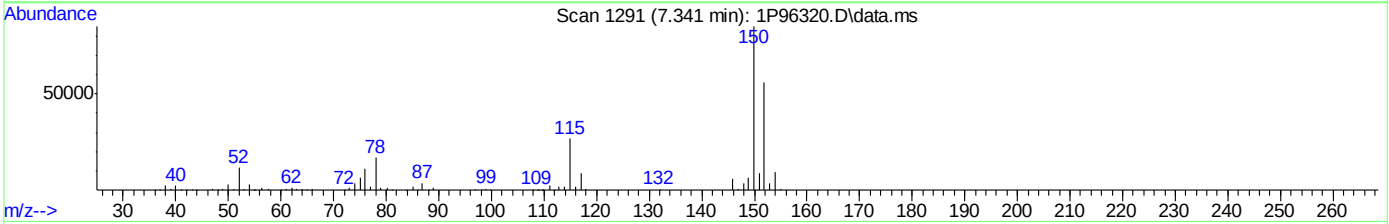
Ion	Exp%	Act%
145.90	100	100
111.00	41.50	47.87
147.90	62.70	61.26
75.00	38.50	38.32

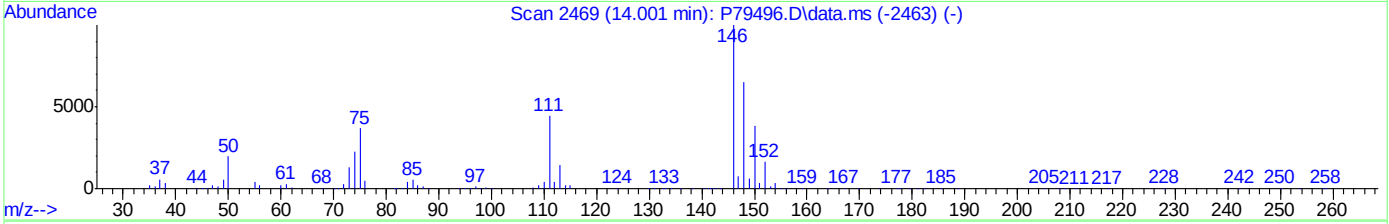
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(105) 1,4-Dichlorobenzene

7.341min (-0.003) 1.08ug/L m

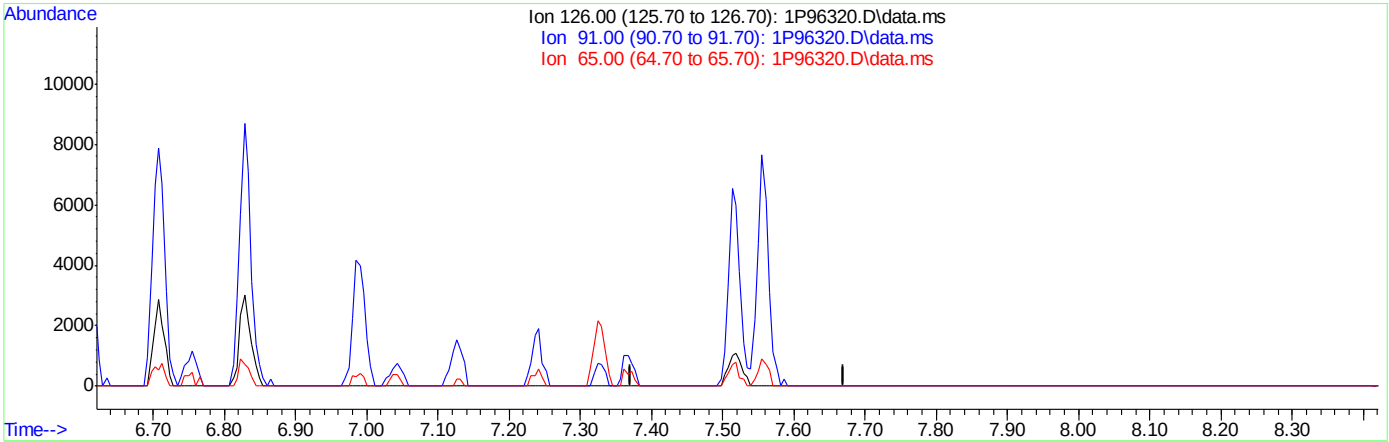
response 7171

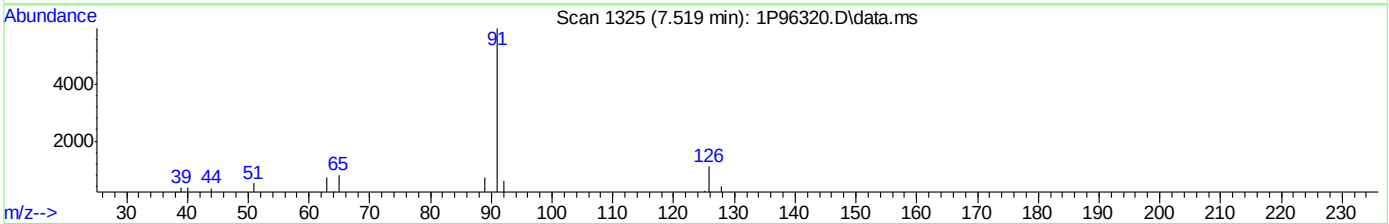
Ion	Exp%	Act%
145.90	100	100
111.00	41.50	46.19
147.90	62.70	65.42
75.00	38.50	111.61#

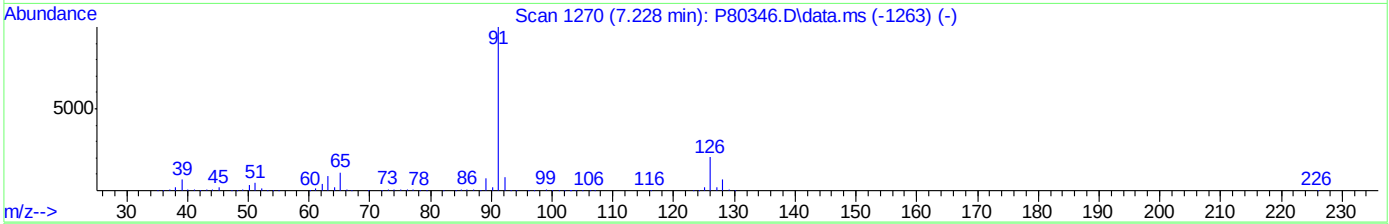
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(107) Benzyl Chloride

7.521min (-7.521) 0.00ug/L

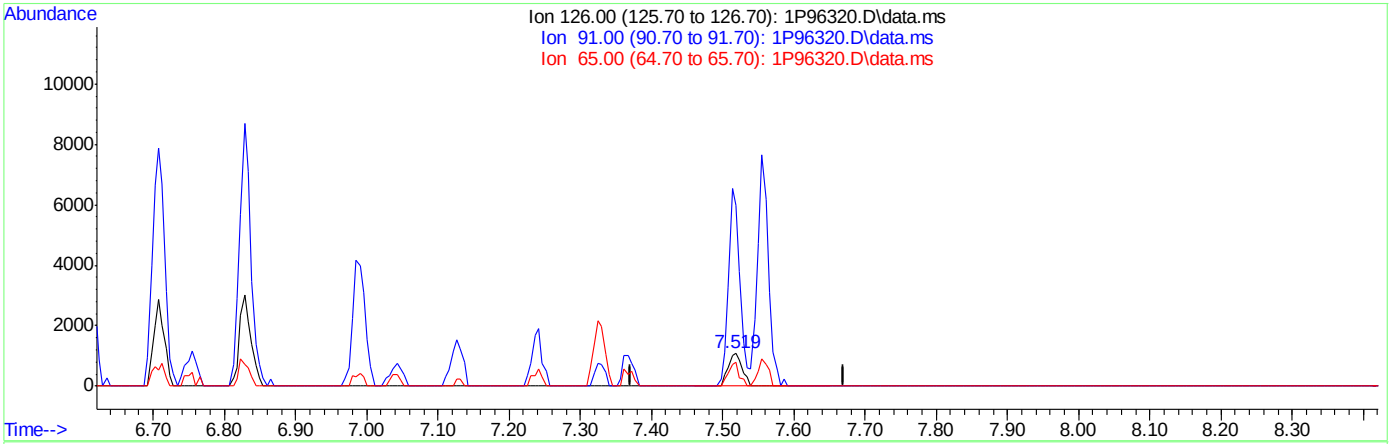
response 0

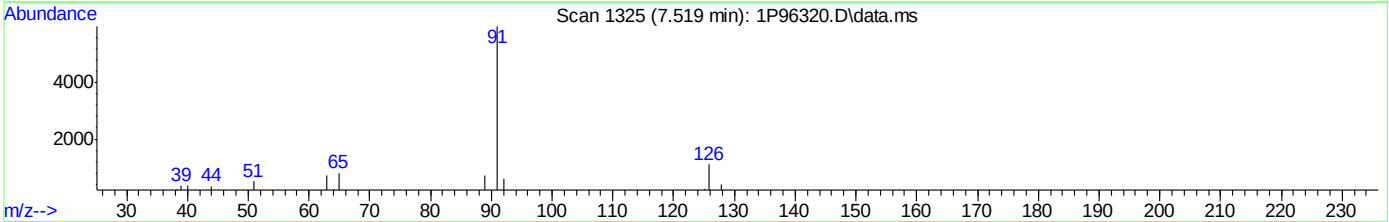
Ion	Exp%	Act%
126.00	100	0.00
91.00	526.60	0.00#
65.00	61.30	0.00#
0.00	0.00	0.00

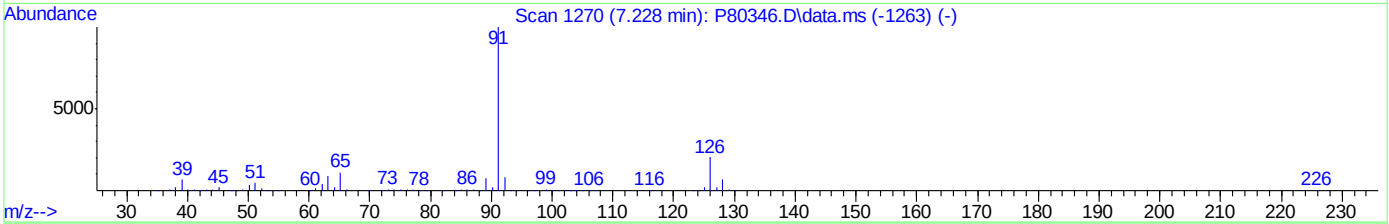
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:30:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration







TIC: 1P96320.D\data.ms

(107) Benzyl Chloride

7.519min (-0.002) 1.07ug/L m

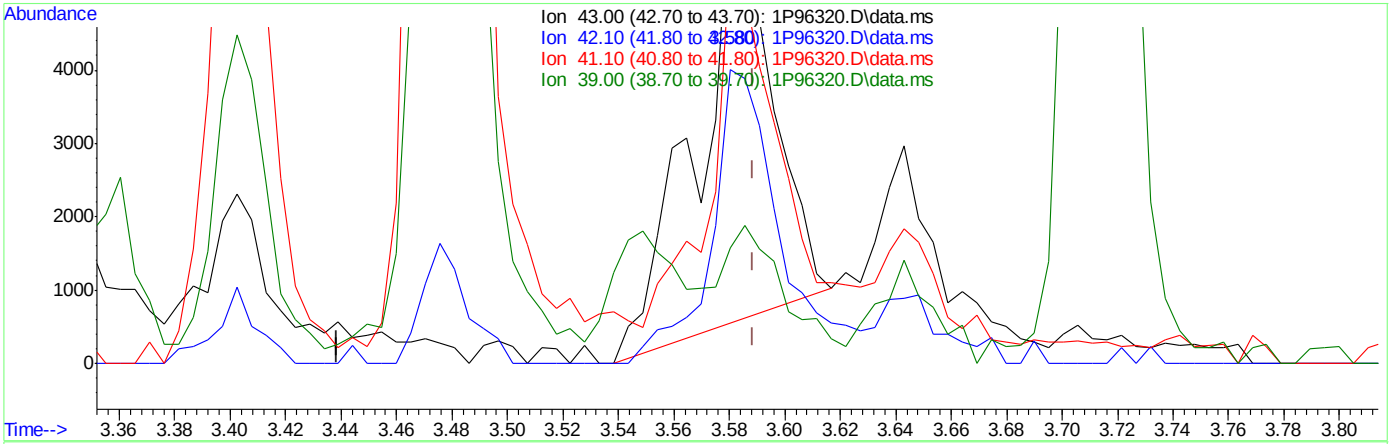
response 1471

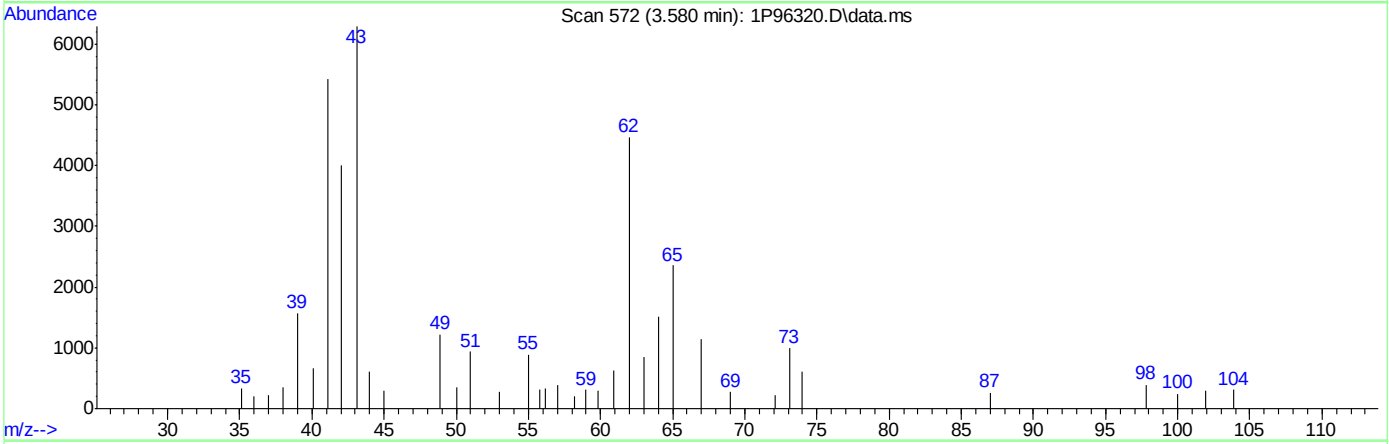
Ion	Exp%	Act%
126.00	100	100
91.00	526.60	544.44
65.00	61.30	72.50
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(50) Isobutyl alcohol

3.580min (-0.008) 15.40ug/L

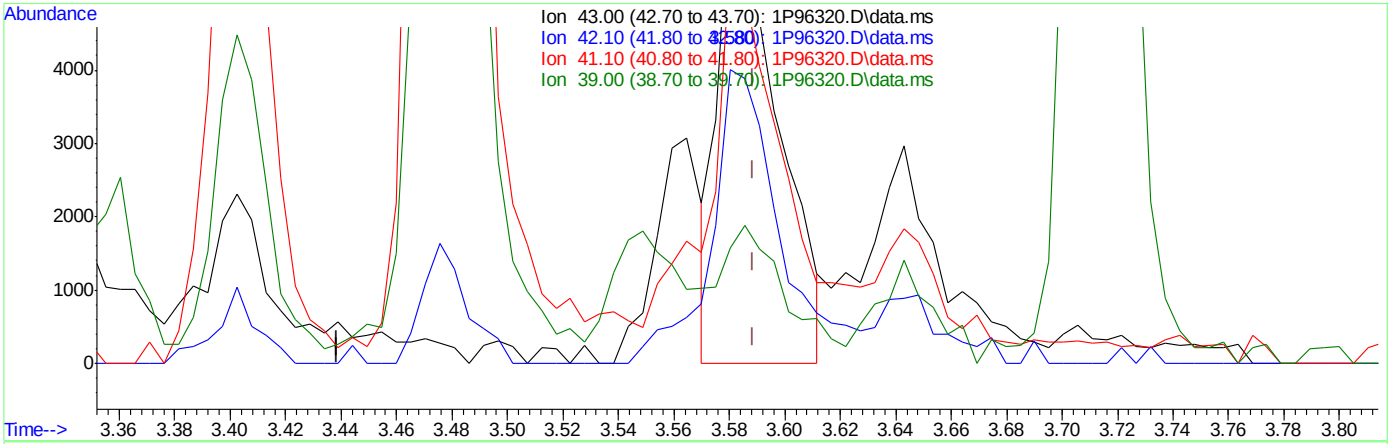
response 10571

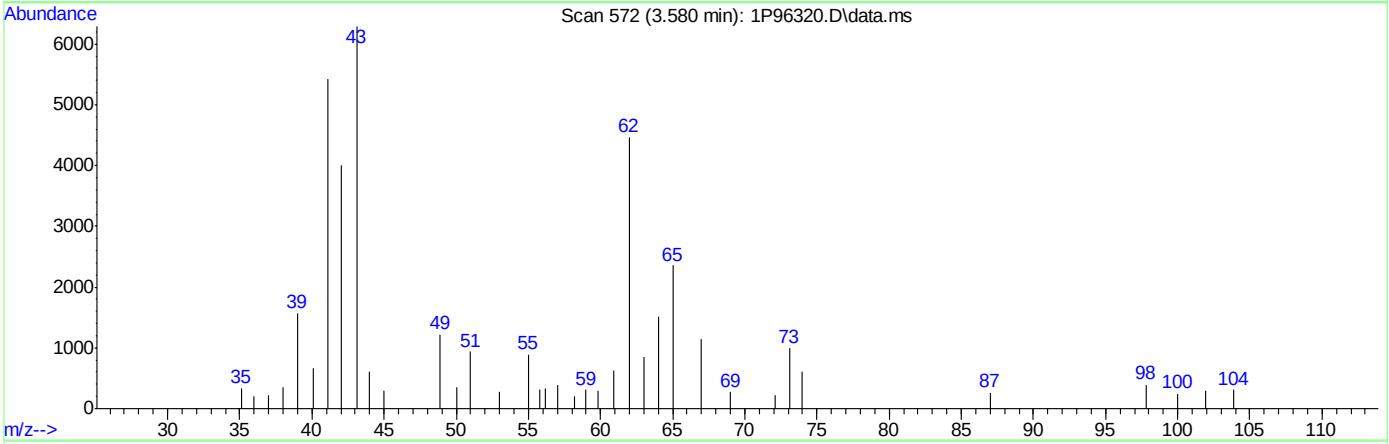
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	63.78
41.10	71.40	75.00
39.00	26.20	19.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96320.D
Acq On : 14 Dec 2022 10:15 am
Operator : courtnef
Sample : IC3646-1
Misc : MS52806,V1P3646,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 10:32:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96320.D\data.ms

(50) Isobutyl alcohol

3.580min (-0.008) 13.36ug/L m

response 9172

Ion	Exp%	Act%
43.00	100	100
42.10	59.60	63.78
41.10	71.40	86.13
39.00	26.20	25.00

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:05:28 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.717	96	984322	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.637	117	667734	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.326	152	288967	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.257	113	218215	53.16	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.32%			
49) 1,2-Dichloroethane-d4	3.545	65	300768	50.85	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.70%			
63) Toluene-d8	4.643	98	940915	48.02	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 96.04%			
86) 4-Bromofluorobenzene	6.494	174	234537	53.14	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.28%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.118	85	24246	6.96	ug/L	98
3) Chloromethane	1.243	50	24005	5.00	ug/L	99
4) 1,3-butadiene	1.311	39	13561	2.88	ug/L	90
5) Vinyl Chloride	1.301	62	19179	4.41	ug/L	98
6) Bromomethane	1.500	94	7616	14.54	ug/L	92
7) Chloroethane	1.578	64	7247	5.07	ug/L	96
8) Trichlorofluoromethane	1.677	101	26090	4.89	ug/L	94
9) Ethyl Ether	1.871	59	15274	3.65	ug/L	96
10) Ethanol	1.944	45	9040	62.24	ug/L	99
11) 1,2-Dichlorotrifluoroe...	1.970	67	21468	4.55	ug/L	97
12) 1,1-Dichloroethene	1.976	61	25403	4.51	ug/L	92
13) Freon 113	2.012	101	16673	5.16	ug/L	88
14) Carbon Disulfide	1.997	76	42842	4.00	ug/L	92
15) Iodomethane	2.054	142	8692	16.73	ug/L	88
16) Acrolein	2.148	56	32783	26.35	ug/L	99
17) Allyl chloride	2.242	41	26070	5.70	ug/L	94
18) Methylene Chloride	2.295	49	23520	4.13	ug/L	97
19) Acetone	2.310	43	65317	24.57	ug/L	99
20) Methyl acetate	2.389	43	115114	19.78	ug/L	95
21) trans-1,2-Dichloroethene	2.399	61	25343	4.69	ug/L	94
22) Hexane	2.462	56	13451	4.52	ug/L	92
23) Methyl Tert Butyl Ether	2.467	73	55917	4.39	ug/L	96
24) Tert Butyl Alcohol	2.499	59	54140	40.35	ug/L	95
25) Acetonitrile	2.546	41	45505	49.00	ug/L	97
26) Di-isopropyl ether	2.682	45	52095	3.95	ug/L	96
27) Chloroprene	2.724	53	81322	4.12	ug/L	99
28) 1,1-Dichloroethane	2.724	63	33509	4.82	ug/L	96
29) Acrylonitrile	2.724	52	52154	20.01	ug/L	98
30) ETBE	2.875	59	55916	4.35	ug/L	97
31) Vinyl acetate	2.854	43	191613	19.25	ug/L	99
32) cis-1,2-Dichloroethene	3.016	96	18569	4.85	ug/L	96
33) 2,2-Dichloropropane	3.079	77	28407	4.93	ug/L	95
34) Bromochloromethane	3.121	128	7955	5.14	ug/L	88
35) Cyclohexane	3.158	56	24905	3.96	ug/L #	84

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:05:28 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.163	83	33096	4.83	ug/L		96
37) Ethyl acetate	3.226	43	142896	20.00	ug/L		98
38) Tetrahydrofuran	3.257	42	10865	3.87	ug/L		93
40) Carbon Tetrachloride	3.262	117	24103m	5.83	ug/L		
41) 1,1,1-Trichloroethane	3.288	97	29733	5.21	ug/L		89
42) 2-Butanone	3.309	43	118062	27.87	ug/L		98
43) 1,1-Dichloropropene	3.362	75	24430	4.65	ug/L		98
44) tert-Butyl formate	3.403	59	91756	30.57	ug/L		97
45) Propionitrile	3.456	54	57870	51.00	ug/L		98
46) Methacrylonitrile	3.477	41	186104	45.68	ug/L		98
47) Benzene	3.487	78	77064	4.59	ug/L		88
48) TAME	3.566	73	53717	4.49	ug/L		94
50) Isobutyl alcohol	3.586	43	40349m	58.22	ug/L		
51) 1,2-Dichloroethane	3.586	62	26558	4.73	ug/L		96
52) Tert Amyl Alcohol	3.644	59	41721	39.87	ug/L		88
53) Trichloroethene	3.822	95	19243	4.86	ug/L		97
54) Methylcyclohexane	3.843	83	24757	4.39	ug/L		96
55) Dibromomethane	4.047	93	10279	4.58	ug/L		87
56) 1,2-Dichloropropane	4.104	63	17709	4.49	ug/L		94
57) Bromodichloromethane	4.141	83	21665	5.15	ug/L		98
58) Methyl methacrylate	4.230	41	17544	3.85	ug/L		96
59) 1,4-Dioxane	4.256	88	6594	72.56	ug/L		92
60) 2-Chloroethyl vinyl ether	4.476	63	78899	71.31	ug/L		89
61) cis-1,3-Dichloropropene	4.517	75	26686	4.81	ug/L		94
64) Toluene	4.680	91	79413	4.51	ug/L		98
65) 2-Nitropropane	4.768	41	35425	20.78	ug/L		93
66) 4-Methyl-2-pentanone	4.884	43	192029	25.58	ug/L		98
67) trans-1,3-Dichloropropene	4.915	75	24342	4.75	ug/L		92
68) Tetrachloroethene	4.931	166	17785	5.16	ug/L		94
69) Ethyl methacrylate	5.025	69	23750	4.29	ug/L		90
70) 1,1,2-Trichloroethane	5.014	83	14089	4.66	ug/L		96
71) Dibromochloromethane	5.140	129	13189	5.01	ug/L		92
72) 1,3-Dichloropropane	5.192	76	29037	4.32	ug/L		92
73) 1,2-Dibromoethane	5.292	107	15401	4.51	ug/L		95
74) 3,3-dimethyl-1-butanol	5.427	57	226190	200.44	ug/L		99
75) 2-hexanone	5.427	43	185742	22.23	ug/L		85
76) 1-Chlorohexane	5.647	91	22589m	4.22	ug/L		
77) Ethylbenzene	5.679	91	81788	4.43	ug/L		97
78) Chlorobenzene	5.652	112	44828	4.51	ug/L		98
79) 1,1,1,2-Tetrachloroethane	5.694	131	15237	5.12	ug/L		99
80) m,p-Xylene	5.778	91	121388	8.50	ug/L		97
81) o-Xylene	6.076	91	56766	4.03	ug/L		99
82) Styrene	6.107	104	37856	3.83	ug/L		98
83) Bromoform	6.113	173	7544	5.84	ug/L		89
84) Isopropylbenzene	6.306	105	62097	3.98	ug/L		98
87) cis-1,4-Dichloro-2-butene	6.521	53	8352	4.97	ug/L	#	88
88) n-Propylbenzene	6.604	91	78164	3.95	ug/L		98
89) Bromobenzene	6.568	156	17410	4.88	ug/L	#	80
90) 1,1,2,2-Tetrachloroethane	6.625	83	23301	4.19	ug/L		98
91) 1,3,5-Trimethylbenzene	6.756	105	51037	3.87	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:05:28 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

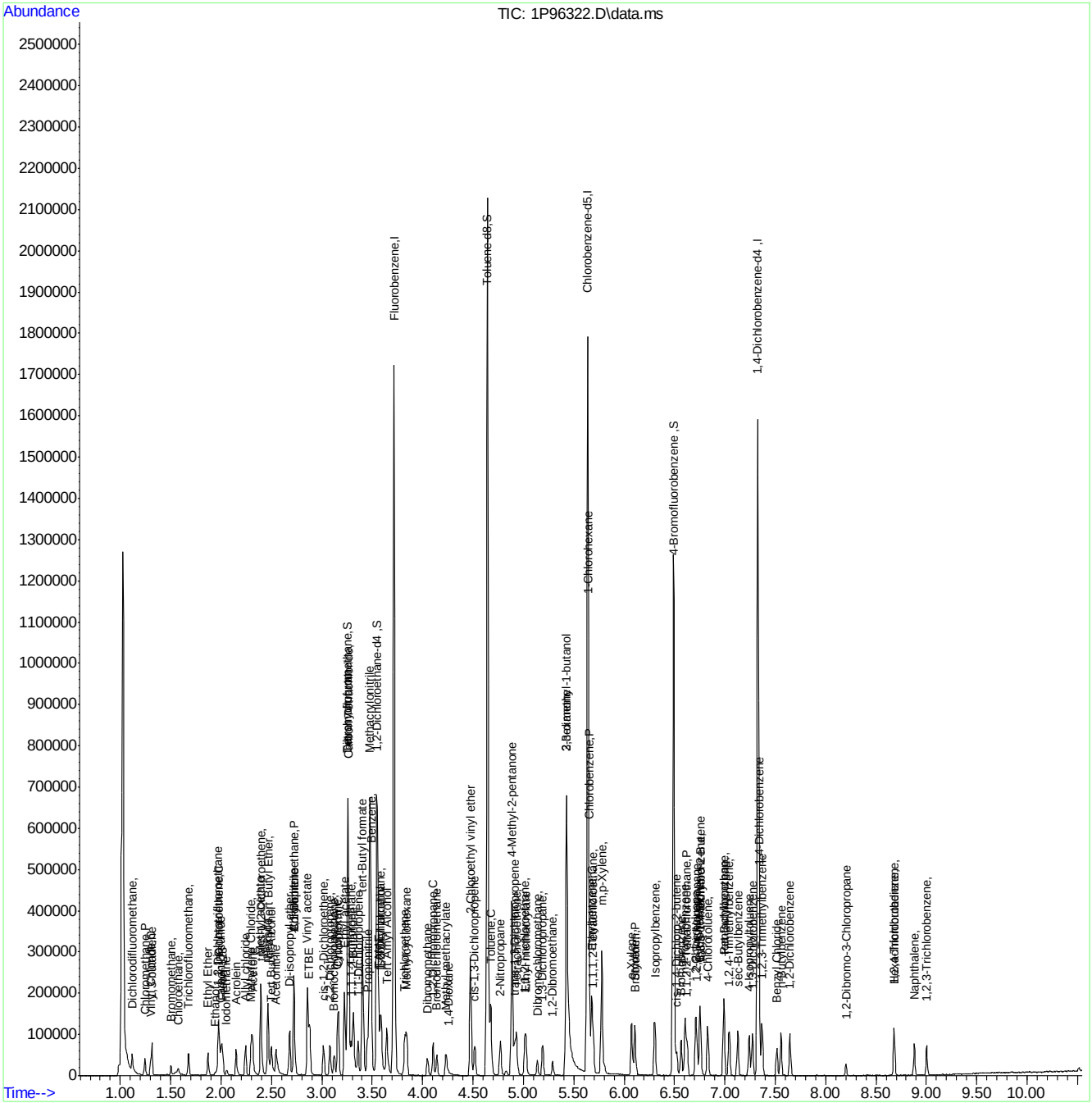
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.709	91	47429	4.03	ug/L		99
93)	trans-1,4-Dichloro-2-B...	6.756	53	8219	4.12	ug/L		97
94)	1,2,3-Trichloropropane	6.719	110	9025	4.61	ug/L		95
95)	Cyclohexanone	6.751	55	6140	15.97	ug/L		85
96)	4-Chlorotoluene	6.829	91	49633	4.03	ug/L		98
97)	tert-Butylbenzene	6.991	91	27928	3.74	ug/L		97
99)	1,2,4-Trimethylbenzene	7.044	105	46149	3.60	ug/L		94
100)	Pentachloroethane	6.991	167	9108	6.23	ug/L	#	40
101)	sec-Butylbenzene	7.127	105	53305	3.70	ug/L		98
102)	4-Isopropyltoluene	7.242	119	42023	3.49	ug/L		98
103)	1,3-Dichlorobenzene	7.274	146	30307	4.64	ug/L		96
104)	1,2,3-Trimethylbenzene	7.368	105	48930	3.85	ug/L		99
105)	1,4-Dichlorobenzene	7.342	146	31437	4.64	ug/L		90
106)	n-Butylbenzene	7.556	92	21873	3.49	ug/L		99
107)	Benzyl Chloride	7.514	126	6771	4.73	ug/L	#	82
108)	1,2-Dichlorobenzene	7.645	146	28277	4.61	ug/L		97
109)	1,2-Dibromo-3-Chloropr...	8.205	75	5171	4.17	ug/L		87
110)	Hexachlorobutadiene	8.681	225	6244	5.53	ug/L		96
111)	1,2,4-Trichlorobenzene	8.681	180	12273	3.68	ug/L		98
112)	Naphthalene	8.879	128	37881	2.58	ug/L		98
113)	1,2,3-Trichlorobenzene	9.005	180	13153	4.26	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:05:28 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3646-IC3646
Lab FileID: 1P96322.D
Injection Time: 12/14/22 10:47

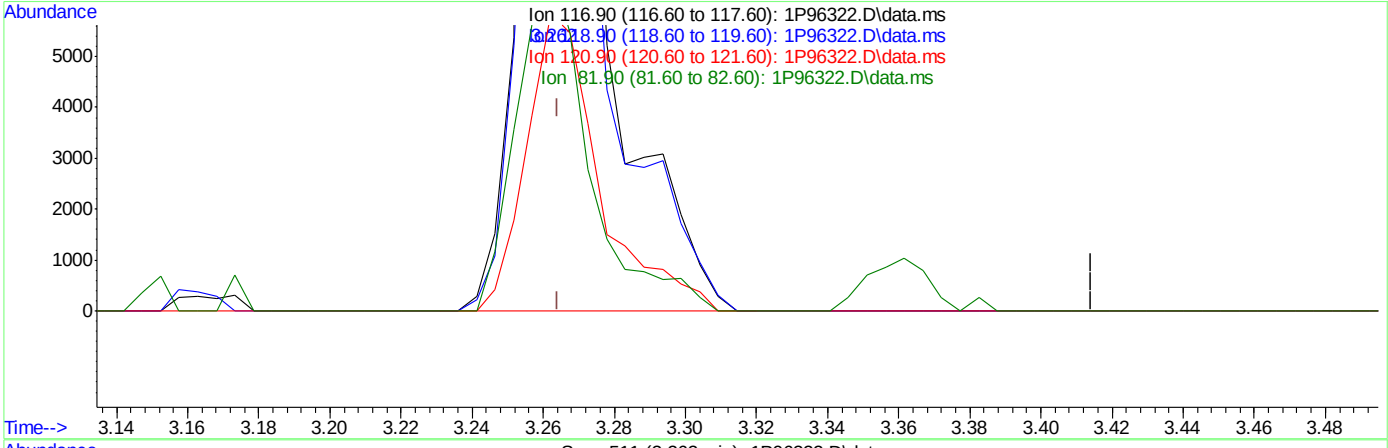
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

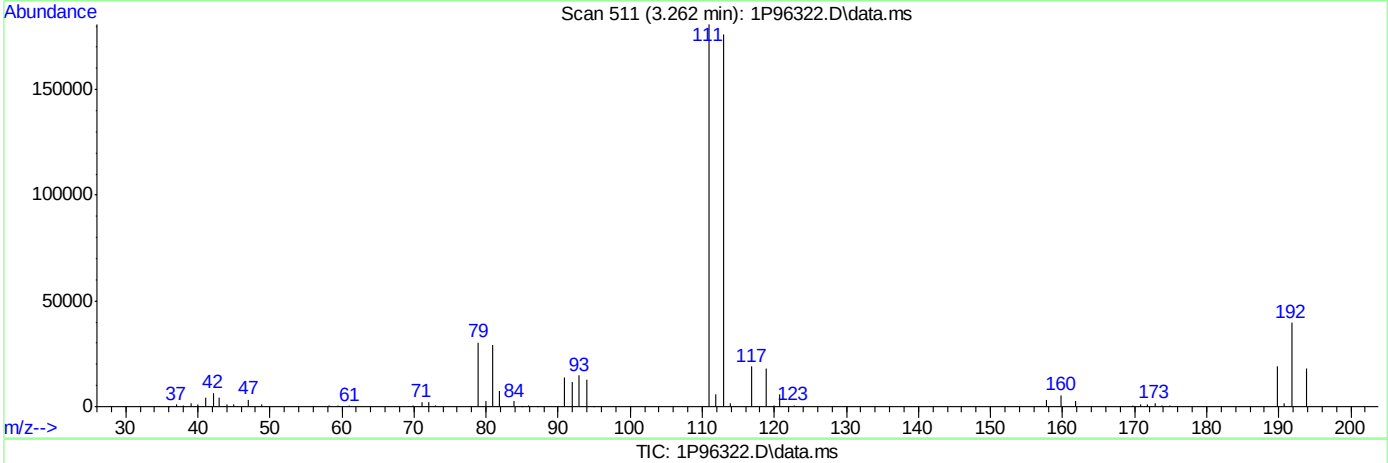
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(40) Carbon Tetrachloride ( )

3.262min (-0.002) 6.52ug/L

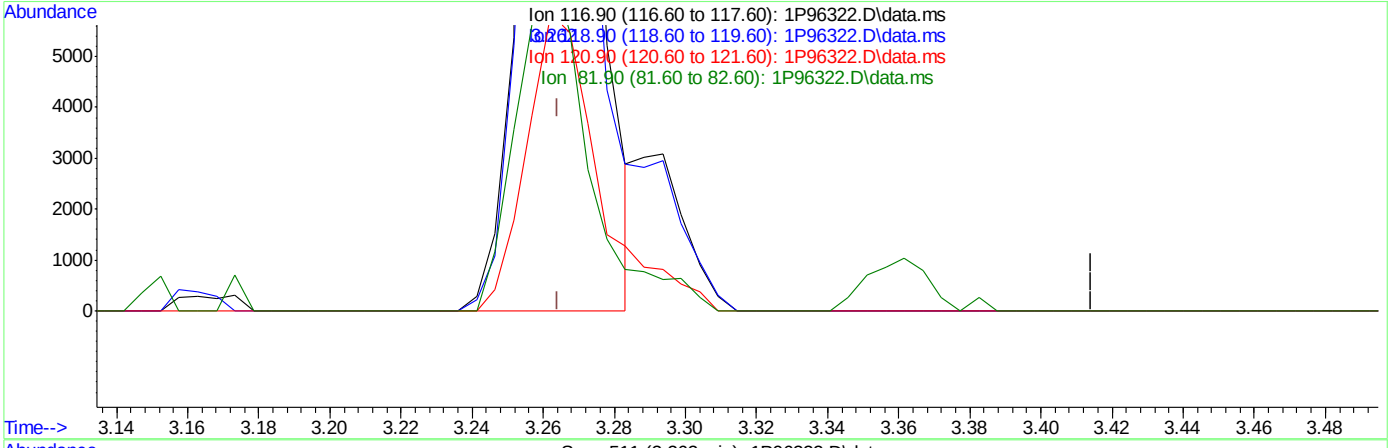
response 26990

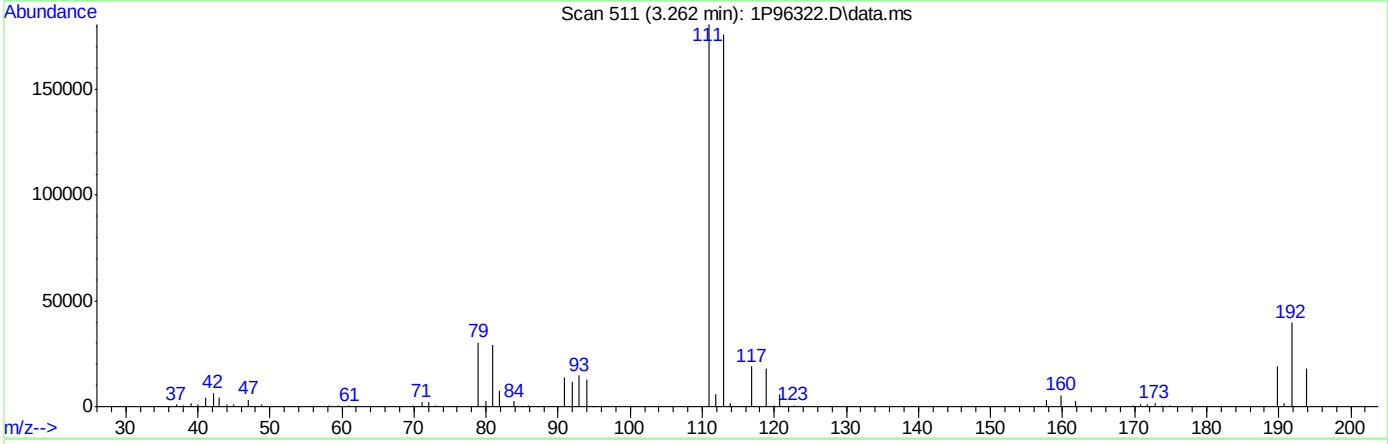
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.04
120.90	31.00	30.98
81.90	30.20	40.21

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(40) Carbon Tetrachloride ( )

3.262min (-0.002) 5.83ug/L m

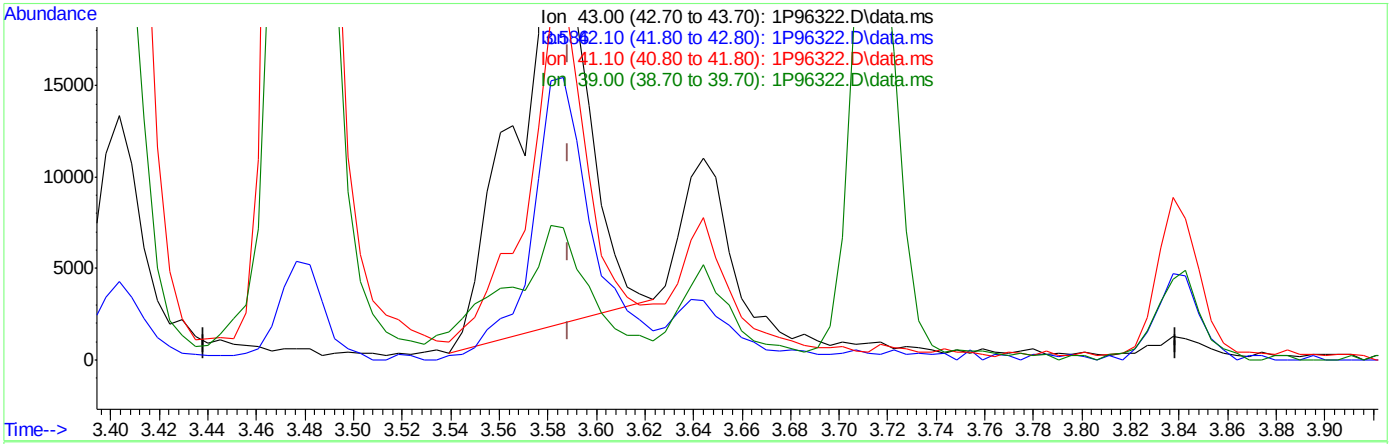
response 24103

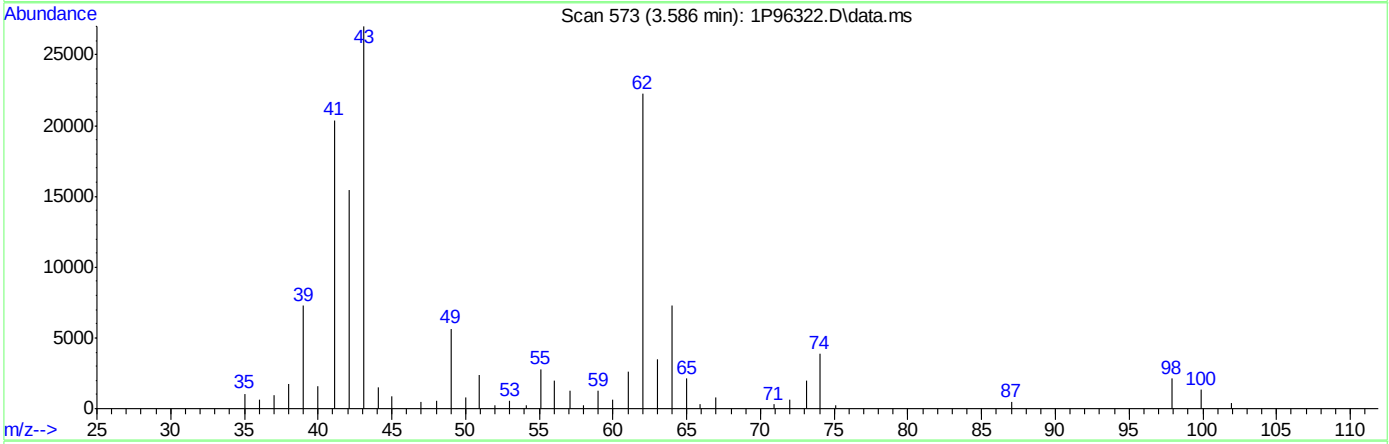
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.04
120.90	31.00	30.98
81.90	30.20	40.21

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(50) Isobutyl alcohol

3.586min (-0.002) 68.27ug/L

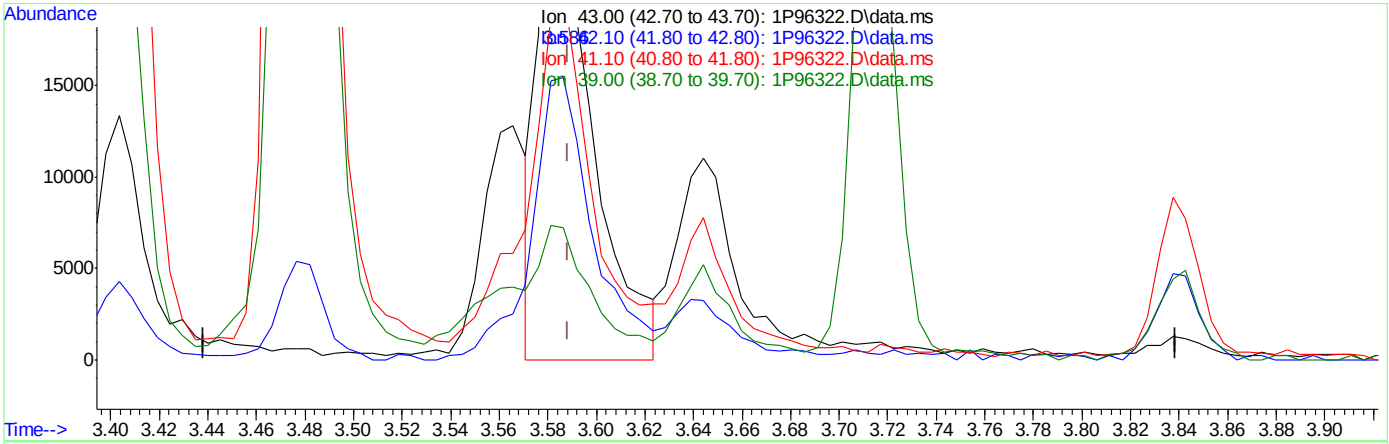
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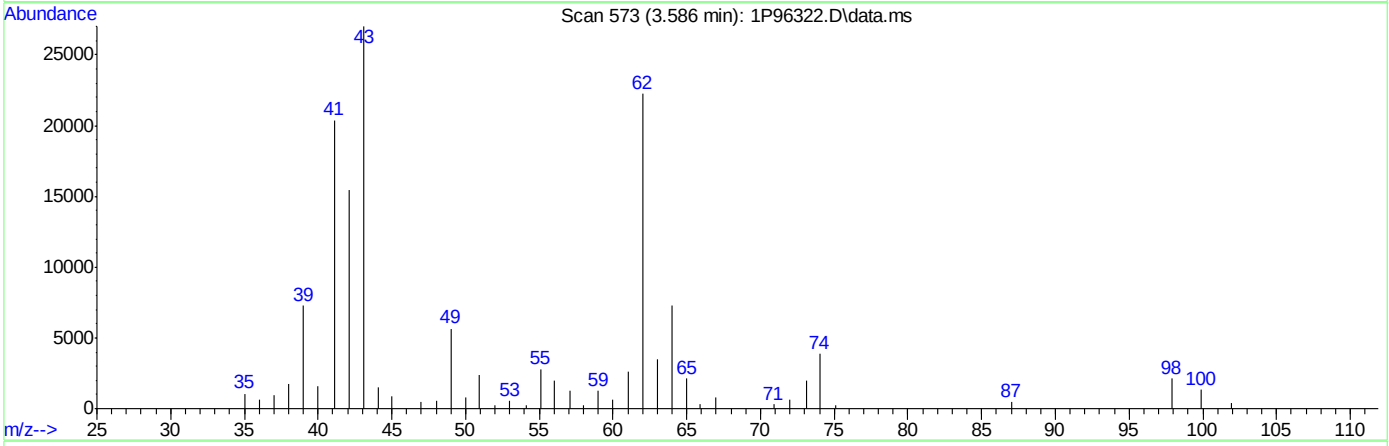
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	57.12
41.10	71.40	72.93
39.00	26.20	23.30

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(50) Isobutyl alcohol

3.586min (-0.002) 58.22ug/L m

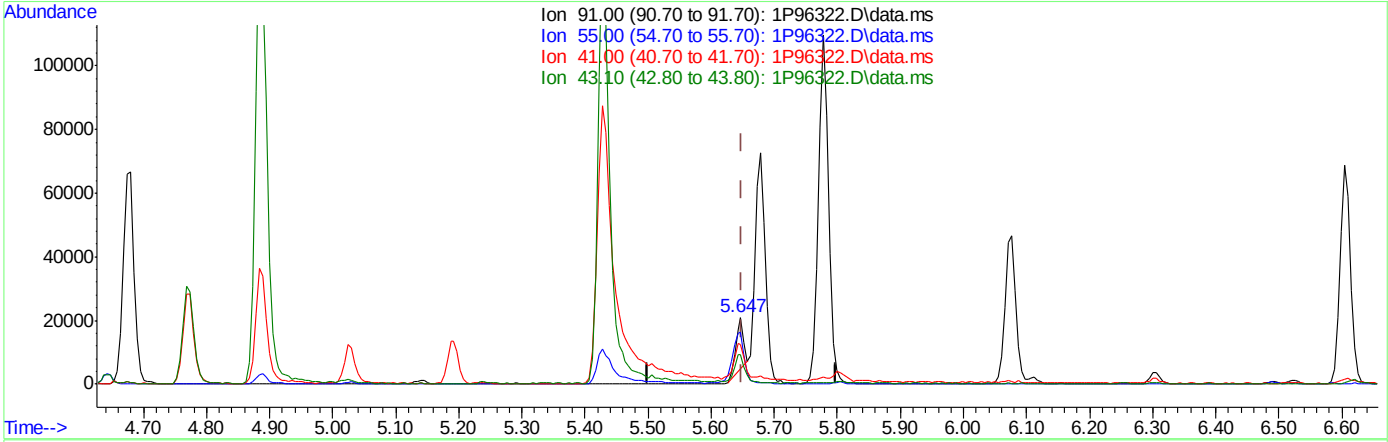
response 40349

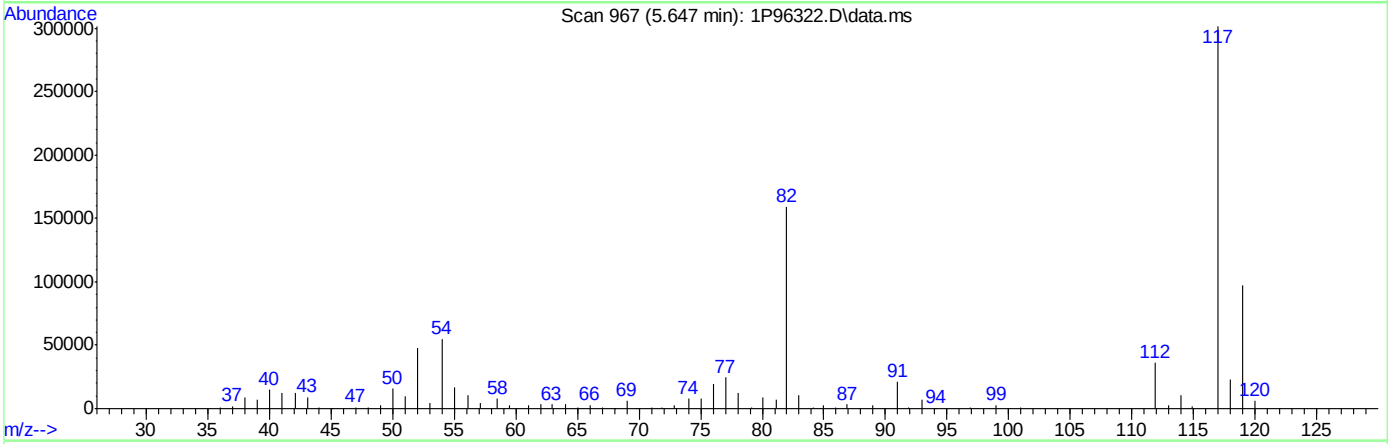
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	57.20
41.10	71.40	75.39
39.00	26.20	26.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(76) 1-Chlorohexane

5.647min (-0.002) 2.82ug/L

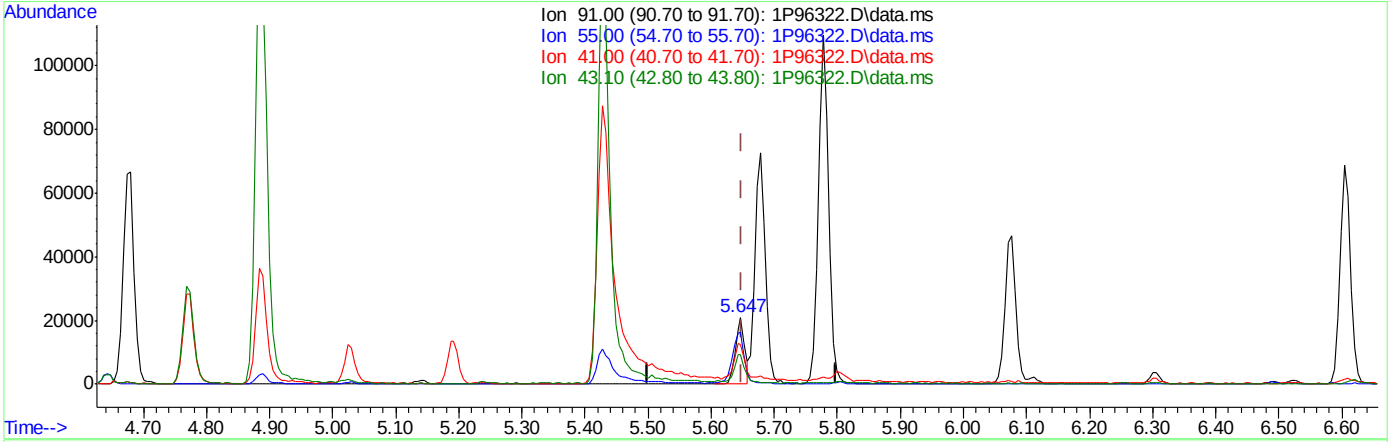
response 15117

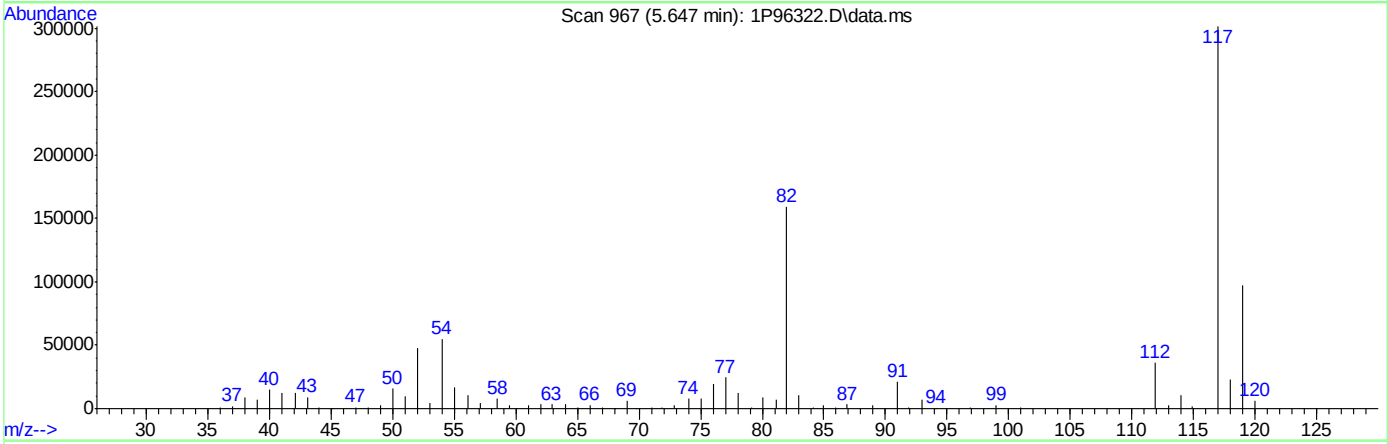
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	66.16
41.00	62.10	48.78
43.10	50.00	39.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96322.D
Acq On : 14 Dec 2022 10:47 am
Operator : courtnef
Sample : IC3646-2
Misc : MS52806,V1P3646,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 14 11:04:19 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96322.D\data.ms

(76) 1-Chlorohexane

5.647min (-0.002) 4.22ug/L m

response 22589

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	78.27
41.00	62.10	59.11
43.10	50.00	44.26

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:38:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.719	96	965994	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.639	117	665836	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.328	152	291654	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.259	113	222959	55.35	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 110.70%			
49) 1,2-Dichloroethane-d4	3.547	65	297085	51.18	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.36%			
63) Toluene-d8	4.645	98	935885	47.90	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.80%			
86) 4-Bromofluorobenzene	6.491	174	236397	53.06	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.120	85	48759	14.27	ug/L	99
3) Chloromethane	1.246	50	47337	10.01	ug/L	93
4) 1,3-butadiene	1.319	39	31777	6.88	ug/L	97
5) Vinyl Chloride	1.303	62	40066	9.39	ug/L	98
6) Bromomethane	1.507	94	13892	27.84	ug/L	94
7) Chloroethane	1.580	64	14916	10.79	ug/L	95
8) Trichlorofluoromethane	1.680	101	49897	9.73	ug/L	93
9) Ethyl Ether	1.873	59	30784	7.61	ug/L	98
10) Ethanol	1.952	45	23087	166.10	ug/L	96
11) 1,2-Dichlorotrifluoroe...	1.973	67	41560	8.98	ug/L	98
12) 1,1-Dichloroethene	1.983	61	52934	9.57	ug/L	92
13) Freon 113	2.014	101	32554	10.27	ug/L	96
14) Carbon Disulfide	1.999	76	89216	8.47	ug/L	97
15) Iodomethane	2.061	142	20298	39.81	ug/L	98
16) Acrolein	2.150	56	60351	49.43	ug/L	100
17) Allyl chloride	2.244	41	58958	13.13	ug/L	97
18) Methylene Chloride	2.302	49	46917	8.40	ug/L	93
19) Acetone	2.312	43	115791	44.74	ug/L	98
20) Methyl acetate	2.396	43	247072	43.26	ug/L	95
21) trans-1,2-Dichloroethene	2.401	61	53728	10.14	ug/L	92
22) Hexane	2.464	56	26180	8.97	ug/L	96
23) Methyl Tert Butyl Ether	2.469	73	126954	10.15	ug/L	98
24) Tert Butyl Alcohol	2.501	59	115545	88.23	ug/L	100
25) Acetonitrile	2.548	41	100450	113.18	ug/L	98
26) Di-isopropyl ether	2.684	45	114702	8.86	ug/L	99
27) Chloroprene	2.726	53	174171	8.99	ug/L	97
28) 1,1-Dichloroethane	2.726	63	70881	10.39	ug/L	99
29) Acrylonitrile	2.726	52	110610	43.24	ug/L	99
30) ETBE	2.877	59	119614	9.48	ug/L	96
31) Vinyl acetate	2.856	43	414441	42.42	ug/L	100
32) cis-1,2-Dichloroethene	3.019	96	41224	10.96	ug/L	96
33) 2,2-Dichloropropane	3.081	77	62910	11.12	ug/L	96
34) Bromochloromethane	3.123	128	16612	10.94	ug/L	88
35) Cyclohexane	3.160	56	55220	8.96	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:38:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	3.165	83	71424	10.63	ug/L	97
37) Ethyl acetate	3.223	43	303462	43.36	ug/L	100
38) Tetrahydrofuran	3.259	42	25532	9.31	ug/L	92
40) Carbon Tetrachloride	3.264	117	50310m	12.39	ug/L	
41) 1,1,1-Trichloroethane	3.291	97	63293	11.30	ug/L	96
42) 2-Butanone	3.311	43	207112	49.99	ug/L	96
43) 1,1-Dichloropropene	3.364	75	53426	10.37	ug/L	97
44) tert-Butyl formate	3.406	59	171526	58.24	ug/L	95
45) Propionitrile	3.458	54	127114	114.15	ug/L	95
46) Methacrylonitrile	3.479	41	419039	104.81	ug/L	99
47) Benzene	3.489	78	164571	9.98	ug/L	89
48) TAME	3.562	73	115268	9.82	ug/L	95
50) Isobutyl alcohol	3.583	43	93231m	137.09	ug/L	
51) 1,2-Dichloroethane	3.589	62	57252	10.40	ug/L	96
52) Tert Amyl Alcohol	3.646	59	89831	87.48	ug/L	95
53) Trichloroethene	3.824	95	39546	10.17	ug/L	90
54) Methylcyclohexane	3.845	83	51890	9.37	ug/L	98
55) Dibromomethane	4.049	93	21990	9.99	ug/L	81
56) 1,2-Dichloropropane	4.106	63	38476	9.93	ug/L	95
57) Bromodichloromethane	4.143	83	46231	11.20	ug/L	98
58) Methyl methacrylate	4.232	41	40632	9.09	ug/L	88
59) 1,4-Dioxane	4.258	88	15365	173.75	ug/L	94
60) 2-Chloroethyl vinyl ether	4.473	63	144627	129.65	ug/L	92
61) cis-1,3-Dichloropropene	4.520	75	59704	10.96	ug/L	88
64) Toluene	4.676	91	164253	9.35	ug/L	98
65) 2-Nitropropane	4.771	41	76805	44.67	ug/L	95
66) 4-Methyl-2-pentanone	4.886	43	341671	45.74	ug/L	98
67) trans-1,3-Dichloropropene	4.917	75	51946	10.16	ug/L	92
68) Tetrachloroethene	4.933	166	37730	10.98	ug/L	97
69) Ethyl methacrylate	5.027	69	58400	10.49	ug/L	88
70) 1,1,2-Trichloroethane	5.016	83	28051	9.30	ug/L	98
71) Dibromochloromethane	5.142	129	31214	11.67	ug/L	96
72) 1,3-Dichloropropane	5.194	76	62403	9.32	ug/L	92
73) 1,2-Dibromoethane	5.294	107	34003	9.99	ug/L	95
74) 3,3-dimethyl-1-butanol	5.424	57	441121	391.38	ug/L	99
75) 2-hexanone	5.430	43	336141	40.50	ug/L	85
76) 1-Chlorohexane	5.644	91	48270m	9.03	ug/L	
77) Ethylbenzene	5.681	91	175174	9.52	ug/L	99
78) Chlorobenzene	5.649	112	94211	9.51	ug/L	98
79) 1,1,1,2-Tetrachloroethane	5.691	131	33594	11.32	ug/L	94
80) m,p-Xylene	5.780	91	264389	18.57	ug/L	99
81) o-Xylene	6.073	91	125196	8.90	ug/L	99
82) Styrene	6.104	104	88751	9.00	ug/L	98
83) Bromoform	6.115	173	18618	13.91	ug/L	95
84) Isopropylbenzene	6.303	105	142946	9.19	ug/L	96
87) cis-1,4-Dichloro-2-butene	6.523	53	19541	11.51	ug/L	88
88) n-Propylbenzene	6.606	91	173108	8.66	ug/L	100
89) Bromobenzene	6.565	156	36171	10.05	ug/L	93
90) 1,1,2,2-Tetrachloroethane	6.627	83	50128	8.93	ug/L	98
91) 1,3,5-Trimethylbenzene	6.753	105	117135	8.80	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:38:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

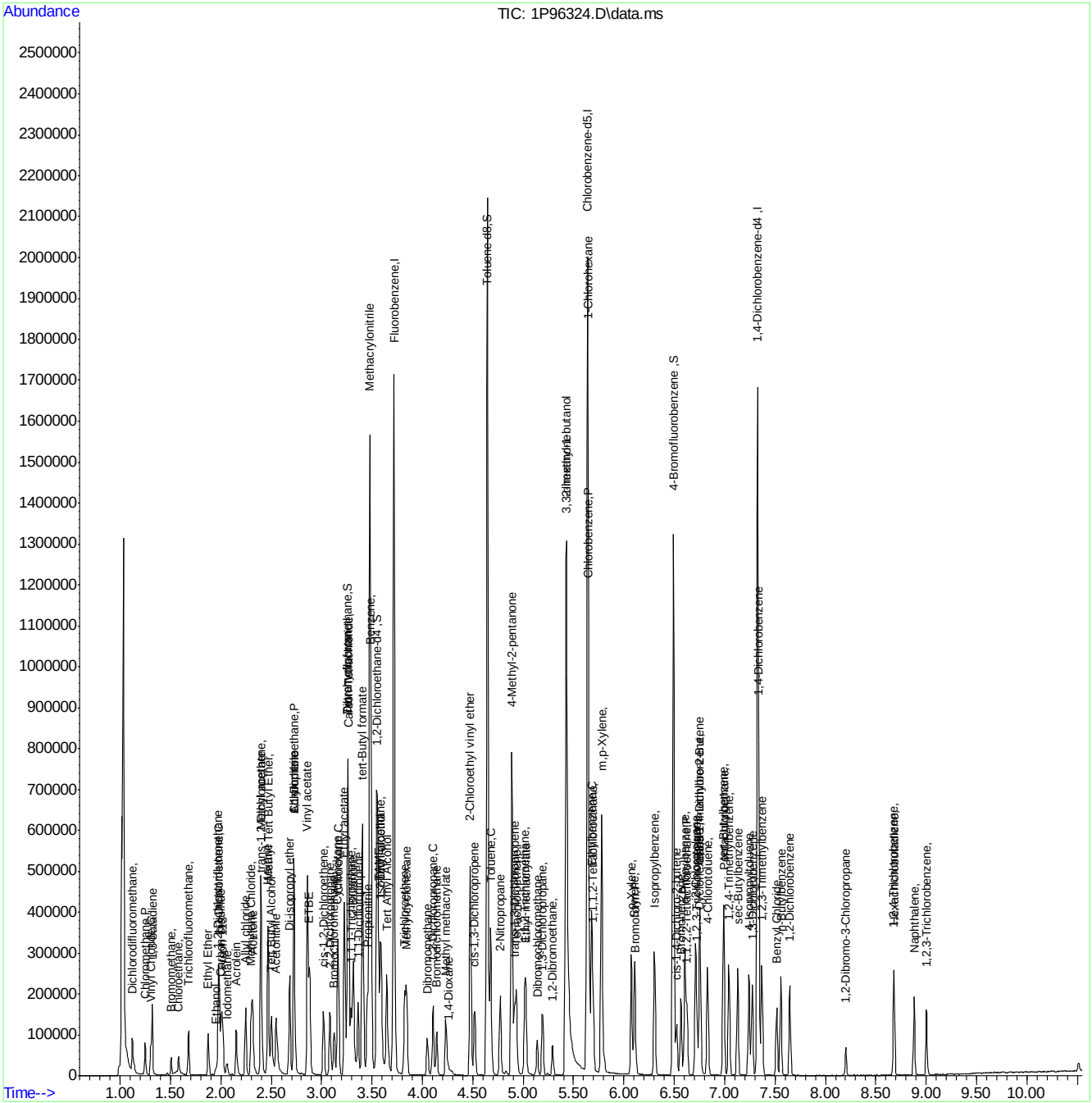
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	6.711	91	103677	8.73	ug/L		94
93) trans-1,4-Dichloro-2-B...	6.753	53	17854	8.86	ug/L		96
94) 1,2,3-Trichloropropane	6.721	110	18282	9.26	ug/L		91
95) Cyclohexanone	6.748	55	13672	35.29	ug/L		86
96) 4-Chlorotoluene	6.831	91	115192	9.26	ug/L		97
97) tert-Butylbenzene	6.988	91	64334	8.54	ug/L		99
99) 1,2,4-Trimethylbenzene	7.041	105	109607	8.47	ug/L		96
100) Pentachloroethane	6.993	167	20532	13.67	ug/L	#	47
101) sec-Butylbenzene	7.129	105	123917	8.52	ug/L		99
102) 4-Isopropyltoluene	7.239	119	104079	8.56	ug/L		98
103) 1,3-Dichlorobenzene	7.276	146	65086	9.86	ug/L		98
104) 1,2,3-Trimethylbenzene	7.370	105	107930	8.41	ug/L		98
105) 1,4-Dichlorobenzene	7.339	146	66645	9.75	ug/L		93
106) n-Butylbenzene	7.558	92	51946	8.21	ug/L		99
107) Benzyl Chloride	7.516	126	16093	10.83	ug/L	#	92
108) 1,2-Dichlorobenzene	7.647	146	60064	9.70	ug/L		98
109) 1,2-Dibromo-3-Chloropr...	8.202	75	11841	9.46	ug/L		97
110) Hexachlorobutadiene	8.683	225	14922	13.09	ug/L		97
111) 1,2,4-Trichlorobenzene	8.678	180	30233	8.97	ug/L		97
112) Naphthalene	8.882	128	92329	6.22	ug/L		99
113) 1,2,3-Trichlorobenzene	9.007	180	30895	9.91	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:38:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3646-IC3646
Lab FileID: 1P96324.D
Injection Time: 12/14/22 11:19

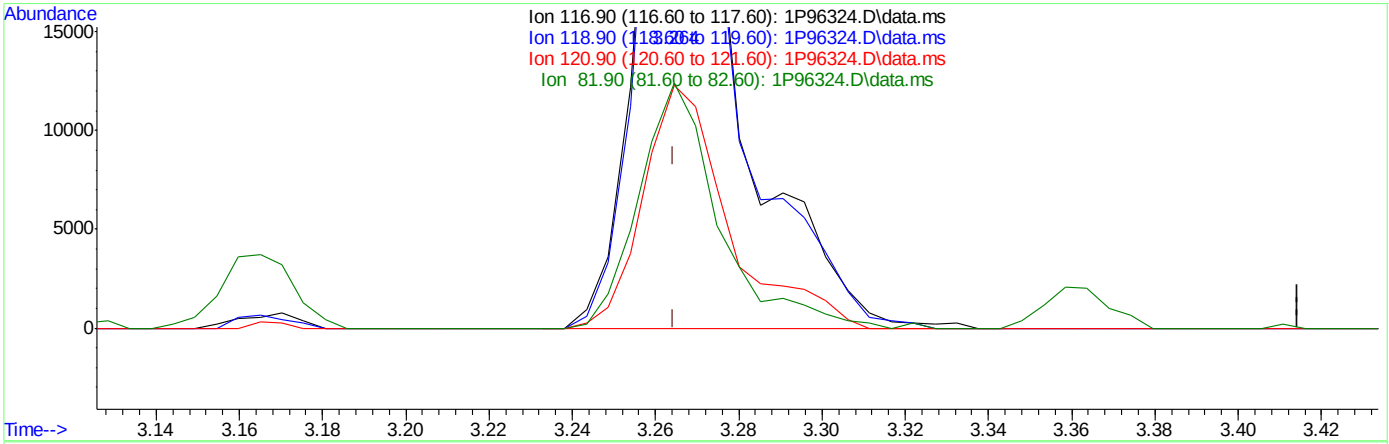
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

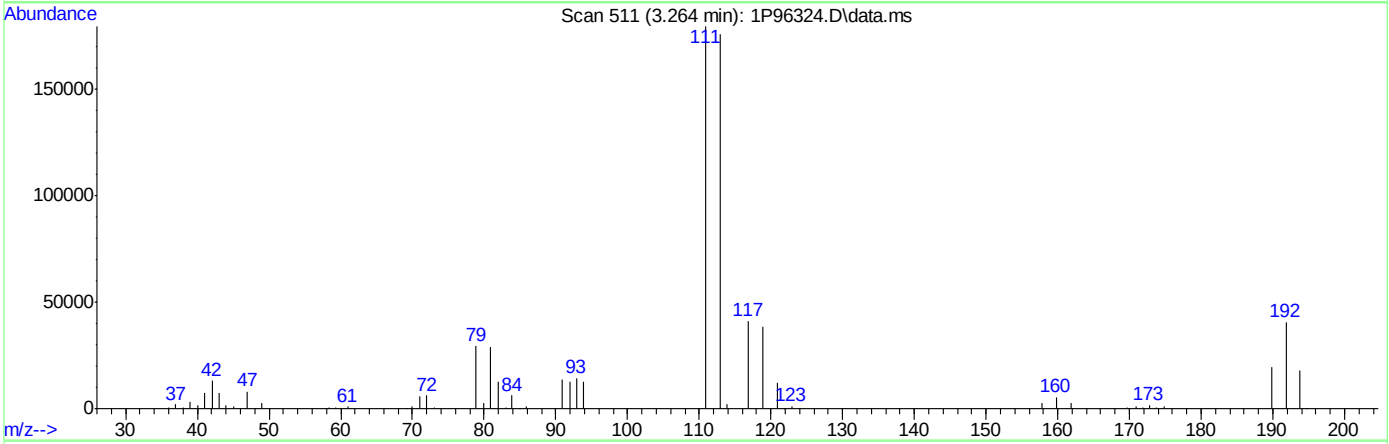
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.58	Poor instrument integration
1-Chlorohexane	544-10-5		5.64	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(40) Carbon Tetrachloride ( )

3.264min (0.000) 13.99ug/L

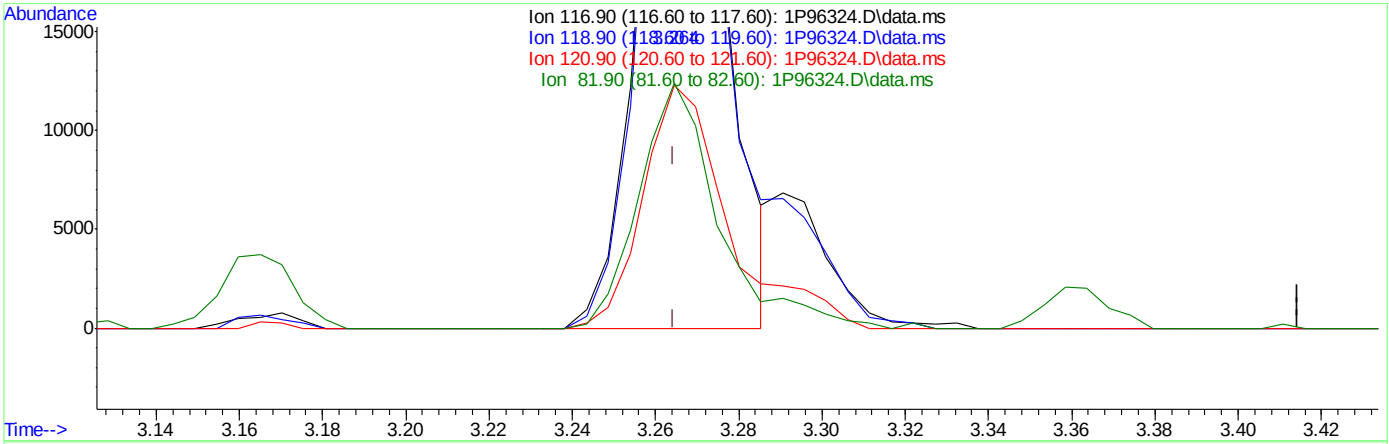
response 56777

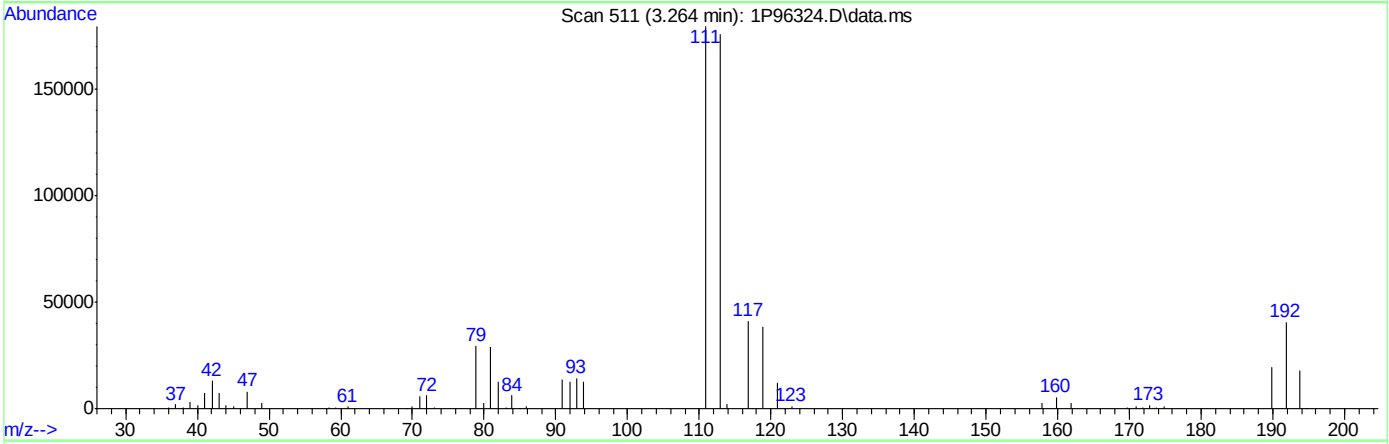
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	93.11
120.90	31.00	29.85
81.90	30.20	30.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(40) Carbon Tetrachloride ( )

3.264min (0.000) 12.39ug/L m

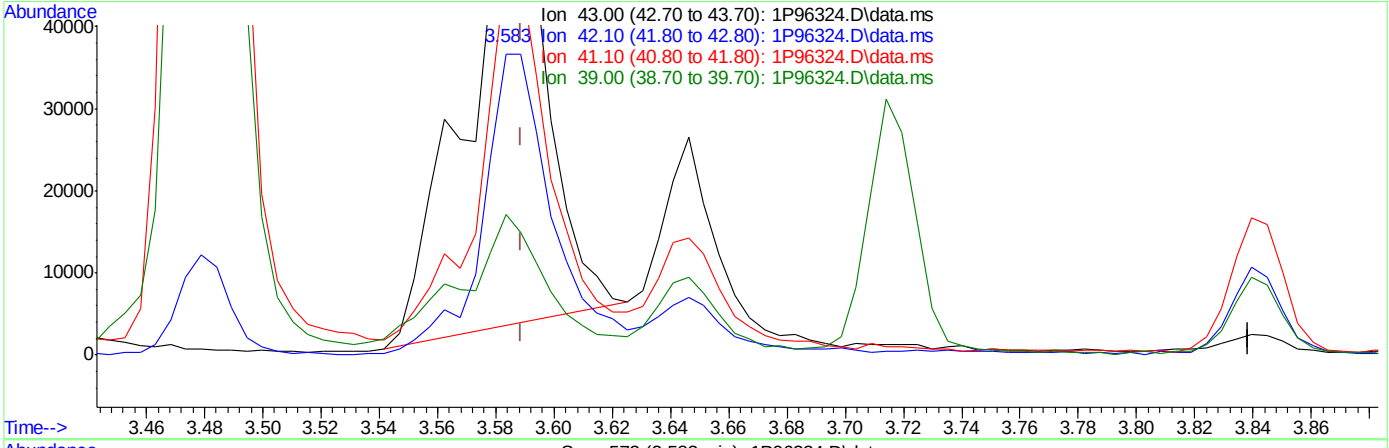
response 50310

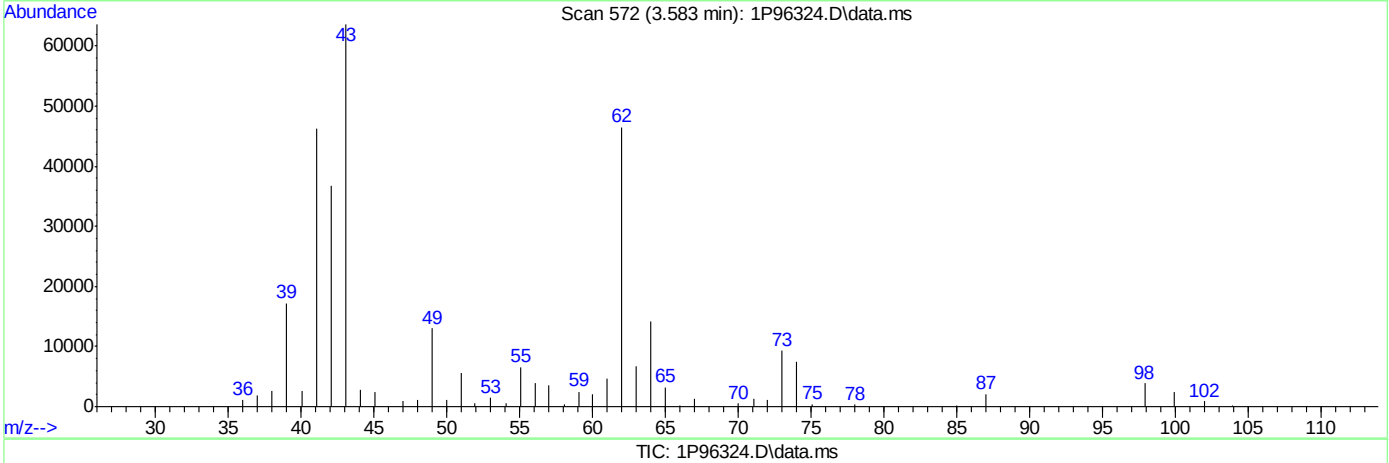
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	93.11
120.90	31.00	29.85
81.90	30.20	30.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(50) Isobutyl alcohol

3.583min (-0.005) 162.97ug/L

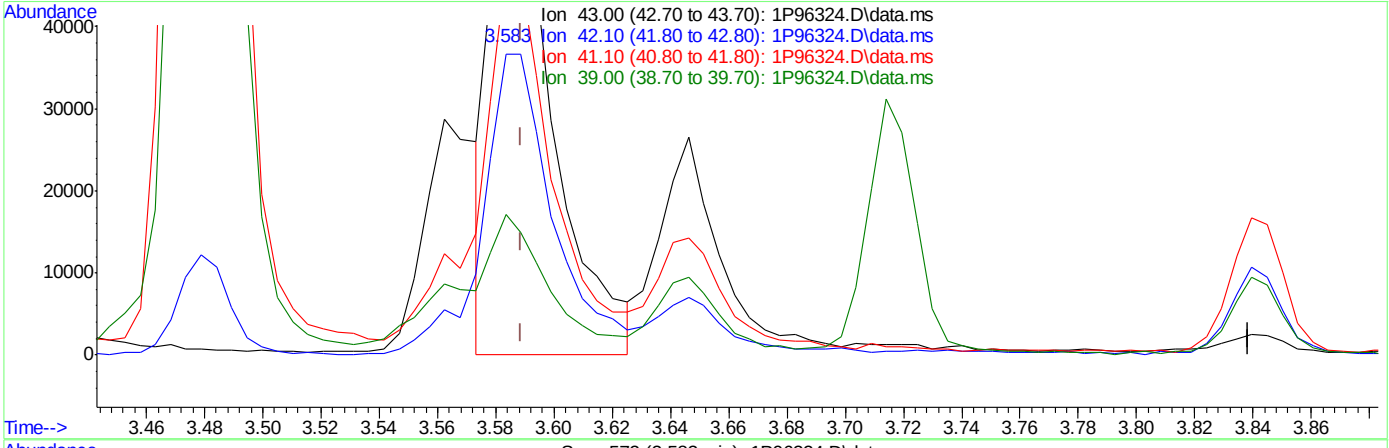
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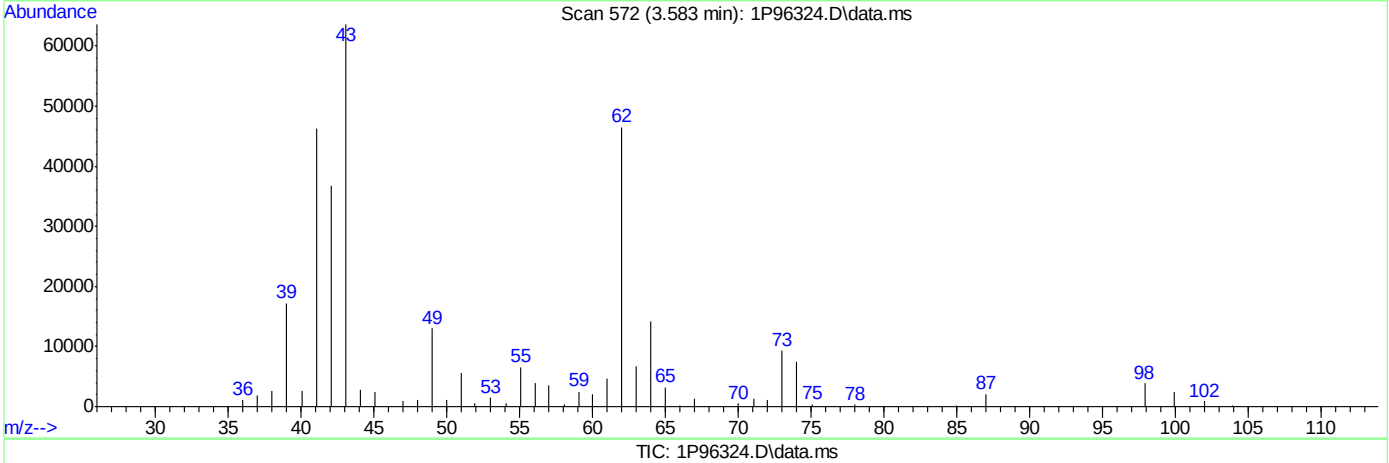
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	57.93
41.10	71.40	70.72
39.00	26.20	24.23

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(50) Isobutyl alcohol

3.583min (-0.005) 137.09ug/L m

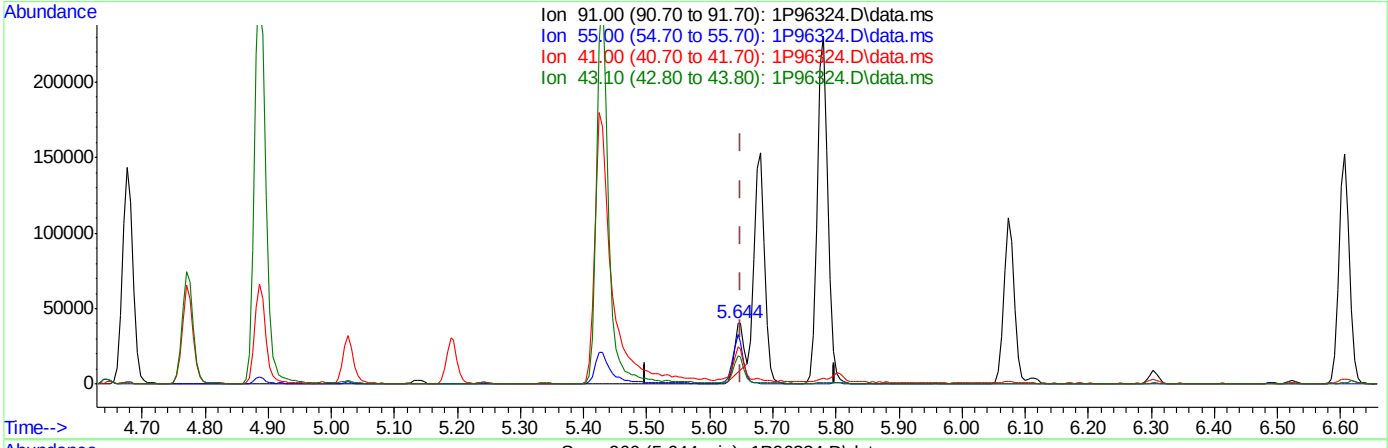
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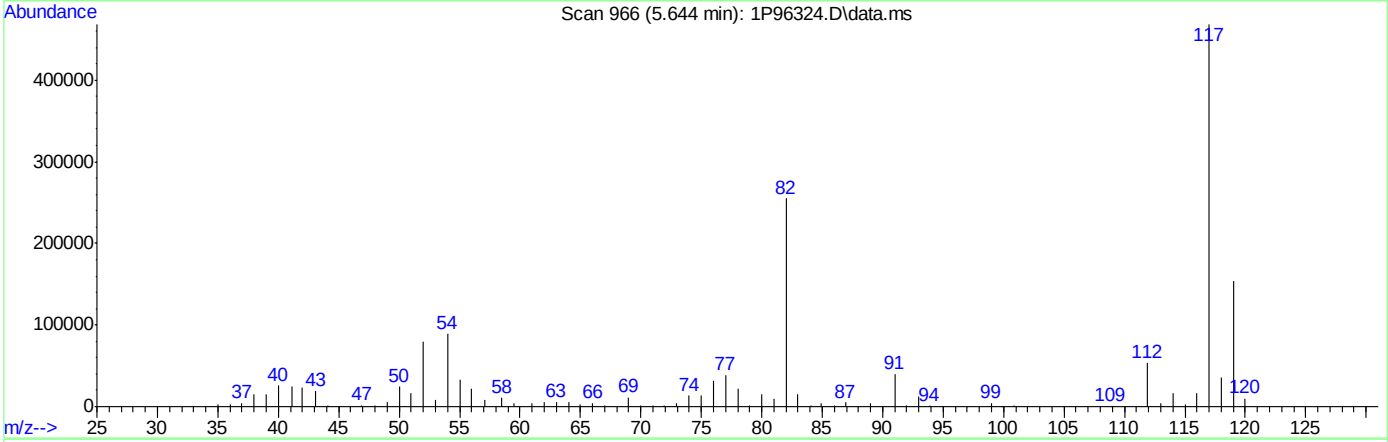
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	57.65
41.10	71.40	72.80
39.00	26.20	26.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(76) 1-Chlorohexane

5.644min (-0.005) 6.27ug/L

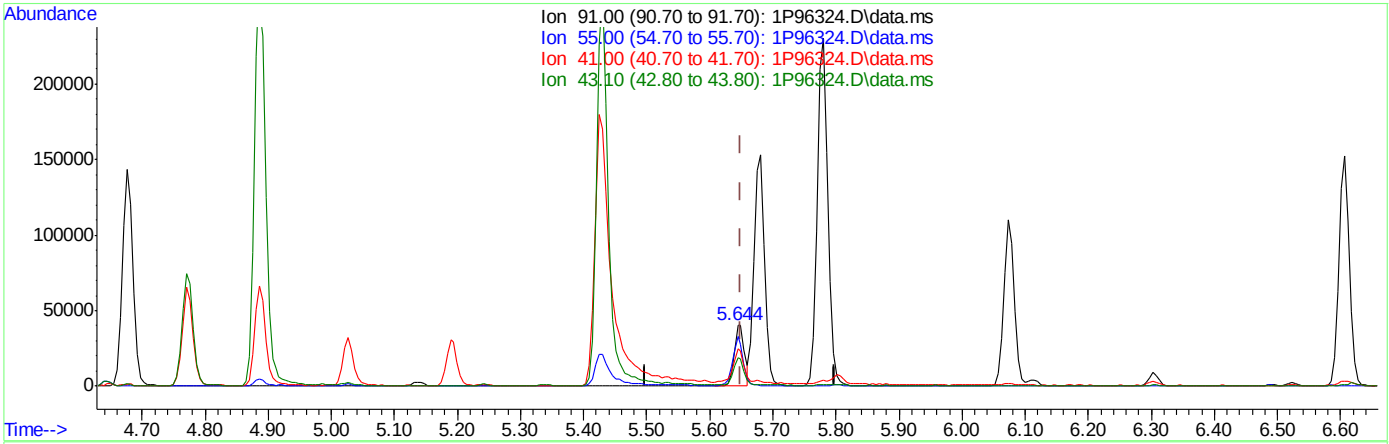
response 33534

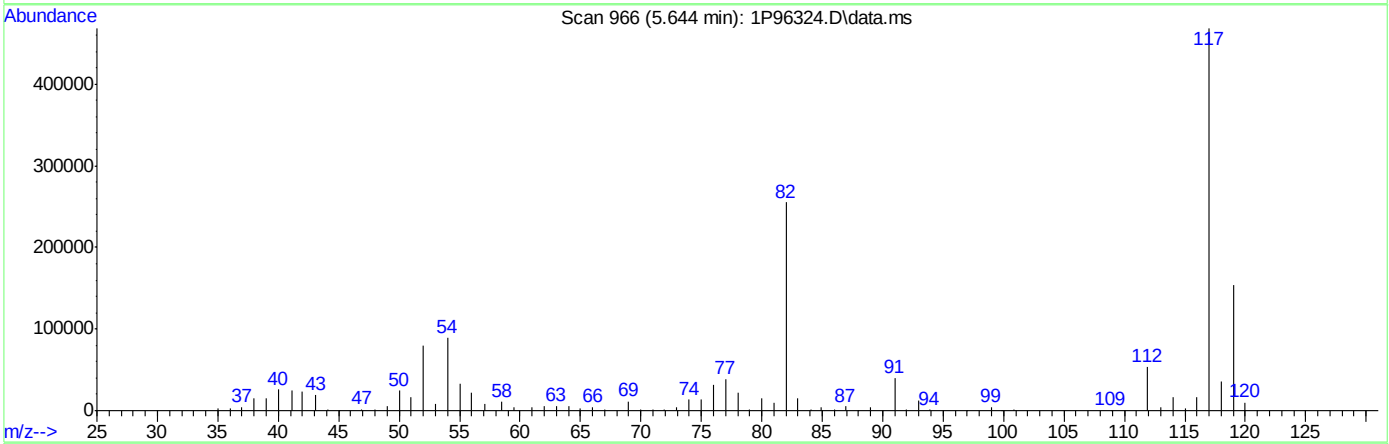
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	74.29
41.00	62.10	50.73
43.10	50.00	44.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96324.D
Acq On : 14 Dec 2022 11:19 am
Operator : courtnef
Sample : IC3646-3
Misc : MS52806,V1P3646,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 11:36:06 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96324.D\data.ms

(76) 1-Chlorohexane

5.644min (-0.005) 9.03ug/L m

response 48270

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	81.69
41.00	62.10	60.41
43.10	50.00	46.76

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson 12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:09:05 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	1007359	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.641	117	686936	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	312199	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	225698	53.73	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.46%			
49) 1,2-Dichloroethane-d4	3.549	65	305233	50.42	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.84%			
63) Toluene-d8	4.642	98	969908	48.12	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 96.24%			
86) 4-Bromofluorobenzene	6.494	174	245231	51.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.84%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.117	85	123174	34.57	ug/L	98
3) Chloromethane	1.243	50	109650	22.02	ug/L	97
4) 1,3-butadiene	1.311	39	80336	16.68	ug/L	99
5) Vinyl Chloride	1.300	62	97395	21.88	ug/L	97
6) Bromomethane	1.504	94	33671	71.97	ug/L	95
7) Chloroethane	1.577	64	38963	28.27	ug/L	96
8) Trichlorofluoromethane	1.671	101	127476	25.64	ug/L	97
9) Ethyl Ether	1.870	59	88559	22.16	ug/L	95
10) Ethanol	1.954	45	48547	350.81	ug/L	97
11) 1,2-Dichlorotrifluoroe...	1.970	67	126665	26.25	ug/L	98
12) 1,1-Dichloroethene	1.975	61	161004	27.93	ug/L	98
13) Freon 113	2.011	101	99127	29.97	ug/L	95
14) Carbon Disulfide	1.996	76	276913	24.87	ug/L	94
15) Iodomethane	2.053	142	67048	126.10	ug/L	98
16) Acrolein	2.147	56	177107	139.11	ug/L	97
17) Allyl chloride	2.241	41	153014	32.68	ug/L	96
18) Methylene Chloride	2.294	49	130323	22.38	ug/L	99
19) Acetone	2.309	43	305605	116.56	ug/L	98
20) Methyl acetate	2.393	43	742105	124.60	ug/L	94
21) trans-1,2-Dichloroethene	2.398	61	155643	28.17	ug/L	93
22) Hexane	2.461	56	85161	27.99	ug/L	93
23) Methyl Tert Butyl Ether	2.466	73	368487	28.26	ug/L	97
24) Tert Butyl Alcohol	2.503	59	348225	260.06	ug/L	98
25) Acetonitrile	2.545	41	222867	256.13	ug/L	100
26) Di-isopropyl ether	2.681	45	352063	26.09	ug/L	97
27) Chloroprene	2.723	53	477363	23.62	ug/L	99
28) 1,1-Dichloroethane	2.723	63	202445	28.44	ug/L	99
29) Acrylonitrile	2.723	52	311974	116.96	ug/L	97
30) ETBE	2.880	59	349994	26.61	ug/L	97
31) Vinyl acetate	2.853	43	1224298	120.16	ug/L	99
32) cis-1,2-Dichloroethene	3.016	96	116010	29.58	ug/L	96
33) 2,2-Dichloropropane	3.084	77	182324	30.90	ug/L	100
34) Bromochloromethane	3.120	128	47644	30.09	ug/L	95
35) Cyclohexane	3.157	56	171697	26.71	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:09:05 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.162	83	205053	29.25	ug/L		98
37) Ethyl acetate	3.225	43	885913	122.20	ug/L		99
38) Tetrahydrofuran	3.256	42	70016	24.93	ug/L		94
40) Carbon Tetrachloride	3.267	117	149319m	35.27	ug/L		
41) 1,1,1-Trichloroethane	3.293	97	181969	31.16	ug/L		95
42) 2-Butanone	3.314	43	546778	128.15	ug/L		97
43) 1,1-Dichloropropene	3.361	75	157195	29.26	ug/L		96
44) tert-Butyl formate	3.403	59	515649	167.88	ug/L		95
45) Propionitrile	3.455	54	301270	259.44	ug/L		98
46) Methacrylonitrile	3.476	41	986453	236.61	ug/L		98
47) Benzene	3.491	78	450509	26.21	ug/L		94
48) TAME	3.565	73	334626	27.34	ug/L		96
50) Isobutyl alcohol	3.586	43	246332m	347.33	ug/L		
51) 1,2-Dichloroethane	3.586	62	158090	27.53	ug/L		98
52) Tert Amyl Alcohol	3.648	59	277038	258.71	ug/L		96
53) Trichloroethene	3.821	95	115776	28.56	ug/L		98
54) Methylcyclohexane	3.842	83	162030	28.07	ug/L		97
55) Dibromomethane	4.046	93	64893	28.27	ug/L		91
56) 1,2-Dichloropropane	4.103	63	112377	27.82	ug/L		97
57) Bromodichloromethane	4.140	83	136058	31.60	ug/L		95
58) Methyl methacrylate	4.229	41	115592	24.80	ug/L		94
59) 1,4-Dioxane	4.260	88	52763	592.90	ug/L		89
60) 2-Chloroethyl vinyl ether	4.475	63	429126	337.09	ug/L		93
61) cis-1,3-Dichloropropene	4.517	75	176009	30.98	ug/L		92
64) Toluene	4.679	91	477006	26.31	ug/L		99
65) 2-Nitropropane	4.773	41	244625	132.44	ug/L		97
66) 4-Methyl-2-pentanone	4.883	43	889970	116.37	ug/L		98
67) trans-1,3-Dichloropropene	4.914	75	154743	29.33	ug/L		91
68) Tetrachloroethene	4.935	166	105440	29.76	ug/L		97
69) Ethyl methacrylate	5.024	69	151050	25.76	ug/L		91
70) 1,1,2-Trichloroethane	5.013	83	81493	26.20	ug/L		98
71) Dibromochloromethane	5.139	129	94704	32.52	ug/L		100
72) 1,3-Dichloropropane	5.191	76	182319	26.38	ug/L		92
73) 1,2-Dibromoethane	5.291	107	98718	28.11	ug/L		95
74) 3,3-dimethyl-1-butanol	5.427	57	1445785	1234.39	ug/L		97
75) 2-hexanone	5.427	43	938996	111.26	ug/L		98
76) 1-Chlorohexane	5.646	91	148291m	26.83	ug/L		
77) Ethylbenzene	5.678	91	513897	27.06	ug/L		98
78) Chlorobenzene	5.652	112	266998	26.12	ug/L		98
79) 1,1,1,2-Tetrachloroethane	5.693	131	95558	31.20	ug/L		97
80) m,p-Xylene	5.777	91	782709	53.28	ug/L		100
81) o-Xylene	6.075	91	377553	26.03	ug/L		98
82) Styrene	6.107	104	283325	27.84	ug/L		97
83) Bromoform	6.112	173	57010	37.31	ug/L		97
84) Isopropylbenzene	6.305	105	439511	27.39	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.525	53	50854	27.98	ug/L	#	80
88) n-Propylbenzene	6.603	91	524401	24.51	ug/L		99
89) Bromobenzene	6.567	156	101828	26.42	ug/L		88
90) 1,1,2,2-Tetrachloroethane	6.624	83	147059	24.47	ug/L		100
91) 1,3,5-Trimethylbenzene	6.755	105	356747	25.05	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:09:05 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

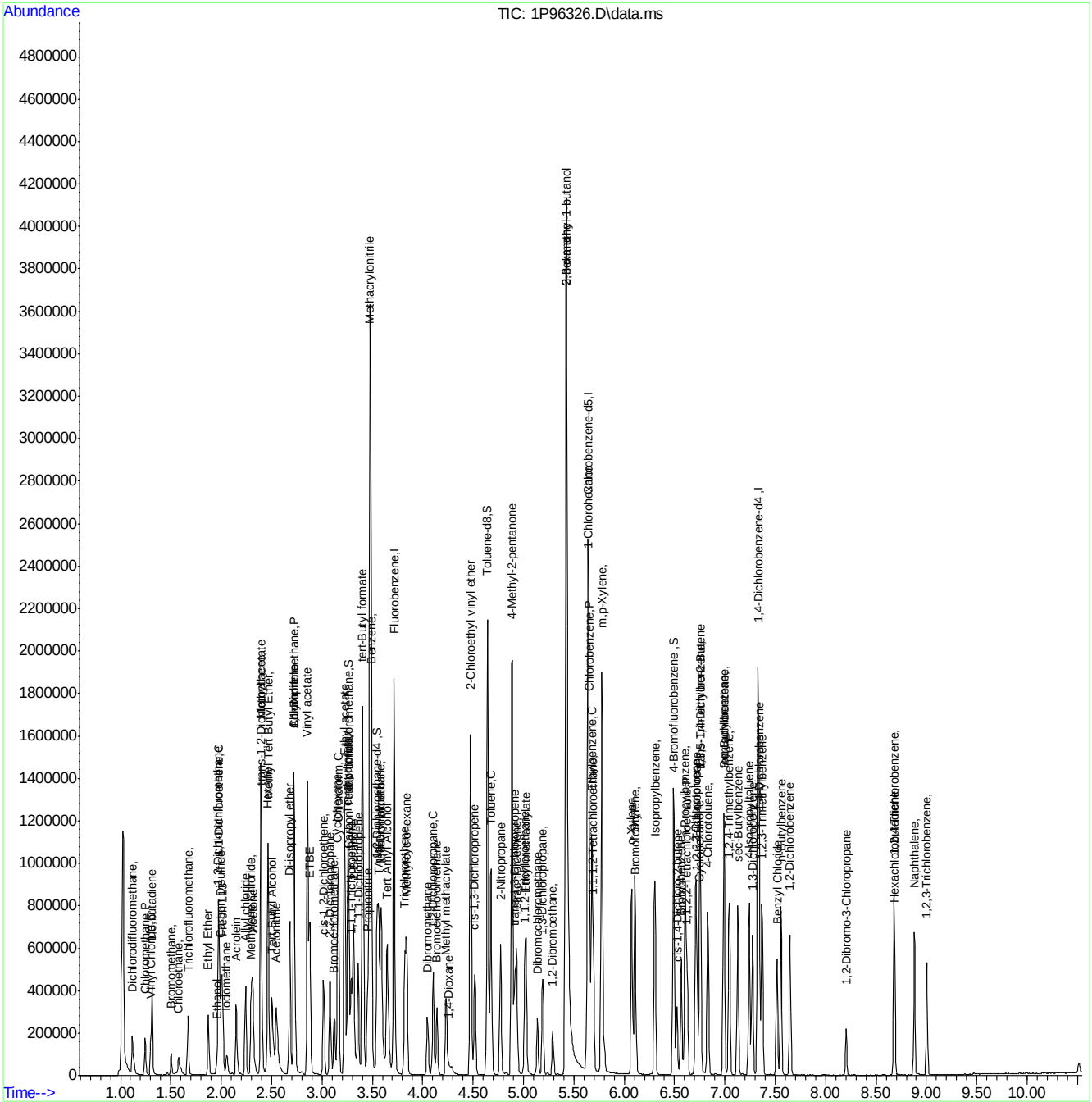
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.708	91	314771	24.75	ug/L		99
93)	trans-1,4-Dichloro-2-B...	6.755	53	55498	25.72	ug/L		90
94)	1,2,3-Trichloropropane	6.718	110	52226	24.72	ug/L		96
95)	Cyclohexanone	6.745	55	45408	110.34	ug/L		92
96)	4-Chlorotoluene	6.828	91	332400	24.95	ug/L		98
97)	tert-Butylbenzene	6.990	91	201836	25.03	ug/L		97
99)	1,2,4-Trimethylbenzene	7.043	105	336873	24.32	ug/L		99
100)	Pentachloroethane	6.990	167	54392	32.38	ug/L	#	74
101)	sec-Butylbenzene	7.126	105	387327	24.88	ug/L		99
102)	4-Isopropyltoluene	7.241	119	338806	26.04	ug/L		98
103)	1,3-Dichlorobenzene	7.273	146	188811	26.73	ug/L		96
104)	1,2,3-Trimethylbenzene	7.367	105	333470	24.29	ug/L		98
105)	1,4-Dichlorobenzene	7.341	146	192471	26.30	ug/L		98
106)	n-Butylbenzene	7.555	92	165658	24.46	ug/L		98
107)	Benzyl Chloride	7.519	126	54174	31.24	ug/L	#	85
108)	1,2-Dichlorobenzene	7.644	146	176337	26.62	ug/L		97
109)	1,2-Dibromo-3-Chloropr...	8.204	75	39108	29.19	ug/L		91
110)	Hexachlorobutadiene	8.685	225	43977	36.03	ug/L		93
111)	1,2,4-Trichlorobenzene	8.680	180	96579	26.77	ug/L		96
112)	Naphthalene	8.879	128	323480	20.35	ug/L		98
113)	1,2,3-Trichlorobenzene	9.004	180	97106	29.11	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:09:05 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3646-IC3646
Lab FileID: 1P96326.D
Injection Time: 12/14/22 11:51

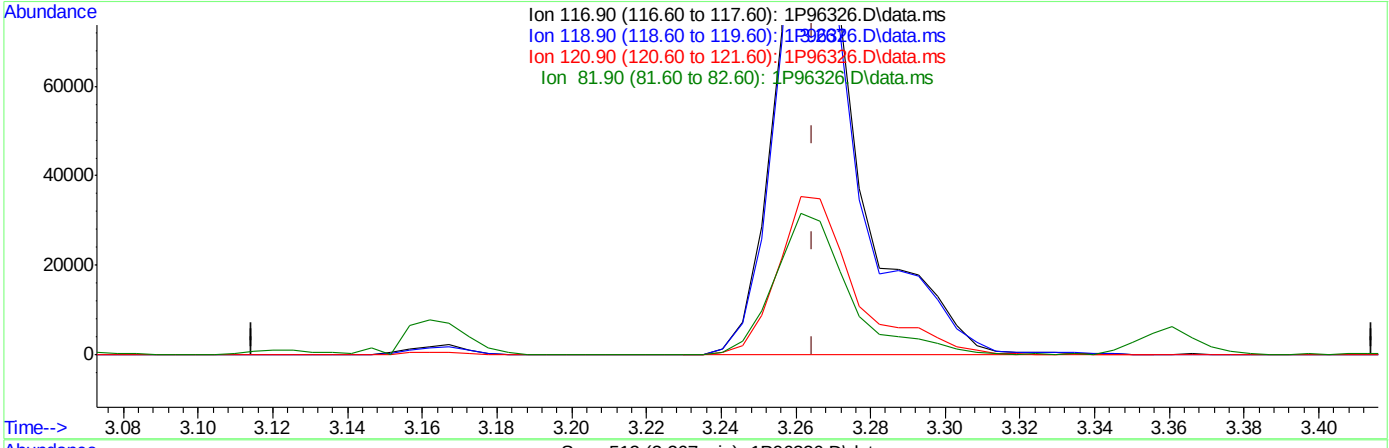
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

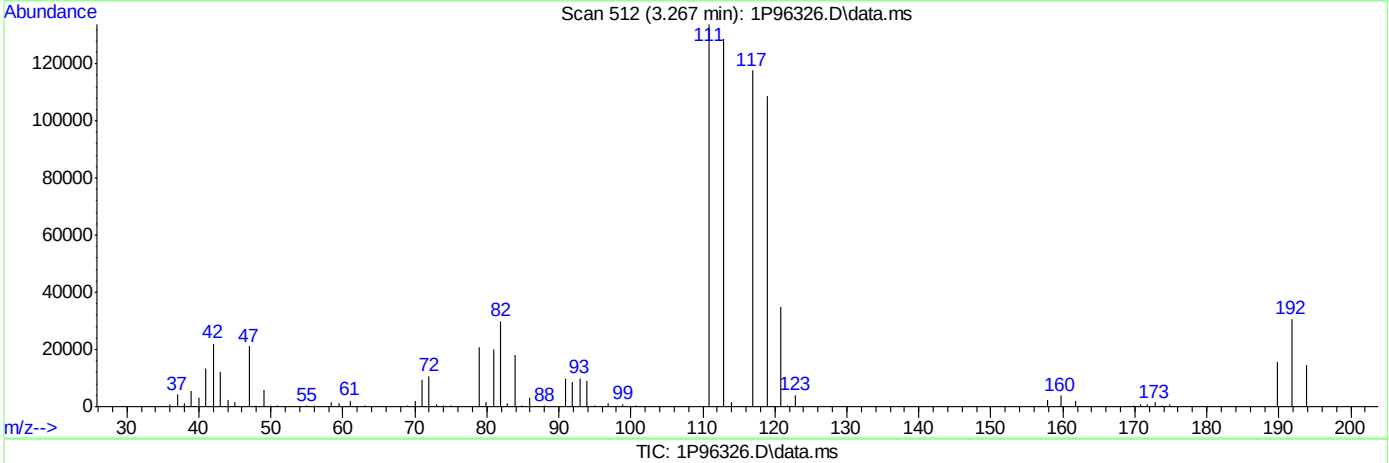
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.27	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(40) Carbon Tetrachloride ( )

3.267min (+0.002) 39.88ug/L

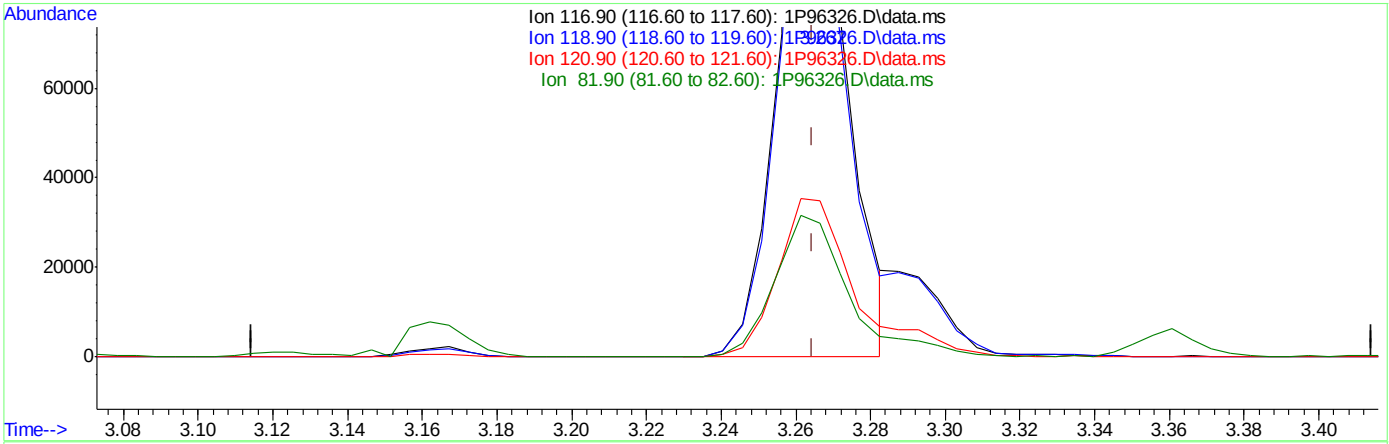
response 168817

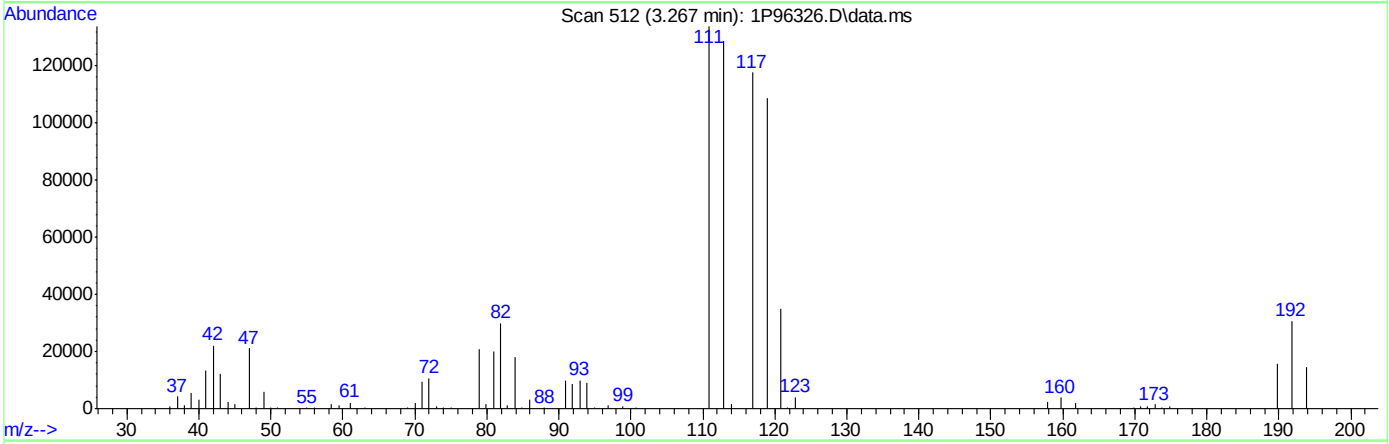
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	92.46
120.90	31.00	29.76
81.90	30.20	25.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(40) Carbon Tetrachloride ( )

3.267min (+0.002) 35.27ug/L m

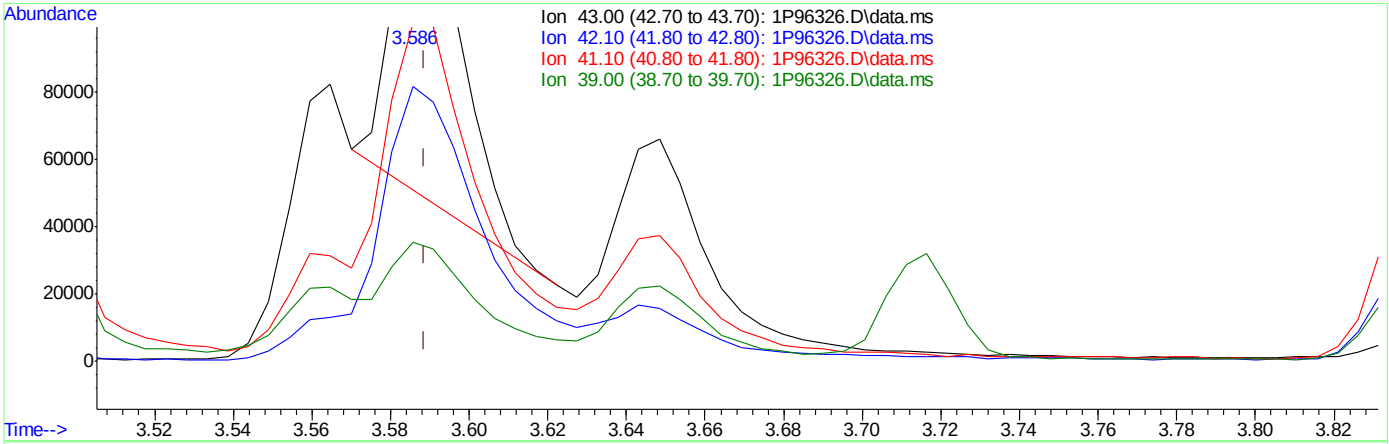
response 149319

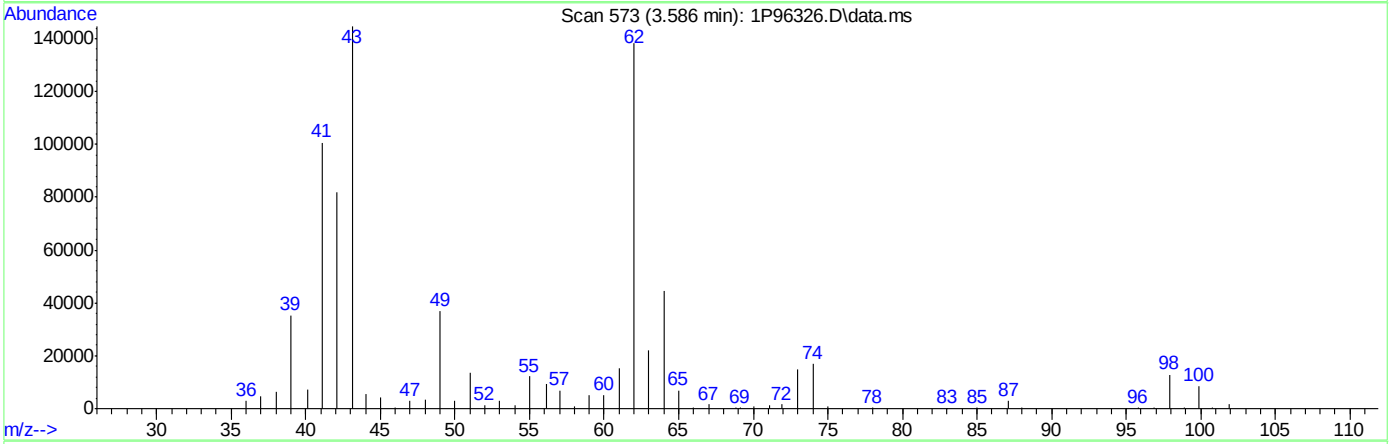
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	92.46
120.90	31.00	29.76
81.90	30.20	25.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(50) Isobutyl alcohol

3.586min (-0.003) 150.11ug/L

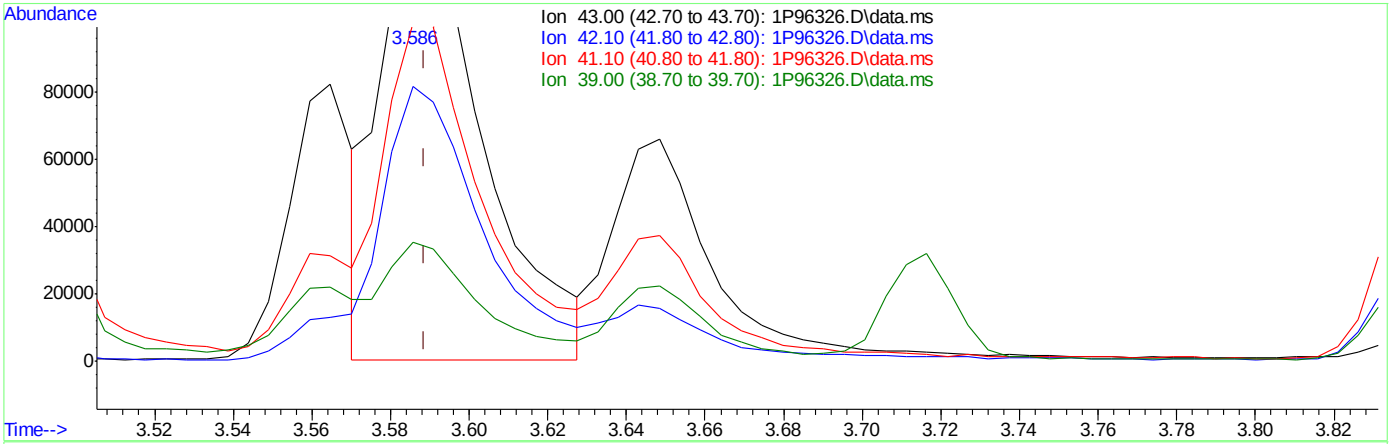
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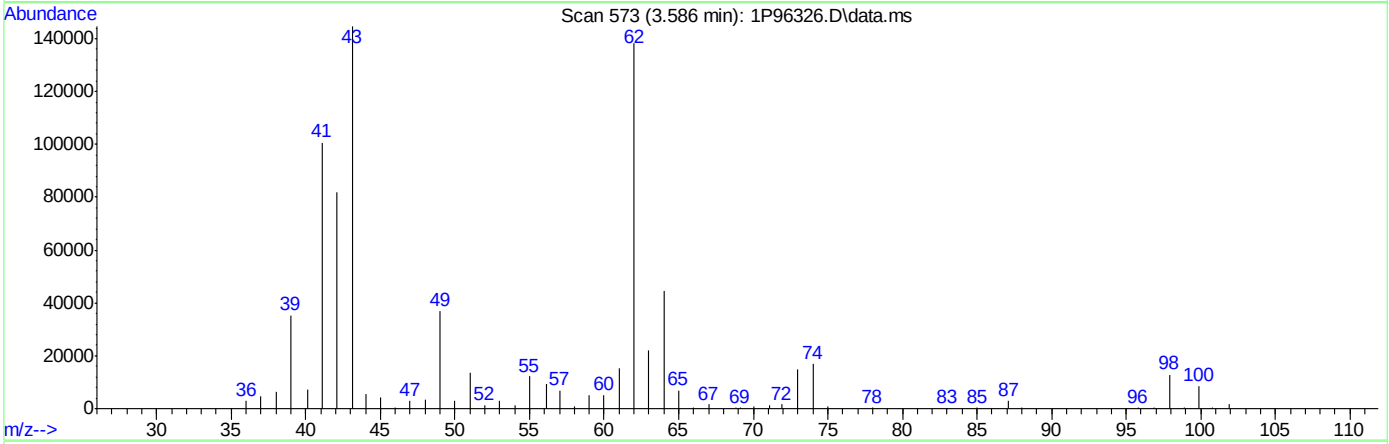
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	57.38
41.10	71.40	69.44
39.00	26.20	23.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(50) Isobutyl alcohol

3.586min (-0.003) 347.33ug/L m

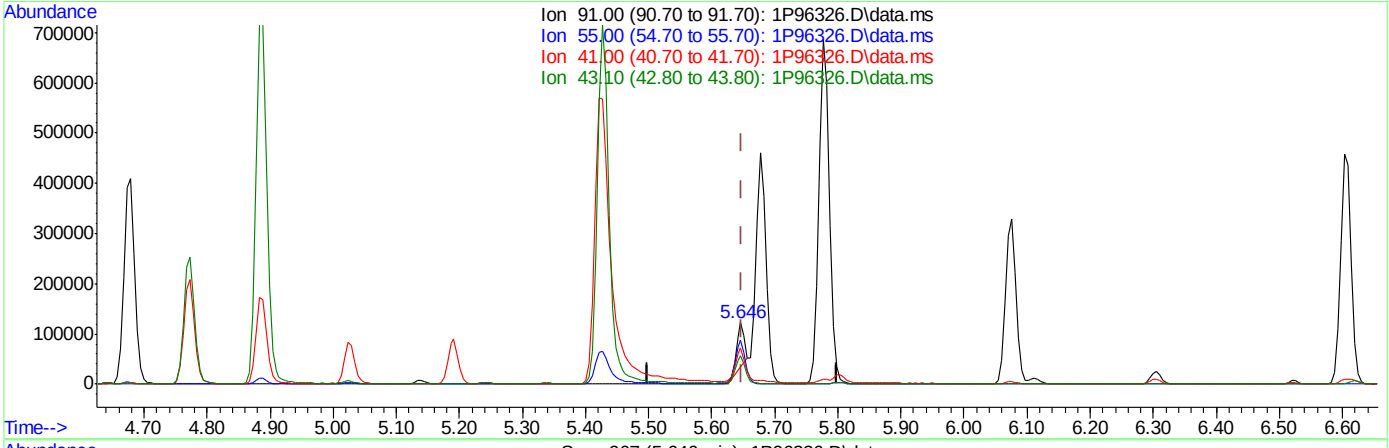
response 246332

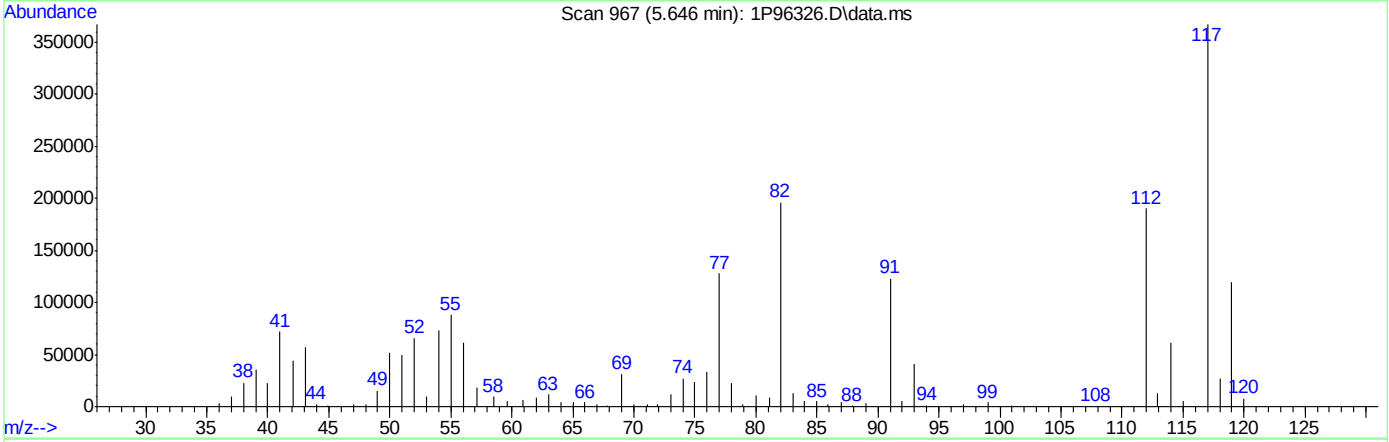
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	56.52
41.10	71.40	69.63
39.00	26.20	24.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 14.86ug/L

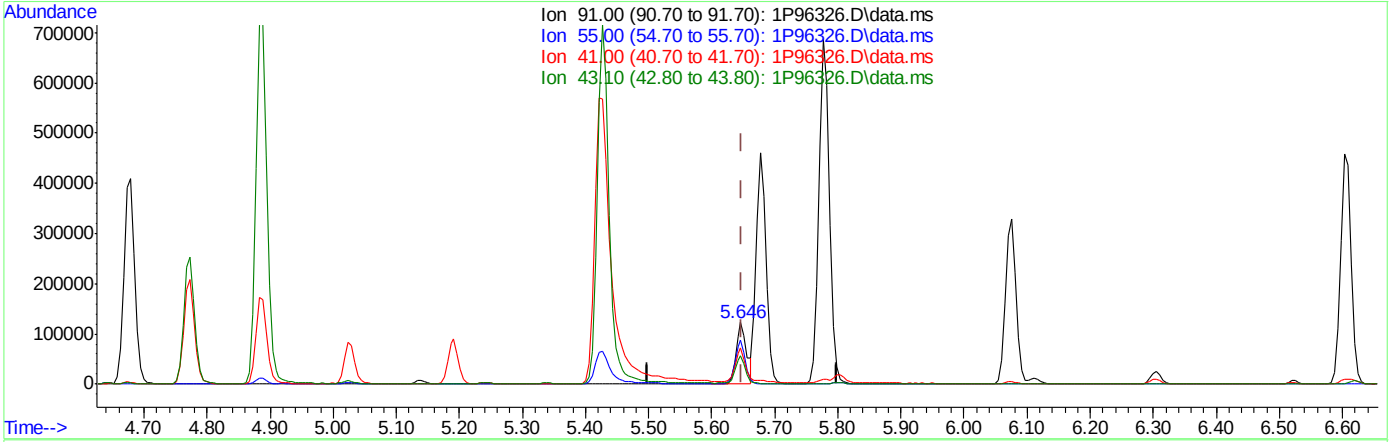
response 81991

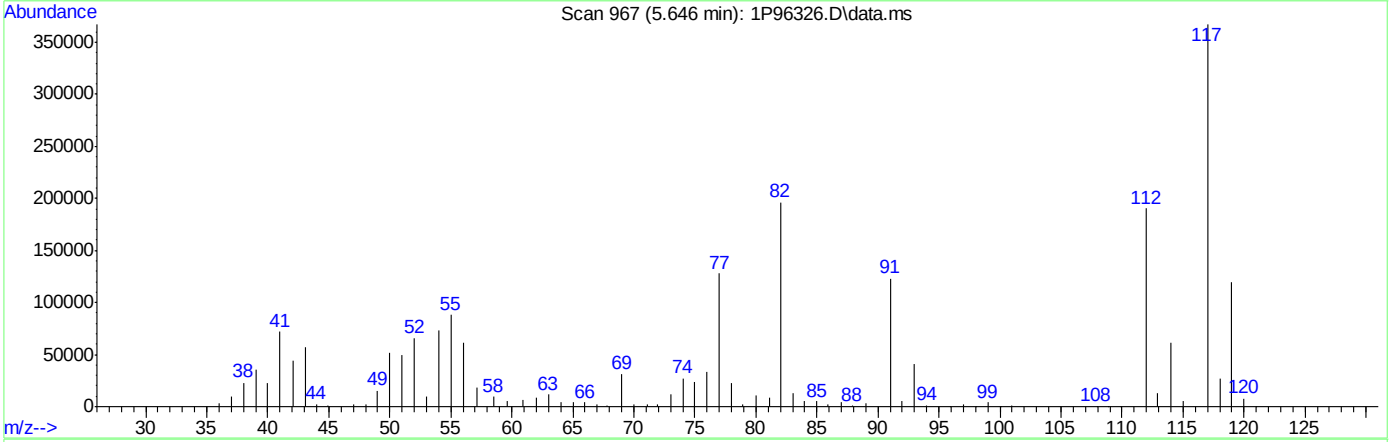
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	68.80
41.00	62.10	53.37
43.10	50.00	44.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96326.D
Acq On : 14 Dec 2022 11:51 am
Operator : courtnef
Sample : IC3646-4
Misc : MS52806,V1P3646,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 14 12:07:59 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96326.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 26.83ug/L m

response 148291

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	71.46
41.00	62.10	58.29
43.10	50.00	46.77

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson 12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:19:36 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	1071093	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.640	117	696900	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	318071	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	237975	53.28	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 106.56%			
49) 1,2-Dichloroethane-d4	3.548	65	323537	50.26	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.52%			
63) Toluene-d8	4.646	98	1027950	50.27	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.54%			
86) 4-Bromofluorobenzene	6.493	174	254831	52.45	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.121	85	188263	49.69	ug/L	98
3) Chloromethane	1.247	50	180707	33.80	ug/L	100
4) 1,3-butadiene	1.315	39	134613	26.29	ug/L	98
5) Vinyl Chloride	1.304	62	159935	33.79	ug/L	100
6) Bromomethane	1.508	94	50935	114.92	ug/L	98
7) Chloroethane	1.582	64	59510	42.14	ug/L	96
8) Trichlorofluoromethane	1.671	101	180153	35.83	ug/L	99
9) Ethyl Ether	1.875	59	128838	31.45	ug/L	96
10) Ethanol	1.963	45	73867	525.61	ug/L	95
11) 1,2-Dichlorotrifluoroe...	1.974	67	191216	37.28	ug/L	97
12) 1,1-Dichloroethene	1.979	61	243031	39.65	ug/L	91
13) Freon 113	2.010	101	159030	45.23	ug/L	96
14) Carbon Disulfide	1.995	76	422669	35.42	ug/L	95
15) Iodomethane	2.058	142	110558	195.57	ug/L	98
16) Acrolein	2.152	56	262143	193.65	ug/L	100
17) Allyl chloride	2.246	41	243348	48.88	ug/L	94
18) Methylene Chloride	2.298	49	200585	32.39	ug/L	94
19) Acetone	2.314	43	483817	178.02	ug/L	99
20) Methyl acetate	2.392	43	1128557	178.22	ug/L	97
21) trans-1,2-Dichloroethene	2.398	61	246924	42.03	ug/L	98
22) Hexane	2.466	56	137054	42.36	ug/L	97
23) Methyl Tert Butyl Ether	2.471	73	591717	42.68	ug/L	90
24) Tert Butyl Alcohol	2.507	59	549393	391.84	ug/L	98
25) Acetonitrile	2.549	41	358460	417.43	ug/L	100
26) Di-isopropyl ether	2.685	45	558594	38.93	ug/L	97
27) Chloroprene	2.727	53	766832	35.68	ug/L	99
28) 1,1-Dichloroethane	2.727	63	313647	41.45	ug/L	100
29) Acrylonitrile	2.727	52	497337	175.36	ug/L	99
30) ETBE	2.879	59	563490	40.29	ug/L	98
31) Vinyl acetate	2.858	43	1979203	182.68	ug/L	99
32) cis-1,2-Dichloroethene	3.020	96	185517	44.49	ug/L	96
33) 2,2-Dichloropropane	3.083	77	289832	46.20	ug/L	98
34) Bromochloromethane	3.124	128	72727	43.19	ug/L	92
35) Cyclohexane	3.161	56	281795	41.22	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:19:36 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.166	83	321720	43.17	ug/L		98
37) Ethyl acetate	3.224	43	1440952	187.99	ug/L		99
38) Tetrahydrofuran	3.255	42	115163	39.22	ug/L		94
40) Carbon Tetrachloride	3.266	117	236815m	52.61	ug/L		
41) 1,1,1-Trichloroethane	3.292	97	287178	46.25	ug/L		95
42) 2-Butanone	3.313	43	888899	198.15	ug/L		100
43) 1,1-Dichloropropene	3.360	75	250373	43.84	ug/L		97
44) tert-Butyl formate	3.407	59	812803	248.88	ug/L		93
45) Propionitrile	3.459	54	499825	404.81	ug/L		98
46) Methacrylonitrile	3.480	41	1604622	361.98	ug/L		99
47) Benzene	3.491	78	698163	38.20	ug/L		89
48) TAME	3.564	73	552849	42.49	ug/L		97
50) Isobutyl alcohol	3.590	43	414446m	549.61	ug/L		
51) 1,2-Dichloroethane	3.585	62	249331	40.83	ug/L		98
52) Tert Amyl Alcohol	3.653	59	458671	402.84	ug/L		97
53) Trichloroethene	3.820	95	184317	42.76	ug/L		98
54) Methylcyclohexane	3.841	83	271780	44.28	ug/L		98
55) Dibromomethane	4.045	93	104754	42.92	ug/L		93
56) 1,2-Dichloropropane	4.103	63	180739	42.09	ug/L		96
57) Bromodichloromethane	4.144	83	224216	48.98	ug/L		97
58) Methyl methacrylate	4.233	41	203211	41.01	ug/L		89
59) 1,4-Dioxane	4.259	88	83162	903.12	ug/L		95
60) 2-Chloroethyl vinyl ether	4.474	63	668067	468.08	ug/L		93
61) cis-1,3-Dichloropropene	4.516	75	283537	46.93	ug/L		92
64) Toluene	4.678	91	769284	41.83	ug/L		99
65) 2-Nitropropane	4.772	41	389639	201.63	ug/L		95
66) 4-Methyl-2-pentanone	4.887	43	1478381	192.14	ug/L		97
67) trans-1,3-Dichloropropene	4.913	75	248494	46.43	ug/L	#	70
68) Tetrachloroethene	4.934	166	171818	47.79	ug/L		98
69) Ethyl methacrylate	5.028	69	269265	44.15	ug/L		84
70) 1,1,2-Trichloroethane	5.018	83	130669	41.41	ug/L		91
71) Dibromochloromethane	5.138	129	154801	50.17	ug/L		98
72) 1,3-Dichloropropane	5.190	76	289813	41.33	ug/L		93
73) 1,2-Dibromoethane	5.290	107	152992	42.94	ug/L		99
74) 3,3-dimethyl-1-butanol	5.426	57	2114631	1771.50	ug/L		97
75) 2-hexanone	5.426	43	1376116	162.44	ug/L		88
76) 1-Chlorohexane	5.645	91	222107m	39.56	ug/L		
77) Ethylbenzene	5.677	91	766330	39.78	ug/L		99
78) Chlorobenzene	5.651	112	407080	39.25	ug/L		98
79) 1,1,1,2-Tetrachloroethane	5.692	131	149513	48.12	ug/L		95
80) m,p-Xylene	5.776	91	1199417	80.48	ug/L		99
81) o-Xylene	6.074	91	595386	40.46	ug/L		99
82) Styrene	6.106	104	445930	43.19	ug/L		98
83) Bromoform	6.111	173	93778	56.14	ug/L		97
84) Isopropylbenzene	6.304	105	687537	42.23	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.524	53	82928	44.79	ug/L	#	79
88) n-Propylbenzene	6.603	91	822697	37.75	ug/L		99
89) Bromobenzene	6.566	156	162923	41.49	ug/L		96
90) 1,1,2,2-Tetrachloroethane	6.623	83	230609	37.66	ug/L		99
91) 1,3,5-Trimethylbenzene	6.754	105	554270	38.20	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:19:36 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

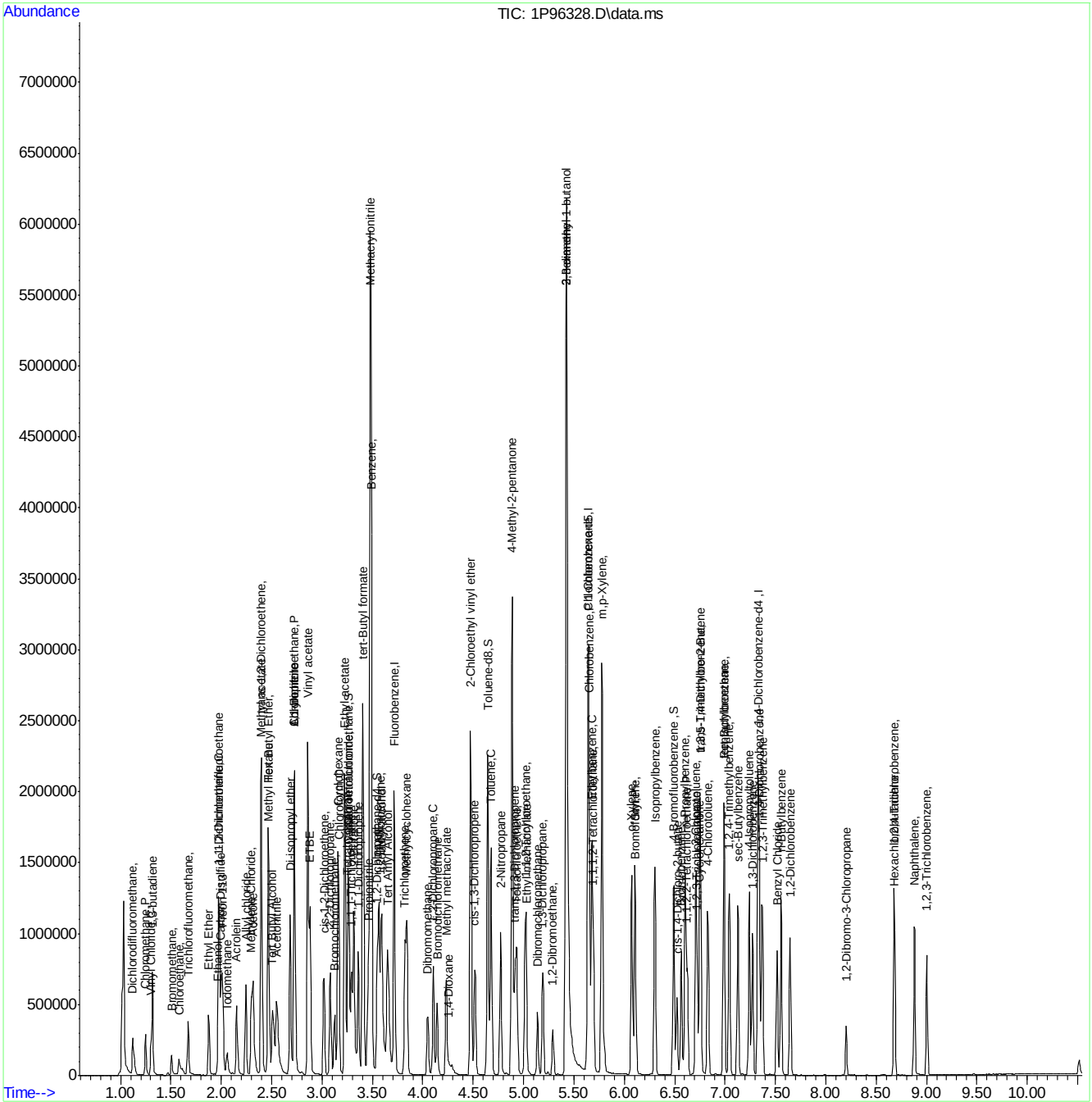
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.707	91	485326	37.45	ug/L		98
93)	trans-1,4-Dichloro-2-B...	6.754	53	87010	39.58	ug/L		84
94)	1,2,3-Trichloropropane	6.723	110	80954	37.61	ug/L		93
95)	Cyclohexanone	6.744	55	71846	172.46	ug/L		95
96)	4-Chlorotoluene	6.827	91	510732	37.63	ug/L		99
97)	tert-Butylbenzene	6.990	91	310757	37.83	ug/L		95
99)	1,2,4-Trimethylbenzene	7.042	105	523164	37.06	ug/L		98
100)	Pentachloroethane	6.990	167	85858	48.38	ug/L	#	69
101)	sec-Butylbenzene	7.126	105	606548	38.24	ug/L		99
102)	4-Isopropyltoluene	7.241	119	536070	40.44	ug/L		99
103)	1,3-Dichlorobenzene	7.272	146	289107	40.17	ug/L		99
104)	1,2,3-Trimethylbenzene	7.371	105	529491	37.85	ug/L		99
105)	1,4-Dichlorobenzene	7.340	146	300134	40.26	ug/L		98
106)	n-Butylbenzene	7.554	92	266218	38.59	ug/L		94
107)	Benzyl Chloride	7.518	126	92006	48.63	ug/L	#	90
108)	1,2-Dichlorobenzene	7.649	146	273196	40.47	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	8.203	75	62788	46.00	ug/L		90
110)	Hexachlorobutadiene	8.684	225	69428	55.83	ug/L		96
111)	1,2,4-Trichlorobenzene	8.679	180	153129	41.66	ug/L		99
112)	Naphthalene	8.883	128	540606	33.39	ug/L		100
113)	1,2,3-Trichlorobenzene	9.003	180	153140	45.06	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:19:36 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

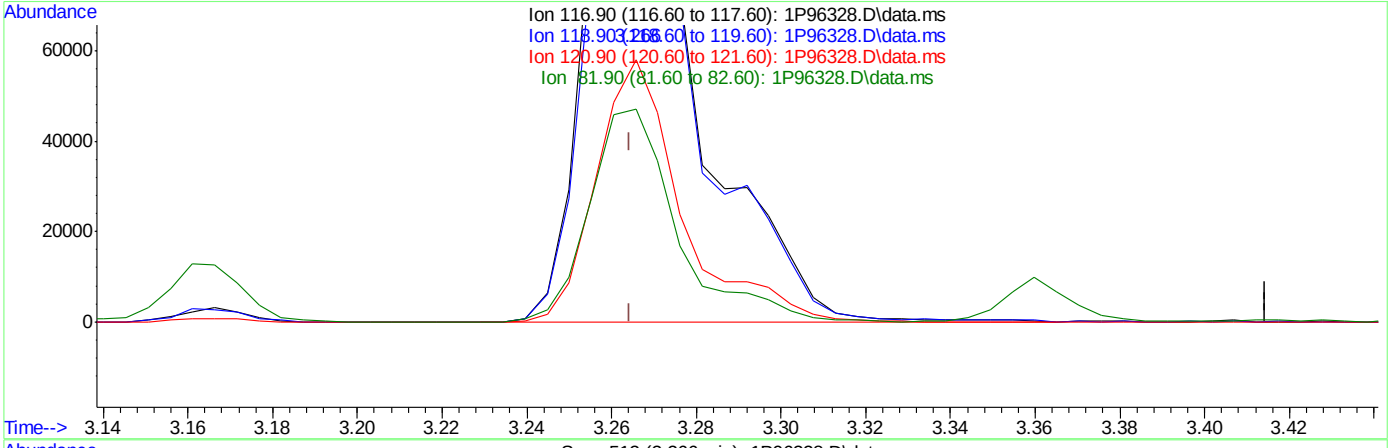
Sample Number: V1P3646-ICC3646 **Method:** SW846 8260D
Lab FileID: 1P96328.D **Analyst approved:** 12/14/22 14:20 Courtney Failla
Injection Time: 12/14/22 12:22 **Supervisor approved:** 12/15/22 13:50 Karen Watson

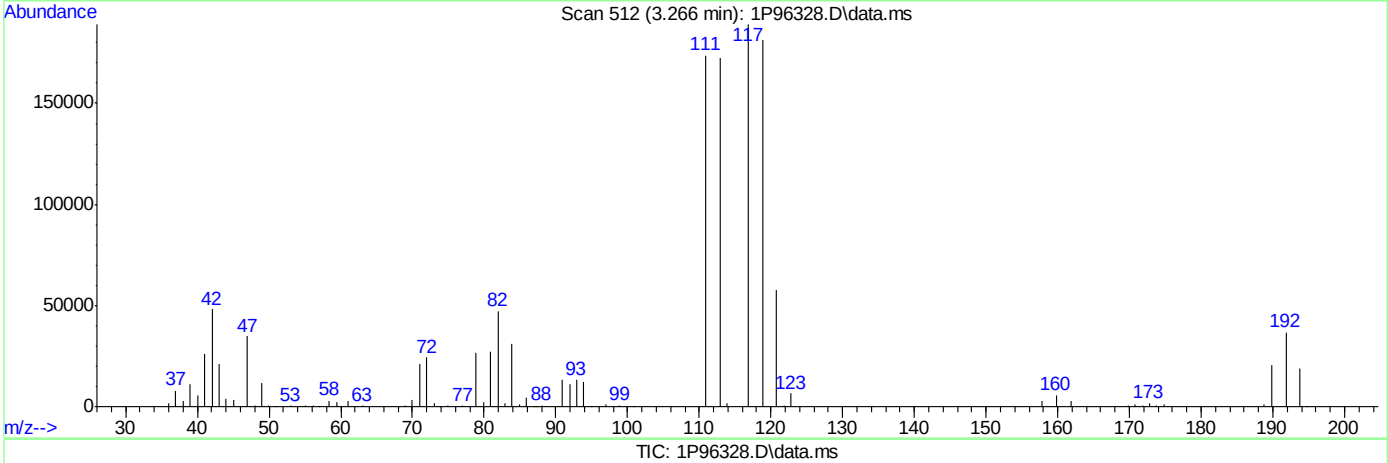
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.27	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.001) 58.16ug/L

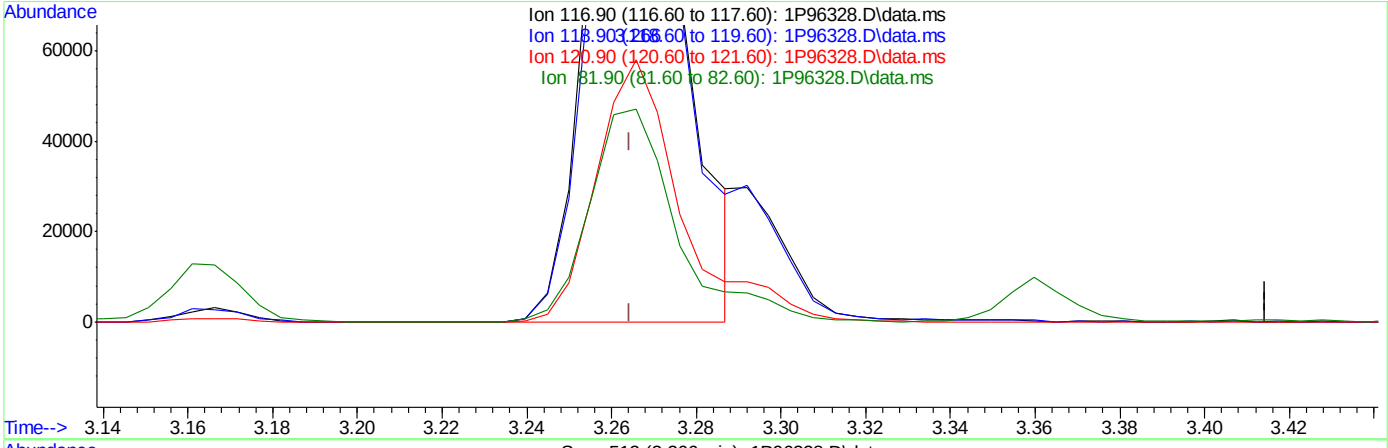
response 261812

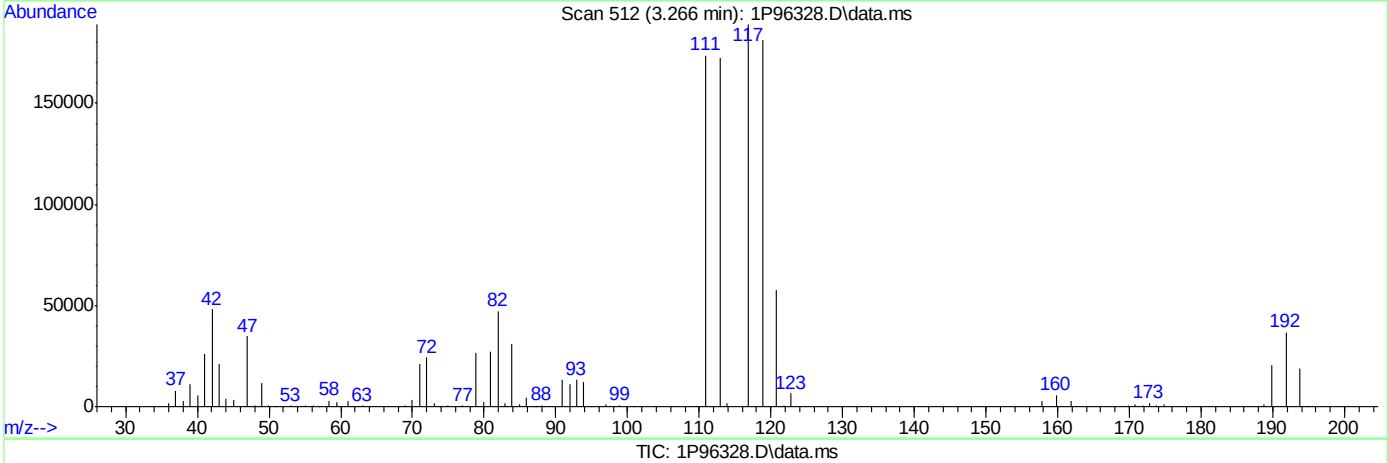
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.01
120.90	31.00	30.63
81.90	30.20	24.93

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.001) 52.61ug/L m

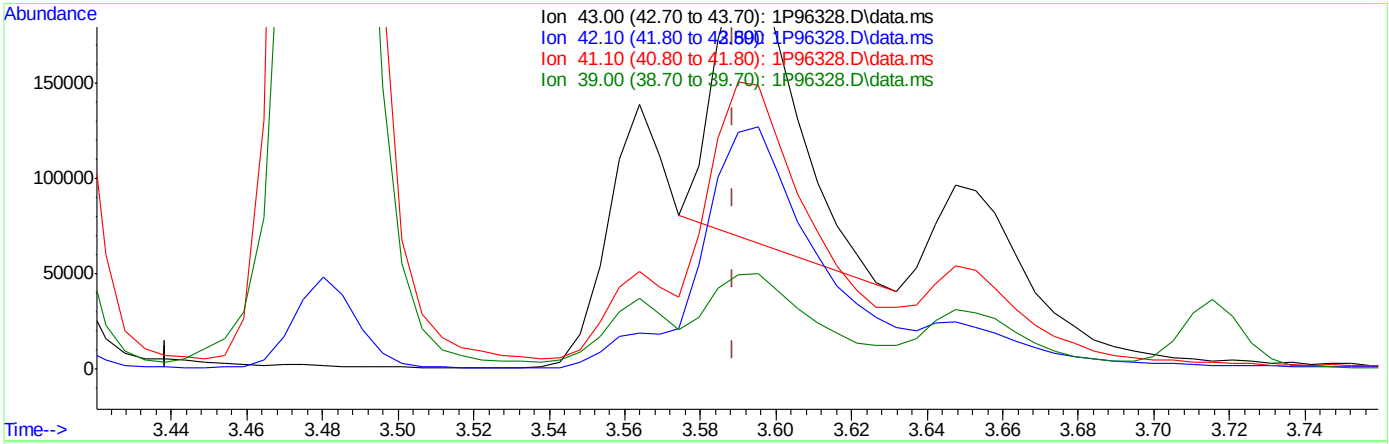
response 236815

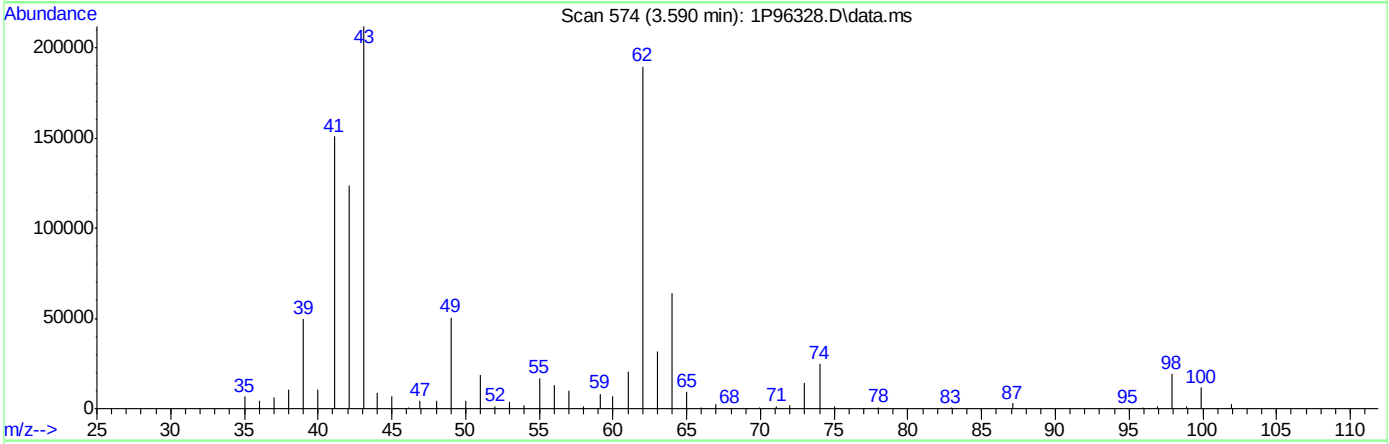
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.01
120.90	31.00	30.63
81.90	30.20	24.93

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.001) 274.16ug/L

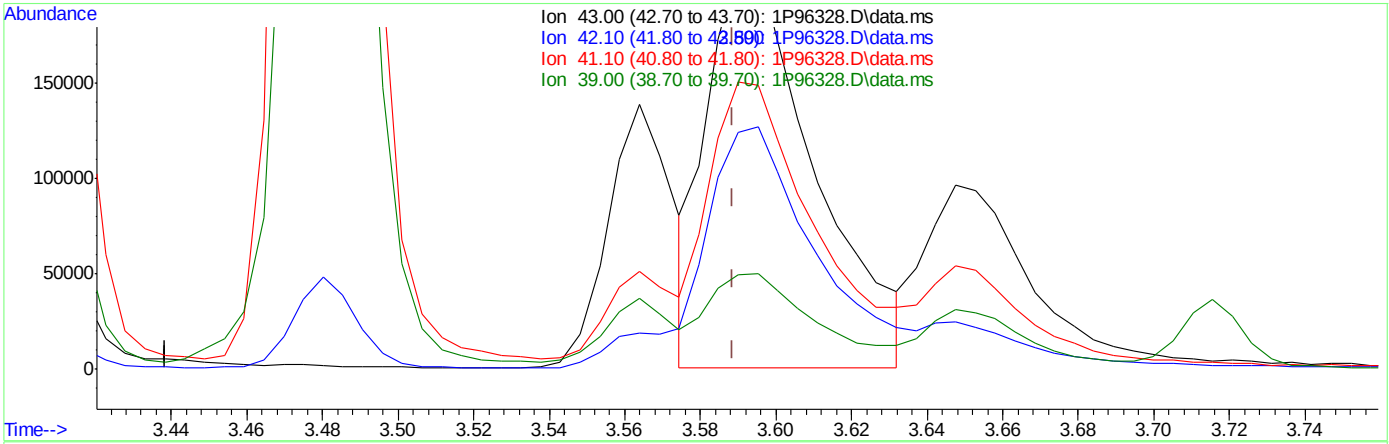
response 206740

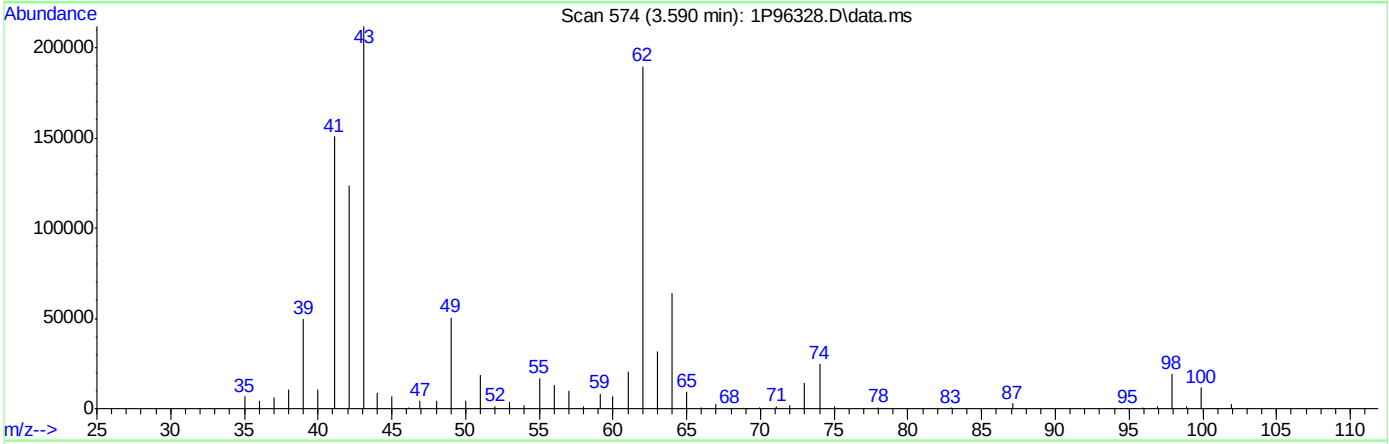
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	59.93
41.10	71.40	69.23
39.00	26.20	21.72

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.001) 549.61ug/L m

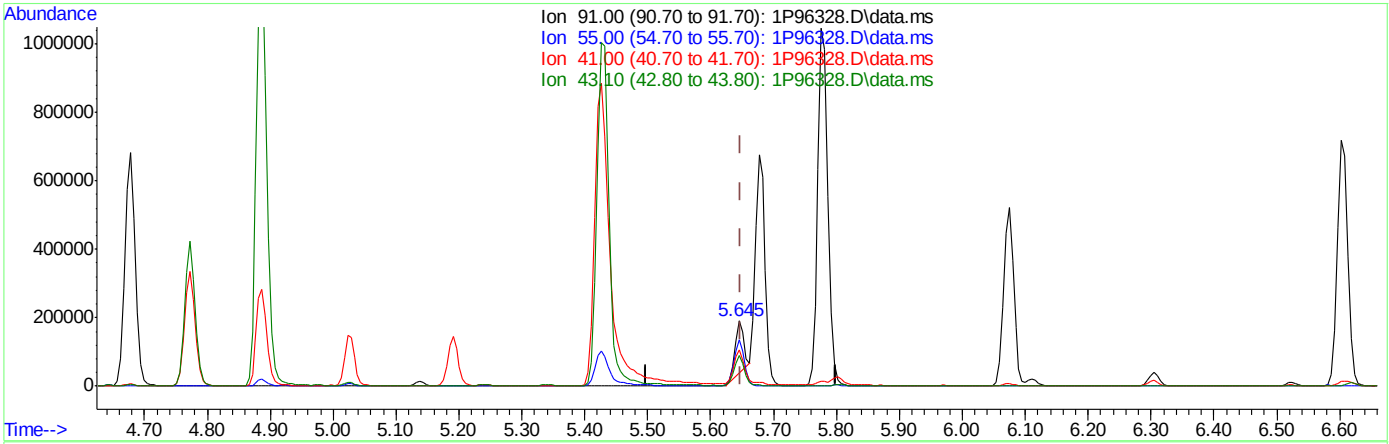
response 414446

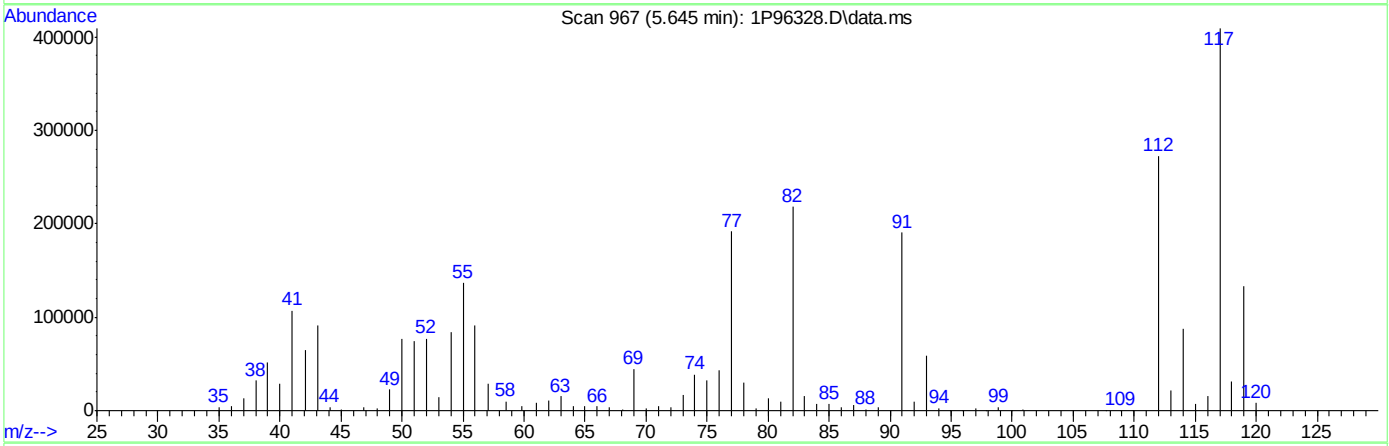
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	58.46
41.10	71.40	71.14
39.00	26.20	23.44

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(76) 1-Chlorohexane

5.645min (-0.004) 25.93ug/L

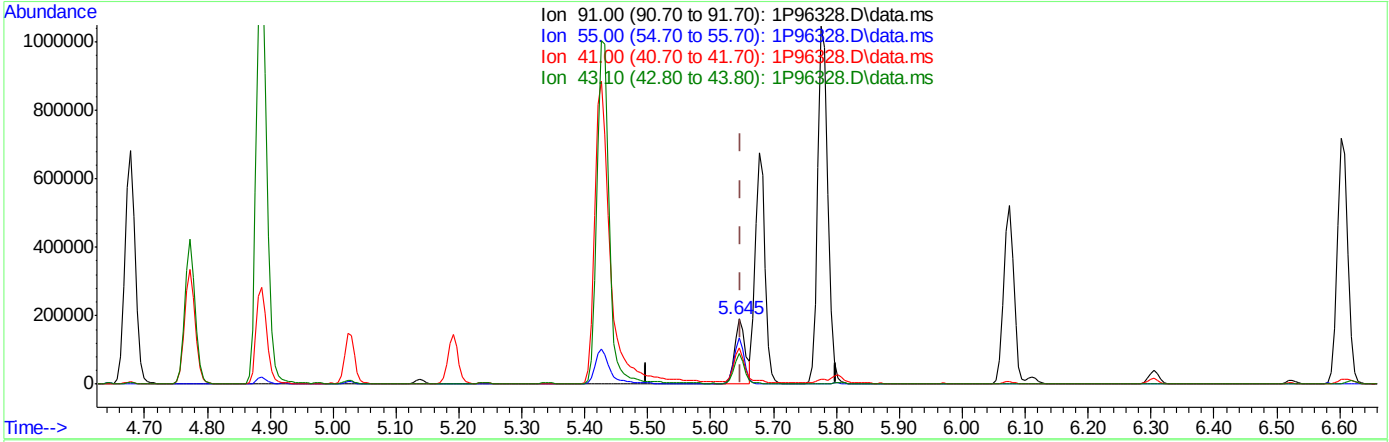
response 145349

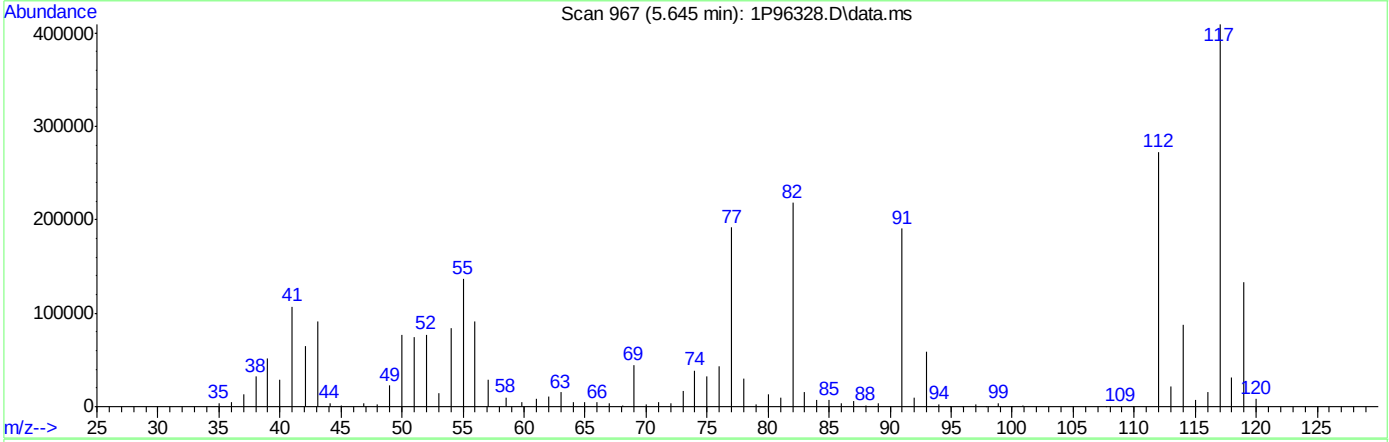
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	69.84
41.00	62.10	52.09
43.10	50.00	46.32

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96328.D
Acq On : 14 Dec 2022 12:22 pm
Operator : courtnef
Sample : ICC3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 14 13:17:54 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96328.D\data.ms

(76) 1-Chlorohexane

5.645min (-0.004) 39.56ug/L m

response 222107

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	71.54
41.00	62.10	56.38
43.10	50.00	47.80

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:23:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	3.713	96	946869	50.00	ug/L		0.00
62) Chlorobenzene-d5	5.638	117	642082	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	7.327	152	304887	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	3.258	113	221340	56.06	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 112.12%				
49) 1,2-Dichloroethane-d4	3.546	65	295358	51.91	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.82%				
63) Toluene-d8	4.644	98	942073	50.00	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.00%				
86) 4-Bromofluorobenzene	6.490	174	251977	54.11	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 108.22%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.119	85	336938	100.60	ug/L		99
3) Chloromethane	1.244	50	317992	65.57	ug/L		97
4) 1,3-butadiene	1.312	39	252702	55.83	ug/L		96
5) Vinyl Chloride	1.302	62	303493	72.53	ug/L		99
6) Bromomethane	1.501	94	89183	Below Cal			98
7) Chloroethane	1.574	64	103861	98.08	ug/L		98
8) Trichlorofluoromethane	1.663	101	268002	75.24	ug/L		97
9) Ethyl Ether	1.872	59	191168	59.44	ug/L		97
10) Ethanol	1.971	45	115571	1100.23	ug/L		96
11) 1,2-Dichlorotrifluoroe...	1.971	67	320496	70.68	ug/L		96
12) 1,1-Dichloroethene	1.971	61	408536	75.39	ug/L		98
13) Freon 113	2.003	101	264588	85.12	ug/L		96
14) Carbon Disulfide	1.992	76	702696	65.11	ug/L		94
15) Iodomethane	2.050	142	193938	388.06	ug/L		98
16) Acrolein	2.149	56	414540	346.41	ug/L		100
17) Allyl chloride	2.238	41	374863	85.18	ug/L		97
18) Methylene Chloride	2.296	49	306140	55.93	ug/L		93
19) Acetone	2.317	43	744851	331.33	ug/L		99
20) Methyl acetate	2.395	43	1705812	304.71	ug/L		93
21) trans-1,2-Dichloroethene	2.395	61	388045	74.72	ug/L		97
22) Hexane	2.463	56	216437	75.67	ug/L	#	92
23) Methyl Tert Butyl Ether	2.468	73	941932	76.85	ug/L		85
24) Tert Butyl Alcohol	2.515	59	872079	732.91	ug/L		92
25) Acetonitrile	2.552	41	490255	783.27	ug/L		98
26) Di-isopropyl ether	2.683	45	863736	68.10	ug/L		97
27) Chloroprene	2.724	53	1159499	61.03	ug/L		97
28) 1,1-Dichloroethane	2.724	63	494715	73.95	ug/L		99
29) Acrylonitrile	2.724	52	739032	294.76	ug/L		97
30) ETBE	2.881	59	887341	71.76	ug/L		98
31) Vinyl acetate	2.855	43	2873800	300.06	ug/L		100
32) cis-1,2-Dichloroethene	3.017	96	292999	79.49	ug/L		98
33) 2,2-Dichloropropane	3.080	77	498584	89.91	ug/L		99
34) Bromochloromethane	3.122	128	116522	78.28	ug/L	#	86
35) Cyclohexane	3.159	56	441984	73.14	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:23:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.164	83	520230	78.96	ug/L		98
37) Ethyl acetate	3.227	43	2107611	314.44	ug/L		98
38) Tetrahydrofuran	3.258	42	165511	65.81	ug/L		92
40) Carbon Tetrachloride	3.263	117	409890m	103.01	ug/L		
41) 1,1,1-Trichloroethane	3.289	97	479642	87.38	ug/L		95
42) 2-Butanone	3.315	43	1293776	333.55	ug/L		96
43) 1,1-Dichloropropene	3.357	75	409650	81.13	ug/L		97
44) tert-Butyl formate	3.404	59	1302289	451.08	ug/L		90
45) Propionitrile	3.462	54	714638	654.73	ug/L		94
46) Methacrylonitrile	3.483	41	2199937	561.38	ug/L		95
47) Benzene	3.488	78	1019781	63.11	ug/L		70
48) TAME	3.567	73	854106	74.25	ug/L		94
50) Isobutyl alcohol	3.598	43	569070m	853.66	ug/L		
51) 1,2-Dichloroethane	3.587	62	406381	75.28	ug/L		94
52) Tert Amyl Alcohol	3.655	59	699609	695.07	ug/L		93
53) Trichloroethene	3.823	95	292057	76.64	ug/L		92
54) Methylcyclohexane	3.838	83	442157	81.48	ug/L		98
55) Dibromomethane	4.048	93	163844	75.95	ug/L		83
56) 1,2-Dichloropropane	4.105	63	277518	73.10	ug/L		95
57) Bromodichloromethane	4.142	83	367943	90.92	ug/L		97
58) Methyl methacrylate	4.231	41	311670	71.15	ug/L		92
59) 1,4-Dioxane	4.262	88	125738	1655.32	ug/L		90
60) 2-Chloroethyl vinyl ether	4.477	63	985234	712.30	ug/L		90
61) cis-1,3-Dichloropropene	4.518	75	456924	85.55	ug/L		91
64) Toluene	4.675	91	1211539	71.50	ug/L		98
65) 2-Nitropropane	4.775	41	615201	327.46	ug/L		94
66) 4-Methyl-2-pentanone	4.885	43	2055406	293.21	ug/L		96
67) trans-1,3-Dichloropropene	4.916	75	400140	81.15	ug/L		81
68) Tetrachloroethene	4.932	166	277782	83.87	ug/L		98
69) Ethyl methacrylate	5.026	69	411616	70.76	ug/L		90
70) 1,1,2-Trichloroethane	5.015	83	195697	67.31	ug/L		96
71) Dibromochloromethane	5.141	129	256533	83.52	ug/L		99
72) 1,3-Dichloropropane	5.193	76	455316	70.48	ug/L		93
73) 1,2-Dibromoethane	5.292	107	253600	77.26	ug/L		99
74) 3,3-dimethyl-1-butanol	5.428	57	3310657	2979.63	ug/L		96
75) 2-hexanone	5.428	43	2057929	269.70	ug/L		91
76) 1-Chlorohexane	5.648	91	350847m	67.61	ug/L		
77) Ethylbenzene	5.679	91	1274558	71.81	ug/L		98
78) Chlorobenzene	5.653	112	650763	68.10	ug/L		97
79) 1,1,1,2-Tetrachloroethane	5.695	131	254496	88.91	ug/L		94
80) m,p-Xylene	5.779	91	1980532	144.23	ug/L		100
81) o-Xylene	6.072	91	1007254	74.29	ug/L		97
82) Styrene	6.108	104	739314	77.72	ug/L		97
83) Bromoform	6.114	173	163732	93.19	ug/L		96
84) Isopropylbenzene	6.302	105	1150117	76.68	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.522	53	139751	78.74	ug/L	#	71
88) n-Propylbenzene	6.605	91	1380321	66.07	ug/L		97
89) Bromobenzene	6.569	156	272829	72.49	ug/L		90
90) 1,1,2,2-Tetrachloroethane	6.626	83	374043	63.73	ug/L		98
91) 1,3,5-Trimethylbenzene	6.752	105	951878	68.45	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:23:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

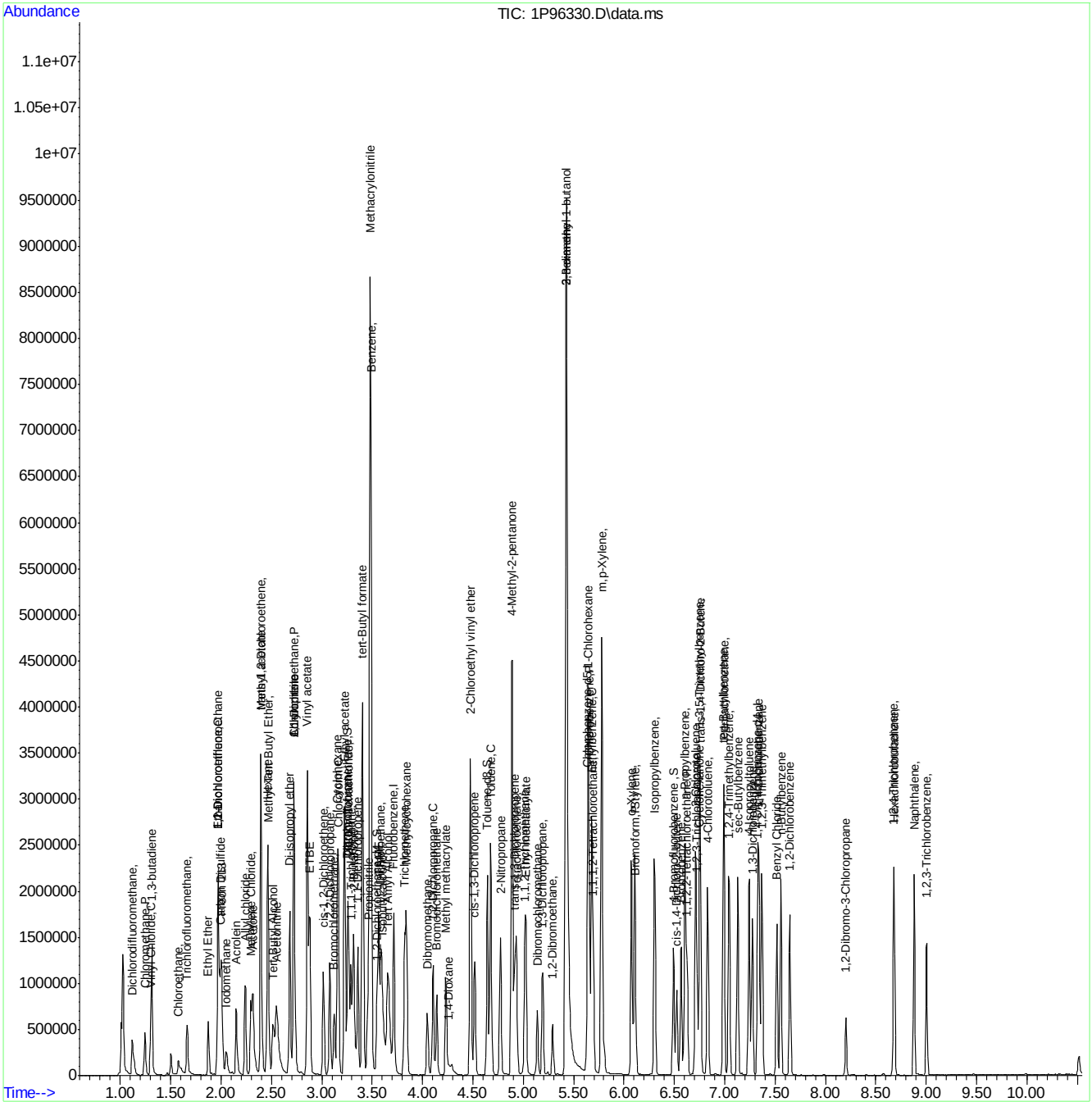
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	6.710	91	828918	66.73	ug/L		96
93) trans-1,4-Dichloro-2-B...	6.757	53	147237	69.88	ug/L		86
94) 1,2,3-Trichloropropane	6.720	110	135345	65.59	ug/L		95
95) Cyclohexanone	6.746	55	116453	295.34	ug/L		93
96) 4-Chlorotoluene	6.830	91	878219	67.51	ug/L		96
97) tert-Butylbenzene	6.987	91	545273	69.25	ug/L		96
99) 1,2,4-Trimethylbenzene	7.045	105	923505	68.26	ug/L		96
100) Pentachloroethane	6.992	167	152502	83.21	ug/L	#	55
101) sec-Butylbenzene	7.128	105	1046383	68.82	ug/L		99
102) 4-Isopropyltoluene	7.243	119	938484	73.85	ug/L		98
103) 1,3-Dichlorobenzene	7.275	146	493417	71.53	ug/L		97
104) 1,2,3-Trimethylbenzene	7.369	105	895984	66.82	ug/L		100
105) 1,4-Dichlorobenzene	7.337	146	500160	69.99	ug/L		99
106) n-Butylbenzene	7.557	92	454007	68.65	ug/L		95
107) Benzyl Chloride	7.515	126	162151	79.91	ug/L		98
108) 1,2-Dichlorobenzene	7.646	146	470400	72.70	ug/L		98
109) 1,2-Dibromo-3-Chloropr...	8.200	75	113120	86.46	ug/L		93
110) Hexachlorobutadiene	8.682	225	126554	106.17	ug/L		96
111) 1,2,4-Trichlorobenzene	8.676	180	287673	81.66	ug/L		98
112) Naphthalene	8.880	128	1022075	65.86	ug/L		99
113) 1,2,3-Trichlorobenzene	9.006	180	277764	85.26	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:23:12 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3646-IC3646
Lab FileID: 1P96330.D
Injection Time: 12/14/22 12:54

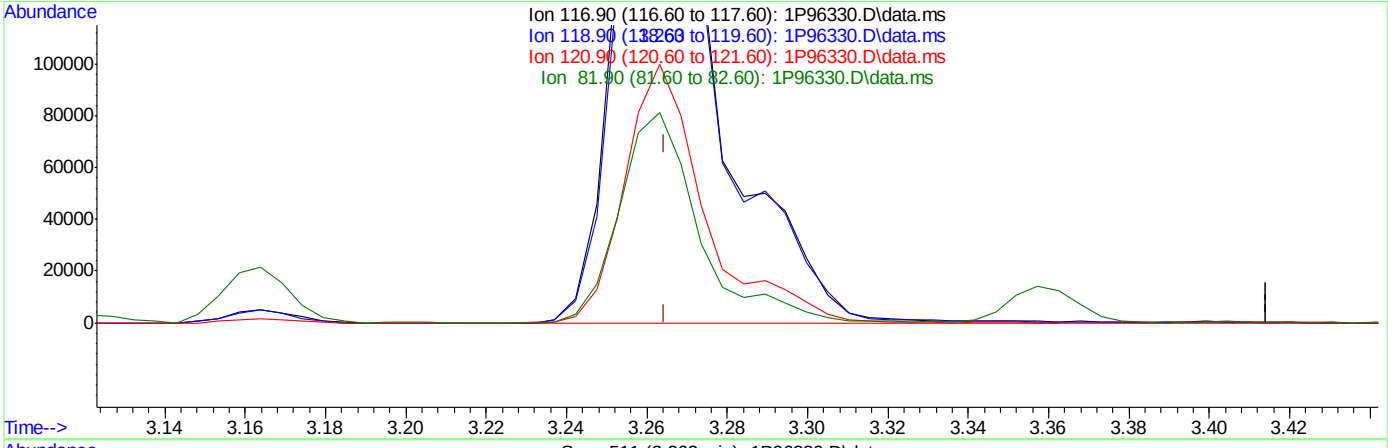
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

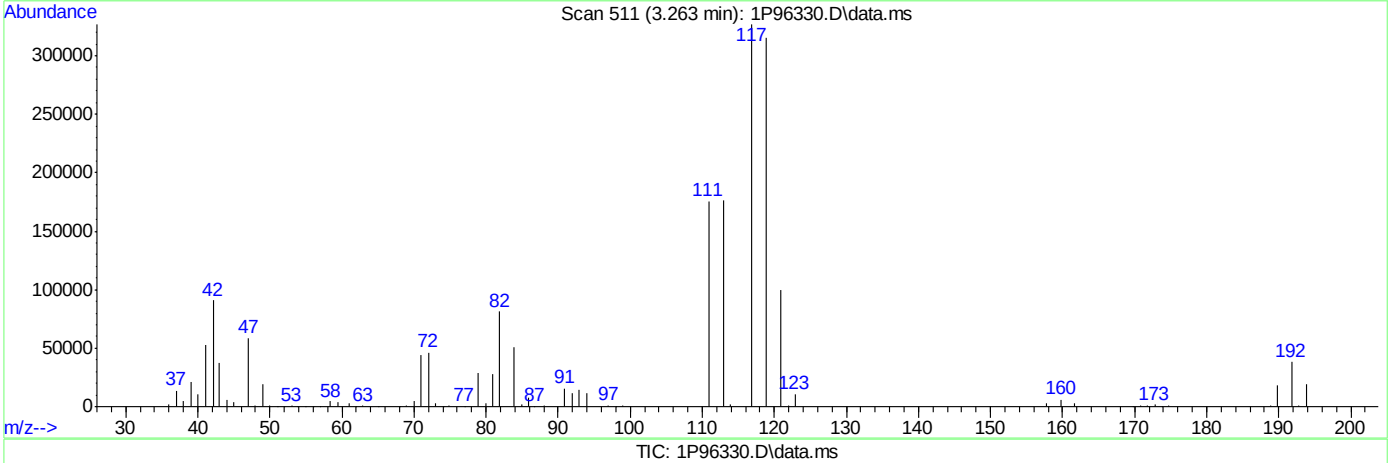
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.60	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(40) Carbon Tetrachloride ( )

3.263min (-0.001) 114.10ug/L

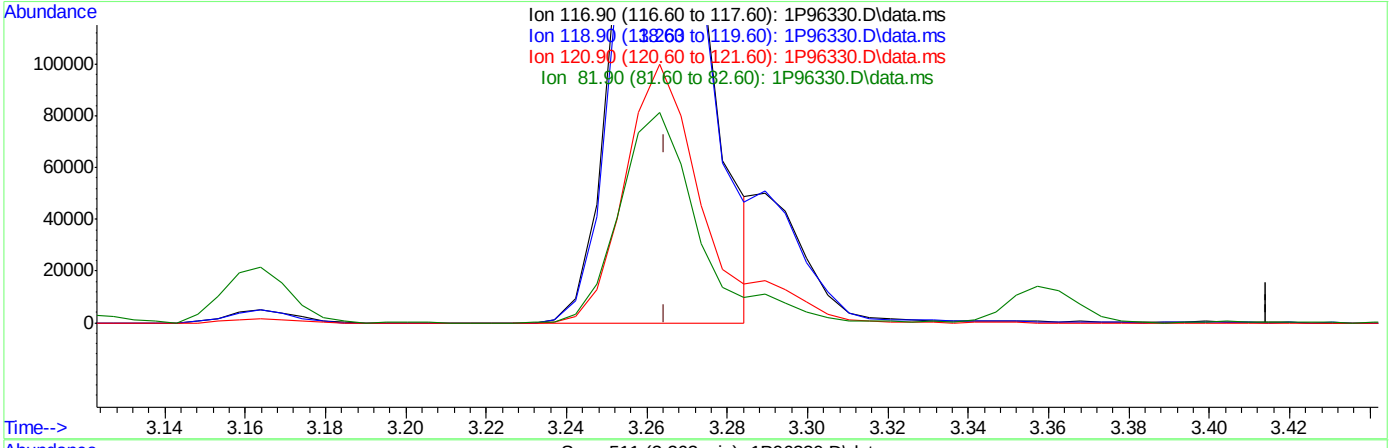
response 454021

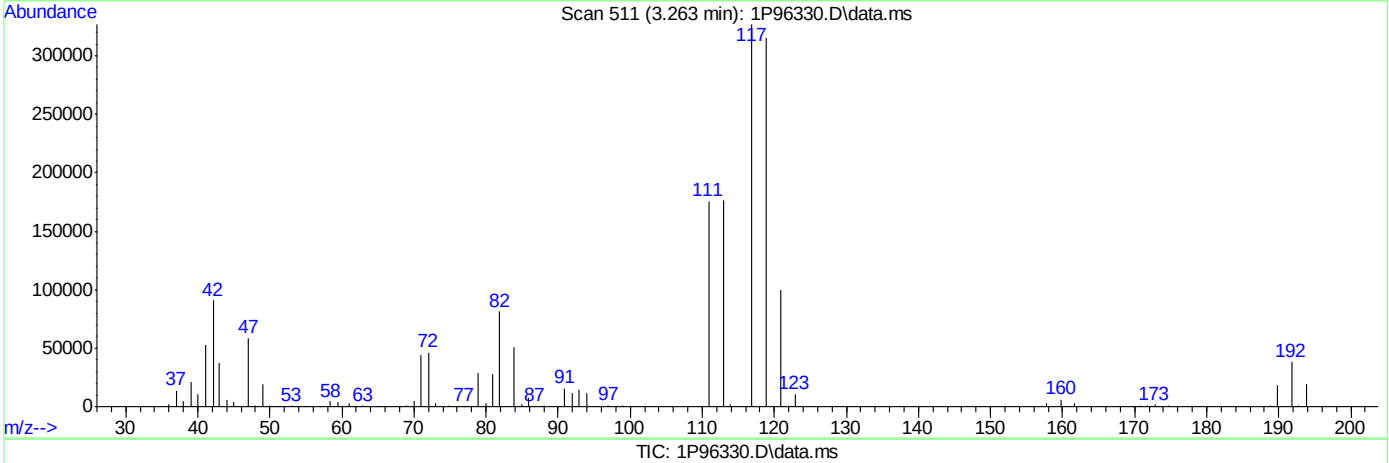
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.57
120.90	31.00	30.55
81.90	30.20	24.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(40) Carbon Tetrachloride ( )

3.263min (-0.001) 103.01ug/L m

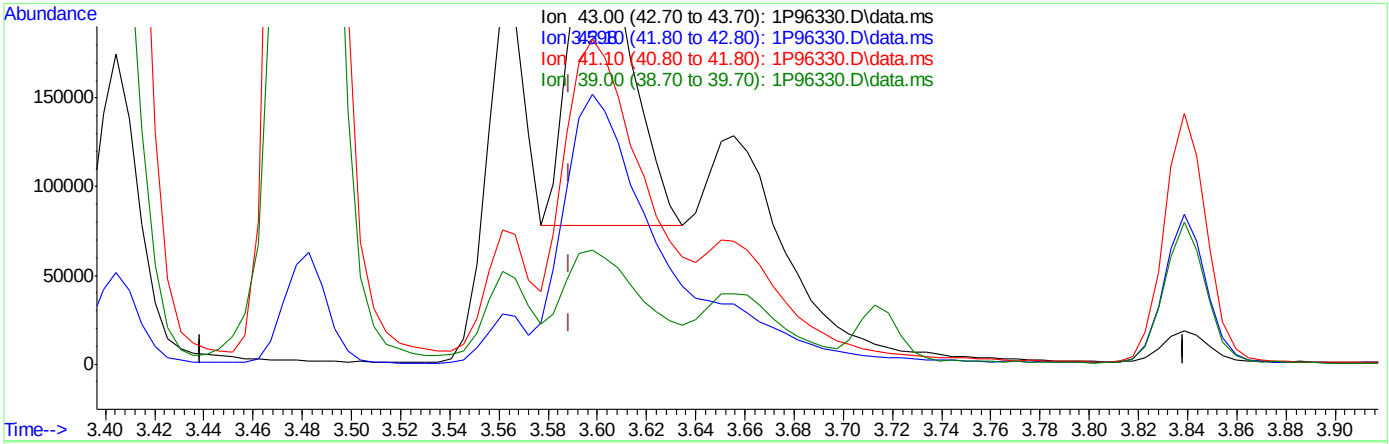
response 409890

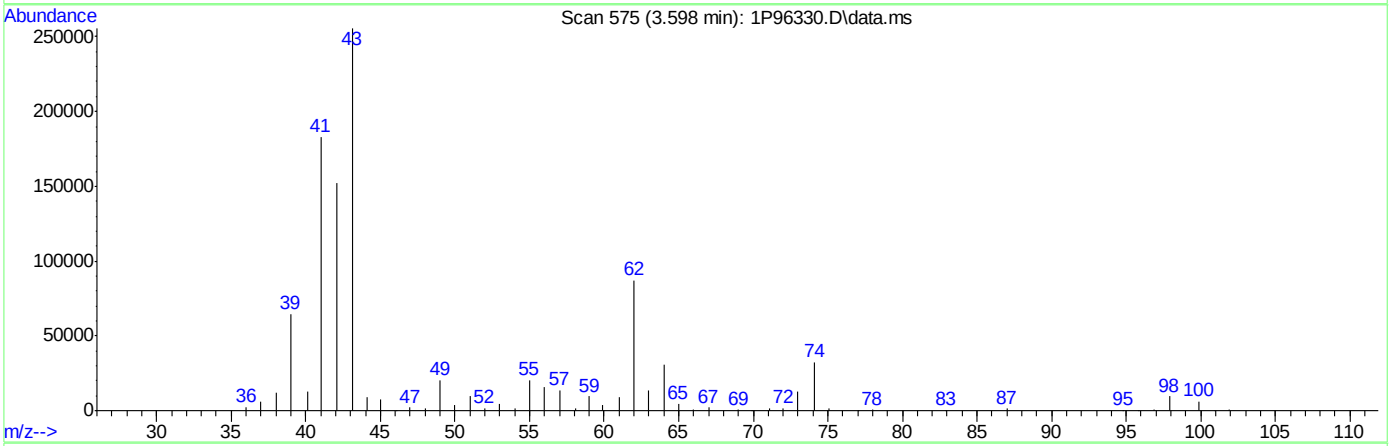
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.57
120.90	31.00	30.55
81.90	30.20	24.85

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(50) Isobutyl alcohol

3.598min (+0.009) 449.99ug/L

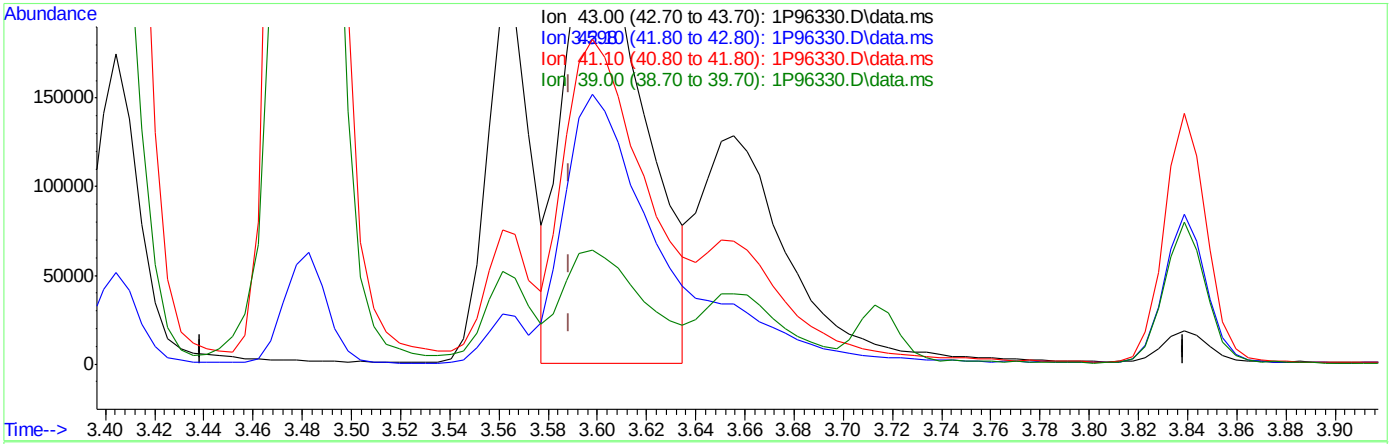
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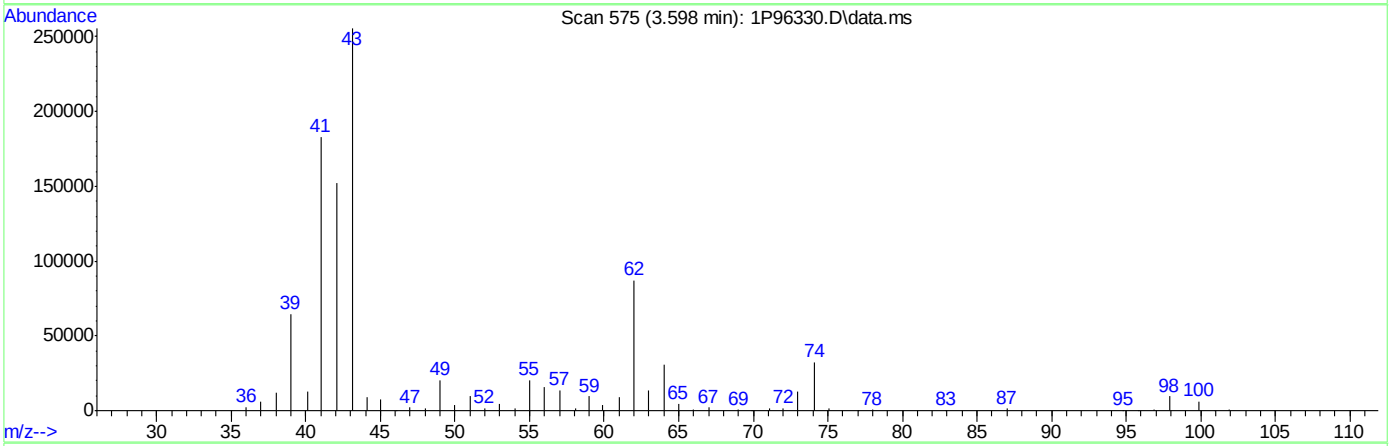
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	72.80
41.10	71.40	80.41
39.00	26.20	24.08

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(50) Isobutyl alcohol

3.598min (+0.009) 853.66ug/L m

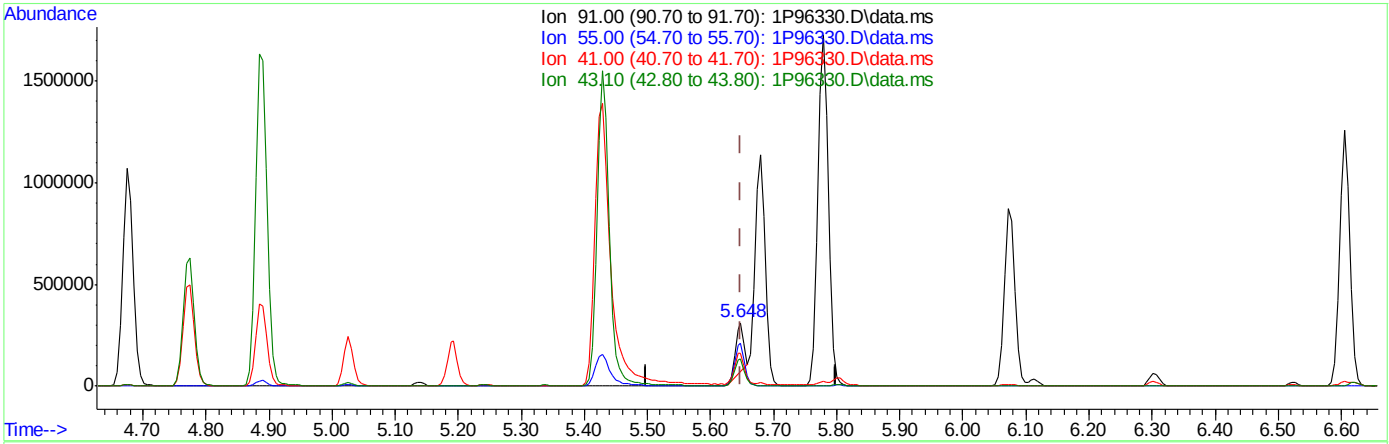
response 569070

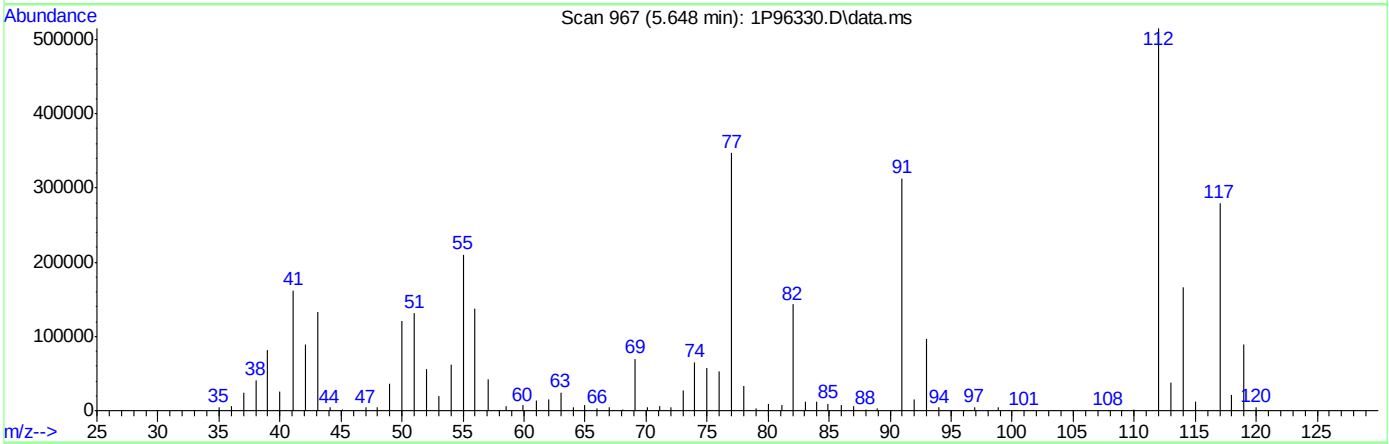
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	59.63
41.10	71.40	71.70
39.00	26.20	25.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(76) 1-Chlorohexane

5.648min (-0.001) 46.72ug/L

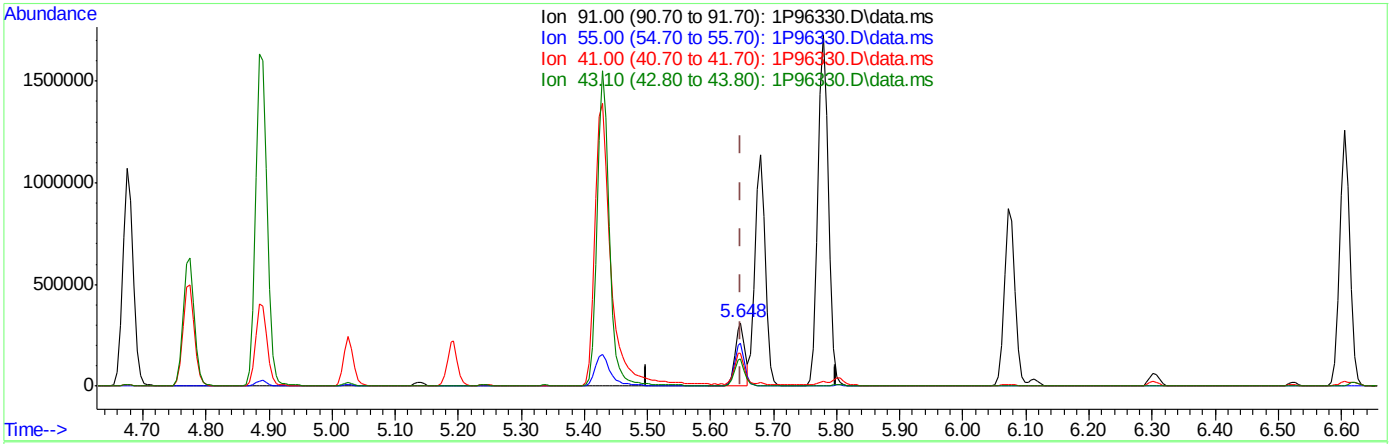
response 241865

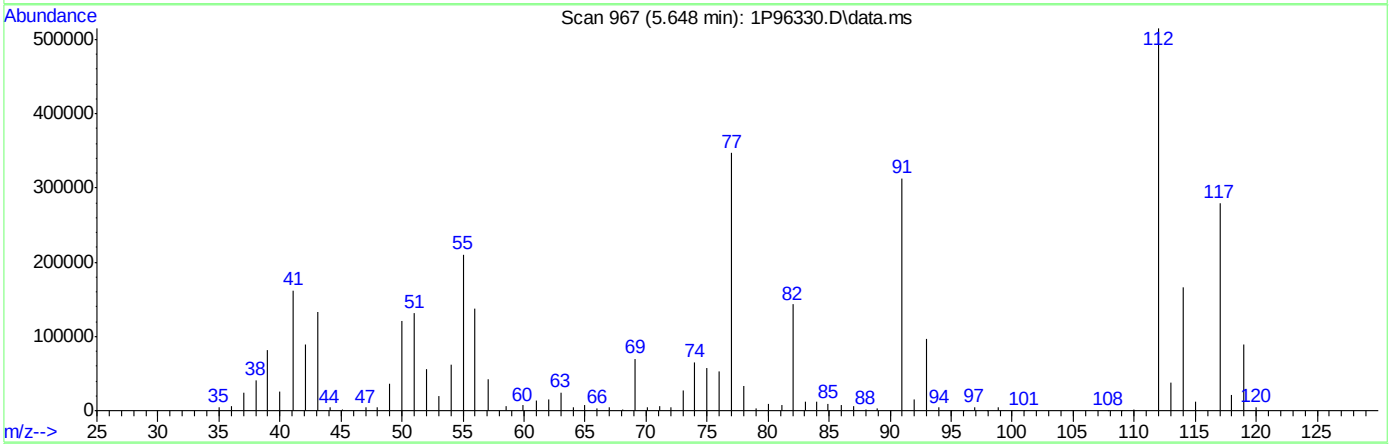
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	65.24
41.00	62.10	47.95
43.10	50.00	40.88

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96330.D
Acq On : 14 Dec 2022 12:54 pm
Operator : courtnef
Sample : IC3646-6
Misc : MS52806,V1P3646,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 14 13:17:56 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96330.D\data.ms

(76) 1-Chlorohexane

5.648min (-0.001) 67.61ug/L m

response 350847

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	67.25
41.00	62.10	51.88
43.10	50.00	42.70

1P96332.D

Manual Integrations APPROVED (compounds with "m" flag)

Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:38:42 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	3.716	96	1010282	50.00	ug/L		0.00
62) Chlorobenzene-d5	5.641	117	649832	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	307174	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	3.261	113	223068	52.95	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.90%				
49) 1,2-Dichloroethane-d4	3.549	65	300531	49.50	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.00%				
63) Toluene-d8	4.647	98	988053	51.82	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.64%				
86) 4-Bromofluorobenzene	6.493	174	255726	54.50	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 109.00%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.127	85	507785	142.09	ug/L		99
3) Chloromethane	1.247	50	466912	88.60	ug/L		96
4) 1,3-butadiene	1.315	39	353710	73.24	ug/L		95
5) Vinyl Chloride	1.305	62	429647	96.24	ug/L		97
6) Bromomethane	1.509	94	136855	Below Cal			96
7) Chloroethane	1.582	64	151155	186.65	ug/L		96
8) Trichlorofluoromethane	1.666	101	295995	80.60	ug/L		97
9) Ethyl Ether	1.880	59	244525	77.60	ug/L		96
10) Ethanol	2.000	45	146714	1499.31	ug/L		93
11) 1,2-Dichlorotrifluoroe...	1.974	67	453419	93.71	ug/L		95
12) 1,1-Dichloroethene	1.974	61	569822	98.55	ug/L		95
13) Freon 113	2.006	101	388781	117.22	ug/L		95
14) Carbon Disulfide	1.990	76	1006833	86.07	ug/L		95
15) Iodomethane	2.053	142	263941	494.99	ug/L		99
16) Acrolein	2.157	56	600178	470.05	ug/L		100
17) Allyl chloride	2.241	41	508361	108.26	ug/L		99
18) Methylene Chloride	2.299	49	438372	75.06	ug/L		93
19) Acetone	2.320	43	1076601	481.15	ug/L		99
20) Methyl acetate	2.398	43	2438623	408.27	ug/L		93
21) trans-1,2-Dichloroethene	2.398	61	563536	101.70	ug/L		98
22) Hexane	2.461	56	325068	106.52	ug/L	#	74
23) Methyl Tert Butyl Ether	2.471	73	1383839	105.82	ug/L		78
24) Tert Butyl Alcohol	2.534	59	1286161	1054.49	ug/L		89
25) Acetonitrile	2.560	41	1069213	Below Cal			97
26) Di-isopropyl ether	2.686	45	1262802	93.31	ug/L		98
27) Chloroprene	2.727	53	1707391	84.22	ug/L		97
28) 1,1-Dichloroethane	2.727	63	709882	99.45	ug/L		97
29) Acrylonitrile	2.727	52	1090172	407.53	ug/L		98
30) ETBE	2.884	59	1314181	99.61	ug/L		98
31) Vinyl acetate	2.858	43	4275479	418.39	ug/L		100
32) cis-1,2-Dichloroethene	3.020	96	438578	111.51	ug/L		96
33) 2,2-Dichloropropane	3.083	77	734589	124.16	ug/L		99
34) Bromochloromethane	3.125	128	171012	107.67	ug/L	#	88
35) Cyclohexane	3.156	56	671874	104.20	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:38:42 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.167	83	758893	107.95	ug/L		99
37) Ethyl acetate	3.230	43	3120088	441.11	ug/L		98
38) Tetrahydrofuran	3.261	42	242879	93.69	ug/L		94
40) Carbon Tetrachloride	3.266	117	616715m	145.25	ug/L		
41) 1,1,1-Trichloroethane	3.292	97	717235	122.46	ug/L		95
42) 2-Butanone	3.318	43	1919938	475.03	ug/L		96
43) 1,1-Dichloropropene	3.360	75	615024	114.16	ug/L		96
44) tert-Butyl formate	3.407	59	1915882	621.96	ug/L		90
45) Propionitrile	3.465	54	1037711	891.04	ug/L		93
46) Methacrylonitrile	3.486	41	3119648	746.10	ug/L		93
47) Benzene	3.491	78	1453540	84.31	ug/L	#	67
48) TAME	3.564	73	1294234	105.45	ug/L		95
50) Isobutyl alcohol	3.606	43	816348m	1147.74	ug/L		
51) 1,2-Dichloroethane	3.585	62	595653	103.42	ug/L		96
52) Tert Amyl Alcohol	3.669	59	1087231	1012.38	ug/L		94
53) Trichloroethene	3.821	95	448245	110.25	ug/L		98
54) Methylcyclohexane	3.841	83	684454	118.22	ug/L		98
55) Dibromomethane	4.045	93	246656	107.16	ug/L		92
56) 1,2-Dichloropropane	4.103	63	432139	106.68	ug/L		95
57) Bromodichloromethane	4.145	83	550387	127.47	ug/L		97
58) Methyl methacrylate	4.234	41	478119	102.30	ug/L		90
59) 1,4-Dioxane	4.270	88	193648	2635.38	ug/L		91
60) 2-Chloroethyl vinyl ether	4.474	63	1479948	930.00	ug/L		93
61) cis-1,3-Dichloropropene	4.521	75	690953	121.25	ug/L		90
64) Toluene	4.678	91	1791975	104.49	ug/L		99
65) 2-Nitropropane	4.772	41	942425	468.24	ug/L		96
66) 4-Methyl-2-pentanone	4.888	43	3069602	439.85	ug/L		96
67) trans-1,3-Dichloropropene	4.919	75	588889	118.00	ug/L		91
68) Tetrachloroethene	4.935	166	417309	124.49	ug/L		96
69) Ethyl methacrylate	5.029	69	619303	101.24	ug/L		87
70) 1,1,2-Trichloroethane	5.018	83	294653	100.14	ug/L		94
71) Dibromochloromethane	5.139	129	381332	114.70	ug/L		99
72) 1,3-Dichloropropane	5.191	76	666216	101.90	ug/L		94
73) 1,2-Dibromoethane	5.290	107	377073	113.51	ug/L		100
74) 3,3-dimethyl-1-butanol	5.431	57	4731701	4166.18	ug/L		95
75) 2-hexanone	5.431	43	2891635	383.78	ug/L		84
76) 1-Chlorohexane	5.646	91	535043m	101.50	ug/L		
77) Ethylbenzene	5.677	91	1846954	102.82	ug/L		98
78) Chlorobenzene	5.651	112	962767	99.55	ug/L		99
79) 1,1,1,2-Tetrachloroethane	5.693	131	369986	127.71	ug/L		94
80) m,p-Xylene	5.782	91	2881139	207.31	ug/L		100
81) o-Xylene	6.075	91	1477185	107.65	ug/L		97
82) Styrene	6.106	104	1082361	112.42	ug/L		97
83) Bromoform	6.117	173	248062	125.77	ug/L		95
84) Isopropylbenzene	6.305	105	1690210	111.35	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.525	53	209413	117.12	ug/L	#	67
88) n-Propylbenzene	6.608	91	2033266	96.60	ug/L		97
89) Bromobenzene	6.566	156	400074	105.51	ug/L		93
90) 1,1,2,2-Tetrachloroethane	6.629	83	544282	92.04	ug/L		100
91) 1,3,5-Trimethylbenzene	6.755	105	1392752	99.40	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:38:42 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration

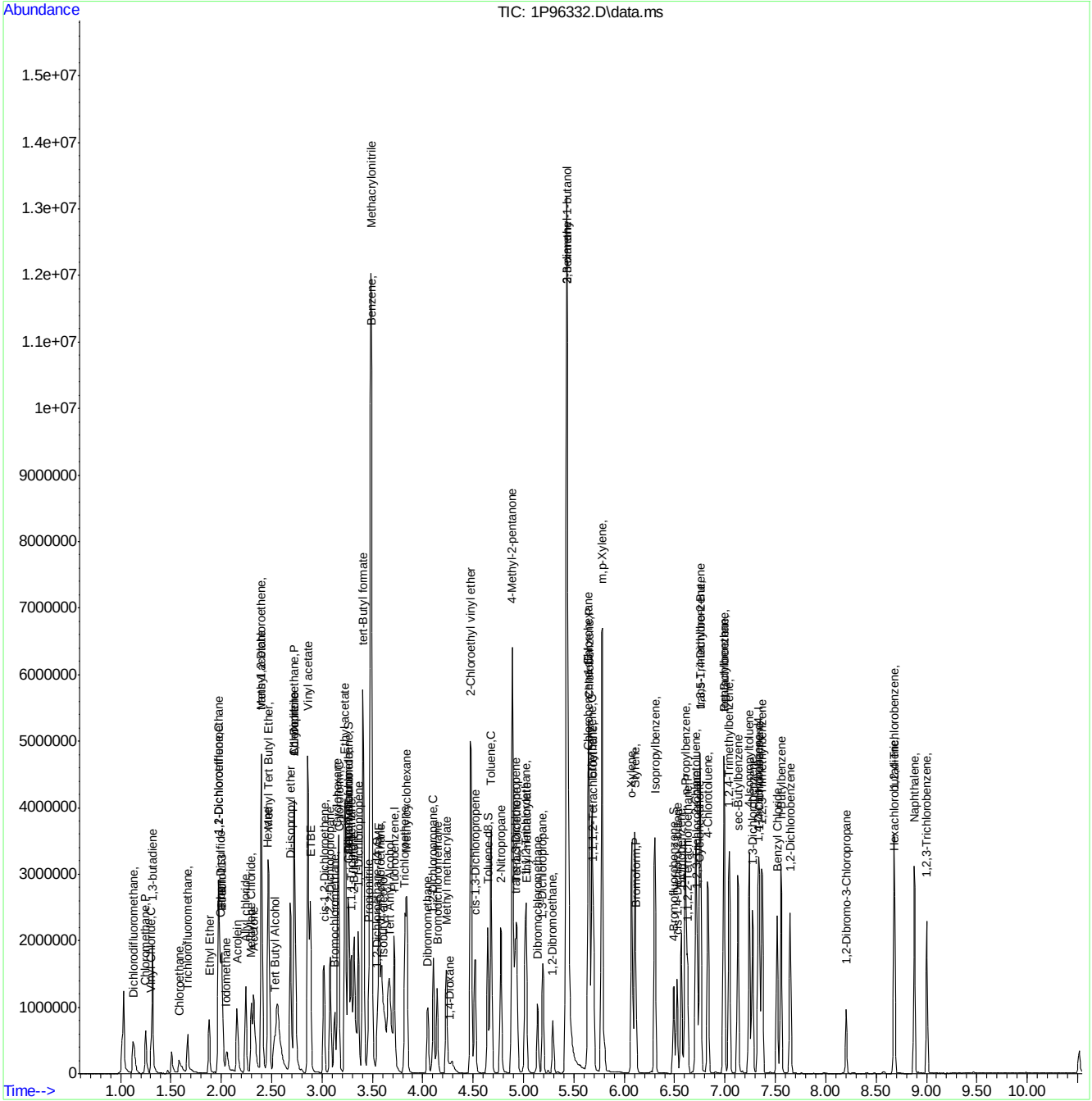
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.708	91	1216324	97.19	ug/L		99
93)	trans-1,4-Dichloro-2-B...	6.755	53	217392	102.41	ug/L		85
94)	1,2,3-Trichloropropane	6.723	110	197064	94.79	ug/L		93
95)	Cyclohexanone	6.744	55	165285	421.60	ug/L		94
96)	4-Chlorotoluene	6.828	91	1272995	97.13	ug/L		100
97)	tert-Butylbenzene	6.990	91	802145	101.12	ug/L		96
99)	1,2,4-Trimethylbenzene	7.042	105	1384815	101.59	ug/L		97
100)	Pentachloroethane	6.990	167	225823	114.81	ug/L	#	64
101)	sec-Butylbenzene	7.126	105	1567437	102.32	ug/L		100
102)	4-Isopropyltoluene	7.241	119	1399221	109.29	ug/L		98
103)	1,3-Dichlorobenzene	7.272	146	722501	103.96	ug/L		99
104)	1,2,3-Trimethylbenzene	7.367	105	1338242	99.06	ug/L		98
105)	1,4-Dichlorobenzene	7.340	146	733601	101.89	ug/L		97
106)	n-Butylbenzene	7.555	92	684039	102.67	ug/L		95
107)	Benzyl Chloride	7.518	126	244697	108.94	ug/L	#	88
108)	1,2-Dichlorobenzene	7.649	146	697630	107.02	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	8.203	75	169681	128.73	ug/L		87
110)	Hexachlorobutadiene	8.685	225	185601	154.54	ug/L		95
111)	1,2,4-Trichlorobenzene	8.679	180	429610	121.04	ug/L		99
112)	Naphthalene	8.878	128	1548005	99.00	ug/L		100
113)	1,2,3-Trichlorobenzene	9.004	180	416931	127.02	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:38:42 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3646-IC3646
Lab FileID: 1P96332.D
Injection Time: 12/14/22 13:26

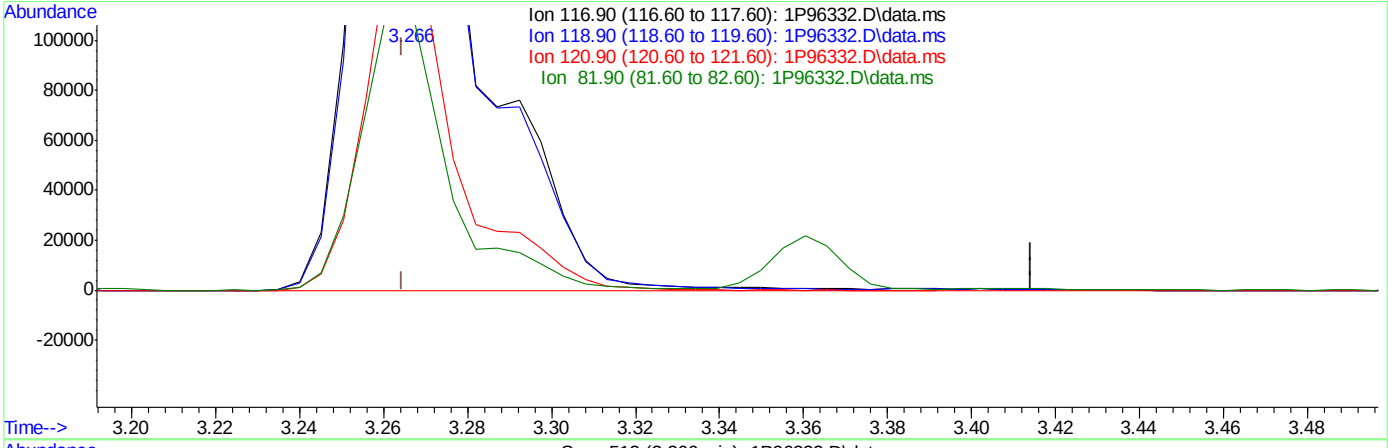
Method: SW846 8260D
Analyst approved: 12/14/22 14:20 Courtney Failla
Supervisor approved: 12/15/22 13:50 Karen Watson

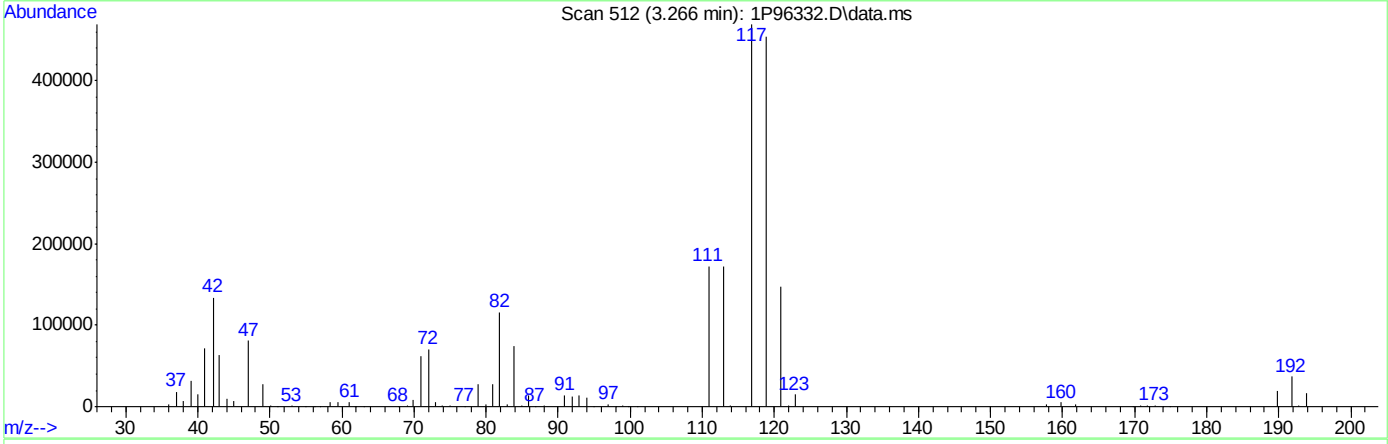
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.27	Overlapping peak
Isobutyl Alcohol	78-83-1		3.61	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.002) 159.85ug/L

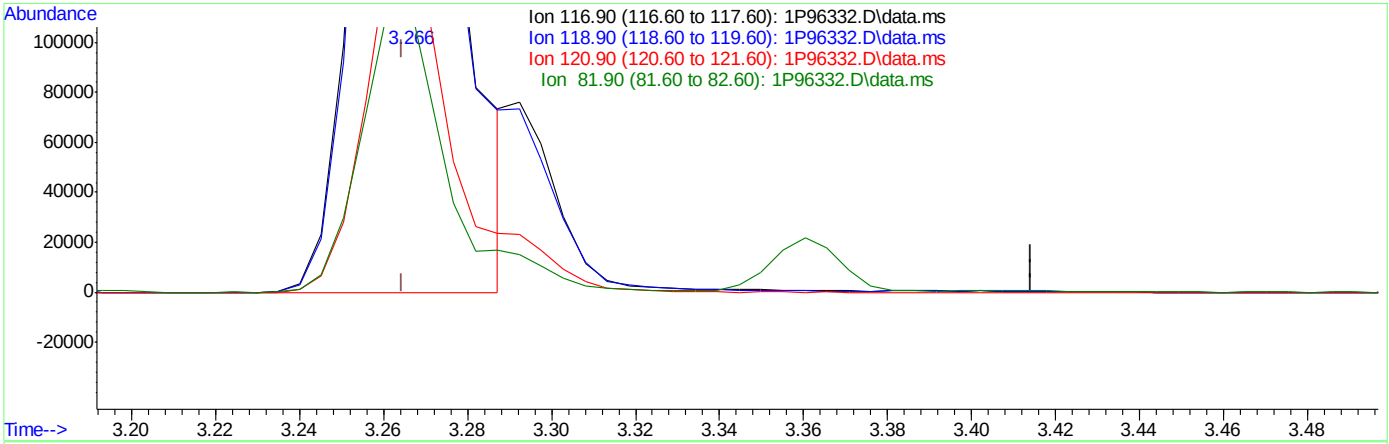
response 678706

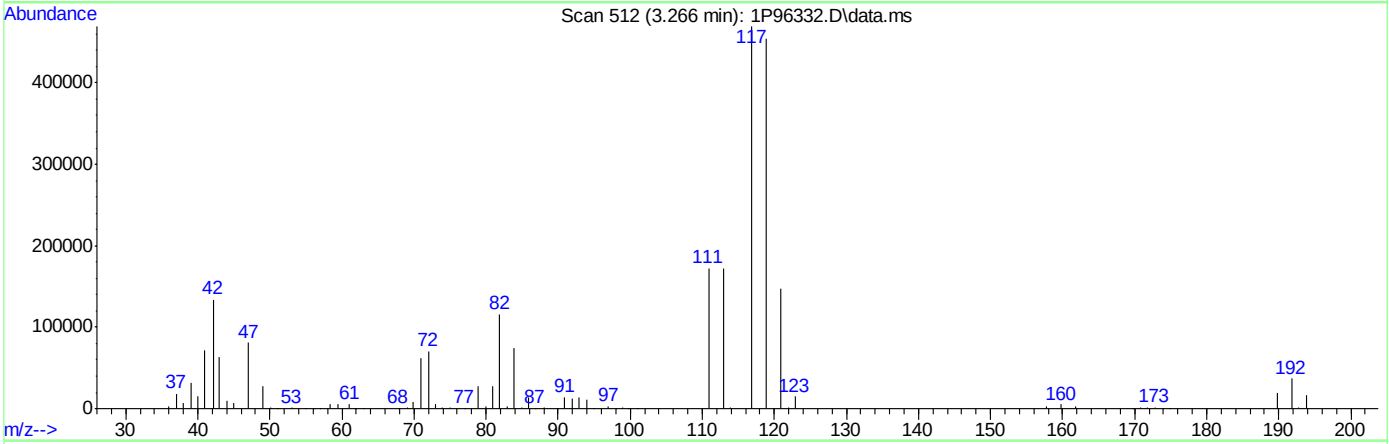
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.77
120.90	31.00	31.25
81.90	30.20	24.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (+0.002) 145.25ug/L m

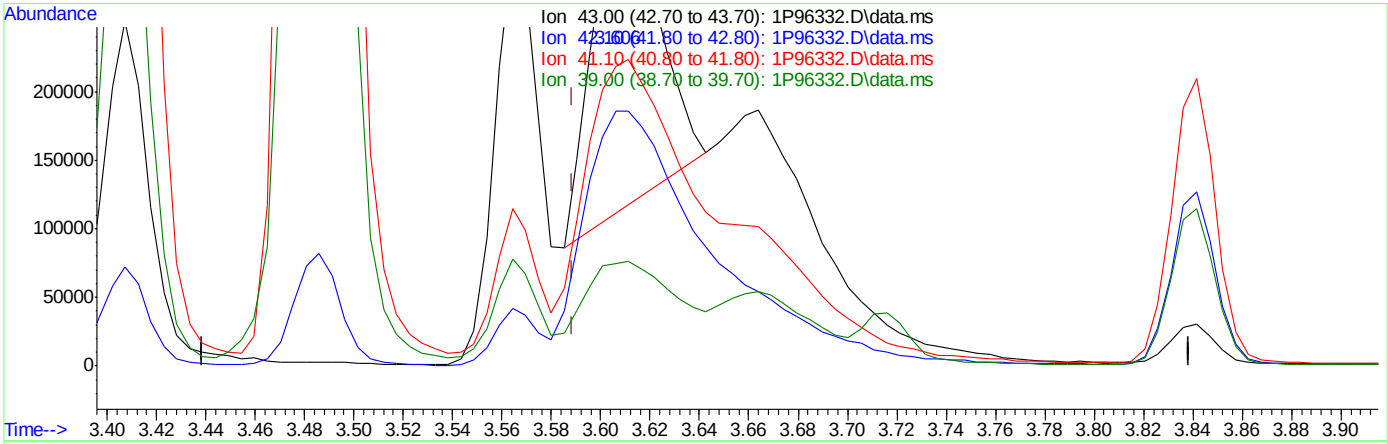
response 616715

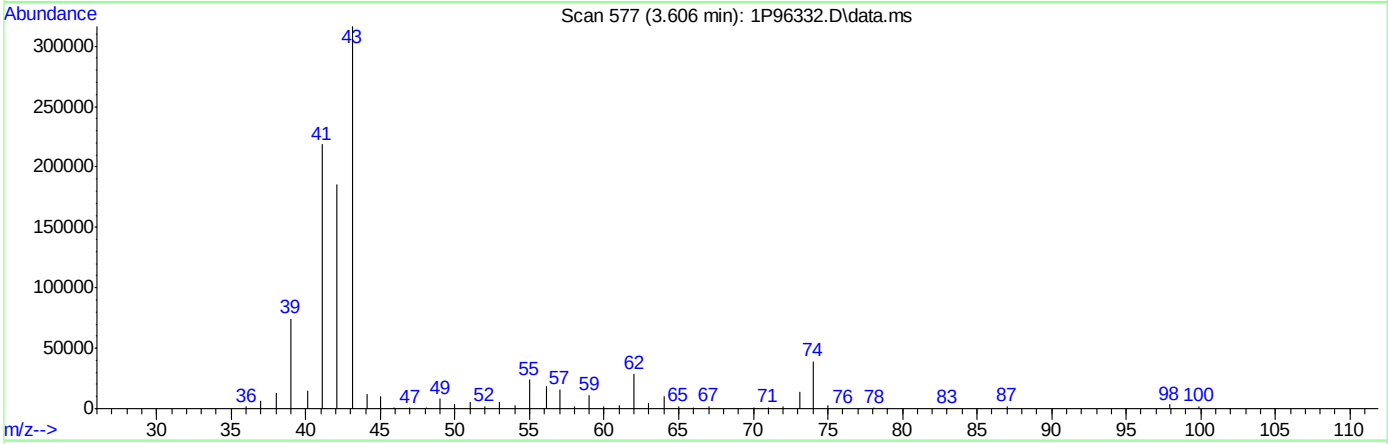
Ion	Exp%	Act%
116.90	100	100
118.90	97.80	96.77
120.90	31.00	31.25
81.90	30.20	24.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(50) Isobutyl alcohol

3.606min (+0.018) 564.21ug/L

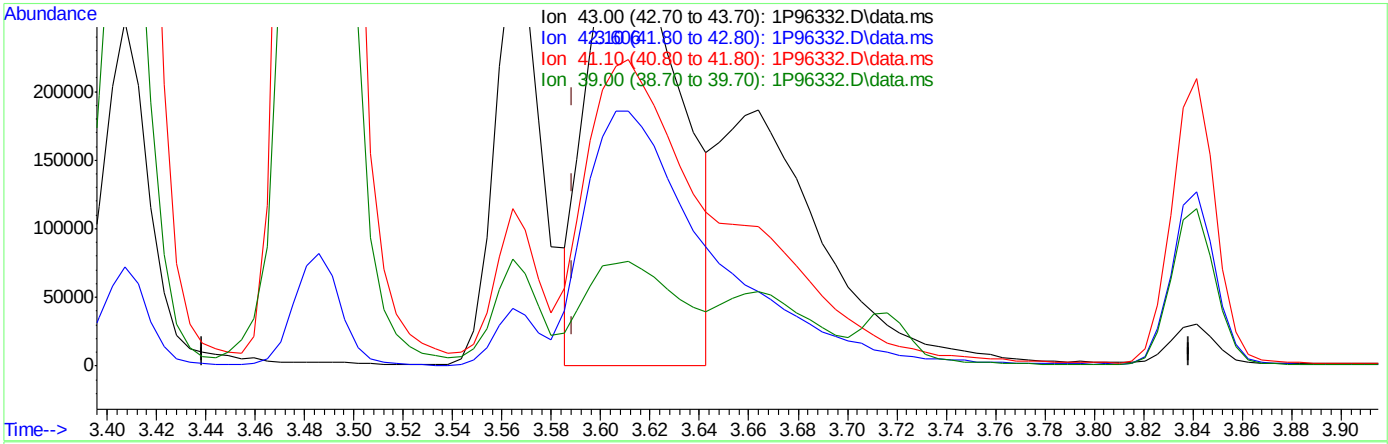
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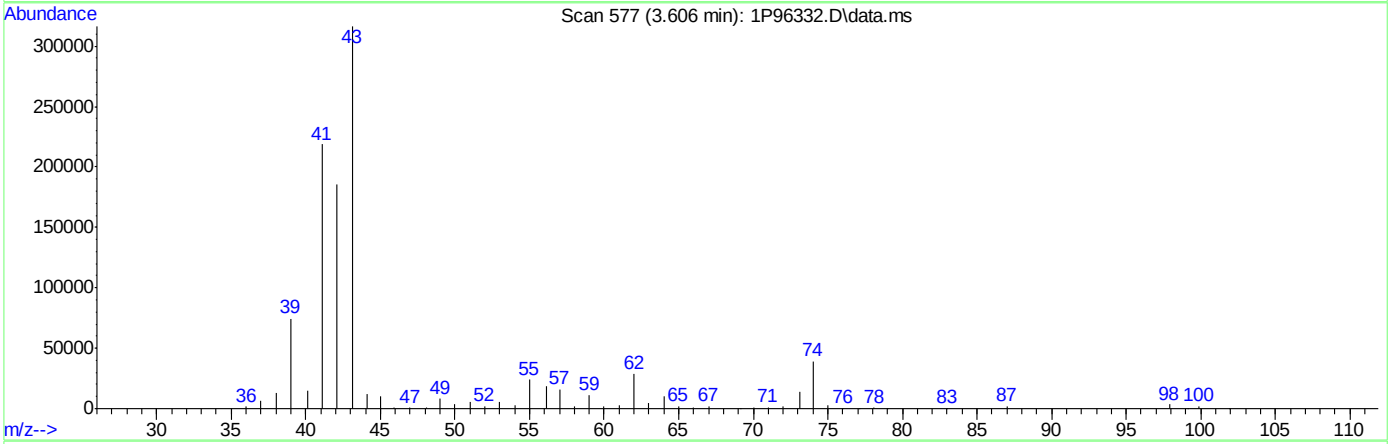
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	63.25
41.10	71.40	70.46
39.00	26.20	22.12

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(50) Isobutyl alcohol

3.606min (+0.018) 1147.74ug/L m

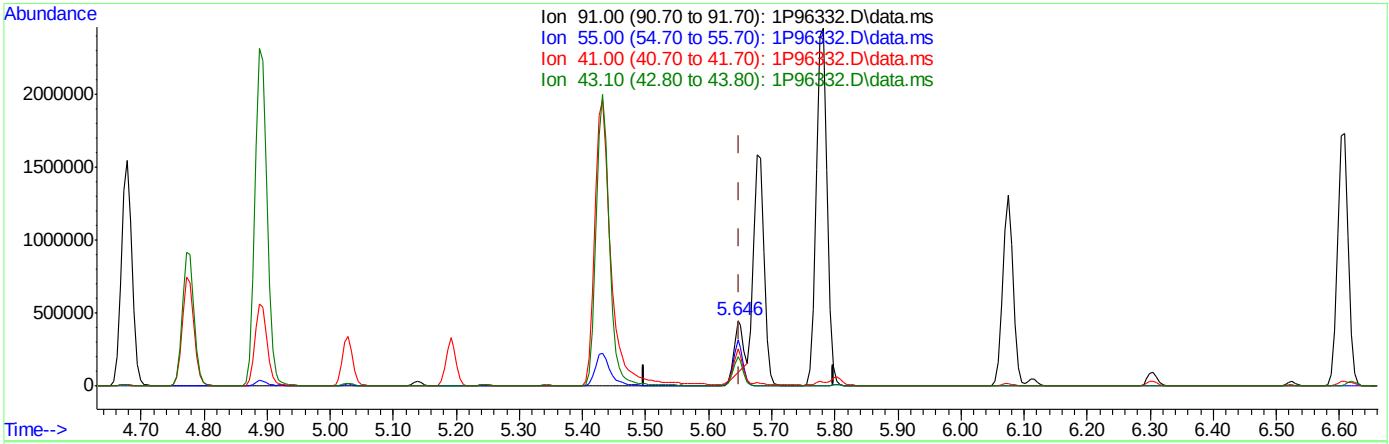
response 816348

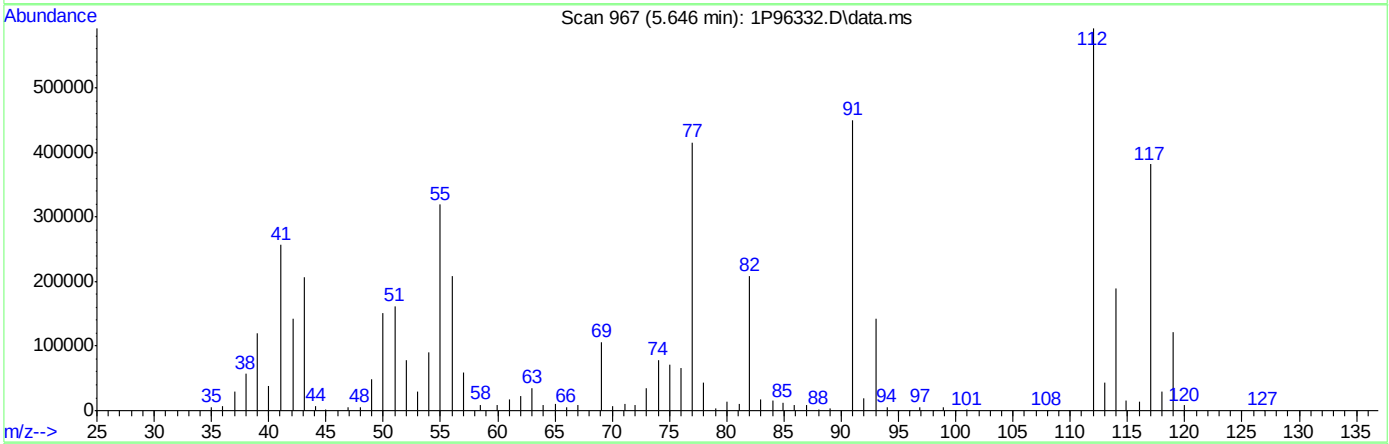
Ion	Exp%	Act%
43.00	100	100
42.10	59.60	58.69
41.10	71.40	69.11
39.00	26.20	23.60

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 68.39ug/L

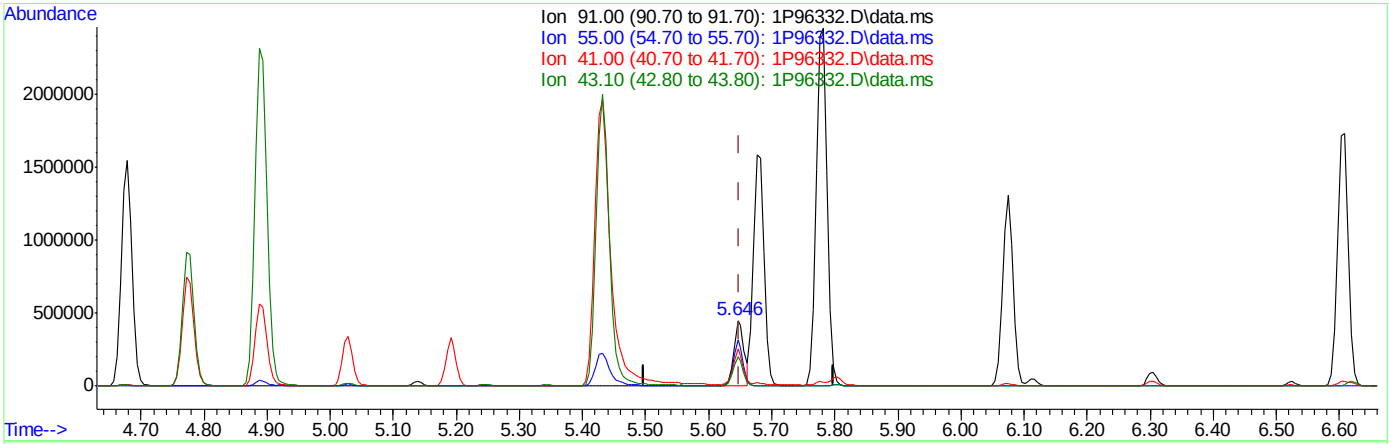
response 359214

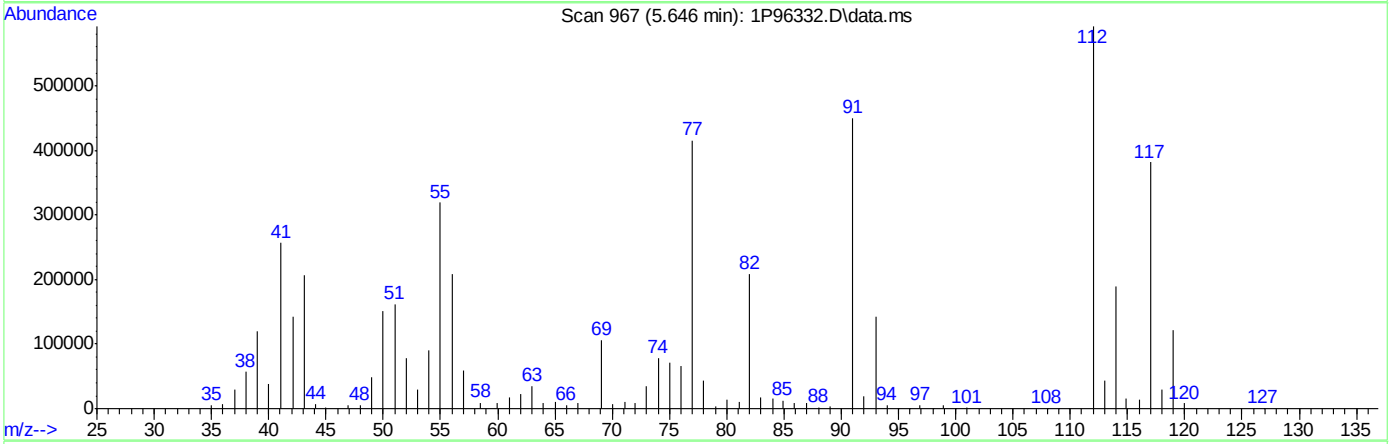
Ion	Exp%	Act%
91.00	100	100
55.00	73.20	68.34
41.00	62.10	53.17
43.10	50.00	43.84

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96332.D
Acq On : 14 Dec 2022 1:26 pm
Operator : courtnef
Sample : IC3646-7
Misc : MS52806,V1P3646,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 14 13:37:17 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Nov 04 16:23:46 2022
Response via : Initial Calibration





TIC: 1P96332.D\data.ms

(76) 1-Chlorohexane

5.646min (-0.003) 101.50ug/L m

response 535043

Ion	Exp%	Act%
91.00	100	100
55.00	73.20	70.89
41.00	62.10	56.93
43.10	50.00	45.68

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:50

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:36:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.715	96	1002901	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.640	117	676707	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.329	152	318620	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.260	113	228854	50.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.44%			
49) 1,2-Dichloroethane-d4	3.548	65	295985	48.52	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.04%			
63) Toluene-d8	4.646	98	996420	51.12	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.24%			
86) 4-Bromofluorobenzene	6.493	174	265361	51.33	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.66%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.121	85	178407	37.87	ug/L	97
3) Chloromethane	1.242	50	185611	41.21	ug/L	96
4) 1,3-butadiene	1.315	39	151896	45.82	ug/L	96
5) Vinyl Chloride	1.299	62	168175	41.38	ug/L	99
6) Bromomethane	1.503	94	53935	38.13	ug/L	99
7) Chloroethane	1.576	64	65100	44.38	ug/L	99
8) Trichlorofluoromethane	1.665	101	181929	40.33	ug/L	99
9) Ethyl Ether	1.874	59	109979	37.34	ug/L	95
10) Ethanol	1.969	45	70892	746.46	ug/L	99
11) 1,2-Dichlorotrifluoroe...	1.969	67	180440	39.36	ug/L	98
12) 1,1-Dichloroethene	1.974	61	226474	39.18	ug/L	96
13) Freon 113	2.005	101	144461	39.17	ug/L	98
14) Carbon Disulfide	1.990	76	417488	41.61	ug/L	99
15) Iodomethane	2.052	142	95075	36.78	ug/L	98
16) Acrolein	2.152	56	221115	176.35	ug/L	99
17) Allyl chloride	2.241	41	234062	39.83	ug/L	98
18) Methylene Chloride	2.298	49	174429	35.69	ug/L	98
19) Acetone	2.314	43	463236	196.55	ug/L	99
20) Methyl acetate	2.392	43	1047717	202.78	ug/L	97
21) trans-1,2-Dichloroethene	2.397	61	223571	39.03	ug/L	96
22) Hexane	2.460	56	122961	39.43	ug/L	90
23) Methyl Tert Butyl Ether	2.465	73	547578	41.28	ug/L	89
24) Tert Butyl Alcohol	2.513	59	535923	428.12	ug/L	96
25) Acetonitrile	2.549	41	286391	322.18	ug/L	97
26) Di-isopropyl ether	2.680	45	514426	41.84	ug/L	98
27) Chloroprene	2.722	53	767977	42.73	ug/L	94
28) 1,1-Dichloroethane	2.722	63	295113	40.53	ug/L	98
29) Acrylonitrile	2.727	52	496925	215.10	ug/L	94
30) ETBE	2.879	59	510774	40.44	ug/L	99
31) Vinyl acetate	2.858	43	2078628	238.20	ug/L	99
32) cis-1,2-Dichloroethene	3.015	96	171125	39.92	ug/L	94
33) 2,2-Dichloropropane	3.083	77	261151	38.47	ug/L	99
34) Bromochloromethane	3.124	128	70896	40.47	ug/L	88
35) Cyclohexane	3.156	56	261167	42.41	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:36:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	3.161	83	299004	39.51	ug/L	98
37) Ethyl acetate	3.224	43	1377891	213.76	ug/L	99
38) Tetrahydrofuran	3.255	42	100344	38.90	ug/L	94
40) Carbon Tetrachloride	3.266	117	224296m	39.81	ug/L	
41) 1,1,1-Trichloroethane	3.292	97	272293	40.51	ug/L	99
42) 2-Butanone	3.313	43	779605	184.38	ug/L	96
43) 1,1-Dichloropropene	3.360	75	228568	39.68	ug/L	97
44) tert-Butyl formate	3.402	59	585839	163.01	ug/L	97
45) Propionitrile	3.459	54	424023	348.38	ug/L	99
46) Methacrylonitrile	3.480	41	1359854	358.22	ug/L	98
47) Benzene	3.491	78	621998	37.93	ug/L	95
48) TAME	3.564	73	498011	40.62	ug/L	98
50) Isobutyl alcohol	3.595	43	335872m	739.79	ug/L	
51) 1,2-Dichloroethane	3.585	62	228063	38.19	ug/L	98
52) Tert Amyl Alcohol	3.653	59	420309	425.08	ug/L	98
53) Trichloroethene	3.820	95	170151	38.94	ug/L	95
54) Methylcyclohexane	3.841	83	253435	41.84	ug/L	99
55) Dibromomethane	4.045	93	93035	38.62	ug/L	94
56) 1,2-Dichloropropane	4.103	63	156800	38.28	ug/L	96
57) Bromodichloromethane	4.139	83	213067	41.72	ug/L	98
58) Methyl methacrylate	4.233	41	185805	41.55	ug/L	98
59) 1,4-Dioxane	4.259	88	84266	891.18	ug/L	94
60) 2-Chloroethyl vinyl ether	4.474	63	626480	211.44	ug/L	98
61) cis-1,3-Dichloropropene	4.516	75	259666	40.80	ug/L	100
64) Toluene	4.678	91	698181	39.22	ug/L	99
65) 2-Nitropropane	4.772	41	373534	215.67	ug/L	98
66) 4-Methyl-2-pentanone	4.887	43	1252517	176.29	ug/L	99
67) trans-1,3-Dichloropropene	4.913	75	243218	43.24	ug/L	90
68) Tetrachloroethene	4.934	166	165616	40.85	ug/L	98
69) Ethyl methacrylate	5.028	69	228450	39.27	ug/L	99
70) 1,1,2-Trichloroethane	5.013	83	117084	39.29	ug/L	90
71) Dibromochloromethane	5.138	129	141735	41.06	ug/L	99
72) 1,3-Dichloropropane	5.190	76	250730	37.73	ug/L	98
73) 1,2-Dibromoethane	5.290	107	148926	41.25	ug/L	100
74) 3,3-dimethyl-1-butanol	5.426	57	2028177	1992.70	ug/L	99
75) 2-hexanone	5.426	43	1272750	188.72	ug/L	99
76) 1-Chlorohexane	5.645	91	221512m	41.41	ug/L	
77) Ethylbenzene	5.677	91	735568	39.58	ug/L	99
78) Chlorobenzene	5.651	112	389371	39.20	ug/L	98
79) 1,1,1,2-Tetrachloroethane	5.692	131	148345	41.78	ug/L	97
80) m,p-Xylene	5.776	91	1163761	83.07	ug/L	99
81) o-Xylene	6.074	91	596721	43.71	ug/L	99
82) Styrene	6.106	104	438908	41.46	ug/L	98
83) Bromoform	6.111	173	93465	41.68	ug/L	98
84) Isopropylbenzene	6.304	105	680805	41.25	ug/L	99
87) cis-1,4-Dichloro-2-butene	6.524	53	72436	34.54	ug/L	95
88) n-Propylbenzene	6.603	91	808950	41.14	ug/L	99
89) Bromobenzene	6.566	156	153786	37.31	ug/L	95
90) 1,1,2,2-Tetrachloroethane	6.623	83	214062	38.11	ug/L	98
91) 1,3,5-Trimethylbenzene	6.754	105	546089	41.81	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:36:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

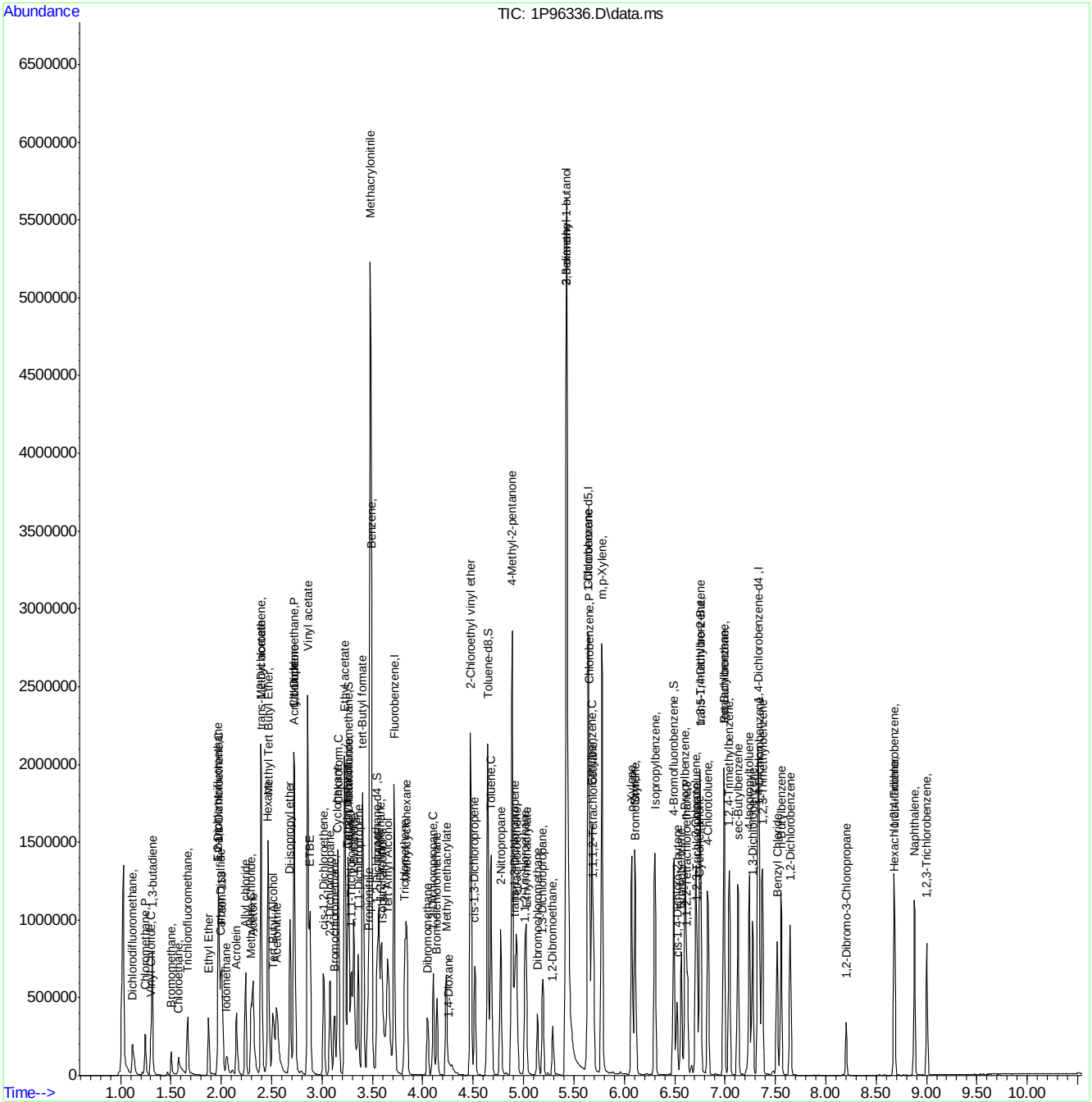
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.707	91	479885	40.66	ug/L		97
93)	trans-1,4-Dichloro-2-B...	6.754	53	88326	43.54	ug/L		97
94)	1,2,3-Trichloropropane	6.723	110	75808	37.62	ug/L		98
95)	Cyclohexanone	6.744	55	71102	222.25	ug/L		98
96)	4-Chlorotoluene	6.827	91	512323	41.11	ug/L		98
97)	tert-Butylbenzene	6.990	91	318307	43.25	ug/L		98
99)	1,2,4-Trimethylbenzene	7.042	105	538546	40.99	ug/L		99
100)	Pentachloroethane	6.990	167	92121	41.89	ug/L	#	91
101)	sec-Butylbenzene	7.126	105	633407	44.57	ug/L		99
102)	4-Isopropyltoluene	7.241	119	564851	42.66	ug/L		99
103)	1,3-Dichlorobenzene	7.272	146	292958	40.36	ug/L		99
104)	1,2,3-Trimethylbenzene	7.371	105	549080	43.64	ug/L		99
105)	1,4-Dichlorobenzene	7.340	146	296207	39.31	ug/L		99
106)	n-Butylbenzene	7.554	92	247636	38.28	ug/L		99
107)	Benzyl Chloride	7.518	126	91190	41.24	ug/L		98
108)	1,2-Dichlorobenzene	7.649	146	278090	40.68	ug/L		98
109)	1,2-Dibromo-3-Chloropr...	8.203	75	59730	39.59	ug/L		98
110)	Hexachlorobutadiene	8.684	225	67647	39.34	ug/L		96
111)	1,2,4-Trichlorobenzene	8.679	180	161337	41.62	ug/L		97
112)	Naphthalene	8.878	128	558056	41.87	ug/L		99
113)	1,2,3-Trichlorobenzene	9.003	180	158094	43.10	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:36:31 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

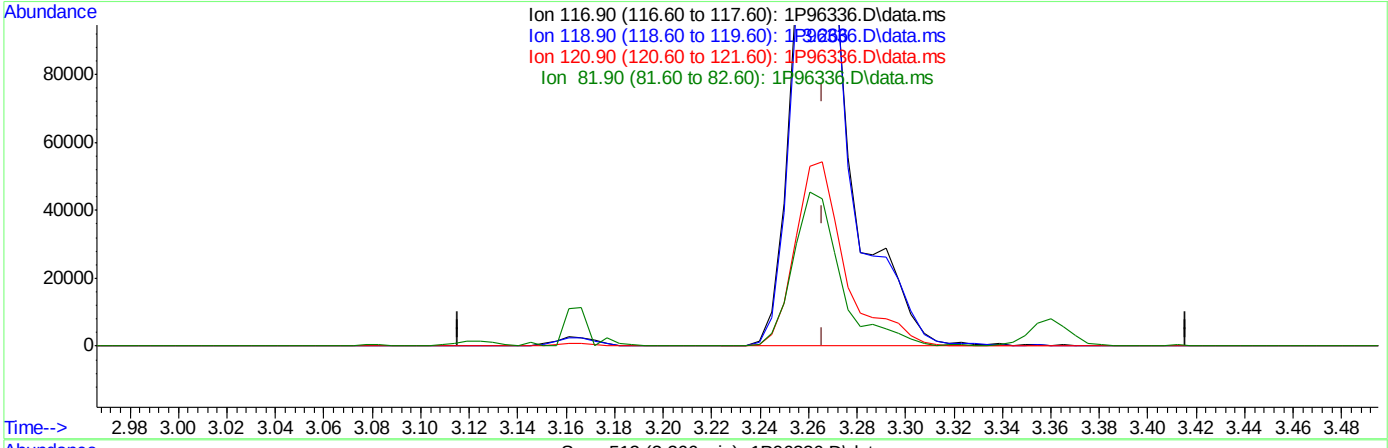
Sample Number: V1P3646-ICV3646 **Method:** SW846 8260D
Lab FileID: 1P96336.D **Analyst approved:** 12/14/22 15:39 Courtney Failla
Injection Time: 12/14/22 14:40 **Supervisor approved:** 12/15/22 13:50 Karen Watson

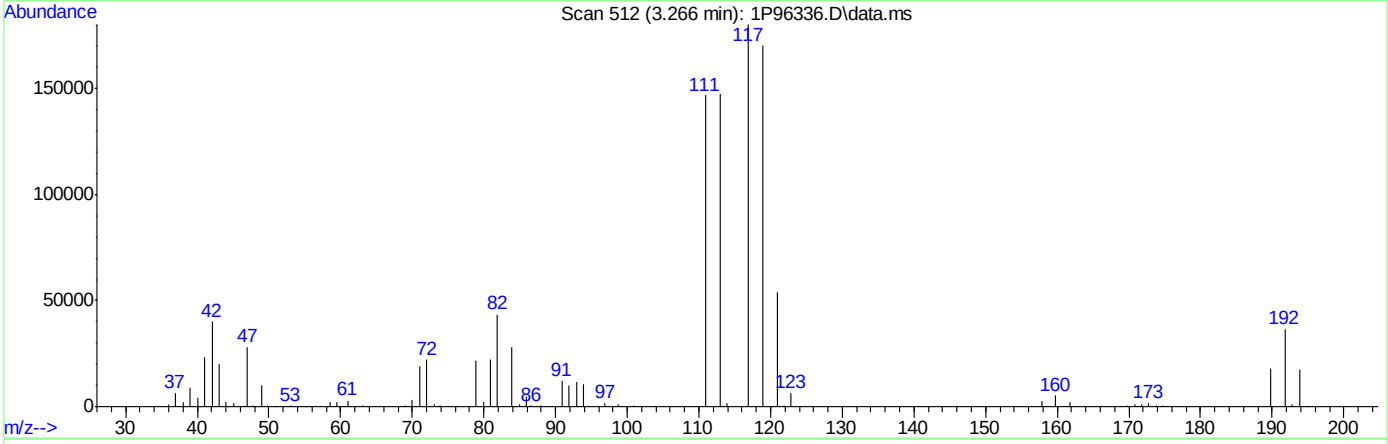
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.27	Overlapping peak
Isobutyl Alcohol	78-83-1		3.60	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (-0.000) 45.10ug/L

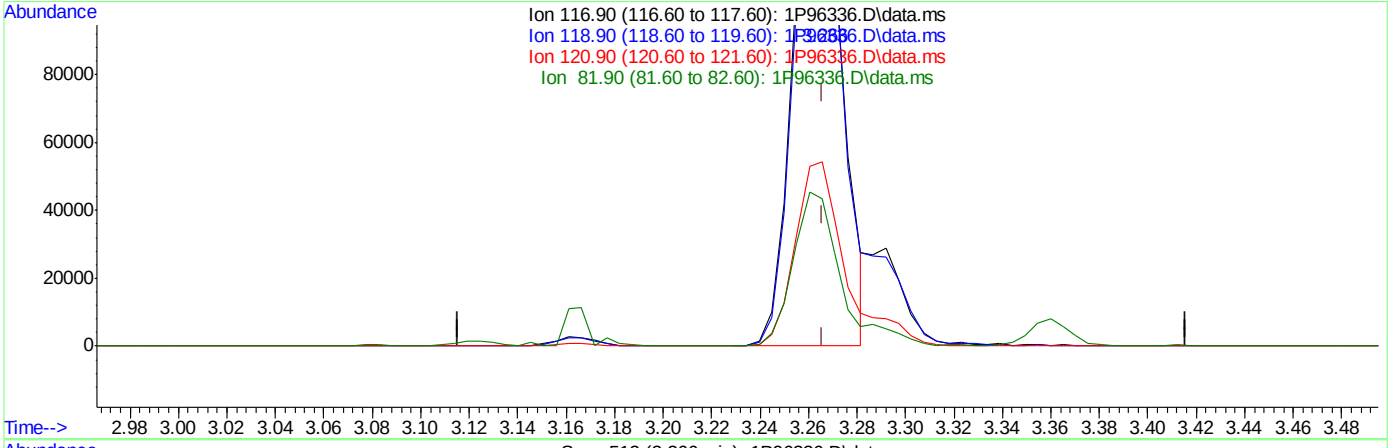
response 254100

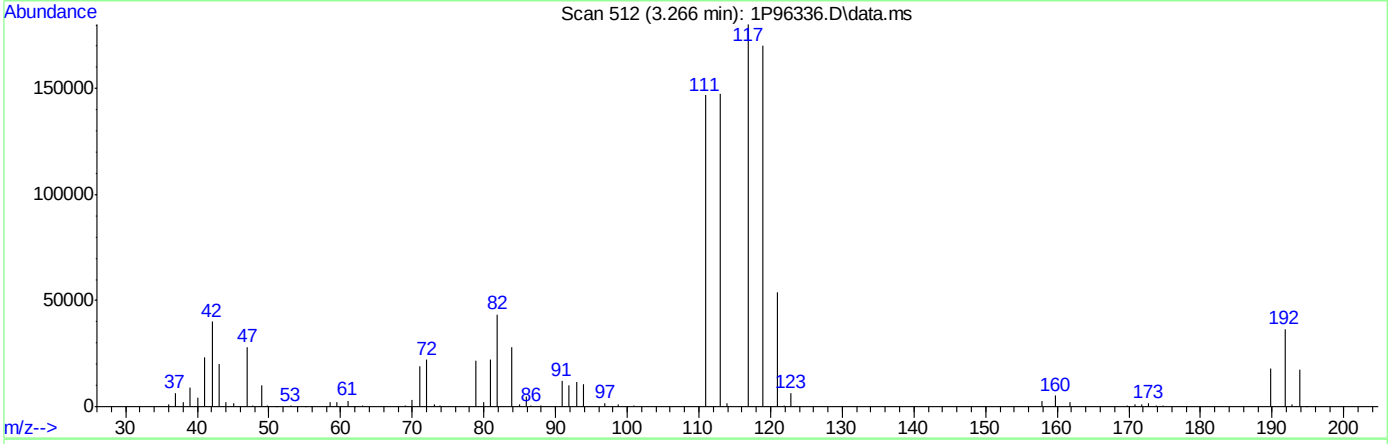
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	94.43
120.90	30.60	30.05
81.90	24.90	24.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(40) Carbon Tetrachloride ( )

3.266min (-0.000) 39.81ug/L m

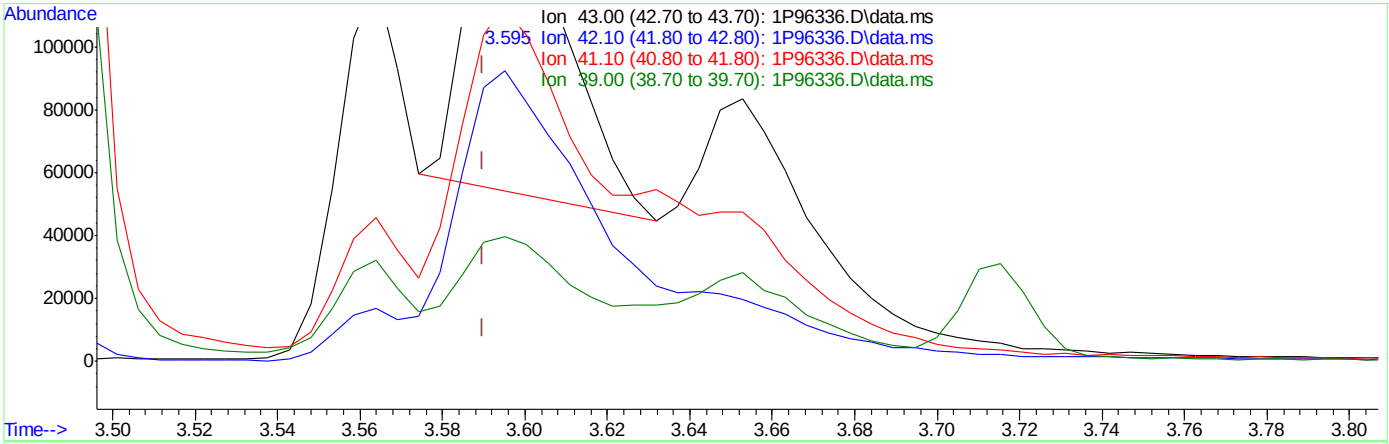
response 224296

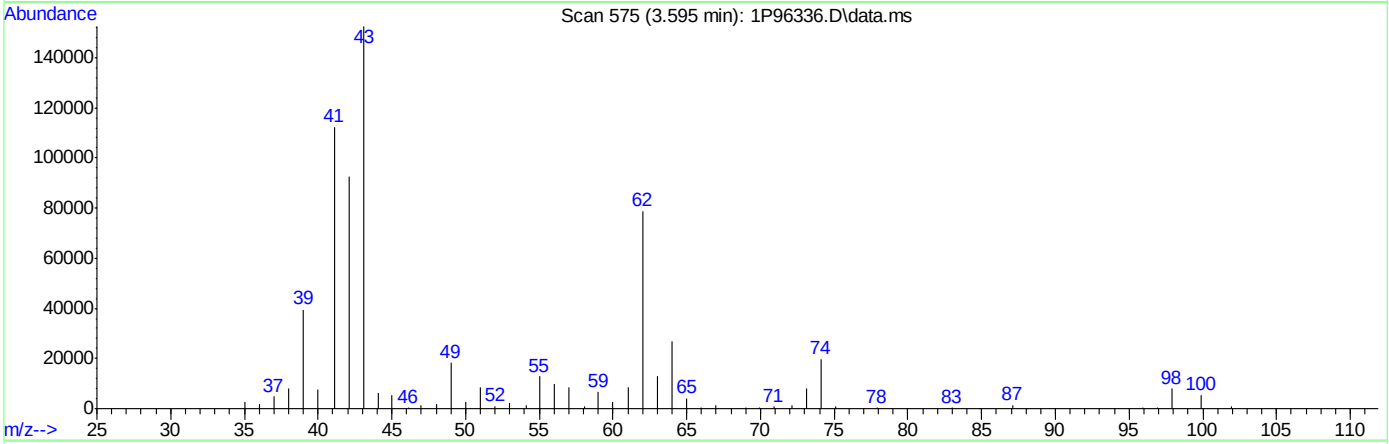
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	94.43
120.90	30.60	30.05
81.90	24.90	24.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(50) Isobutyl alcohol

3.595min (+0.005) 346.06ug/L

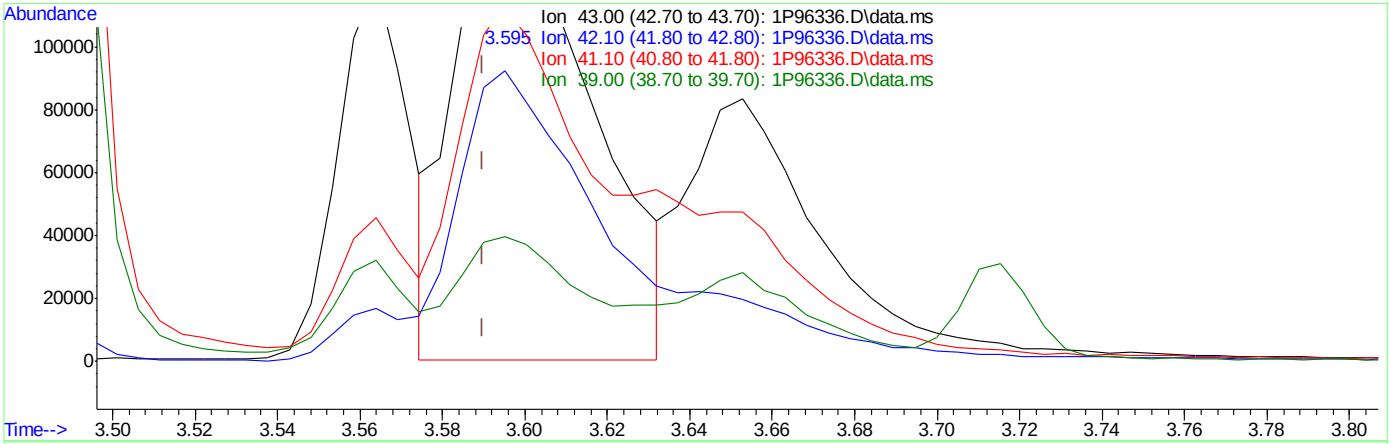
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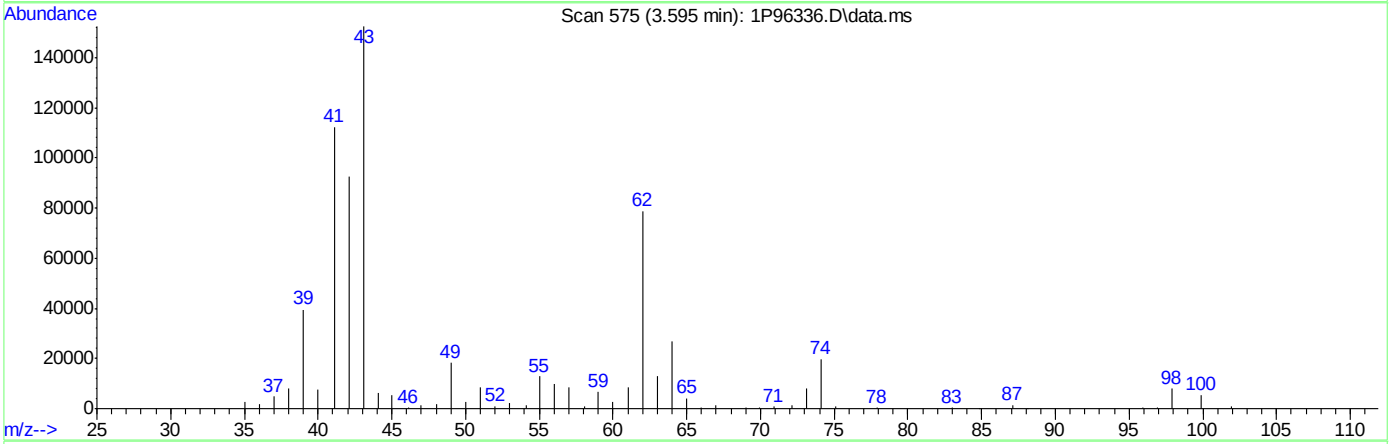
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	72.27
41.10	71.10	79.48
39.00	23.40	22.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(50) Isobutyl alcohol

3.595min (+0.005) 739.79ug/L m

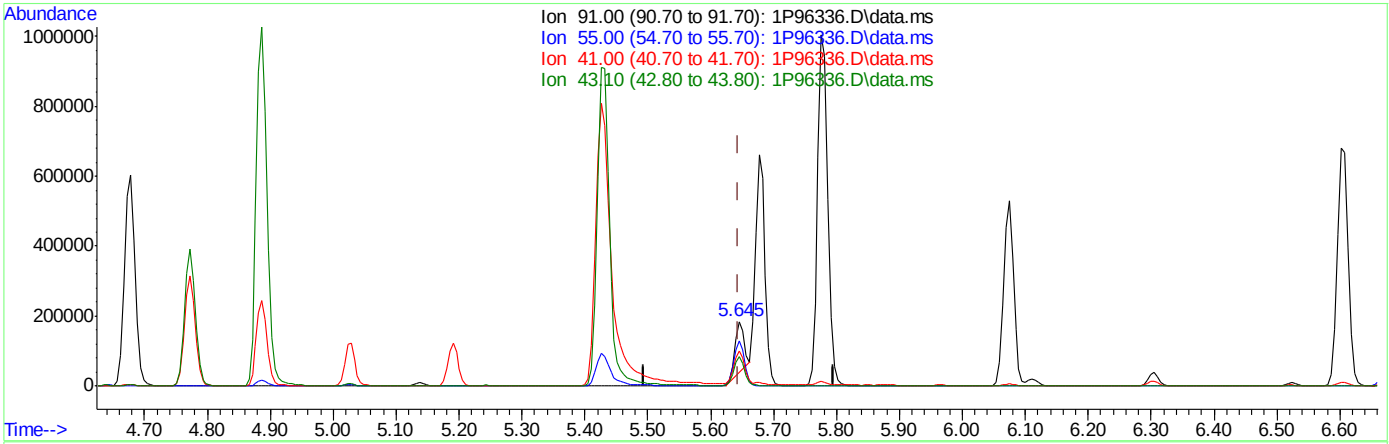
response 335872

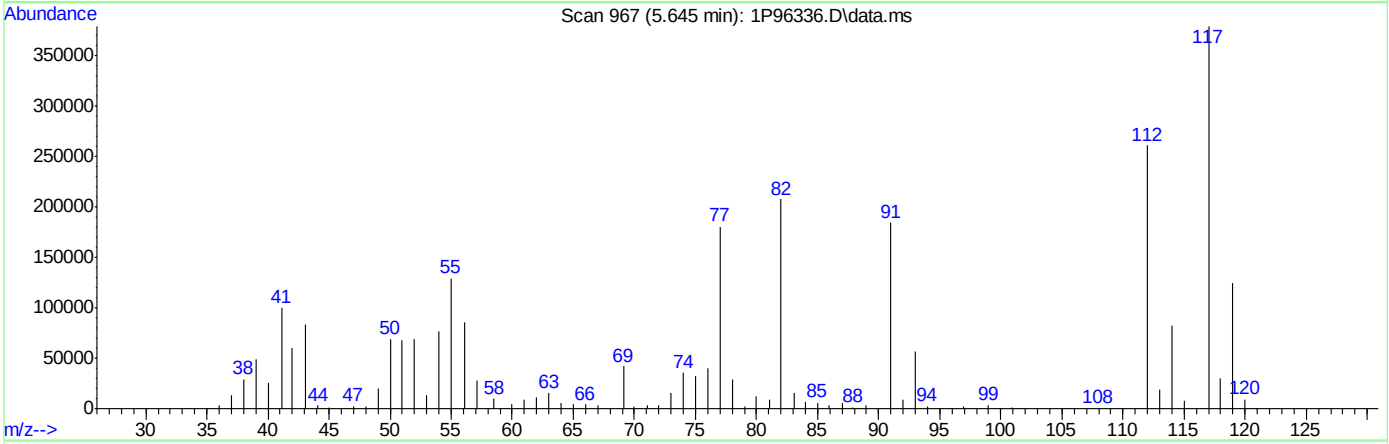
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	60.62
41.10	71.10	73.69
39.00	23.40	25.92

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(76) 1-Chlorohexane

5.645min (-0.000) 27.13ug/L

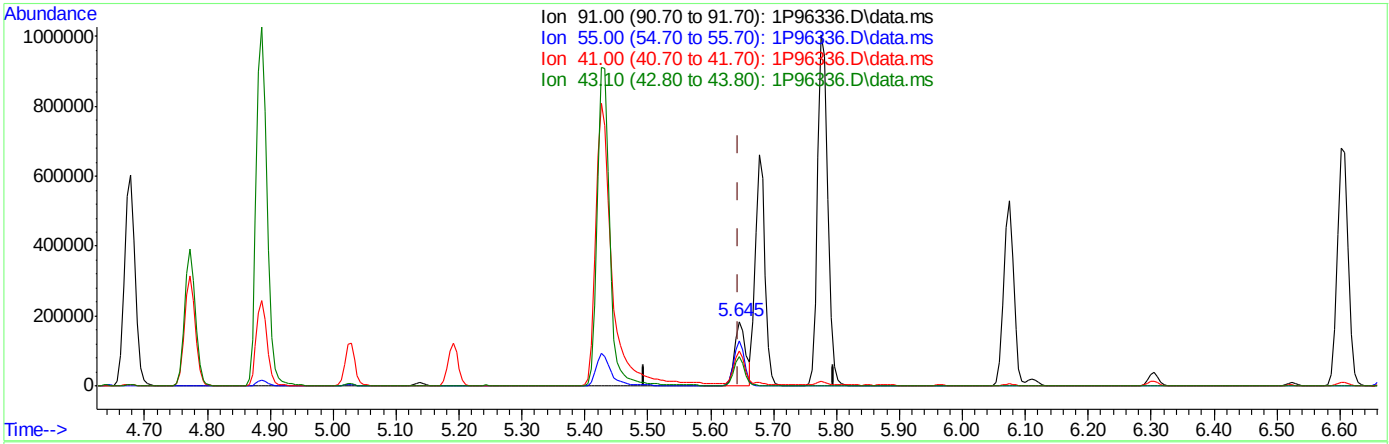
response 145129

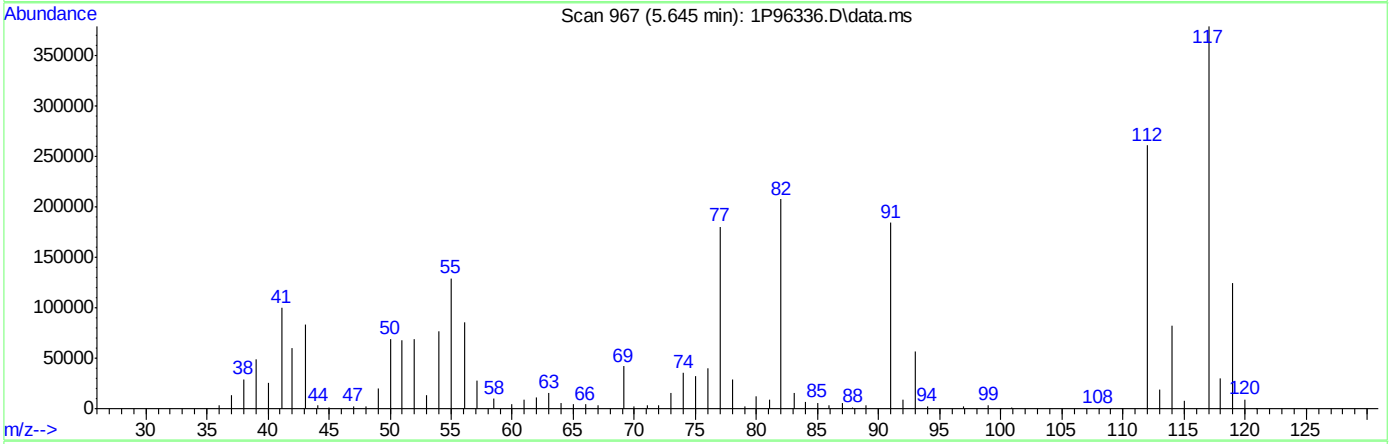
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	68.78
41.00	56.40	50.27
43.10	47.80	43.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-14\
Data File : 1P96336.D
Acq On : 14 Dec 2022 2:40 pm
Operator : courtnef
Sample : ICV3646-5
Misc : MS52806,V1P3646,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 14 15:35:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96336.D\data.ms

(76) 1-Chlorohexane

5.645min (-0.000) 41.41ug/L m

response 221512

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	70.16
41.00	56.40	54.10
43.10	47.80	44.99

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/19/22 14:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:53:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	755003	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.641	117	532359	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.330	152	263676	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	188109	55.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 110.76%			
49) 1,2-Dichloroethane-d4	3.549	65	259561	56.52	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 113.04%			
63) Toluene-d8	4.642	98	751754	49.02	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.04%			
86) 4-Bromofluorobenzene	6.493	174	216377	50.58	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.16%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.117	85	153273	43.22	ug/L	100
3) Chloromethane	1.242	50	123960	36.56	ug/L	98
4) 1,3-butadiene	1.315	39	92041	36.88	ug/L	97
5) Vinyl Chloride	1.300	62	106133	34.99	ug/L	97
6) Bromomethane	1.504	94	45445	42.68	ug/L	99
7) Chloroethane	1.577	64	53512	48.46	ug/L	100
8) Trichlorofluoromethane	1.666	101	163354	51.13	ug/L	97
9) Ethyl Ether	1.875	59	100745	45.44	ug/L	94
10) Ethanol	1.969	45	58773	835.54	ug/L	91
11) 1,2-Dichlorotrifluoroe...	1.969	67	154530	44.77	ug/L	98
12) 1,1-Dichloroethene	1.974	61	205158	47.15	ug/L	93
13) Freon 113	2.006	101	126555	45.59	ug/L	98
14) Carbon Disulfide	1.995	76	337005	44.62	ug/L	97
15) Iodomethane	2.053	142	106157	53.64	ug/L	98
16) Acrolein	2.152	56	205658	217.87	ug/L	99
17) Allyl chloride	2.241	41	177346	40.09	ug/L	93
18) Methylene Chloride	2.293	49	150884	41.41	ug/L	97
19) Acetone	2.314	43	375419	212.68	ug/L	96
20) Methyl acetate	2.393	43	790616	203.26	ug/L	94
21) trans-1,2-Dichloroethene	2.398	61	189469	43.94	ug/L	96
22) Hexane	2.461	56	95600	40.72	ug/L	95
23) Methyl Tert Butyl Ether	2.466	73	455574	45.62	ug/L	93
24) Tert Butyl Alcohol	2.508	59	421723	447.51	ug/L	98
25) Acetonitrile	2.550	41	229228	346.45	ug/L	97
26) Di-isopropyl ether	2.680	45	384396	41.53	ug/L	95
27) Chloroprene	2.722	53	558535	41.28	ug/L	95
28) 1,1-Dichloroethane	2.722	63	235591	42.98	ug/L	97
29) Acrylonitrile	2.722	52	360668	207.38	ug/L	95
30) ETBE	2.879	59	414670	43.61	ug/L	97
31) Vinyl acetate	2.853	43	1365916	207.92	ug/L	98
32) cis-1,2-Dichloroethene	3.015	96	137971	42.75	ug/L	92
33) 2,2-Dichloropropane	3.083	77	245964	48.13	ug/L	98
34) Bromochloromethane	3.120	128	58377	44.26	ug/L	91
35) Cyclohexane	3.156	56	194658	41.98	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:53:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	3.161	83	257191	45.15	ug/L		99
37) Ethyl acetate	3.224	43	1003970	206.89	ug/L		99
38) Tetrahydrofuran	3.256	42	73674	37.93	ug/L		96
40) Carbon Tetrachloride	3.261	117	204828m	48.29	ug/L		
41) 1,1,1-Trichloroethane	3.292	97	241856	47.80	ug/L		99
42) 2-Butanone	3.313	43	597987	188.10	ug/L		95
43) 1,1-Dichloropropene	3.360	75	195605	45.11	ug/L		99
44) tert-Butyl formate	3.402	59	627769	232.03	ug/L		94
45) Propionitrile	3.454	54	336721	367.49	ug/L		98
46) Methacrylonitrile	3.481	41	1059037	372.13	ug/L		95
47) Benzene	3.491	78	495545	40.14	ug/L		89
48) TAME	3.564	73	402900	43.65	ug/L		98
50) Isobutyl alcohol	3.590	43	251109m	734.69	ug/L		
51) 1,2-Dichloroethane	3.585	62	203258	45.21	ug/L		95
52) Tert Amyl Alcohol	3.653	59	325238	436.93	ug/L		97
53) Trichloroethene	3.820	95	141375	42.98	ug/L		97
54) Methylcyclohexane	3.841	83	192485	42.21	ug/L		97
55) Dibromomethane	4.045	93	79582	43.88	ug/L		94
56) 1,2-Dichloropropane	4.103	63	126724	41.09	ug/L		94
57) Bromodichloromethane	4.140	83	173876	45.23	ug/L		96
58) Methyl methacrylate	4.228	41	142734	42.40	ug/L		93
59) 1,4-Dioxane	4.260	88	61066	858.49	ug/L		95
60) 2-Chloroethyl vinyl ether	4.474	63	471746	211.49	ug/L		98
61) cis-1,3-Dichloropropene	4.516	75	213699	44.60	ug/L		97
64) Toluene	4.678	91	553550	39.53	ug/L		99
65) 2-Nitropropane	4.772	41	312746	229.53	ug/L		98
66) 4-Methyl-2-pentanone	4.887	43	951103	170.16	ug/L		96
67) trans-1,3-Dichloropropene	4.914	75	189553	42.84	ug/L	#	82
68) Tetrachloroethene	4.934	166	135721	42.56	ug/L		97
69) Ethyl methacrylate	5.029	69	186570	40.77	ug/L		96
70) 1,1,2-Trichloroethane	5.018	83	93034	39.68	ug/L		97
71) Dibromochloromethane	5.138	129	122780	45.21	ug/L		98
72) 1,3-Dichloropropane	5.191	76	211223	40.40	ug/L		99
73) 1,2-Dibromoethane	5.290	107	119000	41.90	ug/L		96
74) 3,3-dimethyl-1-butanol	5.426	57	1552761	1938.28	ug/L		97
75) 2-hexanone	5.426	43	979024	184.53	ug/L		98
76) 1-Chlorohexane	5.646	91	167390m	39.78	ug/L		
77) Ethylbenzene	5.677	91	578421	39.56	ug/L		98
78) Chlorobenzene	5.651	112	307717	39.38	ug/L		99
79) 1,1,1,2-Tetrachloroethane	5.693	131	122215	43.75	ug/L		93
80) m,p-Xylene	5.777	91	925314	83.96	ug/L		99
81) o-Xylene	6.075	91	454858	42.35	ug/L		98
82) Styrene	6.106	104	338062	40.63	ug/L		97
83) Bromoform	6.111	173	77001	43.43	ug/L		98
84) Isopropylbenzene	6.305	105	533785	41.12	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.524	53	59990	34.56	ug/L		86
88) n-Propylbenzene	6.603	91	629517	38.68	ug/L		99
89) Bromobenzene	6.566	156	132660	38.89	ug/L		91
90) 1,1,2,2-Tetrachloroethane	6.624	83	165343	35.57	ug/L		98
91) 1,3,5-Trimethylbenzene	6.755	105	447661	41.41	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:53:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

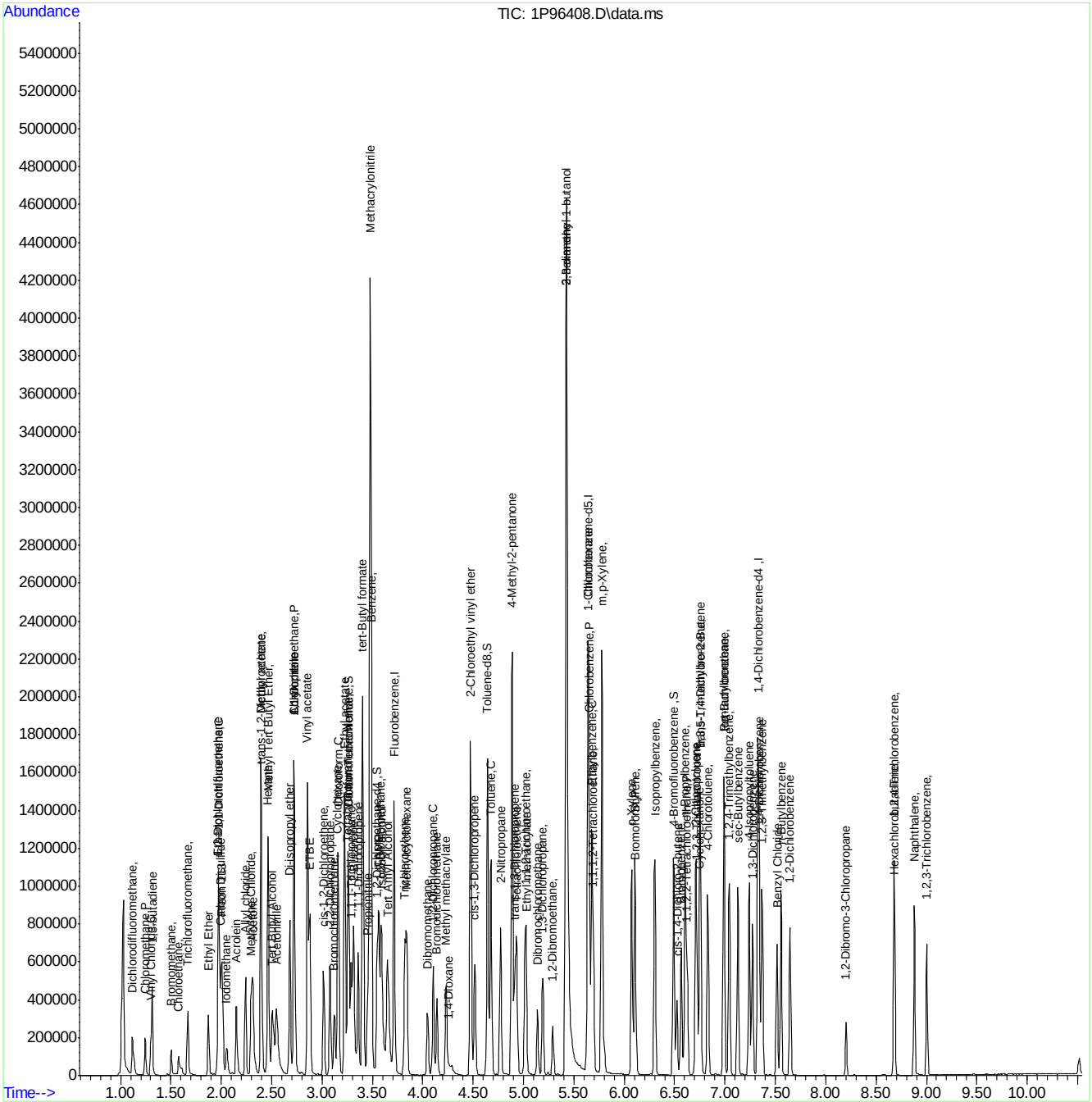
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	6.707	91	380733	38.99	ug/L		98
93)	trans-1,4-Dichloro-2-B...	6.755	53	65623	39.09	ug/L		94
94)	1,2,3-Trichloropropane	6.718	110	64318	38.57	ug/L		97
95)	Cyclohexanone	6.744	55	50204	189.63	ug/L		92
96)	4-Chlorotoluene	6.828	91	402307	39.01	ug/L		98
97)	tert-Butylbenzene	6.990	91	253369	41.60	ug/L		98
99)	1,2,4-Trimethylbenzene	7.042	105	415272	38.36	ug/L		98
100)	Pentachloroethane	6.990	167	71423	39.24	ug/L		92
101)	sec-Butylbenzene	7.126	105	470499	40.01	ug/L		98
102)	4-Isopropyltoluene	7.241	119	420677	38.68	ug/L		98
103)	1,3-Dichlorobenzene	7.272	146	227438	37.87	ug/L		98
104)	1,2,3-Trimethylbenzene	7.367	105	411761	39.54	ug/L		99
105)	1,4-Dichlorobenzene	7.340	146	234802	37.65	ug/L		97
106)	n-Butylbenzene	7.555	92	201412	37.66	ug/L		95
107)	Benzyl Chloride	7.518	126	70855	38.97	ug/L	#	92
108)	1,2-Dichlorobenzene	7.644	146	216616	38.29	ug/L		96
109)	1,2-Dibromo-3-Chloropr...	8.198	75	52753	42.26	ug/L		84
110)	Hexachlorobutadiene	8.684	225	60022	42.18	ug/L		99
111)	1,2,4-Trichlorobenzene	8.679	180	129624	40.53	ug/L		99
112)	Naphthalene	8.878	128	426859	39.12	ug/L		100
113)	1,2,3-Trichlorobenzene	9.004	180	128607	42.36	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:53:50 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V1P3648-CC3646
Lab FileID: 1P96408.D
Injection Time: 12/16/22 08:38

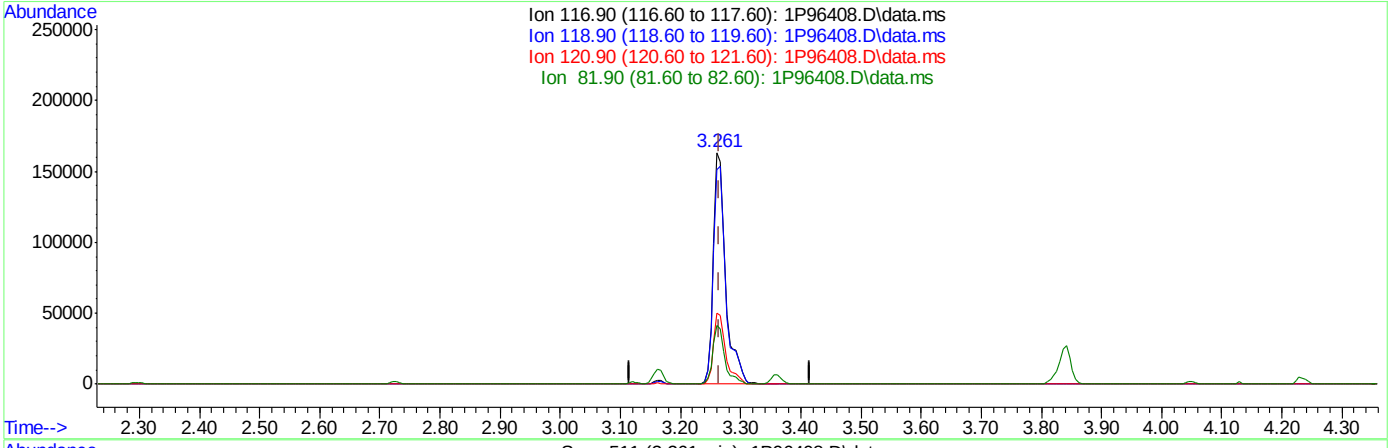
Method: SW846 8260D
Analyst approved: 12/19/22 14:34 Karen Watson
Supervisor approved: 12/19/22 14:53 Karen Watson

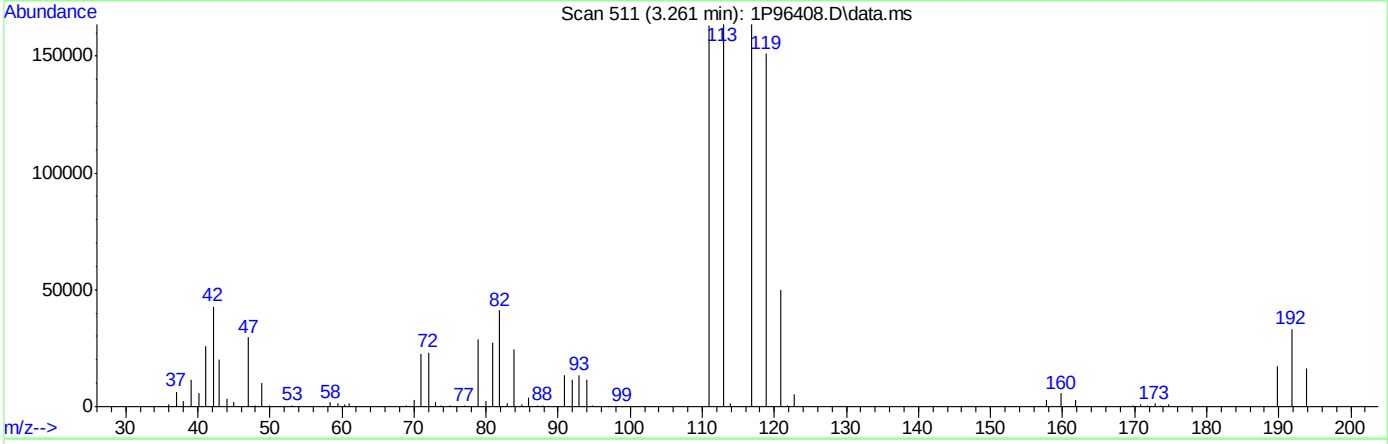
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Missed peak
1-Chlorohexane	544-10-5		5.65	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.005) 54.28ug/L

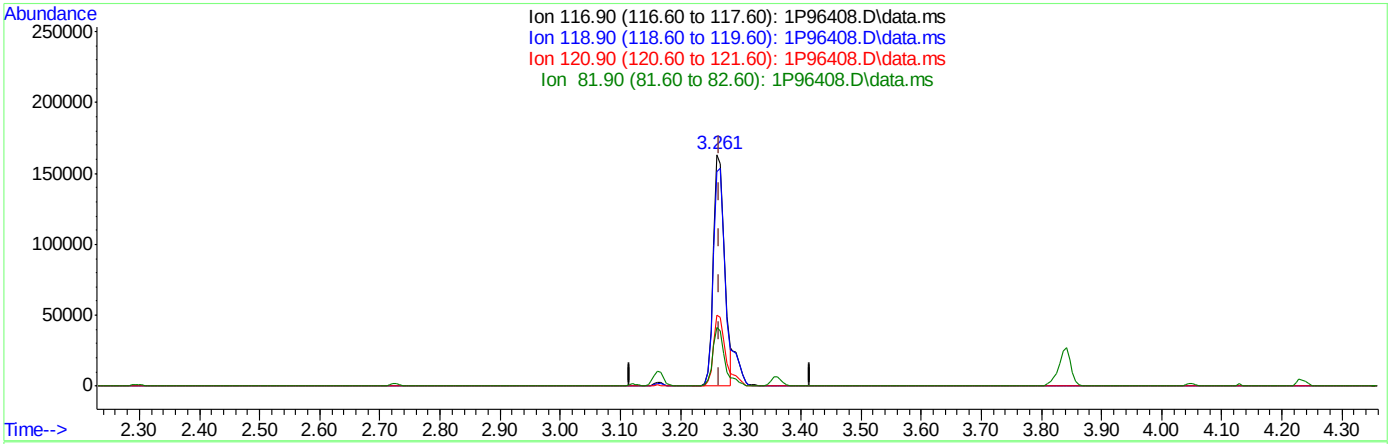
response 230262

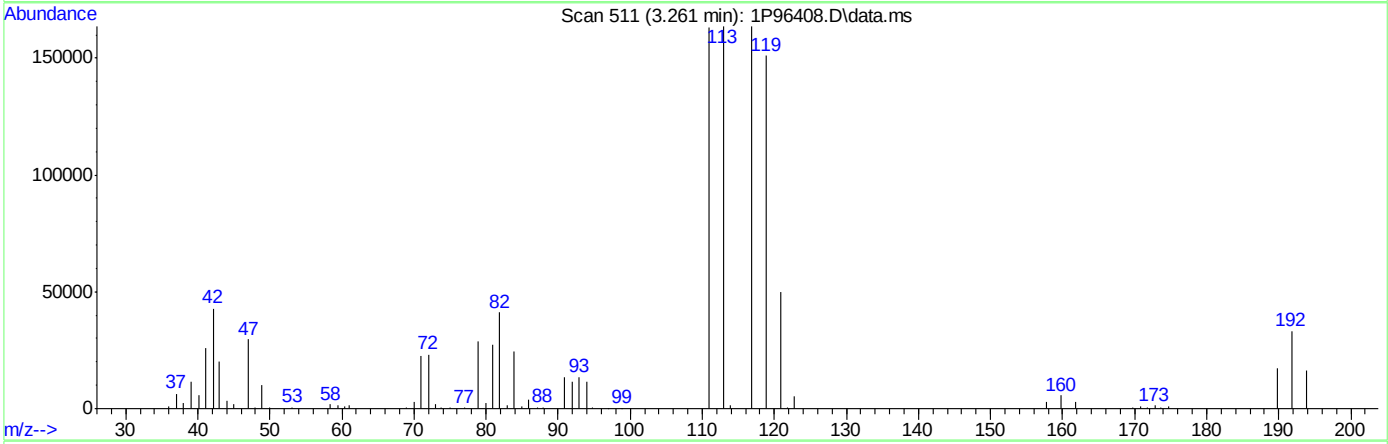
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	92.48
120.90	30.60	30.47
81.90	24.90	25.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.005) 48.29ug/L m

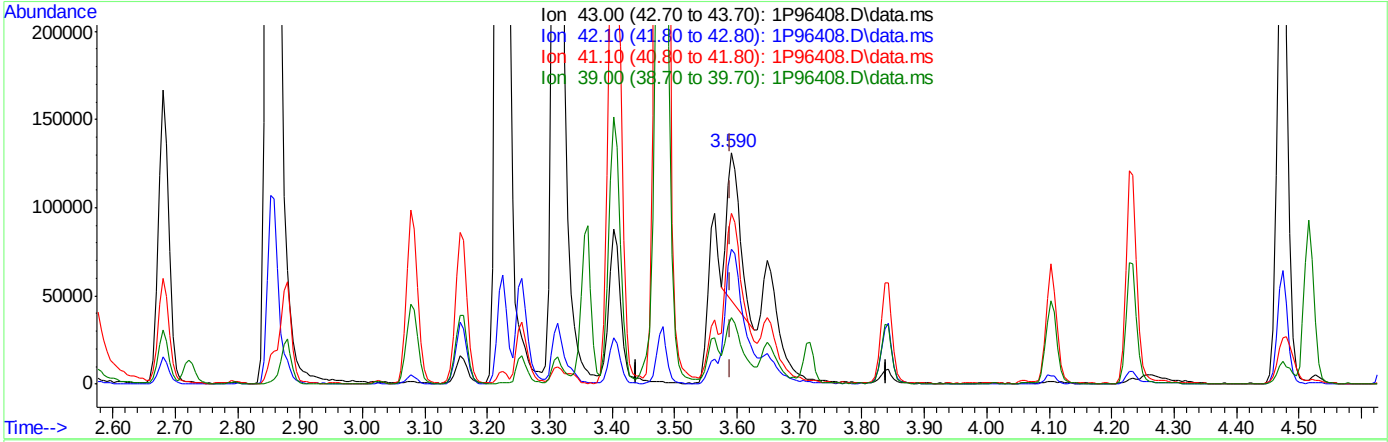
response 204828

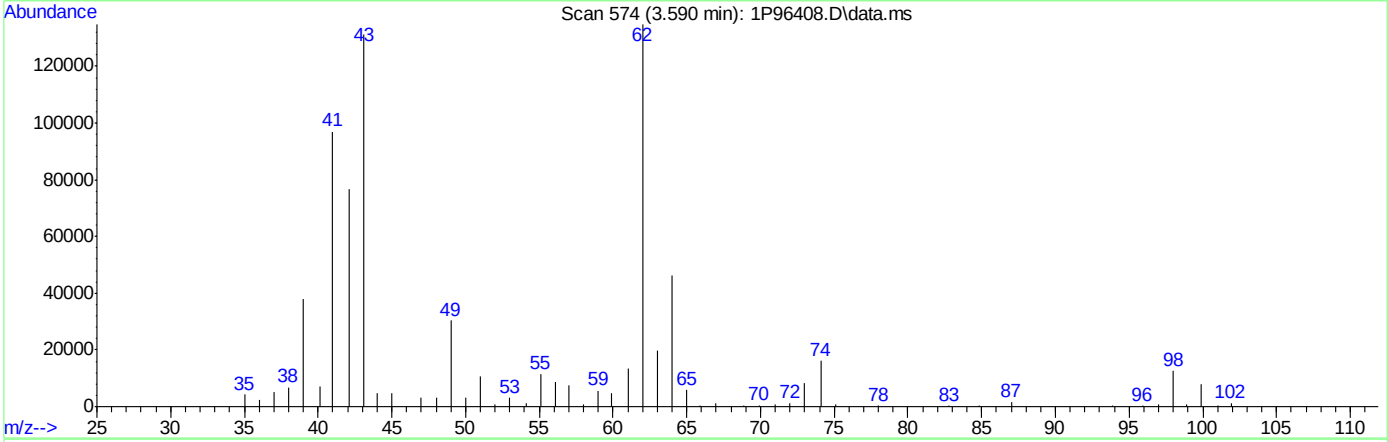
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	92.48
120.90	30.60	30.47
81.90	24.90	25.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.000) 343.30ug/L

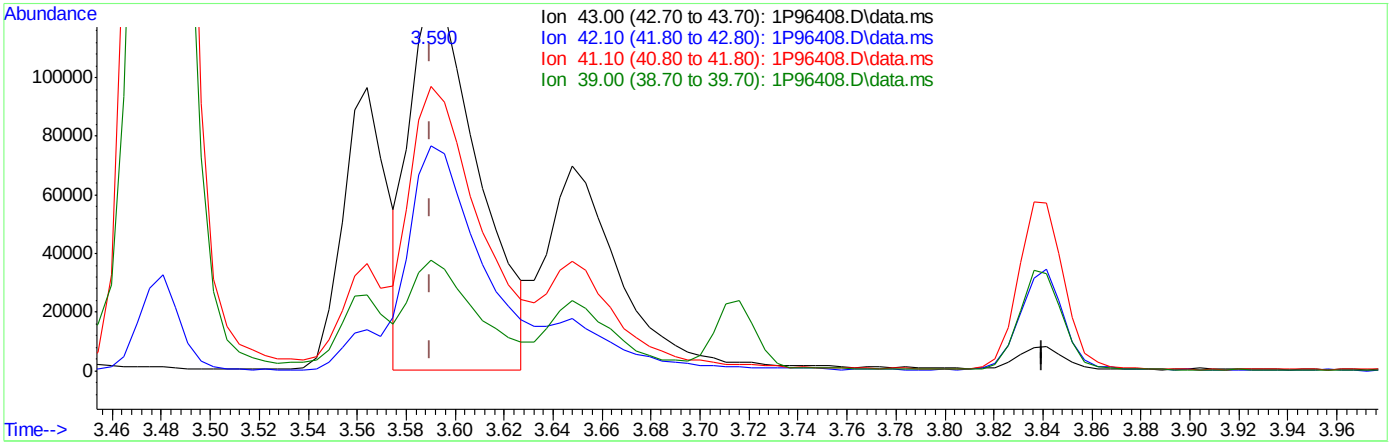
response 117336

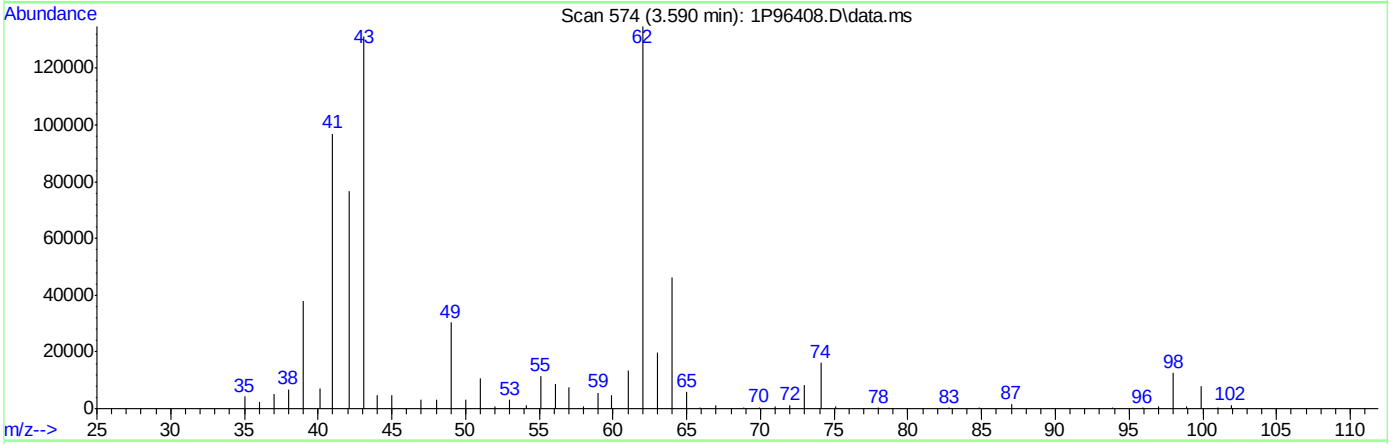
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.06
41.10	71.10	72.41
39.00	23.40	27.77

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(50) Isobutyl alcohol

3.590min (+0.000) 734.69ug/L m

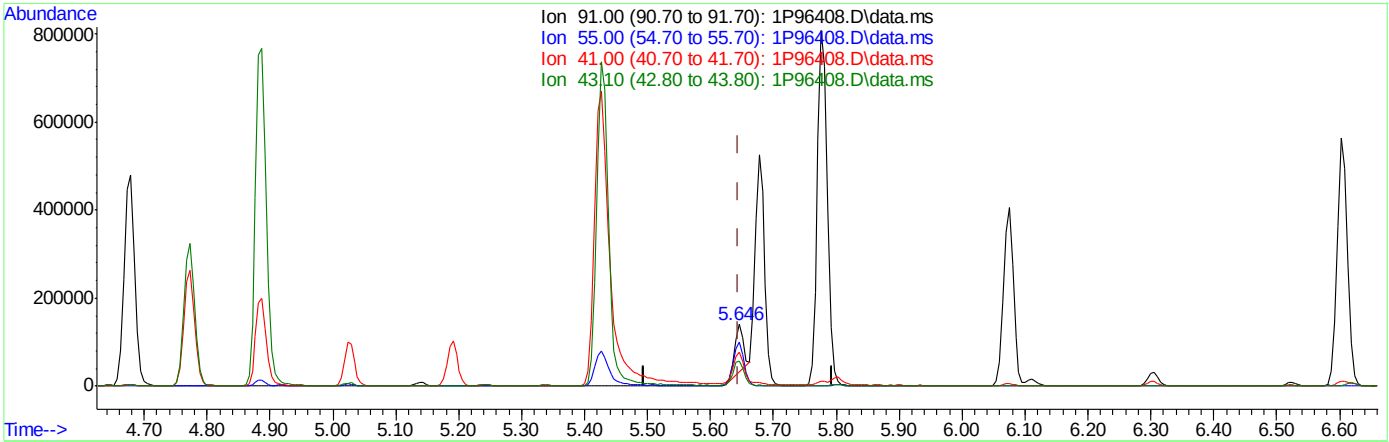
response 251109

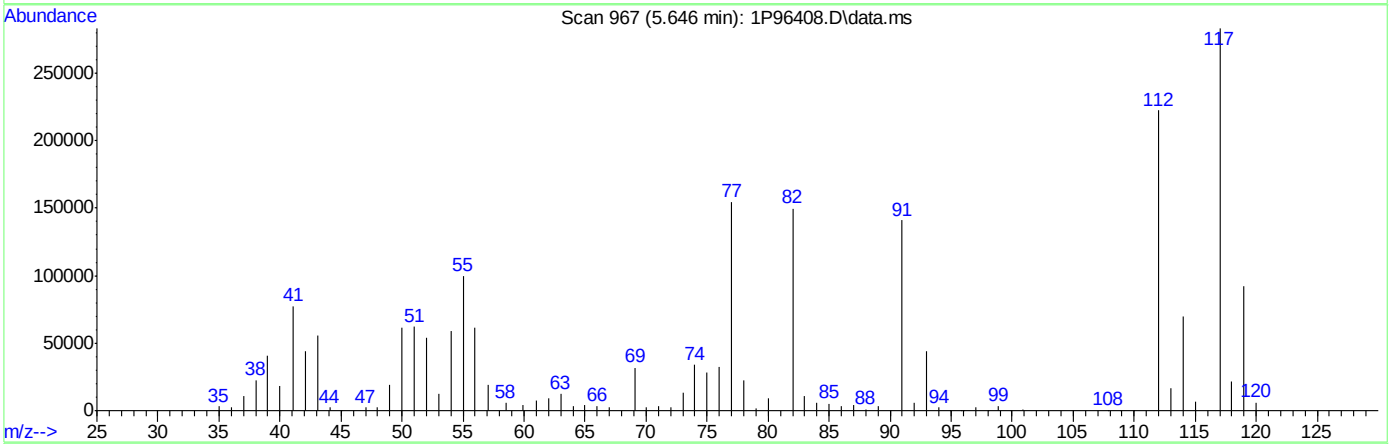
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	58.44
41.10	71.10	73.84
39.00	23.40	28.75

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.000) 24.68ug/L

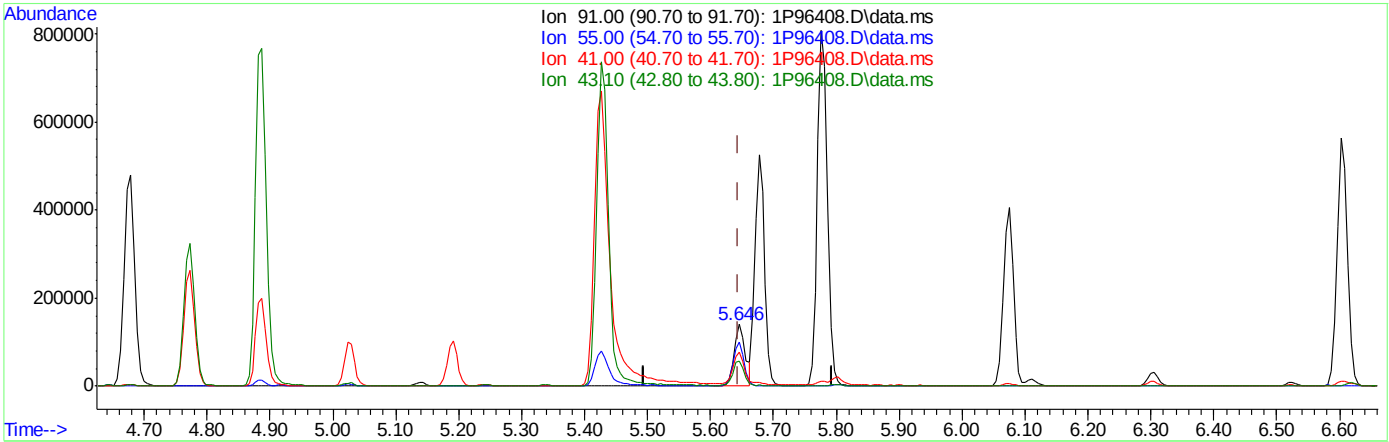
response 103857

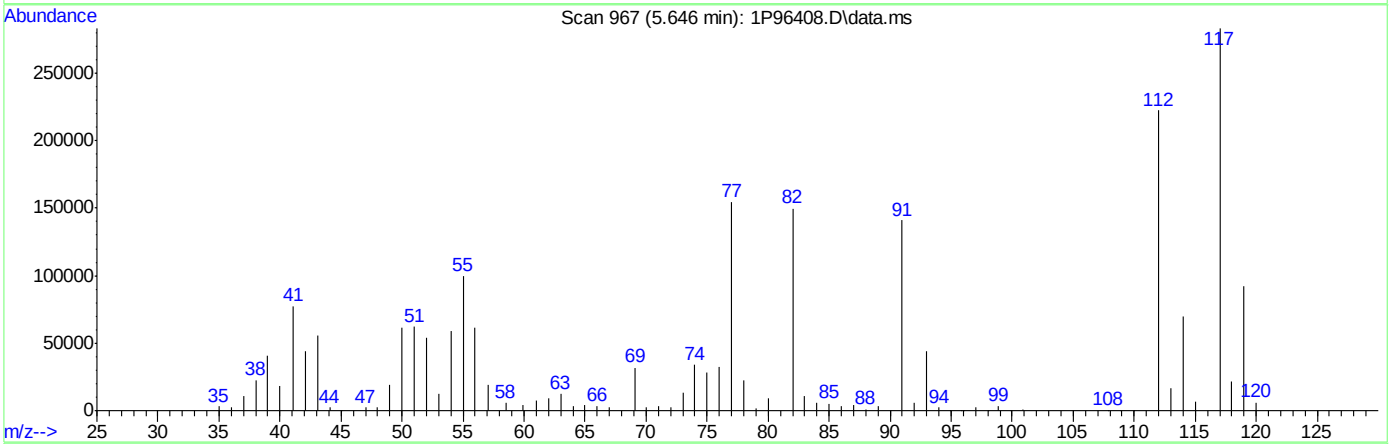
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	68.81
41.00	56.40	50.06
43.10	47.80	38.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-16\
Data File : 1P96408.D
Acq On : 16 Dec 2022 8:38 am
Operator : courtnef
Sample : CC3646-5
Misc : MS52806,V1P3648,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 16 08:52:24 2022
Quant Method : C:\msdchem\1\METHODS\V1P_2022-12-14.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96408.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.000) 39.78ug/L m

response 167390

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	71.03
41.00	56.40	55.05
43.10	47.80	39.74

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/19/22 14:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:13:23 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	3.716	96	667085	50.00	ug/L	0.00
62) Chlorobenzene-d5	5.636	117	473097	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	7.325	152	233066	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	3.261	113	167913	55.95	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 111.90%			
49) 1,2-Dichloroethane-d4	3.549	65	244432	60.24	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 120.48%			
63) Toluene-d8	4.642	98	671288	49.26	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.52%			
86) 4-Bromofluorobenzene	6.494	174	189800	50.19	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.117	85	143382	45.76	ug/L	98
3) Chloromethane	1.243	50	104984	35.05	ug/L	97
4) 1,3-butadiene	1.316	39	80332	36.43	ug/L	98
5) Vinyl Chloride	1.300	62	93957	35.06	ug/L	97
6) Bromomethane	1.504	94	39421	41.90	ug/L	92
7) Chloroethane	1.577	64	53538	54.88	ug/L	97
8) Trichlorofluoromethane	1.666	101	165027	62.67	ug/L	98
9) Ethyl Ether	1.875	59	90594	46.25	ug/L	95
10) Ethanol	1.964	45	55097	896.59	ug/L	99
11) 1,2-Dichlorotrifluoroe...	1.970	67	135899	44.57	ug/L	100
12) 1,1-Dichloroethene	1.975	61	182088	47.36	ug/L	92
13) Freon 113	2.006	101	114728	46.77	ug/L	99
14) Carbon Disulfide	1.996	76	285240	42.74	ug/L	97
15) Iodomethane	2.053	142	88222	50.60	ug/L	95
16) Acrolein	2.153	56	165283	198.18	ug/L	99
17) Allyl chloride	2.242	41	146606	37.51	ug/L	88
18) Methylene Chloride	2.294	49	130713	40.54	ug/L	100
19) Acetone	2.315	43	331452	212.51	ug/L	98
20) Methyl acetate	2.393	43	681400	198.27	ug/L	95
21) trans-1,2-Dichloroethene	2.398	61	165075	43.32	ug/L	96
22) Hexane	2.461	56	79175	38.17	ug/L	94
23) Methyl Tert Butyl Ether	2.466	73	414197	46.95	ug/L	99
24) Tert Butyl Alcohol	2.508	59	387019	464.81	ug/L	99
25) Acetonitrile	2.550	41	191104	323.39	ug/L	98
26) Di-isopropyl ether	2.681	45	328575	40.18	ug/L	93
27) Chloroprene	2.723	53	486789	40.72	ug/L	94
28) 1,1-Dichloroethane	2.723	63	208092	42.97	ug/L	97
29) Acrylonitrile	2.723	52	314140	204.43	ug/L	93
30) ETBE	2.880	59	378702	45.07	ug/L	97
31) Vinyl acetate	2.859	43	1175819	202.58	ug/L	96
32) cis-1,2-Dichloroethene	3.016	96	121689	42.67	ug/L	93
33) 2,2-Dichloropropane	3.078	77	200980	44.51	ug/L	98
34) Bromochloromethane	3.125	128	49809	42.74	ug/L #	86
35) Cyclohexane	3.157	56	169469	41.37	ug/L	95
36) Chloroform	3.162	83	234767	46.64	ug/L	100
37) Ethyl acetate	3.225	43	859874	200.55	ug/L	99
38) Tetrahydrofuran	3.256	42	64335	37.49	ug/L	96
40) Carbon Tetrachloride	3.261	117	189154m	50.47	ug/L	
41) 1,1,1-Trichloroethane	3.288	97	224296	50.17	ug/L	99
42) 2-Butanone	3.314	43	521322	185.43	ug/L	96
43) 1,1-Dichloropropene	3.361	75	171609	44.79	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:13:23 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tert-Butyl formate	3.403	59	563672	235.80	ug/L		91
45) Propionitrile	3.455	54	292289	361.04	ug/L		100
46) Methacrylonitrile	3.481	41	934113	371.41	ug/L		94
47) Benzene	3.492	78	434849	39.86	ug/L		91
48) TAME	3.565	73	361837	44.37	ug/L		98
50) Isobutyl alcohol	3.591	43	230282m	762.55	ug/L		
51) 1,2-Dichloroethane	3.586	62	192837	48.55	ug/L		93
52) Tert Amyl Alcohol	3.654	59	289879	440.76	ug/L		98
53) Trichloroethene	3.821	95	123689	42.56	ug/L		98
54) Methylcyclohexane	3.842	83	170493	42.32	ug/L		96
55) Dibromomethane	4.046	93	71926	44.89	ug/L		95
56) 1,2-Dichloropropane	4.103	63	109024	40.01	ug/L		92
57) Bromodichloromethane	4.140	83	160249	47.18	ug/L		99
58) Methyl methacrylate	4.234	41	122903	41.32	ug/L		95
59) 1,4-Dioxane	4.260	88	54646	869.28	ug/L		95
60) 2-Chloroethyl vinyl ether	4.475	63	410127	208.10	ug/L		97
61) cis-1,3-Dichloropropene	4.517	75	184005	43.46	ug/L		97
64) Toluene	4.679	91	483201	38.82	ug/L		99
65) 2-Nitropropane	4.773	41	293096	242.05	ug/L		100
66) 4-Methyl-2-pentanone	4.888	43	830871	167.27	ug/L		96
67) trans-1,3-Dichloropropene	4.914	75	168815	42.93	ug/L	#	81
68) Tetrachloroethene	4.935	166	125135	44.15	ug/L		99
69) Ethyl methacrylate	5.024	69	158111	38.88	ug/L		89
70) 1,1,2-Trichloroethane	5.014	83	80499	38.64	ug/L		90
71) Dibromochloromethane	5.139	129	109753	45.48	ug/L		97
72) 1,3-Dichloropropane	5.191	76	186820	40.21	ug/L		97
73) 1,2-Dibromoethane	5.291	107	104907	41.57	ug/L		100
74) 3,3-dimethyl-1-butanol	5.427	57	1369568	1923.49	ug/L		96
75) 2-hexanone	5.427	43	866839	183.85	ug/L		97
76) 1-Chlorohexane	5.646	91	149338m	39.94	ug/L		
77) Ethylbenzene	5.678	91	515614	39.68	ug/L		99
78) Chlorobenzene	5.652	112	269325	38.78	ug/L		98
79) 1,1,1,2-Tetrachloroethane	5.693	131	112055	45.14	ug/L		96
80) m,p-Xylene	5.777	91	824594	84.20	ug/L		98
81) o-Xylene	6.075	91	406290	42.57	ug/L		97
82) Styrene	6.107	104	289525	39.23	ug/L		97
83) Bromoform	6.112	173	65924	42.01	ug/L		99
84) Isopropylbenzene	6.305	105	471612	40.89	ug/L		99
87) cis-1,4-Dichloro-2-butene	6.525	53	52446	34.18	ug/L	#	83
88) n-Propylbenzene	6.603	91	545380	37.91	ug/L		100
89) Bromobenzene	6.567	156	111273	36.90	ug/L		94
90) 1,1,2,2-Tetrachloroethane	6.624	83	144183	35.09	ug/L		98
91) 1,3,5-Trimethylbenzene	6.755	105	388889	40.70	ug/L		97
92) 2-Chlorotoluene	6.708	91	334852	38.79	ug/L		97
93) trans-1,4-Dichloro-2-B...	6.755	53	58017	39.10	ug/L		90
94) 1,2,3-Trichloropropane	6.719	110	58240	39.51	ug/L		95
95) Cyclohexanone	6.745	55	46746	199.76	ug/L		95
96) 4-Chlorotoluene	6.828	91	348669	38.25	ug/L		98
97) tert-Butylbenzene	6.991	91	229944	42.71	ug/L		97
99) 1,2,4-Trimethylbenzene	7.043	105	370399	38.69	ug/L		99
100) Pentachloroethane	6.991	167	57499	35.74	ug/L		97
101) sec-Butylbenzene	7.127	105	410172	39.46	ug/L		98
102) 4-Isopropyltoluene	7.242	119	371008	38.60	ug/L		98
103) 1,3-Dichlorobenzene	7.273	146	201129	37.88	ug/L		96
104) 1,2,3-Trimethylbenzene	7.367	105	364239	39.58	ug/L		96
105) 1,4-Dichlorobenzene	7.341	146	203698	36.96	ug/L		98
106) n-Butylbenzene	7.555	92	173819	36.82	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:13:23 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

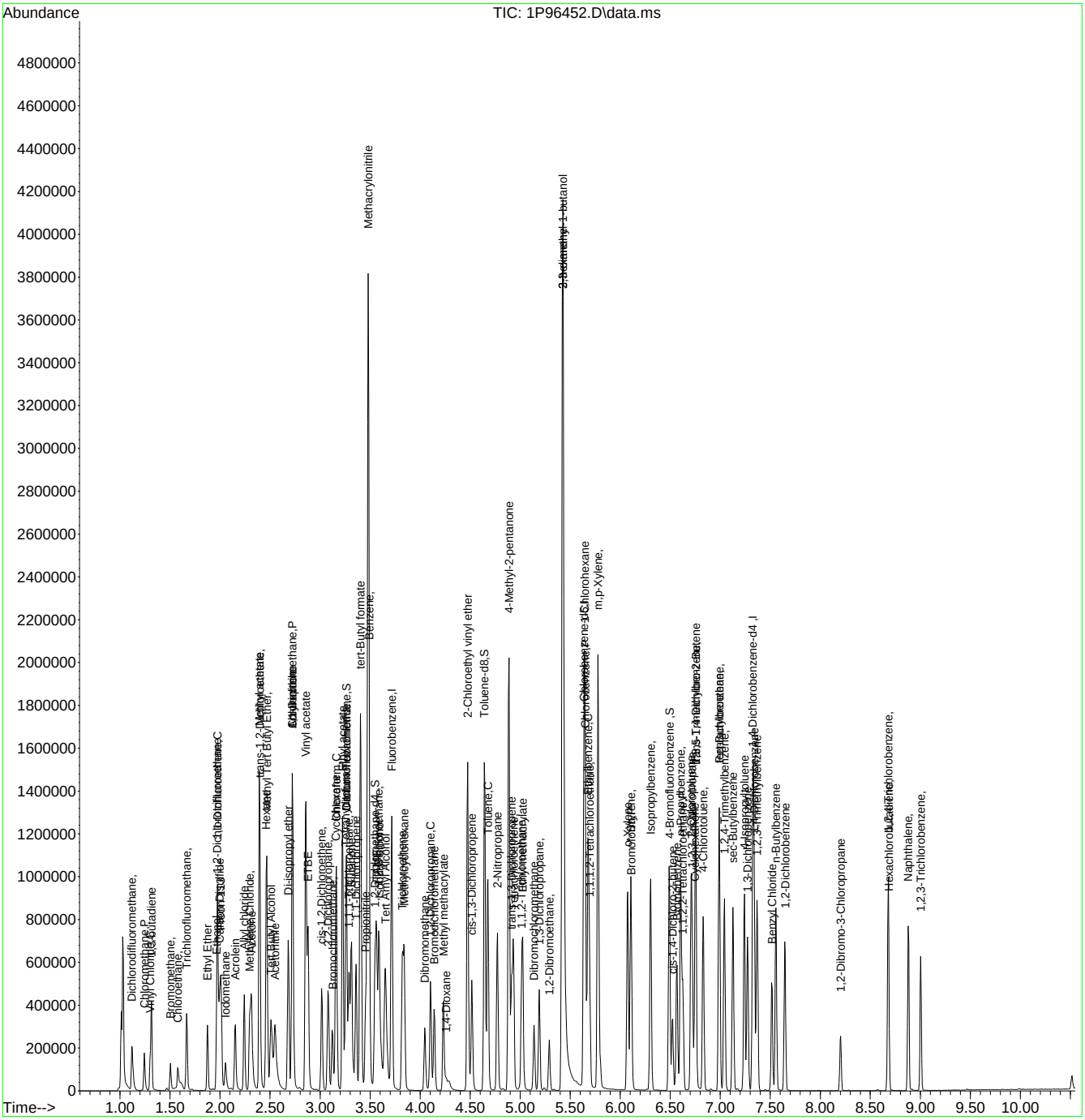
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Benzyl Chloride	7.519	126	50450	32.02	ug/L	98
108) 1,2-Dichlorobenzene	7.650	146	190348	38.07	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	8.204	75	47596	43.13	ug/L	96
110) Hexachlorobutadiene	8.685	225	52813	41.99	ug/L	98
111) 1,2,4-Trichlorobenzene	8.680	180	113149	40.08	ug/L	97
112) Naphthalene	8.879	128	370553	38.52	ug/L	99
113) 1,2,3-Trichlorobenzene	9.004	180	109476	40.80	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 04:13:23 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration



Manual Integration Approval Summary

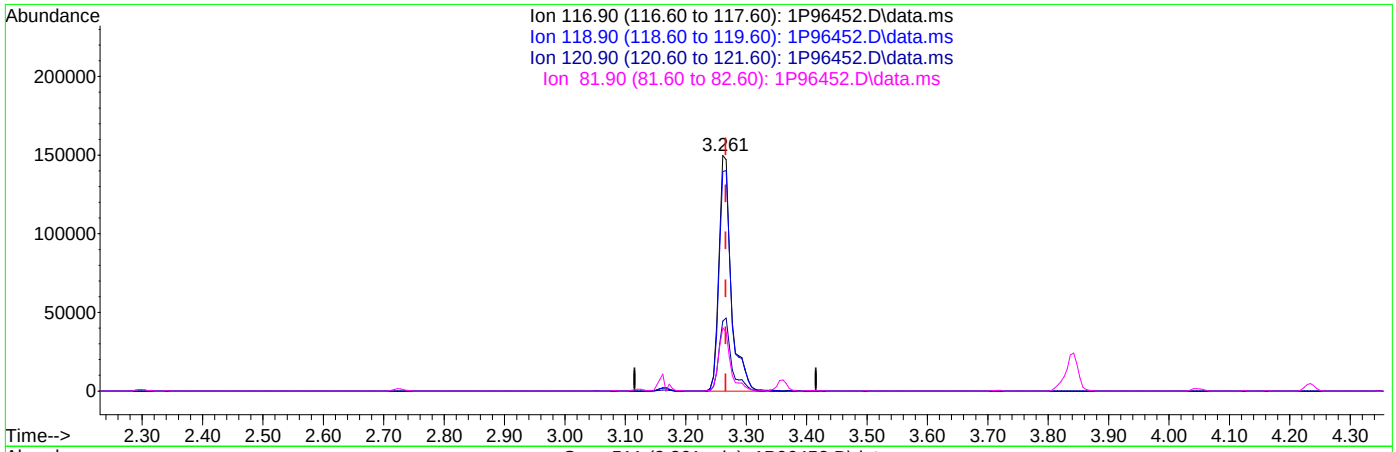
Sample Number: V1P3648-ECC3646 **Method:** SW846 8260D
Lab FileID: 1P96452.D **Analyst approved:** 12/19/22 08:54 Courtney Failla
Injection Time: 12/16/22 20:16 **Supervisor approved:** 12/19/22 14:53 Karen Watson

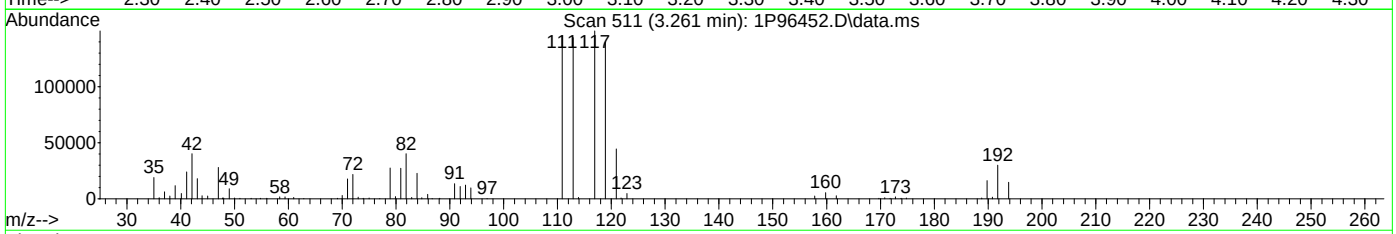
Parameter	CAS	Sig#	R.T. (min.)	Reason
Carbon Tetrachloride	56-23-5		3.26	Overlapping peak
Isobutyl Alcohol	78-83-1		3.59	Poor instrument integration
1-Chlorohexane	544-10-5		5.65	Poor instrument integration

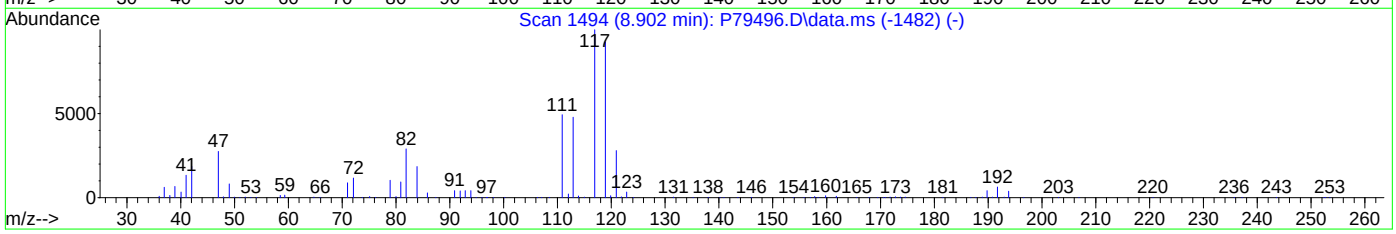
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96452.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.004) 56.41ug/L

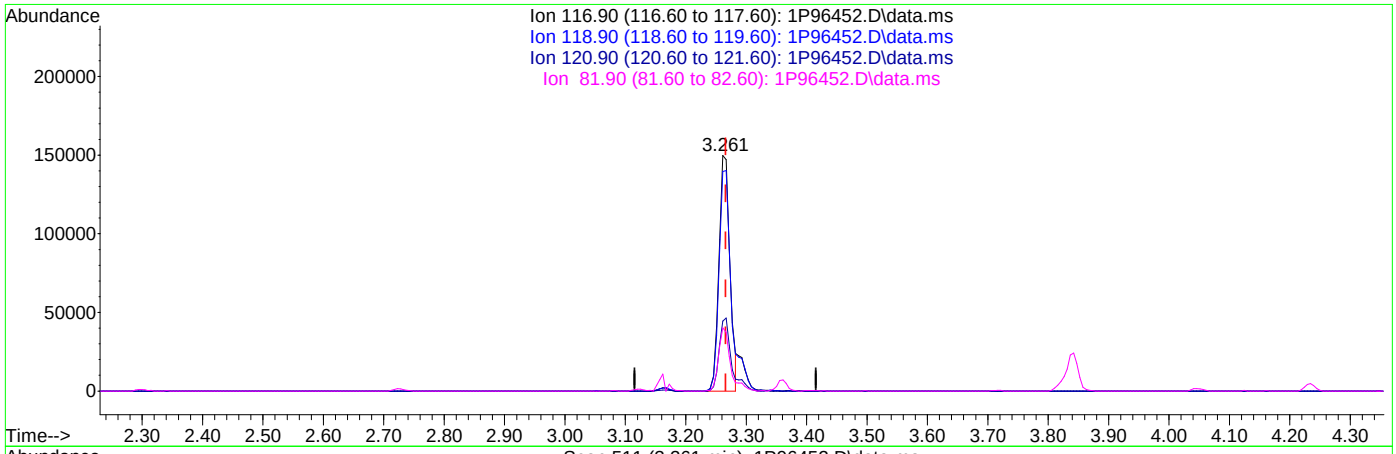
response 211420

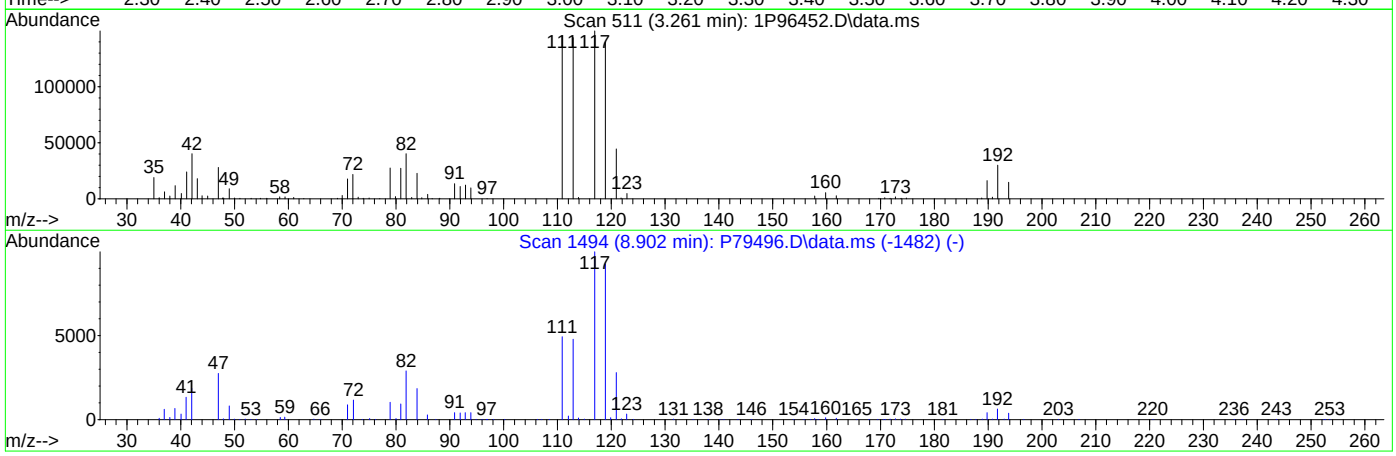
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	93.17
120.90	30.60	29.69
81.90	24.90	26.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration





TIC: 1P96452.D\data.ms

(40) Carbon Tetrachloride ( )

3.261min (-0.004) 50.47ug/L m

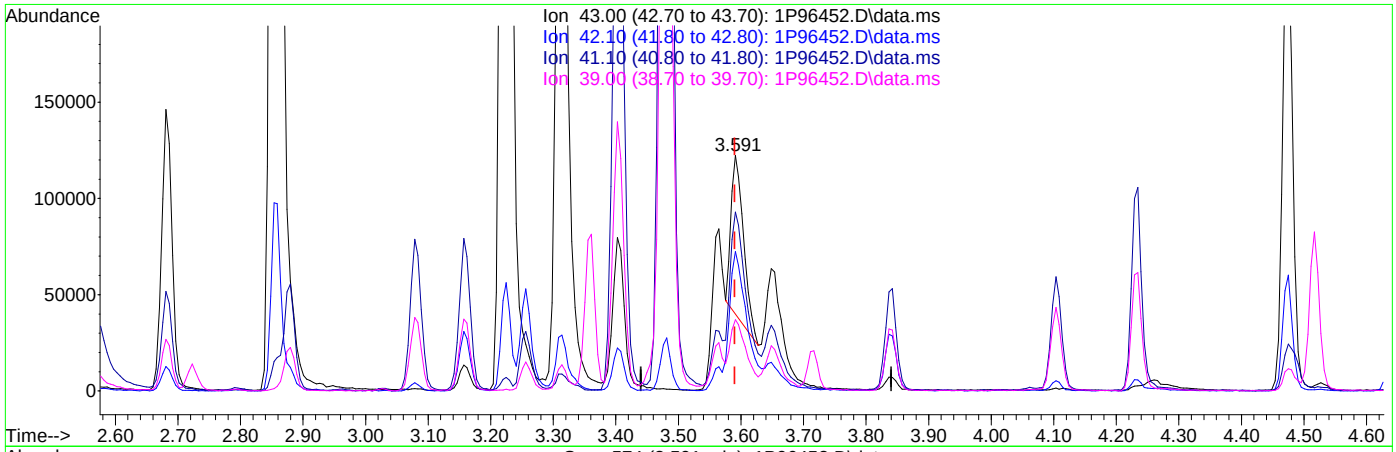
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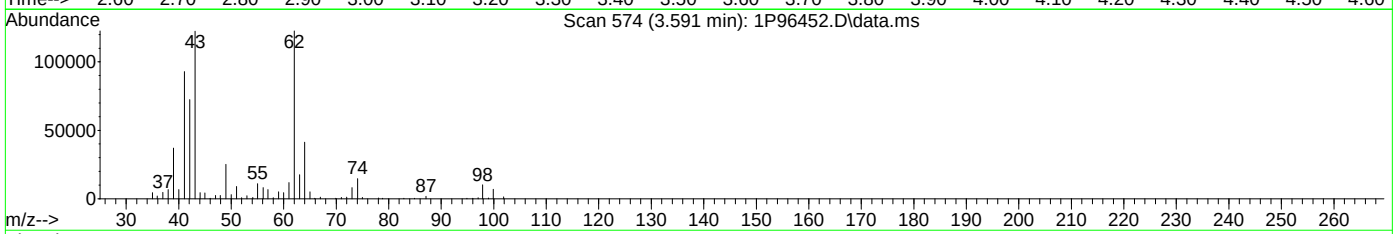
Ion	Exp%	Act%
116.90	100	100
118.90	96.00	93.17
120.90	30.60	29.69
81.90	24.90	26.87

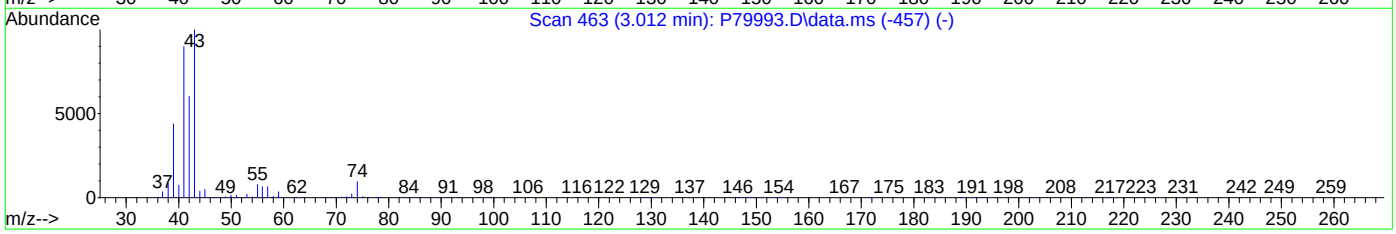
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96452.D\data.ms

(50) Isobutyl alcohol

3.591min (+0.001) 370.03ug/L

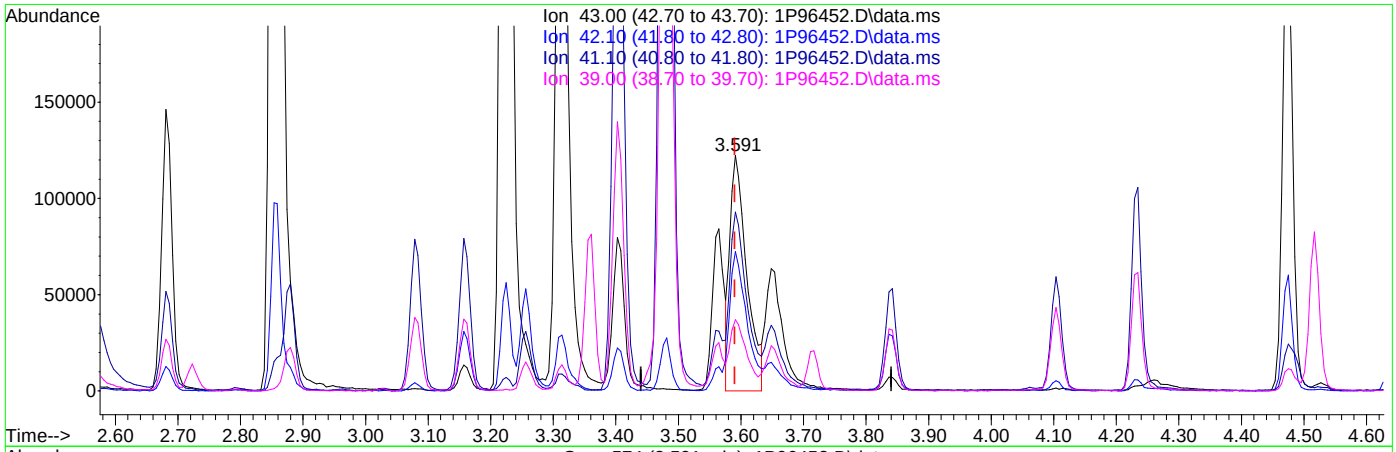
response 111745

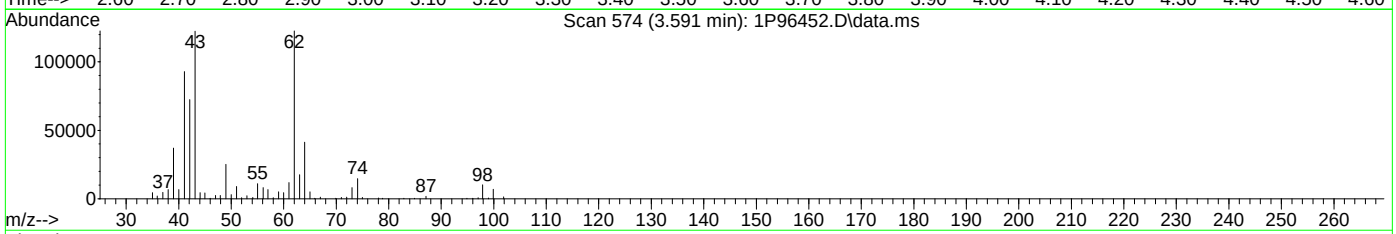
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.99
41.10	71.10	74.56
39.00	23.40	30.04

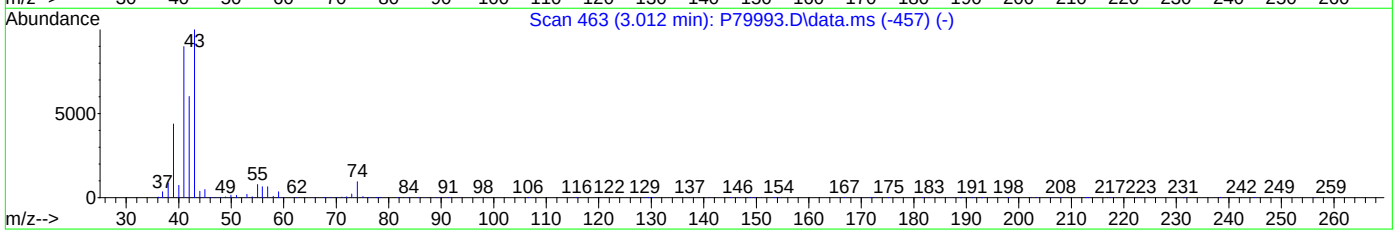
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96452.D\data.ms

(50) Isobutyl alcohol

3.591min (+0.001) 762.55ug/L m

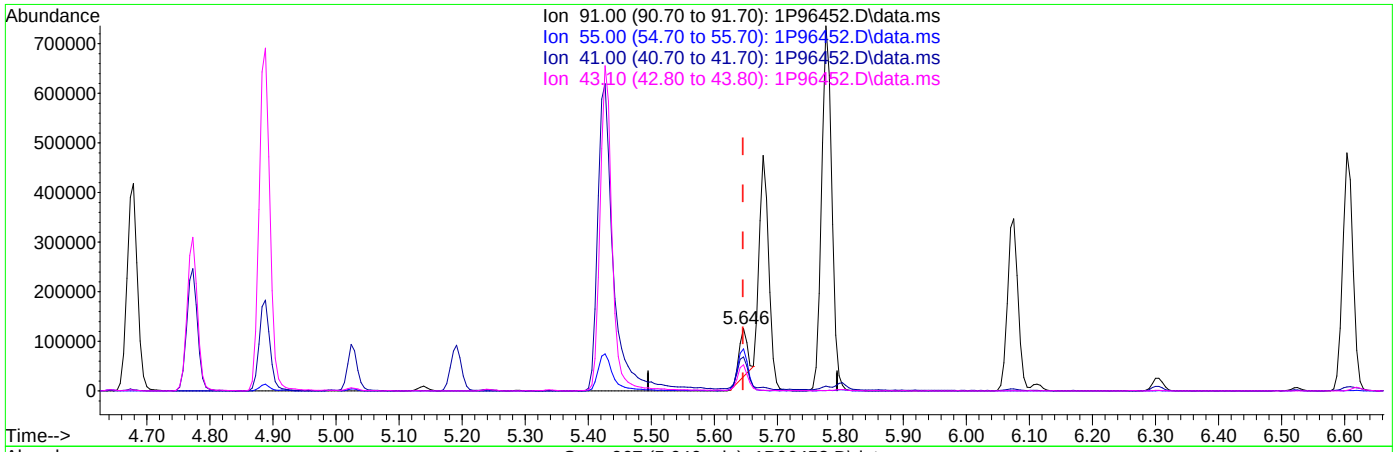
response 230282

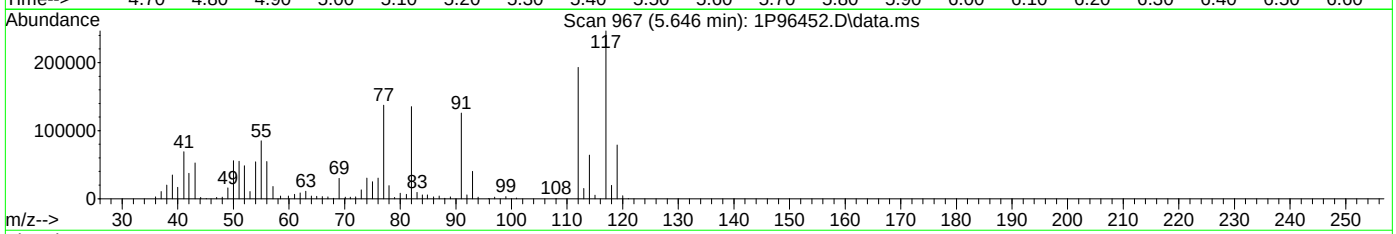
Ion	Exp%	Act%
43.00	100	100
42.10	58.50	59.14
41.10	71.10	75.99
39.00	23.40	30.26

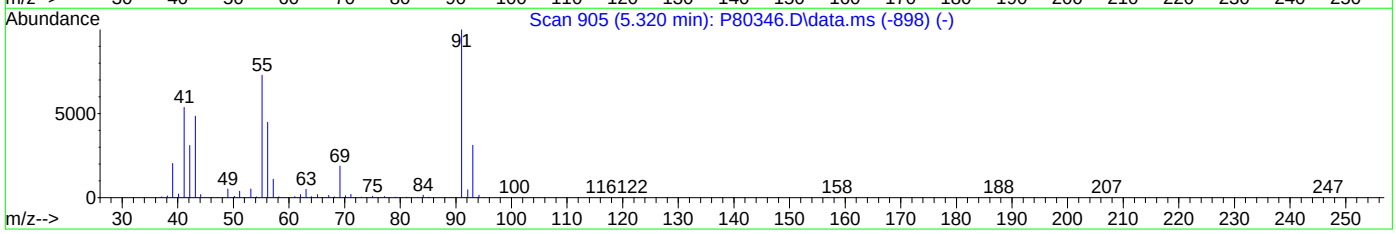
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96452.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.001) 24.75ug/L

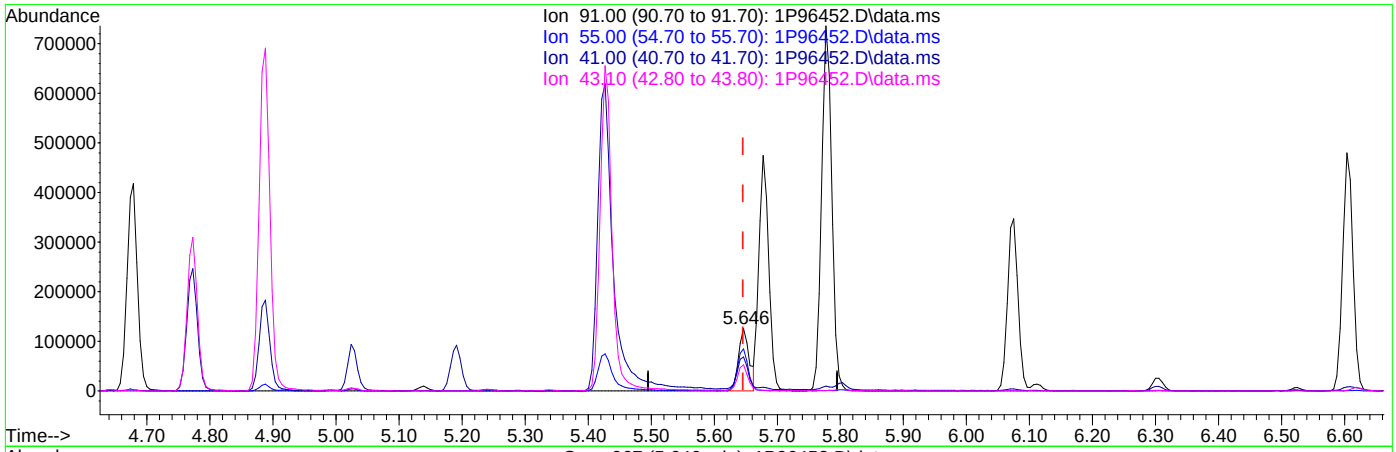
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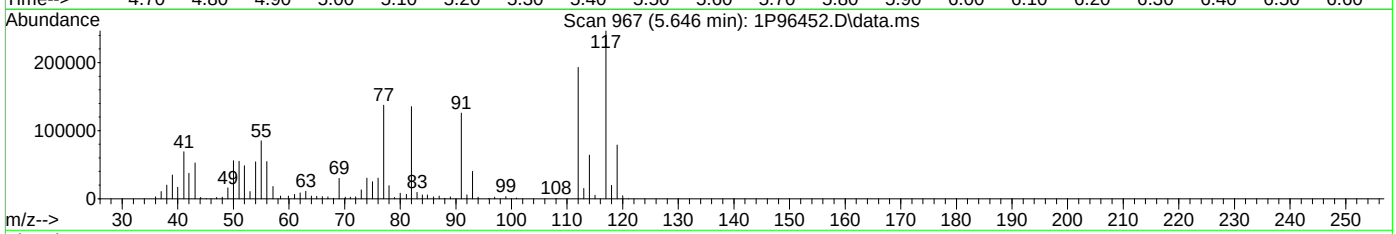
Ion	Exp%	Act%
91.00	100	100
55.00	71.50	65.34
41.00	56.40	50.15
43.10	47.80	40.18

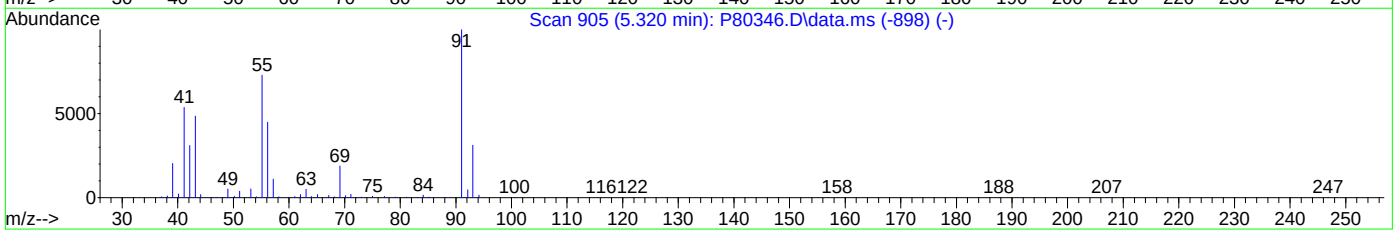
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\JenniferF\2022\December\12-19-2022\V1p3648\
Data File : 1P96452.D
Acq On : 16 Dec 2022 8:16 pm
Operator : courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,,
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\V1P_2022-12-14.M
Quant Results File: V1P_2022-12-14.RES
Quant Time: Dec 19 03:34:35 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration







TIC: 1P96452.D\data.ms

(76) 1-Chlorohexane

5.646min (+0.001) 39.94ug/L m

response 149338

Ion	Exp%	Act%
91.00	100	100
55.00	71.50	67.74
41.00	56.40	54.80
43.10	47.80	41.92

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	334730	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	235123	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	109352	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	92786	47.84	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.68%				
49) 1,2-Dichloroethane-d4	8.665	65	104516	53.29	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 106.58%				
62) Toluene-d8	10.542	98	326882	55.27	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 110.54%				
86) 4-Bromofluorobenzene	13.328	95	95349	55.07	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 110.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.855	85	2217	1.25	ug/L		84
3) Chloromethane	3.220	50	1854	1.05	ug/L		72
4) Vinyl Chloride	3.373	62	1927	1.03	ug/L		86
5) 1,3-Butadiene	3.409	39	1404	0.89	ug/L		95
6) Bromomethane	3.946	94	938	1.08	ug/L		90
7) Chloroethane	4.153	64	1276	0.92	ug/L		73
8) Trichlorofluoromethane	4.385	101	2439	0.90	ug/L		92
9) Ethyl Ether	4.873	59	1268	0.90	ug/L	#	76
11) 1,2-Dichlorotrifluoroe...	5.147	67	1781	0.92	ug/L	#	73
12) 1,1-Dichloroethene	5.165	61	2320	1.03	ug/L		91
13) Freon 113	5.220	101	1639	0.87	ug/L	#	87
14) Carbon Disulfide	5.208	76	5030	0.93	ug/L		89
15) Iodomethane	5.372	142	1295	0.71	ug/L		78
16) Acrolein	5.635	56	1209	3.38	ug/L		87
17) Allyl chloride	5.830	41	1828	0.87	ug/L		88
18) Methylene Chloride	5.958	49	3768	1.59	ug/L		95
19) Acetone	6.031	43	3736	6.80	ug/L		90
20) Methyl acetate	6.177	43	4221	3.59	ug/L		83
21) trans-1,2-Dichloroethene	6.171	61	2164	1.00	ug/L		89
22) Hexane	6.263	56	1228	1.01	ug/L	#	67
23) Methyl Tert Butyl Ether	6.287	73	4112	0.80	ug/L		74
24) Acetonitrile	6.634	41	1813	9.84	ug/L	#	69
25) Di-isopropyl ether	6.756	45	4220	0.88	ug/L		93
26) Chloroprene	6.915	53	2151	0.94	ug/L		96
27) 1,1-Dichloroethane	6.945	63	3130	1.07	ug/L		82
28) Acrylonitrile	7.019	53	2161	3.46	ug/L		87
29) ETBE	7.189	59	4613	0.88	ug/L		84
30) Tert Butyl Alcohol	6.391	59	1631	6.14	ug/L	#	41
31) Vinyl acetate	7.220	43	12287	3.34	ug/L		97
32) cis-1,2-Dichloroethene	7.579	96	1542	0.80	ug/L		96
33) 2,2-Dichloropropane	7.707	77	2279	0.87	ug/L		73
34) Bromochloromethane	7.805	128	622	0.63	ug/L		89
35) Cyclohexane	7.823	56	2503	1.01	ug/L		83
36) Chloroform	7.878	83	2879	0.92	ug/L		79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.988	43	6784	3.88	ug/L		89
40) Carbon Tetrachloride	8.049	117	1907	0.79	ug/L		95
41) 1,1,1-Trichloroethane	8.122	97	2249	0.81	ug/L		78
42) 2-Butanone	8.213	43	4528	5.69	ug/L		88
43) 1,1-Dichloropropene	8.256	75	2114	0.93	ug/L		86
44) tert-Butyl formate	8.354	59	6526	12.55	ug/L		90
45) Propionitrile	8.543	54	1895	6.98	ug/L	#	39
46) Methacrylonitrile	8.561	41	9567	8.14	ug/L		85
47) Benzene	8.524	78	6444	0.96	ug/L		94
48) TAME	8.604	73	3901	0.77	ug/L	#	63
50) 1,2-Dichloroethane	8.738	62	2480	1.04	ug/L		90
51) tert Amyl alcohol	8.786	59	850	5.31	ug/L	#	51
52) Trichloroethene	9.134	95	1609	0.84	ug/L		91
53) Methylcyclohexane	9.134	83	2492	0.85	ug/L		89
54) Dibromomethane	9.579	93	947	0.72	ug/L	#	71
55) 1,2-Dichloropropane	9.677	63	1207	0.73	ug/L		98
56) Bromodichloromethane	9.725	83	1880	0.75	ug/L	#	85
57) Methyl methacrylate	9.835	41	759	0.52	ug/L	#	44
59) 2-Chloroethyl vinyl ether	10.268	63	4279	21.81	ug/L		86
60) cis-1,3-Dichloropropene	10.359	75	1922	0.71	ug/L		71
63) Toluene	10.597	91	6397	0.94	ug/L		91
64) Isobutyl alcohol	8.677	43	1180	17.44	ug/L	#	11
65) 2-Nitropropane	10.829	41	1701	3.27	ug/L	#	70
66) 4-Methyl-2-pentanone	10.945	43	9971	6.05	ug/L		90
67) trans-1,3-Dichloropropene	11.006	75	1586	0.73	ug/L		95
68) Tetrachloroethene	11.006	166	1355	0.73	ug/L		94
69) Ethyl methacrylate	11.109	69	1314	0.60	ug/L	#	78
70) 1,1,2-Trichloroethane	11.170	83	1147	0.87	ug/L		98
71) Dibromochloromethane	11.365	129	1282	0.64	ug/L	#	58
72) 1,3-Dichloropropane	11.451	76	2327	0.91	ug/L		90
73) 1,2-Dibromoethane	11.640	107	1242	0.71	ug/L		70
74) 3,3-Dimethyl-1-butanol	11.707	57	6111	43.65	ug/L		90
75) 2-hexanone	11.774	43	6497	5.59	ug/L		79
76) 1-Chlorohexane	12.060	91	1802	0.81	ug/L		88
77) Ethylbenzene	12.121	91	7721m	0.99	ug/L		
78) Chlorobenzene	12.127	112	4271	0.94	ug/L		88
79) 1,1,1,2-Tetrachloroethane	12.176	131	1314	0.76	ug/L		91
80) m,p-Xylene	12.267	91	10152	1.72	ug/L		93
81) o-Xylene	12.706	91	4670	0.81	ug/L		93
82) Styrene	12.761	104	3152	0.70	ug/L		95
83) Bromoform	12.816	173	649	0.49	ug/L		85
84) Isopropylbenzene	13.011	105	6124	0.82	ug/L		99
87) cis-1,4-Dichloro-2-butene	13.688	53	76	0.21	ug/L	#	1
88) n-Propylbenzene	13.432	91	7689	0.96	ug/L		98
89) Bromobenzene	13.456	156	1427	0.80	ug/L		85
90) 1,1,2,2-Tetrachloroethane	13.499	83	2007	0.99	ug/L		81
91) 1,3,5-Trimethylbenzene	13.615	105	4839	0.86	ug/L		98
92) 2-Chlorotoluene	13.627	91	5103	1.02	ug/L		98
93) trans-1,4-Dichloro-2-B...	13.688	53	76	0.21	ug/L	#	1
94) 1,2,3-Trichloropropane	13.670	110	327	0.55	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

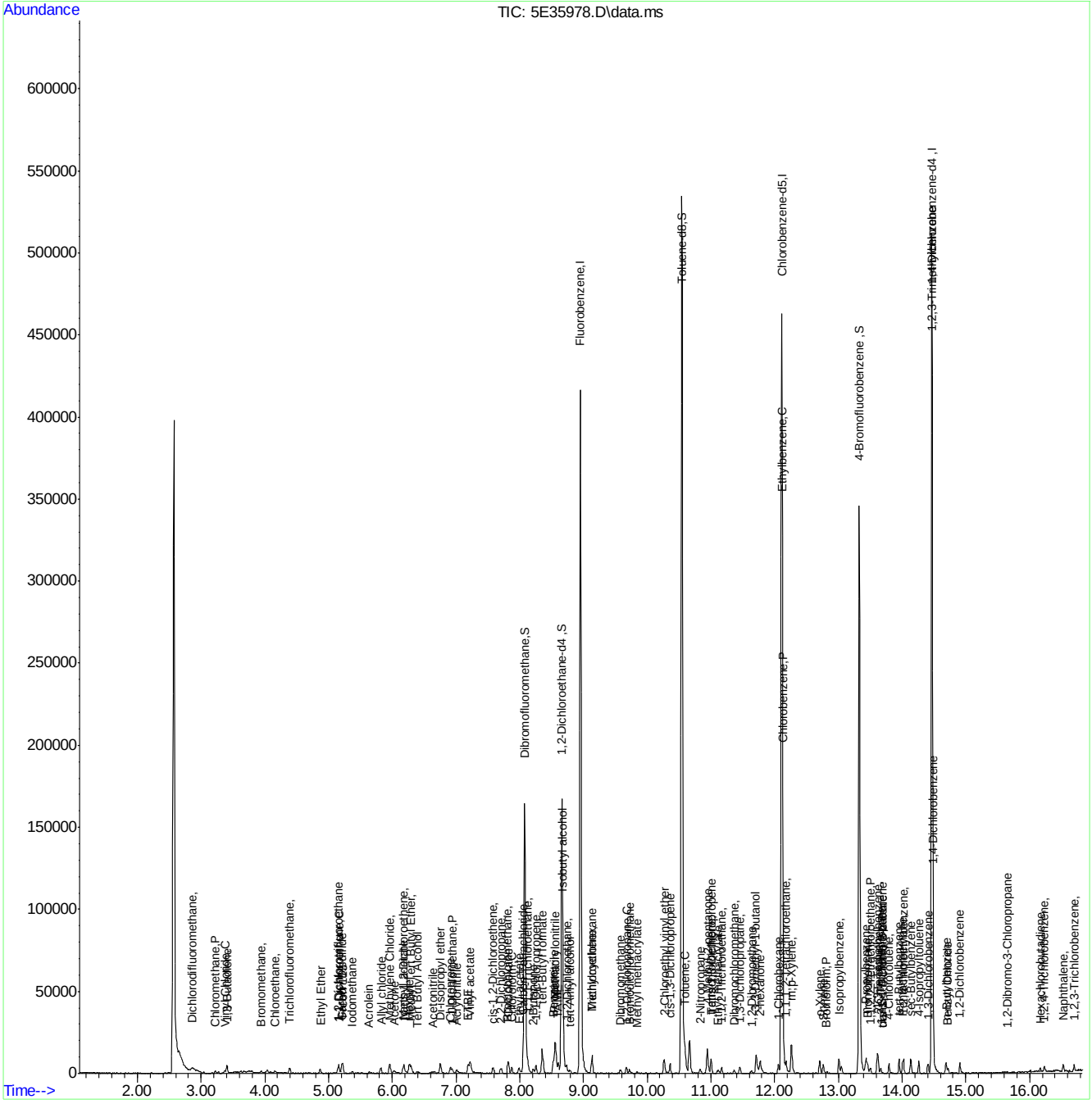
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96)	4-Chlorotoluene	13.798	91	4417	0.98	ug/L		96
98)	tert-Butylbenzene	13.950	91	2804	0.93	ug/L		95
99)	1,2,4-Trimethylbenzene	14.023	105	4604	0.83	ug/L		97
100)	Pentachloroethane	14.011	167	983	0.90	ug/L		78
101)	sec-Butylbenzene	14.139	105	6182	0.91	ug/L		95
102)	4-Isopropyltoluene	14.261	119	5204	0.87	ug/L		98
103)	1,3-Dichlorobenzene	14.407	146	2749	0.83	ug/L		90
104)	1,2,3-Trimethylbenzene	14.474	105	4615	0.80	ug/L	#	46
105)	1,4-Dichlorobenzene	14.487	146	3153m	0.85	ug/L		
106)	n-Butylbenzene	14.694	92	2528	0.80	ug/L	#	68
107)	Benzyl Chloride	14.718	126	342	0.50	ug/L	#	41
108)	1,2-Dichlorobenzene	14.907	146	2796	0.87	ug/L		94
109)	1,2-Dibromo-3-Chloropr...	15.645	75	86	0.26	ug/L	#	24
110)	Hexachlorobutadiene	16.169	225	530	0.82	ug/L	#	79
111)	1,2,4-Trichlorobenzene	16.230	180	1402	0.77	ug/L		86
112)	Naphthalene	16.529	128	3352	0.64	ug/L		86
113)	1,2,3-Trichlorobenzene	16.700	180	1191	0.79	ug/L		82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35978.D
Injection Time: 12/08/22 10:48

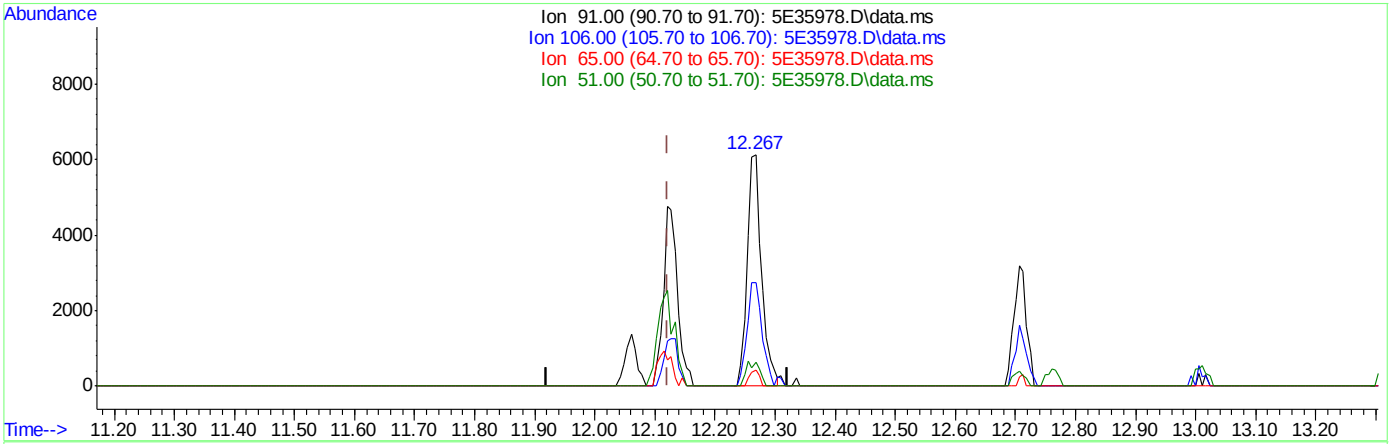
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

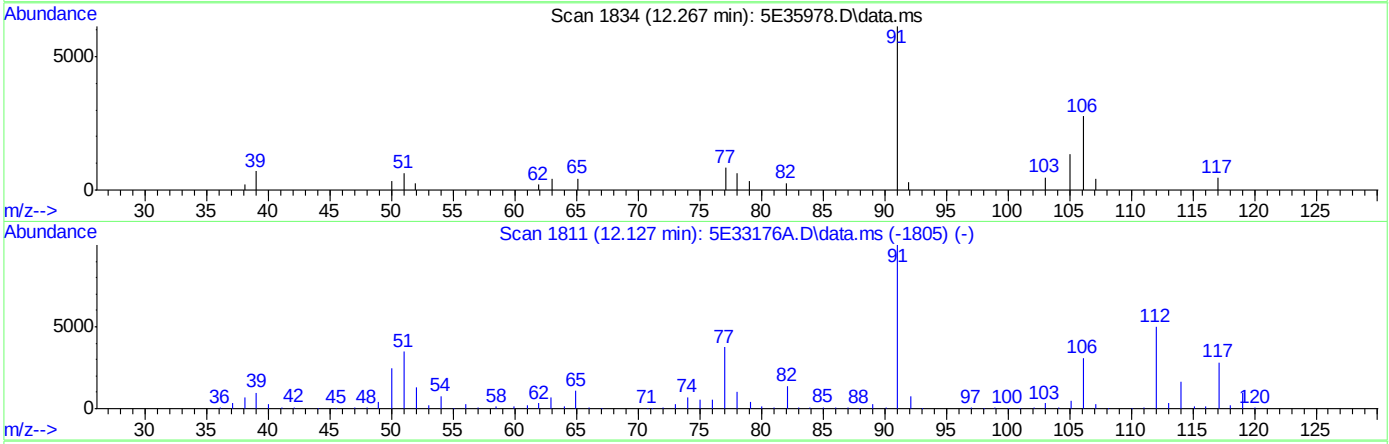
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethylbenzene	100-41-4		12.12	Missed peak
1,4-Dichlorobenzene	106-46-7		14.49	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.267min (+0.146) 1.29ug/L

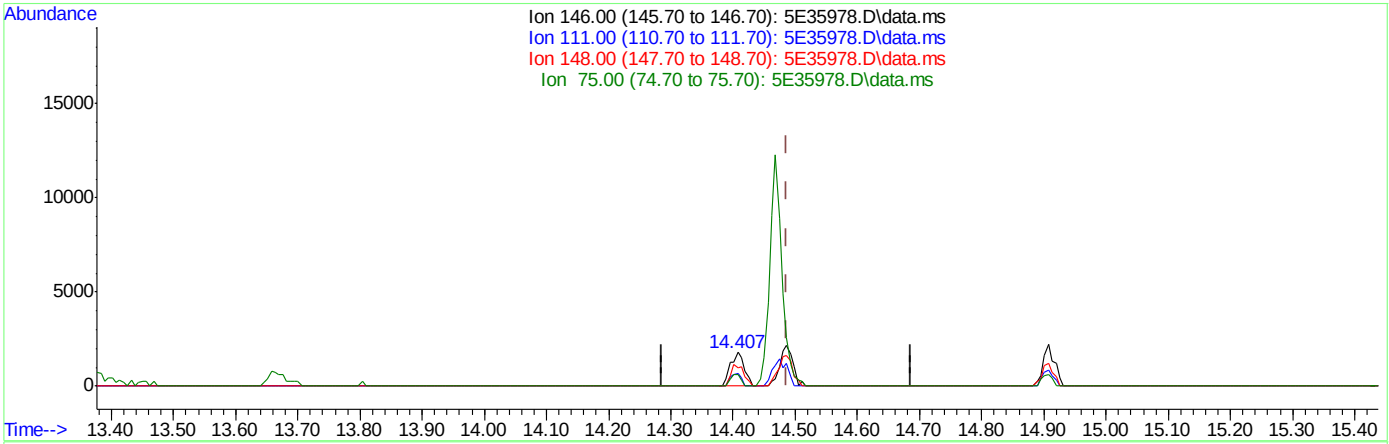
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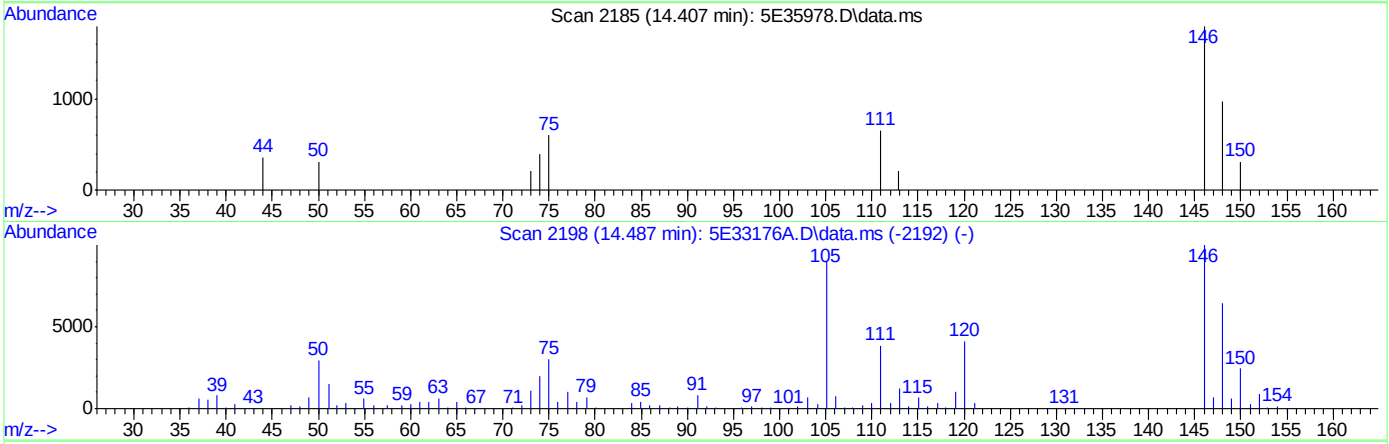
Ion	Exp%	Act%
91.00	100	100
106.00	31.60	44.90
65.00	8.20	6.96
51.00	19.20	10.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.407min (-0.080) 0.74ug/L

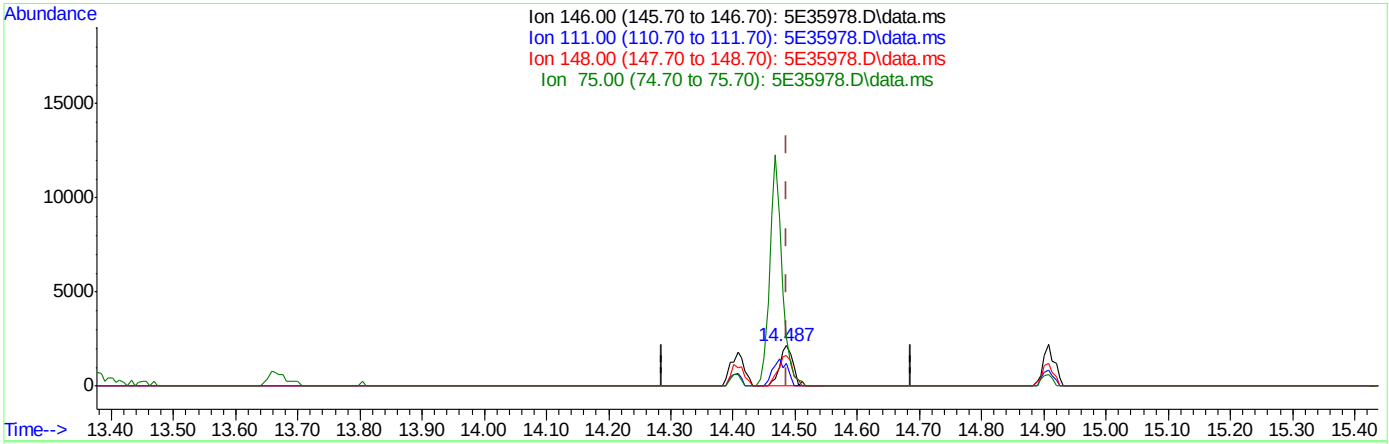
response 2749

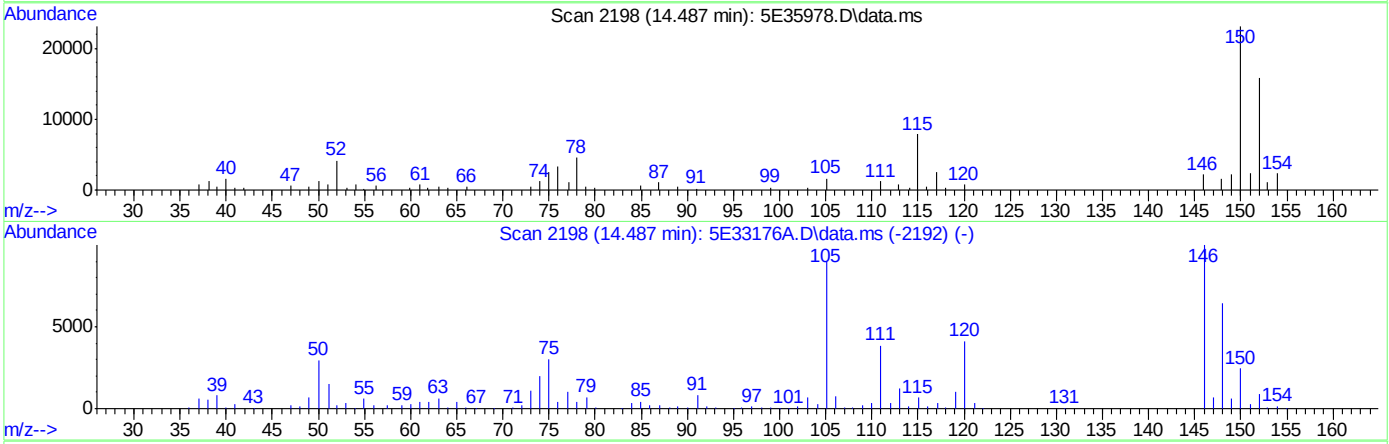
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	36.53
148.00	63.20	53.90
75.00	24.70	33.57

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.487min (-0.000) 0.85ug/L m

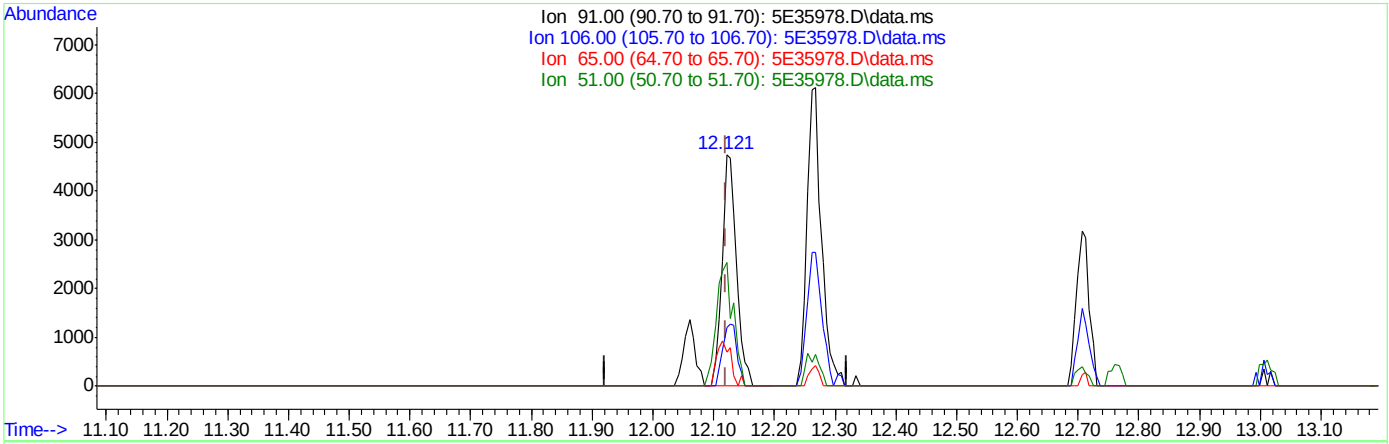
response 3153

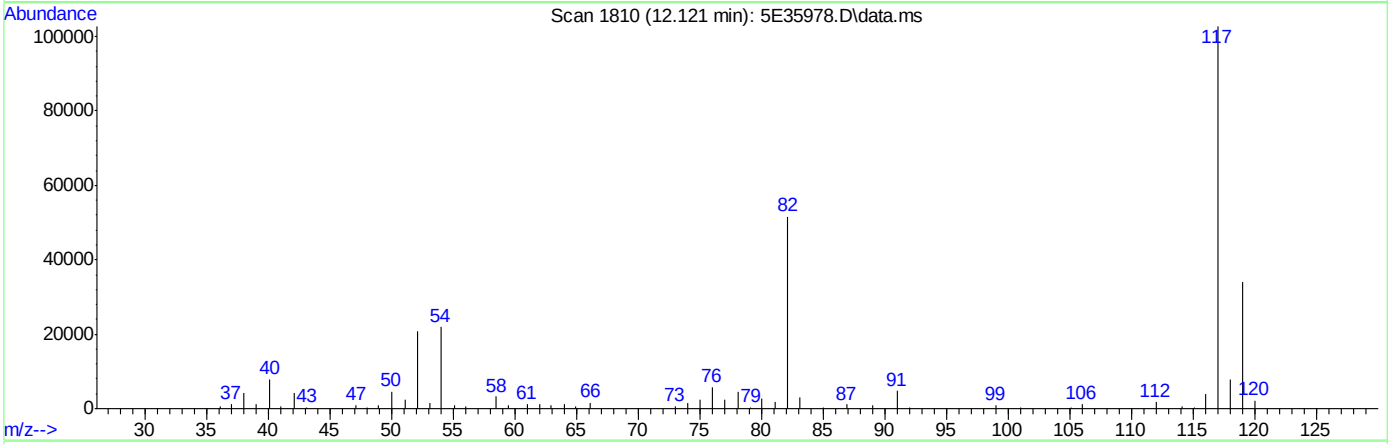
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	56.27
148.00	63.20	76.39
75.00	24.70	120.21#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.121min (+0.000) 0.99ug/L m

response 7721

Ion	Exp%	Act%
91.00	100	100
106.00	31.60	25.44
65.00	8.20	14.79
51.00	19.20	53.21#

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	347220	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.109	117	240750	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	113739	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.073	113	95693	47.57	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.14%				
49) 1,2-Dichloroethane-d4	8.659	65	109774	53.96	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 107.92%				
62) Toluene-d8	10.542	98	330650	54.60	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.20%				
86) 4-Bromofluorobenzene	13.328	95	97585	54.19	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 108.38%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.849	85	9613	5.24	ug/L		96
3) Chloromethane	3.221	50	9681	5.31	ug/L		98
4) Vinyl Chloride	3.373	62	10347	5.32	ug/L		92
5) 1,3-Butadiene	3.403	39	7260	4.44	ug/L		96
6) Bromomethane	3.946	94	4659	5.12	ug/L		91
7) Chloroethane	4.153	64	6426	4.42	ug/L		97
8) Trichlorofluoromethane	4.391	101	11850	4.23	ug/L		99
9) Ethyl Ether	4.867	59	8051	5.50	ug/L		94
11) 1,2-Dichlorotrifluoroe...	5.147	67	11028	5.48	ug/L		95
12) 1,1-Dichloroethene	5.159	61	13625	5.83	ug/L		91
13) Freon 113	5.214	101	9482	4.85	ug/L	#	82
14) Carbon Disulfide	5.208	76	27057	4.82	ug/L		96
15) Iodomethane	5.367	142	9902	5.22	ug/L		99
16) Acrolein	5.635	56	7420	19.98	ug/L		91
17) Allyl chloride	5.818	41	8945	4.11	ug/L		93
18) Methylene Chloride	5.952	49	14967	6.11	ug/L		90
19) Acetone	6.019	43	12305	21.60	ug/L		90
20) Methyl acetate	6.171	43	23892	19.58	ug/L		95
21) trans-1,2-Dichloroethene	6.171	61	12593	5.59	ug/L		87
22) Hexane	6.269	56	7470m	5.95	ug/L		
23) Methyl Tert Butyl Ether	6.293	73	24908	4.65	ug/L		98
24) Acetonitrile	6.622	41	7421	38.65	ug/L		85
25) Di-isopropyl ether	6.750	45	23813	4.77	ug/L		95
26) Chloroprene	6.909	53	10994	4.62	ug/L		95
27) 1,1-Dichloroethane	6.939	63	16232	5.36	ug/L		98
28) Acrylonitrile	7.000	53	15251	23.55	ug/L		93
29) ETBE	7.195	59	26617	4.91	ug/L		95
30) Tert Butyl Alcohol	6.385	59	9588	34.80	ug/L		88
31) Vinyl acetate	7.214	43	78154	20.50	ug/L		96
32) cis-1,2-Dichloroethene	7.580	96	9166	4.56	ug/L		89
33) 2,2-Dichloropropane	7.701	77	13728	5.04	ug/L		92
34) Bromochloromethane	7.811	128	4666	4.56	ug/L		86
35) Cyclohexane	7.817	56	14593	5.70	ug/L		90
36) Chloroform	7.872	83	17247	5.29	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.976	43	37320	20.57	ug/L		99
38) Tetrahydrofuran	8.073	42	2409	4.47	ug/L		93
40) Carbon Tetrachloride	8.055	117	12251	4.91	ug/L		98
41) 1,1,1-Trichloroethane	8.122	97	13588	4.71	ug/L		95
42) 2-Butanone	8.207	43	17733	21.50	ug/L		96
43) 1,1-Dichloropropene	8.250	75	12083	5.13	ug/L		90
44) tert-Butyl formate	8.354	59	34248	62.36	ug/L		92
45) Propionitrile	8.537	54	12173	43.21	ug/L		81
46) Methacrylonitrile	8.555	41	43221m	35.47	ug/L		
47) Benzene	8.524	78	35318	5.06	ug/L		96
48) TAME	8.604	73	24134	4.60	ug/L		96
50) 1,2-Dichloroethane	8.732	62	12687	5.13	ug/L		93
51) tert Amyl alcohol	8.787	59	6797	40.61	ug/L		90
52) Trichloroethene	9.134	95	9308	4.71	ug/L		91
53) Methylcyclohexane	9.134	83	13334	4.39	ug/L		85
54) Dibromomethane	9.579	93	6110	4.51	ug/L		89
55) 1,2-Dichloropropane	9.671	63	9402	5.47	ug/L		94
56) Bromodichloromethane	9.719	83	11203	4.32	ug/L		99
57) Methyl methacrylate	9.841	41	5588	3.69	ug/L		91
58) 1,4-Dioxane	9.927	88	1304	63.74	ug/L		77
59) 2-Chloroethyl vinyl ether	10.262	63	24827	121.98	ug/L		96
60) cis-1,3-Dichloropropene	10.359	75	13370	4.73	ug/L		90
63) Toluene	10.597	91	36328	5.22	ug/L		96
64) Isobutyl alcohol	8.671	43	6467	92.74	ug/L	#	81
65) 2-Nitropropane	10.829	41	11207	21.02	ug/L		99
66) 4-Methyl-2-pentanone	10.945	43	40781	24.16	ug/L		99
67) trans-1,3-Dichloropropene	11.000	75	10777	4.83	ug/L		93
68) Tetrachloroethene	11.000	166	8868	4.67	ug/L		94
69) Ethyl methacrylate	11.103	69	8757	3.89	ug/L		91
70) 1,1,2-Trichloroethane	11.164	83	7153	5.27	ug/L		97
71) Dibromochloromethane	11.365	129	8797	4.28	ug/L		98
72) 1,3-Dichloropropane	11.451	76	13974	5.33	ug/L		96
73) 1,2-Dibromoethane	11.627	107	8218	4.57	ug/L		94
74) 3,3-Dimethyl-1-butanol	11.707	57	33581	231.23	ug/L		94
75) 2-hexanone	11.768	43	27021	22.72	ug/L		93
76) 1-Chlorohexane	12.060	91	11705	5.11	ug/L		91
77) Ethylbenzene	12.121	91	41872	5.23	ug/L		95
78) Chlorobenzene	12.133	112	23709	5.08	ug/L		97
79) 1,1,1,2-Tetrachloroethane	12.182	131	8056	4.57	ug/L		89
80) m,p-Xylene	12.262	91	61272	10.13	ug/L		97
81) o-Xylene	12.707	91	28812	4.88	ug/L		99
82) Styrene	12.755	104	21801	4.70	ug/L		97
83) Bromoform	12.822	173	5098	3.75	ug/L		88
84) Isopropylbenzene	13.005	105	38624	5.04	ug/L		95
87) cis-1,4-Dichloro-2-butene	13.682	53	2055	5.32	ug/L	#	90
88) n-Propylbenzene	13.426	91	46242	5.58	ug/L		98
89) Bromobenzene	13.456	156	9151	4.94	ug/L		87
90) 1,1,2,2-Tetrachloroethane	13.499	83	10666	5.05	ug/L		96
91) 1,3,5-Trimethylbenzene	13.609	105	30173	5.13	ug/L		99
92) 2-Chlorotoluene	13.621	91	28868	5.53	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

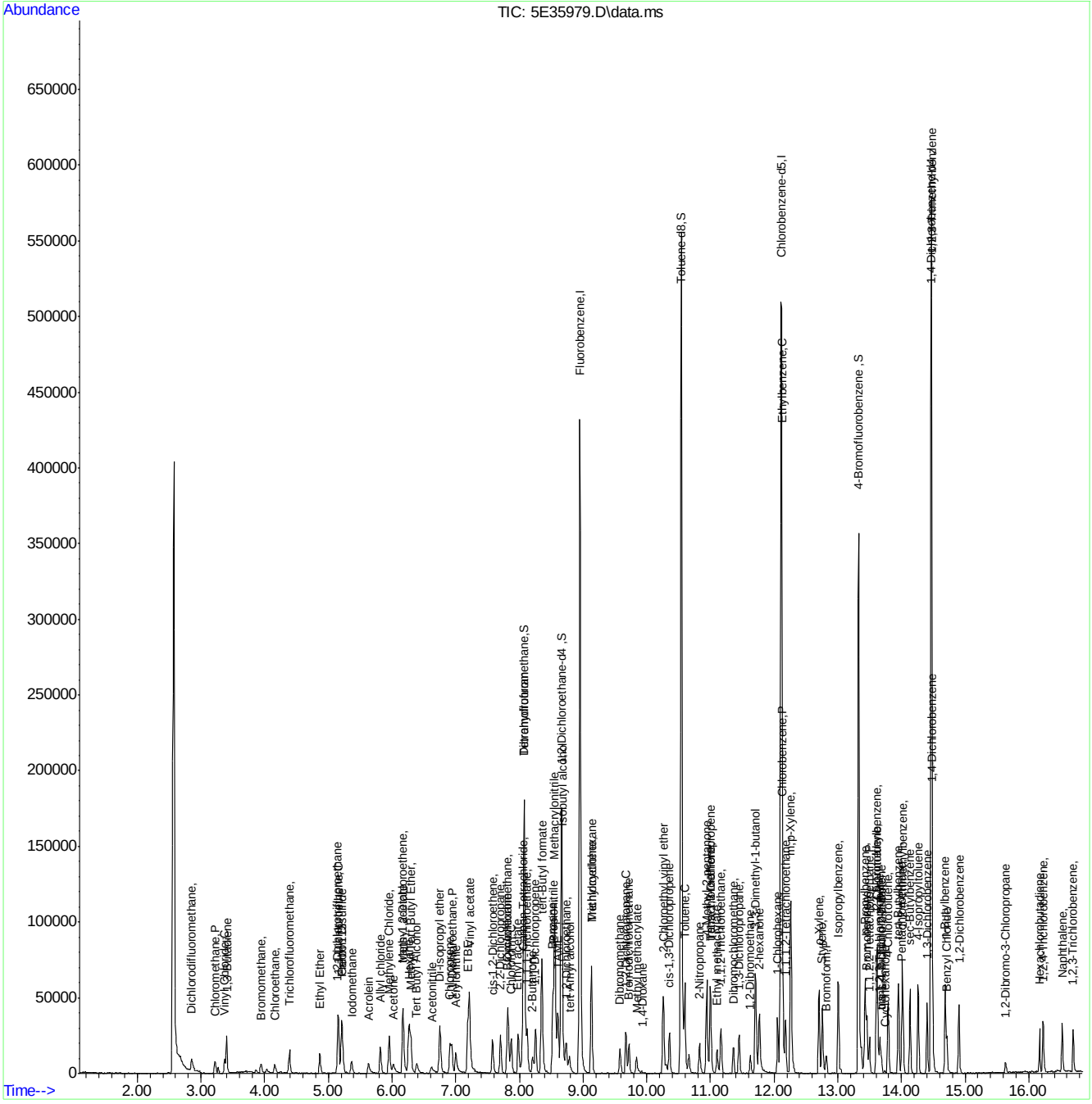
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93)	trans-1,4-Dichloro-2-B...	13.682	53	2055	5.32	ug/L		92
94)	1,2,3-Trichloropropane	13.664	110	2991	4.88	ug/L		86
95)	Cyclohexanone	13.737	55	1043	15.07	ug/L	#	65
96)	4-Chlorotoluene	13.792	91	25633	5.47	ug/L		98
98)	tert-Butylbenzene	13.950	91	16864	5.39	ug/L		96
99)	1,2,4-Trimethylbenzene	14.023	105	28368	4.89	ug/L		90
100)	Pentachloroethane	14.005	167	4590	4.04	ug/L		92
101)	sec-Butylbenzene	14.133	105	36682	5.19	ug/L		97
102)	4-Isopropyltoluene	14.261	119	31711	5.08	ug/L		97
103)	1,3-Dichlorobenzene	14.401	146	16154	4.68	ug/L		92
104)	1,2,3-Trimethylbenzene	14.475	105	29242	4.89	ug/L		87
105)	1,4-Dichlorobenzene	14.487	146	18246	4.75	ug/L		91
106)	n-Butylbenzene	14.688	92	16955	5.16	ug/L		99
107)	Benzyl Chloride	14.712	126	2589	3.65	ug/L	#	78
108)	1,2-Dichlorobenzene	14.907	146	15458	4.60	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	15.639	75	1364	3.88	ug/L	#	81
110)	Hexachlorobutadiene	16.169	225	3708	5.49	ug/L		90
111)	1,2,4-Trichlorobenzene	16.230	180	9054	4.78	ug/L		97
112)	Naphthalene	16.523	128	23282	4.26	ug/L		97
113)	1,2,3-Trichlorobenzene	16.694	180	7266	4.64	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35979.D
Injection Time: 12/08/22 11:33

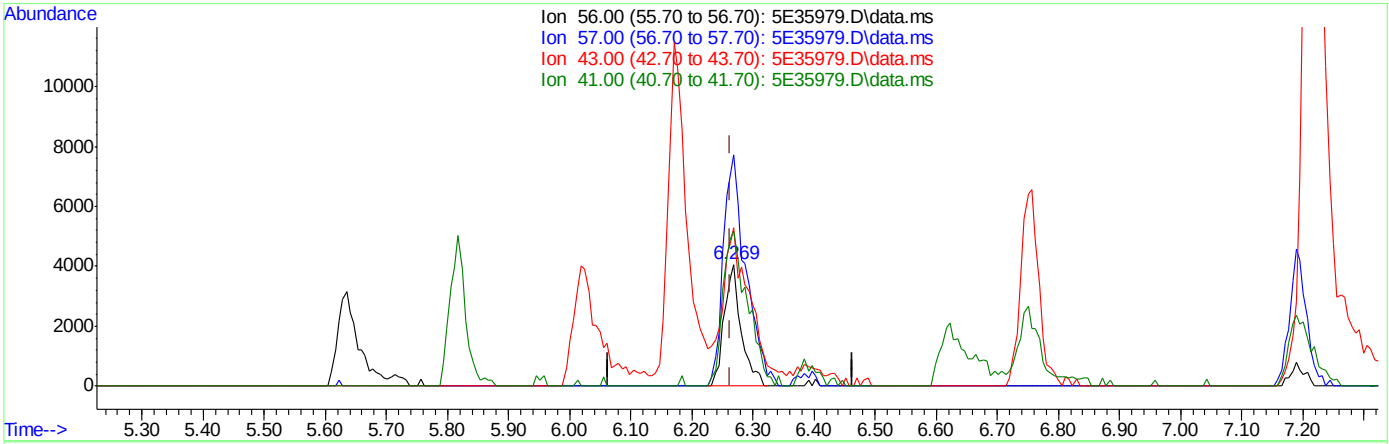
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

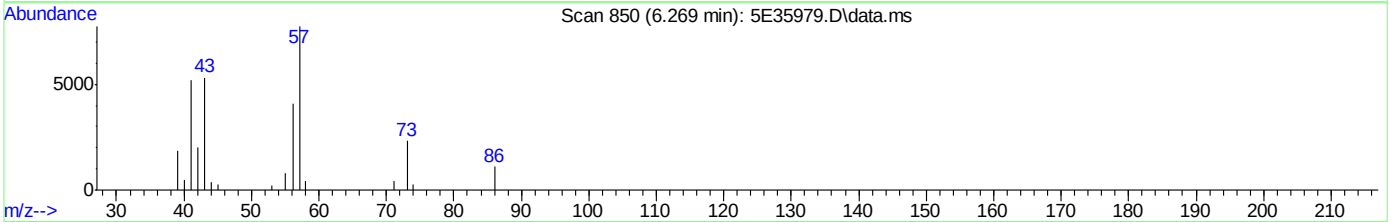
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.27	Overlapping peak
Methacrylonitrile	126-98-7		8.55	Overlapping peak

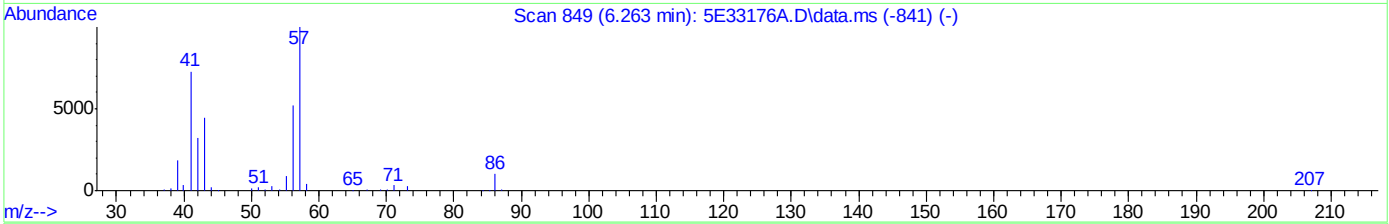
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35979.D\data.ms

(22) Hexane

6.269min (+0.006) 6.23ug/L

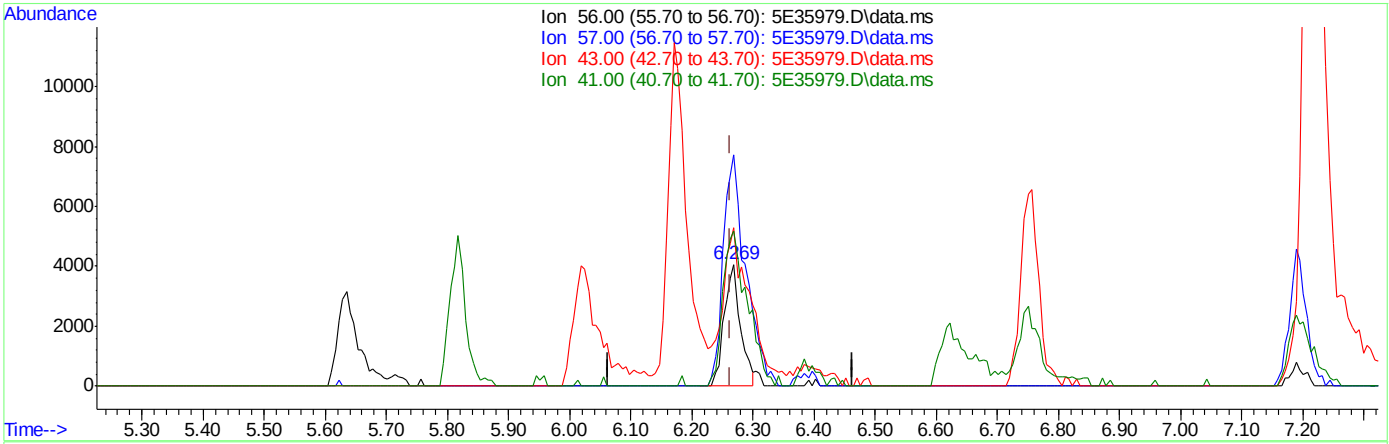
response 7813

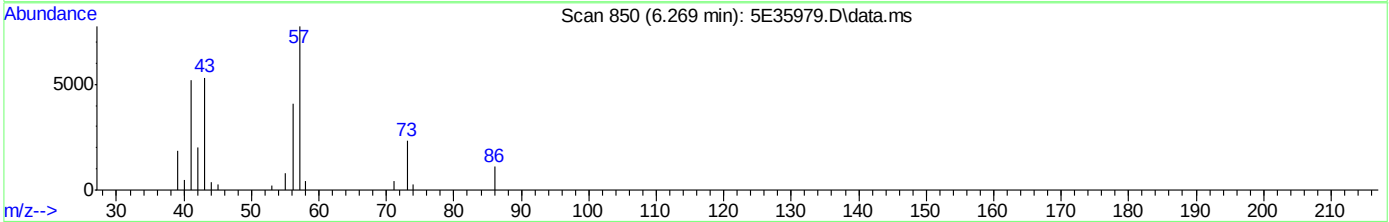
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	189.86
43.00	128.00	113.26
41.00	148.90	127.50#

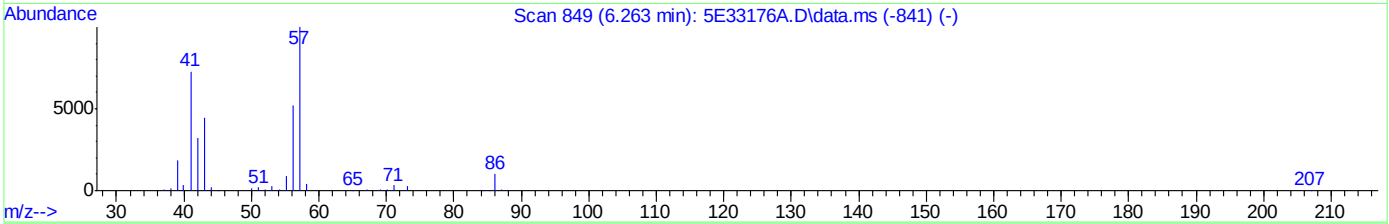
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35979.D\data.ms

(22) Hexane

6.269min (+0.006) 5.95ug/L m

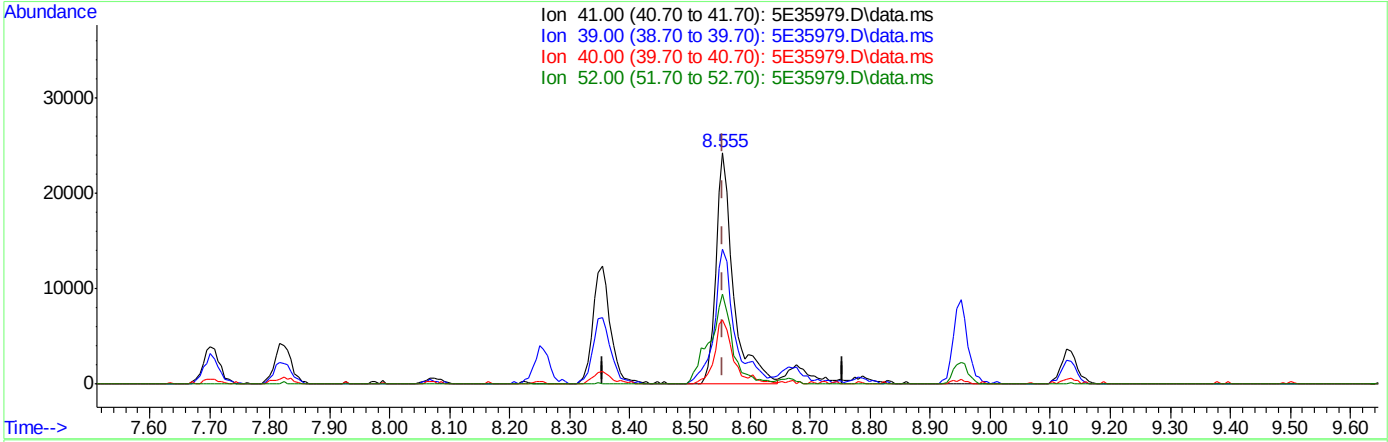
response 7470

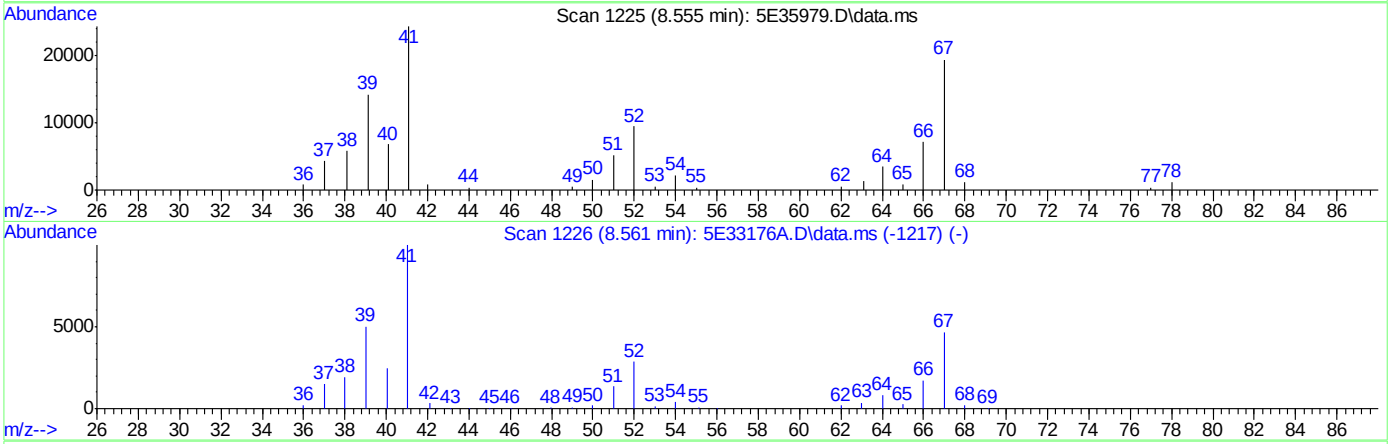
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	189.86
43.00	128.00	130.25
41.00	148.90	127.50#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35979.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 40.05ug/L

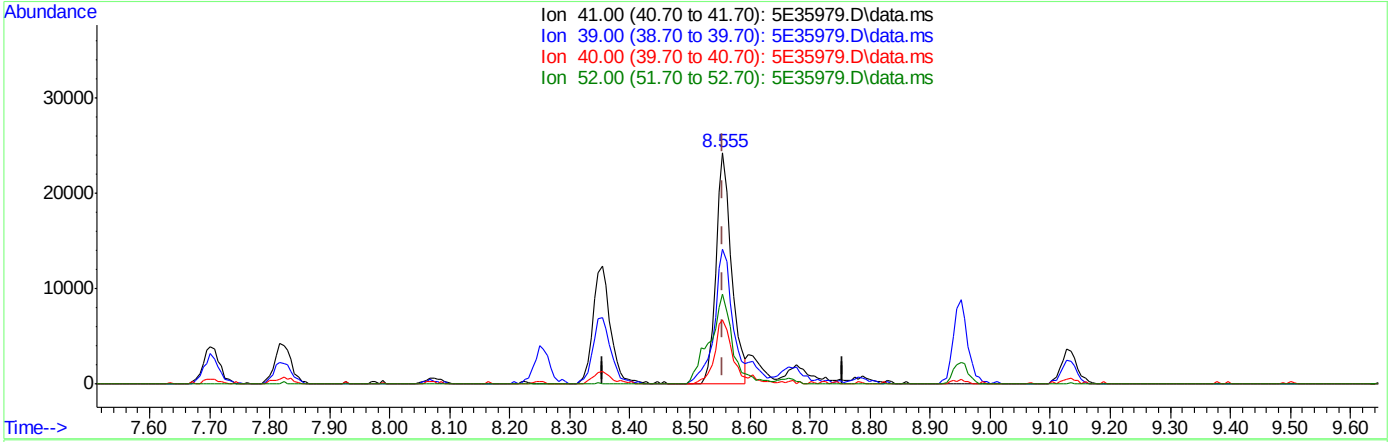
response 48810

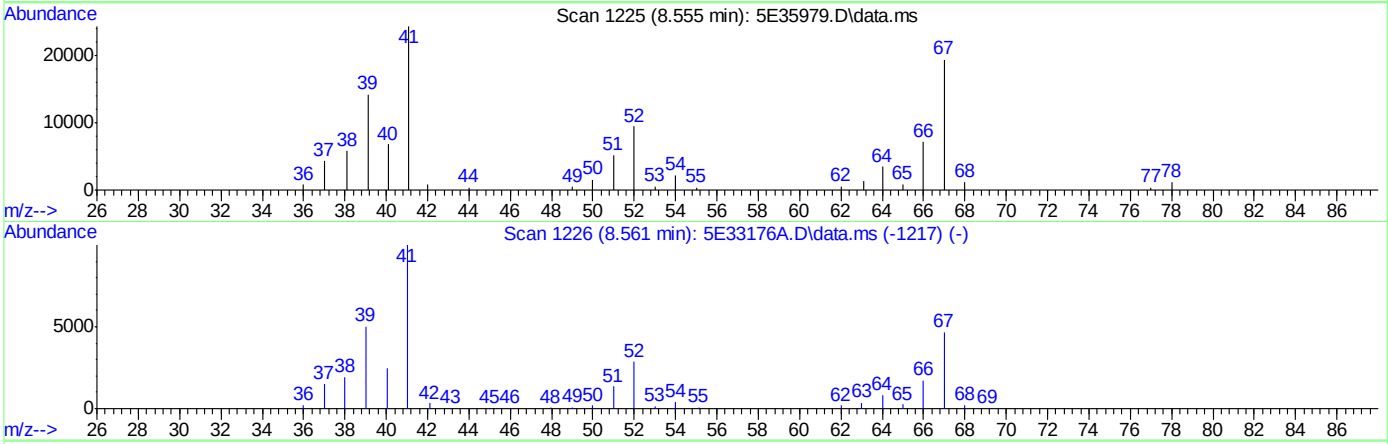
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	54.68
40.00	26.50	26.94
52.00	33.80	37.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35979.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 35.47ug/L m

response 43221

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.35
40.00	26.50	27.83
52.00	33.80	38.73

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	332285	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	234022	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	110165	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	93223	48.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.84%			
49) 1,2-Dichloroethane-d4	8.664	65	106836	54.88	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.76%			
62) Toluene-d8	10.542	98	322752	54.83	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.66%			
86) 4-Bromofluorobenzene	13.328	95	94035	53.91	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	21315	12.15	ug/L	94
3) Chloromethane	3.220	50	20911	11.98	ug/L	94
4) Vinyl Chloride	3.373	62	22495	12.09	ug/L	90
5) 1,3-Butadiene	3.403	39	13612	8.76	ug/L	96
6) Bromomethane	3.946	94	10799	12.18	ug/L	96
7) Chloroethane	4.153	64	14629	10.27	ug/L	92
8) Trichlorofluoromethane	4.391	101	26202	9.77	ug/L	95
9) Ethyl Ether	4.866	59	13605	9.72	ug/L	99
10) Ethanol	5.208	45	627	33.37	ug/L	70
11) 1,2-Dichlorotrifluoroe...	5.147	67	20359	10.57	ug/L	85
12) 1,1-Dichloroethene	5.159	61	24663	11.02	ug/L	93
13) Freon 113	5.220	101	16599	8.89	ug/L	92
14) Carbon Disulfide	5.208	76	45924	8.54	ug/L	99
15) Iodomethane	5.366	142	21689	11.80	ug/L	98
16) Acrolein	5.628	56	15539	43.72	ug/L	96
17) Allyl chloride	5.817	41	17635	8.47	ug/L	87
18) Methylene Chloride	5.958	49	24284	10.38	ug/L	98
19) Acetone	6.019	43	25833	47.37	ug/L	92
20) Methyl acetate	6.171	43	49282	42.21	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	22351	10.37	ug/L	90
22) Hexane	6.263	56	14615	12.17	ug/L	89
23) Methyl Tert Butyl Ether	6.293	73	46499	9.07	ug/L	92
24) Acetonitrile	6.610	41	16780	90.58	ug/L	86
25) Di-isopropyl ether	6.756	45	44475	9.31	ug/L	96
26) Chloroprene	6.909	53	21764	9.56	ug/L	93
27) 1,1-Dichloroethane	6.939	63	29770	10.26	ug/L	94
28) Acrylonitrile	7.000	53	34249	55.25	ug/L	95
29) ETBE	7.189	59	51089	9.85	ug/L	93
30) Tert Butyl Alcohol	6.391	59	24857	94.26	ug/L	96
31) Vinyl acetate	7.214	43	157551	43.18	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	17464	9.08	ug/L	83
33) 2,2-Dichloropropane	7.707	77	24794	9.51	ug/L	96
34) Bromochloromethane	7.805	128	8196	8.38	ug/L #	84
35) Cyclohexane	7.823	56	28111	11.47	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36)	Chloroform	7.878	83	29121	9.34	ug/L		95
37)	Ethyl acetate	7.982	43	81831	47.13	ug/L		98
38)	Tetrahydrofuran	8.073	42	5234	10.14	ug/L		92
40)	Carbon Tetrachloride	8.055	117	21344	8.94	ug/L		93
41)	1,1,1-Trichloroethane	8.122	97	25454	9.23	ug/L		92
42)	2-Butanone	8.207	43	37996	48.13	ug/L		92
43)	1,1-Dichloropropene	8.256	75	22479	9.97	ug/L		96
44)	tert-Butyl formate	8.354	59	69582	129.24	ug/L		98
45)	Propionitrile	8.536	54	27204	100.91	ug/L	#	77
46)	Methacrylonitrile	8.555	41	93128m	79.86	ug/L		
47)	Benzene	8.524	78	63955	9.57	ug/L		98
48)	TAME	8.604	73	45729	9.10	ug/L		97
50)	1,2-Dichloroethane	8.738	62	24175	10.22	ug/L		94
51)	tert Amyl alcohol	8.786	59	15107	93.27	ug/L		92
52)	Trichloroethene	9.134	95	17086	9.04	ug/L		92
53)	Methylcyclohexane	9.134	83	26560	9.14	ug/L		97
54)	Dibromomethane	9.579	93	11707	9.02	ug/L		94
55)	1,2-Dichloropropane	9.670	63	18411	11.20	ug/L		95
56)	Bromodichloromethane	9.725	83	21355	8.60	ug/L		95
57)	Methyl methacrylate	9.841	41	12610	8.65	ug/L		89
58)	1,4-Dioxane	9.920	88	2964	150.43	ug/L		90
59)	2-Chloroethyl vinyl ether	10.256	63	54682	280.75	ug/L		96
60)	cis-1,3-Dichloropropene	10.353	75	23499	8.69	ug/L		96
63)	Toluene	10.597	91	67069	9.91	ug/L		99
64)	Isobutyl alcohol	8.677	43	13385	195.68	ug/L		90
65)	2-Nitropropane	10.829	41	22559	43.53	ug/L		91
66)	4-Methyl-2-pentanone	10.938	43	88541	53.95	ug/L		95
67)	trans-1,3-Dichloropropene	10.999	75	21184	9.77	ug/L		92
68)	Tetrachloroethene	10.999	166	16779	9.09	ug/L		97
69)	Ethyl methacrylate	11.103	69	19933	9.12	ug/L		86
70)	1,1,2-Trichloroethane	11.170	83	13266	10.06	ug/L		95
71)	Dibromochloromethane	11.359	129	16383	8.20	ug/L		93
72)	1,3-Dichloropropane	11.451	76	25656	10.07	ug/L		94
73)	1,2-Dibromoethane	11.627	107	15401	8.81	ug/L		97
74)	3,3-Dimethyl-1-butanol	11.707	57	81117	561.74	ug/L		91
75)	2-hexanone	11.768	43	61114	52.86	ug/L		92
76)	1-Chlorohexane	12.060	91	21846	9.81	ug/L		94
77)	Ethylbenzene	12.121	91	74600	9.59	ug/L		95
78)	Chlorobenzene	12.127	112	43288	9.55	ug/L		91
79)	1,1,1,2-Tetrachloroethane	12.176	131	14801	8.64	ug/L		88
80)	m,p-Xylene	12.261	91	110856	18.86	ug/L		99
81)	o-Xylene	12.706	91	53896	9.39	ug/L		96
82)	Styrene	12.755	104	40667	9.01	ug/L		96
83)	Bromoform	12.816	173	9695	7.34	ug/L		94
84)	Isopropylbenzene	13.005	105	69612	9.35	ug/L		98
87)	cis-1,4-Dichloro-2-butene	13.682	53	4788	12.59	ug/L	#	86
88)	n-Propylbenzene	13.426	91	85909	10.69	ug/L		96
89)	Bromobenzene	13.456	156	16792	9.36	ug/L		84
90)	1,1,2,2-Tetrachloroethane	13.499	83	20850	10.20	ug/L		98
91)	1,3,5-Trimethylbenzene	13.609	105	55157	9.68	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

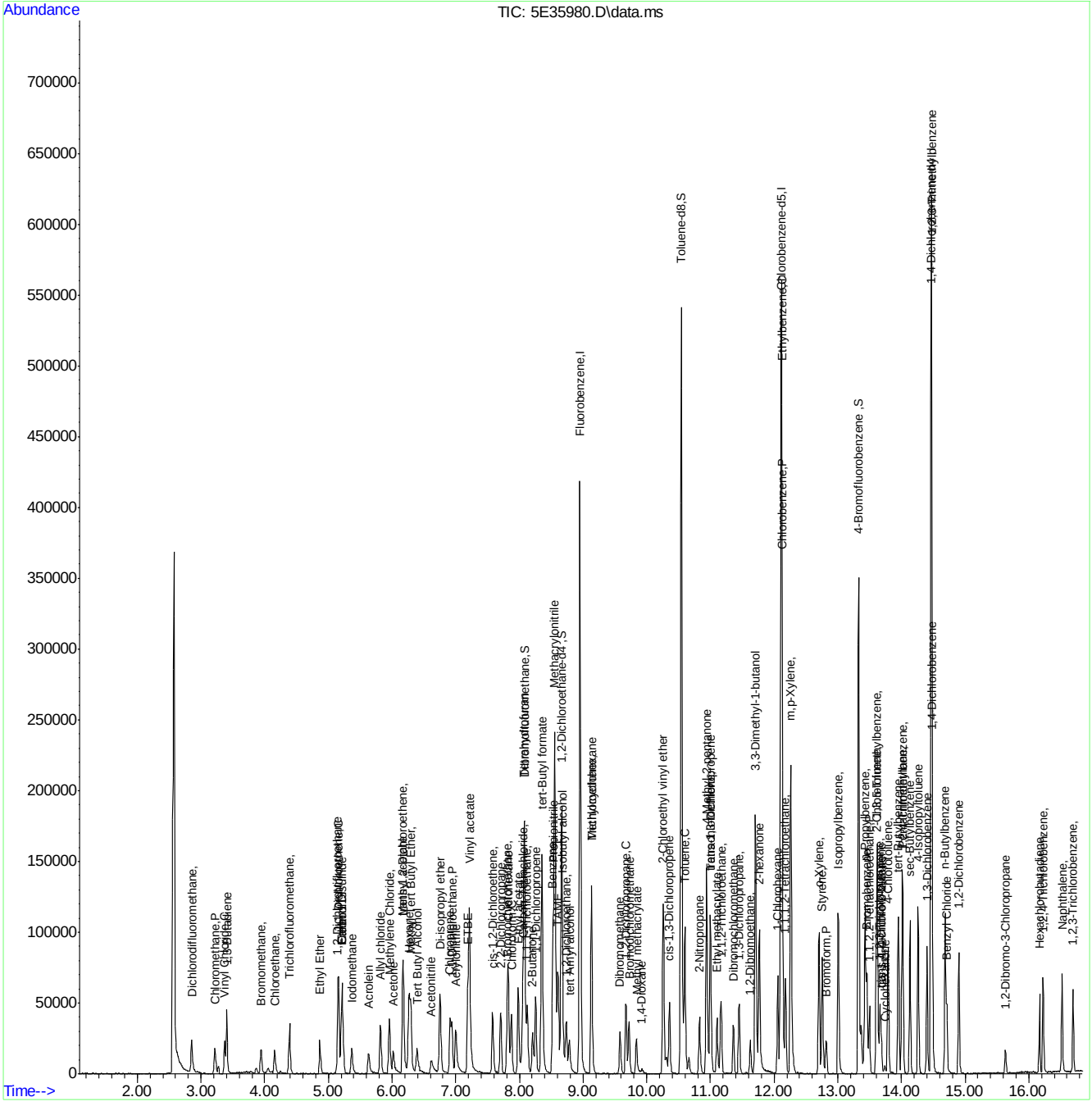
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	50084	9.91	ug/L		98
93)	trans-1,4-Dichloro-2-B...	13.682	53	4788	12.59	ug/L	#	80
94)	1,2,3-Trichloropropane	13.664	110	5592	9.42	ug/L		96
95)	Cyclohexanone	13.737	55	2543	37.93	ug/L		96
96)	4-Chlorotoluene	13.792	91	46002	10.14	ug/L		95
98)	tert-Butylbenzene	13.950	91	30071	9.92	ug/L		95
99)	1,2,4-Trimethylbenzene	14.023	105	53103	9.45	ug/L		92
100)	Pentachloroethane	14.011	167	9931	9.01	ug/L		88
101)	sec-Butylbenzene	14.133	105	67711	9.90	ug/L		98
102)	4-Isopropyltoluene	14.261	119	59105	9.77	ug/L		98
103)	1,3-Dichlorobenzene	14.401	146	31482	9.41	ug/L		98
104)	1,2,3-Trimethylbenzene	14.474	105	54631	9.42	ug/L		97
105)	1,4-Dichlorobenzene	14.487	146	33631	9.04	ug/L		93
106)	n-Butylbenzene	14.688	92	31326	9.83	ug/L		97
107)	Benzyl Chloride	14.712	126	5923	8.52	ug/L	#	63
108)	1,2-Dichlorobenzene	14.901	146	29244	8.98	ug/L		96
109)	1,2-Dibromo-3-Chloropr...	15.639	75	2847	8.34	ug/L		90
110)	Hexachlorobutadiene	16.169	225	6609	10.10	ug/L		97
111)	1,2,4-Trichlorobenzene	16.224	180	16416	8.95	ug/L		95
112)	Naphthalene	16.523	128	46658	8.82	ug/L		98
113)	1,2,3-Trichlorobenzene	16.693	180	14392	9.48	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35980.D
Injection Time: 12/08/22 11:56

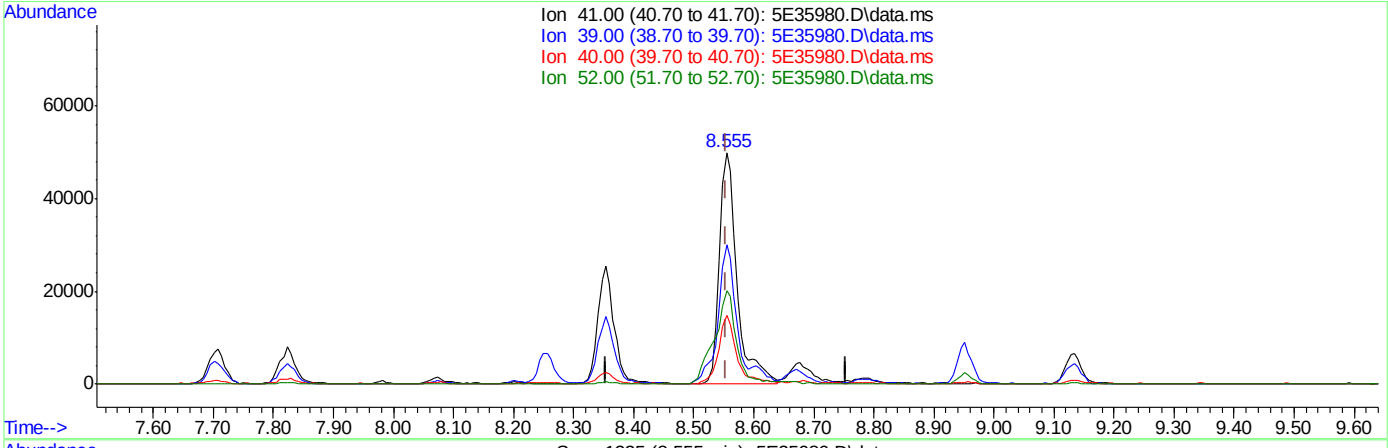
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

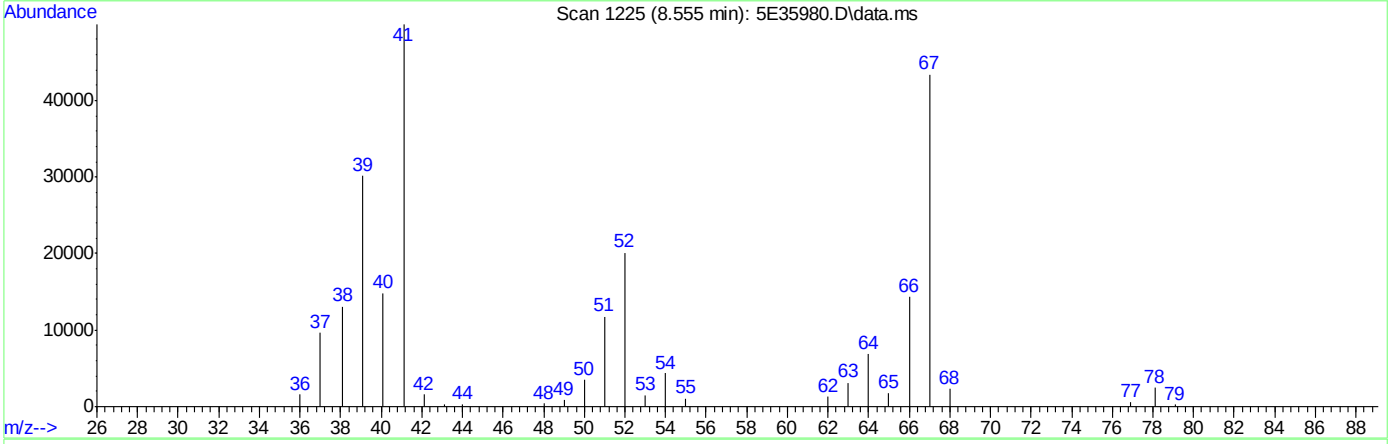
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:46:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35980.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 87.46ug/L

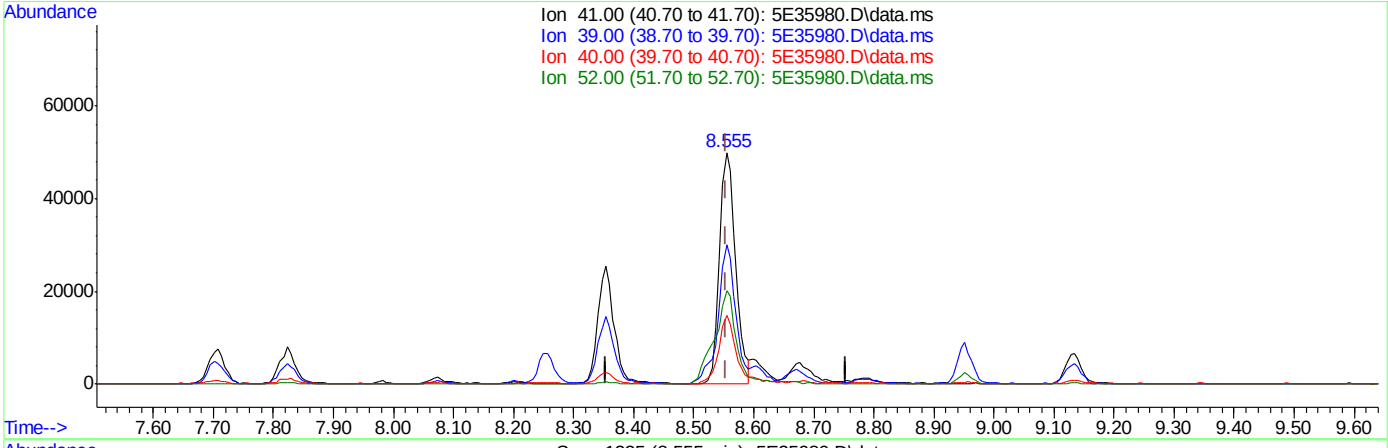
response 101992

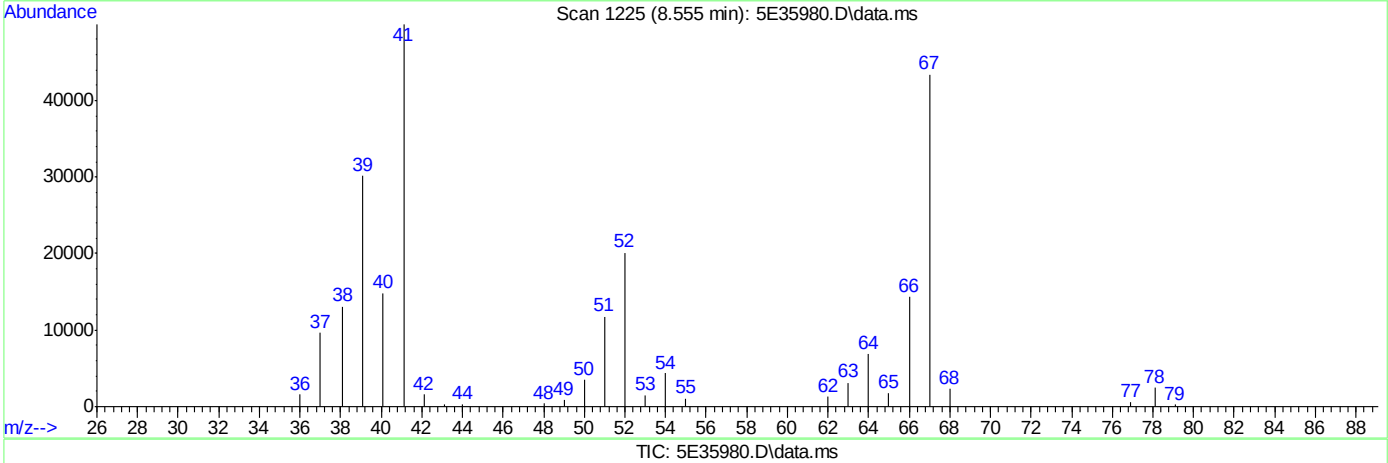
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.65
40.00	26.50	29.65
52.00	33.80	39.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:46:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35980.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 79.86ug/L m

response 93128

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	60.35
40.00	26.50	29.65
52.00	33.80	40.20

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	348214	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	246209	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	120891	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	94470	46.82	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.64%				
49) 1,2-Dichloroethane-d4	8.665	65	110344	54.09	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 108.18%				
62) Toluene-d8	10.542	98	340139	54.92	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.84%				
86) 4-Bromofluorobenzene	13.328	95	98392	51.40	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.849	85	52951	28.81	ug/L		93
3) Chloromethane	3.221	50	50017	27.35	ug/L		94
4) Vinyl Chloride	3.367	62	53175	27.28	ug/L		99
5) 1,3-Butadiene	3.403	39	34791	21.84	ug/L		85
6) Bromomethane	3.940	94	28173	29.02	ug/L		91
7) Chloroethane	4.153	64	39074	24.74	ug/L		100
8) Trichlorofluoromethane	4.385	101	66135	23.52	ug/L		97
9) Ethyl Ether	4.867	59	40008	27.27	ug/L		96
10) Ethanol	5.098	45	6208	315.31	ug/L		96
11) 1,2-Dichlorotrifluoroe...	5.153	67	58080	28.78	ug/L		89
12) 1,1-Dichloroethene	5.159	61	72368	30.86	ug/L		92
13) Freon 113	5.220	101	47871	24.57	ug/L		94
14) Carbon Disulfide	5.208	76	130841	23.22	ug/L		95
15) Iodomethane	5.366	142	65481	32.69	ug/L		98
16) Acrolein	5.635	56	45676	122.65	ug/L		91
17) Allyl chloride	5.818	41	49207	22.55	ug/L		91
18) Methylene Chloride	5.958	49	63938	26.33	ug/L		91
19) Acetone	6.019	43	71687	125.45	ug/L		99
20) Methyl acetate	6.171	43	141240	115.43	ug/L		99
21) trans-1,2-Dichloroethene	6.171	61	66952	29.65	ug/L		92
22) Hexane	6.263	56	41585	33.04	ug/L	#	88
23) Methyl Tert Butyl Ether	6.293	73	134537	25.05	ug/L		93
24) Acetonitrile	6.616	41	45448	229.17	ug/L		96
25) Di-isopropyl ether	6.750	45	126664	25.30	ug/L		99
26) Chloroprene	6.909	53	58275	24.43	ug/L		95
27) 1,1-Dichloroethane	6.939	63	87711	28.86	ug/L		96
28) Acrylonitrile	6.994	53	79207	121.94	ug/L		95
29) ETBE	7.189	59	150049	27.60	ug/L		93
30) Tert Butyl Alcohol	6.391	59	67803	245.37	ug/L		99
31) Vinyl acetate	7.214	43	406143	106.22	ug/L		97
32) cis-1,2-Dichloroethene	7.579	96	47843	23.73	ug/L		87
33) 2,2-Dichloropropane	7.701	77	68581	25.10	ug/L		97
34) Bromochloromethane	7.811	128	25597	24.97	ug/L		90
35) Cyclohexane	7.823	56	78104	30.41	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.872	83	84836	25.97	ug/L	95
37) Ethyl acetate	7.976	43	201963	111.00	ug/L	98
38) Tetrahydrofuran	8.067	42	13906	25.61	ug/L	93
40) Carbon Tetrachloride	8.055	117	62475	24.96	ug/L	97
41) 1,1,1-Trichloroethane	8.122	97	71783	24.83	ug/L	95
42) 2-Butanone	8.201	43	111230	134.44	ug/L	97
43) 1,1-Dichloropropene	8.256	75	64255	27.20	ug/L	94
44) tert-Butyl formate	8.354	59	185595	309.20	ug/L	95
45) Propionitrile	8.537	54	75286	266.49	ug/L	83
46) Methacrylonitrile	8.555	41	261394m	213.89	ug/L	
47) Benzene	8.524	78	183068	26.14	ug/L	99
48) TAME	8.610	73	132765	25.21	ug/L	98
50) 1,2-Dichloroethane	8.738	62	70916	28.61	ug/L	95
51) tert Amyl alcohol	8.787	59	47949	272.21	ug/L	93
52) Trichloroethene	9.134	95	49576	25.02	ug/L	93
53) Methylcyclohexane	9.134	83	79721	26.14	ug/L	92
54) Dibromomethane	9.579	93	33027	24.29	ug/L	94
55) 1,2-Dichloropropane	9.671	63	50669	29.42	ug/L	94
56) Bromodichloromethane	9.725	83	63620	24.46	ug/L	98
57) Methyl methacrylate	9.835	41	36803	23.78	ug/L	95
58) 1,4-Dioxane	9.920	88	9084	431.00	ug/L	88
59) 2-Chloroethyl vinyl ether	10.262	63	145283	711.79	ug/L	94
60) cis-1,3-Dichloropropene	10.353	75	71492	25.22	ug/L	98
63) Toluene	10.597	91	191256	26.87	ug/L	97
64) Isobutyl alcohol	8.671	43	37754	510.55	ug/L	91
65) 2-Nitropropane	10.829	41	68770	126.13	ug/L	97
66) 4-Methyl-2-pentanone	10.939	43	262614	152.11	ug/L	95
67) trans-1,3-Dichloropropene	10.999	75	63037	27.62	ug/L	82
68) Tetrachloroethene	10.999	166	48182	24.80	ug/L	94
69) Ethyl methacrylate	11.103	69	58730	25.54	ug/L	94
70) 1,1,2-Trichloroethane	11.164	83	37465	27.01	ug/L	92
71) Dibromochloromethane	11.359	129	49881	23.73	ug/L	99
72) 1,3-Dichloropropane	11.451	76	76342	28.49	ug/L	99
73) 1,2-Dibromoethane	11.627	107	46247	25.15	ug/L	92
74) 3,3-Dimethyl-1-butanol	11.707	57	227373	1414.87	ug/L	95
75) 2-hexanone	11.768	43	183062	150.51	ug/L	92
76) 1-Chlorohexane	12.060	91	64323	27.45	ug/L	95
77) Ethylbenzene	12.121	91	212789	26.00	ug/L	98
78) Chlorobenzene	12.127	112	127390	26.71	ug/L	94
79) 1,1,1,2-Tetrachloroethane	12.176	131	44754	24.82	ug/L	98
80) m,p-Xylene	12.261	91	324150	52.41	ug/L	99
81) o-Xylene	12.706	91	157993	26.15	ug/L	99
82) Styrene	12.755	104	123440	26.01	ug/L	94
83) Bromoform	12.822	173	29667	21.36	ug/L	98
84) Isopropylbenzene	13.005	105	199466	25.46	ug/L	97
87) cis-1,4-Dichloro-2-butene	13.682	53	14737	33.70	ug/L	93
88) n-Propylbenzene	13.426	91	255185	28.95	ug/L	97
89) Bromobenzene	13.456	156	48873	24.81	ug/L	87
90) 1,1,2,2-Tetrachloroethane	13.499	83	62776	27.98	ug/L	98
91) 1,3,5-Trimethylbenzene	13.609	105	165425	26.46	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

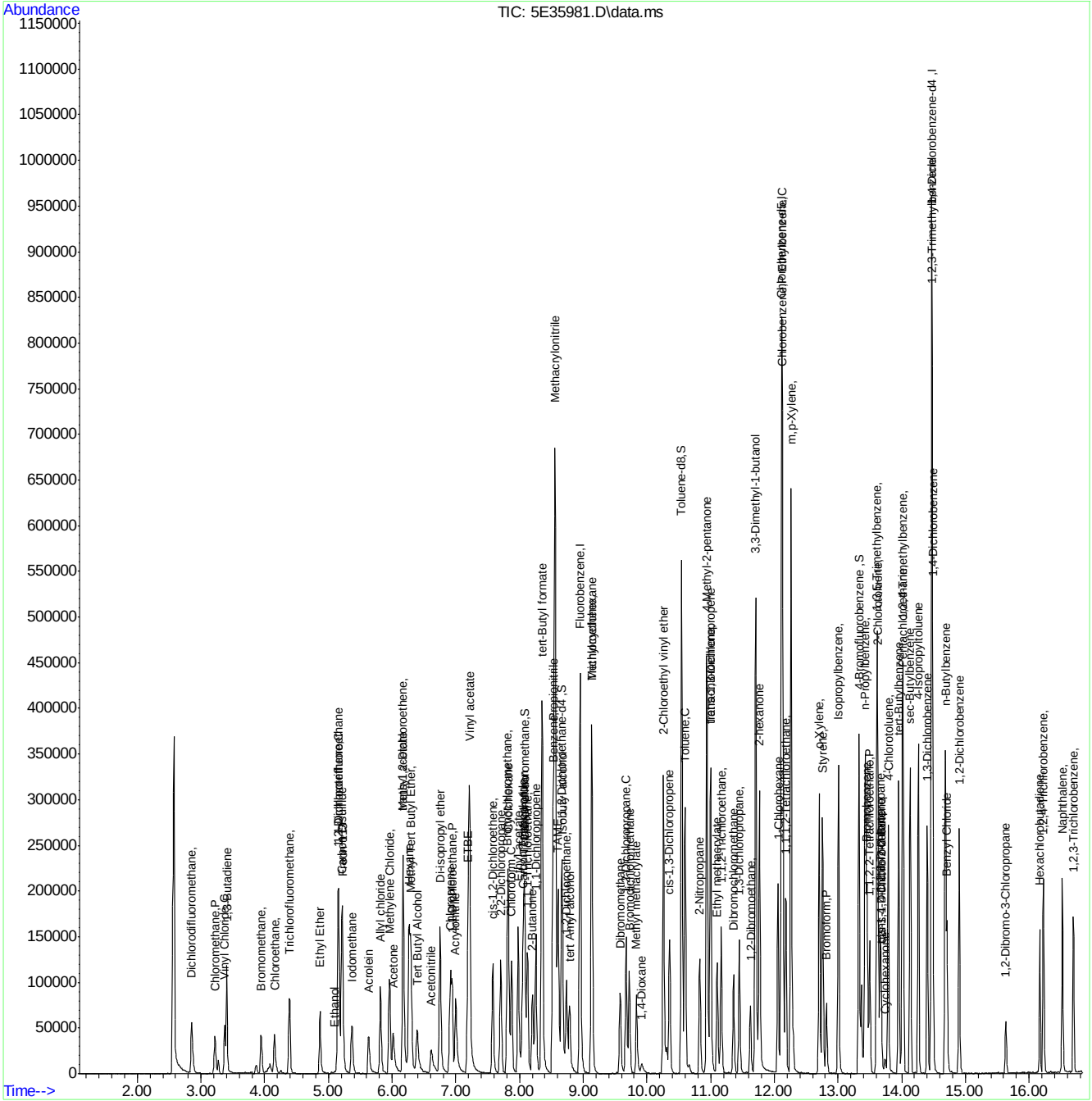
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	152364	27.47	ug/L		97
93)	trans-1,4-Dichloro-2-B...	13.682	53	14737	33.70	ug/L		91
94)	1,2,3-Trichloropropane	13.664	110	17172	26.35	ug/L		90
95)	Cyclohexanone	13.737	55	7752	105.37	ug/L		87
96)	4-Chlorotoluene	13.792	91	136193	27.36	ug/L		96
98)	tert-Butylbenzene	13.950	91	89064	26.76	ug/L		96
99)	1,2,4-Trimethylbenzene	14.017	105	163462	26.52	ug/L		98
100)	Pentachloroethane	14.011	167	29275	24.21	ug/L		89
101)	sec-Butylbenzene	14.133	105	207815	27.69	ug/L		98
102)	4-Isopropyltoluene	14.261	119	182434	27.49	ug/L		99
103)	1,3-Dichlorobenzene	14.401	146	91731	24.98	ug/L		95
104)	1,2,3-Trimethylbenzene	14.474	105	163244	25.66	ug/L		98
105)	1,4-Dichlorobenzene	14.487	146	99777	24.45	ug/L		94
106)	n-Butylbenzene	14.688	92	95733	27.39	ug/L		98
107)	Benzyl Chloride	14.712	126	20137	25.41	ug/L	#	89
108)	1,2-Dichlorobenzene	14.901	146	87133	24.39	ug/L		97
109)	1,2-Dibromo-3-Chloropr...	15.633	75	9136	24.09	ug/L		91
110)	Hexachlorobutadiene	16.169	225	18710	26.06	ug/L		97
111)	1,2,4-Trichlorobenzene	16.224	180	49474	24.58	ug/L		95
112)	Naphthalene	16.523	128	141106	24.31	ug/L		99
113)	1,2,3-Trichlorobenzene	16.694	180	42352	25.43	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35981.D
Injection Time: 12/08/22 12:19

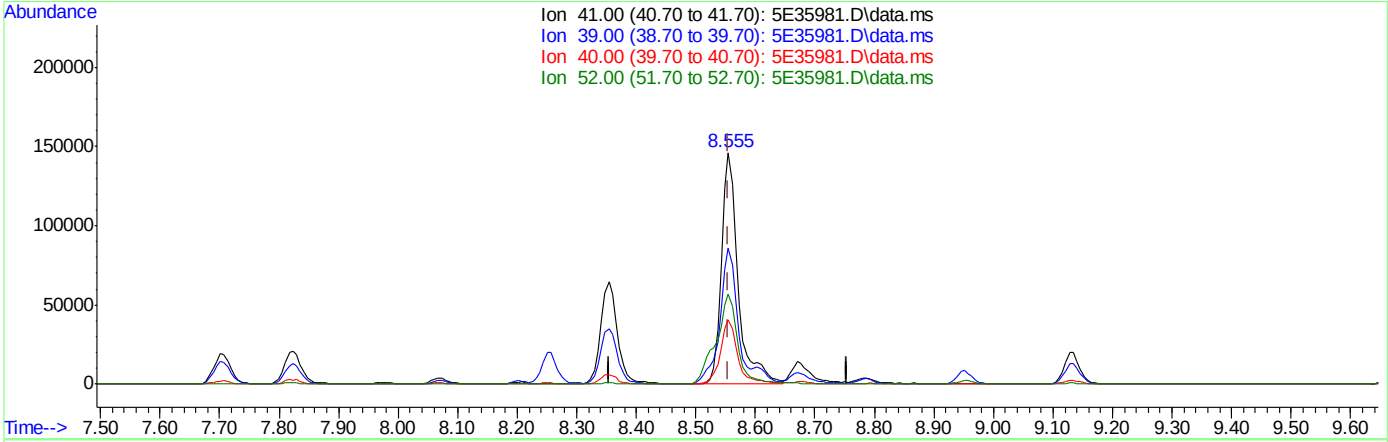
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

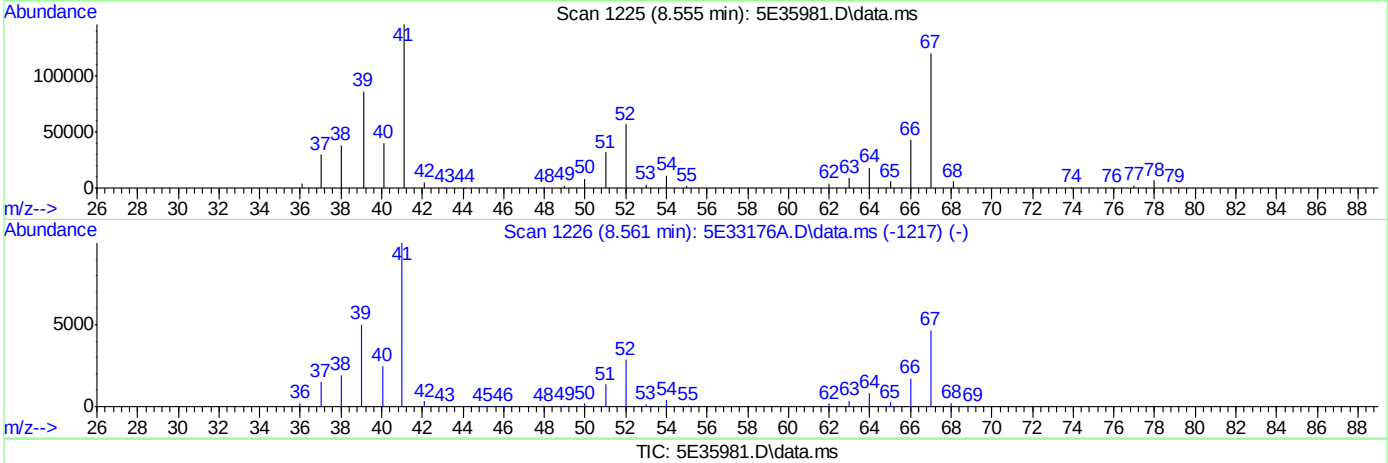
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:46:59 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35981.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 233.06ug/L

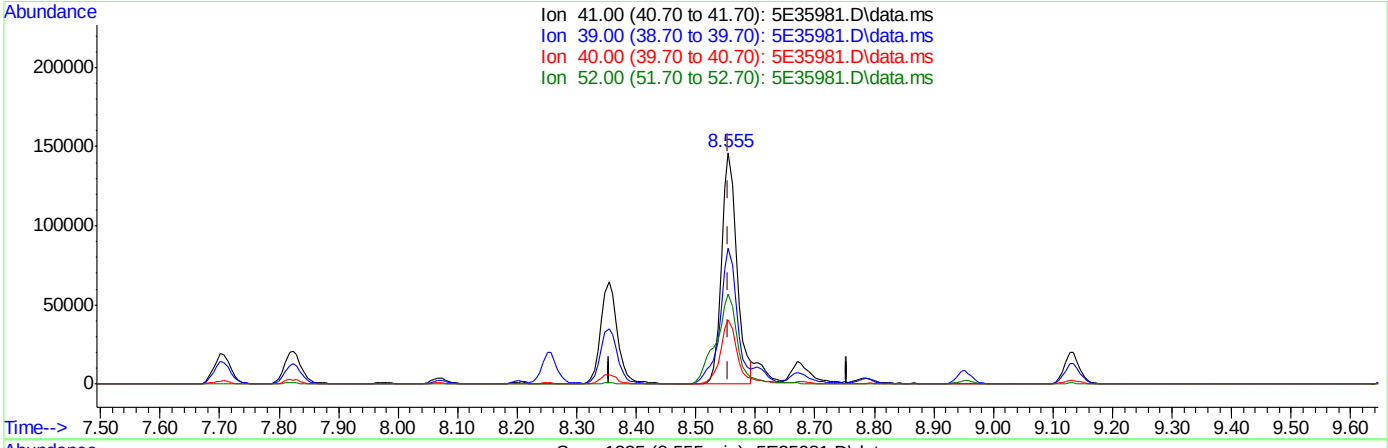
response 284812

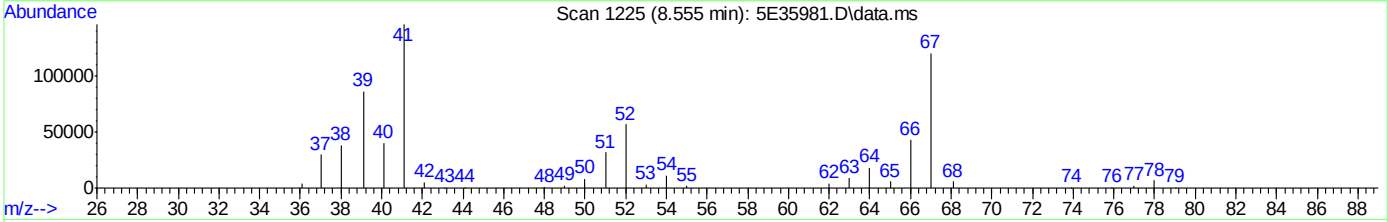
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.78
40.00	26.50	27.69
52.00	33.80	38.50

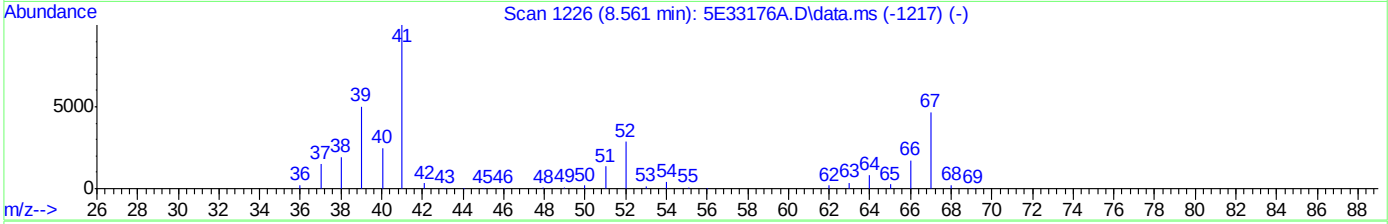
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:46:59 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35981.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 213.89ug/L m

response 261394

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.92
40.00	26.50	27.69
52.00	33.80	38.76

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	367847	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	264640	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129127	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	101237	47.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.00%			
49) 1,2-Dichloroethane-d4	8.665	65	117582	54.56	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.12%			
62) Toluene-d8	10.542	98	355837	53.46	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 106.92%			
86) 4-Bromofluorobenzene	13.328	95	105053	51.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	84203	43.36	ug/L	96
3) Chloromethane	3.221	50	83608	43.28	ug/L	96
4) Vinyl Chloride	3.373	62	89412	43.42	ug/L	98
5) 1,3-Butadiene	3.404	39	54463	32.98	ug/L	82
6) Bromomethane	3.946	94	48326	45.25	ug/L	92
7) Chloroethane	4.153	64	74963	42.15	ug/L	99
8) Trichlorofluoromethane	4.385	101	109209	36.77	ug/L	94
9) Ethyl Ether	4.873	59	67132	43.32	ug/L	93
10) Ethanol	5.098	45	9792	470.80	ug/L	92
11) 1,2-Dichlorotrifluoroe...	5.153	67	93874	44.04	ug/L	89
12) 1,1-Dichloroethene	5.159	61	118642	47.89	ug/L	92
13) Freon 113	5.220	101	77057	37.57	ug/L	92
14) Carbon Disulfide	5.208	76	212896	35.77	ug/L	93
15) Iodomethane	5.367	142	113009	51.60	ug/L	95
16) Acrolein	5.629	56	76274	193.88	ug/L	99
17) Allyl chloride	5.818	41	78262	33.96	ug/L	94
18) Methylene Chloride	5.958	49	105856	41.64	ug/L	90
19) Acetone	6.019	43	106657	176.68	ug/L	99
20) Methyl acetate	6.171	43	243863	188.66	ug/L	99
21) trans-1,2-Dichloroethene	6.171	61	109542	45.93	ug/L	93
22) Hexane	6.263	56	68915	51.83	ug/L #	85
23) Methyl Tert Butyl Ether	6.293	73	222844	39.28	ug/L	96
24) Acetonitrile	6.616	41	71347	335.15	ug/L	97
25) Di-isopropyl ether	6.757	45	212929	40.26	ug/L	98
26) Chloroprene	6.909	53	94854	37.65	ug/L	95
27) 1,1-Dichloroethane	6.939	63	145964	45.46	ug/L	96
28) Acrylonitrile	7.000	53	141107	205.64	ug/L	99
29) ETBE	7.195	59	247901	43.16	ug/L	98
30) Tert Butyl Alcohol	6.397	59	111905	383.35	ug/L	97
31) Vinyl acetate	7.214	43	732361	181.32	ug/L	96
32) cis-1,2-Dichloroethene	7.580	96	80932	38.00	ug/L	88
33) 2,2-Dichloropropane	7.701	77	116571	40.38	ug/L	95
34) Bromochloromethane	7.811	128	40933	37.79	ug/L	87
35) Cyclohexane	7.823	56	125501	46.25	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.872	83	141359	40.96	ug/L		96
37) Ethyl acetate	7.976	43	365869	190.35	ug/L		98
38) Tetrahydrofuran	8.067	42	20789	36.14	ug/L		96
40) Carbon Tetrachloride	8.049	117	104020	39.34	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	118637	38.84	ug/L		94
42) 2-Butanone	8.201	43	172145	196.96	ug/L		99
43) 1,1-Dichloropropene	8.256	75	106016	42.48	ug/L		96
44) tert-Butyl formate	8.354	59	321804	480.13	ug/L		97
45) Propionitrile	8.537	54	129519	433.99	ug/L		93
46) Methacrylonitrile	8.555	41	438397m	339.58	ug/L		
47) Benzene	8.524	78	303234	40.98	ug/L		99
48) TAME	8.604	73	224667	40.38	ug/L		98
50) 1,2-Dichloroethane	8.738	62	116861	44.62	ug/L		96
51) tert Amyl alcohol	8.787	59	79729	416.25	ug/L		95
52) Trichloroethene	9.134	95	81900	39.13	ug/L		93
53) Methylcyclohexane	9.134	83	129690	40.22	ug/L		94
54) Dibromomethane	9.579	93	55294	38.50	ug/L		94
55) 1,2-Dichloropropane	9.671	63	84253	46.30	ug/L		95
56) Bromodichloromethane	9.725	83	107595	39.15	ug/L		98
57) Methyl methacrylate	9.835	41	62014	37.48	ug/L		95
58) 1,4-Dioxane	9.921	88	15001	662.64	ug/L		94
59) 2-Chloroethyl vinyl ether	10.256	63	251001	1164.10	ug/L		95
60) cis-1,3-Dichloropropene	10.353	75	121155	40.45	ug/L		99
63) Toluene	10.597	91	316072	41.31	ug/L		99
64) Isobutyl alcohol	8.677	43	60715	748.69	ug/L		95
65) 2-Nitropropane	10.829	41	118651	202.47	ug/L		99
66) 4-Methyl-2-pentanone	10.939	43	397483	214.19	ug/L		95
67) trans-1,3-Dichloropropene	11.000	75	108483	44.23	ug/L		93
68) Tetrachloroethene	11.000	166	79439	38.05	ug/L		95
69) Ethyl methacrylate	11.103	69	99295	40.17	ug/L		94
70) 1,1,2-Trichloroethane	11.164	83	63623	42.67	ug/L		91
71) Dibromochloromethane	11.359	129	86502	38.28	ug/L		98
72) 1,3-Dichloropropane	11.451	76	125524	43.59	ug/L		97
73) 1,2-Dibromoethane	11.621	107	79692	40.31	ug/L		100
74) 3,3-Dimethyl-1-butanol	11.707	57	402798	2217.88	ug/L		94
75) 2-hexanone	11.768	43	286166	218.90	ug/L		91
76) 1-Chlorohexane	12.060	91	109706	43.56	ug/L		95
77) Ethylbenzene	12.121	91	361875	41.13	ug/L		98
78) Chlorobenzene	12.127	112	212352	41.43	ug/L		95
79) 1,1,1,2-Tetrachloroethane	12.182	131	75816	39.12	ug/L		95
80) m,p-Xylene	12.262	91	551780	83.00	ug/L		99
81) o-Xylene	12.707	91	264919	40.80	ug/L		98
82) Styrene	12.755	104	208811	40.93	ug/L		97
83) Bromoform	12.816	173	52455	35.13	ug/L		95
84) Isopropylbenzene	13.005	105	341883	40.61	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.676	53	26366	54.06	ug/L	#	74
88) n-Propylbenzene	13.426	91	428504	45.51	ug/L		96
89) Bromobenzene	13.456	156	84651	40.24	ug/L		91
90) 1,1,2,2-Tetrachloroethane	13.493	83	106749	44.55	ug/L		97
91) 1,3,5-Trimethylbenzene	13.609	105	285130	42.70	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

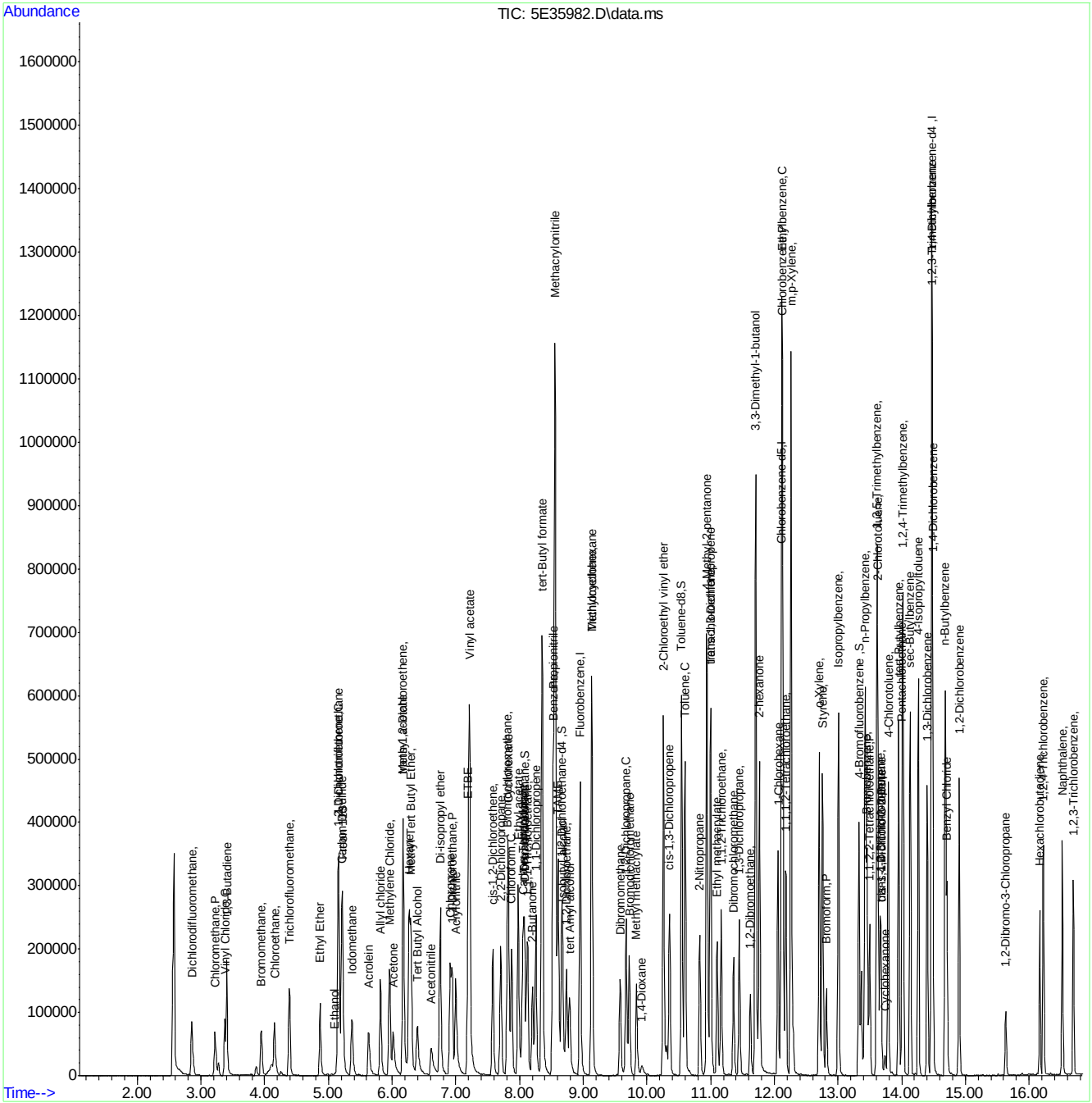
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	259271	43.76	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.676	53	26366	54.06	ug/L	#	76
94) 1,2,3-Trichloropropane	13.664	110	29350	42.17	ug/L		87
95) Cyclohexanone	13.737	55	13429	170.90	ug/L		93
96) 4-Chlorotoluene	13.792	91	229843	43.23	ug/L		98
98) tert-Butylbenzene	13.950	91	151181	42.53	ug/L		98
99) 1,2,4-Trimethylbenzene	14.017	105	280510	42.60	ug/L		96
100) Pentachloroethane	14.005	167	49260	38.15	ug/L		93
101) sec-Butylbenzene	14.133	105	350263	43.69	ug/L		98
102) 4-Isopropyltoluene	14.261	119	311187	43.90	ug/L		98
103) 1,3-Dichlorobenzene	14.401	146	156423	39.88	ug/L		95
104) 1,2,3-Trimethylbenzene	14.475	105	283029	41.65	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	167269	38.37	ug/L		96
106) n-Butylbenzene	14.682	92	170010	45.54	ug/L		96
107) Benzyl Chloride	14.712	126	36616	41.75	ug/L		93
108) 1,2-Dichlorobenzene	14.901	146	151068	39.58	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	15991	39.01	ug/L		90
110) Hexachlorobutadiene	16.169	225	31671	41.30	ug/L		93
111) 1,2,4-Trichlorobenzene	16.224	180	85378	39.72	ug/L		94
112) Naphthalene	16.523	128	245052	39.53	ug/L		100
113) 1,2,3-Trichlorobenzene	16.694	180	72596	40.80	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-ICC1617
Lab FileID: 5E35982.D
Injection Time: 12/08/22 12:42

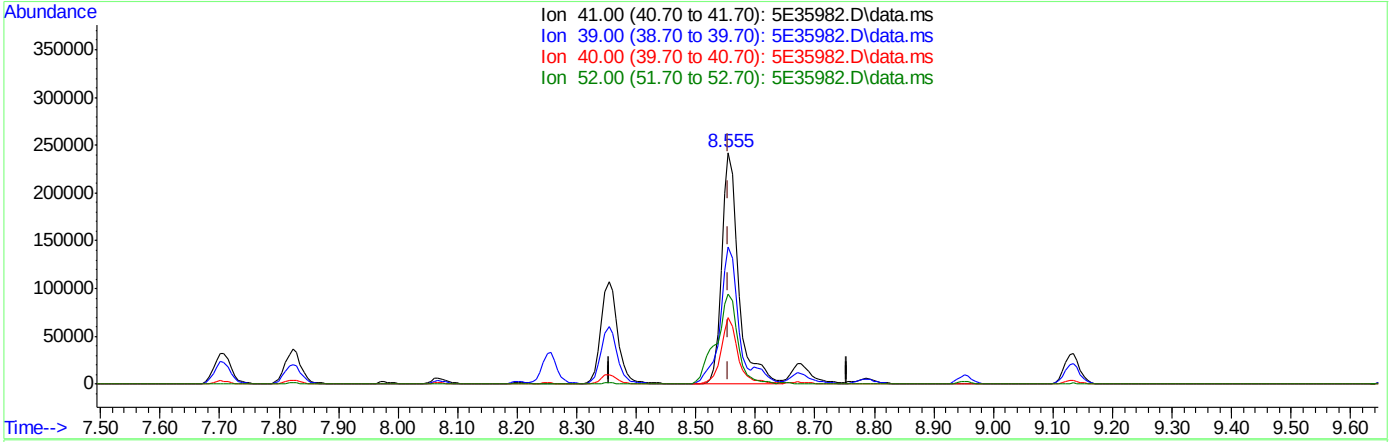
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

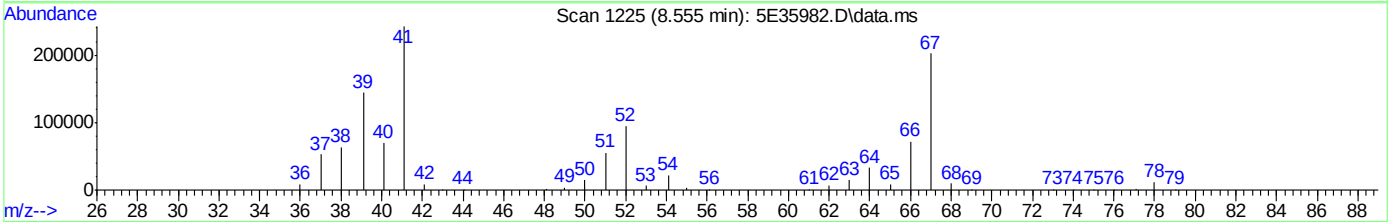
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

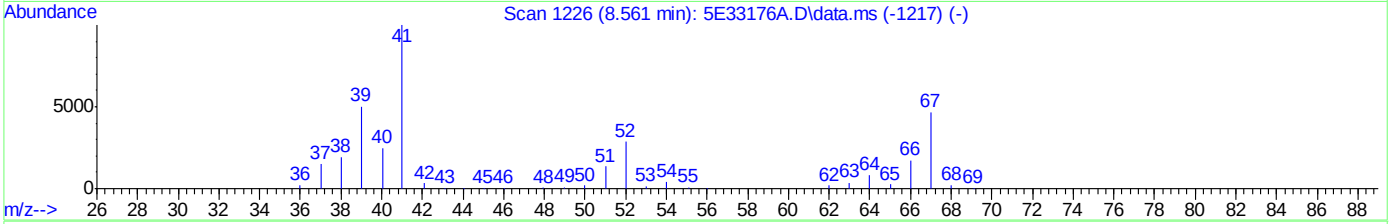
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:47:01 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35982.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 369.66ug/L

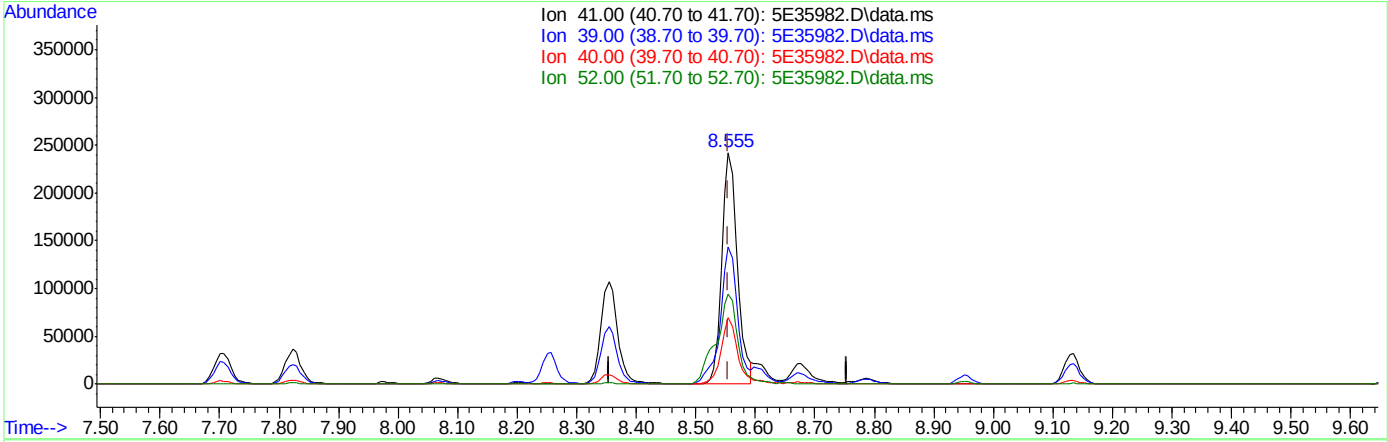
response 477228

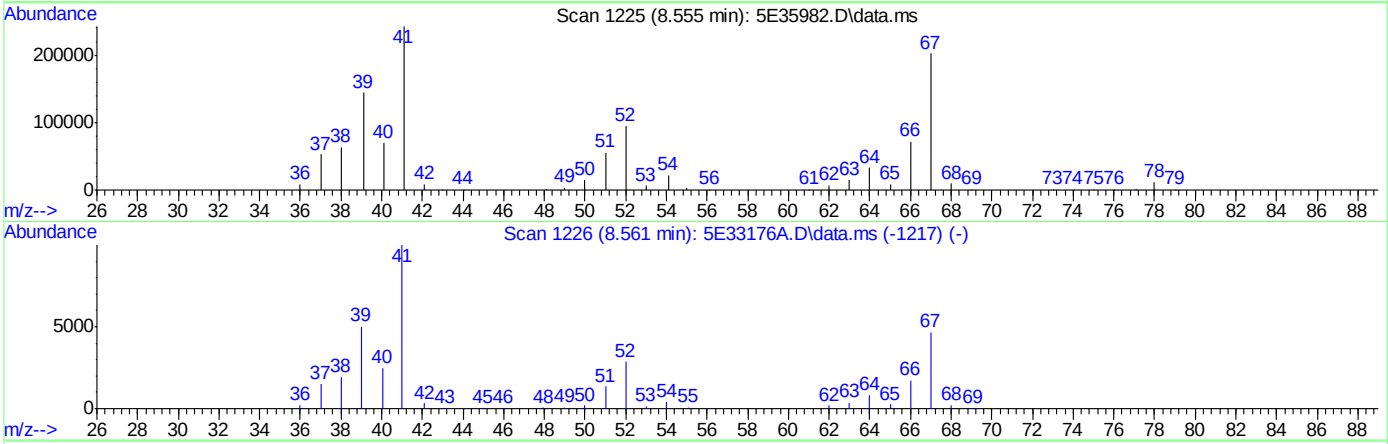
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.10
40.00	26.50	28.46
52.00	33.80	38.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:47:01 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35982.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 339.58ug/L m

response 438397

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.39
40.00	26.50	28.55
52.00	33.80	39.11

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	375819	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	270880	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	134063	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	104555	48.02	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.04%			
49) 1,2-Dichloroethane-d4	8.665	65	119811	54.41	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 108.82%			
62) Toluene-d8	10.542	98	367537	53.94	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 107.88%			
86) 4-Bromofluorobenzene	13.328	95	109372	51.52	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.04%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	166369	83.86	ug/L	97
3) Chloromethane	3.221	50	155783	78.93	ug/L	97
4) Vinyl Chloride	3.373	62	166967	79.36	ug/L	98
5) 1,3-Butadiene	3.403	39	109327	69.10	ug/L	90
6) Bromomethane	3.946	94	96637	81.38	ug/L	94
7) Chloroethane	4.153	64	238075	106.65	ug/L	98
8) Trichlorofluoromethane	4.379	101	207774	68.47	ug/L	99
9) Ethyl Ether	4.873	59	126132	79.67	ug/L	94
10) Ethanol	5.104	45	24361	1146.42	ug/L	95
11) 1,2-Dichlorotrifluoroe...	5.153	67	183768	84.38	ug/L	88
12) 1,1-Dichloroethene	5.159	61	225155	88.96	ug/L	94
13) Freon 113	5.220	101	155054	74.77	ug/L	92
14) Carbon Disulfide	5.208	76	404900	66.59	ug/L	94
15) Iodomethane	5.366	142	206093	86.69	ug/L	97
16) Acrolein	5.629	56	141403	351.80	ug/L	93
17) Allyl chloride	5.818	41	148830	63.21	ug/L	93
18) Methylene Chloride	5.958	49	188989	74.21	ug/L	94
19) Acetone	6.019	43	195204	316.51	ug/L	100
20) Methyl acetate	6.171	43	448238	339.41	ug/L	100
21) trans-1,2-Dichloroethene	6.171	61	210233	86.27	ug/L	93
22) Hexane	6.263	56	116992m	86.12	ug/L	
23) Methyl Tert Butyl Ether	6.293	73	420050	72.47	ug/L	98
24) Acetonitrile	6.616	41	133539	591.28	ug/L	99
25) Di-isopropyl ether	6.756	45	394796	73.06	ug/L	98
26) Chloroprene	6.909	53	182982	71.08	ug/L	96
27) 1,1-Dichloroethane	6.939	63	273098	83.24	ug/L	99
28) Acrylonitrile	6.994	53	263114	375.31	ug/L	98
29) ETBE	7.195	59	465667	79.35	ug/L	97
30) Tert Butyl Alcohol	6.397	59	200755	673.13	ug/L	97
31) Vinyl acetate	7.214	43	1411887	342.14	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	153267	70.44	ug/L	88
33) 2,2-Dichloropropane	7.707	77	220116	74.63	ug/L	96
34) Bromochloromethane	7.811	128	75124	67.89	ug/L	88
35) Cyclohexane	7.823	56	254556	91.83	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.872	83	262998	74.60	ug/L		97
37) Ethyl acetate	7.976	43	678434	345.48	ug/L		99
38) Tetrahydrofuran	8.067	42	39387	66.48	ug/L		95
40) Carbon Tetrachloride	8.049	117	202408	74.92	ug/L		98
41) 1,1,1-Trichloroethane	8.122	97	224510	71.94	ug/L		93
42) 2-Butanone	8.201	43	320516	358.95	ug/L		99
43) 1,1-Dichloropropene	8.256	75	202488	79.41	ug/L		98
44) tert-Butyl formate	8.354	59	618874	816.91	ug/L		98
45) Propionitrile	8.537	54	240126	787.54	ug/L		94
46) Methacrylonitrile	8.555	41	828107m	627.85	ug/L		
47) Benzene	8.524	78	565061	74.75	ug/L		99
48) TAME	8.604	73	425237	74.81	ug/L		99
50) 1,2-Dichloroethane	8.738	62	216945	81.08	ug/L		97
51) tert Amyl alcohol	8.787	59	145211	702.30	ug/L		94
52) Trichloroethene	9.134	95	154519	72.27	ug/L		95
53) Methylcyclohexane	9.134	83	266646	80.73	ug/L		96
54) Dibromomethane	9.579	93	102987	70.18	ug/L		91
55) 1,2-Dichloropropane	9.671	63	158302	85.15	ug/L		96
56) Bromodichloromethane	9.719	83	199443	71.03	ug/L		97
57) Methyl methacrylate	9.835	41	115875	66.85	ug/L		97
58) 1,4-Dioxane	9.920	88	26733	1119.40	ug/L		92
59) 2-Chloroethyl vinyl ether	10.256	63	468718	2127.72	ug/L		95
60) cis-1,3-Dichloropropene	10.353	75	230499	75.33	ug/L		98
63) Toluene	10.597	91	595816	76.09	ug/L		98
64) Isobutyl alcohol	8.677	43	113920	1310.91	ug/L		96
65) 2-Nitropropane	10.829	41	224214	373.78	ug/L		99
66) 4-Methyl-2-pentanone	10.939	43	755809	397.89	ug/L		97
67) trans-1,3-Dichloropropene	11.000	75	205106	81.70	ug/L		92
68) Tetrachloroethene	11.000	166	150609	70.47	ug/L		96
69) Ethyl methacrylate	11.103	69	187743	74.20	ug/L		96
70) 1,1,2-Trichloroethane	11.164	83	115785	75.87	ug/L		93
71) Dibromochloromethane	11.359	129	160133	69.23	ug/L		97
72) 1,3-Dichloropropane	11.451	76	232658	78.93	ug/L		97
73) 1,2-Dibromoethane	11.621	107	146713	72.51	ug/L		99
74) 3,3-Dimethyl-1-butanol	11.707	57	760751	3744.29	ug/L		95
75) 2-hexanone	11.768	43	525156	392.45	ug/L		92
76) 1-Chlorohexane	12.060	91	209762	81.38	ug/L		95
77) Ethylbenzene	12.121	91	679943	75.51	ug/L		97
78) Chlorobenzene	12.127	112	397964	75.85	ug/L		92
79) 1,1,1,2-Tetrachloroethane	12.182	131	141165	71.17	ug/L		97
80) m,p-Xylene	12.261	91	1036590	152.33	ug/L		99
81) o-Xylene	12.707	91	495475	74.55	ug/L		99
82) Styrene	12.755	104	394350	75.51	ug/L		97
83) Bromoform	12.816	173	100543	65.79	ug/L		95
84) Isopropylbenzene	13.005	105	642478	74.55	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.676	53	47865	88.26	ug/L	#	71
88) n-Propylbenzene	13.426	91	800860	81.93	ug/L		98
89) Bromobenzene	13.456	156	154852	70.90	ug/L		87
90) 1,1,2,2-Tetrachloroethane	13.493	83	194842	78.32	ug/L		99
91) 1,3,5-Trimethylbenzene	13.609	105	544293	78.52	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

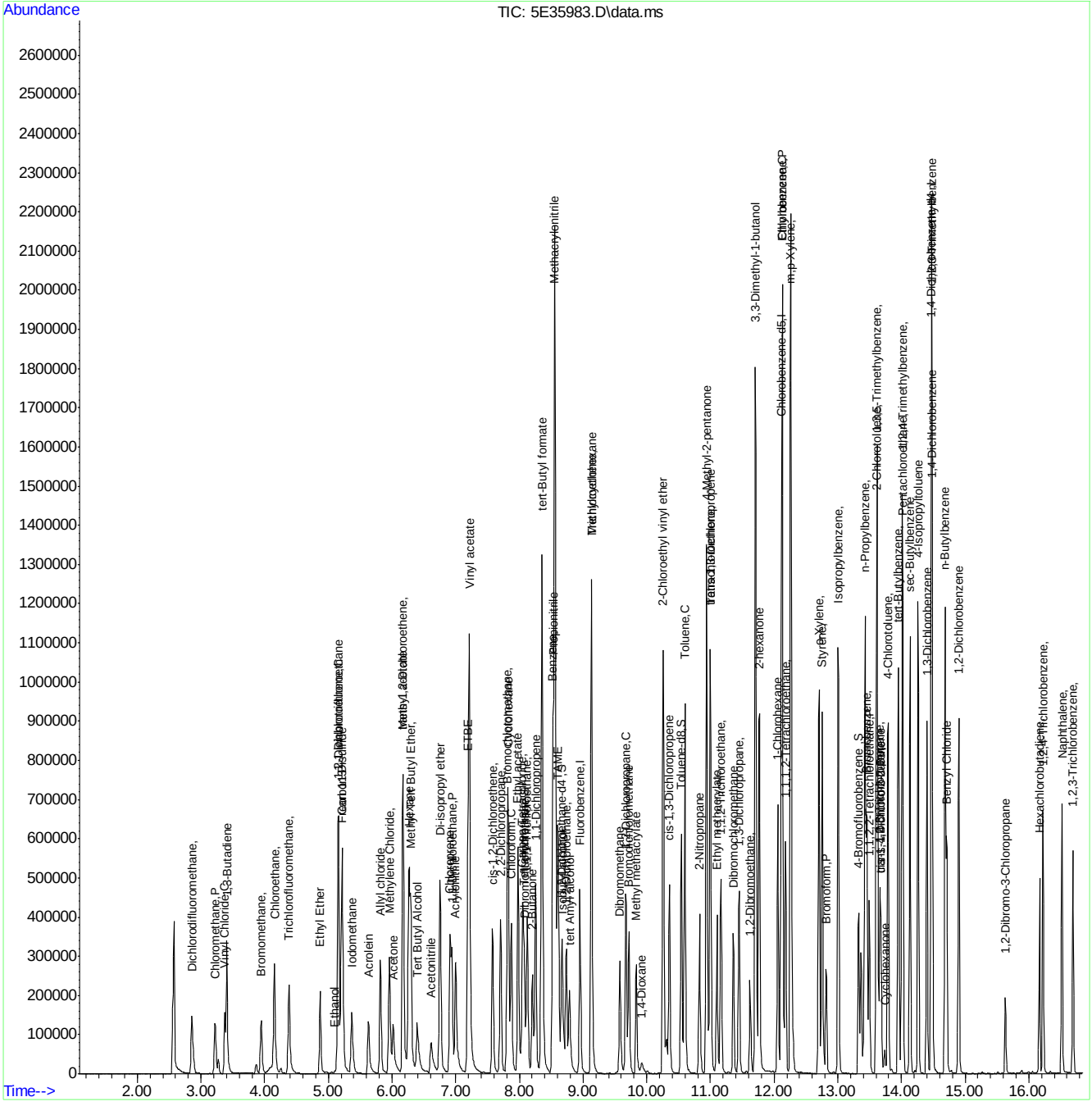
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	485790	78.98	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.676	53	47865	88.26	ug/L	#	73
94) 1,2,3-Trichloropropane	13.664	110	55259	76.47	ug/L		87
95) Cyclohexanone	13.737	55	24482	300.09	ug/L		95
96) 4-Chlorotoluene	13.792	91	433982	78.63	ug/L		98
98) tert-Butylbenzene	13.950	91	284386	77.05	ug/L		98
99) 1,2,4-Trimethylbenzene	14.017	105	534051	78.12	ug/L		98
100) Pentachloroethane	14.011	167	92180	68.76	ug/L	#	84
101) sec-Butylbenzene	14.133	105	665105	79.91	ug/L		99
102) 4-Isopropyltoluene	14.261	119	592775	80.55	ug/L		98
103) 1,3-Dichlorobenzene	14.401	146	296273	72.75	ug/L		96
104) 1,2,3-Trimethylbenzene	14.474	105	530133	75.14	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	320857	70.90	ug/L		96
106) n-Butylbenzene	14.682	92	323529	83.47	ug/L		96
107) Benzyl Chloride	14.712	126	73075	74.95	ug/L		96
108) 1,2-Dichlorobenzene	14.901	146	280861	70.88	ug/L		96
109) 1,2-Dibromo-3-Chloropr...	15.633	75	30000	68.90	ug/L		94
110) Hexachlorobutadiene	16.169	225	58351	73.29	ug/L		97
111) 1,2,4-Trichlorobenzene	16.224	180	158282	70.92	ug/L		95
112) Naphthalene	16.523	128	450609	70.01	ug/L		100
113) 1,2,3-Trichlorobenzene	16.694	180	133369	72.20	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35983.D
Injection Time: 12/08/22 13:05

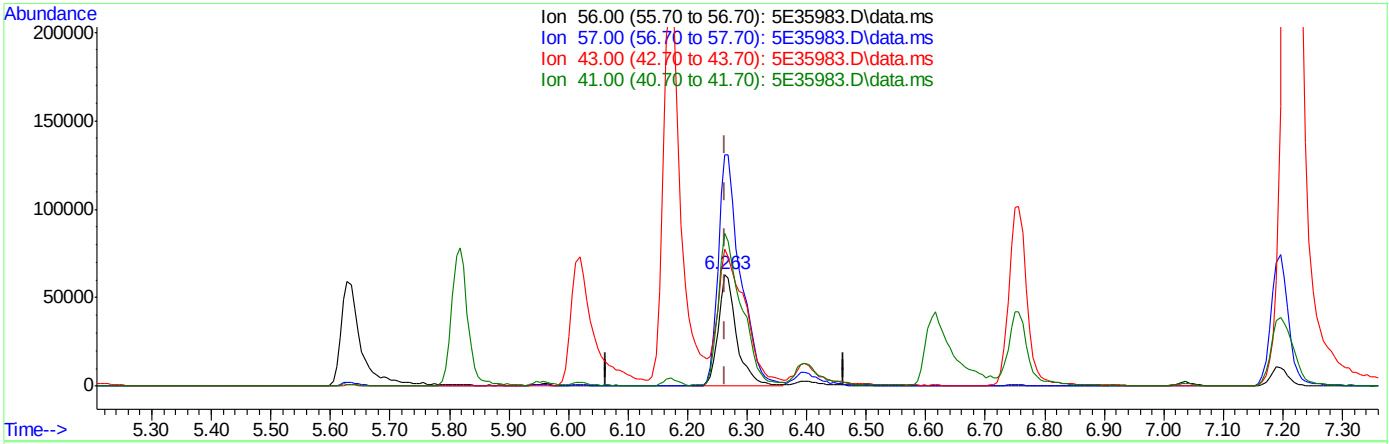
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

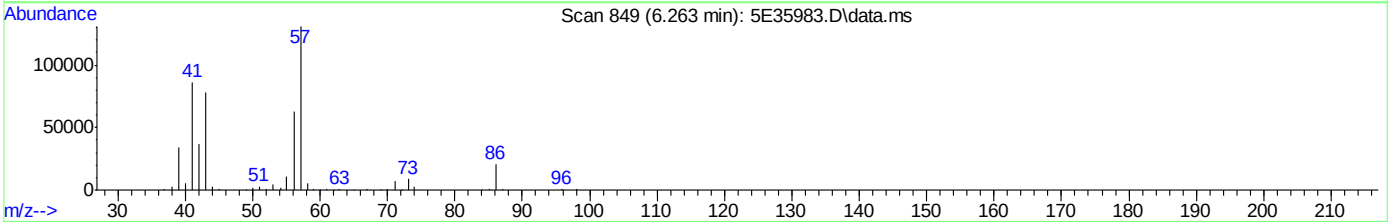
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.26	Overlapping peak
Methacrylonitrile	126-98-7		8.55	Overlapping peak

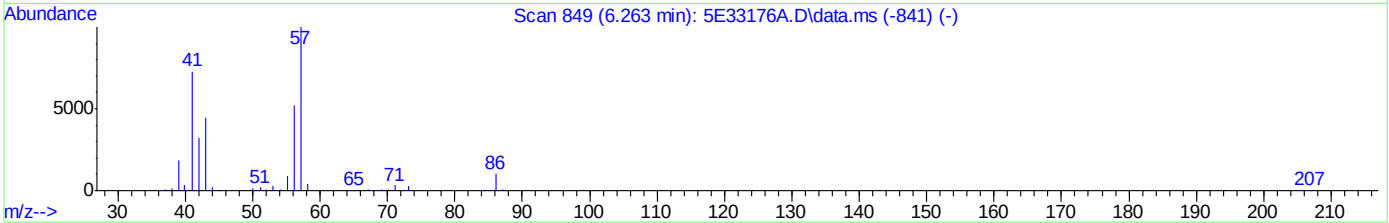
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35983.D\data.ms

(22) Hexane

6.263min (-0.000) 99.51ug/L

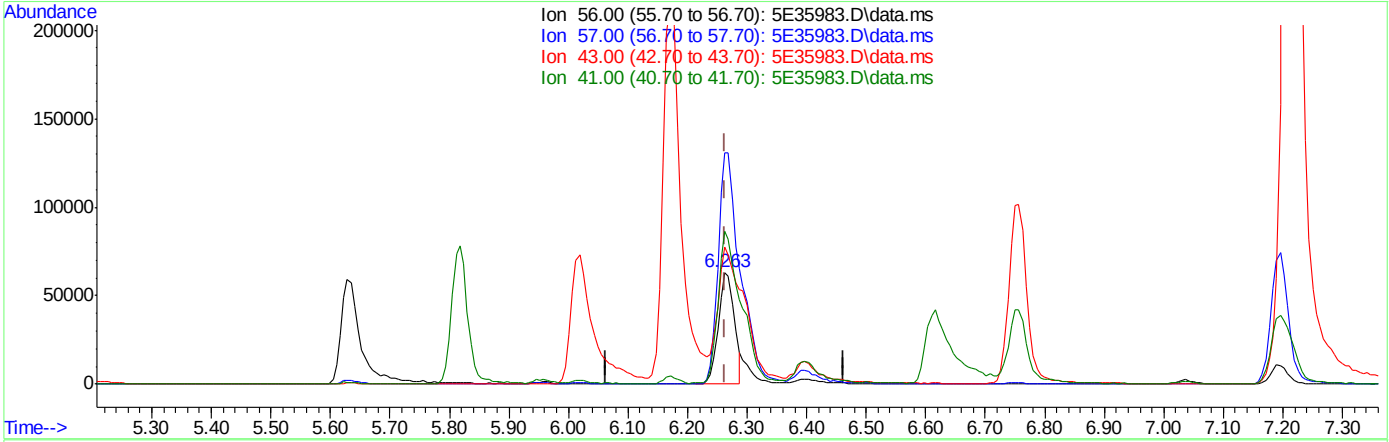
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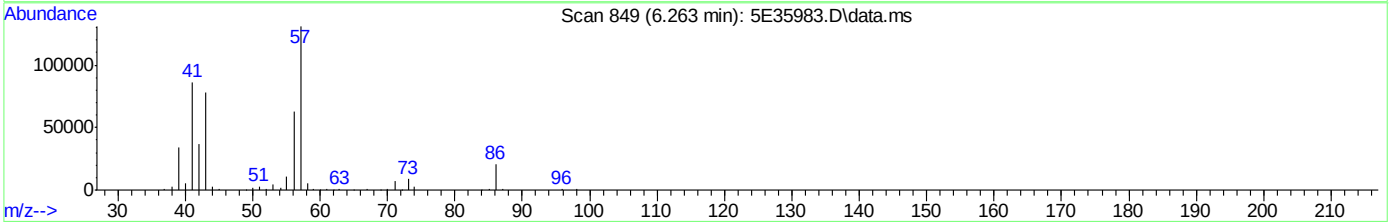
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	207.14
43.00	128.00	116.98
41.00	148.90	135.42

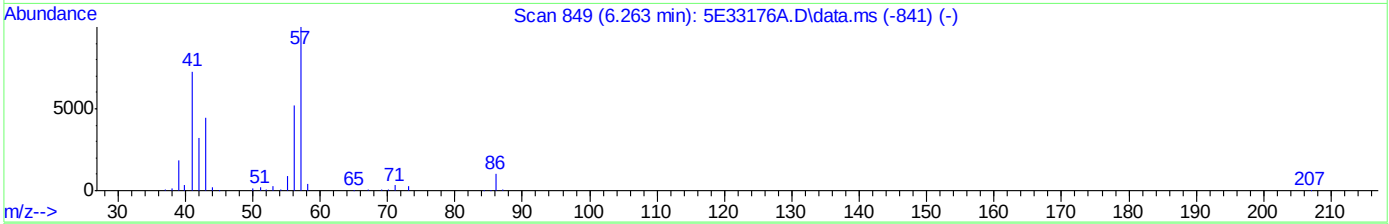
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35983.D\data.ms

(22) Hexane

6.263min (-0.000) 86.12ug/L m

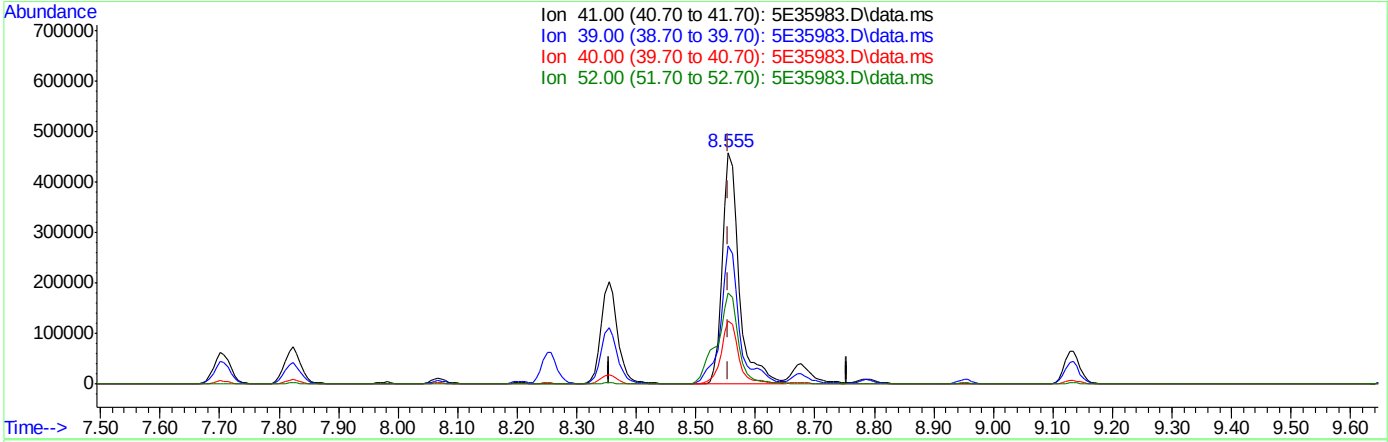
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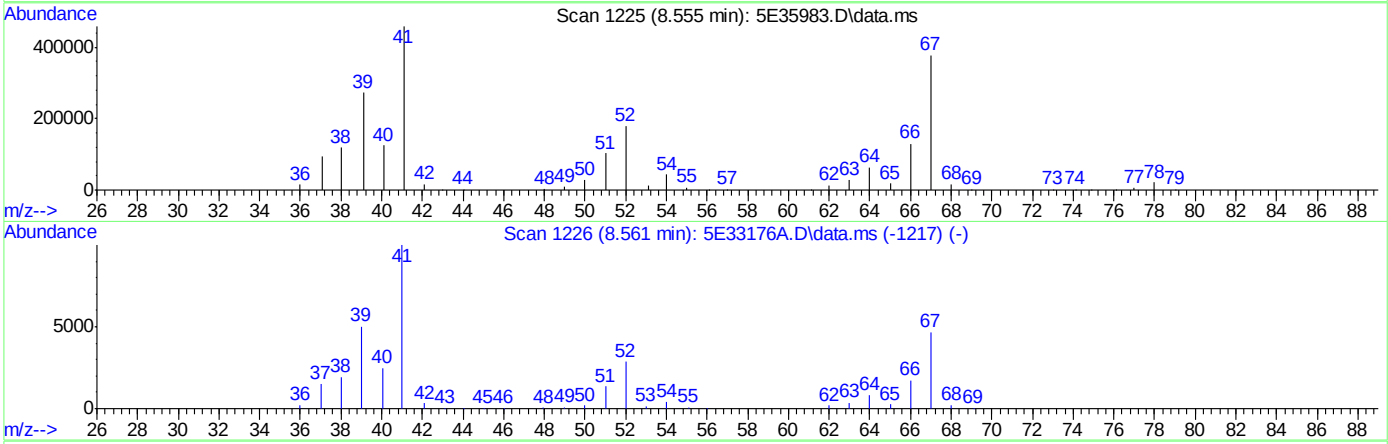
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	207.14
43.00	128.00	122.79
41.00	148.90	136.36

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35983.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 683.39ug/L

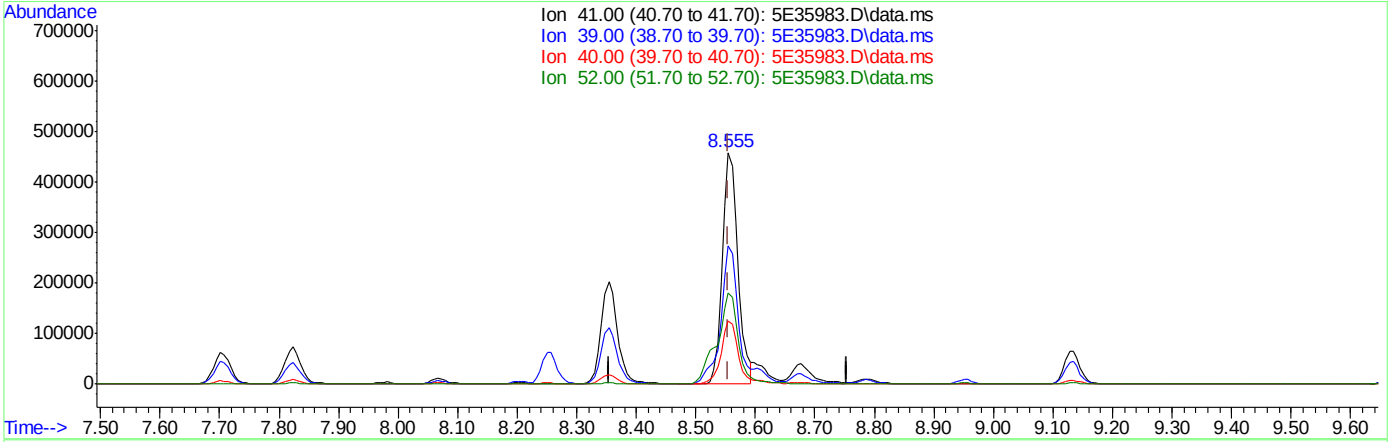
response 901372

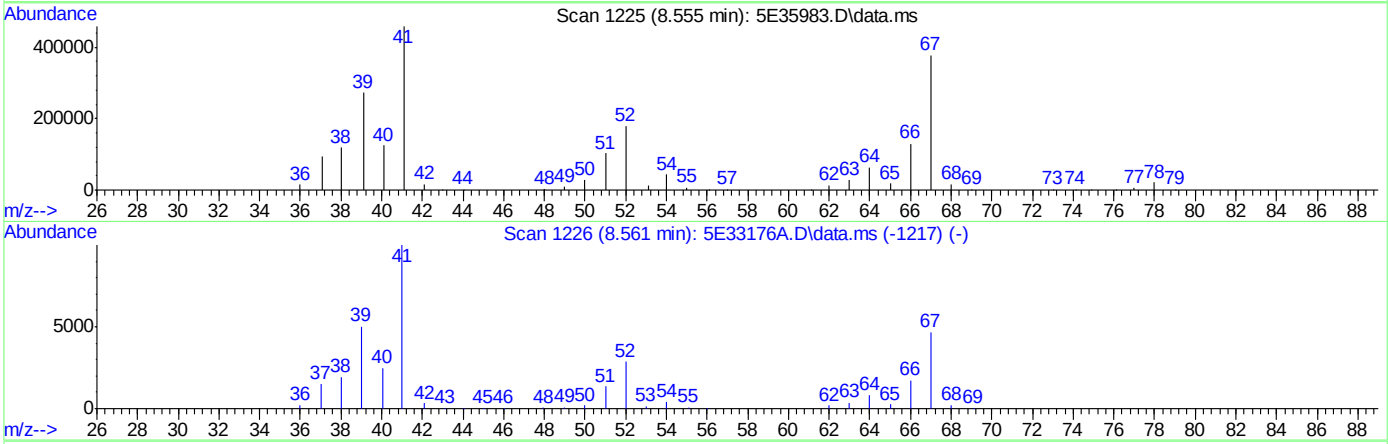
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.41
40.00	26.50	27.30
52.00	33.80	39.13

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35983.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 627.85ug/L m

response 828107

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.58
40.00	26.50	27.30
52.00	33.80	39.38

5E35984.D

Manual Integrations APPROVED (compounds with "m" flag)

Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	387978	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	284780	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	143535	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	109101	48.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.06%			
49) 1,2-Dichloroethane-d4	8.665	65	124668	54.84	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.68%			
62) Toluene-d8	10.542	98	377649	52.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 105.44%			
86) 4-Bromofluorobenzene	13.328	95	114169	50.23	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	234367	114.43	ug/L	99
3) Chloromethane	3.220	50	241651	118.59	ug/L	96
4) Vinyl Chloride	3.373	62	252472	116.24	ug/L	100
5) 1,3-Butadiene	3.409	39	135848	85.80	ug/L	86
6) Bromomethane	3.940	94	150504	114.31	ug/L	94
7) Chloroethane	4.147	64	406821	154.94	ug/L	97
8) Trichlorofluoromethane	4.373	101	299571	95.62	ug/L	97
9) Ethyl Ether	4.873	59	173957	106.44	ug/L	94
10) Ethanol	5.110	45	40409	1842.04	ug/L	87
11) 1,2-Dichlorotrifluoroe...	5.153	67	247749	110.19	ug/L	90
12) 1,1-Dichloroethene	5.159	61	307103	117.53	ug/L	93
13) Freon 113	5.214	101	198538	93.22	ug/L	92
14) Carbon Disulfide	5.208	76	551617	87.87	ug/L	94
15) Iodomethane	5.366	142	296489	115.28	ug/L	95
16) Acrolein	5.629	56	189800	457.41	ug/L	98
17) Allyl chloride	5.811	41	207251	85.26	ug/L	98
18) Methylene Chloride	5.958	49	257677	99.55	ug/L	95
19) Acetone	6.019	43	269824	423.79	ug/L	97
20) Methyl acetate	6.171	43	618582	453.72	ug/L	100
21) trans-1,2-Dichloroethene	6.171	61	292890	116.43	ug/L	92
22) Hexane	6.263	56	171624	122.38	ug/L	90
23) Methyl Tert Butyl Ether	6.293	73	573828	95.90	ug/L	97
24) Acetonitrile	6.616	41	197020	818.20	ug/L	98
25) Di-isopropyl ether	6.756	45	548642	98.35	ug/L	96
26) Chloroprene	6.909	53	250137	94.12	ug/L	93
27) 1,1-Dichloroethane	6.939	63	377899	111.58	ug/L	98
28) Acrylonitrile	7.000	53	380056	525.13	ug/L	98
29) ETBE	7.195	59	655116	108.13	ug/L	95
30) Tert Butyl Alcohol	6.403	59	251200	815.88	ug/L	95
31) Vinyl acetate	7.214	43	2080273	488.31	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	210026	93.50	ug/L	87
33) 2,2-Dichloropropane	7.701	77	302753	99.43	ug/L	98
34) Bromochloromethane	7.811	128	100656	88.11	ug/L	86
35) Cyclohexane	7.823	56	328592	114.82	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.872	83	360140	98.95	ug/L	98
37) Ethyl acetate	7.976	43	935344	461.38	ug/L	98
38) Tetrahydrofuran	8.061	42	50099	81.58	ug/L	94
40) Carbon Tetrachloride	8.049	117	270394	96.95	ug/L	98
41) 1,1,1-Trichloroethane	8.122	97	304721	94.58	ug/L	93
42) 2-Butanone	8.201	43	416875	452.23	ug/L	98
43) 1,1-Dichloropropene	8.250	75	276911	105.20	ug/L	97
44) tert-Butyl formate	8.354	59	828646	1005.44	ug/L	97
45) Propionitrile	8.537	54	323202	1026.79	ug/L	97
46) Methacrylonitrile	8.555	41	1148782m	843.68	ug/L	
47) Benzene	8.524	78	777473	99.62	ug/L	99
48) TAME	8.604	73	582481	99.26	ug/L	98
50) 1,2-Dichloroethane	8.738	62	295204	106.88	ug/L	98
51) tert Amyl alcohol	8.786	59	179912	824.07	ug/L	95
52) Trichloroethene	9.128	95	215292	97.53	ug/L	90
53) Methylcyclohexane	9.134	83	335823	98.37	ug/L	95
54) Dibromomethane	9.579	93	142101	93.80	ug/L	92
55) 1,2-Dichloropropane	9.670	63	216199	112.65	ug/L	96
56) Bromodichloromethane	9.719	83	274647	94.75	ug/L	98
57) Methyl methacrylate	9.835	41	154145	84.85	ug/L	97
58) 1,4-Dioxane	9.920	88	41884	1639.97	ug/L	92
59) 2-Chloroethyl vinyl ether	10.256	63	567028	2493.33	ug/L	96
60) cis-1,3-Dichloropropene	10.353	75	316778	100.28	ug/L	98
63) Toluene	10.597	91	811781	98.61	ug/L	98
64) Isobutyl alcohol	8.677	43	153668	1639.11	ug/L	98
65) 2-Nitropropane	10.829	41	292371	463.62	ug/L	96
66) 4-Methyl-2-pentanone	10.938	43	983114	492.29	ug/L	95
67) trans-1,3-Dichloropropene	10.999	75	286510	108.55	ug/L	96
68) Tetrachloroethene	10.999	166	208145	92.64	ug/L	94
69) Ethyl methacrylate	11.103	69	260929	98.10	ug/L	96
70) 1,1,2-Trichloroethane	11.164	83	157191	97.97	ug/L	94
71) Dibromochloromethane	11.359	129	223795	92.03	ug/L	100
72) 1,3-Dichloropropane	11.451	76	318133	102.66	ug/L	96
73) 1,2-Dibromoethane	11.621	107	199473	93.77	ug/L	99
74) 3,3-Dimethyl-1-butanol	11.707	57	982845	4431.58	ug/L	95
75) 2-hexanone	11.768	43	687776	488.89	ug/L	92
76) 1-Chlorohexane	12.060	91	276547	102.05	ug/L	94
77) Ethylbenzene	12.121	91	931139	98.36	ug/L	98
78) Chlorobenzene	12.127	112	549600	99.64	ug/L	94
79) 1,1,1,2-Tetrachloroethane	12.182	131	192894	92.50	ug/L	96
80) m,p-Xylene	12.261	91	1436384	200.78	ug/L	100
81) o-Xylene	12.706	91	682282	97.65	ug/L	99
82) Styrene	12.755	104	548215	99.85	ug/L	97
83) Bromoform	12.822	173	138721	86.34	ug/L	99
84) Isopropylbenzene	13.005	105	878710	96.99	ug/L	99
87) cis-1,4-Dichloro-2-butene	13.682	53	62887	104.91	ug/L	96
88) n-Propylbenzene	13.426	91	1089853	104.13	ug/L	99
89) Bromobenzene	13.456	156	217871	93.17	ug/L	87
90) 1,1,2,2-Tetrachloroethane	13.499	83	261197	98.07	ug/L	99
91) 1,3,5-Trimethylbenzene	13.609	105	755114	101.74	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

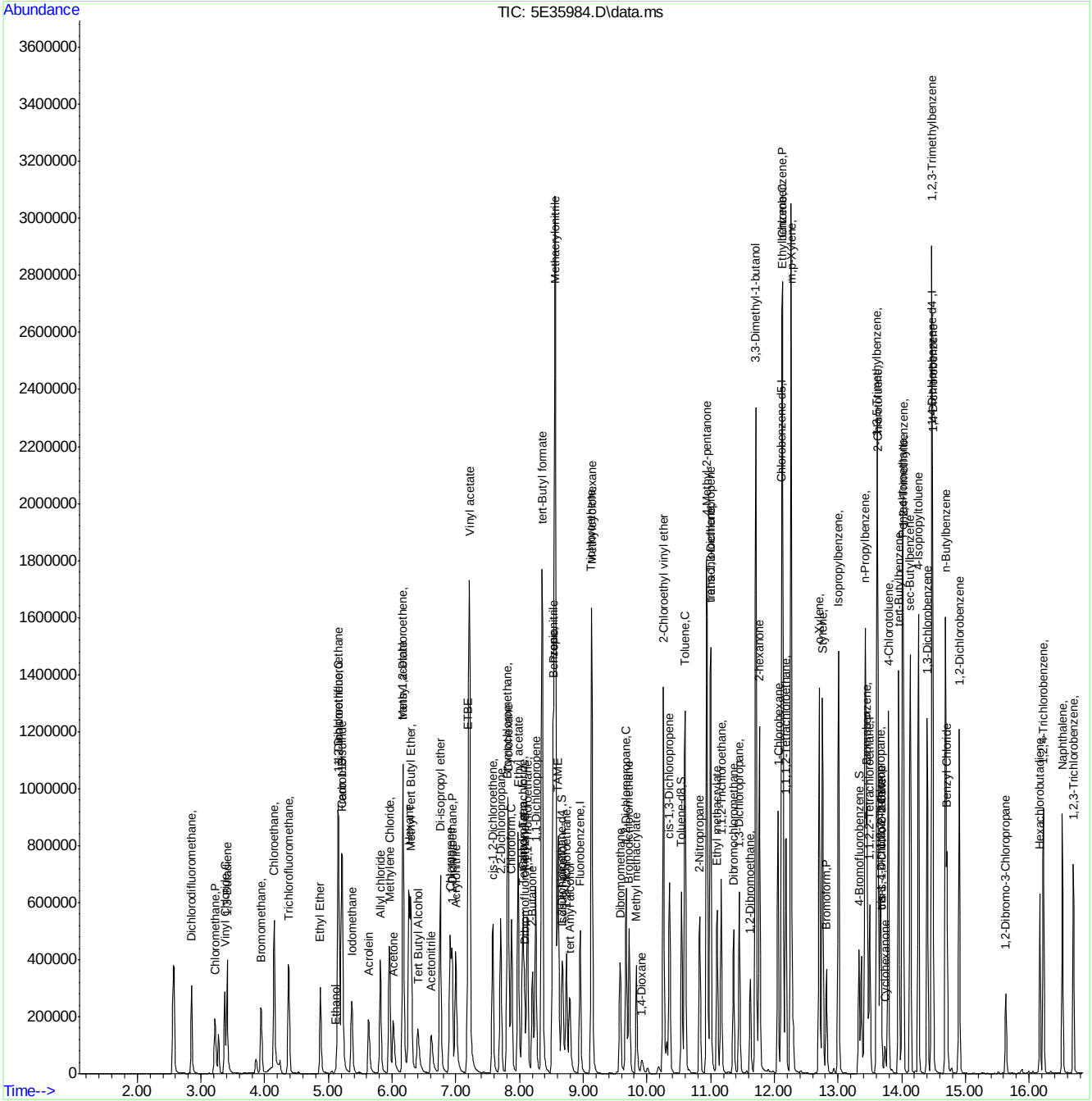
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	680422	103.33	ug/L		98
93) trans-1,4-Dichloro-2-B...	13.682	53	62887	104.91	ug/L		97
94) 1,2,3-Trichloropropane	13.664	110	71797	92.80	ug/L		88
95) Cyclohexanone	13.737	55	38016	435.23	ug/L		94
96) 4-Chlorotoluene	13.792	91	604174	102.24	ug/L		99
98) tert-Butylbenzene	13.950	91	390617	98.85	ug/L		97
99) 1,2,4-Trimethylbenzene	14.023	105	733655	100.24	ug/L		97
100) Pentachloroethane	14.011	167	130358	90.81	ug/L		84
101) sec-Butylbenzene	14.133	105	895687	100.51	ug/L		98
102) 4-Isopropyltoluene	14.261	119	800209	101.56	ug/L		97
103) 1,3-Dichlorobenzene	14.401	146	409300	93.87	ug/L		97
104) 1,2,3-Trimethylbenzene	14.474	105	738466	97.77	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	443527	91.54	ug/L		95
106) n-Butylbenzene	14.688	92	427696	103.06	ug/L		97
107) Benzyl Chloride	14.712	126	92611	86.69	ug/L	#	90
108) 1,2-Dichlorobenzene	14.901	146	386159	91.02	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	38884	82.55	ug/L		90
110) Hexachlorobutadiene	16.169	225	73558	86.29	ug/L		97
111) 1,2,4-Trichlorobenzene	16.224	180	212609	88.98	ug/L		97
112) Naphthalene	16.523	128	577984	83.88	ug/L		99
113) 1,2,3-Trichlorobenzene	16.693	180	174602	88.29	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35984.D
Injection Time: 12/08/22 14:00

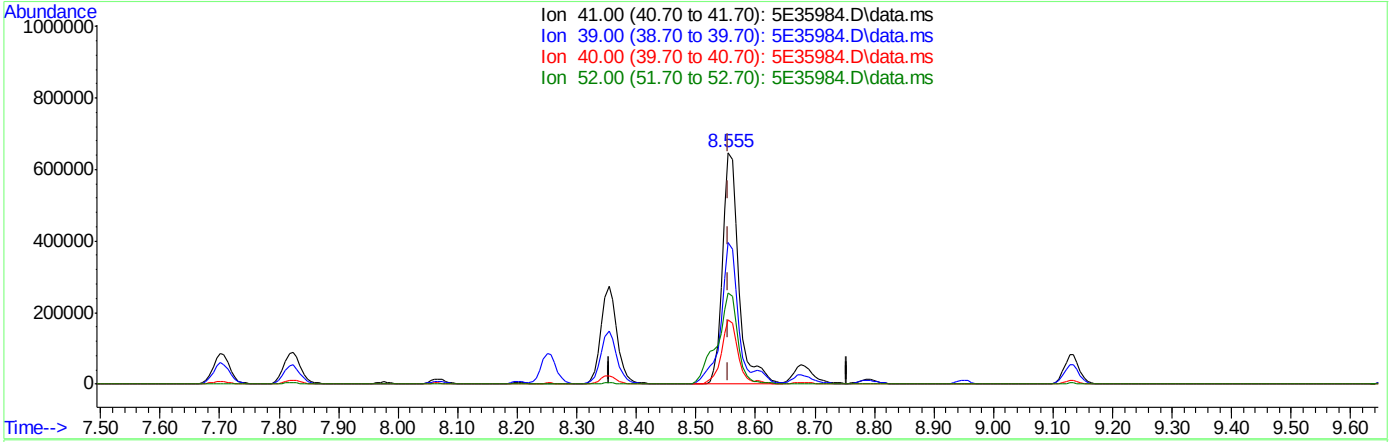
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

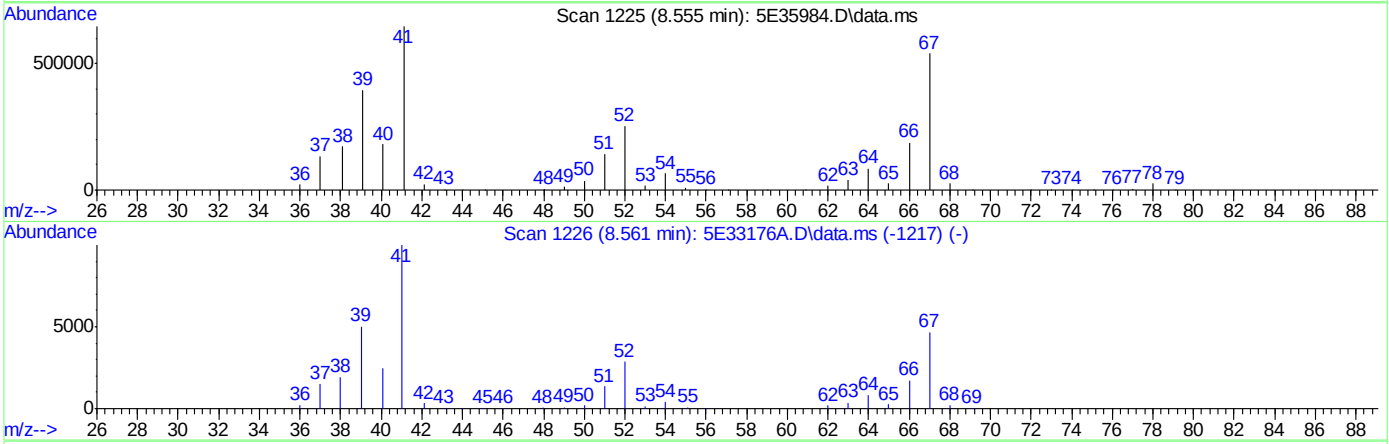
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:10 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35984.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 902.20ug/L

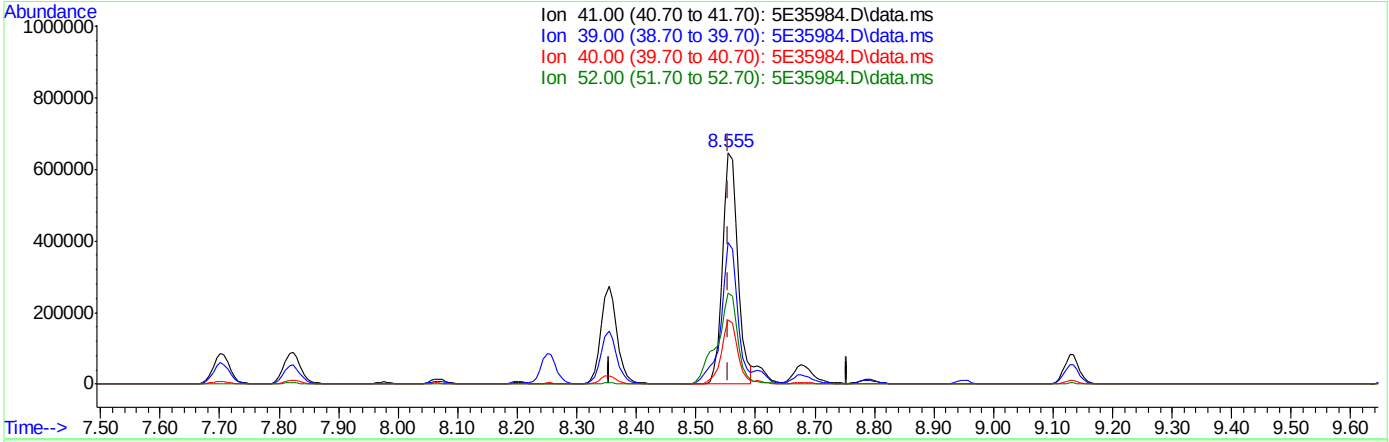
response 1228461

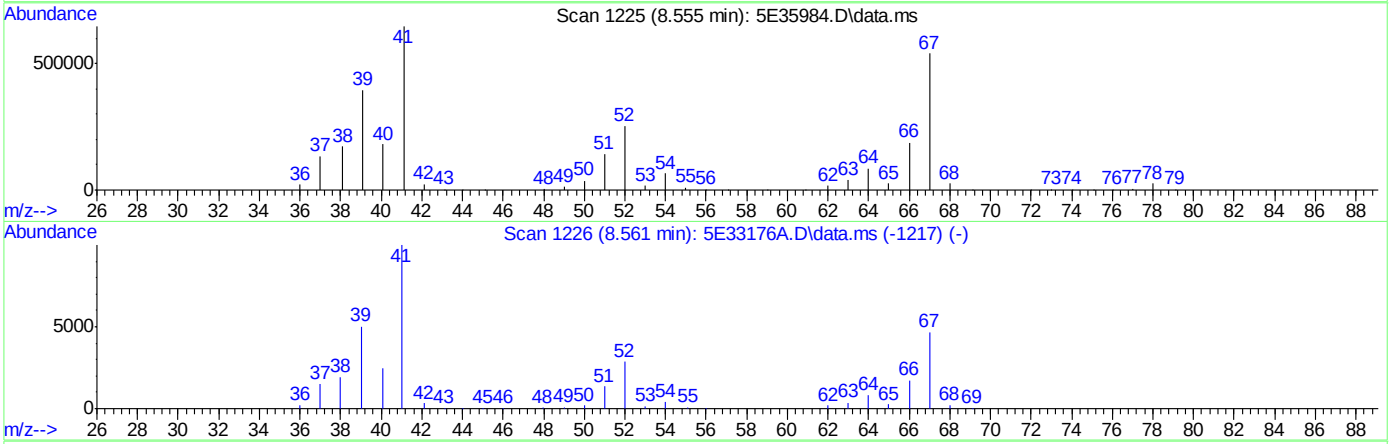
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	60.88
40.00	26.50	27.84
52.00	33.80	39.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:10 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35984.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 843.68ug/L m

response 1148782

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	61.09
40.00	26.50	27.86
52.00	33.80	39.36

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	372429	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	267287	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129481	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	103058	49.94	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.88%				
49) 1,2-Dichloroethane-d4	8.665	65	116889	49.34	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.68%				
62) Toluene-d8	10.542	98	360399	49.41	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.82%				
86) 4-Bromofluorobenzene	13.328	95	109114	50.66	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.855	85	78343	34.45	ug/L		91
3) Chloromethane	3.220	50	82081	37.64	ug/L		99
4) Vinyl Chloride	3.373	62	91450	39.49	ug/L		95
5) 1,3-Butadiene	3.403	39	66425	44.86	ug/L		98
6) Bromomethane	3.940	94	52225	43.04	ug/L		94
7) Chloroethane	4.147	64	117014	47.81	ug/L		98
8) Trichlorofluoromethane	4.379	101	117850	42.08	ug/L		95
9) Ethyl Ether	4.866	59	64836	39.37	ug/L		97
10) Ethanol	5.123	45	9255	703.01	ug/L		82
11) 1,2-Dichlorotrifluoroe...	5.153	67	93383	39.69	ug/L		97
12) 1,1-Dichloroethene	5.159	61	111523	38.08	ug/L		98
13) Freon 113	5.220	101	74094	37.54	ug/L		95
14) Carbon Disulfide	5.208	76	219861	39.91	ug/L		98
15) Iodomethane	5.366	142	104547	38.03	ug/L		99
16) Acrolein	5.629	56	71046	200.74	ug/L		99
17) Allyl chloride	5.818	41	81845	40.60	ug/L		93
18) Methylene Chloride	5.958	49	95509	34.56	ug/L		92
19) Acetone	6.013	43	107870	189.68	ug/L		97
20) Methyl acetate	6.171	43	246457	216.50	ug/L		99
21) trans-1,2-Dichloroethene	6.171	61	105420	38.76	ug/L		97
22) Hexane	6.263	56	68097	41.69	ug/L	#	88
23) Methyl Tert Butyl Ether	6.293	73	222351	40.98	ug/L		96
24) Acetonitrile	6.616	41	71467	384.18	ug/L		95
25) Di-isopropyl ether	6.756	45	216822	41.64	ug/L		98
26) Chloroprene	6.909	53	106679	43.73	ug/L		98
27) 1,1-Dichloroethane	6.939	63	145104	40.24	ug/L		97
28) Acrylonitrile	6.994	53	153740	225.63	ug/L		97
29) ETBE	7.195	59	244441	40.60	ug/L		97
30) Tert Butyl Alcohol	6.397	59	103257	369.77	ug/L		99
32) cis-1,2-Dichloroethene	7.579	96	81172	40.82	ug/L		98
33) 2,2-Dichloropropane	7.701	77	105979	36.79	ug/L		98
34) Bromochloromethane	7.811	128	41845	43.25	ug/L		98
35) Cyclohexane	7.823	56	131580	41.23	ug/L		98
36) Chloroform	7.872	83	137441	39.18	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.976	43	397473	227.28	ug/L		100
38) Tetrahydrofuran	8.067	42	21451	39.44	ug/L		97
40) Carbon Tetrachloride	8.049	117	101752	39.77	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	116421	39.86	ug/L		99
42) 2-Butanone	8.201	43	169913	193.36	ug/L		95
43) 1,1-Dichloropropene	8.256	75	101634	38.62	ug/L		98
44) tert-Butyl formate	8.354	59	249452	324.03	ug/L		99
45) Propionitrile	8.537	54	126524	393.50	ug/L		93
46) Methacrylonitrile	8.555	41	465645	432.39	ug/L		99
47) Benzene	8.524	78	293582	38.86	ug/L		99
48) TAME	8.604	73	227609	42.35	ug/L		100
50) 1,2-Dichloroethane	8.732	62	112255	39.12	ug/L		97
51) tert Amyl alcohol	8.786	59	80030	411.33	ug/L		97
52) Trichloroethene	9.134	95	80306	39.73	ug/L		96
53) Methylcyclohexane	9.134	83	134745	42.29	ug/L		98
54) Dibromomethane	9.579	93	52743	39.65	ug/L		96
55) 1,2-Dichloropropane	9.670	63	79838	37.21	ug/L		96
56) Bromodichloromethane	9.719	83	107925	42.46	ug/L		99
57) Methyl methacrylate	9.835	41	64582	41.94	ug/L		94
58) 1,4-Dioxane	9.926	88	16626	891.93	ug/L		93
59) 2-Chloroethyl vinyl ether	10.262	63	244249	209.20	ug/L		98
60) cis-1,3-Dichloropropene	10.353	75	120787	42.13	ug/L		98
63) Toluene	10.597	91	314298	39.78	ug/L		97
64) Isobutyl alcohol	8.677	43	62777	834.90	ug/L		99
65) 2-Nitropropane	10.829	41	119895	203.72	ug/L		100
66) 4-Methyl-2-pentanone	10.938	43	389217	189.66	ug/L		99
67) trans-1,3-Dichloropropene	10.999	75	115355	45.69	ug/L		96
68) Tetrachloroethene	10.999	166	79189	40.76	ug/L		98
69) Ethyl methacrylate	11.103	69	95154	38.35	ug/L		98
70) 1,1,2-Trichloroethane	11.164	83	62828	40.92	ug/L		92
71) Dibromochloromethane	11.359	129	82697	41.38	ug/L		99
72) 1,3-Dichloropropane	11.451	76	117653	38.43	ug/L		98
73) 1,2-Dibromoethane	11.621	107	77414	41.82	ug/L		98
74) 3,3-Dimethyl-1-butanol	11.707	57	362600	1822.70	ug/L		98
75) 2-hexanone	11.768	43	272999	193.42	ug/L		99
76) 1-Chlorohexane	12.060	91	112724	43.22	ug/L		98
77) Ethylbenzene	12.121	91	360166	39.83	ug/L		100
78) Chlorobenzene	12.133	112	211635	40.34	ug/L		91
79) 1,1,1,2-Tetrachloroethane	12.182	131	76218	42.24	ug/L		99
80) m,p-Xylene	12.261	91	544930	81.24	ug/L		99
81) o-Xylene	12.706	91	272141	42.52	ug/L		99
82) Styrene	12.755	104	208808	42.48	ug/L		98
83) Bromoform	12.816	173	54022	41.57	ug/L		98
84) Isopropylbenzene	13.005	105	343672	41.42	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	26875	43.24	ug/L	#	72
88) n-Propylbenzene	13.426	91	430654	41.70	ug/L		98
89) Bromobenzene	13.456	156	80256	39.94	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.499	83	104448	41.39	ug/L		98
91) 1,3,5-Trimethylbenzene	13.609	105	283154	41.61	ug/L		99
92) 2-Chlorotoluene	13.621	91	256442	40.46	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

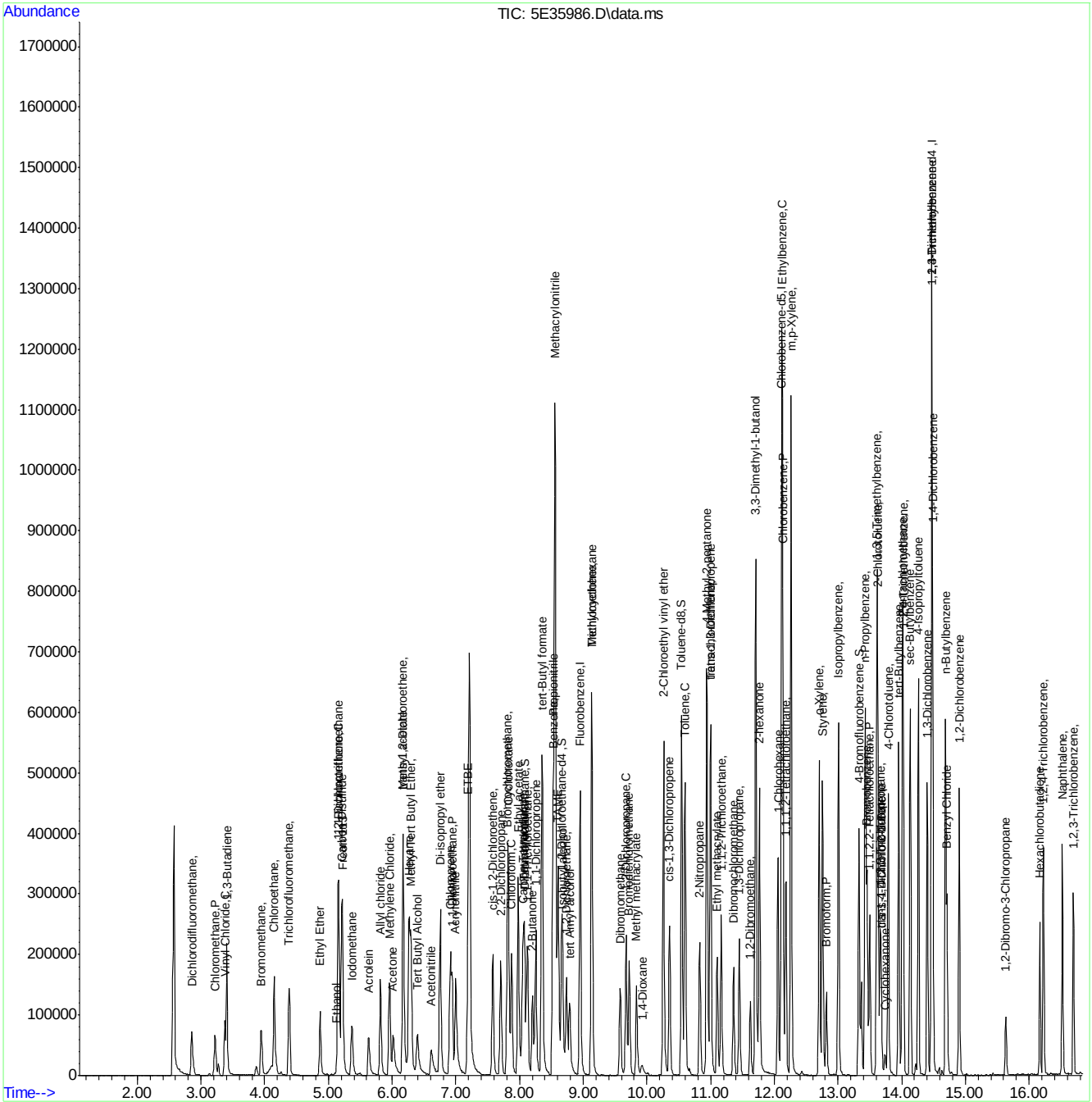
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93)	trans-1,4-Dichloro-2-B...	13.682	53	26875	43.24	ug/L	#	73
94)	1,2,3-Trichloropropane	13.664	110	27298	37.56	ug/L		94
95)	Cyclohexanone	13.737	55	15367	234.20	ug/L		96
96)	4-Chlorotoluene	13.792	91	232492	41.19	ug/L		98
98)	tert-Butylbenzene	13.950	91	151358	41.15	ug/L		98
99)	1,2,4-Trimethylbenzene	14.023	105	287695	43.62	ug/L		95
100)	Pentachloroethane	14.011	167	51020	42.96	ug/L		92
101)	sec-Butylbenzene	14.133	105	370555	44.29	ug/L		99
102)	4-Isopropyltoluene	14.261	119	321036	43.77	ug/L		99
103)	1,3-Dichlorobenzene	14.401	146	163567	43.59	ug/L		97
104)	1,2,3-Trimethylbenzene	14.474	105	306145	45.98	ug/L		98
105)	1,4-Dichlorobenzene	14.487	146	170290	41.48	ug/L		97
106)	n-Butylbenzene	14.688	92	162112	41.69	ug/L		94
107)	Benzyl Chloride	14.712	126	36518	41.06	ug/L		93
108)	1,2-Dichlorobenzene	14.901	146	152720	42.51	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	15.633	75	15341	39.86	ug/L		91
110)	Hexachlorobutadiene	16.169	225	30247	39.85	ug/L		93
111)	1,2,4-Trichlorobenzene	16.224	180	86500	43.21	ug/L		96
112)	Naphthalene	16.523	128	244506	44.60	ug/L		99
113)	1,2,3-Trichlorobenzene	16.693	180	72400	42.93	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35987.D
Acq On : 8 Dec 2022 4:06 pm
Operator : courtnef
Sample : ICV1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 16:33:48 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

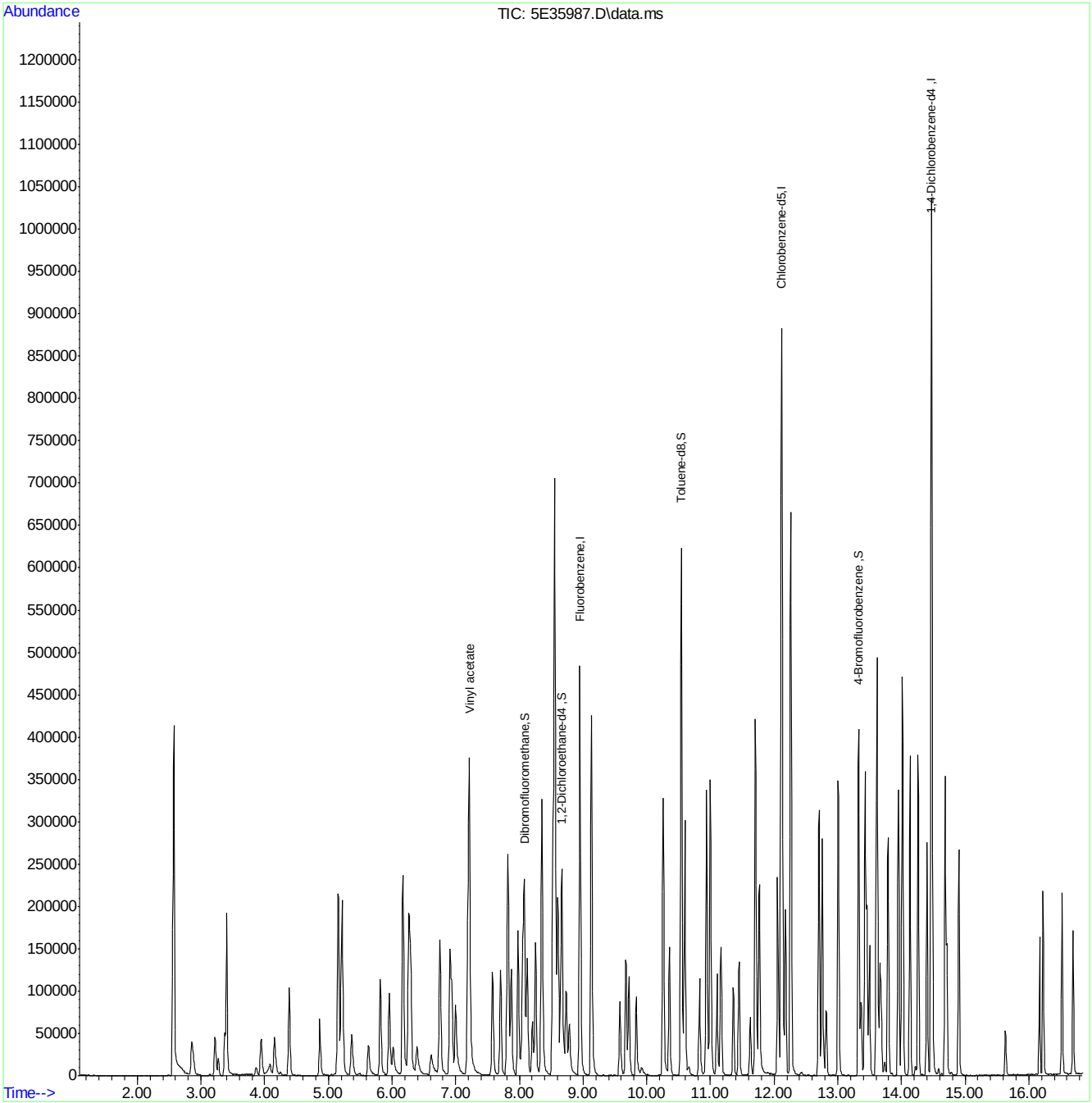
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	386293	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	270797	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129275	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	107995	50.46	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.92%			
49) 1,2-Dichloroethane-d4	8.665	65	126557	51.50	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.00%			
62) Toluene-d8	10.542	98	376881	51.00	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.00%			
86) 4-Bromofluorobenzene	13.328	95	110225	51.26	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.52%			
Target Compounds						Qvalue
31) Vinyl acetate	7.214	43	492954	134.19	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35987.D
Acq On : 8 Dec 2022 4:06 pm
Operator : courtnef
Sample : ICV1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 16:33:48 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36115.D
Acq On : 14 Dec 2022 9:23 am
Operator : courtnef
Sample : CC1617-5
Misc : MS52751,V5E1624,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 09:52:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	334654	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	249700	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	125334	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.073	113	93405	50.37	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.74%			
49) 1,2-Dichloroethane-d4	8.665	65	104663	49.16	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.32%			
62) Toluene-d8	10.542	98	326504	47.91	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.82%			
86) 4-Bromofluorobenzene	13.328	95	100341	48.13	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.26%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	82168	40.21	ug/L	97
3) Chloromethane	3.221	50	76624	39.10	ug/L	97
4) Vinyl Chloride	3.373	62	87283	41.95	ug/L	93
5) 1,3-Butadiene	3.404	39	58631	44.07	ug/L	92
6) Bromomethane	3.940	94	33900	31.09	ug/L	90
7) Chloroethane	4.153	64	62480	34.04	ug/L	97
8) Trichlorofluoromethane	4.385	101	113462	45.09	ug/L	98
9) Ethyl Ether	4.867	59	65805	44.46	ug/L	96
10) Ethanol	5.111	45	7675	648.80	ug/L	95
11) 1,2-Dichlorotrifluoroe...	5.147	67	96456	45.62	ug/L	94
12) 1,1-Dichloroethene	5.159	61	118731	45.11	ug/L	99
13) Freon 113	5.220	101	78448	44.23	ug/L	95
14) Carbon Disulfide	5.208	76	214714	43.38	ug/L	98
15) Iodomethane	5.373	142	31918	13.23	ug/L	94
16) Acrolein	5.629	56	67371	211.85	ug/L	95
17) Allyl chloride	5.818	41	77751	42.92	ug/L	97
18) Methylene Chloride	5.958	49	101782	41.41	ug/L	93
19) Acetone	6.013	43	97903	191.70	ug/L	98
20) Methyl acetate	6.171	43	228540	223.42	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	110248	45.11	ug/L	99
22) Hexane	6.263	56	67801	46.19	ug/L	91
23) Methyl Tert Butyl Ether	6.293	73	215288	44.16	ug/L	98
24) Acetonitrile	6.616	41	65564	392.23	ug/L	91
25) Di-isopropyl ether	6.750	45	202421	43.26	ug/L	98
26) Chloroprene	6.909	53	93639	42.72	ug/L	99
27) 1,1-Dichloroethane	6.939	63	143911	44.41	ug/L	94
28) Acrylonitrile	6.994	53	133348	217.80	ug/L	98
29) ETBE	7.189	59	238438	44.07	ug/L	97
30) Tert Butyl Alcohol	6.397	59	81090	320.69	ug/L	99
31) Vinyl acetate	7.214	43	730644	229.57	ug/L	98
32) cis-1,2-Dichloroethene	7.580	96	79067	44.25	ug/L	97
33) 2,2-Dichloropropane	7.708	77	115343	44.56	ug/L	97
34) Bromochloromethane	7.811	128	37099	42.67	ug/L	95
35) Cyclohexane	7.823	56	127003	44.28	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36115.D
Acq On : 14 Dec 2022 9:23 am
Operator : courtnef
Sample : CC1617-5
Misc : MS52751,V5E1624,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 09:52:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.872	83	135327	42.93	ug/L	98
37) Ethyl acetate	7.976	43	346176	220.29	ug/L	100
38) Tetrahydrofuran	8.067	42	18746	38.36	ug/L	95
40) Carbon Tetrachloride	8.049	117	106011	46.11	ug/L	99
41) 1,1,1-Trichloroethane	8.122	97	118421	45.12	ug/L	95
42) 2-Butanone	8.201	43	155563	197.01	ug/L	100
43) 1,1-Dichloropropene	8.256	75	104894	44.36	ug/L	98
44) tert-Butyl formate	8.354	59	322209	465.78	ug/L	98
45) Propionitrile	8.531	54	117211	405.71	ug/L	96
46) Methacrylonitrile	8.555	41	449514	464.52	ug/L	99
47) Benzene	8.524	78	292205	43.04	ug/L	99
48) TAME	8.604	73	217187	44.97	ug/L	99
50) 1,2-Dichloroethane	8.738	62	114839	44.54	ug/L	97
51) tert Amyl alcohol	8.787	59	68895	393.30	ug/L	97
52) Trichloroethene	9.128	95	80813	44.49	ug/L	98
53) Methylcyclohexane	9.134	83	128639	44.93	ug/L	96
54) Dibromomethane	9.579	93	53261	44.56	ug/L	97
55) 1,2-Dichloropropane	9.671	63	82337	42.74	ug/L	97
56) Bromodichloromethane	9.719	83	102739	44.98	ug/L	97
57) Methyl methacrylate	9.835	41	56252	40.65	ug/L	92
58) 1,4-Dioxane	9.914	88	10948	664.00	ug/L	99
59) 2-Chloroethyl vinyl ether	10.256	63	190760	181.83	ug/L	97
60) cis-1,3-Dichloropropene	10.353	75	118237	45.89	ug/L	98
63) Toluene	10.597	91	311076	42.15	ug/L	98
64) Isobutyl alcohol	8.671	43	51992	740.16	ug/L	92
65) 2-Nitropropane	10.829	41	114070	207.53	ug/L	99
66) 4-Methyl-2-pentanone	10.939	43	367834	191.87	ug/L	99
67) trans-1,3-Dichloropropene	11.000	75	105809	44.86	ug/L	90
68) Tetrachloroethene	11.000	166	80325	44.25	ug/L	97
69) Ethyl methacrylate	11.103	69	91832	39.60	ug/L	98
70) 1,1,2-Trichloroethane	11.164	83	61234	42.69	ug/L	96
71) Dibromochloromethane	11.359	129	85236	45.65	ug/L	98
72) 1,3-Dichloropropane	11.451	76	121625	42.53	ug/L	98
73) 1,2-Dibromoethane	11.621	107	76499	44.24	ug/L	96
74) 3,3-Dimethyl-1-butanol	11.707	57	345474	1859.49	ug/L	98
75) 2-hexanone	11.762	43	261597	198.40	ug/L	98
76) 1-Chlorohexane	12.054	91	106581	43.74	ug/L	92
77) Ethylbenzene	12.121	91	355978	42.14	ug/L	98
78) Chlorobenzene	12.127	112	208752	42.59	ug/L	99
79) 1,1,1,2-Tetrachloroethane	12.182	131	75994	45.08	ug/L	95
80) m,p-Xylene	12.262	91	539419	86.08	ug/L	99
81) o-Xylene	12.707	91	259420	43.39	ug/L	99
82) Styrene	12.755	104	203966	44.42	ug/L	98
83) Bromoform	12.816	173	50753	41.80	ug/L	99
84) Isopropylbenzene	13.005	105	341927	44.11	ug/L	99
87) cis-1,4-Dichloro-2-butene	13.676	53	21682	35.86	ug/L	97
88) n-Propylbenzene	13.426	91	417979	41.82	ug/L	98
89) Bromobenzene	13.456	156	82901	42.63	ug/L	97
90) 1,1,2,2-Tetrachloroethane	13.499	83	101960	41.74	ug/L	95
91) 1,3,5-Trimethylbenzene	13.609	105	280375	42.56	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36115.D
Acq On : 14 Dec 2022 9:23 am
Operator : courtnef
Sample : CC1617-5
Misc : MS52751,V5E1624,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 09:52:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

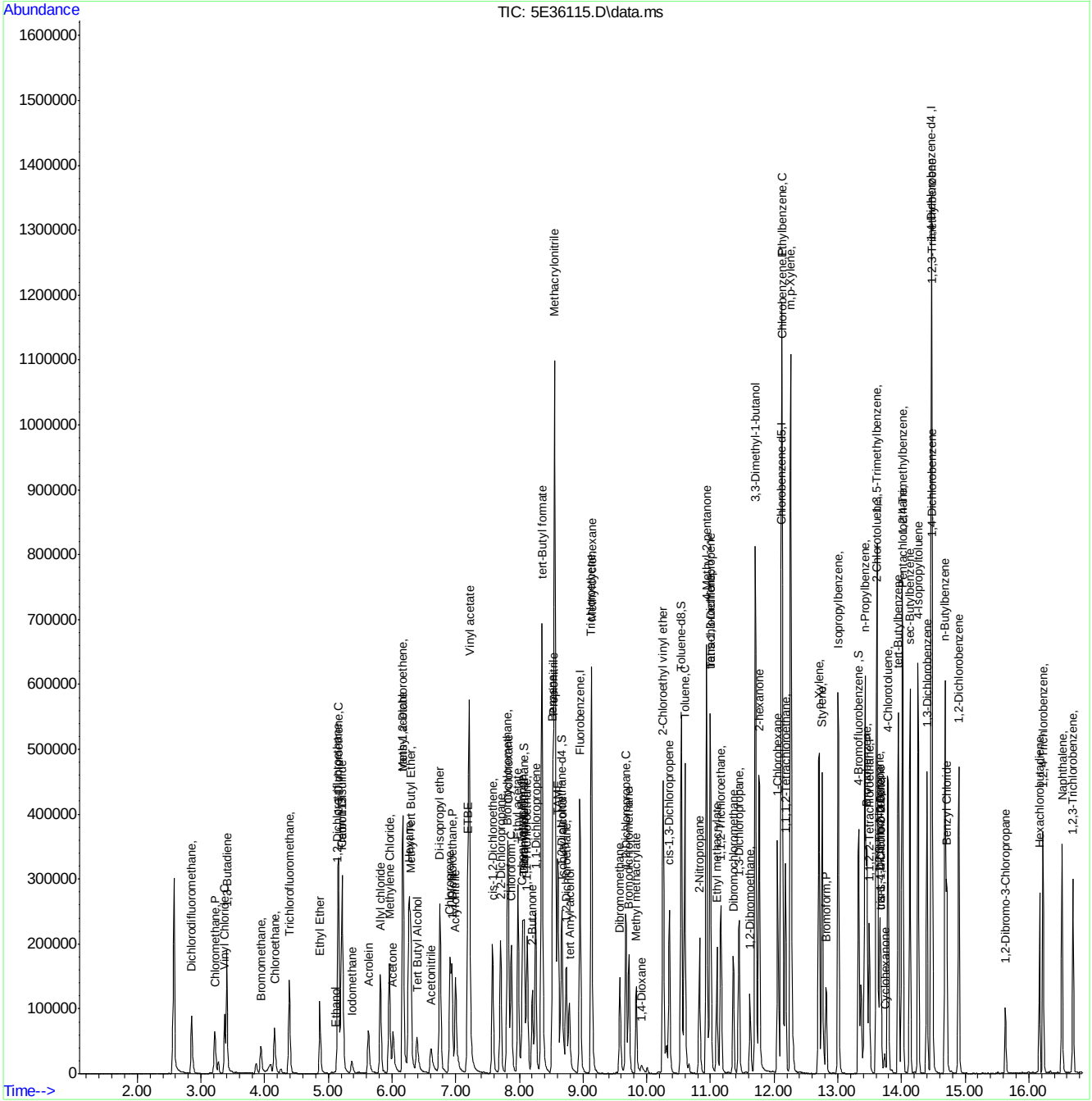
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92)	2-Chlorotoluene	13.621	91	253408	41.30	ug/L	99
93)	trans-1,4-Dichloro-2-B...	13.676	53	21682	35.86	ug/L	97
94)	1,2,3-Trichloropropane	13.664	110	28105	40.06	ug/L	96
95)	Cyclohexanone	13.737	55	11988	190.46	ug/L	96
96)	4-Chlorotoluene	13.786	91	225834	41.34	ug/L	99
98)	tert-Butylbenzene	13.950	91	148804	41.79	ug/L	99
99)	1,2,4-Trimethylbenzene	14.017	105	273801	42.88	ug/L	100
100)	Pentachloroethane	14.011	167	47562	41.37	ug/L	89
101)	sec-Butylbenzene	14.133	105	353526	43.65	ug/L	99
102)	4-Isopropyltoluene	14.261	119	314482	44.29	ug/L	97
103)	1,3-Dichlorobenzene	14.401	146	158235	43.57	ug/L	98
104)	1,2,3-Trimethylbenzene	14.475	105	279879	43.43	ug/L	99
105)	1,4-Dichlorobenzene	14.487	146	169023	42.54	ug/L	99
106)	n-Butylbenzene	14.682	92	165742	44.03	ug/L	97
107)	Benzyl Chloride	14.712	126	34828	40.56	ug/L	94
108)	1,2-Dichlorobenzene	14.901	146	150327	43.23	ug/L	97
109)	1,2-Dibromo-3-Chloropr...	15.633	75	14420	38.67	ug/L	96
110)	Hexachlorobutadiene	16.169	225	32455	44.18	ug/L	93
111)	1,2,4-Trichlorobenzene	16.224	180	86176	44.47	ug/L	98
112)	Naphthalene	16.523	128	232219	43.76	ug/L	100
113)	1,2,3-Trichlorobenzene	16.694	180	72740	44.56	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-14-2022\
Data File : 5E36115.D
Acq On : 14 Dec 2022 9:23 am
Operator : courtnef
Sample : CC1617-5
Misc : MS52751,V5E1624,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 14 09:52:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36143.d
Acq On : 14 Dec 2022 8:08 pm
Operator : courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:30 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	317052	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.109	117	239839	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	119104	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	87725	49.94	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.88%				
49) 1,2-Dichloroethane-d4	8.665	65	100893	50.02	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.04%				
62) Toluene-d8	10.542	98	309982	47.36	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 94.72%				
86) 4-Bromofluorobenzene	13.328	95	95594	48.25	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.50%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.849	85	71249	36.80	ug/L		97
3) Chloromethane	3.220	50	66951	36.07	ug/L		93
4) Vinyl Chloride	3.373	62	77403	39.26	ug/L		100
5) 1,3-Butadiene	3.403	39	56180	44.57	ug/L		96
6) Bromomethane	3.940	94	27048	26.18	ug/L		96
7) Chloroethane	4.147	64	68984	37.69	ug/L		97
8) Trichlorofluoromethane	4.385	101	99451	41.72	ug/L		99
9) Ethyl Ether	4.866	59	59945	42.75	ug/L		96
10) Ethanol	5.098	45	12339	1100.98	ug/L	#	59
11) 1,2-Dichlorotrifluoroe...	5.153	67	86845	43.36	ug/L		99
12) 1,1-Dichloroethene	5.159	61	106258	42.61	ug/L		97
13) Freon 113	5.220	101	68847	40.97	ug/L		97
14) Carbon Disulfide	5.208	76	181392	38.68	ug/L		97
15) Iodomethane	5.366	142	35206	15.37	ug/L		97
16) Acrolein	5.628	56	62766	208.32	ug/L		96
17) Allyl chloride	5.817	41	67806	39.51	ug/L		97
18) Methylene Chloride	5.958	49	93754	40.19	ug/L		96
19) Acetone	6.019	43	91531	189.03	ug/L		99
20) Methyl acetate	6.171	43	222619	229.71	ug/L		97
21) trans-1,2-Dichloroethene	6.171	61	98780	42.66	ug/L		97
22) Hexane	6.269	56	57567	41.40	ug/L		92
23) Methyl Tert Butyl Ether	6.293	73	196318	42.50	ug/L		99
24) Acetonitrile	6.610	41	65079	410.94	ug/L		95
25) Di-isopropyl ether	6.750	45	182044	41.06	ug/L		97
26) Chloroprene	6.909	53	84138	40.51	ug/L		96
27) 1,1-Dichloroethane	6.939	63	127811	41.63	ug/L		99
28) Acrylonitrile	7.000	53	127620	220.01	ug/L		99
29) ETBE	7.195	59	217448	42.43	ug/L		95
30) Tert Butyl Alcohol	6.397	59	85871	360.70	ug/L		92
31) Vinyl acetate	7.214	43	653178	216.63	ug/L		99
32) cis-1,2-Dichloroethene	7.579	96	72143	42.61	ug/L		98
33) 2,2-Dichloropropane	7.701	77	91350	37.25	ug/L		98
34) Bromochloromethane	7.811	128	34909	42.38	ug/L		95
35) Cyclohexane	7.823	56	113598	41.81	ug/L		96
36) Chloroform	7.872	83	124647	41.74	ug/L		98
37) Ethyl acetate	7.976	43	331595	222.72	ug/L		99
38) Tetrahydrofuran	8.067	42	17989	38.86	ug/L		97
40) Carbon Tetrachloride	8.049	117	93139	42.76	ug/L		94
41) 1,1,1-Trichloroethane	8.122	97	106337	42.76	ug/L		97
42) 2-Butanone	8.201	43	146878	196.34	ug/L		95
43) 1,1-Dichloropropene	8.256	75	93181	41.59	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36143.d
Acq On : 14 Dec 2022 8:08 pm
Operator : courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:30 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44)	tert-Butyl formate	8.354	59	281521	429.56	ug/L		99
45)	Propionitrile	8.536	54	117034	427.65	ug/L		98
46)	Methacrylonitrile	8.555	41	431167	470.30	ug/L		99
47)	Benzene	8.524	78	263439	40.96	ug/L		99
48)	TAME	8.604	73	197971	43.27	ug/L		98
50)	1,2-Dichloroethane	8.738	62	106326	43.52	ug/L		96
51)	tert Amyl alcohol	8.786	59	73816	447.40	ug/L		98
52)	Trichloroethene	9.134	95	73438	42.67	ug/L		94
53)	Methylcyclohexane	9.134	83	115450	42.57	ug/L		98
54)	Dibromomethane	9.579	93	48550	42.87	ug/L		96
55)	1,2-Dichloropropane	9.670	63	74403	40.76	ug/L		97
56)	Bromodichloromethane	9.719	83	92901	42.93	ug/L		99
57)	Methyl methacrylate	9.835	41	55194	42.10	ug/L		94
58)	1,4-Dioxane	9.926	88	14094	888.38	ug/L		92
59)	2-Chloroethyl vinyl ether	10.262	63	176869	177.95	ug/L		99
60)	cis-1,3-Dichloropropene	10.353	75	104051	42.63	ug/L		97
63)	Toluene	10.597	91	277464	39.14	ug/L		100
64)	Isobutyl alcohol	8.677	43	55151	817.42	ug/L		98
65)	2-Nitropropane	10.829	41	111345	210.96	ug/L		99
66)	4-Methyl-2-pentanone	10.938	43	351116	190.68	ug/L		99
67)	trans-1,3-Dichloropropene	10.999	75	92060	40.64	ug/L		89
68)	Tetrachloroethene	10.999	166	74885	42.95	ug/L		99
69)	Ethyl methacrylate	11.103	69	85872	38.56	ug/L		97
70)	1,1,2-Trichloroethane	11.164	83	57156	41.48	ug/L		94
71)	Dibromochloromethane	11.359	129	76762	42.80	ug/L		97
72)	1,3-Dichloropropane	11.451	76	111346	40.54	ug/L		99
73)	1,2-Dibromoethane	11.627	107	70847	42.66	ug/L		98
74)	3,3-Dimethyl-1-butanol	11.707	57	355183	1992.52	ug/L		99
75)	2-hexanone	11.768	43	245971	194.22	ug/L		98
76)	1-Chlorohexane	12.060	91	94598	40.42	ug/L		97
77)	Ethylbenzene	12.121	91	316749	39.04	ug/L		99
78)	Chlorobenzene	12.127	112	189128	40.17	ug/L		99
79)	1,1,1,2-Tetrachloroethane	12.176	131	68002	42.00	ug/L		98
80)	m,p-Xylene	12.261	91	482206	80.11	ug/L		98
81)	o-Xylene	12.706	91	232468	40.48	ug/L		99
82)	Styrene	12.755	104	185872	42.14	ug/L		99
83)	Bromoform	12.816	173	45043	38.70	ug/L		99
84)	Isopropylbenzene	13.005	105	307675	41.32	ug/L		98
87)	cis-1,4-Dichloro-2-butene	13.682	53	18439	32.00	ug/L	#	63
88)	n-Propylbenzene	13.426	91	383202	40.34	ug/L		97
89)	Bromobenzene	13.456	156	75631	40.92	ug/L		97
90)	1,1,2,2-Tetrachloroethane	13.493	83	98337	42.36	ug/L		99
91)	1,3,5-Trimethylbenzene	13.609	105	252266	40.30	ug/L		99
92)	2-Chlorotoluene	13.621	91	228683	39.22	ug/L		99
93)	trans-1,4-Dichloro-2-B...	13.682	53	18439	32.00	ug/L	#	62
94)	1,2,3-Trichloropropane	13.664	110	27888	41.91	ug/L		94
95)	Cyclohexanone	13.737	55	13832	229.40	ug/L		96
96)	4-Chlorotoluene	13.785	91	201807	38.87	ug/L		99
98)	tert-Butylbenzene	13.950	91	136836	40.44	ug/L		97
99)	1,2,4-Trimethylbenzene	14.017	105	252080	41.55	ug/L		96
100)	Pentachloroethane	14.011	167	41726	38.20	ug/L		92
101)	sec-Butylbenzene	14.133	105	320153	41.60	ug/L		99
102)	4-Isopropyltoluene	14.261	119	280651	41.60	ug/L		100
103)	1,3-Dichlorobenzene	14.401	146	144299	41.81	ug/L		96
104)	1,2,3-Trimethylbenzene	14.474	105	253492	41.39	ug/L		99
105)	1,4-Dichlorobenzene	14.487	146	154917	41.02	ug/L		98
106)	n-Butylbenzene	14.682	92	148580	41.54	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36143.d
Acq On : 14 Dec 2022 8:08 pm
Operator : courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:30 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

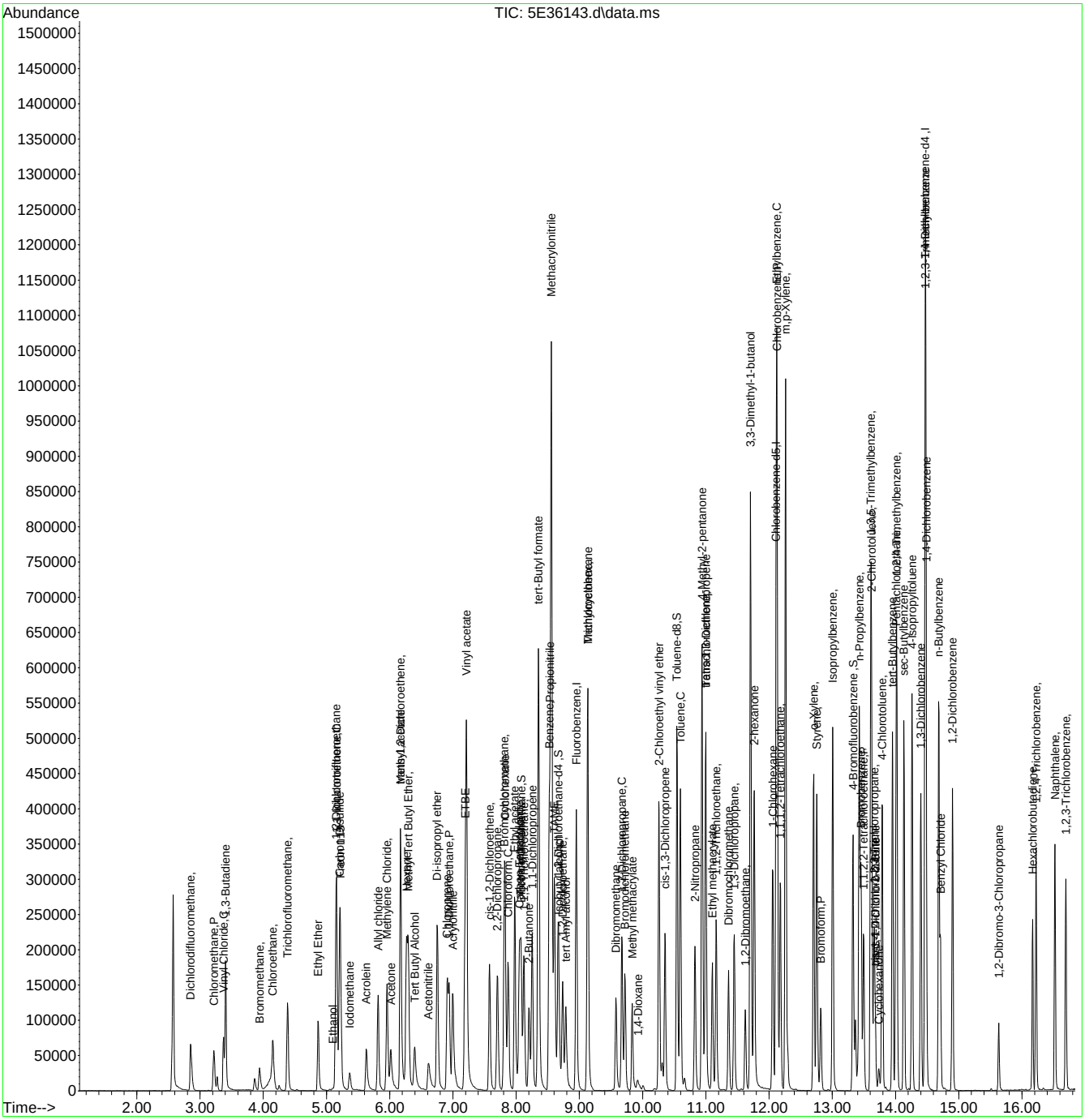
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Benzyl Chloride	14.712	126	25606	32.72	ug/L	97
108) 1,2-Dichlorobenzene	14.901	146	138130	41.80	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.633	75	14568	41.18	ug/L	93
110) Hexachlorobutadiene	16.169	225	29228	41.87	ug/L	97
111) 1,2,4-Trichlorobenzene	16.224	180	80075	43.49	ug/L	98
112) Naphthalene	16.523	128	227824	45.18	ug/L	99
113) 1,2,3-Trichlorobenzene	16.693	180	70756	45.61	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\v5e1624\
Data File : 5E36143.d
Acq On : 14 Dec 2022 8:08 pm
Operator : courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,,
ALS Vial : 30 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Results File: appIX12-08-2022_.RES
Quant Time: Dec 15 01:56:30 2022
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	789594	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	593096	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	213340	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	217425	49.17	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.34%			
50) 1,2-Dichloroethane-d4	8.262	65	204248	52.08	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.16%			
63) Toluene-d8	10.152	98	791990	49.80	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.60%			
86) 4-Bromofluorobenzene	12.944	174	214911	50.54	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	4461	0.98	ug/L	94
3) Chloromethane	3.013	50	3950	0.89	ug/L	91
4) 1,3-butadiene	3.184	39	5195	1.12	ug/L	94
5) Vinyl Chloride	3.153	62	3789	0.82	ug/L	85
6) Bromomethane	3.672	94	1047	0.73	ug/L	70
7) Chloroethane	3.885	64	1800	0.71	ug/L	96
8) Trichlorofluoromethane	4.098	101	5039	0.76	ug/L	99
9) Ethyl Ether	4.556	59	3717	1.09	ug/L	92
11) 1,2-Dichlorotrifluoroe...	4.824	67	6187	1.17	ug/L	96
12) 1,1-Dichloroethene	4.824	61	7356	1.13	ug/L	98
13) Freon 113	4.885	101	5323	1.29	ug/L	94
14) Carbon Disulfide	4.860	76	15702	1.28	ug/L	93
16) Acrolein	5.293	56	2467	3.44	ug/L	82
17) Allyl chloride	5.458	41	5137	0.88	ug/L	97
18) Methylene Chloride	5.592	49	14996	2.26	ug/L	91
19) Acetone	5.665	43	8355	7.39	ug/L	98
20) Methyl acetate	5.811	43	14650	4.90	ug/L	98
21) trans-1,2-Dichloroethene	5.799	61	6999	1.11	ug/L	90
22) Hexane	5.891	56	3638m	1.51	ug/L	
23) Methyl Tert Butyl Ether	5.927	73	13006	1.09	ug/L	93
24) Tert Butyl Alcohol	6.031	59	1621m	5.13	ug/L	
25) Acetonitrile	6.250	41	4659	11.78	ug/L	80
26) Di-isopropyl ether	6.372	45	15839	1.11	ug/L	98
27) Chloroprene	6.519	53	4289	0.84	ug/L	90
28) 1,1-Dichloroethane	6.543	63	8908	1.16	ug/L	95
29) Acrylonitrile	6.610	52	7837	7.19	ug/L	96
30) ETBE	6.799	59	13427	1.00	ug/L	95
31) Vinyl acetate	6.830	43	39252	4.34	ug/L	91
32) cis-1,2-Dichloroethene	7.177	96	5306	1.18	ug/L	94
33) 2,2-Dichloropropane	7.299	77	5160	0.84	ug/L	96
34) Bromochloromethane	7.403	128	2702	1.17	ug/L	98
35) Cyclohexane	7.415	56	7183	1.13	ug/L	97
36) Chloroform	7.470	83	9234	1.14	ug/L	90
37) Ethyl acetate	7.598	43	22247	5.88	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Tetrahydrofuran	7.689	42	1275m	1.05	ug/L		
40) Carbon Tetrachloride	7.646	117	4717	0.78	ug/L		89
41) 1,1,1-Trichloroethane	7.720	97	6788	0.97	ug/L		96
42) 2-Butanone	7.829	43	8277	4.73	ug/L		92
43) 1,1-Dichloropropene	7.848	75	6814	1.17	ug/L		82
44) tert-Butyl formate	7.963	59	4632	1.55	ug/L	#	60
45) Propionitrile	8.152	54	4316	8.85	ug/L	#	45
46) Methacrylonitrile	8.165	41	27254	9.34	ug/L		98
47) Benzene	8.122	78	19949	1.19	ug/L		96
48) TAME	8.213	73	11303	0.97	ug/L		91
49) Isobutyl alcohol	8.213	43	4877	38.43	ug/L	#	67
51) 1,2-Dichloroethane	8.335	62	7904	1.15	ug/L		98
52) Tert Amyl Alcohol	8.421	59	771m	3.46	ug/L		
53) Trichloroethene	8.732	95	5947	1.28	ug/L		90
54) Methylcyclohexane	8.726	83	6912	1.21	ug/L		96
55) Dibromomethane	9.177	93	3634	1.20	ug/L		84
56) 1,2-Dichloropropane	9.274	63	5060	1.17	ug/L		96
57) Bromodichloromethane	9.329	83	5644	0.96	ug/L		95
58) Methyl methacrylate	9.469	41	1769	0.52	ug/L	#	69
60) 2-Chloroethyl vinyl ether	9.884	63	10579	3.42	ug/L		93
61) cis-1,3-Dichloropropene	9.969	75	5462	0.83	ug/L		99
64) Toluene	10.207	91	21221	1.19	ug/L		98
65) 2-Nitropropane	10.451	41	1682	1.40	ug/L		92
66) 4-Methyl-2-pentanone	10.567	43	16939	4.00	ug/L		94
67) trans-1,3-Dichloropropene	10.615	75	4530	0.80	ug/L		85
68) Tetrachloroethene	10.609	166	5862	1.18	ug/L		93
69) Ethyl methacrylate	10.737	69	1974m	0.38	ug/L		
70) 1,1,2-Trichloroethane	10.786	83	3774	1.11	ug/L		99
71) Dibromochloromethane	10.975	129	3262	0.67	ug/L		87
72) 1,3-Dichloropropane	11.067	76	7936	1.16	ug/L		91
73) 1,2-Dibromoethane	11.237	107	4156	0.99	ug/L		86
74) 3,3-dimethyl-1-butanol	11.347	57	4168	15.50	ug/L		91
75) 2-hexanone	11.402	43	10499	3.70	ug/L		96
76) 1-Chlorohexane	11.682	91	5367m	1.08	ug/L		
77) Ethylbenzene	11.743	91	23617	1.18	ug/L		97
78) Chlorobenzene	11.743	112	14212	1.20	ug/L		97
79) 1,1,1,2-Tetrachloroethane	11.792	131	2978	0.70	ug/L		92
80) m,p-Xylene	11.883	91	32893	2.16	ug/L		96
81) o-Xylene	12.328	91	16521	1.12	ug/L		94
82) Styrene	12.383	104	9535	0.89	ug/L		95
83) Bromoform	12.438	173	1544	0.52	ug/L		92
84) Isopropylbenzene	12.633	105	18740	1.07	ug/L		97
87) cis-1,4-Dichloro-2-butene	12.993	53	700m	0.49	ug/L		
88) n-Propylbenzene	13.054	91	22955	1.06	ug/L		93
89) Bromobenzene	13.066	156	5963	0.83	ug/L		93
90) 1,1,2,2-Tetrachloroethane	13.127	83	5037	0.94	ug/L		84
91) 1,3,5-Trimethylbenzene	13.237	105	15265	1.03	ug/L		97
92) 2-Chlorotoluene	13.414	91	14088	1.03	ug/L		96
93) trans-1,4-Dichloro-2-B...	13.316	53	932m	0.78	ug/L		
94) 1,2,3-Trichloropropane	13.292	110	1610	1.07	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

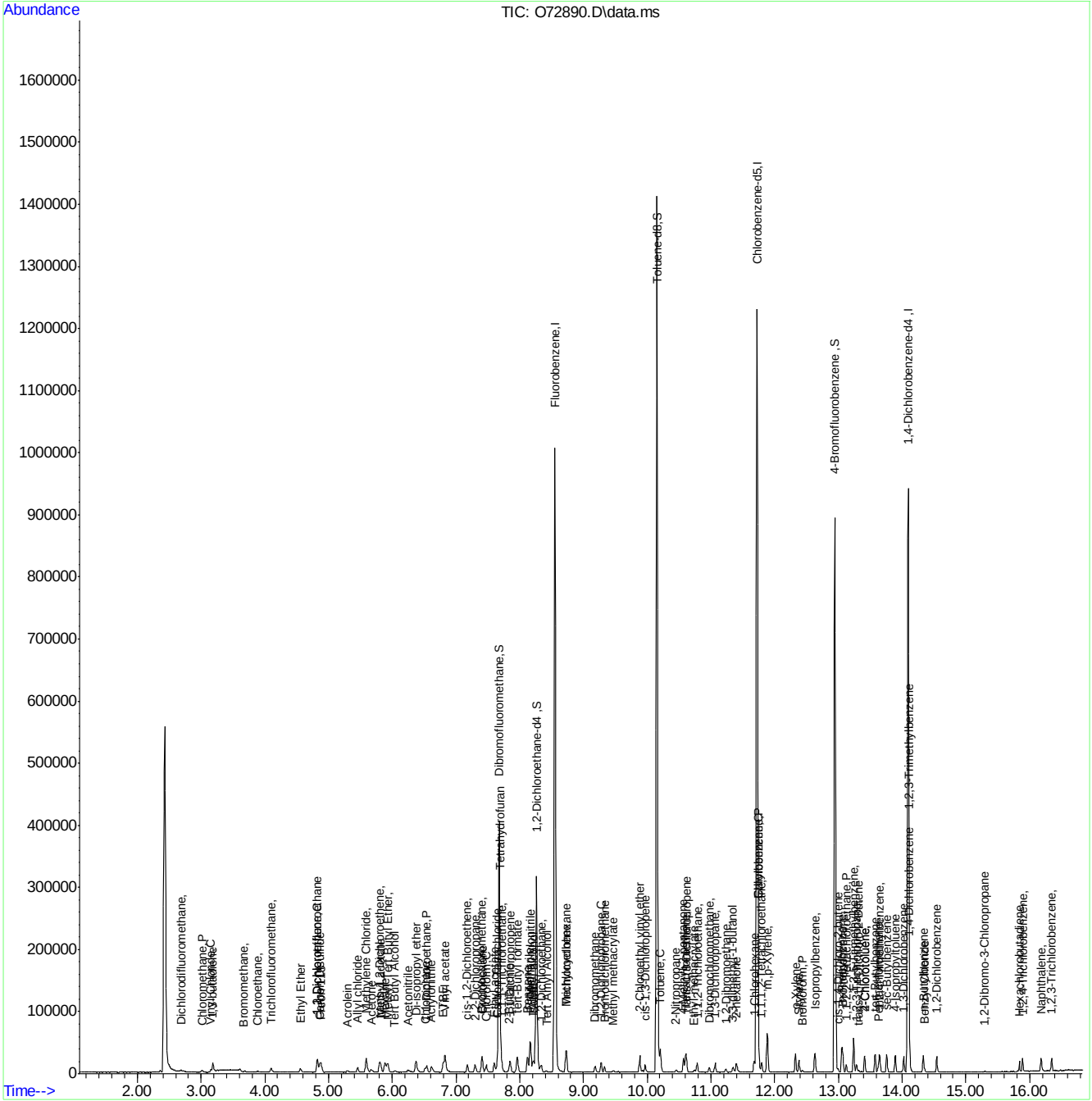
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 4-Chlorotoluene	13.414	91	14088	1.03	ug/L	98
97) tert-Butylbenzene	13.572	91	9181	1.09	ug/L	89
99) 1,2,4-Trimethylbenzene	13.645	105	14973	1.03	ug/L	87
100) Pentachloroethane	13.627	167	876m	0.33	ug/L	
101) sec-Butylbenzene	13.761	105	17896	1.08	ug/L	97
102) 4-Isopropyltoluene	13.895	119	14576	1.03	ug/L	92
103) 1,3-Dichlorobenzene	14.029	146	10442	1.13	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	15482	1.05	ug/L	88
105) 1,4-Dichlorobenzene	14.115	146	11549	1.18	ug/L	93
106) n-Butylbenzene	14.334	92	7264	0.98	ug/L	90
107) Benzyl Chloride	14.352	126	586m	0.40	ug/L	
108) 1,2-Dichlorobenzene	14.548	146	9928	1.13	ug/L	94
109) 1,2-Dibromo-3-Chloropr...	15.291	75	305m	0.40	ug/L	
110) Hexachlorobutadiene	15.840	225	2267	1.29	ug/L	89
111) 1,2,4-Trichlorobenzene	15.895	180	5856	1.12	ug/L	98
112) Naphthalene	16.181	128	13559	1.02	ug/L	97
113) 1,2,3-Trichlorobenzene	16.346	180	5567	1.17	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

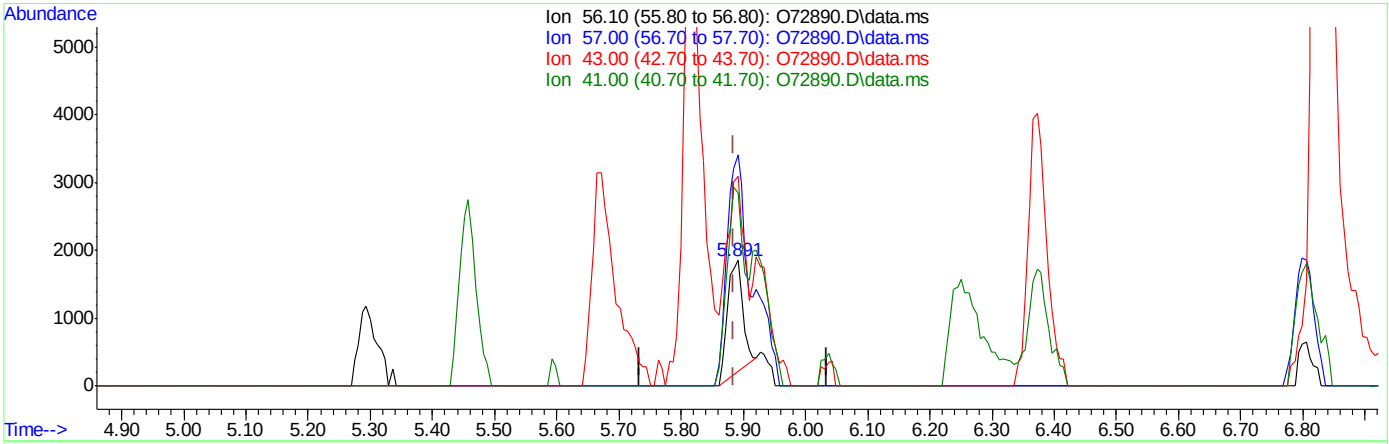
Sample Number: VO2866-IC2866
Lab FileID: O72890.D
Injection Time: 12/08/22 09:56
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

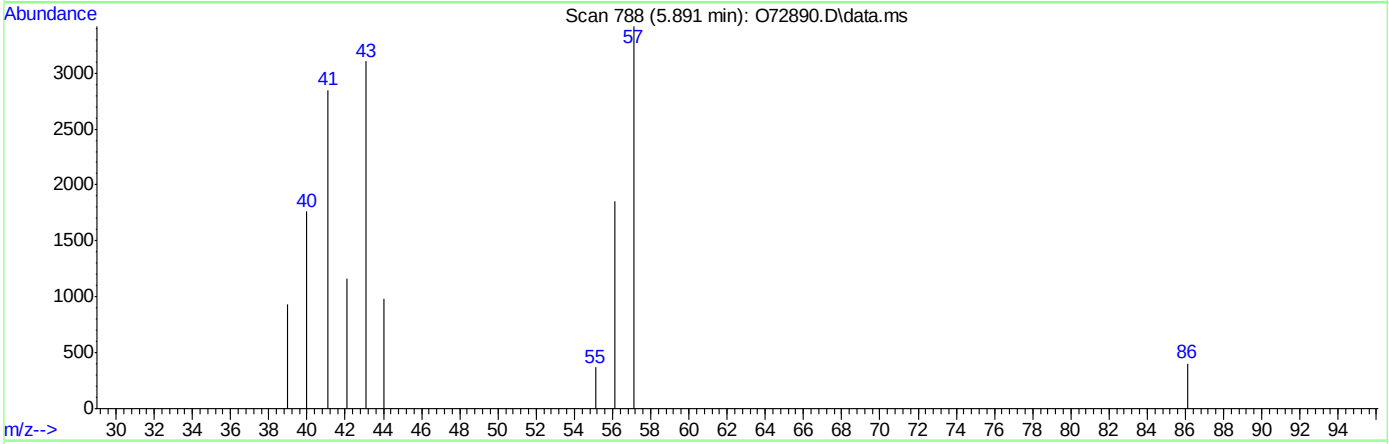
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Poor instrument integration
Tert-Butyl Alcohol	75-65-0		6.03	Missed peak
Tetrahydrofuran	109-99-9		7.69	Missed peak
Tert-Amyl Alcohol	75-85-4		8.42	Missed peak
Ethyl Methacrylate	97-63-2		10.74	Missed peak
1-Chlorohexane	544-10-5		11.68	Poor instrument integration
cis-1,4-Dichloro-2-Butene	1476-11-5		12.99	Missed peak
trans-1,4-Dichloro-2-Butene	110-57-6		13.32	Missed peak
Pentachloroethane	76-01-7		13.63	Missed peak
Benzyl Chloride	100-44-7		14.35	Missed peak
1,2-Dibromo-3-chloropropane	96-12-8		15.29	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(22) Hexane

5.891min (+0.006) 1.20ug/L

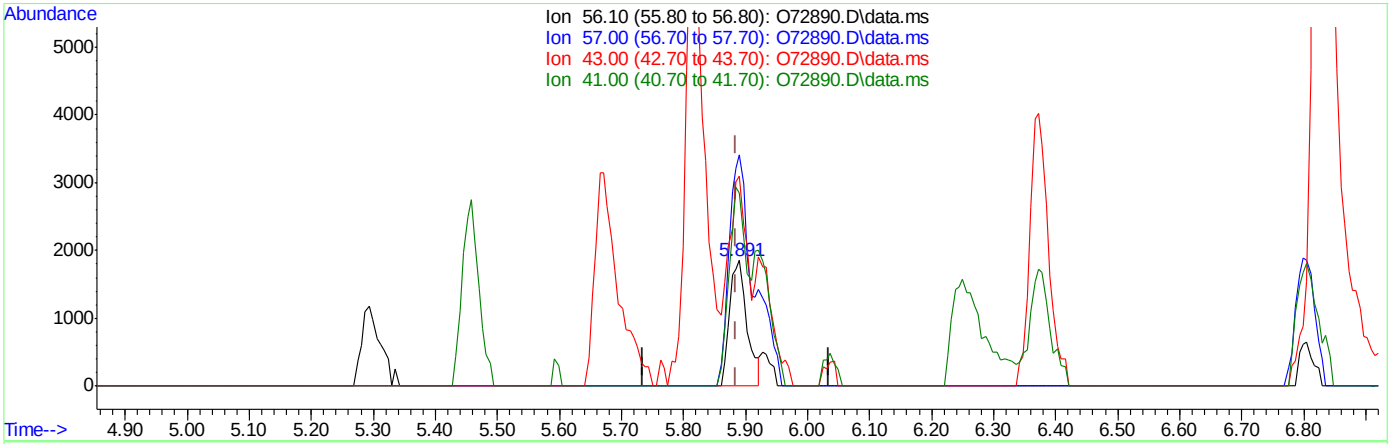
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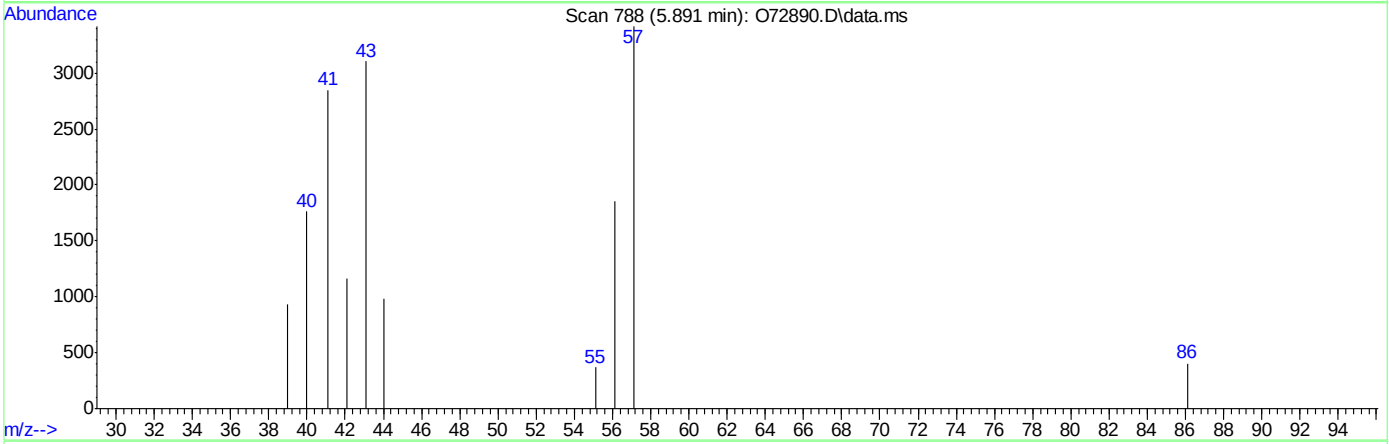
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	166.92#
43.00	149.90	110.79#
41.00	165.70	139.34#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(22) Hexane

5.891min (+0.006) 1.51ug/L m

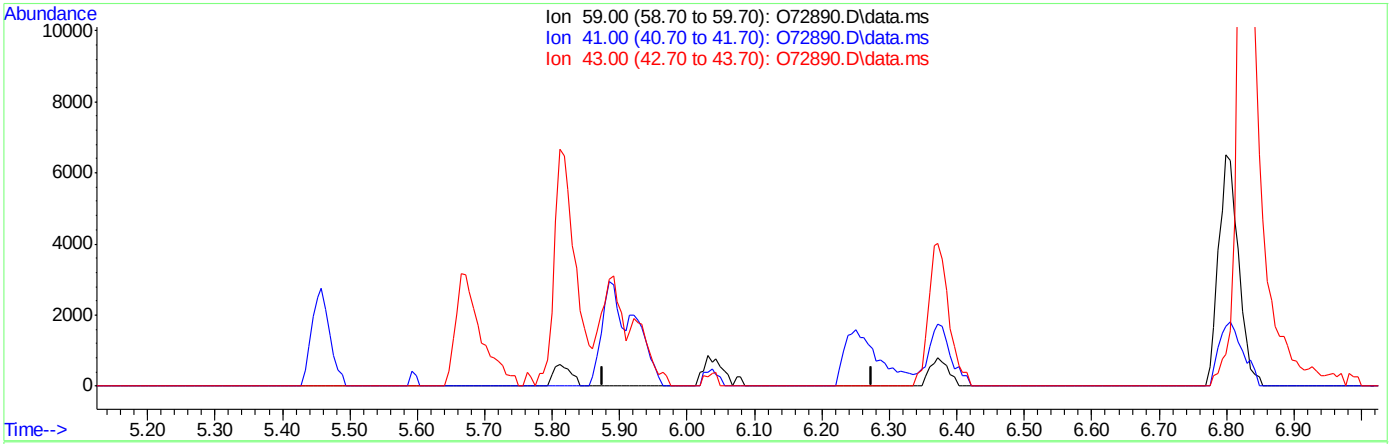
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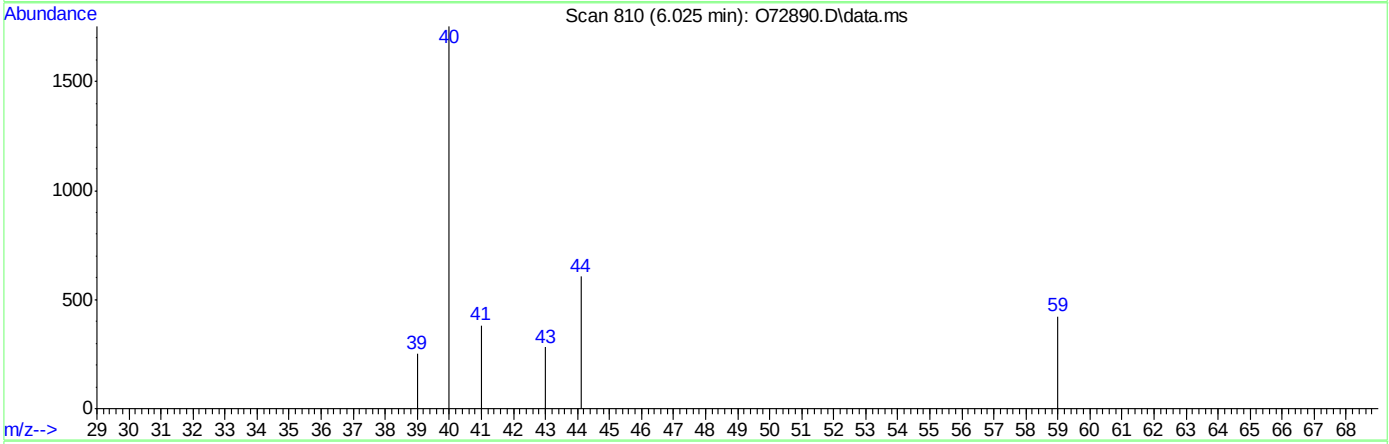
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	184.40
43.00	149.90	167.46
41.00	165.70	153.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(24) Tert Butyl Alcohol

6.025min (-6.025) 0.00ug/L

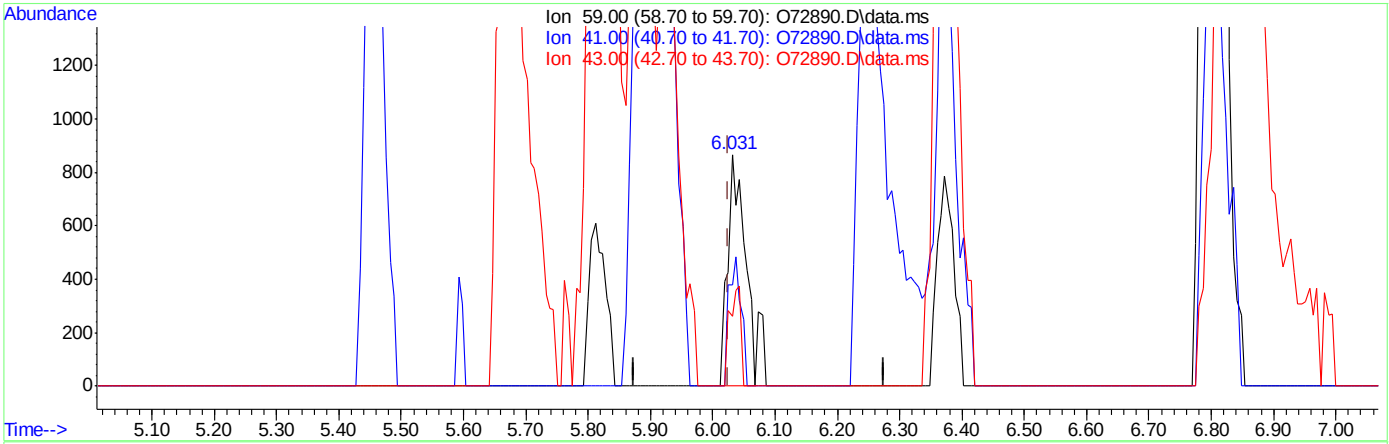
response 0

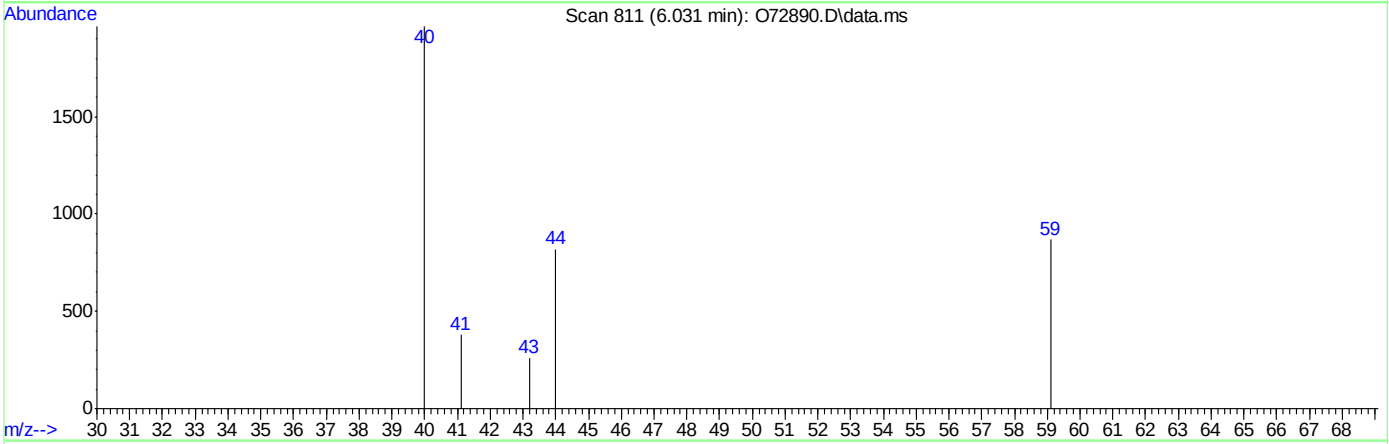
Ion	Exp%	Act%
59.00	100	0.00
41.00	28.00	0.00#
43.00	19.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(24) Tert Butyl Alcohol

6.031min (+0.006) 5.13ug/L m

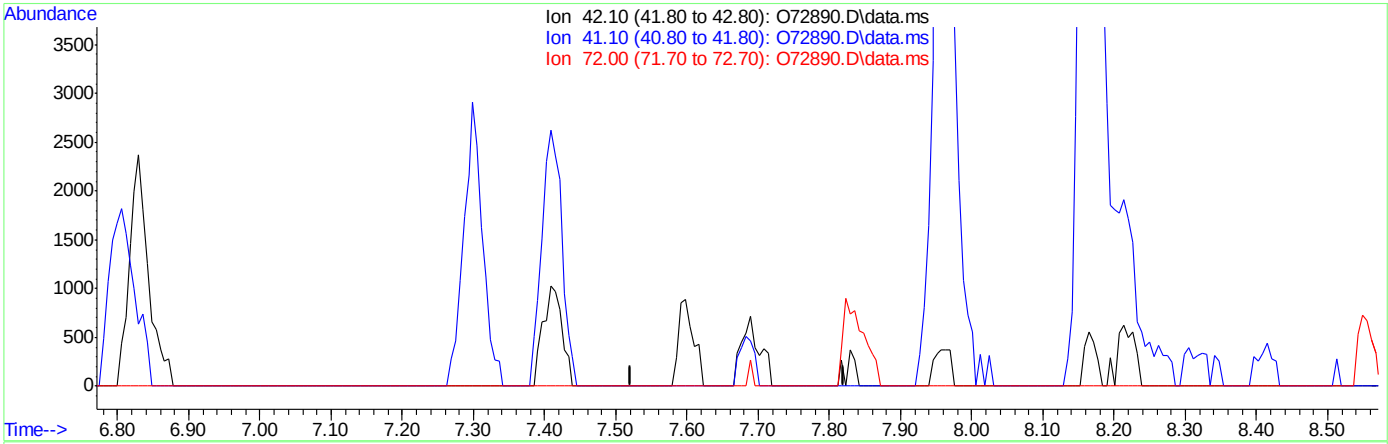
response 1621

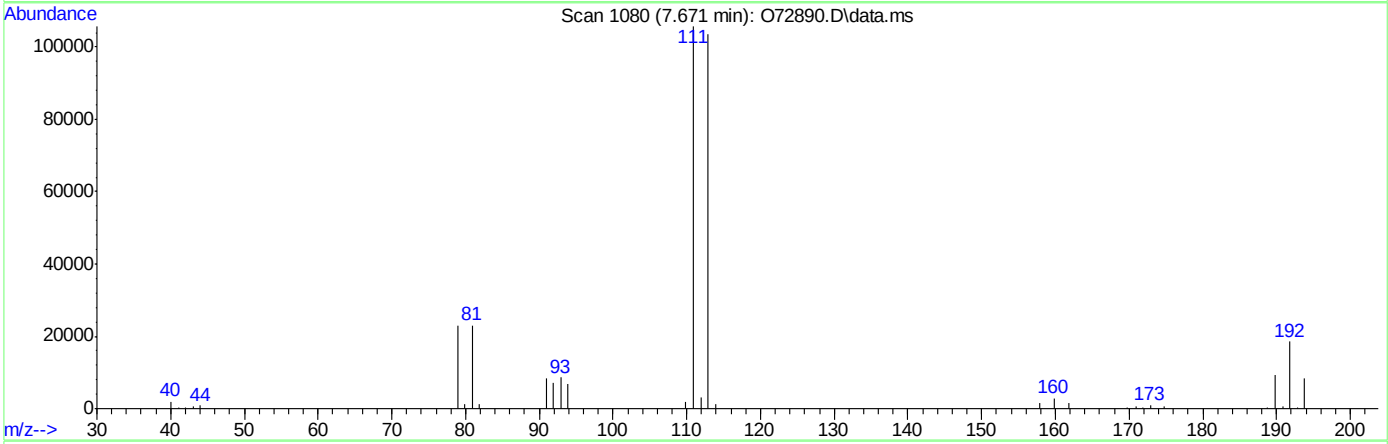
Ion	Exp%	Act%
59.00	100	100
41.00	28.00	43.60
43.00	19.80	30.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(38) Tetrahydrofuran

7.671min (-7.671) 0.00ug/L

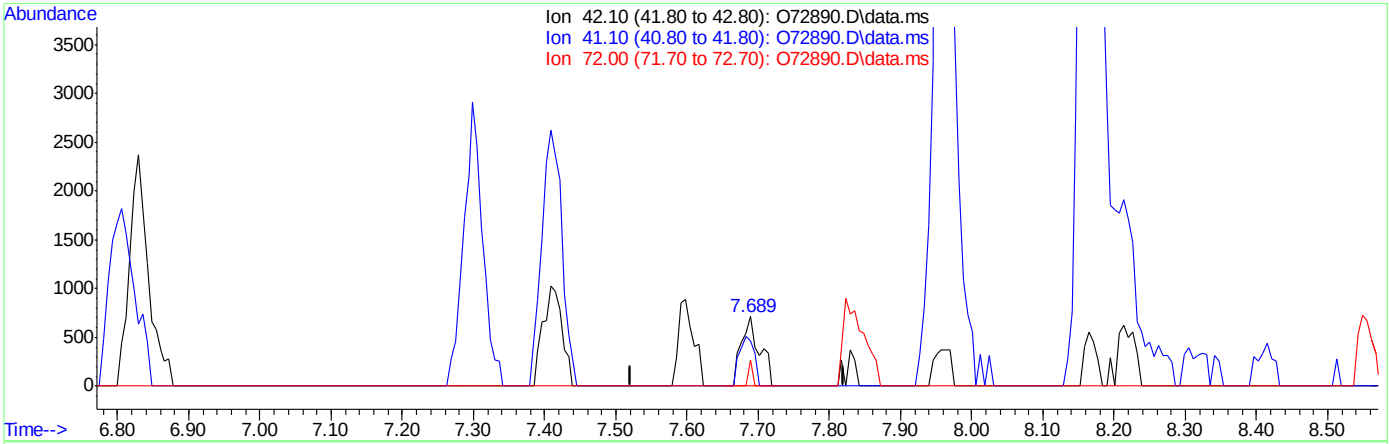
response 0

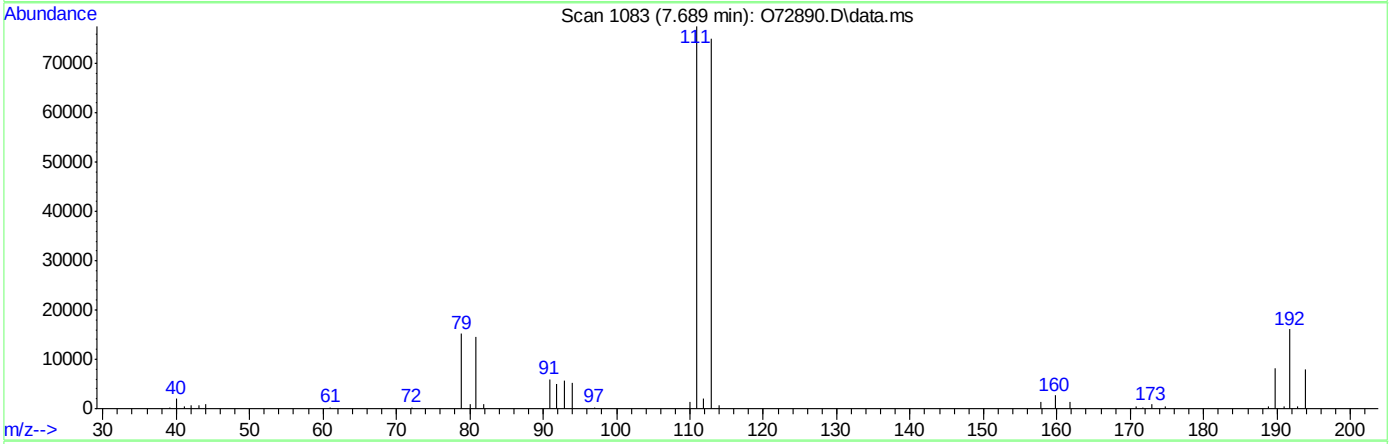
Ion	Exp%	Act%
42.10	100	0.00
41.10	55.40	0.00#
72.00	37.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(38) Tetrahydrofuran

7.689min (+0.018) 1.05ug/L m

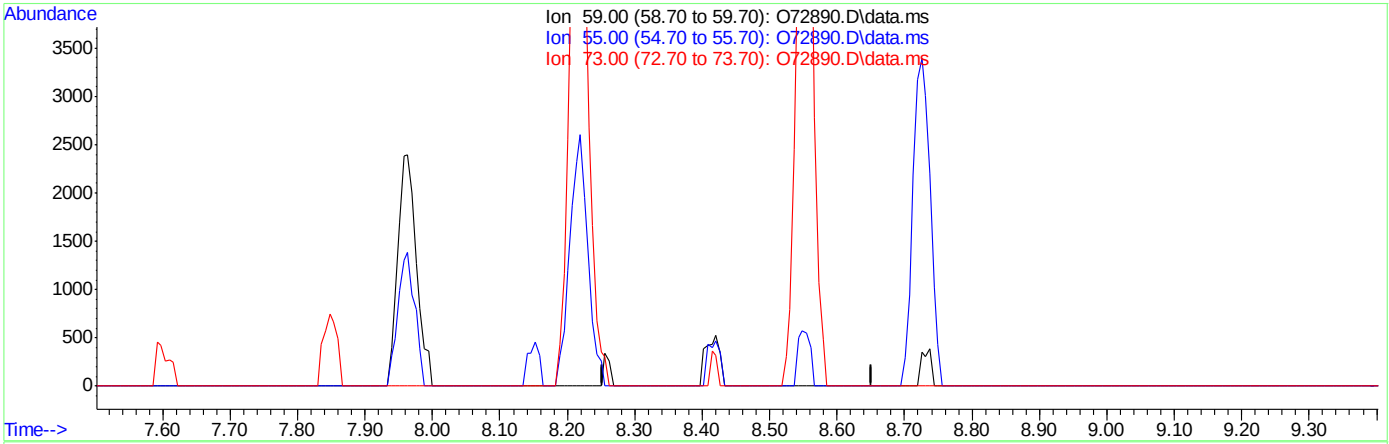
response 1275

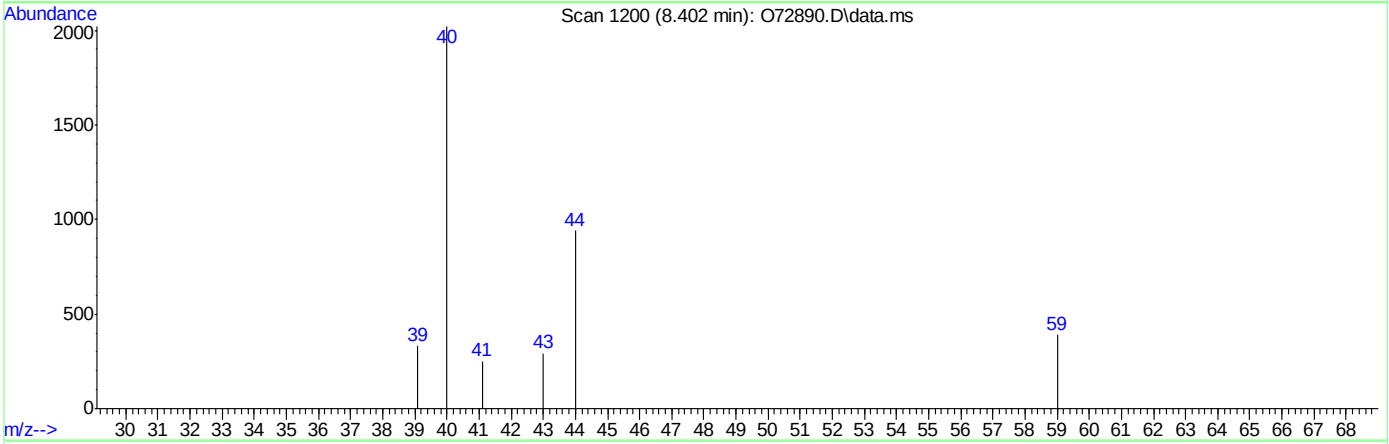
Ion	Exp%	Act%
42.10	100	100
41.10	55.40	64.34
72.00	37.20	37.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(52) Tert Amyl Alcohol

8.402min (-8.402) 0.00ug/L

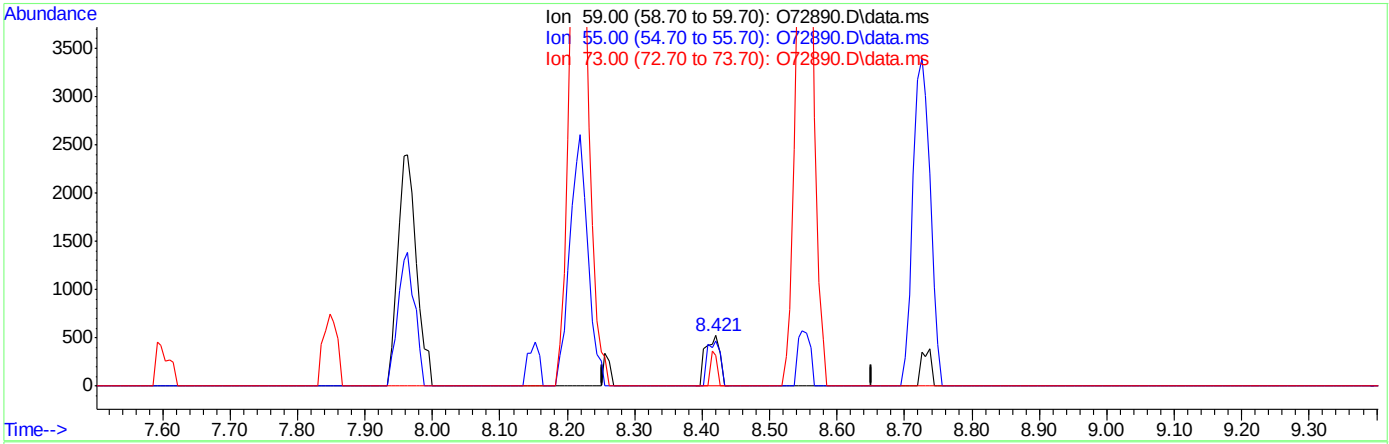
response 0

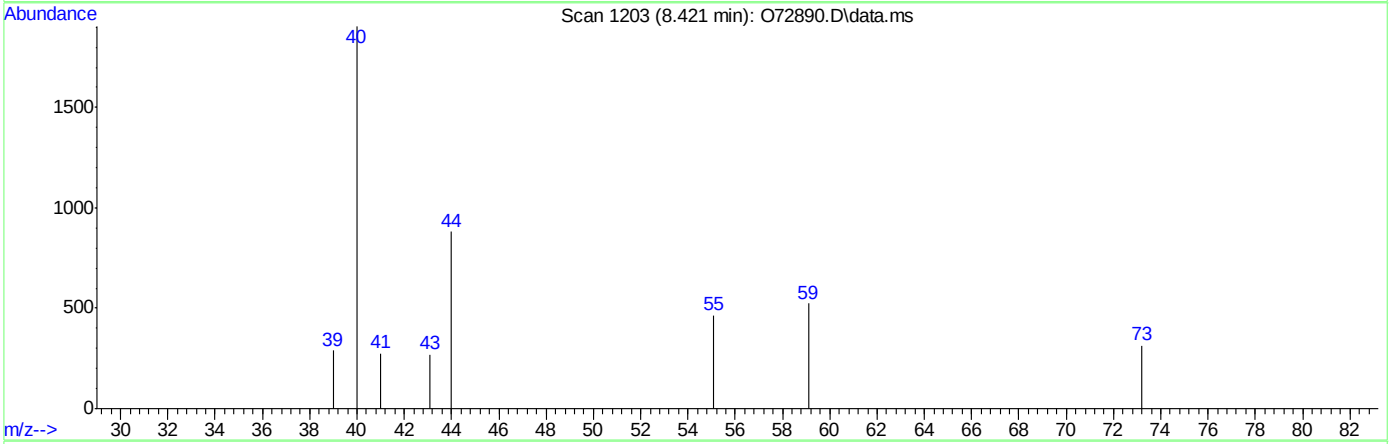
Ion	Exp%	Act%
59.00	100	0.00
55.00	59.10	0.00#
73.00	59.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(52) Tert Amyl Alcohol

8.421min (+0.018) 3.46ug/L m

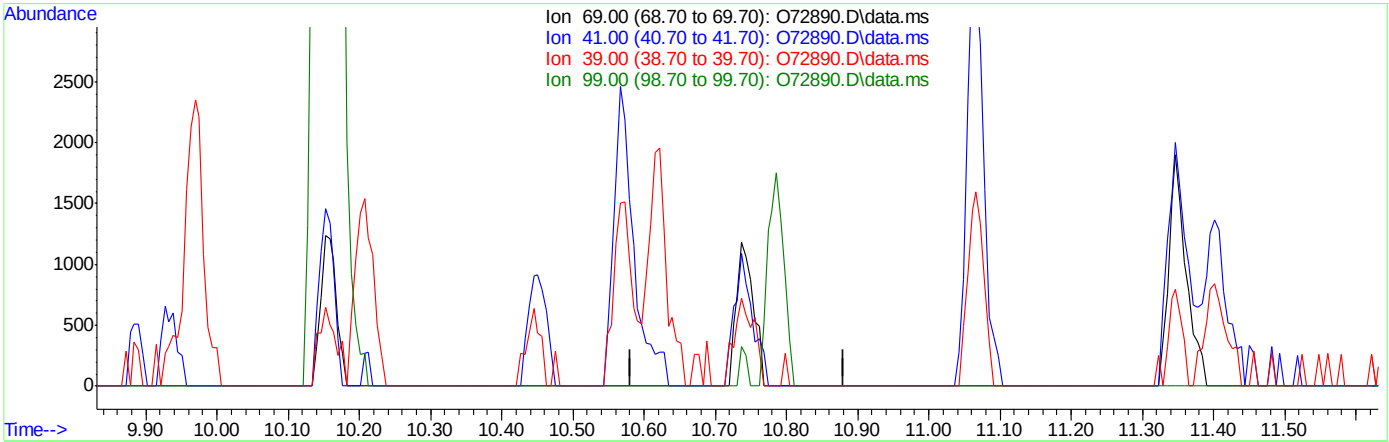
response 771

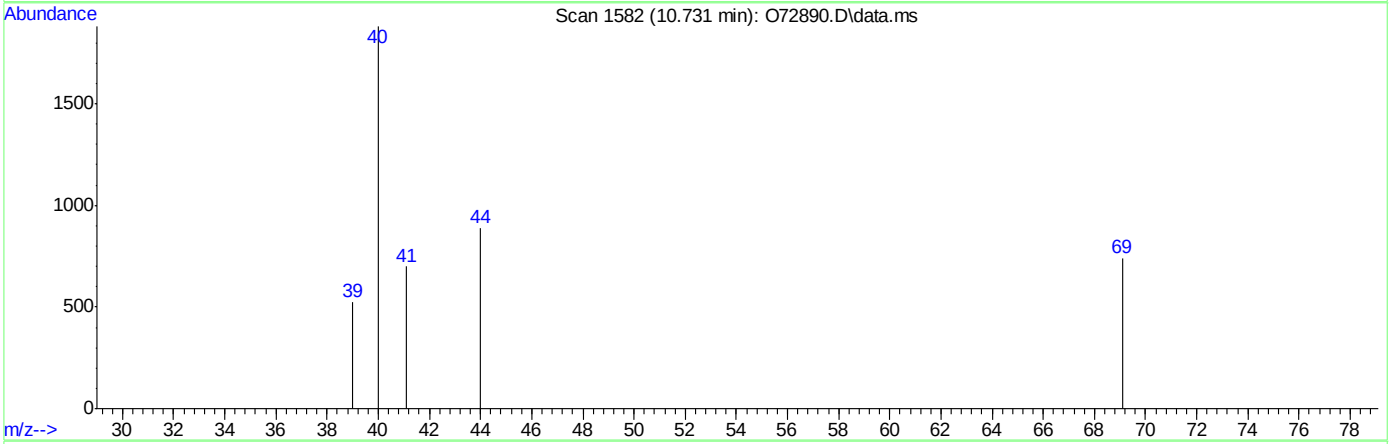
Ion	Exp%	Act%
59.00	100	100
55.00	59.10	88.91
73.00	59.90	60.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(69) Ethyl methacrylate

10.731min (-10.731) 0.00ug/L

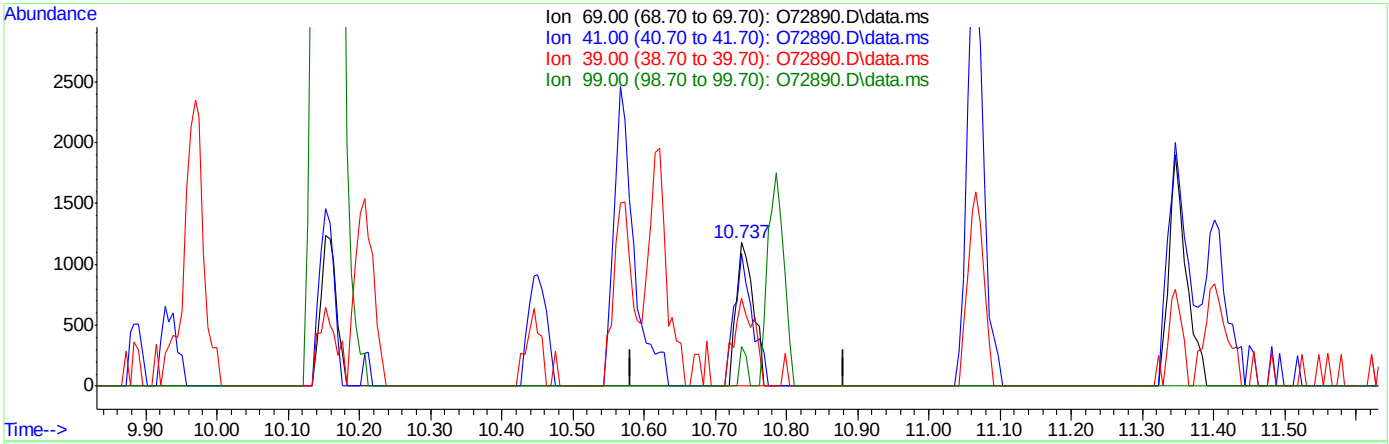
response 0

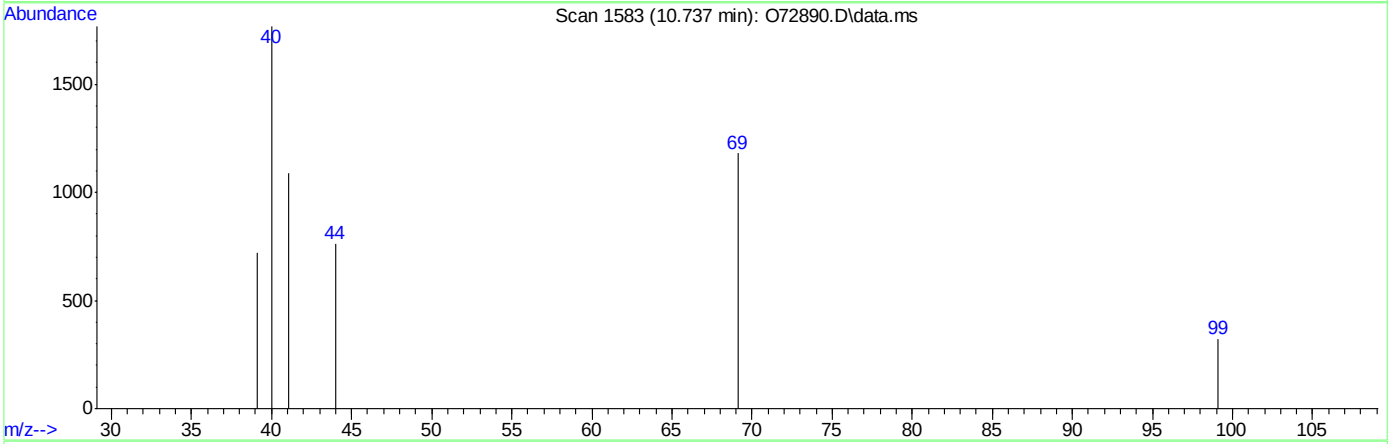
Ion	Exp%	Act%
69.00	100	0.00
41.00	80.20	0.00#
39.00	47.00	0.00#
99.00	18.40	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(69) Ethyl methacrylate

10.737min (+0.006) 0.38ug/L m

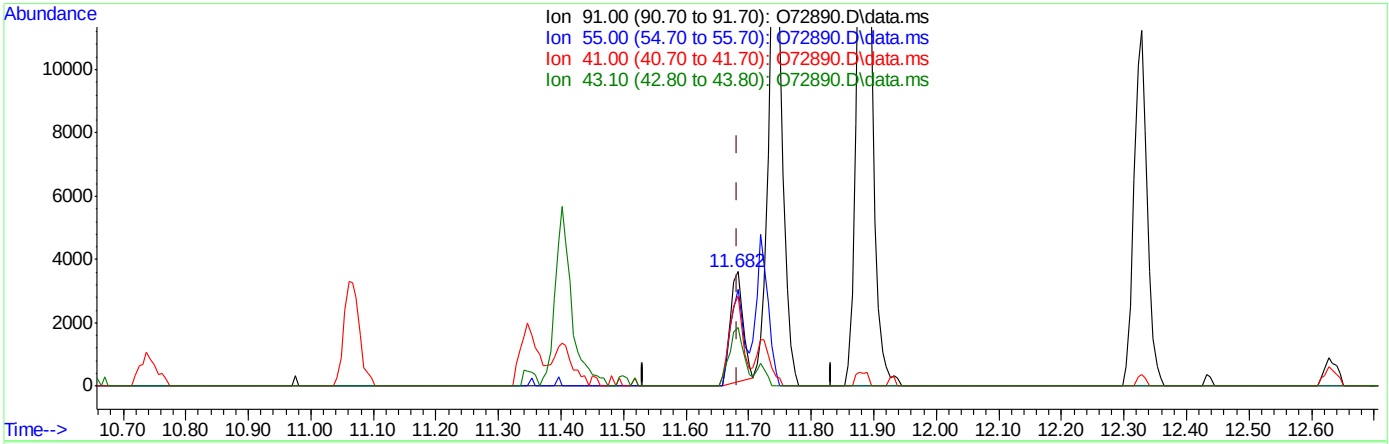
response 1974

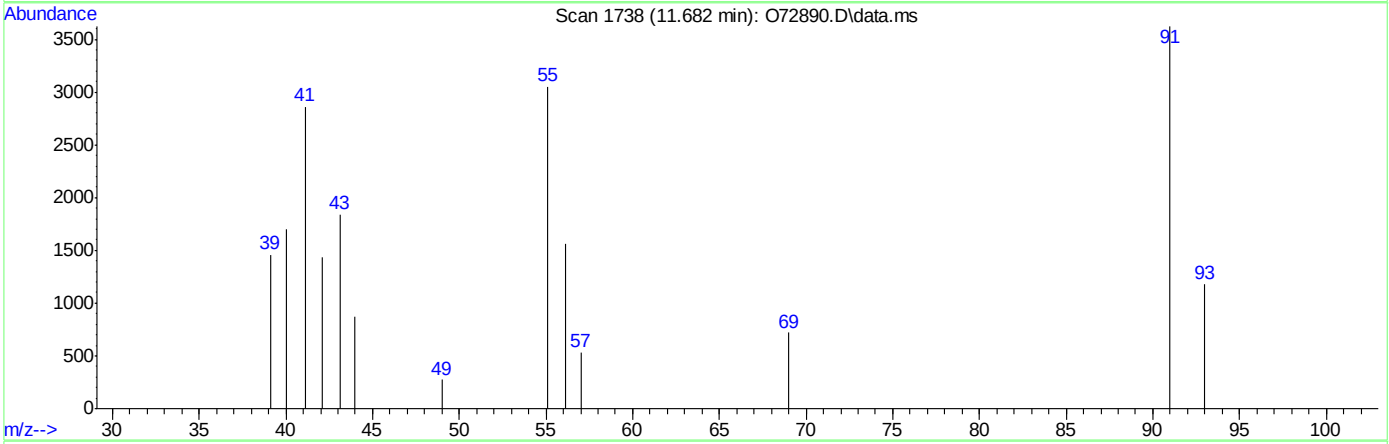
Ion	Exp%	Act%
69.00	100	100
41.00	80.20	92.12
39.00	47.00	61.27
99.00	18.40	27.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 1.00ug/L

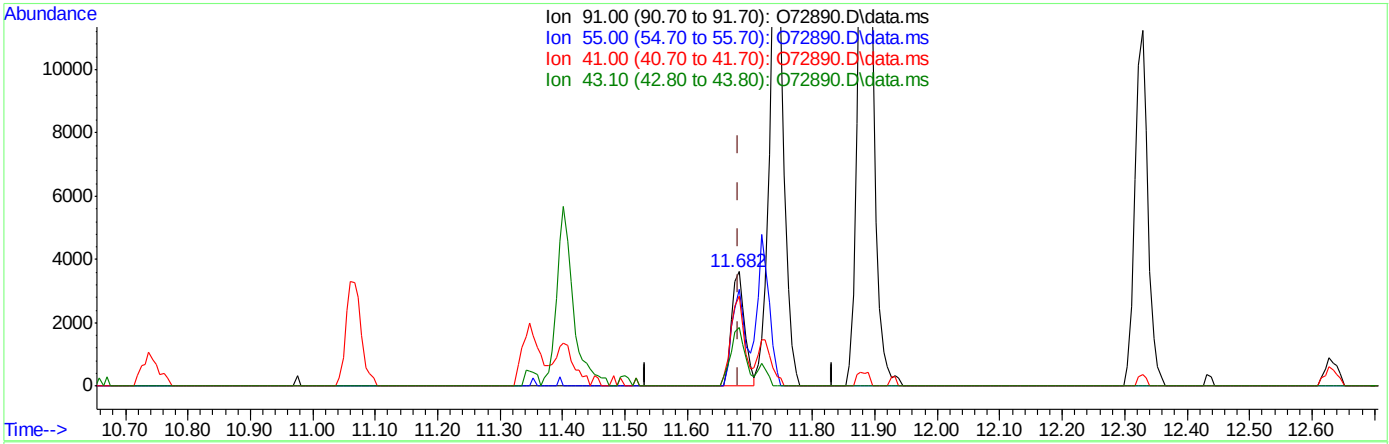
response 4975

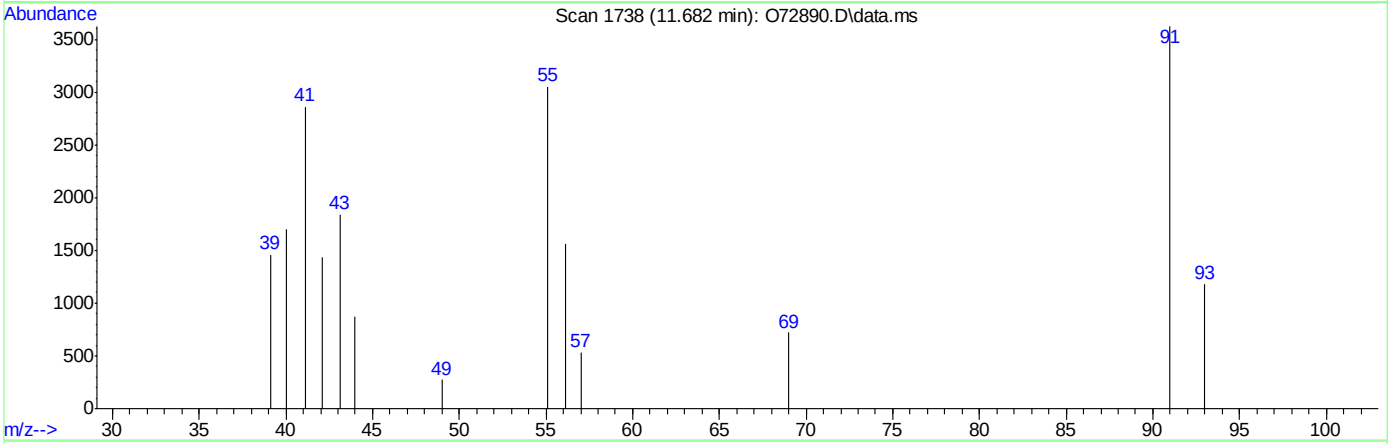
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	84.18
41.00	64.00	70.41
43.10	51.10	42.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 1.08ug/L m

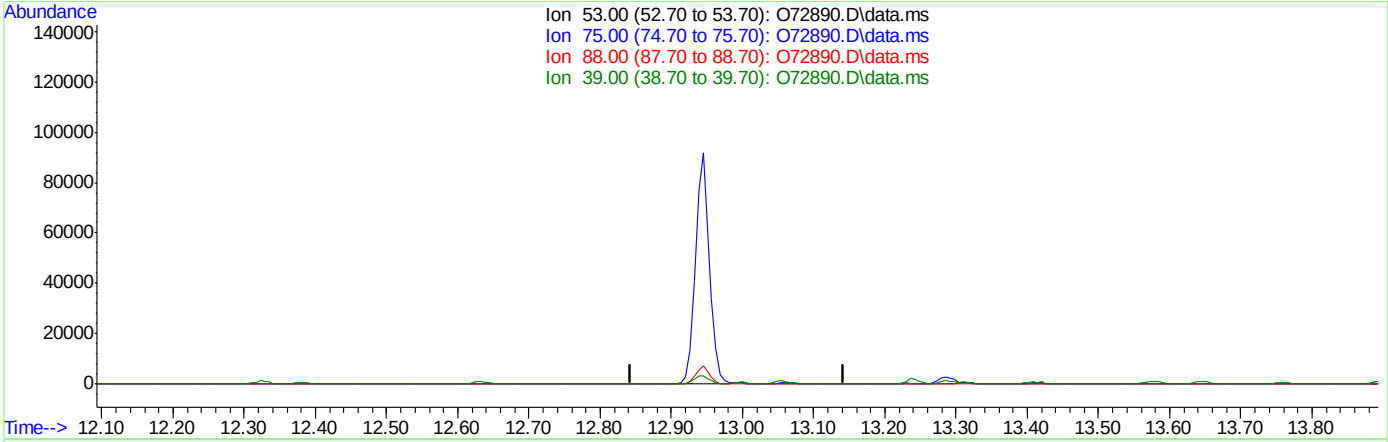
response 5367

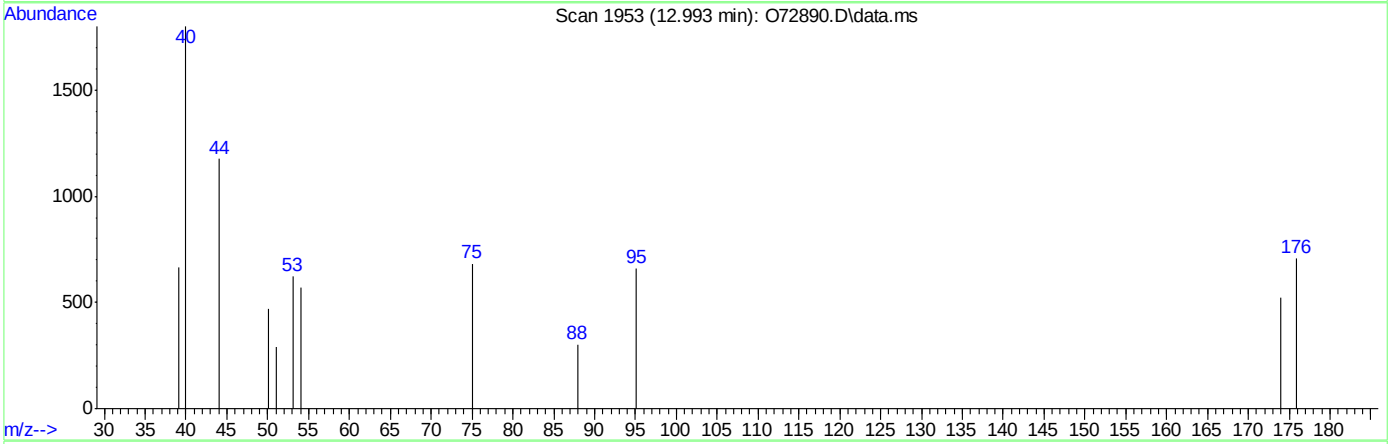
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	84.18
41.00	64.00	78.91
43.10	51.10	50.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(87) cis-1,4-Dichloro-2-butene

12.993min (-12.993) 0.00ug/L

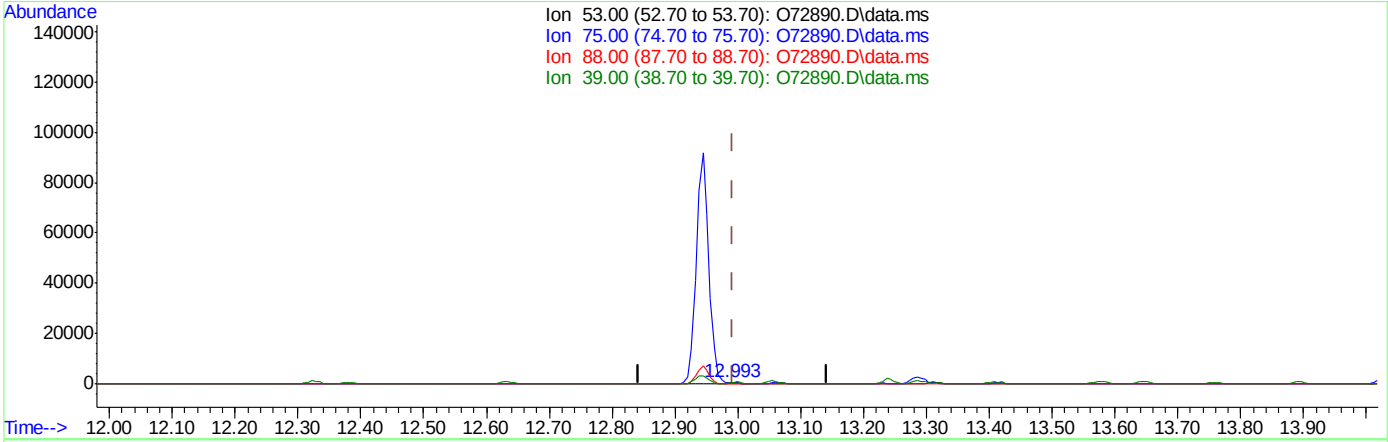
response 0

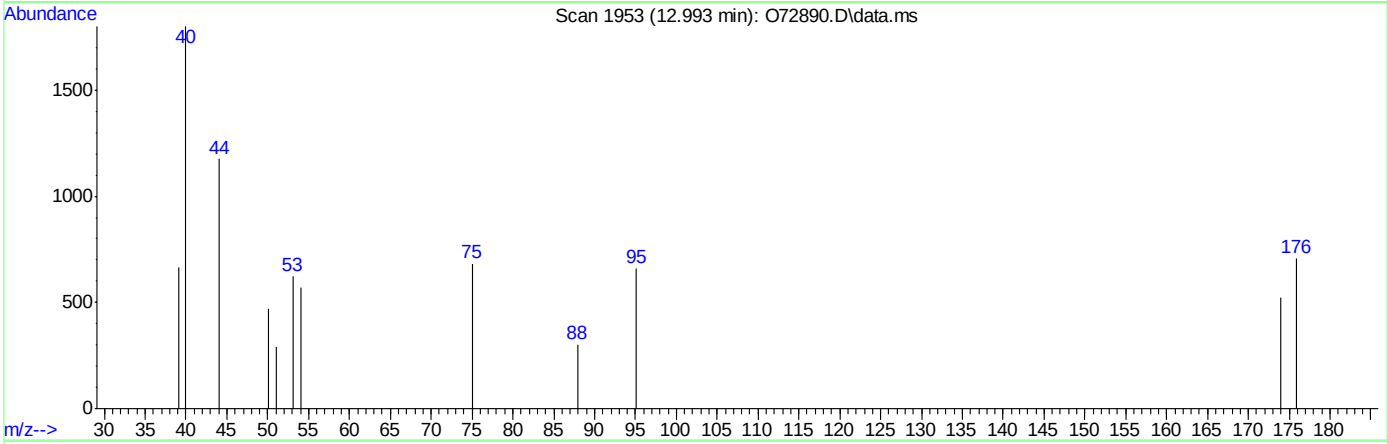
Ion	Exp%	Act%
53.00	100	0.00
75.00	94.00	0.00#
88.00	106.10	0.00#
39.00	52.70	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(87) cis-1,4-Dichloro-2-butene

12.993min (-0.000) 0.49ug/L m

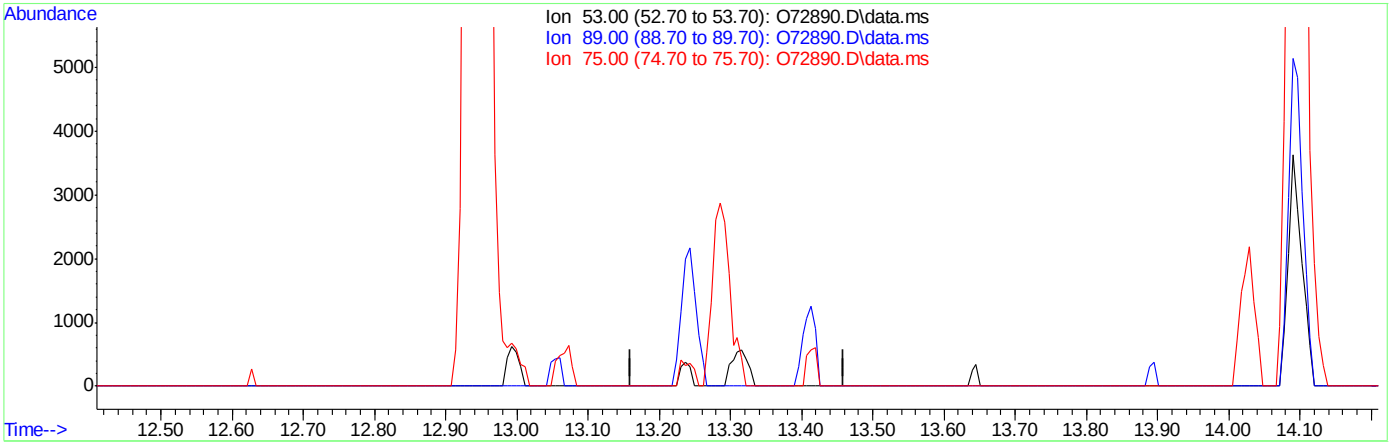
response 700

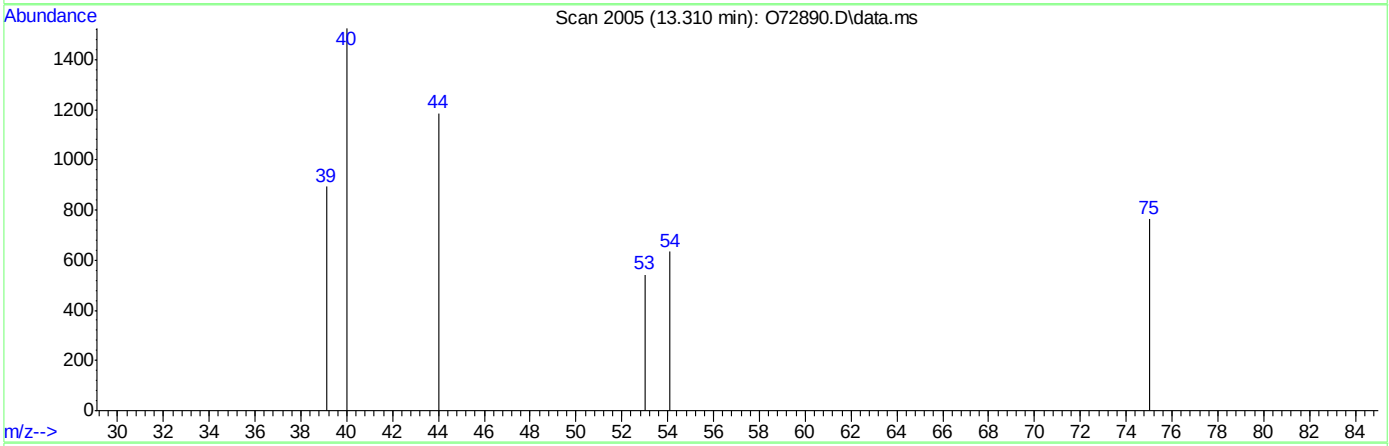
Ion	Exp%	Act%
53.00	100	100
75.00	94.00	109.29
88.00	106.10	48.56#
39.00	52.70	106.41#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(93) trans-1,4-Dichloro-2-Butene

13.310min (-13.310) 0.00ug/L

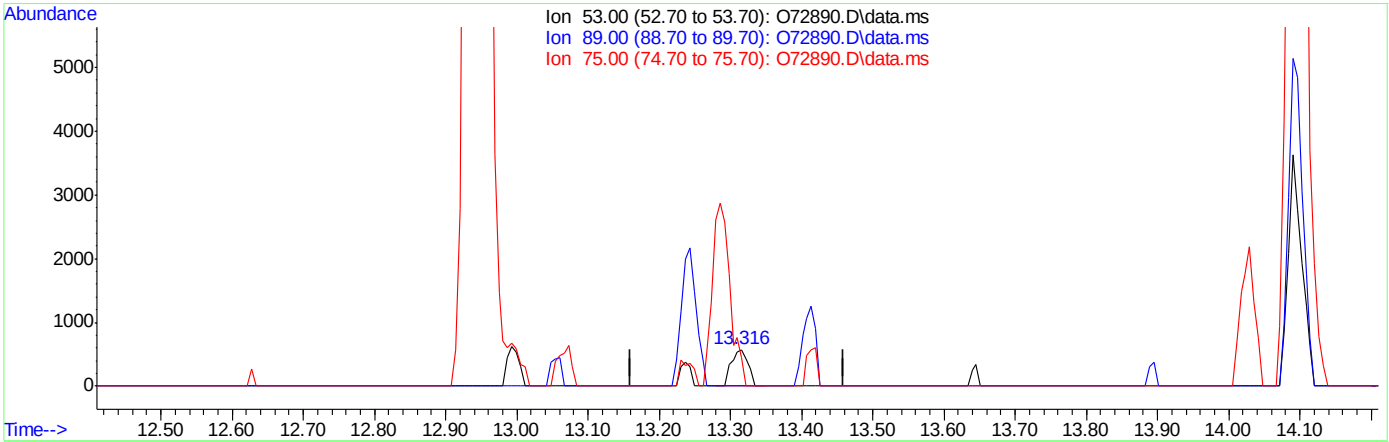
response 0

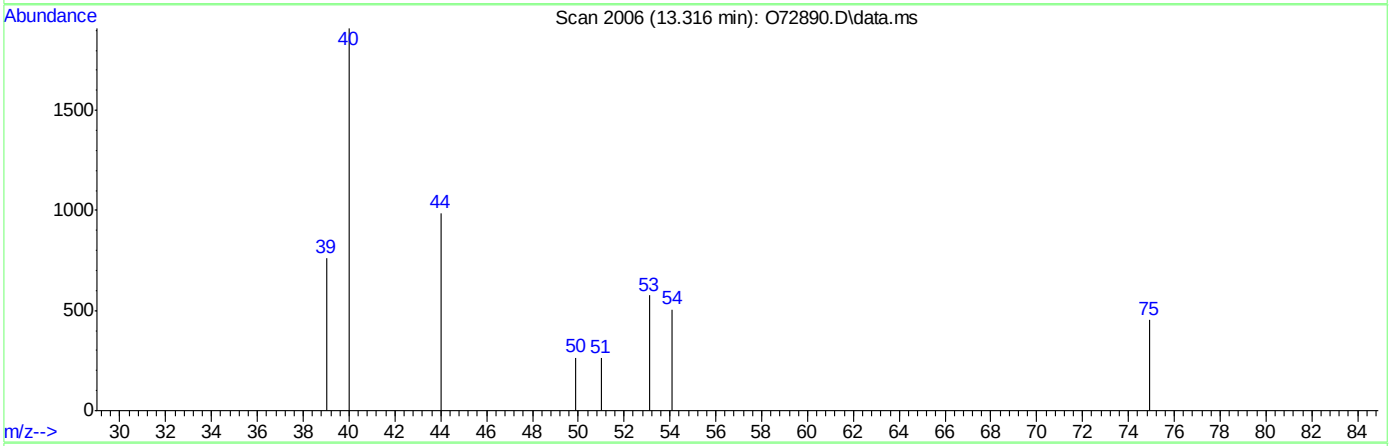
Ion	Exp%	Act%
53.00	100	0.00
89.00	62.50	0.00#
75.00	127.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(93) trans-1,4-Dichloro-2-Butene

13.316min (+0.006) 0.78ug/L m

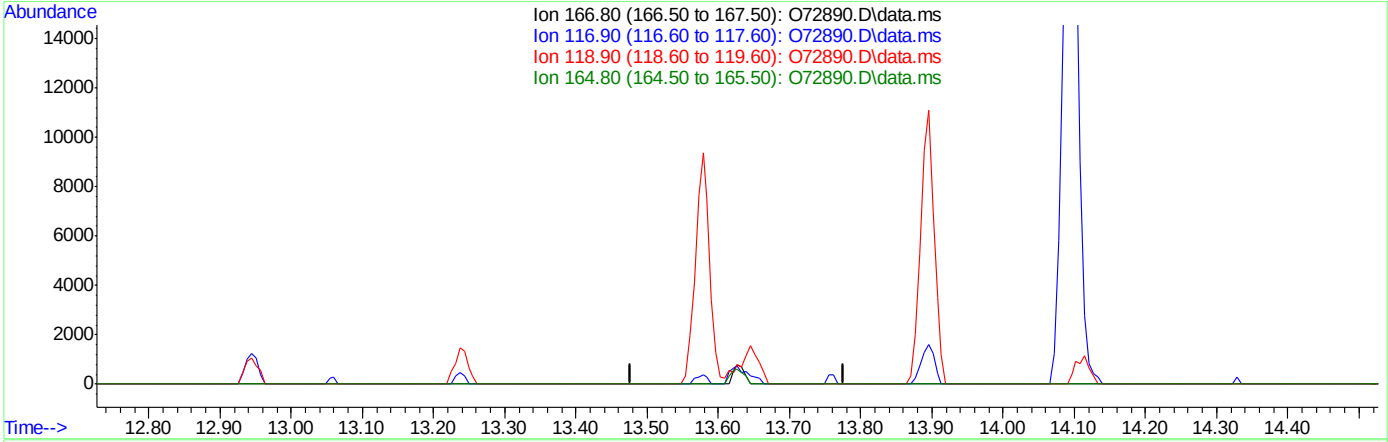
response 932

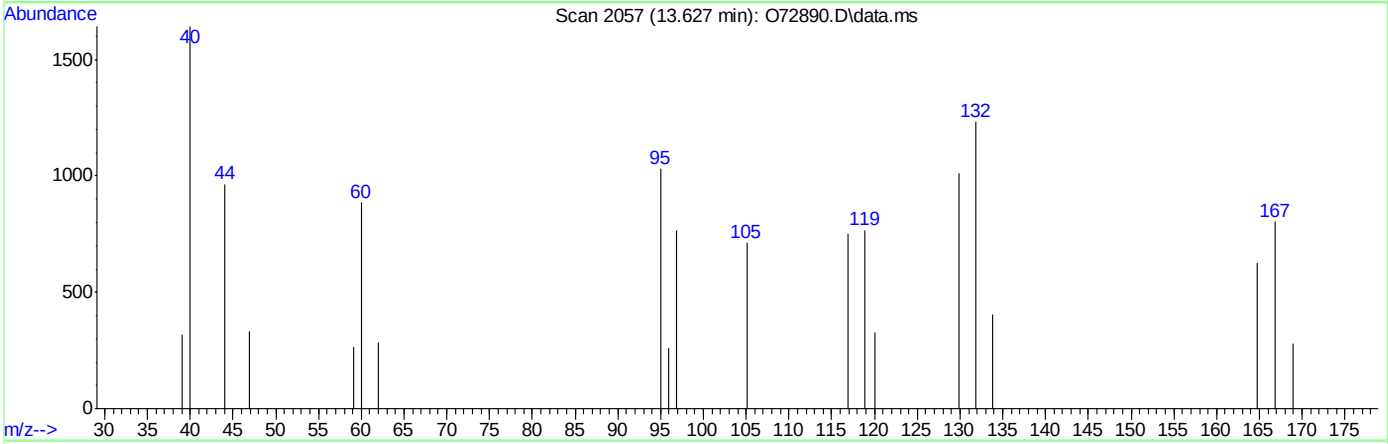
Ion	Exp%	Act%
53.00	100	100
89.00	62.50	0.00#
75.00	127.10	78.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(100) Pentachloroethane ( )

13.627min (-13.627) 0.00ug/L

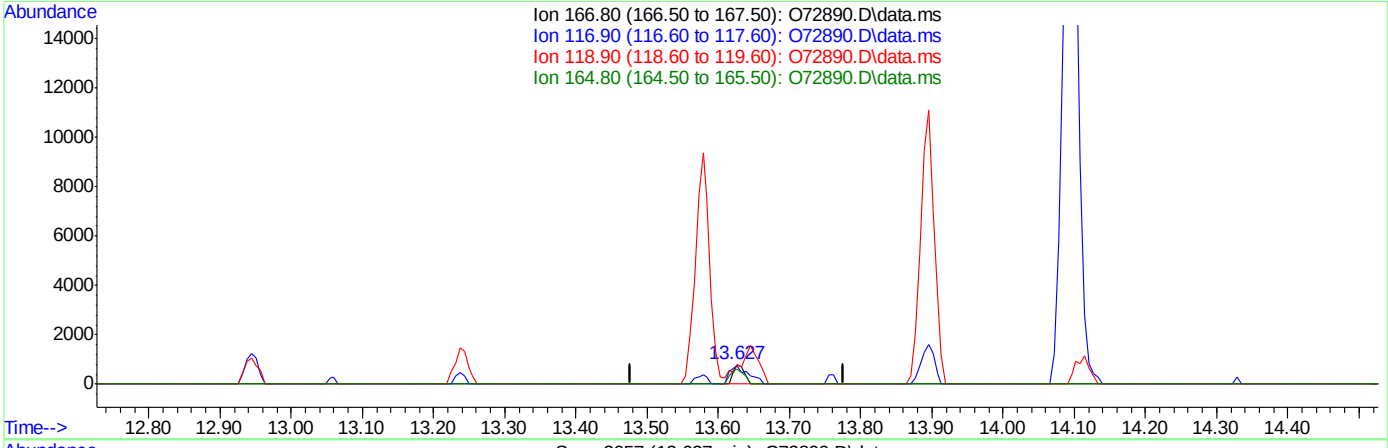
response 0

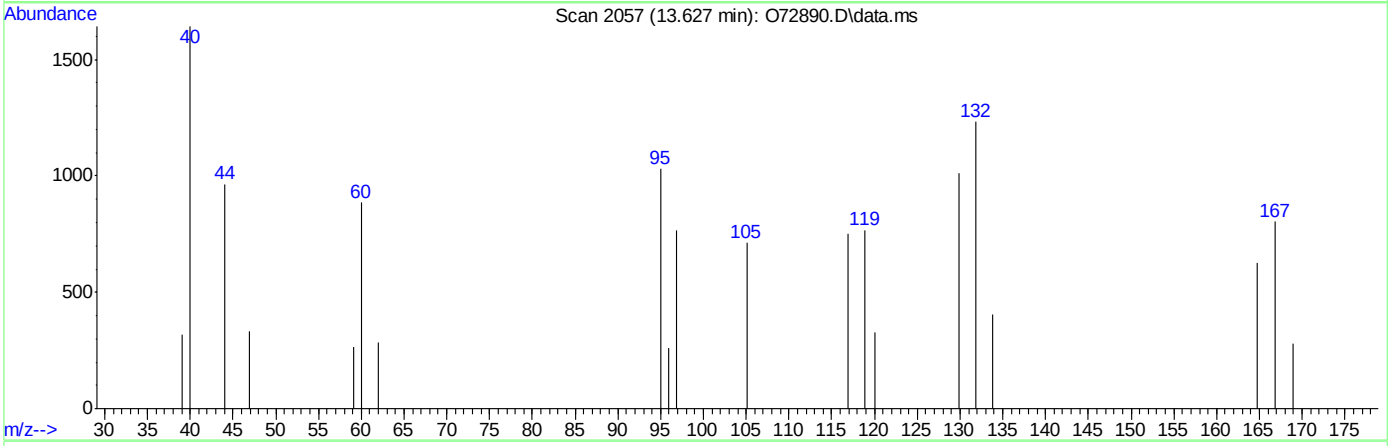
Ion	Exp%	Act%
166.80	100	0.00
116.90	96.70	0.00#
118.90	95.40	0.00#
164.80	79.80	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(100) Pentachloroethane ( )

13.627min (-0.000) 0.33ug/L m

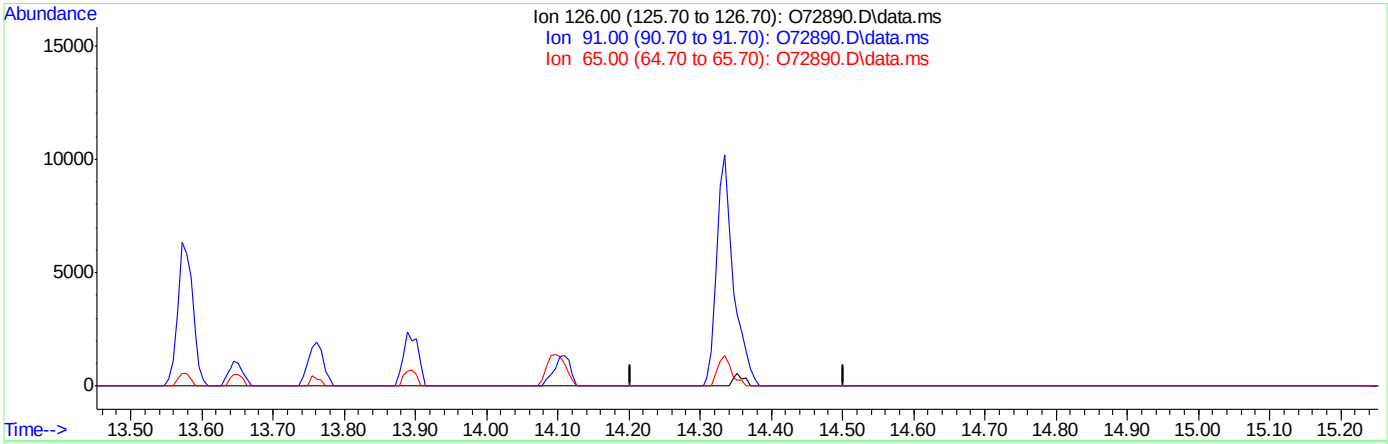
response 876

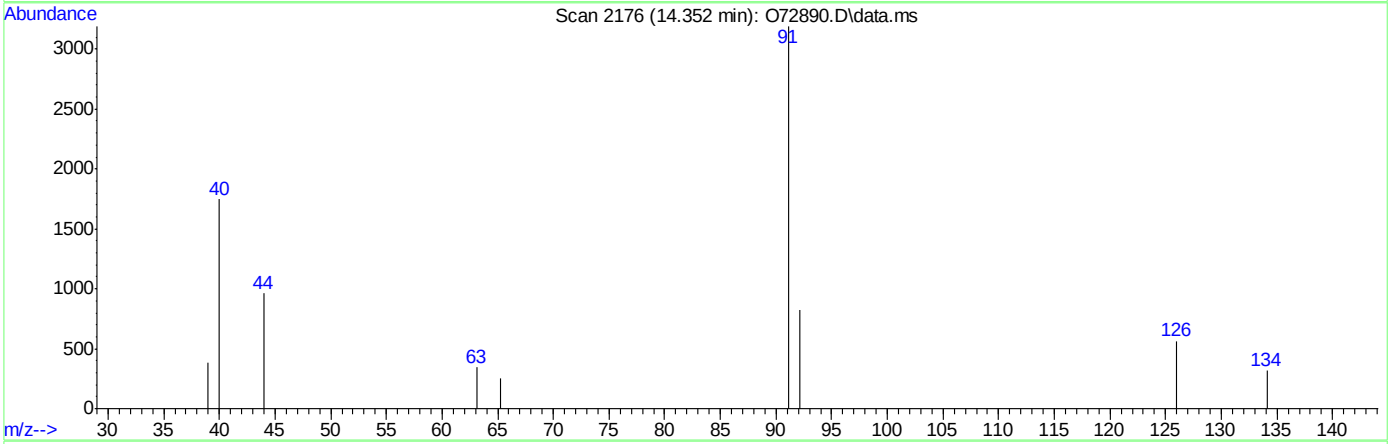
Ion	Exp%	Act%
166.80	100	100
116.90	96.70	93.77
118.90	95.40	95.64
164.80	79.80	77.96

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(107) Benzyl Chloride

14.352min (-14.352) 0.00ug/L

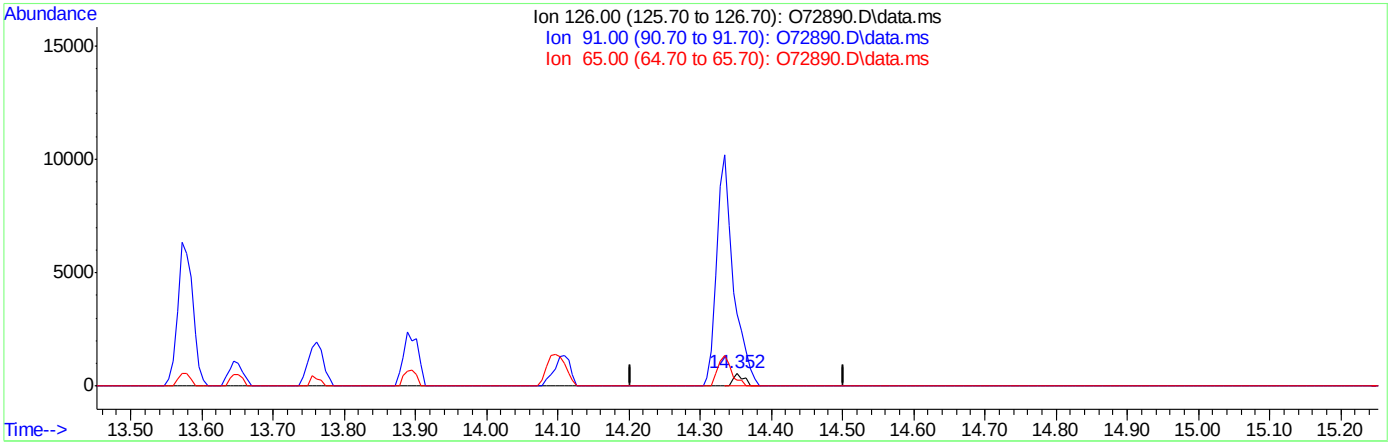
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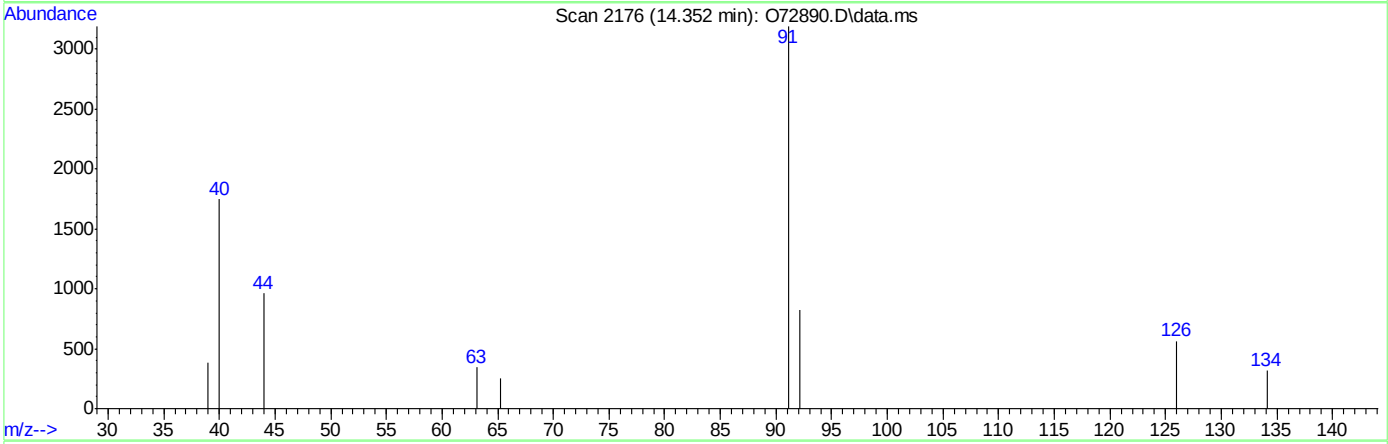
Ion	Exp%	Act%
126.00	100	0.00
91.00	484.40	0.00#
65.00	60.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(107) Benzyl Chloride

14.352min (-0.000) 0.40ug/L m

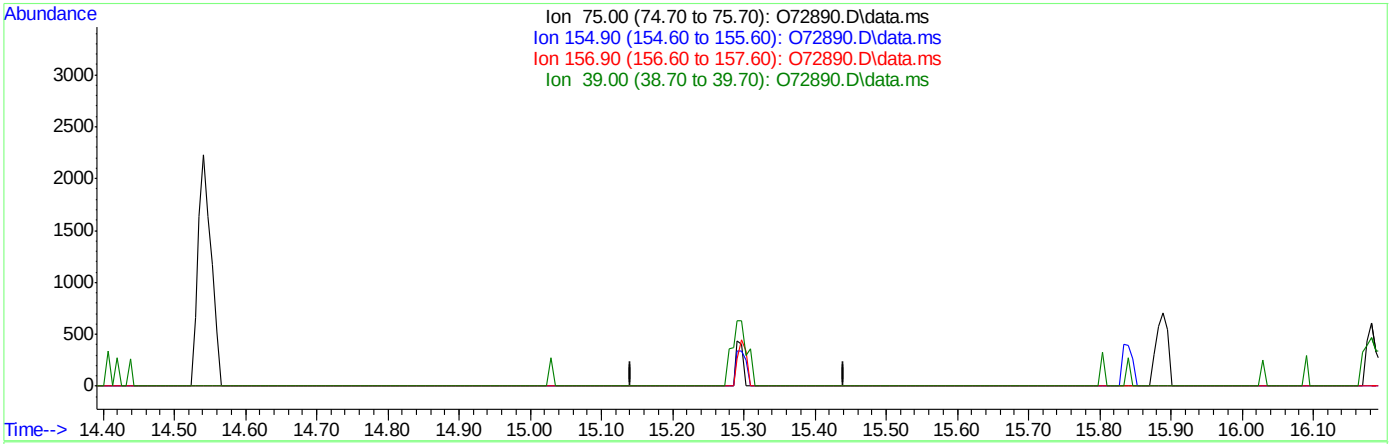
response 586

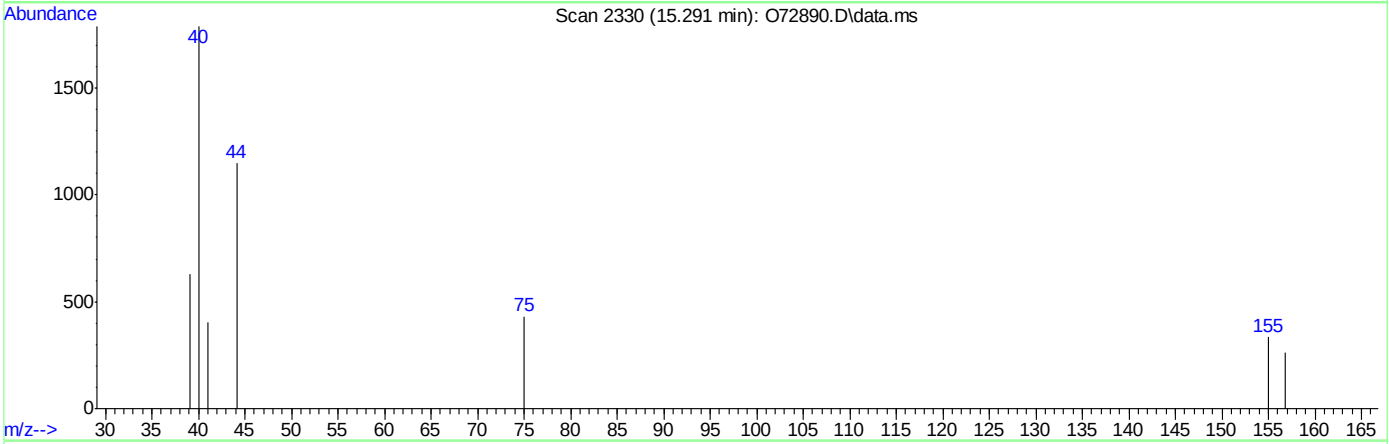
Ion	Exp%	Act%
126.00	100	100
91.00	484.40	563.60#
65.00	60.10	44.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(109) 1,2-Dibromo-3-Chloropropane

15.291min (-15.291) 0.00ug/L

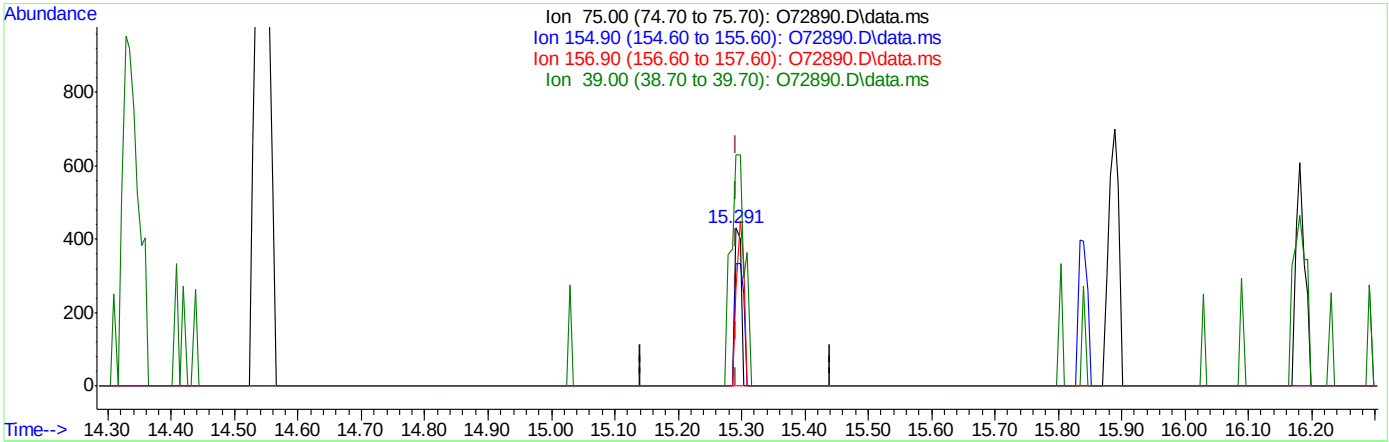
response 0

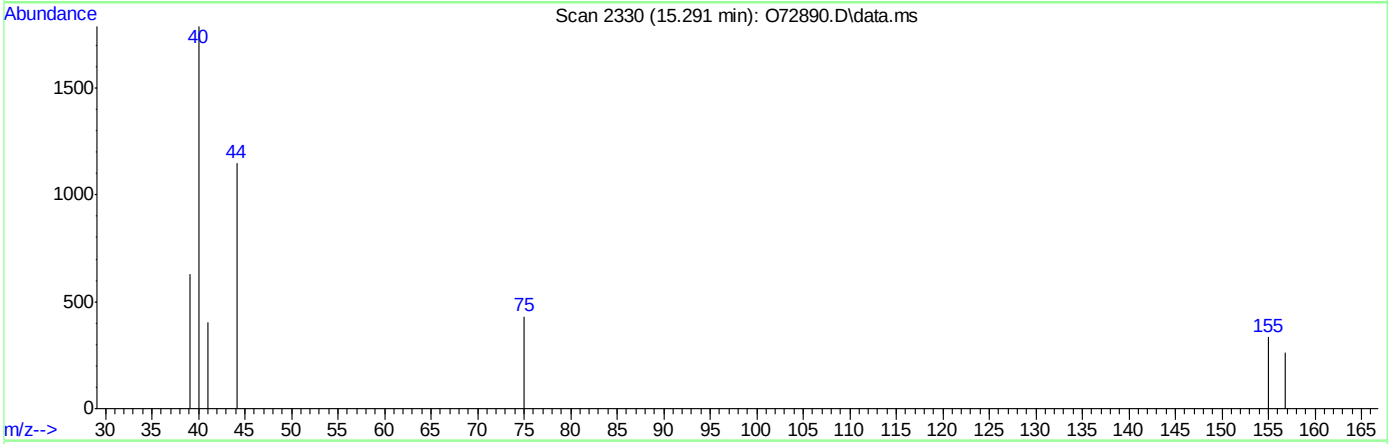
Ion	Exp%	Act%
75.00	100	0.00
154.90	83.70	0.00#
156.90	110.60	0.00#
39.00	89.40	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(109) 1,2-Dibromo-3-Chloropropane

15.291min (-0.000) 0.40ug/L m

response 305

Ion	Exp%	Act%
75.00	100	100
154.90	83.70	77.49
156.90	110.60	61.02#
39.00	89.40	146.40#

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.549	96	778800	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	585735	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	246319	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	219708	50.37	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.74%			
50) 1,2-Dichloroethane-d4	8.262	65	215396	55.69	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.38%			
63) Toluene-d8	10.152	98	775652	49.39	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.78%			
86) 4-Bromofluorobenzene	12.944	174	228074	46.46	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	25838	5.77	ug/L	97
3) Chloromethane	3.013	50	22629	5.19	ug/L	96
4) 1,3-butadiene	3.184	39	27787	6.08	ug/L	96
5) Vinyl Chloride	3.153	62	23207	5.12	ug/L	100
6) Bromomethane	3.678	94	7936	5.57	ug/L	96
7) Chloroethane	3.885	64	13174	5.23	ug/L	97
8) Trichlorofluoromethane	4.098	101	33139	5.06	ug/L	98
9) Ethyl Ether	4.556	59	18360	5.45	ug/L	91
11) 1,2-Dichlorotrifluoroe...	4.824	67	27996	5.37	ug/L	97
12) 1,1-Dichloroethene	4.824	61	33725	5.27	ug/L	96
13) Freon 113	4.879	101	23324	5.73	ug/L	95
14) Carbon Disulfide	4.860	76	67468	5.59	ug/L	98
15) Iodomethane	5.013	142	1923	1.72	ug/L	75
16) Acrolein	5.281	56	18512	26.14	ug/L	96
17) Allyl chloride	5.452	41	30277	5.28	ug/L	96
18) Methylene Chloride	5.586	49	39539	6.07	ug/L	97
19) Acetone	5.659	43	34158	30.63	ug/L	94
20) Methyl acetate	5.805	43	72017	24.43	ug/L	96
21) trans-1,2-Dichloroethene	5.793	61	32853	5.30	ug/L	96
22) Hexane	5.885	56	15154m	6.33	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	61470	5.23	ug/L	94
24) Tert Butyl Alcohol	6.037	59	13940	44.74	ug/L	96
25) Acetonitrile	6.238	41	24112	61.79	ug/L	94
26) Di-isopropyl ether	6.372	45	73408	5.23	ug/L	97
27) Chloroprene	6.513	53	26986	5.36	ug/L	98
28) 1,1-Dichloroethane	6.543	63	40042	5.30	ug/L	98
29) Acrylonitrile	6.610	52	30693	28.57	ug/L	94
30) ETBE	6.799	59	61667	4.67	ug/L	97
31) Vinyl acetate	6.823	43	169186	18.97	ug/L	98
32) cis-1,2-Dichloroethene	7.177	96	24537	5.51	ug/L	94
33) 2,2-Dichloropropane	7.299	77	25487	4.19	ug/L	99
34) Bromochloromethane	7.403	128	12327	5.41	ug/L	91
35) Cyclohexane	7.409	56	35083	5.58	ug/L	96
36) Chloroform	7.476	83	42589	5.34	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.592	43	84779	22.72	ug/L		99
38) Tetrahydrofuran	7.677	42	6713	5.64	ug/L		95
40) Carbon Tetrachloride	7.640	117	21896	3.66	ug/L		97
41) 1,1,1-Trichloroethane	7.720	97	31644	4.58	ug/L		98
42) 2-Butanone	7.817	43	43680	25.32	ug/L		95
43) 1,1-Dichloropropene	7.848	75	31072	5.40	ug/L		98
44) tert-Butyl formate	7.957	59	38443	13.02	ug/L	#	62
45) Propionitrile	8.140	54	26199	54.50	ug/L		94
46) Methacrylonitrile	8.165	41	163237	56.75	ug/L		98
47) Benzene	8.122	78	88634	5.35	ug/L		99
48) TAME	8.213	73	55412	4.82	ug/L		92
49) Isobutyl alcohol	8.299	43	7281m	58.16	ug/L		
51) 1,2-Dichloroethane	8.335	62	36181	5.34	ug/L		98
52) Tert Amyl Alcohol	8.408	59	10171	46.32	ug/L		85
53) Trichloroethene	8.732	95	24746	5.38	ug/L		98
54) Methylcyclohexane	8.726	83	32975	5.83	ug/L		95
55) Dibromomethane	9.177	93	16106	5.39	ug/L		96
56) 1,2-Dichloropropane	9.274	63	22971	5.38	ug/L		97
57) Bromodichloromethane	9.329	83	26779	4.60	ug/L		95
58) Methyl methacrylate	9.457	41	15077	4.46	ug/L		96
59) 1,4-Dioxane	9.536	88	3914	146.64	ug/L		92
60) 2-Chloroethyl vinyl ether	9.878	63	76139	24.99	ug/L		97
61) cis-1,3-Dichloropropene	9.969	75	29193	4.52	ug/L		98
64) Toluene	10.207	91	95234	5.41	ug/L		98
65) 2-Nitropropane	10.445	41	11120	9.36	ug/L		89
66) 4-Methyl-2-pentanone	10.567	43	109574	26.20	ug/L		98
67) trans-1,3-Dichloropropene	10.615	75	23023	4.10	ug/L		87
68) Tetrachloroethene	10.603	166	26849	5.48	ug/L		97
69) Ethyl methacrylate	10.737	69	16616	3.27	ug/L		97
70) 1,1,2-Trichloroethane	10.780	83	18804	5.60	ug/L		98
71) Dibromochloromethane	10.969	129	19121	4.00	ug/L		96
72) 1,3-Dichloropropane	11.067	76	38146	5.62	ug/L		97
73) 1,2-Dibromoethane	11.231	107	22378	5.41	ug/L		100
74) 3,3-dimethyl-1-butanol	11.341	57	21138	79.59	ug/L		93
75) 2-hexanone	11.396	43	69721	24.85	ug/L		98
76) 1-Chlorohexane	11.682	91	26247m	5.36	ug/L		
77) Ethylbenzene	11.743	91	105815	5.36	ug/L		99
78) Chlorobenzene	11.743	112	64364	5.50	ug/L		99
79) 1,1,1,2-Tetrachloroethane	11.792	131	16837	4.00	ug/L		97
80) m,p-Xylene	11.883	91	160313	10.65	ug/L		99
81) o-Xylene	12.322	91	78766	5.40	ug/L		100
82) Styrene	12.377	104	57079	5.41	ug/L		98
83) Bromoform	12.432	173	9951	3.40	ug/L		97
84) Isopropylbenzene	12.633	105	93808	5.41	ug/L		99
87) cis-1,4-Dichloro-2-butene	12.993	53	6080	3.70	ug/L	#	68
88) n-Propylbenzene	13.054	91	111408	4.44	ug/L		98
89) Bromobenzene	13.066	156	29301	3.58	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.127	83	30662	4.98	ug/L		98
91) 1,3,5-Trimethylbenzene	13.237	105	76723	4.46	ug/L		99
92) 2-Chlorotoluene	13.408	91	71533	4.53	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

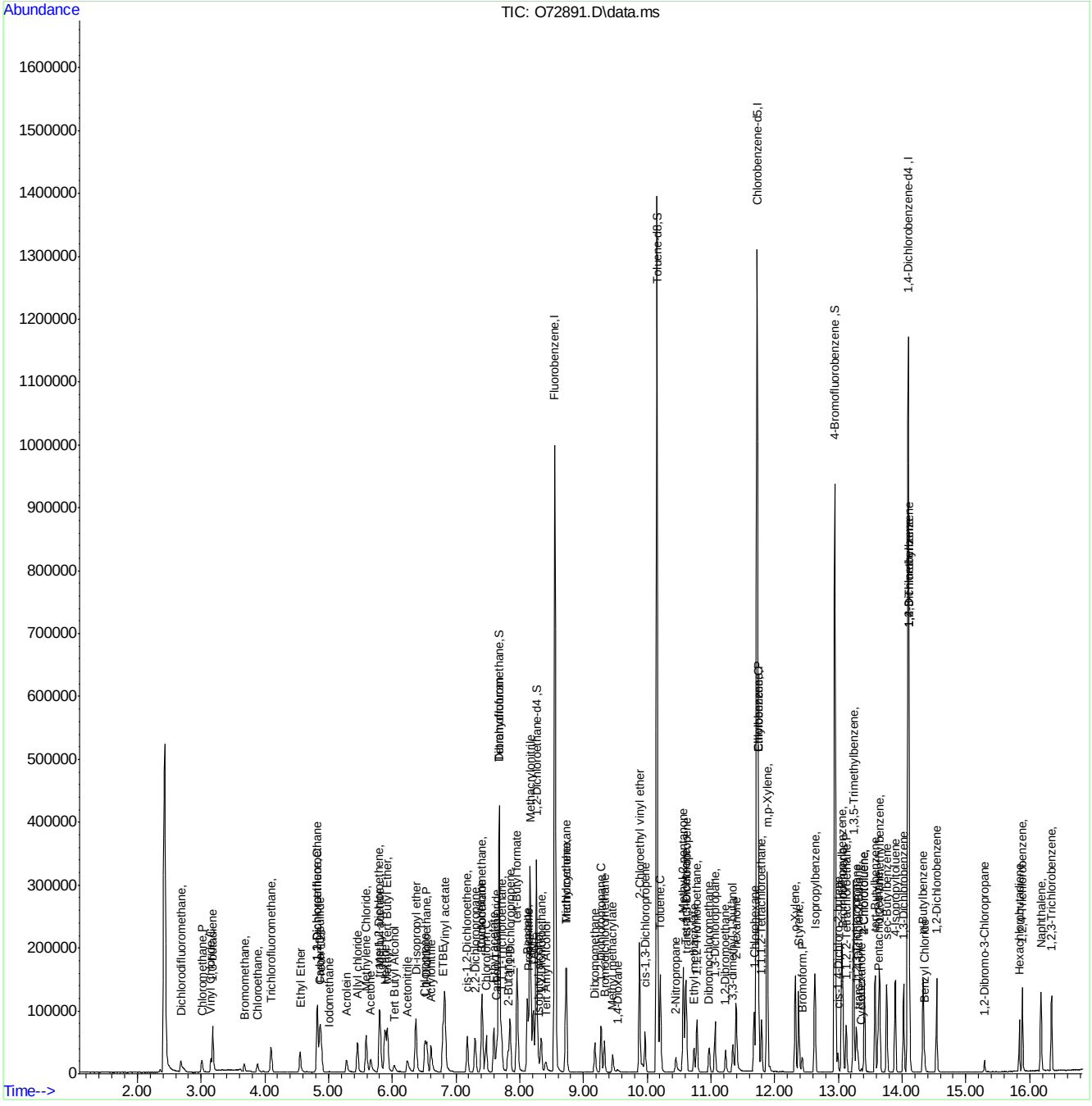
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93) trans-1,4-Dichloro-2-B...	13.310	53	6012	4.34	ug/L	#	68
94) 1,2,3-Trichloropropane	13.286	110	8943	5.13	ug/L		99
95) Cyclohexanone	13.353	55	2272	20.21	ug/L	#	81
96) 4-Chlorotoluene	13.408	91	71533	4.53	ug/L		99
97) tert-Butylbenzene	13.578	91	43783	4.50	ug/L		95
99) 1,2,4-Trimethylbenzene	13.645	105	76631	4.55	ug/L		99
100) Pentachloroethane	13.627	167	7502	2.45	ug/L	#	71
101) sec-Butylbenzene	13.761	105	88850	4.66	ug/L		99
102) 4-Isopropyltoluene	13.895	119	75196	4.60	ug/L		98
103) 1,3-Dichlorobenzene	14.023	146	52102	4.90	ug/L		98
104) 1,2,3-Trimethylbenzene	14.109	105	79279	4.67	ug/L		97
105) 1,4-Dichlorobenzene	14.109	146	54583	4.82	ug/L		93
106) n-Butylbenzene	14.328	92	40264	4.71	ug/L		90
107) Benzyl Chloride	14.352	126	3972	2.32	ug/L	#	52
108) 1,2-Dichlorobenzene	14.541	146	51291	5.08	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.291	75	3368	3.79	ug/L	#	81
110) Hexachlorobutadiene	15.840	225	10727	5.27	ug/L		96
111) 1,2,4-Trichlorobenzene	15.889	180	30365	5.03	ug/L		96
112) Naphthalene	16.181	128	81944	5.34	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	29500	5.38	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

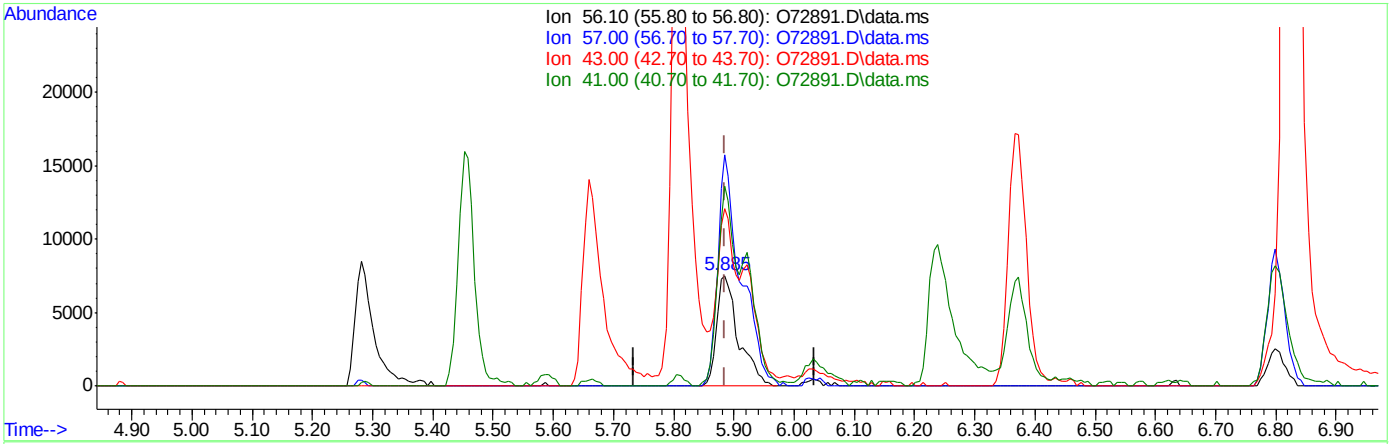
Sample Number: VO2866-IC2866
Lab FileID: O72891.D
Injection Time: 12/08/22 10:20
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

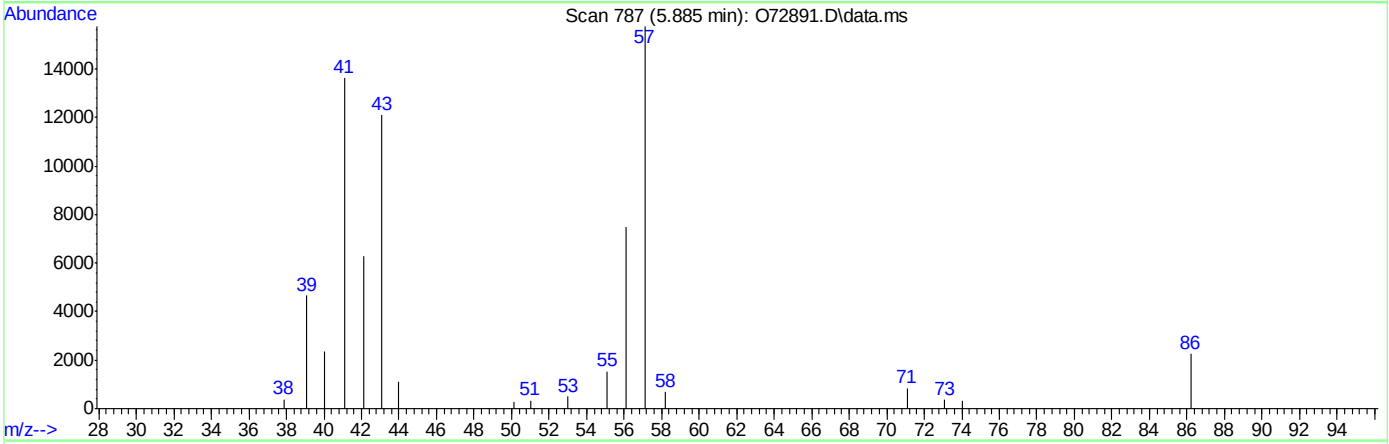
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(22) Hexane

5.885min (-0.000) 7.92ug/L

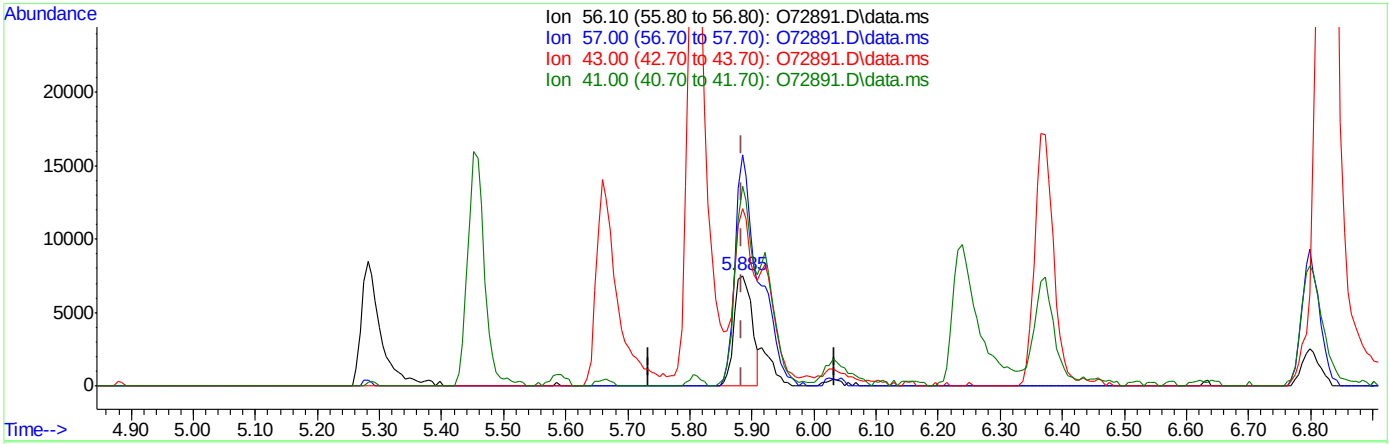
response 18995

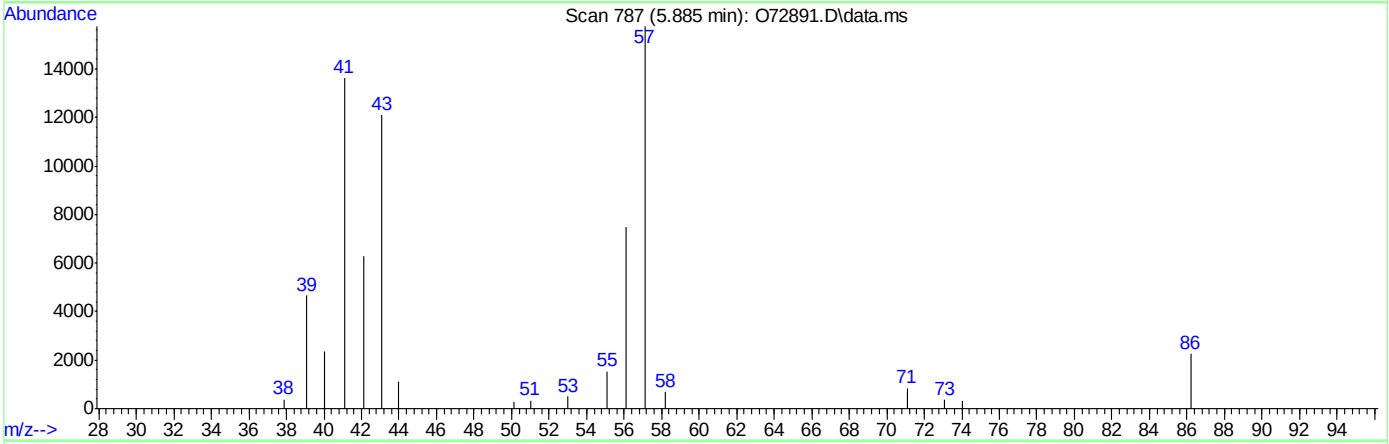
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	210.02
43.00	149.90	152.55
41.00	165.70	181.49

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(22) Hexane

5.885min (-0.000) 6.33ug/L m

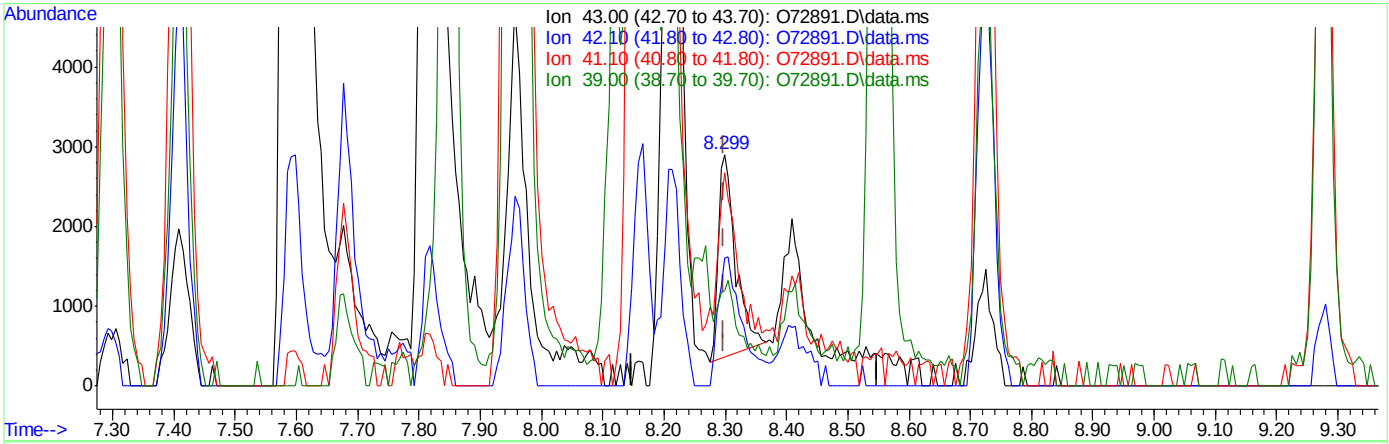
response 15154

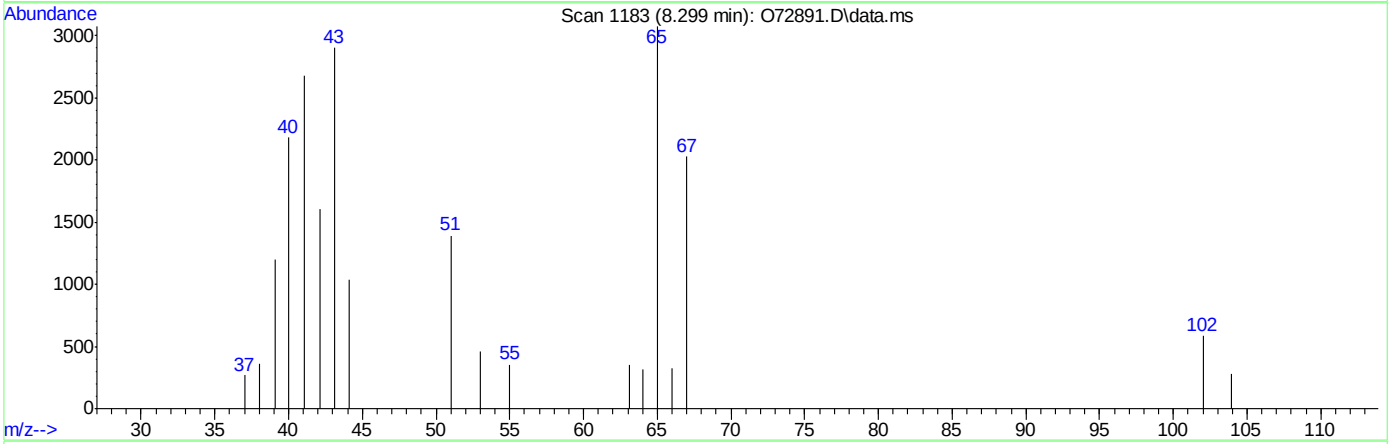
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	210.02
43.00	149.90	161.11
41.00	165.70	181.49

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 39.27ug/L

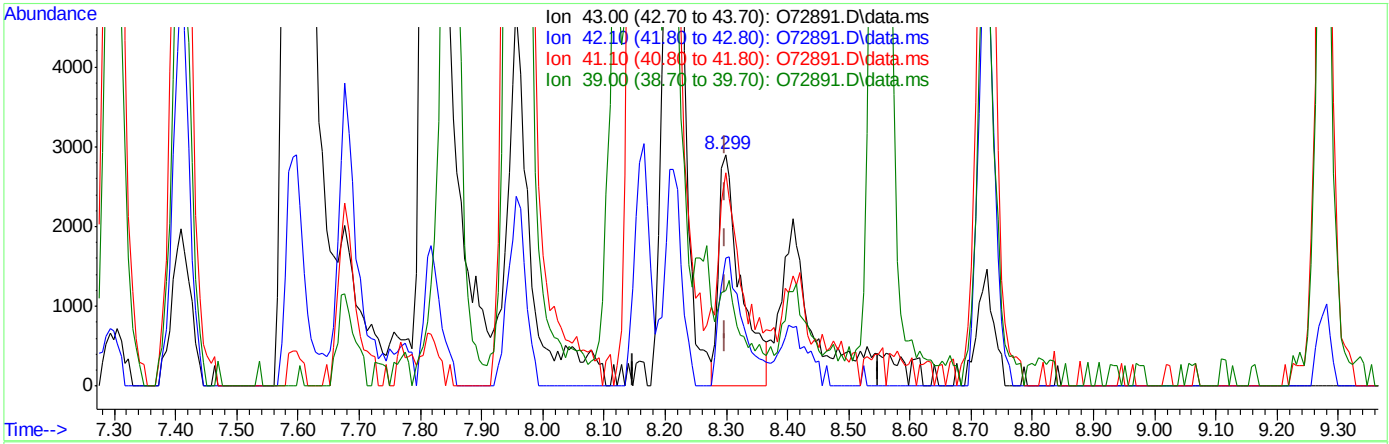
response 4916

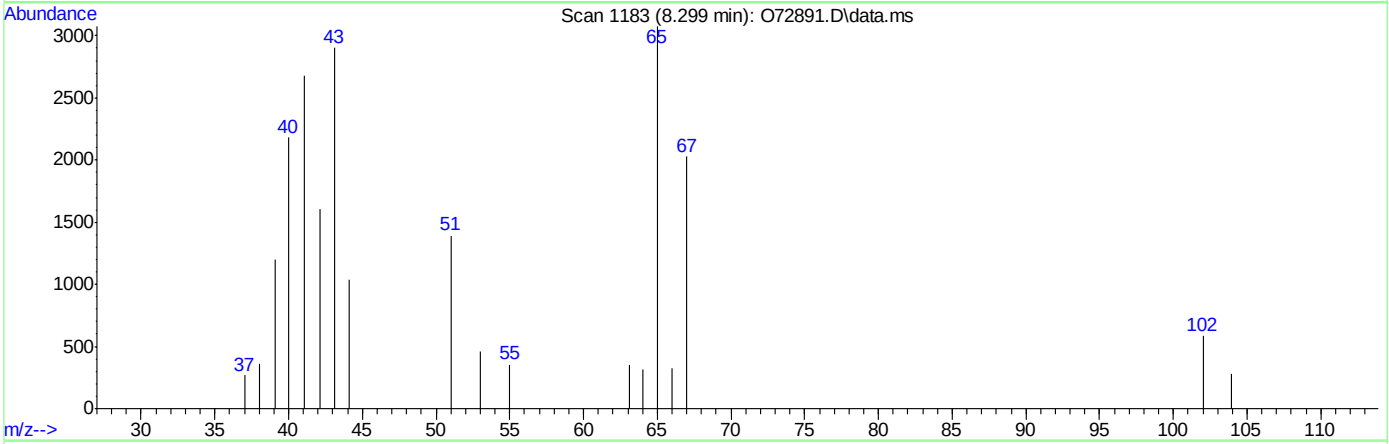
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.59
41.10	78.00	75.86
39.00	30.80	31.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 58.16ug/L m

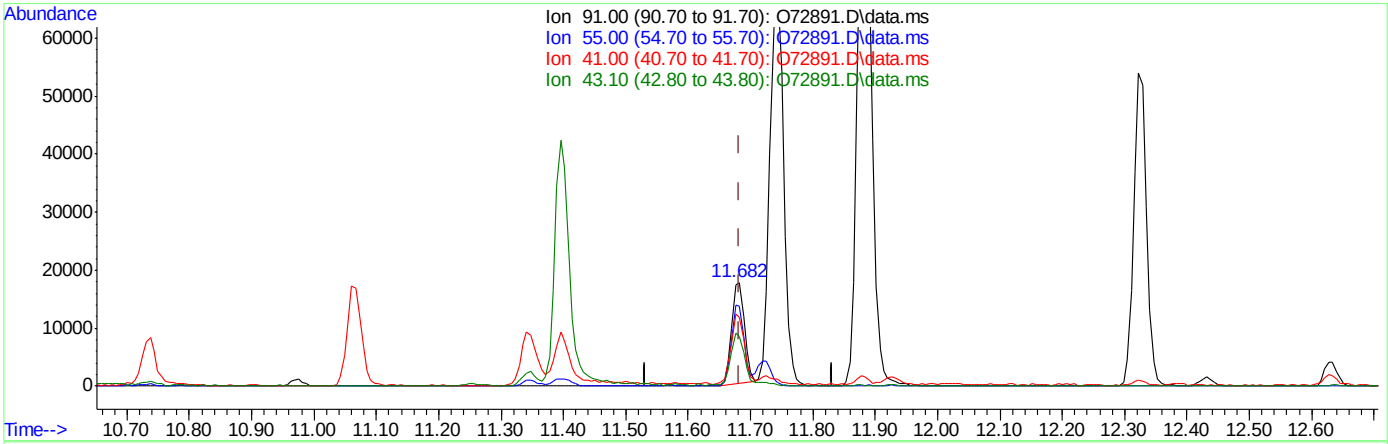
response 7281

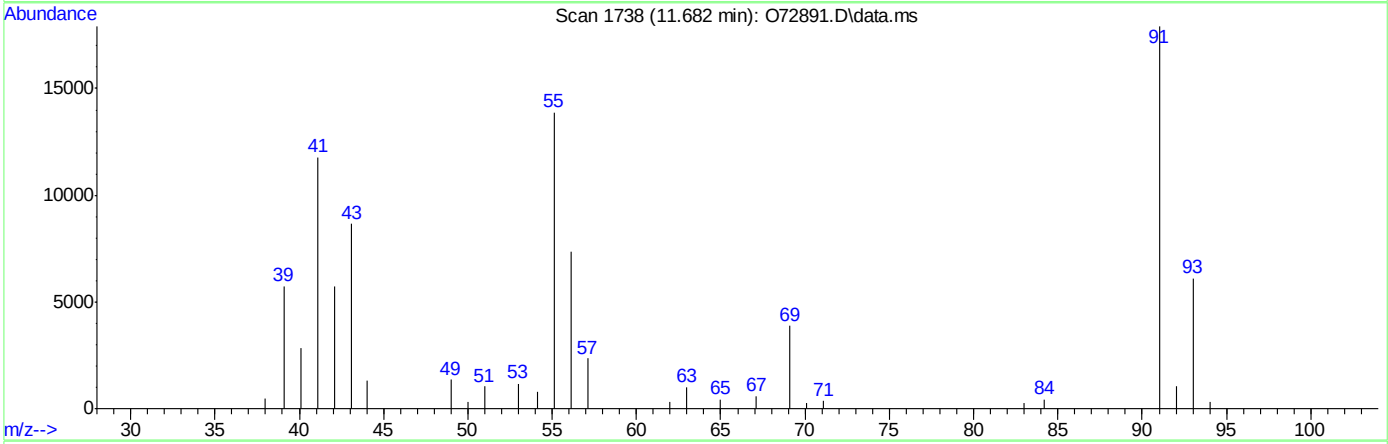
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	55.18
41.10	78.00	92.32
39.00	30.80	41.47

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 5.04ug/L

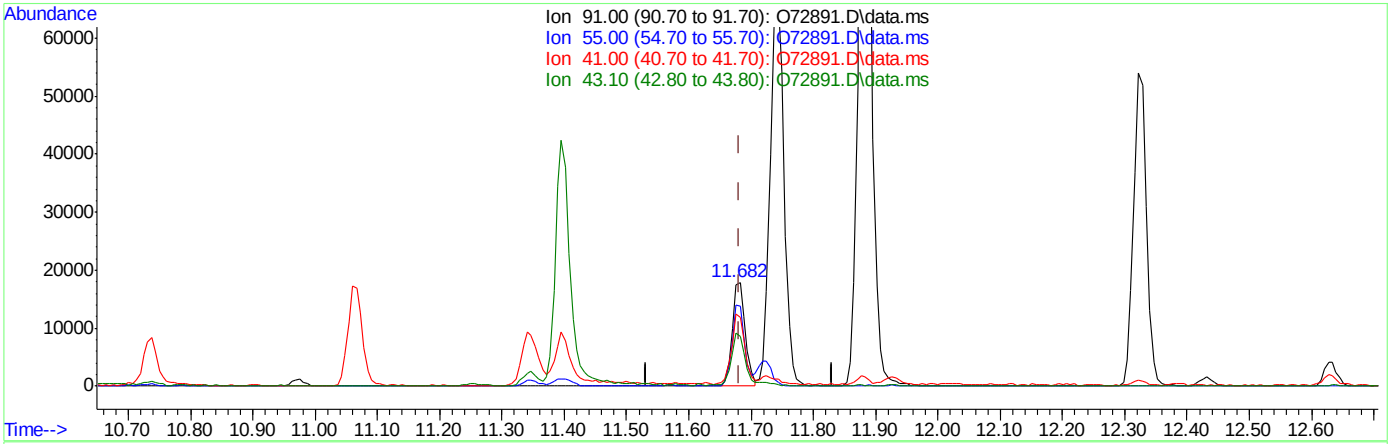
response 24710

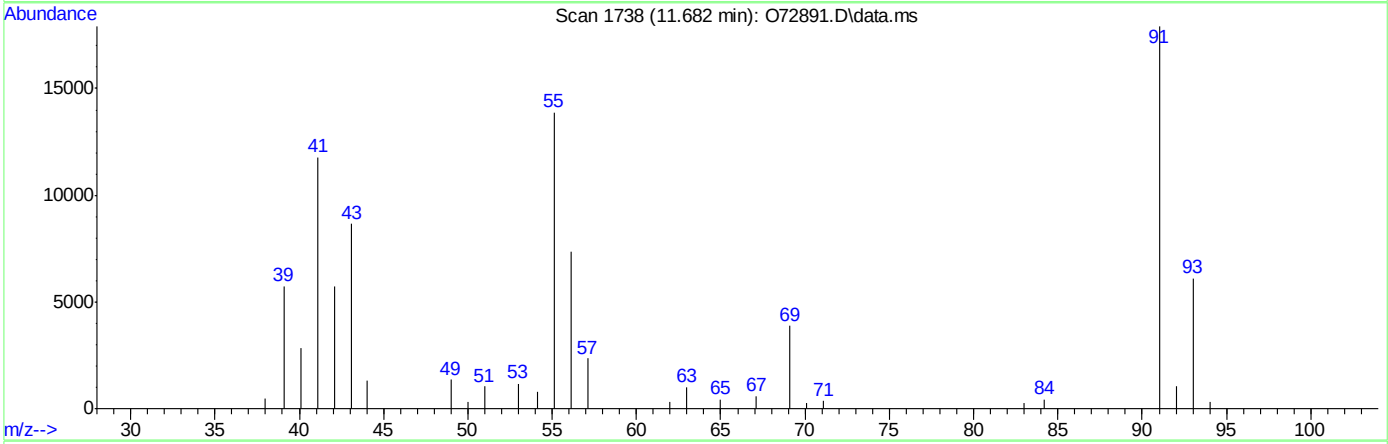
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	77.48
41.00	64.00	62.46
43.10	51.10	46.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 5.36ug/L m

response 26247

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	77.48
41.00	64.00	65.79
43.10	51.10	48.33

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	813672	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	603955	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	215968	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	224601	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
50) 1,2-Dichloroethane-d4	8.262	65	205003	50.73	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.46%			
63) Toluene-d8	10.152	98	813872	50.26	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.52%			
86) 4-Bromofluorobenzene	12.944	174	222748	51.75	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	52509	11.22	ug/L	98
3) Chloromethane	3.019	50	44753	9.82	ug/L	97
4) 1,3-butadiene	3.190	39	51971	10.93	ug/L	99
5) Vinyl Chloride	3.160	62	47543	10.04	ug/L	100
6) Bromomethane	3.684	94	17689	11.89	ug/L	93
7) Chloroethane	3.891	64	27217	10.35	ug/L	97
8) Trichlorofluoromethane	4.104	101	66461	9.71	ug/L	98
9) Ethyl Ether	4.556	59	36192	10.29	ug/L	97
10) Ethanol	4.812	45	3236	152.49	ug/L	98
11) 1,2-Dichlorotrifluoroe...	4.824	67	54775	10.06	ug/L	99
12) 1,1-Dichloroethene	4.830	61	66660	9.97	ug/L	95
13) Freon 113	4.885	101	46296	10.89	ug/L	97
14) Carbon Disulfide	4.867	76	129868	10.30	ug/L	99
15) Iodomethane	5.025	142	5628	4.67	ug/L	96
16) Acrolein	5.287	56	44542	60.20	ug/L	100
17) Allyl chloride	5.458	41	63077	10.54	ug/L	98
18) Methylene Chloride	5.592	49	67060	9.92	ug/L	98
19) Acetone	5.665	43	56673	48.64	ug/L	96
20) Methyl acetate	5.811	43	134107	43.54	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	65431	10.10	ug/L	95
22) Hexane	5.891	56	30421m	12.07	ug/L	
23) Methyl Tert Butyl Ether	5.927	73	117704	9.58	ug/L	99
24) Tert Butyl Alcohol	6.031	59	22108	67.91	ug/L	91
25) Acetonitrile	6.238	41	47118	115.58	ug/L	98
26) Di-isopropyl ether	6.372	45	145464	9.93	ug/L	97
27) Chloroprene	6.519	53	55834	10.62	ug/L	98
28) 1,1-Dichloroethane	6.549	63	78336	9.93	ug/L	100
29) Acrylonitrile	6.610	52	62490	55.67	ug/L	97
30) ETBE	6.805	59	125027	9.06	ug/L	98
31) Vinyl acetate	6.823	43	381829	40.97	ug/L	99
32) cis-1,2-Dichloroethene	7.177	96	48067	10.33	ug/L	99
33) 2,2-Dichloropropane	7.299	77	52590	8.28	ug/L	95
34) Bromochloromethane	7.409	128	25811	10.84	ug/L	96
35) Cyclohexane	7.415	56	67059	10.21	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.476	83	84843	10.19	ug/L		99
37) Ethyl acetate	7.592	43	178916	45.89	ug/L		99
38) Tetrahydrofuran	7.677	42	10754	8.68	ug/L		93
40) Carbon Tetrachloride	7.640	117	44369	7.11	ug/L		97
41) 1,1,1-Trichloroethane	7.720	97	64042	8.86	ug/L		98
42) 2-Butanone	7.817	43	86851	48.18	ug/L		97
43) 1,1-Dichloropropene	7.854	75	60734	10.11	ug/L		95
44) tert-Butyl formate	7.963	59	104599	33.91	ug/L	#	71
45) Propionitrile	8.146	54	57038	113.56	ug/L		80
46) Methacrylonitrile	8.165	41	319300	106.24	ug/L		99
47) Benzene	8.122	78	176419	10.19	ug/L		98
48) TAME	8.213	73	111424	9.28	ug/L		96
49) Isobutyl alcohol	8.299	43	17489m	133.72	ug/L		
51) 1,2-Dichloroethane	8.335	62	70634	9.99	ug/L		98
52) Tert Amyl Alcohol	8.409	59	12991	56.62	ug/L		81
53) Trichloroethene	8.732	95	49099	10.22	ug/L		99
54) Methylcyclohexane	8.732	83	62751	10.62	ug/L		94
55) Dibromomethane	9.177	93	32937	10.54	ug/L		97
56) 1,2-Dichloropropane	9.274	63	45388	10.18	ug/L		97
57) Bromodichloromethane	9.329	83	53944	8.86	ug/L		99
58) Methyl methacrylate	9.457	41	32737	9.27	ug/L		98
59) 1,4-Dioxane	9.536	88	6372	228.50	ug/L		88
60) 2-Chloroethyl vinyl ether	9.878	63	183389	57.61	ug/L		99
61) cis-1,3-Dichloropropene	9.969	75	62508	9.27	ug/L		97
64) Toluene	10.207	91	185911	10.24	ug/L		100
65) 2-Nitropropane	10.451	41	18223	14.88	ug/L		86
66) 4-Methyl-2-pentanone	10.567	43	213052	49.40	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	49806	8.60	ug/L		87
68) Tetrachloroethene	10.603	166	53272	10.54	ug/L		98
69) Ethyl methacrylate	10.731	69	39638	7.59	ug/L		99
70) 1,1,2-Trichloroethane	10.780	83	35889	10.37	ug/L		99
71) Dibromochloromethane	10.975	129	38229	7.76	ug/L		99
72) 1,3-Dichloropropane	11.067	76	72226	10.33	ug/L		97
73) 1,2-Dibromoethane	11.231	107	43340	10.16	ug/L		97
74) 3,3-dimethyl-1-butanol	11.341	57	53618	195.79	ug/L		97
75) 2-hexanone	11.396	43	142528	49.28	ug/L		99
76) 1-Chlorohexane	11.682	91	52511m	10.40	ug/L		
77) Ethylbenzene	11.743	91	206190	10.12	ug/L		100
78) Chlorobenzene	11.743	112	125097	10.37	ug/L		96
79) 1,1,1,2-Tetrachloroethane	11.792	131	35712	8.22	ug/L		99
80) m,p-Xylene	11.883	91	318897	20.55	ug/L		99
81) o-Xylene	12.322	91	156871	10.43	ug/L		99
82) Styrene	12.377	104	116304	10.69	ug/L		99
83) Bromoform	12.432	173	19772	6.56	ug/L		95
84) Isopropylbenzene	12.633	105	186643	10.44	ug/L		97
87) cis-1,4-Dichloro-2-butene	12.993	53	13011	9.04	ug/L	#	68
88) n-Propylbenzene	13.054	91	219847	10.00	ug/L		99
89) Bromobenzene	13.066	156	55541	7.92	ug/L		99
90) 1,1,2,2-Tetrachloroethane	13.127	83	50554	9.36	ug/L		94
91) 1,3,5-Trimethylbenzene	13.237	105	154500	10.25	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

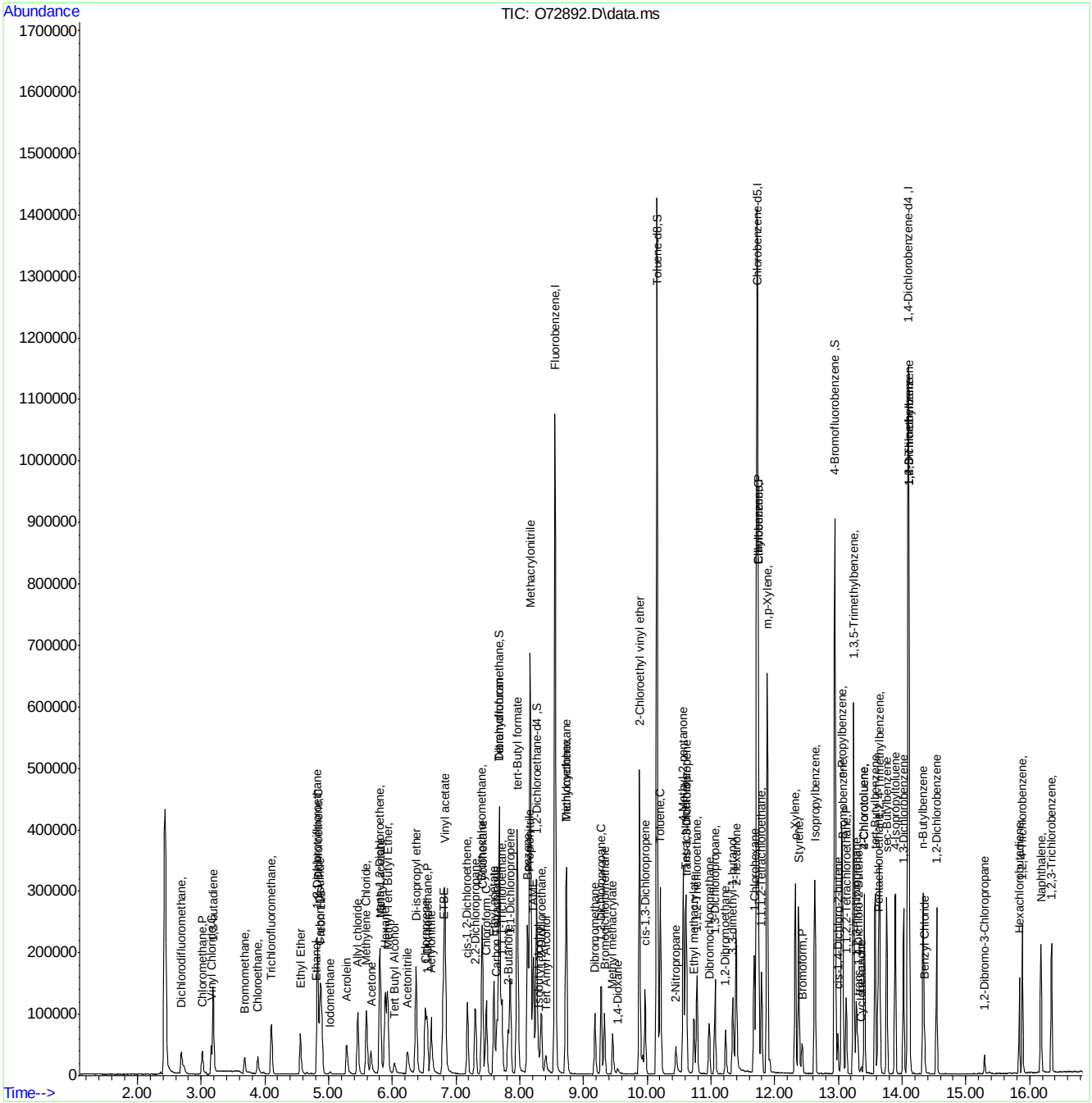
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.408	91	140502	10.16	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	10643	8.76	ug/L	#	71
94) 1,2,3-Trichloropropane	13.286	110	15477	10.13	ug/L		97
95) Cyclohexanone	13.359	55	4941	50.14	ug/L		92
96) 4-Chlorotoluene	13.408	91	140502	10.16	ug/L		100
97) tert-Butylbenzene	13.578	91	85799	10.06	ug/L		99
99) 1,2,4-Trimethylbenzene	13.645	105	151704	10.27	ug/L		98
100) Pentachloroethane	13.627	167	18530	6.90	ug/L		90
101) sec-Butylbenzene	13.761	105	174359	10.43	ug/L		99
102) 4-Isopropyltoluene	13.895	119	149749	10.44	ug/L		99
103) 1,3-Dichlorobenzene	14.023	146	95072	10.19	ug/L		98
104) 1,2,3-Trimethylbenzene	14.109	105	153986	10.34	ug/L		100
105) 1,4-Dichlorobenzene	14.109	146	103655	10.44	ug/L		97
106) n-Butylbenzene	14.328	92	78292	10.45	ug/L		98
107) Benzyl Chloride	14.352	126	8355	5.57	ug/L	#	84
108) 1,2-Dichlorobenzene	14.541	146	92690	10.47	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.297	75	5939	7.62	ug/L		95
110) Hexachlorobutadiene	15.840	225	19818	11.10	ug/L		94
111) 1,2,4-Trichlorobenzene	15.889	180	55363	10.47	ug/L		99
112) Naphthalene	16.181	128	137127	10.18	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	51383	10.70	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

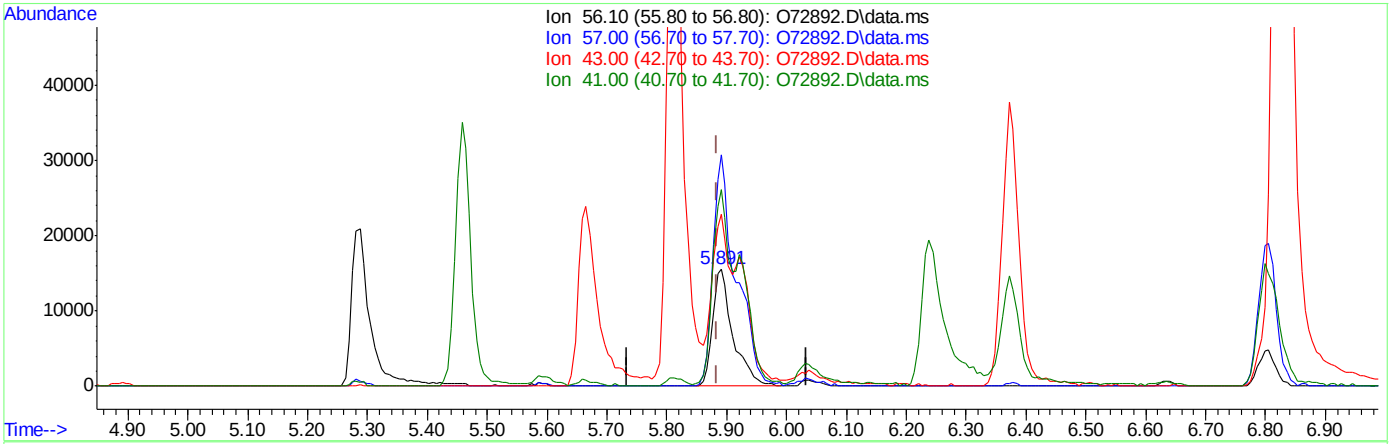
Sample Number: VO2866-IC2866
Lab FileID: O72892.D
Injection Time: 12/08/22 10:45
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

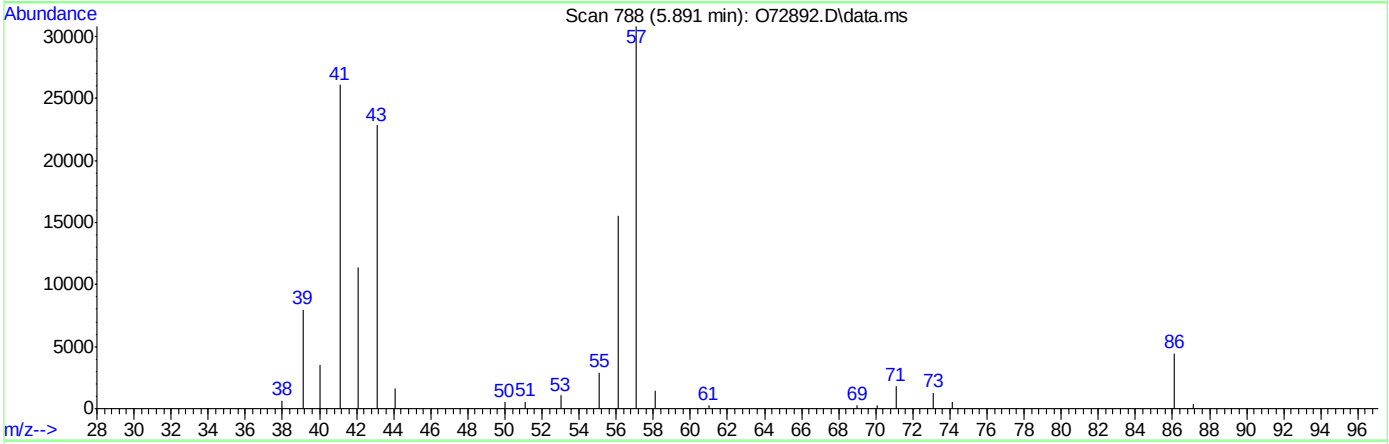
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(22) Hexane

5.891min (+0.006) 14.48ug/L

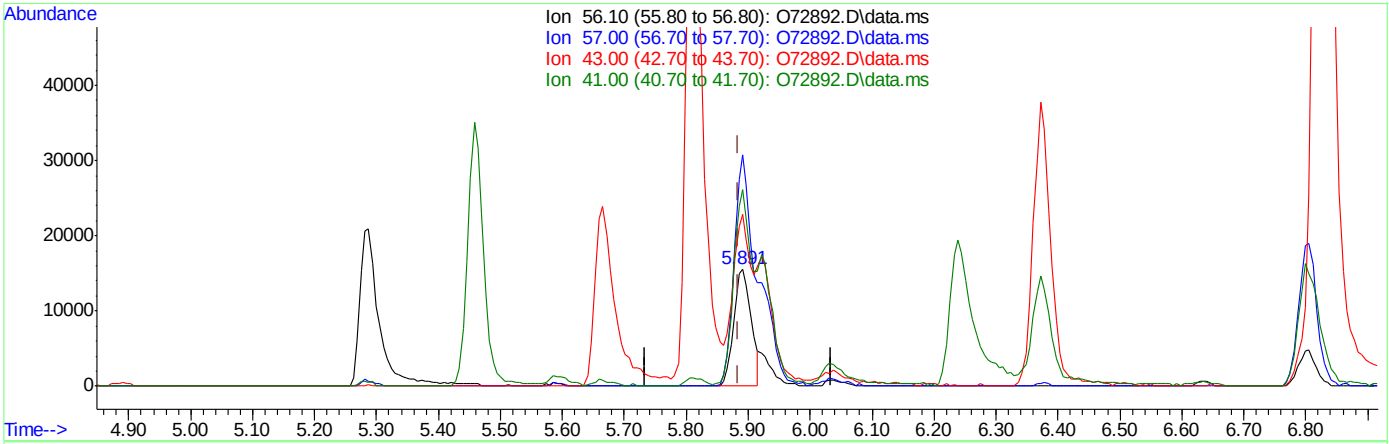
response 36629

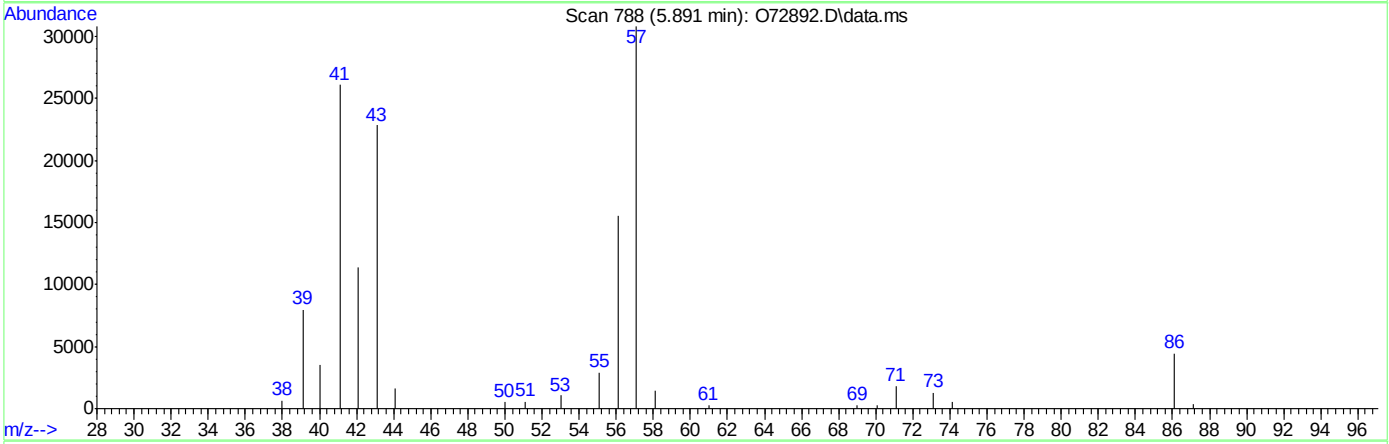
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.93
43.00	149.90	141.47
41.00	165.70	165.35

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(22) Hexane

5.891min (+0.006) 12.07ug/L m

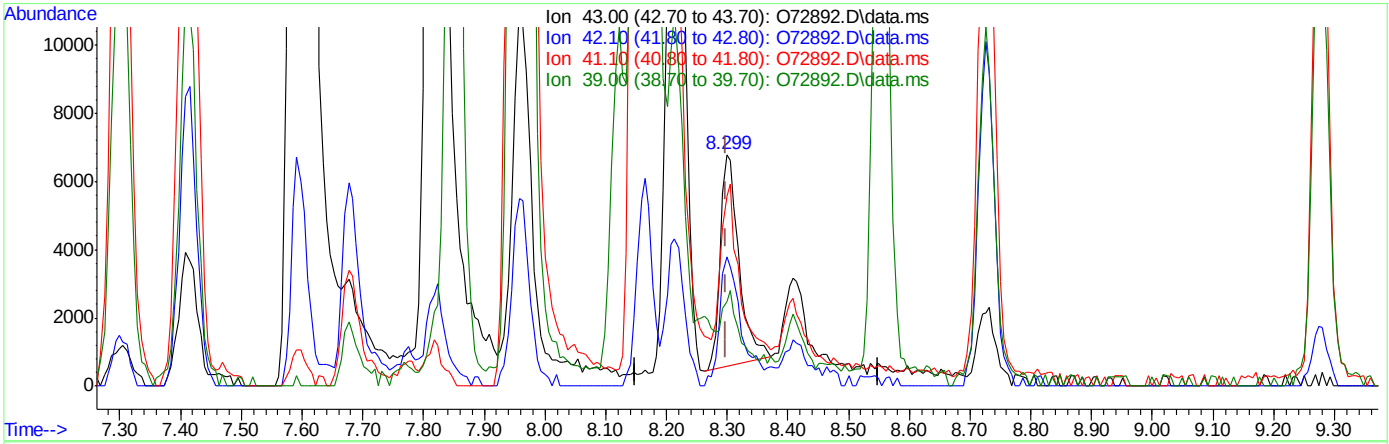
response 30421

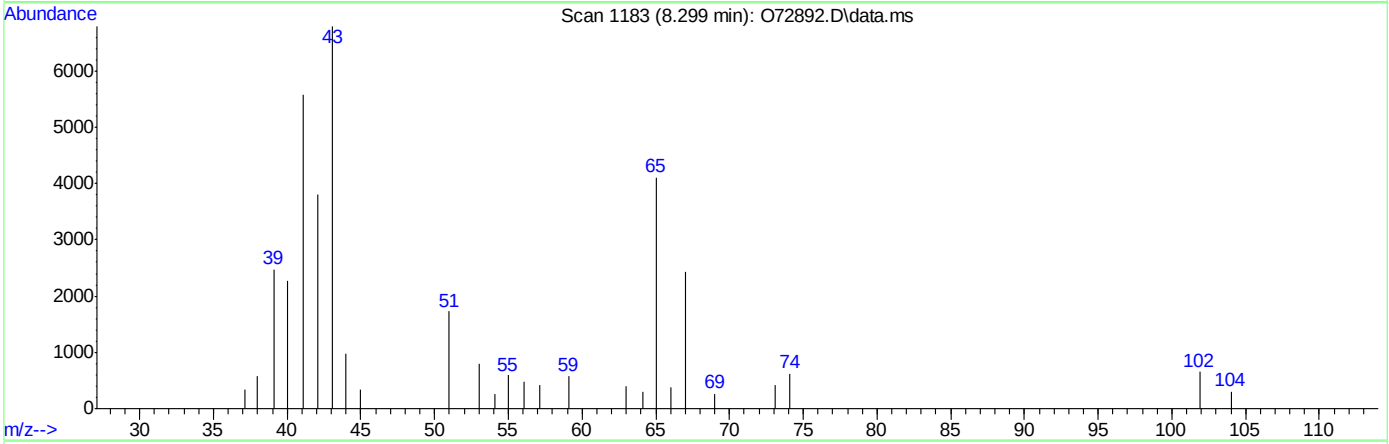
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.93
43.00	149.90	146.74
41.00	165.70	167.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 100.70ug/L

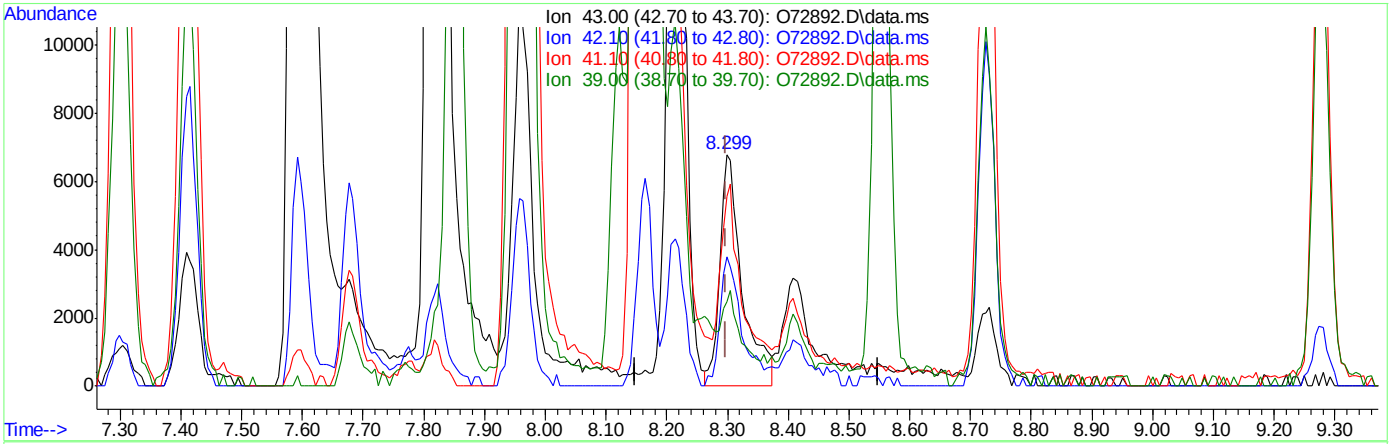
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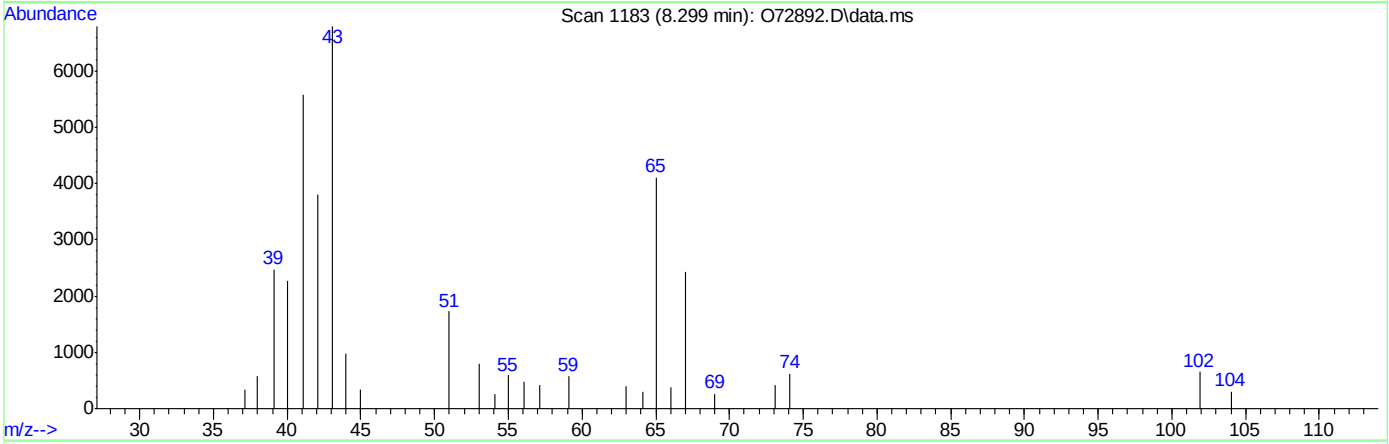
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.95
41.10	78.00	70.78
39.00	30.80	25.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 133.72ug/L m

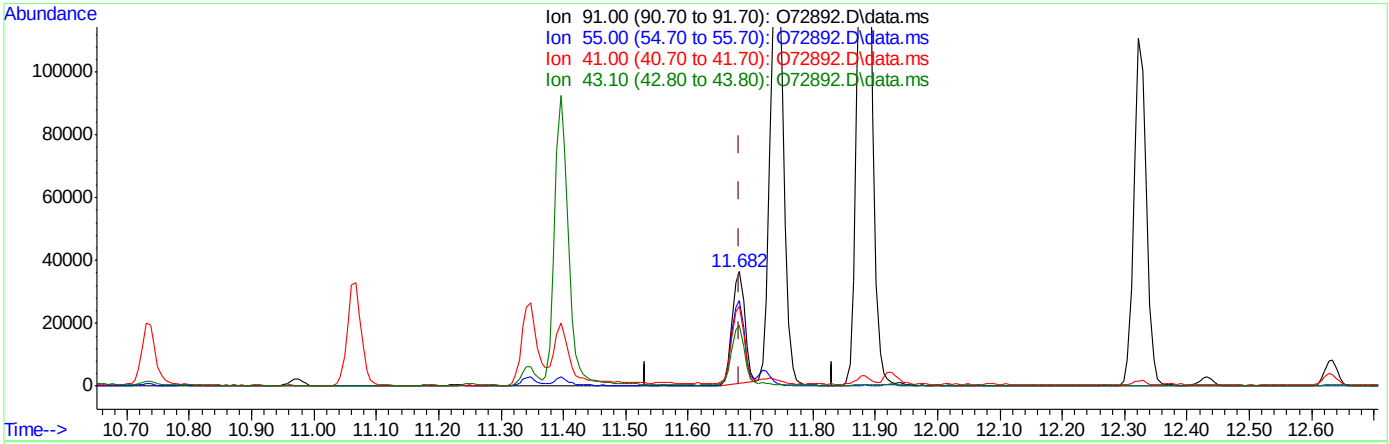
response 17489

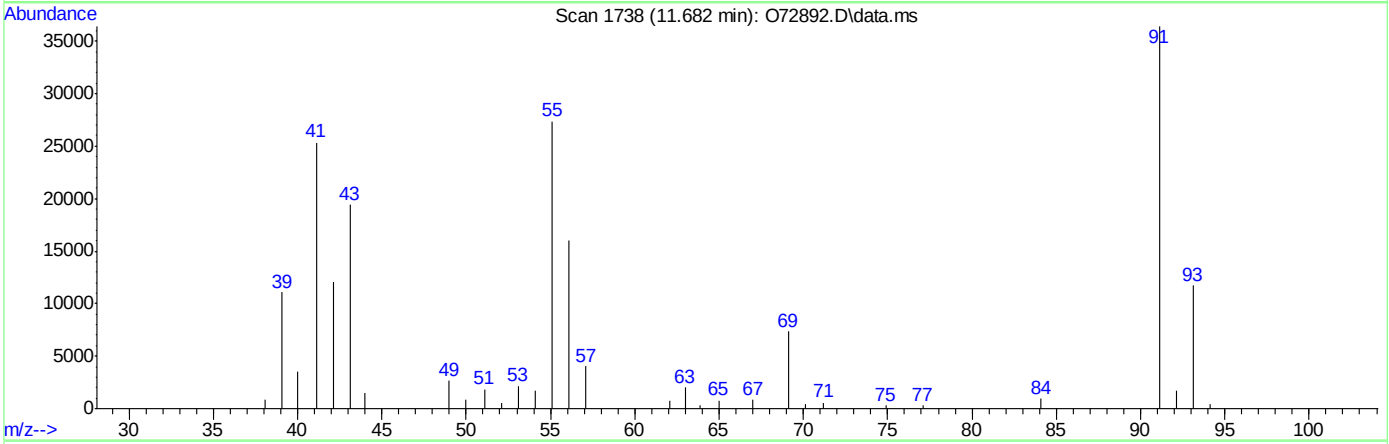
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	55.99
41.10	78.00	81.98
39.00	30.80	36.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 9.93ug/L

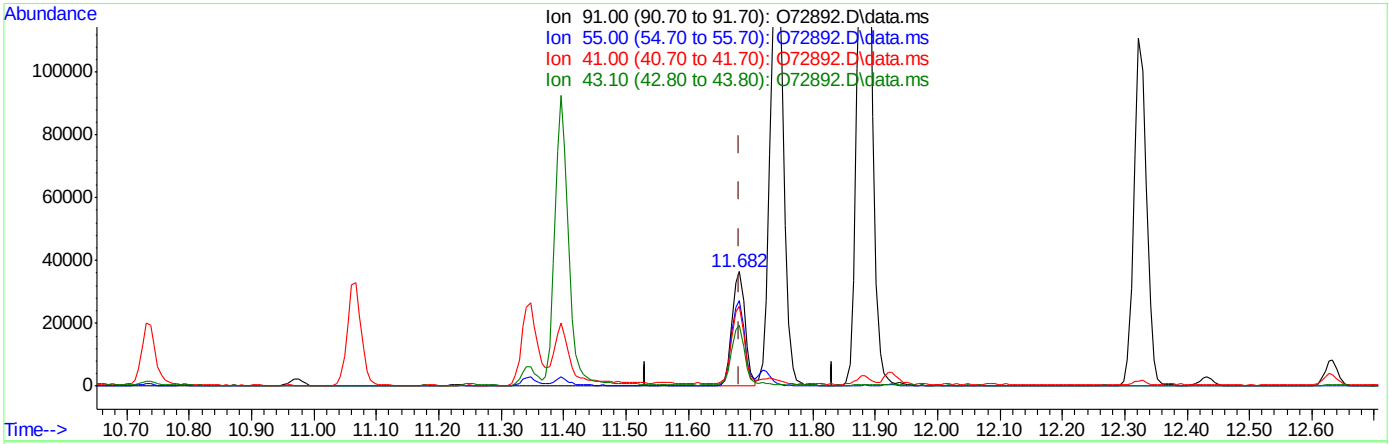
response 50168

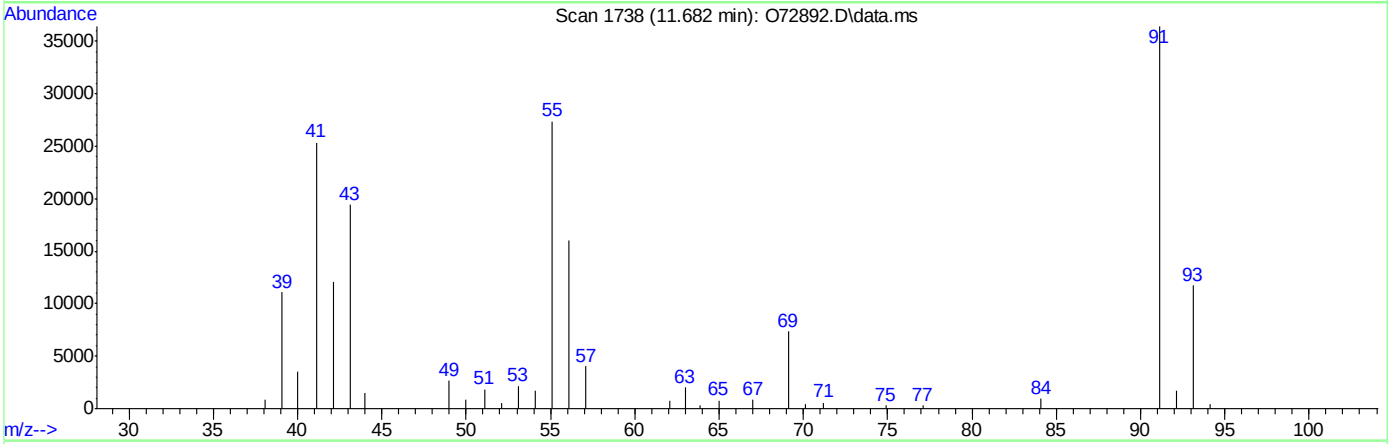
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	74.27
41.00	64.00	66.14
43.10	51.10	51.39

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 10.40ug/L m

response 52511

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	75.19
41.00	64.00	69.63
43.10	51.10	53.25

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	833479	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	626115	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	234505	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	232591	49.83	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.66%			
50) 1,2-Dichloroethane-d4	8.262	65	210335	50.81	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.62%			
63) Toluene-d8	10.152	98	834354	49.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.40%			
86) 4-Bromofluorobenzene	12.944	174	233753	50.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.02%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	155248	32.40	ug/L	97
3) Chloromethane	3.019	50	136120	29.15	ug/L	97
4) 1,3-butadiene	3.190	39	113241	23.54	ug/L	98
5) Vinyl Chloride	3.153	62	138849	28.63	ug/L	100
6) Bromomethane	3.684	94	58252	38.22	ug/L	98
7) Chloroethane	3.885	64	80697	29.96	ug/L	96
8) Trichlorofluoromethane	4.098	101	198230	28.29	ug/L	98
9) Ethyl Ether	4.556	59	94571	26.24	ug/L	98
10) Ethanol	4.775	45	8453	388.86	ug/L	96
11) 1,2-Dichlorotrifluoroe...	4.824	67	142264	25.50	ug/L	98
12) 1,1-Dichloroethene	4.824	61	175294	25.58	ug/L	98
13) Freon 113	4.885	101	118452	27.20	ug/L	99
14) Carbon Disulfide	4.867	76	331537	25.66	ug/L	99
15) Iodomethane	5.025	142	32477	21.96	ug/L	96
16) Acrolein	5.281	56	94159	124.24	ug/L	98
17) Allyl chloride	5.458	41	146478	23.89	ug/L	99
18) Methylene Chloride	5.592	49	164698	24.37	ug/L	98
19) Acetone	5.659	43	138550	116.08	ug/L	99
20) Methyl acetate	5.805	43	373563	118.41	ug/L	98
21) trans-1,2-Dichloroethene	5.799	61	170240	25.64	ug/L	95
22) Hexane	5.891	56	75772m	28.67	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	310594	24.68	ug/L	97
24) Tert Butyl Alcohol	6.031	59	67709	203.03	ug/L	99
25) Acetonitrile	6.232	41	106564	255.18	ug/L	100
26) Di-isopropyl ether	6.372	45	382481	25.48	ug/L	98
27) Chloroprene	6.519	53	133740	24.84	ug/L	98
28) 1,1-Dichloroethane	6.543	63	207052	25.63	ug/L	100
29) Acrylonitrile	6.604	52	156001	135.68	ug/L	99
30) ETBE	6.799	59	341041	24.13	ug/L	100
31) Vinyl acetate	6.823	43	1083622	113.50	ug/L	99
32) cis-1,2-Dichloroethene	7.177	96	123244	25.86	ug/L	99
33) 2,2-Dichloropropane	7.299	77	146010	22.45	ug/L	98
34) Bromochloromethane	7.403	128	67684	27.74	ug/L	96
35) Cyclohexane	7.409	56	175497	26.10	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.476	83	216654	25.40	ug/L		98
37) Ethyl acetate	7.592	43	478238	119.76	ug/L		99
38) Tetrahydrofuran	7.671	42	29594	23.73	ug/L		99
40) Carbon Tetrachloride	7.640	117	125528	19.63	ug/L		98
41) 1,1,1-Trichloroethane	7.720	97	172387	23.29	ug/L		99
42) 2-Butanone	7.811	43	226197	122.51	ug/L		100
43) 1,1-Dichloropropene	7.848	75	158028	25.67	ug/L		98
44) tert-Butyl formate	7.963	59	260354	82.41	ug/L	#	82
45) Propionitrile	8.140	54	136271	264.86	ug/L		93
46) Methacrylonitrile	8.165	41	766922	249.12	ug/L		99
47) Benzene	8.122	78	451542	25.46	ug/L		98
48) TAME	8.213	73	300561	24.44	ug/L		96
49) Isobutyl alcohol	8.299	43	45070m	336.41	ug/L		
51) 1,2-Dichloroethane	8.335	62	183665	25.35	ug/L		99
52) Tert Amyl Alcohol	8.409	59	46953	199.78	ug/L		96
53) Trichloroethene	8.732	95	126283	25.65	ug/L		97
54) Methylcyclohexane	8.726	83	165233	27.31	ug/L		97
55) Dibromomethane	9.177	93	84071	26.27	ug/L		98
56) 1,2-Dichloropropane	9.274	63	118512	25.96	ug/L		98
57) Bromodichloromethane	9.329	83	151568	24.31	ug/L		99
58) Methyl methacrylate	9.457	41	83725	23.15	ug/L		99
59) 1,4-Dioxane	9.530	88	16515	578.17	ug/L		97
60) 2-Chloroethyl vinyl ether	9.878	63	393563	120.69	ug/L		99
61) cis-1,3-Dichloropropene	9.969	75	170352	24.67	ug/L		98
64) Toluene	10.207	91	478792	25.44	ug/L		100
65) 2-Nitropropane	10.451	41	55651	43.83	ug/L		87
66) 4-Methyl-2-pentanone	10.567	43	546985	122.35	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	145371	24.21	ug/L		91
68) Tetrachloroethene	10.603	166	135053	25.77	ug/L		98
69) Ethyl methacrylate	10.731	69	107866	20.04	ug/L		98
70) 1,1,2-Trichloroethane	10.780	83	94439	26.31	ug/L		95
71) Dibromochloromethane	10.975	129	112734	22.06	ug/L		98
72) 1,3-Dichloropropane	11.067	76	187023	25.79	ug/L		99
73) 1,2-Dibromoethane	11.231	107	114997	26.00	ug/L		99
74) 3,3-dimethyl-1-butanol	11.341	57	157923	556.25	ug/L		98
75) 2-hexanone	11.396	43	368726	122.97	ug/L		99
76) 1-Chlorohexane	11.682	91	136703m	26.11	ug/L		
77) Ethylbenzene	11.743	91	542270	25.68	ug/L		99
78) Chlorobenzene	11.743	112	324484	25.94	ug/L		97
79) 1,1,1,2-Tetrachloroethane	11.792	131	101681	22.59	ug/L		99
80) m,p-Xylene	11.883	91	843135	52.41	ug/L		100
81) o-Xylene	12.322	91	408744	26.20	ug/L		98
82) Styrene	12.377	104	319054	28.28	ug/L		99
83) Bromoform	12.432	173	63225	20.23	ug/L		98
84) Isopropylbenzene	12.627	105	490130	26.45	ug/L		99
87) cis-1,4-Dichloro-2-butene	12.993	53	34356	21.97	ug/L	#	79
88) n-Propylbenzene	13.054	91	579068	24.25	ug/L		100
89) Bromobenzene	13.066	156	146990	20.58	ug/L		98
90) 1,1,2,2-Tetrachloroethane	13.121	83	138015	23.53	ug/L		99
91) 1,3,5-Trimethylbenzene	13.237	105	417441	25.51	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

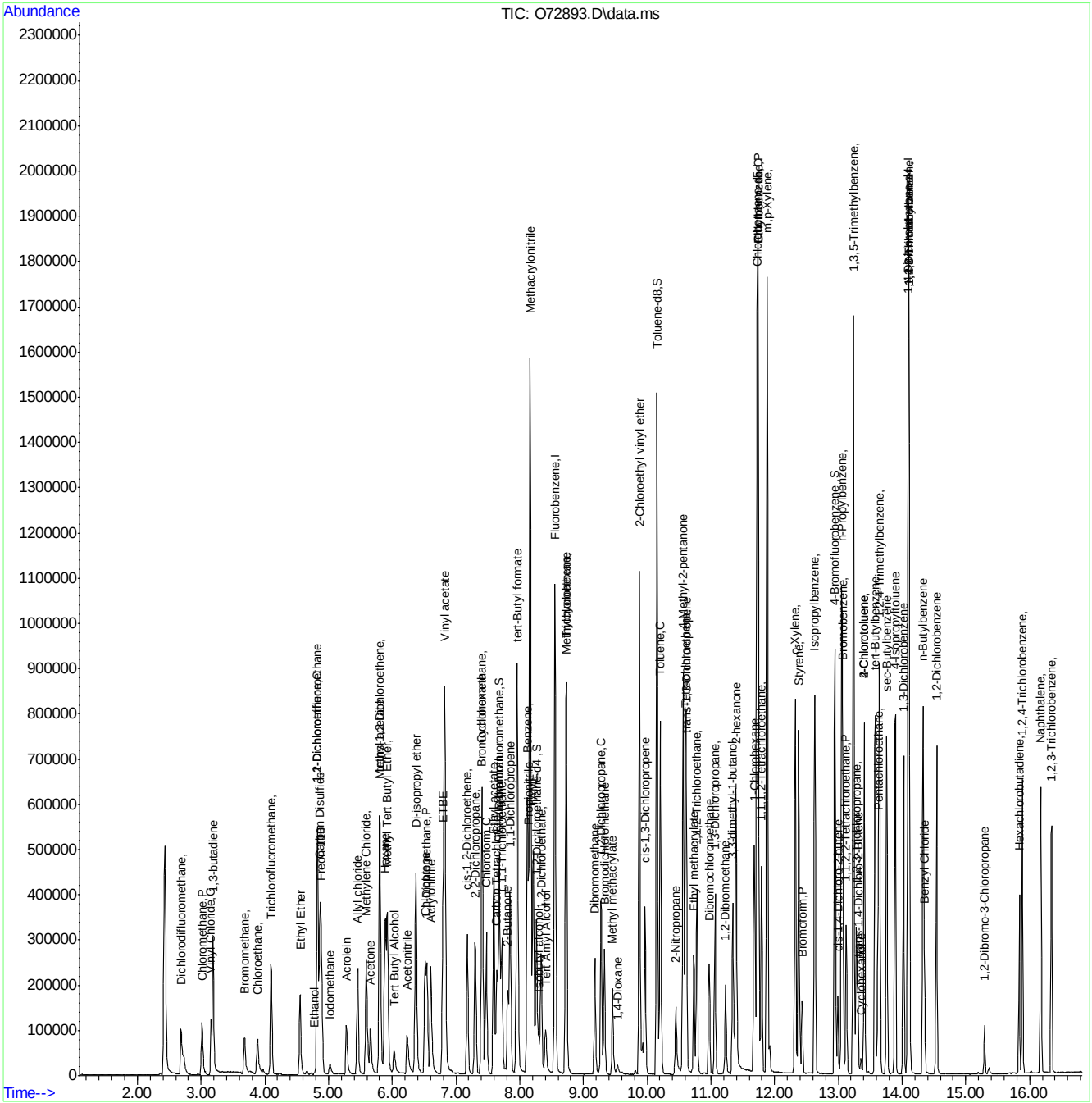
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.408	91	370615	24.67	ug/L		99
93)	trans-1,4-Dichloro-2-B...	13.310	53	32014	24.26	ug/L		83
94)	1,2,3-Trichloropropane	13.286	110	40505	24.41	ug/L		98
95)	Cyclohexanone	13.359	55	12798	119.60	ug/L		92
96)	4-Chlorotoluene	13.408	91	370615	24.67	ug/L		99
97)	tert-Butylbenzene	13.578	91	226296	24.45	ug/L		96
99)	1,2,4-Trimethylbenzene	13.645	105	405103	25.26	ug/L		99
100)	Pentachloroethane	13.627	167	50952	17.46	ug/L		93
101)	sec-Butylbenzene	13.761	105	458312	25.24	ug/L		99
102)	4-Isopropyltoluene	13.895	119	402951	25.87	ug/L		100
103)	1,3-Dichlorobenzene	14.023	146	254663	25.14	ug/L		99
104)	1,2,3-Trimethylbenzene	14.109	105	413494	25.57	ug/L		99
105)	1,4-Dichlorobenzene	14.109	146	267311	24.80	ug/L		99
106)	n-Butylbenzene	14.328	92	212242	26.09	ug/L		98
107)	Benzyl Chloride	14.352	126	30807	18.93	ug/L	#	89
108)	1,2-Dichlorobenzene	14.541	146	246281	25.61	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	15.291	75	18349	21.67	ug/L		90
110)	Hexachlorobutadiene	15.840	225	52483	27.07	ug/L		95
111)	1,2,4-Trichlorobenzene	15.889	180	151926	26.46	ug/L		99
112)	Naphthalene	16.175	128	383811	26.25	ug/L		99
113)	1,2,3-Trichlorobenzene	16.346	180	139577	26.76	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

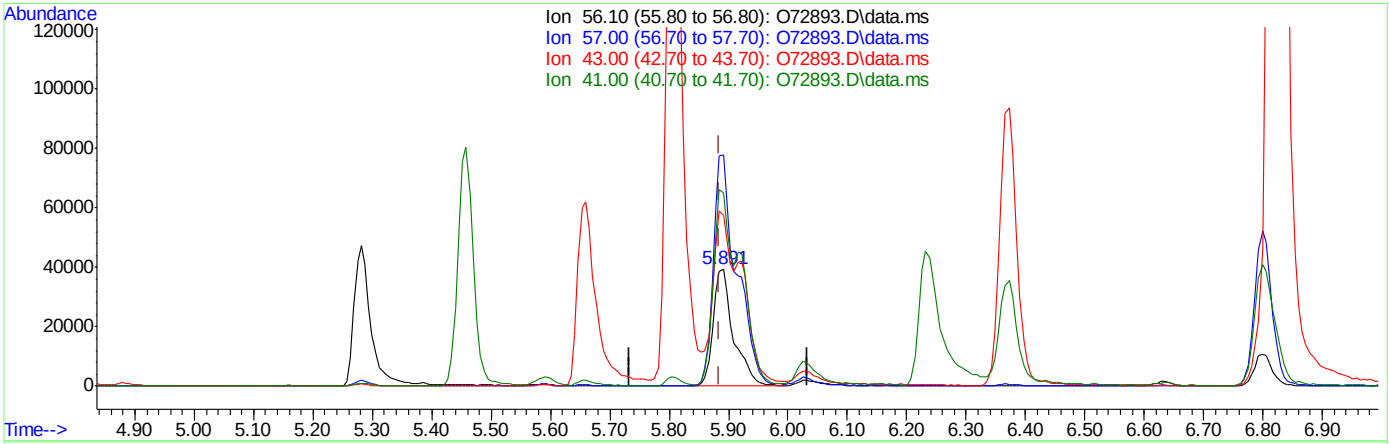
Sample Number: VO2866-IC2866
Lab FileID: O72893.D
Injection Time: 12/08/22 11:10
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

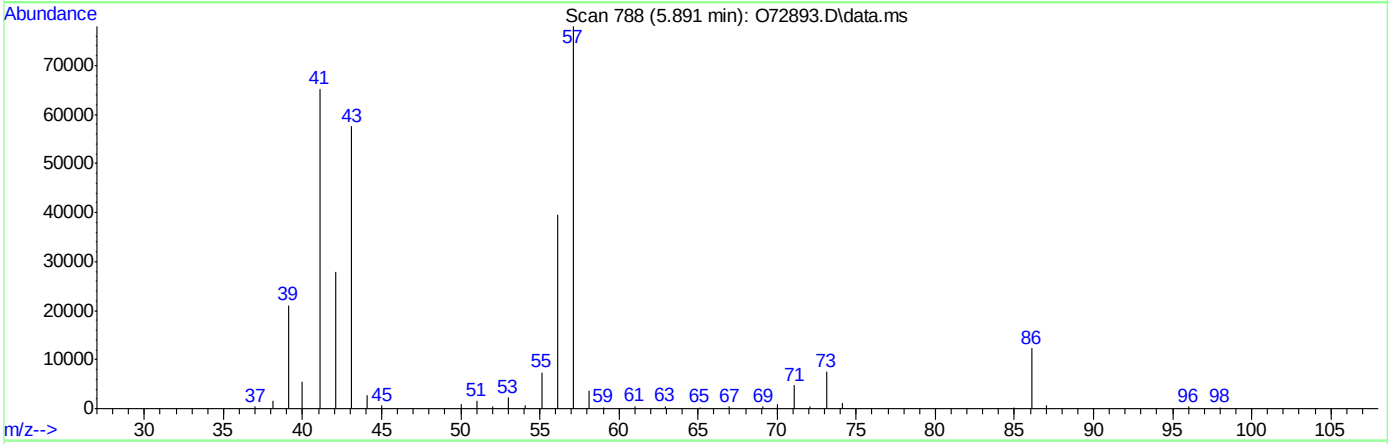
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(22) Hexane

5.891min (+0.006) 35.17ug/L

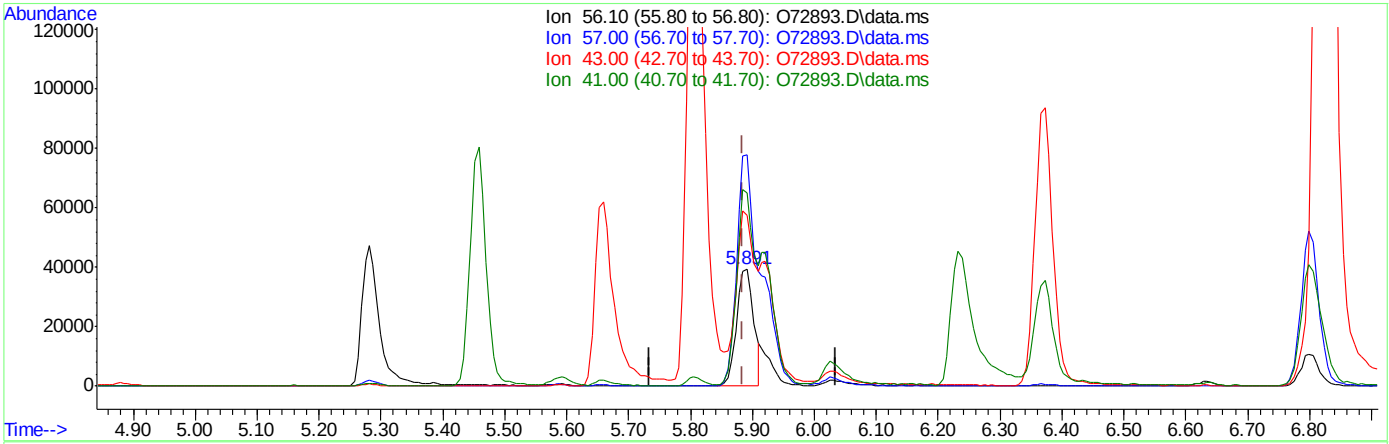
response 93787

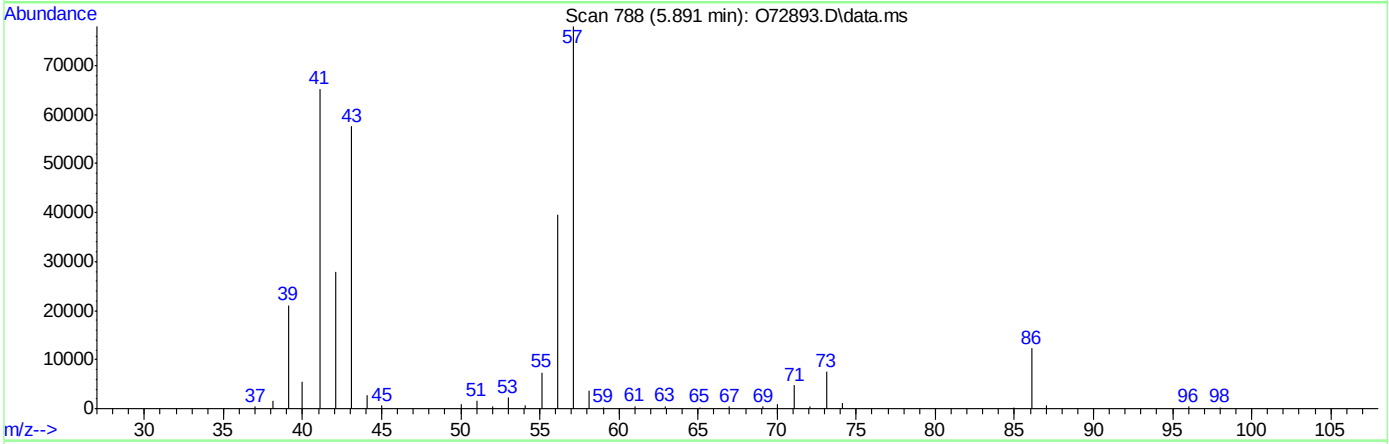
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.53
43.00	149.90	141.72
41.00	165.70	163.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(22) Hexane

5.891min (+0.006) 28.67ug/L m

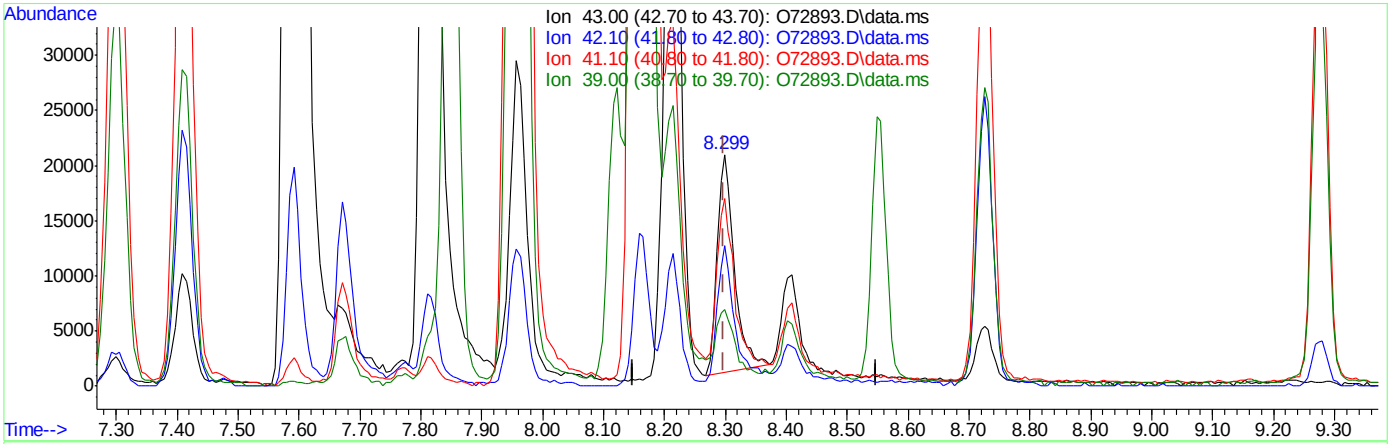
response 75772

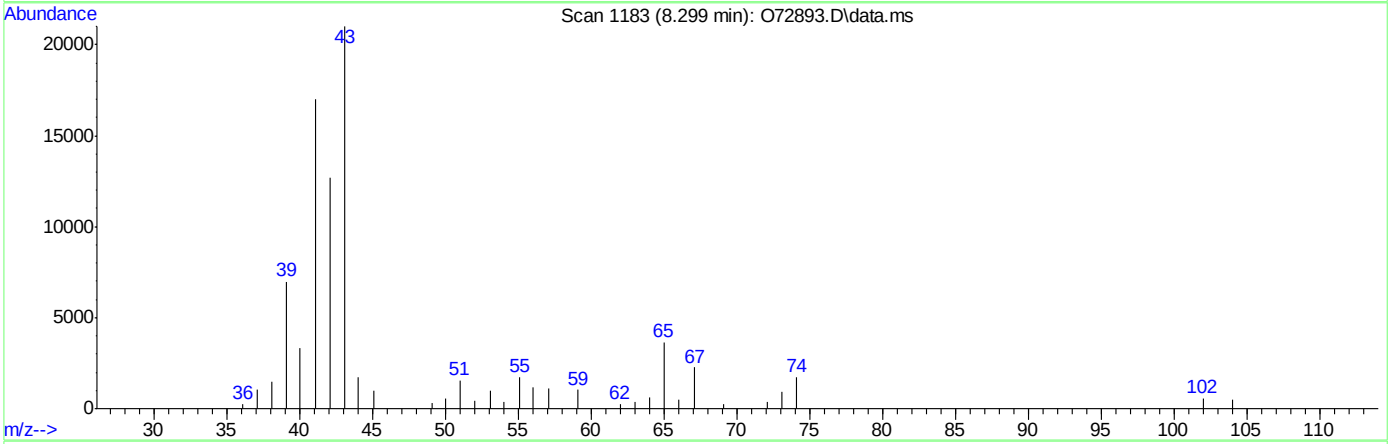
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.53
43.00	149.90	145.71
41.00	165.70	165.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 286.11ug/L

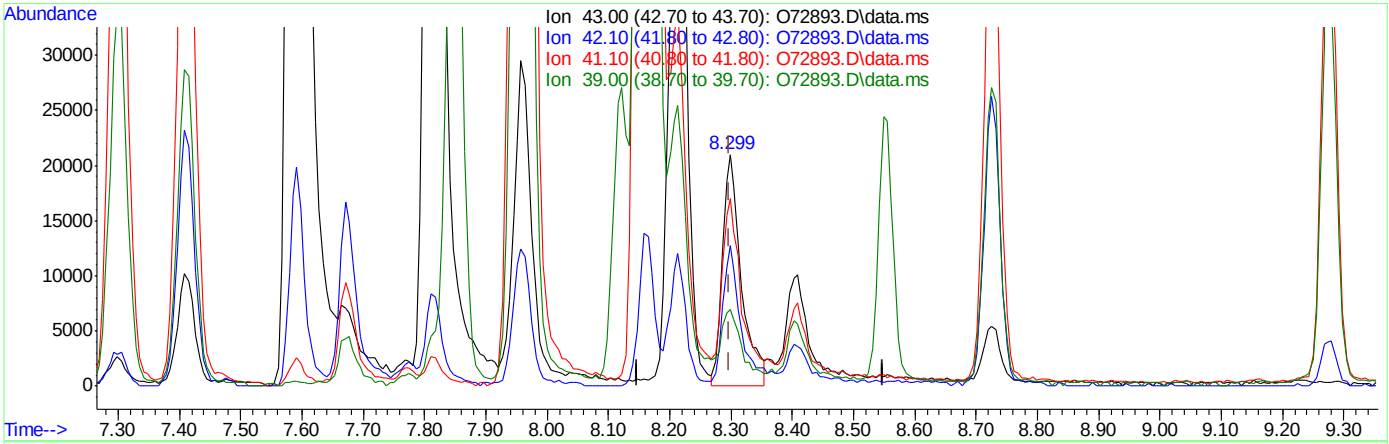
response 38331

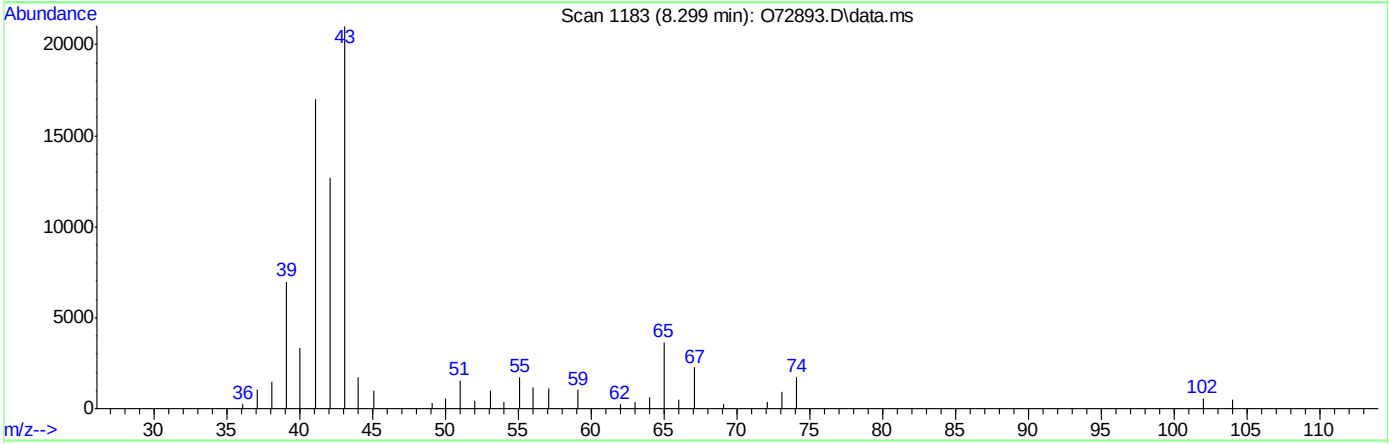
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.07
41.10	78.00	75.40
39.00	30.80	28.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 336.41ug/L m

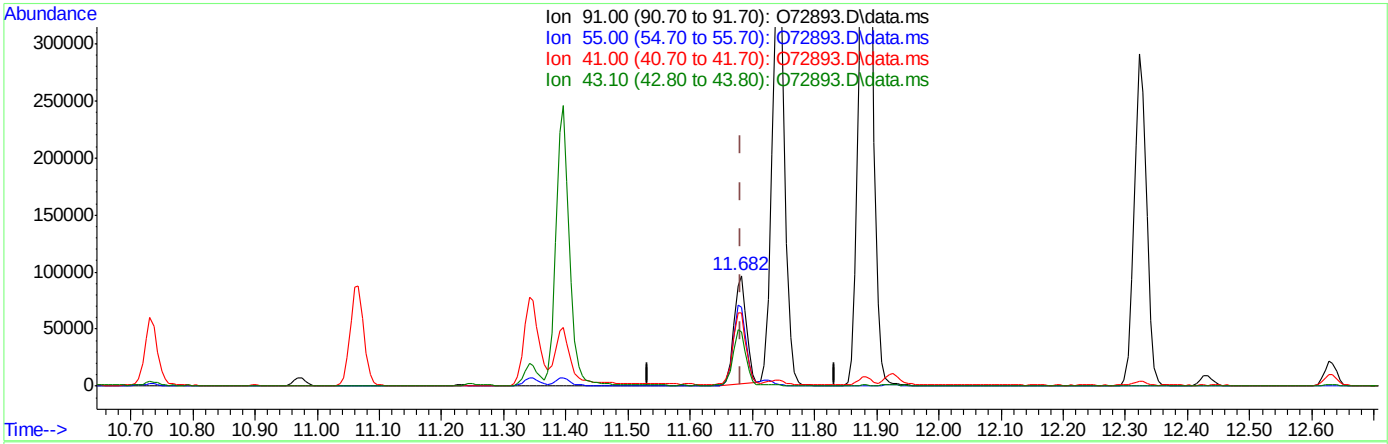
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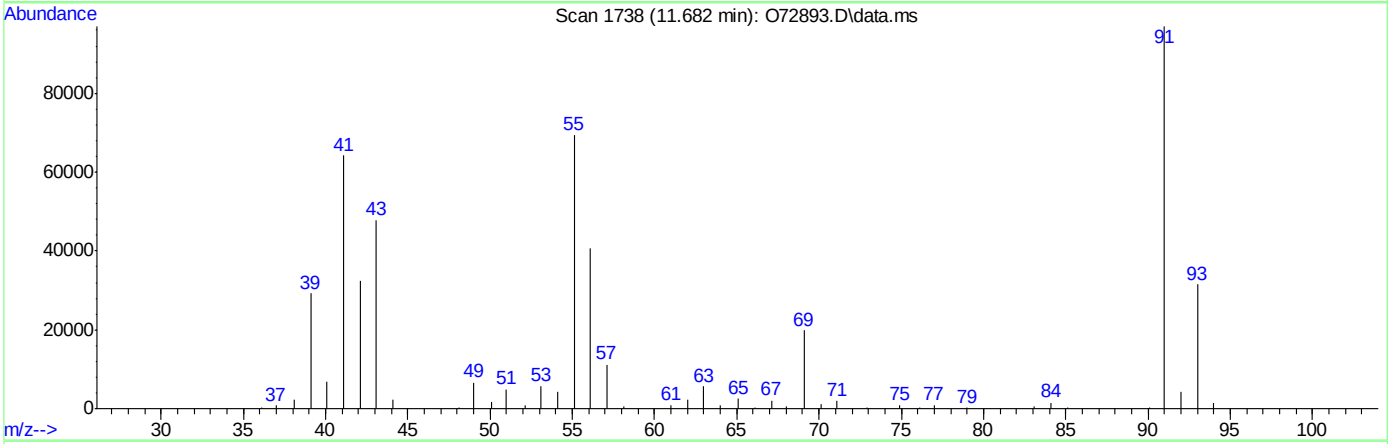
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	60.49
41.10	78.00	80.96
39.00	30.80	33.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 25.09ug/L

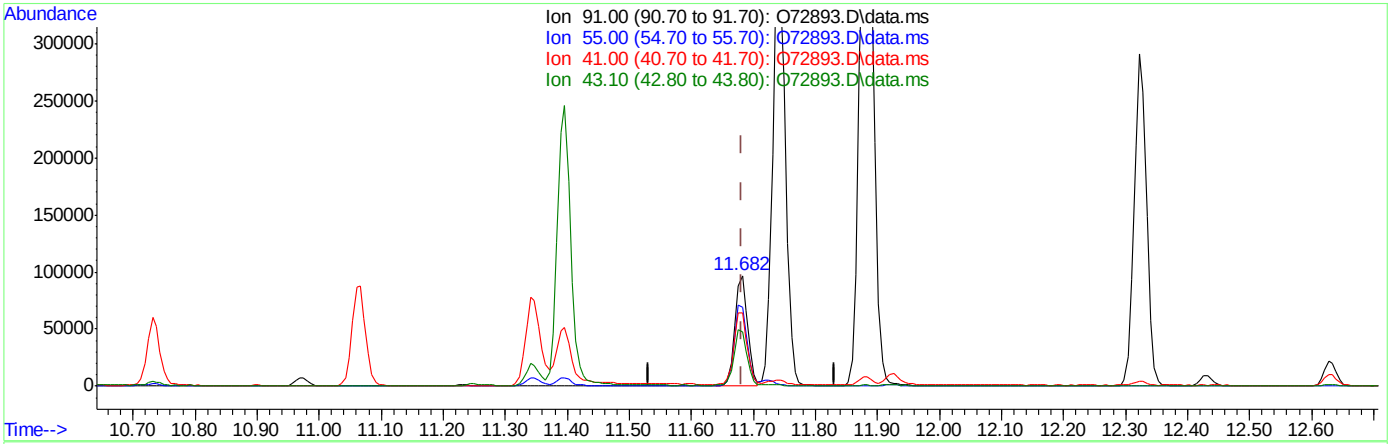
response 131379

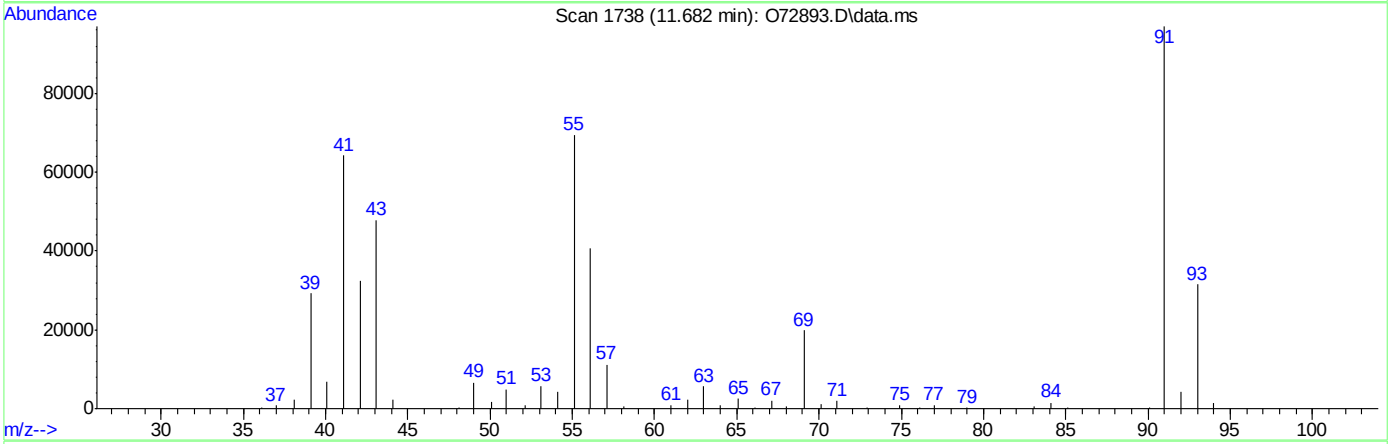
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	71.10
41.00	64.00	64.30
43.10	51.10	48.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 26.11ug/L m

response 136703

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	71.67
41.00	64.00	66.24
43.10	51.10	49.35

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	828618	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	603499	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	216353	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	231947	49.98	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.96%			
50) 1,2-Dichloroethane-d4	8.262	65	215191	52.29	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.58%			
63) Toluene-d8	10.152	98	819493	50.64	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.28%			
86) 4-Bromofluorobenzene	12.944	174	218060	50.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.14%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	264537	55.53	ug/L	99
3) Chloromethane	3.013	50	234745	50.56	ug/L	100
4) 1,3-butadiene	3.184	39	195086	41.52	ug/L	100
5) Vinyl Chloride	3.153	62	239194	49.61	ug/L	97
6) Bromomethane	3.678	94	101499	66.98	ug/L	99
7) Chloroethane	3.879	64	136461	50.96	ug/L	97
8) Trichlorofluoromethane	4.098	101	348319	49.99	ug/L	99
9) Ethyl Ether	4.550	59	145972	40.75	ug/L	99
10) Ethanol	4.781	45	15513	717.82	ug/L	99
11) 1,2-Dichlorotrifluoroe...	4.824	67	218742	39.44	ug/L	99
12) 1,1-Dichloroethene	4.824	61	271671	39.88	ug/L	99
13) Freon 113	4.885	101	178410	41.21	ug/L	99
14) Carbon Disulfide	4.860	76	507670	39.52	ug/L	100
15) Iodomethane	5.019	142	85155	46.80	ug/L	98
16) Acrolein	5.275	56	164018	217.69	ug/L	98
17) Allyl chloride	5.452	41	261377	42.88	ug/L	99
18) Methylene Chloride	5.592	49	249831	38.07	ug/L	99
19) Acetone	5.653	43	227786	191.96	ug/L	97
20) Methyl acetate	5.805	43	590954	188.42	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	263416	39.91	ug/L	100
22) Hexane	5.885	56	126691m	47.02	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	482694	38.57	ug/L	98
24) Tert Butyl Alcohol	6.025	59	105544	318.34	ug/L	96
25) Acetonitrile	6.232	41	188854	454.88	ug/L	99
26) Di-isopropyl ether	6.366	45	586559	39.31	ug/L	100
27) Chloroprene	6.513	53	238006	44.47	ug/L	98
28) 1,1-Dichloroethane	6.543	63	315386	39.26	ug/L	98
29) Acrylonitrile	6.604	52	256372	224.28	ug/L	99
30) ETBE	6.799	59	539907	38.42	ug/L	99
31) Vinyl acetate	6.823	43	1923623	202.67	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	187263	39.53	ug/L	100
33) 2,2-Dichloropropane	7.299	77	239240	37.00	ug/L	99
34) Bromochloromethane	7.403	128	102343	42.19	ug/L	97
35) Cyclohexane	7.409	56	277780	41.55	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	330315	38.95	ug/L	98
37) Ethyl acetate	7.592	43	818403	206.14	ug/L	99
38) Tetrahydrofuran	7.671	42	45347	37.16	ug/L	96
40) Carbon Tetrachloride	7.640	117	207159	32.59	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	272511	37.04	ug/L	98
42) 2-Butanone	7.811	43	369828	201.47	ug/L	99
43) 1,1-Dichloropropene	7.848	75	243332	39.76	ug/L	98
44) tert-Butyl formate	7.957	59	513500	163.49	ug/L	90
45) Propionitrile	8.140	54	240847	470.86	ug/L	96
46) Methacrylonitrile	8.159	41	1359991	444.35	ug/L	99
47) Benzene	8.116	78	684695	38.83	ug/L	99
48) TAME	8.213	73	466976	38.20	ug/L	98
49) Isobutyl alcohol	8.299	43	96229m	722.48	ug/L	
51) 1,2-Dichloroethane	8.335	62	283584	39.37	ug/L	99
52) Tert Amyl Alcohol	8.402	59	76051	325.49	ug/L	97
53) Trichloroethene	8.732	95	193724	39.58	ug/L	99
54) Methylcyclohexane	8.726	83	259038	43.06	ug/L	96
55) Dibromomethane	9.177	93	127292	40.00	ug/L	99
56) 1,2-Dichloropropane	9.274	63	182046	40.11	ug/L	98
57) Bromodichloromethane	9.329	83	234809	37.88	ug/L	99
58) Methyl methacrylate	9.457	41	156781	43.60	ug/L	98
59) 1,4-Dioxane	9.530	88	23713	835.03	ug/L	100
60) 2-Chloroethyl vinyl ether	9.878	63	680411	209.87	ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	268054	39.04	ug/L	98
64) Toluene	10.207	91	728157	40.14	ug/L	100
65) 2-Nitropropane	10.445	41	95625	78.14	ug/L	91
66) 4-Methyl-2-pentanone	10.561	43	912089	211.65	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	237694	41.08	ug/L	97
68) Tetrachloroethene	10.603	166	210052	41.58	ug/L	99
69) Ethyl methacrylate	10.731	69	207827	40.47	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	143301	41.42	ug/L	99
71) Dibromochloromethane	10.969	129	183822	37.32	ug/L	99
72) 1,3-Dichloropropane	11.067	76	285555	40.86	ug/L	98
73) 1,2-Dibromoethane	11.231	107	175493	41.17	ug/L	98
74) 3,3-dimethyl-1-butanol	11.341	57	329710	1204.85	ug/L	99
75) 2-hexanone	11.396	43	619236	214.25	ug/L	99
76) 1-Chlorohexane	11.682	91	216984m	42.99	ug/L	
77) Ethylbenzene	11.743	91	834233	40.98	ug/L	99
78) Chlorobenzene	11.743	112	495507	41.10	ug/L	97
79) 1,1,1,2-Tetrachloroethane	11.792	131	164899	38.00	ug/L	98
80) m,p-Xylene	11.883	91	1293410	83.41	ug/L	100
81) o-Xylene	12.322	91	634596	42.21	ug/L	100
82) Styrene	12.377	104	496476	45.65	ug/L	99
83) Bromoform	12.432	173	106478	35.34	ug/L	99
84) Isopropylbenzene	12.627	105	753853	42.21	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	65012	45.07	ug/L	91
88) n-Propylbenzene	13.054	91	906552	41.15	ug/L	100
89) Bromobenzene	13.066	156	225380	37.57	ug/L	98
90) 1,1,2,2-Tetrachloroethane	13.121	83	211332	39.05	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	646148	42.81	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

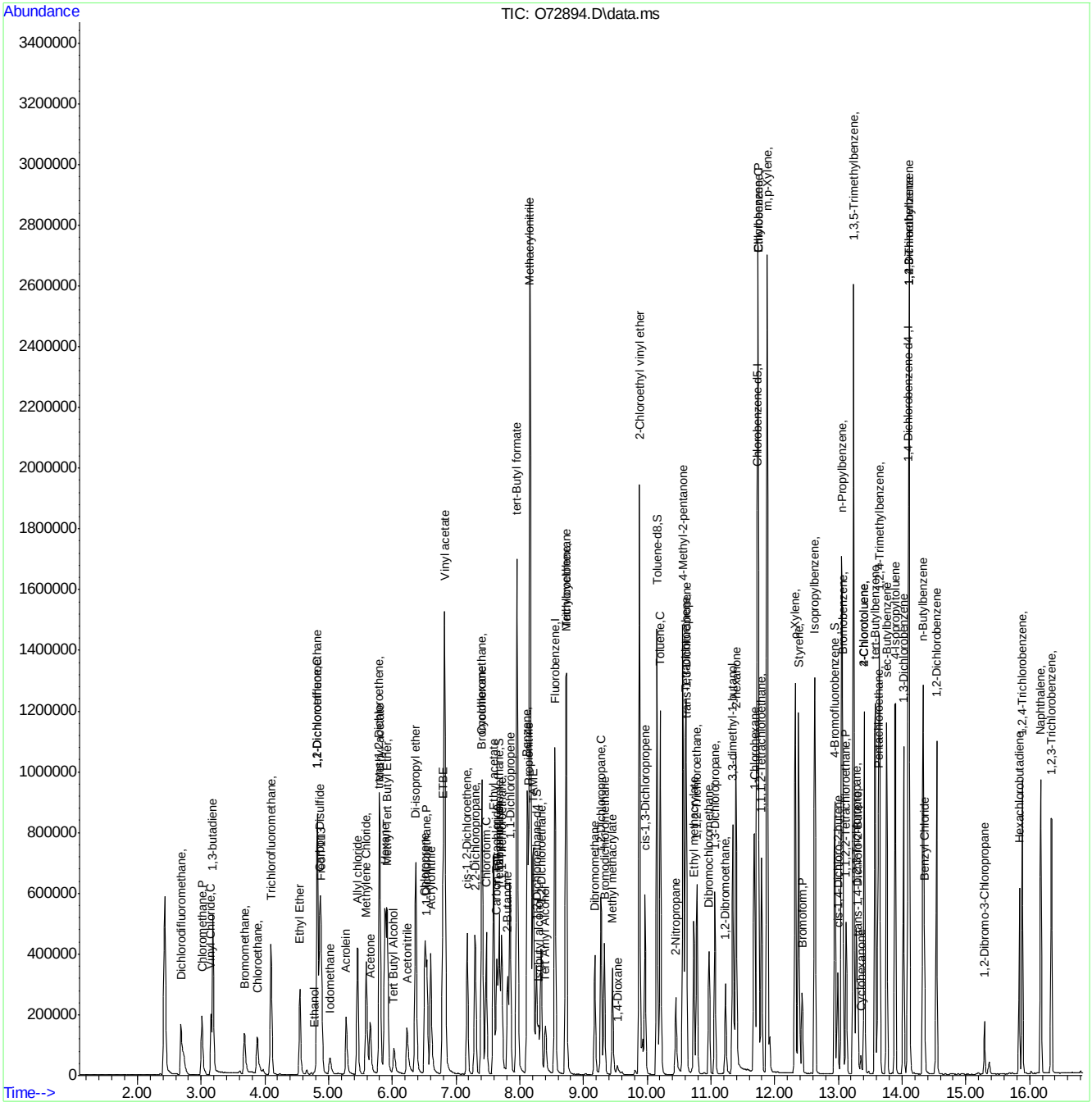
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	565751	40.82	ug/L	100
93) trans-1,4-Dichloro-2-B...	13.304	53	51871	42.60	ug/L	95
94) 1,2,3-Trichloropropane	13.286	110	62521	40.84	ug/L	98
95) Cyclohexanone	13.353	55	21515	217.93	ug/L	92
96) 4-Chlorotoluene	13.408	91	565751	40.82	ug/L	100
97) tert-Butylbenzene	13.578	91	351765	41.19	ug/L	98
99) 1,2,4-Trimethylbenzene	13.645	105	631861	42.71	ug/L	99
100) Pentachloroethane	13.627	167	101396	37.67	ug/L	98
101) sec-Butylbenzene	13.761	105	706459	42.18	ug/L	99
102) 4-Isopropyltoluene	13.895	119	625255	43.51	ug/L	100
103) 1,3-Dichlorobenzene	14.023	146	389918	41.72	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	640030	42.90	ug/L	99
105) 1,4-Dichlorobenzene	14.109	146	412266	41.45	ug/L	99
106) n-Butylbenzene	14.328	92	333898	44.48	ug/L	100
107) Benzyl Chloride	14.352	126	55588	37.02	ug/L	99
108) 1,2-Dichlorobenzene	14.541	146	379263	42.75	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	30038	38.45	ug/L	93
110) Hexachlorobutadiene	15.840	225	81628	45.64	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	237641	44.86	ug/L	98
112) Naphthalene	16.175	128	591088	43.82	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	216039	44.89	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

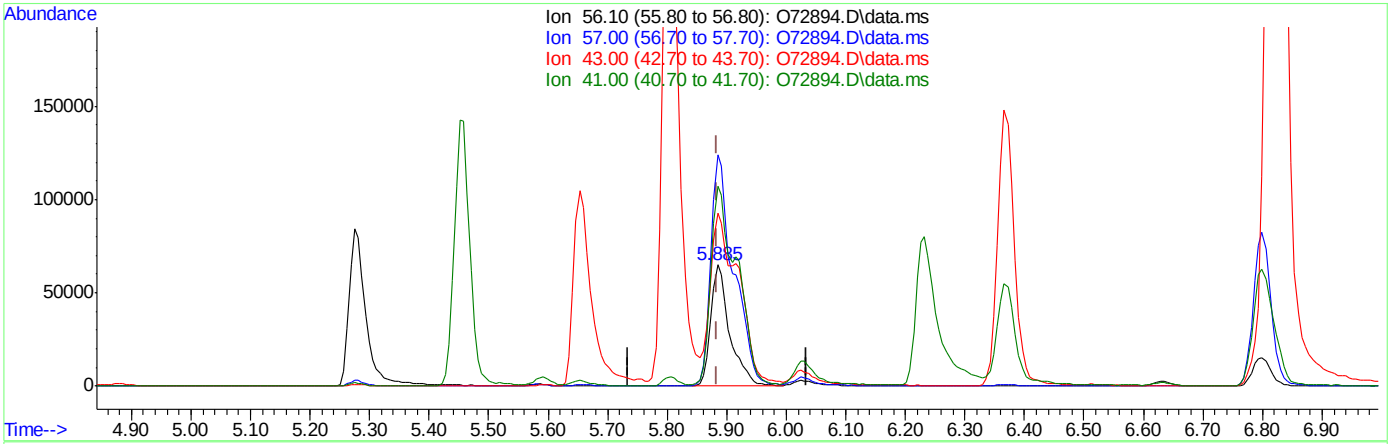
Sample Number: VO2866-ICC2866
Lab FileID: O72894.D
Injection Time: 12/08/22 11:35
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

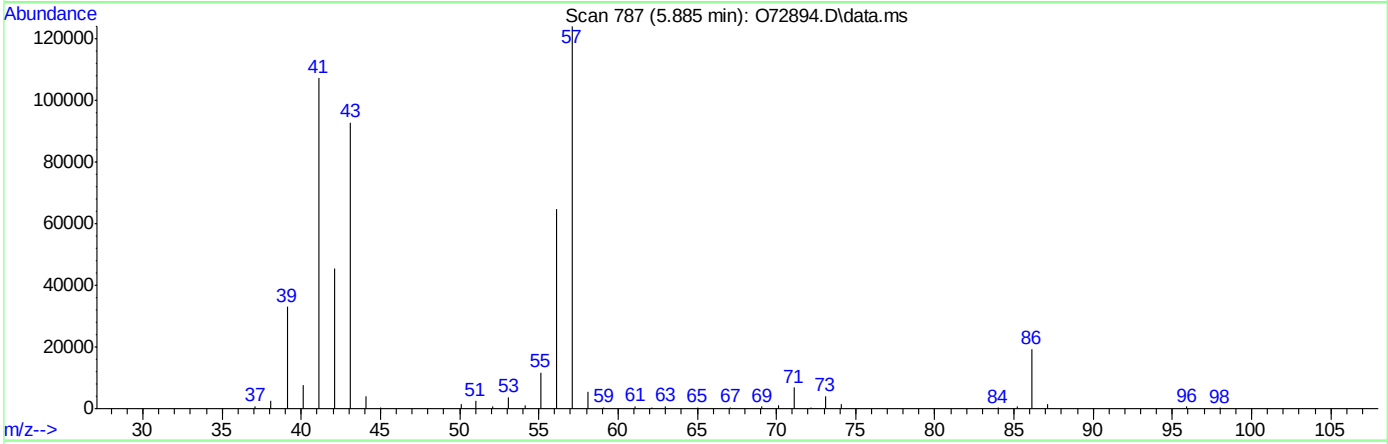
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(22) Hexane

5.885min (0.000) 52.66ug/L

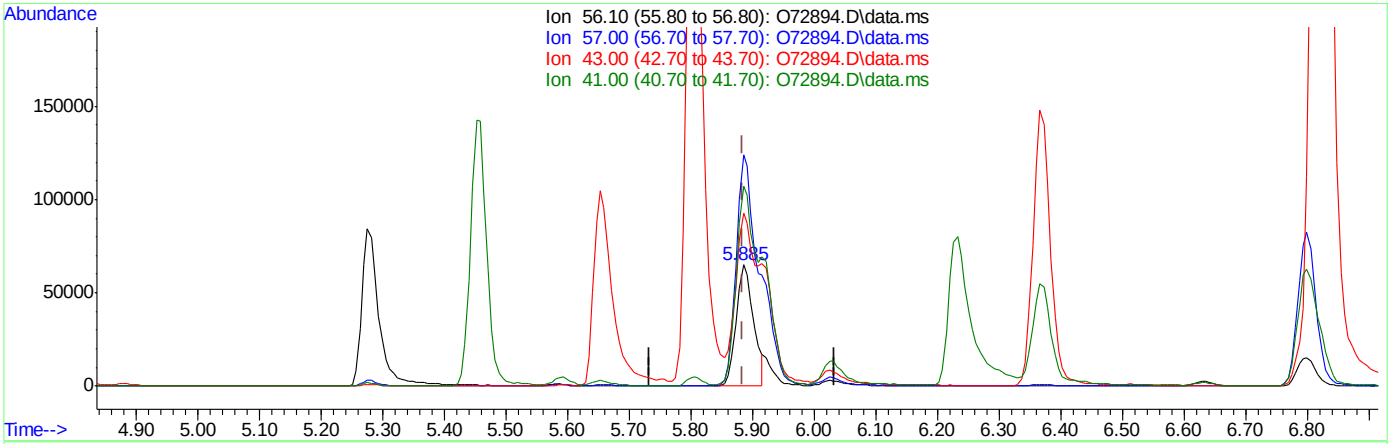
response 142976

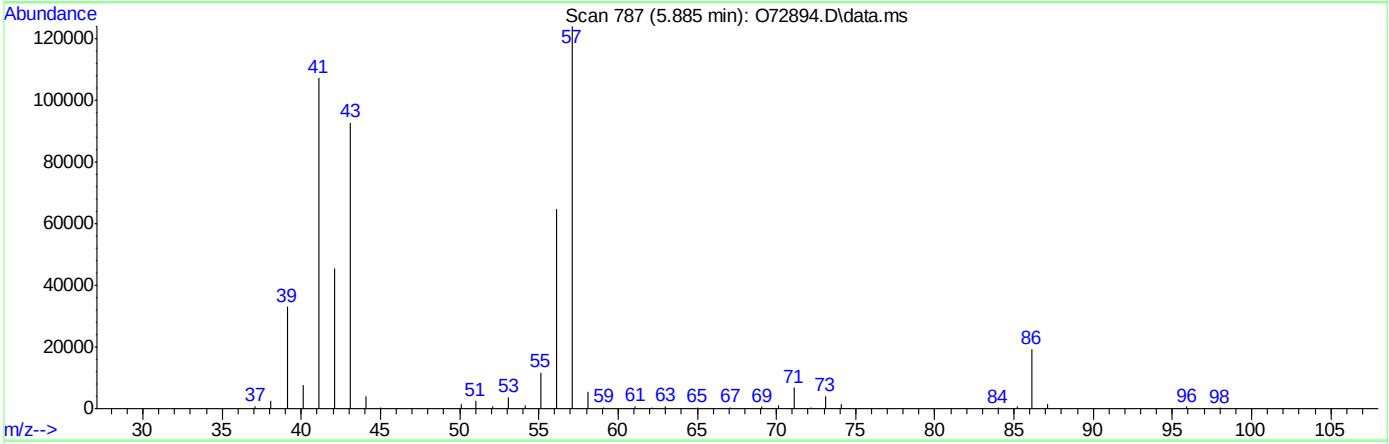
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	191.59
43.00	149.90	140.17
41.00	165.70	164.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(22) Hexane

5.885min (0.000) 47.02ug/L m

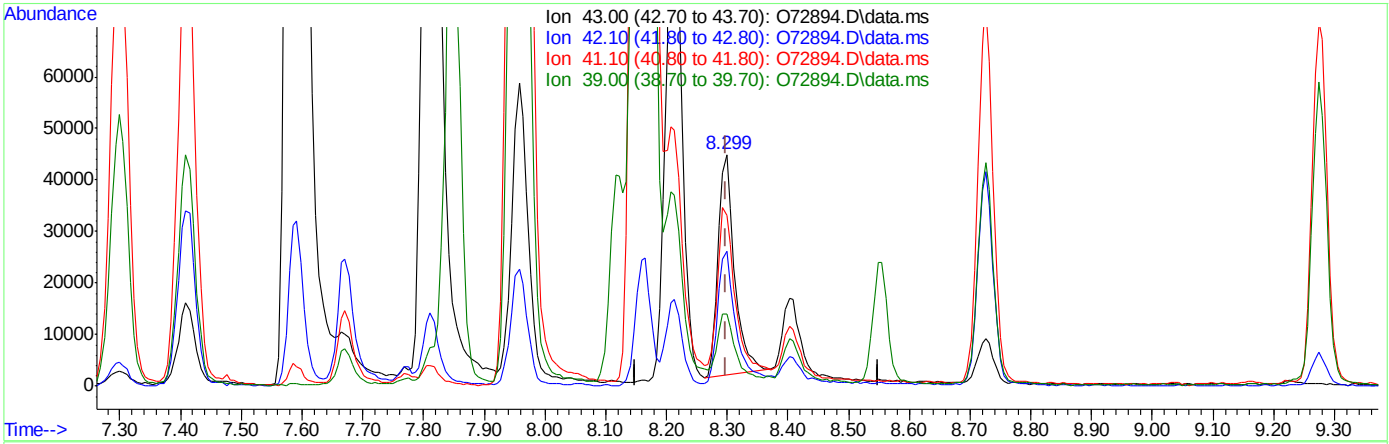
response 126691

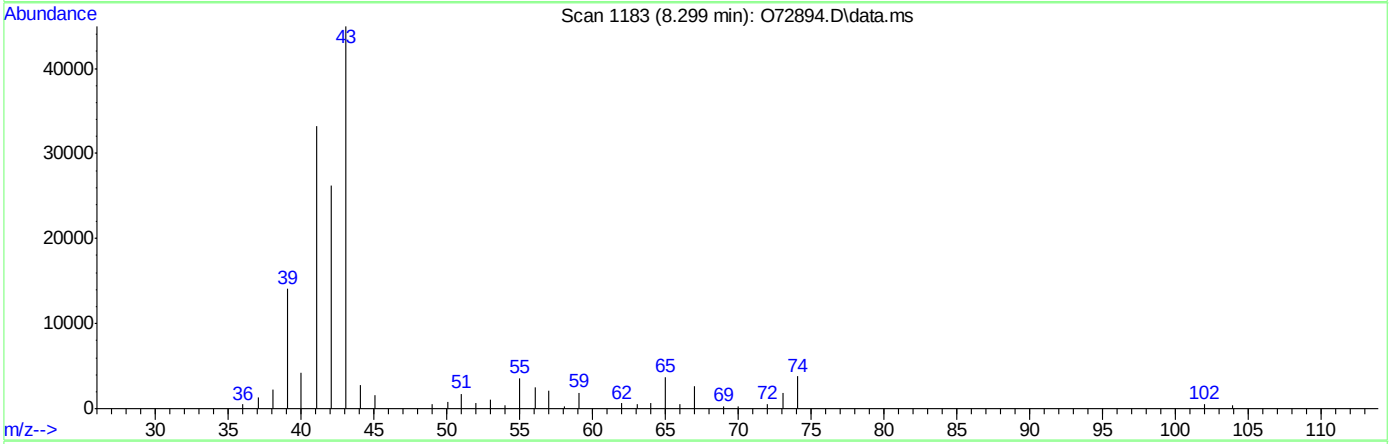
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	191.59
43.00	149.90	143.34
41.00	165.70	165.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(49) Isobutyl alcohol

8.299min (0.000) 603.91ug/L

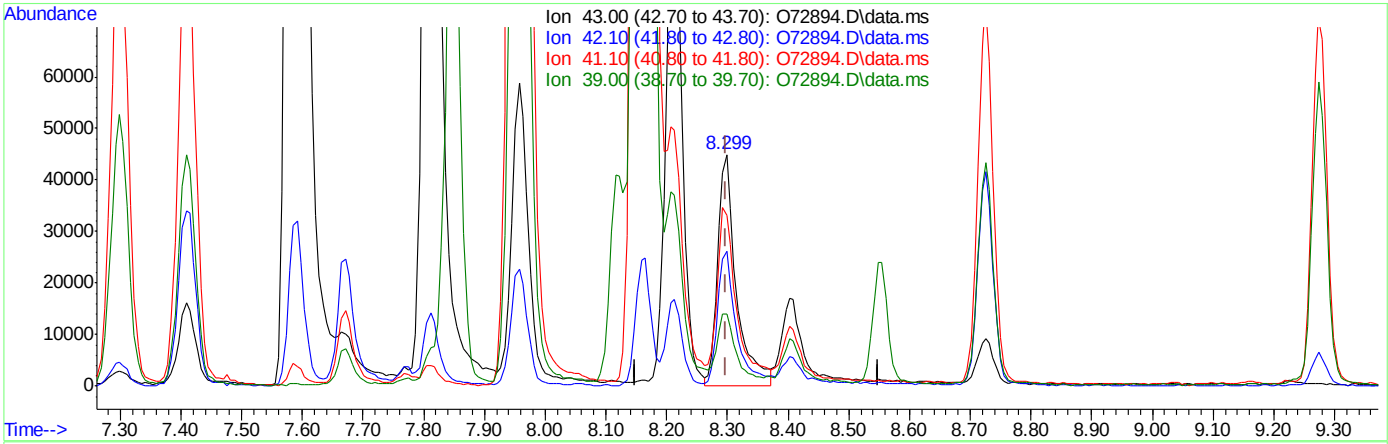
response 80437

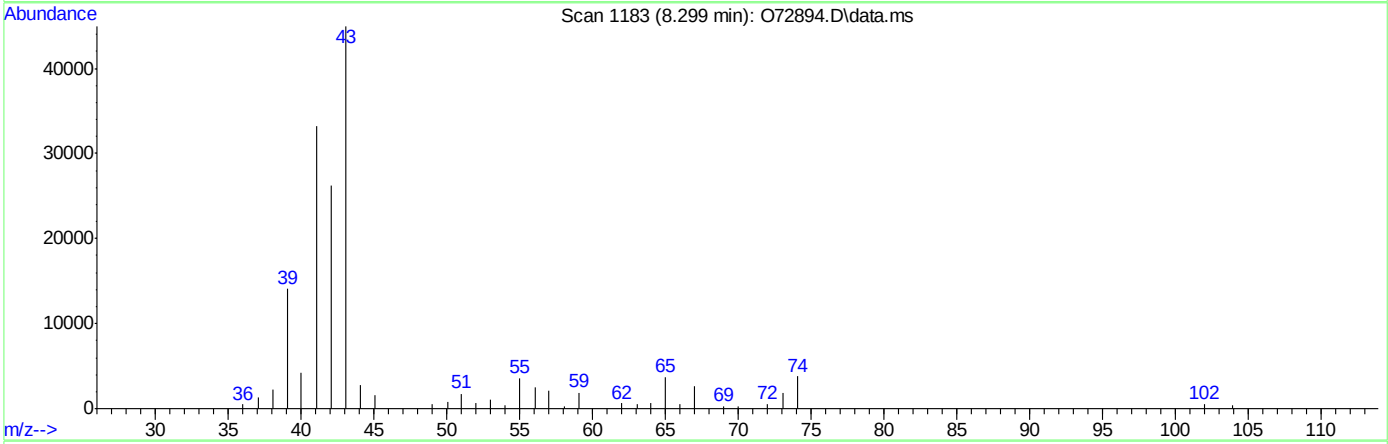
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.11
41.10	78.00	69.31
39.00	30.80	28.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(49) Isobutyl alcohol

8.299min (0.000) 722.48ug/L m

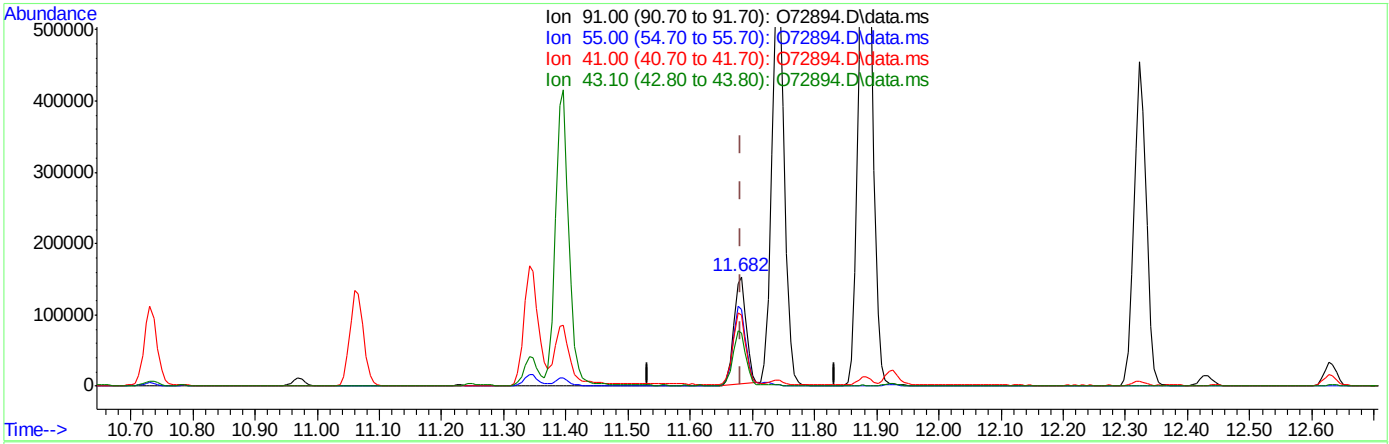
response 96229

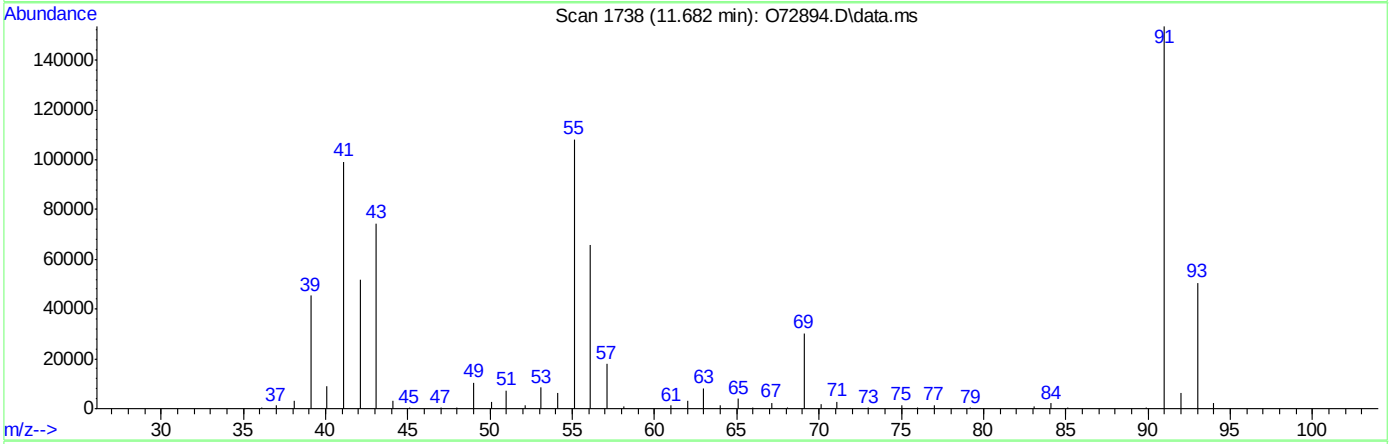
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	58.37
41.10	78.00	73.77
39.00	30.80	31.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 41.31ug/L

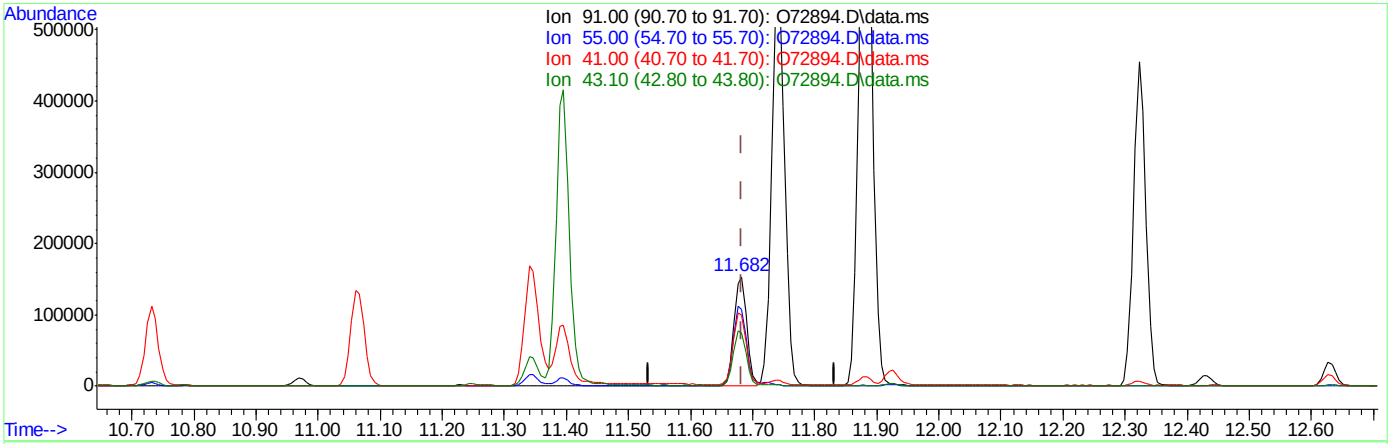
response 208477

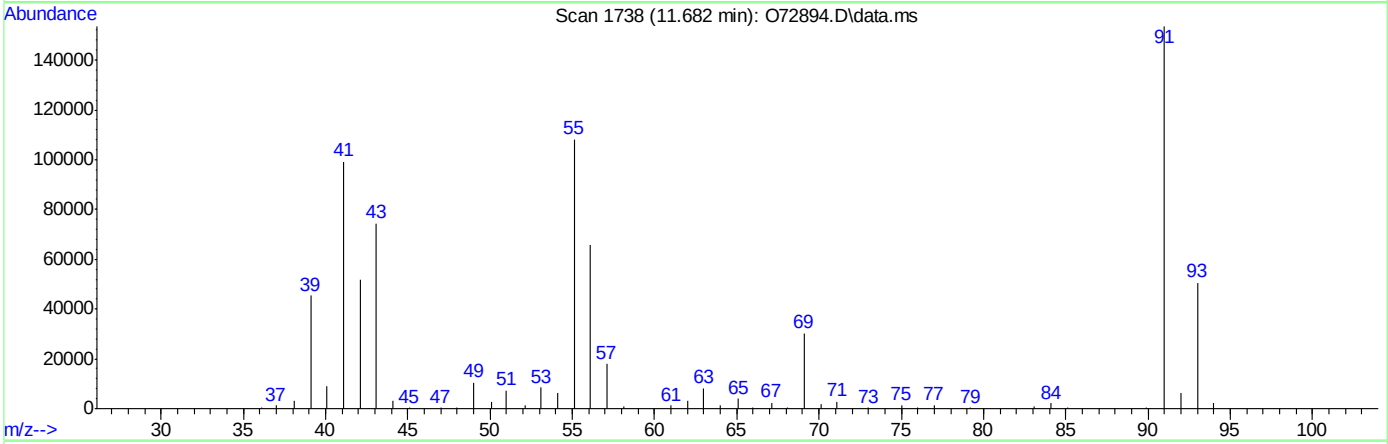
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	69.93
41.00	64.00	62.82
43.10	51.10	47.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 42.99ug/L m

response 216984

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	70.40
41.00	64.00	64.58
43.10	51.10	48.39

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	876904	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	654946	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	245865	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	247634	50.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.84%			
50) 1,2-Dichloroethane-d4	8.262	65	223479	51.31	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.62%			
63) Toluene-d8	10.152	98	873089	49.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.44%			
86) 4-Bromofluorobenzene	12.944	174	239228	48.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	448575	88.98	ug/L	98
3) Chloromethane	3.013	50	389177	79.21	ug/L	96
4) 1,3-butadiene	3.184	39	363610	75.69	ug/L	99
5) Vinyl Chloride	3.153	62	394488	77.32	ug/L	96
6) Bromomethane	3.678	94	183416	114.37	ug/L	99
7) Chloroethane	3.879	64	220064	77.65	ug/L	98
8) Trichlorofluoromethane	4.092	101	599610	81.32	ug/L	100
9) Ethyl Ether	4.550	59	286275	75.51	ug/L	99
10) Ethanol	4.769	45	29411	1285.98	ug/L	89
11) 1,2-Dichlorotrifluoroe...	4.824	67	430378	73.33	ug/L	98
12) 1,1-Dichloroethene	4.824	61	541072	75.06	ug/L	97
13) Freon 113	4.879	101	360341	78.66	ug/L	98
14) Carbon Disulfide	4.860	76	990560	72.87	ug/L	100
15) Iodomethane	5.019	142	224870	88.41	ug/L	99
16) Acrolein	5.275	56	284350	356.61	ug/L	100
17) Allyl chloride	5.452	41	510398	79.11	ug/L	99
18) Methylene Chloride	5.586	49	482192	74.05	ug/L	97
19) Acetone	5.653	43	414330	329.94	ug/L	97
20) Methyl acetate	5.799	43	1176709	354.53	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	519093	74.32	ug/L	99
22) Hexane	5.885	56	242813m	81.37	ug/L	
23) Methyl Tert Butyl Ether	5.915	73	954384	72.07	ug/L	95
24) Tert Butyl Alcohol	6.025	59	218319	622.23	ug/L	98
25) Acetonitrile	6.226	41	346749	789.21	ug/L	99
26) Di-isopropyl ether	6.366	45	1165990	73.83	ug/L	98
27) Chloroprene	6.513	53	467392	82.52	ug/L	99
28) 1,1-Dichloroethane	6.543	63	623022	73.29	ug/L	99
29) Acrylonitrile	6.604	52	462132	382.03	ug/L	97
30) ETBE	6.799	59	1091903	73.42	ug/L	99
31) Vinyl acetate	6.817	43	3657342	364.11	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	367341	73.27	ug/L	99
33) 2,2-Dichloropropane	7.299	77	490141	71.63	ug/L	100
34) Bromochloromethane	7.403	128	200149	77.97	ug/L	97
35) Cyclohexane	7.409	56	547987	77.45	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	645757	71.96	ug/L	98
37) Ethyl acetate	7.586	43	1494989	355.82	ug/L	99
38) Tetrahydrofuran	7.665	42	87531	70.62	ug/L	99
40) Carbon Tetrachloride	7.640	117	434328	64.56	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	550466	70.70	ug/L	99
42) 2-Butanone	7.811	43	682464	351.31	ug/L	98
43) 1,1-Dichloropropene	7.848	75	478879	73.94	ug/L	99
44) tert-Butyl formate	7.957	59	999516	300.71	ug/L	94
45) Propionitrile	8.140	54	446577	825.00	ug/L	95
46) Methacrylonitrile	8.165	41	2503555	772.95	ug/L	99
47) Benzene	8.122	78	1358140	72.78	ug/L	100
48) TAME	8.213	73	922570	71.32	ug/L	98
49) Isobutyl alcohol	8.293	43	187829m	1332.55	ug/L	
51) 1,2-Dichloroethane	8.335	62	560417	73.51	ug/L	99
52) Tert Amyl Alcohol	8.402	59	159315	644.31	ug/L	96
53) Trichloroethene	8.732	95	379822	73.33	ug/L	99
54) Methylcyclohexane	8.726	83	509709	80.07	ug/L	99
55) Dibromomethane	9.177	93	249605	74.12	ug/L	99
56) 1,2-Dichloropropane	9.274	63	357629	74.46	ug/L	97
57) Bromodichloromethane	9.329	83	477120	72.73	ug/L	99
58) Methyl methacrylate	9.457	41	298562	78.45	ug/L	99
59) 1,4-Dioxane	9.530	88	46195	1537.13	ug/L	91
60) 2-Chloroethyl vinyl ether	9.878	63	1181393	344.34	ug/L	98
61) cis-1,3-Dichloropropene	9.969	75	544537	74.94	ug/L	99
64) Toluene	10.207	91	1432648	72.77	ug/L	100
65) 2-Nitropropane	10.445	41	219616	165.36	ug/L	93
66) 4-Methyl-2-pentanone	10.561	43	1689772	361.32	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	492398	78.41	ug/L	87
68) Tetrachloroethene	10.603	166	408112	74.45	ug/L	99
69) Ethyl methacrylate	10.731	69	404838	73.91	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	278455	74.16	ug/L	98
71) Dibromochloromethane	10.969	129	386294	72.27	ug/L	99
72) 1,3-Dichloropropane	11.067	76	554537	73.12	ug/L	100
73) 1,2-Dibromoethane	11.231	107	345610	74.71	ug/L	99
74) 3,3-dimethyl-1-butanol	11.347	57	719205	2421.73	ug/L	100
75) 2-hexanone	11.396	43	1144256	364.80	ug/L	99
76) 1-Chlorohexane	11.682	91	424502m	77.50	ug/L	
77) Ethylbenzene	11.743	91	1638245	74.16	ug/L	100
78) Chlorobenzene	11.743	112	975767	74.58	ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.792	131	341278	72.47	ug/L	99
80) m,p-Xylene	11.883	91	2587710	153.76	ug/L	100
81) o-Xylene	12.322	91	1251246	76.68	ug/L	100
82) Styrene	12.377	104	987038	83.63	ug/L	99
83) Bromoform	12.432	173	231131	70.69	ug/L	99
84) Isopropylbenzene	12.627	105	1482660	76.50	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	127091	77.53	ug/L	94
88) n-Propylbenzene	13.054	91	1791566	71.55	ug/L	100
89) Bromobenzene	13.066	156	434660	98.67	ug/L	99
90) 1,1,2,2-Tetrachloroethane	13.127	83	408592	66.43	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	1296274	75.57	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

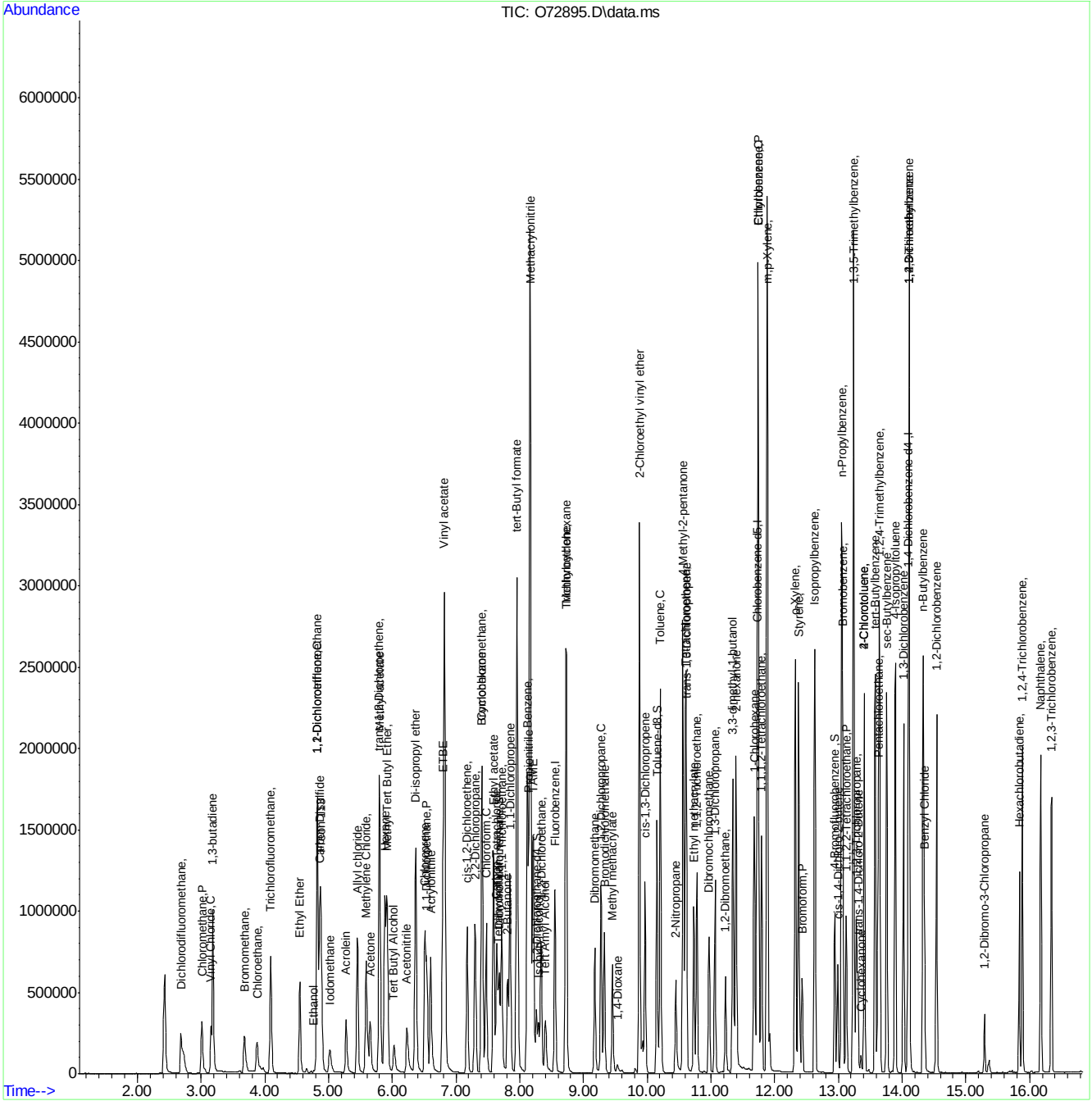
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	1115369	70.82	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	103070	74.49	ug/L	96
94) 1,2,3-Trichloropropane	13.286	110	120372	69.19	ug/L	99
95) Cyclohexanone	13.353	55	38414	342.40	ug/L	95
96) 4-Chlorotoluene	13.408	91	1115369	70.82	ug/L	98
97) tert-Butylbenzene	13.578	91	696708	71.79	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	1247263	74.18	ug/L	99
100) Pentachloroethane	13.627	167	209300	68.42	ug/L	98
101) sec-Butylbenzene	13.761	105	1391343	73.09	ug/L	99
102) 4-Isopropyltoluene	13.895	119	1233066	75.50	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	755430	71.13	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	1276742	75.30	ug/L	99
105) 1,4-Dichlorobenzene	14.109	146	801575	70.93	ug/L	99
106) n-Butylbenzene	14.328	92	671564	78.73	ug/L	100
107) Benzyl Chloride	14.352	126	125764	73.70	ug/L	94
108) 1,2-Dichlorobenzene	14.541	146	736404	73.05	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	64780	72.96	ug/L	99
110) Hexachlorobutadiene	15.840	225	159870	78.66	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	467961	77.73	ug/L	99
112) Naphthalene	16.175	128	1171810	76.45	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	426653	78.01	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

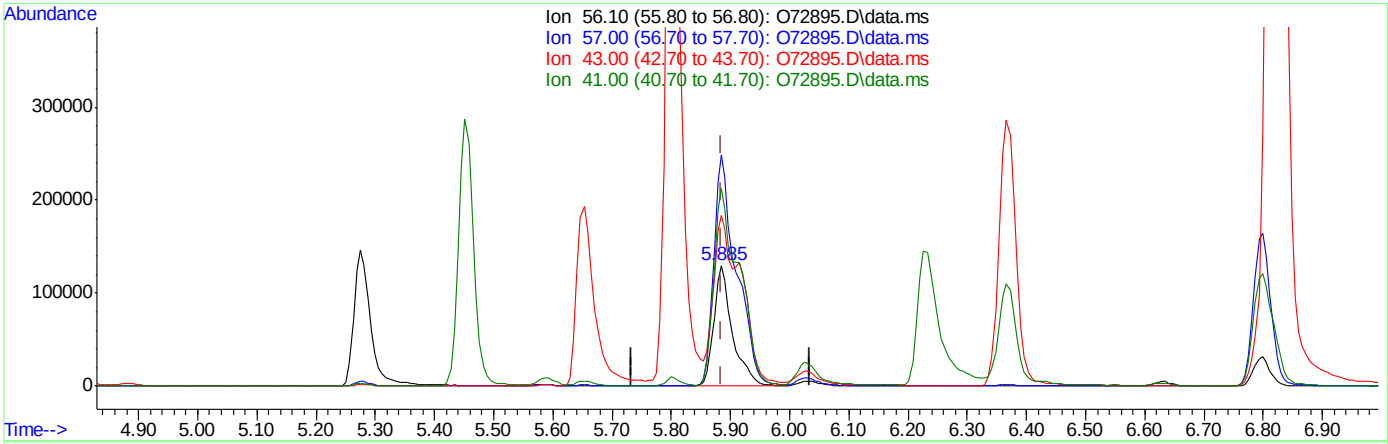
Sample Number: VO2866-IC2866
Lab FileID: O72895.D
Injection Time: 12/08/22 12:00
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

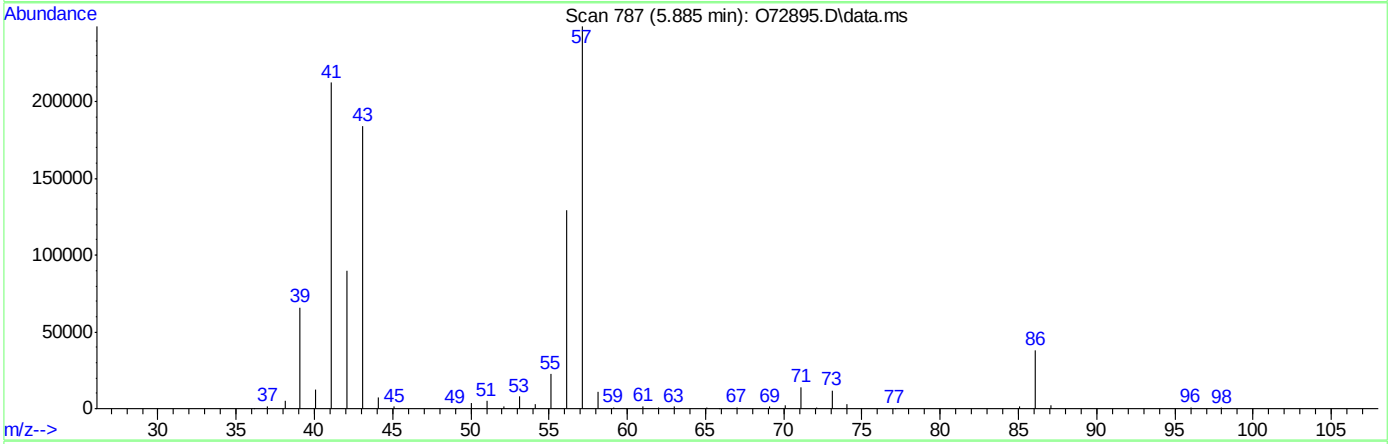
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.29	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(22) Hexane

5.885min (0.000) 93.00ug/L

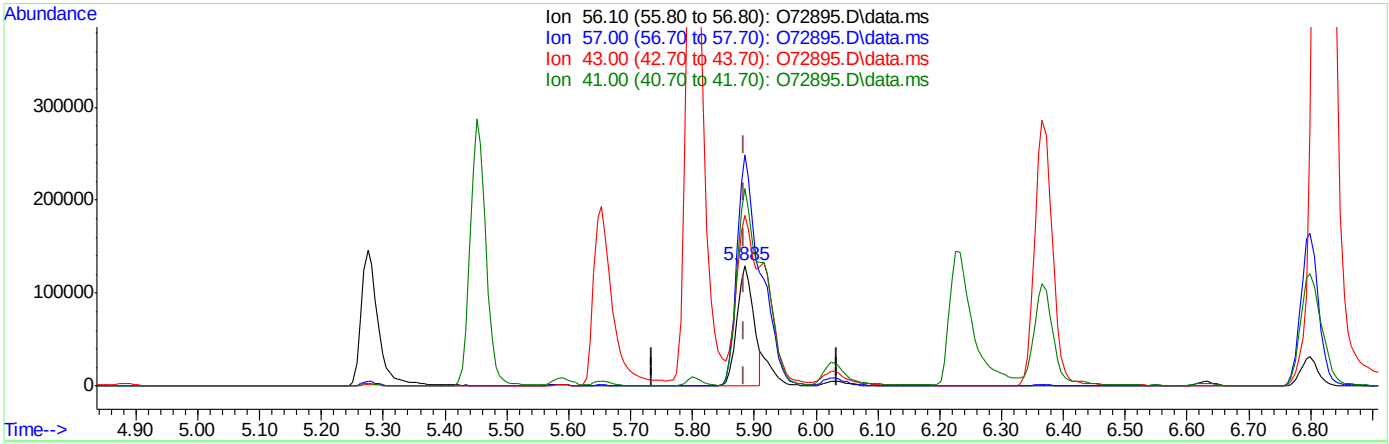
response 281686

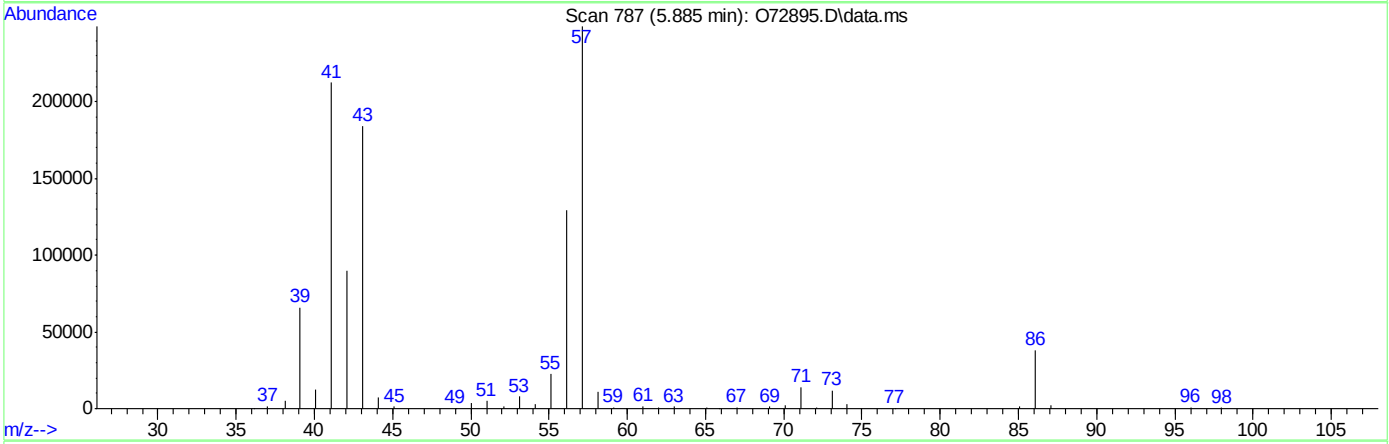
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	192.21
43.00	149.90	138.66
41.00	165.70	162.91

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
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Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(22) Hexane

5.885min (0.000) 81.37ug/L m

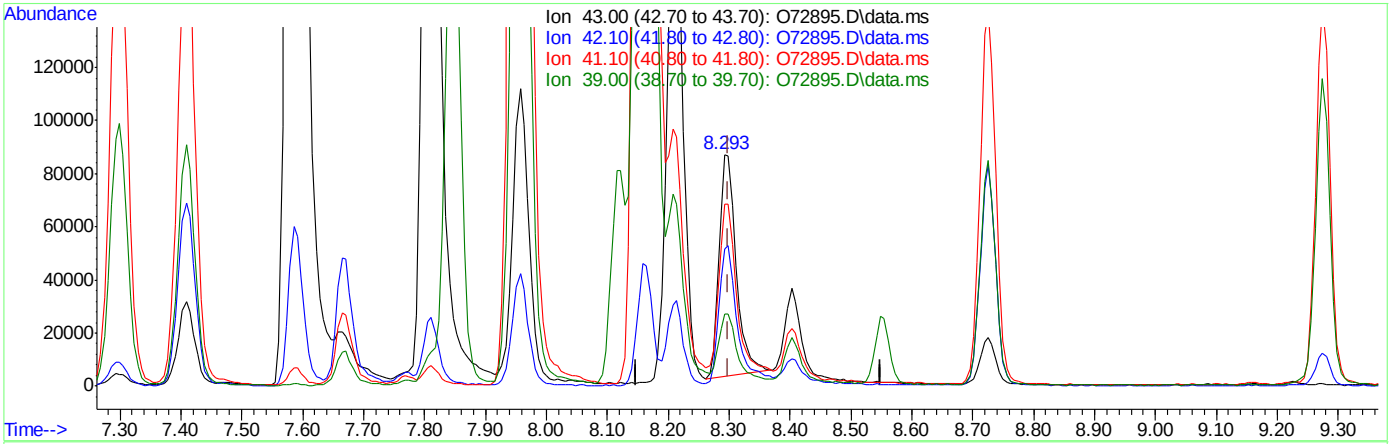
response 242813

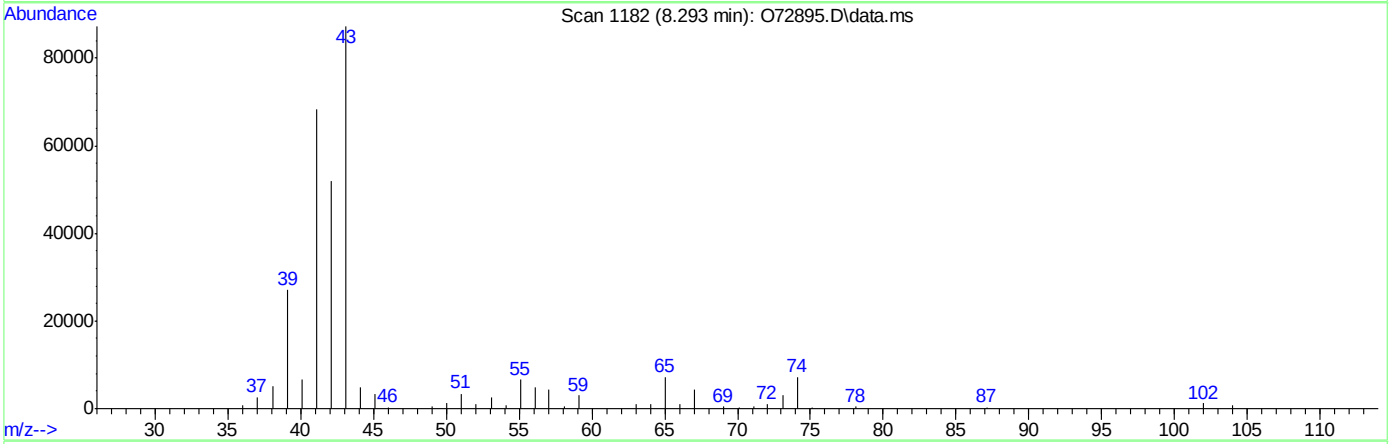
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	192.21
43.00	149.90	142.05
41.00	165.70	164.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 1152.34ug/L

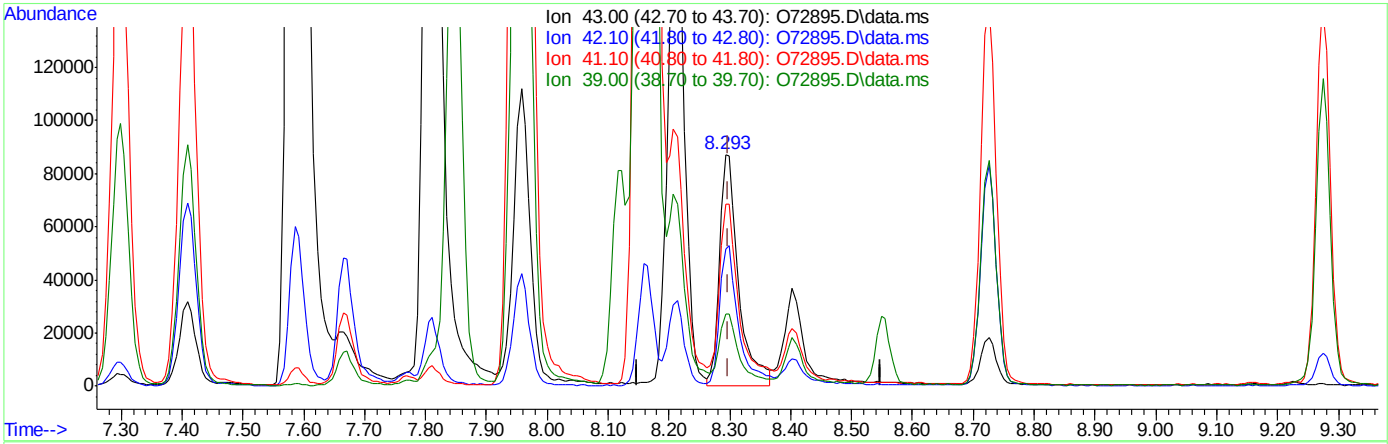
response 162428

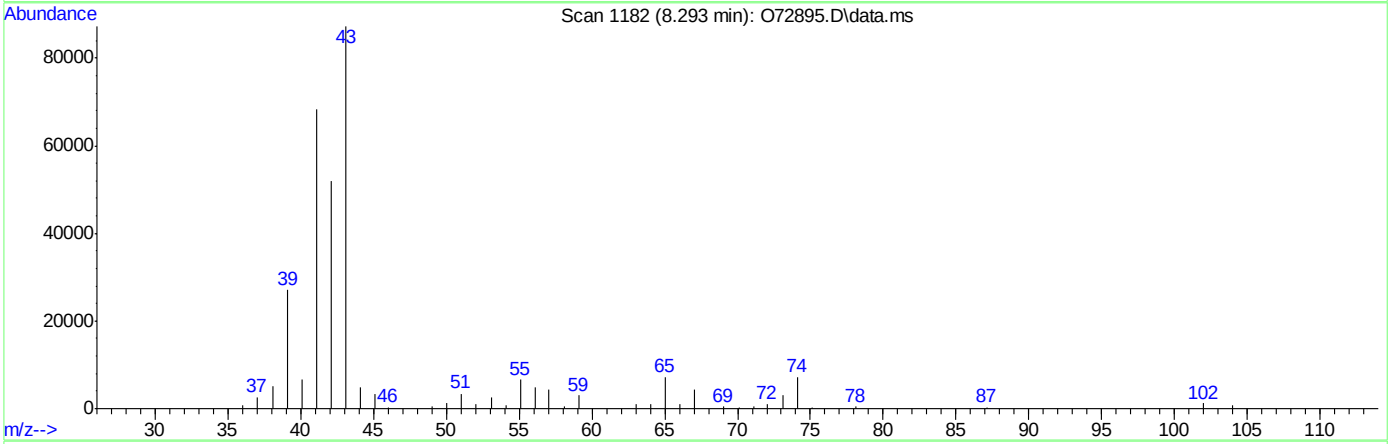
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	60.32
41.10	78.00	73.47
39.00	30.80	28.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 1332.55ug/L m

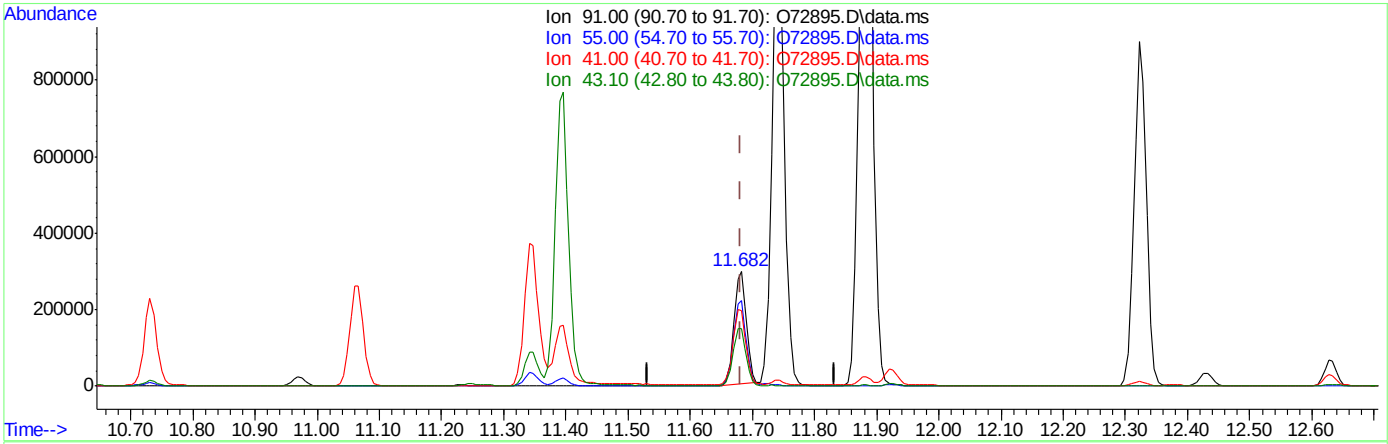
response 187829

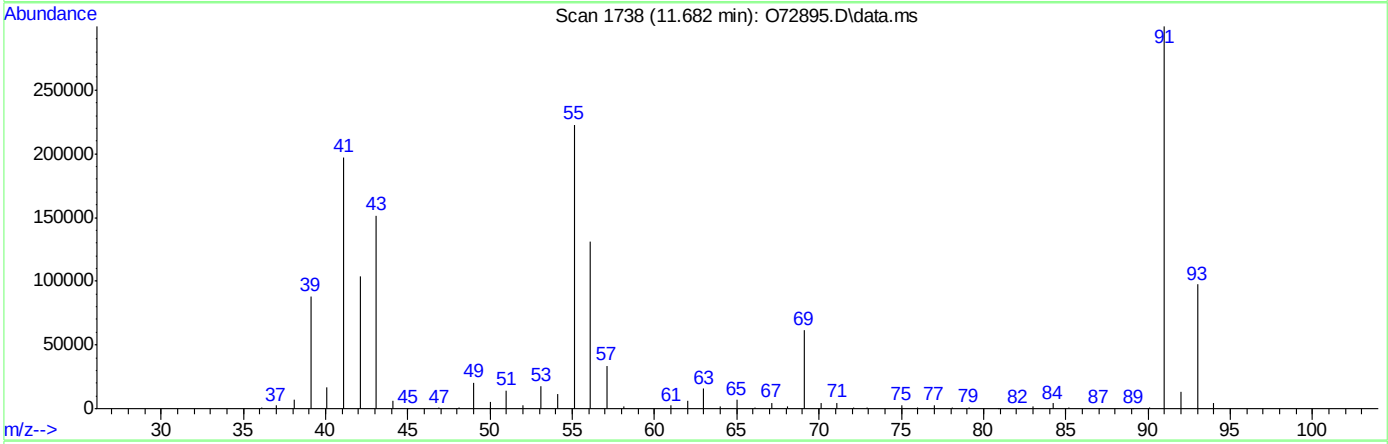
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.42
41.10	78.00	78.42
39.00	30.80	31.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 74.53ug/L

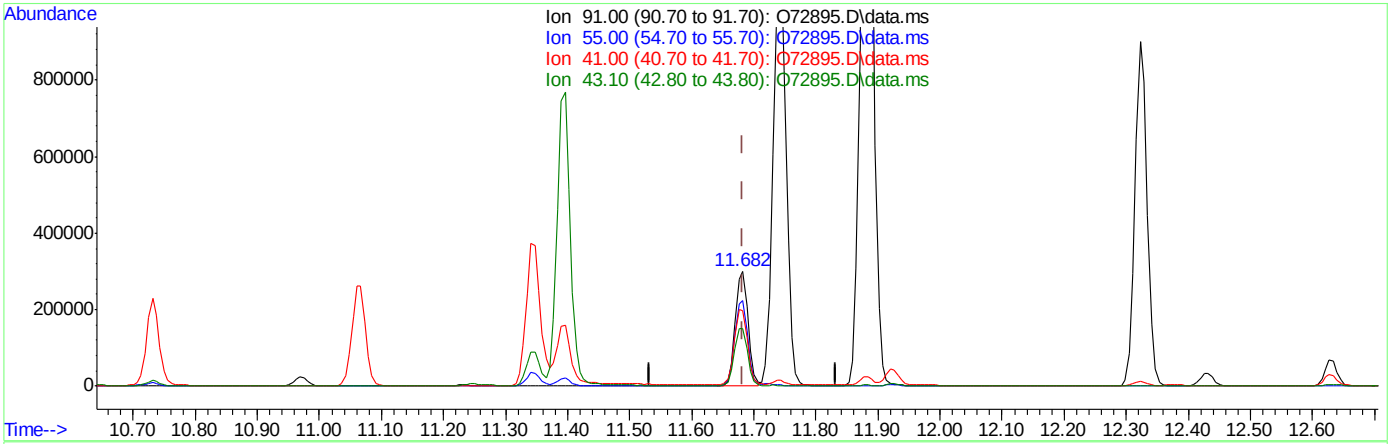
response 408221

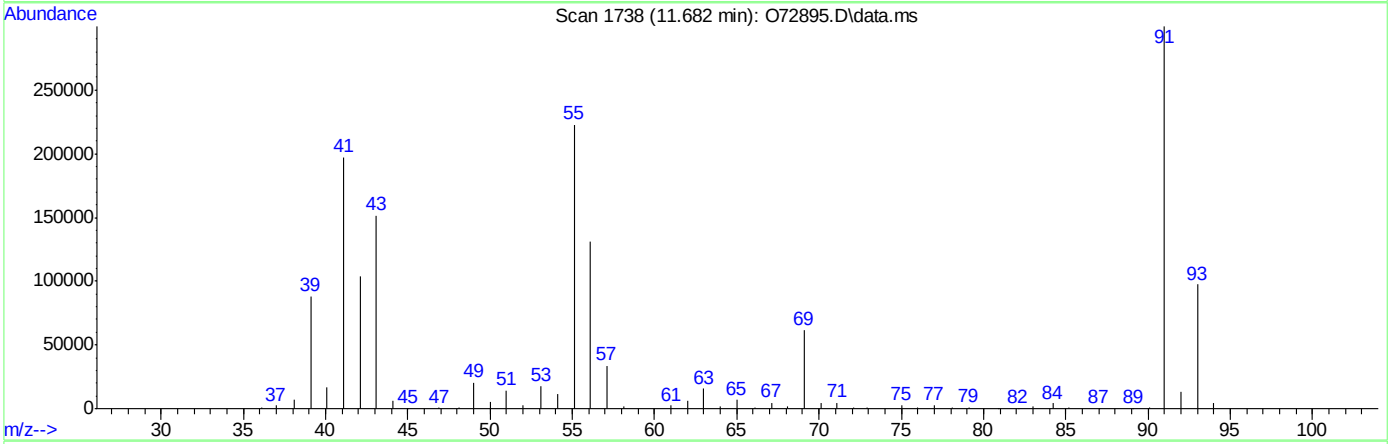
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	73.94
41.00	64.00	64.61
43.10	51.10	49.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 77.50ug/L m

response 424502

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	74.27
41.00	64.00	65.82
43.10	51.10	50.54

O72896.D

Manual Integrations APPROVED (compounds with "m" flag)

Karen Watson 12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	873217	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	634594	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	221224	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	246992	50.51	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.02%			
50) 1,2-Dichloroethane-d4	8.262	65	227094	52.36	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.72%			
63) Toluene-d8	10.152	98	864760	50.82	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.64%			
86) 4-Bromofluorobenzene	12.944	174	224538	50.92	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.84%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	663599	132.18	ug/L	98
3) Chloromethane	3.019	50	592194	121.03	ug/L	99
4) 1,3-butadiene	3.190	39	513604	111.48	ug/L	100
5) Vinyl Chloride	3.160	62	576767	113.52	ug/L	97
6) Bromomethane	3.684	94	289602	181.35	ug/L	98
7) Chloroethane	3.879	64	318983	113.03	ug/L	98
8) Trichlorofluoromethane	4.098	101	873877	119.02	ug/L	100
9) Ethyl Ether	4.550	59	419137	111.02	ug/L	98
10) Ethanol	4.775	45	33030	1450.32	ug/L	100
11) 1,2-Dichlorotrifluoroe...	4.824	67	622523	106.52	ug/L	99
12) 1,1-Dichloroethene	4.824	61	787950	109.77	ug/L	99
13) Freon 113	4.885	101	514026	112.68	ug/L	99
14) Carbon Disulfide	4.867	76	1434461	105.97	ug/L	99
15) Iodomethane	5.025	142	392539	126.66	ug/L	98
16) Acrolein	5.281	56	412853	519.95	ug/L	99
17) Allyl chloride	5.458	41	768958	119.69	ug/L	99
18) Methylene Chloride	5.592	49	698307	117.00	ug/L	98
19) Acetone	5.653	43	587940	470.16	ug/L	99
20) Methyl acetate	5.805	43	1710134	517.41	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	759315	109.17	ug/L	98
22) Hexane	5.885	56	338276m	109.81	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	1402867	106.38	ug/L	99
24) Tert Butyl Alcohol	6.031	59	278870	798.17	ug/L	95
25) Acetonitrile	6.232	41	468142	1070.00	ug/L	100
26) Di-isopropyl ether	6.372	45	1703921	108.35	ug/L	99
27) Chloroprene	6.513	53	699983	124.11	ug/L	99
28) 1,1-Dichloroethane	6.543	63	901344	106.48	ug/L	99
29) Acrylonitrile	6.604	52	676387	561.51	ug/L	99
30) ETBE	6.799	59	1609567	108.68	ug/L	99
31) Vinyl acetate	6.823	43	5538840	553.76	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	530623	106.28	ug/L	98
33) 2,2-Dichloropropane	7.299	77	731450	107.35	ug/L	98
34) Bromochloromethane	7.403	128	287133	112.33	ug/L	97
35) Cyclohexane	7.409	56	791121	112.28	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	941191	105.32	ug/L	99
37) Ethyl acetate	7.592	43	2247136	537.10	ug/L	100
38) Tetrahydrofuran	7.671	42	123298	104.29	ug/L	96
40) Carbon Tetrachloride	7.640	117	661305	98.72	ug/L	100
41) 1,1,1-Trichloroethane	7.720	97	813279	104.89	ug/L	99
42) 2-Butanone	7.811	43	982648	507.98	ug/L	98
43) 1,1-Dichloropropene	7.848	75	692742	107.41	ug/L	98
44) tert-Butyl formate	7.957	59	1576464	476.29	ug/L	97
45) Propionitrile	8.140	54	615321	1141.53	ug/L	97
46) Methacrylonitrile	8.165	41	3598282	1115.63	ug/L	100
47) Benzene	8.122	78	1961734	105.56	ug/L	99
48) TAME	8.213	73	1358198	105.43	ug/L	99
49) Isobutyl alcohol	8.299	43	247787m	1765.34	ug/L	
51) 1,2-Dichloroethane	8.335	62	804084	105.92	ug/L	99
52) Tert Amyl Alcohol	8.409	59	212149	861.60	ug/L	97
53) Trichloroethene	8.732	95	548552	106.35	ug/L	99
54) Methylcyclohexane	8.726	83	725402	114.43	ug/L	99
55) Dibromomethane	9.177	93	360387	107.47	ug/L	99
56) 1,2-Dichloropropane	9.274	63	519422	108.60	ug/L	98
57) Bromodichloromethane	9.329	83	710260	108.73	ug/L	99
58) Methyl methacrylate	9.457	41	454665	119.97	ug/L	99
59) 1,4-Dioxane	9.530	88	45934	1534.90	ug/L	91
60) 2-Chloroethyl vinyl ether	9.878	63	1732406	507.07	ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	798910	110.42	ug/L	99
64) Toluene	10.207	91	2085892	109.35	ug/L	100
65) 2-Nitropropane	10.445	41	358614	278.67	ug/L	94
66) 4-Methyl-2-pentanone	10.567	43	2505624	552.95	ug/L	98
67) trans-1,3-Dichloropropene	10.615	75	727749	119.60	ug/L	96
68) Tetrachloroethene	10.603	166	592126	111.48	ug/L	99
69) Ethyl methacrylate	10.731	69	614552	118.55	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	404972	111.32	ug/L	97
71) Dibromochloromethane	10.969	129	580076	112.01	ug/L	100
72) 1,3-Dichloropropane	11.067	76	809167	110.11	ug/L	98
73) 1,2-Dibromoethane	11.231	107	504420	112.53	ug/L	100
74) 3,3-dimethyl-1-butanol	11.347	57	1116987	3881.78	ug/L	99
75) 2-hexanone	11.396	43	1693455	557.21	ug/L	99
76) 1-Chlorohexane	11.682	91	616462m	116.16	ug/L	
77) Ethylbenzene	11.743	91	2363046	110.40	ug/L	99
78) Chlorobenzene	11.743	112	1402576	110.63	ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.798	131	506089	110.92	ug/L	99
80) m,p-Xylene	11.883	91	3719804	228.12	ug/L	100
81) o-Xylene	12.322	91	1827873	115.61	ug/L	99
82) Styrene	12.377	104	1434690	125.45	ug/L	99
83) Bromoform	12.432	173	352914	111.40	ug/L	98
84) Isopropylbenzene	12.627	105	2145993	114.27	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	193010	130.86	ug/L	98
88) n-Propylbenzene	13.054	91	2587293	114.85	ug/L	99
89) Bromobenzene	13.066	156	627336	Below Cal		98
90) 1,1,2,2-Tetrachloroethane	13.127	83	588502	106.34	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	1872467	121.32	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

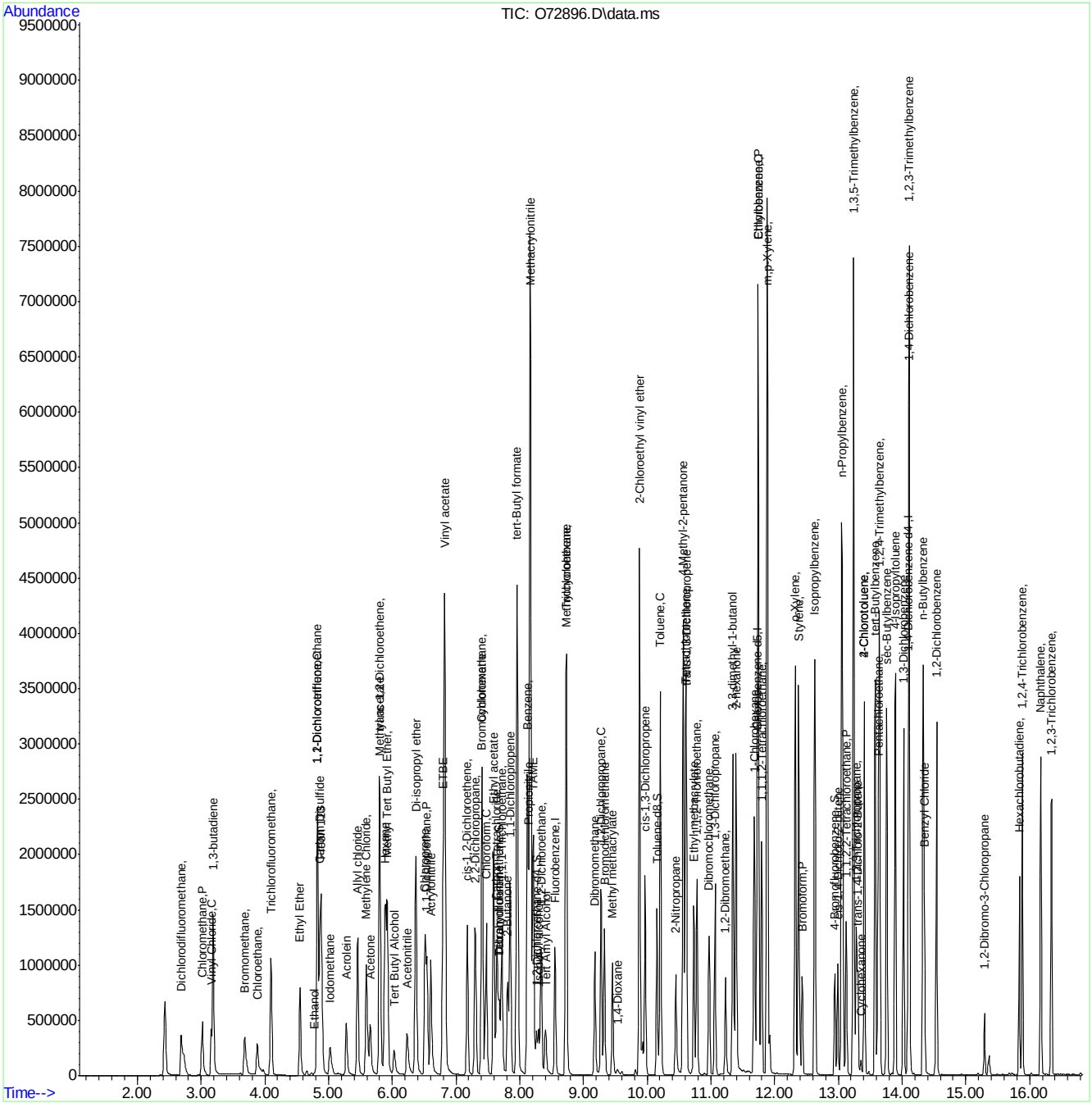
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	1621184	114.41	ug/L	98
93) trans-1,4-Dichloro-2-B...	13.304	53	157655	126.63	ug/L	91
94) 1,2,3-Trichloropropane	13.286	110	172800	110.39	ug/L	98
95) Cyclohexanone	13.353	55	42657	422.57	ug/L	97
96) 4-Chlorotoluene	13.408	91	1621184	114.41	ug/L	98
97) tert-Butylbenzene	13.578	91	1008298	115.47	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	1807167	119.46	ug/L	99
100) Pentachloroethane	13.627	167	320740	116.53	ug/L	98
101) sec-Butylbenzene	13.761	105	1992519	116.33	ug/L	100
102) 4-Isopropyltoluene	13.895	119	1776300	120.88	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	1087306	113.79	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	1841667	120.72	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	1146683	112.76	ug/L	97
106) n-Butylbenzene	14.328	92	970245	126.42	ug/L	99
107) Benzyl Chloride	14.352	126	200279	130.44	ug/L	99
108) 1,2-Dichlorobenzene	14.541	146	1056470	116.47	ug/L	98
109) 1,2-Dibromo-3-Chloropr...	15.291	75	96339	120.59	ug/L	95
110) Hexachlorobutadiene	15.840	225	237836	130.05	ug/L	97
111) 1,2,4-Trichlorobenzene	15.889	180	687159	126.86	ug/L	99
112) Naphthalene	16.175	128	1710270	124.01	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	627555	127.52	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



VO_12-08-2022.M Thu Dec 08 15:38:06 2022 Page: 4

Manual Integration Approval Summary

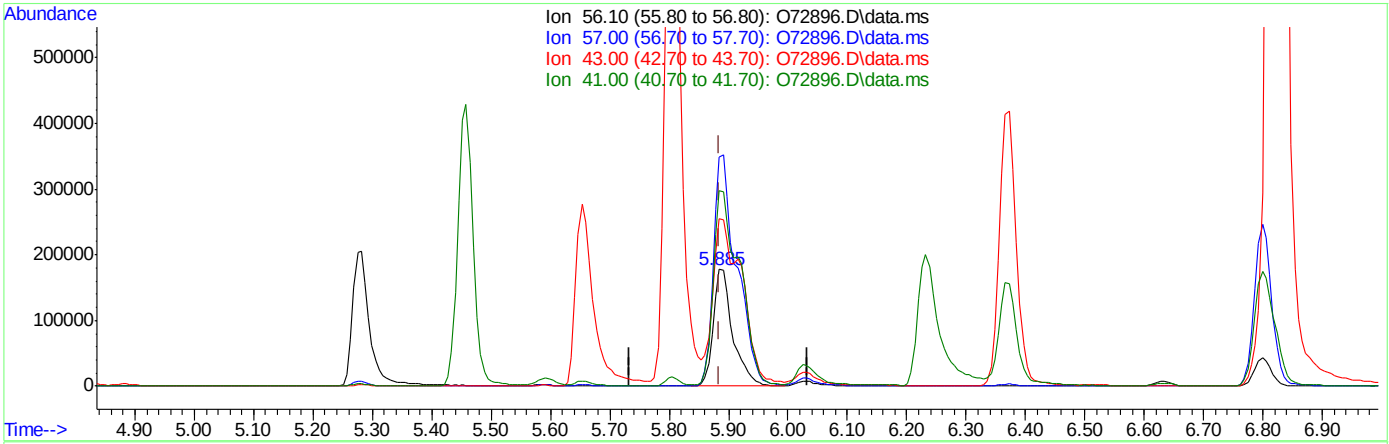
Sample Number: VO2866-IC2866
Lab FileID: O72896.D
Injection Time: 12/08/22 12:25
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

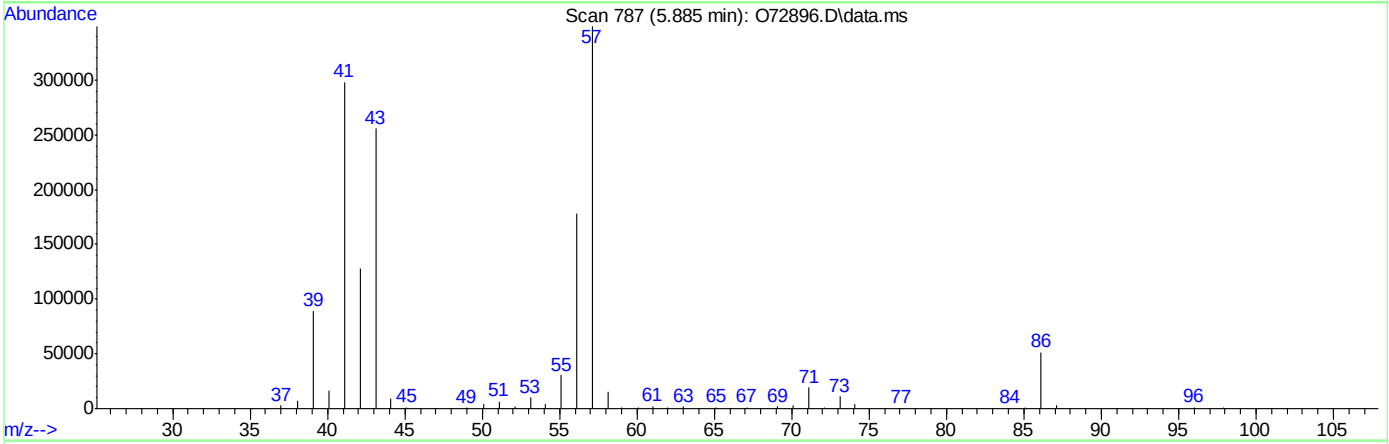
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(22) Hexane

5.885min (-0.000) 127.53ug/L

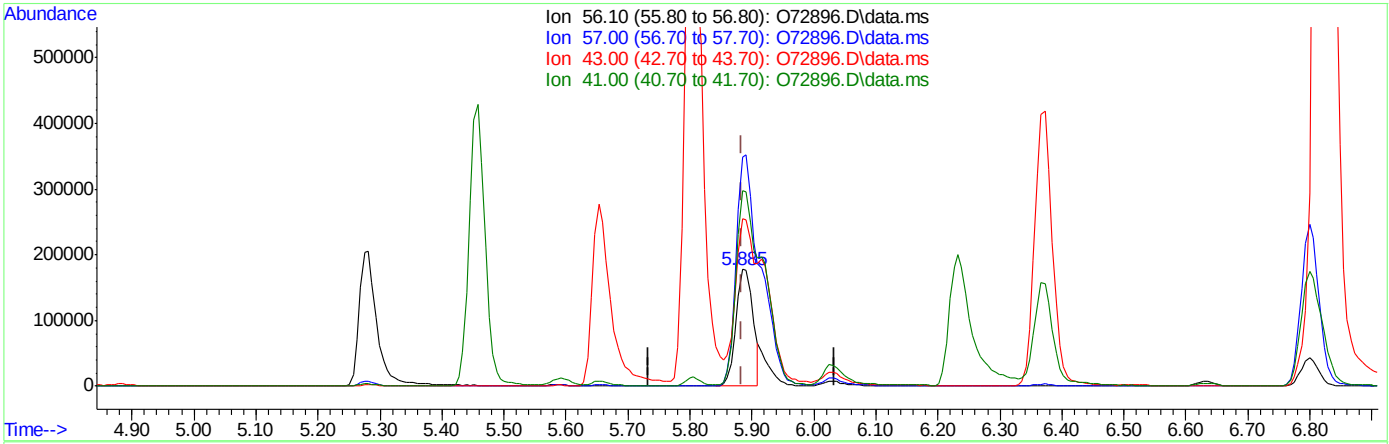
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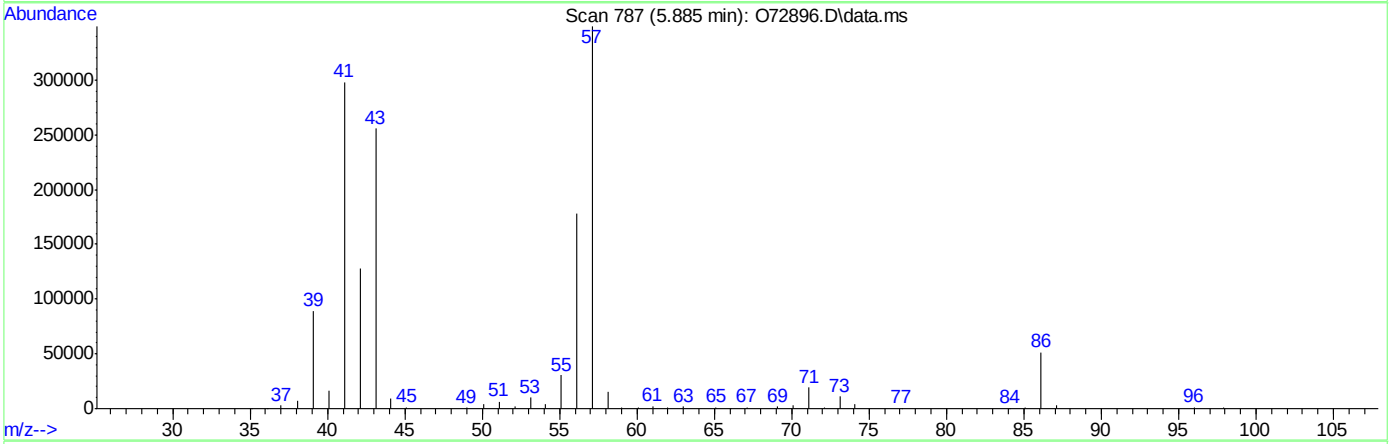
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	196.05
43.00	149.90	140.17
41.00	165.70	166.53

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(22) Hexane

5.885min (-0.000) 109.81ug/L m

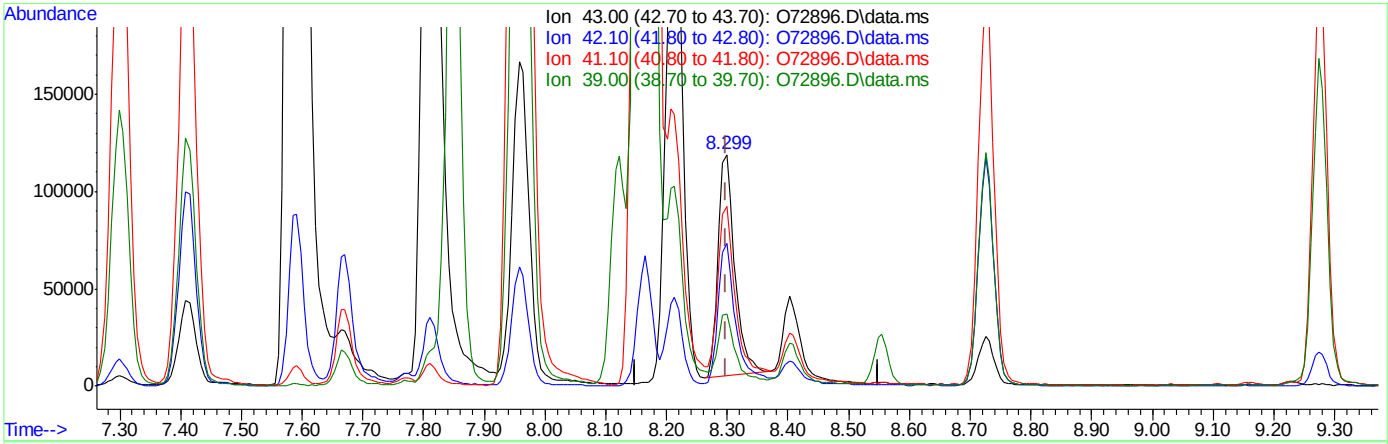
response 338276

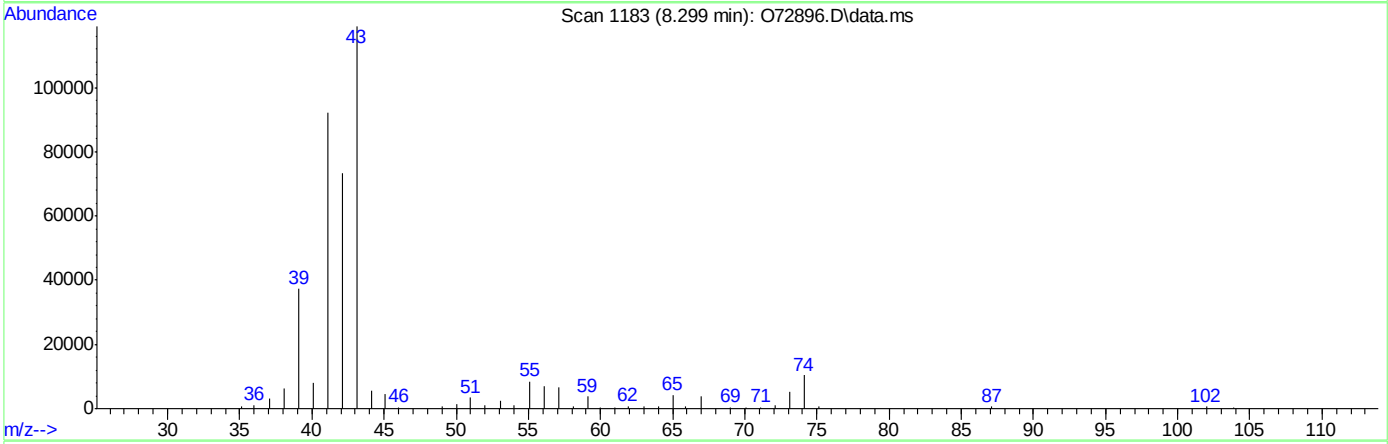
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	196.05
43.00	149.90	143.60
41.00	165.70	167.54

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 1545.01ug/L

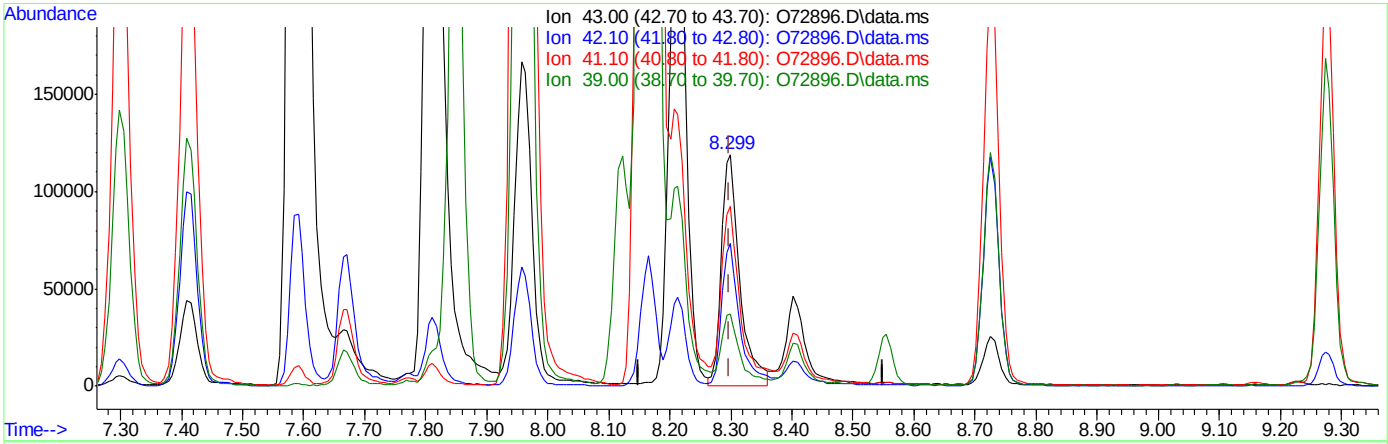
response 216860

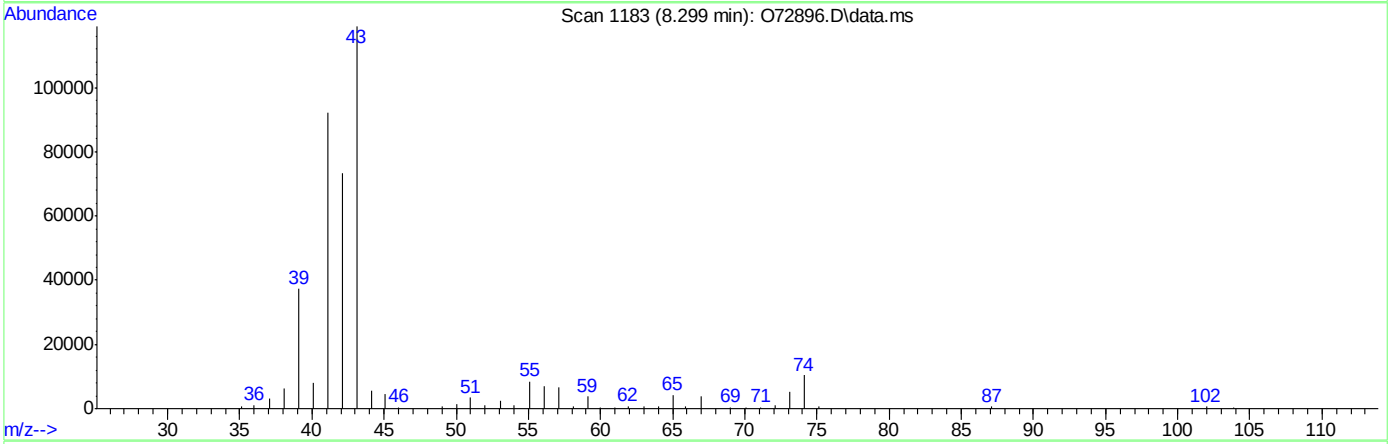
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	62.63
41.10	78.00	73.92
39.00	30.80	29.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 1765.34ug/L m

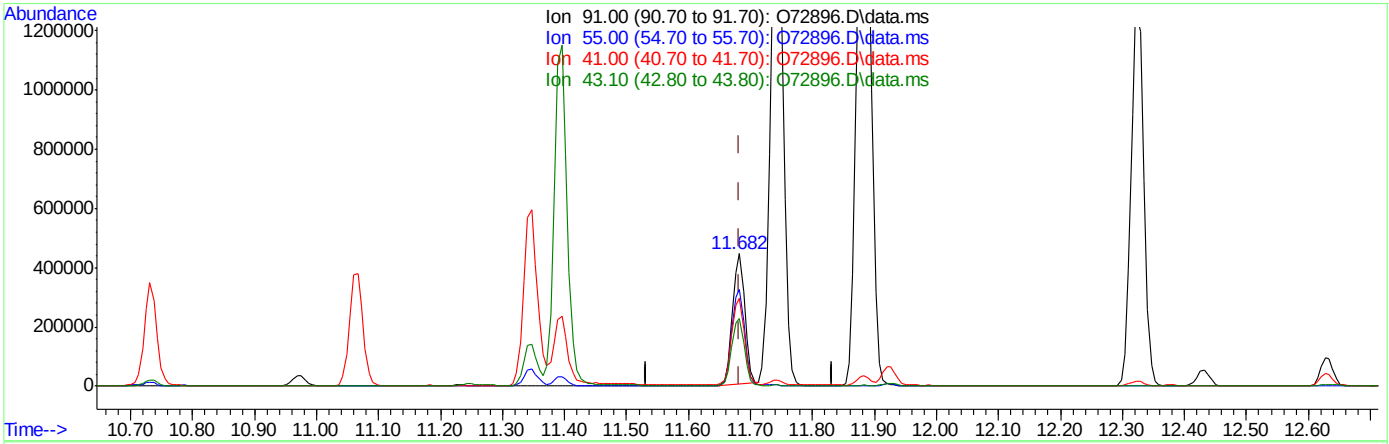
response 247787

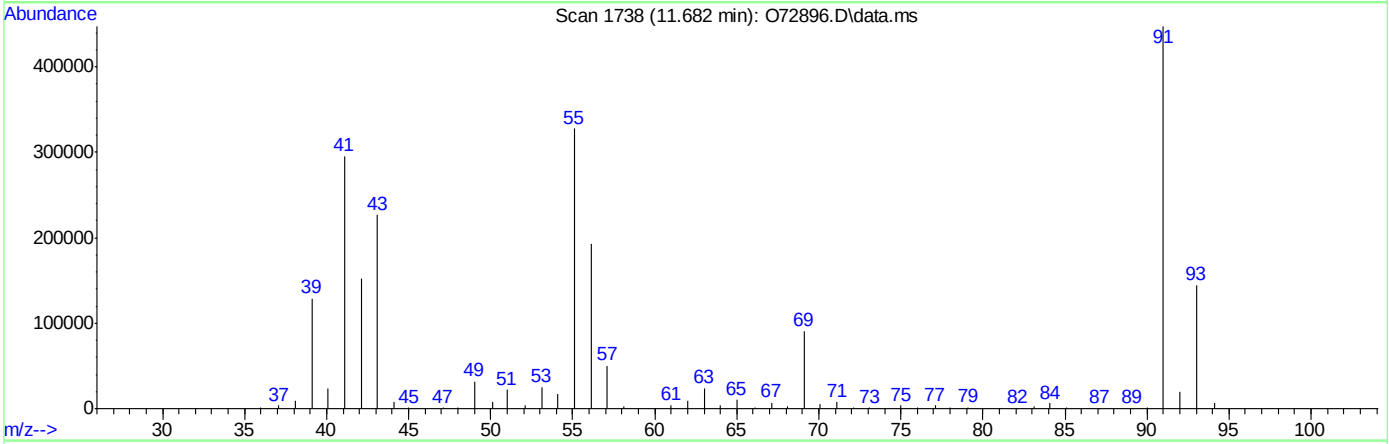
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.59
41.10	78.00	77.56
39.00	30.80	31.30

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 112.56ug/L

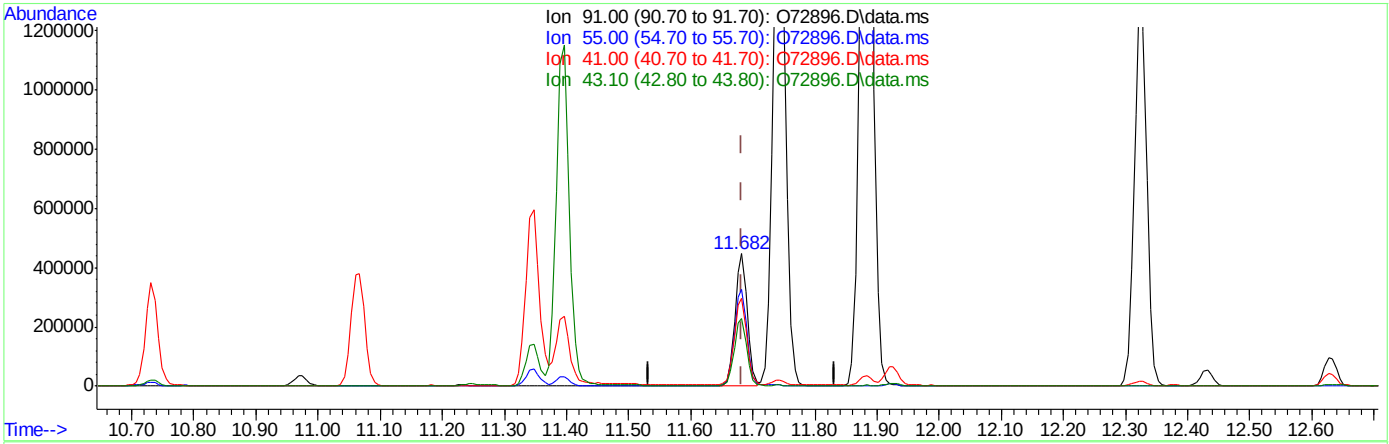
response 597382

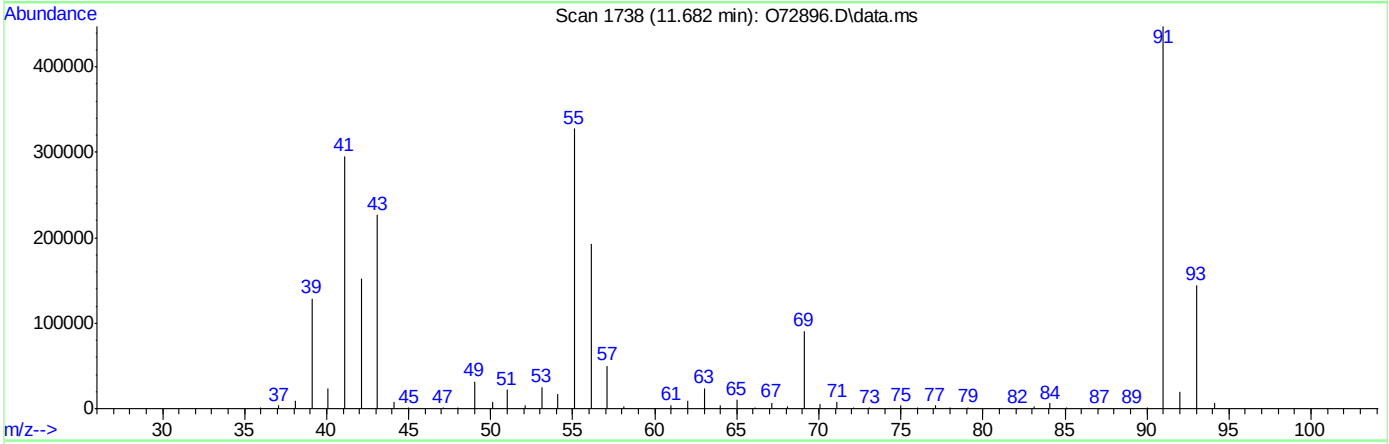
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	72.92
41.00	64.00	64.98
43.10	51.10	50.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 116.16ug/L m

response 616462

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	73.26
41.00	64.00	66.13
43.10	51.10	50.72

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	907648	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	643262	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	226630	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	252728	49.78	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.56%			
50) 1,2-Dichloroethane-d4	8.262	65	238162	50.62	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.24%			
63) Toluene-d8	10.152	98	889229	51.51	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.02%			
86) 4-Bromofluorobenzene	12.944	174	233031	51.73	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.46%			
Target Compounds						Qvalue
3) Chloromethane	3.013	50	187909	33.66	ug/L	98
4) 1,3-butadiene	3.184	39	235097	41.94	ug/L	100
5) Vinyl Chloride	3.153	62	196066	34.75	ug/L	98
6) Bromomethane	3.678	94	96717	38.18	ug/L	99
7) Chloroethane	3.879	64	118242	34.58	ug/L	98
8) Trichlorofluoromethane	4.098	101	306363	35.13	ug/L	99
9) Ethyl Ether	4.549	59	153310	36.63	ug/L	99
10) Ethanol	4.775	45	12858	665.46	ug/L	93
11) 1,2-Dichlorotrifluoroe...	4.824	67	225357	35.24	ug/L	98
12) 1,1-Dichloroethene	4.824	61	272826	34.71	ug/L	99
13) Freon 113	4.885	101	178193	33.32	ug/L	99
14) Carbon Disulfide	4.860	76	554315	36.55	ug/L	99
15) Iodomethane	5.019	142	73778	36.92	ug/L	93
16) Acrolein	5.275	56	148670	170.86	ug/L	99
17) Allyl chloride	5.452	41	299280	42.69	ug/L	100
18) Methylene Chloride	5.592	49	262235	35.65	ug/L	98
19) Acetone	5.653	43	242688	192.12	ug/L	99
20) Methyl acetate	5.805	43	674346	203.09	ug/L	100
21) trans-1,2-Dichloroethene	5.793	61	271874	35.77	ug/L	99
22) Hexane	5.885	56	130583m	36.59	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	525124	37.57	ug/L	97
24) Tert Butyl Alcohol	6.025	59	115206	389.81	ug/L	97
25) Acetonitrile	6.232	41	179901	349.43	ug/L	98
26) Di-isopropyl ether	6.366	45	662999	38.93	ug/L	99
27) Chloroprene	6.512	53	291564	46.41	ug/L	99
28) 1,1-Dichloroethane	6.543	63	345473	37.47	ug/L	98
29) Acrylonitrile	6.604	52	269103	185.36	ug/L	98
30) ETBE	6.799	59	594578	39.16	ug/L	98
31) Vinyl acetate	6.823	43	2295110	237.18	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	203834	36.94	ug/L	100
33) 2,2-Dichloropropane	7.299	77	247459	38.07	ug/L	98
34) Bromochloromethane	7.403	128	112682	38.38	ug/L	99
35) Cyclohexane	7.409	56	301035	37.97	ug/L	99
36) Chloroform	7.476	83	351154	36.24	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Ethyl acetate	7.591	43	885793	201.32	ug/L	99
38) Tetrahydrofuran	7.671	42	52596	39.43	ug/L	99
40) Carbon Tetrachloride	7.640	117	222598	39.04	ug/L	96
41) 1,1,1-Trichloroethane	7.713	97	292306	37.97	ug/L	99
42) 2-Butanone	7.811	43	392104	196.98	ug/L	100
43) 1,1-Dichloropropene	7.848	75	249377	35.14	ug/L	100
44) tert-Butyl formate	7.957	59	407892	162.33	ug/L	99
45) Propionitrile	8.140	54	239975	391.01	ug/L	98
46) Methacrylonitrile	8.158	41	1421062	397.79	ug/L	100
47) Benzene	8.122	78	722056	35.55	ug/L	99
48) TAME	8.213	73	517979	39.42	ug/L	100
49) Isobutyl alcohol	8.299	43	91633m	717.41	ug/L	
51) 1,2-Dichloroethane	8.335	62	304317	36.85	ug/L	98
52) Tert Amyl Alcohol	8.402	59	81605	392.45	ug/L	98
53) Trichloroethene	8.732	95	203454	35.42	ug/L	99
54) Methylcyclohexane	8.725	83	280530	37.76	ug/L	97
55) Dibromomethane	9.177	93	133513	35.68	ug/L	97
56) 1,2-Dichloropropane	9.274	63	187875	35.48	ug/L	98
57) Bromodichloromethane	9.329	83	261284	39.57	ug/L	98
58) Methyl methacrylate	9.457	41	181635	44.37	ug/L	98
60) 2-Chloroethyl vinyl ether	9.878	63	694800	199.96	ug/L	100
61) cis-1,3-Dichloropropene	9.963	75	288136	39.41	ug/L	96
64) Toluene	10.207	91	774041	37.61	ug/L	100
65) 2-Nitropropane	10.445	41	98977	194.03	ug/L	97
66) 4-Methyl-2-pentanone	10.560	43	941506	204.65	ug/L	100
67) trans-1,3-Dichloropropene	10.615	75	278846	44.22	ug/L	98
68) Tetrachloroethene	10.603	166	222807	38.22	ug/L	98
69) Ethyl methacrylate	10.731	69	215600	42.38	ug/L	98
70) 1,1,2-Trichloroethane	10.780	83	156714	39.52	ug/L	98
71) Dibromochloromethane	10.969	129	198183	40.76	ug/L	97
72) 1,3-Dichloropropane	11.066	76	288971	36.15	ug/L	99
73) 1,2-Dibromoethane	11.231	107	188289	39.46	ug/L	97
74) 3,3-dimethyl-1-butanol	11.341	57	307441	1934.38	ug/L	98
75) 2-hexanone	11.396	43	638180	209.23	ug/L	98
76) 1-Chlorohexane	11.682	91	240150m	41.22	ug/L	
77) Ethylbenzene	11.743	91	894462	38.59	ug/L	100
78) Chlorobenzene	11.743	112	535093	38.49	ug/L	99
79) 1,1,1,2-Tetrachloroethane	11.792	131	182701	41.81	ug/L	97
80) m,p-Xylene	11.883	91	1394635	78.74	ug/L	100
81) o-Xylene	12.322	91	698913	40.19	ug/L	99
82) Styrene	12.377	104	533279	41.48	ug/L	99
83) Bromoform	12.432	173	120732	42.91	ug/L	99
84) Isopropylbenzene	12.627	105	821046	40.02	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	64074	41.55	ug/L	99
88) n-Propylbenzene	13.054	91	981354	41.84	ug/L	99
89) Bromobenzene	13.066	156	230310	39.05	ug/L	97
90) 1,1,2,2-Tetrachloroethane	13.127	83	230281	41.79	ug/L	98
91) 1,3,5-Trimethylbenzene	13.237	105	685145	41.40	ug/L	99
92) 2-Chlorotoluene	13.407	91	621988	42.14	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	60643	45.97	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

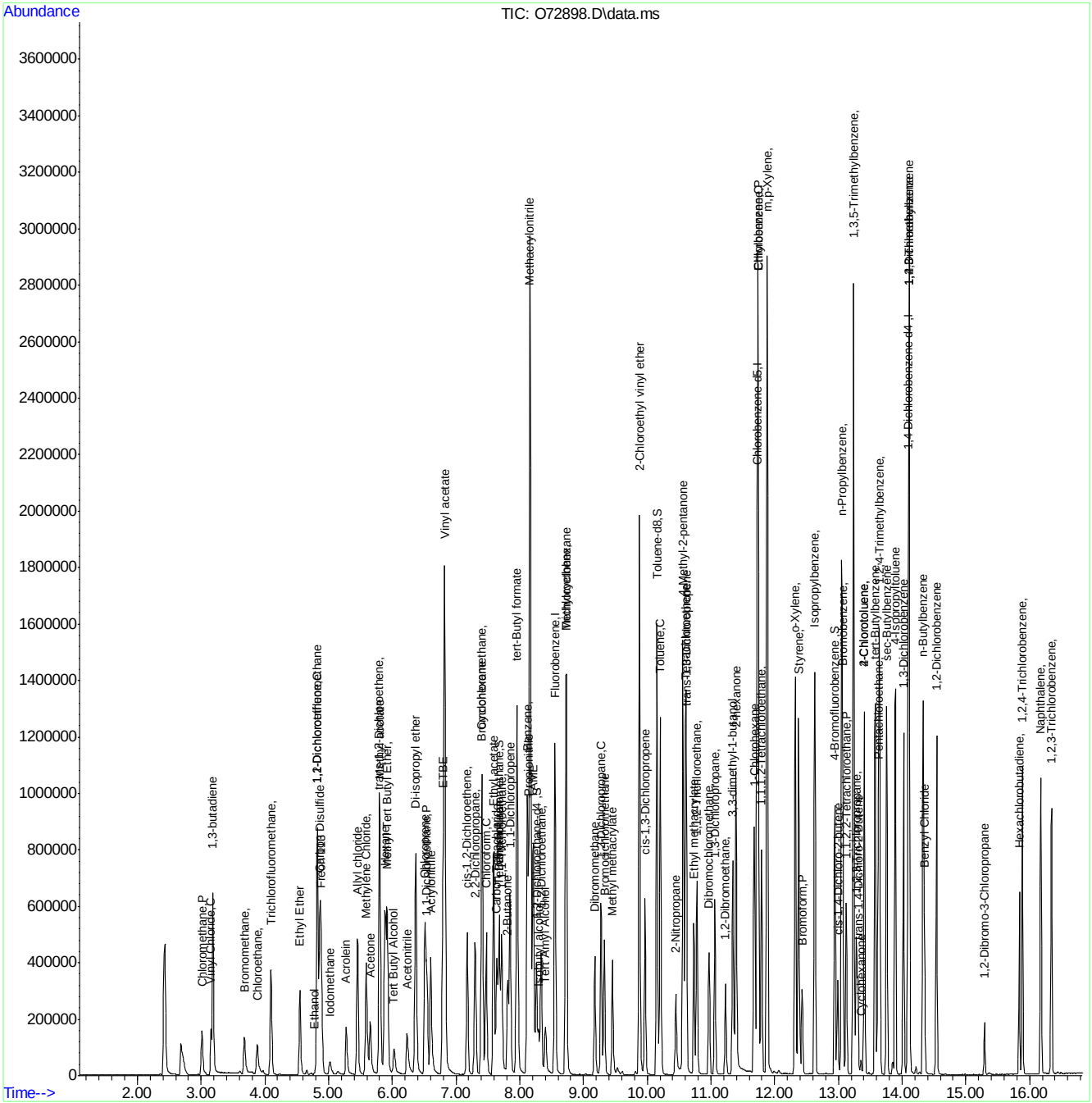
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94)	1,2,3-Trichloropropane	13.286	110	62063	37.65	ug/L	97
95)	Cyclohexanone	13.353	55	18649	190.45	ug/L	93
96)	4-Chlorotoluene	13.407	91	621988	42.14	ug/L	99
97)	tert-Butylbenzene	13.578	91	383959	41.81	ug/L	98
99)	1,2,4-Trimethylbenzene	13.645	105	685087	42.41	ug/L	100
100)	Pentachloroethane	13.627	167	115426	46.78	ug/L	97
101)	sec-Butylbenzene	13.761	105	800131	43.55	ug/L	100
102)	4-Isopropyltoluene	13.895	119	689230	43.30	ug/L	100
103)	1,3-Dichlorobenzene	14.023	146	427439	41.67	ug/L	99
104)	1,2,3-Trimethylbenzene	14.109	105	742860	44.98	ug/L	100
105)	1,4-Dichlorobenzene	14.109	146	443038	40.48	ug/L	97
106)	n-Butylbenzene	14.328	92	349520	41.42	ug/L	100
107)	Benzyl Chloride	14.352	126	65487	46.21	ug/L	98
108)	1,2-Dichlorobenzene	14.541	146	408582	41.04	ug/L	99
109)	1,2-Dibromo-3-Chloropr...	15.291	75	32079	41.95	ug/L	97
110)	Hexachlorobutadiene	15.840	225	84684	39.08	ug/L	98
111)	1,2,4-Trichlorobenzene	15.889	180	255935	41.75	ug/L	98
112)	Naphthalene	16.175	128	644995	42.14	ug/L	100
113)	1,2,3-Trichlorobenzene	16.346	180	234774	41.26	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

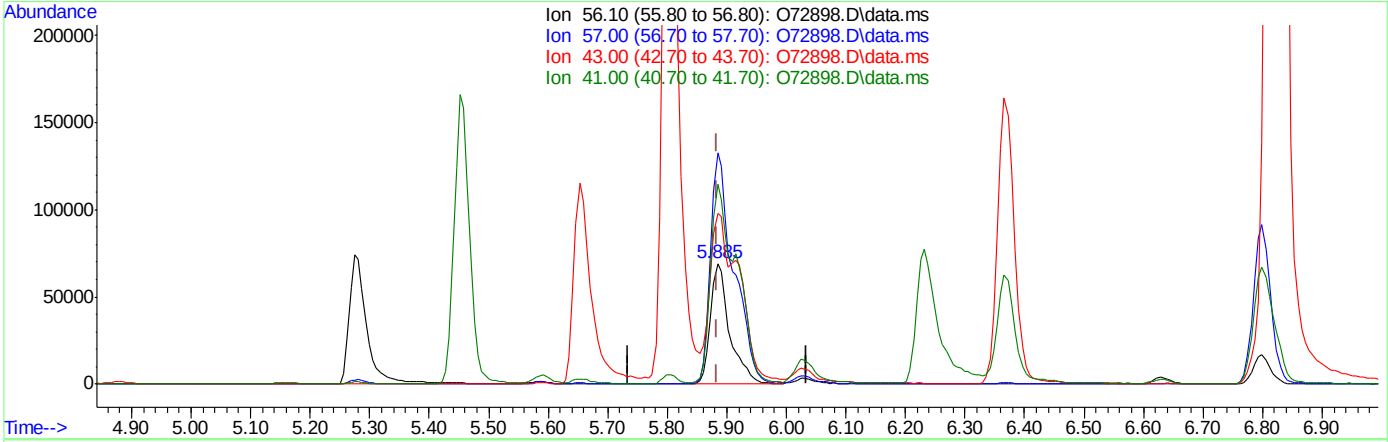
Sample Number: VO2866-ICV2866 **Method:** SW846 8260D
Lab FileID: O72898.D **Analyst approved:** 12/08/22 15:43 Adelard Lefebvre
Injection Time: 12/08/22 13:16 **Supervisor approved:** 12/09/22 16:19 Karen Watson

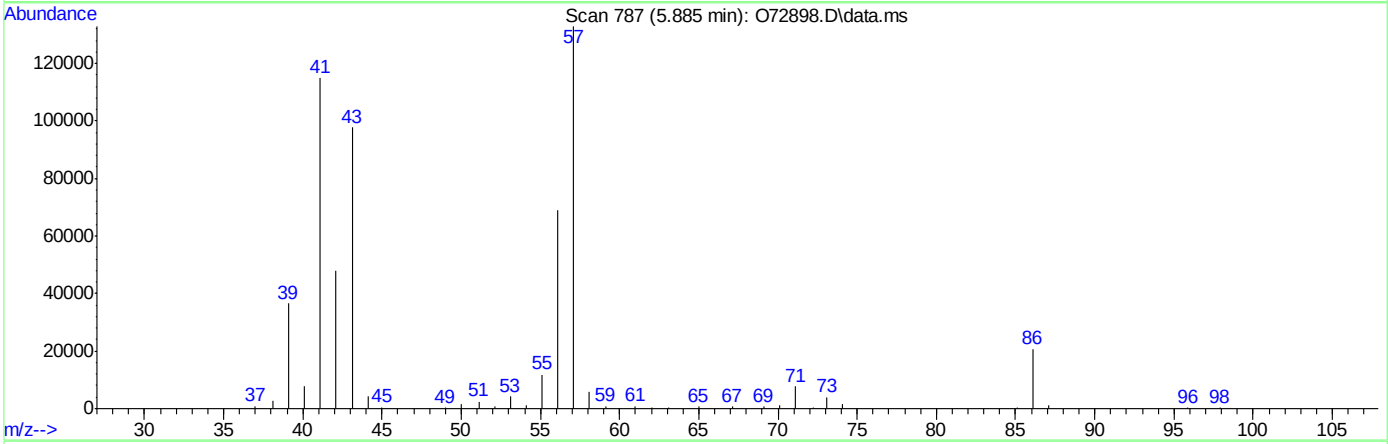
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 43.31ug/L

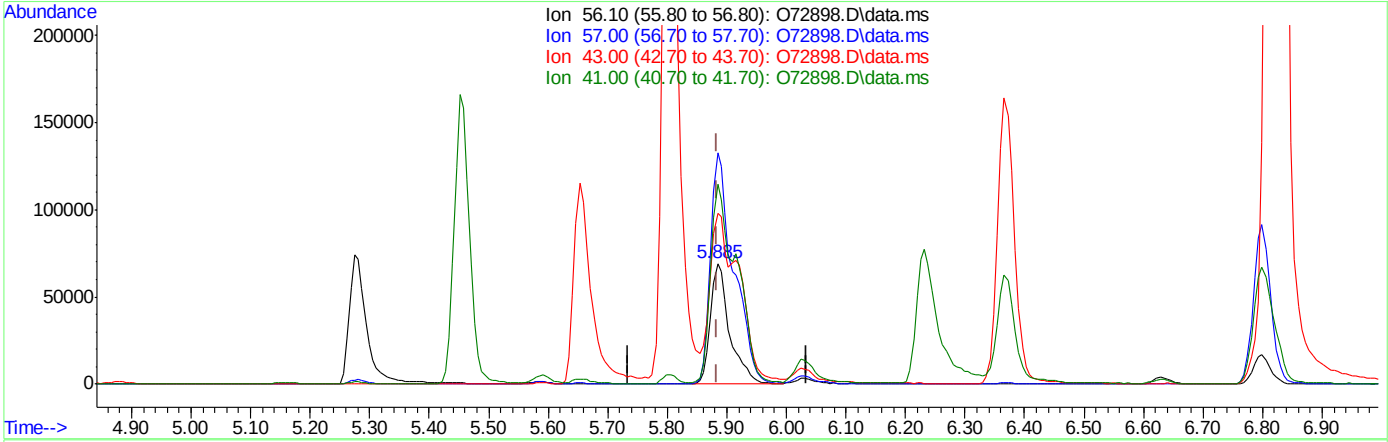
response 154572

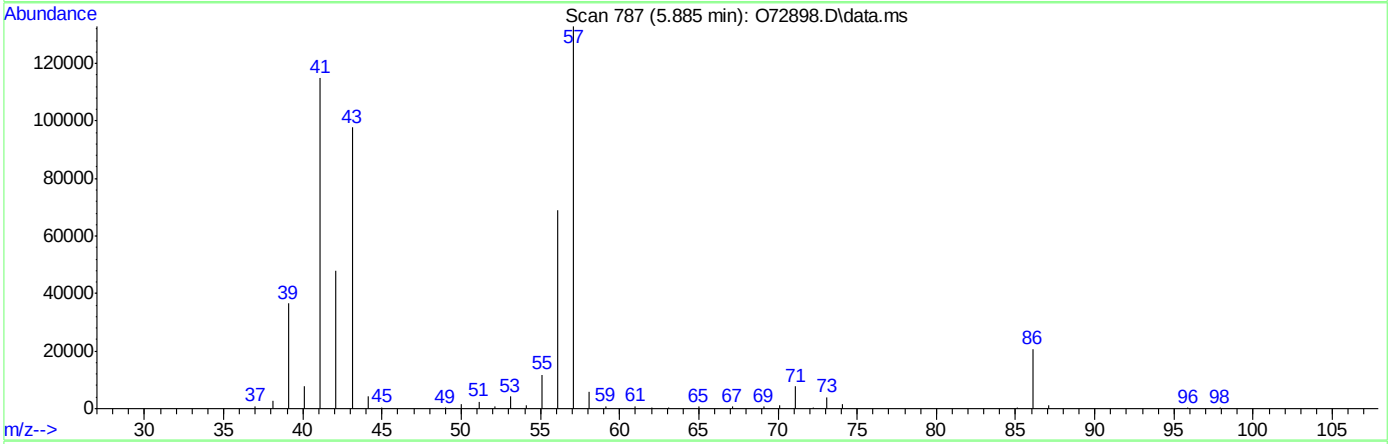
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	137.39
41.00	165.60	165.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 43.31ug/L

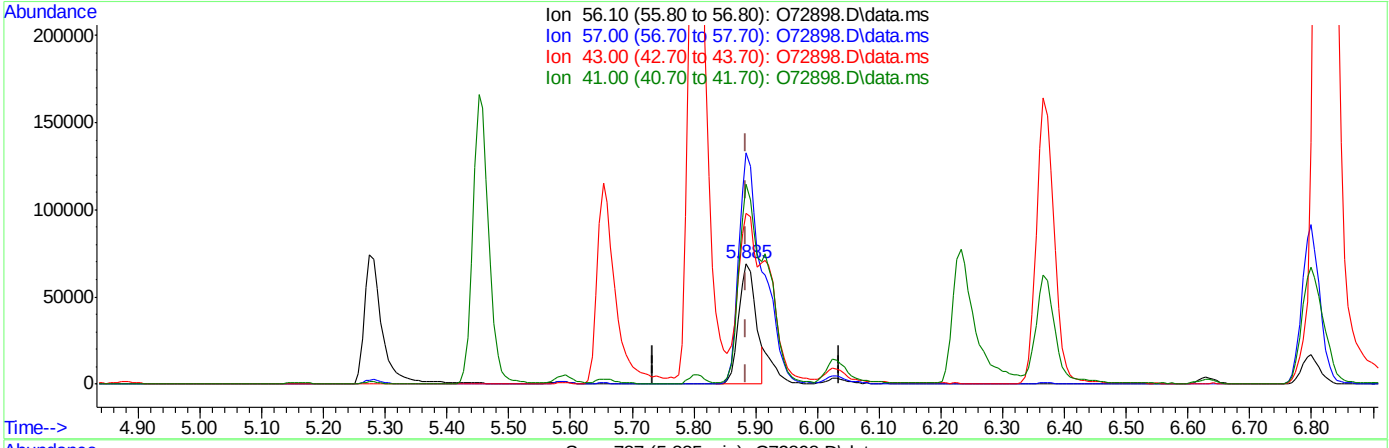
response 154572

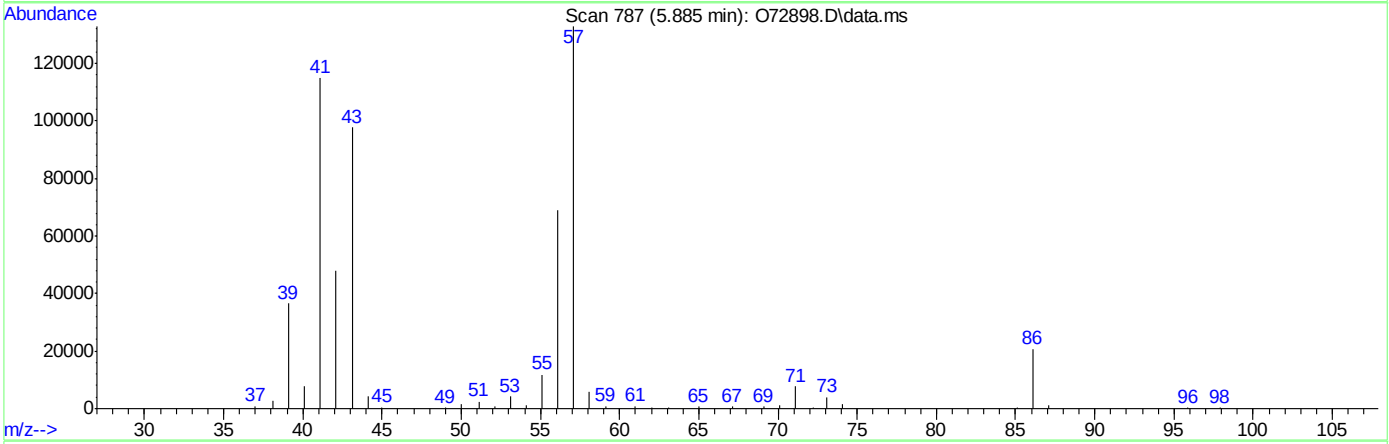
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	137.39
41.00	165.60	165.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 36.59ug/L m

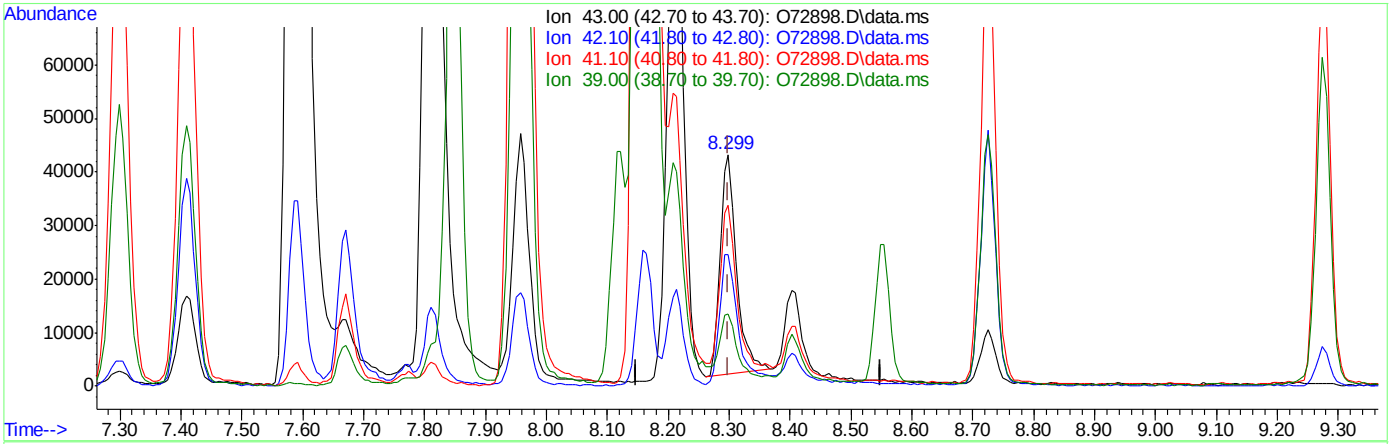
response 130583

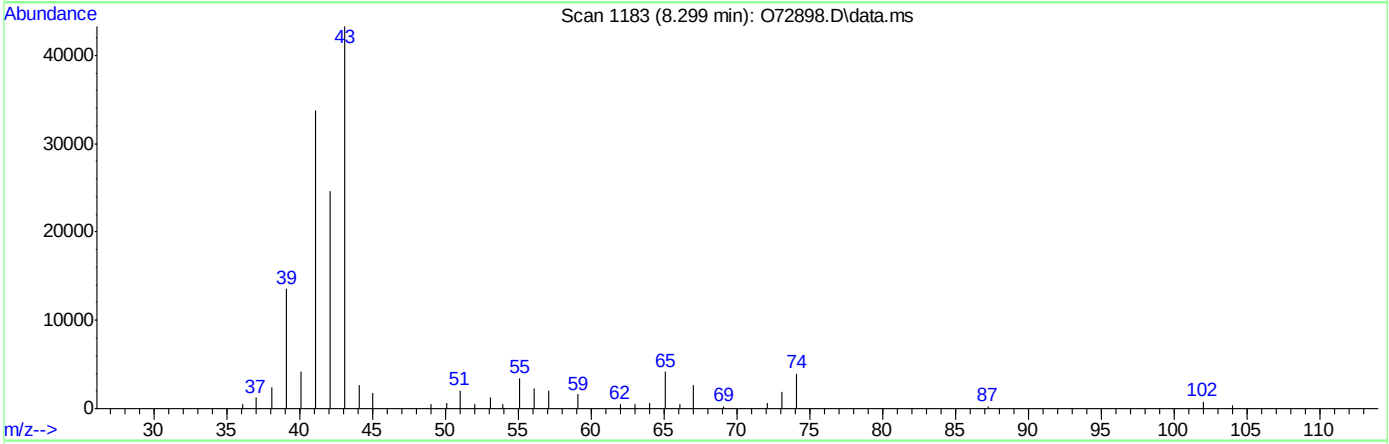
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	141.43
41.00	165.60	166.16

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 600.66ug/L

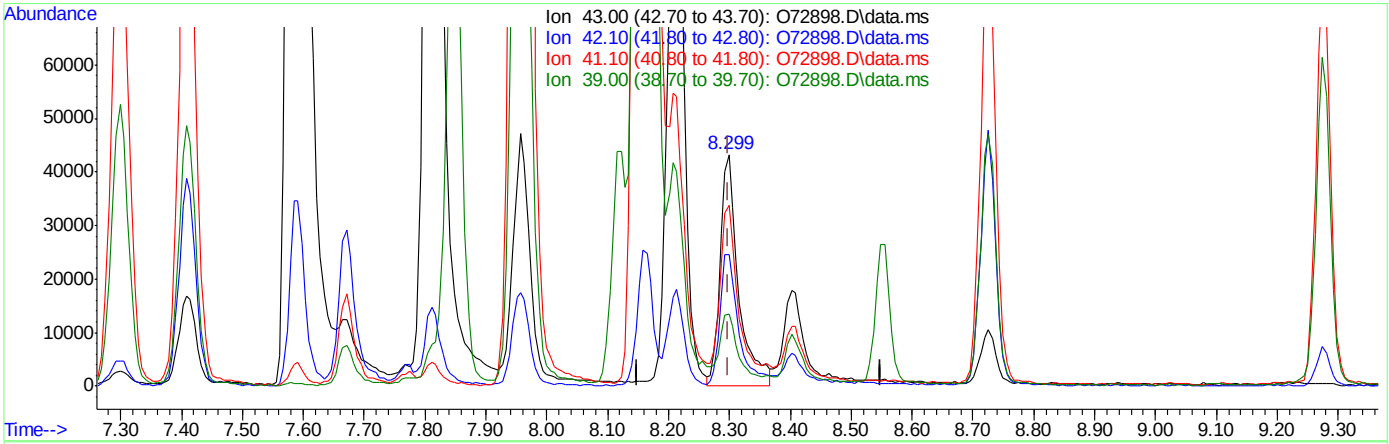
response 76506

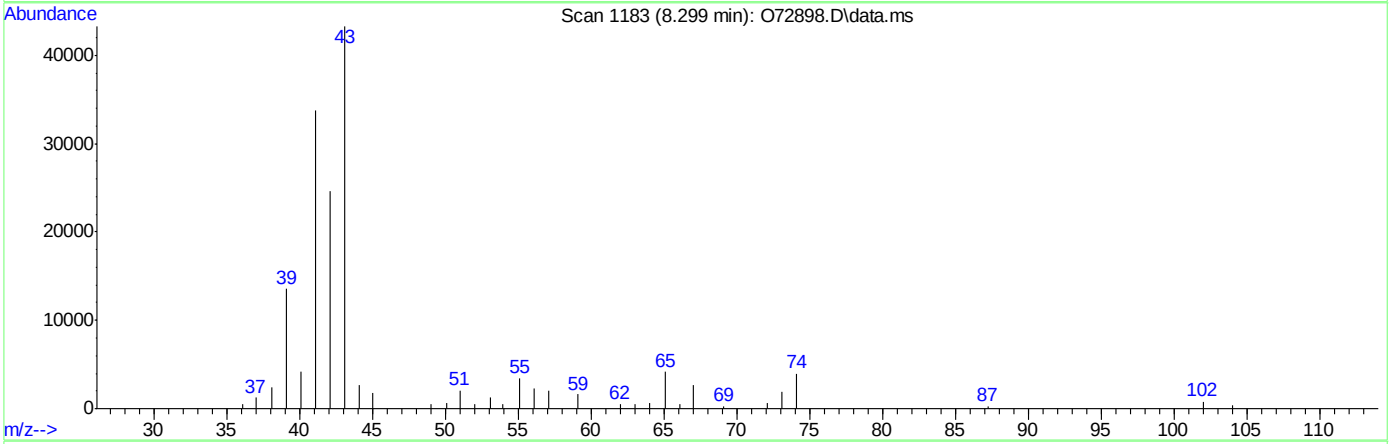
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	58.31
41.10	73.80	71.99
39.00	31.30	27.68

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 717.41ug/L m

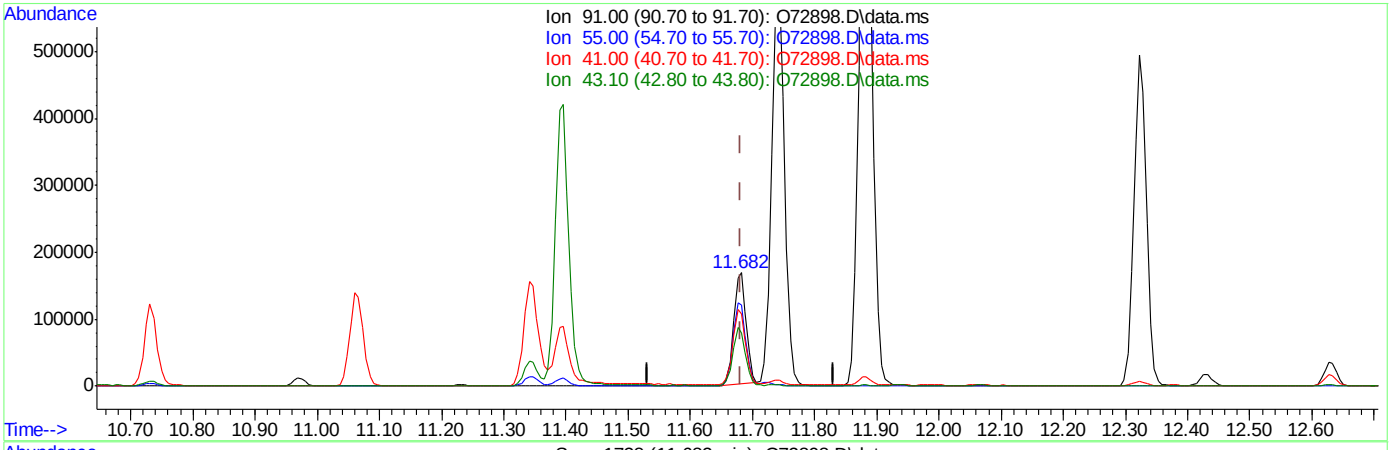
response 91633

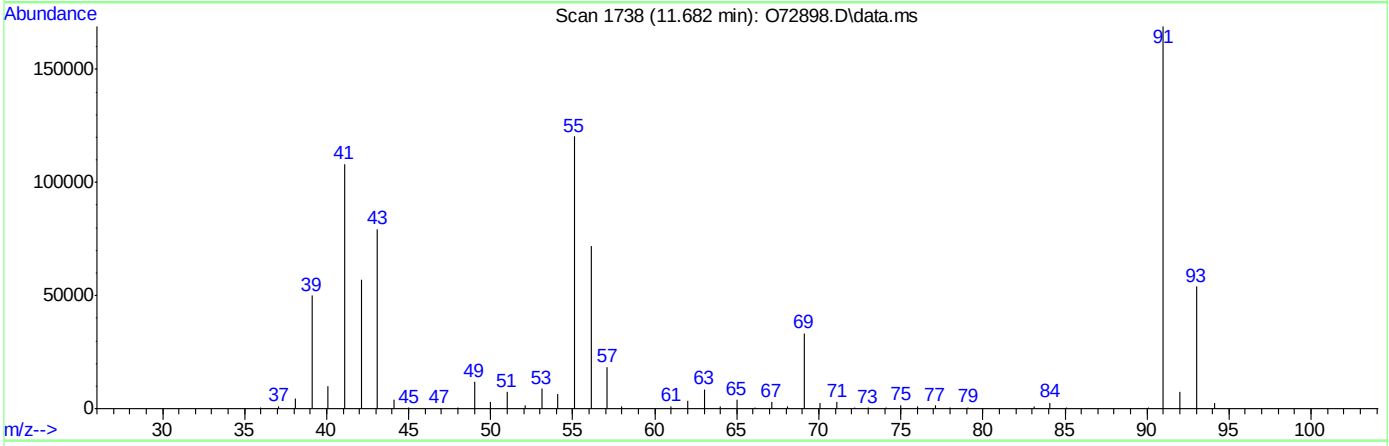
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	56.90
41.10	73.80	78.03
39.00	31.30	31.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 39.63ug/L

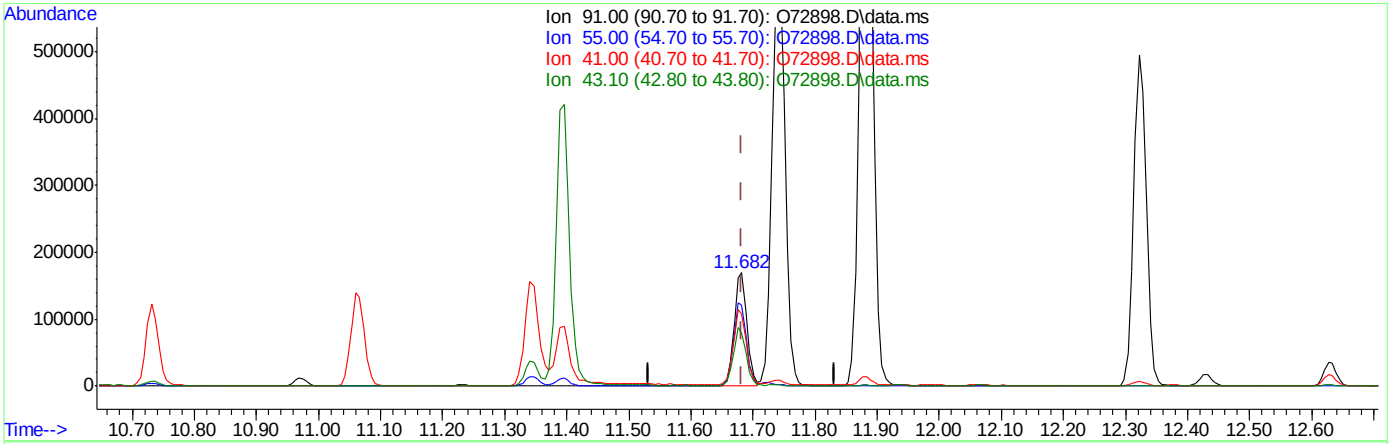
response 230888

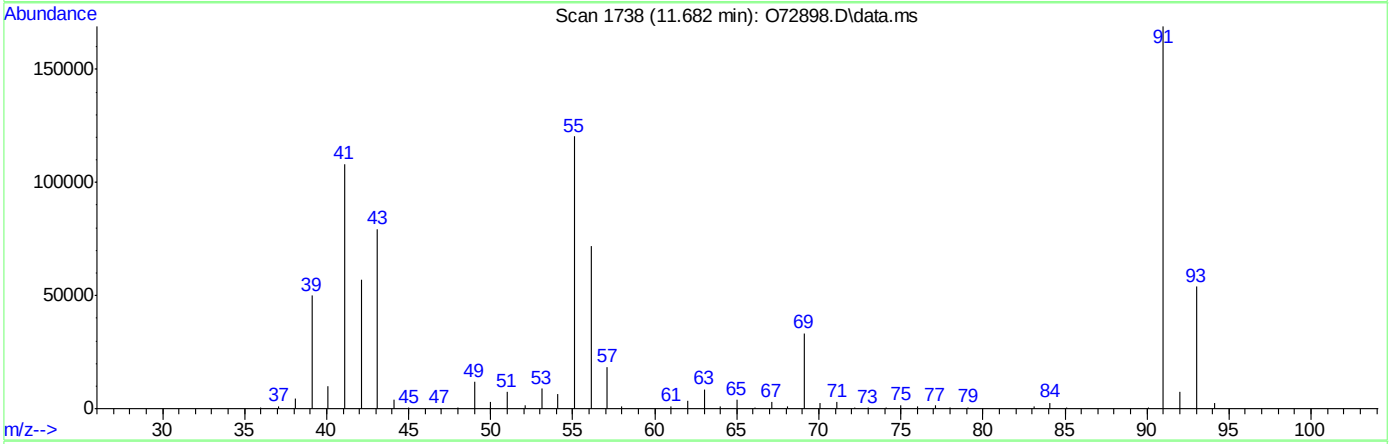
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	70.98
41.00	64.60	62.62
43.10	48.40	46.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 41.22ug/L m

response 240150

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.23
41.00	64.60	64.01
43.10	48.40	47.04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 15:36:35 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

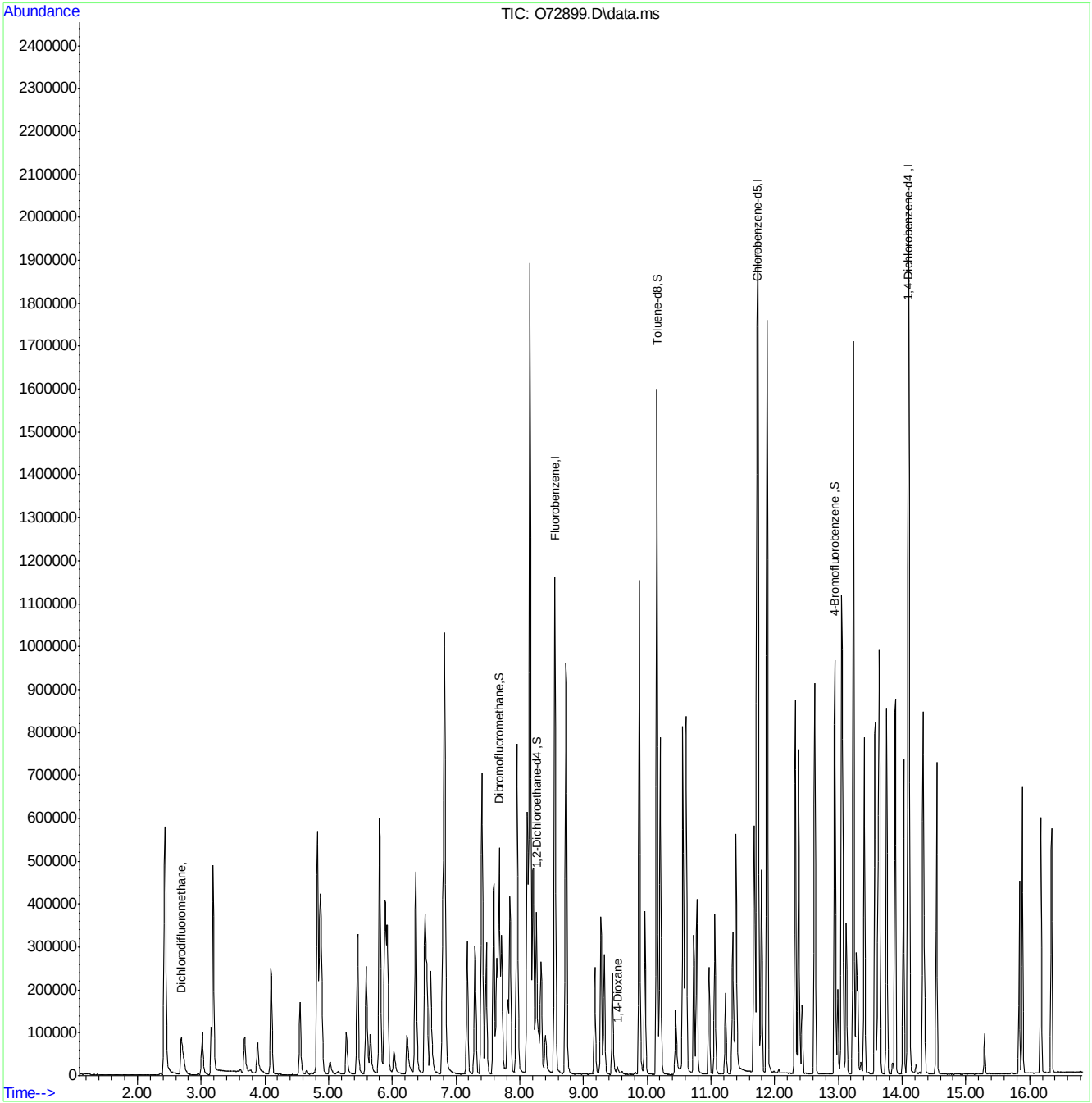
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	903727	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	632401	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	237409	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	251786	49.81	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.62%			
50) 1,2-Dichloroethane-d4	8.262	65	229612	49.02	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.04%			
63) Toluene-d8	10.152	98	878775	51.78	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.56%			
86) 4-Bromofluorobenzene	12.944	174	234664	49.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	123257	19.45	ug/L	97
59) 1,4-Dioxane	9.536	88	13633	372.58	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

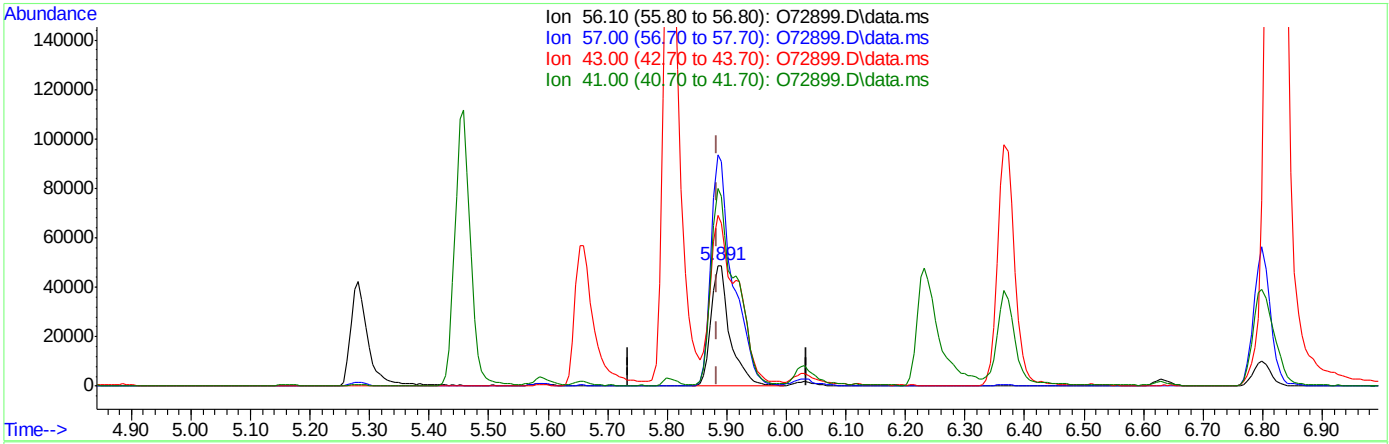
Quant Time: Dec 08 15:36:35 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

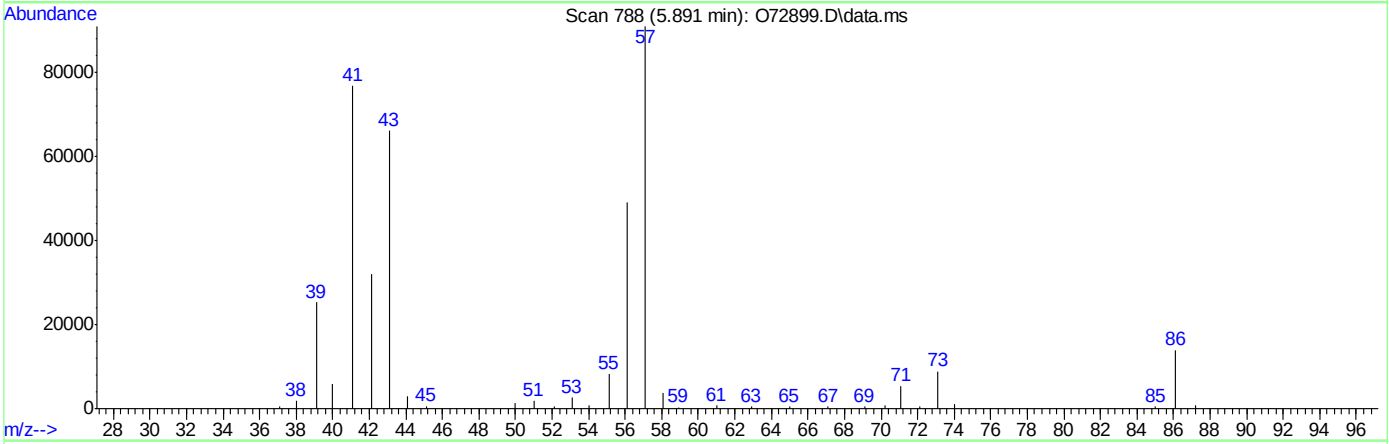


Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(22) Hexane

5.891min (+0.006) 30.26ug/L

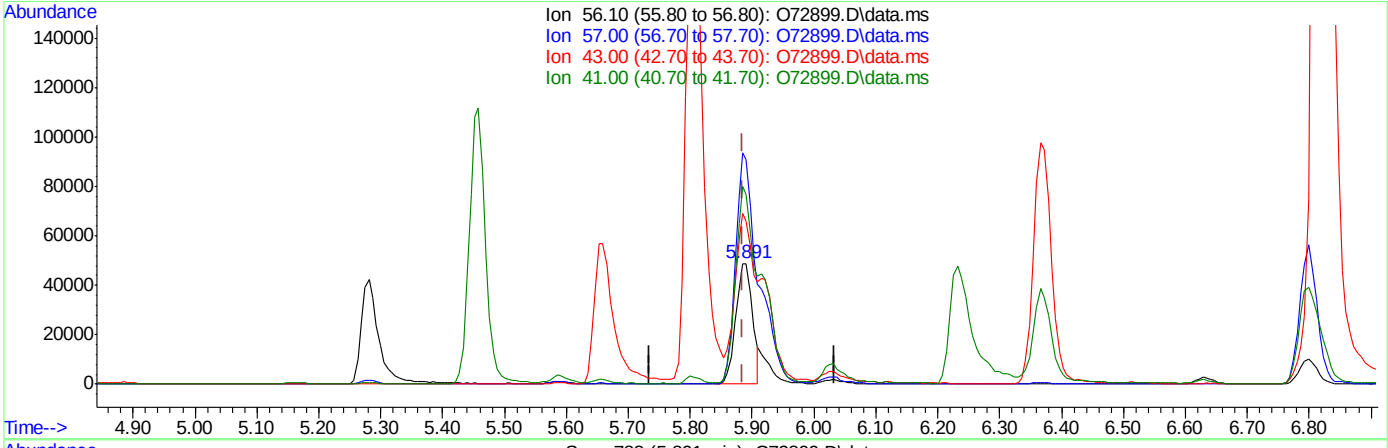
response 107523

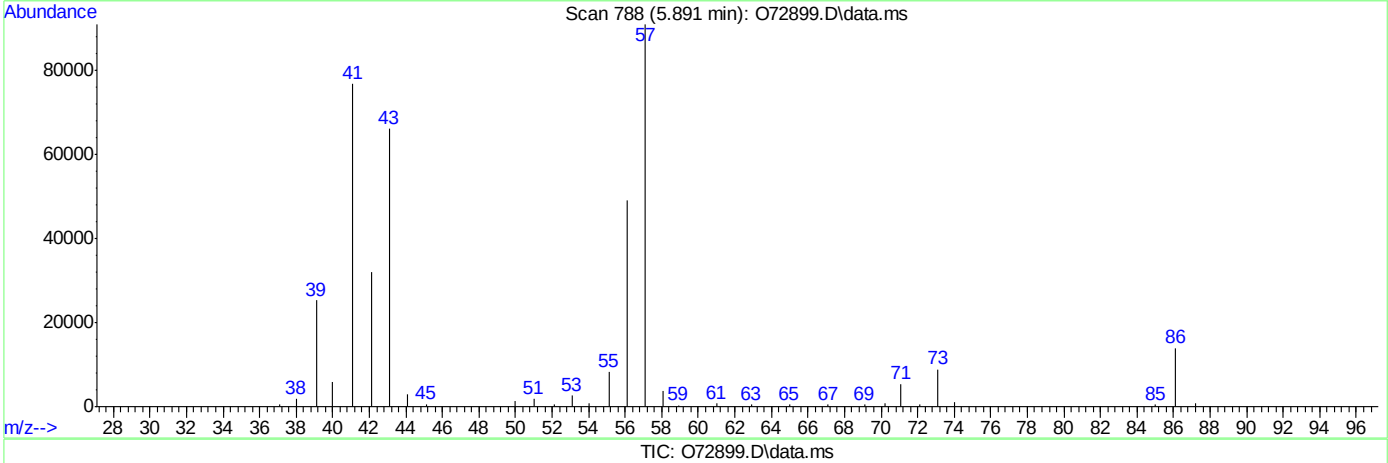
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	185.72
43.00	143.30	131.45
41.00	165.60	155.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(22) Hexane

5.891min (+0.006) 25.98ug/L m

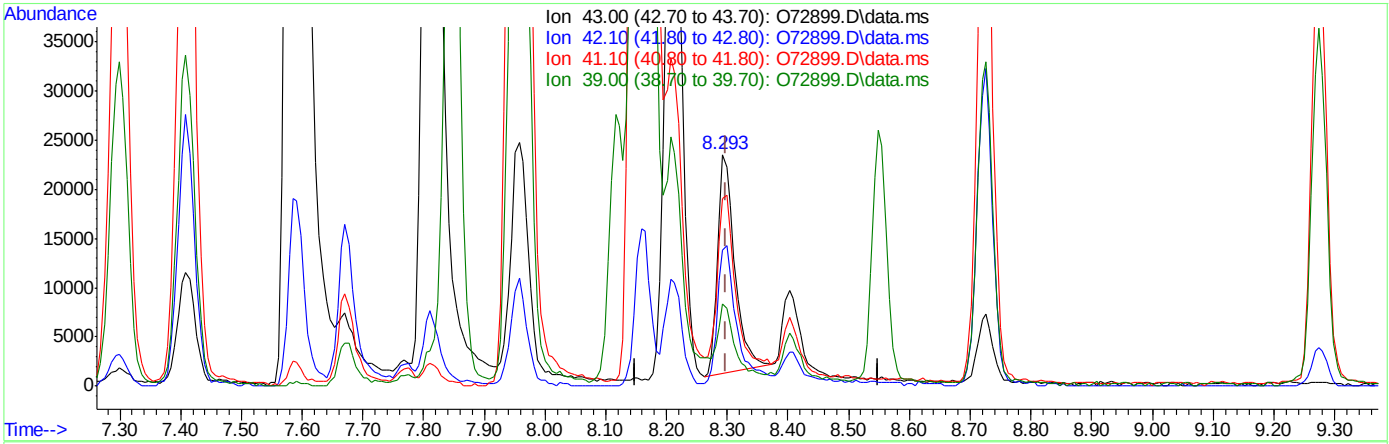
response 92314

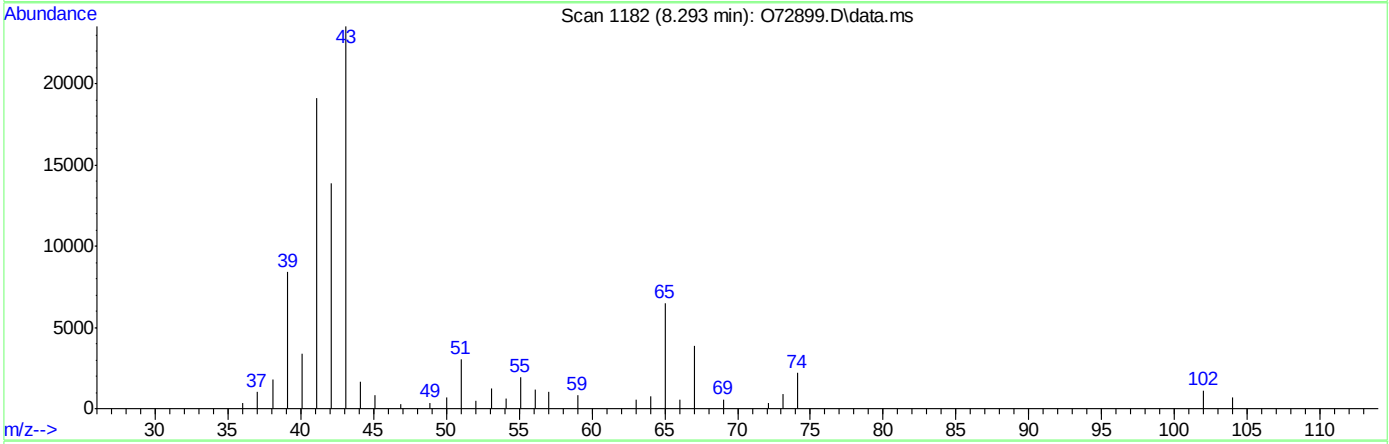
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	185.72
43.00	143.30	134.97
41.00	165.60	156.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 342.96ug/L

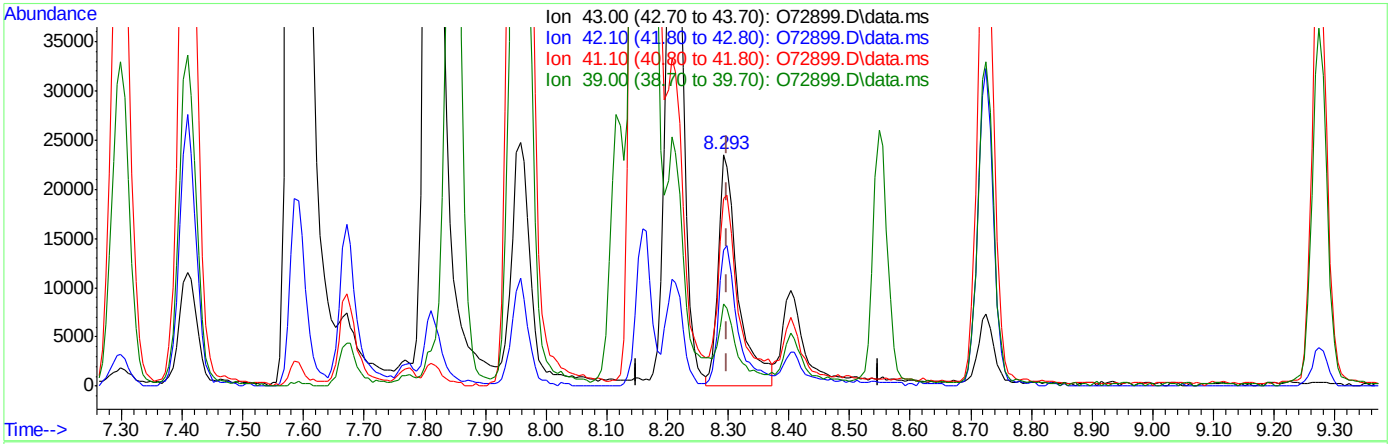
response 43225

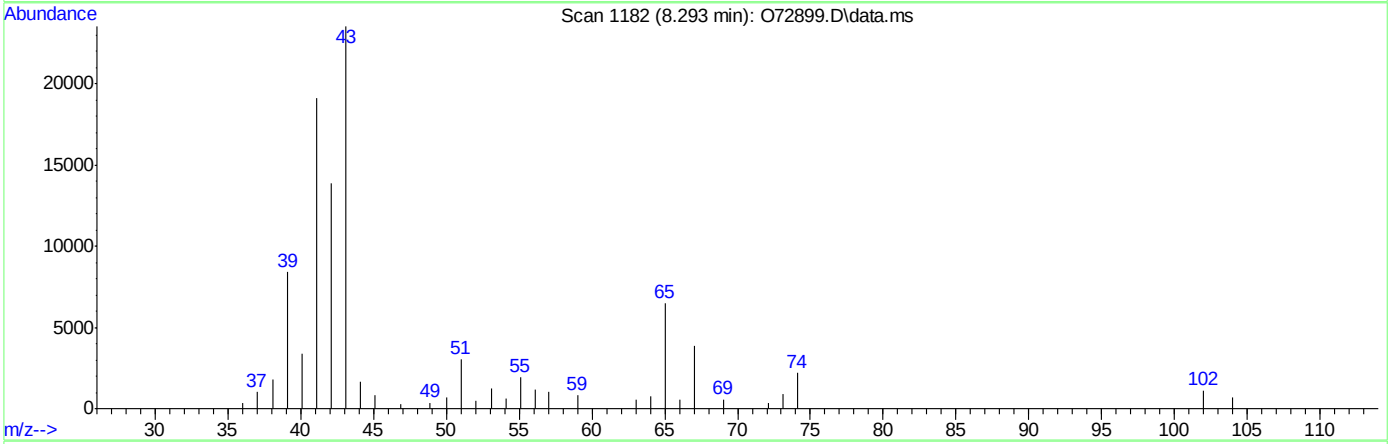
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	60.26
41.10	73.80	74.70
39.00	31.30	30.99

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 425.12ug/L m

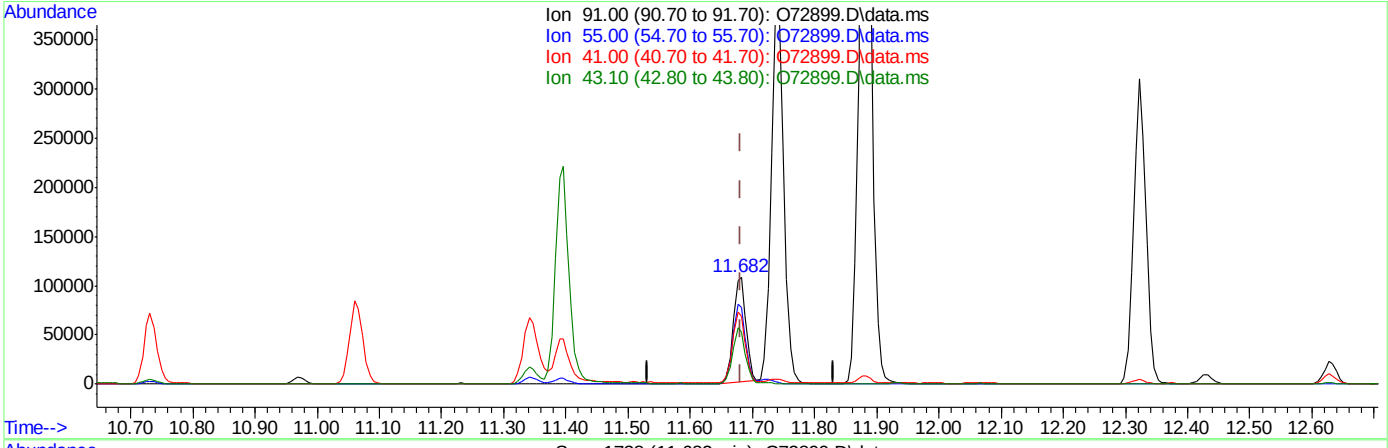
response 53687

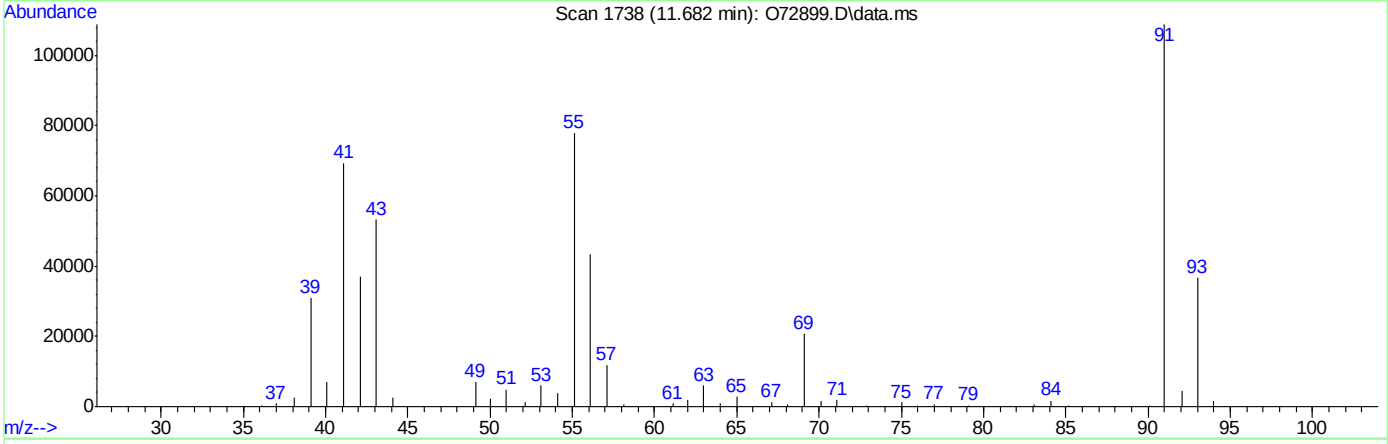
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	58.90
41.10	73.80	81.10
39.00	31.30	35.74

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 26.28ug/L

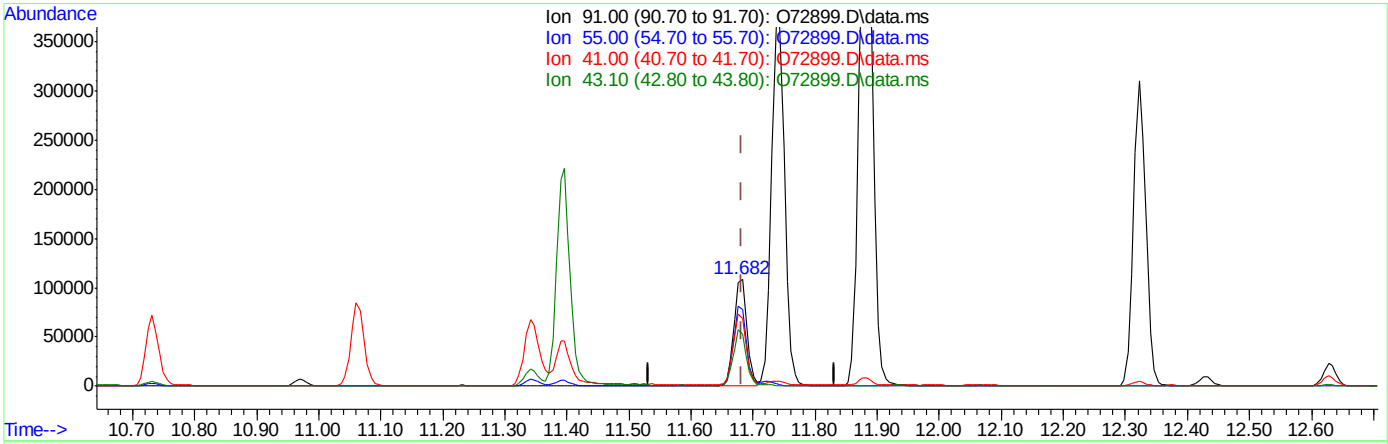
response 150543

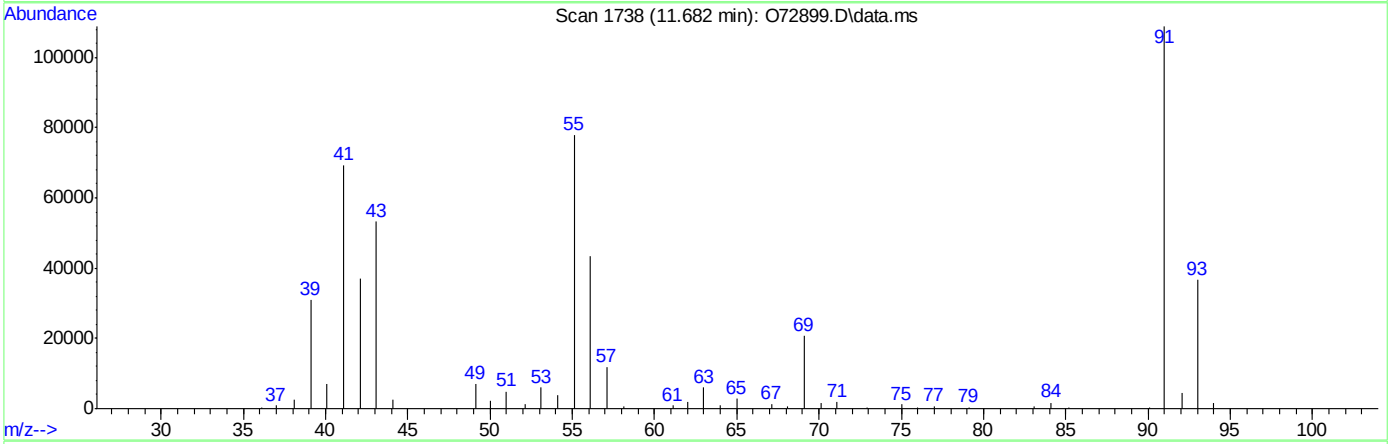
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.28
41.00	64.60	62.23
43.10	48.40	48.26

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 27.37ug/L m

response 156790

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.63
41.00	64.60	63.72
43.10	48.40	48.91

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/14/22 00:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:54:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	851463	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	590347	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	222946	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	233966	49.12	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.24%			
50) 1,2-Dichloroethane-d4	8.262	65	224561	50.88	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.76%			
63) Toluene-d8	10.152	98	809180	51.07	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.14%			
86) 4-Bromofluorobenzene	12.944	174	214060	48.30	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.60%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	217734	36.47	ug/L	100
3) Chloromethane	3.025	50	196411	37.51	ug/L	96
4) 1,3-butadiene	3.196	39	197677	37.59	ug/L	98
5) Vinyl Chloride	3.160	62	210060	39.69	ug/L	99
6) Bromomethane	3.684	94	81190	34.55	ug/L	98
7) Chloroethane	3.891	64	118929	37.12	ug/L	97
8) Trichlorofluoromethane	4.104	101	292864	35.78	ug/L	99
9) Ethyl Ether	4.556	59	145851	37.15	ug/L	98
10) Ethanol	4.775	45	9916	547.06	ug/L	97
11) 1,2-Dichlorotrifluoroe...	4.830	67	215564	35.93	ug/L	98
12) 1,1-Dichloroethene	4.830	61	266996	36.21	ug/L	99
13) Freon 113	4.885	101	174959	34.87	ug/L	97
14) Carbon Disulfide	4.867	76	506707	35.61	ug/L	100
15) Iodomethane	5.025	142	90596	43.43	ug/L	93
16) Acrolein	5.281	56	147317	180.59	ug/L	98
17) Allyl chloride	5.458	41	246178	37.43	ug/L	99
18) Methylene Chloride	5.592	49	249233	36.12	ug/L	99
19) Acetone	5.659	43	203484	171.24	ug/L	99
20) Methyl acetate	5.805	43	599376	192.42	ug/L	99
21) trans-1,2-Dichloroethene	5.799	61	260089	36.48	ug/L	98
22) Hexane	5.891	56	125662m	37.53	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	476073	36.30	ug/L	98
24) Tert Butyl Alcohol	6.031	59	87756	317.17	ug/L	99
25) Acetonitrile	6.232	41	165658	343.00	ug/L	98
26) Di-isopropyl ether	6.372	45	581028	36.37	ug/L	99
27) Chloroprene	6.519	53	225003	38.18	ug/L	98
28) 1,1-Dichloroethane	6.543	63	313135	36.20	ug/L	97
29) Acrylonitrile	6.604	52	243097	178.49	ug/L	97
30) ETBE	6.799	59	518821	36.43	ug/L	99
31) Vinyl acetate	6.823	43	1842860	203.01	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	189242	36.56	ug/L	99
33) 2,2-Dichloropropane	7.299	77	225701	37.01	ug/L	100
34) Bromochloromethane	7.403	128	103172	37.46	ug/L	96
35) Cyclohexane	7.409	56	269924	36.30	ug/L	99
36) Chloroform	7.476	83	329661	36.27	ug/L	97
37) Ethyl acetate	7.592	43	783881	189.91	ug/L	99
38) Tetrahydrofuran	7.671	42	44137	35.27	ug/L	96
40) Carbon Tetrachloride	7.640	117	215628	40.31	ug/L	99
41) 1,1,1-Trichloroethane	7.720	97	273272	37.84	ug/L	99
42) 2-Butanone	7.811	43	354849	190.03	ug/L	100
43) 1,1-Dichloropropene	7.848	75	241008	36.20	ug/L	100
44) tert-Butyl formate	7.957	59	447306	185.72	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:54:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
45) Propionitrile	8.140	54	205864	357.56	ug/L	94
46) Methacrylonitrile	8.159	41	1349044	402.55	ug/L	100
47) Benzene	8.122	78	699493	36.72	ug/L	99
48) TAME	8.213	73	460260	37.34	ug/L	99
49) Isobutyl alcohol	8.299	43	81357m	679.61	ug/L	
51) 1,2-Dichloroethane	8.335	62	280067	36.15	ug/L	99
52) Tert Amyl Alcohol	8.402	59	68830	355.03	ug/L	94
53) Trichloroethene	8.732	95	192983	35.82	ug/L	97
54) Methylcyclohexane	8.726	83	255917	36.72	ug/L	98
55) Dibromomethane	9.177	93	130691	37.24	ug/L	99
56) 1,2-Dichloropropane	9.274	63	181427	36.52	ug/L	98
57) Bromodichloromethane	9.329	83	244046	39.40	ug/L	99
58) Methyl methacrylate	9.457	41	151486	39.96	ug/L	99
59) 1,4-Dioxane	9.536	88	15321	444.42	ug/L	91
60) 2-Chloroethyl vinyl ether	9.878	63	636166	195.16	ug/L	100
61) cis-1,3-Dichloropropene	9.969	75	273314	39.85	ug/L	99
64) Toluene	10.207	91	745322	39.46	ug/L	99
65) 2-Nitropropane	10.445	41	141228	272.37	ug/L	98
66) 4-Methyl-2-pentanone	10.561	43	905191	214.39	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	240959	41.94	ug/L	89
68) Tetrachloroethene	10.603	166	210674	39.38	ug/L	99
69) Ethyl methacrylate	10.731	69	206550	43.95	ug/L	100
70) 1,1,2-Trichloroethane	10.780	83	148283	40.75	ug/L	99
71) Dibromochloromethane	10.969	129	199307	44.13	ug/L	97
72) 1,3-Dichloropropane	11.060	76	290321	39.57	ug/L	97
73) 1,2-Dibromoethane	11.231	107	182570	41.69	ug/L	100
74) 3,3-dimethyl-1-butanol	11.341	57	306832	2064.06	ug/L	100
75) 2-hexanone	11.390	43	606139	216.54	ug/L	99
76) 1-Chlorohexane	11.682	91	215548m	40.31	ug/L	
77) Ethylbenzene	11.743	91	844570	39.70	ug/L	99
78) Chlorobenzene	11.743	112	506885	39.73	ug/L	99
79) 1,1,1,2-Tetrachloroethane	11.792	131	174540	43.32	ug/L	99
80) m,p-Xylene	11.883	91	1312732	80.75	ug/L	99
81) o-Xylene	12.322	91	638134	39.99	ug/L	99
82) Styrene	12.377	104	505556	42.85	ug/L	100
83) Bromoform	12.432	173	120677	46.02	ug/L	97
84) Isopropylbenzene	12.627	105	759480	40.34	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	63905	42.03	ug/L	99
88) n-Propylbenzene	13.054	91	921367	39.93	ug/L	99
89) Bromobenzene	13.066	156	227585	39.22	ug/L	100
90) 1,1,2,2-Tetrachloroethane	13.121	83	222828	41.10	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	654029	40.17	ug/L	98
92) 2-Chlorotoluene	13.408	91	571217	39.34	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	54505	42.55	ug/L	90
94) 1,2,3-Trichloropropane	13.286	110	64496	39.77	ug/L	95
95) Cyclohexanone	13.353	55	15040	156.14	ug/L	98
96) 4-Chlorotoluene	13.408	91	571217	39.34	ug/L	99
97) tert-Butylbenzene	13.578	91	349944	38.74	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	639315	40.23	ug/L	99
100) Pentachloroethane	13.627	167	106623	44.55	ug/L	98
101) sec-Butylbenzene	13.761	105	719908	39.83	ug/L	100
102) 4-Isopropyltoluene	13.895	119	636341	40.64	ug/L	100
103) 1,3-Dichlorobenzene	14.023	146	393926	39.04	ug/L	99
104) 1,2,3-Trimethylbenzene	14.109	105	652528	40.16	ug/L	100
105) 1,4-Dichlorobenzene	14.109	146	421642	39.16	ug/L	99
106) n-Butylbenzene	14.328	92	341797	41.17	ug/L	99
107) Benzyl Chloride	14.352	126	59944	43.85	ug/L	98
108) 1,2-Dichlorobenzene	14.541	146	380951	38.90	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:54:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

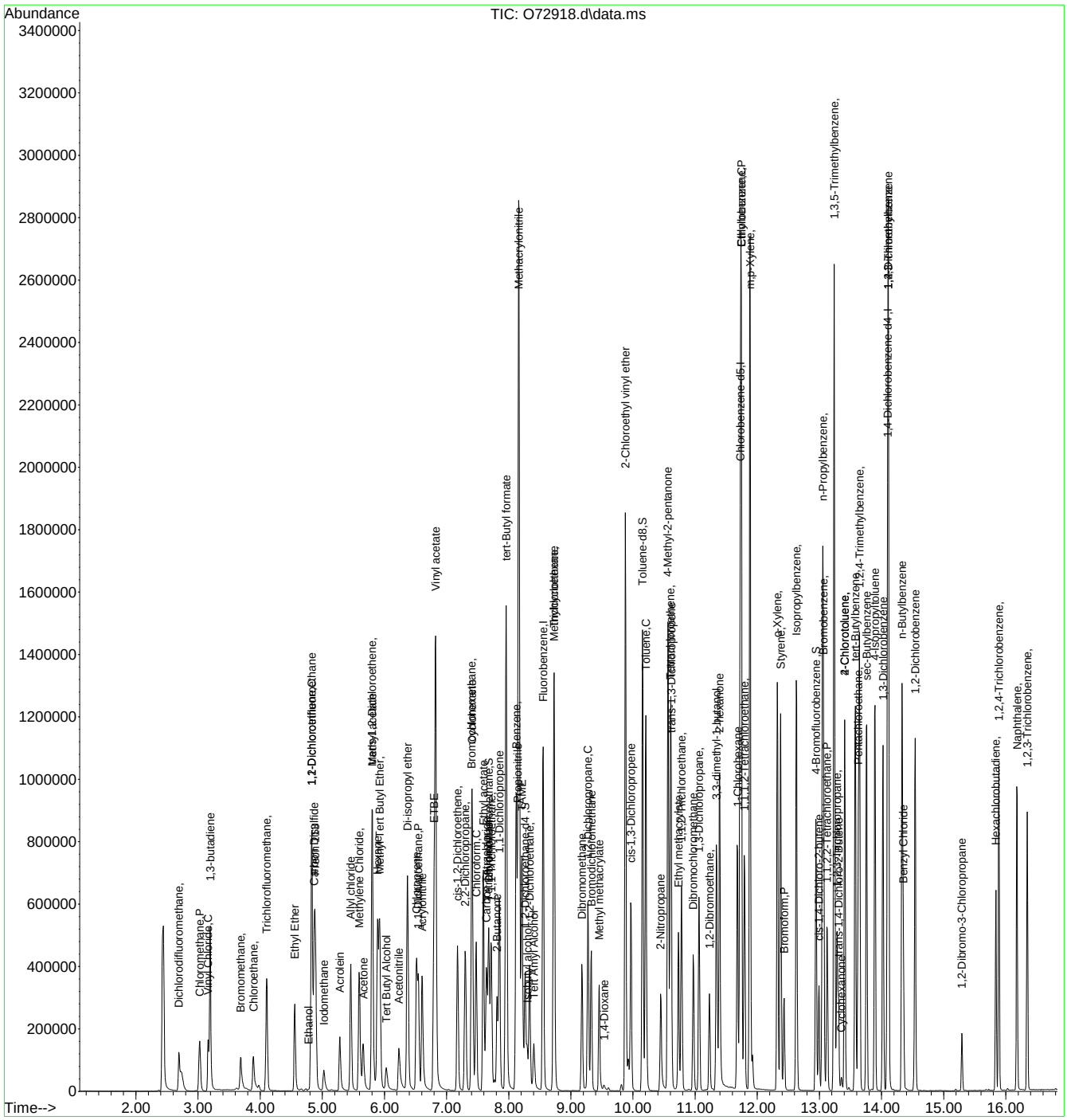
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) 1,2-Dibromo-3-Chloropr...	15.291	75	32952	43.48	ug/L	92
110) Hexachlorobutadiene	15.840	225	79801	37.43	ug/L	96
111) 1,2,4-Trichlorobenzene	15.889	180	238973	39.62	ug/L	99
112) Naphthalene	16.181	128	609658	40.49	ug/L	99
113) 1,2,3-Trichlorobenzene	16.346	180	216736	38.72	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:54:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



VO_12-08-2022.M Sun Dec 11 13:57:44 2022 Page: 4

Manual Integration Approval Summary

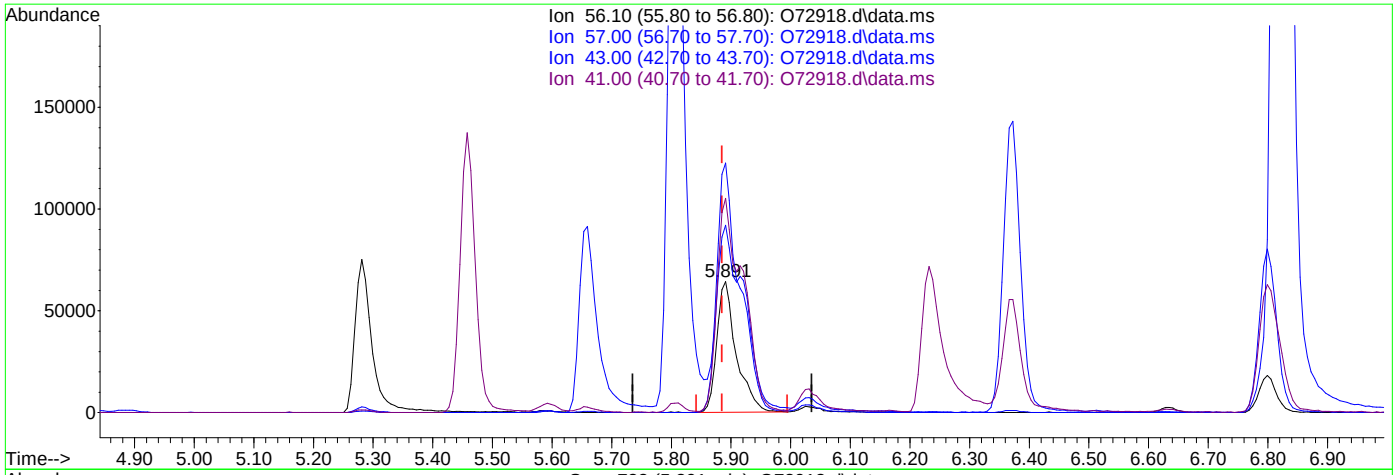
Sample Number: VO2867-CC2866
Lab FileID: O72918.D
Injection Time: 12/09/22 10:04
Method: SW846 8260D
Analyst approved: 12/11/22 13:59 Celine Celis
Supervisor approved: 12/14/22 00:08 Jennifer Fereira

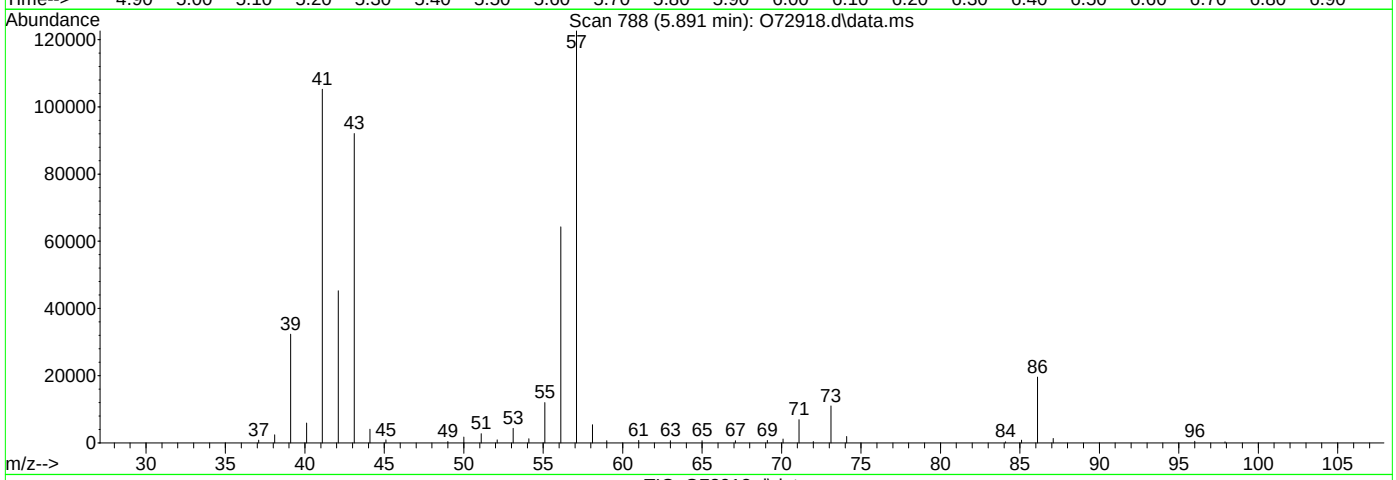
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(22) Hexane

5.891min (+0.006) 43.71ug/L

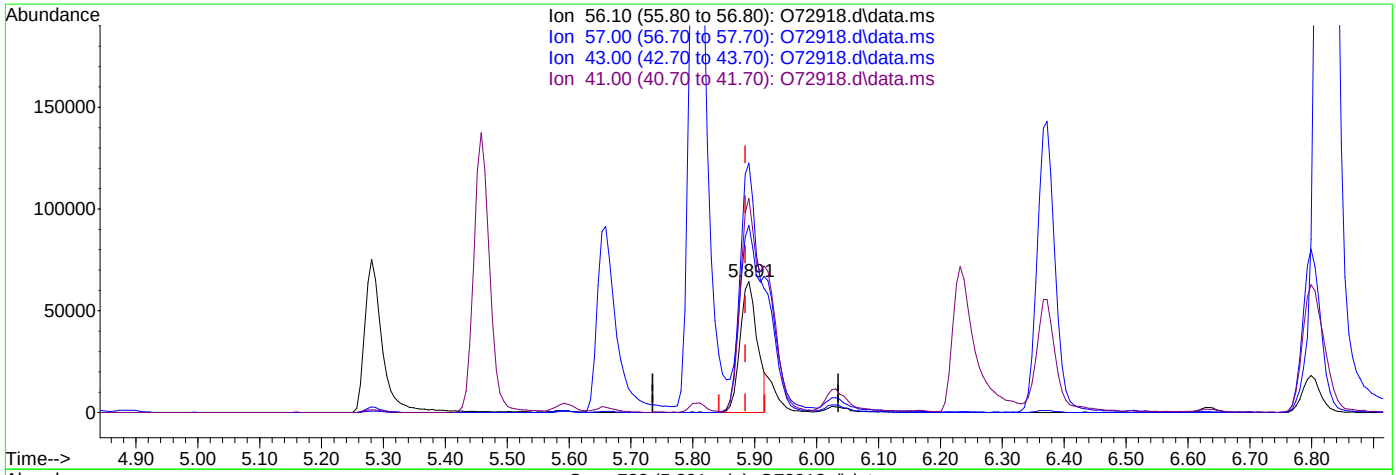
response 146356

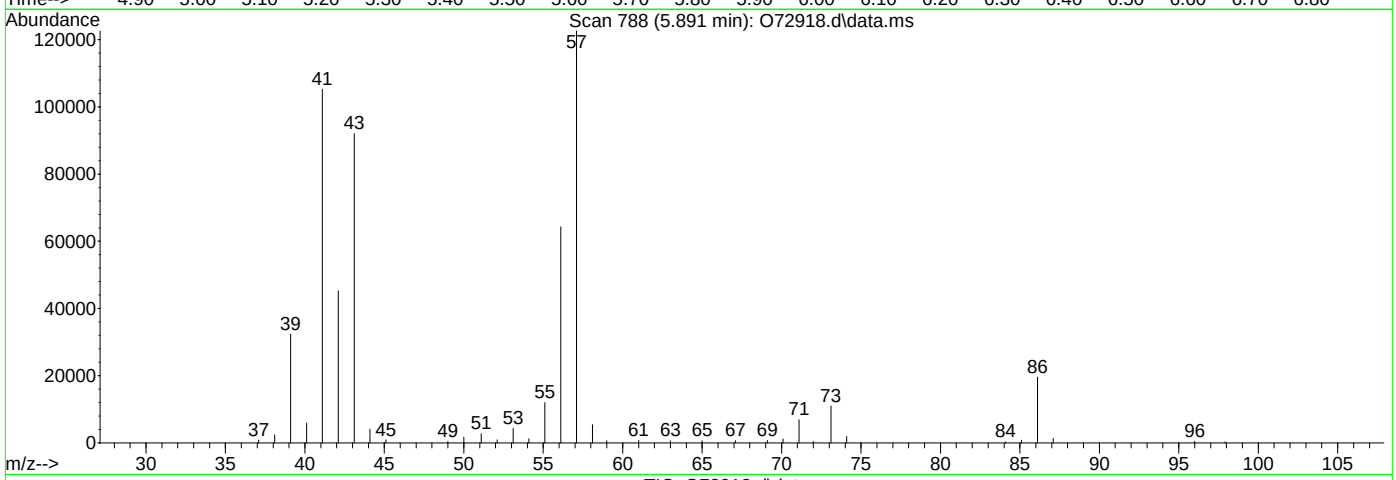
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	190.70
43.00	143.30	139.29
41.00	165.60	162.74

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(22) Hexane

5.891min (+0.006) 37.53ug/L m

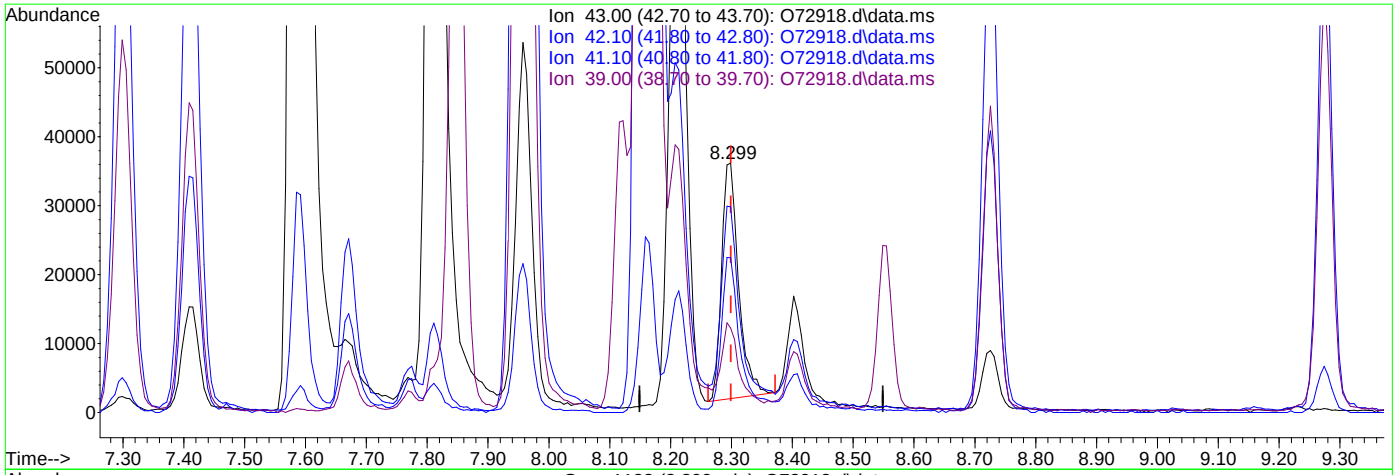
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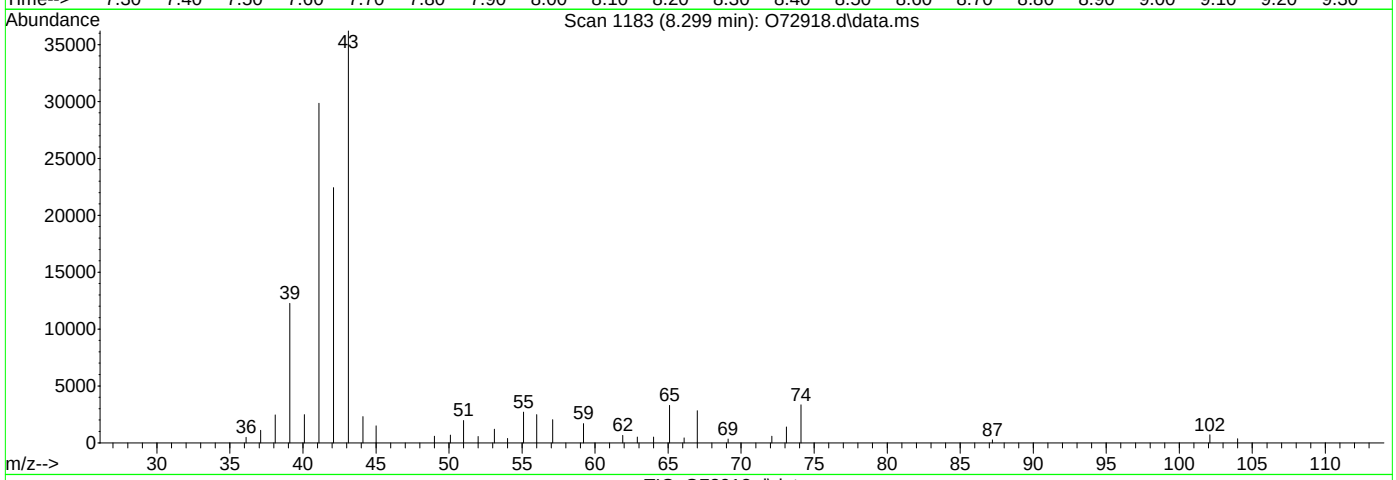
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	190.70
43.00	143.30	143.10
41.00	165.60	163.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 557.14ug/L

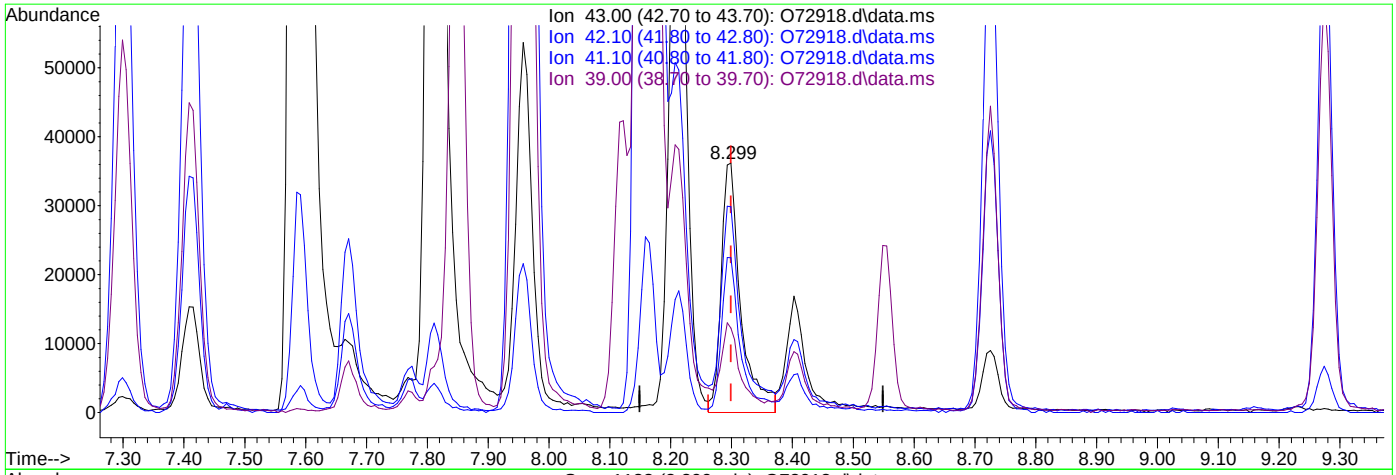
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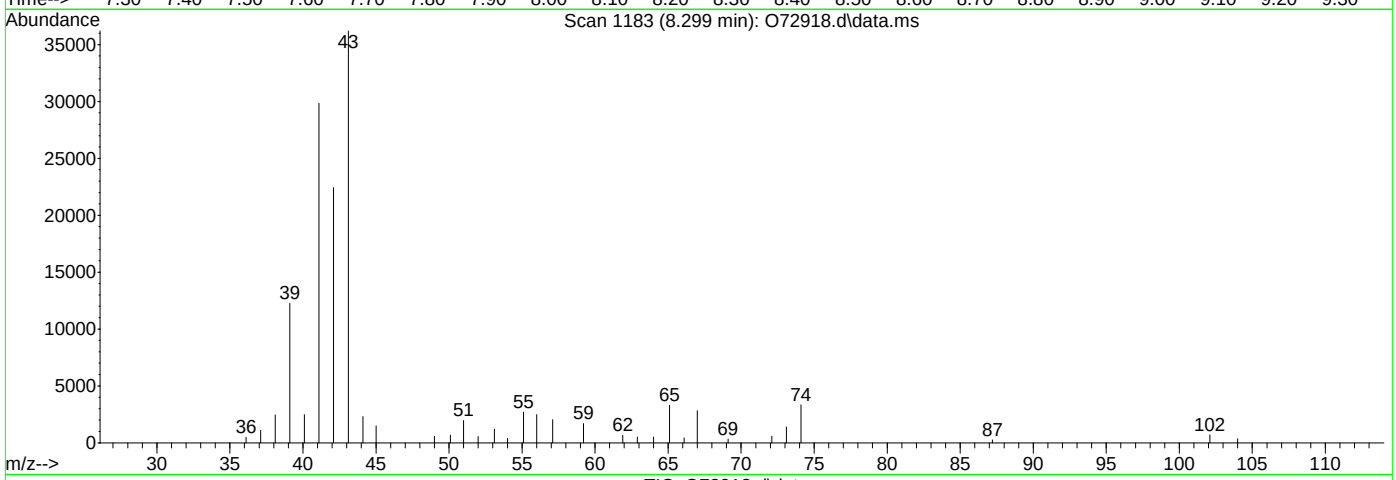
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	63.38
41.10	73.80	78.49
39.00	31.30	30.56

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 679.61ug/L m

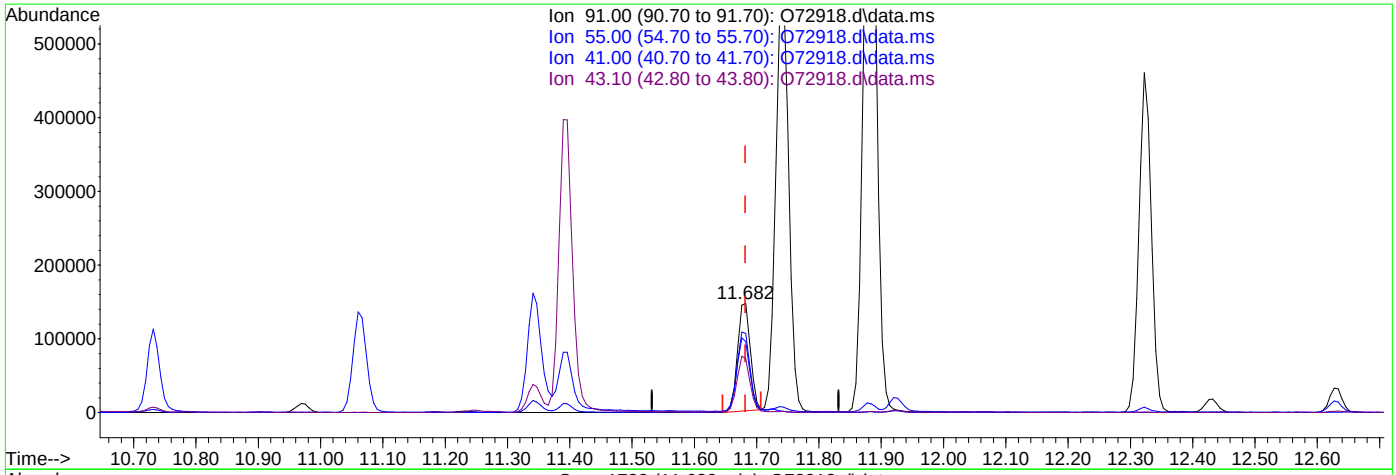
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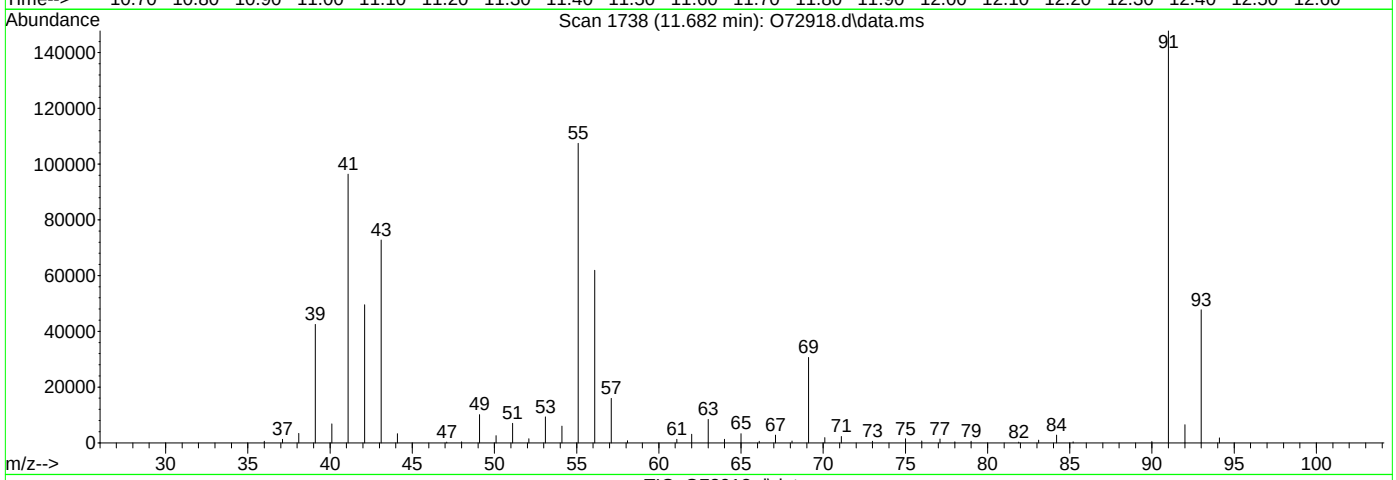
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	61.96
41.10	73.80	82.39
39.00	31.30	33.82

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 38.94ug/L

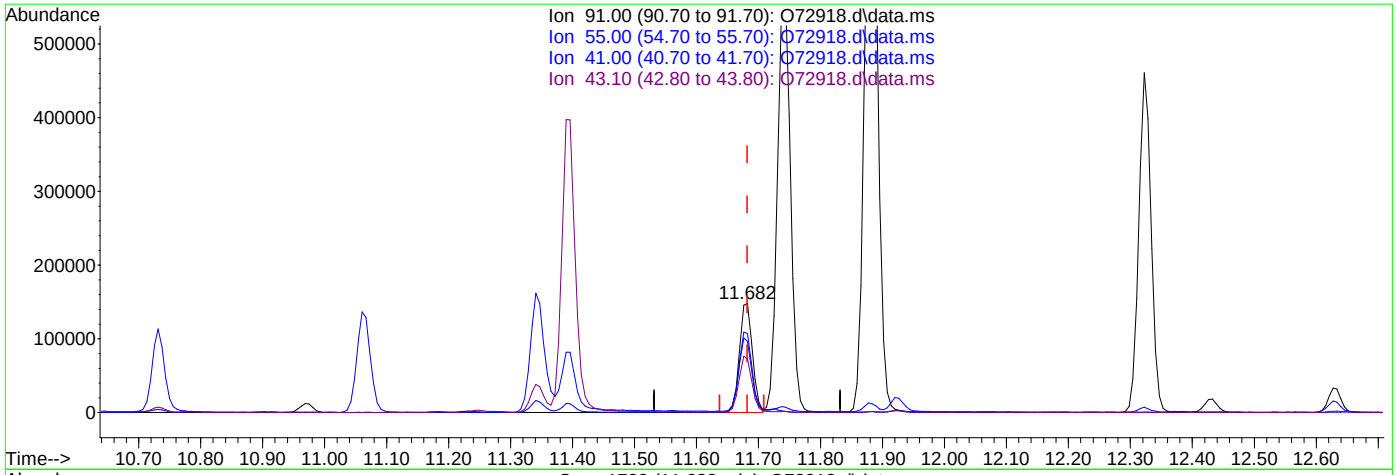
response 208231

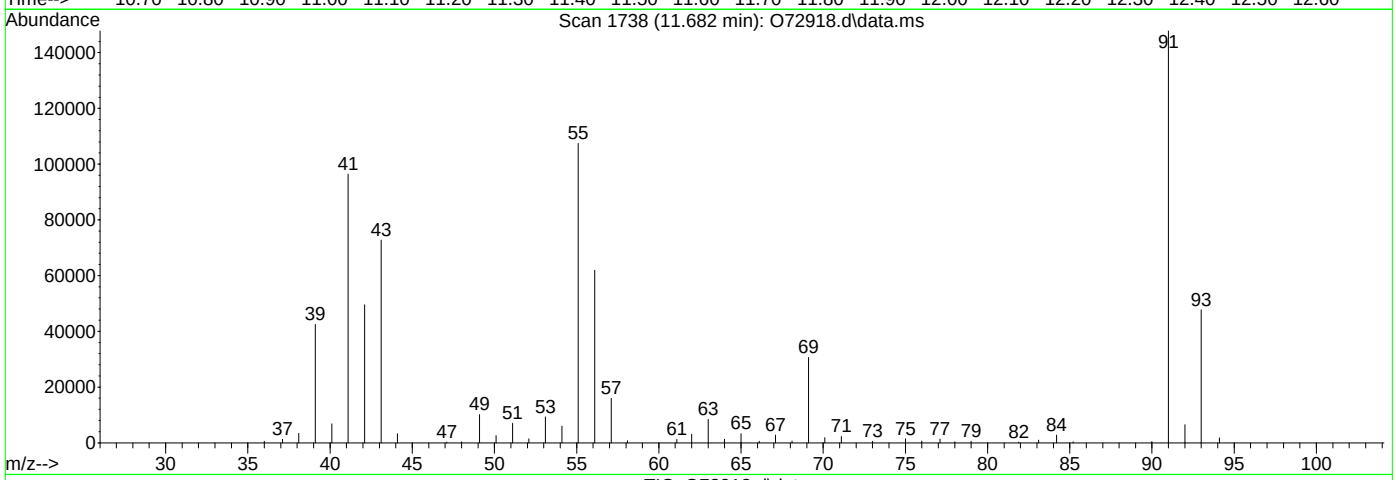
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.31
41.00	64.60	63.90
43.10	48.40	48.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72918.d
Acq On : 9 Dec 2022 10:04 am
Operator : adelardl
Sample : CC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 11 13:46:34 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72918.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 40.31ug/L m

response 215548

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.72
41.00	64.60	65.18
43.10	48.40	49.20

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/14/22 00:08

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 14:19:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	786853	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	570626	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	237879	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	216429	49.17	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	98.34%		
50) 1,2-Dichloroethane-d4	8.262	65	204504	50.14	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery =	100.28%		
63) Toluene-d8	10.152	98	761015	49.69	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery =	99.38%		
86) 4-Bromofluorobenzene	12.944	174	210799	44.58	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	89.16%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	196356	35.59	ug/L	97
3) Chloromethane	3.019	50	183976	38.02	ug/L	99
4) 1,3-butadiene	3.190	39	203825	41.95	ug/L	99
5) Vinyl Chloride	3.160	62	194902	39.85	ug/L	98
6) Bromomethane	3.684	94	76267	35.06	ug/L	99
7) Chloroethane	3.885	64	113354	38.31	ug/L	97
8) Trichlorofluoromethane	4.098	101	267539	35.38	ug/L	99
9) Ethyl Ether	4.556	59	135527	37.35	ug/L	99
10) Ethanol	4.781	45	16330	974.89	ug/L	93
11) 1,2-Dichlorotrifluoroe...	4.824	67	202413	36.51	ug/L	99
12) 1,1-Dichloroethene	4.830	61	244800	35.93	ug/L	97
13) Freon 113	4.885	101	167965	36.23	ug/L	97
14) Carbon Disulfide	4.867	76	467347	35.55	ug/L	99
15) Iodomethane	5.025	142	109799	50.96	ug/L	97
16) Acrolein	5.281	56	127680	169.24	ug/L	99
17) Allyl chloride	5.458	41	234232	38.54	ug/L	98
18) Methylene Chloride	5.592	49	239072	37.52	ug/L	99
19) Acetone	5.653	43	217941	199.21	ug/L	100
20) Methyl acetate	5.805	43	598968	208.08	ug/L	99
21) trans-1,2-Dichloroethene	5.799	61	238784	36.24	ug/L	96
22) Hexane	5.891	56	109422m	35.36	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	442407	36.51	ug/L	99
24) Tert Butyl Alcohol	6.031	59	105401	411.14	ug/L	96
25) Acetonitrile	6.232	41	169798	380.44	ug/L	100
26) Di-isopropyl ether	6.372	45	540899	36.63	ug/L	98
27) Chloroprene	6.513	53	209789	38.52	ug/L	99
28) 1,1-Dichloroethane	6.543	63	293427	36.71	ug/L	100
29) Acrylonitrile	6.604	52	214542	170.46	ug/L	96
30) ETBE	6.799	59	492418	37.41	ug/L	99
31) Vinyl acetate	6.824	43	1549116	184.67	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	175182	36.62	ug/L	98
33) 2,2-Dichloropropane	7.299	77	197796	35.10	ug/L	99
34) Bromochloromethane	7.403	128	95232	37.41	ug/L	99
35) Cyclohexane	7.409	56	250015	36.38	ug/L	98
36) Chloroform	7.476	83	302857	36.06	ug/L	95
37) Ethyl acetate	7.592	43	683955	179.31	ug/L	99
38) Tetrahydrofuran	7.671	42	42729	36.95	ug/L	97
40) Carbon Tetrachloride	7.647	117	197695	40.00	ug/L	99
41) 1,1,1-Trichloroethane	7.720	97	250684	37.56	ug/L	99
42) 2-Butanone	7.811	43	365990	212.09	ug/L	100
43) 1,1-Dichloropropene	7.848	75	222814	36.22	ug/L	99
44) tert-Butyl formate	7.957	59	414247	186.06	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 14:19:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	Propionitrile	8.140	54	223615	420.29	ug/L		97
46)	Methacrylonitrile	8.165	41	1261454	407.32	ug/L		100
47)	Benzene	8.122	78	652718	37.07	ug/L		99
48)	TAME	8.214	73	429959	37.75	ug/L		98
49)	Isobutyl alcohol	8.299	43	98591m	886.80	ug/L		
51)	1,2-Dichloroethane	8.335	62	257250	35.93	ug/L		99
52)	Tert Amyl Alcohol	8.403	59	76240	420.97	ug/L		96
53)	Trichloroethene	8.732	95	178090	35.77	ug/L		98
54)	Methylcyclohexane	8.726	83	237341	36.86	ug/L		98
55)	Dibromomethane	9.177	93	119159	36.74	ug/L		99
56)	1,2-Dichloropropane	9.280	63	169376	36.90	ug/L		99
57)	Bromodichloromethane	9.329	83	216061	37.75	ug/L		98
58)	Methyl methacrylate	9.457	41	142223	40.53	ug/L		98
59)	1,4-Dioxane	9.536	88	22257	698.62	ug/L		95
60)	2-Chloroethyl vinyl ether	9.878	63	572312	189.99	ug/L		99
61)	cis-1,3-Dichloropropene	9.969	75	244261	38.54	ug/L		98
64)	Toluene	10.207	91	694084	38.02	ug/L		99
65)	2-Nitropropane	10.451	41	101038	216.58	ug/L		99
66)	4-Methyl-2-pentanone	10.561	43	903600	221.41	ug/L		99
67)	trans-1,3-Dichloropropene	10.616	75	219186	39.75	ug/L		99
68)	Tetrachloroethene	10.603	166	205636	39.77	ug/L		99
69)	Ethyl methacrylate	10.731	69	194640	43.02	ug/L		99
70)	1,1,2-Trichloroethane	10.780	83	137473	39.08	ug/L		97
71)	Dibromochloromethane	10.969	129	175058	40.61	ug/L		98
72)	1,3-Dichloropropane	11.067	76	266876	37.64	ug/L		98
73)	1,2-Dibromoethane	11.231	107	165875	39.19	ug/L		98
74)	3,3-dimethyl-1-butanol	11.341	57	359880	2391.21	ug/L		100
75)	2-hexanone	11.396	43	615862	227.61	ug/L		99
76)	1-Chlorohexane	11.682	91	197562m	38.23	ug/L		
77)	Ethylbenzene	11.743	91	782113	38.03	ug/L		99
78)	Chlorobenzene	11.743	112	467577	37.91	ug/L		99
79)	1,1,1,2-Tetrachloroethane	11.792	131	157719	40.81	ug/L		97
80)	m,p-Xylene	11.884	91	1211437	77.10	ug/L		99
81)	o-Xylene	12.323	91	583163	37.81	ug/L		99
82)	Styrene	12.377	104	463606	40.65	ug/L		99
83)	Bromoform	12.432	173	99580	40.40	ug/L		97
84)	Isopropylbenzene	12.627	105	704563	38.72	ug/L		98
87)	cis-1,4-Dichloro-2-butene	12.993	53	53070	33.99	ug/L		96
88)	n-Propylbenzene	13.054	91	839514	34.10	ug/L		99
89)	Bromobenzene	13.066	156	207395	33.50	ug/L		99
90)	1,1,2,2-Tetrachloroethane	13.121	83	202801	35.06	ug/L		99
91)	1,3,5-Trimethylbenzene	13.237	105	595177	34.26	ug/L		99
92)	2-Chlorotoluene	13.408	91	527427	34.05	ug/L		100
93)	trans-1,4-Dichloro-2-B...	13.310	53	44188	33.48	ug/L		88
94)	1,2,3-Trichloropropane	13.286	110	58150	33.61	ug/L		94
95)	Cyclohexanone	13.353	55	18110	176.20	ug/L		95
96)	4-Chlorotoluene	13.408	91	527427	34.05	ug/L		100
97)	tert-Butylbenzene	13.578	91	323107	33.52	ug/L		99
99)	1,2,4-Trimethylbenzene	13.645	105	585339	34.52	ug/L		99
100)	Pentachloroethane	13.627	167	86886	35.98	ug/L		97
101)	sec-Butylbenzene	13.761	105	655726	34.00	ug/L		100
102)	4-Isopropyltoluene	13.895	119	572104	34.24	ug/L		100
103)	1,3-Dichlorobenzene	14.023	146	362945	33.71	ug/L		99
104)	1,2,3-Trimethylbenzene	14.109	105	594870	34.31	ug/L		99
105)	1,4-Dichlorobenzene	14.109	146	384759	33.49	ug/L		99
106)	n-Butylbenzene	14.328	92	302209	34.12	ug/L		98
107)	Benzyl Chloride	14.353	126	45064	33.78	ug/L	#	89
108)	1,2-Dichlorobenzene	14.542	146	351437	33.63	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 14:19:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

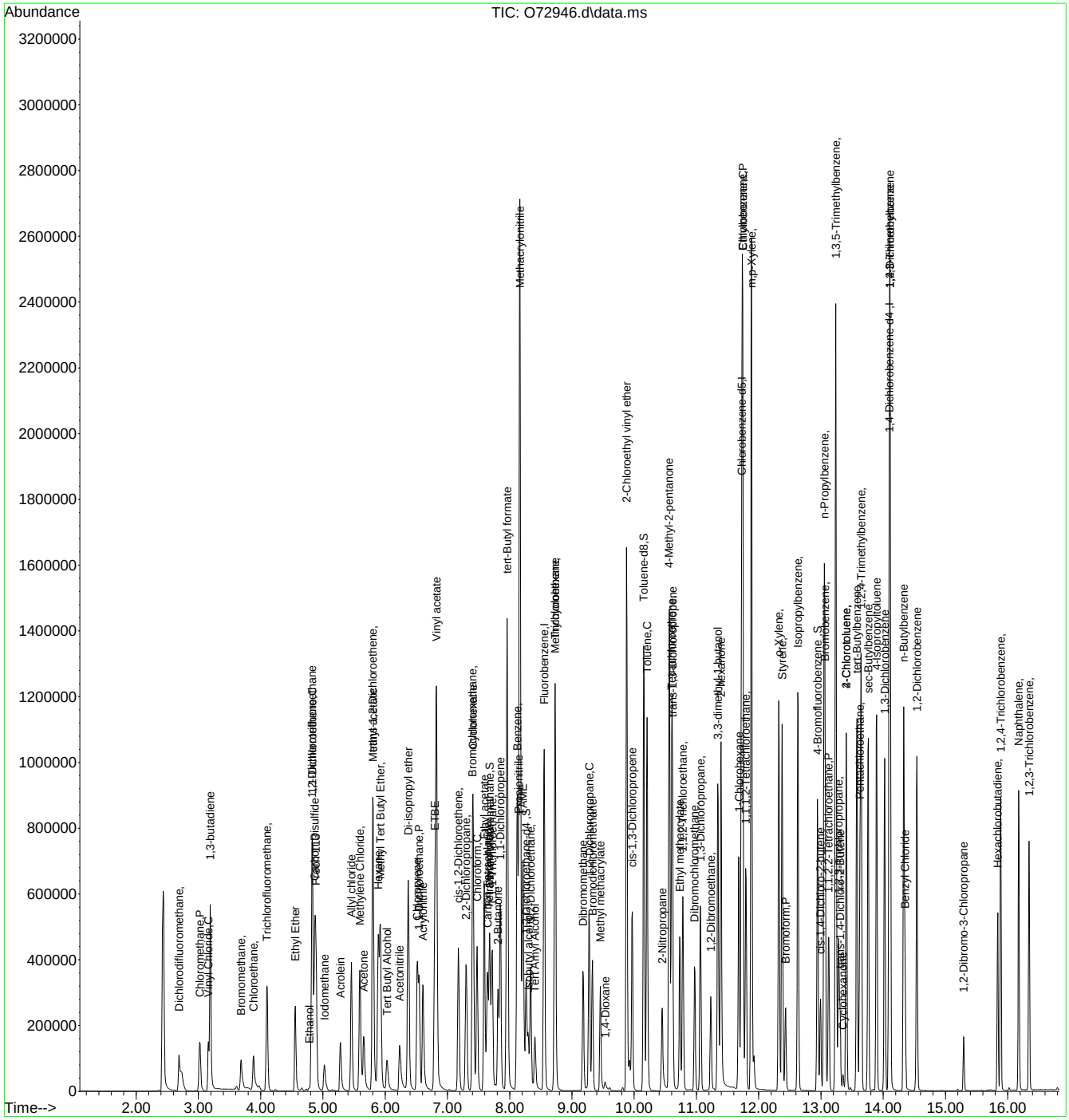
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) 1,2-Dibromo-3-Chloropr...	15.291	75	28237	36.21	ug/L	100
110) Hexachlorobutadiene	15.840	225	68796	30.24	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	207522	32.25	ug/L	98
112) Naphthalene	16.175	128	546519	34.02	ug/L	99
113) 1,2,3-Trichlorobenzene	16.346	180	190430	31.88	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
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Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 14:19:30 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

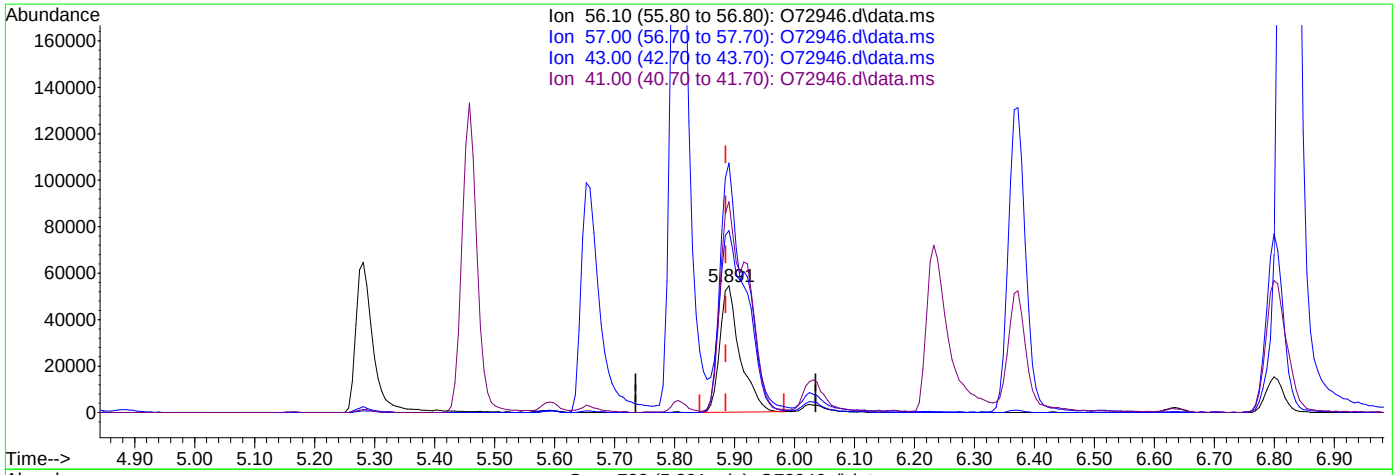
Sample Number: VO2867-ECC2866 **Method:** SW846 8260D
Lab FileID: O72946.D **Analyst approved:** 12/11/22 14:30 Celine Celis
Injection Time: 12/09/22 21:59 **Supervisor approved:** 12/14/22 00:08 Jennifer Fereira

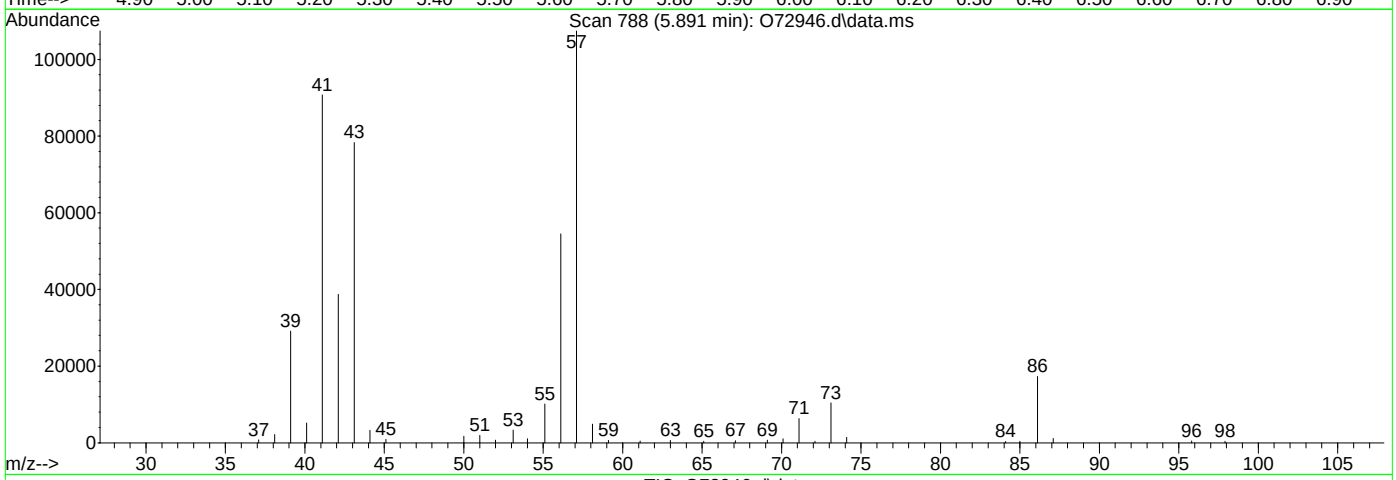
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(22) Hexane

5.891min (+0.006) 40.98ug/L

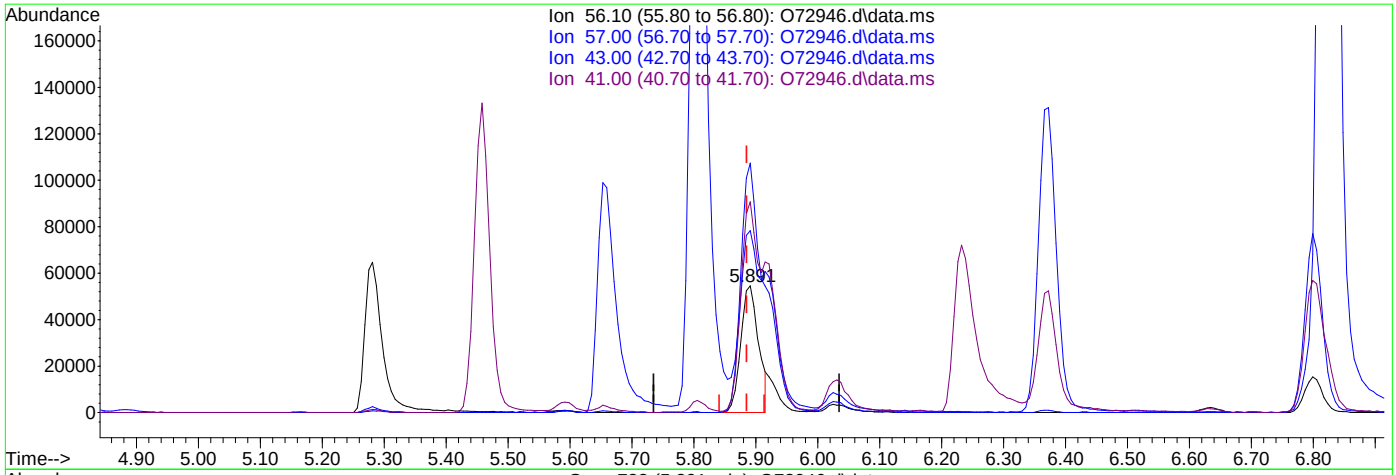
response 126792

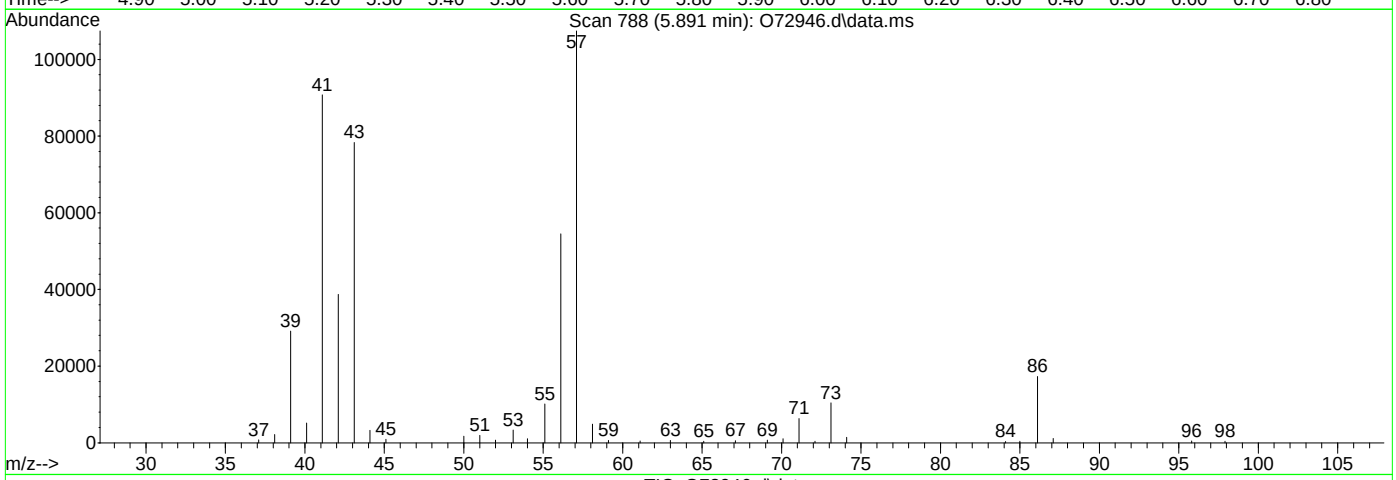
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	197.12
43.00	143.30	139.01
41.00	165.60	165.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(22) Hexane

5.891min (+0.006) 35.36ug/L m

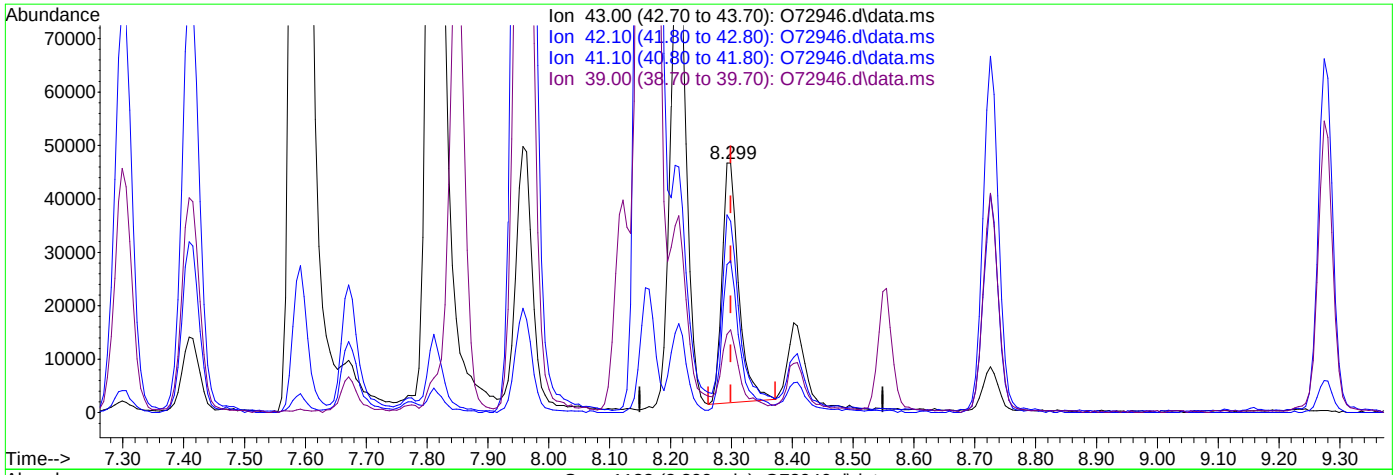
response 109422

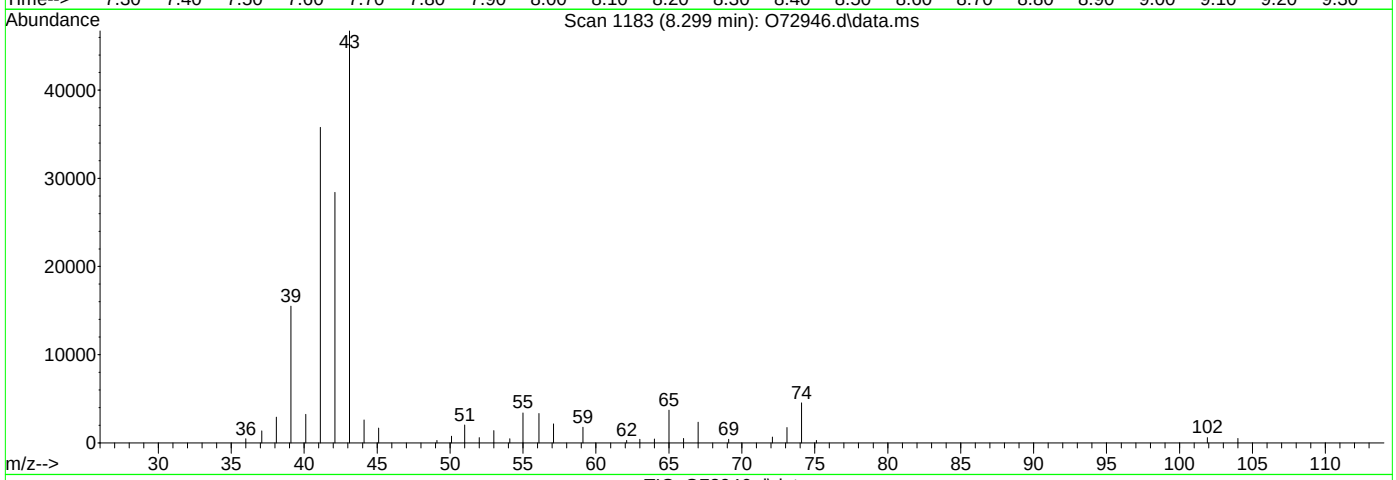
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	197.12
43.00	143.30	143.72
41.00	165.60	166.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 770.52ug/L

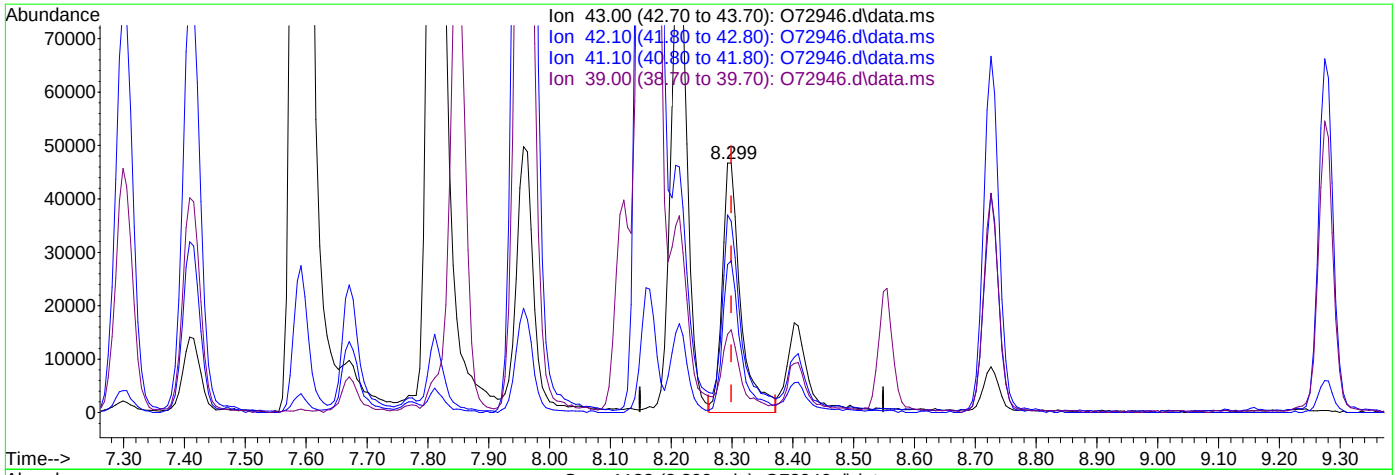
response 85427

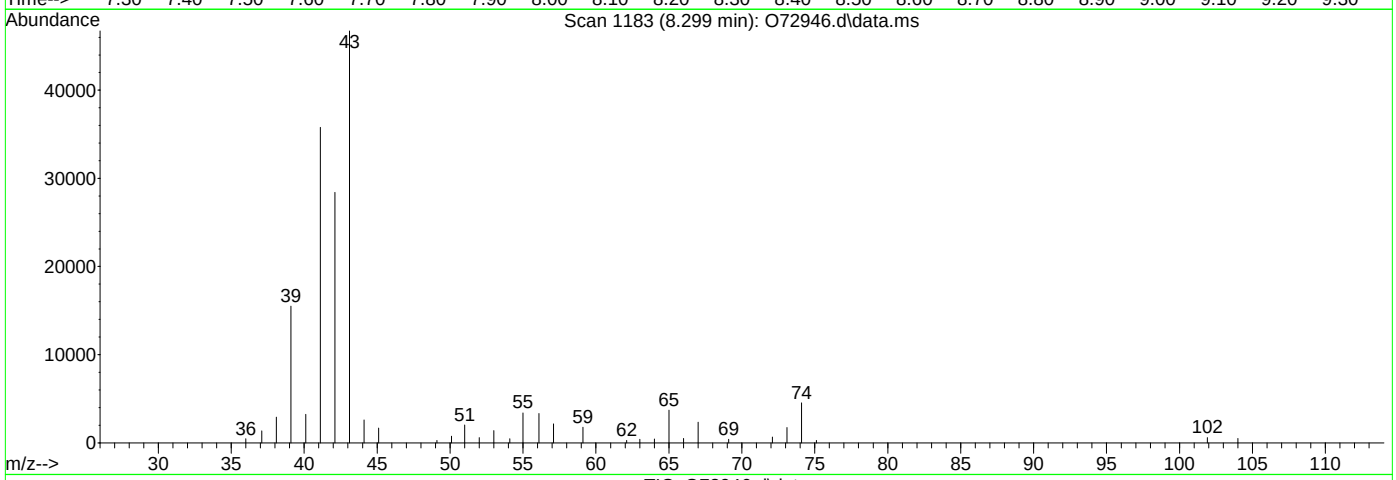
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	61.84
41.10	73.80	73.34
39.00	31.30	31.30

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 886.80ug/L m

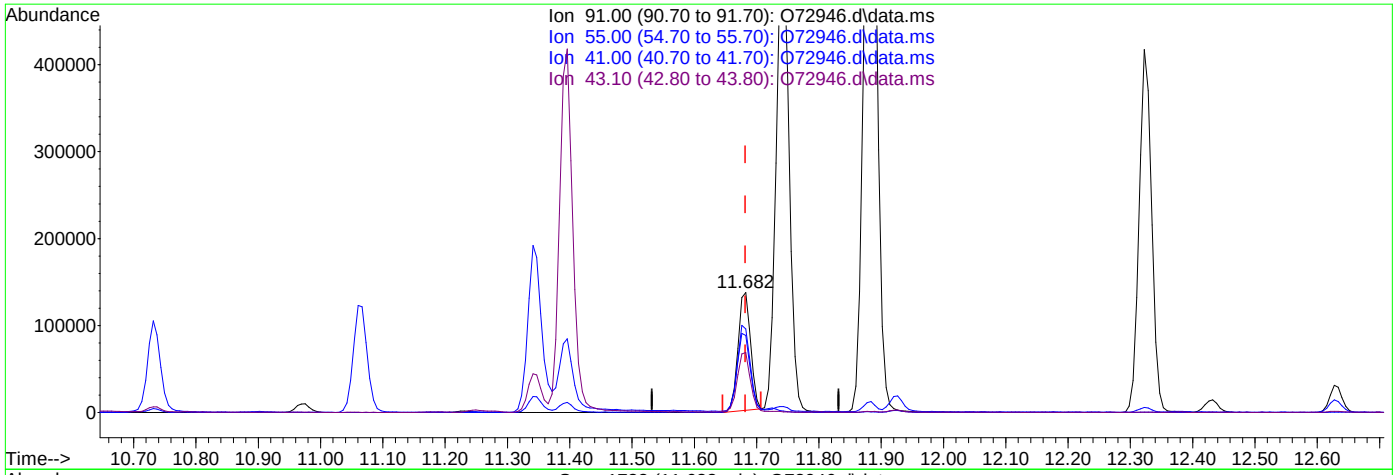
response 98591

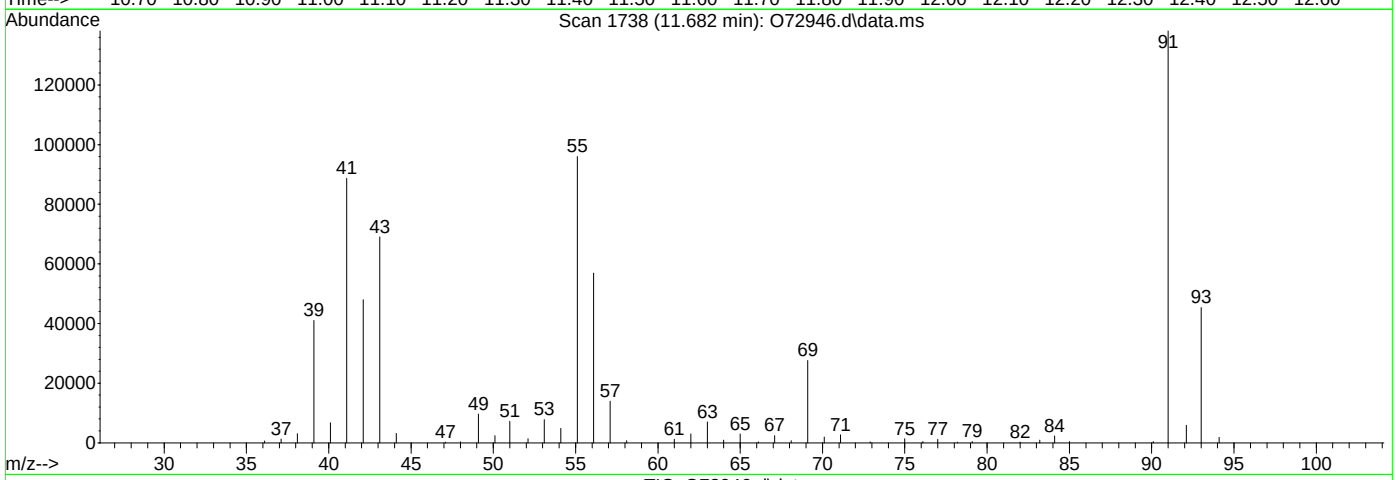
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	60.80
41.10	73.80	76.57
39.00	31.30	33.15

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 36.65ug/L

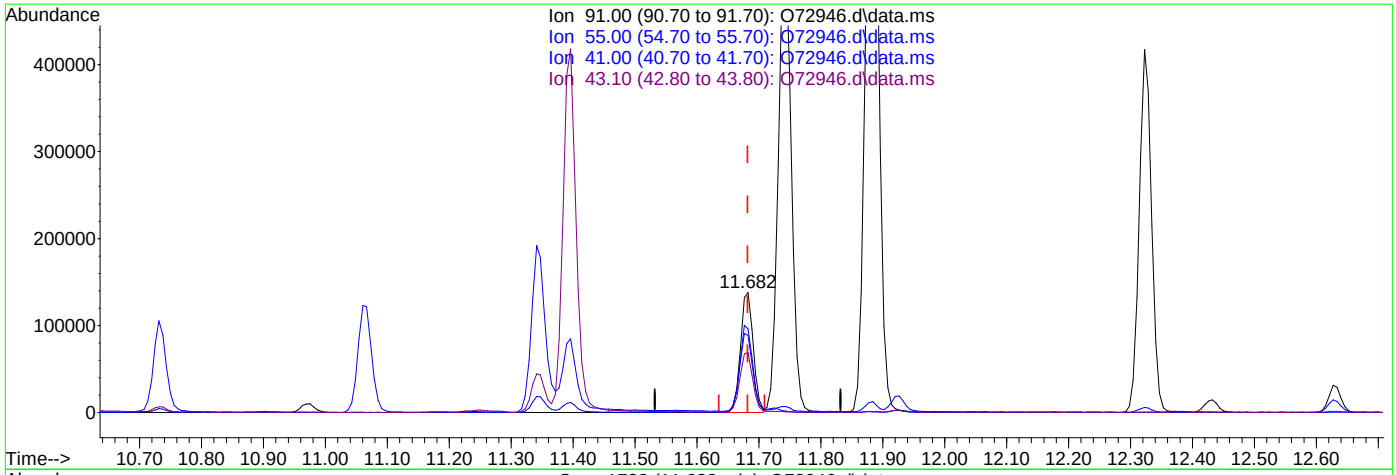
response 189414

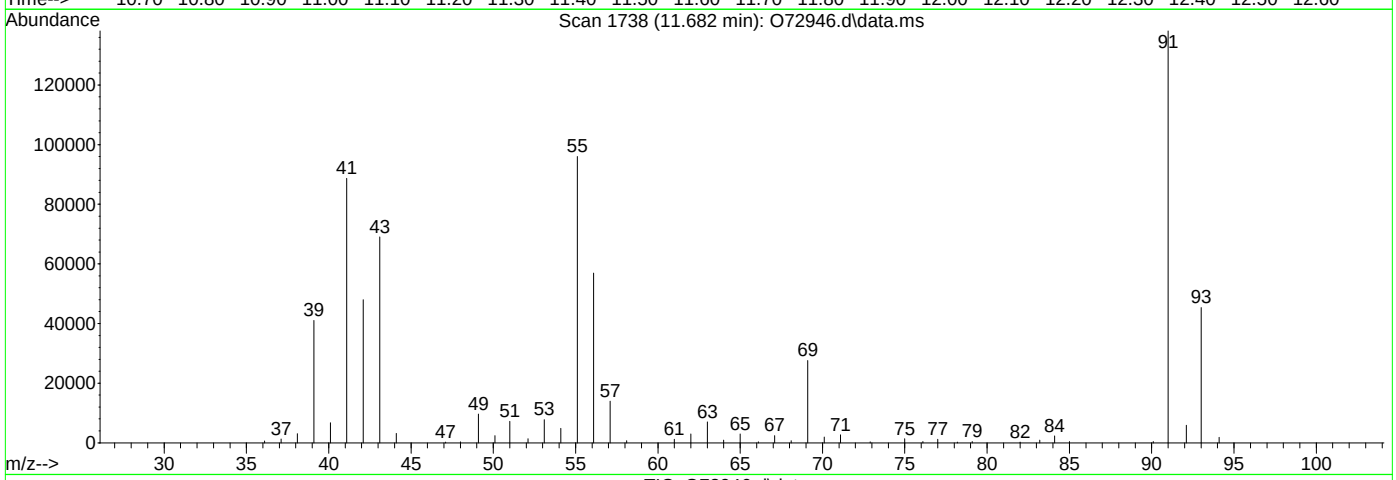
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	69.11
41.00	64.60	62.84
43.10	48.40	49.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VO2867\
Data File : O72946.d
Acq On : 9 Dec 2022 9:59 pm
Operator : adelardl
Sample : ECC2866-5
Misc : MS52925,VO2867,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 13:48:04 2022
Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72946.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 38.23ug/L m

response 197562

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	69.51
41.00	64.60	64.22
43.10	48.40	49.94

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:55 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	9.496	96	736457	50.00	ug/L		0.00
62) Chlorobenzene-d5	12.148	117	523844	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	13.766	152	247664	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.601	113	155389	46.28	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.56%				
49) 1,2-Dichloroethane-d4	9.204	65	192226	49.72	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.44%				
63) Toluene-d8	10.931	98	697604	60.36	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 120.72%#				
86) 4-Bromofluorobenzene	13.006	174	190736	51.30	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.60%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.853	85	3887	0.72	ug/L		82
3) Acrolein	5.596	56	2971	3.41	ug/L		93
4) Chloromethane	3.175	50	6920	0.99	ug/L		97
5) 1,3-butadiene	3.339	39	4487	0.72	ug/L		88
6) Vinyl Chloride	3.309	62	5063	0.84	ug/L		88
7) Bromomethane	3.838	94	3296	1.15	ug/L		76
8) Chloroethane	4.033	64	3331	0.90	ug/L		88
9) Trichlorofluoromethane	4.258	101	4984	0.80	ug/L		90
10) Ethyl Ether	4.744	59	3325	0.71	ug/L		89
12) 1,2-Dichlorotrifluoroe...	5.036	67	3530	0.63	ug/L		86
13) 1,1-Dichloroethene	5.055	61	5169	0.73	ug/L		79
14) Freon 113	5.116	101	2480	0.55	ug/L		87
15) Carbon Disulfide	5.097	76	9866	0.83	ug/L		81
16) Iodomethane	5.274	142	1687	0.55	ug/L	#	42
17) Allyl chloride	5.797	41	5041	0.69	ug/L		85
18) Methylene Chloride	5.961	49	14335	1.75	ug/L		91
19) Acetone	6.059	43	9718	4.32	ug/L		83
20) Methyl acetate	6.247	43	16232	3.50	ug/L		97
21) trans-1,2-Dichloroethene	6.235	61	4593	0.66	ug/L		92
22) Hexane	6.338	56	2184m	0.61	ug/L		
23) Methyl Tert Butyl Ether	6.381	73	10631	0.79	ug/L		76
24) Tert Butyl Alcohol	6.527	59	11040	11.94	ug/L		95
25) Acetonitrile	6.807	41	17960	21.50	ug/L		96
26) Di-isopropyl ether	6.989	45	11461	0.67	ug/L		87
27) Chloroprene	7.184	53	3434	0.53	ug/L		92
28) 1,1-Dichloroethane	7.214	63	6530	0.72	ug/L		88
29) Acrylonitrile	7.348	53	8016	4.30	ug/L		73
30) ETBE	7.573	59	11101	0.72	ug/L		91
31) Vinyl acetate	7.628	43	26213m	2.72	ug/L		
32) cis-1,2-Dichloroethene	8.036	96	3625	0.68	ug/L		85
33) 2,2-Dichloropropane	8.176	77	4306	0.66	ug/L		86
34) Bromochloromethane	8.303	128	1384	0.54	ug/L	#	82
35) Cyclohexane	8.291	56	4884	0.54	ug/L	#	78
36) Chloroform	8.382	83	6536	0.80	ug/L		94
37) Ethyl acetate	8.528	43	27600	4.45	ug/L		96
38) Tetrahydrofuran	8.589	42	3775	1.53	ug/L	#	68
40) Carbon Tetrachloride	8.559	117	3284	0.59	ug/L		81
41) 1,1,1-Trichloroethane	8.638	97	4697	0.65	ug/L		81
42) 2-Butanone	8.772	43	7707	2.04	ug/L		85
43) 1,1-Dichloropropene	8.784	75	4219	0.64	ug/L		91
44) tert-Butyl formate	8.899	59	10165	3.13	ug/L		86
45) Propionitrile	9.088	54	9632	8.58	ug/L	#	72
46) Methacrylonitrile	9.112	41	33715	7.91	ug/L		98
47) Benzene	9.064	78	15379	0.72	ug/L		95
48) TAME	9.173	73	10063	0.79	ug/L		86
50) Isobutyl Alcohol	9.283	42	4208	17.06	ug/L	#	82
51) 1,2-Dichloroethane	9.283	62	6084	0.89	ug/L		78
52) Tert Amyl Alcohol	9.380	59	7512m	9.78	ug/L		

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:55 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

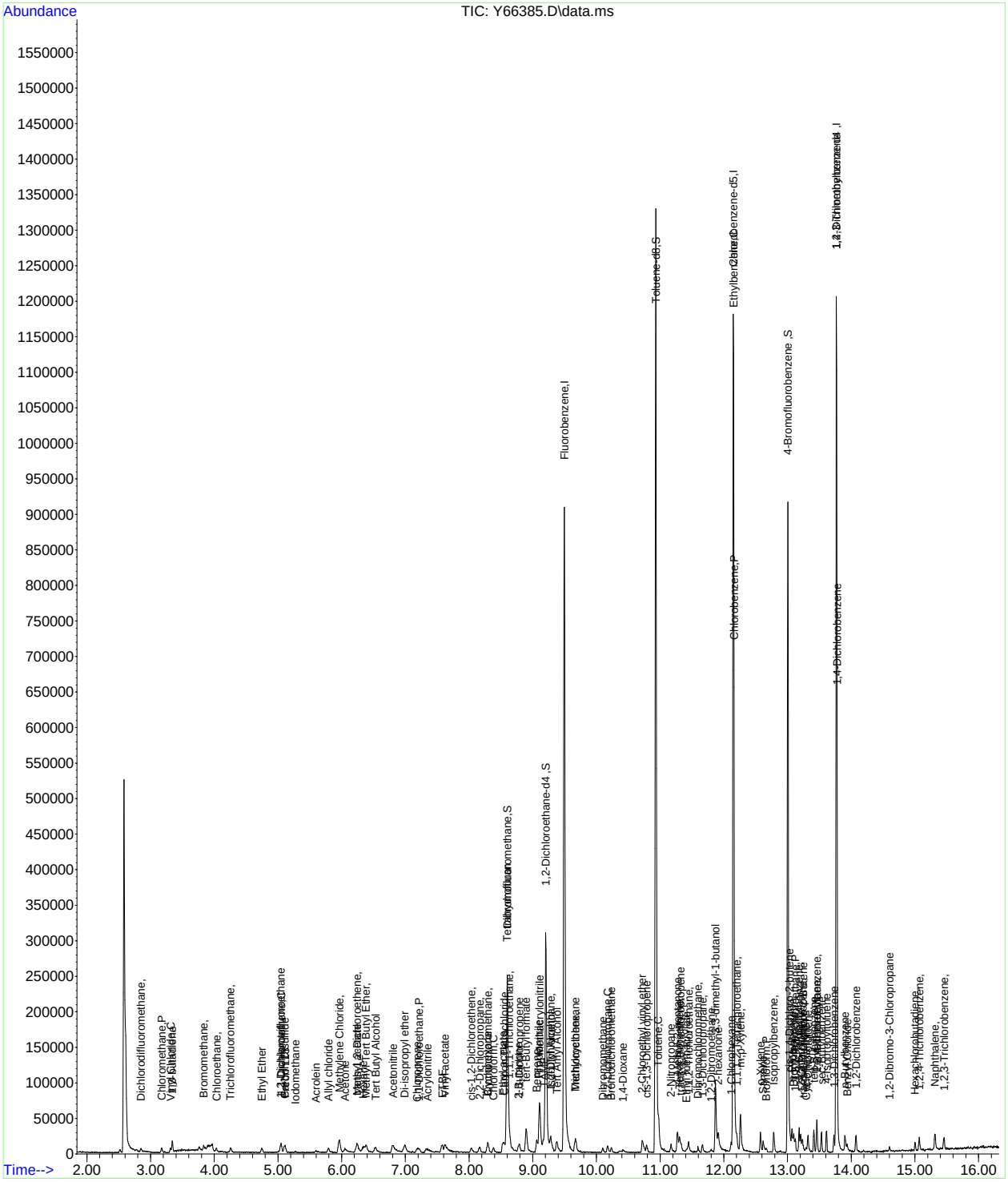
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
53) Trichloroethene	9.678	95	4770	0.89	ug/L		83
54) Methylcyclohexane	9.666	83	3915	0.50	ug/L		86
55) Dibromomethane	10.098	93	2246	0.82	ug/L		83
56) 1,2-Dichloropropane	10.177	63	4029	0.75	ug/L		79
57) Bromodichloromethane	10.238	83	4041	0.76	ug/L		93
59) 1,4-Dioxane	10.414	88	1857	19.58	ug/L	#	65
60) 2-Chloroethyl vinyl ether	10.718	63	10168	3.28	ug/L	#	73
61) cis-1,3-Dichloropropene	10.791	75	4875	0.65	ug/L		85
64) Toluene	10.974	91	18604	1.12	ug/L		88
65) 2-Nitropropane	11.175	41	5424	5.61	ug/L		92
66) 4-Methyl-2-pentanone	11.272	43	21271	3.50	ug/L		93
67) trans-1,3-Dichloropropene	11.327	75	3903	0.85	ug/L		91
68) Tetrachloroethene	11.309	166	3989	0.94	ug/L		88
69) Ethyl methacrylate	11.406	69	3394	0.80	ug/L	#	63
70) 1,1,2-Trichloroethane	11.448	83	2919	1.09	ug/L		88
71) Dibromochloromethane	11.594	129	2953	0.88	ug/L		89
72) 1,3-Dichloropropane	11.661	76	6607	1.12	ug/L		87
73) 1,2-Dibromoethane	11.801	107	3416	0.99	ug/L		94
74) 3,3-dimethyl-1-butanol	11.868	57	37867m	48.50	ug/L		
75) 2-hexanone	11.911	43	14065	3.46	ug/L		98
76) 1-Chlorohexane	12.112	91	3552	0.78	ug/L		87
77) Ethylbenzene	12.160	91	20562	1.17	ug/L		89
78) Chlorobenzene	12.166	112	10810	1.04	ug/L		89
79) 1,1,1,2-Tetrachloroethane	12.209	131	2708	0.77	ug/L	#	75
80) m,p-Xylene	12.264	91	28894	2.15	ug/L		97
81) o-Xylene	12.574	91	13282	1.00	ug/L		91
82) Styrene	12.616	104	8065	0.71	ug/L		91
83) Bromoform	12.665	173	1848	1.16	ug/L		73
84) Isopropylbenzene	12.781	105	15830	0.95	ug/L		91
87) cis-1,4-Dichloro-2-butene	13.036	53	1270	1.13	ug/L	#	46
88) n-Propylbenzene	13.073	91	19971	1.11	ug/L		98
89) Bromobenzene	13.103	156	4700	1.21	ug/L	#	76
90) 1,1,2,2-Tetrachloroethane	13.121	83	4742	1.13	ug/L		79
91) 1,3,5-Trimethylbenzene	13.182	105	13135	1.01	ug/L		89
92) 2-Chlorotoluene	13.207	91	12408	1.04	ug/L		95
93) trans-1,4-Dichloro-2-B...	13.249	53	1125	1.27	ug/L	#	13
94) 1,2,3-Trichloropropane	13.237	110	2159	1.46	ug/L	#	65
95) Cyclohexanone	13.292	55	2218	8.27	ug/L	#	62
96) 4-Chlorotoluene	13.322	91	13564	1.24	ug/L		96
97) tert-Butylbenzene	13.413	91	8157	1.25	ug/L		85
98) 1,2,4-Trimethylbenzene	13.462	105	13537	1.04	ug/L		74
99) Pentachloroethane	13.462	167	1780	1.01	ug/L	#	83
100) sec-Butylbenzene	13.535	105	15993	1.09	ug/L		97
101) 4-Isopropyltoluene	13.614	119	13483	1.05	ug/L		94
102) 1,3-Dichlorobenzene	13.730	146	8298	1.19	ug/L		93
103) 1,2,3-Trimethylbenzene	13.766	105	14210	1.11	ug/L	#	55
104) 1,4-Dichlorobenzene	13.785	146	9906m	1.34	ug/L		
105) n-Butylbenzene	13.906	92	7311	1.16	ug/L	#	79
106) Benzyl Chloride	13.943	126	960m	0.66	ug/L		
107) 1,2-Dichlorobenzene	14.070	146	8601	1.30	ug/L		85
108) 1,2-Dibromo-3-Chloropr...	14.600	75	1105m	1.39	ug/L		
109) Hexachlorobutadiene	15.007	225	1763	1.23	ug/L		80
110) 1,2,4-Trichlorobenzene	15.068	180	5391	1.27	ug/L	#	74
111) Naphthalene	15.318	128	17831	1.25	ug/L		97
112) 1,2,3-Trichlorobenzene	15.457	180	4796	1.15	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:55 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

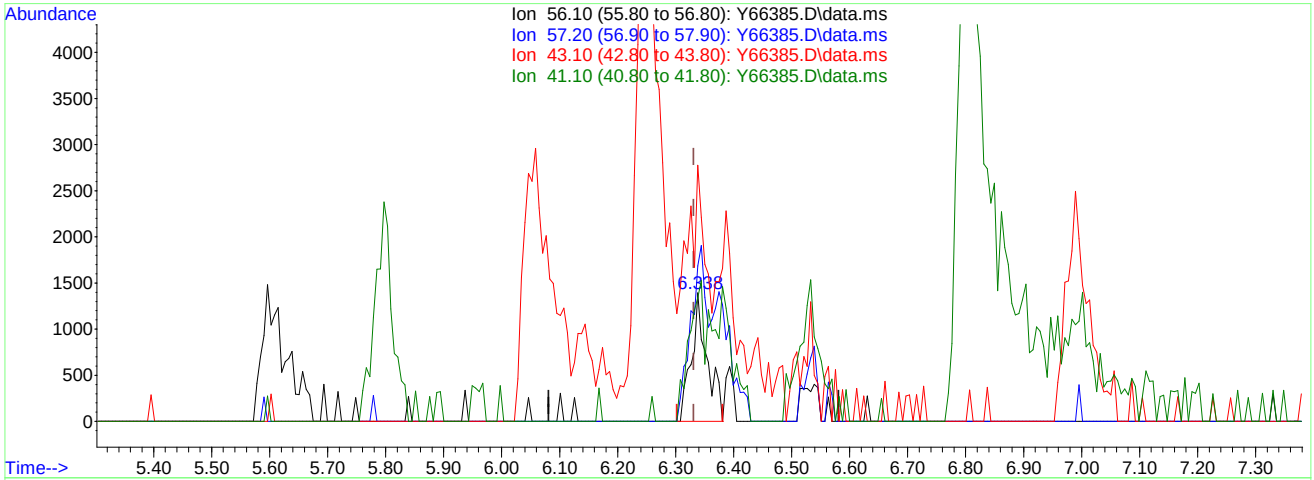
Sample Number: VY2755-IC2755
Lab FileID: Y66385.D
Injection Time: 12/02/22 14:05
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

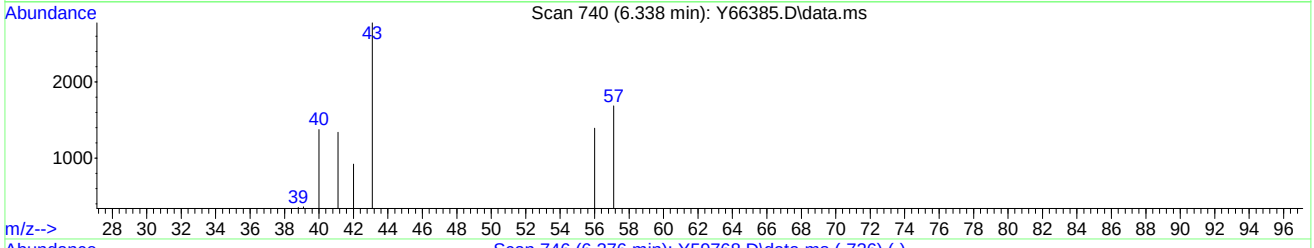
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.34	Overlapping peak
Vinyl Acetate	108-05-4		7.63	Poor instrument integration
Tert-Amyl Alcohol	75-85-4		9.38	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak
1,4-Dichlorobenzene	106-46-7		13.78	Missed peak
Benzyl Chloride	100-44-7		13.94	Missed peak
1,2-Dibromo-3-chloropropane	96-12-8		14.60	Overlapping peak

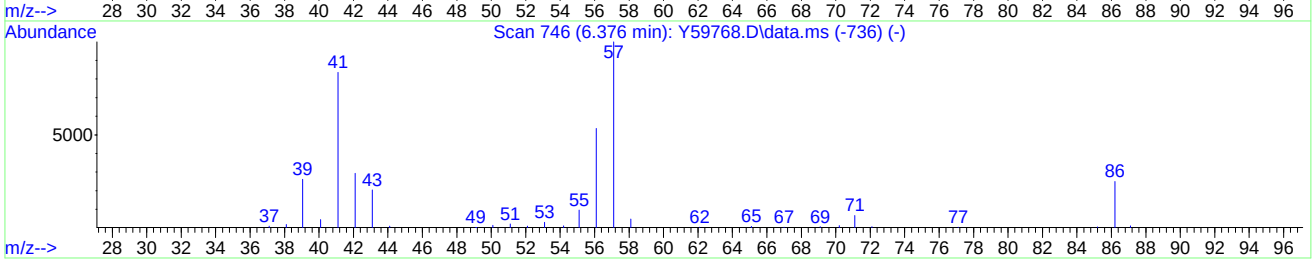
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(22) Hexane

6.338min (+0.007) 0.74ug/L

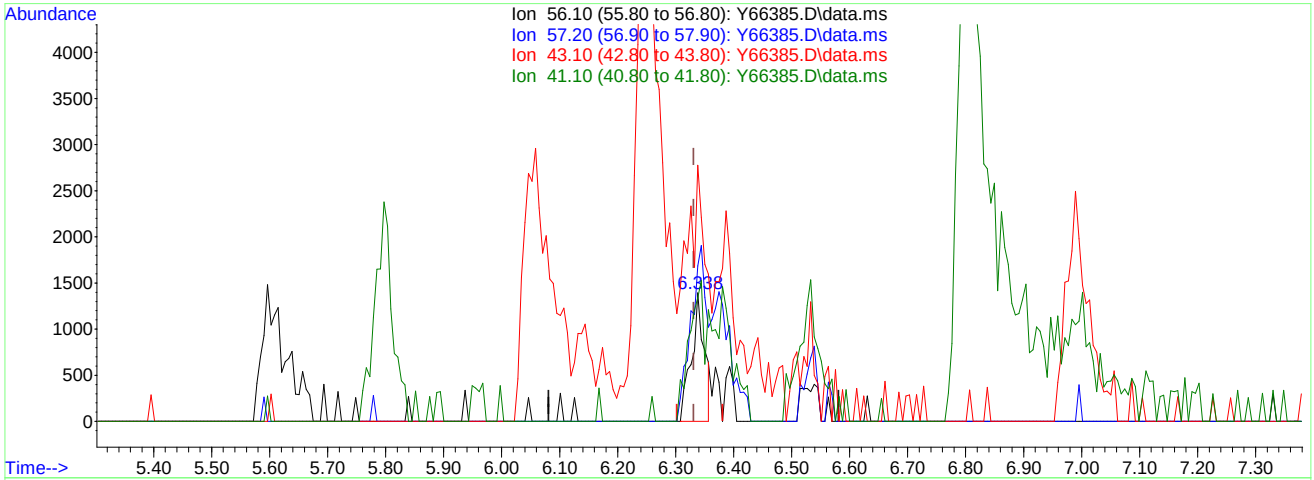
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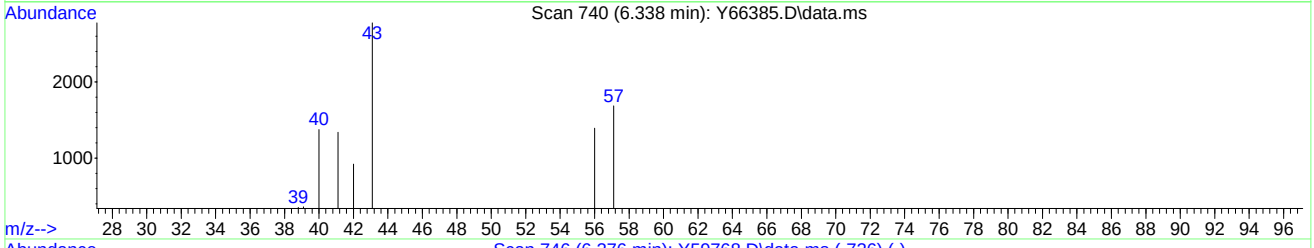
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	121.05#
43.10	144.00	115.52#
41.10	140.20	96.26#

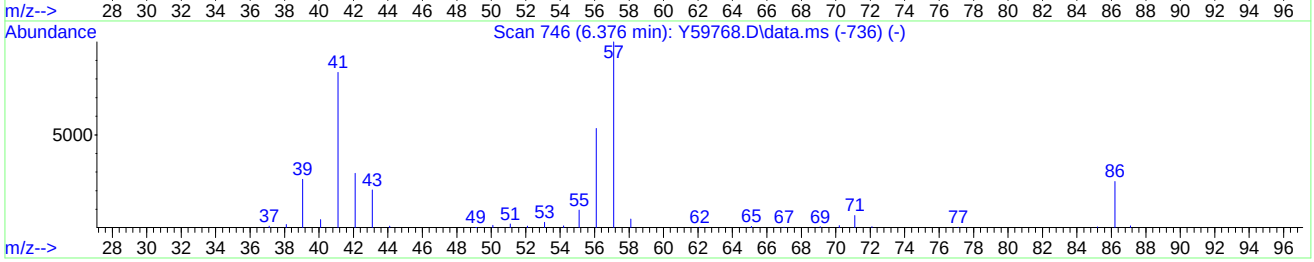
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(22) Hexane

6.338min (+0.007) 0.61ug/L m

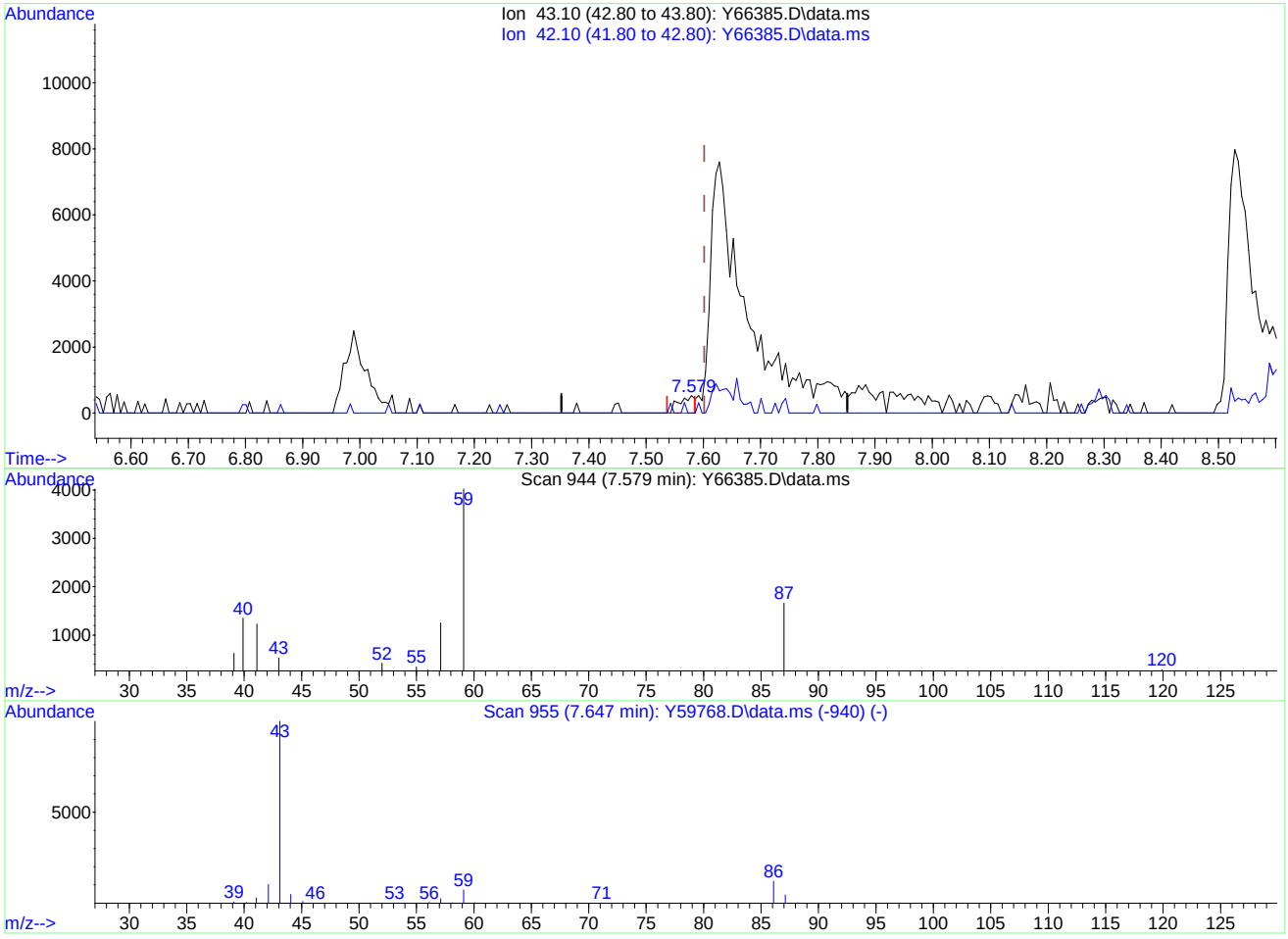
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Ion	Exp%	Act%
56.10	100	100
57.20	199.80	121.05#
43.10	144.00	199.43#
41.10	140.20	96.26#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



TIC: Y66385.D\data.ms

(31) Vinyl acetate

7.579min (-0.023) 0.10ug/L

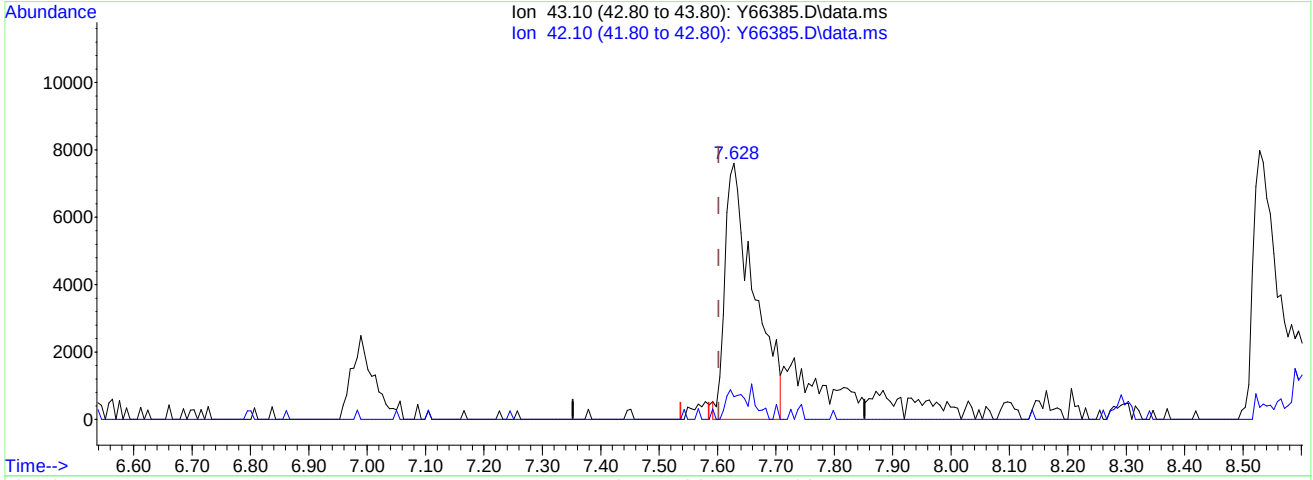
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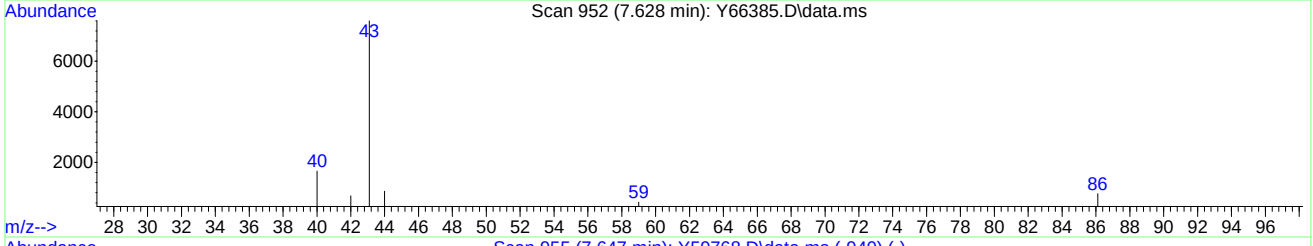
Ion	Exp%	Act%
43.10	100	100
42.10	8.40	0.00
0.00	0.00	0.00
0.00	0.00	0.00

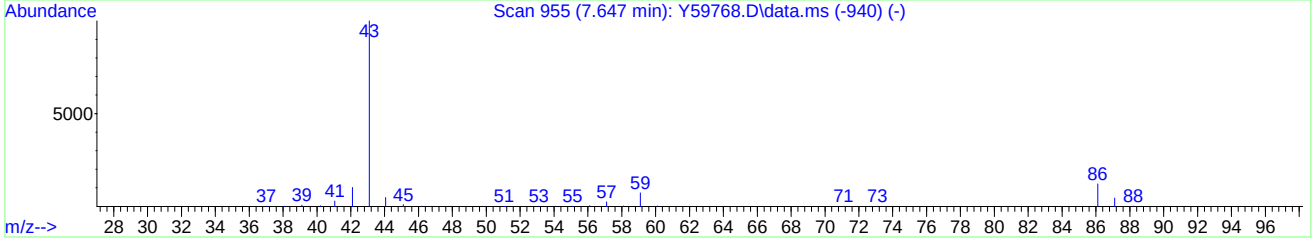
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(31) Vinyl acetate

7.628min (+0.026) 2.72ug/L m

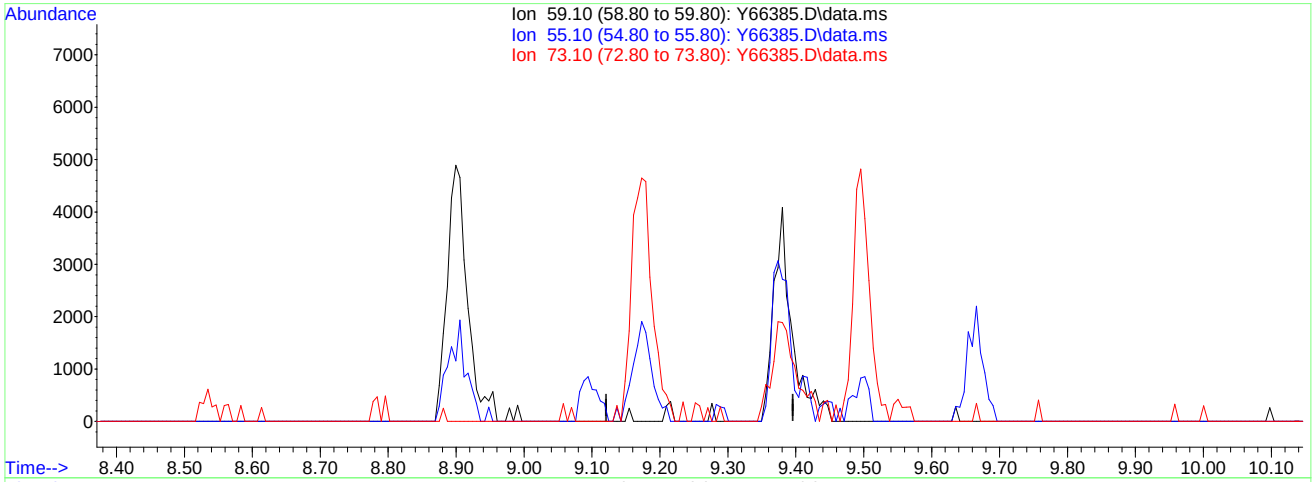
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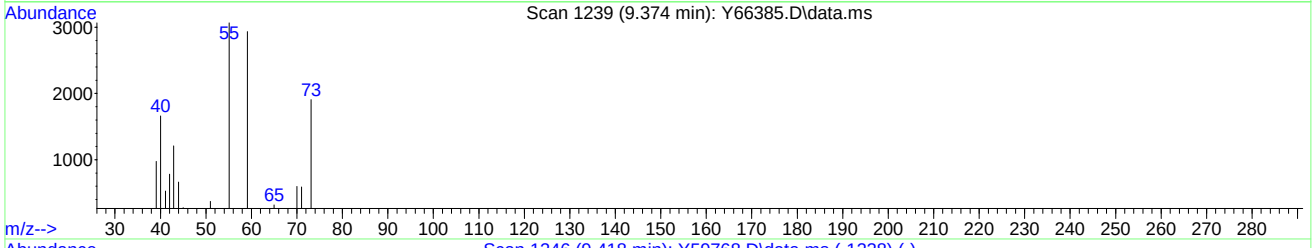
Ion	Exp%	Act%
43.10	100	100
42.10	8.40	8.85
0.00	0.00	0.00
0.00	0.00	0.00

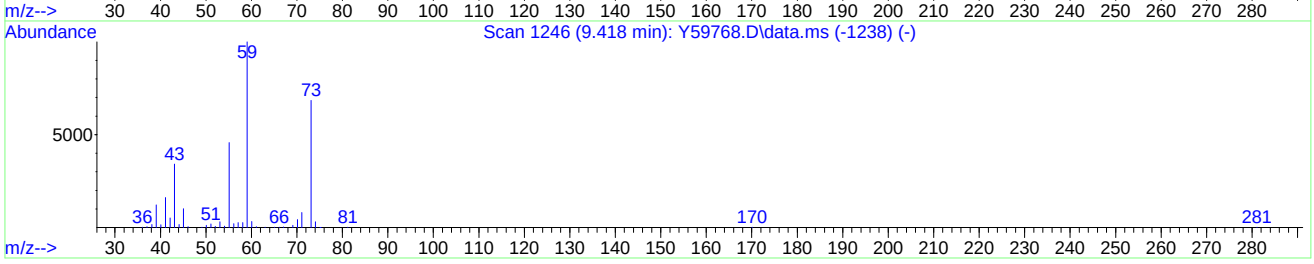
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(52) Tert Amyl Alcohol

9.371min (-9.371) 0.00ug/L

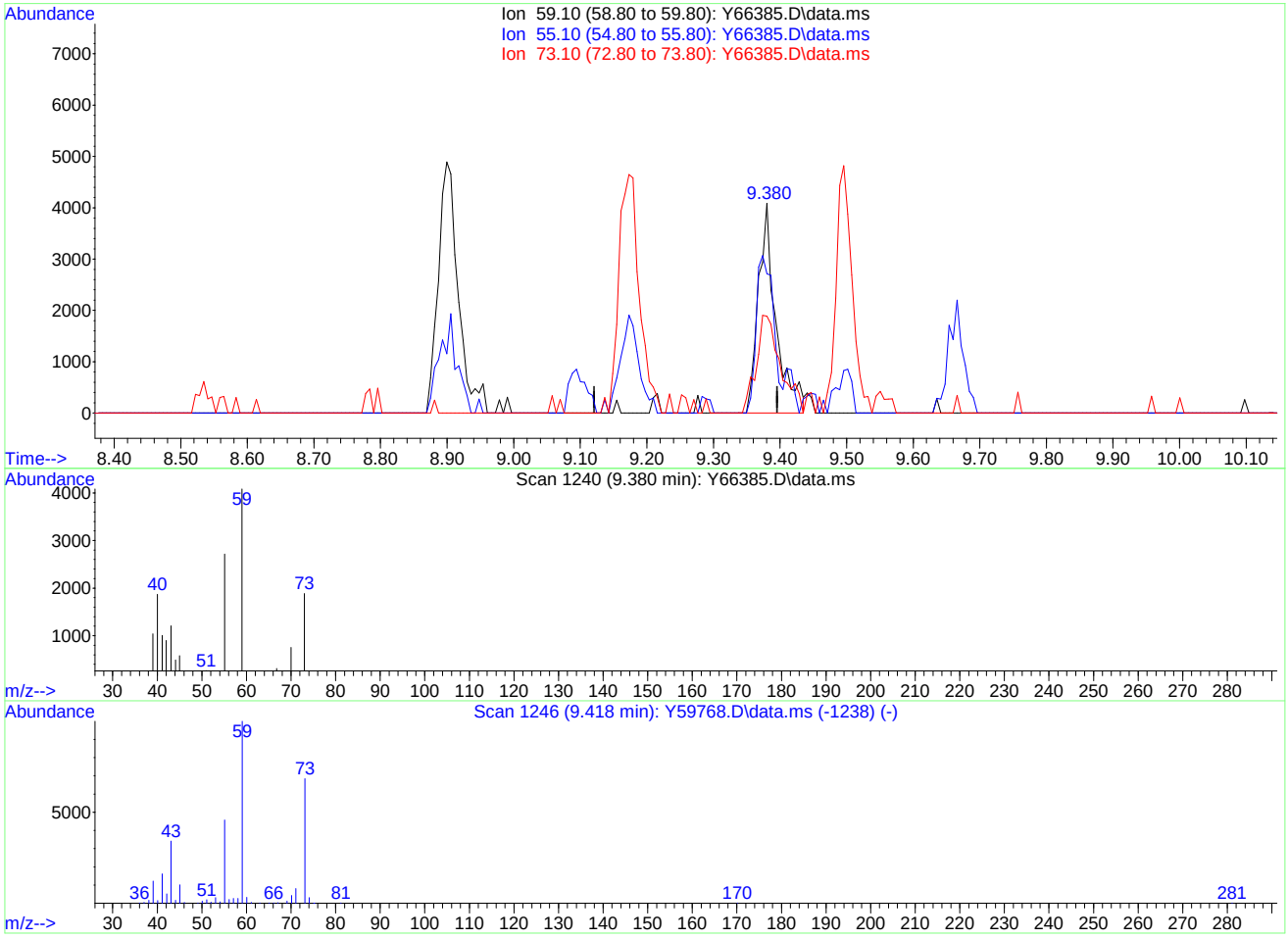
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Ion	Exp%	Act%
59.10	100	0.00
55.10	65.80	0.00#
73.10	51.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



TIC: Y66385.D\data.ms

(52) Tert Amyl Alcohol

9.380min (+0.009) 9.78ug/L m

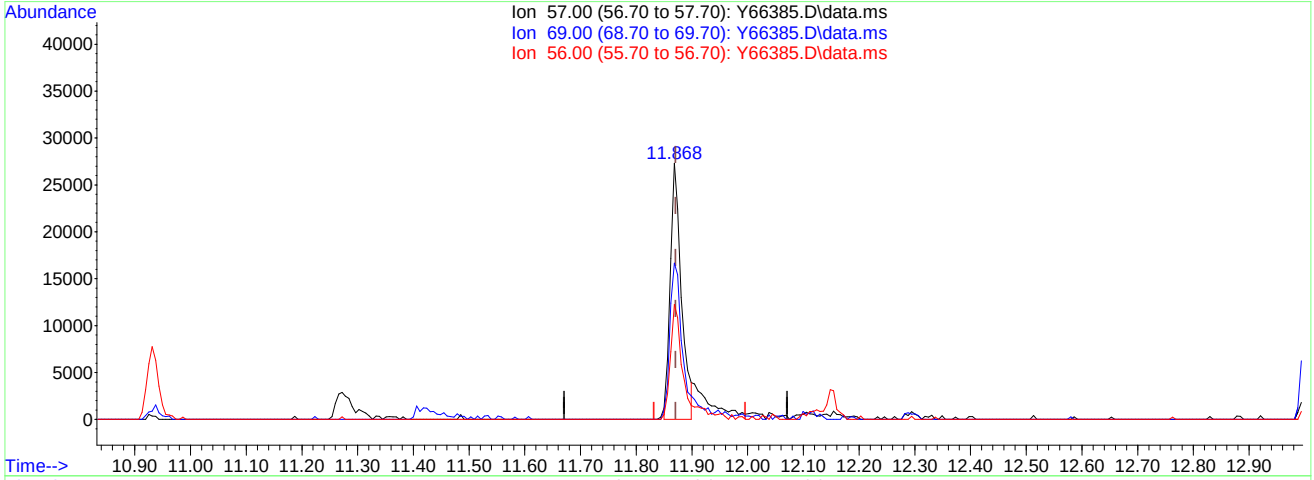
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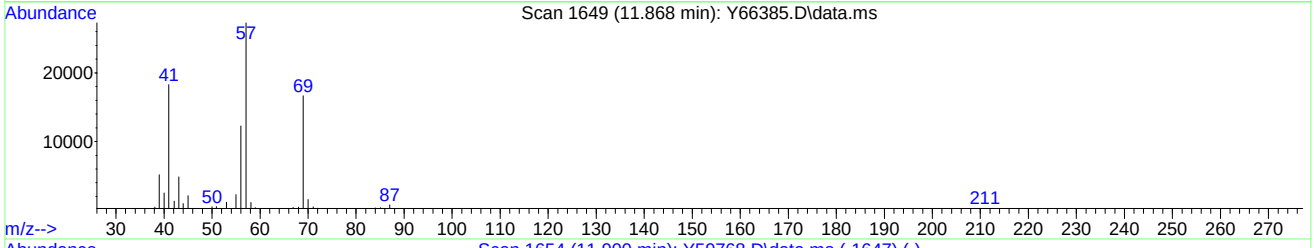
Ion	Exp%	Act%
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55.10	65.80	66.45
73.10	51.70	46.23
0.00	0.00	0.00

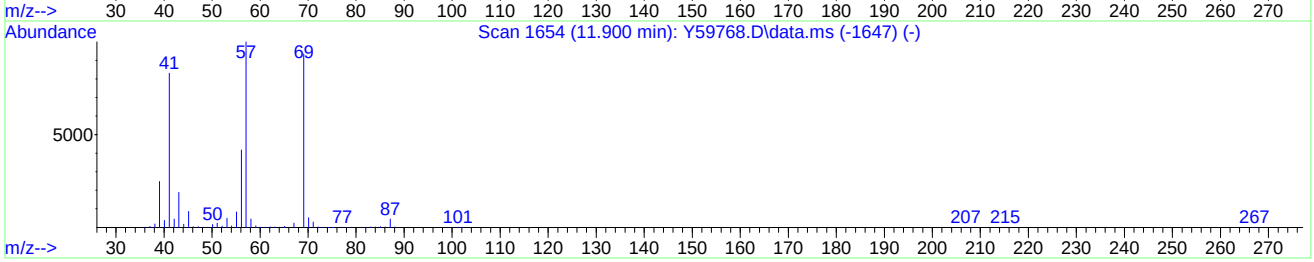
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
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TIC: Y66385.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.868min (-0.003) 48.50ug/L m

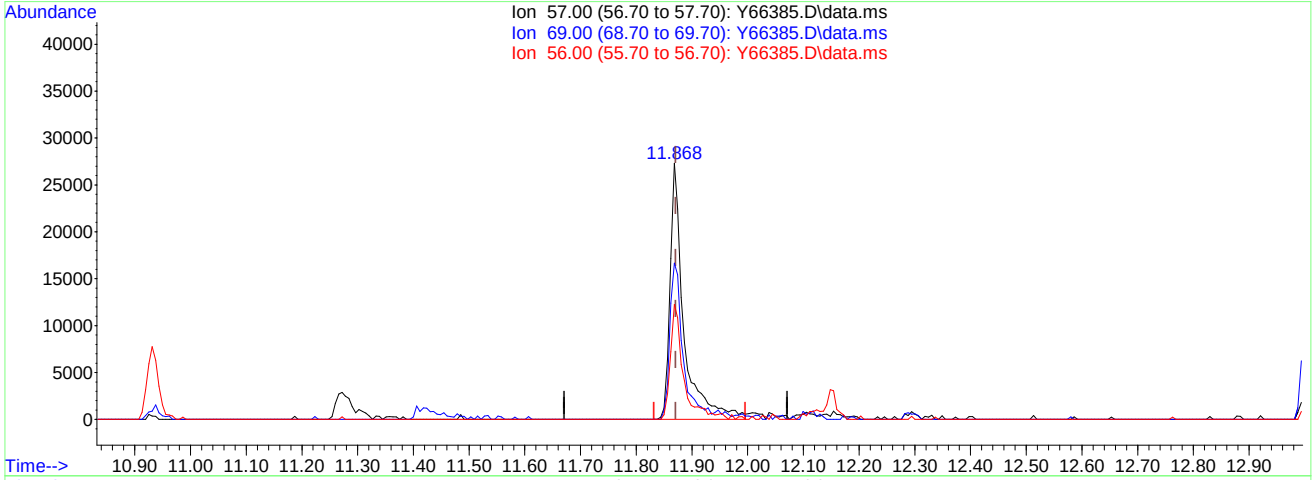
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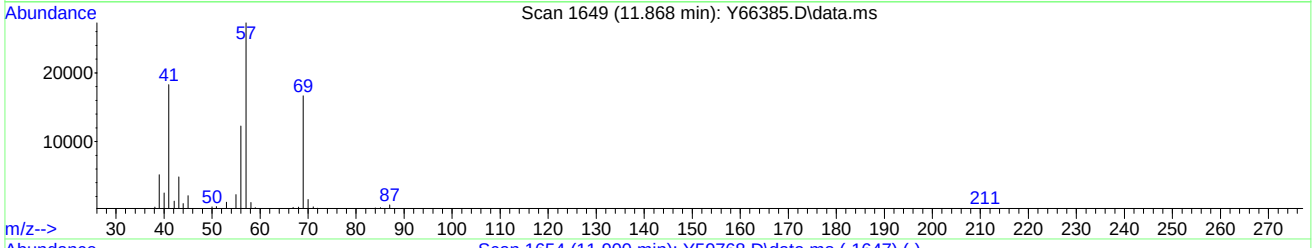
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	61.06
56.00	41.60	44.86
0.00	0.00	0.00

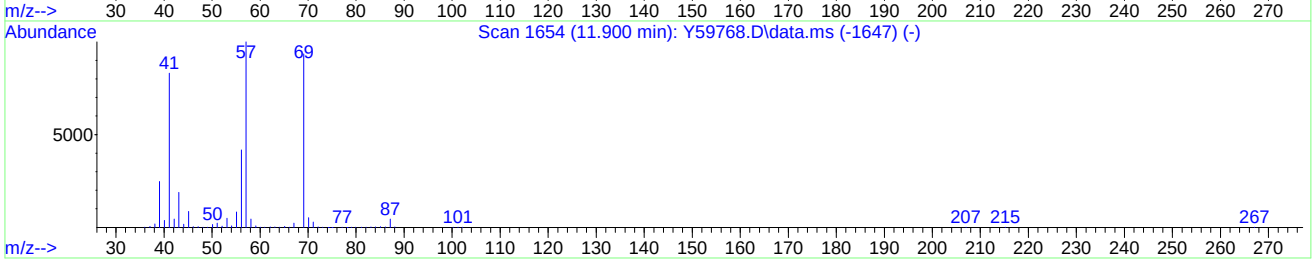
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.868min (-0.003) 60.52ug/L

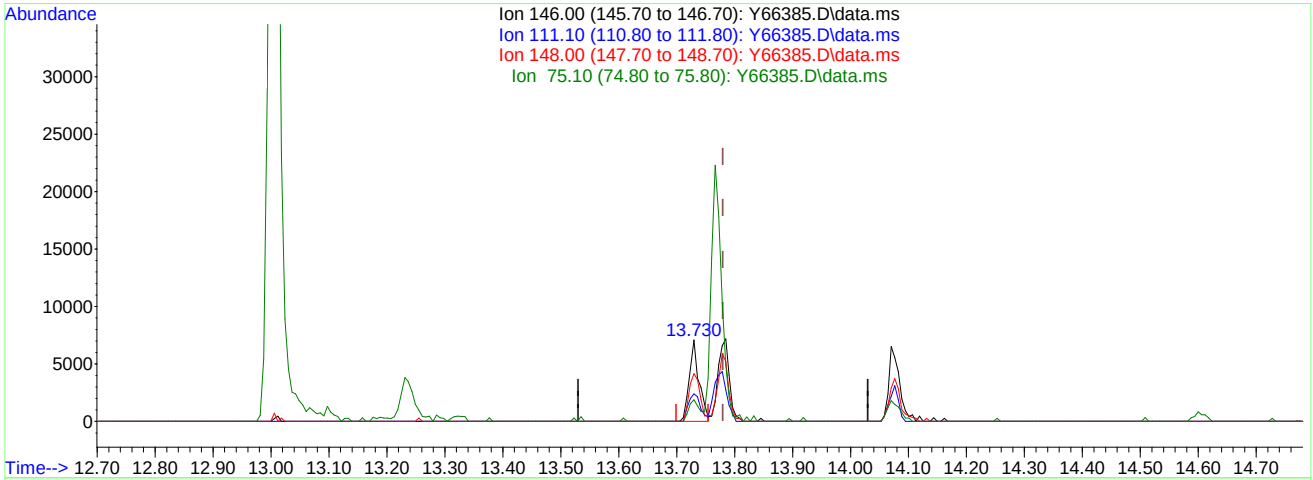
response 47307

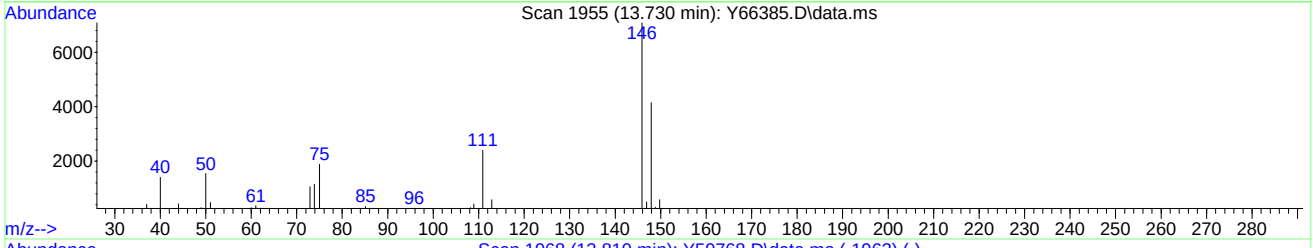
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	61.06
56.00	41.60	44.86
0.00	0.00	0.00

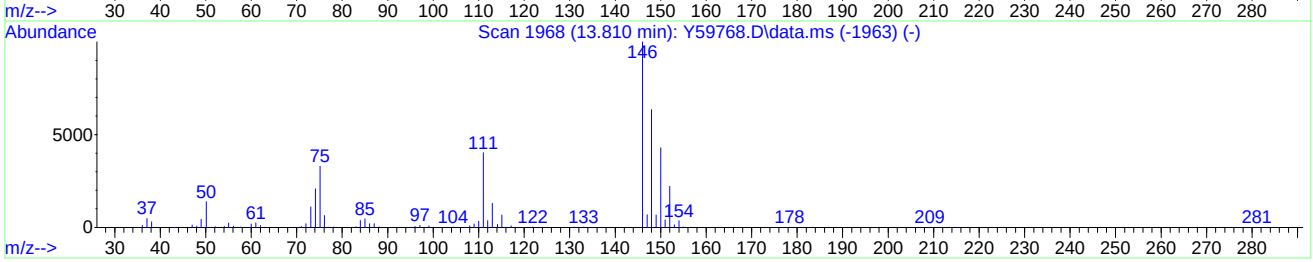
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(104) 1,4-Dichlorobenzene

13.730min (-0.050) 1.12ug/L

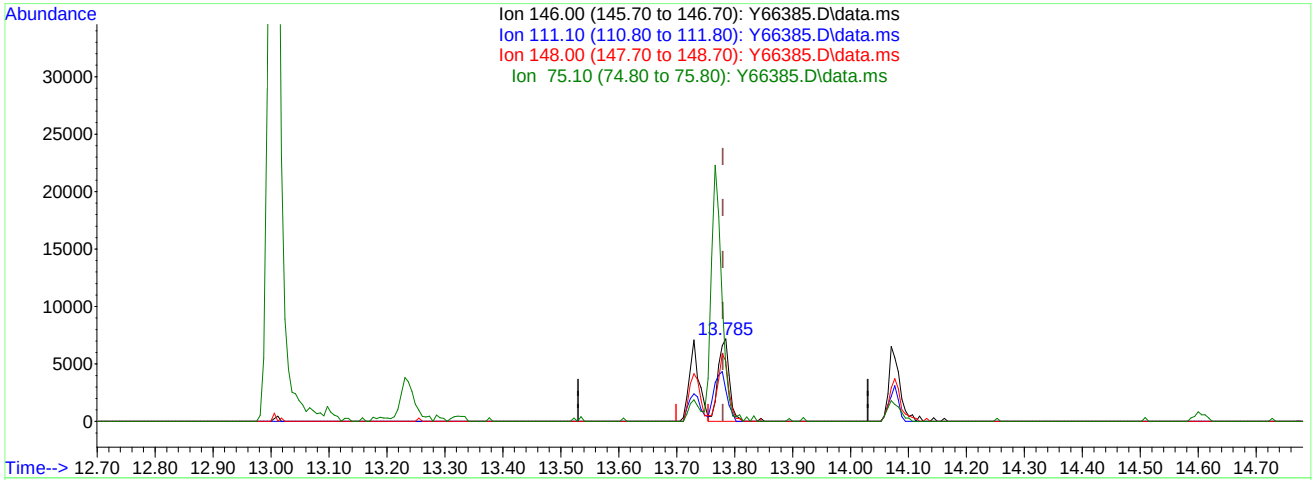
response 8298

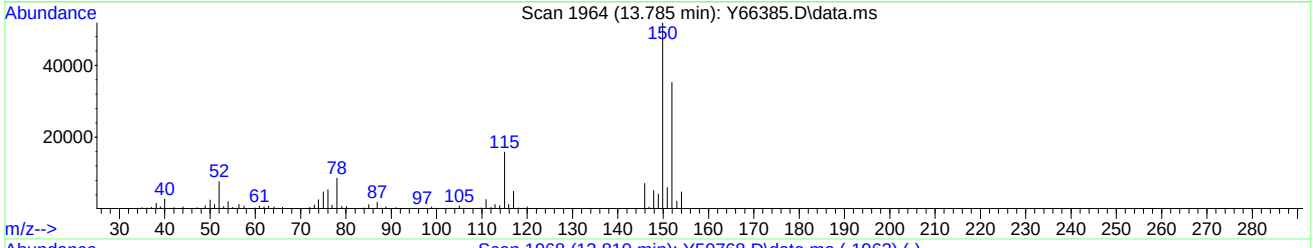
Ion	Exp%	Act%
146.00	100	100
111.10	36.50	33.85
148.00	61.60	58.57
75.10	28.40	26.44

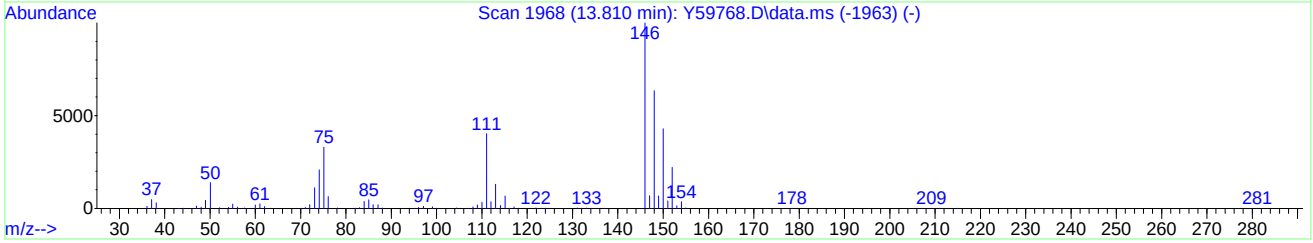
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:28:01 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66385.D\data.ms

(104) 1,4-Dichlorobenzene

13.785min (+0.005) 1.34ug/L m

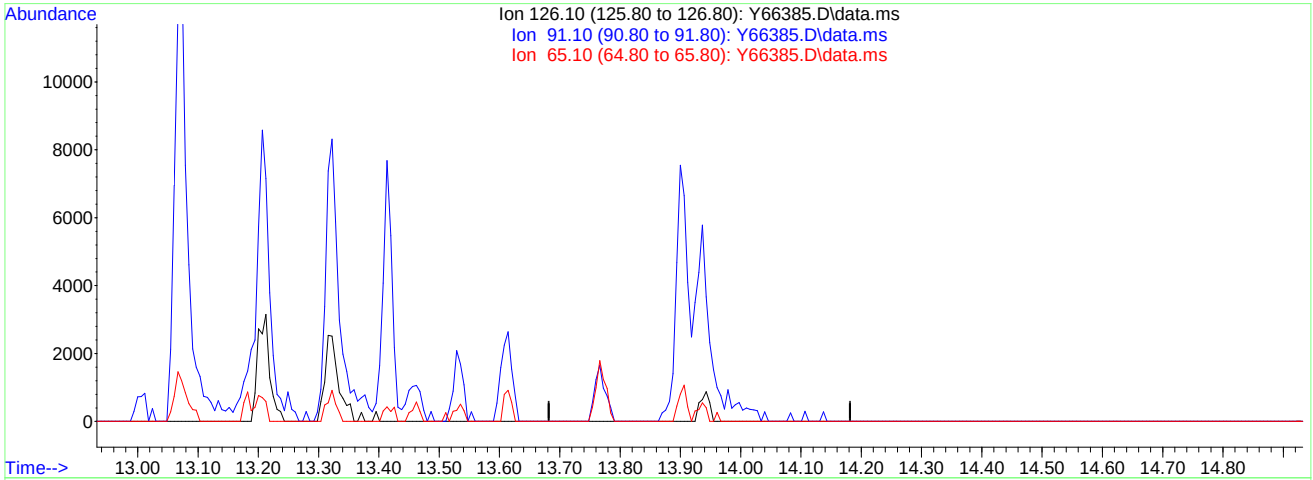
response 9906

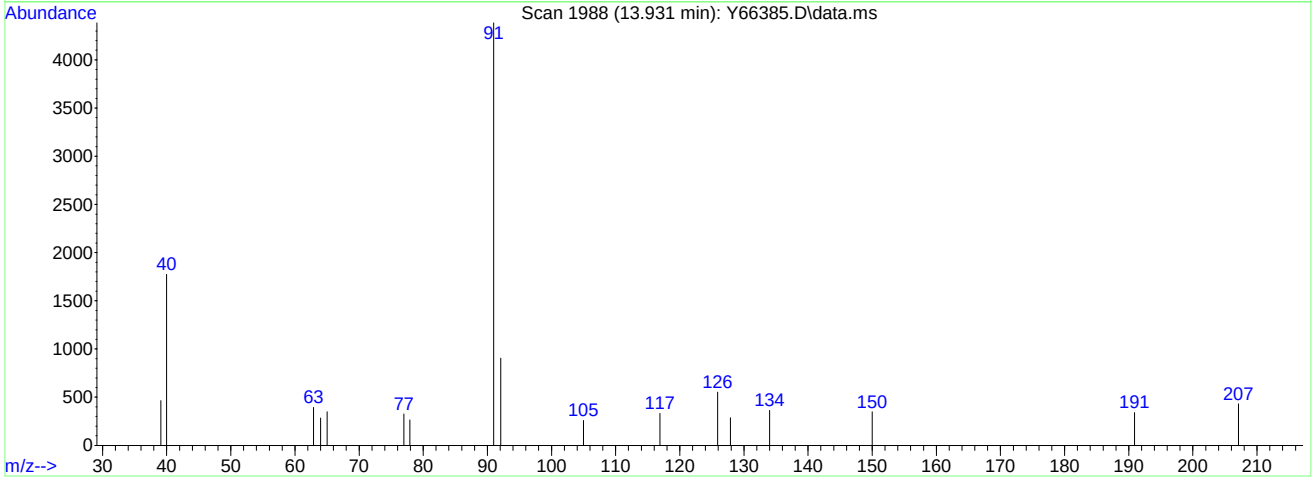
Ion	Exp%	Act%
146.00	100	100
111.10	36.50	38.07
148.00	61.60	73.08
75.10	28.40	67.82#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:04 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66385.D\data.ms

(106) Benzyl Chloride

13.932min (-13.932) 0.00ug/L

response 0

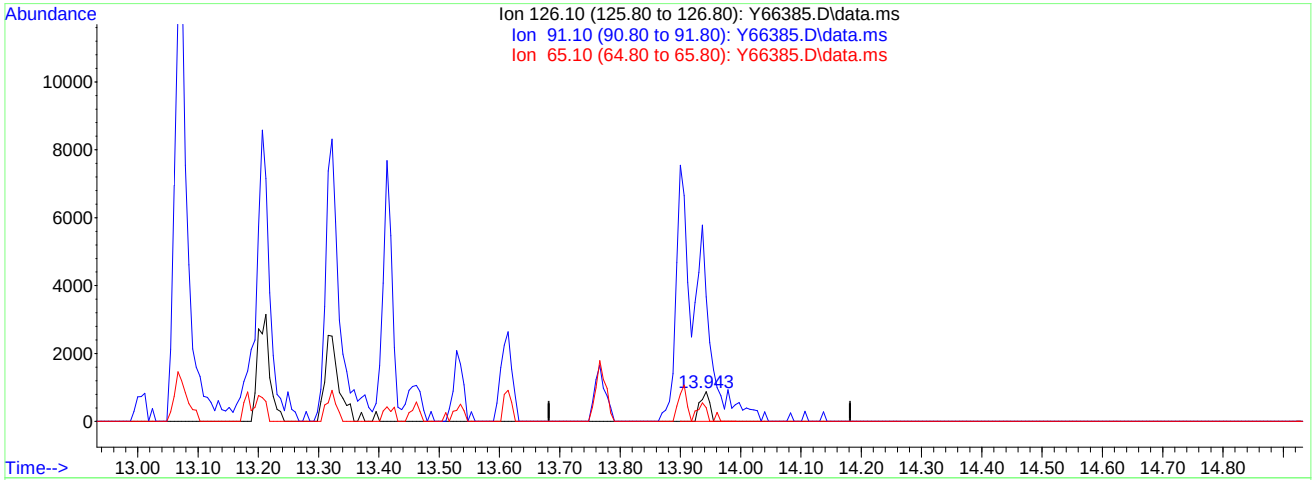
Ion	Exp%	Act%
126.10	100	0.00
91.10	428.90	0.00#
65.10	48.20	0.00#
0.00	0.00	0.00

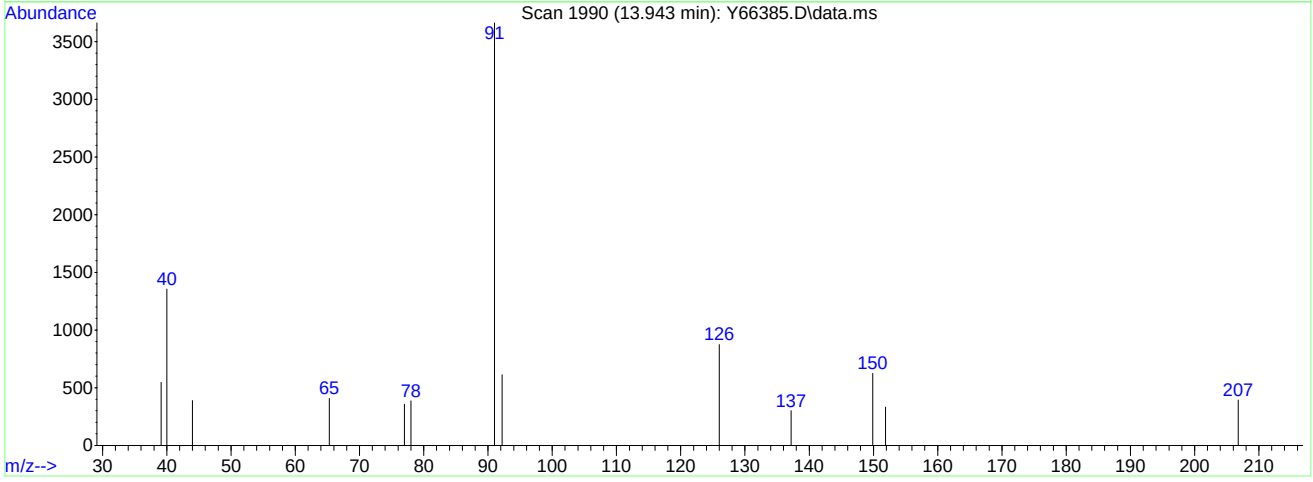
Y66385.D edits: Benzyl Chloride

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:04 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66385.D\data.ms

(106) Benzyl Chloride

13.943min (+0.011) 0.66ug/L m

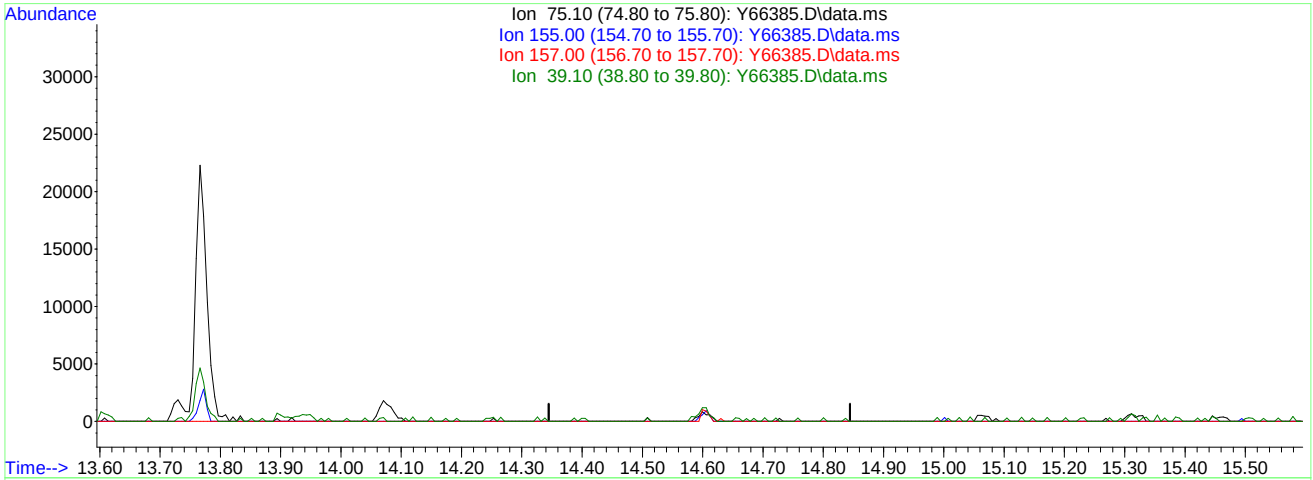
response 960

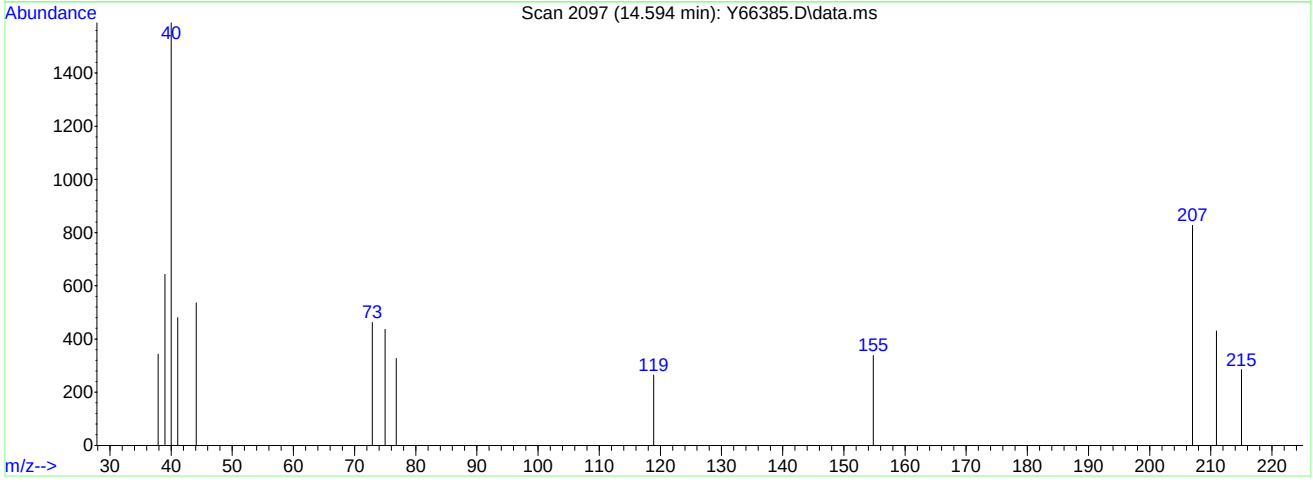
Ion	Exp%	Act%
126.10	100	100
91.10	428.90	418.63
65.10	48.20	46.63
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:04 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66385.D\data.ms

(108) 1,2-Dibromo-3-Chloropropane

14.595min (-14.595) 0.00ug/L

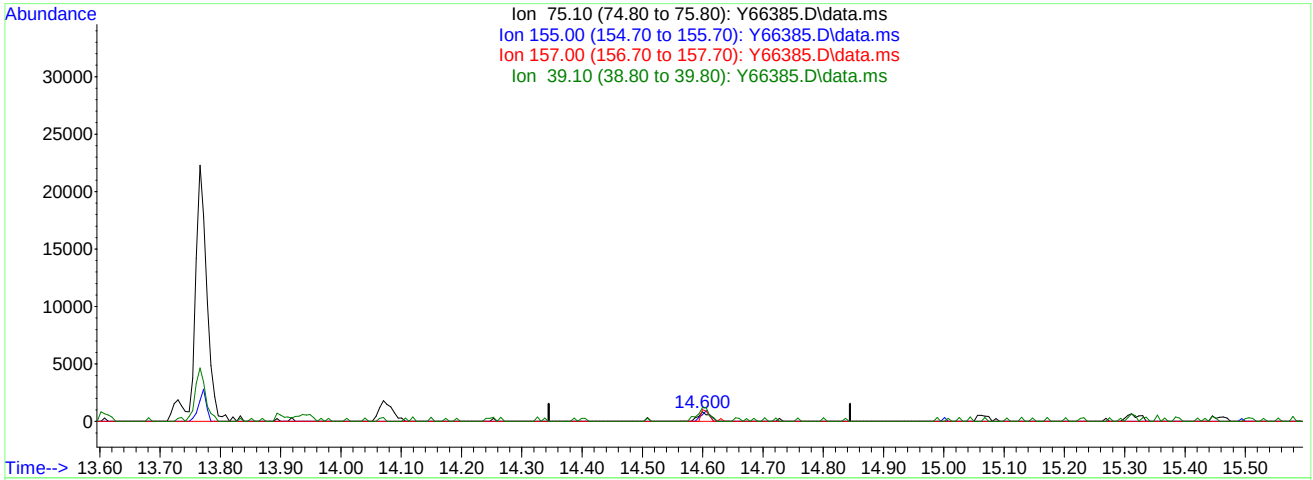
response 0

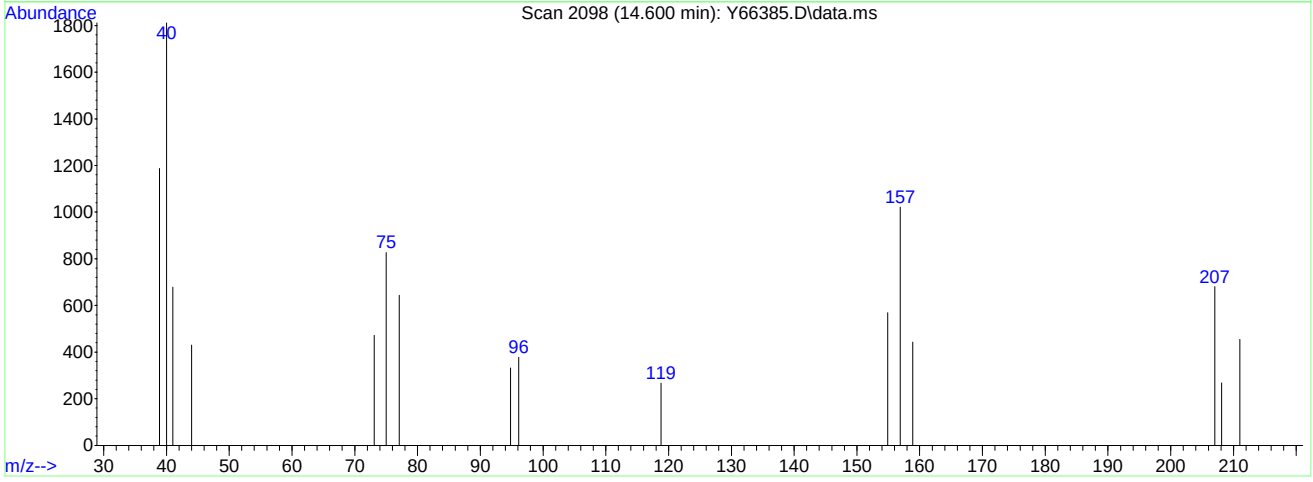
Ion	Exp%	Act%
75.10	100	0.00
155.00	85.00	0.00#
157.00	102.00	0.00#
39.10	94.00	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66385.D
Acq On : 2 Dec 2022 2:05 pm
Operator : joannel
Sample : IC2755-1 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 02 14:34:04 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66385.D\data.ms

(108) 1,2-Dibromo-3-Chloropropane

14.600min (+0.005) 1.39ug/L m

response 1105

Ion	Exp%	Act%
75.10	100	100
155.00	85.00	68.80
157.00	102.00	123.46
39.10	94.00	143.53#

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 16:10:15 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	9.496	96	765580	50.00	ug/L		0.00
62) Chlorobenzene-d5	12.148	117	555133	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	13.767	152	257625	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.602	113	157295	45.06	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 90.12%				
49) 1,2-Dichloroethane-d4	9.204	65	195664	48.68	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.36%				
63) Toluene-d8	10.932	98	742670	60.63	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 121.26%#				
86) 4-Bromofluorobenzene	13.006	174	203490	52.61	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 105.22%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.847	85	20640	3.67	ug/L		94
3) Acrolein	5.584	56	25537	28.04	ug/L		75
4) Chloromethane	3.181	50	27047	3.74	ug/L		86
5) 1,3-butadiene	3.340	39	24352	3.78	ug/L	#	77
6) Vinyl Chloride	3.315	62	23731	3.78	ug/L		95
7) Bromomethane	3.832	94	11370	3.80	ug/L		93
8) Chloroethane	4.033	64	13343	3.49	ug/L		78
9) Trichlorofluoromethane	4.258	101	23846	3.67	ug/L		98
10) Ethyl Ether	4.745	59	16656	3.40	ug/L		98
11) Ethanol	4.994	45	8302m	68.86	ug/L		
12) 1,2-Dichlorotrifluoroe...	5.043	67	19939	3.42	ug/L		95
13) 1,1-Dichloroethene	5.049	61	24430	3.32	ug/L		95
14) Freon 113	5.116	101	16589	3.52	ug/L		92
15) Carbon Disulfide	5.104	76	43354	3.51	ug/L		100
16) Iodomethane	5.286	142	8449	2.64	ug/L		90
17) Allyl chloride	5.791	41	24501	3.22	ug/L		96
18) Methylene Chloride	5.962	49	33708	3.97	ug/L		97
19) Acetone	6.047	43	45536	19.49	ug/L		95
20) Methyl acetate	6.235	43	89293	18.52	ug/L		97
21) trans-1,2-Dichloroethene	6.229	61	23556	3.24	ug/L		92
22) Hexane	6.345	56	13370m	3.60	ug/L		
23) Methyl Tert Butyl Ether	6.381	73	51569	3.67	ug/L		94
24) Tert Butyl Alcohol	6.527	59	44540	45.74	ug/L		92
25) Acetonitrile	6.789	41	37850	43.44	ug/L		96
26) Di-isopropyl ether	6.984	45	57988	3.24	ug/L		97
27) Chloroprene	7.184	53	23319	3.46	ug/L		92
28) 1,1-Dichloroethane	7.215	63	32236	3.43	ug/L		91
29) Acrylonitrile	7.312	53	45902	23.37	ug/L		96
30) ETBE	7.574	59	54055	3.34	ug/L		97
31) Vinyl acetate	7.610	43	171518	16.93	ug/L		95
32) cis-1,2-Dichloroethene	8.036	96	19541	3.51	ug/L		94
33) 2,2-Dichloropropane	8.164	77	23614	3.46	ug/L		97
34) Bromochloromethane	8.291	128	8942	3.39	ug/L	#	81
35) Cyclohexane	8.298	56	33276	3.56	ug/L		96
36) Chloroform	8.383	83	30714	3.62	ug/L		94
37) Ethyl acetate	8.523	43	121665	18.77	ug/L		99
38) Tetrahydrofuran	8.596	42	11298	4.41	ug/L		82
40) Carbon Tetrachloride	8.553	117	20902	3.59	ug/L		88
41) 1,1,1-Trichloroethane	8.632	97	26552	3.52	ug/L		92
42) 2-Butanone	8.754	43	75798	19.31	ug/L		87
43) 1,1-Dichloropropene	8.784	75	23460	3.43	ug/L		94
44) tert-Butyl formate	8.900	59	73565	21.64	ug/L		90
45) Propionitrile	9.082	54	51025	43.73	ug/L		89
46) Methacrylonitrile	9.107	41	163973	37.01	ug/L		96
47) Benzene	9.058	78	82497	3.71	ug/L		96
48) TAME	9.167	73	47675	3.56	ug/L		94
50) Isobutyl Alcohol	9.271	42	22657	86.87	ug/L	#	80
51) 1,2-Dichloroethane	9.283	62	25858	3.64	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 16:10:15 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

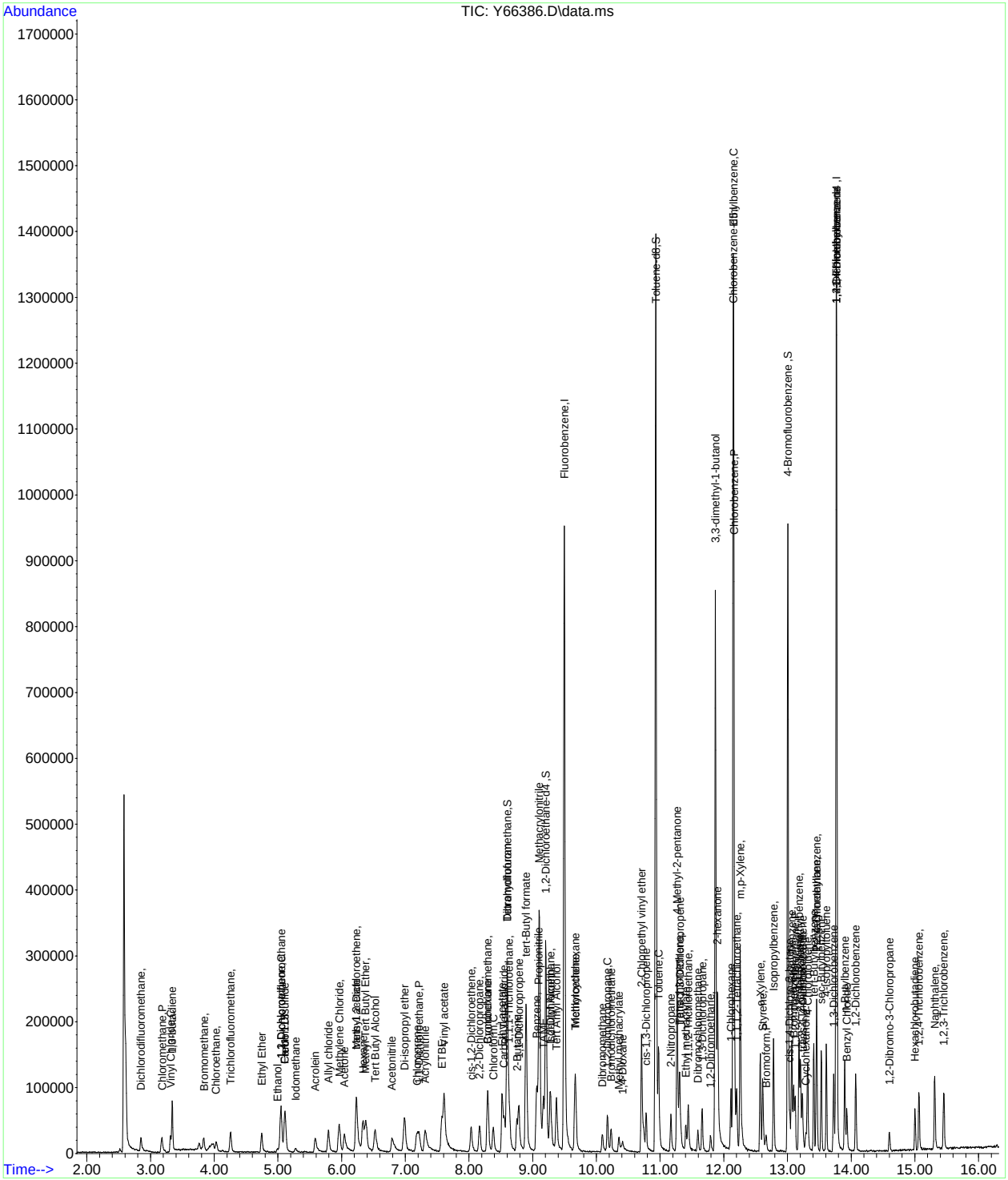
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
52) Tert Amyl Alcohol	9.368	59	38705m	47.54 ug/L		
53) Trichloroethene	9.678	95	20335	3.65 ug/L	#	79
54) Methylcyclohexane	9.660	83	28836	3.51 ug/L		95
55) Dibromomethane	10.098	93	10181	3.57 ug/L		91
56) 1,2-Dichloropropane	10.171	63	19348	3.45 ug/L		95
57) Bromodichloromethane	10.232	83	20070	3.63 ug/L		99
58) Methyl methacrylate	10.348	41	19845	4.30 ug/L		84
59) 1,4-Dioxane	10.409	88	8983	90.67 ug/L		89
60) 2-Chloroethyl vinyl ether	10.707	63	74739	23.17 ug/L		98
61) cis-1,3-Dichloropropene	10.780	75	24813	3.19 ug/L		94
64) Toluene	10.974	91	86466	4.90 ug/L		97
65) 2-Nitropropane	11.169	41	27642	26.45 ug/L		91
66) 4-Methyl-2-pentanone	11.266	43	157095	24.40 ug/L		98
67) trans-1,3-Dichloropropene	11.315	75	21444	4.42 ug/L		77
68) Tetrachloroethene	11.303	166	21784	4.87 ug/L		96
69) Ethyl methacrylate	11.406	69	21915	4.79 ug/L		95
70) 1,1,2-Trichloroethane	11.443	83	14103	4.94 ug/L		89
71) Dibromochloromethane	11.595	129	15226	4.27 ug/L		97
72) 1,3-Dichloropropane	11.662	76	31700	5.06 ug/L		93
73) 1,2-Dibromoethane	11.789	107	15520	4.24 ug/L		94
74) 3,3-dimethyl-1-butanol	11.869	57	292800m	343.25 ug/L		
75) 2-hexanone	11.899	43	125657	27.93 ug/L		93
76) 1-Chlorohexane	12.112	91	22361	4.64 ug/L		98
77) Ethylbenzene	12.161	91	96058	5.14 ug/L		98
78) Chlorobenzene	12.167	112	53375	4.81 ug/L		97
79) 1,1,1,2-Tetrachloroethane	12.203	131	16030	4.29 ug/L		86
80) m,p-Xylene	12.258	91	144471	10.06 ug/L		99
81) o-Xylene	12.574	91	71396	5.04 ug/L		97
82) Styrene	12.611	104	45537	3.81 ug/L		93
83) Bromoform	12.665	173	8548	4.96 ug/L		93
84) Isopropylbenzene	12.781	105	84197	4.75 ug/L		97
87) cis-1,4-Dichloro-2-butene	13.037	53	6855	5.74 ug/L		84
88) n-Propylbenzene	13.067	91	99019	5.29 ug/L		98
89) Bromobenzene	13.097	156	21024	5.20 ug/L		89
90) 1,1,2,2-Tetrachloroethane	13.122	83	26546	6.01 ug/L		97
91) 1,3,5-Trimethylbenzene	13.183	105	69931	5.15 ug/L		97
92) 2-Chlorotoluene	13.207	91	67594	5.41 ug/L		92
93) trans-1,4-Dichloro-2-B...	13.243	53	4978	5.29 ug/L	#	77
94) 1,2,3-Trichloropropane	13.231	110	8683	5.63 ug/L		89
95) Cyclohexanone	13.292	55	10584	37.24 ug/L		94
96) 4-Chlorotoluene	13.316	91	61820	5.42 ug/L		96
97) tert-Butylbenzene	13.414	91	36909	5.41 ug/L		94
98) 1,2,4-Trimethylbenzene	13.456	105	69402	5.09 ug/L		94
99) Pentachloroethane	13.462	167	10536	5.77 ug/L	#	84
100) sec-Butylbenzene	13.529	105	79685	5.20 ug/L		94
101) 4-Isopropyltoluene	13.608	119	69232	5.15 ug/L		98
102) 1,3-Dichlorobenzene	13.724	146	38502m	5.31 ug/L		
103) 1,2,3-Trimethylbenzene	13.761	105	70026	5.22 ug/L		93
104) 1,4-Dichlorobenzene	13.779	146	40550m	5.25 ug/L		
105) n-Butylbenzene	13.900	92	38036	5.77 ug/L		93
106) Benzyl Chloride	13.931	126	7476	4.84 ug/L	#	80
107) 1,2-Dichlorobenzene	14.071	146	38292	5.53 ug/L		95
108) 1,2-Dibromo-3-Chloropr...	14.600	75	5009	5.97 ug/L		79
109) Hexachlorobutadiene	15.002	225	8289	5.56 ug/L		95
110) 1,2,4-Trichlorobenzene	15.062	180	22910	5.19 ug/L		92
111) Naphthalene	15.312	128	80455	5.37 ug/L		96
112) 1,2,3-Trichlorobenzene	15.458	180	23146	5.33 ug/L		92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 16:10:15 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

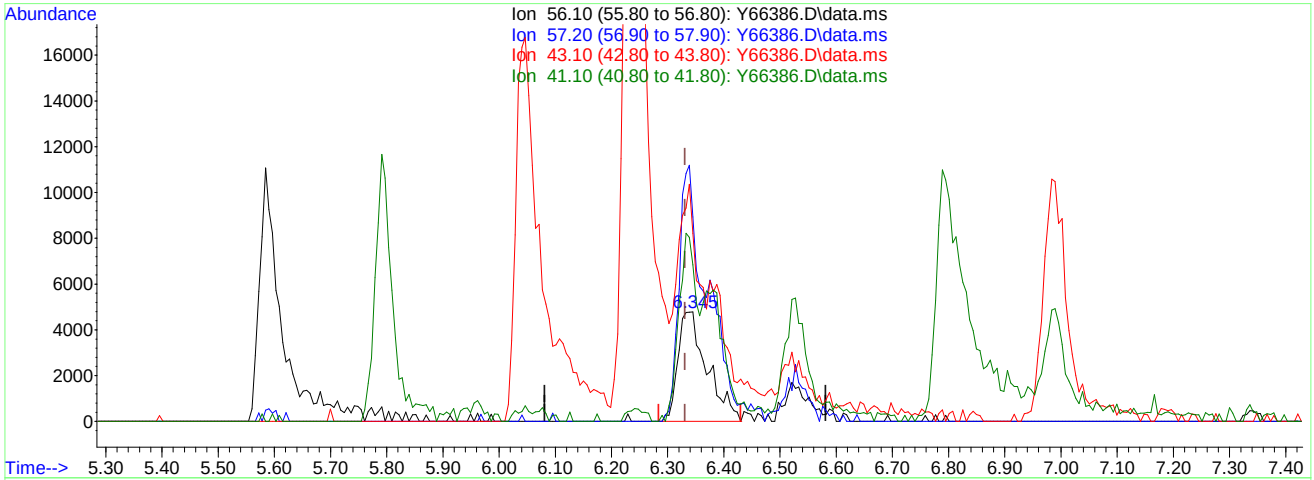
Sample Number: VY2755-IC2755
Lab FileID: Y66386.D
Injection Time: 12/02/22 14:28
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

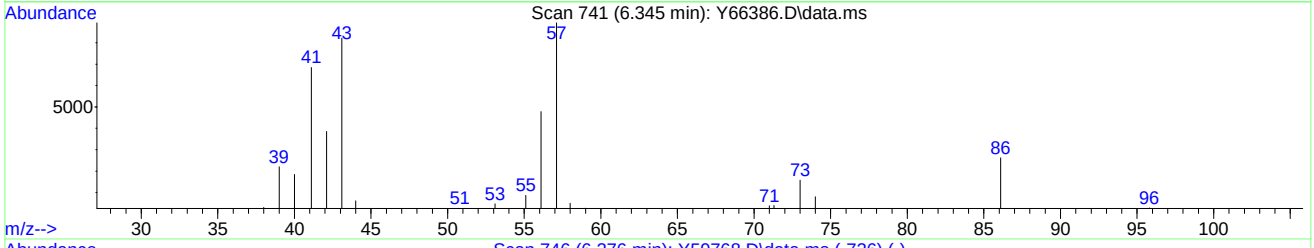
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.99	Poor instrument integration
Hexane	110-54-3		6.34	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak
1,3-Dichlorobenzene	541-73-1		13.72	Missed peak
1,4-Dichlorobenzene	106-46-7		13.78	Missed peak

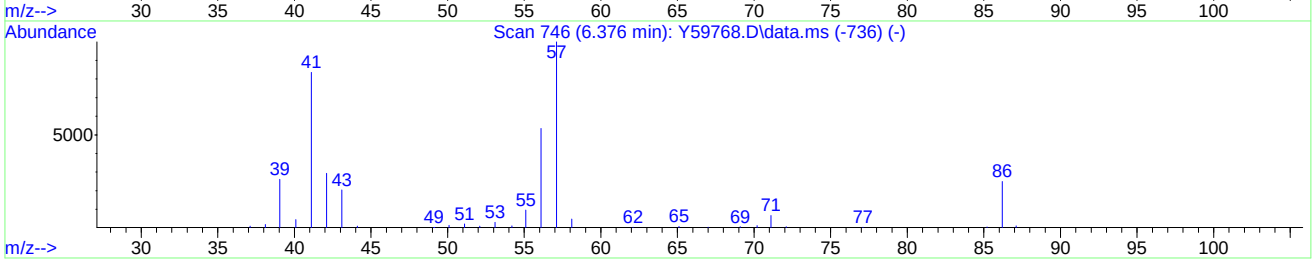
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(22) Hexane

6.345min (+0.014) 4.63ug/L

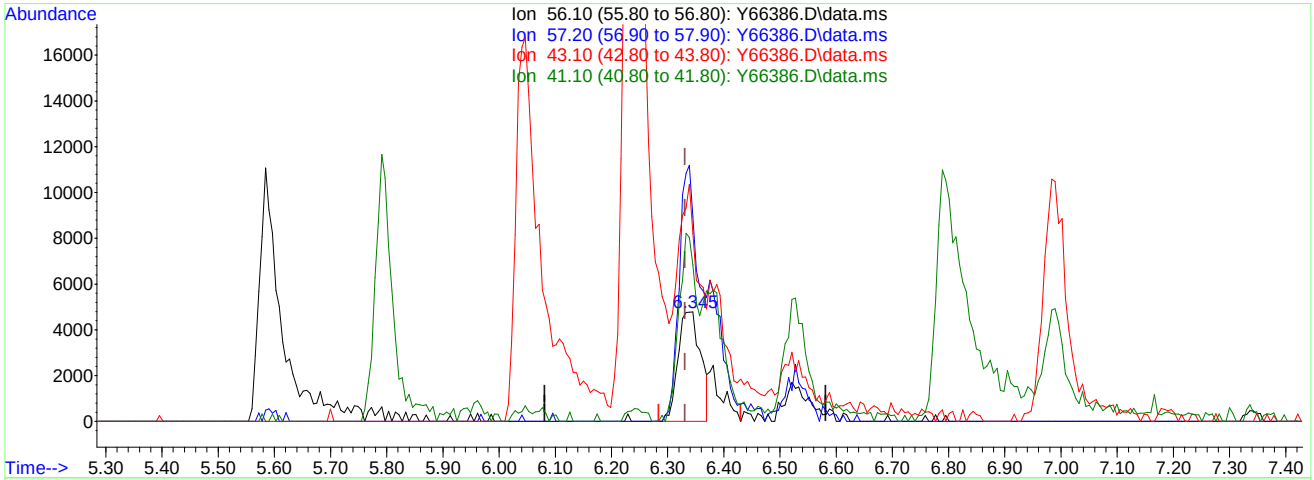
response 17201

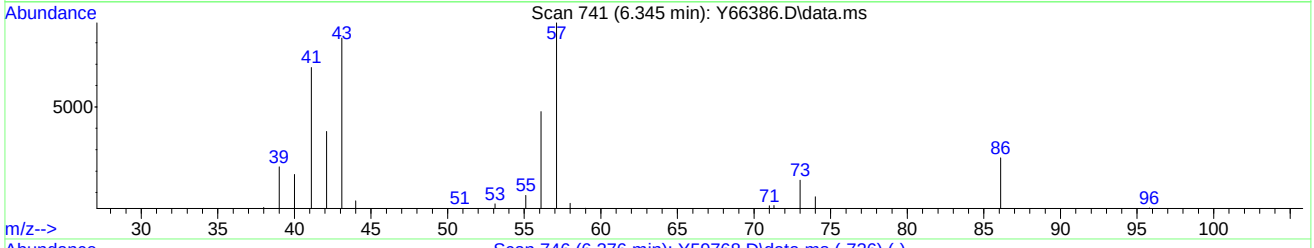
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	186.65
43.10	144.00	133.24
41.10	140.20	142.95

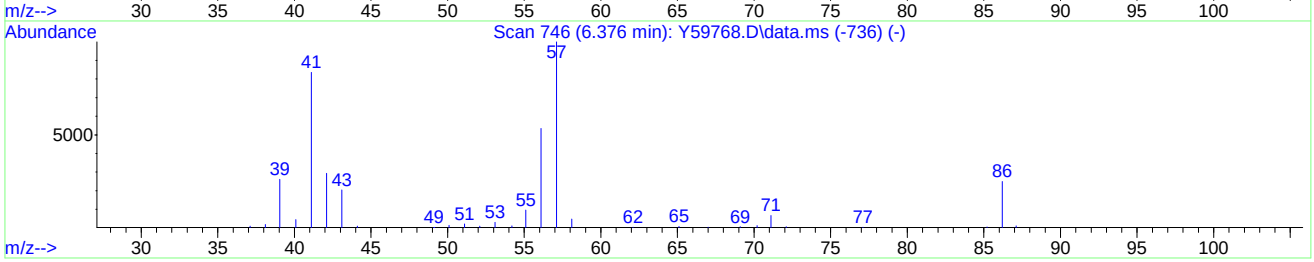
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(22) Hexane

6.345min (+0.014) 3.60ug/L m

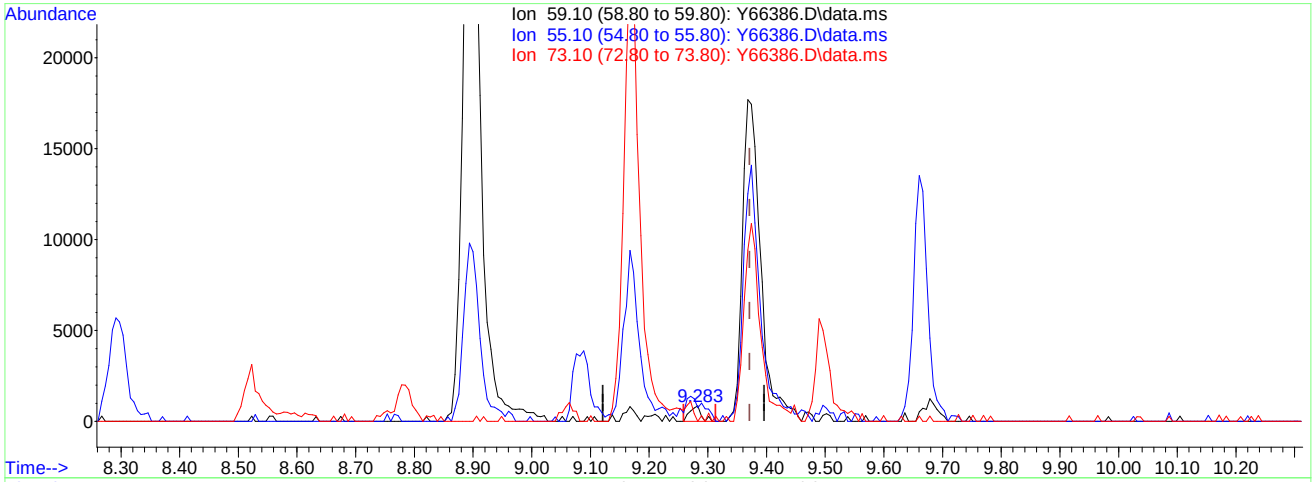
response 13370

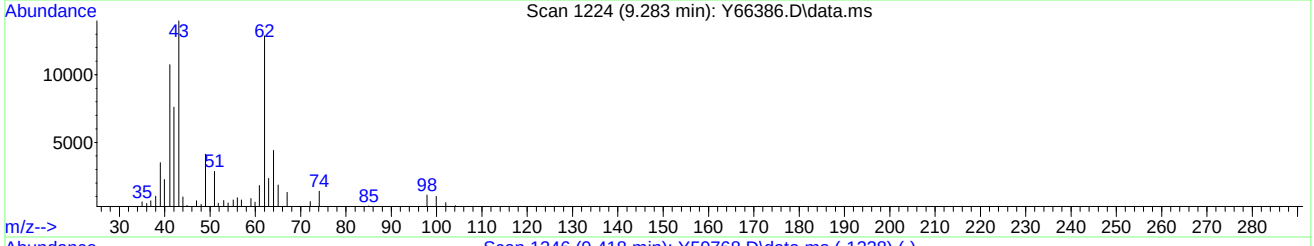
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	186.65
43.10	144.00	171.69#
41.10	140.20	142.95

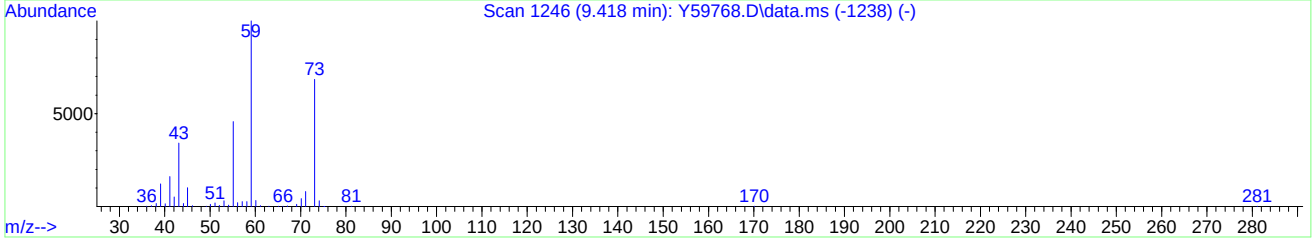
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(52) Tert Amyl Alcohol

9.283min (-0.088) 1.44ug/L

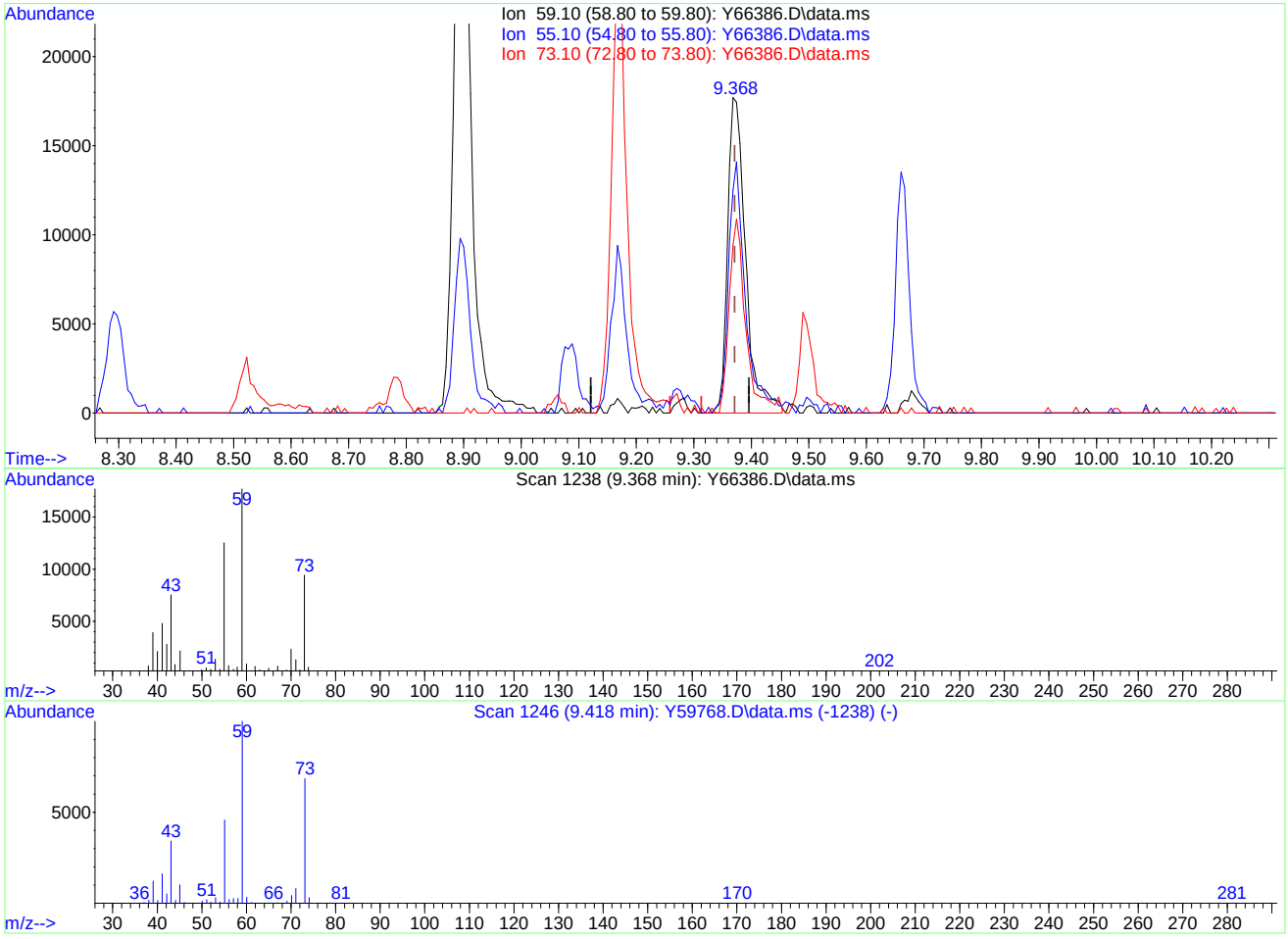
response 1144

Ion	Exp%	Act%
59.10	100	100
55.10	65.80	87.97
73.10	51.70	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



TIC: Y66386.D\data.ms

(52) Tert Amyl Alcohol

9.368min (-0.003) 47.54ug/L m

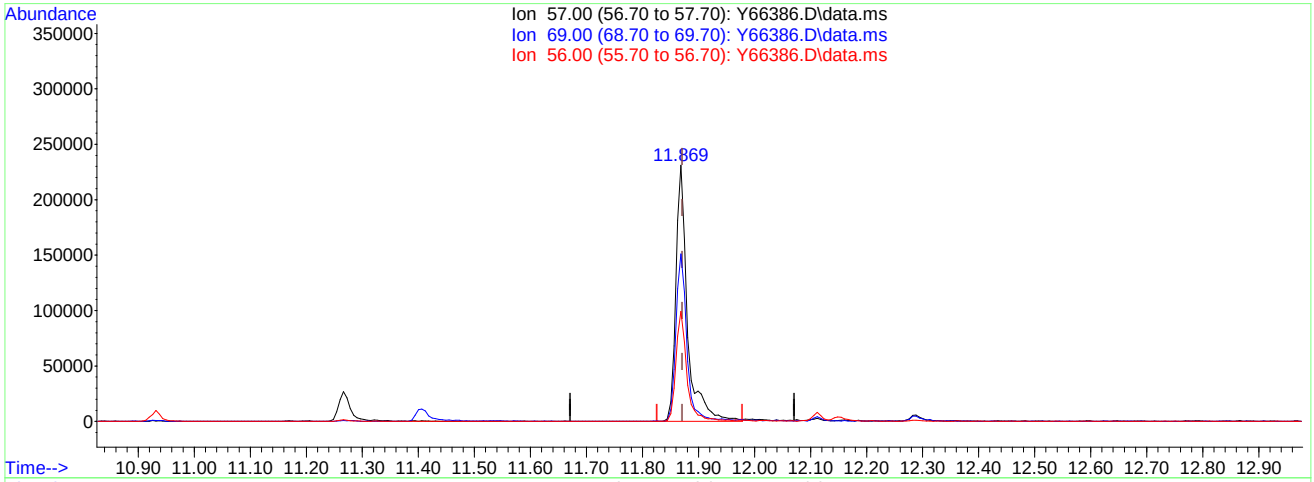
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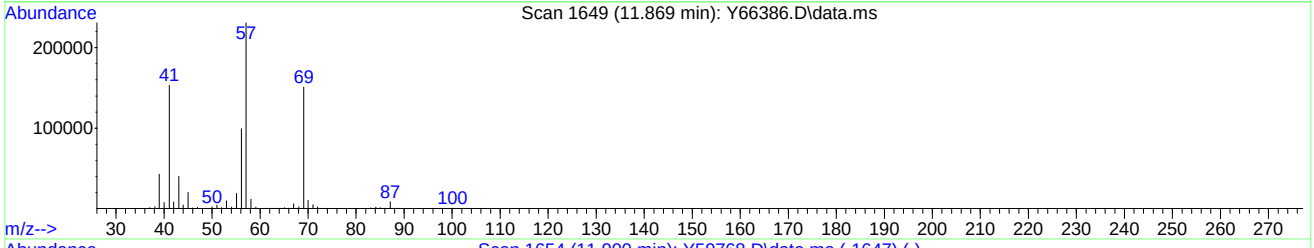
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	70.73
73.10	51.70	53.28
0.00	0.00	0.00

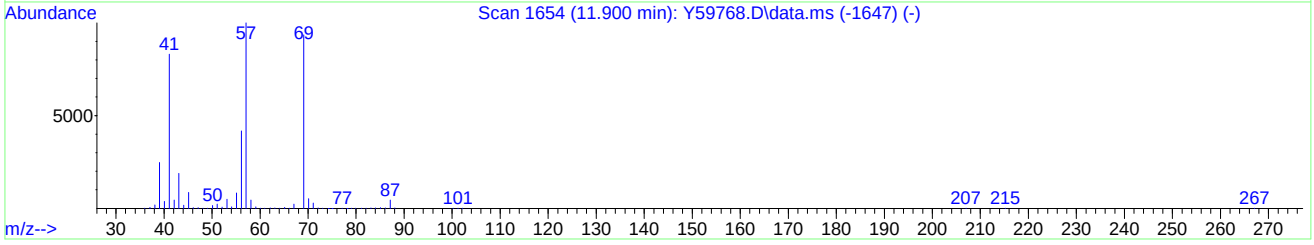
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.002) 392.45ug/L

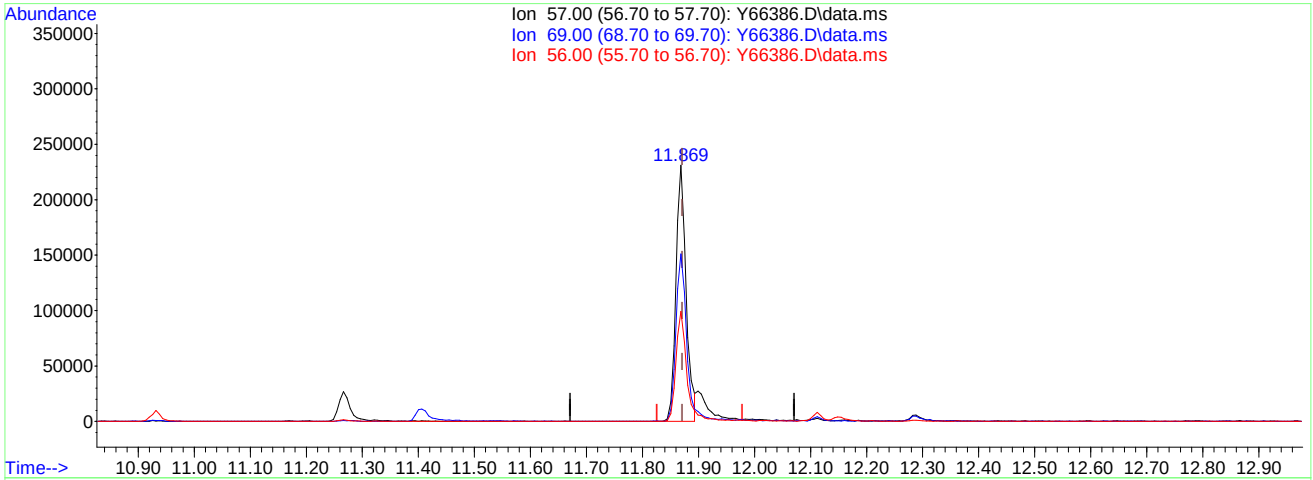
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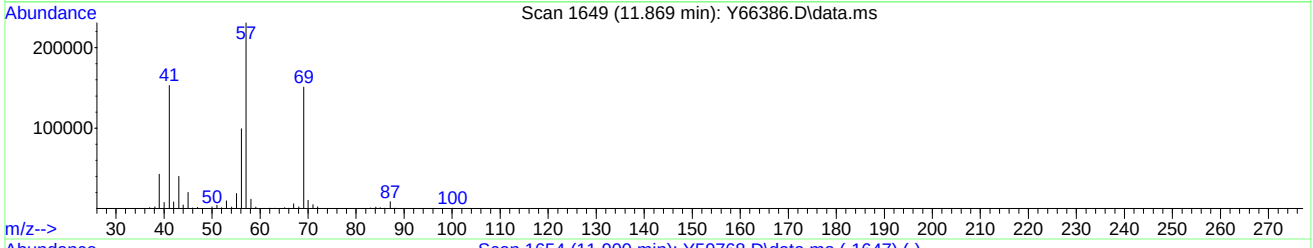
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	65.26
56.00	41.60	42.94
0.00	0.00	0.00

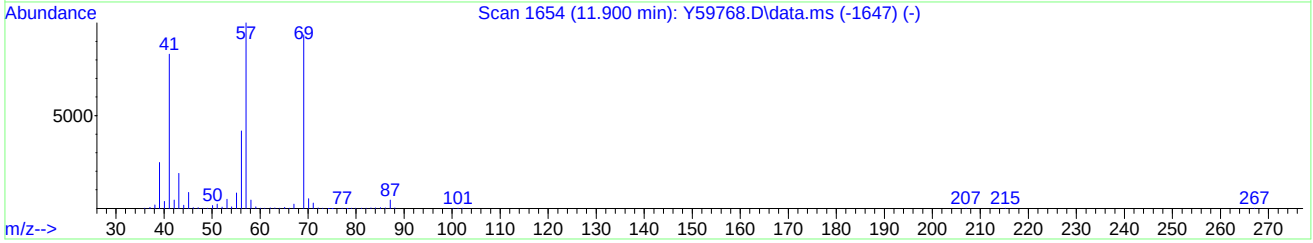
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.002) 343.25ug/L m

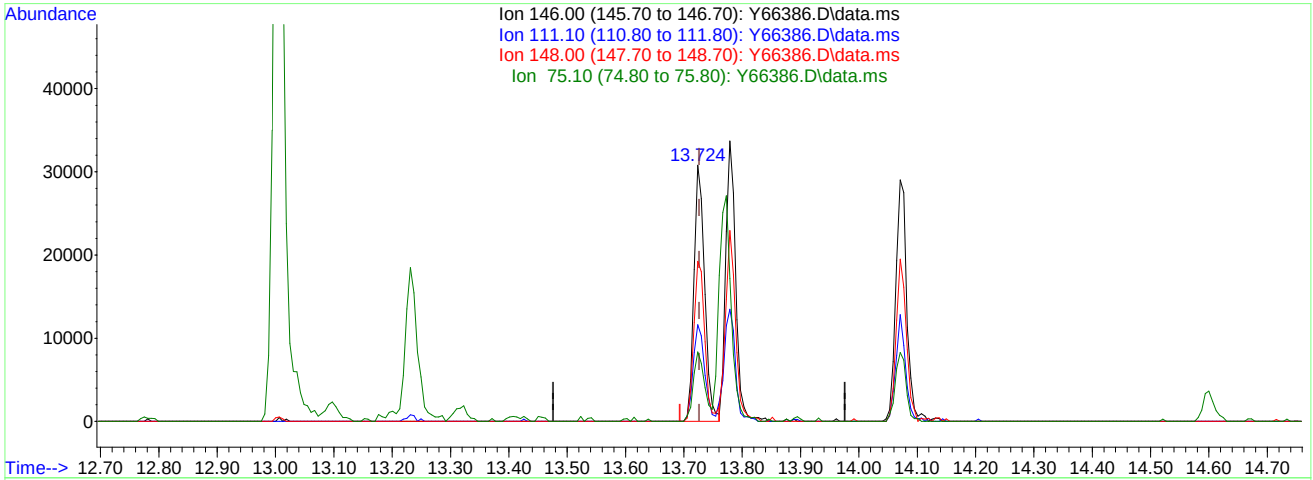
response 292800

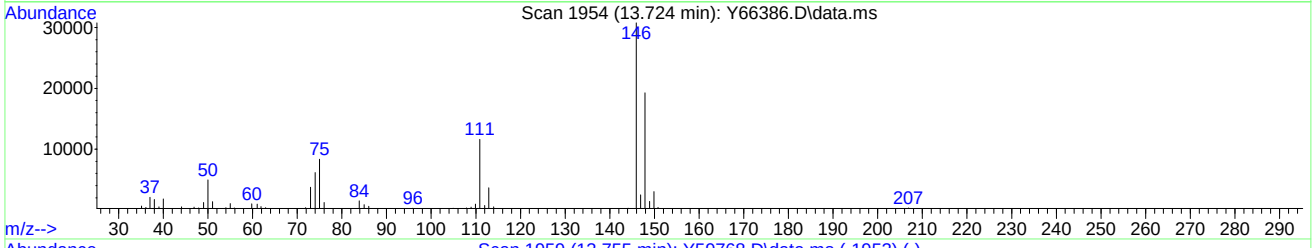
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	65.43
56.00	41.60	42.94
0.00	0.00	0.00

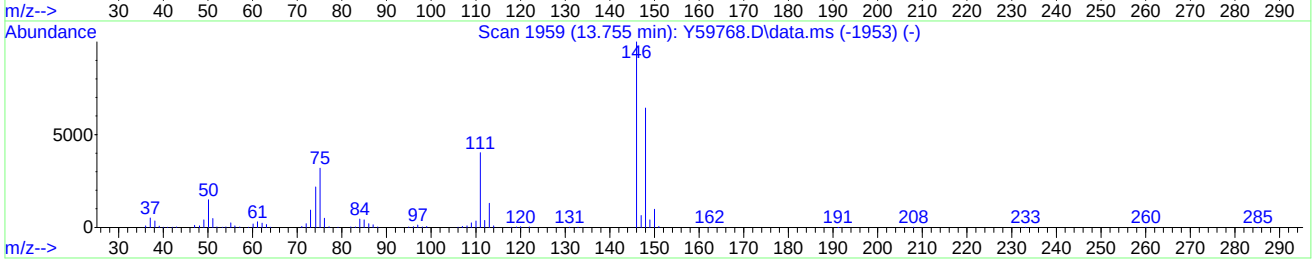
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(102) 1,3-Dichlorobenzene

13.724min (-0.002) 5.35ug/L

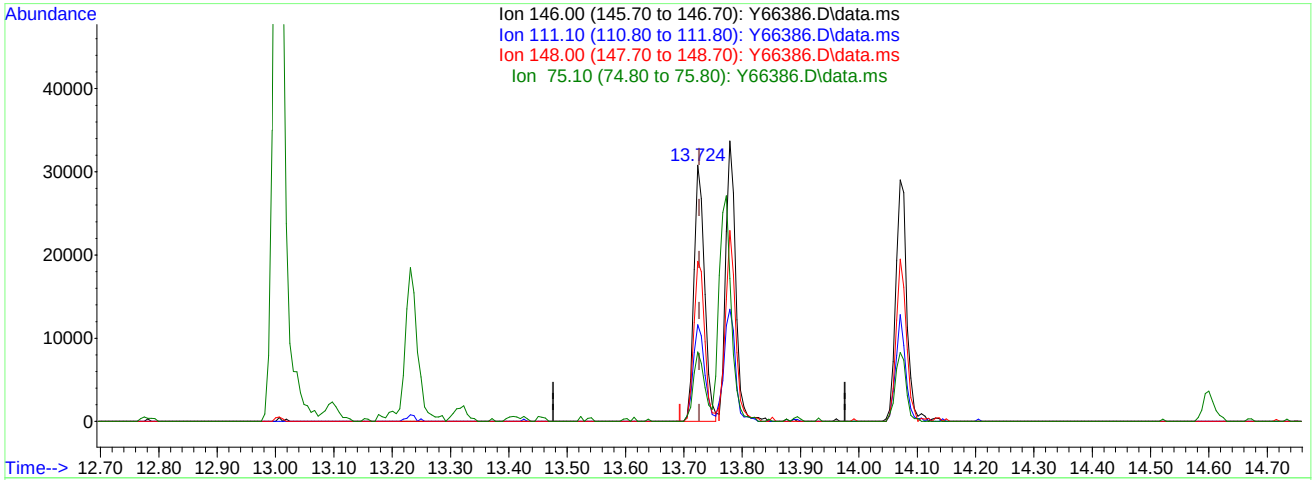
response 38816

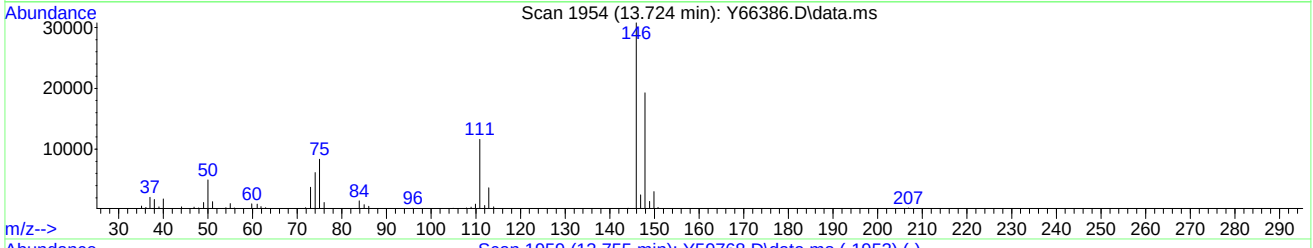
Ion	Exp%	Act%
146.00	100	100
111.10	39.10	37.78
148.00	64.40	62.53
75.10	25.10	27.19

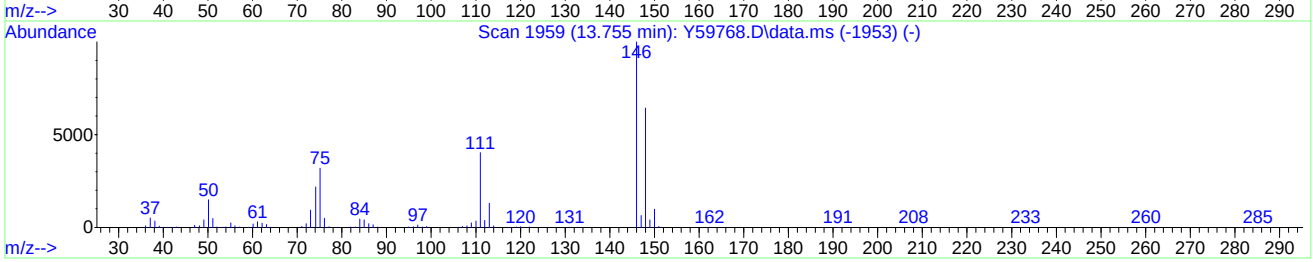
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(102) 1,3-Dichlorobenzene

13.724min (-0.002) 5.31ug/L m

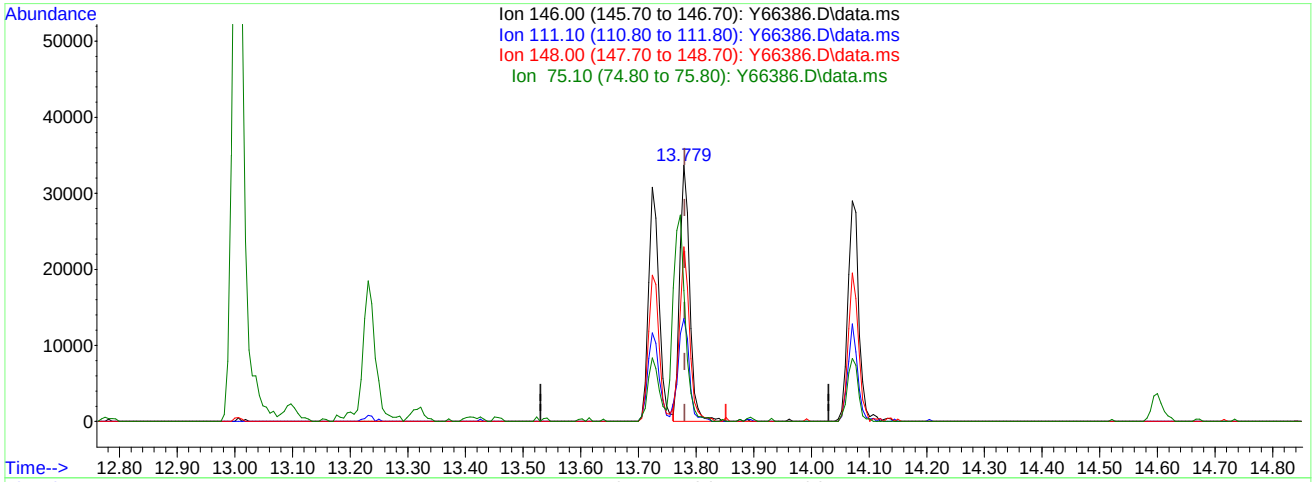
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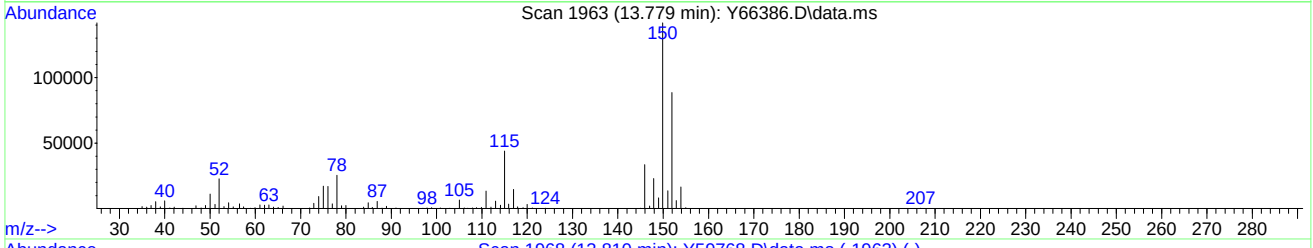
Ion	Exp%	Act%
146.00	100	100
111.10	39.10	37.78
148.00	64.40	62.53
75.10	25.10	27.19

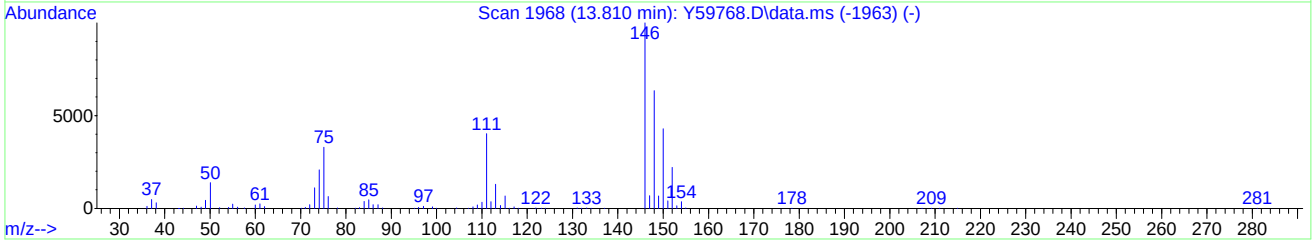
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(104) 1,4-Dichlorobenzene

13.779min (-0.001) 5.22ug/L

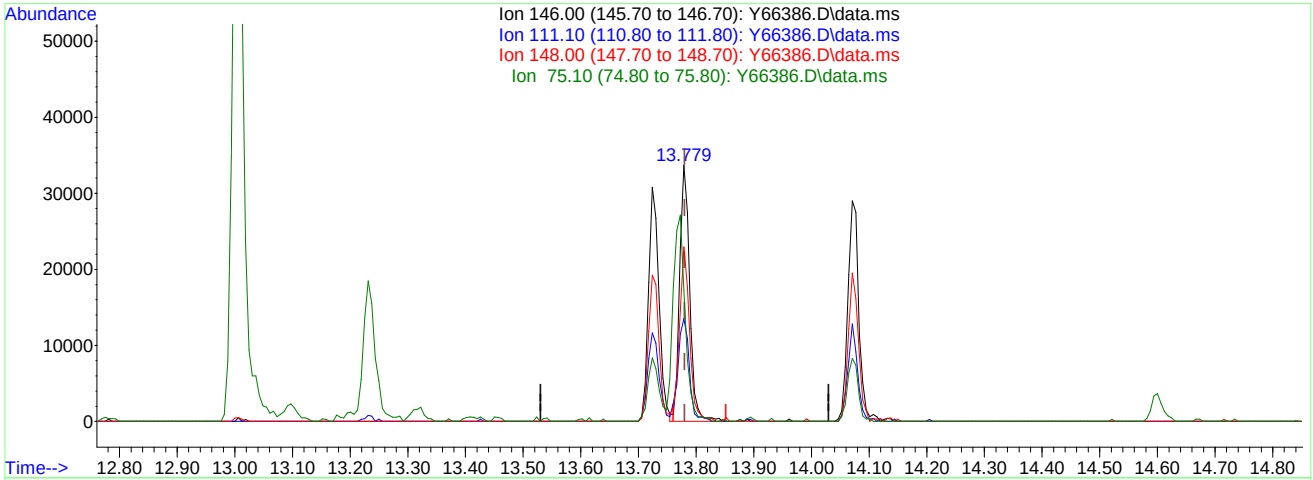
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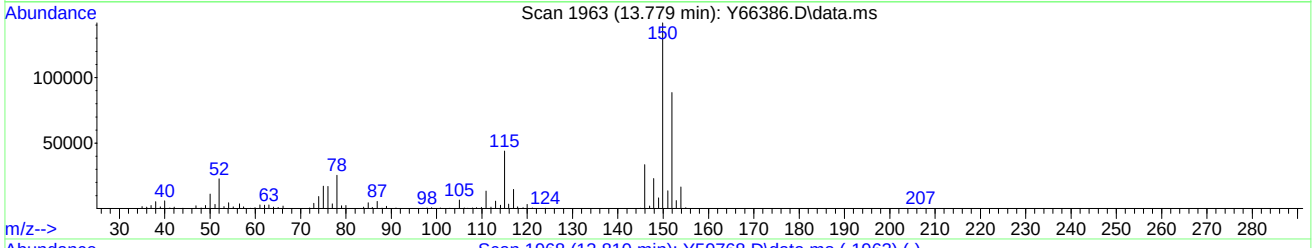
Ion	Exp%	Act%
146.00	100	100
111.10	36.50	40.05
148.00	61.60	66.62
75.10	28.40	51.01

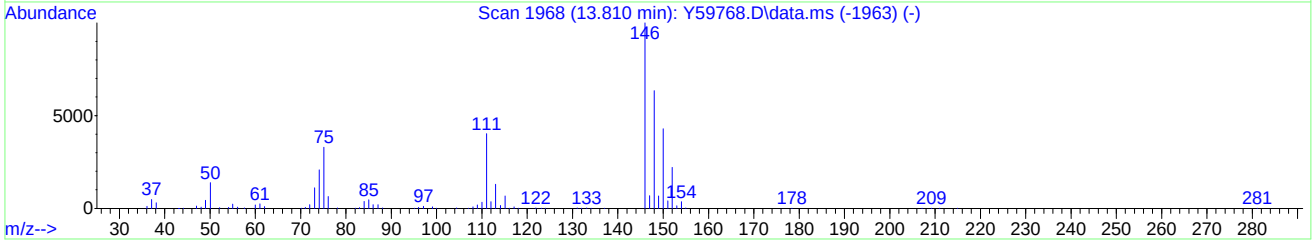
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:00:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(104) 1,4-Dichlorobenzene

13.779min (-0.001) 5.25ug/L m

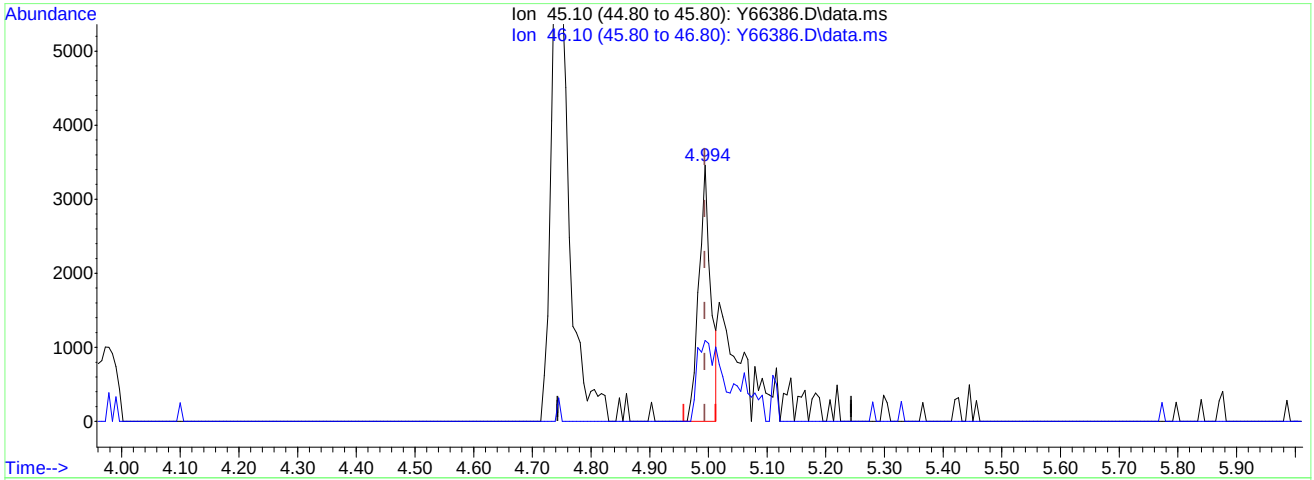
response 40550

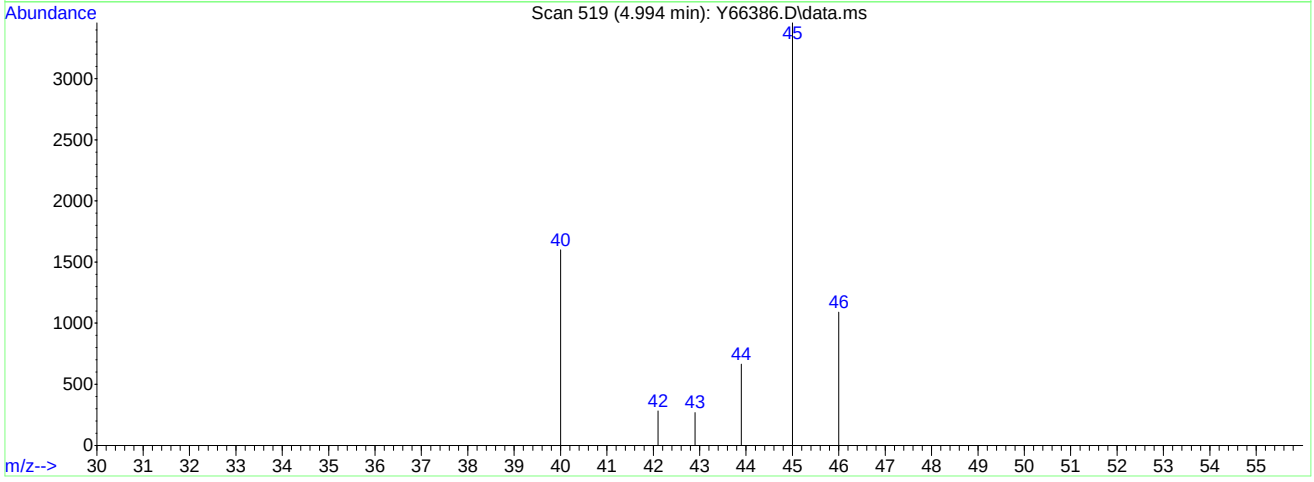
Ion	Exp%	Act%
146.00	100	100
111.10	36.50	40.05
148.00	61.60	68.13
75.10	28.40	51.01

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:04:13 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66386.D\data.ms

(11) Ethanol

4.994min (+0.001) 40.42ug/L

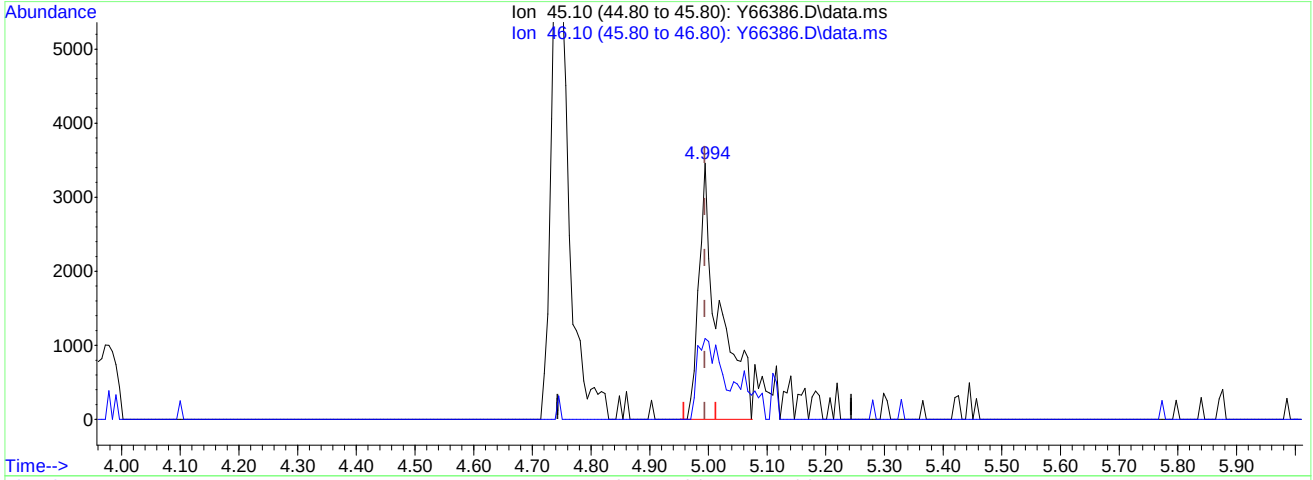
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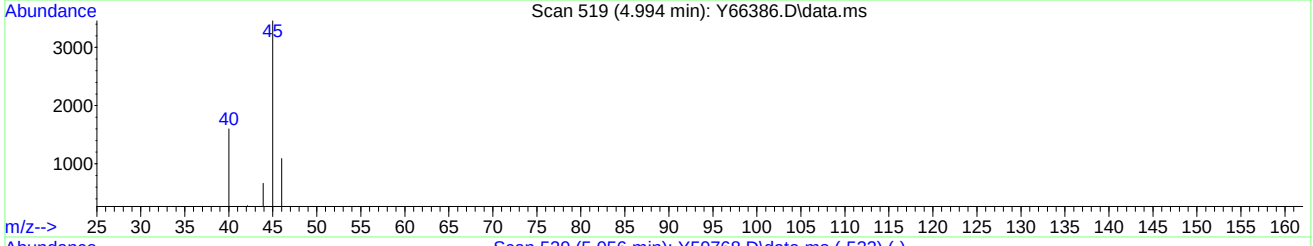
Ion	Exp%	Act%
45.10	100	100
46.10	42.20	31.55
0.00	0.00	0.00
0.00	0.00	0.00

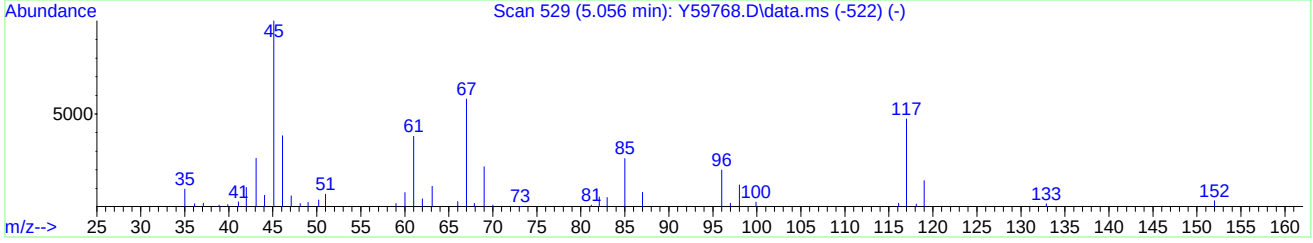
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66386.D
Acq On : 2 Dec 2022 2:28 pm
Operator : joannel
Sample : IC2755-2 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 02 15:04:13 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66386.D\data.ms

(11) Ethanol

4.994min (+0.001) 68.86ug/L m

response 8302

Ion	Exp%	Act%
45.10	100	100
46.10	42.20	31.55
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 16:10:34 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.499	96	789589	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.151	117	571850	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.770	152	264144	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.599	113	169241	47.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.02%			
49) 1,2-Dichloroethane-d4	9.207	65	205599	49.60	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.20%			
63) Toluene-d8	10.929	98	757509	60.04	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 120.08%#			
86) 4-Bromofluorobenzene	13.009	174	207570	52.34	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.68%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.850	85	37349	6.44	ug/L	86
3) Acrolein	5.581	56	52064	55.15	ug/L	96
4) Chloromethane	3.172	50	48314	6.48	ug/L	97
5) 1,3-butadiene	3.342	39	43745	6.62	ug/L	86
6) Vinyl Chloride	3.312	62	40635	6.28	ug/L	97
7) Bromomethane	3.835	94	20540	6.65	ug/L	90
8) Chloroethane	4.030	64	27218	6.99	ug/L	99
9) Trichlorofluoromethane	4.255	101	41438	6.19	ug/L	85
10) Ethyl Ether	4.748	59	44834	8.87	ug/L	98
11) Ethanol	4.985	45	18497m	148.75	ug/L	
12) 1,2-Dichlorotrifluoroe...	5.040	67	50225	8.37	ug/L	97
13) 1,1-Dichloroethene	5.052	61	62472	8.24	ug/L	96
14) Freon 113	5.119	101	40980	8.45	ug/L	88
15) Carbon Disulfide	5.107	76	105268	8.22	ug/L	94
16) Iodomethane	5.277	142	24868	7.39	ug/L	98
17) Allyl chloride	5.794	41	42485	5.41	ug/L	84
18) Methylene Chloride	5.958	49	74488	8.56	ug/L	94
19) Acetone	6.037	43	111878	46.42	ug/L	94
20) Methyl acetate	6.232	43	253566	50.99	ug/L	96
21) trans-1,2-Dichloroethene	6.220	61	59110	7.89	ug/L	90
22) Hexane	6.329	56	31925m	8.34	ug/L	
23) Methyl Tert Butyl Ether	6.378	73	135939	9.34	ug/L	88
24) Tert Butyl Alcohol	6.524	59	116813	113.42	ug/L	96
25) Acetonitrile	6.786	41	81868	90.47	ug/L	97
26) Di-isopropyl ether	6.987	45	153997	8.32	ug/L	95
27) Chloroprene	7.175	53	40441	5.82	ug/L	93
28) 1,1-Dichloroethane	7.218	63	81540	8.41	ug/L	99
29) Acrylonitrile	7.303	53	123020	59.34	ug/L	96
30) ETBE	7.577	59	137391	8.18	ug/L	97
31) Vinyl acetate	7.601	43	525478	49.17	ug/L	99
32) cis-1,2-Dichloroethene	8.033	96	50663	8.83	ug/L	91
33) 2,2-Dichloropropane	8.167	77	57902	8.21	ug/L	96
34) Bromochloromethane	8.294	128	22105	8.17	ug/L	93
35) Cyclohexane	8.294	56	74653	7.75	ug/L	97
36) Chloroform	8.380	83	79606	9.12	ug/L	95
37) Ethyl acetate	8.513	43	388612	57.21	ug/L	98
38) Tetrahydrofuran	8.586	42	29126	10.96	ug/L	86
40) Carbon Tetrachloride	8.550	117	48017	8.00	ug/L	96
41) 1,1,1-Trichloroethane	8.635	97	66470	8.57	ug/L	98
42) 2-Butanone	8.745	43	172612	42.57	ug/L	92
43) 1,1-Dichloropropene	8.781	75	59694	8.46	ug/L	93
44) tert-Butyl formate	8.897	59	136209	38.64	ug/L	92
45) Propionitrile	9.079	54	90752	75.41	ug/L	94
46) Methacrylonitrile	9.104	41	302814	66.28	ug/L	97
47) Benzene	9.061	78	198956	8.68	ug/L	98
48) TAME	9.164	73	128760	9.24	ug/L	97
50) Isobutyl Alcohol	9.274	42	45942	167.56	ug/L	96
51) 1,2-Dichloroethane	9.280	62	65712	8.95	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 16:10:34 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

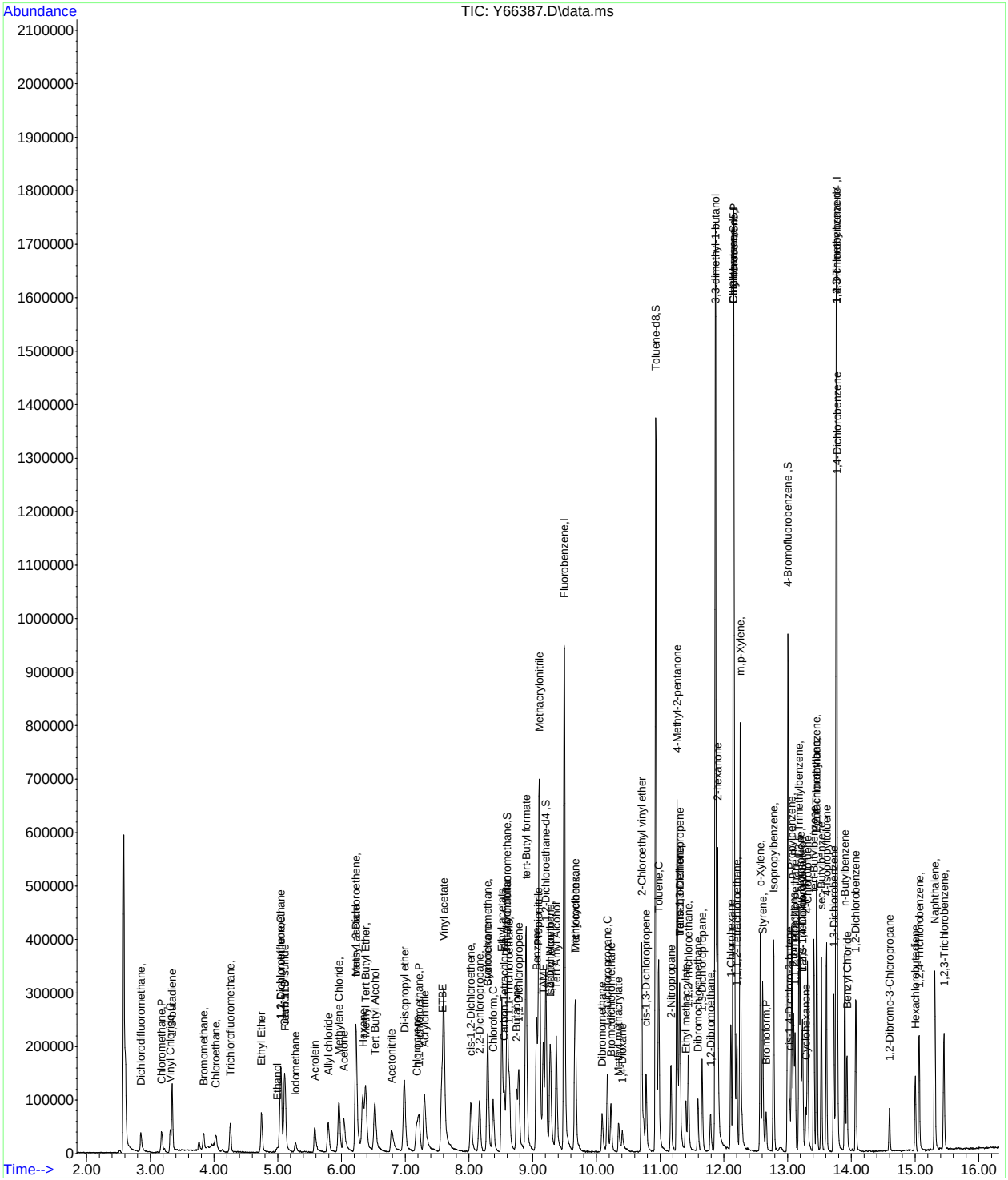
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
52) Tert Amyl Alcohol	9.371	59	100927m	116.07 ug/L		
53) Trichloroethene	9.675	95	49135	8.58 ug/L		94
54) Methylcyclohexane	9.663	83	65968	7.80 ug/L		98
55) Dibromomethane	10.089	93	26492	9.00 ug/L		97
56) 1,2-Dichloropropane	10.174	63	48868	8.44 ug/L		95
57) Bromodichloromethane	10.229	83	52124	9.09 ug/L		95
58) Methyl methacrylate	10.345	41	32020	6.67 ug/L	#	84
59) 1,4-Dioxane	10.405	88	25211	244.16 ug/L		93
60) 2-Chloroethyl vinyl ether	10.710	63	147494	44.25 ug/L		94
61) cis-1,3-Dichloropropene	10.777	75	66610	8.31 ug/L		93
64) Toluene	10.977	91	213088	11.72 ug/L		98
65) 2-Nitropropane	11.166	41	79735	71.05 ug/L		98
66) 4-Methyl-2-pentanone	11.263	43	349250	52.65 ug/L		97
67) trans-1,3-Dichloropropene	11.312	75	57235	11.46 ug/L		86
68) Tetrachloroethene	11.306	166	51507	11.23 ug/L		97
69) Ethyl methacrylate	11.403	69	44616	9.32 ug/L		98
70) 1,1,2-Trichloroethane	11.440	83	35912	12.17 ug/L		91
71) Dibromochloromethane	11.592	129	40709	11.08 ug/L		98
72) 1,3-Dichloropropane	11.659	76	80981	12.51 ug/L		92
73) 1,2-Dibromoethane	11.792	107	44112	11.70 ug/L		99
74) 3,3-dimethyl-1-butanol	11.865	57	602311m	663.73 ug/L		
75) 2-hexanone	11.902	43	280878	57.70 ug/L		95
76) 1-Chlorohexane	12.109	91	56236	11.25 ug/L		97
77) Ethylbenzene	12.157	91	234956	12.07 ug/L		97
78) Chlorobenzene	12.164	112	129509	11.27 ug/L		98
79) 1,1,1,2-Tetrachloroethane	12.200	131	41924	10.90 ug/L		95
80) m,p-Xylene	12.255	91	359968	23.99 ug/L		99
81) o-Xylene	12.571	91	181184	12.27 ug/L		99
82) Styrene	12.608	104	126755	10.29 ug/L		97
83) Bromoform	12.662	173	23597	12.79 ug/L		88
84) Isopropylbenzene	12.778	105	205269	11.13 ug/L		97
87) cis-1,4-Dichloro-2-butene	13.033	53	13604	10.89 ug/L	#	66
88) n-Propylbenzene	13.064	91	249909	12.91 ug/L		98
89) Bromobenzene	13.094	156	55980	13.52 ug/L		82
90) 1,1,2,2-Tetrachloroethane	13.119	83	69623	15.09 ug/L		98
91) 1,3,5-Trimethylbenzene	13.179	105	177505	12.65 ug/L		100
92) 2-Chlorotoluene	13.204	91	170859	13.23 ug/L		95
93) trans-1,4-Dichloro-2-B...	13.240	53	13171	13.13 ug/L	#	79
94) 1,2,3-Trichloropropane	13.234	110	24251	15.21 ug/L		92
95) Cyclohexanone	13.289	55	27310	90.65 ug/L		95
96) 4-Chlorotoluene	13.313	91	154892	13.11 ug/L		98
97) tert-Butylbenzene	13.411	91	89829	12.79 ug/L		97
98) 1,2,4-Trimethylbenzene	13.453	105	174738	12.38 ug/L		99
99) Pentachloroethane	13.459	167	17844	9.53 ug/L	#	63
100) sec-Butylbenzene	13.532	105	187626	11.88 ug/L		99
101) 4-Isopropyltoluene	13.611	119	167716	12.08 ug/L		97
102) 1,3-Dichlorobenzene	13.727	146	96557	12.93 ug/L		98
103) 1,2,3-Trimethylbenzene	13.763	105	177427	12.76 ug/L		96
104) 1,4-Dichlorobenzene	13.782	146	103267	12.97 ug/L		95
105) n-Butylbenzene	13.897	92	92365	13.59 ug/L		98
106) Benzyl Chloride	13.934	126	21251	12.80 ug/L	#	85
107) 1,2-Dichlorobenzene	14.074	146	94339	13.16 ug/L		98
108) 1,2-Dibromo-3-Chloropr...	14.597	75	14628	16.43 ug/L		90
109) Hexachlorobutadiene	15.005	225	19227	12.66 ug/L		93
110) 1,2,4-Trichlorobenzene	15.065	180	58406	12.91 ug/L		97
111) Naphthalene	15.309	128	219776	14.11 ug/L		100
112) 1,2,3-Trichlorobenzene	15.455	180	57481	12.96 ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 16:10:34 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

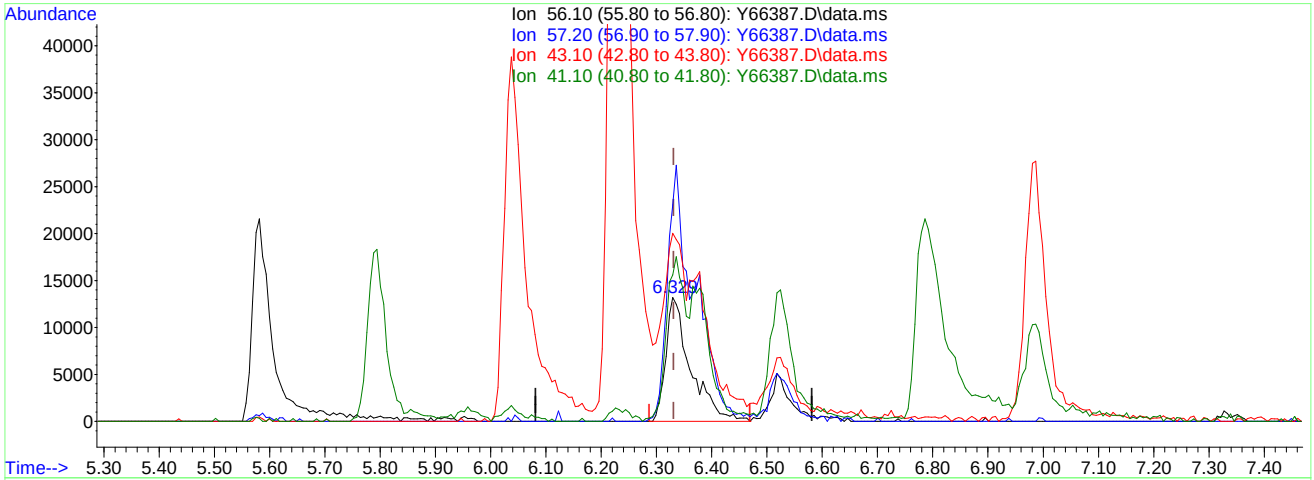
Sample Number: VY2755-IC2755
Lab FileID: Y66387.D
Injection Time: 12/02/22 14:53
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

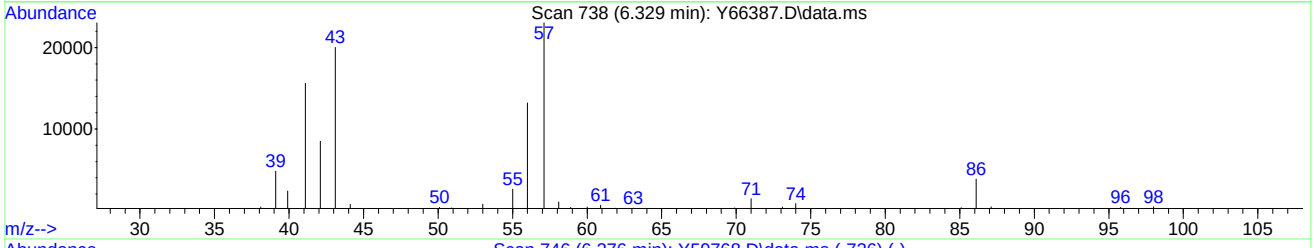
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethyl Alcohol	64-17-5		4.99	Poor instrument integration
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

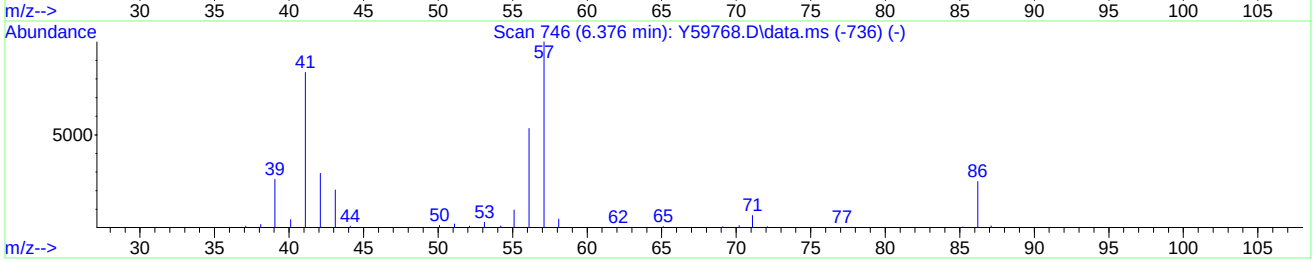
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66387.D\data.ms

(22) Hexane

6.329min (-0.002) 10.82ug/L

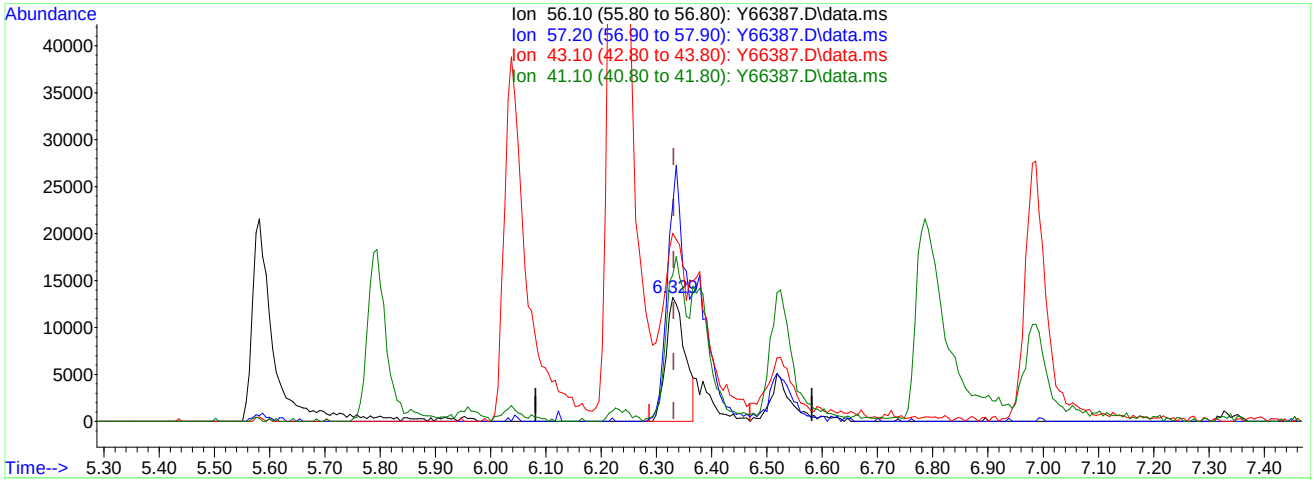
response 41405

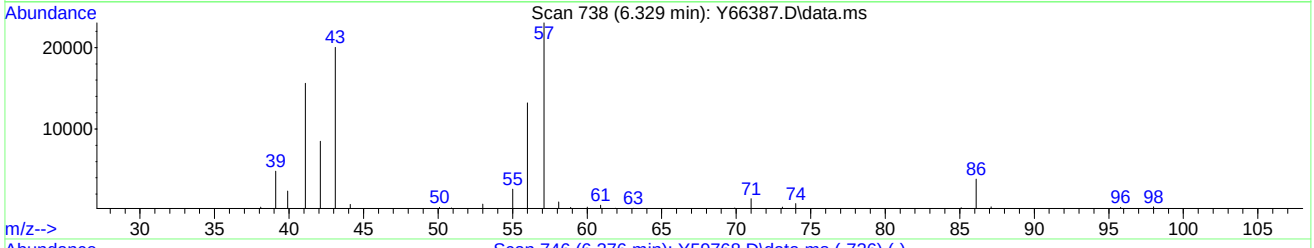
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	172.56#
43.10	144.00	137.21
41.10	140.20	115.51#

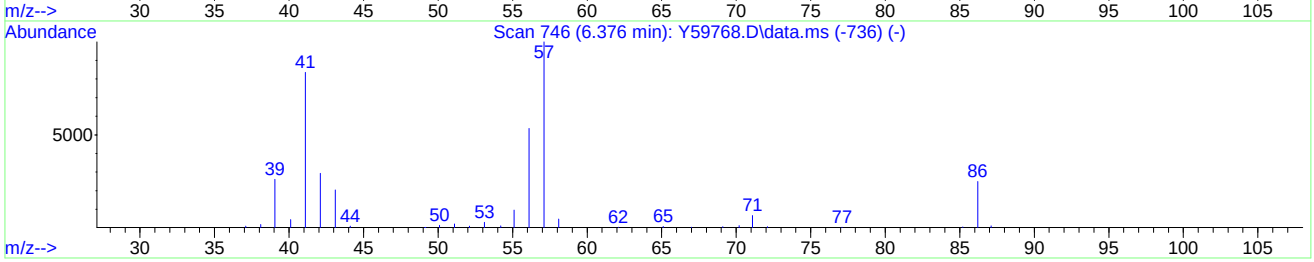
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66387.D\data.ms

(22) Hexane

6.329min (-0.002) 8.34ug/L m

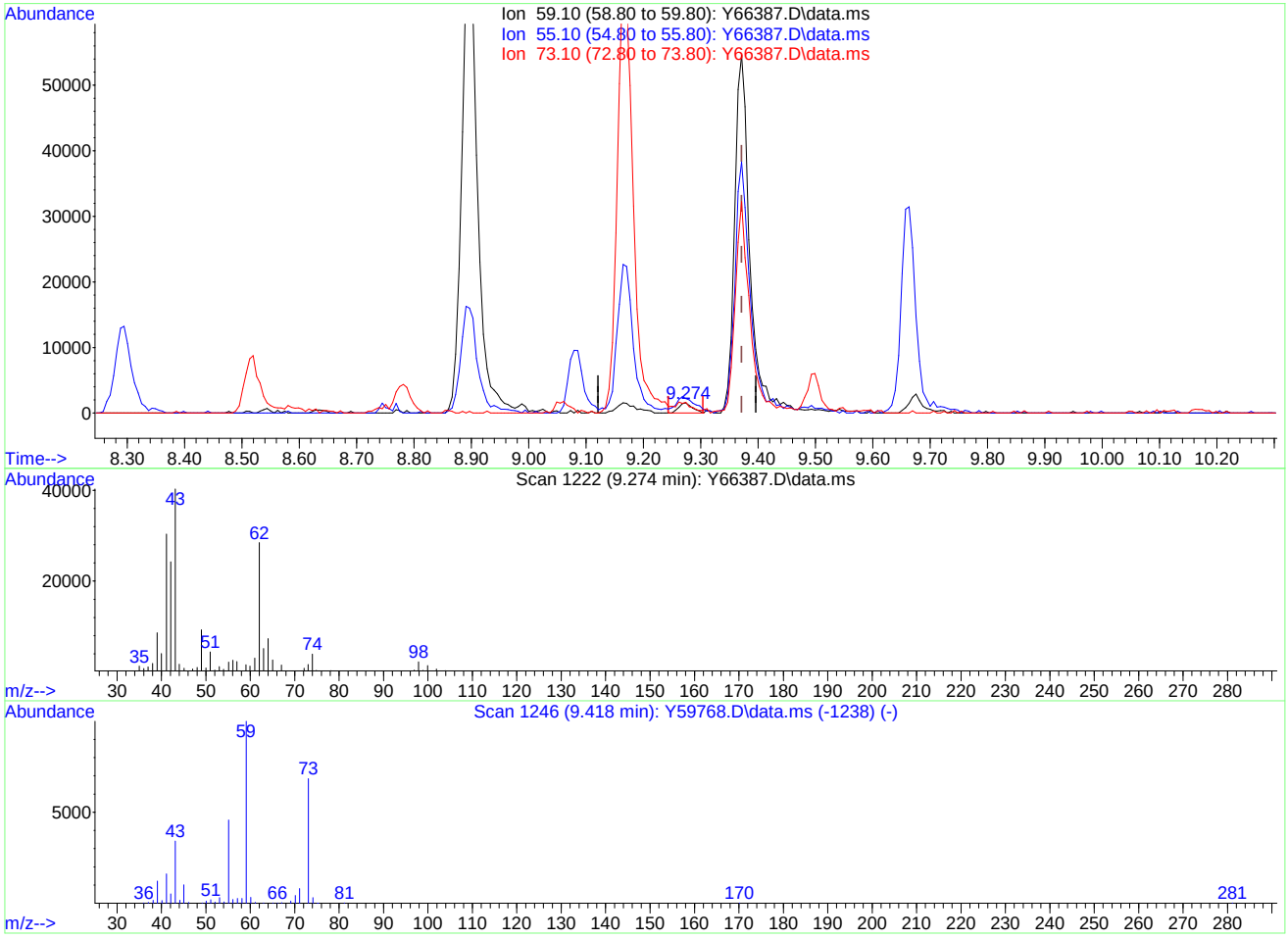
response 31925

Ion	Exp%	Act%
56.10	100	100
57.20	199.80	174.67#
43.10	144.00	151.75
41.10	140.20	118.33#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



TIC: Y66387.D\data.ms

(52) Tert Amyl Alcohol

9.274min (-0.097) 3.13ug/L

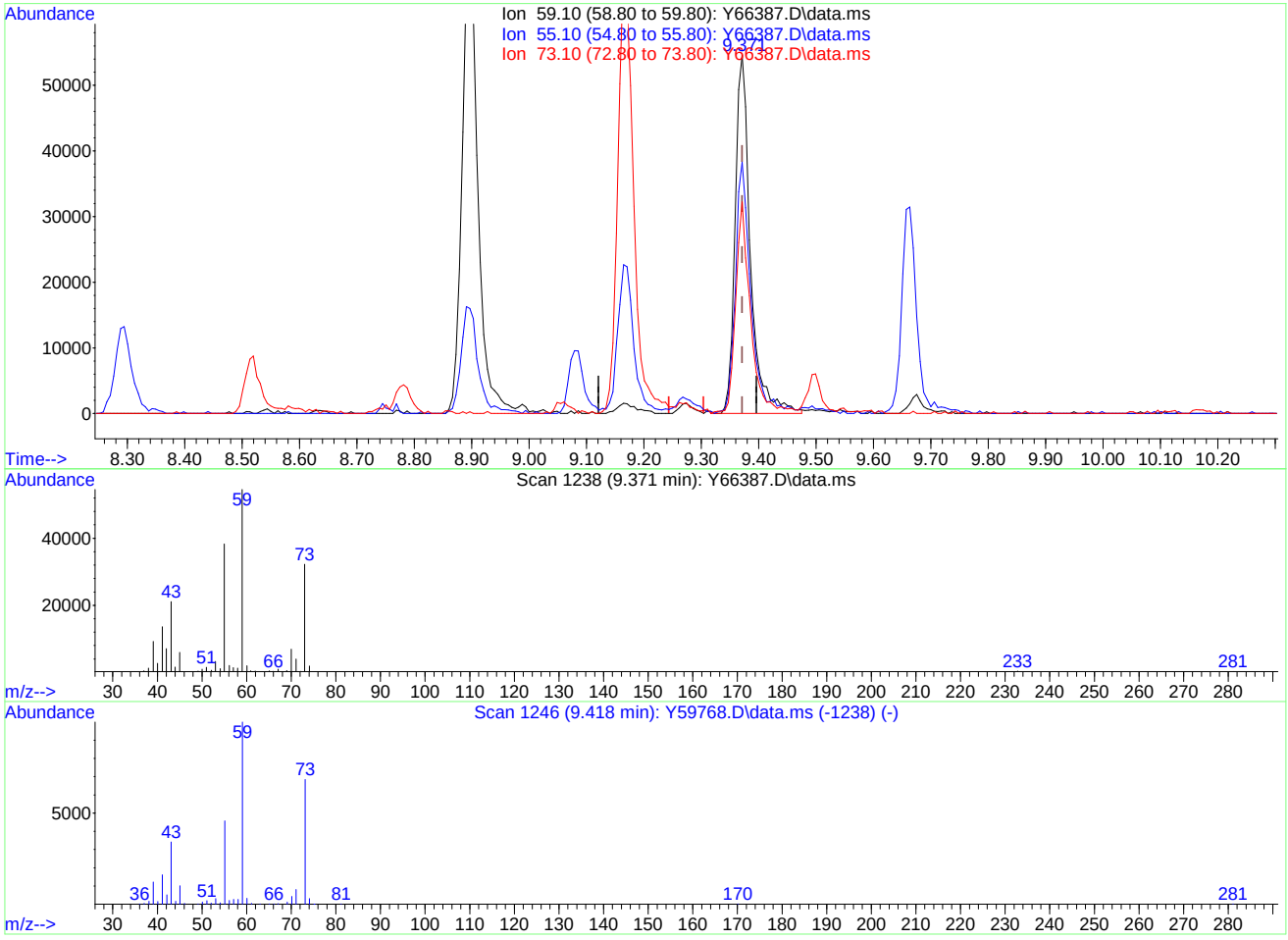
response 2565

Ion	Exp%	Act%
59.10	100	100
55.10	65.80	104.23#
73.10	51.70	74.66
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



TIC: Y66387.D\data.ms

(52) Tert Amyl Alcohol

9.371min (+0.000) 116.07ug/L m

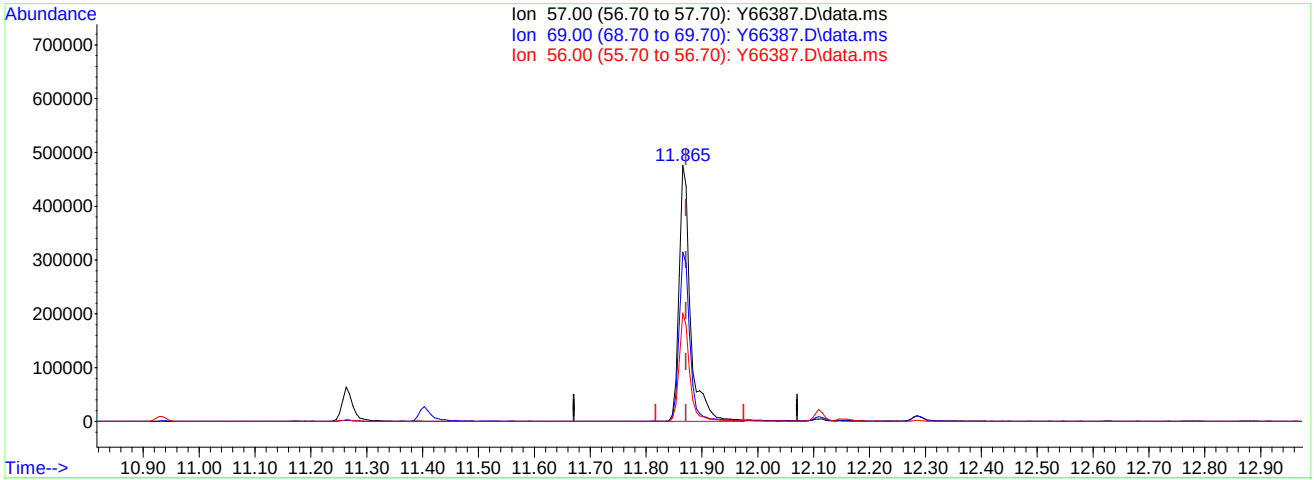
response 100927

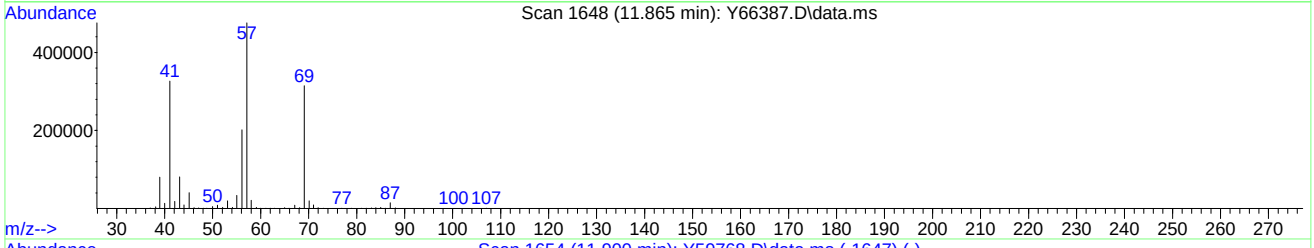
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	70.14
73.10	51.70	59.07
0.00	0.00	0.00

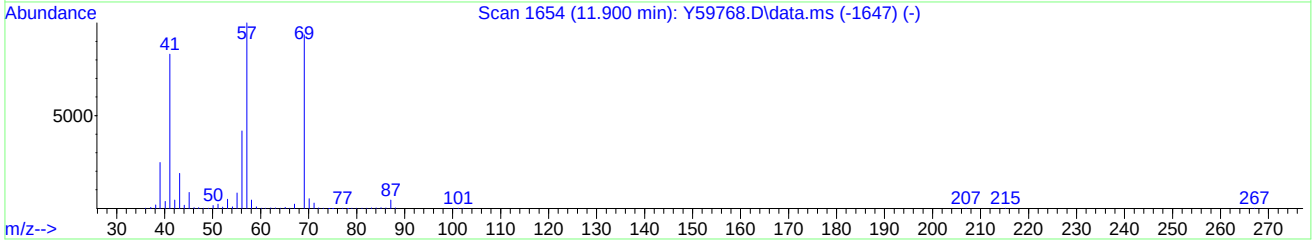
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66387.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.865min (-0.006) 746.34ug/L

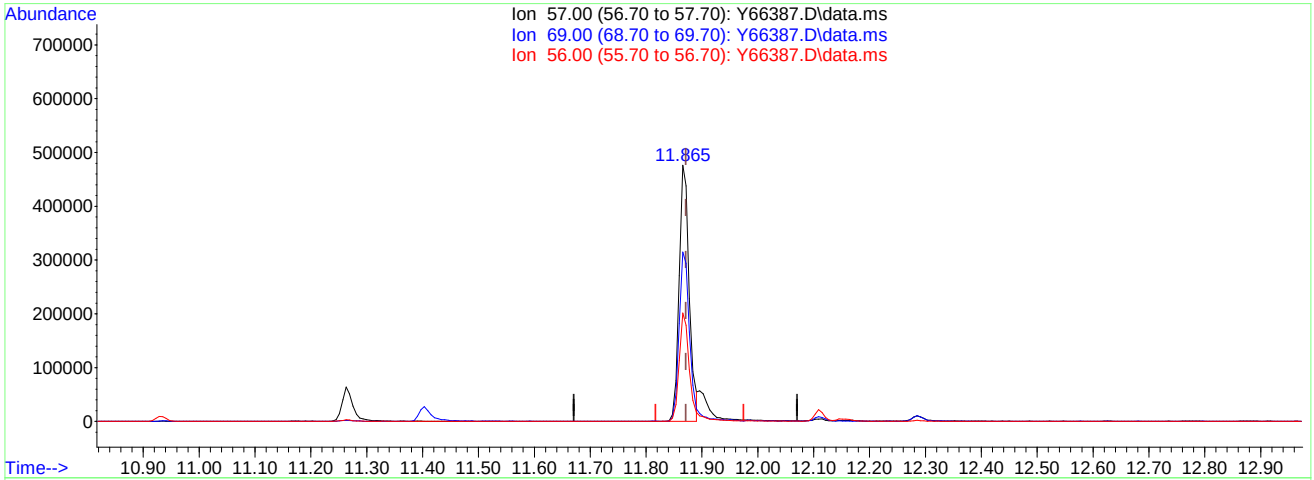
response 682812

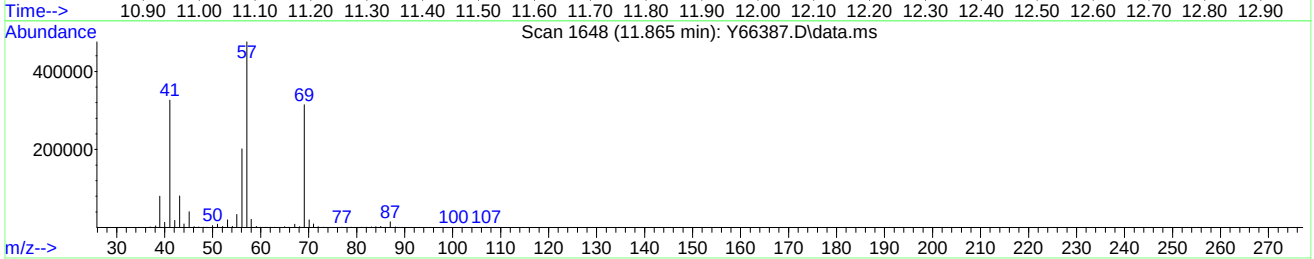
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	65.94
56.00	41.60	42.37
0.00	0.00	0.00

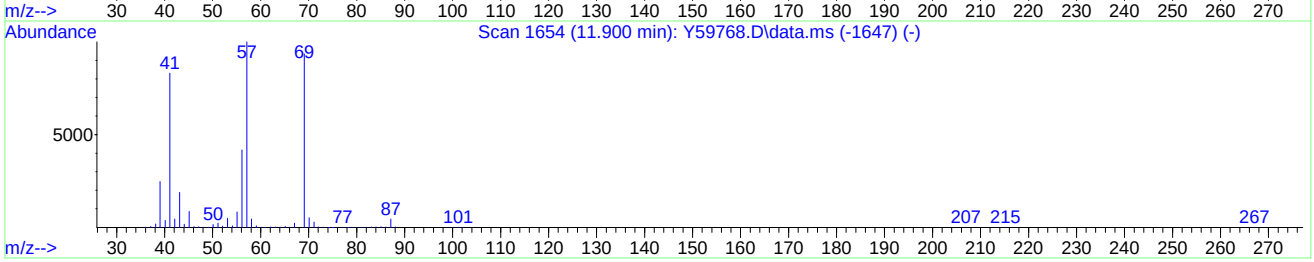
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:13:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration







TIC: Y66387.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.865min (-0.006) 663.73ug/L m

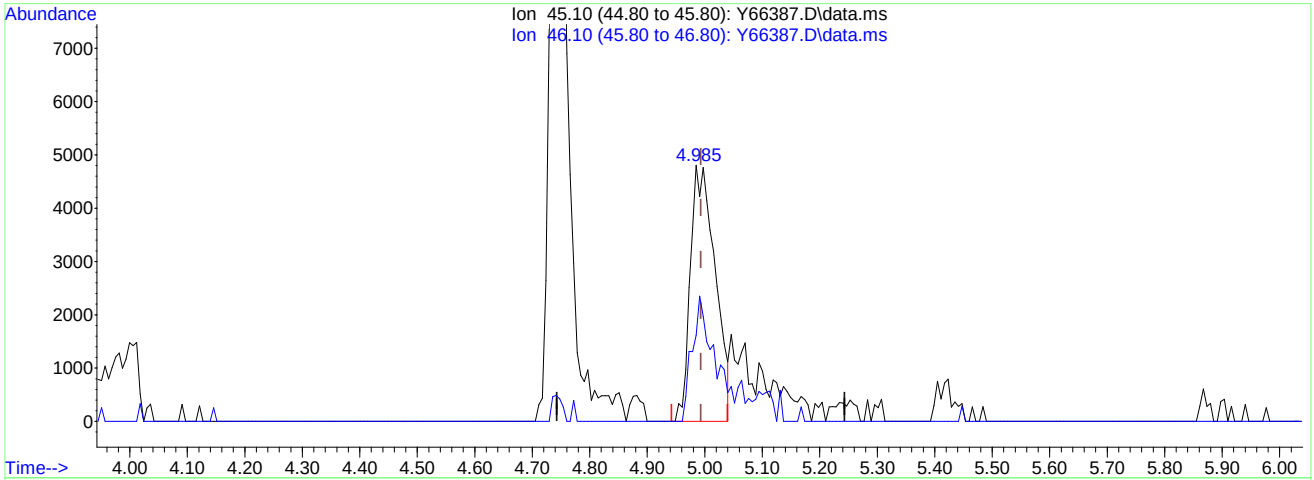
response 602311

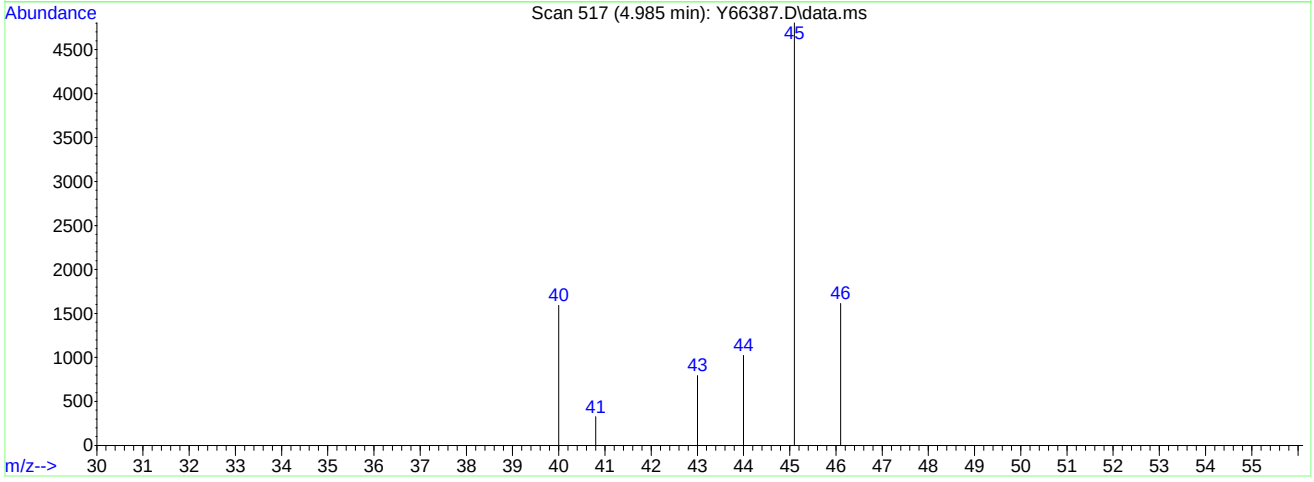
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	66.13
56.00	41.60	42.37
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:15:35 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66387.D\data.ms

(11) Ethanol

4.985min (-0.008) 115.99ug/L

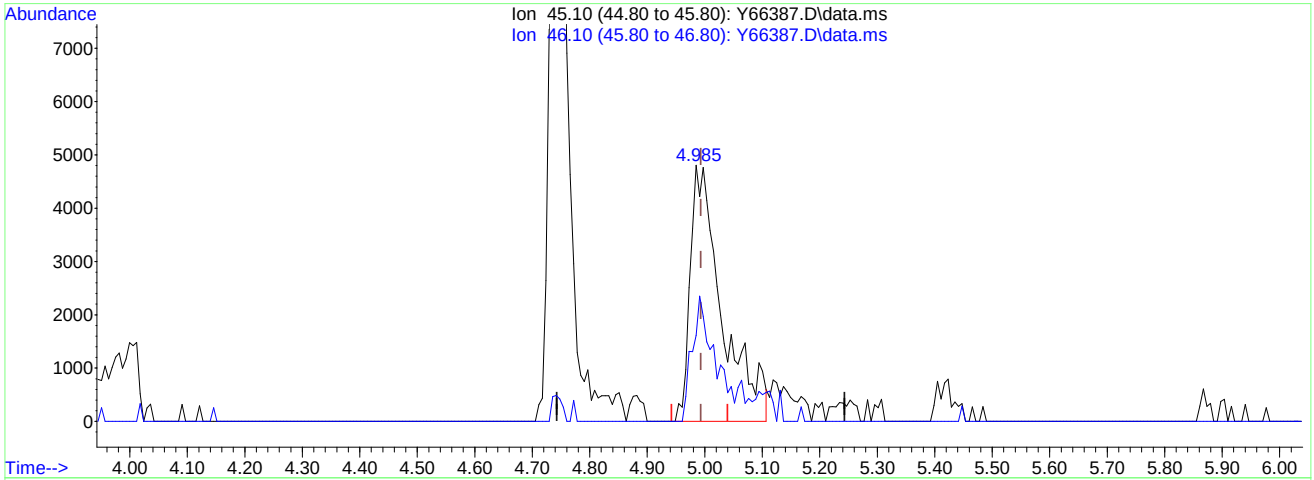
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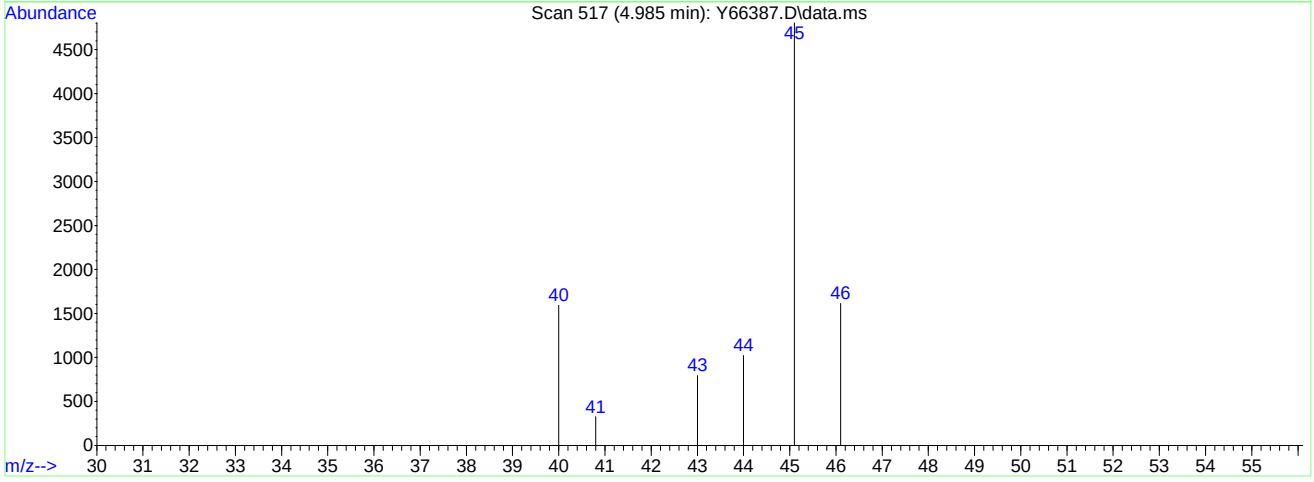
Ion	Exp%	Act%
45.10	100	100
46.10	42.20	33.57
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66387.D
Acq On : 2 Dec 2022 2:53 pm
Operator : joannel
Sample : IC2755-3 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 02 15:15:35 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66387.D\data.ms

(11) Ethanol

4.985min (-0.008) 148.75ug/L m

response 18497

Ion	Exp%	Act%
45.10	100	100
46.10	42.20	33.57
0.00	0.00	0.00
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:09:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.499	96	805735	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.151	117	585818	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.769	152	276929	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.598	113	170389	46.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.76%			
49) 1,2-Dichloroethane-d4	9.207	65	207575	49.07	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.14%			
63) Toluene-d8	10.934	98	770483	59.61	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 119.22%#			
86) 4-Bromofluorobenzene	13.009	174	215009	51.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	102500	17.32	ug/L	96
3) Acrolein	5.581	56	131321	134.24	ug/L	95
4) Chloromethane	3.178	50	139133	18.28	ug/L	98
5) 1,3-butadiene	3.342	39	105561	15.92	ug/L	90
6) Vinyl Chloride	3.312	62	121154	18.35	ug/L	100
7) Bromomethane	3.835	94	53820	17.01	ug/L	87
8) Chloroethane	4.030	64	56960	14.73	ug/L	91
9) Trichlorofluoromethane	4.249	101	124681	18.24	ug/L	96
10) Ethyl Ether	4.747	59	104624	20.19	ug/L	99
11) Ethanol	4.991	45	58673	462.38	ug/L	100
12) 1,2-Dichlorotrifluoroe...	5.045	67	121168	19.82	ug/L	98
13) 1,1-Dichloroethene	5.052	61	150929	19.52	ug/L	97
14) Freon 113	5.112	101	96042	19.53	ug/L	97
15) Carbon Disulfide	5.106	76	267645	20.27	ug/L	99
16) Iodomethane	5.277	142	79745	21.92	ug/L	98
17) Allyl chloride	5.788	41	127337	15.89	ug/L	98
18) Methylene Chloride	5.958	49	165014	18.92	ug/L	94
19) Acetone	6.037	43	295174	120.02	ug/L	97
20) Methyl acetate	6.226	43	646615	127.43	ug/L	97
21) trans-1,2-Dichloroethene	6.220	61	150767	19.73	ug/L	96
22) Hexane	6.329	56	79536m	20.45	ug/L	
23) Methyl Tert Butyl Ether	6.378	73	317926	21.24	ug/L	94
24) Tert Butyl Alcohol	6.530	59	315721	282.85	ug/L	96
25) Acetonitrile	6.779	41	232617	246.17	ug/L	100
26) Di-isopropyl ether	6.986	45	370109	19.51	ug/L	98
27) Chloroprene	7.175	53	117660	16.60	ug/L	97
28) 1,1-Dichloroethane	7.211	63	199679	20.20	ug/L	99
29) Acrylonitrile	7.296	53	287327	129.97	ug/L	98
30) ETBE	7.576	59	358813	20.57	ug/L	99
31) Vinyl acetate	7.601	43	1195846	105.57	ug/L	100
32) cis-1,2-Dichloroethene	8.032	96	120580	20.66	ug/L	93
33) 2,2-Dichloropropane	8.166	77	148162	20.53	ug/L	96
34) Bromochloromethane	8.294	128	51736	19.01	ug/L	97
35) Cyclohexane	8.294	56	198701	20.23	ug/L	98
36) Chloroform	8.379	83	184043	20.71	ug/L	96
37) Ethyl acetate	8.513	43	832077	117.16	ug/L	99
38) Tetrahydrofuran	8.586	42	72042	26.29	ug/L	92
40) Carbon Tetrachloride	8.556	117	119454	19.55	ug/L	98
41) 1,1,1-Trichloroethane	8.635	97	166458	21.12	ug/L	95
42) 2-Butanone	8.744	43	476697	114.69	ug/L	93
43) 1,1-Dichloropropene	8.781	75	150597	21.01	ug/L	93
44) tert-Butyl formate	8.896	59	344612	94.14	ug/L	95
45) Propionitrile	9.079	54	289436	235.68	ug/L	95
46) Methacrylonitrile	9.103	41	912470	195.71	ug/L	97
47) Benzene	9.061	78	485451	20.80	ug/L	98
48) TAME	9.164	73	314675	21.69	ug/L	97
50) Isobutyl Alcohol	9.273	42	146561	487.22	ug/L	99
51) 1,2-Dichloroethane	9.280	62	154302	20.48	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:09:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

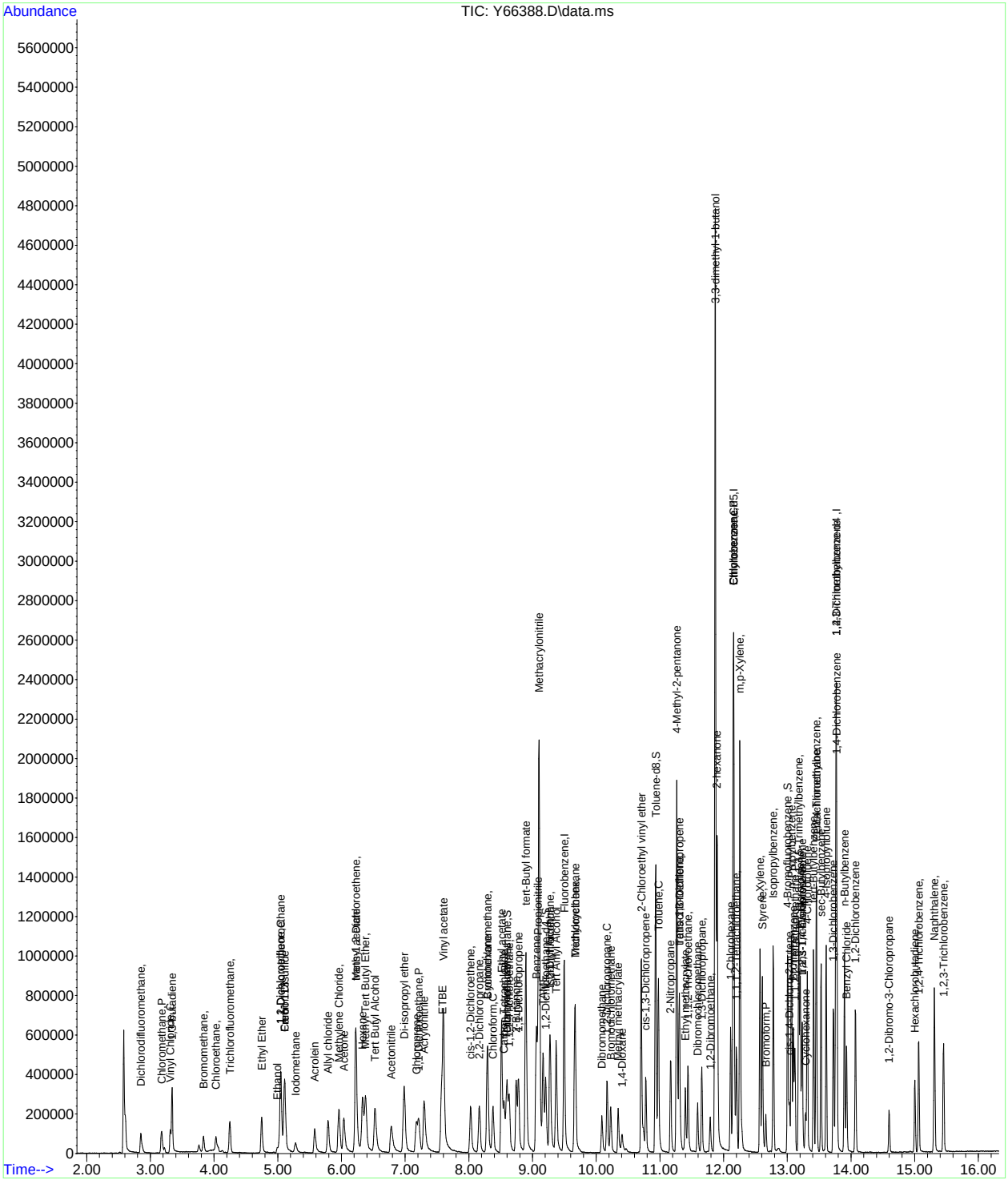
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) Tert Amyl Alcohol	9.371	59	273971m	284.64 ug/L	
53) Trichloroethene	9.675	95	114586	19.72 ug/L	92
54) Methylcyclohexane	9.663	83	174488	20.24 ug/L	98
55) Dibromomethane	10.089	93	66783	22.23 ug/L	96
56) 1,2-Dichloropropane	10.174	63	118757	20.12 ug/L	98
57) Bromodichloromethane	10.229	83	128709	21.76 ug/L	96
58) Methyl methacrylate	10.344	41	101976	19.98 ug/L	95
59) 1,4-Dioxane	10.405	88	64812	600.63 ug/L	93
60) 2-Chloroethyl vinyl ether	10.709	63	359094	104.94 ug/L	95
61) cis-1,3-Dichloropropene	10.776	75	165784	20.26 ug/L	95
64) Toluene	10.977	91	515717	27.60 ug/L	100
65) 2-Nitropropane	11.165	41	219630	174.50 ug/L	98
66) 4-Methyl-2-pentanone	11.263	43	953794	140.37 ug/L	98
67) trans-1,3-Dichloropropene	11.311	75	145668	28.48 ug/L	90
68) Tetrachloroethene	11.305	166	123893	26.65 ug/L	95
69) Ethyl methacrylate	11.397	69	141014	27.16 ug/L	99
70) 1,1,2-Trichloroethane	11.439	83	90044	29.51 ug/L	96
71) Dibromochloromethane	11.591	129	103892	27.59 ug/L	98
72) 1,3-Dichloropropane	11.658	76	195965	29.32 ug/L	92
73) 1,2-Dibromoethane	11.792	107	108094	27.98 ug/L	100
74) 3,3-dimethyl-1-butanol	11.871	57	1669335m	1637.87 ug/L	
75) 2-hexanone	11.895	43	759749	135.36 ug/L	97
76) 1-Chlorohexane	12.108	91	147272	28.32 ug/L	93
77) Ethylbenzene	12.157	91	573072	28.08 ug/L	97
78) Chlorobenzene	12.163	112	320383	26.91 ug/L	99
79) 1,1,1,2-Tetrachloroethane	12.200	131	105478	26.77 ug/L	97
80) m,p-Xylene	12.254	91	896869	56.44 ug/L	99
81) o-Xylene	12.571	91	443331	28.59 ug/L	97
82) Styrene	12.607	104	333930	26.46 ug/L	99
83) Bromoform	12.662	173	64232	31.27 ug/L	92
84) Isopropylbenzene	12.778	105	521726	26.99 ug/L	98
87) cis-1,4-Dichloro-2-butene	13.033	53	43337	30.74 ug/L	85
88) n-Propylbenzene	13.063	91	631789	30.54 ug/L	98
89) Bromobenzene	13.094	156	129640	29.86 ug/L	97
90) 1,1,2,2-Tetrachloroethane	13.118	83	167024	33.29 ug/L	97
91) 1,3,5-Trimethylbenzene	13.179	105	445189	29.76 ug/L	99
92) 2-Chlorotoluene	13.203	91	424488	30.86 ug/L	98
93) trans-1,4-Dichloro-2-B...	13.240	53	39987	34.50 ug/L	96
94) 1,2,3-Trichloropropane	13.234	110	56509	33.28 ug/L	90
95) Cyclohexanone	13.289	55	65084	193.80 ug/L	93
96) 4-Chlorotoluene	13.313	91	385286	30.50 ug/L	99
97) tert-Butylbenzene	13.410	91	230518	30.96 ug/L	97
98) 1,2,4-Trimethylbenzene	13.453	105	449689	29.78 ug/L	98
99) Pentachloroethane	13.465	167	53220	27.11 ug/L	88
100) sec-Butylbenzene	13.532	105	488644	29.14 ug/L	97
101) 4-Isopropyltoluene	13.611	119	430227	29.06 ug/L	98
102) 1,3-Dichlorobenzene	13.727	146	242212	30.57 ug/L	96
103) 1,2,3-Trimethylbenzene	13.763	105	448657	30.08 ug/L	98
104) 1,4-Dichlorobenzene	13.781	146	258347	30.66 ug/L	97
105) n-Butylbenzene	13.897	92	217565	30.20 ug/L	99
106) Benzyl Chloride	13.933	126	59555	30.94 ug/L	97
107) 1,2-Dichlorobenzene	14.073	146	231733	30.25 ug/L	97
108) 1,2-Dibromo-3-Chloropr...	14.596	75	36717	36.96 ug/L	92
109) Hexachlorobutadiene	15.004	225	50420	32.18 ug/L	86
110) 1,2,4-Trichlorobenzene	15.065	180	146825	30.96 ug/L	97
111) Naphthalene	15.308	128	543734	32.40 ug/L	100
112) 1,2,3-Trichlorobenzene	15.454	180	143896	31.19 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:09:49 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

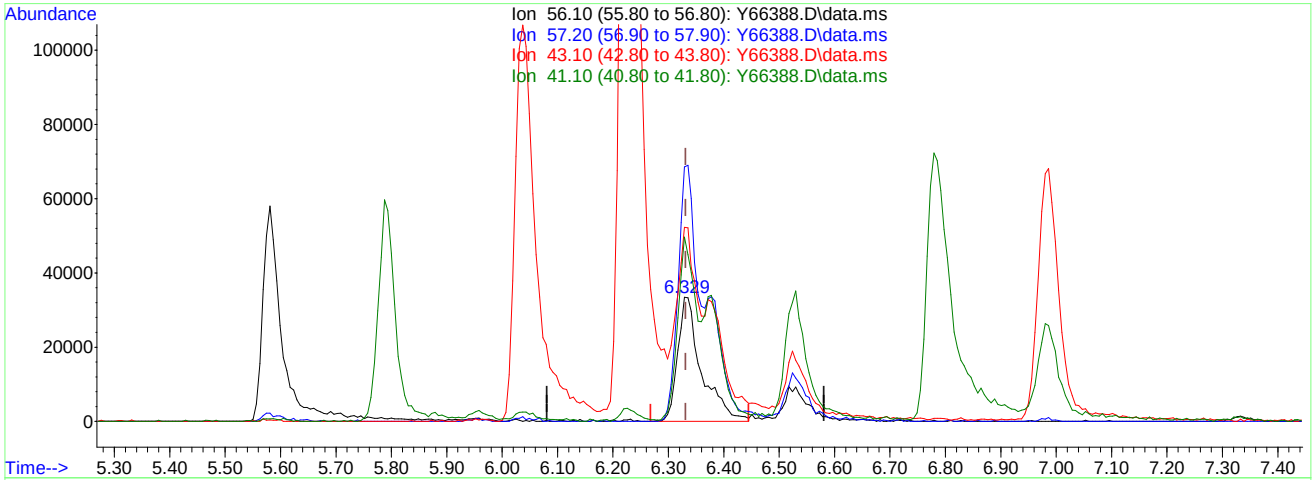
Sample Number: VY2755-IC2755
Lab FileID: Y66388.D
Injection Time: 12/02/22 15:17
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

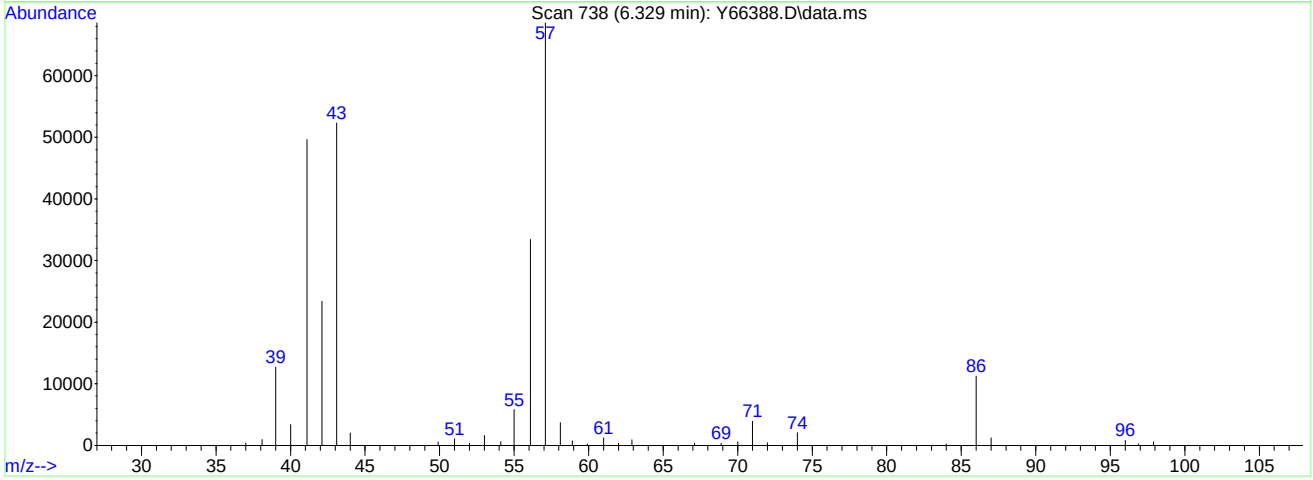
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(22) Hexane

6.329min (-0.002) 25.76ug/L

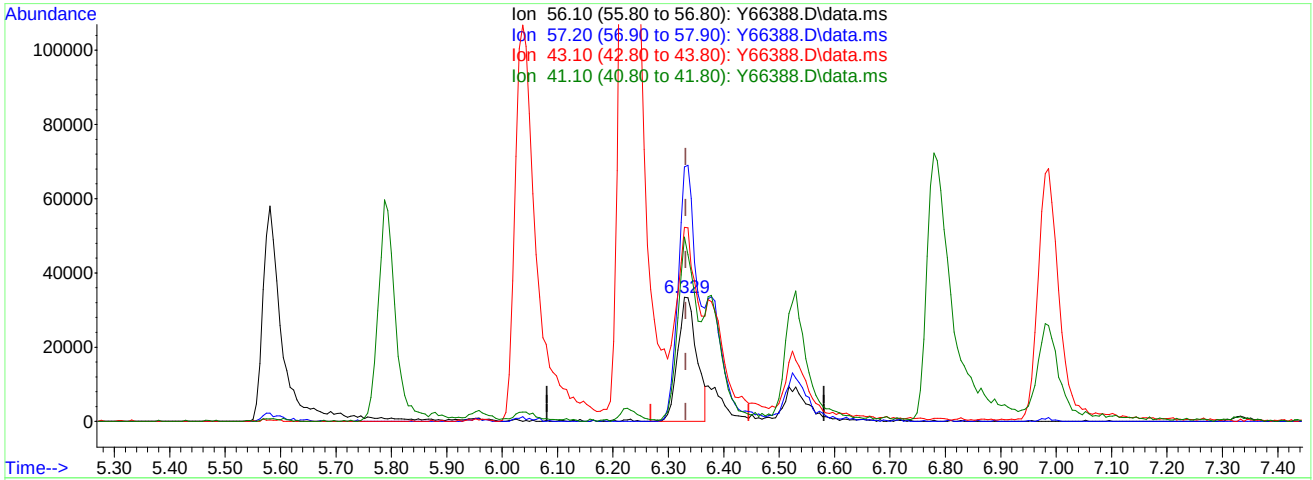
response 99996

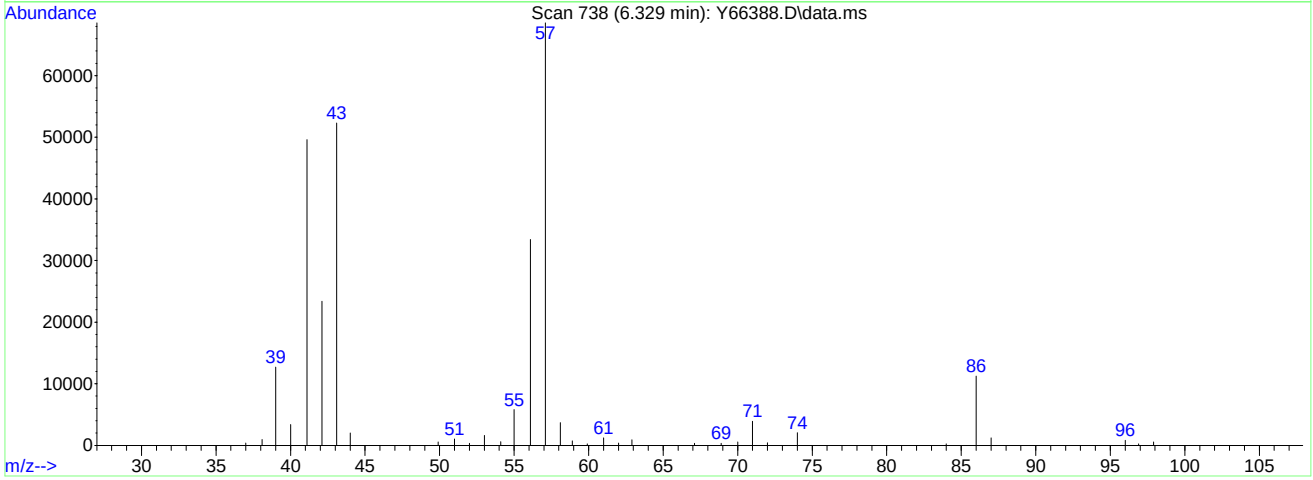
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	205.22
43.10	144.00	141.81
41.10	140.20	146.98

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(22) Hexane

6.329min (-0.002) 20.45ug/L m

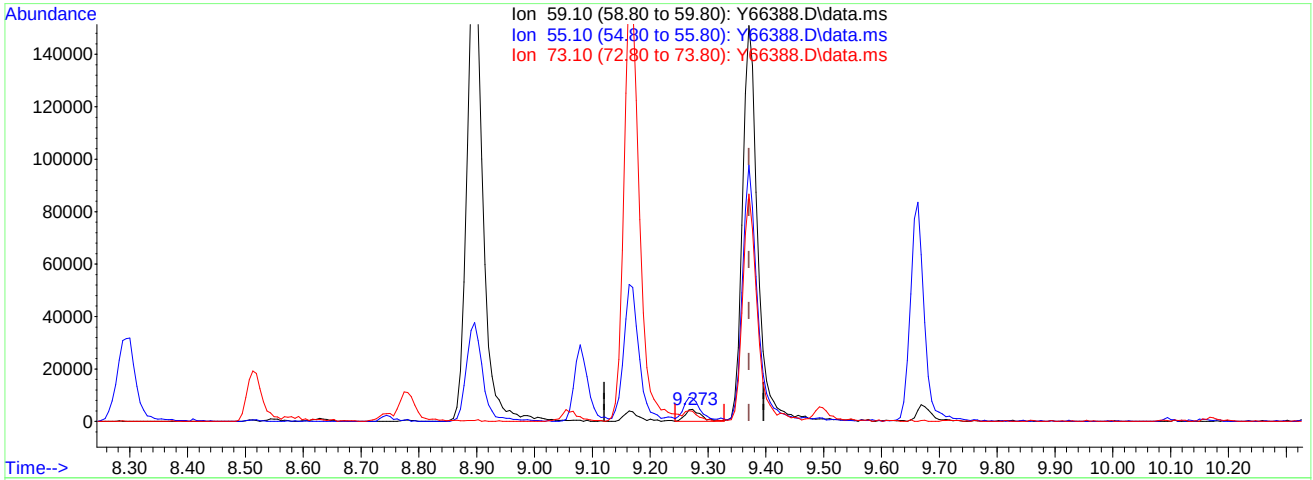
response 79536

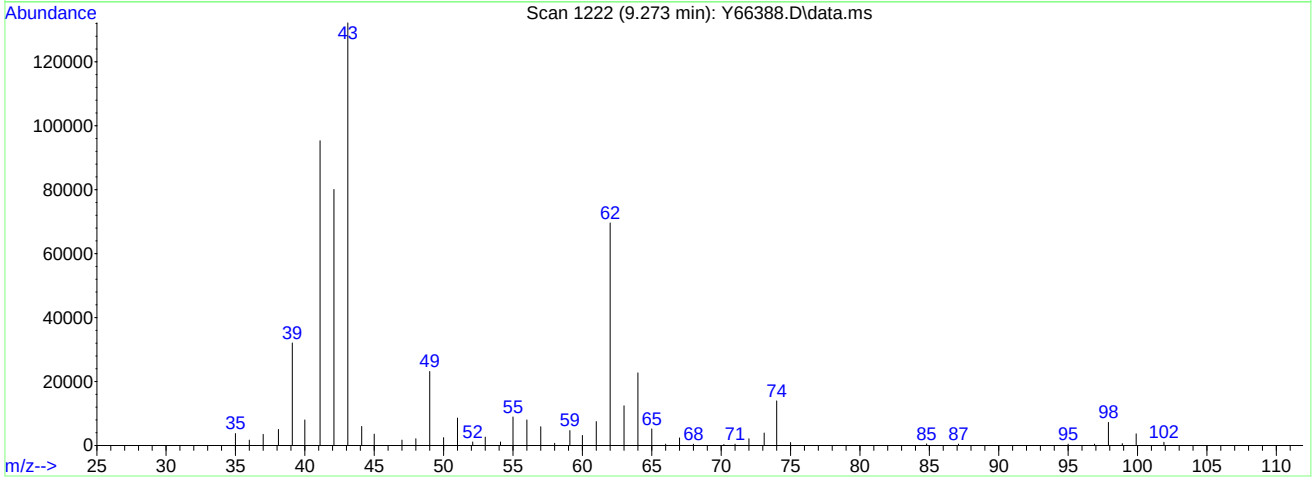
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	205.22
43.10	144.00	156.49
41.10	140.20	148.47

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(52) Tert Amyl Alcohol

9.273min (-0.098) 10.71ug/L

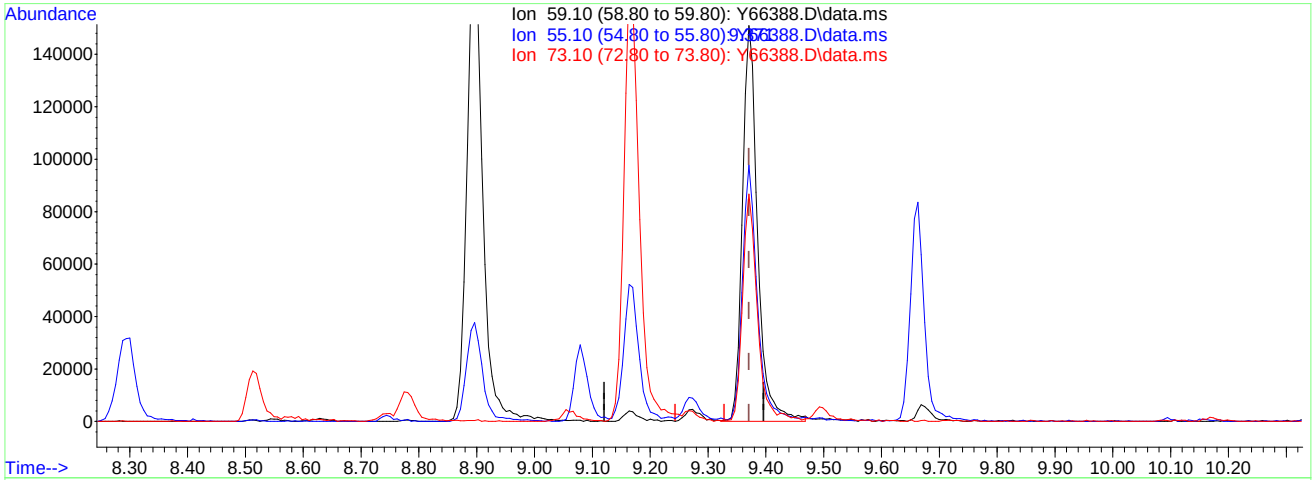
response 9000

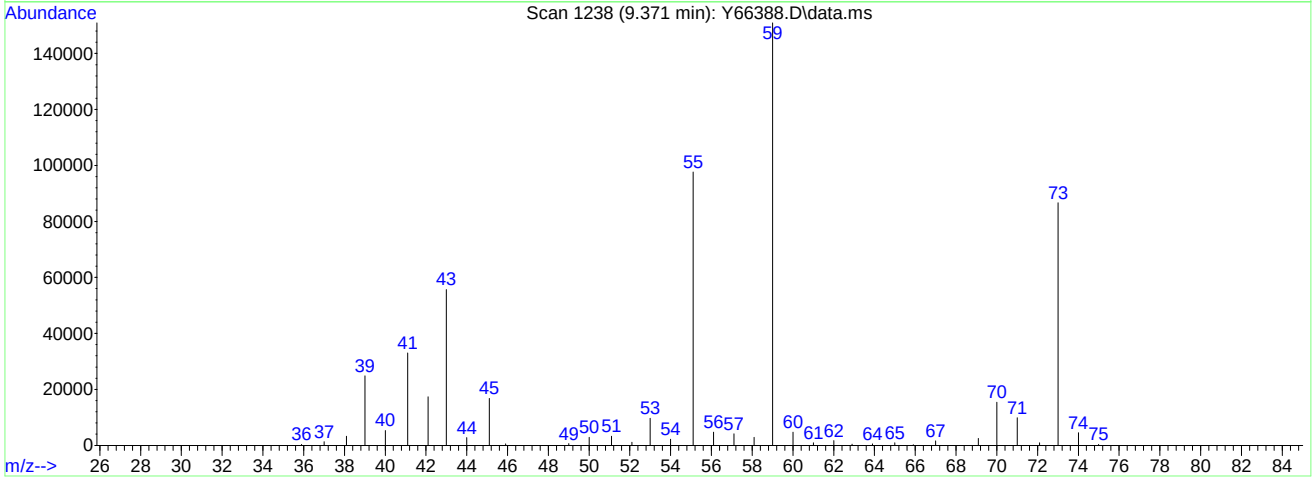
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	173.61#
73.10	51.70	69.76
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(52) Tert Amyl Alcohol

9.371min (-0.000) 284.64ug/L m

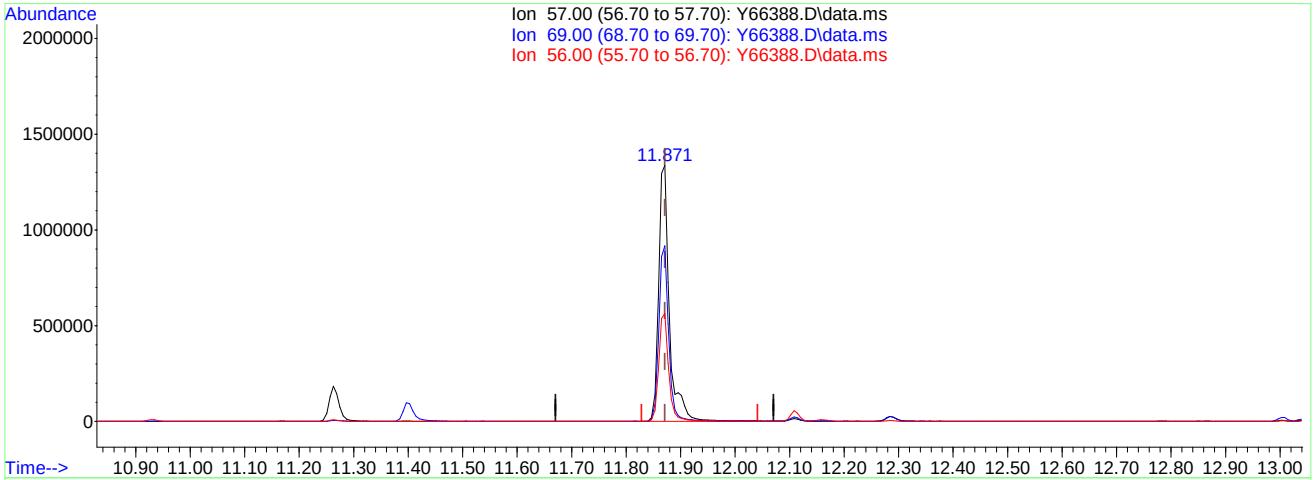
response 273971

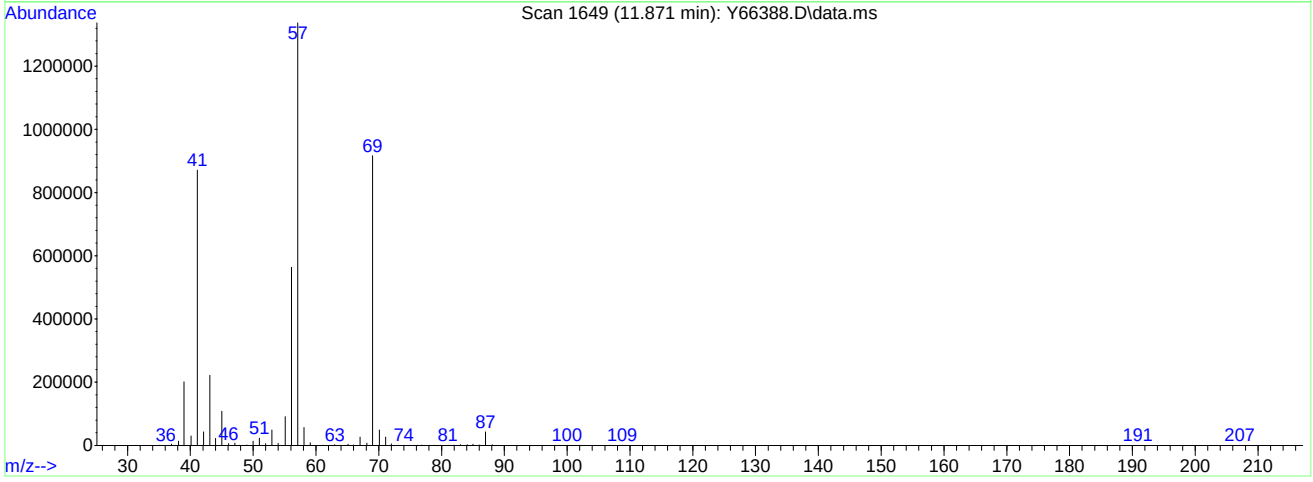
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	64.69
73.10	51.70	57.40
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.871min (+0.000) 1805.15ug/L

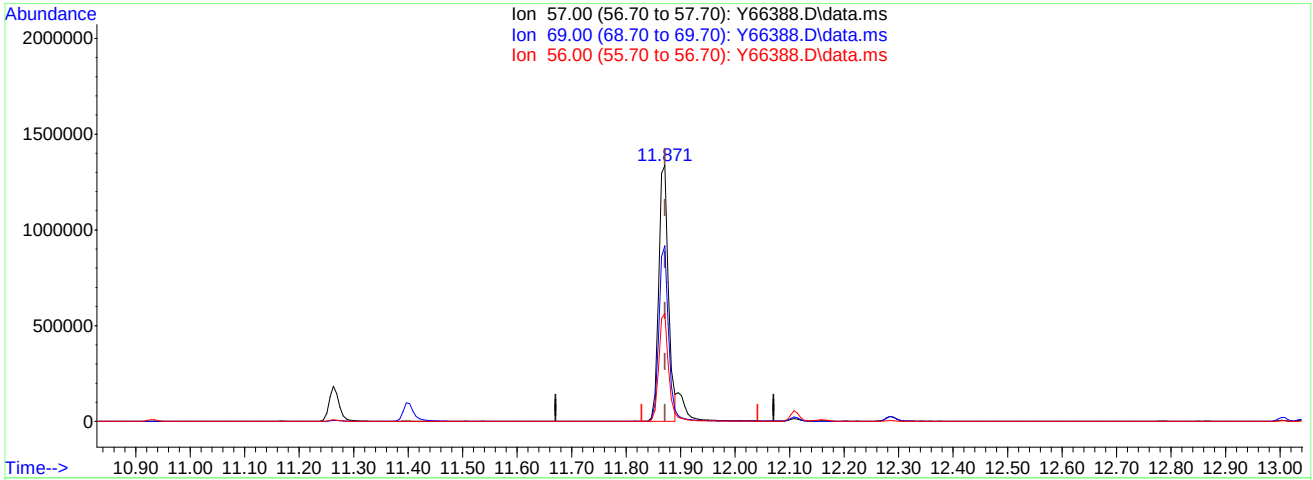
response 1867598

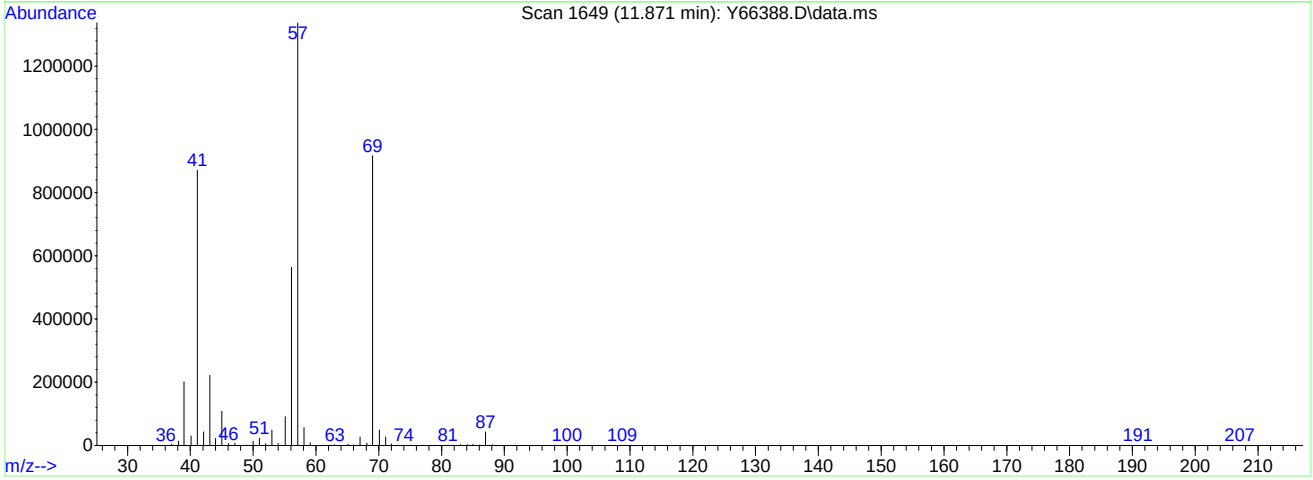
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	68.48
56.00	41.60	42.14
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66388.D
Acq On : 2 Dec 2022 3:17 pm
Operator : joannel
Sample : IC2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 02 16:08:41 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66388.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.871min (+0.000) 1637.87ug/L m

response 1669335

Ion	Exp%	Act%
57.00	100	100
69.00	63.20	68.53
56.00	41.60	42.14
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:11:20 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.497	96	895867	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.150	117	655308	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.768	152	313280	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.597	113	186806	45.73	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 91.46%			
49) 1,2-Dichloroethane-d4	9.205	65	236158	50.21	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.42%			
63) Toluene-d8	10.933	98	850780	58.84	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 117.68%#			
86) 4-Bromofluorobenzene	13.008	174	236212	50.22	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.848	85	170548	25.92	ug/L	100
3) Acrolein	5.580	56	227637	206.43	ug/L	90
4) Chloromethane	3.177	50	231242	27.32	ug/L	99
5) 1,3-butadiene	3.341	39	191646	26.51	ug/L	92
6) Vinyl Chloride	3.310	62	202183	27.54	ug/L	98
7) Bromomethane	3.834	94	95563	27.04	ug/L	93
8) Chloroethane	4.028	64	88842	21.15	ug/L	93
9) Trichlorofluoromethane	4.241	101	202063	26.59	ug/L	93
10) Ethyl Ether	4.746	59	162868	28.19	ug/L	95
11) Ethanol	5.002	45	108341	767.89	ug/L	98
12) 1,2-Dichlorotrifluoroe...	5.038	67	180322	26.57	ug/L	98
13) 1,1-Dichloroethene	5.050	61	224312	26.11	ug/L	94
14) Freon 113	5.111	101	141319	25.93	ug/L	95
15) Carbon Disulfide	5.099	76	411265	27.83	ug/L	97
16) Iodomethane	5.282	142	137699	32.67	ug/L	98
17) Allyl chloride	5.786	41	248006	27.83	ug/L	100
18) Methylene Chloride	5.957	49	252154	26.34	ug/L	94
19) Acetone	6.036	43	536690	196.27	ug/L	98
20) Methyl acetate	6.224	43	1030462	182.65	ug/L	99
21) trans-1,2-Dichloroethene	6.218	61	233888	27.54	ug/L	96
22) Hexane	6.334	56	106037m	24.55	ug/L	
23) Methyl Tert Butyl Ether	6.377	73	510947	30.52	ug/L	97
24) Tert Butyl Alcohol	6.535	59	531758	410.40	ug/L	96
25) Acetonitrile	6.778	41	437202	406.57	ug/L	96
26) Di-isopropyl ether	6.985	45	591161	27.94	ug/L	98
27) Chloroprene	7.173	53	225567	28.62	ug/L	97
28) 1,1-Dichloroethane	7.210	63	309720	28.21	ug/L	98
29) Acrylonitrile	7.295	53	526481	204.85	ug/L	95
30) ETBE	7.575	59	571989	29.15	ug/L	99
31) Vinyl acetate	7.599	43	2184998	166.74	ug/L	99
32) cis-1,2-Dichloroethene	8.025	96	189086	29.21	ug/L	96
33) 2,2-Dichloropropane	8.165	77	230157	28.62	ug/L	96
34) Bromochloromethane	8.287	128	80216	26.80	ug/L	98
35) Cyclohexane	8.293	56	285331	26.14	ug/L	98
36) Chloroform	8.378	83	285980	29.01	ug/L	98
37) Ethyl acetate	8.512	43	1488071	183.57	ug/L	99
38) Tetrahydrofuran	8.585	42	113958	37.12	ug/L	95
40) Carbon Tetrachloride	8.554	117	178336	26.28	ug/L	96
41) 1,1,1-Trichloroethane	8.634	97	246738	28.23	ug/L	98
42) 2-Butanone	8.743	43	882941	190.14	ug/L	95
43) 1,1-Dichloropropene	8.780	75	229849	28.91	ug/L	93
44) tert-Butyl formate	8.895	59	585707	141.81	ug/L	99
45) Propionitrile	9.078	54	557536	408.31	ug/L	91
46) Methacrylonitrile	9.102	41	1789331	345.18	ug/L	98
47) Benzene	9.059	78	729831	28.16	ug/L	99
48) TAME	9.169	73	504227	30.80	ug/L	98
50) Isobutyl Alcohol	9.272	42	315391	870.15	ug/L	98
51) 1,2-Dichloroethane	9.278	62	253077	30.07	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:11:20 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

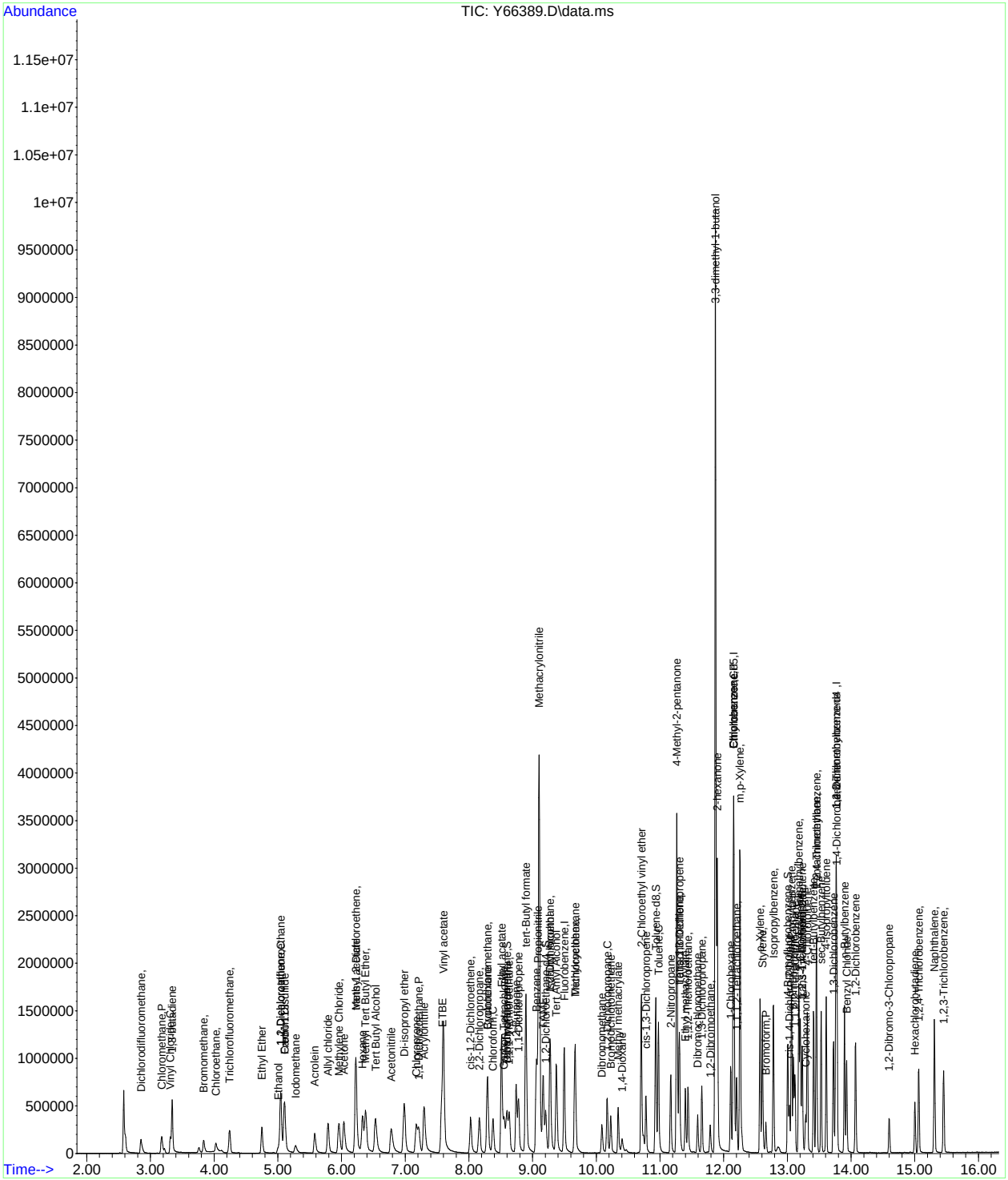
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
52) Tert Amyl Alcohol	9.370	59	474797m	417.87 ug/L		
53) Trichloroethene	9.674	95	184960	28.75 ug/L		95
54) Methylcyclohexane	9.662	83	251484	26.26 ug/L		95
55) Dibromomethane	10.087	93	101578	30.39 ug/L		99
56) 1,2-Dichloropropane	10.173	63	190431	29.03 ug/L		97
57) Bromodichloromethane	10.227	83	200752	30.29 ug/L		96
58) Methyl methacrylate	10.343	41	202317	34.19 ug/L		93
59) 1,4-Dioxane	10.404	88	105140	861.48 ug/L		93
60) 2-Chloroethyl vinyl ether	10.708	63	584815	153.00 ug/L		94
61) cis-1,3-Dichloropropene	10.781	75	265957	29.23 ug/L		94
64) Toluene	10.976	91	801375	38.26 ug/L		100
65) 2-Nitropropane	11.170	41	369123	247.14 ug/L		94
66) 4-Methyl-2-pentanone	11.262	43	1791345	235.67 ug/L		98
67) trans-1,3-Dichloropropene	11.310	75	239013	41.77 ug/L		92
68) Tetrachloroethene	11.304	166	191594	37.12 ug/L		97
69) Ethyl methacrylate	11.402	69	277171	45.19 ug/L		91
70) 1,1,2-Trichloroethane	11.438	83	139511	40.64 ug/L		94
71) Dibromochloromethane	11.590	129	162359	38.55 ug/L		96
72) 1,3-Dichloropropane	11.657	76	302511	40.25 ug/L		96
73) 1,2-Dibromoethane	11.791	107	170090	39.36 ug/L		98
74) 3,3-dimethyl-1-butanol	11.870	57	3246577m	2616.56 ug/L		
75) 2-hexanone	11.900	43	1471438	211.30 ug/L		96
76) 1-Chlorohexane	12.107	91	221812	37.81 ug/L		96
77) Ethylbenzene	12.156	91	918054	39.56 ug/L		94
78) Chlorobenzene	12.162	112	501507	37.37 ug/L		94
79) 1,1,1,2-Tetrachloroethane	12.205	131	164186	37.25 ug/L		95
80) m,p-Xylene	12.253	91	1428626	78.61 ug/L		97
81) o-Xylene	12.570	91	692477	39.30 ug/L		98
82) Styrene	12.606	104	554025	39.24 ug/L		99
83) Bromoform	12.661	173	105890	43.73 ug/L		97
84) Isopropylbenzene	12.782	105	800950	36.55 ug/L		99
87) cis-1,4-Dichloro-2-butene	13.032	53	81437	48.08 ug/L	#	77
88) n-Propylbenzene	13.062	91	971749	41.06 ug/L		99
89) Bromobenzene	13.093	156	208130	42.38 ug/L		91
90) 1,1,2,2-Tetrachloroethane	13.117	83	275993	47.32 ug/L		99
91) 1,3,5-Trimethylbenzene	13.178	105	688323	40.27 ug/L		97
92) 2-Chlorotoluene	13.202	91	665876	42.35 ug/L		99
93) trans-1,4-Dichloro-2-B...	13.239	53	69069	49.47 ug/L	#	84
94) 1,2,3-Trichloropropane	13.233	110	91687	47.18 ug/L		93
95) Cyclohexanone	13.287	55	126459	311.70 ug/L		93
96) 4-Chlorotoluene	13.312	91	616885	42.58 ug/L		99
97) tert-Butylbenzene	13.409	91	346870	40.94 ug/L		99
98) 1,2,4-Trimethylbenzene	13.452	105	701348	40.55 ug/L		98
99) Pentachloroethane	13.464	167	102536	46.18 ug/L		97
100) sec-Butylbenzene	13.531	105	744717	38.98 ug/L		99
101) 4-Isopropyltoluene	13.610	119	665113	39.31 ug/L		98
102) 1,3-Dichlorobenzene	13.725	146	377911	41.86 ug/L		98
103) 1,2,3-Trimethylbenzene	13.762	105	708493	41.37 ug/L		96
104) 1,4-Dichlorobenzene	13.780	146	397128	41.42 ug/L		98
105) n-Butylbenzene	13.896	92	333188	40.61 ug/L		99
106) Benzyl Chloride	13.932	126	109037	46.31 ug/L	#	82
107) 1,2-Dichlorobenzene	14.072	146	373717	42.54 ug/L		97
108) 1,2-Dibromo-3-Chloropr...	14.595	75	65935	55.60 ug/L		94
109) Hexachlorobutadiene	15.003	225	72139	41.00 ug/L		87
110) 1,2,4-Trichlorobenzene	15.064	180	228743	42.63 ug/L		96
111) Naphthalene	15.307	128	882498	45.58 ug/L		100
112) 1,2,3-Trichlorobenzene	15.453	180	215603	41.51 ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:11:20 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

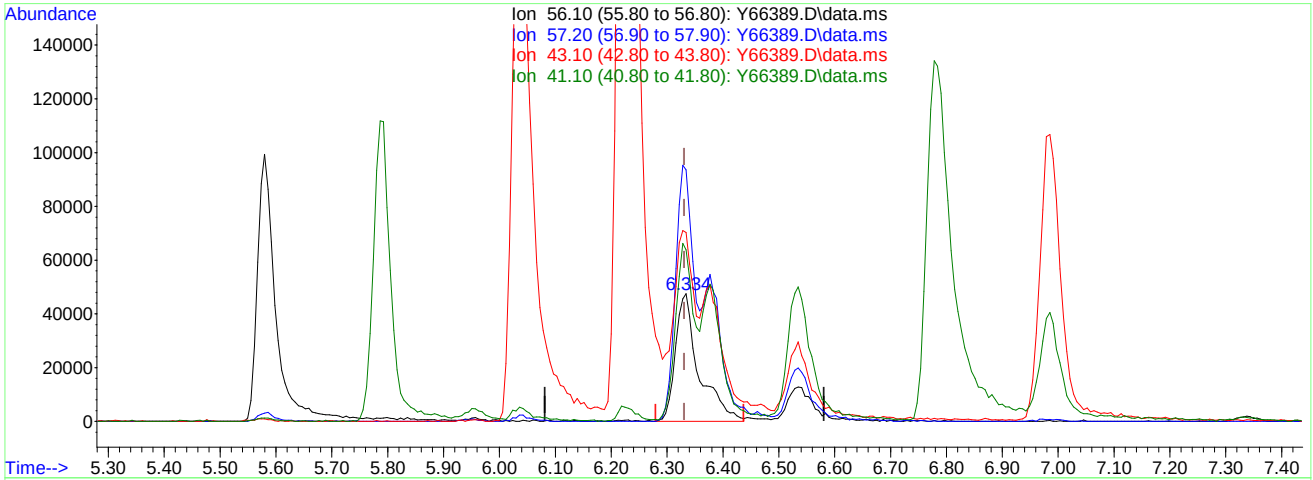
Sample Number: VY2755-ICC2755
Lab FileID: Y66389.D
Injection Time: 12/02/22 15:41
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

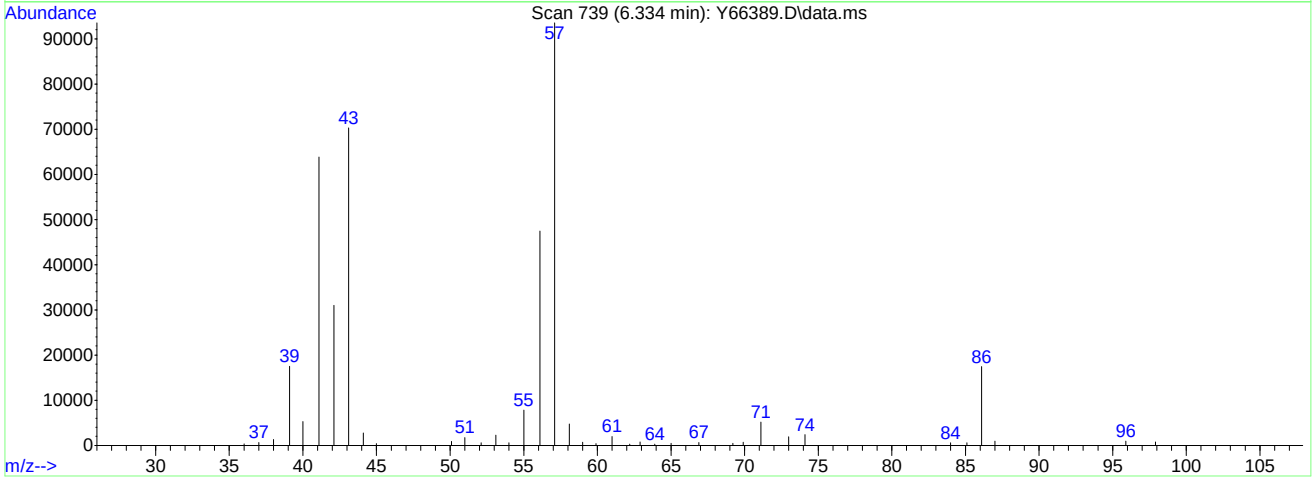
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(22) Hexane

6.334min (+0.003) 32.38ug/L

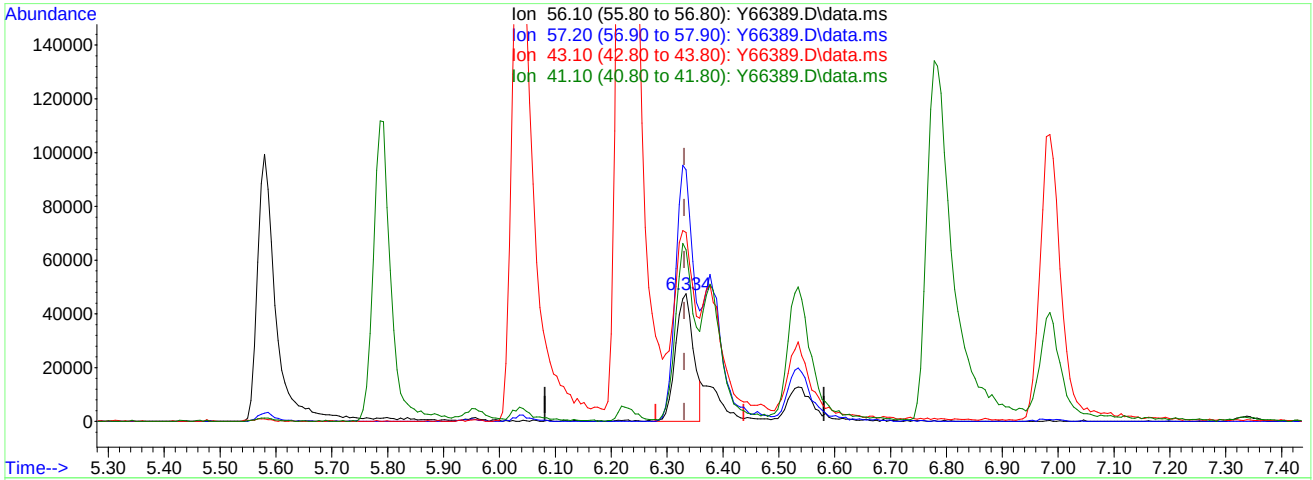
response 139465

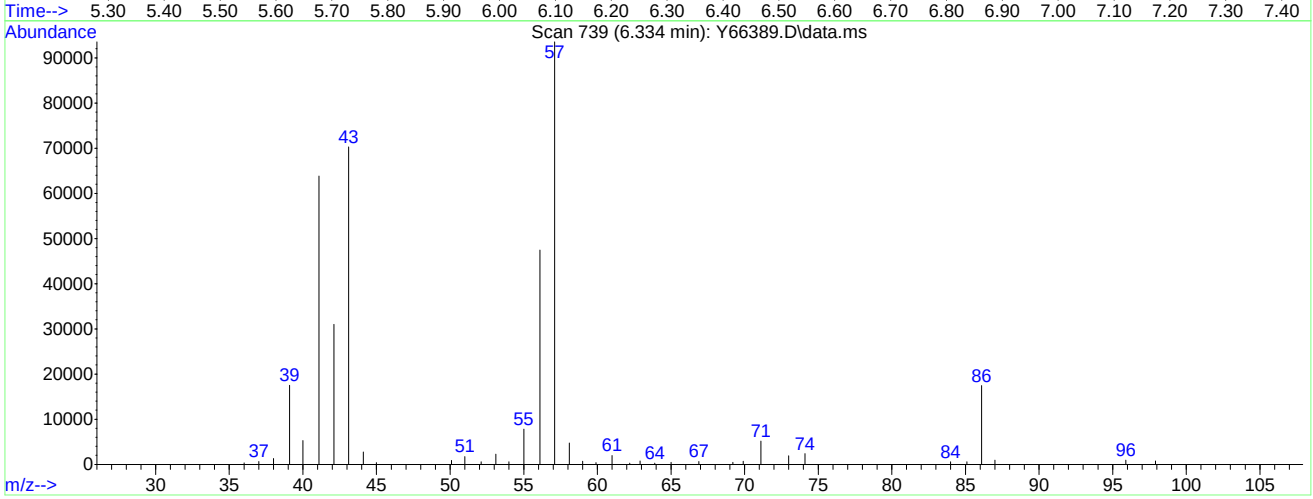
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	197.08
43.10	144.00	132.78
41.10	140.20	132.96

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(22) Hexane

6.334min (+0.003) 24.55ug/L m

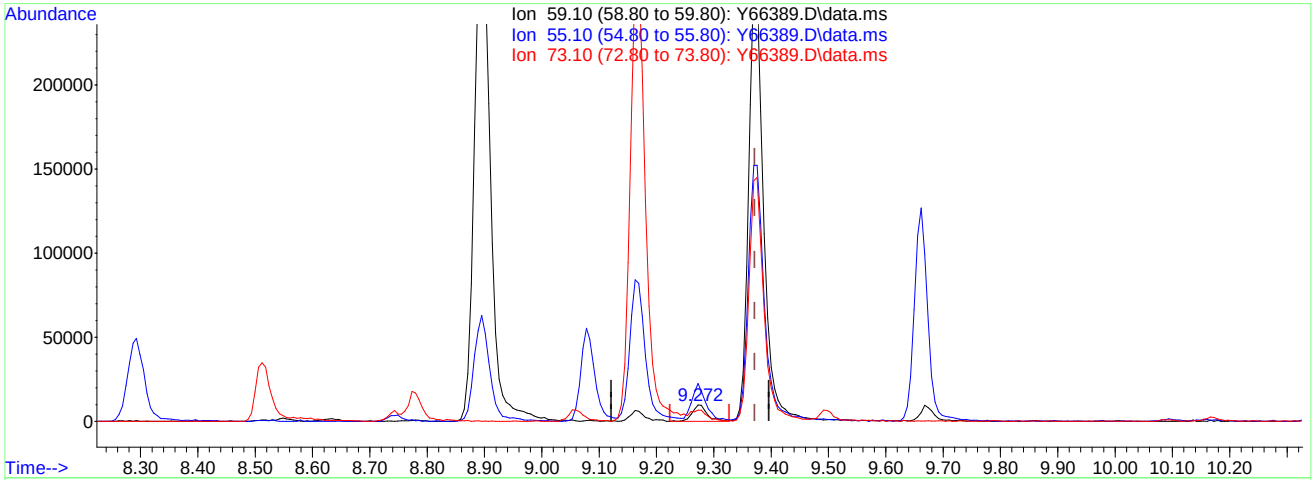
response 106037

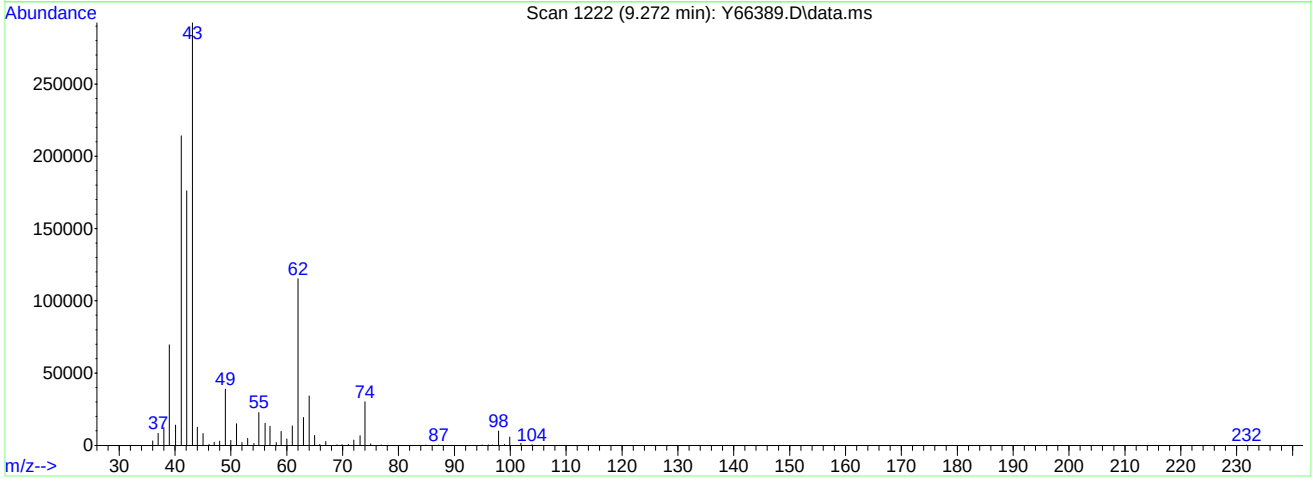
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	197.08
43.10	144.00	148.01
41.10	140.20	134.46

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(52) Tert Amyl Alcohol

9.272min (-0.099) 19.29ug/L

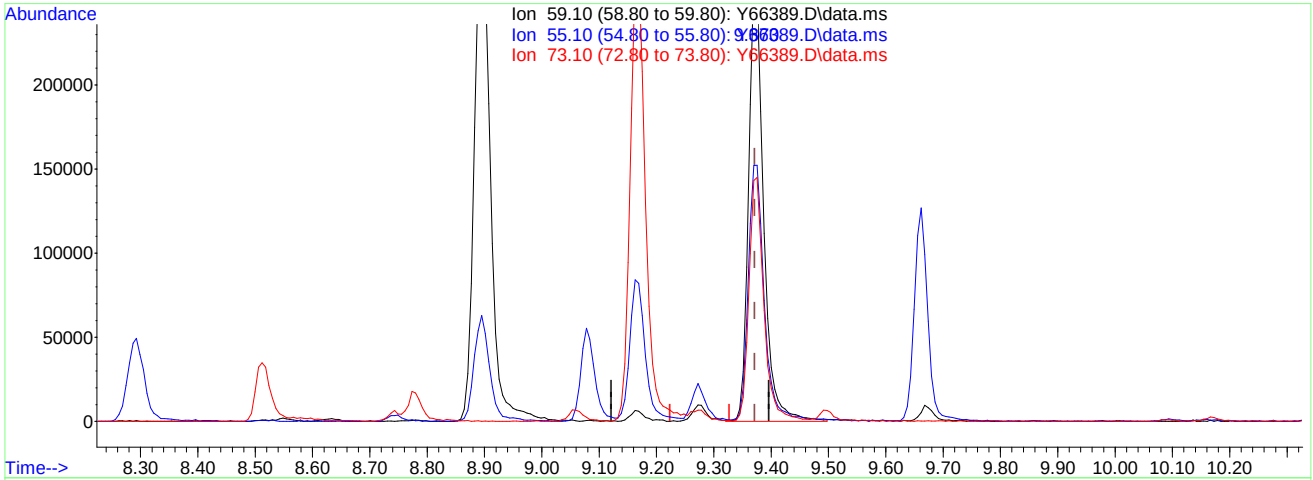
response 18103

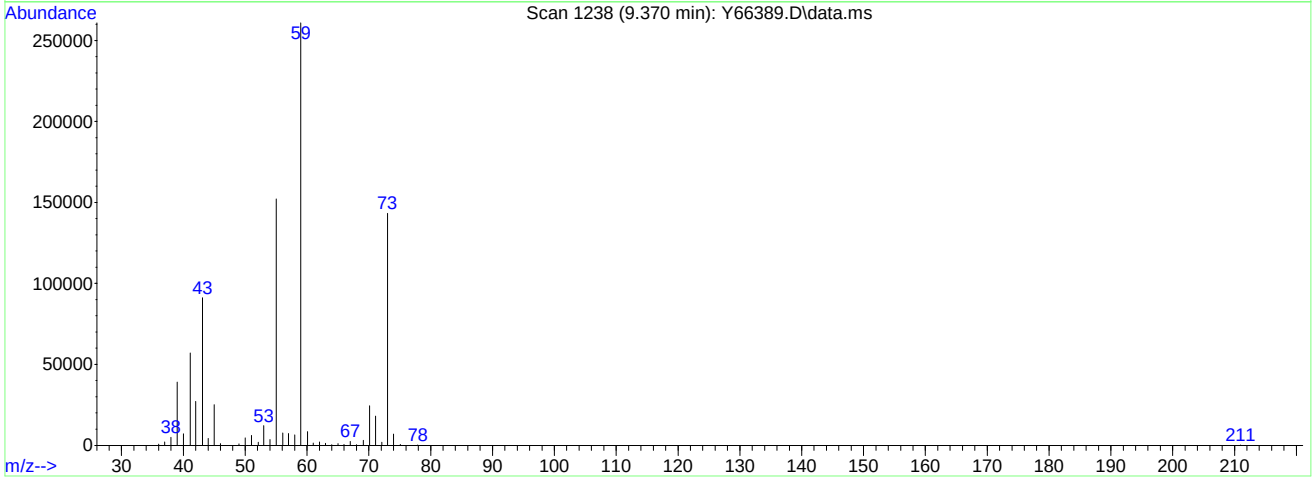
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	222.55#
73.10	51.70	64.46
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(52) Tert Amyl Alcohol

9.370min (-0.001) 417.87ug/L m

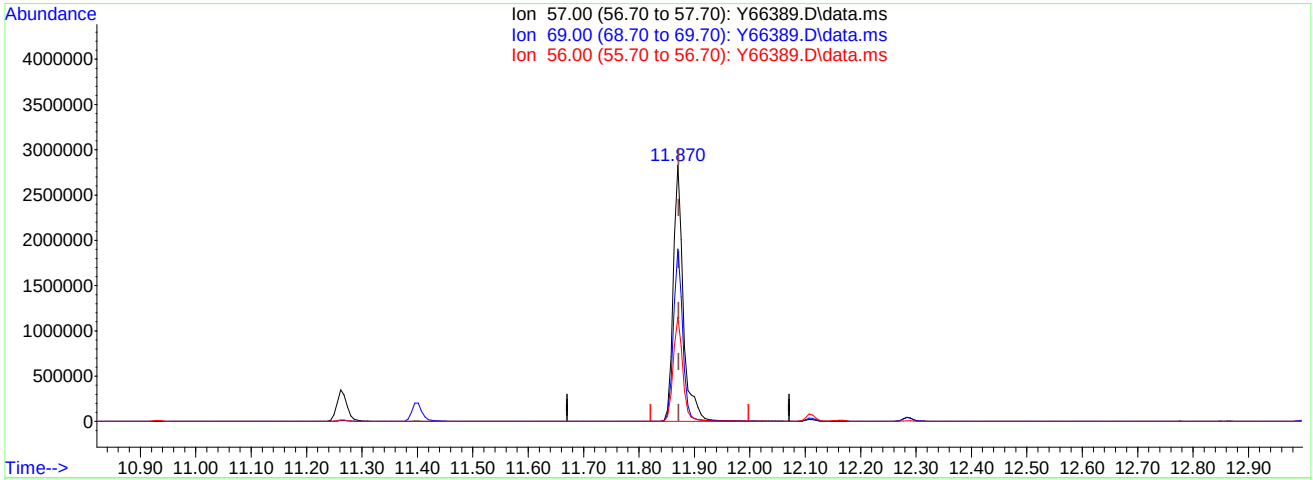
response 474797

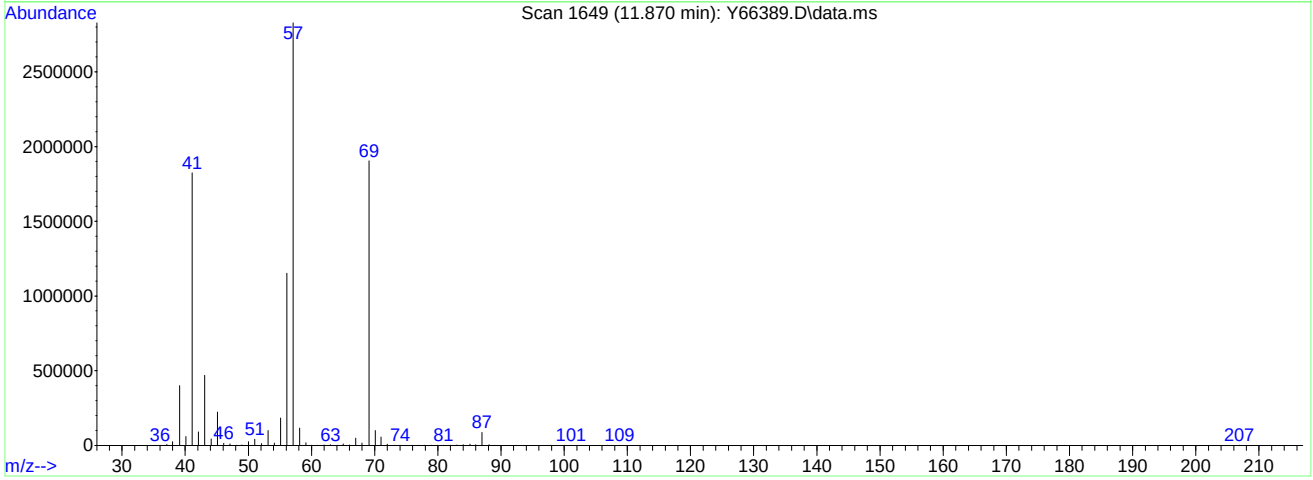
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	58.28
73.10	51.70	54.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (-0.001) 2841.60ug/L

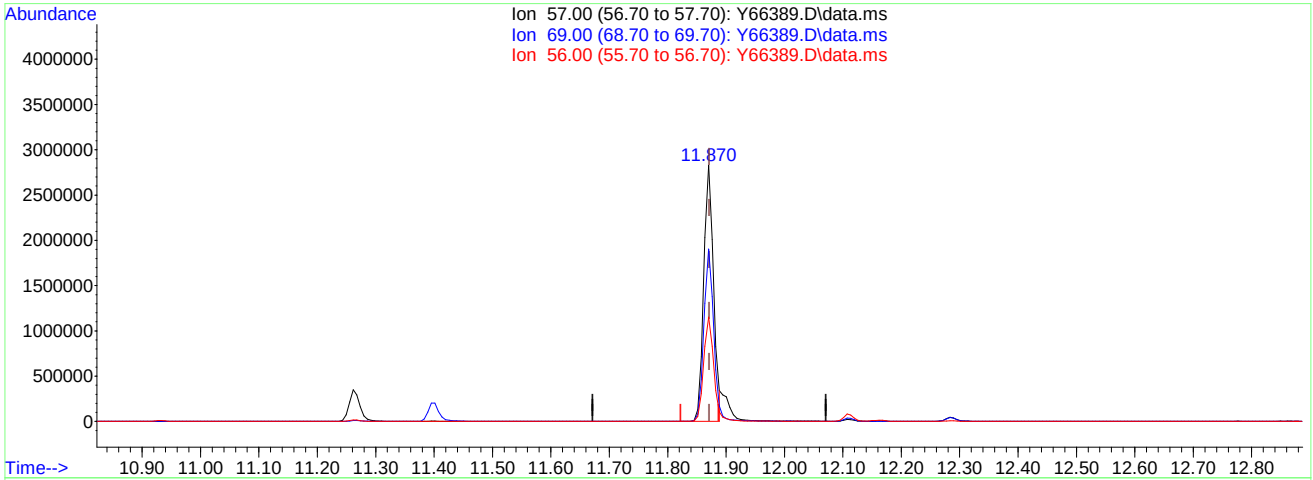
response 3591576

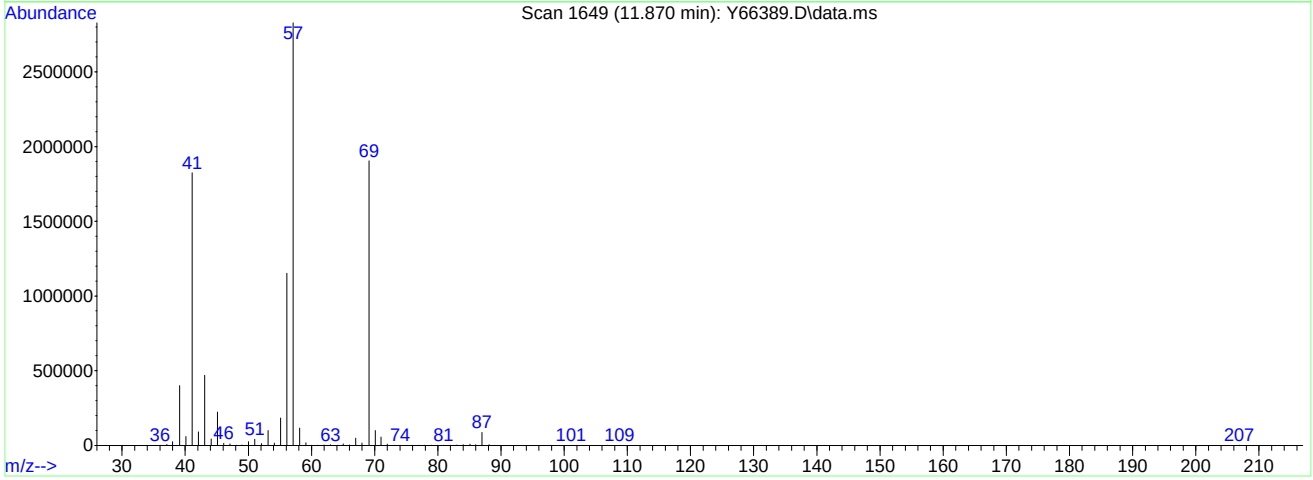
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	67.29
56.00	41.60	40.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66389.D
Acq On : 2 Dec 2022 3:41 pm
Operator : joannel
Sample : ICC2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 02 16:08:43 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66389.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (-0.001) 2616.56ug/L m

response 3246577

Ion	Exp%	Act%
57.00	100	100
69.00	63.20	67.33
56.00	41.60	40.72
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:22:05 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.499	96	983531	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.151	117	734948	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.770	152	360700	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.599	113	203971	45.49	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 90.98%			
49) 1,2-Dichloroethane-d4	9.207	65	263264	50.99	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.98%			
63) Toluene-d8	10.935	98	925555	57.08	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 114.16%#			
86) 4-Bromofluorobenzene	13.009	174	269175	49.71	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.42%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.850	85	336856	46.63	ug/L	98
3) Acrolein	5.581	56	447983	359.63	ug/L	97
4) Chloromethane	3.178	50	452026	48.65	ug/L	97
5) 1,3-butadiene	3.342	39	350530	45.83	ug/L	94
6) Vinyl Chloride	3.312	62	402821	49.97	ug/L	98
7) Bromomethane	3.835	94	195198	49.82	ug/L	94
8) Chloroethane	4.030	64	167478	38.87	ug/L	91
9) Trichlorofluoromethane	4.237	101	442135	52.99	ug/L	98
10) Ethyl Ether	4.760	59	314407	49.17	ug/L	94
11) Ethanol	5.028	45	221343	1428.98	ug/L	99
12) 1,2-Dichlorotrifluoroe...	5.046	67	351921	47.42	ug/L	97
13) 1,1-Dichloroethene	5.046	61	458574	48.74	ug/L	98
14) Freon 113	5.107	101	282814	47.81	ug/L	98
15) Carbon Disulfide	5.095	76	847989	51.24	ug/L	99
16) Iodomethane	5.277	142	283598	56.32	ug/L	99
17) Allyl chloride	5.788	41	488518	49.93	ug/L	98
18) Methylene Chloride	5.958	49	480347	47.44	ug/L	95
19) Acetone	6.037	43	985309	328.21	ug/L	99
20) Methyl acetate	6.226	43	2042462	329.75	ug/L	99
21) trans-1,2-Dichloroethene	6.214	61	461173	49.50	ug/L	95
22) Hexane	6.329	56	218236m	46.39	ug/L	
23) Methyl Tert Butyl Ether	6.378	73	998641	53.50	ug/L	99
24) Tert Butyl Alcohol	6.548	59	1082826	695.62	ug/L	95
25) Acetonitrile	6.786	41	846868	689.46	ug/L	99
26) Di-isopropyl ether	6.986	45	1163262	49.68	ug/L	99
27) Chloroprene	7.175	53	434253	50.19	ug/L	97
28) 1,1-Dichloroethane	7.212	63	614364	51.06	ug/L	99
29) Acrylonitrile	7.297	53	1003655	331.32	ug/L	100
30) ETBE	7.577	59	1135829	51.20	ug/L	98
31) Vinyl acetate	7.601	43	4350576	281.81	ug/L	99
32) cis-1,2-Dichloroethene	8.027	96	364169	51.55	ug/L	98
33) 2,2-Dichloropropane	8.167	77	459899	51.81	ug/L	96
34) Bromochloromethane	8.288	128	151430	47.40	ug/L	97
35) Cyclohexane	8.288	56	582797	48.72	ug/L	97
36) Chloroform	8.380	83	560207	52.08	ug/L	96
37) Ethyl acetate	8.513	43	2839565	304.68	ug/L	98
38) Tetrahydrofuran	8.580	42	220825	64.30	ug/L	94
40) Carbon Tetrachloride	8.550	117	364516	49.16	ug/L	97
41) 1,1,1-Trichloroethane	8.635	97	478377	50.24	ug/L	97
42) 2-Butanone	8.745	43	1642112	319.51	ug/L	96
43) 1,1-Dichloropropene	8.775	75	448733	51.77	ug/L	95
44) tert-Butyl formate	8.897	59	1252172	266.00	ug/L	95
45) Propionitrile	9.085	54	1106498	738.11	ug/L	94
46) Methacrylonitrile	9.104	41	3637789	639.21	ug/L	99
47) Benzene	9.055	78	1459652	51.46	ug/L	97
48) TAME	9.164	73	1030479	55.19	ug/L	97
50) Isobutyl Alcohol	9.280	42	666315	1488.73	ug/L	98
51) 1,2-Dichloroethane	9.280	62	494672	52.95	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:22:05 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

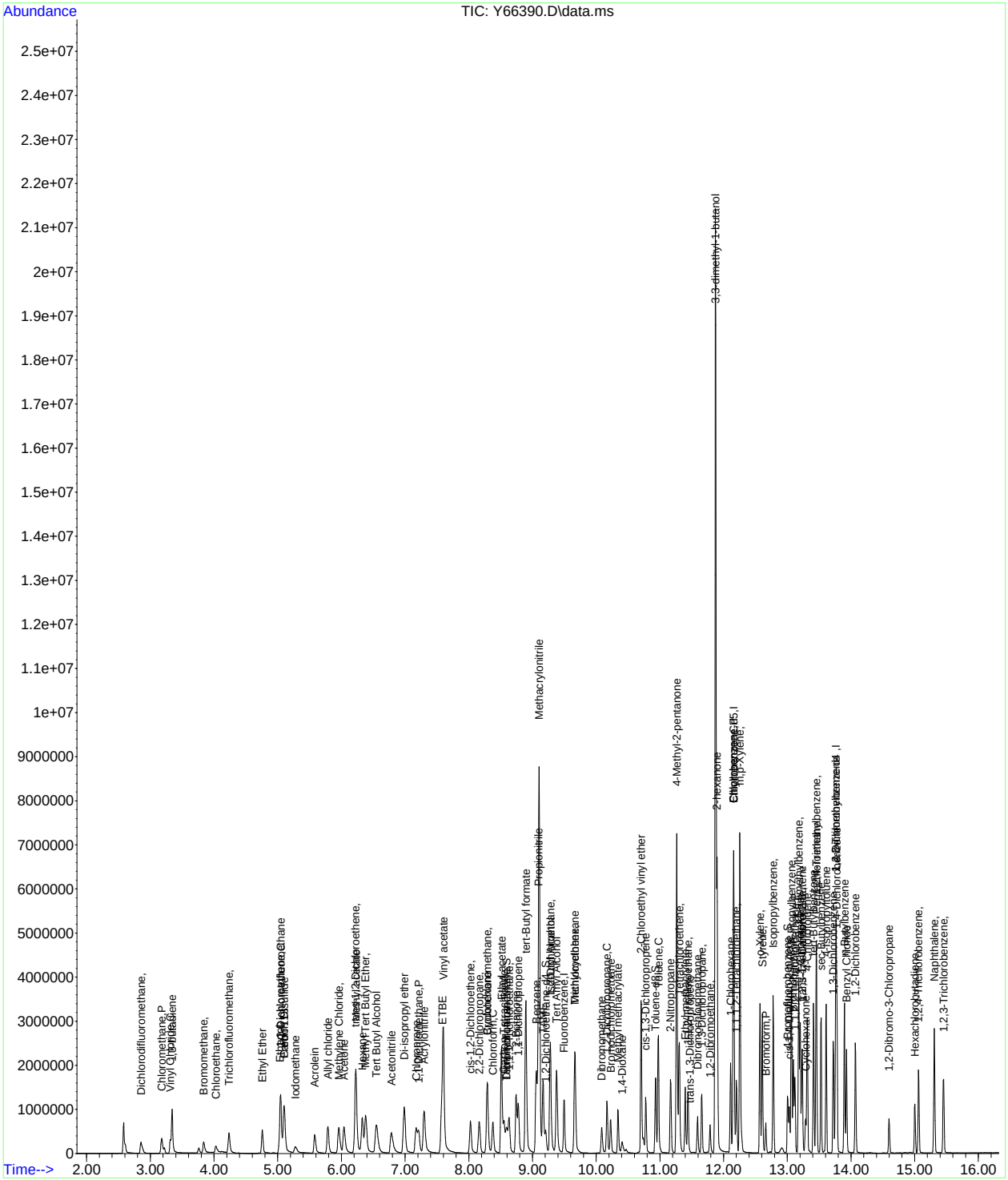
Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
52) Tert Amyl Alcohol	9.377	59	1013799m	718.48 ug/L	
53) Trichloroethene	9.669	95	368891	52.84 ug/L	96
54) Methylcyclohexane	9.663	83	519803	49.58 ug/L	97
55) Dibromomethane	10.083	93	199008	54.15 ug/L	92
56) 1,2-Dichloropropane	10.168	63	369480	51.37 ug/L	98
57) Bromodichloromethane	10.229	83	405476	54.54 ug/L	98
58) Methyl methacrylate	10.338	41	414664	59.47 ug/L	94
59) 1,4-Dioxane	10.405	88	199816	1437.53 ug/L	97
60) 2-Chloroethyl vinyl ether	10.703	63	1189400	280.00 ug/L	95
61) cis-1,3-Dichloropropene	10.776	75	543590	54.42 ug/L	96
64) Toluene	10.977	91	1595814	67.57 ug/L	100
65) 2-Nitropropane	11.166	41	761349	404.34 ug/L	95
66) 4-Methyl-2-pentanone	11.263	43	3535394	414.72 ug/L	99
67) trans-1,3-Dichloropropene	11.476	75	1232	0.19 ug/L	86
68) Tetrachloroethene	11.300	166	385577	68.11 ug/L	97
69) Ethyl methacrylate	11.397	69	574994	76.51 ug/L	95
70) 1,1,2-Trichloroethane	11.440	83	276327	70.64 ug/L	97
71) Dibromochloromethane	11.592	129	326704	69.17 ug/L	99
72) 1,3-Dichloropropane	11.659	76	592960	69.39 ug/L	94
73) 1,2-Dibromoethane	11.786	107	333463	68.80 ug/L	97
74) 3,3-dimethyl-1-butanol	11.871	57	7481318m	4612.80 ug/L	
75) 2-hexanone	11.896	43	4135894	417.81 ug/L	94
76) 1-Chlorohexane	12.109	91	473829	70.01 ug/L	95
77) Ethylbenzene	12.157	91	1906532	70.22 ug/L	96
78) Chlorobenzene	12.164	112	1029253	66.95 ug/L	98
79) 1,1,1,2-Tetrachloroethane	12.200	131	338599	68.49 ug/L	95
80) m,p-Xylene	12.255	91	3000497	138.97 ug/L	96
81) o-Xylene	12.571	91	1431980	69.39 ug/L	98
82) Styrene	12.608	104	1171953	74.02 ug/L	99
83) Bromoform	12.662	173	226864	74.24 ug/L	97
84) Isopropylbenzene	12.778	105	1708059	66.70 ug/L	99
87) cis-1,4-Dichloro-2-butene	13.027	53	176302	81.29 ug/L #	83
88) n-Propylbenzene	13.064	91	2086602	74.01 ug/L	98
89) Bromobenzene	13.094	156	423397	74.91 ug/L	94
90) 1,1,2,2-Tetrachloroethane	13.119	83	571456	80.06 ug/L	99
91) 1,3,5-Trimethylbenzene	13.179	105	1461123	72.06 ug/L	98
92) 2-Chlorotoluene	13.204	91	1413964	75.86 ug/L	97
93) trans-1,4-Dichloro-2-B...	13.234	53	148123	81.50 ug/L #	53
94) 1,2,3-Trichloropropane	13.234	110	189311	82.18 ug/L	94
95) Cyclohexanone	13.289	55	241817	475.62 ug/L	95
96) 4-Chlorotoluene	13.313	91	1283029	74.26 ug/L	99
97) tert-Butylbenzene	13.411	91	759989	76.29 ug/L	96
98) 1,2,4-Trimethylbenzene	13.453	105	1499936	72.65 ug/L	99
99) Pentachloroethane	13.465	167	215768	84.39 ug/L	95
100) sec-Butylbenzene	13.532	105	1615565	71.71 ug/L	98
101) 4-Isopropyltoluene	13.611	119	1436695	71.47 ug/L	98
102) 1,3-Dichlorobenzene	13.721	146	784799	73.99 ug/L	97
103) 1,2,3-Trimethylbenzene	13.763	105	1473186	71.85 ug/L	98
104) 1,4-Dichlorobenzene	13.782	146	835895	74.41 ug/L	98
105) n-Butylbenzene	13.897	92	712011	73.83 ug/L	96
106) Benzyl Chloride	13.928	126	242837	77.69 ug/L #	67
107) 1,2-Dichlorobenzene	14.068	146	779260	74.41 ug/L	98
108) 1,2-Dibromo-3-Chloropr...	14.597	75	135469	90.42 ug/L	87
109) Hexachlorobutadiene	15.005	225	158075	80.71 ug/L	88
110) 1,2,4-Trichlorobenzene	15.059	180	468063	75.76 ug/L	96
111) Naphthalene	15.309	128	1806008	77.41 ug/L	99
112) 1,2,3-Trichlorobenzene	15.455	180	444499	75.49 ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:22:05 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

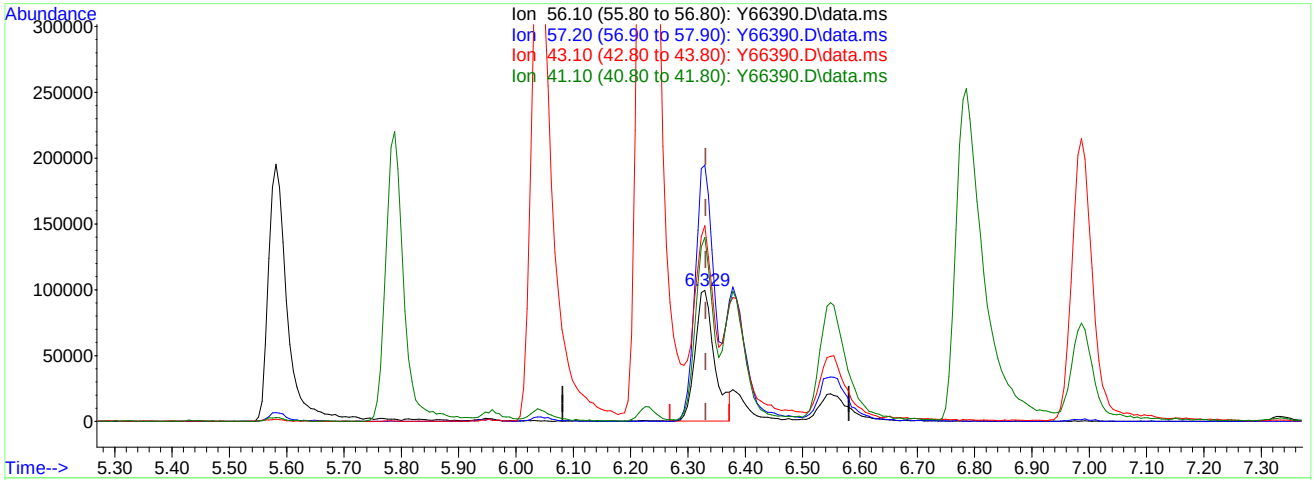
Sample Number: VY2755-IC2755
Lab FileID: Y66390.D
Injection Time: 12/02/22 16:05
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

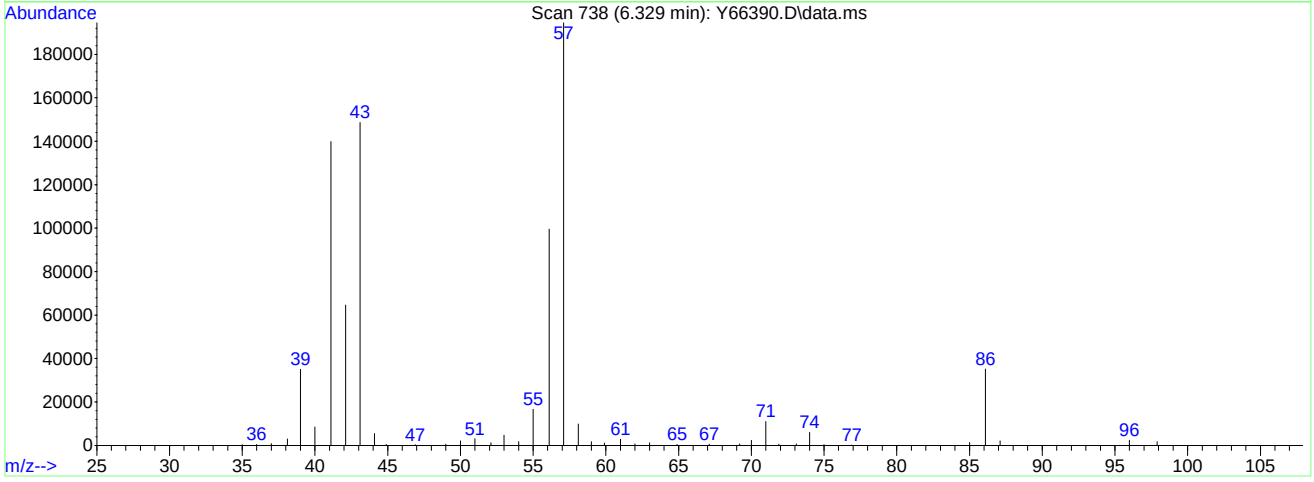
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.38	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(22) Hexane

6.329min (-0.002) 49.48ug/L

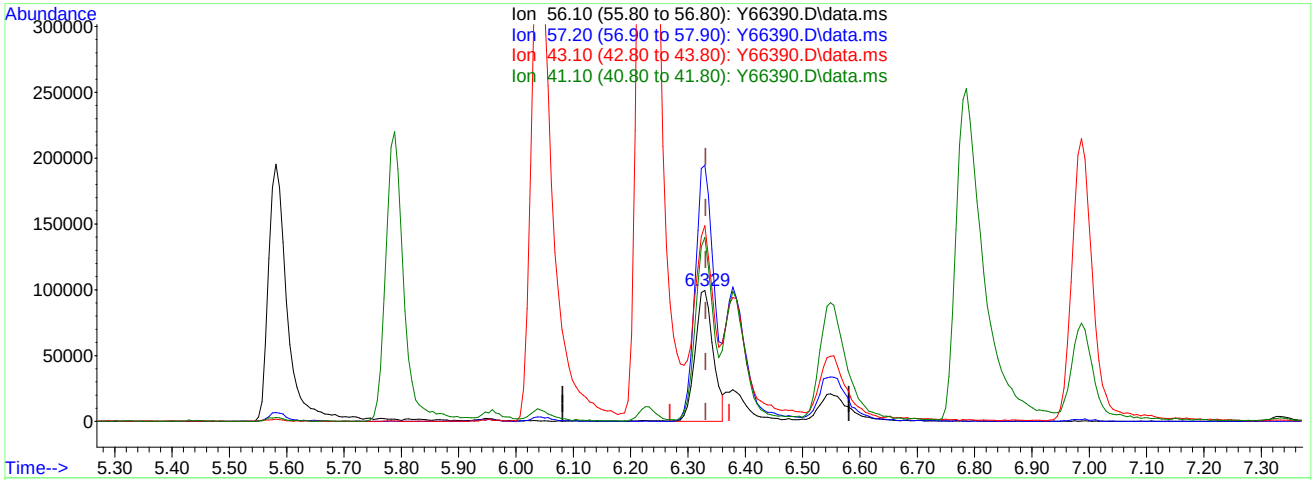
response 232502

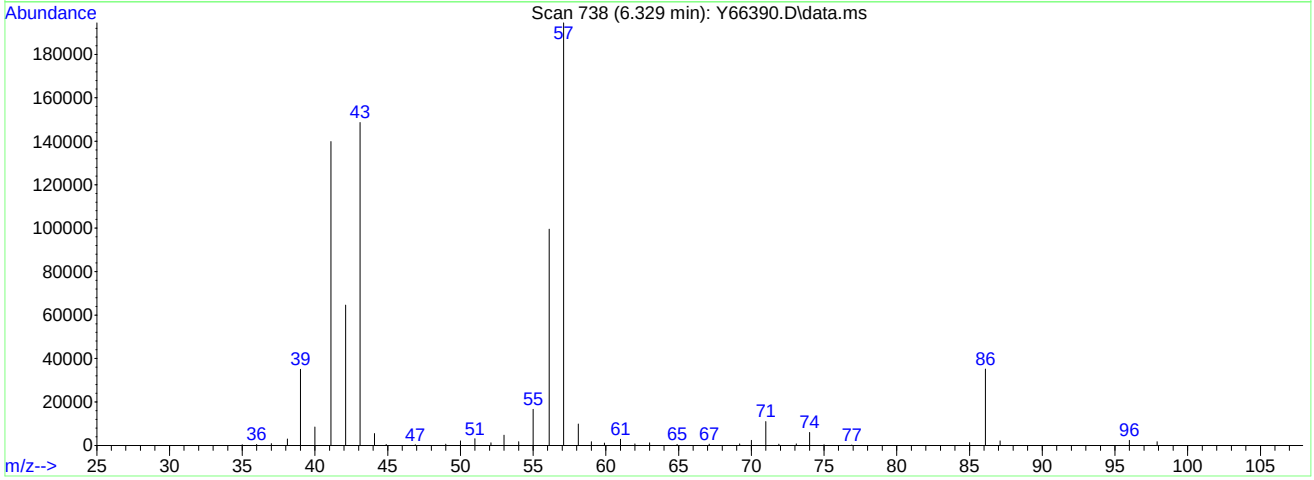
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	196.04
43.10	144.00	59.92#
41.10	140.20	139.71

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(22) Hexane

6.329min (-0.002) 46.39ug/L m

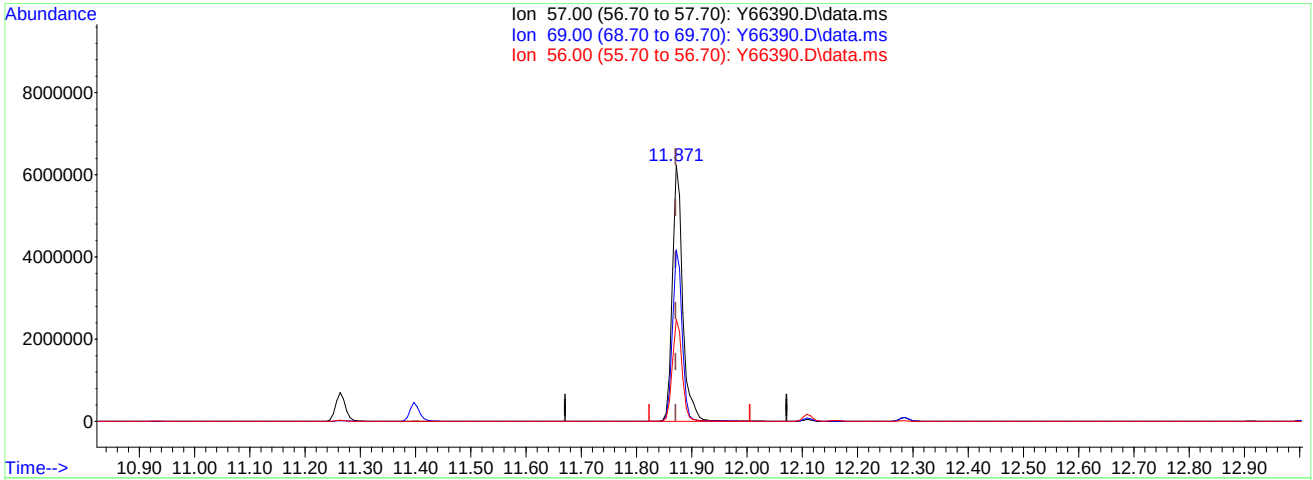
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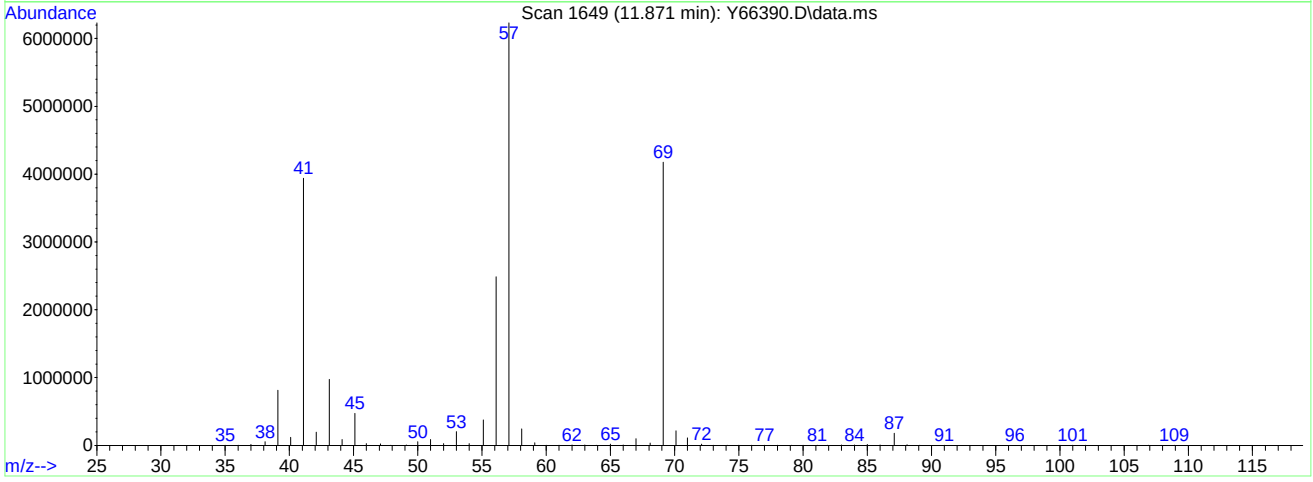
Ion	Exp%	Act%
56.10	100	100
57.20	199.80	195.36
43.10	144.00	149.28
41.10	140.20	140.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.871min (+0.000) 4904.49ug/L

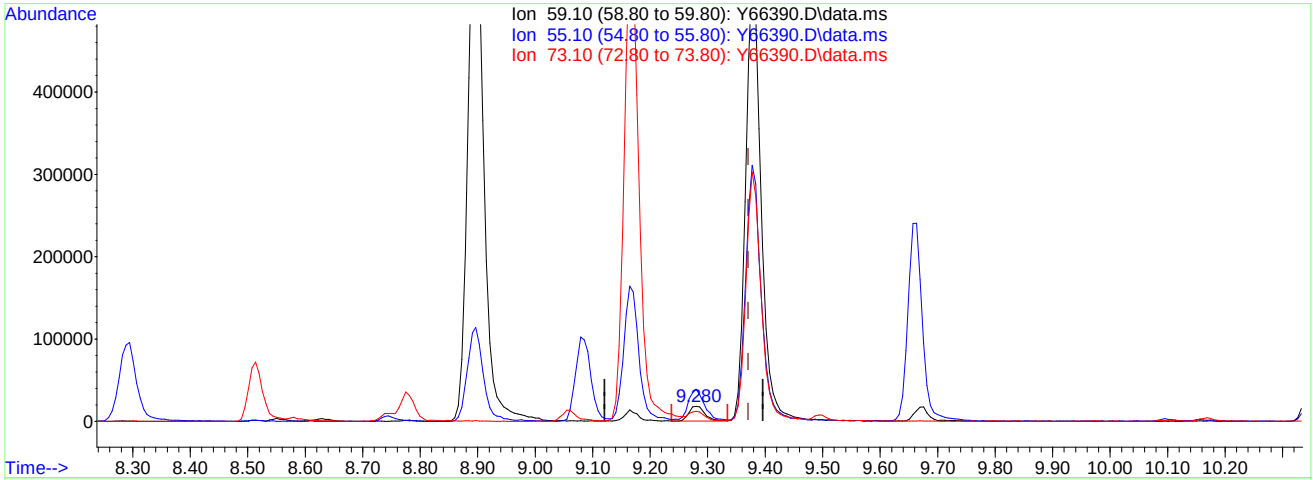
response 8119424

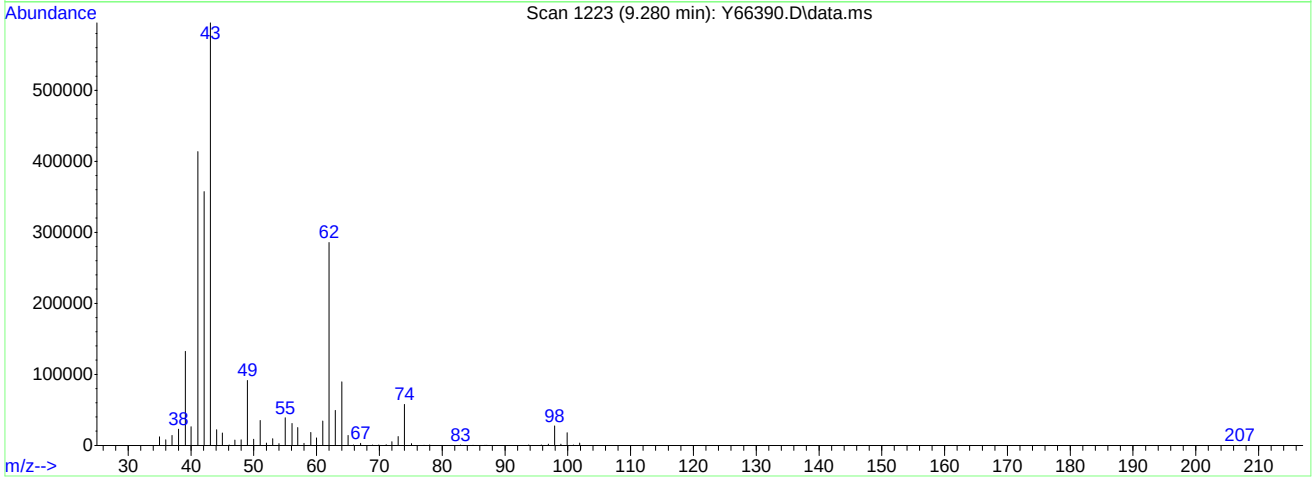
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	66.96
56.00	41.60	39.89
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(52) Tert Amyl Alcohol

9.280min (-0.091) 34.18ug/L

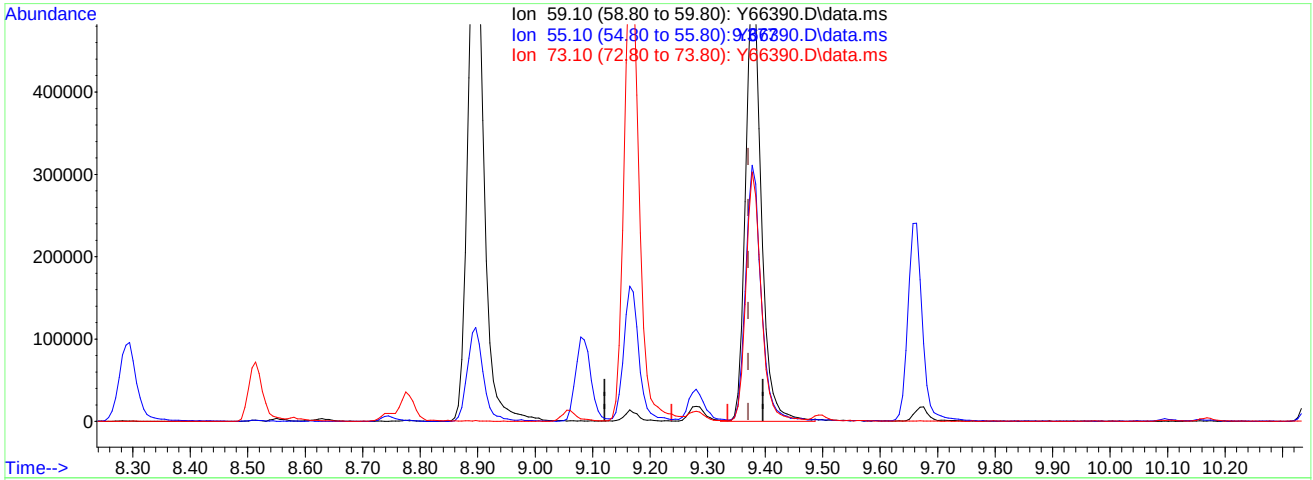
response 35497

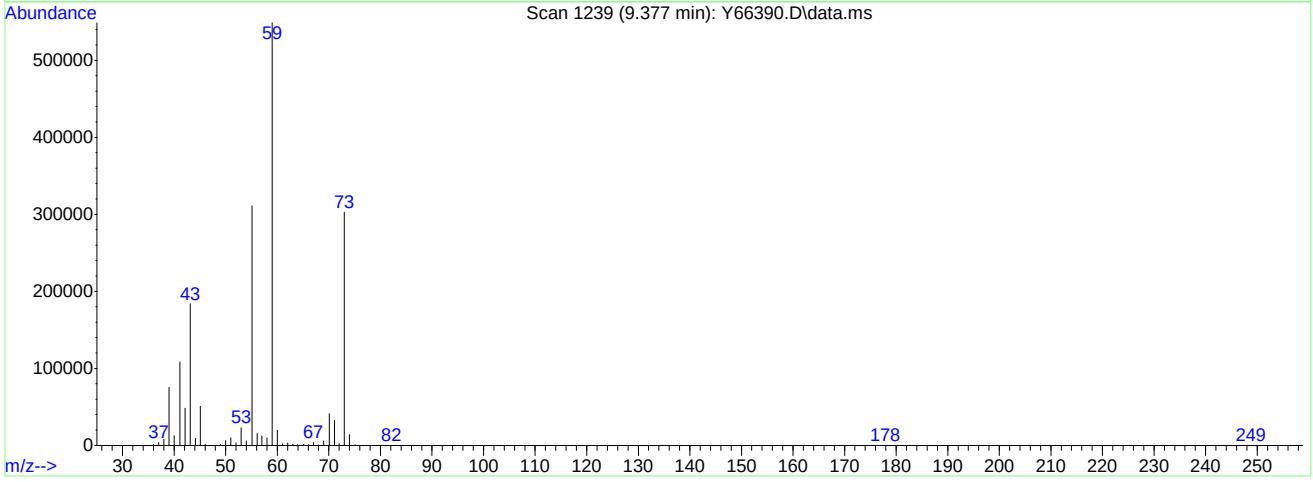
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	208.39#
73.10	51.70	60.91
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(52) Tert Amyl Alcohol

9.377min (+0.006) 718.48ug/L m

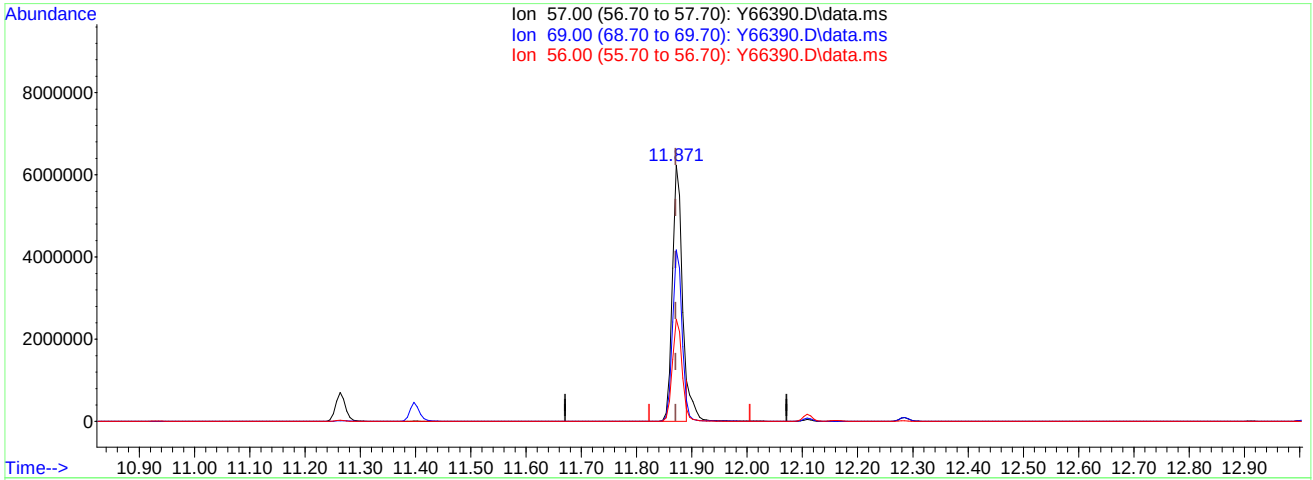
response 1013799

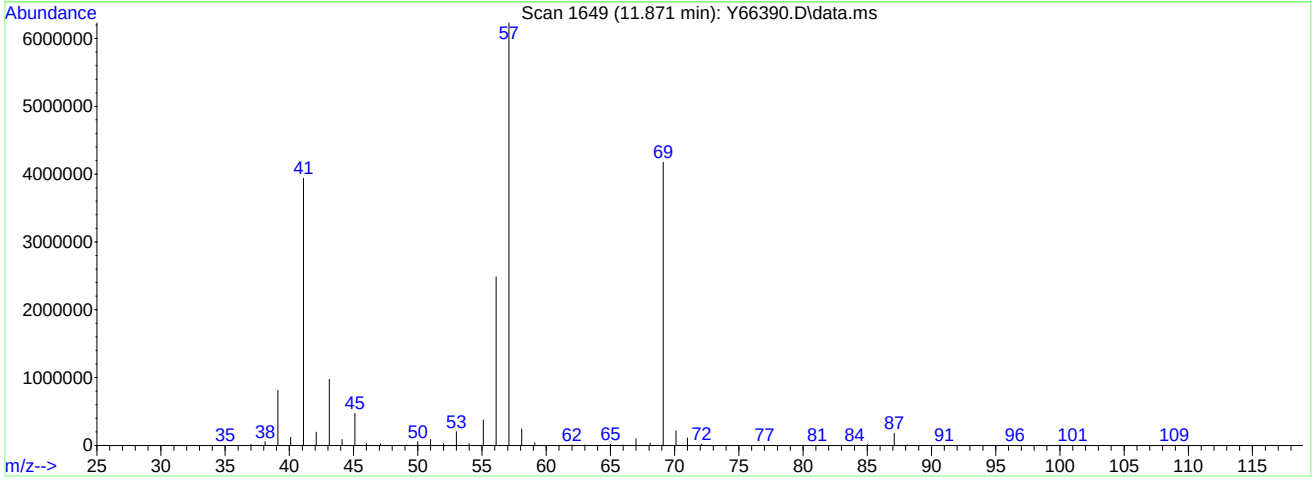
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	56.68
73.10	51.70	55.17
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66390.D
Acq On : 2 Dec 2022 4:05 pm
Operator : joannel
Sample : IC2755-6 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 05 09:21:21 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66390.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.871min (+0.000) 4612.80ug/L m

response 7481318

Ion	Exp%	Act%
57.00	100	100
69.00	63.20	67.00
56.00	41.60	39.90
0.00	0.00	0.00

Y66391.D

Manual Integrations APPROVED (compounds with "m" flag)

Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:22:35 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.497	96	1076743	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.149	117	806497	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.768	152	400764	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.603	113	217867	44.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 88.76%			
49) 1,2-Dichloroethane-d4	9.205	65	283555	50.16	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.32%			
63) Toluene-d8	10.933	98	1003318	56.38	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 112.76%#			
86) 4-Bromofluorobenzene	13.007	174	297283	49.41	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.854	85	493711	62.43	ug/L	99
3) Acrolein	5.585	56	713946	509.49	ug/L	96
4) Chloromethane	3.176	50	704555	69.26	ug/L	98
5) 1,3-butadiene	3.340	39	533730	66.40	ug/L	93
6) Vinyl Chloride	3.316	62	629903	71.38	ug/L	98
7) Bromomethane	3.839	94	293531	67.90	ug/L	89
8) Chloroethane	4.028	64	241421	54.58	ug/L	93
9) Trichlorofluoromethane	4.229	101	458410	50.18	ug/L	91
10) Ethyl Ether	4.764	59	515119	72.94	ug/L	98
11) Ethanol	5.056	45	341715	2015.12	ug/L	97
12) 1,2-Dichlorotrifluoroe...	5.044	67	548954	67.83	ug/L	98
13) 1,1-Dichloroethene	5.044	61	725034	70.55	ug/L	99
14) Freon 113	5.099	101	422065	65.79	ug/L	98
15) Carbon Disulfide	5.092	76	1348216	73.06	ug/L	96
16) Iodomethane	5.281	142	448316	76.15	ug/L	100
17) Allyl chloride	5.786	41	738562	68.96	ug/L	97
18) Methylene Chloride	5.956	49	749807	70.59	ug/L	96
19) Acetone	6.048	43	1567502	476.94	ug/L	97
20) Methyl acetate	6.230	43	3277805	483.39	ug/L	99
21) trans-1,2-Dichloroethene	6.212	61	731190	71.75	ug/L	97
22) Hexane	6.321	56	324541	63.41	ug/L #	87
23) Methyl Tert Butyl Ether	6.382	73	1563875	75.44	ug/L	77
24) Tert Butyl Alcohol	6.565	59	1806282	976.91	ug/L	93
25) Acetonitrile	6.790	41	1355090	970.26	ug/L	99
26) Di-isopropyl ether	6.991	45	1822168	70.54	ug/L	98
27) Chloroprene	7.173	53	709616	74.92	ug/L	97
28) 1,1-Dichloroethane	7.210	63	952071	72.42	ug/L	97
29) Acrylonitrile	7.301	53	1638427	461.47	ug/L	98
30) ETBE	7.581	59	1878393	74.98	ug/L	98
31) Vinyl acetate	7.599	43	7152451	396.33	ug/L	98
32) cis-1,2-Dichloroethene	8.025	96	573574	74.63	ug/L	97
33) 2,2-Dichloropropane	8.165	77	732860	74.99	ug/L	95
34) Bromochloromethane	8.286	128	234687	69.20	ug/L	93
35) Cyclohexane	8.292	56	885615	67.73	ug/L	99
36) Chloroform	8.378	83	872199	74.50	ug/L	98
37) Ethyl acetate	8.511	43	4407577	414.95	ug/L	99
38) Tetrahydrofuran	8.584	42	345337	90.25	ug/L	94
40) Carbon Tetrachloride	8.554	117	567450	70.20	ug/L	97
41) 1,1,1-Trichloroethane	8.633	97	752897	72.82	ug/L	98
42) 2-Butanone	8.743	43	2635122	464.13	ug/L	99
43) 1,1-Dichloropropene	8.779	75	695559	73.80	ug/L	95
44) tert-Butyl formate	8.895	59	2075303	388.61	ug/L	94
45) Propionitrile	9.089	54	1826208	1112.74	ug/L	88
46) Methacrylonitrile	9.108	41	5808052	932.20	ug/L	99
47) Benzene	9.059	78	2291478	74.04	ug/L	98
48) TAME	9.168	73	1645955	77.81	ug/L	93
50) Isobutyl Alcohol	9.284	42	1064633	1992.68	ug/L	94
51) 1,2-Dichloroethane	9.278	62	781014	75.56	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:22:35 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration

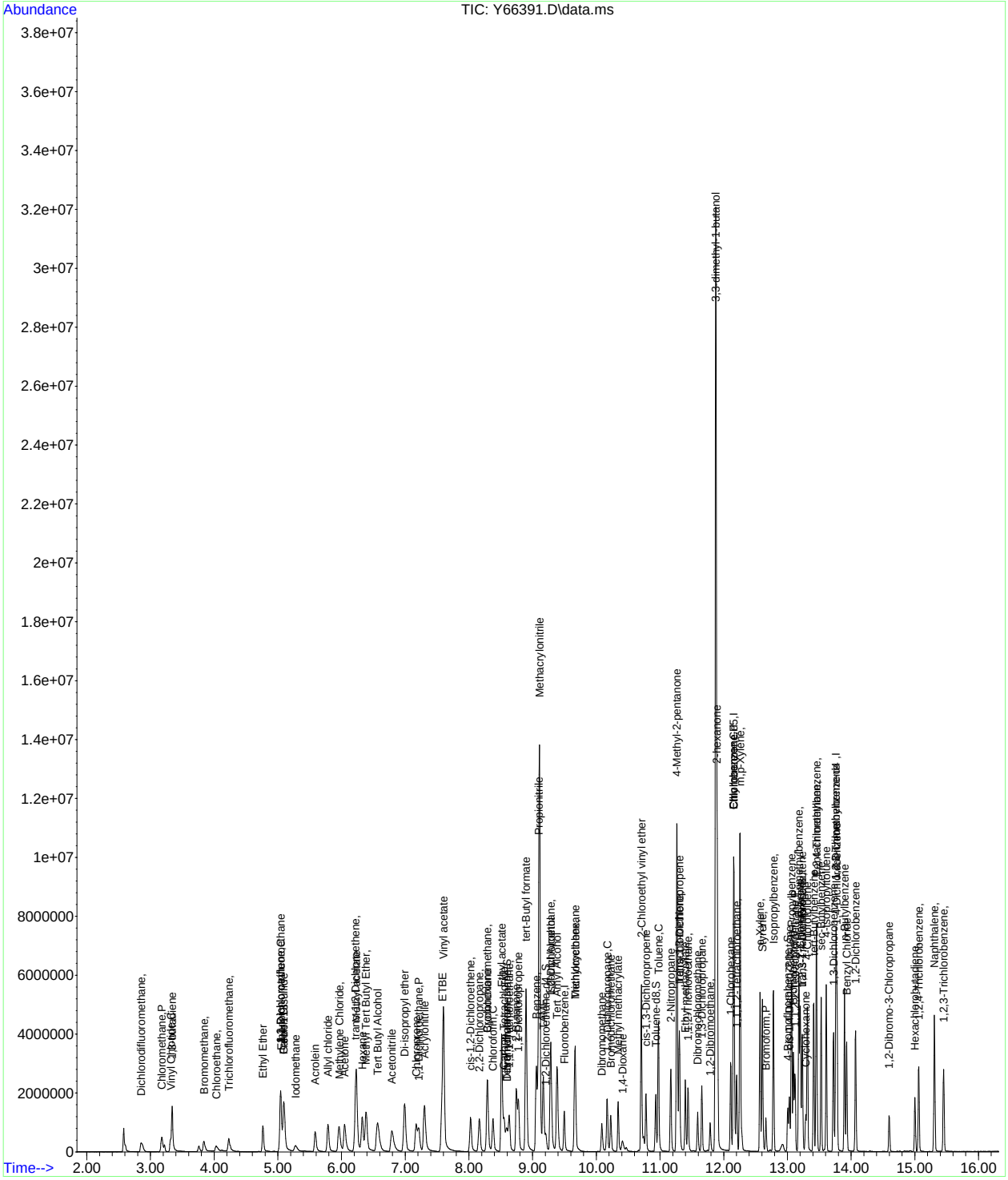
Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
52) Tert Amyl Alcohol	9.381	59	1698831m	994.06 ug/L		
53) Trichloroethene	9.673	95	568926	75.27 ug/L		93
54) Methylcyclohexane	9.661	83	793868	69.35 ug/L		98
55) Dibromomethane	10.087	93	315994	78.41 ug/L		97
56) 1,2-Dichloropropane	10.172	63	580464	73.81 ug/L		98
57) Bromodichloromethane	10.227	83	644352	77.61 ug/L		98
58) Methyl methacrylate	10.343	41	683320	83.98 ug/L		93
59) 1,4-Dioxane	10.409	88	314564	1997.18 ug/L		97
60) 2-Chloroethyl vinyl ether	10.708	63	1881280	399.95 ug/L		94
61) cis-1,3-Dichloropropene	10.781	75	854059	78.11 ug/L		92
64) Toluene	10.975	91	2553469	97.96 ug/L		99
65) 2-Nitropropane	11.170	41	1264175	553.73 ug/L		94
66) 4-Methyl-2-pentanone	11.261	43	5799787	619.98 ug/L		99
67) trans-1,3-Dichloropropene	11.310	75	804485	114.25 ug/L		92
68) Tetrachloroethene	11.298	166	609071	100.38 ug/L		98
69) Ethyl methacrylate	11.395	69	949568	106.51 ug/L		94
70) 1,1,2-Trichloroethane	11.438	83	443462	101.67 ug/L		98
71) Dibromochloromethane	11.590	129	530696	102.39 ug/L		99
72) 1,3-Dichloropropane	11.657	76	951120	100.00 ug/L		95
73) 1,2-Dibromoethane	11.784	107	534427	100.48 ug/L		97
74) 3,3-dimethyl-1-butanol	11.876	57	11697543m	5987.24 ug/L		
75) 2-hexanone	11.900	43	6621768	541.29 ug/L		96
76) 1-Chlorohexane	12.113	91	739663	97.29 ug/L		87
77) Ethylbenzene	12.155	91	3080450	99.45 ug/L		94
78) Chlorobenzene	12.161	112	1647457	95.70 ug/L		95
79) 1,1,1,2-Tetrachloroethane	12.204	131	537921	99.15 ug/L		94
80) m,p-Xylene	12.259	91	4907101	196.59 ug/L		97
81) o-Xylene	12.569	91	2324495	98.59 ug/L		95
82) Styrene	12.606	104	1904793	109.63 ug/L		98
83) Bromoform	12.660	173	379046	102.48 ug/L		97
84) Isopropylbenzene	12.782	105	2800537	95.91 ug/L		99
87) cis-1,4-Dichloro-2-butene	13.031	53	275081	106.16 ug/L	#	75
88) n-Propylbenzene	13.062	91	3432788	106.13 ug/L		95
89) Bromobenzene	13.092	156	683308	108.85 ug/L		94
90) 1,1,2,2-Tetrachloroethane	13.117	83	957061	113.75 ug/L		97
91) 1,3,5-Trimethylbenzene	13.177	105	2405036	103.72 ug/L		96
92) 2-Chlorotoluene	13.202	91	2285909	107.47 ug/L		96
93) trans-1,4-Dichloro-2-B...	13.238	53	241375	108.82 ug/L	#	84
94) 1,2,3-Trichloropropane	13.232	110	311099	118.08 ug/L		94
95) Cyclohexanone	13.287	55	384391	631.63 ug/L		96
96) 4-Chlorotoluene	13.311	91	2141754	107.65 ug/L		96
97) tert-Butylbenzene	13.409	91	1231867	109.18 ug/L		94
98) 1,2,4-Trimethylbenzene	13.451	105	2418297	102.10 ug/L		98
99) Pentachloroethane	13.463	167	347468	122.32 ug/L		96
100) sec-Butylbenzene	13.530	105	2590394	101.33 ug/L		99
101) 4-Isopropyltoluene	13.609	119	2340084	101.82 ug/L		99
102) 1,3-Dichlorobenzene	13.725	146	1278778	106.35 ug/L		97
103) 1,2,3-Trimethylbenzene	13.761	105	2409459	101.92 ug/L		96
104) 1,4-Dichlorobenzene	13.780	146	1351409	106.47 ug/L		98
105) n-Butylbenzene	13.895	92	1176434	107.55 ug/L		97
106) Benzyl Chloride	13.932	126	407483	105.13 ug/L	#	76
107) 1,2-Dichlorobenzene	14.072	146	1282260	106.54 ug/L		98
108) 1,2-Dibromo-3-Chloropr...	14.595	75	225234	124.49 ug/L		92
109) Hexachlorobutadiene	15.002	225	246828	117.12 ug/L		95
110) 1,2,4-Trichlorobenzene	15.063	180	717478	104.51 ug/L		99
111) Naphthalene	15.307	128	2931023	108.38 ug/L		99
112) 1,2,3-Trichlorobenzene	15.453	180	692029	107.36 ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:22:35 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration



Manual Integration Approval Summary

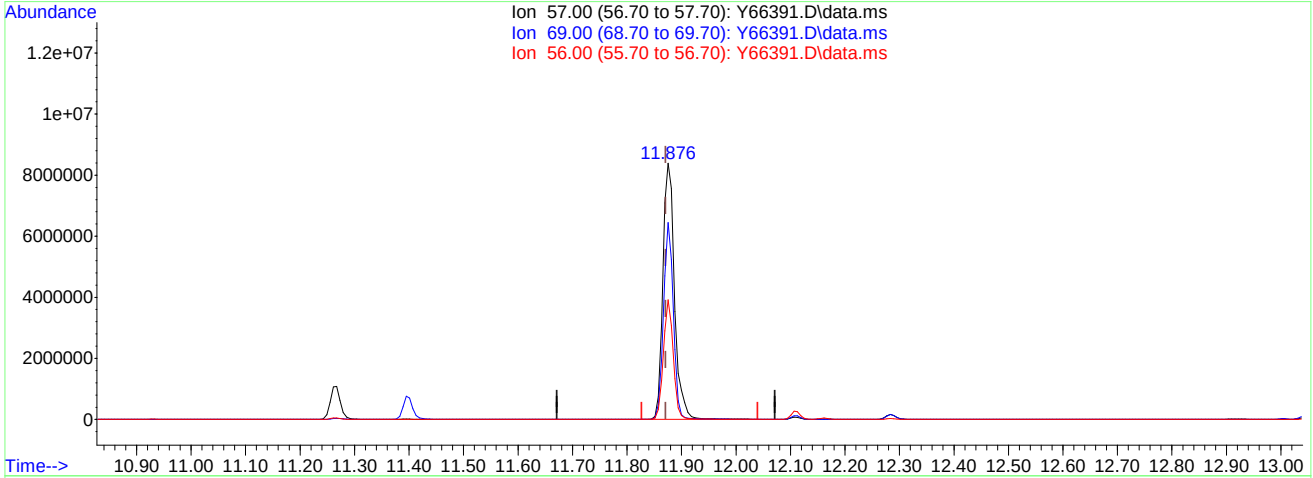
Sample Number: VY2755-IC2755
Lab FileID: Y66391.D
Injection Time: 12/02/22 16:29
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

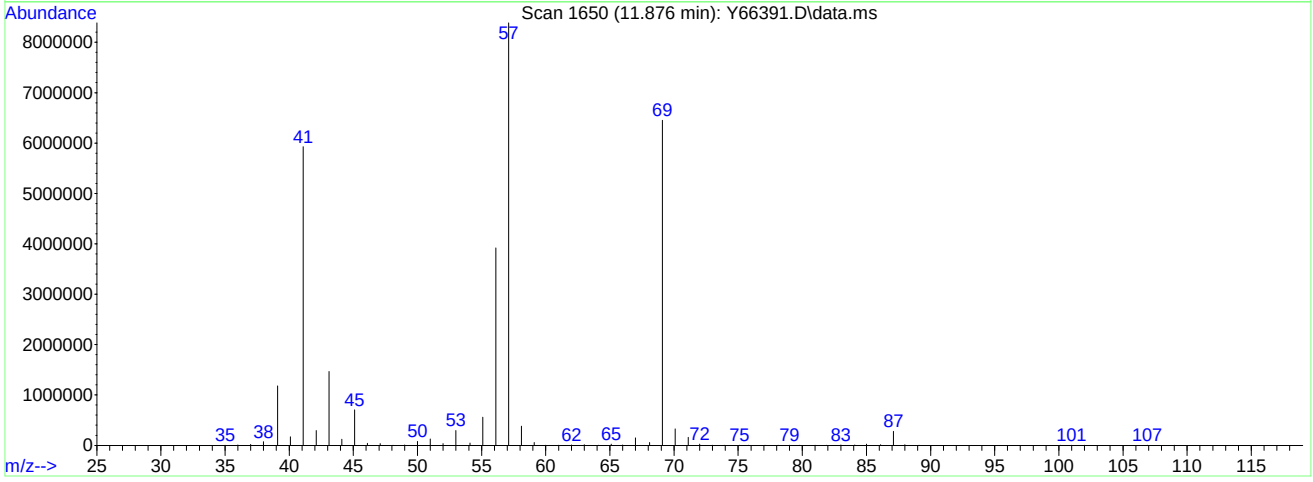
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert-Amyl Alcohol	75-85-4		9.38	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.88	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:21:22 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66391.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.876min (+0.005) 6277.66ug/L

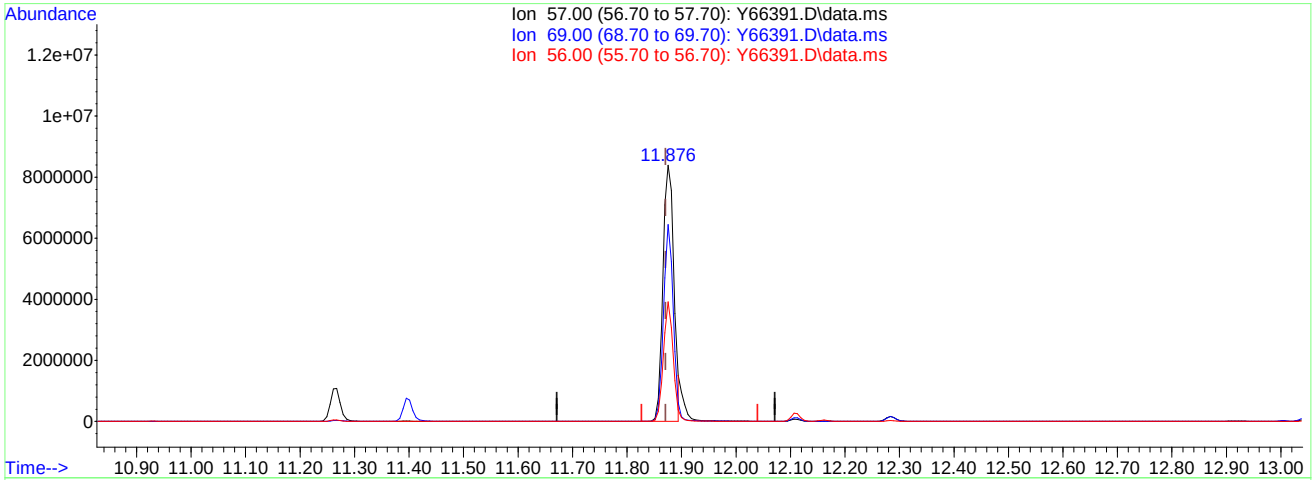
response 12495739

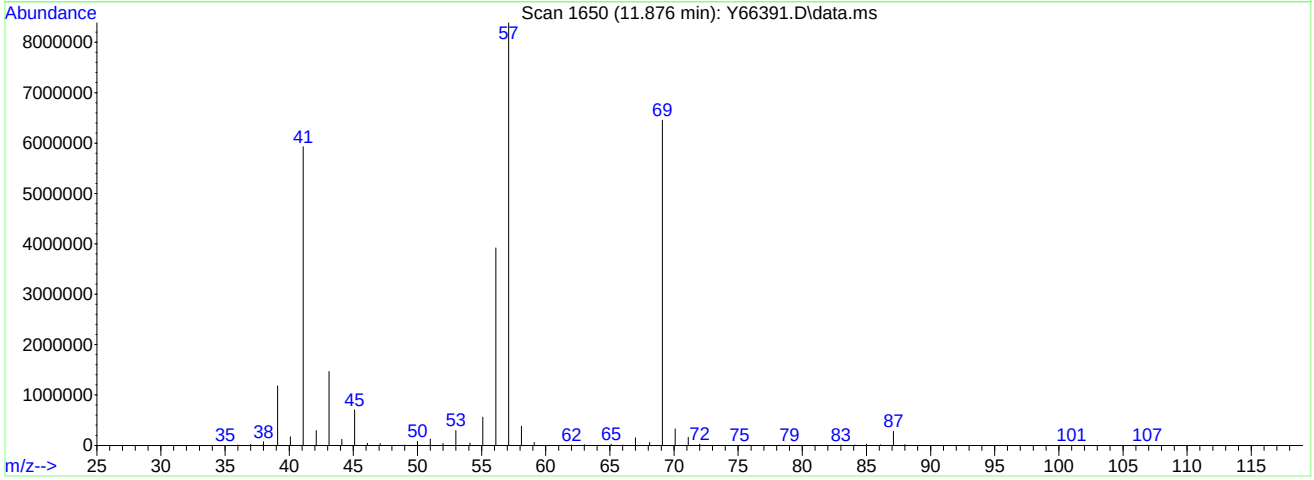
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	76.86
56.00	41.60	46.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:21:22 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66391.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.876min (+0.005) 5987.24ug/L m

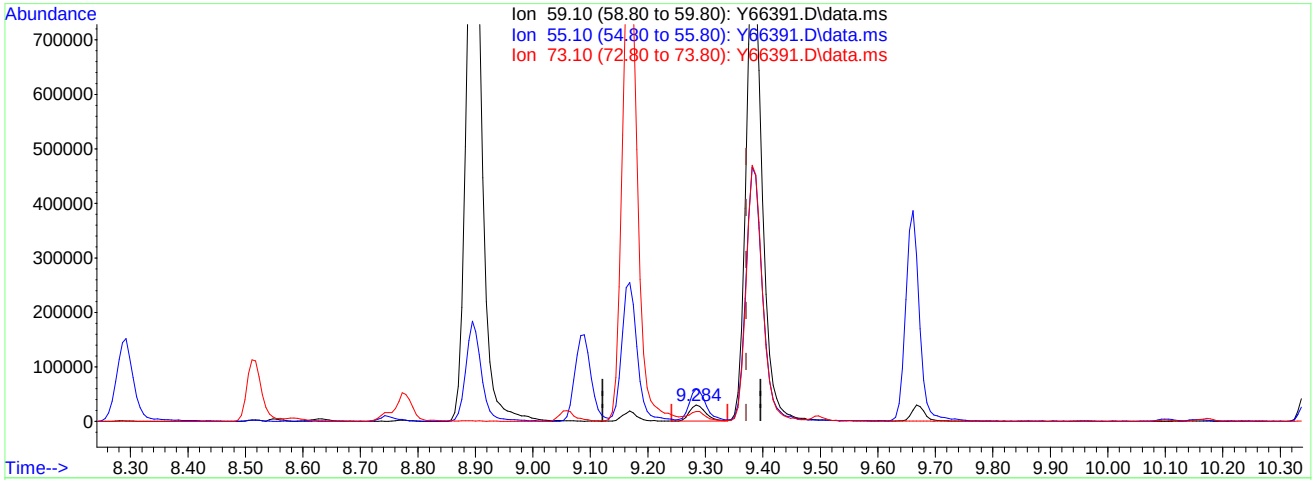
response 11697543

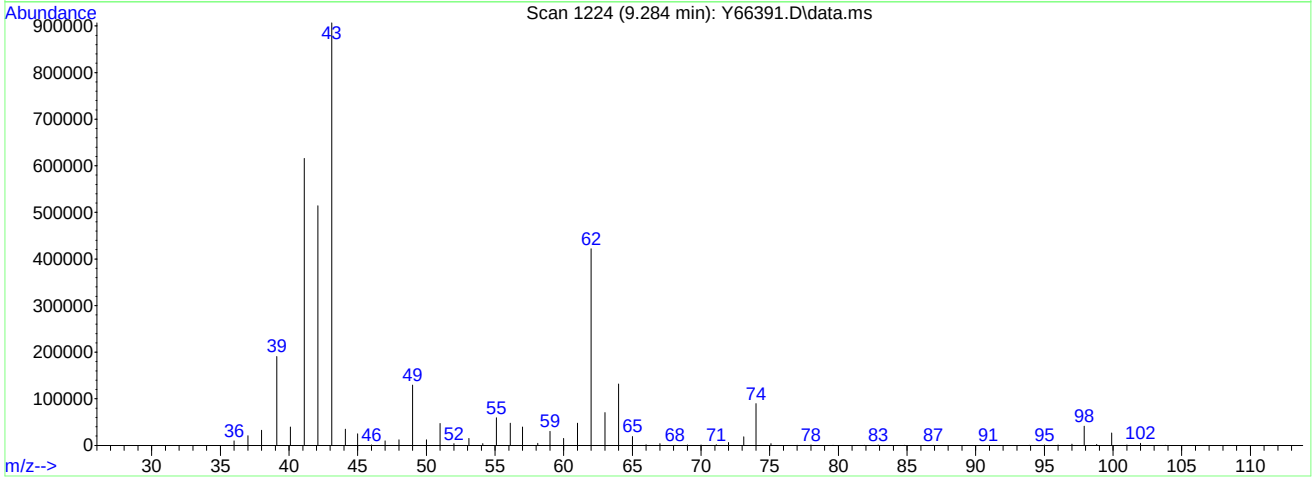
Ion	Exp%	Act%
57.00	100	100
69.00	63.20	76.89
56.00	41.60	46.73
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:21:22 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66391.D\data.ms

(52) Tert Amyl Alcohol

9.284min (-0.087) 51.25ug/L

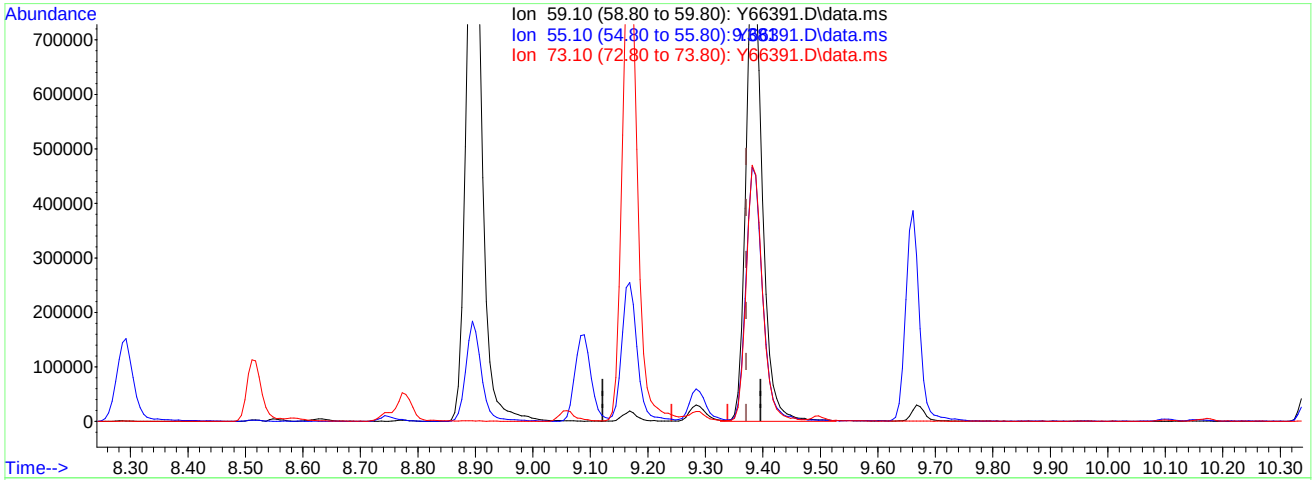
response 58793

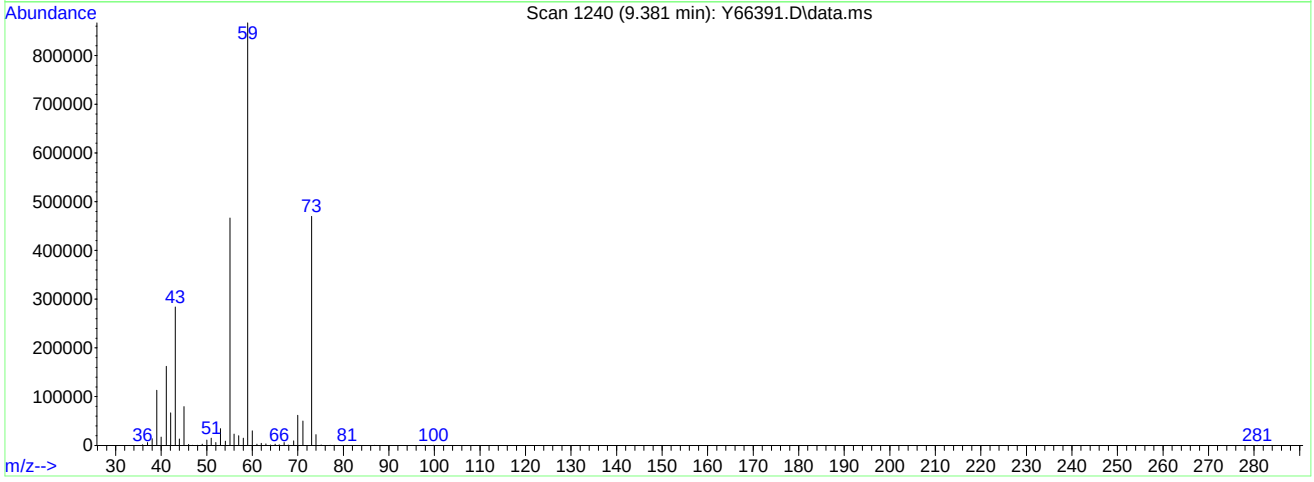
Ion	Exp%	Act%
59.10	100	100
55.10	65.80	192.37#
73.10	51.70	57.07
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66391.D
Acq On : 2 Dec 2022 4:29 pm
Operator : joannel
Sample : IC2755-7 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 05 09:21:22 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Nov 30 16:56:10 2022
Response via : Initial Calibration





TIC: Y66391.D\data.ms

(52) Tert Amyl Alcohol

9.381min (+0.010) 994.06ug/L m

response 1698831

Ion	Exp%	Act%
59.10	100	100
55.10	65.80	53.77
73.10	51.70	54.18
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Lindsay Ritner 12/05/22 11:32

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	9.498	96	1038611	50.00	ug/L		0.00
62) Chlorobenzene-d5	12.150	117	753439	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	13.768	152	363786	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.603	113	207167	47.80	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.60%				
49) 1,2-Dichloroethane-d4	9.206	65	280339	51.65	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.30%				
63) Toluene-d8	10.933	98	971449	49.53	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.06%				
86) 4-Bromofluorobenzene	13.008	174	270679	48.55	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.10%				
Target Compounds							Qvalue
3) Acrolein	5.580	56	248269	185.36	ug/L		98
4) Chloromethane	3.177	50	227426	32.99	ug/L		95
5) 1,3-butadiene	3.341	39	237737	41.48	ug/L		96
6) Vinyl Chloride	3.317	62	210921	34.19	ug/L		98
7) Bromomethane	3.834	94	103994	36.45	ug/L		97
9) Trichlorofluoromethane	4.235	101	236979	39.19	ug/L		90
10) Ethyl Ether	4.752	59	173352	34.74	ug/L		91
11) Ethanol	5.020	45	120008	791.18	ug/L		97
12) 1,2-Dichlorotrifluoroe...	5.038	67	197064	35.30	ug/L		97
13) 1,1-Dichloroethene	5.051	61	260089	36.17	ug/L		95
14) Freon 113	5.105	101	145329	33.06	ug/L		98
15) Carbon Disulfide	5.099	76	447113	34.38	ug/L		98
17) Allyl chloride	5.787	41	281565	41.41	ug/L		97
18) Methylene Chloride	5.957	49	269095	32.63	ug/L		95
19) Acetone	6.036	43	582587	200.82	ug/L		98
20) Methyl acetate	6.231	43	1195807	203.06	ug/L		100
21) trans-1,2-Dichloroethene	6.219	61	260135	37.01	ug/L		98
22) Hexane	6.328	56	125575	35.87	ug/L	#	78
23) Methyl Tert Butyl Ether	6.383	73	556600	36.00	ug/L		92
24) Tert Butyl Alcohol	6.547	59	632651	408.28	ug/L		99
25) Acetonitrile	6.784	41	475472	385.45	ug/L		97
26) Di-isopropyl ether	6.985	45	648363	36.75	ug/L		98
27) Chloroprene	7.174	53	282898	46.61	ug/L		97
28) 1,1-Dichloroethane	7.216	63	360367	37.99	ug/L		99
29) Acrylonitrile	7.301	53	260392	90.27	ug/L		93
30) ETBE	7.575	59	597419	35.22	ug/L		97
31) Vinyl acetate	7.600	43	2687447	212.40	ug/L		99
32) cis-1,2-Dichloroethene	8.025	96	213155	37.49	ug/L		100
33) 2,2-Dichloropropane	8.165	77	244632	35.37	ug/L		96
34) Bromochloromethane	8.293	128	88841	36.96	ug/L		96
35) Cyclohexane	8.293	56	327483	37.22	ug/L		96
36) Chloroform	8.378	83	324747	36.28	ug/L		97
37) Ethyl acetate	8.512	43	1713297	203.66	ug/L		99
38) Tetrahydrofuran	8.585	42	134188	38.56	ug/L		92
40) Carbon Tetrachloride	8.555	117	203222	36.55	ug/L		97
41) 1,1,1-Trichloroethane	8.634	97	277634	36.82	ug/L		99
42) 2-Butanone	8.743	43	921072	189.52	ug/L		100
43) 1,1-Dichloropropene	8.780	75	247037	35.97	ug/L		97
45) Propionitrile	9.078	54	595078	397.64	ug/L		98
46) Methacrylonitrile	9.102	41	1992943	408.29	ug/L		99
47) Benzene	9.060	78	821097	35.80	ug/L		99
48) TAME	9.169	73	603538	39.73	ug/L		99
50) Isobutyl Alcohol	9.272	42	368009	857.25	ug/L		95
51) 1,2-Dichloroethane	9.279	62	285872	36.70	ug/L		97
52) Tert Amyl Alcohol	9.376	59	600229m	424.83	ug/L		
53) Trichloroethene	9.674	95	204817	34.94	ug/L		98
54) Methylcyclohexane	9.662	83	300635	39.11	ug/L		97
55) Dibromomethane	10.088	93	111117	35.59	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration

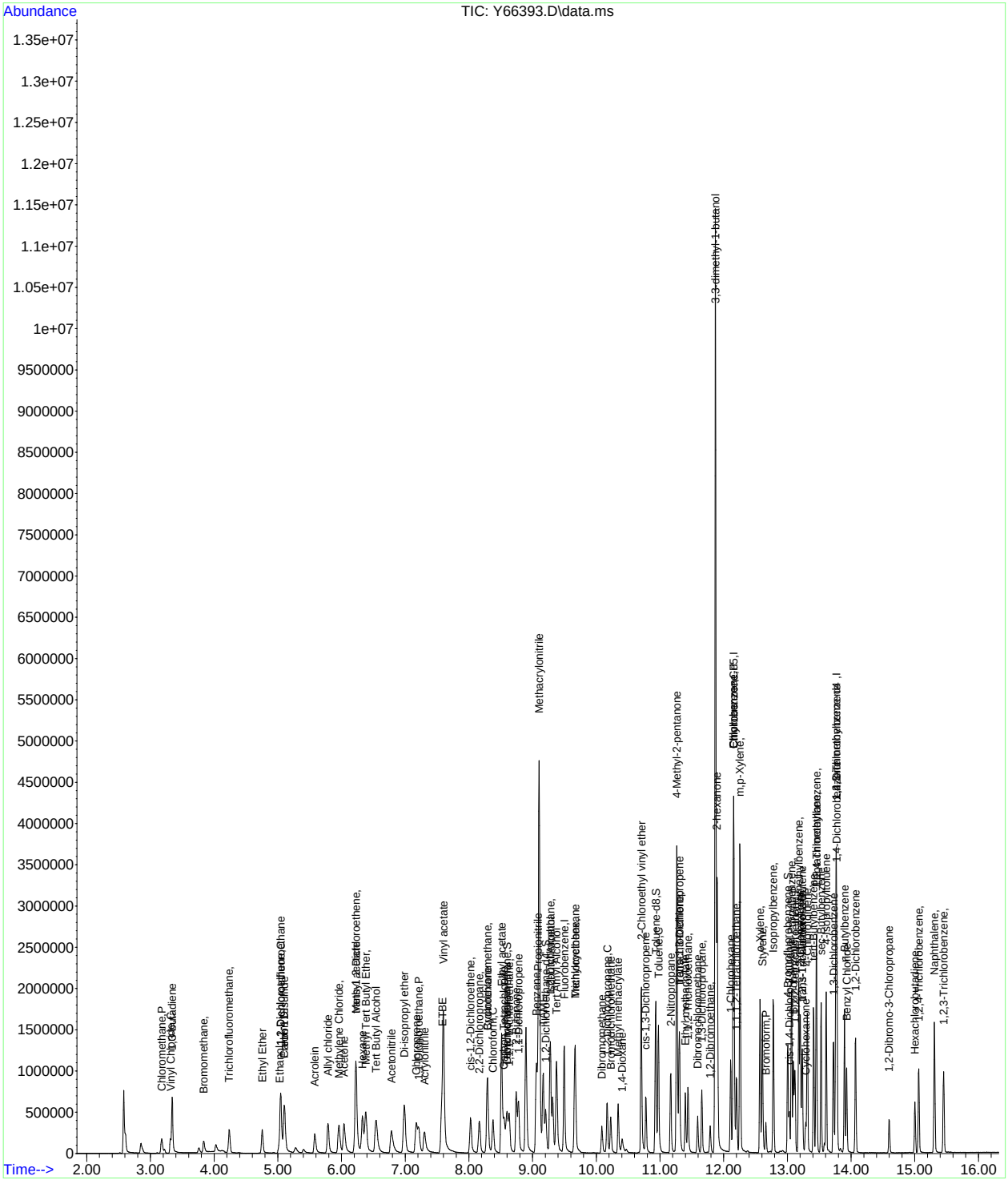
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
56) 1,2-Dichloropropane	10.173	63	204706	35.67	ug/L		97
57) Bromodichloromethane	10.228	83	234448	38.36	ug/L		98
58) Methyl methacrylate	10.343	41	253692	44.50	ug/L		98
59) 1,4-Dioxane	10.404	88	128740	866.10	ug/L		97
60) 2-Chloroethyl vinyl ether	10.708	63	718955	200.39	ug/L		97
61) cis-1,3-Dichloropropene	10.775	75	297766	37.85	ug/L		97
64) Toluene	10.976	91	907561	36.28	ug/L		99
65) 2-Nitropropane	11.171	41	445380	207.36	ug/L		96
66) 4-Methyl-2-pentanone	11.262	43	1901523	191.84	ug/L		99
67) trans-1,3-Dichloropropene	11.310	75	294626	44.19	ug/L		97
68) Tetrachloroethene	11.304	166	215419	36.20	ug/L		96
69) Ethyl methacrylate	11.396	69	302237	40.00	ug/L		95
70) 1,1,2-Trichloroethane	11.438	83	160251	37.91	ug/L		96
71) Dibromochloromethane	11.590	129	181560	37.94	ug/L		95
72) 1,3-Dichloropropane	11.657	76	328402	35.30	ug/L		99
73) 1,2-Dibromoethane	11.785	107	189342	37.58	ug/L		100
74) 3,3-dimethyl-1-butanol	11.870	57	3810575m	2033.90	ug/L		
75) 2-hexanone	11.901	43	1550502	175.99	ug/L		98
76) 1-Chlorohexane	12.107	91	267810	40.41	ug/L		98
77) Ethylbenzene	12.156	91	1053114	37.01	ug/L		98
78) Chlorobenzene	12.162	112	572025	36.92	ug/L		99
79) 1,1,1,2-Tetrachloroethane	12.205	131	192234	39.69	ug/L		95
80) m,p-Xylene	12.253	91	1653054	75.83	ug/L		99
81) o-Xylene	12.570	91	804645	38.12	ug/L		98
82) Styrene	12.606	104	626379	38.26	ug/L		99
83) Bromoform	12.661	173	125704	41.31	ug/L		96
84) Isopropylbenzene	12.777	105	946637	38.15	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.032	53	90078	41.07	ug/L		93
88) n-Propylbenzene	13.062	91	1153655	37.67	ug/L		99
89) Bromobenzene	13.093	156	225621	34.55	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.117	83	324065	39.27	ug/L		98
91) 1,3,5-Trimethylbenzene	13.178	105	793931	37.11	ug/L		98
92) 2-Chlorotoluene	13.202	91	784650	38.25	ug/L		96
93) trans-1,4-Dichloro-2-B...	13.239	53	81625	40.66	ug/L	#	87
94) 1,2,3-Trichloropropane	13.233	110	99160	34.45	ug/L		96
95) Cyclohexanone	13.288	55	115969	168.61	ug/L		95
96) 4-Chlorotoluene	13.312	91	716233	37.19	ug/L		98
97) tert-Butylbenzene	13.409	91	415391	36.76	ug/L		95
98) 1,2,4-Trimethylbenzene	13.452	105	832514	38.57	ug/L		99
99) Pentachloroethane	13.464	167	122318	42.63	ug/L		96
100) sec-Butylbenzene	13.531	105	921839	38.89	ug/L		99
101) 4-Isopropyltoluene	13.610	119	824889	39.47	ug/L		98
102) 1,3-Dichlorobenzene	13.726	146	441722	37.27	ug/L		97
103) 1,2,3-Trimethylbenzene	13.762	105	889818	40.89	ug/L		99
104) 1,4-Dichlorobenzene	13.780	146	469960	36.70	ug/L		99
105) n-Butylbenzene	13.896	92	377444	34.65	ug/L		99
106) Benzyl Chloride	13.932	126	119153	38.07	ug/L	#	84
107) 1,2-Dichlorobenzene	14.072	146	434560	36.95	ug/L		98
108) 1,2-Dibromo-3-Chloropr...	14.595	75	74945	40.69	ug/L		99
109) Hexachlorobutadiene	15.003	225	86278	35.86	ug/L		96
110) 1,2,4-Trichlorobenzene	15.064	180	258060	36.10	ug/L		95
111) Naphthalene	15.307	128	1013752	38.15	ug/L		100
112) 1,2,3-Trichlorobenzene	15.453	180	246998	36.02	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:50 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration



Manual Integration Approval Summary

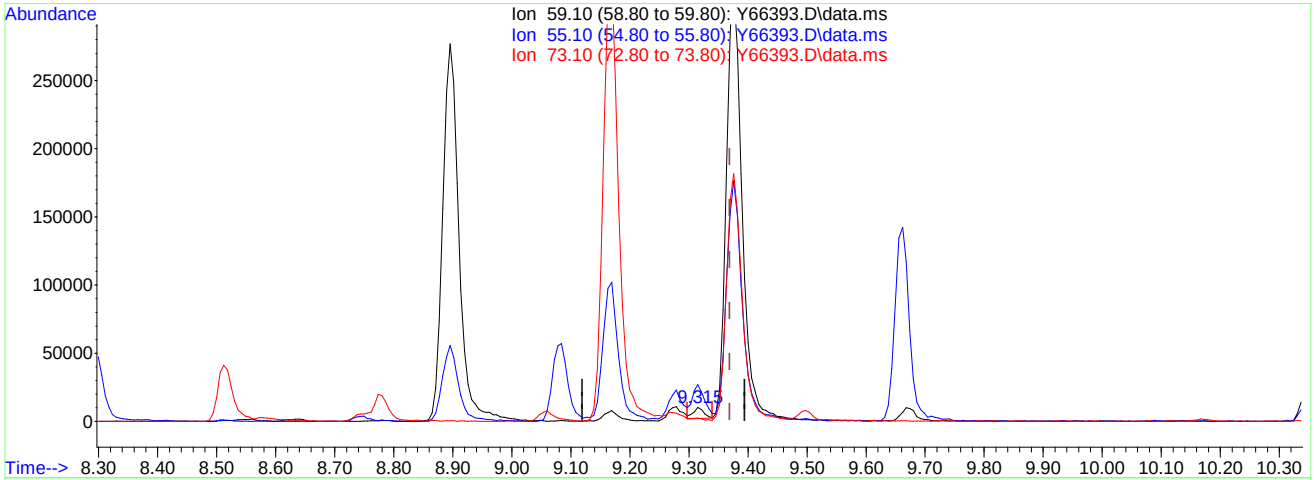
Sample Number: VY2755-ICV2755
Lab FileID: Y66393.D
Injection Time: 12/02/22 17:17
Method: SW846 8260D
Analyst approved: 12/05/22 09:54 Jo-Ann Lugo De Jesus
Supervisor approved: 12/05/22 11:32 Lindsay Ritner

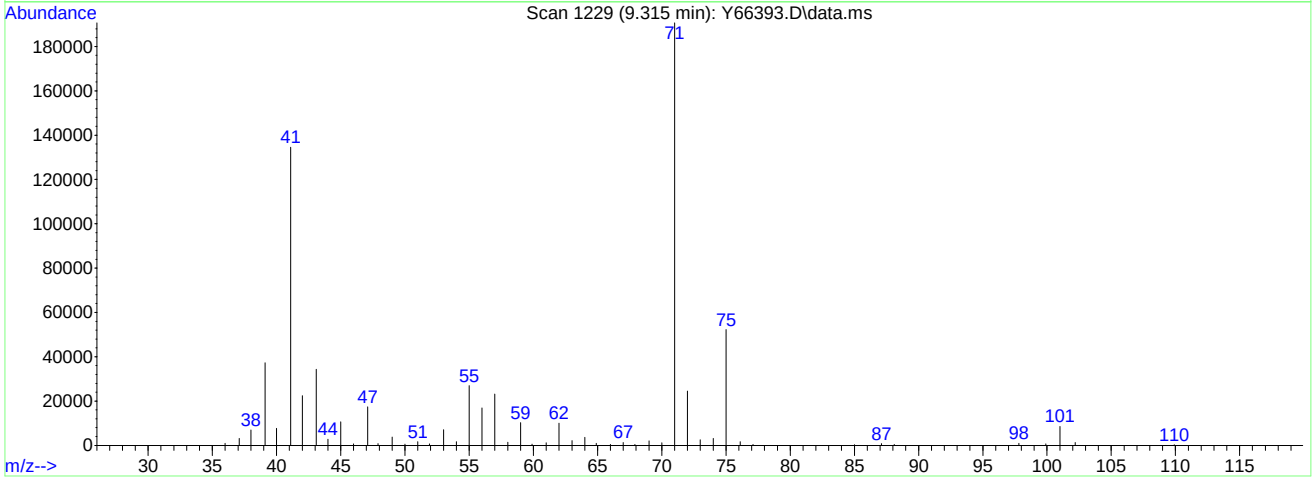
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert-Amyl Alcohol	75-85-4		9.38	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:00 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration





TIC: Y66393.D\data.ms

(52) Tert Amyl Alcohol

9.315min (-0.054) 7.89ug/L

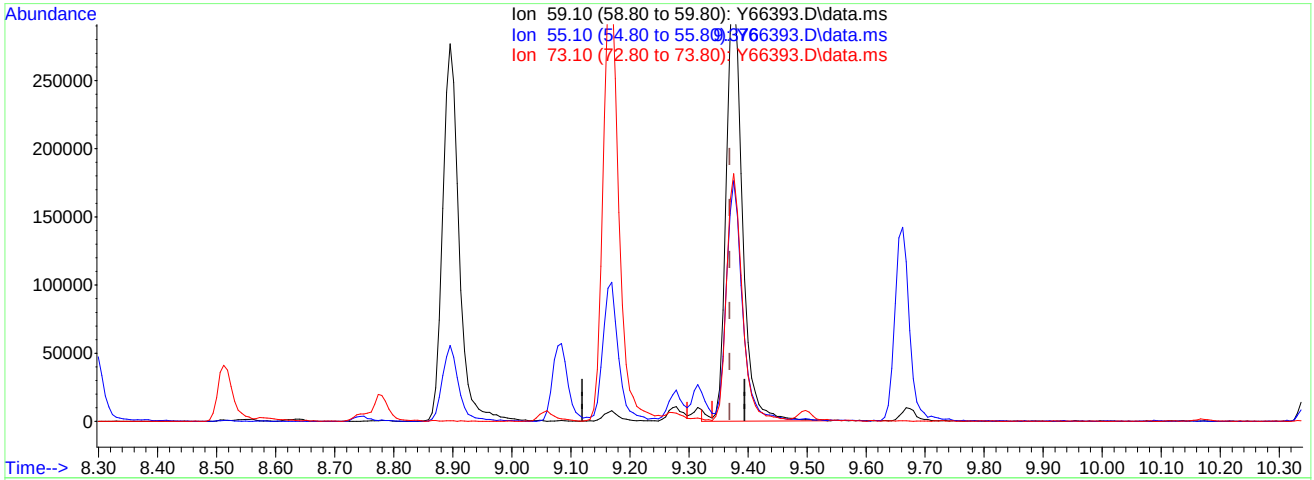
response 9837

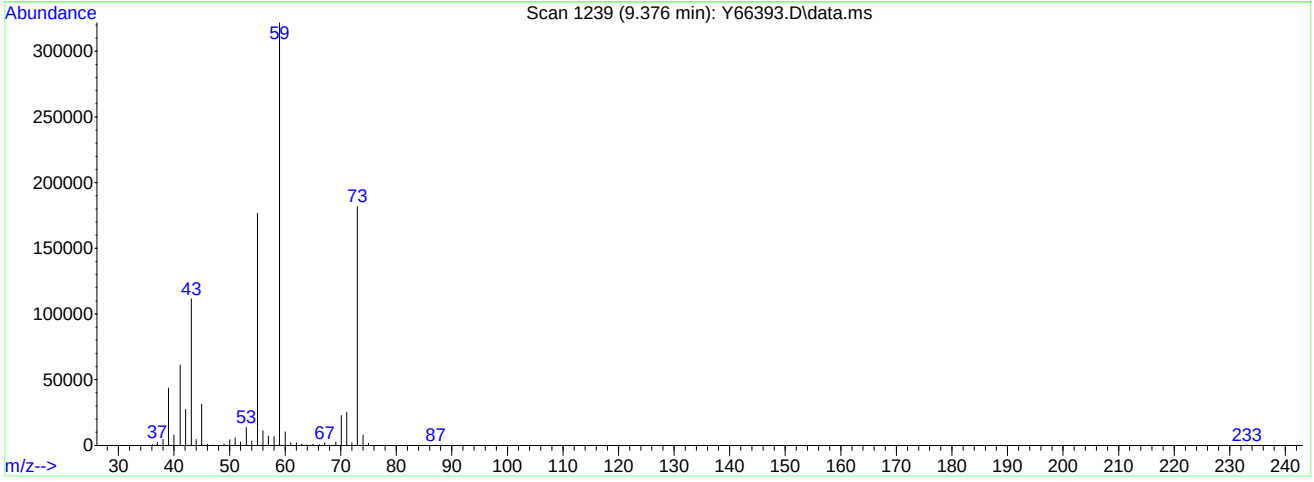
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	266.64#
73.10	54.90	23.47#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:00 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration





TIC: Y66393.D\data.ms

(52) Tert Amyl Alcohol

9.376min (+0.007) 424.83ug/L m

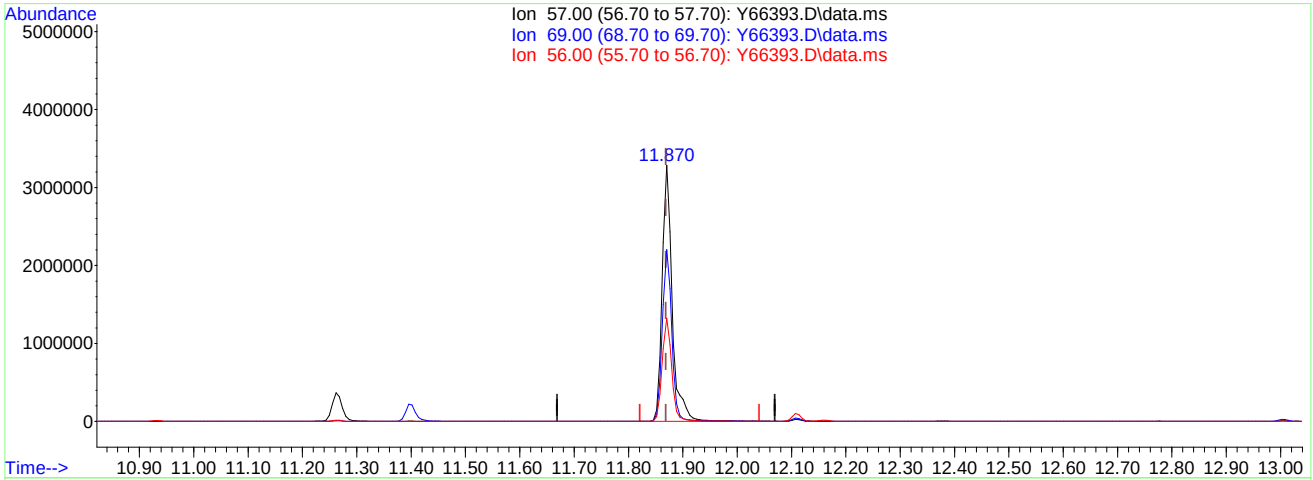
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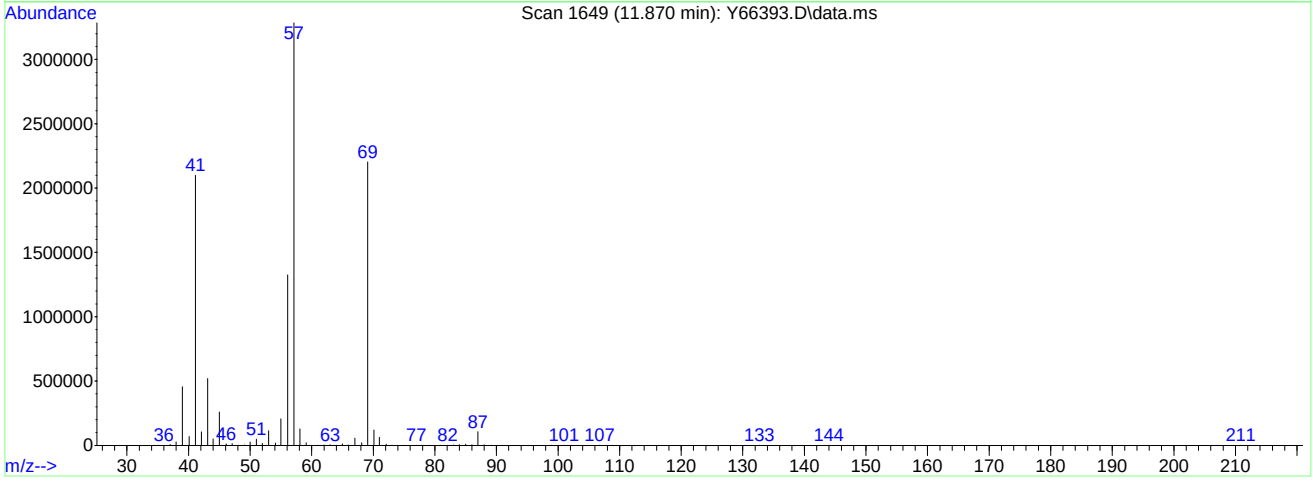
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	54.88
73.10	54.90	56.49
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:00 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration





TIC: Y66393.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (+0.001) 2220.96ug/L

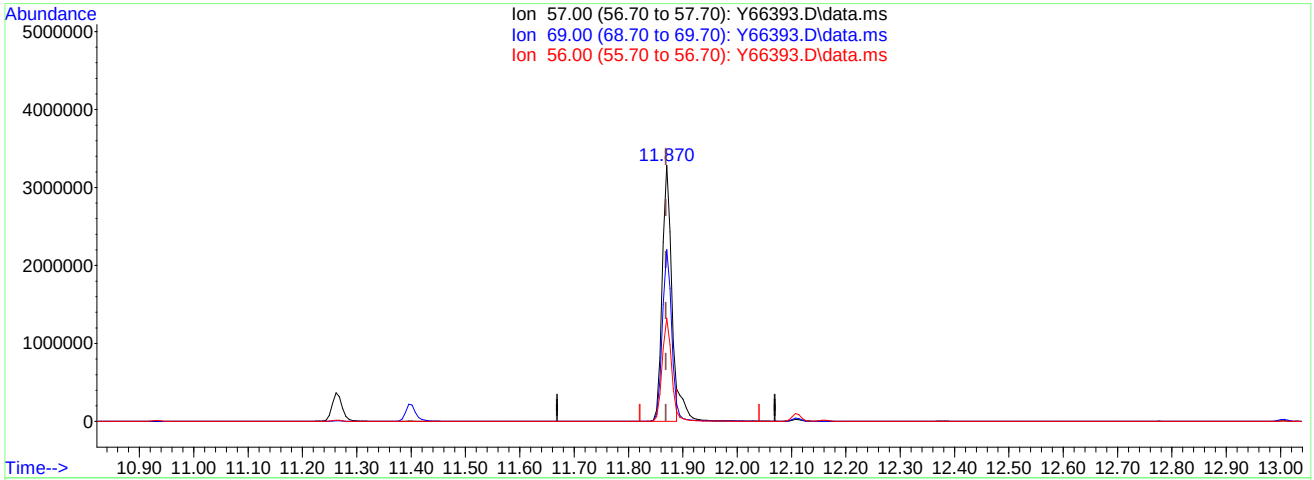
response 4213195

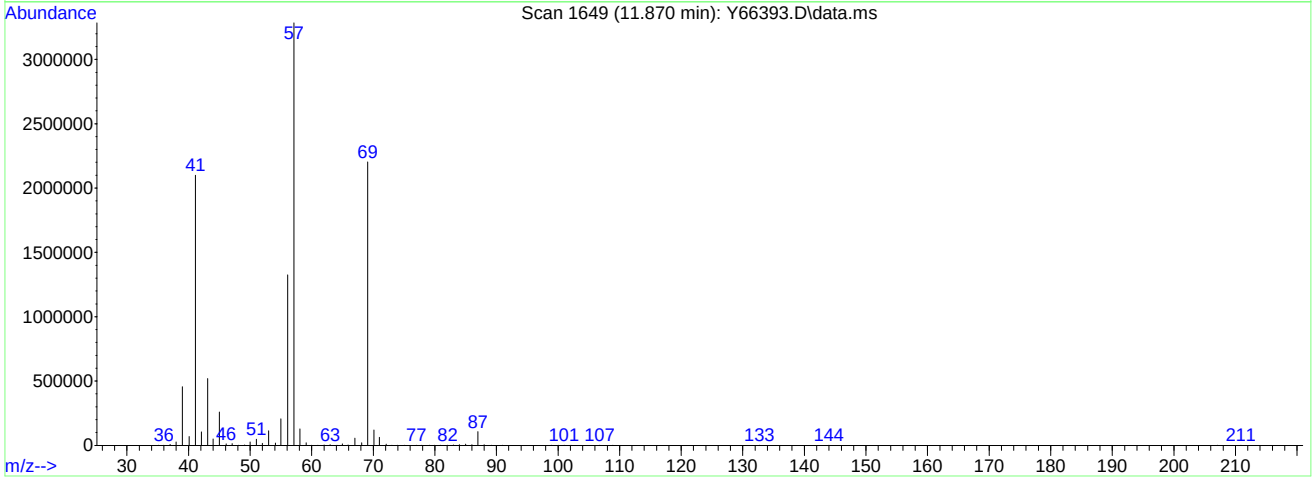
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	67.10
56.00	40.70	40.31
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66393.D
Acq On : 2 Dec 2022 5:17 pm
Operator : joannel
Sample : ICV2755-5 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 05 09:45:00 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration





TIC: Y66393.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (+0.001) 2033.90ug/L m

response 3810575

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	67.10
56.00	40.70	40.32
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66394.D
Acq On : 2 Dec 2022 5:41 pm
Operator : joannel
Sample : ICV2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 05 09:48:51 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration

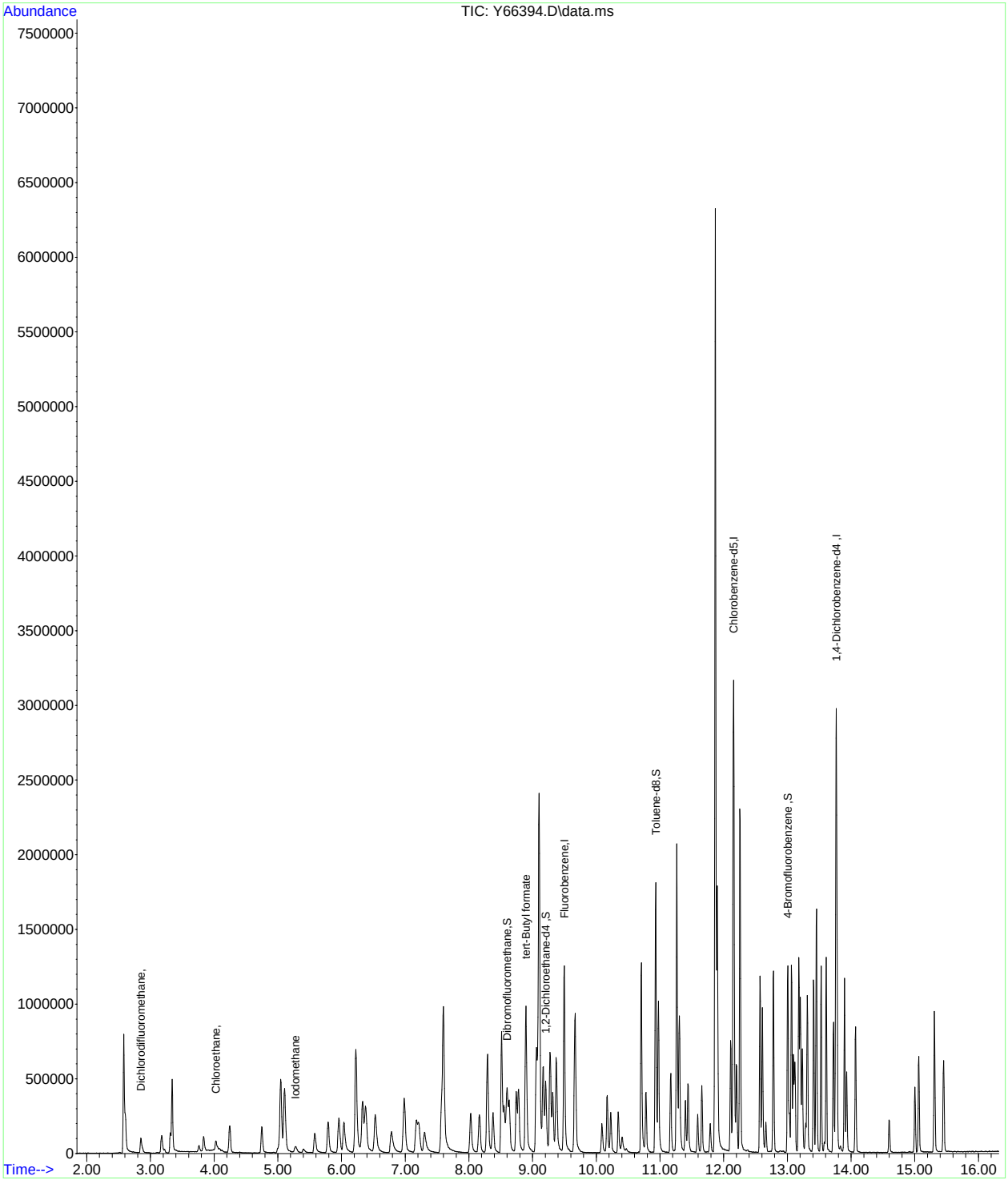
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.497	96	1019010	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.150	117	724610	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.768	152	349384	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.603	113	204027	47.98	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.96%			
49) 1,2-Dichloroethane-d4	9.205	65	265509	49.85	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.70%			
63) Toluene-d8	10.933	98	954690	50.61	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.22%			
86) 4-Bromofluorobenzene	13.007	174	263927	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.848	85	108947	21.41	ug/L	91
8) Chloroethane	4.028	64	56700	20.27	ug/L	91
16) Iodomethane	5.275	142	78212	21.28	ug/L	97
44) tert-Butyl formate	8.895	59	338635	102.26	ug/L	94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\2022-12-02\
Data File : Y66394.D
Acq On : 2 Dec 2022 5:41 pm
Operator : joannel
Sample : ICV2755-4 Inst : MSVOA14-Y
Misc : MS52862,VY2755,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 05 09:48:51 2022
Quant Method : C:\msdchem\1\METHODS\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Mon Dec 05 09:38:57 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/12/22 02:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:56:10 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.496	96	651561	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.149	117	463146	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.767	152	221157	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.602	113	140123	51.54	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.08%			
49) 1,2-Dichloroethane-d4	9.204	65	168846	49.58	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.16%			
63) Toluene-d8	10.932	98	629026	52.17	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 104.34%			
86) 4-Bromofluorobenzene	13.006	174	169776	50.09	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.18%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.847	85	149913	47.21	ug/L	98
3) Acrolein	5.579	56	158888	189.04	ug/L	93
4) Chloromethane	3.176	50	180465	41.83	ug/L	94
5) 1,3-butadiene	3.340	39	161358	44.87	ug/L	94
6) Vinyl Chloride	3.309	62	161901	41.83	ug/L	94
7) Bromomethane	3.833	94	62562	34.96	ug/L	93
8) Chloroethane	4.027	64	85353	51.45	ug/L	92
9) Trichlorofluoromethane	4.240	101	171566	45.23	ug/L	97
10) Ethyl Ether	4.751	59	123758	39.53	ug/L	99
11) Ethanol	5.007	45	75957	797.75	ug/L	98
12) 1,2-Dichlorotrifluoroe...	5.037	67	145547	41.56	ug/L	97
13) 1,1-Dichloroethene	5.049	61	180169	39.94	ug/L	96
14) Freon 113	5.104	101	115554	41.90	ug/L	97
15) Carbon Disulfide	5.098	76	328997	40.32	ug/L	99
16) Iodomethane	5.280	142	83868	34.64	ug/L	98
17) Allyl chloride	5.785	41	184254	43.20	ug/L	99
18) Methylene Chloride	5.962	49	192964	37.74	ug/L	97
19) Acetone	6.035	43	374337	205.69	ug/L	97
20) Methyl acetate	6.223	43	775307	209.87	ug/L	99
21) trans-1,2-Dichloroethene	6.217	61	184695	41.88	ug/L	98
22) Hexane	6.327	56	92002	41.89	ug/L #	78
23) Methyl Tert Butyl Ether	6.375	73	379458	39.13	ug/L	91
24) Tert Butyl Alcohol	6.534	59	372933	383.64	ug/L	97
25) Acetonitrile	6.783	41	307784	397.24	ug/L	95
26) Di-isopropyl ether	6.984	45	448819	40.55	ug/L	98
27) Chloroprene	7.172	53	163355	42.90	ug/L	99
28) 1,1-Dichloroethane	7.215	63	241044	40.50	ug/L	96
29) Acrylonitrile	7.294	53	375630	207.58	ug/L	96
30) ETBE	7.574	59	423023	39.76	ug/L	99
31) Vinyl acetate	7.598	43	1583568	200.26	ug/L	99
32) cis-1,2-Dichloroethene	8.024	96	144234	40.43	ug/L	97
33) 2,2-Dichloropropane	8.164	77	183672	42.33	ug/L	97
34) Bromochloromethane	8.292	128	60532	40.14	ug/L	95
35) Cyclohexane	8.292	56	235241	42.62	ug/L	94
36) Chloroform	8.377	83	221293	39.40	ug/L	98
37) Ethyl acetate	8.511	43	1082662	205.15	ug/L	99
38) Tetrahydrofuran	8.584	42	84441	38.68	ug/L	97
40) Carbon Tetrachloride	8.553	117	147268	42.22	ug/L	97
41) 1,1,1-Trichloroethane	8.632	97	198722	42.01	ug/L	96
42) 2-Butanone	8.742	43	616794	201.89	ug/L	96
43) 1,1-Dichloropropene	8.778	75	177970	41.31	ug/L	96
44) tert-Butyl formate	8.894	59	463310	208.48	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:56:10 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	Propionitrile	9.077	54	365485	389.30	ug/L		99
46)	Methacrylonitrile	9.101	41	1248011	407.56	ug/L		99
47)	Benzene	9.058	78	566048	39.34	ug/L		99
48)	TAME	9.168	73	367650	38.58	ug/L		97
50)	Isobutyl Alcohol	9.271	42	211094	794.05	ug/L		97
51)	1,2-Dichloroethane	9.277	62	188696	38.61	ug/L		97
52)	Tert Amyl Alcohol	9.369	59	322953m	370.08	ug/L		
53)	Trichloroethene	9.673	95	143863	39.12	ug/L		98
54)	Methylcyclohexane	9.661	83	202998	42.10	ug/L		93
55)	Dibromomethane	10.086	93	78826	40.25	ug/L		97
56)	1,2-Dichloropropane	10.172	63	143450	39.84	ug/L		98
57)	Bromodichloromethane	10.226	83	155190	40.47	ug/L		96
58)	Methyl methacrylate	10.342	41	145462	41.10	ug/L		94
59)	1,4-Dioxane	10.403	88	72074	772.91	ug/L		91
60)	2-Chloroethyl vinyl ether	10.707	63	453067	201.29	ug/L		98
61)	cis-1,3-Dichloropropene	10.780	75	205176	41.58	ug/L		99
64)	Toluene	10.975	91	612305	39.82	ug/L		99
65)	2-Nitropropane	11.169	41	260068	197.62	ug/L		99
66)	4-Methyl-2-pentanone	11.261	43	1244780	203.55	ug/L		99
67)	trans-1,3-Dichloropropene	11.309	75	180568	44.05	ug/L		95
68)	Tetrachloroethene	11.303	166	151473	41.41	ug/L		97
69)	Ethyl methacrylate	11.394	69	190936	40.98	ug/L		92
70)	1,1,2-Trichloroethane	11.437	83	107361	41.32	ug/L		97
71)	Dibromochloromethane	11.589	129	122559	41.66	ug/L		95
72)	1,3-Dichloropropane	11.656	76	227799	39.83	ug/L		97
73)	1,2-Dibromoethane	11.784	107	127770	41.26	ug/L		96
74)	3,3-dimethyl-1-butanol	11.869	57	2319192m	2016.15	ug/L		
75)	2-hexanone	11.899	43	1015967	185.20	ug/L		98
76)	1-Chlorohexane	12.112	91	176205	43.25	ug/L		91
77)	Ethylbenzene	12.155	91	688807	39.38	ug/L		98
78)	Chlorobenzene	12.161	112	380033	39.90	ug/L		97
79)	1,1,1,2-Tetrachloroethane	12.203	131	127141	42.71	ug/L		93
80)	m,p-Xylene	12.258	91	1060359	79.13	ug/L		96
81)	o-Xylene	12.568	91	519850	40.07	ug/L		99
82)	Styrene	12.605	104	405318	40.17	ug/L		99
83)	Bromoform	12.660	173	77391	41.38	ug/L		95
84)	Isopropylbenzene	12.781	105	611083	40.06	ug/L		99
87)	cis-1,4-Dichloro-2-butene	13.031	53	42536	31.90	ug/L	#	78
88)	n-Propylbenzene	13.061	91	747341	40.15	ug/L		98
89)	Bromobenzene	13.098	156	155759	39.24	ug/L		92
90)	1,1,2,2-Tetrachloroethane	13.116	83	202948	40.46	ug/L		99
91)	1,3,5-Trimethylbenzene	13.177	105	518762	39.89	ug/L		99
92)	2-Chlorotoluene	13.201	91	501694	40.23	ug/L		96
93)	trans-1,4-Dichloro-2-B...	13.238	53	36687	30.58	ug/L	#	74
94)	1,2,3-Trichloropropane	13.232	110	68847	39.35	ug/L		96
95)	Cyclohexanone	13.286	55	83424	199.52	ug/L		93
96)	4-Chlorotoluene	13.311	91	467074	39.90	ug/L		98
97)	tert-Butylbenzene	13.414	91	260813	37.97	ug/L		95
98)	1,2,4-Trimethylbenzene	13.451	105	520412	39.66	ug/L		98
99)	Pentachloroethane	13.463	167	73809	42.32	ug/L		93
100)	sec-Butylbenzene	13.530	105	566848	39.34	ug/L		99
101)	4-Isopropyltoluene	13.609	119	499520	39.31	ug/L		99
102)	1,3-Dichlorobenzene	13.724	146	286396	39.74	ug/L		99
103)	1,2,3-Trimethylbenzene	13.761	105	521405	39.41	ug/L		99
104)	1,4-Dichlorobenzene	13.779	146	298334	38.32	ug/L		99
105)	n-Butylbenzene	13.895	92	248930	37.59	ug/L		98
106)	Benzyl Chloride	13.931	126	80689	41.91	ug/L		95
107)	1,2-Dichlorobenzene	14.071	146	280139	39.18	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:56:10 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

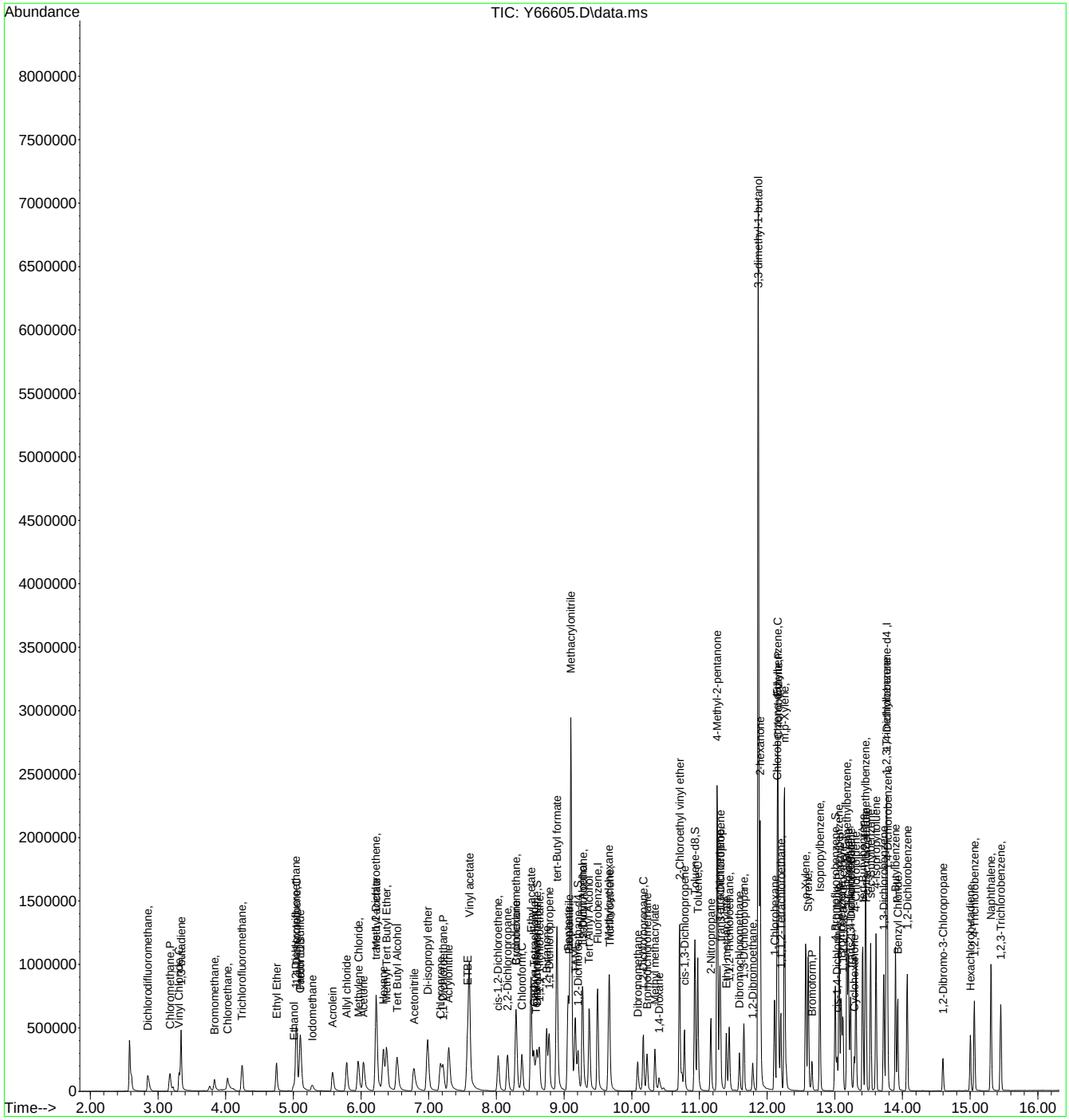
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dibromo-3-Chloropr...	14.600	75	44811	40.02	ug/L #	76
109) Hexachlorobutadiene	15.002	225	58865	40.25	ug/L	92
110) 1,2,4-Trichlorobenzene	15.063	180	173235	39.86	ug/L	97
111) Naphthalene	15.306	128	647863	40.11	ug/L	100
112) 1,2,3-Trichlorobenzene	15.452	180	171017	41.02	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:56:10 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Manual Integration Approval Summary

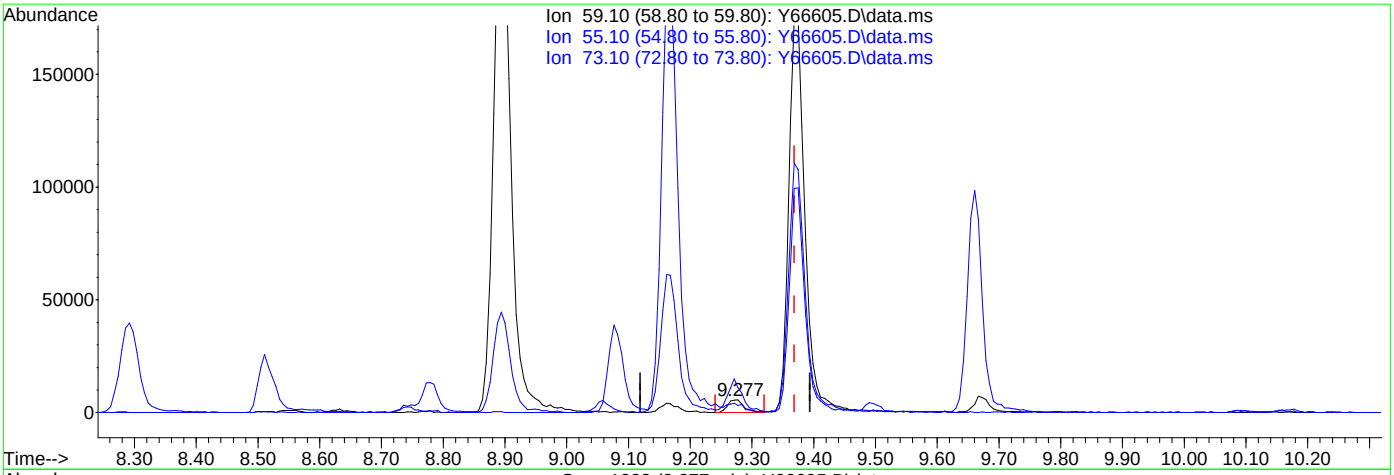
Sample Number: VY2765-CC2755
Lab FileID: Y66605.D
Injection Time: 12/09/22 09:38
Method: SW846 8260D
Analyst approved: 12/11/22 21:02 Celine Celis
Supervisor approved: 12/12/22 02:53 Jennifer Fereira

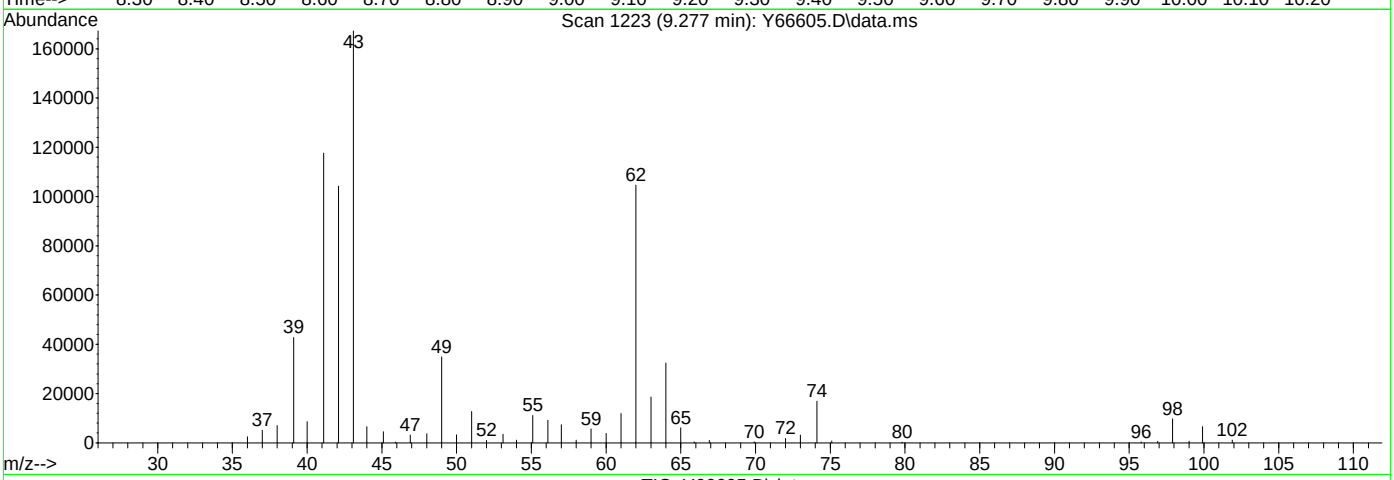
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tert-Amyl Alcohol	75-85-4		9.37	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(52) Tert Amyl Alcohol

9.277min (-0.092) 13.67ug/L

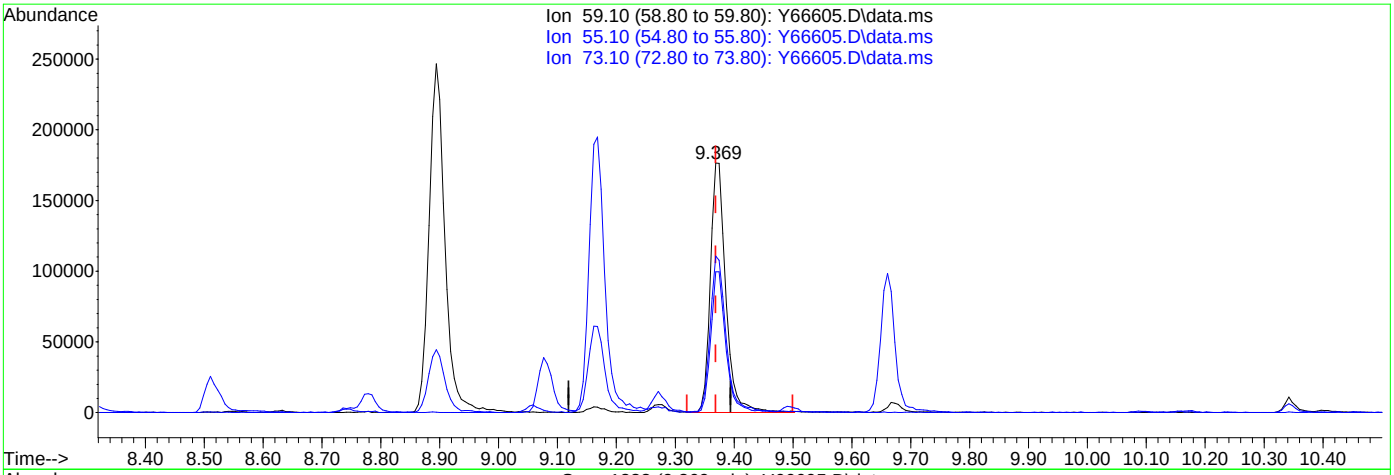
response 10715

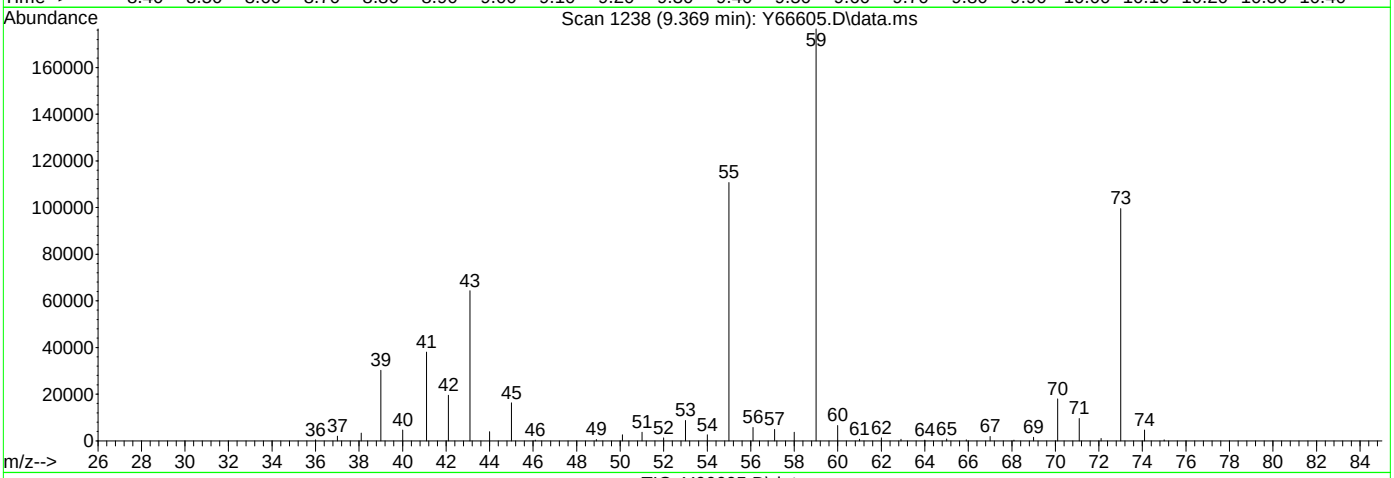
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	191.55#
73.10	54.90	45.71
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(52) Tert Amyl Alcohol

9.369min (-0.000) 370.08ug/L m

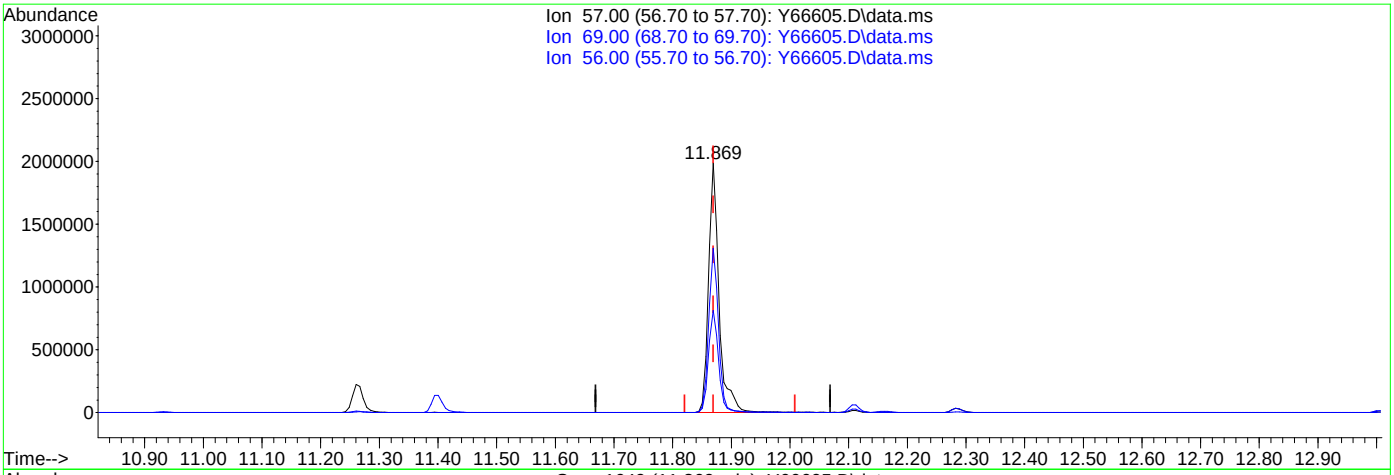
response 322953

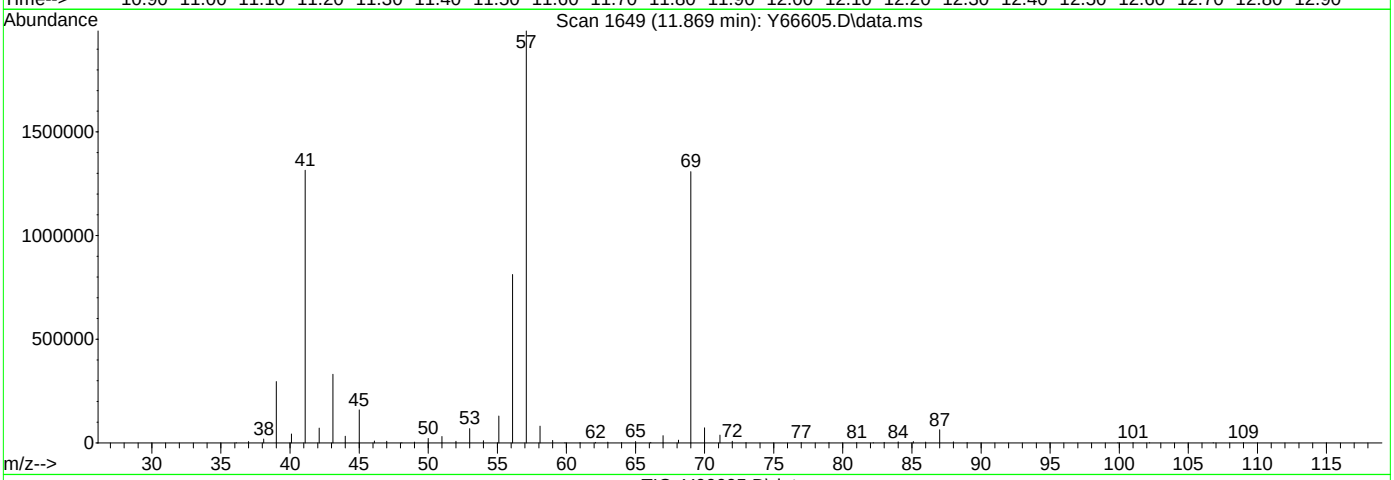
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	62.70
73.10	54.90	56.35
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 2145.94ug/L

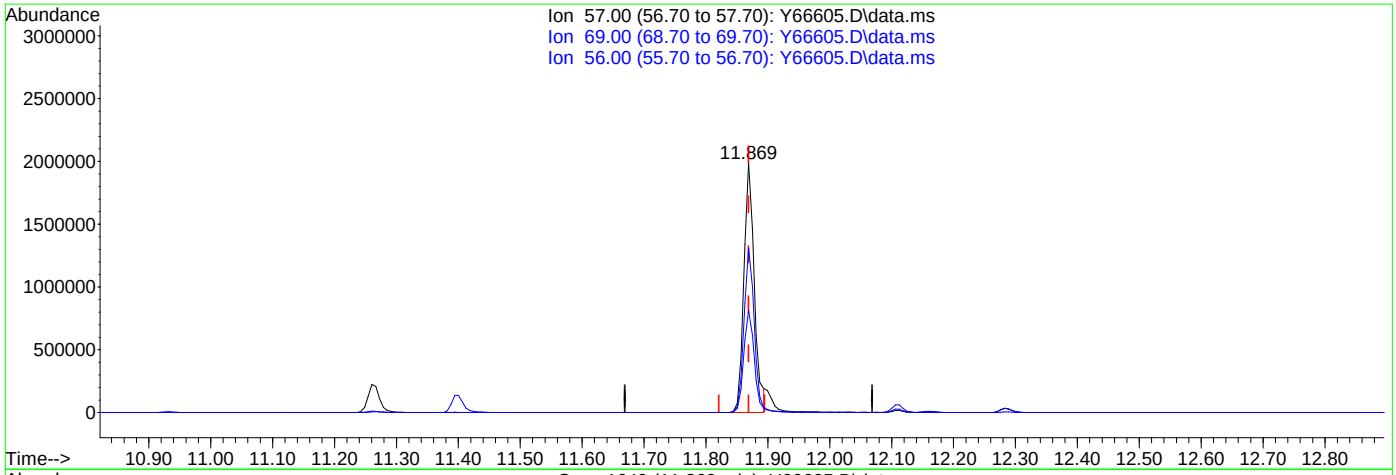
response 2489994

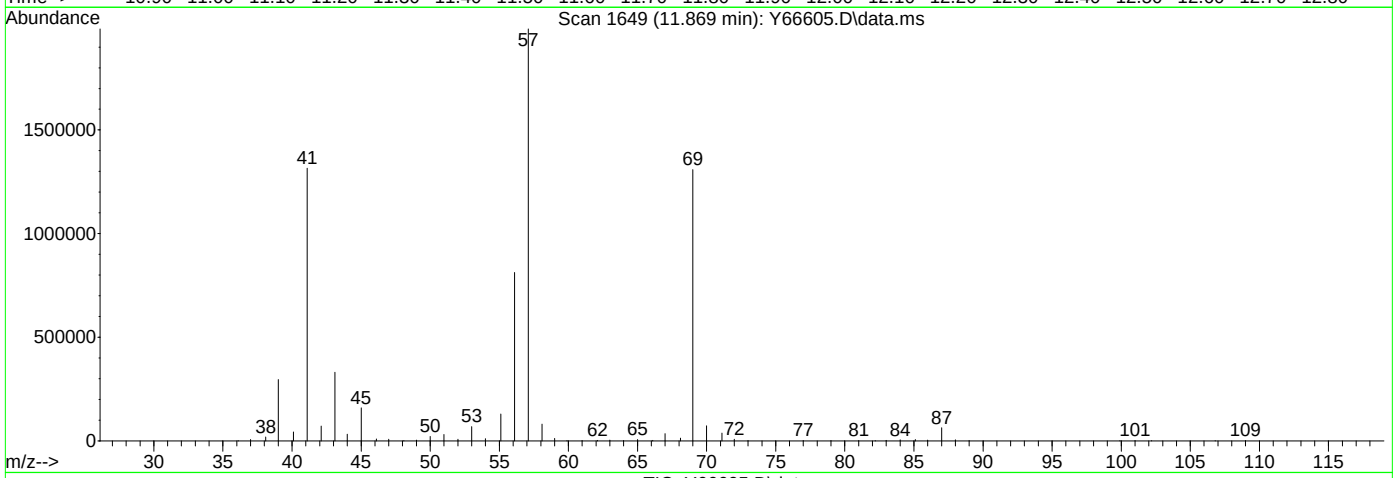
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.75
56.00	40.70	40.86
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66605.D
Acq On : 9 Dec 2022 9:38 am
Operator : joannel
Sample : CC2755-5
Misc : MS52862,VY2765,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 11 20:49:38 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66605.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.869min (-0.000) 2016.15ug/L m

response 2319192

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	65.83
56.00	40.70	40.86
0.00	0.00	0.00

Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/12/22 02:53

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 21:53:51 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	9.497	96	1143089	50.00	ug/L	0.00
62) Chlorobenzene-d5	12.149	117	791862	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	13.768	152	355077	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.603	113	240897	50.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	101.00%		
49) 1,2-Dichloroethane-d4	9.205	65	296427	49.62	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery =	99.24%		
63) Toluene-d8	10.933	98	1091409	52.95	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery =	105.90%		
86) 4-Bromofluorobenzene	13.007	174	280245	51.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	103.00%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.854	85	280094	50.43	ug/L	99
3) Acrolein	5.579	56	266796	181.05	ug/L	96
4) Chloromethane	3.176	50	334535	44.22	ug/L	96
5) 1,3-butadiene	3.341	39	269527	42.72	ug/L	99
6) Vinyl Chloride	3.316	62	293930	43.29	ug/L	96
7) Bromomethane	3.833	94	106527	33.93	ug/L	92
8) Chloroethane	4.034	64	105566	34.83	ug/L	99
9) Trichlorofluoromethane	4.241	101	313839	47.16	ug/L	98
10) Ethyl Ether	4.752	59	229323	41.75	ug/L	97
11) Ethanol	4.995	45	140447	837.66	ug/L	95
12) 1,2-Dichlorotrifluoroe...	5.038	67	273219	44.47	ug/L	97
13) 1,1-Dichloroethene	5.050	61	352478	44.54	ug/L	95
14) Freon 113	5.111	101	204096	42.18	ug/L	96
15) Carbon Disulfide	5.099	76	654349	45.71	ug/L	97
16) Iodomethane	5.281	142	148206	34.87	ug/L	99
17) Allyl chloride	5.786	41	332893	44.49	ug/L	93
18) Methylene Chloride	5.956	49	334443	37.24	ug/L	99
19) Acetone	6.036	43	585914	183.51	ug/L	95
20) Methyl acetate	6.224	43	1331502	205.44	ug/L	98
21) trans-1,2-Dichloroethene	6.218	61	343485	44.40	ug/L	98
22) Hexane	6.328	56	145789m	37.84	ug/L	
23) Methyl Tert Butyl Ether	6.382	73	716769	42.13	ug/L	82
24) Tert Butyl Alcohol	6.534	59	683157	400.58	ug/L	96
25) Acetonitrile	6.778	41	506473	373.51	ug/L	95
26) Di-isopropyl ether	6.985	45	810696	41.75	ug/L	97
27) Chloroprene	7.173	53	302507	45.28	ug/L	98
28) 1,1-Dichloroethane	7.210	63	447371	42.85	ug/L	99
29) Acrylonitrile	7.295	53	646197	203.54	ug/L	96
30) ETBE	7.575	59	780388	41.81	ug/L	98
31) Vinyl acetate	7.599	43	2637732	190.70	ug/L	99
32) cis-1,2-Dichloroethene	8.025	96	265997	42.50	ug/L	97
33) 2,2-Dichloropropane	8.165	77	306850	40.31	ug/L	96
34) Bromochloromethane	8.293	128	109315	41.32	ug/L	100
35) Cyclohexane	8.293	56	413664	42.72	ug/L	98
36) Chloroform	8.378	83	403336	40.94	ug/L	95
37) Ethyl acetate	8.512	43	1821453	196.73	ug/L	98
38) Tetrahydrofuran	8.585	42	147650	38.55	ug/L	95
40) Carbon Tetrachloride	8.554	117	273968	44.77	ug/L	94
41) 1,1,1-Trichloroethane	8.633	97	364768	43.95	ug/L	99
42) 2-Butanone	8.743	43	993459	185.85	ug/L	100
43) 1,1-Dichloropropene	8.779	75	327808	43.37	ug/L	96
44) tert-Butyl formate	8.895	59	855401	218.43	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 21:53:51 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	Propionitrile	9.077	54	623575	378.60	ug/L		97
46)	Methacrylonitrile	9.102	41	2020182	376.05	ug/L		99
47)	Benzene	9.059	78	1032145	40.89	ug/L		98
48)	TAME	9.169	73	684942	40.97	ug/L		96
50)	Isobutyl Alcohol	9.272	42	350611	757.47	ug/L		95
51)	1,2-Dichloroethane	9.278	62	325993	38.03	ug/L		97
52)	Tert Amyl Alcohol	9.375	59	590276m	384.02	ug/L		
53)	Trichloroethene	9.673	95	262064	40.62	ug/L		97
54)	Methylcyclohexane	9.661	83	347373	41.06	ug/L		94
55)	Dibromomethane	10.087	93	137803	40.11	ug/L		93
56)	1,2-Dichloropropane	10.172	63	264918	41.94	ug/L		98
57)	Bromodichloromethane	10.227	83	283567	42.15	ug/L		96
58)	Methyl methacrylate	10.343	41	256287	41.26	ug/L		96
59)	1,4-Dioxane	10.403	88	125778	768.83	ug/L		95
60)	2-Chloroethyl vinyl ether	10.708	63	803777	203.55	ug/L		98
61)	cis-1,3-Dichloropropene	10.781	75	370628	42.81	ug/L		93
64)	Toluene	10.975	91	1242423	47.26	ug/L		100
65)	2-Nitropropane	11.170	41	427791	190.58	ug/L		99
66)	4-Methyl-2-pentanone	11.261	43	2032222	194.89	ug/L		99
67)	trans-1,3-Dichloropropene	11.310	75	322268	45.99	ug/L		99
68)	Tetrachloroethene	11.304	166	264179	42.24	ug/L		96
69)	Ethyl methacrylate	11.395	69	354314	44.05	ug/L		95
70)	1,1,2-Trichloroethane	11.438	83	186520	41.98	ug/L		97
71)	Dibromochloromethane	11.590	129	215929	42.93	ug/L		95
72)	1,3-Dichloropropane	11.657	76	409676	41.90	ug/L		97
73)	1,2-Dibromoethane	11.784	107	230599	43.55	ug/L		99
74)	3,3-dimethyl-1-butanol	11.870	57	3809683m	1946.19	ug/L		
75)	2-hexanone	11.900	43	1556949	169.65	ug/L		97
76)	1-Chlorohexane	12.107	91	306084	43.95	ug/L		98
77)	Ethylbenzene	12.156	91	1260190	42.14	ug/L		98
78)	Chlorobenzene	12.162	112	655640	40.26	ug/L		98
79)	1,1,1,2-Tetrachloroethane	12.204	131	226197	44.44	ug/L		95
80)	m,p-Xylene	12.253	91	2082413	90.89	ug/L		100
81)	o-Xylene	12.569	91	1002335	45.18	ug/L		98
82)	Styrene	12.606	104	715967	41.42	ug/L		99
83)	Bromoform	12.660	173	136500	42.68	ug/L		98
84)	Isopropylbenzene	12.782	105	1081728	41.48	ug/L		100
87)	cis-1,4-Dichloro-2-butene	13.032	53	68362	31.93	ug/L	#	84
88)	n-Propylbenzene	13.062	91	1308365	43.78	ug/L		96
89)	Bromobenzene	13.098	156	265923	41.72	ug/L		87
90)	1,1,2,2-Tetrachloroethane	13.117	83	350758	43.55	ug/L		99
91)	1,3,5-Trimethylbenzene	13.178	105	935353	44.80	ug/L		99
92)	2-Chlorotoluene	13.202	91	877894	43.84	ug/L		95
93)	trans-1,4-Dichloro-2-B...	13.238	53	61738	31.98	ug/L	#	82
94)	1,2,3-Trichloropropane	13.232	110	119735	42.62	ug/L		96
95)	Cyclohexanone	13.287	55	135215	201.42	ug/L		97
96)	4-Chlorotoluene	13.311	91	794743	42.28	ug/L		98
97)	tert-Butylbenzene	13.409	91	455430	41.30	ug/L		97
98)	1,2,4-Trimethylbenzene	13.451	105	1059073	50.27	ug/L		99
99)	Pentachloroethane	13.463	167	109857	39.23	ug/L		95
100)	sec-Butylbenzene	13.530	105	946129	40.89	ug/L		99
101)	4-Isopropyltoluene	13.609	119	838263	41.09	ug/L		99
102)	1,3-Dichlorobenzene	13.725	146	469752	40.60	ug/L		98
103)	1,2,3-Trimethylbenzene	13.762	105	907028	42.70	ug/L		98
104)	1,4-Dichlorobenzene	13.780	146	488585	39.09	ug/L		99
105)	n-Butylbenzene	13.895	92	409868	38.55	ug/L		98
106)	Benzyl Chloride	13.932	126	110882	36.48	ug/L		96
107)	1,2-Dichlorobenzene	14.072	146	464672	40.48	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 21:53:51 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration

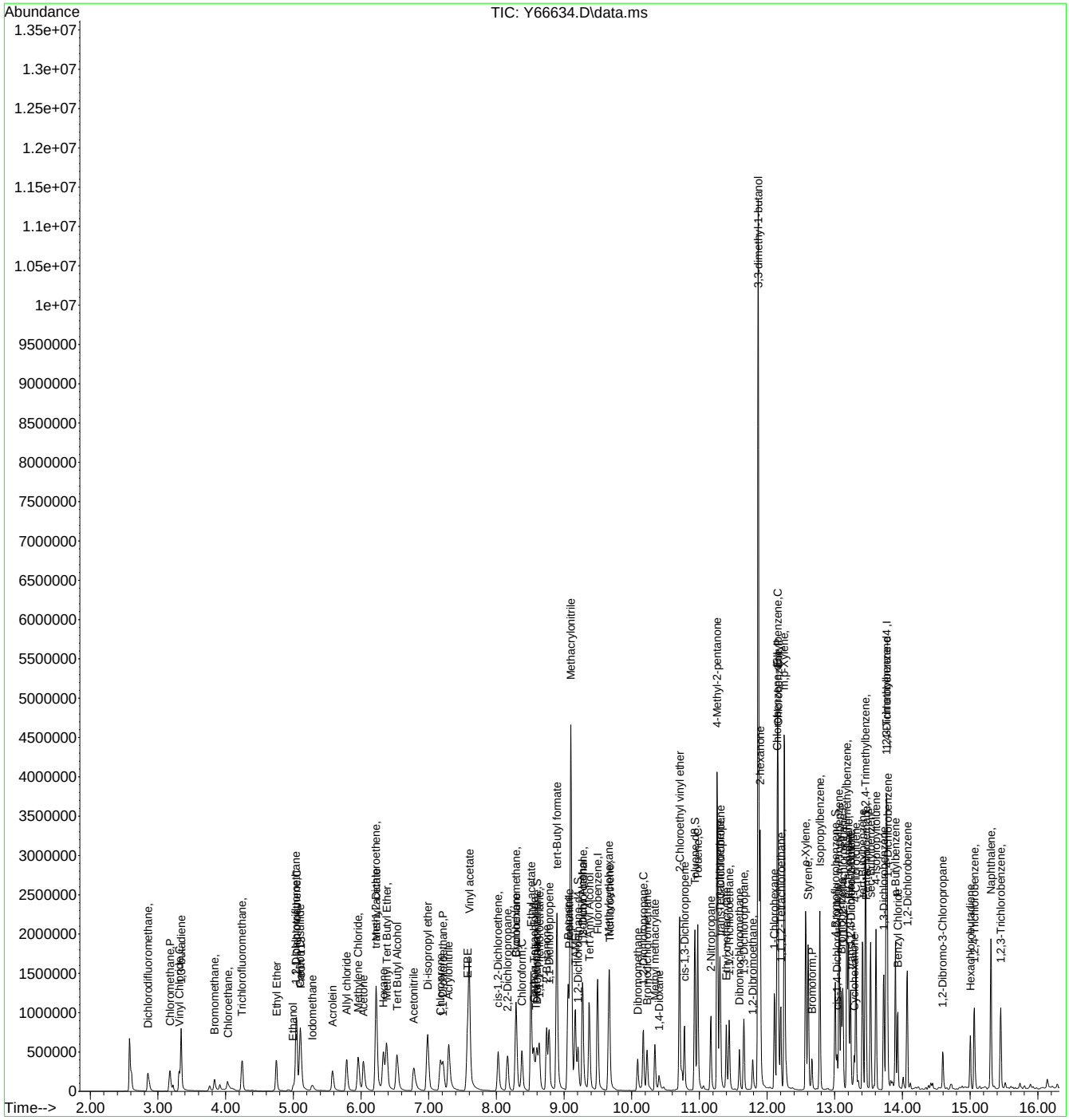
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
108) 1,2-Dibromo-3-Chloropr...	14.595	75	81066	45.10	ug/L	96
109) Hexachlorobutadiene	15.003	225	89065	37.93	ug/L	89
110) 1,2,4-Trichlorobenzene	15.063	180	261937	37.54	ug/L	99
111) Naphthalene	15.307	128	1225474	47.25	ug/L	99
112) 1,2,3-Trichlorobenzene	15.453	180	260265	38.88	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 21:53:51 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration



Manual Integration Approval Summary

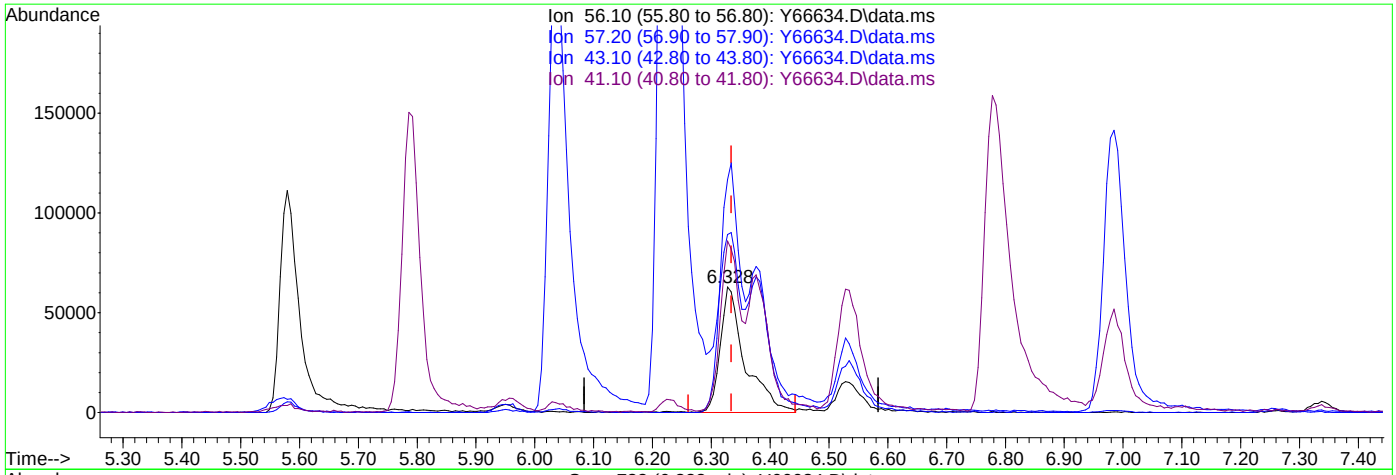
Sample Number: VY2765-ECC2755
Lab FileID: Y66634.D
Injection Time: 12/09/22 21:19
Method: SW846 8260D
Analyst approved: 12/11/22 21:56 Celine Celis
Supervisor approved: 12/12/22 02:53 Jennifer Fereira

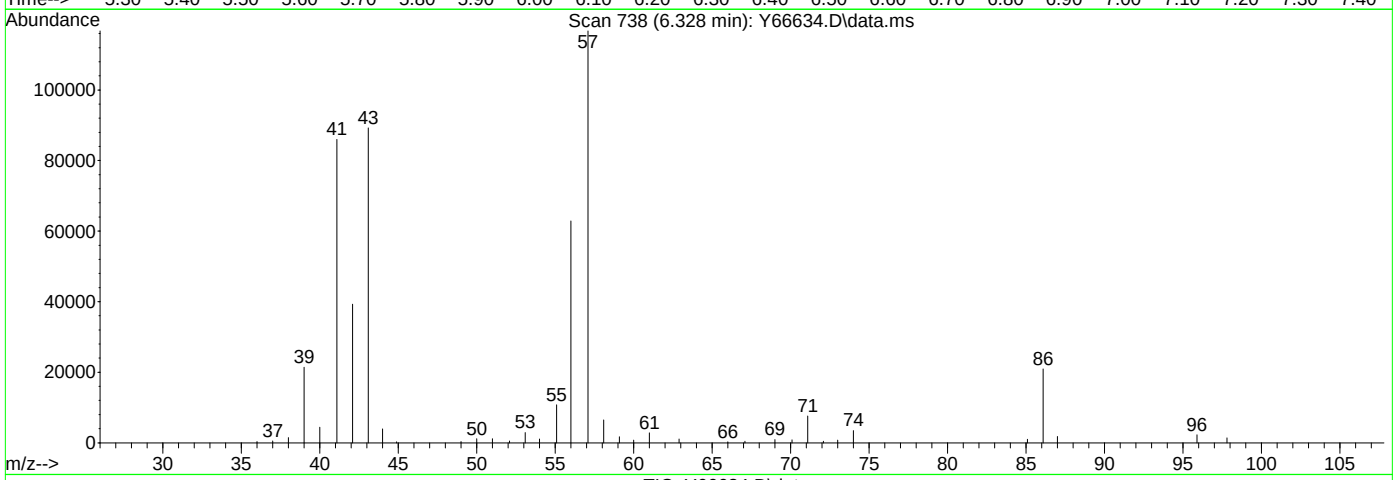
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.33	Overlapping peak
Tert-Amyl Alcohol	75-85-4		9.38	Missed peak
3,3-Dimethyl-1-Butanol	624-95-3		11.87	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(22) Hexane

6.328min (-0.006) 48.09ug/L

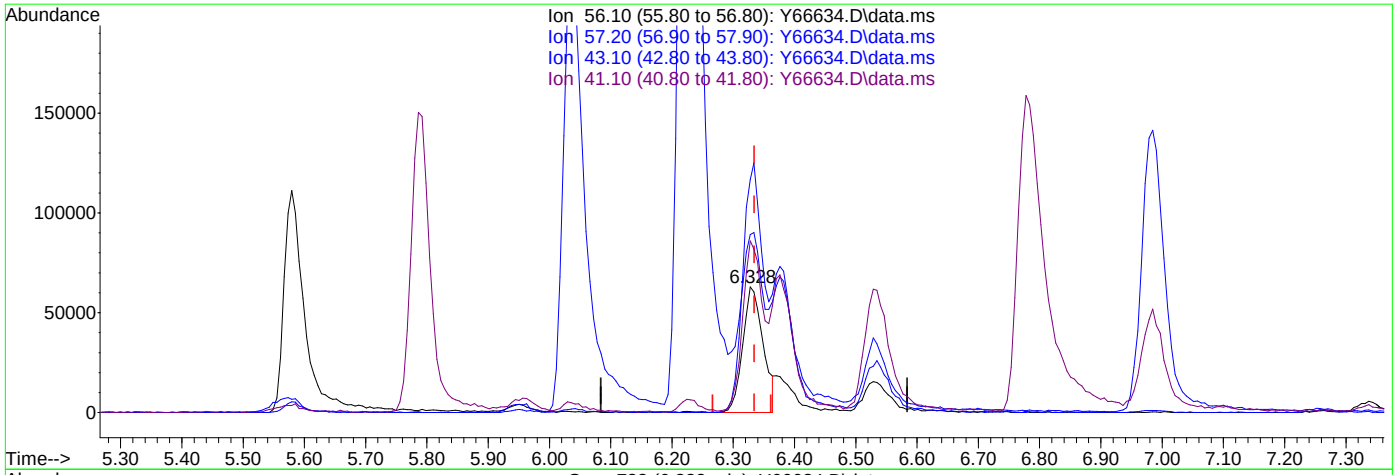
response 185295

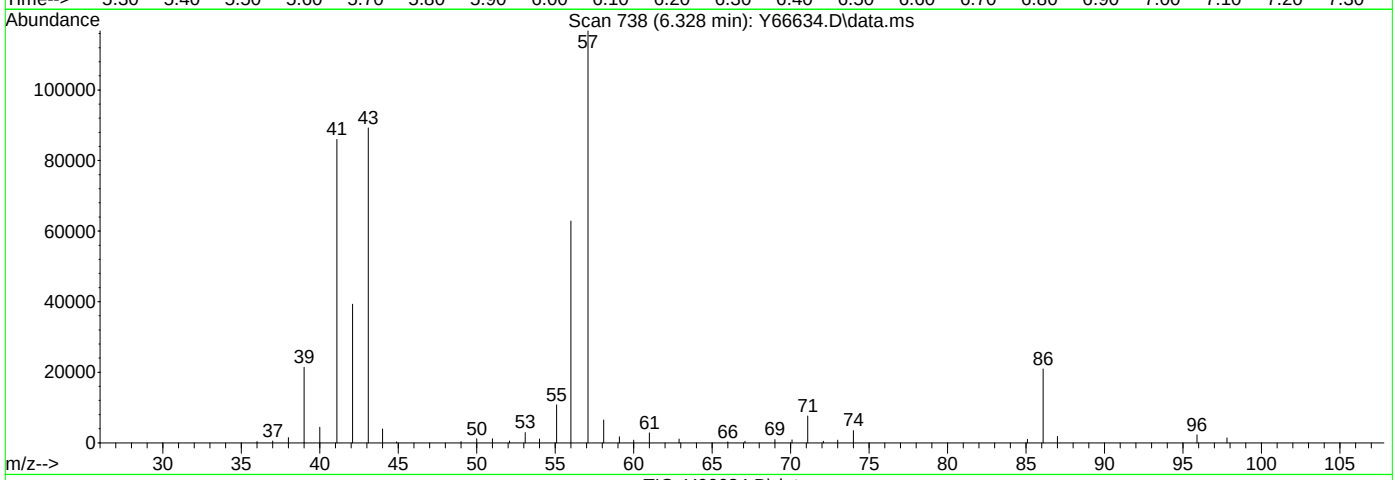
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	185.61
43.10	148.00	127.49#
41.10	134.50	134.45

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(22) Hexane

6.328min (-0.006) 37.84ug/L m

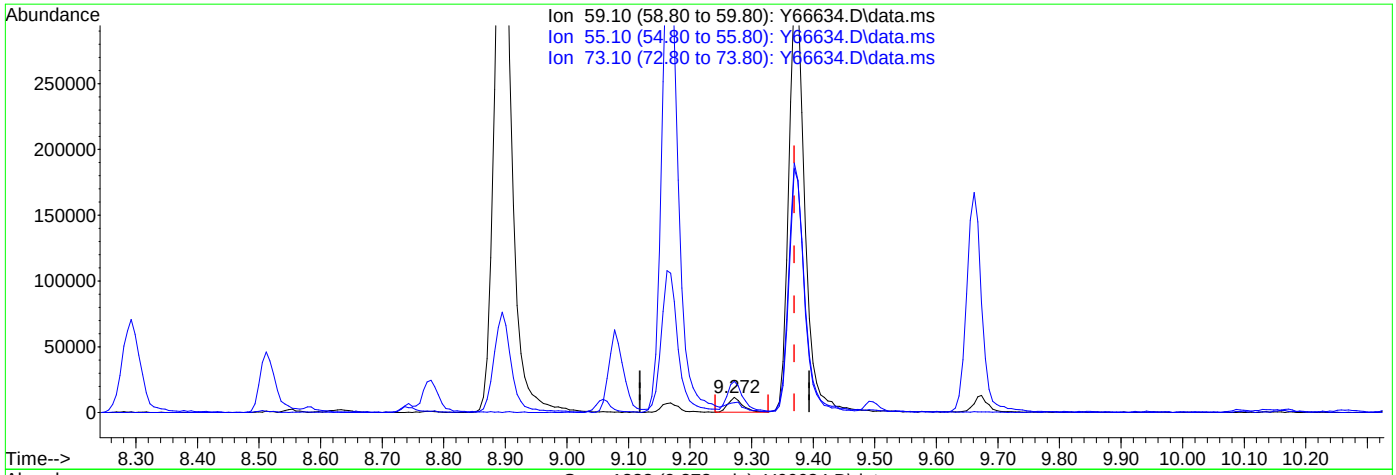
response 145789

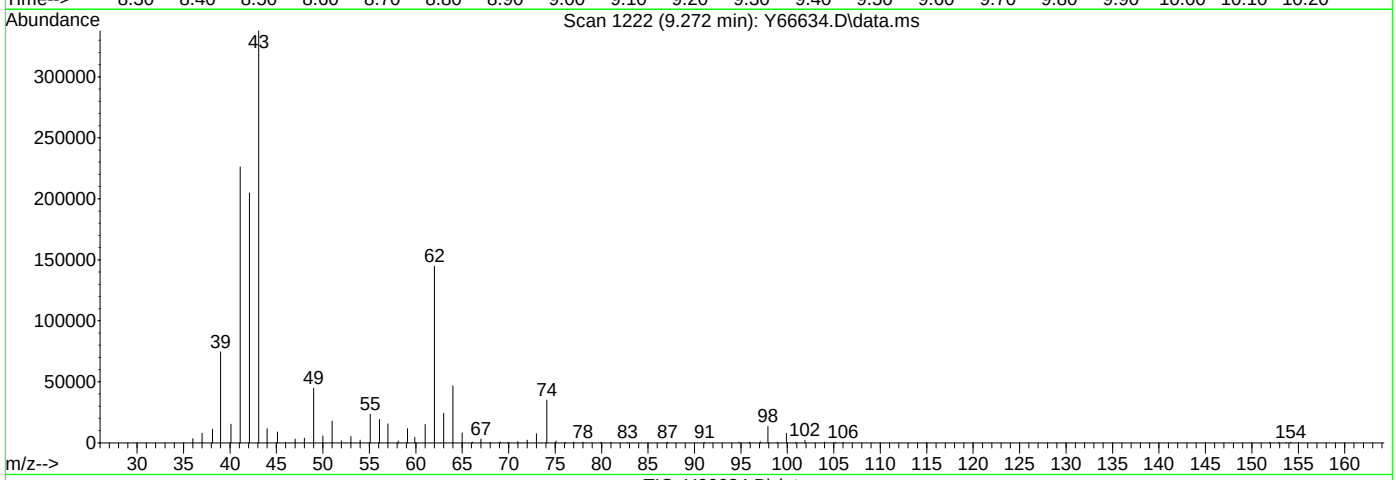
Ion	Exp%	Act%
56.10	100	100
57.20	197.10	185.61
43.10	148.00	141.86
41.10	134.50	136.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(52) Tert Amyl Alcohol

9.272min (-0.097) 13.44ug/L

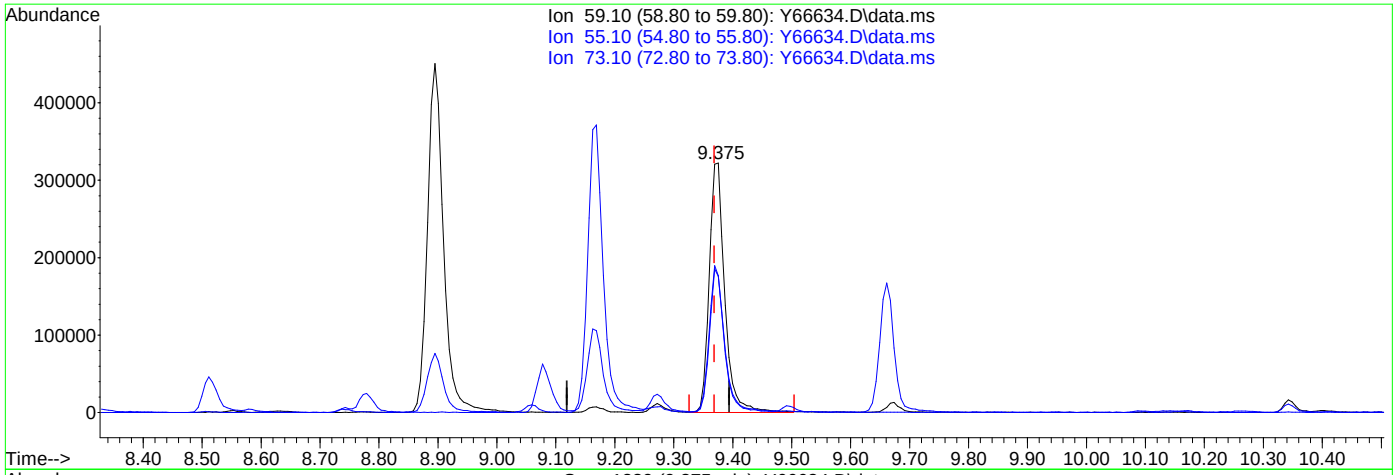
response 18476

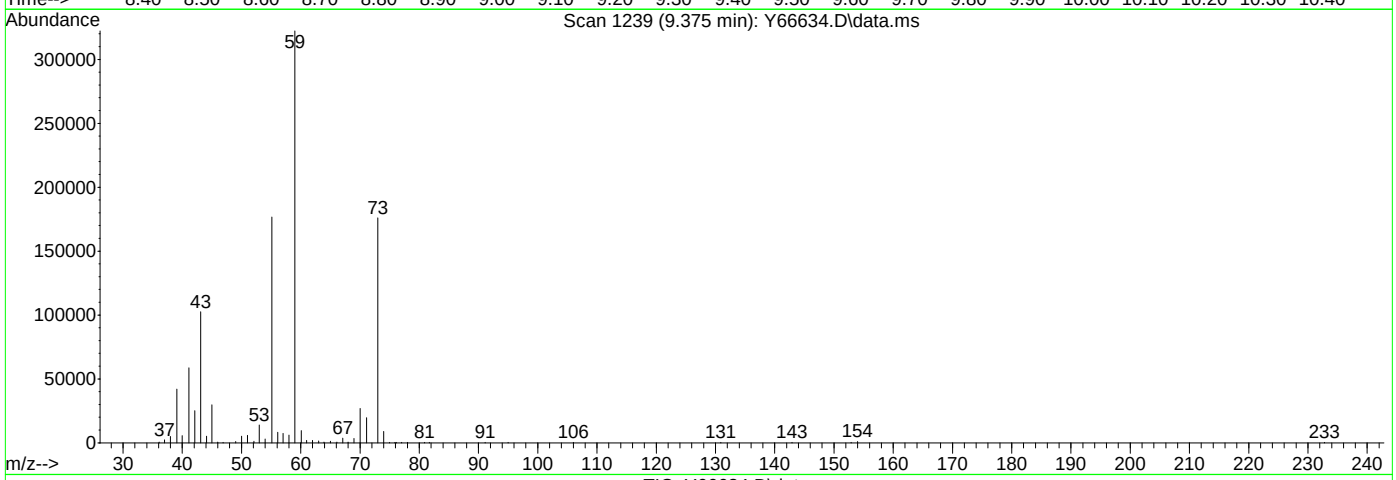
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	197.29#
73.10	54.90	60.29
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(52) Tert Amyl Alcohol

9.375min (+0.006) 384.02ug/L m

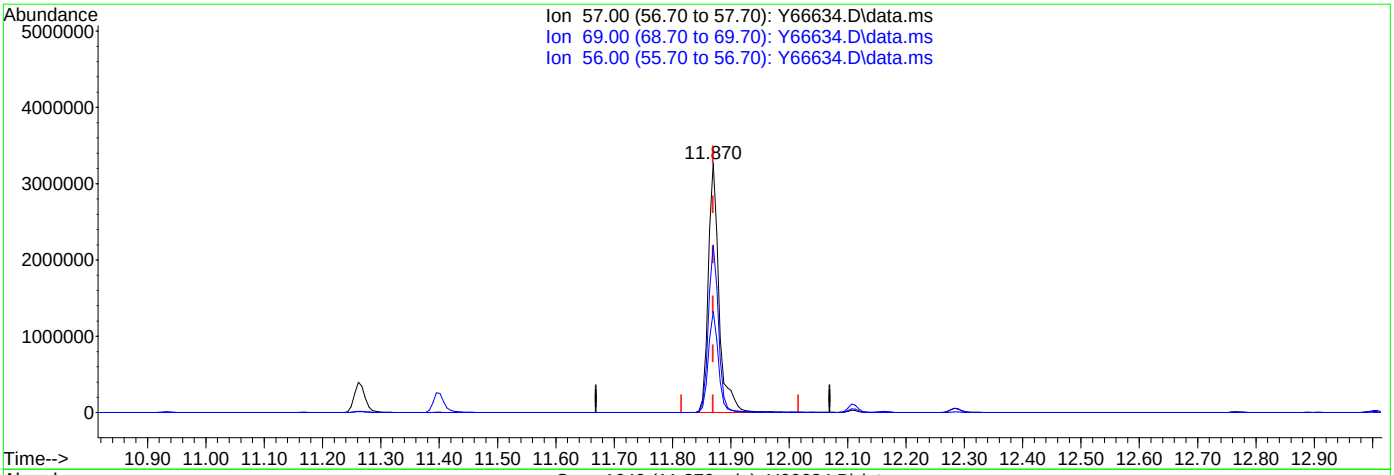
response 590276

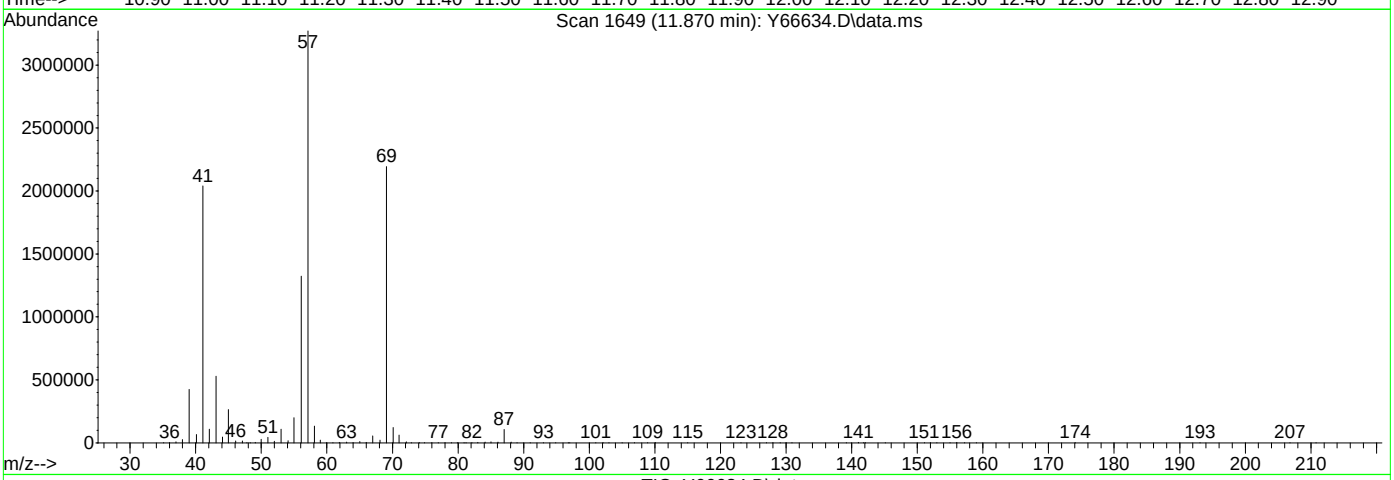
Ion	Exp%	Act%
59.10	100	100
55.10	58.30	54.77
73.10	54.90	54.58
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (+0.001) 2122.31ug/L

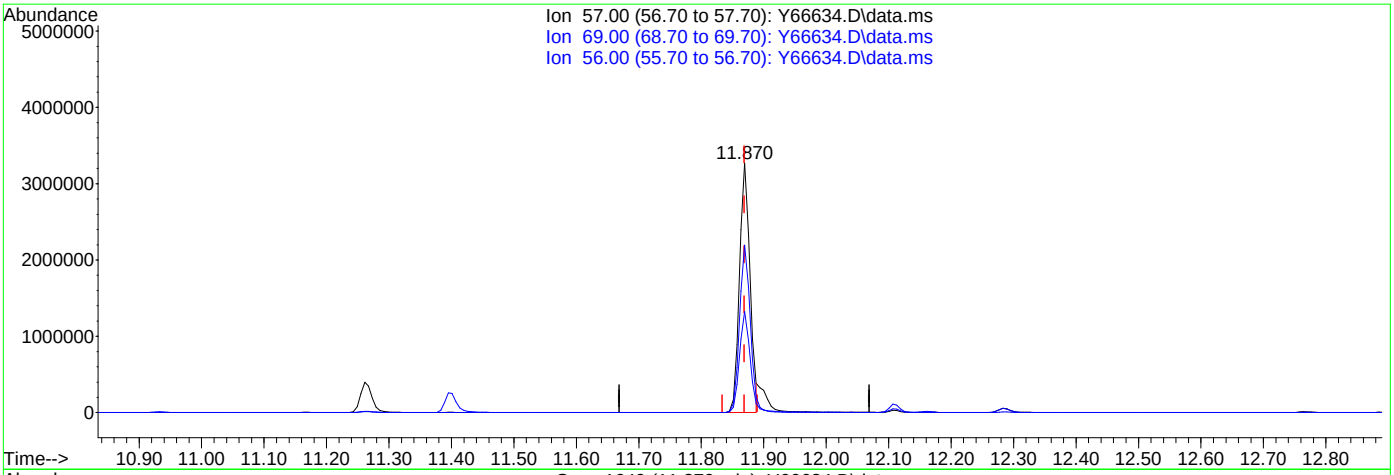
response 4203748

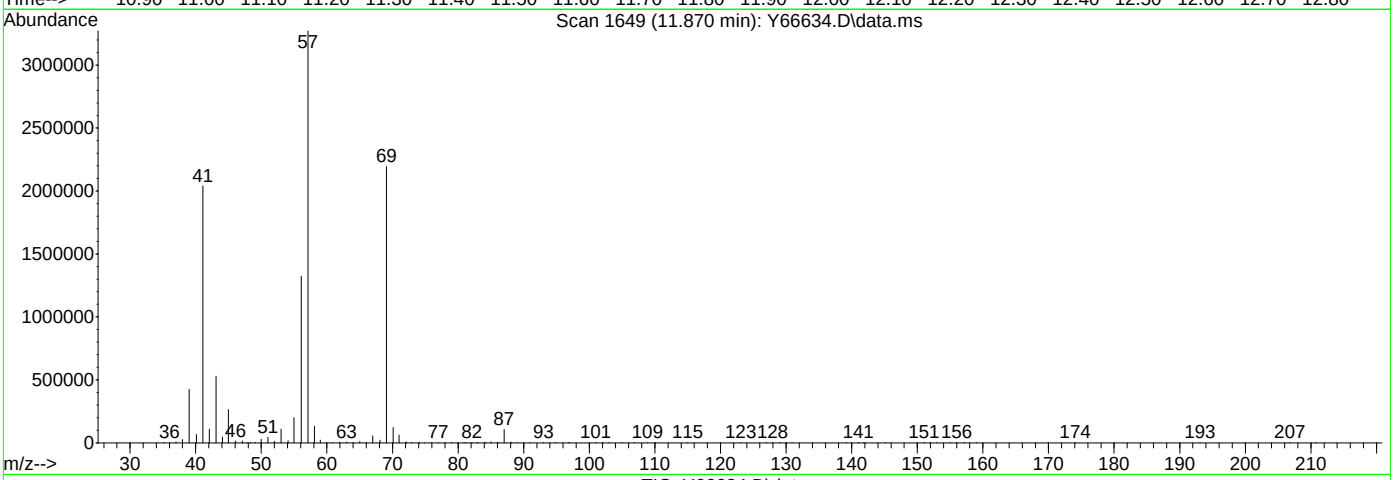
Ion	Exp%	Act%
57.00	100	100
69.00	67.30	66.96
56.00	40.70	40.44
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-12-2022\VY2765-67\
Data File : Y66634.D
Acq On : 9 Dec 2022 9:19 pm
Operator : joannel
Sample : ECC2755-5
Misc : MS52974,VY2765,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 11 20:51:05 2022
Quant Method : C:\msdchem\1\methods\APPIX_12-02-2022_Y.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Fri Sep 14 08:38:11 2018
Response via : Initial Calibration





TIC: Y66634.D\data.ms

(74) 3,3-dimethyl-1-butanol

11.870min (+0.001) 1946.19ug/L m

response 3809683

Ion	Exp%	Act%
57.00	100	100
69.00	67.30	67.03
56.00	40.70	40.45
0.00	0.00	0.00

787 of 1011
SGS
FC1020
Y66634.D edits: 3,3-dimethyl-1-butanol

SGS -ORLANDO

MSVOA13-1P ANALYSIS LOG

Date:	12/14/2022
Column Type:	RTXVMS
Detector:	5973MSD
Instrument:	MSVOA13-1P
Purge Pressure:	1.4 PSI
Purge Volume:	5 mL
Analyst:	Courtney F

Method(s):*	8260
Method File:	V1P_2022-12-14.M
Calibration Date:	12/14/2022
Acq. Method:	RTXFAST
EM Voltage:	1482V
BFB Response:	1450481
Run ID:	**V1P3646**

BFB:	VS2662
ICAL/CC:	VS2655, VS2687, VS2692
VS2693, VS2694, VS2710	
ICV/QC:	VS2641, VS2691, VS2695
VS2696, VS2690, VS2711, VS2684	
ISTD/Surr.:	VS2662

(0-3) pH Paper Lot#:	405
(1-12) pH Paper Lot#:	160
KI Paper Lot#:	14-860
AFA Lot#:	VS2664B
Data processed by:	Courtney F
Sample ID Ver. by:	Courtney F
Date Verified:	12/14/2022

x

x Data File	Sample ID	Dilution Factor	Vial #	Matrix	A.S. Pos.	Work Group	pH	CI? (Y/N)	RR	Comments / Manual Integrations (Peak# & Justification)
1P96318	BLANK	-	-	Water	1	-	-	-	-	Passed autofind ✓
1P96320	BFB/IC3646-1	-	-	Water	2	-	-	-	-	Passed autofind; 1uL(-)100mL ✓
1P96322	IC3646-2	-	-	Water	3	-	-	-	-	5uL(-)100mL ✓
1P96324	IC3646-3	-	-	Water	4	-	-	-	-	10uL(-)100mL ✓
1P96326	IC3646-4	-	-	Water	5	-	-	-	-	25uL(-)100mL ✓
1P96328	ICC3646-5	-	-	Water	6	-	-	-	-	40uL(-)100mL ✓
1P96330	IC3646-6	-	-	Water	7	-	-	-	-	70uL(-)100mL ✓
1P96332	IC3646-7	-	-	Water	8	-	-	-	-	100uL(-)100mL ✓
1P96334	BLANK	-	-	Water	9	-	-	-	-	✓
1P96336A	ICV3646-5/CC3646-5	-	-	Water	10	-	-	-	-	50uL (-) 100mL ✓
1P96338	BS	-	-	Water	11	-	-	-	-	12.5uL (-) 40mL ✓
1P96340	CC3646-1	-	-	Water	12	-	-	-	-	1uL(-)100mL ✓
1P96342	MB	-	-	Water	13	-	-	-	-	ND ✓
1P96344	FA99825-1E	-	-	Water	14	-	-	-	-	1uL(-)200mL ✓
1P96346	FA99825-2E	-	-	Water	15	-	-	-	-	1.5uL(-)200mL ✓
1P96348	FA99825-3E	-	-	Water	16	-	-	-	-	1uL(-)100mL ✓
1P96350	FA99825-4E	-	-	Water	17	-	-	-	-	2uL(-)100mL ✓
1P96352	FA99825-5E	-	-	Water	18	-	-	-	-	3.5uL(-)100mL ✓
1P96354	FA99825-6E	-	-	Water	19	-	-	-	-	5uL(-)100mL ✓
1P96356	FA99825-7E	-	-	Water	20	-	-	-	-	10uL(-)100mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

SGS -ORLANDO

MSVOA13-1P ANALYSIS LOG

Date:	12/16/2022
Column Type:	RTXVMS
Detector:	5973MSD
Instrument:	MSVOA13-1P
Purge Pressure:	1.4 PSI
Purge Volume:	5 mL
Analyst:	Courtney F

Method(s):*	8260
Method File:	V1P_2022-12-14.M
Calibration Date:	12/14/2022
Acq. Method:	RTXFAST
EM Voltage:	1482V
BFB Response:	1365309
Run ID:	**V1P3648**

BFB:	VS2662
ICAL/CC:	VS2655, VS2687, VS2692
VS2693, VS2694, VS2710	
ICV/QC:	VS2641, VS2691, VS2695
VS2696, VS2690, VS2711, VS2684	
ISTD/Surr.:	VS2662

(0-3) pH Paper Lot#:	405
(1-12) pH Paper Lot#:	160
KI Paper Lot#:	14-860
AFA Lot#:	VS2664C
Data processed by:	JenniferF
Sample ID Ver. by:	Courtney F
Date Verified:	12/16/2022

x

x **Data File**	**Sample ID**	**Dilution Factor**	**Vial #**	**Matrix**	**A.S. Pos.**	**Work Group**	**pH**	**CI?** (Y/N)	**RR**	**Comments / Manual Integrations (Peak# & Justification)**
1P96406	BLANK	-	-	Water	1	-	-	-	-	Passed autofind ✓
1P96408	BFB/CC3646-5	-	-	Water	2	-	-	-	-	Passed autofind; 40uL(-)100mL ✓
1P96410	BS	-	-	Water	3	-	-	-	-	12.5uL(-)40mL ✓
1P96412	CC3646-1	-	-	Water	4	-	-	-	-	1uL(-)100mL ✓
1P96414	MB	-	-	Water	5	-	-	-	-	ND ✓
1P96416	FC1065-1	1x	2	Water	6	MS52980	1	N	-	DCFM only ✓
1P96418	FC1020-4	1x	1	Water	7	MS52980	1	N	-	Vial has sig. HS, DCFM only ✓
1P96420	FC1240-3	1x	1	Water	8	MS53011	1	N	-	✓
1P96422	FC1262-2	1x	3	Water	9	MS53011	1	N	-	✓
1P96424	FC1262-3	1x	3	Water	10	MS53011	1	N	-	✓
1P96426	FC1293-9	1x	7	Water	11	MS53019	1	N	-	1,1-DCE only ✓
1P96428	FC1267-6	1x	6	Water	12	MS53019	1	N	-	✓
1P96430	FC1267-7	1x	5	Water	13	MS53019	1	N	-	✓
1P96432	FC1267-8	1x	5	Water	14	MS53019	1	N	-	✓
1P96434	FC1267-9	1x	6	Water	15	MS53019	1	N	-	✓
1P96436	FC1177-6	1x	1	Water	16	MS53018	1	N	-	ND ✓
1P96438	FC1240-2	50x	3	Water	17	MS53011	1	N	-	1uL(-)50mL, Acetone only ✓
1P96440	FC1262-1	50x	3	Water	18	MS53011	1	N	-	1uL(-)50mL, E-combined ✓
1P96442	FC1293-7	5x	7	Water	19	MS53019	1	N	-	10mL(-)50mL, E-combined ✓
1P96444	FC1293-8	5x	5	Water	20	MS53019	1	N	-	10mL(-)50mL, E-combined ✓
1P96446	FC1177-5	5x	2	Water	21	MS53018	1	N	-	10mL(-)50mL; Dilution required due to foam ✓
1P96448	FC1293-8MS	5x	5	Water	22	MS53019	1	N	-	20mL(-)100mL; 12.5uL (-) 40mL ✓
1P96450	FC1293-8MSD	5x	5	Water	23	MS53019	1	N	-	20mL(-)100mL; 12.5uL (-) 40mL ✓
1P96452	ECC3646-5	-	-	Water	24	-	-	-	-	40uL(-)100mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

SGS -ORLANDO

MSVOA20-5E-ANALYSIS LOG

DATE:	12/8/2022
COLUMN TYPE:	RTXVMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA20-5E
PURGE PRESSURE:	11 PSI
PURGE VOLUME:	5 mL
ANALYST:	Courtney F

METHODS:*	8260
METHOD FILE:	applX12-08-2022.M
CALIB. DATE:	12/8/2022
EM VOLTAGE:	1482V
ACQ. METHOD:	8260VMSVI
BFB RESPONSE:	526601
Run ID:	V5E1617

BFB:	VS2676
ICAL/CC:	VS2655, VS2687, VS2692
	VS2693, VS2694, VS2688
ISTD/SUR:	VS2676
ICV/QC:	VS2641, VS2691, VS2695
	VS2696, VS2690, VS2684, VS2697
AFA:	VS2664A

pH LOT: 230320, 230418
KI PAPER LOT: 07062021
Data Processed By:
Courtney F/John M
Sample ID Verified By:
Courtney F
Date verfied: 12/8/2022

Data File	Sample ID	Dil.	Vial #	Matrix	ALS Pos.	Sample Method	Manually Integrated Peaks Rationale, Peak#	pH	CI ?	RR	Comments
5E35977	BLANK	-	-	W	1	8260		-	-	-	Passed autofind ✓
5E35978	BFB/IC1617-1	-	-	W	2	8260		-	-	-	Passed autofind; 1uL→ 100mL ✓
5E35979	IC1617-2	-	-	W	3	8260		-	-	-	5uL→ 100mL ✓
5E35980	IC1617-3	-	-	W	4	8260		-	-	-	5uL→ 50mL ✓
5E35981	IC1617-4	-	-	W	5	8260		-	-	-	12.5uL→ 50mL ✓
5E35982	ICC1617-5	-	-	W	6	8260		-	-	-	20uL→ 50mL ✓
5E35983	IC1617-6	-	-	W	7	8260		-	-	-	35uL→ 50mL ✓
5E35984	IC1617-7	-	-	W	8	8260		-	-	-	50uL→ 50mL ✓
5E35985	BLANK	-	-	W	9	8260		-	-	-	✓
5E35986A	ICV1617-5/CC1617-5	-	-	W	10	8260		-	-	-	25uL→ 50mL ✓
5E35987A	ICV1617-4/BS	-	-	W	11	8260		-	-	-	12.5uL→ 50mL ✓
5E35988	CC1617-1	-	-	W	12	8260		-	-	-	1uL→ 100mL ✓
5E35989	BLANK	-	-	W	13	8260		-	-	-	✓
5E35990	MB	-	-	W	14	8260		-	-	-	AFA, ND ✓
5E35991	FC925-7	1x	1	W	15	8260		7	N	-	MI and Acrylon only ✓
5E35992	FC925-1	1x	3	W	16	8260		7	N	-	AFA, MI and Acrylon only ✓
5E35993	FC925-2	1x	3	W	17	8260		7	N	-	AFA, MI and Acrylon only ✓
5E35994	FC925-3	1x	3	W	18	8260		6	N	-	AFA, MI, MB, and Acrylon only ✓
5E35995	FC925-4	2x	3	W	19	8260	25mL(-)50mL	7	N	-	AFA, MI and Acrylon only ✓
5E35996	FC925-5	1x	3	W	20	8260		7	N	-	AFA, MI and Acrylon only ✓
5E35997	FC925-6	1x	3	W	21	8260		7	N	-	AFA, MI and Acrylon only ✓
5E35998	ECC1617-5	-	-	W	22	8260		-	-	-	20uL→ 50mL ✓

CF 12/9/22

* For NELAC purposes, Method 8260 includes anlytes by SOP MS005 Matrix Designaate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueus Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rational SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument

Analyst's Signature: CF

SGS -ORLANDO

MSVOA20-5E-ANALYSIS LOG

DATE:	12/14/2022
COLUMN TYPE:	RTXVMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA20-5E
PURGE PRESSURE:	11 PSI
PURGE VOLUME:	5 mL
ANALYST:	Courtney F

METHODS:*	8260
METHOD FILE:	applX12-08-2022.M
CALIB. DATE:	12/8/2022
EM VOLTAGE:	1482V
ACQ. METHOD:	8260VMSVI
BFB RESPONSE:	587284
Run ID:	V5E1624

BFB:	VS2676
ICAL/CC:	VS2655, VS2687, VS2692
	VS2693, VS2694, VS2688
ISTD/SUR:	VS2676
ICV/QC:	VS2641, VS2691, VS2695
	VS2696, VS2690, VS2684, VS2697
AFA:	VS2664B

pH LOT:	230320, 230418
KI PAPER LOT:	07062021
Data Processed By:	John M
	John M
Sample ID Verified By:	
	Courtney F
Date verfied:	12/14/2022

Data File	Sample ID	Dil.	Vial #	Matrix	ALS Pos.	Sample Method	Manually Integrated Peaks Rationale, Peak#	pH	CI ?	RR	Comments
5E36114	BFB	-	-	W	1	8260		-	-	-	Passed autofind ✓
5E36115	CC1617-5	-	-	W	2	8260		-	-	-	20uL→ 50mL ✓
5E36116	BS	-	-	W	3	8260		-	-	-	12.5uL→ 40mL ✓
5E36117	CC1617-1	-	-	W	4	8260		-	-	-	1uL→ 100mL; all CCV low peaks present ✓
5E36118	BLANK	-	-	W	5	8260		-	-	-	✓
5E36119	MB	-	-	W	6	8260		-	-	-	ND ✓
5E36120	FC1242-6	1x	2	W	7	8260		1	N	-	ND ✓
5E36121	FC1224-1	1x	2	W	8	8260		1	N	-	✓
5E36122	FC1224-2	1x	2	W	9	8260		1	N	-	✓
5E36123	FC1240-1	500x	2	W	10	8260	100uL(-)50mL	1	N	-	✓
5E36124	FC1240-2	1x	2	W	11	8260		1	N	50x	Acetone ↑
5E36125	FC1240-3	1x	2	W	12	8260		1	N	1x	Acetone carryover
5E36126	FC1240-4	1x	2	W	13	8260		1	N	-	✓
5E36127	FC1242-1	1x	2	W	14	8260		1	N	-	ND ✓
5E36128	FC1242-2	1x	2	W	15	8260		1	N	-	ND ✓
5E36129	FC1242-3	1x	2	W	16	8260		1	N	-	ND ✓
5E36130	FC1242-4	1x	2	W	17	8260		1	N	-	ND ✓
5E36131	FC1242-5	1x	2	W	18	8260		1	N	-	ND ✓
5E36132	FC1262-1	2x	2	W	19	8260	25mL(-)50mL	1	N	50x	Tol, EB, Benz, m,p-xylene, o-xylene ↑
5E36133	FC1262-2	2x	2	W	20	8260	25mL(-)50mL	1	N	1x	Tol, EB, Benz carryover
5E36134	FC1262-3	1x	2	W	21	8260		1	N	1x	Tol, Benz carryover
5E36135	BLANK	-	-	W	22	8260		-	-	-	✓
5E36136	FC1020-3	1x	5	W	23	8260	Bubble > 6mm	1	N	-	DCFM only ✓
5E36137	FC1065-2	1x	5	W	24	8260		1	N	-	DCFM only ✓
5E36138	FC1065-3	1x	6	W	25	8260		1	N	-	DCFM only ✓
5E36139	FC1065-4	1x	5	W	26	8260	Bubble > 6mm	1	N	-	DCFM only ✓
5E36140	FC1065-5	1x	5	W	27	8260		1	N	-	DCFM only ✓
5E36141	FC1262-2MS	10x	2	W	28	8260	10mL(-)100mL	1	N	-	12.5uL→ 50mL ✓
5E36142	FC1262-2MSD	10x	2	W	29	8260	10mL(-)100mL, bad purge, not used	1	N	-	12.5uL→ 50mL ✓
5E36143	ECC1617-5	-	-	W	30	8260		-	-	-	20uL→ 50mL ✓

CF 12/15/22

* For NELAC purposes, Method 8260 includes anlytes by SOP MS005 Matrix: Designaate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aquous Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rational SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument

Analyst's Signature: CF

SGS -ORLANDO

MSVOA13-2P ANALYSIS LOG

Date:	12/08/2022
Column Type:	RTX-VMS
Detector:	5975C-MSD
Instrument:	MSVOA12-1O
Purge Pressure:	10.6 psi
Purge Volume:	5 mL
Analyst:	Adelard L

Method(s):*	8260
Method File:	VO_12-08-2022.M
Calibration Date:	12/08/2022
Acq. Method:	8260VMS.M
EM Voltage:	1576V
BFB Response:	1503171
Run ID:	VO2866

BFB:	VS2679
ICAL/CC:	VS2655, VS2687, VS2692
VS2693, VS2694, VS2688	
ICV/QC:	VS2641, VS2691, VS2695
VS2696, VS2690, VS2689, VS2684	
ISTD/Surr.:	VS2679

(0-3) pH Paper Lot#:	212521
(1-12) pH Paper Lot#:	230320
KI Paper Lot#:	30317
AFA Lot#:	VS2455C
Data processed by:	ABL
Sample ID Ver. by:	ABL
Date Verified:	12/08/2022

Data File	Sample ID	Dilution Factor	Vial #	Matrix	A.S. Pos.	Work Group	pH	CI? (Y/N)	RR	Comments / Manual Integrations (Peak# & Justification)
O72889	BFB	-	-	Water	1	-	-	-	-	Passed Autofind✓
O72890	IC2866-1	-	-	Water	2	-	-	-	-	1uL(-)100mL; Passed autofind; #22,76(PII); #24,38,52,69,87,93,100,107,109(MP)✓
O72891	IC2866-2	-	-	Water	3	-	-	-	-	5uL (-) 100mL; #22(OP); #49,76(PII)✓
O72892	IC2866-3	-	-	Water	4	-	-	-	-	5uL (-) 50mL; #22(OP); #49,76(PII)✓
O72893	IC2866-4	-	-	Water	5	-	-	-	-	12.5uL (-) 50mL; #22(OP); #49,76(PII)✓
O72894	ICC2866-5	-	-	Water	6	-	-	-	-	20uL (-) 50mL; #22(OP); #49,76(PII)✓
O72895	IC2866-6	-	-	Water	7	-	-	-	-	35uL (-) 50mL; #22(OP); 49,76(PII)✓
O72896	IC2866-7	-	-	Water	8	-	-	-	-	50uL (-) 50mL; #22(OP); #49,76(PII)✓
O72897	BLANK	-	-	Water	9	-	-	-	-	-
O72898	ICV2866-5	-	-	Water	10	-	-	-	-	25uL (-) 50mL; #22(OP); #49,76(PII)✓
O72898A	CC2866-5	-	-	Water	10	-	-	-	-	25uL (-) 50mL; #22(OP); #49,76(PII)✓
O72899	ICV2866-4	-	-	Water	11	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)✓
O72899A	BS	-	-	Water	11	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)✓
O72900	BLANK	-	-	Water	12	-	-	-	-	-
O72901	MB	-	-	Water	13	-	-	-	-	ND ✓
O72902	FC811-8	1X	2	Water	14	MS52894	6	N	-	Lot#✓
O72903	FC850-5	1X	2	Water	15	MS52925	6	N	-	Lot#✓
O72904	FC811-1	1X	3	Water	16	MS52894	6	N	-	✓
O72905	FC850-4	1X	2	Water	17	MS52925	6	N	-	✓
O72906	FC811-2	2X	3	Water	18	MS52894	6	N	-	25mL(-)50mL✓
O72907	FC811-3	10X	3	Water	19	MS52894	6	N	-	5mL(-)50mL✓
O72908	FC811-4	20X	3	Water	20	MS52894	6	N	-	2.5mL(-)50mL✓
O72909	FC811-5	50X	3	Water	21	MS52894	6	N	-	1mL(-)50mL✓
O72910	FC811-6	2X	3	Water	22	MS52894	6	N	-	25mL(-)50mL✓
O72911	FC811-7	50X	3	Water	23	MS52894	6	N	-	1mL(-)50mL✓
O72912	FC850-1	20X	2	Water	24	MS52925	6	N	-	2.5mL(-)50mL✓
O72913	FC850-2	50X	2	Water	25	MS52925	6	N	-	1mL(-)50mL✓
O72914	FC850-3	5X	2	Water	26	MS52925	6	N	-	10mL(-)50mL✓
O72915	ECC2866-5	-	-	Water	27	-	-	-	-	20uL(-)50mL✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

SGS -ORLANDO

MSVOA13-2P ANALYSIS LOG

Date:	12/09/2022
Column Type:	RTX-VMS
Detector:	5975C-MSD
Instrument:	MSVOA12-1O
Purge Pressure:	10.6 psi
Purge Volume:	5 mL
Analyst:	Adelard L

Method(s):*	8260
Method File:	VO_12-08-2022.M
Calibration Date:	12/08/2022
Acq. Method:	8260VMS.M
EM Voltage:	1576V
BFB Response:	2954845
Run ID:	VO2866

BFB:	VS2679
ICAL/CC:	VS2655, VS2687, VS2692
VS2693, VS2694, VS2688	
ICV/QC:	VS2641, VS2691, VS2695
VS2696, VS2690, VS2689, VS2684	
ISTD/Surr.:	VS2679

(0-3) pH Paper Lot#:	212521
(1-12) pH Paper Lot#:	230320
KI Paper Lot#:	30317
AFA Lot#:	VS2455C
Data processed by:	ABL / Celine C.
Sample ID Ver. by:	ABL
Date Verified:	12/09/2022

Data File	Sample ID	Dilution Factor	Vial #	Matrix	A.S. Pos.	Work Group	pH	CI? (Y/N)	RR	Comments / Manual Integrations (Peak# & Justification)
O72916	BLANK	-	-	Water	1	-	-	-	-	Passed Autofind✓
O72917	BLANK	-	-	Water	2	-	-	-	-	Passed Autofind✓
O72918	CC2866-5/BFB	-	-	Water	3	-	-	-	-	20uL (-) 50mL;Passed autofind; #22(OP); #49,76(PII)✓
O72919	BS	-	-	Water	4	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII); Bad prep not used
O72920	CC2866-1	-	-	Water	5	-	-	-	-	1uL(-)100mL✓
O72921	BS	-	-	Water	6	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)✓
O72922	BLANK	-	-	Water	7	-	-	-	-	-
O72923	MB	-	-	Water	8	-	-	-	-	ND ✓
O72924	FC889-5	1X	2	Water	9	MS52934	6	N		✓
O72925	FC1065-1	1X	1	Water	10	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72926	FC1111-3	1X	1	Water	11	MS52980	1	N		Toluene hit (Trip blank w/ detection); Lot#427758
O72927	FC1020-4	1X	2	Water	12	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72928	FC1020-3	1X	6	Water	13	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72929	FC889-1	10X	3	Water	14	MS52934	3	N		✓
O72930	FC889-2	2X	2	Water	15	MS52934	6	N		E-combine ✓
O72931	FC889-3	2X	2	Water	16	MS52934	6	N		E-combine ✓
O72932	FC889-4	2X	2	Water	17	MS52934	6	N		E-combine ✓
O72933	FC1065-2	1X	4	Water	18	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72934	FC1065-3	1X	4	Water	19	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72935	FC1065-4	1X	4	Water	20	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72936	FC1065-5	1X	4	Water	21	MS52980	1	N	1x	DCFM low ICV (DoD only)
O72937	FC1111-1	1X	2	Water	22	MS52980	1	N		ND ✓
O72938	FC1111-2	1X	3	Water	23	MS52980	1	N		ND ✓
O72939	FC1151-1	1X	6	Water	24	MS52980	1	N		Bubble > 6mm; ND ✓
O72940	FC1151-2	1X	5	Water	25	MS52980	1	N		ND ✓
O72941	FC1151-3	1X	6	Water	26	MS52980	1	N		ND ✓
O72942	FC1151-4	1X	5	Water	27	MS52980	1	N		AFA, ND ✓
O72943	FC1151-5	1X	6	Water	28	MS52980	1	N		ND ✓
O72944	FC1020-3MS	5X	6	Water	29	MS52980	1	N	-	20uL(-)50mL; 20mL(-)100mL✓
O72945	FC1020-3MSD	5X	6	Water	30	MS52980	1	N	-	20uL(-)50mL; 20mL(-)100mL✓
O72946	ECC2866-5	-	-	Water	31	-	-	-	-	20uL(-)50mL✓
O72947	MB (AFA)	-	-	-	32	-	-	-	-	✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

SGS -ORLANDO

MSVOA14-Y-ANALYSIS LOG

DATE: 12/02/2022	
COLUMN TYPE: RTX-VMS	
DETECTOR: 5973 MSD	
INSTRUMENT: MSVOA14-Y	
PURGE PRESSURE: 9.0 psi	
PURGE VOLUME: 5 mL	
ANALYST: JoAnn L	

METHODS:	8260
METHOD FILE: APIX_12-02-2022_Y.M	
CALIB. DATE:	12/2/2022
EM VOLTAGE:	1224V
BFB RESPONSE:	1084194
RUN ID:	**VY2755**

BFB:	VS2661
ICAL/CC:	VS2655 VS2620, VS2654,
VS2656, VS2657, VS2649	
ISTD/SURR	VS2661
ICV/QC:	VS2641, VS2642, VS2658
VS2663, VS2659, VS2638, VS2650	
DATA PROCESSED BY: JoAnn L	

0 to 12 pH lot#	
0 to 3 pH lot#: 220416	
KI PAPER LOT: 102916	
AFA: N/A	
SAMPLE ID VERIFIED BY: JL	
DATE: 12/02/2022	

DATA FILE	SAMPLE ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE & PEAK #	pH	CI ?	RR	COMMENTS
Y66384	BFB	-	-	W	1	8260		-	-	-	Passed autofind✓
Y66385	IC2755-1	-	-	W	2	8260		-	-	-	Passed autofind; 1uL → 100mL ✓
Y66386	IC2755-2	-	-	W	3	8260		-	-	-	5uL → 100mL ✓
Y66387	IC2755-3	-	-	W	4	8260		-	-	-	5uL → 50mL ✓
Y66388	IC2755-4	-	-	W	5	8260		-	-	-	12.5uL → 50mL ✓
Y66389	ICC2755-5	-	-	W	6	8260		-	-	-	20uL → 50mL ✓
Y66390	IC2755-6	-	-	W	7	8260		-	-	-	35uL → 50mL ✓
Y66391	IC2755-7	-	-	W	8	8260		-	-	-	50uL → 50mL ✓
Y66392	BLANK	-	-	W	9	8260		-	-	-	
Y66393	ICV2755-5	-	-	W	10	8260		-	-	-	25uL → 50mL ✓
Y66394	ICV2755-4	-	-	W	11	8260	DCFM/CE/MI/TBF only	-	-	-	12.5uL → 40mL ✓

12/5/22

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix Designate "W" for Water "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PI Poor Instrument Integration.

Analyst's Signature: _____

SGS -ORLANDO

MSVOA14-Y-ANALYSIS LOG

DATE: 12/09/2022	
COLUMN TYPE: RTX-VMS	
DETECTOR: 5973 MSD	
INSTRUMENT: MSVOA14-Y	
PURGE PRESSURE: 9.0 psi	
PURGE VOLUME: 5 mL	
ANALYST: JoAnn L	

METHODS:	8260
METHOD FILE: APIX_12-02-2022_Y.M	
CALIB. DATE:	12/2/2022
EM VOLTAGE:	1224V
BFB RESPONSE:	4071459
RUN ID:	VY2765,67

BFB:	VS2661
ICAL/CC:	VS2655 VS2620, VS2654,
	VS2656, VS2657, VS2649
ISTD/SURF	VS2661
ICV/QC:	VS2641, VS2642, VS2658
	VS2663, VS2659, VS2684, VS2689
DATA PROCESSED BY:	JoAnn L / Celine C.

0 to 12 pH lot#
0 to 3 pH lot#: 220416
KI PAPER LOT: 102916
AFA: N/A
SAMPLE ID VERIFIED BY: JL
DATE: 12/09/2022

DATA FILE	SAMPLE ID	DIL.	VIAL #	MATRIX	ALS POS.	SAMPLE METHOD	MANUALLY INTEGRATED PEAKS RATIONALE & PEAK #	pH	CI ?	RR	COMMENTS
Y66604	BLANK	-	-	W	1	8260		-	-	-	Passed autofind✓
Y66605	CC2755-5/BFB	-	-	W	2	8260	#22,74(OP), #52(MP)	-	-	-	Passed autofind; 40uL → 100mL ✓
Y66606	BS	-	-	W	3	8260	#22,74(OP), #52(MP)	-	-	-	12.5uL → 40mL ✓
Y66607	CC2755-1	-	-	W	4	8260	All peaks present	-	-	-	1uL → 100mL ✓
Y66608	MB(TCLP) 10X	-	-	W	5	8260		-	-	-	ND ✓
Y66609	MB(AFA)	-	-	W	6	8260		-	-	-	AFA, ND ✓
Y66610	FC1070-8	1X	2	W	7	8260	Lot# not legible	1	N	-	Chloroform hit (trip blank w/ detection)✓
Y66611	FC1089-6	1X	2	W	8	8260	Lot# 427758	1	N	-	Toluene hit (trip blank w/ detection)✓
Y66612	FC1070-7	1X	2	W	9	8260		1	N	-	ND ✓
Y66613	FC1089-4	1X	1	W	10	8260		1	N	-	Toluene hit (field blank w/ detection)✓
Y66614	FC1089-5	1X	2	W	11	8260		1	N	-	✓
Y66615	FC1005-12	1X	3	W	12	8260	Client ID does not match COC, but time collected matches	1	N	-	✓
Y66616	FC1070-1	1X	8	W	13	8260		1	N	-	ND ✓
Y66617	**FC1070-2 5X**	5X	8	W	14	8260	10mL(-50mL	1	N	**1x**	Target compounds↓
Y66618	**FC1070-4 5X**	5X	4	W	15	8260	10mL(-50mL	1	N	**1x**	Target compounds↓
Y66619	**FC1070-5 10X**	10X	4	W	16	8260	5mL(-)50mL	1	N	**1x**	Target compounds↓
Y66620	**FC1070-6 10X**	10X	4	W	17	8260	5mL(-)50mL	1	N	**1x**	Target compounds↓
Y66621	FC1130-1	1X	1	W	18	8260	#98,100(MP)	1	N	-	AFA, ✓
Y66622	FC1130-2	1X	1	W	19	8260		1	N	-	AFA, ✓
Y66623	FC1089-1	1X	6	W	20	8260		1	N	-	ND ✓
Y66624	FC1089-2	1X	9	W	21	8260		1	N	-	ND ✓
Y66625	FC1089-3	1X	9	W	22	8260		1	N	-	ND ✓
Y66626	FC1020-1	1X	5	W	23	8260		1	N	-	✓
Y66627	FC1020-2	1X	5	W	24	8260		1	N		AFA, ND ✓
Y66628	FC1005-3 2X	2X	3	W	25	8260	25mL(-)50mL	1	N		OK to E-Combine
Y66629	**FC832-1 5000X**	5000X	3	W	26	TCLP	STRONG GAS SMELL;1mL(-)10mL(MEOH1);100uL(-)50mL(DI) #64,80,9	6	N	**50,000x**	AFA; Higher dilution required due to matrix interference; **IS3 low; SS4 high; Benzene OR**
Y66630	FC1005-3MS 10X	10X	3	W	27	8260	VY2765; 10mL(-)100mL	1	N	-	12.5uL → 40mL ✓
Y66631	FC1005-3MSD 10X	10X	3	W	28	8260	VY2765; 10mL(-)100mL	1	N	-	12.5uL → 40mL ✓
Y66632	FC832-1MS 5000X	5000X	3	W	29	TCLP	VY2767; 200uL(-)100mL; AFA	6	N	-	12.5uL → 40mL ✓ IS3 low
Y66633	FC832-1MSD 5000X	5000X	3	W	30	TCLP	VY2767; 200uL(-)100mL; AFA	6	N	-	12.5uL → 40mL ✓ IS1,3 low
Y66634	ECC2755-5	-	-	W	31	8260	#22,74(OP), #52(MP)	-	-	-	20uL → 50mL ✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005. Matrix: Designate "W" for Water "S" for Soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rationale SOP QA029: MP Missed Peak, OP Overlapping Peak, SP Split Peak, PDB Poorly Defined Baseline, BR Baseline Ripple, PII Poor Instrument Integration.

Analyst's Signature: _____

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:13	MA19110-STD1	1		STDC
10:18	MA19110-STD2	1		STDD
10:22	MA19110-STD3	1		STDE
10:25	MA19110-STD4	1		STDF
10:29	MA19110-STD5	1		STDG
10:37	MA19110-STD6	1		STDA
10:42	MA19110-STD7	1		STDB
10:54	MA19110-CRIA1	1		
11:00	MA19110-HSTD1	1		
11:06	MA19110-ICV1	1		
11:14	MA19110-ICB1	1		
11:18	MA19110-ICSA1	1		
11:26	MA19110-ICSAB1	1		
11:33	MA19110-CCV1	1		
11:40	MA19110-CCB1	1		
11:51	MP41624-MB1	1		
11:56	MP41624-B1	1		
12:01	FC1282-7F	1		(sample used for QC only; not part of login FC1020)
12:06	MP41622-MB1	1		
12:11	MP41622-B1	1		
12:16	MP41624-D1	1		
12:21	MP41624-SD1	5		
12:26	MP41624-PS1	1		
12:31	MP41624-S1	1		
12:36	MA19110-CCV2	1		
12:41	MA19110-CCB2	1		
12:46	MP41624-S2	1		
12:51	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:11	ZZZZZZ	1		
13:16	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:21	ZZZZZZ	1		
13:26	ZZZZZZ	1		
13:31	ZZZZZZ	1		
13:36	MA19110-CCV3	1		
13:43	MA19110-CCB3	1		
13:48	ZZZZZZ	1		
14:09	ZZZZZZ	10		
14:14	FC1201-4F	1		(sample used for QC only; not part of login FC1020)
14:19	MP41622-D1	1		
14:24	MP41622-SD1	5		
14:29	MP41622-PS1	1		
14:34	MP41622-S1	1		
14:39	MA19110-CCV4	1		
14:44	MA19110-CCB4	1		
15:44	MA19110-CCV5	1		
15:54	MA19110-CCB5	1		
15:59	MP41622-S2	1		
16:04	ZZZZZZ	1		
16:09	ZZZZZZ	1		
16:14	ZZZZZZ	1		
16:19	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:29	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	5		
16:49	MA19110-CCV6	1		
16:54	MA19110-CCB6	1		
16:59	ZZZZZZ	5		
17:05	ZZZZZZ	5		
17:10	ZZZZZZ	5		
17:15	ZZZZZZ	5		
17:20	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:26	FC1020-1	1		
17:31	FC1020-2	1		
17:36	FC1020-3	1		
17:41	ZZZZZZ	5		
17:47	ZZZZZZ	5		
17:52	MA19110-CCV7	1		
17:57	MA19110-CCB7	1		
18:02	MP41622-MB2A	1		
---------->	Last reportable sample/prep for job FC1020			
18:07	ZZZZZZ	20		
18:12	ZZZZZZ	100		
18:17	ZZZZZZ	100		
18:22	ZZZZZZ	100		
18:27	ZZZZZZ	100		
18:32	ZZZZZZ	100		
18:37	MP41623-MB1	1		
18:47	FC1282-7	1		(sample used for QC only; not part of login FC1020)
18:52	MA19110-CCV8	1		
18:57	MA19110-CCB8	1		
---------->	Last reportable CCB for job FC1020			
19:27	ZZZZZZ	1		
19:32	ZZZZZZ	1		
19:37	ZZZZZZ	5		
19:42	ZZZZZZ	5		
19:48	ZZZZZZ	5		
19:53	MA19110-CCV9	1		
19:58	MA19110-CCB9	1		
20:03	ZZZZZZ	5		
20:09	ZZZZZZ	1		
20:14	ZZZZZZ	1		
20:19	ZZZZZZ	1		
20:24	ZZZZZZ	1		
20:29	ZZZZZZ	1		
20:34	ZZZZZZ	1		
20:39	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:44	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:54	MA19110-CCV10	1		
20:59	MA19110-CCB10	1		
21:04	MP41621-MB1	1		
21:09	MP41621-B1	1		
21:14	FC1251-1	1		(sample used for QC only; not part of login FC1020)
21:19	MP41621-D1	1		
21:24	MP41621-SD1	5		
21:29	MP41621-PS1	1		
21:34	MP41621-S1	1		
21:39	MP41621-S2	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19110-CCV11	1		
21:59	MA19110-CCB11	1		
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:14	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:24	ZZZZZZ	1		
22:29	ZZZZZZ	1		
22:34	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:44	ZZZZZZ	1		
22:49	ZZZZZZ	1		
22:54	MA19110-CCV12	1		
22:59	MA19110-CCB12	1		
23:04	ZZZZZZ	1		
23:09	ZZZZZZ	1		
23:14	ZZZZZZ	1		
23:19	ZZZZZZ	1		
23:24	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:34	ZZZZZZ	1		
23:39	MA19110-CCV13	1		
23:44	MA19110-CCB13	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
10:54	MA19110-CRIA1	1	X	X	
11:00	MA19110-HSTD1	1	X	X	
11:06	MA19110-ICV1	1	X	X	
11:14	MA19110-ICB1	1	X	X	
11:18	MA19110-ICSA1	1	X	X	
11:26	MA19110-ICSAB1	1	X	X	
11:33	MA19110-CCV1	1	X	X	
11:40	MA19110-CCB1	1	X	X	
11:51	MP41624-MB1	1	X	X	
11:56	MP41624-B1	1	X	X	
12:01	FC1282-7F	1			(a)
12:06	MP41622-MB1	1	X	X	
12:11	MP41622-B1	1	X	X	
12:16	MP41624-D1	1	X	X	
12:21	MP41624-SD1	5	X	X	
12:26	MP41624-PS1	1	X	X	
12:31	MP41624-S1	1	X	X	
12:36	MA19110-CCV2	1	X	X	
12:41	MA19110-CCB2	1	X	X	
12:46	MP41624-S2	1	X	X	
12:51	ZZZZZZ	1			
12:56	ZZZZZZ	1			
13:01	ZZZZZZ	1			
13:06	ZZZZZZ	1			
13:11	ZZZZZZ	1			
13:16	ZZZZZZ	1			
13:21	ZZZZZZ	1			
13:26	ZZZZZZ	1			
13:31	ZZZZZZ	1			
13:36	MA19110-CCV3	1	X	X	
13:43	MA19110-CCB3	1	X	X	
13:48	ZZZZZZ	1			
14:09	ZZZZZZ	10			
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
14:14	FC1201-4F	1			(a)
14:19	MP41622-D1	1	X	X	
14:24	MP41622-SD1	5	X	X	
14:29	MP41622-PS1	1	X	X	
14:34	MP41622-S1	1	X	X	
14:39	MA19110-CCV4	1	X	X	
14:44	MA19110-CCB4	1	X	X	
15:44	MA19110-CCV5	1	X	X	
15:54	MA19110-CCB5	1	X	X	
15:59	MP41622-S2	1	X	X	
16:04	ZZZZZZ	1			
16:09	ZZZZZZ	1			
16:14	ZZZZZZ	1			
16:19	ZZZZZZ	1			
16:24	ZZZZZZ	1			
16:29	ZZZZZZ	1			
16:34	ZZZZZZ	1			
16:39	ZZZZZZ	1			
16:44	ZZZZZZ	5			
16:49	MA19110-CCV6	1	X	X	
16:54	MA19110-CCB6	1	X	X	
16:59	ZZZZZZ	5			
17:05	ZZZZZZ	5			
17:10	ZZZZZZ	5			
17:15	ZZZZZZ	5			
17:20	ZZZZZZ	5			
17:26	FC1020-1	1	X	X	
17:31	FC1020-2	1	X	X	
17:36	FC1020-3	1	X	X	
17:41	ZZZZZZ	5			
17:47	ZZZZZZ	5			
17:52	MA19110-CCV7	1	X	X	
17:57	MA19110-CCB7	1	X	X	
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
18:02	MP41622-MB2A	1	X	X	
18:07	ZZZZZZ	20			
18:12	ZZZZZZ	100			
18:17	ZZZZZZ	100			
18:22	ZZZZZZ	100			
18:27	ZZZZZZ	100			
18:32	ZZZZZZ	100			
18:37	MP41623-MB1	1	X	X	
18:47	FC1282-7	1			(a)
18:52	MA19110-CCV8	1	X	X	
18:57	MA19110-CCB8	1	X	X	
19:27	ZZZZZZ	1			
19:32	ZZZZZZ	1			
19:37	ZZZZZZ	5			
19:42	ZZZZZZ	5			
19:48	ZZZZZZ	5			
19:53	MA19110-CCV9	1	X	X	
19:58	MA19110-CCB9	1	X	X	
20:03	ZZZZZZ	5			
20:09	ZZZZZZ	1			
20:14	ZZZZZZ	1			
20:19	ZZZZZZ	1			
20:24	ZZZZZZ	1			
20:29	ZZZZZZ	1			
20:34	ZZZZZZ	1			
20:39	ZZZZZZ	5			
20:44	ZZZZZZ	1			
20:49	ZZZZZZ	1			
20:54	MA19110-CCV10	1	X	X	
20:59	MA19110-CCB10	1	X	X	
21:04	MP41621-MB1	1			
21:09	MP41621-B1	1			
21:14	FC1251-1	1			(a)
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	C a	M g
21:19	MP41621-D1	1		
21:24	MP41621-SD1	5		
21:29	MP41621-PS1	1		
21:34	MP41621-S1	1		
21:39	MP41621-S2	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19110-CCV11	1	X	X
21:59	MA19110-CCB11	1	X	X
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:14	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:24	ZZZZZZ	1		
22:29	ZZZZZZ	1		
22:34	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:44	ZZZZZZ	1		
22:49	ZZZZZZ	1		
22:54	MA19110-CCV12	1	X	X
22:59	MA19110-CCB12	1	X	X
23:04	ZZZZZZ	1		
23:09	ZZZZZZ	1		
23:14	ZZZZZZ	1		
23:19	ZZZZZZ	1		
23:24	ZZZZZZ	1		
23:34	ZZZZZZ	1		
23:39	MA19110-CCV13	1	X	X
23:44	MA19110-CCB13	1	X	X

(a) Sample used for QC only; not part of login FC1020.

Element:	C a	M g

INTERNAL STANDARD SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:13	MA19110-STD1	7343	39660	5910	2892
10:18	MA19110-STD2	7266	39704	5914	2812
10:22	MA19110-STD3	7144	38863	5887	2685
10:25	MA19110-STD4	6959	38185	5811	2521
10:29	MA19110-STD5	6696	37570	5801	2333
10:37	MA19110-STD6	7327	39892	5871	3023
10:42	MA19110-STD7	7248	39562	5877	2885
10:54	MA19110-CRIA1	7245	39353	5867	2848
11:00	MA19110-HSTD1	6706	36962	5771	2315
11:06	MA19110-ICV1	6960	37818	5821	2514
11:14	MA19110-ICB1	7348 R	40012 R	5871 R	3015 R
11:18	MA19110-ICSA1	6531	34808	5675	2034
11:26	MA19110-ICSAB1	6512	34507	5589	2121
11:33	MA19110-CCV1	6983	37919	5739	2512
11:40	MA19110-CCB1	7381	39990	5816	3020
11:51	MP41624-MB1	7413	40463	5860	3013
11:56	MP41624-B1	7181	38987	5907	2694
12:01	FC1282-7F	7372	40743	5878	2945
12:06	MP41622-MB1	7378	40603	5795	3007
12:11	MP41622-B1	7139	38592	5675	2656
12:16	MP41624-D1	7400	40514	5899	2944
12:21	MP41624-SD1	7392	40353	5818	3007
12:26	MP41624-PS1	7286	39681	5844	2824
12:31	MP41624-S1	7151	39117	5743	2642
12:36	MA19110-CCV2	6849	37562	5654	2499
12:41	MA19110-CCB2	7270	39958	5788	3008
12:46	MP41624-S2	7199	39055	5813	2675
12:51	ZZZZZZ	7174	39283	5755	2900
12:56	ZZZZZZ	7275	39831	5800	2885
13:01	ZZZZZZ	7084	38533	5717	2758
13:06	ZZZZZZ	7142	39163	5795	2770
13:11	ZZZZZZ	7138	39271	5777	2756
13:16	ZZZZZZ	6984	38479	5712	2686

INTERNAL STANDARD SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:21	ZZZZZZ	7022	38620	5713	2750
13:26	ZZZZZZ	6874	37523	5658	2633
13:31	ZZZZZZ	6919	37792	5632	2636
13:36	MA19110-CCV3	6833	37489	5549	2494
13:43	MA19110-CCB3	7223	39950	5730	3012
13:48	ZZZZZZ	6837	37742	5649	2613
14:09	ZZZZZZ	6945	37921	5669	2576
14:14	FC1201-4F	7031	38559	5604	2737
14:19	MP41622-D1	7017	38348	5575	2733
14:24	MP41622-SD1	7200	39791	5709	2928
14:29	MP41622-PS1	7006	38362	5644	2697
14:34	MP41622-S1	6892	37548	5591	2546
14:39	MA19110-CCV4	6863	37852	5608	2511
14:44	MA19110-CCB4	7153	39290	5649	2982
15:44	MA19110-CCV5	6715	37362	5469	2479
15:54	MA19110-CCB5	7158	39693	5618	3006
15:59	MP41622-S2	6962	37833	5619	2577
16:04	ZZZZZZ	6973	38643	5635	2772
16:09	ZZZZZZ	6950	37703	5618	2610
16:14	ZZZZZZ	6903	38299	5570	2753
16:19	ZZZZZZ	7054	38655	5581	2818
16:24	ZZZZZZ	6890	37707	5512	2637
16:29	ZZZZZZ	6933	38288	5543	2760
16:34	ZZZZZZ	6604	35829	5526	2422
16:39	ZZZZZZ	6889	38197	5607	2700
16:44	ZZZZZZ	6733	36972	5535	2570
16:49	MA19110-CCV6	6836	37924	5624	2537
16:54	MA19110-CCB6	7219	40421	5746	3050
16:59	ZZZZZZ	6677	36849	5642	2527
17:05	ZZZZZZ	6533	35948	5553	2458
17:10	ZZZZZZ	6503	35822	5547	2437
17:15	ZZZZZZ	6620	36371	5529	2507
17:20	ZZZZZZ	6629	36647	5649	2497

INTERNAL STANDARD SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
17:26	FC1020-1	7026	39023	5675	2768
17:31	FC1020-2	7200	40276	5761	2935
17:36	FC1020-3	7141	39448	5799	2704
17:41	ZZZZZZ	6040	32255	5394	2141
17:47	ZZZZZZ	6411	34510	5445	2322
17:52	MA19110-CCV7	6703	37467	5432	2506
17:57	MA19110-CCB7	7224	40034	5610	3048
18:02	MP41622-MB2A	7225	40515	5707	3011
18:07	ZZZZZZ	6961	38283	5591	2758
18:12	ZZZZZZ	7095	39729	5631	2930
18:17	ZZZZZZ	7083	39428	5623	2894
18:22	ZZZZZZ	7089	39461	5668	2877
18:27	ZZZZZZ	7165	39787	5737	2933
18:32	ZZZZZZ	7127	39625	5679	2906
18:37	MP41623-MB1	7210	40814	5679	2999
18:47	FC1282-7	7447	40944	5828	2863
18:52	MA19110-CCV8	6778	38068	5581	2533
18:57	MA19110-CCB8	7110	39993	5579	3015
19:27	ZZZZZZ	7164	39487	5648	2851
19:32	ZZZZZZ	7526	41340	5975	2732
19:37	ZZZZZZ	5852	31160	5239	2050
19:42	ZZZZZZ	5123	27882	5018	1772 !a
19:48	ZZZZZZ	4869	26585	4924	1600 !a
19:53	MA19110-CCV9	6696	37479	5449	2510
19:58	MA19110-CCB9	7109	40038	5593	3010
20:03	ZZZZZZ	5545	29785	5066	1930
20:09	ZZZZZZ	7044	39864	5533	2930
20:14	ZZZZZZ	7080	39881	5526	2971
20:19	ZZZZZZ	7165	40240	5604	2995
20:24	ZZZZZZ	7153	40443	5605	3014
20:29	ZZZZZZ	7072	39761	5480	2933
20:34	ZZZZZZ	7068	39869	5450	2971
20:39	ZZZZZZ	6597	36410	5397	2507

INTERNAL STANDARD SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
20:44	ZZZZZZ	7048	38677	5661	2616
20:49	ZZZZZZ	6578	36872	5276	2627
20:54	MA19110-CCV10	6642	37565	5365	2510
20:59	MA19110-CCB10	7092	40211	5467	3039
21:04	MP41621-MB1	7100	40519	5518	3031
21:09	MP41621-B1	6777	37945	5379	2645
21:14	FC1251-1	7129	39558	5570	2879
21:19	MP41621-D1	7231	40069	5565	2883
21:24	MP41621-SD1	7033	39475	5359	2955
21:29	MP41621-PS1	7079	39573	5543	2793
21:34	MP41621-S1	6952	38503	5482	2581
21:39	MP41621-S2	6880	38391	5467	2564
21:44	ZZZZZZ	7476	41837	5814	2883
21:49	ZZZZZZ	7042	39167	5492	2681
21:54	MA19110-CCV11	6459	36948	5187	2519
21:59	MA19110-CCB11	6916	39813	5309	3047
22:04	ZZZZZZ	7023	38967	5405	2683
22:09	ZZZZZZ	7275	39514	5690	2657
22:14	ZZZZZZ	7181	38476	5756	2494
22:19	ZZZZZZ	7345	40617	5760	2857
22:24	ZZZZZZ	7190	40325	5617	2848
22:29	ZZZZZZ	7182	39341	5601	2668
22:34	ZZZZZZ	7232	39694	5731	2651
22:39	ZZZZZZ	7366	39852	5722	2785
22:44	ZZZZZZ	7499	41204	5907	2829
22:49	ZZZZZZ	7554	41762	6100	2650
22:54	MA19110-CCV12	6721	37718	5448	2529
22:59	MA19110-CCB12	7154	40068	5489	3078
23:04	ZZZZZZ	7254	39793	5741	2678
23:09	ZZZZZZ	7334	39606	5779	2648
23:14	ZZZZZZ	7461	39877	6011	2590
23:19	ZZZZZZ	7359	40429	5797	2819
23:24	ZZZZZZ	7340	40869	5915	2728

INTERNAL STANDARD SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:34	ZZZZZZ	7616	42147	6114	2669
23:39	MA19110-CCV13	6738	37888	5461	2513
23:44	MA19110-CCB13	7162	39905	5651	3000

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

(a) No sample results reported from this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19110 Units: ug/l

Time: / Sample ID:			11:14 ICB1		11:40 CCB1		12:41 CCB2		13:43 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	.5	anr							
Beryllium	4.0	.1	anr							
Boron	100	5								
Cadmium	5.0	.1	anr							
Calcium	1000	50	-2.40	<1000	15.1	<1000	16.7	<1000	-4.30	<1000
Chromium	10	.5	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	15	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	-15.7	<5000	7.40	<5000	-3.90	<5000	18.3	<5000
Manganese	15	.25	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	100	anr							
Selenium	10	2	anr							
Silver	10	.5	anr							
Sodium	10000	250	anr							
Strontium	10	.25								
Thallium	10	1	anr							
Tin	50	.5								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19110 Units: ug/l

Time: / Sample ID:			14:44 CCB4		15:54 CCB5		16:54 CCB6		17:57 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	.5	anr							
Beryllium	4.0	.1	anr							
Boron	100	5								
Cadmium	5.0	.1	anr							
Calcium	1000	50	-2.00	<1000	0.600	<1000	6.20	<1000	3.70	<1000
Chromium	10	.5	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	15	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	-6.30	<5000	-21.7	<5000	-9.10	<5000	-6.50	<5000
Manganese	15	.25	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	100	anr							
Selenium	10	2	anr							
Silver	10	.5	anr							
Sodium	10000	250	anr							
Strontium	10	.25								
Thallium	10	1	anr							
Tin	50	.5								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19110 Units: ug/l

Time:			18:57	
Sample ID:			CCB8	
Metal	RL	IDL	raw	final
Aluminum	200	14	anr	
Antimony	6.0	1	anr	
Arsenic	10	1.3	anr	
Barium	200	.5	anr	
Beryllium	4.0	.1	anr	
Boron	100	5		
Cadmium	5.0	.1	anr	
Calcium	1000	50	2.00	<1000
Chromium	10	.5	anr	
Cobalt	50	.2	anr	
Copper	25	1	anr	
Iron	300	15	anr	
Lead	5.0	1	anr	
Magnesium	5000	35	-13.6	<5000
Manganese	15	.25	anr	
Molybdenum	50	.3	anr	
Nickel	40	.4	anr	
Potassium	10000	100	anr	
Selenium	10	2	anr	
Silver	10	.5	anr	
Sodium	10000	250	anr	
Strontium	10	.25		
Thallium	10	1	anr	
Tin	50	.5		
Titanium	10	.5		
Vanadium	50	.5	anr	
Zinc	20	3	anr	

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19110 Units: ug/l

Time:		11:06			11:33			12:36	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	39800	99.5	40000	39900	99.8	40000	40600	101.5
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	42400	106.0	40000	39800	99.5	40000	40300	100.8
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19110 Units: ug/l

Time:		13:36			14:39			15:44	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	41400	103.5	40000	41200	103.0	40000	40400	101.0
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	41800	104.5	40000	42000	105.0	40000	41200	103.0
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19110 Units: ug/l

Time:		16:49			17:52			18:52	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	40100	100.3	40000	40800	102.0	40000	40200	100.5
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	40200	100.5	40000	41300	103.3	40000	40600	101.5
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA19110 Units: ug/l

Time:		11:00	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium	80000	79600	99.5
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	80000	79400	99.3
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA19110 Units: ug/l

Time:			10:54	
Sample ID:	CRI	CRIA	CRIA1	
Metal	True	True	Results	% Rec
Aluminum	400	200	anr	
Antimony	10	5.0	anr	
Arsenic	20	10	anr	
Barium	400	200	anr	
Beryllium	10	5.0	anr	
Boron	100	50		
Cadmium	10	5.0	anr	
Calcium	2000	1000	975	97.5
Chromium	20	10	anr	
Cobalt	100	50	anr	
Copper	50	25	anr	
Iron	600	300	anr	
Lead	10	5.0	anr	
Magnesium	10000	5000	4940	98.8
Manganese	30	15	anr	
Molybdenum	100	50	anr	
Nickel	80	40	anr	
Potassium	20000	10000	anr	
Selenium	20	10	anr	
Silver	20	10	anr	
Sodium	20000	10000	anr	
Strontium	20	10		
Thallium	20	10	anr	
Tin	100	50		
Titanium	20	10		
Vanadium	100	50	anr	
Zinc	40	20	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA19110 Units: ug/l

Time:			11:18		11:26	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	515000	103.0	528000	105.6
Antimony		1000	1.40		940	94.0
Arsenic		1000	0.00		935	93.5
Barium		500	-0.200		500	100.0
Beryllium		500	-0.100		497	99.4
Boron		1000	0.100		-28.4	0.0*
Cadmium		1000	0.00		964	96.4
Calcium	500000	500000	472000	94.4	473000	94.6
Chromium		500	-0.600		502	100.4
Cobalt		500	-1.00		468	93.6
Copper		500	0.300		539	107.8
Iron	500000	200000	501000	100.2	191000	95.5
Lead		1000	0.200		1100	110.0
Magnesium	500000	500000	513000	102.6	515000	103.0
Manganese		500	-1.00		524	104.8
Molybdenum		1000	-0.300		874	87.4
Nickel		1000	-0.500		914	91.4
Potassium			19.7		20.1	
Selenium		1000	0.00		888	88.8
Silver		1000	-0.700		1110	111.0
Sodium			267		253	
Strontium		1000	0.00		942	94.2
Thallium		1000	0.00		928	92.8
Tin		1000	-0.900		853	85.3
Titanium		1000	1.80		1040	104.0
Vanadium		500	0.300		518	103.6
Zinc		1000	1.10		943	94.3

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:				12/19/22		12/19/22	
Metal	RL	IDL	MDL	MB raw	MB final	MB raw	MB final
Aluminum	200	14	14				
Antimony	6.0	1	1				
Arsenic	10	1.3	1.3				
Barium	200	.5	1				
Beryllium	4.0	.1	.2				
Boron	100	5	10				
Cadmium	5.0	.1	.2				
Calcium	1000	50	50	22.1	<1000	39.4	<1000
Chromium	10	.5	1				
Cobalt	50	.2	.2				
Copper	25	1	1				
Iron	300	15	17				
Lead	5.0	1	1.1				
Magnesium	5000	35	35	-9.7	<5000	-2.1	<5000
Manganese	15	.25	1				
Molybdenum	50	.3	.3				
Nickel	40	.4	.4				
Potassium	10000	100	200				
Selenium	10	2	2.9				
Silver	10	.5	.7				
Sodium	10000	250	500				
Strontium	10	.25	.5				
Thallium	10	1	1.4				
Tin	50	.5	1				
Titanium	10	.5	1				
Vanadium	50	.5	.6				
Zinc	20	3	4.4				

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:			12/19/22					12/19/22	
Metal	FC1201-4F Original	DUP	RPD	QC Limits	FC1201-4F Original	MS	Spikelot MPFLICP2 % Rec	QC Limits	
Aluminum									
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	50900	52800	3.7	0-20	50900	78000	25000	108.4	80-120
Chromium	anr								
Cobalt									
Copper									
Iron									
Lead	anr								
Magnesium	6670	6980	4.5	0-20	6670	32900	25000	104.9	80-120
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	FC1201-4F Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony	anr					
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium	50900	75300	25000	97.6	3.5	20
Chromium	anr					
Cobalt						
Copper						
Iron						
Lead	anr					
Magnesium	6670	31600	25000	99.7	4.0	20
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium	anr					
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	25300	25000	101.2	80-120
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium	25600	25000	102.4	80-120
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	FC1201-4F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony	anr			
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	50900	50900	0.1	0-10
Chromium	anr			
Cobalt				
Copper				
Iron				
Lead	anr			
Magnesium	6670	6640	0.3	0-10
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium	anr			
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41622
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	Sample ml	Final ml	FC1201-4F Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium	9.8	10	50930	49911.4	54650	0.2	250	5000	94.8	80-120
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	6665	6531.7	11550	0.2	250	5000	100.4	80-120
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP41622: FC1020-1, FC1020-2, FC1020-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	.5
Beryllium	.1
Boron	5
Cadmium	.1
Calcium	50
Chromium	.5
Cobalt	.2
Copper	1
Iron	15
Lead	1
Lithium	.5
Magnesium	35
Manganese	.25
Molybdenum	.3
Nickel	.4
Potassium	100
Selenium	2
Silicon	5
Silver	.5
Sodium	250
Strontium	.25
Sulfur	5
Thallium	1
Tin	.5
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA19110

Instrument Linear Ranges

Job Number: FC1020
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Boron	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Lithium	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA19110

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: STDC Acquired: 12/20/2022 10:13:48 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0228**	**1.043**	**.0307**	**.0526**	**2.754**	**3.456**	**2.522**	**1.441**	**.6960**
Stddev	.0001	.001	.0001	.0011	.008	.007	.011	.003	.0023
%RSD	.3247	.1058	.2774	2.050	.2854	.2074	.4234	.2118	.3371
#1	.0227	1.044	.0307	.0529	2.747	3.464	2.522	1.439	.6937
#2	.0228	1.043	.0308	.0514	2.762	3.453	2.532	1.440	.6960
#3	.0228	1.042	.0308	.0535	2.752	3.451	2.511	1.445	.6984

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1987**	**.2431**	**1.212**	**.4988**	**.5159**	**.2865**	**1.006**	**.1902**	**1.707**
Stddev	.0003	.0002	.003	.0018	.0028	.0013	.002	.0004	.013
%RSD	.1541	.0670	.2149	.3601	.5417	.4475	.1546	.1970	.7497
#1	.1990	.2431	1.214	.4995	.5168	.2864	1.006	.1900	1.703
#2	.1984	.2429	1.213	.5001	.5127	.2879	1.004	.1900	1.721
#3	.1988	.2432	1.209	.4968	.5181	.2853	1.006	.1906	1.697

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4685**	**.3420**	**.0477**	**.0228**	**.0788**	**.0879**	**3.259**	**.5098**	**.0650**
Stddev	.0002	.0018	.0002	.0002	.0001	.0002	.021	.0008	.0004
%RSD	.0478	.5193	.4230	1.090	.1489	.2222	.6350	.1655	.5570
#1	.4685	.3439	.0475	.0225	.0786	.0878	3.250	.5108	.0654
#2	.4683	.3405	.0476	.0227	.0789	.0879	3.283	.5095	.0647
#3	.4687	.3415	.0479	.0230	.0788	.0881	3.245	.5092	.0650

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.2851**	**.8428**
Stddev	.0008	.0016
%RSD	.2693	.1890
#1	.2860	.8431
#2	.2850	.8411
#3	.2844	.8442

◀ Zoom In ▶ Zoom Out

Sample Name: STDC Acquired: 12/20/2022 10:13:48 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2891.9**	**7343.2**	**39660.**	**5910.2**
Stddev	6.3	18.8	294.	48.6
%RSD	.21772	.25627	.74060	.82316
#1	2887.9	7346.7	39595.	5922.9
#2	2899.2	7360.0	39981.	5856.4
#3	2888.7	7322.9	39404.	5951.2

◀ Zoom In ▶ Zoom Out

Sample Name: STDD Acquired: 12/20/2022 10:18:02 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0462**	**2.136**	**.0636**	**.1101**	**5.715**	**7.115**	**5.222**	**2.970**	**1.424**
Stddev	.0001	.002	.0001	.0008	.037	.018	.025	.002	.001
%RSD	.2984	.0722	.1523	.6907	.6538	.2483	.4730	.0651	.0434
#1	.0464	2.136	.0636	.1109	5.757	7.135	5.251	2.972	1.425
#2	.0461	2.134	.0635	.1100	5.685	7.102	5.206	2.968	1.424
#3	.0463	2.137	.0636	.1094	5.703	7.109	5.209	2.969	1.425

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4012**	**.4817**	**2.497**	**1.011**	**1.048**	**.5971**	**2.051**	**.3932**	**3.615**
Stddev	.0011	.0016	.002	.006	.007	.0006	.002	.0005	.022
%RSD	.2824	.3246	.0639	.6190	.6974	.0996	.1170	.1271	.6170
#1	.4018	.4835	2.495	1.017	1.056	.5967	2.050	.3938	3.641
#2	.3999	.4808	2.496	1.004	1.045	.5967	2.049	.3931	3.601
#3	.4018	.4807	2.498	1.012	1.042	.5977	2.053	.3928	3.603

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.9532**	**.7154**	**.0972**	**.0473**	**.1612**	**.1788**	**6.835**	**1.045**	**.1342**
Stddev	.0004	.0032	.0003	.0001	.0001	.0005	.050	.002	.0008
%RSD	.0438	.4415	.2800	.2649	.0863	.2930	.7262	.1893	.6108
#1	.9529	.7174	.0973	.0472	.1611	.1790	6.889	1.046	.1340
#2	.9537	.7172	.0969	.0475	.1614	.1792	6.822	1.042	.1351
#3	.9530	.7118	.0975	.0474	.1611	.1782	6.793	1.046	.1335

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.5846**	**1.719**
Stddev	.0010	.001
%RSD	.1751	.0338
#1	.5844	1.718
#2	.5837	1.719
#3	.5857	1.719

◀ Zoom In ▶ Zoom Out

Sample Name: STDD Acquired: 12/20/2022 10:18:02 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2812.3**	**7265.7**	**39704.**	**5913.5**
Stddev	9.3	4.9	48.	23.2
%RSD	.33164	.06789	.12196	.39287
#1	2807.4	7270.7	39677.	5917.5
#2	2806.6	7260.8	39760.	5934.4
#3	2823.1	7265.5	39675.	5888.5

Zoom In Zoom Out

Sample Name: STDE Acquired: 12/20/2022 10:22:00 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0872	4.296	.1294	.2302	11.92	14.84	10.51	5.973	2.843
Stddev	.0006	.035	.0011	.0008	.10	.11	.09	.048	.023
%RSD	.6708	.8218	.8181	.3641	.8513	.7387	.8514	.8006	.8120
#1	.0877	4.334	.1306	.2312	12.03	14.96	10.60	6.026	2.868
#2	.0866	4.289	.1289	.2296	11.91	14.82	10.50	5.962	2.837
#3	.0873	4.264	.1287	.2299	11.82	14.74	10.43	5.932	2.824

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.8217	.9633	4.987	2.007	2.123	1.190	4.219	.7917	7.431
Stddev	.0048	.0059	.040	.016	.016	.007	.017	.0068	.064
%RSD	.5866	.6167	.8112	.8139	.7384	.6032	.4005	.8600	.8622
#1	.8268	.9700	5.030	2.023	2.139	1.197	4.238	.7992	7.495
#2	.8213	.9609	4.981	2.006	2.123	1.189	4.211	.7899	7.432
#3	.8172	.9588	4.949	1.990	2.107	1.183	4.207	.7859	7.367

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.907	1.468	.1968	.0961	.3491	.3621	14.36	2.162	.2741
Stddev	.013	.009	.0016	.0008	.0029	.0023	.13	.010	.0009
%RSD	.6727	.5829	.8369	.7866	.8328	.6245	.8781	.4772	.3351
#1	1.922	1.478	.1986	.0969	.3519	.3646	14.48	2.174	.2752
#2	1.903	1.466	.1963	.0960	.3491	.3615	14.38	2.156	.2735
#3	1.897	1.461	.1954	.0954	.3461	.3602	14.23	2.157	.2737

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	1.219	3.476
Stddev	.005	.023
%RSD	.4150	.6738
#1	1.225	3.501
#2	1.218	3.472
#3	1.215	3.454

Zoom In Zoom Out

Sample Name: STDE Acquired: 12/20/2022 10:22:00 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2685.2	7144.2	38863.	5886.7
Stddev	5.5	25.3	24.	40.4
%RSD	.20496	.35442	.06061	.68633
#1	2680.1	7115.0	38881.	5854.0
#2	2691.0	7160.1	38836.	5874.2
#3	2684.4	7157.5	38872.	5931.9

Zoom In Zoom Out

Sample Name: STDF Acquired: 12/20/2022 10:25:42 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1746	8.446	.2667	.4563	23.43	29.36	20.55	12.12	5.750
Stddev	.0004	.020	.0004	.0010	.10	.08	.08	.03	.015
%RSD	.2077	.2373	.1465	.2123	.4127	.2610	.4106	.2422	.2529
#1	.1750	8.460	.2669	.4570	23.52	29.45	20.63	12.15	5.764
#2	.1744	8.454	.2669	.4552	23.44	29.34	20.56	12.12	5.750
#3	.1743	8.423	.2662	.4567	23.33	29.30	20.46	12.09	5.735

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1.638	1.921	9.781	3.920	4.136	2.322	8.263	1.611	14.63
Stddev	.003	.003	.028	.010	.022	.011	.197	.004	.07
%RSD	.2061	.1491	.2881	.2477	.5380	.4910	2.384	.2472	.4444
#1	1.635	1.924	9.800	3.925	4.144	2.325	8.217	1.614	14.68
#2	1.638	1.920	9.794	3.926	4.153	2.331	8.092	1.612	14.65
#3	1.642	1.918	9.749	3.909	4.111	2.309	8.478	1.607	14.56

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.861	3.070	.4022	.1960	.7095	.7300	28.09	4.307	.5689
Stddev	.006	.011	.0007	.0002	.0008	.0009	.13	.013	.0018
%RSD	.1648	.3658	.1798	.1069	.1132	.1230	.4508	.2963	.3100
#1	3.866	3.065	.4027	.1960	.7098	.7307	28.19	4.321	.5676
#2	3.863	3.083	.4026	.1962	.7101	.7304	28.13	4.303	.5709
#3	3.854	3.062	.4014	.1958	.7086	.7290	27.95	4.296	.5681

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	2.426	7.079
Stddev	.003	.015
%RSD	.1206	.2043
#1	2.429	7.090
#2	2.423	7.085
#3	2.426	7.063

Zoom In Zoom Out

Sample Name: STDF Acquired: 12/20/2022 10:25:42 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2521.0	6959.0	38185.	5811.1
Stddev	6.3	6.8	208.	15.4
%RSD	.24936	.09783	.54478	.26546
#1	2526.3	6952.1	38424.	5803.2
#2	2514.0	6959.3	38084.	5801.1
#3	2522.7	6965.7	38047.	5828.8

Zoom In Zoom Out

Sample Name: STDG Acquired: 12/20/2022 10:29:44 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3639	16.91	.5432	.9219	46.56	58.04	40.93	24.17	11.48
Stddev	.0003	.06	.0012	.0049	.23	.61	.17	.03	.01
%RSD	.0769	.3414	.2134	.5301	.4934	1.045	.4043	.1239	.1089
#1	.3639	16.94	.5434	.9162	46.60	58.73	40.97	24.17	11.48
#2	.3636	16.84	.5420	.9247	46.31	57.79	40.74	24.14	11.47
#3	.3641	16.94	.5443	.9247	46.76	57.60	41.07	24.20	11.49

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.251	3.809	19.32	7.857	8.210	4.578	16.09	3.241	29.24
Stddev	.004	.005	.06	.040	.043	.012	.27	.004	.16
%RSD	.1295	.1201	.3059	.5115	.5267	.2693	1.703	.1090	.5410
#1	3.254	3.813	19.38	7.875	8.235	4.590	16.09	3.243	29.23
#2	3.247	3.804	19.26	7.811	8.160	4.566	15.81	3.236	29.09
#3	3.253	3.811	19.32	7.885	8.235	4.577	16.36	3.242	29.41

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.713	6.371	.8089	.3968	1.163	1.457	55.87	8.521	1.155
Stddev	.005	.009	.0011	.0004	.001	.001	.77	.129	.002
%RSD	.0646	.1396	.1351	.0944	.1131	.0608	1.386	1.509	.1377
#1	7.710	6.373	.8085	.3972	1.163	1.457	55.20	8.661	1.155
#2	7.711	6.362	.8080	.3964	1.162	1.458	55.69	8.409	1.154
#3	7.719	6.379	.8101	.3967	1.165	1.457	56.72	8.492	1.157

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	4.850	14.14
Stddev	.000	.01
%RSD	.0070	.0451
#1	4.850	14.13
#2	4.851	14.13
#3	4.850	14.14

Zoom In Zoom Out

Sample Name: STDG Acquired: 12/20/2022 10:29:44 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2333.4	6695.8	37570.	5800.9
Stddev	9.0	25.5	276.	21.3
%RSD	.38563	.38051	.73376	.36749
#1	2343.1	6722.3	37422.	5787.6
#2	2331.8	6693.8	37888.	5825.5
#3	2325.3	6671.4	37399.	5789.7

Zoom In Zoom Out

Sample Name: STDA Acquired: 12/20/2022 10:37:14 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0001	-.0011	-.0001	.0022	-.0001	.0009	-.0009	-.0001	-.0004
Stddev	.0001	.0051	.0001	.0006	.0068	.0007	.0007	.0002	.0001
%RSD	156.1	450.0	90.03	27.39	5560.	80.20	75.37	166.6	20.93
#1	-.0002	-.0069	.0000	.0020	-.0049	.0014	-.0016	.0001	-.0003
#2	.0000	.0029	-.0001	.0029	-.0031	.0001	-.0002	-.0003	-.0004
#3	.0000	.0006	-.0003	.0017	.0077	.0013	-.0010	-.0003	-.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0145	-.0004	.0275	.0161	-.0002	-.0002	.0002	-.0727
Stddev	.0003	.0007	.0001	.0031	.0022	.0009	.0000	.0002	.0031
%RSD	297.6	4.562	31.64	11.12	13.78	487.7	24.92	69.23	4.280
#1	.0003	.0149	-.0003	.0303	.0186	.0008	-.0002	.0004	-.0699
#2	.0001	.0137	-.0005	.0280	.0142	-.0004	-.0002	.0002	-.0760
#3	-.0002	.0148	-.0004	.0243	.0157	-.0010	-.0001	.0001	-.0722

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0016	-.0075	.0009	-.0004	.0015	.0002	.0027	.0032	-.0011
Stddev	.0002	.0003	.0001	.0001	.0002	.0001	.0002	.0002	.0002
%RSD	12.71	3.440	15.63	19.96	14.08	45.60	7.063	7.653	18.47
#1	-.0016	-.0074	.0009	-.0003	.0017	.0003	.0027	.0031	-.0011
#2	-.0018	-.0072	.0007	-.0004	.0013	.0002	.0028	.0030	-.0009
#3	-.0014	-.0078	.0009	-.0004	.0015	.0001	.0025	.0034	-.0013

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	-.0004	.0009
Stddev	.0002	.0002
%RSD	60.89	16.40
#1	-.0003	.0009
#2	-.0006	.0008
#3	-.0002	.0011

Zoom In Zoom Out

Sample Name: STDA Acquired: 12/20/2022 10:37:14 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3023.0	7327.0	39892.	5871.2
Stddev	8.3	33.9	105.	53.9
%RSD	.27472	.46200	.26391	.91764
#1	3014.8	7289.9	39773.	5847.9
#2	3022.8	7334.8	39930.	5832.9
#3	3031.4	7356.3	39973.	5932.8

Zoom In Zoom Out

Sample Name: STDB Acquired: 12/20/2022 10:42:26 Type: Cal
Method: 60102007_COMBO_102422(v106) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0066**	**.0442**	**.0011**	**2.231**	**.0690**	**.5014**	**.0290**	**.1409**	**.0080**
Stddev	.0002	.0023	.0001	.002	.0008	.0015	.0002	.0006	.0002
%RSD	3.640	5.187	8.990	.0683	1.221	.2942	.8568	.4118	2.758
#1	.0065	.0424	.0010	2.230	.0699	.4997	.0288	.1413	.0080
#2	.0069	.0433	.0012	2.231	.0687	.5023	.0289	.1412	.0077
#3	.0065	.0468	.0011	2.233	.0683	.5022	.0292	.1402	.0082

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0374**	**.0697**	**.9580**	**.0163**	**.2821**	**.0609**	**.0393**	**3.185**	**.0747**
Stddev	.0003	.0002	.0024	.0069	.0007	.0004	.0001	.011	.0003
%RSD	.7361	.2439	.2547	41.96	.2447	.6864	.2644	.3514	.4395
#1	.0377	.0698	.9562	.0093	.2827	.0604	.0394	3.172	.0744
#2	.0372	.0698	.9570	.0167	.2814	.0611	.0392	3.194	.0751
#3	.0373	.0695	.9607	.0230	.2823	.0611	.0392	3.189	.0748

Elem	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0007**	**.0020**	**.0006**	**.0181**	**.1337**	**.0244**	**.0013**	**.0579**	**.0694**
Stddev	.0009	.0002	.0003	.0002	.0008	.0001	.0007	.0004	.0003
%RSD	138.9	8.581	46.13	.9925	.6177	.2975	54.38	.7616	.4569
#1	-.0017	.0019	.0008	.0183	.1345	.0244	.0013	.0575	.0696
#2	.0002	.0022	.0003	.0180	.1338	.0243	.0005	.0583	.0696
#3	-.0006	.0019	.0006	.0180	.1329	.0244	.0019	.0578	.0690

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2884.9**	**7248.2**	**39562.**	**5877.0**
Stddev	5.0	25.8	276.	35.8
%RSD	.17209	.35627	.69722	.60918
#1	2883.4	7234.1	39783.	5838.7
#2	2880.8	7232.5	39649.	5882.8
#3	2890.4	7278.0	39253.	5909.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2022 10:54:04 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0089**	**.2214**	**.0096**	F **.0033**	**.1903**	**.0047**	**.9745**	**.0047**	**.0490**
Stddev	.0004	.0229	.0008	.0007	.0002	.0001	.0013	.0000	.0002
%RSD	4.902	10.36	8.411	22.22	.1097	2.085	.1290	.7376	.3441
#1	.0093	.2115	.0106	.0033	.1903	.0047	.9747	.0047	.0490
#2	.0090	.2476	.0094	.0040	.1901	.0047	.9756	.0047	.0492
#3	.0085	.2050	.0090	.0026	.1905	.0048	.9732	.0047	.0489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0100					
Range				-20.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0099**	**.0247**	**.2934**	**9.591**	F **.0022**	**4.939**	**.0149**	**.0481**	**8.865**
Stddev	.0002	.0005	.0012	.010	.0016	.037	.0000	.0003	.018
%RSD	2.405	2.023	.4231	.1031	75.19	.7422	.1844	.5865	.1991
#1	.0101	.0251	.2936	9.600	.0005	4.978	.0148	.0478	8.864
#2	.0100	.0248	.2920	9.593	.0023	4.906	.0149	.0484	8.848
#3	.0096	.0241	.2945	9.580	.0037	4.934	.0148	.0482	8.883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.0100				
Range					-20.00%				

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0396**	**.0043**	F **.0040**	**.0099**	**.0742**	**.0494**	**.0093**	**.0100**	**.0080**
Stddev	.0001	.0003	.0005	.0019	.0006	.0001	.0001	.0000	.0025
%RSD	.3456	6.815	12.65	19.52	.8047	.1540	.9416	.4615	31.30
#1	.0395	.0045	.0039	.0121	.0743	.0493	.0093	.0100	.0108
#2	.0396	.0043	.0035	.0090	.0735	.0493	.0092	.0100	.0071
#3	.0398	.0039	.0045	.0086	.0747	.0494	.0094	.0101	.0061
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value			.0050						
Range			-20.00%						

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/20/2022 10:54:04 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**.0481**	**.0200**
Stddev	.0002	.0000
%RSD	.3689	.1330
#1	.0483	.0200
#2	.0481	.0200
#3	.0479	.0200
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2848.2**	**7245.0**	**39353.**	**5867.4**
Stddev	4.7	25.5	121.	28.5
%RSD	.16371	.35151	.30686	.48635
#1	2844.8	7256.0	39221.	5839.9
#2	2846.3	7215.9	39382.	5865.4
#3	2853.5	7263.1	39457.	5896.9

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2022 11:00:25 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5090**	**80.00**	**4.061**	F **3.993**	**3.988**	**4.002**	**79.58**	**4.010**	**3.991**
Stddev	.0007	.14	.002	.014	.009	.003	.15	.002	.006
%RSD	.1467	.1715	.0549	.3583	.2190	.0794	.1841	.0440	.1617
#1	.5085	79.85	4.061	4.000	3.978	3.999	79.41	4.008	3.984
#2	.5098	80.01	4.063	4.003	3.994	4.001	79.63	4.011	3.992
#3	.5086	80.13	4.058	3.976	3.991	4.005	79.69	4.010	3.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				5.000%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.051**	**4.034**	**79.80**	**80.14**	**3.986**	**79.36**	**4.019**	**4.013**	**80.00**
Stddev	.008	.016	.14	.26	.008	.24	.065	.004	.26
%RSD	.1886	.3884	.1725	.3185	.1956	.2977	1.624	.0961	.3238
#1	4.057	4.052	79.76	79.85	3.981	79.14	3.971	4.009	79.72
#2	4.055	4.029	79.69	80.24	3.982	79.33	3.993	4.016	80.04
#3	4.043	4.021	79.95	80.33	3.995	79.61	4.093	4.016	80.24
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**4.009**	**4.156**	**4.032**	**4.034**	**3.656**	**4.024**	**4.014**	**4.055**	**4.109**
Stddev	.003	.011	.001	.004	.005	.004	.092	.051	.008
%RSD	.0714	.2634	.0315	.0972	.1247	.1088	2.297	1.271	.1902
#1	4.008	4.168	4.033	4.030	3.651	4.028	3.928	4.019	4.117
#2	4.012	4.151	4.031	4.038	3.658	4.025	4.003	4.032	4.108
#3	4.006	4.148	4.031	4.034	3.660	4.020	4.111	4.114	4.102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/20/2022 11:00:25 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**4.036**	**4.043**
Stddev	.004	.007
%RSD	.0998	.1839
#1	4.035	4.051
#2	4.033	4.043
#3	4.041	4.036
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2314.7**	**6705.7**	**36962.**	**5771.0**
Stddev	5.0	15.8	109.	41.8
%RSD	.21769	.23600	.29561	.72440
#1	2310.8	6712.8	37064.	5797.3
#2	2320.4	6716.8	36975.	5793.0
#3	2312.9	6687.6	36846.	5722.8

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2022 11:06:34 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2626**	**41.59**	**2.094**	F **2.092**	**2.071**	**2.113**	**39.80**	**2.095**	**2.100**
Stddev	.0003	.04	.003	.017	.004	.004	.06	.001	.002
%RSD	.1034	.0907	.1215	.7954	.1932	.2093	.1595	.0409	.0989
#1	.2627	41.59	2.091	2.075	2.066	2.114	39.73	2.096	2.101
#2	.2623	41.55	2.095	2.094	2.074	2.108	39.85	2.094	2.097
#3	.2628	41.63	2.096	2.108	2.073	2.116	39.80	2.094	2.101
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.136**	**2.124**	**40.47**	**41.05**	**2.095**	**42.44**	**2.148**	**2.047**	**40.60**
Stddev	.005	.005	.07	.13	.002	.14	.018	.002	.09
%RSD	.2277	.2174	.1806	.3235	.0905	.3306	.8454	.1093	.2178
#1	2.140	2.125	40.51	40.96	2.095	42.45	2.130	2.049	40.51
#2	2.130	2.118	40.39	41.00	2.093	42.29	2.148	2.045	40.69
#3	2.137	2.127	40.51	41.21	2.097	42.57	2.167	2.046	40.59
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.094**	**2.088**	**2.096**	**2.105**	**.3194**	**2.019**	**2.113**	**2.143**	**2.158**
Stddev	.001	.003	.004	.005	.0003	.002	.006	.005	.005
%RSD	.0418	.1323	.1750	.2586	.0986	.1148	.2842	.2359	.2254
#1	2.095	2.090	2.096	2.104	.3191	2.018	2.108	2.142	2.161
#2	2.093	2.090	2.093	2.100	.3195	2.018	2.120	2.148	2.162
#3	2.094	2.085	2.100	2.111	.3197	2.022	2.111	2.138	2.153
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/20/2022 11:06:34 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.098**	**2.112**
Stddev	.003	.002
%RSD	.1612	.0927
#1	2.101	2.114
#2	2.098	2.111
#3	2.094	2.110
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2513.5**	**6960.1**	**37818.**	**5820.8**
Stddev	2.6	6.0	120.	17.9
%RSD	.10164	.08632	.31649	.30836
#1	2514.6	6964.8	37956.	5801.2
#2	2510.6	6962.3	37743.	5824.8
#3	2515.4	6953.4	37756.	5836.4

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2022 11:14:09 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**-.0004**	**-.0007**	F **-.0017**	**-.0002**	**-.0001**	**-.0024**	**-.0001**
Stddev	.0003	.0090	.0001	.0009	.0000	.0000	.0031	.0001
%RSD	132.6	2043.	21.32	49.35	25.29	51.78	128.8	116.9
#1	-.0006	-.0053	-.0009	-.0009	-.0002	-.0001	-.0052	.0000
#2	.0000	-.0059	-.0006	-.0017	-.0001	.0000	.0009	-.0001
#3	-.0002	.0099	-.0006	-.0026	-.0002	-.0001	-.0028	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0001**	**.0007**	**-.0065**	**-.0009**	**-.0157**	**.0000**
Stddev	.0001	.0004	.0006	.0034	.0162	.0032	.0150	.0000
%RSD	62.69	455.2	621.0	486.3	251.1	367.3	95.50	161.6
#1	.0003	-.0003	.0006	.0025	-.0176	-.0023	-.0009	.0000
#2	.0002	.0002	.0002	.0028	.0121	.0028	-.0153	.0000
#3	.0001	.0003	-.0005	-.0032	-.0138	-.0031	-.0308	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0130**	**.0000**	**.0003**	**.0014**	**.0004**	**.0001**	**-.0001**
Stddev	.000	.0043	.0001	.0002	.0023	.0009	.0008	.0002
%RSD	4766.	33.33	5289.	74.55	167.2	232.4	580.9	144.5
#1	.0003	-.0137	.0000	.0002	.0018	.0014	-.0008	-.0003
#2	-.0002	-.0170	.0001	.0002	-.0011	-.0002	.0006	.0000
#3	-.0002	-.0084	-.0001	.0006	.0034	-.0001	.0006	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/20/2022 11:14:09 Type: QC
Method: 60102007_COMBO_102422(v106) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0001**	**-.0009**	**.0000**	**-.0001**
Stddev	.0003	.0001	.0012	.0002	.0000
%RSD	121.6	140.0	135.2	353.1	37.82
#1	-.0002	-.0001	.0003	.0000	-.0001
#2	-.0005	.0000	-.0021	-.0001	-.0001
#3	.0000	-.0001	-.0009	.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3014.9**	**7348.4**	**40012.**	**5871.2**
Stddev	8.7	19.8	247.	12.2
%RSD	.29011	.26928	.61693	.20782
#1	3008.3	7327.5	39992.	5875.0
#2	3024.8	7366.9	39775.	5881.0
#3	3011.6	7350.9	40268.	5857.5

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2022 11:18:13 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**515.3**	**.0000**	**.0001**	**-.0002**	**-.0001**	**472.4**	**.0000**
Stddev	.0001	2.2	.002	.0267	.0002	.0001	5.1	.000
%RSD	20.70	.4365	8198.	32930.	99.04	79.86	1.072	1518.
#1	-.0007	517.6	-.0005	.0049	-.0005	-.0001	474.0	.0002
#2	-.0008	513.1	.0017	-.0287	.0000	.0000	476.4	-.0005
#3	-.0005	515.1	-.0013	.0241	-.0002	-.0001	466.7	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0010**	**-.0006**	**.0003**	**F 500.6**	**.0197**	**F -.0062**	**512.9**	**-.0010**
Stddev	.0001	.0003	.0002	6.5	.0184	.0003	2.5	.0000
%RSD	5.830	47.88	58.98	1.290	93.18	4.446	.4864	4.034
#1	-.0009	-.0003	.0004	498.4	.0409	-.0059	515.7	-.0010
#2	-.0010	-.0006	.0001	507.9	.0106	-.0061	511.0	-.0010
#3	-.0009	-.0009	.0004	495.5	.0077	-.0065	512.0	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass
High Limit				240.0		.0010		
Low Limit				160.0		-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.2673**	**-.0005**	**.0002**	**.0014**	**.0000**	**.1091**	**-.0009**
Stddev	.0006	.0126	.0003	.0021	.0026	.0041	.0005	.0009
%RSD	186.6	4.729	56.50	905.7	181.7	9925.	.4750	93.20
#1	.0003	.2697	-.0008	.0027	.0038	-.0047	.1086	.0001
#2	-.0003	.2536	-.0002	-.0010	.0019	.0020	.1096	-.0016
#3	-.0009	.2785	-.0005	-.0010	-.0014	.0028	.1092	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/20/2022 11:18:13 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0018**	**.0000**	**.0003**	**.0011**
Stddev	.000	.0003	.002	.0001	.0000
%RSD	47.41	13.67	7937.	45.88	1.699
#1	.0000	.0020	.0005	.0003	.0011
#2	.0000	.0020	.0019	.0004	.0011
#3	-.0001	.0015	-.0024	.0001	.0011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2034.3**	**6531.0**	**34808.**	**5674.7**
Stddev	9.7	2.9	235.	54.7
%RSD	.47643	.04470	.67582	.96454
#1	2026.6	6530.0	34541.	5639.0
#2	2031.1	6528.7	34985.	5647.5
#3	2045.2	6534.3	34897.	5737.8

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2022 11:26:21 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.109**	**528.2**	**.9347**	**F -.0284**	**.5003**	**.4974**	**472.7**	**.9635**
Stddev	.003	6.8	.0021	.0042	.0007	.0010	5.9	.0003
%RSD	.2648	1.279	.2198	14.79	.1362	.1981	1.256	.0311
#1	1.111	521.2	.9324	-.0280	.4997	.4966	466.1	.9632
#2	1.106	528.6	.9359	-.0243	.5003	.4972	474.2	.9638
#3	1.110	534.7	.9359	-.0327	.5010	.4985	477.7	.9635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				1.000				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4684**	**.5017**	**.5392**	**191.2**	**.0201**	**.9754**	**514.8**	**.5239**
Stddev	.0002	.0005	.0010	.6	.0104	.0013	1.2	.0015
%RSD	.0326	.1053	.1920	.2924	51.85	.1331	.2413	.2900
#1	.4684	.5021	.5400	190.9	.0258	.9768	513.9	.5250
#2	.4685	.5018	.5397	190.8	.0263	.9742	514.2	.5221
#3	.4682	.5011	.5380	191.8	.0081	.9751	516.2	.5245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8743**	**.2533**	**.9135**	**1.098**	**.9402**	**.8881**	**.1402**	**.8531**
Stddev	.0011	.0062	.0010	.003	.0044	.0028	.0002	.0011
%RSD	.1273	2.461	.1148	.2477	.4697	.3201	.1781	.1239
#1	.8730	.2600	.9127	1.099	.9394	.8857	.1402	.8534
#2	.8751	.2476	.9132	1.101	.9363	.8913	.1404	.8519
#3	.8749	.2523	.9147	1.095	.9450	.8874	.1399	.8540
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/20/2022 11:26:21 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.9422**	**1.038**	**.9284**	**.5177**	**.9427**
Stddev	.0024	.004	.0059	.0011	.0000
%RSD	.2516	.3718	.6358	.2194	.0052
#1	.9403	1.041	.9220	.5189	.9427
#2	.9415	1.033	.9297	.5167	.9428
#3	.9448	1.039	.9336	.5175	.9428
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2121.3**	**6512.3**	**34507.**	**5589.3**
Stddev	4.1	7.1	130.	63.1
%RSD	.19182	.10962	.37682	1.1288
#1	2125.9	6518.4	34362.	5609.1
#2	2120.0	6513.9	34612.	5640.0
#3	2118.0	6504.4	34548.	5518.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 11:33:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2476**	**39.82**	**2.006**	F **1.952**	**2.023**	**2.012**	**39.92**	**2.012**	**2.001**
Stddev	.0001	.11	.003	.013	.005	.005	.14	.001	.001
%RSD	.0231	.2878	.1699	.6603	.2580	.2334	.3619	.0396	.0662
#1	.2477	39.81	2.004	1.943	2.021	2.012	39.85	2.011	2.000
#2	.2476	39.72	2.004	1.966	2.020	2.008	39.82	2.012	2.002
#3	.2476	39.95	2.010	1.946	2.029	2.017	40.09	2.012	2.000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.052**	**2.034**	**40.03**	**40.17**	**1.983**	**39.75**	**2.064**	**1.993**	**40.28**
Stddev	.004	.003	.14	.11	.004	.11	.021	.001	.15
%RSD	.1949	.1600	.3488	.2805	.1985	.2845	1.016	.0714	.3778
#1	2.050	2.037	40.03	40.13	1.982	39.76	2.079	1.993	40.21
#2	2.049	2.031	39.89	40.08	1.979	39.63	2.040	1.995	40.18
#3	2.056	2.035	40.17	40.29	1.987	39.86	2.074	1.992	40.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.019**	**2.008**	**2.014**	**2.007**	**2.244**	**2.035**	**2.013**	**2.023**	**2.025**
Stddev	.002	.005	.005	.003	.001	.002	.005	.003	.007
%RSD	.1059	.2652	.2309	.1601	.0612	.1043	.2303	.1697	.3302
#1	2.021	2.011	2.009	2.005	2.243	2.036	2.010	2.022	2.027
#2	2.020	2.002	2.015	2.011	2.245	2.036	2.011	2.020	2.017
#3	2.017	2.012	2.018	2.006	2.245	2.032	2.019	2.027	2.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 11:33:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.029**	**2.031**
Stddev	.004	.001
%RSD	.1737	.0419
#1	2.028	2.032
#2	2.027	2.031
#3	2.033	2.030
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2512.2**	**6982.9**	**37919.**	**5739.1**
Stddev	2.1	17.3	182.	44.5
%RSD	.08208	.24751	.48087	.77451
#1	2512.7	6996.0	38006.	5741.2
#2	2514.0	6963.3	38041.	5782.4
#3	2510.0	6989.4	37709.	5693.6

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 11:40:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0133**	**-.0001**	F **-.0057**	**.0000**	**.0000**	**.0151**	**.0000**
Stddev	.0001	.0141	.0012	.0016	.0001	.0000	.0012	.0000
%RSD	195.6	105.9	1553.	28.30	338.1	79.48	7.893	211.3
#1	.0000	.0252	.0004	-.0076	.0001	.0000	.0155	.0000
#2	.0002	-.0023	-.0014	-.0046	.0001	.0000	.0161	.0001
#3	-.0001	.0170	.0008	-.0049	-.0001	.0001	.0138	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0001**	**.0000**	**.0065**	**-.0208**	**.0003**	**.0074**	**.0002**
Stddev	.0001	.0004	.000	.0009	.0542	.0009	.0061	.0000
%RSD	69.31	536.9	5254.	13.79	260.4	295.8	82.94	25.13
#1	.0003	.0000	-.0003	.0059	-.0052	-.0001	.0137	.0001
#2	.0000	.0005	.0003	.0061	-.0812	.0013	.0071	.0001
#3	.0002	-.0003	.0000	.0075	.0239	-.0004	.0014	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0122**	**.0003**	**.0001**	F **.0022**	F **.0020**	**.0015**	**.0000**
Stddev	.0001	.0142	.0001	.0005	.0008	.0026	.0007	.0003
%RSD	125.5	115.9	34.95	623.9	38.01	127.0	44.74	2075.
#1	.0000	-.0165	.0004	.0006	.0031	-.0009	.0009	.0001
#2	.0002	.0036	.0003	.0001	.0016	.0031	.0022	-.0003
#3	.0001	-.0238	.0002	-.0005	.0018	.0039	.0013	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Fail	None	Chk Pass
High Limit					.0020	.0020		
Low Limit					-.0020	-.0020		

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 11:40:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0016**	**.0002**	**.0017**
Stddev	.0001	.0001	.0023	.0001	.0001
%RSD	212.0	125.3	146.4	54.08	4.528
#1	.0002	.0002	-.0006	.0002	.0016
#2	-.0001	-.0001	.0040	.0003	.0017
#3	.0002	.0002	.0014	.0001	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3019.7**	**7380.9**	**39990.**	**5816.1**
Stddev	3.2	16.2	145.	37.9
%RSD	.10560	.22011	.36273	.65102
#1	3016.1	7377.6	40098.	5811.6
#2	3021.1	7366.6	40046.	5856.0
#3	3022.0	7398.6	39825.	5780.7

Zoom In Zoom Out

Sample Name: MP41624-MB1 Acquired: 12/20/2022 11:51:48 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0130**	**.0000**	**-.0039**	**.0000**	**-.0002**	**.0085**	**-.0001**
Stddev	.0004	.0037	.0010	.0016	.0004	.0000	.0033	.0000
%RSD	96.75	28.76	2207.	40.85	794.5	2.522	38.95	19.21
#1	-.0008	.0123	-.0011	-.0045	.0004	-.0002	.0083	-.0001
#2	.0000	.0096	.0005	-.0052	-.0003	-.0002	.0053	-.0001
#3	-.0006	.0170	.0007	-.0021	.0001	-.0002	.0120	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0004**	**.0027**	**.0066**	**.0110**	F **-.0053**	**.0025**	**.0003**
Stddev	.0003	.0002	.0005	.0017	.0095	.0036	.0051	.0001
%RSD	433.4	49.82	19.54	25.77	86.00	67.73	206.0	22.57
#1	.0002	.0003	.0027	.0057	.0015	-.0094	.0035	.0003
#2	.0002	.0006	.0032	.0056	.0204	-.0036	.0070	.0002
#3	-.0002	.0002	.0021	.0086	.0112	-.0028	-.0030	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0050		
Low Limit						-.0050		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0131**	**.0000**	**.0001**	**.0013**	**.0003**	**.0035**	**.0004**
Stddev	.0002	.0053	.000	.0005	.0012	.0012	.0006	.0002
%RSD	338.2	40.64	2816.	551.2	93.21	437.8	16.69	61.23
#1	.0002	-.0158	-.0001	.0006	.0019	-.0010	.0038	.0001
#2	.0000	-.0167	.0002	.0001	.0021	.0005	.0029	.0004
#3	-.0001	-.0070	-.0001	-.0004	-.0001	.0014	.0040	.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: MP41624-MB1 Acquired: 12/20/2022 11:51:48 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0002**	**-.0011**	**.0001**	**.0020**
Stddev	.000	.0001	.0015	.0002	.0000
%RSD	396.8	44.85	138.0	160.7	1.334
#1	-.0002	.0001	.0006	.0000	.0021
#2	.0001	.0001	-.0022	.0000	.0021
#3	.0000	.0002	-.0017	.0003	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3012.7**	**7412.5**	**40463.**	**5859.7**
Stddev	1.9	10.8	127.	22.5
%RSD	.06144	.14588	.31266	.38442
#1	3012.2	7420.9	40318.	5837.2
#2	3014.8	7400.3	40523.	5859.7
#3	3011.2	7416.3	40548.	5882.2

Zoom In Zoom Out

Sample Name: MP41624-B1 Acquired: 12/20/2022 11:56:49 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0488**	**24.55**	**1.826**	F **.0206**	**1.888**	**.0459**	**22.99**	**.0463**	**.4680**
Stddev	.0002	.04	.004	.0019	.002	.0002	.03	.0002	.0011
%RSD	.3274	.1626	.2425	9.157	.1131	.3354	.1224	.3470	.2278
#1	.0490	24.57	1.827	.0204	1.890	.0458	23.00	.0463	.4683
#2	.0488	24.50	1.821	.0188	1.887	.0458	23.00	.0462	.4668
#3	.0487	24.57	1.830	.0226	1.886	.0461	22.95	.0465	.4689
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0500					
Range				-20.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1902**	**.2857**	**23.36**	**22.81**	F **.0016**	**22.61**	**.4818**	**.4808**	**21.44**
Stddev	.0005	.0005	.02	.04	.0013	.02	.0011	.0017	.01
%RSD	.2395	.1577	.0975	.1717	82.26	.0789	.2336	.3613	.0617
#1	.1901	.2856	23.36	22.85	.0002	22.61	.4811	.4818	21.43
#2	.1899	.2852	23.33	22.80	.0028	22.59	.4831	.4788	21.42
#3	.1907	.2861	23.38	22.77	.0019	22.63	.4813	.4818	21.45
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					.0500				
Range					-20.00%				

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4686**	**.4562**	**.4579**	**1.849**	**.2724**	**.4805**	**.4820**	**.4837**	**1.861**
Stddev	.0007	.0003	.0004	.005	.0010	.0005	.0010	.0016	.001
%RSD	.1397	.0621	.0896	.2496	.3822	.0970	.2149	.3360	.0704
#1	.4692	.4564	.4579	1.849	.2726	.4810	.4832	.4823	1.860
#2	.4679	.4559	.4576	1.845	.2713	.4801	.4815	.4855	1.863
#3	.4687	.4564	.4584	1.854	.2734	.4805	.4813	.4833	1.861
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: MP41624-B1 Acquired: 12/20/2022 11:56:49 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**.4689**	**.5091**
Stddev	.0005	.0007
%RSD	.1088	.1463
#1	.4684	.5099
#2	.4691	.5085
#3	.4694	.5090
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2693.6**	**7180.8**	**38987.**	**5907.0**
Stddev	9.9	17.5	156.	29.7
%RSD	.36891	.24383	.39926	.50267
#1	2684.5	7160.7	39122.	5892.8
#2	2692.1	7192.8	38817.	5887.1
#3	2704.2	7188.8	39021.	5941.1

Zoom In Zoom Out

Sample Name: FC1282-7F Acquired: 12/20/2022 12:01:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.5580**	**-.0006**	**.0161**	**.0075**	**-.0001**	**1.128**	**-.0001**	**.0001**
Stddev	.0004	.0076	.0010	.0028	.0002	.0000	.006	.0000	.0001
%RSD	449.3	1.361	156.3	17.34	2.443	59.59	.5220	32.12	99.48
#1	.0003	.5620	-.0008	.0163	.0074	-.0001	1.134	-.0001	.0000
#2	-.0001	.5492	.0004	.0132	.0074	.0000	1.127	-.0001	.0000
#3	-.0005	.5627	-.0015	.0187	.0077	-.0001	1.122	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0013**	**.7854**	**1.617**	**.0017**	**.3252**	**.0048**	**.0005**	**4.189**
Stddev	.0002	.0004	.0018	.021	.0016	.0075	.0000	.0001	.023
%RSD	7.179	33.24	.2240	1.274	97.65	2.300	.6950	22.09	.5509
#1	.0027	.0017	.7859	1.618	.0010	.3307	.0048	.0004	4.200
#2	.0027	.0012	.7870	1.638	.0035	.3167	.0048	.0005	4.162
#3	.0031	.0009	.7835	1.597	.0005	.3282	.0048	.0006	4.204

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0004**	**.0008**	**.0002**	**3.357**	**.0000**	**.0067**	**.0071**	**.0000**
Stddev	.0001	.0006	.0009	.0018	.007	.0001	.0002	.0005	.001
%RSD	31.79	149.4	109.6	1036.	.2045	306.1	2.807	6.604	1398.
#1	.0003	-.0011	.0005	.0009	3.349	.0001	.0068	.0076	-.0006
#2	.0002	.0002	.0019	.0014	3.361	-.0001	.0065	.0068	.0005
#3	.0003	-.0003	.0001	-.0018	3.360	.0001	.0068	.0068	.0000

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0029**	**.0075**
Stddev	.0003	.0001
%RSD	10.34	.8940
#1	.0030	.0074
#2	.0025	.0075
#3	.0031	.0074

Zoom In Zoom Out

Sample Name: FC1282-7F Acquired: 12/20/2022 12:01:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2945.2**	**7371.9**	**40743.**	**5877.6**
Stddev	6.5	2.2	260.	14.2
%RSD	.21985	.02992	.63927	.24240
#1	2941.0	7374.3	41029.	5879.1
#2	2952.6	7370.0	40521.	5862.7
#3	2941.9	7371.4	40678.	5891.1

Zoom In Zoom Out

Sample Name: MP41622-MB1 Acquired: 12/20/2022 12:06:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0099**	**.0002**	F **-.0053**	**-.0003**	**-.0001**	**.0221**	**-.0001**
Stddev	.0001	.0023	.0013	.0017	.0002	.0001	.0022	.0000
%RSD	40.03	23.20	791.6	31.20	85.31	72.03	9.746	50.34
#1	-.0004	.0114	.0015	-.0070	-.0001	-.0002	.0209	-.0001
#2	-.0005	.0111	-.0012	-.0053	-.0006	-.0001	.0246	.0000
#3	-.0002	.0073	.0002	-.0036	-.0001	.0000	.0209	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0050				
Low Limit				-.0050				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0001**	**.0043**	**.0059**	**-.0296**	**-.0035**	**-.0097**	**.0002**
Stddev	.0000	.0003	.0001	.0021	.0246	.0020	.0051	.0000
%RSD	7.097	239.5	3.418	36.46	83.11	57.85	52.83	12.58
#1	.0002	.0000	.0045	.0052	-.0270	-.0012	-.0052	.0002
#2	.0002	-.0005	.0042	.0083	-.0553	-.0043	-.0153	.0002
#3	.0002	.0001	.0042	.0042	-.0064	-.0051	-.0087	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0031**	**.0001**	**.0005**	F **.0031**	**.0015**	**.0027**	**.0000**
Stddev	.0002	.0150	.0001	.0004	.0008	.0015	.0003	.000
%RSD	418.0	489.7	144.5	76.86	26.56	100.9	12.17	670.1
#1	.0002	.0169	.0002	.0009	.0040	.0029	.0031	-.0003
#2	.0001	.0050	.0002	.0002	.0024	-.0001	.0025	.0000
#3	-.0002	-.0128	-.0001	.0004	.0029	.0017	.0026	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass
High Limit					.0025			
Low Limit					-.0025			

Zoom In Zoom Out

Sample Name: MP41622-MB1 Acquired: 12/20/2022 12:06:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0001**	**-.0008**	**.0002**	**.0096**
Stddev	.0001	.0000	.0011	.0000	.0000
%RSD	121.7	37.30	142.6	29.15	.3596
#1	.0000	.0001	-.0001	.0002	.0096
#2	-.0002	.0002	-.0021	.0002	.0096
#3	.0000	.0001	-.0001	.0001	.0097
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3007.0**	**7378.0**	**40603.**	**5795.4**
Stddev	7.3	16.3	212.	35.2
%RSD	.24128	.22087	.52280	.60701
#1	3007.0	7372.7	40442.	5780.0
#2	3014.2	7396.3	40843.	5835.6
#3	2999.7	7365.0	40523.	5770.5

Zoom In Zoom Out

Sample Name: MP41622-B1 Acquired: 12/20/2022 12:11:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0506**	**27.28**	**1.938**	**F .0173**	**2.045**	**.0509**	**25.25**	**.0497**
Stddev	.0003	.04	.003	.0010	.004	.0001	.06	.0000
%RSD	.6518	.1631	.1717	6.009	.1855	.2437	.2267	.0979
#1	.0502	27.23	1.938	.0185	2.049	.0510	25.32	.0498
#2	.0509	27.32	1.934	.0169	2.042	.0508	25.21	.0497
#3	.0506	27.29	1.941	.0166	2.043	.0508	25.23	.0497
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0500				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5030**	**.2066**	**.2648**	**26.17**	**25.25**	**F -.0005**	**25.57**	**.5142**
Stddev	.0010	.0007	.0007	.01	.12	.0005	.04	.0015
%RSD	.1955	.3449	.2675	.0568	.4865	104.9	.1406	.2947
#1	.5036	.2073	.2655	26.17	25.37	-.0003	25.61	.5159
#2	.5019	.2058	.2641	26.18	25.25	-.0001	25.54	.5133
#3	.5036	.2066	.2646	26.15	25.13	-.0010	25.57	.5133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0500		
Range						-20.00%		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5292**	**23.40**	**.5023**	**.4873**	**.4908**	**1.964**	**.2996**	**.5290**
Stddev	.0013	.04	.0010	.0011	.0025	.007	.0009	.0015
%RSD	.2446	.1794	.1995	.2299	.5161	.3813	.2891	.2862
#1	.5303	23.45	.5021	.4860	.4907	1.966	.3002	.5276
#2	.5278	23.37	.5013	.4879	.4884	1.955	.2986	.5289
#3	.5296	23.38	.5033	.4880	.4935	1.970	.2999	.5306
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: MP41622-B1 Acquired: 12/20/2022 12:11:41 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5347**	**.5344**	**1.982**	**.5012**	**.5040**
Stddev	.0014	.0015	.006	.0010	.0009
%RSD	.2661	.2808	.3063	.1943	.1830
#1	.5362	.5348	1.975	.5019	.5033
#2	.5334	.5357	1.986	.5001	.5037
#3	.5344	.5328	1.985	.5016	.5051
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2655.5**	**7139.1**	**38592.**	**5674.6**
Stddev	8.3	35.6	395.	34.6
%RSD	.31427	.49813	1.0240	.60893
#1	2657.1	7125.6	38200.	5689.4
#2	2662.9	7179.5	38990.	5635.1
#3	2646.5	7112.4	38587.	5699.3

Zoom In Zoom Out

Sample Name: MP41624-D1 Acquired: 12/20/2022 12:16:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.6018**	**-.0001**	**.0143**	**.0076**	**-.0001**	**1.148**	**-.0001**	**.0001**
Stddev	.0004	.0154	.0008	.0008	.0001	.0000	.004	.0001	.0001
%RSD	97.08	2.557	771.6	5.874	.9794	76.99	.3533	47.35	90.65
#1	-.0004	.6194	.0004	.0137	.0076	.0000	1.153	-.0001	.0000
#2	.0000	.5912	.0003	.0153	.0077	-.0001	1.146	-.0001	.0001
#3	-.0008	.5947	-.0010	.0139	.0075	-.0001	1.146	-.0002	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.0011**	**.8204**	**1.641**	**.0003**	**.3428**	**.0051**	**.0003**	**4.289**
Stddev	.0002	.0001	.0046	.043	.0015	.0108	.0001	.0001	.037
%RSD	7.557	10.94	.5558	2.617	454.3	3.145	1.173	48.60	.8580
#1	.0030	.0011	.8157	1.628	-.0014	.3452	.0052	.0004	4.322
#2	.0033	.0013	.8247	1.606	.0011	.3310	.0051	.0001	4.296
#3	.0028	.0010	.8209	1.689	.0013	.3521	.0051	.0004	4.250

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0005**	**.0014**	**.0007**	**3.528**	**.0000**	**.0067**	**.0162**	**-.0013**
Stddev	.0001	.0004	.0005	.0023	.009	.0001	.0001	.0017	.0015
%RSD	33.09	79.08	34.32	322.9	.2649	1204.	1.122	10.20	111.7
#1	.0004	-.0003	.0020	.0031	3.519	-.0001	.0068	.0161	-.0019
#2	.0003	-.0002	.0010	-.0015	3.527	.0001	.0067	.0180	-.0024
#3	.0002	-.0010	.0014	.0005	3.538	.0001	.0067	.0146	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0031**	**.0054**
Stddev	.0002	.0000
%RSD	5.646	.5439
#1	.0031	.0054
#2	.0032	.0053
#3	.0029	.0054

Zoom In Zoom Out

Sample Name: MP41624-D1 Acquired: 12/20/2022 12:16:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2944.3**	**7400.0**	**40514.**	**5899.0**
Stddev	3.0	19.6	344.	47.0
%RSD	.10319	.26443	.84904	.79675
#1	2944.9	7421.1	40605.	5870.2
#2	2941.0	7396.5	40134.	5873.6
#3	2947.0	7382.4	40803.	5953.3

Zoom In Zoom Out

Sample Name: MP41624-SD1 Acquired: 12/20/2022 12:21:34 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0011**	**.6738**	**-.0019**	**-.0173**	**.0082**	**-.0003**	**1.113**	**-.0003**	**.0005**
Stddev	.0021	.0407	.0042	.0077	.0003	.0006	.010	.0001	.0005
%RSD	196.8	6.034	223.8	44.64	3.461	224.0	.9345	30.52	87.07
#1	-.0033	.6885	-.0066	-.0121	.0081	.0001	1.108	-.0002	.0005
#2	.0008	.6278	.0013	-.0136	.0085	.0001	1.125	-.0004	.0010
#3	-.0007	.7051	-.0003	-.0262	.0079	-.0010	1.106	-.0003	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**.0002**	**.7801**	**1.478**	**-.0183**	**.2857**	**.0045**	**.0001**	**4.114**
Stddev	.0015	.0008	.0095	.017	.0085	.0552	.0002	.0005	.051
%RSD	44.37	403.5	1.214	1.138	46.43	19.32	4.268	336.8	1.233
#1	.0048	.0007	.7789	1.459	-.0090	.2315	.0047	.0001	4.172
#2	.0038	-.0008	.7714	1.489	-.0257	.3419	.0043	-.0003	4.088
#3	.0018	.0007	.7902	1.487	-.0202	.2839	.0046	.0006	4.081

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0012**	**-.0013**	**-.0021**	**3.312**	**-.0005**	**.0056**	**.0067**	**-.0005**
Stddev	.0008	.0020	.0050	.0064	.010	.0012	.0003	.0010	.0011
%RSD	145.4	163.6	372.8	295.6	.3110	226.4	5.597	14.41	205.1
#1	-.0002	.0016	.0029	-.0005	3.318	.0008	.0060	.0065	-.0016
#2	.0014	-.0009	-.0068	.0032	3.300	-.0013	.0054	.0077	.0006
#3	.0005	.0030	-.0001	-.0092	3.317	-.0010	.0055	.0058	-.0006

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0043**	**.0068**
Stddev	.0005	.0001
%RSD	12.10	1.154
#1	.0048	.0069
#2	.0044	.0068
#3	.0038	.0068

Zoom In Zoom Out

Sample Name: MP41624-SD1 Acquired: 12/20/2022 12:21:34 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3006.7**	**7392.1**	**40353.**	**5817.8**
Stddev	9.2	22.4	348.	25.5
%RSD	.30561	.30318	.86179	.43865
#1	3017.3	7415.8	39998.	5788.5
#2	3002.7	7389.1	40693.	5829.8
#3	3000.3	7371.3	40369.	5835.1

Zoom In Zoom Out

Sample Name: MP41624-PS1 Acquired: 12/20/2022 12:26:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0498**	**3.026**	**.0950**	**.0155**	**.2530**	**.0488**	**6.025**	**.0492**	**.0505**
Stddev	.0006	.016	.0013	.0024	.0014	.0003	.009	.0001	.0003
%RSD	1.264	.5120	1.352	15.52	.5578	.6644	.1505	.1586	.5120
#1	.0503	3.044	.0936	.0164	.2539	.0491	6.030	.0491	.0504
#2	.0500	3.018	.0960	.0172	.2513	.0489	6.015	.0491	.0502
#3	.0491	3.016	.0954	.0127	.2536	.0485	6.031	.0492	.0508

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0535**	**.1030**	**3.719**	**11.15**	**.0015**	**5.449**	**.0557**	**.0946**	**13.15**
Stddev	.0005	.0005	.011	.06	.0023	.030	.0001	.0005	.04
%RSD	.8651	.4978	.2879	.5244	157.3	.5600	.1760	.5489	.3252
#1	.0536	.1024	3.731	11.18	.0040	5.482	.0557	.0942	13.18
#2	.0531	.1031	3.714	11.08	-.0005	5.422	.0558	.0944	13.10
#3	.0540	.1034	3.712	11.19	.0009	5.445	.0556	.0952	13.17

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1009**	**.0457**	**.0998**	**.0922**	**3.445**	**.0503**	**.0560**	**.1088**	**.0937**
Stddev	.0003	.0005	.0009	.0016	.007	.0004	.0002	.0011	.0014
%RSD	.2537	1.159	.8552	1.702	.2177	.7935	.4086	.9681	1.491
#1	.1011	.0461	.1007	.0937	3.440	.0505	.0558	.1081	.0930
#2	.1006	.0459	.0995	.0921	3.440	.0498	.0560	.1100	.0953
#3	.1009	.0451	.0991	.0906	3.453	.0504	.0562	.1083	.0927

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0517**	**.2481**
Stddev	.0004	.0001
%RSD	.6931	.0236
#1	.0513	.2480
#2	.0520	.2481
#3	.0517	.2481

Zoom In Zoom Out

Sample Name: MP41624-PS1 Acquired: 12/20/2022 12:26:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2823.8**	**7286.2**	**39681.**	**5843.6**
Stddev	4.0	23.1	182.	25.4
%RSD	.14293	.31758	.45944	.43543
#1	2828.4	7308.7	39840.	5820.1
#2	2821.1	7287.4	39722.	5870.6
#3	2821.8	7262.4	39482.	5840.2

Zoom In Zoom Out

Sample Name: MP41624-S1 Acquired: 12/20/2022 12:31:32 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0539**	**29.00**	**2.050**	**.0421**	**2.162**	**.0525**	**27.66**	**.0522**	**.5311**
Stddev	.0001	.12	.005	.0008	.005	.0002	.06	.0001	.0006
%RSD	.2287	.4014	.2518	1.869	.2198	.4166	.2309	.1387	.1126
#1	.0539	28.98	2.044	.0418	2.165	.0524	27.69	.0522	.5305
#2	.0541	29.12	2.051	.0416	2.164	.0527	27.71	.0522	.5317
#3	.0538	28.89	2.054	.0430	2.156	.0523	27.59	.0521	.5311

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2172**	**.2705**	**27.80**	**28.02**	**.0008**	**26.73**	**.5454**	**.5285**	**28.95**
Stddev	.0005	.0007	.12	.12	.0015	.14	.0010	.0008	.06
%RSD	.2452	.2577	.4367	.4319	175.6	.5314	.1793	.1501	.1917
#1	.2178	.2713	27.75	28.12	.0013	26.75	.5443	.5276	28.99
#2	.2167	.2701	27.93	28.06	-.0008	26.86	.5456	.5285	28.98
#3	.2172	.2700	27.70	27.89	.0020	26.58	.5462	.5292	28.89

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5287**	**.5151**	**.5150**	**2.070**	**3.918**	**.5218**	**.5431**	**.5405**	**2.096**
Stddev	.0010	.0024	.0012	.003	.005	.0015	.0017	.0009	.006
%RSD	.1949	.4609	.2273	.1375	.1366	.2934	.3160	.1596	.3014
#1	.5276	.5148	.5159	2.068	3.913	.5207	.5450	.5407	2.102
#2	.5286	.5129	.5137	2.069	3.918	.5211	.5416	.5395	2.089
#3	.5297	.5176	.5155	2.074	3.924	.5236	.5428	.5412	2.097

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5301**	**.5256**
Stddev	.0002	.0011
%RSD	.0349	.2031
#1	.5302	.5249
#2	.5299	.5251
#3	.5303	.5268

Zoom In Zoom Out

Sample Name: MP41624-S1 Acquired: 12/20/2022 12:31:32 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2641.9**	**7150.9**	**39117.**	**5743.3**
Stddev	4.4	2.0	240.	45.0
%RSD	.16827	.02818	.61249	.78414
#1	2637.8	7150.2	39216.	5764.3
#2	2646.6	7153.2	38844.	5691.6
#3	2641.1	7149.3	39292.	5774.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 12:36:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2489**	**40.25**	**2.040**	F **1.981**	**2.057**	**2.019**	**40.62**	**2.056**	**2.057**
Stddev	.0008	.18	.003	.017	.005	.013	.12	.003	.003
%RSD	.3224	.4375	.1654	.8747	.2550	.6237	.3010	.1219	.1381
#1	.2489	40.27	2.041	1.993	2.053	2.024	40.55	2.058	2.058
#2	.2497	40.42	2.037	1.961	2.063	2.029	40.76	2.054	2.054
#3	.2481	40.06	2.043	1.989	2.055	2.005	40.54	2.058	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.045**	**2.043**	**40.30**	**40.84**	**2.014**	**40.32**	**2.064**	**2.054**	**41.10**
Stddev	.002	.006	.23	.19	.011	.19	.003	.003	.14
%RSD	.1173	.2866	.5670	.4622	.5549	.4598	.1423	.1464	.3350
#1	2.048	2.050	40.37	40.82	2.011	40.34	2.060	2.053	40.99
#2	2.043	2.039	40.49	41.04	2.026	40.49	2.065	2.052	41.25
#3	2.045	2.041	40.05	40.67	2.004	40.12	2.066	2.058	41.06
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.049**	**2.017**	**2.050**	**2.052**	**2.291**	**2.043**	**2.057**	**2.063**	**2.030**
Stddev	.002	.002	.005	.009	.005	.004	.009	.004	.003
%RSD	.0988	.0739	.2279	.4345	.1987	.2041	.4276	.1918	.1400
#1	2.051	2.019	2.053	2.049	2.291	2.048	2.048	2.063	2.031
#2	2.047	2.017	2.045	2.044	2.286	2.040	2.065	2.068	2.031
#3	2.050	2.016	2.053	2.062	2.296	2.042	2.059	2.060	2.026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 12:36:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.051**	**2.046**
Stddev	.002	.004
%RSD	.1140	.2174
#1	2.051	2.051
#2	2.052	2.042
#3	2.048	2.044
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2499.1**	**6849.3**	**37562.**	**5654.4**
Stddev	12.3	27.3	101.	53.3
%RSD	.49298	.39868	.26889	.94325
#1	2489.1	6819.9	37457.	5674.9
#2	2495.4	6854.1	37571.	5593.8
#3	2512.9	6873.8	37659.	5694.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 12:41:26 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0130**	**.0005**	F **-.0058**	**.0001**	**.0000**	**.0167**	**.0000**
Stddev	.0005	.0121	.0023	.0008	.0001	.0001	.0034	.0000
%RSD	227.1	93.57	455.3	14.28	94.70	222.8	20.50	55.86
#1	.0001	.0111	-.0021	-.0062	.0002	.0001	.0191	.0001
#2	.0008	.0019	.0019	-.0048	.0001	.0001	.0128	.0000
#3	-.0002	.0260	.0017	-.0063	.0000	-.0001	.0183	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0004**	**-.0001**	**.0081**	**.0309**	F **.0013**	**-.0039**	**.0002**
Stddev	.0001	.0004	.0004	.0013	.0228	.0011	.0077	.0000
%RSD	35.94	102.7	346.5	15.95	73.90	84.84	198.0	17.79
#1	.0003	.0008	.0004	.0089	.0052	.0000	.0048	.0002
#2	.0003	.0003	-.0005	.0066	.0384	.0020	-.0098	.0002
#3	.0001	.0000	-.0003	.0089	.0489	.0021	-.0066	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0070**	**.0000**	**.0001**	F **.0020**	**.0000**	**.0005**	**.0000**
Stddev	.0002	.0062	.0002	.0003	.0009	.001	.0006	.001
%RSD	507.8	87.77	1199.	205.0	43.16	2035.	118.7	1579.
#1	.0002	.0110	.0001	.0000	.0013	-.0011	.0010	.0004
#2	-.0002	.0102	.0002	.0005	.0030	.0005	.0006	-.0005
#3	.0002	-.0001	-.0002	.0000	.0018	.0005	-.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	None	Chk Pass
High Limit					.0020			
Low Limit					-.0020			

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 12:41:26 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0001**	**.0003**	**.0005**	**.0018**
Stddev	.0001	.0001	.0010	.0002	.0000
%RSD	292.0	130.9	301.8	29.98	2.370
#1	.0000	.0000	-.0008	.0003	.0017
#2	.0002	.0001	.0007	.0006	.0018
#3	.0000	.0002	.0011	.0006	.0018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3007.9**	**7270.0**	**39958.**	**5788.2**
Stddev	5.7	9.8	210.	30.1
%RSD	.18867	.13524	.52636	.52036
#1	3008.9	7263.2	39816.	5753.6
#2	3013.0	7281.3	40199.	5802.3
#3	3001.8	7265.6	39858.	5808.8

Zoom In Zoom Out

Sample Name: MP41624-S2 Acquired: 12/20/2022 12:46:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0486**	**26.18**	**1.821**	**.0386**	**1.911**	**.0466**	**25.05**	**.0465**	**.4713**
Stddev	.0006	.07	.002	.0036	.010	.0002	.11	.0000	.0012
%RSD	1.222	.2791	.0896	9.225	.5432	.3864	.4313	.0753	.2539
#1	.0488	26.26	1.820	.0368	1.923	.0468	25.17	.0464	.4701
#2	.0480	26.18	1.821	.0363	1.904	.0466	25.04	.0465	.4714
#3	.0491	26.11	1.823	.0428	1.907	.0464	24.96	.0464	.4724

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1931**	**.2404**	**25.15**	**25.41**	**.0009**	**24.21**	**.4859**	**.4896**	**26.35**
Stddev	.0005	.0013	.07	.08	.0022	.09	.0008	.0011	.13
%RSD	.2586	.5596	.2610	.3275	245.5	.3735	.1583	.2195	.4981
#1	.1936	.2419	25.20	25.50	.0015	24.28	.4861	.4885	26.50
#2	.1931	.2398	25.17	25.34	-.0016	24.25	.4851	.4907	26.28
#3	.1926	.2394	25.07	25.39	.0028	24.11	.4866	.4896	26.26

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4693**	**.4559**	**.4586**	**1.844**	**3.661**	**.4847**	**.5005**	**.4987**	**1.866**
Stddev	.0009	.0017	.0004	.005	.005	.0005	.0024	.0007	.004
%RSD	.2002	.3720	.0935	.2521	.1434	.0949	.4847	.1380	.2035
#1	.4684	.4541	.4581	1.838	3.655	.4845	.5033	.4992	1.870
#2	.4694	.4574	.4587	1.845	3.665	.4852	.4989	.4979	1.865
#3	.4703	.4562	.4590	1.847	3.664	.4843	.4993	.4989	1.863

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.4713**	**.4642**
Stddev	.0004	.0005
%RSD	.0837	.0988
#1	.4714	.4636
#2	.4708	.4643
#3	.4716	.4645

Zoom In Zoom Out

Sample Name: MP41624-S2 Acquired: 12/20/2022 12:46:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2675.0	7199.1	39055.	5812.8
Stddev	5.8	17.1	99.	37.2
%RSD	.21551	.23733	.25383	.63935
#1	2681.6	7218.8	39170.	5812.8
#2	2671.2	7188.7	39000.	5775.7
#3	2672.2	7189.8	38996.	5850.0

Zoom In Zoom Out

Sample Name: FC1282-8F Acquired: 12/20/2022 12:51:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.1092	-.0002	.0055	.0080	.0000	29.49	-.0001	.0001
Stddev	.0007	.0102	.0001	.0007	.0001	.000	.18	.0000	.0000
%RSD	543.8	9.363	72.04	13.53	1.826	40.31	.6265	28.16	39.32
#1	-.0009	.0996	-.0003	.0061	.0080	.0000	29.69	-.0001	.0000
#2	.0000	.1200	-.0002	.0047	.0078	.0000	29.34	-.0001	.0001
#3	.0005	.1082	.0000	.0058	.0081	-.0001	29.43	-.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0016	.2696	.7519	-.0037	.6118	.0077	.0029	1.300
Stddev	.0001	.0002	.0030	.0289	.0015	.0163	.0000	.0002	.009
%RSD	11.60	12.49	1.102	3.848	41.06	2.661	.3424	7.283	.7125
#1	.0011	.0018	.2666	.7852	-.0054	.6151	.0077	.0030	1.310
#2	.0010	.0015	.2726	.7337	-.0029	.5941	.0077	.0027	1.298
#3	.0012	.0014	.2697	.7366	-.0027	.6262	.0077	.0030	1.291

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0000	-.0001	.0019	-.0006	1.162	.0003	.0745	.0039	-.0005
Stddev	.0001	.0003	.0012	.0007	.001	.0003	.0007	.0002	.0003
%RSD	234.4	298.3	63.40	117.3	.0710	125.1	.8807	6.117	50.87
#1	-.0001	-.0004	.0012	-.0012	1.161	.0005	.0751	.0041	-.0002
#2	.0001	.0000	.0034	-.0006	1.163	.0003	.0738	.0037	-.0006
#3	.0001	.0001	.0012	.0001	1.161	-.0001	.0747	.0039	-.0008

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	.0020	.0066
Stddev	.0002	.0001
%RSD	10.53	1.016
#1	.0019	.0065
#2	.0018	.0066
#3	.0022	.0066

Zoom In Zoom Out

Sample Name: FC1282-8F Acquired: 12/20/2022 12:51:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2900.1	7173.8	39283.	5754.9
Stddev	8.8	22.7	183.	39.4
%RSD	.30211	.31691	.46522	.68453
#1	2893.9	7166.9	39092.	5715.6
#2	2896.2	7155.2	39301.	5794.4
#3	2910.1	7199.1	39456.	5754.8

Zoom In Zoom Out

Sample Name: FC1282-9F Acquired: 12/20/2022 12:56:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0003	.2139	.0012	.0394	.0113	.0000	5.192	-.0001	.0000
Stddev	.0007	.0146	.0013	.0011	.0001	.000	.043	.0000	.0000
%RSD	273.7	6.809	108.2	2.780	.9340	431.7	.8189	47.84	723.6
#1	-.0008	.2256	.0025	.0400	.0113	.0000	5.238	.0000	.0000
#2	.0006	.1976	.0010	.0381	.0113	.0000	5.185	-.0001	.0000
#3	-.0006	.2185	.0000	.0400	.0111	.0000	5.154	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0025	.0013	3.112	7.255	-.0016	.6998	.0019	.0008	13.91
Stddev	.0002	.0003	.017	.124	.0014	.0129	.0000	.0001	.10
%RSD	6.177	19.64	.5422	1.710	84.00	1.840	1.510	11.29	.6977
#1	.0027	.0016	3.130	7.370	-.0008	.7125	.0019	.0009	14.02
#2	.0024	.0012	3.097	7.273	-.0032	.6868	.0019	.0009	13.90
#3	.0026	.0012	3.108	7.123	-.0008	.6999	.0019	.0007	13.82

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0019	.0013	.0006	2.192	.0001	.0140	.0014	.0006
Stddev	.0002	.0001	.0008	.0011	.008	.0006	.0001	.0003	.0018
%RSD	250.4	6.382	61.50	176.6	.3706	844.7	.8934	19.65	291.5
#1	.0002	-.0019	.0021	.0016	2.183	.0007	.0141	.0012	-.0007
#2	.0002	-.0018	.0014	-.0005	2.194	-.0002	.0141	.0014	-.0001
#3	-.0001	-.0021	.0005	.0008	2.199	-.0003	.0139	.0018	.0027

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	.0071	.0046
Stddev	.0002	.0000
%RSD	2.787	.9268
#1	.0068	.0045
#2	.0072	.0046
#3	.0071	.0046

Zoom In Zoom Out

Sample Name: FC1282-9F Acquired: 12/20/2022 12:56:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2885.0**	**7274.6**	**39831.**	**5800.3**
Stddev	12.5	6.7	318.	11.2
%RSD	.43179	.09251	.79918	.19387
#1	2871.0	7281.6	39510.	5796.9
#2	2894.7	7274.1	39838.	5812.9
#3	2889.4	7268.2	40146.	5791.2

Zoom In Zoom Out

Sample Name: FC1061-1 Acquired: 12/20/2022 13:01:16 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0196**	**-.0006**	**.0551**	**.0059**	**-.0001**	**16.87**	**.0000**	**.0007**
Stddev	.0004	.0121	.0016	.0016	.0001	.0001	.07	.000	.0001
%RSD	238.3	61.77	283.3	2.903	2.230	92.55	.4220	118.0	17.90
#1	-.0003	.0205	-.0018	.0539	.0058	-.0001	16.93	.0000	.0008
#2	.0004	.0071	-.0012	.0569	.0060	-.0001	16.79	.0000	.0006
#3	.0004	.0313	.0012	.0545	.0059	.0000	16.89	-.0001	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0048**	**.0863**	**2.136**	**.0026**	**2.062**	**.0048**	**.0030**	**56.01**
Stddev	.0002	.0007	.0010	.040	.0020	.006	.0000	.0001	.21
%RSD	40.78	13.93	1.133	1.867	74.90	.3026	.6327	4.827	.3728
#1	.0008	.0046	.0854	2.109	.0031	2.057	.0048	.0029	56.16
#2	.0005	.0042	.0873	2.182	.0004	2.060	.0048	.0028	55.77
#3	.0003	.0055	.0863	2.117	.0043	2.069	.0048	.0031	56.10

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0056**	**-.0010**	**.0023**	**.0010**	**2.275**	**.0007**	**.2442**	**.0016**	**-.0010**
Stddev	.0002	.0006	.0011	.0006	.006	.0005	.0012	.0002	.0006
%RSD	3.005	58.79	46.60	56.62	.2668	74.65	.4948	9.663	57.45
#1	.0056	-.0016	.0024	.0007	2.273	.0006	.2452	.0017	-.0016
#2	.0058	-.0008	.0034	.0006	2.271	.0002	.2429	.0015	-.0006
#3	.0054	-.0005	.0012	.0016	2.282	.0012	.2446	.0017	-.0008

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0001**	**.0191**
Stddev	.0001	.0000
%RSD	158.4	.2587
#1	-.0002	.0191
#2	.0000	.0191
#3	-.0001	.0192

Zoom In Zoom Out

Sample Name: FC1061-1 Acquired: 12/20/2022 13:01:16 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2758.0**	**7084.4**	**38533.**	**5716.5**
Stddev	10.1	12.9	129.	72.2
%RSD	.36641	.18238	.33459	1.2626
#1	2748.8	7087.8	38540.	5724.8
#2	2768.8	7095.3	38658.	5784.1
#3	2756.3	7070.2	38400.	5640.5

Zoom In Zoom Out

Sample Name: FC1065-2 Acquired: 12/20/2022 13:06:16 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.3899**	**.0024**	**.0324**	**.0624**	**-.0001**	**64.49**	**-.0001**
Stddev	.0001	.0137	.0017	.0010	.0005	.0000	.12	.0001
%RSD	147.8	3.508	71.05	2.959	.8000	57.33	.1877	81.82
#1	.0002	.3913	.0005	.0313	.0618	-.0001	64.63	-.0002
#2	.0002	.3756	.0027	.0326	.0626	.0000	64.42	.0000
#3	-.0001	.4028	.0039	.0332	.0628	-.0001	64.43	-.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0025**	**.0033**	**23.84**	**.8518**	**.0103**	**7.813**	**1.994**
Stddev	.0000	.0001	.0002	.08	.0461	.0044	.032	.014
%RSD	12.14	4.626	5.708	.3210	5.415	42.33	.4043	.7008
#1	.0003	.0025	.0032	23.91	.7987	.0061	7.821	2.010
#2	.0003	.0023	.0031	23.76	.8749	.0101	7.778	1.986
#3	.0003	.0025	.0035	23.85	.8818	.0148	7.839	1.985

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**9.781**	**.0006**	F **-.0079**	**.0022**	**.0012**	**4.921**	**.0004**
Stddev	.000	.008	.0001	.0008	.0013	.0011	.004	.0002
%RSD	181.7	.0785	9.320	10.20	58.30	88.82	.0775	43.85
#1	.0000	9.788	.0006	-.0088	.0015	.0020	4.921	.0003
#2	.0000	9.773	.0006	-.0078	.0038	.0000	4.917	.0006
#3	.0000	9.781	.0007	-.0072	.0015	.0017	4.925	.0003

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1386**	**.0053**	**.0033**	**.0012**	**.0163**
Stddev	.0002	.0001	.0014	.0002	.0001
%RSD	.1758	2.212	41.93	20.98	.3339
#1	.1383	.0053	.0018	.0013	.0162
#2	.1387	.0052	.0045	.0013	.0163
#3	.1388	.0054	.0036	.0009	.0162

Zoom In Zoom Out

Sample Name: FC1065-2 Acquired: 12/20/2022 13:06:16 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2769.6**	**7141.6**	**39163.**	**5795.3**
Stddev	9.2	28.5	160.	53.1
%RSD	.33193	.39944	.40822	.91625
#1	2775.8	7148.8	39046.	5741.0
#2	2773.9	7165.8	39098.	5847.2
#3	2759.0	7110.2	39345.	5797.6

Zoom In Zoom Out

Sample Name: FC1065-3 Acquired: 12/20/2022 13:11:22 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.5881**	**.0036**	**.0316**	**.0651**	**.0000**	**66.52**	**-.0001**
Stddev	.0002	.0213	.0006	.0050	.0005	.000	.21	.0000
%RSD	146.2	3.624	15.91	15.75	.7985	83.51	.3208	16.71
#1	.0003	.6074	.0041	.0266	.0657	.0000	66.68	-.0001
#2	-.0001	.5652	.0030	.0318	.0647	-.0001	66.28	-.0001
#3	.0002	.5916	.0037	.0365	.0650	.0000	66.61	-.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0030**	**.0035**	**25.38**	**1.003**	**.0086**	**8.200**	**2.046**
Stddev	.0001	.0005	.0006	.07	.025	.0025	.052	.019
%RSD	21.01	15.27	16.48	.2783	2.514	29.03	.6405	.9181
#1	.0004	.0026	.0030	25.46	1.016	.0107	8.247	2.039
#2	.0005	.0035	.0041	25.32	.9735	.0058	8.143	2.033
#3	.0004	.0030	.0035	25.37	1.018	.0092	8.208	2.068

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**10.17**	**.0010**	F **-.0079**	**.0007**	**.0007**	**5.290**	**-.0001**
Stddev	.0001	.03	.0001	.0002	.0013	.0001	.005	.0003
%RSD	34.50	.3130	10.06	2.678	177.1	10.20	.0964	286.4
#1	.0002	10.20	.0011	-.0081	.0017	.0007	5.285	.0001
#2	.0002	10.14	.0011	-.0078	-.0007	.0008	5.288	.0000
#3	.0004	10.18	.0009	-.0078	.0012	.0006	5.295	-.0004

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1426**	**.0068**	**.0042**	**.0012**	**.0196**
Stddev	.0006	.0001	.0003	.0001	.0001
%RSD	.3861	1.794	7.718	5.311	.6320
#1	.1431	.0068	.0042	.0012	.0198
#2	.1420	.0069	.0039	.0013	.0195
#3	.1427	.0066	.0045	.0012	.0196

Zoom In Zoom Out

Sample Name: FC1065-3 Acquired: 12/20/2022 13:11:22 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2755.5**	**7138.2**	**39271.**	**5776.9**
Stddev	1.3	14.1	251.	63.2
%RSD	.04542	.19769	.63870	1.0942
#1	2754.9	7137.2	39560.	5706.8
#2	2757.0	7152.8	39106.	5829.5
#3	2754.7	7124.6	39147.	5794.6

Zoom In Zoom Out

Sample Name: FC1065-4 Acquired: 12/20/2022 13:16:29 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0329**	**.0004**	**.0696**	**.1196**	**-.0001**	**144.4**	**-.0001**
Stddev	.0005	.0034	.0011	.0007	.0006	.0000	.8	.0001
%RSD	74.45	10.27	297.4	1.048	.4890	12.41	.5483	91.55
#1	-.0007	.0290	.0007	.0689	.1193	-.0002	143.6	-.0001
#2	-.0001	.0352	-.0008	.0704	.1192	-.0001	145.1	-.0001
#3	-.0011	.0346	.0012	.0694	.1203	-.0001	144.5	.0000

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0006**	**.0023**	**8.339**	**4.426**	**.0606**	**14.42**	**.6443**
Stddev	.0001	.0001	.0002	.011	.016	.0007	.04	.0013
%RSD	45.71	23.39	8.831	.1297	.3504	1.117	.2635	.2061
#1	.0002	.0005	.0025	8.328	4.443	.0600	14.40	.6447
#2	.0001	.0007	.0023	8.350	4.419	.0605	14.40	.6428
#3	.0003	.0005	.0021	8.338	4.415	.0614	14.46	.6454

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**14.56**	**.0003**	F **-.0054**	**.0007**	**.0003**	**6.032**	**-.0001**
Stddev	.0002	.02	.0001	.0007	.0003	.0036	.008	.0002
%RSD	55.90	.1396	35.47	12.74	37.72	1240.	.1363	199.3
#1	.0001	14.56	.0004	-.0050	.0010	.0000	6.023	.0000
#2	.0004	14.54	.0002	-.0049	.0006	-.0032	6.032	-.0003
#3	.0004	14.58	.0004	-.0061	.0006	.0040	6.040	.0000

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5487**	**.0031**	**.0003**	**.0004**	**.0178**
Stddev	.0007	.0001	.0019	.0004	.0000
%RSD	.1349	3.852	698.4	126.8	.2229
#1	.5490	.0030	.0016	-.0001	.0178
#2	.5478	.0031	-.0019	.0005	.0179
#3	.5492	.0032	.0011	.0007	.0178

Zoom In Zoom Out

Sample Name: FC1065-4 Acquired: 12/20/2022 13:16:29 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2685.8**	**6983.9**	**38479.**	**5712.4**
Stddev	6.7	13.8	117.	13.6
%RSD	.25078	.19818	.30386	.23809
#1	2684.9	6986.2	38413.	5697.0
#2	2693.0	6996.5	38614.	5717.2
#3	2679.6	6969.1	38410.	5722.9

Zoom In Zoom Out

Sample Name: FC1065-5 Acquired: 12/20/2022 13:21:38 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0266**	**-.0003**	**.0318**	**.0467**	**-.0001**	**66.01**	**-.0001**	**.0003**
Stddev	.000	.0132	.0005	.0018	.0007	.0000	.20	.0000	.0002
%RSD	728.9	49.47	183.1	5.657	1.410	45.53	.3060	47.66	73.29
#1	-.0002	.0198	-.0006	.0306	.0474	.0000	66.05	-.0001	.0002
#2	.0002	.0182	.0003	.0311	.0467	-.0001	66.20	-.0001	.0001
#3	-.0001	.0418	-.0005	.0339	.0461	-.0001	65.80	.0000	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0020**	**1.692**	**3.393**	**.0297**	**10.95**	**.4001**	**.0006**	**17.99**
Stddev	.0003	.0003	.005	.019	.0042	.03	.0020	.0001	.04
%RSD	154.2	12.94	.2972	.5704	14.07	.3177	.5099	20.67	.2162
#1	.0002	.0019	1.694	3.371	.0345	10.93	.3978	.0005	18.00
#2	-.0001	.0017	1.695	3.408	.0278	10.99	.4018	.0007	18.03
#3	.0004	.0022	1.686	3.399	.0268	10.93	.4006	.0006	17.95

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0023**	**.0009**	**.0000**	**4.950**	**.0003**	**.3708**	**.0032**	**.0002**
Stddev	.0002	.0002	.0012	.001	.013	.0003	.0006	.0001	.0013
%RSD	52.24	10.56	131.6	5031.	.2699	81.38	.1597	3.569	539.7
#1	.0005	-.0020	.0006	.0015	4.937	.0000	.3711	.0031	-.0011
#2	.0002	-.0023	-.0001	-.0006	4.949	.0004	.3713	.0031	.0015
#3	.0002	-.0025	.0023	-.0009	4.964	.0006	.3702	.0033	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0002**	**.0180**
Stddev	.0003	.0000
%RSD	164.6	.2312
#1	.0005	.0179
#2	.0001	.0180
#3	-.0001	.0180

Zoom In Zoom Out

Sample Name: FC1065-5 Acquired: 12/20/2022 13:21:38 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2750.1**	**7022.1**	**38620.**	**5712.9**
Stddev	5.9	22.4	208.	35.8
%RSD	.21346	.31841	.53826	.62725
#1	2756.9	7045.3	38838.	5745.3
#2	2747.3	7020.2	38424.	5719.1
#3	2746.2	7000.7	38600.	5674.4

Zoom In Zoom Out

Sample Name: FC1068-3F Acquired: 12/20/2022 13:26:36 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0424**	**.0023**	F **1.396**	**.1155**	**-.0001**	**49.09**	**-.0001**	**-.0001**
Stddev	.0003	.0056	.0005	.012	.0004	.0000	.10	.0000	.0001
%RSD	101.5	13.12	21.47	.8669	.3081	27.21	.2068	71.05	227.1
#1	-.0006	.0392	.0028	1.391	.1152	.0000	49.00	-.0001	-.0002
#2	.0000	.0392	.0018	1.388	.1159	-.0001	49.20	.0000	-.0001
#3	-.0003	.0488	.0021	1.410	.1156	.0000	49.07	-.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0102**	**.0022**	**.0383**	**.6877**	**.0394**	**53.33**	**.0023**	**.0010**	F **100.7**
Stddev	.0002	.0004	.0013	.0329	.0019	.12	.0000	.0002	.3
%RSD	1.969	18.00	3.314	4.778	4.889	.2199	1.427	15.82	.2699
#1	.0099	.0022	.0370	.6506	.0392	53.30	.0023	.0011	100.4
#2	.0102	.0018	.0395	.6992	.0414	53.24	.0022	.0012	101.0
#3	.0103	.0026	.0383	.7133	.0375	53.47	.0023	.0009	100.7

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0030**	**.0016**	**.0021**	**10.96**	**.0002**	**1.036**	**.0035**	**-.0020**
Stddev	.0001	.0002	.0010	.0009	.01	.0001	.003	.0002	.0021
%RSD	5.294	5.741	59.57	41.13	.1150	77.07	.2665	6.088	104.3
#1	.0011	-.0028	.0012	.0011	10.96	.0000	1.033	.0035	-.0036
#2	.0011	-.0032	.0009	.0026	10.95	.0003	1.039	.0033	-.0029
#3	.0012	-.0029	.0027	.0025	10.98	.0002	1.037	.0037	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0072**	**.0156**
Stddev	.0000	.0000
%RSD	.6161	.2034
#1	.0072	.0156
#2	.0072	.0156
#3	.0073	.0156

Zoom In Zoom Out

Sample Name: FC1068-3F Acquired: 12/20/2022 13:26:36 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2633.4**	**6874.2**	**37523.**	**5657.7**
Stddev	10.2	25.0	147.	10.0
%RSD	.38760	.36417	.39245	.17611
#1	2633.4	6875.8	37620.	5657.7
#2	2643.6	6898.5	37354.	5647.7
#3	2623.2	6848.5	37596.	5667.7

Zoom In Zoom Out

Sample Name: FC1068-5F Acquired: 12/20/2022 13:31:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0236**	**.0033**	F **.9759**	**.0508**	**.0000**	**36.93**	**-.0001**	**.0000**
Stddev	.0004	.0101	.0008	.0046	.0003	.000	.11	.0000	.0000
%RSD	205.2	43.01	24.41	.4693	.6098	41.79	.2904	20.88	79.19
#1	.0000	.0353	.0040	.9774	.0508	.0000	36.95	-.0001	.0000
#2	.0007	.0181	.0034	.9795	.0505	.0000	36.81	-.0001	.0000
#3	-.0001	.0174	.0024	.9707	.0511	-.0001	37.02	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093**	**.0024**	**.0612**	**.5861**	**.0417**	**68.47**	**.0006**	**.0016**	F **97.24**
Stddev	.0006	.0003	.0009	.0177	.0014	.21	.0000	.0001	.26
%RSD	6.950	12.56	1.524	3.015	3.464	.3136	5.792	5.719	.2652
#1	.0096	.0020	.0621	.5668	.0415	68.42	.0007	.0016	97.41
#2	.0097	.0024	.0603	.6014	.0432	68.29	.0006	.0015	96.94
#3	.0085	.0026	.0613	.5901	.0403	68.71	.0006	.0017	97.36

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0029**	**.0021**	**.0006**	**12.97**	**.0004**	**.8324**	**.0024**	**-.0021**
Stddev	.0001	.0007	.0014	.0032	.03	.0004	.0026	.0001	.0017
%RSD	38.86	22.44	65.94	579.0	.2198	90.99	.3122	2.202	82.38
#1	.0005	-.0025	.0006	-.0028	12.96	.0009	.8343	.0024	-.0009
#2	.0003	-.0037	.0033	.0037	12.96	.0001	.8294	.0024	-.0041
#3	.0003	-.0026	.0026	.0008	13.01	.0003	.8334	.0023	-.0013

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0111**	**.0178**
Stddev	.0004	.0001
%RSD	3.717	.4308
#1	.0107	.0177
#2	.0116	.0178
#3	.0111	.0179

Zoom In Zoom Out

Sample Name: FC1068-5F Acquired: 12/20/2022 13:31:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2635.5**	**6918.9**	**37792.**	**5632.2**
Stddev	3.0	12.9	117.	57.7
%RSD	.11401	.18686	.30970	1.0251
#1	2637.7	6928.6	37750.	5637.4
#2	2636.9	6923.8	37925.	5687.2
#3	2632.1	6904.2	37702.	5572.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 13:36:42 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2499**	**41.10**	**2.041**	F **1.984**	**2.090**	**2.056**	**41.35**	**2.082**	**2.084**
Stddev	.0007	.19	.001	.025	.005	.008	.15	.002	.003
%RSD	.2640	.4671	.0353	1.260	.2638	.3760	.3528	.1077	.1459
#1	.2500	41.29	2.041	1.955	2.097	2.063	41.52	2.079	2.081
#2	.2492	41.12	2.040	1.996	2.088	2.058	41.29	2.084	2.087
#3	.2505	40.90	2.041	2.000	2.086	2.048	41.25	2.082	2.085
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.059**	**2.095**	**41.33**	**41.94**	**2.085**	**41.79**	**2.080**	**2.075**	**41.85**
Stddev	.001	.004	.13	.18	.005	.20	.024	.003	.13
%RSD	.0701	.1857	.3163	.4240	.2496	.4895	1.162	.1289	.3183
#1	2.060	2.099	41.48	42.12	2.091	42.03	2.108	2.073	42.00
#2	2.058	2.091	41.30	41.93	2.085	41.71	2.063	2.078	41.80
#3	2.060	2.096	41.22	41.77	2.080	41.64	2.070	2.075	41.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.060**	**2.033**	**2.063**	**2.066**	**2.312**	**2.044**	**2.095**	**2.078**	**2.036**
Stddev	.002	.001	.004	.003	.000	.001	.007	.003	.007
%RSD	.0861	.0627	.1793	.1668	.0037	.0278	.3507	.1322	.3639
#1	2.058	2.034	2.063	2.062	2.312	2.045	2.104	2.079	2.044
#2	2.062	2.034	2.067	2.069	2.312	2.044	2.090	2.080	2.030
#3	2.059	2.032	2.060	2.066	2.312	2.044	2.093	2.075	2.034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 13:36:42 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.055**	**2.064**
Stddev	.004	.002
%RSD	.1977	.0831
#1	2.054	2.063
#2	2.059	2.064
#3	2.051	2.066
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2493.6**	**6833.2**	**37489.**	**5548.6**
Stddev	2.2	13.4	151.	59.2
%RSD	.08973	.19566	.40178	1.0672
#1	2495.0	6847.5	37327.	5480.2
#2	2494.7	6830.9	37625.	5581.7
#3	2491.0	6821.1	37516.	5583.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 13:43:18 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0056**	**-.0007**	F **-.0046**	**.0001**	**.0000**	**-.0043**	**.0000**
Stddev	.0002	.0219	.0005	.0021	.0005	.000	.0028	.000
%RSD	85.48	391.3	72.34	45.78	382.6	172.6	66.10	92.36
#1	.0000	.0308	-.0012	-.0022	.0001	-.0001	-.0035	.0000
#2	-.0004	-.0050	-.0002	-.0063	.0006	.0000	-.0075	.0000
#3	-.0002	-.0090	-.0008	-.0054	-.0003	-.0001	-.0020	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0001**	**.0000**	**.0013**	**.0481**	F **.0014**	**.0183**	**.0000**
Stddev	.0000	.0001	.001	.0014	.0226	.0021	.0057	.0000
%RSD	66.58	250.5	5319.	107.0	46.92	145.8	31.02	111.1
#1	.0001	.0002	.0007	.0008	.0599	.0017	.0156	.0000
#2	.0000	.0001	.0000	.0002	.0221	-.0008	.0248	.0001
#3	.0000	-.0001	-.0007	.0029	.0623	.0034	.0144	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0040**	**-.0001**	**.0003**	**.0000**	**.0016**	**.0002**	**.0000**
Stddev	.0002	.0099	.0001	.0004	.0007	.0009	.0003	.001
%RSD	316.2	244.0	265.0	149.3	2192.	55.92	180.7	4830.
#1	-.0003	.0144	.0000	-.0001	.0009	.0020	.0005	.0003
#2	.0001	-.0053	.0000	.0003	-.0006	.0021	.0002	.0002
#3	.0000	.0031	-.0002	.0007	-.0002	.0006	-.0002	-.0006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 13:43:18 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0001**	**-.0016**	**.0004**	**-.0001**
Stddev	.000	.0001	.0006	.0001	.0000
%RSD	2711.	204.6	35.28	15.18	19.62
#1	-.0001	-.0002	-.0012	.0003	-.0001
#2	.0000	.0000	-.0023	.0004	-.0001
#3	.0001	.0000	-.0014	.0003	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3011.5**	**7223.2**	**39950.**	**5730.0**
Stddev	7.2	20.8	198.	15.0
%RSD	.23973	.28809	.49519	.26182
#1	3009.7	7221.6	39723.	5726.5
#2	3005.4	7203.3	40038.	5717.1
#3	3019.5	7244.8	40088.	5746.5

Zoom In Zoom Out

Sample Name: FC1068-8F Acquired: 12/20/2022 13:48:20 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0273**	**.0032**	F **1.041**	**.0563**	**-.0001**	**47.96**	**-.0001**	**.0000**
Stddev	.0005	.0046	.0004	.009	.0004	.0000	.09	.0000	.0001
%RSD	1521.	16.95	13.83	.9132	.6408	82.92	.1911	13.04	779.6
#1	.0004	.0251	.0036	1.031	.0566	-.0001	48.07	-.0002	-.0001
#2	-.0005	.0326	.0031	1.050	.0564	-.0001	47.89	-.0001	.0002
#3	.0002	.0242	.0028	1.043	.0559	.0000	47.93	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093**	**.0025**	**.0338**	**.5261**	**.0438**	**67.12**	**.0018**	**.0013**	F **106.9**
Stddev	.0006	.0005	.0015	.0297	.0009	.34	.0001	.0002	.1
%RSD	6.278	19.91	4.401	5.645	1.987	.5063	3.779	16.02	.0953
#1	.0086	.0029	.0328	.4926	.0439	67.41	.0018	.0014	107.0
#2	.0097	.0020	.0330	.5494	.0428	66.74	.0019	.0011	106.8
#3	.0096	.0026	.0355	.5363	.0446	67.20	.0019	.0015	106.8

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0024**	**.0022**	**.0009**	**12.37**	**.0003**	**1.033**	**.0029**	**-.0019**
Stddev	.0002	.0008	.0020	.0020	.03	.0004	.002	.0001	.0015
%RSD	30.75	34.57	94.06	230.0	.2455	127.1	.2218	2.677	80.02
#1	.0007	-.0015	.0011	-.0011	12.34	.0006	1.032	.0028	-.0017
#2	.0007	-.0028	.0009	.0029	12.37	-.0002	1.035	.0030	-.0004
#3	.0004	-.0030	.0045	.0008	12.40	.0006	1.031	.0030	-.0034

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0092**	**.0158**
Stddev	.0000	.0000
%RSD	.5208	.1085
#1	.0092	.0158
#2	.0091	.0158
#3	.0092	.0158

Zoom In Zoom Out

Sample Name: FC1068-8F Acquired: 12/20/2022 13:48:20 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2613.1**	**6836.9**	**37742.**	**5649.4**
Stddev	10.2	19.0	65.	46.2
%RSD	.39042	.27764	.17338	.81862
#1	2622.3	6854.3	37779.	5607.8
#2	2615.0	6839.9	37781.	5699.2
#3	2602.1	6816.7	37667.	5641.1

Zoom In Zoom Out

Sample Name: FC1192-17 Acquired: 12/20/2022 14:09:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**58.70**	**.0726**	**.0589**	**.4782**	**.0029**	**3560.**	**.0110**	**.0267**
Stddev	.0008	.07	.0106	.0173	.0030	.0007	56.	.0003	.0007
%RSD	40.40	.1137	14.55	29.45	.6351	23.97	1.584	2.297	2.603
#1	.0029	58.78	.0605	.0394	.4748	.0036	3619.	.0109	.0265
#2	.0014	58.66	.0796	.0645	.4792	.0023	3555.	.0108	.0262
#3	.0017	58.66	.0778	.0728	.4807	.0027	3506.	.0113	.0275

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2645**	**.4055**	**76.59**	**4.580**	**.0753**	**29.58**	**2.025**	**.0651**	**15.99**
Stddev	.0028	.0080	.27	.716	.0306	.22	.002	.0015	.07
%RSD	1.063	1.964	.3494	15.63	40.69	.7510	.0991	2.236	.4076
#1	.2613	.4048	76.39	3.766	.1088	29.33	2.024	.0634	15.93
#2	.2654	.4138	76.90	5.111	.0487	29.74	2.027	.0662	16.06
#3	.2666	.3979	76.48	4.863	.0683	29.67	2.024	.0655	15.99

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0947**	**.4779**	**.0104**	**-.0214**	**12.70**	**.0443**	**12.03**	**1.390**	**-.0057**
Stddev	.0011	.0045	.0268	.0228	.03	.0034	.06	.007	.0103
%RSD	1.174	.9503	256.5	106.7	.2540	7.726	.5351	.4841	179.7
#1	.0944	.4769	.0346	-.0474	12.71	.0481	11.97	1.387	-.0083
#2	.0959	.4829	-.0184	-.0049	12.66	.0415	12.10	1.398	-.0145
#3	.0937	.4740	.0152	-.0118	12.72	.0433	12.03	1.385	.0056

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.2449**	**4.848**
Stddev	.0016	.006
%RSD	.6657	.1149
#1	.2455	4.852
#2	.2430	4.850
#3	.2461	4.842

Zoom In Zoom Out

Sample Name: FC1192-17 Acquired: 12/20/2022 14:09:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 10.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2576.3**	**6945.3**	**37921.**	**5669.0**
Stddev	7.7	10.6	162.	59.0
%RSD	.29798	.15211	.42670	1.0407
#1	2577.2	6937.6	38035.	5637.2
#2	2583.4	6957.3	37735.	5632.7
#3	2568.2	6940.9	37992.	5737.1

Zoom In Zoom Out

Sample Name: FC1201-4F Acquired: 12/20/2022 14:14:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.1139**	**.0010**	**.0775**	**.0438**	**-.0001**	**50.93**	**-.0001**	**.0002**
Stddev	.0001	.0265	.0009	.0020	.0003	.0000	.24	.0001	.0001
%RSD	64.60	23.26	81.65	2.522	.6540	9.845	.4695	147.7	30.68
#1	.0002	.1136	.0020	.0767	.0442	-.0001	51.08	.0000	.0002
#2	.0000	.1406	.0006	.0797	.0436	-.0001	51.05	-.0001	.0003
#3	.0001	.0876	.0005	.0761	.0437	-.0001	50.65	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0043**	**.0790**	**5.762**	**.0126**	**6.665**	**.0064**	**.0044**	**34.70**
Stddev	.0003	.0001	.0027	.082	.0031	.041	.0000	.0001	.15
%RSD	24.47	2.179	3.403	1.425	24.45	.6202	.7717	1.749	.4407
#1	.0016	.0041	.0760	5.708	.0150	6.688	.0064	.0044	34.80
#2	.0010	.0043	.0810	5.856	.0136	6.691	.0065	.0043	34.78
#3	.0016	.0043	.0801	5.721	.0091	6.618	.0064	.0045	34.52

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0013**	**.0010**	**.0011**	**8.901**	**.0010**	**.1834**	**.0040**	**-.0016**
Stddev	.0000	.0004	.0010	.0013	.018	.0002	.0014	.0001	.0005
%RSD	3.537	31.51	98.95	120.3	.2077	15.37	.7854	2.239	31.84
#1	.0012	-.0009	.0021	-.0003	8.892	.0010	.1844	.0040	-.0020
#2	.0012	-.0013	.0006	.0013	8.890	.0012	.1841	.0039	-.0017
#3	.0011	-.0018	.0003	.0024	8.923	.0008	.1818	.0041	-.0010

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0053**	**.0108**
Stddev	.0002	.0001
%RSD	2.848	.6258
#1	.0052	.0108
#2	.0055	.0107
#3	.0052	.0108

Zoom In Zoom Out

Sample Name: FC1201-4F Acquired: 12/20/2022 14:14:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2737.2	7031.1	38559.	5604.1
Stddev	6.3	23.2	198.	31.9
%RSD	.22847	.33035	.51310	.56903
#1	2743.1	7040.8	38786.	5598.9
#2	2737.9	7047.9	38424.	5638.3
#3	2730.6	7004.6	38465.	5575.2

Zoom In Zoom Out

Sample Name: MP41622-D1 Acquired: 12/20/2022 14:19:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	.1115	.0022	.0789	.0454	-.0001	52.78	-.0001	.0002
Stddev	.0002	.0044	.0013	.0018	.0002	.0000	.29	.0001	.0001
%RSD	49.58	3.901	59.40	2.251	.5136	33.08	.5455	65.85	32.00
#1	-.0004	.1070	.0030	.0776	.0451	-.0001	53.10	-.0002	.0001
#2	-.0002	.1157	.0007	.0782	.0456	-.0001	52.55	.0000	.0002
#3	-.0006	.1119	.0028	.0809	.0455	-.0001	52.68	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.0044	.1504	6.001	.0116	6.981	.0068	.0042	35.85
Stddev	.0003	.0006	.0020	.025	.0025	.045	.0001	.0001	.18
%RSD	28.76	13.03	1.360	.4154	21.67	.6420	.8795	2.804	.4901
#1	.0013	.0043	.1512	6.022	.0092	7.018	.0068	.0043	36.05
#2	.0013	.0050	.1481	5.973	.0113	6.995	.0068	.0041	35.72
#3	.0008	.0038	.1520	6.007	.0142	6.931	.0069	.0043	35.79

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	-.0018	.0002	.0015	9.160	.0010	.1891	.0041	-.0002
Stddev	.0001	.0001	.0009	.0006	.008	.0002	.0015	.0000	.0007
%RSD	6.885	4.173	533.1	38.50	.0891	17.06	.7941	.5116	372.6
#1	.0010	-.0017	-.0004	.0019	9.151	.0011	.1906	.0041	-.0010
#2	.0011	-.0018	.0012	.0008	9.163	.0012	.1876	.0041	.0001
#3	.0010	-.0017	-.0003	.0017	9.166	.0008	.1892	.0041	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	.0058	.0106
Stddev	.0003	.0000
%RSD	5.920	.1478
#1	.0061	.0106
#2	.0055	.0106
#3	.0057	.0106

Zoom In Zoom Out

Sample Name: MP41622-D1 Acquired: 12/20/2022 14:19:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2732.6	7016.6	38348.	5574.8
Stddev	2.6	8.2	62.	27.3
%RSD	.09682	.11714	.16136	.48891
#1	2735.2	7018.9	38397.	5563.3
#2	2730.0	7023.4	38278.	5555.3
#3	2732.6	7007.4	38369.	5606.0

Zoom In Zoom Out

Sample Name: MP41622-SD1 Acquired: 12/20/2022 14:24:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.1280	.0003	.0427	.0444	-.0004	50.87	-.0004	.0008
Stddev	.0014	.0552	.0028	.0155	.0012	.0001	.25	.0002	.0002
%RSD	164.0	43.16	1105.	36.28	2.736	26.96	.4854	51.03	27.02
#1	-.0022	.1917	.0018	.0594	.0442	-.0004	51.09	-.0005	.0010
#2	-.0008	.0984	.0020	.0401	.0433	-.0006	50.93	-.0002	.0008
#3	.0005	.0938	-.0030	.0287	.0457	-.0004	50.60	-.0005	.0006

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	.0033	.0765	5.663	.0244	6.642	.0063	.0038	34.76
Stddev	.0011	.0011	.0102	.378	.0075	.105	.0000	.0003	.22
%RSD	60.97	33.29	13.35	6.675	30.85	1.586	.7785	8.036	.6260
#1	.0016	.0027	.0863	5.965	.0204	6.567	.0064	.0035	34.96
#2	.0008	.0045	.0773	5.239	.0331	6.597	.0063	.0041	34.79
#3	.0029	.0026	.0659	5.785	.0197	6.762	.0063	.0036	34.53

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0014	-.0007	-.0009	-.0009	8.889	.0008	.1839	.0064	.0064
Stddev	.0004	.0022	.0060	.0082	.009	.0003	.0014	.0002	.0024
%RSD	25.17	323.2	643.9	874.7	.0952	36.09	.7417	2.918	36.97
#1	.0013	-.0013	-.0072	-.0015	8.884	.0011	.1840	.0065	.0050
#2	.0019	.0018	.0046	-.0089	8.884	.0007	.1852	.0064	.0051
#3	.0012	-.0025	-.0001	.0075	8.899	.0005	.1825	.0062	.0091

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	.0069	.0105
Stddev	.0010	.0003
%RSD	15.04	2.427
#1	.0057	.0103
#2	.0075	.0108
#3	.0074	.0105

Zoom In Zoom Out

Sample Name: MP41622-SD1 Acquired: 12/20/2022 14:24:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2927.8**	**7200.4**	**39791.**	**5709.0**
Stddev	3.7	11.0	120.	41.6
%RSD	.12516	.15270	.30037	.72865
#1	2931.2	7206.7	39827.	5683.5
#2	2928.2	7206.7	39658.	5686.4
#3	2923.9	7187.7	39888.	5757.0

Zoom In Zoom Out

Sample Name: MP41622-PS1 Acquired: 12/20/2022 14:29:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0495**	**2.559**	**.0973**	**.0774**	**.2865**	**.0487**	**54.65**	**.0492**	**.0501**
Stddev	.0003	.011	.0015	.0024	.0008	.0000	.04	.0001	.0001
%RSD	.6177	.4113	1.547	3.061	.2743	.0264	.0715	.1072	.1345
#1	.0496	2.565	.0989	.0801	.2865	.0487	54.69	.0492	.0502
#2	.0491	2.547	.0970	.0757	.2857	.0487	54.62	.0492	.0500
#3	.0497	2.566	.0959	.0764	.2873	.0487	54.64	.0492	.0501

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0507**	**.1045**	**2.987**	**15.35**	**.0113**	**11.55**	**.0566**	**.0999**	**42.92**
Stddev	.0003	.0004	.001	.06	.0022	.02	.0003	.0001	.08
%RSD	.5317	.4283	.0230	.3810	19.56	.1490	.5022	.1070	.1930
#1	.0510	.1050	2.987	15.41	.0137	11.56	.0564	.0999	42.95
#2	.0505	.1042	2.987	15.35	.0108	11.53	.0565	.0998	42.83
#3	.0507	.1043	2.988	15.29	.0094	11.57	.0569	.1000	42.98

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0996**	**.0438**	**.0993**	**.0938**	**8.879**	**.0494**	**.2283**	**.1034**	**.0909**
Stddev	.0001	.0003	.0028	.0025	.004	.0004	.0002	.0003	.0001
%RSD	.1226	.7648	2.850	2.713	.0413	.8631	.0670	.2673	.1603
#1	.0996	.0434	.0986	.0919	8.876	.0496	.2284	.1032	.0910
#2	.0995	.0439	.1024	.0967	8.883	.0498	.2283	.1032	.0909
#3	.0998	.0440	.0969	.0928	8.878	.0490	.2281	.1037	.0907

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0546**	**.2503**
Stddev	.0003	.0003
%RSD	.6326	.1237
#1	.0546	.2506
#2	.0542	.2500
#3	.0549	.2502

Zoom In Zoom Out

Sample Name: MP41622-PS1 Acquired: 12/20/2022 14:29:23 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2697.4**	**7006.4**	**38362.**	**5644.1**
Stddev	4.4	12.9	95.	13.9
%RSD	.16156	.18435	.24674	.24658
#1	2695.3	6995.9	38452.	5632.0
#2	2702.4	7020.8	38369.	5659.3
#3	2694.4	7002.5	38263.	5641.0

Zoom In Zoom Out

Sample Name: MP41622-S1 Acquired: 12/20/2022 14:34:20 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0518**	**28.18**	**1.982**	**.1056**	**2.120**	**.0507**	**77.97**	**.0502**	**.5103**
Stddev	.0003	.03	.003	.0012	.005	.0002	.20	.0001	.0008
%RSD	.5764	.1170	.1237	1.115	.2158	.3616	.2507	.1397	.1537
#1	.0521	28.21	1.984	.1059	2.125	.0508	78.18	.0501	.5094
#2	.0516	28.18	1.982	.1066	2.119	.0507	77.91	.0503	.5110
#3	.0516	28.14	1.979	.1043	2.116	.0504	77.80	.0502	.5105

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2053**	**.2630**	**26.81**	**32.34**	**.0145**	**32.91**	**.5245**	**.5449**	**59.53**
Stddev	.0002	.0005	.06	.11	.0024	.06	.0012	.0007	.08
%RSD	.1038	.1961	.2269	.3276	16.79	.1912	.2301	.1346	.1320
#1	.2051	.2635	26.77	32.45	.0164	32.89	.5258	.5440	59.62
#2	.2054	.2629	26.88	32.31	.0153	32.97	.5234	.5453	59.53
#3	.2055	.2625	26.78	32.25	.0117	32.85	.5245	.5453	59.46

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5027**	**.4876**	**.4980**	**2.009**	**9.489**	**.5224**	**.7365**	**.5449**	**1.964**
Stddev	.0001	.0018	.0014	.006	.012	.0012	.0016	.0012	.006
%RSD	.0112	.3602	.2780	.2888	.1273	.2310	.2177	.2223	.3267
#1	.5027	.4859	.4964	2.009	9.476	.5210	.7383	.5460	1.967
#2	.5027	.4876	.4984	2.003	9.500	.5234	.7357	.5452	1.957
#3	.5026	.4894	.4991	2.015	9.490	.5227	.7354	.5436	1.968

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5125**	**.5042**
Stddev	.0002	.0007
%RSD	.0300	.1425
#1	.5126	.5035
#2	.5125	.5043
#3	.5123	.5049

Zoom In Zoom Out

Sample Name: MP41622-S1 Acquired: 12/20/2022 14:34:20 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2545.6**	**6892.2**	**37548.**	**5591.2**
Stddev	7.6	5.8	157.	35.1
%RSD	.29905	.08390	.41757	.62725
#1	2545.6	6895.5	37416.	5575.7
#2	2553.2	6895.7	37722.	5566.5
#3	2538.0	6885.6	37507.	5631.3

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 14:39:15 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2472**	**41.04**	**2.023**	F **1.981**	**2.080**	**2.048**	**41.21**	**2.064**	**2.067**
Stddev	.0006	.06	.003	.007	.004	.006	.11	.006	.006
%RSD	.2497	.1346	.1614	.3547	.1875	.3129	.2713	.2939	.2761
#1	.2466	41.07	2.026	1.978	2.082	2.053	41.22	2.071	2.074
#2	.2478	40.98	2.020	1.989	2.076	2.041	41.09	2.062	2.065
#3	.2472	41.07	2.023	1.977	2.083	2.050	41.31	2.060	2.063
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.035**	**2.081**	**41.29**	**42.01**	**2.098**	**41.99**	**2.041**	**2.059**	**41.70**
Stddev	.004	.001	.11	.11	.005	.11	.011	.006	.11
%RSD	.2176	.0667	.2686	.2667	.2411	.2623	.5328	.3165	.2684
#1	2.035	2.082	41.37	42.11	2.096	41.90	2.043	2.066	41.71
#2	2.031	2.079	41.17	41.89	2.094	41.97	2.030	2.056	41.59
#3	2.040	2.081	41.34	42.02	2.103	42.12	2.051	2.054	41.81
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.042**	**2.010**	**2.043**	**2.050**	**2.292**	**2.025**	**2.082**	**2.063**	**2.014**
Stddev	.004	.002	.004	.005	.005	.003	.005	.001	.002
%RSD	.1957	.0842	.1871	.2342	.2157	.1447	.2203	.0526	.1036
#1	2.046	2.009	2.047	2.056	2.298	2.028	2.083	2.062	2.012
#2	2.039	2.010	2.042	2.047	2.290	2.023	2.076	2.063	2.013
#3	2.039	2.012	2.039	2.048	2.290	2.023	2.085	2.064	2.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 14:39:15 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.035**	**2.044**
Stddev	.003	.007
%RSD	.1436	.3230
#1	2.034	2.051
#2	2.032	2.041
#3	2.038	2.039
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2510.9**	**6863.0**	**37852.**	**5608.4**
Stddev	1.8	18.2	328.	39.7
%RSD	.07095	.26502	.86621	.70838
#1	2510.8	6842.1	37941.	5593.2
#2	2512.8	6872.0	38127.	5653.5
#3	2509.2	6874.9	37490.	5578.5

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 14:44:16 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0057**	**.0003**	F **-.0041**	**.0000**	**.0000**	**-.0020**	**.0000**
Stddev	.0004	.0059	.0005	.0018	.0003	.000	.0045	.000
%RSD	288.8	103.7	158.9	42.98	700.3	1395.	229.8	42.96
#1	-.0005	.0001	.0006	-.0058	-.0003	-.0001	.0021	.0000
#2	-.0001	.0052	-.0003	-.0041	.0003	.0000	-.0069	.0000
#3	.0002	.0118	.0006	-.0023	.0000	.0000	-.0012	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0003**	**.0000**	**-.0004**	**.0027**	F **-.0027**	**-.0063**	**.0000**
Stddev	.0001	.0002	.0004	.0042	.0329	.0004	.0088	.0001
%RSD	53.42	55.07	1045.	991.7	1210.	14.80	140.7	207.1
#1	.0001	.0001	.0004	.0000	-.0350	-.0026	-.0058	.0000
#2	.0001	.0005	-.0004	-.0048	.0256	-.0024	-.0153	.0001
#3	.0002	.0003	.0001	.0035	.0175	-.0032	.0023	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0162**	**-.0001**	**.0002**	**.0006**	**.0000**	**.0012**	**.0001**
Stddev	.0001	.0171	.0002	.0005	.0007	.0014	.0004	.0001
%RSD	106.6	105.8	125.6	236.4	122.8	11430.	34.66	53.31
#1	.0002	.0143	-.0001	.0000	.0010	-.0014	.0012	.0001
#2	.0002	.0341	.0000	.0008	-.0002	.0014	.0007	.0001
#3	.0000	.0001	-.0003	-.0002	.0009	.0001	.0015	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 14:44:16 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0004**	**.0004**	**-.0001**
Stddev	.0000	.000	.0006	.0001	.0000
%RSD	167.1	392.4	165.6	22.33	29.06
#1	.0000	-.0001	.0011	.0005	-.0001
#2	.0000	-.0002	-.0002	.0004	-.0001
#3	.0000	.0002	.0003	.0004	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2982.2**	**7153.0**	**39290.**	**5649.1**
Stddev	7.9	19.2	190.	56.2
%RSD	.26583	.26800	.48283	.99423
#1	2986.6	7151.2	39313.	5604.6
#2	2973.1	7134.8	39467.	5712.2
#3	2987.1	7173.0	39090.	5630.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 15:44:49 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2444**	**40.51**	**2.000**	**F 1.995**	**2.034**	**2.052**	**40.44**	**2.021**	**2.015**
Stddev	.0009	.17	.003	.012	.009	.008	.20	.004	.004
%RSD	.3701	.4309	.1528	.5830	.4231	.4111	.4893	.1836	.1761
#1	.2451	40.68	1.997	1.994	2.043	2.060	40.63	2.025	2.019
#2	.2447	40.33	1.999	1.983	2.026	2.043	40.24	2.018	2.013
#3	.2434	40.50	2.003	2.007	2.034	2.053	40.44	2.019	2.014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.034**	**2.052**	**40.81**	**40.73**	**2.053**	**41.18**	**2.010**	**2.006**	**40.77**
Stddev	.002	.005	.19	.16	.008	.18	.010	.005	.18
%RSD	.1157	.2295	.4741	.3910	.3820	.4470	.4849	.2277	.4328
#1	2.035	2.056	40.98	40.87	2.058	41.30	2.002	2.012	40.95
#2	2.037	2.054	40.60	40.56	2.044	40.97	2.007	2.004	40.60
#3	2.032	2.047	40.86	40.76	2.057	41.27	2.021	2.004	40.75
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.013**	**1.992**	**2.005**	**2.004**	**2.247**	**2.012**	**2.019**	**2.017**	**2.003**
Stddev	.002	.004	.005	.001	.003	.001	.009	.006	.004
%RSD	.0762	.2210	.2314	.0549	.1456	.0317	.4551	.3089	.2020
#1	2.015	1.989	2.009	2.002	2.251	2.011	2.027	2.024	1.999
#2	2.012	1.997	2.000	2.004	2.245	2.013	2.009	2.014	2.007
#3	2.012	1.991	2.005	2.004	2.245	2.013	2.019	2.013	2.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 15:44:49 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.012**	**2.024**
Stddev	.005	.001
%RSD	.2329	.0357
#1	2.017	2.025
#2	2.012	2.024
#3	2.007	2.024
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2479.3**	**6715.1**	**37362.**	**5469.2**
Stddev	1.1	18.8	122.	31.7
%RSD	.04277	.27931	.32641	.57923
#1	2479.9	6700.2	37325.	5440.6
#2	2478.1	6736.2	37498.	5503.3
#3	2480.0	6708.9	37262.	5463.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 15:54:55 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0072**	**-.0013**	**F .0024**	**.0001**	**.0000**	**.0006**	**.0001**	**.0001**
Stddev	.0003	.0137	.0005	.0013	.0001	.0000	.0011	.0000	.0001
%RSD	524.3	190.5	39.93	54.15	145.4	132.7	206.1	61.11	57.37
#1	-.0001	.0063	-.0014	.0038	.0001	.0000	-.0005	.0001	.0002
#2	-.0003	.0213	-.0017	.0023	.0002	.0000	.0004	.0001	.0001
#3	.0003	-.0061	-.0007	.0012	.0000	.0000	.0018	.0000	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010					
Low Limit				-.0010					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0003**	**.0008**	**.0015**	**-.0006**	**-.0217**	**.0000**	**.0001**	**.0126**
Stddev	.0000	.0003	.0026	.0231	.0025	.0129	.0000	.0002	.0086
%RSD	42.19	108.5	309.7	1511.	397.4	59.48	102.8	141.6	68.34
#1	.0001	.0000	.0000	-.0251	.0022	-.0171	.0001	.0001	.0028
#2	.0001	-.0003	-.0012	.0165	-.0013	-.0117	.0000	.0000	.0159
#3	.0001	-.0007	.0037	.0132	-.0027	-.0363	.0001	.0003	.0191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0003**	**-.0007**	**-.0002**	**.0003**	**.0002**	**.0001**	**-.0001**	**.0013**
Stddev	.000	.0004	.0002	.0022	.0004	.0001	.0001	.0002	.0008
%RSD	2527.	150.9	27.31	1329.	115.2	55.05	59.66	198.6	62.02
#1	-.0001	-.0002	-.0006	-.0027	.0006	.0002	.0002	.0000	.0019
#2	.0001	.0001	-.0008	.0010	-.0001	.0001	.0002	.0000	.0017
#3	.0000	-.0007	-.0005	.0012	.0005	.0003	.0000	-.0004	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 15:54:55 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**.0004**	**.0000**
Stddev	.0003	.000
%RSD	74.26	346.6
#1	.0002	.0000
#2	.0007	.0000
#3	.0003	.0000
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3005.5**	**7157.5**	**39693.**	**5617.5**
Stddev	5.8	5.4	102.	48.3
%RSD	.19177	.07586	.25614	.85983
#1	2999.7	7154.3	39810.	5665.8
#2	3005.4	7163.7	39645.	5569.2
#3	3011.3	7154.4	39624.	5617.4

Zoom In Zoom Out

Sample Name: MP41622-S2 Acquired: 12/20/2022 15:59:32 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0515**	**27.16**	**1.943**	**.1147**	**2.080**	**.0515**	**75.29**	**.0486**	**.4907**
Stddev	.0003	.06	.001	.0017	.005	.0002	.18	.0001	.0005
%RSD	.6040	.2335	.0441	1.453	.2198	.4073	.2348	.1798	.0967
#1	.0518	27.24	1.943	.1143	2.085	.0517	75.48	.0487	.4908
#2	.0512	27.13	1.944	.1133	2.076	.0513	75.13	.0485	.4901
#3	.0516	27.13	1.944	.1165	2.079	.0515	75.26	.0487	.4910

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2064**	**.2597**	**25.95**	**30.52**	**.0114**	**31.58**	**.5117**	**.5066**	**57.21**
Stddev	.0016	.0033	.05	.10	.0014	.09	.0047	.0017	.11
%RSD	.7869	1.265	.1928	.3409	12.07	.2811	.9278	.3306	.1873
#1	.2082	.2635	26.01	30.64	.0106	31.66	.5172	.5060	57.31
#2	.2058	.2576	25.91	30.48	.0106	31.49	.5086	.5054	57.09
#3	.2051	.2580	25.94	30.45	.0130	31.60	.5094	.5085	57.22

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4914**	**.4817**	**.4859**	**1.952**	**9.100**	**.5005**	**.6933**	**.5146**	**1.962**
Stddev	.0007	.0009	.0032	.005	.011	.0013	.0015	.0048	.003
%RSD	.1326	.1781	.6515	.2726	.1168	.2696	.2119	.9253	.1365
#1	.4920	.4808	.4836	1.950	9.109	.4993	.6947	.5200	1.959
#2	.4907	.4823	.4847	1.947	9.088	.5003	.6918	.5115	1.964
#3	.4915	.4821	.4896	1.958	9.103	.5019	.6935	.5122	1.961

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5077**	**.4964**
Stddev	.0052	.0001
%RSD	1.030	.0138
#1	.5137	.4964
#2	.5043	.4964
#3	.5050	.4965

Zoom In Zoom Out

Sample Name: MP41622-S2 Acquired: 12/20/2022 15:59:32 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2577.2**	**6961.8**	**37833.**	**5619.4**
Stddev	7.6	14.1	285.	18.2
%RSD	.29487	.20255	.75252	.32456
#1	2584.8	6976.7	37514.	5627.4
#2	2569.6	6948.7	37927.	5632.2
#3	2577.3	6959.8	38059.	5598.5

Zoom In Zoom Out

Sample Name: FC1189-1F Acquired: 12/20/2022 16:04:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.2633**	**.1118**	**.0309**	**.0081**	**.0001**	**64.98**	**.0000**	**.0002**
Stddev	.0002	.0118	.0008	.0013	.0003	.0001	.41	.000	.0001
%RSD	486.4	4.480	.7520	4.225	4.013	80.30	.6257	416.3	59.88
#1	.0000	.2769	.1110	.0317	.0081	.0000	65.45	.0000	.0001
#2	.0002	.2561	.1116	.0294	.0085	.0001	64.79	.0000	.0002
#3	-.0001	.2568	.1127	.0317	.0078	.0001	64.71	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0063**	**4.499**	**1.052**	**.0050**	**5.388**	**.1464**	**.0006**	**2.172**
Stddev	.0002	.0001	.008	.053	.0017	.017	.0001	.0002	.006
%RSD	18.55	1.640	.1744	5.037	33.93	.3160	.0947	34.74	.2998
#1	.0010	.0065	4.506	1.058	.0049	5.407	.1463	.0003	2.167
#2	.0011	.0063	4.499	.9956	.0033	5.375	.1465	.0007	2.170
#3	.0014	.0063	4.491	1.101	.0067	5.381	.1465	.0007	2.180

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0021**	**.0013**	**-.0001**	**2.846**	**.0006**	**.3688**	**.0037**	**.0005**
Stddev	.0002	.0008	.0002	.0006	.002	.0005	.0029	.0003	.0010
%RSD	31.83	35.79	16.04	960.5	.0854	83.04	.7881	7.304	210.2
#1	.0008	-.0016	.0012	.0006	2.849	.0010	.3720	.0034	.0004
#2	.0004	-.0030	.0011	-.0007	2.846	.0001	.3680	.0039	-.0005
#3	.0006	-.0018	.0015	-.0001	2.844	.0006	.3664	.0038	.0015

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0013**	**.0556**
Stddev	.0002	.0000
%RSD	13.70	.0492
#1	.0013	.0555
#2	.0014	.0556
#3	.0011	.0556

Zoom In Zoom Out

Sample Name: FC1189-1F Acquired: 12/20/2022 16:04:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2771.9**	**6972.8**	**38643.**	**5635.1**
Stddev	7.0	12.0	178.	40.0
%RSD	.25415	.17265	.46031	.70958
#1	2779.7	6986.2	38832.	5601.4
#2	2770.1	6969.2	38479.	5624.6
#3	2766.0	6963.0	38618.	5679.2

Zoom In Zoom Out

Sample Name: FC1189-2F Acquired: 12/20/2022 16:09:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**5.689**	**.0066**	**.0445**	**.0710**	**.0003**	**49.90**	**.0004**	**.0011**
Stddev	.0002	.035	.0005	.0001	.0004	.0000	.09	.0001	.0000
%RSD	341.1	.6189	6.884	.2344	.5090	11.27	.1890	14.31	3.470
#1	.0001	5.707	.0067	.0446	.0714	.0004	49.92	.0004	.0011
#2	-.0002	5.712	.0071	.0446	.0710	.0003	49.98	.0004	.0011
#3	.0003	5.649	.0061	.0444	.0706	.0003	49.80	.0005	.0012

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0059**	**.0148**	**3.623**	**44.86**	**.0179**	**13.16**	**.1048**	**.0018**	F **109.0**
Stddev	.0003	.0001	.013	.16	.0009	.06	.0001	.0003	.1
%RSD	4.318	.5988	.3562	.3561	4.971	.4845	.0921	14.76	.1154
#1	.0060	.0147	3.626	44.73	.0174	13.16	.1049	.0021	109.0
#2	.0061	.0148	3.634	45.04	.0173	13.23	.1048	.0016	109.0
#3	.0056	.0149	3.608	44.81	.0189	13.10	.1047	.0017	108.8

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0156**	**.0125**	**.0000**	**-.0008**	**7.201**	**.0010**	**.5959**	**.0030**	**-.0008**
Stddev	.0001	.0003	.0003	.0025	.007	.0002	.0017	.0000	.0007
%RSD	.3797	2.570	748.8	320.3	.1042	23.02	.2907	.5796	86.76
#1	.0156	.0124	.0001	.0019	7.195	.0011	.5945	.0030	-.0007
#2	.0157	.0129	.0003	-.0013	7.209	.0013	.5978	.0030	-.0002
#3	.0155	.0123	-.0002	-.0030	7.200	.0008	.5953	.0030	-.0017

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0076**	**.1069**
Stddev	.0002	.0001
%RSD	2.088	.1098
#1	.0075	.1068
#2	.0076	.1070
#3	.0078	.1068

Zoom In Zoom Out

Sample Name: FC1189-2F Acquired: 12/20/2022 16:09:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2610.2**	**6950.4**	**37703.**	**5618.0**
Stddev	5.4	15.7	243.	36.9
%RSD	.20636	.22544	.64442	.65683
#1	2607.0	6938.8	37774.	5577.8
#2	2616.4	6968.2	37902.	5625.9
#3	2607.2	6944.2	37432.	5650.3

Zoom In Zoom Out

Sample Name: FC1189-3F Acquired: 12/20/2022 16:14:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.2024**	**.0021**	**.0536**	**.0059**	**.0000**	**75.56**	**.0001**	**.0002**
Stddev	.000	.0058	.0005	.0011	.0002	.0001	.43	.0000	.0002
%RSD	1782.	2.869	24.12	2.025	3.045	408.1	.5736	90.31	102.4
#1	.0001	.2084	.0018	.0536	.0059	.0000	75.12	.0001	.0000
#2	.0000	.2019	.0018	.0525	.0058	-.0001	75.57	.0000	.0002
#3	-.0002	.1968	.0027	.0546	.0061	.0001	75.99	.0000	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0046**	**.2100**	**9.576**	**-.0003**	**5.392**	**.0453**	**.0070**	**3.085**
Stddev	.0001	.0005	.0037	.087	.0015	.021	.0002	.0002	.017
%RSD	8.380	10.58	1.745	.9077	531.1	.3936	.4830	2.799	.5360
#1	.0013	.0045	.2059	9.482	-.0005	5.397	.0454	.0072	3.067
#2	.0014	.0042	.2111	9.592	-.0017	5.368	.0454	.0069	3.090
#3	.0012	.0051	.2130	9.654	.0013	5.410	.0450	.0069	3.099

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0015**	**.0018**	**-.0018**	**5.358**	**.0004**	**.2430**	**.0059**	**-.0009**
Stddev	.0002	.0004	.0017	.0019	.010	.0002	.0017	.0001	.0015
%RSD	14.67	28.59	95.55	101.9	.1883	49.80	.6822	1.114	164.6
#1	.0011	-.0016	.0008	-.0040	5.365	.0002	.2415	.0058	-.0002
#2	.0011	-.0010	.0008	-.0004	5.346	.0006	.2427	.0059	-.0026
#3	.0014	-.0019	.0038	-.0011	5.362	.0003	.2447	.0059	.0001

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0083**	**.0357**
Stddev	.0003	.0001
%RSD	3.774	.3643
#1	.0079	.0358
#2	.0085	.0356
#3	.0084	.0357

Zoom In Zoom Out

Sample Name: FC1189-3F Acquired: 12/20/2022 16:14:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2753.0**	**6903.1**	**38299.**	**5569.7**
Stddev	2.7	29.3	174.	63.0
%RSD	.09720	.42505	.45414	1.1307
#1	2750.0	6869.3	38164.	5641.4
#2	2755.1	6922.4	38238.	5544.2
#3	2753.8	6917.5	38495.	5523.4

Zoom In Zoom Out

Sample Name: FC1189-4F Acquired: 12/20/2022 16:19:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.1053**	**.0003**	**.0267**	**.0001**	**.0000**	**43.79**	**.0000**	**.0002**
Stddev	.0000	.0152	.0005	.0017	.0001	.0000	.17	.0000	.0001
%RSD	40.33	14.41	180.0	6.303	136.3	61.54	.3821	163.8	65.06
#1	.0001	.1058	.0000	.0258	.0002	.0001	43.96	.0000	.0002
#2	.0001	.0898	-.0001	.0287	.0000	.0000	43.62	.0001	.0003
#3	.0000	.1202	.0008	.0257	.0001	.0000	43.80	.0000	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0046**	**.0624**	**4.333**	**.0022**	**2.252**	**.1039**	**.0068**	**1.941**
Stddev	.0002	.0003	.0011	.044	.0004	.042	.0002	.0001	.016
%RSD	22.24	6.751	1.716	1.026	16.44	1.853	.1504	1.349	.8051
#1	.0009	.0048	.0613	4.384	.0020	2.253	.1040	.0069	1.957
#2	.0010	.0042	.0634	4.311	.0026	2.210	.1039	.0069	1.926
#3	.0006	.0047	.0626	4.304	.0020	2.294	.1037	.0067	1.940

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**-.0011**	**.0020**	**-.0016**	**6.064**	**.0006**	**.0609**	**.0040**	**-.0001**
Stddev	.0002	.0003	.0002	.0007	.003	.0004	.0004	.0001	.0008
%RSD	14.82	26.30	9.940	41.78	.0430	75.02	.6198	3.192	1436.
#1	.0010	-.0008	.0019	-.0009	6.065	.0001	.0613	.0039	.0005
#2	.0013	-.0013	.0020	-.0022	6.065	.0009	.0607	.0042	-.0010
#3	.0014	-.0012	.0022	-.0016	6.061	.0007	.0607	.0041	.0003

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0069**	**.0353**
Stddev	.0002	.0000
%RSD	2.576	.1253
#1	.0071	.0353
#2	.0068	.0353
#3	.0069	.0352

Zoom In Zoom Out

Sample Name: FC1189-4F Acquired: 12/20/2022 16:19:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2818.0**	**7053.6**	**38655.**	**5580.8**
Stddev	7.4	7.4	151.	11.8
%RSD	.26240	.10424	.39155	.21096
#1	2825.9	7061.1	38587.	5568.6
#2	2817.0	7046.4	38549.	5581.5
#3	2811.2	7053.3	38828.	5592.2

Zoom In Zoom Out

Sample Name: FC1189-5F Acquired: 12/20/2022 16:24:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**1.420**	**-.0018**	**.0354**	**.0615**	**.0002**	**43.80**	**.0005**	**.0013**
Stddev	.0002	.003	.0008	.0011	.0003	.0001	.13	.0000	.0001
%RSD	36.23	.1865	42.59	3.212	.4344	42.00	.3013	8.107	9.472
#1	-.0003	1.420	-.0011	.0365	.0612	.0001	43.71	.0004	.0014
#2	-.0006	1.423	-.0026	.0354	.0614	.0003	43.74	.0005	.0012
#3	-.0005	1.417	-.0018	.0343	.0618	.0003	43.96	.0005	.0012

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0053**	**1.387**	**31.09**	**.0157**	**9.905**	**.1033**	**.0016**	**76.71**
Stddev	.0001	.0002	.007	.11	.0015	.047	.0003	.0002	.22
%RSD	16.32	3.677	.4821	.3393	9.840	.4762	.2727	10.57	.2814
#1	.0007	.0052	1.387	30.99	.0151	9.891	.1036	.0014	76.59
#2	.0009	.0056	1.380	31.07	.0175	9.867	.1030	.0017	76.59
#3	.0010	.0053	1.393	31.20	.0146	9.958	.1032	.0017	76.96

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**-.0020**	**.0005**	**.0005**	**7.372**	**.0007**	**.4217**	**.0027**	**-.0003**
Stddev	.0002	.0005	.0012	.0006	.007	.0002	.0007	.0001	.0008
%RSD	1.676	24.07	226.2	129.0	.0923	26.35	.1647	3.285	255.6
#1	.0101	-.0025	-.0002	.0008	7.379	.0007	.4209	.0027	.0004
#2	.0105	-.0020	-.0001	-.0002	7.372	.0005	.4219	.0028	-.0001
#3	.0103	-.0015	.0020	.0008	7.366	.0008	.4222	.0026	-.0012

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0040**	**.0871**
Stddev	.0003	.0001
%RSD	7.302	.0634
#1	.0043	.0872
#2	.0039	.0871
#3	.0038	.0871

Zoom In Zoom Out

Sample Name: FC1189-5F Acquired: 12/20/2022 16:24:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2637.1**	**6889.6**	**37707.**	**5512.1**
Stddev	3.2	5.8	280.	63.5
%RSD	.12045	.08398	.74249	1.1526
#1	2638.1	6887.9	37400.	5518.8
#2	2639.6	6896.0	37773.	5572.0
#3	2633.5	6884.8	37948.	5445.5

Zoom In Zoom Out

Sample Name: FC1015-1 Acquired: 12/20/2022 16:29:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0653**	**-.0008**	**.0404**	**.0163**	**.0001**	**66.65**	**.0000**	**.0001**
Stddev	.000	.0105	.0003	.0027	.0001	.0001	.24	.0000	.0001
%RSD	1628.	16.15	45.74	6.575	.3228	117.5	.3546	85.65	127.0
#1	-.0005	.0552	-.0011	.0433	.0163	.0002	66.92	.0000	.0002
#2	.0002	.0762	-.0004	.0380	.0164	.0000	66.57	.0000	.0000
#3	.0002	.0645	-.0008	.0400	.0164	.0001	66.47	.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0032**	**.1778**	**1.504**	**.0039**	**7.981**	**.1077**	**.0006**	**18.08**
Stddev	.0004	.0004	.0025	.054	.0026	.022	.0002	.0002	.05
%RSD	56.80	12.57	1.427	3.619	67.43	.2754	.2091	31.83	.2906
#1	.0007	.0028	.1803	1.560	.0054	8.005	.1077	.0008	18.15
#2	.0011	.0031	.1779	1.451	.0009	7.963	.1075	.0005	18.06
#3	.0003	.0036	.1753	1.499	.0054	7.973	.1079	.0004	18.05

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0009**	**.0018**	**-.0002**	**2.836**	**.0000**	**.2330**	**.0036**	**-.0019**
Stddev	.0002	.0005	.0013	.0002	.002	.0005	.0012	.0001	.0009
%RSD	14.85	58.04	71.88	91.59	.0685	1002.	.5021	2.451	45.23
#1	.0011	-.0005	.0012	-.0001	2.838	-.0003	.2343	.0037	-.0025
#2	.0010	-.0007	.0008	-.0001	2.834	.0006	.2324	.0035	-.0023
#3	.0013	-.0015	.0032	-.0004	2.836	-.0001	.2323	.0036	-.0009

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0008**	**.0156**
Stddev	.0002	.0001
%RSD	22.15	.3216
#1	.0008	.0156
#2	.0006	.0155
#3	.0010	.0156

Zoom In Zoom Out

Sample Name: FC1015-1 Acquired: 12/20/2022 16:29:25 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2760.0**	**6933.3**	**38288.**	**5543.3**
Stddev	1.3	6.3	149.	39.3
%RSD	.04774	.09017	.38898	.70979
#1	2759.3	6940.4	38460.	5504.2
#2	2761.5	6928.7	38204.	5582.9
#3	2759.2	6930.7	38199.	5542.9

Zoom In Zoom Out

Sample Name: FC1015-2 Acquired: 12/20/2022 16:34:24 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0919**	**-.0001**	**.0498**	**.0140**	**.0001**	**88.08**	**.0000**	**.0007**
Stddev	.0004	.0108	.0008	.0009	.0003	.0000	.05	.0001	.0001
%RSD	234.1	11.78	869.1	1.888	2.397	35.81	.0586	155.0	11.98
#1	.0005	.0920	-.0008	.0503	.0144	.0001	88.04	.0000	.0007
#2	.0004	.1026	-.0003	.0487	.0137	.0001	88.06	.0000	.0006
#3	-.0003	.0810	.0008	.0505	.0141	.0001	88.14	.0001	.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0057**	**.2301**	F **133.7**	**.0214**	**7.721**	**1.145**	**.0009**	F **459.6**
Stddev	.0002	.0005	.0035	.2	.0006	.026	.004	.0002	6.3
%RSD	37.10	9.250	1.517	.1656	2.705	.3342	.3059	17.65	1.375
#1	.0007	.0061	.2339	134.0	.0220	7.745	1.148	.0011	466.9
#2	.0004	.0059	.2292	133.5	.0208	7.694	1.146	.0007	456.0
#3	.0008	.0051	.2271	133.7	.0214	7.725	1.142	.0009	455.9

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0019**	**.0015**	**-.0003**	**2.296**	**.0000**	**.2251**	**.0045**	**.0014**
Stddev	.0001	.0003	.0005	.0015	.003	.0002	.0010	.0002	.0009
%RSD	10.02	17.92	35.48	430.5	.1433	506.7	.4476	5.446	61.87
#1	.0012	-.0016	.0017	-.0004	2.294	-.0002	.2241	.0048	.0018
#2	.0011	-.0020	.0009	.0012	2.293	.0003	.2261	.0043	.0021
#3	.0010	-.0022	.0020	-.0018	2.299	.0000	.2251	.0043	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0007**	**.0571**
Stddev	.0002	.0001
%RSD	22.19	.0914
#1	.0007	.0571
#2	.0006	.0571
#3	.0009	.0570

Zoom In Zoom Out

Sample Name: FC1015-2 Acquired: 12/20/2022 16:34:24 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2421.6**	**6603.5**	**35829.**	**5525.5**
Stddev	9.3	17.7	243.	68.8
%RSD	.38419	.26870	.67828	1.2454
#1	2411.7	6586.0	35555.	5446.3
#2	2430.1	6621.5	35914.	5559.6
#3	2423.1	6602.8	36018.	5570.5

Zoom In Zoom Out

Sample Name: FC1015-5 Acquired: 12/20/2022 16:39:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0604**	**-.0014**	**.0106**	**.0121**	**.0000**	**62.34**	**.0000**	**.0002**
Stddev	.0003	.0025	.0005	.0026	.0002	.0000	.21	.0001	.0001
%RSD	671.3	4.130	37.63	24.83	1.699	963.0	.3424	380.1	49.29
#1	.0003	.0633	-.0014	.0102	.0123	.0000	62.58	.0000	.0001
#2	.0000	.0586	-.0019	.0134	.0119	.0000	62.26	.0001	.0002
#3	-.0002	.0594	-.0009	.0082	.0122	.0000	62.17	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0039**	**.1839**	**11.71**	**.0057**	**5.425**	**.2076**	**.0004**	**40.53**
Stddev	.0004	.0005	.0020	.05	.0023	.024	.0004	.0001	.13
%RSD	93.57	13.21	1.092	.4082	40.50	.4354	.1897	16.86	.3256
#1	.0008	.0034	.1827	11.71	.0083	5.451	.2080	.0005	40.68
#2	.0000	.0044	.1827	11.76	.0039	5.419	.2073	.0004	40.47
#3	.0004	.0041	.1862	11.66	.0049	5.405	.2075	.0004	40.44

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0008**	**.0011**	**.0000**	**2.604**	**.0003**	**.1643**	**.0038**	**-.0013**
Stddev	.0001	.0005	.0007	.0027	.002	.0005	.0007	.0002	.0013
%RSD	39.88	56.94	67.29	14700.	.0783	147.3	.4264	4.213	100.2
#1	.0001	-.0013	.0005	.0024	2.601	.0000	.1652	.0037	-.0025
#2	.0001	-.0004	.0019	-.0030	2.604	.0001	.1639	.0037	-.0013
#3	.0002	-.0009	.0008	.0006	2.605	.0009	.1640	.0040	.0000

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0007**	**.0176**
Stddev	.0005	.0000
%RSD	63.85	.1179
#1	.0012	.0176
#2	.0003	.0176
#3	.0007	.0176

Zoom In Zoom Out

Sample Name: FC1015-5 Acquired: 12/20/2022 16:39:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2700.4**	**6888.9**	**38197.**	**5606.9**
Stddev	3.1	7.8	228.	16.6
%RSD	.11331	.11306	.59775	.29653
#1	2701.1	6892.4	38152.	5622.3
#2	2697.1	6879.9	38445.	5589.3
#3	2703.1	6894.2	37995.	5609.3

Zoom In Zoom Out

Sample Name: FC1018-1 Acquired: 12/20/2022 16:44:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.1299**	**.0834**	**F 3.115**	**.0019**	**.0002**	**662.3**	**.0075**	**.0015**
Stddev	.0005	.0032	.0054	.022	.0008	.0002	9.9	.0002	.0005
%RSD	309.7	2.479	6.534	.6944	45.34	97.25	1.490	2.316	31.58
#1	-.0003	.1313	.0895	3.101	.0009	.0004	668.9	.0075	.0019
#2	.0002	.1322	.0817	3.140	.0026	.0000	651.0	.0073	.0010
#3	.0006	.1262	.0790	3.105	.0021	.0004	667.1	.0076	.0016

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0161**	**.3721**	**20.86**	**.2174**	**209.0**	**.7298**	**.0196**	**F 889.3**
Stddev	.0006	.0017	.0220	.25	.0118	.6	.0019	.0005	4.8
%RSD	39.43	10.37	5.924	1.191	5.415	.2870	.2576	2.407	.5391
#1	.0009	.0171	.3855	20.63	.2227	208.4	.7319	.0191	885.3
#2	.0020	.0142	.3842	20.83	.2039	209.6	.7285	.0195	894.6
#3	.0021	.0171	.3467	21.12	.2256	209.2	.7288	.0201	887.8

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0140**	**-.0103**	**.0037**	**.0028**	**3.967**	**.0040**	**11.44**	**.0153**	**-.0014**
Stddev	.0004	.0040	.0083	.0102	.004	.0003	.03	.0006	.0055
%RSD	2.589	38.88	221.2	361.3	.1122	8.400	.3041	3.955	403.3
#1	.0144	-.0148	.0076	.0126	3.964	.0043	11.44	.0146	.0047
#2	.0137	-.0071	.0094	.0037	3.965	.0036	11.47	.0157	-.0061
#3	.0139	-.0091	-.0058	-.0078	3.972	.0040	11.40	.0156	-.0027

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0003**	**.0341**
Stddev	.0006	.0001
%RSD	178.2	.3337
#1	-.0004	.0340
#2	.0007	.0342
#3	.0007	.0341

Zoom In Zoom Out

Sample Name: FC1018-1 Acquired: 12/20/2022 16:44:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2569.7	6732.6	36972.	5535.1
Stddev	4.2	9.5	166.	28.1
%RSD	.16311	.14048	.44881	.50829
#1	2566.2	6742.1	36889.	5510.5
#2	2574.3	6723.2	37163.	5565.8
#3	2568.6	6732.4	36865.	5528.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 16:49:51 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2440	39.87	2.001	F 2.001	2.025	2.018	40.08	2.017	2.019
Stddev	.0005	.19	.004	.016	.003	.011	.07	.003	.001
%RSD	.1878	.4770	.2085	.7871	.1537	.5512	.1779	.1220	.0544
#1	.2435	40.09	2.001	2.009	2.028	2.030	40.16	2.015	2.018
#2	.2444	39.74	1.997	2.011	2.023	2.014	40.03	2.018	2.019
#3	.2441	39.77	2.005	1.983	2.023	2.009	40.06	2.020	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.001	2.004	39.98	40.25	2.008	40.18	2.028	2.016	40.61
Stddev	.007	.005	.26	.04	.011	.19	.017	.002	.03
%RSD	.3678	.2378	.6510	.1025	.5676	.4642	.8335	.0947	.0698
#1	1.995	2.001	40.28	40.29	2.021	40.39	2.040	2.015	40.65
#2	2.009	2.010	39.83	40.21	2.000	40.03	2.035	2.016	40.59
#3	2.000	2.002	39.84	40.24	2.003	40.12	2.009	2.019	40.60
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.009	1.978	2.008	2.006	2.247	2.003	2.017	2.021	1.987
Stddev	.001	.004	.001	.003	.002	.000	.003	.004	.006
%RSD	.0296	.1978	.0507	.1593	.0756	.0209	.1554	.2069	.2927
#1	2.008	1.973	2.008	2.006	2.245	2.003	2.013	2.016	1.982
#2	2.009	1.981	2.009	2.002	2.247	2.004	2.019	2.024	1.993
#3	2.010	1.979	2.007	2.009	2.249	2.003	2.018	2.021	1.988
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 16:49:51 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	2.009	2.006
Stddev	.007	.001
%RSD	.3555	.0602
#1	2.002	2.005
#2	2.016	2.007
#3	2.008	2.007
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2536.7	6835.6	37924.	5624.2
Stddev	8.2	13.5	42.	29.1
%RSD	.32468	.19765	.10947	.51783
#1	2542.0	6841.0	37972.	5632.9
#2	2527.2	6820.2	37905.	5648.0
#3	2540.8	6845.5	37895.	5591.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 16:54:52 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0076	-.0012	F .0026	-.0001	.0001	.0062	.0001
Stddev	.0004	.0021	.0008	.0007	.0001	.0001	.0020	.0000
%RSD	458.4	27.95	68.34	26.33	135.5	186.3	31.39	55.59
#1	-.0003	.0085	-.0020	.0030	-.0002	.0002	.0074	.0001
#2	.0005	.0052	-.0003	.0018	-.0001	.0000	.0040	.0001
#3	.0002	.0091	-.0013	.0029	.0000	.0000	.0073	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.0002	-.0004	.0014	.0556	F -.0030	-.0091	.0001
Stddev	.0001	.0002	.0001	.0019	.0384	.0030	.0142	.0000
%RSD	152.7	97.21	18.84	134.7	69.10	100.1	155.3	24.28
#1	.0000	-.0003	-.0004	.0008	.0924	-.0036	-.0226	.0001
#2	.0000	-.0004	-.0004	.0035	.0586	-.0058	-.0103	.0001
#3	.0002	.0000	-.0003	-.0001	.0158	.0002	.0056	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0895	.0000	-.0006	.0004	-.0004	-.0003	.0001
Stddev	.0002	.0062	.000	.0004	.0004	.0014	.0007	.0001
%RSD	114.1	6.959	114.2	65.16	96.65	340.5	274.2	103.1
#1	.0004	.0829	.0000	-.0010	.0007	.0000	-.0010	.0002
#2	.0000	.0902	.0000	-.0005	.0001	-.0019	.0004	.0000
#3	.0001	.0953	.0000	-.0002	.0003	.0007	-.0002	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 16:54:52 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0011**	**.0003**	**.0000**
Stddev	.0001	.000	.0006	.0002	.000
%RSD	36.42	458.4	53.67	69.24	233.1
#1	.0003	-.0002	.0018	.0001	.0000
#2	.0002	.0000	.0006	.0005	.0000
#3	.0001	.0001	.0011	.0004	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3049.7**	**7219.1**	**40421.**	**5746.4**
Stddev	5.9	16.0	247.	30.6
%RSD	.19394	.22148	.61084	.53250
#1	3045.7	7201.9	40566.	5745.3
#2	3046.9	7222.0	40561.	5777.6
#3	3056.5	7233.5	40136.	5716.4

Zoom In Zoom Out

Sample Name: FC1018-2 Acquired: 12/20/2022 16:59:54 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.1067**	**.0438**	F **4.714**	**-.0023**	**.0001**	**585.6**	**.0002**	**.0008**
Stddev	.0029	.0243	.0033	.012	.0008	.0003	4.0	.0002	.0006
%RSD	389.8	22.78	7.571	.2529	33.24	211.3	.6789	115.8	74.79
#1	-.0027	.1173	.0441	4.727	-.0016	-.0001	581.9	.0004	.0006
#2	.0025	.0789	.0469	4.706	-.0031	.0000	589.8	.0000	.0016
#3	-.0020	.1239	.0403	4.708	-.0022	.0004	585.0	.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0061**	**.4845**	**21.59**	**.3701**	**478.3**	**1.146**	**.0195**	F **1235.**
Stddev	.0025	.0013	.0036	.25	.0072	2.7	.002	.0008	16.
%RSD	261.8	20.70	.7499	1.145	1.949	.5711	.2127	4.075	1.310
#1	.0019	.0073	.4852	21.45	.3739	477.6	1.148	.0186	1231.
#2	.0027	.0062	.4877	21.88	.3618	481.3	1.144	.0197	1252.
#3	-.0019	.0048	.4805	21.45	.3747	475.9	1.147	.0201	1221.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063**	**-.0099**	**-.0031**	**-.0086**	**3.938**	**.0010**	**12.06**	**.0141**	**.0084**
Stddev	.0007	.0030	.0061	.0103	.016	.0010	.07	.0005	.0054
%RSD	10.35	30.25	196.9	119.6	.4030	97.00	.5865	3.480	64.59
#1	.0060	-.0133	-.0004	-.0205	3.927	.0012	12.11	.0144	.0129
#2	.0070	-.0075	.0011	-.0025	3.930	-.0001	12.10	.0136	.0024
#3	.0059	-.0089	-.0101	-.0029	3.956	.0020	11.98	.0144	.0099

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0001**	**.0091**
Stddev	.0015	.0004
%RSD	2794.	4.010
#1	.0011	.0089
#2	-.0017	.0089
#3	.0007	.0095

Zoom In Zoom Out

Sample Name: FC1018-2 Acquired: 12/20/2022 16:59:54 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2526.9**	**6676.6**	**36849.**	**5642.0**
Stddev	8.8	22.6	147.	32.7
%RSD	.34738	.33822	.40018	.57945
#1	2530.7	6688.7	36691.	5672.8
#2	2533.2	6690.6	36983.	5607.7
#3	2516.9	6650.6	36872.	5645.4

Zoom In Zoom Out

Sample Name: FC1018-3 Acquired: 12/20/2022 17:05:10 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0023**	**.0992**	**-.0016**	F **5.969**	**-.0057**	**.0004**	**582.1**	**.0001**	**.0028**
Stddev	.0035	.0788	.0053	.025	.0021	.0001	4.0	.0003	.0005
%RSD	151.4	79.44	336.4	.4114	37.25	32.64	.6924	327.1	16.84
#1	-.0031	.0284	-.0074	5.941	-.0049	.0006	578.9	.0003	.0029
#2	.0015	.1840	-.0003	5.988	-.0081	.0003	586.6	.0003	.0023
#3	-.0053	.0851	.0030	5.978	-.0041	.0004	580.8	-.0003	.0032

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0039**	**.3073**	**27.61**	**.4324**	**452.1**	**3.282**	**.0242**	F **2089.**
Stddev	.0011	.0004	.0145	.10	.0085	.7	.005	.0010	22.
%RSD	75.28	11.06	4.730	.3725	1.960	.1619	.1468	4.279	1.047
#1	.0007	.0042	.3128	27.60	.4391	451.2	3.285	.0253	2065.
#2	.0026	.0040	.3182	27.51	.4229	452.5	3.277	.0233	2093.
#3	.0009	.0034	.2908	27.72	.4353	452.6	3.285	.0239	2108.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1175**	**-.0137**	**.0040**	**-.0041**	**4.741**	**.0001**	**10.47**	**.0144**	**.0026**
Stddev	.0010	.0053	.0015	.0117	.022	.0020	.03	.0004	.0105
%RSD	.8473	38.90	37.56	285.2	.4626	1599.	.3303	2.690	411.4
#1	.1170	-.0082	.0036	-.0084	4.722	.0005	10.43	.0147	-.0006
#2	.1169	-.0188	.0028	-.0130	4.737	-.0020	10.49	.0146	.0143
#3	.1187	-.0141	.0057	.0092	4.765	.0018	10.49	.0140	-.0060

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0000**	**.0047**
Stddev	.0006	.0002
%RSD	2868.	3.387
#1	-.0006	.0047
#2	.0003	.0045
#3	.0004	.0048

Zoom In Zoom Out

Sample Name: FC1018-3 Acquired: 12/20/2022 17:05:10 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2458.2**	**6533.0**	**35948.**	**5552.6**
Stddev	3.2	34.8	141.	27.5
%RSD	.13006	.53268	.39358	.49469
#1	2456.6	6565.0	35908.	5581.2
#2	2461.9	6537.9	35830.	5550.2
#3	2456.1	6495.9	36105.	5526.5

Zoom In Zoom Out

Sample Name: FC1018-4 Acquired: 12/20/2022 17:10:27 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0696**	**.0116**	F **5.586**	**-.0006**	**-.0002**	**572.3**	**.0003**	**.0030**
Stddev	.0031	.1138	.0024	.018	.0009	.0002	5.1	.0002	.0006
%RSD	333.8	163.5	20.94	.3276	148.2	107.6	.8908	64.61	18.50
#1	-.0018	.0949	.0131	5.597	-.0002	-.0001	568.7	.0001	.0029
#2	.0002	.1687	.0088	5.564	-.0017	.0000	578.1	.0003	.0025
#3	.0043	-.0547	.0128	5.595	.0000	-.0004	570.0	.0003	.0036

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0043**	**1.401**	**24.69**	**.4137**	**382.9**	**1.923**	**.0350**	F **2549.**
Stddev	.0007	.0020	.004	.37	.0114	1.5	.006	.0005	33.
%RSD	25.59	46.70	.3104	1.486	2.766	.3873	.3345	1.477	1.308
#1	.0036	.0059	1.399	24.94	.4240	383.1	1.928	.0354	2543.
#2	.0022	.0021	1.398	24.87	.4014	384.2	1.916	.0344	2585.
#3	.0026	.0048	1.406	24.27	.4155	381.3	1.925	.0352	2520.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1679**	**-.0114**	**.0092**	**-.0006**	**4.229**	**.0009**	**10.03**	**.0153**	**.0038**
Stddev	.0009	.0042	.0060	.0048	.013	.0017	.05	.0009	.0076
%RSD	.5509	37.14	65.48	867.4	.2948	184.6	.5002	6.101	203.4
#1	.1673	-.0068	.0046	.0048	4.214	.0004	10.07	.0150	.0090
#2	.1675	-.0150	.0161	-.0045	4.237	.0029	10.05	.0145	-.0050
#3	.1690	-.0123	.0071	-.0020	4.235	-.0005	9.976	.0164	.0073

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0005**	**.0096**
Stddev	.0004	.0001
%RSD	72.49	.8095
#1	-.0001	.0095
#2	-.0007	.0096
#3	-.0008	.0096

Zoom In Zoom Out

Sample Name: FC1018-4 Acquired: 12/20/2022 17:10:27 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2437.4**	**6503.2**	**35822.**	**5546.6**
Stddev	.8	10.0	229.	11.2
%RSD	.03248	.15370	.63996	.20262
#1	2436.4	6497.8	35614.	5555.0
#2	2437.8	6514.7	36068.	5533.9
#3	2437.9	6497.0	35783.	5551.0

Zoom In Zoom Out

Sample Name: FC1018-5 Acquired: 12/20/2022 17:15:43 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.1083**	**.0193**	F **5.307**	**-.0069**	**.0000**	**538.6**	**.0002**	**.0006**
Stddev	.0020	.0580	.0034	.057	.0005	.000	12.7	.0002	.0003
%RSD	231.5	53.52	17.45	1.071	6.838	690.2	2.360	76.32	62.05
#1	-.0014	.0420	.0229	5.266	-.0066	-.0002	549.1	.0002	.0007
#2	.0016	.1495	.0163	5.284	-.0074	-.0002	542.2	.0001	.0008
#3	.0024	.1333	.0187	5.372	-.0066	.0003	524.4	.0004	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0034**	**.8944**	**18.70**	**.3436**	**465.0**	**.2737**	**.0118**	F **1421.**
Stddev	.0016	.0021	.0162	.11	.0065	2.7	.0012	.0006	15.
%RSD	179.7	62.74	1.817	.6090	1.898	.5817	.4211	5.064	1.061
#1	.0027	.0021	.9129	18.77	.3472	467.7	.2749	.0118	1438.
#2	.0003	.0022	.8828	18.77	.3361	464.9	.2726	.0112	1417.
#3	-.0003	.0058	.8874	18.57	.3476	462.3	.2736	.0124	1409.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0084**	**-.0099**	**-.0002**	**-.0037**	**3.636**	**-.0003**	**9.127**	**.0140**	**-.0015**
Stddev	.0010	.0024	.0040	.0174	.013	.0033	.031	.0006	.0012
%RSD	11.38	23.69	1650.	475.5	.3532	1252.	.3419	4.169	81.09
#1	.0076	-.0117	-.0032	-.0218	3.633	.0013	9.160	.0140	-.0023
#2	.0095	-.0108	-.0019	-.0021	3.624	-.0041	9.122	.0135	-.0020
#3	.0082	-.0073	.0044	.0129	3.649	.0020	9.098	.0146	-.0001

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0019**	**.0048**
Stddev	.0001	.0002
%RSD	6.625	3.963
#1	-.0019	.0048
#2	-.0017	.0047
#3	-.0020	.0050

Zoom In Zoom Out

Sample Name: FC1018-5 Acquired: 12/20/2022 17:15:43 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2507.3**	**6619.9**	**36371.**	**5528.6**
Stddev	.9	10.3	110.	82.0
%RSD	.03608	.15513	.30348	1.4824
#1	2506.6	6608.1	36419.	5467.0
#2	2506.9	6626.5	36449.	5497.3
#3	2508.3	6625.1	36245.	5621.6

Zoom In Zoom Out

Sample Name: FC1018-6 Acquired: 12/20/2022 17:20:57 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0790**	**-.0030**	**1.607**	**.0033**	**.0004**	**693.4**	**.0004**	**.0020**
Stddev	.001	.0745	.0053	.022	.0006	.0005	12.2	.0002	.0006
%RSD	1533.	94.26	176.2	1.359	18.27	135.8	1.760	54.37	28.55
#1	.0001	-.0043	-.0056	1.632	.0032	-.0001	684.2	.0005	.0024
#2	-.0007	.1023	.0031	1.597	.0039	.0010	688.8	.0005	.0013
#3	.0005	.1391	-.0065	1.592	.0027	.0003	707.3	.0001	.0023

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0039**	**.2509**	**39.59**	**.1521**	**236.5**	**.7972**	**.0323**	F **1705.**
Stddev	.0018	.0013	.0107	.09	.0028	.8	.0016	.0009	13.
%RSD	62.88	34.14	4.277	.2151	1.863	.3465	.1978	2.853	.7428
#1	.0027	.0053	.2454	39.53	.1488	235.7	.7990	.0331	1690.
#2	.0011	.0026	.2440	39.55	.1538	236.5	.7966	.0313	1712.
#3	.0046	.0039	.2633	39.69	.1537	237.3	.7961	.0324	1712.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0375**	**-.0120**	**.0028**	**.0046**	**4.898**	**.0016**	**12.07**	**.0151**	**.0084**
Stddev	.0003	.0016	.0077	.0058	.010	.0020	.04	.0004	.0125
%RSD	.7589	13.14	272.8	126.9	.1960	126.2	.2906	2.783	148.6
#1	.0372	-.0102	.0014	.0104	4.896	.0021	12.11	.0147	.0166
#2	.0376	-.0130	-.0041	.0045	4.889	.0032	12.06	.0155	-.0060
#3	.0377	-.0127	.0111	-.0012	4.908	-.0006	12.04	.0151	.0146

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0005**	**.0139**
Stddev	.0008	.0002
%RSD	168.8	1.516
#1	.0003	.0141
#2	.0014	.0140
#3	-.0002	.0137

Zoom In Zoom Out

Sample Name: FC1018-6 Acquired: 12/20/2022 17:20:57 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2496.5**	**6628.7**	**36647.**	**5648.9**
Stddev	8.1	44.5	29.	47.0
%RSD	.32518	.67158	.08026	.83148
#1	2491.1	6595.3	36641.	5698.8
#2	2505.8	6679.2	36679.	5642.1
#3	2492.6	6611.6	36621.	5605.6

Zoom In Zoom Out

Sample Name: FC1020-1 Acquired: 12/20/2022 17:26:15 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0264**	**-.0002**	**.0198**	**.0289**	**.0000**	**131.2**	**.0000**	**.0007**
Stddev	.0007	.0051	.0005	.0030	.0004	.0001	.5	.0000	.0001
%RSD	233.5	19.49	316.2	15.27	1.503	738.3	.3734	127.3	15.27
#1	-.0004	.0205	-.0004	.0221	.0292	.0000	131.4	.0000	.0008
#2	.0010	.0288	.0004	.0209	.0284	.0001	131.6	.0001	.0006
#3	.0003	.0300	-.0005	.0164	.0292	.0000	130.6	.0000	.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0029**	**2.914**	**1.493**	**.0055**	**9.989**	**3.151**	**.0004**	**3.814**
Stddev	.0001	.0005	.012	.011	.0017	.027	.055	.0002	.015
%RSD	19.57	16.41	.3938	.7052	29.84	.2725	1.745	59.56	.3830
#1	.0008	.0032	2.921	1.484	.0066	9.976	3.179	.0004	3.821
#2	.0007	.0031	2.900	1.492	.0036	9.971	3.187	.0007	3.797
#3	.0005	.0023	2.919	1.505	.0064	10.02	3.088	.0002	3.823

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**-.0023**	**.0009**	**.0015**	**3.665**	**.0005**	**.2040**	**.0030**	**.0050**
Stddev	.0001	.0006	.0012	.0016	.006	.0002	.0010	.0001	.0010
%RSD	7.014	24.30	131.2	106.2	.1783	44.51	.4966	3.975	20.02
#1	.0013	-.0027	.0021	.0031	3.658	.0006	.2038	.0030	.0041
#2	.0015	-.0025	.0011	.0016	3.671	.0005	.2032	.0031	.0061
#3	.0015	-.0016	-.0003	-.0001	3.665	.0002	.2051	.0029	.0049

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0000**	**.0217**
Stddev	.000	.0000
%RSD	363.8	.1405
#1	.0000	.0216
#2	.0000	.0217
#3	-.0001	.0217

Zoom In Zoom Out

Sample Name: FC1020-1 Acquired: 12/20/2022 17:26:15 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2767.8	7026.3	39023.	5674.5
Stddev	6.1	12.8	298.	9.4
%RSD	.22167	.18152	.76481	.16621
#1	2764.6	7015.2	39034.	5666.4
#2	2774.9	7040.2	38719.	5684.9
#3	2764.0	7023.6	39315.	5672.2

Zoom In Zoom Out

Sample Name: FC1020-2 Acquired: 12/20/2022 17:31:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.1293	-.0009	.0091	.0056	.0001	19.59	.0000	.0001
Stddev	.0002	.0137	.0005	.0015	.0003	.0001	.03	.0001	.0001
%RSD	89.10	10.63	50.36	16.90	6.267	163.3	.1604	181.8	46.39
#1	-.0001	.1181	-.0006	.0107	.0059	.0001	19.62	.0000	.0001
#2	-.0001	.1251	-.0007	.0077	.0056	.0002	19.58	.0001	.0001
#3	-.0005	.1446	-.0014	.0089	.0052	.0000	19.56	.0000	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0041	.8765	1.291	-.0030	1.833	.2233	.0002	4.205
Stddev	.0003	.0003	.0040	.071	.0008	.010	.0003	.0002	.001
%RSD	101.3	7.902	.4517	5.529	26.48	.5232	.1473	135.6	.0313
#1	.0004	.0042	.8741	1.337	-.0034	1.823	.2229	.0004	4.206
#2	.0006	.0045	.8811	1.327	-.0021	1.836	.2236	.0002	4.204
#3	.0000	.0038	.8744	1.209	-.0034	1.842	.2234	-.0001	4.204

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	-.0004	.0005	-.0005	1.922	.0003	.0475	.0026	.0004
Stddev	.0001	.0001	.0005	.0008	.002	.0003	.0003	.0000	.0008
%RSD	12.30	16.33	96.90	168.6	.0881	73.34	.6113	1.578	186.5
#1	.0005	-.0005	.0009	-.0004	1.923	.0003	.0478	.0026	.0002
#2	.0005	-.0004	.0007	-.0014	1.920	.0001	.0472	.0027	-.0002
#3	.0006	-.0004	.0000	.0003	1.922	.0006	.0475	.0026	.0013

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	.0005	.0205
Stddev	.0001	.0000
%RSD	24.46	.1089
#1	.0005	.0205
#2	.0007	.0205
#3	.0004	.0205

Zoom In Zoom Out

Sample Name: FC1020-2 Acquired: 12/20/2022 17:31:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2935.4	7199.5	40276.	5760.6
Stddev	3.5	15.6	69.	16.9
%RSD	.11885	.21710	.17009	.29332
#1	2933.6	7186.2	40353.	5748.9
#2	2939.4	7216.7	40252.	5779.9
#3	2933.2	7195.7	40223.	5752.9

Zoom In Zoom Out

Sample Name: FC1020-3 Acquired: 12/20/2022 17:36:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	5.200	.0095	.0187	.1253	.0004	127.7	-.0001
Stddev	.0004	.018	.0010	.0042	.0006	.0000	2.1	.0001
%RSD	434.1	.3421	10.85	22.34	.5001	7.044	1.681	74.83
#1	-.0002	5.218	.0087	.0185	.1260	.0004	126.1	-.0001
#2	-.0001	5.182	.0106	.0231	.1250	.0004	126.8	.0000
#3	.0006	5.200	.0091	.0147	.1249	.0004	130.1	-.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0036	.0068	.0178	51.10	3.829	.0384	9.344	2.216
Stddev	.0000	.0003	.0002	.23	.071	.0011	.016	.008
%RSD	.4947	4.247	1.254	.4416	1.866	2.852	.1686	.3630
#1	.0037	.0065	.0180	51.02	3.782	.0383	9.329	2.213
#2	.0036	.0068	.0176	50.93	3.794	.0395	9.342	2.209
#3	.0037	.0071	.0180	51.36	3.911	.0373	9.360	2.225

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	9.692	.0087	F -.0064	-.0006	.0011	8.964	.0006
Stddev	.0002	.017	.0002	.0000	.0005	.0027	.011	.0002
%RSD	36.52	.1715	1.764	.3785	90.78	242.1	.1276	35.37
#1	.0005	9.708	.0087	-.0065	-.0003	.0040	8.974	.0008
#2	.0006	9.675	.0085	-.0064	-.0003	.0006	8.952	.0004
#3	.0003	9.691	.0088	-.0064	-.0012	-.0013	8.967	.0006

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.3492	.0425	.0045	.0093	.0529
Stddev	.0011	.0008	.0022	.0001	.0001
%RSD	.3267	1.973	49.04	.6623	.1633
#1	.3505	.0423	.0066	.0093	.0529
#2	.3485	.0418	.0022	.0092	.0528
#3	.3486	.0434	.0046	.0093	.0529

Zoom In Zoom Out

Sample Name: FC1020-3 Acquired: 12/20/2022 17:36:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2704.4**	**7141.2**	**39448.**	**5798.6**
Stddev	8.7	5.5	217.	67.8
%RSD	.32081	.07758	.55033	1.1686
#1	2702.4	7137.5	39298.	5842.4
#2	2696.9	7138.5	39697.	5832.8
#3	2713.9	7147.6	39349.	5720.5

Zoom In Zoom Out

Sample Name: FC1025-1 Acquired: 12/20/2022 17:41:51 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.1156**	**.3967**	F **5.000**	**.3607**	**.0002**	**62.33**	**-.0003**
Stddev	.0021	.0356	.0038	.060	.0004	.0003	.22	.0004
%RSD	231.5	30.83	.9655	1.207	.1131	147.0	.3556	154.4
#1	.0009	.0753	.3928	5.069	.3611	.0000	62.57	-.0004
#2	-.0031	.1284	.4004	4.965	.3606	.0006	62.27	-.0007
#3	-.0005	.1431	.3969	4.965	.3603	.0001	62.14	.0002

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0363**	**.0254**	**.0105**	**17.49**	F **5921.**	F **16.87**	**6.667**	**.1784**
Stddev	.0005	.0009	.0021	.05	41.	.08	.066	.0008
%RSD	1.428	3.686	19.72	.2723	.6915	.4560	.9853	.4440
#1	.0369	.0265	.0105	17.54	5921.	16.95	6.725	.1793
#2	.0358	.0249	.0126	17.49	5881.	16.86	6.596	.1782
#3	.0363	.0249	.0084	17.45	5963.	16.80	6.679	.1777

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.472**	F **10270.**	**.6261**	**-.0099**	**.0322**	**.0706**	**17.63**	**.0052**
Stddev	.004	78.	.0016	.0048	.0048	.0112	.01	.0008
%RSD	.1078	.7555	.2476	49.01	14.85	15.85	.0783	16.31
#1	3.476	10360.	.6265	-.0046	.0369	.0812	17.63	.0047
#2	3.472	10260.	.6244	-.0142	.0325	.0589	17.62	.0062
#3	3.469	10200.	.6275	-.0108	.0273	.0718	17.64	.0047

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.43**	**.0155**	**-.0334**	**.1361**	**.0238**
Stddev	.27	.0007	.0035	.0008	.0005
%RSD	1.879	4.381	10.38	.5828	1.937
#1	14.12	.0152	-.0368	.1370	.0235
#2	14.62	.0163	-.0299	.1354	.0243
#3	14.56	.0150	-.0336	.1361	.0235

Zoom In Zoom Out

Sample Name: FC1025-1 Acquired: 12/20/2022 17:41:51 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2140.6**	**6040.4**	**32255.**	**5394.4**
Stddev	2.6	11.0	132.	46.8
%RSD	.12081	.18130	.41075	.86689
#1	2137.8	6028.2	32114.	5447.0
#2	2142.8	6043.5	32377.	5378.5
#3	2141.1	6049.5	32273.	5357.7

Zoom In Zoom Out

Sample Name: FC1025-2 Acquired: 12/20/2022 17:47:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0025**	**.0333**	**.1324**	F **5.483**	**2.343**	**.0005**	**176.0**	**-.0001**	**.0319**
Stddev	.0033	.0753	.0018	.001	.010	.0001	.6	.0003	.0006
%RSD	133.1	226.1	1.342	.0188	.4100	30.35	.3506	636.0	1.948
#1	-.0062	.1189	.1303	5.482	2.342	.0005	175.8	.0002	.0325
#2	-.0014	.0034	.1334	5.482	2.353	.0003	176.6	.0000	.0312
#3	.0002	-.0225	.1334	5.484	2.334	.0006	175.5	-.0004	.0319

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0729**	**.0093**	**3.419**	F **1793.**	**1.835**	**92.49**	**.6962**	**.8722**	F **5302.**
Stddev	.0014	.0009	.006	7.	.007	.33	.0013	.0023	83.
%RSD	1.914	9.672	.1680	.3789	.3654	.3612	.1850	.2688	1.564
#1	.0718	.0097	3.418	1794.	1.835	92.54	.6976	.8698	5250.
#2	.0725	.0100	3.413	1800.	1.842	92.80	.6959	.8723	5397.
#3	.0745	.0083	3.425	1786.	1.828	92.14	.6951	.8745	5258.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1764**	**-.0118**	**.0061**	**.0217**	**15.11**	**.0043**	**5.212**	**.0758**	**-.0037**
Stddev	.0004	.0038	.0078	.0024	.02	.0007	.026	.0009	.0122
%RSD	.2004	32.19	128.3	10.92	.1444	15.82	.5039	1.169	332.5
#1	.1761	-.0138	.0151	.0209	15.09	.0040	5.210	.0759	.0082
#2	.1762	-.0143	.0008	.0197	15.12	.0038	5.240	.0748	-.0030
#3	.1768	-.0074	.0024	.0243	15.13	.0050	5.187	.0766	-.0162

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.1331**	**.0363**
Stddev	.0021	.0002
%RSD	1.545	.4642
#1	.1332	.0362
#2	.1351	.0362
#3	.1310	.0365

Zoom In Zoom Out

Sample Name: FC1025-2 Acquired: 12/20/2022 17:47:17 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2322.2	6411.1	34510.	5444.7
Stddev	5.9	17.8	172.	34.3
%RSD	.25569	.27819	.49861	.62922
#1	2320.6	6414.1	34318.	5476.1
#2	2317.3	6391.9	34650.	5408.2
#3	2328.8	6427.2	34563.	5449.9

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 17:52:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2447	40.54	2.012	F 1.997	2.053	2.042	40.78	2.041	2.047
Stddev	.0005	.19	.002	.018	.010	.009	.19	.001	.001
%RSD	.1878	.4704	.1069	.8859	.5006	.4372	.4762	.0225	.0336
#1	.2443	40.72	2.010	2.011	2.061	2.050	40.96	2.041	2.048
#2	.2452	40.56	2.014	2.002	2.057	2.043	40.81	2.042	2.048
#3	.2446	40.34	2.012	1.977	2.042	2.033	40.57	2.041	2.047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.011	2.035	40.71	41.73	2.056	41.29	1.999	2.042	42.05
Stddev	.004	.005	.22	.17	.009	.25	.026	.000	.20
%RSD	.2218	.2318	.5426	.4108	.4450	.5940	1.284	.0202	.4700
#1	2.007	2.030	40.93	41.86	2.065	41.52	2.003	2.042	42.23
#2	2.012	2.035	40.73	41.79	2.054	41.30	2.023	2.042	42.10
#3	2.016	2.040	40.49	41.54	2.047	41.03	1.972	2.041	41.84
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.025	1.982	2.022	2.031	2.295	2.008	2.050	2.035	1.985
Stddev	.001	.001	.001	.006	.004	.003	.008	.004	.001
%RSD	.0692	.0297	.0459	.3040	.1882	.1244	.3862	.2021	.0460
#1	2.024	1.983	2.022	2.024	2.299	2.007	2.057	2.034	1.984
#2	2.024	1.981	2.022	2.031	2.295	2.006	2.052	2.039	1.986
#3	2.026	1.982	2.024	2.037	2.290	2.011	2.041	2.031	1.986
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 17:52:25 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	2.016	2.020
Stddev	.004	.002
%RSD	.2195	.0911
#1	2.012	2.021
#2	2.021	2.018
#3	2.014	2.021
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2505.5	6702.9	37467.	5431.7
Stddev	7.4	13.1	25.	23.1
%RSD	.29461	.19549	.06593	.42529
#1	2499.4	6694.6	37468.	5457.7
#2	2513.7	6718.0	37441.	5424.1
#3	2503.3	6696.1	37491.	5413.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 17:57:27 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	-.0026	-.0014	F .0041	.0001	.0002	.0037	.0000
Stddev	.0004	.0058	.0009	.0013	.0002	.0001	.0017	.0000
%RSD	108.4	225.3	62.02	30.60	184.6	34.95	44.46	223.5
#1	.0003	.0031	-.0023	.0033	.0001	.0001	.0021	.0000
#2	.0000	-.0024	-.0013	.0034	-.0001	.0002	.0054	.0000
#3	.0007	-.0084	-.0006	.0055	.0003	.0001	.0037	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0001	-.0005	.0052	.2906	F -.0033	-.0065	.0001
Stddev	.0001	.0003	.0002	.0026	.0290	.0012	.0062	.0000
%RSD	93.87	518.8	34.93	50.82	9.967	37.66	94.87	31.83
#1	.0002	-.0001	-.0005	.0075	.2572	-.0046	-.0012	.0001
#2	.0000	-.0002	-.0006	.0058	.3082	-.0030	-.0050	.0001
#3	.0001	.0004	-.0003	.0023	.3065	-.0022	-.0132	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.3926	.0001	-.0001	.0001	.0015	.0047	.0004
Stddev	.0001	.0141	.0001	.0008	.0014	.0010	.0004	.0004
%RSD	90.19	3.589	129.5	816.2	1421.	64.76	9.279	93.38
#1	.0000	.4035	.0002	-.0004	-.0012	.0005	.0048	.0001
#2	.0001	.3976	.0000	-.0007	.0016	.0014	.0051	.0003
#3	.0002	.3767	.0000	.0008	-.0001	.0024	.0042	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 17:57:27 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0001**	**.0012**	**.0004**	**.0001**
Stddev	.0002	.0002	.0007	.0003	.0000
%RSD	379.2	335.3	59.14	59.71	48.98
#1	-.0001	-.0002	.0010	.0007	.0000
#2	.0002	.0002	.0020	.0005	.0001
#3	.0000	-.0002	.0006	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3048.4**	**7224.1**	**40034.**	**5609.7**
Stddev	3.9	19.9	58.	59.4
%RSD	.12886	.27571	.14475	1.0589
#1	3043.9	7221.4	40049.	5670.3
#2	3050.0	7205.7	40083.	5551.5
#3	3051.2	7245.3	39970.	5607.3

Zoom In Zoom Out

Sample Name: MP41622-MB2A Acquired: 12/20/2022 18:02:30 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0002**	**-.0013**	**.0028**	**.0002**	**.0001**	**.0394**	**.0000**	**.0001**
Stddev	.0001	.0165	.0008	.0014	.0002	.0001	.0010	.000	.0001
%RSD	51.58	9343.	65.52	49.06	122.9	83.79	2.495	165.3	144.4
#1	-.0003	.0175	-.0022	.0036	.0000	.0001	.0390	-.0001	.0002
#2	-.0001	-.0028	-.0005	.0012	.0004	.0001	.0406	.0000	.0000
#3	-.0004	-.0153	-.0011	.0035	.0002	.0000	.0388	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0041**	**.0079**	**.1629**	**.0016**	**-.0021**	**.0001**	**.0001**	**.3018**
Stddev	.0001	.0001	.0030	.0354	.0022	.0089	.0000	.0001	.0060
%RSD	38.26	3.106	38.06	21.74	132.7	425.3	29.17	70.59	1.978
#1	.0002	.0039	.0046	.1385	.0036	-.0090	.0002	.0002	.2977
#2	.0005	.0042	.0088	.2035	-.0007	-.0053	.0001	.0000	.2991
#3	.0004	.0041	.0104	.1467	.0020	.0080	.0001	.0001	.3087
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0002**	**.0006**	**-.0003**	**.0100**	**.0000**	**.0005**	**.0001**	**-.0003**
Stddev	.000	.0007	.0006	.0016	.0004	.0001	.0000	.0000	.0003
%RSD	784.1	329.4	100.9	553.5	4.167	324.0	7.671	33.13	104.9
#1	-.0001	-.0006	.0000	.0006	.0096	.0002	.0004	.0001	.0001
#2	.0000	-.0006	.0005	-.0022	.0100	.0000	.0005	.0000	-.0005
#3	.0000	.0006	.0013	.0007	.0105	-.0001	.0005	.0001	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP41622-MB2A Acquired: 12/20/2022 18:02:30 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**.0003**	F **.0225**
Stddev	.0003	.0001
%RSD	94.57	.3043
#1	.0006	.0224
#2	.0002	.0225
#3	.0001	.0226
Check ?	Chk Pass	Chk Fail
High Limit		.0100
Low Limit		-.0100

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3010.8**	**7224.6**	**40515.**	**5707.2**
Stddev	5.0	9.2	346.	34.8
%RSD	.16747	.12733	.85358	.60979
#1	3005.0	7222.2	40134.	5680.0
#2	3013.9	7234.7	40605.	5695.3
#3	3013.5	7216.8	40808.	5746.4

Zoom In Zoom Out

Sample Name: FC1018-1 Acquired: 12/20/2022 18:07:31 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.1505**	**.0707**	**3.300**	**.0038**	**.0013**	**727.9**	**.0081**	**.0022**
Stddev	.0054	.1075	.0293	.047	.0052	.0010	2.2	.0006	.0013
%RSD	172.3	71.44	41.38	1.437	134.6	73.51	.2957	6.889	60.61
#1	.0062	.0338	.0835	3.245	-.0002	.0002	727.2	.0076	.0007
#2	-.0031	.1720	.0372	3.329	.0021	.0021	730.3	.0087	.0027
#3	.0062	.2456	.0914	3.325	.0096	.0016	726.1	.0082	.0031

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**.0163**	**.4572**	**23.98**	**.2037**	**233.9**	**.8037**	**.0185**	**981.3**
Stddev	.0045	.0047	.0352	1.43	.0120	.4	.0033	.0018	3.0
%RSD	105.7	28.68	7.708	5.964	5.877	.1713	.4119	9.696	.3103
#1	.0090	.0212	.4741	25.63	.1955	233.5	.8049	.0168	981.2
#2	.0036	.0119	.4167	23.05	.1981	233.9	.7999	.0204	984.4
#3	.0001	.0159	.4809	23.26	.2175	234.3	.8062	.0184	978.3

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0133**	**-.0112**	**-.0015**	**-.0046**	**4.353**	**.0152**	**12.41**	**.0434**	**.0075**
Stddev	.0022	.0055	.0161	.0321	.030	.0076	.04	.0017	.0297
%RSD	16.59	49.02	1067.	698.8	.6898	49.99	.3509	4.016	396.5
#1	.0152	-.0075	-.0200	.0290	4.347	.0086	12.42	.0454	-.0251
#2	.0139	-.0175	.0078	-.0350	4.385	.0136	12.45	.0423	.0144
#3	.0109	-.0086	.0077	-.0078	4.326	.0235	12.36	.0425	.0331

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0035**	**.0378**
Stddev	.0036	.0008
%RSD	103.4	2.175
#1	.0013	.0387
#2	.0016	.0377
#3	.0077	.0371

Zoom In Zoom Out

Sample Name: FC1018-1 Acquired: 12/20/2022 18:07:31 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 20.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2757.9**	**6960.8**	**38283.**	**5591.0**
Stddev	9.0	7.5	419.	35.5
%RSD	.32782	.10780	1.0943	.63411
#1	2758.8	6968.3	37854.	5563.7
#2	2766.5	6953.3	38691.	5578.2
#3	2748.4	6960.9	38304.	5631.1

Zoom In Zoom Out

Sample Name: FC1018-2 Acquired: 12/20/2022 18:12:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0335**	**.5602**	**-.0198**	**3.894**	**-.0123**	**.0093**	**508.6**	**-.0040**	**.0041**
Stddev	.0129	.4765	.0157	.046	.0414	.0078	1.5	.0031	.0075
%RSD	38.60	85.07	79.56	1.173	338.1	83.57	.2975	78.96	182.6
#1	.0368	.2310	-.0349	3.859	.0143	.0137	510.2	-.0009	.0089
#2	.0193	.3429	-.0209	3.878	-.0600	.0003	508.4	-.0038	.0080
#3	.0445	1.107	-.0035	3.946	.0089	.0140	507.2	-.0072	-.0045

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0268**	**-.0248**	**.4570**	**28.37**	**-.0903**	**422.0**	**.9881**	**.0186**	**1091.**
Stddev	.0207	.0319	.0992	3.30	.3062	4.1	.0026	.0152	5.
%RSD	77.28	128.6	21.71	11.64	339.2	.9768	.2621	81.84	.4478
#1	-.0053	-.0098	.5693	24.73	.2430	424.6	.9905	.0072	1094.
#2	-.0467	-.0614	.4207	31.17	-.3592	424.1	.9883	.0127	1094.
#3	-.0284	-.0032	.3811	29.21	-.1546	417.2	.9854	.0359	1086.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**-.0162**	**-.0043**	**-.0024**	**3.546**	**.0213**	**10.20**	**.0492**	**.1215**
Stddev	.0164	.0873	.1022	.0894	.049	.0464	.06	.0096	.1916
%RSD	511.1	539.4	2379.	3693.	1.375	217.3	.5531	19.52	157.7
#1	-.0131	-.0360	.0400	-.1057	3.499	.0593	10.24	.0565	.0951
#2	.0197	.0793	-.1212	.0475	3.596	-.0304	10.23	.0383	-.0555
#3	.0030	-.0919	.0683	.0509	3.544	.0351	10.14	.0528	.3249

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0260**	**.0045**
Stddev	.0203	.0041
%RSD	78.25	92.52
#1	.0261	.0014
#2	.0462	.0028
#3	.0056	.0092

Zoom In Zoom Out

Sample Name: FC1018-2 Acquired: 12/20/2022 18:12:33 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2929.7**	**7094.5**	**39729.**	**5631.3**
Stddev	6.4	9.2	249.	49.8
%RSD	.21710	.13001	.62639	.88428
#1	2934.5	7105.1	39460.	5644.8
#2	2932.1	7088.4	39778.	5576.1
#3	2922.5	7090.1	39950.	5673.0

Zoom In Zoom Out

Sample Name: FC1018-3 Acquired: 12/20/2022 18:17:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0070**	**.9525**	**-.1201**	**4.816**	**-.0079**	**.0012**	**518.1**	**-.0008**	**.0076**
Stddev	.0353	1.685	.0493	.152	.0356	.0080	2.2	.0023	.0129
%RSD	506.2	176.9	41.07	3.151	452.1	684.6	.4241	293.8	169.6
#1	.0374	2.872	-.1473	4.642	.0155	-.0052	519.9	-.0029	-.0051
#2	-.0317	.2664	-.0631	4.885	.0097	.0102	515.6	-.0012	.0207
#3	.0152	-.2808	-.1497	4.922	-.0489	-.0015	518.7	.0017	.0072

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0066**	**-.0491**	**.3650**	**32.62**	**-.1403**	**403.8**	**2.907**	**.0229**	**1908.**
Stddev	.0047	.0472	.1796	6.93	.2991	1.5	.005	.0071	5.
%RSD	70.85	96.11	49.20	21.24	213.2	.3695	.1793	31.04	.2606
#1	-.0097	-.0188	.3318	40.60	.1076	402.9	2.904	.0181	1914.
#2	-.0012	-.0251	.2044	29.11	-.0560	405.5	2.913	.0196	1905.
#3	-.0089	-.1035	.5589	28.15	-.4725	402.9	2.904	.0311	1905.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1079**	**-.0520**	**-.1634**	**-.0531**	**4.176**	**.0367**	**9.030**	**.0575**	**.1355**
Stddev	.0117	.0880	.2004	.2390	.038	.0270	.019	.0081	.1797
%RSD	10.89	169.3	122.6	449.9	.9181	73.73	.2124	14.13	132.6
#1	.1042	-.0708	.0566	-.2763	4.173	.0610	9.049	.0576	.2032
#2	.0985	-.1290	-.2113	.1991	4.216	.0075	9.011	.0494	.2715
#3	.1211	.0439	-.3356	-.0822	4.139	.0415	9.029	.0657	-.0682

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0268**	**.0049**
Stddev	.0240	.0012
%RSD	89.31	24.99
#1	.0012	.0052
#2	.0487	.0060
#3	.0306	.0036

Zoom In Zoom Out

Sample Name: FC1018-3 Acquired: 12/20/2022 18:17:35 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2894.3**	**7083.2**	**39428.**	**5622.9**
Stddev	6.8	8.2	178.	22.6
%RSD	.23573	.11636	.45238	.40190
#1	2902.2	7080.7	39350.	5639.8
#2	2890.9	7092.4	39302.	5597.2
#3	2889.8	7076.5	39632.	5631.5

Zoom In Zoom Out

Sample Name: FC1018-4 Acquired: 12/20/2022 18:22:39 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0024**	**.4673**	**-.0224**	**4.711**	**.0046**	**.0045**	**512.7**	**-.0023**	**.0101**
Stddev	.0487	.3295	.0629	.195	.0023	.0048	.8	.0005	.0129
%RSD	2046.	70.50	280.2	4.136	49.19	106.9	.1541	22.39	127.2
#1	-.0500	.0872	.0490	4.776	.0031	.0060	513.5	-.0018	-.0047
#2	-.0044	.6434	-.0694	4.865	.0072	.0082	512.7	-.0028	.0162
#3	.0473	.6713	-.0469	4.492	.0035	-.0009	511.9	-.0023	.0189

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0094**	**-.0155**	**1.291**	**20.42**	**.2226**	**346.0**	**1.717**	**.0223**	**2362.**
Stddev	.0312	.0087	.211	6.23	.2163	1.6	.009	.0148	11.
%RSD	333.0	55.99	16.36	30.50	97.17	.4732	.5249	66.11	.4627
#1	-.0146	-.0057	1.098	27.34	.4677	347.0	1.723	.0055	2369.
#2	-.0376	-.0186	1.517	15.28	.1412	344.1	1.721	.0283	2367.
#3	.0241	-.0222	1.259	18.63	.0588	346.8	1.707	.0332	2349.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1448**	**-.0124**	**.0067**	**-.1184**	**3.770**	**-.0108**	**8.715**	**.0308**	**.0752**
Stddev	.0202	.0341	.0633	.0833	.055	.0419	.043	.0225	.1324
%RSD	13.98	274.8	938.6	70.36	1.451	389.7	.4963	73.20	176.2
#1	.1508	-.0295	.0739	-.1706	3.798	.0336	8.739	.0233	.2180
#2	.1222	.0269	-.0518	-.1625	3.805	-.0161	8.742	.0561	.0511
#3	.1614	-.0347	-.0019	-.0223	3.707	-.0497	8.666	.0129	-.0435

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0176**	**.0089**
Stddev	.0268	.0026
%RSD	152.2	28.92
#1	.0072	.0115
#2	-.0024	.0063
#3	.0481	.0089

Zoom In Zoom Out

Sample Name: FC1018-4 Acquired: 12/20/2022 18:22:39 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2876.8**	**7089.4**	**39461.**	**5668.3**
Stddev	8.6	16.3	240.	58.5
%RSD	.29849	.23049	.60826	1.0313
#1	2886.4	7108.3	39203.	5600.8
#2	2869.7	7079.7	39677.	5702.5
#3	2874.3	7080.3	39502.	5701.6

Zoom In Zoom Out

Sample Name: FC1018-5 Acquired: 12/20/2022 18:27:40 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0122**	**.9015**	**-.0849**	**4.543**	**-.0129**	**.0003**	**485.9**	**-.0023**	**.0115**
Stddev	.0453	.5861	.0877	.144	.0135	.0021	1.9	.0032	.0092
%RSD	371.4	65.01	103.3	3.160	104.4	664.1	.3938	141.4	80.66
#1	.0562	.3706	-.0239	4.393	-.0119	-.0019	483.9	-.0035	.0009
#2	-.0343	.8035	-.1854	4.556	-.0269	.0006	487.7	.0014	.0152
#3	.0147	1.530	-.0454	4.680	.0000	.0022	486.2	-.0046	.0183

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0352**	**-.0132**	**.9124**	**21.27**	**-.0814**	**416.0**	**.2405**	**.0230**	**1295.**
Stddev	.0286	.0226	.3344	3.09	.1438	4.0	.0052	.0253	4.
%RSD	81.20	170.8	36.65	14.55	176.5	.9548	2.173	110.4	.2999
#1	.0406	.0113	.6100	17.70	.0136	411.9	.2409	.0522	1291.
#2	.0608	-.0333	.8555	23.25	-.2469	416.2	.2352	.0085	1298.
#3	.0043	-.0177	1.272	22.85	-.0110	419.9	.2456	.0081	1297.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0155**	**.0120**	**.0997**	**3.235**	**.0205**	**7.934**	**.0476**	**.1943**
Stddev	.0082	.0223	.2235	.0903	.073	.0220	.041	.0151	.1229
%RSD	673.5	144.0	1865.	90.58	2.248	107.7	.5183	31.69	63.24
#1	.0064	-.0243	-.0232	.1966	3.198	-.0013	7.887	.0456	.2389
#2	.0055	.0099	-.1918	.0848	3.188	.0198	7.962	.0336	.2887
#3	-.0083	-.0319	.2510	.0178	3.319	.0428	7.954	.0636	.0554

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0447**	**.0032**
Stddev	.0295	.0004
%RSD	65.83	13.03
#1	.0164	.0037
#2	.0426	.0029
#3	.0752	.0030

Zoom In Zoom Out

Sample Name: FC1018-5 Acquired: 12/20/2022 18:27:40 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2932.8**	**7164.5**	**39787.**	**5736.5**
Stddev	5.7	17.1	104.	45.2
%RSD	.19295	.23827	.26065	.78768
#1	2927.1	7145.6	39821.	5753.8
#2	2938.4	7169.2	39870.	5770.5
#3	2932.9	7178.8	39671.	5685.3

Zoom In Zoom Out

Sample Name: FC1018-6 Acquired: 12/20/2022 18:32:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0572**	**1.104**	**-.0944**	**1.392**	**-.0036**	**.0053**	**605.3**	**-.0010**	**.0172**
Stddev	.0225	1.040	.0845	.234	.0179	.0057	.8	.0016	.0132
%RSD	39.31	94.22	89.51	16.80	502.2	107.6	.1331	164.9	76.76
#1	-.0313	-.0952	-.1873	1.610	.0023	-.0012	605.7	-.0020	.0303
#2	-.0701	1.646	-.0736	1.145	-.0237	.0093	605.8	.0009	.0171
#3	-.0704	1.762	-.0223	1.421	.0106	.0078	604.3	-.0019	.0040

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0196**	**.0086**	**.4052**	**33.58**	**-.1735**	**209.2**	**.6892**	**.0189**	**1550.**
Stddev	.0059	.0315	.3243	4.19	.2350	1.3	.0042	.0182	2.
%RSD	30.23	368.2	80.03	12.49	135.4	.6356	.6151	96.73	.1165
#1	.0162	-.0226	.7365	31.26	.0407	210.5	.6927	.0213	1552.
#2	.0162	.0078	.3906	38.42	-.4250	209.3	.6845	.0358	1548.
#3	.0264	.0404	.0884	31.05	-.1363	207.9	.6905	-.0005	1550.

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0188**	**-.0965**	**-.1464**	**.1624**	**4.237**	**.0391**	**10.21**	**.0485**	**.0696**
Stddev	.0145	.0242	.0923	.2143	.072	.0752	.03	.0143	.1584
%RSD	76.77	25.02	63.05	132.0	1.702	192.3	.3366	29.51	227.4
#1	.0320	-.0691	-.0421	.0479	4.269	.1200	10.23	.0474	-.0183
#2	.0211	-.1145	-.1795	.0296	4.287	-.0286	10.22	.0348	-.0253
#3	.0034	-.1060	-.2178	.4096	4.154	.0258	10.17	.0633	.2525

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0220**	**.0148**
Stddev	.0128	.0054
%RSD	58.05	36.57
#1	.0216	.0141
#2	.0349	.0097
#3	.0094	.0205

Zoom In Zoom Out

Sample Name: FC1018-6 Acquired: 12/20/2022 18:32:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 100.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2906.2**	**7126.6**	**39625.**	**5678.9**
Stddev	6.3	17.0	109.	39.6
%RSD	.21530	.23863	.27529	.69669
#1	2909.1	7122.5	39554.	5666.3
#2	2910.5	7145.3	39750.	5723.3
#3	2899.0	7112.1	39570.	5647.3

Zoom In Zoom Out

Sample Name: MP41623-MB1 Acquired: 12/20/2022 18:37:44 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0086**	**-.0016**	**.0011**	**-.0002**	**.0000**	**.0242**	**.0000**	**.0001**
Stddev	.0004	.0065	.0012	.0023	.0004	.000	.0025	.000	.0001
%RSD	335.5	76.44	74.46	209.6	244.0	288.0	10.27	111.9	120.3
#1	.0001	.0084	-.0030	.0010	-.0003	.0000	.0237	.0000	.0000
#2	.0006	.0021	-.0013	-.0011	.0003	.0000	.0220	.0000	.0000
#3	-.0003	.0152	-.0006	.0035	-.0004	.0000	.0269	.0000	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0058**	**.0055**	**.1216**	**.0002**	**-.0097**	**.0002**	**.0002**	**.1247**
Stddev	.0003	.0006	.0022	.0417	.0012	.0059	.0001	.0001	.0058
%RSD	311.1	11.05	40.39	34.27	534.3	60.45	37.76	53.88	4.646
#1	-.0003	.0052	.0048	.1430	.0012	-.0124	.0001	.0001	.1287
#2	.0003	.0065	.0080	.0735	-.0011	-.0137	.0002	.0001	.1273
#3	.0003	.0059	.0037	.1481	.0006	-.0030	.0001	.0003	.1181
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0009**	**-.0005**	**.0013**	**.0092**	**.0001**	**.0000**	**.0001**	**-.0007**
Stddev	.0001	.0005	.0011	.0018	.0006	.0001	.0001	.0001	.0005
%RSD	59.84	56.59	246.4	138.0	6.313	181.3	1152.	118.2	68.45
#1	-.0002	.0014	-.0017	.0025	.0086	.0000	.0000	.0003	-.0005
#2	-.0001	.0004	.0004	-.0008	.0093	.0002	-.0001	.0002	-.0013
#3	-.0004	.0009	-.0001	.0022	.0098	.0000	.0001	.0000	-.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP41623-MB1 Acquired: 12/20/2022 18:37:44 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**.0001**	**.0039**
Stddev	.0004	.0000
%RSD	564.0	.2725
#1	-.0002	.0039
#2	.0006	.0039
#3	-.0002	.0039
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2998.6**	**7210.2**	**40814.**	**5679.2**
Stddev	4.9	17.6	161.	17.3
%RSD	.16373	.24349	.39505	.30406
#1	3004.1	7217.6	40813.	5661.4
#2	2997.2	7222.8	40653.	5695.9
#3	2994.6	7190.1	40975.	5680.2

Zoom In Zoom Out

Sample Name: FC1282-7 Acquired: 12/20/2022 18:47:43 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**35.15**	**.0017**	**.0205**	**.0501**	**.0016**	**2.597**	**.0001**	**.0003**
Stddev	.0001	.21	.0007	.0004	.0002	.0001	.009	.0000	.0000
%RSD	204.6	.5919	42.45	1.955	.3534	4.363	.3389	30.77	5.301
#1	-.0001	35.29	.0009	.0202	.0502	.0016	2.602	.0000	.0003
#2	.0002	35.24	.0023	.0203	.0502	.0015	2.603	.0001	.0003
#3	.0001	34.91	.0017	.0209	.0499	.0017	2.587	.0000	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0744**	**.0080**	**1.973**	**2.122**	**.0081**	**.7389**	**.0100**	**.0048**	**4.392**
Stddev	.0004	.0003	.008	.028	.0017	.0209	.0000	.0001	.012
%RSD	.4864	3.486	.4001	1.340	21.62	2.825	.3581	3.048	.2616
#1	.0744	.0080	1.972	2.133	.0101	.7321	.0100	.0047	4.399
#2	.0740	.0083	1.981	2.090	.0068	.7624	.0100	.0050	4.399
#3	.0748	.0077	1.966	2.144	.0074	.7223	.0101	.0048	4.379

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.0423**	**.0003**	**.0083**	**10.95**	**.0013**	**.0339**	**.0164**	**-.0026**
Stddev	.0001	.0011	.0019	.0029	.01	.0001	.0002	.0012	.0011
%RSD	4.342	2.659	564.7	34.99	.0967	6.841	.4459	7.013	43.38
#1	.0025	.0411	.0019	.0052	10.94	.0013	.0341	.0158	-.0034
#2	.0024	.0433	.0009	.0110	10.94	.0012	.0339	.0157	-.0030
#3	.0023	.0425	-.0018	.0088	10.96	.0014	.0338	.0178	-.0013

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0750**	**.0089**
Stddev	.0003	.0001
%RSD	.4603	.7051
#1	.0750	.0089
#2	.0746	.0090
#3	.0753	.0090

Zoom In Zoom Out

Sample Name: FC1282-7 Acquired: 12/20/2022 18:47:43 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2863.1**	**7447.0**	**40944.**	**5828.4**
Stddev	2.0	16.9	341.	41.8
%RSD	.07077	.22740	.83323	.71717
#1	2865.4	7451.5	40886.	5824.5
#2	2861.8	7461.3	41310.	5788.6
#3	2861.9	7428.3	40635.	5872.0

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 18:52:43 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2422**	**39.91**	**1.982**	F **2.007**	**2.028**	**2.008**	**40.24**	**2.015**	**2.019**
Stddev	.0007	.02	.004	.016	.003	.002	.06	.003	.003
%RSD	.2993	.0518	.2200	.7715	.1293	.1018	.1512	.1685	.1301
#1	.2428	39.89	1.979	1.990	2.026	2.010	40.20	2.015	2.019
#2	.2424	39.93	1.980	2.013	2.031	2.006	40.31	2.011	2.016
#3	.2414	39.92	1.987	2.020	2.026	2.008	40.22	2.018	2.022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.987**	**2.008**	**40.06**	**40.49**	**2.021**	**40.61**	**2.001**	**2.014**	**40.60**
Stddev	.005	.007	.07	.11	.007	.15	.013	.004	.09
%RSD	.2778	.3492	.1793	.2654	.3579	.3589	.6236	.2025	.2140
#1	1.983	2.005	39.99	40.45	2.017	40.44	1.991	2.014	40.52
#2	1.993	2.016	40.05	40.61	2.030	40.68	2.015	2.010	40.69
#3	1.984	2.003	40.13	40.41	2.018	40.70	1.999	2.018	40.59
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.998**	**1.958**	**1.998**	**1.999**	**2.241**	**1.982**	**2.025**	**2.010**	**1.960**
Stddev	.003	.003	.003	.003	.004	.001	.004	.002	.006
%RSD	.1527	.1481	.1629	.1719	.1573	.0472	.2169	.0877	.2951
#1	1.996	1.955	1.998	1.995	2.243	1.982	2.022	2.008	1.956
#2	1.996	1.959	1.996	1.998	2.237	1.982	2.030	2.010	1.967
#3	2.001	1.960	2.002	2.002	2.243	1.983	2.023	2.011	1.958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/20/2022 18:52:43 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**1.990**	**1.995**
Stddev	.003	.002
%RSD	.1247	.1063
#1	1.989	1.996
#2	1.993	1.993
#3	1.988	1.997
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2532.7**	**6778.1**	**38068.**	**5580.8**
Stddev	9.0	28.5	120.	28.1
%RSD	.35510	.42089	.31623	.50421
#1	2539.4	6783.1	38164.	5563.9
#2	2536.2	6803.8	37933.	5613.3
#3	2522.5	6747.4	38106.	5565.2

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 18:57:46 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0051**	**-.0011**	F **.0011**	**.0000**	**.0002**	**.0020**	**.0001**
Stddev	.000	.0076	.0006	.0013	.000	.0000	.0022	.0001
%RSD	867.3	150.0	51.66	125.1	986.7	15.48	111.3	63.43
#1	-.0001	.0138	-.0016	.0012	.0001	.0003	-.0004	.0002
#2	-.0002	.0009	-.0005	.0023	-.0003	.0002	.0023	.0001
#3	.0002	.0004	-.0014	-.0003	.0001	.0002	.0039	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0003**	**-.0002**	**.0054**	**.0212**	F **-.0025**	**-.0136**	**.0001**
Stddev	.0001	.0001	.0006	.0009	.0614	.0026	.0160	.0000
%RSD	59.82	44.37	288.6	16.24	290.3	103.3	117.4	31.82
#1	.0001	.0002	.0003	.0061	.0324	.0005	-.0180	.0001
#2	.0001	.0004	-.0008	.0058	.0762	-.0037	.0041	.0001
#3	.0003	.0003	-.0001	.0044	-.0451	-.0044	-.0269	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0836**	**.0000**	**-.0002**	**-.0006**	**.0004**	**.0006**	**.0001**
Stddev	.0001	.0149	.000	.0004	.0015	.0009	.0004	.0004
%RSD	61.55	17.84	535.6	173.0	241.8	213.6	67.13	672.5
#1	.0002	.0724	.0001	-.0002	-.0009	-.0005	.0004	.0006
#2	.0001	.0779	-.0001	-.0006	.0010	.0005	.0011	-.0002
#3	.0002	.1005	.0000	.0002	-.0020	.0013	.0004	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/20/2022 18:57:46 Type: QC
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0012**	**.0002**	**.0000**
Stddev	.0001	.000	.0005	.0001	.000
%RSD	67.99	384.8	40.56	61.34	320.5
#1	.0001	.0000	.0016	.0003	.0000
#2	.0003	.0000	.0012	.0001	.0000
#3	.0001	-.0001	.0007	.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3015.4**	**7110.1**	**39993.**	**5578.5**
Stddev	5.1	16.1	256.	25.3
%RSD	.16802	.22706	.64008	.45390
#1	3015.2	7101.4	39958.	5605.7
#2	3010.3	7100.2	40264.	5555.6
#3	3020.5	7128.7	39756.	5574.1

Zoom In Zoom Out

Sample Name: MP41623-D1 Acquired: 12/20/2022 19:02:48 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**33.31**	**.0004**	**.0245**	**.0478**	**.0016**	**2.630**	**.0001**	**.0003**
Stddev	.0002	.10	.0004	.0016	.0004	.0000	.011	.0001	.0000
%RSD	45.26	.3037	103.6	6.403	.7535	.9685	.4124	73.41	13.43
#1	-.0005	33.33	.0004	.0260	.0475	.0016	2.635	.0001	.0003
#2	-.0004	33.39	.0000	.0229	.0482	.0016	2.638	.0001	.0003
#3	-.0002	33.19	.0008	.0248	.0478	.0016	2.618	.0000	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0678**	**.0074**	**1.952**	**2.093**	**.0054**	**.7074**	**.0102**	**.0044**	**4.457**
Stddev	.0004	.0004	.002	.021	.0027	.0038	.0001	.0000	.031
%RSD	.5767	4.888	.1190	.9831	50.61	.5422	.6802	.3581	.6891
#1	.0679	.0078	1.951	2.074	.0042	.7030	.0102	.0044	4.483
#2	.0682	.0071	1.954	2.115	.0034	.7094	.0102	.0045	4.466
#3	.0674	.0073	1.950	2.091	.0085	.7099	.0101	.0044	4.423

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0022**	**.0385**	**.0003**	**.0085**	**10.25**	**.0011**	**.0319**	**.0121**	**-.0017**
Stddev	.0000	.0006	.0001	.0019	.02	.0000	.0001	.0001	.0013
%RSD	.9845	1.598	52.73	22.04	.1541	.6236	.3054	1.037	76.09
#1	.0022	.0379	.0002	.0068	10.27	.0011	.0320	.0122	-.0033
#2	.0022	.0391	.0004	.0082	10.24	.0011	.0319	.0120	-.0007
#3	.0022	.0384	.0002	.0105	10.25	.0011	.0318	.0120	-.0013

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0713**	**.0092**
Stddev	.0002	.0001
%RSD	.2115	.6253
#1	.0715	.0092
#2	.0712	.0093
#3	.0712	.0091

Zoom In Zoom Out

Sample Name: MP41623-D1 Acquired: 12/20/2022 19:02:48 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2888.1**	**7432.0**	**40937.**	**5869.7**
Stddev	4.5	9.6	283.	18.2
%RSD	.15547	.12939	.69239	.31018
#1	2892.0	7441.0	40863.	5887.3
#2	2883.2	7421.9	40698.	5850.9
#3	2889.1	7433.2	41250.	5870.8

Zoom In Zoom Out

Sample Name: MP41623-SD1 Acquired: 12/20/2022 19:07:48 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**34.84**	**-.0060**	**.0316**	**.0514**	**.0016**	**2.582**	**.0000**	**.0002**
Stddev	.0010	.09	.0026	.0019	.0013	.0002	.009	.000	.0006
%RSD	93.64	.2666	43.99	5.985	2.538	14.44	.3292	9794.	304.4
#1	.0021	34.74	-.0066	.0330	.0529	.0018	2.587	-.0002	.0009
#2	.0004	34.92	-.0031	.0294	.0512	.0015	2.587	.0000	-.0002
#3	.0006	34.85	-.0083	.0323	.0503	.0014	2.572	.0002	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0726**	**.0076**	**1.929**	**2.119**	**.0091**	**.6717**	**.0099**	**.0047**	**4.588**
Stddev	.0010	.0009	.005	.199	.0144	.0571	.0001	.0003	.008
%RSD	1.325	12.24	.2597	9.370	158.3	8.497	1.109	6.440	.1769
#1	.0734	.0084	1.933	2.207	.0201	.6489	.0100	.0043	4.589
#2	.0715	.0079	1.924	2.258	.0145	.6296	.0100	.0049	4.579
#3	.0729	.0066	1.932	1.892	-.0072	.7367	.0098	.0048	4.595

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**.0395**	**-.0002**	**.0101**	**10.98**	**.0001**	**.0336**	**.0119**	**.0018**
Stddev	.0009	.0010	.0018	.0085	.03	.0027	.0004	.0001	.0053
%RSD	33.57	2.648	970.0	83.58	.2419	3391.	1.138	1.049	293.1
#1	.0031	.0396	.0015	.0119	10.95	-.0016	.0339	.0119	.0075
#2	.0017	.0406	-.0021	.0009	11.00	-.0014	.0337	.0117	.0011
#3	.0035	.0385	.0000	.0176	11.00	.0032	.0332	.0119	-.0031

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0735**	**.0090**
Stddev	.0002	.0003
%RSD	.2463	2.859
#1	.0737	.0093
#2	.0735	.0088
#3	.0733	.0088

Zoom In Zoom Out

Sample Name: MP41623-SD1 Acquired: 12/20/2022 19:07:48 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3015.9**	**7340.1**	**40961.**	**5810.7**
Stddev	6.7	20.2	80.	34.4
%RSD	.22066	.27560	.19487	.59282
#1	3022.4	7341.6	41035.	5834.2
#2	3009.1	7319.2	40973.	5771.2
#3	3016.3	7359.5	40876.	5826.8

Zoom In Zoom Out

Sample Name: MP41623-PS1 Acquired: 12/20/2022 19:12:49 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0461**	**36.72**	**.0897**	**.0220**	**.2845**	**.0485**	**7.198**	**.0462**	**.0475**
Stddev	.0004	.02	.0013	.0036	.0011	.0000	.012	.0001	.0001
%RSD	.7914	.0448	1.490	16.15	.3871	.0294	.1622	.1385	.1456
#1	.0466	36.72	.0911	.0253	.2850	.0485	7.202	.0461	.0475
#2	.0459	36.71	.0897	.0225	.2853	.0485	7.208	.0461	.0474
#3	.0459	36.74	.0884	.0182	.2832	.0484	7.185	.0462	.0474

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1174**	**.1012**	**4.731**	**11.14**	**.0009**	**5.670**	**.0569**	**.0937**	**12.85**
Stddev	.0007	.0017	.011	.05	.0034	.009	.0007	.0002	.03
%RSD	.6045	1.645	.2210	.4825	378.4	.1540	1.239	.2297	.2495
#1	.1173	.1016	4.728	11.10	-.0027	5.677	.0571	.0939	12.85
#2	.1181	.1027	4.722	11.20	.0013	5.660	.0575	.0936	12.89
#3	.1166	.0994	4.743	11.11	.0040	5.671	.0561	.0935	12.82

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0957**	**.0853**	**.0911**	**.0959**	**11.82**	**.0461**	**.0814**	**.1981**	**.0881**
Stddev	.0003	.0012	.0006	.0024	.03	.0003	.0007	.0033	.0020
%RSD	.3561	1.395	.6293	2.490	.2735	.6608	.8820	1.688	2.299
#1	.0961	.0851	.0908	.0951	11.86	.0464	.0818	.1966	.0900
#2	.0955	.0842	.0917	.0941	11.83	.0458	.0819	.2020	.0884
#3	.0954	.0866	.0907	.0986	11.79	.0462	.0806	.1959	.0860

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.1193**	**.2315**
Stddev	.0016	.0005
%RSD	1.380	.2293
#1	.1193	.2320
#2	.1209	.2309
#3	.1176	.2316

Zoom In Zoom Out

Sample Name: MP41623-PS1 Acquired: 12/20/2022 19:12:49 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2815.6**	**7393.2**	**41063.**	**5831.8**
Stddev	8.5	20.0	518.	19.5
%RSD	.30037	.27060	1.2621	.33468
#1	2806.4	7370.9	40960.	5850.4
#2	2823.1	7399.2	40603.	5833.6
#3	2817.2	7409.5	41625.	5811.4

Zoom In Zoom Out

Sample Name: MP41623-S1 Acquired: 12/20/2022 19:17:47 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0485**	**62.76**	**1.853**	**.0471**	**2.064**	**.0507**	**27.98**	**.0478**	**.4896**
Stddev	.0011	.18	.004	.0027	.006	.0002	.10	.0002	.0016
%RSD	2.165	.2878	.2258	5.803	.3045	.4810	.3741	.3270	.3346
#1	.0497	62.97	1.858	.0441	2.069	.0509	28.09	.0479	.4915
#2	.0478	62.68	1.851	.0494	2.066	.0505	27.96	.0477	.4888
#3	.0481	62.64	1.850	.0478	2.057	.0509	27.88	.0476	.4886

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2578**	**.2553**	**28.07**	**27.22**	**.0109**	**26.56**	**.5005**	**.4919**	**27.81**
Stddev	.0008	.0005	.09	.11	.0031	.19	.0013	.0013	.06
%RSD	.3244	.2023	.3377	.4000	28.31	.6984	.2545	.2728	.2311
#1	.2568	.2554	28.18	27.35	.0074	26.77	.5017	.4935	27.88
#2	.2581	.2547	28.00	27.15	.0131	26.47	.4992	.4910	27.80
#3	.2584	.2557	28.03	27.17	.0121	26.44	.5006	.4913	27.75

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4855**	**.5304**	**.3004**	**1.895**	**14.67**	**.3733**	**.6602**	**.4803**	**1.953**
Stddev	.0010	.0009	.0027	.004	.05	.0011	.0025	.0015	.001
%RSD	.2151	.1655	.9124	.1923	.3560	.2823	.3730	.3043	.0259
#1	.4866	.5313	.3034	1.899	14.73	.3724	.6619	.4819	1.953
#2	.4854	.5295	.2981	1.896	14.64	.3745	.6612	.4790	1.952
#3	.4845	.5304	.2997	1.891	14.65	.3731	.6573	.4801	1.953

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5484**	**.4788**
Stddev	.0008	.0009
%RSD	.1421	.1825
#1	.5493	.4795
#2	.5478	.4791
#3	.5482	.4778

Zoom In Zoom Out

Sample Name: MP41623-S1 Acquired: 12/20/2022 19:17:47 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2623.4**	**7196.5**	**39874.**	**5754.4**
Stddev	11.2	35.4	92.	46.6
%RSD	.42772	.49211	.22969	.80911
#1	2616.1	7166.5	39791.	5711.2
#2	2617.8	7187.4	39973.	5803.7
#3	2636.3	7235.6	39859.	5748.2

Zoom In Zoom Out

Sample Name: MP41623-S2 Acquired: 12/20/2022 19:22:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0529**	**66.04**	**1.980**	**.0442**	**2.219**	**.0545**	**28.42**	**.0512**	**.5247**
Stddev	.0002	.05	.006	.0033	.004	.0001	.03	.0004	.0033
%RSD	.3192	.0699	.3296	7.442	.1863	.2404	.0939	.7068	.6215
#1	.0531	66.03	1.985	.0478	2.222	.0545	28.45	.0515	.5269
#2	.0528	65.99	1.983	.0412	2.220	.0543	28.40	.0514	.5263
#3	.0529	66.09	1.973	.0437	2.214	.0546	28.41	.0508	.5209

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2763**	**.2729**	**28.58**	**27.63**	**.0117**	**26.97**	**.5361**	**.4991**	**28.28**
Stddev	.0009	.0003	.09	.04	.0024	.05	.0007	.0027	.04
%RSD	.3369	.1201	.3086	.1400	20.40	.1899	.1255	.5468	.1356
#1	.2774	.2727	28.58	27.66	.0145	26.97	.5362	.5001	28.31
#2	.2756	.2727	28.50	27.65	.0107	26.91	.5368	.5012	28.28
#3	.2760	.2733	28.67	27.59	.0100	27.02	.5355	.4960	28.23

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5192**	**.5672**	**.3097**	**2.027**	**16.33**	**.3768**	**.6873**	**.4918**	**2.080**
Stddev	.0026	.0027	.0015	.010	.10	.0024	.0026	.0016	.013
%RSD	.4952	.4832	.4812	.5058	.5835	.6451	.3721	.3174	.6067
#1	.5210	.5687	.3113	2.034	16.40	.3793	.6891	.4925	2.086
#2	.5203	.5688	.3084	2.032	16.37	.3767	.6886	.4900	2.088
#3	.5162	.5640	.3093	2.015	16.22	.3745	.6844	.4928	2.065

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5860**	**.5127**
Stddev	.0015	.0029
%RSD	.2558	.5748
#1	.5848	.5154
#2	.5877	.5133
#3	.5855	.5095

Inst QC: MA19110

Zoom In
Zoom Out

Sample Name: MP41623-S2 Acquired: 12/20/2022 19:22:41 Type: Unk
Method: 60102007_COMBO_102422(v107) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2620.3**	**7162.7**	**39648.**	**5708.5**
Stddev	16.7	44.6	234.	36.8
%RSD	.63800	.62263	.59097	.64408
#1	2607.9	7122.0	39471.	5739.1
#2	2613.7	7155.8	39559.	5718.7
#3	2639.3	7210.4	39913.	5667.7

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	-0.000008	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040336	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000048	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
B 249.773 {135}	☒	1	Fe	0.002319	0.000000	No
Ba 455.403 { 74}	☒	4	Fe	-0.000029	0.000000	No
			Al	0.000025	0.000000	No
			Ca	0.000016	0.000000	No
			Mg	0.000016	0.000000	No
Be 313.042 {108}	☒	2	V	0.000089	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000071	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000005	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000016	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	0.000007	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Li 670.784 { 50}	☒	4	Ca	0.000004	0.000000	No
			Fe	0.000031	0.000000	No
			Al	-0.000009	0.000000	No
			Mg	-0.000006	0.000000	No
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000009	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	3	Fe	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ca	-0.000003	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000026	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Pb 220.353 {453}	☒	9	Al	0.000153	0.000000	No
				Fe	0.000309	0.000000	No
				Mo	-0.002189	0.000000	No
				Cu	0.000467	0.000000	No
				Ti	0.000036	0.000000	No
				Si	0.000182	0.000000	No
				Ca	0.000012	0.000000	No
				Cr	-0.000260	0.000000	No
				Mg	0.000002	0.000000	No
	Sb 206.833 {463}	☒	11	Fe	0.000007	0.000000	No
				Cr	0.011486	0.000000	No
				Mo	-0.002538	0.000000	No
				V	-0.002735	0.000000	No
				Sn	-0.008695	0.000000	No
				Ti	0.000278	0.000000	No
				Ca	0.000001	0.000000	No
				Ni	-0.000818	0.000000	No
				Al	0.000005	0.000000	No
				Mn	-0.000133	0.000000	No
				Mg	-0.000002	0.000000	No
	Se 196.090 {472}	☒	12	Fe	-0.000037	0.000000	No
				Ca	0.000006	0.000000	No
				Mn	0.000331	0.000000	No
				Mo	0.000111	0.000000	No
				Al	0.000001	0.000000	No
				V	0.000000	0.000000	No
				Zn	0.000000	0.000000	No
				Sr	-0.000111	0.000000	No
				As	0.000125	0.000000	No
				Cd	-0.000250	0.000000	No
				Mg	0.000002	0.000000	No
				Cr	-0.000326	0.000000	No
	Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
	Sn 189.989 {477}	☒	1	Fe	0.000005	0.000000	No
	Sr 407.771 { 83}	☒	2	Ca	-0.000001	0.000000	No
				Al	0.000012	0.000000	No
	Ti 334.941 {101}	☒	1	Ca	-0.000008	0.000000	No
	Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
				Fe	-0.000037	0.000000	No
				Al	0.000000	0.000000	No
				Ba	-0.000051	0.000000	No
				Ti	-0.000648	0.000000	No
				Sb	0.000167	0.000000	No
				Ca	0.000001	0.000000	No
				Cr	0.000340	0.000000	No
				Mg	-0.000002	0.000000	No
				V	0.000015	0.000000	No
	V 292.402 {115}	☒	5	Fe	0.000005	0.000000	No
				Cr	-0.003634	0.000000	No
				Mo	-0.009536	0.000000	No
				Ti	0.000303	0.000000	No
				Mn	-0.000333	0.000000	No
	Y 224.306 {450}*	☒	None				
	Y 360.073 { 94}*	☒	None				
	Y 371.030 { 91}*	☒	None				
	Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
				Al	0.000014	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Ca	0.000003	0.000000	No
				Fe	-0.000009	0.000000	No
				As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000082	0.752895	0.000000	1.000000
Al 396.152 { 85}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.001140	0.211416	0.000000	1.000000
As 189.042 {478}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000133	0.133594	0.000000	1.000000
B 249.773 {135}	12/20/2022 11:25:55	12/20/2022 10:40:48	Linear	1/Conc	0.002214	0.217042	0.000000	1.000000
Ba 455.403 { 74}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000325	11.642485	0.000000	1.000000
Be 313.042 {108}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000922	14.558479	0.000000	1.000000
Ca 317.933 {106}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000950	0.514342	0.000000	1.000000
Cd 226.502 {449}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000151	6.013453	0.000000	1.000000
Co 228.616 {447}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000407	2.860275	0.000000	1.000000
Cr 267.716 {126}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000090	0.814511	0.000000	1.000000
Cu 324.754 {104}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.014481	0.948060	0.000000	1.000000
Fe 259.940 {130}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000405	0.243822	0.000000	1.000000
In 230.606 {446}*	12/20/2022 11:25:55	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.027509	0.097489	0.000000	1.000000
Li 670.784 { 50}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.016129	2.055094	0.000000	1.000000
Mg 279.079 {121}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000184	0.057850	0.000000	1.000000
Mn 257.610 {131}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000178	4.081545	0.000000	1.000000
Mo 202.030 {467}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000244	0.803233	0.000000	1.000000
Na 589.592 { 57}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.072861	0.365160	0.000000	1.000000
Ni 231.604 {445}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.001586	1.923201	0.000000	1.000000
Pb 220.353 {453}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.007481	1.536880	0.000000	1.000000
Sb 206.833 {463}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000855	0.200426	0.000000	1.000000
Se 196.090 {472}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000372	0.098233	0.000000	1.000000
Si 212.412 {459}	12/20/2022 11:25:55	12/20/2022 10:40:48	Linear	1/Conc	0.001530	0.316640	0.000000	1.000000
Sn 189.989 {477}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000199	0.363186	0.000000	1.000000
Sr 407.771 { 83}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.002643	13.982974	0.000000	1.000000
Ti 334.941 {101}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.003161	2.133094	0.000000	1.000000
Tl 190.856 {477}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.001106	0.283293	0.000000	1.000000
V 292.402 {115}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	-0.000377	1.224385	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	12/20/2022 11:25:55	12/20/2022 10:45:58	Linear	1/Conc	0.000911	3.515748	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999736	0.000061	0.000499	0.001664	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999976	0.000305	0.009241	0.030805	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999703	0.000034	0.001098	0.003659	OK.	1.000000	0.000000	1	0
	B 249.773 {135}	0.999676	0.000311	0.002445	0.008151	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999881	0.008450	0.000227	0.000758	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999904	0.001483	0.000060	0.000201	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999947	0.002463	0.002126	0.007088	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999952	0.000435	0.000049	0.000162	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999981	0.000417	0.000117	0.000390	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999972	0.000064	0.000325	0.001084	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999968	0.000126	0.000437	0.001455	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999921	0.000783	0.001988	0.006628	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999900	0.001477	0.032257	0.107524	OK.	1.000000	0.000000	1	0
	Li 670.784 { 50}	0.999380	0.000716	0.001707	0.005689	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999875	0.000964	0.012185	0.040618	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999849	0.000906	0.000056	0.000186	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999902	0.000262	0.000209	0.000697	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999581	0.011350	0.009190	0.030634	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999982	0.000239	0.000176	0.000587	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999325	0.000419	0.000446	0.001486	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999820	0.000028	0.001380	0.004601	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999868	0.000017	0.002326	0.007752	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.995830	0.001562	0.000638	0.002125	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999966	0.000070	0.000419	0.001397	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999855	0.002478	0.000113	0.000375	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999921	0.000279	0.000177	0.000589	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999689	0.000074	0.001043	0.003476	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999904	0.000392	0.000299	0.000997	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999933	0.000602	0.000058	0.000195	OK.	1.000000	0.000000	1	0

SGS Orlando

Date:	12/19/22
[24hr] Time	11:15

Analysts Name:	Thomas F
MP Batch ID:	MP41622
Method	SW846-3010A

Reagent / Lot Number		Spk.Soln(A)	Vol. Used (ml)	Pipette Number
Conc. HNO3 (B)	22330073	ACC1362	0.5	KU15244
Conc. HCl (B)	22C1662007	ACC1346	0.25	KU15244
NA	NA	MET7303	0.25	KU15244
NA	NA	NA	NA	NA

HotBlock I.D.	9	Therm ID	204	Temp. C	95	Corr. Factor	-2	Corrected Observed Temp. C	93
pH Paper Lot Number	230320			Filter Lot Number		280632432		Digestion Tube Lot Number	2208066

	Bot#	Sample #	Initial Vol.(ml)	Final Vol.(ml)	pH<2	Comments
	NA	Method Blank(MB)	50	50	NA	
	NA	Spike Blank(SB)	50	50	NA	
	8	Matrix Spike(MS)	50	50	Y	
	8	Matrix Spike Dup(MSD)	50	50	Y	
	8	Duplicate(DUP)	50	50	Y	
1(QC) C	8	FC1201-4F	50	50	Y	MB2A
2	4	FC1189-1F	50	50	Y	MB2A
3	4	FC1189-2F	50	50	Y	MB2A
4	4	FC1189-3F	50	50	Y	MB2A
5	4	FC1189-4F	50	50	Y	MB2A
6	4	FC1189-5F	50	50	Y	MB2A
7	2	FC1015-1	50	50	Y	
8	2	FC1015-2	50	50	Y	
9	2	FC1015-5	50	50	Y	
10	1	FC1018-1	50	50	Y	
11	1	FC1018-2	50	50	Y	
12	1	FC1018-3	50	50	Y	
13	1	FC1018-4	50	50	Y	
14	1	FC1018-5	50	50	Y	
15	1	FC1018-6	50	50	Y	
16	10	FC1020-1	50	50	Y	
17	10	FC1020-2	50	50	Y	
18	10	FC1020-3	50	50	Y	
19	1	FC1025-1	50	50	Y	Reactive
20	1	FC1025-2	50	50	Y	Reactive
21 [D]	NA	MB2A-12/15	50	50	Y	
22 [D]						
23 [D]						
24 [D]						

Protected Worksheet

A Used for SB, MS, MSD
B For reagent volumes used refer to SOP MET 103, current verion
C Parent sample used to prepare MS, MSD, DUP
D Additional matrix QC

9.2.1 9

ICP_WaterPrep_Logbook
Rev. 07/09/2021
DM

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN92993			mg/l	250	256	102.2	85-115%
BOD, 5 Day	GP38277/GN92998	2.0	0.0	mg/l	198	214	107.9	85-115%
Bromide	GP38275/GN92948	0.50	0.0	mg/l	10	9.53	95.3	90-110%
Chemical Oxygen Demand	GP38274/GN92946	20	0.0	mg/l	50.0	52.5	105.0	85-115%
Chloride	GP38275/GN92948	2.0	0.0	mg/l	50	48.2	96.4	90-110%
Color, Apparent	GN92938	5	0	CU				
Fluoride	GP38275/GN92948	0.20	0.071	mg/l	2.5	2.53	101.2	90-110%
Nitrogen, Nitrate	GP38275/GN92948	0.10	0.0	mg/l	2.5	2.47	98.8	90-110%
Nitrogen, Nitrite	GP38275/GN92948	0.10	0.0	mg/l	2.5	2.63	105.2	90-110%
Phosphate, Ortho	GP38273/GN92941	0.10	0	mg/l	0.300	0.296	98.5	83-116%
Solids, Total Dissolved	GN92953	50	0.00	mg/l				
Sulfate	GP38275/GN92948	2.0	0.0	mg/l	50	46.7	93.4	90-110%
Total Organic Carbon	GP38294/GN92992	2.0	0.0	mg/l	15	15.1	100.7	90-110%

Associated Samples:
Batch GN92938: FC1020-1, FC1020-2, FC1020-3
Batch GN92953: FC1020-1, FC1020-2, FC1020-3
Batch GN92993: FC1020-1, FC1020-2, FC1020-3
Batch GP38273: FC1020-1, FC1020-2, FC1020-3
Batch GP38274: FC1020-1, FC1020-2, FC1020-3
Batch GP38275: FC1020-1, FC1020-2, FC1020-3
Batch GP38277: FC1020-1, FC1020-2, FC1020-3
Batch GP38294: FC1020-1, FC1020-2, FC1020-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN92993	FC1070-1	mg/l	105	105	0.4	0-20%
BOD, 5 Day	GP38277/GN92998	FC1014-1	mg/l	0.0	0.0	57.3(a)	0-30%
Color, Apparent	GN92938	FC1020-1	CU	60	60	0.0	0-20%
Solids, Total Dissolved	GN92953	FC1015-1	mg/l	248	238	4.1	0-5%

Associated Samples:
Batch GN92938: FC1020-1, FC1020-2, FC1020-3
Batch GN92953: FC1020-1, FC1020-2, FC1020-3
Batch GN92993: FC1020-1, FC1020-2, FC1020-3
Batch GP38277: FC1020-1, FC1020-2, FC1020-3
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP38275/GN92948	FC1015-1	mg/l	0.12 U	10	9.4	94.0	90-110%
Chemical Oxygen Demand	GP38274/GN92946	FC1020-1	mg/l	7.5	50.0	60.0	105.0	85-115%
Chloride	GP38275/GN92948	FC1015-1	mg/l	4.6	50	53.1	97.0	90-110%
Fluoride	GP38275/GN92948	FC1015-1	mg/l	0.27	2.5	2.5	89.2N(a)	90-110%
Nitrogen, Nitrate	GP38275/GN92948	FC1015-1	mg/l	0.70	2.5	3.2	100.0	90-110%
Nitrogen, Nitrite	GP38275/GN92948	FC1015-1	mg/l	0.040 U	2.5	2.7	108.0	90-110%
Phosphate, Ortho	GP38273/GN92941	FC1014-4F	mg/l	0.683	0.300	2.099	472.2*(a)	83-116%
Sulfate	GP38275/GN92948	FC1015-1	mg/l	9.8	50	55.3	91.0	90-110%
Total Organic Carbon	GP38294/GN92992	FC1123-1	mg/l	0.83	15	15.0(b)	94.5(b)	90-110%

Associated Samples:
Batch GP38273: FC1020-1, FC1020-2, FC1020-3
Batch GP38274: FC1020-1, FC1020-2, FC1020-3
Batch GP38275: FC1020-1, FC1020-2, FC1020-3
Batch GP38294: FC1020-1, FC1020-2, FC1020-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.
(b) Sample was not preserved to a pH < 2.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP38275/GN92948	FC1015-1	mg/l	0.12 U	10	9.5	1.1	15%
Chemical Oxygen Demand	GP38274/GN92946	FC1020-1	mg/l	7.5	50.0	57.5	4.3	5%
Chloride	GP38275/GN92948	FC1015-1	mg/l	4.6	50	53.3	0.4	15%
Fluoride	GP38275/GN92948	FC1015-1	mg/l	0.27	2.5	2.5	0.0	15%
Nitrogen, Nitrate	GP38275/GN92948	FC1015-1	mg/l	0.70	2.5	3.2	0.0	15%
Nitrogen, Nitrite	GP38275/GN92948	FC1015-1	mg/l	0.040 U	2.5	2.7	0.0	15%
Phosphate, Ortho	GP38273/GN92941	FC1014-4F	mg/l	0.683	0.300	2.074	1.2	26%
Sulfate	GP38275/GN92948	FC1015-1	mg/l	9.8	50	55.5	0.4	15%
Total Organic Carbon	GP38294/GN92992	FC1123-1	mg/l	0.83	15	15.5(a)	3.3(a)	20%

Associated Samples:
Batch GP38273: FC1020-1, FC1020-2, FC1020-3
Batch GP38274: FC1020-1, FC1020-2, FC1020-3
Batch GP38275: FC1020-1, FC1020-2, FC1020-3
Batch GP38294: FC1020-1, FC1020-2, FC1020-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Sample was not preserved to a pH < 2.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120601.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92948
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:37	GN92948-STD1	1		STDA
12:57	GN92948-STD2	1		STDB
13:18	GN92948-STD3	1		STDC
13:38	GN92948-STD4	1		STDD
13:59	GN92948-STD5	1		STDE
14:19	GN92948-STD6	1		STDF
14:40	GN92948-STD7	1		STDG
15:00	GN92948-STD8	1		STDH
15:21	GN92948-STD9	1		STDI
15:41	GN92948-STD10	1		STDJ
16:02	GN92948-STD11	1		STDK
16:22	GN92948-ICV1	1		
16:43	GN92948-ICB1	1		
17:03	GN92948-CRI1	1		
17:24	GN92948-CCV1	1		
17:45	GN92948-CCB1	1		
10:36	GN92948-CCV2	1		
11:01	GP38275-MB1	1		
11:22	GP38275-B1	1		
11:42	FC1015-1	1		(sample used for QC only; not part of login FC1020)
12:03	GP38275-S1	1		
12:23	GP38275-S2	1		
12:44	ZZZZZZ	10		
13:04	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:45	ZZZZZZ	1		
14:06	ZZZZZZ	50		
14:26	GN92948-CCV3	1		
14:47	GN92948-CCB2	1		
15:07	ZZZZZZ	100		
15:28	ZZZZZZ	100		
15:48	ZZZZZZ	100		
16:08	ZZZZZZ	100		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120601.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92948
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:29	FC1018-6	100		(sample used for QC only; not part of login FC1020)
16:49	GP38275-S3	100		
17:09	GP38275-S4	100		
17:29	FC1020-1	1		
17:50	FC1020-2	1		
18:11	FC1020-3	1		
18:31	GN92948-CCV4	1		
18:52	GN92948-CCB3	1		
19:12	ZZZZZZ	1000		
19:33	ZZZZZZ	1		
19:53	ZZZZZZ	1		
20:14	ZZZZZZ	1000		
20:34	ZZZZZZ	10		
20:54	ZZZZZZ	50		
21:15	GP38276-MB1	1		
21:35	GP38276-B1	1		
21:56	ZZZZZZ	500		
22:16	ZZZZZZ	1		
22:37	GN92948-CCV5	1		
22:57	GN92948-CCB4	1		
23:18	ZZZZZZ	500		
23:38	ZZZZZZ	500		
23:58	LA85743-12	1		(sample used for QC only; not part of login FC1020)
00:19	GP38276-S1	1		
00:40	GP38276-S2	1		
01:00	ZZZZZZ	1		
01:21	ZZZZZZ	200		
01:41	ZZZZZZ	200		
02:01	ZZZZZZ	500		
02:21	ZZZZZZ	500		
02:42	GN92948-CCV6	1		
03:02	GN92948-CCB5	1		
03:23	ZZZZZZ	500		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120601.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92948
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
03:43	ZZZZZZ	500		
04:03	ZZZZZZ	1		
04:24	ZZZZZZ	1000		
04:44	ZZZZZZ	1000		
05:05	ZZZZZZ	500		
05:25	ZZZZZZ	10		
05:45	ZZZZZZ	1		
06:06	FC945-3	1		(sample used for QC only; not part of login FC1020)
06:26	GP38276-S3	1		
06:47	GN92948-CCV7	1		
07:08	GN92948-CCB6	1		
07:28	GP38276-S4	1		
07:49	ZZZZZZ	10		
08:09	GN92948-CCV8	1		
08:30	GN92948-CCB7	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120601.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Run ID: GN92948 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92948-ICV1	Fluoride	2.45	0.20	0.060	2.5	98.0	90-110
GN92948-ICV1	Chloride	49.6	2.0	0.80	50	99.2	90-110
GN92948-ICV1	Nitrogen, Nitrite	2.68	0.10	0.040	2.5	107.2	90-110
GN92948-ICV1	Bromide	9.76	0.50	0.12	10	97.6	90-110
GN92948-ICV1	Nitrogen, Nitrate	2.55	0.10	0.040	2.5	102.0	90-110
GN92948-ICV1	Sulfate	48.8	2.0	0.60	50	97.6	90-110
GN92948-ICB1	Fluoride	0.0740	0.20	0.060			
GN92948-ICB1	Chloride	0.80 U	2.0	0.80			
GN92948-ICB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-ICB1	Bromide	0.12 U	0.50	0.12			
GN92948-ICB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-ICB1	Sulfate	0.60 U	2.0	0.60			
GN92948-CRI1	Fluoride	0.144	0.20	0.060	.1	144.0	50-150
GN92948-CRI1	Chloride	1.07	2.0	0.80	1	107.0	50-150
GN92948-CRI1	Nitrogen, Nitrite	0.108	0.10	0.040	.1	108.0	50-150
GN92948-CRI1	Bromide	0.257	0.50	0.12	.2	128.5	50-150
GN92948-CRI1	Nitrogen, Nitrate	0.126	0.10	0.040	.1	126.0	50-150
GN92948-CRI1	Sulfate	0.682	2.0	0.60	1	68.2	50-150
GN92948-CCV1	Fluoride	2.70	0.20	0.060	2.5	108.0	90-110
GN92948-CCV1	Chloride	49.5	2.0	0.80	50	99.0	90-110
GN92948-CCV1	Nitrogen, Nitrite	2.56	0.10	0.040	2.5	102.4	90-110
GN92948-CCV1	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92948-CCV1	Nitrogen, Nitrate	2.41	0.10	0.040	2.5	96.4	90-110
GN92948-CCV1	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN92948-CCB1	Fluoride	0.0750	0.20	0.060			
GN92948-CCB1	Chloride	0.80 U	2.0	0.80			
GN92948-CCB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB1	Bromide	0.12 U	0.50	0.12			
GN92948-CCB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB1	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV2	Fluoride	2.63	0.20	0.060	2.5	105.2	90-110
GN92948-CCV2	Chloride	49.5	2.0	0.80	50	99.0	90-110
GN92948-CCV2	Nitrogen, Nitrite	2.59	0.10	0.040	2.5	103.6	90-110
GN92948-CCV2	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92948-CCV2	Nitrogen, Nitrate	2.43	0.10	0.040	2.5	97.2	90-110
GN92948-CCV2	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92948-CCV3	Fluoride	2.48	0.20	0.060	2.5	99.2	90-110
GN92948-CCV3	Chloride	49.6	2.0	0.80	50	99.2	90-110
GN92948-CCV3	Nitrogen, Nitrite	2.60	0.10	0.040	2.5	104.0	90-110
GN92948-CCV3	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92948-CCV3	Nitrogen, Nitrate	2.44	0.10	0.040	2.5	97.6	90-110
GN92948-CCV3	Sulfate	49.4	2.0	0.60	50	98.8	90-110
GN92948-CCB2	Fluoride	0.060 U	0.20	0.060			
GN92948-CCB2	Chloride	0.80 U	2.0	0.80			
GN92948-CCB2	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB2	Bromide	0.12 U	0.50	0.12			
GN92948-CCB2	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB2	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV4	Fluoride	2.47	0.20	0.060	2.5	98.8	90-110
GN92948-CCV4	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN92948-CCV4	Nitrogen, Nitrite	2.60	0.10	0.040	2.5	104.0	90-110
GN92948-CCV4	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92948-CCV4	Nitrogen, Nitrate	2.44	0.10	0.040	2.5	97.6	90-110
GN92948-CCV4	Sulfate	49.5	2.0	0.60	50	99.0	90-110
GN92948-CCB3	Fluoride	0.060 U	0.20	0.060			
GN92948-CCB3	Chloride	0.80 U	2.0	0.80			
GN92948-CCB3	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB3	Bromide	0.12 U	0.50	0.12			
GN92948-CCB3	Nitrogen, Nitrate	0.040 U	0.10	0.040			

Instrument QC Summary
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120601.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Run ID: GN92948 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92948-CCB3	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV5	Fluoride	2.51	0.20	0.060	2.5	100.4	90-110
GN92948-CCV5	Chloride	49.9	2.0	0.80	50	99.8	90-110
GN92948-CCV5	Nitrogen, Nitrite	2.61	0.10	0.040	2.5	104.4	90-110
GN92948-CCV5	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92948-CCV5	Nitrogen, Nitrate	2.45	0.10	0.040	2.5	98.0	90-110
GN92948-CCV5	Sulfate	50.1	2.0	0.60	50	100.2	90-110
GN92948-CCB4	Fluoride	0.0710	0.20	0.060			
GN92948-CCB4	Chloride	0.80 U	2.0	0.80			
GN92948-CCB4	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB4	Bromide	0.12 U	0.50	0.12			
GN92948-CCB4	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB4	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV6	Fluoride	2.52	0.20	0.060	2.5	100.8	90-110
GN92948-CCV6	Chloride	49.9	2.0	0.80	50	99.8	90-110
GN92948-CCV6	Nitrogen, Nitrite	2.61	0.10	0.040	2.5	104.4	90-110
GN92948-CCV6	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92948-CCV6	Nitrogen, Nitrate	2.45	0.10	0.040	2.5	98.0	90-110
GN92948-CCV6	Sulfate	50.1	2.0	0.60	50	100.2	90-110
GN92948-CCB5	Fluoride	0.060 U	0.20	0.060			
GN92948-CCB5	Chloride	0.80 U	2.0	0.80			
GN92948-CCB5	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB5	Bromide	0.12 U	0.50	0.12			
GN92948-CCB5	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB5	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV7	Fluoride	2.49	0.20	0.060	2.5	99.6	90-110
GN92948-CCV7	Chloride	50.0	2.0	0.80	50	100.0	90-110
GN92948-CCV7	Nitrogen, Nitrite	2.62	0.10	0.040	2.5	104.8	90-110
GN92948-CCV7	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92948-CCV7	Nitrogen, Nitrate	2.46	0.10	0.040	2.5	98.4	90-110
GN92948-CCV7	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92948-CCB6	Fluoride	0.060 U	0.20	0.060			
GN92948-CCB6	Chloride	0.80 U	2.0	0.80			
GN92948-CCB6	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB6	Bromide	0.12 U	0.50	0.12			
GN92948-CCB6	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB6	Sulfate	0.60 U	2.0	0.60			
GN92948-CCV8	Fluoride	2.48	0.20	0.060	2.5	99.2	90-110
GN92948-CCV8	Chloride	50.1	2.0	0.80	50	100.2	90-110
GN92948-CCV8	Nitrogen, Nitrite	2.61	0.10	0.040	2.5	104.4	90-110
GN92948-CCV8	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92948-CCV8	Nitrogen, Nitrate	2.59	0.10	0.040	2.5	103.6	90-110
GN92948-CCV8	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92948-CCB7	Fluoride	0.060 U	0.20	0.060			
GN92948-CCB7	Chloride	0.80 U	2.0	0.80			
GN92948-CCB7	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92948-CCB7	Bromide	0.12 U	0.50	0.12			
GN92948-CCB7	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92948-CCB7	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Analyst: FN Run ID: GN92992
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:57	GN92992-CCV1	1		
18:20	GP38294-MB1	1		
18:42	GP38294-B1	1		
19:05	ZZZZZZ	1		
19:25	ZZZZZZ	1		
19:46	ZZZZZZ	1		
20:08	ZZZZZZ	1		
20:31	FC1020-1	1		
20:53	FC1020-2	1		
21:16	FC1020-3	1		
21:39	ZZZZZZ	1		
22:02	GN92992-CCV2	1		
22:25	GN92992-CCB1	1		
22:49	FC1123-1	1		(sample used for QC only; not part of login FC1020)
23:11	GP38294-S1	1		
23:34	GP38294-S2	1		
23:58	ZZZZZZ	1		
00:21	ZZZZZZ	1		
00:44	ZZZZZZ	1		
01:03	ZZZZZZ	1		
01:29	ZZZZZZ	1		
01:51	ZZZZZZ	1		
02:14	ZZZZZZ	1		
02:38	GN92992-CCV3	1		
02:59	GN92992-CCB2	1		
03:24	ZZZZZZ	1		
03:45	ZZZZZZ	1		
04:08	FC1215-1	1		(sample used for QC only; not part of login FC1020)
04:32	GP38294-S3	1		
04:50	GP38294-S4	1		
05:32	ZZZZZZ	1		
05:58	ZZZZZZ	1		
06:46	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Analyst: FN Run ID: GN92992
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:08	ZZZZZZ	1		
07:34	GN92992-CCV4	1		
07:56	GP38295-MB1	1		
08:21	GP38295-B1	1		
08:46	FC1214-3	1		(sample used for QC only; not part of login FC1020)
09:10	GP38295-S1	1		
09:28	GP38295-S2	1		
10:10	ZZZZZZ	1		
10:36	ZZZZZZ	1		
11:00	ZZZZZZ	1		
11:23	ZZZZZZ	1		
14:11	GN92992-CCV5	1		
14:36	GN92992-CCB3	1		
14:56	ZZZZZZ	5		
15:20	GN92992-CCV6	1		
15:43	GN92992-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1020
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Run ID: GN92992 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92992-CCV1	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCV2	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCB1	Total Organic Carbon	0.54 U	2.0	0.54			
GN92992-CCV3	Total Organic Carbon	15.4	2.0	0.54	15	102.7	90-110
GN92992-CCB2	Total Organic Carbon	0.54 U	2.0	0.54			
GN92992-CCV4	Total Organic Carbon	15.6	2.0	0.54	15	104.0	90-110
GN92992-CCV5	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCB3	Total Organic Carbon	0.546(a)	2.0	0.54			
GN92992-CCV6	Total Organic Carbon	15.3	2.0	0.54	15	102.0	90-110
GN92992-CCB4	Total Organic Carbon	0.54 U	2.0	0.54			

(!) Outside of QC limits
(a) CCBis > 1/2 RL but is < RL.

General Chemistry

Raw Data

Apparent Color Analysis Log

Method: SM 2120B - 2001

RL: 5 CU

pH Meter ID: H05803
Calibration Stock Lot#: WC2006
Date of Curve(mm-dd-yy): 12/2/22
NaOH Lot#: /
ICV Lot#: WC2003
CCV Lot#: WC2005
HCL Lot#: /

GN# 92938
Date (mm-dd-yy): 12/6/22
Time (24:00): 11:45

Sample ID	Bottle #	pH, su	pH, su adj	Result, CU	Dilut'n	Final Result, CU	RL, CU	Comments
ICV	-	-	N/A	35	1	35	5	
CCV	-	-		35	1	35	5	
FC1020-1 Dup	13	6.42		30	2	*30 60	10	%RPD
-1		↓		30	2	60	10	*JR 12/6/22
-2		6.41		35	2	70	10	
-3	↓	6.92		45	1	45	5	
MB	-	-	↓	0	1	0	5	
		JR	12/6/22					
CCV	-	-	-		1		5	
Dup	-							%RPD
			JR 12/6/22					
CCV								

Comments:

Analyst Signature: Johnny Rios Date: 12/6/22

QC Reviewer: Mutz Date: 12/6/22

EXCEL Spreadsheet Calculation

Excel 006.5
Rev: 0318 SI
Page 1 of 2

Test Title: OPO4

Analyst: ST / BW
Prep Date/Time: 12/06/22 14:00
GP Batch: GP38273

EPA 365.3
Analysis Date/Time: 12/06/22 14:45
GN Batch: GN92941

Calibration Summary Cal. Date: 11/16/22 Spec #: 1

STD	Cal. Blk.	STD 1	STD 2	STD 3	STD 4	STD 5
Conc(mg/l)	0.000	0.100	0.200	0.300	0.400	0.500
Abs.	0.000	0.040	0.081	0.120	0.163	0.200

Corr. Coef: 0.9999 Slope: 2.49 Intercept: 0.000

Sample		Abs.	Conc.	Final Vol. (ml)	Sam. Vol (ml)	Dilution	Final Conc.	Units	RL	MDL	LOD
QC Section											
ICV			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
CCV		0.121	0.301	50.0	50.0	1	0.301	mg/l	0.10	0.019	0.04
MB	(F)	0.001	0.002	50.0	50.0	1	0.002	mg/l	0.10	0.019	0.04
BS	(F)	0.119	0.296	50.0	50.0	1	0.296	mg/l	0.10	0.019	0.04
MS	FC 1014 - 4F.1	0.169	0.420	50.0	50.0	5	2.099	mg/l	0.50	0.095	0.20
MSD	FC 1014 - 4F.1	0.167	0.415	50.0	50.0	5	2.074	mg/l	0.50	0.095	0.20
QC1.	FC 1014 - 4F.1	0.055	0.137	50.0	50.0	5	0.683	mg/l	0.50	0.095	0.20
Samples											
1	FC 1020 - 1.12	0.005	0.012	50.0	50.0	1	0.012	mg/l	0.10	0.019	0.04
2	FC 1020 - 2.12	0.004	0.010	50.0	50.0	1	0.010	mg/l	0.10	0.019	0.04
3	FC 1020 - 3.12	0.005	0.012	50.0	50.0	1	0.012	mg/l	0.10	0.019	0.04
4	FC 1014 - 4F.1	0.256	0.636	50.0	50.0	1	0.636	mg/l	0.10	0.019	0.04
5			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
CCV		0.124	0.308	50.0	50.0	1	0.308	mg/l	0.10	0.019	0.04
6			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
7			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
8			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
9			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
10			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
11			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
12			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
13			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
14			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
15			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
CCV			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
16			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
17			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
18			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
19			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
20			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
CCV			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04

Serial # OPO4 12/06/22

SGS Accutest - Orlando

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QC Summary Report

1.0	Matrix Spike Result	2.099	REC =	472.2	
	Matrix Spike Dup	2.074	REC =	463.9	RPD = 1.2
	Spike Amount	0.300			
	Sample Result	0.683			
	MB Result	0.002			
	Blank Spike Result	0.296	REC =	98.5	
	Spike Amount	0.300			

2.0

Primary Std Lot# :	WC1994	Primary Std Conc:	1000 mg/l
Secondary Std Lot# :	WC1929	Sec'dary Std Conc:	1000 mg/l

Primary Intermediate Lot# :	GN34324	Conc:	10 mg/l	Vol Spike Added:	1.5 ml
Secondary Intermediate Lot# :	GN34325	Conc:	10 mg/l	Vol Spike Added:	1.5 ml

3.0 Daily Standards are Prepared by:

1.0 ml of **Primary** (1000 mg/l) Standard to final volume of 100 ml in DI water	**10.0 mg/l**
1.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.100 mg/l**
2.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.200 mg/l**
3.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.300 mg/l**
4.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.400 mg/l**
5.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.500 mg/l**
CCV = 3.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI	**0.300 mg/l**
CCV2 = 1.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI	**0.100 mg/l**
1.0 ml of Secondary (1000 mg/l) Standard to final volume of 100 ml in DI water	**10.0 mg/l**
ICV = 3.0 ml of 10.0 mg/l Secondary Intermediate to final volume of 100 ml in DI	**0.300 mg/l**

*ST 12-06-22 ↗ recovery

Comments: MS/MSD indicates possible matrix interference.

Analyst's Signature: Sydny Talamo Romain Wallace Date: 12-06-22

Reviewer's Signature: [signature] Date: 12/7/22

Serial # OPO4 12/06/22

Colorimetric Absorbance Data

Test Title: ORTHOPHOSPHATE

Matrix: WATER
Wavelength: 650nm
Method: EPA 365.3
Analysis Date: 12-06-22
Analysis Time: 14:45
GN Batch: 92941

Analyst: ST/BW
Prep Date: 12-06-22
Prep Time: 14:00
GP Batch: 38273

Spec. ID # 1
Digestion Tube Lot # 2208066
Calib. Date: 11-16-22

	Samp ID.Bot#	Abs.	Dilution
Calib BLK			
0.10mg/l			
0.20mg/l		*	
0.30mg/l			
0.40mg/l			
0.50mg/l			
ICV			
CCV	—	0.121	1
MB	—	0.001	1
BS	—	0.119	1
MS	FC1014-4F.1	0.169	5
MSD	FC1014-4F.1	0.167	5
QC1	FC1014-4F.1	0.055	5
(1)	FC1020-1.12	0.005	1
(1)	FC1020-2.12	0.004	1
(1)	FC1020-3.12	0.005	1
*	FC1014-4F.1	0.256	1
		*	
CCV	—	0.124	1
CCV	* ST	12-06-22	
CCV			

Stock Solutions **Lot #**

Calib. Stk WC1994
MS/MSD/BS Stk WC1929
Primary Intermediate GN34324
ICV Stk WC1929
Secondary Intermediate GN34325

REAGENTS

11N Sulfuric acid GN34020
Ascorbic acid soln GN34289
Ammonium molybdate-antimony K tartrate soln GN34206
Filter Lot# 306067223

PIPETTES

ID#1 TV11245
ID#2 PV13805
ID#3 —

Comments: *DNR! Needs higher dilution. (1) Manually filtered in lab.

Analyst's Signature: Sydney Talsma / Brian Waller Date: 12-06-22

opo4 w absorbance 1018.xls Rev 1018 08262021 DM SGS - Orlando

EXCEL Spreadsheet Calculation

Excel 014.2
Rev: 0116 LM
Page 1 of 1

Test Title: COD

Method: SM5220C
Matrix: water
Ave FAS N: 0.012500
Standardization of FAS — Ave FAS Vol: 4.000

undigested blk 1	0.00	4.00	4.00	
undigested blk 2	0.00	4.00	4.00	

Prep Temp: 150
Prep Date: 12/7/2022
Prep Time: 10:30
Analysis Date: 12/8/2022
Analysis Time: 10:00
GP Batch: GP38274
GN Batch: GN92946
MB (A) 3.900

	Sample ID.Bottle#	Init. Vol. ml (C)	Final Vol ml (D)	D-C=B	A-B	Results mg/l	Dilution Factor	Final Result mg/l	RL mg/l	MDL mg/l	LOD mg/l
	MB1	0.00	3.90	3.90	0.000	0.00	1	0.00	20	5.3	10
	SB1 (50mg/l)	0.00	2.85	2.85	1.050	52.50	1	52.50	20	5.3	10
MS1	F C 1020 - 1.11	0.00	2.70	2.70	1.200	60.00	1	60.00	20	5.3	10
MSD1	F C 1020 - 1.11	0.00	2.75	2.75	1.150	57.50	1	57.50	20	5.3	10
QC1	F C 1020 - 1.11	0.00	3.75	3.75	0.150	7.50	1	7.50	20	5.3	10
2	F C 1020 - 2.11	0.00	3.60	3.60	0.300	15.00	1	15.00	20	5.3	10
3	F C 1020 - 3.11	0.00	3.40	3.40	0.500	25.00	1	25.00	20	5.3	10
4	F C 1030 - 1.1	0.00	3.20	3.20	0.700	35.00	1	35.00	20	5.3	10
5	F C 1032 - 1.1	0.00	2.65	2.65	1.250	62.50	1	62.50	20	5.3	10
6	F C 1052 - 1.1	0.00	3.85	3.85	0.050	2.50	1	2.50	20	5.3	10
7	F C 1052 - 2.1	0.00	3.85	3.85	0.050	2.50	1	2.50	20	5.3	10
8	F C 956 - 2.1	0.00	3.95	3.95	-0.050	-2.50	1	-2.50	20	5.3	10
9				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
10				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
MS2				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
MSD2				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
QC2				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
12				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
13				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
14				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
15				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
16				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
17				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
18				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
19				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####
20				#VALUE!	#VALUE!	#VALUE!		#VALUE!	#####	#####	#####

QC SUMMARY REPORT

MB Result	0.00		
Blank Spike Result	52.50	REC=	105.00
Spike Amount	50.00		
QC1 Sample Result	7.50		
Matrix Spike1 Result	60.00	MS REC=	105.00
Matrix Spike Dup1 Result	57.50	MS REC=	100.00
Spike Amount	50.00		
QC2 Sample Result	#VALUE!		
Matrix Spike2 Result	#VALUE!	MS REC=	#VALUE!
Matrix Spike Dup2 Result	#VALUE!	MS REC=	#VALUE!
Spike Amount	50.00		

RPD= 4.255319149
RPD= #VALUE!

Stock Sol Lot#: WC2006
Spike Conc: 50mg/l
Stock Conc: 1000 ppm
Vol Spike Added: 0.5 ml

Comments: _____

Analyst's Signature: Frida N. Date: 12/08/22

Reviewer's Signature: [illegible] Date: 12/08/22

SGS Accutest - Orlando

Serial# COD: 12/08/22

COD Analysis Log

Method: SM 5220C - 1997
Reporting Limit: 20.0 mg/l AQ / 200 mg/kg SO

Matrix (circle one) (AQ) / SO

Prep Batch # : GP	382274
Prep Date (mm-dd-yy):	12-07-22
Start Prep Time (24:00):	10:30
End Prep Time (24:00):	12:30
Tubes (circle one): (Low) / Mid	
FAS Standardization Date (mm-dd-yy):	12-08-22

	Init. Vol, ml	Final Vol, ml
undigested blank 1	0.00	4.00
undigested blank 2	0.00	4.00

Analytical Batch #: GN	92946
Analysis Date (mm-dd-yy):	12-08-22
Analysis Time (24:00):	10:00
COD Vial Lot #	WC 2013
KHP Lot#	WC 2006
Ferroin Indicator Lot#	WC 1892
Potassium Dichromate FAS Standardization Solution Lot#	GN34083
Sulfuric Acid Lot#	20220412.85
FAS Lot#	WC 1798

Digestor ID #	COD-1	Correction Factor:	N/A
Thermometer ID#	SN0915/000501	Temp Criteria: 150C +/- 2C	
Observed Temp, C:	150°C		
Corrected Temp, C:	150°C		

Sample ID	Bot #	Digest Amt (ml) (gm)	Initial Titrant Vol (ml) C	Final Titrant Vol (ml) D	Dilution Factor	Comments
Method Blank	—	2.00	0.00	3.90	1	
Spike Blank	—	2.00	0.00	2.85	1	
GP382274 -S1	11	2.00	0.00	2.70	1	
GP382274 -S2	11	2.00	0.00	2.75	1	
1- FC1020-1 -QC	11	2.00	0.00	3.75	1	
2- -2	11	2.00	0.00	3.60	1	
3- -3	11	2.00	0.00	3.40	1	
4- FC1030-1	1	2.00	0.00	3.20	1	
5- FC1032-1	1	2.00	0.00	2.65	1	
6- FC1052-1	1	2.00	0.00	3.85	1	
7- -2	1	2.00	0.00	3.85	1	*
8- FC956-2	1	2.00	0.00	3.95	1	
9-						
10-						
-S1						
-S2						
11- -QC						
12-		* F.N. 12/08/22				
13-						
14-						
15-						
16-						
17-						
18-						
19-						
20-						

Comments:

Analyst's Signature: Frida N. Date (mm-dd-yy): 12/08/22

QC Review Signature: _____ Date (mm-dd-yy): _____

Raw Data GN92948: Bromide, Chloride, Fluoride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate page 1 of 53

QC Reports:

GN92948

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
CW	NO_2/NO_3	IC0142223	Ref	12-2-22	100	5	200	2.5	12-1-22	JR	IC0142226	12-2-22
↓	SO_4	WC1982	Ricca	11-1-23	1000	10	↓	50	↓	↓	↓	↓
↓	Cl	WC2002	fisher	8-1-24	↓	↓	↓	↓	↓	↓	↓	↓
↓	F	WC1970	Lonc	6-30-23	↓	0.5	↓	2.5	↓	↓	↓	↓
↓	Br	WC1968	Spex	↓	↓	2	↓	10	↓	↓	↓	↓
B1	NO_2/NO_3	IC0142245	Ref	12-2-22	100	2.5	100	2.5	↓	↓	IC0142277	↓
*JR 12/1/22	SO_4	GN341297	↓	1-30-23	1000	5	↓	50	↓	↓	↓	↓
↓	Cl	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
↓	F	WC1995	Spex	9-30-23	↓	0.25	↓	2.5	↓	↓	↓	↓
↓	Br	GN341298	Ref	1-30-23	↓	1	↓	10	↓	↓	↓	↓
1°NO_2	NO_2	WC1975	Absolute	5-18-24	1000	2.5	50	100	12-3-22	JR	IC0142228	12-4-22
1°NO_3	NO_3	WC1999	↓	11-3-24	↓	↓	↓	↓	↓	↓	29	↓
2°NO_2	NO_2	WC1877	↓	11-10-23	↓	↓	↓	↓	↓	↓	30	↓
2°NO_3	NO_3	WC1982	↓	5-12-25	↓	↓	↓	↓	↓	↓	31	↓
CW	NO_2/NO_3	IC0142289	Ref	12-4-22	100	5	200	2.5	↓	↓	IC0142232	↓
↓	SO_4	WC1982	Ricca	11-1-23	1000	10	↓	50	↓	↓	↓	↓
↓	Cl	WC2002	fisher	8-1-24	↓	↓	↓	↓	↓	↓	↓	↓
↓	F	WC1970	Lonc	6-30-23	↓	0.5	↓	2.5	↓	↓	↓	↓
↓	Br	WC1968	Spex	↓	↓	2	↓	10	↓	↓	↓	↓
B1	NO_2/NO_3	IC0142301	Ref	12-4-22	100	2.5	100	2.5	↓	↓	IC0142233	↓
↓	SO_4	GN341296	↓	1-30-23	1000	5	↓	50	↓	↓	↓	↓
↓	Cl	↓ 7	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
↓	F	WC1995	Spex	9-30-23	↓	0.25	↓	2.5	↓	↓	↓	↓
↓	Br	GN341298	Ref	1-30-23	↓	1	↓	10	↓	↓	↓	↓
1°NO_2	NO_2	WC1975	Absolute	5/18/24	1000	2.5	*5025	100	12/5/22	GT	IC0142234	12/6/22 *GT 12/5/22
1°NO_3	NO_3	WC1899	↓	11/3/24	↓	↓	↓	↓	↓	↓	35	↓
2°NO_2	NO_2	WC1877	↓	11/10/23	↓	↓	↓	↓	↓	↓	36	↓
2°NO_3	NO_3	WC1982	↓	5/12/25	↓	↓	↓	↓	↓	↓	37	↓
CW	NO_2/NO_3	IC0142345	Ref	12-6-22	100	5	200	2.5	12-6-22	JR	IC0142238	12-6-22
↓	SO_4	WC1982	Ricca	11-1-23	1000	10	200	50	↓	↓	↓	↓
↓	Cl	WC2002	fisher	8-1-24	↓	↓	↓	↓	↓	↓	↓	↓
↓	F	WC1970	Lonc	6-30-23	↓	0.5	↓	2.5	↓	↓	↓	↓
↓	Br	WC1968	Spex	↓	↓	2	↓	10	↓	↓	↓	↓

JR 12/6/22

SGS

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FC1020

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IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
B1	NO_2/NO_3	1L014236/7	Ref	12-6-22	100	2.5	100	2.5	12-6-22	GL	1L014239	12-6-22
↓	SO_4	GN31296	↓	1-30-23	1000	5	↓	50	↓	↓	↓	↓
	Cl	↓ 7		↓	↓	↓		↓				
	F	WC1995	Varx	9-30-23	↓	0.25		2.5				
	Br	GN31290	Ref	1-30-23		1		10				

IC Instrument Log

Method: ~~EPA300.0~~ / SW846 ~~9056A~~ (circle one)

Date:	12/6/22 @ 10:15
Analyst:	JR
Instrument:	#4
Inst. File Name:	42022120601.ws

Prep Batchs:	38275/9
Analytical Batch:	820480
Calibration Date:	11/26/22
Pump pressure:	9.56MPa

Vial lot#	706370-F23497
Cap lot#	—
Syringe lot#	—
Filter lot#	—

Standards	
ICAL:	—
ICV:	—
CCV:	1001423 8
QC:	↓ 9

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed						Results OK or Dilution Needed						Comments
Rinse						F	Cl	NO2	Br	NO3	SO4	(2) F	Cl	NO2	Br	NO3	SO4	
CCV	-	AQ	-	1	N													(2) Ok unless marked
MB1	-		-															
LB1	-		-															
FC1015-1	3		(2)															(2) Dilutions made from historical results.
-1S1																		
-1S2				↓														
-2				10														
-3				1														
-4																		
-5	↓		↓	↓														
JR 12/6/22 ~~FC1018~~ FC1018-1	2		↓	50														
CCV	-		-	1														
CCB	-		-	↓														
FC1018-2	2		(2)	100														
-3																		
-4																		
-5																		
-6																		
-6S3																		
-6S4	↓		↓	↓														
FC1020-1	13		1001 ppm	1														
-2	↓		119 ppm	↓														
-3	↓		54.4 ppm	↓														
CCV	-		-															
CCB	-		-	↓		↓	↓	↓	↓	↓	↓							
LA85743-2	1		87 ppm	1000														* JR 12/6/22
-3			115 ppm	1														
-4	↓	↓	100 ppm	↓	↓													

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12/6/22 (cont.)
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
LAB5743-5	1	AQ	93mS	1000			—		—									
-6	↓		1272	10			—		—						RR			Needs 25x dil
↓ -7	↓		7.5mS	50			—		—									
MB1	-		-	1			—		—		—							
B1	-		-	↓			—		—		—							
LAB5743-8	1		24mS	500			—		—									
↓ -9	↓		138	1			—		—									
CCV	-		-	↓			—		—		—							
CCB	-		-	↓			—		—		—							
LAB5743-10	1		23mS	500														
-11			24mS	↓														
-12			275	1														
-12S1			↓								—							
-12S2											—							
-13			135	↓											RR			needs 5x dil
-14			11mS	200														
-15			14mS	↓														
-16			32mS	500														
-17	↓		23mS	↓														
CCV	-		-	1							—							
CCB	-		-	↓							—							
LAB5743-18	1		24mS	500														
-19			24mS	↓														
-20			358	1														
-21			120mS	1000														
-22			120mS	↓														
-23			55mS	500														
-24	↓	↓	2.4mS	10		↓			↓									

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12/6/22 (cont.)
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
LA85743-25	1	AQ	505µS	1	N		—		—									
FC945-3	↓		1016µS				—		—		—							* JR 12/6/22
-353	↓		↓				—		—		—							
CCV	-		-				—		—		—							
CCB	-		-				—		—		—							
FC945-354	1		1016µS				—		—		—							
FC1003-1	↓		2.3mS	10					—									
CCV	-		-	1			—		—		—							
CCB	-	↓	-	↓	↓		—		—		—							

JR 12/7/22

MagIC Net

2022-11-30 1:35:33

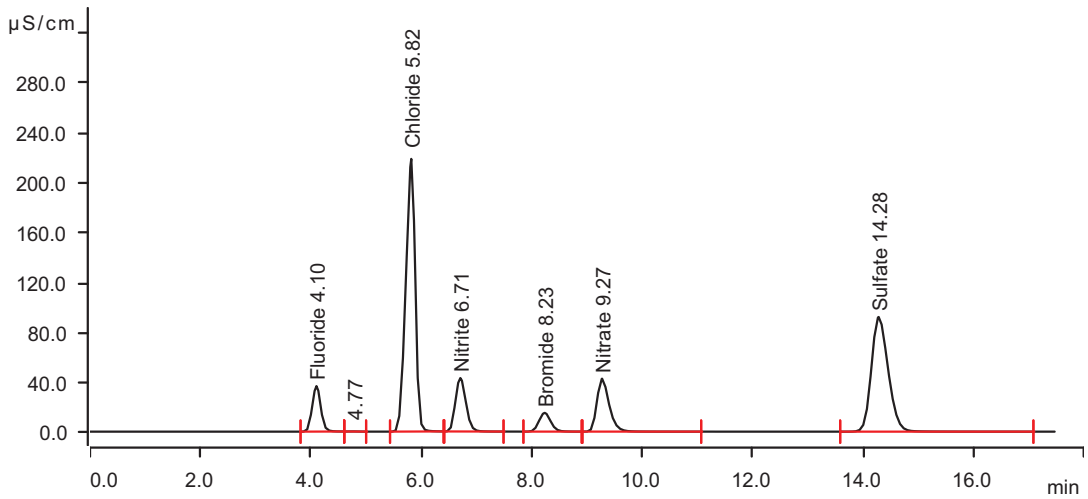
Sample data

Ident	STDK
Sample type	Standard 10
Determination start	2022-11-26 16:02:24 UTC-5
Method	SGS In-Vial Anions191003A
Operator	JR

Anions

Data source	Conductivity detector 1 (930 Compact IC Flex 1)	
Channel	Conductivity	
Recording time	17.5	min
Integration	Automatically	
Column type	Metrosep A Supp 5 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	9.45	MPa
Maximum pressure monitored	yes	
Temperature	30.0	°C

Anions

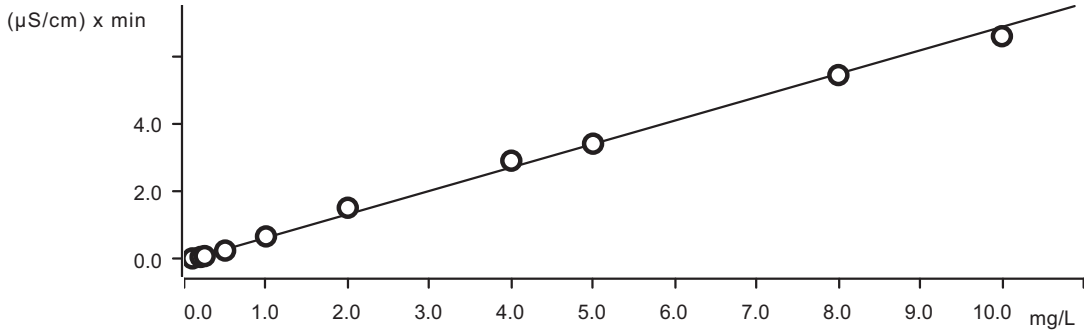


Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration mg/L	Component name
1	4.102	6.5807	36.412	9.603	Fluoride
2	4.768	0.0172	0.094	invalid	
3	5.818	42.8879	218.196	99.245	Chloride
4	6.707	9.3950	42.757	9.721	Nitrite
5	8.233	3.7008	15.034	20.319	Bromide
6	9.273	10.8708	42.331	10.051	Nitrate
7	14.280	32.3964	91.791	99.691	Sulfate

MagIC Net

2022-11-30 1:35:33

Fluoride (Anions)



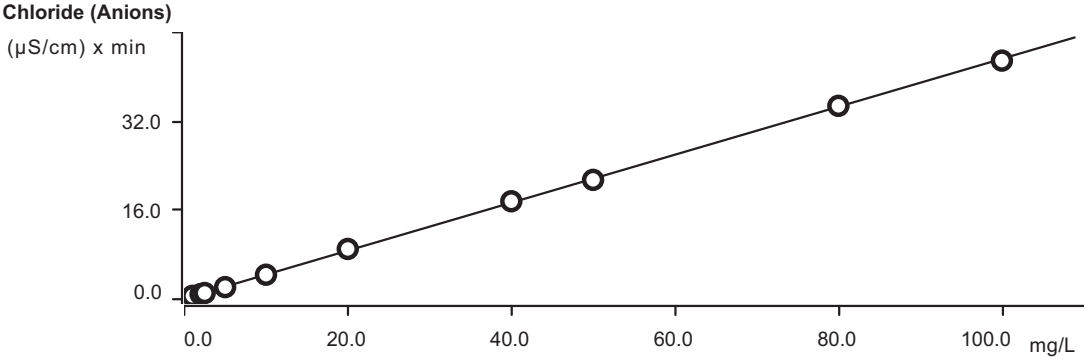
Function: . . . . . *A = - 0.0484197 + 0.0345142× Q*

Relative standard deviation . . . . . *6.666507 %*

Correlation coefficient *0.998479*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0324	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.0743	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.1005	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.2632	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.6805	STDF	2022-11-26 14:19:44 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	1.5249	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	2.9126	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	3.4132	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	5.4361	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	6.5807	STDK	2022-11-26 16:02:24 UTC-5

Chloride (Anions)



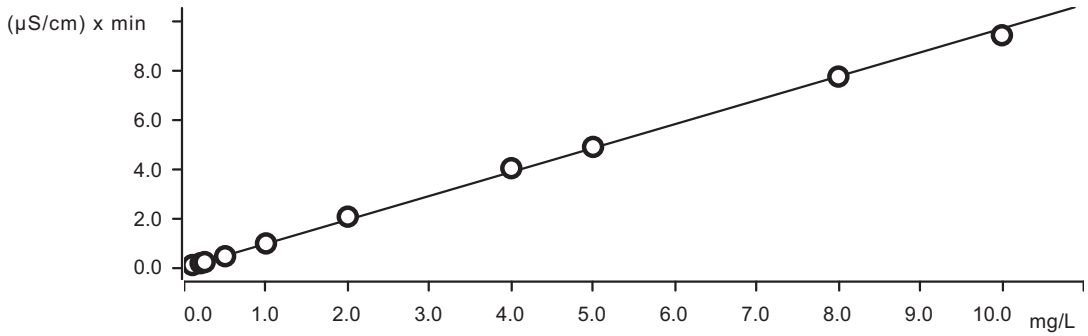
Function: . . . . . *A = - 0.0829805 + 0.0216488× Q*

Relative standard deviation . . . . . *1.589518 %*

Correlation coefficient *0.999915*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	1.000	20.0	1.0	1.0	0.4185	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	2.000	20.0	1.0	1.0	0.7236	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	2.500	20.0	1.0	1.0	0.9331	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	5.000	20.0	1.0	1.0	1.9940	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	10.000	20.0	1.0	1.0	4.2319	STDF	2022-11-26 14:19:44 UTC-5
Standard 6	1	20.000	20.0	1.0	1.0	8.8843	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	40.000	20.0	1.0	1.0	17.4942	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	50.000	20.0	1.0	1.0	21.3591	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	80.000	20.0	1.0	1.0	34.7273	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	100.000	20.0	1.0	1.0	42.8879	STDK	2022-11-26 16:02:24 UTC-5

Nitrite (Anions)



Function: . . . . . *A = - 0.0253571 + 0.0484520× Q*

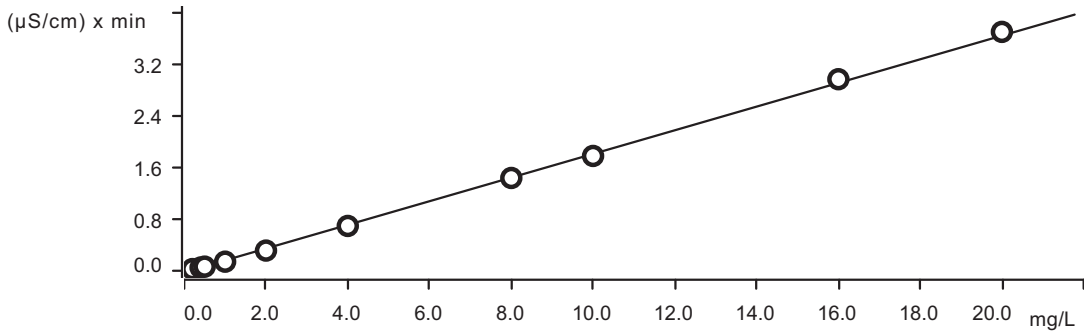
Relative standard deviation . . . . . *4.054421 %*

Correlation coefficient *0.999435*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0810	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.1559	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.1998	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.4385	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.9576	STDF	2022-11-26 14:19:44 UTC-5

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 6	1	2.000	20.0	1.0	1.0	2.0415	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	4.0064	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	4.8679	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	7.7187	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	9.3950	STDK	2022-11-26 16:02:24 UTC-5

Bromide (Anions)



Function: . . . . . *A = - 0.0177251 + 9.15016E-3× Q*

Relative standard deviation . . . . . *3.104255 %*

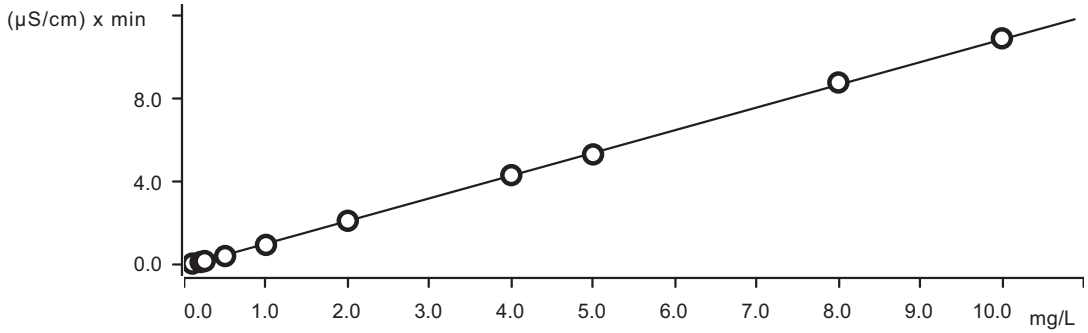
Correlation coefficient *0.999694*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	0.200	20.0	1.0	1.0	0.0301	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	0.400	20.0	1.0	1.0	0.0537	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	0.500	20.0	1.0	1.0	0.0679	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	1.000	20.0	1.0	1.0	0.1447	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	2.000	20.0	1.0	1.0	0.3166	STDF	2022-11-26 14:19:44 UTC-5
Standard 6	1	4.000	20.0	1.0	1.0	0.6978	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	8.000	20.0	1.0	1.0	1.4402	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	10.000	20.0	1.0	1.0	1.7810	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	16.000	20.0	1.0	1.0	2.9684	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	20.000	20.0	1.0	1.0	3.7008	STDK	2022-11-26 16:02:24 UTC-5

MagIC Net

2022-11-30 1:35:33

Nitrate (Anions)



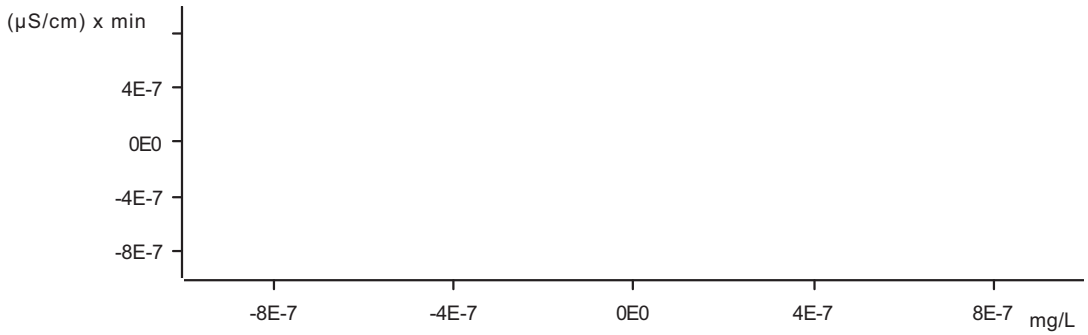
Function: . . . . . *A = - 0.0518972 + 0.0543348× Q*

Relative standard deviation . . . . . *1.801347 %*

Correlation coefficient *0.999895*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0817	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.1564	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.2016	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.4417	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.9765	STDF	2022-11-26 14:19:44 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	2.1310	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	4.3178	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	5.3110	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	8.7560	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	10.8708	STDK	2022-11-26 16:02:24 UTC-5

Phosphate (Anions)



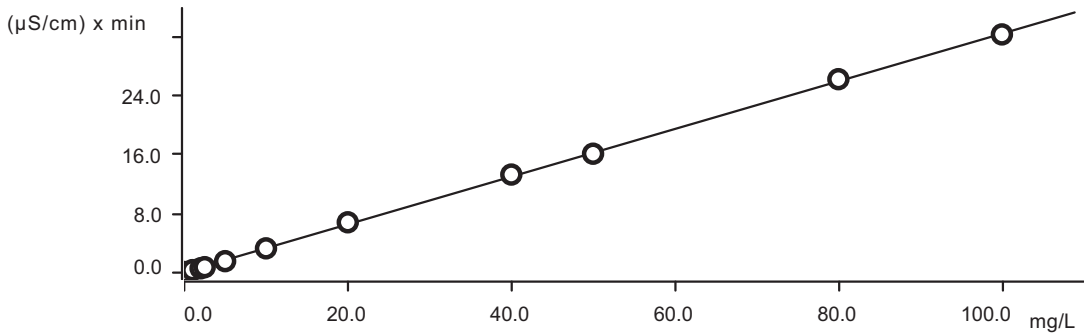
Function: . . . . . .

Relative standard deviation . . . . . *invalid %*

Correlation coefficient . . . . . *invalid*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	n. d.	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	n. d.	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	n. d.	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	n. d.	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	n. d.	STDF	2022-11-26 14:19:44 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	n. d.	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	n. d.	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	n. d.	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	n. d.	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	n. d.	STDK	2022-11-26 16:02:24 UTC-5

Sulfate (Anions)



Function: . . . . . *A = 6.90154E-4 + 0.0162480× Q*

Relative standard deviation . . . . . *2.118876 %*

Correlation coefficient *0.999870*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	0.0033	STDA	2022-11-26 12:37:03 UTC-5
Standard 1	1	1.000	20.0	1.0	1.0	0.2612	STDB	2022-11-26 12:57:36 UTC-5
Standard 2	1	2.000	20.0	1.0	1.0	0.5081	STDC	2022-11-26 13:18:09 UTC-5
Standard 3	1	2.500	20.0	1.0	1.0	0.6636	STDD	2022-11-26 13:38:40 UTC-5
Standard 4	1	5.000	20.0	1.0	1.0	1.4835	STDE	2022-11-26 13:59:12 UTC-5
Standard 5	1	10.000	20.0	1.0	1.0	3.2287	STDF	2022-11-26 14:19:44 UTC-5

MagIC Net

2022-11-30 1:35:33

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 6	1	20.000	20.0	1.0	1.0	6.7809	STDG	2022-11-26 14:40:14 UTC-5
Standard 7	1	40.000	20.0	1.0	1.0	13.2891	STDH	2022-11-26 15:00:46 UTC-5
Standard 8	1	50.000	20.0	1.0	1.0	16.1297	STDI	2022-11-26 15:21:20 UTC-5
Standard 9	1	80.000	20.0	1.0	1.0	26.2910	STDJ	2022-11-26 15:41:52 UTC-5
Standard 10	1	100.000	20.0	1.0	1.0	32.3964	STDK	2022-11-26 16:02:24 UTC-5

MagIC Net

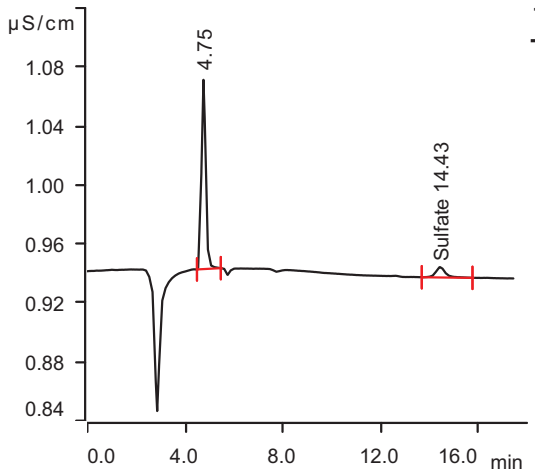
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDA
Sample type . . . . . Standard 100
Determination start 2022-11-26 12:37:03
Dilution factor 1.00

Anions

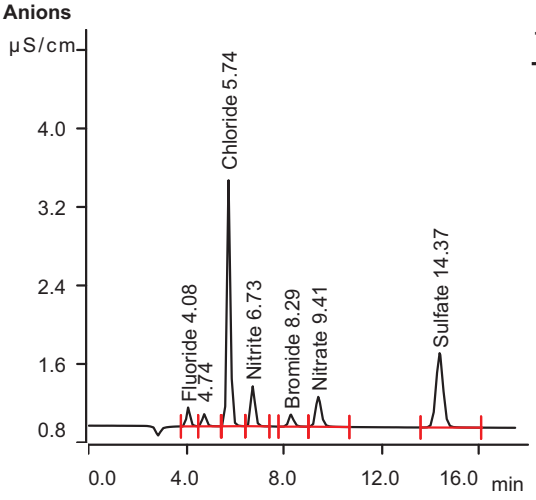


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
14.43	Sulfate	0.0033	0.008	0.008

Sample data

Ident . . . . . STDB
Sample type . . . . . Standard 1
Determination start 2022-11-26 12:57:36
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0324	0.117	0.117
5.74	Chloride	0.4185	1.158	1.158
6.73	Nitrite	0.0810	0.110	0.110
8.29	Bromide	0.0301	0.261	0.261
9.41	Nitrate	0.0817	0.123	0.123
14.37	Sulfate	0.2612	0.802	0.802

MagIC Net

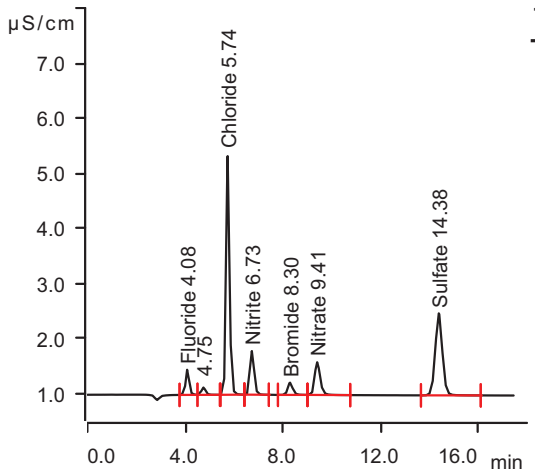
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDC
Sample type . . . . . Standard 2
Determination start 2022-11-26 13:18:09
Dilution factor 1.00

Anions

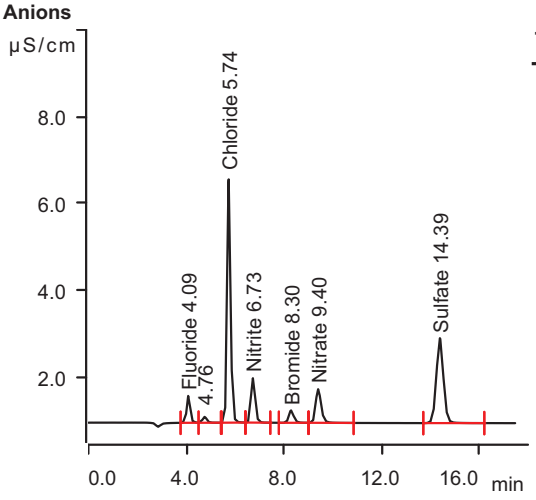


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0743	0.178	0.178
5.74	Chloride	0.7236	1.863	1.863
6.73	Nitrite	0.1559	0.187	0.187
8.30	Bromide	0.0537	0.390	0.390
9.41	Nitrate	0.1564	0.192	0.192
14.38	Sulfate	0.5081	1.561	1.561

Sample data

Ident . . . . . STDD
Sample type . . . . . Standard 3
Determination start 2022-11-26 13:38:40
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.1005	0.216	0.216
5.74	Chloride	0.9331	2.347	2.347
6.73	Nitrite	0.1998	0.232	0.232
8.30	Bromide	0.0679	0.468	0.468
9.40	Nitrate	0.2016	0.233	0.233
14.39	Sulfate	0.6636	2.040	2.040

MagIC Net

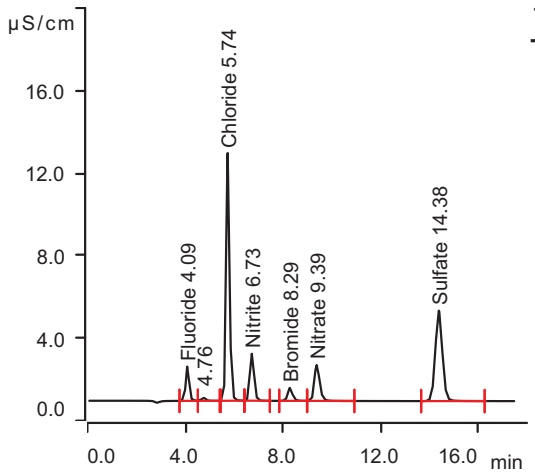
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDE
Sample type . . . . . Standard 4
Determination start 2022-11-26 13:59:12
Dilution factor 1.00

Anions

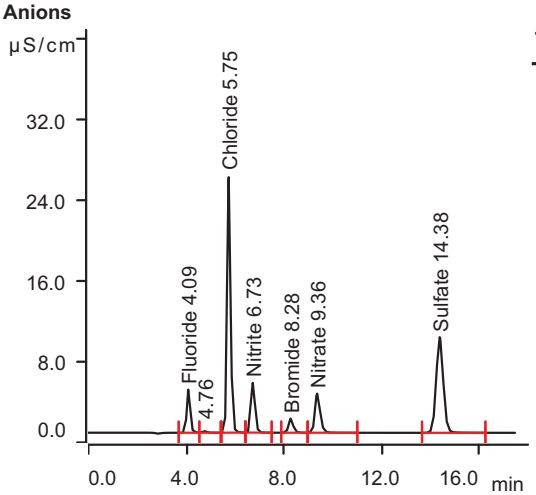


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.2632	0.451	0.451
5.74	Chloride	1.9940	4.797	4.797
6.73	Nitrite	0.4385	0.479	0.479
8.29	Bromide	0.1447	0.887	0.887
9.39	Nitrate	0.4417	0.454	0.454
14.38	Sulfate	1.4835	4.563	4.563

Sample data

Ident . . . . . STDF
Sample type . . . . . Standard 5
Determination start 2022-11-26 14:19:44
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.6805	1.056	1.056
5.75	Chloride	4.2319	9.966	9.966
6.73	Nitrite	0.9576	1.014	1.014
8.28	Bromide	0.3166	1.827	1.827
9.36	Nitrate	0.9765	0.946	0.946
14.38	Sulfate	3.2287	9.934	9.934

MagIC Net

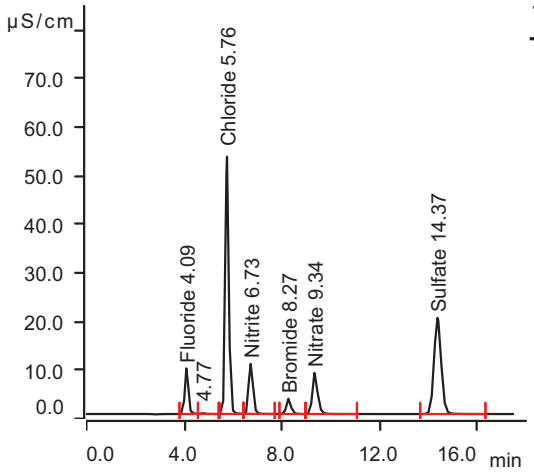
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDG
Sample type . . . . . Standard 6
Determination start 2022-11-26 14:40:14
Dilution factor 1.00

Anions

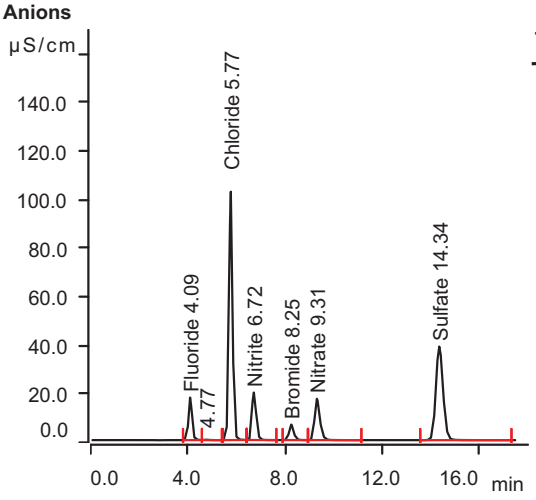


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.5249	2.279	2.279
5.76	Chloride	8.8843	20.711	20.711
6.73	Nitrite	2.0415	2.133	2.133
8.27	Bromide	0.6978	3.910	3.910
9.34	Nitrate	2.1310	2.009	2.009
14.37	Sulfate	6.7809	20.865	20.865

Sample data

Ident . . . . . STDH
Sample type . . . . . Standard 7
Determination start 2022-11-26 15:00:46
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	2.9126	4.290	4.290
5.77	Chloride	17.4942	40.596	40.596
6.72	Nitrite	4.0064	4.161	4.161
8.25	Bromide	1.4402	7.966	7.966
9.31	Nitrate	4.3178	4.021	4.021
14.34	Sulfate	13.2891	40.892	40.892

MagIC Net

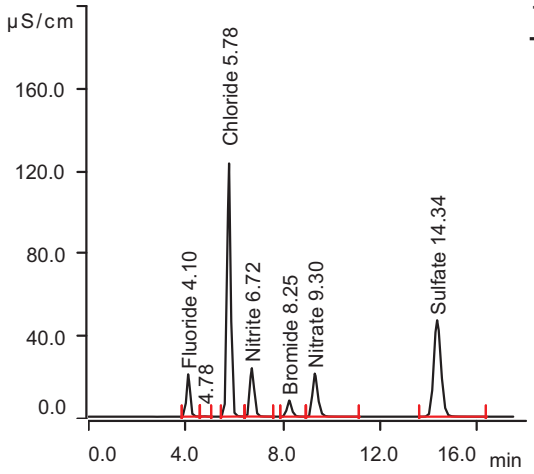
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDI
Sample type . . . . . Standard 8
Determination start 2022-11-26 15:21:20
Dilution factor 1.00

Anions

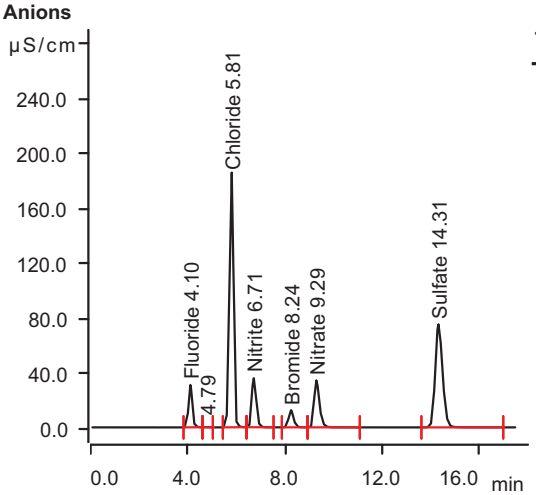


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	3.4132	5.015	5.015
5.78	Chloride	21.3591	49.523	49.523
6.72	Nitrite	4.8679	5.050	5.050
8.25	Bromide	1.7810	9.829	9.829
9.30	Nitrate	5.3110	4.935	4.935
14.34	Sulfate	16.1297	49.634	49.634

Sample data

Ident . . . . . STDJ
Sample type . . . . . Standard 9
Determination start 2022-11-26 15:41:52
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	5.4361	7.945	7.945
5.81	Chloride	34.7273	80.398	80.398
6.71	Nitrite	7.7187	7.991	7.991
8.24	Bromide	2.9684	16.318	16.318
9.29	Nitrate	8.7560	8.105	8.105
14.31	Sulfate	26.2910	80.903	80.903

MagIC Net

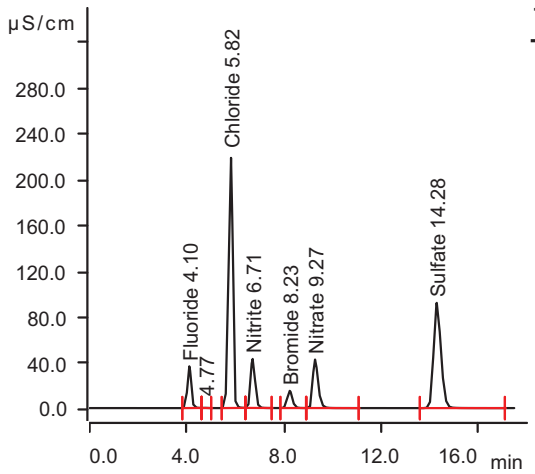
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDK
Sample type . . . . . Standard 10
Determination start 2022-11-26 16:02:24
Dilution factor 1.00

Anions

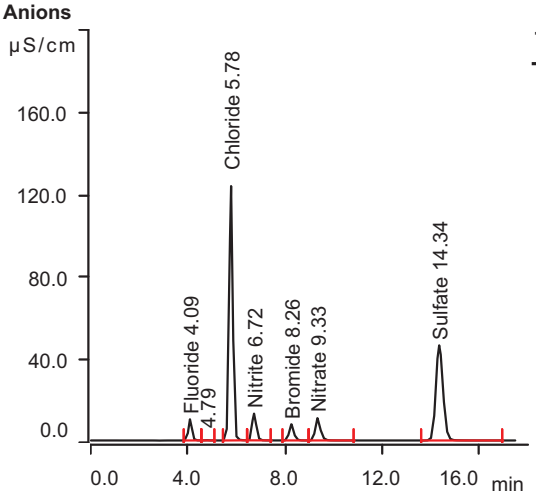


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	6.5807	9.603	9.603
5.82	Chloride	42.8879	99.245	99.245
6.71	Nitrite	9.3950	9.721	9.721
8.23	Bromide	3.7008	20.319	20.319
9.27	Nitrate	10.8708	10.051	10.051
14.28	Sulfate	32.3964	99.691	99.691

Sample data

Ident ICV
Sample type . . . . . Sample
Determination start 2022-11-26 16:22:55
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.6452	2.454	2.454
5.78	Chloride	21.4039	49.626	49.626
6.72	Nitrite	2.5689	2.677	2.677
8.26	Bromide	1.7692	9.764	9.764
9.33	Nitrate	2.7174	2.548	2.548
14.34	Sulfate	15.8438	48.754	48.754

MagIC Net

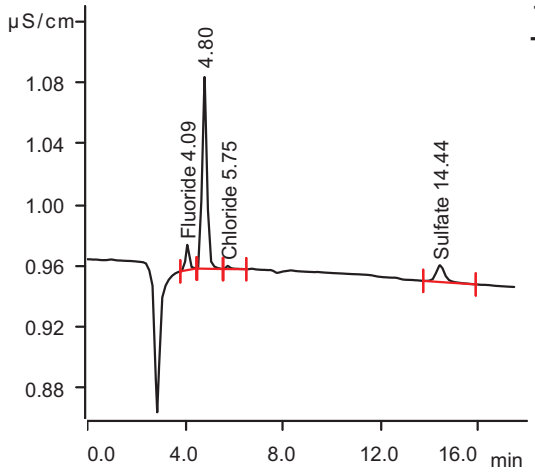
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . ICB
Sample type . . . . . Sample
Determination start 2022-11-26 16:43:27
Dilution factor 1.00

Anions

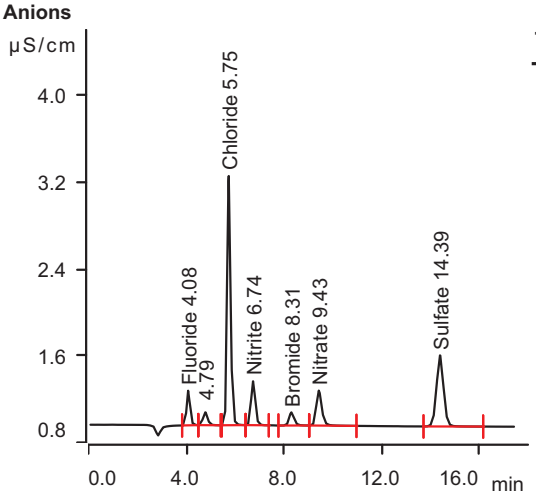


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0028	0.074	0.074
5.75	Chloride	0.0005	0.193	0.193
14.44	Sulfate	0.0048	0.013	0.013

Sample data

Ident . . . . . CRI
Sample type . . . . . Sample
Determination start 2022-11-26 17:03:56
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0512	0.144	0.144
5.75	Chloride	0.3789	1.067	1.067
6.74	Nitrite	0.0793	0.108	0.108
8.31	Bromide	0.0293	0.257	0.257
9.43	Nitrate	0.0850	0.126	0.126
14.39	Sulfate	0.2225	0.682	0.682

MagIC Net

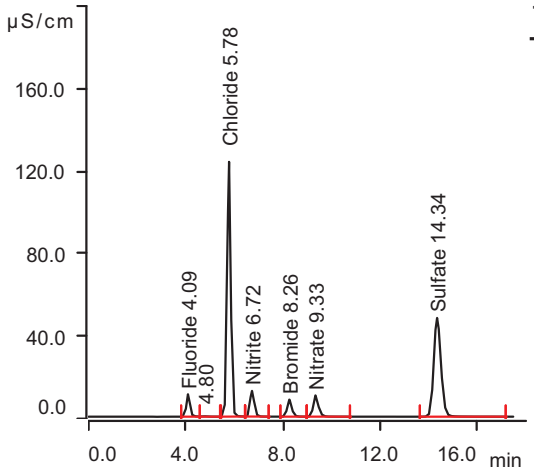
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-11-26 17:24:28
Dilution factor 1.00

Anions

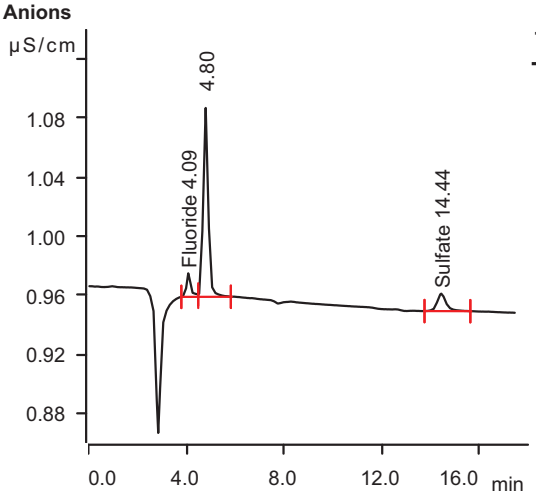


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.8159	2.701	2.701
5.78	Chloride	21.3625	49.530	49.530
6.72	Nitrite	2.4519	2.556	2.556
8.26	Bromide	1.8498	10.205	10.205
9.33	Nitrate	2.5650	2.408	2.408
14.34	Sulfate	16.5215	50.839	50.839

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-11-26 17:45:06
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0033	0.075	0.075
14.44	Sulfate	0.0052	0.014	0.014

MagIC Net

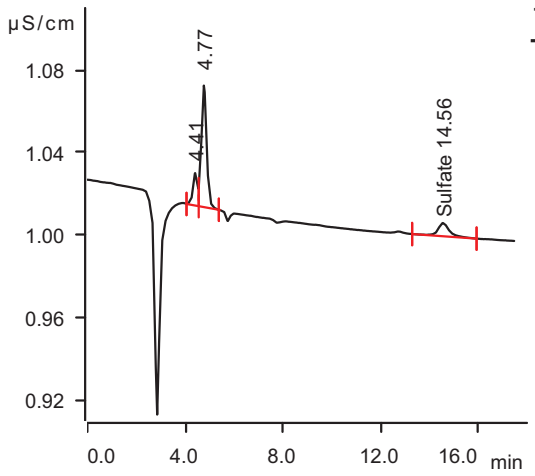
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident . . . . . Rinse
Sample type . . . . . Sample
Determination start 2022-12-06 10:15:31
Dilution factor 1.00

Anions

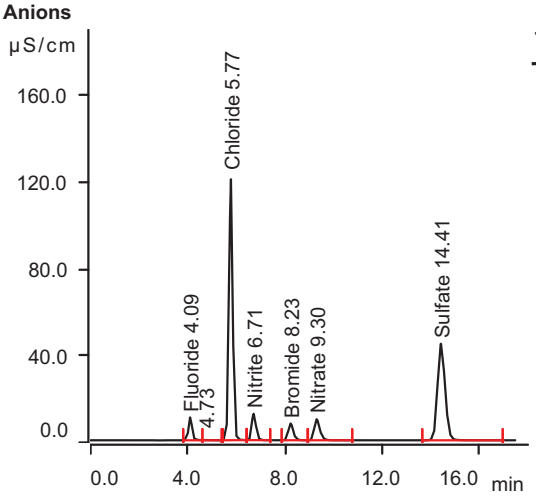


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
14.56	Sulfate	0.0035	0.009	0.009

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-06 10:36:02
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.7696	2.634	2.634
5.77	Chloride	21.3552	49.514	49.514
6.71	Nitrite	2.4841	2.590	2.590
8.23	Bromide	1.8432	10.169	10.169
9.30	Nitrate	2.5830	2.425	2.425
14.41	Sulfate	16.1819	49.794	49.794

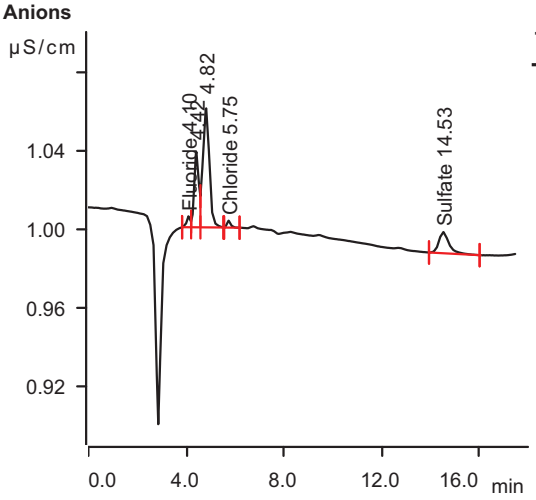
MagIC Net

Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

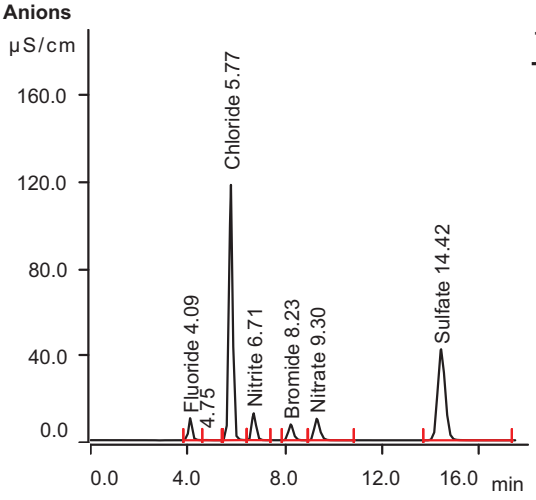
Ident MB1
Sample type . . . . . Sample
Determination start 2022-12-06 11:01:20
Dilution factor 1.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	0.0009	0.071	0.071
5.75	Chloride	0.0006	0.193	0.193
14.53	Sulfate	0.0052	0.014	0.014

Sample data

Ident B1
Sample type . . . . . Sample
Determination start 2022-12-06 11:22:00
Dilution factor 1.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.6990	2.531	2.531
5.77	Chloride	20.7935	48.216	48.216
6.71	Nitrite	2.5271	2.634	2.634
8.23	Bromide	1.7270	9.534	9.534
9.30	Nitrate	2.6287	2.467	2.467
14.42	Sulfate	15.1897	46.741	46.741

MagIC Net

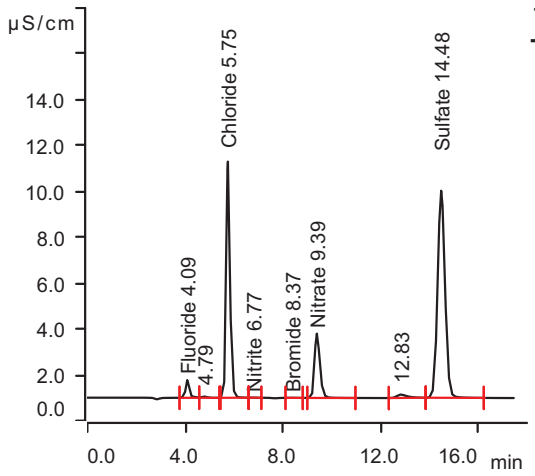
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1015-1
Sample type . . . . . Sample
Determination start 2022-12-06 11:42:32
Dilution factor 1.00

Anions

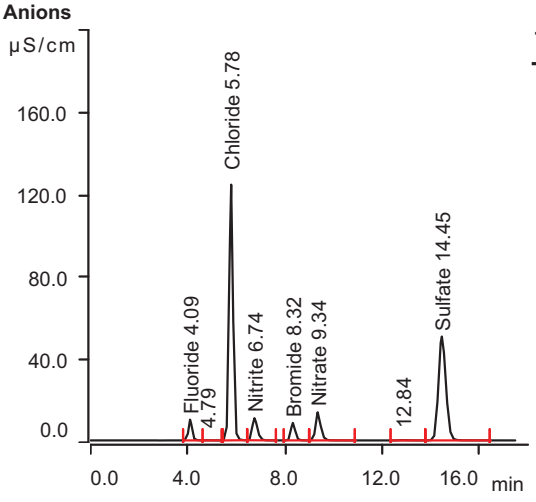


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.1369	0.268	0.268
5.75	Chloride	1.8983	4.576	4.576
6.77	Nitrite	0.0010	0.027	0.027
8.37	Bromide	0.0013	0.104	0.104
9.39	Nitrate	0.7102	0.701	0.701
14.48	Sulfate	3.1846	9.798	9.798

Sample data

Ident FC1015-1S1
Sample type . . . . . Sample
Determination start 2022-12-06 12:03:16
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.6990	2.531	2.531
5.78	Chloride	22.9228	53.134	53.134
6.74	Nitrite	2.6079	2.717	2.717
8.32	Bromide	1.7088	9.435	9.435
9.34	Nitrate	3.3841	3.162	3.162
14.45	Sulfate	17.9773	55.319	55.319

MagIC Net

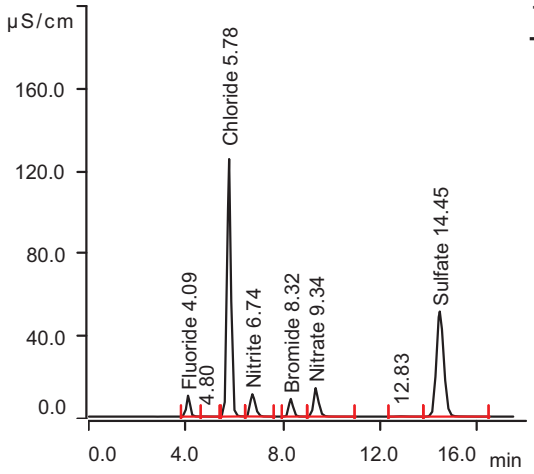
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1015-1S2
Sample type . . . . . Sample
Determination start 2022-12-06 12:23:50
Dilution factor 1.00

Anions

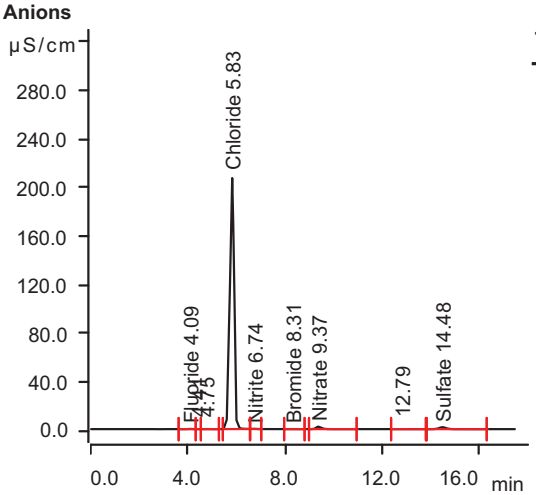


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.7060	2.542	2.542
5.78	Chloride	22.9853	53.278	53.278
6.74	Nitrite	2.6208	2.731	2.731
8.32	Bromide	1.7153	9.470	9.470
9.34	Nitrate	3.3963	3.173	3.173
14.45	Sulfate	18.0265	55.471	55.471

Sample data

Ident FC1015-2
Sample type . . . . . Sample
Determination start 2022-12-06 12:44:24
Dilution factor 10.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0301	0.114	1.138
5.83	Chloride	40.0873	92.777	927.771
6.74	Nitrite	0.0284	0.055	0.555
8.31	Bromide	0.0049	0.124	1.238
9.37	Nitrate	0.5106	0.518	5.176
14.48	Sulfate	0.5388	1.656	16.559

MagIC Net

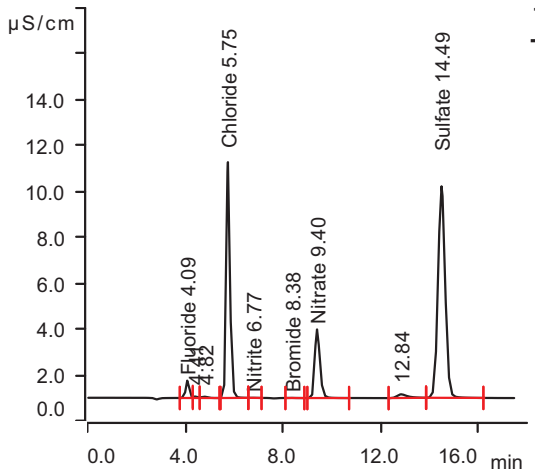
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1015-3
Sample type . . . . . Sample
Determination start 2022-12-06 13:04:44
Dilution factor 1.00

Anions

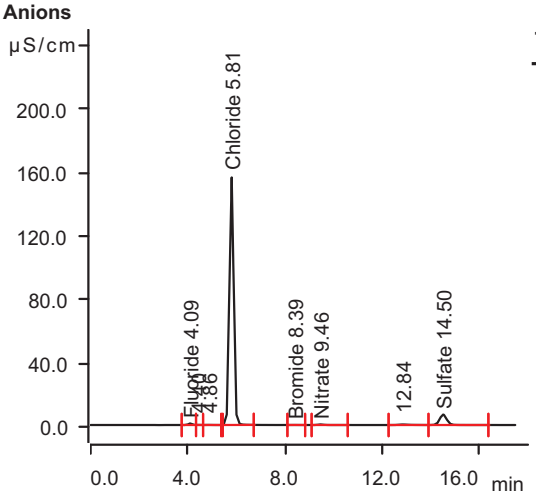


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.1239	0.250	0.250
5.75	Chloride	1.8544	4.474	4.474
6.77	Nitrite	0.0011	0.027	0.027
8.38	Bromide	0.0012	0.103	0.103
9.40	Nitrate	0.7274	0.717	0.717
14.49	Sulfate	3.1523	9.699	9.699

Sample data

Ident FC1015-4
Sample type . . . . . Sample
Determination start 2022-12-06 13:25:21
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.1655	0.310	0.310
5.81	Chloride	30.0743	69.651	69.651
8.39	Bromide	0.0044	0.121	0.121
9.46	Nitrate	0.0882	0.129	0.129
14.50	Sulfate	2.2541	6.934	6.934

MagIC Net

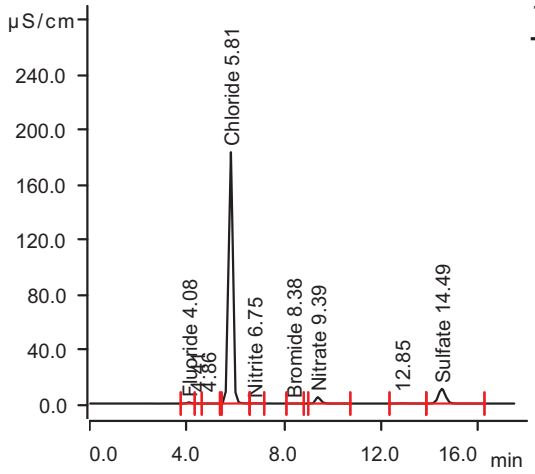
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1015-5
Sample type . . . . . Sample
Determination start 2022-12-06 13:45:55
Dilution factor 1.00

Anions

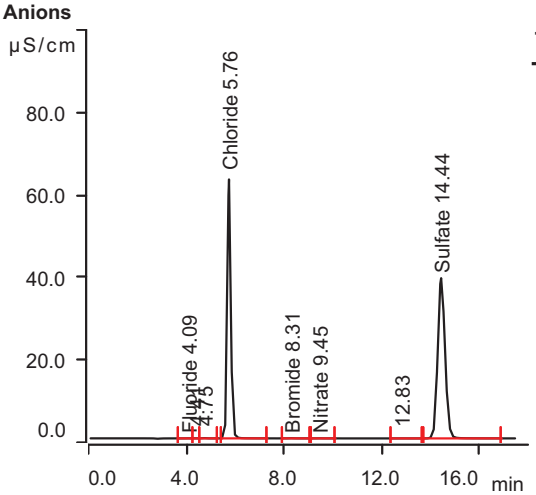


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.1490	0.286	0.286
5.81	Chloride	36.1193	83.612	83.612
6.75	Nitrite	0.0136	0.040	0.040
8.38	Bromide	0.0051	0.125	0.125
9.39	Nitrate	1.1082	1.068	1.068
14.49	Sulfate	3.6381	11.193	11.193

Sample data

Ident FC1018-1
Sample type . . . . . Sample
Determination start 2022-12-06 14:06:29
Dilution factor 50.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0028	0.074	3.711
5.76	Chloride	10.5649	24.592	1229.615
8.31	Bromide	0.0084	0.143	7.139
9.45	Nitrate	0.0047	0.052	2.602
14.44	Sulfate	13.5183	41.598	2079.895

MagIC Net

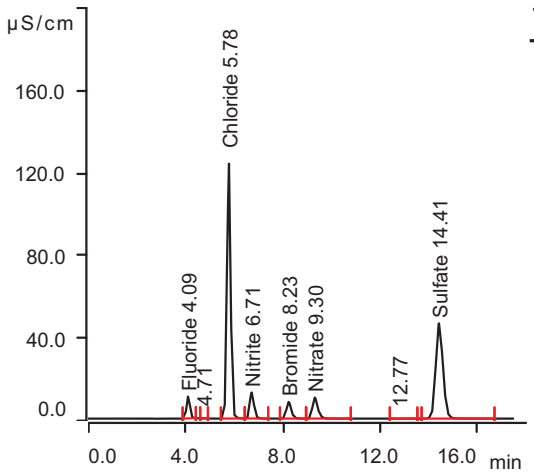
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-06 14:26:48
Dilution factor 1.00

Anions

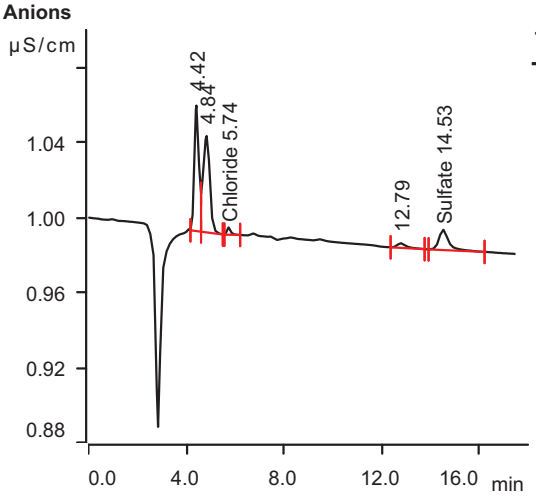


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.6624	2.478	2.478
5.78	Chloride	21.4057	49.630	49.630
6.71	Nitrite	2.4968	2.603	2.603
8.23	Bromide	1.8523	10.219	10.219
9.30	Nitrate	2.5955	2.436	2.436
14.41	Sulfate	16.0624	49.427	49.427

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-06 14:47:25
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	0.0007	0.193	0.193
14.53	Sulfate	0.0052	0.014	0.014

MagIC Net

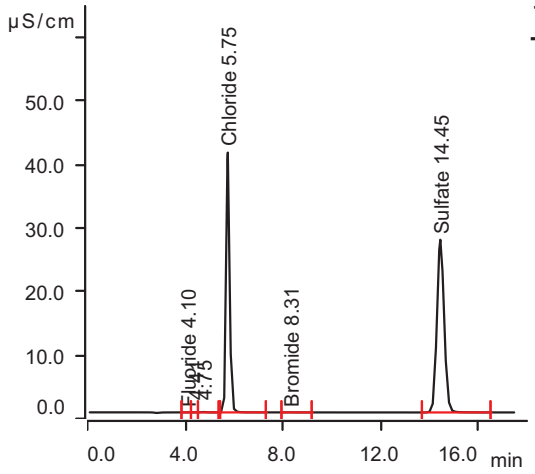
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1018-2
Sample type . . . . . Sample
Determination start 2022-12-06 15:07:57
Dilution factor 100.00

Anions

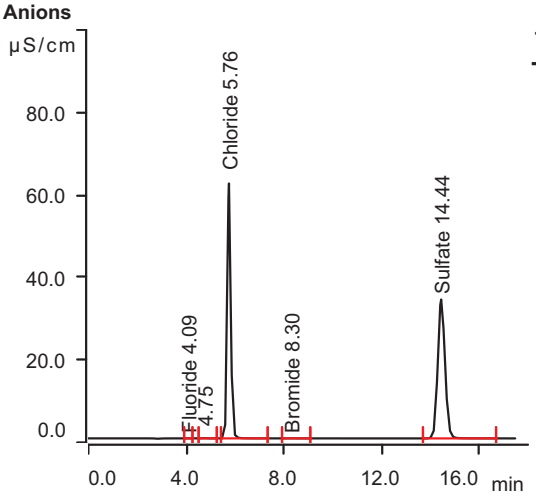


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	0.0008	0.071	7.134
5.75	Chloride	6.8179	15.938	1593.812
8.31	Bromide	0.0036	0.117	11.672
14.45	Sulfate	9.3406	28.742	2874.173

Sample data

Ident FC1018-3
Sample type . . . . . Sample
Determination start 2022-12-06 15:28:13
Dilution factor 100.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0011	0.072	7.173
5.76	Chloride	10.3602	24.119	2411.944
8.30	Bromide	0.0052	0.125	12.540
14.44	Sulfate	11.5870	35.654	3565.449

MagIC Net

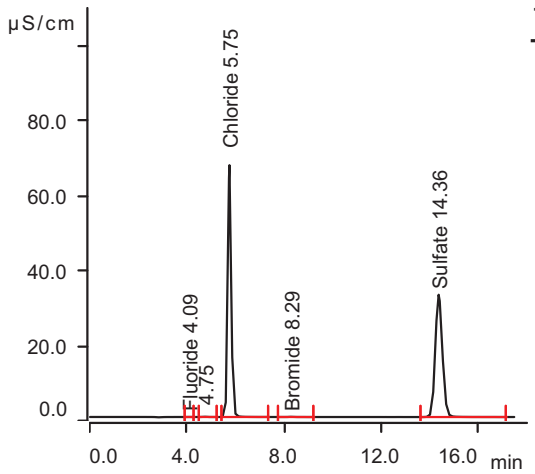
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1018-4
Sample type . . . . . Sample
Determination start 2022-12-06 15:48:30
Dilution factor 100.00

Anions

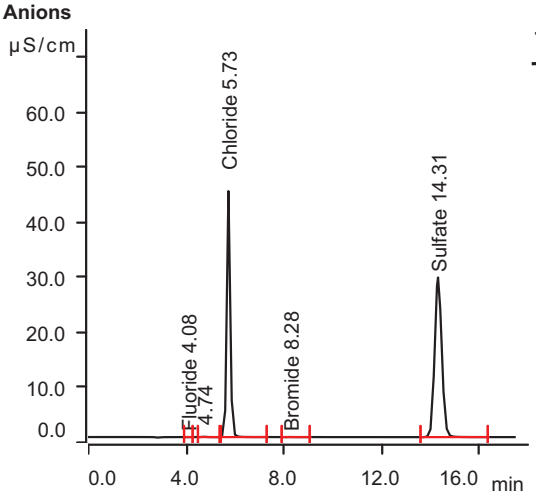


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0014	0.072	7.217
5.75	Chloride	11.2428	26.158	2615.787
8.29	Bromide	0.0124	0.164	16.449
14.36	Sulfate	11.1047	34.170	3417.029

Sample data

Ident FC1018-5
Sample type . . . . . Sample
Determination start 2022-12-06 16:08:47
Dilution factor 100.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0004	0.071	7.074
5.73	Chloride	7.4052	17.295	1729.458
8.28	Bromide	0.0035	0.116	11.602
14.31	Sulfate	9.8288	30.244	3024.399

MagIC Net

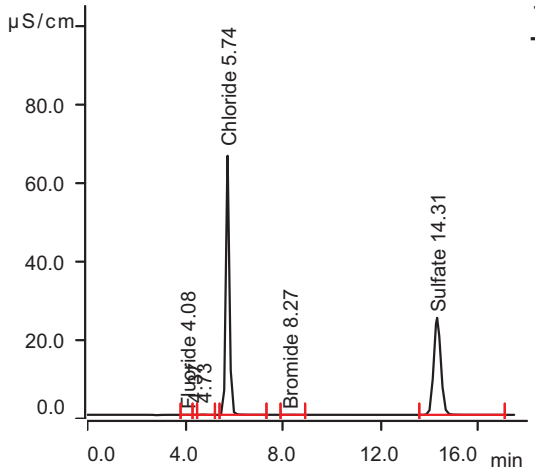
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1018-6
Sample type . . . . . Sample
Determination start 2022-12-06 16:29:03
Dilution factor 100.00

Anions

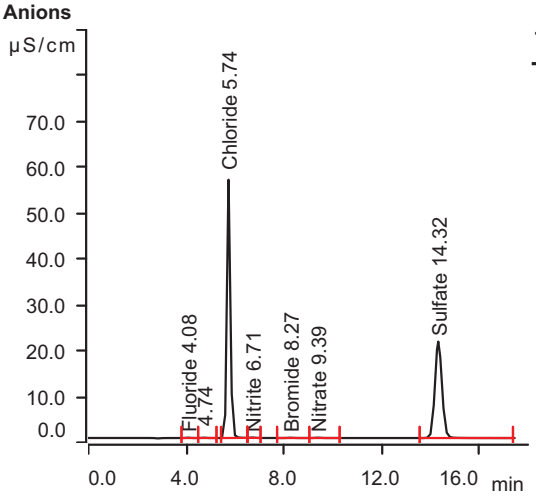


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0032	0.075	7.485
5.74	Chloride	10.9934	25.582	2558.190
8.27	Bromide	0.0035	0.116	11.585
14.31	Sulfate	8.3389	25.659	2565.927

Sample data

Ident FC1018-6S3
Sample type . . . . . Sample
Determination start 2022-12-06 16:49:20
Dilution factor 100.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0133	0.089	8.937
5.74	Chloride	9.3371	21.757	2175.661
6.71	Nitrite	0.0168	0.044	4.350
8.27	Bromide	0.0159	0.184	18.363
9.39	Nitrate	0.0193	0.066	6.556
14.32	Sulfate	7.0881	21.810	2181.003

MagIC Net

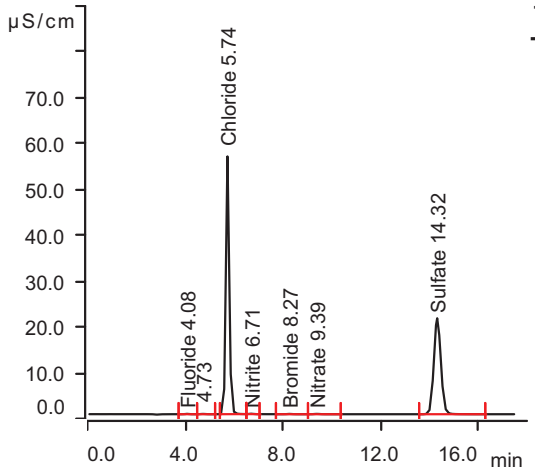
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1018-6S4
Sample type . . . . . Sample
Determination start 2022-12-06 17:09:38
Dilution factor 100.00

Anions

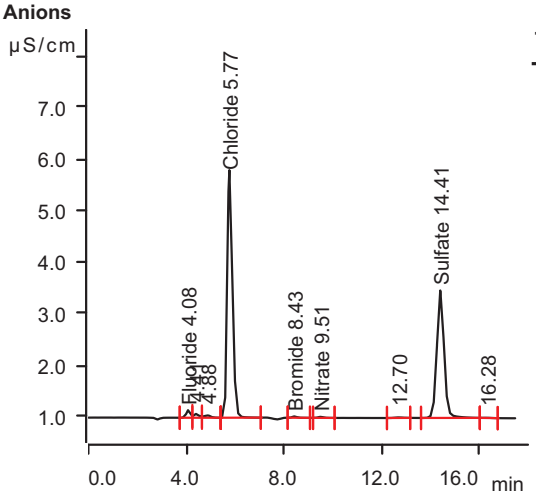


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0135	0.090	8.970
5.74	Chloride	9.2616	21.582	2158.217
6.71	Nitrite	0.0167	0.043	4.343
8.27	Bromide	0.0158	0.183	18.333
9.39	Nitrate	0.0193	0.065	6.549
14.32	Sulfate	7.0194	21.599	2159.871

Sample data

Ident FC1020-1
Sample type . . . . . Sample
Determination start 2022-12-06 17:29:55
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0269	0.109	0.109
5.77	Chloride	1.1632	2.878	2.878
8.43	Bromide	0.0054	0.126	0.126
9.51	Nitrate	0.0051	0.052	0.052
14.41	Sulfate	0.8547	2.628	2.628

MagIC Net

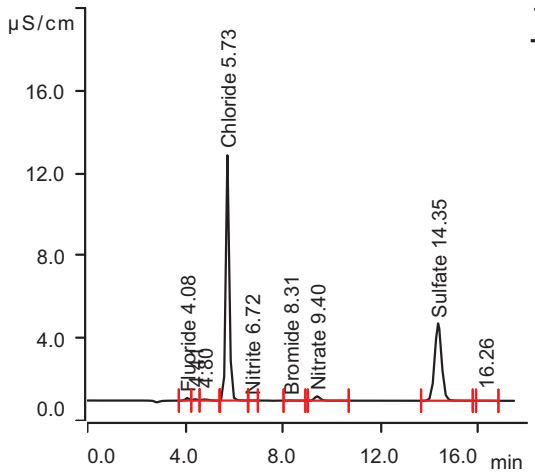
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident FC1020-2
Sample type . . . . . Sample
Determination start 2022-12-06 17:50:31
Dilution factor 1.00

Anions

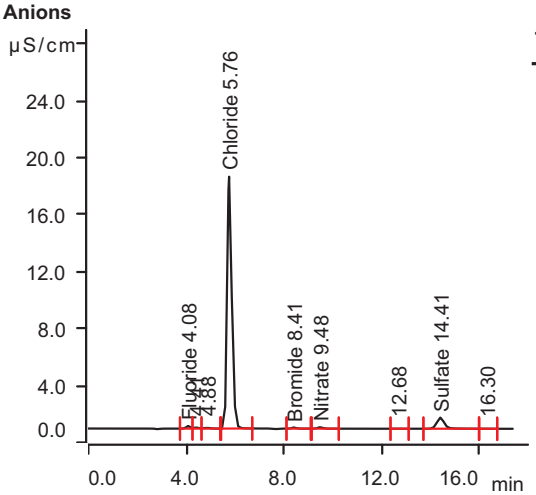


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0215	0.101	0.101
5.73	Chloride	1.9773	4.758	4.758
6.72	Nitrite	0.0005	0.027	0.027
8.31	Bromide	0.0019	0.107	0.107
9.40	Nitrate	0.0546	0.098	0.098
14.35	Sulfate	1.2317	3.788	3.788

Sample data

Ident FC1020-3
Sample type . . . . . Sample
Determination start 2022-12-06 18:11:12
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0337	0.119	0.119
5.76	Chloride	3.9276	9.263	9.263
8.41	Bromide	0.0164	0.186	0.186
9.48	Nitrate	0.0247	0.070	0.070
14.41	Sulfate	0.2840	0.872	0.872

MagIC Net

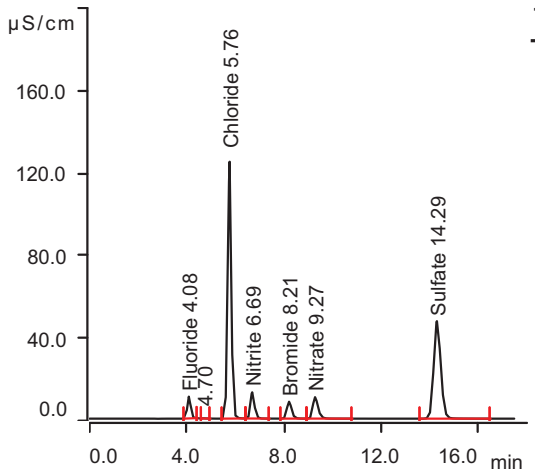
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-06 18:31:46
Dilution factor 1.00

Anions

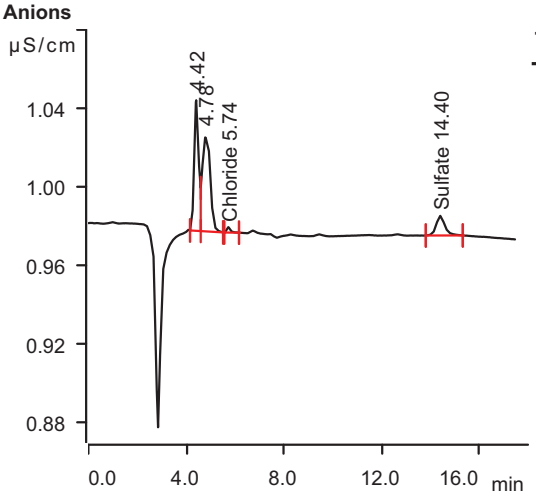


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6553	2.468	2.468
5.76	Chloride	21.4333	49.694	49.694
6.69	Nitrite	2.4961	2.602	2.602
8.21	Bromide	1.8529	10.222	10.222
9.27	Nitrate	2.5981	2.439	2.439
14.29	Sulfate	16.0783	49.476	49.476

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-06 18:52:26
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	0.0005	0.193	0.193
14.40	Sulfate	0.0042	0.011	0.011

MagIC Net

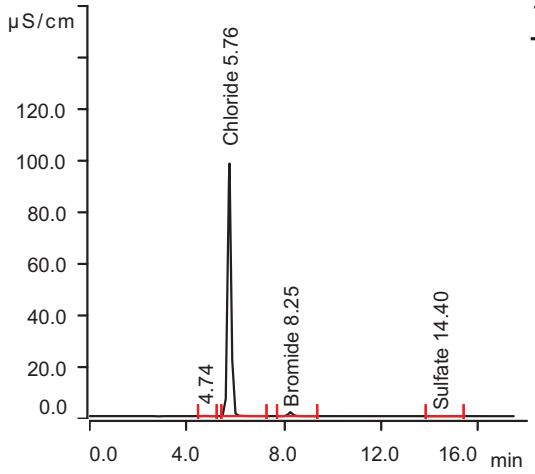
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-2
Sample type . . . . . Sample
Determination start 2022-12-06 19:12:58
Dilution factor 1000.00

Anions

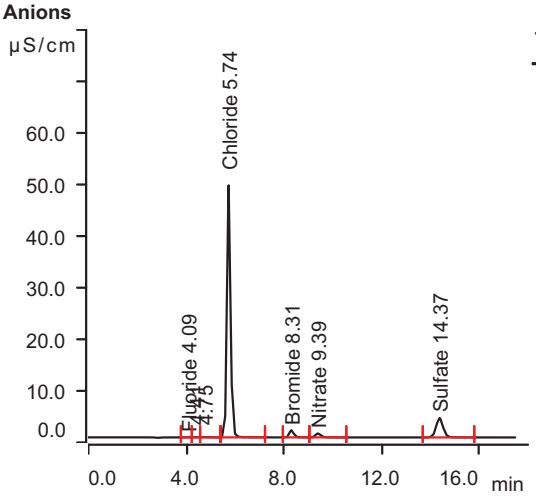


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.76	Chloride	16.3396	37.930	37929.523
8.25	Bromide	0.3251	1.873	1873.479
14.40	Sulfate	0.0042	0.011	10.873

Sample data

Ident LA85743-3
Sample type . . . . . Sample
Determination start 2022-12-06 19:33:14
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0068	0.080	0.080
5.74	Chloride	8.3565	19.492	19.492
8.31	Bromide	0.2800	1.627	1.627
9.39	Nitrate	0.1877	0.221	0.221
14.37	Sulfate	1.2597	3.874	3.874

MagIC Net

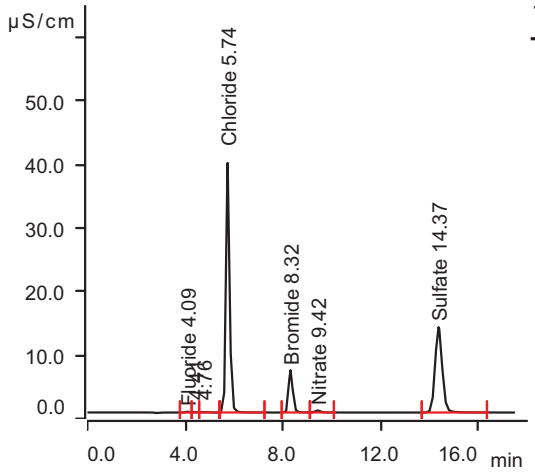
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-4
Sample type . . . . . Sample
Determination start 2022-12-06 19:53:52
Dilution factor 1.00

Anions

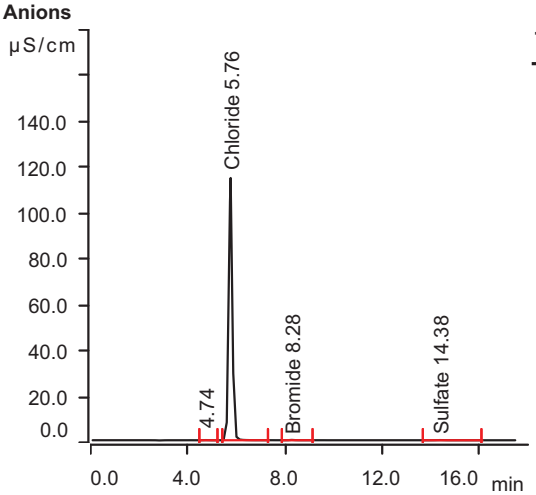


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0230	0.103	0.103
5.74	Chloride	6.8651	16.047	16.047
8.32	Bromide	1.2867	7.128	7.128
9.42	Nitrate	0.0754	0.117	0.117
14.37	Sulfate	4.5990	14.150	14.150

Sample data

Ident LA85743-5
Sample type . . . . . Sample
Determination start 2022-12-06 20:14:24
Dilution factor 1000.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.76	Chloride	19.4424	45.096	45095.575
8.28	Bromide	0.0288	0.254	254.278
14.38	Sulfate	0.0278	0.083	83.446

MagIC Net

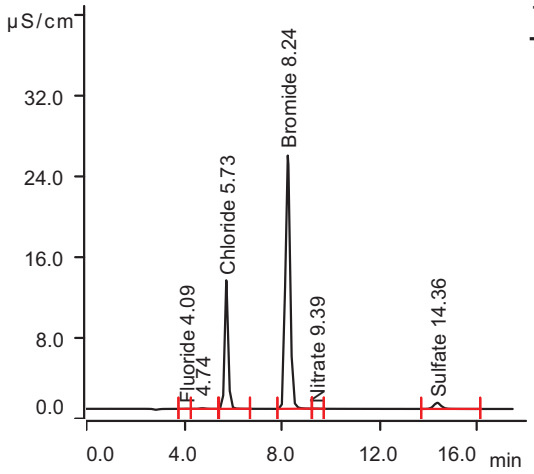
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-6
Sample type . . . . . Sample
Determination start 2022-12-06 20:34:40
Dilution factor 10.00

Anions

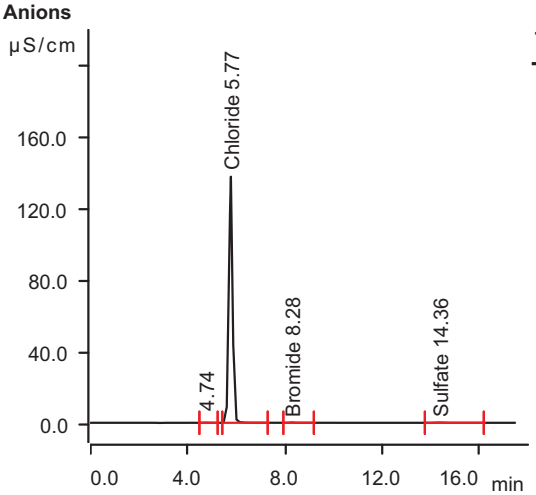


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0029	0.074	0.744
5.73	Chloride	2.0881	5.014	50.144
8.24	Bromide	5.6961	31.222	312.224
9.39	Nitrate	0.0018	0.049	0.494
14.36	Sulfate	0.2179	0.668	6.684

Sample data

Ident LA85743-7
Sample type . . . . . Sample
Determination start 2022-12-06 20:54:58
Dilution factor 50.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.77	Chloride	23.7785	55.110	2755.513
8.28	Bromide	0.0338	0.282	14.078
14.36	Sulfate	0.0552	0.168	8.380

MagIC Net

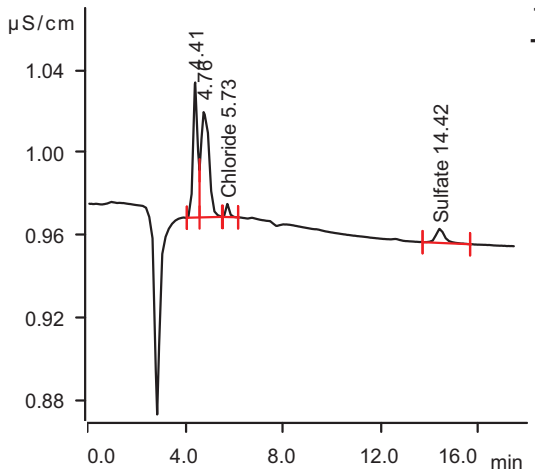
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident MB1
Sample type . . . . . Sample
Determination start 2022-12-06 21:15:14
Dilution factor 1.00

Anions

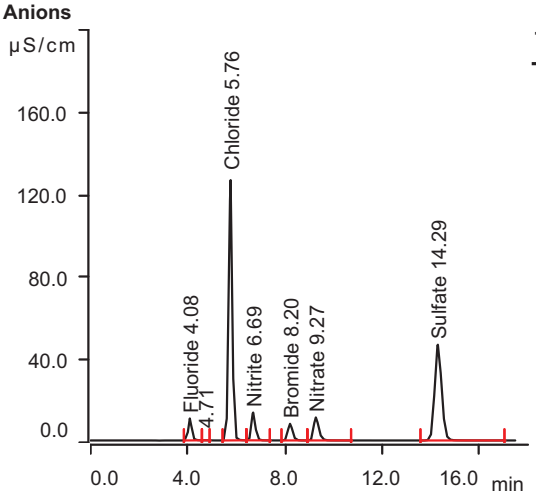


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.73	Chloride	0.0011	0.194	0.194
14.42	Sulfate	0.0030	0.007	0.007

Sample data

Ident B1
Sample type . . . . . Sample
Determination start 2022-12-06 21:35:49
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.7101	2.548	2.548
5.76	Chloride	21.5090	49.869	49.869
6.69	Nitrite	2.6169	2.727	2.727
8.20	Bromide	1.7939	9.900	9.900
9.27	Nitrate	2.7286	2.559	2.559
14.29	Sulfate	15.5783	47.937	47.937

MagIC Net

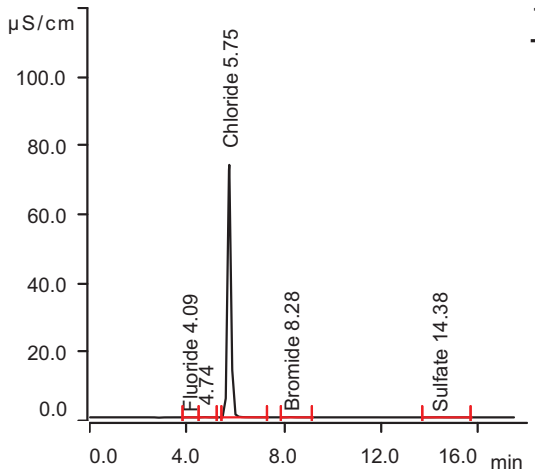
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-8
Sample type . . . . . Sample
Determination start 2022-12-06 21:56:21
Dilution factor 500.00

Anions

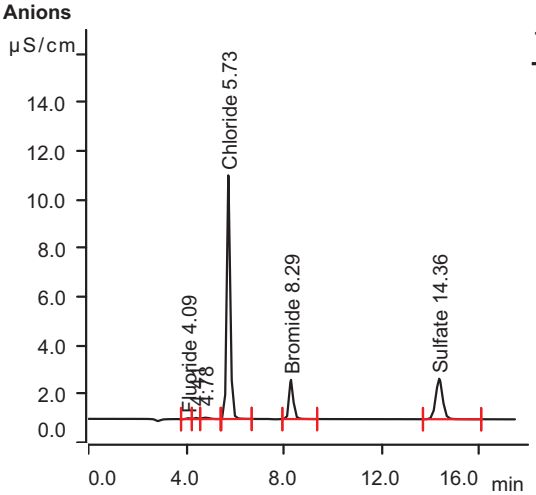


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0024	0.074	36.777
5.75	Chloride	12.1169	28.177	14088.371
8.28	Bromide	0.0146	0.177	88.307
14.38	Sulfate	0.0106	0.030	15.227

Sample data

Ident LA85743-9
Sample type . . . . . Sample
Determination start 2022-12-06 22:16:38
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0076	0.081	0.081
5.73	Chloride	1.6680	4.044	4.044
8.29	Bromide	0.3218	1.856	1.856
14.36	Sulfate	0.5497	1.689	1.689

MagIC Net

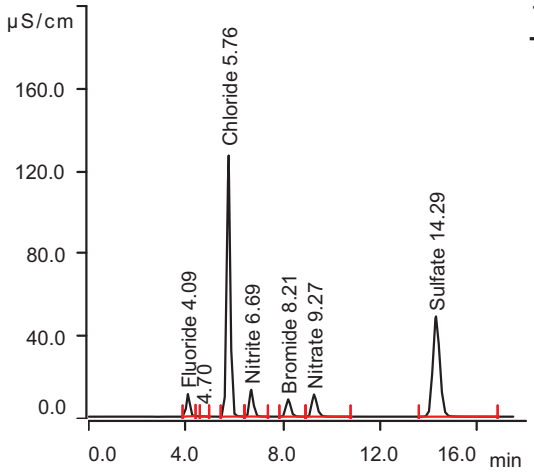
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-06 22:37:13
Dilution factor 1.00

Anions

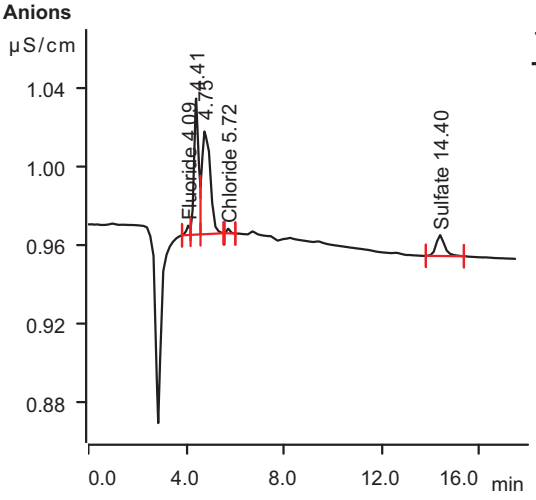


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	1.6870	2.514	2.514
5.76	Chloride	21.5169	49.887	49.887
6.69	Nitrite	2.5046	2.611	2.611
8.21	Bromide	1.8633	10.279	10.279
9.27	Nitrate	2.6101	2.450	2.450
14.29	Sulfate	16.2687	50.061	50.061

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-06 22:57:50
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0008	0.071	0.071
5.72	Chloride	0.0004	0.193	0.193
14.40	Sulfate	0.0043	0.011	0.011

MagIC Net

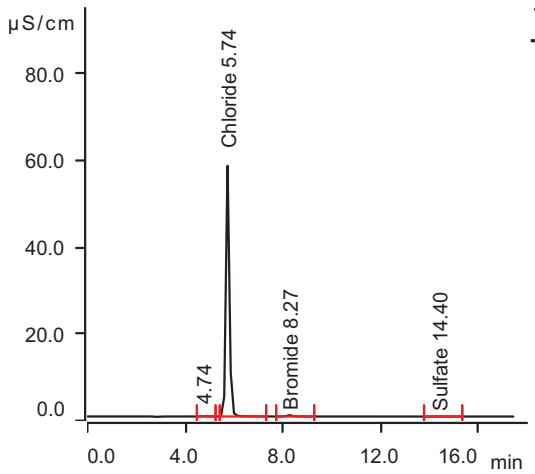
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-10
Sample type . . . . . Sample
Determination start 2022-12-06 23:18:23
Dilution factor 500.00

Anions

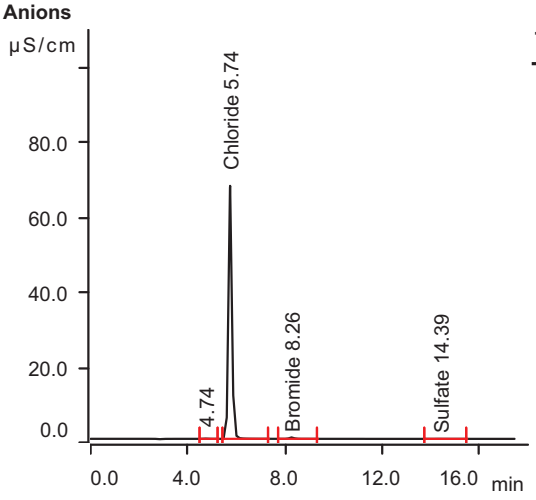


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	9.4973	22.126	11063.250
8.27	Bromide	0.0697	0.477	238.733
14.40	Sulfate	0.0052	0.014	6.945

Sample data

Ident LA85743-11
Sample type . . . . . Sample
Determination start 2022-12-06 23:38:39
Dilution factor 500.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	11.1236	25.883	12941.345
8.26	Bromide	0.0824	0.547	273.541
14.39	Sulfate	0.0053	0.014	7.133

MagIC Net

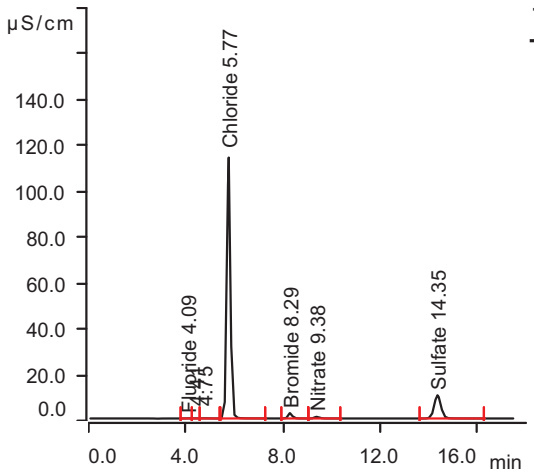
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-12
Sample type . . . . . Sample
Determination start 2022-12-06 23:58:56
Dilution factor 1.00

Anions

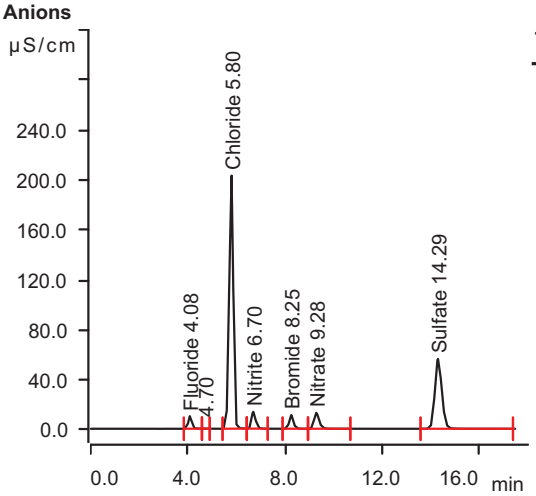


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0109	0.086	0.086
5.77	Chloride	19.4331	45.074	45.074
8.29	Bromide	0.4568	2.593	2.593
9.38	Nitrate	0.1693	0.204	0.204
14.35	Sulfate	3.3105	10.185	10.185

Sample data

Ident LA85743-12S1
Sample type . . . . . Sample
Determination start 2022-12-07 00:19:31
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6421	2.449	2.449
5.80	Chloride	38.0635	88.103	88.103
6.70	Nitrite	2.6903	2.802	2.802
8.25	Bromide	2.2074	12.159	12.159
9.28	Nitrate	3.0067	2.815	2.815
14.29	Sulfate	18.6692	57.449	57.449

MagIC Net

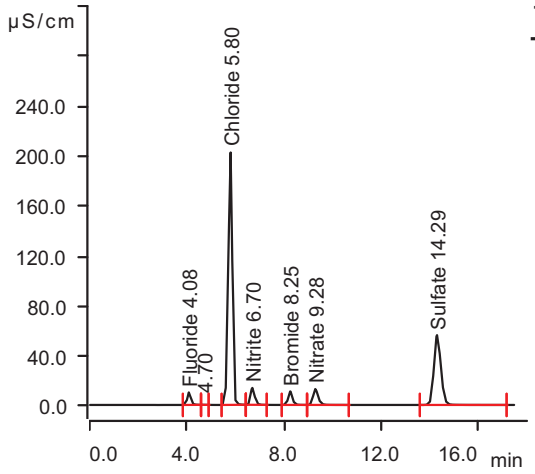
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-12S2
Sample type . . . . . Sample
Determination start 2022-12-07 00:40:03
Dilution factor 1.00

Anions

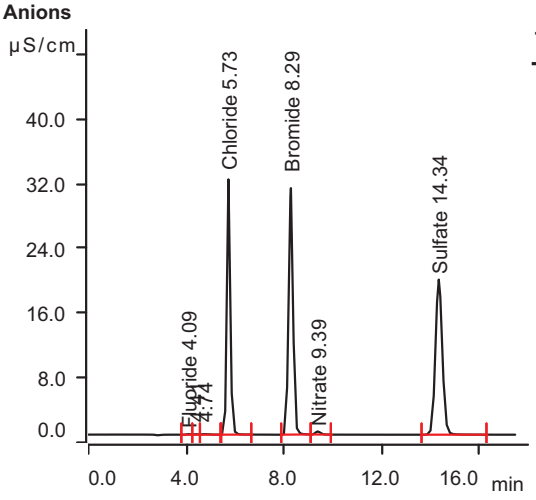


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6368	2.441	2.441
5.80	Chloride	38.0656	88.108	88.108
6.70	Nitrite	2.7044	2.817	2.817
8.25	Bromide	2.2086	12.166	12.166
9.28	Nitrate	3.0093	2.817	2.817
14.29	Sulfate	18.6533	57.400	57.400

Sample data

Ident LA85743-13
Sample type . . . . . Sample
Determination start 2022-12-07 01:00:36
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0146	0.091	0.091
5.73	Chloride	5.2016	12.205	12.205
8.29	Bromide	6.4103	35.125	35.125
9.39	Nitrate	0.0896	0.130	0.130
14.34	Sulfate	6.2728	19.301	19.301

MagIC Net

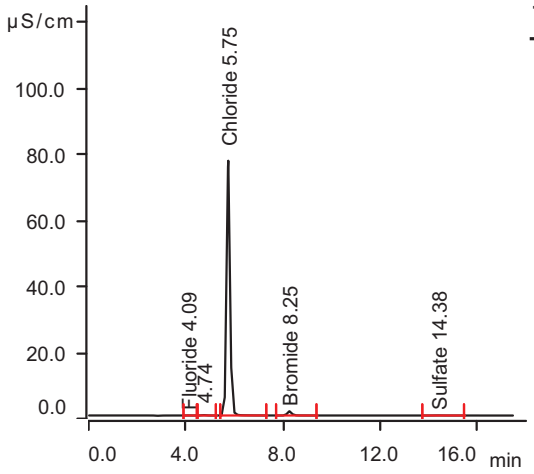
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-14
Sample type . . . . . Sample
Determination start 2022-12-07 01:21:07
Dilution factor 200.00

Anions

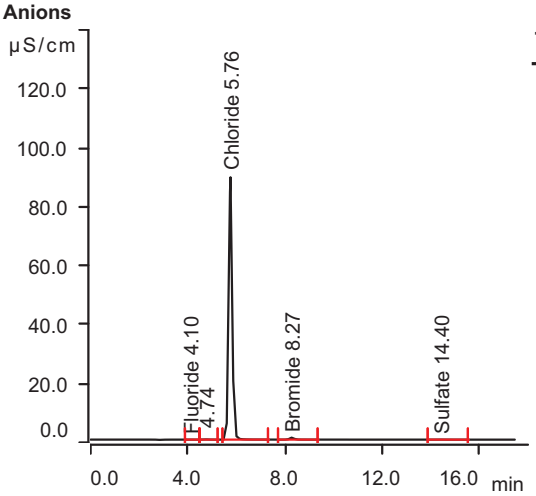


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0026	0.074	14.791
5.75	Chloride	12.6610	29.433	5886.670
8.25	Bromide	0.2737	1.593	318.515
14.38	Sulfate	0.0103	0.030	5.944

Sample data

Ident LA85743-15
Sample type . . . . . Sample
Determination start 2022-12-07 01:41:23
Dilution factor 200.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	0.0009	0.071	14.288
5.76	Chloride	14.7872	34.344	6868.827
8.27	Bromide	0.1433	0.880	175.933
14.40	Sulfate	0.0064	0.018	3.524

MagIC Net

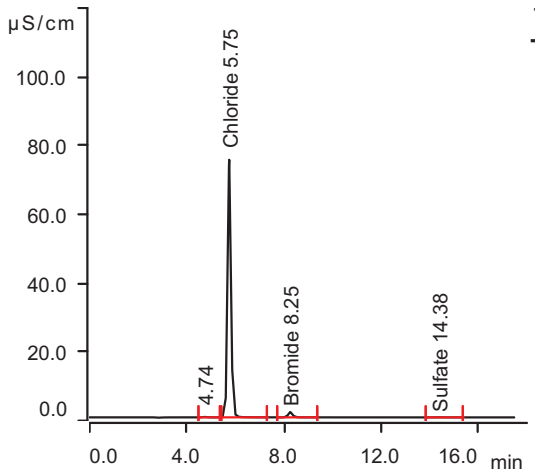
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-16
Sample type . . . . . Sample
Determination start 2022-12-07 02:01:40
Dilution factor 500.00

Anions

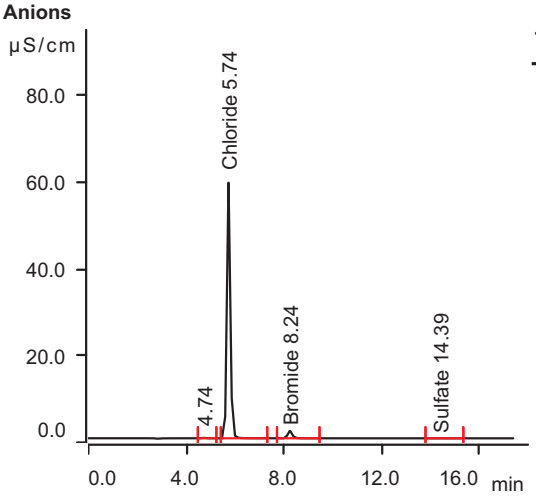


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.75	Chloride	12.3053	28.612	14305.889
8.25	Bromide	0.3282	1.890	945.045
14.38	Sulfate	0.0097	0.028	13.907

Sample data

Ident LA85743-17
Sample type . . . . . Sample
Determination start 2022-12-07 02:21:56
Dilution factor 500.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	9.5684	22.291	11145.388
8.24	Bromide	0.3669	2.102	1050.831
14.39	Sulfate	0.0041	0.010	5.206

MagIC Net

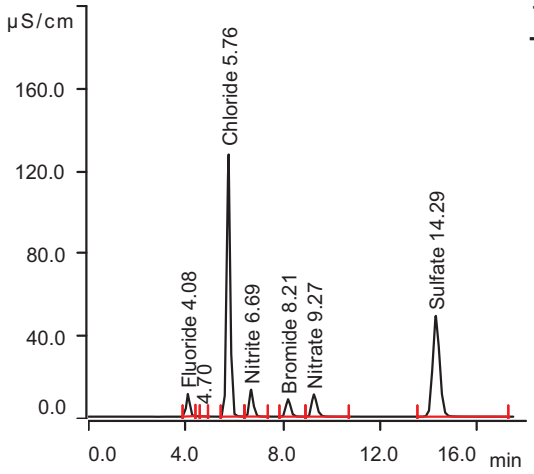
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-07 02:42:13
Dilution factor 1.00

Anions

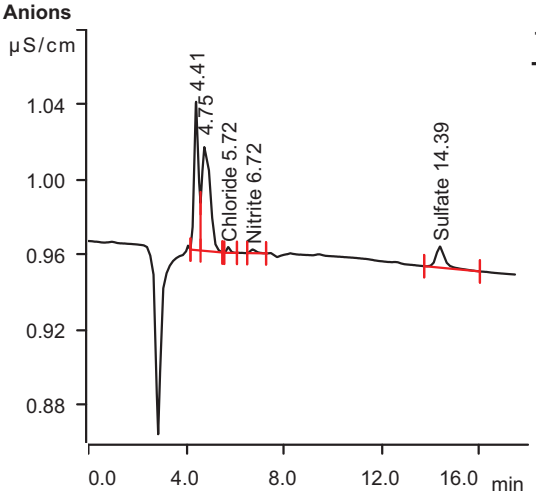


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6892	2.517	2.517
5.76	Chloride	21.5427	49.947	49.947
6.69	Nitrite	2.5071	2.613	2.613
8.21	Bromide	1.8667	10.297	10.297
9.27	Nitrate	2.6148	2.454	2.454
14.29	Sulfate	16.2898	50.127	50.127

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-07 03:02:51
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.72	Chloride	0.0005	0.193	0.193
6.72	Nitrite	0.0005	0.027	0.027
14.39	Sulfate	0.0049	0.013	0.013

MagIC Net

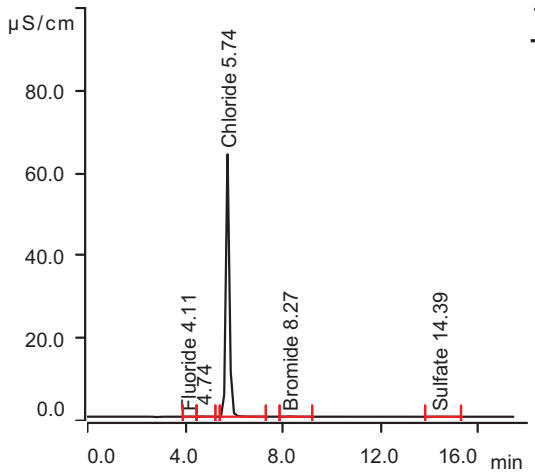
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-18
Sample type . . . . . Sample
Determination start 2022-12-07 03:23:24
Dilution factor 500.00

Anions

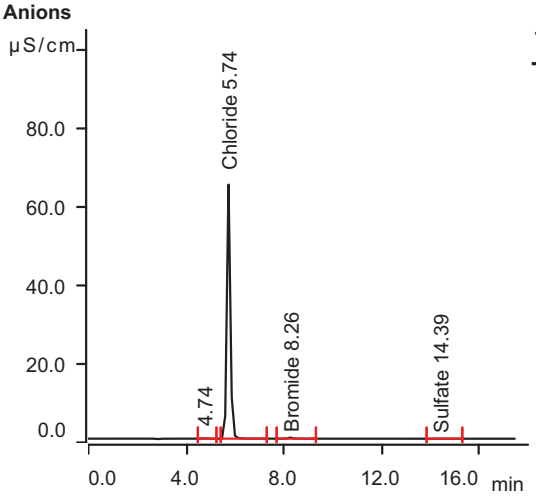


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.11	Fluoride	0.0006	0.071	35.515
5.74	Chloride	10.5130	24.472	12236.203
8.27	Bromide	0.0179	0.195	97.412
14.39	Sulfate	0.0059	0.016	8.008

Sample data

Ident LA85743-19
Sample type . . . . . Sample
Determination start 2022-12-07 03:43:40
Dilution factor 500.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.74	Chloride	10.6389	24.763	12381.571
8.26	Bromide	0.0610	0.430	215.098
14.39	Sulfate	0.0054	0.015	7.281

MagIC Net

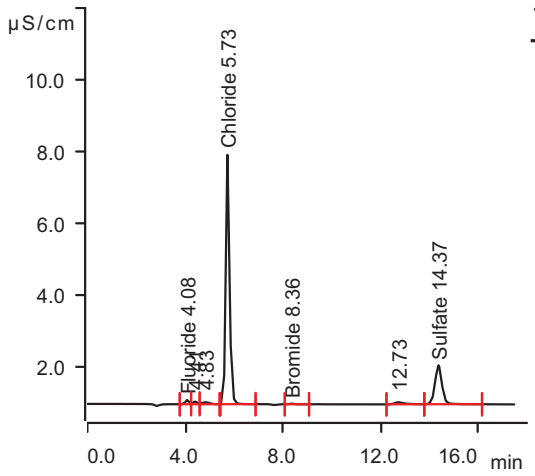
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-20
Sample type . . . . . Sample
Determination start 2022-12-07 04:03:56
Dilution factor 1.00

Anions

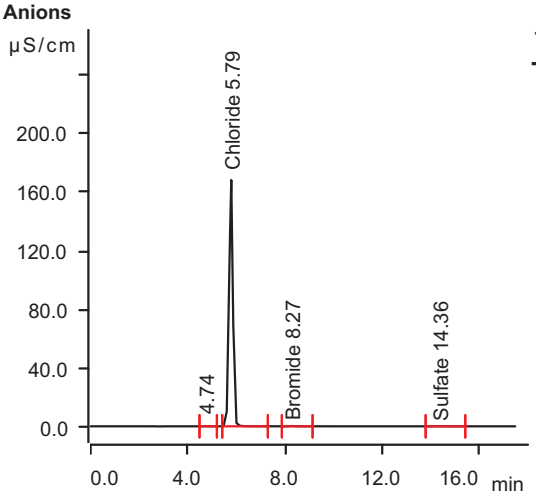


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0204	0.100	0.100
5.73	Chloride	1.2613	3.105	3.105
8.36	Bromide	0.0037	0.117	0.117
14.37	Sulfate	0.3588	1.102	1.102

Sample data

Ident LA85743-21
Sample type . . . . . Sample
Determination start 2022-12-07 04:24:35
Dilution factor 1000.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.79	Chloride	29.6635	68.702	68702.277
8.27	Bromide	0.0443	0.339	338.923
14.36	Sulfate	0.0151	0.044	44.212

MagIC Net

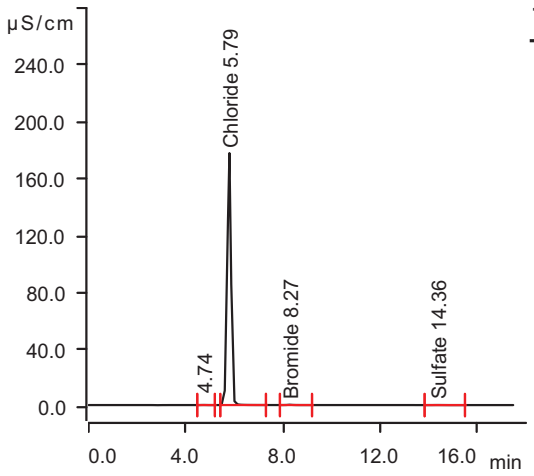
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-22
Sample type . . . . . Sample
Determination start 2022-12-07 04:44:51
Dilution factor 1000.00

Anions

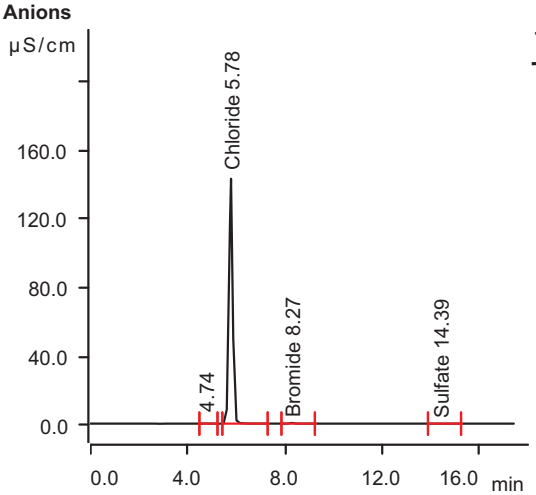


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.79	Chloride	31.9803	74.053	74053.127
8.27	Bromide	0.0480	0.359	359.359
14.36	Sulfate	0.0174	0.051	51.468

Sample data

Ident LA85743-23
Sample type . . . . . Sample
Determination start 2022-12-07 05:05:06
Dilution factor 500.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.78	Chloride	24.6510	57.125	28562.732
8.27	Bromide	0.0846	0.559	279.506
14.39	Sulfate	0.0054	0.014	7.199

MagIC Net

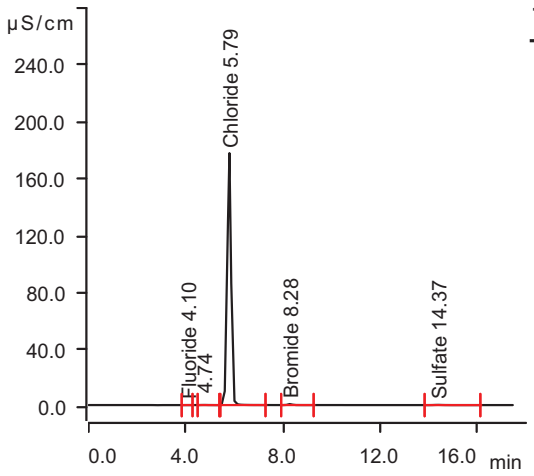
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident LA85743-24
Sample type . . . . . Sample
Determination start 2022-12-07 05:25:23
Dilution factor 10.00

Anions

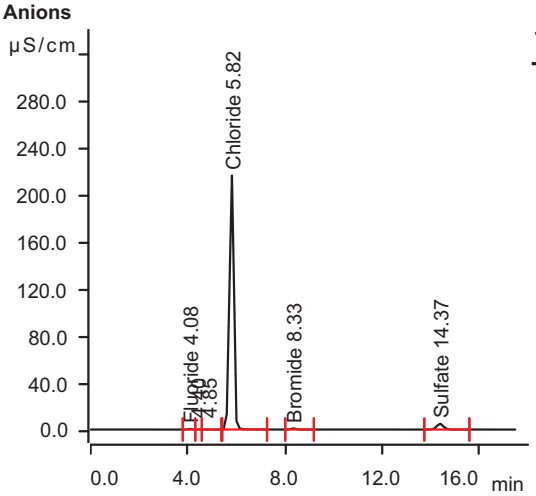


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.10	Fluoride	0.0004	0.071	0.707
5.79	Chloride	31.9231	73.921	739.210
8.28	Bromide	0.1409	0.867	8.667
14.37	Sulfate	0.0551	0.168	1.675

Sample data

Ident LA85743-25
Sample type . . . . . Sample
Determination start 2022-12-07 05:45:39
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	0.0885	0.198	0.198
5.82	Chloride	42.7388	98.901	98.901
8.33	Bromide	0.1846	1.105	1.105
14.37	Sulfate	1.5685	4.825	4.825

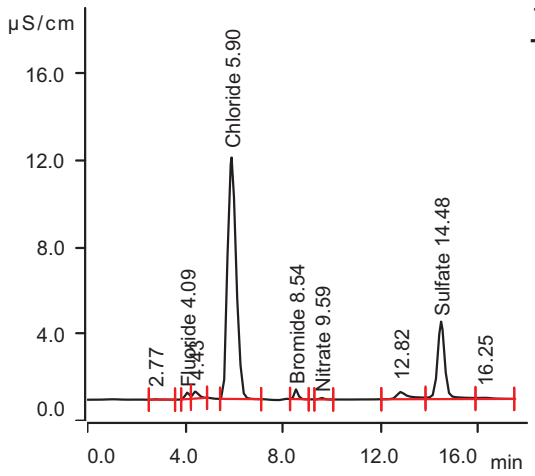
MagIC Net

Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

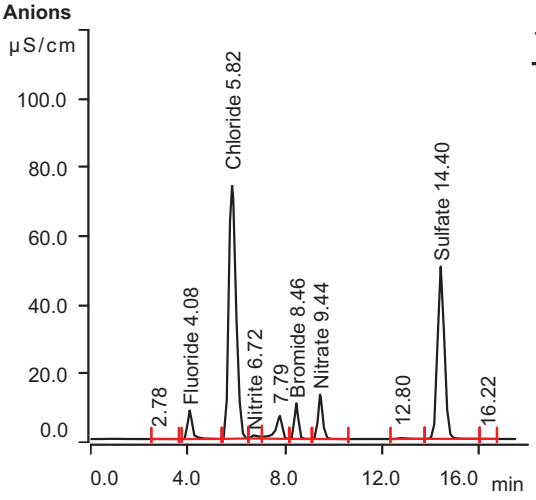
Ident FC945-3
Sample type . . . . . Sample
Determination start 2022-12-07 06:06:19
Dilution factor 1.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0595	0.156	0.156
5.90	Chloride	4.5434	10.685	10.685
8.54	Bromide	0.0821	0.545	0.545
9.59	Nitrate	0.0152	0.062	0.062
14.48	Sulfate	1.2681	3.900	3.900

Sample data

Ident FC945-3S3
Sample type . . . . . Sample
Determination start 2022-12-07 06:26:54
Dilution factor 1.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.8075	2.689	2.689
5.82	Chloride	25.5462	59.193	59.193
6.72	Nitrite	0.3184	0.355	0.355
8.46	Bromide	1.8362	10.131	10.131
9.44	Nitrate	2.7892	2.614	2.614
14.40	Sulfate	16.4963	50.762	50.762

MagIC Net

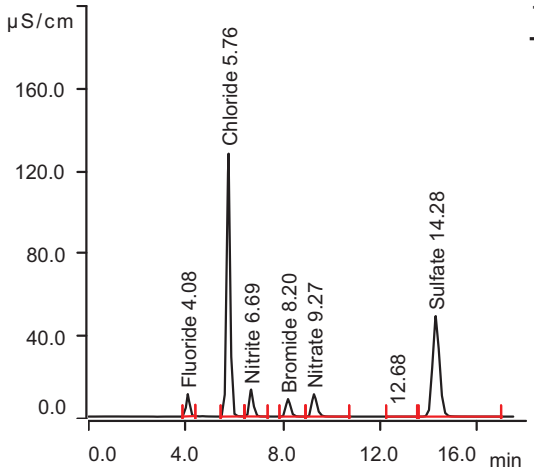
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-07 06:47:28
Dilution factor 1.00

Anions

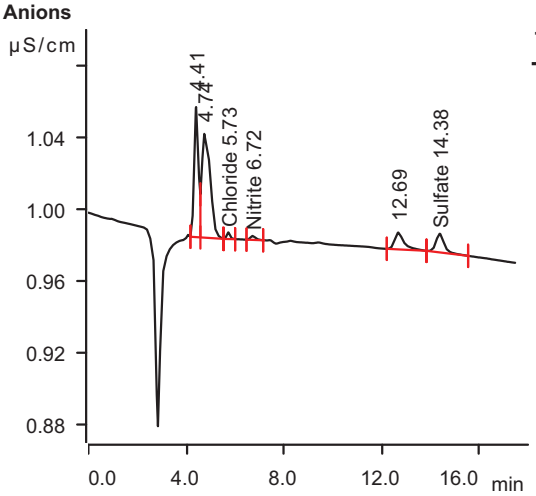


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6669	2.485	2.485
5.76	Chloride	21.5835	50.041	50.041
6.69	Nitrite	2.5138	2.620	2.620
8.20	Bromide	1.8734	10.334	10.334
9.27	Nitrate	2.6250	2.463	2.463
14.28	Sulfate	16.1948	49.834	49.834

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-07 07:08:05
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.73	Chloride	0.0006	0.193	0.193
6.72	Nitrite	0.0005	0.027	0.027
14.38	Sulfate	0.0041	0.011	0.011

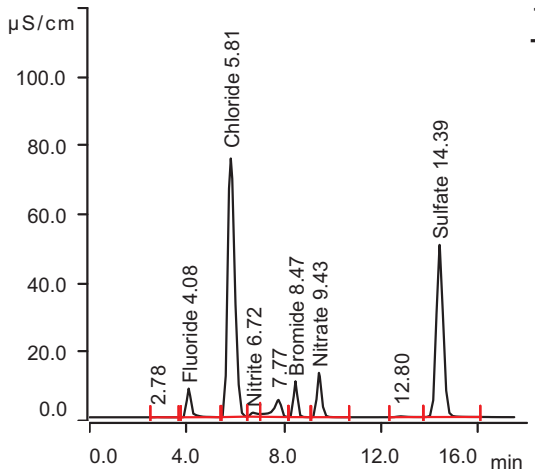
MagIC Net

Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

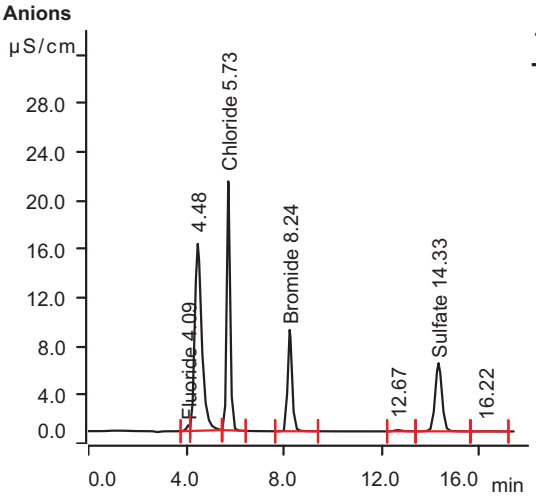
Ident FC945-3S4
Sample type . . . . . Sample
Determination start 2022-12-07 07:28:37
Dilution factor 1.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.8101	2.692	2.692
5.81	Chloride	25.5464	59.193	59.193
6.72	Nitrite	0.4017	0.441	0.441
8.47	Bromide	1.8367	10.133	10.133
9.43	Nitrate	2.7893	2.615	2.615
14.39	Sulfate	16.5173	50.827	50.827

Sample data

Ident FC1003-1
Sample type . . . . . Sample
Determination start 2022-12-07 07:49:16
Dilution factor 10.00



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.09	Fluoride	0.0708	0.173	1.727
5.73	Chloride	3.3061	7.827	78.275
8.24	Bromide	1.7267	9.532	95.325
14.33	Sulfate	1.8081	5.562	55.619

MagIC Net

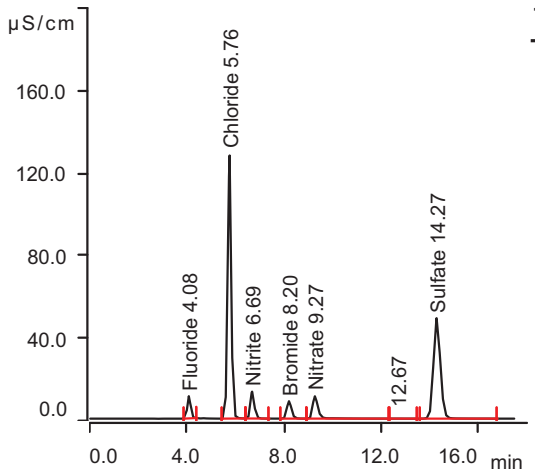
Summary Report

2022-12-07 2:39:03
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-07 08:09:33
Dilution factor 1.00

Anions

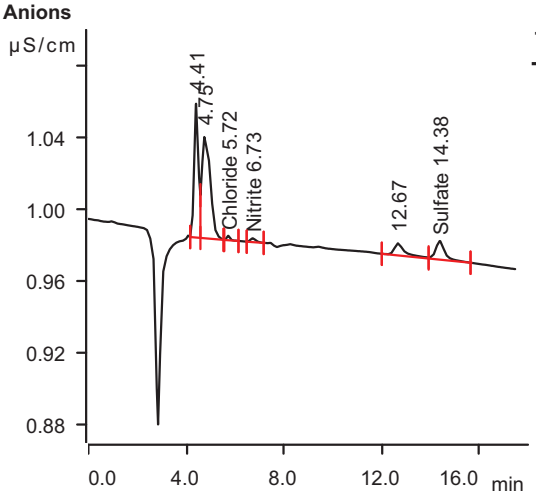


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.08	Fluoride	1.6632	2.480	2.480
5.76	Chloride	21.5927	50.062	50.062
6.69	Nitrite	2.5045	2.611	2.611
8.20	Bromide	1.8700	10.315	10.315
9.27	Nitrate	2.7657	2.593	2.593
14.27	Sulfate	16.1946	49.833	49.833

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-07 08:30:08
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.72	Chloride	0.0004	0.193	0.193
6.73	Nitrite	0.0005	0.027	0.027
14.38	Sulfate	0.0045	0.012	0.012

TDS Worksheet

Method: SM2540C-11

GN Batch ID:	92953	Filter Lot#	115519		
Analyst:	BW	Date (mm/dd/yy):	12/12/2022	12/12/2022	
Filter Date:	12/7/2022	Time (24hr)(Start/Finish):	10:25-11:25	12:35-13:35	
Balance ID:	AS-120S	Temp Deg C (Start/Finish):	180/180	180/180	

104 Oven ID: oven#3
180 Oven ID: oven#4
Therm ID (Oven 3): 919106 Corr. Factor, C: 0
Therm ID (Oven 4): 919218 Corr. Factor, C: 0

All recorded temperatures are in corrected temperature.

	Bottle #	Sample ID	Dish #	Volume Filtered (ml)	Filter tare weight (g)	Initial weight after drying at 180 deg C (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	TDS (mg/l)	RL (mg/l)	Scon(Umhos/cm)
MB	-	Method Blank	1201	50	48.0070	48.0074	48.0076	NO		FALSE		FALSE	12.0	50.0	-
QC1	3	FC1015-1	62	50	47.5251	47.5379	47.5375	NO		FALSE		FALSE	248.0	50.0	325
D1	3	FC1015-1	437	50	48.0728	48.0843	48.0847	NO		FALSE		FALSE	238.0	50.0	325
	-	Blank Spike	13	50	47.4139	47.5178	47.5174	NO		FALSE		FALSE	2070.0	50.0	-
	3	FC1015-2	27	25	48.2167	48.2694	48.2697	NO		FALSE		FALSE	2120.0	100.0	3310
	3	FC1015-3	3	50	48.0069	48.0193	48.0189	NO		FALSE		FALSE	240.0	50.0	320
	3	FC1015-4	50	50	48.2388	48.2572	48.2573	NO		FALSE		FALSE	370.0	50.0	515
	3	FC1015-5	77	50	47.4889	47.5090	47.5086	NO		FALSE		FALSE	394.0	50.0	550
	10	FC1033-1	32	3	47.4518	47.4968	47.4966	NO		FALSE		FALSE	17920.0	1000.0	31000
	12	FC1020-1	43	50	48.3308	48.3533	48.3529	NO		FALSE		FALSE	442.0	50.0	620
	12	FC1020-2	46	50	50.9895	50.9965	50.9965	NO		FALSE		FALSE	140.0	50.0	130
	12	FC1020-3	8	50	48.3391	48.3632	48.3628	NO		FALSE		FALSE	474.0	50.0	545
QC2								FALSE		FALSE		FALSE		#DIV/0!	
D2								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	

Duplicate 1 RPD	4.115
Duplicate 2 RPD	#VALUE!

Analyst's Signature: B Marie Wallace Date: 12/12/22

Reviewer's Signature: [signature] Date: 12/12/22

TDS Worksheet

Method: SM2540C-11

GN Batch ID:	92953	Filter Lot#	115519
Analyst:	BW	Date (mm/dd/yy):	
Filter Date:	12/7/2022	Time (24hr)(Start/Finish):	
Balance ID:	AS-120S	Temp Deg C (Start/Finish):	

All recorded temperatures are in corrected temperature.

104 Oven ID	oven#3		
180 Oven ID	oven#4		
Therm ID (Oven 3)	919106	Corr. Factor, C	0
Therm ID (Oven 4)	919218	Corr. Factor, C	0

	Bottle #	Sample ID	Dish #	Volume Filtered (ml)	Filter tare weight (g)	Initial weight after drying at 180 deg C (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	TDS (mg/l)	RL (mg/l)	Scon(Umhos/cm)
MB	-	Method Blank	1201	50	48.0070			FALSE		FALSE		FALSE		50.0	-
QC1	3	FC1015-1	62	50	47.5251			FALSE		FALSE		FALSE		50.0	325
D1	3	FC1015-1	437	50	48.0728			FALSE		FALSE		FALSE		50.0	325
	-	Blank Spike	13	50	47.4139			FALSE		FALSE		FALSE		50.0	-
	3	FC1015-2	27	25	48.2167			FALSE		FALSE		FALSE		100.0	3310
	3	FC1015-3	3	50	48.0069			FALSE		FALSE		FALSE		50.0	320
	3	FC1015-4	50	50	48.2388			FALSE		FALSE		FALSE		50.0	515
	3	FC1015-5	77	50	47.4889			FALSE		FALSE		FALSE		50.0	550
	10	FC1033-1	32	3	47.4518			FALSE		FALSE		FALSE		1000.0	31000
	12	FC1020-1	43	50	48.3308			FALSE		FALSE		FALSE		50.0	620
	12	FC1020-2	46	50	50.9895			FALSE		FALSE		FALSE		50.0	130
	12	FC1020-3	8	50	48.3391			FALSE		FALSE		FALSE		50.0	545
QC2								FALSE		FALSE		FALSE		#DIV/0!	
D2								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	

Duplicate 1 RPD	#VALUE!
Duplicate 2 RPD	#VALUE!

Analyst's Signature:_____ Date:_____

Reviewer's Signature:_____ Date:_____

- started filtering @ 16:26
- in 104° @ 17:06
- BW 12/7/22

TOC ANALYSIS LOG, Aqueous

DATE:	12-12-2022
ANALYST:	F.N.
INSTRUMENT:	TOC2
INST. FILE NAME:	12121201.txt
Filter Lot#:	—

METHODS:	SM5310B SW846 9060A
METHOD FILE:	NPOC-MET
CALIB. DATE:	11-30-2022
GN BATCH:	GN92992

pH paper lot#	230320
pipette ID#	TU 11245
pipette ID#	PU 13805
pipette ID#	—

STANDARDS	
ICAL:	LIST INDIVIDUALLY IN COMMENTS
ICV:	TOC 407
CCV:	TOC 407
QC:	WC1799

Autosampler position	Sample ID	Bottle #	pH, su	Injected Volume, ml	Manual Dilution	Instrument Dilution	GP BATCH	COMMENTS
1	BLANK	—	—	50 ml	1x	1x		
2	CCV	—	1.5					
3	MB1	—	—				38294	
4	B1	—	1.5					
5	FC1116-1	1	1.5					
6	-2	1	1.5					
7	-3	1	1.0*					
8	-4	1	1.0*					* ⇒ INITIAL PH ≥ 2, ADDED DROPS CONC. HCL TO ACIDIFY
9	FC1120-1	1	1.0*					
10	-2	1	1.5					
11	-3	1	1.0*					
12	FC1123-7	1	1.5					
13	CCV	—	1.5					
14	CCB	—	—					
15	FC1123-1	1	1.0*				38294	
16	S1 (FC1123-1)	2	1.0*					
17	S2 (FC1123-1)	3	1.0*					
18	FC1123-8	1	1.5					
19	FC1124-1	1	1.5					
20	-2	1	1.5					
21	-3	1	1.5					
22	-4	1	1.5					
23	FC1135-1	1	1.5					
24	FC1142-3	1	1.5					
25	CCV	—	1.5					
26	CCB	—	—					

Notes: (1 of 2) ACID LOT ID#: 22G166007 (CONC. HCL)

Analyst Signature: Frida N.

TOC ANALYSIS LOG, Aqueous

DATE:	12-12-2022
ANALYST:	F. N.
INSTRUMENT:	TOC2
INST. FILE NAME:	12121101.txt
Filter Lot#:	—

METHODS:	SM5310B SW846 9060A
METHOD FILE:	NPOC-MET
CALIB. DATE:	11-30-2022
GN BATCH:	GN92992

pH paper lot#	230320
pipette ID#	TV11245
pipette ID#	PV13805
pipette ID#	—

STANDARDS	
ICAL:	LIST INDIVIDUALLY IN COMMENTS
ICV:	TOC 4071
CCV:	TOC 4072
QC:	WC1799

Autosampler position	Sample ID	Bottle #	pH, su	Injected Volume, ml	Manual Dilution	Instrument Dilution	GP BATCH	COMMENTS
27	FC1159-1	1	1.5	50 mL	1X	1X	38294	
28	-2	1	1.5					
29	FC1215-1	1	1.0*					
30	S3(FC1215-1)	2	1.0*					
30	S4(FC1215-1)	2	1.0*					
31	FC1215-2	1	1.0*					
32	FC1203-1	1	1.0*				38295	
33	FC1214-1	1	1.0*					DNR! ⇒ NEEDS HIGHER DIL
34	-2	1	1.0*					
35	-4	1	1.0*					
36	CCV	—	1.5					
37	MB1	—	—				38295	
38	B1	—	1.5					
39	FC1214-3	1	1.0*					
40	S1(FC1214-3)	2	1.0*					
40	S2(FC1214-3)	2	1.0*					
41	LA85729-1	1	1.5					
42	LA85979-1	1	1.5					
43	LA85980-1	1	1.5					
44	LA85982-3	1	1.5					
45	LA85983-1	1	1.0*					DNR! ⇒ FOR CONF. ONLY.
46	-1	1	1.0		100X			DNR! ⇒ NEEDS HIGHER DIL./ SCH. TO RE-RUN
47	CCV	—	1.5		1X			
48	CCB	—	—		1X			
49	FC1214-1	1	1.0		5X ~~1X~~ (*)		38295	
47/48	CCV/CCB	—/—	1.5/—		1X/1X			

Notes: (2 of 2)

Analyst Signature (*) Farida N

SGS Accutest - Orlando Organic Carbon Standards Preparation Log

SGS Std. #	Name Description	Parent Std. #	Parent Name	Parent Vendor	Parent Exp. Date	Parent Conc(mg/l)	Weight(g) / Vol.(ml) used	Bal.ID**/ pipette ID	Final Vol.(ml)	Final Conc(mg/l)	pH paper lot#	Prep. Date	Exp. Date	Initials
TOC 4065	Cal #1 STD 1.0 ppm	WC 1908	TOC KHP-1	INORG. VENTUR.	02/15/23	1000	0.1 ml	NU 04977	100	1.0	230 320	11/30/22	12/30/22	F.N
TOC 4066	Cal # 2 STD 2.0 ppm						0.2 ml			2.0				
TOC 4067	Cal #3 STD 5.0 ppm						0.5 ml	TU 11245		5.0				
TOC 4068	Cal #4 STD 10.0 ppm						1.0 ml			10.0				
TOC 4069	Cal #5 STD 20.0 ppm						2.0 ml			20.0				
TOC 4070	Cal #6 STD 30.0 ppm						3.0 ml			30.0				
TOC 4071	ICV - STD 15.0 ppm	WC 1799	TOC KHP1	INORG. VENTUR.	01/03/23	1000	1.5 ml		100	15.0	230 320	11/30/22	12/30/22	F.N
TOC 4072	CCV - STD 15.0 ppm						3.75 ml	PU 13806	250	15.0		12/05/22	01/03/23	F.N.

** Record ANALYTICAL balance sequential number

C:\TOC3201\Data\toc 2 aq 12-12-2022.t32

	Type	Analysis	Sample Name	Origin	Manual Dilution	Result	Comment	Status	Date / Time	Vial
1	Unknown	NPOC	BLANK	NPOC.met	1.000	NPOC:0.1252mg/L	SM5310B SW846 9060A	Completed	12/12/2022 5:41:01 PM	1
2	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.46mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:05:12 PM	2
3	Unknown	NPOC	GP38294-MB1	NPOC.met	1.000	NPOC:0.1365mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:26:32 PM	3
4	Unknown	NPOC	GP38294-B1	NPOC.met	1.000	NPOC:15.06mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:50:13 PM	4
5	Unknown	NPOC	FC1116-1	NPOC.met	1.000	NPOC:1.690mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:12:16 PM	5
6	Unknown	NPOC	FC1116-2	NPOC.met	1.000	NPOC:1.167mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:31:37 PM	6
7	Unknown	NPOC	FC1116-3	NPOC.met	1.000	NPOC:2.376mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:53:27 PM	7
8	Unknown	NPOC	FC1116-4	NPOC.met	1.000	NPOC:6.405mg/L	SM5310B SW846 9060A	Completed	12/12/2022 8:16:03 PM	8
9	Unknown	NPOC	FC1020-1	NPOC.met	1.000	NPOC:2.148mg/L	SM5310B SW846 9060A	Completed	12/12/2022 8:38:22 PM	9
10	Unknown	NPOC	FC1020-2	NPOC.met	1.000	NPOC:4.864mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:00:53 PM	10
11	Unknown	NPOC	FC1020-3	NPOC.met	1.000	NPOC:3.183mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:23:35 PM	11
12	Unknown	NPOC	FC1123-7	NPOC.met	1.000	NPOC:9.114mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:46:25 PM	12
13	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.51mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:12:30 PM	13
14	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.2157mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:34:07 PM	14
15	Unknown	NPOC	FC1123-1	NPOC.met	1.000	NPOC:0.8250mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:55:26 PM	15
16	Unknown	NPOC	GP38294-S1	NPOC.met	1.000	NPOC:14.98mg/L	SM5310B SW846 9060A	Completed	12/12/2022 11:18:57 PM	16
17	Unknown	NPOC	GP38294-S2	NPOC.met	1.000	NPOC:15.50mg/L	SM5310B SW846 9060A	Completed	12/12/2022 11:42:27 PM	17
18	Unknown	NPOC	FC1123-8	NPOC.met	1.000	NPOC:16.08mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:05:52 AM	18
19	Unknown	NPOC	FC1124-1	NPOC.met	1.000	NPOC:5.479mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:29:05 AM	19
20	Unknown	NPOC	FC1124-2	NPOC.met	1.000	NPOC:0.6559mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:50:55 AM	20
21	Unknown	NPOC	FC1124-3	NPOC.met	1.000	NPOC:0.7739mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:13:35 AM	21
22	Unknown	NPOC	FC1124-4	NPOC.met	1.000	NPOC:1.320mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:35:35 AM	22
23	Unknown	NPOC	FC1135-1	NPOC.met	1.000	NPOC:1.825mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:57:58 AM	23
24	Unknown	NPOC	FC1142-3	NPOC.met	1.000	NPOC:7.195mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:21:38 AM	24
25	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.40mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:46:05 AM	25
26	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.2252mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:08:16 AM	26
27	Unknown	NPOC	FC1159-1	NPOC.met	1.000	NPOC:20.82mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:31:51 AM	27
28	Unknown	NPOC	FC1159-2	NPOC.met	1.000	NPOC:3.686mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:55:18 AM	28
29	Unknown	NPOC	FC1215-1	NPOC.met	1.000	NPOC:7.645mg/L	SM5310B SW846 9060A	Completed	12/13/2022 4:16:15 AM	29
30	Unknown	NPOC	GP38294-S3	NPOC.met	1.000	NPOC:22.74mg/L	SM5310B SW846 9060A	Completed	12/13/2022 4:41:12 AM	30
31	Unknown	NPOC	GP38294-S4	NPOC.met	1.000	NPOC:23.49mg/L	SM5310B SW846 9060A	Completed	12/13/2022 5:18:44 AM	30
32	Unknown	NPOC	FC1215-2	NPOC.met	1.000	NPOC:15.96mg/L	SM5310B SW846 9060A	Completed	12/13/2022 5:43:12 AM	31
33	Unknown	NPOC	FC1203-1	NPOC.met	1.000	NPOC:4.447mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:06:49 AM	32
34	Unknown	NPOC	FC1214-1	NPOC.met	1.000	NPOC:99.26mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:31:03 AM	33
35	Unknown	NPOC	FC1214-2	NPOC.met	1.000	NPOC:20.40mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:54:51 AM	34
36	Unknown	NPOC	FC1214-4	NPOC.met	1.000	NPOC:8.219mg/L	SM5310B SW846 9060A	Completed	12/13/2022 7:18:30 AM	35
37	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.59mg/L	SM5310B SW846 9060A	Completed	12/13/2022 7:42:57 AM	36
38	Unknown	NPOC	GP38295-MB1	NPOC.met	1.000	NPOC:0.3076mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:04:57 AM	37

12/13/2022 4:12:25 PM

C:\TOC3201\Data\toc 2 aq 12-12-2022.t32

	Type	Analysis	Sample Name	Origin	Manual Dilution	Result	Comment	Status	Date / Time	Vial
39	Unknown	NPOC	GP38295-B1	NPOC.met	1.000	NPOC:14.99mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:29:40 AM	38
40	Unknown	NPOC	FC1214-3	NPOC.met	1.000	NPOC:11.43mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:53:41 AM	39
41	Unknown	NPOC	GP38295-S1	NPOC.met	1.000	NPOC:26.17mg/L	SM5310B SW846 9060A	Completed	12/13/2022 9:18:47 AM	40
42	Unknown	NPOC	GP38295-S2	NPOC.met	1.000	NPOC:26.79mg/L	SM5310B SW846 9060A	Completed	12/13/2022 9:57:00 AM	40
43	Unknown	NPOC	LA85729-1	NPOC.met	1.000	NPOC:4.844mg/L	SM5310B SW846 9060A	Completed	12/13/2022 10:20:25 AM	41
44	Unknown	NPOC	LA85979-1	NPOC.met	1.000	NPOC:9.555mg/L	SM5310B SW846 9060A	Completed	12/13/2022 10:44:39 AM	42
45	Unknown	NPOC	LA85980-1	NPOC.met	1.000	NPOC:6.543mg/L	SM5310B SW846 9060A	Completed	12/13/2022 11:07:55 AM	43
46	Unknown	NPOC	LA85982-3	NPOC.met	1.000	NPOC:4.878mg/L	SM5310B SW846 9060A	Completed	12/13/2022 11:31:49 AM	44
47	Unknown	NPOC	LA85983-1	NPOC.met	1.000	NPOC:1814mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:07:18 PM	45
48	Unknown	NPOC	LA85983-1	NPOC.met	100.0	NPOC:8097mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:46:45 PM	46
49	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.52mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:19:44 PM	47
50	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.5461mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:43:00 PM	48
51	Unknown	NPOC	FC1214-1	NPOC.met	5.000	NPOC:136.3mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:04:17 PM	49
52	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.27mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:28:11 PM	47
53	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.3478mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:50:03 PM	48

Instr.Information

System	TOC-2
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	BLANK
Sample ID:	Untitled
Origin:	NPOC.met
Status	Completed
Chk. Result	

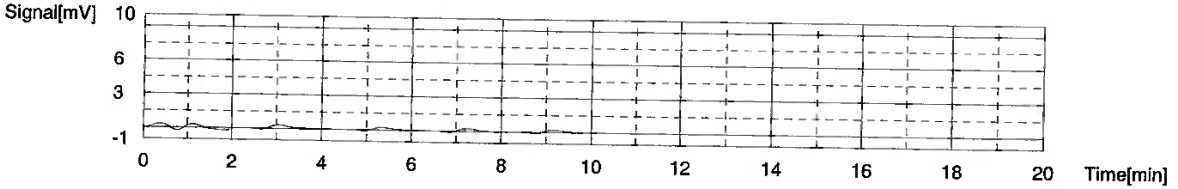
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1252mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.402	0.2679mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:32:26 PM
2	1.099	0.1838mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:34:52 PM
3	0.8260	0.1080mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:36:55 PM
4	0.8679	0.1196mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:38:58 PM
5	0.7594	0.08952mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:41:01 PM

Mean Area	0.8881
Mean Conc.	0.1252mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

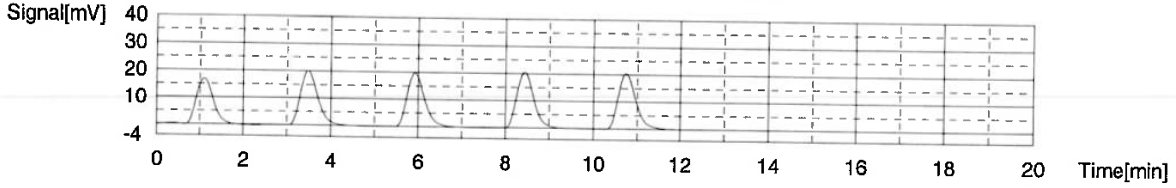
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.52	12.79mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:54:29 PM
2	55.75	15.36mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:57:04 PM
3	55.36	15.25mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:59:44 PM
4	56.03	15.43mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:02:12 PM
5	57.31	15.79mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:05:12 PM

Mean Area 56.11
Mean Conc. 15.46mg/L



Sample

Sample Name: GP38294-MB1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1365mg/L

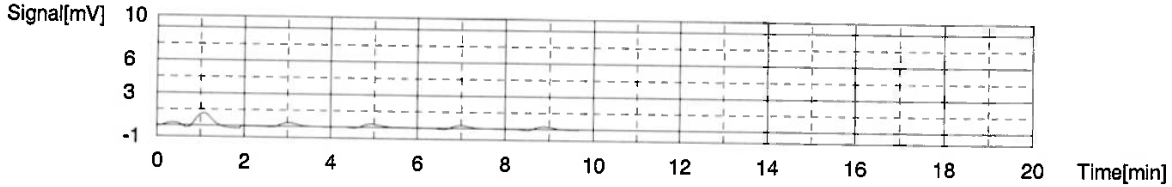
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.742	0.9176mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:18:12 PM
2	0.9856	0.1523mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:20:15 PM
3	0.9939	0.1546mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:22:26 PM
4	0.8650	0.1188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:24:29 PM
5	0.8705	0.1204mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:26:32 PM

Mean Area 0.9287
Mean Conc. 0.1365mg/L



Sample

Sample Name: GP38294-B1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

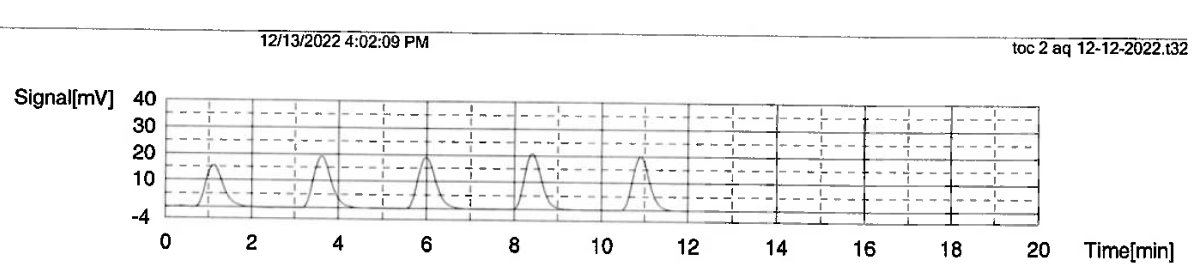
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.73	12.30mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:40:07 PM
2	53.81	14.82mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:42:39 PM
3	53.82	14.82mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:45:14 PM
4	56.93	15.68mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:47:51 PM
5	54.15	14.91mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:50:13 PM

Mean Area 54.68
Mean Conc. 15.06mg/L



Sample

Sample Name: FC1116-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

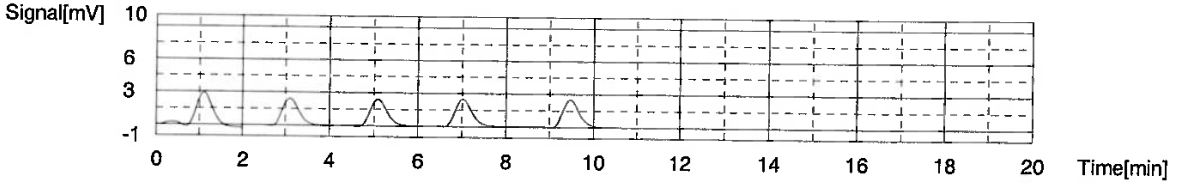
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.690mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.137	2.138mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:03:18 PM
2	6.521	1.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:05:26 PM
3	6.489	1.680mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:07:32 PM
4	6.521	1.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:10:08 PM
5	6.559	1.700mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:12:16 PM

Mean Area 6.523
Mean Conc. 1.690mg/L



Sample

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Sample Name: FC1116-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

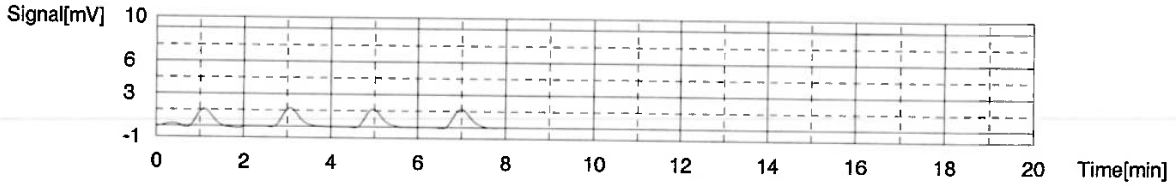
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.167mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.654	1.171mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:25:19 PM
2	4.626	1.163mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:27:23 PM
3	4.566	1.146mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:29:31 PM
4	4.716	1.188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:31:37 PM

Mean Area 4.641
Mean Conc. 1.167mg/L



Sample

Sample Name: FC1116-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.376mg/L

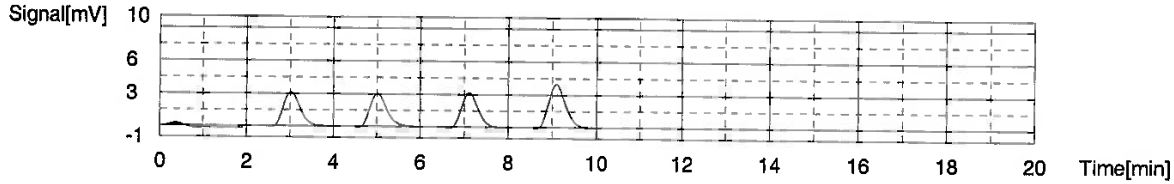
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5299	0.02580mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:44:41 PM
2	8.415	2.215mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:46:52 PM
3	8.408	2.213mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:49:06 PM
4	8.386	2.207mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:51:14 PM
5	10.77	2.869mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:53:27 PM

Mean Area 8.995
Mean Conc. 2.376mg/L



Sample

Sample Name: FC1116-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

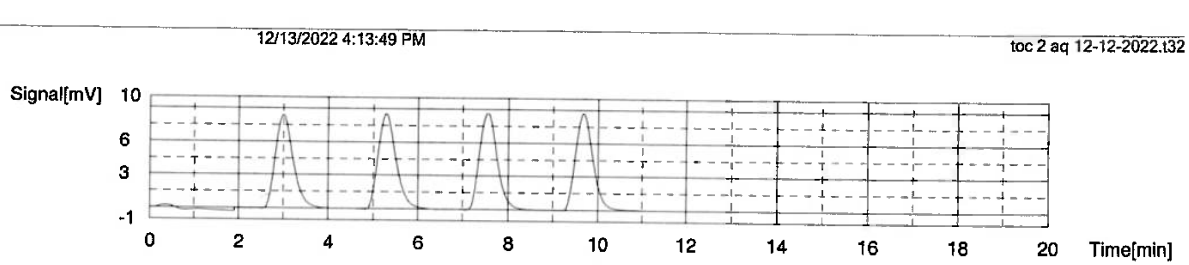
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.405mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3827	-0.01507mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:06:26 PM
2	23.24	6.331mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:08:51 PM
3	23.88	6.509mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:11:16 PM
4	23.28	6.342mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:13:33 PM
5	23.62	6.437mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:16:03 PM

Mean Area 23.51
Mean Conc. 6.405mg/L



Sample

Sample Name: FC1020-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

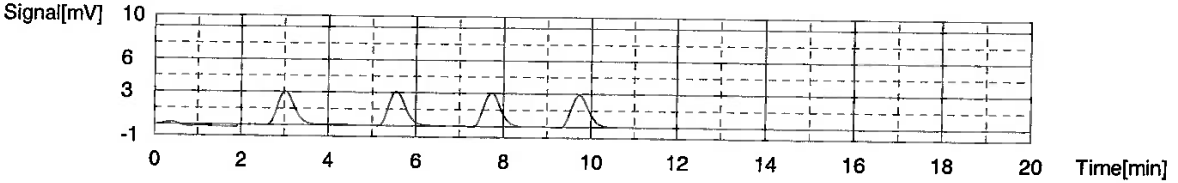
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.148mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4139	-0.00641mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:29:02 PM
2	8.263	2.173mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:31:44 PM
3	8.317	2.188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:34:03 PM
4	8.076	2.121mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:36:12 PM
5	8.042	2.111mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:38:22 PM

Mean Area 8.175
Mean Conc. 2.148mg/L



Sample

Sample Name: FC1020-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

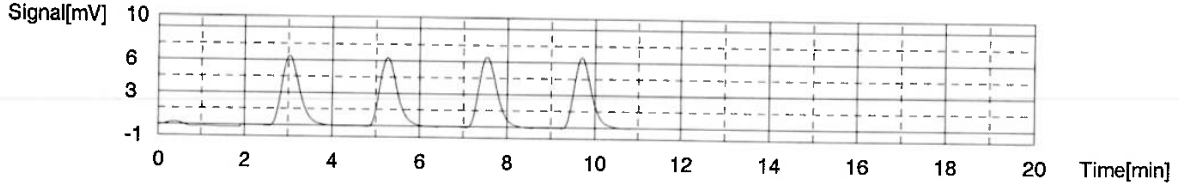
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.864mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4789	0.01164mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:51:21 PM
2	18.11	4.907mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:53:46 PM
3	17.50	4.737mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:56:10 PM
4	18.24	4.943mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:58:30 PM
5	17.98	4.871mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:00:53 PM

Mean Area 17.96
Mean Conc. 4.864mg/L



Sample

Sample Name: FC1020-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.183mg/L

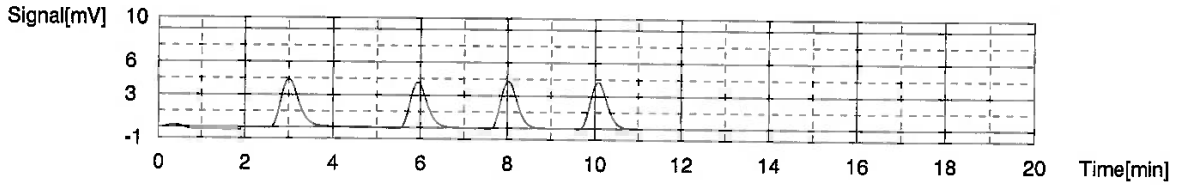
1. Det

Anal.: NPOC

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11.6

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5818	0.04021mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:13:52 PM
2	12.97	3.480mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:16:59 PM
3	11.44	3.055mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:19:11 PM
4	11.64	3.110mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:21:23 PM
5	11.56	3.088mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:23:35 PM

Mean Area 11.90
Mean Conc. 3.183mg/L



Sample

Sample Name: FC1123-7
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

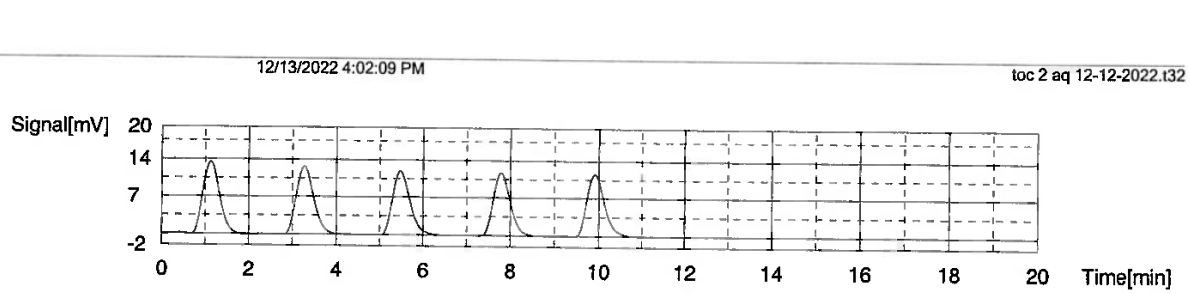
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.114mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.58	10.03mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:36:48 PM
2	35.05	9.610mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:39:11 PM
3	33.30	9.124mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:41:39 PM
4	31.92	8.741mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:43:55 PM
5	32.79	8.983mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:46:25 PM

Mean Area 33.27
Mean Conc. 9.114mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

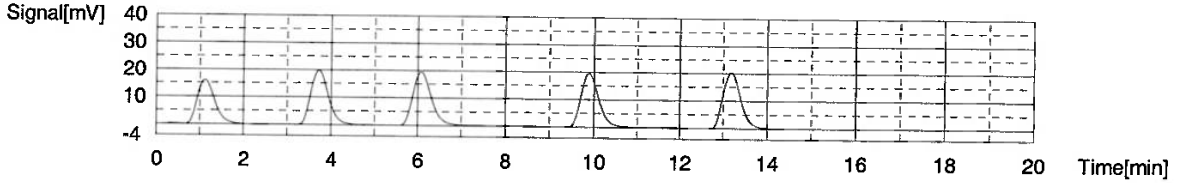
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.03	12.66mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:00:05 PM
2	55.23	15.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:02:35 PM
3	58.06	16.00mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:06:34 PM
4	55.41	15.26mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:09:59 PM
5	56.51	15.57mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:12:30 PM

Mean Area 56.30
Mean Conc. 15.51mg/L



Sample

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QC Reports:
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11.6

Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

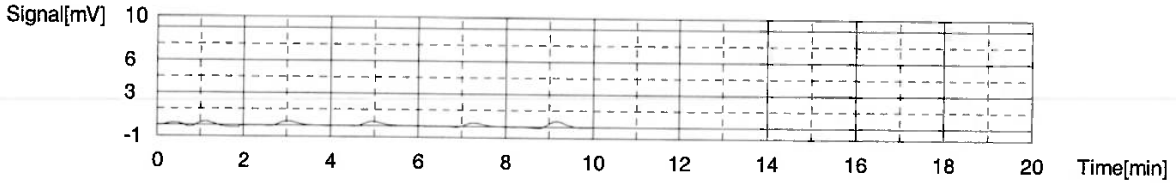
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2157mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.467	0.2860mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:25:29 PM
2	1.112	0.1874mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:27:34 PM
3	1.233	0.2210mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:30:01 PM
4	1.044	0.1685mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:32:04 PM
5	1.551	0.3093mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:34:07 PM

Mean Area 1.214
Mean Conc. 0.2157mg/L



Sample

Sample Name: FC1123-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8250mg/L

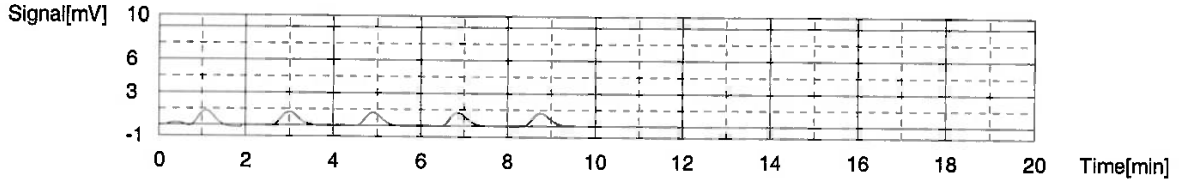
1. Det

Anal.: NPOC

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QC Reports:
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11.6

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.238	1.055mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:47:06 PM
2	3.388	0.8193mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:49:09 PM
3	3.361	0.8118mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:51:14 PM
4	3.407	0.8246mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:53:18 PM
5	3.478	0.8443mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:55:26 PM

Mean Area 3.409
Mean Conc. 0.8250mg/L



Sample

Sample Name: GP38294-S1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

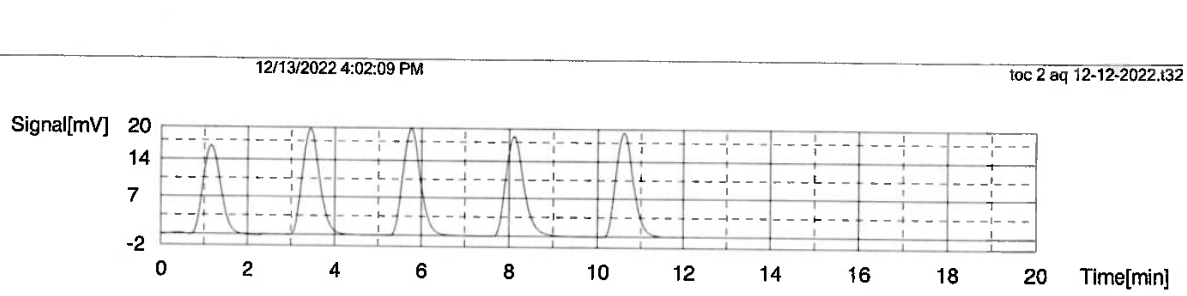
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.98mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.27	12.73mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:08:50 PM
2	54.31	14.96mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:11:16 PM
3	55.83	15.38mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:13:48 PM
4	53.46	14.72mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:16:27 PM
5	54.01	14.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:18:57 PM

Mean Area 54.40
Mean Conc. 14.98mg/L



Sample

Sample Name: GP38294-S2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

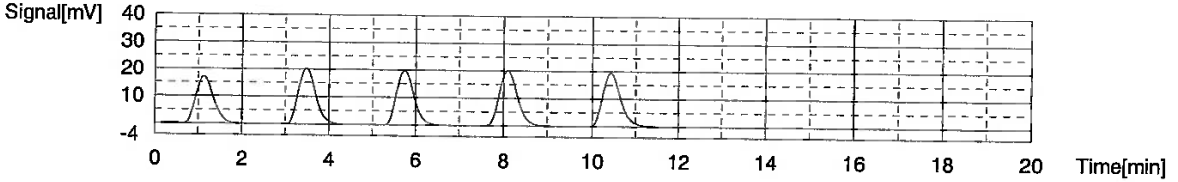
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.33	13.30mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:32:23 PM
2	56.07	15.45mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:34:49 PM
3	54.92	15.13mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:37:16 PM
4	57.97	15.97mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:39:47 PM
5	56.14	15.47mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:42:27 PM

Mean Area 56.28
Mean Conc. 15.50mg/L



Sample

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QC Reports:
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Sample Name: FC1123-8
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

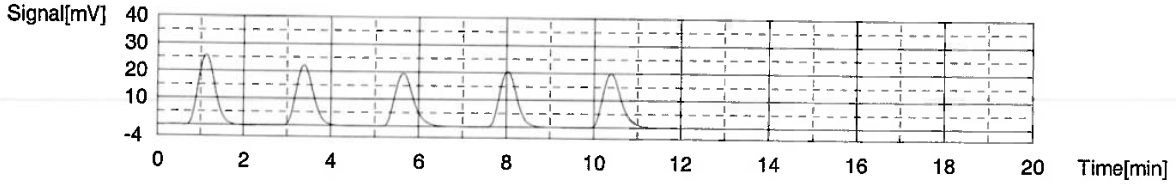
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.85	19.55mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:55:48 PM
2	60.90	16.79mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:58:13 PM
3	56.90	15.68mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:00:45 AM
4	56.27	15.50mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:03:14 AM
5	59.41	16.37mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:05:52 AM

Mean Area 58.37
Mean Conc. 16.08mg/L



Sample

Sample Name: FC1124-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.479mg/L

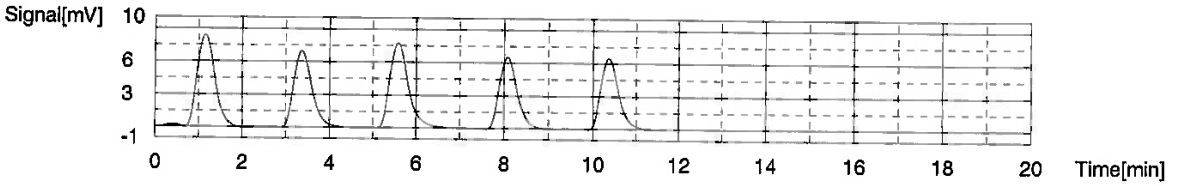
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.45	6.667mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:19:11 AM
2	20.00	5.432mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:21:35 AM
3	22.95	6.251mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:24:12 AM
4	18.95	5.140mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:26:38 AM
5	18.79	5.096mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:29:05 AM

Mean Area 20.17
Mean Conc. 5.479mg/L



Sample

Sample Name: FC1124-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

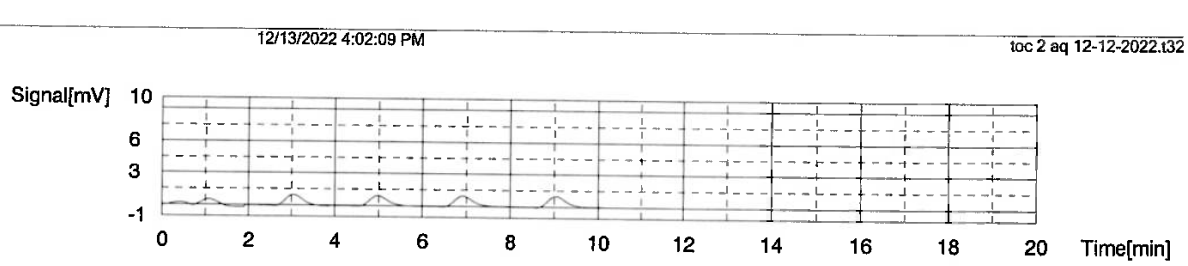
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6559mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.118	0.4667mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:42:04 AM
2	2.808	0.6583mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:44:10 AM
3	2.684	0.6239mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:46:16 AM
4	2.790	0.6533mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:48:32 AM
5	2.916	0.6883mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:50:55 AM

Mean Area 2.800
Mean Conc. 0.6559mg/L



Sample

Sample Name: FC1124-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

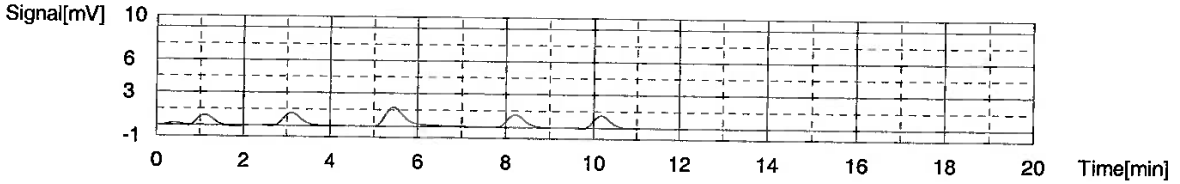
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7739mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.158	0.7555mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:03:57 AM
2	3.278	0.7888mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:06:30 AM
3	5.285	1.346mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:09:22 AM
4	3.217	0.7719mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:11:27 AM
5	3.245	0.7796mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:13:35 AM

Mean Area 3.224
Mean Conc. 0.7739mg/L



Sample

Sample Name: FC1124-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

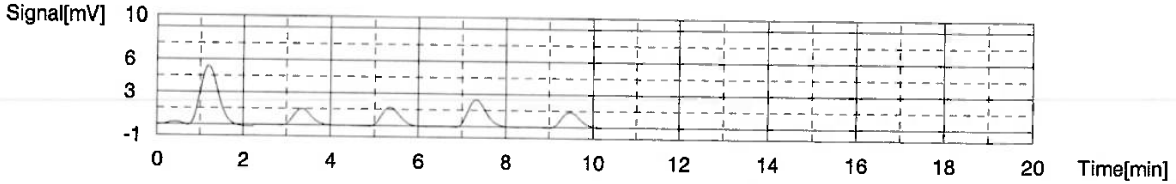
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.320mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.35	4.418mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:26:54 AM
2	4.261	1.062mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:29:00 AM
3	5.012	1.270mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:31:10 AM
4	7.355	1.921mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:33:26 AM
5	4.144	1.029mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:35:35 AM

Mean Area 5.193
Mean Conc. 1.320mg/L



Sample

Sample Name: FC1135-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

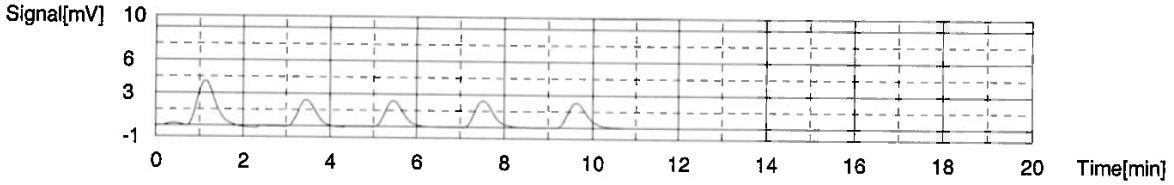
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.825mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.92	3.466mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:49:00 AM
2	7.053	1.837mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:51:09 AM
3	6.967	1.813mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:53:23 AM
4	7.036	1.832mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:55:37 AM
5	6.979	1.816mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:57:58 AM

Mean Area 7.009
Mean Conc. 1.825mg/L



Sample

Sample Name: FC1142-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

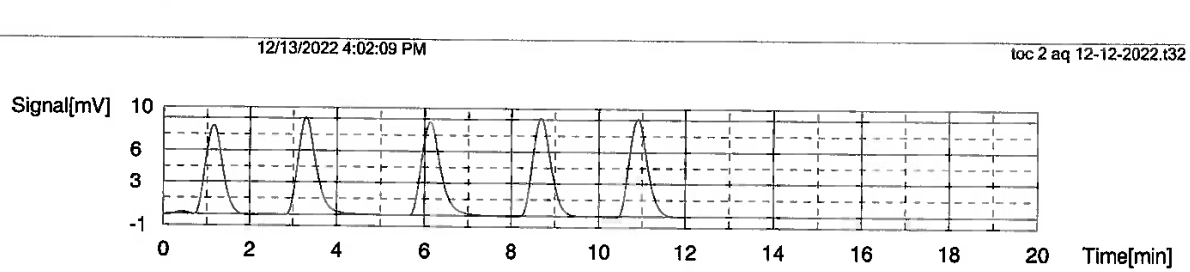
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.195mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.81	6.489mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:11:14 AM
2	26.41	7.211mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:14:11 AM
3	26.34	7.192mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:16:53 AM
4	26.38	7.203mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:19:16 AM
5	26.27	7.172mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:21:38 AM

Mean Area 26.35
Mean Conc. 7.195mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

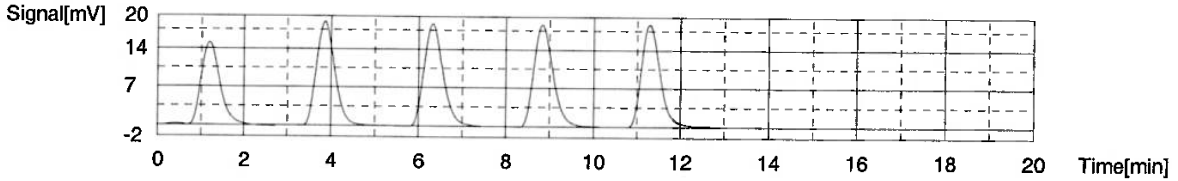
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.93	12.91mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:35:26 AM
2	55.13	15.19mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:38:00 AM
3	56.64	15.60mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:40:40 AM
4	56.20	15.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:43:18 AM
5	55.71	15.35mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:46:05 AM

Mean Area 55.92
Mean Conc. 15.40mg/L



Sample

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QC Reports:
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Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

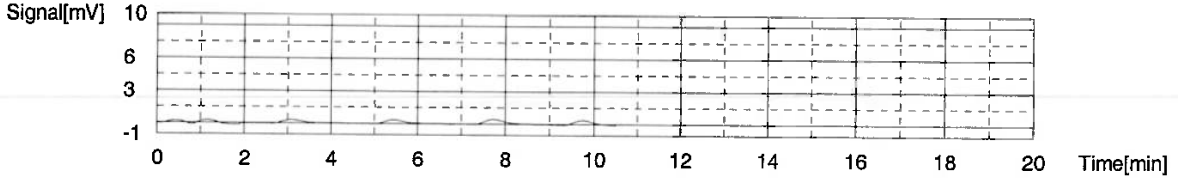
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2252mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.341	0.2510mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:59:04 AM
2	0.9780	0.1502mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:01:35 AM
3	1.073	0.1766mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:04:03 AM
4	1.360	0.2563mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:06:13 AM
5	1.219	0.2171mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:08:16 AM

Mean Area 1.248
Mean Conc. 0.2252mg/L



Sample

Sample Name: FC1159-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.82mg/L

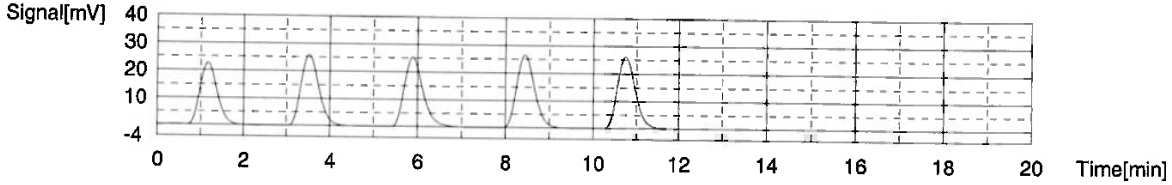
1. Det

Anal.: NPOC

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11.6 11

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.08	17.95mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:21:43 AM
2	74.24	20.49mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:24:15 AM
3	75.13	20.74mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:26:55 AM
4	76.40	21.09mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:29:23 AM
5	75.87	20.94mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:31:51 AM

Mean Area 75.41
Mean Conc. 20.82mg/L



Sample

Sample Name: FC1159-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.686mg/L

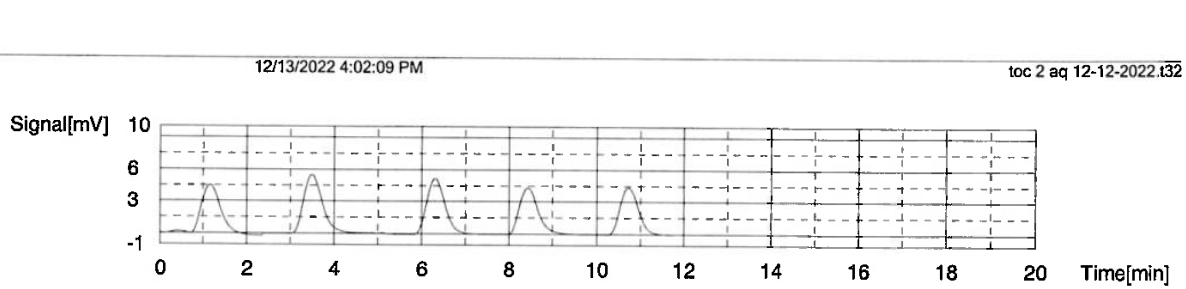
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.35	3.863mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:45:18 AM
2	16.40	4.432mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:48:15 AM
3	15.02	4.049mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:50:32 AM
4	12.89	3.457mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:52:58 AM
5	12.59	3.374mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:55:18 AM

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Mean Area 13.71
Mean Conc. 3.686mg/L



Sample

Sample Name: FC1215-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

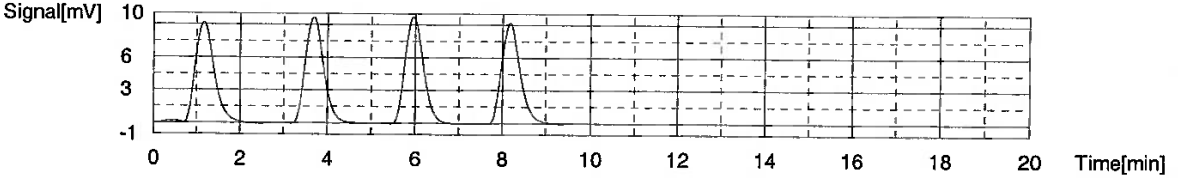
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.645mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.13	7.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:08:55 AM
2	28.13	7.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:11:20 AM
3	28.27	7.728mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:13:43 AM
4	27.36	7.475mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:16:15 AM

Mean Area 27.97
Mean Conc. 7.645mg/L



Sample

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FC1020

Sample Name: GP38294-S3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

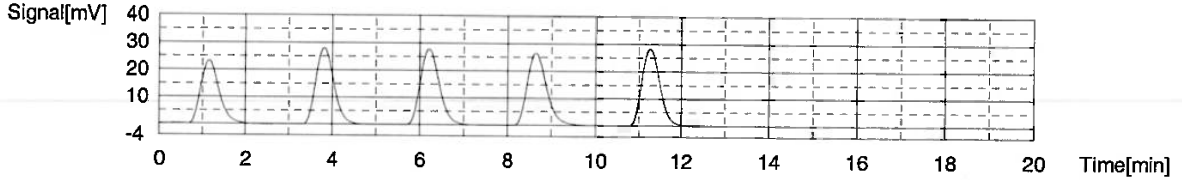
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.78	19.25mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:30:04 AM
2	81.61	22.54mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:32:36 AM
3	83.55	23.08mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:35:11 AM
4	81.40	22.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:37:58 AM
5	82.80	22.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:41:12 AM

Mean Area 82.34
Mean Conc. 22.74mg/L



Sample

Sample Name: GP38294-S4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.49mg/L

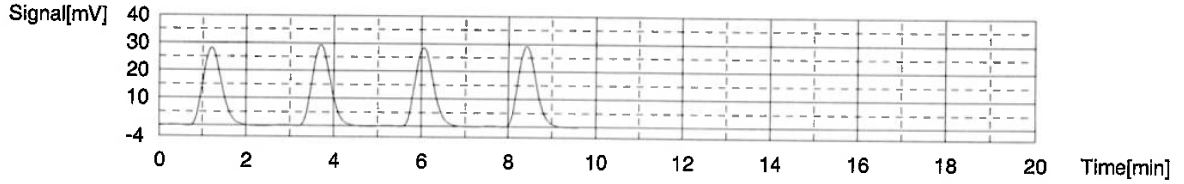
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.70	23.39mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:50:41 AM
2	86.31	23.84mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:00:02 AM
3	83.47	23.05mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:09:23 AM
4	85.65	23.66mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:18:44 AM

Mean Area 85.03
Mean Conc. 23.49mg/L



Sample

Sample Name: FC1215-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

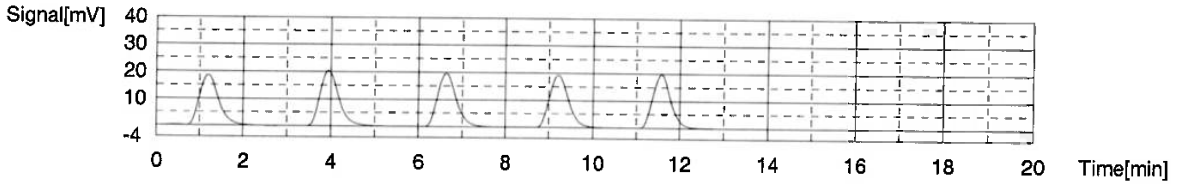
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.88	15.95mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:32:39 AM
2	61.68	17.00mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:35:26 AM
3	58.75	16.19mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:38:09 AM
4	57.55	15.86mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:40:41 AM
5	57.44	15.83mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:43:12 AM

Mean Area 57.91
Mean Conc. 15.96mg/L



Sample

Sample Name:	FC1203-1
Sample ID:	Untitled
Origin:	NPOC.met
Status	Completed
Chk. Result	

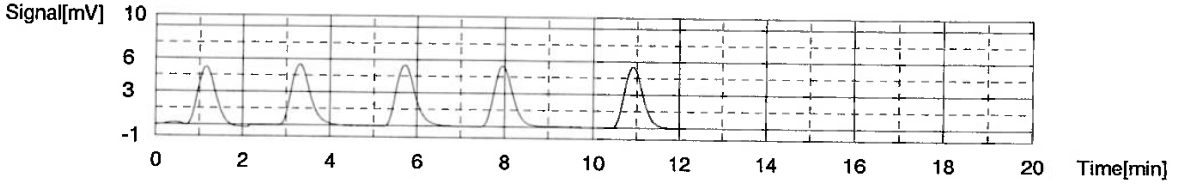
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.447mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.67	4.229mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:56:27 AM
2	16.57	4.479mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:58:59 AM
3	16.58	4.482mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:01:22 AM
4	16.49	4.457mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:04:27 AM
5	16.18	4.371mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:06:49 AM

Mean Area 16.46
Mean Conc. 4.447mg/L



Sample

Sample Name:	FC1214-1
Sample ID:	Untitled
Origin:	NPOC.met
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:99.26mg/L

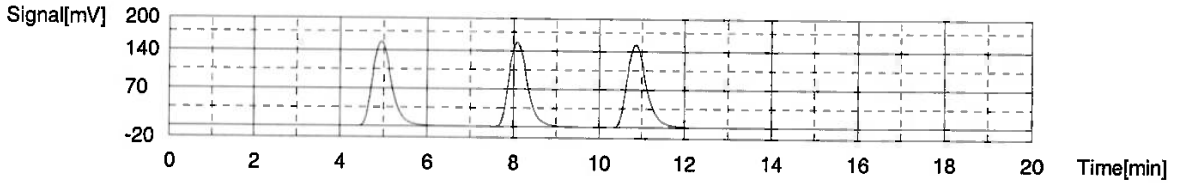
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5674	0.03621mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:19:50 AM
2	0.000	-0.1213mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:21:53 AM
3	476.2	132.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:25:09 AM
4	472.7	131.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:28:02 AM
5	482.3	133.8mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:31:03 AM

Mean Area 357.9
Mean Conc. 99.26mg/L



Sample

Sample Name: FC1214-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.40mg/L

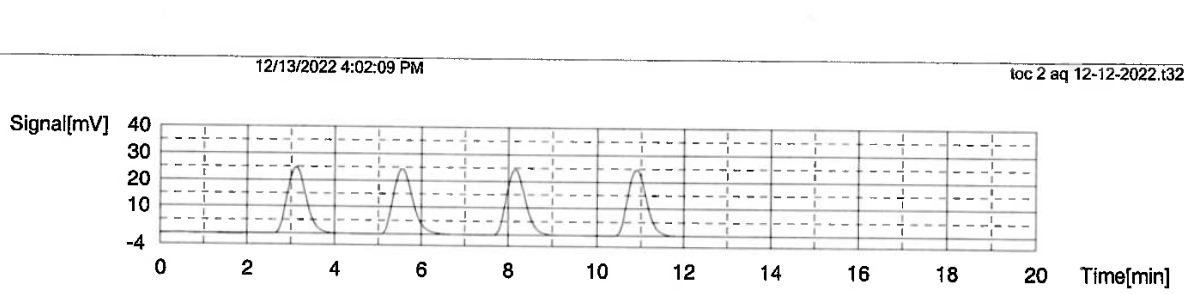
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9389	0.1394mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:44:04 AM
2	74.23	20.49mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:46:41 AM
3	75.27	20.78mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:49:26 AM
4	73.31	20.23mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:52:18 AM
5	72.89	20.12mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:54:51 AM

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Mean Area 73.92
Mean Conc. 20.40mg/L



Sample

Sample Name: FC1214-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

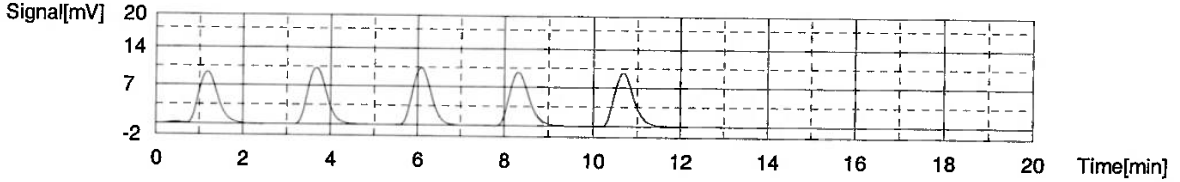
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.219mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.42	8.047mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:08:26 AM
2	30.61	8.377mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:10:58 AM
3	31.39	8.594mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:13:24 AM
4	30.28	8.286mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:15:54 AM
5	29.85	8.166mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:18:30 AM

Mean Area 30.04
Mean Conc. 8.219mg/L



Sample

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Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

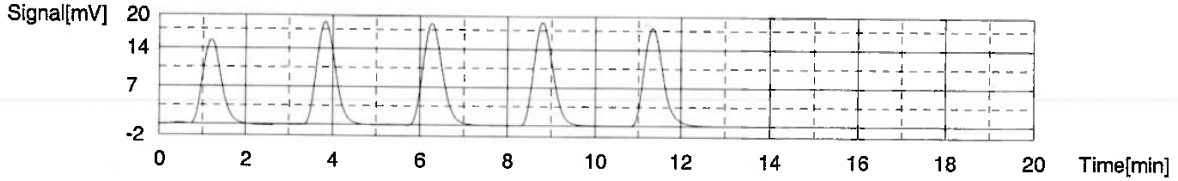
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.01	12.93mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:32:15 AM
2	56.13	15.46mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:34:49 AM
3	57.26	15.78mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:37:31 AM
4	56.78	15.64mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:40:12 AM
5	56.18	15.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:42:57 AM

Mean Area 56.59
Mean Conc. 15.59mg/L



Sample

Sample Name: GP38295-MB1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3076mg/L

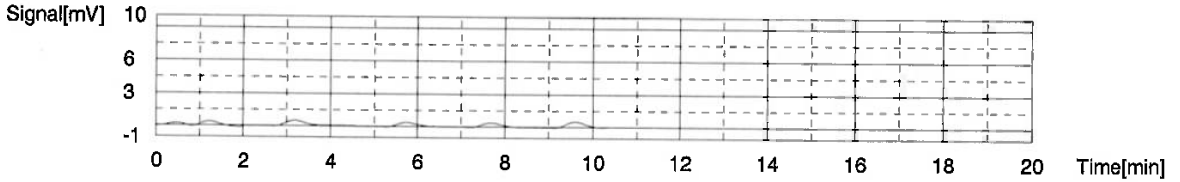
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.718	0.3557mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:56:02 AM
2	1.624	0.3296mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:58:46 AM
3	1.153	0.1988mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:00:50 AM
4	1.245	0.2243mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:02:54 AM
5	1.593	0.3210mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:04:57 AM

Mean Area 1.545
Mean Conc. 0.3076mg/L



Sample

Sample Name: GP38295-B1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.99mg/L

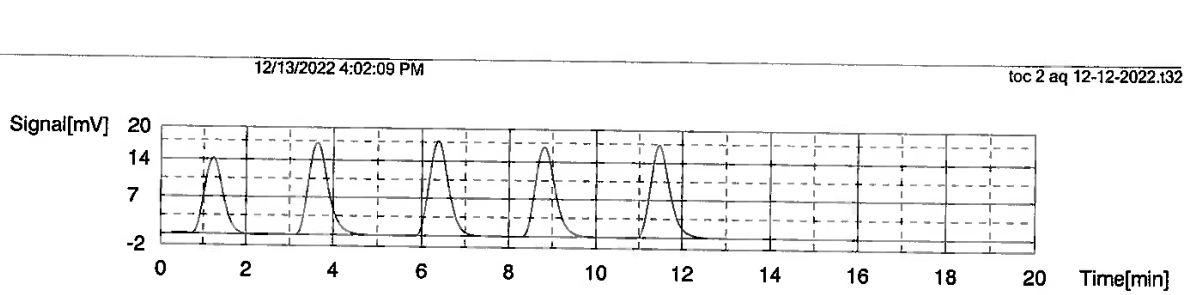
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.90	12.07mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:18:30 AM
2	54.38	14.98mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:21:22 AM
3	55.02	15.15mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:23:59 AM
4	53.05	14.61mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:26:46 AM
5	55.29	15.23mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:29:40 AM

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Mean Area 54.44
Mean Conc. 14.99mg/L



Sample

Sample Name: FC1214-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

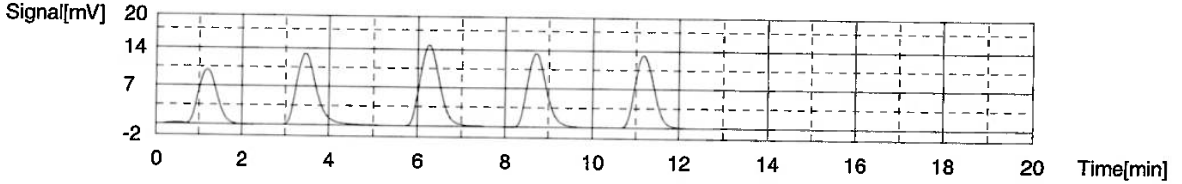
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.03	8.216mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:43:03 AM
2	40.83	11.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:46:01 AM
3	44.87	12.34mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:48:36 AM
4	40.99	11.26mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:51:13 AM
5	39.69	10.90mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:53:41 AM

Mean Area 41.60
Mean Conc. 11.43mg/L



Sample

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Sample Name: GP38295-S1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

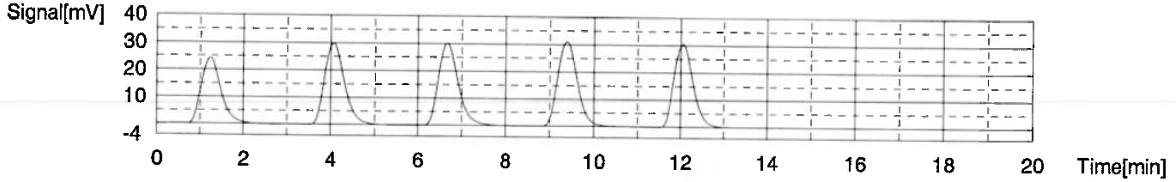
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.54	21.68mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:07:38 AM
2	94.49	26.11mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:10:23 AM
3	95.60	26.42mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:13:13 AM
4	95.65	26.44mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:16:04 AM
5	93.09	25.72mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:18:47 AM

Mean Area 94.71
Mean Conc. 26.17mg/L



Sample

Sample Name: GP38295-S2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.79mg/L

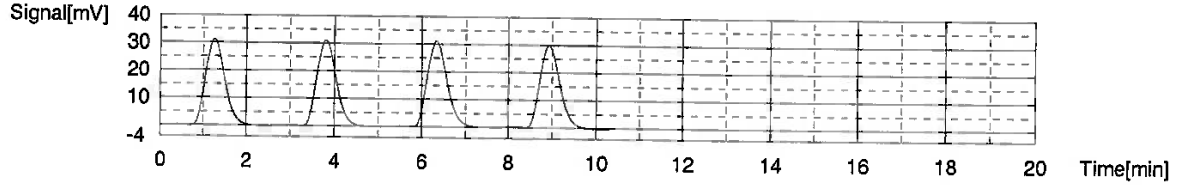
1. Det

Anal.: NPOC

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QC Reports:
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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	97.59	26.97mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:28:20 AM
2	95.93	26.51mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:37:50 AM
3	98.43	27.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:47:24 AM
4	95.81	26.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:57:00 AM

Mean Area 96.94
Mean Conc. 26.79mg/L



Sample

Sample Name: LA85729-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

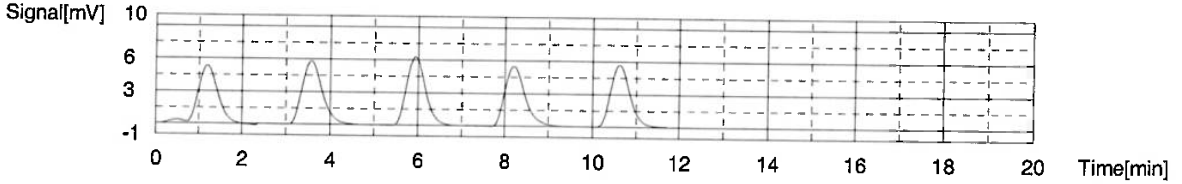
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.844mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.68	4.787mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:10:28 AM
2	18.40	4.987mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:13:00 AM
3	19.17	5.201mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:15:25 AM
4	18.02	4.882mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:17:59 AM
5	17.44	4.721mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:20:25 AM

Mean Area 17.88
Mean Conc. 4.844mg/L



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QC Reports:
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Sample

Sample Name: LA85979-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

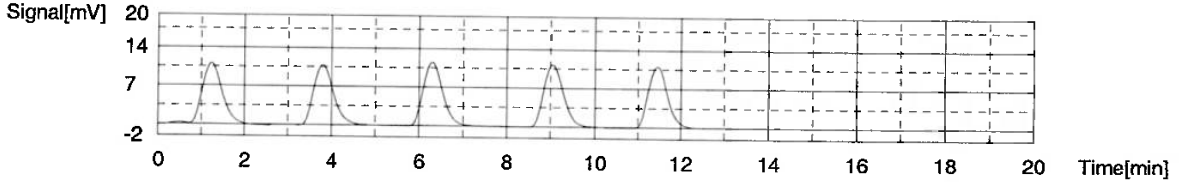
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.67	10.06mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:34:07 AM
2	34.69	9.510mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:36:44 AM
3	35.55	9.749mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:39:39 AM
4	34.52	9.463mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:42:10 AM
5	34.65	9.499mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:44:39 AM

Mean Area 34.85
Mean Conc. 9.555mg/L



Sample

Sample Name: LA85980-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.543mg/L

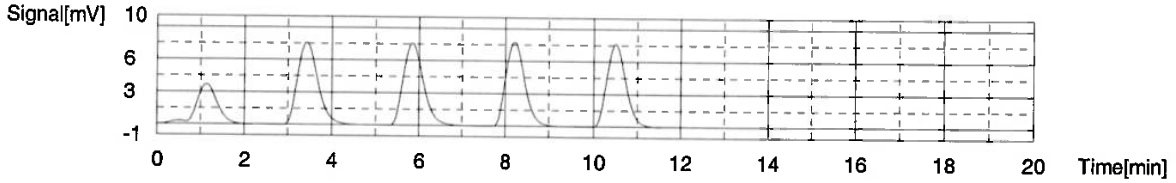
Raw Data GN92992: Total Organic Carbon page 38 of 48
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.36	3.310mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:57:56 AM
2	24.54	6.692mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:00:32 AM
3	24.32	6.631mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:03:04 AM
4	23.93	6.523mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:05:29 AM
5	23.22	6.326mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:07:55 AM

Mean Area 24.00
Mean Conc. 6.543mg/L



Sample

Sample Name: LA85982-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.878mg/L

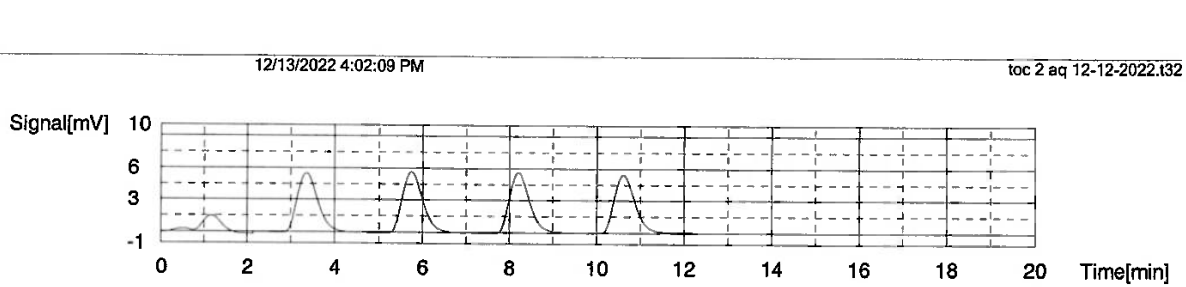
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.548	1.419mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:21:10 AM
2	17.87	4.840mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:23:41 AM
3	18.30	4.960mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:26:18 AM
4	18.02	4.882mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:28:51 AM
5	17.83	4.829mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:31:49 AM

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Mean Area 18.00
Mean Conc. 4.878mg/L



Sample

Sample Name: LA85983-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

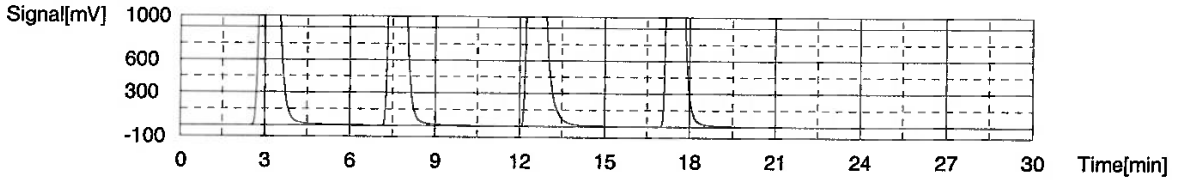
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1814mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7104	0.07591mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:44:49 AM
2	6926	1923mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:49:37 AM
3	6163	1711mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:54:56 AM
4	6791	1885mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:01:19 PM
5	6252	1736mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:07:18 PM

Mean Area 6533
Mean Conc. 1814mg/L



Sample

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QC Reports:
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Sample Name: LA85983-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

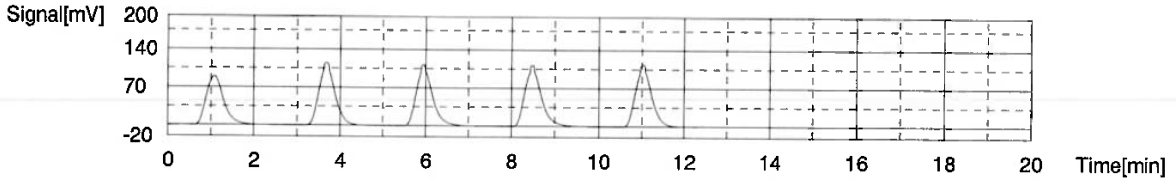
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:8097mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	250.8	6951mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:36:27 PM
2	294.4	8162mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:38:54 PM
3	292.9	8120mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:41:34 PM
4	291.0	8067mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:44:15 PM
5	290.0	8039mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:46:45 PM

Mean Area 292.1
Mean Conc. 8097mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.52mg/L

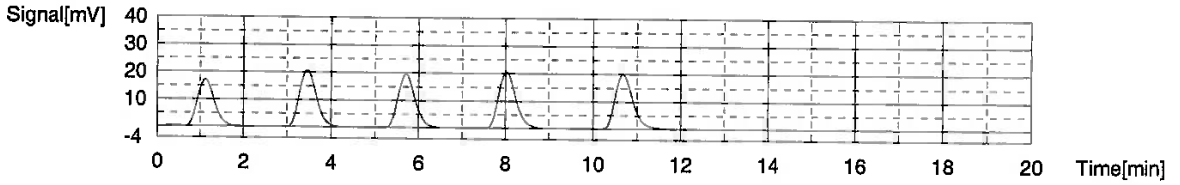
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.49	13.06mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:09:20 PM
2	56.60	15.59mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:11:45 PM
3	54.22	14.93mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:14:11 PM
4	57.58	15.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:17:01 PM
5	56.89	15.67mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:19:44 PM

Mean Area 56.32
Mean Conc. 15.52mg/L



Sample

Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

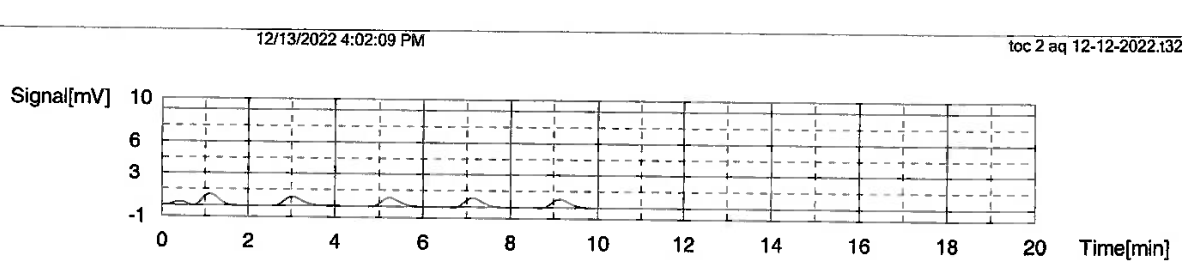
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5461mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.494	0.8488mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:34:23 PM
2	2.431	0.5536mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:36:46 PM
3	2.328	0.5250mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:38:50 PM
4	2.527	0.5803mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:40:57 PM
5	2.330	0.5256mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:43:00 PM

Mean Area 2.404
Mean Conc. 0.5461mg/L



Sample

Sample Name: FC1214-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

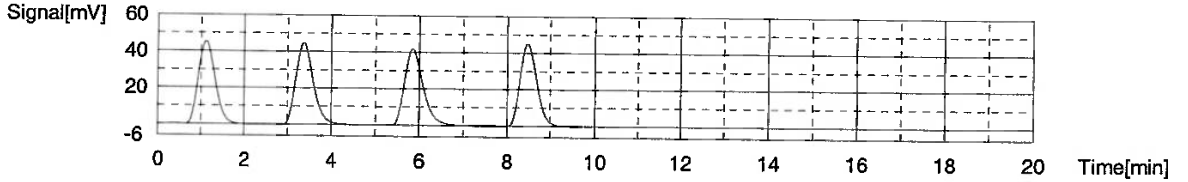
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:136.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	122.7	135.8mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:56:24 PM
2	124.8	138.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:59:02 PM
3	122.2	135.2mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:01:47 PM
4	123.1	136.2mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:04:17 PM

Mean Area 123.2
Mean Conc. 136.3mg/L



Sample

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Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

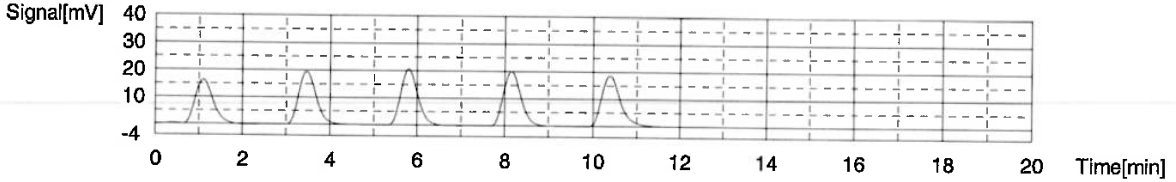
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.40	13.04mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:18:04 PM
2	53.64	14.77mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:20:32 PM
3	57.02	15.71mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:23:02 PM
4	55.36	15.25mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:25:25 PM
5	55.70	15.34mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:28:11 PM

Mean Area 55.43
Mean Conc. 15.27mg/L



Sample

Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3478mg/L

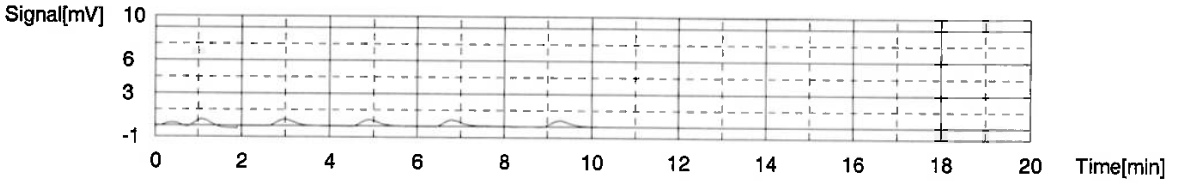
1. Det

Anal.: NPOC

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11.6

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.470	0.5645mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:41:12 PM
2	1.662	0.3401mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:43:15 PM
3	1.647	0.3360mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:45:19 PM
4	1.802	0.3790mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:47:55 PM
5	1.648	0.3362mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:50:03 PM

Mean Area 1.690
Mean Conc. 0.3478mg/L



Instr.Information

System	TOC-2
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

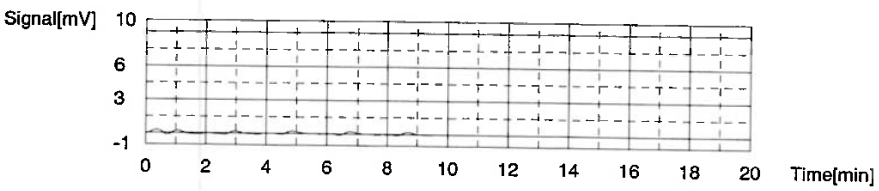
Sample Name:	NPOC METHOD
Sample ID:	Untitled
Cal. Curve:	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.039	50uL	1	*******	E	11/30/2022 4:20:51 PM
2	0.6210	50uL	1	*******		11/30/2022 4:22:54 PM
3	0.6237	50uL	1	*******		11/30/2022 4:24:57 PM
4	0.5785	50uL	1	*******		11/30/2022 4:27:00 PM
5	0.6045	50uL	1	*******		11/30/2022 4:29:04 PM

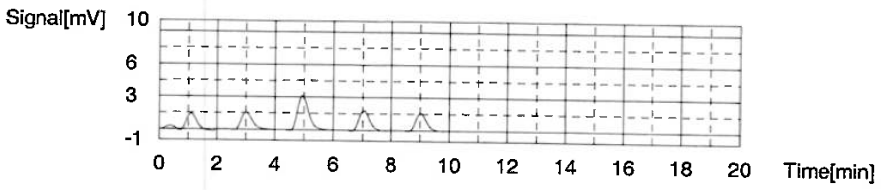
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 0.6069



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.224	50uL	1	*******		11/30/2022 4:42:05 PM
2	4.128	50uL	1	*******		11/30/2022 4:44:11 PM
3	8.232	50uL	1	*******	E	11/30/2022 4:46:24 PM
4	4.660	50uL	1	*******		11/30/2022 4:48:31 PM
5	4.124	50uL	1	*******		11/30/2022 4:50:35 PM

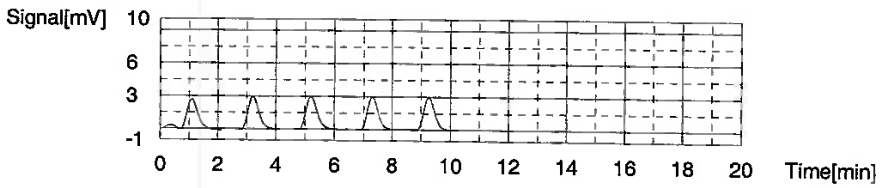
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 4.284



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.835	50uL	1	*******		11/30/2022 5:03:47 PM
2	7.762	50uL	1	*******		11/30/2022 5:05:56 PM
3	8.131	50uL	1	*******	E	11/30/2022 5:08:12 PM
4	7.838	50uL	1	*******		11/30/2022 5:10:18 PM
5	7.866	50uL	1	*******		11/30/2022 5:12:26 PM

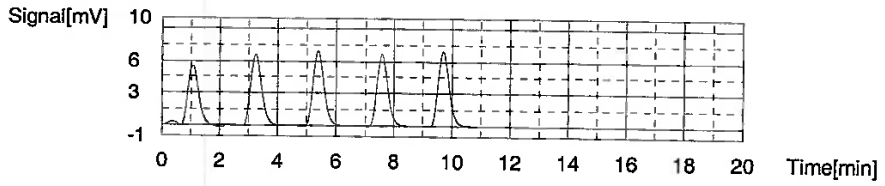
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 7.825



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.35	50uL	1	*******	E	11/30/2022 5:25:40 PM
2	17.57	50uL	1	*******		11/30/2022 5:27:57 PM
3	18.21	50uL	1	*******		11/30/2022 5:30:17 PM
4	18.09	50uL	1	*******		11/30/2022 5:32:34 PM
5	18.19	50uL	1	*******		11/30/2022 5:34:48 PM

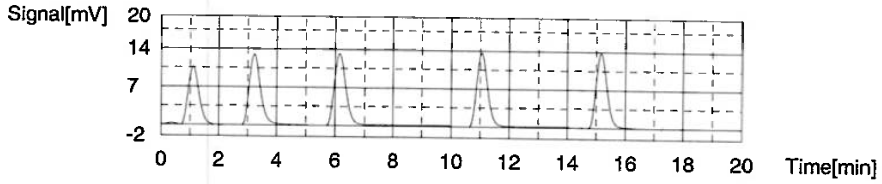
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 18.02



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	28.78	50uL	1	*******	E	11/30/2022 5:48:03 PM
2	35.20	50uL	1	*******		11/30/2022 5:51:06 PM
3	36.85	50uL	1	T*******		11/30/2022 5:56:09 PM
4	36.53	50uL	1	*******		11/30/2022 6:00:25 PM
5	36.11	50uL	1	*******		11/30/2022 6:02:53 PM

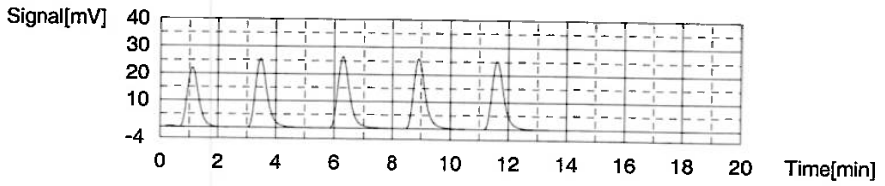
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 36.17



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	61.23	50uL	1	*******	E	11/30/2022 6:16:21 PM
2	72.35	50uL	1	*******		11/30/2022 6:19:20 PM
3	73.19	50uL	1	*******		11/30/2022 6:22:06 PM
4	72.33	50uL	1	*******		11/30/2022 6:24:55 PM
5	71.63	50uL	1	*******		11/30/2022 6:27:58 PM

Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 72.38



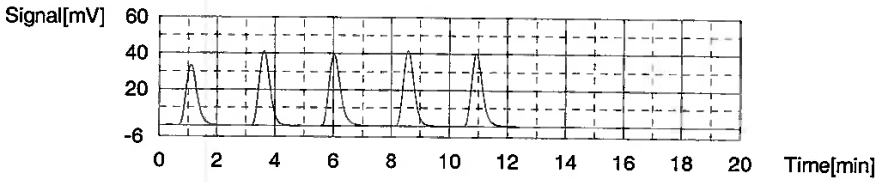
Conc: 30.00mg/L

SGS FC1020

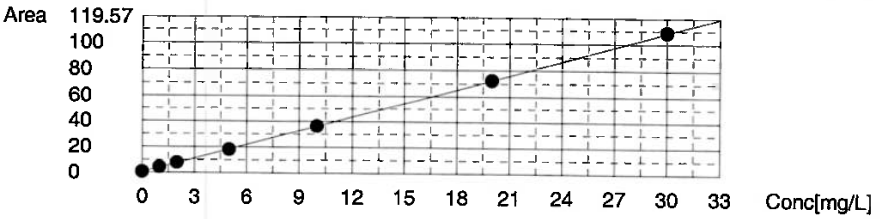
12/13/2022 4:02:31 PM tc 2 - toc 2 aq Cal-Curves 11-30-2022.t32

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	91.08	50uL	1	*******	E	11/30/2022 6:41:36 PM
2	108.8	50uL	1	*******		11/30/2022 6:44:09 PM
3	107.9	50uL	1	*******		11/30/2022 6:46:52 PM
4	108.6	50uL	1	*******		11/30/2022 6:49:21 PM
5	109.5	50uL	1	*******		11/30/2022 6:51:58 PM

Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 108.7



Slope: 3.602
Intercept 0.4370
r^2 1.0000
r 1.0000
Zero Shift No



Sample

Sample Name: ICV
Sample ID: Untitled
Origin: toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal
Status Completed
Chk. Result

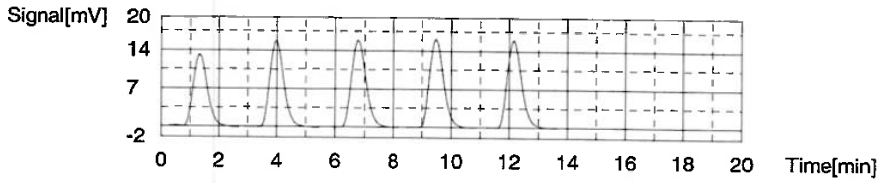
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.89	12.62mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:09:47 AM
2	53.33	14.69mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:12:42 AM
3	54.57	15.03mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:15:34 AM
4	55.00	15.15mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:18:23 AM
5	55.04	15.16mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:21:19 AM

Mean Area 54.48
Mean Conc. 15.01mg/L



3/3

① High level determination is required

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-13 08:02:15 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk
1		2022-12-12 15:57:06 UTC-5	855 pH Cal 171016jpm					
2	System Prep-250mg/L	2022-12-12 16:13:21 UTC-5	Total Alkalinity-All Forms 210115jpm	10.69	10.69		9.03	257.9
3	BSP-250mg/L	2022-12-12 16:24:39 UTC-5	Total Alkalinity-All Forms 210115jpm	10.70	10.70		8.94	255.5
4	FC1070-1.18	2022-12-12 16:35:47 UTC-5	Total Alkalinity-All Forms 210115jpm	6.96	6.94		3.68	105.1
5	FC1070-1.18DUP	2022-12-12 16:48:38 UTC-5	Total Alkalinity-All Forms 210115jpm	6.77	6.76		3.67	104.7
6	FC1070-2.53	2022-12-12 16:56:39 UTC-5	Total Alkalinity-All Forms 210115jpm	6.85	6.84		6.32	180.7
7	FC1070-4.18	2022-12-12 17:07:41 UTC-5	Total Alkalinity-All Forms 210115jpm	7.13	7.12		6.11	174.5
8	FC1070-5.18	2022-12-12 17:22:03 UTC-5	Total Alkalinity-All Forms 210115jpm	7.31	7.30		6.73	192.2
9	FC1070-6.18	2022-12-12 17:36:44 UTC-5	Total Alkalinity-All Forms 210115jpm	7.14	7.13		6.80	194.4
10	FC1124-1.15	2022-12-12 17:46:44 UTC-5	Total Alkalinity-All Forms 210115jpm	6.78	6.78		6.11	174.6
11	FC1124-2.15	2022-12-12 17:58:10 UTC-5	Total Alkalinity-All Forms 210115jpm	7.51	7.50		11.47	327.7
12	FC1124-3.14	2022-12-12 18:15:59 UTC-5	Total Alkalinity-All Forms 210115jpm	7.52	7.52		10.78	307.9
13	FC1124-4.15	2022-12-12 18:28:23 UTC-5	Total Alkalinity-All Forms 210115jpm	7.36	7.36		5.81	165.9
14	FC1010-5.12	2022-12-12 18:37:16 UTC-5	Total Alkalinity-All Forms 210115jpm	7.03	7.02		4.04	115.4
15	FC1010-6.12	2022-12-12 18:47:14 UTC-5	Total Alkalinity-All Forms 210115jpm	7.01	7.00		4.03	115.2
16	FC1020-1.13	2022-12-12 18:56:08 UTC-5	Total Alkalinity-All Forms 210115jpm	7.42	7.41		12.82	366.3
17	FC1020-2.13	2022-12-12 19:09:58 UTC-5	Total Alkalinity-All Forms 210115jpm	7.59	7.60		1.99	57.0
18	FC1020-3.13	2022-12-12 19:19:21 UTC-5	Total Alkalinity-All Forms 210115jpm	7.64	7.64		11.71	334.5
19	FC1072-1.4 (1)	2022-12-12 19:32:15 UTC-5	Total Alkalinity-All Forms 210115jpm	7.87	7.87		invalid	invalid
20	FC1065-2.13	2022-12-12 20:02:48 UTC-5	Total Alkalinity-All Forms 210115jpm	6.96	6.96		7.78	222.2

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-13 08:02:15 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk
21	FC1065-3.13	2022-12-12 20:13:45 UTC-5	Total Alkalinity-All Forms 210115jpm	7.15	7.14		7.69	219.7
22	FC1065-4.13	2022-12-12 20:29:16 UTC-5	Total Alkalinity-All Forms 210115jpm	7.31	7.31		17.25	492.8
23	FC1065-5.13	2022-12-12 20:46:27 UTC-5	Total Alkalinity-All Forms 210115jpm	7.83	7.83		9.09	259.6
24	FC1135-1.12	2022-12-12 20:57:40 UTC-5	Total Alkalinity-All Forms 210115jpm	8.15	8.16		5.17	147.7

GN92993/94
metrohm 8560125

Sodium Carbonate Spike: GN 34331
0.02N H_2SO_4: GN34279

B, Recovery: 102.20%
Duplicate RPD: 0.38%

Grace Taylor 12/13/22
12/13/22

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-13 08:02:15 UTC-5

Determination overview

	Temp	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Zero Pt	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	21.0	22.8	99.20		6.93					
2	20.9	22.7				120.0	17.9	240.1	0.00	
3	21.0	22.8				117.9	19.8	235.8	0.00	
4	20.8	22.6				0.0	105.1	0.0	0.00	
5	20.6	22.4				0.0	104.7	0.0	0.00	
6	20.9	22.7				0.0	180.7	0.0	0.00	
7	20.8	22.6				0.0	174.5	0.0	0.00	
8	20.7	22.5				0.0	192.2	0.0	0.00	
9	20.6	22.4				0.0	194.4	0.0	0.00	
10	20.8	22.6				0.0	174.6	0.0	0.00	
11	20.9	22.7				0.0	327.7	0.0	0.00	
12	20.7	22.5				0.0	307.9	0.0	0.00	
13	20.5	22.3				0.0	165.9	0.0	0.00	
14	20.8	22.6				0.0	115.4	0.0	0.00	
15	20.6	22.4				0.0	115.2	0.0	0.00	
16	20.6	22.4				0.0	366.3	0.0	0.00	
17	20.8	22.6				0.0	57.0	0.0	0.00	
18	20.6	22.4				0.0	334.5	0.0	0.00	
19	20.6	22.4				0.0	invalid	0.0	0.00	
20	20.7	22.5				0.0	222.2	0.0	0.00	

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-13 08:02:15 UTC-5

Determination overview

	Temp	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Zero Pt	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	21.1	22.9				0.0	219.7	0.0	0.00	
22	21.1	22.9				0.0	492.8	0.0	0.00	
23	21.1	22.9				0.0	259.6	0.0	0.00	
24	21.0	22.8				0.0	147.7	0.0	0.00	

BOD/CBOD Calculations

Method: SM5210B-2001

GP Batch: 38277
Prep Date: 12/07/22
Prep Time: 9:30

GN Batch: 92998
Analysis Date: 12/12/22
Analysis Time: 8:30

Limits:
MB ≤ 0.2mg/l
SC=0.6 to 1 mg/l

	Day1Read	Day5Read	Depletion	Seed result
MB	8.67	8.50	0.17	
Seed 10			0.00	0.00
Seed 15	8.81	5.87	2.94	0.20
Seed 20	8.81	4.82	3.99	0.20
Seed 25	8.83	3.75	5.08	0.20
Seed 30	8.81	3.10	5.71	0.19
Seed correction=(Average of seed results with valid seed depletions)x4				0.790

SB Result 213.667
SB %Rec 107.9

	Samp#.bot#	SampVol,m	DIL	Day1Read	Day5Read (≥1)	Depletion (≥2)	RL,mg/L	BOD,mg/L		
	BS1	6	50	8.87	3.72	5.15	100	218.00		
	BS2	6	50	8.85	3.81	5.04	100	212.50		
	BS3	6	50	8.88	3.88	5.00	100	210.50		
DUP	FC1014-1.1	20	15.0	8.96	7.54	1.42	30	9.45	1.84	
		50	6.0	9.16	7.95	1.21	12	2.52	57.34	DupRPD
		150	2.0	10.11	8.40	1.71	4	1.84		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
QC	FC1014-1.1	20	15.0	9.02	7.79	1.23	30	6.60	1.02	
		50	6.0	9.17	7.99	1.18	12	2.34		
		150	2.0	9.99	8.69	1.30	4	1.02		
	FC1016-1.5	1	300.0	8.82	1.16	7.66	600	2061.00		
		3	100.0	8.86	0.58	8.28	200	749.00		
		10	30.0	8.84	0.52	8.32	60	225.90		
		30	10.0	8.50	0.42	8.08	20	72.90		
		75	4.0	7.60	0.36	7.24	8	25.80		
	FC1020-1.1	6	50.0	8.73	7.66	1.07	100	14.00		
		20	15.0	8.88	7.70	1.18	30	5.85		
		50	6.0	8.94	7.54	1.40	12	3.66		
		150	2.0	8.86	6.89	1.97	4	2.36		
	FC1020-2.1	6	50.0	8.99	7.74	1.25	100	23.00		
		20	15.0	9.03	7.81	1.22	30	6.45		
		50	6.0	9.19	8.01	1.18	12	2.34		
		150	2.0	10.11	8.46	1.65	4	1.72		
	FC1020-3.1	6	50.0	8.92	7.83	1.09	100	15.00		
		20	15.0	9.02	7.69	1.33	30	8.10		
		50	6.0	9.16	7.67	1.49	12	4.20		
		150	2.0	9.24	7.19	2.05	4	2.52		
	FC1054-2.2	1	300.0	8.93	7.25	1.68	600	267.00		
		3	100.0	8.93	5.97	2.96	200	217.00	> 210.95	
		10	30.0	8.85	1.23	7.62	60	204.90		
	FC1061-1.1	20	15.0	8.86	5.46	3.40	30	39.15	> 34.075	
		50	6.0	8.54	2.65	5.89	12	30.60		
		150	2.0	8.01	0.77	7.24	4	12.90		
	FC1065-2.1	6	50.0	8.99	7.84	1.15	100	18.00		
		20	15.0	8.83	7.6	1.23	30	6.60		
		50	6.0	8.64	7.26	1.38	12	3.54		
		150	2.0	6.85	4.73	2.12	4	2.66		
	FC1065-3.1	6	50.0	8.83	7.63	1.20	100	20.50		
		20	15.0	8.86	7.75	1.11	30	4.80		
		50	6.0	8.69	7.3	1.39	12	3.60		
		150	2.0	6.98	5.22	1.76	4	1.94		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		

Analyst's Initials JC/BW Date 12/13/22 Reviewer's Initials [signature] Date 12/13/22

12-07-22A.xls SI

SGS - Orlando

11.8 11

BOD/CBOD Calculations

Method: SM5210B-2001

Limits:
MB ≤ 0.2mg/l

SC=0.6 to 1 mg/l

	Day1Read	Day5Read	Depletion	Seed result
MB	8.67	8.50	0.17	
Seed 10			0.00	0.00
Seed 15	8.81	5.87	2.94	0.20
Seed 20	8.81	4.82	3.99	0.20
Seed 25	8.83	3.75	5.08	0.20
Seed 30	8.81	3.10	5.71	0.19

Seed correction=(Average of seed results with valid seed depletions)x4 0.790

GP Batch: 38277
Prep Date: 12/07/22
Prep Time: 9:30

GN Batch: 92998
Analysis Date: 12/12/22
Analysis Time: 8:30

SB Result 213.667
SB %Rec 107.9

Samp#.bot#	SampVol,m	DIL	Day1Read	Day5Read (≥1)	Depletion (≥2)	RL,mg/L	BOD,mg/L		
BS1	6	50	8.87	3.72	5.15	100	218.00		
BS2	6	50	8.85	3.81	5.04	100	212.50		
BS3	6	50	8.88	3.88	5.00	100	210.50		
DUP		#DIV/0!			0.00	#DIV/0!	#DIV/0!		
		#DIV/0!			0.00	#DIV/0!	#DIV/0!	#DIV/0!	DupRPD
		#DIV/0!			0.00	#DIV/0!	#DIV/0!		
		#DIV/0!			0.00	#DIV/0!	#DIV/0!		
		#DIV/0!			0.00	#DIV/0!	#DIV/0!		
QC FC1065-4.1	6	50.0	9.07	7.78	1.29	100	25.00		
	20	15.0	9.04	7.70	1.34	30	8.25		
	50	6.0	8.66	6.60	2.06	12	7.62	>8.72	
	150	2.0	7.41	1.71	5.70	4	9.82		
FC1065-5.1	6	50.0	9.02	7.52	1.50	100	35.50		
	20	15.0	9.03	7.55	1.48	30	10.35		
	50	6.0	8.84	7.19	1.65	12	5.16		
	150	2.0	7.13	4.97	2.16	4	2.74		
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Analyst's Initials JRF PSW Date 12/13/22 Reviewer's Initials _____ Date _____

12-07-22B.xls SI

SGS - Orlando

BOD / CBOD Log

(BOD) / CBOD (circle one) by SM 5210B-2001

GP# 38277
GN# 92998

Winkler Verification Date ____ (mm-dd-yy) (performed monthly)

Date Set 12/7/22 (mm-dd-yy) Time Set 9:30 (24:00) DO Meter Cal Day 1 8.70 By: JR init
767.3 mmHg/20.9°

Date Read 12/12/22 (mm-dd-yy) Time Read 8:30 (24:00) DO Meter Cal Day 5 9.10 By: BW init
761.7 mmHg/19.8°

DO Meter ID D450 Incubator ID #2 pH meter ID H05893/Strip: 0921

Dilution Water Lot GM343329 GGA Lot WC19881 exp 12/16/22 Inhibitor Lot ____

0.025N Na2SO3 Lot ____ 1N H2SO4 Lot ____ 1N NaOH Lot GM339241

Seed Start Time: 8:49 (24:00) Seed Exp Time: 14:49 (24:00) Seed Lot GM343330

Sample ID	Bottle #	Chlorine present Y/N	Na2SO3 added Y/N	Initial pH, su	Adjusted pH, 7.0 - 7.2, su	Volume, ml	Day 1 DO, mg/l	Day 5 DO, mg/l	Comments (clients, sample appearance, etc.)
MB	N/A	N/A	N/A	N/A	N/A	N/A	8.67	8.50	
Vessel 15							8.81	5.87	
20							8.81	4.82	
25							8.83	3.75	
30							8.81	3.10	
BS1						6	8.87	3.72	
2							8.85	3.81	
3							8.88	3.88	
DUP FC1014-1	1		N	6.8		20	8.96	7.54	
						50	9.16	7.95	
						150	10.11	8.40	
QC						20	9.02	7.79	
						50	9.17	7.99	
						150	9.99	8.69	
FC1016-1	5			4.80	7.01	1	8.82	1.16	No History; Dilutions based off initial DO, which is less than 2.
						3	8.86	0.58	
						10	8.84	0.52	
						30	8.50	0.42	
						75	7.60	0.36	
FC1020-1	14			7.2	N/A	6	8.73	~~7.46~~ *	*7.66
						20	8.88	7.70	BW 12/12/22
						50	8.94	7.54	
						150	8.86	6.89	
FC1020-2				6.8		6	8.99	7.74	
						20	9.03	7.81	

Analyst Signature Jaclyn Rice / BJ Marie Wallace Date 12/7/22 12/12/22 (mm-dd-yy)

Reviewer Signature ____ Date ____ (mm-dd-yy)

Rev. 0116 LM

SGS Accutest - Orlando

12 of 50

BOD / CBOD Log

BOD / CBOD (circle one) by SM 5210B-2001

GP# _____

GN# _____

Winkler Verification Date _____ (mm-dd-yy) (performed monthly)

Date Set 12/7/22 (Cont.) (mm-dd-yy) Time Set _____ (24:00)

DO Meter Cal Day 1 _____ By: _____ init

Date Read _____ (mm-dd-yy) Time Read _____ (24:00)

DO Meter Cal Day 5 _____ By: _____ init

DO Meter ID _____ Incubator ID _____ pH meter ID _____

Dilution Water Lot _____ GGA Lot _____ Inhibitor Lot _____

0.025N Na2SO3 Lot _____ 1N H2SO4 Lot _____ 1N NaOH Lot _____

Seed Start Time: _____ (24:00) Seed Exp Time: _____ (24:00) Seed Lot _____

Sample ID	Bottle #	Chlorine present Y/N	Na2SO3 added Y/N	Initial pH, su	Adjusted pH, 7.0 - 7.2, su	Volume, ml	Day 1 DO, mg/l	Day 5 DO, mg/l	Comments (clients, sample appearance, etc.)
							JR 12/7/22		JR 12/7/22
FC1020-2	14	N	N	6.8	N/A	50	8.99	8.01	9.03 9.19
↓				↓		150	9.03	8.46	9.19 10.11
FC1020-3				7.0		6	9.19	7.83	10.11 8.92
						20	10.11	7.69	9.02
						50	9.16	7.67	
						150	9.24	7.19	
FC1054	2			8.0		1	8.93	7.25	
						3	8.93	5.97	
						10	8.85	1.23	
FC1061-1	10			6.6		20	8.86	5.46	
						50	9.54	2.65	
						150	8.01	0.77	
FC1065-2	13			7.2		6	8.99	7.84	
						20	8.83	7.60	
						50	8.64	7.26	
						150	6.85	4.73	
FC1065-3				7.0		6	8.83	7.63	
						20	8.86	7.75	
						50	8.69	7.30	
						150	6.98	5.22	
FC1065-4				7.2		6	9.07	7.78	
						20	9.04	7.70	
						50	8.46	6.60	
						150	7.41	1.71	
					JR 12/7/22				

Analyst Signature Jacqueline Rivera /By Marie Wallace Date 12/7/22 12/12/22 (mm-dd-yy)

Reviewer Signature _____ Date _____ (mm-dd-yy)

BOD / CBOD Log

BOD / CBOD (circle one) by SM 5210B-2001

GP# _____

GN# _____

Winkler Verification Date _____ (mm-dd-yy)
(performed monthly)

Date Set 12/7/22 (mm-dd-yy) Time Set _____ (24:00) DO Meter Cal Day 1 _____ By: _____ init

Date Read _____ (mm-dd-yy) Time Read _____ (24:00) DO Meter Cal Day 5 _____ By: _____ init

DO Meter ID _____ Incubator ID _____ pH meter ID _____

Dilution Water Lot _____ GGA Lot _____ Inhibitor Lot _____

0.025N Na2SO3 Lot _____ 1N H2SO4 Lot _____ 1N NaOH Lot _____

Seed Start Time: _____ (24:00) Seed Exp Time: _____ (24:00) Seed Lot _____

Sample ID	Bottle #	Chlorine present Y/N	Na2SO3 added Y/N	Initial pH, su	Adjusted pH, 7.0 - 7.2, su	Volume, ml	Day 1 DO, mg/l	Day 5 DO, mg/l	Comments (clients, sample appearance, etc.)
FC10625-5	13	N	N	7.0	N/A	6	9.02	7.52	
↓	↓	↓	↓	↓	↓	20	9.03	7.55	
						50	8.84	7.19	
↓	↓	↓	↓	↓	↓	150	7.13	4.97	

JL 12/8/22

Analyst Signature Jadynn Lin / Bymarie Wallace Date 12/7/22 12/12/22 (mm-dd-yy)

Reviewer Signature _____ Date _____ (mm-dd-yy)

Rev. 0116 LM

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ANALYTICAL REPORT

February 16, 2023

SGS North America Inc. - Orlando, FL

Sample Delivery Group:	L1569097
Samples Received:	12/19/2022
Project Number:	FC1020X
Description:	Griffiss AFB; Rome, NY

Report To:

Muna Mohammed
4405 Vineland Rd
Suite C-15
Orlando, FL 32811

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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DUP(R3873985-7) WG1976827 12/20/22 11:00 FS3100-01 15

LCS(R3873985-2) WG1976827 12/20/22 10:08 FS3100-01 16

MS(R3873985-3) WG1976827 12/20/22 10:34 FS3100-01 17

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LF1SW-1-1222 L1569097-01 WW

Collected by: BP
Collected date/time: 12/05/22 16:30
Received date/time: 12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:33	12/20/22 10:33	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:20	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:28	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1977039	1	12/20/22 12:08	12/21/22 13:21	CCE	Mt. Juliet, TN

LF1SW-3-1222 L1569097-02 WW

Collected by: BP
Collected date/time: 12/05/22 15:30
Received date/time: 12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:37	12/20/22 10:37	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:22	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:29	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1977039	1	12/20/22 12:08	12/21/22 16:30	CCE	Mt. Juliet, TN

LF1SW-2SMC-1222 L1569097-03 WW

Collected by: BP
Collected date/time: 12/05/22 16:00
Received date/time: 12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:40	12/20/22 10:40	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:23	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:30	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG1977039	1	12/20/22 12:08	12/21/22 16:33	CCE	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Report Revision History

Level II Report - Version 1: 12/23/22 13:48
Level II Report - Version 2: 02/02/23 18:16

Project Narrative

Revised reporting units

350.1 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569097-01	**SDG:**	L1569097
Client Sample ID:	LF1SW-1-1222	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103300	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:33
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:33
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0750	U	0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-3-1222

Lab Sample ID:	L1569097-02	**SDG:**	L1569097
Client Sample ID:	LF1SW-3-1222	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221220103700	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:37
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:37
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0750	U	0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-2SMC-1222

Lab Sample ID:	L1569097-03	**SDG:**	L1569097
Client Sample ID:	LF1SW-2SMC-1222	**Collected Date/Time:**	12/05/22 16:00
Lab File ID:	20221220104000	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:40
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:40
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.478		0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-1	**SDG:**	L1569097
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20221220100700	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:07
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:07
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0750	U	0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-5	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221220103900	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:39
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:39
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	0.0750	U	0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-7	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221220110000	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 11:00
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 11:00
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	1.50		0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-2	**SDG:**	L1569097
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20221220100800	**Received Date/Time:**	
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:08
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:08
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	7.33		0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-3	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103400	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:34
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:34
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	4.69		0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-6	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221220105700	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:57
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:57
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	5.36		0.0317	0.0750	0.150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-4	**SDG:**	L1569097
Client Sample ID:	MSD	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103600	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:36
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:36
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	
Total Solids (%):		**Final Wt/Vol:**	

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	7664-41-7	4.83		0.0317	0.0750	0.150

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

		ICV				CCV				CCV			
Sample ID:		FS3100-011220221005				FS3100-011220221027				FS3100-011220221046			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.945	98.90		5	4.884	97.70		5	4.880	97.60	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

CCV

Sample ID: FS3100-011220221101

Analyte	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.858	97.20	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221220100700		20221220102800		20221220104800		20221220110300	
Analyte	mg/l		mg/l		mg/l		mg/l	
AMMONIA NITROGEN	0.0750	U	-0.03000		-0.02800		-0.02900	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3873985-3
R3873985-4

MS Sample / File ID:	R3873985-3 / 20221220103400	**SDG:**	L1569097
MSD Sample / File ID:	R3873985-4 / 20221220103600	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569097-01 / 20221220103300	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5.00	0.0750	4.69	4.83	93.7	96.5	1	90.0 - 110	2.96	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.: R3873985-6

MS Sample / File ID:	R3873985-6 / 20221220105700	**SDG:**	L1569097
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569103-03 / 20221220105500	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5.00	0.751	5.36		92.3		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3873985-5 / 20221220103900	**SDG:**	L1569097
OS Sample / File ID:	L1569097-02 / 20221220103700	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	0.0750	0.0750	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3873985-7 / 20221220110000	**SDG:**	L1569097
OS Sample / File ID:	L1569103-04 / 20221220105800	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Ammonia Nitrogen	1.50	1.50	0.0668	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3873985-2

LCS Sample / File ID:	R3873985-2 / 20221220100800	**SDG:**	L1569097
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Ammonia Nitrogen	7.50	7.33		97.7		90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569097-01,02,03 **Analytical Method:** 350.1

Matrix: WW **Prep Method:** 350.1

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Ammonia Nitrogen	7664-41-7			0.0317	0.15

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	12/20/22 09:54
Analytical Run:	122022_1	**Calibration End Date:**	12/20/22 10:02

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	10.0	20221220095400	12/20/22 09:54		
CAL	5.00	20221220095600	12/20/22 09:56		
CAL	2.50	20221220095700	12/20/22 09:57		
CAL	1.00	20221220095900	12/20/22 09:59		
CAL	0.10	20221220100100	12/20/22 10:01		
CAL	0.00	20221220100200	12/20/22 10:02		
ICV	FS3100-011220221005	20221220100500	12/20/22 10:05		
BLANK	R3873985-1	20221220100700	12/20/22 10:07	1	WG1976827
LCS	R3873985-2	20221220100800	12/20/22 10:08	1	WG1976827
L1568037-03	L1568037-03	20221220101500	12/20/22 10:15	500	WG1976827
L1568037-04	L1568037-04	20221220101600	12/20/22 10:16	50	WG1976827
L1568132-01	L1568132-01	20221220101800	12/20/22 10:18	1	WG1976827
L1568243-01	L1568243-01	20221220102100	12/20/22 10:21	1	WG1976827
L1568243-02	L1568243-02	20221220102200	12/20/22 10:22	1	WG1976827
L1568243-03	L1568243-03	20221220102400	12/20/22 10:24	1	WG1976827
L1568251-01	L1568251-01	20221220102500	12/20/22 10:25	5	WG1976827
CCV	FS3100-011220221027	20221220102700	12/20/22 10:27		
CCB	FS3100-011220221028	20221220102800	12/20/22 10:28		
L1568255-01	L1568255-01	20221220103100	12/20/22 10:31	5	WG1976827
LF1SW-1-1222	L1569097-01	20221220103300	12/20/22 10:33	1	WG1976827
MS	R3873985-3	20221220103400	12/20/22 10:34	1	WG1976827
MSD	R3873985-4	20221220103600	12/20/22 10:36	1	WG1976827
LF1SW-3-1222	L1569097-02	20221220103700	12/20/22 10:37	1	WG1976827
DUP	R3873985-5	20221220103900	12/20/22 10:39	1	WG1976827
LF1SW-2SMC-1222	L1569097-03	20221220104000	12/20/22 10:40	1	WG1976827
L1569102-01	L1569102-01	20221220104200	12/20/22 10:42	1	WG1976827
L1569102-02	L1569102-02	20221220104300	12/20/22 10:43	1	WG1976827
L1569102-03	L1569102-03	20221220104500	12/20/22 10:45	1	WG1976827
CCV	FS3100-011220221046	20221220104600	12/20/22 10:46		
CCB	FS3100-011220221048	20221220104800	12/20/22 10:48		
L1569102-04	L1569102-04	20221220105100	12/20/22 10:51	1	WG1976827
OS	L1569103-03	20221220105500	12/20/22 10:55		
L1569103-03	L1569103-03	20221220105500	12/20/22 10:55	1	WG1976827
MS	R3873985-6	20221220105700	12/20/22 10:57	1	WG1976827
OS	L1569103-04	20221220105800	12/20/22 10:58		
L1569103-04	L1569103-04	20221220105800	12/20/22 10:58	1	WG1976827
DUP	R3873985-7	20221220110000	12/20/22 11:00	1	WG1976827
CCV	FS3100-011220221101	20221220110100	12/20/22 11:01		
CCB	FS3100-011220221103	20221220110300	12/20/22 11:03		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	10	9.946	99.50	5	5.117	102
File ID:		20221220095400			20221220095600	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	2.50	2.488	99.50	1	.981	98.10
File ID:		20221220095700			20221220095900	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	0.10	.082	82	0	-.015	
File ID:		20221220100100			20221220100200	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
AMMONIA NITROGEN	0	5	0.999882			58084	1536.6	

Calibration Type

0 = Linear Regression

Weightage

5 = None

Created: 12/20/22 16:00

Instrument: FS3100-01

Instrument Method: nh3.mth

Analytical Method: 350.1

Analyte: AMMONIA NITROGEN

Equation: Conc = 58084 * Resp + 1536.6

Standard ID: 22L20114

Date/Time	Sample ID	Std. Conc.	Repsonse
12/20/22 09:54	Cal 10.0 ppm	10.0	579263
12/20/22 09:56	Cal 5.00 ppm	5.00	298765
12/20/22 09:57	Cal 2.50 ppm	2.50	146030
12/20/22 09:59	Cal 1.00 ppm	1.00	58545
12/20/22 10:01	Cal 0.10 ppm	0.10	6327
12/20/22 10:02	Cal 0.00 ppm	0.00	643

R = 0.999882

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

Date	Time	Peak	Cup	Name	Dil Fact	Mult.
20-Dec-22	09:50	1	102	Sync	1.0000	1.0000
20-Dec-22	09:51	2	0	INSTBLK	1.0000	1.0000
20-Dec-22	09:53	3	0	Read Baseline	1.0000	1.0000
20-Dec-22	09:54	4	101	Cal 10.0 ppm	1.0000	1.0000
20-Dec-22	09:56	5	102	Cal 5.00 ppm	1.0000	1.0000
20-Dec-22	09:57	6	103	Cal 2.50 ppm	1.0000	1.0000
20-Dec-22	09:59	7	104	Cal 1.00 ppm	1.0000	1.0000
20-Dec-22	10:01	8	105	Cal 0.10 ppm	1.0000	1.0000
20-Dec-22	10:02	9	106	Cal 0.00 ppm	1.0000	1.0000
20-Dec-22	10:04	10	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:05	11	109	ICV	1.0000	1.0000
20-Dec-22	10:07	12	107	Blank WG1976827	1.0000	1.0000
20-Dec-22	10:08	13	111	LCS	1.0000	1.0000
20-Dec-22	10:15	14	114	L1568037-03	500.0000	1.0000
20-Dec-22	10:16	15	115	L1568037-04	50.0000	1.0000
20-Dec-22	10:18	16	116	L1568132-01	1.0000	1.0000
20-Dec-22	10:19	17	117	L1568223-01	1.0000	1.0000
20-Dec-22	10:21	18	118	L1568243-01	1.0000	1.0000
20-Dec-22	10:22	19	119	L1568243-02	1.0000	1.0000
20-Dec-22	10:24	20	120	L1568243-03	1.0000	1.0000
20-Dec-22	10:25	21	121	L1568251-01	5.0000	1.0000
20-Dec-22	10:27	22	109	CCV	1.0000	1.0000
20-Dec-22	10:28	23	0	CCB	1.0000	1.0000
20-Dec-22	10:30	24	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:31	25	122	L1568255-01	5.0000	1.0000
20-Dec-22	10:33	26	123	L1569097-01	1.0000	1.0000
20-Dec-22	10:34	27	124	MS L1569097-01	1.0000	1.0000
20-Dec-22	10:36	28	125	MSD L1569097-01	1.0000	1.0000
20-Dec-22	10:37	29	126	L1569097-02	1.0000	1.0000
20-Dec-22	10:39	30	127	DUP L1569097-02	1.0000	1.0000
20-Dec-22	10:40	31	128	L1569097-03	1.0000	1.0000
20-Dec-22	10:42	32	129	L1569102-01	1.0000	1.0000
20-Dec-22	10:43	33	130	L1569102-02	1.0000	1.0000
20-Dec-22	10:45	34	131	L1569102-03	1.0000	1.0000
20-Dec-22	10:46	35	109	CCV	1.0000	1.0000

20-Dec-22	10:48	36	0	CCB	1.0000	1.0000
20-Dec-22	10:49	37	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:51	38	132	L1569102-04	1.0000	1.0000
20-Dec-22	10:52	39	133	L1569103-01	1.0000	1.0000
20-Dec-22	10:54	40	134	L1569103-02	1.0000	1.0000
20-Dec-22	10:55	41	135	L1569103-03	1.0000	1.0000
20-Dec-22	10:57	42	136	MS L1569103-03	1.0000	1.0000
20-Dec-22	10:58	43	137	L1569103-04	1.0000	1.0000
20-Dec-22	11:00	44	138	DUP L1569103-04	1.0000	1.0000
20-Dec-22	11:01	45	109	CCV	1.0000	1.0000
20-Dec-22	11:03	46	0	CCB	1.0000	1.0000
20-Dec-22	11:04	47	0	Read Baseline	1.0000	1.0000
20-Dec-22	11:10	48	133	L1569103-01	5.0000	1.0000
20-Dec-22	11:12	49	134	L1569103-02	1.0000	1.0000
20-Dec-22	11:13	50	109	CCV	1.0000	1.0000
20-Dec-22	11:15	51	0	CCB	1.0000	1.0000
20-Dec-22	11:16	52	0	Read Baseline	1.0000	1.0000

*** Calibration Data ***

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

| In-line Gas Diffusion TKN & NH3 |

Peak	Response	Calc [ppm]	Flags
1	294072	5.036	
2	277	-0.022	LO
3	0	-0.026	BL
4	579263	9.946	
5	298765	5.117	
6	146030	2.488	
7	58545	0.981	
8	6327	0.082	
9	643	-0.015	LO
10	0	-0.026	BL
11	288759	4.945	
12	350	-0.020	LO
13	427084	7.326	
14	188083	1605.845	
15	72205	60.833	
16	11156	0.166	
17	22194	0.356	
18	2043	0.009	
19	2339	0.014	
20	1643	0.002	
21	320142	27.426	
22	285218	4.884	
23	-210	-0.030	LO
24	0	-0.026	BL
25	211883	18.107	
26	2508	0.017	
27	273645	4.685	
28	281867	4.826	
29	1525	0.000	LO
30	1691	0.003	
31	29314	0.478	
32	14432	0.222	
33	13067	0.199	
34	89859	1.521	
35	284957	4.880	

36	-110	-0.028	LO
37	0	-0.026	BL
38	25922	0.420	
39	705969	12.128	HI
40	14693	0.227	FL
41	45170	0.751	FL
42	313073	5.364	
43	88430	1.496	
44	88509	1.497	
45	283695	4.858	
46	-147	-0.029	LO
47	0	-0.026	BL
48	144871	12.339	
49	15145	0.234	
50	281460	4.819	
51	-234	-0.030	LO
52	0	-0.026	BL

*** Calibration Data ***

Calibration Data for In-line Gas Diffusion TKN & NH3

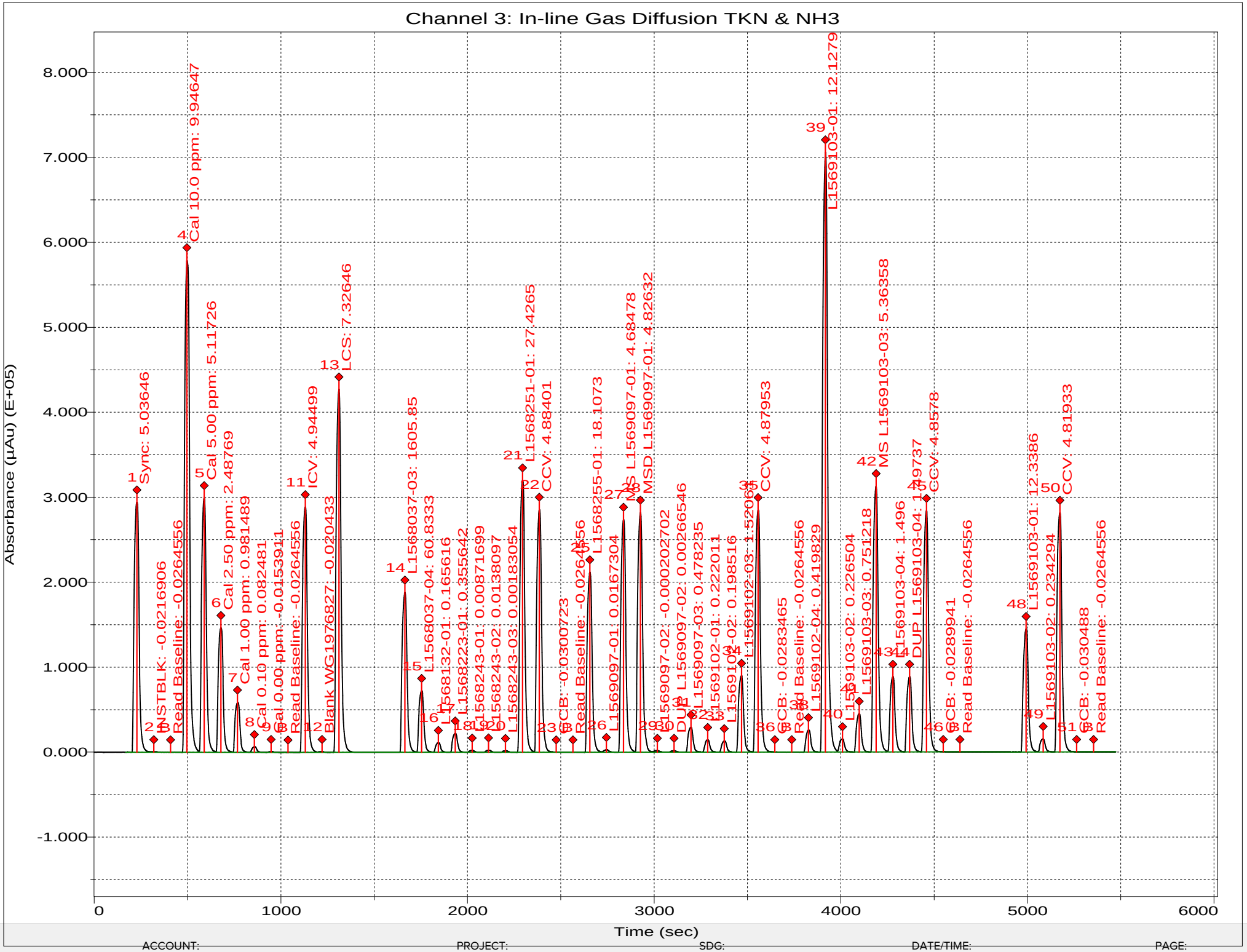
Calibration 1 (Peaks 4-52)

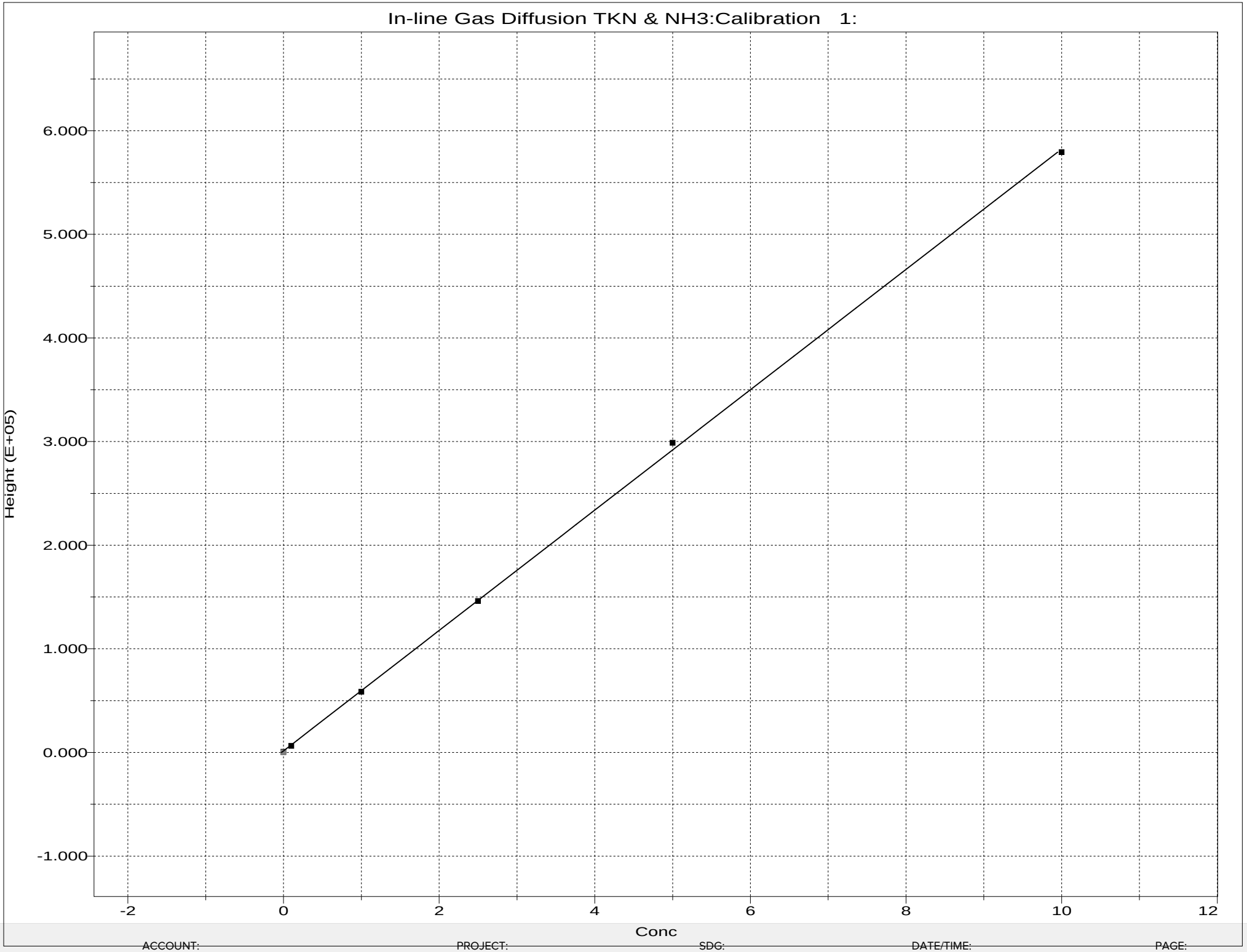
Name	Conc	Height
*Cal 10.0 ppm	10.000000	579263.375
*Cal 5.00 ppm	5.000000	298765.438
*Cal 2.50 ppm	2.500000	146030.312
*Cal 1.00 ppm	1.000000	58545.027
*Cal 0.10 ppm	0.100000	6327.425
*Cal 0.00 ppm	0.000000	642.664

Fitting Method: 1st Order
Calib Coef:
y=bx+a
a: (intercept) 1.5366e+03
b: 5.8084e+04

Corr Coef: 0.999882

Carryover: 0.0941%


Channel 3: In-line Gas Diffusion TKN & NH3
Absorbance (µAu) (E+05)
Time (sec)
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
0
1000
2000
3000
4000
5000
6000
1 Sync: 5.03646
2 INSTBLK: -0.0216906
3 Read Baseline: -0.0264556
4 Cal 10.0 ppm: 9.94647
5 Cal 5.00 ppm: 5.11726
6 Cal 2.50 ppm: 2.48769
7 Cal 1.00 ppm: 0.981489
8 Cal 0.10 ppm: 0.082481
9 Cal 0.00 ppm: -0.0153911
10 Read Baseline: -0.0264556
11 ICV: 4.94499
12 Blank WG1976827: -0.020433
13 LCS: 7.32646
14 L1568037-03: 1605.85
15 L1568037-04: 60.8333
16 L1568132-01: 0.165616
17 L1568223-01: 0.355642
18 L1568243-01: 0.00871699
19 L1568243-02: 0.0138097
20 L1568243-03: 0.00183054
21 L1568251-01: 27.4265
22 CCV: 4.88401
23 CCB: -0.0300723
24 Read Baseline: -0.0264556
25 L1568255-01: 18.1073
26 L1569097-01: 0.0167304
27 MS L1569097-01: 4.68478
28 MSD L1569097-01: 4.82632
29 L1569097-02: -0.000202702
30 DUP L1569097-02: 0.00266546
31 L1569097-03: 0.478235
32 L1569102-01: 0.222011
33 L1569103-02: 0.198516
34 L1569102-03: 1.52065
35 CCV: 4.87953
36 CCB: -0.0283465
37 Read Baseline: -0.0264556
38 L1569102-04: 0.419829
39 L1569103-01: 12.1279
40 L1569103-02: 0.226504
41 L1569103-03: 0.751218
42 MS L1569103-03: 5.36358
43 L1569103-04: 1.496
44 DUP L1569103-04: 1.49737
45 CCV: 4.85578
46 CCB: -0.0289941
47 Read Baseline: -0.0264556
48 L1569103-01: 12.3386
49 L1569103-02: 0.234294
50 CCV: 4.81933
51 CCB: -0.030488
52 Read Baseline: -0.0264556


In-line Gas Diffusion TKN & NH3:Calibration 1:
Height (E+05)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2
0
2
4
6
8
10
12
Conc

In-line Gas Diffusion TKN & NH3:Calibration 1: Peak 4-52

File name: C:\FLOW_4\TABLES\122022_1.RST
Date: 20-Dec-22
Operator: 3730

*	Name	Conc	Height
*	Cal 10.0 ppm	10.000000	579263.375000
*	Cal 5.00 ppm	5.000000	298765.437500
*	Cal 2.50 ppm	2.500000	146030.312500
*	Cal 1.00 ppm	1.000000	58545.027344
*	Cal 0.10 ppm	0.100000	6327.425293
*	Cal 0.00 ppm	0.000000	642.664307

Calib Coef:
y=bx+a
a: (intercept) 1.5366e+03
b: 5.8084e+04

Corr Coef: 0.999882

Carryover: 0.0941%

No Drift Peaks

NH3 Waters WetChem Prep Benchsheet

Batch: WG1976827

Analyst: BMD3730 **Analyst 2:** NA___ **Analyst 3:** NA___ **Batch Date/Time:** 12/20/22 08:00 **Prep End Date/Time:** 12/20/22 09:00 **SOP:** MTJL-0157
Method: 350.1 **ICV True Value:** 5 ppm **LCS True Value:** 7.5 ppm **MS/D True Value:** 5 ppm **RLV True Value:** 0.1 ppm **pH Strip Lot#:** HC178067
Chlorine Strip Lot#: 2144 **0.45 Nylon Filter Lot#:** 309048186 **10mL Syringe Lot#:** 2194253 **0.2mL Auto Pipette ID:** K10507311 **0.2mL Pipette Tip Lot#:** 21500301
1mL Auto Pipette ID: K19101681 **1mL Pipette Tip Lot#:** 21510757 **10mL Auto Pipette ID:** 10021329 **10mL Pipette Tip Lot#:** 21349B0
CultureTube Lot#: 22307889 **Dilution Tube Lot#:** 2076119

Salicylate/NFC : 22L20115 Amt. Used: 1 Exp. Date:12/21/22 **Hypochlorite:** 22L20116 Amt. Used: 1 Exp. Date:12/21/22
Complexing Reagent: 22L20117 Amt. Used: 1 Exp. Date:12/21/22 **MS/D Standard:** 22J30555 Amt. Used: 0.05 mL Exp. Date:04/30/23
ICV Standard: 22L20118 Amt. Used: 1 Exp. Date:12/21/22 **LCS/D Standard:** 22L20119 Amt. Used: 1 Exp. Date:12/21/22
Calibration Standard: 22L20114 Amt. Used: 1 Exp. Date:01/20/23 **Diluent:** 22L20120 Amt. Used: 1 Exp. Date:12/21/22
Reagent: 22K07621 Amt. Used: 1 Exp. Date:02/09/23

Sample Number	Matrix	Initial Sample Vol (mL)	Initial pH (s.u.)	Dilution Factor	Chlorine Test/Treat	Review Analyst	Review Date
BLANK		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
LCS		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569097-02)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569103-04)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569103-03)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MSD(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
1. L1568037-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
2. L1568037-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
3. L1568132-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
4. L1568223-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
5. L1568243-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
6. L1568243-02	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
7. L1568243-03	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
8. L1568251-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
9. L1568255-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
10. L1569097-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
11. L1569097-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
12. L1569097-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
13. L1569102-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
14. L1569102-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
15. L1569102-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
16. L1569102-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
17. L1569103-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
18. L1569103-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
19. L1569103-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
20. L1569103-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55

Comments:

Reviewed By:BMD3730 on 12/20/22 12:45:55

351.2 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569097-01	**SDG:**	L1569097
Client Sample ID:	LF1SW-1-1222	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221222102045	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:20
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.205	J	0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569097-02	**SDG:**	L1569097
Client Sample ID:	LF1SW-3-1222	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221222102200	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:22
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.248	J	0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-2SMC-1222

Lab Sample ID:	L1569097-03	**SDG:**	L1569097
Client Sample ID:	LF1SW-2SMC-1222	**Collected Date/Time:**	12/05/22 16:00
Lab File ID:	20221222102321	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:23
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	1.07		0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-1	**SDG:**	L1569097
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20221222095612	**Received Date/Time:**	
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:56
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.300	U	0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-2	**SDG:**	L1569097
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20221222095734	**Received Date/Time:**	
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:57
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):		**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	19.1		0.140	0.300	0.250

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-3	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100017	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:00
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.300	U	0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-6	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100543	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:05
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	0.300	U	0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-4	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100139	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:01
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5.41		0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-7	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100704	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:07
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5.33		0.140	0.300	0.600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-5	**SDG:**	L1569097
Client Sample ID:	MSD	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100300	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:03
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5.26		0.140	0.300	0.600

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1
Concentration Units:	mg/L		

		ICV				CCV				CCV			
Sample ID:		LACHAT6122222095452				LACHAT6122222100947				LACHAT6122222102605			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.80	108		10	10.70	107		10	10.70	107	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221222095612		20221222101109		20221222102727	
Analyte	mg/l		mg/L		mg/L	
KJELDAHL NITROGEN, TKN	0.300	U	-0.09030		-0.09970	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3874770-4
R3874770-5

MS Sample / File ID:	R3874770-4 / 20221222100139	**SDG:**	L1569097
MSD Sample / File ID:	R3874770-5 / 20221222100300	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-03 / 20221222095856	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5.00	0.300	5.41	5.26	108	105	1	90.0 - 110	2.81	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3874770-7

MS Sample / File ID:	R3874770-7 / 20221222100704	**SDG:**	L1569097
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-04 / 20221222100422	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5.00	0.300	5.33		107		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-3 / 20221222100017	**SDG:**	L1569097
OS Sample / File ID:	L1567792-03 / 20221222095856	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	0.300	0.300	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-6 / 20221222100543	**SDG:**	L1569097
OS Sample / File ID:	L1567792-04 / 20221222100422	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Kjeldahl Nitrogen, TKN	0.300	0.300	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1569097-01,02,03

SAMPLE NO.:
R3874770-2

LCS Sample / File ID:	R3874770-2 / 20221222095734	**SDG:**	L1569097
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	20.6	19.1		92.7		74.0 - 124		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

9-IN

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569097-01,02,03
Matrix: WW
Analytical Method: 351.2
Prep Method: 351.2/365.4

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9			0.14	0.60

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	_____
Analytical Run:	CAL122122_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	20.0	20221221152401	12/21/22 15:24		
CAL	10.0	20221221152524	12/21/22 15:25		
CAL	5.0	20221221152645	12/21/22 15:26		
CAL	2.5	20221221152807	12/21/22 15:28		
CAL	1.0	20221221152929	12/21/22 15:29		
CAL	0.5	20221221153051	12/21/22 15:30		
CAL	0.25	20221221153212	12/21/22 15:32		
CAL	0.0	20221221153334	12/21/22 15:33		

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	12/21/22 15:24
Analytical Run:	R122222_1	**Calibration End Date:**	12/21/22 15:33

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT6122222095452	20221222095452	12/22/22 09:54		
BLANK	R3874770-1	20221222095612	12/22/22 09:56	1	WG1976947
LCS	R3874770-2	20221222095734	12/22/22 09:57	1	WG1976947
OS	L1567792-03	20221222095856	12/22/22 09:58		
L1567792-03	L1567792-03	20221222095856	12/22/22 09:58	1	WG1976947
DUP	R3874770-3	20221222100017	12/22/22 10:00	1	WG1976947
MS	R3874770-4	20221222100139	12/22/22 10:01	1	WG1976947
MSD	R3874770-5	20221222100300	12/22/22 10:03	1	WG1976947
OS	L1567792-04	20221222100422	12/22/22 10:04		
L1567792-04	L1567792-04	20221222100422	12/22/22 10:04	1	WG1976947
DUP	R3874770-6	20221222100543	12/22/22 10:05	1	WG1976947
MS	R3874770-7	20221222100704	12/22/22 10:07	1	WG1976947
L1568280-01	L1568280-01	20221222100825	12/22/22 10:08	5	WG1976947
CCV	LACHAT6122222100947	20221222100947	12/22/22 10:09		
CCB	LACHAT6122222101109	20221222101109	12/22/22 10:11		
L1568351-01	L1568351-01	20221222101230	12/22/22 10:12	1	WG1976947
L1568381-02	L1568381-02	20221222101511	12/22/22 10:15	5	WG1976947
L1568387-06	L1568387-06	20221222101916	12/22/22 10:19	1	WG1976947
LF1SW-1-1222	L1569097-01	20221222102045	12/22/22 10:20	1	WG1976947
LF1SW-3-1222	L1569097-02	20221222102200	12/22/22 10:22	1	WG1976947
LF1SW-2SMC-1222	L1569097-03	20221222102321	12/22/22 10:23	1	WG1976947
L1569102-01	L1569102-01	20221222102443	12/22/22 10:24	1	WG1976947
CCV	LACHAT6122222102605	20221222102605	12/22/22 10:26		
CCB	LACHAT6122222102727	20221222102727	12/22/22 10:27		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	20	18.1129	90.60	10	10.6097	106
File ID:		20221221152401			20221221152524	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	5	5.4343	109	2.50	2.8805	115
File ID:		20221221152645			20221221152807	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	1	1.20358	120	0.50	.45778	91.60
File ID:		20221221152929			20221221153051	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	0.25	.225	90	0	-.053432	
File ID:		20221221153212			20221221153334	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
KJELDAHL NITROGEN, TKN	5	1	0.99926			0.226	-0.0801	

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat6 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_03-22-58PM.OMN Created: 12/21/2022 3:22:58 PM
Original Run Author's Signature: [lachat6]
Current Run Filename: CAL122122_1.omn Last Modified: 12/21/2022 3:37:56 PM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF	Description
STD 20.0 ppm 22L20214	1	31	20.0	80.5	12/21/2022@3:24:01 PM			
STD 10.0 ppm	1	32	10.0	47.3	12/21/2022@3:25:24 PM			
STD 5.0 ppm	1	33	5.00	24.4	12/21/2022@3:26:45 PM			
STD 2.5 ppm	1	34	2.50	13.1	12/21/2022@3:28:07 PM			
STD 1.0 ppm	1	35	1.00	5.68	12/21/2022@3:29:29 PM			
STD 0.5 ppm	1	36	0.500	2.38	12/21/2022@3:30:51 PM			
STD 0.25 ppm	1	37	0.250	1.35	12/21/2022@3:32:12 PM			
STD 0.0 ppm	1	38	0.00	0.118	12/21/2022@3:33:34 PM			
ICV	1	2	10.2	45.7	12/21/2022@3:34:56 PM			
Calibration:			Table/Fig. : 1					

Channel 2 (TKN) - Current View

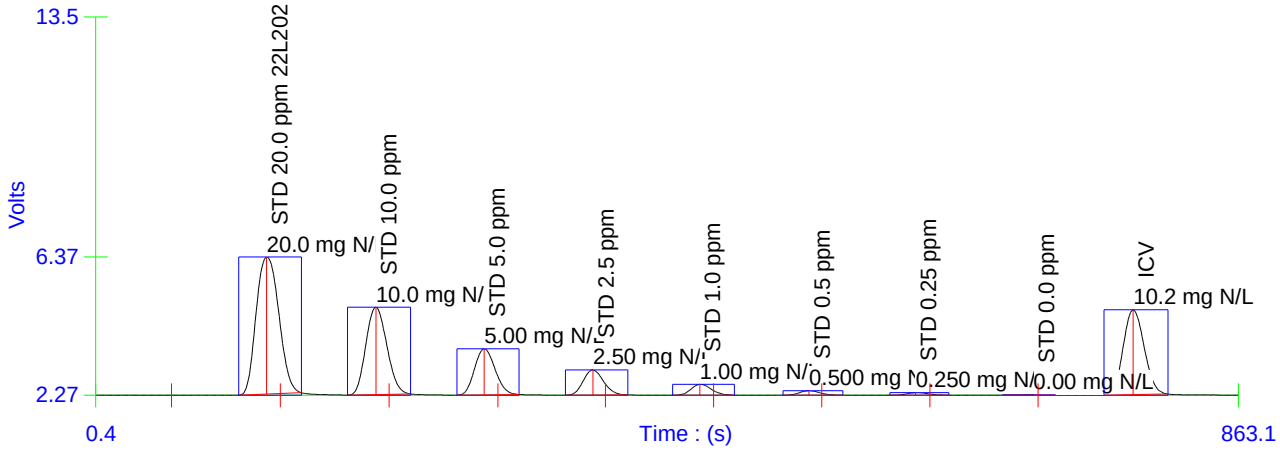
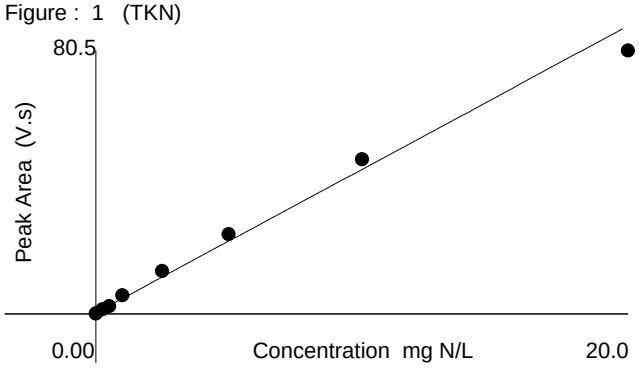


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Author: lachat6 Date : 12/21/2022

Figure : 1 (TKN)



Area = 4.38 * Conc + 0.383
Conc = 0.226 * Area - 0.0801
Correlation Coefficient (r) = 0.99926

Weighting : 1/x

Author: lachat6 Date : 12/22/2022

Original Run Filename: OM_12-22-2022_09-52-26AM.OMN Created: 12/22/2022 9:52:26 AM
Original Run Author's Signature: [lachat6]
Current Run Filename: R122222_1.omn Last Modified: 12/22/2022 10:49:37 AM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF
INSTBLK WG1976947	1	1	-0.0849	-0.0209	12/22/2022@9:53:30 AM		
Calibration:			Table/Fig. : 1				
ICV WG1976947	1	2	10.8	48.0	12/22/2022@9:54:52 AM		
BLANK WG1976947	1	30	-0.139	-0.260	12/22/2022@9:56:12 AM		
LCS 20.6 WG1976947	1	3	19.1	84.8	12/22/2022@9:57:34 AM		
L1567792-03 WG1976947	1	4	-0.164	-0.370	12/22/2022@9:58:56 AM		
DUP L1567792-03 WG1976947	1	5	-0.0249	0.245	12/22/2022@10:00:17 AM		
MS L1567792-03 WG1976947	1	6	5.41	24.3	12/22/2022@10:01:39 AM		
MSD L1567792-03 WG1976947	1	7	5.26	23.7	12/22/2022@10:03:00 AM		
L1567792-04 WG1976947	1	8	-0.126	-0.202	12/22/2022@10:04:22 AM		
DUP L1567792-04 WG1976947	1	9	-0.116	-0.159	12/22/2022@10:05:43 AM		
MS L1567792-04 WG1976947	1	10	5.33	24.0	12/22/2022@10:07:04 AM		
L1568280-01 WG1976947	1	11	0.777	3.80	12/22/2022@10:08:25 AM		
CCV	1	2	10.7	47.9	12/22/2022@10:09:47 AM		
CCB	1	1	-0.0903	-0.0451	12/22/2022@10:11:09 AM		
L1568351-01 WG1976947	1	12	1.25	5.89	12/22/2022@10:12:30 AM		
L1568381-01 WG1976947	1	13	28.9	128	12/22/2022@10:13:51 AM		
L1568381-02 WG1976947	1	14	-0.407	-1.45	12/22/2022@10:15:11 AM		
L1568387-04 WG1976947	1	15	33.5	149	12/22/2022@10:16:32 AM		
L1568387-05 WG1976947	1	16	31.4	140	12/22/2022@10:17:54 AM		
L1568387-06 WG1976947	1	17	18.9	84.2	12/22/2022@10:19:16 AM		
L1569097-01 WG1976947	1	18	0.205	1.26	12/22/2022@10:20:45 AM		
L1569097-02 WG1976947	1	19	0.248	1.45	12/22/2022@10:22:00 AM		
L1569097-03 WG1976947	1	20	1.07	5.09	12/22/2022@10:23:21 AM		
L1569102-01 WG1976947	1	21	0.378	2.03	12/22/2022@10:24:43 AM		
CCV	1	2	10.7	47.8	12/22/2022@10:26:05 AM		
CCB	1	1	-0.0997	-0.0867	12/22/2022@10:27:27 AM		
L1569102-02 WG1976947	1	22	0.785	3.83	12/22/2022@10:28:48 AM		
L1569102-03 WG1976947	1	23	1.85	8.56	12/22/2022@10:30:11 AM		
L1569102-04 WG1976947	1	24	0.552	2.80	12/22/2022@10:31:30 AM		
L1569103-01 WG1976947	1	25	13.3	59.4	12/22/2022@10:32:52 AM		
L1569103-02 WG1976947	1	26	0.330	1.81	12/22/2022@10:34:12 AM		
L1569103-03 WG1976947	1	27	0.966	4.63	12/22/2022@10:35:33 AM		
L1569103-04 WG1976947	1	28	2.11	9.70	12/22/2022@10:36:54 AM		
CCV	1	2	10.7	48.0	12/22/2022@10:38:16 AM		
CCB	1	1	-0.112	-0.141	12/22/2022@10:39:39 AM		
L1568381-01 WG1976947	1	13	11.0	48.9	12/22/2022@10:40:59 AM		5.00
L1568387-04 WG1976947	1	15	10.9	48.5	12/22/2022@10:42:20 AM		10.00
L1568387-05 WG1976947	1	16	8.08	36.1	12/22/2022@10:43:42 AM		10.00
CCV	1	2	10.8	48.1	12/22/2022@10:45:03 AM		
CCB	1	1	-0.116	-0.158	12/22/2022@10:46:26 AM		

Author: lachat6 Date : 12/22/2022

Channel 2 (TKN) - Current View

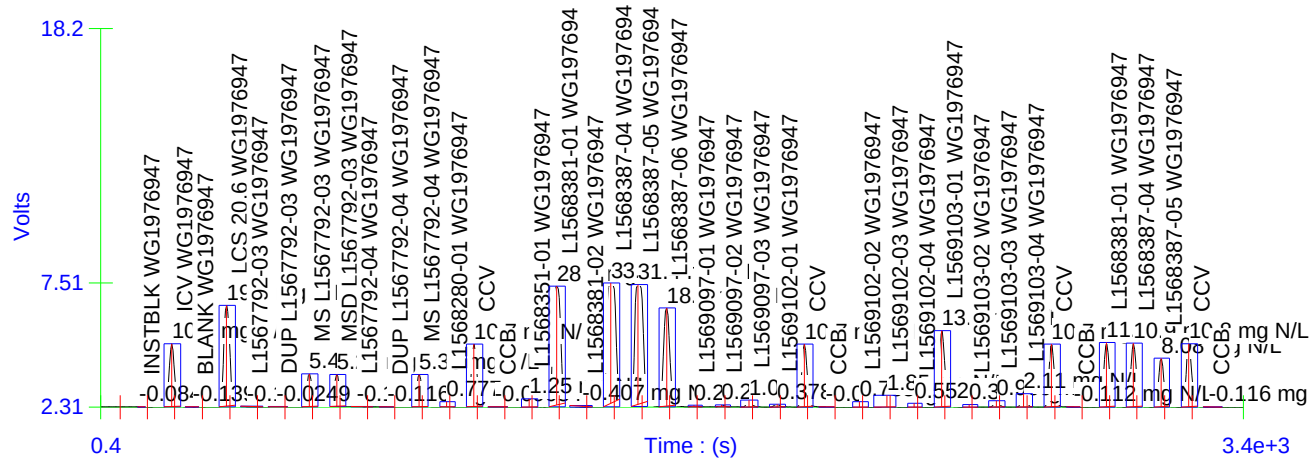
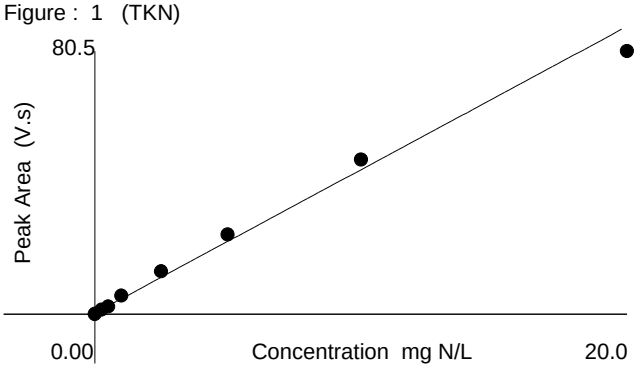


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Figure : 1 (TKN)



Area = 4.38 * Conc + 0.383
Conc = 0.226 * Area - 0.0801
Correlation Coefficient (r) = 0.99926

Weighting : 1/x

TKN/PT Waters WetChem Prep Benchsheet

Batch: WG1976947

Analyst: UNP3773 **Analyst 2:** NA___ **Analyst 3:** NA___ **Prep Start Date/Time:** 12/21/22 15:22-15:23 **Prep End Date/Time:** 12/21/22 23:57 **SOP:** 0180
Method: 351.2/365.4 **Thermometer SN:** CP52532 **ThermoCorrectFact:** +0.3 **HotBlock Temp/CorrectedTemp/Loc.:** 380/380.3/A2 **Digestion Tube Lot#:** 2208066
1mL Auto Pipette SN: TU12425 **1mL Auto Pipette Tip Lot#:** 22311016 **Repeat Pipette SN:** 306659K **Repeat Pipette Tip Lot#:** K196538K
pH Strip Lot#: 10BDH2221 **NO2/NO3 Strip Lot#:** 220603 **Boiling Stone Lot#:** 1344-28-1 **1mL Pipette Lot# Prep/Lachat:** **2mL Pipette Lot# Prep/Lachat:**
5mL Pipette Lot# Prep/Lachat: **10mL Pipette Lot# Prep/Lachat:** **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314333 **0.45 Nylon Filter Lot#:**
0.45 PVDF Filter Lot#: **Syringe Lot#:** **TKN/PT LCS TV:** 20.6/1.17 **Cal and Stds Workgroup:** 1975215

TKN MS/D Standard: 22L02860 Amt. Used: 1 Exp. Date:01/01/23 **PT MS/D Standard:** 22K29485 Amt. Used: 1 Exp. Date:03/31/23
LCS/D Standard: 22L06388 Amt. Used: 20 mL Exp. Date:01/06/23 **Digestion Solution:** 22L21226 Amt. Used: 5 mL Exp. Date:12/31/22
TKN ICV Standard: 22L21321 Amt. Used: 1 Exp. Date:12/22/22 **TKN Carrier:** 22L20105 Amt. Used: 1 Exp. Date:12/27/22
TKN Buffer: 22L19934 Amt. Used: 1 Exp. Date:01/19/23 **Salicylate/Nitroprusside:** 22L21319 Amt. Used: 1 Exp. Date:12/28/22
0.8M NaOH: 22L20106 Amt. Used: 1 Exp. Date:01/20/23 **Na Hypochlorite:** 22L21318 Amt. Used: 1 Exp. Date:12/22/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	pH	Dilution Factor	Review Analyst	Review Date
BLANK		20	20	<2	1	LDT1016	12/22/22 10:45:08
LCS		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MSD(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
1. L1567792-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
2. L1567792-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
3. L1568280-01	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
4. L1568351-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
5. L1568381-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
6. L1568381-02	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
7. L1568387-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
8. L1568387-05	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
9. L1568387-06	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
10. L1569097-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
11. L1569097-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
12. L1569097-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
13. L1569102-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
14. L1569102-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
15. L1569102-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
16. L1569102-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
17. L1569103-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
18. L1569103-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
19. L1569103-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
20. L1569103-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08

Comments:
L1568280-01 & L1568381-02 is 1X for PT and 5X for TKN due to NO2/NO3 hit.

Reviewed By:LDT1016 on 12/22/22 10:45:08

420.4 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569097-01	**SDG:**	L1569097
Client Sample ID:	LF1SW-1-1222	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220232850	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:28
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.0200	U	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569097-02	**SDG:**	L1569097
Client Sample ID:	LF1SW-3-1222	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221220232938	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:29
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.0200	U	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-2SMC-1222

Lab Sample ID:	L1569097-03	**SDG:**	L1569097
Client Sample ID:	LF1SW-2SMC-1222	**Collected Date/Time:**	12/05/22 16:00
Lab File ID:	20221220233025	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:30
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.0200	U	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-1	**SDG:**	L1569097
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20221220231535	**Received Date/Time:**	
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:15
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.0200	J U	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-2	**SDG:**	L1569097
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20221220231621	**Received Date/Time:**	
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:16
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.486		0.00370	0.0200	0.0250

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-10	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234209	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	2.14		0.0415	0.100	0.200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-7	**SDG:**	L1569097
Client Sample ID:	DUP	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232629	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:26
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.00855	J	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-11	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234256	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	2.93	J6	0.0415	0.100	0.200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-8	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232716	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:27
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.494	J6	0.00830	0.0200	0.0400

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-9	**SDG:**	L1569097
Client Sample ID:	MSD	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232803	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:28
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	108-95-2	0.412	J6	0.00830	0.0200	0.0400

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

	ICV				CCV				CCV			
Sample ID:	LACHAT5122022231448				LACHAT5122022232323				LACHAT5122022233247			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	1.000	100		1	1.000	100		1	1.010	101	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

		CCV				**CCV**		
Sample ID:		LACHAT5122022233947			LACHAT5122022234911			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	0.9960	99.60		1	1.000	100	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221220231535		20221220232411		20221220233334		20221220234035	
Analyte	mg/l		mg/L		mg/L		mg/L	
TOTAL PHENOL BY 4AAP	0.0200	J U	0.008230		0.003840		0.002810	

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20221220234958	

Analyte	mg/L
TOTAL PHENOL BY 4AAP	0.004380

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3874135-11

MS Sample / File ID:	R3874135-11 / 20221220234256	**SDG:**	L1569097
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568060-01 / 20221220234736	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*		*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1.00	2.06	2.93		86.8*		5	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3874135-8
R3874135-9

MS Sample / File ID:	R3874135-8 / 20221220232716	**SDG:**	L1569097
MSD Sample / File ID:	R3874135-9 / 20221220232803	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568816-02 / 20221220232544	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1.00	0.0100	0.494	0.412	48.4*	40.2*	1	90.0 - 110	18.0	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-10 / 20221220234209	**SDG:**	L1569097
OS Sample / File ID:	L1568060-01 / 20221220234736	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	5
Analytical Method:	420.4	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	2.06	2.14	3.76	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-7 / 20221220232629	**SDG:**	L1569097
OS Sample / File ID:	L1568816-02 / 20221220232544	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	mg/l	*mg/l*	*mg/l*	*mg/l*
Total Phenol by 4AAP	0.0100	0.00855	15.6	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1569097-01,02,03

SAMPLE NO.:
R3874135-2

LCS Sample / File ID:	R3874135-2 / 20221220231621	**SDG:**	L1569097
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*		*%*	*%*	*%*	*%*	*%*
Total Phenol by 4AAP	0.500	0.486		97.2		90.0 - 110		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569097-01,02,03 **Analytical Method:** 420.4

Matrix: WW **Prep Method:** 4AAP

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Total Phenol by 4AAP	108-95-2			0.0083	0.04

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	_____
Analytical Run:	CAL122022_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	2.0	20221220174905	12/20/22 17:49		
CAL	1.0	20221220174953	12/20/22 17:49		
CAL	0.5	20221220175042	12/20/22 17:50		
CAL	0.1	20221220175131	12/20/22 17:51		
CAL	0.04	20221220175219	12/20/22 17:52		
CAL	0.0	20221220175306	12/20/22 17:53		

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	12/20/22 17:49
Analytical Run:	R122022_3	**Calibration End Date:**	12/20/22 17:53

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT5122022231448	20221220231448	12/20/22 23:14		
BLANK	R3874135-1	20221220231535	12/20/22 23:15	1	WG1977545
LCS	R3874135-2	20221220231621	12/20/22 23:16	1	WG1977545
CCV	LACHAT5122022232323	20221220232323	12/20/22 23:23		
CCB	LACHAT5122022232411	20221220232411	12/20/22 23:24		
L1568714-02	L1568714-02	20221220232457	12/20/22 23:24	1	WG1977545
OS	L1568816-02	20221220232544	12/20/22 23:25		
L1568816-02	L1568816-02	20221220232544	12/20/22 23:25	1	WG1977545
DUP	R3874135-7	20221220232629	12/20/22 23:26	1	WG1977545
MS	R3874135-8	20221220232716	12/20/22 23:27	1	WG1977545
MSD	R3874135-9	20221220232803	12/20/22 23:28	1	WG1977545
LF1SW-1-1222	L1569097-01	20221220232850	12/20/22 23:28	1	WG1977545
LF1SW-3-1222	L1569097-02	20221220232938	12/20/22 23:29	1	WG1977545
LF1SW-2SMC-1222	L1569097-03	20221220233025	12/20/22 23:30	1	WG1977545
L1569102-01	L1569102-01	20221220233112	12/20/22 23:31	1	WG1977545
L1569102-02	L1569102-02	20221220233159	12/20/22 23:31	1	WG1977545
CCV	LACHAT5122022233247	20221220233247	12/20/22 23:32		
CCB	LACHAT5122022233334	20221220233334	12/20/22 23:33		
CCV	LACHAT5122022233947	20221220233947	12/20/22 23:39		
CCB	LACHAT5122022234035	20221220234035	12/20/22 23:40		
DUP	R3874135-10	20221220234209	12/20/22 23:42	5	WG1977545
MS	R3874135-11	20221220234256	12/20/22 23:42	5	WG1977545
L1568060-03	L1568060-03	20221220234430	12/20/22 23:44	5	WG1977545
L1568060-04	L1568060-04	20221220234517	12/20/22 23:45	5	WG1977545
L1568351-01	L1568351-01	20221220234603	12/20/22 23:46	1	WG1977545
L1568714-01	L1568714-01	20221220234649	12/20/22 23:46	1	WG1977545
OS	L1568060-01	20221220234736	12/20/22 23:47		
L1568060-01	L1568060-01	20221220234736	12/20/22 23:47	5	WG1977545
L1568060-02	L1568060-02	20221220234823	12/20/22 23:48	5	WG1977545
CCV	LACHAT5122022234911	20221220234911	12/20/22 23:49		
CCB	LACHAT5122022234958	20221220234958	12/20/22 23:49		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	2	1.98313	99.20	1	1.00393	100
File ID:		20221220174905			20221220174953	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.50	.50857	102	0.10	.103066	103
File ID:		20221220175042			20221220175131	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.04	.040474	101	0	-.0023996	
File ID:		20221220175219			20221220175306	

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
TOTAL PHENOL BY 4AAP	5	1	0.99999			0.384	-0.00599	

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat5 Date : 12/20/2022

Original Run Filename: OM_12-20-2022_05-48-08PM.OMN Created: 12/20/2022 5:48:08 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: CAL122022_1.omn Last Modified: 12/20/2022 5:56:02 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Channel 1 PHENOL Area (V.s)	Detection Time	ADF	MDF	Description
STD 2.0 PPM 22L20190	1	31	2.00	5.18	12/20/2022@5:49:05 PM			
STD 1.0 PPM	1	32	1.00	2.63	12/20/2022@5:49:53 PM			
STD 0.5 PPM	1	33	0.500	1.34	12/20/2022@5:50:42 PM			
STD 0.1 PPM	1	34	0.100	0.284	12/20/2022@5:51:31 PM			
STD 0.04 PPM	1	35	0.0400	0.121	12/20/2022@5:52:19 PM			
STD 0.0 PPM	1	36	0.00	9.35e-3	12/20/2022@5:53:06 PM			
ICV	1	2	1.01	2.63	12/20/2022@5:53:55 PM			
Calibration:			Table/Fig. : 1					

Channel 1 - Current View

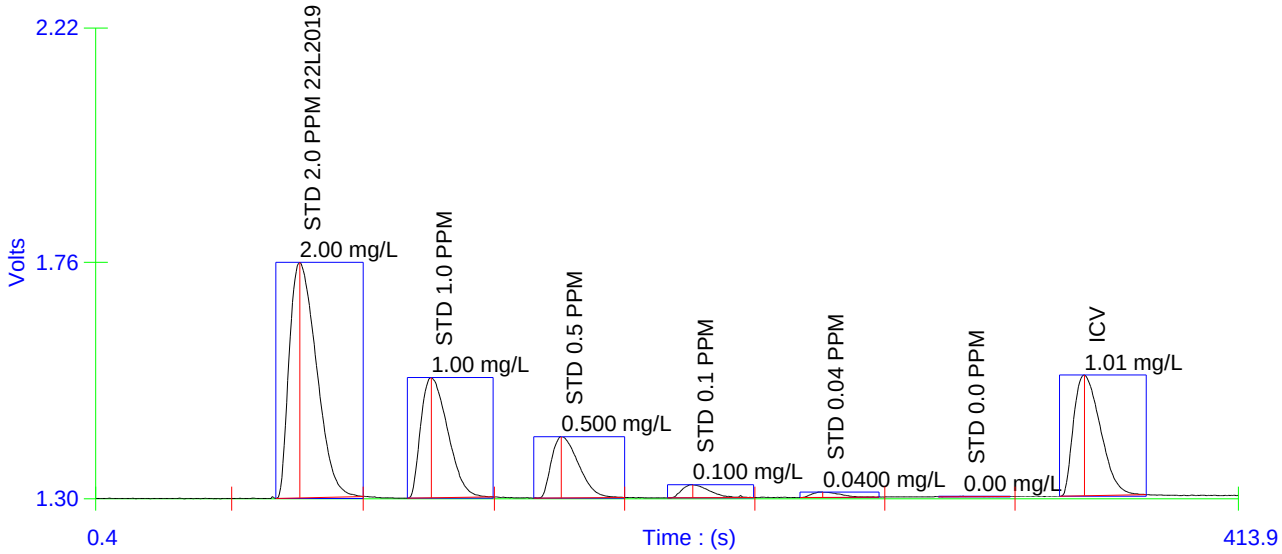
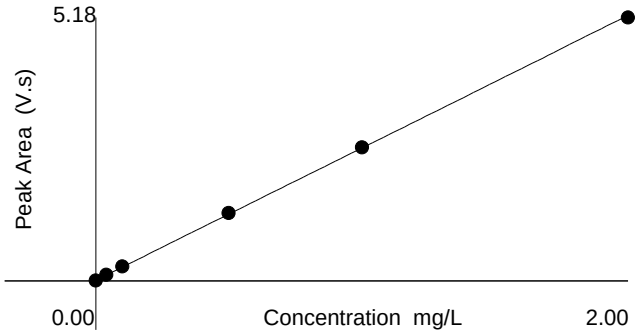


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Author: lachat5 Date : 12/20/2022

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Author: lachat5 Date : 12/20/2022

Original Run Filename: OM_12-20-2022_11-13-11PM.OMN Created: 12/20/2022 11:13:11 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: R122022_3.omn Last Modified: 12/20/2022 11:52:20 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Channel 1 PHENOL Area (V.s)	Detection Time	ADF	MDF
INSTBLK WG1977545	1	1	1.57e-3	0.0197	12/20/2022@11:14:01 PM		
ICV 1.0 WG1977545	1	2	1.00	2.63	12/20/2022@11:14:48 PM		
Calibration:			Table/Fig. : 1				
BLANK WG1977545	1	30	6.29e-3	0.0320	12/20/2022@11:15:35 PM		
LCS 0.5 WG1977545	1	3	0.487	1.28	12/20/2022@11:16:21 PM		
L1568060-01 WG1977545	1	4	2.13	5.57	12/20/2022@11:17:09 PM		
DUP L1568060-01 WG1977545	1	5	2.16	5.63	12/20/2022@11:17:56 PM		
MS L1568060-01 WG1977545	1	6	2.85	7.44	12/20/2022@11:18:43 PM		
L1568060-02 WG1977545	1	7	1.89	4.92	12/20/2022@11:19:30 PM		
L1568060-03 WG1977545	1	8	1.72	4.48	12/20/2022@11:20:16 PM		
L1568060-04 WG1977545	1	9	3.30	8.60	12/20/2022@11:21:03 PM		
L1568351-01 WG1977545	1	10	0.0385	0.116	12/20/2022@11:21:49 PM		
L1568714-01 WG1977545	1	11	0.114	0.313	12/20/2022@11:22:36 PM		
CCV 1.0	1	2	1.00	2.63	12/20/2022@11:23:23 PM		
CCB	1	1	8.23e-3	0.0370	12/20/2022@11:24:11 PM		
L1568714-02 WG1977545	1	12	9.65e-3	0.0407	12/20/2022@11:24:57 PM		
L1568816-02 WG1977545	1	13	0.0100	0.0417	12/20/2022@11:25:44 PM		
DUP L1568816-02 WG1977545	1	14	8.56e-3	0.0379	12/20/2022@11:26:29 PM		
MS L1568816-02 WG1977545	1	15	0.503	1.33	12/20/2022@11:27:16 PM		
MSD L1568816-02 WG1977545	1	16	0.421	1.11	12/20/2022@11:28:03 PM		
L1569097-01 WG1977545	1	17	4.53e-3	0.0274	12/20/2022@11:28:50 PM		
L1569097-02 WG1977545	1	18	4.24e-3	0.0266	12/20/2022@11:29:38 PM		
L1569097-03 WG1977545	1	19	3.20e-3	0.0239	12/20/2022@11:30:25 PM		
L1569102-01 WG1977545	1	20	-1.31e-3	0.0122	12/20/2022@11:31:12 PM		
L1569102-02 WG1977545	1	21	1.54e-3	0.0196	12/20/2022@11:31:59 PM		
CCV 1.0	1	2	1.01	2.65	12/20/2022@11:32:47 PM		
CCB	1	1	3.84e-3	0.0256	12/20/2022@11:33:34 PM		
L1569102-03 WG1977545	1	22	1.70e-3	0.0200	12/20/2022@11:34:21 PM		
L1569102-04 WG1977545	1	23	2.72e-4	0.0163	12/20/2022@11:35:08 PM		
L1569103-01 WG1977545	1	24	9.86e-4	0.0181	12/20/2022@11:35:55 PM		
L1569103-02 WG1977545	1	25	-5.57e-4	0.0141	12/20/2022@11:36:41 PM		
L1569103-03 WG1977545	1	26	3.35e-4	0.0164	12/20/2022@11:37:27 PM		
L1569103-04 WG1977545	1	27	3.73e-3	0.0253	12/20/2022@11:38:13 PM		
L1569393-01 WG1977545	1	28	5.05e-3	0.0287	12/20/2022@11:39:00 PM		
CCV 1.0	1	2	0.997	2.61	12/20/2022@11:39:47 PM		
CCB	1	1	2.81e-3	0.0229	12/20/2022@11:40:35 PM		
L1568060-01 WG1977545	1	4	0.384	1.02	12/20/2022@11:41:22 PM		5.00
DUP L1568060-01 WG1977545	1	5	0.443	1.17	12/20/2022@11:42:09 PM		5.00
MS L1568060-01 WG1977545	1	6	0.607	1.60	12/20/2022@11:42:56 PM		5.00
L1568060-02 WG1977545	1	7	0.385	1.02	12/20/2022@11:43:43 PM		5.00
L1568060-03 WG1977545	1	8	0.352	0.932	12/20/2022@11:44:30 PM		5.00
L1568060-04 WG1977545	1	9	0.700	1.84	12/20/2022@11:45:17 PM		5.00
L1568351-01 WG1977545	1	10	0.0163	0.0580	12/20/2022@11:46:03 PM		
L1568714-01 WG1977545	1	11	0.112	0.307	12/20/2022@11:46:49 PM		
L1568060-01 WG1977545	1	4	0.428	1.13	12/20/2022@11:47:36 PM		5.00
L1568060-02 WG1977545	1	7	0.386	1.02	12/20/2022@11:48:23 PM		5.00
CCV 1.0	1	2	1.01	2.63	12/20/2022@11:49:11 PM		
CCB	1	1	4.38e-3	0.0270	12/20/2022@11:49:58 PM		

Author: lachat5 Date : 12/20/2022

Channel 1 - Current View

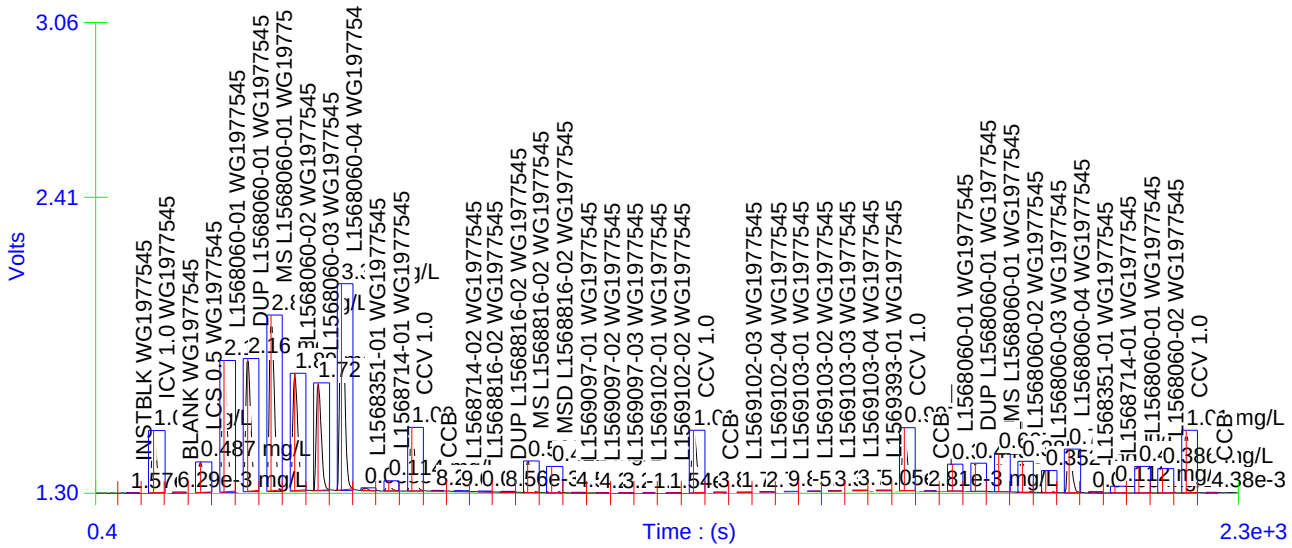
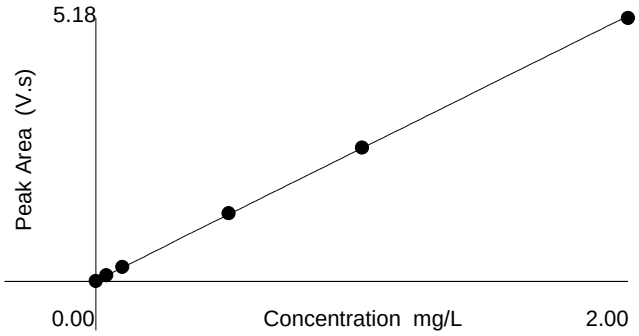


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Author: lachat5 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_12-01-47AM.OMN Created: 12/21/2022 12:01:47 AM
Original Run Author's Signature: [lachat5]
Current Run Filename: SB122022_3.omn Last Modified: 12/21/2022 12:23:04 AM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Channel 1 PHENOL Area (V.s)	Detection Time	ADF	MDF
L1568060-01 WG1977545	1	4	0.0133	0.0503	12/21/2022@12:02:38 AM		5.00
Calibration:			Table/Fig. : 1				
DUP L1568060-01 WG1977545	1	5	0.0145	0.0534	12/21/2022@12:03:25 AM		5.00
MS L1568060-01 WG1977545	1	6	0.0208	0.0697	12/21/2022@12:04:12 AM		5.00
L1568060-02 WG1977545	1	7	0.0107	0.0435	12/21/2022@12:04:58 AM		5.00
L1568060-03 WG1977545	1	8	0.0106	0.0432	12/21/2022@12:05:45 AM		5.00
L1568060-04 WG1977545	1	9	0.0220	0.0728	12/21/2022@12:06:32 AM		5.00
L1568351-01 WG1977545	1	10	-4.60e-3	3.61e-3	12/21/2022@12:07:18 AM		
L1568714-01 WG1977545	1	11	0.0140	0.0519	12/21/2022@12:08:04 AM		
L1568714-02 WG1977545	1	12	-0.0106	-0.0120	12/21/2022@12:08:51 AM		
L1568816-02 WG1977545	1	13	-4.13e-3	4.83e-3	12/21/2022@12:09:37 AM		
DUP L1568816-02 WG1977545	1	14	-4.04e-3	5.06e-3	12/21/2022@12:10:23 AM		
MS L1568816-02 WG1977545	1	15	9.09e-3	0.0392	12/21/2022@12:11:09 AM		
MSD L1568816-02 WG1977545	1	16	6.85e-3	0.0334	12/21/2022@12:11:57 AM		
L1569097-01 WG1977545	1	17	-5.45e-3	1.40e-3	12/21/2022@12:12:44 AM		
L1569097-02 WG1977545	1	18	-2.46e-3	9.17e-3	12/21/2022@12:13:31 AM		
L1569097-03 WG1977545	1	19	-4.27e-3	4.46e-3	12/21/2022@12:14:19 AM		
L1569102-01 WG1977545	1	20	-6.54e-3	-1.44e-3	12/21/2022@12:15:06 AM		
L1569102-02 WG1977545	1	21	-8.27e-3	-5.96e-3	12/21/2022@12:15:53 AM		
L1569102-03 WG1977545	1	22	-6.04e-3	-1.44e-4	12/21/2022@12:16:39 AM		
L1569102-04 WG1977545	1	23	-8.64e-3	-6.91e-3	12/21/2022@12:17:26 AM		
L1569103-01 WG1977545	1	24	-7.10e-3	-2.91e-3	12/21/2022@12:18:13 AM		
L1569103-02 WG1977545	1	25	-6.59e-3	-1.58e-3	12/21/2022@12:19:00 AM		
L1569103-03 WG1977545	1	26	-7.11e-3	-2.92e-3	12/21/2022@12:19:46 AM		
L1569103-04 WG1977545	1	27	-6.45e-3	-1.22e-3	12/21/2022@12:20:32 AM		
L1569393-01 WG1977545	1	28	-4.41e-3	4.11e-3	12/21/2022@12:21:19 AM		

Channel 1 - Current View

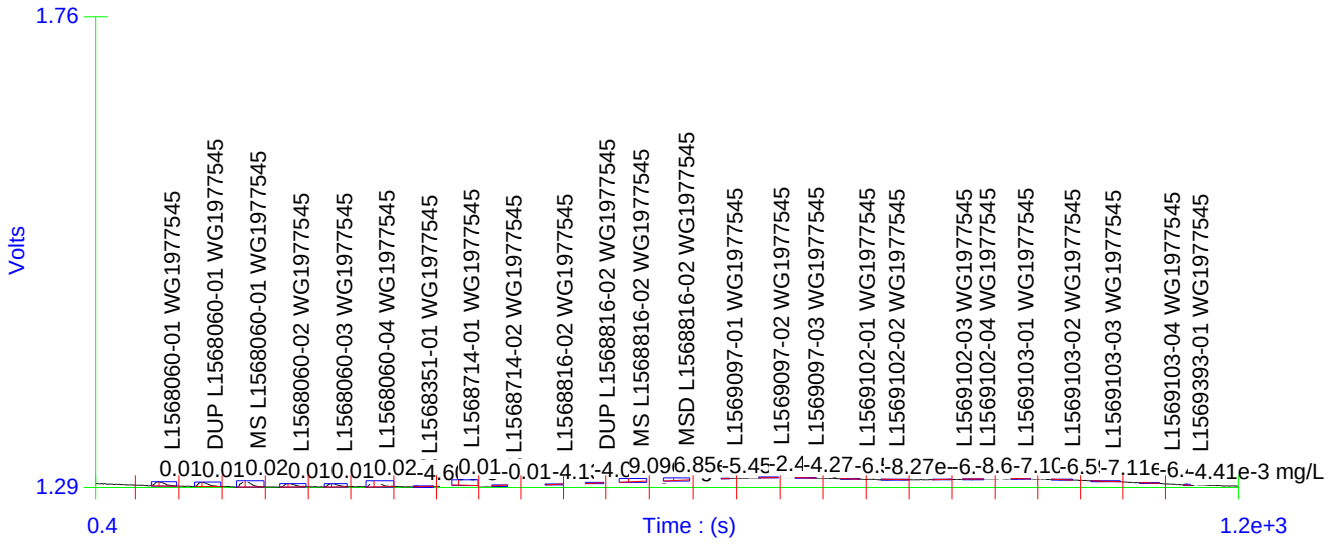
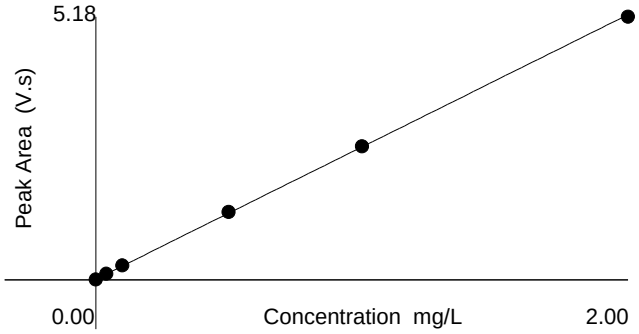


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

PHT Waters WetChem Prep Benchsheet

Batch: WG1977545

Analyst: CAT3538 **Analyst 2:** LDT1016 **Analyst 3:** NA___ **Prep Start Date/Time:** 12/20/22 18:20 **Prep End Date/Time:** 12/20/22 21:53 **SOP:** MTJL-0166
Method: 4AAP **ICV True Value:** 1.0 ppm **LCS True Value:** 0.5 ppm **MS/D True Value:** 1.0 ppm **pH Probe SN:** XV1-15243 **Boiling Chips Lot#:** 26719567
Boston Round Bottom Bottle Lot#: O-2-297-06DB **1mL Pipette Lot# Prep/Lachat:** NA **2mL Pipette Lot# Prep/Lachat:** NA **5mL Pipette Lot# Prep/Lachat:** NA
10mL Pipette Lot# Prep/Lachat: NA **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314299

ICV Standard: 22L20185 Amt. Used: 5 mL Exp. Date:12/21/22 **LCS/D Standard:** 22L08746 Amt. Used: 2.50 mL Exp. Date:01/08/23
MS/D Standard: 22L08746 Amt. Used: 5 mL Exp. Date:01/08/23 **1:9 NaOH:** 22L12999 Amt. Used: 1 N/A Exp. Date:06/12/23
1:9 H2SO4: 22I06475 Amt. Used: 1 N/A Exp. Date:03/01/23 **Phenol Buffer:** 22L20186 Amt. Used: 1 Exp. Date:12/27/22 **4 AAP:** 22L20187 Amt. Used: 1 Exp. Date:12/21/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	Dilution Factor	Initial pH	Adjusted pH	Sulfide Test/Treat	Chloroform Cleanup	Review Analyst	Review Date
BLANK		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
LCS		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MSD(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
1. L1568060-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
2. L1568060-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
3. L1568060-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
4. L1568060-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
5. L1568351-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
6. L1568714-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
7. L1568714-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
8. L1568816-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
9. L1569097-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
10. L1569097-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
11. L1569097-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
12. L1569102-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
13. L1569102-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
14. L1569102-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
15. L1569102-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
16. L1569103-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
17. L1569103-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
18. L1569103-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
19. L1569103-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
20. L1569393-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10

Comments:

Reviewed By:CAT3538 on 12/20/22 22:54:10

6010D Metals (ICP)

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-1-1222

Lab Sample ID:	L1569097-01	**SDG:**	L1569097
Client Sample ID:	LF1SW-1-1222	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221221132131	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 13:21
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	40.2	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-3-1222

Lab Sample ID:	L1569097-02	**SDG:**	L1569097
Client Sample ID:	LF1SW-3-1222	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221221163044	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:30
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	100	U	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1SW-2SMC-1222

Lab Sample ID:	L1569097-03	**SDG:**	L1569097
Client Sample ID:	LF1SW-2SMC-1222	**Collected Date/Time:**	12/05/22 16:00
Lab File ID:	20221221163336	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:33
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	44.9	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-1	**SDG:**	L1569097
Client Sample ID:	BLANK	**Collected Date/Time:**	
Lab File ID:	20221221122757	**Received Date/Time:**	
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:27
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	100	U	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-2	**SDG:**	L1569097
Client Sample ID:	LCS	**Collected Date/Time:**	
Lab File ID:	20221221123038	**Received Date/Time:**	
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:30
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):		**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	995		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-4	**SDG:**	L1569097
Client Sample ID:	MS	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123902	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:39
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Boron	7440-42-8	1.10		0.0396	0.100	0.200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-5	**SDG:**	L1569097
Client Sample ID:	MSD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221124142	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:41
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Boron	7440-42-8	1.09		0.0396	0.100	0.200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-3	**SDG:**	L1569097
Client Sample ID:	SD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123623	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:36
Dilution Factor:	5	**Prep Method:**	3015
Analytical Method:	6010D	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		mg/l		*mg/l*	*mg/l*	*mg/l*
Boron	7440-42-8	0.500	U	0.198	0.500	1.00

2-IN

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		ICV				ICVLL				CCV			
Sample ID:		ICP121221220742-2				ICP121221220754-2				ICP121221221206			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
BORON	1	1.01944	102	1.350000	0.20	0.1944241	97.20	0.704000	1	0.9739401	97.40	1.370000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		CCVLL				**CCV**				**CCV**		
Sample ID:		ICP121221221215-2				ICP121221221310-3				ICP121221221324		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
BORON	0.20	0.2043356	102	2.390000	1	1.003654	100	0.355000	1	0.9963113	99.60	1.580000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

CCVLL

Sample ID: ICP121221221352-3

Analyte	True	Found	%R	%RSD
BORON	0.20	0.1991745	99.60	3.460000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

2-IN

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

		ICV				**CCV**				**ICVLL**			
Sample ID:		ICP121221221453-3				ICP121221221459-3				ICP121221221505-3			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
BORON	1	1.00483	100	1.390000	1	1.012855	101	0.842000	0.20	0.2075596	104	3.480000

ICV Limits: 90 - 110 CCV Limits: 90 - 110 ICVLL Limits: 80 - 120

CALIBRATION VERIFICATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

CCV

Sample ID: ICP121221221636-3

Analyte	True	Found	%R	%RSD
BORON	1	1.000977	100	0.897000

ICV Limits: 90 - 110 CCV Limits: 90 - 110 ICVLL Limits: 80 - 120

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12

	Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**
	File ID:	20221221074532-2		20221221121147		20221221122757		20221221131309-3	
Analyte		mg/l		mg/l		ug/l		mg/l	
BORON		0.001222208	U	0.008527657	U	100	U	0.00800933	U

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20221221132709	
Analyte	mg/l	
BORON	0.01409876	U

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221221145637-3		20221221150211-3		20221221163910-3	
Analyte	mg/l		mg/l		mg/l	
BORON	0.008450084	U	0.005713598	U	0.0121901	U

4-IN INTERFERENCE CHECK SAMPLE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	12/21/22 07:57
Instrument Run:	122122ICP12		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	496.0188	99.20	500	493.5611	98.70
ANTIMONY	0	-0.01797631		0.50	0.4814869	96.30
ARSENIC	0	-0.0149897		0.50	0.5051793	101
BARIUM	0	0.002870845		0.50	0.5034654	101
BERYLLIUM	0	-0.0001290747		0.50	0.4968421	99.40
BORON	0	-0.004355311		1	0.989256	98.90
CADMIUM	0	0.0003668836		1	1.054962	105
CALCIUM	500	499.553	99.90	500	498.8179	99.80
CERIUM	0	1.383347		0	1.354173	
CHROMIUM	0	0.002717674		0.50	0.4929103	98.60
COBALT	0	0.002440233		0.50	0.4834393	96.70
COPPER	0	-0.007352967		0.50	0.5062709	101
IRON	200	196.2211	98.10	200	197.633	98.80
LANTHANUM	0	0.005752144		0	0.001254382	
LEAD	0	-0.03528731		1	0.9119994	91.20
LITHIUM	0	0.004396194		0	0.00498092	
MAGNESIUM	500	506.0213	101	500	507.4545	101
MANGANESE	0	0.007018834		0.50	0.4795318	95.90
MOLYBDENUM	0	0.002874691		0.50	0.4918267	98.40
NICKEL	0	0.008590876		1	0.9696703	97
PHOSPHORUS	0	0.007986995		0	0.005996953	
POTASSIUM	0	-0.09545332		0	-0.06385567	
SELENIUM	0	0.03906392		0.50	0.5129875	103
SILICON	0	-0.01017802		1	0.9591665	95.90
SILVER	0	-0.002561309		1	1.081038	108
SODIUM	0	0.04314867		0	0.05309935	
STRONTIUM	0	0.003992856		0	0.004048319	
SULFUR	0	-0.006634471		0	-0.01021863	
THALLIUM	0	0.004685809		0.50	0.4492684	89.90
TIN	0	-0.01770268		0.50	0.4757444	95.10
TITANIUM	0	0.04633869		0.50	0.5491807	110
VANADIUM	0	0.01103393		0.50	0.4925627	98.50
ZINC	0	0.006737381		1	0.9095777	91

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	12/21/22 12:19
Instrument Run:	122122ICP12		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	497.393	99.50	500	498.4053	99.70
ANTIMONY	0	-0.01675715		0.50	0.4825586	96.50
ARSENIC	0	-0.007166553		0.50	0.5068293	101
BARIUM	0	0.00269241		0.50	0.5027348	101
BERYLLIUM	0	-0.00003177329		0.50	0.4917959	98.40
BORON	0	-0.004229812		1	0.980087	98
CADMIUM	0	0.0002820603		1	1.056943	106
CALCIUM	500	499.957	100	500	501.5403	100
CERIUM	0	1.469064		0	1.442261	
CHROMIUM	0	0.001584513		0.50	0.4890966	97.80
COBALT	0	0.002046801		0.50	0.4868684	97.40
COPPER	0	-0.007001141		0.50	0.5121583	102
IRON	200	197.1944	98.60	200	196.187	98.10
LANTHANUM	0	0.005082386		0	-0.0009565712	
LEAD	0	-0.03475505		1	0.9085203	90.90
LITHIUM	0	0.00462316		0	0.00364804	
MAGNESIUM	500	493.4555	98.70	500	494.7418	98.90
MANGANESE	0	0.006962439		0.50	0.4804433	96.10
MOLYBDENUM	0	0.003122196		0.50	0.4922481	98.40
NICKEL	0	0.008411421		1	0.9610605	96.10
PHOSPHORUS	0	0.02642022		0	0.02325781	
POTASSIUM	0	-0.08691291		0	-0.03696935	
SELENIUM	0	0.0142028		0.50	0.525842	105
SILICON	0	-0.01477816		1	0.9526756	95.30
SILVER	0	-0.00265116		1	1.079485	108
SODIUM	0	0.09313466		0	0.1050921	
STRONTIUM	0	0.004115603		0	0.004035046	
SULFUR	0	0.01611913		0	-0.007014852	
THALLIUM	0	0.001042301		0.50	0.4516081	90.30
TIN	0	-0.01433857		0.50	0.4687267	93.70
TITANIUM	0	0.04631129		0.50	0.5441921	109
VANADIUM	0	0.01126934		0.50	0.4888171	97.80
ZINC	0	0.006332094		1	0.8981165	89.80

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	12/21/22 14:03
Instrument Run:	122122ICP12		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	447.5229	89.50	500	449.8942	90
ANTIMONY	0	-0.01979124		0.50	0.4645102	92.90
ARSENIC	0	-0.007079457		0.50	0.4780252	95.60
BARIUM	0	0.002661461		0.50	0.5374223	107
BERYLLIUM	0	-0.0001338899		0.50	0.5322755	106
BORON	0	-0.007934736		1	0.993912	99.40
CADMIUM	0	0.00005664602		1	1.091943	109
CALCIUM	500	478.8285	95.80	500	481.2127	96.20
CERIUM	0	1.045592		0	1.020877	
CHROMIUM	0	0.002217701		0.50	0.5667219	113
COBALT	0	0.001767247		0.50	0.4371816	87.40
COPPER	0	-0.008971547		0.50	0.4598552	92
IRON	200	173.0997	86.50	200	174.0803	87
LANTHANUM	0	-0.001953075		0	-0.00366662	
LEAD	0	-0.02778499		1	0.8893959	88.90
LITHIUM	0	0.004407643		0	0.003988314	
MAGNESIUM	500	523.0361	105	500	525.2149	105
MANGANESE	0	0.006621792		0.50	0.4619115	92.40
MOLYBDENUM	0	0.003423849		0.50	0.4768336	95.40
NICKEL	0	0.007869465		1	0.9565932	95.70
PHOSPHORUS	0	0.01467631		0	0.007984275	
POTASSIUM	0	-0.08248467		0	-0.06213313	
SELENIUM	0	0.01604919		0.50	0.5293053	106
SILICON	0	-0.008355635		1	1.027153	103
SILVER	0	-0.003100588		1	1.099756	110
SODIUM	0	0.0915777		0	0.09939959	
STRONTIUM	0	0.003901342		0	0.003882632	
SULFUR	0	0.006926354		0	0.003972924	
THALLIUM	0	0.001566821		0.50	0.4227679	84.60
TIN	0	-0.01111817		0.50	0.4664242	93.30
TITANIUM	0	0.04241494		0.50	0.5721901	114
VANADIUM	0	0.00876257		0.50	0.4816739	96.30
ZINC	0	0.004357425		1	0.8949121	89.50

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	12/21/22 15:07
Instrument Run:	122122ICP12A		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	512.2707	102	500	511.1245	102
ANTIMONY	0	-0.01927159		0.50	0.484509	96.90
ARSENIC	0	-0.003988608		0.50	0.5283322	106
BARIUM	0	0.002770571		0.50	0.5153191	103
BERYLLIUM	0	-0.00005485471		0.50	0.5105242	102
BORON	0	-0.01308163		1	1.015858	102
CADMIUM	0	0.0000893872		1	1.080634	108
CALCIUM	500	512.7862	103	500	513.5476	103
CERIUM	0	1.262536		0	1.230125	
CHROMIUM	0	0.001795381		0.50	0.5050518	101
COBALT	0	0.001449602		0.50	0.4940633	98.80
COPPER	0	-0.008350145		0.50	0.5186385	104
IRON	200	205.0335	103	200	202.7427	101
LANTHANUM	0	0.00630958		0	0.001112305	
LEAD	0	-0.03199152		1	0.9355537	93.60
LITHIUM	0	0.004295885		0	0.004748324	
MAGNESIUM	500	514.0516	103	500	515.2499	103
MANGANESE	0	0.007147605		0.50	0.4889786	97.80
MOLYBDENUM	0	0.002846725		0.50	0.5037329	101
NICKEL	0	0.009533711		1	0.9886577	98.90
PHOSPHORUS	0	0.006900232		0	-0.0007537725	
POTASSIUM	0	-0.09269025		0	-0.1184173	
SELENIUM	0	0.01678457		0.50	0.5369599	107
SILICON	0	-0.007289969		1	1.007524	101
SILVER	0	-0.002859133		1	1.11035	111
SODIUM	0	0.08138529		0	0.07579857	
STRONTIUM	0	0.003902692		0	0.003943274	
SULFUR	0	0.007773493		0	0.004430237	
THALLIUM	0	0.01316823		0.50	0.4564653	91.30
TIN	0	-0.0172368		0.50	0.4791161	95.80
TITANIUM	0	0.04382336		0.50	0.5561113	111
VANADIUM	0	0.006927908		0.50	0.504204	101
ZINC	0	0.006035356		1	0.9324326	93.20

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	12/21/22 21:01
Instrument Run:	122122ICP12A		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	509.6162	102	500	504.9319	101
ANTIMONY	0	-0.02065904		0.50	0.4944281	98.90
ARSENIC	0	-0.01112909		0.50	0.531053	106
BARIUM	0	0.003215737		0.50	0.5120202	102
BERYLLIUM	0	0.00003077524		0.50	0.5021319	100
BORON	0	0.0005651068		1	1.006747	101
CADMIUM	0	0.0002916792		1	1.079339	108
CALCIUM	500	509.8533	102	500	507.3146	101
CERIUM	0	1.277034		0	1.314824	
CHROMIUM	0	0.002569653		0.50	0.4916647	98.30
COBALT	0	0.002140057		0.50	0.504767	101
COPPER	0	-0.00836749		0.50	0.5468705	109
IRON	200	206.6061	103	200	204.9131	102
LANTHANUM	0	-0.002631285		0	0.001654214	
LEAD	0	-0.03441945		1	0.9388549	93.90
LITHIUM	0	0.004680751		0	0.004200672	
MAGNESIUM	500	503.9956	101	500	505.4639	101
MANGANESE	0	0.007435013		0.50	0.5010861	100
MOLYBDENUM	0	0.002468243		0.50	0.5073654	101
NICKEL	0	0.009263391		1	0.9977673	99.80
PHOSPHORUS	0	0.001399703		0	0.02300174	
POTASSIUM	0	-0.04290559		0	-0.07333462	
SELENIUM	0	0.03591814		0.50	0.5147988	103
SILICON	0	-0.00409259		1	1.006424	101
SILVER	0	-0.002670794		1	1.133243	113
SODIUM	0	0.1596254		0	0.1305163	
STRONTIUM	0	0.004021616		0	0.003822841	
SULFUR	0	0.02476021		0	0.009842477	
THALLIUM	0	0.005752626		0.50	0.4791567	95.80
TIN	0	-0.01435184		0.50	0.4822263	96.40
TITANIUM	0	0.04475566		0.50	0.5527	111
VANADIUM	0	0.006204478		0.50	0.5019138	100
ZINC	0	0.006581174		1	0.9258762	92.60

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569097-01,02,03

SAMPLE NO.:
R3874405-4
R3874405-5

MS Sample / File ID:	R3874405-4 / 20221221123902	**SDG:**	L1569097
MSD Sample / File ID:	R3874405-5 / 20221221124142	**Analytical Batch:**	WG1977039
OS Sample / File ID:	L1568841-01 / 20221221123329	**Matrix:**	WW
Instrument ID:	ICP12		
Analytical Method:	6010D		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	mg/l	*mg/l*	*mg/l*	*mg/l*	*%*	*%*		*%*	*%*	*%*
Boron	1.00	0.0913	1.10	1.09	101	99.6	1	85.0 - 113	1.37	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY
L1569097-01,02,03

SAMPLE NO.:
R3874405-2

LCS Sample / File ID:	R3874405-2 / 20221221123038	**SDG:**	L1569097
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977039
Instrument ID:	ICP12	**Dilution Factor:**	1
Analytical Method:	6010D	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Boron	1000	995		99.5		85.0 - 113		

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

ICP AND ICP/MS SERIAL DILUTIONS
L1569097-01,02,03

SD Sample / File ID:	R3874405-3 / 20221221123623	**SDG:**	L1569097
OS Sample / File ID:	L1568841-01 / 20221221123329	**Analytical Batch:**	WG1977039
Lab File ID:	20221221123623	**Dilution Factor:**	5
Instrument ID:	ICP12	**Matrix:**	WW
Analytical Method:	6010D		

Analyte	OS Result	SD Result	RPD	RPD Limits
	mg/l	*mg/l*	*%*	*%*
Boron	0.0913	0.500	0.000	10

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569097-01,02,03 **Analytical Method:** 6010D

Matrix: WW **Prep Method:** 3015

Analyte	CAS	Wavelength	Mass	MDL	RDL
				ug/l	*ug/l*
Boron	7440-42-8	228.6160	249.6780	39.6	200

10A-IN

INTERELEMENT CORRECTION FACTORS

SDG: L1569097 **Analytical Method:** 6010D

Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	ARSENIC	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LANTHANUM
	nm	189.0420	317.9330	267.7160	228.6160	324.7540	259.94	333.7490
ALUMINUM	308.2150							
ANTIMONY	206.8330			-0.00010364				
ARSENIC	189.0420							-0.00520043
BARIUM	233.5270						-0.00011317	
BERYLLIUM	313.0420							
CADMIUM	228.8020	-0.25019590						
CHROMIUM	267.7160							
COBALT	228.6160							
IRON	271.4410				-0.00018664			
LEAD	220.3530					-0.00003085		-0.00013179
LITHIUM	670.7840		-0.00032182					
SELENIUM	196.09			-0.00001854				
THALLIUM	190.8560				-0.00026544			

10A-IN

INTERELEMENT CORRECTION FACTORS

SDG: L1569097 **Analytical Method:** 6010D

Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	MANGANESE	SILICON	TIN	TITANIUM	VANADIUM
	nm	257.61	251.6110	189.9890	334.9410	292.4020
ALUMINUM	308.2150					-0.00434031
ANTIMONY	206.8330			-0.00419814		
ARSENIC	189.0420					
BARIUM	233.5270					
BERYLLIUM	313.0420					-0.02889282
CADMIUM	228.8020					
CHROMIUM	267.7160	-0.00003148				
COBALT	228.6160				-0.00101627	
IRON	271.4410					
LEAD	220.3530		-0.00008881			
LITHIUM	670.7840					
SELENIUM	196.09					
THALLIUM	190.8560	-0.00000492				

10C-IN

LINEAR DYNAMIC RANGE

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Date:**	09/04/22 16:07

Analyte	LDR *ppm*
ALUMINUM	500
ANTIMONY	10
ARSENIC	50
BARIUM	50
BERYLLIUM	10
BORON	50
CADMIUM	10
CALCIUM	1000
CHROMIUM	50
COBALT	50
COPPER	50
IRON	500
LEAD	100
LITHIUM	10
MAGNESIUM	1000
MANGANESE	20
MOLYBDENUM	20
NICKEL	50
PHOSPHORUS	100
POTASSIUM	500
SELENIUM	10
SILICON	50
SILVER	10
SODIUM	1000
STRONTIUM	20
SULFUR	200
THALLIUM	10
TIN	50
TITANIUM	50
VANADIUM	20
ZINC	20

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 07:22
Analytical Run:	122122ICP12	**Calibration End Date:**	12/21/22 07:39

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221220719	20221221071946	12/21/22 07:19		
CAL	STD1	20221221072239	12/21/22 07:22		
CAL	STD2	20221221072523	12/21/22 07:25		
CAL	STD3	20221221072804	12/21/22 07:28		
CAL	STD4	20221221073041	12/21/22 07:30		
CAL	STD5	20221221073331	12/21/22 07:33		
CAL	STD6	20221221073622	12/21/22 07:36		
CAL	STD7	20221221073924	12/21/22 07:39		
ICV	ICP121221220742-2	20221221074239-2	12/21/22 07:42		
ICB	ICP121221220745-2	20221221074532-2	12/21/22 07:45		
ICVLL	ICP121221220754-2	20221221075402-2	12/21/22 07:54		
ICSA	ICP121221220757-2	20221221075701-2	12/21/22 07:57		
ICSAB	ICP121221220759-2	20221221075950-2	12/21/22 07:59		
CCV	ICP121221221206	20221221120616	12/21/22 12:06		
CCB	ICP121221221211	20221221121147	12/21/22 12:11		
CCVLL	ICP121221221215-2	20221221121514-2	12/21/22 12:15		
ICSA	ICP121221221219-2	20221221121915-2	12/21/22 12:19		
ICSAB	ICP121221221222-2	20221221122202-2	12/21/22 12:22		
BLANK	R3874405-1	20221221122757	12/21/22 12:27	1	WG1977039
LCS	R3874405-2	20221221123038	12/21/22 12:30	1	WG1977039
OS	L1568841-01	20221221123329	12/21/22 12:33		
SD	R3874405-3	20221221123623	12/21/22 12:36	5	WG1977039
MS	R3874405-4	20221221123902	12/21/22 12:39	1	WG1977039
MSD	R3874405-5	20221221124142	12/21/22 12:41	1	WG1977039
L1564959-01	L1564959-01	20221221125845	12/21/22 12:58	1	WG1977039
L1565291-02	L1565291-02	20221221130143	12/21/22 13:01	1	WG1977039
CCV	ICP121221221310-3	20221221131016-3	12/21/22 13:10		
CCB	ICP121221221313-3	20221221131309-3	12/21/22 13:13		
L1568818-01	L1568818-01	20221221131555	12/21/22 13:15	9	WG1977039
L1568889-01	L1568889-01	20221221131839	12/21/22 13:18	1	WG1977039
LF1SW-1-1222	L1569097-01	20221221132131	12/21/22 13:21	1	WG1977039
CCV	ICP121221221324	20221221132415	12/21/22 13:24		
CCB	ICP121221221327	20221221132709	12/21/22 13:27		
CCVLL	ICP121221221352-3	20221221135213-3	12/21/22 13:52		
ICSA	ICP121221221403-3	20221221140308-3	12/21/22 14:03		
ICSAB	ICP121221221405-3	20221221140546-3	12/21/22 14:05		

ANALYSIS LOG

SDG:	L1569097	**Analytical Method:**	6010D
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 14:33
Analytical Run:	122122ICP12A	**Calibration End Date:**	12/21/22 14:50

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221221431	20221221143101	12/21/22 14:31		
CAL	STD1	20221221143355	12/21/22 14:33		
CAL	STD2	20221221143639	12/21/22 14:36		
CAL	STD3	20221221143919	12/21/22 14:39		
CAL	STD4	20221221144156	12/21/22 14:41		
ICV	ICP121221221453-3	20221221145344-3	12/21/22 14:53		
ICB	ICP121221221456-3	20221221145637-3	12/21/22 14:56		
CCV	ICP121221221459-3	20221221145917-3	12/21/22 14:59		
CCB	ICP121221221502-3	20221221150211-3	12/21/22 15:02		
ICVLL	ICP121221221505-3	20221221150506-3	12/21/22 15:05		
ICSA	ICP121221221507-3	20221221150758-3	12/21/22 15:07		
ICSAB	ICP121221221510-3	20221221151038-3	12/21/22 15:10		
BLANK	R3874607-1	20221221160837	12/21/22 16:08	1	WG1977039
LCS	R3874607-2	20221221161118	12/21/22 16:11	1	WG1977039
MS	R3874607-4	20221221161944	12/21/22 16:19	1	WG1977039
MSD	R3874607-5	20221221162223	12/21/22 16:22	1	WG1977039
L1568818-01	L1568818-01	20221221162509	12/21/22 16:25	9	WG1977039
L1568889-01	L1568889-01	20221221162753	12/21/22 16:27	1	WG1977039
LF1SW-3-1222	L1569097-02	20221221163044	12/21/22 16:30	1	WG1977039
LF1SW-2SMC-1222	L1569097-03	20221221163336	12/21/22 16:33	1	WG1977039
CCV	ICP121221221636-3	20221221163616-3	12/21/22 16:36		
CCB	ICP121221221639-3	20221221163910-3	12/21/22 16:39		
ICSA	ICP121221222101-3	20221221210107-3	12/21/22 21:01		
ICSAB	ICP121221222103-3	20221221210346-3	12/21/22 21:03		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	0.20	.2101587	105	0.50	.5069697	101
File ID:		20221221072239			20221221072523	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	1	1.002356	100	2	1.996064	99.80
File ID:		20221221072804			20221221073041	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	0.20	.2057409	103	0.50	.4993322	99.90
File ID:		20221221143355			20221221143639	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	1	.9955635	99.60	2	2.001811	100
File ID:		20221221143919			20221221144156	

16A-IN

INITIAL CALIBRATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010D	**Analytical Run:**	122122ICP12

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
BORON	249.678	8	5	0.999966	217.1361	-0.208227

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16A-IN

INITIAL CALIBRATION

SDG:	L1569097	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010D	**Analytical Run:**	122122ICP12A

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
BORON	249.678	8	5	0.999989	211.4439	-0.81833

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 07:19 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10469.53	10461.03	10465.50	10482.07
YTTRIUM	360.073	Axial	392984.7	393061.2	394247.4	391645.7
YTTRIUM	360.073	Radial	11192.16	11080.01	11200.37	11296.09
INDIUM	230.606	Axial	3214.320	3207.174	3213.437	3222.350

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	5.773297	4.261710	7.279164	5.779017
ANTIMONY	206.833	Axial	-1.00952	-0.6257480	-1.672421	-0.7303998
ARSENIC	189.042	Axial	-0.5926253	-1.240962	-0.7583531	0.2214394
BARIUM	233.527	Axial	2.514772	3.326311	1.531802	2.686203
BERYLLIUM	313.042	Radial	15.63836	14.04040	18.93513	13.93954
BORON	249.678	Radial	-0.2078598	0.08331945	-0.9978380	0.2909393
CADMIUM	228.802	Axial	3.796806	6.644928	3.333131	1.412359
CALCIUM	317.933	Radial	166.9254	166.6389	167.7615	166.3757
CALCIUM	373.690	Radial	15.81921	12.37294	17.25428	17.83042
CERIUM	535.353	Radial	77.09353	71.52975	75.62781	84.12303
CHROMIUM	267.716	Axial	11.70833	12.6250	4.291667	18.20833
COBALT	228.616	Axial	2.267367	0.2984983	3.300214	3.203389
COPPER	324.754	Axial	27.40278	23.83929	29.66071	28.70833
IRON	259.940	Radial	1.994970	-0.4999167	3.118244	3.366584
IRON	271.441	Radial	0.6243558	1.291451	-0.7899551	1.371571
LANTHANUM	333.749	Radial	1.538648	0.5832361	3.367703	0.6650042
LEAD	220.353	Axial	0.9583556	1.757353	1.492010	-0.3742962
LITHIUM	670.784	Radial	-5.40573	-3.749375	3.035091	-15.50291
MAGNESIUM	279.079	Radial	-2.34412	-3.291118	-1.829370	-1.911887
MANGANESE	257.610	Axial	-2.41666	-3.333333	-4.5	0.5833333
MOLYBDENUM	202.030	Axial	1.579528	1.008981	2.686203	1.043401
NICKEL	231.604	Axial	6.210185	5.732343	7.137307	5.760906
PHOSPHORUS	177.495	Axial	-0.09373890	0.01478360	-0.01480001	-0.2812003
POTASSIUM	766.490	Radial	-60.9857	-62.19797	-58.66456	-62.09476
SELENIUM	196.090	Axial	0.9096922	1.374875	0.8066008	0.5476005
SILICON	251.611	Axial	59.90816	55.19729	52.62949	71.89769
SILVER	328.068	Axial	-23.9583	-33.83333	-17.6250	-20.41667
SODIUM	589.592	Radial	30.46147	43.95101	30.93298	16.50042
SODIUM	818.326	Radial	84.65133	77.69538	97.74655	78.51205
STRONTIUM	421.552	Radial	-22.2952	-19.70505	-20.70514	-26.47548
SULFUR	182.034	Axial	0.007149758	0.6763499	-0.7104007	0.05550006
THALLIUM	190.856	Axial	0.9168762	0.9978544	0.4434855	1.309289
TIN	189.989	Axial	-1.72722	-1.818383	-1.587302	-1.776002
TITANIUM	334.941	Radial	-3.24219	0.9158679	-3.700536	-6.941913
VANADIUM	292.402	Radial	-0.9899691	-2.110759	-0.5543545	-0.3047936
ZINC	206.200	Axial	1.756525	2.638873	0.8436008	1.787102

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 07:22 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10538.10	10531.93	10523.44	10558.92
YTTRIUM	360.073	Axial	395384.9	394834.3	395161.7	396158.8
YTTRIUM	360.073	Radial	11341.67	11270.22	11359.37	11395.42
INDIUM	230.606	Axial	3208.679	3202.320	3208.781	3214.935

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	24.21796	21.87220	26.07166	24.71001
ANTIMONY	206.833	Axial	1.137594	0.7553347	1.648392	1.009055
ARSENIC	189.042	Axial	0.6529818	0.1801161	0.9425905	0.8362389
BARIUM	233.527	Axial	25.13242	24.98612	24.60361	25.80753
BERYLLIUM	313.042	Radial	54.79990	51.45831	57.25721	55.68418
BORON	249.678	Radial	46.03625	43.44753	49.75849	44.90271
CADMIUM	228.802	Axial	14.71313	16.03387	13.88687	14.21867
CALCIUM	317.933	Radial	1248.420	1245.593	1249.126	1250.540
CHROMIUM	267.716	Axial	73.83333	73.75000	73.0	74.750
COBALT	228.616	Axial	43.13790	43.40870	43.67908	42.32591
COPPER	324.754	Axial	205.7024	207.7976	209.0833	200.2262
IRON	259.940	Radial	53.78640	51.09762	55.87941	54.38217
LEAD	220.353	Axial	5.276382	6.074224	5.156983	4.597940
LITHIUM	670.784	Radial	123.8352	132.4214	123.6259	115.4582
MAGNESIUM	279.079	Radial	62.14581	61.61650	60.91772	63.90321
MANGANESE	257.610	Axial	897.4028	895.1250	897.7083	899.3750
MOLYBDENUM	202.030	Axial	9.712858	9.623710	9.058654	10.45621
NICKEL	231.604	Axial	25.98322	27.45033	25.14691	25.35243
PHOSPHORUS	177.495	Axial	3.597637	3.515004	3.333703	3.944204
POTASSIUM	766.490	Radial	365.8992	346.7487	383.9107	367.0381
SELENIUM	196.090	Axial	2.059160	2.656603	1.374875	2.146002
SILICON	251.611	Axial	748.8288	729.4261	749.2251	767.8352
SILVER	328.068	Axial	67.44444	70.41667	68.20833	63.70833
SODIUM	589.592	Radial	959.7060	955.4715	959.5686	964.0778
STRONTIUM	421.552	Radial	598.8050	596.9150	593.7292	605.7708
SULFUR	182.034	Axial	58.57163	59.60706	58.45437	57.65346
THALLIUM	190.856	Axial	3.108870	2.477059	2.496427	4.353124
TIN	189.989	Axial	15.12739	14.98501	15.20124	15.19592
TITANIUM	334.941	Radial	154.9482	155.7005	158.7238	150.4203
VANADIUM	292.402	Radial	12.88608	13.63712	13.18565	11.83547
ZINC	206.200	Axial	149.9314	149.2951	150.4380	150.0611

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 07:25 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10735.68	10745.63	10731.94	10729.47
YTTRIUM	360.073	Axial	402100.1	403170.7	401186.1	401943.4
YTTRIUM	360.073	Radial	11585.12	11591.46	11577.54	11586.36
INDIUM	230.606	Axial	3235.232	3243.203	3232.198	3230.295

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	122.5692	121.7595	122.7066	123.2416
ARSENIC	189.042	Axial	80.36750	81.33632	79.75269	80.01348
BERYLLIUM	313.042	Radial	10263.41	10249.62	10249.20	10291.42
BORON	249.678	Radial	113.7308	113.3905	113.4890	114.3130
CADMIUM	228.802	Axial	2802.600	2813.809	2796.140	2797.852
CHROMIUM	267.716	Axial	3376.971	3371.776	3386.028	3373.110
COBALT	228.616	Axial	2056.699	2059.650	2051.000	2059.447
COPPER	324.754	Axial	9100.248	9095.601	9106.544	9098.598
IRON	259.940	Radial	259.4120	259.6538	258.6436	259.9385
LEAD	220.353	Axial	383.9300	384.3630	384.3667	383.0605
LITHIUM	670.784	Radial	4575.647	4555.052	4587.683	4584.207
MANGANESE	257.610	Axial	45334.87	45300.26	45443.43	45260.92
MOLYBDENUM	202.030	Axial	781.8655	780.5904	783.0578	781.9483
NICKEL	231.604	Axial	1083.985	1085.240	1082.991	1083.724
PHOSPHORUS	177.495	Axial	16.88546	16.35778	16.84234	17.45627
SELENIUM	196.090	Axial	43.46883	43.54678	43.29302	43.56670
SILICON	251.611	Axial	2418.951	2316.989	2425.112	2514.751
SILVER	328.068	Axial	9881.282	9856.798	9898.820	9888.229
STRONTIUM	421.552	Radial	31033.34	30904.92	31023.77	31171.32
SULFUR	182.034	Axial	29.64824	29.35301	30.23411	29.35759
THALLIUM	190.856	Axial	95.82594	96.30956	95.30163	95.86661
TIN	189.989	Axial	165.6693	166.7739	164.7731	165.4610
TITANIUM	334.941	Radial	1583.839	1578.514	1582.731	1590.272
VANADIUM	292.402	Radial	323.8428	323.1525	324.4958	323.8800
ZINC	206.200	Axial	1456.756	1459.649	1456.186	1454.432

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 07:28 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10720.58	10723.02	10740.45	10698.26
YTTRIUM	360.073	Axial	399930.8	400677.3	400338.1	398776.9
YTTRIUM	360.073	Radial	11641.42	11667.69	11663.97	11592.60
INDIUM	230.606	Axial	3205.255	3208.943	3202.121	3204.702

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	256.3423	258.8167	254.9141	255.2959
ARSENIC	189.042	Axial	165.0111	166.8347	164.8709	163.3279
BARIUM	233.527	Axial	4497.715	4500.144	4499.456	4493.546
BERYLLIUM	313.042	Radial	21039.04	21060.66	21010.14	21046.33
BORON	249.678	Radial	226.1697	229.2324	224.9208	224.3558
CADMIUM	228.802	Axial	5706.502	5705.211	5705.804	5708.490
CALCIUM	317.933	Radial	1364.720	1365.675	1363.231	1365.254
CHROMIUM	267.716	Axial	6840.730	6846.416	6851.300	6824.475
COBALT	228.616	Axial	4196.356	4207.970	4194.898	4186.200
COPPER	324.754	Axial	18752.22	18760.59	18758.36	18737.71
IRON	259.940	Radial	535.5824	535.1803	533.9527	537.6143
LEAD	220.353	Axial	777.8383	778.0690	777.2107	778.2353
LITHIUM	670.784	Radial	9379.252	9389.641	9368.272	9379.842
MANGANESE	257.610	Axial	91675.33	91727.22	91622.46	91676.32
MOLYBDENUM	202.030	Axial	1573.527	1573.549	1577.751	1569.280
NICKEL	231.604	Axial	2204.052	2206.713	2207.594	2197.849
PHOSPHORUS	177.495	Axial	34.01272	33.52195	34.39547	34.12073
SELENIUM	196.090	Axial	87.86987	87.00026	88.64957	87.95978
SILICON	251.611	Axial	5397.882	5165.171	5381.813	5646.662
SILVER	328.068	Axial	20031.44	20061.24	19991.38	20041.69
STRONTIUM	421.552	Radial	63443.18	63394.58	63465.17	63469.78
SULFUR	182.034	Axial	62.45146	61.64429	62.79560	62.91449
THALLIUM	190.856	Axial	197.5762	197.1635	198.7078	196.8574
TIN	189.989	Axial	336.7794	338.2337	336.7381	335.3665
TITANIUM	334.941	Radial	3225.407	3234.863	3211.906	3229.451
VANADIUM	292.402	Radial	662.6456	665.5591	662.0841	660.2937
ZINC	206.200	Axial	3009.807	3019.538	3011.946	2997.937

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 07:30 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10773.65	10796.85	10769.18	10754.92
YTTRIUM	360.073	Axial	400221.9	399505.0	401673.5	399487.3
YTTRIUM	360.073	Radial	11669.14	11674.07	11673.95	11659.41
INDIUM	230.606	Axial	3180.259	3185.492	3182.496	3172.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	519.2767	521.4875	518.6743	517.6683
ARSENIC	189.042	Axial	333.2106	334.4175	333.0095	332.2050
BARIUM	233.527	Axial	8847.374	8864.397	8838.636	8839.089
BERYLLIUM	313.042	Radial	41446.82	41521.49	41433.10	41385.87
BORON	249.678	Radial	451.6729	451.2814	455.6405	448.0967
CADMIUM	228.802	Axial	11383.52	11406.99	11379.14	11364.43
CALCIUM	317.933	Radial	2360.235	2369.071	2352.509	2359.126
CHROMIUM	267.716	Axial	13313.30	13330.56	13297.33	13312.00
COBALT	228.616	Axial	8276.746	8294.730	8264.737	8270.772
COPPER	324.754	Axial	37563.23	37592.77	37535.02	37561.89
IRON	259.940	Radial	1037.147	1040.980	1033.477	1036.985
LEAD	220.353	Axial	1547.415	1545.326	1549.895	1547.025
LITHIUM	670.784	Radial	18273.14	18270.14	18243.89	18305.39
MANGANESE	257.610	Axial	179797.3	180153.8	179599.9	179638.1
MOLYBDENUM	202.030	Axial	3091.857	3096.373	3092.601	3086.596
NICKEL	231.604	Axial	4352.706	4354.913	4353.766	4349.439
PHOSPHORUS	177.495	Axial	68.47912	68.76664	68.00518	68.66556
POTASSIUM	766.490	Radial	834.6757	826.7183	853.4225	823.8863
SELENIUM	196.090	Axial	178.7739	179.8654	177.8369	178.6193
SILICON	251.611	Axial	12187.09	11534.88	12166.48	12859.90
SILVER	328.068	Axial	40581.80	40603.67	40586.83	40554.88
SODIUM	589.592	Radial	1935.877	1929.190	1933.502	1944.938
STRONTIUM	421.552	Radial	125276.6	125074.1	125338.3	125417.5
SULFUR	182.034	Axial	126.5201	126.2644	127.1880	126.1077
THALLIUM	190.856	Axial	402.0042	402.1647	401.0067	402.8411
TIN	189.989	Axial	674.7879	676.4419	676.4947	671.4270
TITANIUM	334.941	Radial	6361.528	6359.819	6370.478	6354.289
VANADIUM	292.402	Radial	1301.690	1303.406	1297.032	1304.632
ZINC	206.200	Axial	5963.861	5967.846	5963.627	5960.111

Sample ID: STD5 Units: mg/l
Analyzed: 12/21/22 07:33 Sequence: 7 Standard ID: 22H04626

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10627.05	10652.04	10619.21	10609.91
YTTRIUM	360.073	Axial	394170.8	393467.5	395145.5	393899.3
YTTRIUM	360.073	Radial	11690.64	11662.45	11701.00	11708.46
INDIUM	230.606	Axial	3143.927	3145.758	3143.680	3142.343

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	941.3044	938.4331	944.8505	940.6295
BARIUM	233.527	Axial	42695.14	42734.72	42676.95	42673.74
CALCIUM	317.933	Radial	10764.84	10757.12	10798.55	10738.86
CALCIUM	373.690	Radial	6147.504	6140.401	6165.057	6137.055
IRON	259.940	Radial	5162.181	5150.932	5186.292	5149.318
IRON	271.441	Radial	286.5625	286.5468	286.8504	286.2903
MAGNESIUM	279.079	Radial	659.6779	662.2544	661.0593	655.7200
POTASSIUM	766.490	Radial	4453.213	4462.080	4466.647	4430.911
SILICON	251.611	Axial	32165.65	32024.08	32199.45	32273.42
SODIUM	589.592	Radial	9486.808	9472.444	9495.545	9492.434
SODIUM	818.326	Radial	735.2070	730.6027	750.9161	724.1021
SULFUR	182.034	Axial	632.6738	632.6458	633.4591	631.9165

Sample ID: STD6 Units: mg/l
Analyzed: 12/21/22 07:36 Sequence: 8 Standard ID: 22H04640

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9219.577	9224.362	9214.867	9219.504
YTTRIUM	360.073	Axial	340860.4	340631.1	341032.8	340917.4
YTTRIUM	360.073	Radial	10884.82	10887.69	10910.02	10856.76
INDIUM	230.606	Axial	2528.475	2531.690	2528.011	2525.724

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	21350.63	21317.98	21370.27	21363.66
CALCIUM	373.690	Radial	144297.3	144132.3	144397.1	144362.5
CERIUM	535.353	Radial	1906.556	1900.125	1915.725	1903.817
IRON	271.441	Radial	2495.652	2485.417	2497.133	2504.408
LANTHANUM	333.749	Radial	4746.384	4717.000	4768.991	4753.160
MAGNESIUM	279.079	Radial	15137.65	15092.63	15170.42	15149.91
POTASSIUM	766.490	Radial	20904.53	20910.46	20934.72	20868.43
SODIUM	818.326	Radial	13861.19	13816.83	13902.09	13864.65
SULFUR	182.034	Axial	2882.061	2882.045	2881.315	2882.821

Sample ID: STD7 Units: mg/l
Analyzed: 12/21/22 07:39 Sequence: 9 Standard ID: 22H04627

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8814.486	8829.352	8816.576	8797.529
YTTRIUM	360.073	Axial	327728.7	327753.0	328568.4	326864.8
YTTRIUM	360.073	Radial	10674.36	10723.87	10652.25	10646.97
INDIUM	230.606	Axial	2347.253	2348.174	2353.022	2340.564

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	42018.17	42160.80	41967.34	41926.36
CALCIUM	373.690	Radial	277369.1	278390.2	276994.0	276723.1
IRON	271.441	Radial	4786.709	4794.127	4781.083	4784.917
MAGNESIUM	279.079	Radial	29883.23	29969.43	29819.71	29860.54
POTASSIUM	766.490	Radial	41261.20	41404.51	41197.75	41181.33
SODIUM	818.326	Radial	27059.90	27133.67	27033.25	27012.79
SULFUR	182.034	Axial	5569.998	5589.265	5568.426	5552.302

Sample ID: ICV-2 Units: mg/l
Analyzed: 12/21/22 07:42 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10387.92	10377.62	10382.61	10395.04	10396.42
YTTRIUM	360.073	Axial	390633.7	389666.8	390970.1	389287.5	392610.5
YTTRIUM	360.073	Radial	11312.85	11320.03	11291.04	11343.14	11297.18
INDIUM	230.606	Axial	3066.748	3062.127	3067.137	3069.302	3068.427

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	900.3329	10.05186	10.03177	10.05675	9.998315	10.12063
ANTIMONY	206.833	Axial	248.0198	0.9960454	0.9991815	1.003372	0.9891313	0.9924970
ARSENIC	189.042	Axial	155.6074	0.9723032	0.9781016	0.9667796	0.9755153	0.9688162
BARIUM	233.527	Axial	4401.603	1.052822	1.054105	1.052314	1.052412	1.052456
BERYLLIUM	313.042	Radial	20603.12	1.021935	1.023325	1.020585	1.017979	1.025850
BORON	249.678	Radial	223.5325	1.019440	1.037866	1.020343	1.005251	1.014299
CADMIUM	228.802	Axial	5548.385	1.009893	1.010637	1.009483	1.009325	1.010128
CALCIUM	317.933	Radial	10762.28	10.30622	10.31536	10.30705	10.27035	10.33212
CHROMIUM	267.716	Axial	6684.103	1.033506	1.035605	1.033157	1.032984	1.032278
COBALT	228.616	Axial	3988.453	0.9991938	0.9999588	1.000960	0.9998738	0.9959823
COPPER	324.754	Axial	17911.58	0.9783800	0.9802043	0.9800755	0.9804929	0.9727475
IRON	259.940	Radial	5097.275	10.19833	10.19039	10.18199	10.18177	10.23919
LEAD	220.353	Axial	735.6577	0.9872088	0.9854752	0.9857374	0.9890779	0.9885447
LITHIUM	670.784	Radial	8924.471	1.001798	1.002263	1.002413	0.9974485	1.005066
MAGNESIUM	279.079	Radial	654.1036	10.37656	10.40757	10.43494	10.34320	10.32052
MANGANESE	257.610	Axial	87358.17	1.002514	1.003069	1.001462	1.002637	1.002888
MOLYBDENUM	202.030	Axial	1578.118	1.053065	1.053415	1.053114	1.052722	1.053009
NICKEL	231.604	Axial	2089.834	0.9949065	0.9952994	0.9955201	0.9956773	0.9931290
PHOSPHORUS	177.495	Axial	33.92037	1.028979	1.032272	1.009835	1.050431	1.023378
POTASSIUM	766.490	Radial	4296.451	9.961941	9.923620	9.960824	9.946966	10.01636
SELENIUM	196.090	Axial	85.71956	0.9944692	0.9961787	0.9755265	1.005655	1.000517
SILICON	251.611	Axial	5310.136	1.608651	1.506159	1.574983	1.644945	1.708517
SILVER	328.068	Axial	19214.39	0.9742730	0.9757858	0.9731358	0.9777028	0.9704674
SODIUM	589.592	Radial	9547.022	10.39621	10.38127	10.41809	10.36338	10.42210
STRONTIUM	421.552	Radial	24881.37	0.4088517	0.4088191	0.4085699	0.4082550	0.4097627
SULFUR	182.034	Axial	596.6516	9.662365	9.637026	9.692779	9.653585	9.666072
THALLIUM	190.856	Axial	183.0848	0.9502247	0.9505750	0.9444934	0.9521846	0.9536456
TIN	189.989	Axial	324.0101	1.001051	1.000299	0.9985507	1.003016	1.002337
TITANIUM	334.941	Radial	3211.186	1.038270	1.037241	1.040345	1.034982	1.040514
VANADIUM	292.402	Radial	651.1742	1.028365	1.027459	1.029645	1.031561	1.024794
ZINC	206.200	Axial	2890.504	1.003316	1.004538	1.006140	1.001373	1.001212
CERIUM	535.353	Radial	70.81315	-0.03712674	-0.1578001	0.01460894	-0.01461500	0.009299173
LANTHANUM	333.749	Radial	0.2067683	-0.002732414	0.003417841	-0.003828871	-0.006100174	-0.004418453

Sample ID: ICB-2 Units: mg/l
Analyzed: 12/21/22 07:45 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10536.66	10539.30	10526.98	10543.72
YTTRIUM	360.073	Axial	396923.2	395472.7	396512.3	398784.5
YTTRIUM	360.073	Radial	11363.48	11298.13	11368.05	11424.28
INDIUM	230.606	Axial	3262.830	3263.603	3262.950	3261.936

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.976269	0.01256452	0.02778935	0.0008750470	0.009029158
ANTIMONY	206.833	Axial	-0.2716890	0.002935144	0.005088393	0.001811138	0.001905900
ARSENIC	189.042	Axial	-0.08569160	0.003135647	0.006949309	-0.001565804	0.004023435
BARIUM	233.527	Axial	3.113635	0.0001373962	0.0004789833	-0.0001284496	0.00006165491
BERYLLIUM	313.042	Radial	19.78979	0.0001932934	0.0001860476	0.0001903733	0.0002034593
BORON	249.678	Radial	0.05493123	0.001222208	0.003044076	0.005666352	-0.005043804
CADMIUM	228.802	Axial	4.525232	0.0001260785	0.000006459687	0.00006142307	0.0003103528
CALCIUM	317.933	Radial	180.6647	0.01083118	0.01388827	0.009850342	0.008754937
CERIUM	535.353	Radial	62.02279	-0.08471123	-0.04790527	-0.1132631	-0.09296530
CHROMIUM	267.716	Axial	10.29167	-0.0002271952	-0.0002531271	-0.00004115663	-0.0003873019
COBALT	228.616	Axial	2.459622	0.00003773174	0.0001331218	-0.000006703250	-0.00001322328
COPPER	324.754	Axial	27.27976	-0.00002173473	-0.0003202693	0.0002284390	0.00002662618
IRON	259.940	Radial	4.377413	0.004705932	0.004483303	0.001366355	0.008268137
LANTHANUM	333.749	Radial	2.368622	0.001610553	-0.004754744	0.004222673	0.005363729
LEAD	220.353	Axial	-0.05558479	-0.001301039	-0.001112089	-0.001113960	-0.001677067
LITHIUM	670.784	Radial	-10.7407	-0.0005890340	-0.001211107	0.001675427	-0.002231422
MAGNESIUM	279.079	Radial	-2.99065	-0.009591802	-0.005872957	-0.05392302	0.03102057
MANGANESE	257.610	Axial	10.55556	0.0001469361	0.0001279190	0.0001119942	0.0002008950
MOLYBDENUM	202.030	Axial	2.717181	0.0007423860	0.0001880574	0.0009189580	0.001120143
NICKEL	231.604	Axial	5.450007	-0.0003833317	-0.00009991984	0.0001264600	-0.001176535
PHOSPHORUS	177.495	Axial	-0.3056728	-0.006297248	-0.008884294	0.01185760	-0.02186505
POTASSIUM	766.490	Radial	-45.5146	0.03741812	0.05732745	0.03823411	0.01669280
SELENIUM	196.090	Axial	0.9491917	0.0003824342	0.007458476	-0.008533409	0.002222235
SILICON	251.611	Axial	70.14091	0.002976063	0.002383445	0.001494245	0.005050499
SILVER	328.068	Axial	-20.0138	0.0002084773	0.00002645942	0.0003725555	0.0002264170
SODIUM	589.592	Radial	46.12098	0.01645508	0.02584868	0.01375924	0.009757340
STRONTIUM	421.552	Radial	-17.7133	0.00008038368	0.0002043560	-0.00004761305	0.00008440814
SULFUR	182.034	Axial	0.3584081	0.005602463	-0.004191091	0.0009471187	0.02005136
THALLIUM	190.856	Axial	1.260415	0.001617738	0.002508514	-0.001355957	0.003700658
TIN	189.989	Axial	-0.05545493	0.004905356	0.004937441	0.005962628	0.003815998
TITANIUM	334.941	Radial	-0.8325347	0.0007833726	0.0005932150	0.001704157	0.00005274570
VANADIUM	292.402	Radial	-1.59757	-0.0009303696	-0.004928821	0.001978459	0.0001592535
ZINC	206.200	Axial	2.887397	0.0003833550	0.0002268129	0.0004700679	0.0004531841

Sample ID: ICVLL-2 Units: mg/l
Analyzed: 12/21/22 07:54 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10583.56	10588.78	10581.75	10580.14
YTTRIUM	360.073	Axial	399270.0	400205.1	399016.1	398588.7
YTTRIUM	360.073	Radial	11328.23	11347.72	11300.22	11336.75
INDIUM	230.606	Axial	3241.030	3251.142	3232.764	3239.183

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.28752	0.1845648	0.1958302	0.1608539	0.1970104
ANTIMONY	206.833	Axial	1.357565	0.009337054	0.006870654	0.01066381	0.01047669
ARSENIC	189.042	Axial	1.138911	0.01062150	0.01388871	0.003806033	0.01416976
BARIUM	233.527	Axial	25.19333	0.005320797	0.005379878	0.005165031	0.005417482
BERYLLIUM	313.042	Radial	57.32392	0.002056829	0.002113074	0.001922207	0.002135207
BORON	249.678	Radial	42.51938	0.1944241	0.1950991	0.1928489	0.1953242
CADMIUM	228.802	Axial	13.84004	0.001787744	0.001859232	0.001771862	0.001732137
CALCIUM	317.933	Radial	1231.771	1.032567	1.035212	1.028515	1.033973
CHROMIUM	267.716	Axial	77.91667	0.01004630	0.01127537	0.009339042	0.009524498
COBALT	228.616	Axial	42.68694	0.009582107	0.01004538	0.009544903	0.009156036
COPPER	324.754	Axial	200.3075	0.009230531	0.009432476	0.009222744	0.009036374
IRON	259.940	Radial	53.09644	0.1021181	0.1057470	0.1020253	0.09858203
LEAD	220.353	Axial	5.568870	0.005849239	0.005956657	0.006000944	0.005590116
LITHIUM	670.784	Radial	143.8479	0.01672401	0.01713020	0.01624449	0.01679734
MAGNESIUM	279.079	Radial	63.93902	1.046796	1.030089	1.038042	1.072257
MANGANESE	257.610	Axial	889.5556	0.01004700	0.01010899	0.01008706	0.009944935
MOLYBDENUM	202.030	Axial	9.157619	0.004956663	0.005579267	0.005241959	0.004048763
NICKEL	231.604	Axial	25.67440	0.008770566	0.008011621	0.008821478	0.009478598
PHOSPHORUS	177.495	Axial	3.315159	0.1012485	0.09802034	0.1090598	0.09666526
POTASSIUM	766.490	Radial	365.2870	0.9747049	1.035314	0.9306690	0.9581317
SELENIUM	196.090	Axial	1.708480	0.009077159	0.004633448	0.002856853	0.01974118
SILICON	251.611	Axial	709.5642	0.1951691	0.1913567	0.1949875	0.1991631
SILVER	328.068	Axial	72.34722	0.004790917	0.004497435	0.005364533	0.004510782
SODIUM	589.592	Radial	983.6709	1.039443	1.035731	1.038639	1.043958
STRONTIUM	421.552	Radial	591.5391	0.01006792	0.01006433	0.01013216	0.01000728
SULFUR	182.034	Axial	59.34141	0.9431285	0.9322668	0.9424049	0.9547138
THALLIUM	190.856	Axial	2.885683	0.009679168	0.009955424	0.01025926	0.008822822
TIN	189.989	Axial	14.85559	0.04827819	0.04679614	0.05000797	0.04803044
TITANIUM	334.941	Radial	156.9449	0.05167392	0.05208393	0.05099971	0.05193814
VANADIUM	292.402	Radial	12.71672	0.02161356	0.02263244	0.02324236	0.01896589
ZINC	206.200	Axial	147.2763	0.04960047	0.05014310	0.04964756	0.04901074
CERIUM	535.353	Radial	58.36062	-0.1030003	-0.05817187	-0.08757959	-0.1632495
LANTHANUM	333.749	Radial	-1.26227	-0.005709405	-0.001891121	-0.005852300	-0.009384795

Sample ID: ICSA-2 Units: mg/l
Analyzed: 12/21/22 07:57 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9074.808	9074.879	9082.478	9067.066
YTTRIUM	360.073	Axial	338400.4	337372.3	338498.7	339330.1
YTTRIUM	360.073	Radial	10796.54	10777.98	10790.05	10821.59
INDIUM	230.606	Axial	2496.810	2500.416	2491.928	2498.085

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	42131.33	496.0188	496.8430	495.7220	495.4913
ANTIMONY	206.833	Axial	-4.80055	-0.01797631	-0.01748843	-0.01235771	-0.02408280
ARSENIC	189.042	Axial	-2.61738	-0.01498970	-0.01714080	-0.009082581	-0.01874572
BARIUM	233.527	Axial	12.65928	0.002870845	0.002820048	0.003038743	0.002753744
BERYLLIUM	313.042	Radial	12.60685	-0.0001290747	-0.0001487714	-0.0002560578	0.00001760512
BORON	249.678	Radial	-1.11131	-0.004355311	-0.01637428	0.003341531	-0.00003317972
CADMIUM	228.802	Axial	5.052064	0.0003668836	0.00005301080	0.0005032536	0.0005443864
CALCIUM	373.690	Radial	281431.7	499.5530	500.4920	499.1778	498.9893
CERIUM	535.353	Radial	325.6420	1.383347	1.461541	1.348197	1.340301
CHROMIUM	267.716	Axial	25.47222	0.002717674	0.002618897	0.002342090	0.003192037
COBALT	228.616	Axial	9.685271	0.002440233	0.002518735	0.002613989	0.002187975
COPPER	324.754	Axial	-92.8273	-0.007352967	-0.007919659	-0.007102737	-0.007036504
IRON	271.441	Radial	4772.218	196.2211	196.2479	196.1740	196.2415
LANTHANUM	333.749	Radial	4.189091	0.005752144	0.005360394	0.009572552	0.002323485
LEAD	220.353	Axial	-20.6379	-0.03528731	-0.03768782	-0.03289248	-0.03528162
LITHIUM	670.784	Radial	32.21712	0.004396194	0.004126341	0.004769301	0.004292940
MAGNESIUM	279.079	Radial	30550.37	506.0213	506.6249	505.9997	505.4394
MANGANESE	257.610	Axial	532.2222	0.007018834	0.007018619	0.007058708	0.006979176
MOLYBDENUM	202.030	Axial	5.128570	0.002874691	0.002055865	0.002739386	0.003828821
NICKEL	231.604	Axial	19.47342	0.008590876	0.008318774	0.009008203	0.008445651
PHOSPHORUS	177.495	Axial	0.1500320	0.007986995	0.001786393	0.04449936	-0.02232477
POTASSIUM	766.490	Radial	-98.6867	-0.09545332	-0.07088214	-0.1318107	-0.08366713
SELENIUM	196.090	Axial	3.699659	0.03906392	0.02522841	0.05553096	0.03643237
SILICON	251.611	Axial	22.90166	-0.01017802	-0.01178395	-0.008549620	-0.01020048
SILVER	328.068	Axial	-64.4444	-0.002561309	-0.002724971	-0.002312537	-0.002646420
SODIUM	589.592	Radial	67.15885	0.04314867	0.04862019	0.04309988	0.03772594
STRONTIUM	421.552	Radial	210.6190	0.003992856	0.004033679	0.004028931	0.003915958
SULFUR	182.034	Axial	-0.3514183	-0.006634471	-0.002582496	-0.001758958	-0.01556196
THALLIUM	190.856	Axial	1.442749	0.004685809	-0.0008920416	0.008513269	0.006436200
TIN	189.989	Axial	-6.03048	-0.01770268	-0.01625358	-0.01666175	-0.02019273
TITANIUM	334.941	Radial	133.8176	0.04633869	0.04525764	0.04599217	0.04776625
VANADIUM	292.402	Radial	5.716851	0.01103393	0.01179200	0.01097812	0.01033167
ZINC	206.200	Axial	18.46855	0.006737381	0.005720320	0.007001126	0.007490697

Sample ID: ICSAB-2 Units: mg/l
Analyzed: 12/21/22 07:59 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8994.709	8994.264	8998.506	8991.357
YTTRIUM	360.073	Axial	335049.8	335011.8	335269.9	334867.8
YTTRIUM	360.073	Radial	10695.17	10665.75	10752.84	10666.92
INDIUM	230.606	Axial	2470.574	2472.158	2468.781	2470.783

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	41529.04	493.5611	493.9765	493.5213	493.1855
ANTIMONY	206.833	Axial	103.3650	0.4814869	0.4900929	0.4796724	0.4746954
ARSENIC	189.042	Axial	69.76068	0.5051793	0.5058646	0.5015840	0.5080894
BARIUM	233.527	Axial	1823.698	0.5034654	0.5035190	0.5040265	0.5028506
BERYLLIUM	313.042	Radial	9477.528	0.4968421	0.4974089	0.4959177	0.4971998
BORON	249.678	Radial	205.0616	0.9892560	0.9931815	0.9817147	0.9928718
CADMIUM	228.802	Axial	5018.497	1.054962	1.054628	1.054608	1.055650
CALCIUM	373.690	Radial	278378.6	498.8179	499.7991	498.1944	498.4602
CERIUM	535.353	Radial	317.3335	1.354173	1.377337	1.326602	1.358580
CHROMIUM	267.716	Axial	2765.564	0.4929103	0.4946386	0.4931124	0.4909799
COBALT	228.616	Axial	1555.493	0.4834393	0.4844039	0.4827883	0.4831258
COPPER	324.754	Axial	7961.015	0.5062709	0.5070876	0.5053239	0.5064011
IRON	271.441	Radial	4761.407	197.6330	198.3164	197.4008	197.1819
LANTHANUM	333.749	Radial	2.065040	0.001254382	-0.003599724	0.009798232	-0.002435360
LEAD	220.353	Axial	547.5505	0.9119994	0.9071338	0.9158390	0.9130255
LITHIUM	670.784	Radial	36.86007	0.004980920	0.004637891	0.005766516	0.004538352
MAGNESIUM	279.079	Radial	30349.19	507.4545	508.1836	506.8008	507.3790
MANGANESE	257.610	Axial	36180.62	0.4795318	0.4793895	0.4797122	0.4794936
MOLYBDENUM	202.030	Axial	638.9204	0.4918267	0.4906183	0.4925642	0.4922976
NICKEL	231.604	Axial	1640.989	0.9696703	0.9716361	0.9686930	0.9686817
PHOSPHORUS	177.495	Axial	0.09099159	0.005996953	-0.006240180	-0.01759923	0.04183027
POTASSIUM	766.490	Radial	-84.6889	-0.06385567	-0.05849966	-0.06045504	-0.07261229
SELENIUM	196.090	Axial	38.66582	0.5129875	0.5168734	0.5272047	0.4948843
SILICON	251.611	Axial	2762.232	0.9591665	0.9604467	0.9567465	0.9603064
SILVER	328.068	Axial	18288.75	1.081038	1.084617	1.079690	1.078808
SODIUM	589.592	Radial	75.14317	0.05309935	0.05829019	0.05208866	0.04891920
STRONTIUM	421.552	Radial	211.8329	0.004048319	0.003998481	0.003998292	0.004148182
SULFUR	182.034	Axial	-0.5400561	-0.01021863	-0.01963379	0.001128666	-0.01215077
THALLIUM	190.856	Axial	70.10669	0.4492684	0.4538369	0.4477967	0.4461716
TIN	189.989	Axial	123.3530	0.4757444	0.4735955	0.4747910	0.4788468
TITANIUM	334.941	Radial	1604.317	0.5491807	0.5502106	0.5464959	0.5508357
VANADIUM	292.402	Radial	294.3731	0.4925627	0.4925863	0.4938692	0.4912326
ZINC	206.200	Axial	2269.143	0.9095777	0.9100797	0.9106257	0.9080276

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 12:06 Sequence: 101 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9928.868	9937.469	9928.315	9920.821
YTTRIUM	360.073	Axial	378281.9	379969.8	375002.8	379873.2
YTTRIUM	360.073	Radial	11081.82	11087.79	11113.32	11044.34
INDIUM	230.606	Axial	2867.377	2868.964	2866.220	2866.948

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	840.5964	9.577537	9.539087	9.560374	9.633149
ANTIMONY	206.833	Axial	115.0764	0.4855727	0.4849487	0.4879237	0.4838457
ARSENIC	189.042	Axial	151.4177	0.9897952	0.9969960	0.9940493	0.9783404
BARIUM	233.527	Axial	1946.601	0.4868149	0.4860467	0.4873404	0.4870577
BERYLLIUM	313.042	Radial	3784.567	0.1909941	0.1909124	0.1907962	0.1912738
BORON	249.678	Radial	209.1828	0.9739401	0.9848401	0.9589992	0.9779811
CADMIUM	228.802	Axial	2587.409	0.4923716	0.4917388	0.4932907	0.4920854
CALCIUM	373.690	Radial	27562.85	47.64138	47.69871	47.51030	47.71515
CHROMIUM	267.716	Axial	5887.659	0.9523054	0.9544693	0.9535028	0.9489440
COBALT	228.616	Axial	3759.340	1.007284	1.007894	1.007362	1.006594
COPPER	324.754	Axial	17439.58	0.9837333	0.9799038	0.9911856	0.9801105
IRON	259.940	Radial	4623.435	9.442874	9.417857	9.440336	9.470430
LEAD	220.353	Axial	334.7013	0.4797487	0.4759081	0.4824680	0.4808699
LITHIUM	670.784	Radial	8441.169	0.9673145	0.9691915	0.9671696	0.9655824
MAGNESIUM	279.079	Radial	578.1282	9.366088	9.401945	9.370167	9.326152
MANGANESE	257.610	Axial	80359.78	0.9648395	0.9647911	0.9647734	0.9649539
MOLYBDENUM	202.030	Axial	357.7212	0.2489417	0.2495250	0.2489990	0.2483012
NICKEL	231.604	Axial	1911.316	0.9731254	0.9714766	0.9737757	0.9741238
PHOSPHORUS	177.495	Axial	31.47238	0.9989495	1.006169	0.9678367	1.022842
POTASSIUM	766.490	Radial	20458.87	47.88169	47.81682	47.84056	47.98770
SELENIUM	196.090	Axial	81.77178	0.9925096	1.006797	0.9822596	0.9884726
SILICON	251.611	Axial	6287.943	1.997364	1.987920	1.993342	2.010831
SILVER	328.068	Axial	9016.773	0.4727638	0.4703298	0.4771458	0.4708157
SODIUM	818.326	Radial	2879.976	49.89676	49.61730	50.08569	49.98730
STRONTIUM	421.552	Radial	57907.23	0.9708627	0.9695347	0.9711149	0.9719384
SULFUR	182.034	Axial	286.8240	4.859612	4.867888	4.864485	4.846462
THALLIUM	190.856	Axial	172.8072	0.9592878	0.9604918	0.9630355	0.9543361
TIN	189.989	Axial	144.2460	0.4792973	0.4844162	0.4782508	0.4752251
TITANIUM	334.941	Radial	2974.509	0.9818476	0.9852666	0.9803941	0.9798821
VANADIUM	292.402	Radial	605.5293	0.9763013	0.9731362	0.9774102	0.9783573
ZINC	206.200	Axial	2650.581	0.9625499	0.9588445	0.9628578	0.9659473
CERIUM	535.353	Radial	79.80537	0.01881843	-0.002904619	0.02608399	0.03327590
LANTHANUM	333.749	Radial	-1.99490	-0.007276706	-0.01131966	-0.007013217	-0.003497237

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 12:11 Sequence: 102

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10268.14	10251.03	10268.64	10284.76
YTTRIUM	360.073	Axial	389357.0	390312.1	389171.7	388587.1
YTTRIUM	360.073	Radial	10955.07	10917.21	10978.59	10969.41
INDIUM	230.606	Axial	3175.931	3174.199	3175.513	3178.080

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	7.543977	0.02204619	0.03107337	-0.002788607	0.03785380
ANTIMONY	206.833	Axial	0.6460068	0.006617721	0.002478096	0.009282966	0.008092101
ARSENIC	189.042	Axial	-0.2325334	0.002196712	-0.003618743	0.009771446	0.0004374330
BARIUM	233.527	Axial	1.630738	-0.0002021574	-0.0001158325	-0.00004356485	-0.0004470749
BERYLLIUM	313.042	Radial	15.68692	0.00001929486	-0.00007601389	0.0001081730	0.00002572551
BORON	249.678	Radial	1.607179	0.008527657	0.01253294	0.007013251	0.006036780
CADMIUM	228.802	Axial	2.520877	-0.0002217012	0.0001926001	-0.0006103529	-0.0002473507
CALCIUM	317.933	Radial	170.4907	0.007129001	0.01038293	0.006356484	0.004647591
CERIUM	535.353	Radial	72.76236	-0.01444593	-0.006576748	0.01820840	-0.05496943
CHROMIUM	267.716	Axial	8.277778	-0.0005017209	-0.0003862388	-0.0006628675	-0.0004560565
COBALT	228.616	Axial	2.363844	0.00003017309	-0.0003926333	-0.0002348658	0.0007180184
COPPER	324.754	Axial	33.09524	0.0003265531	0.0002039209	0.0002628152	0.0005129233
IRON	259.940	Radial	0.9566029	-0.002033524	-0.001683472	0.001823727	-0.006240828
LANTHANUM	333.749	Radial	-0.2103441	-0.003566589	0.01029323	-0.01688502	-0.004107973
LEAD	220.353	Axial	0.4566489	-0.0006383862	-0.001291195	0.0001153533	-0.0007393170
LITHIUM	670.784	Radial	3.971047	0.001072928	0.003178693	-0.0005065011	0.0005465912
MAGNESIUM	279.079	Radial	-1.85660	0.007221284	0.007584539	0.01788010	-0.003800790
MANGANESE	257.610	Axial	30.04167	0.0003762973	0.0003749473	0.0003675799	0.0003863645
MOLYBDENUM	202.030	Axial	2.370262	0.0005546197	0.0001763491	0.001128163	0.0003593466
NICKEL	231.604	Axial	4.702630	-0.0006608967	-0.0005018018	-0.001027326	-0.0004535624
PHOSPHORUS	177.495	Axial	0.4240127	0.01581040	0.03453513	0.02070131	-0.007805257
POTASSIUM	766.490	Radial	-51.4509	0.01946185	0.01219033	0.003746860	0.04244836
SELENIUM	196.090	Axial	1.217432	0.003848897	0.001446194	-0.002598651	0.01269915
SILICON	251.611	Axial	52.71492	-0.001870234	-0.0008675706	-0.003888380	-0.0008547524
SILVER	328.068	Axial	-22.4166	0.00006735879	-0.0001285188	0.0003398878	-0.000009292650
SODIUM	589.592	Radial	55.09196	0.02840763	0.02171893	0.01856977	0.04493419
STRONTIUM	421.552	Radial	-21.8926	-0.000001392219	0.00008690873	0.00007971769	-0.0001708031
SULFUR	182.034	Axial	0.8206255	0.01333492	0.02262871	0.005884958	0.01149110
THALLIUM	190.856	Axial	0.9462266	0.0002043577	-0.001712238	0.002705622	-0.0003803111
TIN	189.989	Axial	-1.36404	0.001016236	-0.001849425	0.003022666	0.001875467
TITANIUM	334.941	Radial	-1.78759	0.0004517507	-0.001008077	0.0002609774	0.002102352
VANADIUM	292.402	Radial	1.218442	0.003576155	0.005706084	-0.001070997	0.006093378
ZINC	206.200	Axial	0.1994843	-0.0005352160	-0.0004180394	-0.0006950530	-0.0004925555

Sample ID: CCVLL-2 Units: mg/l
Analyzed: 12/21/22 12:15 Sequence: 103 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10334.98	10338.30	10342.78	10323.86
YTTRIUM	360.073	Axial	391603.1	391207.9	392550.4	391051.1
YTTRIUM	360.073	Radial	11044.10	11008.50	11086.43	11037.37
INDIUM	230.606	Axial	3179.782	3183.766	3181.724	3173.855

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	24.06238	0.2115215	0.2376681	0.1844292	0.2124672
ANTIMONY	206.833	Axial	1.624992	0.01053904	0.01078577	0.01155049	0.009280877
ARSENIC	189.042	Axial	1.488777	0.01297780	0.01229909	0.01454343	0.01209088
BARIUM	233.527	Axial	23.08300	0.004955586	0.005032334	0.004752409	0.005082015
BERYLLIUM	313.042	Radial	51.85817	0.001852272	0.001894092	0.001815789	0.001846935
BORON	249.678	Radial	43.57566	0.2043356	0.2018717	0.2011674	0.2099675
CADMIUM	228.802	Axial	13.52425	0.001789455	0.001758778	0.001819628	0.001789958
CALCIUM	317.933	Radial	1187.156	1.018913	1.026411	1.013762	1.016565
CHROMIUM	267.716	Axial	72.48611	0.009486311	0.008641580	0.009713055	0.01010430
COBALT	228.616	Axial	42.56561	0.009748212	0.009795196	0.009896602	0.009552836
COPPER	324.754	Axial	208.4802	0.009886619	0.01000395	0.009918303	0.009737601
IRON	259.940	Radial	48.75101	0.09593639	0.09367443	0.09746350	0.09667125
LEAD	220.353	Axial	4.318135	0.004364176	0.004678016	0.004817942	0.003596569
LITHIUM	670.784	Radial	123.3018	0.01477795	0.01542565	0.01533567	0.01357253
MAGNESIUM	279.079	Radial	60.40439	1.015460	0.9767795	1.043755	1.025846
MANGANESE	257.610	Axial	884.0972	0.01022502	0.01024323	0.01024985	0.01018198
MOLYBDENUM	202.030	Axial	9.268492	0.005176071	0.005605795	0.004217830	0.005704587
NICKEL	231.604	Axial	25.39082	0.008862891	0.008268631	0.009052156	0.009267886
PHOSPHORUS	177.495	Axial	3.536058	0.1103248	0.1130322	0.1208539	0.09708836
POTASSIUM	766.490	Radial	376.3031	1.022049	1.032424	1.006823	1.026901
SELENIUM	196.090	Axial	1.916238	0.01199042	0.01304019	0.02191859	0.001012485
SILICON	251.611	Axial	651.9888	0.1825717	0.1791274	0.1821075	0.1864802
SILVER	328.068	Axial	71.31944	0.004809125	0.005078808	0.004670803	0.004677764
SODIUM	589.592	Radial	958.5877	1.038979	1.037824	1.040243	1.038870
STRONTIUM	421.552	Radial	589.3491	0.01028116	0.01057984	0.01002749	0.01023615
SULFUR	182.034	Axial	57.80911	0.9408861	0.9432734	0.9127136	0.9666713
THALLIUM	190.856	Axial	3.068101	0.01087085	0.01044811	0.01146172	0.01070271
TIN	189.989	Axial	13.56268	0.04527590	0.04559023	0.04314966	0.04708781
TITANIUM	334.941	Radial	150.5506	0.05086363	0.05149420	0.04983253	0.05126415
VANADIUM	292.402	Radial	13.19651	0.02290614	0.02210921	0.01981388	0.02679532
ZINC	206.200	Axial	143.9210	0.04963709	0.05008230	0.04887935	0.04994964
CERIUM	535.353	Radial	62.06871	-0.07528468	-0.06439944	0.006508317	-0.1679629
LANTHANUM	333.749	Radial	-1.58521	-0.006425315	-0.004974926	-0.01857694	0.004275925

Sample ID: ICSA-2 Units: mg/l
Analyzed: 12/21/22 12:19 Sequence: 104 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8891.026	8895.630	8884.363	8893.085
YTTRIUM	360.073	Axial	334847.4	334672.4	334823.8	335046.0
YTTRIUM	360.073	Radial	10461.90	10457.58	10430.09	10498.03
INDIUM	230.606	Axial	2452.307	2451.598	2455.134	2450.188

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40938.44	497.3930	498.8211	497.6316	495.7263
ANTIMONY	206.833	Axial	-4.44357	-0.01675715	-0.01996829	-0.01190231	-0.01840086
ARSENIC	189.042	Axial	-1.48944	-0.007166553	-0.01184242	-0.0006447896	-0.009012448
BARIUM	233.527	Axial	11.76430	0.002692410	0.002384019	0.002759912	0.002933298
BERYLLIUM	313.042	Radial	14.02305	-0.00003177329	-0.00001442031	0.00003227660	-0.0001131762
BORON	249.678	Radial	-1.05536	-0.004229812	0.002396568	-0.003158590	-0.01192742
CADMIUM	228.802	Axial	4.550834	0.0002820603	0.0001105749	0.0004794738	0.0002561321
CALCIUM	373.690	Radial	272928.3	499.9570	500.7195	500.6939	498.4575
CERIUM	535.353	Radial	330.6303	1.469064	1.505444	1.502574	1.399173
CHROMIUM	267.716	Axial	18.69444	0.001584513	0.0007258349	0.002208050	0.001819653
COBALT	228.616	Axial	8.257725	0.002046801	0.001180268	0.002214226	0.002745908
COPPER	324.754	Axial	-86.3511	-0.007001141	-0.007443602	-0.007020355	-0.006539465
IRON	271.441	Radial	4647.234	197.1944	197.5789	197.0328	196.9715
LANTHANUM	333.749	Radial	3.749451	0.005082386	-0.0001356222	0.01407398	0.001308799
LEAD	220.353	Axial	-19.9501	-0.03475505	-0.03738286	-0.02997156	-0.03691073
LITHIUM	670.784	Radial	33.08001	0.004623160	0.005382560	0.004704944	0.003781977
MAGNESIUM	279.079	Radial	28868.12	493.4555	493.3132	495.1143	491.9390
MANGANESE	257.610	Axial	517.2361	0.006962439	0.006950664	0.006947704	0.006988949
MOLYBDENUM	202.030	Axial	5.341989	0.003122196	0.001931423	0.003404004	0.004031160
NICKEL	231.604	Axial	18.82677	0.008411421	0.008871568	0.008544216	0.007818479
PHOSPHORUS	177.495	Axial	0.6680926	0.02642022	0.03784099	0.01666791	0.02475177
POTASSIUM	766.490	Radial	-92.1709	-0.08691291	-0.1150146	-0.07329865	-0.07242554
SELENIUM	196.090	Axial	1.809285	0.01420280	0.01747973	0.02548974	-0.0003610561
SILICON	251.611	Axial	9.583149	-0.01477816	-0.01579543	-0.01234550	-0.01619353
SILVER	328.068	Axial	-65.2916	-0.002651160	-0.002286267	-0.002969070	-0.002698142
SODIUM	589.592	Radial	107.4317	0.09313466	0.07592665	0.08419435	0.1192830
STRONTIUM	421.552	Radial	211.0179	0.004115603	0.004017068	0.004112122	0.004217620
SULFUR	182.034	Axial	0.8580193	0.01611913	0.02906217	0.02150865	-0.002213432
THALLIUM	190.856	Axial	0.8588070	0.001042301	0.002086552	-0.002122978	0.003163328
TIN	189.989	Axial	-5.04762	-0.01433857	-0.02318993	-0.01098451	-0.008841276
TITANIUM	334.941	Radial	129.5820	0.04631129	0.04696927	0.04663002	0.04533457
VANADIUM	292.402	Radial	5.675337	0.01126934	0.01253284	0.01284485	0.008430332
ZINC	206.200	Axial	17.09677	0.006332094	0.006989438	0.005716385	0.006290459

Sample ID: ICSAB-2 Units: mg/l
Analyzed: 12/21/22 12:22 Sequence: 105 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8845.923	8845.383	8851.078	8841.309
YTTRIUM	360.073	Axial	332049.1	332499.5	331668.4	331979.4
YTTRIUM	360.073	Radial	10430.75	10450.39	10394.81	10447.05
INDIUM	230.606	Axial	2440.259	2441.949	2438.480	2440.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40899.65	498.4053	497.5895	499.3990	498.2275
ANTIMONY	206.833	Axial	101.8836	0.4825586	0.4825256	0.4868186	0.4783317
ARSENIC	189.042	Axial	68.83251	0.5068293	0.5227441	0.4988666	0.4988773
BARIUM	233.527	Axial	1790.931	0.5027348	0.5020046	0.5032729	0.5029269
BERYLLIUM	313.042	Radial	9149.507	0.4917959	0.4917257	0.4924291	0.4912330
BORON	249.678	Radial	198.1387	0.9800870	0.9803649	0.9853950	0.9745012
CADMIUM	228.802	Axial	4944.745	1.056943	1.057008	1.056846	1.056974
CALCIUM	373.690	Radial	272977.7	501.5403	500.5423	502.6149	501.4636
CERIUM	535.353	Radial	324.9809	1.442261	1.461481	1.380445	1.484858
CHROMIUM	267.716	Axial	2698.850	0.4890966	0.4908153	0.4888899	0.4875846
COBALT	228.616	Axial	1547.291	0.4868684	0.4874874	0.4873229	0.4857950
COPPER	324.754	Axial	7981.185	0.5121583	0.5105474	0.5124389	0.5134885
IRON	271.441	Radial	4609.686	196.1870	195.2455	197.2840	196.0314
LANTHANUM	333.749	Radial	0.9995233	-0.0009565712	-0.003516927	-0.002876599	0.003523813
LEAD	220.353	Axial	538.7704	0.9085203	0.9013991	0.9169510	0.9072108
LITHIUM	670.784	Radial	24.96239	0.003648040	0.002144052	0.004588817	0.004211250
MAGNESIUM	279.079	Radial	28857.19	494.7418	492.5167	496.7253	494.9835
MANGANESE	257.610	Axial	35649.77	0.4804433	0.4801838	0.4805440	0.4806021
MOLYBDENUM	202.030	Axial	628.8881	0.4922481	0.4915197	0.4909108	0.4943138
NICKEL	231.604	Axial	1606.501	0.9610605	0.9579105	0.9624881	0.9627829
PHOSPHORUS	177.495	Axial	0.5753911	0.02325781	-0.009796704	0.02016455	0.05940557
POTASSIUM	766.490	Radial	-71.7553	-0.03696935	-0.05650955	-0.03584461	-0.01855389
SELENIUM	196.090	Axial	38.95995	0.5258420	0.5468387	0.5328972	0.4977899
SILICON	251.611	Axial	2698.499	0.9526756	0.9534800	0.9511541	0.9533926
SILVER	328.068	Axial	18098.83	1.079485	1.076182	1.082503	1.079769
SODIUM	589.592	Radial	117.1729	0.1050921	0.1070371	0.1021544	0.1060849
STRONTIUM	421.552	Radial	205.8459	0.004035046	0.004013167	0.004160417	0.003931556
SULFUR	182.034	Axial	-0.3627312	-0.007014852	-0.004966634	-0.006238943	-0.009838979
THALLIUM	190.856	Axial	69.60377	0.4516081	0.4574846	0.4435245	0.4538153
TIN	189.989	Axial	120.0236	0.4687267	0.4737286	0.4608429	0.4716087
TITANIUM	334.941	Radial	1550.421	0.5441921	0.5416981	0.5467225	0.5441556
VANADIUM	292.402	Radial	284.9015	0.4888171	0.4899015	0.4904668	0.4860828
ZINC	206.200	Axial	2203.507	0.8981165	0.8991744	0.8977531	0.8974219

Sample ID: BLANK DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:27 Sequence: 107

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10563.93	10550.05	10567.46	10574.29
YTTRIUM	360.073	Axial	401410.8	401500.5	399932.1	402799.9
YTTRIUM	360.073	Radial	11308.05	11284.55	11330.73	11308.86
INDIUM	230.606	Axial	3259.047	3254.878	3259.247	3263.015

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	0.9276159	0.005184667	-0.001697993	0.001526660	0.01572533
ALUMINUM	308.215	Radial	4.641779	-0.01337094	-0.03401203	0.02032482	-0.02642561
ANTIMONY	206.833	Axial	-0.9796407	0.0001546899	0.001589151	-0.0003605322	-0.0007645489
ARSENIC	189.042	Axial	-0.2113093	0.002371569	0.004384028	0.002355626	0.0003750537
BARIUM	233.527	Axial	3.491302	0.0002245188	0.0002477050	0.0003575430	0.00006830834
BERYLLIUM	313.042	Radial	13.39048	-0.0001195357	-0.00001609501	-0.0002130597	-0.0001294526
CADMIUM	228.802	Axial	1.810510	-0.0003621707	-0.0003510388	-0.0003236386	-0.0004118347
CALCIUM	317.933	Radial	200.6539	0.03113327	0.02942020	0.03132065	0.03265895
CHROMIUM	267.716	Axial	12.93056	0.0001704028	-0.0003182484	0.001075019	-0.0002455625
COBALT	228.616	Axial	2.612970	0.00007474873	0.0003791197	-0.0001598730	0.000004999499
COPPER	324.754	Axial	31.79167	0.0002022363	0.00008036267	0.0001898897	0.0003364567
IRON	259.940	Radial	6.317653	0.008640310	0.01024603	0.01012135	0.005553545
LEAD	220.353	Axial	1.648726	0.0008537137	0.001150581	0.0001133109	0.001297249
LITHIUM	670.784	Radial	5.203215	0.001189618	-0.001451610	0.003609628	0.001410835
MAGNESIUM	279.079	Radial	0.6235546	0.04738329	0.04477045	0.05262692	0.04475249
MANGANESE	257.610	Axial	7.125	0.0001079072	0.00006943734	0.0001050903	0.0001491941
MOLYBDENUM	202.030	Axial	1.250482	-0.0002255202	0.00006999280	-0.0008358363	0.00008928298
NICKEL	231.604	Axial	3.516829	-0.001249135	-0.001880135	-0.0005525624	-0.001314706
PHOSPHORUS	177.495	Axial	0.6187511	0.02120639	0.003692005	0.03358517	0.02634199
POTASSIUM	766.490	Radial	-45.5507	0.03674052	0.02104625	0.03800924	0.05116607
SELENIUM	196.090	Axial	0.4166702	-0.005778788	-0.002042823	-0.004451851	-0.01084169
SILICON	251.611	Axial	191.2769	0.03941728	0.03884030	0.04063492	0.03877662
SILVER	328.068	Axial	-28.0972	-0.0001780622	-0.00007490223	-0.00002221718	-0.0004370673
SODIUM	589.592	Radial	166.1978	0.1478764	0.1073289	0.1512012	0.1850991
STRONTIUM	421.552	Radial	-14.1158	0.0001377570	0.0001063700	0.0001739571	0.0001329440
SULFUR	182.034	Axial	3.239890	0.05147192	0.04183225	0.05636697	0.05621654
THALLIUM	190.856	Axial	0.2511187	-0.003328829	-0.003854538	-0.003963338	-0.002168611
TIN	189.989	Axial	-0.1923961	0.004510026	0.005290731	0.005033622	0.003205725
TITANIUM	334.941	Radial	-1.44102	0.0005839732	0.00002760447	0.0009694687	0.0007548463
VANADIUM	292.402	Radial	0.07383285	0.001700979	-0.001871630	0.002329667	0.004644899
ZINC	206.200	Axial	3.602228	0.0006246463	0.0002107809	0.0008482849	0.0008148730
CERIUM	535.353	Radial	71.53480	-0.03311123	0.05821356	-0.1024131	-0.05513411
LANTHANUM	333.749	Radial	-0.1818308	-0.003516527	-0.003912035	-0.01047878	0.003841236

Rows shaded in gray for analytes that were not ordered.

Sample ID: BLANK DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:27 Sequence: 107

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10563.93	10550.05	10567.46	10574.29
YTTRIUM	360.073	Axial	401410.8	401500.5	399932.1	402799.9
YTTRIUM	360.073	Radial	11308.05	11284.55	11330.73	11308.86
INDIUM	230.606	Axial	3259.047	3254.878	3259.247	3263.015

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	0.9276159	0.005184667	-0.001697993	0.001526660	0.01572533
ALUMINUM	308.215	Radial	4.641779	-0.01337094	-0.03401203	0.02032482	-0.02642561
ANTIMONY	206.833	Axial	-0.9796407	0.0001546899	0.001589151	-0.0003605322	-0.0007645489
ARSENIC	189.042	Axial	-0.2113093	0.002371569	0.004384028	0.002355626	0.0003750537
BARIUM	233.527	Axial	3.491302	0.0002245188	0.0002477050	0.0003575430	0.00006830834
BERYLLIUM	313.042	Radial	13.39048	-0.0001195357	-0.00001609501	-0.0002130597	-0.0001294526
CADMIUM	228.802	Axial	1.810510	-0.0003621707	-0.0003510388	-0.0003236386	-0.0004118347
CALCIUM	317.933	Radial	200.6539	0.03113327	0.02942020	0.03132065	0.03265895
CHROMIUM	267.716	Axial	12.93056	0.0001704028	-0.0003182484	0.001075019	-0.0002455625
COBALT	228.616	Axial	2.612970	0.00007474873	0.0003791197	-0.0001598730	0.000004999499
COPPER	324.754	Axial	31.79167	0.0002022363	0.00008036267	0.0001898897	0.0003364567
IRON	259.940	Radial	6.317653	0.008640310	0.01024603	0.01012135	0.005553545
LEAD	220.353	Axial	1.648726	0.0008537137	0.001150581	0.0001133109	0.001297249
LITHIUM	670.784	Radial	5.203215	0.001189618	-0.001451610	0.003609628	0.001410835
MAGNESIUM	279.079	Radial	0.6235546	0.04738329	0.04477045	0.05262692	0.04475249
MANGANESE	257.610	Axial	7.125	0.0001079072	0.00006943734	0.0001050903	0.0001491941
MOLYBDENUM	202.030	Axial	1.250482	-0.0002255202	0.00006999280	-0.0008358363	0.00008928298
NICKEL	231.604	Axial	3.516829	-0.001249135	-0.001880135	-0.0005525624	-0.001314706
PHOSPHORUS	177.495	Axial	0.6187511	0.02120639	0.003692005	0.03358517	0.02634199
POTASSIUM	766.490	Radial	-45.5507	0.03674052	0.02104625	0.03800924	0.05116607
SELENIUM	196.090	Axial	0.4166702	-0.005778788	-0.002042823	-0.004451851	-0.01084169
SILICON	251.611	Axial	191.2769	0.03941728	0.03884030	0.04063492	0.03877662
SILVER	328.068	Axial	-28.0972	-0.0001780622	-0.00007490223	-0.00002221718	-0.0004370673
SODIUM	589.592	Radial	166.1978	0.1478764	0.1073289	0.1512012	0.1850991
STRONTIUM	421.552	Radial	-14.1158	0.0001377570	0.0001063700	0.0001739571	0.0001329440
SULFUR	182.034	Axial	3.239890	0.05147192	0.04183225	0.05636697	0.05621654
THALLIUM	190.856	Axial	0.2511187	-0.003328829	-0.003854538	-0.003963338	-0.002168611
TIN	189.989	Axial	-0.1923961	0.004510026	0.005290731	0.005033622	0.003205725
TITANIUM	334.941	Radial	-1.44102	0.0005839732	0.00002760447	0.0009694687	0.0007548463
VANADIUM	292.402	Radial	0.07383285	0.001700979	-0.001871630	0.002329667	0.004644899
ZINC	206.200	Axial	3.602228	0.0006246463	0.0002107809	0.0008482849	0.0008148730
CERIUM	535.353	Radial	71.53480	-0.03311123	0.05821356	-0.1024131	-0.05513411
LANTHANUM	333.749	Radial	-0.1818308	-0.003516527	-0.003912035	-0.01047878	0.003841236

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:30 Sequence: 108

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10396.15	10386.00	10375.37	10427.07
YTTRIUM	360.073	Axial	393838.6	393225.8	395048.2	393241.7
YTTRIUM	360.073	Radial	11312.41	11342.55	11321.54	11273.15
INDIUM	230.606	Axial	3090.579	3086.543	3087.800	3097.395

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	196.2730	0.8952919	0.8860954	0.8912431	0.9085371
ALUMINUM	308.215	Radial	792.7921	8.843751	8.810588	8.838198	8.882466
ANTIMONY	206.833	Axial	226.3944	0.9088285	0.9072692	0.9105857	0.9086306
ARSENIC	189.042	Axial	138.1775	0.8631489	0.8716896	0.8722003	0.8455569
BARIUM	233.527	Axial	4016.310	0.9598521	0.9591929	0.9614153	0.9589480
BERYLLIUM	313.042	Radial	18735.30	0.9292612	0.9251859	0.9280287	0.9345691
CADMIUM	228.802	Axial	5067.855	0.9216404	0.9204082	0.9232041	0.9213088
CALCIUM	317.933	Radial	9477.476	9.056682	9.014866	9.051106	9.104075
CHROMIUM	267.716	Axial	6117.004	0.9449208	0.9454241	0.9463688	0.9429694
COBALT	228.616	Axial	3576.198	0.8889492	0.8914887	0.8886443	0.8867146
COPPER	324.754	Axial	16191.56	0.8770773	0.8805259	0.8711217	0.8795843
IRON	259.940	Radial	4461.937	8.927087	8.893055	8.925665	8.962542
LEAD	220.353	Axial	665.3445	0.8858429	0.8863867	0.8852594	0.8858824
LITHIUM	670.784	Radial	8263.909	0.9277335	0.9232155	0.9279882	0.9319969
MAGNESIUM	279.079	Radial	576.7420	9.154122	9.122808	9.166644	9.172915
MANGANESE	257.610	Axial	74855.25	0.8583589	0.8588630	0.8597495	0.8564643
MOLYBDENUM	202.030	Axial	1394.071	0.9293930	0.9288346	0.9298438	0.9295006
NICKEL	231.604	Axial	1902.305	0.8983751	0.8998881	0.8992441	0.8959929
PHOSPHORUS	177.495	Axial	29.85041	0.9051501	0.9113440	0.9047970	0.8993093
POTASSIUM	766.490	Radial	3864.410	8.974730	8.942635	8.980594	9.000961
SELENIUM	196.090	Axial	77.70025	0.8997205	0.8903892	0.9030106	0.9057618
SILICON	251.611	Axial	2898.706	0.8691908	0.8672154	0.8699614	0.8703955
SILVER	328.068	Axial	3122.612	0.1580563	0.1582305	0.1572566	0.1586818
SODIUM	589.592	Radial	8790.798	9.570457	9.534077	9.569520	9.607773
STRONTIUM	421.552	Radial	55750.42	0.9156773	0.9112488	0.9160367	0.9197464
SULFUR	182.034	Axial	547.2777	8.855810	8.844682	8.889368	8.833379
THALLIUM	190.856	Axial	171.3360	0.8820620	0.8793272	0.8816291	0.8852298
TIN	189.989	Axial	295.0898	0.9051666	0.9084325	0.9099391	0.8971282
TITANIUM	334.941	Radial	2932.646	0.9483404	0.9445395	0.9492070	0.9512747
VANADIUM	292.402	Radial	576.5099	0.9106816	0.9104501	0.9034777	0.9181170
ZINC	206.200	Axial	2527.512	0.8765471	0.8756326	0.8775144	0.8764943
CERIUM	535.353	Radial	72.10206	-0.03035387	-0.08753819	0.02884341	-0.03236682
LANTHANUM	333.749	Radial	-1.87008	-0.006953910	-0.0005408003	-0.009295528	-0.01102540

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:30 Sequence: 108

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10396.15	10386.00	10375.37	10427.07
YTTRIUM	360.073	Axial	393838.6	393225.8	395048.2	393241.7
YTTRIUM	360.073	Radial	11312.41	11342.55	11321.54	11273.15
INDIUM	230.606	Axial	3090.579	3086.543	3087.800	3097.395

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	196.2730	0.8952919	0.8860954	0.8912431	0.9085371
ALUMINUM	308.215	Radial	792.7921	8.843751	8.810588	8.838198	8.882466
ANTIMONY	206.833	Axial	226.3944	0.9088285	0.9072692	0.9105857	0.9086306
ARSENIC	189.042	Axial	138.1775	0.8631489	0.8716896	0.8722003	0.8455569
BARIUM	233.527	Axial	4016.310	0.9598521	0.9591929	0.9614153	0.9589480
BERYLLIUM	313.042	Radial	18735.30	0.9292612	0.9251859	0.9280287	0.9345691
CADMIUM	228.802	Axial	5067.855	0.9216404	0.9204082	0.9232041	0.9213088
CALCIUM	317.933	Radial	9477.476	9.056682	9.014866	9.051106	9.104075
CHROMIUM	267.716	Axial	6117.004	0.9449208	0.9454241	0.9463688	0.9429694
COBALT	228.616	Axial	3576.198	0.8889492	0.8914887	0.8886443	0.8867146
COPPER	324.754	Axial	16191.56	0.8770773	0.8805259	0.8711217	0.8795843
IRON	259.940	Radial	4461.937	8.927087	8.893055	8.925665	8.962542
LEAD	220.353	Axial	665.3445	0.8858429	0.8863867	0.8852594	0.8858824
LITHIUM	670.784	Radial	8263.909	0.9277335	0.9232155	0.9279882	0.9319969
MAGNESIUM	279.079	Radial	576.7420	9.154122	9.122808	9.166644	9.172915
MANGANESE	257.610	Axial	74855.25	0.8583589	0.8588630	0.8597495	0.8564643
MOLYBDENUM	202.030	Axial	1394.071	0.9293930	0.9288346	0.9298438	0.9295006
NICKEL	231.604	Axial	1902.305	0.8983751	0.8998881	0.8992441	0.8959929
PHOSPHORUS	177.495	Axial	29.85041	0.9051501	0.9113440	0.9047970	0.8993093
POTASSIUM	766.490	Radial	3864.410	8.974730	8.942635	8.980594	9.000961
SELENIUM	196.090	Axial	77.70025	0.8997205	0.8903892	0.9030106	0.9057618
SILICON	251.611	Axial	2898.706	0.8691908	0.8672154	0.8699614	0.8703955
SILVER	328.068	Axial	3122.612	0.1580563	0.1582305	0.1572566	0.1586818
SODIUM	589.592	Radial	8790.798	9.570457	9.534077	9.569520	9.607773
STRONTIUM	421.552	Radial	55750.42	0.9156773	0.9112488	0.9160367	0.9197464
SULFUR	182.034	Axial	547.2777	8.855810	8.844682	8.889368	8.833379
THALLIUM	190.856	Axial	171.3360	0.8820620	0.8793272	0.8816291	0.8852298
TIN	189.989	Axial	295.0898	0.9051666	0.9084325	0.9099391	0.8971282
TITANIUM	334.941	Radial	2932.646	0.9483404	0.9445395	0.9492070	0.9512747
VANADIUM	292.402	Radial	576.5099	0.9106816	0.9104501	0.9034777	0.9181170
ZINC	206.200	Axial	2527.512	0.8765471	0.8756326	0.8775144	0.8764943
CERIUM	535.353	Radial	72.10206	-0.03035387	-0.08753819	0.02884341	-0.03236682
LANTHANUM	333.749	Radial	-1.87008	-0.006953910	-0.0005408003	-0.009295528	-0.01102540

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568841-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:33 Sequence: 109

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10274.23	10266.78	10273.29	10282.62
YTTRIUM	360.073	Axial	390738.8	389841.2	390466.2	391909.2
YTTRIUM	360.073	Radial	11306.79	11311.26	11355.87	11253.24
INDIUM	230.606	Axial	3061.330	3053.893	3057.940	3072.156

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ANTIMONY	206.833	Axial	-0.2739427	0.002900834	0.008475682	-0.0003696416	0.0005964609
ARSENIC	189.042	Axial	-0.3487912	0.001467889	-0.002213489	0.006422848	0.0001943077
BARIUM	233.527	Axial	715.0890	0.1724357	0.1716080	0.1725144	0.1731847
BERYLLIUM	313.042	Radial	12.84758	-0.0001464687	-0.00002579607	-0.0002448156	-0.0001687944
CADMIUM	228.802	Axial	5.142270	0.0002605835	0.0004163114	0.0002195394	0.0001458998
CHROMIUM	267.716	Axial	9.835926	-0.0002585727	-0.0005793989	0.0001074668	-0.0003037859
LEAD	220.353	Axial	1.537879	0.0008430497	0.002870659	0.0007353273	-0.001076837
NICKEL	231.604	Axial	5.175816	-0.0003536303	-0.0006723342	-0.00009587152	-0.0002926851
SELENIUM	196.090	Axial	0.8806129	-0.0001456325	0.002062619	-0.0008432843	-0.001656232
SILVER	328.068	Axial	-27.1811	-0.0001700137	0.00004268494	-0.0004965301	-0.00005619610
THALLIUM	190.856	Axial	1.131963	0.001364256	0.004683056	0.004262527	-0.004852814
ALUMINUM	308.215	Radial	6.363050	0.006077298	0.002121851	-0.009244887	0.02535493
BORON	249.678	Radial	17.80932	0.08215456	0.08007468	0.08070653	0.08568247
CALCIUM	373.690	Radial	33116.68	56.10645	55.96757	56.23627	56.11551
COBALT	228.616	Axial	4.183982	0.0005091325	0.0004907982	0.0007001784	0.0003364209
COPPER	324.754	Axial	28.13030	0.00004822437	0.0001160539	-0.0001756489	0.0002042681
IRON	259.940	Radial	8.786439	0.01358433	0.01286829	0.01437554	0.01350917
LITHIUM	670.784	Radial	494.6249	0.05612913	0.05588884	0.05586200	0.05663656
MAGNESIUM	279.079	Radial	1290.870	20.45268	20.43582	20.37532	20.54690
MANGANESE	257.610	Axial	60.89258	0.0007340481	0.0007295491	0.0007467376	0.0007258577
MOLYBDENUM	202.030	Axial	3.789206	0.001512404	0.001977939	0.001848179	0.0007110948
PHOSPHORUS	177.495	Axial	0.3405527	0.01322928	0.01051590	0.02590988	0.003262064
POTASSIUM	766.490	Radial	2315.399	5.436360	5.442970	5.439262	5.426847
SILICON	251.611	Axial	50776.45	15.71080	15.71840	15.70188	15.71214
SODIUM	589.592	Radial	12133.34	13.22878	13.21384	13.23349	13.23900
STRONTIUM	421.552	Radial	37656.51	0.6189116	0.6166171	0.6209724	0.6191453
SULFUR	182.034	Axial	232.2981	3.803462	3.795652	3.798825	3.815909
TIN	189.989	Axial	-1.50272	0.0004327685	0.0003345871	-0.002979343	0.003943061
TITANIUM	334.941	Radial	39.81635	0.01391964	0.01487044	0.01279795	0.01409053
VANADIUM	292.402	Radial	7.039707	0.01269256	0.01385824	0.01241814	0.01180129
ZINC	206.200	Axial	22.33090	0.007236160	0.006841329	0.007241376	0.007625773
CERIUM	535.353	Radial	76.43761	-0.007318642	-0.01440257	-0.03377694	0.02622359
LANTHANUM	333.749	Radial	-2.25815	-0.007723925	-0.004415405	-0.01271707	-0.006039298

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568841-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:33 Sequence: 109

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10274.23	10266.78	10273.29	10282.62
YTTRIUM	360.073	Axial	390738.8	389841.2	390466.2	391909.2
YTTRIUM	360.073	Radial	11306.79	11311.26	11355.87	11253.24
INDIUM	230.606	Axial	3061.330	3053.893	3057.940	3072.156

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ANTIMONY	206.833	Axial	-0.2739427	0.002900834	0.008475682	-0.0003696416	0.0005964609
ARSENIC	189.042	Axial	-0.3487912	0.001467889	-0.002213489	0.006422848	0.0001943077
BARIUM	233.527	Axial	715.0890	0.1724357	0.1716080	0.1725144	0.1731847
BERYLLIUM	313.042	Radial	12.84758	-0.0001464687	-0.00002579607	-0.0002448156	-0.0001687944
CADMIUM	228.802	Axial	5.142270	0.0002605835	0.0004163114	0.0002195394	0.0001458998
CHROMIUM	267.716	Axial	9.835926	-0.0002585727	-0.0005793989	0.0001074668	-0.0003037859
LEAD	220.353	Axial	1.537879	0.0008430497	0.002870659	0.0007353273	-0.001076837
NICKEL	231.604	Axial	5.175816	-0.0003536303	-0.0006723342	-0.00009587152	-0.0002926851
SELENIUM	196.090	Axial	0.8806129	-0.0001456325	0.002062619	-0.0008432843	-0.001656232
SILVER	328.068	Axial	-27.1811	-0.0001700137	0.00004268494	-0.0004965301	-0.00005619610
THALLIUM	190.856	Axial	1.131963	0.001364256	0.004683056	0.004262527	-0.004852814
ALUMINUM	308.215	Radial	6.363050	0.006077298	0.002121851	-0.009244887	0.02535493
BORON	249.678	Radial	17.80932	0.08215456	0.08007468	0.08070653	0.08568247
CALCIUM	373.690	Radial	33116.68	56.10645	55.96757	56.23627	56.11551
COBALT	228.616	Axial	4.183982	0.0005091325	0.0004907982	0.0007001784	0.0003364209
COPPER	324.754	Axial	28.13030	0.00004822437	0.0001160539	-0.0001756489	0.0002042681
IRON	259.940	Radial	8.786439	0.01358433	0.01286829	0.01437554	0.01350917
LITHIUM	670.784	Radial	494.6249	0.05612913	0.05588884	0.05586200	0.05663656
MAGNESIUM	279.079	Radial	1290.870	20.45268	20.43582	20.37532	20.54690
MANGANESE	257.610	Axial	60.89258	0.0007340481	0.0007295491	0.0007467376	0.0007258577
MOLYBDENUM	202.030	Axial	3.789206	0.001512404	0.001977939	0.001848179	0.0007110948
PHOSPHORUS	177.495	Axial	0.3405527	0.01322928	0.01051590	0.02590988	0.003262064
POTASSIUM	766.490	Radial	2315.399	5.436360	5.442970	5.439262	5.426847
SILICON	251.611	Axial	50776.45	15.71080	15.71840	15.70188	15.71214
SODIUM	589.592	Radial	12133.34	13.22878	13.21384	13.23349	13.23900
STRONTIUM	421.552	Radial	37656.51	0.6189116	0.6166171	0.6209724	0.6191453
SULFUR	182.034	Axial	232.2981	3.803462	3.795652	3.798825	3.815909
TIN	189.989	Axial	-1.50272	0.0004327685	0.0003345871	-0.002979343	0.003943061
TITANIUM	334.941	Radial	39.81635	0.01391964	0.01487044	0.01279795	0.01409053
VANADIUM	292.402	Radial	7.039707	0.01269256	0.01385824	0.01241814	0.01180129
ZINC	206.200	Axial	22.33090	0.007236160	0.006841329	0.007241376	0.007625773
CERIUM	535.353	Radial	76.43761	-0.007318642	-0.01440257	-0.03377694	0.02622359
LANTHANUM	333.749	Radial	-2.25815	-0.007723925	-0.004415405	-0.01271707	-0.006039298

Rows shaded in gray for analytes that were not ordered.

Sample ID: SD DF: 5x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:36 Sequence: 110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10566.41	10566.00	10555.21	10578.01
YTTRIUM	360.073	Axial	398708.7	399534.3	398276.0	398315.7
YTTRIUM	360.073	Radial	11280.45	11249.96	11258.61	11332.78
INDIUM	230.606	Axial	3279.910	3276.690	3279.028	3284.012

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	5.672344	0.02687970	0.1284921	0.1449563	0.1297471
ALUMINUM	308.215	Radial	3.196119	-0.02951598	-0.2348501	-0.08941267	-0.1184769
ANTIMONY	206.833	Axial	-1.35445	-0.001316825	0.005257470	0.004170104	-0.02917996
ARSENIC	189.042	Axial	-0.6106648	-0.00007259522	-0.02872675	0.02168330	0.005954521
BARIUM	233.527	Axial	134.5175	0.03105260	0.1545419	0.1557816	0.1554655
BERYLLIUM	313.042	Radial	15.42952	-0.00001639939	-0.00007292140	0.0002215963	-0.0003946656
CADMIUM	228.802	Axial	4.185782	0.00006307524	0.002866883	-0.0009181440	-0.001002611
CALCIUM	317.933	Radial	10597.88	10.17587	50.84701	50.95090	50.84017
CHROMIUM	267.716	Axial	10.30846	-0.0002293162	0.0002732828	-0.003010143	-0.0007028842
COBALT	228.616	Axial	2.800549	0.0001149082	0.003311281	-0.0006770015	-0.0009106555
COPPER	324.754	Axial	17.17873	-0.0005692282	-0.003366805	-0.0006457079	-0.004525911
IRON	259.940	Radial	3.564289	0.003149090	0.01631430	0.02602292	0.004899126
LEAD	220.353	Axial	1.615410	0.0007978228	-0.003801508	0.007379146	0.008389703
LITHIUM	670.784	Radial	75.91187	0.009153796	0.05723486	0.04236861	0.03770346
MAGNESIUM	279.079	Radial	229.9201	3.68223	18.37917	18.58868	18.26561
MANGANESE	257.610	Axial	13.40896	0.0001788258	0.001281271	0.0007827802	0.0006183352
MOLYBDENUM	202.030	Axial	2.480409	0.0005820134	-0.001152782	0.006172010	0.003710972
NICKEL	231.604	Axial	4.181369	-0.0009623172	-0.006257937	-0.003054256	-0.005122564
PHOSPHORUS	177.495	Axial	0.3993132	0.01467593	0.07677856	-0.001353823	0.1447143
POTASSIUM	766.490	Radial	367.5650	0.9835644	4.882028	5.046106	4.825333
SELENIUM	196.090	Axial	0.4382986	-0.005530666	-0.09686079	0.03023285	-0.01633205
SILICON	251.611	Axial	9005.156	2.694182	13.44446	13.48621	13.48207
SILVER	328.068	Axial	-23.5771	0.00003658168	-0.001014138	-0.0004586411	0.002021504
SODIUM	589.592	Radial	2360.294	2.552322	12.89994	12.80228	12.58261
STRONTIUM	421.552	Radial	6578.058	0.1086725	0.5444606	0.5412644	0.5443625
SULFUR	182.034	Axial	40.82493	0.6498480	3.184973	3.226220	3.336528
THALLIUM	190.856	Axial	1.378751	0.002163834	0.02106020	0.009637554	0.001759739
TIN	189.989	Axial	-1.94073	-0.0005131426	0.01047889	-0.03029586	0.01211983
TITANIUM	334.941	Radial	6.891657	0.003283950	0.01752704	0.01809346	0.01363874
VANADIUM	292.402	Radial	1.486350	0.003933292	0.03493967	-0.007901450	0.03196118
ZINC	206.200	Axial	4.351430	0.0008804340	0.003227135	0.004969941	0.005009434
CERIUM	535.353	Radial	58.54264	-0.1007262	-0.2609182	-0.7277393	-0.5222358
LANTHANUM	333.749	Radial	-4.20143	-0.01168228	-0.05768347	-0.02806545	-0.08948533

Rows shaded in gray for analytes that were not ordered.

Sample ID: SD DF: 5x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:36 Sequence: 110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10566.41	10566.00	10555.21	10578.01
YTTRIUM	360.073	Axial	398708.7	399534.3	398276.0	398315.7
YTTRIUM	360.073	Radial	11280.45	11249.96	11258.61	11332.78
INDIUM	230.606	Axial	3279.910	3276.690	3279.028	3284.012

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	5.672344	0.02687970	0.1284921	0.1449563	0.1297471
ALUMINUM	308.215	Radial	3.196119	-0.02951598	-0.2348501	-0.08941267	-0.1184769
ANTIMONY	206.833	Axial	-1.35445	-0.001316825	0.005257470	0.004170104	-0.02917996
ARSENIC	189.042	Axial	-0.6106648	-0.00007259522	-0.02872675	0.02168330	0.005954521
BARIUM	233.527	Axial	134.5175	0.03105260	0.1545419	0.1557816	0.1554655
BERYLLIUM	313.042	Radial	15.42952	-0.00001639939	-0.00007292140	0.0002215963	-0.0003946656
CADMIUM	228.802	Axial	4.185782	0.00006307524	0.002866883	-0.0009181440	-0.001002611
CALCIUM	317.933	Radial	10597.88	10.17587	50.84701	50.95090	50.84017
CHROMIUM	267.716	Axial	10.30846	-0.0002293162	0.0002732828	-0.003010143	-0.0007028842
COBALT	228.616	Axial	2.800549	0.0001149082	0.003311281	-0.0006770015	-0.0009106555
COPPER	324.754	Axial	17.17873	-0.0005692282	-0.003366805	-0.0006457079	-0.004525911
IRON	259.940	Radial	3.564289	0.003149090	0.01631430	0.02602292	0.004899126
LEAD	220.353	Axial	1.615410	0.0007978228	-0.003801508	0.007379146	0.008389703
LITHIUM	670.784	Radial	75.91187	0.009153796	0.05723486	0.04236861	0.03770346
MAGNESIUM	279.079	Radial	229.9201	3.68223	18.37917	18.58868	18.26561
MANGANESE	257.610	Axial	13.40896	0.0001788258	0.001281271	0.0007827802	0.0006183352
MOLYBDENUM	202.030	Axial	2.480409	0.0005820134	-0.001152782	0.006172010	0.003710972
NICKEL	231.604	Axial	4.181369	-0.0009623172	-0.006257937	-0.003054256	-0.005122564
PHOSPHORUS	177.495	Axial	0.3993132	0.01467593	0.07677856	-0.001353823	0.1447143
POTASSIUM	766.490	Radial	367.5650	0.9835644	4.882028	5.046106	4.825333
SELENIUM	196.090	Axial	0.4382986	-0.005530666	-0.09686079	0.03023285	-0.01633205
SILICON	251.611	Axial	9005.156	2.694182	13.44446	13.48621	13.48207
SILVER	328.068	Axial	-23.5771	0.00003658168	-0.001014138	-0.0004586411	0.002021504
SODIUM	589.592	Radial	2360.294	2.552322	12.89994	12.80228	12.58261
STRONTIUM	421.552	Radial	6578.058	0.1086725	0.5444606	0.5412644	0.5443625
SULFUR	182.034	Axial	40.82493	0.6498480	3.184973	3.226220	3.336528
THALLIUM	190.856	Axial	1.378751	0.002163834	0.02106020	0.009637554	0.001759739
TIN	189.989	Axial	-1.94073	-0.0005131426	0.01047889	-0.03029586	0.01211983
TITANIUM	334.941	Radial	6.891657	0.003283950	0.01752704	0.01809346	0.01363874
VANADIUM	292.402	Radial	1.486350	0.003933292	0.03493967	-0.007901450	0.03196118
ZINC	206.200	Axial	4.351430	0.0008804340	0.003227135	0.004969941	0.005009434
CERIUM	535.353	Radial	58.54264	-0.1007262	-0.2609182	-0.7277393	-0.5222358
LANTHANUM	333.749	Radial	-4.20143	-0.01168228	-0.05768347	-0.02806545	-0.08948533

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:39 Sequence: 111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10249.23	10271.32	10246.57	10229.80
YTTRIUM	360.073	Axial	384652.5	384630.9	385920.9	383405.8
YTTRIUM	360.073	Radial	11425.06	11504.33	11343.72	11427.14
INDIUM	230.606	Axial	3024.781	3024.192	3031.803	3018.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	219.6803	0.9920798	0.9870287	0.9989306	0.9902802
ALUMINUM	308.215	Radial	736.0237	8.124320	8.083498	8.148260	8.141202
ANTIMONY	206.833	Axial	217.6636	0.8864070	0.8828781	0.8889809	0.8873619
ARSENIC	189.042	Axial	135.0905	0.8559808	0.8444201	0.8579917	0.8655307
BARIUM	233.527	Axial	4754.770	1.152744	1.151552	1.152973	1.153706
BERYLLIUM	313.042	Radial	19640.54	0.9645978	0.9576596	0.9677822	0.9683516
CADMIUM	228.802	Axial	5101.477	0.9410675	0.9407190	0.9418301	0.9406534
CALCIUM	373.690	Radial	37169.95	62.32623	61.90309	62.53080	62.54481
CHROMIUM	267.716	Axial	6442.660	1.009617	1.006733	1.008412	1.013705
COBALT	228.616	Axial	3282.383	0.8336307	0.8355282	0.8303020	0.8350617
COPPER	324.754	Axial	15336.87	0.8505667	0.8497497	0.8505702	0.8513803
IRON	259.940	Radial	4437.967	8.791617	8.740668	8.813610	8.820571
LEAD	220.353	Axial	636.8083	0.8662709	0.8681694	0.8620314	0.8686119
LITHIUM	670.784	Radial	8658.663	0.9624513	0.9557926	0.9637302	0.9678313
MAGNESIUM	279.079	Radial	1901.599	29.80039	29.64941	29.95072	29.80103
MANGANESE	257.610	Axial	71808.47	0.8352248	0.8337672	0.8356625	0.8362448
MOLYBDENUM	202.030	Axial	1324.753	0.8958049	0.8943243	0.8952585	0.8978318
NICKEL	231.604	Axial	1839.766	0.8877047	0.8878677	0.8878605	0.8873858
PHOSPHORUS	177.495	Axial	30.14623	0.9271428	0.9364848	0.9125264	0.9324171
POTASSIUM	766.490	Radial	5940.045	13.58589	13.47875	13.63134	13.64757
SELENIUM	196.090	Axial	77.02730	0.9047923	0.8882851	0.9218052	0.9042867
SILICON	251.611	Axial	54724.59	16.97520	16.93501	17.02184	16.96876
SILVER	328.068	Axial	3154.178	0.1634253	0.1637378	0.1628023	0.1637358
SODIUM	818.326	Radial	1314.500	21.25676	21.22369	21.31276	21.23383
STRONTIUM	421.552	Radial	91322.43	1.484934	1.474879	1.489849	1.490074
SULFUR	182.034	Axial	794.1815	13.03536	12.97162	13.09908	13.03539
THALLIUM	190.856	Axial	159.8964	0.8408629	0.8461843	0.8415924	0.8348119
TIN	189.989	Axial	281.0132	0.8808692	0.8821022	0.8787578	0.8817475
TITANIUM	334.941	Radial	3031.238	0.9705471	0.9650555	0.9741402	0.9724457
VANADIUM	292.402	Radial	577.4187	0.9031674	0.8933361	0.9110523	0.9051138
ZINC	206.200	Axial	2449.804	0.8617667	0.8600563	0.8647090	0.8605349
CERIUM	535.353	Radial	88.52535	0.05149786	-0.02195079	0.06290817	0.1135362
LANTHANUM	333.749	Radial	-3.13747	-0.009464282	-0.006890680	-0.01233480	-0.009167363

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:39 Sequence: 111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10249.23	10271.32	10246.57	10229.80
YTTRIUM	360.073	Axial	384652.5	384630.9	385920.9	383405.8
YTTRIUM	360.073	Radial	11425.06	11504.33	11343.72	11427.14
INDIUM	230.606	Axial	3024.781	3024.192	3031.803	3018.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	219.6803	0.9920798	0.9870287	0.9989306	0.9902802
ALUMINUM	308.215	Radial	736.0237	8.124320	8.083498	8.148260	8.141202
ANTIMONY	206.833	Axial	217.6636	0.8864070	0.8828781	0.8889809	0.8873619
ARSENIC	189.042	Axial	135.0905	0.8559808	0.8444201	0.8579917	0.8655307
BARIUM	233.527	Axial	4754.770	1.152744	1.151552	1.152973	1.153706
BERYLLIUM	313.042	Radial	19640.54	0.9645978	0.9576596	0.9677822	0.9683516
CADMIUM	228.802	Axial	5101.477	0.9410675	0.9407190	0.9418301	0.9406534
CALCIUM	373.690	Radial	37169.95	62.32623	61.90309	62.53080	62.54481
CHROMIUM	267.716	Axial	6442.660	1.009617	1.006733	1.008412	1.013705
COBALT	228.616	Axial	3282.383	0.8336307	0.8355282	0.8303020	0.8350617
COPPER	324.754	Axial	15336.87	0.8505667	0.8497497	0.8505702	0.8513803
IRON	259.940	Radial	4437.967	8.791617	8.740668	8.813610	8.820571
LEAD	220.353	Axial	636.8083	0.8662709	0.8681694	0.8620314	0.8686119
LITHIUM	670.784	Radial	8658.663	0.9624513	0.9557926	0.9637302	0.9678313
MAGNESIUM	279.079	Radial	1901.599	29.80039	29.64941	29.95072	29.80103
MANGANESE	257.610	Axial	71808.47	0.8352248	0.8337672	0.8356625	0.8362448
MOLYBDENUM	202.030	Axial	1324.753	0.8958049	0.8943243	0.8952585	0.8978318
NICKEL	231.604	Axial	1839.766	0.8877047	0.8878677	0.8878605	0.8873858
PHOSPHORUS	177.495	Axial	30.14623	0.9271428	0.9364848	0.9125264	0.9324171
POTASSIUM	766.490	Radial	5940.045	13.58589	13.47875	13.63134	13.64757
SELENIUM	196.090	Axial	77.02730	0.9047923	0.8882851	0.9218052	0.9042867
SILICON	251.611	Axial	54724.59	16.97520	16.93501	17.02184	16.96876
SILVER	328.068	Axial	3154.178	0.1634253	0.1637378	0.1628023	0.1637358
SODIUM	818.326	Radial	1314.500	21.25676	21.22369	21.31276	21.23383
STRONTIUM	421.552	Radial	91322.43	1.484934	1.474879	1.489849	1.490074
SULFUR	182.034	Axial	794.1815	13.03536	12.97162	13.09908	13.03539
THALLIUM	190.856	Axial	159.8964	0.8408629	0.8461843	0.8415924	0.8348119
TIN	189.989	Axial	281.0132	0.8808692	0.8821022	0.8787578	0.8817475
TITANIUM	334.941	Radial	3031.238	0.9705471	0.9650555	0.9741402	0.9724457
VANADIUM	292.402	Radial	577.4187	0.9031674	0.8933361	0.9110523	0.9051138
ZINC	206.200	Axial	2449.804	0.8617667	0.8600563	0.8647090	0.8605349
CERIUM	535.353	Radial	88.52535	0.05149786	-0.02195079	0.06290817	0.1135362
LANTHANUM	333.749	Radial	-3.13747	-0.009464282	-0.006890680	-0.01233480	-0.009167363

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:41 Sequence: 112

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10258.29	10266.46	10266.59	10241.81
YTTRIUM	360.073	Axial	384505.8	384508.5	385476.6	383532.2
YTTRIUM	360.073	Radial	11485.49	11588.07	11409.98	11458.43
INDIUM	230.606	Axial	3030.738	3035.207	3029.565	3027.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	217.8254	0.9785889	0.9584456	0.9788206	0.9985006
ALUMINUM	308.215	Radial	734.7780	8.067474	8.022493	8.075648	8.104282
ANTIMONY	206.833	Axial	222.2728	0.9042899	0.9050986	0.9078000	0.8999710
ARSENIC	189.042	Axial	136.2170	0.8623168	0.8560914	0.8657191	0.8651398
BARIUM	233.527	Axial	4746.240	1.149656	1.149264	1.150497	1.149208
BERYLLIUM	313.042	Radial	19732.33	0.9639990	0.9600431	0.9645218	0.9674322
CADMIUM	228.802	Axial	5086.338	0.9374444	0.9362810	0.9375205	0.9385315
CALCIUM	373.690	Radial	37190.89	62.03269	61.77899	62.08170	62.23739
CHROMIUM	267.716	Axial	6456.042	1.010820	1.012834	1.006685	1.012940
COBALT	228.616	Axial	3262.584	0.8269664	0.8259406	0.8271811	0.8277775
COPPER	324.754	Axial	15306.14	0.8491848	0.8508194	0.8476562	0.8490787
IRON	259.940	Radial	4426.340	8.722442	8.673390	8.728242	8.765695
LEAD	220.353	Axial	633.4141	0.8599495	0.8554215	0.8614380	0.8629892
LITHIUM	670.784	Radial	8676.168	0.9593139	0.9572456	0.9586043	0.9620916
MAGNESIUM	279.079	Radial	1916.460	29.87507	29.75290	29.98821	29.88410
MANGANESE	257.610	Axial	71466.84	0.8305159	0.8305427	0.8301997	0.8308052
MOLYBDENUM	202.030	Axial	1344.376	0.9082840	0.9076262	0.9084518	0.9087739
NICKEL	231.604	Axial	1831.510	0.8819662	0.8809492	0.8843795	0.8805699
PHOSPHORUS	177.495	Axial	29.93415	0.9198366	0.9011112	0.9354317	0.9229670
POTASSIUM	766.490	Radial	5956.697	13.55259	13.47967	13.57227	13.60584
SELENIUM	196.090	Axial	76.73789	0.9005368	0.9074558	0.8911702	0.9029845
SILICON	251.611	Axial	54986.80	17.04156	17.00701	17.01862	17.09906
SILVER	328.068	Axial	3142.786	0.1629013	0.1631089	0.1620375	0.1635576
SODIUM	818.326	Radial	1311.451	21.08475	20.99385	21.13369	21.12671
STRONTIUM	421.552	Radial	91537.60	1.480580	1.476750	1.478913	1.486077
SULFUR	182.034	Axial	792.3848	12.99432	12.95601	13.04655	12.98041
THALLIUM	190.856	Axial	157.6277	0.8272361	0.8253749	0.8232223	0.8331111
TIN	189.989	Axial	286.9759	0.8976950	0.8930694	0.9022087	0.8978070
TITANIUM	334.941	Radial	3089.566	0.9840125	0.9786583	0.9912821	0.9820972
VANADIUM	292.402	Radial	574.8207	0.8943686	0.8894420	0.8960001	0.8976637
ZINC	206.200	Axial	2440.848	0.8578559	0.8560885	0.8580032	0.8594759
CERIUM	535.353	Radial	73.97277	-0.02631551	-0.04537755	-0.006481809	-0.02708715
LANTHANUM	333.749	Radial	-0.08419050	-0.003343099	0.002113103	-0.005159710	-0.006982690

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:41 Sequence: 112

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10258.29	10266.46	10266.59	10241.81
YTTRIUM	360.073	Axial	384505.8	384508.5	385476.6	383532.2
YTTRIUM	360.073	Radial	11485.49	11588.07	11409.98	11458.43
INDIUM	230.606	Axial	3030.738	3035.207	3029.565	3027.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	217.8254	0.9785889	0.9584456	0.9788206	0.9985006
ALUMINUM	308.215	Radial	734.7780	8.067474	8.022493	8.075648	8.104282
ANTIMONY	206.833	Axial	222.2728	0.9042899	0.9050986	0.9078000	0.8999710
ARSENIC	189.042	Axial	136.2170	0.8623168	0.8560914	0.8657191	0.8651398
BARIUM	233.527	Axial	4746.240	1.149656	1.149264	1.150497	1.149208
BERYLLIUM	313.042	Radial	19732.33	0.9639990	0.9600431	0.9645218	0.9674322
CADMIUM	228.802	Axial	5086.338	0.9374444	0.9362810	0.9375205	0.9385315
CALCIUM	373.690	Radial	37190.89	62.03269	61.77899	62.08170	62.23739
CHROMIUM	267.716	Axial	6456.042	1.010820	1.012834	1.006685	1.012940
COBALT	228.616	Axial	3262.584	0.8269664	0.8259406	0.8271811	0.8277775
COPPER	324.754	Axial	15306.14	0.8491848	0.8508194	0.8476562	0.8490787
IRON	259.940	Radial	4426.340	8.722442	8.673390	8.728242	8.765695
LEAD	220.353	Axial	633.4141	0.8599495	0.8554215	0.8614380	0.8629892
LITHIUM	670.784	Radial	8676.168	0.9593139	0.9572456	0.9586043	0.9620916
MAGNESIUM	279.079	Radial	1916.460	29.87507	29.75290	29.98821	29.88410
MANGANESE	257.610	Axial	71466.84	0.8305159	0.8305427	0.8301997	0.8308052
MOLYBDENUM	202.030	Axial	1344.376	0.9082840	0.9076262	0.9084518	0.9087739
NICKEL	231.604	Axial	1831.510	0.8819662	0.8809492	0.8843795	0.8805699
PHOSPHORUS	177.495	Axial	29.93415	0.9198366	0.9011112	0.9354317	0.9229670
POTASSIUM	766.490	Radial	5956.697	13.55259	13.47967	13.57227	13.60584
SELENIUM	196.090	Axial	76.73789	0.9005368	0.9074558	0.8911702	0.9029845
SILICON	251.611	Axial	54986.80	17.04156	17.00701	17.01862	17.09906
SILVER	328.068	Axial	3142.786	0.1629013	0.1631089	0.1620375	0.1635576
SODIUM	818.326	Radial	1311.451	21.08475	20.99385	21.13369	21.12671
STRONTIUM	421.552	Radial	91537.60	1.480580	1.476750	1.478913	1.486077
SULFUR	182.034	Axial	792.3848	12.99432	12.95601	13.04655	12.98041
THALLIUM	190.856	Axial	157.6277	0.8272361	0.8253749	0.8232223	0.8331111
TIN	189.989	Axial	286.9759	0.8976950	0.8930694	0.9022087	0.8978070
TITANIUM	334.941	Radial	3089.566	0.9840125	0.9786583	0.9912821	0.9820972
VANADIUM	292.402	Radial	574.8207	0.8943686	0.8894420	0.8960001	0.8976637
ZINC	206.200	Axial	2440.848	0.8578559	0.8560885	0.8580032	0.8594759
CERIUM	535.353	Radial	73.97277	-0.02631551	-0.04537755	-0.006481809	-0.02708715
LANTHANUM	333.749	Radial	-0.08419050	-0.003343099	0.002113103	-0.005159710	-0.006982690

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1564959-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:58 Sequence: 113

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10095.53	10106.45	10101.93	10078.21
YTTRIUM	360.073	Axial	373710.4	373978.6	373422.4	373730.1
YTTRIUM	360.073	Radial	11310.76	11372.20	11273.18	11286.89
INDIUM	230.606	Axial	2941.084	2945.186	2942.609	2935.455

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
CADMIUM	228.802	Axial	66.81543	0.01183572	0.01181988	0.01186850	0.01181878
NICKEL	231.604	Axial	542.0133	0.2669975	0.2673222	0.2664119	0.2672584
SILVER	328.068	Axial	15.60476	0.002032066	0.002332758	0.001783518	0.001979923
ZINC	206.200	Axial	168.6925	0.05968136	0.05952379	0.05970764	0.05981264
ALUMINUM	308.215	Radial	15.46757	0.1083306	0.1058800	0.09876019	0.1203517
ANTIMONY	206.833	Axial	-1.40289	-0.001767392	0.001059328	-0.004680630	-0.001680874
ARSENIC	189.042	Axial	0.07386704	0.004133482	0.009173514	0.002146696	0.001080236
BARIUM	233.527	Axial	203.3014	0.04946718	0.05012360	0.04890698	0.04937097
BERYLLIUM	313.042	Radial	14.51122	-0.00006420460	-0.00006281157	-0.00009894414	-0.00003085808
BORON	249.678	Radial	37.81937	0.1732857	0.1803891	0.1666195	0.1728485
CALCIUM	373.690	Radial	24116.77	40.83735	40.78591	40.95364	40.77249
CERIUM	535.353	Radial	79.65955	0.009401375	-0.001066776	0.005724633	0.02354627
CHROMIUM	267.716	Axial	5587.405	0.8887035	0.8883948	0.8880178	0.8896980
COBALT	228.616	Axial	5.848229	0.0009867640	0.0007392362	0.001376341	0.0008447151
COPPER	324.754	Axial	2588.739	0.1465417	0.1449554	0.1475058	0.1471639
IRON	259.940	Radial	96.11530	0.1884008	0.1884906	0.1844810	0.1922306
LANTHANUM	333.749	Radial	-1.46956	-0.006134764	-0.005248923	-0.006537756	-0.006617612
LEAD	220.353	Axial	7.893078	0.009829422	0.008853738	0.008911714	0.01172282
LITHIUM	670.784	Radial	668.6484	0.07563335	0.07610341	0.07517154	0.07562511
MAGNESIUM	279.079	Radial	1222.897	19.37118	19.17844	19.45592	19.47919
MANGANESE	257.610	Axial	3215.667	0.03799791	0.03799688	0.03808356	0.03791329
MOLYBDENUM	202.030	Axial	10.35086	0.006067376	0.006270944	0.005587099	0.006344083
PHOSPHORUS	177.495	Axial	29.25099	0.9133506	0.9404416	0.8836189	0.9159911
POTASSIUM	766.490	Radial	1971.648	4.648629	4.642496	4.635168	4.668222
SELENIUM	196.090	Axial	0.6826606	-0.002353116	-0.0006054152	-0.0004249010	-0.006029031
SILICON	251.611	Axial	13086.64	4.107398	4.103206	4.110610	4.108376
SODIUM	818.326	Radial	11650.40	202.1950	202.0973	202.2311	202.2566
STRONTIUM	421.552	Radial	31520.82	0.5179513	0.5166701	0.5191243	0.5180597
SULFUR	182.034	Axial	3332.683	55.53431	55.47945	55.48290	55.64058
THALLIUM	190.856	Axial	0.6041556	-0.001278732	0.0001468450	0.001172269	-0.005155309
TIN	189.989	Axial	-2.31415	-0.002349100	-0.003987177	-0.003460226	0.0004001026
TITANIUM	334.941	Radial	30.76850	0.01099223	0.01037813	0.01179814	0.01080041
VANADIUM	292.402	Radial	-4.02945	-0.004761720	-0.006370245	-0.0007382378	-0.007176678

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1565291-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 13:01 Sequence: 114

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10130.44	10124.60	10147.24	10119.49
YTTRIUM	360.073	Axial	370350.1	370423.0	370471.6	370155.6
YTTRIUM	360.073	Radial	11195.43	11179.30	11213.81	11193.17
INDIUM	230.606	Axial	2899.150	2890.974	2907.420	2899.058

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BARIUM	233.527	Axial	1275.839	0.3125057	0.3124293	0.3118997	0.3131881
CALCIUM	317.933	Radial	3748.162	3.520580	3.518761	3.513847	3.529131
MAGNESIUM	279.079	Radial	58.87296	0.9778742	0.9889248	0.9554962	0.9892015
POTASSIUM	766.490	Radial	237.9602	0.6905701	0.6705483	0.6636712	0.7374908
SODIUM	818.326	Radial	18081.17	317.8834	317.0349	318.2610	318.3543
ALUMINUM	308.215	Radial	10.43753	0.05299586	0.05891094	0.06736676	0.03270988
ANTIMONY	206.833	Axial	-0.6134175	0.001492266	0.003111008	-0.0003206409	0.001686432
ARSENIC	189.042	Axial	-0.8888320	-0.002009719	-0.005208979	-0.001742037	0.0009218580
BERYLLIUM	313.042	Radial	13.53482	-0.0001057703	-0.0002037436	-0.0001241644	0.00001059696
BORON	249.678	Radial	24.47787	0.1136587	0.1131154	0.1098258	0.1180350
CADMIUM	228.802	Axial	2.634914	-0.0001942664	-0.0002758053	-0.0002584974	-0.00004849651
CERIUM	535.353	Radial	50.00306	-0.1437338	-0.1199858	-0.1287885	-0.1824271
CHROMIUM	267.716	Axial	10.48204	-0.0001339131	0.00006056729	-0.0003026048	-0.0001597018
COBALT	228.616	Axial	5.561092	0.0009329612	0.0007662408	0.0005850566	0.001447586
COPPER	324.754	Axial	94.21528	0.003946307	0.004134394	0.003705366	0.003999161
IRON	259.940	Radial	1504.397	3.038665	3.044098	3.033197	3.038698
LANTHANUM	333.749	Radial	-4.81421	-0.01300738	-0.008280181	-0.02461021	-0.006131731
LEAD	220.353	Axial	3.050338	0.003102463	0.001867547	0.004151547	0.003288296
LITHIUM	670.784	Radial	230.6819	0.02675789	0.02565651	0.02844116	0.02617600
MANGANESE	257.610	Axial	3365.545	0.03963084	0.03966934	0.03955128	0.03967189
MOLYBDENUM	202.030	Axial	2.019845	0.0003364236	0.0003081601	0.0004177768	0.0002833340
NICKEL	231.604	Axial	15.10778	0.004800886	0.004664985	0.004733355	0.005004317
PHOSPHORUS	177.495	Axial	4.597032	0.1454123	0.1432602	0.1501554	0.1428212
SELENIUM	196.090	Axial	0.8213630	-0.0007184331	-0.003636903	0.008242397	-0.006760794
SILICON	251.611	Axial	13963.05	4.368521	4.368021	4.360925	4.376618
SILVER	328.068	Axial	-22.3903	0.00001009219	0.00005203775	0.0002161495	-0.0002379106
STRONTIUM	421.552	Radial	15498.77	0.2574839	0.2570105	0.2575683	0.2578728
SULFUR	182.034	Axial	19.79141	0.3285481	0.3336008	0.3215206	0.3305229
THALLIUM	190.856	Axial	0.9663552	0.0007743938	-0.000005321730	-0.004125017	0.006453521
TIN	189.989	Axial	-1.28342	0.0008920285	0.001479573	0.001898875	-0.0007023624
TITANIUM	334.941	Radial	1.870886	0.001661287	0.001758032	0.001104366	0.002121462
VANADIUM	292.402	Radial	1.194630	0.003489990	0.004999253	0.006045920	-0.0005752040
ZINC	206.200	Axial	56.52147	0.01952469	0.01943683	0.01925993	0.01987731

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV-3 Units: mg/l
Analyzed: 12/21/22 13:10 Sequence: 117 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10150.09	10148.27	10139.58	10162.41
YTTRIUM	360.073	Axial	373404.5	372620.1	374018.4	373575.0
YTTRIUM	360.073	Radial	11077.65	11106.50	11079.42	11047.02
INDIUM	230.606	Axial	3028.221	3027.483	3029.529	3027.653

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	772.5611	8.800375	8.783624	8.767793	8.849709
ANTIMONY	206.833	Axial	114.6465	0.4733177	0.4763016	0.4719086	0.4717429
ARSENIC	189.042	Axial	147.4248	0.9428702	0.9460880	0.9410772	0.9414453
BARIUM	233.527	Axial	2200.664	0.5384205	0.5391079	0.5383893	0.5377643
BERYLLIUM	313.042	Radial	4242.511	0.2142798	0.2146013	0.2141520	0.2140861
BORON	249.678	Radial	215.4950	1.003654	1.006957	1.004124	0.9998814
CADMIUM	228.802	Axial	2767.599	0.5152143	0.5143792	0.5159399	0.5153238
CALCIUM	373.690	Radial	26940.90	46.58329	46.47753	46.57378	46.69856
CHROMIUM	267.716	Axial	7373.150	1.166994	1.165195	1.170559	1.165229
COBALT	228.616	Axial	3521.941	0.8934903	0.8936689	0.8922580	0.8945440
COPPER	324.754	Axial	15995.15	0.9139063	0.9146867	0.9139675	0.9130647
IRON	259.940	Radial	4746.571	9.698075	9.706444	9.691463	9.696319
LEAD	220.353	Axial	339.6745	0.4609681	0.4601921	0.4578155	0.4648966
LITHIUM	670.784	Radial	8489.739	0.9732415	0.9754455	0.9727775	0.9715017
MAGNESIUM	279.079	Radial	625.7645	10.13876	10.06686	10.10248	10.24695
MANGANESE	257.610	Axial	79993.73	0.9395127	0.9363919	0.9418057	0.9403406
MOLYBDENUM	202.030	Axial	362.6785	0.2468818	0.2473269	0.2456782	0.2476402
NICKEL	231.604	Axial	2007.693	0.9678857	0.9697524	0.9658272	0.9680775
PHOSPHORUS	177.495	Axial	32.63504	1.013240	0.9985736	1.032257	1.008890
POTASSIUM	766.490	Radial	19574.45	45.83503	45.69880	45.99621	45.81007
SELENIUM	196.090	Axial	81.77699	0.9707179	0.9689934	0.9756006	0.9675598
SILICON	251.611	Axial	35374.70	11.07382	11.25819	10.94591	11.01736
SILVER	328.068	Axial	9277.986	0.4927417	0.4914708	0.4927220	0.4940325
SODIUM	818.326	Radial	2796.512	48.42654	48.26027	48.36934	48.65000
STRONTIUM	421.552	Radial	58018.37	0.9730870	0.9751314	0.9724688	0.9716610
SULFUR	182.034	Axial	307.6019	5.098068	5.083826	5.100654	5.109724
THALLIUM	190.856	Axial	162.0059	0.8510496	0.8600836	0.8433669	0.8496982
TIN	189.989	Axial	150.6473	0.4740371	0.4740039	0.4744079	0.4736995
TITANIUM	334.941	Radial	3283.319	1.084082	1.082514	1.086628	1.083104
VANADIUM	292.402	Radial	598.2507	0.9649485	0.9674464	0.9575675	0.9698314
ZINC	206.200	Axial	2717.047	0.9651804	0.9660989	0.9626812	0.9667612
CERIUM	535.353	Radial	71.08273	-0.02772746	-0.04816886	-0.09289590	0.05788238
LANTHANUM	333.749	Radial	0.04245768	-0.003041168	-0.01528039	-0.003927269	0.01008415

Sample ID: CCB-3 Units: mg/l
Analyzed: 12/21/22 13:13 Sequence: 118

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10824.38	10825.79	10829.07	10818.29
YTTRIUM	360.073	Axial	404441.9	405518.5	404472.7	403334.6
YTTRIUM	360.073	Radial	11371.04	11347.96	11382.57	11382.59
INDIUM	230.606	Axial	3400.358	3401.270	3403.896	3395.909

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	8.620903	0.03086471	0.03320027	0.06569740	-0.006303554
ANTIMONY	206.833	Axial	0.4852759	0.005869794	0.006462081	0.004741528	0.006405772
ARSENIC	189.042	Axial	0.2236711	0.004998391	0.005860125	0.008284844	0.0008502044
BARIUM	233.527	Axial	2.880527	0.00006432606	0.0001641627	0.0002845474	-0.0002557320
BERYLLIUM	313.042	Radial	13.83208	-0.0001014757	-0.00003289416	-0.0002008845	-0.00007064848
BORON	249.678	Radial	1.553801	0.008009330	0.01494770	0.005297210	0.003783076
CADMIUM	228.802	Axial	4.333961	0.00007112540	-0.00002909121	0.00005528560	0.0001871818
CALCIUM	317.933	Radial	153.2983	-0.01578262	-0.01586227	-0.01639142	-0.01509417
CERIUM	535.353	Radial	45.85762	-0.1695369	-0.2073409	-0.1745146	-0.1267552
CHROMIUM	267.716	Axial	10.76389	-0.0001987164	-0.00003393838	-0.0007773763	0.0002151656
COBALT	228.616	Axial	2.679525	0.00006404019	-0.0003633655	0.0003238123	0.0002316737
COPPER	324.754	Axial	22.56349	-0.0002981385	0.000008340669	-0.0006132980	-0.0002894583
IRON	259.940	Radial	2.580364	0.001125606	-0.001269812	0.003032771	0.001613859
LANTHANUM	333.749	Radial	1.804950	0.0004959268	0.006859801	0.002304607	-0.007676627
LEAD	220.353	Axial	1.192471	0.0002140478	0.0003277620	0.0003798452	-0.00006546375
LITHIUM	670.784	Radial	-7.41878	-0.0002199647	-0.001261985	0.0008413119	-0.0002392214
MAGNESIUM	279.079	Radial	-0.9430306	0.02271032	0.03424924	0.02313259	0.01074914
MANGANESE	257.610	Axial	12.3750	0.0001638364	0.0001316859	0.0001376171	0.0002222062
MOLYBDENUM	202.030	Axial	1.663738	0.00001948343	0.0002961716	-0.00003702124	-0.0002007001
NICKEL	231.604	Axial	4.884370	-0.0007257722	-0.001062851	-0.0004033732	-0.0007110920
PHOSPHORUS	177.495	Axial	0.09613719	0.005604064	-0.006845586	0.006246267	0.01741151
POTASSIUM	766.490	Radial	-48.3127	0.03106290	0.04532185	0.03502940	0.01283745
SELENIUM	196.090	Axial	1.617068	0.007609522	0.002304328	0.01155331	0.008970932
SILICON	251.611	Axial	2748.349	0.7898527	0.9161382	0.7710525	0.6823675
SILVER	328.068	Axial	-24.3611	0.00001436192	0.0002386212	-0.0001857242	-0.000009811161
SODIUM	589.592	Radial	99.87841	0.07482177	0.07685906	0.07457944	0.07302680
STRONTIUM	421.552	Radial	-10.6900	0.0001950640	0.0002177494	0.0003220688	0.00004537380
SULFUR	182.034	Axial	1.652810	0.02556863	0.02865765	0.03109498	0.01695325
THALLIUM	190.856	Axial	0.5801731	-0.001833450	-0.001589453	0.0002346121	-0.004145509
TIN	189.989	Axial	-1.14976	0.001877660	0.001838962	0.002514178	0.001279841
TITANIUM	334.941	Radial	-2.40088	0.0002788523	0.0003800182	-0.00003293391	0.0004894727
VANADIUM	292.402	Radial	1.598736	0.004095899	0.004509609	0.0008911919	0.006886895
ZINC	206.200	Axial	2.266211	0.0001501265	-0.0001101983	-0.00004323171	0.0006038094

Sample ID: L1568818-01 DF: 1x bench / 9x total Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 13:15 Sequence: 119

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10332.39	10353.75	10341.29	10302.12
YTTRIUM	360.073	Axial	386178.2	385686.1	386607.8	386240.7
YTTRIUM	360.073	Radial	11427.38	11446.33	11432.75	11403.05
INDIUM	230.606	Axial	3101.194	3104.772	3102.349	3096.461

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	-0.4077713	0.001106926	0.004740628	-0.00004825179	-0.001371597
BARIUM	233.527	Axial	2850.909	0.6853684	0.6849898	0.6849290	0.6861863
CADMIUM	228.802	Axial	2.955859	-0.0001451814	-0.0004000289	0.0001868493	-0.0002223646
CHROMIUM	267.716	Axial	6527.762	1.014721	1.015411	1.016254	1.012499
LEAD	220.353	Axial	11.65939	0.01426101	0.01422215	0.01420093	0.01435995
SELENIUM	196.090	Axial	2.123693	0.01444428	0.01595877	0.01548819	0.01188587
SILVER	328.068	Axial	-6.45126	0.0008753296	0.0004031206	0.001272206	0.0009506619
ALUMINUM	308.215	Radial	424.5889	4.657890	4.681938	4.633794	4.657937
ANTIMONY	206.833	Axial	4.332460	0.02142916	0.02108428	0.02177125	0.02143193
BERYLLIUM	313.042	Radial	13.06404	-0.0001425769	-0.0001200325	-0.0002667834	-0.00004091474
BORON	249.678	Radial	460.1197	2.076384	2.067336	2.085009	2.076807
CALCIUM	317.933	Radial	13262.96	12.60976	12.56565	12.61670	12.64694
CERIUM	535.353	Radial	61.60172	-0.08883091	-0.09147788	-0.05353002	-0.1214848
COBALT	228.616	Axial	66.74652	0.01600314	0.01555990	0.01632113	0.01612839
COPPER	324.754	Axial	10890.38	0.6011464	0.6013843	0.6004511	0.6016037
IRON	259.940	Radial	3554.337	7.038818	7.023468	7.023503	7.069483
LANTHANUM	333.749	Radial	2.786540	0.002449112	0.003772200	-0.007666535	0.01124167
LITHIUM	670.784	Radial	136.6762	0.01578658	0.01658236	0.01664971	0.01412768
MAGNESIUM	279.079	Radial	394.1472	6.205178	6.218326	6.123676	6.273533
MANGANESE	257.610	Axial	12331.51	0.1422993	0.1423762	0.1423888	0.1421327
MOLYBDENUM	202.030	Axial	716.8309	0.4803376	0.4794435	0.4814546	0.4801146
NICKEL	231.604	Axial	943.0657	0.4424107	0.4431197	0.4429030	0.4412093
PHOSPHORUS	177.495	Axial	109.7021	3.339377	3.345341	3.350845	3.321947
POTASSIUM	766.490	Radial	21414.49	48.60054	48.47615	48.58912	48.73636
SILICON	251.611	Axial	16447.62	5.048077	5.057977	5.044218	5.042038
SODIUM	818.326	Radial	3067.445	51.58683	51.56421	51.67532	51.52095
STRONTIUM	421.552	Radial	6772.171	0.1104359	0.1098844	0.1104132	0.1110101
SULFUR	182.034	Axial	1727.696	28.12953	28.14486	28.05579	28.18794
THALLIUM	190.856	Axial	0.08607292	-0.004114803	-0.008785560	-0.0003206921	-0.003238156
TIN	189.989	Axial	16.49697	0.05521363	0.05533916	0.05410137	0.05620036
TITANIUM	334.941	Radial	784.0115	0.2517497	0.2502686	0.2526388	0.2523418
VANADIUM	292.402	Radial	62.25139	0.09876030	0.09815653	0.1021819	0.09594242
ZINC	206.200	Axial	4182.781	1.459951	1.459771	1.460737	1.459345

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568889-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 13:18 Sequence: 120

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8356.768	8372.509	8353.422	8344.373
YTTRIUM	360.073	Axial	307447.3	307711.1	307838.8	306792.0
YTTRIUM	360.073	Radial	10346.91	10414.56	10325.97	10300.21
INDIUM	230.606	Axial	2260.674	2262.732	2259.285	2260.006

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	-0.2904212	0.001410564	0.005737335	0.003708469	-0.005214112
BARIUM	233.527	Axial	798.7712	0.2370345	0.2361212	0.2378081	0.2371741
CADMIUM	228.802	Axial	8.945049	0.001338869	0.001352847	0.001059363	0.001604397
CHROMIUM	267.716	Axial	1458.941	0.2791053	0.2760333	0.2794941	0.2817887
LEAD	220.353	Axial	15.48816	0.02699894	0.02835879	0.02714840	0.02548964
SELENIUM	196.090	Axial	1.634788	0.01324362	0.01212835	0.008703995	0.01889852
SILVER	328.068	Axial	-24.4523	-0.0003673480	0.00009024593	-0.0006519947	-0.0005402951
ALUMINUM	308.215	Radial	427.9350	5.192520	5.106436	5.247410	5.223714
ANTIMONY	206.833	Axial	-0.9617689	-0.0007714827	-0.003852112	-0.001238418	0.002776082
BERYLLIUM	313.042	Radial	24.83931	0.0005637586	0.0005044708	0.0004688008	0.0007180043
BORON	249.678	Radial	2833.020	14.11426	14.04629	14.11247	14.18401
CALCIUM	373.690	Radial	140322.9	259.8932	258.7964	260.2519	260.6312
CERIUM	535.353	Radial	179.8650	0.6239886	0.5897560	0.6631175	0.6190923
COBALT	228.616	Axial	94.57332	0.03161640	0.03133727	0.03163354	0.03187839
COPPER	324.754	Axial	342.6255	0.02232519	0.02190357	0.02237895	0.02269306
IRON	271.441	Radial	641.8859	27.51786	27.62009	27.55364	27.37984
LANTHANUM	333.749	Radial	5.167941	0.008307671	0.007737145	0.008753464	0.008432403
LITHIUM	670.784	Radial	2229.512	0.2740763	0.2740558	0.2720978	0.2760752
MAGNESIUM	279.079	Radial	3330.686	57.59869	57.50100	57.61635	57.67870
MANGANESE	257.610	Axial	66263.83	0.9452687	0.9434891	0.9461583	0.9461585
MOLYBDENUM	202.030	Axial	12.95905	0.009713076	0.009642352	0.009727382	0.009769495
NICKEL	231.604	Axial	797.4629	0.5136526	0.5122023	0.5138534	0.5149019
PHOSPHORUS	177.495	Axial	1496.884	56.29399	55.97919	56.59033	56.31246
POTASSIUM	766.490	Radial	106131.9	265.3922	264.4578	265.7674	265.9513
SILICON	251.611	Axial	58581.22	22.29232	22.22456	22.32385	22.32855
SODIUM	818.326	Radial	119977.1	2291.561	2282.736	2293.113	2298.832
STRONTIUM	421.552	Radial	51727.76	0.9288837	0.9258087	0.9282556	0.9325870
SULFUR	182.034	Axial	31457.37	633.2589	632.2040	633.8334	633.7394
THALLIUM	190.856	Axial	0.5705068	-0.0005265739	0.004678937	-0.001050380	-0.005208279
TIN	189.989	Axial	-0.6887289	0.002195820	-0.0006686658	0.01131064	-0.004054514
TITANIUM	334.941	Radial	211.6158	0.07578446	0.07541749	0.07608469	0.07585119
VANADIUM	292.402	Radial	22.10295	0.03971057	0.03332213	0.04727750	0.03853209
ZINC	206.200	Axial	6059.665	2.615563	2.605560	2.625606	2.615521

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569097-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 13:21 Sequence: 121

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10361.77	10353.72	10368.59	10363.00
YTTRIUM	360.073	Axial	390147.3	390412.4	391383.4	388646.2
YTTRIUM	360.073	Radial	11460.49	11444.19	11490.38	11446.90
INDIUM	230.606	Axial	3112.972	3108.397	3111.272	3119.248

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	7.837584	0.03620159	0.03058552	0.04181091	0.03620834
ALUMINUM	308.215	Radial	6.738388	0.009203666	0.005520204	0.02835217	-0.006261378
ANTIMONY	206.833	Axial	-0.8015798	0.0007926225	0.0009162046	0.0005149303	0.0009467328
ARSENIC	189.042	Axial	-0.4155522	0.001069207	0.001516303	0.007319800	-0.005628481
BARIUM	233.527	Axial	130.8693	0.03080234	0.03091732	0.03103981	0.03044989
BERYLLIUM	313.042	Radial	12.45189	-0.0001745699	-0.0002111474	-0.0001261003	-0.0001864620
CADMIUM	228.802	Axial	4.357751	0.0001094096	0.0003475625	-0.0003087542	0.0002894206
CALCIUM	373.690	Radial	67279.19	112.4836	112.0961	112.4191	112.9358
CERIUM	535.353	Radial	106.2919	0.1420052	0.1687078	0.1463584	0.1109492
CHROMIUM	267.716	Axial	27.32923	0.002444859	0.002191607	0.001998596	0.003144375
COBALT	228.616	Axial	6.165085	0.0009807193	0.0008485790	0.001243253	0.0008503259
COPPER	324.754	Axial	29.25159	0.0001111213	-0.00009918743	0.0006780851	-0.0002455339
IRON	259.940	Radial	1271.029	2.507211	2.495131	2.509391	2.517111
LANTHANUM	333.749	Radial	1.151608	-0.0008456862	-0.0006483028	-0.001657507	-0.0002312483
LEAD	220.353	Axial	0.8141597	-0.0001528885	0.0001188389	-0.0002551403	-0.0003223641
LITHIUM	670.784	Radial	47.36938	0.005857394	0.006398632	0.003792007	0.007381544
MAGNESIUM	279.079	Radial	576.2174	9.028168	9.050182	8.976317	9.058004
MANGANESE	257.610	Axial	239271.7	2.752742	2.754714	2.754127	2.749384
MOLYBDENUM	202.030	Axial	2.178170	0.0004114924	-0.00009479726	0.0003272413	0.001002033
NICKEL	231.604	Axial	7.020100	0.0004730518	0.0004075537	0.0006605179	0.0003510838
PHOSPHORUS	177.495	Axial	1.126959	0.03700040	0.06300511	0.01985599	0.02814011
POTASSIUM	766.490	Radial	563.1776	1.411684	1.429232	1.399724	1.406095
SELENIUM	196.090	Axial	1.237866	0.003961911	-0.001010309	0.01071107	0.002184969
SILICON	251.611	Axial	15260.74	4.669177	4.684947	4.657949	4.664637
SILVER	328.068	Axial	-21.8078	0.00009987164	-0.0001456003	0.0004762096	-0.00003099429
SODIUM	589.592	Radial	4170.562	4.463829	4.509293	4.453557	4.428636
STRONTIUM	421.552	Radial	11347.11	0.1842572	0.1834134	0.1842517	0.1851064
SULFUR	182.034	Axial	65.75127	1.067389	1.093004	1.069465	1.039697
THALLIUM	190.856	Axial	1.256202	0.001892851	0.001869237	0.001344460	0.002464856
TIN	189.989	Axial	-3.89094	-0.006716486	-0.004764059	-0.008521807	-0.006863593
TITANIUM	334.941	Radial	63.13455	0.02118141	0.02165375	0.02015853	0.02173195
VANADIUM	292.402	Radial	-1.85026	-0.001295928	-0.005118082	0.001200135	0.00003016348
ZINC	206.200	Axial	49.66199	0.01668673	0.01708666	0.01667505	0.01629848

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 13:24 Sequence: 122 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10110.75	10089.61	10123.26	10119.37
YTTRIUM	360.073	Axial	375873.2	376053.7	375840.6	375725.3
YTTRIUM	360.073	Radial	11075.78	11029.73	11098.62	11098.99
INDIUM	230.606	Axial	3000.237	2998.025	2999.773	3002.913

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	794.5930	9.054674	9.046732	9.055901	9.061388
ANTIMONY	206.833	Axial	116.4013	0.4823604	0.4872742	0.4761542	0.4836530
ARSENIC	189.042	Axial	150.6231	0.9669816	0.9676449	0.9566579	0.9766419
BARIUM	233.527	Axial	2170.616	0.5331296	0.5334493	0.5325659	0.5333737
BERYLLIUM	313.042	Radial	4174.047	0.2108468	0.2115241	0.2112150	0.2098012
BORON	249.678	Radial	213.8856	0.9963113	0.9824931	1.013474	0.9929670
CADMIUM	228.802	Axial	2748.575	0.5136620	0.5140948	0.5130086	0.5138824
CALCIUM	373.690	Radial	27445.15	47.46372	47.56236	47.45467	47.37413
CHROMIUM	267.716	Axial	7093.204	1.126993	1.129898	1.126347	1.124735
COBALT	228.616	Axial	3638.819	0.9317739	0.9303263	0.9310618	0.9339336
COPPER	324.754	Axial	16426.71	0.9324292	0.9318802	0.9332450	0.9321623
IRON	259.940	Radial	4782.355	9.772877	9.771636	9.783098	9.763896
LEAD	220.353	Axial	341.5906	0.4679103	0.4690209	0.4664986	0.4682113
LITHIUM	670.784	Radial	8568.723	0.9824583	0.9817654	0.9858195	0.9797899
MAGNESIUM	279.079	Radial	617.6859	10.00972	9.934200	10.02098	10.07399
MANGANESE	257.610	Axial	80909.53	0.9539661	0.9543711	0.9530274	0.9544997
MOLYBDENUM	202.030	Axial	369.6209	0.2526117	0.2528893	0.2532189	0.2517268
NICKEL	231.604	Axial	2009.026	0.9775890	0.9746532	0.9791856	0.9789281
PHOSPHORUS	177.495	Axial	32.70736	1.019418	1.022606	1.000189	1.035458
POTASSIUM	766.490	Radial	20037.29	46.92342	46.99038	47.02617	46.75369
SELENIUM	196.090	Axial	82.92289	0.9883421	0.9927953	0.9857272	0.9865038
SILICON	251.611	Axial	8398.464	2.625443	2.620684	2.623955	2.631691
SILVER	328.068	Axial	9244.174	0.4877350	0.4874338	0.4873846	0.4883866
SODIUM	818.326	Radial	2858.067	49.53392	49.65955	49.53704	49.40516
STRONTIUM	421.552	Radial	58769.86	0.9858630	0.9893171	0.9870663	0.9812056
SULFUR	182.034	Axial	307.5474	5.117005	5.119552	5.118641	5.112822
THALLIUM	190.856	Axial	167.2823	0.8871540	0.8893407	0.8818702	0.8902510
TIN	189.989	Axial	151.2835	0.4804103	0.4818544	0.4773215	0.4820549
TITANIUM	334.941	Radial	3249.805	1.073206	1.072346	1.075348	1.071925
VANADIUM	292.402	Radial	609.0849	0.9825600	0.9837210	0.9839740	0.9799852
ZINC	206.200	Axial	2734.254	0.9750788	0.9739817	0.9747284	0.9765264
CERIUM	535.353	Radial	86.36002	0.05414741	0.02488080	0.1113044	0.02625703
LANTHANUM	333.749	Radial	-0.7080418	-0.004615722	-0.003325037	-0.01003818	-0.0004839464

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 13:27 Sequence: 123

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10762.46	10769.82	10759.36	10758.20
YTTRIUM	360.073	Axial	406936.5	407030.2	404881.3	408898.0
YTTRIUM	360.073	Radial	11373.52	11367.91	11384.67	11367.97
INDIUM	230.606	Axial	3363.268	3367.027	3362.288	3360.489

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.549867	0.007677587	-0.01692044	0.03818508	0.001768121
ANTIMONY	206.833	Axial	-0.1993821	0.003237072	0.003203646	0.003361996	0.003145575
ARSENIC	189.042	Axial	-0.6791790	-0.0004176437	0.0006986470	0.001001194	-0.002952772
BARIUM	233.527	Axial	2.344978	-0.00005551127	0.00003316593	-0.0001175455	-0.00008215421
BERYLLIUM	313.042	Radial	11.59225	-0.0002122359	-0.0004696866	-0.0003121723	0.0001451511
BORON	249.678	Radial	2.899727	0.01409876	0.01399264	0.01755162	0.01075202
CADMIUM	228.802	Axial	3.094070	-0.0001424695	-0.0002817758	-0.00009887287	-0.00004675991
CALCIUM	317.933	Radial	165.1502	-0.004346067	-0.004358577	-0.004284616	-0.004395008
CERIUM	535.353	Radial	66.61206	-0.06110208	-0.03784090	-0.07133686	-0.07412850
CHROMIUM	267.716	Axial	12.16667	0.00002017040	-0.0003360116	0.0002822765	0.0001142464
COBALT	228.616	Axial	3.409243	0.0002376103	0.00001210960	0.0003385146	0.0003622067
COPPER	324.754	Axial	20.46230	-0.0004150797	-0.0005950563	-0.0001938251	-0.0004563578
IRON	259.940	Radial	3.979129	0.003913293	0.003126005	0.0005454167	0.008068455
LANTHANUM	333.749	Radial	-2.17916	-0.007544272	-0.005085424	-0.01347355	-0.004073838
LEAD	220.353	Axial	1.933347	0.001137454	0.002096160	-0.00006236747	0.001378570
LITHIUM	670.784	Radial	0.3946240	0.0006531338	0.001339299	0.0006648142	-0.00004471167
MAGNESIUM	279.079	Radial	0.8187637	0.05041555	0.08274388	0.02052118	0.04798160
MANGANESE	257.610	Axial	15.68056	0.0002012064	0.0002336900	0.0001854178	0.0001845115
MOLYBDENUM	202.030	Axial	1.856618	0.0001500933	-0.00006722189	0.0001985892	0.0003189125
NICKEL	231.604	Axial	3.883609	-0.001138097	-0.001303558	-0.0009243878	-0.001186345
PHOSPHORUS	177.495	Axial	0.2934461	0.01138089	0.004753662	0.01966918	0.009719837
POTASSIUM	766.490	Radial	-43.5304	0.04190004	0.01592199	0.1352428	-0.02546465
SELENIUM	196.090	Axial	0.7076031	-0.002579334	0.001548823	-0.008826821	-0.0004600031
SILICON	251.611	Axial	346.8055	0.08434519	0.08938277	0.08396511	0.07968771
SILVER	328.068	Axial	-23.0416	0.00008647265	0.0003353685	0.0001068050	-0.0001827556
SODIUM	589.592	Radial	160.7400	0.1409477	0.1566701	0.1073187	0.1588542
STRONTIUM	421.552	Radial	-7.61116	0.0002452768	-0.00005710676	0.0004056509	0.0003872862
SULFUR	182.034	Axial	2.071309	0.03225976	0.03421424	0.03337984	0.02918519
THALLIUM	190.856	Axial	0.9423897	-0.00007843913	-0.0008191253	-0.001606860	0.002190667
TIN	189.989	Axial	-1.21325	0.001665400	0.001180974	0.001393348	0.002421878
TITANIUM	334.941	Radial	-3.16224	0.00003355370	-0.001012098	0.001571345	-0.0004585853
VANADIUM	292.402	Radial	-0.4175662	0.0009322357	-0.001899002	0.001587473	0.003108236
ZINC	206.200	Axial	1.394709	-0.0001378955	0.0001086014	-0.00009169959	-0.0004305882

Sample ID: CCVLL-3 Units: mg/l
Analyzed: 12/21/22 13:52 Sequence: 132 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10802.33	10807.37	10806.21	10793.41
YTTRIUM	360.073	Axial	400864.1	400312.2	401980.2	400299.8
YTTRIUM	360.073	Radial	11284.66	11284.55	11277.38	11292.03
INDIUM	230.606	Axial	3401.118	3405.894	3404.125	3393.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	20.99373	0.1709790	0.1697285	0.1584367	0.1847718
ANTIMONY	206.833	Axial	1.336779	0.009147656	0.01171818	0.008629305	0.007095486
ARSENIC	189.042	Axial	0.8726293	0.008884161	0.01489368	0.009839319	0.001919485
BARIUM	233.527	Axial	26.78314	0.005566838	0.005645946	0.005478989	0.005575578
BERYLLIUM	313.042	Radial	53.99151	0.001902164	0.001847553	0.001998313	0.001860624
BORON	249.678	Radial	43.39584	0.1991745	0.1928967	0.1980791	0.2065476
CADMIUM	228.802	Axial	16.65972	0.002231624	0.001908633	0.002334664	0.002451575
CALCIUM	317.933	Radial	1203.703	1.009820	1.006120	1.015168	1.008171
CHROMIUM	267.716	Axial	88.76389	0.01142228	0.01173672	0.01131630	0.01121384
COBALT	228.616	Axial	39.73535	0.008438512	0.008799822	0.008522888	0.007992826
COPPER	324.754	Axial	169.9345	0.007569244	0.008019041	0.007393860	0.007294831
IRON	259.940	Radial	50.09058	0.09649778	0.09417777	0.09751536	0.09780019
LEAD	220.353	Axial	4.376892	0.004074546	0.002499381	0.003414429	0.006309829
LITHIUM	670.784	Radial	125.6939	0.01474512	0.01588271	0.01398655	0.01436611
MAGNESIUM	279.079	Radial	67.74853	1.111054	1.088781	1.103472	1.140908
MANGANESE	257.610	Axial	865.4028	0.009577558	0.009616921	0.009540272	0.009575479
MOLYBDENUM	202.030	Axial	8.589082	0.004469848	0.005039110	0.004399388	0.003971045
NICKEL	231.604	Axial	25.94746	0.008341399	0.008365604	0.008139635	0.008518959
PHOSPHORUS	177.495	Axial	3.248726	0.09732067	0.1020080	0.09481485	0.09513914
POTASSIUM	766.490	Radial	369.2404	0.9870420	0.9443802	0.9885609	1.028185
SELENIUM	196.090	Axial	1.533278	0.006699433	0.01109737	0.008409606	0.0005913258
SILICON	251.611	Axial	779.7782	0.2115339	0.2112707	0.2106626	0.2126683
SILVER	328.068	Axial	76.63889	0.004988469	0.004902192	0.004841744	0.005221472
SODIUM	589.592	Radial	1116.213	1.188741	1.199819	1.167861	1.198543
STRONTIUM	421.552	Radial	577.6500	0.009876679	0.009962796	0.009761126	0.009906115
SULFUR	182.034	Axial	62.85348	0.9787183	0.9752418	0.9785803	0.9823327
THALLIUM	190.856	Axial	3.097032	0.01000455	0.01004389	0.008213046	0.01175672
TIN	189.989	Axial	15.40293	0.04775842	0.04853887	0.04688588	0.04785051
TITANIUM	334.941	Radial	159.5386	0.05270970	0.05107950	0.05259692	0.05445269
VANADIUM	292.402	Radial	10.22049	0.01774577	0.01927444	0.02213623	0.01182664
ZINC	206.200	Axial	142.8220	0.04709614	0.04730052	0.04680832	0.04717956
CERIUM	535.353	Radial	45.49269	-0.1695804	-0.1501455	-0.1672238	-0.1913720
LANTHANUM	333.749	Radial	-3.14538	-0.009547174	-0.007130914	-0.01354750	-0.007963103

Sample ID: ICSA-3 Units: mg/l
Analyzed: 12/21/22 14:03 Sequence: 133 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9276.824	9296.785	9271.558	9262.128
YTTRIUM	360.073	Axial	342552.3	342966.5	342789.4	341901.1
YTTRIUM	360.073	Radial	10697.43	10696.47	10733.68	10662.15
INDIUM	230.606	Axial	2607.206	2613.925	2602.492	2605.200

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37663.73	447.5229	447.0356	447.3215	448.2117
ANTIMONY	206.833	Axial	-5.31340	-0.01979124	-0.02022894	-0.01843217	-0.02071261
ARSENIC	189.042	Axial	-1.54100	-0.007079457	-0.005192888	-0.009727370	-0.006318115
BARIUM	233.527	Axial	12.15690	0.002661461	0.002038695	0.002906043	0.003039647
BERYLLIUM	313.042	Radial	12.39512	-0.0001338899	-0.0001832419	-0.0001437261	-0.00007470166
BORON	249.678	Radial	-1.84670	-0.007934736	-0.01771088	-0.005242736	-0.0008505897
CADMIUM	228.802	Axial	3.642242	0.00005664602	-0.0002554183	0.0004576603	-0.00003230390
CALCIUM	373.690	Radial	267280.2	478.8285	478.5593	478.2688	479.6575
CERIUM	535.353	Radial	261.8847	1.045592	1.035804	1.094223	1.006749
CHROMIUM	267.716	Axial	23.15401	0.002217701	0.001663963	0.002210794	0.002778345
COBALT	228.616	Axial	7.830242	0.001767247	0.001635414	0.002277135	0.001389191
COPPER	324.754	Axial	-119.924	-0.008971547	-0.009170178	-0.008603947	-0.009140517
IRON	271.441	Radial	4171.329	173.0997	172.6670	173.5450	173.0870
LANTHANUM	333.749	Radial	0.5540769	-0.001953075	-0.0008288905	-0.007247484	0.002217150
LEAD	220.353	Axial	-16.8018	-0.02778499	-0.02746027	-0.02669434	-0.02920035
LITHIUM	670.784	Radial	32.01757	0.004407643	0.004014744	0.004579247	0.004628938
MAGNESIUM	279.079	Radial	31287.73	523.0361	523.2198	521.8985	523.9902
MANGANESE	257.610	Axial	513.1714	0.006621792	0.006639310	0.006603669	0.006622396
MOLYBDENUM	202.030	Axial	5.976621	0.003423849	0.003095289	0.002990261	0.004185996
NICKEL	231.604	Axial	19.05163	0.007869465	0.008256880	0.007406335	0.007945180
PHOSPHORUS	177.495	Axial	0.3500455	0.01467631	0.009063864	0.01183994	0.02312512
POTASSIUM	766.490	Radial	-92.4560	-0.08248467	-0.07420836	-0.1288643	-0.04438138
SELENIUM	196.090	Axial	2.029560	0.01604919	0.02557574	0.01507801	0.007493810
SILICON	251.611	Axial	28.71797	-0.008355635	-0.009972461	-0.006523409	-0.008571036
SILVER	328.068	Axial	-74.5766	-0.003100588	-0.003338233	-0.002911564	-0.003051966
SODIUM	589.592	Radial	108.4598	0.09157770	0.08366428	0.09179554	0.09927329
STRONTIUM	421.552	Radial	203.4043	0.003901342	0.003846767	0.003806599	0.004050661
SULFUR	182.034	Axial	0.3882419	0.006926354	0.006913990	0.001293816	0.01257126
THALLIUM	190.856	Axial	0.9993686	0.001566821	0.002351072	-0.004646517	0.006995909
TIN	189.989	Axial	-4.47569	-0.01111817	-0.01130724	-0.01431431	-0.007732951
TITANIUM	334.941	Radial	121.0891	0.04241494	0.04118284	0.04179529	0.04426669
VANADIUM	292.402	Radial	4.302990	0.008762570	0.01163818	0.007495446	0.007154083
ZINC	206.200	Axial	12.76006	0.004357425	0.004232186	0.004228071	0.004612019

Sample ID: ICSAB-3 Units: mg/l
Analyzed: 12/21/22 14:05 Sequence: 134 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9155.693	9149.438	9164.897	9152.744
YTTRIUM	360.073	Axial	338093.3	338163.8	338560.8	337555.2
YTTRIUM	360.073	Radial	10601.30	10596.71	10613.17	10594.03
INDIUM	230.606	Axial	2571.322	2575.722	2569.801	2568.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37523.07	449.8942	450.8349	449.1920	449.6557
ANTIMONY	206.833	Axial	101.4739	0.4645102	0.4608766	0.4622518	0.4704023
ARSENIC	189.042	Axial	67.16458	0.4780252	0.4876300	0.4800482	0.4663975
BARIUM	233.527	Axial	1981.388	0.5374223	0.5389974	0.5352400	0.5380296
BERYLLIUM	313.042	Radial	10063.33	0.5322755	0.5329997	0.5329599	0.5308668
BORON	249.678	Radial	204.2231	0.9939120	0.9929296	0.9897753	0.9990311
CADMIUM	228.802	Axial	5287.262	1.091943	1.094125	1.088326	1.093379
CALCIUM	373.690	Radial	266198.0	481.2127	481.4492	481.1748	481.0141
CERIUM	535.353	Radial	255.1038	1.020877	0.9928683	1.013741	1.056023
CHROMIUM	267.716	Axial	3235.069	0.5667219	0.5669010	0.5655617	0.5677030
COBALT	228.616	Axial	1464.191	0.4371816	0.4376759	0.4359124	0.4379564
COPPER	324.754	Axial	7298.984	0.4598552	0.4589225	0.4602982	0.4603449
IRON	271.441	Radial	4157.242	174.0803	173.9187	173.7985	174.5237
LANTHANUM	333.749	Radial	-0.2365696	-0.003666620	-0.002431812	0.0008921332	-0.009460182
LEAD	220.353	Axial	555.7726	0.8893959	0.8857120	0.8861951	0.8962807
LITHIUM	670.784	Radial	28.21712	0.003988314	0.004288918	0.001901752	0.005774272
MAGNESIUM	279.079	Radial	31135.87	525.2149	525.2165	524.9706	525.4574
MANGANESE	257.610	Axial	35474.83	0.4619115	0.4621372	0.4618311	0.4617661
MOLYBDENUM	202.030	Axial	630.5717	0.4768336	0.4775483	0.4768913	0.4760611
NICKEL	231.604	Axial	1684.938	0.9565932	0.9552988	0.9565766	0.9579041
PHOSPHORUS	177.495	Axial	0.1507135	0.007984275	0.04119441	0.01499940	-0.03224099
POTASSIUM	766.490	Radial	-83.2377	-0.06213313	-0.07437981	-0.03879248	-0.07322712
SELENIUM	196.090	Axial	40.58444	0.5293053	0.5283215	0.5375147	0.5220797
SILICON	251.611	Axial	3007.245	1.027153	1.030610	1.024382	1.026466
SILVER	328.068	Axial	18774.77	1.099756	1.100417	1.100109	1.098740
SODIUM	589.592	Radial	114.2049	0.09939959	0.1014564	0.1057010	0.09104137
STRONTIUM	421.552	Radial	200.5215	0.003882632	0.003943181	0.003807403	0.003897312
SULFUR	182.034	Axial	0.2218464	0.003972924	0.03233820	-0.01704021	-0.003379213
THALLIUM	190.856	Axial	68.70401	0.4227679	0.4177931	0.4250730	0.4254377
TIN	189.989	Axial	125.8420	0.4664242	0.4703996	0.4656292	0.4632437
TITANIUM	334.941	Radial	1657.018	0.5721901	0.5691766	0.5752236	0.5721702
VANADIUM	292.402	Radial	285.3191	0.4816739	0.4749000	0.4904246	0.4796971
ZINC	206.200	Axial	2272.537	0.8949121	0.8952125	0.8941969	0.8953268

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 14:31 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10503.19	10496.31	10494.06	10519.21
YTTRIUM	360.073	Axial	397957.5	396206.7	399610.0	398055.8
YTTRIUM	360.073	Radial	11016.78	11009.57	10993.18	11047.60
INDIUM	230.606	Axial	3284.679	3279.898	3280.803	3293.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	3.253482	3.058846	3.787316	2.914284
ANTIMONY	206.833	Axial	-0.1308332	-0.4936050	0.4934350	-0.3923295
ARSENIC	189.042	Axial	-0.7641114	-0.2815156	-1.040978	-0.9698402
BARIUM	233.527	Axial	1.767289	2.960417	1.753802	0.5876483
BERYLLIUM	313.042	Radial	13.03607	12.84870	13.61855	12.64097
BORON	249.678	Radial	-0.8181666	-1.415016	-0.4991681	-0.5403159
CADMIUM	228.802	Axial	3.903785	3.991413	4.829200	2.890741
CALCIUM	317.933	Radial	149.2761	151.0321	145.9235	150.8728
CALCIUM	373.690	Radial	12.00572	10.19644	12.31281	13.50790
CERIUM	535.353	Radial	58.42292	50.23306	67.92845	57.10723
CHROMIUM	267.716	Axial	8.597222	12.41667	10	3.375
COBALT	228.616	Axial	3.027367	3.010059	2.712429	3.359614
COPPER	324.754	Axial	19.80556	13.67262	24.57738	21.16667
IRON	259.940	Radial	0.9282788	0.1248543	-0.04159734	2.701579
IRON	271.441	Radial	0.2218733	0.5410355	-0.1247920	0.2493766
LANTHANUM	333.749	Radial	-2.35563	-0.4161811	-0.8319468	-5.818786
LEAD	220.353	Axial	1.251235	1.017245	1.049498	1.686961
LITHIUM	670.784	Radial	-10.4063	0.9155985	-7.945092	-24.18953
MAGNESIUM	279.079	Radial	-2.09284	-0.7075079	-1.955075	-3.615960
MANGANESE	257.610	Axial	-7.43055	-5.625	-14.50	-2.166667
MOLYBDENUM	202.030	Axial	1.190667	1.130946	1.587302	0.8537532
NICKEL	231.604	Axial	3.478787	4.102450	2.553003	3.780907
PHOSPHORUS	177.495	Axial	0.2033607	-0.03326311	0.2331002	0.4102450
POTASSIUM	766.490	Radial	-49.4397	-49.23423	-49.37604	-49.70906
SELENIUM	196.090	Axial	0.8554665	1.212256	1.302401	0.05174262
SILICON	251.611	Axial	42.58137	40.33251	39.69597	47.71563
SILVER	328.068	Axial	-17.5138	-15.83333	-24.54167	-12.16667
SODIUM	589.592	Radial	41.38286	34.95921	44.80033	44.38903
SODIUM	818.326	Radial	80.92742	88.31363	75.74875	78.71987
STRONTIUM	421.552	Radial	-14.2073	-4.203429	-17.67887	-20.73982
SULFUR	182.034	Axial	-0.09211856	-0.7317884	0.7548008	-0.2993680
THALLIUM	190.856	Axial	0.03272781	-0.4330527	0.2547660	0.2764701
TIN	189.989	Axial	-1.88920	-1.995787	-1.609502	-2.062313
TITANIUM	334.941	Radial	-3.28754	-5.577462	-4.243440	-0.04173546
VANADIUM	292.402	Radial	0.7957928	3.551412	-0.3327787	-0.8312552
ZINC	206.200	Axial	1.220386	1.363788	1.998002	0.2993680

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 14:33 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10530.28	10535.92	10531.14	10523.80
YTTRIUM	360.073	Axial	399617.7	399760.0	400318.0	398775.2
YTTRIUM	360.073	Radial	11064.99	11004.86	11089.22	11100.88
INDIUM	230.606	Axial	3273.004	3276.827	3271.501	3270.684

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	23.53925	21.73084	25.58567	23.30123
ANTIMONY	206.833	Axial	1.727388	1.626064	1.813141	1.742958
ARSENIC	189.042	Axial	0.7456394	0.4147275	1.497001	0.3251900
BARIUM	233.527	Axial	24.31324	25.02495	24.34232	23.57246
BERYLLIUM	313.042	Radial	53.14791	51.42253	56.21573	51.80547
BORON	249.678	Radial	42.86954	43.20113	42.74892	42.65857
CADMIUM	228.802	Axial	15.07137	13.82920	14.39411	16.99081
CALCIUM	317.933	Radial	1186.478	1179.678	1192.932	1186.824
CHROMIUM	267.716	Axial	78.47222	71.08333	87.91667	76.41667
COBALT	228.616	Axial	42.04847	43.33588	40.98142	41.82811
COPPER	324.754	Axial	179.9107	182.2560	173.4464	184.0298
IRON	259.940	Radial	49.68294	47.49208	51.36530	50.19144
LEAD	220.353	Axial	4.564814	4.670603	3.173158	5.850680
LITHIUM	670.784	Radial	121.6109	111.5647	130.7443	122.5237
MAGNESIUM	279.079	Radial	61.66128	64.61423	60.18981	60.17979
MANGANESE	257.610	Axial	877.3194	877.2500	880.5417	874.1667
MOLYBDENUM	202.030	Axial	9.006711	8.958865	9.457209	8.604058
NICKEL	231.604	Axial	25.74049	25.83435	26.05173	25.33540
PHOSPHORUS	177.495	Axial	4.067407	3.281960	5.183705	3.736556
POTASSIUM	766.490	Radial	357.5284	361.3564	350.6077	360.6209
SELENIUM	196.090	Axial	1.715626	1.877518	1.968402	1.300957
SILICON	251.611	Axial	692.7421	690.0725	692.3208	695.8329
SILVER	328.068	Axial	71.59722	75.8750	73.16667	65.750
SODIUM	589.592	Radial	1005.926	1005.124	1010.365	1002.289
STRONTIUM	421.552	Radial	585.8524	593.6927	583.9993	579.8652
SULFUR	182.034	Axial	60.08397	60.91584	59.20746	60.12862
THALLIUM	190.856	Axial	3.344690	2.980906	3.517531	3.535633
TIN	189.989	Axial	14.93700	15.50061	15.05162	14.25879
TITANIUM	334.941	Radial	152.1297	158.1783	151.8853	146.3254
VANADIUM	292.402	Radial	13.72888	9.720602	16.48352	14.98252
ZINC	206.200	Axial	144.1193	145.4152	143.5120	143.4305

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 14:36 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10701.80	10719.34	10702.51	10683.55
YTTRIUM	360.073	Axial	404918.7	406578.5	404980.0	403197.5
YTTRIUM	360.073	Radial	11358.98	11335.05	11351.66	11390.22
INDIUM	230.606	Axial	3281.124	3280.862	3281.029	3281.482

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	120.0354	120.6866	120.3846	119.0349
ARSENIC	189.042	Axial	77.20960	76.93726	76.62703	78.06451
BERYLLIUM	313.042	Radial	10201.89	10166.26	10209.53	10229.88
BORON	249.678	Radial	108.0162	109.8434	105.2149	108.9904
CADMIUM	228.802	Axial	2839.962	2844.074	2839.982	2835.831
CHROMIUM	267.716	Axial	3601.708	3604.219	3606.164	3594.742
COBALT	228.616	Axial	1945.321	1949.942	1947.890	1938.129
COPPER	324.754	Axial	8513.160	8530.841	8551.070	8457.569
IRON	259.940	Radial	245.8801	245.7528	247.7091	244.1783
LEAD	220.353	Axial	379.5778	380.3611	380.0159	378.3564
LITHIUM	670.784	Radial	4473.781	4446.411	4480.173	4494.760
MANGANESE	257.610	Axial	43761.98	43789.19	43855.58	43641.18
MOLYBDENUM	202.030	Axial	760.6092	760.7813	759.1581	761.8884
NICKEL	231.604	Axial	1073.272	1075.363	1076.119	1068.335
PHOSPHORUS	177.495	Axial	18.73691	18.75486	18.98256	18.47332
SELENIUM	196.090	Axial	43.25555	43.85751	43.25225	42.65690
SILICON	251.611	Axial	1932.962	1891.228	1931.433	1976.224
SILVER	328.068	Axial	9777.548	9794.309	9778.452	9759.885
STRONTIUM	421.552	Radial	30282.96	30104.93	30307.61	30436.34
SULFUR	182.034	Axial	31.06137	31.35057	30.55648	31.27704
THALLIUM	190.856	Axial	95.47459	94.59373	96.25575	95.57429
TIN	189.989	Axial	163.8619	164.3103	163.3233	163.9521
TITANIUM	334.941	Radial	1569.461	1563.648	1561.836	1582.900
VANADIUM	292.402	Radial	303.7332	303.9640	303.3989	303.8368
ZINC	206.200	Axial	1429.001	1430.263	1429.679	1427.061

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 14:39 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10679.22	10688.13	10676.06	10673.46
YTTRIUM	360.073	Axial	401609.2	400314.2	403040.5	401472.8
YTTRIUM	360.073	Radial	11320.64	11327.84	11350.69	11283.37
INDIUM	230.606	Axial	3255.393	3256.609	3254.080	3255.490

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	247.9981	249.1661	248.3639	246.4643
ARSENIC	189.042	Axial	156.8622	155.9440	157.8375	156.8052
BARIUM	233.527	Axial	4561.411	4574.831	4554.302	4555.102
BERYLLIUM	313.042	Radial	20563.63	20615.99	20608.26	20466.64
BORON	249.678	Radial	215.4733	216.4254	216.7139	213.2806
CADMIUM	228.802	Axial	5699.369	5712.180	5699.743	5686.184
CALCIUM	317.933	Radial	1206.492	1215.885	1204.841	1198.751
CHROMIUM	267.716	Axial	7203.724	7214.054	7187.188	7209.930
COBALT	228.616	Axial	3913.938	3917.516	3913.641	3910.657
COPPER	324.754	Axial	17352.51	17307.80	17377.48	17372.26
IRON	259.940	Radial	494.8370	497.0877	494.2093	493.2140
LEAD	220.353	Axial	758.6413	757.7791	759.1485	758.9963
LITHIUM	670.784	Radial	8985.800	8972.957	9019.122	8965.321
MANGANESE	257.610	Axial	87488.95	87413.82	87496.21	87556.81
MOLYBDENUM	202.030	Axial	1517.678	1516.561	1516.365	1520.107
NICKEL	231.604	Axial	2156.690	2157.958	2156.811	2155.301
PHOSPHORUS	177.495	Axial	36.89525	36.63223	37.82614	36.22738
SELENIUM	196.090	Axial	85.79292	85.92691	85.39284	86.05899
SILICON	251.611	Axial	4209.994	4116.636	4183.574	4329.771
SILVER	328.068	Axial	19775.41	19747.00	19781.53	19797.69
STRONTIUM	421.552	Radial	60873.56	60888.92	61040.95	60690.80
SULFUR	182.034	Axial	61.87595	62.53471	62.57355	60.51960
THALLIUM	190.856	Axial	193.9241	193.5520	193.8324	194.3880
TIN	189.989	Axial	331.2879	332.6780	331.0536	330.1321
TITANIUM	334.941	Radial	3161.453	3172.580	3163.313	3148.465
VANADIUM	292.402	Radial	612.1566	614.4117	614.8420	607.2162
ZINC	206.200	Axial	2873.521	2879.474	2873.976	2867.114

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 14:41 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10715.82	10740.75	10710.28	10696.42
YTTRIUM	360.073	Axial	403034.8	401816.0	403618.5	403669.8
YTTRIUM	360.073	Radial	11447.12	11475.13	11386.78	11479.44
INDIUM	230.606	Axial	3230.895	3232.527	3233.370	3226.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	508.9282	508.1056	511.1887	507.4904
ARSENIC	189.042	Axial	322.2148	321.7645	321.0301	323.8496
BARIUM	233.527	Axial	9071.404	9089.665	9072.561	9051.987
BERYLLIUM	313.042	Radial	41593.19	41600.89	41493.53	41685.16
BORON	249.678	Radial	438.9480	434.6199	439.1825	443.0417
CADMIUM	228.802	Axial	11507.31	11517.38	11495.34	11509.21
CALCIUM	317.933	Radial	2272.827	2271.960	2270.522	2276.000
CHROMIUM	267.716	Axial	14242.15	14235.59	14261.39	14229.46
COBALT	228.616	Axial	7805.862	7811.963	7800.531	7805.091
COPPER	324.754	Axial	35247.27	35330.01	35063.62	35348.18
IRON	259.940	Radial	991.5577	993.8030	987.7866	993.0833
LEAD	220.353	Axial	1523.284	1526.106	1521.726	1522.019
LITHIUM	670.784	Radial	18041.07	18053.78	17981.26	18088.17
MANGANESE	257.610	Axial	173886.1	174445.7	173522.3	173690.2
MOLYBDENUM	202.030	Axial	2999.139	2993.872	3007.007	2996.537
NICKEL	231.604	Axial	4325.309	4327.909	4324.867	4323.152
PHOSPHORUS	177.495	Axial	77.06161	76.62078	77.80488	76.75916
POTASSIUM	766.490	Radial	806.7247	801.0314	813.5178	805.6250
SELENIUM	196.090	Axial	176.9240	177.0056	176.3636	177.4029
SILICON	251.611	Axial	9335.096	9026.144	9314.080	9665.064
SILVER	328.068	Axial	40452.63	40543.30	40255.03	40559.54
SODIUM	589.592	Radial	2038.609	2045.375	2030.409	2040.042
STRONTIUM	421.552	Radial	122043.3	122154.4	121506.3	122469.3
SULFUR	182.034	Axial	129.7728	129.3739	130.1109	129.8335
THALLIUM	190.856	Axial	395.8420	395.1647	397.0476	395.3139
TIN	189.989	Axial	667.8072	667.7287	670.5543	665.1387
TITANIUM	334.941	Radial	6363.152	6356.076	6344.568	6388.814
VANADIUM	292.402	Radial	1232.760	1229.912	1229.257	1239.111
ZINC	206.200	Axial	5818.618	5853.575	5806.397	5795.882

Sample ID: ICV-3 Units: mg/l
Analyzed: 12/21/22 14:53 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10349.53	10353.22	10348.39	10352.16	10344.36
YTTRIUM	360.073	Axial	387418.2	388987.2	384500.5	388150.3	388034.8
YTTRIUM	360.073	Radial	11171.93	11208.20	11161.51	11170.58	11147.45
INDIUM	230.606	Axial	3118.912	3118.144	3122.125	3118.997	3116.380

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	818.0538	10.04094	10.05998	10.06960	9.931645	10.10255
ANTIMONY	206.833	Axial	241.6689	0.9902821	0.9906454	0.9864836	0.9880589	0.9959405
ARSENIC	189.042	Axial	149.4332	0.9681751	0.9662084	0.9632244	0.9735310	0.9697365
BARIUM	233.527	Axial	4500.582	1.047312	1.048688	1.047021	1.046132	1.047409
BERYLLIUM	313.042	Radial	20854.56	1.027861	1.026253	1.030101	1.028379	1.026709
BORON	249.678	Radial	214.6281	1.004830	1.002049	0.9927647	1.024956	0.9995508
CADMIUM	228.802	Axial	5610.401	1.011103	1.012744	1.012600	1.006747	1.012321
CALCIUM	317.933	Radial	10381.01	10.23275	10.22378	10.22210	10.25622	10.22892
CHROMIUM	267.716	Axial	7191.508	1.041623	1.044409	1.040539	1.039314	1.042231
COBALT	228.616	Axial	3723.694	0.9898308	0.9850751	0.9903817	0.9921843	0.9916822
COPPER	324.754	Axial	16624.04	0.9849524	0.9834250	0.9901918	0.9844633	0.9817296
IRON	259.940	Radial	4856.202	10.14949	10.11650	10.15891	10.15483	10.16770
LEAD	220.353	Axial	719.8606	0.9815228	0.9777320	0.9848485	0.9810995	0.9824112
LITHIUM	670.784	Radial	8770.742	0.9952958	0.9950802	0.9962927	0.9946450	0.9951655
MAGNESIUM	279.079	Radial	643.3647	10.31888	10.34438	10.36025	10.29332	10.27756
MANGANESE	257.610	Axial	83839.05	0.9962297	0.9966187	0.9948241	0.9974371	0.9960388
MOLYBDENUM	202.030	Axial	1520.670	1.045829	1.044731	1.047160	1.047031	1.044396
NICKEL	231.604	Axial	2059.813	0.9891041	0.9894069	0.9887540	0.9884509	0.9898045
PHOSPHORUS	177.495	Axial	37.93501	1.026551	1.015222	1.012302	1.045111	1.033570
POTASSIUM	766.490	Radial	4109.589	9.887158	9.911371	9.881488	9.862976	9.892798
SELENIUM	196.090	Axial	84.87409	0.9961585	0.9921295	1.001209	0.9947073	0.9965887
SILICON	251.611	Axial	4213.705	1.274297	1.232303	1.251611	1.291868	1.321404
SILVER	328.068	Axial	19122.66	0.9891762	0.9863352	0.9965848	0.9893093	0.9844755
SODIUM	589.592	Radial	10056.43	10.45004	10.44844	10.47496	10.44188	10.43489
STRONTIUM	421.552	Radial	24166.66	0.4052879	0.4047554	0.4064901	0.4051216	0.4047844
SULFUR	182.034	Axial	604.5083	9.065183	9.096603	9.056785	9.048672	9.058671
THALLIUM	190.856	Axial	180.2207	0.9504427	0.9444422	0.9559980	0.9533800	0.9479507
TIN	189.989	Axial	319.9309	0.9989253	1.005193	0.9984466	0.9915226	1.000539
TITANIUM	334.941	Radial	3228.776	1.039492	1.038399	1.042019	1.040746	1.036806
VANADIUM	292.402	Radial	611.1509	1.015000	1.017954	1.022983	1.010109	1.008954
ZINC	206.200	Axial	2793.595	0.9965368	0.9960135	0.9986594	0.9949646	0.9965098
CERIUM	535.353	Radial	61.27135	0.009896187	0.06590564	0.006431634	-0.05750401	0.02475148
LANTHANUM	333.749	Radial	0.9881530	0.006500007	0.003553876	0.01029175	0.007560697	0.004593701

Sample ID: ICB-3 Units: mg/l
Analyzed: 12/21/22 14:56 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10476.33	10480.42	10492.23	10456.35
YTTRIUM	360.073	Axial	394709.5	394965.2	392999.7	396163.7
YTTRIUM	360.073	Radial	11041.21	11028.91	11084.56	11010.15
INDIUM	230.606	Axial	3300.094	3297.877	3304.207	3298.198

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.725106	0.04314425	0.04457396	0.06409380	0.02076498
ANTIMONY	206.833	Axial	0.4641204	0.002403026	0.005949270	0.001612712	-0.0003529026
ARSENIC	189.042	Axial	-0.6010776	0.001026444	0.0007489865	-0.00003879433	0.002369141
BARIUM	233.527	Axial	1.896933	0.00003064311	-0.0001659956	0.0001755526	0.00008237230
BERYLLIUM	313.042	Radial	18.04140	0.0002485556	0.0003322974	0.0001113988	0.0003019707
BORON	249.678	Radial	0.9716209	0.008450084	-0.00006203357	0.01287643	0.01253585
CADMIUM	228.802	Axial	5.180943	0.0002288479	0.00004624352	0.0006371585	0.000003141594
CALCIUM	317.933	Radial	153.6693	0.004112212	0.006043638	0.004627791	0.001665207
CERIUM	535.353	Radial	53.86894	-0.02333716	-0.05964433	-0.02156937	0.01120222
CHROMIUM	267.716	Axial	12.66667	0.0005854996	0.001396328	0.0001000593	0.0002601109
COBALT	228.616	Axial	3.400876	0.00009029355	0.00002740369	0.0003278504	-0.00008437341
COPPER	324.754	Axial	16.19246	-0.0001999884	-0.0003188763	-0.0001309795	-0.0001501095
IRON	259.940	Radial	5.523474	0.009709887	0.01037527	0.01427265	0.004481740
LANTHANUM	333.749	Radial	-1.69241	0.001288242	-0.003204634	0.004998161	0.002071199
LEAD	220.353	Axial	0.4560832	-0.001032820	-0.001400073	-0.001663415	-0.00003497148
LITHIUM	670.784	Radial	-12.5287	-0.0002448455	0.0005634065	0.0004994343	-0.001797377
MAGNESIUM	279.079	Radial	-1.12395	0.01574141	-0.03619177	0.01846291	0.06495310
MANGANESE	257.610	Axial	5.638889	0.0001532943	0.0001750453	0.00008606944	0.0001987683
MOLYBDENUM	202.030	Axial	1.996144	0.0005504642	0.0004206773	-0.0001520744	0.001382790
NICKEL	231.604	Axial	4.156207	0.0003002766	-0.0002066976	0.0008857145	0.0002218129
PHOSPHORUS	177.495	Axial	0.03693850	-0.004452446	-0.003660200	-0.006936712	-0.002760426
POTASSIUM	766.490	Radial	-46.4677	0.007343353	-0.04105932	0.04971734	0.01337204
SELENIUM	196.090	Axial	0.7518008	-0.001189030	-0.01086548	-0.0004816363	0.007780028
SILICON	251.611	Axial	57.95529	0.004674056	0.004019584	0.004411714	0.005590871
SILVER	328.068	Axial	-18.6388	-0.00006430639	-0.0001987634	0.0002076598	-0.0002018156
SODIUM	589.592	Radial	69.59149	0.02968801	0.02378160	0.03155891	0.03372352
STRONTIUM	421.552	Radial	-14.5985	-0.000006170946	0.00003364278	-0.00002740565	-0.00002474996
SULFUR	182.034	Axial	0.8946337	0.01460665	0.02450580	0.01038706	0.008927070
THALLIUM	190.856	Axial	0.4980747	0.002323341	0.006250295	-0.001659036	0.002378764
TIN	189.989	Axial	-0.9464748	0.002791716	0.004429629	0.002999152	0.0009463659
TITANIUM	334.941	Radial	1.012244	0.001403265	0.001371568	0.001289459	0.001548769
VANADIUM	292.402	Radial	0.9350970	0.0002205151	-0.002185561	0.004706368	-0.001859262
ZINC	206.200	Axial	1.882030	0.0002339269	0.0003052030	0.0003481730	0.00004840470

Sample ID: CCV-3 Units: mg/l
Analyzed: 12/21/22 14:59 Sequence: 12 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10148.31	10170.58	10151.17	10123.19
YTTRIUM	360.073	Axial	379527.8	378427.9	380830.2	379325.5
YTTRIUM	360.073	Radial	11101.26	11073.45	11073.09	11157.24
INDIUM	230.606	Axial	2988.371	2993.451	2985.139	2986.524

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	804.2053	9.933348	9.977678	9.889315	9.933051
ANTIMONY	206.833	Axial	116.5074	0.4871425	0.4907503	0.4826877	0.4879897
ARSENIC	189.042	Axial	151.6831	1.002074	1.001075	0.9966594	1.008488
BARIUM	233.527	Axial	2130.132	0.5053144	0.5045650	0.5052159	0.5061623
BERYLLIUM	313.042	Radial	4071.743	0.2014364	0.2013404	0.2009826	0.2019860
BORON	249.678	Radial	214.9771	1.012855	1.022700	1.007986	1.007880
CADMIUM	228.802	Axial	2766.001	0.5080251	0.5081469	0.5085724	0.5073559
CALCIUM	373.690	Radial	27432.06	49.22154	49.22596	49.16035	49.27831
CHROMIUM	267.716	Axial	6902.643	1.019580	1.021841	1.017628	1.019271
COBALT	228.616	Axial	3621.932	1.004848	1.005812	1.003177	1.005555
COPPER	324.754	Axial	16369.70	0.9900460	0.9928825	0.9868421	0.9904133
IRON	259.940	Radial	4708.331	9.902959	9.910580	9.881012	9.917284
LEAD	220.353	Axial	343.5453	0.4880706	0.4855410	0.4868357	0.4918352
LITHIUM	670.784	Radial	8448.811	0.9648939	0.9604393	0.9657234	0.9685191
MAGNESIUM	279.079	Radial	614.3074	9.917138	9.920167	10.00303	9.828212
MANGANESE	257.610	Axial	80478.90	0.9752682	0.9735689	0.9755045	0.9767313
MOLYBDENUM	202.030	Axial	364.0452	0.2547236	0.2545733	0.2545122	0.2550854
NICKEL	231.604	Axial	1990.593	0.9976344	0.9966384	0.9965515	0.9997135
PHOSPHORUS	177.495	Axial	37.75633	1.042046	1.049964	1.039725	1.036448
POTASSIUM	766.490	Radial	20194.62	48.42458	48.41717	48.27148	48.58510
SELENIUM	196.090	Axial	84.09009	1.006612	1.025069	0.9948747	0.9998918
SILICON	251.611	Axial	6708.673	2.077047	2.064463	2.074455	2.092223
SILVER	328.068	Axial	9322.513	0.4926995	0.4954558	0.4896781	0.4929647
SODIUM	818.326	Radial	2866.445	50.16257	49.84208	50.30300	50.34262
STRONTIUM	421.552	Radial	58122.44	0.9805967	0.9781523	0.9795051	0.9841329
SULFUR	182.034	Axial	308.6459	4.720856	4.713362	4.745154	4.704054
THALLIUM	190.856	Axial	171.6090	0.9445635	0.9422995	0.9415218	0.9498691
TIN	189.989	Axial	152.1926	0.4987566	0.4963590	0.4991533	0.5007576
TITANIUM	334.941	Radial	3167.299	1.026196	1.021544	1.027134	1.029910
VANADIUM	292.402	Radial	598.4415	1.000205	1.001860	0.9993397	0.9994163
ZINC	206.200	Axial	2745.488	0.9987975	0.9981293	0.9980590	1.000204
CERIUM	535.353	Radial	79.27021	0.1010310	0.1213287	0.09460321	0.08716097
LANTHANUM	333.749	Radial	0.8852591	0.006290671	0.01009622	-0.005282074	0.01405787

Sample ID: CCB-3 Units: mg/l
Analyzed: 12/21/22 15:02 Sequence: 13

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10470.65	10468.49	10472.28	10471.19
YTTRIUM	360.073	Axial	396127.6	392848.5	397064.8	398469.3
YTTRIUM	360.073	Radial	11027.36	10980.53	11032.95	11068.60
INDIUM	230.606	Axial	3297.117	3300.815	3297.417	3293.118

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.951949	0.04609839	0.03007514	0.05669264	0.05152740
ANTIMONY	206.833	Axial	1.283556	0.005723147	0.008059158	0.008245068	0.0008652146
ARSENIC	189.042	Axial	-0.2479659	0.003273489	0.009079930	0.001937892	-0.001197356
BARIUM	233.527	Axial	2.444131	0.0001567769	-0.0001325486	0.0002984583	0.0003044211
BERYLLIUM	313.042	Radial	16.83969	0.0001893764	0.0001882912	0.0001869655	0.0001928725
BORON	249.678	Radial	0.3892789	0.005713598	0.01197489	-0.005937193	0.01110309
CADMIUM	228.802	Axial	4.023464	0.00002332134	-0.00006911666	0.0005135878	-0.0003745071
CALCIUM	317.933	Radial	155.1704	0.005831700	0.008082721	0.0008760370	0.008536342
CERIUM	535.353	Radial	48.19539	-0.05136087	-0.06360420	-0.07405910	-0.01641930
CHROMIUM	267.716	Axial	6.083333	-0.0003569609	0.0005451110	-0.001163331	-0.0004526621
COBALT	228.616	Axial	2.318255	-0.0001813365	0.00004329162	-0.0003293385	-0.0002579628
COPPER	324.754	Axial	19.77183	0.000005225790	0.0002113370	0.00003091013	-0.0002265697
IRON	259.940	Radial	3.658042	0.005779682	0.004948604	0.003312659	0.009077785
LANTHANUM	333.749	Radial	-5.45994	-0.006063896	-0.005860332	-0.005698507	-0.006632849
LEAD	220.353	Axial	2.074536	0.001057472	0.003055603	-0.0006942860	0.0008110989
LITHIUM	670.784	Radial	4.461967	0.001709774	0.003226292	0.0009986930	0.0009043375
MAGNESIUM	279.079	Radial	-2.20572	-0.001896393	-0.03860376	0.02246865	0.01044592
MANGANESE	257.610	Axial	7.277778	0.0001725162	0.0001619306	0.0001853883	0.0001702297
MOLYBDENUM	202.030	Axial	1.941599	0.0005131468	-0.0001437719	0.0001878330	0.001495379
NICKEL	231.604	Axial	4.311554	0.0003733037	0.0004269721	-0.0003477390	0.001040678
PHOSPHORUS	177.495	Axial	0.09982215	-0.002762650	0.002007759	-0.007235993	-0.003059717
POTASSIUM	766.490	Radial	-44.3274	0.01243910	0.02335742	-0.001294017	0.01525388
SELENIUM	196.090	Axial	0.2736717	-0.006794141	-0.01381195	-0.002119490	-0.004450978
SILICON	251.611	Axial	48.79499	0.001916882	0.0003075503	0.002378826	0.003064270
SILVER	328.068	Axial	-17.3055	0.000007432216	0.0003687949	-0.0001258220	-0.0002206763
SODIUM	589.592	Radial	58.99080	0.01859911	0.02994123	0.01357192	0.01228418
STRONTIUM	421.552	Radial	-14.8453	-0.00001077518	-0.00006906975	0.00006162475	-0.00002488055
SULFUR	182.034	Axial	0.6873925	0.01154479	0.01138364	0.02370232	-0.0004515872
THALLIUM	190.856	Axial	1.130837	0.005481492	0.001989427	0.008907983	0.005547066
TIN	189.989	Axial	-1.03530	0.002528142	0.002609014	0.002964152	0.002011258
TITANIUM	334.941	Radial	-0.1925850	0.001012276	0.001550494	0.001019472	0.0004668623
VANADIUM	292.402	Radial	2.948190	0.003624500	0.005469587	0.0005675285	0.004836383
ZINC	206.200	Axial	3.112761	0.0006686193	0.0008458916	0.0008141463	0.0003458200

Sample ID: ICVLL-3 Units: mg/l
Analyzed: 12/21/22 15:05 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10519.69	10525.22	10508.18	10525.68
YTTRIUM	360.073	Axial	399104.6	400729.8	398104.0	398480.0
YTTRIUM	360.073	Radial	11091.47	11076.30	11097.84	11100.26
INDIUM	230.606	Axial	3280.456	3285.009	3280.719	3275.640

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.14891	0.2342808	0.2454120	0.2441772	0.2132532
ANTIMONY	206.833	Axial	2.084408	0.008924651	0.01038568	0.007087504	0.009300769
ARSENIC	189.042	Axial	1.040430	0.01145230	0.01370391	0.01262989	0.008023116
BARIUM	233.527	Axial	25.49434	0.005433486	0.005029401	0.005623572	0.005647484
BERYLLIUM	313.042	Radial	54.22647	0.002041847	0.002182422	0.002025652	0.001917468
BORON	249.678	Radial	43.36157	0.2075596	0.2034232	0.2033600	0.2158957
CADMIUM	228.802	Axial	14.31011	0.001845029	0.002064524	0.001674205	0.001796358
CALCIUM	317.933	Radial	1190.301	1.047884	1.054616	1.048316	1.040721
CHROMIUM	267.716	Axial	83.91667	0.01074318	0.01112294	0.01097634	0.01013025
COBALT	228.616	Axial	40.53205	0.009486893	0.009455260	0.009650519	0.009354899
COPPER	324.754	Axial	182.6052	0.009371027	0.009603481	0.009041454	0.009468146
IRON	259.940	Radial	50.45704	0.1042775	0.1036178	0.1020655	0.1071493
LEAD	220.353	Axial	5.288467	0.005245665	0.003638067	0.007175791	0.004923136
LITHIUM	670.784	Radial	119.3186	0.01481663	0.01554851	0.01389823	0.01500314
MAGNESIUM	279.079	Radial	63.65060	1.058822	1.061954	1.091734	1.022778
MANGANESE	257.610	Axial	873.2500	0.01029483	0.01032647	0.01028359	0.01027443
MOLYBDENUM	202.030	Axial	9.127888	0.005373082	0.004879124	0.005241999	0.005998125
NICKEL	231.604	Axial	26.74831	0.01064299	0.01059670	0.01039946	0.01093281
PHOSPHORUS	177.495	Axial	3.724599	0.09423987	0.09818058	0.09567196	0.08886706
POTASSIUM	766.490	Radial	365.7953	0.9949094	0.9703830	0.9948112	1.019534
SELENIUM	196.090	Axial	1.767852	0.01062055	0.003283992	0.01496961	0.01360805
SILICON	251.611	Axial	687.9805	0.1939338	0.1913339	0.1942796	0.1961879
SILVER	328.068	Axial	73.26389	0.004556811	0.004155320	0.004543645	0.004971469
SODIUM	589.592	Radial	1034.687	1.043735	1.045747	1.044013	1.041445
STRONTIUM	421.552	Radial	584.8673	0.01011520	0.01014519	0.01011145	0.01008896
SULFUR	182.034	Axial	60.66478	0.8962369	0.8849169	0.8988076	0.9049861
THALLIUM	190.856	Axial	1.803823	0.008884046	0.009505038	0.007457518	0.009689583
TIN	189.989	Axial	15.38251	0.05097870	0.05147796	0.04953935	0.05191879
TITANIUM	334.941	Radial	157.5084	0.05209877	0.05306852	0.05374456	0.04948324
VANADIUM	292.402	Radial	11.21611	0.01744409	0.01800315	0.01953687	0.01479224
ZINC	206.200	Axial	144.2837	0.05022925	0.04981089	0.05062195	0.05025493
CERIUM	535.353	Radial	56.56995	-0.01115913	0.02034148	-0.02712346	-0.02669542
LANTHANUM	333.749	Radial	-1.64891	0.001394868	0.003542894	0.0001580866	0.0004836228

Sample ID: ICSA-3 Units: mg/l
Analyzed: 12/21/22 15:07 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9024.935	9018.797	9035.939	9020.069
YTTRIUM	360.073	Axial	337927.7	337902.0	338072.5	337808.6
YTTRIUM	360.073	Radial	10454.25	10451.42	10464.28	10447.06
INDIUM	230.606	Axial	2523.099	2520.351	2525.191	2523.755

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38900.14	512.2707	511.3738	511.8393	513.5991
ANTIMONY	206.833	Axial	-4.21425	-0.01927159	-0.03071785	-0.01000847	-0.01708843
ARSENIC	189.042	Axial	-1.19622	-0.003988608	-0.005109872	-0.006987870	0.0001319164
BARIUM	233.527	Axial	11.89711	0.002770571	0.002556434	0.002633594	0.003121684
BERYLLIUM	313.042	Radial	11.33115	-0.00005485471	-0.0001158089	0.00003370941	-0.00008246462
BORON	249.678	Radial	-3.40171	-0.01308163	-0.004837967	-0.01853572	-0.01587121
CADMIUM	228.802	Axial	3.788495	0.00008938720	-0.0003281113	0.0004918757	0.0001043972
CALCIUM	373.690	Radial	269020.4	512.7862	512.7616	511.9219	513.6751
CERIUM	535.353	Radial	295.5106	1.262536	1.290665	1.217843	1.279098
CHROMIUM	267.716	Axial	18.18607	0.001795381	0.001932742	0.001564084	0.001889317
COBALT	228.616	Axial	6.734176	0.001449602	0.0009749434	0.001852693	0.001521170
COPPER	324.754	Axial	-105.983	-0.008350145	-0.008255391	-0.007941546	-0.008853499
IRON	271.441	Radial	4383.162	205.0335	204.5387	205.0261	205.5357
LANTHANUM	333.749	Radial	0.8327233	0.006309580	0.006649638	0.004079406	0.008199694
LEAD	220.353	Axial	-17.9887	-0.03199152	-0.03223117	-0.03265441	-0.03108900
LITHIUM	670.784	Radial	25.60731	0.004295885	0.004701254	0.004032782	0.004153619
MAGNESIUM	279.079	Radial	30088.10	514.0516	514.6089	513.2805	514.2655
MANGANESE	257.610	Axial	518.1852	0.007147605	0.007169166	0.007089190	0.007184460
MOLYBDENUM	202.030	Axial	4.630964	0.002846725	0.002196085	0.004087136	0.002256954
NICKEL	231.604	Axial	18.70865	0.009533711	0.008237703	0.01024096	0.01012247
PHOSPHORUS	177.495	Axial	0.3954614	0.006900232	0.03435876	-0.008556757	-0.005101310
POTASSIUM	766.490	Radial	-83.4076	-0.09269025	-0.09164558	-0.09758799	-0.08883719
SELENIUM	196.090	Axial	1.971147	0.01678457	-0.002558908	0.03626882	0.01664378
SILICON	251.611	Axial	15.77374	-0.007289969	-0.008081474	-0.007305844	-0.006482589
SILVER	328.068	Axial	-63.1184	-0.002859133	-0.002847498	-0.002994738	-0.002735163
SODIUM	589.592	Radial	112.2504	0.08138529	0.08225585	0.07977875	0.08212126
STRONTIUM	421.552	Radial	204.4137	0.003902692	0.003993125	0.003823156	0.003891793
SULFUR	182.034	Axial	0.3732860	0.007773493	0.005936495	0.01240188	0.004982106
THALLIUM	190.856	Axial	2.044080	0.01316823	0.01450920	0.003497702	0.02149778
TIN	189.989	Axial	-5.94300	-0.01723680	-0.01134391	-0.02406766	-0.01629883
TITANIUM	334.941	Radial	124.3830	0.04382336	0.04295263	0.04350725	0.04501021
VANADIUM	292.402	Radial	4.654612	0.006927908	0.006788410	0.006743992	0.007251324
ZINC	206.200	Axial	15.79628	0.006035356	0.005732432	0.005902030	0.006471607

Sample ID: ICSAB-3 Units: mg/l
Analyzed: 12/21/22 15:10 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8947.132	8946.788	8961.001	8933.607
YTTRIUM	360.073	Axial	334506.2	333682.1	335083.2	334753.3
YTTRIUM	360.073	Radial	10406.49	10387.44	10440.63	10391.39
INDIUM	230.606	Axial	2507.608	2506.994	2510.064	2505.765

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38635.73	511.1245	513.1313	510.7419	509.5002
ANTIMONY	206.833	Axial	102.1602	0.4845090	0.4859321	0.4797540	0.4878408
ARSENIC	189.042	Axial	70.20012	0.5283322	0.5239388	0.5300767	0.5309811
BARIUM	233.527	Axial	1915.156	0.5153191	0.5150706	0.5141271	0.5167595
BERYLLIUM	313.042	Radial	9654.668	0.5105242	0.5112916	0.5097695	0.5105115
BORON	249.678	Radial	202.1255	1.015858	1.023984	1.018253	1.005338
CADMIUM	228.802	Axial	5183.471	1.080634	1.079306	1.080538	1.082057
CALCIUM	373.690	Radial	268188.8	513.5476	514.3533	513.2244	513.0649
CERIUM	535.353	Radial	288.0142	1.230125	1.292964	1.183180	1.214231
CHROMIUM	267.716	Axial	3018.217	0.5050518	0.5014830	0.5054544	0.5082179
COBALT	228.616	Axial	1495.505	0.4940633	0.4945985	0.4929934	0.4945981
COPPER	324.754	Axial	7566.042	0.5186385	0.5182762	0.5191153	0.5185239
IRON	271.441	Radial	4314.392	202.7427	202.6899	202.7248	202.8135
LANTHANUM	333.749	Radial	-1.69032	0.001112305	0.001312412	-0.008522089	0.01054659
LEAD	220.353	Axial	551.7066	0.9355537	0.9315050	0.9371078	0.9380483
LITHIUM	670.784	Radial	29.20913	0.004748324	0.003733784	0.004653287	0.005857902
MAGNESIUM	279.079	Radial	30020.42	515.2499	514.3488	514.6346	516.7662
MANGANESE	257.610	Axial	35571.25	0.4889786	0.4879927	0.4879967	0.4909465
MOLYBDENUM	202.030	Axial	633.7222	0.5037329	0.5033583	0.5048280	0.5030126
NICKEL	231.604	Axial	1655.346	0.9886577	0.9879602	0.9894864	0.9885266
PHOSPHORUS	177.495	Axial	0.1481498	-0.0007537725	-0.01033834	-0.02708732	0.03516434
POTASSIUM	766.490	Radial	-93.1205	-0.1184173	-0.1113341	-0.1384267	-0.1054911
SELENIUM	196.090	Axial	39.88629	0.5369599	0.5178516	0.5411939	0.5518344
SILICON	251.611	Axial	2887.733	1.007524	1.004102	1.006918	1.011552
SILVER	328.068	Axial	18535.73	1.110350	1.108746	1.110728	1.111576
SODIUM	589.592	Radial	106.7715	0.07579857	0.06512081	0.08940061	0.07287428
STRONTIUM	421.552	Radial	205.7344	0.003943274	0.003960061	0.003915970	0.003953791
SULFUR	182.034	Axial	0.1776495	0.004430237	0.008289535	0.01116869	-0.006167509
THALLIUM	190.856	Axial	69.60162	0.4564653	0.4501523	0.4531825	0.4660611
TIN	189.989	Axial	122.6235	0.4791161	0.4745211	0.4856169	0.4772103
TITANIUM	334.941	Radial	1607.551	0.5561113	0.5558056	0.5568797	0.5556485
VANADIUM	292.402	Radial	283.1654	0.5042040	0.5052275	0.5011628	0.5062217
ZINC	206.200	Axial	2259.766	0.9324326	0.9320067	0.9326134	0.9326775

Sample ID: BLANK DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:08 Sequence: 33

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10625.31	10634.20	10620.79	10620.93
YTTRIUM	360.073	Axial	400472.2	401335.7	399235.3	400845.7
YTTRIUM	360.073	Radial	11206.57	11211.77	11221.71	11186.21
INDIUM	230.606	Axial	3308.815	3315.518	3305.922	3305.006

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	2.719232	0.01651339	0.01200133	0.01912043	0.01841841
ALUMINUM	308.215	Radial	5.987263	0.03287536	0.01635810	0.05836915	0.02389884
ANTIMONY	206.833	Axial	-1.56201	-0.005704793	-0.004206660	-0.007064030	-0.005843687
ARSENIC	189.042	Axial	-0.3675043	0.002545906	0.001163079	0.0008444695	0.005630169
BARIUM	233.527	Axial	4.821105	0.0006875800	0.0007537584	0.0003901053	0.0009188764
BERYLLIUM	313.042	Radial	13.04610	-0.00001056894	0.00002501722	-0.00005419776	-0.000002526268
CADMIUM	228.802	Axial	3.628207	-0.00005649255	-0.0001284943	0.0004438472	-0.0004848305
CALCIUM	317.933	Radial	183.2719	0.03134045	0.03174229	0.03022106	0.03205801
CHROMIUM	267.716	Axial	14.65278	0.0008405790	0.001023182	0.000001540848	0.001497014
COBALT	228.616	Axial	4.253123	0.0003017777	0.0004277816	0.0001036642	0.0003738872
COPPER	324.754	Axial	36.88492	0.0009729737	0.001467976	0.0005223624	0.0009285829
IRON	259.940	Radial	3.621412	0.005582581	0.006715139	0.006430569	0.003602033
LEAD	220.353	Axial	2.323970	0.001370748	0.0004110932	0.003192645	0.0005085063
LITHIUM	670.784	Radial	-5.40753	0.0005841710	0.0003989861	-0.0002696091	0.001623136
MAGNESIUM	279.079	Radial	-2.06659	0.0009729144	0.01929913	-0.02102295	0.004642564
MANGANESE	257.610	Axial	23.8750	0.0003633294	0.0004291346	0.0003229508	0.0003379026
MOLYBDENUM	202.030	Axial	1.369001	0.0001101394	-0.000004685099	0.0003685641	-0.00003346097
NICKEL	231.604	Axial	5.587006	0.0009443247	0.0009475830	0.001000275	0.0008851162
PHOSPHORUS	177.495	Axial	-0.02220002	-0.006033752	-0.01073734	-0.01604063	0.008676720
POTASSIUM	766.490	Radial	-32.4663	0.04226021	0.03204292	0.02757140	0.06716631
SELENIUM	196.090	Axial	1.033534	0.001936269	-0.003255389	0.002737032	0.006327162
SILICON	251.611	Axial	206.8981	0.04874236	0.04978378	0.04788021	0.04856309
SILVER	328.068	Axial	-19.8055	-0.0001097184	-0.0001525288	-0.0001955774	0.00001895111
SODIUM	589.592	Radial	189.2812	0.1531460	0.1239351	0.1440548	0.1914481
STRONTIUM	421.552	Radial	-6.98307	0.0001246693	0.00004100111	0.0002150168	0.0001179900
SULFUR	182.034	Axial	2.752803	0.04155870	0.04784480	0.03200984	0.04482147
THALLIUM	190.856	Axial	0.7056850	0.003347264	0.002971552	-0.0008291281	0.007899367
TIN	189.989	Axial	-1.15810	0.002179832	0.002067717	0.002480247	0.001991532
TITANIUM	334.941	Radial	1.981907	0.001709627	0.00009872012	0.002298173	0.002731989
VANADIUM	292.402	Radial	0.9819922	0.0002838322	0.004868826	-0.003088087	-0.0009292425
ZINC	206.200	Axial	3.000703	0.0006135885	0.0008158475	0.0002576970	0.0007672209
CERIUM	535.353	Radial	51.84925	-0.03724424	-0.05604911	-0.001117426	-0.05456617
LANTHANUM	333.749	Radial	-1.29173	0.002114197	-0.004604881	0.005231759	0.005715712

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:11 Sequence: 34

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10402.09	10401.85	10388.83	10415.58
YTTRIUM	360.073	Axial	394214.0	393309.2	396029.0	393303.8
YTTRIUM	360.073	Radial	11273.72	11325.75	11259.36	11236.04
INDIUM	230.606	Axial	3118.920	3116.051	3114.699	3126.010

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	199.7302	0.9269663	0.9172744	0.9311379	0.9324865
ALUMINUM	308.215	Radial	756.3049	9.195997	9.099822	9.259361	9.228807
ANTIMONY	206.833	Axial	223.7037	0.9120786	0.9089791	0.9162716	0.9109852
ARSENIC	189.042	Axial	136.7910	0.8822215	0.8803386	0.8830726	0.8832533
BARIUM	233.527	Axial	4100.600	0.9493747	0.9494171	0.9490514	0.9496556
BERYLLIUM	313.042	Radial	19094.89	0.9325913	0.9245456	0.9370458	0.9361824
CADMIUM	228.802	Axial	5126.701	0.9191995	0.9186955	0.9195167	0.9193864
CALCIUM	317.933	Radial	9498.477	9.264306	9.199061	9.309150	9.284707
CHROMIUM	267.716	Axial	6462.503	0.9311772	0.9327104	0.9336107	0.9272105
COBALT	228.616	Axial	3462.539	0.9203581	0.9225500	0.9212483	0.9172761
COPPER	324.754	Axial	15563.85	0.9061448	0.9073053	0.9029977	0.9081313
IRON	259.940	Radial	4430.073	9.175220	9.111982	9.183890	9.229789
LEAD	220.353	Axial	664.0469	0.9052951	0.9099162	0.9021308	0.9038382
LITHIUM	670.784	Radial	8229.381	0.9255241	0.9206857	0.9305496	0.9253368
MAGNESIUM	279.079	Radial	583.6999	9.280944	9.249447	9.262214	9.331170
MANGANESE	257.610	Axial	73952.06	0.8743194	0.8740026	0.8770545	0.8719012
MOLYBDENUM	202.030	Axial	1376.159	0.9415824	0.9438550	0.9421103	0.9387819
NICKEL	231.604	Axial	1899.954	0.9122174	0.9140500	0.9121869	0.9104153
PHOSPHORUS	177.495	Axial	34.63875	0.9321195	0.9394116	0.9309436	0.9260032
POTASSIUM	766.490	Radial	3781.766	9.027030	8.951567	9.018147	9.111375
SELENIUM	196.090	Axial	77.02458	0.8984951	0.9005533	0.9022785	0.8926535
SILICON	251.611	Axial	3032.721	0.9088709	0.9073522	0.9116764	0.9075839
SILVER	328.068	Axial	3126.638	0.1596833	0.1593853	0.1593581	0.1603066
SODIUM	589.592	Radial	9132.764	9.400308	9.337394	9.422962	9.440570
STRONTIUM	421.552	Radial	55164.79	0.9164996	0.9103333	0.9186546	0.9205109
SULFUR	182.034	Axial	557.4795	8.317811	8.316484	8.310601	8.326347
THALLIUM	190.856	Axial	173.3112	0.9139923	0.9113448	0.9122448	0.9183873
TIN	189.989	Axial	293.6794	0.9174134	0.9171913	0.9173753	0.9176736
TITANIUM	334.941	Radial	2968.055	0.9470344	0.9419347	0.9492199	0.9499486
VANADIUM	292.402	Radial	563.9713	0.9280916	0.9204187	0.9350160	0.9288401
ZINC	206.200	Axial	2522.764	0.8953360	0.8950308	0.8967278	0.8942494
CERIUM	535.353	Radial	51.19802	-0.04180499	-0.07844060	-0.05539749	0.008423120
LANTHANUM	333.749	Radial	-3.16261	-0.001435498	-0.004670673	-0.003113043	0.003477222

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:19 Sequence: 37

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10090.59	10092.48	10079.31	10099.99
YTTRIUM	360.073	Axial	378299.8	377515.3	376829.0	380555.3
YTTRIUM	360.073	Radial	11111.92	11181.92	11078.08	11075.76
INDIUM	230.606	Axial	2980.308	2986.291	2975.883	2978.749

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	211.5379	0.9957502	0.9955764	0.9925486	0.9991257
ALUMINUM	308.215	Radial	746.1084	9.204087	9.157474	9.225538	9.229248
ANTIMONY	206.833	Axial	216.0217	0.9079455	0.9065838	0.9067091	0.9105436
ARSENIC	189.042	Axial	134.8126	0.8962257	0.8921111	0.8988865	0.8976795
BARIUM	233.527	Axial	4641.455	1.107834	1.107170	1.106864	1.109467
BERYLLIUM	313.042	Radial	18897.90	0.9364020	0.9338137	0.9370355	0.9383568
CADMIUM	228.802	Axial	5019.188	0.9277093	0.9278075	0.9271116	0.9282089
CALCIUM	373.690	Radial	37100.61	66.51431	66.38001	66.62449	66.53842
CHROMIUM	267.716	Axial	6288.564	0.9340872	0.9331300	0.9343291	0.9348024
COBALT	228.616	Axial	3254.072	0.9051616	0.9022795	0.9062272	0.9069780
COPPER	324.754	Axial	14986.52	0.9092538	0.9144471	0.9110193	0.9022950
IRON	259.940	Radial	4331.346	9.101213	9.093782	9.133862	9.075995
LEAD	220.353	Axial	629.5094	0.8981142	0.8949543	0.8997808	0.8996076
LITHIUM	670.784	Radial	8523.098	0.9724427	0.9730439	0.9705021	0.9737821
MAGNESIUM	279.079	Radial	1821.522	29.31055	29.31327	29.26276	29.35563
MANGANESE	257.610	Axial	70378.78	0.8577596	0.8589391	0.8586271	0.8557126
MOLYBDENUM	202.030	Axial	1311.986	0.9253698	0.9227338	0.9261797	0.9271958
NICKEL	231.604	Axial	1796.018	0.9024037	0.9003120	0.9029476	0.9039514
PHOSPHORUS	177.495	Axial	36.15511	1.003365	0.9809820	1.004287	1.024825
POTASSIUM	766.490	Radial	5987.930	14.42881	14.37634	14.45570	14.45439
SELENIUM	196.090	Axial	75.34131	0.9060611	0.9155018	0.8908380	0.9118435
SILICON	251.611	Axial	53490.85	16.74562	16.75183	16.76650	16.71854
SILVER	328.068	Axial	3042.167	0.1618952	0.1628725	0.1619888	0.1608241
SODIUM	818.326	Radial	1325.286	22.38007	22.34552	22.63464	22.16004
STRONTIUM	421.552	Radial	90604.46	1.527028	1.525171	1.527073	1.528840
SULFUR	182.034	Axial	780.5031	12.00433	12.00954	12.03265	11.97080
THALLIUM	190.856	Axial	162.8932	0.8990092	0.8967005	0.9003232	0.9000039
TIN	189.989	Axial	278.2389	0.9096561	0.9044590	0.9091502	0.9153592
TITANIUM	334.941	Radial	2930.124	0.9485442	0.9445593	0.9516993	0.9493741
VANADIUM	292.402	Radial	562.5253	0.9392205	0.9301696	0.9399925	0.9474994
ZINC	206.200	Axial	2419.172	0.8850683	0.8844912	0.8846077	0.8861060
CERIUM	535.353	Radial	90.21938	0.1547645	0.1632130	0.1935858	0.1074946
LANTHANUM	333.749	Radial	-1.66110	0.001344243	0.01133173	-0.003978746	-0.003320253

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:22 Sequence: 38

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10149.26	10155.40	10155.39	10136.99
YTTRIUM	360.073	Axial	380505.0	381374.6	378187.1	381953.4
YTTRIUM	360.073	Radial	11217.46	11249.67	11219.82	11182.90
INDIUM	230.606	Axial	3004.894	3013.195	3002.235	2999.251

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	211.3466	0.9855256	0.9758953	1.005255	0.9754265
ALUMINUM	308.215	Radial	734.1251	8.969856	8.977213	8.973407	8.958949
ANTIMONY	206.833	Axial	219.9002	0.9189034	0.9136835	0.9174865	0.9255402
ARSENIC	189.042	Axial	133.9669	0.8855159	0.8885945	0.8773980	0.8905550
BARIUM	233.527	Axial	4709.596	1.117606	1.115418	1.116867	1.120534
BERYLLIUM	313.042	Radial	19178.68	0.9413757	0.9376533	0.9418044	0.9446693
CADMIUM	228.802	Axial	5058.351	0.9295464	0.9280930	0.9294481	0.9310980
CALCIUM	373.690	Radial	37030.66	65.76381	65.58967	65.85912	65.84265
CHROMIUM	267.716	Axial	6394.440	0.9443388	0.9407107	0.9448021	0.9475035
COBALT	228.616	Axial	3226.572	0.8901533	0.8904175	0.8890623	0.8909801
COPPER	324.754	Axial	15007.27	0.9052253	0.9037469	0.9097721	0.9021568
IRON	259.940	Radial	4336.253	9.025804	8.986160	9.053440	9.037811
LEAD	220.353	Axial	630.9600	0.8928132	0.8875270	0.8952884	0.8956241
LITHIUM	670.784	Radial	8581.087	0.9698576	0.9644830	0.9742501	0.9708397
MAGNESIUM	279.079	Radial	1859.079	29.63339	29.43564	29.68350	29.78102
MANGANESE	257.610	Axial	70397.46	0.8530274	0.8537624	0.8521644	0.8531554
MOLYBDENUM	202.030	Axial	1331.711	0.9338602	0.9362075	0.9325052	0.9328678
NICKEL	231.604	Axial	1808.046	0.9010185	0.8949816	0.9035586	0.9045153
PHOSPHORUS	177.495	Axial	34.79145	0.9597069	0.9500687	0.9725203	0.9565318
POTASSIUM	766.490	Radial	5972.442	14.25739	14.24723	14.23129	14.29365
SELENIUM	196.090	Axial	76.70464	0.9172566	0.9241644	0.9071014	0.9205041
SILICON	251.611	Axial	54699.19	17.02515	16.97770	17.00836	17.08940
SILVER	328.068	Axial	3076.998	0.1627931	0.1626395	0.1631796	0.1625602
SODIUM	818.326	Radial	1323.835	22.13004	21.90396	22.22985	22.25631
STRONTIUM	421.552	Radial	90900.59	1.517607	1.512053	1.520724	1.520044
SULFUR	182.034	Axial	789.3396	12.07004	12.07173	12.05920	12.07919
THALLIUM	190.856	Axial	161.5962	0.8845497	0.8840841	0.8853895	0.8841754
TIN	189.989	Axial	284.9283	0.9238250	0.9149630	0.9285158	0.9279963
TITANIUM	334.941	Radial	3011.327	0.9656328	0.9624541	0.9660295	0.9684148
VANADIUM	292.402	Radial	561.9722	0.9294459	0.9140104	0.9392607	0.9350667
ZINC	206.200	Axial	2422.101	0.8810170	0.8789648	0.8820322	0.8820538
CERIUM	535.353	Radial	74.20575	0.07220556	0.0005328194	0.1121430	0.1039409
LANTHANUM	333.749	Radial	-1.13657	0.002407438	0.002363449	0.007144668	-0.002285801

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568818-01 DF: 1x bench / 9x total Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:25 Sequence: 39

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10021.73	10033.37	10026.65	10005.17
YTTRIUM	360.073	Axial	378626.7	379515.9	378906.9	377457.2
YTTRIUM	360.073	Radial	11277.52	11309.68	11329.01	11193.87
INDIUM	230.606	Axial	3031.670	3033.245	3032.002	3029.765

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	0.5483408	0.008502137	0.007873746	0.01119805	0.006434619
BARIUM	233.527	Axial	2844.566	0.6834584	0.6832952	0.6838315	0.6832485
CADMIUM	228.802	Axial	4.114958	0.00007252661	0.00009491447	0.00002513233	0.00009753305
CHROMIUM	267.716	Axial	6510.244	0.9737104	0.9757695	0.9730880	0.9722738
LEAD	220.353	Axial	11.83209	0.01500293	0.01392427	0.01590918	0.01517533
SELENIUM	196.090	Axial	2.163742	0.01648991	0.01869451	0.01290137	0.01787384
SILVER	328.068	Axial	-4.02655	0.0006662798	0.001423180	0.0006697089	-0.00009404989
ALUMINUM	308.215	Radial	437.7447	5.303530	5.308814	5.299503	5.302273
ANTIMONY	206.833	Axial	6.096519	0.02630941	0.02647936	0.02974736	0.02270151
BERYLLIUM	313.042	Radial	16.13423	0.0001365885	0.000003074322	0.0001666880	0.0002400032
BORON	249.678	Radial	459.5304	2.126914	2.138142	2.119003	2.123596
CALCIUM	317.933	Radial	13055.49	12.78592	12.78758	12.74715	12.82302
CERIUM	535.353	Radial	43.03501	-0.08174872	-0.1209478	-0.05887443	-0.06542396
COBALT	228.616	Axial	67.39249	0.01767931	0.01810609	0.01734200	0.01758983
COPPER	324.754	Axial	10914.86	0.6613253	0.6601674	0.6611359	0.6626727
IRON	259.940	Radial	3554.239	7.358373	7.358464	7.330373	7.386281
LANTHANUM	333.749	Radial	-0.9562754	0.002784543	0.003407633	-0.001807586	0.006753582
LITHIUM	670.784	Radial	131.8568	0.01600200	0.01502665	0.01614875	0.01683059
MAGNESIUM	279.079	Radial	387.9649	6.178117	6.162387	6.149878	6.222087
MANGANESE	257.610	Axial	12214.15	0.1499578	0.1497409	0.1500002	0.1501324
MOLYBDENUM	202.030	Axial	714.3369	0.5069355	0.5057122	0.5057854	0.5093087
NICKEL	231.604	Axial	927.5585	0.4573703	0.4562921	0.4583324	0.4574863
PHOSPHORUS	177.495	Axial	124.1987	3.483817	3.473121	3.497129	3.481201
POTASSIUM	766.490	Radial	21370.42	50.43888	50.40689	50.38922	50.52054
SILICON	251.611	Axial	16697.27	5.254304	5.257976	5.247394	5.257543
SODIUM	818.326	Radial	3076.055	53.07327	53.01098	52.96964	53.23920
STRONTIUM	421.552	Radial	6806.216	0.1132498	0.1132144	0.1131008	0.1134343
SULFUR	182.034	Axial	1697.945	26.29261	26.25627	26.33092	26.29065
THALLIUM	190.856	Axial	0.04614411	0.00008838991	-0.002000689	0.002758984	-0.0004931245
TIN	189.989	Axial	16.12398	0.05707345	0.05718387	0.05614287	0.05789360
TITANIUM	334.941	Radial	1123.925	0.3591568	0.3578350	0.3608601	0.3587754
VANADIUM	292.402	Radial	63.68587	0.1035837	0.1043873	0.1005103	0.1058535
ZINC	206.200	Axial	4111.766	1.514958	1.513556	1.516555	1.514762

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568889-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:27 Sequence: 40

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8148.825	8148.170	8147.814	8150.492
YTTRIUM	360.073	Axial	302714.7	303758.3	302463.5	301922.3
YTTRIUM	360.073	Radial	10214.53	10221.65	10238.68	10183.26
INDIUM	230.606	Axial	2221.651	2220.013	2223.973	2220.966

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ARSENIC	189.042	Axial	0.2229456	0.006678785	0.003919631	0.01323102	0.002885703
BARIUM	233.527	Axial	786.3222	0.2320832	0.2326704	0.2320443	0.2315348
CADMIUM	228.802	Axial	8.376951	0.001224846	0.001276879	0.001110344	0.001287314
CHROMIUM	267.716	Axial	1407.176	0.2579363	0.2575341	0.2570806	0.2591943
LEAD	220.353	Axial	15.77296	0.02862048	0.02914549	0.02789302	0.02882293
SELENIUM	196.090	Axial	1.366422	0.01057414	0.005710823	0.02487364	0.001137974
SILVER	328.068	Axial	-23.4971	-0.0006735906	-0.0006834656	-0.0005983526	-0.0007389537
ALUMINUM	308.215	Radial	416.3793	5.571679	5.571670	5.584511	5.558855
ANTIMONY	206.833	Axial	-0.1925386	-0.0004745181	0.004802607	-0.005613992	-0.0006121691
BERYLLIUM	313.042	Radial	25.26488	0.0007103561	0.0007060417	0.0009580729	0.0004669536
BORON	249.678	Radial	2792.332	14.24712	14.27316	14.21406	14.25415
CALCIUM	373.690	Radial	137440.5	268.1178	267.8796	267.4344	269.0395
CERIUM	535.353	Radial	179.1778	0.6728598	0.6260503	0.6877582	0.7047709
COBALT	228.616	Axial	93.43697	0.03413116	0.03427568	0.03340400	0.03471380
COPPER	324.754	Axial	340.3990	0.02469795	0.02494390	0.02448099	0.02466897
IRON	271.441	Radial	632.1294	30.25515	30.05608	30.31811	30.39125
LANTHANUM	333.749	Radial	6.768753	0.01886054	0.02799183	0.01150523	0.01708457
LITHIUM	670.784	Radial	2226.212	0.2771714	0.2781254	0.2756577	0.2777311
MAGNESIUM	279.079	Radial	3285.689	57.48336	57.24485	57.51260	57.69263
MANGANESE	257.610	Axial	65232.00	0.9844645	0.9831579	0.9841220	0.9861136
MOLYBDENUM	202.030	Axial	13.47818	0.01097432	0.01255454	0.009982283	0.01038614
NICKEL	231.604	Axial	778.4121	0.5240030	0.5245016	0.5231472	0.5243601
PHOSPHORUS	177.495	Axial	1657.164	57.25174	57.04351	57.31504	57.39666
POTASSIUM	766.490	Radial	104692.2	272.2856	271.9978	271.6679	273.1910
SILICON	251.611	Axial	58376.97	22.63450	22.61928	22.59002	22.69420
SODIUM	818.326	Radial	118866.7	2325.500	2324.269	2320.519	2331.713
STRONTIUM	421.552	Radial	51143.77	0.9377871	0.9370229	0.9358648	0.9404737
SULFUR	182.034	Axial	30865.81	587.7787	588.4212	587.4330	587.4819
THALLIUM	190.856	Axial	0.5248178	0.003722537	0.007403430	0.008375898	-0.004611715
TIN	189.989	Axial	-0.4587504	0.003567951	0.005472323	0.007647257	-0.002415726
TITANIUM	334.941	Radial	214.0869	0.07638150	0.07731294	0.07517100	0.07666055
VANADIUM	292.402	Radial	20.55593	0.03604610	0.03279145	0.03741611	0.03793075
ZINC	206.200	Axial	5927.948	2.686443	2.685090	2.690706	2.683534

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569097-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:30 Sequence: 41

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10577.95	10566.12	10587.95	10579.78
YTTRIUM	360.073	Axial	399508.4	397426.2	397660.1	403438.8
YTTRIUM	360.073	Radial	11568.69	11595.55	11579.72	11530.79
INDIUM	230.606	Axial	3270.293	3263.161	3271.723	3275.996

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	7.002119	0.03541721	0.03543706	0.02749242	0.04332215
ALUMINUM	308.215	Radial	12.65951	0.1099959	0.1069555	0.1133812	0.1096510
ANTIMONY	206.833	Axial	-0.9019696	-0.003085251	-0.0005577697	-0.006453685	-0.002244298
ARSENIC	189.042	Axial	0.04952413	0.005165886	0.006947307	0.005991041	0.002559309
BARIUM	233.527	Axial	27.80330	0.005926943	0.005525714	0.006020175	0.006234940
BERYLLIUM	313.042	Radial	15.44949	0.00008372886	-0.00003026135	0.0002849679	-0.000003520003
CADMIUM	228.802	Axial	2.595402	-0.0002357115	0.00007401520	-0.0004822225	-0.0002989273
CALCIUM	317.933	Radial	18705.23	17.91783	17.91351	17.90269	17.93728
CERIUM	535.353	Radial	52.76713	-0.04076474	0.0007055716	-0.1353079	0.01230808
CHROMIUM	267.716	Axial	14.48673	0.0008266568	0.001113911	0.0001785535	0.001187506
COBALT	228.616	Axial	3.387161	0.00009471580	0.0001711733	-0.0002172063	0.0003301804
COPPER	324.754	Axial	33.29851	0.0007708239	0.0006000366	0.0005822039	0.001130231
IRON	259.940	Radial	369.0023	0.7429521	0.7397366	0.7429039	0.7462157
LANTHANUM	333.749	Radial	0.8156055	0.006126193	0.003436104	-0.0008284242	0.01577090
LEAD	220.353	Axial	1.304697	0.00007757662	-0.00005994744	0.0006337571	-0.0003410798
LITHIUM	670.784	Radial	-0.06724577	0.001187650	-0.0009802782	0.003440401	0.001102826
MAGNESIUM	279.079	Radial	107.2427	1.689571	1.649933	1.702831	1.715948
MANGANESE	257.610	Axial	17733.66	0.2062419	0.2066975	0.2057653	0.2062630
MOLYBDENUM	202.030	Axial	1.187430	-0.000008202163	-0.0003143550	-0.00001611301	0.0003058615
NICKEL	231.604	Axial	4.523496	0.0004862703	0.0004094535	0.0005591171	0.0004902403
PHOSPHORUS	177.495	Axial	0.7953572	0.01571394	0.004893391	0.03115360	0.01109483
POTASSIUM	766.490	Radial	517.6075	1.307285	1.340729	1.249131	1.331996
SELENIUM	196.090	Axial	0.6288502	-0.002709398	-0.005279414	0.005091789	-0.007940569
SILICON	251.611	Axial	8287.153	2.463893	2.470355	2.461833	2.459490
SILVER	328.068	Axial	-21.3561	-0.0001888479	-0.00006345608	-0.0001382122	-0.0003648755
SODIUM	589.592	Radial	4750.383	4.743105	4.801399	4.736791	4.691127
STRONTIUM	421.552	Radial	2715.174	0.04418830	0.04409315	0.04439504	0.04407671
SULFUR	182.034	Axial	95.12501	1.396840	1.405838	1.401244	1.383438
THALLIUM	190.856	Axial	0.9234257	0.004483330	0.004973566	0.003405874	0.005070551
TIN	189.989	Axial	-0.5771185	0.003860997	0.004911072	0.002513668	0.004158249
TITANIUM	334.941	Radial	16.30956	0.006140560	0.004950491	0.006658610	0.006812579
VANADIUM	292.402	Radial	0.3883221	-0.0007174993	-0.002321131	-0.0008094417	0.0009780745
ZINC	206.200	Axial	42.90419	0.01455142	0.01454677	0.01455572	0.01455178

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569097-03 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:33 Sequence: 42

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10189.90	10206.92	10176.96	10185.81
YTTRIUM	360.073	Axial	382920.8	383328.0	383649.3	381785.2
YTTRIUM	360.073	Radial	11431.25	11459.54	11440.42	11393.80
INDIUM	230.606	Axial	3054.141	3063.372	3045.282	3053.768

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	8.006170	0.04038409	0.03396173	0.03290361	0.05428694
ALUMINUM	308.215	Radial	54.77604	0.6190313	0.6492106	0.6055650	0.6023183
ANTIMONY	206.833	Axial	-0.9247653	-0.003316223	-0.007021494	-0.0002619891	-0.002665185
ARSENIC	189.042	Axial	0.2546928	0.006520947	0.004829139	0.003797693	0.01093601
BARIUM	233.527	Axial	357.8807	0.08421336	0.08360515	0.08471066	0.08432426
BERYLLIUM	313.042	Radial	17.67459	0.0002000676	0.0001258871	0.0001781480	0.0002961678
CADMIUM	228.802	Axial	2.638955	-0.0002105093	-0.0001349689	-0.00009364326	-0.0004029159
CALCIUM	373.690	Radial	62803.21	109.4626	109.2671	109.3540	109.7669
CERIUM	535.353	Radial	101.0688	0.1945968	0.1309820	0.2168127	0.2359956
CHROMIUM	267.716	Axial	28.01688	0.002898007	0.002191749	0.003292893	0.003209379
COBALT	228.616	Axial	7.925976	0.001388312	0.001533822	0.001224348	0.001406767
COPPER	324.754	Axial	134.6371	0.006937473	0.007068569	0.006675809	0.007068041
IRON	271.441	Radial	722.9525	30.91937	30.91889	30.81633	31.02289
LANTHANUM	333.749	Radial	-0.8729128	0.002941733	0.003733577	0.007808187	-0.002716564
LEAD	220.353	Axial	6.318981	0.007188178	0.008973671	0.005890493	0.006700369
LITHIUM	670.784	Radial	200.5403	0.02340766	0.02408583	0.02294334	0.02319382
MAGNESIUM	279.079	Radial	436.2054	6.849032	6.864370	6.814981	6.867744
MANGANESE	257.610	Axial	153791.1	1.856003	1.851569	1.860814	1.855627
MOLYBDENUM	202.030	Axial	1.131967	-0.00001609666	-0.0003666354	0.0001712420	0.0001471035
NICKEL	231.604	Axial	8.565996	0.002618502	0.002662679	0.002441162	0.002751666
PHOSPHORUS	177.495	Axial	5.588749	0.1489819	0.1404424	0.1597666	0.1467366
POTASSIUM	766.490	Radial	1147.203	2.783953	2.845942	2.787177	2.718741
SELENIUM	196.090	Axial	0.2317083	-0.007214582	-0.004846728	-0.01642345	-0.0003735681
SILICON	251.611	Axial	17932.37	5.550559	5.548390	5.549463	5.553824
SILVER	328.068	Axial	-32.5115	-0.0008190383	-0.001028024	-0.0008541224	-0.0005749682
SODIUM	589.592	Radial	9225.179	9.364288	9.347991	9.364819	9.380055
STRONTIUM	421.552	Radial	16569.38	0.2716541	0.2711784	0.2715099	0.2722741
SULFUR	182.034	Axial	24.25176	0.3706752	0.3781090	0.3772679	0.3566486
THALLIUM	190.856	Axial	0.3413326	0.001667590	0.005401665	-0.003675222	0.003276327
TIN	189.989	Axial	-2.63323	-0.002776669	-0.004420212	-0.0008550333	-0.003054762
TITANIUM	334.941	Radial	74.04860	0.02434633	0.02541370	0.02435325	0.02327206
VANADIUM	292.402	Radial	1.961557	0.001838452	0.004819411	0.001587929	-0.0008919833
ZINC	206.200	Axial	68.64342	0.02445207	0.02396890	0.02517571	0.02421161

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV-3 Units: mg/l
Analyzed: 12/21/22 16:36 Sequence: 43 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10166.34	10184.38	10161.58	10153.05
YTTRIUM	360.073	Axial	378891.3	377272.4	378505.0	380896.5
YTTRIUM	360.073	Radial	11236.34	11290.34	11213.07	11205.62
INDIUM	230.606	Axial	3007.027	3007.715	3002.888	3010.477

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	775.4978	9.461778	9.422177	9.495902	9.467254
ANTIMONY	206.833	Axial	115.3283	0.4813617	0.4838586	0.4838863	0.4763404
ARSENIC	189.042	Axial	151.1471	0.9967790	0.9992043	0.9981890	0.9929437
BARIUM	233.527	Axial	2148.950	0.5088758	0.5093681	0.5087774	0.5084820
BERYLLIUM	313.042	Radial	4149.412	0.2028186	0.2020911	0.2033636	0.2030011
BORON	249.678	Radial	215.0331	1.000977	0.9983991	1.010968	0.9935650
CADMIUM	228.802	Axial	2772.860	0.5083840	0.5074563	0.5090602	0.5086355
CALCIUM	373.690	Radial	26958.91	47.79105	47.59599	47.81948	47.95769
CHROMIUM	267.716	Axial	6991.142	1.030836	1.032572	1.027128	1.032808
COBALT	228.616	Axial	3574.373	0.9854880	0.9853989	0.9856650	0.9854000
COPPER	324.754	Axial	16457.77	0.9970562	0.9982801	0.9998395	0.9930489
IRON	259.940	Radial	4712.565	9.792787	9.762455	9.847810	9.768096
LEAD	220.353	Axial	345.7427	0.4881427	0.4902652	0.4861916	0.4879714
LITHIUM	670.784	Radial	8538.712	0.9634567	0.9601633	0.9659670	0.9642397
MAGNESIUM	279.079	Radial	622.5460	9.929306	9.819973	10.03139	9.936552
MANGANESE	257.610	Axial	80417.02	0.9727909	0.9701397	0.9739080	0.9743250
MOLYBDENUM	202.030	Axial	359.8693	0.2513454	0.2503813	0.2508000	0.2528549
NICKEL	231.604	Axial	2000.551	0.9964014	0.9965362	0.9949937	0.9976743
PHOSPHORUS	177.495	Axial	36.34373	1.001070	1.010454	0.9947278	0.9980282
POTASSIUM	766.490	Radial	19933.03	47.22653	47.03895	47.23609	47.40456
SELENIUM	196.090	Axial	83.79592	1.001273	1.005734	0.9997346	0.9983508
SILICON	251.611	Axial	7337.526	2.268900	2.239180	2.265664	2.301856
SILVER	328.068	Axial	9495.153	0.5026482	0.5039874	0.5032701	0.5006871
SODIUM	818.326	Radial	2841.714	49.10184	49.25484	49.05748	48.99321
STRONTIUM	421.552	Radial	57914.56	0.9653641	0.9619975	0.9669524	0.9671423
SULFUR	182.034	Axial	312.5813	4.772560	4.784669	4.763994	4.769015
THALLIUM	190.856	Axial	174.9509	0.9569820	0.9512684	0.9563535	0.9633240
TIN	189.989	Axial	151.4652	0.4933530	0.4970359	0.4925890	0.4904342
TITANIUM	334.941	Radial	3215.011	1.029154	1.022838	1.032072	1.032552
VANADIUM	292.402	Radial	602.8338	0.9954269	0.9948125	0.9978606	0.9936075
ZINC	206.200	Axial	2710.120	0.9841769	0.9817173	0.9864215	0.9843918
CERIUM	535.353	Radial	68.50579	0.04362617	0.03704053	0.02805429	0.06578368
LANTHANUM	333.749	Radial	-3.43538	-0.001969233	-0.009351308	-0.002510174	0.005953784

Sample ID: CCB-3 Units: mg/l
Analyzed: 12/21/22 16:39 Sequence: 44

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10554.81	10546.17	10551.72	10566.54
YTTRIUM	360.073	Axial	400392.5	398137.4	401489.2	401550.8
YTTRIUM	360.073	Radial	11209.86	11209.31	11199.97	11220.29
INDIUM	230.606	Axial	3314.208	3314.574	3311.466	3316.583

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.576078	0.04009638	0.05779049	0.02446438	0.03803426
ANTIMONY	206.833	Axial	0.4150802	0.002193954	0.002718424	0.001503187	0.002360251
ARSENIC	189.042	Axial	-0.06197174	0.004459843	0.001758232	0.005197888	0.006423409
BARIUM	233.527	Axial	3.045103	0.0002894850	0.0002106178	0.0003547616	0.0003030756
BERYLLIUM	313.042	Radial	14.33228	0.00005238464	0.0001282754	-0.00008198746	0.0001108660
BORON	249.678	Radial	1.789233	0.01219010	0.01624260	0.01607162	0.004256075
CADMIUM	228.802	Axial	4.870731	0.0001674474	0.0002912037	-0.00001767710	0.0002288156
CALCIUM	317.933	Radial	156.4483	0.004544231	0.008133268	0.001447073	0.004052352
CERIUM	535.353	Radial	36.30254	-0.1135097	-0.1218712	-0.05044014	-0.1682177
CHROMIUM	267.716	Axial	5.736111	-0.0004132699	0.0004846074	-0.001389028	-0.0003353889
COBALT	228.616	Axial	2.547921	-0.0001267520	-0.0002009529	-0.0001251841	-0.00005411908
COPPER	324.754	Axial	19.05159	-0.00004865431	0.0001950666	-0.0002821814	-0.00005884806
IRON	259.940	Radial	3.160486	0.004621168	0.006009398	0.002725249	0.005128858
LANTHANUM	333.749	Radial	-0.5123821	0.003610823	0.007309353	0.003393422	0.0001296953
LEAD	220.353	Axial	1.582226	0.0004122965	-0.0006701882	0.002007910	-0.0001008323
LITHIUM	670.784	Radial	-11.0200	-0.00005052854	0.0002403939	0.00004095619	-0.0004329357
MAGNESIUM	279.079	Radial	-0.3053151	0.02903000	0.03853734	0.01663798	0.03191467
MANGANESE	257.610	Axial	17.68056	0.0002930526	0.0003003282	0.0003230383	0.0002557912
MOLYBDENUM	202.030	Axial	1.857402	0.0004457553	0.0001369704	0.0006984825	0.0005018132
NICKEL	231.604	Axial	4.473304	0.0004362553	0.0008980695	0.0005031712	-0.00009247472
PHOSPHORUS	177.495	Axial	0.3441003	0.003721518	-0.01493023	0.007880817	0.01821397
POTASSIUM	766.490	Radial	-29.6968	0.04881755	0.06832778	0.03427949	0.04384536
SELENIUM	196.090	Axial	0.9398009	0.0009224631	-0.007417469	0.008585359	0.001599500
SILICON	251.611	Axial	118.8530	0.02278313	0.02301394	0.02264608	0.02268936
SILVER	328.068	Axial	-22.7083	-0.0002552392	-0.0003473183	-0.0003017429	-0.0001166563
SODIUM	589.592	Radial	158.0476	0.1205787	0.1331655	0.1206632	0.1079074
STRONTIUM	421.552	Radial	-6.84840	0.0001269849	0.00003642730	0.0001759529	0.0001685744
SULFUR	182.034	Axial	1.232101	0.01947643	0.02128380	0.02568084	0.01146464
THALLIUM	190.856	Axial	0.6727794	0.003181162	0.006005470	0.009319571	-0.005781555
TIN	189.989	Axial	-0.9028009	0.002931049	0.005244861	0.001673907	0.001874379
TITANIUM	334.941	Radial	1.455164	0.001539945	0.001606646	0.001407501	0.001605687
VANADIUM	292.402	Radial	1.476659	0.001099968	0.001734819	-0.004475018	0.006040103
ZINC	206.200	Axial	1.291301	0.00002231431	-0.00002511345	-0.0002273678	0.0003194242

Sample ID: ICSA-3 Units: mg/l
Analyzed: 12/21/22 21:01 Sequence: 136 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8826.073	8815.952	8829.168	8833.100
YTTRIUM	360.073	Axial	333505.4	332911.2	333957.5	333647.5
YTTRIUM	360.073	Radial	10291.60	10295.26	10293.68	10285.84
INDIUM	230.606	Axial	2466.063	2461.553	2463.849	2472.788

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38096.49	509.6162	509.2556	509.3735	510.2196
ANTIMONY	206.833	Axial	-4.41121	-0.02065904	-0.02266823	-0.02262429	-0.01668459
ARSENIC	189.042	Axial	-2.11392	-0.01112909	-0.01452735	-0.01240991	-0.006450003
BARIUM	233.527	Axial	13.26606	0.003215737	0.003233654	0.003007334	0.003406224
BERYLLIUM	313.042	Radial	12.75246	0.00003077524	-0.0001000671	-0.00004288126	0.0002352741
BORON	249.678	Radial	-0.6525535	0.0005651068	0.001344414	0.005343802	-0.004992896
CADMIUM	228.802	Axial	4.660747	0.0002916792	0.0002135664	0.0001369544	0.0005245168
CALCIUM	373.690	Radial	263320.3	509.8533	509.7031	509.7599	510.0968
CERIUM	535.353	Radial	293.6282	1.277034	1.194950	1.325352	1.310799
CHROMIUM	267.716	Axial	22.33777	0.002569653	0.003083565	0.002422949	0.002202444
COBALT	228.616	Axial	8.632523	0.002140057	0.002242901	0.002215198	0.001962071
COPPER	324.754	Axial	-104.853	-0.008367490	-0.008185925	-0.008866024	-0.008050521
IRON	271.441	Radial	4348.058	206.6061	205.7920	207.0290	206.9973
LANTHANUM	333.749	Radial	-3.45396	-0.002631285	0.003115322	-0.008191885	-0.002817291
LEAD	220.353	Axial	-18.9859	-0.03441945	-0.03765132	-0.03297010	-0.03263694
LITHIUM	670.784	Radial	28.33798	0.004680751	0.004616334	0.004923830	0.004502091
MAGNESIUM	279.079	Radial	29040.51	503.9956	503.9762	503.9432	504.0675
MANGANESE	257.610	Axial	527.3956	0.007435013	0.007491808	0.007439202	0.007374028
MOLYBDENUM	202.030	Axial	4.059540	0.002468243	0.001602241	0.003468239	0.002334249
NICKEL	231.604	Axial	17.83916	0.009263391	0.01012786	0.008679067	0.008983251
PHOSPHORUS	177.495	Axial	0.2144279	0.001399703	0.01473658	-0.01075102	0.0002135542
POTASSIUM	766.490	Radial	-62.8171	-0.04290559	-0.07660671	-0.03404271	-0.01806735
SELENIUM	196.090	Axial	3.302126	0.03591814	0.05861482	0.04207738	0.007062206
SILICON	251.611	Axial	24.35575	-0.004092590	-0.005734229	-0.004033375	-0.002510165
SILVER	328.068	Axial	-59.1541	-0.002670794	-0.002761994	-0.002769383	-0.002481005
SODIUM	589.592	Radial	179.5759	0.1596254	0.1717643	0.1477753	0.1593367
STRONTIUM	421.552	Radial	207.7730	0.004021616	0.004124919	0.004018841	0.003921088
SULFUR	182.034	Axial	1.330861	0.02476021	0.02946168	0.02747088	0.01734809
THALLIUM	190.856	Axial	0.8874348	0.005752626	0.008777684	-0.002483534	0.01096373
TIN	189.989	Axial	-5.07258	-0.01435184	-0.01654609	-0.01290841	-0.01360103
TITANIUM	334.941	Radial	125.1181	0.04475566	0.04296359	0.04569934	0.04560407
VANADIUM	292.402	Radial	4.180992	0.006204478	0.006011109	0.002659278	0.009943047
ZINC	206.200	Axial	16.75183	0.006581174	0.007119140	0.006606903	0.006017480

Sample ID: ICSAB-3 Units: mg/l
Analyzed: 12/21/22 21:03 Sequence: 137 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8784.296	8771.908	8785.924	8795.057
YTTRIUM	360.073	Axial	332378.7	332216.2	331998.5	332921.4
YTTRIUM	360.073	Radial	10201.73	10153.98	10232.38	10218.83
INDIUM	230.606	Axial	2460.183	2453.859	2467.210	2459.479

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37416.64	504.9319	505.3816	503.6590	505.7550
ANTIMONY	206.833	Axial	102.3588	0.4944281	0.4874678	0.4931693	0.5026471
ARSENIC	189.042	Axial	69.28185	0.5310530	0.5215549	0.5314104	0.5401937
BARIUM	233.527	Axial	1868.272	0.5120202	0.5131936	0.5136970	0.5091699
BERYLLIUM	313.042	Radial	9309.326	0.5021319	0.5024548	0.5019740	0.5019669
BORON	249.678	Radial	196.3644	1.006747	1.009734	1.026201	0.9843055
CADMIUM	228.802	Axial	5083.041	1.079339	1.080206	1.079027	1.078784
CALCIUM	373.690	Radial	259720.3	507.3146	508.0465	505.7430	508.1544
CERIUM	535.353	Radial	298.0842	1.314824	1.297243	1.297152	1.350076
CHROMIUM	267.716	Axial	2884.930	0.4916647	0.4938732	0.4903158	0.4908052
COBALT	228.616	Axial	1498.958	0.5047670	0.5049454	0.5040233	0.5053322
COPPER	324.754	Axial	7926.282	0.5468705	0.5473020	0.5441278	0.5491817
IRON	271.441	Radial	4274.798	204.9131	204.4608	204.8805	205.3980
LANTHANUM	333.749	Radial	-1.40143	0.001654214	0.008478503	-0.005657189	0.002141328
LEAD	220.353	Axial	543.1770	0.9388549	0.9394392	0.9359904	0.9411351
LITHIUM	670.784	Radial	24.20768	0.004200672	0.004803606	0.002961853	0.004836557
MAGNESIUM	279.079	Radial	28870.65	505.4639	506.5900	504.7075	505.0944
MANGANESE	257.610	Axial	35788.81	0.5010861	0.5019322	0.5008077	0.5005184
MOLYBDENUM	202.030	Axial	626.6666	0.5073654	0.5073283	0.5082618	0.5065062
NICKEL	231.604	Axial	1638.974	0.9977673	0.9971356	0.9945156	1.001651
PHOSPHORUS	177.495	Axial	0.8872882	0.02300174	0.03405998	0.02369167	0.01125359
POTASSIUM	766.490	Radial	-73.9870	-0.07333462	-0.03820915	-0.08855570	-0.09323902
SELENIUM	196.090	Axial	37.57484	0.5147988	0.5054438	0.5068927	0.5320599
SILICON	251.611	Axial	2832.133	1.006424	1.002541	1.010465	1.006266
SILVER	328.068	Axial	18797.85	1.133243	1.134212	1.132774	1.132743
SODIUM	589.592	Radial	152.5785	0.1305163	0.1070157	0.1327629	0.1517705
STRONTIUM	421.552	Radial	195.1397	0.003822841	0.003726485	0.003872777	0.003869260
SULFUR	182.034	Axial	0.4808232	0.009842477	-0.002761628	0.01487180	0.01741726
THALLIUM	190.856	Axial	71.67775	0.4791567	0.4800511	0.4713821	0.4860369
TIN	189.989	Axial	121.0942	0.4822263	0.4831816	0.4843401	0.4791572
TITANIUM	334.941	Radial	1566.224	0.5527000	0.5536009	0.5510345	0.5534646
VANADIUM	292.402	Radial	276.3371	0.5019138	0.5029506	0.4990360	0.5037546
ZINC	206.200	Axial	2203.043	0.9258762	0.9273960	0.9261582	0.9240744

3015 GW/SPLP ICP Metals Prep Benchsheet

Workgroup: WG1977039

Prep Start Date/Time: 12/20/22 12:07-12:08 **Analyst:** TAS4003 **Leachate Fluid Type:** N/A **Vessel ESC Lot ID:** 2208066 **Pipette ID:** F13409151 **Carousel ID:** 8
Microwave ID: MJ9747 **Dig. Start Date/Time:** 12/20/22 13:30:00 **Prep End Date/Time:** 12/20/22 14:50 **SOP:** ENV-SOP-MTJL-0219 **Method:** 3015 **Filter Lot#:** N/A
pH Lot #: 10BDH3021 **Analyst Verified pH:** TAS4003 **Pipette Tip Lot#:** 236276

Nitric Acid: 22L20139 Amt. Used: 4 mL Exp. Date:06/20/23 **Hydrochloric Acid:** 22L15564 Amt. Used: 1 mL Exp. Date:06/15/23
High Spike: 22L07438 Amt. Used: 0.45 mL Exp. Date:06/07/23 **High Spike 2:** 22L07439 Amt. Used: 0.45 mL Exp. Date:06/07/23

Sample Number	Prep Flags	ListType	Initial Sample Vol (mL)	Final Volume (mL)	Sample Description	Initial pH	Review Analyst	Review Date
BLANK			45	50	NANO	<2	SJM723	12/20/22 14:51:16
LCS			45	50	NANO	<2	SJM723	12/20/22 14:51:16
MS(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
MSD(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
1. L1564959-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
2. L1565291-02		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
3. L1565381-03		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
4. L1565616-01	T2	ICP METALS	5	50	DARK GRAY WATER	<2	SJM723	12/20/22 14:51:16
5. L1568818-01		ICP METALS	5	50	WATER W/ FLOATING STUFF	<2	SJM723	12/20/22 14:51:16
6. L1568841-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
7. L1568889-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
8. L1569097-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
9. L1569097-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
10. L1569097-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
11. L1569102-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
12. L1569102-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
13. L1569102-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
14. L1569102-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
15. L1569103-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
16. L1569103-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
17. L1569103-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
18. L1569103-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16

Comments:
L1565616-01 PREPPED @ 5 ML. T2 APPLIED, UNABLE TO READ PH STRIP DUE TO MATRIX. L1568818-01 PREPPED @ BOTH 1X AND 5 ML DUE TO MATRIX, 1X VENTED, REPORTED @ 5 ML. TS 12.20.22

Reviewed By:SJM723 on 12/20/22 14:51:16

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

Coef1	First Order Coefficient.
Coef2	Second Order Coefficient.
Corr.	Correlation Coefficient.
DL	Detection Limit.
Incpt	Intercept.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
Mass	Mass of parameter.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RSD	Relative Standard Deviation.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Slope	Slope of calibration curve.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.

RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).

GLOSSARY OF TERMS

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY

SGS North America Inc. - Orlando
4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com/ehsusa

458097

FED-EX Tracking #	Bottle Order Control #
SGS Quote #	SGS Job # FC1020X

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: muna.mohammed@sgs.com E-mail:
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): BP Phone:

Project Information

Project Name: Griffiss AFB; Rome, NY
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Ammonia (350.1), TKN (351.2), Phenol (420.4)	Boron (6010)	LAB USE ONLY
1X	LF1SW-1-1222		12/5/22	4:30:00 PM	BP	AQ	3			X	X					X	X	-01
2X	LF1SW-3-1222		12/5/22	3:30:00 PM	BP	AQ	3			X	X					X	X	-02
3X	LF1SW-25MC-1222		12/5/22	4:00:00 PM	BP	AQ	3			X	X					X	X	-03

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Day (business)
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] other Due 12/20/2022

Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] Commercial "C"
- [ ] State Forms
- [ ] EDD Format
- [ ] Other
- [X] FL

Commercial "A" = Results Onl
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Send to Pace Mt. Juliet, TN
DOD/NY Cert
1-250ml H2SO4 Plastic Bottle
1-250ml H2SO4 Amber Bottle
1-250ml HNO3 Plastic Bottle

OK

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		12/6/22	1	2		2
3	Relinquished by Sampler:	Date Time: 900			12-9-22 0930	4
5	Relinquished by:	Date Time:				

Preserved where applicable ☐ Therm. ID: On Ice ☐ Cooler Temp.

2.5°c to 2.5°c

Sample Receipt Checklist

COC Seal Present/Intact:	Y ✓ N	If Applicable	
COC Signed/Accurate:	✓ Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	✓ Y N	Pres.Correct/Check:	✓ Y N
Correct bottles used:	✓ Y N		
Sufficient volume sent:	✓ Y N		
RAD Screen <0.5 mR/hr:	✓ Y N		

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

Bhate Environmental

Griffiss AFB; Rome, NY

GRFIS-BECOS

SGS Job Number: FC1065



Sampling Date: 12/06/22

Report to:

MOLIVE@bhate.com

ATTN: Distribution6

Total number of pages in report: **391**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Ariel Hartney 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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Test results relate only to samples analyzed.

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Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

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SGS LabLink@16:32 03-Jan-2023

Sample Summary

Bhate Environmental

Job No: FC1065

Griffiss AFB; Rome, NY
Project No: GRFIS-BECOS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC1065-1	12/06/22	07:30	BP	12/07/22	AQ	Trip Blank Water	LF1-TB-120622
FC1065-2	12/06/22	10:15	BP	12/07/22	AQ	Ground Water	LF1MW-13-1222-A
FC1065-3	12/06/22	10:15	BP	12/07/22	AQ	Ground Water	LF1MW-13-1222
FC1065-4	12/06/22	12:50	BP	12/07/22	AQ	Ground Water	LF1P-2-1222
FC1065-5	12/06/22	14:10	BP	12/07/22	AQ	Ground Water	LF1MW-6-1222

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FC1065

Site: Griffiss AFB; Rome, NY **Report Date** 12/23/2022 3:05:33

On 12/07/2022, 4 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 4 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC1065 was assigned to the project. Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V1P3648

Sample(s) FC1293-8MS, FC1293-8MSD were used as the QC samples indicated.

Matrix: AQ **Batch ID:** V5E1624

Sample(s) FC1262-2MS were used as the QC samples indicated.

V5E1624-BS: No MSD available for this run.

FC1065-4: Sample vial(s) contained bubbles greater than 6mm.

Matrix: AQ **Batch ID:** VO2867

Sample(s) FC1020-3MS, FC1020-3MSD were used as the QC samples indicated.

RPD(s) for MSD for Methyl Bromide are outside control limits for sample FC1020-3MSD. Probable cause is due to sample non-homogeneity.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP41624

Sample(s) FC1282-7FDUP, FC1282-7FMS, FC1282-7FMSD, FC1282-7FPS, FC1282-7FSDL were used as the QC samples for metals.

RPD(s) for Serial Dilution for Magnesium are outside control limits for sample MP41624-SD1. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP38282

Sample(s) FC1065-2MS, FC1065-2MSD were used as the QC samples for Bromide, Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Sulfate, Bromide, Fluoride.

Matrix Spike Recovery(s) for Fluoride are outside control limits. Spike recovery indicates possible matrix interference.

FC1065-4 for Bromide: Dilution required based on initial conductivity reading.

FC1065-4 for Fluoride: Dilution required based on initial conductivity reading.

FC1065-4 for Nitrogen, Nitrate: Dilution required based on initial conductivity reading.

FC1065-4 for Nitrogen, Nitrite: Dilution required based on initial conductivity reading.

FC1065-4 for Sulfate: Dilution required based on initial conductivity reading.

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP38278

Sample(s) FC1065-2MS, FC1065-2MSD were used as the QC samples for Phosphate, Ortho.

General Chemistry By Method SM19 2340B

Matrix: AQ **Batch ID:** R58636

FC1065-3 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58637

FC1065-2 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58638

FC1065-4 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58639

FC1065-5 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

General Chemistry By Method SM2120 B-11

Matrix: AQ **Batch ID:** GN92956

Sample(s) FC1065-2DUP were used as the QC samples for Color, Apparent.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN92993

Sample(s) FC1070-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN92987

Sample(s) FC1065-2DUP were used as the QC samples for Solids, Total Dissolved.

RPD(s) for Duplicate for Solids, Total Dissolved are outside control limits for sample GN92987-D2. RPD acceptable due to low duplicate and sample concentrations.

General Chemistry By Method SM5210 B-11

Matrix: AQ **Batch ID:** GP38277

Sample(s) FC1014-1DUP were used as the QC samples for BOD, 5 Day.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP38277-D1. RPD acceptable due to low duplicate and sample concentrations.

FC1065-2 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria

FC1065-3 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria

FC1065-5 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria

General Chemistry By Method SM5220 C-11

Matrix: AQ **Batch ID:** GP38286

Sample(s) FC1052-4MS, FC1052-4MSD were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ **Batch ID:** GP38281

Sample(s) FC1010-1MS, FC1010-1MSD were used as the QC samples for Total Organic Carbon.

FC1065-4 for Total Organic Carbon: Sample was not preserved to a pH < 2.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Summary of Hits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FC1065-1	**LF1-TB-120622**					
No hits reported in this sample.						
FC1065-2	**LF1MW-13-1222-A**					
Calcium		64500	1000	100	ug/l	SW846 6010D
Magnesium		7810	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		222	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.18 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		9.8 J	20	10	mg/l	SM5220 C-11
Chloride		7.0	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		150	25	25	CU	SM2120 B-11
Fluoride		0.14 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		193	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.052 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Phosphate, Ortho		0.062 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		254	50	50	mg/l	SM2540 C-11
Sulfate		2.5	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		2.0	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1065-3	**LF1MW-13-1222**					
Vinyl Chloride		0.49 J	1.0	0.50	ug/l	SW846 8260D
Calcium		66500	1000	100	ug/l	SW846 6010D
Magnesium		8200	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		220	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.18 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		9.8 J	20	10	mg/l	SM5220 C-11
Chloride		6.9	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		100	25	25	CU	SM2120 B-11
Fluoride		0.13 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		200	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.050 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Phosphate, Ortho		0.047 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		266	50	50	mg/l	SM2540 C-11
Sulfate		2.1	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		2.0	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1065-4	**LF1P-2-1222**					
Benzene		0.33 J	1.0	0.50	ug/l	SW846 8260D
Chlorobenzene		0.89 J	1.0	0.50	ug/l	SW846 8260D
1,4-Dichlorobenzene		1.3	1.0	0.50	ug/l	SW846 8260D
Calcium		144000	1000	100	ug/l	SW846 6010D

Summary of Hits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Magnesium		14400	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		493	5.0	2.5	mg/l	SM2320 B-11
BOD, 5 Day		8.7	4.0	4.0 [b]	mg/l	SM5210 B-11
Bromide [c]		0.63 J	2.5	1.3	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		12.3 J	20	10	mg/l	SM5220 C-11
Chloride		13.1	10	5.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		125	25	25	CU	SM2120 B-11
Fluoride [c]		0.44 J	1.0	0.50	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		419	23	0.66	mg/l	SM19 2340B
Phosphate, Ortho		0.042 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		528	50	50	mg/l	SM2540 C-11
Total Organic Carbon [d]		1.7 J	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1065-5	**LF1MW-6-1222**					
Calcium		66000	1000	100	ug/l	SW846 6010D
Magnesium		11000	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		260	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.23 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chloride		18.2	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		50	10	10	CU	SM2120 B-11
Fluoride		0.11 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		210	23	0.66	mg/l	SM19 2340B
Phosphate, Ortho		0.032 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		324	50	50	mg/l	SM2540 C-11
Total Organic Carbon		0.67 J	2.0	1.0	mg/l	SM5310 B-11/SW9060A

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Value reported is laboratory DL (MDL).
(c) Dilution required based on initial conductivity reading.
(d) Sample was not preserved to a pH < 2.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	LF1-TB-120622		
Lab Sample ID:	FC1065-1	**Date Sampled:**	12/06/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72925.D	1	12/09/22 13:16	AL	n/a	n/a	VO2867
Run #2	1P96416.D	1	12/16/22 10:44	CF	n/a	n/a	V1P3648

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [a]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1-TB-120622
Lab Sample ID: FC1065-1
Matrix: AQ - Trip Blank Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	107%	83-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1-TB-120622		
Lab Sample ID:	FC1065-1	**Date Sampled:**	12/06/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	100%	108%	79-125%
2037-26-5	Toluene-D8	105%	94%	85-112%
460-00-4	4-Bromofluorobenzene	97%	102%	83-118%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1MW-13-1222-A		
Lab Sample ID:	FC1065-2	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72933.D	1	12/09/22 16:35	AL	n/a	n/a	VO2867
Run #2	5E36137.D	1	12/14/22 17:51	CF	n/a	n/a	V5E1624

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [a]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1MW-13-1222-A
Lab Sample ID: FC1065-2
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	101%	83-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1MW-13-1222-A		
Lab Sample ID:	FC1065-2	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	112%	100%	79-125%
2037-26-5	Toluene-D8	101%	98%	85-112%
460-00-4	4-Bromofluorobenzene	86%	103%	83-118%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1MW-13-1222-A
Lab Sample ID: FC1065-2
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	64500	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	7810	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41624

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-13-1222-A
Lab Sample ID: FC1065-2
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	222	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.18 J	0.50	0.25	0.12	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	9.8 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	7.0	2.0	1.0	0.80	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Color, Apparent	150	25	25	25	CU	5	12/07/22 16:25	JB	SM2120 B-11
Fluoride	0.14 J	0.20	0.10	0.060	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	193	23	0.66	0.27	mg/l	1	12/20/22 13:06	LM	SM19 2340B
Nitrogen, Nitrate	0.052 J	0.10	0.050	0.040	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.062 J	0.10	0.040	0.020	mg/l	1	12/07/22 13:40	FN	EPA 365.3
Solids, Total Dissolved	254	50	50	50	mg/l	1	12/12/22 16:05	BW	SM2540 C-11
Sulfate	2.5	2.0	1.0	0.60	mg/l	1	12/07/22 13:28	JB	EPA 300/SW846 9056A
Total Organic Carbon	2.0	2.0	1.0	0.54	mg/l	1	12/08/22 18:10	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	LF1MW-13-1222		
Lab Sample ID:	FC1065-3	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72934.D	1	12/09/22 17:00	AL	n/a	n/a	VO2867
Run #2	5E36138.D	1	12/14/22 18:14	CF	n/a	n/a	V5E1624

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [a]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1MW-13-1222		
Lab Sample ID:	FC1065-3	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.49	1.0	0.50	0.41	ug/l	J
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	103%	83-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1MW-13-1222		
Lab Sample ID:	FC1065-3	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	102%	101%	79-125%
2037-26-5	Toluene-D8	105%	99%	85-112%
460-00-4	4-Bromofluorobenzene	94%	100%	83-118%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1MW-13-1222
Lab Sample ID: FC1065-3
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	66500	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	8200	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41624

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-13-1222
Lab Sample ID: FC1065-3
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	220	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.18 J	0.50	0.25	0.12	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	9.8 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	6.9	2.0	1.0	0.80	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Color, Apparent	100	25	25	25	CU	5	12/07/22 16:25	JB	SM2120 B-11
Fluoride	0.13 J	0.20	0.10	0.060	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	200	23	0.66	0.27	mg/l	1	12/20/22 13:11	LM	SM19 2340B
Nitrogen, Nitrate	0.050 J	0.10	0.050	0.040	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.047 J	0.10	0.040	0.020	mg/l	1	12/07/22 13:40	FN	EPA 365.3
Solids, Total Dissolved	266	50	50	50	mg/l	1	12/12/22 16:05	BW	SM2540 C-11
Sulfate	2.1	2.0	1.0	0.60	mg/l	1	12/07/22 14:30	JB	EPA 300/SW846 9056A
Total Organic Carbon	2.0	2.0	1.0	0.54	mg/l	1	12/08/22 18:32	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	LF1P-2-1222		
Lab Sample ID:	FC1065-4	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72935.D	1	12/09/22 17:25	AL	n/a	n/a	VO2867
Run #2 [a]	5E36139.D	1	12/14/22 18:37	CF	n/a	n/a	V5E1624

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.33	1.0	0.50	0.31	ug/l	J
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.89	1.0	0.50	0.20	ug/l	J
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [b]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	1.3	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1P-2-1222
Lab Sample ID: FC1065-4
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	101%	83-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1P-2-1222		
Lab Sample ID:	FC1065-4	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	103%	79-125%
2037-26-5	Toluene-D8	109%	97%	85-112%
460-00-4	4-Bromofluorobenzene	100%	102%	83-118%

(a) Sample vial(s) contained bubbles greater than 6mm.
(b) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1P-2-1222
Lab Sample ID: FC1065-4
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	144000	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	14400	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41624

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1P-2-1222
Lab Sample ID: FC1065-4
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	493	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day	8.7	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide [b]	0.63 J	2.5	1.3	0.60	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	12.3 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	13.1	10	5.0	4.0	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Color, Apparent	125	25	25	25	CU	5	12/07/22 16:25	JB	SM2120 B-11
Fluoride [b]	0.44 J	1.0	0.50	0.30	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	419	23	0.66	0.27	mg/l	1	12/20/22 13:16	LM	SM19 2340B
Nitrogen, Nitrate [b]	0.25 U	0.50	0.25	0.20	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite [b]	0.25 U	0.50	0.25	0.20	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.042 J	0.10	0.040	0.020	mg/l	1	12/07/22 13:40	FN	EPA 365.3
Solids, Total Dissolved	528	50	50	50	mg/l	1	12/12/22 16:05	BW	SM2540 C-11
Sulfate [b]	5.0 U	10	5.0	3.0	mg/l	5	12/07/22 14:51	JB	EPA 300/SW846 9056A
Total Organic Carbon [d]	1.7 J	2.0	1.0	0.54	mg/l	1	12/08/22 18:53	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Dilution required based on initial conductivity reading.
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(d) Sample was not preserved to a pH < 2.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-6-1222
Lab Sample ID: FC1065-5
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	O72936.D	1	12/09/22 17:50	AL	n/a	n/a	VO2867
Run #2	5E36140.D	1	12/14/22 19:00	CF	n/a	n/a	V5E1624

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U [a]	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1MW-6-1222
Lab Sample ID: FC1065-5
Matrix: AQ - Ground Water
Method: SW846 8260D
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.50 U	1.0	0.50	0.41	ug/l	
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	92%	101%	83-118%

U = Not detected LOD = Limit of Detection
LOQ = Limit of Quantitation DL = Detection Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	LF1MW-6-1222		
Lab Sample ID:	FC1065-5	**Date Sampled:**	12/06/22
Matrix:	AQ - Ground Water	**Date Received:**	12/07/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	103%	79-125%
2037-26-5	Toluene-D8	107%	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	104%	83-118%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: LF1MW-6-1222
Lab Sample ID: FC1065-5
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	66000	1000	100	50	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	11000	5000	100	35	ug/l	1	12/19/22	12/20/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19110
(2) Prep QC Batch: MP41624

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-6-1222
Lab Sample ID: FC1065-5
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/06/22
Date Received: 12/07/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	260	5.0	2.5	2.0	mg/l	1	12/12/22 16:13	GT	SM2320 B-11
BOD, 5 Day [b]	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/12/22 08:30	JB	SM5210 B-11
Bromide	0.23 J	0.50	0.25	0.12	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	10 U	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	18.2	2.0	1.0	0.80	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Color, Apparent	50	10	10	10	CU	2	12/07/22 16:25	JB	SM2120 B-11
Fluoride	0.11 J	0.20	0.10	0.060	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [c]	210	23	0.66	0.27	mg/l	1	12/20/22 13:21	LM	SM19 2340B
Nitrogen, Nitrate	0.050 U	0.10	0.050	0.040	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.032 J	0.10	0.040	0.020	mg/l	1	12/07/22 13:40	FN	EPA 365.3
Solids, Total Dissolved	324	50	50	50	mg/l	1	12/12/22 16:05	BW	SM2540 C-11
Sulfate	1.0 U	2.0	1.0	0.60	mg/l	1	12/07/22 15:11	JB	EPA 300/SW846 9056A
Total Organic Carbon	0.67 J	2.0	1.0	0.54	mg/l	1	12/08/22 19:16	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Estimated value, oxygen depletion outside of acceptable BOD criteria
(c) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Subcontract Lab Data

Report of Analysis

ANALYTICAL REPORT

December 30, 2022

SGS North America Inc. - Orlando, FL

Sample Delivery Group:	L1569102
Samples Received:	12/19/2022
Project Number:	FC1065X
Description:	Griffis AFB; Rome, NY

Report To:

Muna Mohammed
4405 Vineland Rd
Suite C-15
Orlando, FL 32811

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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LF1MW-13-1222-A L1569102-01 WW

Collected by	Collected date/time	Received date/time
BP	12/06/22 10:15	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:42	12/20/22 10:42	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:24	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:31	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:42	ZSA	Mt. Juliet, TN

LF1MW-13-1222 L1569102-02 WW

Collected by	Collected date/time	Received date/time
BP	12/06/22 10:15	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:43	12/20/22 10:43	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:28	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:31	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:44	ZSA	Mt. Juliet, TN

LF1P-2-1222 L1569102-03 WW

Collected by	Collected date/time	Received date/time
BP	12/06/22 12:50	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:45	12/20/22 10:45	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:30	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:34	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:47	ZSA	Mt. Juliet, TN

LF1MW-6-1222 L1569102-04 WW

Collected by	Collected date/time	Received date/time
BP	12/06/22 14:10	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:51	12/20/22 10:51	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:31	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:35	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:50	ZSA	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Report Revision History

Level II Report - Version 1: 12/23/22 13:47

350.1 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222-A

Lab Sample ID:	L1569102-01	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222-A	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221220104200	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:42
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:42
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	222		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222

Lab Sample ID:	L1569102-02	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221220104300	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:43
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:43
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	199		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-2-1222

Lab Sample ID:	L1569102-03	**SDG:**	L1569102
Client Sample ID:	LF1P-2-1222	**Collected Date/Time:**	12/06/22 12:50
Lab File ID:	20221220104500	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:45
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:45
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	1520		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-6-1222

Lab Sample ID:	L1569102-04	**SDG:**	L1569102
Client Sample ID:	LF1MW-6-1222	**Collected Date/Time:**	12/06/22 14:10
Lab File ID:	20221220105100	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:51
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:51
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	420		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-1

Lab Sample ID:	R3873985-1	**SDG:**	L1569102
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221220100700	**Received Date/Time:**	_____
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:07
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:07
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	75.0	U	31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-5

Lab Sample ID:	R3873985-5	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221220103900	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:39
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:39
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	75.0	U	31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-7

Lab Sample ID:	R3873985-7	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221220110000	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 11:00
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 11:00
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	1500		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3873985-2	**SDG:**	L1569102
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221220100800	**Received Date/Time:**	_____
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:08
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:08
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	7330		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-3

Lab Sample ID:	R3873985-3	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103400	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:34
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:34
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	4690		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-6

Lab Sample ID:	R3873985-6	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221220105700	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:57
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:57
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	5360		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-4

Lab Sample ID:	R3873985-4	**SDG:**	L1569102
Client Sample ID:	MSD	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103600	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:36
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:36
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	4830		31.7	75.0	150

2-IN

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

		ICV				CCV				CCV			
Sample ID:		FS3100-011220221005				FS3100-011220221027				FS3100-011220221046			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.945	98.90		5	4.884	97.70		5	4.880	97.60	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

CCV

Sample ID: FS3100-011220221101

Analyte	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.858	97.20	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221220100700		20221220102800		20221220104800		20221220110300	
Analyte	mg/l		mg/l		mg/l		mg/l	
AMMONIA NITROGEN	0.0750	U	-0.03000		-0.02800		-0.02900	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3873985-3
R3873985-4

MS Sample / File ID:	R3873985-3 / 20221220103400	**SDG:**	L1569102
MSD Sample / File ID:	R3873985-4 / 20221220103600	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569097-01 / 20221220103300	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5000	75.0	4690	4830	93.7	96.5	1	90.0 - 110	2.96	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.: R3873985-6

MS Sample / File ID:	R3873985-6 / 20221220105700	**SDG:**	L1569102
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569103-03 / 20221220105500	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5000	751	5360		92.3		1	90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3873985-5 / 20221220103900	**SDG:**	L1569102
OS Sample / File ID:	L1569097-02 / 20221220103700	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	ug/l	*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	75.0	75.0	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUPLICATES

L1569102-01,02,03,04

SAMPLE NO.:
R3873985-7

DUP Sample / File ID:	R3873985-7 / 20221220110000	**SDG:**	L1569102
OS Sample / File ID:	L1569103-04 / 20221220105800	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	1500	1500	0.0668	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3873985-2

LCS Sample / File ID:	R3873985-2 / 20221220100800	**SDG:**	L1569102
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Ammonia Nitrogen	7500	7330		97.7		90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569102-01,02,03,04 **Analytical Method:** 350.1
Matrix: WW **Prep Method:** 350.1

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Ammonia Nitrogen	7664-41-7			0.0317	0.15

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	12/20/22 09:54
Analytical Run:	122022_1	**Calibration End Date:**	12/20/22 10:02

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	10.0	20221220095400	12/20/22 09:54		
CAL	5.00	20221220095600	12/20/22 09:56		
CAL	2.50	20221220095700	12/20/22 09:57		
CAL	1.00	20221220095900	12/20/22 09:59		
CAL	0.10	20221220100100	12/20/22 10:01		
CAL	0.00	20221220100200	12/20/22 10:02		
ICV	FS3100-011220221005	20221220100500	12/20/22 10:05		
BLANK	R3873985-1	20221220100700	12/20/22 10:07	1	WG1976827
LCS	R3873985-2	20221220100800	12/20/22 10:08	1	WG1976827
L1568037-03	L1568037-03	20221220101500	12/20/22 10:15	500	WG1976827
L1568037-04	L1568037-04	20221220101600	12/20/22 10:16	50	WG1976827
L1568132-01	L1568132-01	20221220101800	12/20/22 10:18	1	WG1976827
L1568251-01	L1568251-01	20221220102500	12/20/22 10:25	5	WG1976827
CCV	FS3100-011220221027	20221220102700	12/20/22 10:27		
CCB	FS3100-011220221028	20221220102800	12/20/22 10:28		
L1568255-01	L1568255-01	20221220103100	12/20/22 10:31	5	WG1976827
OS	L1569097-01	20221220103300	12/20/22 10:33		
L1569097-01	L1569097-01	20221220103300	12/20/22 10:33	1	WG1976827
MS	R3873985-3	20221220103400	12/20/22 10:34	1	WG1976827
MSD	R3873985-4	20221220103600	12/20/22 10:36	1	WG1976827
OS	L1569097-02	20221220103700	12/20/22 10:37		
L1569097-02	L1569097-02	20221220103700	12/20/22 10:37	1	WG1976827
DUP	R3873985-5	20221220103900	12/20/22 10:39	1	WG1976827
L1569097-03	L1569097-03	20221220104000	12/20/22 10:40	1	WG1976827
LF1MW-13-1222-A	L1569102-01	20221220104200	12/20/22 10:42	1	WG1976827
LF1MW-13-1222	L1569102-02	20221220104300	12/20/22 10:43	1	WG1976827
LF1P-2-1222	L1569102-03	20221220104500	12/20/22 10:45	1	WG1976827
CCV	FS3100-011220221046	20221220104600	12/20/22 10:46		
CCB	FS3100-011220221048	20221220104800	12/20/22 10:48		
LF1MW-6-1222	L1569102-04	20221220105100	12/20/22 10:51	1	WG1976827
OS	L1569103-03	20221220105500	12/20/22 10:55		
L1569103-03	L1569103-03	20221220105500	12/20/22 10:55	1	WG1976827
MS	R3873985-6	20221220105700	12/20/22 10:57	1	WG1976827
OS	L1569103-04	20221220105800	12/20/22 10:58		
L1569103-04	L1569103-04	20221220105800	12/20/22 10:58	1	WG1976827
DUP	R3873985-7	20221220110000	12/20/22 11:00	1	WG1976827
CCV	FS3100-011220221101	20221220110100	12/20/22 11:01		
CCB	FS3100-011220221103	20221220110300	12/20/22 11:03		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	10	9.946	99.50	5	5.117	102
File ID:		20221220095400			20221220095600	

5

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	2.50	2.488	99.50	1	.981	98.10
File ID:		20221220095700			20221220095900	

5

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	0.10	.082	82	0	-.015	
File ID:		20221220100100			20221220100200	

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16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
AMMONIA NITROGEN	0	5	0.999882			58084	1536.6	

5

Calibration Type

0 = Linear Regression

Weightage

5 = None

Instrument: FS3100-01

Created: 12/20/22 16:00

Instrument Method: nh3.mth

Analytical Method: 350.1

Analyte: AMMONIA NITROGEN

Equation: Conc = 58084 * Resp + 1536.6

Standard ID: 22L20114

Date/Time	Sample ID	Std. Conc.	Repsonse
12/20/22 09:54	Cal 10.0 ppm	10.0	579263
12/20/22 09:56	Cal 5.00 ppm	5.00	298765
12/20/22 09:57	Cal 2.50 ppm	2.50	146030
12/20/22 09:59	Cal 1.00 ppm	1.00	58545
12/20/22 10:01	Cal 0.10 ppm	0.10	6327
12/20/22 10:02	Cal 0.00 ppm	0.00	643

R = 0.999882

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

Date	Time	Peak	Cup	Name	Dil Fact	Mult.
20-Dec-22	09:50	1	102	Sync	1.0000	1.0000
20-Dec-22	09:51	2	0	INSTBLK	1.0000	1.0000
20-Dec-22	09:53	3	0	Read Baseline	1.0000	1.0000
20-Dec-22	09:54	4	101	Cal 10.0 ppm	1.0000	1.0000
20-Dec-22	09:56	5	102	Cal 5.00 ppm	1.0000	1.0000
20-Dec-22	09:57	6	103	Cal 2.50 ppm	1.0000	1.0000
20-Dec-22	09:59	7	104	Cal 1.00 ppm	1.0000	1.0000
20-Dec-22	10:01	8	105	Cal 0.10 ppm	1.0000	1.0000
20-Dec-22	10:02	9	106	Cal 0.00 ppm	1.0000	1.0000
20-Dec-22	10:04	10	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:05	11	109	ICV	1.0000	1.0000
20-Dec-22	10:07	12	107	Blank WG1976827	1.0000	1.0000
20-Dec-22	10:08	13	111	LCS	1.0000	1.0000
20-Dec-22	10:15	14	114	L1568037-03	500.0000	1.0000
20-Dec-22	10:16	15	115	L1568037-04	50.0000	1.0000
20-Dec-22	10:18	16	116	L1568132-01	1.0000	1.0000
20-Dec-22	10:19	17	117	L1568223-01	1.0000	1.0000
20-Dec-22	10:21	18	118	L1568243-01	1.0000	1.0000
20-Dec-22	10:22	19	119	L1568243-02	1.0000	1.0000
20-Dec-22	10:24	20	120	L1568243-03	1.0000	1.0000
20-Dec-22	10:25	21	121	L1568251-01	5.0000	1.0000
20-Dec-22	10:27	22	109	CCV	1.0000	1.0000
20-Dec-22	10:28	23	0	CCB	1.0000	1.0000
20-Dec-22	10:30	24	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:31	25	122	L1568255-01	5.0000	1.0000
20-Dec-22	10:33	26	123	L1569097-01	1.0000	1.0000
20-Dec-22	10:34	27	124	MS L1569097-01	1.0000	1.0000
20-Dec-22	10:36	28	125	MSD L1569097-01	1.0000	1.0000
20-Dec-22	10:37	29	126	L1569097-02	1.0000	1.0000
20-Dec-22	10:39	30	127	DUP L1569097-02	1.0000	1.0000
20-Dec-22	10:40	31	128	L1569097-03	1.0000	1.0000
20-Dec-22	10:42	32	129	L1569102-01	1.0000	1.0000
20-Dec-22	10:43	33	130	L1569102-02	1.0000	1.0000
20-Dec-22	10:45	34	131	L1569102-03	1.0000	1.0000
20-Dec-22	10:46	35	109	CCV	1.0000	1.0000

20-Dec-22	10:48	36	0	CCB	1.0000	1.0000
20-Dec-22	10:49	37	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:51	38	132	L1569102-04	1.0000	1.0000
20-Dec-22	10:52	39	133	L1569103-01	1.0000	1.0000
20-Dec-22	10:54	40	134	L1569103-02	1.0000	1.0000
20-Dec-22	10:55	41	135	L1569103-03	1.0000	1.0000
20-Dec-22	10:57	42	136	MS L1569103-03	1.0000	1.0000
20-Dec-22	10:58	43	137	L1569103-04	1.0000	1.0000
20-Dec-22	11:00	44	138	DUP L1569103-04	1.0000	1.0000
20-Dec-22	11:01	45	109	CCV	1.0000	1.0000
20-Dec-22	11:03	46	0	CCB	1.0000	1.0000
20-Dec-22	11:04	47	0	Read Baseline	1.0000	1.0000
20-Dec-22	11:10	48	133	L1569103-01	5.0000	1.0000
20-Dec-22	11:12	49	134	L1569103-02	1.0000	1.0000
20-Dec-22	11:13	50	109	CCV	1.0000	1.0000
20-Dec-22	11:15	51	0	CCB	1.0000	1.0000
20-Dec-22	11:16	52	0	Read Baseline	1.0000	1.0000

*** Calibration Data ***

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

| In-line Gas Diffusion TKN & NH3 |

Peak	Response	Calc [ppm]	Flags
1	294072	5.036	
2	277	-0.022	LO
3	0	-0.026	BL
4	579263	9.946	
5	298765	5.117	
6	146030	2.488	
7	58545	0.981	
8	6327	0.082	
9	643	-0.015	LO
10	0	-0.026	BL
11	288759	4.945	
12	350	-0.020	LO
13	427084	7.326	
14	188083	1605.845	
15	72205	60.833	
16	11156	0.166	
17	22194	0.356	
18	2043	0.009	
19	2339	0.014	
20	1643	0.002	
21	320142	27.426	
22	285218	4.884	
23	-210	-0.030	LO
24	0	-0.026	BL
25	211883	18.107	
26	2508	0.017	
27	273645	4.685	
28	281867	4.826	
29	1525	0.000	LO
30	1691	0.003	
31	29314	0.478	
32	14432	0.222	
33	13067	0.199	
34	89859	1.521	
35	284957	4.880	

36	-110	-0.028	LO
37	0	-0.026	BL
38	25922	0.420	
39	705969	12.128	HI
40	14693	0.227	FL
41	45170	0.751	FL
42	313073	5.364	
43	88430	1.496	
44	88509	1.497	
45	283695	4.858	
46	-147	-0.029	LO
47	0	-0.026	BL
48	144871	12.339	
49	15145	0.234	
50	281460	4.819	
51	-234	-0.030	LO
52	0	-0.026	BL

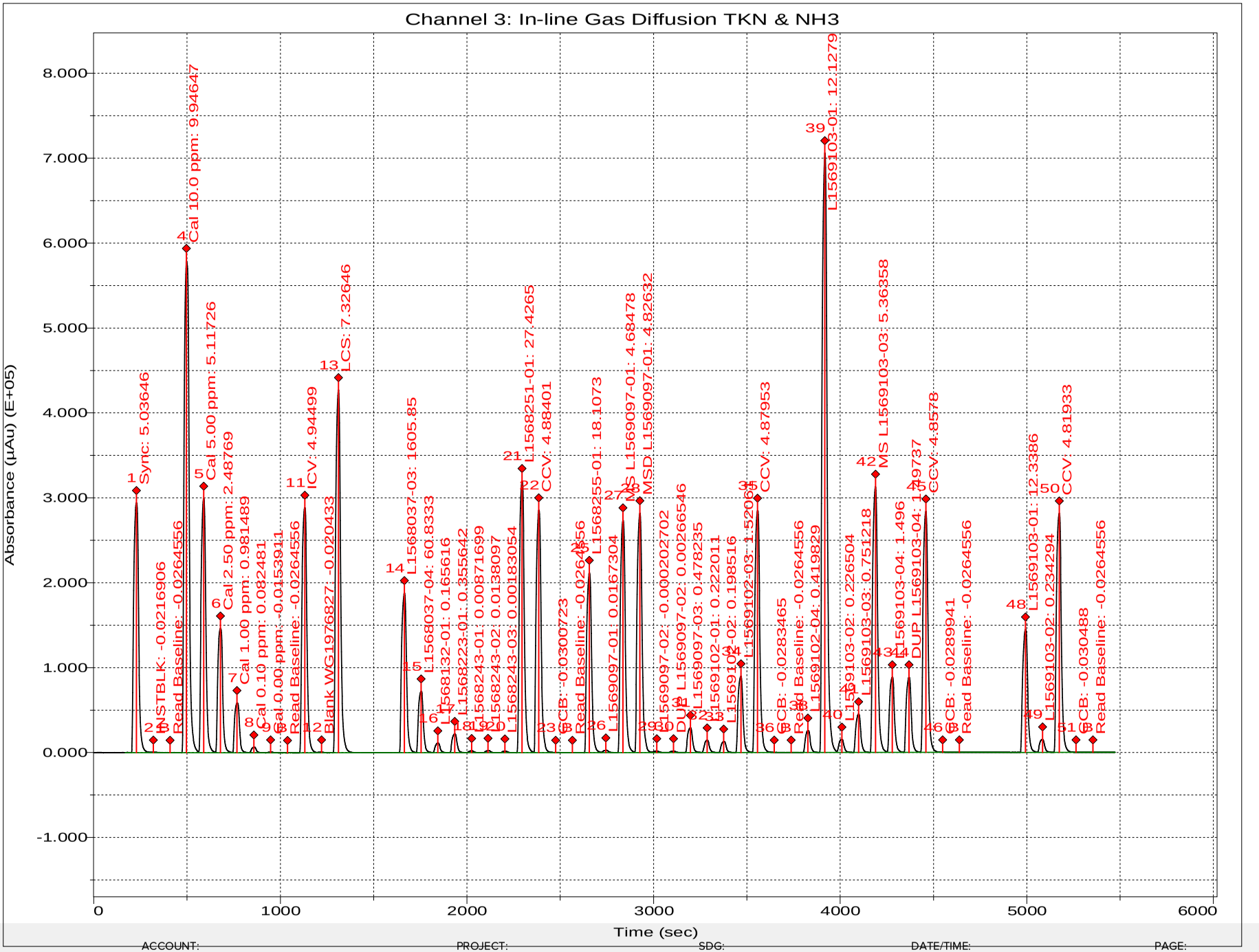
*** Calibration Data ***

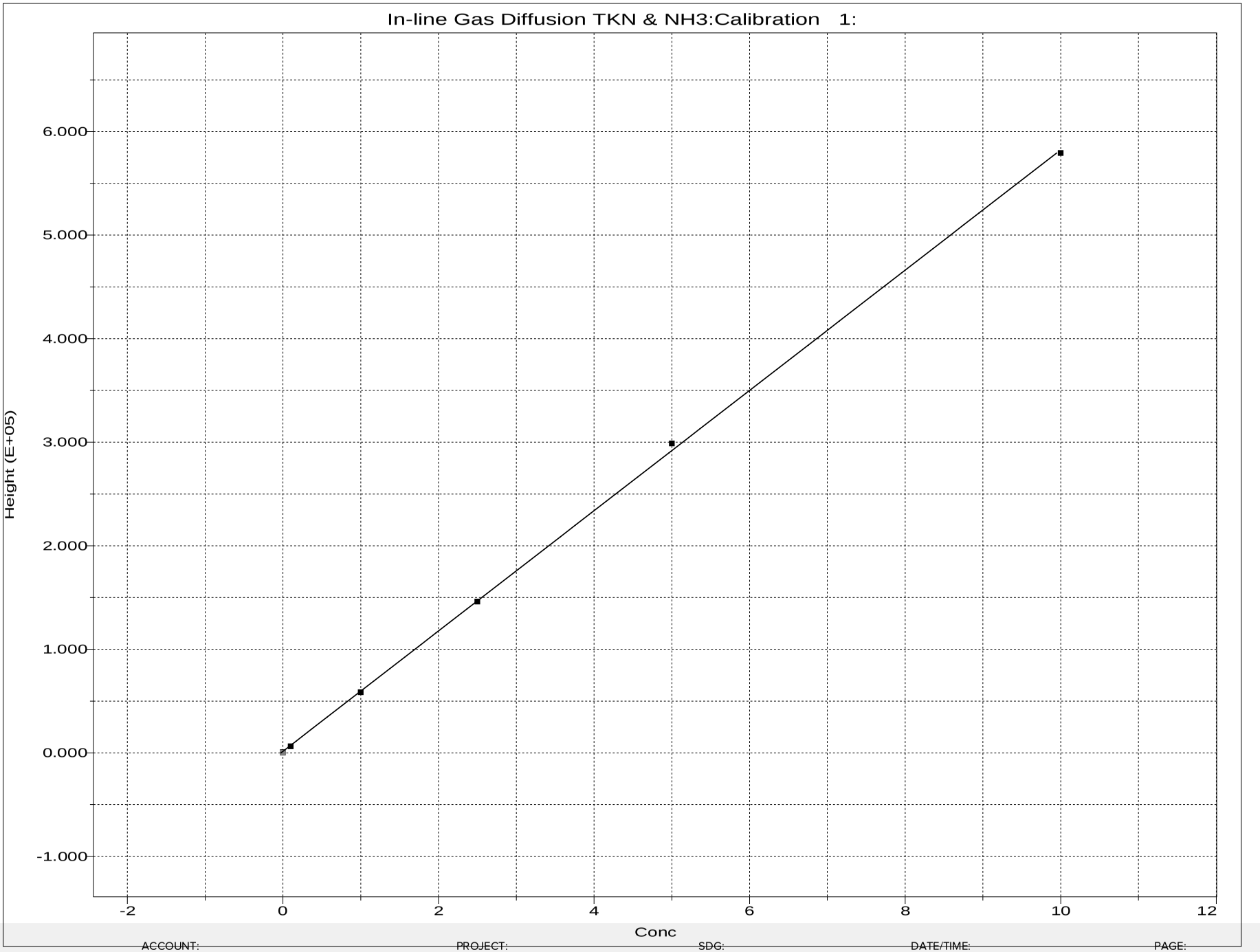
Calibration Data for In-line Gas Diffusion TKN & NH3

Calibration 1 (Peaks 4-52)

Name	Conc	Height
*Cal 10.0 ppm	10.000000	579263.375
*Cal 5.00 ppm	5.000000	298765.438
*Cal 2.50 ppm	2.500000	146030.312
*Cal 1.00 ppm	1.000000	58545.027
*Cal 0.10 ppm	0.100000	6327.425
*Cal 0.00 ppm	0.000000	642.664

Fitting Method:	1st Order
Calib Coef:	
y=bx+a	
a: (intercept)	1.5366e+03
b:	5.8084e+04
Corr Coef:	0.999882
Carryover:	0.0941%


Channel 3: In-line Gas Diffusion TKN & NH3
Absorbance (µAu) (E+05)
Time (sec)
8.000
7.000
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
0
1000
2000
3000
4000
5000
6000
1 Sync: 5.03646
2 B
3 NSTBLK: -0.0216906
Read Baseline: -0.0264556
4 Cal 10.0 ppm: 9.94647
5 Cal 5.00 ppm: 5.11726
6 Cal 2.50 ppm: 2.48769
7 Cal 1.00 ppm: 0.981489
8 Cal 0.10 ppm: 0.082481
9 Cal 0.00 ppm: -0.0153911
Read Baseline: -0.0264556
11 ICV: 4.94499
12 B
Blank WG1976827: -0.020433
13 LCS: 7.32646
14 L1568037-03: 1605.85
15 L1568037-04: 60.8333
16 L1568132-01: 0.165616
17 L1568223-01: 0.355642
18 L1568243-01: 0.00871699
19 L1568243-02: 0.0138097
20 L1568243-03: 0.00183054
21 L1568251-01: 27.4265
22 CCV: 4.88401
23 CCB: -0.0300723
24 B
Read Baseline: -0.0264556
26 L1568255-01: 18.1073
L1569097-01: 0.0167304
27 MS L1569097-01: 4.68478
28 MSD L1569097-01: 4.82632
29 L1569097-02: -0.000202702
30 DUP L1569097-02: 0.00266546
31 L1569097-03: 0.478235
32 L1569102-01: 0.222011
33 L1569102-02: 0.198516
34 L1569102-03: 1.52064
35 CCV: 4.87953
36 CCB: -0.0283465
37 B
Read Baseline: -0.0264556
38 L1569102-04: 0.419829
39 L1569103-01: 12.1279
40 L1569103-02: 0.226504
L1569103-03: 0.751218
42 MS L1569103-03: 5.36358
43 L1569103-04: 1.496
44 DUP L1569103-04: 1.49737
45 CCV: 4.85578
46 CCB: -0.0289941
47 B
Read Baseline: -0.0264556
48 L1569103-01: 12.3386
49 L1569103-02: 0.234294
50 CCV: 4.81933
51 CCB: -0.030488
52 B
Read Baseline: -0.0264556


In-line Gas Diffusion TKN & NH3:Calibration 1:
Height (E+05)
6.000
5.000
4.000
3.000
2.000
1.000
0.000
-1.000
-2
0
2
4
6
8
10
12
Conc

In-line Gas Diffusion TKN & NH3:Calibration 1: Peak 4-52

File name: C:\FLOW_4\TABLES\122022_1.RST
Date: 20-Dec-22
Operator: 3730

*	Name	Conc	Height
*	Cal 10.0 ppm	10.000000	579263.375000
*	Cal 5.00 ppm	5.000000	298765.437500
*	Cal 2.50 ppm	2.500000	146030.312500
*	Cal 1.00 ppm	1.000000	58545.027344
*	Cal 0.10 ppm	0.100000	6327.425293
*	Cal 0.00 ppm	0.000000	642.664307

Calib Coef:
y=bx+a
a: (intercept) 1.5366e+03
b: 5.8084e+04

Corr Coef: 0.999882

Carryover: 0.0941%

No Drift Peaks

NH3 Waters WetChem Prep Benchsheet

Batch: WG1976827

Analyst: BMD3730 **Analyst 2:** NA___ **Analyst 3:** NA___ **Batch Date/Time:** 12/20/22 08:00 **Prep End Date/Time:** 12/20/22 09:00 **SOP:** MTJL-0157
Method: 350.1 **ICV True Value:** 5 ppm **LCS True Value:** 7.5 ppm **MS/D True Value:** 5 ppm **RLV True Value:** 0.1 ppm **pH Strip Lot#:** HC178067
Chlorine Strip Lot#: 2144 **0.45 Nylon Filter Lot#:** 309048186 **10mL Syringe Lot#:** 2194253 **0.2mL Auto Pipette ID:** K10507311 **0.2mL Pipette Tip Lot#:** 21500301
1mL Auto Pipette ID: K19101681 **1mL Pipette Tip Lot#:** 21510757 **10mL Auto Pipette ID:** 10021329 **10mL Pipette Tip Lot#:** 21349B0
CultureTube Lot#: 22307889 **Dilution Tube Lot#:** 2076119

Salicylate/NFC : 22L20115 Amt. Used: 1 Exp. Date:12/21/22 **Hypochlorite:** 22L20116 Amt. Used: 1 Exp. Date:12/21/22
Complexing Reagent: 22L20117 Amt. Used: 1 Exp. Date:12/21/22 **MS/D Standard:** 22J30555 Amt. Used: 0.05 mL Exp. Date:04/30/23
ICV Standard: 22L20118 Amt. Used: 1 Exp. Date:12/21/22 **LCS/D Standard:** 22L20119 Amt. Used: 1 Exp. Date:12/21/22
Calibration Standard: 22L20114 Amt. Used: 1 Exp. Date:01/20/23 **Diluent:** 22L20120 Amt. Used: 1 Exp. Date:12/21/22
Reagent: 22K07621 Amt. Used: 1 Exp. Date:02/09/23

Sample Number	Matrix	Initial Sample Vol (mL)	Initial pH (s.u.)	Dilution Factor	Chlorine Test/Treat	Review Analyst	Review Date
BLANK		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
LCS		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569097-02)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569103-04)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569103-03)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MSD(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
1. L1568037-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
2. L1568037-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
3. L1568132-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
4. L1568223-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
5. L1568243-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
6. L1568243-02	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
7. L1568243-03	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
8. L1568251-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
9. L1568255-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
10. L1569097-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
11. L1569097-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
12. L1569097-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
13. L1569102-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
14. L1569102-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
15. L1569102-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
16. L1569102-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
17. L1569103-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
18. L1569103-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
19. L1569103-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
20. L1569103-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55

Comments:

Reviewed By:BMD3730 on 12/20/22 12:45:55

351.2 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222-A

Lab Sample ID:	L1569102-01	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222-A	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221222102443	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:24
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	378	J	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222

Lab Sample ID:	L1569102-02	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221222102848	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:28
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	785		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-2-1222

Lab Sample ID:	L1569102-03	**SDG:**	L1569102
Client Sample ID:	LF1P-2-1222	**Collected Date/Time:**	12/06/22 12:50
Lab File ID:	20221222103011	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:30
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	1850		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-6-1222

Lab Sample ID:	L1569102-04	**SDG:**	L1569102
Client Sample ID:	LF1MW-6-1222	**Collected Date/Time:**	12/06/22 14:10
Lab File ID:	20221222103130	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:31
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	552	J	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-1

Lab Sample ID:	R3874770-1	**SDG:**	L1569102
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221222095612	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:56
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-3

Lab Sample ID:	R3874770-3	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100017	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:00
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-6

Lab Sample ID:	R3874770-6	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100543	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:05
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-2

Lab Sample ID:	R3874770-2	**SDG:**	L1569102
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221222095734	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:57
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	19100		140	300	250

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-4

Lab Sample ID:	R3874770-4	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100139	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:01
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5410		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-7

Lab Sample ID:	R3874770-7	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100704	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:07
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5330		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-5

Lab Sample ID:	R3874770-5	**SDG:**	L1569102
Client Sample ID:	MSD	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100300	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:03
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5260		140	300	600

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1
Concentration Units:	mg/L		

		ICV				CCV				CCV			
Sample ID:		LACHAT6122222095452				LACHAT6122222100947				LACHAT6122222102605			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.80	108		10	10.70	107		10	10.70	107	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1
Concentration Units:	mg/L		

CCV

Sample ID: LACHAT6122222103816

Analyte	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.70	107	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Sample ID:	BLANK Result	BLANK Qual	CCB Result	CCB Qual	CCB Result	CCB Qual	CCB Result	CCB Qual
File ID:	20221222095612		20221222101109		20221222102727		20221222103939	
Analyte	mg/l		mg/L		mg/L		mg/L	
KJELDAHL NITROGEN, TKN	0.300	U	-0.09030		-0.09970		-0.1120	

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874770-4
R3874770-5

MS Sample / File ID:	R3874770-4 / 20221222100139	**SDG:**	L1569102
MSD Sample / File ID:	R3874770-5 / 20221222100300	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-03 / 20221222095856	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5000	300	5410	5260	108	105	1	90.0 - 110	2.81	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.: R3874770-7

MS Sample / File ID:	R3874770-7 / 20221222100704	**SDG:**	L1569102
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-04 / 20221222100422	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5000	300	5330		107		1	90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-3 / 20221222100017	**SDG:**	L1569102
OS Sample / File ID:	L1567792-03 / 20221222095856	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	300	300	0.000	20

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*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-6 / 20221222100543	**SDG:**	L1569102
OS Sample / File ID:	L1567792-04 / 20221222100422	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	300	300	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874770-2

LCS Sample / File ID:	R3874770-2 / 20221222095734	**SDG:**	L1569102
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	20600	19100		92.7		74.0 - 124		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569102-01,02,03,04
Matrix: WW
Analytical Method: 351.2
Prep Method: 351.2/365.4

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9			0.14	0.60

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	_____
Analytical Run:	CAL122122_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	20.0	20221221152401	12/21/22 15:24		
CAL	10.0	20221221152524	12/21/22 15:25		
CAL	5.0	20221221152645	12/21/22 15:26		
CAL	2.5	20221221152807	12/21/22 15:28		
CAL	1.0	20221221152929	12/21/22 15:29		
CAL	0.5	20221221153051	12/21/22 15:30		
CAL	0.25	20221221153212	12/21/22 15:32		
CAL	0.0	20221221153334	12/21/22 15:33		

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	12/21/22 15:24
Analytical Run:	R122222_1	**Calibration End Date:**	12/21/22 15:33

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT6122222095452	20221222095452	12/22/22 09:54		
BLANK	R3874770-1	20221222095612	12/22/22 09:56	1	WG1976947
LCS	R3874770-2	20221222095734	12/22/22 09:57	1	WG1976947
OS	L1567792-03	20221222095856	12/22/22 09:58		
L1567792-03	L1567792-03	20221222095856	12/22/22 09:58	1	WG1976947
DUP	R3874770-3	20221222100017	12/22/22 10:00	1	WG1976947
MS	R3874770-4	20221222100139	12/22/22 10:01	1	WG1976947
MSD	R3874770-5	20221222100300	12/22/22 10:03	1	WG1976947
OS	L1567792-04	20221222100422	12/22/22 10:04		
L1567792-04	L1567792-04	20221222100422	12/22/22 10:04	1	WG1976947
DUP	R3874770-6	20221222100543	12/22/22 10:05	1	WG1976947
MS	R3874770-7	20221222100704	12/22/22 10:07	1	WG1976947
CCV	LACHAT6122222100947	20221222100947	12/22/22 10:09		
CCB	LACHAT6122222101109	20221222101109	12/22/22 10:11		
L1568381-02	L1568381-02	20221222101511	12/22/22 10:15	5	WG1976947
L1568387-06	L1568387-06	20221222101916	12/22/22 10:19	1	WG1976947
L1569097-01	L1569097-01	20221222102045	12/22/22 10:20	1	WG1976947
L1569097-02	L1569097-02	20221222102200	12/22/22 10:22	1	WG1976947
L1569097-03	L1569097-03	20221222102321	12/22/22 10:23	1	WG1976947
LF1MW-13-1222-A	L1569102-01	20221222102443	12/22/22 10:24	1	WG1976947
CCV	LACHAT6122222102605	20221222102605	12/22/22 10:26		
CCB	LACHAT6122222102727	20221222102727	12/22/22 10:27		
LF1MW-13-1222	L1569102-02	20221222102848	12/22/22 10:28	1	WG1976947
LF1P-2-1222	L1569102-03	20221222103011	12/22/22 10:30	1	WG1976947
LF1MW-6-1222	L1569102-04	20221222103130	12/22/22 10:31	1	WG1976947
L1569103-01	L1569103-01	20221222103252	12/22/22 10:32	1	WG1976947
L1569103-02	L1569103-02	20221222103412	12/22/22 10:34	1	WG1976947
L1569103-03	L1569103-03	20221222103533	12/22/22 10:35	1	WG1976947
L1569103-04	L1569103-04	20221222103654	12/22/22 10:36	1	WG1976947
CCV	LACHAT6122222103816	20221222103816	12/22/22 10:38		
CCB	LACHAT6122222103939	20221222103939	12/22/22 10:39		

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	20	18.1129	90.60	10	10.6097	106
File ID:		20221221152401			20221221152524	

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	5	5.4343	109	2.50	2.8805	115
File ID:		20221221152645			20221221152807	

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	1	1.20358	120	0.50	.45778	91.60
File ID:		20221221152929			20221221153051	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	0.25	.225	90	0	-.053432	
File ID:		20221221153212			20221221153334	

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16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
KJELDAHL NITROGEN, TKN	5	1	0.99926			0.226	-0.0801	

5

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat6 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_03-22-58PM.OMN Created: 12/21/2022 3:22:58 PM
Original Run Author's Signature: [lachat6]
Current Run Filename: CAL122122_1.omn Last Modified: 12/21/2022 3:37:56 PM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF	Description
STD 20.0 ppm 22L20214	1	31	20.0	80.5	12/21/2022@3:24:01 PM			
STD 10.0 ppm	1	32	10.0	47.3	12/21/2022@3:25:24 PM			
STD 5.0 ppm	1	33	5.00	24.4	12/21/2022@3:26:45 PM			
STD 2.5 ppm	1	34	2.50	13.1	12/21/2022@3:28:07 PM			
STD 1.0 ppm	1	35	1.00	5.68	12/21/2022@3:29:29 PM			
STD 0.5 ppm	1	36	0.500	2.38	12/21/2022@3:30:51 PM			
STD 0.25 ppm	1	37	0.250	1.35	12/21/2022@3:32:12 PM			
STD 0.0 ppm	1	38	0.00	0.118	12/21/2022@3:33:34 PM			
ICV	1	2	10.2	45.7	12/21/2022@3:34:56 PM			
Calibration:			Table/Fig. : 1					

Channel 2 (TKN) - Current View

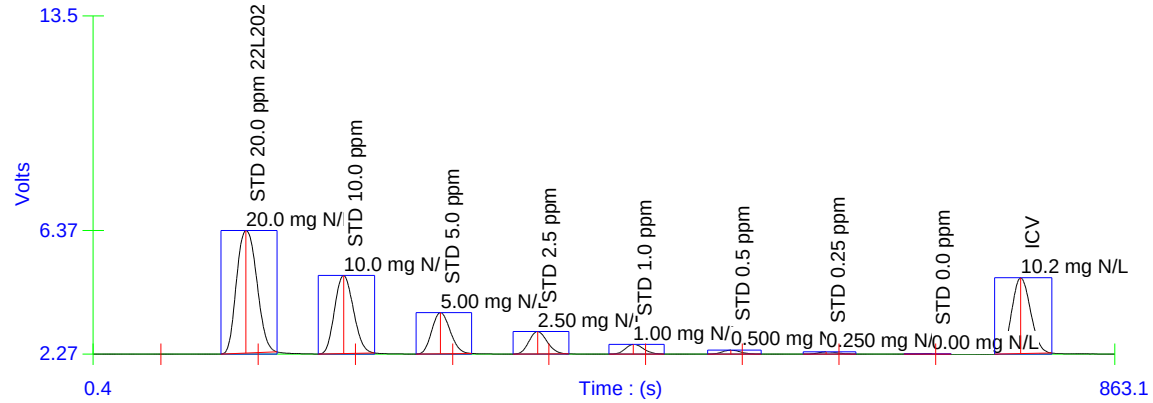
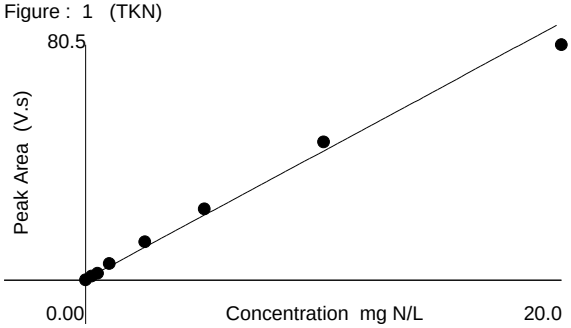


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Author: lachat6 Date : 12/21/2022

Figure : 1 (TKN)



Area = 4.38 * Conc + 0.383
Conc = 0.226 * Area - 0.0801
Correlation Coefficient (r) = 0.99926

Weighting : 1/x

5

Original Run Filename: OM_12-22-2022_09-52-26AM.OMN Created: 12/22/2022 9:52:26 AM
Original Run Author's Signature: [lachat6]
Current Run Filename: R122222_1.omn Last Modified: 12/22/2022 10:49:37 AM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF
INSTBLK WG1976947	1	1	-0.0849	-0.0209	12/22/2022@9:53:30 AM		
Calibration:			Table/Fig. : 1				
ICV WG1976947	1	2	10.8	48.0	12/22/2022@9:54:52 AM		
BLANK WG1976947	1	30	-0.139	-0.260	12/22/2022@9:56:12 AM		
LCS 20.6 WG1976947	1	3	19.1	84.8	12/22/2022@9:57:34 AM		
L1567792-03 WG1976947	1	4	-0.164	-0.370	12/22/2022@9:58:56 AM		
DUP L1567792-03 WG1976947	1	5	-0.0249	0.245	12/22/2022@10:00:17 AM		
MS L1567792-03 WG1976947	1	6	5.41	24.3	12/22/2022@10:01:39 AM		
MSD L1567792-03 WG1976947	1	7	5.26	23.7	12/22/2022@10:03:00 AM		
L1567792-04 WG1976947	1	8	-0.126	-0.202	12/22/2022@10:04:22 AM		
DUP L1567792-04 WG1976947	1	9	-0.116	-0.159	12/22/2022@10:05:43 AM		
MS L1567792-04 WG1976947	1	10	5.33	24.0	12/22/2022@10:07:04 AM		
L1568280-01 WG1976947	1	11	0.777	3.80	12/22/2022@10:08:25 AM		
CCV	1	2	10.7	47.9	12/22/2022@10:09:47 AM		
CCB	1	1	-0.0903	-0.0451	12/22/2022@10:11:09 AM		
L1568351-01 WG1976947	1	12	1.25	5.89	12/22/2022@10:12:30 AM		
L1568381-01 WG1976947	1	13	28.9	128	12/22/2022@10:13:51 AM		
L1568381-02 WG1976947	1	14	-0.407	-1.45	12/22/2022@10:15:11 AM		
L1568387-04 WG1976947	1	15	33.5	149	12/22/2022@10:16:32 AM		
L1568387-05 WG1976947	1	16	31.4	140	12/22/2022@10:17:54 AM		
L1568387-06 WG1976947	1	17	18.9	84.2	12/22/2022@10:19:16 AM		
L1569097-01 WG1976947	1	18	0.205	1.26	12/22/2022@10:20:45 AM		
L1569097-02 WG1976947	1	19	0.248	1.45	12/22/2022@10:22:00 AM		
L1569097-03 WG1976947	1	20	1.07	5.09	12/22/2022@10:23:21 AM		
L1569102-01 WG1976947	1	21	0.378	2.03	12/22/2022@10:24:43 AM		
CCV	1	2	10.7	47.8	12/22/2022@10:26:05 AM		
CCB	1	1	-0.0997	-0.0867	12/22/2022@10:27:27 AM		
L1569102-02 WG1976947	1	22	0.785	3.83	12/22/2022@10:28:48 AM		
L1569102-03 WG1976947	1	23	1.85	8.56	12/22/2022@10:30:11 AM		
L1569102-04 WG1976947	1	24	0.552	2.80	12/22/2022@10:31:30 AM		
L1569103-01 WG1976947	1	25	13.3	59.4	12/22/2022@10:32:52 AM		
L1569103-02 WG1976947	1	26	0.330	1.81	12/22/2022@10:34:12 AM		
L1569103-03 WG1976947	1	27	0.966	4.63	12/22/2022@10:35:33 AM		
L1569103-04 WG1976947	1	28	2.11	9.70	12/22/2022@10:36:54 AM		
CCV	1	2	10.7	48.0	12/22/2022@10:38:16 AM		
CCB	1	1	-0.112	-0.141	12/22/2022@10:39:39 AM		
L1568381-01 WG1976947	1	13	11.0	48.9	12/22/2022@10:40:59 AM		5.00
L1568387-04 WG1976947	1	15	10.9	48.5	12/22/2022@10:42:20 AM		10.00
L1568387-05 WG1976947	1	16	8.08	36.1	12/22/2022@10:43:42 AM		10.00
CCV	1	2	10.8	48.1	12/22/2022@10:45:03 AM		
CCB	1	1	-0.116	-0.158	12/22/2022@10:46:26 AM		

Author: lachat6 Date : 12/22/2022

Channel 2 (TKN) - Current View

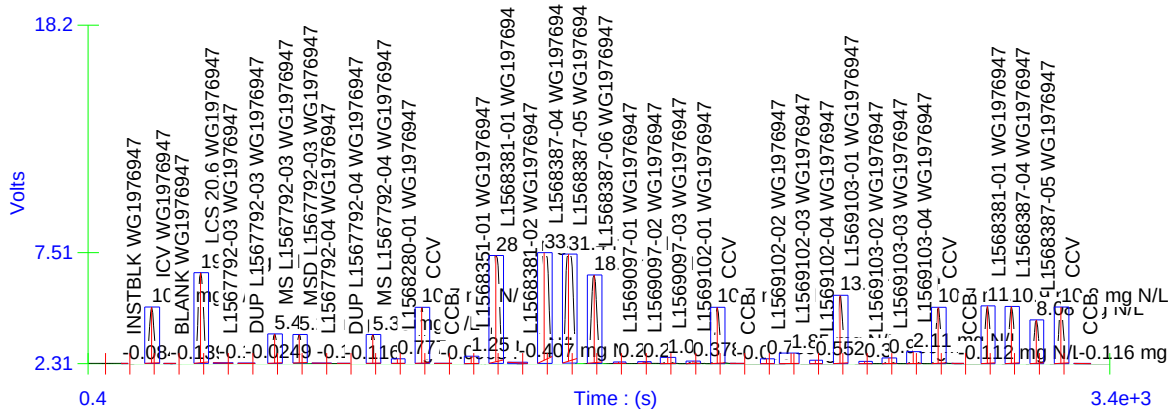
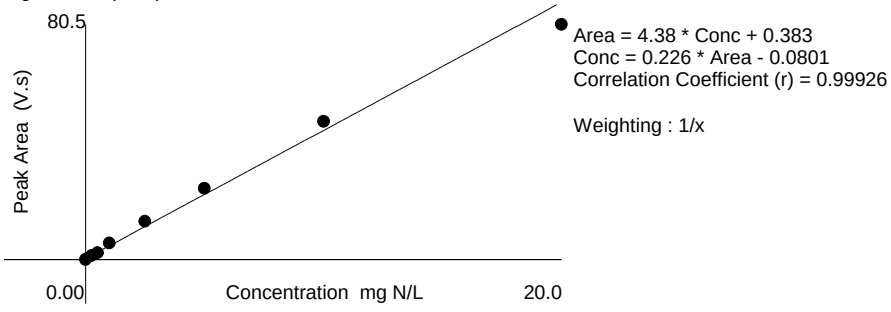


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Figure : 1 (TKN)



TKN/PT Waters WetChem Prep Benchsheet

Batch: WG1976947

Analyst: UNP3773 **Analyst 2:** NA___ **Analyst 3:** NA___ **Prep Start Date/Time:** 12/21/22 15:22-15:23 **Prep End Date/Time:** 12/21/22 23:57 **SOP:** 0180
Method: 351.2/365.4 **Thermometer SN:** CP52532 **ThermoCorrectFact:** +0.3 **HotBlock Temp/CorrectedTemp/Loc.:** 380/380.3/A2 **Digestion Tube Lot#:** 2208066
1mL Auto Pipette SN: TU12425 **1mL Auto Pipette Tip Lot#:** 22311016 **Repeat Pipette SN:** 306659K **Repeat Pipette Tip Lot#:** K196538K
pH Strip Lot#: 10BDH2221 **NO2/NO3 Strip Lot#:** 220603 **Boiling Stone Lot#:** 1344-28-1 **1mL Pipette Lot# Prep/Lachat:** **2mL Pipette Lot# Prep/Lachat:**
5mL Pipette Lot# Prep/Lachat: **10mL Pipette Lot# Prep/Lachat:** **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314333 **0.45 Nylon Filter Lot#:**
0.45 PVDF Filter Lot#: **Syringe Lot#:** **TKN/PT LCS TV:** 20.6/1.17 **Cal and Stds Workgroup:** 1975215

TKN MS/D Standard: 22L02860 Amt. Used: 1 Exp. Date:01/01/23 **PT MS/D Standard:** 22K29485 Amt. Used: 1 Exp. Date:03/31/23
LCS/D Standard: 22L06388 Amt. Used: 20 mL Exp. Date:01/06/23 **Digestion Solution:** 22L21226 Amt. Used: 5 mL Exp. Date:12/31/22
TKN ICV Standard: 22L21321 Amt. Used: 1 Exp. Date:12/22/22 **TKN Carrier:** 22L20105 Amt. Used: 1 Exp. Date:12/27/22
TKN Buffer: 22L19934 Amt. Used: 1 Exp. Date:01/19/23 **Salicylate/Nitroprusside:** 22L21319 Amt. Used: 1 Exp. Date:12/28/22
0.8M NaOH: 22L20106 Amt. Used: 1 Exp. Date:01/20/23 **Na Hypochlorite:** 22L21318 Amt. Used: 1 Exp. Date:12/22/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	pH	Dilution Factor	Review Analyst	Review Date
BLANK		20	20	<2	1	LDT1016	12/22/22 10:45:08
LCS		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MSD(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
1. L1567792-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
2. L1567792-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
3. L1568280-01	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
4. L1568351-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
5. L1568381-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
6. L1568381-02	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
7. L1568387-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
8. L1568387-05	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
9. L1568387-06	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
10. L1569097-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
11. L1569097-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
12. L1569097-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
13. L1569102-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
14. L1569102-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
15. L1569102-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
16. L1569102-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
17. L1569103-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
18. L1569103-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
19. L1569103-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
20. L1569103-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08

Comments:
L1568280-01 & L1568381-02 is 1X for PT and 5X for TKN due to NO2/NO3 hit.

Reviewed By:LDT1016 on 12/22/22 10:45:08

420.4 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222-A

Lab Sample ID:	L1569102-01	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222-A	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221220233112	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:31
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222

Lab Sample ID:	L1569102-02	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221220233159	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:31
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569102-03	**SDG:**	L1569102
Client Sample ID:	LF1P-2-1222	**Collected Date/Time:**	12/06/22 12:50
Lab File ID:	20221220233421	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:34
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	L1569102-04	**SDG:**	L1569102
Client Sample ID:	LF1MW-6-1222	**Collected Date/Time:**	12/06/22 14:10
Lab File ID:	20221220233508	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:35
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-1

Lab Sample ID:	R3874135-1	**SDG:**	L1569102
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221220231535	**Received Date/Time:**	_____
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:15
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	J U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-10	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234209	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	2140		41.5	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-7

Lab Sample ID:	R3874135-7	**SDG:**	L1569102
Client Sample ID:	DUP	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232629	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:26
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	8.55	J	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-2

Lab Sample ID:	R3874135-2	**SDG:**	L1569102
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221220231621	**Received Date/Time:**	_____
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:16
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	486		3.70	20.0	25.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-11	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234256	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	2930	J6	41.5	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-8	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232716	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:27
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	494	J6	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-9

Lab Sample ID:	R3874135-9	**SDG:**	L1569102
Client Sample ID:	MSD	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232803	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:28
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	412	J6	8.30	20.0	40.0

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

	ICV				CCV				CCV			
Sample ID:	LACHAT5122022231448				LACHAT5122022232323				LACHAT5122022233247			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	1.000	100		1	1.000	100		1	1.010	101	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

		CCV				CCV		
Sample ID:		LACHAT5122022233947				LACHAT5122022234911		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	0.9960	99.60		1	1.000	100	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	BLANK Result	BLANK Qual	CCB Result	CCB Qual	CCB Result	CCB Qual	CCB Result	CCB Qual
File ID:	20221220231535		20221220232411		20221220233334		20221220234035	
Analyte	mg/l		mg/L		mg/L		mg/L	
TOTAL PHENOL BY 4AAP	0.0200	J U	0.008230		0.003840		0.002810	

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20221220234958	
Analyte	mg/L	
TOTAL PHENOL BY 4AAP	0.004380	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.: R3874135-11

MS Sample / File ID:	R3874135-11 / 20221220234256	**SDG:**	L1569102
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568060-01 / 20221220234736	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1000	2060	2930		86.8*		5	90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874135-8
R3874135-9

MS Sample / File ID:	R3874135-8 / 20221220232716	**SDG:**	L1569102
MSD Sample / File ID:	R3874135-9 / 20221220232803	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568816-02 / 20221220232544	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1000	10.0	494	412	48.4*	40.2*	1	90.0 - 110	18.0	20

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-10 / 20221220234209	**SDG:**	L1569102
OS Sample / File ID:	L1568060-01 / 20221220234736	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	5
Analytical Method:	420.4	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	2060	2140	3.76	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-7 / 20221220232629	**SDG:**	L1569102
OS Sample / File ID:	L1568816-02 / 20221220232544	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	10.0	8.55	15.6	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874135-2

LCS Sample / File ID:	R3874135-2 / 20221220231621	**SDG:**	L1569102
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Total Phenol by 4AAP	500	486		97.2		90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569102-01,02,03,04 **Analytical Method:** 420.4
Matrix: WW **Prep Method:** 4AAP

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Total Phenol by 4AAP	108-95-2			0.0083	0.04

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	_____
Analytical Run:	CAL122022_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	2.0	20221220174905	12/20/22 17:49		
CAL	1.0	20221220174953	12/20/22 17:49		
CAL	0.5	20221220175042	12/20/22 17:50		
CAL	0.1	20221220175131	12/20/22 17:51		
CAL	0.04	20221220175219	12/20/22 17:52		
CAL	0.0	20221220175306	12/20/22 17:53		

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	12/20/22 17:49
Analytical Run:	R122022_3	**Calibration End Date:**	12/20/22 17:53

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT5122022231448	20221220231448	12/20/22 23:14		
BLANK	R3874135-1	20221220231535	12/20/22 23:15	1	WG1977545
LCS	R3874135-2	20221220231621	12/20/22 23:16	1	WG1977545
CCV	LACHAT5122022232323	20221220232323	12/20/22 23:23		
CCB	LACHAT5122022232411	20221220232411	12/20/22 23:24		
L1568714-02	L1568714-02	20221220232457	12/20/22 23:24	1	WG1977545
OS	L1568816-02	20221220232544	12/20/22 23:25		
L1568816-02	L1568816-02	20221220232544	12/20/22 23:25	1	WG1977545
DUP	R3874135-7	20221220232629	12/20/22 23:26	1	WG1977545
MS	R3874135-8	20221220232716	12/20/22 23:27	1	WG1977545
MSD	R3874135-9	20221220232803	12/20/22 23:28	1	WG1977545
L1569097-01	L1569097-01	20221220232850	12/20/22 23:28	1	WG1977545
L1569097-02	L1569097-02	20221220232938	12/20/22 23:29	1	WG1977545
L1569097-03	L1569097-03	20221220233025	12/20/22 23:30	1	WG1977545
LF1MW-13-1222-A	L1569102-01	20221220233112	12/20/22 23:31	1	WG1977545
LF1MW-13-1222	L1569102-02	20221220233159	12/20/22 23:31	1	WG1977545
CCV	LACHAT5122022233247	20221220233247	12/20/22 23:32		
CCB	LACHAT5122022233334	20221220233334	12/20/22 23:33		
LF1P-2-1222	L1569102-03	20221220233421	12/20/22 23:34	1	WG1977545
LF1MW-6-1222	L1569102-04	20221220233508	12/20/22 23:35	1	WG1977545
L1569103-01	L1569103-01	20221220233555	12/20/22 23:35	1	WG1977545
L1569103-02	L1569103-02	20221220233641	12/20/22 23:36	1	WG1977545
L1569103-03	L1569103-03	20221220233727	12/20/22 23:37	1	WG1977545
L1569103-04	L1569103-04	20221220233813	12/20/22 23:38	1	WG1977545
L1569393-01	L1569393-01	20221220233900	12/20/22 23:39	1	WG1977545
CCV	LACHAT5122022233947	20221220233947	12/20/22 23:39		
CCB	LACHAT5122022234035	20221220234035	12/20/22 23:40		
DUP	R3874135-10	20221220234209	12/20/22 23:42	5	WG1977545
MS	R3874135-11	20221220234256	12/20/22 23:42	5	WG1977545
L1568060-03	L1568060-03	20221220234430	12/20/22 23:44	5	WG1977545
L1568060-04	L1568060-04	20221220234517	12/20/22 23:45	5	WG1977545
L1568714-01	L1568714-01	20221220234649	12/20/22 23:46	1	WG1977545
OS	L1568060-01	20221220234736	12/20/22 23:47		
L1568060-01	L1568060-01	20221220234736	12/20/22 23:47	5	WG1977545
L1568060-02	L1568060-02	20221220234823	12/20/22 23:48	5	WG1977545
CCV	LACHAT5122022234911	20221220234911	12/20/22 23:49		
CCB	LACHAT5122022234958	20221220234958	12/20/22 23:49		

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	2	1.98313	99.20	1	1.00393	100
File ID:		20221220174905			20221220174953	

15-IN INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.50	.50857	102	0.10	.103066	103
File ID:		20221220175042			20221220175131	

5

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.04	.040474	101	0	-.0023996	
File ID:		20221220175219			20221220175306	

5

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
TOTAL PHENOL BY 4AAP	5	1	0.99999			0.384	-0.00599	

5

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat5 Date : 12/20/2022

Original Run Filename: OM_12-20-2022_05-48-08PM.OMN Created: 12/20/2022 5:48:08 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: CAL122022_1.omn Last Modified: 12/20/2022 5:56:02 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Area (V.s)	Detection Time	ADF	MDF	Description
STD 2.0 PPM 22L20190	1	31	2.00	5.18	12/20/2022@5:49:05 PM			
STD 1.0 PPM	1	32	1.00	2.63	12/20/2022@5:49:53 PM			
STD 0.5 PPM	1	33	0.500	1.34	12/20/2022@5:50:42 PM			
STD 0.1 PPM	1	34	0.100	0.284	12/20/2022@5:51:31 PM			
STD 0.04 PPM	1	35	0.0400	0.121	12/20/2022@5:52:19 PM			
STD 0.0 PPM	1	36	0.00	9.35e-3	12/20/2022@5:53:06 PM			
ICV	1	2	1.01	2.63	12/20/2022@5:53:55 PM			
Calibration:			Table/Fig. : 1					

Channel 1 - Current View

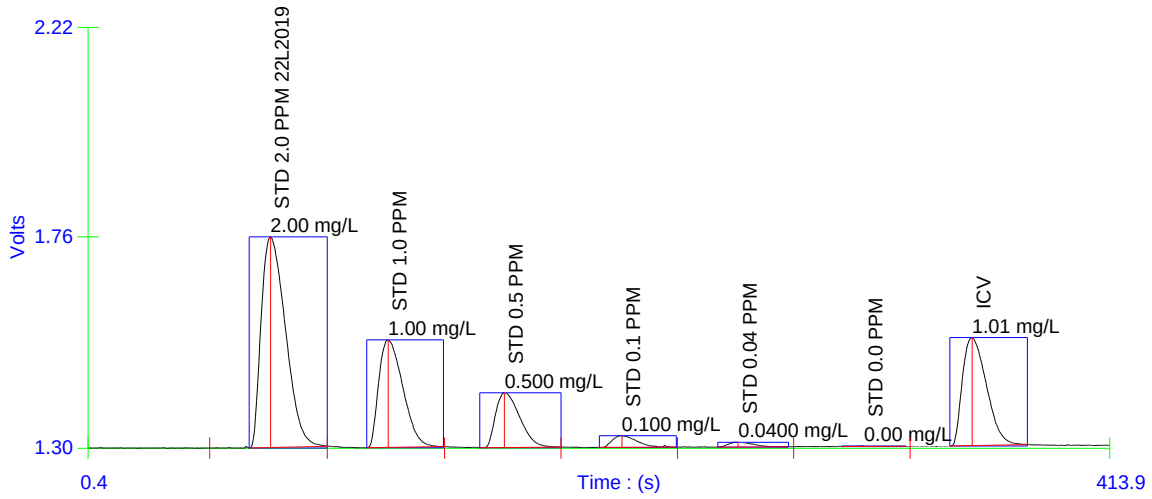
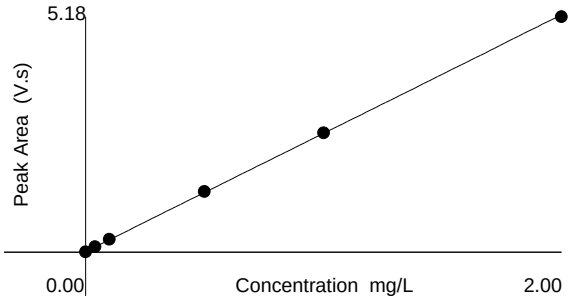


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Author: lachat5 Date : 12/20/2022

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

5

Original Run Filename: OM_12-20-2022_11-13-11PM.OMN Created: 12/20/2022 11:13:11 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: R122022_3.omn Last Modified: 12/20/2022 11:52:20 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL		Detection Time	ADF	MDF
			Conc. (mg/L)	Area (V.s)			
INSTBLK WG1977545	1	1	1.57e-3	0.0197	12/20/2022@11:14:01 PM		
ICV 1.0 WG1977545	1	2	1.00	2.63	12/20/2022@11:14:48 PM		
Calibration:			Table/Fig. : 1				
BLANK WG1977545	1	30	6.29e-3	0.0320	12/20/2022@11:15:35 PM		
LCS 0.5 WG1977545	1	3	0.487	1.28	12/20/2022@11:16:21 PM		
L1568060-01 WG1977545	1	4	2.13	5.57	12/20/2022@11:17:09 PM		
DUP L1568060-01 WG1977545	1	5	2.16	5.63	12/20/2022@11:17:56 PM		
MS L1568060-01 WG1977545	1	6	2.85	7.44	12/20/2022@11:18:43 PM		
L1568060-02 WG1977545	1	7	1.89	4.92	12/20/2022@11:19:30 PM		
L1568060-03 WG1977545	1	8	1.72	4.48	12/20/2022@11:20:16 PM		
L1568060-04 WG1977545	1	9	3.30	8.60	12/20/2022@11:21:03 PM		
L1568351-01 WG1977545	1	10	0.0385	0.116	12/20/2022@11:21:49 PM		
L1568714-01 WG1977545	1	11	0.114	0.313	12/20/2022@11:22:36 PM		
CCV 1.0	1	2	1.00	2.63	12/20/2022@11:23:23 PM		
CCB	1	1	8.23e-3	0.0370	12/20/2022@11:24:11 PM		
L1568714-02 WG1977545	1	12	9.65e-3	0.0407	12/20/2022@11:24:57 PM		
L1568816-02 WG1977545	1	13	0.0100	0.0417	12/20/2022@11:25:44 PM		
DUP L1568816-02 WG1977545	1	14	8.56e-3	0.0379	12/20/2022@11:26:29 PM		
MS L1568816-02 WG1977545	1	15	0.503	1.33	12/20/2022@11:27:16 PM		
MSD L1568816-02 WG1977545	1	16	0.421	1.11	12/20/2022@11:28:03 PM		
L1569097-01 WG1977545	1	17	4.53e-3	0.0274	12/20/2022@11:28:50 PM		
L1569097-02 WG1977545	1	18	4.24e-3	0.0266	12/20/2022@11:29:38 PM		
L1569097-03 WG1977545	1	19	3.20e-3	0.0239	12/20/2022@11:30:25 PM		
L1569102-01 WG1977545	1	20	-1.31e-3	0.0122	12/20/2022@11:31:12 PM		
L1569102-02 WG1977545	1	21	1.54e-3	0.0196	12/20/2022@11:31:59 PM		
CCV 1.0	1	2	1.01	2.65	12/20/2022@11:32:47 PM		
CCB	1	1	3.84e-3	0.0256	12/20/2022@11:33:34 PM		
L1569102-03 WG1977545	1	22	1.70e-3	0.0200	12/20/2022@11:34:21 PM		
L1569102-04 WG1977545	1	23	2.72e-4	0.0163	12/20/2022@11:35:08 PM		
L1569103-01 WG1977545	1	24	9.86e-4	0.0181	12/20/2022@11:35:55 PM		
L1569103-02 WG1977545	1	25	-5.57e-4	0.0141	12/20/2022@11:36:41 PM		
L1569103-03 WG1977545	1	26	3.35e-4	0.0164	12/20/2022@11:37:27 PM		
L1569103-04 WG1977545	1	27	3.73e-3	0.0253	12/20/2022@11:38:13 PM		
L1569393-01 WG1977545	1	28	5.05e-3	0.0287	12/20/2022@11:39:00 PM		
CCV 1.0	1	2	0.997	2.61	12/20/2022@11:39:47 PM		
CCB	1	1	2.81e-3	0.0229	12/20/2022@11:40:35 PM		
L1568060-01 WG1977545	1	4	0.384	1.02	12/20/2022@11:41:22 PM		5.00
DUP L1568060-01 WG1977545	1	5	0.443	1.17	12/20/2022@11:42:09 PM		5.00
MS L1568060-01 WG1977545	1	6	0.607	1.60	12/20/2022@11:42:56 PM		5.00
L1568060-02 WG1977545	1	7	0.385	1.02	12/20/2022@11:43:43 PM		5.00
L1568060-03 WG1977545	1	8	0.352	0.932	12/20/2022@11:44:30 PM		5.00
L1568060-04 WG1977545	1	9	0.700	1.84	12/20/2022@11:45:17 PM		5.00
L1568351-01 WG1977545	1	10	0.0163	0.0580	12/20/2022@11:46:03 PM		
L1568714-01 WG1977545	1	11	0.112	0.307	12/20/2022@11:46:49 PM		
L1568060-01 WG1977545	1	4	0.428	1.13	12/20/2022@11:47:36 PM		5.00
L1568060-02 WG1977545	1	7	0.386	1.02	12/20/2022@11:48:23 PM		5.00
CCV 1.0	1	2	1.01	2.63	12/20/2022@11:49:11 PM		
CCB	1	1	4.38e-3	0.0270	12/20/2022@11:49:58 PM		

Author: lachat5 Date : 12/20/2022

Channel 1 - Current View

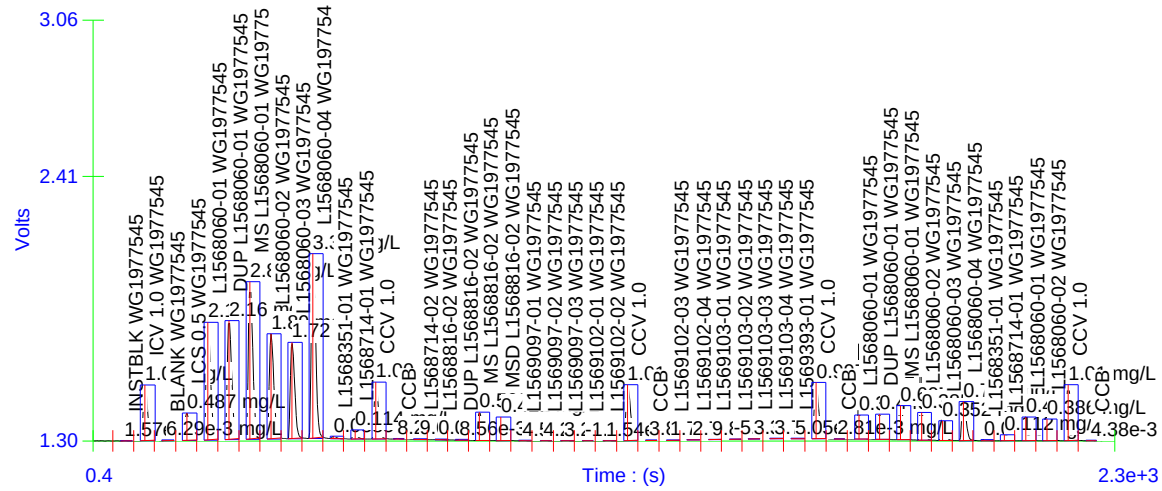
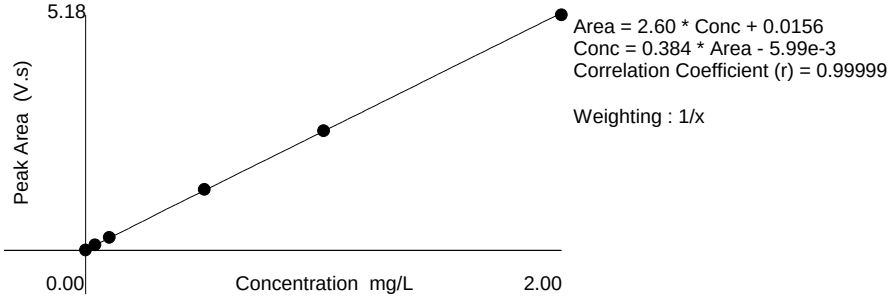


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Author: lachat5 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_12-01-47AM.OMN Created: 12/21/2022 12:01:47 AM
Original Run Author's Signature: [lachat5]
Current Run Filename: SB122022_3.omn Last Modified: 12/21/2022 12:23:04 AM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Area (V.s)	Detection Time	ADF	MDF
L1568060-01 WG1977545	1	4	0.0133	0.0503	12/21/2022@12:02:38 AM		5.00
Calibration:			Table/Fig. : 1				
DUP L1568060-01 WG1977545	1	5	0.0145	0.0534	12/21/2022@12:03:25 AM		5.00
MS L1568060-01 WG1977545	1	6	0.0208	0.0697	12/21/2022@12:04:12 AM		5.00
L1568060-02 WG1977545	1	7	0.0107	0.0435	12/21/2022@12:04:58 AM		5.00
L1568060-03 WG1977545	1	8	0.0106	0.0432	12/21/2022@12:05:45 AM		5.00
L1568060-04 WG1977545	1	9	0.0220	0.0728	12/21/2022@12:06:32 AM		5.00
L1568351-01 WG1977545	1	10	-4.60e-3	3.61e-3	12/21/2022@12:07:18 AM		
L1568714-01 WG1977545	1	11	0.0140	0.0519	12/21/2022@12:08:04 AM		
L1568714-02 WG1977545	1	12	-0.0106	-0.0120	12/21/2022@12:08:51 AM		
L1568816-02 WG1977545	1	13	-4.13e-3	4.83e-3	12/21/2022@12:09:37 AM		
DUP L1568816-02 WG1977545	1	14	-4.04e-3	5.06e-3	12/21/2022@12:10:23 AM		
MS L1568816-02 WG1977545	1	15	9.09e-3	0.0392	12/21/2022@12:11:09 AM		
MSD L1568816-02 WG1977545	1	16	6.85e-3	0.0334	12/21/2022@12:11:57 AM		
L1569097-01 WG1977545	1	17	-5.45e-3	1.40e-3	12/21/2022@12:12:44 AM		
L1569097-02 WG1977545	1	18	-2.46e-3	9.17e-3	12/21/2022@12:13:31 AM		
L1569097-03 WG1977545	1	19	-4.27e-3	4.46e-3	12/21/2022@12:14:19 AM		
L1569102-01 WG1977545	1	20	-6.54e-3	-1.44e-3	12/21/2022@12:15:06 AM		
L1569102-02 WG1977545	1	21	-8.27e-3	-5.96e-3	12/21/2022@12:15:53 AM		
L1569102-03 WG1977545	1	22	-6.04e-3	-1.44e-4	12/21/2022@12:16:39 AM		
L1569102-04 WG1977545	1	23	-8.64e-3	-6.91e-3	12/21/2022@12:17:26 AM		
L1569103-01 WG1977545	1	24	-7.10e-3	-2.91e-3	12/21/2022@12:18:13 AM		
L1569103-02 WG1977545	1	25	-6.59e-3	-1.58e-3	12/21/2022@12:19:00 AM		
L1569103-03 WG1977545	1	26	-7.11e-3	-2.92e-3	12/21/2022@12:19:46 AM		
L1569103-04 WG1977545	1	27	-6.45e-3	-1.22e-3	12/21/2022@12:20:32 AM		
L1569393-01 WG1977545	1	28	-4.41e-3	4.11e-3	12/21/2022@12:21:19 AM		

Channel 1 - Current View

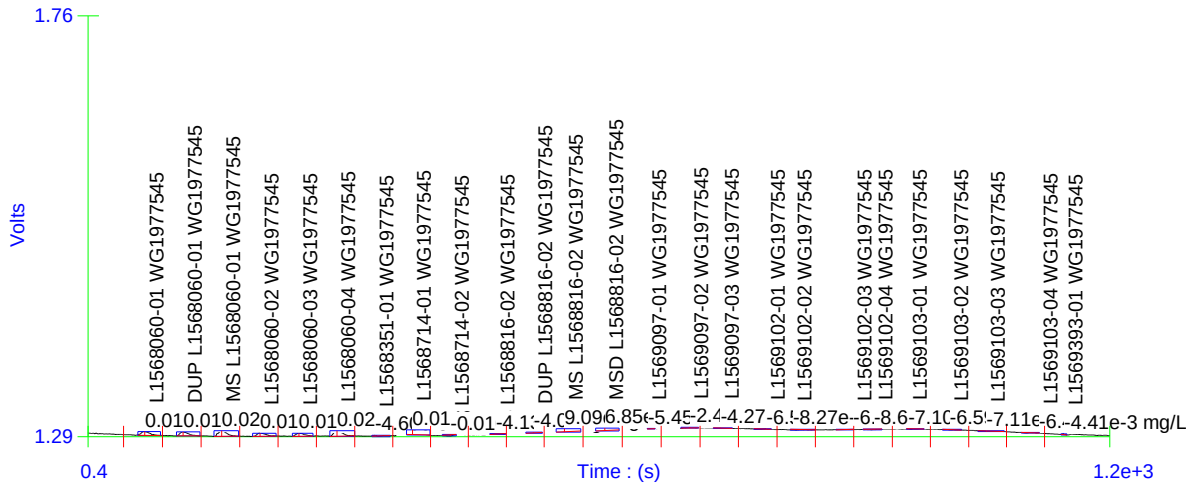
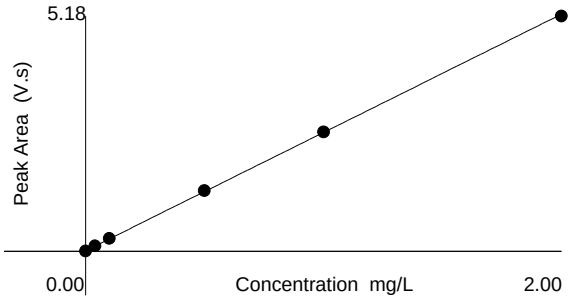


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

PHT Waters WetChem Prep Benchsheet

Batch: WG1977545

Analyst: CAT3538 **Analyst 2:** LDT1016 **Analyst 3:** NA___ **Prep Start Date/Time:** 12/20/22 18:20 **Prep End Date/Time:** 12/20/22 21:53 **SOP:** MTJL-0166
Method: 4AAP **ICV True Value:** 1.0 ppm **LCS True Value:** 0.5 ppm **MS/D True Value:** 1.0 ppm **pH Probe SN:** XV1-15243 **Boiling Chips Lot#:** 26719567
Boston Round Bottom Bottle Lot#: O-2-297-06DB **1mL Pipette Lot# Prep/Lachat:** NA **2mL Pipette Lot# Prep/Lachat:** NA **5mL Pipette Lot# Prep/Lachat:** NA
10mL Pipette Lot# Prep/Lachat: NA **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314299

ICV Standard: 22L20185 Amt. Used: 5 mL Exp. Date:12/21/22 **LCS/D Standard:** 22L08746 Amt. Used: 2.50 mL Exp. Date:01/08/23
MS/D Standard: 22L08746 Amt. Used: 5 mL Exp. Date:01/08/23 **1:9 NaOH:** 22L12999 Amt. Used: 1 N/A Exp. Date:06/12/23
1:9 H2SO4: 22I06475 Amt. Used: 1 N/A Exp. Date:03/01/23 **Phenol Buffer:** 22L20186 Amt. Used: 1 Exp. Date:12/27/22 **4 AAP:** 22L20187 Amt. Used: 1 Exp. Date:12/21/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	Dilution Factor	Initial pH	Adjusted pH	Sulfide Test/Treat	Chloroform Cleanup	Review Analyst	Review Date
BLANK		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
LCS		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MSD(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
1. L1568060-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
2. L1568060-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
3. L1568060-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
4. L1568060-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
5. L1568351-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
6. L1568714-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
7. L1568714-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
8. L1568816-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
9. L1569097-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
10. L1569097-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
11. L1569097-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
12. L1569102-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
13. L1569102-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
14. L1569102-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
15. L1569102-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
16. L1569103-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
17. L1569103-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
18. L1569103-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
19. L1569103-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
20. L1569393-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10

Comments:

Reviewed By:CAT3538 on 12/20/22 22:54:10

6010B Metals (ICP)

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222-A

Lab Sample ID:	L1569102-01	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222-A	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221221164201	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:42
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	57.8	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-13-1222

Lab Sample ID:	L1569102-02	**SDG:**	L1569102
Client Sample ID:	LF1MW-13-1222	**Collected Date/Time:**	12/06/22 10:15
Lab File ID:	20221221164453	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:44
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	63.7	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-2-1222

Lab Sample ID:	L1569102-03	**SDG:**	L1569102
Client Sample ID:	LF1P-2-1222	**Collected Date/Time:**	12/06/22 12:50
Lab File ID:	20221221164745	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:47
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	111	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-6-1222

Lab Sample ID:	L1569102-04	**SDG:**	L1569102
Client Sample ID:	LF1MW-6-1222	**Collected Date/Time:**	12/06/22 14:10
Lab File ID:	20221221165038	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:50
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	60.1	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874405-1

Lab Sample ID:	R3874405-1	**SDG:**	L1569102
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221221122757	**Received Date/Time:**	_____
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:27
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	100	U	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874405-2

Lab Sample ID:	R3874405-2	**SDG:**	L1569102
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221221123038	**Received Date/Time:**	_____
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:30
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	995		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-4	**SDG:**	L1569102
Client Sample ID:	MS	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123902	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:39
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	1100		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-5	**SDG:**	L1569102
Client Sample ID:	MSD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221124142	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:41
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	1090		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874405-3

Lab Sample ID:	R3874405-3	**SDG:**	L1569102
Client Sample ID:	SD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123623	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:36
Dilution Factor:	5	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	500	U	198	500	1000

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		ICV				ICVLL				CCV		
Sample ID:		ICP121221220742-4				ICP121221220754-4				ICP121221221206-2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ALUMINUM	10	10.05186	101	0.514000	0.20	0.1845648	92.30	11.100000	10	9.577537	95.80	0.515000
ANTIMONY	1	0.9960454	99.60	0.645000	0.01	0.009337054	93.40	22.900000	0.50	0.4855727	97.10	0.434000
ARSENIC	1	0.9723032	97.20	0.553000	0.01	0.0106215	106	55.600000	1	0.9897952	99	1.010000
BARIUM	1	1.052822	105	0.081400	0.0050	0.005320797	106	2.560000	0.50	0.4868149	97.40	0.140000
BERYLLIUM	1	1.021935	102	0.333000	0.0020	0.002056829	103	5.690000	0.20	0.1909941	95.50	0.130000
BORON	1	1.01944	102	1.350000	0.20	0.1944241	97.20	0.704000	1	0.9739401	97.40	1.370000
CADMIUM	1	1.009893	101	0.059900	0.0020	0.001787744	89.40	3.640000	0.50	0.4923716	98.50	0.165000
CALCIUM	10	10.30622	103	0.253000	1	1.032567	103	0.345000	50	47.64138	95.30	0.239000
CHROMIUM	1	1.033506	103	0.140000	0.01	0.0100463	100	10.600000	1	0.9523054	95.20	0.310000
COBALT	1	0.9991938	99.90	0.220000	0.01	0.009582107	95.80	4.650000	1	1.007284	101	0.064900
COPPER	1	0.97838	97.80	0.384000	0.01	0.009230531	92.30	2.150000	1	0.9837333	98.40	0.656000
IRON	10	10.19833	102	0.270000	0.10	0.1021181	102	3.510000	10	9.442874	94.40	0.279000
LEAD	1	0.9872088	98.70	0.189000	0.0050	0.005849239	117	3.860000	0.50	0.4797487	95.90	0.713000
LITHIUM	1	1.001798	100	0.317000	0.0150	0.01672401	111	2.680000	1	0.9673145	96.70	0.187000
MAGNESIUM	10	10.37656	104	0.517000	1	1.046796	105	2.140000	10	9.366088	93.70	0.406000
MANGANESE	1	1.002514	100	0.072100	0.01	0.010047	100	0.886000	1	0.9648395	96.50	0.010300
MOLYBDENUM	1	1.053065	105	0.027200	0.0050	0.004956663	99.10	16.200000	0.25	0.2489417	99.60	0.247000
NICKEL	1	0.9949065	99.50	0.120000	0.01	0.008770566	87.70	8.380000	1	0.9731254	97.30	0.148000
POTASSIUM	10	9.961941	99.60	0.395000	1	0.9747049	97.50	5.570000	50	47.88169	95.80	0.193000
SELENIUM	1	0.9944692	99.40	1.330000	0.01	0.009077159	90.80	102.000000	1	0.9925096	99.30	1.290000
SILVER	1	0.974273	97.40	0.324000	0.0050	0.004790917	95.80	10.400000	0.50	0.4727638	94.60	0.804000
SODIUM	10	10.39621	104	0.275000	1	1.039443	104	0.401000	50	49.89676	99.80	0.495000
STRONTIUM	0.40	0.4088517	102	0.159000	0.01	0.01006792	101	0.621000	1	0.9708627	97.10	0.126000
SULFUR	10	9.662365	96.60	0.243000					5	4.859612	97.20	0.237000
THALLIUM	1	0.9502247	95	0.423000	0.01	0.009679168	96.80	7.820000	1	0.9592878	95.90	0.466000
TIN	1	1.001051	100	0.203000	0.05	0.04827819	96.60	3.360000	0.50	0.4792973	95.90	0.977000
TITANIUM	1	1.03827	104	0.256000	0.05	0.05167392	103	1.140000	1	0.9818476	98.20	0.303000
VANADIUM	1	1.028365	103	0.283000	0.02	0.02161356	108	10.700000	1	0.9763013	97.60	0.285000
ZINC	1	1.003316	100	0.242000	0.05	0.04960047	99.20	1.140000	1	0.9625499	96.30	0.370000
SILICON					0.20	0.1951691	97.60	2.000000	2	1.997364	99.90	0.599000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		CCVLL				CCV				CCVLL		
Sample ID:		ICP121221221215-4				ICP121221221310				ICP121221221352		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ALUMINUM	0.20	0.2115215	106	12.600000	10	8.800375	88	0.494000	0.20	0.170979	85.50	7.730000
ANTIMONY	0.01	0.01053904	105	11.000000	0.50	0.4733177	94.70	0.546000	0.01	0.009147656	91.50	25.700000
ARSENIC	0.01	0.0129778	130	10.500000	1	0.9428702	94.30	0.296000	0.01	0.008884161	88.80	73.600000
BARIUM	0.0050	0.004955586	99.10	3.590000	0.50	0.5384205	108	0.125000	0.0050	0.005566838	111	1.510000
BERYLLIUM	0.0020	0.001852272	92.60	2.130000	0.20	0.2142798	107	0.131000	0.0020	0.001902164	95.10	4.390000
BORON	0.20	0.2043356	102	2.390000	1	1.003654	100	0.355000	0.20	0.1991745	99.60	3.460000
CADMIUM	0.0020	0.001789455	89.50	1.700000	0.50	0.5152143	103	0.153000	0.0020	0.002231624	112	12.800000
CALCIUM	1	1.018913	102	0.652000	50	46.58329	93.20	0.238000	1	1.00982	101	0.470000
CHROMIUM	0.01	0.009486311	94.90	7.980000	1	1.166994	117	0.265000	0.01	0.01142228	114	2.430000
COBALT	0.01	0.009748212	97.50	1.810000	1	0.8934903	89.30	0.129000	0.01	0.008438512	84.40	4.860000
COPPER	0.01	0.009886619	98.90	1.380000	1	0.9139063	91.40	0.088900	0.01	0.007569244	75.70	5.190000
IRON	0.10	0.09593639	95.90	2.080000	10	9.698075	97	0.078800	0.10	0.09649778	96.50	2.090000
LEAD	0.0050	0.004364176	87.30	15.300000	0.50	0.4609681	92.20	0.782000	0.0050	0.004074546	81.50	48.800000
LITHIUM	0.0150	0.01477795	98.50	7.070000	1	0.9732415	97.30	0.207000	0.0150	0.01474512	98.30	6.800000
MAGNESIUM	1	1.01546	102	3.410000	10	10.13876	101	0.941000	1	1.111054	111	2.420000
MANGANESE	0.01	0.01022502	102	0.366000	1	0.9395127	94	0.298000	0.01	0.009577558	95.80	0.401000
MOLYBDENUM	0.0050	0.005176071	104	16.100000	0.25	0.2468818	98.80	0.427000	0.0050	0.004469848	89.40	12.000000
NICKEL	0.01	0.008862891	88.60	5.930000	1	0.9678857	96.80	0.203000	0.01	0.008341399	83.40	2.290000
POTASSIUM	1	1.022049	102	1.320000	50	45.83503	91.70	0.328000	1	0.987042	98.70	4.250000
SELENIUM	0.01	0.01199042	120	87.500000	1	0.9707179	97.10	0.442000	0.01	0.006699433	67	81.500000
SILVER	0.0050	0.004809125	96.20	4.860000	0.50	0.4927417	98.50	0.260000	0.0050	0.004988469	99.80	4.090000
SODIUM	1	1.038979	104	0.117000	50	48.42654	96.90	0.415000	1	1.188741	119	1.520000
STRONTIUM	0.01	0.01028116	103	2.710000	1	0.973087	97.30	0.187000	0.01	0.009876679	98.80	1.050000
SULFUR	1	0.9408861	94.10	2.880000	5	5.098068	102	0.258000	1	0.9787183	97.90	0.362000
THALLIUM	0.01	0.01087085	109	4.850000	1	0.8510496	85.10	0.992000	0.01	0.01000455	100	17.700000
TIN	0.05	0.0452759	90.60	4.390000	0.50	0.4740371	94.80	0.075000	0.05	0.04775842	95.50	1.740000
TITANIUM	0.05	0.05086363	102	1.770000	1	1.084082	108	0.205000	0.05	0.0527097	105	3.210000
VANADIUM	0.02	0.02290614	115	15.500000	1	0.9649485	96.50	0.674000	0.02	0.01774577	88.70	30.000000
ZINC	0.05	0.04963709	99.30	1.330000	1	0.9651804	96.50	0.227000	0.05	0.04709614	94.20	0.545000
SILICON	0.20	0.1825717	91.30	2.030000	2	11.07382	554	1.480000	0.20	0.2115339	106	0.486000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

		ICV				ICVLL				CCV			
Sample ID:		ICP121221221453				ICP121221221505				ICP121221221636			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
BORON	1	1.00483	100	1.390000	0.20	0.2075596	104	3.480000	1	1.000977	100	0.897000

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ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

CCV

Sample ID: ICP121221221708

Analyte	True	Found	%R	%RSD
BORON	1	0.9835635	98.40	0.620000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**
File ID:	20221221074532-4		20221221121147-2		20221221131309		20221221122757	
Analyte	mg/l		mg/l		mg/l		mg/l	
ALUMINUM	0.01256452	U	0.02204619	U	0.03086471	U		
ANTIMONY	0.002935144	U	0.006617721	U	0.005869794	U	0.00800	U
ARSENIC	0.003135647	U	0.002196712	U	0.004998391	U	0.0150	U
BARIUM	0.0001373962	U	-0.0002021574	U	0.00006432606	U	0.00250	U
BERYLLIUM	0.0001932934	U	0.00001929486	U	-0.0001014757	U	0.00100	U
BORON	0.001222208	U	0.008527657	U	0.00800933	U	0.100	U
CADMIUM	0.0001260785	U	-0.0002217012	U	0.0000711254	U	0.00150	U
CALCIUM	0.01083118	U	0.007129001	U	-0.01578262	U	0.500	U
CERIUM	-0.08471123	U	-0.01444593	U	-0.1695369	U		
CHROMIUM	-0.0002271952	U	-0.0005017209	U	-0.0001987164	U	0.00500	U
COBALT	0.00003773174	U	0.00003017309	U	0.00006404019	U		
COPPER	-0.00002173473	U	0.0003265531	U	-0.0002981385	U	0.00500	U
IRON	0.004705932	U	-0.002033524	U	0.001125606	U	0.0500	U
LANTHANUM	0.001610553	U	-0.003566589	U	0.0004959268	U		
LEAD	-0.001301039	U	-0.0006383862	U	0.0002140478	U	0.00500	U
LITHIUM	-0.000589034	U	0.001072928	U	-0.0002199647	U	0.0150	U
MAGNESIUM	-0.009591802	U	0.007221284	U	0.02271032	U	0.500	U
MANGANESE	0.0001469361	U	0.0003762973	U	0.0001638364	U	0.00500	U
MOLYBDENUM	0.000742386	U	0.0005546197	U	0.00001948343	U	0.00250	U
NICKEL	-0.0003833317	U	-0.0006608967	U	-0.0007257722	U	0.00500	U
PHOSPHORUS	-0.006297248	U	0.0158104	U	0.005604064	U	0.0236	J
POTASSIUM	0.03741812	U	0.01946185	U	0.0310629	U	0.750	U
SELENIUM	0.0003824342	U	0.003848897	U	0.007609522	U	0.0150	U
SILICON	0.002976063	U	-0.001870234	U	0.7898527			
SILVER	0.0002084773	U	0.00006735879	U	0.00001436192	U	0.00400	U
SODIUM	0.01645508	U	0.02840763	U	0.07482177	U	1.00	U
STRONTIUM	0.00008038368	U	-0.000001392219	U	0.000195064	U	0.00500	U
SULFUR	0.005602463	U	0.01333492	U	0.02556863	U	0.500	U
THALLIUM	0.001617738	U	0.0002043577	U	-0.00183345	U		
TIN	0.004905356	U	0.001016236	U	0.00187766	U	0.00501	J
TITANIUM	0.0007833726	U	0.0004517507	U	0.0002788523	U	0.0250	U
VANADIUM	-0.0009303696	U	0.003576155	U	0.004095899	U	0.0150	U
ZINC	0.000383355	U	-0.000535216	U	0.0001501265	U	0.0250	U

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

	Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
	File ID:	20221221145637		20221221163910		20221221171059	
Analyte		mg/l		mg/l		mg/l	
BORON		0.008450084	U	0.0121901	U	0.0137859	U

INTERFERENCE CHECK SAMPLE

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 07:57
Instrument Run: 122122ICP12

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	496.0188	99.20	500	493.5611	98.70
ANTIMONY	0	-0.01797631		0.50	0.4814869	96.30
ARSENIC	0	-0.0149897		0.50	0.5051793	101
BARIUM	0	0.002870845		0.50	0.5034654	101
BERYLLIUM	0	-0.0001290747		0.50	0.4968421	99.40
BORON	0	-0.004355311		1	0.989256	98.90
CADMIUM	0	0.0003668836		1	1.054962	105
CALCIUM	500	499.553	99.90	500	498.8179	99.80
CERIUM	0	1.383347		0	1.354173	
CHROMIUM	0	0.002717674		0.50	0.4929103	98.60
COBALT	0	0.002440233		0.50	0.4834393	96.70
COPPER	0	-0.007352967		0.50	0.5062709	101
IRON	200	196.2211	98.10	200	197.633	98.80
LANTHANUM	0	0.005752144		0	0.001254382	
LEAD	0	-0.03528731		1	0.9119994	91.20
LITHIUM	0	0.004396194		0	0.00498092	
MAGNESIUM	500	506.0213	101	500	507.4545	101
MANGANESE	0	0.007018834		0.50	0.4795318	95.90
MOLYBDENUM	0	0.002874691		0.50	0.4918267	98.40
NICKEL	0	0.008590876		1	0.9696703	97
PHOSPHORUS	0	0.007986995		0	0.005996953	
POTASSIUM	0	-0.09545332		0	-0.06385567	
SELENIUM	0	0.03906392		0.50	0.5129875	103
SILICON	0	-0.01017802		1	0.9591665	95.90
SILVER	0	-0.002561309		1	1.081038	108
SODIUM	0	0.04314867		0	0.05309935	
STRONTIUM	0	0.003992856		0	0.004048319	
SULFUR	0	-0.006634471		0	-0.01021863	
THALLIUM	0	0.004685809		0.50	0.4492684	89.90
TIN	0	-0.01770268		0.50	0.4757444	95.10
TITANIUM	0	0.04633869		0.50	0.5491807	110
VANADIUM	0	0.01103393		0.50	0.4925627	98.50
ZINC	0	0.006737381		1	0.9095777	91

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 12:19
Instrument Run: 122122ICP12

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	497.393	99.50	500	498.4053	99.70
ANTIMONY	0	-0.01675715		0.50	0.4825586	96.50
ARSENIC	0	-0.007166553		0.50	0.5068293	101
BARIUM	0	0.00269241		0.50	0.5027348	101
BERYLLIUM	0	-0.00003177329		0.50	0.4917959	98.40
BORON	0	-0.004229812		1	0.980087	98
CADMIUM	0	0.0002820603		1	1.056943	106
CALCIUM	500	499.957	100	500	501.5403	100
CERIUM	0	1.469064		0	1.442261	
CHROMIUM	0	0.001584513		0.50	0.4890966	97.80
COBALT	0	0.002046801		0.50	0.4868684	97.40
COPPER	0	-0.007001141		0.50	0.5121583	102
IRON	200	197.1944	98.60	200	196.187	98.10
LANTHANUM	0	0.005082386		0	-0.0009565712	
LEAD	0	-0.03475505		1	0.9085203	90.90
LITHIUM	0	0.00462316		0	0.00364804	
MAGNESIUM	500	493.4555	98.70	500	494.7418	98.90
MANGANESE	0	0.006962439		0.50	0.4804433	96.10
MOLYBDENUM	0	0.003122196		0.50	0.4922481	98.40
NICKEL	0	0.008411421		1	0.9610605	96.10
PHOSPHORUS	0	0.02642022		0	0.02325781	
POTASSIUM	0	-0.08691291		0	-0.03696935	
SELENIUM	0	0.0142028		0.50	0.525842	105
SILICON	0	-0.01477816		1	0.9526756	95.30
SILVER	0	-0.00265116		1	1.079485	108
SODIUM	0	0.09313466		0	0.1050921	
STRONTIUM	0	0.004115603		0	0.004035046	
SULFUR	0	0.01611913		0	-0.007014852	
THALLIUM	0	0.001042301		0.50	0.4516081	90.30
TIN	0	-0.01433857		0.50	0.4687267	93.70
TITANIUM	0	0.04631129		0.50	0.5441921	109
VANADIUM	0	0.01126934		0.50	0.4888171	97.80
ZINC	0	0.006332094		1	0.8981165	89.80

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 14:03
Instrument Run: 122122ICP12

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	447.5229	89.50	500	449.8942	90
ANTIMONY	0	-0.01979124		0.50	0.4645102	92.90
ARSENIC	0	-0.007079457		0.50	0.4780252	95.60
BARIUM	0	0.002661461		0.50	0.5374223	107
BERYLLIUM	0	-0.0001338899		0.50	0.5322755	106
BORON	0	-0.007934736		1	0.993912	99.40
CADMIUM	0	0.00005664602		1	1.091943	109
CALCIUM	500	478.8285	95.80	500	481.2127	96.20
CERIUM	0	1.045592		0	1.020877	
CHROMIUM	0	0.002217701		0.50	0.5667219	113
COBALT	0	0.001767247		0.50	0.4371816	87.40
COPPER	0	-0.008971547		0.50	0.4598552	92
IRON	200	173.0997	86.50	200	174.0803	87
LANTHANUM	0	-0.001953075		0	-0.00366662	
LEAD	0	-0.02778499		1	0.8893959	88.90
LITHIUM	0	0.004407643		0	0.003988314	
MAGNESIUM	500	523.0361	105	500	525.2149	105
MANGANESE	0	0.006621792		0.50	0.4619115	92.40
MOLYBDENUM	0	0.003423849		0.50	0.4768336	95.40
NICKEL	0	0.007869465		1	0.9565932	95.70
PHOSPHORUS	0	0.01467631		0	0.007984275	
POTASSIUM	0	-0.08248467		0	-0.06213313	
SELENIUM	0	0.01604919		0.50	0.5293053	106
SILICON	0	-0.008355635		1	1.027153	103
SILVER	0	-0.003100588		1	1.099756	110
SODIUM	0	0.0915777		0	0.09939959	
STRONTIUM	0	0.003901342		0	0.003882632	
SULFUR	0	0.006926354		0	0.003972924	
THALLIUM	0	0.001566821		0.50	0.4227679	84.60
TIN	0	-0.01111817		0.50	0.4664242	93.30
TITANIUM	0	0.04241494		0.50	0.5721901	114
VANADIUM	0	0.00876257		0.50	0.4816739	96.30
ZINC	0	0.004357425		1	0.8949121	89.50

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 15:07
Instrument Run: 122122ICP12A

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	512.2707	102	500	511.1245	102
ANTIMONY	0	-0.01927159		0.50	0.484509	96.90
ARSENIC	0	-0.003988608		0.50	0.5283322	106
BARIUM	0	0.002770571		0.50	0.5153191	103
BERYLLIUM	0	-0.00005485471		0.50	0.5105242	102
BORON	0	-0.01308163		1	1.015858	102
CADMIUM	0	0.0000893872		1	1.080634	108
CALCIUM	500	512.7862	103	500	513.5476	103
CERIUM	0	1.262536		0	1.230125	
CHROMIUM	0	0.001795381		0.50	0.5050518	101
COBALT	0	0.001449602		0.50	0.4940633	98.80
COPPER	0	-0.008350145		0.50	0.5186385	104
IRON	200	205.0335	103	200	202.7427	101
LANTHANUM	0	0.00630958		0	0.001112305	
LEAD	0	-0.03199152		1	0.9355537	93.60
LITHIUM	0	0.004295885		0	0.004748324	
MAGNESIUM	500	514.0516	103	500	515.2499	103
MANGANESE	0	0.007147605		0.50	0.4889786	97.80
MOLYBDENUM	0	0.002846725		0.50	0.5037329	101
NICKEL	0	0.009533711		1	0.9886577	98.90
PHOSPHORUS	0	0.006900232		0	-0.0007537725	
POTASSIUM	0	-0.09269025		0	-0.1184173	
SELENIUM	0	0.01678457		0.50	0.5369599	107
SILICON	0	-0.007289969		1	1.007524	101
SILVER	0	-0.002859133		1	1.11035	111
SODIUM	0	0.08138529		0	0.07579857	
STRONTIUM	0	0.003902692		0	0.003943274	
SULFUR	0	0.007773493		0	0.004430237	
THALLIUM	0	0.01316823		0.50	0.4564653	91.30
TIN	0	-0.0172368		0.50	0.4791161	95.80
TITANIUM	0	0.04382336		0.50	0.5561113	111
VANADIUM	0	0.006927908		0.50	0.504204	101
ZINC	0	0.006035356		1	0.9324326	93.20

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 21:01
Instrument Run: 122122ICP12A

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	509.6162	102	500	504.9319	101
ANTIMONY	0	-0.02065904		0.50	0.4944281	98.90
ARSENIC	0	-0.01112909		0.50	0.531053	106
BARIUM	0	0.003215737		0.50	0.5120202	102
BERYLLIUM	0	0.00003077524		0.50	0.5021319	100
BORON	0	0.0005651068		1	1.006747	101
CADMIUM	0	0.0002916792		1	1.079339	108
CALCIUM	500	509.8533	102	500	507.3146	101
CERIUM	0	1.277034		0	1.314824	
CHROMIUM	0	0.002569653		0.50	0.4916647	98.30
COBALT	0	0.002140057		0.50	0.504767	101
COPPER	0	-0.00836749		0.50	0.5468705	109
IRON	200	206.6061	103	200	204.9131	102
LANTHANUM	0	-0.002631285		0	0.001654214	
LEAD	0	-0.03441945		1	0.9388549	93.90
LITHIUM	0	0.004680751		0	0.004200672	
MAGNESIUM	500	503.9956	101	500	505.4639	101
MANGANESE	0	0.007435013		0.50	0.5010861	100
MOLYBDENUM	0	0.002468243		0.50	0.5073654	101
NICKEL	0	0.009263391		1	0.9977673	99.80
PHOSPHORUS	0	0.001399703		0	0.02300174	
POTASSIUM	0	-0.04290559		0	-0.07333462	
SELENIUM	0	0.03591814		0.50	0.5147988	103
SILICON	0	-0.00409259		1	1.006424	101
SILVER	0	-0.002670794		1	1.133243	113
SODIUM	0	0.1596254		0	0.1305163	
STRONTIUM	0	0.004021616		0	0.003822841	
SULFUR	0	0.02476021		0	0.009842477	
THALLIUM	0	0.005752626		0.50	0.4791567	95.80
TIN	0	-0.01435184		0.50	0.4822263	96.40
TITANIUM	0	0.04475566		0.50	0.5527	111
VANADIUM	0	0.006204478		0.50	0.5019138	100
ZINC	0	0.006581174		1	0.9258762	92.60

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874405-4
R3874405-5

MS Sample / File ID:	R3874405-4 / 20221221123902	**SDG:**	L1569102
MSD Sample / File ID:	R3874405-5 / 20221221124142	**Analytical Batch:**	WG1977039
OS Sample / File ID:	L1568841-01 / 20221221123329	**Matrix:**	WW
Instrument ID:	ICP12		
Analytical Method:	6010B		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Boron	1000	91.3	1100	1090	101	99.6	1	85.0 - 113	1.37	20

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569102-01,02,03,04

SAMPLE NO.:
R3874405-2

LCS Sample / File ID:	R3874405-2 / 20221221123038	**SDG:**	L1569102
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977039
Instrument ID:	ICP12	**Dilution Factor:**	1
Analytical Method:	6010B	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Boron	1000	995		99.5		85.0 - 113		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SD Sample / File ID:	R3874405-3 / 20221221123623	**SDG:**	L1569102
OS Sample / File ID:	L1568841-01 / 20221221123329	**Analytical Batch:**	WG1977039
Lab File ID:	20221221123623	**Dilution Factor:**	5
Instrument ID:	ICP12	**Matrix:**	WW
Analytical Method:	6010B		

Analyte	OS Result	SD Result	RPD	RPD Limits
	ug/l	*ug/l*	*%*	*%*
Boron	91.3	500	0.000	10

5

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569102-01,02,03,04 **Analytical Method:** 6010B
Matrix: WW **Prep Method:** 3015

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Boron	7440-42-8	189.0420	249.6780	0.0396	0.20

INTERELEMENT CORRECTION FACTORS

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	ARSENIC	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LANTHANUM
	nm	189.0420	317.9330	267.7160	228.6160	324.7540	259.94	333.7490
ALUMINUM	308.2150							
ANTIMONY	206.8330			-0.00010364				
ARSENIC	189.0420							-0.00520043
BARIUM	233.5270						-0.00011317	
BERYLLIUM	313.0420							
CADMIUM	228.8020	-0.25019590						
CHROMIUM	267.7160							
COBALT	228.6160							
IRON	271.4410				-0.00018664			
LEAD	220.3530					-0.00003085		-0.00013179
LITHIUM	670.7840		-0.00032182					
SELENIUM	196.09			-0.00001854				
THALLIUM	190.8560				-0.00026544			

INTERELEMENT CORRECTION FACTORS

SDG: L1569102 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	MANGANESE	SILICON	TIN	TITANIUM	VANADIUM
	nm	257.61	251.6110	189.9890	334.9410	292.4020
ALUMINUM	308.2150					-0.00434031
ANTIMONY	206.8330			-0.00419814		
ARSENIC	189.0420					
BARIUM	233.5270					
BERYLLIUM	313.0420					-0.02889282
CADMIUM	228.8020					
CHROMIUM	267.7160	-0.00003148				
COBALT	228.6160				-0.00101627	
IRON	271.4410					
LEAD	220.3530		-0.00008881			
LITHIUM	670.7840					
SELENIUM	196.09					
THALLIUM	190.8560	-0.00000492				

LINEAR DYNAMIC RANGE

SDG:	L1569102	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Date:**	09/04/22 16:07

Analyte	LDR *ppm*
ALUMINUM	500
ANTIMONY	10
ARSENIC	50
BARIUM	50
BERYLLIUM	10
BORON	50
CADMIUM	10
CALCIUM	1000
CHROMIUM	50
COBALT	50
COPPER	50
IRON	500
LEAD	100
LITHIUM	10
MAGNESIUM	1000
MANGANESE	20
MOLYBDENUM	20
NICKEL	50
PHOSPHORUS	100
POTASSIUM	500
SELENIUM	10
SILICON	50
SILVER	10
SODIUM	1000
STRONTIUM	20
SULFUR	200
THALLIUM	10
TIN	50
TITANIUM	50
VANADIUM	20
ZINC	20

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 07:22
Analytical Run:	122122ICP12	**Calibration End Date:**	12/21/22 07:39

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221220719	20221221071946	12/21/22 07:19		
CAL	STD1	20221221072239	12/21/22 07:22		
CAL	STD2	20221221072523	12/21/22 07:25		
CAL	STD3	20221221072804	12/21/22 07:28		
CAL	STD4	20221221073041	12/21/22 07:30		
CAL	STD5	20221221073331	12/21/22 07:33		
CAL	STD6	20221221073622	12/21/22 07:36		
CAL	STD7	20221221073924	12/21/22 07:39		
ICV	ICP121221220742-4	20221221074239-4	12/21/22 07:42		
ICB	ICP121221220745-4	20221221074532-4	12/21/22 07:45		
ICVLL	ICP121221220754-4	20221221075402-4	12/21/22 07:54		
ICSA	ICP121221220757-4	20221221075701-4	12/21/22 07:57		
ICSAB	ICP121221220759-4	20221221075950-4	12/21/22 07:59		
CCV	ICP121221221206-2	20221221120616-2	12/21/22 12:06		
CCB	ICP121221221211-2	20221221121147-2	12/21/22 12:11		
CCVLL	ICP121221221215-4	20221221121514-4	12/21/22 12:15		
ICSA	ICP121221221219-4	20221221121915-4	12/21/22 12:19		
ICSAB	ICP121221221222-4	20221221122202-4	12/21/22 12:22		
BLANK	R3874405-1	20221221122757	12/21/22 12:27	1	WG1977039
LCS	R3874405-2	20221221123038	12/21/22 12:30	1	WG1977039
OS	L1568841-01	20221221123329	12/21/22 12:33		
SD	R3874405-3	20221221123623	12/21/22 12:36	5	WG1977039
MS	R3874405-4	20221221123902	12/21/22 12:39	1	WG1977039
MSD	R3874405-5	20221221124142	12/21/22 12:41	1	WG1977039
CCV	ICP121221221310	20221221131016	12/21/22 13:10		
CCB	ICP121221221313	20221221131309	12/21/22 13:13		
CCVLL	ICP121221221352	20221221135213	12/21/22 13:52		
ICSA	ICP121221221403	20221221140308	12/21/22 14:03		
ICSAB	ICP121221221405	20221221140546	12/21/22 14:05		

ANALYSIS LOG

SDG:	L1569102	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 14:33
Analytical Run:	122122ICP12A	**Calibration End Date:**	12/21/22 14:50

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221221431	20221221143101	12/21/22 14:31		
CAL	STD1	20221221143355	12/21/22 14:33		
CAL	STD2	20221221143639	12/21/22 14:36		
CAL	STD3	20221221143919	12/21/22 14:39		
CAL	STD4	20221221144156	12/21/22 14:41		
ICV	ICP121221221453	20221221145344	12/21/22 14:53		
ICB	ICP121221221456	20221221145637	12/21/22 14:56		
ICVLL	ICP121221221505	20221221150506	12/21/22 15:05		
ICSA	ICP121221221507	20221221150758	12/21/22 15:07		
ICSAB	ICP121221221510	20221221151038	12/21/22 15:10		
CCV	ICP121221221636	20221221163616	12/21/22 16:36		
CCB	ICP121221221639	20221221163910	12/21/22 16:39		
LF1MW-13-1222-A	L1569102-01	20221221164201	12/21/22 16:42	1	WG1977039
LF1MW-13-1222	L1569102-02	20221221164453	12/21/22 16:44	1	WG1977039
LF1P-2-1222	L1569102-03	20221221164745	12/21/22 16:47	1	WG1977039
LF1MW-6-1222	L1569102-04	20221221165038	12/21/22 16:50	1	WG1977039
L1569103-01	L1569103-01	20221221165331	12/21/22 16:53	1	WG1977039
L1569103-02	L1569103-02	20221221165630	12/21/22 16:56	1	WG1977039
L1569103-03	L1569103-03	20221221165919	12/21/22 16:59	1	WG1977039
L1569103-04	L1569103-04	20221221170209	12/21/22 17:02	1	WG1977039
CCV	ICP121221221708	20221221170806	12/21/22 17:08		
CCB	ICP121221221710	20221221171059	12/21/22 17:10		
ICSA	ICP121221222101	20221221210107	12/21/22 21:01		
ICSAB	ICP121221222103	20221221210346	12/21/22 21:03		

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	0.20	.2058662	103			
ANTIMONY	0.01	.008493116	84.90	0.50	.4783829	95.70
ARSENIC	0.01	.007669835	76.70	0.50	.4877345	97.50
BARIUM	0.0050	.005331806	107			
BERYLLIUM	0.0020	.00192823	96.40	0.50	.4967067	99.30
BORON	0.20	.2101587	105	0.50	.5069697	101
CADMIUM	0.0020	.001955234	97.80	0.50	.4932416	98.60
CALCIUM	1	1.047326	105			
CHROMIUM	0.01	.009474111	94.70	0.50	.5043192	101
COBALT	0.01	.009793008	97.90	0.50	.4881383	97.60
COPPER	0.01	.009628027	96.30	0.50	.4821489	96.40
IRON	0.10	.103358	103	0.50	.5030065	101
LEAD	0.0050	.005546309	111	0.50	.4877595	97.60
LITHIUM	0.0150	.01446996	96.50	0.50	.5018612	100
MAGNESIUM	1	1.017301	102			
MANGANESE	0.01	.010179	102	0.50	.5034201	101
MOLYBDENUM	0.0050	.005347813	107	0.50	.5042876	101
NICKEL	0.01	.009028118	90.30	0.50	.4877403	97.50
PHOSPHORUS	0.10	.1100857	110	0.50	.4970972	99.40
POTASSIUM	1	.9750794	97.50			
SELENIUM	0.01	.01321063	132	0.50	.4825757	96.50
SILVER	0.0050	.004580849	91.60	0.50	.4873494	97.50
SODIUM	1	1.012061	101			
STRONTIUM	0.01	.01017535	102	0.50	.4978757	99.60
SULFUR	1	.9349195	93.50	0.50	.4644717	92.90
THALLIUM	0.01	.01092909	109	0.50	.4691448	93.80
TIN	0.05	.04950913	99	0.50	.4877992	97.60
TITANIUM	0.05	.05097473	102	0.50	.5006087	100
VANADIUM	0.02	.02186006	109	0.50	.5002265	100
ZINC	0.05	.0507263	101	0.50	.4889605	97.80
CERIUM						
LANTHANUM						
File ID:		20221221072239			20221221072523	

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM						
ANTIMONY	1	.9975173	99.80	2	2.006653	100
ARSENIC	1	.9989621	99.90	2	2.003597	100
BARIUM	1	1.042425	104	2	2.041003	102
BERYLLIUM	1	1.014104	101	2	1.993772	99.70
BORON	1	1.002356	100	2	1.996064	99.80
CADMIUM	1	1.006444	101	2	1.998468	99.90
CALCIUM	1	1.12608	113	2	2.061943	103
CHROMIUM	1	1.024888	102	2	1.986479	99.30
COBALT	1	1.005852	101	2	2.00004	100
COPPER	1	1.000513	100	2	2.004208	100
IRON	1	1.037733	104	2	2.008484	100
LEAD	1	.9987229	99.90	2	2.003697	100
LITHIUM	1	1.023124	102	2	1.987977	99.40
MAGNESIUM						
MANGANESE	1	1.019415	102	2	1.989437	99.50
MOLYBDENUM	1	1.017384	102	2	1.990235	99.50
NICKEL	1	1.003966	100	2	2.001087	100
PHOSPHORUS	1	.9998475	100	2	2.000298	100
POTASSIUM				2	1.990587	99.50
SELENIUM	1	.9877166	98.80	2	2.010482	101
SILVER	1	.9920632	99.20	2	2.007132	100
SODIUM				2	2.016595	101
STRONTIUM	1	1.012539	101	2	1.994261	99.70
SULFUR	1	.9798781	98	2	1.975463	98.80
THALLIUM	1	.9812767	98.10	2	2.017071	101
TIN	1	.9955672	99.60	2	2.005279	100
TITANIUM	1	1.013466	101	2	1.99309	99.70
VANADIUM	1	1.016966	102	2	1.991442	99.60
ZINC	1	1.012313	101	2	1.996585	99.80
CERIUM						
LANTHANUM						
File ID:		20221221072804			20221221073041	

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	10	10.17038	102	250	249.2936	99.70
ANTIMONY						
ARSENIC						
BARIUM	10	9.987557	99.90			
BERYLLIUM						
BORON						
CADMIUM						
CALCIUM	10	9.970271	99.70			
CHROMIUM						
COBALT						
COPPER						
IRON	10	9.994346	99.90			
LEAD						
LITHIUM						
MAGNESIUM	10	10.12777	101	250	248.7185	99.50
MANGANESE						
MOLYBDENUM						
NICKEL						
PHOSPHORUS						
POTASSIUM	10	9.991351	99.90	50	49.80439	99.60
SELENIUM						
SILVER						
SODIUM	10	9.995475	100			
STRONTIUM						
SULFUR	10	10.0152	100			
THALLIUM						
TIN						
TITANIUM						
VANADIUM						
ZINC						
CERIUM				10	10	100
LANTHANUM				10	10	100
File ID:		20221221073331			20221221073622	

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	500	500.3498	100
ANTIMONY			
ARSENIC			
BARIUM			
BERYLLIUM			
BORON			
CADMIUM			
CALCIUM			
CHROMIUM			
COBALT			
COPPER			
IRON			
LEAD			
LITHIUM			
MAGNESIUM	500	500.6382	100
MANGANESE			
MOLYBDENUM			
NICKEL			
PHOSPHORUS			
POTASSIUM	100	100.0991	100
SELENIUM			
SILVER			
SODIUM			
STRONTIUM			
SULFUR			
THALLIUM			
TIN			
TITANIUM			
VANADIUM			
ZINC			
CERIUM			
LANTHANUM			
File ID:		20221221073924	

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CALCIUM	10	10.05101	101	250	254.0436	102
IRON	10	10.85819	109	100	101.7712	102
SODIUM	10	10.94069	109	250	250.3309	100
File ID:		20221221073331			20221221073622	

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%
CALCIUM	500	497.9772	99.60
IRON	200	199.0715	99.50
SODIUM	500	499.8157	100
File ID:		20221221073924	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	0.20	.2057409	103	0.50	.4993322	99.90
File ID:		20221221143355			20221221143639	

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INITIAL CALIBRATION RECOVERY

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	1	.9955635	99.60	2	2.001811	100
File ID:		20221221143919			20221221144156	

INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
ALUMINUM	308.215	8	5	0.999998	88.03993	5.768172
ANTIMONY	206.833	8	5	0.999908	251.9753	-1.009616
ARSENIC	189.042	8	5	0.99997	161.9075	-0.593147
BARIUM	233.527	8	5	0.999974	4211.225	2.514799
BERYLLIUM	313.042	8	5	0.999956	19930.57	15.63835
BORON	249.678	8	5	0.999966	217.1361	-0.208227
CADMIUM	228.802	8	5	0.999984	5533.433	3.798472
CALCIUM	317.933	8	5	0.999826	1016.916	166.9363
CERIUM	535.353	8	5	1	188.3328	77.05837
CHROMIUM	267.716	8	5	0.999852	6506.893	11.70505
COBALT	228.616	8	5	0.999969	4181.485	2.265231
COPPER	324.754	8	5	0.99994	18389.74	27.40229
IRON	259.94	8	5	0.99999	494.2889	1.982196
LANTHANUM	333.749	8	5	1	487.8872	1.537753
LEAD	220.353	8	5	0.999971	780.0746	0.960109
LITHIUM	670.784	8	5	0.999876	8818.818	-5.371576
MAGNESIUM	279.079	8	5	0.999995	62.59071	-2.348918
MANGANESE	257.61	8	5	0.99991	87826.11	-2.41838
MOLYBDENUM	202.03	8	5	0.999925	1508.868	1.57973
NICKEL	231.604	8	5	0.99997	2195.369	6.210312
PHOSPHORUS	177.495	8	5	0.999979	33.31491	-0.093625
POTASSIUM	766.49	8	5	0.999997	432.8093	-60.99083
SELENIUM	196.09	8	5	0.999898	85.95801	0.90995
SILVER	328.068	8	5	0.999951	19865.25	-23.96059
SODIUM	589.592	8	5	0.999997	905.5856	30.55158
STRONTIUM	421.552	8	5	0.999965	60262.04	-22.27544
SULFUR	182.034	8	5	0.999953	62.23442	0.00722
THALLIUM	190.856	8	5	0.999718	200.9821	0.91657
TIN	189.989	8	5	0.999964	340.9702	-1.72725
TITANIUM	334.941	8	5	0.999958	3062.938	-3.216909
VANADIUM	292.402	8	5	0.999934	627.4249	-0.99602
ZINC	206.2	8	5	0.999948	2901.838	1.756637

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16A-IN

INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
CALCIUM	373.69	8	5	0.999939	583.9799	15.80206
IRON	271.441	8	5	0.999908	25.20861	0.624699
SODIUM	818.326	8	5	0.999997	56.59688	84.64878

5

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16A-IN

INITIAL CALIBRATION

SDG:	L1569102	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
BORON	249.678	8	5	0.999989	211.4439	-0.81833

5

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 07:19 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10469.53	10461.03	10465.50	10482.07
YTTRIUM	360.073	Axial	392984.7	393061.2	394247.4	391645.7
YTTRIUM	360.073	Radial	11192.16	11080.01	11200.37	11296.09
INDIUM	230.606	Axial	3214.320	3207.174	3213.437	3222.350

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	5.773297	4.261710	7.279164	5.779017
ANTIMONY	206.833	Axial	-1.00952	-0.6257480	-1.672421	-0.7303998
ARSENIC	189.042	Axial	-0.5926253	-1.240962	-0.7583531	0.2214394
BARIUM	233.527	Axial	2.514772	3.326311	1.531802	2.686203
BERYLLIUM	313.042	Radial	15.63836	14.04040	18.93513	13.93954
BORON	249.678	Radial	-0.2078598	0.08331945	-0.9978380	0.2909393
CADMIUM	228.802	Axial	3.796806	6.644928	3.333131	1.412359
CALCIUM	317.933	Radial	166.9254	166.6389	167.7615	166.3757
CALCIUM	373.690	Radial	15.81921	12.37294	17.25428	17.83042
CERIUM	535.353	Radial	77.09353	71.52975	75.62781	84.12303
CHROMIUM	267.716	Axial	11.70833	12.6250	4.291667	18.20833
COBALT	228.616	Axial	2.267367	0.2984983	3.300214	3.203389
COPPER	324.754	Axial	27.40278	23.83929	29.66071	28.70833
IRON	259.940	Radial	1.994970	-0.4999167	3.118244	3.366584
IRON	271.441	Radial	0.6243558	1.291451	-0.7899551	1.371571
LANTHANUM	333.749	Radial	1.538648	0.5832361	3.367703	0.6650042
LEAD	220.353	Axial	0.9583556	1.757353	1.492010	-0.3742962
LITHIUM	670.784	Radial	-5.40573	-3.749375	3.035091	-15.50291
MAGNESIUM	279.079	Radial	-2.34412	-3.291118	-1.829370	-1.911887
MANGANESE	257.610	Axial	-2.41666	-3.333333	-4.5	0.5833333
MOLYBDENUM	202.030	Axial	1.579528	1.008981	2.686203	1.043401
NICKEL	231.604	Axial	6.210185	5.732343	7.137307	5.760906
PHOSPHORUS	177.495	Axial	-0.09373890	0.01478360	-0.01480001	-0.2812003
POTASSIUM	766.490	Radial	-60.9857	-62.19797	-58.66456	-62.09476
SELENIUM	196.090	Axial	0.9096922	1.374875	0.8066008	0.5476005
SILICON	251.611	Axial	59.90816	55.19729	52.62949	71.89769
SILVER	328.068	Axial	-23.9583	-33.83333	-17.6250	-20.41667
SODIUM	589.592	Radial	30.46147	43.95101	30.93298	16.50042
SODIUM	818.326	Radial	84.65133	77.69538	97.74655	78.51205
STRONTIUM	421.552	Radial	-22.2952	-19.70505	-20.70514	-26.47548
SULFUR	182.034	Axial	0.007149758	0.6763499	-0.7104007	0.05550006
THALLIUM	190.856	Axial	0.9168762	0.9978544	0.4434855	1.309289
TIN	189.989	Axial	-1.72722	-1.818383	-1.587302	-1.776002
TITANIUM	334.941	Radial	-3.24219	0.9158679	-3.700536	-6.941913
VANADIUM	292.402	Radial	-0.9899691	-2.110759	-0.5543545	-0.3047936
ZINC	206.200	Axial	1.756525	2.638873	0.8436008	1.787102

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 07:22 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10538.10	10531.93	10523.44	10558.92
YTTRIUM	360.073	Axial	395384.9	394834.3	395161.7	396158.8
YTTRIUM	360.073	Radial	11341.67	11270.22	11359.37	11395.42
INDIUM	230.606	Axial	3208.679	3202.320	3208.781	3214.935

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	24.21796	21.87220	26.07166	24.71001
ANTIMONY	206.833	Axial	1.137594	0.7553347	1.648392	1.009055
ARSENIC	189.042	Axial	0.6529818	0.1801161	0.9425905	0.8362389
BARIUM	233.527	Axial	25.13242	24.98612	24.60361	25.80753
BERYLLIUM	313.042	Radial	54.79990	51.45831	57.25721	55.68418
BORON	249.678	Radial	46.03625	43.44753	49.75849	44.90271
CADMIUM	228.802	Axial	14.71313	16.03387	13.88687	14.21867
CALCIUM	317.933	Radial	1248.420	1245.593	1249.126	1250.540
CHROMIUM	267.716	Axial	73.83333	73.75000	73.0	74.750
COBALT	228.616	Axial	43.13790	43.40870	43.67908	42.32591
COPPER	324.754	Axial	205.7024	207.7976	209.0833	200.2262
IRON	259.940	Radial	53.78640	51.09762	55.87941	54.38217
LEAD	220.353	Axial	5.276382	6.074224	5.156983	4.597940
LITHIUM	670.784	Radial	123.8352	132.4214	123.6259	115.4582
MAGNESIUM	279.079	Radial	62.14581	61.61650	60.91772	63.90321
MANGANESE	257.610	Axial	897.4028	895.1250	897.7083	899.3750
MOLYBDENUM	202.030	Axial	9.712858	9.623710	9.058654	10.45621
NICKEL	231.604	Axial	25.98322	27.45033	25.14691	25.35243
PHOSPHORUS	177.495	Axial	3.597637	3.515004	3.333703	3.944204
POTASSIUM	766.490	Radial	365.8992	346.7487	383.9107	367.0381
SELENIUM	196.090	Axial	2.059160	2.656603	1.374875	2.146002
SILICON	251.611	Axial	748.8288	729.4261	749.2251	767.8352
SILVER	328.068	Axial	67.44444	70.41667	68.20833	63.70833
SODIUM	589.592	Radial	959.7060	955.4715	959.5686	964.0778
STRONTIUM	421.552	Radial	598.8050	596.9150	593.7292	605.7708
SULFUR	182.034	Axial	58.57163	59.60706	58.45437	57.65346
THALLIUM	190.856	Axial	3.108870	2.477059	2.496427	4.353124
TIN	189.989	Axial	15.12739	14.98501	15.20124	15.19592
TITANIUM	334.941	Radial	154.9482	155.7005	158.7238	150.4203
VANADIUM	292.402	Radial	12.88608	13.63712	13.18565	11.83547
ZINC	206.200	Axial	149.9314	149.2951	150.4380	150.0611

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 07:25 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10735.68	10745.63	10731.94	10729.47
YTTRIUM	360.073	Axial	402100.1	403170.7	401186.1	401943.4
YTTRIUM	360.073	Radial	11585.12	11591.46	11577.54	11586.36
INDIUM	230.606	Axial	3235.232	3243.203	3232.198	3230.295

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	122.5692	121.7595	122.7066	123.2416
ARSENIC	189.042	Axial	80.36750	81.33632	79.75269	80.01348
BERYLLIUM	313.042	Radial	10263.41	10249.62	10249.20	10291.42
BORON	249.678	Radial	113.7308	113.3905	113.4890	114.3130
CADMIUM	228.802	Axial	2802.600	2813.809	2796.140	2797.852
CHROMIUM	267.716	Axial	3376.971	3371.776	3386.028	3373.110
COBALT	228.616	Axial	2056.699	2059.650	2051.000	2059.447
COPPER	324.754	Axial	9100.248	9095.601	9106.544	9098.598
IRON	259.940	Radial	259.4120	259.6538	258.6436	259.9385
LEAD	220.353	Axial	383.9300	384.3630	384.3667	383.0605
LITHIUM	670.784	Radial	4575.647	4555.052	4587.683	4584.207
MANGANESE	257.610	Axial	45334.87	45300.26	45443.43	45260.92
MOLYBDENUM	202.030	Axial	781.8655	780.5904	783.0578	781.9483
NICKEL	231.604	Axial	1083.985	1085.240	1082.991	1083.724
PHOSPHORUS	177.495	Axial	16.88546	16.35778	16.84234	17.45627
SELENIUM	196.090	Axial	43.46883	43.54678	43.29302	43.56670
SILICON	251.611	Axial	2418.951	2316.989	2425.112	2514.751
SILVER	328.068	Axial	9881.282	9856.798	9898.820	9888.229
STRONTIUM	421.552	Radial	31033.34	30904.92	31023.77	31171.32
SULFUR	182.034	Axial	29.64824	29.35301	30.23411	29.35759
THALLIUM	190.856	Axial	95.82594	96.30956	95.30163	95.86661
TIN	189.989	Axial	165.6693	166.7739	164.7731	165.4610
TITANIUM	334.941	Radial	1583.839	1578.514	1582.731	1590.272
VANADIUM	292.402	Radial	323.8428	323.1525	324.4958	323.8800
ZINC	206.200	Axial	1456.756	1459.649	1456.186	1454.432

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 07:28 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10720.58	10723.02	10740.45	10698.26
YTTRIUM	360.073	Axial	399930.8	400677.3	400338.1	398776.9
YTTRIUM	360.073	Radial	11641.42	11667.69	11663.97	11592.60
INDIUM	230.606	Axial	3205.255	3208.943	3202.121	3204.702

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	256.3423	258.8167	254.9141	255.2959
ARSENIC	189.042	Axial	165.0111	166.8347	164.8709	163.3279
BARIUM	233.527	Axial	4497.715	4500.144	4499.456	4493.546
BERYLLIUM	313.042	Radial	21039.04	21060.66	21010.14	21046.33
BORON	249.678	Radial	226.1697	229.2324	224.9208	224.3558
CADMIUM	228.802	Axial	5706.502	5705.211	5705.804	5708.490
CALCIUM	317.933	Radial	1364.720	1365.675	1363.231	1365.254
CHROMIUM	267.716	Axial	6840.730	6846.416	6851.300	6824.475
COBALT	228.616	Axial	4196.356	4207.970	4194.898	4186.200
COPPER	324.754	Axial	18752.22	18760.59	18758.36	18737.71
IRON	259.940	Radial	535.5824	535.1803	533.9527	537.6143
LEAD	220.353	Axial	777.8383	778.0690	777.2107	778.2353
LITHIUM	670.784	Radial	9379.252	9389.641	9368.272	9379.842
MANGANESE	257.610	Axial	91675.33	91727.22	91622.46	91676.32
MOLYBDENUM	202.030	Axial	1573.527	1573.549	1577.751	1569.280
NICKEL	231.604	Axial	2204.052	2206.713	2207.594	2197.849
PHOSPHORUS	177.495	Axial	34.01272	33.52195	34.39547	34.12073
SELENIUM	196.090	Axial	87.86987	87.00026	88.64957	87.95978
SILICON	251.611	Axial	5397.882	5165.171	5381.813	5646.662
SILVER	328.068	Axial	20031.44	20061.24	19991.38	20041.69
STRONTIUM	421.552	Radial	63443.18	63394.58	63465.17	63469.78
SULFUR	182.034	Axial	62.45146	61.64429	62.79560	62.91449
THALLIUM	190.856	Axial	197.5762	197.1635	198.7078	196.8574
TIN	189.989	Axial	336.7794	338.2337	336.7381	335.3665
TITANIUM	334.941	Radial	3225.407	3234.863	3211.906	3229.451
VANADIUM	292.402	Radial	662.6456	665.5591	662.0841	660.2937
ZINC	206.200	Axial	3009.807	3019.538	3011.946	2997.937

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 07:30 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10773.65	10796.85	10769.18	10754.92
YTTRIUM	360.073	Axial	400221.9	399505.0	401673.5	399487.3
YTTRIUM	360.073	Radial	11669.14	11674.07	11673.95	11659.41
INDIUM	230.606	Axial	3180.259	3185.492	3182.496	3172.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	519.2767	521.4875	518.6743	517.6683
ARSENIC	189.042	Axial	333.2106	334.4175	333.0095	332.2050
BARIUM	233.527	Axial	8847.374	8864.397	8838.636	8839.089
BERYLLIUM	313.042	Radial	41446.82	41521.49	41433.10	41385.87
BORON	249.678	Radial	451.6729	451.2814	455.6405	448.0967
CADMIUM	228.802	Axial	11383.52	11406.99	11379.14	11364.43
CALCIUM	317.933	Radial	2360.235	2369.071	2352.509	2359.126
CHROMIUM	267.716	Axial	13313.30	13330.56	13297.33	13312.00
COBALT	228.616	Axial	8276.746	8294.730	8264.737	8270.772
COPPER	324.754	Axial	37563.23	37592.77	37535.02	37561.89
IRON	259.940	Radial	1037.147	1040.980	1033.477	1036.985
LEAD	220.353	Axial	1547.415	1545.326	1549.895	1547.025
LITHIUM	670.784	Radial	18273.14	18270.14	18243.89	18305.39
MANGANESE	257.610	Axial	179797.3	180153.8	179599.9	179638.1
MOLYBDENUM	202.030	Axial	3091.857	3096.373	3092.601	3086.596
NICKEL	231.604	Axial	4352.706	4354.913	4353.766	4349.439
PHOSPHORUS	177.495	Axial	68.47912	68.76664	68.00518	68.66556
POTASSIUM	766.490	Radial	834.6757	826.7183	853.4225	823.8863
SELENIUM	196.090	Axial	178.7739	179.8654	177.8369	178.6193
SILICON	251.611	Axial	12187.09	11534.88	12166.48	12859.90
SILVER	328.068	Axial	40581.80	40603.67	40586.83	40554.88
SODIUM	589.592	Radial	1935.877	1929.190	1933.502	1944.938
STRONTIUM	421.552	Radial	125276.6	125074.1	125338.3	125417.5
SULFUR	182.034	Axial	126.5201	126.2644	127.1880	126.1077
THALLIUM	190.856	Axial	402.0042	402.1647	401.0067	402.8411
TIN	189.989	Axial	674.7879	676.4419	676.4947	671.4270
TITANIUM	334.941	Radial	6361.528	6359.819	6370.478	6354.289
VANADIUM	292.402	Radial	1301.690	1303.406	1297.032	1304.632
ZINC	206.200	Axial	5963.861	5967.846	5963.627	5960.111

Sample ID: STD5 Units: mg/l
Analyzed: 12/21/22 07:33 Sequence: 7 Standard ID: 22H04626

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10627.05	10652.04	10619.21	10609.91
YTTRIUM	360.073	Axial	394170.8	393467.5	395145.5	393899.3
YTTRIUM	360.073	Radial	11690.64	11662.45	11701.00	11708.46
INDIUM	230.606	Axial	3143.927	3145.758	3143.680	3142.343

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	941.3044	938.4331	944.8505	940.6295
BARIUM	233.527	Axial	42695.14	42734.72	42676.95	42673.74
CALCIUM	317.933	Radial	10764.84	10757.12	10798.55	10738.86
CALCIUM	373.690	Radial	6147.504	6140.401	6165.057	6137.055
IRON	259.940	Radial	5162.181	5150.932	5186.292	5149.318
IRON	271.441	Radial	286.5625	286.5468	286.8504	286.2903
MAGNESIUM	279.079	Radial	659.6779	662.2544	661.0593	655.7200
POTASSIUM	766.490	Radial	4453.213	4462.080	4466.647	4430.911
SILICON	251.611	Axial	32165.65	32024.08	32199.45	32273.42
SODIUM	589.592	Radial	9486.808	9472.444	9495.545	9492.434
SODIUM	818.326	Radial	735.2070	730.6027	750.9161	724.1021
SULFUR	182.034	Axial	632.6738	632.6458	633.4591	631.9165

Sample ID: STD6 Units: mg/l
Analyzed: 12/21/22 07:36 Sequence: 8 Standard ID: 22H04640

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9219.577	9224.362	9214.867	9219.504
YTTRIUM	360.073	Axial	340860.4	340631.1	341032.8	340917.4
YTTRIUM	360.073	Radial	10884.82	10887.69	10910.02	10856.76
INDIUM	230.606	Axial	2528.475	2531.690	2528.011	2525.724

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	21350.63	21317.98	21370.27	21363.66
CALCIUM	373.690	Radial	144297.3	144132.3	144397.1	144362.5
CERIUM	535.353	Radial	1906.556	1900.125	1915.725	1903.817
IRON	271.441	Radial	2495.652	2485.417	2497.133	2504.408
LANTHANUM	333.749	Radial	4746.384	4717.000	4768.991	4753.160
MAGNESIUM	279.079	Radial	15137.65	15092.63	15170.42	15149.91
POTASSIUM	766.490	Radial	20904.53	20910.46	20934.72	20868.43
SODIUM	818.326	Radial	13861.19	13816.83	13902.09	13864.65
SULFUR	182.034	Axial	2882.061	2882.045	2881.315	2882.821

Sample ID: STD7 Units: mg/l
Analyzed: 12/21/22 07:39 Sequence: 9 Standard ID: 22H04627

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8814.486	8829.352	8816.576	8797.529
YTTRIUM	360.073	Axial	327728.7	327753.0	328568.4	326864.8
YTTRIUM	360.073	Radial	10674.36	10723.87	10652.25	10646.97
INDIUM	230.606	Axial	2347.253	2348.174	2353.022	2340.564

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	42018.17	42160.80	41967.34	41926.36
CALCIUM	373.690	Radial	277369.1	278390.2	276994.0	276723.1
IRON	271.441	Radial	4786.709	4794.127	4781.083	4784.917
MAGNESIUM	279.079	Radial	29883.23	29969.43	29819.71	29860.54
POTASSIUM	766.490	Radial	41261.20	41404.51	41197.75	41181.33
SODIUM	818.326	Radial	27059.90	27133.67	27033.25	27012.79
SULFUR	182.034	Axial	5569.998	5589.265	5568.426	5552.302

Sample ID: ICV-4 Units: mg/l
Analyzed: 12/21/22 07:42 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10387.92	10377.62	10382.61	10395.04	10396.42
YTTRIUM	360.073	Axial	390633.7	389666.8	390970.1	389287.5	392610.5
YTTRIUM	360.073	Radial	11312.85	11320.03	11291.04	11343.14	11297.18
INDIUM	230.606	Axial	3066.748	3062.127	3067.137	3069.302	3068.427

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	900.3329	10.05186	10.03177	10.05675	9.998315	10.12063
ANTIMONY	206.833	Axial	248.0198	0.9960454	0.9991815	1.003372	0.9891313	0.9924970
ARSENIC	189.042	Axial	155.6074	0.9723032	0.9781016	0.9667796	0.9755153	0.9688162
BARIUM	233.527	Axial	4401.603	1.052822	1.054105	1.052314	1.052412	1.052456
BERYLLIUM	313.042	Radial	20603.12	1.021935	1.023325	1.020585	1.017979	1.025850
BORON	249.678	Radial	223.5325	1.019440	1.037866	1.020343	1.005251	1.014299
CADMIUM	228.802	Axial	5548.385	1.009893	1.010637	1.009483	1.009325	1.010128
CALCIUM	317.933	Radial	10762.28	10.30622	10.31536	10.30705	10.27035	10.33212
CHROMIUM	267.716	Axial	6684.103	1.033506	1.035605	1.033157	1.032984	1.032278
COBALT	228.616	Axial	3988.453	0.9991938	0.9999588	1.000960	0.9998738	0.9959823
COPPER	324.754	Axial	17911.58	0.9783800	0.9802043	0.9800755	0.9804929	0.9727475
IRON	259.940	Radial	5097.275	10.19833	10.19039	10.18199	10.18177	10.23919
LEAD	220.353	Axial	735.6577	0.9872088	0.9854752	0.9857374	0.9890779	0.9885447
LITHIUM	670.784	Radial	8924.471	1.001798	1.002263	1.002413	0.9974485	1.005066
MAGNESIUM	279.079	Radial	654.1036	10.37656	10.40757	10.43494	10.34320	10.32052
MANGANESE	257.610	Axial	87358.17	1.002514	1.003069	1.001462	1.002637	1.002888
MOLYBDENUM	202.030	Axial	1578.118	1.053065	1.053415	1.053114	1.052722	1.053009
NICKEL	231.604	Axial	2089.834	0.9949065	0.9952994	0.9955201	0.9956773	0.9931290
POTASSIUM	766.490	Radial	4296.451	9.961941	9.923620	9.960824	9.946966	10.01636
SELENIUM	196.090	Axial	85.71956	0.9944692	0.9961787	0.9755265	1.005655	1.000517
SILICON	251.611	Axial	5310.136	1.608651	1.506159	1.574983	1.644945	1.708517
SILVER	328.068	Axial	19214.39	0.9742730	0.9757858	0.9731358	0.9777028	0.9704674
SODIUM	589.592	Radial	9547.022	10.39621	10.38127	10.41809	10.36338	10.42210
STRONTIUM	421.552	Radial	24881.37	0.4088517	0.4088191	0.4085699	0.4082550	0.4097627
SULFUR	182.034	Axial	596.6516	9.662365	9.637026	9.692779	9.653585	9.666072
THALLIUM	190.856	Axial	183.0848	0.9502247	0.9505750	0.9444934	0.9521846	0.9536456
TIN	189.989	Axial	324.0101	1.001051	1.000299	0.9985507	1.003016	1.002337
TITANIUM	334.941	Radial	3211.186	1.038270	1.037241	1.040345	1.034982	1.040514
VANADIUM	292.402	Radial	651.1742	1.028365	1.027459	1.029645	1.031561	1.024794
ZINC	206.200	Axial	2890.504	1.003316	1.004538	1.006140	1.001373	1.001212
CERIUM	535.353	Radial	70.81315	-0.03712674	-0.1578001	0.01460894	-0.01461500	0.009299173
LANTHANUM	333.749	Radial	0.2067683	-0.002732414	0.003417841	-0.003828871	-0.006100174	-0.004418453
PHOSPHORUS	177.495	Axial	33.92037	1.028979	1.032272	1.009835	1.050431	1.023378

Sample ID: ICB-4 Units: mg/l
Analyzed: 12/21/22 07:45 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10536.66	10539.30	10526.98	10543.72
YTTRIUM	360.073	Axial	396923.2	395472.7	396512.3	398784.5
YTTRIUM	360.073	Radial	11363.48	11298.13	11368.05	11424.28
INDIUM	230.606	Axial	3262.830	3263.603	3262.950	3261.936

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.976269	0.01256452	0.02778935	0.0008750470	0.009029158
ANTIMONY	206.833	Axial	-0.2716890	0.002935144	0.005088393	0.001811138	0.001905900
ARSENIC	189.042	Axial	-0.08569160	0.003135647	0.006949309	-0.001565804	0.004023435
BARIUM	233.527	Axial	3.113635	0.0001373962	0.0004789833	-0.0001284496	0.00006165491
BERYLLIUM	313.042	Radial	19.78979	0.0001932934	0.0001860476	0.0001903733	0.0002034593
BORON	249.678	Radial	0.05493123	0.001222208	0.003044076	0.005666352	-0.005043804
CADMIUM	228.802	Axial	4.525232	0.0001260785	0.000006459687	0.00006142307	0.0003103528
CALCIUM	317.933	Radial	180.6647	0.01083118	0.01388827	0.009850342	0.008754937
CERIUM	535.353	Radial	62.02279	-0.08471123	-0.04790527	-0.1132631	-0.09296530
CHROMIUM	267.716	Axial	10.29167	-0.0002271952	-0.0002531271	-0.00004115663	-0.0003873019
COBALT	228.616	Axial	2.459622	0.00003773174	0.0001331218	-0.000006703250	-0.00001322328
COPPER	324.754	Axial	27.27976	-0.00002173473	-0.0003202693	0.0002284390	0.00002662618
IRON	259.940	Radial	4.377413	0.004705932	0.004483303	0.001366355	0.008268137
LANTHANUM	333.749	Radial	2.368622	0.001610553	-0.004754744	0.004222673	0.005363729
LEAD	220.353	Axial	-0.05558479	-0.001301039	-0.001112089	-0.001113960	-0.001677067
LITHIUM	670.784	Radial	-10.7407	-0.0005890340	-0.001211107	0.001675427	-0.002231422
MAGNESIUM	279.079	Radial	-2.99065	-0.009591802	-0.005872957	-0.05392302	0.03102057
MANGANESE	257.610	Axial	10.55556	0.0001469361	0.0001279190	0.0001119942	0.0002008950
MOLYBDENUM	202.030	Axial	2.717181	0.0007423860	0.0001880574	0.0009189580	0.001120143
NICKEL	231.604	Axial	5.450007	-0.0003833317	-0.00009991984	0.0001264600	-0.001176535
PHOSPHORUS	177.495	Axial	-0.3056728	-0.006297248	-0.008884294	0.01185760	-0.02186505
POTASSIUM	766.490	Radial	-45.5146	0.03741812	0.05732745	0.03823411	0.01669280
SELENIUM	196.090	Axial	0.9491917	0.0003824342	0.007458476	-0.008533409	0.002222235
SILICON	251.611	Axial	70.14091	0.002976063	0.002383445	0.001494245	0.005050499
SILVER	328.068	Axial	-20.0138	0.0002084773	0.00002645942	0.0003725555	0.0002264170
SODIUM	589.592	Radial	46.12098	0.01645508	0.02584868	0.01375924	0.009757340
STRONTIUM	421.552	Radial	-17.7133	0.00008038368	0.0002043560	-0.00004761305	0.00008440814
SULFUR	182.034	Axial	0.3584081	0.005602463	-0.004191091	0.0009471187	0.02005136
THALLIUM	190.856	Axial	1.260415	0.001617738	0.002508514	-0.001355957	0.003700658
TIN	189.989	Axial	-0.05545493	0.004905356	0.004937441	0.005962628	0.003815998
TITANIUM	334.941	Radial	-0.8325347	0.0007833726	0.0005932150	0.001704157	0.00005274570
VANADIUM	292.402	Radial	-1.59757	-0.0009303696	-0.004928821	0.001978459	0.0001592535
ZINC	206.200	Axial	2.887397	0.0003833550	0.0002268129	0.0004700679	0.0004531841

Sample ID: ICVLL-4 Units: mg/l
Analyzed: 12/21/22 07:54 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10583.56	10588.78	10581.75	10580.14
YTTRIUM	360.073	Axial	399270.0	400205.1	399016.1	398588.7
YTTRIUM	360.073	Radial	11328.23	11347.72	11300.22	11336.75
INDIUM	230.606	Axial	3241.030	3251.142	3232.764	3239.183

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.28752	0.1845648	0.1958302	0.1608539	0.1970104
ANTIMONY	206.833	Axial	1.357565	0.009337054	0.006870654	0.01066381	0.01047669
ARSENIC	189.042	Axial	1.138911	0.01062150	0.01388871	0.003806033	0.01416976
BARIUM	233.527	Axial	25.19333	0.005320797	0.005379878	0.005165031	0.005417482
BERYLLIUM	313.042	Radial	57.32392	0.002056829	0.002113074	0.001922207	0.002135207
BORON	249.678	Radial	42.51938	0.1944241	0.1950991	0.1928489	0.1953242
CADMIUM	228.802	Axial	13.84004	0.001787744	0.001859232	0.001771862	0.001732137
CALCIUM	317.933	Radial	1231.771	1.032567	1.035212	1.028515	1.033973
CHROMIUM	267.716	Axial	77.91667	0.01004630	0.01127537	0.009339042	0.009524498
COBALT	228.616	Axial	42.68694	0.009582107	0.01004538	0.009544903	0.009156036
COPPER	324.754	Axial	200.3075	0.009230531	0.009432476	0.009222744	0.009036374
IRON	259.940	Radial	53.09644	0.1021181	0.1057470	0.1020253	0.09858203
LEAD	220.353	Axial	5.568870	0.005849239	0.005956657	0.006000944	0.005590116
LITHIUM	670.784	Radial	143.8479	0.01672401	0.01713020	0.01624449	0.01679734
MAGNESIUM	279.079	Radial	63.93902	1.046796	1.030089	1.038042	1.072257
MANGANESE	257.610	Axial	889.5556	0.01004700	0.01010899	0.01008706	0.009944935
MOLYBDENUM	202.030	Axial	9.157619	0.004956663	0.005579267	0.005241959	0.004048763
NICKEL	231.604	Axial	25.67440	0.008770566	0.008011621	0.008821478	0.009478598
POTASSIUM	766.490	Radial	365.2870	0.9747049	1.035314	0.9306690	0.9581317
SELENIUM	196.090	Axial	1.708480	0.009077159	0.004633448	0.002856853	0.01974118
SILICON	251.611	Axial	709.5642	0.1951691	0.1913567	0.1949875	0.1991631
SILVER	328.068	Axial	72.34722	0.004790917	0.004497435	0.005364533	0.004510782
SODIUM	589.592	Radial	983.6709	1.039443	1.035731	1.038639	1.043958
STRONTIUM	421.552	Radial	591.5391	0.01006792	0.01006433	0.01013216	0.01000728
THALLIUM	190.856	Axial	2.885683	0.009679168	0.009955424	0.01025926	0.008822822
TIN	189.989	Axial	14.85559	0.04827819	0.04679614	0.05000797	0.04803044
TITANIUM	334.941	Radial	156.9449	0.05167392	0.05208393	0.05099971	0.05193814
VANADIUM	292.402	Radial	12.71672	0.02161356	0.02263244	0.02324236	0.01896589
ZINC	206.200	Axial	147.2763	0.04960047	0.05014310	0.04964756	0.04901074
CERIUM	535.353	Radial	58.36062	-0.1030003	-0.05817187	-0.08757959	-0.1632495
LANTHANUM	333.749	Radial	-1.26227	-0.005709405	-0.001891121	-0.005852300	-0.009384795
PHOSPHORUS	177.495	Axial	3.315159	0.1012485	0.09802034	0.1090598	0.09666526
SULFUR	182.034	Axial	59.34141	0.9431285	0.9322668	0.9424049	0.9547138

Sample ID: ICSA-4 Units: mg/l
Analyzed: 12/21/22 07:57 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9074.808	9074.879	9082.478	9067.066
YTTRIUM	360.073	Axial	338400.4	337372.3	338498.7	339330.1
YTTRIUM	360.073	Radial	10796.54	10777.98	10790.05	10821.59
INDIUM	230.606	Axial	2496.810	2500.416	2491.928	2498.085

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	42131.33	496.0188	496.8430	495.7220	495.4913
ANTIMONY	206.833	Axial	-4.80055	-0.01797631	-0.01748843	-0.01235771	-0.02408280
ARSENIC	189.042	Axial	-2.61738	-0.01498970	-0.01714080	-0.009082581	-0.01874572
BARIUM	233.527	Axial	12.65928	0.002870845	0.002820048	0.003038743	0.002753744
BERYLLIUM	313.042	Radial	12.60685	-0.0001290747	-0.0001487714	-0.0002560578	0.00001760512
BORON	249.678	Radial	-1.11131	-0.004355311	-0.01637428	0.003341531	-0.00003317972
CADMIUM	228.802	Axial	5.052064	0.0003668836	0.00005301080	0.0005032536	0.0005443864
CALCIUM	373.690	Radial	281431.7	499.5530	500.4920	499.1778	498.9893
CERIUM	535.353	Radial	325.6420	1.383347	1.461541	1.348197	1.340301
CHROMIUM	267.716	Axial	25.47222	0.002717674	0.002618897	0.002342090	0.003192037
COBALT	228.616	Axial	9.685271	0.002440233	0.002518735	0.002613989	0.002187975
COPPER	324.754	Axial	-92.8273	-0.007352967	-0.007919659	-0.007102737	-0.007036504
IRON	271.441	Radial	4772.218	196.2211	196.2479	196.1740	196.2415
LANTHANUM	333.749	Radial	4.189091	0.005752144	0.005360394	0.009572552	0.002323485
LEAD	220.353	Axial	-20.6379	-0.03528731	-0.03768782	-0.03289248	-0.03528162
LITHIUM	670.784	Radial	32.21712	0.004396194	0.004126341	0.004769301	0.004292940
MAGNESIUM	279.079	Radial	30550.37	506.0213	506.6249	505.9997	505.4394
MANGANESE	257.610	Axial	532.2222	0.007018834	0.007018619	0.007058708	0.006979176
MOLYBDENUM	202.030	Axial	5.128570	0.002874691	0.002055865	0.002739386	0.003828821
NICKEL	231.604	Axial	19.47342	0.008590876	0.008318774	0.009008203	0.008445651
PHOSPHORUS	177.495	Axial	0.1500320	0.007986995	0.001786393	0.04449936	-0.02232477
POTASSIUM	766.490	Radial	-98.6867	-0.09545332	-0.07088214	-0.1318107	-0.08366713
SELENIUM	196.090	Axial	3.699659	0.03906392	0.02522841	0.05553096	0.03643237
SILICON	251.611	Axial	22.90166	-0.01017802	-0.01178395	-0.008549620	-0.01020048
SILVER	328.068	Axial	-64.4444	-0.002561309	-0.002724971	-0.002312537	-0.002646420
SODIUM	589.592	Radial	67.15885	0.04314867	0.04862019	0.04309988	0.03772594
STRONTIUM	421.552	Radial	210.6190	0.003992856	0.004033679	0.004028931	0.003915958
SULFUR	182.034	Axial	-0.3514183	-0.006634471	-0.002582496	-0.001758958	-0.01556196
THALLIUM	190.856	Axial	1.442749	0.004685809	-0.0008920416	0.008513269	0.006436200
TIN	189.989	Axial	-6.03048	-0.01770268	-0.01625358	-0.01666175	-0.02019273
TITANIUM	334.941	Radial	133.8176	0.04633869	0.04525764	0.04599217	0.04776625
VANADIUM	292.402	Radial	5.716851	0.01103393	0.01179200	0.01097812	0.01033167
ZINC	206.200	Axial	18.46855	0.006737381	0.005720320	0.007001126	0.007490697

Sample ID: ICSAB-4 Units: mg/l
Analyzed: 12/21/22 07:59 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8994.709	8994.264	8998.506	8991.357
YTTRIUM	360.073	Axial	335049.8	335011.8	335269.9	334867.8
YTTRIUM	360.073	Radial	10695.17	10665.75	10752.84	10666.92
INDIUM	230.606	Axial	2470.574	2472.158	2468.781	2470.783

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	41529.04	493.5611	493.9765	493.5213	493.1855
ANTIMONY	206.833	Axial	103.3650	0.4814869	0.4900929	0.4796724	0.4746954
ARSENIC	189.042	Axial	69.76068	0.5051793	0.5058646	0.5015840	0.5080894
BARIUM	233.527	Axial	1823.698	0.5034654	0.5035190	0.5040265	0.5028506
BERYLLIUM	313.042	Radial	9477.528	0.4968421	0.4974089	0.4959177	0.4971998
BORON	249.678	Radial	205.0616	0.9892560	0.9931815	0.9817147	0.9928718
CADMIUM	228.802	Axial	5018.497	1.054962	1.054628	1.054608	1.055650
CALCIUM	373.690	Radial	278378.6	498.8179	499.7991	498.1944	498.4602
CERIUM	535.353	Radial	317.3335	1.354173	1.377337	1.326602	1.358580
CHROMIUM	267.716	Axial	2765.564	0.4929103	0.4946386	0.4931124	0.4909799
COBALT	228.616	Axial	1555.493	0.4834393	0.4844039	0.4827883	0.4831258
COPPER	324.754	Axial	7961.015	0.5062709	0.5070876	0.5053239	0.5064011
IRON	271.441	Radial	4761.407	197.6330	198.3164	197.4008	197.1819
LANTHANUM	333.749	Radial	2.065040	0.001254382	-0.003599724	0.009798232	-0.002435360
LEAD	220.353	Axial	547.5505	0.9119994	0.9071338	0.9158390	0.9130255
LITHIUM	670.784	Radial	36.86007	0.004980920	0.004637891	0.005766516	0.004538352
MAGNESIUM	279.079	Radial	30349.19	507.4545	508.1836	506.8008	507.3790
MANGANESE	257.610	Axial	36180.62	0.4795318	0.4793895	0.4797122	0.4794936
MOLYBDENUM	202.030	Axial	638.9204	0.4918267	0.4906183	0.4925642	0.4922976
NICKEL	231.604	Axial	1640.989	0.9696703	0.9716361	0.9686930	0.9686817
PHOSPHORUS	177.495	Axial	0.09099159	0.005996953	-0.006240180	-0.01759923	0.04183027
POTASSIUM	766.490	Radial	-84.6889	-0.06385567	-0.05849966	-0.06045504	-0.07261229
SELENIUM	196.090	Axial	38.66582	0.5129875	0.5168734	0.5272047	0.4948843
SILICON	251.611	Axial	2762.232	0.9591665	0.9604467	0.9567465	0.9603064
SILVER	328.068	Axial	18288.75	1.081038	1.084617	1.079690	1.078808
SODIUM	589.592	Radial	75.14317	0.05309935	0.05829019	0.05208866	0.04891920
STRONTIUM	421.552	Radial	211.8329	0.004048319	0.003998481	0.003998292	0.004148182
SULFUR	182.034	Axial	-0.5400561	-0.01021863	-0.01963379	0.001128666	-0.01215077
THALLIUM	190.856	Axial	70.10669	0.4492684	0.4538369	0.4477967	0.4461716
TIN	189.989	Axial	123.3530	0.4757444	0.4735955	0.4747910	0.4788468
TITANIUM	334.941	Radial	1604.317	0.5491807	0.5502106	0.5464959	0.5508357
VANADIUM	292.402	Radial	294.3731	0.4925627	0.4925863	0.4938692	0.4912326
ZINC	206.200	Axial	2269.143	0.9095777	0.9100797	0.9106257	0.9080276

Sample ID: CCV-2 Units: mg/l
Analyzed: 12/21/22 12:06 Sequence: 101 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9928.868	9937.469	9928.315	9920.821
YTTRIUM	360.073	Axial	378281.9	379969.8	375002.8	379873.2
YTTRIUM	360.073	Radial	11081.82	11087.79	11113.32	11044.34
INDIUM	230.606	Axial	2867.377	2868.964	2866.220	2866.948

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	840.5964	9.577537	9.539087	9.560374	9.633149
ANTIMONY	206.833	Axial	115.0764	0.4855727	0.4849487	0.4879237	0.4838457
ARSENIC	189.042	Axial	151.4177	0.9897952	0.9969960	0.9940493	0.9783404
BARIUM	233.527	Axial	1946.601	0.4868149	0.4860467	0.4873404	0.4870577
BERYLLIUM	313.042	Radial	3784.567	0.1909941	0.1909124	0.1907962	0.1912738
BORON	249.678	Radial	209.1828	0.9739401	0.9848401	0.9589992	0.9779811
CADMIUM	228.802	Axial	2587.409	0.4923716	0.4917388	0.4932907	0.4920854
CALCIUM	373.690	Radial	27562.85	47.64138	47.69871	47.51030	47.71515
CHROMIUM	267.716	Axial	5887.659	0.9523054	0.9544693	0.9535028	0.9489440
COBALT	228.616	Axial	3759.340	1.007284	1.007894	1.007362	1.006594
COPPER	324.754	Axial	17439.58	0.9837333	0.9799038	0.9911856	0.9801105
IRON	259.940	Radial	4623.435	9.442874	9.417857	9.440336	9.470430
LEAD	220.353	Axial	334.7013	0.4797487	0.4759081	0.4824680	0.4808699
LITHIUM	670.784	Radial	8441.169	0.9673145	0.9691915	0.9671696	0.9655824
MAGNESIUM	279.079	Radial	578.1282	9.366088	9.401945	9.370167	9.326152
MANGANESE	257.610	Axial	80359.78	0.9648395	0.9647911	0.9647734	0.9649539
MOLYBDENUM	202.030	Axial	357.7212	0.2489417	0.2495250	0.2489990	0.2483012
NICKEL	231.604	Axial	1911.316	0.9731254	0.9714766	0.9737757	0.9741238
POTASSIUM	766.490	Radial	20458.87	47.88169	47.81682	47.84056	47.98770
SELENIUM	196.090	Axial	81.77178	0.9925096	1.006797	0.9822596	0.9884726
SILICON	251.611	Axial	6287.943	1.997364	1.987920	1.993342	2.010831
SILVER	328.068	Axial	9016.773	0.4727638	0.4703298	0.4771458	0.4708157
SODIUM	818.326	Radial	2879.976	49.89676	49.61730	50.08569	49.98730
STRONTIUM	421.552	Radial	57907.23	0.9708627	0.9695347	0.9711149	0.9719384
SULFUR	182.034	Axial	286.8240	4.859612	4.867888	4.864485	4.846462
THALLIUM	190.856	Axial	172.8072	0.9592878	0.9604918	0.9630355	0.9543361
TIN	189.989	Axial	144.2460	0.4792973	0.4844162	0.4782508	0.4752251
TITANIUM	334.941	Radial	2974.509	0.9818476	0.9852666	0.9803941	0.9798821
VANADIUM	292.402	Radial	605.5293	0.9763013	0.9731362	0.9774102	0.9783573
ZINC	206.200	Axial	2650.581	0.9625499	0.9588445	0.9628578	0.9659473
CERIUM	535.353	Radial	79.80537	0.01881843	-0.002904619	0.02608399	0.03327590
LANTHANUM	333.749	Radial	-1.99490	-0.007276706	-0.01131966	-0.007013217	-0.003497237
PHOSPHORUS	177.495	Axial	31.47238	0.9989495	1.006169	0.9678367	1.022842

Sample ID: CCB-2 Units: mg/l
Analyzed: 12/21/22 12:11 Sequence: 102

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10268.14	10251.03	10268.64	10284.76
YTTRIUM	360.073	Axial	389357.0	390312.1	389171.7	388587.1
YTTRIUM	360.073	Radial	10955.07	10917.21	10978.59	10969.41
INDIUM	230.606	Axial	3175.931	3174.199	3175.513	3178.080

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	7.543977	0.02204619	0.03107337	-0.002788607	0.03785380
ANTIMONY	206.833	Axial	0.6460068	0.006617721	0.002478096	0.009282966	0.008092101
ARSENIC	189.042	Axial	-0.2325334	0.002196712	-0.003618743	0.009771446	0.0004374330
BARIUM	233.527	Axial	1.630738	-0.0002021574	-0.0001158325	-0.00004356485	-0.0004470749
BERYLLIUM	313.042	Radial	15.68692	0.00001929486	-0.00007601389	0.0001081730	0.00002572551
BORON	249.678	Radial	1.607179	0.008527657	0.01253294	0.007013251	0.006036780
CADMIUM	228.802	Axial	2.520877	-0.0002217012	0.0001926001	-0.0006103529	-0.0002473507
CALCIUM	317.933	Radial	170.4907	0.007129001	0.01038293	0.006356484	0.004647591
CERIUM	535.353	Radial	72.76236	-0.01444593	-0.006576748	0.01820840	-0.05496943
CHROMIUM	267.716	Axial	8.277778	-0.0005017209	-0.0003862388	-0.0006628675	-0.0004560565
COBALT	228.616	Axial	2.363844	0.00003017309	-0.0003926333	-0.0002348658	0.0007180184
COPPER	324.754	Axial	33.09524	0.0003265531	0.0002039209	0.0002628152	0.0005129233
IRON	259.940	Radial	0.9566029	-0.002033524	-0.001683472	0.001823727	-0.006240828
LANTHANUM	333.749	Radial	-0.2103441	-0.003566589	0.01029323	-0.01688502	-0.004107973
LEAD	220.353	Axial	0.4566489	-0.0006383862	-0.001291195	0.0001153533	-0.0007393170
LITHIUM	670.784	Radial	3.971047	0.001072928	0.003178693	-0.0005065011	0.0005465912
MAGNESIUM	279.079	Radial	-1.85660	0.007221284	0.007584539	0.01788010	-0.003800790
MANGANESE	257.610	Axial	30.04167	0.0003762973	0.0003749473	0.0003675799	0.0003863645
MOLYBDENUM	202.030	Axial	2.370262	0.0005546197	0.0001763491	0.001128163	0.0003593466
NICKEL	231.604	Axial	4.702630	-0.0006608967	-0.0005018018	-0.001027326	-0.0004535624
PHOSPHORUS	177.495	Axial	0.4240127	0.01581040	0.03453513	0.02070131	-0.007805257
POTASSIUM	766.490	Radial	-51.4509	0.01946185	0.01219033	0.003746860	0.04244836
SELENIUM	196.090	Axial	1.217432	0.003848897	0.001446194	-0.002598651	0.01269915
SILICON	251.611	Axial	52.71492	-0.001870234	-0.0008675706	-0.003888380	-0.0008547524
SILVER	328.068	Axial	-22.4166	0.00006735879	-0.0001285188	0.0003398878	-0.000009292650
SODIUM	589.592	Radial	55.09196	0.02840763	0.02171893	0.01856977	0.04493419
STRONTIUM	421.552	Radial	-21.8926	-0.000001392219	0.00008690873	0.00007971769	-0.0001708031
SULFUR	182.034	Axial	0.8206255	0.01333492	0.02262871	0.005884958	0.01149110
THALLIUM	190.856	Axial	0.9462266	0.0002043577	-0.001712238	0.002705622	-0.0003803111
TIN	189.989	Axial	-1.36404	0.001016236	-0.001849425	0.003022666	0.001875467
TITANIUM	334.941	Radial	-1.78759	0.0004517507	-0.001008077	0.0002609774	0.002102352
VANADIUM	292.402	Radial	1.218442	0.003576155	0.005706084	-0.001070997	0.006093378
ZINC	206.200	Axial	0.1994843	-0.0005352160	-0.0004180394	-0.0006950530	-0.0004925555

Sample ID: CCVLL-4 Units: mg/l
Analyzed: 12/21/22 12:15 Sequence: 103 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10334.98	10338.30	10342.78	10323.86
YTTRIUM	360.073	Axial	391603.1	391207.9	392550.4	391051.1
YTTRIUM	360.073	Radial	11044.10	11008.50	11086.43	11037.37
INDIUM	230.606	Axial	3179.782	3183.766	3181.724	3173.855

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	24.06238	0.2115215	0.2376681	0.1844292	0.2124672
ANTIMONY	206.833	Axial	1.624992	0.01053904	0.01078577	0.01155049	0.009280877
ARSENIC	189.042	Axial	1.488777	0.01297780	0.01229909	0.01454343	0.01209088
BARIUM	233.527	Axial	23.08300	0.004955586	0.005032334	0.004752409	0.005082015
BERYLLIUM	313.042	Radial	51.85817	0.001852272	0.001894092	0.001815789	0.001846935
BORON	249.678	Radial	43.57566	0.2043356	0.2018717	0.2011674	0.2099675
CADMIUM	228.802	Axial	13.52425	0.001789455	0.001758778	0.001819628	0.001789958
CALCIUM	317.933	Radial	1187.156	1.018913	1.026411	1.013762	1.016565
CHROMIUM	267.716	Axial	72.48611	0.009486311	0.008641580	0.009713055	0.01010430
COBALT	228.616	Axial	42.56561	0.009748212	0.009795196	0.009896602	0.009552836
COPPER	324.754	Axial	208.4802	0.009886619	0.01000395	0.009918303	0.009737601
IRON	259.940	Radial	48.75101	0.09593639	0.09367443	0.09746350	0.09667125
LEAD	220.353	Axial	4.318135	0.004364176	0.004678016	0.004817942	0.003596569
LITHIUM	670.784	Radial	123.3018	0.01477795	0.01542565	0.01533567	0.01357253
MAGNESIUM	279.079	Radial	60.40439	1.015460	0.9767795	1.043755	1.025846
MANGANESE	257.610	Axial	884.0972	0.01022502	0.01024323	0.01024985	0.01018198
MOLYBDENUM	202.030	Axial	9.268492	0.005176071	0.005605795	0.004217830	0.005704587
NICKEL	231.604	Axial	25.39082	0.008862891	0.008268631	0.009052156	0.009267886
POTASSIUM	766.490	Radial	376.3031	1.022049	1.032424	1.006823	1.026901
SELENIUM	196.090	Axial	1.916238	0.01199042	0.01304019	0.02191859	0.001012485
SILICON	251.611	Axial	651.9888	0.1825717	0.1791274	0.1821075	0.1864802
SILVER	328.068	Axial	71.31944	0.004809125	0.005078808	0.004670803	0.004677764
SODIUM	589.592	Radial	958.5877	1.038979	1.037824	1.040243	1.038870
STRONTIUM	421.552	Radial	589.3491	0.01028116	0.01057984	0.01002749	0.01023615
SULFUR	182.034	Axial	57.80911	0.9408861	0.9432734	0.9127136	0.9666713
THALLIUM	190.856	Axial	3.068101	0.01087085	0.01044811	0.01146172	0.01070271
TIN	189.989	Axial	13.56268	0.04527590	0.04559023	0.04314966	0.04708781
TITANIUM	334.941	Radial	150.5506	0.05086363	0.05149420	0.04983253	0.05126415
VANADIUM	292.402	Radial	13.19651	0.02290614	0.02210921	0.01981388	0.02679532
ZINC	206.200	Axial	143.9210	0.04963709	0.05008230	0.04887935	0.04994964
CERIUM	535.353	Radial	62.06871	-0.07528468	-0.06439944	0.006508317	-0.1679629
LANTHANUM	333.749	Radial	-1.58521	-0.006425315	-0.004974926	-0.01857694	0.004275925
PHOSPHORUS	177.495	Axial	3.536058	0.1103248	0.1130322	0.1208539	0.09708836

Sample ID: ICSA-4 Units: mg/l
Analyzed: 12/21/22 12:19 Sequence: 104 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8891.026	8895.630	8884.363	8893.085
YTTRIUM	360.073	Axial	334847.4	334672.4	334823.8	335046.0
YTTRIUM	360.073	Radial	10461.90	10457.58	10430.09	10498.03
INDIUM	230.606	Axial	2452.307	2451.598	2455.134	2450.188

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40938.44	497.3930	498.8211	497.6316	495.7263
ANTIMONY	206.833	Axial	-4.44357	-0.01675715	-0.01996829	-0.01190231	-0.01840086
ARSENIC	189.042	Axial	-1.48944	-0.007166553	-0.01184242	-0.0006447896	-0.009012448
BARIUM	233.527	Axial	11.76430	0.002692410	0.002384019	0.002759912	0.002933298
BERYLLIUM	313.042	Radial	14.02305	-0.00003177329	-0.00001442031	0.00003227660	-0.0001131762
BORON	249.678	Radial	-1.05536	-0.004229812	0.002396568	-0.003158590	-0.01192742
CADMIUM	228.802	Axial	4.550834	0.0002820603	0.0001105749	0.0004794738	0.0002561321
CALCIUM	373.690	Radial	272928.3	499.9570	500.7195	500.6939	498.4575
CERIUM	535.353	Radial	330.6303	1.469064	1.505444	1.502574	1.399173
CHROMIUM	267.716	Axial	18.69444	0.001584513	0.0007258349	0.002208050	0.001819653
COBALT	228.616	Axial	8.257725	0.002046801	0.001180268	0.002214226	0.002745908
COPPER	324.754	Axial	-86.3511	-0.007001141	-0.007443602	-0.007020355	-0.006539465
IRON	271.441	Radial	4647.234	197.1944	197.5789	197.0328	196.9715
LANTHANUM	333.749	Radial	3.749451	0.005082386	-0.0001356222	0.01407398	0.001308799
LEAD	220.353	Axial	-19.9501	-0.03475505	-0.03738286	-0.02997156	-0.03691073
LITHIUM	670.784	Radial	33.08001	0.004623160	0.005382560	0.004704944	0.003781977
MAGNESIUM	279.079	Radial	28868.12	493.4555	493.3132	495.1143	491.9390
MANGANESE	257.610	Axial	517.2361	0.006962439	0.006950664	0.006947704	0.006988949
MOLYBDENUM	202.030	Axial	5.341989	0.003122196	0.001931423	0.003404004	0.004031160
NICKEL	231.604	Axial	18.82677	0.008411421	0.008871568	0.008544216	0.007818479
PHOSPHORUS	177.495	Axial	0.6680926	0.02642022	0.03784099	0.01666791	0.02475177
POTASSIUM	766.490	Radial	-92.1709	-0.08691291	-0.1150146	-0.07329865	-0.07242554
SELENIUM	196.090	Axial	1.809285	0.01420280	0.01747973	0.02548974	-0.0003610561
SILICON	251.611	Axial	9.583149	-0.01477816	-0.01579543	-0.01234550	-0.01619353
SILVER	328.068	Axial	-65.2916	-0.002651160	-0.002286267	-0.002969070	-0.002698142
SODIUM	589.592	Radial	107.4317	0.09313466	0.07592665	0.08419435	0.1192830
STRONTIUM	421.552	Radial	211.0179	0.004115603	0.004017068	0.004112122	0.004217620
SULFUR	182.034	Axial	0.8580193	0.01611913	0.02906217	0.02150865	-0.002213432
THALLIUM	190.856	Axial	0.8588070	0.001042301	0.002086552	-0.002122978	0.003163328
TIN	189.989	Axial	-5.04762	-0.01433857	-0.02318993	-0.01098451	-0.008841276
TITANIUM	334.941	Radial	129.5820	0.04631129	0.04696927	0.04663002	0.04533457
VANADIUM	292.402	Radial	5.675337	0.01126934	0.01253284	0.01284485	0.008430332
ZINC	206.200	Axial	17.09677	0.006332094	0.006989438	0.005716385	0.006290459

Sample ID: ICSAB-4 Units: mg/l
Analyzed: 12/21/22 12:22 Sequence: 105 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8845.923	8845.383	8851.078	8841.309
YTTRIUM	360.073	Axial	332049.1	332499.5	331668.4	331979.4
YTTRIUM	360.073	Radial	10430.75	10450.39	10394.81	10447.05
INDIUM	230.606	Axial	2440.259	2441.949	2438.480	2440.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40899.65	498.4053	497.5895	499.3990	498.2275
ANTIMONY	206.833	Axial	101.8836	0.4825586	0.4825256	0.4868186	0.4783317
ARSENIC	189.042	Axial	68.83251	0.5068293	0.5227441	0.4988666	0.4988773
BARIUM	233.527	Axial	1790.931	0.5027348	0.5020046	0.5032729	0.5029269
BERYLLIUM	313.042	Radial	9149.507	0.4917959	0.4917257	0.4924291	0.4912330
BORON	249.678	Radial	198.1387	0.9800870	0.9803649	0.9853950	0.9745012
CADMIUM	228.802	Axial	4944.745	1.056943	1.057008	1.056846	1.056974
CALCIUM	373.690	Radial	272977.7	501.5403	500.5423	502.6149	501.4636
CERIUM	535.353	Radial	324.9809	1.442261	1.461481	1.380445	1.484858
CHROMIUM	267.716	Axial	2698.850	0.4890966	0.4908153	0.4888899	0.4875846
COBALT	228.616	Axial	1547.291	0.4868684	0.4874874	0.4873229	0.4857950
COPPER	324.754	Axial	7981.185	0.5121583	0.5105474	0.5124389	0.5134885
IRON	271.441	Radial	4609.686	196.1870	195.2455	197.2840	196.0314
LANTHANUM	333.749	Radial	0.9995233	-0.0009565712	-0.003516927	-0.002876599	0.003523813
LEAD	220.353	Axial	538.7704	0.9085203	0.9013991	0.9169510	0.9072108
LITHIUM	670.784	Radial	24.96239	0.003648040	0.002144052	0.004588817	0.004211250
MAGNESIUM	279.079	Radial	28857.19	494.7418	492.5167	496.7253	494.9835
MANGANESE	257.610	Axial	35649.77	0.4804433	0.4801838	0.4805440	0.4806021
MOLYBDENUM	202.030	Axial	628.8881	0.4922481	0.4915197	0.4909108	0.4943138
NICKEL	231.604	Axial	1606.501	0.9610605	0.9579105	0.9624881	0.9627829
PHOSPHORUS	177.495	Axial	0.5753911	0.02325781	-0.009796704	0.02016455	0.05940557
POTASSIUM	766.490	Radial	-71.7553	-0.03696935	-0.05650955	-0.03584461	-0.01855389
SELENIUM	196.090	Axial	38.95995	0.5258420	0.5468387	0.5328972	0.4977899
SILICON	251.611	Axial	2698.499	0.9526756	0.9534800	0.9511541	0.9533926
SILVER	328.068	Axial	18098.83	1.079485	1.076182	1.082503	1.079769
SODIUM	589.592	Radial	117.1729	0.1050921	0.1070371	0.1021544	0.1060849
STRONTIUM	421.552	Radial	205.8459	0.004035046	0.004013167	0.004160417	0.003931556
SULFUR	182.034	Axial	-0.3627312	-0.007014852	-0.004966634	-0.006238943	-0.009838979
THALLIUM	190.856	Axial	69.60377	0.4516081	0.4574846	0.4435245	0.4538153
TIN	189.989	Axial	120.0236	0.4687267	0.4737286	0.4608429	0.4716087
TITANIUM	334.941	Radial	1550.421	0.5441921	0.5416981	0.5467225	0.5441556
VANADIUM	292.402	Radial	284.9015	0.4888171	0.4899015	0.4904668	0.4860828
ZINC	206.200	Axial	2203.507	0.8981165	0.8991744	0.8977531	0.8974219

Sample ID: BLANK DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:27 Sequence: 107

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10563.93	10550.05	10567.46	10574.29
YTTRIUM	360.073	Axial	401410.8	401500.5	399932.1	402799.9
YTTRIUM	360.073	Radial	11308.05	11284.55	11330.73	11308.86
INDIUM	230.606	Axial	3259.047	3254.878	3259.247	3263.015

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	0.9276159	0.005184667	-0.001697993	0.001526660	0.01572533
ALUMINUM	308.215	Radial	4.641779	-0.01337094	-0.03401203	0.02032482	-0.02642561
ANTIMONY	206.833	Axial	-0.9796407	0.0001546899	0.001589151	-0.0003605322	-0.0007645489
ARSENIC	189.042	Axial	-0.2113093	0.002371569	0.004384028	0.002355626	0.0003750537
BARIUM	233.527	Axial	3.491302	0.0002245188	0.0002477050	0.0003575430	0.00006830834
BERYLLIUM	313.042	Radial	13.39048	-0.0001195357	-0.00001609501	-0.0002130597	-0.0001294526
CADMIUM	228.802	Axial	1.810510	-0.0003621707	-0.0003510388	-0.0003236386	-0.0004118347
CALCIUM	317.933	Radial	200.6539	0.03113327	0.02942020	0.03132065	0.03265895
CHROMIUM	267.716	Axial	12.93056	0.0001704028	-0.0003182484	0.001075019	-0.0002455625
COBALT	228.616	Axial	2.612970	0.00007474873	0.0003791197	-0.0001598730	0.000004999499
COPPER	324.754	Axial	31.79167	0.0002022363	0.00008036267	0.0001898897	0.0003364567
IRON	259.940	Radial	6.317653	0.008640310	0.01024603	0.01012135	0.005553545
LEAD	220.353	Axial	1.648726	0.0008537137	0.001150581	0.0001133109	0.001297249
LITHIUM	670.784	Radial	5.203215	0.001189618	-0.001451610	0.003609628	0.001410835
MAGNESIUM	279.079	Radial	0.6235546	0.04738329	0.04477045	0.05262692	0.04475249
MANGANESE	257.610	Axial	7.125	0.0001079072	0.00006943734	0.0001050903	0.0001491941
MOLYBDENUM	202.030	Axial	1.250482	-0.0002255202	0.00006999280	-0.0008358363	0.00008928298
NICKEL	231.604	Axial	3.516829	-0.001249135	-0.001880135	-0.0005525624	-0.001314706
PHOSPHORUS	177.495	Axial	0.6187511	0.02120639	0.003692005	0.03358517	0.02634199
POTASSIUM	766.490	Radial	-45.5507	0.03674052	0.02104625	0.03800924	0.05116607
SELENIUM	196.090	Axial	0.4166702	-0.005778788	-0.002042823	-0.004451851	-0.01084169
SILICON	251.611	Axial	191.2769	0.03941728	0.03884030	0.04063492	0.03877662
SILVER	328.068	Axial	-28.0972	-0.0001780622	-0.00007490223	-0.00002221718	-0.0004370673
SODIUM	589.592	Radial	166.1978	0.1478764	0.1073289	0.1512012	0.1850991
STRONTIUM	421.552	Radial	-14.1158	0.0001377570	0.0001063700	0.0001739571	0.0001329440
SULFUR	182.034	Axial	3.239890	0.05147192	0.04183225	0.05636697	0.05621654
THALLIUM	190.856	Axial	0.2511187	-0.003328829	-0.003854538	-0.003963338	-0.002168611
TIN	189.989	Axial	-0.1923961	0.004510026	0.005290731	0.005033622	0.003205725
TITANIUM	334.941	Radial	-1.44102	0.0005839732	0.00002760447	0.0009694687	0.0007548463
VANADIUM	292.402	Radial	0.07383285	0.001700979	-0.001871630	0.002329667	0.004644899
ZINC	206.200	Axial	3.602228	0.0006246463	0.0002107809	0.0008482849	0.0008148730
CERIUM	535.353	Radial	71.53480	-0.03311123	0.05821356	-0.1024131	-0.05513411
LANTHANUM	333.749	Radial	-0.1818308	-0.003516527	-0.003912035	-0.01047878	0.003841236

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:30 Sequence: 108

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10396.15	10386.00	10375.37	10427.07
YTTRIUM	360.073	Axial	393838.6	393225.8	395048.2	393241.7
YTTRIUM	360.073	Radial	11312.41	11342.55	11321.54	11273.15
INDIUM	230.606	Axial	3090.579	3086.543	3087.800	3097.395

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	196.2730	0.8952919	0.8860954	0.8912431	0.9085371
ALUMINUM	308.215	Radial	792.7921	8.843751	8.810588	8.838198	8.882466
ANTIMONY	206.833	Axial	226.3944	0.9088285	0.9072692	0.9105857	0.9086306
ARSENIC	189.042	Axial	138.1775	0.8631489	0.8716896	0.8722003	0.8455569
BARIUM	233.527	Axial	4016.310	0.9598521	0.9591929	0.9614153	0.9589480
BERYLLIUM	313.042	Radial	18735.30	0.9292612	0.9251859	0.9280287	0.9345691
CADMIUM	228.802	Axial	5067.855	0.9216404	0.9204082	0.9232041	0.9213088
CALCIUM	317.933	Radial	9477.476	9.056682	9.014866	9.051106	9.104075
CHROMIUM	267.716	Axial	6117.004	0.9449208	0.9454241	0.9463688	0.9429694
COBALT	228.616	Axial	3576.198	0.8889492	0.8914887	0.8886443	0.8867146
COPPER	324.754	Axial	16191.56	0.8770773	0.8805259	0.8711217	0.8795843
IRON	259.940	Radial	4461.937	8.927087	8.893055	8.925665	8.962542
LEAD	220.353	Axial	665.3445	0.8858429	0.8863867	0.8852594	0.8858824
LITHIUM	670.784	Radial	8263.909	0.9277335	0.9232155	0.9279882	0.9319969
MAGNESIUM	279.079	Radial	576.7420	9.154122	9.122808	9.166644	9.172915
MANGANESE	257.610	Axial	74855.25	0.8583589	0.8588630	0.8597495	0.8564643
MOLYBDENUM	202.030	Axial	1394.071	0.9293930	0.9288346	0.9298438	0.9295006
NICKEL	231.604	Axial	1902.305	0.8983751	0.8998881	0.8992441	0.8959929
PHOSPHORUS	177.495	Axial	29.85041	0.9051501	0.9113440	0.9047970	0.8993093
POTASSIUM	766.490	Radial	3864.410	8.974730	8.942635	8.980594	9.000961
SELENIUM	196.090	Axial	77.70025	0.8997205	0.8903892	0.9030106	0.9057618
SILICON	251.611	Axial	2898.706	0.8691908	0.8672154	0.8699614	0.8703955
SILVER	328.068	Axial	3122.612	0.1580563	0.1582305	0.1572566	0.1586818
SODIUM	589.592	Radial	8790.798	9.570457	9.534077	9.569520	9.607773
STRONTIUM	421.552	Radial	55750.42	0.9156773	0.9112488	0.9160367	0.9197464
SULFUR	182.034	Axial	547.2777	8.855810	8.844682	8.889368	8.833379
THALLIUM	190.856	Axial	171.3360	0.8820620	0.8793272	0.8816291	0.8852298
TIN	189.989	Axial	295.0898	0.9051666	0.9084325	0.9099391	0.8971282
TITANIUM	334.941	Radial	2932.646	0.9483404	0.9445395	0.9492070	0.9512747
VANADIUM	292.402	Radial	576.5099	0.9106816	0.9104501	0.9034777	0.9181170
ZINC	206.200	Axial	2527.512	0.8765471	0.8756326	0.8775144	0.8764943
CERIUM	535.353	Radial	72.10206	-0.03035387	-0.08753819	0.02884341	-0.03236682
LANTHANUM	333.749	Radial	-1.87008	-0.006953910	-0.0005408003	-0.009295528	-0.01102540

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568841-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:33 Sequence: 109

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10274.23	10266.78	10273.29	10282.62
YTTRIUM	360.073	Axial	390738.8	389841.2	390466.2	391909.2
YTTRIUM	360.073	Radial	11306.79	11311.26	11355.87	11253.24
INDIUM	230.606	Axial	3061.330	3053.893	3057.940	3072.156

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ANTIMONY	206.833	Axial	-0.2739427	0.002900834	0.008475682	-0.0003696416	0.0005964609
ARSENIC	189.042	Axial	-0.3487912	0.001467889	-0.002213489	0.006422848	0.0001943077
BARIUM	233.527	Axial	715.0890	0.1724357	0.1716080	0.1725144	0.1731847
BERYLLIUM	313.042	Radial	12.84758	-0.0001464687	-0.00002579607	-0.0002448156	-0.0001687944
CADMIUM	228.802	Axial	5.142270	0.0002605835	0.0004163114	0.0002195394	0.0001458998
CHROMIUM	267.716	Axial	9.835926	-0.0002585727	-0.0005793989	0.0001074668	-0.0003037859
LEAD	220.353	Axial	1.537879	0.0008430497	0.002870659	0.0007353273	-0.001076837
NICKEL	231.604	Axial	5.175816	-0.0003536303	-0.0006723342	-0.00009587152	-0.0002926851
SELENIUM	196.090	Axial	0.8806129	-0.0001456325	0.002062619	-0.0008432843	-0.001656232
SILVER	328.068	Axial	-27.1811	-0.0001700137	0.00004268494	-0.0004965301	-0.00005619610
THALLIUM	190.856	Axial	1.131963	0.001364256	0.004683056	0.004262527	-0.004852814
ALUMINUM	308.215	Radial	6.363050	0.006077298	0.002121851	-0.009244887	0.02535493
BORON	249.678	Radial	17.80932	0.08215456	0.08007468	0.08070653	0.08568247
CALCIUM	373.690	Radial	33116.68	56.10645	55.96757	56.23627	56.11551
COBALT	228.616	Axial	4.183982	0.0005091325	0.0004907982	0.0007001784	0.0003364209
COPPER	324.754	Axial	28.13030	0.00004822437	0.0001160539	-0.0001756489	0.0002042681
IRON	259.940	Radial	8.786439	0.01358433	0.01286829	0.01437554	0.01350917
LITHIUM	670.784	Radial	494.6249	0.05612913	0.05588884	0.05586200	0.05663656
MAGNESIUM	279.079	Radial	1290.870	20.45268	20.43582	20.37532	20.54690
MANGANESE	257.610	Axial	60.89258	0.0007340481	0.0007295491	0.0007467376	0.0007258577
MOLYBDENUM	202.030	Axial	3.789206	0.001512404	0.001977939	0.001848179	0.0007110948
PHOSPHORUS	177.495	Axial	0.3405527	0.01322928	0.01051590	0.02590988	0.003262064
POTASSIUM	766.490	Radial	2315.399	5.436360	5.442970	5.439262	5.426847
SILICON	251.611	Axial	50776.45	15.71080	15.71840	15.70188	15.71214
SODIUM	589.592	Radial	12133.34	13.22878	13.21384	13.23349	13.23900
STRONTIUM	421.552	Radial	37656.51	0.6189116	0.6166171	0.6209724	0.6191453
SULFUR	182.034	Axial	232.2981	3.803462	3.795652	3.798825	3.815909
TIN	189.989	Axial	-1.50272	0.0004327685	0.0003345871	-0.002979343	0.003943061
TITANIUM	334.941	Radial	39.81635	0.01391964	0.01487044	0.01279795	0.01409053
VANADIUM	292.402	Radial	7.039707	0.01269256	0.01385824	0.01241814	0.01180129
ZINC	206.200	Axial	22.33090	0.007236160	0.006841329	0.007241376	0.007625773
CERIUM	535.353	Radial	76.43761	-0.007318642	-0.01440257	-0.03377694	0.02622359
LANTHANUM	333.749	Radial	-2.25815	-0.007723925	-0.004415405	-0.01271707	-0.006039298

Rows shaded in gray for analytes that were not ordered.

Sample ID: SD DF: 5x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:36 Sequence: 110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10566.41	10566.00	10555.21	10578.01
YTTRIUM	360.073	Axial	398708.7	399534.3	398276.0	398315.7
YTTRIUM	360.073	Radial	11280.45	11249.96	11258.61	11332.78
INDIUM	230.606	Axial	3279.910	3276.690	3279.028	3284.012

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	5.672344	0.02687970	0.1284921	0.1449563	0.1297471
ALUMINUM	308.215	Radial	3.196119	-0.02951598	-0.2348501	-0.08941267	-0.1184769
ANTIMONY	206.833	Axial	-1.35445	-0.001316825	0.005257470	0.004170104	-0.02917996
ARSENIC	189.042	Axial	-0.6106648	-0.00007259522	-0.02872675	0.02168330	0.005954521
BARIUM	233.527	Axial	134.5175	0.03105260	0.1545419	0.1557816	0.1554655
BERYLLIUM	313.042	Radial	15.42952	-0.00001639939	-0.00007292140	0.0002215963	-0.0003946656
CADMIUM	228.802	Axial	4.185782	0.00006307524	0.002866883	-0.0009181440	-0.001002611
CALCIUM	317.933	Radial	10597.88	10.17587	50.84701	50.95090	50.84017
CHROMIUM	267.716	Axial	10.30846	-0.0002293162	0.0002732828	-0.003010143	-0.0007028842
COBALT	228.616	Axial	2.800549	0.0001149082	0.003311281	-0.0006770015	-0.0009106555
COPPER	324.754	Axial	17.17873	-0.0005692282	-0.003366805	-0.0006457079	-0.004525911
IRON	259.940	Radial	3.564289	0.003149090	0.01631430	0.02602292	0.004899126
LEAD	220.353	Axial	1.615410	0.0007978228	-0.003801508	0.007379146	0.008389703
LITHIUM	670.784	Radial	75.91187	0.009153796	0.05723486	0.04236861	0.03770346
MAGNESIUM	279.079	Radial	229.9201	3.68223	18.37917	18.58868	18.26561
MANGANESE	257.610	Axial	13.40896	0.0001788258	0.001281271	0.0007827802	0.0006183352
MOLYBDENUM	202.030	Axial	2.480409	0.0005820134	-0.001152782	0.006172010	0.003710972
NICKEL	231.604	Axial	4.181369	-0.0009623172	-0.006257937	-0.003054256	-0.005122564
PHOSPHORUS	177.495	Axial	0.3993132	0.01467593	0.07677856	-0.001353823	0.1447143
POTASSIUM	766.490	Radial	367.5650	0.9835644	4.882028	5.046106	4.825333
SELENIUM	196.090	Axial	0.4382986	-0.005530666	-0.09686079	0.03023285	-0.01633205
SILICON	251.611	Axial	9005.156	2.694182	13.44446	13.48621	13.48207
SILVER	328.068	Axial	-23.5771	0.00003658168	-0.001014138	-0.0004586411	0.002021504
SODIUM	589.592	Radial	2360.294	2.552322	12.89994	12.80228	12.58261
STRONTIUM	421.552	Radial	6578.058	0.1086725	0.5444606	0.5412644	0.5443625
SULFUR	182.034	Axial	40.82493	0.6498480	3.184973	3.226220	3.336528
THALLIUM	190.856	Axial	1.378751	0.002163834	0.02106020	0.009637554	0.001759739
TIN	189.989	Axial	-1.94073	-0.0005131426	0.01047889	-0.03029586	0.01211983
TITANIUM	334.941	Radial	6.891657	0.003283950	0.01752704	0.01809346	0.01363874
VANADIUM	292.402	Radial	1.486350	0.003933292	0.03493967	-0.007901450	0.03196118
ZINC	206.200	Axial	4.351430	0.0008804340	0.003227135	0.004969941	0.005009434
CERIUM	535.353	Radial	58.54264	-0.1007262	-0.2609182	-0.7277393	-0.5222358
LANTHANUM	333.749	Radial	-4.20143	-0.01168228	-0.05768347	-0.02806545	-0.08948533

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:39 Sequence: 111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10249.23	10271.32	10246.57	10229.80
YTTRIUM	360.073	Axial	384652.5	384630.9	385920.9	383405.8
YTTRIUM	360.073	Radial	11425.06	11504.33	11343.72	11427.14
INDIUM	230.606	Axial	3024.781	3024.192	3031.803	3018.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	219.6803	0.9920798	0.9870287	0.9989306	0.9902802
ALUMINUM	308.215	Radial	736.0237	8.124320	8.083498	8.148260	8.141202
ANTIMONY	206.833	Axial	217.6636	0.8864070	0.8828781	0.8889809	0.8873619
ARSENIC	189.042	Axial	135.0905	0.8559808	0.8444201	0.8579917	0.8655307
BARIUM	233.527	Axial	4754.770	1.152744	1.151552	1.152973	1.153706
BERYLLIUM	313.042	Radial	19640.54	0.9645978	0.9576596	0.9677822	0.9683516
CADMIUM	228.802	Axial	5101.477	0.9410675	0.9407190	0.9418301	0.9406534
CALCIUM	373.690	Radial	37169.95	62.32623	61.90309	62.53080	62.54481
CHROMIUM	267.716	Axial	6442.660	1.009617	1.006733	1.008412	1.013705
COBALT	228.616	Axial	3282.383	0.8336307	0.8355282	0.8303020	0.8350617
COPPER	324.754	Axial	15336.87	0.8505667	0.8497497	0.8505702	0.8513803
IRON	259.940	Radial	4437.967	8.791617	8.740668	8.813610	8.820571
LEAD	220.353	Axial	636.8083	0.8662709	0.8681694	0.8620314	0.8686119
LITHIUM	670.784	Radial	8658.663	0.9624513	0.9557926	0.9637302	0.9678313
MAGNESIUM	279.079	Radial	1901.599	29.80039	29.64941	29.95072	29.80103
MANGANESE	257.610	Axial	71808.47	0.8352248	0.8337672	0.8356625	0.8362448
MOLYBDENUM	202.030	Axial	1324.753	0.8958049	0.8943243	0.8952585	0.8978318
NICKEL	231.604	Axial	1839.766	0.8877047	0.8878677	0.8878605	0.8873858
PHOSPHORUS	177.495	Axial	30.14623	0.9271428	0.9364848	0.9125264	0.9324171
POTASSIUM	766.490	Radial	5940.045	13.58589	13.47875	13.63134	13.64757
SELENIUM	196.090	Axial	77.02730	0.9047923	0.8882851	0.9218052	0.9042867
SILICON	251.611	Axial	54724.59	16.97520	16.93501	17.02184	16.96876
SILVER	328.068	Axial	3154.178	0.1634253	0.1637378	0.1628023	0.1637358
SODIUM	818.326	Radial	1314.500	21.25676	21.22369	21.31276	21.23383
STRONTIUM	421.552	Radial	91322.43	1.484934	1.474879	1.489849	1.490074
SULFUR	182.034	Axial	794.1815	13.03536	12.97162	13.09908	13.03539
THALLIUM	190.856	Axial	159.8964	0.8408629	0.8461843	0.8415924	0.8348119
TIN	189.989	Axial	281.0132	0.8808692	0.8821022	0.8787578	0.8817475
TITANIUM	334.941	Radial	3031.238	0.9705471	0.9650555	0.9741402	0.9724457
VANADIUM	292.402	Radial	577.4187	0.9031674	0.8933361	0.9110523	0.9051138
ZINC	206.200	Axial	2449.804	0.8617667	0.8600563	0.8647090	0.8605349
CERIUM	535.353	Radial	88.52535	0.05149786	-0.02195079	0.06290817	0.1135362
LANTHANUM	333.749	Radial	-3.13747	-0.009464282	-0.006890680	-0.01233480	-0.009167363

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:41 Sequence: 112

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10258.29	10266.46	10266.59	10241.81
YTTRIUM	360.073	Axial	384505.8	384508.5	385476.6	383532.2
YTTRIUM	360.073	Radial	11485.49	11588.07	11409.98	11458.43
INDIUM	230.606	Axial	3030.738	3035.207	3029.565	3027.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	217.8254	0.9785889	0.9584456	0.9788206	0.9985006
ALUMINUM	308.215	Radial	734.7780	8.067474	8.022493	8.075648	8.104282
ANTIMONY	206.833	Axial	222.2728	0.9042899	0.9050986	0.9078000	0.8999710
ARSENIC	189.042	Axial	136.2170	0.8623168	0.8560914	0.8657191	0.8651398
BARIUM	233.527	Axial	4746.240	1.149656	1.149264	1.150497	1.149208
BERYLLIUM	313.042	Radial	19732.33	0.9639990	0.9600431	0.9645218	0.9674322
CADMIUM	228.802	Axial	5086.338	0.9374444	0.9362810	0.9375205	0.9385315
CALCIUM	373.690	Radial	37190.89	62.03269	61.77899	62.08170	62.23739
CHROMIUM	267.716	Axial	6456.042	1.010820	1.012834	1.006685	1.012940
COBALT	228.616	Axial	3262.584	0.8269664	0.8259406	0.8271811	0.8277775
COPPER	324.754	Axial	15306.14	0.8491848	0.8508194	0.8476562	0.8490787
IRON	259.940	Radial	4426.340	8.722442	8.673390	8.728242	8.765695
LEAD	220.353	Axial	633.4141	0.8599495	0.8554215	0.8614380	0.8629892
LITHIUM	670.784	Radial	8676.168	0.9593139	0.9572456	0.9586043	0.9620916
MAGNESIUM	279.079	Radial	1916.460	29.87507	29.75290	29.98821	29.88410
MANGANESE	257.610	Axial	71466.84	0.8305159	0.8305427	0.8301997	0.8308052
MOLYBDENUM	202.030	Axial	1344.376	0.9082840	0.9076262	0.9084518	0.9087739
NICKEL	231.604	Axial	1831.510	0.8819662	0.8809492	0.8843795	0.8805699
PHOSPHORUS	177.495	Axial	29.93415	0.9198366	0.9011112	0.9354317	0.9229670
POTASSIUM	766.490	Radial	5956.697	13.55259	13.47967	13.57227	13.60584
SELENIUM	196.090	Axial	76.73789	0.9005368	0.9074558	0.8911702	0.9029845
SILICON	251.611	Axial	54986.80	17.04156	17.00701	17.01862	17.09906
SILVER	328.068	Axial	3142.786	0.1629013	0.1631089	0.1620375	0.1635576
SODIUM	818.326	Radial	1311.451	21.08475	20.99385	21.13369	21.12671
STRONTIUM	421.552	Radial	91537.60	1.480580	1.476750	1.478913	1.486077
SULFUR	182.034	Axial	792.3848	12.99432	12.95601	13.04655	12.98041
THALLIUM	190.856	Axial	157.6277	0.8272361	0.8253749	0.8232223	0.8331111
TIN	189.989	Axial	286.9759	0.8976950	0.8930694	0.9022087	0.8978070
TITANIUM	334.941	Radial	3089.566	0.9840125	0.9786583	0.9912821	0.9820972
VANADIUM	292.402	Radial	574.8207	0.8943686	0.8894420	0.8960001	0.8976637
ZINC	206.200	Axial	2440.848	0.8578559	0.8560885	0.8580032	0.8594759
CERIUM	535.353	Radial	73.97277	-0.02631551	-0.04537755	-0.006481809	-0.02708715
LANTHANUM	333.749	Radial	-0.08419050	-0.003343099	0.002113103	-0.005159710	-0.006982690

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 13:10 Sequence: 117 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10150.09	10148.27	10139.58	10162.41
YTTRIUM	360.073	Axial	373404.5	372620.1	374018.4	373575.0
YTTRIUM	360.073	Radial	11077.65	11106.50	11079.42	11047.02
INDIUM	230.606	Axial	3028.221	3027.483	3029.529	3027.653

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	772.5611	8.800375	8.783624	8.767793	8.849709
ANTIMONY	206.833	Axial	114.6465	0.4733177	0.4763016	0.4719086	0.4717429
ARSENIC	189.042	Axial	147.4248	0.9428702	0.9460880	0.9410772	0.9414453
BARIUM	233.527	Axial	2200.664	0.5384205	0.5391079	0.5383893	0.5377643
BERYLLIUM	313.042	Radial	4242.511	0.2142798	0.2146013	0.2141520	0.2140861
BORON	249.678	Radial	215.4950	1.003654	1.006957	1.004124	0.9998814
CADMIUM	228.802	Axial	2767.599	0.5152143	0.5143792	0.5159399	0.5153238
CALCIUM	373.690	Radial	26940.90	46.58329	46.47753	46.57378	46.69856
CHROMIUM	267.716	Axial	7373.150	1.166994	1.165195	1.170559	1.165229
COBALT	228.616	Axial	3521.941	0.8934903	0.8936689	0.8922580	0.8945440
COPPER	324.754	Axial	15995.15	0.9139063	0.9146867	0.9139675	0.9130647
IRON	259.940	Radial	4746.571	9.698075	9.706444	9.691463	9.696319
LEAD	220.353	Axial	339.6745	0.4609681	0.4601921	0.4578155	0.4648966
LITHIUM	670.784	Radial	8489.739	0.9732415	0.9754455	0.9727775	0.9715017
MAGNESIUM	279.079	Radial	625.7645	10.13876	10.06686	10.10248	10.24695
MANGANESE	257.610	Axial	79993.73	0.9395127	0.9363919	0.9418057	0.9403406
MOLYBDENUM	202.030	Axial	362.6785	0.2468818	0.2473269	0.2456782	0.2476402
NICKEL	231.604	Axial	2007.693	0.9678857	0.9697524	0.9658272	0.9680775
POTASSIUM	766.490	Radial	19574.45	45.83503	45.69880	45.99621	45.81007
SELENIUM	196.090	Axial	81.77699	0.9707179	0.9689934	0.9756006	0.9675598
SILICON	251.611	Axial	35374.70	11.07382	11.25819	10.94591	11.01736
SILVER	328.068	Axial	9277.986	0.4927417	0.4914708	0.4927220	0.4940325
SODIUM	818.326	Radial	2796.512	48.42654	48.26027	48.36934	48.65000
STRONTIUM	421.552	Radial	58018.37	0.9730870	0.9751314	0.9724688	0.9716610
SULFUR	182.034	Axial	307.6019	5.098068	5.083826	5.100654	5.109724
THALLIUM	190.856	Axial	162.0059	0.8510496	0.8600836	0.8433669	0.8496982
TIN	189.989	Axial	150.6473	0.4740371	0.4740039	0.4744079	0.4736995
TITANIUM	334.941	Radial	3283.319	1.084082	1.082514	1.086628	1.083104
VANADIUM	292.402	Radial	598.2507	0.9649485	0.9674464	0.9575675	0.9698314
ZINC	206.200	Axial	2717.047	0.9651804	0.9660989	0.9626812	0.9667612
CERIUM	535.353	Radial	71.08273	-0.02772746	-0.04816886	-0.09289590	0.05788238
LANTHANUM	333.749	Radial	0.04245768	-0.003041168	-0.01528039	-0.003927269	0.01008415
PHOSPHORUS	177.495	Axial	32.63504	1.013240	0.9985736	1.032257	1.008890

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 13:13 Sequence: 118

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10824.38	10825.79	10829.07	10818.29
YTTRIUM	360.073	Axial	404441.9	405518.5	404472.7	403334.6
YTTRIUM	360.073	Radial	11371.04	11347.96	11382.57	11382.59
INDIUM	230.606	Axial	3400.358	3401.270	3403.896	3395.909

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	8.620903	0.03086471	0.03320027	0.06569740	-0.006303554
ANTIMONY	206.833	Axial	0.4852759	0.005869794	0.006462081	0.004741528	0.006405772
ARSENIC	189.042	Axial	0.2236711	0.004998391	0.005860125	0.008284844	0.0008502044
BARIUM	233.527	Axial	2.880527	0.00006432606	0.0001641627	0.0002845474	-0.0002557320
BERYLLIUM	313.042	Radial	13.83208	-0.0001014757	-0.00003289416	-0.0002008845	-0.00007064848
BORON	249.678	Radial	1.553801	0.008009330	0.01494770	0.005297210	0.003783076
CADMIUM	228.802	Axial	4.333961	0.00007112540	-0.00002909121	0.00005528560	0.0001871818
CALCIUM	317.933	Radial	153.2983	-0.01578262	-0.01586227	-0.01639142	-0.01509417
CERIUM	535.353	Radial	45.85762	-0.1695369	-0.2073409	-0.1745146	-0.1267552
CHROMIUM	267.716	Axial	10.76389	-0.0001987164	-0.00003393838	-0.0007773763	0.0002151656
COBALT	228.616	Axial	2.679525	0.00006404019	-0.0003633655	0.0003238123	0.0002316737
COPPER	324.754	Axial	22.56349	-0.0002981385	0.000008340669	-0.0006132980	-0.0002894583
IRON	259.940	Radial	2.580364	0.001125606	-0.001269812	0.003032771	0.001613859
LANTHANUM	333.749	Radial	1.804950	0.0004959268	0.006859801	0.002304607	-0.007676627
LEAD	220.353	Axial	1.192471	0.0002140478	0.0003277620	0.0003798452	-0.00006546375
LITHIUM	670.784	Radial	-7.41878	-0.0002199647	-0.001261985	0.0008413119	-0.0002392214
MAGNESIUM	279.079	Radial	-0.9430306	0.02271032	0.03424924	0.02313259	0.01074914
MANGANESE	257.610	Axial	12.3750	0.0001638364	0.0001316859	0.0001376171	0.0002222062
MOLYBDENUM	202.030	Axial	1.663738	0.00001948343	0.0002961716	-0.00003702124	-0.0002007001
NICKEL	231.604	Axial	4.884370	-0.0007257722	-0.001062851	-0.0004033732	-0.0007110920
PHOSPHORUS	177.495	Axial	0.09613719	0.005604064	-0.006845586	0.006246267	0.01741151
POTASSIUM	766.490	Radial	-48.3127	0.03106290	0.04532185	0.03502940	0.01283745
SELENIUM	196.090	Axial	1.617068	0.007609522	0.002304328	0.01155331	0.008970932
SILICON	251.611	Axial	2748.349	0.7898527	0.9161382	0.7710525	0.6823675
SILVER	328.068	Axial	-24.3611	0.00001436192	0.0002386212	-0.0001857242	-0.000009811161
SODIUM	589.592	Radial	99.87841	0.07482177	0.07685906	0.07457944	0.07302680
STRONTIUM	421.552	Radial	-10.6900	0.0001950640	0.0002177494	0.0003220688	0.00004537380
SULFUR	182.034	Axial	1.652810	0.02556863	0.02865765	0.03109498	0.01695325
THALLIUM	190.856	Axial	0.5801731	-0.001833450	-0.001589453	0.0002346121	-0.004145509
TIN	189.989	Axial	-1.14976	0.001877660	0.001838962	0.002514178	0.001279841
TITANIUM	334.941	Radial	-2.40088	0.0002788523	0.0003800182	-0.00003293391	0.0004894727
VANADIUM	292.402	Radial	1.598736	0.004095899	0.004509609	0.0008911919	0.006886895
ZINC	206.200	Axial	2.266211	0.0001501265	-0.0001101983	-0.00004323171	0.0006038094

Sample ID: CCVLL Units: mg/l
Analyzed: 12/21/22 13:52 Sequence: 132 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10802.33	10807.37	10806.21	10793.41
YTTRIUM	360.073	Axial	400864.1	400312.2	401980.2	400299.8
YTTRIUM	360.073	Radial	11284.66	11284.55	11277.38	11292.03
INDIUM	230.606	Axial	3401.118	3405.894	3404.125	3393.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	20.99373	0.1709790	0.1697285	0.1584367	0.1847718
ANTIMONY	206.833	Axial	1.336779	0.009147656	0.01171818	0.008629305	0.007095486
ARSENIC	189.042	Axial	0.8726293	0.008884161	0.01489368	0.009839319	0.001919485
BARIUM	233.527	Axial	26.78314	0.005566838	0.005645946	0.005478989	0.005575578
BERYLLIUM	313.042	Radial	53.99151	0.001902164	0.001847553	0.001998313	0.001860624
BORON	249.678	Radial	43.39584	0.1991745	0.1928967	0.1980791	0.2065476
CADMIUM	228.802	Axial	16.65972	0.002231624	0.001908633	0.002334664	0.002451575
CALCIUM	317.933	Radial	1203.703	1.009820	1.006120	1.015168	1.008171
CHROMIUM	267.716	Axial	88.76389	0.01142228	0.01173672	0.01131630	0.01121384
COBALT	228.616	Axial	39.73535	0.008438512	0.008799822	0.008522888	0.007992826
COPPER	324.754	Axial	169.9345	0.007569244	0.008019041	0.007393860	0.007294831
IRON	259.940	Radial	50.09058	0.09649778	0.09417777	0.09751536	0.09780019
LEAD	220.353	Axial	4.376892	0.004074546	0.002499381	0.003414429	0.006309829
LITHIUM	670.784	Radial	125.6939	0.01474512	0.01588271	0.01398655	0.01436611
MAGNESIUM	279.079	Radial	67.74853	1.111054	1.088781	1.103472	1.140908
MANGANESE	257.610	Axial	865.4028	0.009577558	0.009616921	0.009540272	0.009575479
MOLYBDENUM	202.030	Axial	8.589082	0.004469848	0.005039110	0.004399388	0.003971045
NICKEL	231.604	Axial	25.94746	0.008341399	0.008365604	0.008139635	0.008518959
POTASSIUM	766.490	Radial	369.2404	0.9870420	0.9443802	0.9885609	1.028185
SELENIUM	196.090	Axial	1.533278	0.006699433	0.01109737	0.008409606	0.0005913258
SILICON	251.611	Axial	779.7782	0.2115339	0.2112707	0.2106626	0.2126683
SILVER	328.068	Axial	76.63889	0.004988469	0.004902192	0.004841744	0.005221472
SODIUM	589.592	Radial	1116.213	1.188741	1.199819	1.167861	1.198543
STRONTIUM	421.552	Radial	577.6500	0.009876679	0.009962796	0.009761126	0.009906115
SULFUR	182.034	Axial	62.85348	0.9787183	0.9752418	0.9785803	0.9823327
THALLIUM	190.856	Axial	3.097032	0.01000455	0.01004389	0.008213046	0.01175672
TIN	189.989	Axial	15.40293	0.04775842	0.04853887	0.04688588	0.04785051
TITANIUM	334.941	Radial	159.5386	0.05270970	0.05107950	0.05259692	0.05445269
VANADIUM	292.402	Radial	10.22049	0.01774577	0.01927444	0.02213623	0.01182664
ZINC	206.200	Axial	142.8220	0.04709614	0.04730052	0.04680832	0.04717956
CERIUM	535.353	Radial	45.49269	-0.1695804	-0.1501455	-0.1672238	-0.1913720
LANTHANUM	333.749	Radial	-3.14538	-0.009547174	-0.007130914	-0.01354750	-0.007963103
PHOSPHORUS	177.495	Axial	3.248726	0.09732067	0.1020080	0.09481485	0.09513914

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 14:03 Sequence: 133 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9276.824	9296.785	9271.558	9262.128
YTTRIUM	360.073	Axial	342552.3	342966.5	342789.4	341901.1
YTTRIUM	360.073	Radial	10697.43	10696.47	10733.68	10662.15
INDIUM	230.606	Axial	2607.206	2613.925	2602.492	2605.200

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37663.73	447.5229	447.0356	447.3215	448.2117
ANTIMONY	206.833	Axial	-5.31340	-0.01979124	-0.02022894	-0.01843217	-0.02071261
ARSENIC	189.042	Axial	-1.54100	-0.007079457	-0.005192888	-0.009727370	-0.006318115
BARIUM	233.527	Axial	12.15690	0.002661461	0.002038695	0.002906043	0.003039647
BERYLLIUM	313.042	Radial	12.39512	-0.0001338899	-0.0001832419	-0.0001437261	-0.00007470166
BORON	249.678	Radial	-1.84670	-0.007934736	-0.01771088	-0.005242736	-0.0008505897
CADMIUM	228.802	Axial	3.642242	0.00005664602	-0.0002554183	0.0004576603	-0.00003230390
CALCIUM	373.690	Radial	267280.2	478.8285	478.5593	478.2688	479.6575
CERIUM	535.353	Radial	261.8847	1.045592	1.035804	1.094223	1.006749
CHROMIUM	267.716	Axial	23.15401	0.002217701	0.001663963	0.002210794	0.002778345
COBALT	228.616	Axial	7.830242	0.001767247	0.001635414	0.002277135	0.001389191
COPPER	324.754	Axial	-119.924	-0.008971547	-0.009170178	-0.008603947	-0.009140517
IRON	271.441	Radial	4171.329	173.0997	172.6670	173.5450	173.0870
LANTHANUM	333.749	Radial	0.5540769	-0.001953075	-0.0008288905	-0.007247484	0.002217150
LEAD	220.353	Axial	-16.8018	-0.02778499	-0.02746027	-0.02669434	-0.02920035
LITHIUM	670.784	Radial	32.01757	0.004407643	0.004014744	0.004579247	0.004628938
MAGNESIUM	279.079	Radial	31287.73	523.0361	523.2198	521.8985	523.9902
MANGANESE	257.610	Axial	513.1714	0.006621792	0.006639310	0.006603669	0.006622396
MOLYBDENUM	202.030	Axial	5.976621	0.003423849	0.003095289	0.002990261	0.004185996
NICKEL	231.604	Axial	19.05163	0.007869465	0.008256880	0.007406335	0.007945180
PHOSPHORUS	177.495	Axial	0.3500455	0.01467631	0.009063864	0.01183994	0.02312512
POTASSIUM	766.490	Radial	-92.4560	-0.08248467	-0.07420836	-0.1288643	-0.04438138
SELENIUM	196.090	Axial	2.029560	0.01604919	0.02557574	0.01507801	0.007493810
SILICON	251.611	Axial	28.71797	-0.008355635	-0.009972461	-0.006523409	-0.008571036
SILVER	328.068	Axial	-74.5766	-0.003100588	-0.003338233	-0.002911564	-0.003051966
SODIUM	589.592	Radial	108.4598	0.09157770	0.08366428	0.09179554	0.09927329
STRONTIUM	421.552	Radial	203.4043	0.003901342	0.003846767	0.003806599	0.004050661
SULFUR	182.034	Axial	0.3882419	0.006926354	0.006913990	0.001293816	0.01257126
THALLIUM	190.856	Axial	0.9993686	0.001566821	0.002351072	-0.004646517	0.006995909
TIN	189.989	Axial	-4.47569	-0.01111817	-0.01130724	-0.01431431	-0.007732951
TITANIUM	334.941	Radial	121.0891	0.04241494	0.04118284	0.04179529	0.04426669
VANADIUM	292.402	Radial	4.302990	0.008762570	0.01163818	0.007495446	0.007154083
ZINC	206.200	Axial	12.76006	0.004357425	0.004232186	0.004228071	0.004612019

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 14:05 Sequence: 134 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9155.693	9149.438	9164.897	9152.744
YTTRIUM	360.073	Axial	338093.3	338163.8	338560.8	337555.2
YTTRIUM	360.073	Radial	10601.30	10596.71	10613.17	10594.03
INDIUM	230.606	Axial	2571.322	2575.722	2569.801	2568.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37523.07	449.8942	450.8349	449.1920	449.6557
ANTIMONY	206.833	Axial	101.4739	0.4645102	0.4608766	0.4622518	0.4704023
ARSENIC	189.042	Axial	67.16458	0.4780252	0.4876300	0.4800482	0.4663975
BARIUM	233.527	Axial	1981.388	0.5374223	0.5389974	0.5352400	0.5380296
BERYLLIUM	313.042	Radial	10063.33	0.5322755	0.5329997	0.5329599	0.5308668
BORON	249.678	Radial	204.2231	0.9939120	0.9929296	0.9897753	0.9990311
CADMIUM	228.802	Axial	5287.262	1.091943	1.094125	1.088326	1.093379
CALCIUM	373.690	Radial	266198.0	481.2127	481.4492	481.1748	481.0141
CERIUM	535.353	Radial	255.1038	1.020877	0.9928683	1.013741	1.056023
CHROMIUM	267.716	Axial	3235.069	0.5667219	0.5669010	0.5655617	0.5677030
COBALT	228.616	Axial	1464.191	0.4371816	0.4376759	0.4359124	0.4379564
COPPER	324.754	Axial	7298.984	0.4598552	0.4589225	0.4602982	0.4603449
IRON	271.441	Radial	4157.242	174.0803	173.9187	173.7985	174.5237
LANTHANUM	333.749	Radial	-0.2365696	-0.003666620	-0.002431812	0.0008921332	-0.009460182
LEAD	220.353	Axial	555.7726	0.8893959	0.8857120	0.8861951	0.8962807
LITHIUM	670.784	Radial	28.21712	0.003988314	0.004288918	0.001901752	0.005774272
MAGNESIUM	279.079	Radial	31135.87	525.2149	525.2165	524.9706	525.4574
MANGANESE	257.610	Axial	35474.83	0.4619115	0.4621372	0.4618311	0.4617661
MOLYBDENUM	202.030	Axial	630.5717	0.4768336	0.4775483	0.4768913	0.4760611
NICKEL	231.604	Axial	1684.938	0.9565932	0.9552988	0.9565766	0.9579041
PHOSPHORUS	177.495	Axial	0.1507135	0.007984275	0.04119441	0.01499940	-0.03224099
POTASSIUM	766.490	Radial	-83.2377	-0.06213313	-0.07437981	-0.03879248	-0.07322712
SELENIUM	196.090	Axial	40.58444	0.5293053	0.5283215	0.5375147	0.5220797
SILICON	251.611	Axial	3007.245	1.027153	1.030610	1.024382	1.026466
SILVER	328.068	Axial	18774.77	1.099756	1.100417	1.100109	1.098740
SODIUM	589.592	Radial	114.2049	0.09939959	0.1014564	0.1057010	0.09104137
STRONTIUM	421.552	Radial	200.5215	0.003882632	0.003943181	0.003807403	0.003897312
SULFUR	182.034	Axial	0.2218464	0.003972924	0.03233820	-0.01704021	-0.003379213
THALLIUM	190.856	Axial	68.70401	0.4227679	0.4177931	0.4250730	0.4254377
TIN	189.989	Axial	125.8420	0.4664242	0.4703996	0.4656292	0.4632437
TITANIUM	334.941	Radial	1657.018	0.5721901	0.5691766	0.5752236	0.5721702
VANADIUM	292.402	Radial	285.3191	0.4816739	0.4749000	0.4904246	0.4796971
ZINC	206.200	Axial	2272.537	0.8949121	0.8952125	0.8941969	0.8953268

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 14:31 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10503.19	10496.31	10494.06	10519.21
YTTRIUM	360.073	Axial	397957.5	396206.7	399610.0	398055.8
YTTRIUM	360.073	Radial	11016.78	11009.57	10993.18	11047.60
INDIUM	230.606	Axial	3284.679	3279.898	3280.803	3293.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	3.253482	3.058846	3.787316	2.914284
ANTIMONY	206.833	Axial	-0.1308332	-0.4936050	0.4934350	-0.3923295
ARSENIC	189.042	Axial	-0.7641114	-0.2815156	-1.040978	-0.9698402
BARIUM	233.527	Axial	1.767289	2.960417	1.753802	0.5876483
BERYLLIUM	313.042	Radial	13.03607	12.84870	13.61855	12.64097
BORON	249.678	Radial	-0.8181666	-1.415016	-0.4991681	-0.5403159
CADMIUM	228.802	Axial	3.903785	3.991413	4.829200	2.890741
CALCIUM	317.933	Radial	149.2761	151.0321	145.9235	150.8728
CALCIUM	373.690	Radial	12.00572	10.19644	12.31281	13.50790
CERIUM	535.353	Radial	58.42292	50.23306	67.92845	57.10723
CHROMIUM	267.716	Axial	8.597222	12.41667	10	3.375
COBALT	228.616	Axial	3.027367	3.010059	2.712429	3.359614
COPPER	324.754	Axial	19.80556	13.67262	24.57738	21.16667
IRON	259.940	Radial	0.9282788	0.1248543	-0.04159734	2.701579
IRON	271.441	Radial	0.2218733	0.5410355	-0.1247920	0.2493766
LANTHANUM	333.749	Radial	-2.35563	-0.4161811	-0.8319468	-5.818786
LEAD	220.353	Axial	1.251235	1.017245	1.049498	1.686961
LITHIUM	670.784	Radial	-10.4063	0.9155985	-7.945092	-24.18953
MAGNESIUM	279.079	Radial	-2.09284	-0.7075079	-1.955075	-3.615960
MANGANESE	257.610	Axial	-7.43055	-5.625	-14.50	-2.166667
MOLYBDENUM	202.030	Axial	1.190667	1.130946	1.587302	0.8537532
NICKEL	231.604	Axial	3.478787	4.102450	2.553003	3.780907
PHOSPHORUS	177.495	Axial	0.2033607	-0.03326311	0.2331002	0.4102450
POTASSIUM	766.490	Radial	-49.4397	-49.23423	-49.37604	-49.70906
SELENIUM	196.090	Axial	0.8554665	1.212256	1.302401	0.05174262
SILICON	251.611	Axial	42.58137	40.33251	39.69597	47.71563
SILVER	328.068	Axial	-17.5138	-15.83333	-24.54167	-12.16667
SODIUM	589.592	Radial	41.38286	34.95921	44.80033	44.38903
SODIUM	818.326	Radial	80.92742	88.31363	75.74875	78.71987
STRONTIUM	421.552	Radial	-14.2073	-4.203429	-17.67887	-20.73982
SULFUR	182.034	Axial	-0.09211856	-0.7317884	0.7548008	-0.2993680
THALLIUM	190.856	Axial	0.03272781	-0.4330527	0.2547660	0.2764701
TIN	189.989	Axial	-1.88920	-1.995787	-1.609502	-2.062313
TITANIUM	334.941	Radial	-3.28754	-5.577462	-4.243440	-0.04173546
VANADIUM	292.402	Radial	0.7957928	3.551412	-0.3327787	-0.8312552
ZINC	206.200	Axial	1.220386	1.363788	1.998002	0.2993680

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 14:33 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10530.28	10535.92	10531.14	10523.80
YTTRIUM	360.073	Axial	399617.7	399760.0	400318.0	398775.2
YTTRIUM	360.073	Radial	11064.99	11004.86	11089.22	11100.88
INDIUM	230.606	Axial	3273.004	3276.827	3271.501	3270.684

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	23.53925	21.73084	25.58567	23.30123
ANTIMONY	206.833	Axial	1.727388	1.626064	1.813141	1.742958
ARSENIC	189.042	Axial	0.7456394	0.4147275	1.497001	0.3251900
BARIUM	233.527	Axial	24.31324	25.02495	24.34232	23.57246
BERYLLIUM	313.042	Radial	53.14791	51.42253	56.21573	51.80547
BORON	249.678	Radial	42.86954	43.20113	42.74892	42.65857
CADMIUM	228.802	Axial	15.07137	13.82920	14.39411	16.99081
CALCIUM	317.933	Radial	1186.478	1179.678	1192.932	1186.824
CHROMIUM	267.716	Axial	78.47222	71.08333	87.91667	76.41667
COBALT	228.616	Axial	42.04847	43.33588	40.98142	41.82811
COPPER	324.754	Axial	179.9107	182.2560	173.4464	184.0298
IRON	259.940	Radial	49.68294	47.49208	51.36530	50.19144
LEAD	220.353	Axial	4.564814	4.670603	3.173158	5.850680
LITHIUM	670.784	Radial	121.6109	111.5647	130.7443	122.5237
MAGNESIUM	279.079	Radial	61.66128	64.61423	60.18981	60.17979
MANGANESE	257.610	Axial	877.3194	877.2500	880.5417	874.1667
MOLYBDENUM	202.030	Axial	9.006711	8.958865	9.457209	8.604058
NICKEL	231.604	Axial	25.74049	25.83435	26.05173	25.33540
PHOSPHORUS	177.495	Axial	4.067407	3.281960	5.183705	3.736556
POTASSIUM	766.490	Radial	357.5284	361.3564	350.6077	360.6209
SELENIUM	196.090	Axial	1.715626	1.877518	1.968402	1.300957
SILICON	251.611	Axial	692.7421	690.0725	692.3208	695.8329
SILVER	328.068	Axial	71.59722	75.8750	73.16667	65.750
SODIUM	589.592	Radial	1005.926	1005.124	1010.365	1002.289
STRONTIUM	421.552	Radial	585.8524	593.6927	583.9993	579.8652
SULFUR	182.034	Axial	60.08397	60.91584	59.20746	60.12862
THALLIUM	190.856	Axial	3.344690	2.980906	3.517531	3.535633
TIN	189.989	Axial	14.93700	15.50061	15.05162	14.25879
TITANIUM	334.941	Radial	152.1297	158.1783	151.8853	146.3254
VANADIUM	292.402	Radial	13.72888	9.720602	16.48352	14.98252
ZINC	206.200	Axial	144.1193	145.4152	143.5120	143.4305

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 14:36 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10701.80	10719.34	10702.51	10683.55
YTTRIUM	360.073	Axial	404918.7	406578.5	404980.0	403197.5
YTTRIUM	360.073	Radial	11358.98	11335.05	11351.66	11390.22
INDIUM	230.606	Axial	3281.124	3280.862	3281.029	3281.482

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	120.0354	120.6866	120.3846	119.0349
ARSENIC	189.042	Axial	77.20960	76.93726	76.62703	78.06451
BERYLLIUM	313.042	Radial	10201.89	10166.26	10209.53	10229.88
BORON	249.678	Radial	108.0162	109.8434	105.2149	108.9904
CADMIUM	228.802	Axial	2839.962	2844.074	2839.982	2835.831
CHROMIUM	267.716	Axial	3601.708	3604.219	3606.164	3594.742
COBALT	228.616	Axial	1945.321	1949.942	1947.890	1938.129
COPPER	324.754	Axial	8513.160	8530.841	8551.070	8457.569
IRON	259.940	Radial	245.8801	245.7528	247.7091	244.1783
LEAD	220.353	Axial	379.5778	380.3611	380.0159	378.3564
LITHIUM	670.784	Radial	4473.781	4446.411	4480.173	4494.760
MANGANESE	257.610	Axial	43761.98	43789.19	43855.58	43641.18
MOLYBDENUM	202.030	Axial	760.6092	760.7813	759.1581	761.8884
NICKEL	231.604	Axial	1073.272	1075.363	1076.119	1068.335
PHOSPHORUS	177.495	Axial	18.73691	18.75486	18.98256	18.47332
SELENIUM	196.090	Axial	43.25555	43.85751	43.25225	42.65690
SILICON	251.611	Axial	1932.962	1891.228	1931.433	1976.224
SILVER	328.068	Axial	9777.548	9794.309	9778.452	9759.885
STRONTIUM	421.552	Radial	30282.96	30104.93	30307.61	30436.34
SULFUR	182.034	Axial	31.06137	31.35057	30.55648	31.27704
THALLIUM	190.856	Axial	95.47459	94.59373	96.25575	95.57429
TIN	189.989	Axial	163.8619	164.3103	163.3233	163.9521
TITANIUM	334.941	Radial	1569.461	1563.648	1561.836	1582.900
VANADIUM	292.402	Radial	303.7332	303.9640	303.3989	303.8368
ZINC	206.200	Axial	1429.001	1430.263	1429.679	1427.061

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 14:39 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10679.22	10688.13	10676.06	10673.46
YTTRIUM	360.073	Axial	401609.2	400314.2	403040.5	401472.8
YTTRIUM	360.073	Radial	11320.64	11327.84	11350.69	11283.37
INDIUM	230.606	Axial	3255.393	3256.609	3254.080	3255.490

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	247.9981	249.1661	248.3639	246.4643
ARSENIC	189.042	Axial	156.8622	155.9440	157.8375	156.8052
BARIUM	233.527	Axial	4561.411	4574.831	4554.302	4555.102
BERYLLIUM	313.042	Radial	20563.63	20615.99	20608.26	20466.64
BORON	249.678	Radial	215.4733	216.4254	216.7139	213.2806
CADMIUM	228.802	Axial	5699.369	5712.180	5699.743	5686.184
CALCIUM	317.933	Radial	1206.492	1215.885	1204.841	1198.751
CHROMIUM	267.716	Axial	7203.724	7214.054	7187.188	7209.930
COBALT	228.616	Axial	3913.938	3917.516	3913.641	3910.657
COPPER	324.754	Axial	17352.51	17307.80	17377.48	17372.26
IRON	259.940	Radial	494.8370	497.0877	494.2093	493.2140
LEAD	220.353	Axial	758.6413	757.7791	759.1485	758.9963
LITHIUM	670.784	Radial	8985.800	8972.957	9019.122	8965.321
MANGANESE	257.610	Axial	87488.95	87413.82	87496.21	87556.81
MOLYBDENUM	202.030	Axial	1517.678	1516.561	1516.365	1520.107
NICKEL	231.604	Axial	2156.690	2157.958	2156.811	2155.301
PHOSPHORUS	177.495	Axial	36.89525	36.63223	37.82614	36.22738
SELENIUM	196.090	Axial	85.79292	85.92691	85.39284	86.05899
SILICON	251.611	Axial	4209.994	4116.636	4183.574	4329.771
SILVER	328.068	Axial	19775.41	19747.00	19781.53	19797.69
STRONTIUM	421.552	Radial	60873.56	60888.92	61040.95	60690.80
SULFUR	182.034	Axial	61.87595	62.53471	62.57355	60.51960
THALLIUM	190.856	Axial	193.9241	193.5520	193.8324	194.3880
TIN	189.989	Axial	331.2879	332.6780	331.0536	330.1321
TITANIUM	334.941	Radial	3161.453	3172.580	3163.313	3148.465
VANADIUM	292.402	Radial	612.1566	614.4117	614.8420	607.2162
ZINC	206.200	Axial	2873.521	2879.474	2873.976	2867.114

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 14:41 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10715.82	10740.75	10710.28	10696.42
YTTRIUM	360.073	Axial	403034.8	401816.0	403618.5	403669.8
YTTRIUM	360.073	Radial	11447.12	11475.13	11386.78	11479.44
INDIUM	230.606	Axial	3230.895	3232.527	3233.370	3226.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	508.9282	508.1056	511.1887	507.4904
ARSENIC	189.042	Axial	322.2148	321.7645	321.0301	323.8496
BARIUM	233.527	Axial	9071.404	9089.665	9072.561	9051.987
BERYLLIUM	313.042	Radial	41593.19	41600.89	41493.53	41685.16
BORON	249.678	Radial	438.9480	434.6199	439.1825	443.0417
CADMIUM	228.802	Axial	11507.31	11517.38	11495.34	11509.21
CALCIUM	317.933	Radial	2272.827	2271.960	2270.522	2276.000
CHROMIUM	267.716	Axial	14242.15	14235.59	14261.39	14229.46
COBALT	228.616	Axial	7805.862	7811.963	7800.531	7805.091
COPPER	324.754	Axial	35247.27	35330.01	35063.62	35348.18
IRON	259.940	Radial	991.5577	993.8030	987.7866	993.0833
LEAD	220.353	Axial	1523.284	1526.106	1521.726	1522.019
LITHIUM	670.784	Radial	18041.07	18053.78	17981.26	18088.17
MANGANESE	257.610	Axial	173886.1	174445.7	173522.3	173690.2
MOLYBDENUM	202.030	Axial	2999.139	2993.872	3007.007	2996.537
NICKEL	231.604	Axial	4325.309	4327.909	4324.867	4323.152
PHOSPHORUS	177.495	Axial	77.06161	76.62078	77.80488	76.75916
POTASSIUM	766.490	Radial	806.7247	801.0314	813.5178	805.6250
SELENIUM	196.090	Axial	176.9240	177.0056	176.3636	177.4029
SILICON	251.611	Axial	9335.096	9026.144	9314.080	9665.064
SILVER	328.068	Axial	40452.63	40543.30	40255.03	40559.54
SODIUM	589.592	Radial	2038.609	2045.375	2030.409	2040.042
STRONTIUM	421.552	Radial	122043.3	122154.4	121506.3	122469.3
SULFUR	182.034	Axial	129.7728	129.3739	130.1109	129.8335
THALLIUM	190.856	Axial	395.8420	395.1647	397.0476	395.3139
TIN	189.989	Axial	667.8072	667.7287	670.5543	665.1387
TITANIUM	334.941	Radial	6363.152	6356.076	6344.568	6388.814
VANADIUM	292.402	Radial	1232.760	1229.912	1229.257	1239.111
ZINC	206.200	Axial	5818.618	5853.575	5806.397	5795.882

Sample ID: ICV Units: mg/l
Analyzed: 12/21/22 14:53 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10349.53	10353.22	10348.39	10352.16	10344.36
YTTRIUM	360.073	Axial	387418.2	388987.2	384500.5	388150.3	388034.8
YTTRIUM	360.073	Radial	11171.93	11208.20	11161.51	11170.58	11147.45
INDIUM	230.606	Axial	3118.912	3118.144	3122.125	3118.997	3116.380

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	818.0538	10.04094	10.05998	10.06960	9.931645	10.10255
ANTIMONY	206.833	Axial	241.6689	0.9902821	0.9906454	0.9864836	0.9880589	0.9959405
ARSENIC	189.042	Axial	149.4332	0.9681751	0.9662084	0.9632244	0.9735310	0.9697365
BARIUM	233.527	Axial	4500.582	1.047312	1.048688	1.047021	1.046132	1.047409
BERYLLIUM	313.042	Radial	20854.56	1.027861	1.026253	1.030101	1.028379	1.026709
BORON	249.678	Radial	214.6281	1.004830	1.002049	0.9927647	1.024956	0.9995508
CADMIUM	228.802	Axial	5610.401	1.011103	1.012744	1.012600	1.006747	1.012321
CALCIUM	317.933	Radial	10381.01	10.23275	10.22378	10.22210	10.25622	10.22892
CHROMIUM	267.716	Axial	7191.508	1.041623	1.044409	1.040539	1.039314	1.042231
COBALT	228.616	Axial	3723.694	0.9898308	0.9850751	0.9903817	0.9921843	0.9916822
COPPER	324.754	Axial	16624.04	0.9849524	0.9834250	0.9901918	0.9844633	0.9817296
IRON	259.940	Radial	4856.202	10.14949	10.11650	10.15891	10.15483	10.16770
LEAD	220.353	Axial	719.8606	0.9815228	0.9777320	0.9848485	0.9810995	0.9824112
LITHIUM	670.784	Radial	8770.742	0.9952958	0.9950802	0.9962927	0.9946450	0.9951655
MAGNESIUM	279.079	Radial	643.3647	10.31888	10.34438	10.36025	10.29332	10.27756
MANGANESE	257.610	Axial	83839.05	0.9962297	0.9966187	0.9948241	0.9974371	0.9960388
MOLYBDENUM	202.030	Axial	1520.670	1.045829	1.044731	1.047160	1.047031	1.044396
NICKEL	231.604	Axial	2059.813	0.9891041	0.9894069	0.9887540	0.9884509	0.9898045
POTASSIUM	766.490	Radial	4109.589	9.887158	9.911371	9.881488	9.862976	9.892798
SELENIUM	196.090	Axial	84.87409	0.9961585	0.9921295	1.001209	0.9947073	0.9965887
SILICON	251.611	Axial	4213.705	1.274297	1.232303	1.251611	1.291868	1.321404
SILVER	328.068	Axial	19122.66	0.9891762	0.9863352	0.9965848	0.9893093	0.9844755
SODIUM	589.592	Radial	10056.43	10.45004	10.44844	10.47496	10.44188	10.43489
STRONTIUM	421.552	Radial	24166.66	0.4052879	0.4047554	0.4064901	0.4051216	0.4047844
SULFUR	182.034	Axial	604.5083	9.065183	9.096603	9.056785	9.048672	9.058671
THALLIUM	190.856	Axial	180.2207	0.9504427	0.9444422	0.9559980	0.9533800	0.9479507
TIN	189.989	Axial	319.9309	0.9989253	1.005193	0.9984466	0.9915226	1.000539
TITANIUM	334.941	Radial	3228.776	1.039492	1.038399	1.042019	1.040746	1.036806
VANADIUM	292.402	Radial	611.1509	1.015000	1.017954	1.022983	1.010109	1.008954
ZINC	206.200	Axial	2793.595	0.9965368	0.9960135	0.9986594	0.9949646	0.9965098
CERIUM	535.353	Radial	61.27135	0.009896187	0.06590564	0.006431634	-0.05750401	0.02475148
LANTHANUM	333.749	Radial	0.9881530	0.006500007	0.003553876	0.01029175	0.007560697	0.004593701
PHOSPHORUS	177.495	Axial	37.93501	1.026551	1.015222	1.012302	1.045111	1.033570

Sample ID: ICB Units: mg/l
Analyzed: 12/21/22 14:56 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10476.33	10480.42	10492.23	10456.35
YTTRIUM	360.073	Axial	394709.5	394965.2	392999.7	396163.7
YTTRIUM	360.073	Radial	11041.21	11028.91	11084.56	11010.15
INDIUM	230.606	Axial	3300.094	3297.877	3304.207	3298.198

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.725106	0.04314425	0.04457396	0.06409380	0.02076498
ANTIMONY	206.833	Axial	0.4641204	0.002403026	0.005949270	0.001612712	-0.0003529026
ARSENIC	189.042	Axial	-0.6010776	0.001026444	0.0007489865	-0.00003879433	0.002369141
BARIUM	233.527	Axial	1.896933	0.00003064311	-0.0001659956	0.0001755526	0.00008237230
BERYLLIUM	313.042	Radial	18.04140	0.0002485556	0.0003322974	0.0001113988	0.0003019707
BORON	249.678	Radial	0.9716209	0.008450084	-0.00006203357	0.01287643	0.01253585
CADMIUM	228.802	Axial	5.180943	0.0002288479	0.00004624352	0.0006371585	0.000003141594
CALCIUM	317.933	Radial	153.6693	0.004112212	0.006043638	0.004627791	0.001665207
CERIUM	535.353	Radial	53.86894	-0.02333716	-0.05964433	-0.02156937	0.01120222
CHROMIUM	267.716	Axial	12.66667	0.0005854996	0.001396328	0.0001000593	0.0002601109
COBALT	228.616	Axial	3.400876	0.00009029355	0.00002740369	0.0003278504	-0.00008437341
COPPER	324.754	Axial	16.19246	-0.0001999884	-0.0003188763	-0.0001309795	-0.0001501095
IRON	259.940	Radial	5.523474	0.009709887	0.01037527	0.01427265	0.004481740
LANTHANUM	333.749	Radial	-1.69241	0.001288242	-0.003204634	0.004998161	0.002071199
LEAD	220.353	Axial	0.4560832	-0.001032820	-0.001400073	-0.001663415	-0.00003497148
LITHIUM	670.784	Radial	-12.5287	-0.0002448455	0.0005634065	0.0004994343	-0.001797377
MAGNESIUM	279.079	Radial	-1.12395	0.01574141	-0.03619177	0.01846291	0.06495310
MANGANESE	257.610	Axial	5.638889	0.0001532943	0.0001750453	0.00008606944	0.0001987683
MOLYBDENUM	202.030	Axial	1.996144	0.0005504642	0.0004206773	-0.0001520744	0.001382790
NICKEL	231.604	Axial	4.156207	0.0003002766	-0.0002066976	0.0008857145	0.0002218129
PHOSPHORUS	177.495	Axial	0.03693850	-0.004452446	-0.003660200	-0.006936712	-0.002760426
POTASSIUM	766.490	Radial	-46.4677	0.007343353	-0.04105932	0.04971734	0.01337204
SELENIUM	196.090	Axial	0.7518008	-0.001189030	-0.01086548	-0.0004816363	0.007780028
SILICON	251.611	Axial	57.95529	0.004674056	0.004019584	0.004411714	0.005590871
SILVER	328.068	Axial	-18.6388	-0.00006430639	-0.0001987634	0.0002076598	-0.0002018156
SODIUM	589.592	Radial	69.59149	0.02968801	0.02378160	0.03155891	0.03372352
STRONTIUM	421.552	Radial	-14.5985	-0.000006170946	0.00003364278	-0.00002740565	-0.00002474996
SULFUR	182.034	Axial	0.8946337	0.01460665	0.02450580	0.01038706	0.008927070
THALLIUM	190.856	Axial	0.4980747	0.002323341	0.006250295	-0.001659036	0.002378764
TIN	189.989	Axial	-0.9464748	0.002791716	0.004429629	0.002999152	0.0009463659
TITANIUM	334.941	Radial	1.012244	0.001403265	0.001371568	0.001289459	0.001548769
VANADIUM	292.402	Radial	0.9350970	0.0002205151	-0.002185561	0.004706368	-0.001859262
ZINC	206.200	Axial	1.882030	0.0002339269	0.0003052030	0.0003481730	0.00004840470

Sample ID: ICVLL Units: mg/l
Analyzed: 12/21/22 15:05 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10519.69	10525.22	10508.18	10525.68
YTTRIUM	360.073	Axial	399104.6	400729.8	398104.0	398480.0
YTTRIUM	360.073	Radial	11091.47	11076.30	11097.84	11100.26
INDIUM	230.606	Axial	3280.456	3285.009	3280.719	3275.640

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.14891	0.2342808	0.2454120	0.2441772	0.2132532
ANTIMONY	206.833	Axial	2.084408	0.008924651	0.01038568	0.007087504	0.009300769
ARSENIC	189.042	Axial	1.040430	0.01145230	0.01370391	0.01262989	0.008023116
BARIUM	233.527	Axial	25.49434	0.005433486	0.005029401	0.005623572	0.005647484
BERYLLIUM	313.042	Radial	54.22647	0.002041847	0.002182422	0.002025652	0.001917468
BORON	249.678	Radial	43.36157	0.2075596	0.2034232	0.2033600	0.2158957
CADMIUM	228.802	Axial	14.31011	0.001845029	0.002064524	0.001674205	0.001796358
CALCIUM	317.933	Radial	1190.301	1.047884	1.054616	1.048316	1.040721
CHROMIUM	267.716	Axial	83.91667	0.01074318	0.01112294	0.01097634	0.01013025
COBALT	228.616	Axial	40.53205	0.009486893	0.009455260	0.009650519	0.009354899
COPPER	324.754	Axial	182.6052	0.009371027	0.009603481	0.009041454	0.009468146
IRON	259.940	Radial	50.45704	0.1042775	0.1036178	0.1020655	0.1071493
LEAD	220.353	Axial	5.288467	0.005245665	0.003638067	0.007175791	0.004923136
LITHIUM	670.784	Radial	119.3186	0.01481663	0.01554851	0.01389823	0.01500314
MAGNESIUM	279.079	Radial	63.65060	1.058822	1.061954	1.091734	1.022778
MANGANESE	257.610	Axial	873.2500	0.01029483	0.01032647	0.01028359	0.01027443
MOLYBDENUM	202.030	Axial	9.127888	0.005373082	0.004879124	0.005241999	0.005998125
NICKEL	231.604	Axial	26.74831	0.01064299	0.01059670	0.01039946	0.01093281
POTASSIUM	766.490	Radial	365.7953	0.9949094	0.9703830	0.9948112	1.019534
SELENIUM	196.090	Axial	1.767852	0.01062055	0.003283992	0.01496961	0.01360805
SILICON	251.611	Axial	687.9805	0.1939338	0.1913339	0.1942796	0.1961879
SILVER	328.068	Axial	73.26389	0.004556811	0.004155320	0.004543645	0.004971469
SODIUM	589.592	Radial	1034.687	1.043735	1.045747	1.044013	1.041445
STRONTIUM	421.552	Radial	584.8673	0.01011520	0.01014519	0.01011145	0.01008896
THALLIUM	190.856	Axial	1.803823	0.008884046	0.009505038	0.007457518	0.009689583
TIN	189.989	Axial	15.38251	0.05097870	0.05147796	0.04953935	0.05191879
TITANIUM	334.941	Radial	157.5084	0.05209877	0.05306852	0.05374456	0.04948324
VANADIUM	292.402	Radial	11.21611	0.01744409	0.01800315	0.01953687	0.01479224
ZINC	206.200	Axial	144.2837	0.05022925	0.04981089	0.05062195	0.05025493
CERIUM	535.353	Radial	56.56995	-0.01115913	0.02034148	-0.02712346	-0.02669542
LANTHANUM	333.749	Radial	-1.64891	0.001394868	0.003542894	0.0001580866	0.0004836228
PHOSPHORUS	177.495	Axial	3.724599	0.09423987	0.09818058	0.09567196	0.08886706
SULFUR	182.034	Axial	60.66478	0.8962369	0.8849169	0.8988076	0.9049861

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 15:07 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9024.935	9018.797	9035.939	9020.069
YTTRIUM	360.073	Axial	337927.7	337902.0	338072.5	337808.6
YTTRIUM	360.073	Radial	10454.25	10451.42	10464.28	10447.06
INDIUM	230.606	Axial	2523.099	2520.351	2525.191	2523.755

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38900.14	512.2707	511.3738	511.8393	513.5991
ANTIMONY	206.833	Axial	-4.21425	-0.01927159	-0.03071785	-0.01000847	-0.01708843
ARSENIC	189.042	Axial	-1.19622	-0.003988608	-0.005109872	-0.006987870	0.0001319164
BARIUM	233.527	Axial	11.89711	0.002770571	0.002556434	0.002633594	0.003121684
BERYLLIUM	313.042	Radial	11.33115	-0.00005485471	-0.0001158089	0.00003370941	-0.00008246462
BORON	249.678	Radial	-3.40171	-0.01308163	-0.004837967	-0.01853572	-0.01587121
CADMIUM	228.802	Axial	3.788495	0.00008938720	-0.0003281113	0.0004918757	0.0001043972
CALCIUM	373.690	Radial	269020.4	512.7862	512.7616	511.9219	513.6751
CERIUM	535.353	Radial	295.5106	1.262536	1.290665	1.217843	1.279098
CHROMIUM	267.716	Axial	18.18607	0.001795381	0.001932742	0.001564084	0.001889317
COBALT	228.616	Axial	6.734176	0.001449602	0.0009749434	0.001852693	0.001521170
COPPER	324.754	Axial	-105.983	-0.008350145	-0.008255391	-0.007941546	-0.008853499
IRON	271.441	Radial	4383.162	205.0335	204.5387	205.0261	205.5357
LANTHANUM	333.749	Radial	0.8327233	0.006309580	0.006649638	0.004079406	0.008199694
LEAD	220.353	Axial	-17.9887	-0.03199152	-0.03223117	-0.03265441	-0.03108900
LITHIUM	670.784	Radial	25.60731	0.004295885	0.004701254	0.004032782	0.004153619
MAGNESIUM	279.079	Radial	30088.10	514.0516	514.6089	513.2805	514.2655
MANGANESE	257.610	Axial	518.1852	0.007147605	0.007169166	0.007089190	0.007184460
MOLYBDENUM	202.030	Axial	4.630964	0.002846725	0.002196085	0.004087136	0.002256954
NICKEL	231.604	Axial	18.70865	0.009533711	0.008237703	0.01024096	0.01012247
PHOSPHORUS	177.495	Axial	0.3954614	0.006900232	0.03435876	-0.008556757	-0.005101310
POTASSIUM	766.490	Radial	-83.4076	-0.09269025	-0.09164558	-0.09758799	-0.08883719
SELENIUM	196.090	Axial	1.971147	0.01678457	-0.002558908	0.03626882	0.01664378
SILICON	251.611	Axial	15.77374	-0.007289969	-0.008081474	-0.007305844	-0.006482589
SILVER	328.068	Axial	-63.1184	-0.002859133	-0.002847498	-0.002994738	-0.002735163
SODIUM	589.592	Radial	112.2504	0.08138529	0.08225585	0.07977875	0.08212126
STRONTIUM	421.552	Radial	204.4137	0.003902692	0.003993125	0.003823156	0.003891793
SULFUR	182.034	Axial	0.3732860	0.007773493	0.005936495	0.01240188	0.004982106
THALLIUM	190.856	Axial	2.044080	0.01316823	0.01450920	0.003497702	0.02149778
TIN	189.989	Axial	-5.94300	-0.01723680	-0.01134391	-0.02406766	-0.01629883
TITANIUM	334.941	Radial	124.3830	0.04382336	0.04295263	0.04350725	0.04501021
VANADIUM	292.402	Radial	4.654612	0.006927908	0.006788410	0.006743992	0.007251324
ZINC	206.200	Axial	15.79628	0.006035356	0.005732432	0.005902030	0.006471607

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 15:10 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8947.132	8946.788	8961.001	8933.607
YTTRIUM	360.073	Axial	334506.2	333682.1	335083.2	334753.3
YTTRIUM	360.073	Radial	10406.49	10387.44	10440.63	10391.39
INDIUM	230.606	Axial	2507.608	2506.994	2510.064	2505.765

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38635.73	511.1245	513.1313	510.7419	509.5002
ANTIMONY	206.833	Axial	102.1602	0.4845090	0.4859321	0.4797540	0.4878408
ARSENIC	189.042	Axial	70.20012	0.5283322	0.5239388	0.5300767	0.5309811
BARIUM	233.527	Axial	1915.156	0.5153191	0.5150706	0.5141271	0.5167595
BERYLLIUM	313.042	Radial	9654.668	0.5105242	0.5112916	0.5097695	0.5105115
BORON	249.678	Radial	202.1255	1.015858	1.023984	1.018253	1.005338
CADMIUM	228.802	Axial	5183.471	1.080634	1.079306	1.080538	1.082057
CALCIUM	373.690	Radial	268188.8	513.5476	514.3533	513.2244	513.0649
CERIUM	535.353	Radial	288.0142	1.230125	1.292964	1.183180	1.214231
CHROMIUM	267.716	Axial	3018.217	0.5050518	0.5014830	0.5054544	0.5082179
COBALT	228.616	Axial	1495.505	0.4940633	0.4945985	0.4929934	0.4945981
COPPER	324.754	Axial	7566.042	0.5186385	0.5182762	0.5191153	0.5185239
IRON	271.441	Radial	4314.392	202.7427	202.6899	202.7248	202.8135
LANTHANUM	333.749	Radial	-1.69032	0.001112305	0.001312412	-0.008522089	0.01054659
LEAD	220.353	Axial	551.7066	0.9355537	0.9315050	0.9371078	0.9380483
LITHIUM	670.784	Radial	29.20913	0.004748324	0.003733784	0.004653287	0.005857902
MAGNESIUM	279.079	Radial	30020.42	515.2499	514.3488	514.6346	516.7662
MANGANESE	257.610	Axial	35571.25	0.4889786	0.4879927	0.4879967	0.4909465
MOLYBDENUM	202.030	Axial	633.7222	0.5037329	0.5033583	0.5048280	0.5030126
NICKEL	231.604	Axial	1655.346	0.9886577	0.9879602	0.9894864	0.9885266
PHOSPHORUS	177.495	Axial	0.1481498	-0.0007537725	-0.01033834	-0.02708732	0.03516434
POTASSIUM	766.490	Radial	-93.1205	-0.1184173	-0.1113341	-0.1384267	-0.1054911
SELENIUM	196.090	Axial	39.88629	0.5369599	0.5178516	0.5411939	0.5518344
SILICON	251.611	Axial	2887.733	1.007524	1.004102	1.006918	1.011552
SILVER	328.068	Axial	18535.73	1.110350	1.108746	1.110728	1.111576
SODIUM	589.592	Radial	106.7715	0.07579857	0.06512081	0.08940061	0.07287428
STRONTIUM	421.552	Radial	205.7344	0.003943274	0.003960061	0.003915970	0.003953791
SULFUR	182.034	Axial	0.1776495	0.004430237	0.008289535	0.01116869	-0.006167509
THALLIUM	190.856	Axial	69.60162	0.4564653	0.4501523	0.4531825	0.4660611
TIN	189.989	Axial	122.6235	0.4791161	0.4745211	0.4856169	0.4772103
TITANIUM	334.941	Radial	1607.551	0.5561113	0.5558056	0.5568797	0.5556485
VANADIUM	292.402	Radial	283.1654	0.5042040	0.5052275	0.5011628	0.5062217
ZINC	206.200	Axial	2259.766	0.9324326	0.9320067	0.9326134	0.9326775

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 16:36 Sequence: 43 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10166.34	10184.38	10161.58	10153.05
YTTRIUM	360.073	Axial	378891.3	377272.4	378505.0	380896.5
YTTRIUM	360.073	Radial	11236.34	11290.34	11213.07	11205.62
INDIUM	230.606	Axial	3007.027	3007.715	3002.888	3010.477

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	775.4978	9.461778	9.422177	9.495902	9.467254
ANTIMONY	206.833	Axial	115.3283	0.4813617	0.4838586	0.4838863	0.4763404
ARSENIC	189.042	Axial	151.1471	0.9967790	0.9992043	0.9981890	0.9929437
BARIUM	233.527	Axial	2148.950	0.5088758	0.5093681	0.5087774	0.5084820
BERYLLIUM	313.042	Radial	4149.412	0.2028186	0.2020911	0.2033636	0.2030011
BORON	249.678	Radial	215.0331	1.000977	0.9983991	1.010968	0.9935650
CADMIUM	228.802	Axial	2772.860	0.5083840	0.5074563	0.5090602	0.5086355
CALCIUM	373.690	Radial	26958.91	47.79105	47.59599	47.81948	47.95769
CHROMIUM	267.716	Axial	6991.142	1.030836	1.032572	1.027128	1.032808
COBALT	228.616	Axial	3574.373	0.9854880	0.9853989	0.9856650	0.9854000
COPPER	324.754	Axial	16457.77	0.9970562	0.9982801	0.9998395	0.9930489
IRON	259.940	Radial	4712.565	9.792787	9.762455	9.847810	9.768096
LEAD	220.353	Axial	345.7427	0.4881427	0.4902652	0.4861916	0.4879714
LITHIUM	670.784	Radial	8538.712	0.9634567	0.9601633	0.9659670	0.9642397
MAGNESIUM	279.079	Radial	622.5460	9.929306	9.819973	10.03139	9.936552
MANGANESE	257.610	Axial	80417.02	0.9727909	0.9701397	0.9739080	0.9743250
MOLYBDENUM	202.030	Axial	359.8693	0.2513454	0.2503813	0.2508000	0.2528549
NICKEL	231.604	Axial	2000.551	0.9964014	0.9965362	0.9949937	0.9976743
POTASSIUM	766.490	Radial	19933.03	47.22653	47.03895	47.23609	47.40456
SELENIUM	196.090	Axial	83.79592	1.001273	1.005734	0.9997346	0.9983508
SILICON	251.611	Axial	7337.526	2.268900	2.239180	2.265664	2.301856
SILVER	328.068	Axial	9495.153	0.5026482	0.5039874	0.5032701	0.5006871
SODIUM	818.326	Radial	2841.714	49.10184	49.25484	49.05748	48.99321
STRONTIUM	421.552	Radial	57914.56	0.9653641	0.9619975	0.9669524	0.9671423
SULFUR	182.034	Axial	312.5813	4.772560	4.784669	4.763994	4.769015
THALLIUM	190.856	Axial	174.9509	0.9569820	0.9512684	0.9563535	0.9633240
TIN	189.989	Axial	151.4652	0.4933530	0.4970359	0.4925890	0.4904342
TITANIUM	334.941	Radial	3215.011	1.029154	1.022838	1.032072	1.032552
VANADIUM	292.402	Radial	602.8338	0.9954269	0.9948125	0.9978606	0.9936075
ZINC	206.200	Axial	2710.120	0.9841769	0.9817173	0.9864215	0.9843918
CERIUM	535.353	Radial	68.50579	0.04362617	0.03704053	0.02805429	0.06578368
LANTHANUM	333.749	Radial	-3.43538	-0.001969233	-0.009351308	-0.002510174	0.005953784
PHOSPHORUS	177.495	Axial	36.34373	1.001070	1.010454	0.9947278	0.9980282

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 16:39 Sequence: 44

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10554.81	10546.17	10551.72	10566.54
YTTRIUM	360.073	Axial	400392.5	398137.4	401489.2	401550.8
YTTRIUM	360.073	Radial	11209.86	11209.31	11199.97	11220.29
INDIUM	230.606	Axial	3314.208	3314.574	3311.466	3316.583

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.576078	0.04009638	0.05779049	0.02446438	0.03803426
ANTIMONY	206.833	Axial	0.4150802	0.002193954	0.002718424	0.001503187	0.002360251
ARSENIC	189.042	Axial	-0.06197174	0.004459843	0.001758232	0.005197888	0.006423409
BARIUM	233.527	Axial	3.045103	0.0002894850	0.0002106178	0.0003547616	0.0003030756
BERYLLIUM	313.042	Radial	14.33228	0.00005238464	0.0001282754	-0.00008198746	0.0001108660
BORON	249.678	Radial	1.789233	0.01219010	0.01624260	0.01607162	0.004256075
CADMIUM	228.802	Axial	4.870731	0.0001674474	0.0002912037	-0.00001767710	0.0002288156
CALCIUM	317.933	Radial	156.4483	0.004544231	0.008133268	0.001447073	0.004052352
CERIUM	535.353	Radial	36.30254	-0.1135097	-0.1218712	-0.05044014	-0.1682177
CHROMIUM	267.716	Axial	5.736111	-0.0004132699	0.0004846074	-0.001389028	-0.0003353889
COBALT	228.616	Axial	2.547921	-0.0001267520	-0.0002009529	-0.0001251841	-0.00005411908
COPPER	324.754	Axial	19.05159	-0.00004865431	0.0001950666	-0.0002821814	-0.00005884806
IRON	259.940	Radial	3.160486	0.004621168	0.006009398	0.002725249	0.005128858
LANTHANUM	333.749	Radial	-0.5123821	0.003610823	0.007309353	0.003393422	0.0001296953
LEAD	220.353	Axial	1.582226	0.0004122965	-0.0006701882	0.002007910	-0.0001008323
LITHIUM	670.784	Radial	-11.0200	-0.00005052854	0.0002403939	0.00004095619	-0.0004329357
MAGNESIUM	279.079	Radial	-0.3053151	0.02903000	0.03853734	0.01663798	0.03191467
MANGANESE	257.610	Axial	17.68056	0.0002930526	0.0003003282	0.0003230383	0.0002557912
MOLYBDENUM	202.030	Axial	1.857402	0.0004457553	0.0001369704	0.0006984825	0.0005018132
NICKEL	231.604	Axial	4.473304	0.0004362553	0.0008980695	0.0005031712	-0.00009247472
PHOSPHORUS	177.495	Axial	0.3441003	0.003721518	-0.01493023	0.007880817	0.01821397
POTASSIUM	766.490	Radial	-29.6968	0.04881755	0.06832778	0.03427949	0.04384536
SELENIUM	196.090	Axial	0.9398009	0.0009224631	-0.007417469	0.008585359	0.001599500
SILICON	251.611	Axial	118.8530	0.02278313	0.02301394	0.02264608	0.02268936
SILVER	328.068	Axial	-22.7083	-0.0002552392	-0.0003473183	-0.0003017429	-0.0001166563
SODIUM	589.592	Radial	158.0476	0.1205787	0.1331655	0.1206632	0.1079074
STRONTIUM	421.552	Radial	-6.84840	0.0001269849	0.00003642730	0.0001759529	0.0001685744
SULFUR	182.034	Axial	1.232101	0.01947643	0.02128380	0.02568084	0.01146464
THALLIUM	190.856	Axial	0.6727794	0.003181162	0.006005470	0.009319571	-0.005781555
TIN	189.989	Axial	-0.9028009	0.002931049	0.005244861	0.001673907	0.001874379
TITANIUM	334.941	Radial	1.455164	0.001539945	0.001606646	0.001407501	0.001605687
VANADIUM	292.402	Radial	1.476659	0.001099968	0.001734819	-0.004475018	0.006040103
ZINC	206.200	Axial	1.291301	0.00002231431	-0.00002511345	-0.0002273678	0.0003194242

Sample ID: L1569102-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:42 Sequence: 45

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10310.23	10332.96	10309.60	10288.13
YTTRIUM	360.073	Axial	387283.3	387276.2	386308.6	388265.1
YTTRIUM	360.073	Radial	11331.02	11340.38	11311.07	11341.61
INDIUM	230.606	Axial	3121.619	3124.242	3126.551	3114.065

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	10.46158	0.05198417	0.04748097	0.06242538	0.04604615
ALUMINUM	308.215	Radial	15.37873	0.1462000	0.1200416	0.1516474	0.1669110
ANTIMONY	206.833	Axial	-0.2472856	-0.0004894628	-0.0005499161	-0.0005264545	-0.0003920177
ARSENIC	189.042	Axial	0.09559939	0.005471722	0.006176311	0.003822464	0.006416392
BARIUM	233.527	Axial	274.8377	0.06382004	0.06344228	0.06374260	0.06427522
BERYLLIUM	313.042	Radial	13.93560	0.00002571579	-0.00007252989	0.0001366301	0.00001304719
CADMIUM	228.802	Axial	2.882635	-0.0001716146	-0.0003998727	-0.0002775102	0.0001625389
CALCIUM	373.690	Radial	34410.32	60.49591	60.42069	60.53288	60.53416
CERIUM	535.353	Radial	67.90518	0.03787583	0.06646510	0.01977155	0.02739084
CHROMIUM	267.716	Axial	33.84854	0.003697052	0.004147940	0.004305286	0.002637930
COBALT	228.616	Axial	3.573871	0.0001851329	0.0002276505	0.0002809822	0.00004676606
COPPER	324.754	Axial	15.42653	-0.0002276280	-0.0003295468	-0.0002974972	-0.00005583998
IRON	271.441	Radial	565.0643	24.37827	24.60806	24.27010	24.25665
LANTHANUM	333.749	Radial	3.671286	0.01156603	0.009177315	0.008942084	0.01657868
LEAD	220.353	Axial	2.260366	0.001462648	0.0009835004	0.001756549	0.001647893
LITHIUM	670.784	Radial	90.24386	0.01127861	0.009891666	0.01086734	0.01307683
MAGNESIUM	279.079	Radial	480.2379	7.603377	7.563440	7.653887	7.592805
MANGANESE	257.610	Axial	157655.2	1.880431	1.876518	1.880659	1.884116
MOLYBDENUM	202.030	Axial	1.428325	0.0001776198	0.001051758	0.0005191110	-0.001038009
NICKEL	231.604	Axial	6.157675	0.001371167	0.0003194065	0.001697339	0.002096755
PHOSPHORUS	177.495	Axial	14.01038	0.3771595	0.3674773	0.3825698	0.3814315
POTASSIUM	766.490	Radial	262.6013	0.7345925	0.7051462	0.7540613	0.7445702
SELENIUM	196.090	Axial	0.8729739	0.0003905537	-0.005606866	0.009462163	-0.002683636
SILICON	251.611	Axial	19674.20	6.019735	6.001546	6.020417	6.037242
SILVER	328.068	Axial	-30.0537	-0.0006733316	-0.0006531420	-0.0007840377	-0.0005828150
SODIUM	589.592	Radial	10360.81	10.61588	10.61290	10.62960	10.60512
STRONTIUM	421.552	Radial	8046.468	0.1332110	0.1332090	0.1332161	0.1332078
SULFUR	182.034	Axial	51.11533	0.7706846	0.7699993	0.7775886	0.7644658
THALLIUM	190.856	Axial	0.2320003	0.001056552	0.002598492	0.002771615	-0.002200451
TIN	189.989	Axial	-2.14887	-0.001097484	-0.001174352	-0.0007568092	-0.001361290
TITANIUM	334.941	Radial	42.03972	0.01440579	0.01365675	0.01609019	0.01347045
VANADIUM	292.402	Radial	-2.12813	-0.004834204	-0.01243907	-0.005119921	0.003056383
ZINC	206.200	Axial	44.48759	0.01550739	0.01552858	0.01584709	0.01514648

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:44 Sequence: 46

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10257.29	10266.61	10273.53	10231.72
YTTRIUM	360.073	Axial	383498.4	385012.1	383387.2	382095.9
YTTRIUM	360.073	Radial	11335.63	11395.20	11326.84	11284.84
INDIUM	230.606	Axial	3091.718	3095.055	3094.361	3085.736

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	11.64175	0.05737303	0.05945392	0.05746454	0.05520063
ALUMINUM	308.215	Radial	12.71592	0.1137412	0.1221543	0.1212939	0.09777554
ANTIMONY	206.833	Axial	-0.7451494	-0.002556126	-0.001328410	-0.0006629974	-0.005676969
ARSENIC	189.042	Axial	-0.2983914	0.002918913	0.0002607803	0.0001131351	0.008382824
BARIUM	233.527	Axial	267.8702	0.06251459	0.06227188	0.06254914	0.06272275
BERYLLIUM	313.042	Radial	14.35480	0.00004512744	0.0002611442	-0.00004290733	-0.00008285455
CADMIUM	228.802	Axial	3.348817	-0.00008427960	-0.0002964461	-0.00006699627	0.0001106035
CALCIUM	373.690	Radial	34529.60	60.68211	60.32178	60.72057	61.00397
CERIUM	535.353	Radial	73.26213	0.06370692	0.05630632	0.1093313	0.02548311
CHROMIUM	267.716	Axial	30.07021	0.003169683	0.003957960	0.003282167	0.002268922
COBALT	228.616	Axial	2.964112	0.00003073135	0.00007418296	0.0001181639	-0.0001001529
COPPER	324.754	Axial	18.44477	-0.00003747180	-0.00007924983	0.000007219450	-0.00004038500
IRON	271.441	Radial	550.7717	23.75229	23.61593	23.73766	23.90328
LANTHANUM	333.749	Radial	0.8459093	0.006196620	0.005537473	0.01076216	0.002290229
LEAD	220.353	Axial	0.6879972	-0.0006751659	0.0009847599	-0.001206855	-0.001803403
LITHIUM	670.784	Radial	94.18638	0.01171478	0.01139036	0.01301909	0.01073489
MAGNESIUM	279.079	Radial	470.8610	7.452513	7.461317	7.435486	7.460737
MANGANESE	257.610	Axial	155550.0	1.864897	1.865333	1.861289	1.868070
MOLYBDENUM	202.030	Axial	1.261168	0.00006779104	0.0001923897	0.0002159153	-0.0002049318
NICKEL	231.604	Axial	7.241522	0.001924727	0.002452570	0.001596996	0.001724613
PHOSPHORUS	177.495	Axial	13.05967	0.3530307	0.3682549	0.3383019	0.3525353
POTASSIUM	766.490	Radial	284.3700	0.7852767	0.7991488	0.7844735	0.7722078
SELENIUM	196.090	Axial	-0.08618300	-0.01102698	-0.01485860	-0.01079551	-0.007426830
SILICON	251.611	Axial	19158.90	5.892037	5.907797	5.871316	5.896998
SILVER	328.068	Axial	-28.8266	-0.0006242026	-0.0004957867	-0.001119015	-0.0002578055
SODIUM	589.592	Radial	10243.97	10.49151	10.43863	10.52579	10.51009
STRONTIUM	421.552	Radial	8051.423	0.1332406	0.1326159	0.1334054	0.1337006
SULFUR	182.034	Axial	49.88332	0.7560419	0.7625453	0.7350457	0.7705347
THALLIUM	190.856	Axial	0.5430438	0.002729633	0.004248964	-0.001284450	0.005224385
TIN	189.989	Axial	-2.61875	-0.002635407	-0.001612007	-0.001517376	-0.004776839
TITANIUM	334.941	Radial	41.22356	0.01413769	0.01507960	0.01369200	0.01364146
VANADIUM	292.402	Radial	-0.9991213	-0.002997635	0.002185387	-0.003801374	-0.007376918
ZINC	206.200	Axial	42.60463	0.01491207	0.01484405	0.01483475	0.01505741

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-03 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:47 Sequence: 47

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9886.161	9899.449	9869.453	9889.581
YTTRIUM	360.073	Axial	372174.9	372464.7	373098.5	370961.3
YTTRIUM	360.073	Radial	11072.58	11049.50	11065.43	11102.82
INDIUM	230.606	Axial	2915.202	2916.356	2911.199	2918.051

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	20.43511	0.1000225	0.09444505	0.1024888	0.1031336
ALUMINUM	308.215	Radial	6.235399	0.03688989	0.05675352	0.03046448	0.02345166
ANTIMONY	206.833	Axial	-0.8104120	-0.002951438	0.0003415246	-0.007044529	-0.002151309
ARSENIC	189.042	Axial	-1.00515	-0.001929705	-0.005976212	-0.002805372	0.002992469
BARIUM	233.527	Axial	582.7335	0.1416115	0.1412515	0.1423419	0.1412410
BERYLLIUM	313.042	Radial	13.52191	0.00002084725	-0.00008244323	0.0001656236	-0.00002063862
CADMIUM	228.802	Axial	2.806687	-0.0001640756	0.00006735260	-0.0002017826	-0.0003577969
CALCIUM	373.690	Radial	89356.75	160.7983	160.5341	161.0829	160.7779
CERIUM	535.353	Radial	147.4749	0.4406464	0.5003225	0.3303075	0.4913092
CHROMIUM	267.716	Axial	14.43254	0.0009622863	0.0004281757	0.001171884	0.001286799
COBALT	228.616	Axial	3.685940	0.0002843230	0.0003417666	0.00008961547	0.0004215871
COPPER	324.754	Axial	14.95775	-0.0002191578	0.00003167614	-0.0004225788	-0.0002665707
IRON	259.940	Radial	4283.708	9.033010	9.005989	9.034454	9.058587
LANTHANUM	333.749	Radial	-0.4995838	0.003629285	0.004269699	0.008805962	-0.002187805
LEAD	220.353	Axial	1.499196	0.0005702892	0.00005063317	0.002714147	-0.001053913
LITHIUM	670.784	Radial	554.6138	0.06461880	0.06545463	0.06262322	0.06577853
MAGNESIUM	279.079	Radial	977.7369	15.80446	15.75244	15.81921	15.84174
MANGANESE	257.610	Axial	56461.85	0.7023894	0.7025918	0.7040060	0.7005703
MOLYBDENUM	202.030	Axial	1.515824	0.0002845617	0.0001747235	0.0003206633	0.0003582983
NICKEL	231.604	Axial	6.559068	0.001786312	0.001945590	0.001473725	0.001939621
PHOSPHORUS	177.495	Axial	0.3032977	0.003175805	0.01254739	-0.01367137	0.01065139
POTASSIUM	766.490	Radial	2061.951	5.064115	5.027520	5.078365	5.086460
SELENIUM	196.090	Axial	0.6657463	-0.001731108	0.006233132	0.01232917	-0.02375562
SILICON	251.611	Axial	27747.87	8.860218	8.881139	8.868057	8.831459
SILVER	328.068	Axial	-29.1843	-0.0006905915	-0.0006252933	-0.0001473086	-0.001299173
SODIUM	589.592	Radial	16894.53	17.74374	17.74250	17.75024	17.73849
STRONTIUM	421.552	Radial	36654.14	0.6200937	0.6180139	0.6206516	0.6216155
SULFUR	182.034	Axial	9.147052	0.1449283	0.1452536	0.1359427	0.1535884
THALLIUM	190.856	Axial	1.368419	0.007561252	0.01108758	0.008025806	0.003570373
TIN	189.989	Axial	-3.68238	-0.006665666	-0.005820029	-0.009958404	-0.004218566
TITANIUM	334.941	Radial	78.25538	0.02646725	0.02639591	0.02642434	0.02658150
VANADIUM	292.402	Radial	-1.24898	-0.003439206	-0.001950127	-0.004886478	-0.003481012
ZINC	206.200	Axial	42.20793	0.01533961	0.01523761	0.01531760	0.01546361

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-04 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:50 Sequence: 48

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10134.84	10148.15	10131.48	10124.88
YTTRIUM	360.073	Axial	383649.4	383716.3	383317.3	383914.5
YTTRIUM	360.073	Radial	11120.84	11125.33	11112.18	11125.01
INDIUM	230.606	Axial	3031.087	3030.225	3036.541	3026.494

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	10.72777	0.05412560	0.06536889	0.03979362	0.05721428
ALUMINUM	308.215	Radial	6.846549	0.04408645	0.09458761	0.02278059	0.01489114
ANTIMONY	206.833	Axial	-1.22167	-0.004581658	-0.005352024	-0.004944033	-0.003448918
ARSENIC	189.042	Axial	-0.4260823	0.002047985	0.002428470	0.0009530202	0.002762465
BARIUM	233.527	Axial	212.4124	0.05009092	0.04975241	0.05021502	0.05030534
BERYLLIUM	313.042	Radial	14.88045	0.00008527977	-0.00003870297	0.0001875552	0.0001069870
CADMIUM	228.802	Axial	3.321959	-0.00008182626	-0.0004794503	0.0001479458	0.00008602577
CALCIUM	373.690	Radial	37301.36	66.82023	66.63961	66.83632	66.98477
CERIUM	535.353	Radial	95.62297	0.1811465	0.2236601	0.1725611	0.1472185
CHROMIUM	267.716	Axial	14.22343	0.0008771429	0.001276018	-0.00007616132	0.001431572
COBALT	228.616	Axial	4.117852	0.0003621703	0.0006257793	0.0006390774	-0.0001783458
COPPER	324.754	Axial	29.98476	0.0006531429	0.0005079301	0.0004462026	0.001005296
IRON	259.940	Radial	671.4970	1.408186	1.392882	1.411938	1.419739
LANTHANUM	333.749	Radial	2.092836	0.008644909	0.01810227	0.009030234	-0.001197777
LEAD	220.353	Axial	2.904707	0.002460538	0.003847864	0.001591092	0.001942659
LITHIUM	670.784	Radial	241.9687	0.02874518	0.02832894	0.02769890	0.03020769
MAGNESIUM	279.079	Radial	681.3524	10.97625	10.90974	10.98855	11.03045
MANGANESE	257.610	Axial	32489.86	0.3942970	0.3937965	0.3939318	0.3951628
MOLYBDENUM	202.030	Axial	2.411598	0.0008873092	0.0008051295	0.001135562	0.0007212363
NICKEL	231.604	Axial	4.720064	0.0007468994	0.001356703	0.0009447977	-0.00006080288
PHOSPHORUS	177.495	Axial	1.025004	0.02301065	0.04013087	0.04205665	-0.01315557
POTASSIUM	766.490	Radial	1462.654	3.611695	3.549752	3.604758	3.680576
SELENIUM	196.090	Axial	0.5275554	-0.003611224	-0.006510981	-0.004533756	0.0002110642
SILICON	251.611	Axial	20861.78	6.494540	6.505088	6.480138	6.498394
SILVER	328.068	Axial	-32.2270	-0.0008014468	-0.001067353	-0.0009889474	-0.0003480398
SODIUM	589.592	Radial	18698.66	19.55781	19.48585	19.55291	19.63465
STRONTIUM	421.552	Radial	22573.53	0.3803239	0.3785678	0.3803531	0.3820510
SULFUR	182.034	Axial	7.807746	0.1209015	0.1284880	0.1101658	0.1240507
THALLIUM	190.856	Axial	1.315293	0.006976381	0.01224201	0.005241075	0.003446053
TIN	189.989	Axial	-1.88646	-0.0004581484	-0.003050818	0.0007902445	0.0008861286
TITANIUM	334.941	Radial	46.20578	0.01600265	0.01441370	0.01693365	0.01666060
VANADIUM	292.402	Radial	0.03701543	-0.001282368	-0.001390521	-0.001158608	-0.001297974
ZINC	206.200	Axial	47.97130	0.01705328	0.01663931	0.01744838	0.01707214

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:53 Sequence: 49

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10154.49	10158.83	10145.63	10159.00
YTTRIUM	360.073	Axial	380192.1	381834.8	380977.8	377763.7
YTTRIUM	360.073	Radial	11190.40	11223.32	11187.71	11160.16
INDIUM	230.606	Axial	2997.136	2993.395	2995.171	3002.842

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	42.26035	0.2006370	0.2015199	0.1959826	0.2044086
ALUMINUM	308.215	Radial	29.95357	0.3278368	0.3512200	0.3101520	0.3221385
ANTIMONY	206.833	Axial	-0.5254810	-0.001665903	-0.004850012	-0.0004897104	0.0003420150
ARSENIC	189.042	Axial	1.637603	0.01561133	0.01512998	0.01281573	0.01888828
BARIUM	233.527	Axial	21.37442	0.004665861	0.004588344	0.004663026	0.004746214
BERYLLIUM	313.042	Radial	12.92101	-0.00001573684	-0.00007686997	0.00002257375	0.000007085693
CADMIUM	228.802	Axial	4.240870	0.00008566158	0.0001739754	0.0001386470	-0.00005563768
CALCIUM	317.933	Radial	2768.485	2.613341	2.607499	2.622093	2.610430
CERIUM	535.353	Radial	48.27717	-0.05431726	-0.1374646	0.03198297	-0.05747014
CHROMIUM	267.716	Axial	441.3560	0.06400213	0.06335534	0.06409188	0.06455917
COBALT	228.616	Axial	3.549058	0.0002176800	-0.000008462109	0.0002478511	0.0004136508
COPPER	324.754	Axial	150.6147	0.007960719	0.007992636	0.008007449	0.007882074
IRON	259.940	Radial	37.73019	0.07677350	0.07952832	0.07668988	0.07410229
LANTHANUM	333.749	Radial	0.7473510	0.006036823	0.003316492	0.005632832	0.009161144
LEAD	220.353	Axial	2.024696	0.001255741	0.0005638601	0.002174120	0.001029243
LITHIUM	670.784	Radial	2908.413	0.3303000	0.3293499	0.3302675	0.3312827
MAGNESIUM	279.079	Radial	-0.5958163	0.02442182	0.02396463	-0.01384925	0.06315009
MANGANESE	257.610	Axial	306.2861	0.003796126	0.003794195	0.003812134	0.003782048
MOLYBDENUM	202.030	Axial	52.85002	0.03626610	0.03600711	0.03588183	0.03690937
NICKEL	231.604	Axial	8.025550	0.002428944	0.002561076	0.003092666	0.001633089
PHOSPHORUS	177.495	Axial	1.416720	0.03382914	0.02285524	0.02316836	0.05546382
POTASSIUM	766.490	Radial	939.2307	2.347997	2.296304	2.378812	2.368873
SELENIUM	196.090	Axial	1.856789	0.01243333	0.01690074	0.01002296	0.01037628
SILICON	251.611	Axial	70864.21	22.04894	22.03493	22.12655	21.98532
SILVER	328.068	Axial	-22.3590	-0.0002963556	-0.0006075064	-0.0001013156	-0.0001802449
SODIUM	818.326	Radial	6477.633	114.2810	113.8431	114.3781	114.6217
STRONTIUM	421.552	Radial	2873.607	0.04832516	0.04817289	0.04857755	0.04822503
SULFUR	182.034	Axial	622.8694	9.519863	9.522699	9.497220	9.539671
THALLIUM	190.856	Axial	1.203734	0.006446268	0.006416661	0.007805036	0.005117106
TIN	189.989	Axial	-0.5809211	0.003690618	0.0005418148	0.005748404	0.004781635
TITANIUM	334.941	Radial	1.654618	0.001603524	0.001945786	0.002440518	0.0004242688
VANADIUM	292.402	Radial	5.365331	0.007571022	0.003524274	0.007808052	0.01138074
ZINC	206.200	Axial	40.57095	0.01432723	0.01490216	0.01373049	0.01434903

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:56 Sequence: 50

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10347.46	10343.12	10346.66	10352.62
YTTRIUM	360.073	Axial	392137.3	392656.7	390268.8	393486.5
YTTRIUM	360.073	Radial	11272.86	11278.96	11265.14	11274.47
INDIUM	230.606	Axial	3145.392	3140.504	3147.880	3147.791

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	2.856116	0.01707295	0.01923253	0.02504397	0.006942357
ALUMINUM	308.215	Radial	6.178064	0.03479532	0.01508797	0.05355397	0.03574402
ANTIMONY	206.833	Axial	-0.7422148	-0.002513047	-0.003247824	0.00000006061108	-0.004291377
ARSENIC	189.042	Axial	-0.2084878	0.003509303	0.001501458	0.009950731	-0.0009242818
BARIUM	233.527	Axial	138.8833	0.03193241	0.03203645	0.03204085	0.03171994
BERYLLIUM	313.042	Radial	14.24143	0.00004407094	0.00003677270	0.00006644717	0.00002899296
CADMIUM	228.802	Axial	1.967012	-0.0003391208	-0.0002039490	-0.0008920916	0.00007867821
CALCIUM	317.933	Radial	15140.34	14.85793	14.88680	14.82710	14.85988
CERIUM	535.353	Radial	62.97863	0.01556642	0.007897093	0.02222293	0.01657924
CHROMIUM	267.716	Axial	71.58527	0.009153984	0.009733762	0.009410297	0.008317892
COBALT	228.616	Axial	3.580654	0.0001799694	0.0002509443	0.0004392953	-0.0001503314
COPPER	324.754	Axial	-11.1487	-0.001795909	-0.002126942	-0.001625753	-0.001635032
IRON	271.441	Radial	1001.424	43.43458	43.48640	43.15330	43.66405
LANTHANUM	333.749	Radial	0.7621169	0.006051796	-0.007386534	0.009524513	0.01601741
LEAD	220.353	Axial	1.926440	0.0009878053	0.002042117	0.0007507480	0.0001705509
LITHIUM	670.784	Radial	152.6190	0.01833738	0.01829840	0.01769377	0.01901997
MAGNESIUM	279.079	Radial	130.3078	2.098389	2.081022	2.093181	2.120964
MANGANESE	257.610	Axial	709579.9	8.432724	8.431480	8.434512	8.432181
MOLYBDENUM	202.030	Axial	0.7770008	-0.0002728051	-0.0002572914	-0.0002956898	-0.0002654342
NICKEL	231.604	Axial	7.729308	0.002098215	0.002854478	0.001743839	0.001696326
PHOSPHORUS	177.495	Axial	15.46232	0.4152808	0.4245209	0.4080627	0.4132586
POTASSIUM	766.490	Radial	364.4105	0.9775704	0.9892194	0.9713874	0.9721043
SELENIUM	196.090	Axial	1.021201	0.002108355	0.0007967183	0.004390742	0.001137604
SILICON	251.611	Axial	13029.79	3.968015	3.975084	3.957010	3.971952
SILVER	328.068	Axial	-13.2039	0.0002062004	0.0002685002	0.0001164539	0.0002336471
SODIUM	589.592	Radial	5801.558	5.955899	5.959135	5.932676	5.975886
STRONTIUM	421.552	Radial	5557.425	0.09255277	0.09264546	0.09229182	0.09272103
SULFUR	182.034	Axial	8.487808	0.1286418	0.1096048	0.1312097	0.1451109
THALLIUM	190.856	Axial	-0.7071908	-0.003863565	-0.007231532	-0.003048890	-0.001310274
TIN	189.989	Axial	-1.08040	0.002240982	-0.0001810636	0.002905670	0.003998340
TITANIUM	334.941	Radial	8.795522	0.003876797	0.003681129	0.002970601	0.004978660
VANADIUM	292.402	Radial	-1.69045	-0.004130880	0.00007088698	-0.004135558	-0.008327968
ZINC	206.200	Axial	53.09505	0.01852279	0.01857296	0.01883193	0.01816347

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-03 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:59 Sequence: 51

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10031.73	10042.56	10012.14	10040.49
YTTRIUM	360.073	Axial	381164.7	380862.0	380998.3	381633.7
YTTRIUM	360.073	Radial	11082.51	11083.62	11094.05	11069.85
INDIUM	230.606	Axial	2998.403	2998.551	2992.671	3003.986

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	9.423301	0.04817120	0.05025259	0.04854810	0.04571289
ALUMINUM	308.215	Radial	5.438847	0.02687649	0.02094798	0.06253305	-0.002851564
ANTIMONY	206.833	Axial	-0.9743354	-0.003594692	-0.0009737993	-0.008639856	-0.001170422
ARSENIC	189.042	Axial	-1.37895	-0.004316683	-0.007473016	-0.003040469	-0.002436566
BARIUM	233.527	Axial	317.1735	0.07577089	0.07546669	0.07642123	0.07542476
BERYLLIUM	313.042	Radial	14.27962	0.00005797413	-0.00008044607	0.00005953190	0.0001948366
CADMIUM	228.802	Axial	3.672276	-0.00001049425	-0.0001043559	0.0001099029	-0.00003702973
CALCIUM	373.690	Radial	59665.31	107.2650	107.4177	107.1702	107.2071
CERIUM	535.353	Radial	105.4870	0.2317034	0.2661968	0.2350290	0.1938843
CHROMIUM	267.716	Axial	18.48541	0.001536482	0.0009876871	0.001472247	0.002149512
COBALT	228.616	Axial	4.295397	0.0004245640	0.0006030097	0.0007862305	-0.0001155482
COPPER	324.754	Axial	9.741947	-0.0005554496	-0.0003967900	-0.0007436635	-0.0005258953
IRON	259.940	Radial	9176.541	19.33547	19.37033	19.33305	19.30302
LANTHANUM	333.749	Radial	-0.9281919	0.002792226	0.003461681	0.0004020811	0.004512916
LEAD	220.353	Axial	1.686735	0.0007746436	0.001569299	0.0006271620	0.0001274701
LITHIUM	670.784	Radial	193.6360	0.02331800	0.02452372	0.02332769	0.02210258
MAGNESIUM	279.079	Radial	886.1903	14.31511	14.32555	14.31271	14.30707
MANGANESE	257.610	Axial	92608.03	1.135279	1.134031	1.137109	1.134698
MOLYBDENUM	202.030	Axial	1.238923	0.00007161071	0.0007197335	-0.0003265009	-0.0001784004
NICKEL	231.604	Axial	5.845074	0.001335931	0.0009213642	0.001746051	0.001340378
PHOSPHORUS	177.495	Axial	0.8134224	0.01738150	0.01913734	0.01669029	0.01631687
POTASSIUM	766.490	Radial	753.1936	1.923841	1.945057	1.945268	1.881199
SELENIUM	196.090	Axial	0.4339122	-0.004697823	-0.001411530	-0.009275504	-0.003406435
SILICON	251.611	Axial	23053.66	7.252169	7.242365	7.258758	7.255386
SILVER	328.068	Axial	-24.4567	-0.0004040747	-0.0004758365	-0.0002698334	-0.0004665543
SODIUM	589.592	Radial	10034.50	10.51167	10.50793	10.49139	10.53569
STRONTIUM	421.552	Radial	24231.21	0.4096464	0.4102622	0.4092984	0.4093784
SULFUR	182.034	Axial	11.15045	0.1738534	0.1524651	0.1854071	0.1836880
THALLIUM	190.856	Axial	0.03696962	0.00004238591	-0.003489331	0.003088261	0.0005282280
TIN	189.989	Axial	-3.92267	-0.007100395	-0.006009702	-0.008028785	-0.007262699
TITANIUM	334.941	Radial	63.46814	0.02164987	0.02278856	0.02190052	0.02026052
VANADIUM	292.402	Radial	-1.21007	-0.003372941	-0.003065641	-0.003431346	-0.003621835
ZINC	206.200	Axial	43.57572	0.01561465	0.01532053	0.01589896	0.01562445

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-04 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 17:02 Sequence: 52

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9988.675	9983.306	9981.300	10001.42
YTTRIUM	360.073	Axial	378271.7	379608.7	374925.0	380281.3
YTTRIUM	360.073	Radial	11151.26	11193.77	11166.78	11093.24
INDIUM	230.606	Axial	2973.630	2975.536	2969.952	2975.402

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	8.879029	0.04535581	0.04653033	0.04390549	0.04563161
ALUMINUM	308.215	Radial	6.398986	0.03829794	0.04681055	0.04486455	0.02321873
ANTIMONY	206.833	Axial	-0.7339854	-0.002587187	-0.001857123	-0.002641435	-0.003263002
ARSENIC	189.042	Axial	1.286903	0.01345281	0.007606725	0.02483163	0.007920086
BARIUM	233.527	Axial	325.7729	0.07817330	0.07770110	0.07926815	0.07755066
BERYLLIUM	313.042	Radial	13.70038	0.00002468672	0.00004833512	0.00009880859	-0.00007308355
CADMIUM	228.802	Axial	0.8024988	-0.0005440049	-0.0004431158	-0.0007756209	-0.0004132779
CALCIUM	373.690	Radial	71030.20	126.9143	126.6481	126.7692	127.3255
CERIUM	535.353	Radial	110.3026	0.2523167	0.2467530	0.2233553	0.2868416
CHROMIUM	267.716	Axial	36.62470	0.004273441	0.004220398	0.003693904	0.004906020
COBALT	228.616	Axial	11.52026	0.002449810	0.002200073	0.002460637	0.002688721
COPPER	324.754	Axial	17.44150	-0.00008230021	-0.0001864874	0.0001225374	-0.0001829505
IRON	271.441	Radial	574.7520	25.19659	25.00354	25.35535	25.23089
LANTHANUM	333.749	Radial	0.9421176	0.006420272	0.004433468	0.005557259	0.009270089
LEAD	220.353	Axial	1.285380	0.0002189058	0.003261866	-0.0004867137	-0.002118435
LITHIUM	670.784	Radial	81.74693	0.01047563	0.01032720	0.01118849	0.009911198
MAGNESIUM	279.079	Radial	670.1744	10.76741	10.73732	10.78673	10.77818
MANGANESE	257.610	Axial	291530.9	3.589082	3.593270	3.586708	3.587267
MOLYBDENUM	202.030	Axial	2.185595	0.0007505780	0.0002615127	0.0006657341	0.001324487
NICKEL	231.604	Axial	9.076187	0.002989620	0.003240707	0.002380786	0.003347369
PHOSPHORUS	177.495	Axial	8.777065	0.2419640	0.2412331	0.2585036	0.2261552
POTASSIUM	766.490	Radial	905.6164	2.275848	2.248001	2.247146	2.332396
SELENIUM	196.090	Axial	0.8728918	0.0007228149	-0.01309221	0.01501422	0.0002464341
SILICON	251.611	Axial	22537.30	7.120060	7.114937	7.133108	7.112135
SILVER	328.068	Axial	-22.2783	-0.0002985361	0.0001057096	-0.0003309026	-0.0006704154
SODIUM	589.592	Radial	5541.669	5.749692	5.733086	5.744782	5.771207
STRONTIUM	421.552	Radial	18731.14	0.3147692	0.3139718	0.3149076	0.3154284
SULFUR	182.034	Axial	12.57932	0.1967892	0.2116790	0.1932562	0.1854325
THALLIUM	190.856	Axial	-0.005765837	-0.0001928698	0.001522454	0.001782846	-0.003883910
TIN	189.989	Axial	-3.14739	-0.004681690	-0.001728120	-0.006338359	-0.005978590
TITANIUM	334.941	Radial	70.86360	0.02390682	0.02419352	0.02338786	0.02413908
VANADIUM	292.402	Radial	-2.74075	-0.005894572	-0.009826071	-0.007812334	-0.00004531062
ZINC	206.200	Axial	52.08052	0.01882837	0.01870754	0.01900712	0.01877044

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 17:08 Sequence: 54 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10021.55	10010.15	10011.38	10043.12
YTTRIUM	360.073	Axial	378111.9	377848.2	377653.3	378834.2
YTTRIUM	360.073	Radial	11227.84	11243.27	11219.17	11221.07
INDIUM	230.606	Axial	2951.437	2951.983	2947.428	2954.900

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	808.1940	9.869793	9.908374	9.867516	9.833490
ANTIMONY	206.833	Axial	116.6017	0.4937027	0.4978321	0.4938832	0.4893928
ARSENIC	189.042	Axial	152.1688	1.017917	1.022205	1.016127	1.015421
BARIUM	233.527	Axial	2070.966	0.4974867	0.4975867	0.4983645	0.4965091
BERYLLIUM	313.042	Radial	4036.323	0.1974218	0.1967970	0.1982159	0.1972525
BORON	249.678	Radial	211.1197	0.9835635	0.9905661	0.9806544	0.9794701
CADMIUM	228.802	Axial	2719.690	0.5058360	0.5050729	0.5070587	0.5053763
CALCIUM	373.690	Radial	27473.22	48.73966	48.65193	48.89574	48.67132
CHROMIUM	267.716	Axial	6594.603	0.9863666	0.9891778	0.9870373	0.9828848
COBALT	228.616	Axial	3632.008	1.020267	1.019376	1.022057	1.019368
COPPER	324.754	Axial	16889.23	1.025329	1.025444	1.027326	1.023215
IRON	259.940	Radial	4697.805	9.769464	9.738123	9.816820	9.753448
LEAD	220.353	Axial	338.5967	0.4870559	0.4875817	0.4880788	0.4855073
LITHIUM	670.784	Radial	8624.341	0.9738361	0.9721437	0.9769414	0.9724232
MAGNESIUM	279.079	Radial	600.3761	9.583958	9.495748	9.622489	9.633637
MANGANESE	257.610	Axial	79852.37	0.9799159	0.9810196	0.9813741	0.9773540
MOLYBDENUM	202.030	Axial	359.9106	0.2550171	0.2554570	0.2550244	0.2545698
NICKEL	231.604	Axial	1963.023	0.9961255	0.9952899	0.9963728	0.9967139
POTASSIUM	766.490	Radial	20483.76	48.56431	48.47161	48.71165	48.50968
SELENIUM	196.090	Axial	83.44818	1.011626	1.016697	1.002474	1.015708
SILICON	251.611	Axial	43163.45	13.60288	13.67805	13.17292	13.95767
SILVER	328.068	Axial	9278.141	0.4921866	0.4919954	0.4934472	0.4911172
SODIUM	818.326	Radial	2910.330	50.36256	50.30035	50.39765	50.38969
STRONTIUM	421.552	Radial	59028.99	0.9846739	0.9825729	0.9876243	0.9838244
SULFUR	182.034	Axial	301.3831	4.668128	4.674022	4.685086	4.645275
THALLIUM	190.856	Axial	174.3938	0.9719075	0.9710943	0.9732353	0.9713930
TIN	189.989	Axial	148.3428	0.4922947	0.4898429	0.4927560	0.4942853
TITANIUM	334.941	Radial	3141.093	1.006264	1.004481	1.007876	1.006434
VANADIUM	292.402	Radial	603.1065	0.9966391	0.9867679	1.005976	0.9971734
ZINC	206.200	Axial	2670.676	0.9838647	0.9855979	0.9837214	0.9822749
CERIUM	535.353	Radial	76.11221	0.08107803	0.1176003	0.002460956	0.1231728
LANTHANUM	333.749	Radial	-2.59185	-0.0003760625	-0.0001021792	-0.005220302	0.004194293
PHOSPHORUS	177.495	Axial	34.85668	0.9738567	0.9662711	0.9963264	0.9589725

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 17:10 Sequence: 55

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10407.56	10396.30	10399.30	10427.08
YTTRIUM	360.073	Axial	396005.7	396425.7	395711.0	395880.5
YTTRIUM	360.073	Radial	11084.82	11106.39	11063.49	11084.57
INDIUM	230.606	Axial	3247.015	3242.743	3244.861	3253.441

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	5.478090	0.02735224	0.02693004	-0.006383413	0.06151009
ANTIMONY	206.833	Axial	0.3029018	0.001761065	0.0004807839	0.003635733	0.001166678
ARSENIC	189.042	Axial	-1.30358	-0.003501901	-0.003519557	-0.001412442	-0.005573703
BARIUM	233.527	Axial	3.746590	0.0004619417	0.0005425725	0.0006076429	0.0002356098
BERYLLIUM	313.042	Radial	13.66358	0.00002715676	-0.00002547374	-0.00001546492	0.0001224089
BORON	249.678	Radial	2.108063	0.01378590	0.003674830	0.01443294	0.02324993
CADMIUM	228.802	Axial	3.852626	-0.000003107659	-0.0001151953	-0.00006326432	0.0001691366
CALCIUM	317.933	Radial	162.6585	0.01257074	0.009323565	0.01790889	0.01047976
CERIUM	535.353	Radial	45.07940	-0.06795524	-0.08419866	-0.007370930	-0.1122961
CHROMIUM	267.716	Axial	9.402778	0.0001272795	0.0001905168	0.0004907689	-0.0002994473
COBALT	228.616	Axial	3.409802	0.0001063220	-0.0002351659	0.0001052319	0.0004489000
COPPER	324.754	Axial	38.78175	0.001107958	0.0006735655	0.001342272	0.001308037
IRON	259.940	Radial	3.272154	0.004932614	0.005568571	0.007506550	0.001722720
LANTHANUM	333.749	Radial	-0.8069612	0.003032806	-0.001137398	0.008553747	0.001682070
LEAD	220.353	Axial	0.6540326	-0.0007625552	0.0006505022	-0.001014670	-0.001923498
LITHIUM	670.784	Radial	-3.44383	0.0008008334	0.001175148	0.001336756	-0.0001094045
MAGNESIUM	279.079	Radial	-0.8157507	0.02070894	0.04662286	-0.02577586	0.04127983
MANGANESE	257.610	Axial	21.79167	0.0003445601	0.0003896498	0.0003368438	0.0003071868
MOLYBDENUM	202.030	Axial	2.674171	0.001022752	0.0009168271	0.001313614	0.0008378159
NICKEL	231.604	Axial	3.846486	0.0001889408	0.0003091935	0.0006025538	-0.0003449248
PHOSPHORUS	177.495	Axial	-0.06671904	-0.007236918	0.003260633	-0.001540594	-0.02343079
POTASSIUM	766.490	Radial	-35.6589	0.03379330	-0.005097995	0.07151447	0.03496341
SELENIUM	196.090	Axial	1.812496	0.01135876	0.006138047	0.008246623	0.01969160
SILICON	251.611	Axial	5078.839	1.530057	1.704107	1.514335	1.371731
SILVER	328.068	Axial	-25.1111	-0.0003889328	-0.0005230802	-0.00007445082	-0.0005692673
SODIUM	589.592	Radial	103.5760	0.06513946	0.07060939	0.06812170	0.05668730
STRONTIUM	421.552	Radial	-5.37150	0.0001507336	0.00008480544	0.0002259140	0.0001414813
SULFUR	182.034	Axial	0.3620506	0.006762956	0.02353461	-0.004108041	0.0008622998
THALLIUM	190.856	Axial	0.2361484	0.001033906	-0.002527464	0.005011133	0.0006180469
TIN	189.989	Axial	-1.09475	0.002304612	0.001959994	0.003250289	0.001703553
TITANIUM	334.941	Radial	0.8789526	0.001356431	0.002501552	-0.0007071876	0.002274929
VANADIUM	292.402	Radial	0.4833074	-0.0005371409	-0.0006011517	-0.005250270	0.004239998
ZINC	206.200	Axial	0.7469536	-0.0001640745	-0.00000004438757	-0.00006276965	-0.0004294096

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 21:01 Sequence: 136 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8826.073	8815.952	8829.168	8833.100
YTTRIUM	360.073	Axial	333505.4	332911.2	333957.5	333647.5
YTTRIUM	360.073	Radial	10291.60	10295.26	10293.68	10285.84
INDIUM	230.606	Axial	2466.063	2461.553	2463.849	2472.788

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38096.49	509.6162	509.2556	509.3735	510.2196
ANTIMONY	206.833	Axial	-4.41121	-0.02065904	-0.02266823	-0.02262429	-0.01668459
ARSENIC	189.042	Axial	-2.11392	-0.01112909	-0.01452735	-0.01240991	-0.006450003
BARIUM	233.527	Axial	13.26606	0.003215737	0.003233654	0.003007334	0.003406224
BERYLLIUM	313.042	Radial	12.75246	0.00003077524	-0.0001000671	-0.00004288126	0.0002352741
BORON	249.678	Radial	-0.6525535	0.0005651068	0.001344414	0.005343802	-0.004992896
CADMIUM	228.802	Axial	4.660747	0.0002916792	0.0002135664	0.0001369544	0.0005245168
CALCIUM	373.690	Radial	263320.3	509.8533	509.7031	509.7599	510.0968
CERIUM	535.353	Radial	293.6282	1.277034	1.194950	1.325352	1.310799
CHROMIUM	267.716	Axial	22.33777	0.002569653	0.003083565	0.002422949	0.002202444
COBALT	228.616	Axial	8.632523	0.002140057	0.002242901	0.002215198	0.001962071
COPPER	324.754	Axial	-104.853	-0.008367490	-0.008185925	-0.008866024	-0.008050521
IRON	271.441	Radial	4348.058	206.6061	205.7920	207.0290	206.9973
LANTHANUM	333.749	Radial	-3.45396	-0.002631285	0.003115322	-0.008191885	-0.002817291
LEAD	220.353	Axial	-18.9859	-0.03441945	-0.03765132	-0.03297010	-0.03263694
LITHIUM	670.784	Radial	28.33798	0.004680751	0.004616334	0.004923830	0.004502091
MAGNESIUM	279.079	Radial	29040.51	503.9956	503.9762	503.9432	504.0675
MANGANESE	257.610	Axial	527.3956	0.007435013	0.007491808	0.007439202	0.007374028
MOLYBDENUM	202.030	Axial	4.059540	0.002468243	0.001602241	0.003468239	0.002334249
NICKEL	231.604	Axial	17.83916	0.009263391	0.01012786	0.008679067	0.008983251
PHOSPHORUS	177.495	Axial	0.2144279	0.001399703	0.01473658	-0.01075102	0.0002135542
POTASSIUM	766.490	Radial	-62.8171	-0.04290559	-0.07660671	-0.03404271	-0.01806735
SELENIUM	196.090	Axial	3.302126	0.03591814	0.05861482	0.04207738	0.007062206
SILICON	251.611	Axial	24.35575	-0.004092590	-0.005734229	-0.004033375	-0.002510165
SILVER	328.068	Axial	-59.1541	-0.002670794	-0.002761994	-0.002769383	-0.002481005
SODIUM	589.592	Radial	179.5759	0.1596254	0.1717643	0.1477753	0.1593367
STRONTIUM	421.552	Radial	207.7730	0.004021616	0.004124919	0.004018841	0.003921088
SULFUR	182.034	Axial	1.330861	0.02476021	0.02946168	0.02747088	0.01734809
THALLIUM	190.856	Axial	0.8874348	0.005752626	0.008777684	-0.002483534	0.01096373
TIN	189.989	Axial	-5.07258	-0.01435184	-0.01654609	-0.01290841	-0.01360103
TITANIUM	334.941	Radial	125.1181	0.04475566	0.04296359	0.04569934	0.04560407
VANADIUM	292.402	Radial	4.180992	0.006204478	0.006011109	0.002659278	0.009943047
ZINC	206.200	Axial	16.75183	0.006581174	0.007119140	0.006606903	0.006017480

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 21:03 Sequence: 137 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8784.296	8771.908	8785.924	8795.057
YTTRIUM	360.073	Axial	332378.7	332216.2	331998.5	332921.4
YTTRIUM	360.073	Radial	10201.73	10153.98	10232.38	10218.83
INDIUM	230.606	Axial	2460.183	2453.859	2467.210	2459.479

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37416.64	504.9319	505.3816	503.6590	505.7550
ANTIMONY	206.833	Axial	102.3588	0.4944281	0.4874678	0.4931693	0.5026471
ARSENIC	189.042	Axial	69.28185	0.5310530	0.5215549	0.5314104	0.5401937
BARIUM	233.527	Axial	1868.272	0.5120202	0.5131936	0.5136970	0.5091699
BERYLLIUM	313.042	Radial	9309.326	0.5021319	0.5024548	0.5019740	0.5019669
BORON	249.678	Radial	196.3644	1.006747	1.009734	1.026201	0.9843055
CADMIUM	228.802	Axial	5083.041	1.079339	1.080206	1.079027	1.078784
CALCIUM	373.690	Radial	259720.3	507.3146	508.0465	505.7430	508.1544
CERIUM	535.353	Radial	298.0842	1.314824	1.297243	1.297152	1.350076
CHROMIUM	267.716	Axial	2884.930	0.4916647	0.4938732	0.4903158	0.4908052
COBALT	228.616	Axial	1498.958	0.5047670	0.5049454	0.5040233	0.5053322
COPPER	324.754	Axial	7926.282	0.5468705	0.5473020	0.5441278	0.5491817
IRON	271.441	Radial	4274.798	204.9131	204.4608	204.8805	205.3980
LANTHANUM	333.749	Radial	-1.40143	0.001654214	0.008478503	-0.005657189	0.002141328
LEAD	220.353	Axial	543.1770	0.9388549	0.9394392	0.9359904	0.9411351
LITHIUM	670.784	Radial	24.20768	0.004200672	0.004803606	0.002961853	0.004836557
MAGNESIUM	279.079	Radial	28870.65	505.4639	506.5900	504.7075	505.0944
MANGANESE	257.610	Axial	35788.81	0.5010861	0.5019322	0.5008077	0.5005184
MOLYBDENUM	202.030	Axial	626.6666	0.5073654	0.5073283	0.5082618	0.5065062
NICKEL	231.604	Axial	1638.974	0.9977673	0.9971356	0.9945156	1.001651
PHOSPHORUS	177.495	Axial	0.8872882	0.02300174	0.03405998	0.02369167	0.01125359
POTASSIUM	766.490	Radial	-73.9870	-0.07333462	-0.03820915	-0.08855570	-0.09323902
SELENIUM	196.090	Axial	37.57484	0.5147988	0.5054438	0.5068927	0.5320599
SILICON	251.611	Axial	2832.133	1.006424	1.002541	1.010465	1.006266
SILVER	328.068	Axial	18797.85	1.133243	1.134212	1.132774	1.132743
SODIUM	589.592	Radial	152.5785	0.1305163	0.1070157	0.1327629	0.1517705
STRONTIUM	421.552	Radial	195.1397	0.003822841	0.003726485	0.003872777	0.003869260
SULFUR	182.034	Axial	0.4808232	0.009842477	-0.002761628	0.01487180	0.01741726
THALLIUM	190.856	Axial	71.67775	0.4791567	0.4800511	0.4713821	0.4860369
TIN	189.989	Axial	121.0942	0.4822263	0.4831816	0.4843401	0.4791572
TITANIUM	334.941	Radial	1566.224	0.5527000	0.5536009	0.5510345	0.5534646
VANADIUM	292.402	Radial	276.3371	0.5019138	0.5029506	0.4990360	0.5037546
ZINC	206.200	Axial	2203.043	0.9258762	0.9273960	0.9261582	0.9240744

3015 GW/SPLP ICP Metals Prep Benchsheet

Workgroup: WG1977039

Prep Start Date/Time: 12/20/22 12:07-12:08 **Analyst:** TAS4003 **Leachate Fluid Type:** N/A **Vessel ESC Lot ID:** 2208066 **Pipette ID:** F13409151 **Carousel ID:** 8
Microwave ID: MJ9747 **Dig. Start Date/Time:** 12/20/22 13:30:00 **Prep End Date/Time:** 12/20/22 14:50 **SOP:** ENV-SOP-MTJL-0219 **Method:** 3015 **Filter Lot#:** N/A
pH Lot #: 10BDH3021 **Analyst Verified pH:** TAS4003 **Pipette Tip Lot#:** 236276

Nitric Acid: 22L20139 Amt. Used: 4 mL Exp. Date:06/20/23 **Hydrochloric Acid:** 22L15564 Amt. Used: 1 mL Exp. Date:06/15/23
High Spike: 22L07438 Amt. Used: 0.45 mL Exp. Date:06/07/23 **High Spike 2:** 22L07439 Amt. Used: 0.45 mL Exp. Date:06/07/23

Sample Number	Prep Flags	ListType	Initial Sample Vol (mL)	Final Volume (mL)	Sample Description	Initial pH	Review Analyst	Review Date
BLANK			45	50	NANO	<2	SJM723	12/20/22 14:51:16
LCS			45	50	NANO	<2	SJM723	12/20/22 14:51:16
MS(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
MSD(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
1. L1564959-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
2. L1565291-02		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
3. L1565381-03		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
4. L1565616-01	T2	ICP METALS	5	50	DARK GRAY WATER	<2	SJM723	12/20/22 14:51:16
5. L1568818-01		ICP METALS	5	50	WATER W/ FLOATING STUFF	<2	SJM723	12/20/22 14:51:16
6. L1568841-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
7. L1568889-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
8. L1569097-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
9. L1569097-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
10. L1569097-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
11. L1569102-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
12. L1569102-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
13. L1569102-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
14. L1569102-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
15. L1569103-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
16. L1569103-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
17. L1569103-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
18. L1569103-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16

Comments:
L1565616-01 PREPPED @ 5 ML. T2 APPLIED, UNABLE TO READ PH STRIP DUE TO MATRIX. L1568818-01 PREPPED @ BOTH 1X AND 5 ML DUE TO MATRIX, 1X VENTED, REPORTED @ 5 ML. TS 12.20.22

Reviewed By:SJM723 on 12/20/22 14:51:16

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

Coef1	First Order Coefficient.
Coef2	Second Order Coefficient.
Corr.	Correlation Coefficient.
DL	Detection Limit.
Incpt	Intercept.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
Mass	Mass of parameter.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RSD	Relative Standard Deviation.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Slope	Slope of calibration curve.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.

RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY

SGS North America Inc. - Orlando
4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com/ehsusa

L1569102

FED-EX Tracking # | Bottle Order Control #
SGS Quote # | SGS Job # FC1065X

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: muna.mohammed@sgs.com E-mail
Phone #: 407-425-6700 Fax #
Sampler(s) Name(s): BP Phone

Project Information

Project Name: Griffiss AFB; Rome, NY
Street
City State
Project #
Client Purchase Order #
Project Manager

Billing Information (if different from Report to)

Company Name
Street Address
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AMN (350.1) PN (420.1), TKN (351.2),	Boron (6010)	LAB USE ONLY
2X	LF1MW-13-1222-A		12/6/22	10:15:00 AM	BP	AQ	3			X	X					X	X	-01
3X	LF1MW-13-1222		12/6/22	10:15:00 AM	BP	AQ	3			X	X					X	X	-02
4X	LF1P-2-1222		12/6/22	12:50:00 PM	BP	AQ	3			X	X					X	X	-03
5X	LF1MW-6-1222		12/6/22	2:10:00 PM	BP	AQ	3			X	X					X	X	-04

Number of preserved Bottles

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Day (business)
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] other Due 12/21/2022

Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] Commercial "C"
- [ ] State Forms
- [ ] EDD Format
- [ ] Other
- [X] FL

Commercial "A" = Results Onl
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Send to Pace Mt. Juliet, TN
DOD/NY Cert
1-250ml H2SO4 Plastic Bottle
1-250ml H2SO4 Amber Bottle
1-250ml HNO3 Plastic Bottle

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	12/16/22	1	2		2
3				12-17-22 0930	4
5				Preserved where applicable	On Ice / Cooler Temp.

Therm. ID:

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

2.5°c to 2.5°c

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Parameter Certification Exceptions

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
BOD, 5 Day		**SM5210 B-11**	AQ	SGS is not certified for this parameter.
Chemical Oxygen Demand		**SM5220 C-11**	AQ	SGS is not certified for this parameter.
Color, Apparent		**SM2120 B-11**	AQ	SGS is not certified for this parameter.

FC1065

Custody Seal #s: 8818 & 8817

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: Bhate
Address: 445 Union Blvd Ste 129
City: Lakewood State: CO Zip: 80228
Project Contact: Frank Gardner Email:
Phone #: 720.463.3903
Sampler(s) Name(s) (Printed)
Sampler 1: B Pollard Sampler 2:

Project Information

Project Name: Former Griffiss AFB NE BECOS
Street ← SAME →
City State
Project # GRFIS-BECOS
Fax #
Client Purchase Order #

Analytical Information

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MEOH	AMN 1C0D	B	BOD 0DOH	PN	524, NO3, NO2, CHLOROFORM, CHLORITES, BROMATES, CHLORATES, BROMIDE, BROMOACETIC ACID, DBAA, TBAA	TOC	XHRDCALC	VOCLSTD	LAB USE ONLY
1	LFI-TB-120622	12/6/22	0730	BP	LIQ	2			2															
2	LFIMW-13-1222-a		1015		GW	13			3	5		2	3			X	X	X	X	X	X	X	X	X	X
3	LFIMW-13-1222		1015			13			3	5		2	3			X	X	X	X	X	X	X	X	X	X
4	LFIP-2-1222		1250			13			3	5		2	3			X	X	X	X	X	X	X	X	X	X
5	LFIMW-6-1222		1410			13			3	5		2	3			X	X	X	X	X	X	X	X	X	X

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT
LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	B Pollard (Bhate (FC)	12/6/22 1800	2 FedEX	3		4 12/7/22 1000
5	Relinquished by/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
			6	7		8

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 3.8 CTM, 1.0 CTM

http://www.sgs.com/en/terms-and-conditions

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6.2 6

FC1065: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC1065 **Client:** BHATE **Project:** FORMER GRIFFIS AFB NE BECOS

Date / Time Received: 12/7/2022 10:00:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 5700 7357 2248

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8); Cooler 2: (1.0);

Cooler Temps (Corrected) °C: Cooler 1: (4.0); Cooler 2: (1.2);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☑	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments

SM001
Rev. Date 05/24/17

Technician: SAMUELM Date: 12/7/2022 10:00:00 A Reviewer: _____ Date: _____

FC1065: Chain of Custody
Page 2 of 2

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V1P3648	SW846 8260D						
V1P3648-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	103	%	32-152
V1P3648-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	110	%	80-119
V1P3648-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	112	%	81-118
V1P3648-BS	2037-26-5	Toluene-D8	BSP	SURR	97	%	89-112
V1P3648-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	105	%	85-114
FC1293-8MS*	75-71-8	Dichlorodifluoromethane	MS	REC	122	%	32-152
FC1293-8MS*	1868-53-7	Dibromofluoromethane	MS	SURR	113	%	80-119
FC1293-8MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	126	%	81-118
FC1293-8MS*	2037-26-5	Toluene-D8	MS	SURR	94	%	89-112
FC1293-8MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	99	%	85-114
FC1293-8MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	119	%	32-152
FC1293-8MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	3	%	20
FC1293-8MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	113	%	80-119
FC1293-8MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	121	%	81-118
FC1293-8MSD*	2037-26-5	Toluene-D8	MSD	SURR	95	%	89-112
FC1293-8MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	99	%	85-114
V1P3648-MB	1868-53-7	Dibromofluoromethane	MB	SURR	106	%	80-119
V1P3648-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	109	%	81-118
V1P3648-MB	2037-26-5	Toluene-D8	MB	SURR	94	%	89-112
V1P3648-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	85-114
FC1065-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	107	%	80-119
FC1065-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	108	%	81-118
FC1065-1	2037-26-5	Toluene-D8	SAMP	SURR	94	%	89-112
FC1065-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
V5E1624	SW846 8260D						
V5E1624-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	101	%	32-152
V5E1624-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	103	%	80-119
V5E1624-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	104	%	81-118
V5E1624-BS	2037-26-5	Toluene-D8	BSP	SURR	97	%	89-112
V5E1624-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	99	%	85-114
FC1262-2MS*	75-71-8	Dichlorodifluoromethane	MS	REC	99	%	32-152
FC1262-2MS*	1868-53-7	Dibromofluoromethane	MS	SURR	101	%	80-119
FC1262-2MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	99	%	81-118
FC1262-2MS*	2037-26-5	Toluene-D8	MS	SURR	95	%	89-112
FC1262-2MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	99	%	85-114
V5E1624-MB	1868-53-7	Dibromofluoromethane	MB	SURR	101	%	80-119
V5E1624-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	100	%	81-118
V5E1624-MB	2037-26-5	Toluene-D8	MB	SURR	98	%	89-112
V5E1624-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	101	%	85-114
FC1065-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	101	%	80-119

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1065-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	100	%	81-118
FC1065-2	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FC1065-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	103	%	85-114
FC1065-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	103	%	80-119
FC1065-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	101	%	81-118
FC1065-3	2037-26-5	Toluene-D8	SAMP	SURR	99	%	89-112
FC1065-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
FC1065-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	101	%	80-119
FC1065-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
FC1065-4	2037-26-5	Toluene-D8	SAMP	SURR	97	%	89-112
FC1065-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
FC1065-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	101	%	80-119
FC1065-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	103	%	81-118
FC1065-5	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FC1065-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	104	%	85-114
VO2867	SW846 8260D						
VO2867-BS	67-64-1	Acetone	BSP	REC	87	%	39-160
VO2867-BS	71-43-2	Benzene	BSP	REC	86	%	79-120
VO2867-BS	108-86-1	Bromobenzene	BSP	REC	96	%	80-120
VO2867-BS	74-97-5	Bromochloromethane	BSP	REC	92	%	78-123
VO2867-BS	75-27-4	Bromodichloromethane	BSP	REC	91	%	79-125
VO2867-BS	75-25-2	Bromoform	BSP	REC	109	%	66-130
VO2867-BS	78-93-3	2-Butanone (MEK)	BSP	REC	94	%	56-143
VO2867-BS	104-51-8	n-Butylbenzene	BSP	REC	107	%	75-128
VO2867-BS	135-98-8	sec-Butylbenzene	BSP	REC	115	%	77-126
VO2867-BS	98-06-6	tert-Butylbenzene	BSP	REC	105	%	78-124
VO2867-BS	75-15-0	Carbon Disulfide	BSP	REC	92	%	64-133
VO2867-BS	56-23-5	Carbon Tetrachloride	BSP	REC	97	%	72-136
VO2867-BS	108-90-7	Chlorobenzene	BSP	REC	98	%	82-118
VO2867-BS	75-00-3	Chloroethane	BSP	REC	87	%	60-138
VO2867-BS	67-66-3	Chloroform	BSP	REC	85	%	79-124
VO2867-BS	95-49-8	o-Chlorotoluene	BSP	REC	105	%	79-122
VO2867-BS	106-43-4	p-Chlorotoluene	BSP	REC	105	%	78-122
VO2867-BS	124-48-1	Dibromochloromethane	BSP	REC	103	%	74-126
VO2867-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	106	%	62-128
VO2867-BS	106-93-4	1,2-Dibromoethane	BSP	REC	98	%	77-121
VO2867-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	101	%	80-119
VO2867-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	104	%	80-119
VO2867-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	102	%	79-118
VO2867-BS	75-34-3	1,1-Dichloroethane	BSP	REC	88	%	77-125
VO2867-BS	107-06-2	1,2-Dichloroethane	BSP	REC	84	%	73-128
VO2867-BS	75-35-4	1,1-Dichloroethylene	BSP	REC	85	%	71-131
VO2867-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	87	%	78-123

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
VO2867-BS	156-60-5	trans-1,2-Dichloroethylene	BSP	REC	85	%	75-124
VO2867-BS	540-59-0	1,2-Dichloroethene (total)	BSP	REC	86	%	79-121
VO2867-BS	78-87-5	1,2-Dichloropropane	BSP	REC	82	%	78-122
VO2867-BS	142-28-9	1,3-Dichloropropane	BSP	REC	90	%	80-119
VO2867-BS	594-20-7	2,2-Dichloropropane	BSP	REC	86	%	60-139
VO2867-BS	563-58-6	1,1-Dichloropropene	BSP	REC	87	%	79-125
VO2867-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	88	%	75-124
VO2867-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	108	%	73-127
VO2867-BS	100-41-4	Ethylbenzene	BSP	REC	98	%	79-121
VO2867-BS	87-68-3	Hexachlorobutadiene	BSP	REC	104	%	66-134
VO2867-BS	591-78-6	2-Hexanone	BSP	REC	105	%	57-139
VO2867-BS	98-82-8	Isopropylbenzene	BSP	REC	102	%	72-131
VO2867-BS	99-87-6	p-Isopropyltoluene	BSP	REC	112	%	77-127
VO2867-BS	74-83-9	Methyl Bromide	BSP	REC	89	%	53-141
VO2867-BS	74-87-3	Methyl Chloride	BSP	REC	80	%	50-139
VO2867-BS	74-95-3	Methylene Bromide	BSP	REC	83	%	79-123
VO2867-BS	75-09-2	Methylene Chloride	BSP	REC	82	%	74-124
VO2867-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	103	%	67-130
VO2867-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	84	%	71-124
VO2867-BS	91-20-3	Naphthalene	BSP	REC	102	%	61-128
VO2867-BS	103-65-1	n-Propylbenzene	BSP	REC	108	%	76-126
VO2867-BS	100-42-5	Styrene	BSP	REC	102	%	78-123
VO2867-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	108	%	78-124
VO2867-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	105	%	71-121
VO2867-BS	127-18-4	Tetrachloroethylene	BSP	REC	99	%	74-129
VO2867-BS	108-88-3	Toluene	BSP	REC	97	%	80-121
VO2867-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	99	%	69-129
VO2867-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	101	%	69-130
VO2867-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	93	%	74-131
VO2867-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	98	%	80-119
VO2867-BS	79-01-6	Trichloroethylene	BSP	REC	87	%	79-123
VO2867-BS	75-69-4	Trichlorofluoromethane	BSP	REC	90	%	65-141
VO2867-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	97	%	73-122
VO2867-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	106	%	76-124
VO2867-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	103	%	75-124
VO2867-BS	108-05-4	Vinyl Acetate	BSP	REC	107	%	54-146
VO2867-BS	75-01-4	Vinyl Chloride	BSP	REC	91	%	58-137
VO2867-BS		m,p-Xylene	BSP	REC	99	%	80-121
VO2867-BS	95-47-6	o-Xylene	BSP	REC	100	%	78-122
VO2867-BS	1330-20-7	Xylene (total)	BSP	REC	99	%	79-121
VO2867-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	97	%	80-119
VO2867-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	101	%	81-118
VO2867-BS	2037-26-5	Toluene-D8	BSP	SURR	106	%	89-112
VO2867-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	99	%	85-114
FC1020-3MS*	67-64-1	Acetone	MS	REC	84	%	39-160

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MS*	71-43-2	Benzene	MS	REC	85	%	79-120
FC1020-3MS*	108-86-1	Bromobenzene	MS	REC	91	%	80-120
FC1020-3MS*	74-97-5	Bromochloromethane	MS	REC	87	%	78-123
FC1020-3MS*	75-27-4	Bromodichloromethane	MS	REC	85	%	79-125
FC1020-3MS*	75-25-2	Bromoform	MS	REC	90	%	66-130
FC1020-3MS*	78-93-3	2-Butanone (MEK)	MS	REC	87	%	56-143
FC1020-3MS*	104-51-8	n-Butylbenzene	MS	REC	95	%	75-128
FC1020-3MS*	135-98-8	sec-Butylbenzene	MS	REC	106	%	77-126
FC1020-3MS*	98-06-6	tert-Butylbenzene	MS	REC	98	%	78-124
FC1020-3MS*	75-15-0	Carbon Disulfide	MS	REC	88	%	64-133
FC1020-3MS*	56-23-5	Carbon Tetrachloride	MS	REC	89	%	72-136
FC1020-3MS*	108-90-7	Chlorobenzene	MS	REC	94	%	82-118
FC1020-3MS*	75-00-3	Chloroethane	MS	REC	85	%	60-138
FC1020-3MS*	67-66-3	Chloroform	MS	REC	84	%	79-124
FC1020-3MS*	95-49-8	o-Chlorotoluene	MS	REC	98	%	79-122
FC1020-3MS*	106-43-4	p-Chlorotoluene	MS	REC	98	%	78-122
FC1020-3MS*	124-48-1	Dibromochloromethane	MS	REC	93	%	74-126
FC1020-3MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	90	%	62-128
FC1020-3MS*	106-93-4	1,2-Dibromoethane	MS	REC	91	%	77-121
FC1020-3MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	96	%	80-119
FC1020-3MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	98	%	80-119
FC1020-3MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	95	%	79-118
FC1020-3MS*	75-34-3	1,1-Dichloroethane	MS	REC	86	%	77-125
FC1020-3MS*	107-06-2	1,2-Dichloroethane	MS	REC	80	%	73-128
FC1020-3MS*	75-35-4	1,1-Dichloroethylene	MS	REC	82	%	71-131
FC1020-3MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	84	%	78-123
FC1020-3MS*	156-60-5	trans-1,2-Dichloroethylene	MS	REC	82	%	75-124
FC1020-3MS*	540-59-0	1,2-Dichloroethene (total)	MS	REC	83	%	79-121
FC1020-3MS*	78-87-5	1,2-Dichloropropane	MS	REC	81	%	78-122
FC1020-3MS*	142-28-9	1,3-Dichloropropane	MS	REC	84	%	80-119
FC1020-3MS*	594-20-7	2,2-Dichloropropane	MS	REC	74	%	60-139
FC1020-3MS*	563-58-6	1,1-Dichloropropene	MS	REC	84	%	79-125
FC1020-3MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	80	%	75-124
FC1020-3MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	96	%	73-127
FC1020-3MS*	100-41-4	Ethylbenzene	MS	REC	94	%	79-121
FC1020-3MS*	87-68-3	Hexachlorobutadiene	MS	REC	85	%	66-134
FC1020-3MS*	591-78-6	2-Hexanone	MS	REC	92	%	57-139
FC1020-3MS*	98-82-8	Isopropylbenzene	MS	REC	97	%	72-131
FC1020-3MS*	99-87-6	p-Isopropyltoluene	MS	REC	102	%	77-127
FC1020-3MS*	74-83-9	Methyl Bromide	MS	REC	68	%	53-141
FC1020-3MS*	74-87-3	Methyl Chloride	MS	REC	78	%	50-139
FC1020-3MS*	74-95-3	Methylene Bromide	MS	REC	81	%	79-123
FC1020-3MS*	75-09-2	Methylene Chloride	MS	REC	84	%	74-124
FC1020-3MS*	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	90	%	67-130
FC1020-3MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	79	%	71-124

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MS*	91-20-3	Naphthalene	MS	REC	89	%	61-128
FC1020-3MS*	103-65-1	n-Propylbenzene	MS	REC	99	%	76-126
FC1020-3MS*	100-42-5	Styrene	MS	REC	96	%	78-123
FC1020-3MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	98	%	78-124
FC1020-3MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	96	%	71-121
FC1020-3MS*	127-18-4	Tetrachloroethylene	MS	REC	91	%	74-129
FC1020-3MS*	108-88-3	Toluene	MS	REC	91	%	80-121
FC1020-3MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	86	%	69-129
FC1020-3MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	85	%	69-130
FC1020-3MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	87	%	74-131
FC1020-3MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	94	%	80-119
FC1020-3MS*	79-01-6	Trichloroethylene	MS	REC	85	%	79-123
FC1020-3MS*	75-69-4	Trichlorofluoromethane	MS	REC	86	%	65-141
FC1020-3MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	87	%	73-122
FC1020-3MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	99	%	76-124
FC1020-3MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	97	%	75-124
FC1020-3MS*	108-05-4	Vinyl Acetate	MS	REC	102	%	54-146
FC1020-3MS*	75-01-4	Vinyl Chloride	MS	REC	90	%	58-137
FC1020-3MS*		m,p-Xylene	MS	REC	94	%	80-121
FC1020-3MS*	95-47-6	o-Xylene	MS	REC	94	%	78-122
FC1020-3MS*	1330-20-7	Xylene (total)	MS	REC	94	%	79-121
FC1020-3MS*	1868-53-7	Dibromofluoromethane	MS	SURR	96	%	80-119
FC1020-3MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	98	%	81-118
FC1020-3MS*	2037-26-5	Toluene-D8	MS	SURR	102	%	89-112
FC1020-3MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	95	%	85-114
FC1020-3MSD*	67-64-1	Acetone	MSD	REC	82	%	39-160
FC1020-3MSD*	67-64-1	Acetone	MSD	RPD	2	%	20
FC1020-3MSD*	71-43-2	Benzene	MSD	REC	86	%	79-120
FC1020-3MSD*	71-43-2	Benzene	MSD	RPD	1	%	20
FC1020-3MSD*	108-86-1	Bromobenzene	MSD	REC	95	%	80-120
FC1020-3MSD*	108-86-1	Bromobenzene	MSD	RPD	4	%	20
FC1020-3MSD*	74-97-5	Bromochloromethane	MSD	REC	90	%	78-123
FC1020-3MSD*	74-97-5	Bromochloromethane	MSD	RPD	3	%	20
FC1020-3MSD*	75-27-4	Bromodichloromethane	MSD	REC	88	%	79-125
FC1020-3MSD*	75-27-4	Bromodichloromethane	MSD	RPD	4	%	20
FC1020-3MSD*	75-25-2	Bromoform	MSD	REC	96	%	66-130
FC1020-3MSD*	75-25-2	Bromoform	MSD	RPD	7	%	20
FC1020-3MSD*	78-93-3	2-Butanone (MEK)	MSD	REC	87	%	56-143
FC1020-3MSD*	78-93-3	2-Butanone (MEK)	MSD	RPD	0	%	20
FC1020-3MSD*	104-51-8	n-Butylbenzene	MSD	REC	100	%	75-128
FC1020-3MSD*	104-51-8	n-Butylbenzene	MSD	RPD	5	%	20
FC1020-3MSD*	135-98-8	sec-Butylbenzene	MSD	REC	111	%	77-126
FC1020-3MSD*	135-98-8	sec-Butylbenzene	MSD	RPD	4	%	20
FC1020-3MSD*	98-06-6	tert-Butylbenzene	MSD	REC	103	%	78-124
FC1020-3MSD*	98-06-6	tert-Butylbenzene	MSD	RPD	6	%	20

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD*	75-15-0	Carbon Disulfide	MSD	REC	91	%	64-133
FC1020-3MSD*	75-15-0	Carbon Disulfide	MSD	RPD	4	%	20
FC1020-3MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	95	%	72-136
FC1020-3MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	7	%	20
FC1020-3MSD*	108-90-7	Chlorobenzene	MSD	REC	94	%	82-118
FC1020-3MSD*	108-90-7	Chlorobenzene	MSD	RPD	0	%	20
FC1020-3MSD*	75-00-3	Chloroethane	MSD	REC	97	%	60-138
FC1020-3MSD*	75-00-3	Chloroethane	MSD	RPD	13	%	20
FC1020-3MSD*	67-66-3	Chloroform	MSD	REC	85	%	79-124
FC1020-3MSD*	67-66-3	Chloroform	MSD	RPD	1	%	20
FC1020-3MSD*	95-49-8	o-Chlorotoluene	MSD	REC	103	%	79-122
FC1020-3MSD*	95-49-8	o-Chlorotoluene	MSD	RPD	6	%	20
FC1020-3MSD*	106-43-4	p-Chlorotoluene	MSD	REC	103	%	78-122
FC1020-3MSD*	106-43-4	p-Chlorotoluene	MSD	RPD	6	%	20
FC1020-3MSD*	124-48-1	Dibromochloromethane	MSD	REC	94	%	74-126
FC1020-3MSD*	124-48-1	Dibromochloromethane	MSD	RPD	2	%	20
FC1020-3MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	95	%	62-128
FC1020-3MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	5	%	20
FC1020-3MSD*	106-93-4	1,2-Dibromoethane	MSD	REC	92	%	77-121
FC1020-3MSD*	106-93-4	1,2-Dibromoethane	MSD	RPD	1	%	20
FC1020-3MSD*	95-50-1	1,2-Dichlorobenzene	MSD	REC	100	%	80-119
FC1020-3MSD*	95-50-1	1,2-Dichlorobenzene	MSD	RPD	4	%	20
FC1020-3MSD*	541-73-1	1,3-Dichlorobenzene	MSD	REC	102	%	80-119
FC1020-3MSD*	541-73-1	1,3-Dichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD*	106-46-7	1,4-Dichlorobenzene	MSD	REC	100	%	79-118
FC1020-3MSD*	106-46-7	1,4-Dichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	87	%	77-125
FC1020-3MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	1	%	20
FC1020-3MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	81	%	73-128
FC1020-3MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	1	%	20
FC1020-3MSD*	75-35-4	1,1-Dichloroethylene	MSD	REC	83	%	71-131
FC1020-3MSD*	75-35-4	1,1-Dichloroethylene	MSD	RPD	2	%	20
FC1020-3MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	87	%	78-123
FC1020-3MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	4	%	20
FC1020-3MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	REC	82	%	75-124
FC1020-3MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	RPD	1	%	20
FC1020-3MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	REC	85	%	79-121
FC1020-3MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	RPD	2	%	20
FC1020-3MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	81	%	78-122
FC1020-3MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	0	%	20
FC1020-3MSD*	142-28-9	1,3-Dichloropropane	MSD	REC	85	%	80-119
FC1020-3MSD*	142-28-9	1,3-Dichloropropane	MSD	RPD	1	%	20
FC1020-3MSD*	594-20-7	2,2-Dichloropropane	MSD	REC	77	%	60-139
FC1020-3MSD*	594-20-7	2,2-Dichloropropane	MSD	RPD	5	%	20
FC1020-3MSD*	563-58-6	1,1-Dichloropropene	MSD	REC	84	%	79-125

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD*	563-58-6	1,1-Dichloropropene	MSD	RPD	0	%	20
FC1020-3MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	81	%	75-124
FC1020-3MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	1	%	20
FC1020-3MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	99	%	73-127
FC1020-3MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	3	%	20
FC1020-3MSD*	100-41-4	Ethylbenzene	MSD	REC	94	%	79-121
FC1020-3MSD*	100-41-4	Ethylbenzene	MSD	RPD	1	%	20
FC1020-3MSD*	87-68-3	Hexachlorobutadiene	MSD	REC	90	%	66-134
FC1020-3MSD*	87-68-3	Hexachlorobutadiene	MSD	RPD	6	%	20
FC1020-3MSD*	591-78-6	2-Hexanone	MSD	REC	94	%	57-139
FC1020-3MSD*	591-78-6	2-Hexanone	MSD	RPD	2	%	20
FC1020-3MSD*	98-82-8	Isopropylbenzene	MSD	REC	98	%	72-131
FC1020-3MSD*	98-82-8	Isopropylbenzene	MSD	RPD	1	%	20
FC1020-3MSD*	99-87-6	p-Isopropyltoluene	MSD	REC	108	%	77-127
FC1020-3MSD*	99-87-6	p-Isopropyltoluene	MSD	RPD	5	%	20
FC1020-3MSD*	74-83-9	Methyl Bromide	MSD	REC	86	%	53-141
FC1020-3MSD*	74-83-9	Methyl Bromide	MSD	RPD	24	%	20
FC1020-3MSD*	74-87-3	Methyl Chloride	MSD	REC	88	%	50-139
FC1020-3MSD*	74-87-3	Methyl Chloride	MSD	RPD	12	%	20
FC1020-3MSD*	74-95-3	Methylene Bromide	MSD	REC	82	%	79-123
FC1020-3MSD*	74-95-3	Methylene Bromide	MSD	RPD	1	%	20
FC1020-3MSD*	75-09-2	Methylene Chloride	MSD	REC	85	%	74-124
FC1020-3MSD*	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FC1020-3MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	92	%	67-130
FC1020-3MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	2	%	20
FC1020-3MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	82	%	71-124
FC1020-3MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	4	%	20
FC1020-3MSD*	91-20-3	Naphthalene	MSD	REC	94	%	61-128
FC1020-3MSD*	91-20-3	Naphthalene	MSD	RPD	6	%	20
FC1020-3MSD*	103-65-1	n-Propylbenzene	MSD	REC	105	%	76-126
FC1020-3MSD*	103-65-1	n-Propylbenzene	MSD	RPD	5	%	20
FC1020-3MSD*	100-42-5	Styrene	MSD	REC	97	%	78-123
FC1020-3MSD*	100-42-5	Styrene	MSD	RPD	1	%	20
FC1020-3MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	101	%	78-124
FC1020-3MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	2	%	20
FC1020-3MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	99	%	71-121
FC1020-3MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	3	%	20
FC1020-3MSD*	127-18-4	Tetrachloroethylene	MSD	REC	93	%	74-129
FC1020-3MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	2	%	20
FC1020-3MSD*	108-88-3	Toluene	MSD	REC	93	%	80-121
FC1020-3MSD*	108-88-3	Toluene	MSD	RPD	2	%	20
FC1020-3MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	91	%	69-129
FC1020-3MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	5	%	20
FC1020-3MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	92	%	69-130
FC1020-3MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	8	%	20

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1020-3MSD*	71-55-6	1,1,1-Trichloroethane	MSD	REC	90	%	74-131
FC1020-3MSD*	71-55-6	1,1,1-Trichloroethane	MSD	RPD	3	%	20
FC1020-3MSD*	79-00-5	1,1,2-Trichloroethane	MSD	REC	94	%	80-119
FC1020-3MSD*	79-00-5	1,1,2-Trichloroethane	MSD	RPD	1	%	20
FC1020-3MSD*	79-01-6	Trichloroethylene	MSD	REC	86	%	79-123
FC1020-3MSD*	79-01-6	Trichloroethylene	MSD	RPD	1	%	20
FC1020-3MSD*	75-69-4	Trichlorofluoromethane	MSD	REC	96	%	65-141
FC1020-3MSD*	75-69-4	Trichlorofluoromethane	MSD	RPD	11	%	20
FC1020-3MSD*	96-18-4	1,2,3-Trichloropropane	MSD	REC	94	%	73-122
FC1020-3MSD*	96-18-4	1,2,3-Trichloropropane	MSD	RPD	7	%	20
FC1020-3MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	105	%	76-124
FC1020-3MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	5	%	20
FC1020-3MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	102	%	75-124
FC1020-3MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	5	%	20
FC1020-3MSD*	108-05-4	Vinyl Acetate	MSD	REC	104	%	54-146
FC1020-3MSD*	108-05-4	Vinyl Acetate	MSD	RPD	2	%	20
FC1020-3MSD*	75-01-4	Vinyl Chloride	MSD	REC	101	%	58-137
FC1020-3MSD*	75-01-4	Vinyl Chloride	MSD	RPD	12	%	20
FC1020-3MSD*		m,p-Xylene	MSD	REC	95	%	80-121
FC1020-3MSD*		m,p-Xylene	MSD	RPD	1	%	20
FC1020-3MSD*	95-47-6	o-Xylene	MSD	REC	96	%	78-122
FC1020-3MSD*	95-47-6	o-Xylene	MSD	RPD	2	%	20
FC1020-3MSD*	1330-20-7	Xylene (total)	MSD	REC	95	%	79-121
FC1020-3MSD*	1330-20-7	Xylene (total)	MSD	RPD	1	%	20
FC1020-3MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	97	%	80-119
FC1020-3MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	97	%	81-118
FC1020-3MSD*	2037-26-5	Toluene-D8	MSD	SURR	103	%	89-112
FC1020-3MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	99	%	85-114
VO2867-MB	1868-53-7	Dibromofluoromethane	MB	SURR	94	%	80-119
VO2867-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	102	%	81-118
VO2867-MB	2037-26-5	Toluene-D8	MB	SURR	108	%	89-112
VO2867-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	98	%	85-114
FC1065-1	1868-53-7	Dibromofluoromethane	SAMP	SURR	96	%	80-119
FC1065-1	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	100	%	81-118
FC1065-1	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FC1065-1	460-00-4	4-Bromofluorobenzene	SAMP	SURR	97	%	85-114
FC1065-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	96	%	80-119
FC1065-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	112	%	81-118
FC1065-2	2037-26-5	Toluene-D8	SAMP	SURR	101	%	89-112
FC1065-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	86	%	85-114
FC1065-3	1868-53-7	Dibromofluoromethane	SAMP	SURR	94	%	80-119
FC1065-3	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	102	%	81-118
FC1065-3	2037-26-5	Toluene-D8	SAMP	SURR	105	%	89-112
FC1065-3	460-00-4	4-Bromofluorobenzene	SAMP	SURR	94	%	85-114
FC1065-4	1868-53-7	Dibromofluoromethane	SAMP	SURR	93	%	80-119

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1065-4	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	98	%	81-118
FC1065-4	2037-26-5	Toluene-D8	SAMP	SURR	109	%	89-112
FC1065-4	460-00-4	4-Bromofluorobenzene	SAMP	SURR	100	%	85-114
FC1065-5	1868-53-7	Dibromofluoromethane	SAMP	SURR	92	%	80-119
FC1065-5	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	96	%	81-118
FC1065-5	2037-26-5	Toluene-D8	SAMP	SURR	107	%	89-112
FC1065-5	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
MP41624	SW846 6010D						
MP41624-B1	7440-70-2	Calcium	BSP	REC	92	%	87-113
MP41624-B1	7439-95-4	Magnesium	BSP	REC	90.4	%	85-113
MP41624-S1*	7440-70-2	Calcium	MS	REC	106.3	%	87-113
MP41624-S1*	7439-95-4	Magnesium	MS	REC	105.5	%	85-113
MP41624-S2*	7440-70-2	Calcium	MSD	REC	95.9	%	87-113
MP41624-S2*	7440-70-2	Calcium	MSD	RPD	9.8	%	20
MP41624-S2*	7439-95-4	Magnesium	MSD	REC	95.5	%	85-113
MP41624-S2*	7439-95-4	Magnesium	MSD	RPD	9.8	%	20
MP41624-D1*	7440-70-2	Calcium	DUP	RPD	1.8	%	20
MP41624-D1*	7439-95-4	Magnesium	DUP	RPD	5.4	%	20
GP38282	EPA 300/SW846 9056A						
GP38282-B1	16984-48-8	Fluoride	BSP	REC	99.6	%	88-112
GP38282-B1	16887-00-6	Chloride	BSP	REC	99.4	%	87-111
GP38282-B1	14797-65-0	Nitrogen, Nitrite	BSP	REC	106.4	%	87-111
GP38282-B1	24959-67-9	Bromide	BSP	REC	97.3	%	91-110
GP38282-B1	14797-55-8	Nitrogen, Nitrate	BSP	REC	104.8	%	88-111
GP38282-B1	14808-79-8	Sulfate	BSP	REC	99.8	%	87-112
GP38282-S1	16984-48-8	Fluoride	MS	REC	86.4 [a]	%	88-112
GP38282-S1	16887-00-6	Chloride	MS	REC	97.8	%	87-111
GP38282-S1	14797-65-0	Nitrogen, Nitrite	MS	REC	104	%	87-111
GP38282-S1	24959-67-9	Bromide	MS	REC	95.2	%	91-110
GP38282-S1	14797-55-8	Nitrogen, Nitrate	MS	REC	105.9	%	88-111
GP38282-S1	14808-79-8	Sulfate	MS	REC	98	%	87-112
GP38282-S2	16984-48-8	Fluoride	MSD	RPD	4.3	%	15
GP38282-S2	16984-48-8	Fluoride	MSD	REC	90.4	%	88-112
GP38282-S2	16887-00-6	Chloride	MSD	RPD	1.4	%	15
GP38282-S2	16887-00-6	Chloride	MSD	REC	99.4	%	87-111
GP38282-S2	14797-65-0	Nitrogen, Nitrite	MSD	RPD	3.8	%	15
GP38282-S2	14797-65-0	Nitrogen, Nitrite	MSD	REC	108	%	87-111
GP38282-S2	24959-67-9	Bromide	MSD	RPD	2	%	15
GP38282-S2	24959-67-9	Bromide	MSD	REC	97.2	%	91-110
GP38282-S2	14797-55-8	Nitrogen, Nitrate	MSD	RPD	0	%	15
GP38282-S2	14797-55-8	Nitrogen, Nitrate	MSD	REC	105.9	%	88-111

* Sample used for QC is not from job FC1065

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1065
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/06/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
GP38282-S2	14808-79-8	Sulfate	MSD	RPD	1.2	%	15
GP38282-S2	14808-79-8	Sulfate	MSD	REC	99.2	%	87-112

(a) Spike recovery indicates possible matrix interference.

* Sample used for QC is not from job FC1065

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	

Method Blank Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Result	RL	MDL	Units	Q
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	83-118%

Method Blank Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-MB	O72923.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	102%	79-125%
2037-26-5	Toluene-D8	108%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
124-38-9	Carbon dioxide	2.42	35	ug/l	JN
	Total TIC, Volatile		0	ug/l	

Method Blank Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1624-MB	5E36119.D	1	12/14/22	CF	n/a	n/a	V5E1624

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

FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Result	RL	MDL	Units	Q
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Method Blank Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1P3648-MB	1P96414.D	1	12/16/22	CF	n/a	n/a	V1P3648

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

FC1065-1

CAS No.	Compound	Result	RL	MDL	Units	Q
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	79-125%
2037-26-5	Toluene-D8	94%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Blank Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	109	87	50-147
71-43-2	Benzene	25	21.5	86	81-122
108-86-1	Bromobenzene	25	24.1	96	80-121
74-97-5	Bromochloromethane	25	22.9	92	76-123
75-27-4	Bromodichloromethane	25	22.7	91	79-123
75-25-2	Bromoform	25	27.3	109	66-123
78-93-3	2-Butanone (MEK)	125	117	94	56-143
104-51-8	n-Butylbenzene	25	26.7	107	79-126
135-98-8	sec-Butylbenzene	25	28.8	115	83-133
98-06-6	tert-Butylbenzene	25	26.3	105	80-133
75-15-0	Carbon Disulfide	25	23.0	92	66-148
56-23-5	Carbon Tetrachloride	25	24.3	97	76-136
108-90-7	Chlorobenzene	25	24.4	98	82-124
75-00-3	Chloroethane	25	21.8	87	62-144
67-66-3	Chloroform	25	21.3	85	80-124
95-49-8	o-Chlorotoluene	25	26.2	105	81-127
106-43-4	p-Chlorotoluene	25	26.2	105	83-130
124-48-1	Dibromochloromethane	25	25.8	103	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	26.5	106	64-123
106-93-4	1,2-Dibromoethane	25	24.6	98	75-120
95-50-1	1,2-Dichlorobenzene	25	25.2	101	82-124
541-73-1	1,3-Dichlorobenzene	25	26.1	104	84-125
106-46-7	1,4-Dichlorobenzene	25	25.4	102	78-120
75-34-3	1,1-Dichloroethane	25	22.0	88	81-122
107-06-2	1,2-Dichloroethane	25	20.9	84	75-125
75-35-4	1,1-Dichloroethylene	25	21.3	85	78-137
156-59-2	cis-1,2-Dichloroethylene	25	21.8	87	78-120
156-60-5	trans-1,2-Dichloroethylene	25	21.3	85	76-127
540-59-0	1,2-Dichloroethene (total)	50	43.1	86	77-122
78-87-5	1,2-Dichloropropane	25	20.5	82	76-124
142-28-9	1,3-Dichloropropane	25	22.4	90	80-118
594-20-7	2,2-Dichloropropane	25	21.6	86	74-139
563-58-6	1,1-Dichloropropene	25	21.7	87	79-131
10061-01-5	cis-1,3-Dichloropropene	25	22.1	88	75-118
10061-02-6	trans-1,3-Dichloropropene	25	27.0	108	80-120
100-41-4	Ethylbenzene	25	24.6	98	81-121

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
87-68-3	Hexachlorobutadiene	25	26.0	104	75-142
591-78-6	2-Hexanone	125	131	105	61-129
98-82-8	Isopropylbenzene	25	25.6	102	83-132
99-87-6	p-Isopropyltoluene	25	27.9	112	79-130
74-83-9	Methyl Bromide	25	22.3	89	59-143
74-87-3	Methyl Chloride	25	20.0	80	50-159
74-95-3	Methylene Bromide	25	20.8	83	78-119
75-09-2	Methylene Chloride	25	20.5	82	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	129	103	66-122
1634-04-4	Methyl Tert Butyl Ether	25	21.0	84	72-117
91-20-3	Naphthalene	25	25.4	102	63-132
103-65-1	n-Propylbenzene	25	26.9	108	82-133
100-42-5	Styrene	25	25.5	102	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	27.0	108	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	26.2	105	72-120
127-18-4	Tetrachloroethylene	25	24.8	99	76-135
108-88-3	Toluene	25	24.2	97	80-120
87-61-6	1,2,3-Trichlorobenzene	25	24.7	99	68-131
120-82-1	1,2,4-Trichlorobenzene	25	25.3	101	73-129
71-55-6	1,1,1-Trichloroethane	25	23.3	93	75-130
79-00-5	1,1,2-Trichloroethane	25	24.5	98	76-119
79-01-6	Trichloroethylene	25	21.8	87	81-126
75-69-4	Trichlorofluoromethane	25	22.4	90	71-156
96-18-4	1,2,3-Trichloropropane	25	24.2	97	77-120
95-63-6	1,2,4-Trimethylbenzene	25	26.6	106	79-120
108-67-8	1,3,5-Trimethylbenzene	25	25.8	103	79-120
108-05-4	Vinyl Acetate	125	134	107	43-154
75-01-4	Vinyl Chloride	25	22.7	91	69-159
	m,p-Xylene	50	49.6	99	79-126
95-47-6	o-Xylene	25	25.1	100	80-127
1330-20-7	Xylene (total)	75	74.6	99	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2867-BS	O72921.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	106%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1624-BS [a]	5E36116.D	1	12/14/22	CF	n/a	n/a	V5E1624

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

FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-71-8	Dichlorodifluoromethane	25	25.3	101	42-167

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	99%	83-118%

(a) No MSD available for this run.

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1P3648-BS	1P96410.D	1	12/16/22	CF	n/a	n/a	V1P3648

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

FC1065-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
75-71-8	Dichlorodifluoromethane	25	25.8	103	42-167

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	110%	83-118%
17060-07-0	1,2-Dichloroethane-D4	112%	79-125%
2037-26-5	Toluene-D8	97%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

* = Outside of Control Limits.

Matrix Spike Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1262-2MS	5E36141.D	10	12/14/22	CF	n/a	n/a	V5E1624
FC1262-2	5E36133.D	2	12/14/22	CF	n/a	n/a	V5E1624

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

FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	FC1262-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Limits
75-71-8	Dichlorodifluoromethane	4.0	U	250	247	99	42-167

CAS No.	Surrogate Recoveries	MS	FC1262-2	Limits
1868-53-7	Dibromofluoromethane	101%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	101%	79-125%
2037-26-5	Toluene-D8	95%	96%	85-112%
460-00-4	4-Bromofluorobenzene	99%	104%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	FC1020-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	25 U		625	527	84	625	515	82	2	50-147/21
71-43-2	Benzene	1.0 U		125	106	85	125	107	86	1	81-122/14
108-86-1	Bromobenzene	1.0 U		125	114	91	125	119	95	4	80-121/14
74-97-5	Bromochloromethane	1.0 U		125	109	87	125	112	90	3	76-123/14
75-27-4	Bromodichloromethane	1.0 U		125	106	85	125	110	88	4	79-123/19
75-25-2	Bromoform	1.0 U		125	112	90	125	120	96	7	66-123/21
78-93-3	2-Butanone (MEK)	5.0 U		625	546	87	625	546	87	0	56-143/18
104-51-8	n-Butylbenzene	1.0 U		125	119	95	125	125	100	5	79-126/16
135-98-8	sec-Butylbenzene	1.0 U		125	133	106	125	139	111	4	83-133/16
98-06-6	tert-Butylbenzene	1.0 U		125	122	98	125	129	103	6	80-133/16
75-15-0	Carbon Disulfide	2.0 U		125	110	88	125	114	91	4	66-148/23
56-23-5	Carbon Tetrachloride	1.0 U		125	111	89	125	119	95	7	76-136/23
108-90-7	Chlorobenzene	0.48	J	125	118	94	125	118	94	0	82-124/14
75-00-3	Chloroethane	2.0 U		125	106	85	125	121	97	13	62-144/20
67-66-3	Chloroform	1.0 U		125	105	84	125	106	85	1	80-124/15
95-49-8	o-Chlorotoluene	1.0 U		125	122	98	125	129	103	6	81-127/15
106-43-4	p-Chlorotoluene	1.0 U		125	122	98	125	129	103	6	83-130/15
124-48-1	Dibromochloromethane	1.0 U		125	116	93	125	118	94	2	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	5.0 U		125	113	90	125	119	95	5	64-123/18
106-93-4	1,2-Dibromoethane	2.0 U		125	114	91	125	115	92	1	75-120/13
95-50-1	1,2-Dichlorobenzene	1.0 U		125	120	96	125	125	100	4	82-124/14
541-73-1	1,3-Dichlorobenzene	1.0 U		125	122	98	125	128	102	5	84-125/14
106-46-7	1,4-Dichlorobenzene	0.94	J	125	120	95	125	126	100	5	78-120/15
75-34-3	1,1-Dichloroethane	1.0 U		125	108	86	125	109	87	1	81-122/15
107-06-2	1,2-Dichloroethane	1.0 U		125	100	80	125	101	81	1	75-125/14
75-35-4	1,1-Dichloroethylene	1.0 U		125	102	82	125	104	83	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	1.0 U		125	105	84	125	109	87	4	78-120/15
156-60-5	trans-1,2-Dichloroethylene	1.0 U		125	102	82	125	103	82	1	76-127/17
540-59-0	1,2-Dichloroethene (total)	2.0 U		250	207	83	250	212	85	2	77-122/15
78-87-5	1,2-Dichloropropane	1.0 U		125	101	81	125	101	81	0	76-124/14
142-28-9	1,3-Dichloropropane	1.0 U		125	105	84	125	106	85	1	80-118/13
594-20-7	2,2-Dichloropropane	1.0 U		125	92.0	74	125	96.6	77	5	74-139/17
563-58-6	1,1-Dichloropropene	1.0 U		125	105	84	125	105	84	0	79-131/16
10061-01-5	cis-1,3-Dichloropropene	1.0 U		125	100	80	125	101	81	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	1.0 U		125	120	96	125	124	99	3	80-120/22
100-41-4	Ethylbenzene	1.0 U		125	117	94	125	118	94	1	81-121/14

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Compound	FC1020-3 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
87-68-3	Hexachlorobutadiene	2.0 U		125	106	85	125	113	90	6	75-142/19
591-78-6	2-Hexanone	10 U		625	573	92	625	586	94	2	61-129/18
98-82-8	Isopropylbenzene	1.0 U		125	121	97	125	122	98	1	83-132/15
99-87-6	p-Isopropyltoluene	1.0 U		125	128	102	125	135	108	5	79-130/16
74-83-9	Methyl Bromide	5.0 U		125	85.2	68	125	108	86	24*	59-143/19
74-87-3	Methyl Chloride	2.0 U		125	97.6	78	125	110	88	12	50-159/19
74-95-3	Methylene Bromide	2.0 U		125	101	81	125	102	82	1	78-119/14
75-09-2	Methylene Chloride	5.0 U		125	105	84	125	106	85	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	5.0 U		625	565	90	625	576	92	2	66-122/16
1634-04-4	Methyl Tert Butyl Ether	1.0 U		125	98.3	79	125	102	82	4	72-117/14
91-20-3	Naphthalene	5.0 U		125	111	89	125	118	94	6	63-132/25
103-65-1	n-Propylbenzene	1.0 U		125	124	99	125	131	105	5	82-133/15
100-42-5	Styrene	1.0 U		125	120	96	125	121	97	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	1.0 U		125	123	98	125	126	101	2	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	1.0 U		125	120	96	125	124	99	3	72-120/14
127-18-4	Tetrachloroethylene	1.0 U		125	114	91	125	116	93	2	76-135/16
108-88-3	Toluene	1.0 U		125	114	91	125	116	93	2	80-120/14
87-61-6	1,2,3-Trichlorobenzene	2.0 U		125	108	86	125	114	91	5	68-131/25
120-82-1	1,2,4-Trichlorobenzene	2.0 U		125	106	85	125	115	92	8	73-129/20
71-55-6	1,1,1-Trichloroethane	1.0 U		125	109	87	125	112	90	3	75-130/16
79-00-5	1,1,2-Trichloroethane	1.0 U		125	117	94	125	118	94	1	76-119/14
79-01-6	Trichloroethylene	1.0 U		125	106	85	125	107	86	1	81-126/15
75-69-4	Trichlorofluoromethane	2.0 U		125	107	86	125	120	96	11	71-156/21
96-18-4	1,2,3-Trichloropropane	2.0 U		125	109	87	125	117	94	7	77-120/16
95-63-6	1,2,4-Trimethylbenzene	1.0 U		125	124	99	125	131	105	5	79-120/18
108-67-8	1,3,5-Trimethylbenzene	1.0 U		125	121	97	125	127	102	5	79-120/19
108-05-4	Vinyl Acetate	10 U		625	638	102	625	653	104	2	43-154/14
75-01-4	Vinyl Chloride	1.0 U		125	112	90	125	126	101	12	69-159/18
	m,p-Xylene	2.0 U		250	235	94	250	237	95	1	79-126/15
95-47-6	o-Xylene	1.0 U		125	118	94	125	120	96	2	80-127/14
1330-20-7	Xylene (total)	3.0 U		375	352	94	375	357	95	1	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FC1020-3	Limits
1868-53-7	Dibromofluoromethane	96%	97%	93%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1020-3MS	O72944.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3MSD	O72945.D	5	12/09/22	AL	n/a	n/a	VO2867
FC1020-3 [a]	O72928.D	1	12/09/22	AL	n/a	n/a	VO2867

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

FC1065-1, FC1065-2, FC1065-3, FC1065-4, FC1065-5

CAS No.	Surrogate Recoveries	MS	MSD	FC1020-3	Limits
17060-07-0	1,2-Dichloroethane-D4	98%	97%	102%	79-125%
2037-26-5	Toluene-D8	102%	103%	109%	85-112%
460-00-4	4-Bromofluorobenzene	95%	99%	100%	83-118%

(a) RR@1x, DCFM ICV low DoD

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1293-8MS	1P96448.D	5	12/16/22	CF	n/a	n/a	V1P3648
FC1293-8MSD	1P96450.D	5	12/16/22	CF	n/a	n/a	V1P3648
FC1293-8	1P96444.D	5	12/16/22	CF	n/a	n/a	V1P3648

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

FC1065-1

CAS No.	Compound	FC1293-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
75-71-8	Dichlorodifluoromethane	ND		125	153	122	125	149	119	3	42-167/19

CAS No.	Surrogate Recoveries	MS	MSD	FC1293-8	Limits
1868-53-7	Dibromofluoromethane	113%	113%	114%	83-118%
17060-07-0	1,2-Dichloroethane-D4	126%*	121%	124%	79-125%
2037-26-5	Toluene-D8	94%	95%	95%	85-112%
460-00-4	4-Bromofluorobenzene	99%	99%	103%	83-118%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-BFB
Lab File ID: 1P96320.D
Instrument ID: GCMS1P
Injection Date: 12/14/22
Injection Time: 10:15

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	41333	17.4		Pass
75	30.0 - 60.0% of mass 95	120613	50.9		Pass
95	Base peak, 100% relative abundance	236949	100.0		Pass
96	5.0 - 9.0% of mass 95	16014	6.76		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	167168	70.6		Pass
175	5.0 - 9.0% of mass 174	12628	5.33	(7.55) [a]	Pass
176	95.0 - 101.0% of mass 174	160480	67.7	(96.0) [a]	Pass
177	5.0 - 9.0% of mass 176	10084	4.26	(6.28) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1P3646-IC3646	1P96320.D	12/14/22	10:15	00:00	Initial cal 1
V1P3646-IC3646	1P96322.D	12/14/22	10:47	00:32	Initial cal 2
V1P3646-IC3646	1P96324.D	12/14/22	11:19	01:04	Initial cal 3
V1P3646-IC3646	1P96326.D	12/14/22	11:51	01:36	Initial cal 4
V1P3646-ICC3646	1P96328.D	12/14/22	12:22	02:07	Initial cal 5
V1P3646-IC3646	1P96330.D	12/14/22	12:54	02:39	Initial cal 6
V1P3646-IC3646	1P96332.D	12/14/22	13:26	03:11	Initial cal 7
V1P3646-ICV3646	1P96336.D	12/14/22	14:40	04:25	Initial cal verification 5
V1P3646-CC3646	1P96336A.D	12/14/22	14:40	04:25	Continuing cal 5
V1P3646-BS	1P96338.D	12/14/22	15:12	04:57	Blank Spike
V1P3646-MB	1P96342.D	12/14/22	16:15	06:00	Method Blank
ZZZZZZ	1P96344.D	12/14/22	16:47	06:32	(unrelated sample)
ZZZZZZ	1P96346.D	12/14/22	17:19	07:04	(unrelated sample)
ZZZZZZ	1P96348.D	12/14/22	17:51	07:36	(unrelated sample)
ZZZZZZ	1P96350.D	12/14/22	18:23	08:08	(unrelated sample)
ZZZZZZ	1P96352.D	12/14/22	18:54	08:39	(unrelated sample)
ZZZZZZ	1P96354.D	12/14/22	19:26	09:11	(unrelated sample)
ZZZZZZ	1P96356.D	12/14/22	19:58	09:43	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-BFB
Lab File ID: 1P96408.D
Instrument ID: GCMS1P
Injection Date: 12/16/22
Injection Time: 08:38

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	39106	18.3		Pass
75	30.0 - 60.0% of mass 95	114645	53.7		Pass
95	Base peak, 100% relative abundance	213610	100.0		Pass
96	5.0 - 9.0% of mass 95	14372	6.73		Pass
173	Less than 2.0% of mass 174	0	0.00	(0.00) [a]	Pass
174	50.0 - 100.0% of mass 95	151421	70.9		Pass
175	5.0 - 9.0% of mass 174	12095	5.66	(7.99) [a]	Pass
176	95.0 - 101.0% of mass 174	144789	67.8	(95.6) [a]	Pass
177	5.0 - 9.0% of mass 176	9993	4.68	(6.90) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V1P3648-CC3646	1P96408.D	12/16/22	08:38	00:00	Continuing cal 5
V1P3648-BS	1P96410.D	12/16/22	09:09	00:31	Blank Spike
V1P3648-MB	1P96414.D	12/16/22	10:12	01:34	Method Blank
FC1065-1	1P96416.D	12/16/22	10:44	02:06	LF1-TB-120622
ZZZZZZ	1P96418.D	12/16/22	11:16	02:38	(unrelated sample)
ZZZZZZ	1P96420.D	12/16/22	11:48	03:10	(unrelated sample)
ZZZZZZ	1P96422.D	12/16/22	12:19	03:41	(unrelated sample)
ZZZZZZ	1P96424.D	12/16/22	12:51	04:13	(unrelated sample)
ZZZZZZ	1P96426.D	12/16/22	13:23	04:45	(unrelated sample)
ZZZZZZ	1P96428.D	12/16/22	13:55	05:17	(unrelated sample)
ZZZZZZ	1P96430.D	12/16/22	14:26	05:48	(unrelated sample)
ZZZZZZ	1P96432.D	12/16/22	14:59	06:21	(unrelated sample)
ZZZZZZ	1P96434.D	12/16/22	15:31	06:53	(unrelated sample)
ZZZZZZ	1P96436.D	12/16/22	16:02	07:24	(unrelated sample)
ZZZZZZ	1P96438.D	12/16/22	16:34	07:56	(unrelated sample)
ZZZZZZ	1P96440.D	12/16/22	17:05	08:27	(unrelated sample)
ZZZZZZ	1P96442.D	12/16/22	17:38	09:00	(unrelated sample)
FC1293-8	1P96444.D	12/16/22	18:09	09:31	(used for QC only; not part of job FC1065)
ZZZZZZ	1P96446.D	12/16/22	18:41	10:03	(unrelated sample)
FC1293-8MS	1P96448.D	12/16/22	19:12	10:34	Matrix Spike
FC1293-8MSD	1P96450.D	12/16/22	19:44	11:06	Matrix Spike Duplicate
V1P3648-ECC3646	1P96452.D	12/16/22	20:16	11:38	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-BFB
Lab File ID: 5E35978.D
Instrument ID: GCMS5E
Injection Date: 12/08/22
Injection Time: 10:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13727	25.3		Pass
75	30.0 - 60.0% of mass 95	29731	54.8		Pass
95	Base peak, 100% relative abundance	54288	100.0		Pass
96	5.0 - 9.0% of mass 95	3641	6.71		Pass
173	Less than 2.0% of mass 174	617	1.14	(1.28) [a]	Pass
174	50.0 - 100.0% of mass 95	48392	89.1		Pass
175	5.0 - 9.0% of mass 174	3371	6.21	(6.97) [a]	Pass
176	95.0 - 101.0% of mass 174	46675	86.0	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	3157	5.82	(6.76) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1617-IC1617	5E35978.D	12/08/22	10:48	00:00	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22	11:33	00:45	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22	11:56	01:08	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22	12:19	01:31	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22	12:42	01:54	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22	13:05	02:17	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22	14:00	03:12	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22	15:25	04:37	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22	15:25	04:37	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22	16:06	05:18	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22	16:06	05:18	Blank Spike
V5E1617-MB	5E35990.D	12/08/22	17:39	06:51	Method Blank
ZZZZZZ	5E35991.D	12/08/22	18:02	07:14	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22	18:25	07:37	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22	18:48	08:00	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22	19:11	08:23	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22	19:34	08:46	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22	19:58	09:10	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22	20:21	09:33	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22	20:44	09:56	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	V5E1624-BFB	**Injection Date:**	12/14/22
Lab File ID:	5E36114.D	**Injection Time:**	09:00
Instrument ID:	GCMS5E		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14158	25.3		Pass
75	30.0 - 60.0% of mass 95	29197	52.2		Pass
95	Base peak, 100% relative abundance	55880	100.0		Pass
96	5.0 - 9.0% of mass 95	3670	6.57		Pass
173	Less than 2.0% of mass 174	638	1.14	(1.29) [a]	Pass
174	50.0 - 100.0% of mass 95	49485	88.6		Pass
175	5.0 - 9.0% of mass 174	3732	6.68	(7.54) [a]	Pass
176	95.0 - 101.0% of mass 174	48208	86.3	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	3014	5.39	(6.25) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1624-CC1617	5E36115.D	12/14/22	09:23	00:23	Continuing cal 5
V5E1624-BS	5E36116.D	12/14/22	09:45	00:45	Blank Spike
V5E1624-MB	5E36119.D	12/14/22	10:55	01:55	Method Blank
ZZZZZZ	5E36120.D	12/14/22	11:18	02:18	(unrelated sample)
ZZZZZZ	5E36121.D	12/14/22	11:41	02:41	(unrelated sample)
ZZZZZZ	5E36122.D	12/14/22	12:04	03:04	(unrelated sample)
ZZZZZZ	5E36123.D	12/14/22	12:28	03:28	(unrelated sample)
ZZZZZZ	5E36124.D	12/14/22	12:51	03:51	(unrelated sample)
ZZZZZZ	5E36125.D	12/14/22	13:14	04:14	(unrelated sample)
ZZZZZZ	5E36126.D	12/14/22	13:37	04:37	(unrelated sample)
ZZZZZZ	5E36127.D	12/14/22	14:00	05:00	(unrelated sample)
ZZZZZZ	5E36128.D	12/14/22	14:23	05:23	(unrelated sample)
ZZZZZZ	5E36129.D	12/14/22	14:46	05:46	(unrelated sample)
ZZZZZZ	5E36130.D	12/14/22	15:09	06:09	(unrelated sample)
ZZZZZZ	5E36131.D	12/14/22	15:32	06:32	(unrelated sample)
ZZZZZZ	5E36132.D	12/14/22	15:55	06:55	(unrelated sample)
FC1262-2	5E36133.D	12/14/22	16:19	07:19	(used for QC only; not part of job FC1065)
ZZZZZZ	5E36134.D	12/14/22	16:42	07:42	(unrelated sample)
ZZZZZZ	5E36136.D	12/14/22	17:28	08:28	(unrelated sample)
FC1065-2	5E36137.D	12/14/22	17:51	08:51	LF1MW-13-1222-A
FC1065-3	5E36138.D	12/14/22	18:14	09:14	LF1MW-13-1222
FC1065-4	5E36139.D	12/14/22	18:37	09:37	LF1P-2-1222
FC1065-5	5E36140.D	12/14/22	19:00	10:00	LF1MW-6-1222
FC1262-2MS	5E36141.D	12/14/22	19:24	10:24	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	V5E1624-BFB	**Injection Date:**	12/14/22
Lab File ID:	5E36114.D	**Injection Time:**	09:00
Instrument ID:	GCMS5E		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1624-ECC1617	5E36143.D	12/14/22	20:08	11:08	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-BFB
Lab File ID: O72889.D
Instrument ID: GCMSO
Injection Date: 12/08/22
Injection Time: 09:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	37693	20.6		Pass
75	30.0 - 60.0% of mass 95	90992	49.6		Pass
95	Base peak, 100% relative abundance	183381	100.0		Pass
96	5.0 - 9.0% of mass 95	12483	6.81		Pass
173	Less than 2.0% of mass 174	1006	0.55	(0.63) [a]	Pass
174	50.0 - 100.0% of mass 95	160725	87.6		Pass
175	5.0 - 9.0% of mass 174	11036	6.02	(6.87) [a]	Pass
176	95.0 - 101.0% of mass 174	157312	85.8	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10341	5.64	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2866-IC2866	O72890.D	12/08/22	09:56	00:25	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22	10:20	00:49	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22	10:45	01:14	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22	11:10	01:39	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22	11:35	02:04	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22	12:00	02:29	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22	12:25	02:54	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22	13:16	03:45	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22	13:16	03:45	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22	13:59	04:28	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22	13:59	04:28	Blank Spike
VO2866-MB	O72901.D	12/08/22	15:38	06:07	Method Blank
ZZZZZZ	O72902.D	12/08/22	16:02	06:31	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22	16:27	06:56	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22	16:52	07:21	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22	17:17	07:46	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22	17:42	08:11	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22	18:07	08:36	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22	18:32	09:01	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22	18:57	09:26	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22	19:22	09:51	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22	19:46	10:15	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22	20:11	10:40	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22	20:36	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2866-BFB	**Injection Date:**	12/08/22
Lab File ID:	O72889.D	**Injection Time:**	09:31
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	O72914.D	12/08/22	21:01	11:30	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22	21:26	11:55	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2867-BFB	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	30195	20.1		Pass
75	30.0 - 60.0% of mass 95	75067	50.0		Pass
95	Base peak, 100% relative abundance	150101	100.0		Pass
96	5.0 - 9.0% of mass 95	9536	6.35		Pass
173	Less than 2.0% of mass 174	723	0.48	(0.55) [a]	Pass
174	50.0 - 100.0% of mass 95	132325	88.2		Pass
175	5.0 - 9.0% of mass 174	9314	6.21	(7.04) [a]	Pass
176	95.0 - 101.0% of mass 174	128771	85.8	(97.3) [a]	Pass
177	5.0 - 9.0% of mass 176	8562	5.70	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2867-CC2866	O72918.D	12/09/22	10:04	00:00	Continuing cal 5
VO2867-BS	O72921.D	12/09/22	11:36	01:32	Blank Spike
VO2867-MB	O72923.D	12/09/22	12:26	02:22	Method Blank
ZZZZZZ	O72924.D	12/09/22	12:51	02:47	(unrelated sample)
FC1065-1	O72925.D	12/09/22	13:16	03:12	LF1-TB-120622
ZZZZZZ	O72926.D	12/09/22	13:41	03:37	(unrelated sample)
ZZZZZZ	O72927.D	12/09/22	14:05	04:01	(unrelated sample)
FC1020-3	O72928.D	12/09/22	14:30	04:26	(used for QC only; not part of job FC1065)
ZZZZZZ	O72929.D	12/09/22	14:55	04:51	(unrelated sample)
ZZZZZZ	O72930.D	12/09/22	15:20	05:16	(unrelated sample)
ZZZZZZ	O72931.D	12/09/22	15:45	05:41	(unrelated sample)
ZZZZZZ	O72932.D	12/09/22	16:10	06:06	(unrelated sample)
FC1065-2	O72933.D	12/09/22	16:35	06:31	LF1MW-13-1222-A
FC1065-3	O72934.D	12/09/22	17:00	06:56	LF1MW-13-1222
FC1065-4	O72935.D	12/09/22	17:25	07:21	LF1P-2-1222
FC1065-5	O72936.D	12/09/22	17:50	07:46	LF1MW-6-1222
ZZZZZZ	O72937.D	12/09/22	18:14	08:10	(unrelated sample)
ZZZZZZ	O72938.D	12/09/22	18:39	08:35	(unrelated sample)
ZZZZZZ	O72939.D	12/09/22	19:04	09:00	(unrelated sample)
ZZZZZZ	O72940.D	12/09/22	19:29	09:25	(unrelated sample)
ZZZZZZ	O72941.D	12/09/22	19:54	09:50	(unrelated sample)
ZZZZZZ	O72942.D	12/09/22	20:19	10:15	(unrelated sample)
ZZZZZZ	O72943.D	12/09/22	20:44	10:40	(unrelated sample)
FC1020-3MS	O72944.D	12/09/22	21:09	11:05	Matrix Spike

Instrument Performance Check (BFB)

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2867-BFB	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
FC1020-3MSD	O72945.D	12/09/22	21:34	11:30	Matrix Spike Duplicate
VO2867-ECC2866	O72946.D	12/09/22	21:59	11:55	Ending cal 5

Internal Standard Area Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V1P3648-CC3646	**Injection Date:**	12/16/22
Lab File ID:	1P96408.D	**Injection Time:**	08:38
Instrument ID:	GCMS1P	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	1071093	3.72	696900	5.64	318071	7.33
Check Std [b]	755003	3.72	532359	5.64	263676	7.33
Upper Limit [c]	1510006	3.89	1064718	5.81	527352	7.50
Lower Limit [d]	377502	3.55	266180	5.47	131838	7.16

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V1P3648-BS	796487	3.71	564877	5.64	270339	7.33
V1P3648-MB	815536	3.72	580754	5.64	266440	7.33
FC1065-1	802608	3.71	565816	5.64	257466	7.33
ZZZZZZ	808531	3.72	570878	5.64	261893	7.33
ZZZZZZ	774210	3.71	551153	5.64	245191	7.33
ZZZZZZ	764953	3.72	545487	5.64	242109	7.33
ZZZZZZ	734057	3.71	519956	5.64	229956	7.33
ZZZZZZ	702518	3.72	500401	5.64	223242	7.33
ZZZZZZ	676236	3.72	476889	5.64	214273	7.33
ZZZZZZ	667251	3.72	475906	5.64	212921	7.33
ZZZZZZ	640772	3.72	461905	5.64	208685	7.33
ZZZZZZ	618693	3.72	447056	5.64	201479	7.33
ZZZZZZ	617231	3.71	440832	5.64	195556	7.33
ZZZZZZ	603413	3.72	428985	5.64	191348	7.33
ZZZZZZ	606516	3.72	421996	5.64	199210	7.33
ZZZZZZ	600929	3.71	429788	5.64	191731	7.33
FC1293-8	601473	3.72	423574	5.64	191033	7.33
ZZZZZZ	585989	3.72	418022	5.64	188921	7.33
FC1293-8MS	593629	3.72	430131	5.64	209762	7.33
FC1293-8MSD	629183	3.71	452447	5.64	220992	7.33
V1P3648-ECC3646	667085	3.72	473097	5.64	233066	7.33

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: V1P3646-ICC3646 1P96328.D 12/14/22 12:22
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V5E1624-CC1617	**Injection Date:**	12/14/22
Lab File ID:	5E36115.D	**Injection Time:**	09:23
Instrument ID:	GCMS5E	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	367847	8.95	264640	12.11	129127	14.47
Check Std [b]	334654	8.95	249700	12.11	125334	14.47
Upper Limit [c]	669308	9.12	499400	12.28	250668	14.64
Lower Limit [d]	167327	8.78	124850	11.94	62667	14.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5E1624-BS [e]	336581	8.95	249054	12.11	121964	14.47
V5E1624-MB	294774	8.95	217534	12.11	101684	14.47
ZZZZZZ	284940	8.95	209892	12.11	98296	14.47
ZZZZZZ	293494	8.95	213389	12.11	100575	14.47
ZZZZZZ	289641	8.95	213660	12.12	98241	14.47
ZZZZZZ	299627	8.95	220862	12.11	103482	14.47
ZZZZZZ	294994	8.95	215341	12.11	100296	14.47
ZZZZZZ	288644	8.95	211806	12.11	97405	14.47
ZZZZZZ	278285	8.95	207276	12.12	96740	14.47
ZZZZZZ	278142	8.95	206033	12.12	94558	14.47
ZZZZZZ	281093	8.95	208338	12.11	95937	14.47
ZZZZZZ	278883	8.95	207563	12.11	96589	14.47
ZZZZZZ	280476	8.95	204917	12.11	95602	14.47
ZZZZZZ	274894	8.95	204110	12.12	95770	14.47
ZZZZZZ	279530	8.95	222302	12.11	111111	14.47
FC1262-2	289018	8.95	213969	12.11	97750	14.47
ZZZZZZ	282909	8.95	210094	12.11	97951	14.47
ZZZZZZ	278388	8.95	206390	12.11	96779	14.47
FC1065-2	276160	8.95	205788	12.12	94175	14.47
FC1065-3	274743	8.95	204687	12.12	95971	14.47
FC1065-4 [f]	283077	8.95	211454	12.11	98015	14.47
FC1065-5	276672	8.95	201624	12.11	95376	14.47
FC1262-2MS	299718	8.95	223388	12.11	110133	14.47
V5E1624-ECC1617	317052	8.95	239839	12.11	119104	14.47

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: V5E1617-ICC1617 5E35982.D 12/08/22 12:42
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Internal Standard Area Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V5E1624-CC1617	**Injection Date:**	12/14/22
Lab File ID:	5E36115.D	**Injection Time:**	09:23
Instrument ID:	GCMS5E	**Method:**	SW846 8260D

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT

(e) No MSD available for this run.
(f) Sample vial(s) contained bubbles greater than 6mm.

Internal Standard Area Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VO2867-CC2866	**Injection Date:**	12/09/22
Lab File ID:	O72918.D	**Injection Time:**	10:04
Instrument ID:	GCMSO	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	828618	8.55	603499	11.72	216353	14.10
Check Std [b]	851463	8.55	590347	11.72	222946	14.10
Upper Limit [c]	1702926	8.72	1180694	11.89	445892	14.27
Lower Limit [d]	425732	8.38	295174	11.55	111473	13.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VO2867-MB	797478	8.55	522651	11.72	179709	14.10
ZZZZZZ	784382	8.55	520176	11.72	167074	14.10
FC1065-1	797518	8.55	543913	11.72	192853	14.10
ZZZZZZ	774379	8.55	515462	11.73	164036	14.10
ZZZZZZ	775010	8.55	514258	11.73	163002	14.10
FC1020-3	740723	8.55	483913	11.72	161023	14.10
ZZZZZZ	756937	8.55	511960	11.73	165986	14.10
ZZZZZZ	716790	8.55	474905	11.73	144112	14.10
ZZZZZZ	734384	8.55	491413	11.72	156896	14.10
ZZZZZZ	735570	8.55	501653	11.72	165779	14.10
FC1065-2	767956	8.55	551250	11.72	237013	14.10
FC1065-3	726068	8.55	497380	11.73	178976	14.10
FC1065-4	720362	8.55	476996	11.72	156730	14.10
FC1065-5	716094	8.55	476465	11.72	149943	14.10
ZZZZZZ	710803	8.55	472615	11.73	149220	14.10
ZZZZZZ	701225	8.55	468492	11.72	143864	14.10
ZZZZZZ	683818	8.55	451230	11.73	137950	14.10
ZZZZZZ	689183	8.55	452361	11.72	138047	14.10
ZZZZZZ	719751	8.55	493775	11.72	163134	14.10
ZZZZZZ	676373	8.55	457105	11.73	157249	14.10
ZZZZZZ	677233	8.55	448448	11.72	145285	14.10
FC1020-3MS	747271	8.55	516767	11.73	185563	14.10
FC1020-3MSD	774006	8.55	533318	11.73	183628	14.10
VO2867-ECC2866	786853	8.55	570626	11.73	237879	14.10

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: VO2866-ICC2866 O72894.D 12/08/22 11:35
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FC1065-1	1P96416.D	107	108	94	102
FC1065-1	O72925.D	96	100	105	97
FC1065-2	5E36137.D	101	100	98	103
FC1065-2	O72933.D	96	112	101	86
FC1065-3	5E36138.D	103	101	99	100
FC1065-3	O72934.D	94	102	105	94
FC1065-4	5E36139.D	101	103	97	102
FC1065-4	O72935.D	93	98	109	100
FC1065-5	5E36140.D	101	103	101	104
FC1065-5	O72936.D	92	96	107	102
FC1020-3MS	O72944.D	96	98	102	95
FC1020-3MSD	O72945.D	97	97	103	99
FC1262-2MS	5E36141.D	101	99	95	99
FC1293-8MS	1P96448.D	113	126*	94	99
FC1293-8MSD	1P96450.D	113	121	95	99
V1P3648-BS	1P96410.D	110	112	97	105
V1P3648-MB	1P96414.D	106	109	94	101
V5E1624-BS	5E36116.D	103	104	97	99
V5E1624-MB	5E36119.D	101	100	98	101
VO2867-BS	O72921.D	97	101	106	99
VO2867-MB	O72923.D	94	102	108	98

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICC3646
Lab FileID: 1P96328.D

Response Factor Report MSVOA13

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Initial Calibration

Calibration Files
1 =1P96320.D 2 =1P96322.D 3 =1P96324.D 4 =1P96326.D
5 =1P96328.D 6 =1P96330.D 7 =1P96332.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.176	0.246	0.252	0.245	0.220	0.254	0.251	0.235	12.20
3)P Chloromethane	0.183	0.244	0.245	0.218	0.211	0.240	0.231	0.225	9.98
4) 1,3-butadiene	0.172	0.138	0.164	0.159	0.157	0.191	0.175	0.165	10.02
5)C Vinyl Chloride	0.137	0.195	0.207	0.193	0.187	0.229	0.213	0.194	15.00
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9958									
Response Ratio = 0.00000 + 0.19112 *A + 0.01392 *A^2									
6) Bromomethane	0.083	0.077	0.072	0.067	0.059	0.067	0.068	0.071	10.98
7) Chloroethane	0.061	0.074	0.077	0.077	0.069	0.078	0.075	0.073	8.35
8) Trichlorofluorome	0.221	0.265	0.258	0.253	0.210	0.202	0.146	0.222	18.70
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9965									
Response Ratio = 0.00000 + 0.27457 *A + -0.06159 *A^2									
9) Ethyl Ether	0.122	0.155	0.159	0.176	0.150	0.144	0.121	0.147	13.55
10) Ethanol	0.009	0.005	0.006	0.005	0.004	0.004	0.004	0.005	36.40
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9941									
Response Ratio = 0.00000 + 0.00538 *A + -0.00004 *A^2									
11) 1,2-Dichlorotrifl	0.226	0.218	0.215	0.251	0.223	0.242	0.224	0.229	5.77
12)C 1,1-Dichloroethen	0.292	0.258	0.274	0.320	0.284	0.308	0.282	0.288	7.18
13) Freon 113	0.175	0.169	0.169	0.197	0.186	0.200	0.192	0.184	7.10
14) Carbon Disulfide	0.533	0.435	0.462	0.550	0.493	0.530	0.498	0.500	8.23
15) Iodomethane	0.104	0.088	0.105	0.133	0.129	0.146	0.131	0.119	17.22
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9938									
Response Ratio = 0.00000 + 0.12413 *A + 0.00647 *A^2									
16) Acrolein	0.055	0.067	0.062	0.070	0.061	0.063	0.059	0.063	7.87
17) Allyl chloride	0.358	0.265	0.305	0.304	0.284	0.283	0.252	0.293	11.86
18) Methylene Chlorid	0.401	0.239	0.243	0.259	0.234	0.231	0.217	0.261	24.30
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985									
Response Ratio = 0.00000 + 0.25848 *A + -0.02075 *A^2									
19) Acetone	0.183	0.133	0.120	0.121	0.113	0.112	0.107	0.127	20.58
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9994									
Response Ratio = 0.00000 + 0.12481 *A + -0.00186 *A^2									
20) Methyl acetate	0.257	0.234	0.256	0.295	0.263	0.257	0.241	0.258	7.50
21) trans-1,2-Dichlor	0.295	0.257	0.278	0.309	0.288	0.293	0.279	0.286	5.68
22) Hexane	0.163	0.137	0.136	0.169	0.160	0.163	0.161	0.155	8.73
23) Methyl Tert Butyl	0.586	0.568	0.657	0.732	0.691	0.711	0.685	0.661	9.39
24) Tert Butyl Alcoho	0.059	0.055	0.060	0.069	0.064	0.066	0.064	0.062	7.52
25) Acetonitrile	0.082	0.046	0.052	0.044	0.042	0.037		0.051	31.87
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9975									
Response Ratio = 0.00000 + 0.05094 *A + -0.00103 *A^2									

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
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26)	Di-isopropyl ethe	0.540	0.529	0.594	0.699	0.652	0.652	0.625	0.613	10.16
27)	Chloroprene	0.982	0.826	0.902	0.948	0.895	0.875	0.845	0.896	6.12
28)P	1,1-Dichloroethan	0.341	0.340	0.367	0.402	0.366	0.373	0.351	0.363	5.91
29)	Acrylonitrile	0.126	0.106	0.115	0.124	0.116	0.112	0.108	0.115	6.67
30)	ETBE	0.549	0.568	0.619	0.695	0.658	0.669	0.650	0.630	8.57
31)	Vinyl acetate	0.422	0.389	0.429	0.486	0.462	0.434	0.423	0.435	7.13
32)	cis-1,2-Dichloroe	0.209	0.189	0.213	0.230	0.217	0.221	0.217	0.214	6.03
33)	2,2-Dichloropropa	0.315	0.289	0.326	0.362	0.338	0.376	0.364	0.338	9.19
34)	Bromochloromethan	0.093	0.081	0.086	0.095	0.085	0.088	0.085	0.087	5.50
35)	Cyclohexane	0.275	0.253	0.286	0.341	0.329	0.333	0.333	0.307	11.42
36)C	Chloroform	0.384	0.336	0.370	0.407	0.375	0.392	0.376	0.377	5.85
37)	Ethyl acetate	0.330	0.290	0.314	0.352	0.336	0.318	0.309	0.321	6.24
38)	Tetrahydrofuran	0.139	0.110	0.132	0.139	0.134	0.125	0.120	0.129	8.31
39)S	Dibromofluorometh	0.221	0.222	0.231	0.224	0.222	0.234	0.221	0.225	2.31
40)	Carbon Tetrachlor	0.274	0.245	0.260	0.296	0.276	0.309	0.305	0.281	8.50
41)	1,1,1-Trichloroet	0.303	0.302	0.328	0.361	0.335	0.362	0.355	0.335	7.70
42)	2-Butanone	0.287	0.240	0.214	0.217	0.207	0.195	0.190	0.222	14.96

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.22411 *A + -0.00361 *A^2

43)	1,1-Dichloroprope	0.268	0.248	0.277	0.312	0.292	0.309	0.304	0.287	8.33
44)	tert-Butyl format	0.137	0.186	0.178	0.205	0.190			0.179	14.13
45)	Propionitrile	0.077	0.059	0.066	0.060	0.058	0.054	0.051	0.061	13.91
46)	Methacrylonitrile	0.241	0.189	0.217	0.196	0.187	0.166	0.154	0.193	15.15

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9992
Response Ratio = 0.00000 + 0.20967 *A + -0.00285 *A^2

47)	Benzene	0.891	0.783	0.852	0.894	0.815	0.769	0.719	0.818	7.99
48)	TAME	0.542	0.546	0.597	0.664	0.645	0.644	0.641	0.611	8.25
49)S	1,2-Dichloroethan	0.301	0.306	0.308	0.303	0.302	0.312	0.297	0.304	1.54
50)	Isobutyl alcohol	0.024	0.020	0.024	0.024	0.024	0.021	0.020	0.023	8.18
51)	1,2-Dichloroethan	0.312	0.270	0.296	0.314	0.291	0.307	0.295	0.298	5.07
52)	Tert Amyl Alcohol	0.041	0.042	0.046	0.055	0.054	0.053	0.054	0.049	11.89
53)	Trichloroethene	0.238	0.195	0.205	0.230	0.215	0.220	0.222	0.218	6.59
54)	Methylcyclohexane	0.283	0.252	0.269	0.322	0.317	0.334	0.339	0.302	11.31
55)	Dibromomethane	0.126	0.104	0.114	0.129	0.122	0.124	0.122	0.120	6.92
56)C	1,2-Dichloropropa	0.193	0.180	0.199	0.223	0.211	0.209	0.214	0.204	7.09
57)	Bromodichlorometh	0.241	0.220	0.239	0.270	0.262	0.278	0.272	0.255	8.40
58)	Methyl methacryla	0.234	0.178	0.210	0.229	0.237	0.235	0.237	0.223	9.79
59)	1,4-Dioxane	0.003	0.003	0.004	0.005	0.005	0.005	0.005	0.004	19.36

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9966
Response Ratio = 0.00000 + 0.00462 *A + 0.00001 *A^2

60)	2-Chloroethyl vin	0.103	0.160	0.150	0.170	0.156	0.149	0.146	0.148	14.59
61)	cis-1,3-Dichlorop	0.274	0.271	0.309	0.349	0.331	0.345	0.342	0.317	10.49
62) I	Chlorobenzene-d5	----------	----------	----------	ISTD	----------	----------	----------	----------	
63)S	Toluene-d8	1.392	1.409	1.406	1.412	1.475	1.467	1.520	1.440	3.31
64)C	Toluene	1.290	1.189	1.233	1.389	1.380	1.348	1.379	1.315	6.04
65)	2-Nitropropane	0.110	0.106	0.115	0.142	0.140	0.137	0.145	0.128	13.04
66)	4-Methyl-2-pentan	0.608	0.575	0.513	0.518	0.530	0.457	0.472	0.525	10.14
67)	trans-1,3-Dichlor	0.360	0.365	0.390	0.451	0.446	0.445	0.453	0.416	10.19
68)	Tetrachloroethene	0.302	0.266	0.283	0.307	0.308	0.309	0.321	0.300	6.18
69)	Ethyl methacrylat	0.357	0.356	0.439	0.440	0.483	0.458	0.477	0.430	12.28
70)	1,1,2-Trichloroet	0.204	0.211	0.211	0.237	0.234	0.218	0.227	0.220	5.83
71)	Dibromochlorometh	0.221	0.198	0.234	0.276	0.278	0.285	0.293	0.255	14.49
72)	1,3-Dichloropropa	0.464	0.435	0.469	0.531	0.520	0.507	0.513	0.491	7.20
73)	1,2-Dibromoethane	0.247	0.231	0.255	0.287	0.274	0.282	0.290	0.267	8.51
74)	3,3-dimethyl-1-bu	0.043	0.068	0.066	0.084	0.076	0.074	0.073	0.069	18.63

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9978

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICC3646
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              Response Ratio = 0.00000 + 0.07660 *A + -0.00004 *A^2

 75)  2-hexanone         0.484 0.556 0.505 0.547 0.494 0.458 0.445 0.498   8.38
 76)  1-Chlorohexane     0.434 0.338 0.362 0.432 0.398 0.390 0.412 0.395   8.90
 77)C Ethylbenzene       1.363 1.225 1.315 1.496 1.375 1.418 1.421 1.373   6.30
 78)P Chlorobenzene      0.787 0.671 0.707 0.777 0.730 0.724 0.741 0.734   5.40
 79)  1,1,1,2-Tetrachlo 0.242 0.228 0.252 0.278 0.268 0.283 0.285 0.262   8.39
 80)  m,p-Xylene         0.919 0.909 0.993 1.139 1.076 1.102 1.108 1.035   9.13
 81)  o-Xylene           0.847 0.850 0.940 1.099 1.068 1.121 1.137 1.009  12.58
 82)  Styrene            0.528 0.567 0.666 0.825 0.800 0.822 0.833 0.720  18.25
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.73897 *A + 0.05221 *A^2

 83)P Bromoform          0.114 0.113 0.140 0.166 0.168 0.182 0.191 0.153  20.52
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.14599 *A + 0.02361 *A^2

 84)  Isopropylbenzene  0.825 0.930 1.073 1.280 1.233 1.279 1.300 1.132  16.94
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
               Response Ratio = 0.00000 + 1.15327 *A + 0.08019 *A^2


 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 0.811 0.812 0.811 0.785 0.801 0.826 0.833 0.811   1.92
 87)  cis-1,4-Dichloro- 0.360 0.289 0.335 0.326 0.326 0.327 0.341 0.329   6.51
 88)  n-Propylbenzene   2.793 2.705 2.968 3.359 3.233 3.234 3.310 3.086   8.50
 89)  Bromobenzene      0.722 0.602 0.620 0.652 0.640 0.639 0.651 0.647   5.83
 90)P 1,1,2,2-Tetrachlo 0.894 0.806 0.859 0.942 0.906 0.876 0.886 0.882   4.78
 91)  1,3,5-Trimethylbe 1.614 1.766 2.008 2.285 2.178 2.230 2.267 2.050  12.97
 92)  2-Chlorotoluene   1.699 1.641 1.777 2.016 1.907 1.942 1.980 1.852   7.88
 93)  trans-1,4-Dichlor 0.242 0.284 0.306 0.356 0.342 0.345 0.354 0.318  13.50
 94)  1,2,3-Trichloropr 0.297 0.312 0.313 0.335 0.318 0.317 0.321 0.316   3.51
 95)  Cyclohexanone     0.039 0.042 0.047 0.058 0.056 0.055 0.054 0.050  14.78
 96)  4-Chlorotoluene   1.731 1.718 1.975 2.129 2.007 2.057 2.072 1.956   8.47
 97)  tert-Butylbenzene 0.918 0.966 1.103 1.293 1.221 1.277 1.306 1.155  13.95
 98)  a-Methyl styrene                                                  0.000  -1.00
 99)  1,2,4-Trimethylbe 1.398 1.597 1.879 2.158 2.056 2.164 2.254 1.929  16.71
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
               Response Ratio = 0.00000 + 1.92184 *A + 0.17056 *A^2

100)  Pentachloroethane 0.338 0.315 0.352 0.348 0.337 0.357 0.368 0.345   4.90
101)  sec-Butylbenzene  1.774 1.845 2.124 2.481 2.384 2.451 2.551 2.230  14.26
102)  4-Isopropyltoluen 1.415 1.454 1.784 2.170 2.107 2.199 2.278 1.915  18.98
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
               Response Ratio = 0.00000 + 1.91353 *A + 0.19253 *A^2

103)  1,3-Dichlorobenze 1.130 1.049 1.116 1.210 1.136 1.156 1.176 1.139   4.45
104)  1,2,3-Trimethylbe 1.783 1.693 1.850 2.136 2.081 2.099 2.178 1.974   9.82
105)  1,4-Dichlorobenze 1.269 1.088 1.143 1.233 1.180 1.172 1.194 1.182   4.98
106)  n-Butylbenzene    0.755 0.757 0.891 1.061 1.046 1.064 1.113 0.955  15.97
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.95116 *A + 0.08371 *A^2

107)  Benzyl Chloride   0.260 0.234 0.276 0.347 0.362 0.380 0.398 0.322  20.02
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9983
               Response Ratio = 0.00000 + 0.30710 *A + 0.04832 *A^2

108)  1,2-Dichlorobenze 1.059 0.979 1.030 1.130 1.074 1.102 1.136 1.073   5.24
109)  1,2-Dibromo-3-Chl 0.237 0.179 0.203 0.251 0.247 0.265 0.276 0.237  14.56
110)  Hexachlorobutadie 0.264 0.216 0.256 0.282 0.273 0.296 0.302 0.270  10.73
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Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICC3646
Lab FileID: 1P96328.D

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111)  1,2,4-Trichlorobe 0.441 0.425 0.518 0.619 0.602 0.674 0.699 0.568  19.20
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9987
               Response Ratio = 0.00000 + 0.53683 *A + 0.08593 *A^2

112)  Naphthalene       1.327 1.311 1.583 2.072 2.125 2.395 2.520 1.905  26.12
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 1.74870 *A + 0.40915 *A^2

113)  1,2,3-Trichlorobe 0.492 0.455 0.530 0.622 0.602 0.651 0.679 0.576  14.67
 ----------------------------------------------------------------------------
 (#) = Out of Range

          V1P_2022-12-14.M        Wed Dec 14 15:37:06 2022
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Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-14\1P96336.D Vial: 10
Acq On : 14 Dec 2022 2:40 pm Operator: courtnef
Sample : ICV3646-5 Inst : MSVOA13
Misc : MS52806,V1P3646,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	94	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.222	5.5	95	0.00	1.12
3 P	Chloromethane	0.225	0.231	-2.7	103	0.00	1.24
4	1,3-butadiene	0.165	0.189	-14.5	113	0.00	1.31
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	41.376	-3.4	105	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.067	5.6	106	0.00	1.50
7	Chloroethane	0.073	0.081	-11.0	109	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	40.332	-0.8	101	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.137	6.8	85	0.00	1.87
		Amount	Calc.	%Drift			
10	Ethanol	800.000	746.461	6.7	96	0.00	1.97
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.225	1.7	94	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.282	2.1	93	0.00	1.97
13	Freon 113	0.184	0.180	2.2	91	0.00	2.01
14	Carbon Disulfide	0.500	0.520	-4.0	99	0.00	1.99
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	36.776	8.1	86	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.055	12.7	84	0.00	2.15
17	Allyl chloride	0.293	0.292	0.3	96	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	35.689	10.8	87	0.00	2.30
19	Acetone	200.000	196.551	1.7	96	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.261	-1.2	93	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.279	2.4	91	0.00	2.40
22	Hexane	0.155	0.153	1.3	90	0.00	2.46

Initial Calibration Verification

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Project: Griffiss AFB; Rome, NY
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23		Methyl Tert Butyl Ether	0.661	0.682	-3.2	93	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.067	-8.1	98	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	322.180	19.5	80	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.641	-4.6	92	0.00	2.68
27		Chloroprene	0.896	0.957	-6.8	100	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.368	-1.4	94	0.00	2.72
29		Acrylonitrile	0.115	0.124	-7.8	100	0.00	2.73
30		ETBE	0.630	0.637	-1.1	91	0.00	2.88
31		Vinyl acetate	0.435	0.518	-19.1	105	0.00	2.86
32		cis-1,2-Dichloroethene	0.214	0.213	0.5	92	0.00	3.01
33		2,2-Dichloropropane	0.338	0.325	3.8	90	0.00	3.08
34		Bromochloromethane	0.087	0.088	-1.1	97	0.00	3.12
35		Cyclohexane	0.307	0.326	-6.2	93	0.00	3.16
36	C	Chloroform	0.377	0.373	1.1	93	0.00	3.16
37		Ethyl acetate	0.321	0.343	-6.9	96	0.00	3.22
38		Tetrahydrofuran	0.129	0.125	3.1	87	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.228	-1.3	96	0.00	3.26
40		Carbon Tetrachloride	0.281	0.280	0.4	95	0.00	3.27
41		1,1,1-Trichloroethane	0.335	0.339	-1.2	95	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	184.381	7.8	88	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.285	0.7	91	0.00	3.36
44		tert-Butyl formate	0.179	0.146	18.4	72	0.00	3.40
45		Propionitrile	0.061	0.053	13.1	85	0.00	3.46
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	358.217	10.4	85	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.775	5.3	89	0.00	3.49
48		TAME	0.611	0.621	-1.6	90	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.295	3.0	91	0.00	3.55
50		Isobutyl alcohol	0.023	0.021	8.7	81	0.00	3.60
51		1,2-Dichloroethane	0.298	0.284	4.7	91	0.00	3.58
52		Tert Amyl Alcohol	0.049	0.052	-6.1	92	0.00	3.65
53		Trichloroethene	0.218	0.212	2.8	92	0.00	3.82
54		Methylcyclohexane	0.302	0.316	-4.6	93	0.00	3.84
55		Dibromomethane	0.120	0.116	3.3	89	0.00	4.04
56	C	1,2-Dichloropropane	0.204	0.195	4.4	87	0.00	4.10
57		Bromodichloromethane	0.255	0.266	-4.3	95	0.00	4.14
58		Methyl methacrylate	0.223	0.232	-4.0	91	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	891.182	-11.4	101	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.156	-5.4	94	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.324	-2.2	92	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	97	0.00	5.64
63	S	Toluene-d8	1.440	1.472	-2.2	97	0.00	4.65
64	C	Toluene	1.315	1.290	1.9	91	0.00	4.68
65		2-Nitropropane	0.128	0.138	-7.8	96	0.00	4.77

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

66		4-Methyl-2-pentanone	0.525	0.463	11.8	85	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.449	-7.9	98	0.00	4.91
68		Tetrachloroethene	0.300	0.306	-2.0	96	0.00	4.93
69		Ethyl methacrylate	0.430	0.422	1.9	85	0.00	5.03
70		1,1,2-Trichloroethane	0.220	0.216	1.8	90	0.00	5.01
71		Dibromochloromethane	0.255	0.262	-2.7	92	0.00	5.14
72		1,3-Dichloropropane	0.491	0.463	5.7	87	0.00	5.19
73		1,2-Dibromoethane	0.267	0.275	-3.0	97	0.00	5.29
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1992.704	0.4	96	0.00	5.43
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.498	0.470	5.6	92	0.00	5.43
76		1-Chlorohexane	0.395	0.409	-3.5	100	0.00	5.65
77	C	Ethylbenzene	1.373	1.359	1.0	96	0.00	5.68
78	P	Chlorobenzene	0.734	0.719	2.0	96	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.274	-4.6	99	0.00	5.69
80		m,p-Xylene	1.035	1.075	-3.9	97	0.00	5.78
81		o-Xylene	1.009	1.102	-9.2	100	0.00	6.07
			Amount	Calc.	%Drift			
82		Styrene	40.000	41.456	-3.6	98	0.00	6.11
83	P	Bromoform	40.000	41.682	-4.2	100	0.00	6.11
84		Isopropylbenzene	40.000	41.251	-3.1	99	0.00	6.30
			AvgRF	CCRF	%Dev			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.833	-2.7	104	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.284	13.7	87	0.00	6.52
88		n-Propylbenzene	3.086	3.174	-2.9	98	0.00	6.60
89		Bromobenzene	0.647	0.603	6.8	94	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.840	4.8	93	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.142	-4.5	99	0.00	6.75
92		2-Chlorotoluene	1.852	1.883	-1.7	99	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.347	-9.1	102	0.00	6.75
94		1,2,3-Trichloropropane	0.316	0.297	6.0	94	0.00	6.72
95		Cyclohexanone	0.050	0.056	-12.0	99	0.00	6.74
96		4-Chlorotoluene	1.956	2.010	-2.8	100	0.00	6.83
97		tert-Butylbenzene	1.155	1.249	-8.1	102	0.00	6.99
98		a-Methyl styrene		----------NA----------				
			Amount	Calc.	%Drift			
99		1,2,4-Trimethylbenzene	40.000	40.992	-2.5	103	0.00	7.04
			AvgRF	CCRF	%Dev			
100		Pentachloroethane	0.345	0.361	-4.6	107	0.00	6.99
101		sec-Butylbenzene	2.230	2.485	-11.4	104	0.00	7.13
			Amount	Calc.	%Drift			
102		4-Isopropyltoluene	40.000	42.661	-6.7	105	0.00	7.24
			AvgRF	CCRF	%Dev			
103		1,3-Dichlorobenzene	1.139	1.149	-0.9	101	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	2.154	-9.1	104	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.162	1.7	99	0.00	7.34
			Amount	Calc.	%Drift			
106		n-Butylbenzene	40.000	38.277	4.3	93	0.00	7.55

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3646-ICV3646
Lab FileID: 1P96336.D

107	Benzyl Chloride	40.000	41.245	-3.1	99	0.00	7.52
	----------	AvgRF	CCRF	%Dev	----------		
108	1,2-Dichlorobenzene	1.073	1.091	-1.7	102	0.00	7.65
109	1,2-Dibromo-3-Chloropropa	0.237	0.234	1.3	95	0.00	8.20
110	Hexachlorobutadiene	0.270	0.265	1.9	97	0.00	8.68
	----------	Amount	Calc.	%Drift	----------		
111	1,2,4-Trichlorobenzene	40.000	41.617	-4.0	105	0.00	8.68
112	Naphthalene	40.000	41.874	-4.7	103	0.00	8.88
	----------	AvgRF	CCRF	%Dev	----------		
113	1,2,3-Trichlorobenzene	0.576	0.620	-7.6	103	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Wed Dec 14 15:36:57 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\2022-12-16\1P96408.D Vial: 2
Acq On : 16 Dec 2022 8:38 am Operator: courtnef
Sample : CC3646-5 Inst : MSVOA13
Misc : MS52806,V1P3648,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\MET...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	70	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.254	-8.1	81	0.00	1.12
3 P	Chloromethane	0.225	0.205	8.9	69	0.00	1.24
4	1,3-butadiene	0.165	0.152	7.9	68	0.00	1.32
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	34.992	12.5	66	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.075	-5.6	89	0.00	1.50
7	Chloroethane	0.073	0.089	-21.9#	90	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	51.128	-27.8#	91	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.167	-13.6	78	0.00	1.87
		Amount	Calc.	%Drift			
10	Ethanol	800.000	835.537	-4.4	80	0.00	1.97
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.256	-11.8	81	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.340	-18.1	84	0.00	1.97
13	Freon 113	0.184	0.210	-14.1	80	0.00	2.01
14	Carbon Disulfide	0.500	0.558	-11.6	80	0.00	2.00
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	53.637	-34.1#	96	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.068	-7.9	78	0.00	2.15
17	Allyl chloride	0.293	0.294	-0.3	73	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	41.412	-3.5	75	0.00	2.29
19	Acetone	200.000	212.677	-6.3	78	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.262	-1.6	70	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.314	-9.8	77	0.00	2.40
22	Hexane	0.155	0.158	-1.9	70	0.00	2.46

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

23		Methyl Tert Butyl Ether	0.661	0.754	-14.1	77	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.070	-12.9	77	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	346.445	13.4	64	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.636	-3.8	69	0.00	2.68
27		Chloroprene	0.896	0.925	-3.2	73	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.390	-7.4	75	0.00	2.72
29		Acrylonitrile	0.115	0.119	-3.5	73	0.00	2.72
30		ETBE	0.630	0.687	-9.0	74	0.00	2.88
31		Vinyl acetate	0.435	0.452	-3.9	69	0.00	2.85
32		cis-1,2-Dichloroethene	0.214	0.228	-6.5	74	0.00	3.02
33		2,2-Dichloropropane	0.338	0.407	-20.4#	85	0.00	3.08
34		Bromochloromethane	0.087	0.097	-11.5	80	0.00	3.12
35		Cyclohexane	0.307	0.322	-4.9	69	0.00	3.16
36	C	Chloroform	0.377	0.426	-13.0	80	0.00	3.16
37		Ethyl acetate	0.321	0.332	-3.4	70	0.00	3.22
38		Tetrahydrofuran	0.129	0.122	5.4	64	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.249	-10.7	79	0.00	3.26
40		Carbon Tetrachloride	0.281	0.339	-20.6#	86	0.00	3.26
41		1,1,1-Trichloroethane	0.335	0.400	-19.4	84	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	188.103	5.9	67	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.324	-12.9	78	0.00	3.36
44		tert-Butyl formate	0.179	0.208	-16.2	77	0.00	3.40
45		Propionitrile	0.061	0.056	8.2	67	0.00	3.45
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	372.132	7.0	66	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.820	-0.2	71	0.00	3.49
48		TAME	0.611	0.667	-9.2	73	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.344	-13.2	80	0.00	3.55
50		Isobutyl alcohol	0.023	0.021	8.7	61	0.00	3.59
51		1,2-Dichloroethane	0.298	0.337	-13.1	82	0.00	3.59
52		Tert Amyl Alcohol	0.049	0.054	-10.2	71	0.00	3.65
53		Trichloroethene	0.218	0.234	-7.3	77	0.00	3.82
54		Methylcyclohexane	0.302	0.319	-5.6	71	0.00	3.84
55		Dibromomethane	0.120	0.132	-10.0	76	0.00	4.05
56	C	1,2-Dichloropropane	0.204	0.210	-2.9	70	0.00	4.10
57		Bromodichloromethane	0.255	0.288	-12.9	78	0.00	4.14
58		Methyl methacrylate	0.223	0.236	-5.8	70	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	858.490	-7.3	73	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.156	-5.4	71	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.354	-11.7	75	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	76	0.00	5.64
63	S	Toluene-d8	1.440	1.412	1.9	73	0.00	4.64
64	C	Toluene	1.315	1.300	1.1	72	0.00	4.68
65		2-Nitropropane	0.128	0.147	-14.8	80	0.00	4.77

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

66		4-Methyl-2-pentanone	0.525	0.447	14.9	64	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.445	-7.0	76	0.00	4.91
68		Tetrachloroethene	0.300	0.319	-6.3	79	0.00	4.93
69		Ethyl methacrylate	0.430	0.438	-1.9	69	0.00	5.03
70		1,1,2-Trichloroethane	0.220	0.218	0.9	71	0.00	5.02
71		Dibromochloromethane	0.255	0.288	-12.9	79	0.00	5.14
72		1,3-Dichloropropane	0.491	0.496	-1.0	73	0.00	5.19
73		1,2-Dibromoethane	0.267	0.279	-4.5	78	0.00	5.29
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1938.280	3.1	73	0.00	5.43
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.498	0.460	7.6	71	0.00	5.43
76		1-Chlorohexane	0.395	0.393	0.5	75	0.00	5.65
77	C	Ethylbenzene	1.373	1.358	1.1	75	0.00	5.68
78	P	Chlorobenzene	0.734	0.723	1.5	76	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.287	-9.5	82	0.00	5.69
80		m,p-Xylene	1.035	1.086	-4.9	77	0.00	5.78
81		o-Xylene	1.009	1.068	-5.8	76	0.00	6.07
			Amount	Calc.	%Drift			
82		Styrene	40.000	40.634	-1.6	76	0.00	6.11
83	P	Bromoform	40.000	43.434	-8.6	82	0.00	6.11
84		Isopropylbenzene	40.000	41.120	-2.8	78	0.00	6.30
			AvgRF	CCRF	%Dev			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	83	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.821	-1.2	85	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.284	13.7	72	0.00	6.52
88		n-Propylbenzene	3.086	2.984	3.3	77	0.00	6.60
89		Bromobenzene	0.647	0.629	2.8	81	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.784	11.1	72	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.122	-3.5	81	0.00	6.75
92		2-Chlorotoluene	1.852	1.805	2.5	78	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.311	2.2	75	0.00	6.75
94		1,2,3-Trichloropropane	0.316	0.305	3.5	79	0.00	6.72
95		Cyclohexanone	0.050	0.048	4.0	70	0.00	6.74
96		4-Chlorotoluene	1.956	1.907	2.5	79	0.00	6.83
97		tert-Butylbenzene	1.155	1.201	-4.0	82	0.00	6.99
98		a-Methyl styrene		----------NA----------				
			Amount	Calc.	%Drift			
99		1,2,4-Trimethylbenzene	40.000	38.362	4.1	79	0.00	7.04
			AvgRF	CCRF	%Dev			
100		Pentachloroethane	0.345	0.339	1.7	83	0.00	6.99
101		sec-Butylbenzene	2.230	2.230	0.0	78	0.00	7.13
			Amount	Calc.	%Drift			
102		4-Isopropyltoluene	40.000	38.678	3.3	78	0.00	7.24
			AvgRF	CCRF	%Dev			
103		1,3-Dichlorobenzene	1.139	1.078	5.4	79	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	1.952	1.1	78	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.113	5.8	78	0.00	7.34
			Amount	Calc.	%Drift			
106		n-Butylbenzene	40.000	37.658	5.9	76	0.00	7.55

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-CC3646
Lab FileID: 1P96408.D

107	Benzyl Chloride	40.000	38.972	2.6	77	0.00	7.52
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.073	1.027	4.3	79	0.00	7.64
109	1,2-Dibromo-3-Chloropropa	0.237	0.250	-5.5	84	0.00	8.20
110	Hexachlorobutadiene	0.270	0.285	-5.6	86	0.00	8.68
		Amount	Calc.	%Drift			
111	1,2,4-Trichlorobenzene	40.000	40.529	-1.3	85	0.00	8.68
112	Naphthalene	40.000	39.125	2.2	79	0.00	8.88
		AvgRF	CCRF	%Dev			
113	1,2,3-Trichlorobenzene	0.576	0.610	-5.9	84	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Fri Dec 16 08:55:38 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

Evaluate Continuing Calibration Report

Data File : C:\Users\Organics\Desktop\P\1P96452.D Vial: 24
Acq On : 16 Dec 2022 8:16 pm Operator: courtnef
Sample : ECC3646-5 Inst : MSVOA13
Misc : MS53011,V1P3648,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\Users\Organic...V1P_2022-12-14.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Wed Dec 14 15:34:34 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	62	0.00	3.72
2	Dichlorodifluoromethane	0.235	0.269	-14.5	76	0.00	1.12
3 P	Chloromethane	0.225	0.197	12.4	58	0.00	1.24
4	1,3-butadiene	0.165	0.151	8.5	60	0.00	1.32
		Amount	Calc.	%Drift			
5 C	Vinyl Chloride	40.000	35.057	12.4	59	0.00	1.30
		AvgRF	CCRF	%Dev			
6	Bromomethane	0.071	0.074	-4.2	77	0.00	1.50
7	Chloroethane	0.073	0.100	-37.0	90	0.00	1.58
		Amount	Calc.	%Drift			
8	Trichlorofluoromethane	40.000	62.670	-56.7#	92	0.00	1.67
		AvgRF	CCRF	%Dev			
9	Ethyl Ether	0.147	0.170	-15.6	70	0.00	1.88
		Amount	Calc.	%Drift			
10	Ethanol	800.000	896.594	-12.1	75	0.00	1.96
		AvgRF	CCRF	%Dev			
11	1,2-Dichlorotrifluoroetha	0.229	0.255	-11.4	71	0.00	1.97
12 C	1,1-Dichloroethene	0.288	0.341	-18.4	75	0.00	1.97
13	Freon 113	0.184	0.215	-16.8	72	0.00	2.01
14	Carbon Disulfide	0.500	0.534	-6.8	67	0.00	2.00
		Amount	Calc.	%Drift			
15	Iodomethane	40.000	50.602	-26.5	80	0.00	2.05
		AvgRF	CCRF	%Dev			
16	Acrolein	0.063	0.062	1.6	63	0.00	2.15
17	Allyl chloride	0.293	0.275	6.1	60	0.00	2.24
		Amount	Calc.	%Drift			
18	Methylene Chloride	40.000	40.544	-1.4	65	0.00	2.29
19	Acetone	200.000	212.505	-6.3	69	0.00	2.31
		AvgRF	CCRF	%Dev			
20	Methyl acetate	0.258	0.255	1.2	60	0.00	2.39
21	trans-1,2-Dichloroethene	0.286	0.309	-8.0	67	0.00	2.40
22	Hexane	0.155	0.148	4.5	58	0.00	2.46

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

23		Methyl Tert Butyl Ether	0.661	0.776	-17.4	70	0.00	2.47
24		Tert Butyl Alcohol	0.062	0.073	-17.7	70	0.00	2.51
			Amount	Calc.	%Drift			
25		Acetonitrile	400.000	323.393	19.2	53	0.00	2.55
			AvgRF	CCRF	%Dev			
26		Di-isopropyl ether	0.613	0.616	-0.5	59	0.00	2.68
27		Chloroprene	0.896	0.912	-1.8	63	0.00	2.72
28	P	1,1-Dichloroethane	0.363	0.390	-7.4	66	0.00	2.72
29		Acrylonitrile	0.115	0.118	-2.6	63	0.00	2.72
30		ETBE	0.630	0.710	-12.7	67	0.00	2.88
31		Vinyl acetate	0.435	0.441	-1.4	59	0.00	2.86
32		cis-1,2-Dichloroethene	0.214	0.228	-6.5	66	0.00	3.02
33		2,2-Dichloropropane	0.338	0.377	-11.5	69	0.00	3.08
34		Bromochloromethane	0.087	0.093	-6.9	68	0.00	3.13
35		Cyclohexane	0.307	0.318	-3.6	60	0.00	3.16
36	C	Chloroform	0.377	0.440	-16.7	73	0.00	3.16
37		Ethyl acetate	0.321	0.322	-0.3	60	0.00	3.22
38		Tetrahydrofuran	0.129	0.121	6.2	56	0.00	3.26
39	S	Dibromofluoromethane	0.225	0.252	-12.0	71	0.00	3.26
40		Carbon Tetrachloride	0.281	0.354	-26.0	80	0.00	3.26
41		1,1,1-Trichloroethane	0.335	0.420	-25.4	78	0.00	3.29
			Amount	Calc.	%Drift			
42		2-Butanone	200.000	185.430	7.3	59	0.00	3.31
			AvgRF	CCRF	%Dev			
43		1,1-Dichloropropene	0.287	0.322	-12.2	69	0.00	3.36
44		tert-Butyl formate	0.179	0.211	-17.9	69	0.00	3.40
45		Propionitrile	0.061	0.055	9.8	58	0.00	3.45
			Amount	Calc.	%Drift			
46		Methacrylonitrile	400.000	371.414	7.1	58	0.00	3.48
			AvgRF	CCRF	%Dev			
47		Benzene	0.818	0.815	0.4	62	0.00	3.49
48		TAME	0.611	0.678	-11.0	65	0.00	3.56
49	S	1,2-Dichloroethane-d4	0.304	0.366	-20.4	76	0.00	3.55
50		Isobutyl alcohol	0.023	0.022	4.3	56	0.00	3.59
51		1,2-Dichloroethane	0.298	0.361	-21.1	77	0.00	3.59
52		Tert Amyl Alcohol	0.049	0.054	-10.2	63	0.00	3.65
53		Trichloroethene	0.218	0.232	-6.4	67	0.00	3.82
54		Methylcyclohexane	0.302	0.319	-5.6	63	0.00	3.84
55		Dibromomethane	0.120	0.135	-12.5	69	0.00	4.05
56	C	1,2-Dichloropropane	0.204	0.204	0.0	60	0.00	4.10
57		Bromodichloromethane	0.255	0.300	-17.6	71	0.00	4.14
58		Methyl methacrylate	0.223	0.230	-3.1	60	0.00	4.23
			Amount	Calc.	%Drift			
59		1,4-Dioxane	800.000	869.278	-8.7	66	0.00	4.26
			AvgRF	CCRF	%Dev			
60		2-Chloroethyl vinyl ether	0.148	0.154	-4.1	61	0.00	4.47
61		cis-1,3-Dichloropropene	0.317	0.345	-8.8	65	0.00	4.52
62	I	Chlorobenzene-d5	1.000	1.000	0.0	68	0.00	5.64
63	S	Toluene-d8	1.440	1.419	1.5	65	0.00	4.64
64	C	Toluene	1.315	1.277	2.9	63	0.00	4.68
65		2-Nitropropane	0.128	0.155	-21.1	75	0.00	4.77

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

66		4-Methyl-2-pentanone	0.525	0.439	16.4	56	0.00	4.89
67		trans-1,3-Dichloropropene	0.416	0.446	-7.2	68	0.00	4.91
68		Tetrachloroethene	0.300	0.331	-10.3	73	0.00	4.94
69		Ethyl methacrylate	0.430	0.418	2.8	59	0.00	5.02
70		1,1,2-Trichloroethane	0.220	0.213	3.2	62	0.00	5.01
71		Dibromochloromethane	0.255	0.290	-13.7	71	0.00	5.14
72		1,3-Dichloropropane	0.491	0.494	-0.6	64	0.00	5.19
73		1,2-Dibromoethane	0.267	0.277	-3.7	69	0.00	5.29
		----------	Amount	Calc.	%Drift	----------		
74		3,3-dimethyl-1-butanol	2000.000	1923.490	3.8	65	0.00	5.43
		----------	AvgRF	CCRF	%Dev	----------		
75		2-hexanone	0.498	0.458	8.0	63	0.00	5.43
76		1-Chlorohexane	0.395	0.395	0.0	67	0.00	5.65
77	C	Ethylbenzene	1.373	1.362	0.8	67	0.00	5.68
78	P	Chlorobenzene	0.734	0.712	3.0	66	0.00	5.65
79		1,1,1,2-Tetrachloroethane	0.262	0.296	-13.0	75	0.00	5.69
80		m,p-Xylene	1.035	1.089	-5.2	69	0.00	5.78
81		o-Xylene	1.009	1.073	-6.3	68	0.00	6.08
		----------	Amount	Calc.	%Drift	----------		
82		Styrene	40.000	39.232	1.9	65	0.00	6.11
83	P	Bromoform	40.000	42.013	-5.0	70	0.00	6.11
84		Isopropylbenzene	40.000	40.893	-2.2	69	0.00	6.31
		----------	AvgRF	CCRF	%Dev	----------		
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	73	0.00	7.33
86	S	4-Bromofluorobenzene	0.811	0.814	-0.4	74	0.00	6.49
87		cis-1,4-Dichloro-2-butene	0.329	0.281	14.6	63	0.00	6.53
88		n-Propylbenzene	3.086	2.925	5.2	66	0.00	6.60
89		Bromobenzene	0.647	0.597	7.7	68	0.00	6.57
90	P	1,1,2,2-Tetrachloroethane	0.882	0.773	12.4	63	0.00	6.62
91		1,3,5-Trimethylbenzene	2.050	2.086	-1.8	70	0.00	6.76
92		2-Chlorotoluene	1.852	1.796	3.0	69	0.00	6.71
93		trans-1,4-Dichloro-2-Bute	0.318	0.311	2.2	67	0.00	6.76
94		1,2,3-Trichloropropane	0.316	0.312	1.3	72	0.00	6.72
95		Cyclohexanone	0.050	0.050	0.0	65	0.00	6.74
96		4-Chlorotoluene	1.956	1.870	4.4	68	0.00	6.83
97		tert-Butylbenzene	1.155	1.233	-6.8	74	0.00	6.99
98		a-Methyl styrene	0.000	0.000	0.0	0#	-0.10	7.04
		----------	Amount	Calc.	%Drift	----------		
99		1,2,4-Trimethylbenzene	40.000	38.690	3.3	71	0.00	7.04
		----------	AvgRF	CCRF	%Dev	----------		
100		Pentachloroethane	0.345	0.308	10.7	67	0.00	6.99
101		sec-Butylbenzene	2.230	2.200	1.3	68	0.00	7.13
		----------	Amount	Calc.	%Drift	----------		
102		4-Isopropyltoluene	40.000	38.597	3.5	69	0.00	7.24
		----------	AvgRF	CCRF	%Dev	----------		
103		1,3-Dichlorobenzene	1.139	1.079	5.3	70	0.00	7.27
104		1,2,3-Trimethylbenzene	1.974	1.954	1.0	69	0.00	7.37
105		1,4-Dichlorobenzene	1.182	1.092	7.6	68	0.00	7.34
		----------	Amount	Calc.	%Drift	----------		
106		n-Butylbenzene	40.000	36.818	8.0	65	0.00	7.56

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V1P3648-ECC3646
Lab FileID: 1P96452.D

107	Benzyl Chloride	40.000	32.017	20.0	55	0.00	7.52
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.073	1.021	4.8	70	0.00	7.65
109	1,2-Dibromo-3-Chloropropa	0.237	0.255	-7.6	76	0.00	8.20
110	Hexachlorobutadiene	0.270	0.283	-4.8	76	0.00	8.69
		Amount	Calc.	%Drift			
111	1,2,4-Trichlorobenzene	40.000	40.075	-0.2	74	0.00	8.68
112	Naphthalene	40.000	38.517	3.7	69	0.00	8.88
		AvgRF	CCRF	%Dev			
113	1,2,3-Trichlorobenzene	0.576	0.587	-1.9	71	0.00	9.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0
1P96328.D V1P_2022-12-14.M Mon Dec 19 08:54:12 2022

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

Response Factor Report MSVOA20

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Calibration Files
1 =5E35978.D 2 =5E35979.D 3 =5E35980.D 4 =5E35981.D
5 =5E35982.D 6 =5E35983.D 7 =5E35984.D

	Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I	Fluorobenzene	----------	ISTD	----------						
2)	Dichlorodifluorom	0.331	0.277	0.321	0.304	0.286	0.316	0.302	0.305	6.29
3)P	Chloromethane	0.277	0.279	0.315	0.287	0.284	0.296	0.311	0.293	5.20
4)C	Vinyl Chloride	0.288	0.298	0.338	0.305	0.304	0.317	0.325	0.311	5.56
5)	1,3-Butadiene	0.210	0.209	0.205	0.200	0.185	0.208	0.175	0.199	6.80
6)	Bromomethane	0.140	0.134	0.162	0.162	0.164	0.184	0.194	0.163	13.12
7)	Chloroethane	0.191	0.185	0.220	0.224	0.255	0.452	0.524	0.293	46.73
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9954									
	Response Ratio = 0.00000 + 0.13976 *A + 0.19750 *A^2									
8)	Trichlorofluorome	0.364	0.341	0.394	0.380	0.371	0.395	0.386	0.376	5.06
9)	Ethyl Ether	0.189	0.232	0.205	0.230	0.228	0.240	0.224	0.221	7.98
10)	Ethanol			0.000	0.002	0.002	0.002	0.003	0.002	46.39
11)	1,2-Dichlorotrifl	0.266	0.318	0.306	0.334	0.319	0.349	0.319	0.316	8.20
12)C	1,1-Dichloroethen	0.347	0.392	0.371	0.416	0.403	0.428	0.396	0.393	6.95
13)	Freon 113	0.245	0.273	0.250	0.275	0.262	0.295	0.256	0.265	6.50
14)	Carbon Disulfide	0.751	0.779	0.691	0.751	0.723	0.770	0.711	0.740	4.34
15)	Iodomethane	0.193	0.285	0.326	0.376	0.384	0.392	0.382	0.334	21.90
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9986									
	Response Ratio = 0.00000 + 0.35603 *A + 0.01713 *A^2									
16)	Acrolein	0.036	0.043	0.047	0.052	0.052	0.054	0.049	0.048	13.24
17)	Allyl chloride	0.273	0.258	0.265	0.283	0.266	0.283	0.267	0.271	3.48
18)	Methylene Chlorid	0.563	0.431	0.365	0.367	0.360	0.359	0.332	0.397	19.95
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991									
	Response Ratio = 0.00000 + 0.39060 *A + -0.02825 *A^2									
19)	Acetone	0.112	0.071	0.078	0.082	0.072	0.074	0.070	0.080	18.38
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981									
	Response Ratio = 0.00000 + 0.08034 *A + -0.00105 *A^2									
20)	Methyl acetate	0.126	0.138	0.148	0.162	0.166	0.170	0.159	0.153	10.60
21)	trans-1,2-Dichlor	0.323	0.363	0.336	0.385	0.372	0.400	0.377	0.365	7.38
22)	Hexane	0.183	0.215	0.220	0.239	0.234	0.222	0.221	0.219	8.16
23)	Methyl Tert Butyl	0.614	0.717	0.700	0.773	0.757	0.798	0.740	0.728	8.27
24)	Acetonitrile	0.027	0.021	0.025	0.026	0.024	0.025	0.025	0.025	7.24
25)	Di-isopropyl ethe	0.630	0.686	0.669	0.728	0.724	0.750	0.707	0.699	5.81
26)	Chloroprene	0.321	0.317	0.327	0.335	0.322	0.348	0.322	0.328	3.23
27)P	1,1-Dichloroethan	0.468	0.467	0.448	0.504	0.496	0.519	0.487	0.484	5.07
28)	Acrylonitrile	0.065	0.088	0.103	0.091	0.096	0.100	0.098	0.091	14.16
29)	ETBE	0.689	0.767	0.769	0.862	0.842	0.885	0.844	0.808	8.56
30)	Tert Butyl Alcoho	0.024	0.028	0.037	0.039	0.038	0.038	0.032	0.034	17.30
	---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9961									
	Response Ratio = 0.00000 + 0.03967 *A + -0.00030 *A^2									
31)	Vinyl acetate	0.367	0.450	0.474	0.467	0.498	0.537	0.536	0.476	12.26

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

32)	cis-1,2-Dichloroe	0.230	0.264	0.263	0.275	0.275	0.291	0.271	0.267	7.01
33)	2,2-Dichloropropa	0.340	0.395	0.373	0.394	0.396	0.418	0.390	0.387	6.29
34)	Bromochloromethan	0.093	0.134	0.123	0.147	0.139	0.143	0.130	0.130	13.97
35)	Cyclohexane	0.374	0.420	0.423	0.449	0.426	0.484	0.423	0.429	7.72
36)C	Chloroform	0.430	0.497	0.438	0.487	0.480	0.500	0.464	0.471	5.91
37)	Ethyl acetate	0.203	0.215	0.246	0.232	0.249	0.258	0.241	0.235	8.39
38)	Tetrahydrofuran		0.069	0.079	0.080	0.071	0.075	0.065	0.073	8.07
39)S	Dibromofluorometh	0.277	0.276	0.281	0.271	0.275	0.278	0.281	0.277	1.23
40)	Carbon Tetrachlor	0.285	0.353	0.321	0.359	0.353	0.385	0.348	0.343	9.27
41)	1,1,1-Trichloroet	0.336	0.391	0.383	0.412	0.403	0.427	0.393	0.392	7.33
42)	2-Butanone	0.135	0.102	0.114	0.128	0.117	0.122	0.107	0.118	9.70
43)	1,1-Dichloroprope	0.316	0.348	0.338	0.369	0.360	0.385	0.357	0.353	6.29
44)	tert-Butyl format	0.097	0.099	0.105	0.107	0.109			0.103	4.96
45)	Propionitrile	0.028	0.035	0.041	0.043	0.044	0.046	0.042	0.040	15.30

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980
Response Ratio = 0.00000 + 0.04328 *A + -0.00001 *A^2

46)	Methacrylonitrile	0.143	0.124	0.140	0.150	0.149	0.157	0.148	0.145	7.22
47)	Benzene	0.963	1.017	0.962	1.051	1.030	1.074	1.002	1.014	4.17
48)	TAME	0.583	0.695	0.688	0.763	0.763	0.808	0.751	0.722	10.26
49)S	1,2-Dichloroethan	0.312	0.316	0.322	0.317	0.320	0.319	0.321	0.318	1.03
50)	1,2-Dichloroethan	0.370	0.365	0.364	0.407	0.397	0.412	0.380	0.385	5.25
51)	tert Amyl alcohol	0.013	0.020	0.023	0.028	0.027	0.028	0.023	0.023	23.66

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9944
Response Ratio = 0.00000 + 0.02728 *A + -0.00014 *A^2

52)	Trichloroethene	0.240	0.268	0.257	0.285	0.278	0.294	0.277	0.271	6.62
53)	Methylcyclohexane	0.372	0.384	0.400	0.458	0.441	0.507	0.433	0.428	10.94
54)	Dibromomethane	0.141	0.176	0.176	0.190	0.188	0.196	0.183	0.179	10.01
55)C	1,2-Dichloropropa	0.180	0.271	0.277	0.291	0.286	0.301	0.279	0.269	15.03

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9989
Response Ratio = 0.00000 + 0.28965 *A + -0.00217 *A^2

56)	Bromodichlorometh	0.281	0.323	0.321	0.365	0.366	0.379	0.354	0.341	10.12
57)	Methyl methacryla	0.113	0.161	0.190	0.211	0.211	0.220	0.199	0.186	20.19

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9973
Response Ratio = 0.00000 + 0.20724 *A + -0.00060 *A^2

58)	1,4-Dioxane		0.002	0.002	0.003	0.003	0.003	0.003	0.002	12.74

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9985
Response Ratio = 0.00000 + 0.00235 *A + 0.00001 *A^2

59)	2-Chloroethyl vin	0.128	0.143	0.165	0.167	0.171	0.178	0.146	0.157	11.51
60)	cis-1,3-Dichlorop	0.287	0.385	0.354	0.411	0.412	0.438	0.408	0.385	13.12

61) I	Chlorobenzene-d5	----------ISTD----------								
62)S	Toluene-d8	1.390	1.373	1.379	1.382	1.345	1.357	1.326	1.365	1.69
63)C	Toluene	1.360	1.509	1.433	1.554	1.493	1.571	1.425	1.478	5.11
64)	Isobutyl alcohol	0.013	0.013	0.014	0.015	0.014	0.015	0.013	0.014	6.92
65)	2-Nitropropane	0.072	0.093	0.096	0.112	0.112	0.118	0.103	0.101	15.36

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9959
Response Ratio = 0.00000 + 0.11190 *A + -0.00044 *A^2

66)	4-Methyl-2-pentan	0.424	0.339	0.378	0.427	0.375	0.399	0.345	0.384	9.08
67)	trans-1,3-Dichlor	0.337	0.448	0.453	0.512	0.512	0.541	0.503	0.472	14.48
68)	Tetrachloroethene	0.288	0.368	0.358	0.391	0.375	0.397	0.365	0.363	9.91
69)	Ethyl methacrylat	0.279	0.364	0.426	0.477	0.469	0.495	0.458	0.424	18.16

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9979
Response Ratio = 0.00000 + 0.45917 *A + 0.00655 *A^2

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

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 70)  1,1,2-Trichloroet 0.244 0.297 0.283 0.304 0.301 0.305 0.276 0.287   7.67
 71)  Dibromochlorometh 0.273 0.365 0.350 0.405 0.409 0.422 0.393 0.374  13.72
 72)  1,3-Dichloropropa 0.495 0.580 0.548 0.620 0.593 0.613 0.559 0.573   7.56
 73)  1,2-Dibromoethane 0.264 0.341 0.329 0.376 0.376 0.387 0.350 0.346  12.09
 74)  3,3-Dimethyl-1-bu 0.026 0.028 0.035 0.037 0.038 0.040 0.035 0.034  15.39
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9952
               Response Ratio = 0.00000 + 0.03777 *A + -0.00002 *A^2

 75)  2-hexanone        0.276 0.224 0.261 0.297 0.270 0.277 0.242 0.264   9.22
 76)  1-Chlorohexane    0.383 0.486 0.467 0.523 0.518 0.553 0.486 0.488  11.16
 77)C Ethylbenzene      1.642 1.739 1.594 1.729 1.709 1.793 1.635 1.692   4.14
 78)P Chlorobenzene     0.908 0.985 0.925 1.035 1.003 1.049 0.965 0.981   5.39
 79)  1,1,1,2-Tetrachlo 0.279 0.335 0.316 0.364 0.358 0.372 0.339 0.338   9.48
 80)  m,p-Xylene        1.079 1.273 1.184 1.317 1.303 1.367 1.261 1.255   7.61
 81)  o-Xylene          0.993 1.197 1.152 1.283 1.251 1.307 1.198 1.197   8.76
 82)  Styrene           0.670 0.906 0.869 1.003 0.986 1.040 0.963 0.919  13.51
 83)P Bromoform         0.138 0.212 0.207 0.241 0.248 0.265 0.244 0.222  19.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.23635 *A + 0.00810 *A^2

 84)  Isopropylbenzene  1.302 1.604 1.487 1.620 1.615 1.694 1.543 1.552   8.24

 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 0.872 0.858 0.854 0.814 0.814 0.816 0.795 0.832   3.47
 87)  cis-1,4-Dichloro- 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 88)  n-Propylbenzene   3.516 4.066 3.899 4.222 4.148 4.267 3.796 3.988   6.73
 89)  Bromobenzene      0.652 0.805 0.762 0.809 0.819 0.825 0.759 0.776   7.79
 90)P 1,1,2,2-Tetrachlo 0.918 0.938 0.946 1.039 1.033 1.038 0.910 0.975   6.09
 91)  1,3,5-Trimethylbe 2.213 2.653 2.503 2.737 2.760 2.900 2.630 2.628   8.39
 92)  2-Chlorotoluene   2.333 2.538 2.273 2.521 2.510 2.588 2.370 2.448   4.91
 93)  trans-1,4-Dichlor 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 94)  1,2,3-Trichloropr 0.150 0.263 0.254 0.284 0.284 0.294 0.250 0.254  19.32
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9964
               Response Ratio = 0.00000 + 0.29199 *A + -0.01507 *A^2

 95)  Cyclohexanone           0.018 0.023 0.026 0.026 0.026 0.026 0.024  12.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.02412 *A + 0.00026 *A^2

 96)  4-Chlorotoluene   2.020 2.254 2.088 2.253 2.225 2.312 2.105 2.179   4.96
 97)  a-Methyl styrene                                           0.000  -1.00
 98)  tert-Butylbenzene 1.282 1.483 1.365 1.473 1.463 1.515 1.361 1.420   5.98
 99)  1,2,4-Trimethylbe 2.105 2.494 2.410 2.704 2.715 2.845 2.556 2.547   9.60
100)  Pentachloroethane 0.449 0.404 0.451 0.484 0.477 0.491 0.454 0.459   6.45
101)  sec-Butylbenzene  2.827 3.225 3.073 3.438 3.391 3.544 3.120 3.231   7.65
102)  4-Isopropyltoluen 2.379 2.788 2.683 3.018 3.012 3.158 2.788 2.832   9.17
103)  1,3-Dichlorobenze 1.257 1.420 1.429 1.518 1.514 1.579 1.426 1.449   7.15
104)  1,2,3-Trimethylbe 2.110 2.571 2.480 2.701 2.740 2.825 2.572 2.571   9.13
105)  1,4-Dichlorobenze 1.442 1.604 1.526 1.651 1.619 1.710 1.545 1.585   5.58
106)  n-Butylbenzene    1.156 1.491 1.422 1.584 1.646 1.724 1.490 1.502  12.25
107)  Benzyl Chloride   0.156 0.228 0.269 0.333 0.354 0.389       0.288  30.26
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
               Response Ratio = 0.00000 + 0.27006 *A + 0.08940 *A^2
```

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

```
108)  1,2-Dichlorobenze 1.278 1.359 1.327 1.442 1.462 1.496 1.345 1.387   5.78
109)  1,2-Dibromo-3-Chl 0.039 0.120 0.129 0.151 0.155 0.160 0.135 0.127  32.52
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9950
               Response Ratio = 0.00000 + 0.15234 *A + -0.00464 *A^2

110)  Hexachlorobutadie 0.242 0.326 0.300 0.310 0.307 0.311 0.256 0.293  10.64
111)  1,2,4-Trichlorobe 0.641 0.796 0.745 0.818 0.826 0.843 0.741 0.773   9.09
112)  Naphthalene       1.533 2.047 2.118 2.334 2.372 2.401 2.013 2.117  14.30
113)  1,2,3-Trichlorobe 0.545 0.639 0.653 0.701 0.703 0.711 0.608 0.651   9.30
 ----------------------------------------------------------------------------
 (#) = Out of Range

          appIX12-08-2022_.M        Thu Dec 08 16:36:18 2022
```

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35986.D Vial: 10
Acq On : 8 Dec 2022 3:25 pm Operator: courtnef
Sample : ICV1617-5 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	101	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.263	13.8	93	0.00	2.85
3	P	Chloromethane	0.293	0.275	6.1	98	0.00	3.22
4	C	Vinyl Chloride	0.311	0.307	1.3	102	0.00	3.37
5		1,3-Butadiene	0.199	0.223	-12.1	122	0.00	3.40
6		Bromomethane	0.163	0.175	-7.4	108	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	47.808	-19.5	156	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.396	-5.3	108	0.00	4.38
9		Ethyl Ether	0.221	0.218	1.4	97	0.00	4.87
10		Ethanol	0.002	0.002	0.0	95	0.02	5.12
11		1,2-Dichlorotrifluoroetha	0.316	0.313	0.9	99	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.374	4.8	94	0.00	5.16
13		Freon 113	0.265	0.249	6.0	96	0.00	5.22
14		Carbon Disulfide	0.740	0.738	0.3	103	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	38.031	4.9	93	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.048	0.0	93	0.00	5.63
17		Allyl chloride	0.271	0.275	-1.5	105	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	34.555	13.6	90	0.00	5.96
19		Acetone	200.000	189.683	5.2	101	0.00	6.01
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.165	-7.8	101	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.354	3.0	96	0.00	6.17
22		Hexane	0.219	0.229	-4.6	99	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.746	-2.5	100	0.00	6.29
24		Acetonitrile	0.025	0.024	4.0	100	0.00	6.62
25		Di-isopropyl ether	0.699	0.728	-4.1	102	0.00	6.76
26		Chloroprene	0.328	0.358	-9.1	112	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.487	-0.6	99	0.00	6.94
28		Acrylonitrile	0.091	0.103	-13.2	109	0.00	6.99
29		ETBE	0.808	0.820	-1.5	99	0.00	7.20

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	369.770	7.6	92	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate		----------NA----------				
32		cis-1,2-Dichloroethene	0.267	0.272	-1.9	100	0.00	7.58
33		2,2-Dichloropropane	0.387	0.356	8.0	91	0.00	7.70
34		Bromochloromethane	0.130	0.140	-7.7	102	0.00	7.81
35		Cyclohexane	0.429	0.442	-3.0	105	0.00	7.82
36	C	Chloroform	0.471	0.461	2.1	97	0.00	7.87
37		Ethyl acetate	0.235	0.267	-13.6	109	0.00	7.98
38		Tetrahydrofuran	0.073	0.072	1.4	103	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.277	0.0	102	0.00	8.08
40		Carbon Tetrachloride	0.343	0.342	0.3	98	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.391	0.3	98	0.00	8.12
42		2-Butanone	0.118	0.114	3.4	99	0.00	8.20
43		1,1-Dichloropropene	0.353	0.341	3.4	96	0.00	8.26
44		tert-Butyl formate	0.103	0.084	18.4	78	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	393.496	1.6	98	0.00	8.54
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.156	-7.6	106	0.00	8.55
47		Benzene	1.014	0.985	2.9	97	0.00	8.52
48		TAME	0.722	0.764	-5.8	101	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.314	1.3	99	0.00	8.66
50		1,2-Dichloroethane	0.385	0.377	2.1	96	0.00	8.73
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	411.326	-2.8	100	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.270	0.4	98	0.00	9.13
53		Methylcyclohexane	0.428	0.452	-5.6	104	0.00	9.13
54		Dibromomethane	0.179	0.177	1.1	95	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	37.212	7.0	95	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.362	-6.2	100	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	41.939	-4.8	104	0.00	9.84
58		1,4-Dioxane	800.000	891.935	-11.5	111	0.00	9.93
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.164	-4.5	97	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.405	-5.2	100	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	12.12
62	S	Toluene-d8	1.365	1.348	1.2	101	0.00	10.54
63	C	Toluene	1.478	1.470	0.5	99	0.00	10.60
64		Isobutyl alcohol	0.014	0.015	-7.1	103	0.00	8.68
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	203.716	-1.9	101	0.00	10.83
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

66		4-Methyl-2-pentanone	0.384	0.364	5.2	98	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.539	-14.2	106	0.00	11.00
68		Tetrachloroethene	0.363	0.370	-1.9	100	0.00	11.00
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	38.346	4.1	96	0.00	11.10
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.287	0.294	-2.4	99	0.00	11.16
71		Dibromochloromethane	0.374	0.387	-3.5	96	0.00	11.36
72		1,3-Dichloropropane	0.573	0.550	4.0	94	0.00	11.45
73		1,2-Dibromoethane	0.346	0.362	-4.6	97	0.00	11.62
			Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1822.705	8.9	90	0.00	11.71
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.264	0.255	3.4	95	0.00	11.77
76		1-Chlorohexane	0.488	0.527	-8.0	103	0.00	12.06
77	C	Ethylbenzene	1.692	1.684	0.5	100	0.00	12.12
78	P	Chlorobenzene	0.981	0.990	-0.9	100	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.356	-5.3	101	0.00	12.18
80		m,p-Xylene	1.255	1.274	-1.5	99	0.00	12.26
81		o-Xylene	1.197	1.273	-6.3	103	0.00	12.71
82		Styrene	0.919	0.977	-6.3	100	0.00	12.76
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	41.573	-3.9	103	0.00	12.82
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.552	1.607	-3.5	101	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	100	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.843	-1.3	104	0.00	13.33
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	43.242	-8.1	102	0.00	13.68
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	3.988	4.158	-4.3	101	0.00	13.43
89		Bromobenzene	0.776	0.775	0.1	95	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.008	-3.4	98	0.00	13.50
91		1,3,5-Trimethylbenzene	2.628	2.734	-4.0	99	0.00	13.61
92		2-Chlorotoluene	2.448	2.476	-1.1	99	0.00	13.62
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	43.242	-8.1	102	0.00	13.68
94		1,2,3-Trichloropropane	40.000	37.558	6.1	93	0.00	13.66
95		Cyclohexanone	200.000	234.198	-17.1	114	0.00	13.74
			AvgRF	CCRF	%Dev			
96		4-Chlorotoluene	2.179	2.244	-3.0	101	0.00	13.79
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene	1.420	1.461	-2.9	100	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.777	-9.0	103	0.00	14.02
100		Pentachloroethane	0.459	0.493	-7.4	104	0.00	14.01
101		sec-Butylbenzene	3.231	3.577	-10.7	106	0.00	14.13
102		4-Isopropyltoluene	2.832	3.099	-9.4	103	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.579	-9.0	105	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.956	-15.0	108	0.00	14.47

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

105	1,4-Dichlorobenzene	1.585	1.644	-3.7	102	0.00	14.49
106	n-Butylbenzene	1.502	1.565	-4.2	95	0.00	14.69
		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	41.057	-2.6	100	0.00	14.71
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.387	1.474	-6.3	101	0.00	14.90
		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	39.855	0.4	96	0.00	15.63
		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.293	0.292	0.3	96	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.835	-8.0	101	0.00	16.22
112	Naphthalene	2.117	2.360	-11.5	100	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.699	-7.4	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Thu Dec 08 16:35:37 2022

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35987.D Vial: 11
Acq On : 8 Dec 2022 4:06 pm Operator: courtnef
Sample : ICV1617-4 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	111	0.00	8.95
2		Dichlorodifluoromethane		----------	NA	----------		
3	P	Chloromethane		----------	NA	----------		
4	C	Vinyl Chloride		----------	NA	----------		
5		1,3-Butadiene		----------	NA	----------		
6		Bromomethane		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
7		Chloroethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
8		Trichlorofluoromethane		----------	NA	----------		
9		Ethyl Ether		----------	NA	----------		
10		Ethanol		----------	NA	----------		
11		1,2-Dichlorotrifluoroetha		----------	NA	----------		
12	C	1,1-Dichloroethene		----------	NA	----------		
13		Freon 113		----------	NA	----------		
14		Carbon Disulfide		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
16		Acrolein		----------	NA	----------		
17		Allyl chloride		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------	NA	----------		
19		Acetone		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------	NA	----------		
21		trans-1,2-Dichloroethene		----------	NA	----------		
22		Hexane		----------	NA	----------		
23		Methyl Tert Butyl Ether		----------	NA	----------		
24		Acetonitrile		----------	NA	----------		
25		Di-isopropyl ether		----------	NA	----------		
26		Chloroprene		----------	NA	----------		
27	P	1,1-Dichloroethane		----------	NA	----------		
28		Acrylonitrile		----------	NA	----------		
29		ETBE		----------	NA	----------		

Initial Calibration Verification

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Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol		NA				
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.510	-7.1	121	0.00	7.21
32		cis-1,2-Dichloroethene		NA				
33		2,2-Dichloropropane		NA				
34		Bromochloromethane		NA				
35		Cyclohexane		NA				
36	C	Chloroform		NA				
37		Ethyl acetate		NA				
38		Tetrahydrofuran		NA				
39	S	Dibromofluoromethane	0.277	0.280	-1.1	114	0.00	8.08
40		Carbon Tetrachloride		NA				
41		1,1,1-Trichloroethane		NA				
42		2-Butanone		NA				
43		1,1-Dichloropropene		NA				
44		tert-Butyl formate		NA				
			Amount	Calc.	%Drift			
45		Propionitrile		NA				
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile		NA				
47		Benzene		NA				
48		TAME		NA				
49	S	1,2-Dichloroethane-d4	0.318	0.328	-3.1	115	0.00	8.66
50		1,2-Dichloroethane		NA				
			Amount	Calc.	%Drift			
51		tert Amyl alcohol		NA				
			AvgRF	CCRF	%Dev			
52		Trichloroethene		NA				
53		Methylcyclohexane		NA				
54		Dibromomethane		NA				
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane		NA				
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane		NA				
			Amount	Calc.	%Drift			
57		Methyl methacrylate		NA				
58		1,4-Dioxane		NA				
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether		NA				
60		cis-1,3-Dichloropropene		NA				
61	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	12.12
62	S	Toluene-d8	1.365	1.392	-2.0	111	0.00	10.54
63	C	Toluene		NA				
64		Isobutyl alcohol		NA				
			Amount	Calc.	%Drift			
65		2-Nitropropane		NA				
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

66		4-Methyl-2-pentanone		----------NA----------				
67		trans-1,3-Dichloropropene		----------NA----------				
68		Tetrachloroethene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
69		Ethyl methacrylate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
70		1,1,2-Trichloroethane		----------NA----------				
71		Dibromochloromethane		----------NA----------				
72		1,3-Dichloropropane		----------NA----------				
73		1,2-Dibromoethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
74		3,3-Dimethyl-1-butanol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
75		2-hexanone		----------NA----------				
76		1-Chlorohexane		----------NA----------				
77	C	Ethylbenzene		----------NA----------				
78	P	Chlorobenzene		----------NA----------				
79		1,1,1,2-Tetrachloroethane		----------NA----------				
80		m,p-Xylene		----------NA----------				
81		o-Xylene		----------NA----------				
82		Styrene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
83	P	Bromoform		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
84		Isopropylbenzene		----------NA----------				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.853	-2.5	112	0.00	13.33
		----------	Amount	Calc.	%Drift	----------		
87		cis-1,4-Dichloro-2-butene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
88		n-Propylbenzene		----------NA----------				
89		Bromobenzene		----------NA----------				
90	P	1,1,2,2-Tetrachloroethane		----------NA----------				
91		1,3,5-Trimethylbenzene		----------NA----------				
92		2-Chlorotoluene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
93		trans-1,4-Dichloro-2-Bute		----------NA----------				
94		1,2,3-Trichloropropane		----------NA----------				
95		Cyclohexanone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
96		4-Chlorotoluene		----------NA----------				
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene		----------NA----------				
99		1,2,4-Trimethylbenzene		----------NA----------				
100		Pentachloroethane		----------NA----------				
101		sec-Butylbenzene		----------NA----------				
102		4-Isopropyltoluene		----------NA----------				
103		1,3-Dichlorobenzene		----------NA----------				
104		1,2,3-Trimethylbenzene		----------NA----------				

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

105	1,4-Dichlorobenzene			NA	
106	n-Butylbenzene			NA	
		Amount	Calc.	%Drift	
107	Benzyl Chloride			NA	
		AvgRF	CCRF	%Dev	
108	1,2-Dichlorobenzene			NA	
		Amount	Calc.	%Drift	
109	1,2-Dibromo-3-Chloropropa			NA	
		AvgRF	CCRF	%Dev	
110	Hexachlorobutadiene			NA	
111	1,2,4-Trichlorobenzene			NA	
112	Naphthalene			NA	
113	1,2,3-Trichlorobenzene			NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
5E35981.D appIX12-08-2022_.M Thu Dec 08 16:36:09 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-14-2022\5E36115.D Vial: 2
Acq On : 14 Dec 2022 9:23 am Operator: courtnef
Sample : CC1617-5 Inst : MSVOA20
Misc : MS52751,V5E1624,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	91	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.307	-0.7	98	0.00	2.85
3	P	Chloromethane	0.293	0.286	2.4	92	0.00	3.22
4	C	Vinyl Chloride	0.311	0.326	-4.8	98	0.00	3.37
5		1,3-Butadiene	0.199	0.219	-10.1	108	0.00	3.40
6		Bromomethane	0.163	0.127	22.1#	70	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	34.042	14.9	83	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.424	-12.8	104	0.00	4.39
9		Ethyl Ether	0.221	0.246	-11.3	98	0.00	4.87
10		Ethanol	0.002	0.001	50.0#	78	0.01	5.11
11		1,2-Dichlorotrifluoroetha	0.316	0.360	-13.9	103	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.443	-12.7	100	0.00	5.16
13		Freon 113	0.265	0.293	-10.6	102	0.00	5.22
14		Carbon Disulfide	0.740	0.802	-8.4	101	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	13.226	66.9#	28	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.050	-4.2	88	0.00	5.63
17		Allyl chloride	0.271	0.290	-7.0	99	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	41.414	-3.5	96	0.00	5.96
19		Acetone	200.000	191.695	4.2	92	0.00	6.01
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.171	-11.8	94	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.412	-12.9	101	0.00	6.17
22		Hexane	0.219	0.253	-15.5	98	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.804	-10.4	97	0.00	6.29
24		Acetonitrile	0.025	0.024	4.0	92	0.00	6.62
25		Di-isopropyl ether	0.699	0.756	-8.2	95	0.00	6.75
26		Chloroprene	0.328	0.350	-6.7	99	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.538	-11.2	99	0.00	6.94
28		Acrylonitrile	0.091	0.100	-9.9	95	0.00	6.99
29		ETBE	0.808	0.891	-10.3	96	0.00	7.19

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	320.688	19.8	72	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.546	-14.7	100	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.295	-10.5	98	0.00	7.58
33		2,2-Dichloropropane	0.387	0.431	-11.4	99	0.00	7.71
34		Bromochloromethane	0.130	0.139	-6.9	91	0.00	7.81
35		Cyclohexane	0.429	0.474	-10.5	101	0.00	7.82
36	C	Chloroform	0.471	0.505	-7.2	96	0.00	7.87
37		Ethyl acetate	0.235	0.259	-10.2	95	0.00	7.98
38		Tetrahydrofuran	0.073	0.070	4.1	90	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.279	-0.7	92	0.00	8.07
40		Carbon Tetrachloride	0.343	0.396	-15.5	102	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.442	-12.8	100	0.00	8.12
42		2-Butanone	0.118	0.116	1.7	90	0.00	8.20
43		1,1-Dichloropropene	0.353	0.392	-11.0	99	0.00	8.26
44		tert-Butyl formate	0.103	0.120	-16.5	100	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	405.712	-1.4	90	0.00	8.53
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.168	-15.9	103	0.00	8.55
47		Benzene	1.014	1.091	-7.6	96	0.00	8.52
48		TAME	0.722	0.811	-12.3	97	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.313	1.6	89	0.00	8.66
50		1,2-Dichloroethane	0.385	0.429	-11.4	98	0.00	8.74
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	393.299	1.7	86	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.302	-11.4	99	0.00	9.13
53		Methylcyclohexane	0.428	0.480	-12.1	99	0.00	9.13
54		Dibromomethane	0.179	0.199	-11.2	96	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	42.744	-6.9	98	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.384	-12.6	95	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	40.650	-1.6	91	0.00	9.84
58		1,4-Dioxane	800.000	664.003	17.0	73	0.00	9.91
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.143	8.9	76	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.442	-14.8	98	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00	12.11
62	S	Toluene-d8	1.365	1.308	4.2	92	0.00	10.54
63	C	Toluene	1.478	1.557	-5.3	98	0.00	10.60
64		Isobutyl alcohol	0.014	0.013	7.1	86	0.00	8.67
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	207.533	-3.8	96	0.00	10.83
			AvgRF	CCRF	%Dev			

Continuing Calibration Summary

Job Number: FC1065 **Sample:** V5E1624-CC1617
Account: BHATALB Bhate Environmental **Lab FileID:** 5E36115.D
Project: Griffiss AFB; Rome, NY

66		4-Methyl-2-pentanone	0.384	0.368	4.2	93	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.530	-12.3	98	0.00	11.00
68		Tetrachloroethene	0.363	0.402	-10.7	101	0.00	11.00
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	39.600	1.0	92	0.00	11.10
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.287	0.307	-7.0	96	0.00	11.16
71		Dibromochloromethane	0.374	0.427	-14.2	99	0.00	11.36
72		1,3-Dichloropropane	0.573	0.609	-6.3	97	0.00	11.45
73		1,2-Dibromoethane	0.346	0.383	-10.7	96	0.00	11.62
			Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1859.490	7.0	86	0.00	11.71
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.264	0.262	0.8	91	0.00	11.76
76		1-Chlorohexane	0.488	0.534	-9.4	97	0.00	12.05
77	C	Ethylbenzene	1.692	1.782	-5.3	98	0.00	12.12
78	P	Chlorobenzene	0.981	1.045	-6.5	98	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.380	-12.4	100	0.00	12.18
80		m,p-Xylene	1.255	1.350	-7.6	98	0.00	12.26
81		o-Xylene	1.197	1.299	-8.5	98	0.00	12.71
82		Styrene	0.919	1.021	-11.1	98	0.00	12.76
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	41.801	-4.5	97	0.00	12.82
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.552	1.712	-10.3	100	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.801	3.7	96	0.00	13.33
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	35.857	10.4	82	0.00	13.68
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	3.988	4.169	-4.5	98	0.00	13.43
89		Bromobenzene	0.776	0.827	-6.6	98	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.017	-4.3	96	0.00	13.50
91		1,3,5-Trimethylbenzene	2.628	2.796	-6.4	98	0.00	13.61
92		2-Chlorotoluene	2.448	2.527	-3.2	98	0.00	13.62
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	35.857	10.4	82	0.00	13.68
94		1,2,3-Trichloropropane	40.000	40.055	-0.1	96	0.00	13.66
95		Cyclohexanone	200.000	190.455	4.8	89	0.00	13.74
			AvgRF	CCRF	%Dev			
96		4-Chlorotoluene	2.179	2.252	-3.4	98	0.00	13.79
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene	1.420	1.484	-4.5	98	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.731	-7.2	98	0.00	14.02
100		Pentachloroethane	0.459	0.474	-3.3	97	0.00	14.01
101		sec-Butylbenzene	3.231	3.526	-9.1	101	0.00	14.13
102		4-Isopropyltoluene	2.832	3.136	-10.7	101	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.578	-8.9	101	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.791	-8.6	99	0.00	14.47

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-CC1617
Lab FileID: 5E36115.D

105	1,4-Dichlorobenzene	1.585	1.686	-6.4	101	0.00	14.49
106	n-Butylbenzene	1.502	1.653	-10.1	97	0.00	14.68
	----------	Amount	Calc.	%Drift	----------		
107	Benzyl Chloride	40.000	40.558	-1.4	95	0.00	14.71
	----------	AvgRF	CCRF	%Dev	----------		
108	1,2-Dichlorobenzene	1.387	1.499	-8.1	100	0.00	14.90
	----------	Amount	Calc.	%Drift	----------		
109	1,2-Dibromo-3-Chloropropa	40.000	38.674	3.3	90	0.00	15.63
	----------	AvgRF	CCRF	%Dev	----------		
110	Hexachlorobutadiene	0.293	0.324	-10.6	102	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.859	-11.1	101	0.00	16.22
112	Naphthalene	2.117	2.316	-9.4	95	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.725	-11.4	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Wed Dec 14 10:04:22 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1624-ECC1617
Lab FileID: 5E36143.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...022\v5e1624\5E36143.d Vial: 30
Acq On : 14 Dec 2022 8:08 pm Operator: courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53011,V5E1624,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	86	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.281	7.9	85	0.00	2.85
3	P	Chloromethane	0.293	0.264	9.9	80	0.00	3.22
4	C	Vinyl Chloride	0.311	0.305	1.9	87	0.00	3.37
5		1,3-Butadiene	0.199	0.221	-11.1	103	0.00	3.40
6		Bromomethane	0.163	0.107	34.4	56	0.00	3.94
			True	Calc.	% Drift			
7		Chloroethane	40.000	37.691	5.8	92	0.00	4.15
			AvgRF	CCRF	% Dev			
8		Trichlorofluoromethane	0.376	0.392	-4.3	91	0.00	4.38
9		Ethyl Ether	0.221	0.236	-6.8	89	0.00	4.87
10		Ethanol	0.002	0.002	0.0	126	0.00	5.10
11		1,2-Dichlorotrifluoroetha	0.316	0.342	-8.2	93	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.419	-6.6	90	0.00	5.16
13		Freon 113	0.265	0.271	-2.3	89	0.00	5.22
14		Carbon Disulfide	0.740	0.715	3.4	85	0.00	5.21
			True	Calc.	% Drift			
15		Iodomethane	40.000	15.367	61.6#	31	0.00	5.37
			AvgRF	CCRF	% Dev			
16		Acrolein	0.048	0.049	-2.1	82	0.00	5.63
17		Allyl chloride	0.271	0.267	1.5	87	0.00	5.82
			True	Calc.	% Drift			
18		Methylene Chloride	40.000	40.189	-0.5	89	0.00	5.96
19		Acetone	200.000	189.030	5.5	86	0.00	6.02
			AvgRF	CCRF	% Dev			
20		Methyl acetate	0.153	0.176	-15.0	91	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.389	-6.6	90	0.00	6.17
22		Hexane	0.219	0.227	-3.7	84	0.00	6.27
23		Methyl Tert Butyl Ether	0.728	0.774	-6.3	88	0.00	6.29
24		Acetonitrile	0.025	0.026	-4.0	91	0.00	6.61
25		Di-isopropyl ether	0.699	0.718	-2.7	85	0.00	6.75
26		Chloroprene	0.328	0.332	-1.2	89	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.504	-4.1	88	0.00	6.94
28		Acrylonitrile	0.091	0.101	-11.0	90	0.00	7.00
29		ETBE	0.808	0.857	-6.1	88	0.00	7.20

Continuing Calibration Summary

Job Number: FC1065
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			True	Calc.	% Drift			
30		Tert Butyl Alcohol	400.000	360.705	9.8	77	0.00	6.40
			AvgRF	CCRF	% Dev			
31		Vinyl acetate	0.476	0.515	-8.2	89	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.284	-6.4	89	0.00	7.58
33		2,2-Dichloropropane	0.387	0.360	7.0	78	0.00	7.70
34		Bromochloromethane	0.130	0.138	-6.2	85	0.00	7.81
35		Cyclohexane	0.429	0.448	-4.4	91	0.00	7.82
36	C	Chloroform	0.471	0.491	-4.2	88	0.00	7.87
37		Ethyl acetate	0.235	0.261	-11.1	91	0.00	7.98
38		Tetrahydrofuran	0.073	0.071	2.7	87	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.277	0.0	87	0.00	8.08
40		Carbon Tetrachloride	0.343	0.367	-7.0	90	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.419	-6.9	90	0.00	8.12
42		2-Butanone	0.118	0.116	1.7	85	0.00	8.20
43		1,1-Dichloropropene	0.353	0.367	-4.0	88	0.00	8.26
44		tert-Butyl formate	0.103	0.111	-7.8	87	0.00	8.35
			True	Calc.	% Drift			
45		Propionitrile	400.000	427.650	-6.9	90	0.00	8.54
			AvgRF	CCRF	% Dev			
46		Methacrylonitrile	0.145	0.170	-17.2	98	0.00	8.55
47		Benzene	1.014	1.039	-2.5	87	0.00	8.52
48		TAME	0.722	0.781	-8.2	88	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.318	0.0	86	0.00	8.66
50		1,2-Dichloroethane	0.385	0.419	-8.8	91	0.00	8.74
			True	Calc.	% Drift			
51		tert Amyl alcohol	400.000	447.400	-11.8	93	0.00	8.79
			AvgRF	CCRF	% Dev			
52		Trichloroethene	0.271	0.290	-7.0	90	0.00	9.13
53		Methylcyclohexane	0.428	0.455	-6.3	89	0.00	9.13
54		Dibromomethane	0.179	0.191	-6.7	88	0.00	9.58
			True	Calc.	% Drift			
55	C	1,2-Dichloropropane	40.000	40.758	-1.9	88	0.00	9.67
			AvgRF	CCRF	% Dev			
56		Bromodichloromethane	0.341	0.366	-7.3	86	0.00	9.72
			True	Calc.	% Drift			
57		Methyl methacrylate	40.000	42.103	-5.3	89	0.00	9.84
58		1,4-Dioxane	800.000	888.379	-11.0	94	0.00	9.93
			AvgRF	CCRF	% Dev			
59		2-Chloroethyl vinyl ether	0.157	0.139	11.5	70	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.410	-6.5	86	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00	12.11
62	S	Toluene-d8	1.365	1.292	5.3	87	0.00	10.54
63	C	Toluene	1.478	1.446	2.2	88	0.00	10.60
64		Isobutyl alcohol	0.014	0.014	0.0	91	0.00	8.68
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	210.963	-5.5	94	0.00	10.83
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1065
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Sample: V5E1624-ECC1617
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66		4-Methyl-2-pentanone	0.384	0.366	4.7	88	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.480	-1.7	85	0.00	11.00
68		Tetrachloroethene	0.363	0.390	-7.4	94	0.00	11.00
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	38.564	3.6	86	0.00	11.10
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.287	0.298	-3.8	90	0.00	11.16
71		Dibromochloromethane	0.374	0.400	-7.0	89	0.00	11.36
72		1,3-Dichloropropane	0.573	0.580	-1.2	89	0.00	11.45
73		1,2-Dibromoethane	0.346	0.369	-6.6	89	0.00	11.63
			True	Calc.	% Drift			
74		3,3-Dimethyl-1-butanol	2000.000	1992.519	0.4	88	0.00	11.71
			AvgRF	CCRF	% Dev			
75		2-hexanone	0.264	0.256	3.0	86	0.00	11.77
76		1-Chlorohexane	0.488	0.493	-1.0	86	0.00	12.06
77	C	Ethylbenzene	1.692	1.651	2.4	88	0.00	12.12
78	P	Chlorobenzene	0.981	0.986	-0.5	89	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.354	-4.7	90	0.00	12.18
80		m,p-Xylene	1.255	1.257	-0.2	87	0.00	12.26
81		o-Xylene	1.197	1.212	-1.3	88	0.00	12.71
82		Styrene	0.919	0.969	-5.4	89	0.00	12.76
			True	Calc.	% Drift			
83	P	Bromoform	40.000	38.704	3.2	86	0.00	12.82
			AvgRF	CCRF	% Dev			
84		Isopropylbenzene	1.552	1.604	-3.4	90	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.803	3.5	91	0.00	13.33
			True	Calc.	% Drift			
87		cis-1,4-Dichloro-2-butene	40.000	32.004	20.0	70	0.00	13.68
			AvgRF	CCRF	% Dev			
88		n-Propylbenzene	3.988	4.022	-0.9	89	0.00	13.43
89		Bromobenzene	0.776	0.794	-2.3	89	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.032	-5.8	92	0.00	13.49
91		1,3,5-Trimethylbenzene	2.628	2.648	-0.8	88	0.00	13.61
92		2-Chlorotoluene	2.448	2.400	2.0	88	0.00	13.62
			True	Calc.	% Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	32.004	20.0	70	0.00	13.68
94		1,2,3-Trichloropropane	40.000	41.909	-4.8	95	0.00	13.66
95		Cyclohexanone	200.000	229.396	-14.7	103	0.00	13.74
			AvgRF	CCRF	% Dev			
96		4-Chlorotoluene	2.179	2.118	2.8	88	0.00	13.79
97		a-Methyl styrene	0.000	0.001	0.0	0#	0.00	10.96
98		tert-Butylbenzene	1.420	1.436	-1.1	91	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.646	-3.9	90	0.00	14.02
100		Pentachloroethane	0.459	0.438	4.6	85	0.00	14.01
101		sec-Butylbenzene	3.231	3.360	-4.0	91	0.00	14.13
102		4-Isopropyltoluene	2.832	2.945	-4.0	90	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.514	-4.5	92	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.660	-3.5	90	0.00	14.47

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
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Sample: V5E1624-ECC1617
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105	1,4-Dichlorobenzene	1.585	1.626	-2.6	93	0.00	14.49
106	n-Butylbenzene	1.502	1.559	-3.8	87	0.00	14.68
	----------	True	Calc.	% Drift	----------		
107	Benzyl Chloride	40.000	32.717	18.2	70	0.00	14.71
	----------	AvgRF	CCRF	% Dev	----------		
108	1,2-Dichlorobenzene	1.387	1.450	-4.5	91	0.00	14.90
	----------	True	Calc.	% Drift	----------		
109	1,2-Dibromo-3-Chloropropa	40.000	41.179	-2.9	91	0.00	15.63
	----------	AvgRF	CCRF	% Dev	----------		
110	Hexachlorobutadiene	0.293	0.307	-4.8	92	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.840	-8.7	94	0.00	16.22
112	Naphthalene	2.117	2.391	-12.9	93	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.743	-14.1	97	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Thu Dec 15 03:58:16 2022

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Calibration Files
1 =O72890.D 2 =O72891.D 3 =O72892.D 4 =O72893.D
5 =O72894.D 6 =O72895.D 7 =O72896.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.282	0.332	0.323	0.373	0.399	0.365	0.380	0.351	11.46
3)P Chloromethane	0.250	0.291	0.275	0.327	0.354	0.317	0.339	0.308	12.07
4) 1,3-butadiene	0.329	0.357	0.319	0.272	0.294	0.296	0.294	0.309	9.14
5)C Vinyl Chloride	0.240	0.298	0.292	0.333	0.361	0.321	0.330	0.311	12.48
6) Bromomethane	0.066	0.102	0.109	0.140	0.153	0.149	0.166	0.126	27.97
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977									
Response Ratio = 0.00000 + 0.12316 *A + 0.02148 *A^2									
7) Chloroethane	0.114	0.169	0.167	0.194	0.206	0.179	0.183	0.173	16.95
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9973									
Response Ratio = 0.00000 + 0.19140 *A + -0.00441 *A^2									
8) Trichlorofluorome	0.319	0.426	0.408	0.476	0.525	0.488	0.500	0.449	15.70
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.46750 *A + 0.01833 *A^2									
9) Ethyl Ether	0.235	0.236	0.222	0.227	0.220	0.233	0.240	0.231	3.23
10) Ethanol			0.001	0.001	0.001	0.001	0.001	0.001	10.56
11) 1,2-Dichlorotrifl	0.392	0.359	0.337	0.341	0.330	0.351	0.356	0.352	5.79
12)C 1,1-Dichloroethen	0.466	0.433	0.410	0.421	0.410	0.441	0.451	0.433	4.90
13) Freon 113	0.337	0.299	0.284	0.284	0.269	0.294	0.294	0.295	7.18
14) Carbon Disulfide	0.994	0.866	0.798	0.796	0.766	0.807	0.821	0.835	9.15
15) Iodomethane		0.025	0.035	0.078	0.128	0.183	0.225	0.112	72.18
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9968									
Response Ratio = 0.00000 + 0.03946 *A + 0.09562 *A^2									
16) Acrolein	0.031	0.048	0.055	0.045	0.049	0.046	0.047	0.046	15.66
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.04847 *A + -0.00016 *A^2									
17) Allyl chloride	0.325	0.389	0.388	0.351	0.394	0.416	0.440	0.386	9.91
18) Methylene Chlorid	0.950	0.508	0.412	0.395	0.377	0.393	0.400	0.491	42.19
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9976									
Response Ratio = 0.00000 + 0.41242 *A + -0.01007 *A^2									
19) Acetone	0.106	0.088	0.070	0.066	0.069	0.067	0.067	0.076	19.74
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.07138 *A + -0.00047 *A^2									
20) Methyl acetate	0.186	0.185	0.165	0.179	0.178	0.192	0.196	0.183	5.55
21) trans-1,2-Dichlor	0.443	0.422	0.402	0.409	0.397	0.423	0.435	0.419	4.05
22) Hexane	0.230	0.195	0.187	0.182	0.191	0.198	0.194	0.197	8.03
23) Methyl Tert Butyl	0.824	0.789	0.723	0.745	0.728	0.777	0.803	0.770	5.02
24) Tert Butyl Alcoho	0.010	0.018	0.014	0.016	0.016	0.018	0.016	0.015	17.38
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9957									

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
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                Response Ratio = 0.00000 + 0.01610 *A + 0.00002 *A^2

 25)  Acetonitrile      0.030 0.031 0.029 0.026 0.028 0.028 0.027 0.028   6.22
 26)  Di-isopropyl ethe 1.003 0.943 0.894 0.918 0.885 0.950 0.976 0.938   4.56
 27)  Chloroprene       0.272 0.347 0.343 0.321 0.359 0.381 0.401 0.346  12.12
 28)P 1,1-Dichloroethan 0.564 0.514 0.481 0.497 0.476 0.507 0.516 0.508   5.75
 29)  Acrylonitrile     0.099 0.079 0.077 0.075 0.077 0.075 0.077 0.080  10.76
 30)  ETBE              0.850 0.792 0.768 0.818 0.814 0.889 0.922 0.836   6.49
 31)  Vinyl acetate     0.497 0.434 0.469 0.520 0.580 0.596 0.634 0.533  13.63
 32)  cis-1,2-Dichloroe 0.336 0.315 0.295 0.296 0.282 0.299 0.304 0.304   5.66
 33)  2,2-Dichloropropa 0.327 0.327 0.323 0.350 0.361 0.399 0.419 0.358  10.57
 34)  Bromochloromethan 0.171 0.158 0.159 0.162 0.154 0.163 0.164 0.162   3.32
 35)  Cyclohexane       0.455 0.450 0.412 0.421 0.419 0.446 0.453 0.437   4.22
 36)C Chloroform        0.585 0.547 0.521 0.520 0.498 0.526 0.539 0.534   5.11
 37)  Ethyl acetate     0.282 0.218 0.220 0.230 0.247 0.244 0.257 0.242   9.34
 38)  Tetrahydrofuran   0.081 0.086 0.066 0.071 0.068 0.071 0.071 0.073   9.85
 39)S Dibromofluorometh 0.275 0.282 0.276 0.279 0.280 0.282 0.283 0.280   1.09
 40)  Carbon Tetrachlor 0.299 0.281 0.273 0.301 0.313 0.354 0.379 0.314  12.30
 41)  1,1,1-Trichloroet 0.430 0.406 0.394 0.414 0.411 0.448 0.466 0.424   6.00
 42)  2-Butanone        0.105 0.112 0.107 0.109 0.112 0.111 0.113 0.110   2.73
 43)  1,1-Dichloroprope 0.431 0.399 0.373 0.379 0.367 0.390 0.397 0.391   5.49
 44)  tert-Butyl format 0.059 0.099 0.129 0.125 0.155 0.163 0.181 0.130  31.97
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.11749 *A + 0.00645 *A^2

 45)  Propionitrile     0.027 0.034 0.035 0.033 0.036 0.036 0.035 0.034   9.33
 46)  Methacrylonitrile 0.173 0.210 0.196 0.184 0.205 0.204 0.206 0.197   6.94
 47)  Benzene           1.263 1.138 1.084 1.084 1.033 1.106 1.123 1.119   6.45
 48)  TAME              0.716 0.712 0.685 0.721 0.704 0.751 0.778 0.724   4.29
 49)  Isobutyl alcohol  0.015 0.005 0.005 0.005 0.007 0.008 0.007 0.008  48.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9927
              Response Ratio = 0.00000 + 0.00692 *A + 0.00001 *A^2

 50)S 1,2-Dichloroethan 0.259 0.277 0.252 0.252 0.260 0.255 0.260 0.259   3.23
 51)  1,2-Dichloroethan 0.501 0.465 0.434 0.441 0.428 0.456 0.460 0.455   5.37
 52)  Tert Amyl Alcohol 0.005 0.013 0.008 0.011 0.011 0.013 0.012 0.011  28.67
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9939
              Response Ratio = 0.00000 + 0.01072 *A + 0.00009 *A^2

 53)  Trichloroethene   0.377 0.318 0.302 0.303 0.292 0.309 0.314 0.316   8.81
 54)  Methylcyclohexane 0.438 0.423 0.386 0.396 0.391 0.415 0.415 0.409   4.62
 55)  Dibromomethane    0.230 0.207 0.202 0.202 0.192 0.203 0.206 0.206   5.66
 56)C 1,2-Dichloropropa 0.320 0.295 0.279 0.284 0.275 0.291 0.297 0.292   5.19
 57)  Bromodichlorometh 0.357 0.344 0.331 0.364 0.354 0.389 0.407 0.364   7.13
 58)  Methyl methacryla 0.112 0.194 0.201 0.201 0.237 0.243 0.260 0.207  23.60
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
              Response Ratio = 0.00000 + 0.19627 *A + 0.03295 *A^2

 59)  1,4-Dioxane             0.003 0.002 0.002 0.002 0.002       0.002  13.99
 60)  2-Chloroethyl vin 0.134 0.196 0.225 0.189 0.205 0.192 0.198 0.191  14.65
 61)  cis-1,3-Dichlorop 0.346 0.375 0.384 0.409 0.404 0.444 0.457 0.403   9.65

 62) I   Chlorobenzene-d5      ----------------ISTD--------------------
 63)S Toluene-d8        1.335 1.324 1.348 1.333 1.358 1.333 1.363 1.342   1.07
 64)C Toluene           1.789 1.626 1.539 1.529 1.508 1.562 1.643 1.600   6.08
 65)  2-Nitropropane    0.028 0.038 0.030 0.036 0.040 0.048 0.057 0.039  25.12
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.02908 *A + 0.00272 *A^2

 66)  4-Methyl-2-pentan 0.286 0.374 0.353 0.349 0.378 0.369 0.395 0.358   9.86
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Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

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 67)  trans-1,3-Dichlor 0.382 0.393 0.412 0.464 0.492 0.537 0.573 0.465  15.84
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.42070 *A + 0.07857 *A^2

 68)  Tetrachloroethene 0.494 0.458 0.441 0.431 0.435 0.445 0.467 0.453   4.85
 69)  Ethyl methacrylat 0.166 0.284 0.328 0.345 0.430 0.442 0.484 0.354  30.79
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.32644 *A + 0.08142 *A^2

 70)  1,1,2-Trichloroet 0.318 0.321 0.297 0.302 0.297 0.304 0.319 0.308   3.50
 71)  Dibromochlorometh 0.275 0.326 0.316 0.360 0.381 0.421 0.457 0.362  17.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.32195 *A + 0.06866 *A^2

 72)  1,3-Dichloropropa 0.669 0.651 0.598 0.597 0.591 0.605 0.638 0.621   4.97
 73)  1,2-Dibromoethane 0.350 0.382 0.359 0.367 0.363 0.377 0.397 0.371   4.26
 74)  3,3-dimethyl-1-bu 0.007 0.007 0.009 0.010 0.014 0.016 0.018 0.011  36.81
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9977
               Response Ratio = 0.00000 + 0.00882 *A + 0.00009 *A^2

 75)  2-hexanone        0.177 0.238 0.236 0.236 0.257 0.250 0.267 0.237  12.22
 76)  1-Chlorohexane    0.452 0.448 0.435 0.437 0.449 0.463 0.486 0.453   3.83
 77)C Ethylbenzene      1.991 1.807 1.707 1.732 1.728 1.787 1.862 1.802   5.50
 78)P Chlorobenzene     1.198 1.099 1.036 1.036 1.026 1.064 1.105 1.081   5.59
 79)  1,1,1,2-Tetrachlo 0.251 0.287 0.296 0.325 0.342 0.372 0.399 0.324  15.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.29572 *A + 0.05255 *A^2

 80)  m,p-Xylene        1.386 1.368 1.320 1.347 1.339 1.411 1.465 1.377   3.60
 81)  o-Xylene          1.393 1.345 1.299 1.306 1.314 1.365 1.440 1.352   3.83
 82)  Styrene           0.804 0.974 0.963 1.019 1.028 1.076 1.130 0.999  10.38
 83)P Bromoform         0.130 0.170 0.164 0.202 0.221 0.252 0.278 0.202  25.76
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.17211 *A + 0.05431 *A^2

 84)  Isopropylbenzene  1.580 1.602 1.545 1.566 1.561 1.617 1.691 1.594   3.07

 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 1.007 0.926 1.031 0.997 1.008 0.973 1.015 0.994   3.51
 87)  cis-1,4-Dichloro- 0.164 0.247 0.301 0.293 0.376 0.369 0.436 0.312  29.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.27417 *A + 0.07945 *A^2

 88)  n-Propylbenzene   5.380 4.523 5.090 4.939 5.238 5.205 5.848 5.174   7.84
 89)  Bromobenzene      1.398 1.190 1.286 1.254 1.302 1.263 1.418 1.301   6.22
 90)P 1,1,2,2-Tetrachlo 1.181 1.245 1.170 1.177 1.221 1.187 1.330 1.216   4.70
 91)  1,3,5-Trimethylbe 3.578 3.115 3.577 3.560 3.733 3.766 4.232 3.652   9.11
 92)  2-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 93)  trans-1,4-Dichlor 0.218 0.244 0.246 0.273 0.300 0.299 0.356 0.277  16.67
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
               Response Ratio = 0.00000 + 0.24071 *A + 0.05475 *A^2

 94)  1,2,3-Trichloropr 0.377 0.363 0.358 0.345 0.361 0.350 0.391 0.364   4.31
 95)  Cyclohexanone           0.018 0.023 0.022 0.025 0.022 0.019 0.022  10.98
 96)  4-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 97)  tert-Butylbenzene 2.152 1.777 1.986 1.930 2.032 2.024 2.279 2.026   7.87
 98)  a-Methyl styrene                                                0.000  -1.00
 99)  1,2,4-Trimethylbe 3.509 3.111 3.512 3.455 3.651 3.624 4.084 3.564   8.14
100)  Pentachloroethane 0.205 0.305 0.429 0.435 0.586 0.608 0.725 0.470  38.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
```

Initial Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

```
                Response Ratio = 0.00000 + 0.38525 *A + 0.17005 *A^2

101)  sec-Butylbenzene  4.194 3.607 4.037 3.909 4.082 4.042 4.503 4.053   6.71
102)  4-Isopropyltoluen 3.416 3.053 3.467 3.437 3.612 3.582 4.015 3.512   8.18
103)  1,3-Dichlorobenze 2.447 2.115 2.201 2.172 2.253 2.195 2.457 2.263   6.00
104)  1,2,3-Trimethylbe 3.628 3.219 3.565 3.527 3.698 3.709 4.162 3.644   7.74
105)  1,4-Dichlorobenze 2.707 2.216 2.400 2.280 2.382 2.329 2.592 2.415   7.23
106)  n-Butylbenzene    1.702 1.635 1.813 1.810 1.929 1.951 2.193 1.862   9.91
107)  Benzyl Chloride   0.137 0.161 0.193 0.263 0.321 0.365 0.453 0.271  42.79
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
                Response Ratio = 0.00000 + 0.19284 *A + 0.12965 *A^2

108)  1,2-Dichlorobenze 2.327 2.082 2.146 2.100 2.191 2.139 2.388 2.196   5.31
109)  1,2-Dibromo-3-Chl 0.071 0.137 0.137 0.156 0.174 0.188 0.218 0.155  30.12
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
                Response Ratio = 0.00000 + 0.13382 *A + 0.04157 *A^2

110)  Hexachlorobutadie 0.531 0.435 0.459 0.448 0.472 0.464 0.538 0.478   8.41
111)  1,2,4-Trichlorobe 1.372 1.233 1.282 1.296 1.373 1.360 1.553 1.353   7.62
112)  Naphthalene       3.178 3.327 3.175 3.273 3.415 3.404 3.865 3.377   6.99
113)  1,2,3-Trichlorobe 1.305 1.198 1.190 1.190 1.248 1.240 1.418 1.255   6.60
 ----------------------------------------------------------------------------
 (#) = Out of Range

           VO_12-08-2022.M        Thu Dec 08 15:43:02 2022
```

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72898.D Vial: 10
Acq On : 8 Dec 2022 1:16 pm Operator: adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	110	0.00	8.55
2		Dichlorodifluoromethane		NA				
3	P	Chloromethane	0.308	0.259	15.9	80	0.00	3.01
4		1,3-butadiene	0.309	0.324	-4.9	121	0.00	3.18
5	C	Vinyl Chloride	0.311	0.270	13.2	82	0.00	3.15
			Amount	Calc.	%Drift			
6		Bromomethane	40.000	38.177	4.6	95	0.00	3.68
7		Chloroethane	40.000	34.583	13.5	87	0.00	3.88
8		Trichlorofluoromethane	40.000	35.132	12.2	88	0.00	4.10
			AvgRF	CCRF	%Dev			
9		Ethyl Ether	0.231	0.211	8.7	105	0.00	4.55
10		Ethanol	0.001	0.001	0.0	83	0.00	4.77
11		1,2-Dichlorotrifluoroetha	0.352	0.310	11.9	103	0.00	4.82
12	C	1,1-Dichloroethene	0.433	0.376	13.2	100	0.00	4.82
13		Freon 113	0.295	0.245	16.9	100	0.00	4.88
14		Carbon Disulfide	0.835	0.763	8.6	109	0.00	4.86
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	36.923	7.7	87	0.00	5.02
16		Acrolein	200.000	170.858	14.6	91	0.00	5.27
			AvgRF	CCRF	%Dev			
17		Allyl chloride	0.386	0.412	-6.7	115	0.00	5.45
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	35.648	10.9	105	0.00	5.59
19		Acetone	200.000	192.124	3.9	107	0.00	5.65
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.183	0.186	-1.6	114	0.00	5.81
21		trans-1,2-Dichloroethene	0.419	0.374	10.7	103	0.00	5.79
22		Hexane	0.197	0.180	8.6	103	0.00	5.88
23		Methyl Tert Butyl Ether	0.770	0.723	6.1	109	0.00	5.92
			Amount	Calc.	%Drift			
24		Tert Butyl Alcohol	400.000	389.813	2.5	109	0.00	6.02
			AvgRF	CCRF	%Dev			
25		Acetonitrile	0.028	0.025	10.7	95	0.00	6.23
26		Di-isopropyl ether	0.938	0.913	2.7	113	0.00	6.37

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

27		Chloroprene	0.346	0.402	-16.2	123	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.476	6.3	110	0.00	6.54
29		Acrylonitrile	0.080	0.074	7.5	105	0.00	6.60
30		ETBE	0.836	0.819	2.0	110	0.00	6.80
31		Vinyl acetate	0.533	0.632	-18.6	119	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.281	7.6	109	0.00	7.18
33		2,2-Dichloropropane	0.358	0.341	4.7	103	0.00	7.30
34		Bromochloromethane	0.162	0.155	4.3	110	0.00	7.40
35		Cyclohexane	0.437	0.415	5.0	108	0.00	7.41
36	C	Chloroform	0.534	0.484	9.4	106	0.00	7.48
37		Ethyl acetate	0.242	0.244	-0.8	108	0.00	7.59
38		Tetrahydrofuran	0.073	0.072	1.4	116	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.278	0.7	109	0.00	7.68
40		Carbon Tetrachloride	0.314	0.307	2.2	107	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.403	5.0	107	0.00	7.71
42		2-Butanone	0.110	0.108	1.8	106	0.00	7.81
43		1,1-Dichloropropene	0.391	0.343	12.3	102	0.00	7.85
			Amount	Calc.	%Drift			
44		tert-Butyl formate	200.000	162.330	18.8	79	0.00	7.96
			AvgRF	CCRF	%Dev			
45		Propionitrile	0.034	0.033	2.9	100	0.00	8.14
46		Methacrylonitrile	0.197	0.196	0.5	104	0.00	8.16
47		Benzene	1.119	0.994	11.2	105	0.00	8.12
48		TAME	0.724	0.713	1.5	111	0.00	8.21
			Amount	Calc.	%Drift			
49		Isobutyl alcohol	800.000	717.414	10.3	95	0.00	8.30
			AvgRF	CCRF	%Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.262	-1.2	111	0.00	8.26
51		1,2-Dichloroethane	0.455	0.419	7.9	107	0.00	8.34
			Amount	Calc.	%Drift			
52		Tert Amyl Alcohol	400.000	392.452	1.9	107	0.00	8.40
			AvgRF	CCRF	%Dev			
53		Trichloroethene	0.316	0.280	11.4	105	0.00	8.73
54		Methylcyclohexane	0.409	0.386	5.6	108	0.00	8.73
55		Dibromomethane	0.206	0.184	10.7	105	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.259	11.3	103	0.00	9.27
57		Bromodichloromethane	0.364	0.360	1.1	111	0.00	9.33
			Amount	Calc.	%Drift			
58		Methyl methacrylate	40.000	44.369	-10.9	116	0.00	9.46
			AvgRF	CCRF	%Dev			
59		1,4-Dioxane		----------NA----------				
60		2-Chloroethyl vinyl ether	0.191	0.191	0.0	102	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.397	1.5	107	0.00	9.96
62	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	11.72
63	S	Toluene-d8	1.342	1.382	-3.0	109	0.00	10.15
64	C	Toluene	1.600	1.504	6.0	106	0.00	10.21
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	194.033	3.0	104	0.00	10.44
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

66		4-Methyl-2-pentanone	0.358	0.366	-2.2	103	0.00	10.56
			Amount	Calc.	%Drift			
67		trans-1,3-Dichloropropene	40.000	44.217	-10.5	117	0.00	10.62
			AvgRF	CCRF	%Dev			
68		Tetrachloroethene	0.453	0.433	4.4	106	0.00	10.60
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	42.379	-5.9	104	0.00	10.73
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.308	0.305	1.0	109	0.00	10.78
			Amount	Calc.	%Drift			
71		Dibromochloromethane	40.000	40.761	-1.9	108	0.00	10.97
			AvgRF	CCRF	%Dev			
72		1,3-Dichloropropane	0.621	0.562	9.5	101	0.00	11.07
73		1,2-Dibromoethane	0.371	0.366	1.3	107	0.00	11.23
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1934.383	3.3	93	0.00	11.34
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.237	0.248	-4.6	103	0.00	11.40
76		1-Chlorohexane	0.453	0.467	-3.1	111	0.00	11.68
77	C	Ethylbenzene	1.802	1.738	3.6	107	0.00	11.74
78	P	Chlorobenzene	1.081	1.040	3.8	108	0.00	11.74
			Amount	Calc.	%Drift			
79		1,1,1,2-Tetrachloroethane	40.000	41.810	-4.5	111	0.00	11.79
			AvgRF	CCRF	%Dev			
80		m,p-Xylene	1.377	1.355	1.6	108	0.00	11.88
81		o-Xylene	1.352	1.358	-0.4	110	0.00	12.32
82		Styrene	0.999	1.036	-3.7	107	0.00	12.38
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	42.906	-7.3	113	0.00	12.43
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.594	1.595	-0.1	109	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	1.028	-3.4	107	0.00	12.94
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	41.553	-3.9	99	0.00	12.99
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	5.174	5.413	-4.6	108	0.00	13.05
89		Bromobenzene	1.301	1.270	2.4	102	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.270	-4.4	109	0.00	13.13
91		1,3,5-Trimethylbenzene	3.652	3.779	-3.5	106	0.00	13.24
92		2-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	45.969	-14.9	117	0.00	13.31

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

		AvgRF	CCRF	%Dev			
94	1,2,3-Trichloropropane	0.364	0.342	6.0	99	0.00	13.29
95	Cyclohexanone	0.022	0.021	4.5	87	0.00	13.35
96	4-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
97	tert-Butylbenzene	2.026	2.118	-4.5	109	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.779	-6.0	108	0.00	13.65

		Amount	Calc.	%Drift			
100	Pentachloroethane	40.000	46.781	-17.0	114	0.00	13.63

		AvgRF	CCRF	%Dev			
101	sec-Butylbenzene	4.053	4.413	-8.9	113	0.00	13.76
102	4-Isopropyltoluene	3.512	3.802	-8.3	110	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.358	-4.2	110	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	4.097	-12.4	116	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.444	-1.2	107	0.00	14.11
106	n-Butylbenzene	1.862	1.928	-3.5	105	0.00	14.33

		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	46.210	-15.5	118	0.00	14.35

		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	2.196	2.254	-2.6	108	0.00	14.54

		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	41.952	-4.9	107	0.00	15.29

		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.478	0.467	2.3	104	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.412	-4.4	108	0.00	15.89
112	Naphthalene	3.377	3.558	-5.4	109	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.295	-3.2	109	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Thu Dec 08 15:41:55 2022

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72899.D Vial: 11
Acq On : 8 Dec 2022 1:59 pm Operator: adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	108	0.00	8.55
2		Dichlorodifluoromethane	0.351	0.273	22.2#	79	0.00	2.69
3	P	Chloromethane		----------NA----------				
4		1,3-butadiene		----------NA----------				
5	C	Vinyl Chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
6		Bromomethane		----------NA----------				
7		Chloroethane		----------NA----------				
8		Trichlorofluoromethane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
9		Ethyl Ether		----------NA----------				
10		Ethanol		----------NA----------				
11		1,2-Dichlorotrifluoroetha		----------NA----------				
12	C	1,1-Dichloroethene		----------NA----------				
13		Freon 113		----------NA----------				
14		Carbon Disulfide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------NA----------				
16		Acrolein		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
17		Allyl chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------NA----------				
19		Acetone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------NA----------				
21		trans-1,2-Dichloroethene		----------NA----------				
22		Hexane		----------NA----------				
23		Methyl Tert Butyl Ether		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
24		Tert Butyl Alcohol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
25		Acetonitrile		----------NA----------				
26		Di-isopropyl ether		----------NA----------				

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

27		Chloroprene		----------NA----------					
28	P	1,1-Dichloroethane		----------NA----------					
29		Acrylonitrile		----------NA----------					
30		ETBE		----------NA----------					
31		Vinyl acetate		----------NA----------					
32		cis-1,2-Dichloroethene		----------NA----------					
33		2,2-Dichloropropane		----------NA----------					
34		Bromochloromethane		----------NA----------					
35		Cyclohexane		----------NA----------					
36	C	Chloroform		----------NA----------					
37		Ethyl acetate		----------NA----------					
38		Tetrahydrofuran		----------NA----------					
39	S	Dibromofluoromethane	0.280	0.279	0.4	108	0.00	7.68	
40		Carbon Tetrachloride		----------NA----------					
41		1,1,1-Trichloroethane		----------NA----------					
42		2-Butanone		----------NA----------					
43		1,1-Dichloropropene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
44		tert-Butyl formate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
45		Propionitrile		----------NA----------					
46		Methacrylonitrile		----------NA----------					
47		Benzene		----------NA----------					
48		TAME		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
49		Isobutyl alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
50	S	1,2-Dichloroethane-d4	0.259	0.254	1.9	109	0.00	8.26	
51		1,2-Dichloroethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
52		Tert Amyl Alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
53		Trichloroethene		----------NA----------					
54		Methylcyclohexane		----------NA----------					
55		Dibromomethane		----------NA----------					
56	C	1,2-Dichloropropane		----------NA----------					
57		Bromodichloromethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
58		Methyl methacrylate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
59		1,4-Dioxane	0.002	0.002	0.0	83	0.00	9.54	
60		2-Chloroethyl vinyl ether		----------NA----------					
61		cis-1,3-Dichloropropene		----------NA----------					
62	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	11.72	
63	S	Toluene-d8	1.342	1.390	-3.6	105	0.00	10.15	
64	C	Toluene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
65		2-Nitropropane		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

			Amount	Calc.	%Drift		
66		4-Methyl-2-pentanone		NA			
			Amount	Calc.	%Drift		
67		trans-1,3-Dichloropropene		NA			
			AvgRF	CCRF	%Dev		
68		Tetrachloroethene		NA			
			Amount	Calc.	%Drift		
69		Ethyl methacrylate		NA			
			AvgRF	CCRF	%Dev		
70		1,1,2-Trichloroethane		NA			
			Amount	Calc.	%Drift		
71		Dibromochloromethane		NA			
			AvgRF	CCRF	%Dev		
72		1,3-Dichloropropane		NA			
73		1,2-Dibromoethane		NA			
			Amount	Calc.	%Drift		
74		3,3-dimethyl-1-butanol		NA			
			AvgRF	CCRF	%Dev		
75		2-hexanone		NA			
76		1-Chlorohexane		NA			
77	C	Ethylbenzene		NA			
78	P	Chlorobenzene		NA			
			Amount	Calc.	%Drift		
79		1,1,1,2-Tetrachloroethane		NA			
			AvgRF	CCRF	%Dev		
80		m,p-Xylene		NA			
81		o-Xylene		NA			
82		Styrene		NA			
			Amount	Calc.	%Drift		
83	P	Bromoform		NA			
			AvgRF	CCRF	%Dev		
84		Isopropylbenzene		NA			
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	101	0.00 14.10
86	S	4-Bromofluorobenzene	0.994	0.988	0.6	100	0.00 12.94
			Amount	Calc.	%Drift		
87		cis-1,4-Dichloro-2-butene		NA			
			AvgRF	CCRF	%Dev		
88		n-Propylbenzene		NA			
89		Bromobenzene		NA			
90	P	1,1,2,2-Tetrachloroethane		NA			
91		1,3,5-Trimethylbenzene		NA			
92		2-Chlorotoluene		NA			
			Amount	Calc.	%Drift		
93		trans-1,4-Dichloro-2-Bute		NA			

Initial Calibration Verification

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

		AvgRF	CCRF	%Dev
94	1,2,3-Trichloropropane		NA	
95	Cyclohexanone		NA	
96	4-Chlorotoluene		NA	
97	tert-Butylbenzene		NA	
98	a-Methyl styrene		NA	
99	1,2,4-Trimethylbenzene		NA	

		Amount	Calc.	%Drift
100	Pentachloroethane		NA	

		AvgRF	CCRF	%Dev
101	sec-Butylbenzene		NA	
102	4-Isopropyltoluene		NA	
103	1,3-Dichlorobenzene		NA	
104	1,2,3-Trimethylbenzene		NA	
105	1,4-Dichlorobenzene		NA	
106	n-Butylbenzene		NA	

		Amount	Calc.	%Drift
107	Benzyl Chloride		NA	

		AvgRF	CCRF	%Dev
108	1,2-Dichlorobenzene		NA	

		Amount	Calc.	%Drift
109	1,2-Dibromo-3-Chloropropa		NA	

		AvgRF	CCRF	%Dev
110	Hexachlorobutadiene		NA	
111	1,2,4-Trichlorobenzene		NA	
112	Naphthalene		NA	
113	1,2,3-Trichlorobenzene		NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
O72893.D VO_12-08-2022.M Thu Dec 08 15:42:40 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...-2022\VO2867\O72918.d Vial: 3
Acq On : 9 Dec 2022 10:04 am Operator: adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS52925,VO2867,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	103	0.00	8.55
2	Dichlorodifluoromethane	0.351	0.320	8.8	82	0.00	2.69
3 P	Chloromethane	0.308	0.288	6.5	84	0.01	3.03
4	1,3-butadiene	0.309	0.290	6.1	101	0.01	3.20
5 C	Vinyl Chloride	0.311	0.308	1.0	88	0.00	3.16
		True	Calc.	% Drift			
6	Bromomethane	40.000	34.549	13.6	80	0.00	3.68
7	Chloroethane	40.000	37.123	7.2	87	0.01	3.89
8	Trichlorofluoromethane	40.000	35.782	10.5	84	0.00	4.10
		AvgRF	CCRF	% Dev			
9	Ethyl Ether	0.231	0.214	7.4	100	0.00	4.56
10	Ethanol	0.001	0.001	0.0	64	0.00	4.78
11	1,2-Dichlorotrifluoroetha	0.352	0.316	10.2	99	0.00	4.83
12 C	1,1-Dichloroethene	0.433	0.392	9.5	98	0.00	4.83
13	Freon 113	0.295	0.257	12.9	98	0.00	4.88
14	Carbon Disulfide	0.835	0.744	10.9	100	0.00	4.87
		True	Calc.	% Drift			
15	Iodomethane	40.000	43.426	-8.6	106	0.00	5.03
16	Acrolein	200.000	180.589	9.7	90	0.00	5.28
		AvgRF	CCRF	% Dev			
17	Allyl chloride	0.386	0.361	6.5	94	0.00	5.46
		True	Calc.	% Drift			
18	Methylene Chloride	40.000	36.124	9.7	100	0.00	5.59
19	Acetone	200.000	171.237	14.4	89	0.00	5.66
		AvgRF	CCRF	% Dev			
20	Methyl acetate	0.183	0.176	3.8	101	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.382	8.8	99	0.00	5.80
22	Hexane	0.197	0.184	6.6	99	0.00	5.89
23	Methyl Tert Butyl Ether	0.770	0.699	9.2	99	0.00	5.92
		True	Calc.	% Drift			
24	Tert Butyl Alcohol	400.000	317.168	20.7#	83	0.00	6.03
		AvgRF	CCRF	% Dev			
25	Acetonitrile	0.028	0.024	14.3	88	0.00	6.23
26	Di-isopropyl ether	0.938	0.853	9.1	99	0.00	6.37

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

27		Chloroprene	0.346	0.330	4.6	95	0.00	6.52
28	P	1,1-Dichloroethane	0.508	0.460	9.4	99	0.00	6.54
29		Acrylonitrile	0.080	0.071	11.3	95	0.00	6.60
30		ETBE	0.836	0.762	8.9	96	0.00	6.80
31		Vinyl acetate	0.533	0.541	-1.5	96	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.278	8.6	101	0.00	7.18
33		2,2-Dichloropropane	0.358	0.331	7.5	94	0.00	7.30
34		Bromochloromethane	0.162	0.151	6.8	101	0.00	7.40
35		Cyclohexane	0.437	0.396	9.4	97	0.00	7.41
36	C	Chloroform	0.534	0.484	9.4	100	0.00	7.48
37		Ethyl acetate	0.242	0.230	5.0	96	0.00	7.59
38		Tetrahydrofuran	0.073	0.065	11.0	97	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.275	1.8	101	0.00	7.68
40		Carbon Tetrachloride	0.314	0.317	-1.0	104	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.401	5.4	100	0.00	7.72
42		2-Butanone	0.110	0.104	5.5	96	0.00	7.81
43		1,1-Dichloropropene	0.391	0.354	9.5	99	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	185.717	7.1	87	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.030	11.8	85	0.00	8.14
46		Methacrylonitrile	0.197	0.198	-0.5	99	0.00	8.16
47		Benzene	1.119	1.027	8.2	102	0.00	8.12
48		TAME	0.724	0.676	6.6	99	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	679.606	15.0	85	0.00	8.30
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.264	-1.9	104	0.00	8.26
51		1,2-Dichloroethane	0.455	0.411	9.7	99	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	355.030	11.2	91	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.283	10.4	100	0.00	8.73
54		Methylcyclohexane	0.409	0.376	8.1	99	0.00	8.73
55		Dibromomethane	0.206	0.192	6.8	103	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.266	8.9	100	0.00	9.27
57		Bromodichloromethane	0.364	0.358	1.6	104	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	39.961	0.1	97	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.001	50.0#	65	0.00	9.54
60		2-Chloroethyl vinyl ether	0.191	0.187	2.1	93	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.401	0.5	102	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	98	0.00	11.72
63	S	Toluene-d8	1.342	1.371	-2.2	99	0.00	10.15
64	C	Toluene	1.600	1.578	1.4	102	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	272.368	-36.2#	148	0.00	10.44
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

			True	Calc.	% Drift			
66		4-Methyl-2-pentanone	0.358	0.383	-7.0	99	0.00	10.56
			True	Calc.	% Drift			
67		trans-1,3-Dichloropropene	40.000	41.940	-4.8	101	0.00	10.62
			AvgRF	CCRF	% Dev			
68		Tetrachloroethene	0.453	0.446	1.5	100	0.00	10.60
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	43.954	-9.9	99	0.00	10.73
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.308	0.314	-1.9	103	0.00	10.78
			True	Calc.	% Drift			
71		Dibromochloromethane	40.000	44.127	-10.3	108	0.00	10.97
			AvgRF	CCRF	% Dev			
72		1,3-Dichloropropane	0.621	0.615	1.0	102	0.00	11.06
73		1,2-Dibromoethane	0.371	0.387	-4.3	104	0.00	11.23
			True	Calc.	% Drift			
74		3,3-dimethyl-1-butanol	2000.000	2064.061	-3.2	93	0.00	11.34
			AvgRF	CCRF	% Dev			
75		2-hexanone	0.237	0.257	-8.4	98	0.00	11.39
76		1-Chlorohexane	0.453	0.456	-0.7	99	0.00	11.68
77	C	Ethylbenzene	1.802	1.788	0.8	101	0.00	11.74
78	P	Chlorobenzene	1.081	1.073	0.7	102	0.00	11.74
			True	Calc.	% Drift			
79		1,1,1,2-Tetrachloroethane	40.000	43.320	-8.3	106	0.00	11.79
			AvgRF	CCRF	% Dev			
80		m,p-Xylene	1.377	1.390	-0.9	101	0.00	11.88
81		o-Xylene	1.352	1.351	0.1	101	0.00	12.32
82		Styrene	0.999	1.070	-7.1	102	0.00	12.38
			True	Calc.	% Drift			
83	P	Bromoform	40.000	46.019	-15.0	113	0.00	12.43
			AvgRF	CCRF	% Dev			
84		Isopropylbenzene	1.594	1.608	-0.9	101	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.960	3.4	98	0.00	12.94
			True	Calc.	% Drift			
87		cis-1,4-Dichloro-2-butene	40.000	42.034	-5.1	98	0.00	12.99
			AvgRF	CCRF	% Dev			
88		n-Propylbenzene	5.174	5.166	0.2	102	0.00	13.05
89		Bromobenzene	1.301	1.276	1.9	101	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.249	-2.7	105	0.00	13.12
91		1,3,5-Trimethylbenzene	3.652	3.667	-0.4	101	0.00	13.24
92		2-Chlorotoluene	3.256	3.203	1.6	101	0.00	13.41
			True	Calc.	% Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	42.547	-6.4	105	0.00	13.31

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-CC2866
Lab FileID: O72918.D

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.362	0.5	103	0.00	13.29
95	Cyclohexanone	0.022	0.017	22.7#	70	0.00	13.35
96	4-Chlorotoluene	3.256	3.203	1.6	101	0.00	13.41
97	tert-Butylbenzene	2.026	1.962	3.2	99	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.584	-0.6	101	0.00	13.65

		True	Calc.	% Drift			
100	Pentachloroethane	40.000	44.549	-11.4	105	0.00	13.63

		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	4.036	0.4	102	0.00	13.76
102	4-Isopropyltoluene	3.512	3.568	-1.6	102	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.209	2.4	101	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.659	-0.4	102	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.364	2.1	102	0.00	14.11
106	n-Butylbenzene	1.862	1.916	-2.9	102	0.00	14.33

		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	43.854	-9.6	108	0.00	14.35

		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	2.136	2.7	100	0.00	14.54

		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	43.479	-8.7	110	0.00	15.29

		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.447	6.5	98	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.340	1.0	101	0.00	15.89
112	Naphthalene	3.377	3.418	-1.2	103	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.215	3.2	100	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Sun Dec 11 13:57:21 2022

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...-2022\VO2867\O72946.d Vial: 31
Acq On : 9 Dec 2022 9:59 pm Operator: adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS52925,VO2867,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	95	0.00	8.55
2	Dichlorodifluoromethane	0.351	0.312	11.1	74	0.00	2.69
3 P	Chloromethane	0.308	0.292	5.2	78	0.00	3.02
4	1,3-butadiene	0.309	0.324	-4.9	104	0.00	3.19
5 C	Vinyl Chloride	0.311	0.310	0.3	81	0.00	3.16
		True	Calc.	% Drift			
6	Bromomethane	40.000	35.063	12.3	75	0.00	3.68
7	Chloroethane	40.000	38.310	4.2	83	0.00	3.89
8	Trichlorofluoromethane	40.000	35.383	11.5	77	0.00	4.10
		AvgRF	CCRF	% Dev			
9	Ethyl Ether	0.231	0.215	6.9	93	0.00	4.56
10	Ethanol	0.001	0.001	0.0	105	0.00	4.78
11	1,2-Dichlorotrifluoroetha	0.352	0.322	8.5	93	0.00	4.82
12 C	1,1-Dichloroethene	0.433	0.389	10.2	90	0.00	4.83
13	Freon 113	0.295	0.267	9.5	94	0.00	4.88
14	Carbon Disulfide	0.835	0.742	11.1	92	0.00	4.87
		True	Calc.	% Drift			
15	Iodomethane	40.000	50.959	-27.4	129	0.00	5.03
16	Acrolein	200.000	169.244	15.4	78	0.00	5.28
		AvgRF	CCRF	% Dev			
17	Allyl chloride	0.386	0.372	3.6	90	0.00	5.46
		True	Calc.	% Drift			
18	Methylene Chloride	40.000	37.523	6.2	96	0.00	5.59
19	Acetone	200.000	199.210	0.4	96	0.00	5.65
		AvgRF	CCRF	% Dev			
20	Methyl acetate	0.183	0.190	-3.8	101	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.379	9.5	91	0.00	5.80
22	Hexane	0.197	0.174	11.7	86	0.00	5.89
23	Methyl Tert Butyl Ether	0.770	0.703	8.7	92	0.00	5.92
		True	Calc.	% Drift			
24	Tert Butyl Alcohol	400.000	411.142	-2.8	100	0.00	6.03
		AvgRF	CCRF	% Dev			
25	Acetonitrile	0.028	0.027	3.6	90	0.00	6.23
26	Di-isopropyl ether	0.938	0.859	8.4	92	0.00	6.37

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

27		Chloroprene	0.346	0.333	3.8	88	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.466	8.3	93	0.00	6.54
29		Acrylonitrile	0.080	0.068	15.0	84	0.00	6.60
30		ETBE	0.836	0.782	6.5	91	0.00	6.80
31		Vinyl acetate	0.533	0.492	7.7	81	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.278	8.6	94	0.00	7.18
33		2,2-Dichloropropane	0.358	0.314	12.3	83	0.00	7.30
34		Bromochloromethane	0.162	0.151	6.8	93	0.00	7.40
35		Cyclohexane	0.437	0.397	9.2	90	0.00	7.41
36	C	Chloroform	0.534	0.481	9.9	92	0.00	7.48
37		Ethyl acetate	0.242	0.217	10.3	84	0.00	7.59
38		Tetrahydrofuran	0.073	0.068	6.8	94	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.275	1.8	93	0.00	7.68
40		Carbon Tetrachloride	0.314	0.314	0.0	95	0.00	7.65
41		1,1,1-Trichloroethane	0.424	0.398	6.1	92	0.00	7.72
42		2-Butanone	0.110	0.116	-5.5	99	0.00	7.81
43		1,1-Dichloropropene	0.391	0.354	9.5	92	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	186.056	7.0	81	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.036	-5.9	93	0.00	8.14
46		Methacrylonitrile	0.197	0.200	-1.5	93	0.00	8.16
47		Benzene	1.119	1.037	7.3	95	0.00	8.12
48		TAME	0.724	0.683	5.7	92	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	886.798	-10.8	102	0.00	8.30
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.260	-0.4	95	0.00	8.26
51		1,2-Dichloroethane	0.455	0.409	10.1	91	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	420.974	-5.2	100	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.283	10.4	92	0.00	8.73
54		Methylcyclohexane	0.409	0.377	7.8	92	0.00	8.73
55		Dibromomethane	0.206	0.189	8.3	94	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.269	7.9	93	0.00	9.28
57		Bromodichloromethane	0.364	0.343	5.8	92	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	40.530	-1.3	91	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.002	0.0	94	0.00	9.54
60		2-Chloroethyl vinyl ether	0.191	0.182	4.7	84	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.388	3.7	91	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	95	0.00	11.73
63	S	Toluene-d8	1.342	1.334	0.6	93	0.00	10.15
64	C	Toluene	1.600	1.520	5.0	95	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	216.579	-8.3	106	0.00	10.45
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

66		4-Methyl-2-pentanone	0.358	0.396	-10.6	99	0.00	10.56
		----------	True	Calc.	% Drift	----------		
67		trans-1,3-Dichloropropene	40.000	39.750	0.6	92	0.00	10.62
		----------	AvgRF	CCRF	% Dev	----------		
68		Tetrachloroethene	0.453	0.450	0.7	98	0.00	10.60
		----------	True	Calc.	% Drift	----------		
69		Ethyl methacrylate	40.000	43.016	-7.5	94	0.00	10.73
		----------	AvgRF	CCRF	% Dev	----------		
70		1,1,2-Trichloroethane	0.308	0.301	2.3	96	0.00	10.78
		----------	True	Calc.	% Drift	----------		
71		Dibromochloromethane	40.000	40.610	-1.5	95	0.00	10.97
		----------	AvgRF	CCRF	% Dev	----------		
72		1,3-Dichloropropane	0.621	0.585	5.8	93	0.00	11.07
73		1,2-Dibromoethane	0.371	0.363	2.2	95	0.00	11.23
		----------	True	Calc.	% Drift	----------		
74		3,3-dimethyl-1-butanol	2000.000	2391.213	-19.6	109	0.00	11.34
		----------	AvgRF	CCRF	% Dev	----------		
75		2-hexanone	0.237	0.270	-13.9	99	0.00	11.40
76		1-Chlorohexane	0.453	0.433	4.4	91	0.00	11.68
77	C	Ethylbenzene	1.802	1.713	4.9	94	0.00	11.74
78	P	Chlorobenzene	1.081	1.024	5.3	94	0.00	11.74
		----------	True	Calc.	% Drift	----------		
79		1,1,1,2-Tetrachloroethane	40.000	40.813	-2.0	96	0.00	11.79
		----------	AvgRF	CCRF	% Dev	----------		
80		m,p-Xylene	1.377	1.327	3.6	94	0.00	11.88
81		o-Xylene	1.352	1.277	5.5	92	0.00	12.32
82		Styrene	0.999	1.016	-1.7	93	0.00	12.38
		----------	True	Calc.	% Drift	----------		
83	P	Bromoform	40.000	40.397	-1.0	94	0.00	12.43
		----------	AvgRF	CCRF	% Dev	----------		
84		Isopropylbenzene	1.594	1.543	3.2	93	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.886	10.9	97	0.00	12.94
		----------	True	Calc.	% Drift	----------		
87		cis-1,4-Dichloro-2-butene	40.000	33.990	15.0	82	0.00	12.99
		----------	AvgRF	CCRF	% Dev	----------		
88		n-Propylbenzene	5.174	4.411	14.7	93	0.00	13.05
89		Bromobenzene	1.301	1.090	16.2	92	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.066	12.3	96	0.00	13.12
91		1,3,5-Trimethylbenzene	3.652	3.128	14.3	92	0.00	13.24
92		2-Chlorotoluene	3.256	2.772	14.9	93	0.00	13.41
		----------	True	Calc.	% Drift	----------		
93		trans-1,4-Dichloro-2-Bute	40.000	33.485	16.3	85	0.00	13.31

Continuing Calibration Summary

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2867-ECC2866
Lab FileID: O72946.D

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.306	15.9	93	0.00	13.29
95	Cyclohexanone	0.022	0.019	13.6	84	0.00	13.35
96	4-Chlorotoluene	3.256	2.772	14.9	93	0.00	13.41
97	tert-Butylbenzene	2.026	1.698	16.2	92	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.076	13.7	93	0.00	13.65
		True	Calc.	% Drift			
100	Pentachloroethane	40.000	35.977	10.1	86	0.00	13.63
		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	3.446	15.0	93	0.00	13.76
102	4-Isopropyltoluene	3.512	3.006	14.4	91	0.00	13.90
103	1,3-Dichlorobenzene	2.263	1.907	15.7	93	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.126	14.2	93	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.022	16.3	93	0.00	14.11
106	n-Butylbenzene	1.862	1.588	14.7	91	0.00	14.33
		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	33.778	15.6	81	0.00	14.35
		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	1.847	15.9	93	0.00	14.54
		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	36.206	9.5	94	0.00	15.29
		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.362	24.3	84	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.090	19.4	87	0.00	15.89
112	Naphthalene	3.377	2.872	15.0	92	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.001	20.2	88	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Sun Dec 11 14:20:43 2022

7.8.14

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Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V1P3646	**Method:** SW846 8260D	**Instrument ID:** GCMS1P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1P3646-BFB	1P96320.D	12/14/22 10:15	n/a	BFB Tune
V1P3646-IC3646	1P96320.D	12/14/22 10:15	n/a	Initial cal 1
V1P3646-IC3646	1P96322.D	12/14/22 10:47	n/a	Initial cal 2
V1P3646-IC3646	1P96324.D	12/14/22 11:19	n/a	Initial cal 3
V1P3646-IC3646	1P96326.D	12/14/22 11:51	n/a	Initial cal 4
V1P3646-ICC3646	1P96328.D	12/14/22 12:22	n/a	Initial cal 5
V1P3646-IC3646	1P96330.D	12/14/22 12:54	n/a	Initial cal 6
V1P3646-IC3646	1P96332.D	12/14/22 13:26	n/a	Initial cal 7
V1P3646-ICV3646	1P96336.D	12/14/22 14:40	n/a	Initial cal verification 5
V1P3646-CC3646	1P96336A.D	12/14/22 14:40	n/a	Continuing cal 5
V1P3646-BS	1P96338.D	12/14/22 15:12	n/a	Blank Spike
V1P3646-MB	1P96342.D	12/14/22 16:15	n/a	Method Blank
ZZZZZZ	1P96344.D	12/14/22 16:47	n/a	(unrelated sample)
ZZZZZZ	1P96346.D	12/14/22 17:19	n/a	(unrelated sample)
ZZZZZZ	1P96348.D	12/14/22 17:51	n/a	(unrelated sample)
ZZZZZZ	1P96350.D	12/14/22 18:23	n/a	(unrelated sample)
ZZZZZZ	1P96352.D	12/14/22 18:54	n/a	(unrelated sample)
ZZZZZZ	1P96354.D	12/14/22 19:26	n/a	(unrelated sample)
ZZZZZZ	1P96356.D	12/14/22 19:58	n/a	(unrelated sample)

Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V1P3648	**Method:** SW846 8260D	**Instrument ID:** GCMS1P

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V1P3648-BFB	1P96408.D	12/16/22 08:38	n/a	BFB Tune
V1P3648-CC3646	1P96408.D	12/16/22 08:38	n/a	Continuing cal 5
V1P3648-BS	1P96410.D	12/16/22 09:09	n/a	Blank Spike
V1P3648-MB	1P96414.D	12/16/22 10:12	n/a	Method Blank
FC1065-1	1P96416.D	12/16/22 10:44	n/a	LF1-TB-120622
ZZZZZZ	1P96418.D	12/16/22 11:16	n/a	(unrelated sample)
ZZZZZZ	1P96420.D	12/16/22 11:48	n/a	(unrelated sample)
ZZZZZZ	1P96422.D	12/16/22 12:19	n/a	(unrelated sample)
ZZZZZZ	1P96424.D	12/16/22 12:51	n/a	(unrelated sample)
ZZZZZZ	1P96426.D	12/16/22 13:23	n/a	(unrelated sample)
ZZZZZZ	1P96428.D	12/16/22 13:55	n/a	(unrelated sample)
ZZZZZZ	1P96430.D	12/16/22 14:26	n/a	(unrelated sample)
ZZZZZZ	1P96432.D	12/16/22 14:59	n/a	(unrelated sample)
ZZZZZZ	1P96434.D	12/16/22 15:31	n/a	(unrelated sample)
ZZZZZZ	1P96436.D	12/16/22 16:02	n/a	(unrelated sample)
ZZZZZZ	1P96438.D	12/16/22 16:34	n/a	(unrelated sample)
ZZZZZZ	1P96440.D	12/16/22 17:05	n/a	(unrelated sample)
ZZZZZZ	1P96442.D	12/16/22 17:38	n/a	(unrelated sample)
FC1293-8	1P96444.D	12/16/22 18:09	n/a	(used for QC only; not part of job FC1065)
ZZZZZZ	1P96446.D	12/16/22 18:41	n/a	(unrelated sample)
FC1293-8MS	1P96448.D	12/16/22 19:12	n/a	Matrix Spike
FC1293-8MSD	1P96450.D	12/16/22 19:44	n/a	Matrix Spike Duplicate
V1P3648-ECC3646	1P96452.D	12/16/22 20:16	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1617	**Method:** SW846 8260D	**Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1617-BFB	5E35978.D	12/08/22 10:48	n/a	BFB Tune
V5E1617-IC1617	5E35978.D	12/08/22 10:48	n/a	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22 11:33	n/a	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22 11:56	n/a	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22 12:19	n/a	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22 12:42	n/a	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22 13:05	n/a	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22 14:00	n/a	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22 15:25	n/a	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22 15:25	n/a	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22 16:06	n/a	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22 16:06	n/a	Blank Spike
V5E1617-MB	5E35990.D	12/08/22 17:39	n/a	Method Blank
ZZZZZZ	5E35991.D	12/08/22 18:02	n/a	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22 18:25	n/a	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22 18:48	n/a	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22 19:11	n/a	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22 19:34	n/a	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22 19:58	n/a	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22 20:21	n/a	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22 20:44	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1624	**Method:** SW846 8260D	**Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1624-BFB	5E36114.D	12/14/22 09:00	n/a	BFB Tune
V5E1624-CC1617	5E36115.D	12/14/22 09:23	n/a	Continuing cal 5
V5E1624-BS	5E36116.D	12/14/22 09:45	n/a	Blank Spike
V5E1624-MB	5E36119.D	12/14/22 10:55	n/a	Method Blank
ZZZZZZ	5E36120.D	12/14/22 11:18	n/a	(unrelated sample)
ZZZZZZ	5E36121.D	12/14/22 11:41	n/a	(unrelated sample)
ZZZZZZ	5E36122.D	12/14/22 12:04	n/a	(unrelated sample)
ZZZZZZ	5E36123.D	12/14/22 12:28	n/a	(unrelated sample)
ZZZZZZ	5E36124.D	12/14/22 12:51	n/a	(unrelated sample)
ZZZZZZ	5E36125.D	12/14/22 13:14	n/a	(unrelated sample)
ZZZZZZ	5E36126.D	12/14/22 13:37	n/a	(unrelated sample)
ZZZZZZ	5E36127.D	12/14/22 14:00	n/a	(unrelated sample)
ZZZZZZ	5E36128.D	12/14/22 14:23	n/a	(unrelated sample)
ZZZZZZ	5E36129.D	12/14/22 14:46	n/a	(unrelated sample)
ZZZZZZ	5E36130.D	12/14/22 15:09	n/a	(unrelated sample)
ZZZZZZ	5E36131.D	12/14/22 15:32	n/a	(unrelated sample)
ZZZZZZ	5E36132.D	12/14/22 15:55	n/a	(unrelated sample)
FC1262-2	5E36133.D	12/14/22 16:19	n/a	(used for QC only; not part of job FC1065)
ZZZZZZ	5E36134.D	12/14/22 16:42	n/a	(unrelated sample)
ZZZZZZ	5E36136.D	12/14/22 17:28	n/a	(unrelated sample)
FC1065-2	5E36137.D	12/14/22 17:51	n/a	LF1MW-13-1222-A
FC1065-3	5E36138.D	12/14/22 18:14	n/a	LF1MW-13-1222
FC1065-4	5E36139.D	12/14/22 18:37	n/a	LF1P-2-1222
FC1065-5	5E36140.D	12/14/22 19:00	n/a	LF1MW-6-1222
FC1262-2MS	5E36141.D	12/14/22 19:24	n/a	Matrix Spike
V5E1624-ECC1617	5E36143.D	12/14/22 20:08	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2866	**Method:** SW846 8260D	**Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2866-BFB	O72889.D	12/08/22 09:31	n/a	BFB Tune
VO2866-IC2866	O72890.D	12/08/22 09:56	n/a	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22 10:20	n/a	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22 10:45	n/a	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22 11:10	n/a	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22 11:35	n/a	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22 12:00	n/a	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22 12:25	n/a	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22 13:16	n/a	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22 13:16	n/a	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22 13:59	n/a	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22 13:59	n/a	Blank Spike
VO2866-MB	O72901.D	12/08/22 15:38	n/a	Method Blank
ZZZZZZ	O72902.D	12/08/22 16:02	n/a	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22 16:27	n/a	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22 16:52	n/a	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22 17:17	n/a	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22 17:42	n/a	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22 18:07	n/a	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22 18:32	n/a	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22 18:57	n/a	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22 19:22	n/a	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22 19:46	n/a	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22 20:11	n/a	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22 20:36	n/a	(unrelated sample)
ZZZZZZ	O72914.D	12/08/22 21:01	n/a	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22 21:26	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2867	**Method:** SW846 8260D	**Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2867-BFB	O72918.D	12/09/22 10:04	n/a	BFB Tune
VO2867-CC2866	O72918.D	12/09/22 10:04	n/a	Continuing cal 5
VO2867-BS	O72921.D	12/09/22 11:36	n/a	Blank Spike
VO2867-MB	O72923.D	12/09/22 12:26	n/a	Method Blank
ZZZZZZ	O72924.D	12/09/22 12:51	n/a	(unrelated sample)
FC1065-1	O72925.D	12/09/22 13:16	n/a	LF1-TB-120622
ZZZZZZ	O72926.D	12/09/22 13:41	n/a	(unrelated sample)
ZZZZZZ	O72927.D	12/09/22 14:05	n/a	(unrelated sample)
FC1020-3	O72928.D	12/09/22 14:30	n/a	(used for QC only; not part of job FC1065)
ZZZZZZ	O72929.D	12/09/22 14:55	n/a	(unrelated sample)
ZZZZZZ	O72930.D	12/09/22 15:20	n/a	(unrelated sample)
ZZZZZZ	O72931.D	12/09/22 15:45	n/a	(unrelated sample)
ZZZZZZ	O72932.D	12/09/22 16:10	n/a	(unrelated sample)
FC1065-2	O72933.D	12/09/22 16:35	n/a	LF1MW-13-1222-A
FC1065-3	O72934.D	12/09/22 17:00	n/a	LF1MW-13-1222
FC1065-4	O72935.D	12/09/22 17:25	n/a	LF1P-2-1222
FC1065-5	O72936.D	12/09/22 17:50	n/a	LF1MW-6-1222
ZZZZZZ	O72937.D	12/09/22 18:14	n/a	(unrelated sample)
ZZZZZZ	O72938.D	12/09/22 18:39	n/a	(unrelated sample)
ZZZZZZ	O72939.D	12/09/22 19:04	n/a	(unrelated sample)
ZZZZZZ	O72940.D	12/09/22 19:29	n/a	(unrelated sample)
ZZZZZZ	O72941.D	12/09/22 19:54	n/a	(unrelated sample)
ZZZZZZ	O72942.D	12/09/22 20:19	n/a	(unrelated sample)
ZZZZZZ	O72943.D	12/09/22 20:44	n/a	(unrelated sample)
FC1020-3MS	O72944.D	12/09/22 21:09	n/a	Matrix Spike
FC1020-3MSD	O72945.D	12/09/22 21:34	n/a	Matrix Spike Duplicate
VO2867-ECC2866	O72946.D	12/09/22 21:59	n/a	Ending cal 5

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:13	MA19110-STD1	1		STDC
10:18	MA19110-STD2	1		STDD
10:22	MA19110-STD3	1		STDE
10:25	MA19110-STD4	1		STDF
10:29	MA19110-STD5	1		STDG
10:37	MA19110-STD6	1		STDA
10:42	MA19110-STD7	1		STDB
10:54	MA19110-CRIA1	1		
11:00	MA19110-HSTD1	1		
11:06	MA19110-ICV1	1		
11:14	MA19110-ICB1	1		
11:18	MA19110-ICSA1	1		
11:26	MA19110-ICSAB1	1		
11:33	MA19110-CCV1	1		
11:40	MA19110-CCB1	1		
11:51	MP41624-MB1	1		
11:56	MP41624-B1	1		
12:01	FC1282-7F	1		(sample used for QC only; not part of login FC1065)
12:06	MP41622-MB1	1		
12:11	MP41622-B1	1		
12:16	MP41624-D1	1		
12:21	MP41624-SD1	5		
12:26	MP41624-PS1	1		
12:31	MP41624-S1	1		
12:36	MA19110-CCV2	1		
12:41	MA19110-CCB2	1		
12:46	MP41624-S2	1		
12:51	ZZZZZZ	1		
12:56	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:06	FC1065-2	1		
13:11	FC1065-3	1		
13:16	FC1065-4	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	13:21	FC1065-5	1		
----------->	Last reportable sample/prep for job FC1065				
	13:26	ZZZZZZ	1		
	13:31	ZZZZZZ	1		
	13:36	MA19110-CCV3	1		
	13:43	MA19110-CCB3	1		
----------->	Last reportable CCB for job FC1065				
	13:48	ZZZZZZ	1		
	14:09	ZZZZZZ	10		
	14:14	FC1201-4F	1		(sample used for QC only; not part of login FC1065)
	14:19	MP41622-D1	1		
	14:24	MP41622-SD1	5		
	14:29	MP41622-PS1	1		
	14:34	MP41622-S1	1		
	14:39	MA19110-CCV4	1		
	14:44	MA19110-CCB4	1		
	15:44	MA19110-CCV5	1		
	15:54	MA19110-CCB5	1		
	15:59	MP41622-S2	1		
	16:04	ZZZZZZ	1		
	16:09	ZZZZZZ	1		
	16:14	ZZZZZZ	1		
	16:19	ZZZZZZ	1		
	16:24	ZZZZZZ	1		
	16:29	ZZZZZZ	1		
	16:34	ZZZZZZ	1		
	16:39	ZZZZZZ	1		
	16:44	ZZZZZZ	5		
	16:49	MA19110-CCV6	1		
	16:54	MA19110-CCB6	1		
	16:59	ZZZZZZ	5		
	17:05	ZZZZZZ	5		
	17:10	ZZZZZZ	5		
	17:15	ZZZZZZ	5		
	17:20	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:26	ZZZZZZ	1		
17:31	ZZZZZZ	1		
17:36	ZZZZZZ	1		
17:41	ZZZZZZ	5		
17:47	ZZZZZZ	5		
17:52	MA19110-CCV7	1		
17:57	MA19110-CCB7	1		
18:02	MP41622-MB2A	1		
18:07	ZZZZZZ	20		
18:12	ZZZZZZ	100		
18:17	ZZZZZZ	100		
18:22	ZZZZZZ	100		
18:27	ZZZZZZ	100		
18:32	ZZZZZZ	100		
18:37	MP41623-MB1	1		
18:47	FC1282-7	1		(sample used for QC only; not part of login FC1065)
18:52	MA19110-CCV8	1		
18:57	MA19110-CCB8	1		
19:27	ZZZZZZ	1		
19:32	ZZZZZZ	1		
19:37	ZZZZZZ	5		
19:42	ZZZZZZ	5		
19:48	ZZZZZZ	5		
19:53	MA19110-CCV9	1		
19:58	MA19110-CCB9	1		
20:03	ZZZZZZ	5		
20:09	ZZZZZZ	1		
20:14	ZZZZZZ	1		
20:19	ZZZZZZ	1		
20:24	ZZZZZZ	1		
20:29	ZZZZZZ	1		
20:34	ZZZZZZ	1		
20:39	ZZZZZZ	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
20:44	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:54	MA19110-CCV10	1		
20:59	MA19110-CCB10	1		
21:04	MP41621-MB1	1		
21:09	MP41621-B1	1		
21:14	FC1251-1	1		(sample used for QC only; not part of login FC1065)
21:19	MP41621-D1	1		
21:24	MP41621-SD1	5		
21:29	MP41621-PS1	1		
21:34	MP41621-S1	1		
21:39	MP41621-S2	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19110-CCV11	1		
21:59	MA19110-CCB11	1		
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:14	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:24	ZZZZZZ	1		
22:29	ZZZZZZ	1		
22:34	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:44	ZZZZZZ	1		
22:49	ZZZZZZ	1		
22:54	MA19110-CCV12	1		
22:59	MA19110-CCB12	1		
23:04	ZZZZZZ	1		
23:09	ZZZZZZ	1		
23:14	ZZZZZZ	1		
23:19	ZZZZZZ	1		
23:24	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:34	ZZZZZZ	1		
23:39	MA19110-CCV13	1		
23:44	MA19110-CCB13	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
10:54	MA19110-CRIA1	1	X	X	
11:00	MA19110-HSTD1	1	X	X	
11:06	MA19110-ICV1	1	X	X	
11:14	MA19110-ICB1	1	X	X	
11:18	MA19110-ICSA1	1	X	X	
11:26	MA19110-ICSAB1	1	X	X	
11:33	MA19110-CCV1	1	X	X	
11:40	MA19110-CCB1	1	X	X	
11:51	MP41624-MB1	1	X	X	
11:56	MP41624-B1	1	X	X	
12:01	FC1282-7F	1			(a)
12:06	MP41622-MB1	1	X	X	
12:11	MP41622-B1	1	X	X	
12:16	MP41624-D1	1	X	X	
12:21	MP41624-SD1	5	X	X	
12:26	MP41624-PS1	1	X	X	
12:31	MP41624-S1	1	X	X	
12:36	MA19110-CCV2	1	X	X	
12:41	MA19110-CCB2	1	X	X	
12:46	MP41624-S2	1	X	X	
12:51	ZZZZZZ	1			
12:56	ZZZZZZ	1			
13:01	ZZZZZZ	1			
13:06	FC1065-2	1	X	X	
13:11	FC1065-3	1	X	X	
13:16	FC1065-4	1	X	X	
13:21	FC1065-5	1	X	X	
13:26	ZZZZZZ	1			
13:31	ZZZZZZ	1			
13:36	MA19110-CCV3	1	X	X	
13:43	MA19110-CCB3	1	X	X	
13:48	ZZZZZZ	1			
14:09	ZZZZZZ	10			
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
14:14	FC1201-4F	1			(a)
14:19	MP41622-D1	1	X	X	
14:24	MP41622-SD1	5	X	X	
14:29	MP41622-PS1	1	X	X	
14:34	MP41622-S1	1	X	X	
14:39	MA19110-CCV4	1	X	X	
14:44	MA19110-CCB4	1	X	X	
15:44	MA19110-CCV5	1	X	X	
15:54	MA19110-CCB5	1	X	X	
15:59	MP41622-S2	1	X	X	
16:04	ZZZZZZ	1			
16:09	ZZZZZZ	1			
16:14	ZZZZZZ	1			
16:19	ZZZZZZ	1			
16:24	ZZZZZZ	1			
16:29	ZZZZZZ	1			
16:34	ZZZZZZ	1			
16:39	ZZZZZZ	1			
16:44	ZZZZZZ	5			
16:49	MA19110-CCV6	1	X	X	
16:54	MA19110-CCB6	1	X	X	
16:59	ZZZZZZ	5			
17:05	ZZZZZZ	5			
17:10	ZZZZZZ	5			
17:15	ZZZZZZ	5			
17:20	ZZZZZZ	5			
17:26	ZZZZZZ	1			
17:31	ZZZZZZ	1			
17:36	ZZZZZZ	1			
17:41	ZZZZZZ	5			
17:47	ZZZZZZ	5			
17:52	MA19110-CCV7	1	X	X	
17:57	MA19110-CCB7	1	X	X	
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
18:02	MP41622-MB2A	1	X	X	
18:07	ZZZZZZ	20			
18:12	ZZZZZZ	100			
18:17	ZZZZZZ	100			
18:22	ZZZZZZ	100			
18:27	ZZZZZZ	100			
18:32	ZZZZZZ	100			
18:37	MP41623-MB1	1	X	X	
18:47	FC1282-7	1			(a)
18:52	MA19110-CCV8	1	X	X	
18:57	MA19110-CCB8	1	X	X	
19:27	ZZZZZZ	1			
19:32	ZZZZZZ	1			
19:37	ZZZZZZ	5			
19:42	ZZZZZZ	5			
19:48	ZZZZZZ	5			
19:53	MA19110-CCV9	1	X	X	
19:58	MA19110-CCB9	1	X	X	
20:03	ZZZZZZ	5			
20:09	ZZZZZZ	1			
20:14	ZZZZZZ	1			
20:19	ZZZZZZ	1			
20:24	ZZZZZZ	1			
20:29	ZZZZZZ	1			
20:34	ZZZZZZ	1			
20:39	ZZZZZZ	5			
20:44	ZZZZZZ	1			
20:49	ZZZZZZ	1			
20:54	MA19110-CCV10	1	X	X	
20:59	MA19110-CCB10	1	X	X	
21:04	MP41621-MB1	1			
21:09	MP41621-B1	1			
21:14	FC1251-1	1			(a)
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	C a	M g
21:19	MP41621-D1	1		
21:24	MP41621-SD1	5		
21:29	MP41621-PS1	1		
21:34	MP41621-S1	1		
21:39	MP41621-S2	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19110-CCV11	1	X	X
21:59	MA19110-CCB11	1	X	X
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:14	ZZZZZZ	1		
22:19	ZZZZZZ	1		
22:24	ZZZZZZ	1		
22:29	ZZZZZZ	1		
22:34	ZZZZZZ	1		
22:39	ZZZZZZ	1		
22:44	ZZZZZZ	1		
22:49	ZZZZZZ	1		
22:54	MA19110-CCV12	1	X	X
22:59	MA19110-CCB12	1	X	X
23:04	ZZZZZZ	1		
23:09	ZZZZZZ	1		
23:14	ZZZZZZ	1		
23:19	ZZZZZZ	1		
23:24	ZZZZZZ	1		
23:34	ZZZZZZ	1		
23:39	MA19110-CCV13	1	X	X
23:44	MA19110-CCB13	1	X	X

(a) Sample used for QC only; not part of login FC1065.

Element:	C a	M g

INTERNAL STANDARD SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:13	MA19110-STD1	7343	39660	5910	2892
10:18	MA19110-STD2	7266	39704	5914	2812
10:22	MA19110-STD3	7144	38863	5887	2685
10:25	MA19110-STD4	6959	38185	5811	2521
10:29	MA19110-STD5	6696	37570	5801	2333
10:37	MA19110-STD6	7327	39892	5871	3023
10:42	MA19110-STD7	7248	39562	5877	2885
10:54	MA19110-CRIA1	7245	39353	5867	2848
11:00	MA19110-HSTD1	6706	36962	5771	2315
11:06	MA19110-ICV1	6960	37818	5821	2514
11:14	MA19110-ICB1	7348 R	40012 R	5871 R	3015 R
11:18	MA19110-ICSA1	6531	34808	5675	2034
11:26	MA19110-ICSAB1	6512	34507	5589	2121
11:33	MA19110-CCV1	6983	37919	5739	2512
11:40	MA19110-CCB1	7381	39990	5816	3020
11:51	MP41624-MB1	7413	40463	5860	3013
11:56	MP41624-B1	7181	38987	5907	2694
12:01	FC1282-7F	7372	40743	5878	2945
12:06	MP41622-MB1	7378	40603	5795	3007
12:11	MP41622-B1	7139	38592	5675	2656
12:16	MP41624-D1	7400	40514	5899	2944
12:21	MP41624-SD1	7392	40353	5818	3007
12:26	MP41624-PS1	7286	39681	5844	2824
12:31	MP41624-S1	7151	39117	5743	2642
12:36	MA19110-CCV2	6849	37562	5654	2499
12:41	MA19110-CCB2	7270	39958	5788	3008
12:46	MP41624-S2	7199	39055	5813	2675
12:51	ZZZZZZ	7174	39283	5755	2900
12:56	ZZZZZZ	7275	39831	5800	2885
13:01	ZZZZZZ	7084	38533	5717	2758
13:06	FC1065-2	7142	39163	5795	2770
13:11	FC1065-3	7138	39271	5777	2756
13:16	FC1065-4	6984	38479	5712	2686

INTERNAL STANDARD SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:21	FC1065-5	7022	38620	5713	2750
13:26	ZZZZZZ	6874	37523	5658	2633
13:31	ZZZZZZ	6919	37792	5632	2636
13:36	MA19110-CCV3	6833	37489	5549	2494
13:43	MA19110-CCB3	7223	39950	5730	3012
13:48	ZZZZZZ	6837	37742	5649	2613
14:09	ZZZZZZ	6945	37921	5669	2576
14:14	FC1201-4F	7031	38559	5604	2737
14:19	MP41622-D1	7017	38348	5575	2733
14:24	MP41622-SD1	7200	39791	5709	2928
14:29	MP41622-PS1	7006	38362	5644	2697
14:34	MP41622-S1	6892	37548	5591	2546
14:39	MA19110-CCV4	6863	37852	5608	2511
14:44	MA19110-CCB4	7153	39290	5649	2982
15:44	MA19110-CCV5	6715	37362	5469	2479
15:54	MA19110-CCB5	7158	39693	5618	3006
15:59	MP41622-S2	6962	37833	5619	2577
16:04	ZZZZZZ	6973	38643	5635	2772
16:09	ZZZZZZ	6950	37703	5618	2610
16:14	ZZZZZZ	6903	38299	5570	2753
16:19	ZZZZZZ	7054	38655	5581	2818
16:24	ZZZZZZ	6890	37707	5512	2637
16:29	ZZZZZZ	6933	38288	5543	2760
16:34	ZZZZZZ	6604	35829	5526	2422
16:39	ZZZZZZ	6889	38197	5607	2700
16:44	ZZZZZZ	6733	36972	5535	2570
16:49	MA19110-CCV6	6836	37924	5624	2537
16:54	MA19110-CCB6	7219	40421	5746	3050
16:59	ZZZZZZ	6677	36849	5642	2527
17:05	ZZZZZZ	6533	35948	5553	2458
17:10	ZZZZZZ	6503	35822	5547	2437
17:15	ZZZZZZ	6620	36371	5529	2507
17:20	ZZZZZZ	6629	36647	5649	2497

INTERNAL STANDARD SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4	
17:26	ZZZZZZ	7026	39023	5675	2768	
17:31	ZZZZZZ	7200	40276	5761	2935	
17:36	ZZZZZZ	7141	39448	5799	2704	
17:41	ZZZZZZ	6040	32255	5394	2141	
17:47	ZZZZZZ	6411	34510	5445	2322	
17:52	MA19110-CCV7	6703	37467	5432	2506	
17:57	MA19110-CCB7	7224	40034	5610	3048	
18:02	MP41622-MB2A	7225	40515	5707	3011	
18:07	ZZZZZZ	6961	38283	5591	2758	
18:12	ZZZZZZ	7095	39729	5631	2930	
18:17	ZZZZZZ	7083	39428	5623	2894	
18:22	ZZZZZZ	7089	39461	5668	2877	
18:27	ZZZZZZ	7165	39787	5737	2933	
18:32	ZZZZZZ	7127	39625	5679	2906	
18:37	MP41623-MB1	7210	40814	5679	2999	
18:47	FC1282-7	7447	40944	5828	2863	
18:52	MA19110-CCV8	6778	38068	5581	2533	
18:57	MA19110-CCB8	7110	39993	5579	3015	
19:27	ZZZZZZ	7164	39487	5648	2851	
19:32	ZZZZZZ	7526	41340	5975	2732	
19:37	ZZZZZZ	5852	31160	5239	2050	
19:42	ZZZZZZ	5123	27882	5018	1772	!a
19:48	ZZZZZZ	4869	26585	4924	1600	!a
19:53	MA19110-CCV9	6696	37479	5449	2510	
19:58	MA19110-CCB9	7109	40038	5593	3010	
20:03	ZZZZZZ	5545	29785	5066	1930	
20:09	ZZZZZZ	7044	39864	5533	2930	
20:14	ZZZZZZ	7080	39881	5526	2971	
20:19	ZZZZZZ	7165	40240	5604	2995	
20:24	ZZZZZZ	7153	40443	5605	3014	
20:29	ZZZZZZ	7072	39761	5480	2933	
20:34	ZZZZZZ	7068	39869	5450	2971	
20:39	ZZZZZZ	6597	36410	5397	2507	

INTERNAL STANDARD SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
20:44	ZZZZZZ	7048	38677	5661	2616
20:49	ZZZZZZ	6578	36872	5276	2627
20:54	MA19110-CCV10	6642	37565	5365	2510
20:59	MA19110-CCB10	7092	40211	5467	3039
21:04	MP41621-MB1	7100	40519	5518	3031
21:09	MP41621-B1	6777	37945	5379	2645
21:14	FC1251-1	7129	39558	5570	2879
21:19	MP41621-D1	7231	40069	5565	2883
21:24	MP41621-SD1	7033	39475	5359	2955
21:29	MP41621-PS1	7079	39573	5543	2793
21:34	MP41621-S1	6952	38503	5482	2581
21:39	MP41621-S2	6880	38391	5467	2564
21:44	ZZZZZZ	7476	41837	5814	2883
21:49	ZZZZZZ	7042	39167	5492	2681
21:54	MA19110-CCV11	6459	36948	5187	2519
21:59	MA19110-CCB11	6916	39813	5309	3047
22:04	ZZZZZZ	7023	38967	5405	2683
22:09	ZZZZZZ	7275	39514	5690	2657
22:14	ZZZZZZ	7181	38476	5756	2494
22:19	ZZZZZZ	7345	40617	5760	2857
22:24	ZZZZZZ	7190	40325	5617	2848
22:29	ZZZZZZ	7182	39341	5601	2668
22:34	ZZZZZZ	7232	39694	5731	2651
22:39	ZZZZZZ	7366	39852	5722	2785
22:44	ZZZZZZ	7499	41204	5907	2829
22:49	ZZZZZZ	7554	41762	6100	2650
22:54	MA19110-CCV12	6721	37718	5448	2529
22:59	MA19110-CCB12	7154	40068	5489	3078
23:04	ZZZZZZ	7254	39793	5741	2678
23:09	ZZZZZZ	7334	39606	5779	2648
23:14	ZZZZZZ	7461	39877	6011	2590
23:19	ZZZZZZ	7359	40429	5797	2819
23:24	ZZZZZZ	7340	40869	5915	2728

INTERNAL STANDARD SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19110
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
23:34	ZZZZZZ	7616	42147	6114	2669
23:39	MA19110-CCV13	6738	37888	5461	2513
23:44	MA19110-CCB13	7162	39905	5651	3000

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

(a) No sample results reported from this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19110 Units: ug/l

Time: / Sample ID:			11:14 ICB1		11:40 CCB1		12:41 CCB2		13:43 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	6.0	1	anr							
Arsenic	10	1.3	anr							
Barium	200	.5	anr							
Beryllium	4.0	.1	anr							
Boron	100	5								
Cadmium	5.0	.1	anr							
Calcium	1000	50	-2.40	<1000	15.1	<1000	16.7	<1000	-4.30	<1000
Chromium	10	.5	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	15	anr							
Lead	5.0	1	anr							
Magnesium	5000	35	-15.7	<5000	7.40	<5000	-3.90	<5000	18.3	<5000
Manganese	15	.25	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	100	anr							
Selenium	10	2	anr							
Silver	10	.5	anr							
Sodium	10000	250	anr							
Strontium	10	.25								
Thallium	10	1	anr							
Tin	50	.5								
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19110 Units: ug/l

Time:		11:06			11:33			12:36	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	39800	99.5	40000	39900	99.8	40000	40600	101.5
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	42400	106.0	40000	39800	99.5	40000	40300	100.8
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19110 Units: ug/l

Time:		13:36	
Sample ID:	CCV	CCV3	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium	40000	41400	103.5
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	40000	41800	104.5
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA19110 Units: ug/l

Time:		11:00	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium	80000	79600	99.5
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	80000	79400	99.3
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin			
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA19110 Units: ug/l

Time:			10:54	
Sample ID:	CRI	CRIA	CRIA1	
Metal	True	True	Results	% Rec
Aluminum	400	200	anr	
Antimony	10	5.0	anr	
Arsenic	20	10	anr	
Barium	400	200	anr	
Beryllium	10	5.0	anr	
Boron	100	50		
Cadmium	10	5.0	anr	
Calcium	2000	1000	975	97.5
Chromium	20	10	anr	
Cobalt	100	50	anr	
Copper	50	25	anr	
Iron	600	300	anr	
Lead	10	5.0	anr	
Magnesium	10000	5000	4940	98.8
Manganese	30	15	anr	
Molybdenum	100	50	anr	
Nickel	80	40	anr	
Potassium	20000	10000	anr	
Selenium	20	10	anr	
Silver	20	10	anr	
Sodium	20000	10000	anr	
Strontium	20	10		
Thallium	20	10	anr	
Tin	100	50		
Titanium	20	10		
Vanadium	100	50	anr	
Zinc	40	20	anr	

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122022M1.ICP Date Analyzed: 12/20/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA19110 Units: ug/l

Time:			11:18		11:26	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	515000	103.0	528000	105.6
Antimony		1000	1.40		940	94.0
Arsenic		1000	0.00		935	93.5
Barium		500	-0.200		500	100.0
Beryllium		500	-0.100		497	99.4
Boron		1000	0.100		-28.4	0.0*
Cadmium		1000	0.00		964	96.4
Calcium	500000	500000	472000	94.4	473000	94.6
Chromium		500	-0.600		502	100.4
Cobalt		500	-1.00		468	93.6
Copper		500	0.300		539	107.8
Iron	500000	200000	501000	100.2	191000	95.5
Lead		1000	0.200		1100	110.0
Magnesium	500000	500000	513000	102.6	515000	103.0
Manganese		500	-1.00		524	104.8
Molybdenum		1000	-0.300		874	87.4
Nickel		1000	-0.500		914	91.4
Potassium			19.7		20.1	
Selenium		1000	0.00		888	88.8
Silver		1000	-0.700		1110	111.0
Sodium			267		253	
Strontium		1000	0.00		942	94.2
Thallium		1000	0.00		928	92.8
Tin		1000	-0.900		853	85.3
Titanium		1000	1.80		1040	104.0
Vanadium		500	0.300		518	103.6
Zinc		1000	1.10		943	94.3

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	.5	1		
Beryllium	4.0	.1	.2		
Boron	100	5	10		
Cadmium	5.0	.1	.2		
Calcium	1000	50	50	8.5	<1000
Chromium	10	.5	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	15	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35	2.5	<5000
Manganese	15	.25	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	100	200		
Selenium	10	2	2.9		
Silver	10	.5	.7		
Sodium	10000	250	500		
Strontium	10	.25	.5		
Thallium	10	1	1.4		
Tin	50	.5	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:			12/19/22					12/19/22	
Metal	FC1282-7F Original	DUP	RPD	QC Limits	FC1282-7F Original	MS	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium									
Boron									
Cadmium	anr								
Calcium	1130	1150	1.8	0-20	1130	27700	25000	106.3	80-120
Chromium	anr								
Cobalt									
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	325	343	5.4	0-20	325	26700	25000	105.5	80-120
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium									
Selenium	anr								
Silver	anr								
Sodium									
Strontium									
Thallium									
Tin									
Titanium									
Vanadium									
Zinc	anr								

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/19/22

Metal	FC1282-7F Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum						
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium						
Boron						
Cadmium	anr					
Calcium	1130	25100	25000	95.9	9.8	20
Chromium	anr					
Cobalt						
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	325	24200	25000	95.5	9.8	20
Manganese	anr					
Molybdenum						
Nickel	anr					
Potassium						
Selenium	anr					
Silver	anr					
Sodium						
Strontium						
Thallium						
Tin						
Titanium						
Vanadium						
Zinc	anr					

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium	23000	25000	92.0	80-120
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	22600	25000	90.4	80-120
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	FC1282-7F Original	SDL 1:5	%DIF	QC Limits
Aluminum				
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium				
Boron				
Cadmium	anr			
Calcium	1130	1110	1.3	0-10
Chromium	anr			
Cobalt				
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	325	286	12.1 (a)	0-10
Manganese	anr			
Molybdenum				
Nickel	anr			
Potassium				
Selenium	anr			
Silver	anr			
Sodium				
Strontium				
Thallium				
Tin				
Titanium				
Vanadium				
Zinc	anr			

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested
(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

POST DIGESTATE SPIKE SUMMARY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41624
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/19/22

Metal	Sample ml	Final ml	FC1282-7F Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium	9.8	10	1128	1105.44	6025	0.2	250	5000	98.4	80-120
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	325.2	318.696	5449	0.2	250	5000	102.6	80-120
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP41624: FC1065-2, FC1065-3, FC1065-4, FC1065-5

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	.5
Beryllium	.1
Boron	5
Cadmium	.1
Calcium	50
Chromium	.5
Cobalt	.2
Copper	1
Iron	15
Lead	1
Lithium	.5
Magnesium	35
Manganese	.25
Molybdenum	.3
Nickel	.4
Potassium	100
Selenium	2
Silicon	5
Silver	.5
Sodium	250
Strontium	.25
Sulfur	5
Thallium	1
Tin	.5
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA19110

Instrument Linear Ranges

Job Number: FC1065
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Boron	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Lithium	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA19110

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN92993			mg/l	250	256	102.2	85-115%
BOD, 5 Day	GP38277/GN92998	2.0	0.0	mg/l	198	214	107.9	85-115%
Bromide	GP38282/GN92958	0.50	0.0	mg/l	10	9.73	97.3	90-110%
Chemical Oxygen Demand	GP38286/GN92967	20	0.0	mg/l	50.0	51.5	103.1	85-115%
Chloride	GP38282/GN92958	2.0	0.0	mg/l	50	49.7	99.4	90-110%
Color, Apparent	GN92956	5	0	CU				
Fluoride	GP38282/GN92958	0.20	0.0	mg/l	2.5	2.49	99.6	90-110%
Nitrogen, Nitrate	GP38282/GN92958	0.10	0.0	mg/l	2.5	2.62	104.8	90-110%
Nitrogen, Nitrite	GP38282/GN92958	0.10	0.0	mg/l	2.5	2.66	106.4	90-110%
Phosphate, Ortho	GP38278/GN92951	0.10	0	mg/l	0.300	0.296	98.5	83-116%
Solids, Total Dissolved	GN92987	50	0.00	mg/l				
Sulfate	GP38282/GN92958	2.0	0.0	mg/l	50	49.9	99.8	90-110%
Total Organic Carbon	GP38281/GN92957	2.0	0.0	mg/l	15	14.6	97.3	90-110%

Associated Samples:
Batch GN92956: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GN92987: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GN92993: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38277: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38278: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38281: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38282: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38286: FC1065-2, FC1065-3, FC1065-4, FC1065-5
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN92993	FC1070-1	mg/l	105	105	0.4	0-20%
BOD, 5 Day	GP38277/GN92998	FC1014-1	mg/l	0.0	0.0	57.3(a)	0-30%
Color, Apparent	GN92956	FC1065-2	CU	150	150	0.0	0-20%
Solids, Total Dissolved	GN92987	FC1065-2	mg/l	254	286	11.9(a)	0-5%

Associated Samples:
Batch GN92956: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GN92987: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GN92993: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38277: FC1065-2, FC1065-3, FC1065-4, FC1065-5
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP38282/GN92958	FC1065-2	mg/l	0.18	10	9.7	95.2	90-110%
Chemical Oxygen Demand	GP38286/GN92967	FC1052-4	mg/l	5.3 U	50.0	56.4	103.1	85-115%
Chloride	GP38282/GN92958	FC1065-2	mg/l	7.0	50	55.9	97.8	90-110%
Fluoride	GP38282/GN92958	FC1065-2	mg/l	0.14	2.5	2.3	86.4N(a)	90-110%
Nitrogen, Nitrate	GP38282/GN92958	FC1065-2	mg/l	0.052	2.5	2.7	105.9	90-110%
Nitrogen, Nitrite	GP38282/GN92958	FC1065-2	mg/l	0.040 U	2.5	2.6	104.0	90-110%
Phosphate, Ortho	GP38278/GN92951	FC1065-2	mg/l	0.062	0.300	0.368	101.9	83-116%
Sulfate	GP38282/GN92958	FC1065-2	mg/l	2.5	50	51.5	98.0	90-110%
Total Organic Carbon	GP38281/GN92957	FC1010-1	mg/l	1.4	15	15.9	96.7	90-110%

Associated Samples:
Batch GP38278: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38281: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38282: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38286: FC1065-2, FC1065-3, FC1065-4, FC1065-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP38282/GN92958	FC1065-2	mg/l	0.18	10	9.9	2.0	15%
Chemical Oxygen Demand	GP38286/GN92967	FC1052-4	mg/l	5.3 U	50.0	56.4	0.0	5%
Chloride	GP38282/GN92958	FC1065-2	mg/l	7.0	50	56.7	1.4	15%
Fluoride	GP38282/GN92958	FC1065-2	mg/l	0.14	2.5	2.4	4.3	15%
Nitrogen, Nitrate	GP38282/GN92958	FC1065-2	mg/l	0.052	2.5	2.7	0.0	15%
Nitrogen, Nitrite	GP38282/GN92958	FC1065-2	mg/l	0.040 U	2.5	2.7	3.8	15%
Phosphate, Ortho	GP38278/GN92951	FC1065-2	mg/l	0.062	0.300	0.363	1.4	26%
Sulfate	GP38282/GN92958	FC1065-2	mg/l	2.5	50	52.1	1.2	15%
Total Organic Carbon	GP38281/GN92957	FC1010-1	mg/l	1.4	15	16.0	0.6	20%

Associated Samples:
Batch GP38278: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38281: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38282: FC1065-2, FC1065-3, FC1065-4, FC1065-5
Batch GP38286: FC1065-2, FC1065-3, FC1065-4, FC1065-5
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21208W1.TXT Date Analyzed: 12/08/22 Methods: SM5310 B-11/SW9060A
Analyst: FN Run ID: GN92957
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:10	GN92957-CCV1	1		
10:33	GP38281-MB1	1		
10:55	GP38281-B1	1		
11:18	FC1010-1	1		(sample used for QC only; not part of login FC1065)
11:41	GP38281-S1	1		
12:04	GP38281-S2	1		
12:25	ZZZZZZ	1		
12:47	ZZZZZZ	1		
13:08	ZZZZZZ	1		
14:00	ZZZZZZ	100		
14:24	GN92957-CCV2	1		
17:49	GN92957-CCB1	1		
18:10	FC1065-2	1		
18:32	FC1065-3	1		
18:53	FC1065-4	1		
19:16	FC1065-5	1		
19:35	ZZZZZZ	1		
19:57	ZZZZZZ	1		
20:19	ZZZZZZ	1		
20:42	ZZZZZZ	1		
21:02	ZZZZZZ	1		
21:25	ZZZZZZ	1		
21:48	GN92957-CCV3	1		
22:10	GN92957-CCB2	1		
22:30	ZZZZZZ	1		
22:54	FC1070-2	1		(sample used for QC only; not part of login FC1065)
23:17	GP38281-S3	1		
23:42	GP38281-S4	1		
00:05	ZZZZZZ	1		
00:28	ZZZZZZ	1		
00:49	ZZZZZZ	1		
01:14	GN92957-CCV4	1		
01:37	GN92957-CCB3	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21208W1.TXT Date Analyzed: 12/08/22 Methods: SM5310 B-11/SW9060A
Run ID: GN92957 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92957-CCV1	Total Organic Carbon	14.5	2.0	0.54	15	96.7	90-110
GN92957-CCV2	Total Organic Carbon	15.9	2.0	0.54	15	106.0	90-110
GN92957-CCB1	Total Organic Carbon	0.54 U	2.0	0.54			
GN92957-CCV3	Total Organic Carbon	15.2	2.0	0.54	15	101.3	90-110
GN92957-CCB2	Total Organic Carbon	0.54 U	2.0	0.54			
GN92957-CCV4	Total Organic Carbon	15.1	2.0	0.54	15	100.7	90-110
GN92957-CCB3	Total Organic Carbon	0.54 U	2.0	0.54			

(!) Outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92958
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:37	GN92958-STD1	1		STDA
12:57	GN92958-STD2	1		STDB
13:18	GN92958-STD3	1		STDC
13:38	GN92958-STD4	1		STDD
13:59	GN92958-STD5	1		STDE
14:19	GN92958-STD6	1		STDF
14:40	GN92958-STD7	1		STDG
15:00	GN92958-STD8	1		STDH
15:21	GN92958-STD9	1		STDI
15:41	GN92958-STD10	1		STDJ
16:02	GN92958-STD11	1		STDK
16:22	GN92958-ICV1	1		
16:43	GN92958-ICB1	1		
17:03	GN92958-CRI1	1		
17:24	GN92958-CCV1	1		
17:45	GN92958-CCB1	1		
08:09	GN92958-CCV2	1		
08:30	GN92958-CCB2	1		
09:05	GP38282-MB1	1		
09:59	GP38282-B1	1		
10:24	ZZZZZZ	5		
11:05	ZZZZZZ	1		
11:26	ZZZZZZ	2		
11:46	ZZZZZZ	1		
12:07	ZZZZZZ	5		
12:27	ZZZZZZ	5		
12:47	GN92958-CCV3	1		
13:08	GN92958-CCB3	1		
13:28	FC1065-2	1		
13:49	GP38282-S1	1		
14:10	GP38282-S2	1		
14:30	FC1065-3	1		
14:51	FC1065-4	5		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92958
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:11	FC1065-5	1		
15:31	ZZZZZZ	1		
15:52	ZZZZZZ	1		
16:12	ZZZZZZ	1		
16:33	ZZZZZZ	1		
16:53	GN92958-CCV4	1		
17:14	GN92958-CCV5	1		
17:35	GN92958-CCV6	1		
17:55	GN92958-CCB4	1		
18:16	FC1069-6	10		(sample used for QC only; not part of login FC1065)
18:36	GP38282-S3	10		
18:56	GP38282-S4	10		
19:17	ZZZZZZ	10		
19:37	ZZZZZZ	1		
19:57	ZZZZZZ	1		
20:18	ZZZZZZ	5		
20:38	ZZZZZZ	10		
20:59	GP38283-MB1	1		
21:19	GP38283-B1	1		
21:40	GN92958-CCV7	1		
22:00	GN92958-CCB5	1		
22:21	ZZZZZZ	10		
22:41	GP38283-S1	10		
23:01	GP38283-S2	10		
23:22	FC1070-2	1		(sample used for QC only; not part of login FC1065)
23:42	ZZZZZZ	1		
00:03	ZZZZZZ	1		
00:23	ZZZZZZ	10		
00:44	ZZZZZZ	10		
01:04	ZZZZZZ	10		
01:24	ZZZZZZ	10		
01:44	GN92958-CCV8	1		
02:05	GN92958-CCB6	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92958
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
02:26	ZZZZZZ	1		
02:46	ZZZZZZ	1		
03:07	FC1010-1	1		(sample used for QC only; not part of login FC1065)
03:27	GP38283-S3	1		
03:48	GP38283-S4	1		
04:08	ZZZZZZ	1		
04:29	ZZZZZZ	1		
04:49	ZZZZZZ	1		
05:10	ZZZZZZ	25		
05:30	ZZZZZZ	5		
05:51	GN92958-CCV9	1		
06:11	GN92958-CCB7	1		
06:32	ZZZZZZ	50		
07:33	ZZZZZZ	500		
07:53	GN92958-CCV10	1		
08:13	GN92958-CCB8	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Run ID: GN92958 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92958-ICV1	Fluoride	2.30	0.20	0.060	2.5	92.0	90-110
GN92958-ICV1	Chloride	49.6	2.0	0.80	50	99.2	90-110
GN92958-ICV1	Nitrogen, Nitrite	2.68	0.10	0.040	2.5	107.2	90-110
GN92958-ICV1	Bromide	9.76	0.50	0.12	10	97.6	90-110
GN92958-ICV1	Nitrogen, Nitrate	2.55	0.10	0.040	2.5	102.0	90-110
GN92958-ICV1	Sulfate	48.8	2.0	0.60	50	97.6	90-110
GN92958-ICB1	Fluoride	0.0850	0.20	0.060			
GN92958-ICB1	Chloride	0.80 U	2.0	0.80			
GN92958-ICB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-ICB1	Bromide	0.12 U	0.50	0.12			
GN92958-ICB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-ICB1	Sulfate	0.60 U	2.0	0.60			
GN92958-CRI1	Fluoride	0.150	0.20	0.060	.1	150.0	50-150
GN92958-CRI1	Chloride	1.07	2.0	0.80	1	107.0	50-150
GN92958-CRI1	Nitrogen, Nitrite	0.108	0.10	0.040	.1	108.0	50-150
GN92958-CRI1	Bromide	0.257	0.50	0.12	.2	128.5	50-150
GN92958-CRI1	Nitrogen, Nitrate	0.126	0.10	0.040	.1	126.0	50-150
GN92958-CRI1	Sulfate	0.682	2.0	0.60	1	68.2	50-150
GN92958-CCV1	Fluoride	2.53	0.20	0.060	2.5	101.2	90-110
GN92958-CCV1	Chloride	49.5	2.0	0.80	50	99.0	90-110
GN92958-CCV1	Nitrogen, Nitrite	2.56	0.10	0.040	2.5	102.4	90-110
GN92958-CCV1	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92958-CCV1	Nitrogen, Nitrate	2.41	0.10	0.040	2.5	96.4	90-110
GN92958-CCV1	Sulfate	50.8	2.0	0.60	50	101.6	90-110
GN92958-CCB1	Fluoride	0.0850	0.20	0.060			
GN92958-CCB1	Chloride	0.80 U	2.0	0.80			
GN92958-CCB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB1	Bromide	0.12 U	0.50	0.12			
GN92958-CCB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB1	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV2	Fluoride	2.32	0.20	0.060	2.5	92.8	90-110
GN92958-CCV2	Chloride	50.1	2.0	0.80	50	100.2	90-110
GN92958-CCV2	Nitrogen, Nitrite	2.61	0.10	0.040	2.5	104.4	90-110
GN92958-CCV2	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV2	Nitrogen, Nitrate	2.59	0.10	0.040	2.5	103.6	90-110
GN92958-CCV2	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92958-CCB2	Fluoride	0.060 U	0.20	0.060			
GN92958-CCB2	Chloride	0.80 U	2.0	0.80			
GN92958-CCB2	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB2	Bromide	0.12 U	0.50	0.12			
GN92958-CCB2	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB2	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV3	Fluoride	2.51	0.20	0.060	2.5	100.4	90-110
GN92958-CCV3	Chloride	49.6	2.0	0.80	50	99.2	90-110
GN92958-CCV3	Nitrogen, Nitrite	2.54	0.10	0.040	2.5	101.6	90-110
GN92958-CCV3	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92958-CCV3	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92958-CCV3	Sulfate	49.4	2.0	0.60	50	98.8	90-110
GN92958-CCB3	Fluoride	0.0820	0.20	0.060			
GN92958-CCB3	Chloride	0.80 U	2.0	0.80			
GN92958-CCB3	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB3	Bromide	0.12 U	0.50	0.12			
GN92958-CCB3	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB3	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV4	Fluoride	2.89	0.20	0.060	2.5	115.6!(a)	90-110
GN92958-CCV4	Chloride	49.9	2.0	0.80	50	99.8	90-110
GN92958-CCV4	Nitrogen, Nitrite	2.56	0.10	0.040	2.5	102.4	90-110
GN92958-CCV4	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV4	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110

Instrument QC Summary
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Run ID: GN92958 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92958-CCV4	Sulfate	51.5	2.0	0.60	50	103.0	90-110
GN92958-CCV5	Fluoride	2.60	0.20	0.060	2.5	104.0	90-110
GN92958-CCV5	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN92958-CCV5	Nitrogen, Nitrite	2.54	0.10	0.040	2.5	101.6	90-110
GN92958-CCV5	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92958-CCV5	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92958-CCV5	Sulfate	49.9	2.0	0.60	50	99.8	90-110
GN92958-CCV6	Fluoride	2.51	0.20	0.060	2.5	100.4	90-110
GN92958-CCV6	Chloride	49.7	2.0	0.80	50	99.4	90-110
GN92958-CCV6	Nitrogen, Nitrite	2.54	0.10	0.040	2.5	101.6	90-110
GN92958-CCV6	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92958-CCV6	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92958-CCV6	Sulfate	49.7	2.0	0.60	50	99.4	90-110
GN92958-CCB4	Fluoride	0.0840	0.20	0.060			
GN92958-CCB4	Chloride	0.80 U	2.0	0.80			
GN92958-CCB4	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB4	Bromide	0.12 U	0.50	0.12			
GN92958-CCB4	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB4	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV7	Fluoride	2.70	0.20	0.060	2.5	108.0	90-110
GN92958-CCV7	Chloride	49.8	2.0	0.80	50	99.6	90-110
GN92958-CCV7	Nitrogen, Nitrite	2.55	0.10	0.040	2.5	102.0	90-110
GN92958-CCV7	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV7	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92958-CCV7	Sulfate	50.3	2.0	0.60	50	100.6	90-110
GN92958-CCB5	Fluoride	0.0840	0.20	0.060			
GN92958-CCB5	Chloride	0.80 U	2.0	0.80			
GN92958-CCB5	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB5	Bromide	0.12 U	0.50	0.12			
GN92958-CCB5	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB5	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV8	Fluoride	2.38	0.20	0.060	2.5	95.2	90-110
GN92958-CCV8	Chloride	49.9	2.0	0.80	50	99.8	90-110
GN92958-CCV8	Nitrogen, Nitrite	2.55	0.10	0.040	2.5	102.0	90-110
GN92958-CCV8	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV8	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92958-CCV8	Sulfate	49.6	2.0	0.60	50	99.2	90-110
GN92958-CCB6	Fluoride	0.0820	0.20	0.060			
GN92958-CCB6	Chloride	0.80 U	2.0	0.80			
GN92958-CCB6	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB6	Bromide	0.12 U	0.50	0.12			
GN92958-CCB6	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB6	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV9	Fluoride	2.42	0.20	0.060	2.5	96.8	90-110
GN92958-CCV9	Chloride	50.0	2.0	0.80	50	100.0	90-110
GN92958-CCV9	Nitrogen, Nitrite	2.55	0.10	0.040	2.5	102.0	90-110
GN92958-CCV9	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV9	Nitrogen, Nitrate	2.39	0.10	0.040	2.5	95.6	90-110
GN92958-CCV9	Sulfate	50.0	2.0	0.60	50	100.0	90-110
GN92958-CCB7	Fluoride	0.0830	0.20	0.060			
GN92958-CCB7	Chloride	0.80 U	2.0	0.80			
GN92958-CCB7	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB7	Bromide	0.12 U	0.50	0.12			
GN92958-CCB7	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB7	Sulfate	0.60 U	2.0	0.60			
GN92958-CCV10	Fluoride	2.88	0.20	0.060	2.5	115.2!(a)	90-110
GN92958-CCV10	Chloride	50.2	2.0	0.80	50	100.4	90-110
GN92958-CCV10	Nitrogen, Nitrite	2.56	0.10	0.040	2.5	102.4	90-110

Instrument QC Summary
Inorganics Analyses

Login Number: FC1065
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120701.CSV Date Analyzed: 11/26/22 Methods: EPA 300/SW846 9056A
Run ID: GN92958 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92958-CCV10	Bromide	10.3	0.50	0.12	10	103.0	90-110
GN92958-CCV10	Nitrogen, Nitrate	2.39	0.10	0.040	2.5	95.6	90-110
GN92958-CCV10	Sulfate	51.4	2.0	0.60	50	102.8	90-110
GN92958-CCB8	Fluoride	0.060 U	0.20	0.060			
GN92958-CCB8	Chloride	0.80 U	2.0	0.80			
GN92958-CCB8	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92958-CCB8	Bromide	0.12 U	0.50	0.12			
GN92958-CCB8	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92958-CCB8	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits
(a) No samples for F reported in the area bracketed by this CCV.

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The results set forth herein are provided by SGS North America Inc.

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Automated Report



Technical Report for

Bhate Environmental

Griffiss AFB; Rome, NY

GRFIS-BECOS

SGS Job Number: FC1116

Sampling Date: 12/07/22

Report to:

Bhate Environmental
1608 13th Ave S Suite 300
Birmingham, AL 35205
dbadio@bhate.com

ATTN: David Badio

Total number of pages in report: **794**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Ariel Hartney 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001) DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177), AL, AK, AR, CT, IA, KY, MA, MI. MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

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Please share your ideas about how we can serve you better at:
EHS.US.CustomerCare@sgs.com

January 25, 2023

Mr. David Badio
BHATE
1608 13th Ave S Suite 300
Birmingham, AL 35205

RE: SGS North America Inc. - Orlando job FC1116 Reissue

Dear Mr. Badio,

The report for FC1116 has been edited to reflect the following change(s):

Subcontract data is now included.

SGS North America Inc, sincerely apologizes for any inconvenience this delay may have presented. Please feel free to contact us if we can be of any further assistance.

Sincerely,

SGS North America, Inc. - Orlando

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SGS North America Inc.

Sample Summary

Bhate Environmental

Job No: FC1116

Griffiss AFB; Rome, NY
Project No: GRFIS-BECOS

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FC1116-1	12/07/22	10:15	BP	12/08/22	AQ	Ground Water	LF1MW-103-1222
FC1116-2	12/07/22	09:20	BP	12/08/22	AQ	Ground Water	MWSAR03-1222
FC1116-3	12/07/22	15:00	BP	12/08/22	AQ	Ground Water	LF1P-5-1222
FC1116-4	12/07/22	13:30	BP	12/08/22	AQ	Ground Water	LF1MW-11-1222

SAMPLE DELIVERY GROUP CASE NARRATIVE

Client: Bhate Environmental **Job No:** FC1116

Site: Griffiss AFB; Rome, NY **Report Date:** 12/27/2022 11:06:08

On 12/08/2022, 4 Sample(s), 0 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc - Orlando. at a maximum corrected temperature of 3 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. - Orlando Job Number of FC1116 was assigned to the project.

Laboratory sample ID, client sample ID and dates of sample collection are detailed in the report's Results Summary Section. Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

MS Volatiles By Method SW846 8260D

Matrix: AQ **Batch ID:** V5E1623

Sample(s) FC1217-1MS, FC1217-1MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for 2,2-Dichloropropane are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for 2,2-Dichloropropane are outside control limits. Probable cause is due to matrix interference.

V5E1623-MB: Sample was treated with an anti-foaming agent.

Matrix: AQ **Batch ID:** VO2870

Sample(s) FC1196-11MS, FC1196-11MSD were used as the QC samples indicated.

Matrix Spike Recovery(s) for Methyl Bromide are outside control limits. Probable cause is due to matrix interference.

Matrix Spike Duplicate Recovery(s) for Methyl Bromide are outside control limits. Probable cause is due to matrix interference.

RPD(s) for MSD for Methyl Bromide are outside control limits for sample FC1196-11MSD. Probable cause is due to sample non-homogeneity.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP41628

Sample(s) FC1090-1FDUP, FC1090-1FMS, FC1090-1FMSD, FC1090-1FPS, FC1090-1FSDL were used as the QC samples for metals.

General Chemistry By Method EPA 300/SW846 9056A

Matrix: AQ **Batch ID:** GP38287

Sample(s) FC1116-1MS, FC1116-1MSD were used as the QC samples for Bromide, Chloride, Nitrogen, Nitrate, Nitrogen, Nitrite, Bromide, Fluoride, Sulfate.

Matrix Spike Recovery(s) for Fluoride, Sulfate are outside control limits. Spike recovery indicates possible matrix interference.

General Chemistry By Method EPA 365.3

Matrix: AQ **Batch ID:** GP38285

Sample(s) FC1116-1MS, FC1116-1MSD were used as the QC samples for Phosphate, Ortho.

General Chemistry By Method SM19 2340B

Matrix: AQ **Batch ID:** R58649

FC1116-1 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58650

FC1116-2 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58651

FC1116-3 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

Matrix: AQ **Batch ID:** R58652

FC1116-4 for Hardness, Total as CaCO3: Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

General Chemistry By Method SM2120 B-11

Matrix: AQ **Batch ID:** GN92962

Sample(s) FC1116-1DUP were used as the QC samples for Color, Apparent.

General Chemistry By Method SM2320 B-11

Matrix: AQ **Batch ID:** GN93010

Sample(s) FC1123-1DUP were used as the QC samples for Alkalinity, Total as CaCO3.

General Chemistry By Method SM2540 C-11

Matrix: AQ **Batch ID:** GN92999

Sample(s) FC1123-1DUP were used as the QC samples for Solids, Total Dissolved.

General Chemistry By Method SM5210 B-11

Matrix: AQ **Batch ID:** GP38284

Sample(s) FC1113-2DUP were used as the QC samples for BOD, 5 Day.

RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP38284-D1. RPD acceptable due to low duplicate and sample concentrations.

General Chemistry By Method SM5220 C-11

Matrix: AQ **Batch ID:** GP38286

Sample(s) FC1052-4MS, FC1052-4MSD were used as the QC samples for Chemical Oxygen Demand.

General Chemistry By Method SM5310 B-11/SW9060A

Matrix: AQ **Batch ID:** GP38294

Sample(s) FC1123-1MS, FC1123-1MSD were used as the QC samples for Total Organic Carbon.

FC1116-3 for Total Organic Carbon: Sample was not preserved to a pH < 2.

FC1116-4 for Total Organic Carbon: Sample was not preserved to a pH < 2.

SGS North America Inc. - Orlando certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting the Quality System precision, accuracy and completeness objectives except as noted. Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria. SGS North America Inc.- Orlando is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety.

Narrative prepared by:

_____

Kim Benham, Client Services *(Signature on File)*

Summary of Hits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
FC1116-1	**LF1MW-103-1222**					
Calcium		2780	1000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		112	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.24 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		9.8 J	20	10	mg/l	SM5220 C-11
Chloride		12.6	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		15	5	5	CU	SM2120 B-11
Fluoride		0.85	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		6.9 J	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.43	0.10	0.050	mg/l	EPA 300/SW846 9056A
Nitrogen, Nitrite		0.085 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Phosphate, Ortho		0.062 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		404	50	50	mg/l	SM2540 C-11
Sulfate		30.0	2.0	1.0	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.7 J	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1116-2	**MWSAR03-1222**					
Vinyl Chloride		0.48 J	1.0	0.50	ug/l	SW846 8260D
Calcium		16000	1000	100	ug/l	SW846 6010D
Magnesium		2250 J	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		110	5.0	2.5	mg/l	SM2320 B-11
Bromide		0.15 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		12.3 J	20	10	mg/l	SM5220 C-11
Chloride		5.7	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		15	5	5	CU	SM2120 B-11
Hardness, Total as CaCO3 [a]		49.2	23	0.66	mg/l	SM19 2340B
Phosphate, Ortho		0.027 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		156	50	50	mg/l	SM2540 C-11
Total Organic Carbon		1.2 J	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1116-3	**LF1P-5-1222**					
Calcium		121000	1000	100	ug/l	SW846 6010D
Magnesium		16400	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		377	5.0	2.5	mg/l	SM2320 B-11
BOD, 5 Day		5.8	4.0	4.0 [b]	mg/l	SM5210 B-11
Bromide		0.20 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		22.1	20	10	mg/l	SM5220 C-11
Chloride		7.6	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		200	50	5	CU	SM2120 B-11
Hardness, Total as CaCO3 [a]		370	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.053 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Phosphate, Ortho		0.037 J	0.10	0.040	mg/l	EPA 365.3

Summary of Hits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	LOQ	LOD	Units	Method
Solids, Total Dissolved		428	50	50	mg/l	SM2540 C-11
Total Organic Carbon [c]		2.4	2.0	1.0	mg/l	SM5310 B-11/SW9060A
FC1116-4	**LF1MW-11-1222**					
Calcium		130000	1000	100	ug/l	SW846 6010D
Magnesium		11100	5000	100	ug/l	SW846 6010D
Alkalinity, Total as CaCO3		382	5.0	2.5	mg/l	SM2320 B-11
BOD, 5 Day		13.1	12	12 [b]	mg/l	SM5210 B-11
Bromide		0.18 J	0.50	0.25	mg/l	EPA 300/SW846 9056A
Chemical Oxygen Demand		9.8 J	20	10	mg/l	SM5220 C-11
Chloride		3.5	2.0	1.0	mg/l	EPA 300/SW846 9056A
Color, Apparent		150	50	5	CU	SM2120 B-11
Fluoride		0.065 J	0.20	0.10	mg/l	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [a]		370	23	0.66	mg/l	SM19 2340B
Nitrogen, Nitrate		0.046 J	0.10	0.050	mg/l	EPA 300/SW846 9056A
Phosphate, Ortho		0.032 J	0.10	0.040	mg/l	EPA 365.3
Solids, Total Dissolved		456	50	50	mg/l	SM2540 C-11
Total Organic Carbon [c]		6.4	2.0	1.0	mg/l	SM5310 B-11/SW9060A

(a) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(b) Value reported is laboratory DL (MDL).
(c) Sample was not preserved to a pH < 2.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: LF1MW-103-1222
Lab Sample ID: FC1116-1
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	2780	1000	100	50	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	100 U	5000	100	35	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19112
(2) Prep QC Batch: MP41628

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-103-1222
Lab Sample ID: FC1116-1
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	112	5.0	2.5	2.0	mg/l	1	12/13/22 15:56	BW	SM2320 B-11
BOD, 5 Day	4.0 U	4.0	4.0 [a]	4.0	mg/l	2	12/13/22 11:28	JB	SM5210 B-11
Bromide	0.24 J	0.50	0.25	0.12	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	9.8 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	12.6	2.0	1.0	0.80	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Color, Apparent	15	5	5	5	CU	1	12/08/22 14:00	GT	SM2120 B-11
Fluoride	0.85	0.20	0.10	0.060	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	6.9 J	23	0.66	0.27	mg/l	1	12/21/22 14:37	LM	SM19 2340B
Nitrogen, Nitrate	0.43	0.10	0.050	0.040	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.085 J	0.10	0.050	0.040	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.062 J	0.10	0.040	0.020	mg/l	1	12/08/22 15:30	FN	EPA 365.3
Solids, Total Dissolved	404	50	50	50	mg/l	1	12/13/22 12:18	BW	SM2540 C-11
Sulfate	30.0	2.0	1.0	0.60	mg/l	1	12/08/22 18:47	JB	EPA 300/SW846 9056A
Total Organic Carbon	1.7 J	2.0	1.0	0.54	mg/l	1	12/12/22 19:05	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

SGS North America Inc.

Report of Analysis

Client Sample ID:	MWSAR03-1222		
Lab Sample ID:	FC1116-2	**Date Sampled:**	12/07/22
Matrix:	AQ - Ground Water	**Date Received:**	12/08/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E36104.D	1	12/14/22 01:12	CF	n/a	n/a	V5E1623
Run #2	O73033.D	1	12/14/22 14:15	AL	n/a	n/a	VO2870

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
67-64-1	Acetone	20 U	25	20	10	ug/l	
71-43-2	Benzene	0.50 U	1.0	0.50	0.31	ug/l	
108-86-1	Bromobenzene	0.50 U	1.0	0.50	0.37	ug/l	
74-97-5	Bromochloromethane	0.50 U	1.0	0.50	0.45	ug/l	
75-27-4	Bromodichloromethane	0.50 U	1.0	0.50	0.24	ug/l	
75-25-2	Bromoform	0.50 U	1.0	0.50	0.41	ug/l	
78-93-3	2-Butanone (MEK)	3.5 U	5.0	3.5	2.0	ug/l	
104-51-8	n-Butylbenzene	0.50 U	1.0	0.50	0.23	ug/l	
135-98-8	sec-Butylbenzene	0.50 U	1.0	0.50	0.24	ug/l	
98-06-6	tert-Butylbenzene	0.50 U	1.0	0.50	0.31	ug/l	
75-15-0	Carbon Disulfide	1.0 U	2.0	1.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	0.50 U	1.0	0.50	0.36	ug/l	
108-90-7	Chlorobenzene	0.50 U	1.0	0.50	0.20	ug/l	
75-00-3	Chloroethane	1.0 U	2.0	1.0	0.67	ug/l	
67-66-3	Chloroform	0.50 U	1.0	0.50	0.30	ug/l	
95-49-8	o-Chlorotoluene	0.50 U	1.0	0.50	0.22	ug/l	
106-43-4	p-Chlorotoluene	0.50 U	1.0	0.50	0.31	ug/l	
124-48-1	Dibromochloromethane	0.50 U	1.0	0.50	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	2.0 U	5.0	2.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	1.0 U	2.0	1.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	0.50 U	1.0	0.50	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.50 U	1.0	0.50	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.50 U	1.0	0.50	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.50 U	1.0	0.50	0.34	ug/l	
107-06-2	1,2-Dichloroethane	0.50 U	1.0	0.50	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	0.50 U	1.0	0.50	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	1.0 U	2.0	1.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	0.50 U	1.0	0.50	0.43	ug/l	
142-28-9	1,3-Dichloropropane	0.50 U	1.0	0.50	0.31	ug/l	

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MWSAR03-1222		
Lab Sample ID:	FC1116-2	**Date Sampled:**	12/07/22
Matrix:	AQ - Ground Water	**Date Received:**	12/08/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Compound	Result	LOQ	LOD	DL	Units	Q
594-20-7	2,2-Dichloropropane	0.50 U	1.0	0.50	0.24	ug/l	
563-58-6	1,1-Dichloropropene	0.50 U	1.0	0.50	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	0.50 U	1.0	0.50	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	0.50 U	1.0	0.50	0.21	ug/l	
100-41-4	Ethylbenzene	0.50 U	1.0	0.50	0.36	ug/l	
87-68-3	Hexachlorobutadiene	1.0 U	2.0	1.0	0.30	ug/l	
591-78-6	2-Hexanone	5.0 U	10	5.0	2.0	ug/l	
98-82-8	Isopropylbenzene	0.50 U	1.0	0.50	0.22	ug/l	
99-87-6	p-Isopropyltoluene	0.50 U	1.0	0.50	0.21	ug/l	
74-83-9	Methyl Bromide	4.0 U [a]	5.0	4.0	2.0	ug/l	
74-87-3	Methyl Chloride	1.0 U	2.0	1.0	0.50	ug/l	
74-95-3	Methylene Bromide	0.50 U	2.0	0.50	0.37	ug/l	
75-09-2	Methylene Chloride	4.0 U	5.0	4.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	2.0 U	5.0	2.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	0.50 U	1.0	0.50	0.23	ug/l	
91-20-3	Naphthalene	2.0 U	5.0	2.0	1.0	ug/l	
103-65-1	n-Propylbenzene	0.50 U	1.0	0.50	0.29	ug/l	
100-42-5	Styrene	0.50 U	1.0	0.50	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	0.50 U	1.0	0.50	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	0.50 U	1.0	0.50	0.30	ug/l	
127-18-4	Tetrachloroethylene	0.50 U	1.0	0.50	0.22	ug/l	
108-88-3	Toluene	0.50 U	1.0	0.50	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	1.0 U	2.0	1.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	1.0 U	2.0	1.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	0.50 U	1.0	0.50	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	0.50 U	1.0	0.50	0.47	ug/l	
79-01-6	Trichloroethylene	0.50 U	1.0	0.50	0.35	ug/l	
75-69-4	Trichlorofluoromethane	1.0 U	2.0	1.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	1.0 U	2.0	1.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	0.50 U	1.0	0.50	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	0.50 U	1.0	0.50	0.27	ug/l	
108-05-4	Vinyl Acetate	5.0 U	10	5.0	2.0	ug/l	
75-01-4	Vinyl Chloride	0.48	1.0	0.50	0.41	ug/l	J
	m,p-Xylene	1.0 U	2.0	1.0	0.47	ug/l	
95-47-6	o-Xylene	0.50 U	1.0	0.50	0.26	ug/l	
1330-20-7	Xylene (total)	1.5 U	3.0	1.5	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%	93%	83-118%

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MWSAR03-1222		
Lab Sample ID:	FC1116-2	**Date Sampled:**	12/07/22
Matrix:	AQ - Ground Water	**Date Received:**	12/08/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Griffiss AFB; Rome, NY		

VOA 8260 List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	92%	79-125%
2037-26-5	Toluene-D8	98%	108%	85-112%
460-00-4	4-Bromofluorobenzene	102%	101%	83-118%

(a) Result is from Run# 2

U = Not detected LOD = Limit of Detection J = Indicates an estimated value
LOQ = Limit of Quantitation DL = Detection Limit B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MWSAR03-1222
Lab Sample ID: FC1116-2
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	16000	1000	100	50	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	2250 J	5000	100	35	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19112
(2) Prep QC Batch: MP41628

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: MWSAR03-1222
Lab Sample ID: FC1116-2
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	110	5.0	2.5	2.0	mg/l	1	12/13/22 15:56	BW	SM2320 B-11
BOD, 5 Day	12 U	12	12 [a]	12	mg/l	6	12/13/22 11:28	JB	SM5210 B-11
Bromide	0.15 J	0.50	0.25	0.12	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	12.3 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	5.7	2.0	1.0	0.80	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Color, Apparent	15	5	5	5	CU	1	12/08/22 14:00	GT	SM2120 B-11
Fluoride	0.10 U	0.20	0.10	0.060	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	49.2	23	0.66	0.27	mg/l	1	12/21/22 14:42	LM	SM19 2340B
Nitrogen, Nitrate	0.050 U	0.10	0.050	0.040	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.027 J	0.10	0.040	0.020	mg/l	1	12/08/22 15:30	FN	EPA 365.3
Solids, Total Dissolved	156	50	50	50	mg/l	1	12/13/22 12:18	BW	SM2540 C-11
Sulfate	1.0 U	2.0	1.0	0.60	mg/l	1	12/08/22 19:48	JB	EPA 300/SW846 9056A
Total Organic Carbon	1.2 J	2.0	1.0	0.54	mg/l	1	12/12/22 19:25	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1P-5-1222
Lab Sample ID: FC1116-3
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	121000	1000	100	50	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	16400	5000	100	35	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19112
(2) Prep QC Batch: MP41628

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	LF1P-5-1222		
Lab Sample ID:	FC1116-3	**Date Sampled:**	12/07/22
Matrix:	AQ - Ground Water	**Date Received:**	12/08/22
		Percent Solids:	n/a
Project:	Griffiss AFB; Rome, NY		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	377	5.0	2.5	2.0	mg/l	1	12/13/22 15:56	BW	SM2320 B-11
BOD, 5 Day	5.8	4.0	4.0 [a]	4.0	mg/l	2	12/13/22 11:28	JB	SM5210 B-11
Bromide	0.20 J	0.50	0.25	0.12	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	22.1	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	7.6	2.0	1.0	0.80	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Color, Apparent	200	50	5	5	CU	10	12/08/22 14:00	GT	SM2120 B-11
Fluoride	0.10 U	0.20	0.10	0.060	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	370	23	0.66	0.27	mg/l	1	12/21/22 14:48	LM	SM19 2340B
Nitrogen, Nitrate	0.053 J	0.10	0.050	0.040	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.037 J	0.10	0.040	0.020	mg/l	1	12/08/22 15:30	FN	EPA 365.3
Solids, Total Dissolved	428	50	50	50	mg/l	1	12/13/22 12:18	BW	SM2540 C-11
Sulfate	1.0 U	2.0	1.0	0.60	mg/l	1	12/08/22 20:09	JB	EPA 300/SW846 9056A
Total Organic Carbon [c]	2.4	2.0	1.0	0.54	mg/l	1	12/12/22 19:46	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(c) Sample was not preserved to a pH < 2.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID: LF1MW-11-1222
Lab Sample ID: FC1116-4
Matrix: AQ - Ground Water
Project: Griffiss AFB; Rome, NY

Date Sampled: 12/07/22
Date Received: 12/08/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	LOQ	LOD	DL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Calcium	130000	1000	100	50	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]
Magnesium	11100	5000	100	35	ug/l	1	12/20/22	12/21/22	LM	SW846 6010D [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA19112
(2) Prep QC Batch: MP41628

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

Report of Analysis

Client Sample ID:	LF1MW-11-1222		
Lab Sample ID:	FC1116-4	**Date Sampled:**	12/07/22
Matrix:	AQ - Ground Water	**Date Received:**	12/08/22
		Percent Solids:	n/a
Project:	Griffiss AFB; Rome, NY		

General Chemistry

Analyte	Result	LOQ	LOD	DL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3	382	5.0	2.5	2.0	mg/l	1	12/13/22 15:56	BW	SM2320 B-11
BOD, 5 Day	13.1	12	12 [a]	12	mg/l	6	12/13/22 11:28	JB	SM5210 B-11
Bromide	0.18 J	0.50	0.25	0.12	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Chemical Oxygen Demand	9.8 J	20	10	5.3	mg/l	1	12/09/22 15:30	FN	SM5220 C-11
Chloride	3.5	2.0	1.0	0.80	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Color, Apparent	150	50	5	5	CU	10	12/08/22 14:00	GT	SM2120 B-11
Fluoride	0.065 J	0.20	0.10	0.060	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Hardness, Total as CaCO3 [b]	370	23	0.66	0.27	mg/l	1	12/21/22 15:03	LM	SM19 2340B
Nitrogen, Nitrate	0.046 J	0.10	0.050	0.040	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Nitrogen, Nitrite	0.050 U	0.10	0.050	0.040	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Phosphate, Ortho	0.032 J	0.10	0.040	0.020	mg/l	1	12/08/22 15:30	FN	EPA 365.3
Solids, Total Dissolved	456	50	50	50	mg/l	1	12/13/22 12:18	BW	SM2540 C-11
Sulfate	1.0 U	2.0	1.0	0.60	mg/l	1	12/08/22 20:29	JB	EPA 300/SW846 9056A
Total Organic Carbon [c]	6.4	2.0	1.0	0.54	mg/l	1	12/12/22 20:08	FN	SM5310 B-11/SW9060A

(a) Value reported is laboratory DL (MDL).
(b) Calculated as: (Calcium * 2.497) + (Magnesium * 4.118)
(c) Sample was not preserved to a pH < 2.

LOQ = Limit of Quantitation DL = Detection Limit U = Indicates a result < LOD
LOD = Limit of Detection B = Analyte found in associated blank J = Indicates a result > = DL (MDL) but < LOQ

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Subcontract Lab Data

Report of Analysis

ANALYTICAL REPORT

December 24, 2022

SGS North America Inc. - Orlando, FL

Sample Delivery Group:	L1569103
Samples Received:	12/19/2022
Project Number:	FC1116X
Description:	Griffiss AFB; Rome, NY

Report To:

Muna Mohammed
4405 Vineland Rd
Suite C-15
Orlando, FL 32811

Entire Report Reviewed By:

John Hawkins
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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LF1MW-103-1222 L1569103-01 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 10:15	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	5	12/20/22 11:10	12/20/22 11:10	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:32	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:35	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:53	ZSA	Mt. Juliet, TN

MWSAR03-1222 L1569103-02 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 09:20	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 11:12	12/20/22 11:12	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:34	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:36	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:56	ZSA	Mt. Juliet, TN

LF1P-5-1222 L1569103-03 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 15:00	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:55	12/20/22 10:55	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:35	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:37	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:59	ZSA	Mt. Juliet, TN

LF1MW-11-1222 L1569103-04 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 13:30	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:58	12/20/22 10:58	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:36	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:38	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 17:02	ZSA	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



John Hawkins
Project Manager

Wet Chemistry by Method 350.1

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Ammonia Nitrogen	7664-41-7	12300		158	375	750	5	12/20/2022 11:10	WG1976827

Wet Chemistry by Method 351.2

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Kjeldahl Nitrogen, TKN	7727-37-9	13300		140	300	600	1	12/22/2022 10:32	WG1976947

Wet Chemistry by Method 420.4

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0	1	12/20/2022 23:35	WG1977545

Metals (ICP) by Method 6010B

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Boron	7440-42-8	223		39.6	100	200	1	12/21/2022 16:53	WG1977039

Wet Chemistry by Method 350.1

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Ammonia Nitrogen	7664-41-7	234		31.7	75.0	150	1	12/20/2022 11:12	WG1976827

Wet Chemistry by Method 351.2

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Kjeldahl Nitrogen, TKN	7727-37-9	330	J	140	300	600	1	12/22/2022 10:34	WG1976947

Wet Chemistry by Method 420.4

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0	1	12/20/2022 23:36	WG1977545

Metals (ICP) by Method 6010B

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Boron	7440-42-8	100	U	39.6	100	200	1	12/21/2022 16:56	WG1977039

Wet Chemistry by Method 350.1

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Ammonia Nitrogen	7664-41-7	751		31.7	75.0	150	1	12/20/2022 10:55	WG1976827

Wet Chemistry by Method 351.2

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Kjeldahl Nitrogen, TKN	7727-37-9	966		140	300	600	1	12/22/2022 10:35	WG1976947

Wet Chemistry by Method 420.4

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0	1	12/20/2022 23:37	WG1977545

Metals (ICP) by Method 6010B

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Boron	7440-42-8	53.5	J	39.6	100	200	1	12/21/2022 16:59	WG1977039

Wet Chemistry by Method 350.1

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Ammonia Nitrogen	7664-41-7	1500		31.7	75.0	150	1	12/20/2022 10:58	WG1976827

Wet Chemistry by Method 351.2

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Kjeldahl Nitrogen, TKN	7727-37-9	2110		140	300	600	1	12/22/2022 10:36	WG1976947

Wet Chemistry by Method 420.4

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0	1	12/20/2022 23:38	WG1977545

Metals (ICP) by Method 6010B

Analyte	CAS #	Result	Qualifier	DL	LOD	LOQ	Dilution	Analysis	Batch
		ug/l		ug/l	ug/l	ug/l		date / time	
Boron	7440-42-8	50.4	J	39.6	100	200	1	12/21/2022 17:02	WG1977039

Method Blank (MB)

(MB) R3873985-1 12/20/22 10:07

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Ammonia Nitrogen	75.0	U	31.7	75.0	150

L1569097-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1569097-02 12/20/22 10:37 • (DUP) R3873985-5 12/20/22 10:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	75.0	75.0	1	0.000	U	20

L1569103-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1569103-04 12/20/22 10:58 • (DUP) R3873985-7 12/20/22 11:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	1500	1500	1	0.0668		20

Laboratory Control Sample (LCS)

(LCS) R3873985-2 12/20/22 10:08

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ammonia Nitrogen	7500	7330	97.7	90.0-110	

L1569097-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1569097-01 12/20/22 10:33 • (MS) R3873985-3 12/20/22 10:34 • (MSD) R3873985-4 12/20/22 10:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	5000	75.0	4690	4830	93.7	96.5	1	90.0-110			2.96	20

L1569103-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1569103-03 12/20/22 10:55 • (MS) R3873985-6 12/20/22 10:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	5000	751	5360	92.3	1	90.0-110	

Method Blank (MB)

(MB) R3874770-1 12/22/22 09:56

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Kjeldahl Nitrogen, TKN	300	U	140	300	600

L1567792-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1567792-03 12/22/22 09:58 • (DUP) R3874770-3 12/22/22 10:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Kjeldahl Nitrogen, TKN	300	300	1	0.000	U	20

L1567792-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1567792-04 12/22/22 10:04 • (DUP) R3874770-6 12/22/22 10:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Kjeldahl Nitrogen, TKN	300	300	1	0.000	U	20

Laboratory Control Sample (LCS)

(LCS) R3874770-2 12/22/22 09:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Kjeldahl Nitrogen, TKN	20600	19100	92.7	74.0-124	

L1567792-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1567792-03 12/22/22 09:58 • (MS) R3874770-4 12/22/22 10:01 • (MSD) R3874770-5 12/22/22 10:03

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Kjeldahl Nitrogen, TKN	5000	300	5410	5260	108	105	1	90.0-110			2.81	20

L1567792-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1567792-04 12/22/22 10:04 • (MS) R3874770-7 12/22/22 10:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Kjeldahl Nitrogen, TKN	5000	300	5330	107	1	90.0-110	

Method Blank (MB)

(MB) R3874135-1 12/20/22 23:15

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Total Phenol by 4AAP	20.0	J U	8.30	20.0	40.0

L1568816-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1568816-02 12/20/22 23:25 • (DUP) R3874135-7 12/20/22 23:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	10.0	8.55	1	15.6	J	20

L1568060-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1568060-01 12/20/22 23:47 • (DUP) R3874135-10 12/20/22 23:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Phenol by 4AAP	2060	2140	5	3.76		20

Laboratory Control Sample (LCS)

(LCS) R3874135-2 12/20/22 23:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Phenol by 4AAP	500	486	97.2	90.0-110	

L1568816-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1568816-02 12/20/22 23:25 • (MS) R3874135-8 12/20/22 23:27 • (MSD) R3874135-9 12/20/22 23:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Total Phenol by 4AAP	1000	10.0	494	412	48.4	40.2	1	90.0-110	J6	J6	18.0	20

L1568060-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1568060-01 12/20/22 23:47 • (MS) R3874135-11 12/20/22 23:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Total Phenol by 4AAP	1000	2060	2930	86.8	5	90.0-110	J6

Method Blank (MB)

(MB) R3874405-1 12/21/22 12:27

Analyte	MB Result ug/l	MB Qualifier	MB DL ug/l	MB LOD ug/l	MB LOQ ug/l
Boron	100	U	39.6	100	200

Laboratory Control Sample (LCS)

(LCS) R3874405-2 12/21/22 12:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Boron	1000	995	99.5	85.0-113	

L1568841-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1568841-01 12/21/22 12:33 • (MS) R3874405-4 12/21/22 12:39 • (MSD) R3874405-5 12/21/22 12:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Boron	1000	91.3	1100	1090	101	99.6	1	85.0-113			1.37	20

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

DL	Detection Limit.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY

SGS North America Inc. - Orlando
4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com/ehsusa

11589/03

FED-EX Tracking # | Bottle Order Control #
SGS Quote # | SGS Job # FC1116X

Client / Reporting Information

Company Name: SGS North America Inc.
Street Address: 4405 Vineland Rd, Suite C-15
City: Orlando State: FL Zip: 32811
Project Contact: muna.mohammed@sgs.com E-mail:
Phone #: 407-425-6700 Fax #:
Sampler(s) Name(s): BP Phone:

Project Information

Project Name: Griffiss AFB; Rome, NY
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AMN (350.1) ,PN (420.1) ,TKN (351.2)	Boron (6010)	LAB USE ONLY
1X	LF1MW-103-1222		12/7/22	10:15:00 AM	BP	AQ	3			X	X					X	X	-01
2X	MWSAR03-1222		12/7/22	9:20:00 AM	BP	AQ	3			X	X					X	X	-02
3X	LF1P-5-1222		12/7/22	3:00:00 PM	BP	AQ	3			X	X					X	X	-03
4X	LF1MW-11-1222		12/7/22	1:30:00 PM	BP	AQ	3			X	X					X	X	-04

Number of preserved Bottles

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB-Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Day (business)
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] other Due 12/22/2022

Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] Commercial "C"
- [ ] State Forms
- [ ] EDD Format
- [ ] Other
- [X] FL

Commercial "A" = Results Onl
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Send to Pace Mt. Juliet, TN
DOD/NY Cert
1-250ml H2SO4 Plastic Bottle
1-250ml H2SO4 Amber Bottle
1-250ml HNO3 Plastic Bottle

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		12/8/22 1200	1	2		2
3					12-19-22 0930	4
5	Relinquished by:	Date Time:				

Preserved where applicable ☐ On Ice ☐ Cooler Temp. Therm. ID:

2.5° to 2.5°

Sample Receipt Checklist

COC Seal Present/Intact:	Y N	If Applicable	
COC Signed/Accurate:	Y N	VOA Zero Headspace:	Y N
Bottles arrive intact:	Y N	Pres.Correct/Check:	Y N
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

ANALYTICAL REPORT

January 24, 2023

Revised Report

SGS North America Inc. - Orlando, FL

Sample Delivery Group:	L1569103
Samples Received:	12/19/2022
Project Number:	FC1116X
Description:	Griffiss AFB; Rome, NY

Report To:

Muna Mohammed
4405 Vineland Rd
Suite C-15
Orlando, FL 32811

Entire Report Reviewed By:

Jeff Carr
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



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L1569103-04 12/20/22 10:58 FS3100-01 13

BLANK(R3873985-1) WG1976827 12/20/22 10:07 FS3100-01 14

LCS(R3873985-2) WG1976827 12/20/22 10:08 FS3100-01 15

DUP(R3873985-5) WG1976827 12/20/22 10:39 FS3100-01 16

DUP(R3873985-7) WG1976827 12/20/22 11:00 FS3100-01 17

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LF1MW-103-1222 L1569103-01 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 10:15	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	5	12/20/22 11:10	12/20/22 11:10	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:32	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:35	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:53	ZSA	Mt. Juliet, TN

MWSAR03-1222 L1569103-02 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 09:20	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 11:12	12/20/22 11:12	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:34	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:36	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:56	ZSA	Mt. Juliet, TN

LF1P-5-1222 L1569103-03 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 15:00	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:55	12/20/22 10:55	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:35	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:37	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 16:59	ZSA	Mt. Juliet, TN

LF1MW-11-1222 L1569103-04 WW

Collected by	Collected date/time	Received date/time
BP	12/07/22 13:30	12/19/22 09:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 350.1	WG1976827	1	12/20/22 10:58	12/20/22 10:58	BMD	Mt. Juliet, TN
Wet Chemistry by Method 351.2	WG1976947	1	12/21/22 15:23	12/22/22 10:36	LDT	Mt. Juliet, TN
Wet Chemistry by Method 420.4	WG1977545	1	12/20/22 18:20	12/20/22 23:38	CAT	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1977039	1	12/20/22 12:08	12/21/22 17:02	ZSA	Mt. Juliet, TN

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Jeff Carr
Project Manager

Report Revision History

Level II Report - Version 1: 12/24/22 08:50
Level IV Report - Version 2: 12/27/22 10:01

350.1 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-103-1222

Lab Sample ID:	L1569103-01	**SDG:**	L1569103
Client Sample ID:	LF1MW-103-1222	**Collected Date/Time:**	12/07/22 10:15
Lab File ID:	20221220111000	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 11:10
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 11:10
Dilution Factor:	5	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	12300		158	375	750

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
MWSAR03-1222

Lab Sample ID:	L1569103-02	**SDG:**	L1569103
Client Sample ID:	MWSAR03-1222	**Collected Date/Time:**	12/07/22 09:20
Lab File ID:	20221220111200	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 11:12
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 11:12
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	234		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-5-1222

Lab Sample ID:	L1569103-03	**SDG:**	L1569103
Client Sample ID:	LF1P-5-1222	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221220105500	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:55
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:55
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

5

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	751		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-11-1222

Lab Sample ID:	L1569103-04	**SDG:**	L1569103
Client Sample ID:	LF1MW-11-1222	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221220105800	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:58
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:58
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	1500		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-1

Lab Sample ID:	R3873985-1	**SDG:**	L1569103
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221220100700	**Received Date/Time:**	_____
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:07
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:07
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	75.0	U	31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-2

Lab Sample ID:	R3873985-2	**SDG:**	L1569103
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221220100800	**Received Date/Time:**	_____
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:08
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:08
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	7330		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-5

Lab Sample ID:	R3873985-5	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/05/22 15:30
Lab File ID:	20221220103900	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:39
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:39
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	75.0	U	31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-7

Lab Sample ID:	R3873985-7	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221220110000	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 11:00
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 11:00
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	1500		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-3

Lab Sample ID:	R3873985-3	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103400	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:34
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:34
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	4690		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-6

Lab Sample ID:	R3873985-6	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221220105700	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:57
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:57
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	5360		31.7	75.0	150

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3873985-4

Lab Sample ID:	R3873985-4	**SDG:**	L1569103
Client Sample ID:	MSD	**Collected Date/Time:**	12/05/22 16:30
Lab File ID:	20221220103600	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	FS3100-01	**Preparation Date/Time:**	12/20/22 10:36
Analytical Batch:	WG1976827	**Analysis Date/Time:**	12/20/22 10:36
Dilution Factor:	1	**Prep Method:**	350.1
Analytical Method:	350.1	**Sample Vol Used:**	10 mL
Matrix:	WW	**Initial Wt/Vol:**	_____
Total Solids (%):	_____	**Final Wt/Vol:**	_____

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	7664-41-7	4830		31.7	75.0	150

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

		ICV			CCV				CCV			
Sample ID:		FS3100-011220221005			FS3100-011220221027				FS3100-011220221046			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.945	98.90		5	4.884	97.70		5	4.880	97.60	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1
Concentration Units:	mg/l		

		CCV				CCV		
Sample ID:		FS3100-011220221101				FS3100-011220221113		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
AMMONIA NITROGEN	5	4.858	97.20		5	4.819	96.40	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Sample ID:	**BLANK Result**	**BLANK Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
File ID:	20221220100700		20221220102800		20221220104800		20221220110300	
Analyte	mg/l		mg/l		mg/l		mg/l	
AMMONIA NITROGEN	0.0750	U	-0.03000		-0.02800		-0.02900	

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20221220111500	
Analyte	mg/l	
AMMONIA NITROGEN	-0.03000	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3873985-3
R3873985-4

MS Sample / File ID:	R3873985-3 / 20221220103400	**SDG:**	L1569103
MSD Sample / File ID:	R3873985-4 / 20221220103600	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569097-01 / 20221220103300	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5000	75.0	4690	4830	93.7	96.5	1	90.0 - 110	2.96	20

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.: R3873985-6

MS Sample / File ID:	R3873985-6 / 20221220105700	**SDG:**	L1569103
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
OS Sample / File ID:	L1569103-03 / 20221220105500	**Matrix:**	WW
Instrument ID:	FS3100-01		
Analytical Method:	350.1		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Ammonia Nitrogen	5000	751	5360		92.3		1	90.0 - 110		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3873985-5 / 20221220103900	**SDG:**	L1569103
OS Sample / File ID:	L1569097-02 / 20221220103700	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	ug/l	*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	75.0	75.0	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3873985-7 / 20221220110000	**SDG:**	L1569103
OS Sample / File ID:	L1569103-04 / 20221220105800	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	**OS Result**	**DUP Result**	**RPD**	**RPD Limits**
	ug/l	*ug/l*	*ug/l*	*ug/l*
Ammonia Nitrogen	1500	1500	0.0668	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3873985-2

LCS Sample / File ID:	R3873985-2 / 20221220100800	**SDG:**	L1569103
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976827
Instrument ID:	FS3100-01	**Dilution Factor:**	1
Analytical Method:	350.1	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Ammonia Nitrogen	7500	7330		97.7		90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569103-01,02,03,04 **Analytical Method:** 350.1
Matrix: WW **Prep Method:** 350.1

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Ammonia Nitrogen	7664-41-7			0.0317	0.15

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	350.1
Instrument ID:	FS3100-01	**Calibration Start Date:**	12/20/22 09:54
Analytical Run:	122022_1	**Calibration End Date:**	12/20/22 10:02

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	10.0	20221220095400	12/20/22 09:54		
CAL	5.00	20221220095600	12/20/22 09:56		
CAL	2.50	20221220095700	12/20/22 09:57		
CAL	1.00	20221220095900	12/20/22 09:59		
CAL	0.10	20221220100100	12/20/22 10:01		
CAL	0.00	20221220100200	12/20/22 10:02		
ICV	FS3100-011220221005	20221220100500	12/20/22 10:05		
BLANK	R3873985-1	20221220100700	12/20/22 10:07	1	WG1976827
LCS	R3873985-2	20221220100800	12/20/22 10:08	1	WG1976827
L1568037-03	L1568037-03	20221220101500	12/20/22 10:15	500	WG1976827
L1568037-04	L1568037-04	20221220101600	12/20/22 10:16	50	WG1976827
L1568132-01	L1568132-01	20221220101800	12/20/22 10:18	1	WG1976827
L1568243-01	L1568243-01	20221220102100	12/20/22 10:21	1	WG1976827
L1568243-02	L1568243-02	20221220102200	12/20/22 10:22	1	WG1976827
L1568243-03	L1568243-03	20221220102400	12/20/22 10:24	1	WG1976827
L1568251-01	L1568251-01	20221220102500	12/20/22 10:25	5	WG1976827
CCV	FS3100-011220221027	20221220102700	12/20/22 10:27		
CCB	FS3100-011220221028	20221220102800	12/20/22 10:28		
L1568255-01	L1568255-01	20221220103100	12/20/22 10:31	5	WG1976827
OS	L1569097-01	20221220103300	12/20/22 10:33		
L1569097-01	L1569097-01	20221220103300	12/20/22 10:33	1	WG1976827
MS	R3873985-3	20221220103400	12/20/22 10:34	1	WG1976827
MSD	R3873985-4	20221220103600	12/20/22 10:36	1	WG1976827
OS	L1569097-02	20221220103700	12/20/22 10:37		
L1569097-02	L1569097-02	20221220103700	12/20/22 10:37	1	WG1976827
DUP	R3873985-5	20221220103900	12/20/22 10:39	1	WG1976827
L1569097-03	L1569097-03	20221220104000	12/20/22 10:40	1	WG1976827
L1569102-01	L1569102-01	20221220104200	12/20/22 10:42	1	WG1976827
L1569102-02	L1569102-02	20221220104300	12/20/22 10:43	1	WG1976827
L1569102-03	L1569102-03	20221220104500	12/20/22 10:45	1	WG1976827
CCV	FS3100-011220221046	20221220104600	12/20/22 10:46		
CCB	FS3100-011220221048	20221220104800	12/20/22 10:48		
L1569102-04	L1569102-04	20221220105100	12/20/22 10:51	1	WG1976827
LF1P-5-1222	L1569103-03	20221220105500	12/20/22 10:55	1	WG1976827
MS	R3873985-6	20221220105700	12/20/22 10:57	1	WG1976827
LF1MW-11-1222	L1569103-04	20221220105800	12/20/22 10:58	1	WG1976827
DUP	R3873985-7	20221220110000	12/20/22 11:00	1	WG1976827
CCV	FS3100-011220221101	20221220110100	12/20/22 11:01		
CCB	FS3100-011220221103	20221220110300	12/20/22 11:03		
LF1MW-103-1222	L1569103-01	20221220111000	12/20/22 11:10	5	WG1976827
MWSAR03-1222	L1569103-02	20221220111200	12/20/22 11:12	1	WG1976827
CCV	FS3100-011220221113	20221220111300	12/20/22 11:13		
CCB	FS3100-011220221115	20221220111500	12/20/22 11:15		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	10	9.946	99.50	5	5.117	102
File ID:		20221220095400			20221220095600	

5

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	2.50	2.488	99.50	1	.981	98.10
File ID:		20221220095700			20221220095900	

5

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
AMMONIA NITROGEN	0.10	.082	82	0	-.015	
File ID:		20221220100100			20221220100200	

5

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 09:54
Instrument ID:	FS3100-01	**Calibration (end) date/time:**	12/20/22 10:02
Analytical Method:	350.1	**Analytical Run:**	122022_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
AMMONIA NITROGEN	0	5	0.999882			58084	1536.6	

5

Calibration Type

0 = Linear Regression

Weightage

5 = None

Instrument: FS3100-01

Created: 12/20/22 16:00

Instrument Method: nh3.mth

Analytical Method: 350.1

Analyte: AMMONIA NITROGEN

Equation: Conc = 58084 * Resp + 1536.6

Standard ID: 22L20114

Date/Time	Sample ID	Std. Conc.	Repsonse
12/20/22 09:54	Cal 10.0 ppm	10.0	579263
12/20/22 09:56	Cal 5.00 ppm	5.00	298765
12/20/22 09:57	Cal 2.50 ppm	2.50	146030
12/20/22 09:59	Cal 1.00 ppm	1.00	58545
12/20/22 10:01	Cal 0.10 ppm	0.10	6327
12/20/22 10:02	Cal 0.00 ppm	0.00	643

R = 0.999882

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

Date	Time	Peak	Cup	Name	Dil Fact	Mult.
20-Dec-22	09:50	1	102	Sync	1.0000	1.0000
20-Dec-22	09:51	2	0	INSTBLK	1.0000	1.0000
20-Dec-22	09:53	3	0	Read Baseline	1.0000	1.0000
20-Dec-22	09:54	4	101	Cal 10.0 ppm	1.0000	1.0000
20-Dec-22	09:56	5	102	Cal 5.00 ppm	1.0000	1.0000
20-Dec-22	09:57	6	103	Cal 2.50 ppm	1.0000	1.0000
20-Dec-22	09:59	7	104	Cal 1.00 ppm	1.0000	1.0000
20-Dec-22	10:01	8	105	Cal 0.10 ppm	1.0000	1.0000
20-Dec-22	10:02	9	106	Cal 0.00 ppm	1.0000	1.0000
20-Dec-22	10:04	10	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:05	11	109	ICV	1.0000	1.0000
20-Dec-22	10:07	12	107	Blank WG1976827	1.0000	1.0000
20-Dec-22	10:08	13	111	LCS	1.0000	1.0000
20-Dec-22	10:15	14	114	L1568037-03	500.0000	1.0000
20-Dec-22	10:16	15	115	L1568037-04	50.0000	1.0000
20-Dec-22	10:18	16	116	L1568132-01	1.0000	1.0000
20-Dec-22	10:19	17	117	L1568223-01	1.0000	1.0000
20-Dec-22	10:21	18	118	L1568243-01	1.0000	1.0000
20-Dec-22	10:22	19	119	L1568243-02	1.0000	1.0000
20-Dec-22	10:24	20	120	L1568243-03	1.0000	1.0000
20-Dec-22	10:25	21	121	L1568251-01	5.0000	1.0000
20-Dec-22	10:27	22	109	CCV	1.0000	1.0000
20-Dec-22	10:28	23	0	CCB	1.0000	1.0000
20-Dec-22	10:30	24	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:31	25	122	L1568255-01	5.0000	1.0000
20-Dec-22	10:33	26	123	L1569097-01	1.0000	1.0000
20-Dec-22	10:34	27	124	MS L1569097-01	1.0000	1.0000
20-Dec-22	10:36	28	125	MSD L1569097-01	1.0000	1.0000
20-Dec-22	10:37	29	126	L1569097-02	1.0000	1.0000
20-Dec-22	10:39	30	127	DUP L1569097-02	1.0000	1.0000
20-Dec-22	10:40	31	128	L1569097-03	1.0000	1.0000
20-Dec-22	10:42	32	129	L1569102-01	1.0000	1.0000
20-Dec-22	10:43	33	130	L1569102-02	1.0000	1.0000
20-Dec-22	10:45	34	131	L1569102-03	1.0000	1.0000
20-Dec-22	10:46	35	109	CCV	1.0000	1.0000

20-Dec-22	10:48	36	0	CCB	1.0000	1.0000
20-Dec-22	10:49	37	0	Read Baseline	1.0000	1.0000
20-Dec-22	10:51	38	132	L1569102-04	1.0000	1.0000
20-Dec-22	10:52	39	133	L1569103-01	1.0000	1.0000
20-Dec-22	10:54	40	134	L1569103-02	1.0000	1.0000
20-Dec-22	10:55	41	135	L1569103-03	1.0000	1.0000
20-Dec-22	10:57	42	136	MS L1569103-03	1.0000	1.0000
20-Dec-22	10:58	43	137	L1569103-04	1.0000	1.0000
20-Dec-22	11:00	44	138	DUP L1569103-04	1.0000	1.0000
20-Dec-22	11:01	45	109	CCV	1.0000	1.0000
20-Dec-22	11:03	46	0	CCB	1.0000	1.0000
20-Dec-22	11:04	47	0	Read Baseline	1.0000	1.0000
20-Dec-22	11:10	48	133	L1569103-01	5.0000	1.0000
20-Dec-22	11:12	49	134	L1569103-02	1.0000	1.0000
20-Dec-22	11:13	50	109	CCV	1.0000	1.0000
20-Dec-22	11:15	51	0	CCB	1.0000	1.0000
20-Dec-22	11:16	52	0	Read Baseline	1.0000	1.0000

*** Calibration Data ***

Run Results Report

Facility Name	ESC Lab Sciences
Facility Location	Mt. Juliet, TN
Department	Wet Chemistry FS3100-01
Operator Name	BMD
Operator ID	3730
Platform	FS III/IV/3100
Software Rev Code	234
Data system ID	57
Channel	3
Analysis	In-line Gas Diffusion TKN & NH3
CAS Number	
Methodology	351.2 & 350.1
Result path	C:\FLOW_4\TABLES\122022_1.RST
Sample table path	C:\FLOW_4\TABLES\122022_1.tbl
Method path	C:\FLOW_4\nh3.mth
Date acquired	20-Dec-22
Time acquired	11:22

| In-line Gas Diffusion TKN & NH3 |

Peak	Response	Calc [ppm]	Flags
1	294072	5.036	
2	277	-0.022	LO
3	0	-0.026	BL
4	579263	9.946	
5	298765	5.117	
6	146030	2.488	
7	58545	0.981	
8	6327	0.082	
9	643	-0.015	LO
10	0	-0.026	BL
11	288759	4.945	
12	350	-0.020	LO
13	427084	7.326	
14	188083	1605.845	
15	72205	60.833	
16	11156	0.166	
17	22194	0.356	
18	2043	0.009	
19	2339	0.014	
20	1643	0.002	
21	320142	27.426	
22	285218	4.884	
23	-210	-0.030	LO
24	0	-0.026	BL
25	211883	18.107	
26	2508	0.017	
27	273645	4.685	
28	281867	4.826	
29	1525	0.000	LO
30	1691	0.003	
31	29314	0.478	
32	14432	0.222	
33	13067	0.199	
34	89859	1.521	
35	284957	4.880	

36	-110	-0.028	LO
37	0	-0.026	BL
38	25922	0.420	
39	705969	12.128	HI
40	14693	0.227	FL
41	45170	0.751	FL
42	313073	5.364	
43	88430	1.496	
44	88509	1.497	
45	283695	4.858	
46	-147	-0.029	LO
47	0	-0.026	BL
48	144871	12.339	
49	15145	0.234	
50	281460	4.819	
51	-234	-0.030	LO
52	0	-0.026	BL

*** Calibration Data ***

Calibration Data for In-line Gas Diffusion TKN & NH3

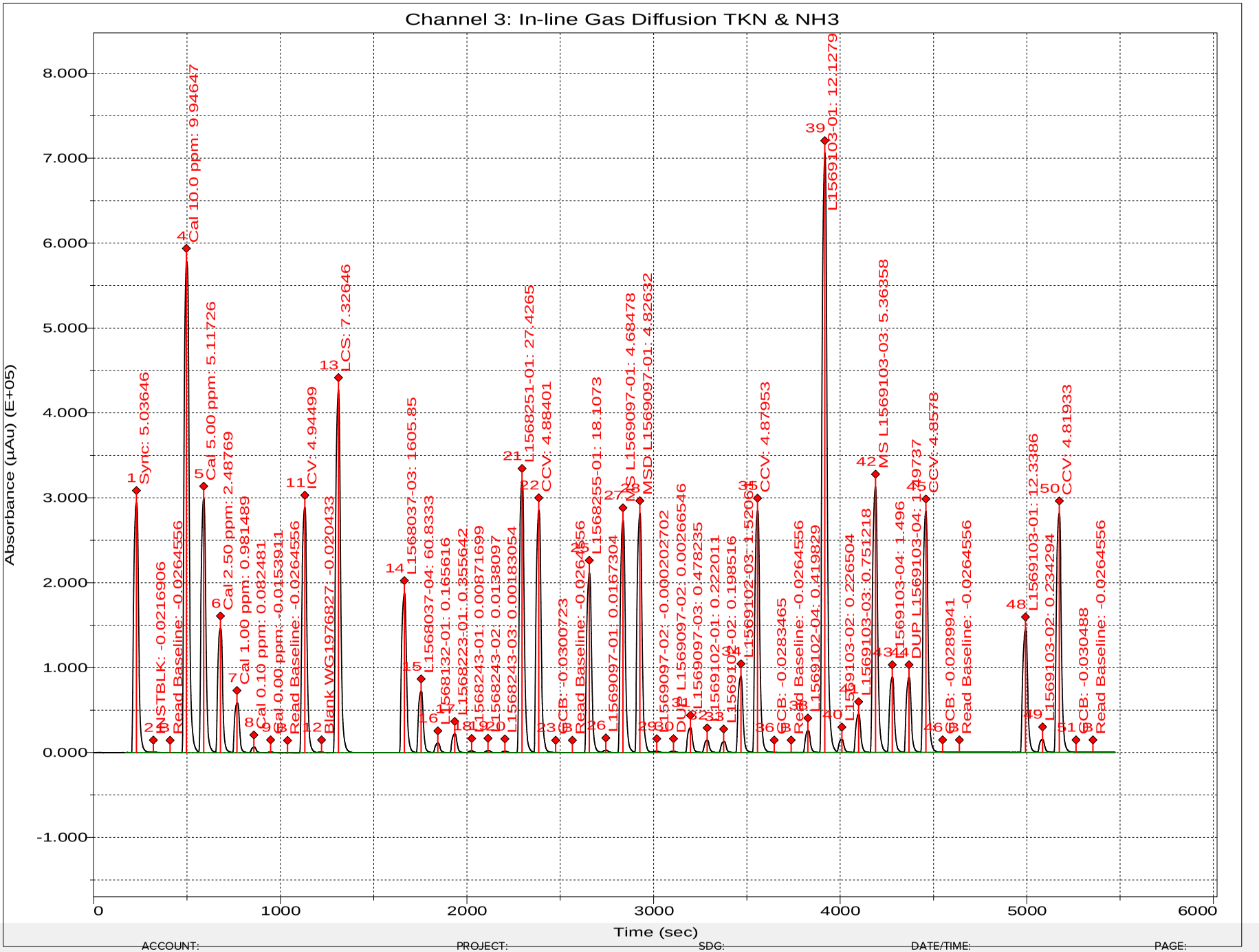
Calibration 1 (Peaks 4-52)

Name	Conc	Height
*Cal 10.0 ppm	10.000000	579263.375
*Cal 5.00 ppm	5.000000	298765.438
*Cal 2.50 ppm	2.500000	146030.312
*Cal 1.00 ppm	1.000000	58545.027
*Cal 0.10 ppm	0.100000	6327.425
*Cal 0.00 ppm	0.000000	642.664

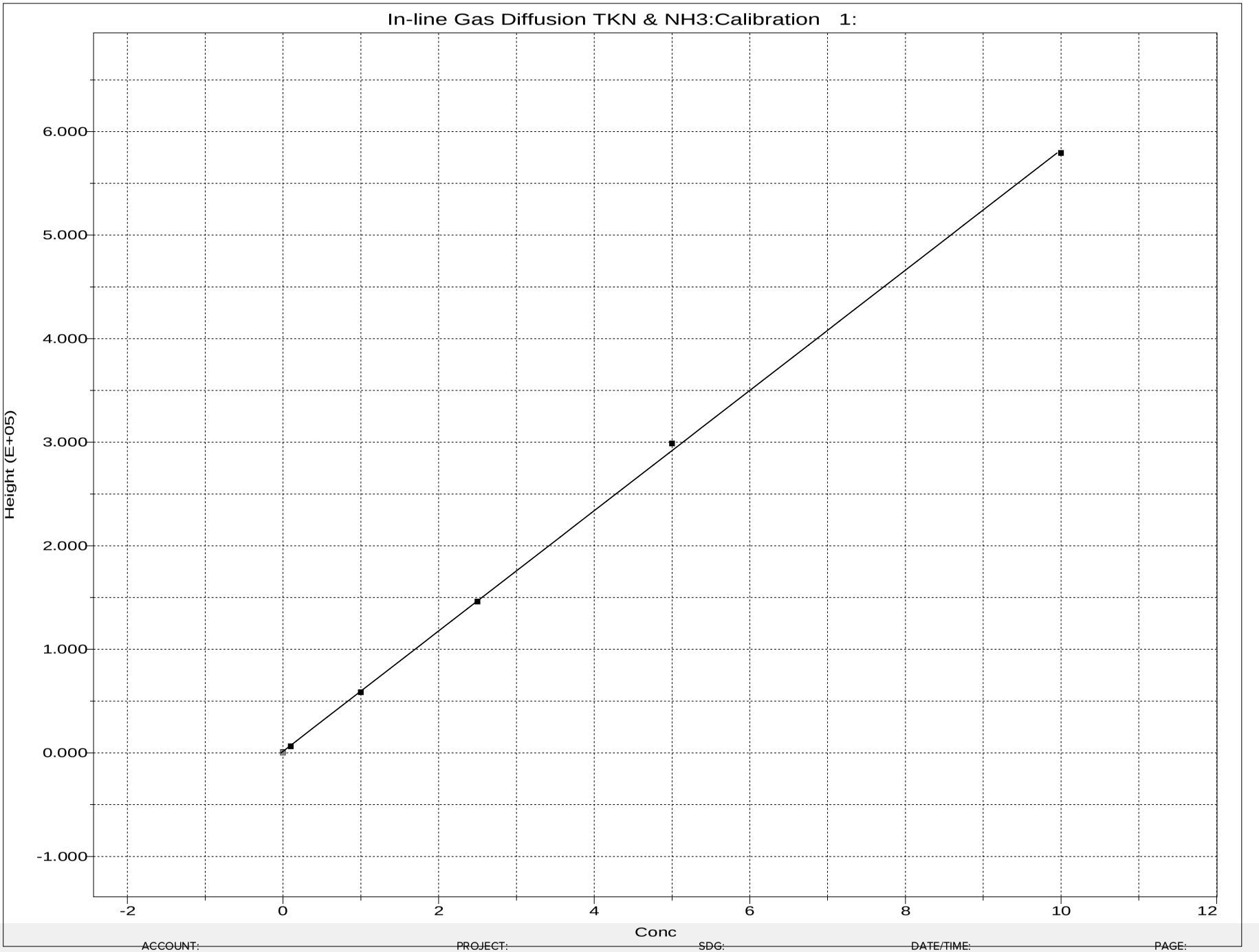
Fitting Method: 1st Order
Calib Coef:
y=bx+a
a: (intercept) 1.5366e+03
b: 5.8084e+04

Corr Coef: 0.999882

Carryover: 0.0941%



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
SGS North America Inc. - Orlando, FL	FC1116X	L1569103	01/24/23 16:49	41 of 212



ACCOUNT:	PROJECT:	SDG:	DATE/TIME:	PAGE:
SGS North America Inc. - Orlando, FL	FC1116X	L1569103	01/24/23 16:49	42 of 212

In-line Gas Diffusion TKN & NH3:Calibration 1: Peak 4-52

File name: C:\FLOW_4\TABLES\122022_1.RST
Date: 20-Dec-22
Operator: 3730

*	Name	Conc	Height
*	Cal 10.0 ppm	10.000000	579263.375000
*	Cal 5.00 ppm	5.000000	298765.437500
*	Cal 2.50 ppm	2.500000	146030.312500
*	Cal 1.00 ppm	1.000000	58545.027344
*	Cal 0.10 ppm	0.100000	6327.425293
*	Cal 0.00 ppm	0.000000	642.664307

Calib Coef:
y=bx+a
a: (intercept) 1.5366e+03
b: 5.8084e+04

Corr Coef: 0.999882

Carryover: 0.0941%

No Drift Peaks

NH3 Waters WetChem Prep Benchsheet

Batch: WG1976827

Analyst: BMD3730 **Analyst 2:** NA___ **Analyst 3:** NA___ **Batch Date/Time:** 12/20/22 08:00 **Prep End Date/Time:** 12/20/22 09:00 **SOP:** MTJL-0157
Method: 350.1 **ICV True Value:** 5 ppm **LCS True Value:** 7.5 ppm **MS/D True Value:** 5 ppm **RLV True Value:** 0.1 ppm **pH Strip Lot#:** HC178067
Chlorine Strip Lot#: 2144 **0.45 Nylon Filter Lot#:** 309048186 **10mL Syringe Lot#:** 2194253 **0.2mL Auto Pipette ID:** K10507311 **0.2mL Pipette Tip Lot#:** 21500301
1mL Auto Pipette ID: K19101681 **1mL Pipette Tip Lot#:** 21510757 **10mL Auto Pipette ID:** 10021329 **10mL Pipette Tip Lot#:** 21349B0
CultureTube Lot#: 22307889 **Dilution Tube Lot#:** 2076119

Salicylate/NFC : 22L20115 Amt. Used: 1 Exp. Date:12/21/22 **Hypochlorite:** 22L20116 Amt. Used: 1 Exp. Date:12/21/22
Complexing Reagent: 22L20117 Amt. Used: 1 Exp. Date:12/21/22 **MS/D Standard:** 22J30555 Amt. Used: 0.05 mL Exp. Date:04/30/23
ICV Standard: 22L20118 Amt. Used: 1 Exp. Date:12/21/22 **LCS/D Standard:** 22L20119 Amt. Used: 1 Exp. Date:12/21/22
Calibration Standard: 22L20114 Amt. Used: 1 Exp. Date:01/20/23 **Diluent:** 22L20120 Amt. Used: 1 Exp. Date:12/21/22
Reagent: 22K07621 Amt. Used: 1 Exp. Date:02/09/23

Sample Number	Matrix	Initial Sample Vol (mL)	Initial pH (s.u.)	Dilution Factor	Chlorine Test/Treat	Review Analyst	Review Date
BLANK		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
LCS		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569097-02)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
DUP(L1569103-04)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MS(L1569103-03)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
MSD(L1569097-01)		10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
1. L1568037-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
2. L1568037-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
3. L1568132-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
4. L1568223-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
5. L1568243-01	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
6. L1568243-02	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
7. L1568243-03	GW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
8. L1568251-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
9. L1568255-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
10. L1569097-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
11. L1569097-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
12. L1569097-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
13. L1569102-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
14. L1569102-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
15. L1569102-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
16. L1569102-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
17. L1569103-01	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
18. L1569103-02	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
19. L1569103-03	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55
20. L1569103-04	WW	10	<2	1	Tested Negative	BMD3730	12/20/22 12:45:55

Comments:

Reviewed By:BMD3730 on 12/20/22 12:45:55

351.2 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-103-1222

Lab Sample ID:	L1569103-01	**SDG:**	L1569103
Client Sample ID:	LF1MW-103-1222	**Collected Date/Time:**	12/07/22 10:15
Lab File ID:	20221222103252	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:32
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	13300		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
MWSAR03-1222

Lab Sample ID:	L1569103-02	**SDG:**	L1569103
Client Sample ID:	MWSAR03-1222	**Collected Date/Time:**	12/07/22 09:20
Lab File ID:	20221222103412	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:34
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	330	J	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-5-1222

Lab Sample ID:	L1569103-03	**SDG:**	L1569103
Client Sample ID:	LF1P-5-1222	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221222103533	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:35
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	966		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-11-1222

Lab Sample ID:	L1569103-04	**SDG:**	L1569103
Client Sample ID:	LF1MW-11-1222	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221222103654	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:36
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	2110		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-1

Lab Sample ID:	R3874770-1	**SDG:**	L1569103
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221222095612	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:56
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

5

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-3

Lab Sample ID:	R3874770-3	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100017	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:00
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-6

Lab Sample ID:	R3874770-6	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100543	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:05
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	300	U	140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-2

Lab Sample ID:	R3874770-2	**SDG:**	L1569103
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221222095734	**Received Date/Time:**	_____
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:22
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 09:57
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	19100		140	300	250

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-4	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100139	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:01
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5410		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874770-7

Lab Sample ID:	R3874770-7	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/14/22 06:25
Lab File ID:	20221222100704	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:07
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5330		140	300	600

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874770-5	**SDG:**	L1569103
Client Sample ID:	MSD	**Collected Date/Time:**	12/14/22 06:20
Lab File ID:	20221222100300	**Received Date/Time:**	12/15/22 09:00
Instrument ID:	LACHAT6	**Preparation Date/Time:**	12/21/22 15:23
Analytical Batch:	WG1976947	**Analysis Date/Time:**	12/22/22 10:03
Dilution Factor:	1	**Prep Method:**	351.2/365.4
Analytical Method:	351.2	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	20 mL
Total Solids (%):	_____	**Final Wt/Vol:**	20 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	7727-37-9	5260		140	300	600

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1
Concentration Units:	mg/L		

		ICV				CCV				CCV			
Sample ID:		LACHAT6122222095452				LACHAT6122222100947				LACHAT6122222102605			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.80	108		10	10.70	107		10	10.70	107	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

2-IN

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1
Concentration Units:	mg/L		

CCV

Sample ID: LACHAT6122222103816

Analyte	True	Found	%R	%RSD
KJELDAHL NITROGEN, TKN	10	10.70	107	

5

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Sample ID:	BLANK Result	BLANK Qual	CCB Result	CCB Qual	CCB Result	CCB Qual	CCB Result	CCB Qual
File ID:	20221222095612		20221222101109		20221222102727		20221222103939	
Analyte	mg/l		mg/L		mg/L		mg/L	
KJELDAHL NITROGEN, TKN	0.300	U	-0.09030		-0.09970		-0.1120	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874770-4
R3874770-5

MS Sample / File ID:	R3874770-4 / 20221222100139	**SDG:**	L1569103
MSD Sample / File ID:	R3874770-5 / 20221222100300	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-03 / 20221222095856	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5000	300	5410	5260	108	105	1	90.0 - 110	2.81	20

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.: R3874770-7

MS Sample / File ID:	R3874770-7 / 20221222100704	**SDG:**	L1569103
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
OS Sample / File ID:	L1567792-04 / 20221222100422	**Matrix:**	WW
Instrument ID:	LACHAT6		
Analytical Method:	351.2		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	5000	300	5330		107		1	90.0 - 110		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-3 / 20221222100017	**SDG:**	L1569103
OS Sample / File ID:	L1567792-03 / 20221222095856	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	300	300	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874770-6 / 20221222100543	**SDG:**	L1569103
OS Sample / File ID:	L1567792-04 / 20221222100422	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Kjeldahl Nitrogen, TKN	300	300	0.000	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874770-2

LCS Sample / File ID:	R3874770-2 / 20221222095734	**SDG:**	L1569103
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1976947
Instrument ID:	LACHAT6	**Dilution Factor:**	1
Analytical Method:	351.2	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Kjeldahl Nitrogen, TKN	20600	19100		92.7		74.0 - 124		

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569103-01,02,03,04
Matrix: WW
Analytical Method: 351.2
Prep Method: 351.2/365.4

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Kjeldahl Nitrogen, TKN	7727-37-9			0.14	0.60

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	_____
Analytical Run:	CAL122122_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	20.0	20221221152401	12/21/22 15:24		
CAL	10.0	20221221152524	12/21/22 15:25		
CAL	5.0	20221221152645	12/21/22 15:26		
CAL	2.5	20221221152807	12/21/22 15:28		
CAL	1.0	20221221152929	12/21/22 15:29		
CAL	0.5	20221221153051	12/21/22 15:30		
CAL	0.25	20221221153212	12/21/22 15:32		
CAL	0.0	20221221153334	12/21/22 15:33		

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	351.2
Instrument ID:	LACHAT6	**Calibration Start Date:**	12/21/22 15:24
Analytical Run:	R122222_1	**Calibration End Date:**	12/21/22 15:33

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT6122222095452	20221222095452	12/22/22 09:54		
BLANK	R3874770-1	20221222095612	12/22/22 09:56	1	WG1976947
LCS	R3874770-2	20221222095734	12/22/22 09:57	1	WG1976947
OS	L1567792-03	20221222095856	12/22/22 09:58		
L1567792-03	L1567792-03	20221222095856	12/22/22 09:58	1	WG1976947
DUP	R3874770-3	20221222100017	12/22/22 10:00	1	WG1976947
MS	R3874770-4	20221222100139	12/22/22 10:01	1	WG1976947
MSD	R3874770-5	20221222100300	12/22/22 10:03	1	WG1976947
OS	L1567792-04	20221222100422	12/22/22 10:04		
L1567792-04	L1567792-04	20221222100422	12/22/22 10:04	1	WG1976947
DUP	R3874770-6	20221222100543	12/22/22 10:05	1	WG1976947
MS	R3874770-7	20221222100704	12/22/22 10:07	1	WG1976947
L1568280-01	L1568280-01	20221222100825	12/22/22 10:08	5	WG1976947
CCV	LACHAT6122222100947	20221222100947	12/22/22 10:09		
CCB	LACHAT6122222101109	20221222101109	12/22/22 10:11		
CCV	LACHAT6122222102605	20221222102605	12/22/22 10:26		
CCB	LACHAT6122222102727	20221222102727	12/22/22 10:27		
L1569102-02	L1569102-02	20221222102848	12/22/22 10:28	1	WG1976947
L1569102-03	L1569102-03	20221222103011	12/22/22 10:30	1	WG1976947
L1569102-04	L1569102-04	20221222103130	12/22/22 10:31	1	WG1976947
LF1MW-103-1222	L1569103-01	20221222103252	12/22/22 10:32	1	WG1976947
MWSAR03-1222	L1569103-02	20221222103412	12/22/22 10:34	1	WG1976947
LF1P-5-1222	L1569103-03	20221222103533	12/22/22 10:35	1	WG1976947
LF1MW-11-1222	L1569103-04	20221222103654	12/22/22 10:36	1	WG1976947
CCV	LACHAT6122222103816	20221222103816	12/22/22 10:38		
CCB	LACHAT6122222103939	20221222103939	12/22/22 10:39		

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	20	18.1129	90.60	10	10.6097	106
File ID:		20221221152401			20221221152524	

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INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	5	5.4343	109	2.50	2.8805	115
File ID:		20221221152645			20221221152807	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	1	1.20358	120	0.50	.45778	91.60
File ID:		20221221152929			20221221153051	

5

15-IN INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
KJELDAHL NITROGEN, TKN	0.25	.225	90	0	-.053432	
File ID:		20221221153212			20221221153334	

5

16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 15:24
Instrument ID:	LACHAT6	**Calibration (end) date/time:**	12/21/22 15:33
Analytical Method:	351.2	**Analytical Run:**	R122222_1

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
KJELDAHL NITROGEN, TKN	5	1	0.99926			0.226	-0.0801	

5

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat6 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_03-22-58PM.OMN Created: 12/21/2022 3:22:58 PM
Original Run Author's Signature: [lachat6]
Current Run Filename: CAL122122_1.omn Last Modified: 12/21/2022 3:37:56 PM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF	Description
STD 20.0 ppm 22L20214	1	31	20.0	80.5	12/21/2022@3:24:01 PM			
STD 10.0 ppm	1	32	10.0	47.3	12/21/2022@3:25:24 PM			
STD 5.0 ppm	1	33	5.00	24.4	12/21/2022@3:26:45 PM			
STD 2.5 ppm	1	34	2.50	13.1	12/21/2022@3:28:07 PM			
STD 1.0 ppm	1	35	1.00	5.68	12/21/2022@3:29:29 PM			
STD 0.5 ppm	1	36	0.500	2.38	12/21/2022@3:30:51 PM			
STD 0.25 ppm	1	37	0.250	1.35	12/21/2022@3:32:12 PM			
STD 0.0 ppm	1	38	0.00	0.118	12/21/2022@3:33:34 PM			
ICV	1	2	10.2	45.7	12/21/2022@3:34:56 PM			
Calibration:			Table/Fig. : 1					

Channel 2 (TKN) - Current View

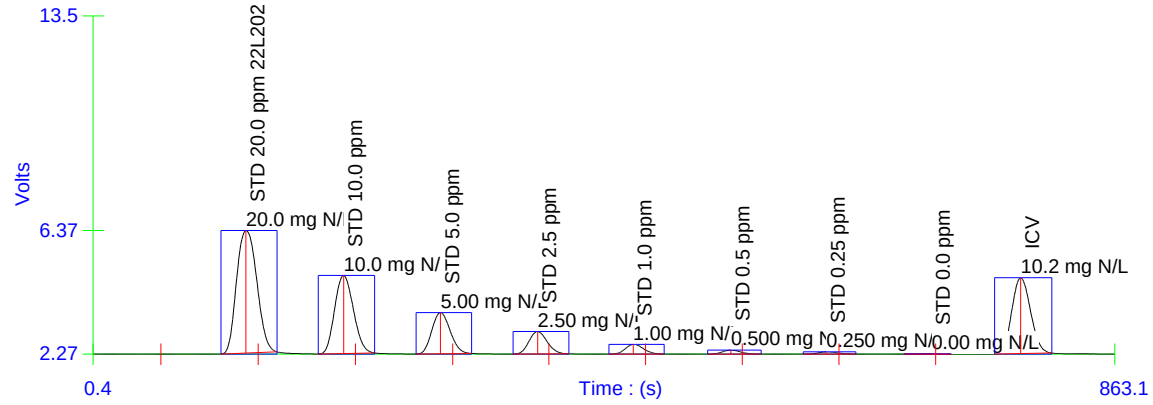
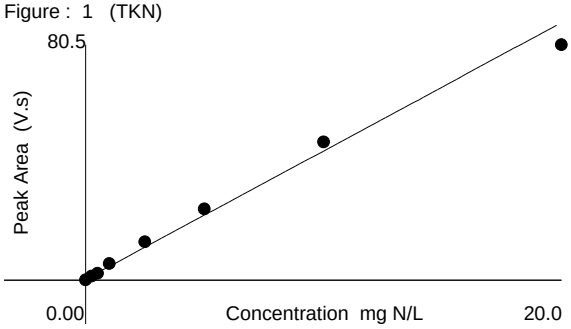


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Author: lachat6 Date : 12/21/2022

Figure : 1 (TKN)



Area = 4.38 * Conc + 0.383
Conc = 0.226 * Area - 0.0801
Correlation Coefficient (r) = 0.99926

Weighting : 1/x

5

Original Run Filename: OM_12-22-2022_09-52-26AM.OMN Created: 12/22/2022 9:52:26 AM
Original Run Author's Signature: [lachat6]
Current Run Filename: R122222_1.omn Last Modified: 12/22/2022 10:49:37 AM
Current Run Author's Signature: [lachat6]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 TKN Conc. (mg N/L)	Channel 2 TKN Area (V.s)	Detection Time	ADF	MDF
INSTBLK WG1976947	1	1	-0.0849	-0.0209	12/22/2022@9:53:30 AM		
Calibration:			Table/Fig. : 1				
ICV WG1976947	1	2	10.8	48.0	12/22/2022@9:54:52 AM		
BLANK WG1976947	1	30	-0.139	-0.260	12/22/2022@9:56:12 AM		
LCS 20.6 WG1976947	1	3	19.1	84.8	12/22/2022@9:57:34 AM		
L1567792-03 WG1976947	1	4	-0.164	-0.370	12/22/2022@9:58:56 AM		
DUP L1567792-03 WG1976947	1	5	-0.0249	0.245	12/22/2022@10:00:17 AM		
MS L1567792-03 WG1976947	1	6	5.41	24.3	12/22/2022@10:01:39 AM		
MSD L1567792-03 WG1976947	1	7	5.26	23.7	12/22/2022@10:03:00 AM		
L1567792-04 WG1976947	1	8	-0.126	-0.202	12/22/2022@10:04:22 AM		
DUP L1567792-04 WG1976947	1	9	-0.116	-0.159	12/22/2022@10:05:43 AM		
MS L1567792-04 WG1976947	1	10	5.33	24.0	12/22/2022@10:07:04 AM		
L1568280-01 WG1976947	1	11	0.777	3.80	12/22/2022@10:08:25 AM		
CCV	1	2	10.7	47.9	12/22/2022@10:09:47 AM		
CCB	1	1	-0.0903	-0.0451	12/22/2022@10:11:09 AM		
L1568351-01 WG1976947	1	12	1.25	5.89	12/22/2022@10:12:30 AM		
L1568381-01 WG1976947	1	13	28.9	128	12/22/2022@10:13:51 AM		
L1568381-02 WG1976947	1	14	-0.407	-1.45	12/22/2022@10:15:11 AM		
L1568387-04 WG1976947	1	15	33.5	149	12/22/2022@10:16:32 AM		
L1568387-05 WG1976947	1	16	31.4	140	12/22/2022@10:17:54 AM		
L1568387-06 WG1976947	1	17	18.9	84.2	12/22/2022@10:19:16 AM		
L1569097-01 WG1976947	1	18	0.205	1.26	12/22/2022@10:20:45 AM		
L1569097-02 WG1976947	1	19	0.248	1.45	12/22/2022@10:22:00 AM		
L1569097-03 WG1976947	1	20	1.07	5.09	12/22/2022@10:23:21 AM		
L1569102-01 WG1976947	1	21	0.378	2.03	12/22/2022@10:24:43 AM		
CCV	1	2	10.7	47.8	12/22/2022@10:26:05 AM		
CCB	1	1	-0.0997	-0.0867	12/22/2022@10:27:27 AM		
L1569102-02 WG1976947	1	22	0.785	3.83	12/22/2022@10:28:48 AM		
L1569102-03 WG1976947	1	23	1.85	8.56	12/22/2022@10:30:11 AM		
L1569102-04 WG1976947	1	24	0.552	2.80	12/22/2022@10:31:30 AM		
L1569103-01 WG1976947	1	25	13.3	59.4	12/22/2022@10:32:52 AM		
L1569103-02 WG1976947	1	26	0.330	1.81	12/22/2022@10:34:12 AM		
L1569103-03 WG1976947	1	27	0.966	4.63	12/22/2022@10:35:33 AM		
L1569103-04 WG1976947	1	28	2.11	9.70	12/22/2022@10:36:54 AM		
CCV	1	2	10.7	48.0	12/22/2022@10:38:16 AM		
CCB	1	1	-0.112	-0.141	12/22/2022@10:39:39 AM		
L1568381-01 WG1976947	1	13	11.0	48.9	12/22/2022@10:40:59 AM		5.00
L1568387-04 WG1976947	1	15	10.9	48.5	12/22/2022@10:42:20 AM		10.00
L1568387-05 WG1976947	1	16	8.08	36.1	12/22/2022@10:43:42 AM		10.00
CCV	1	2	10.8	48.1	12/22/2022@10:45:03 AM		
CCB	1	1	-0.116	-0.158	12/22/2022@10:46:26 AM		

Author: lachat6 Date : 12/22/2022

Channel 2 (TKN) - Current View

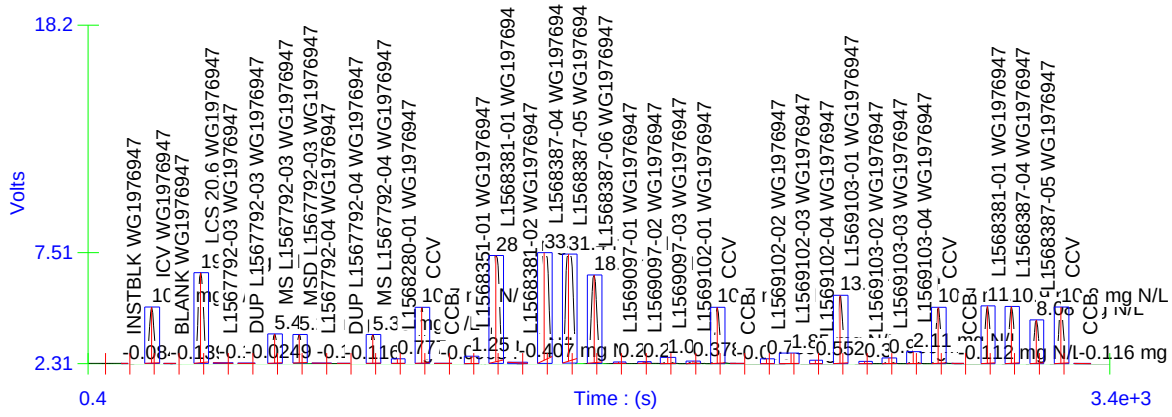
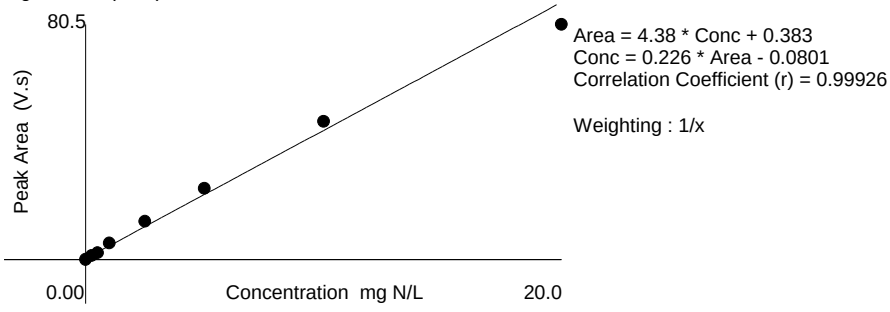


Table : 1 (TKN)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	20.0	1	80.5	4.07	0.0	8.6	18.1	12/21/2022	3:24:01 PM
2	10.0	1	47.3	2.59	0.0	-7.0	10.6	12/21/2022	3:25:24 PM
3	5.00	1	24.4	1.37	0.0	-9.5	5.43	12/21/2022	3:26:45 PM
4	2.50	1	13.1	0.747	0.0	-15.5	2.88	12/21/2022	3:28:07 PM
5	1.00	1	5.68	0.323	0.0	-19.2	1.20	12/21/2022	3:29:29 PM
6	0.500	1	2.38	0.133	0.0	7.7	0.456	12/21/2022	3:30:51 PM
7	0.250	1	1.35	0.0741	0.0	8.6	0.225	12/21/2022	3:32:12 PM
8	0.00	1	0.118	6.89e-3			-0.0536	12/21/2022	3:33:34 PM

Figure : 1 (TKN)



TKN/PT Waters WetChem Prep Benchsheet

Batch: WG1976947

Analyst: UNP3773 **Analyst 2:** NA___ **Analyst 3:** NA___ **Prep Start Date/Time:** 12/21/22 15:22-15:23 **Prep End Date/Time:** 12/21/22 23:57 **SOP:** 0180
Method: 351.2/365.4 **Thermometer SN:** CP52532 **ThermoCorrectFact:** +0.3 **HotBlock Temp/CorrectedTemp/Loc.:** 380/380.3/A2 **Digestion Tube Lot#:** 2208066
1mL Auto Pipette SN: TU12425 **1mL Auto Pipette Tip Lot#:** 22311016 **Repeat Pipette SN:** 306659K **Repeat Pipette Tip Lot#:** K196538K
pH Strip Lot#: 10BDH2221 **NO2/NO3 Strip Lot#:** 220603 **Boiling Stone Lot#:** 1344-28-1 **1mL Pipette Lot# Prep/Lachat:** **2mL Pipette Lot# Prep/Lachat:**
5mL Pipette Lot# Prep/Lachat: **10mL Pipette Lot# Prep/Lachat:** **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314333 **0.45 Nylon Filter Lot#:**
0.45 PVDF Filter Lot#: **Syringe Lot#:** **TKN/PT LCS TV:** 20.6/1.17 **Cal and Stds Workgroup:** 1975215

TKN MS/D Standard: 22L02860 Amt. Used: 1 Exp. Date:01/01/23 **PT MS/D Standard:** 22K29485 Amt. Used: 1 Exp. Date:03/31/23
LCS/D Standard: 22L06388 Amt. Used: 20 mL Exp. Date:01/06/23 **Digestion Solution:** 22L21226 Amt. Used: 5 mL Exp. Date:12/31/22
TKN ICV Standard: 22L21321 Amt. Used: 1 Exp. Date:12/22/22 **TKN Carrier:** 22L20105 Amt. Used: 1 Exp. Date:12/27/22
TKN Buffer: 22L19934 Amt. Used: 1 Exp. Date:01/19/23 **Salicylate/Nitroprusside:** 22L21319 Amt. Used: 1 Exp. Date:12/28/22
0.8M NaOH: 22L20106 Amt. Used: 1 Exp. Date:01/20/23 **Na Hypochlorite:** 22L21318 Amt. Used: 1 Exp. Date:12/22/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	pH	Dilution Factor	Review Analyst	Review Date
BLANK		20	20	<2	1	LDT1016	12/22/22 10:45:08
LCS		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
DUP(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MS(L1567792-04)		20	20	<2	1	LDT1016	12/22/22 10:45:08
MSD(L1567792-03)		20	20	<2	1	LDT1016	12/22/22 10:45:08
1. L1567792-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
2. L1567792-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
3. L1568280-01	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
4. L1568351-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
5. L1568381-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
6. L1568381-02	WW	4	20	<2	5	LDT1016	12/22/22 10:45:08
7. L1568387-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
8. L1568387-05	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
9. L1568387-06	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
10. L1569097-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
11. L1569097-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
12. L1569097-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
13. L1569102-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
14. L1569102-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
15. L1569102-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
16. L1569102-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
17. L1569103-01	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
18. L1569103-02	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
19. L1569103-03	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08
20. L1569103-04	WW	20	20	<2	1	LDT1016	12/22/22 10:45:08

Comments:
L1568280-01 & L1568381-02 is 1X for PT and 5X for TKN due to NO2/NO3 hit.

Reviewed By: LDT1016 on 12/22/22 10:45:08

420.4 Wet Chemistry

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-103-1222

Lab Sample ID:	L1569103-01	**SDG:**	L1569103
Client Sample ID:	LF1MW-103-1222	**Collected Date/Time:**	12/07/22 10:15
Lab File ID:	20221220233555	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:35
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
MWSAR03-1222

Lab Sample ID:	L1569103-02	**SDG:**	L1569103
Client Sample ID:	MWSAR03-1222	**Collected Date/Time:**	12/07/22 09:20
Lab File ID:	20221220233641	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:36
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-5-1222

Lab Sample ID:	L1569103-03	**SDG:**	L1569103
Client Sample ID:	LF1P-5-1222	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221220233727	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:37
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-11-1222

Lab Sample ID:	L1569103-04	**SDG:**	L1569103
Client Sample ID:	LF1MW-11-1222	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221220233813	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:38
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-1

Lab Sample ID:	R3874135-1	**SDG:**	L1569103
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221220231535	**Received Date/Time:**	_____
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:15
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	20.0	J U	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-10	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234209	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	2140		41.5	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-7

Lab Sample ID:	R3874135-7	**SDG:**	L1569103
Client Sample ID:	DUP	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232629	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:26
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	8.55	J	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-2

Lab Sample ID:	R3874135-2	**SDG:**	L1569103
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221220231621	**Received Date/Time:**	_____
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:16
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	486		3.70	20.0	25.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874135-11

Lab Sample ID:	R3874135-11	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/15/22 09:00
Lab File ID:	20221220234256	**Received Date/Time:**	12/15/22 15:33
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:42
Dilution Factor:	5	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	2930	J6	41.5	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-8	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232716	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:27
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	494	J6	8.30	20.0	40.0

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874135-9	**SDG:**	L1569103
Client Sample ID:	MSD	**Collected Date/Time:**	12/16/22 09:45
Lab File ID:	20221220232803	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	LACHAT5	**Preparation Date/Time:**	12/20/22 18:20
Analytical Batch:	WG1977545	**Analysis Date/Time:**	12/20/22 23:28
Dilution Factor:	1	**Prep Method:**	4AAP
Analytical Method:	420.4	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	50 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	108-95-2	412	J6	8.30	20.0	40.0

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

		ICV			CCV				CCV			
Sample ID:		LACHAT5122022231448			LACHAT5122022232323				LACHAT5122022233247			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	1.000	100		1	1.000	100		1	1.010	101	

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ICV Limits: 90 - 110 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3
Concentration Units:	mg/L		

		CCV				CCV		
Sample ID:		LACHAT5122022233947				LACHAT5122022234911		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD
TOTAL PHENOL BY 4AAP	1	0.9960	99.60		1	1.000	100	

ICV Limits: 90 - 110 CCV Limits: 90 - 110

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	BLANK Result	BLANK Qual	CCB Result	CCB Qual	CCB Result	CCB Qual	CCB Result	CCB Qual
File ID:	20221220231535		20221220232411		20221220233334		20221220234035	
Analyte	mg/l		mg/L		mg/L		mg/L	
TOTAL PHENOL BY 4AAP	0.0200	J U	0.008230		0.003840		0.002810	

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Sample ID:	**CCB Result**	**CCB Qual**
File ID:	20221220234958	
Analyte	mg/L	
TOTAL PHENOL BY 4AAP	0.004380	

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.: R3874135-11

MS Sample / File ID:	R3874135-11 / 20221220234256	**SDG:**	L1569103
MSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568060-01 / 20221220234736	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*		*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1000	2060	2930		86.8*		5	90.0 - 110		

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*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874135-8
R3874135-9

MS Sample / File ID:	R3874135-8 / 20221220232716	**SDG:**	L1569103
MSD Sample / File ID:	R3874135-9 / 20221220232803	**Analytical Batch:**	WG1977545
OS Sample / File ID:	L1568816-02 / 20221220232544	**Matrix:**	WW
Instrument ID:	LACHAT5		
Analytical Method:	420.4		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Total Phenol by 4AAP	1000	10.0	494	412	48.4*	40.2*	1	90.0 - 110	18.0	20

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*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-10 / 20221220234209	**SDG:**	L1569103
OS Sample / File ID:	L1568060-01 / 20221220234736	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	5
Analytical Method:	420.4	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	2060	2140	3.76	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DUP Sample / File ID:	R3874135-7 / 20221220232629	**SDG:**	L1569103
OS Sample / File ID:	L1568816-02 / 20221220232544	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	OS Result	DUP Result	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*
Total Phenol by 4AAP	10.0	8.55	15.6	20

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

7-IN

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874135-2

LCS Sample / File ID:	R3874135-2 / 20221220231621	**SDG:**	L1569103
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977545
Instrument ID:	LACHAT5	**Dilution Factor:**	1
Analytical Method:	420.4	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Total Phenol by 4AAP	500	486		97.2		90.0 - 110		

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*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569103-01,02,03,04 **Analytical Method:** 420.4
Matrix: WW **Prep Method:** 4AAP

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Total Phenol by 4AAP	108-95-2			0.0083	0.04

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	_____
Analytical Run:	CAL122022_1	**Calibration End Date:**	_____

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CAL	2.0	20221220174905	12/20/22 17:49		
CAL	1.0	20221220174953	12/20/22 17:49		
CAL	0.5	20221220175042	12/20/22 17:50		
CAL	0.1	20221220175131	12/20/22 17:51		
CAL	0.04	20221220175219	12/20/22 17:52		
CAL	0.0	20221220175306	12/20/22 17:53		

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	420.4
Instrument ID:	LACHAT5	**Calibration Start Date:**	12/20/22 17:49
Analytical Run:	R122022_3	**Calibration End Date:**	12/20/22 17:53

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
ICV	LACHAT5122022231448	20221220231448	12/20/22 23:14		
BLANK	R3874135-1	20221220231535	12/20/22 23:15	1	WG1977545
LCS	R3874135-2	20221220231621	12/20/22 23:16	1	WG1977545
CCV	LACHAT5122022232323	20221220232323	12/20/22 23:23		
CCB	LACHAT5122022232411	20221220232411	12/20/22 23:24		
L1568714-02	L1568714-02	20221220232457	12/20/22 23:24	1	WG1977545
OS	L1568816-02	20221220232544	12/20/22 23:25		
L1568816-02	L1568816-02	20221220232544	12/20/22 23:25	1	WG1977545
DUP	R3874135-7	20221220232629	12/20/22 23:26	1	WG1977545
MS	R3874135-8	20221220232716	12/20/22 23:27	1	WG1977545
MSD	R3874135-9	20221220232803	12/20/22 23:28	1	WG1977545
L1569097-01	L1569097-01	20221220232850	12/20/22 23:28	1	WG1977545
L1569097-02	L1569097-02	20221220232938	12/20/22 23:29	1	WG1977545
L1569097-03	L1569097-03	20221220233025	12/20/22 23:30	1	WG1977545
L1569102-01	L1569102-01	20221220233112	12/20/22 23:31	1	WG1977545
L1569102-02	L1569102-02	20221220233159	12/20/22 23:31	1	WG1977545
CCV	LACHAT5122022233247	20221220233247	12/20/22 23:32		
CCB	LACHAT5122022233334	20221220233334	12/20/22 23:33		
L1569102-03	L1569102-03	20221220233421	12/20/22 23:34	1	WG1977545
L1569102-04	L1569102-04	20221220233508	12/20/22 23:35	1	WG1977545
LF1MW-103-1222	L1569103-01	20221220233555	12/20/22 23:35	1	WG1977545
MWSAR03-1222	L1569103-02	20221220233641	12/20/22 23:36	1	WG1977545
LF1P-5-1222	L1569103-03	20221220233727	12/20/22 23:37	1	WG1977545
LF1MW-11-1222	L1569103-04	20221220233813	12/20/22 23:38	1	WG1977545
L1569393-01	L1569393-01	20221220233900	12/20/22 23:39	1	WG1977545
CCV	LACHAT5122022233947	20221220233947	12/20/22 23:39		
CCB	LACHAT5122022234035	20221220234035	12/20/22 23:40		
DUP	R3874135-10	20221220234209	12/20/22 23:42	5	WG1977545
MS	R3874135-11	20221220234256	12/20/22 23:42	5	WG1977545
L1568060-03	L1568060-03	20221220234430	12/20/22 23:44	5	WG1977545
L1568060-04	L1568060-04	20221220234517	12/20/22 23:45	5	WG1977545
L1568351-01	L1568351-01	20221220234603	12/20/22 23:46	1	WG1977545
L1568714-01	L1568714-01	20221220234649	12/20/22 23:46	1	WG1977545
OS	L1568060-01	20221220234736	12/20/22 23:47		
L1568060-01	L1568060-01	20221220234736	12/20/22 23:47	5	WG1977545
L1568060-02	L1568060-02	20221220234823	12/20/22 23:48	5	WG1977545
CCV	LACHAT5122022234911	20221220234911	12/20/22 23:49		
CCB	LACHAT5122022234958	20221220234958	12/20/22 23:49		

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	2	1.98313	99.20	1	1.00393	100
File ID:		20221220174905			20221220174953	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.50	.50857	102	0.10	.103066	103
File ID:		20221220175042			20221220175131	

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15-IN INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/L	mg/L	%	mg/L	mg/L	%
TOTAL PHENOL BY 4AAP	0.04	.040474	101	0	-.0023996	
File ID:		20221220175219			20221220175306	

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16C-IN

GENERAL CHEMISTRY
INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/20/22 17:49
Instrument ID:	LACHAT5	**Calibration (end) date/time:**	12/20/22 17:53
Analytical Method:	420.4	**Analytical Run:**	R122022_3

Analyte	Cal. Type	Weightage	Corr.	Coef1	Coef2	Slope	Incpt	% RSD
TOTAL PHENOL BY 4AAP	5	1	0.99999			0.384	-0.00599	

5

Calibration Type

5 = Weighted Linear Regression

Weightage

1 = Inverse Concentration

Author: lachat5 Date : 12/20/2022

Original Run Filename: OM_12-20-2022_05-48-08PM.OMN Created: 12/20/2022 5:48:08 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: CAL122022_1.omn Last Modified: 12/20/2022 5:56:02 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Area (V.s)	Detection Time	ADF	MDF	Description
STD 2.0 PPM 22L20190	1	31	2.00	5.18	12/20/2022@5:49:05 PM			
STD 1.0 PPM	1	32	1.00	2.63	12/20/2022@5:49:53 PM			
STD 0.5 PPM	1	33	0.500	1.34	12/20/2022@5:50:42 PM			
STD 0.1 PPM	1	34	0.100	0.284	12/20/2022@5:51:31 PM			
STD 0.04 PPM	1	35	0.0400	0.121	12/20/2022@5:52:19 PM			
STD 0.0 PPM	1	36	0.00	9.35e-3	12/20/2022@5:53:06 PM			
ICV	1	2	1.01	2.63	12/20/2022@5:53:55 PM			
Calibration:			Table/Fig. : 1					

Channel 1 - Current View

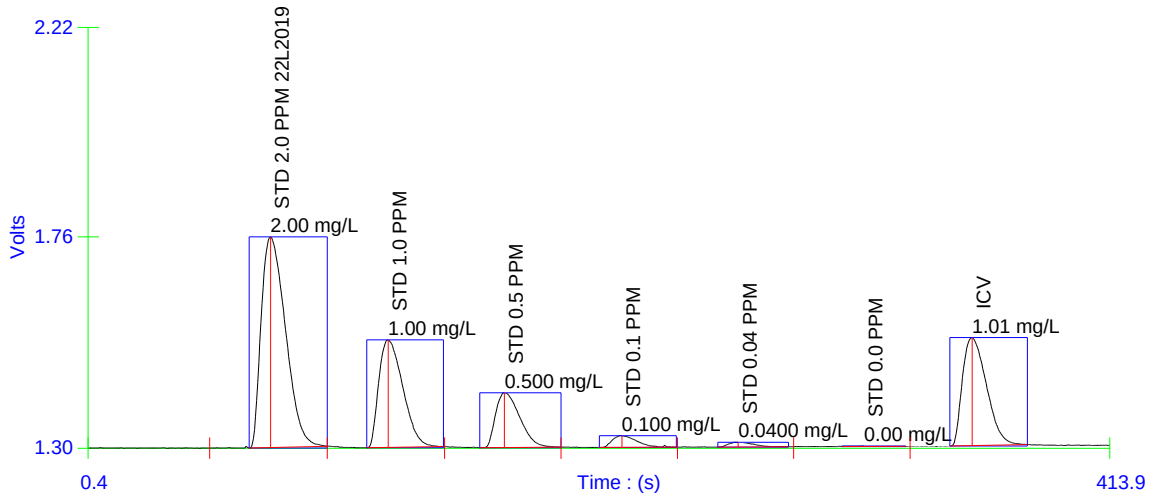
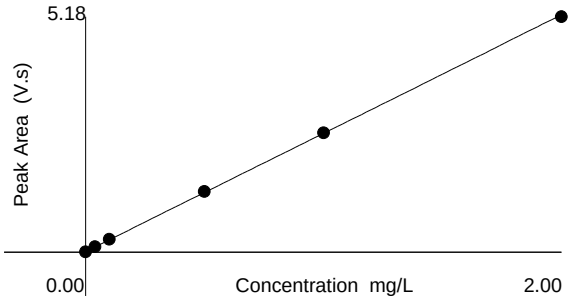


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Author: lachat5 Date : 12/20/2022

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

5

Author: lachat5 Date : 12/20/2022

Original Run Filename: OM_12-20-2022_11-13-11PM.OMN Created: 12/20/2022 11:13:11 PM
Original Run Author's Signature: [lachat5]
Current Run Filename: R122022_3.omn Last Modified: 12/20/2022 11:52:20 PM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL		Detection Time	ADF	MDF
			Conc. (mg/L)	Area (V.s)			
INSTBLK WG1977545	1	1	1.57e-3	0.0197	12/20/2022@11:14:01 PM		
ICV 1.0 WG1977545	1	2	1.00	2.63	12/20/2022@11:14:48 PM		
Calibration:			Table/Fig. : 1				
BLANK WG1977545	1	30	6.29e-3	0.0320	12/20/2022@11:15:35 PM		
LCS 0.5 WG1977545	1	3	0.487	1.28	12/20/2022@11:16:21 PM		
L1568060-01 WG1977545	1	4	2.13	5.57	12/20/2022@11:17:09 PM		
DUP L1568060-01 WG1977545	1	5	2.16	5.63	12/20/2022@11:17:56 PM		
MS L1568060-01 WG1977545	1	6	2.85	7.44	12/20/2022@11:18:43 PM		
L1568060-02 WG1977545	1	7	1.89	4.92	12/20/2022@11:19:30 PM		
L1568060-03 WG1977545	1	8	1.72	4.48	12/20/2022@11:20:16 PM		
L1568060-04 WG1977545	1	9	3.30	8.60	12/20/2022@11:21:03 PM		
L1568351-01 WG1977545	1	10	0.0385	0.116	12/20/2022@11:21:49 PM		
L1568714-01 WG1977545	1	11	0.114	0.313	12/20/2022@11:22:36 PM		
CCV 1.0	1	2	1.00	2.63	12/20/2022@11:23:23 PM		
CCB	1	1	8.23e-3	0.0370	12/20/2022@11:24:11 PM		
L1568714-02 WG1977545	1	12	9.65e-3	0.0407	12/20/2022@11:24:57 PM		
L1568816-02 WG1977545	1	13	0.0100	0.0417	12/20/2022@11:25:44 PM		
DUP L1568816-02 WG1977545	1	14	8.56e-3	0.0379	12/20/2022@11:26:29 PM		
MS L1568816-02 WG1977545	1	15	0.503	1.33	12/20/2022@11:27:16 PM		
MSD L1568816-02 WG1977545	1	16	0.421	1.11	12/20/2022@11:28:03 PM		
L1569097-01 WG1977545	1	17	4.53e-3	0.0274	12/20/2022@11:28:50 PM		
L1569097-02 WG1977545	1	18	4.24e-3	0.0266	12/20/2022@11:29:38 PM		
L1569097-03 WG1977545	1	19	3.20e-3	0.0239	12/20/2022@11:30:25 PM		
L1569102-01 WG1977545	1	20	-1.31e-3	0.0122	12/20/2022@11:31:12 PM		
L1569102-02 WG1977545	1	21	1.54e-3	0.0196	12/20/2022@11:31:59 PM		
CCV 1.0	1	2	1.01	2.65	12/20/2022@11:32:47 PM		
CCB	1	1	3.84e-3	0.0256	12/20/2022@11:33:34 PM		
L1569102-03 WG1977545	1	22	1.70e-3	0.0200	12/20/2022@11:34:21 PM		
L1569102-04 WG1977545	1	23	2.72e-4	0.0163	12/20/2022@11:35:08 PM		
L1569103-01 WG1977545	1	24	9.86e-4	0.0181	12/20/2022@11:35:55 PM		
L1569103-02 WG1977545	1	25	-5.57e-4	0.0141	12/20/2022@11:36:41 PM		
L1569103-03 WG1977545	1	26	3.35e-4	0.0164	12/20/2022@11:37:27 PM		
L1569103-04 WG1977545	1	27	3.73e-3	0.0253	12/20/2022@11:38:13 PM		
L1569393-01 WG1977545	1	28	5.05e-3	0.0287	12/20/2022@11:39:00 PM		
CCV 1.0	1	2	0.997	2.61	12/20/2022@11:39:47 PM		
CCB	1	1	2.81e-3	0.0229	12/20/2022@11:40:35 PM		
L1568060-01 WG1977545	1	4	0.384	1.02	12/20/2022@11:41:22 PM		5.00
DUP L1568060-01 WG1977545	1	5	0.443	1.17	12/20/2022@11:42:09 PM		5.00
MS L1568060-01 WG1977545	1	6	0.607	1.60	12/20/2022@11:42:56 PM		5.00
L1568060-02 WG1977545	1	7	0.385	1.02	12/20/2022@11:43:43 PM		5.00
L1568060-03 WG1977545	1	8	0.352	0.932	12/20/2022@11:44:30 PM		5.00
L1568060-04 WG1977545	1	9	0.700	1.84	12/20/2022@11:45:17 PM		5.00
L1568351-01 WG1977545	1	10	0.0163	0.0580	12/20/2022@11:46:03 PM		
L1568714-01 WG1977545	1	11	0.112	0.307	12/20/2022@11:46:49 PM		
L1568060-01 WG1977545	1	4	0.428	1.13	12/20/2022@11:47:36 PM		5.00
L1568060-02 WG1977545	1	7	0.386	1.02	12/20/2022@11:48:23 PM		5.00
CCV 1.0	1	2	1.01	2.63	12/20/2022@11:49:11 PM		
CCB	1	1	4.38e-3	0.0270	12/20/2022@11:49:58 PM		

Author: lachat5 Date : 12/20/2022

Channel 1 - Current View

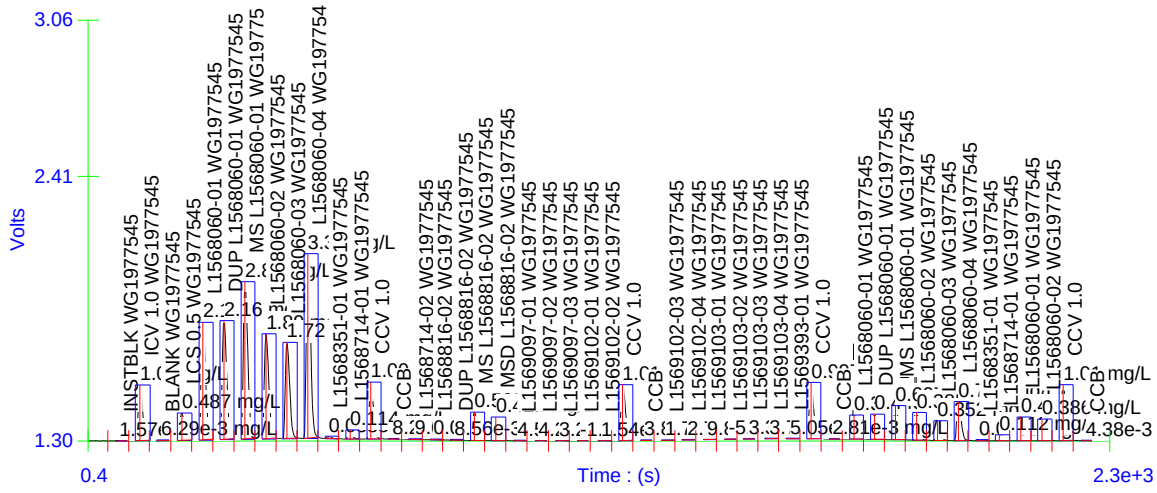
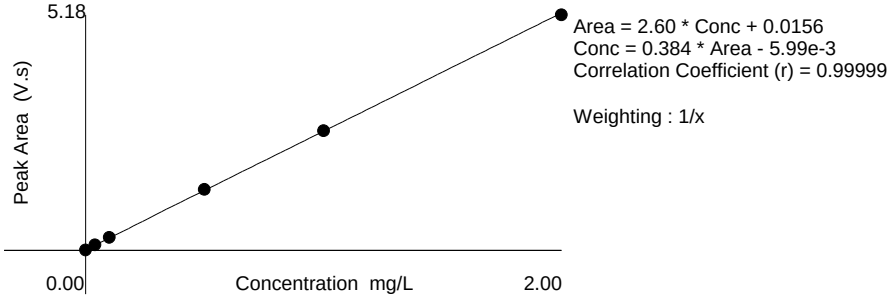


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Author: lachat5 Date : 12/21/2022

Original Run Filename: OM_12-21-2022_12-01-47AM.OMN Created: 12/21/2022 12:01:47 AM
Original Run Author's Signature: [lachat5]
Current Run Filename: SB122022_3.omn Last Modified: 12/21/2022 12:23:04 AM
Current Run Author's Signature: [lachat5]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 PHENOL Conc. (mg/L)	Area (V.s)	Detection Time	ADF	MDF
L1568060-01 WG1977545	1	4	0.0133	0.0503	12/21/2022@12:02:38 AM		5.00
Calibration:			Table/Fig. : 1				
DUP L1568060-01 WG1977545	1	5	0.0145	0.0534	12/21/2022@12:03:25 AM		5.00
MS L1568060-01 WG1977545	1	6	0.0208	0.0697	12/21/2022@12:04:12 AM		5.00
L1568060-02 WG1977545	1	7	0.0107	0.0435	12/21/2022@12:04:58 AM		5.00
L1568060-03 WG1977545	1	8	0.0106	0.0432	12/21/2022@12:05:45 AM		5.00
L1568060-04 WG1977545	1	9	0.0220	0.0728	12/21/2022@12:06:32 AM		5.00
L1568351-01 WG1977545	1	10	-4.60e-3	3.61e-3	12/21/2022@12:07:18 AM		
L1568714-01 WG1977545	1	11	0.0140	0.0519	12/21/2022@12:08:04 AM		
L1568714-02 WG1977545	1	12	-0.0106	-0.0120	12/21/2022@12:08:51 AM		
L1568816-02 WG1977545	1	13	-4.13e-3	4.83e-3	12/21/2022@12:09:37 AM		
DUP L1568816-02 WG1977545	1	14	-4.04e-3	5.06e-3	12/21/2022@12:10:23 AM		
MS L1568816-02 WG1977545	1	15	9.09e-3	0.0392	12/21/2022@12:11:09 AM		
MSD L1568816-02 WG1977545	1	16	6.85e-3	0.0334	12/21/2022@12:11:57 AM		
L1569097-01 WG1977545	1	17	-5.45e-3	1.40e-3	12/21/2022@12:12:44 AM		
L1569097-02 WG1977545	1	18	-2.46e-3	9.17e-3	12/21/2022@12:13:31 AM		
L1569097-03 WG1977545	1	19	-4.27e-3	4.46e-3	12/21/2022@12:14:19 AM		
L1569102-01 WG1977545	1	20	-6.54e-3	-1.44e-3	12/21/2022@12:15:06 AM		
L1569102-02 WG1977545	1	21	-8.27e-3	-5.96e-3	12/21/2022@12:15:53 AM		
L1569102-03 WG1977545	1	22	-6.04e-3	-1.44e-4	12/21/2022@12:16:39 AM		
L1569102-04 WG1977545	1	23	-8.64e-3	-6.91e-3	12/21/2022@12:17:26 AM		
L1569103-01 WG1977545	1	24	-7.10e-3	-2.91e-3	12/21/2022@12:18:13 AM		
L1569103-02 WG1977545	1	25	-6.59e-3	-1.58e-3	12/21/2022@12:19:00 AM		
L1569103-03 WG1977545	1	26	-7.11e-3	-2.92e-3	12/21/2022@12:19:46 AM		
L1569103-04 WG1977545	1	27	-6.45e-3	-1.22e-3	12/21/2022@12:20:32 AM		
L1569393-01 WG1977545	1	28	-4.41e-3	4.11e-3	12/21/2022@12:21:19 AM		

Channel 1 - Current View

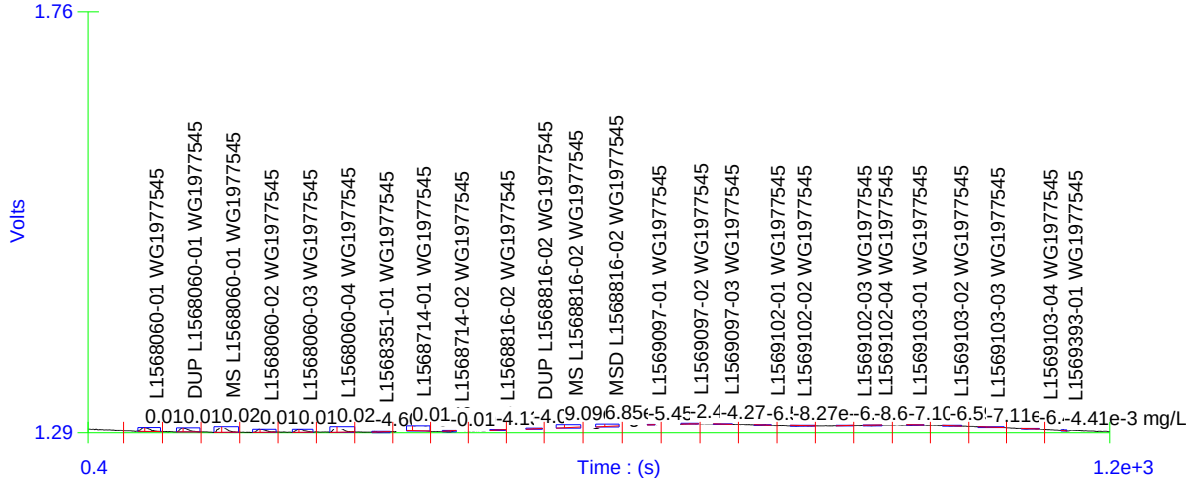
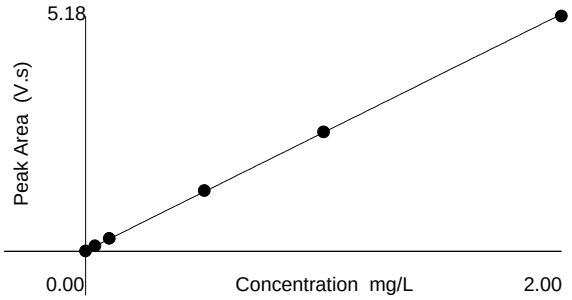


Table : 1 (PHENOL)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	2.00	1	5.18	0.456	0.0	0.8	1.98	12/20/2022	5:49:05 PM
2	1.00	1	2.63	0.234	0.0	-0.4	1.00	12/20/2022	5:49:53 PM
3	0.500	1	1.34	0.119	0.0	-1.8	0.509	12/20/2022	5:50:42 PM
4	0.100	1	0.284	0.0252	0.0	-2.9	0.103	12/20/2022	5:51:31 PM
5	0.0400	1	0.121	0.0106	0.0	-1.4	0.0406	12/20/2022	5:52:19 PM
6	0.00	1	9.35e-3	8.15e-4			-2.39e-3	12/20/2022	5:53:06 PM

Figure : 1 (PHENOL)



Area = 2.60 * Conc + 0.0156
Conc = 0.384 * Area - 5.99e-3
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

PHT Waters WetChem Prep Benchsheet

Batch: WG1977545

Analyst: CAT3538 **Analyst 2:** LDT1016 **Analyst 3:** NA___ **Prep Start Date/Time:** 12/20/22 18:20 **Prep End Date/Time:** 12/20/22 21:53 **SOP:** MTJL-0166
Method: 4AAP **ICV True Value:** 1.0 ppm **LCS True Value:** 0.5 ppm **MS/D True Value:** 1.0 ppm **pH Probe SN:** XV1-15243 **Boiling Chips Lot#:** 26719567
Boston Round Bottom Bottle Lot#: O-2-297-06DB **1mL Pipette Lot# Prep/Lachat:** NA **2mL Pipette Lot# Prep/Lachat:** NA **5mL Pipette Lot# Prep/Lachat:** NA
10mL Pipette Lot# Prep/Lachat: NA **Dilution Tube Lot#:** 2188025 **Culture Tube Lot#:** 22314299

ICV Standard: 22L20185 Amt. Used: 5 mL Exp. Date:12/21/22 **LCS/D Standard:** 22L08746 Amt. Used: 2.50 mL Exp. Date:01/08/23
MS/D Standard: 22L08746 Amt. Used: 5 mL Exp. Date:01/08/23 **1:9 NaOH:** 22L12999 Amt. Used: 1 N/A Exp. Date:06/12/23
1:9 H2SO4: 22I06475 Amt. Used: 1 N/A Exp. Date:03/01/23 **Phenol Buffer:** 22L20186 Amt. Used: 1 Exp. Date:12/27/22 **4 AAP:** 22L20187 Amt. Used: 1 Exp. Date:12/21/22

Sample Number	Matrix	Initial Sample Vol (mL)	Final Volume (mL)	Dilution Factor	Initial pH	Adjusted pH	Sulfide Test/Treat	Chloroform Cleanup	Review Analyst	Review Date
BLANK		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
LCS		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
DUP(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568060-01)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MS(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
MSD(L1568816-02)		50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
1. L1568060-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
2. L1568060-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
3. L1568060-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
4. L1568060-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
5. L1568351-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
6. L1568714-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
7. L1568714-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
8. L1568816-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
9. L1569097-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
10. L1569097-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
11. L1569097-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
12. L1569102-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
13. L1569102-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
14. L1569102-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
15. L1569102-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
16. L1569103-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
17. L1569103-02	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
18. L1569103-03	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
19. L1569103-04	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10
20. L1569393-01	WW	50	50	1	<2	3.5-4.5	Tested Negative	No	CAT3538	12/20/22 22:54:10

Comments:

Reviewed By:CAT3538 on 12/20/22 22:54:10

6010B Metals (ICP)

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-103-1222

Lab Sample ID:	L1569103-01	**SDG:**	L1569103
Client Sample ID:	LF1MW-103-1222	**Collected Date/Time:**	12/07/22 10:15
Lab File ID:	20221221165331	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:53
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	223		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
MWSAR03-1222

Lab Sample ID:	L1569103-02	**SDG:**	L1569103
Client Sample ID:	MWSAR03-1222	**Collected Date/Time:**	12/07/22 09:20
Lab File ID:	20221221165630	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:56
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	100	U	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1P-5-1222

Lab Sample ID:	L1569103-03	**SDG:**	L1569103
Client Sample ID:	LF1P-5-1222	**Collected Date/Time:**	12/07/22 15:00
Lab File ID:	20221221165919	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 16:59
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	53.5	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
LF1MW-11-1222

Lab Sample ID:	L1569103-04	**SDG:**	L1569103
Client Sample ID:	LF1MW-11-1222	**Collected Date/Time:**	12/07/22 13:30
Lab File ID:	20221221170209	**Received Date/Time:**	12/19/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 17:02
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	50.4	J	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874405-1

Lab Sample ID:	R3874405-1	**SDG:**	L1569103
Client Sample ID:	BLANK	**Collected Date/Time:**	_____
Lab File ID:	20221221122757	**Received Date/Time:**	_____
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:27
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	100	U	39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

SAMPLE NO.:
R3874405-2

Lab Sample ID:	R3874405-2	**SDG:**	L1569103
Client Sample ID:	LCS	**Collected Date/Time:**	_____
Lab File ID:	20221221123038	**Received Date/Time:**	_____
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:07
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:30
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	995		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-4	**SDG:**	L1569103
Client Sample ID:	MS	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123902	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:39
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	1100		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-5	**SDG:**	L1569103
Client Sample ID:	MSD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221124142	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:41
Dilution Factor:	1	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	1090		39.6	100	200

SAMPLE RESULT SUMMARY
INORGANIC ANALYSIS DATA SHEET

Lab Sample ID:	R3874405-3	**SDG:**	L1569103
Client Sample ID:	SD	**Collected Date/Time:**	12/13/22 16:00
Lab File ID:	20221221123623	**Received Date/Time:**	12/17/22 09:30
Instrument ID:	ICP12	**Preparation Date/Time:**	12/20/22 12:08
Analytical Batch:	WG1977039	**Analysis Date/Time:**	12/21/22 12:36
Dilution Factor:	5	**Prep Method:**	3015
Analytical Method:	6010B	**Sample Vol Used:**	_____
Matrix:	WW	**Initial Wt/Vol:**	45 mL
Total Solids (%):	_____	**Final Wt/Vol:**	50 mL

Analyte	CAS	Result	Qualifier	DL	LOD	LOQ
		ug/l		*ug/l*	*ug/l*	*ug/l*
Boron	7440-42-8	500	U	198	500	1000

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		ICV				ICVLL				CCV		
Sample ID:		ICP121221220742-4				ICP121221220754-4				ICP121221221206-2		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ALUMINUM	10	10.05186	101	0.514000	0.20	0.1845648	92.30	11.100000	10	9.577537	95.80	0.515000
ANTIMONY	1	0.9960454	99.60	0.645000	0.01	0.009337054	93.40	22.900000	0.50	0.4855727	97.10	0.434000
ARSENIC	1	0.9723032	97.20	0.553000	0.01	0.0106215	106	55.600000	1	0.9897952	99	1.010000
BARIUM	1	1.052822	105	0.081400	0.0050	0.005320797	106	2.560000	0.50	0.4868149	97.40	0.140000
BERYLLIUM	1	1.021935	102	0.333000	0.0020	0.002056829	103	5.690000	0.20	0.1909941	95.50	0.130000
BORON	1	1.01944	102	1.350000	0.20	0.1944241	97.20	0.704000	1	0.9739401	97.40	1.370000
CADMIUM	1	1.009893	101	0.059900	0.0020	0.001787744	89.40	3.640000	0.50	0.4923716	98.50	0.165000
CALCIUM	10	10.30622	103	0.253000	1	1.032567	103	0.345000	50	47.64138	95.30	0.239000
CHROMIUM	1	1.033506	103	0.140000	0.01	0.0100463	100	10.600000	1	0.9523054	95.20	0.310000
COBALT	1	0.9991938	99.90	0.220000	0.01	0.009582107	95.80	4.650000	1	1.007284	101	0.064900
COPPER	1	0.97838	97.80	0.384000	0.01	0.009230531	92.30	2.150000	1	0.9837333	98.40	0.656000
IRON	10	10.19833	102	0.270000	0.10	0.1021181	102	3.510000	10	9.442874	94.40	0.279000
LEAD	1	0.9872088	98.70	0.189000	0.0050	0.005849239	117	3.860000	0.50	0.4797487	95.90	0.713000
LITHIUM	1	1.001798	100	0.317000	0.0150	0.01672401	111	2.680000	1	0.9673145	96.70	0.187000
MAGNESIUM	10	10.37656	104	0.517000	1	1.046796	105	2.140000	10	9.366088	93.70	0.406000
MANGANESE	1	1.002514	100	0.072100	0.01	0.010047	100	0.886000	1	0.9648395	96.50	0.010300
MOLYBDENUM	1	1.053065	105	0.027200	0.0050	0.004956663	99.10	16.200000	0.25	0.2489417	99.60	0.247000
NICKEL	1	0.9949065	99.50	0.120000	0.01	0.008770566	87.70	8.380000	1	0.9731254	97.30	0.148000
POTASSIUM	10	9.961941	99.60	0.395000	1	0.9747049	97.50	5.570000	50	47.88169	95.80	0.193000
SELENIUM	1	0.9944692	99.40	1.330000	0.01	0.009077159	90.80	102.000000	1	0.9925096	99.30	1.290000
SILVER	1	0.974273	97.40	0.324000	0.0050	0.004790917	95.80	10.400000	0.50	0.4727638	94.60	0.804000
SODIUM	10	10.39621	104	0.275000	1	1.039443	104	0.401000	50	49.89676	99.80	0.495000
STRONTIUM	0.40	0.4088517	102	0.159000	0.01	0.01006792	101	0.621000	1	0.9708627	97.10	0.126000
SULFUR	10	9.662365	96.60	0.243000					5	4.859612	97.20	0.237000
THALLIUM	1	0.9502247	95	0.423000	0.01	0.009679168	96.80	7.820000	1	0.9592878	95.90	0.466000
TIN	1	1.001051	100	0.203000	0.05	0.04827819	96.60	3.360000	0.50	0.4792973	95.90	0.977000
TITANIUM	1	1.03827	104	0.256000	0.05	0.05167392	103	1.140000	1	0.9818476	98.20	0.303000
VANADIUM	1	1.028365	103	0.283000	0.02	0.02161356	108	10.700000	1	0.9763013	97.60	0.285000
ZINC	1	1.003316	100	0.242000	0.05	0.04960047	99.20	1.140000	1	0.9625499	96.30	0.370000
SILICON					0.20	0.1951691	97.60	2.000000	2	1.997364	99.90	0.599000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12
Concentration Units:	mg/l		

		CCVLL				CCV				CCVLL		
Sample ID:		ICP121221221215-4				ICP121221221310				ICP121221221352		
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
ALUMINUM	0.20	0.2115215	106	12.600000	10	8.800375	88	0.494000	0.20	0.170979	85.50	7.730000
ANTIMONY	0.01	0.01053904	105	11.000000	0.50	0.4733177	94.70	0.546000	0.01	0.009147656	91.50	25.700000
ARSENIC	0.01	0.0129778	130	10.500000	1	0.9428702	94.30	0.296000	0.01	0.008884161	88.80	73.600000
BARIUM	0.0050	0.004955586	99.10	3.590000	0.50	0.5384205	108	0.125000	0.0050	0.005566838	111	1.510000
BERYLLIUM	0.0020	0.001852272	92.60	2.130000	0.20	0.2142798	107	0.131000	0.0020	0.001902164	95.10	4.390000
BORON	0.20	0.2043356	102	2.390000	1	1.003654	100	0.355000	0.20	0.1991745	99.60	3.460000
CADMIUM	0.0020	0.001789455	89.50	1.700000	0.50	0.5152143	103	0.153000	0.0020	0.002231624	112	12.800000
CALCIUM	1	1.018913	102	0.652000	50	46.58329	93.20	0.238000	1	1.00982	101	0.470000
CHROMIUM	0.01	0.009486311	94.90	7.980000	1	1.166994	117	0.265000	0.01	0.01142228	114	2.430000
COBALT	0.01	0.009748212	97.50	1.810000	1	0.8934903	89.30	0.129000	0.01	0.008438512	84.40	4.860000
COPPER	0.01	0.009886619	98.90	1.380000	1	0.9139063	91.40	0.088900	0.01	0.007569244	75.70	5.190000
IRON	0.10	0.09593639	95.90	2.080000	10	9.698075	97	0.078800	0.10	0.09649778	96.50	2.090000
LEAD	0.0050	0.004364176	87.30	15.300000	0.50	0.4609681	92.20	0.782000	0.0050	0.004074546	81.50	48.800000
LITHIUM	0.0150	0.01477795	98.50	7.070000	1	0.9732415	97.30	0.207000	0.0150	0.01474512	98.30	6.800000
MAGNESIUM	1	1.01546	102	3.410000	10	10.13876	101	0.941000	1	1.111054	111	2.420000
MANGANESE	0.01	0.01022502	102	0.366000	1	0.9395127	94	0.298000	0.01	0.009577558	95.80	0.401000
MOLYBDENUM	0.0050	0.005176071	104	16.100000	0.25	0.2468818	98.80	0.427000	0.0050	0.004469848	89.40	12.000000
NICKEL	0.01	0.008862891	88.60	5.930000	1	0.9678857	96.80	0.203000	0.01	0.008341399	83.40	2.290000
POTASSIUM	1	1.022049	102	1.320000	50	45.83503	91.70	0.328000	1	0.987042	98.70	4.250000
SELENIUM	0.01	0.01199042	120	87.500000	1	0.9707179	97.10	0.442000	0.01	0.006699433	67	81.500000
SILVER	0.0050	0.004809125	96.20	4.860000	0.50	0.4927417	98.50	0.260000	0.0050	0.004988469	99.80	4.090000
SODIUM	1	1.038979	104	0.117000	50	48.42654	96.90	0.415000	1	1.188741	119	1.520000
STRONTIUM	0.01	0.01028116	103	2.710000	1	0.973087	97.30	0.187000	0.01	0.009876679	98.80	1.050000
SULFUR	1	0.9408861	94.10	2.880000	5	5.098068	102	0.258000	1	0.9787183	97.90	0.362000
THALLIUM	0.01	0.01087085	109	4.850000	1	0.8510496	85.10	0.992000	0.01	0.01000455	100	17.700000
TIN	0.05	0.0452759	90.60	4.390000	0.50	0.4740371	94.80	0.075000	0.05	0.04775842	95.50	1.740000
TITANIUM	0.05	0.05086363	102	1.770000	1	1.084082	108	0.205000	0.05	0.0527097	105	3.210000
VANADIUM	0.02	0.02290614	115	15.500000	1	0.9649485	96.50	0.674000	0.02	0.01774577	88.70	30.000000
ZINC	0.05	0.04963709	99.30	1.330000	1	0.9651804	96.50	0.227000	0.05	0.04709614	94.20	0.545000
SILICON	0.20	0.1825717	91.30	2.030000	2	11.07382	554	1.480000	0.20	0.2115339	106	0.486000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110 CCVLL Limits: 50 - 150

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

		ICV				ICVLL				CCV			
Sample ID:		ICP121221221453				ICP121221221505				ICP121221221636			
Analyte	True	Found	%R	%RSD	True	Found	%R	%RSD	True	Found	%R	%RSD
BORON	1	1.00483	100	1.390000	0.20	0.2075596	104	3.480000	1	1.000977	100	0.897000

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ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110

CALIBRATION VERIFICATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A
Concentration Units:	mg/l		

CCV

Sample ID: ICP121221221708

Analyte	True	Found	%R	%RSD
BORON	1	0.9835635	98.40	0.620000

ICV Limits: 90 - 110 ICVLL Limits: 80 - 120 CCV Limits: 90 - 110

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**	**BLANK Result**	**BLANK Qual**
File ID:	20221221074532-4		20221221121147-2		20221221131309		20221221122757	
Analyte	mg/l		mg/l		mg/l		mg/l	
ALUMINUM	0.01256452	U	0.02204619	U	0.03086471	U		
ANTIMONY	0.002935144	U	0.006617721	U	0.005869794	U	0.00800	U
ARSENIC	0.003135647	U	0.002196712	U	0.004998391	U	0.0150	U
BARIUM	0.0001373962	U	-0.0002021574	U	0.00006432606	U	0.00250	U
BERYLLIUM	0.0001932934	U	0.00001929486	U	-0.0001014757	U	0.00100	U
BORON	0.001222208	U	0.008527657	U	0.00800933	U	0.100	U
CADMIUM	0.0001260785	U	-0.0002217012	U	0.0000711254	U	0.00150	U
CALCIUM	0.01083118	U	0.007129001	U	-0.01578262	U	0.500	U
CERIUM	-0.08471123	U	-0.01444593	U	-0.1695369	U		
CHROMIUM	-0.0002271952	U	-0.0005017209	U	-0.0001987164	U	0.00500	U
COBALT	0.00003773174	U	0.00003017309	U	0.00006404019	U		
COPPER	-0.00002173473	U	0.0003265531	U	-0.0002981385	U	0.00500	U
IRON	0.004705932	U	-0.002033524	U	0.001125606	U	0.0500	U
LANTHANUM	0.001610553	U	-0.003566589	U	0.0004959268	U		
LEAD	-0.001301039	U	-0.0006383862	U	0.0002140478	U	0.00500	U
LITHIUM	-0.000589034	U	0.001072928	U	-0.0002199647	U	0.0150	U
MAGNESIUM	-0.009591802	U	0.007221284	U	0.02271032	U	0.500	U
MANGANESE	0.0001469361	U	0.0003762973	U	0.0001638364	U	0.00500	U
MOLYBDENUM	0.000742386	U	0.0005546197	U	0.00001948343	U	0.00250	U
NICKEL	-0.0003833317	U	-0.0006608967	U	-0.0007257722	U	0.00500	U
PHOSPHORUS	-0.006297248	U	0.0158104	U	0.005604064	U	0.0236	J
POTASSIUM	0.03741812	U	0.01946185	U	0.0310629	U	0.750	U
SELENIUM	0.0003824342	U	0.003848897	U	0.007609522	U	0.0150	U
SILICON	0.002976063	U	-0.001870234	U	0.7898527			
SILVER	0.0002084773	U	0.00006735879	U	0.00001436192	U	0.00400	U
SODIUM	0.01645508	U	0.02840763	U	0.07482177	U	1.00	U
STRONTIUM	0.00008038368	U	-0.000001392219	U	0.000195064	U	0.00500	U
SULFUR	0.005602463	U	0.01333492	U	0.02556863	U	0.500	U
THALLIUM	0.001617738	U	0.0002043577	U	-0.00183345	U		
TIN	0.004905356	U	0.001016236	U	0.00187766	U	0.00501	J
TITANIUM	0.0007833726	U	0.0004517507	U	0.0002788523	U	0.0250	U
VANADIUM	-0.0009303696	U	0.003576155	U	0.004095899	U	0.0150	U
ZINC	0.000383355	U	-0.000535216	U	0.0001501265	U	0.0250	U

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

	Sample ID:	**ICB Result**	**ICB Qual**	**CCB Result**	**CCB Qual**	**CCB Result**	**CCB Qual**
	File ID:	20221221145637		20221221163910		20221221171059	
Analyte		mg/l		mg/l		mg/l	
BORON		0.008450084	U	0.0121901	U	0.0137859	U

4-IN

INTERFERENCE CHECK SAMPLE

SDG:	L1569103	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Date:**	12/21/22 07:57
Instrument Run:	122122ICP12		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	496.0188	99.20	500	493.5611	98.70
ANTIMONY	0	-0.01797631		0.50	0.4814869	96.30
ARSENIC	0	-0.0149897		0.50	0.5051793	101
BARIUM	0	0.002870845		0.50	0.5034654	101
BERYLLIUM	0	-0.0001290747		0.50	0.4968421	99.40
BORON	0	-0.004355311		1	0.989256	98.90
CADMIUM	0	0.0003668836		1	1.054962	105
CALCIUM	500	499.553	99.90	500	498.8179	99.80
CERIUM	0	1.383347		0	1.354173	
CHROMIUM	0	0.002717674		0.50	0.4929103	98.60
COBALT	0	0.002440233		0.50	0.4834393	96.70
COPPER	0	-0.007352967		0.50	0.5062709	101
IRON	200	196.2211	98.10	200	197.633	98.80
LANTHANUM	0	0.005752144		0	0.001254382	
LEAD	0	-0.03528731		1	0.9119994	91.20
LITHIUM	0	0.004396194		0	0.00498092	
MAGNESIUM	500	506.0213	101	500	507.4545	101
MANGANESE	0	0.007018834		0.50	0.4795318	95.90
MOLYBDENUM	0	0.002874691		0.50	0.4918267	98.40
NICKEL	0	0.008590876		1	0.9696703	97
PHOSPHORUS	0	0.007986995		0	0.005996953	
POTASSIUM	0	-0.09545332		0	-0.06385567	
SELENIUM	0	0.03906392		0.50	0.5129875	103
SILICON	0	-0.01017802		1	0.9591665	95.90
SILVER	0	-0.002561309		1	1.081038	108
SODIUM	0	0.04314867		0	0.05309935	
STRONTIUM	0	0.003992856		0	0.004048319	
SULFUR	0	-0.006634471		0	-0.01021863	
THALLIUM	0	0.004685809		0.50	0.4492684	89.90
TIN	0	-0.01770268		0.50	0.4757444	95.10
TITANIUM	0	0.04633869		0.50	0.5491807	110
VANADIUM	0	0.01103393		0.50	0.4925627	98.50
ZINC	0	0.006737381		1	0.9095777	91

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569103 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 12:19
Instrument Run: 122122ICP12

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	497.393	99.50	500	498.4053	99.70
ANTIMONY	0	-0.01675715		0.50	0.4825586	96.50
ARSENIC	0	-0.007166553		0.50	0.5068293	101
BARIUM	0	0.00269241		0.50	0.5027348	101
BERYLLIUM	0	-0.00003177329		0.50	0.4917959	98.40
BORON	0	-0.004229812		1	0.980087	98
CADMIUM	0	0.0002820603		1	1.056943	106
CALCIUM	500	499.957	100	500	501.5403	100
CERIUM	0	1.469064		0	1.442261	
CHROMIUM	0	0.001584513		0.50	0.4890966	97.80
COBALT	0	0.002046801		0.50	0.4868684	97.40
COPPER	0	-0.007001141		0.50	0.5121583	102
IRON	200	197.1944	98.60	200	196.187	98.10
LANTHANUM	0	0.005082386		0	-0.0009565712	
LEAD	0	-0.03475505		1	0.9085203	90.90
LITHIUM	0	0.00462316		0	0.00364804	
MAGNESIUM	500	493.4555	98.70	500	494.7418	98.90
MANGANESE	0	0.006962439		0.50	0.4804433	96.10
MOLYBDENUM	0	0.003122196		0.50	0.4922481	98.40
NICKEL	0	0.008411421		1	0.9610605	96.10
PHOSPHORUS	0	0.02642022		0	0.02325781	
POTASSIUM	0	-0.08691291		0	-0.03696935	
SELENIUM	0	0.0142028		0.50	0.525842	105
SILICON	0	-0.01477816		1	0.9526756	95.30
SILVER	0	-0.00265116		1	1.079485	108
SODIUM	0	0.09313466		0	0.1050921	
STRONTIUM	0	0.004115603		0	0.004035046	
SULFUR	0	0.01611913		0	-0.007014852	
THALLIUM	0	0.001042301		0.50	0.4516081	90.30
TIN	0	-0.01433857		0.50	0.4687267	93.70
TITANIUM	0	0.04631129		0.50	0.5441921	109
VANADIUM	0	0.01126934		0.50	0.4888171	97.80
ZINC	0	0.006332094		1	0.8981165	89.80

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG:	L1569103	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Date:**	12/21/22 14:03
Instrument Run:	122122ICP12		

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	447.5229	89.50	500	449.8942	90
ANTIMONY	0	-0.01979124		0.50	0.4645102	92.90
ARSENIC	0	-0.007079457		0.50	0.4780252	95.60
BARIUM	0	0.002661461		0.50	0.5374223	107
BERYLLIUM	0	-0.0001338899		0.50	0.5322755	106
BORON	0	-0.007934736		1	0.993912	99.40
CADMIUM	0	0.00005664602		1	1.091943	109
CALCIUM	500	478.8285	95.80	500	481.2127	96.20
CERIUM	0	1.045592		0	1.020877	
CHROMIUM	0	0.002217701		0.50	0.5667219	113
COBALT	0	0.001767247		0.50	0.4371816	87.40
COPPER	0	-0.008971547		0.50	0.4598552	92
IRON	200	173.0997	86.50	200	174.0803	87
LANTHANUM	0	-0.001953075		0	-0.00366662	
LEAD	0	-0.02778499		1	0.8893959	88.90
LITHIUM	0	0.004407643		0	0.003988314	
MAGNESIUM	500	523.0361	105	500	525.2149	105
MANGANESE	0	0.006621792		0.50	0.4619115	92.40
MOLYBDENUM	0	0.003423849		0.50	0.4768336	95.40
NICKEL	0	0.007869465		1	0.9565932	95.70
PHOSPHORUS	0	0.01467631		0	0.007984275	
POTASSIUM	0	-0.08248467		0	-0.06213313	
SELENIUM	0	0.01604919		0.50	0.5293053	106
SILICON	0	-0.008355635		1	1.027153	103
SILVER	0	-0.003100588		1	1.099756	110
SODIUM	0	0.0915777		0	0.09939959	
STRONTIUM	0	0.003901342		0	0.003882632	
SULFUR	0	0.006926354		0	0.003972924	
THALLIUM	0	0.001566821		0.50	0.4227679	84.60
TIN	0	-0.01111817		0.50	0.4664242	93.30
TITANIUM	0	0.04241494		0.50	0.5721901	114
VANADIUM	0	0.00876257		0.50	0.4816739	96.30
ZINC	0	0.004357425		1	0.8949121	89.50

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569103 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 15:07
Instrument Run: 122122ICP12A

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	512.2707	102	500	511.1245	102
ANTIMONY	0	-0.01927159		0.50	0.484509	96.90
ARSENIC	0	-0.003988608		0.50	0.5283322	106
BARIUM	0	0.002770571		0.50	0.5153191	103
BERYLLIUM	0	-0.00005485471		0.50	0.5105242	102
BORON	0	-0.01308163		1	1.015858	102
CADMIUM	0	0.0000893872		1	1.080634	108
CALCIUM	500	512.7862	103	500	513.5476	103
CERIUM	0	1.262536		0	1.230125	
CHROMIUM	0	0.001795381		0.50	0.5050518	101
COBALT	0	0.001449602		0.50	0.4940633	98.80
COPPER	0	-0.008350145		0.50	0.5186385	104
IRON	200	205.0335	103	200	202.7427	101
LANTHANUM	0	0.00630958		0	0.001112305	
LEAD	0	-0.03199152		1	0.9355537	93.60
LITHIUM	0	0.004295885		0	0.004748324	
MAGNESIUM	500	514.0516	103	500	515.2499	103
MANGANESE	0	0.007147605		0.50	0.4889786	97.80
MOLYBDENUM	0	0.002846725		0.50	0.5037329	101
NICKEL	0	0.009533711		1	0.9886577	98.90
PHOSPHORUS	0	0.006900232		0	-0.0007537725	
POTASSIUM	0	-0.09269025		0	-0.1184173	
SELENIUM	0	0.01678457		0.50	0.5369599	107
SILICON	0	-0.007289969		1	1.007524	101
SILVER	0	-0.002859133		1	1.11035	111
SODIUM	0	0.08138529		0	0.07579857	
STRONTIUM	0	0.003902692		0	0.003943274	
SULFUR	0	0.007773493		0	0.004430237	
THALLIUM	0	0.01316823		0.50	0.4564653	91.30
TIN	0	-0.0172368		0.50	0.4791161	95.80
TITANIUM	0	0.04382336		0.50	0.5561113	111
VANADIUM	0	0.006927908		0.50	0.504204	101
ZINC	0	0.006035356		1	0.9324326	93.20

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

INTERFERENCE CHECK SAMPLE

SDG: L1569103 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 12/21/22 21:01
Instrument Run: 122122ICP12A

Analyte	True	Found		True	Found	
	ICSA	*ICSA*	*ICSA*	*ICSAB*	*ICSAB*	*ICSAB*
	mg/l	*mg/l*	*% Rec.*	*mg/l*	*mg/l*	*% Rec.*
ALUMINUM	500	509.6162	102	500	504.9319	101
ANTIMONY	0	-0.02065904		0.50	0.4944281	98.90
ARSENIC	0	-0.01112909		0.50	0.531053	106
BARIUM	0	0.003215737		0.50	0.5120202	102
BERYLLIUM	0	0.00003077524		0.50	0.5021319	100
BORON	0	0.0005651068		1	1.006747	101
CADMIUM	0	0.0002916792		1	1.079339	108
CALCIUM	500	509.8533	102	500	507.3146	101
CERIUM	0	1.277034		0	1.314824	
CHROMIUM	0	0.002569653		0.50	0.4916647	98.30
COBALT	0	0.002140057		0.50	0.504767	101
COPPER	0	-0.00836749		0.50	0.5468705	109
IRON	200	206.6061	103	200	204.9131	102
LANTHANUM	0	-0.002631285		0	0.001654214	
LEAD	0	-0.03441945		1	0.9388549	93.90
LITHIUM	0	0.004680751		0	0.004200672	
MAGNESIUM	500	503.9956	101	500	505.4639	101
MANGANESE	0	0.007435013		0.50	0.5010861	100
MOLYBDENUM	0	0.002468243		0.50	0.5073654	101
NICKEL	0	0.009263391		1	0.9977673	99.80
PHOSPHORUS	0	0.001399703		0	0.02300174	
POTASSIUM	0	-0.04290559		0	-0.07333462	
SELENIUM	0	0.03591814		0.50	0.5147988	103
SILICON	0	-0.00409259		1	1.006424	101
SILVER	0	-0.002670794		1	1.133243	113
SODIUM	0	0.1596254		0	0.1305163	
STRONTIUM	0	0.004021616		0	0.003822841	
SULFUR	0	0.02476021		0	0.009842477	
THALLIUM	0	0.005752626		0.50	0.4791567	95.80
TIN	0	-0.01435184		0.50	0.4822263	96.40
TITANIUM	0	0.04475566		0.50	0.5527	111
VANADIUM	0	0.006204478		0.50	0.5019138	100
ZINC	0	0.006581174		1	0.9258762	92.60

ICSA Limits: 80 - 120 ICSAB Limits: 80 - 120

5A-IN

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874405-4
R3874405-5

MS Sample / File ID:	R3874405-4 / 20221221123902	**SDG:**	L1569103
MSD Sample / File ID:	R3874405-5 / 20221221124142	**Analytical Batch:**	WG1977039
OS Sample / File ID:	L1568841-01 / 20221221123329	**Matrix:**	WW
Instrument ID:	ICP12		
Analytical Method:	6010B		

Analyte	Spike Amount	OS Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*	*ug/l*	*ug/l*	*%*	*%*		*%*	*%*	*%*
Boron	1000	91.3	1100	1090	101	99.6	1	85.0 - 113	1.37	20

5

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

LABORATORY CONTROL SAMPLE
LABORATORY CONTROL SAMPLE DUPLICATE
RECOVERY

L1569103-01,02,03,04

SAMPLE NO.:
R3874405-2

LCS Sample / File ID:	R3874405-2 / 20221221123038	**SDG:**	L1569103
LCSD Sample / File ID:	_____	**Analytical Batch:**	WG1977039
Instrument ID:	ICP12	**Dilution Factor:**	1
Analytical Method:	6010B	**Matrix:**	WW

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	RPD	RPD Limits
	ug/l	*ug/l*		*%*	*%*	*%*	*%*	*%*
Boron	1000	995		99.5		85.0 - 113		

*: Value outside the established quality control limits.

D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

SD Sample / File ID:	R3874405-3 / 20221221123623	**SDG:**	L1569103
OS Sample / File ID:	L1568841-01 / 20221221123329	**Analytical Batch:**	WG1977039
Lab File ID:	20221221123623	**Dilution Factor:**	5
Instrument ID:	ICP12	**Matrix:**	WW
Analytical Method:	6010B		

Analyte	OS Result	SD Result	RPD	RPD Limits
	ug/l	*ug/l*	*%*	*%*
Boron	91.3	500	0.000	10

*: Value outside the established quality control limits.
D: Surrogate recovery cannot be used for control limit evaluation due to dilution.

DETECTION LIMIT SUMMARY

Lab Sample IDs: L1569103-01,02,03,04 **Analytical Method:** 6010B
Matrix: WW **Prep Method:** 3015

Analyte	CAS	Wavelength	Mass	MDL	RDL
				mg/l	*mg/l*
Boron	7440-42-8	228.8020	249.6780	0.0396	0.20

INTERELEMENT CORRECTION FACTORS

SDG: L1569103 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	ARSENIC	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LANTHANUM
	nm	189.0420	317.9330	267.7160	228.6160	324.7540	259.94	333.7490
ALUMINUM	308.2150							
ANTIMONY	206.8330			-0.00010364				
ARSENIC	189.0420							-0.00520043
BARIUM	233.5270						-0.00011317	
BERYLLIUM	313.0420							
CADMIUM	228.8020	-0.25019590						
CHROMIUM	267.7160							
COBALT	228.6160							
IRON	271.4410				-0.00018664			
LEAD	220.3530					-0.00003085		-0.00013179
LITHIUM	670.7840		-0.00032182					
SELENIUM	196.09			-0.00001854				
THALLIUM	190.8560				-0.00026544			

INTERELEMENT CORRECTION FACTORS

SDG: L1569103 **Analytical Method:** 6010B
Instrument ID: ICP12 **Date:** 08/24/21 13:38

Analyte	Wavelength	MANGANESE	SILICON	TIN	TITANIUM	VANADIUM
	nm	257.61	251.6110	189.9890	334.9410	292.4020
ALUMINUM	308.2150					-0.00434031
ANTIMONY	206.8330			-0.00419814		
ARSENIC	189.0420					
BARIUM	233.5270					
BERYLLIUM	313.0420					-0.02889282
CADMIUM	228.8020					
CHROMIUM	267.7160	-0.00003148				
COBALT	228.6160				-0.00101627	
IRON	271.4410					
LEAD	220.3530		-0.00008881			
LITHIUM	670.7840					
SELENIUM	196.09					
THALLIUM	190.8560	-0.00000492				

LINEAR DYNAMIC RANGE

SDG:	L1569103	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Date:**	09/04/22 16:07

Analyte	LDR *ppm*
ALUMINUM	500
ANTIMONY	10
ARSENIC	50
BARIUM	50
BERYLLIUM	10
BORON	50
CADMIUM	10
CALCIUM	1000
CHROMIUM	50
COBALT	50
COPPER	50
IRON	500
LEAD	100
LITHIUM	10
MAGNESIUM	1000
MANGANESE	20
MOLYBDENUM	20
NICKEL	50
PHOSPHORUS	100
POTASSIUM	500
SELENIUM	10
SILICON	50
SILVER	10
SODIUM	1000
STRONTIUM	20
SULFUR	200
THALLIUM	10
TIN	50
TITANIUM	50
VANADIUM	20
ZINC	20

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 07:22
Analytical Run:	122122ICP12	**Calibration End Date:**	12/21/22 07:39

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221220719	20221221071946	12/21/22 07:19		
CAL	STD1	20221221072239	12/21/22 07:22		
CAL	STD2	20221221072523	12/21/22 07:25		
CAL	STD3	20221221072804	12/21/22 07:28		
CAL	STD4	20221221073041	12/21/22 07:30		
CAL	STD5	20221221073331	12/21/22 07:33		
CAL	STD6	20221221073622	12/21/22 07:36		
CAL	STD7	20221221073924	12/21/22 07:39		
ICV	ICP121221220742-4	20221221074239-4	12/21/22 07:42		
ICB	ICP121221220745-4	20221221074532-4	12/21/22 07:45		
ICVLL	ICP121221220754-4	20221221075402-4	12/21/22 07:54		
ICSA	ICP121221220757-4	20221221075701-4	12/21/22 07:57		
ICSAB	ICP121221220759-4	20221221075950-4	12/21/22 07:59		
CCV	ICP121221221206-2	20221221120616-2	12/21/22 12:06		
CCB	ICP121221221211-2	20221221121147-2	12/21/22 12:11		
CCVLL	ICP121221221215-4	20221221121514-4	12/21/22 12:15		
ICSA	ICP121221221219-4	20221221121915-4	12/21/22 12:19		
ICSAB	ICP121221221222-4	20221221122202-4	12/21/22 12:22		
BLANK	R3874405-1	20221221122757	12/21/22 12:27	1	WG1977039
LCS	R3874405-2	20221221123038	12/21/22 12:30	1	WG1977039
OS	L1568841-01	20221221123329	12/21/22 12:33		
SD	R3874405-3	20221221123623	12/21/22 12:36	5	WG1977039
MS	R3874405-4	20221221123902	12/21/22 12:39	1	WG1977039
MSD	R3874405-5	20221221124142	12/21/22 12:41	1	WG1977039
CCV	ICP121221221310	20221221131016	12/21/22 13:10		
CCB	ICP121221221313	20221221131309	12/21/22 13:13		
CCVLL	ICP121221221352	20221221135213	12/21/22 13:52		
ICSA	ICP121221221403	20221221140308	12/21/22 14:03		
ICSAB	ICP121221221405	20221221140546	12/21/22 14:05		

ANALYSIS LOG

SDG:	L1569103	**Analytical Method:**	6010B
Instrument ID:	ICP12	**Calibration Start Date:**	12/21/22 14:33
Analytical Run:	122122ICP12A	**Calibration End Date:**	12/21/22 14:50

Client Sample ID	Lab Sample ID	File ID	Analysis Date Time	Dilution	Batch
CALBLK	ICP121221221431	20221221143101	12/21/22 14:31		
CAL	STD1	20221221143355	12/21/22 14:33		
CAL	STD2	20221221143639	12/21/22 14:36		
CAL	STD3	20221221143919	12/21/22 14:39		
CAL	STD4	20221221144156	12/21/22 14:41		
ICV	ICP121221221453	20221221145344	12/21/22 14:53		
ICB	ICP121221221456	20221221145637	12/21/22 14:56		
ICVLL	ICP121221221505	20221221150506	12/21/22 15:05		
ICSA	ICP121221221507	20221221150758	12/21/22 15:07		
ICSAB	ICP121221221510	20221221151038	12/21/22 15:10		
CCV	ICP121221221636	20221221163616	12/21/22 16:36		
CCB	ICP121221221639	20221221163910	12/21/22 16:39		
L1569102-01	L1569102-01	20221221164201	12/21/22 16:42	1	WG1977039
L1569102-02	L1569102-02	20221221164453	12/21/22 16:44	1	WG1977039
L1569102-03	L1569102-03	20221221164745	12/21/22 16:47	1	WG1977039
L1569102-04	L1569102-04	20221221165038	12/21/22 16:50	1	WG1977039
LF1MW-103-1222	L1569103-01	20221221165331	12/21/22 16:53	1	WG1977039
MWSAR03-1222	L1569103-02	20221221165630	12/21/22 16:56	1	WG1977039
LF1P-5-1222	L1569103-03	20221221165919	12/21/22 16:59	1	WG1977039
LF1MW-11-1222	L1569103-04	20221221170209	12/21/22 17:02	1	WG1977039
CCV	ICP121221221708	20221221170806	12/21/22 17:08		
CCB	ICP121221221710	20221221171059	12/21/22 17:10		
ICSA	ICP121221222101	20221221210107	12/21/22 21:01		
ICSAB	ICP121221222103	20221221210346	12/21/22 21:03		

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	0.20	.2058662	103			
ANTIMONY	0.01	.008493116	84.90	0.50	.4783829	95.70
ARSENIC	0.01	.007669835	76.70	0.50	.4877345	97.50
BARIUM	0.0050	.005331806	107			
BERYLLIUM	0.0020	.00192823	96.40	0.50	.4967067	99.30
BORON	0.20	.2101587	105	0.50	.5069697	101
CADMIUM	0.0020	.001955234	97.80	0.50	.4932416	98.60
CALCIUM	1	1.047326	105			
CHROMIUM	0.01	.009474111	94.70	0.50	.5043192	101
COBALT	0.01	.009793008	97.90	0.50	.4881383	97.60
COPPER	0.01	.009628027	96.30	0.50	.4821489	96.40
IRON	0.10	.103358	103	0.50	.5030065	101
LEAD	0.0050	.005546309	111	0.50	.4877595	97.60
LITHIUM	0.0150	.01446996	96.50	0.50	.5018612	100
MAGNESIUM	1	1.017301	102			
MANGANESE	0.01	.010179	102	0.50	.5034201	101
MOLYBDENUM	0.0050	.005347813	107	0.50	.5042876	101
NICKEL	0.01	.009028118	90.30	0.50	.4877403	97.50
PHOSPHORUS	0.10	.1100857	110	0.50	.4970972	99.40
POTASSIUM	1	.9750794	97.50			
SELENIUM	0.01	.01321063	132	0.50	.4825757	96.50
SILVER	0.0050	.004580849	91.60	0.50	.4873494	97.50
SODIUM	1	1.012061	101			
STRONTIUM	0.01	.01017535	102	0.50	.4978757	99.60
SULFUR	1	.9349195	93.50	0.50	.4644717	92.90
THALLIUM	0.01	.01092909	109	0.50	.4691448	93.80
TIN	0.05	.04950913	99	0.50	.4877992	97.60
TITANIUM	0.05	.05097473	102	0.50	.5006087	100
VANADIUM	0.02	.02186006	109	0.50	.5002265	100
ZINC	0.05	.0507263	101	0.50	.4889605	97.80
CERIUM						
LANTHANUM						
File ID:		20221221072239			20221221072523	

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM						
ANTIMONY	1	.9975173	99.80	2	2.006653	100
ARSENIC	1	.9989621	99.90	2	2.003597	100
BARIUM	1	1.042425	104	2	2.041003	102
BERYLLIUM	1	1.014104	101	2	1.993772	99.70
BORON	1	1.002356	100	2	1.996064	99.80
CADMIUM	1	1.006444	101	2	1.998468	99.90
CALCIUM	1	1.12608	113	2	2.061943	103
CHROMIUM	1	1.024888	102	2	1.986479	99.30
COBALT	1	1.005852	101	2	2.00004	100
COPPER	1	1.000513	100	2	2.004208	100
IRON	1	1.037733	104	2	2.008484	100
LEAD	1	.9987229	99.90	2	2.003697	100
LITHIUM	1	1.023124	102	2	1.987977	99.40
MAGNESIUM						
MANGANESE	1	1.019415	102	2	1.989437	99.50
MOLYBDENUM	1	1.017384	102	2	1.990235	99.50
NICKEL	1	1.003966	100	2	2.001087	100
PHOSPHORUS	1	.9998475	100	2	2.000298	100
POTASSIUM				2	1.990587	99.50
SELENIUM	1	.9877166	98.80	2	2.010482	101
SILVER	1	.9920632	99.20	2	2.007132	100
SODIUM				2	2.016595	101
STRONTIUM	1	1.012539	101	2	1.994261	99.70
SULFUR	1	.9798781	98	2	1.975463	98.80
THALLIUM	1	.9812767	98.10	2	2.017071	101
TIN	1	.9955672	99.60	2	2.005279	100
TITANIUM	1	1.013466	101	2	1.99309	99.70
VANADIUM	1	1.016966	102	2	1.991442	99.60
ZINC	1	1.012313	101	2	1.996585	99.80
CERIUM						
LANTHANUM						
File ID:		20221221072804			20221221073041	

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	10	10.17038	102	250	249.2936	99.70
ANTIMONY						
ARSENIC						
BARIUM	10	9.987557	99.90			
BERYLLIUM						
BORON						
CADMIUM						
CALCIUM	10	9.970271	99.70			
CHROMIUM						
COBALT						
COPPER						
IRON	10	9.994346	99.90			
LEAD						
LITHIUM						
MAGNESIUM	10	10.12777	101	250	248.7185	99.50
MANGANESE						
MOLYBDENUM						
NICKEL						
PHOSPHORUS						
POTASSIUM	10	9.991351	99.90	50	49.80439	99.60
SELENIUM						
SILVER						
SODIUM	10	9.995475	100			
STRONTIUM						
SULFUR	10	10.0152	100			
THALLIUM						
TIN						
TITANIUM						
VANADIUM						
ZINC						
CERIUM				10	10	100
LANTHANUM				10	10	100
File ID:		20221221073331			20221221073622	

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc** mg/l	**Result** mg/l	**Rec.** %
ALUMINUM	500	500.3498	100
ANTIMONY			
ARSENIC			
BARIUM			
BERYLLIUM			
BORON			
CADMIUM			
CALCIUM			
CHROMIUM			
COBALT			
COPPER			
IRON			
LEAD			
LITHIUM			
MAGNESIUM	500	500.6382	100
MANGANESE			
MOLYBDENUM			
NICKEL			
PHOSPHORUS			
POTASSIUM	100	100.0991	100
SELENIUM			
SILVER			
SODIUM			
STRONTIUM			
SULFUR			
THALLIUM			
TIN			
TITANIUM			
VANADIUM			
ZINC			
CERIUM			
LANTHANUM			
File ID:		20221221073924	

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
CALCIUM	10	10.05101	101	250	254.0436	102
IRON	10	10.85819	109	100	101.7712	102
SODIUM	10	10.94069	109	250	250.3309	100
File ID:		20221221073331			20221221073622	

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%
CALCIUM	500	497.9772	99.60
IRON	200	199.0715	99.50
SODIUM	500	499.8157	100
File ID:		20221221073924	

15-IN

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	0.20	.2057409	103	0.50	.4993322	99.90
File ID:		20221221143355			20221221143639	

5

INITIAL CALIBRATION RECOVERY

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	**Std Conc**	**Result**	**Rec.**	**Std Conc**	**Result**	**Rec.**
	mg/l	mg/l	%	mg/l	mg/l	%
BORON	1	.9955635	99.60	2	2.001811	100
File ID:		20221221143919			20221221144156	

INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
ALUMINUM	308.215	8	5	0.999998	88.03993	5.768172
ANTIMONY	206.833	8	5	0.999908	251.9753	-1.009616
ARSENIC	189.042	8	5	0.99997	161.9075	-0.593147
BARIUM	233.527	8	5	0.999974	4211.225	2.514799
BERYLLIUM	313.042	8	5	0.999956	19930.57	15.63835
BORON	249.678	8	5	0.999966	217.1361	-0.208227
CADMIUM	228.802	8	5	0.999984	5533.433	3.798472
CALCIUM	317.933	8	5	0.999826	1016.916	166.9363
CERIUM	535.353	8	5	1	188.3328	77.05837
CHROMIUM	267.716	8	5	0.999852	6506.893	11.70505
COBALT	228.616	8	5	0.999969	4181.485	2.265231
COPPER	324.754	8	5	0.99994	18389.74	27.40229
IRON	259.94	8	5	0.99999	494.2889	1.982196
LANTHANUM	333.749	8	5	1	487.8872	1.537753
LEAD	220.353	8	5	0.999971	780.0746	0.960109
LITHIUM	670.784	8	5	0.999876	8818.818	-5.371576
MAGNESIUM	279.079	8	5	0.999995	62.59071	-2.348918
MANGANESE	257.61	8	5	0.99991	87826.11	-2.41838
MOLYBDENUM	202.03	8	5	0.999925	1508.868	1.57973
NICKEL	231.604	8	5	0.99997	2195.369	6.210312
PHOSPHORUS	177.495	8	5	0.999979	33.31491	-0.093625
POTASSIUM	766.49	8	5	0.999997	432.8093	-60.99083
SELENIUM	196.09	8	5	0.999898	85.95801	0.90995
SILVER	328.068	8	5	0.999951	19865.25	-23.96059
SODIUM	589.592	8	5	0.999997	905.5856	30.55158
STRONTIUM	421.552	8	5	0.999965	60262.04	-22.27544
SULFUR	182.034	8	5	0.999953	62.23442	0.00722
THALLIUM	190.856	8	5	0.999718	200.9821	0.91657
TIN	189.989	8	5	0.999964	340.9702	-1.72725
TITANIUM	334.941	8	5	0.999958	3062.938	-3.216909
VANADIUM	292.402	8	5	0.999934	627.4249	-0.99602
ZINC	206.2	8	5	0.999948	2901.838	1.756637

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16A-IN

INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 07:22
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 07:39
Analytical Method:	6010B	**Analytical Run:**	122122ICP12

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
CALCIUM	373.69	8	5	0.999939	583.9799	15.80206
IRON	271.441	8	5	0.999908	25.20861	0.624699
SODIUM	818.326	8	5	0.999997	56.59688	84.64878

5

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

16A-IN

INITIAL CALIBRATION

SDG:	L1569103	**Calibration (begin) date/time:**	12/21/22 14:33
Instrument ID:	ICP12	**Calibration (end) date/time:**	12/21/22 14:50
Analytical Method:	6010B	**Analytical Run:**	122122ICP12A

Analyte	Wavelength	Cal. Type	Weightage	Corr.	Slope	Incpt
BORON	249.678	8	5	0.999989	211.4439	-0.81833

5

Calibration Type

8 = Linear Regression Forced through Blank

Weightage

5 = None

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 07:19 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10469.53	10461.03	10465.50	10482.07
YTTRIUM	360.073	Axial	392984.7	393061.2	394247.4	391645.7
YTTRIUM	360.073	Radial	11192.16	11080.01	11200.37	11296.09
INDIUM	230.606	Axial	3214.320	3207.174	3213.437	3222.350

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	5.773297	4.261710	7.279164	5.779017
ANTIMONY	206.833	Axial	-1.00952	-0.6257480	-1.672421	-0.7303998
ARSENIC	189.042	Axial	-0.5926253	-1.240962	-0.7583531	0.2214394
BARIUM	233.527	Axial	2.514772	3.326311	1.531802	2.686203
BERYLLIUM	313.042	Radial	15.63836	14.04040	18.93513	13.93954
BORON	249.678	Radial	-0.2078598	0.08331945	-0.9978380	0.2909393
CADMIUM	228.802	Axial	3.796806	6.644928	3.333131	1.412359
CALCIUM	317.933	Radial	166.9254	166.6389	167.7615	166.3757
CALCIUM	373.690	Radial	15.81921	12.37294	17.25428	17.83042
CERIUM	535.353	Radial	77.09353	71.52975	75.62781	84.12303
CHROMIUM	267.716	Axial	11.70833	12.6250	4.291667	18.20833
COBALT	228.616	Axial	2.267367	0.2984983	3.300214	3.203389
COPPER	324.754	Axial	27.40278	23.83929	29.66071	28.70833
IRON	259.940	Radial	1.994970	-0.4999167	3.118244	3.366584
IRON	271.441	Radial	0.6243558	1.291451	-0.7899551	1.371571
LANTHANUM	333.749	Radial	1.538648	0.5832361	3.367703	0.6650042
LEAD	220.353	Axial	0.9583556	1.757353	1.492010	-0.3742962
LITHIUM	670.784	Radial	-5.40573	-3.749375	3.035091	-15.50291
MAGNESIUM	279.079	Radial	-2.34412	-3.291118	-1.829370	-1.911887
MANGANESE	257.610	Axial	-2.41666	-3.333333	-4.5	0.5833333
MOLYBDENUM	202.030	Axial	1.579528	1.008981	2.686203	1.043401
NICKEL	231.604	Axial	6.210185	5.732343	7.137307	5.760906
PHOSPHORUS	177.495	Axial	-0.09373890	0.01478360	-0.01480001	-0.2812003
POTASSIUM	766.490	Radial	-60.9857	-62.19797	-58.66456	-62.09476
SELENIUM	196.090	Axial	0.9096922	1.374875	0.8066008	0.5476005
SILICON	251.611	Axial	59.90816	55.19729	52.62949	71.89769
SILVER	328.068	Axial	-23.9583	-33.83333	-17.6250	-20.41667
SODIUM	589.592	Radial	30.46147	43.95101	30.93298	16.50042
SODIUM	818.326	Radial	84.65133	77.69538	97.74655	78.51205
STRONTIUM	421.552	Radial	-22.2952	-19.70505	-20.70514	-26.47548
SULFUR	182.034	Axial	0.007149758	0.6763499	-0.7104007	0.05550006
THALLIUM	190.856	Axial	0.9168762	0.9978544	0.4434855	1.309289
TIN	189.989	Axial	-1.72722	-1.818383	-1.587302	-1.776002
TITANIUM	334.941	Radial	-3.24219	0.9158679	-3.700536	-6.941913
VANADIUM	292.402	Radial	-0.9899691	-2.110759	-0.5543545	-0.3047936
ZINC	206.200	Axial	1.756525	2.638873	0.8436008	1.787102

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 07:22 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10538.10	10531.93	10523.44	10558.92
YTTRIUM	360.073	Axial	395384.9	394834.3	395161.7	396158.8
YTTRIUM	360.073	Radial	11341.67	11270.22	11359.37	11395.42
INDIUM	230.606	Axial	3208.679	3202.320	3208.781	3214.935

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	24.21796	21.87220	26.07166	24.71001
ANTIMONY	206.833	Axial	1.137594	0.7553347	1.648392	1.009055
ARSENIC	189.042	Axial	0.6529818	0.1801161	0.9425905	0.8362389
BARIUM	233.527	Axial	25.13242	24.98612	24.60361	25.80753
BERYLLIUM	313.042	Radial	54.79990	51.45831	57.25721	55.68418
BORON	249.678	Radial	46.03625	43.44753	49.75849	44.90271
CADMIUM	228.802	Axial	14.71313	16.03387	13.88687	14.21867
CALCIUM	317.933	Radial	1248.420	1245.593	1249.126	1250.540
CHROMIUM	267.716	Axial	73.83333	73.75000	73.0	74.750
COBALT	228.616	Axial	43.13790	43.40870	43.67908	42.32591
COPPER	324.754	Axial	205.7024	207.7976	209.0833	200.2262
IRON	259.940	Radial	53.78640	51.09762	55.87941	54.38217
LEAD	220.353	Axial	5.276382	6.074224	5.156983	4.597940
LITHIUM	670.784	Radial	123.8352	132.4214	123.6259	115.4582
MAGNESIUM	279.079	Radial	62.14581	61.61650	60.91772	63.90321
MANGANESE	257.610	Axial	897.4028	895.1250	897.7083	899.3750
MOLYBDENUM	202.030	Axial	9.712858	9.623710	9.058654	10.45621
NICKEL	231.604	Axial	25.98322	27.45033	25.14691	25.35243
PHOSPHORUS	177.495	Axial	3.597637	3.515004	3.333703	3.944204
POTASSIUM	766.490	Radial	365.8992	346.7487	383.9107	367.0381
SELENIUM	196.090	Axial	2.059160	2.656603	1.374875	2.146002
SILICON	251.611	Axial	748.8288	729.4261	749.2251	767.8352
SILVER	328.068	Axial	67.44444	70.41667	68.20833	63.70833
SODIUM	589.592	Radial	959.7060	955.4715	959.5686	964.0778
STRONTIUM	421.552	Radial	598.8050	596.9150	593.7292	605.7708
SULFUR	182.034	Axial	58.57163	59.60706	58.45437	57.65346
THALLIUM	190.856	Axial	3.108870	2.477059	2.496427	4.353124
TIN	189.989	Axial	15.12739	14.98501	15.20124	15.19592
TITANIUM	334.941	Radial	154.9482	155.7005	158.7238	150.4203
VANADIUM	292.402	Radial	12.88608	13.63712	13.18565	11.83547
ZINC	206.200	Axial	149.9314	149.2951	150.4380	150.0611

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 07:25 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10735.68	10745.63	10731.94	10729.47
YTTRIUM	360.073	Axial	402100.1	403170.7	401186.1	401943.4
YTTRIUM	360.073	Radial	11585.12	11591.46	11577.54	11586.36
INDIUM	230.606	Axial	3235.232	3243.203	3232.198	3230.295

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	122.5692	121.7595	122.7066	123.2416
ARSENIC	189.042	Axial	80.36750	81.33632	79.75269	80.01348
BERYLLIUM	313.042	Radial	10263.41	10249.62	10249.20	10291.42
BORON	249.678	Radial	113.7308	113.3905	113.4890	114.3130
CADMIUM	228.802	Axial	2802.600	2813.809	2796.140	2797.852
CHROMIUM	267.716	Axial	3376.971	3371.776	3386.028	3373.110
COBALT	228.616	Axial	2056.699	2059.650	2051.000	2059.447
COPPER	324.754	Axial	9100.248	9095.601	9106.544	9098.598
IRON	259.940	Radial	259.4120	259.6538	258.6436	259.9385
LEAD	220.353	Axial	383.9300	384.3630	384.3667	383.0605
LITHIUM	670.784	Radial	4575.647	4555.052	4587.683	4584.207
MANGANESE	257.610	Axial	45334.87	45300.26	45443.43	45260.92
MOLYBDENUM	202.030	Axial	781.8655	780.5904	783.0578	781.9483
NICKEL	231.604	Axial	1083.985	1085.240	1082.991	1083.724
PHOSPHORUS	177.495	Axial	16.88546	16.35778	16.84234	17.45627
SELENIUM	196.090	Axial	43.46883	43.54678	43.29302	43.56670
SILICON	251.611	Axial	2418.951	2316.989	2425.112	2514.751
SILVER	328.068	Axial	9881.282	9856.798	9898.820	9888.229
STRONTIUM	421.552	Radial	31033.34	30904.92	31023.77	31171.32
SULFUR	182.034	Axial	29.64824	29.35301	30.23411	29.35759
THALLIUM	190.856	Axial	95.82594	96.30956	95.30163	95.86661
TIN	189.989	Axial	165.6693	166.7739	164.7731	165.4610
TITANIUM	334.941	Radial	1583.839	1578.514	1582.731	1590.272
VANADIUM	292.402	Radial	323.8428	323.1525	324.4958	323.8800
ZINC	206.200	Axial	1456.756	1459.649	1456.186	1454.432

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 07:28 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10720.58	10723.02	10740.45	10698.26
YTTRIUM	360.073	Axial	399930.8	400677.3	400338.1	398776.9
YTTRIUM	360.073	Radial	11641.42	11667.69	11663.97	11592.60
INDIUM	230.606	Axial	3205.255	3208.943	3202.121	3204.702

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	256.3423	258.8167	254.9141	255.2959
ARSENIC	189.042	Axial	165.0111	166.8347	164.8709	163.3279
BARIUM	233.527	Axial	4497.715	4500.144	4499.456	4493.546
BERYLLIUM	313.042	Radial	21039.04	21060.66	21010.14	21046.33
BORON	249.678	Radial	226.1697	229.2324	224.9208	224.3558
CADMIUM	228.802	Axial	5706.502	5705.211	5705.804	5708.490
CALCIUM	317.933	Radial	1364.720	1365.675	1363.231	1365.254
CHROMIUM	267.716	Axial	6840.730	6846.416	6851.300	6824.475
COBALT	228.616	Axial	4196.356	4207.970	4194.898	4186.200
COPPER	324.754	Axial	18752.22	18760.59	18758.36	18737.71
IRON	259.940	Radial	535.5824	535.1803	533.9527	537.6143
LEAD	220.353	Axial	777.8383	778.0690	777.2107	778.2353
LITHIUM	670.784	Radial	9379.252	9389.641	9368.272	9379.842
MANGANESE	257.610	Axial	91675.33	91727.22	91622.46	91676.32
MOLYBDENUM	202.030	Axial	1573.527	1573.549	1577.751	1569.280
NICKEL	231.604	Axial	2204.052	2206.713	2207.594	2197.849
PHOSPHORUS	177.495	Axial	34.01272	33.52195	34.39547	34.12073
SELENIUM	196.090	Axial	87.86987	87.00026	88.64957	87.95978
SILICON	251.611	Axial	5397.882	5165.171	5381.813	5646.662
SILVER	328.068	Axial	20031.44	20061.24	19991.38	20041.69
STRONTIUM	421.552	Radial	63443.18	63394.58	63465.17	63469.78
SULFUR	182.034	Axial	62.45146	61.64429	62.79560	62.91449
THALLIUM	190.856	Axial	197.5762	197.1635	198.7078	196.8574
TIN	189.989	Axial	336.7794	338.2337	336.7381	335.3665
TITANIUM	334.941	Radial	3225.407	3234.863	3211.906	3229.451
VANADIUM	292.402	Radial	662.6456	665.5591	662.0841	660.2937
ZINC	206.200	Axial	3009.807	3019.538	3011.946	2997.937

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 07:30 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10773.65	10796.85	10769.18	10754.92
YTTRIUM	360.073	Axial	400221.9	399505.0	401673.5	399487.3
YTTRIUM	360.073	Radial	11669.14	11674.07	11673.95	11659.41
INDIUM	230.606	Axial	3180.259	3185.492	3182.496	3172.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	519.2767	521.4875	518.6743	517.6683
ARSENIC	189.042	Axial	333.2106	334.4175	333.0095	332.2050
BARIUM	233.527	Axial	8847.374	8864.397	8838.636	8839.089
BERYLLIUM	313.042	Radial	41446.82	41521.49	41433.10	41385.87
BORON	249.678	Radial	451.6729	451.2814	455.6405	448.0967
CADMIUM	228.802	Axial	11383.52	11406.99	11379.14	11364.43
CALCIUM	317.933	Radial	2360.235	2369.071	2352.509	2359.126
CHROMIUM	267.716	Axial	13313.30	13330.56	13297.33	13312.00
COBALT	228.616	Axial	8276.746	8294.730	8264.737	8270.772
COPPER	324.754	Axial	37563.23	37592.77	37535.02	37561.89
IRON	259.940	Radial	1037.147	1040.980	1033.477	1036.985
LEAD	220.353	Axial	1547.415	1545.326	1549.895	1547.025
LITHIUM	670.784	Radial	18273.14	18270.14	18243.89	18305.39
MANGANESE	257.610	Axial	179797.3	180153.8	179599.9	179638.1
MOLYBDENUM	202.030	Axial	3091.857	3096.373	3092.601	3086.596
NICKEL	231.604	Axial	4352.706	4354.913	4353.766	4349.439
PHOSPHORUS	177.495	Axial	68.47912	68.76664	68.00518	68.66556
POTASSIUM	766.490	Radial	834.6757	826.7183	853.4225	823.8863
SELENIUM	196.090	Axial	178.7739	179.8654	177.8369	178.6193
SILICON	251.611	Axial	12187.09	11534.88	12166.48	12859.90
SILVER	328.068	Axial	40581.80	40603.67	40586.83	40554.88
SODIUM	589.592	Radial	1935.877	1929.190	1933.502	1944.938
STRONTIUM	421.552	Radial	125276.6	125074.1	125338.3	125417.5
SULFUR	182.034	Axial	126.5201	126.2644	127.1880	126.1077
THALLIUM	190.856	Axial	402.0042	402.1647	401.0067	402.8411
TIN	189.989	Axial	674.7879	676.4419	676.4947	671.4270
TITANIUM	334.941	Radial	6361.528	6359.819	6370.478	6354.289
VANADIUM	292.402	Radial	1301.690	1303.406	1297.032	1304.632
ZINC	206.200	Axial	5963.861	5967.846	5963.627	5960.111

Sample ID: STD5 Units: mg/l
Analyzed: 12/21/22 07:33 Sequence: 7 Standard ID: 22H04626

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10627.05	10652.04	10619.21	10609.91
YTTRIUM	360.073	Axial	394170.8	393467.5	395145.5	393899.3
YTTRIUM	360.073	Radial	11690.64	11662.45	11701.00	11708.46
INDIUM	230.606	Axial	3143.927	3145.758	3143.680	3142.343

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	941.3044	938.4331	944.8505	940.6295
BARIUM	233.527	Axial	42695.14	42734.72	42676.95	42673.74
CALCIUM	317.933	Radial	10764.84	10757.12	10798.55	10738.86
CALCIUM	373.690	Radial	6147.504	6140.401	6165.057	6137.055
IRON	259.940	Radial	5162.181	5150.932	5186.292	5149.318
IRON	271.441	Radial	286.5625	286.5468	286.8504	286.2903
MAGNESIUM	279.079	Radial	659.6779	662.2544	661.0593	655.7200
POTASSIUM	766.490	Radial	4453.213	4462.080	4466.647	4430.911
SILICON	251.611	Axial	32165.65	32024.08	32199.45	32273.42
SODIUM	589.592	Radial	9486.808	9472.444	9495.545	9492.434
SODIUM	818.326	Radial	735.2070	730.6027	750.9161	724.1021
SULFUR	182.034	Axial	632.6738	632.6458	633.4591	631.9165

Sample ID: STD6 Units: mg/l
Analyzed: 12/21/22 07:36 Sequence: 8 Standard ID: 22H04640

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9219.577	9224.362	9214.867	9219.504
YTTRIUM	360.073	Axial	340860.4	340631.1	341032.8	340917.4
YTTRIUM	360.073	Radial	10884.82	10887.69	10910.02	10856.76
INDIUM	230.606	Axial	2528.475	2531.690	2528.011	2525.724

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	21350.63	21317.98	21370.27	21363.66
CALCIUM	373.690	Radial	144297.3	144132.3	144397.1	144362.5
CERIUM	535.353	Radial	1906.556	1900.125	1915.725	1903.817
IRON	271.441	Radial	2495.652	2485.417	2497.133	2504.408
LANTHANUM	333.749	Radial	4746.384	4717.000	4768.991	4753.160
MAGNESIUM	279.079	Radial	15137.65	15092.63	15170.42	15149.91
POTASSIUM	766.490	Radial	20904.53	20910.46	20934.72	20868.43
SODIUM	818.326	Radial	13861.19	13816.83	13902.09	13864.65
SULFUR	182.034	Axial	2882.061	2882.045	2881.315	2882.821

Sample ID: STD7 Units: mg/l
Analyzed: 12/21/22 07:39 Sequence: 9 Standard ID: 22H04627

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8814.486	8829.352	8816.576	8797.529
YTTRIUM	360.073	Axial	327728.7	327753.0	328568.4	326864.8
YTTRIUM	360.073	Radial	10674.36	10723.87	10652.25	10646.97
INDIUM	230.606	Axial	2347.253	2348.174	2353.022	2340.564

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	42018.17	42160.80	41967.34	41926.36
CALCIUM	373.690	Radial	277369.1	278390.2	276994.0	276723.1
IRON	271.441	Radial	4786.709	4794.127	4781.083	4784.917
MAGNESIUM	279.079	Radial	29883.23	29969.43	29819.71	29860.54
POTASSIUM	766.490	Radial	41261.20	41404.51	41197.75	41181.33
SODIUM	818.326	Radial	27059.90	27133.67	27033.25	27012.79
SULFUR	182.034	Axial	5569.998	5589.265	5568.426	5552.302

Sample ID: ICV-4 Units: mg/l
Analyzed: 12/21/22 07:42 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10387.92	10377.62	10382.61	10395.04	10396.42
YTTRIUM	360.073	Axial	390633.7	389666.8	390970.1	389287.5	392610.5
YTTRIUM	360.073	Radial	11312.85	11320.03	11291.04	11343.14	11297.18
INDIUM	230.606	Axial	3066.748	3062.127	3067.137	3069.302	3068.427

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	900.3329	10.05186	10.03177	10.05675	9.998315	10.12063
ANTIMONY	206.833	Axial	248.0198	0.9960454	0.9991815	1.003372	0.9891313	0.9924970
ARSENIC	189.042	Axial	155.6074	0.9723032	0.9781016	0.9667796	0.9755153	0.9688162
BARIUM	233.527	Axial	4401.603	1.052822	1.054105	1.052314	1.052412	1.052456
BERYLLIUM	313.042	Radial	20603.12	1.021935	1.023325	1.020585	1.017979	1.025850
BORON	249.678	Radial	223.5325	1.019440	1.037866	1.020343	1.005251	1.014299
CADMIUM	228.802	Axial	5548.385	1.009893	1.010637	1.009483	1.009325	1.010128
CALCIUM	317.933	Radial	10762.28	10.30622	10.31536	10.30705	10.27035	10.33212
CHROMIUM	267.716	Axial	6684.103	1.033506	1.035605	1.033157	1.032984	1.032278
COBALT	228.616	Axial	3988.453	0.9991938	0.9999588	1.000960	0.9998738	0.9959823
COPPER	324.754	Axial	17911.58	0.9783800	0.9802043	0.9800755	0.9804929	0.9727475
IRON	259.940	Radial	5097.275	10.19833	10.19039	10.18199	10.18177	10.23919
LEAD	220.353	Axial	735.6577	0.9872088	0.9854752	0.9857374	0.9890779	0.9885447
LITHIUM	670.784	Radial	8924.471	1.001798	1.002263	1.002413	0.9974485	1.005066
MAGNESIUM	279.079	Radial	654.1036	10.37656	10.40757	10.43494	10.34320	10.32052
MANGANESE	257.610	Axial	87358.17	1.002514	1.003069	1.001462	1.002637	1.002888
MOLYBDENUM	202.030	Axial	1578.118	1.053065	1.053415	1.053114	1.052722	1.053009
NICKEL	231.604	Axial	2089.834	0.9949065	0.9952994	0.9955201	0.9956773	0.9931290
POTASSIUM	766.490	Radial	4296.451	9.961941	9.923620	9.960824	9.946966	10.01636
SELENIUM	196.090	Axial	85.71956	0.9944692	0.9961787	0.9755265	1.005655	1.000517
SILICON	251.611	Axial	5310.136	1.608651	1.506159	1.574983	1.644945	1.708517
SILVER	328.068	Axial	19214.39	0.9742730	0.9757858	0.9731358	0.9777028	0.9704674
SODIUM	589.592	Radial	9547.022	10.39621	10.38127	10.41809	10.36338	10.42210
STRONTIUM	421.552	Radial	24881.37	0.4088517	0.4088191	0.4085699	0.4082550	0.4097627
SULFUR	182.034	Axial	596.6516	9.662365	9.637026	9.692779	9.653585	9.666072
THALLIUM	190.856	Axial	183.0848	0.9502247	0.9505750	0.9444934	0.9521846	0.9536456
TIN	189.989	Axial	324.0101	1.001051	1.000299	0.9985507	1.003016	1.002337
TITANIUM	334.941	Radial	3211.186	1.038270	1.037241	1.040345	1.034982	1.040514
VANADIUM	292.402	Radial	651.1742	1.028365	1.027459	1.029645	1.031561	1.024794
ZINC	206.200	Axial	2890.504	1.003316	1.004538	1.006140	1.001373	1.001212
CERIUM	535.353	Radial	70.81315	-0.03712674	-0.1578001	0.01460894	-0.01461500	0.009299173
LANTHANUM	333.749	Radial	0.2067683	-0.002732414	0.003417841	-0.003828871	-0.006100174	-0.004418453
PHOSPHORUS	177.495	Axial	33.92037	1.028979	1.032272	1.009835	1.050431	1.023378

Sample ID: ICB-4 Units: mg/l
Analyzed: 12/21/22 07:45 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10536.66	10539.30	10526.98	10543.72
YTTRIUM	360.073	Axial	396923.2	395472.7	396512.3	398784.5
YTTRIUM	360.073	Radial	11363.48	11298.13	11368.05	11424.28
INDIUM	230.606	Axial	3262.830	3263.603	3262.950	3261.936

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.976269	0.01256452	0.02778935	0.0008750470	0.009029158
ANTIMONY	206.833	Axial	-0.2716890	0.002935144	0.005088393	0.001811138	0.001905900
ARSENIC	189.042	Axial	-0.08569160	0.003135647	0.006949309	-0.001565804	0.004023435
BARIUM	233.527	Axial	3.113635	0.0001373962	0.0004789833	-0.0001284496	0.00006165491
BERYLLIUM	313.042	Radial	19.78979	0.0001932934	0.0001860476	0.0001903733	0.0002034593
BORON	249.678	Radial	0.05493123	0.001222208	0.003044076	0.005666352	-0.005043804
CADMIUM	228.802	Axial	4.525232	0.0001260785	0.000006459687	0.00006142307	0.0003103528
CALCIUM	317.933	Radial	180.6647	0.01083118	0.01388827	0.009850342	0.008754937
CERIUM	535.353	Radial	62.02279	-0.08471123	-0.04790527	-0.1132631	-0.09296530
CHROMIUM	267.716	Axial	10.29167	-0.0002271952	-0.0002531271	-0.00004115663	-0.0003873019
COBALT	228.616	Axial	2.459622	0.00003773174	0.0001331218	-0.000006703250	-0.00001322328
COPPER	324.754	Axial	27.27976	-0.00002173473	-0.0003202693	0.0002284390	0.00002662618
IRON	259.940	Radial	4.377413	0.004705932	0.004483303	0.001366355	0.008268137
LANTHANUM	333.749	Radial	2.368622	0.001610553	-0.004754744	0.004222673	0.005363729
LEAD	220.353	Axial	-0.05558479	-0.001301039	-0.001112089	-0.001113960	-0.001677067
LITHIUM	670.784	Radial	-10.7407	-0.0005890340	-0.001211107	0.001675427	-0.002231422
MAGNESIUM	279.079	Radial	-2.99065	-0.009591802	-0.005872957	-0.05392302	0.03102057
MANGANESE	257.610	Axial	10.55556	0.0001469361	0.0001279190	0.0001119942	0.0002008950
MOLYBDENUM	202.030	Axial	2.717181	0.0007423860	0.0001880574	0.0009189580	0.001120143
NICKEL	231.604	Axial	5.450007	-0.0003833317	-0.00009991984	0.0001264600	-0.001176535
PHOSPHORUS	177.495	Axial	-0.3056728	-0.006297248	-0.008884294	0.01185760	-0.02186505
POTASSIUM	766.490	Radial	-45.5146	0.03741812	0.05732745	0.03823411	0.01669280
SELENIUM	196.090	Axial	0.9491917	0.0003824342	0.007458476	-0.008533409	0.002222235
SILICON	251.611	Axial	70.14091	0.002976063	0.002383445	0.001494245	0.005050499
SILVER	328.068	Axial	-20.0138	0.0002084773	0.00002645942	0.0003725555	0.0002264170
SODIUM	589.592	Radial	46.12098	0.01645508	0.02584868	0.01375924	0.009757340
STRONTIUM	421.552	Radial	-17.7133	0.00008038368	0.0002043560	-0.00004761305	0.00008440814
SULFUR	182.034	Axial	0.3584081	0.005602463	-0.004191091	0.0009471187	0.02005136
THALLIUM	190.856	Axial	1.260415	0.001617738	0.002508514	-0.001355957	0.003700658
TIN	189.989	Axial	-0.05545493	0.004905356	0.004937441	0.005962628	0.003815998
TITANIUM	334.941	Radial	-0.8325347	0.0007833726	0.0005932150	0.001704157	0.00005274570
VANADIUM	292.402	Radial	-1.59757	-0.0009303696	-0.004928821	0.001978459	0.0001592535
ZINC	206.200	Axial	2.887397	0.0003833550	0.0002268129	0.0004700679	0.0004531841

Sample ID: ICVLL-4 Units: mg/l
Analyzed: 12/21/22 07:54 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10583.56	10588.78	10581.75	10580.14
YTTRIUM	360.073	Axial	399270.0	400205.1	399016.1	398588.7
YTTRIUM	360.073	Radial	11328.23	11347.72	11300.22	11336.75
INDIUM	230.606	Axial	3241.030	3251.142	3232.764	3239.183

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.28752	0.1845648	0.1958302	0.1608539	0.1970104
ANTIMONY	206.833	Axial	1.357565	0.009337054	0.006870654	0.01066381	0.01047669
ARSENIC	189.042	Axial	1.138911	0.01062150	0.01388871	0.003806033	0.01416976
BARIUM	233.527	Axial	25.19333	0.005320797	0.005379878	0.005165031	0.005417482
BERYLLIUM	313.042	Radial	57.32392	0.002056829	0.002113074	0.001922207	0.002135207
BORON	249.678	Radial	42.51938	0.1944241	0.1950991	0.1928489	0.1953242
CADMIUM	228.802	Axial	13.84004	0.001787744	0.001859232	0.001771862	0.001732137
CALCIUM	317.933	Radial	1231.771	1.032567	1.035212	1.028515	1.033973
CHROMIUM	267.716	Axial	77.91667	0.01004630	0.01127537	0.009339042	0.009524498
COBALT	228.616	Axial	42.68694	0.009582107	0.01004538	0.009544903	0.009156036
COPPER	324.754	Axial	200.3075	0.009230531	0.009432476	0.009222744	0.009036374
IRON	259.940	Radial	53.09644	0.1021181	0.1057470	0.1020253	0.09858203
LEAD	220.353	Axial	5.568870	0.005849239	0.005956657	0.006000944	0.005590116
LITHIUM	670.784	Radial	143.8479	0.01672401	0.01713020	0.01624449	0.01679734
MAGNESIUM	279.079	Radial	63.93902	1.046796	1.030089	1.038042	1.072257
MANGANESE	257.610	Axial	889.5556	0.01004700	0.01010899	0.01008706	0.009944935
MOLYBDENUM	202.030	Axial	9.157619	0.004956663	0.005579267	0.005241959	0.004048763
NICKEL	231.604	Axial	25.67440	0.008770566	0.008011621	0.008821478	0.009478598
POTASSIUM	766.490	Radial	365.2870	0.9747049	1.035314	0.9306690	0.9581317
SELENIUM	196.090	Axial	1.708480	0.009077159	0.004633448	0.002856853	0.01974118
SILICON	251.611	Axial	709.5642	0.1951691	0.1913567	0.1949875	0.1991631
SILVER	328.068	Axial	72.34722	0.004790917	0.004497435	0.005364533	0.004510782
SODIUM	589.592	Radial	983.6709	1.039443	1.035731	1.038639	1.043958
STRONTIUM	421.552	Radial	591.5391	0.01006792	0.01006433	0.01013216	0.01000728
THALLIUM	190.856	Axial	2.885683	0.009679168	0.009955424	0.01025926	0.008822822
TIN	189.989	Axial	14.85559	0.04827819	0.04679614	0.05000797	0.04803044
TITANIUM	334.941	Radial	156.9449	0.05167392	0.05208393	0.05099971	0.05193814
VANADIUM	292.402	Radial	12.71672	0.02161356	0.02263244	0.02324236	0.01896589
ZINC	206.200	Axial	147.2763	0.04960047	0.05014310	0.04964756	0.04901074
CERIUM	535.353	Radial	58.36062	-0.1030003	-0.05817187	-0.08757959	-0.1632495
LANTHANUM	333.749	Radial	-1.26227	-0.005709405	-0.001891121	-0.005852300	-0.009384795
PHOSPHORUS	177.495	Axial	3.315159	0.1012485	0.09802034	0.1090598	0.09666526
SULFUR	182.034	Axial	59.34141	0.9431285	0.9322668	0.9424049	0.9547138

Sample ID: ICSA-4 Units: mg/l
Analyzed: 12/21/22 07:57 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9074.808	9074.879	9082.478	9067.066
YTTRIUM	360.073	Axial	338400.4	337372.3	338498.7	339330.1
YTTRIUM	360.073	Radial	10796.54	10777.98	10790.05	10821.59
INDIUM	230.606	Axial	2496.810	2500.416	2491.928	2498.085

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	42131.33	496.0188	496.8430	495.7220	495.4913
ANTIMONY	206.833	Axial	-4.80055	-0.01797631	-0.01748843	-0.01235771	-0.02408280
ARSENIC	189.042	Axial	-2.61738	-0.01498970	-0.01714080	-0.009082581	-0.01874572
BARIUM	233.527	Axial	12.65928	0.002870845	0.002820048	0.003038743	0.002753744
BERYLLIUM	313.042	Radial	12.60685	-0.0001290747	-0.0001487714	-0.0002560578	0.00001760512
BORON	249.678	Radial	-1.11131	-0.004355311	-0.01637428	0.003341531	-0.00003317972
CADMIUM	228.802	Axial	5.052064	0.0003668836	0.00005301080	0.0005032536	0.0005443864
CALCIUM	373.690	Radial	281431.7	499.5530	500.4920	499.1778	498.9893
CERIUM	535.353	Radial	325.6420	1.383347	1.461541	1.348197	1.340301
CHROMIUM	267.716	Axial	25.47222	0.002717674	0.002618897	0.002342090	0.003192037
COBALT	228.616	Axial	9.685271	0.002440233	0.002518735	0.002613989	0.002187975
COPPER	324.754	Axial	-92.8273	-0.007352967	-0.007919659	-0.007102737	-0.007036504
IRON	271.441	Radial	4772.218	196.2211	196.2479	196.1740	196.2415
LANTHANUM	333.749	Radial	4.189091	0.005752144	0.005360394	0.009572552	0.002323485
LEAD	220.353	Axial	-20.6379	-0.03528731	-0.03768782	-0.03289248	-0.03528162
LITHIUM	670.784	Radial	32.21712	0.004396194	0.004126341	0.004769301	0.004292940
MAGNESIUM	279.079	Radial	30550.37	506.0213	506.6249	505.9997	505.4394
MANGANESE	257.610	Axial	532.2222	0.007018834	0.007018619	0.007058708	0.006979176
MOLYBDENUM	202.030	Axial	5.128570	0.002874691	0.002055865	0.002739386	0.003828821
NICKEL	231.604	Axial	19.47342	0.008590876	0.008318774	0.009008203	0.008445651
PHOSPHORUS	177.495	Axial	0.1500320	0.007986995	0.001786393	0.04449936	-0.02232477
POTASSIUM	766.490	Radial	-98.6867	-0.09545332	-0.07088214	-0.1318107	-0.08366713
SELENIUM	196.090	Axial	3.699659	0.03906392	0.02522841	0.05553096	0.03643237
SILICON	251.611	Axial	22.90166	-0.01017802	-0.01178395	-0.008549620	-0.01020048
SILVER	328.068	Axial	-64.4444	-0.002561309	-0.002724971	-0.002312537	-0.002646420
SODIUM	589.592	Radial	67.15885	0.04314867	0.04862019	0.04309988	0.03772594
STRONTIUM	421.552	Radial	210.6190	0.003992856	0.004033679	0.004028931	0.003915958
SULFUR	182.034	Axial	-0.3514183	-0.006634471	-0.002582496	-0.001758958	-0.01556196
THALLIUM	190.856	Axial	1.442749	0.004685809	-0.0008920416	0.008513269	0.006436200
TIN	189.989	Axial	-6.03048	-0.01770268	-0.01625358	-0.01666175	-0.02019273
TITANIUM	334.941	Radial	133.8176	0.04633869	0.04525764	0.04599217	0.04776625
VANADIUM	292.402	Radial	5.716851	0.01103393	0.01179200	0.01097812	0.01033167
ZINC	206.200	Axial	18.46855	0.006737381	0.005720320	0.007001126	0.007490697

Sample ID: ICSAB-4 Units: mg/l
Analyzed: 12/21/22 07:59 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8994.709	8994.264	8998.506	8991.357
YTTRIUM	360.073	Axial	335049.8	335011.8	335269.9	334867.8
YTTRIUM	360.073	Radial	10695.17	10665.75	10752.84	10666.92
INDIUM	230.606	Axial	2470.574	2472.158	2468.781	2470.783

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	41529.04	493.5611	493.9765	493.5213	493.1855
ANTIMONY	206.833	Axial	103.3650	0.4814869	0.4900929	0.4796724	0.4746954
ARSENIC	189.042	Axial	69.76068	0.5051793	0.5058646	0.5015840	0.5080894
BARIUM	233.527	Axial	1823.698	0.5034654	0.5035190	0.5040265	0.5028506
BERYLLIUM	313.042	Radial	9477.528	0.4968421	0.4974089	0.4959177	0.4971998
BORON	249.678	Radial	205.0616	0.9892560	0.9931815	0.9817147	0.9928718
CADMIUM	228.802	Axial	5018.497	1.054962	1.054628	1.054608	1.055650
CALCIUM	373.690	Radial	278378.6	498.8179	499.7991	498.1944	498.4602
CERIUM	535.353	Radial	317.3335	1.354173	1.377337	1.326602	1.358580
CHROMIUM	267.716	Axial	2765.564	0.4929103	0.4946386	0.4931124	0.4909799
COBALT	228.616	Axial	1555.493	0.4834393	0.4844039	0.4827883	0.4831258
COPPER	324.754	Axial	7961.015	0.5062709	0.5070876	0.5053239	0.5064011
IRON	271.441	Radial	4761.407	197.6330	198.3164	197.4008	197.1819
LANTHANUM	333.749	Radial	2.065040	0.001254382	-0.003599724	0.009798232	-0.002435360
LEAD	220.353	Axial	547.5505	0.9119994	0.9071338	0.9158390	0.9130255
LITHIUM	670.784	Radial	36.86007	0.004980920	0.004637891	0.005766516	0.004538352
MAGNESIUM	279.079	Radial	30349.19	507.4545	508.1836	506.8008	507.3790
MANGANESE	257.610	Axial	36180.62	0.4795318	0.4793895	0.4797122	0.4794936
MOLYBDENUM	202.030	Axial	638.9204	0.4918267	0.4906183	0.4925642	0.4922976
NICKEL	231.604	Axial	1640.989	0.9696703	0.9716361	0.9686930	0.9686817
PHOSPHORUS	177.495	Axial	0.09099159	0.005996953	-0.006240180	-0.01759923	0.04183027
POTASSIUM	766.490	Radial	-84.6889	-0.06385567	-0.05849966	-0.06045504	-0.07261229
SELENIUM	196.090	Axial	38.66582	0.5129875	0.5168734	0.5272047	0.4948843
SILICON	251.611	Axial	2762.232	0.9591665	0.9604467	0.9567465	0.9603064
SILVER	328.068	Axial	18288.75	1.081038	1.084617	1.079690	1.078808
SODIUM	589.592	Radial	75.14317	0.05309935	0.05829019	0.05208866	0.04891920
STRONTIUM	421.552	Radial	211.8329	0.004048319	0.003998481	0.003998292	0.004148182
SULFUR	182.034	Axial	-0.5400561	-0.01021863	-0.01963379	0.001128666	-0.01215077
THALLIUM	190.856	Axial	70.10669	0.4492684	0.4538369	0.4477967	0.4461716
TIN	189.989	Axial	123.3530	0.4757444	0.4735955	0.4747910	0.4788468
TITANIUM	334.941	Radial	1604.317	0.5491807	0.5502106	0.5464959	0.5508357
VANADIUM	292.402	Radial	294.3731	0.4925627	0.4925863	0.4938692	0.4912326
ZINC	206.200	Axial	2269.143	0.9095777	0.9100797	0.9106257	0.9080276

Sample ID: CCV-2 Units: mg/l
Analyzed: 12/21/22 12:06 Sequence: 101 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9928.868	9937.469	9928.315	9920.821
YTTRIUM	360.073	Axial	378281.9	379969.8	375002.8	379873.2
YTTRIUM	360.073	Radial	11081.82	11087.79	11113.32	11044.34
INDIUM	230.606	Axial	2867.377	2868.964	2866.220	2866.948

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	840.5964	9.577537	9.539087	9.560374	9.633149
ANTIMONY	206.833	Axial	115.0764	0.4855727	0.4849487	0.4879237	0.4838457
ARSENIC	189.042	Axial	151.4177	0.9897952	0.9969960	0.9940493	0.9783404
BARIUM	233.527	Axial	1946.601	0.4868149	0.4860467	0.4873404	0.4870577
BERYLLIUM	313.042	Radial	3784.567	0.1909941	0.1909124	0.1907962	0.1912738
BORON	249.678	Radial	209.1828	0.9739401	0.9848401	0.9589992	0.9779811
CADMIUM	228.802	Axial	2587.409	0.4923716	0.4917388	0.4932907	0.4920854
CALCIUM	373.690	Radial	27562.85	47.64138	47.69871	47.51030	47.71515
CHROMIUM	267.716	Axial	5887.659	0.9523054	0.9544693	0.9535028	0.9489440
COBALT	228.616	Axial	3759.340	1.007284	1.007894	1.007362	1.006594
COPPER	324.754	Axial	17439.58	0.9837333	0.9799038	0.9911856	0.9801105
IRON	259.940	Radial	4623.435	9.442874	9.417857	9.440336	9.470430
LEAD	220.353	Axial	334.7013	0.4797487	0.4759081	0.4824680	0.4808699
LITHIUM	670.784	Radial	8441.169	0.9673145	0.9691915	0.9671696	0.9655824
MAGNESIUM	279.079	Radial	578.1282	9.366088	9.401945	9.370167	9.326152
MANGANESE	257.610	Axial	80359.78	0.9648395	0.9647911	0.9647734	0.9649539
MOLYBDENUM	202.030	Axial	357.7212	0.2489417	0.2495250	0.2489990	0.2483012
NICKEL	231.604	Axial	1911.316	0.9731254	0.9714766	0.9737757	0.9741238
POTASSIUM	766.490	Radial	20458.87	47.88169	47.81682	47.84056	47.98770
SELENIUM	196.090	Axial	81.77178	0.9925096	1.006797	0.9822596	0.9884726
SILICON	251.611	Axial	6287.943	1.997364	1.987920	1.993342	2.010831
SILVER	328.068	Axial	9016.773	0.4727638	0.4703298	0.4771458	0.4708157
SODIUM	818.326	Radial	2879.976	49.89676	49.61730	50.08569	49.98730
STRONTIUM	421.552	Radial	57907.23	0.9708627	0.9695347	0.9711149	0.9719384
SULFUR	182.034	Axial	286.8240	4.859612	4.867888	4.864485	4.846462
THALLIUM	190.856	Axial	172.8072	0.9592878	0.9604918	0.9630355	0.9543361
TIN	189.989	Axial	144.2460	0.4792973	0.4844162	0.4782508	0.4752251
TITANIUM	334.941	Radial	2974.509	0.9818476	0.9852666	0.9803941	0.9798821
VANADIUM	292.402	Radial	605.5293	0.9763013	0.9731362	0.9774102	0.9783573
ZINC	206.200	Axial	2650.581	0.9625499	0.9588445	0.9628578	0.9659473
CERIUM	535.353	Radial	79.80537	0.01881843	-0.002904619	0.02608399	0.03327590
LANTHANUM	333.749	Radial	-1.99490	-0.007276706	-0.01131966	-0.007013217	-0.003497237
PHOSPHORUS	177.495	Axial	31.47238	0.9989495	1.006169	0.9678367	1.022842

Sample ID: CCB-2 Units: mg/l
Analyzed: 12/21/22 12:11 Sequence: 102

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10268.14	10251.03	10268.64	10284.76
YTTRIUM	360.073	Axial	389357.0	390312.1	389171.7	388587.1
YTTRIUM	360.073	Radial	10955.07	10917.21	10978.59	10969.41
INDIUM	230.606	Axial	3175.931	3174.199	3175.513	3178.080

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	7.543977	0.02204619	0.03107337	-0.002788607	0.03785380
ANTIMONY	206.833	Axial	0.6460068	0.006617721	0.002478096	0.009282966	0.008092101
ARSENIC	189.042	Axial	-0.2325334	0.002196712	-0.003618743	0.009771446	0.0004374330
BARIUM	233.527	Axial	1.630738	-0.0002021574	-0.0001158325	-0.00004356485	-0.0004470749
BERYLLIUM	313.042	Radial	15.68692	0.00001929486	-0.00007601389	0.0001081730	0.00002572551
BORON	249.678	Radial	1.607179	0.008527657	0.01253294	0.007013251	0.006036780
CADMIUM	228.802	Axial	2.520877	-0.0002217012	0.0001926001	-0.0006103529	-0.0002473507
CALCIUM	317.933	Radial	170.4907	0.007129001	0.01038293	0.006356484	0.004647591
CERIUM	535.353	Radial	72.76236	-0.01444593	-0.006576748	0.01820840	-0.05496943
CHROMIUM	267.716	Axial	8.277778	-0.0005017209	-0.0003862388	-0.0006628675	-0.0004560565
COBALT	228.616	Axial	2.363844	0.00003017309	-0.0003926333	-0.0002348658	0.0007180184
COPPER	324.754	Axial	33.09524	0.0003265531	0.0002039209	0.0002628152	0.0005129233
IRON	259.940	Radial	0.9566029	-0.002033524	-0.001683472	0.001823727	-0.006240828
LANTHANUM	333.749	Radial	-0.2103441	-0.003566589	0.01029323	-0.01688502	-0.004107973
LEAD	220.353	Axial	0.4566489	-0.0006383862	-0.001291195	0.0001153533	-0.0007393170
LITHIUM	670.784	Radial	3.971047	0.001072928	0.003178693	-0.0005065011	0.0005465912
MAGNESIUM	279.079	Radial	-1.85660	0.007221284	0.007584539	0.01788010	-0.003800790
MANGANESE	257.610	Axial	30.04167	0.0003762973	0.0003749473	0.0003675799	0.0003863645
MOLYBDENUM	202.030	Axial	2.370262	0.0005546197	0.0001763491	0.001128163	0.0003593466
NICKEL	231.604	Axial	4.702630	-0.0006608967	-0.0005018018	-0.001027326	-0.0004535624
PHOSPHORUS	177.495	Axial	0.4240127	0.01581040	0.03453513	0.02070131	-0.007805257
POTASSIUM	766.490	Radial	-51.4509	0.01946185	0.01219033	0.003746860	0.04244836
SELENIUM	196.090	Axial	1.217432	0.003848897	0.001446194	-0.002598651	0.01269915
SILICON	251.611	Axial	52.71492	-0.001870234	-0.0008675706	-0.003888380	-0.0008547524
SILVER	328.068	Axial	-22.4166	0.00006735879	-0.0001285188	0.0003398878	-0.000009292650
SODIUM	589.592	Radial	55.09196	0.02840763	0.02171893	0.01856977	0.04493419
STRONTIUM	421.552	Radial	-21.8926	-0.000001392219	0.00008690873	0.00007971769	-0.0001708031
SULFUR	182.034	Axial	0.8206255	0.01333492	0.02262871	0.005884958	0.01149110
THALLIUM	190.856	Axial	0.9462266	0.0002043577	-0.001712238	0.002705622	-0.0003803111
TIN	189.989	Axial	-1.36404	0.001016236	-0.001849425	0.003022666	0.001875467
TITANIUM	334.941	Radial	-1.78759	0.0004517507	-0.001008077	0.0002609774	0.002102352
VANADIUM	292.402	Radial	1.218442	0.003576155	0.005706084	-0.001070997	0.006093378
ZINC	206.200	Axial	0.1994843	-0.0005352160	-0.0004180394	-0.0006950530	-0.0004925555

Sample ID: CCVLL-4 Units: mg/l
Analyzed: 12/21/22 12:15 Sequence: 103 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10334.98	10338.30	10342.78	10323.86
YTTRIUM	360.073	Axial	391603.1	391207.9	392550.4	391051.1
YTTRIUM	360.073	Radial	11044.10	11008.50	11086.43	11037.37
INDIUM	230.606	Axial	3179.782	3183.766	3181.724	3173.855

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	24.06238	0.2115215	0.2376681	0.1844292	0.2124672
ANTIMONY	206.833	Axial	1.624992	0.01053904	0.01078577	0.01155049	0.009280877
ARSENIC	189.042	Axial	1.488777	0.01297780	0.01229909	0.01454343	0.01209088
BARIUM	233.527	Axial	23.08300	0.004955586	0.005032334	0.004752409	0.005082015
BERYLLIUM	313.042	Radial	51.85817	0.001852272	0.001894092	0.001815789	0.001846935
BORON	249.678	Radial	43.57566	0.2043356	0.2018717	0.2011674	0.2099675
CADMIUM	228.802	Axial	13.52425	0.001789455	0.001758778	0.001819628	0.001789958
CALCIUM	317.933	Radial	1187.156	1.018913	1.026411	1.013762	1.016565
CHROMIUM	267.716	Axial	72.48611	0.009486311	0.008641580	0.009713055	0.01010430
COBALT	228.616	Axial	42.56561	0.009748212	0.009795196	0.009896602	0.009552836
COPPER	324.754	Axial	208.4802	0.009886619	0.01000395	0.009918303	0.009737601
IRON	259.940	Radial	48.75101	0.09593639	0.09367443	0.09746350	0.09667125
LEAD	220.353	Axial	4.318135	0.004364176	0.004678016	0.004817942	0.003596569
LITHIUM	670.784	Radial	123.3018	0.01477795	0.01542565	0.01533567	0.01357253
MAGNESIUM	279.079	Radial	60.40439	1.015460	0.9767795	1.043755	1.025846
MANGANESE	257.610	Axial	884.0972	0.01022502	0.01024323	0.01024985	0.01018198
MOLYBDENUM	202.030	Axial	9.268492	0.005176071	0.005605795	0.004217830	0.005704587
NICKEL	231.604	Axial	25.39082	0.008862891	0.008268631	0.009052156	0.009267886
POTASSIUM	766.490	Radial	376.3031	1.022049	1.032424	1.006823	1.026901
SELENIUM	196.090	Axial	1.916238	0.01199042	0.01304019	0.02191859	0.001012485
SILICON	251.611	Axial	651.9888	0.1825717	0.1791274	0.1821075	0.1864802
SILVER	328.068	Axial	71.31944	0.004809125	0.005078808	0.004670803	0.004677764
SODIUM	589.592	Radial	958.5877	1.038979	1.037824	1.040243	1.038870
STRONTIUM	421.552	Radial	589.3491	0.01028116	0.01057984	0.01002749	0.01023615
SULFUR	182.034	Axial	57.80911	0.9408861	0.9432734	0.9127136	0.9666713
THALLIUM	190.856	Axial	3.068101	0.01087085	0.01044811	0.01146172	0.01070271
TIN	189.989	Axial	13.56268	0.04527590	0.04559023	0.04314966	0.04708781
TITANIUM	334.941	Radial	150.5506	0.05086363	0.05149420	0.04983253	0.05126415
VANADIUM	292.402	Radial	13.19651	0.02290614	0.02210921	0.01981388	0.02679532
ZINC	206.200	Axial	143.9210	0.04963709	0.05008230	0.04887935	0.04994964
CERIUM	535.353	Radial	62.06871	-0.07528468	-0.06439944	0.006508317	-0.1679629
LANTHANUM	333.749	Radial	-1.58521	-0.006425315	-0.004974926	-0.01857694	0.004275925
PHOSPHORUS	177.495	Axial	3.536058	0.1103248	0.1130322	0.1208539	0.09708836

Sample ID: ICSA-4 Units: mg/l
Analyzed: 12/21/22 12:19 Sequence: 104 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8891.026	8895.630	8884.363	8893.085
YTTRIUM	360.073	Axial	334847.4	334672.4	334823.8	335046.0
YTTRIUM	360.073	Radial	10461.90	10457.58	10430.09	10498.03
INDIUM	230.606	Axial	2452.307	2451.598	2455.134	2450.188

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40938.44	497.3930	498.8211	497.6316	495.7263
ANTIMONY	206.833	Axial	-4.44357	-0.01675715	-0.01996829	-0.01190231	-0.01840086
ARSENIC	189.042	Axial	-1.48944	-0.007166553	-0.01184242	-0.0006447896	-0.009012448
BARIUM	233.527	Axial	11.76430	0.002692410	0.002384019	0.002759912	0.002933298
BERYLLIUM	313.042	Radial	14.02305	-0.00003177329	-0.00001442031	0.00003227660	-0.0001131762
BORON	249.678	Radial	-1.05536	-0.004229812	0.002396568	-0.003158590	-0.01192742
CADMIUM	228.802	Axial	4.550834	0.0002820603	0.0001105749	0.0004794738	0.0002561321
CALCIUM	373.690	Radial	272928.3	499.9570	500.7195	500.6939	498.4575
CERIUM	535.353	Radial	330.6303	1.469064	1.505444	1.502574	1.399173
CHROMIUM	267.716	Axial	18.69444	0.001584513	0.0007258349	0.002208050	0.001819653
COBALT	228.616	Axial	8.257725	0.002046801	0.001180268	0.002214226	0.002745908
COPPER	324.754	Axial	-86.3511	-0.007001141	-0.007443602	-0.007020355	-0.006539465
IRON	271.441	Radial	4647.234	197.1944	197.5789	197.0328	196.9715
LANTHANUM	333.749	Radial	3.749451	0.005082386	-0.0001356222	0.01407398	0.001308799
LEAD	220.353	Axial	-19.9501	-0.03475505	-0.03738286	-0.02997156	-0.03691073
LITHIUM	670.784	Radial	33.08001	0.004623160	0.005382560	0.004704944	0.003781977
MAGNESIUM	279.079	Radial	28868.12	493.4555	493.3132	495.1143	491.9390
MANGANESE	257.610	Axial	517.2361	0.006962439	0.006950664	0.006947704	0.006988949
MOLYBDENUM	202.030	Axial	5.341989	0.003122196	0.001931423	0.003404004	0.004031160
NICKEL	231.604	Axial	18.82677	0.008411421	0.008871568	0.008544216	0.007818479
PHOSPHORUS	177.495	Axial	0.6680926	0.02642022	0.03784099	0.01666791	0.02475177
POTASSIUM	766.490	Radial	-92.1709	-0.08691291	-0.1150146	-0.07329865	-0.07242554
SELENIUM	196.090	Axial	1.809285	0.01420280	0.01747973	0.02548974	-0.0003610561
SILICON	251.611	Axial	9.583149	-0.01477816	-0.01579543	-0.01234550	-0.01619353
SILVER	328.068	Axial	-65.2916	-0.002651160	-0.002286267	-0.002969070	-0.002698142
SODIUM	589.592	Radial	107.4317	0.09313466	0.07592665	0.08419435	0.1192830
STRONTIUM	421.552	Radial	211.0179	0.004115603	0.004017068	0.004112122	0.004217620
SULFUR	182.034	Axial	0.8580193	0.01611913	0.02906217	0.02150865	-0.002213432
THALLIUM	190.856	Axial	0.8588070	0.001042301	0.002086552	-0.002122978	0.003163328
TIN	189.989	Axial	-5.04762	-0.01433857	-0.02318993	-0.01098451	-0.008841276
TITANIUM	334.941	Radial	129.5820	0.04631129	0.04696927	0.04663002	0.04533457
VANADIUM	292.402	Radial	5.675337	0.01126934	0.01253284	0.01284485	0.008430332
ZINC	206.200	Axial	17.09677	0.006332094	0.006989438	0.005716385	0.006290459

Sample ID: ICSAB-4 Units: mg/l
Analyzed: 12/21/22 12:22 Sequence: 105 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8845.923	8845.383	8851.078	8841.309
YTTRIUM	360.073	Axial	332049.1	332499.5	331668.4	331979.4
YTTRIUM	360.073	Radial	10430.75	10450.39	10394.81	10447.05
INDIUM	230.606	Axial	2440.259	2441.949	2438.480	2440.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	40899.65	498.4053	497.5895	499.3990	498.2275
ANTIMONY	206.833	Axial	101.8836	0.4825586	0.4825256	0.4868186	0.4783317
ARSENIC	189.042	Axial	68.83251	0.5068293	0.5227441	0.4988666	0.4988773
BARIUM	233.527	Axial	1790.931	0.5027348	0.5020046	0.5032729	0.5029269
BERYLLIUM	313.042	Radial	9149.507	0.4917959	0.4917257	0.4924291	0.4912330
BORON	249.678	Radial	198.1387	0.9800870	0.9803649	0.9853950	0.9745012
CADMIUM	228.802	Axial	4944.745	1.056943	1.057008	1.056846	1.056974
CALCIUM	373.690	Radial	272977.7	501.5403	500.5423	502.6149	501.4636
CERIUM	535.353	Radial	324.9809	1.442261	1.461481	1.380445	1.484858
CHROMIUM	267.716	Axial	2698.850	0.4890966	0.4908153	0.4888899	0.4875846
COBALT	228.616	Axial	1547.291	0.4868684	0.4874874	0.4873229	0.4857950
COPPER	324.754	Axial	7981.185	0.5121583	0.5105474	0.5124389	0.5134885
IRON	271.441	Radial	4609.686	196.1870	195.2455	197.2840	196.0314
LANTHANUM	333.749	Radial	0.9995233	-0.0009565712	-0.003516927	-0.002876599	0.003523813
LEAD	220.353	Axial	538.7704	0.9085203	0.9013991	0.9169510	0.9072108
LITHIUM	670.784	Radial	24.96239	0.003648040	0.002144052	0.004588817	0.004211250
MAGNESIUM	279.079	Radial	28857.19	494.7418	492.5167	496.7253	494.9835
MANGANESE	257.610	Axial	35649.77	0.4804433	0.4801838	0.4805440	0.4806021
MOLYBDENUM	202.030	Axial	628.8881	0.4922481	0.4915197	0.4909108	0.4943138
NICKEL	231.604	Axial	1606.501	0.9610605	0.9579105	0.9624881	0.9627829
PHOSPHORUS	177.495	Axial	0.5753911	0.02325781	-0.009796704	0.02016455	0.05940557
POTASSIUM	766.490	Radial	-71.7553	-0.03696935	-0.05650955	-0.03584461	-0.01855389
SELENIUM	196.090	Axial	38.95995	0.5258420	0.5468387	0.5328972	0.4977899
SILICON	251.611	Axial	2698.499	0.9526756	0.9534800	0.9511541	0.9533926
SILVER	328.068	Axial	18098.83	1.079485	1.076182	1.082503	1.079769
SODIUM	589.592	Radial	117.1729	0.1050921	0.1070371	0.1021544	0.1060849
STRONTIUM	421.552	Radial	205.8459	0.004035046	0.004013167	0.004160417	0.003931556
SULFUR	182.034	Axial	-0.3627312	-0.007014852	-0.004966634	-0.006238943	-0.009838979
THALLIUM	190.856	Axial	69.60377	0.4516081	0.4574846	0.4435245	0.4538153
TIN	189.989	Axial	120.0236	0.4687267	0.4737286	0.4608429	0.4716087
TITANIUM	334.941	Radial	1550.421	0.5441921	0.5416981	0.5467225	0.5441556
VANADIUM	292.402	Radial	284.9015	0.4888171	0.4899015	0.4904668	0.4860828
ZINC	206.200	Axial	2203.507	0.8981165	0.8991744	0.8977531	0.8974219

Sample ID: BLANK DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:27 Sequence: 107

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10563.93	10550.05	10567.46	10574.29
YTTRIUM	360.073	Axial	401410.8	401500.5	399932.1	402799.9
YTTRIUM	360.073	Radial	11308.05	11284.55	11330.73	11308.86
INDIUM	230.606	Axial	3259.047	3254.878	3259.247	3263.015

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	0.9276159	0.005184667	-0.001697993	0.001526660	0.01572533
ALUMINUM	308.215	Radial	4.641779	-0.01337094	-0.03401203	0.02032482	-0.02642561
ANTIMONY	206.833	Axial	-0.9796407	0.0001546899	0.001589151	-0.0003605322	-0.0007645489
ARSENIC	189.042	Axial	-0.2113093	0.002371569	0.004384028	0.002355626	0.0003750537
BARIUM	233.527	Axial	3.491302	0.0002245188	0.0002477050	0.0003575430	0.00006830834
BERYLLIUM	313.042	Radial	13.39048	-0.0001195357	-0.00001609501	-0.0002130597	-0.0001294526
CADMIUM	228.802	Axial	1.810510	-0.0003621707	-0.0003510388	-0.0003236386	-0.0004118347
CALCIUM	317.933	Radial	200.6539	0.03113327	0.02942020	0.03132065	0.03265895
CHROMIUM	267.716	Axial	12.93056	0.0001704028	-0.0003182484	0.001075019	-0.0002455625
COBALT	228.616	Axial	2.612970	0.00007474873	0.0003791197	-0.0001598730	0.000004999499
COPPER	324.754	Axial	31.79167	0.0002022363	0.00008036267	0.0001898897	0.0003364567
IRON	259.940	Radial	6.317653	0.008640310	0.01024603	0.01012135	0.005553545
LEAD	220.353	Axial	1.648726	0.0008537137	0.001150581	0.0001133109	0.001297249
LITHIUM	670.784	Radial	5.203215	0.001189618	-0.001451610	0.003609628	0.001410835
MAGNESIUM	279.079	Radial	0.6235546	0.04738329	0.04477045	0.05262692	0.04475249
MANGANESE	257.610	Axial	7.125	0.0001079072	0.00006943734	0.0001050903	0.0001491941
MOLYBDENUM	202.030	Axial	1.250482	-0.0002255202	0.00006999280	-0.0008358363	0.00008928298
NICKEL	231.604	Axial	3.516829	-0.001249135	-0.001880135	-0.0005525624	-0.001314706
PHOSPHORUS	177.495	Axial	0.6187511	0.02120639	0.003692005	0.03358517	0.02634199
POTASSIUM	766.490	Radial	-45.5507	0.03674052	0.02104625	0.03800924	0.05116607
SELENIUM	196.090	Axial	0.4166702	-0.005778788	-0.002042823	-0.004451851	-0.01084169
SILICON	251.611	Axial	191.2769	0.03941728	0.03884030	0.04063492	0.03877662
SILVER	328.068	Axial	-28.0972	-0.0001780622	-0.00007490223	-0.00002221718	-0.0004370673
SODIUM	589.592	Radial	166.1978	0.1478764	0.1073289	0.1512012	0.1850991
STRONTIUM	421.552	Radial	-14.1158	0.0001377570	0.0001063700	0.0001739571	0.0001329440
SULFUR	182.034	Axial	3.239890	0.05147192	0.04183225	0.05636697	0.05621654
THALLIUM	190.856	Axial	0.2511187	-0.003328829	-0.003854538	-0.003963338	-0.002168611
TIN	189.989	Axial	-0.1923961	0.004510026	0.005290731	0.005033622	0.003205725
TITANIUM	334.941	Radial	-1.44102	0.0005839732	0.00002760447	0.0009694687	0.0007548463
VANADIUM	292.402	Radial	0.07383285	0.001700979	-0.001871630	0.002329667	0.004644899
ZINC	206.200	Axial	3.602228	0.0006246463	0.0002107809	0.0008482849	0.0008148730
CERIUM	535.353	Radial	71.53480	-0.03311123	0.05821356	-0.1024131	-0.05513411
LANTHANUM	333.749	Radial	-0.1818308	-0.003516527	-0.003912035	-0.01047878	0.003841236

Rows shaded in gray for analytes that were not ordered.

Sample ID: LCS DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:30 Sequence: 108

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10396.15	10386.00	10375.37	10427.07
YTTRIUM	360.073	Axial	393838.6	393225.8	395048.2	393241.7
YTTRIUM	360.073	Radial	11312.41	11342.55	11321.54	11273.15
INDIUM	230.606	Axial	3090.579	3086.543	3087.800	3097.395

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	196.2730	0.8952919	0.8860954	0.8912431	0.9085371
ALUMINUM	308.215	Radial	792.7921	8.843751	8.810588	8.838198	8.882466
ANTIMONY	206.833	Axial	226.3944	0.9088285	0.9072692	0.9105857	0.9086306
ARSENIC	189.042	Axial	138.1775	0.8631489	0.8716896	0.8722003	0.8455569
BARIUM	233.527	Axial	4016.310	0.9598521	0.9591929	0.9614153	0.9589480
BERYLLIUM	313.042	Radial	18735.30	0.9292612	0.9251859	0.9280287	0.9345691
CADMIUM	228.802	Axial	5067.855	0.9216404	0.9204082	0.9232041	0.9213088
CALCIUM	317.933	Radial	9477.476	9.056682	9.014866	9.051106	9.104075
CHROMIUM	267.716	Axial	6117.004	0.9449208	0.9454241	0.9463688	0.9429694
COBALT	228.616	Axial	3576.198	0.8889492	0.8914887	0.8886443	0.8867146
COPPER	324.754	Axial	16191.56	0.8770773	0.8805259	0.8711217	0.8795843
IRON	259.940	Radial	4461.937	8.927087	8.893055	8.925665	8.962542
LEAD	220.353	Axial	665.3445	0.8858429	0.8863867	0.8852594	0.8858824
LITHIUM	670.784	Radial	8263.909	0.9277335	0.9232155	0.9279882	0.9319969
MAGNESIUM	279.079	Radial	576.7420	9.154122	9.122808	9.166644	9.172915
MANGANESE	257.610	Axial	74855.25	0.8583589	0.8588630	0.8597495	0.8564643
MOLYBDENUM	202.030	Axial	1394.071	0.9293930	0.9288346	0.9298438	0.9295006
NICKEL	231.604	Axial	1902.305	0.8983751	0.8998881	0.8992441	0.8959929
PHOSPHORUS	177.495	Axial	29.85041	0.9051501	0.9113440	0.9047970	0.8993093
POTASSIUM	766.490	Radial	3864.410	8.974730	8.942635	8.980594	9.000961
SELENIUM	196.090	Axial	77.70025	0.8997205	0.8903892	0.9030106	0.9057618
SILICON	251.611	Axial	2898.706	0.8691908	0.8672154	0.8699614	0.8703955
SILVER	328.068	Axial	3122.612	0.1580563	0.1582305	0.1572566	0.1586818
SODIUM	589.592	Radial	8790.798	9.570457	9.534077	9.569520	9.607773
STRONTIUM	421.552	Radial	55750.42	0.9156773	0.9112488	0.9160367	0.9197464
SULFUR	182.034	Axial	547.2777	8.855810	8.844682	8.889368	8.833379
THALLIUM	190.856	Axial	171.3360	0.8820620	0.8793272	0.8816291	0.8852298
TIN	189.989	Axial	295.0898	0.9051666	0.9084325	0.9099391	0.8971282
TITANIUM	334.941	Radial	2932.646	0.9483404	0.9445395	0.9492070	0.9512747
VANADIUM	292.402	Radial	576.5099	0.9106816	0.9104501	0.9034777	0.9181170
ZINC	206.200	Axial	2527.512	0.8765471	0.8756326	0.8775144	0.8764943
CERIUM	535.353	Radial	72.10206	-0.03035387	-0.08753819	0.02884341	-0.03236682
LANTHANUM	333.749	Radial	-1.87008	-0.006953910	-0.0005408003	-0.009295528	-0.01102540

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1568841-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:33 Sequence: 109

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10274.23	10266.78	10273.29	10282.62
YTTRIUM	360.073	Axial	390738.8	389841.2	390466.2	391909.2
YTTRIUM	360.073	Radial	11306.79	11311.26	11355.87	11253.24
INDIUM	230.606	Axial	3061.330	3053.893	3057.940	3072.156

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ANTIMONY	206.833	Axial	-0.2739427	0.002900834	0.008475682	-0.0003696416	0.0005964609
ARSENIC	189.042	Axial	-0.3487912	0.001467889	-0.002213489	0.006422848	0.0001943077
BARIUM	233.527	Axial	715.0890	0.1724357	0.1716080	0.1725144	0.1731847
BERYLLIUM	313.042	Radial	12.84758	-0.0001464687	-0.00002579607	-0.0002448156	-0.0001687944
CADMIUM	228.802	Axial	5.142270	0.0002605835	0.0004163114	0.0002195394	0.0001458998
CHROMIUM	267.716	Axial	9.835926	-0.0002585727	-0.0005793989	0.0001074668	-0.0003037859
LEAD	220.353	Axial	1.537879	0.0008430497	0.002870659	0.0007353273	-0.001076837
NICKEL	231.604	Axial	5.175816	-0.0003536303	-0.0006723342	-0.00009587152	-0.0002926851
SELENIUM	196.090	Axial	0.8806129	-0.0001456325	0.002062619	-0.0008432843	-0.001656232
SILVER	328.068	Axial	-27.1811	-0.0001700137	0.00004268494	-0.0004965301	-0.00005619610
THALLIUM	190.856	Axial	1.131963	0.001364256	0.004683056	0.004262527	-0.004852814
ALUMINUM	308.215	Radial	6.363050	0.006077298	0.002121851	-0.009244887	0.02535493
BORON	249.678	Radial	17.80932	0.08215456	0.08007468	0.08070653	0.08568247
CALCIUM	373.690	Radial	33116.68	56.10645	55.96757	56.23627	56.11551
COBALT	228.616	Axial	4.183982	0.0005091325	0.0004907982	0.0007001784	0.0003364209
COPPER	324.754	Axial	28.13030	0.00004822437	0.0001160539	-0.0001756489	0.0002042681
IRON	259.940	Radial	8.786439	0.01358433	0.01286829	0.01437554	0.01350917
LITHIUM	670.784	Radial	494.6249	0.05612913	0.05588884	0.05586200	0.05663656
MAGNESIUM	279.079	Radial	1290.870	20.45268	20.43582	20.37532	20.54690
MANGANESE	257.610	Axial	60.89258	0.0007340481	0.0007295491	0.0007467376	0.0007258577
MOLYBDENUM	202.030	Axial	3.789206	0.001512404	0.001977939	0.001848179	0.0007110948
PHOSPHORUS	177.495	Axial	0.3405527	0.01322928	0.01051590	0.02590988	0.003262064
POTASSIUM	766.490	Radial	2315.399	5.436360	5.442970	5.439262	5.426847
SILICON	251.611	Axial	50776.45	15.71080	15.71840	15.70188	15.71214
SODIUM	589.592	Radial	12133.34	13.22878	13.21384	13.23349	13.23900
STRONTIUM	421.552	Radial	37656.51	0.6189116	0.6166171	0.6209724	0.6191453
SULFUR	182.034	Axial	232.2981	3.803462	3.795652	3.798825	3.815909
TIN	189.989	Axial	-1.50272	0.0004327685	0.0003345871	-0.002979343	0.003943061
TITANIUM	334.941	Radial	39.81635	0.01391964	0.01487044	0.01279795	0.01409053
VANADIUM	292.402	Radial	7.039707	0.01269256	0.01385824	0.01241814	0.01180129
ZINC	206.200	Axial	22.33090	0.007236160	0.006841329	0.007241376	0.007625773
CERIUM	535.353	Radial	76.43761	-0.007318642	-0.01440257	-0.03377694	0.02622359
LANTHANUM	333.749	Radial	-2.25815	-0.007723925	-0.004415405	-0.01271707	-0.006039298

Rows shaded in gray for analytes that were not ordered.

Sample ID: SD DF: 5x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:36 Sequence: 110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10566.41	10566.00	10555.21	10578.01
YTTRIUM	360.073	Axial	398708.7	399534.3	398276.0	398315.7
YTTRIUM	360.073	Radial	11280.45	11249.96	11258.61	11332.78
INDIUM	230.606	Axial	3279.910	3276.690	3279.028	3284.012

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	5.672344	0.02687970	0.1284921	0.1449563	0.1297471
ALUMINUM	308.215	Radial	3.196119	-0.02951598	-0.2348501	-0.08941267	-0.1184769
ANTIMONY	206.833	Axial	-1.35445	-0.001316825	0.005257470	0.004170104	-0.02917996
ARSENIC	189.042	Axial	-0.6106648	-0.00007259522	-0.02872675	0.02168330	0.005954521
BARIUM	233.527	Axial	134.5175	0.03105260	0.1545419	0.1557816	0.1554655
BERYLLIUM	313.042	Radial	15.42952	-0.00001639939	-0.00007292140	0.0002215963	-0.0003946656
CADMIUM	228.802	Axial	4.185782	0.00006307524	0.002866883	-0.0009181440	-0.001002611
CALCIUM	317.933	Radial	10597.88	10.17587	50.84701	50.95090	50.84017
CHROMIUM	267.716	Axial	10.30846	-0.0002293162	0.0002732828	-0.003010143	-0.0007028842
COBALT	228.616	Axial	2.800549	0.0001149082	0.003311281	-0.0006770015	-0.0009106555
COPPER	324.754	Axial	17.17873	-0.0005692282	-0.003366805	-0.0006457079	-0.004525911
IRON	259.940	Radial	3.564289	0.003149090	0.01631430	0.02602292	0.004899126
LEAD	220.353	Axial	1.615410	0.0007978228	-0.003801508	0.007379146	0.008389703
LITHIUM	670.784	Radial	75.91187	0.009153796	0.05723486	0.04236861	0.03770346
MAGNESIUM	279.079	Radial	229.9201	3.68223	18.37917	18.58868	18.26561
MANGANESE	257.610	Axial	13.40896	0.0001788258	0.001281271	0.0007827802	0.0006183352
MOLYBDENUM	202.030	Axial	2.480409	0.0005820134	-0.001152782	0.006172010	0.003710972
NICKEL	231.604	Axial	4.181369	-0.0009623172	-0.006257937	-0.003054256	-0.005122564
PHOSPHORUS	177.495	Axial	0.3993132	0.01467593	0.07677856	-0.001353823	0.1447143
POTASSIUM	766.490	Radial	367.5650	0.9835644	4.882028	5.046106	4.825333
SELENIUM	196.090	Axial	0.4382986	-0.005530666	-0.09686079	0.03023285	-0.01633205
SILICON	251.611	Axial	9005.156	2.694182	13.44446	13.48621	13.48207
SILVER	328.068	Axial	-23.5771	0.00003658168	-0.001014138	-0.0004586411	0.002021504
SODIUM	589.592	Radial	2360.294	2.552322	12.89994	12.80228	12.58261
STRONTIUM	421.552	Radial	6578.058	0.1086725	0.5444606	0.5412644	0.5443625
SULFUR	182.034	Axial	40.82493	0.6498480	3.184973	3.226220	3.336528
THALLIUM	190.856	Axial	1.378751	0.002163834	0.02106020	0.009637554	0.001759739
TIN	189.989	Axial	-1.94073	-0.0005131426	0.01047889	-0.03029586	0.01211983
TITANIUM	334.941	Radial	6.891657	0.003283950	0.01752704	0.01809346	0.01363874
VANADIUM	292.402	Radial	1.486350	0.003933292	0.03493967	-0.007901450	0.03196118
ZINC	206.200	Axial	4.351430	0.0008804340	0.003227135	0.004969941	0.005009434
CERIUM	535.353	Radial	58.54264	-0.1007262	-0.2609182	-0.7277393	-0.5222358
LANTHANUM	333.749	Radial	-4.20143	-0.01168228	-0.05768347	-0.02806545	-0.08948533

Rows shaded in gray for analytes that were not ordered.

Sample ID: MS DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:39 Sequence: 111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10249.23	10271.32	10246.57	10229.80
YTTRIUM	360.073	Axial	384652.5	384630.9	385920.9	383405.8
YTTRIUM	360.073	Radial	11425.06	11504.33	11343.72	11427.14
INDIUM	230.606	Axial	3024.781	3024.192	3031.803	3018.347

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	219.6803	0.9920798	0.9870287	0.9989306	0.9902802
ALUMINUM	308.215	Radial	736.0237	8.124320	8.083498	8.148260	8.141202
ANTIMONY	206.833	Axial	217.6636	0.8864070	0.8828781	0.8889809	0.8873619
ARSENIC	189.042	Axial	135.0905	0.8559808	0.8444201	0.8579917	0.8655307
BARIUM	233.527	Axial	4754.770	1.152744	1.151552	1.152973	1.153706
BERYLLIUM	313.042	Radial	19640.54	0.9645978	0.9576596	0.9677822	0.9683516
CADMIUM	228.802	Axial	5101.477	0.9410675	0.9407190	0.9418301	0.9406534
CALCIUM	373.690	Radial	37169.95	62.32623	61.90309	62.53080	62.54481
CHROMIUM	267.716	Axial	6442.660	1.009617	1.006733	1.008412	1.013705
COBALT	228.616	Axial	3282.383	0.8336307	0.8355282	0.8303020	0.8350617
COPPER	324.754	Axial	15336.87	0.8505667	0.8497497	0.8505702	0.8513803
IRON	259.940	Radial	4437.967	8.791617	8.740668	8.813610	8.820571
LEAD	220.353	Axial	636.8083	0.8662709	0.8681694	0.8620314	0.8686119
LITHIUM	670.784	Radial	8658.663	0.9624513	0.9557926	0.9637302	0.9678313
MAGNESIUM	279.079	Radial	1901.599	29.80039	29.64941	29.95072	29.80103
MANGANESE	257.610	Axial	71808.47	0.8352248	0.8337672	0.8356625	0.8362448
MOLYBDENUM	202.030	Axial	1324.753	0.8958049	0.8943243	0.8952585	0.8978318
NICKEL	231.604	Axial	1839.766	0.8877047	0.8878677	0.8878605	0.8873858
PHOSPHORUS	177.495	Axial	30.14623	0.9271428	0.9364848	0.9125264	0.9324171
POTASSIUM	766.490	Radial	5940.045	13.58589	13.47875	13.63134	13.64757
SELENIUM	196.090	Axial	77.02730	0.9047923	0.8882851	0.9218052	0.9042867
SILICON	251.611	Axial	54724.59	16.97520	16.93501	17.02184	16.96876
SILVER	328.068	Axial	3154.178	0.1634253	0.1637378	0.1628023	0.1637358
SODIUM	818.326	Radial	1314.500	21.25676	21.22369	21.31276	21.23383
STRONTIUM	421.552	Radial	91322.43	1.484934	1.474879	1.489849	1.490074
SULFUR	182.034	Axial	794.1815	13.03536	12.97162	13.09908	13.03539
THALLIUM	190.856	Axial	159.8964	0.8408629	0.8461843	0.8415924	0.8348119
TIN	189.989	Axial	281.0132	0.8808692	0.8821022	0.8787578	0.8817475
TITANIUM	334.941	Radial	3031.238	0.9705471	0.9650555	0.9741402	0.9724457
VANADIUM	292.402	Radial	577.4187	0.9031674	0.8933361	0.9110523	0.9051138
ZINC	206.200	Axial	2449.804	0.8617667	0.8600563	0.8647090	0.8605349
CERIUM	535.353	Radial	88.52535	0.05149786	-0.02195079	0.06290817	0.1135362
LANTHANUM	333.749	Radial	-3.13747	-0.009464282	-0.006890680	-0.01233480	-0.009167363

Rows shaded in gray for analytes that were not ordered.

Sample ID: MSD DF: 1x Ref Sample ID: L1568841-01 Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 12:41 Sequence: 112

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10258.29	10266.46	10266.59	10241.81
YTTRIUM	360.073	Axial	384505.8	384508.5	385476.6	383532.2
YTTRIUM	360.073	Radial	11485.49	11588.07	11409.98	11458.43
INDIUM	230.606	Axial	3030.738	3035.207	3029.565	3027.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	217.8254	0.9785889	0.9584456	0.9788206	0.9985006
ALUMINUM	308.215	Radial	734.7780	8.067474	8.022493	8.075648	8.104282
ANTIMONY	206.833	Axial	222.2728	0.9042899	0.9050986	0.9078000	0.8999710
ARSENIC	189.042	Axial	136.2170	0.8623168	0.8560914	0.8657191	0.8651398
BARIUM	233.527	Axial	4746.240	1.149656	1.149264	1.150497	1.149208
BERYLLIUM	313.042	Radial	19732.33	0.9639990	0.9600431	0.9645218	0.9674322
CADMIUM	228.802	Axial	5086.338	0.9374444	0.9362810	0.9375205	0.9385315
CALCIUM	373.690	Radial	37190.89	62.03269	61.77899	62.08170	62.23739
CHROMIUM	267.716	Axial	6456.042	1.010820	1.012834	1.006685	1.012940
COBALT	228.616	Axial	3262.584	0.8269664	0.8259406	0.8271811	0.8277775
COPPER	324.754	Axial	15306.14	0.8491848	0.8508194	0.8476562	0.8490787
IRON	259.940	Radial	4426.340	8.722442	8.673390	8.728242	8.765695
LEAD	220.353	Axial	633.4141	0.8599495	0.8554215	0.8614380	0.8629892
LITHIUM	670.784	Radial	8676.168	0.9593139	0.9572456	0.9586043	0.9620916
MAGNESIUM	279.079	Radial	1916.460	29.87507	29.75290	29.98821	29.88410
MANGANESE	257.610	Axial	71466.84	0.8305159	0.8305427	0.8301997	0.8308052
MOLYBDENUM	202.030	Axial	1344.376	0.9082840	0.9076262	0.9084518	0.9087739
NICKEL	231.604	Axial	1831.510	0.8819662	0.8809492	0.8843795	0.8805699
PHOSPHORUS	177.495	Axial	29.93415	0.9198366	0.9011112	0.9354317	0.9229670
POTASSIUM	766.490	Radial	5956.697	13.55259	13.47967	13.57227	13.60584
SELENIUM	196.090	Axial	76.73789	0.9005368	0.9074558	0.8911702	0.9029845
SILICON	251.611	Axial	54986.80	17.04156	17.00701	17.01862	17.09906
SILVER	328.068	Axial	3142.786	0.1629013	0.1631089	0.1620375	0.1635576
SODIUM	818.326	Radial	1311.451	21.08475	20.99385	21.13369	21.12671
STRONTIUM	421.552	Radial	91537.60	1.480580	1.476750	1.478913	1.486077
SULFUR	182.034	Axial	792.3848	12.99432	12.95601	13.04655	12.98041
THALLIUM	190.856	Axial	157.6277	0.8272361	0.8253749	0.8232223	0.8331111
TIN	189.989	Axial	286.9759	0.8976950	0.8930694	0.9022087	0.8978070
TITANIUM	334.941	Radial	3089.566	0.9840125	0.9786583	0.9912821	0.9820972
VANADIUM	292.402	Radial	574.8207	0.8943686	0.8894420	0.8960001	0.8976637
ZINC	206.200	Axial	2440.848	0.8578559	0.8560885	0.8580032	0.8594759
CERIUM	535.353	Radial	73.97277	-0.02631551	-0.04537755	-0.006481809	-0.02708715
LANTHANUM	333.749	Radial	-0.08419050	-0.003343099	0.002113103	-0.005159710	-0.006982690

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 13:10 Sequence: 117 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10150.09	10148.27	10139.58	10162.41
YTTRIUM	360.073	Axial	373404.5	372620.1	374018.4	373575.0
YTTRIUM	360.073	Radial	11077.65	11106.50	11079.42	11047.02
INDIUM	230.606	Axial	3028.221	3027.483	3029.529	3027.653

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	772.5611	8.800375	8.783624	8.767793	8.849709
ANTIMONY	206.833	Axial	114.6465	0.4733177	0.4763016	0.4719086	0.4717429
ARSENIC	189.042	Axial	147.4248	0.9428702	0.9460880	0.9410772	0.9414453
BARIUM	233.527	Axial	2200.664	0.5384205	0.5391079	0.5383893	0.5377643
BERYLLIUM	313.042	Radial	4242.511	0.2142798	0.2146013	0.2141520	0.2140861
BORON	249.678	Radial	215.4950	1.003654	1.006957	1.004124	0.9998814
CADMIUM	228.802	Axial	2767.599	0.5152143	0.5143792	0.5159399	0.5153238
CALCIUM	373.690	Radial	26940.90	46.58329	46.47753	46.57378	46.69856
CHROMIUM	267.716	Axial	7373.150	1.166994	1.165195	1.170559	1.165229
COBALT	228.616	Axial	3521.941	0.8934903	0.8936689	0.8922580	0.8945440
COPPER	324.754	Axial	15995.15	0.9139063	0.9146867	0.9139675	0.9130647
IRON	259.940	Radial	4746.571	9.698075	9.706444	9.691463	9.696319
LEAD	220.353	Axial	339.6745	0.4609681	0.4601921	0.4578155	0.4648966
LITHIUM	670.784	Radial	8489.739	0.9732415	0.9754455	0.9727775	0.9715017
MAGNESIUM	279.079	Radial	625.7645	10.13876	10.06686	10.10248	10.24695
MANGANESE	257.610	Axial	79993.73	0.9395127	0.9363919	0.9418057	0.9403406
MOLYBDENUM	202.030	Axial	362.6785	0.2468818	0.2473269	0.2456782	0.2476402
NICKEL	231.604	Axial	2007.693	0.9678857	0.9697524	0.9658272	0.9680775
POTASSIUM	766.490	Radial	19574.45	45.83503	45.69880	45.99621	45.81007
SELENIUM	196.090	Axial	81.77699	0.9707179	0.9689934	0.9756006	0.9675598
SILICON	251.611	Axial	35374.70	11.07382	11.25819	10.94591	11.01736
SILVER	328.068	Axial	9277.986	0.4927417	0.4914708	0.4927220	0.4940325
SODIUM	818.326	Radial	2796.512	48.42654	48.26027	48.36934	48.65000
STRONTIUM	421.552	Radial	58018.37	0.9730870	0.9751314	0.9724688	0.9716610
SULFUR	182.034	Axial	307.6019	5.098068	5.083826	5.100654	5.109724
THALLIUM	190.856	Axial	162.0059	0.8510496	0.8600836	0.8433669	0.8496982
TIN	189.989	Axial	150.6473	0.4740371	0.4740039	0.4744079	0.4736995
TITANIUM	334.941	Radial	3283.319	1.084082	1.082514	1.086628	1.083104
VANADIUM	292.402	Radial	598.2507	0.9649485	0.9674464	0.9575675	0.9698314
ZINC	206.200	Axial	2717.047	0.9651804	0.9660989	0.9626812	0.9667612
CERIUM	535.353	Radial	71.08273	-0.02772746	-0.04816886	-0.09289590	0.05788238
LANTHANUM	333.749	Radial	0.04245768	-0.003041168	-0.01528039	-0.003927269	0.01008415
PHOSPHORUS	177.495	Axial	32.63504	1.013240	0.9985736	1.032257	1.008890

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 13:13 Sequence: 118

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10824.38	10825.79	10829.07	10818.29
YTTRIUM	360.073	Axial	404441.9	405518.5	404472.7	403334.6
YTTRIUM	360.073	Radial	11371.04	11347.96	11382.57	11382.59
INDIUM	230.606	Axial	3400.358	3401.270	3403.896	3395.909

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	8.620903	0.03086471	0.03320027	0.06569740	-0.006303554
ANTIMONY	206.833	Axial	0.4852759	0.005869794	0.006462081	0.004741528	0.006405772
ARSENIC	189.042	Axial	0.2236711	0.004998391	0.005860125	0.008284844	0.0008502044
BARIUM	233.527	Axial	2.880527	0.00006432606	0.0001641627	0.0002845474	-0.0002557320
BERYLLIUM	313.042	Radial	13.83208	-0.0001014757	-0.00003289416	-0.0002008845	-0.00007064848
BORON	249.678	Radial	1.553801	0.008009330	0.01494770	0.005297210	0.003783076
CADMIUM	228.802	Axial	4.333961	0.00007112540	-0.00002909121	0.00005528560	0.0001871818
CALCIUM	317.933	Radial	153.2983	-0.01578262	-0.01586227	-0.01639142	-0.01509417
CERIUM	535.353	Radial	45.85762	-0.1695369	-0.2073409	-0.1745146	-0.1267552
CHROMIUM	267.716	Axial	10.76389	-0.0001987164	-0.00003393838	-0.0007773763	0.0002151656
COBALT	228.616	Axial	2.679525	0.00006404019	-0.0003633655	0.0003238123	0.0002316737
COPPER	324.754	Axial	22.56349	-0.0002981385	0.000008340669	-0.0006132980	-0.0002894583
IRON	259.940	Radial	2.580364	0.001125606	-0.001269812	0.003032771	0.001613859
LANTHANUM	333.749	Radial	1.804950	0.0004959268	0.006859801	0.002304607	-0.007676627
LEAD	220.353	Axial	1.192471	0.0002140478	0.0003277620	0.0003798452	-0.00006546375
LITHIUM	670.784	Radial	-7.41878	-0.0002199647	-0.001261985	0.0008413119	-0.0002392214
MAGNESIUM	279.079	Radial	-0.9430306	0.02271032	0.03424924	0.02313259	0.01074914
MANGANESE	257.610	Axial	12.3750	0.0001638364	0.0001316859	0.0001376171	0.0002222062
MOLYBDENUM	202.030	Axial	1.663738	0.00001948343	0.0002961716	-0.00003702124	-0.0002007001
NICKEL	231.604	Axial	4.884370	-0.0007257722	-0.001062851	-0.0004033732	-0.0007110920
PHOSPHORUS	177.495	Axial	0.09613719	0.005604064	-0.006845586	0.006246267	0.01741151
POTASSIUM	766.490	Radial	-48.3127	0.03106290	0.04532185	0.03502940	0.01283745
SELENIUM	196.090	Axial	1.617068	0.007609522	0.002304328	0.01155331	0.008970932
SILICON	251.611	Axial	2748.349	0.7898527	0.9161382	0.7710525	0.6823675
SILVER	328.068	Axial	-24.3611	0.00001436192	0.0002386212	-0.0001857242	-0.000009811161
SODIUM	589.592	Radial	99.87841	0.07482177	0.07685906	0.07457944	0.07302680
STRONTIUM	421.552	Radial	-10.6900	0.0001950640	0.0002177494	0.0003220688	0.00004537380
SULFUR	182.034	Axial	1.652810	0.02556863	0.02865765	0.03109498	0.01695325
THALLIUM	190.856	Axial	0.5801731	-0.001833450	-0.001589453	0.0002346121	-0.004145509
TIN	189.989	Axial	-1.14976	0.001877660	0.001838962	0.002514178	0.001279841
TITANIUM	334.941	Radial	-2.40088	0.0002788523	0.0003800182	-0.00003293391	0.0004894727
VANADIUM	292.402	Radial	1.598736	0.004095899	0.004509609	0.0008911919	0.006886895
ZINC	206.200	Axial	2.266211	0.0001501265	-0.0001101983	-0.00004323171	0.0006038094

Sample ID: CCVLL Units: mg/l
Analyzed: 12/21/22 13:52 Sequence: 132 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10802.33	10807.37	10806.21	10793.41
YTTRIUM	360.073	Axial	400864.1	400312.2	401980.2	400299.8
YTTRIUM	360.073	Radial	11284.66	11284.55	11277.38	11292.03
INDIUM	230.606	Axial	3401.118	3405.894	3404.125	3393.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	20.99373	0.1709790	0.1697285	0.1584367	0.1847718
ANTIMONY	206.833	Axial	1.336779	0.009147656	0.01171818	0.008629305	0.007095486
ARSENIC	189.042	Axial	0.8726293	0.008884161	0.01489368	0.009839319	0.001919485
BARIUM	233.527	Axial	26.78314	0.005566838	0.005645946	0.005478989	0.005575578
BERYLLIUM	313.042	Radial	53.99151	0.001902164	0.001847553	0.001998313	0.001860624
BORON	249.678	Radial	43.39584	0.1991745	0.1928967	0.1980791	0.2065476
CADMIUM	228.802	Axial	16.65972	0.002231624	0.001908633	0.002334664	0.002451575
CALCIUM	317.933	Radial	1203.703	1.009820	1.006120	1.015168	1.008171
CHROMIUM	267.716	Axial	88.76389	0.01142228	0.01173672	0.01131630	0.01121384
COBALT	228.616	Axial	39.73535	0.008438512	0.008799822	0.008522888	0.007992826
COPPER	324.754	Axial	169.9345	0.007569244	0.008019041	0.007393860	0.007294831
IRON	259.940	Radial	50.09058	0.09649778	0.09417777	0.09751536	0.09780019
LEAD	220.353	Axial	4.376892	0.004074546	0.002499381	0.003414429	0.006309829
LITHIUM	670.784	Radial	125.6939	0.01474512	0.01588271	0.01398655	0.01436611
MAGNESIUM	279.079	Radial	67.74853	1.111054	1.088781	1.103472	1.140908
MANGANESE	257.610	Axial	865.4028	0.009577558	0.009616921	0.009540272	0.009575479
MOLYBDENUM	202.030	Axial	8.589082	0.004469848	0.005039110	0.004399388	0.003971045
NICKEL	231.604	Axial	25.94746	0.008341399	0.008365604	0.008139635	0.008518959
POTASSIUM	766.490	Radial	369.2404	0.9870420	0.9443802	0.9885609	1.028185
SELENIUM	196.090	Axial	1.533278	0.006699433	0.01109737	0.008409606	0.0005913258
SILICON	251.611	Axial	779.7782	0.2115339	0.2112707	0.2106626	0.2126683
SILVER	328.068	Axial	76.63889	0.004988469	0.004902192	0.004841744	0.005221472
SODIUM	589.592	Radial	1116.213	1.188741	1.199819	1.167861	1.198543
STRONTIUM	421.552	Radial	577.6500	0.009876679	0.009962796	0.009761126	0.009906115
SULFUR	182.034	Axial	62.85348	0.9787183	0.9752418	0.9785803	0.9823327
THALLIUM	190.856	Axial	3.097032	0.01000455	0.01004389	0.008213046	0.01175672
TIN	189.989	Axial	15.40293	0.04775842	0.04853887	0.04688588	0.04785051
TITANIUM	334.941	Radial	159.5386	0.05270970	0.05107950	0.05259692	0.05445269
VANADIUM	292.402	Radial	10.22049	0.01774577	0.01927444	0.02213623	0.01182664
ZINC	206.200	Axial	142.8220	0.04709614	0.04730052	0.04680832	0.04717956
CERIUM	535.353	Radial	45.49269	-0.1695804	-0.1501455	-0.1672238	-0.1913720
LANTHANUM	333.749	Radial	-3.14538	-0.009547174	-0.007130914	-0.01354750	-0.007963103
PHOSPHORUS	177.495	Axial	3.248726	0.09732067	0.1020080	0.09481485	0.09513914

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 14:03 Sequence: 133 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9276.824	9296.785	9271.558	9262.128
YTTRIUM	360.073	Axial	342552.3	342966.5	342789.4	341901.1
YTTRIUM	360.073	Radial	10697.43	10696.47	10733.68	10662.15
INDIUM	230.606	Axial	2607.206	2613.925	2602.492	2605.200

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37663.73	447.5229	447.0356	447.3215	448.2117
ANTIMONY	206.833	Axial	-5.31340	-0.01979124	-0.02022894	-0.01843217	-0.02071261
ARSENIC	189.042	Axial	-1.54100	-0.007079457	-0.005192888	-0.009727370	-0.006318115
BARIUM	233.527	Axial	12.15690	0.002661461	0.002038695	0.002906043	0.003039647
BERYLLIUM	313.042	Radial	12.39512	-0.0001338899	-0.0001832419	-0.0001437261	-0.00007470166
BORON	249.678	Radial	-1.84670	-0.007934736	-0.01771088	-0.005242736	-0.0008505897
CADMIUM	228.802	Axial	3.642242	0.00005664602	-0.0002554183	0.0004576603	-0.00003230390
CALCIUM	373.690	Radial	267280.2	478.8285	478.5593	478.2688	479.6575
CERIUM	535.353	Radial	261.8847	1.045592	1.035804	1.094223	1.006749
CHROMIUM	267.716	Axial	23.15401	0.002217701	0.001663963	0.002210794	0.002778345
COBALT	228.616	Axial	7.830242	0.001767247	0.001635414	0.002277135	0.001389191
COPPER	324.754	Axial	-119.924	-0.008971547	-0.009170178	-0.008603947	-0.009140517
IRON	271.441	Radial	4171.329	173.0997	172.6670	173.5450	173.0870
LANTHANUM	333.749	Radial	0.5540769	-0.001953075	-0.0008288905	-0.007247484	0.002217150
LEAD	220.353	Axial	-16.8018	-0.02778499	-0.02746027	-0.02669434	-0.02920035
LITHIUM	670.784	Radial	32.01757	0.004407643	0.004014744	0.004579247	0.004628938
MAGNESIUM	279.079	Radial	31287.73	523.0361	523.2198	521.8985	523.9902
MANGANESE	257.610	Axial	513.1714	0.006621792	0.006639310	0.006603669	0.006622396
MOLYBDENUM	202.030	Axial	5.976621	0.003423849	0.003095289	0.002990261	0.004185996
NICKEL	231.604	Axial	19.05163	0.007869465	0.008256880	0.007406335	0.007945180
PHOSPHORUS	177.495	Axial	0.3500455	0.01467631	0.009063864	0.01183994	0.02312512
POTASSIUM	766.490	Radial	-92.4560	-0.08248467	-0.07420836	-0.1288643	-0.04438138
SELENIUM	196.090	Axial	2.029560	0.01604919	0.02557574	0.01507801	0.007493810
SILICON	251.611	Axial	28.71797	-0.008355635	-0.009972461	-0.006523409	-0.008571036
SILVER	328.068	Axial	-74.5766	-0.003100588	-0.003338233	-0.002911564	-0.003051966
SODIUM	589.592	Radial	108.4598	0.09157770	0.08366428	0.09179554	0.09927329
STRONTIUM	421.552	Radial	203.4043	0.003901342	0.003846767	0.003806599	0.004050661
SULFUR	182.034	Axial	0.3882419	0.006926354	0.006913990	0.001293816	0.01257126
THALLIUM	190.856	Axial	0.9993686	0.001566821	0.002351072	-0.004646517	0.006995909
TIN	189.989	Axial	-4.47569	-0.01111817	-0.01130724	-0.01431431	-0.007732951
TITANIUM	334.941	Radial	121.0891	0.04241494	0.04118284	0.04179529	0.04426669
VANADIUM	292.402	Radial	4.302990	0.008762570	0.01163818	0.007495446	0.007154083
ZINC	206.200	Axial	12.76006	0.004357425	0.004232186	0.004228071	0.004612019

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 14:05 Sequence: 134 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9155.693	9149.438	9164.897	9152.744
YTTRIUM	360.073	Axial	338093.3	338163.8	338560.8	337555.2
YTTRIUM	360.073	Radial	10601.30	10596.71	10613.17	10594.03
INDIUM	230.606	Axial	2571.322	2575.722	2569.801	2568.442

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37523.07	449.8942	450.8349	449.1920	449.6557
ANTIMONY	206.833	Axial	101.4739	0.4645102	0.4608766	0.4622518	0.4704023
ARSENIC	189.042	Axial	67.16458	0.4780252	0.4876300	0.4800482	0.4663975
BARIUM	233.527	Axial	1981.388	0.5374223	0.5389974	0.5352400	0.5380296
BERYLLIUM	313.042	Radial	10063.33	0.5322755	0.5329997	0.5329599	0.5308668
BORON	249.678	Radial	204.2231	0.9939120	0.9929296	0.9897753	0.9990311
CADMIUM	228.802	Axial	5287.262	1.091943	1.094125	1.088326	1.093379
CALCIUM	373.690	Radial	266198.0	481.2127	481.4492	481.1748	481.0141
CERIUM	535.353	Radial	255.1038	1.020877	0.9928683	1.013741	1.056023
CHROMIUM	267.716	Axial	3235.069	0.5667219	0.5669010	0.5655617	0.5677030
COBALT	228.616	Axial	1464.191	0.4371816	0.4376759	0.4359124	0.4379564
COPPER	324.754	Axial	7298.984	0.4598552	0.4589225	0.4602982	0.4603449
IRON	271.441	Radial	4157.242	174.0803	173.9187	173.7985	174.5237
LANTHANUM	333.749	Radial	-0.2365696	-0.003666620	-0.002431812	0.0008921332	-0.009460182
LEAD	220.353	Axial	555.7726	0.8893959	0.8857120	0.8861951	0.8962807
LITHIUM	670.784	Radial	28.21712	0.003988314	0.004288918	0.001901752	0.005774272
MAGNESIUM	279.079	Radial	31135.87	525.2149	525.2165	524.9706	525.4574
MANGANESE	257.610	Axial	35474.83	0.4619115	0.4621372	0.4618311	0.4617661
MOLYBDENUM	202.030	Axial	630.5717	0.4768336	0.4775483	0.4768913	0.4760611
NICKEL	231.604	Axial	1684.938	0.9565932	0.9552988	0.9565766	0.9579041
PHOSPHORUS	177.495	Axial	0.1507135	0.007984275	0.04119441	0.01499940	-0.03224099
POTASSIUM	766.490	Radial	-83.2377	-0.06213313	-0.07437981	-0.03879248	-0.07322712
SELENIUM	196.090	Axial	40.58444	0.5293053	0.5283215	0.5375147	0.5220797
SILICON	251.611	Axial	3007.245	1.027153	1.030610	1.024382	1.026466
SILVER	328.068	Axial	18774.77	1.099756	1.100417	1.100109	1.098740
SODIUM	589.592	Radial	114.2049	0.09939959	0.1014564	0.1057010	0.09104137
STRONTIUM	421.552	Radial	200.5215	0.003882632	0.003943181	0.003807403	0.003897312
SULFUR	182.034	Axial	0.2218464	0.003972924	0.03233820	-0.01704021	-0.003379213
THALLIUM	190.856	Axial	68.70401	0.4227679	0.4177931	0.4250730	0.4254377
TIN	189.989	Axial	125.8420	0.4664242	0.4703996	0.4656292	0.4632437
TITANIUM	334.941	Radial	1657.018	0.5721901	0.5691766	0.5752236	0.5721702
VANADIUM	292.402	Radial	285.3191	0.4816739	0.4749000	0.4904246	0.4796971
ZINC	206.200	Axial	2272.537	0.8949121	0.8952125	0.8941969	0.8953268

Sample ID: CALBLK Units: mg/l
Analyzed: 12/21/22 14:31 Sequence: 2 Standard ID: 22H09169

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10503.19	10496.31	10494.06	10519.21
YTTRIUM	360.073	Axial	397957.5	396206.7	399610.0	398055.8
YTTRIUM	360.073	Radial	11016.78	11009.57	10993.18	11047.60
INDIUM	230.606	Axial	3284.679	3279.898	3280.803	3293.336

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	3.253482	3.058846	3.787316	2.914284
ANTIMONY	206.833	Axial	-0.1308332	-0.4936050	0.4934350	-0.3923295
ARSENIC	189.042	Axial	-0.7641114	-0.2815156	-1.040978	-0.9698402
BARIUM	233.527	Axial	1.767289	2.960417	1.753802	0.5876483
BERYLLIUM	313.042	Radial	13.03607	12.84870	13.61855	12.64097
BORON	249.678	Radial	-0.8181666	-1.415016	-0.4991681	-0.5403159
CADMIUM	228.802	Axial	3.903785	3.991413	4.829200	2.890741
CALCIUM	317.933	Radial	149.2761	151.0321	145.9235	150.8728
CALCIUM	373.690	Radial	12.00572	10.19644	12.31281	13.50790
CERIUM	535.353	Radial	58.42292	50.23306	67.92845	57.10723
CHROMIUM	267.716	Axial	8.597222	12.41667	10	3.375
COBALT	228.616	Axial	3.027367	3.010059	2.712429	3.359614
COPPER	324.754	Axial	19.80556	13.67262	24.57738	21.16667
IRON	259.940	Radial	0.9282788	0.1248543	-0.04159734	2.701579
IRON	271.441	Radial	0.2218733	0.5410355	-0.1247920	0.2493766
LANTHANUM	333.749	Radial	-2.35563	-0.4161811	-0.8319468	-5.818786
LEAD	220.353	Axial	1.251235	1.017245	1.049498	1.686961
LITHIUM	670.784	Radial	-10.4063	0.9155985	-7.945092	-24.18953
MAGNESIUM	279.079	Radial	-2.09284	-0.7075079	-1.955075	-3.615960
MANGANESE	257.610	Axial	-7.43055	-5.625	-14.50	-2.166667
MOLYBDENUM	202.030	Axial	1.190667	1.130946	1.587302	0.8537532
NICKEL	231.604	Axial	3.478787	4.102450	2.553003	3.780907
PHOSPHORUS	177.495	Axial	0.2033607	-0.03326311	0.2331002	0.4102450
POTASSIUM	766.490	Radial	-49.4397	-49.23423	-49.37604	-49.70906
SELENIUM	196.090	Axial	0.8554665	1.212256	1.302401	0.05174262
SILICON	251.611	Axial	42.58137	40.33251	39.69597	47.71563
SILVER	328.068	Axial	-17.5138	-15.83333	-24.54167	-12.16667
SODIUM	589.592	Radial	41.38286	34.95921	44.80033	44.38903
SODIUM	818.326	Radial	80.92742	88.31363	75.74875	78.71987
STRONTIUM	421.552	Radial	-14.2073	-4.203429	-17.67887	-20.73982
SULFUR	182.034	Axial	-0.09211856	-0.7317884	0.7548008	-0.2993680
THALLIUM	190.856	Axial	0.03272781	-0.4330527	0.2547660	0.2764701
TIN	189.989	Axial	-1.88920	-1.995787	-1.609502	-2.062313
TITANIUM	334.941	Radial	-3.28754	-5.577462	-4.243440	-0.04173546
VANADIUM	292.402	Radial	0.7957928	3.551412	-0.3327787	-0.8312552
ZINC	206.200	Axial	1.220386	1.363788	1.998002	0.2993680

Sample ID: STD1 Units: mg/l
Analyzed: 12/21/22 14:33 Sequence: 3 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10530.28	10535.92	10531.14	10523.80
YTTRIUM	360.073	Axial	399617.7	399760.0	400318.0	398775.2
YTTRIUM	360.073	Radial	11064.99	11004.86	11089.22	11100.88
INDIUM	230.606	Axial	3273.004	3276.827	3271.501	3270.684

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ALUMINUM	308.215	Radial	23.53925	21.73084	25.58567	23.30123
ANTIMONY	206.833	Axial	1.727388	1.626064	1.813141	1.742958
ARSENIC	189.042	Axial	0.7456394	0.4147275	1.497001	0.3251900
BARIUM	233.527	Axial	24.31324	25.02495	24.34232	23.57246
BERYLLIUM	313.042	Radial	53.14791	51.42253	56.21573	51.80547
BORON	249.678	Radial	42.86954	43.20113	42.74892	42.65857
CADMIUM	228.802	Axial	15.07137	13.82920	14.39411	16.99081
CALCIUM	317.933	Radial	1186.478	1179.678	1192.932	1186.824
CHROMIUM	267.716	Axial	78.47222	71.08333	87.91667	76.41667
COBALT	228.616	Axial	42.04847	43.33588	40.98142	41.82811
COPPER	324.754	Axial	179.9107	182.2560	173.4464	184.0298
IRON	259.940	Radial	49.68294	47.49208	51.36530	50.19144
LEAD	220.353	Axial	4.564814	4.670603	3.173158	5.850680
LITHIUM	670.784	Radial	121.6109	111.5647	130.7443	122.5237
MAGNESIUM	279.079	Radial	61.66128	64.61423	60.18981	60.17979
MANGANESE	257.610	Axial	877.3194	877.2500	880.5417	874.1667
MOLYBDENUM	202.030	Axial	9.006711	8.958865	9.457209	8.604058
NICKEL	231.604	Axial	25.74049	25.83435	26.05173	25.33540
PHOSPHORUS	177.495	Axial	4.067407	3.281960	5.183705	3.736556
POTASSIUM	766.490	Radial	357.5284	361.3564	350.6077	360.6209
SELENIUM	196.090	Axial	1.715626	1.877518	1.968402	1.300957
SILICON	251.611	Axial	692.7421	690.0725	692.3208	695.8329
SILVER	328.068	Axial	71.59722	75.8750	73.16667	65.750
SODIUM	589.592	Radial	1005.926	1005.124	1010.365	1002.289
STRONTIUM	421.552	Radial	585.8524	593.6927	583.9993	579.8652
SULFUR	182.034	Axial	60.08397	60.91584	59.20746	60.12862
THALLIUM	190.856	Axial	3.344690	2.980906	3.517531	3.535633
TIN	189.989	Axial	14.93700	15.50061	15.05162	14.25879
TITANIUM	334.941	Radial	152.1297	158.1783	151.8853	146.3254
VANADIUM	292.402	Radial	13.72888	9.720602	16.48352	14.98252
ZINC	206.200	Axial	144.1193	145.4152	143.5120	143.4305

Sample ID: STD2 Units: mg/l
Analyzed: 12/21/22 14:36 Sequence: 4 Standard ID: 22H04633

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10701.80	10719.34	10702.51	10683.55
YTTRIUM	360.073	Axial	404918.7	406578.5	404980.0	403197.5
YTTRIUM	360.073	Radial	11358.98	11335.05	11351.66	11390.22
INDIUM	230.606	Axial	3281.124	3280.862	3281.029	3281.482

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	120.0354	120.6866	120.3846	119.0349
ARSENIC	189.042	Axial	77.20960	76.93726	76.62703	78.06451
BERYLLIUM	313.042	Radial	10201.89	10166.26	10209.53	10229.88
BORON	249.678	Radial	108.0162	109.8434	105.2149	108.9904
CADMIUM	228.802	Axial	2839.962	2844.074	2839.982	2835.831
CHROMIUM	267.716	Axial	3601.708	3604.219	3606.164	3594.742
COBALT	228.616	Axial	1945.321	1949.942	1947.890	1938.129
COPPER	324.754	Axial	8513.160	8530.841	8551.070	8457.569
IRON	259.940	Radial	245.8801	245.7528	247.7091	244.1783
LEAD	220.353	Axial	379.5778	380.3611	380.0159	378.3564
LITHIUM	670.784	Radial	4473.781	4446.411	4480.173	4494.760
MANGANESE	257.610	Axial	43761.98	43789.19	43855.58	43641.18
MOLYBDENUM	202.030	Axial	760.6092	760.7813	759.1581	761.8884
NICKEL	231.604	Axial	1073.272	1075.363	1076.119	1068.335
PHOSPHORUS	177.495	Axial	18.73691	18.75486	18.98256	18.47332
SELENIUM	196.090	Axial	43.25555	43.85751	43.25225	42.65690
SILICON	251.611	Axial	1932.962	1891.228	1931.433	1976.224
SILVER	328.068	Axial	9777.548	9794.309	9778.452	9759.885
STRONTIUM	421.552	Radial	30282.96	30104.93	30307.61	30436.34
SULFUR	182.034	Axial	31.06137	31.35057	30.55648	31.27704
THALLIUM	190.856	Axial	95.47459	94.59373	96.25575	95.57429
TIN	189.989	Axial	163.8619	164.3103	163.3233	163.9521
TITANIUM	334.941	Radial	1569.461	1563.648	1561.836	1582.900
VANADIUM	292.402	Radial	303.7332	303.9640	303.3989	303.8368
ZINC	206.200	Axial	1429.001	1430.263	1429.679	1427.061

Sample ID: STD3 Units: mg/l
Analyzed: 12/21/22 14:39 Sequence: 5 Standard ID: 22H04634

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10679.22	10688.13	10676.06	10673.46
YTTRIUM	360.073	Axial	401609.2	400314.2	403040.5	401472.8
YTTRIUM	360.073	Radial	11320.64	11327.84	11350.69	11283.37
INDIUM	230.606	Axial	3255.393	3256.609	3254.080	3255.490

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	247.9981	249.1661	248.3639	246.4643
ARSENIC	189.042	Axial	156.8622	155.9440	157.8375	156.8052
BARIUM	233.527	Axial	4561.411	4574.831	4554.302	4555.102
BERYLLIUM	313.042	Radial	20563.63	20615.99	20608.26	20466.64
BORON	249.678	Radial	215.4733	216.4254	216.7139	213.2806
CADMIUM	228.802	Axial	5699.369	5712.180	5699.743	5686.184
CALCIUM	317.933	Radial	1206.492	1215.885	1204.841	1198.751
CHROMIUM	267.716	Axial	7203.724	7214.054	7187.188	7209.930
COBALT	228.616	Axial	3913.938	3917.516	3913.641	3910.657
COPPER	324.754	Axial	17352.51	17307.80	17377.48	17372.26
IRON	259.940	Radial	494.8370	497.0877	494.2093	493.2140
LEAD	220.353	Axial	758.6413	757.7791	759.1485	758.9963
LITHIUM	670.784	Radial	8985.800	8972.957	9019.122	8965.321
MANGANESE	257.610	Axial	87488.95	87413.82	87496.21	87556.81
MOLYBDENUM	202.030	Axial	1517.678	1516.561	1516.365	1520.107
NICKEL	231.604	Axial	2156.690	2157.958	2156.811	2155.301
PHOSPHORUS	177.495	Axial	36.89525	36.63223	37.82614	36.22738
SELENIUM	196.090	Axial	85.79292	85.92691	85.39284	86.05899
SILICON	251.611	Axial	4209.994	4116.636	4183.574	4329.771
SILVER	328.068	Axial	19775.41	19747.00	19781.53	19797.69
STRONTIUM	421.552	Radial	60873.56	60888.92	61040.95	60690.80
SULFUR	182.034	Axial	61.87595	62.53471	62.57355	60.51960
THALLIUM	190.856	Axial	193.9241	193.5520	193.8324	194.3880
TIN	189.989	Axial	331.2879	332.6780	331.0536	330.1321
TITANIUM	334.941	Radial	3161.453	3172.580	3163.313	3148.465
VANADIUM	292.402	Radial	612.1566	614.4117	614.8420	607.2162
ZINC	206.200	Axial	2873.521	2879.474	2873.976	2867.114

Sample ID: STD4 Units: mg/l
Analyzed: 12/21/22 14:41 Sequence: 6 Standard ID: 22H04625

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10715.82	10740.75	10710.28	10696.42
YTTRIUM	360.073	Axial	403034.8	401816.0	403618.5	403669.8
YTTRIUM	360.073	Radial	11447.12	11475.13	11386.78	11479.44
INDIUM	230.606	Axial	3230.895	3232.527	3233.370	3226.787

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
ANTIMONY	206.833	Axial	508.9282	508.1056	511.1887	507.4904
ARSENIC	189.042	Axial	322.2148	321.7645	321.0301	323.8496
BARIUM	233.527	Axial	9071.404	9089.665	9072.561	9051.987
BERYLLIUM	313.042	Radial	41593.19	41600.89	41493.53	41685.16
BORON	249.678	Radial	438.9480	434.6199	439.1825	443.0417
CADMIUM	228.802	Axial	11507.31	11517.38	11495.34	11509.21
CALCIUM	317.933	Radial	2272.827	2271.960	2270.522	2276.000
CHROMIUM	267.716	Axial	14242.15	14235.59	14261.39	14229.46
COBALT	228.616	Axial	7805.862	7811.963	7800.531	7805.091
COPPER	324.754	Axial	35247.27	35330.01	35063.62	35348.18
IRON	259.940	Radial	991.5577	993.8030	987.7866	993.0833
LEAD	220.353	Axial	1523.284	1526.106	1521.726	1522.019
LITHIUM	670.784	Radial	18041.07	18053.78	17981.26	18088.17
MANGANESE	257.610	Axial	173886.1	174445.7	173522.3	173690.2
MOLYBDENUM	202.030	Axial	2999.139	2993.872	3007.007	2996.537
NICKEL	231.604	Axial	4325.309	4327.909	4324.867	4323.152
PHOSPHORUS	177.495	Axial	77.06161	76.62078	77.80488	76.75916
POTASSIUM	766.490	Radial	806.7247	801.0314	813.5178	805.6250
SELENIUM	196.090	Axial	176.9240	177.0056	176.3636	177.4029
SILICON	251.611	Axial	9335.096	9026.144	9314.080	9665.064
SILVER	328.068	Axial	40452.63	40543.30	40255.03	40559.54
SODIUM	589.592	Radial	2038.609	2045.375	2030.409	2040.042
STRONTIUM	421.552	Radial	122043.3	122154.4	121506.3	122469.3
SULFUR	182.034	Axial	129.7728	129.3739	130.1109	129.8335
THALLIUM	190.856	Axial	395.8420	395.1647	397.0476	395.3139
TIN	189.989	Axial	667.8072	667.7287	670.5543	665.1387
TITANIUM	334.941	Radial	6363.152	6356.076	6344.568	6388.814
VANADIUM	292.402	Radial	1232.760	1229.912	1229.257	1239.111
ZINC	206.200	Axial	5818.618	5853.575	5806.397	5795.882

Sample ID: ICV Units: mg/l
Analyzed: 12/21/22 14:53 Sequence: 10 Standard ID: 22H04642

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3	Intensity Rep4
YTTRIUM	224.306	Axial	10349.53	10353.22	10348.39	10352.16	10344.36
YTTRIUM	360.073	Axial	387418.2	388987.2	384500.5	388150.3	388034.8
YTTRIUM	360.073	Radial	11171.93	11208.20	11161.51	11170.58	11147.45
INDIUM	230.606	Axial	3118.912	3118.144	3122.125	3118.997	3116.380

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3	Conc. Rep4
ALUMINUM	308.215	Radial	818.0538	10.04094	10.05998	10.06960	9.931645	10.10255
ANTIMONY	206.833	Axial	241.6689	0.9902821	0.9906454	0.9864836	0.9880589	0.9959405
ARSENIC	189.042	Axial	149.4332	0.9681751	0.9662084	0.9632244	0.9735310	0.9697365
BARIUM	233.527	Axial	4500.582	1.047312	1.048688	1.047021	1.046132	1.047409
BERYLLIUM	313.042	Radial	20854.56	1.027861	1.026253	1.030101	1.028379	1.026709
BORON	249.678	Radial	214.6281	1.004830	1.002049	0.9927647	1.024956	0.9995508
CADMIUM	228.802	Axial	5610.401	1.011103	1.012744	1.012600	1.006747	1.012321
CALCIUM	317.933	Radial	10381.01	10.23275	10.22378	10.22210	10.25622	10.22892
CHROMIUM	267.716	Axial	7191.508	1.041623	1.044409	1.040539	1.039314	1.042231
COBALT	228.616	Axial	3723.694	0.9898308	0.9850751	0.9903817	0.9921843	0.9916822
COPPER	324.754	Axial	16624.04	0.9849524	0.9834250	0.9901918	0.9844633	0.9817296
IRON	259.940	Radial	4856.202	10.14949	10.11650	10.15891	10.15483	10.16770
LEAD	220.353	Axial	719.8606	0.9815228	0.9777320	0.9848485	0.9810995	0.9824112
LITHIUM	670.784	Radial	8770.742	0.9952958	0.9950802	0.9962927	0.9946450	0.9951655
MAGNESIUM	279.079	Radial	643.3647	10.31888	10.34438	10.36025	10.29332	10.27756
MANGANESE	257.610	Axial	83839.05	0.9962297	0.9966187	0.9948241	0.9974371	0.9960388
MOLYBDENUM	202.030	Axial	1520.670	1.045829	1.044731	1.047160	1.047031	1.044396
NICKEL	231.604	Axial	2059.813	0.9891041	0.9894069	0.9887540	0.9884509	0.9898045
POTASSIUM	766.490	Radial	4109.589	9.887158	9.911371	9.881488	9.862976	9.892798
SELENIUM	196.090	Axial	84.87409	0.9961585	0.9921295	1.001209	0.9947073	0.9965887
SILICON	251.611	Axial	4213.705	1.274297	1.232303	1.251611	1.291868	1.321404
SILVER	328.068	Axial	19122.66	0.9891762	0.9863352	0.9965848	0.9893093	0.9844755
SODIUM	589.592	Radial	10056.43	10.45004	10.44844	10.47496	10.44188	10.43489
STRONTIUM	421.552	Radial	24166.66	0.4052879	0.4047554	0.4064901	0.4051216	0.4047844
SULFUR	182.034	Axial	604.5083	9.065183	9.096603	9.056785	9.048672	9.058671
THALLIUM	190.856	Axial	180.2207	0.9504427	0.9444422	0.9559980	0.9533800	0.9479507
TIN	189.989	Axial	319.9309	0.9989253	1.005193	0.9984466	0.9915226	1.000539
TITANIUM	334.941	Radial	3228.776	1.039492	1.038399	1.042019	1.040746	1.036806
VANADIUM	292.402	Radial	611.1509	1.015000	1.017954	1.022983	1.010109	1.008954
ZINC	206.200	Axial	2793.595	0.9965368	0.9960135	0.9986594	0.9949646	0.9965098
CERIUM	535.353	Radial	61.27135	0.009896187	0.06590564	0.006431634	-0.05750401	0.02475148
LANTHANUM	333.749	Radial	0.9881530	0.006500007	0.003553876	0.01029175	0.007560697	0.004593701
PHOSPHORUS	177.495	Axial	37.93501	1.026551	1.015222	1.012302	1.045111	1.033570

Sample ID: ICB Units: mg/l
Analyzed: 12/21/22 14:56 Sequence: 11

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10476.33	10480.42	10492.23	10456.35
YTTRIUM	360.073	Axial	394709.5	394965.2	392999.7	396163.7
YTTRIUM	360.073	Radial	11041.21	11028.91	11084.56	11010.15
INDIUM	230.606	Axial	3300.094	3297.877	3304.207	3298.198

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.725106	0.04314425	0.04457396	0.06409380	0.02076498
ANTIMONY	206.833	Axial	0.4641204	0.002403026	0.005949270	0.001612712	-0.0003529026
ARSENIC	189.042	Axial	-0.6010776	0.001026444	0.0007489865	-0.00003879433	0.002369141
BARIUM	233.527	Axial	1.896933	0.00003064311	-0.0001659956	0.0001755526	0.00008237230
BERYLLIUM	313.042	Radial	18.04140	0.0002485556	0.0003322974	0.0001113988	0.0003019707
BORON	249.678	Radial	0.9716209	0.008450084	-0.00006203357	0.01287643	0.01253585
CADMIUM	228.802	Axial	5.180943	0.0002288479	0.00004624352	0.0006371585	0.000003141594
CALCIUM	317.933	Radial	153.6693	0.004112212	0.006043638	0.004627791	0.001665207
CERIUM	535.353	Radial	53.86894	-0.02333716	-0.05964433	-0.02156937	0.01120222
CHROMIUM	267.716	Axial	12.66667	0.0005854996	0.001396328	0.0001000593	0.0002601109
COBALT	228.616	Axial	3.400876	0.00009029355	0.00002740369	0.0003278504	-0.00008437341
COPPER	324.754	Axial	16.19246	-0.0001999884	-0.0003188763	-0.0001309795	-0.0001501095
IRON	259.940	Radial	5.523474	0.009709887	0.01037527	0.01427265	0.004481740
LANTHANUM	333.749	Radial	-1.69241	0.001288242	-0.003204634	0.004998161	0.002071199
LEAD	220.353	Axial	0.4560832	-0.001032820	-0.001400073	-0.001663415	-0.00003497148
LITHIUM	670.784	Radial	-12.5287	-0.0002448455	0.0005634065	0.0004994343	-0.001797377
MAGNESIUM	279.079	Radial	-1.12395	0.01574141	-0.03619177	0.01846291	0.06495310
MANGANESE	257.610	Axial	5.638889	0.0001532943	0.0001750453	0.00008606944	0.0001987683
MOLYBDENUM	202.030	Axial	1.996144	0.0005504642	0.0004206773	-0.0001520744	0.001382790
NICKEL	231.604	Axial	4.156207	0.0003002766	-0.0002066976	0.0008857145	0.0002218129
PHOSPHORUS	177.495	Axial	0.03693850	-0.004452446	-0.003660200	-0.006936712	-0.002760426
POTASSIUM	766.490	Radial	-46.4677	0.007343353	-0.04105932	0.04971734	0.01337204
SELENIUM	196.090	Axial	0.7518008	-0.001189030	-0.01086548	-0.0004816363	0.007780028
SILICON	251.611	Axial	57.95529	0.004674056	0.004019584	0.004411714	0.005590871
SILVER	328.068	Axial	-18.6388	-0.00006430639	-0.0001987634	0.0002076598	-0.0002018156
SODIUM	589.592	Radial	69.59149	0.02968801	0.02378160	0.03155891	0.03372352
STRONTIUM	421.552	Radial	-14.5985	-0.000006170946	0.00003364278	-0.00002740565	-0.00002474996
SULFUR	182.034	Axial	0.8946337	0.01460665	0.02450580	0.01038706	0.008927070
THALLIUM	190.856	Axial	0.4980747	0.002323341	0.006250295	-0.001659036	0.002378764
TIN	189.989	Axial	-0.9464748	0.002791716	0.004429629	0.002999152	0.0009463659
TITANIUM	334.941	Radial	1.012244	0.001403265	0.001371568	0.001289459	0.001548769
VANADIUM	292.402	Radial	0.9350970	0.0002205151	-0.002185561	0.004706368	-0.001859262
ZINC	206.200	Axial	1.882030	0.0002339269	0.0003052030	0.0003481730	0.00004840470

Sample ID: ICVLL Units: mg/l
Analyzed: 12/21/22 15:05 Sequence: 14 Standard ID: 22K01889

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10519.69	10525.22	10508.18	10525.68
YTTRIUM	360.073	Axial	399104.6	400729.8	398104.0	398480.0
YTTRIUM	360.073	Radial	11091.47	11076.30	11097.84	11100.26
INDIUM	230.606	Axial	3280.456	3285.009	3280.719	3275.640

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	22.14891	0.2342808	0.2454120	0.2441772	0.2132532
ANTIMONY	206.833	Axial	2.084408	0.008924651	0.01038568	0.007087504	0.009300769
ARSENIC	189.042	Axial	1.040430	0.01145230	0.01370391	0.01262989	0.008023116
BARIUM	233.527	Axial	25.49434	0.005433486	0.005029401	0.005623572	0.005647484
BERYLLIUM	313.042	Radial	54.22647	0.002041847	0.002182422	0.002025652	0.001917468
BORON	249.678	Radial	43.36157	0.2075596	0.2034232	0.2033600	0.2158957
CADMIUM	228.802	Axial	14.31011	0.001845029	0.002064524	0.001674205	0.001796358
CALCIUM	317.933	Radial	1190.301	1.047884	1.054616	1.048316	1.040721
CHROMIUM	267.716	Axial	83.91667	0.01074318	0.01112294	0.01097634	0.01013025
COBALT	228.616	Axial	40.53205	0.009486893	0.009455260	0.009650519	0.009354899
COPPER	324.754	Axial	182.6052	0.009371027	0.009603481	0.009041454	0.009468146
IRON	259.940	Radial	50.45704	0.1042775	0.1036178	0.1020655	0.1071493
LEAD	220.353	Axial	5.288467	0.005245665	0.003638067	0.007175791	0.004923136
LITHIUM	670.784	Radial	119.3186	0.01481663	0.01554851	0.01389823	0.01500314
MAGNESIUM	279.079	Radial	63.65060	1.058822	1.061954	1.091734	1.022778
MANGANESE	257.610	Axial	873.2500	0.01029483	0.01032647	0.01028359	0.01027443
MOLYBDENUM	202.030	Axial	9.127888	0.005373082	0.004879124	0.005241999	0.005998125
NICKEL	231.604	Axial	26.74831	0.01064299	0.01059670	0.01039946	0.01093281
POTASSIUM	766.490	Radial	365.7953	0.9949094	0.9703830	0.9948112	1.019534
SELENIUM	196.090	Axial	1.767852	0.01062055	0.003283992	0.01496961	0.01360805
SILICON	251.611	Axial	687.9805	0.1939338	0.1913339	0.1942796	0.1961879
SILVER	328.068	Axial	73.26389	0.004556811	0.004155320	0.004543645	0.004971469
SODIUM	589.592	Radial	1034.687	1.043735	1.045747	1.044013	1.041445
STRONTIUM	421.552	Radial	584.8673	0.01011520	0.01014519	0.01011145	0.01008896
THALLIUM	190.856	Axial	1.803823	0.008884046	0.009505038	0.007457518	0.009689583
TIN	189.989	Axial	15.38251	0.05097870	0.05147796	0.04953935	0.05191879
TITANIUM	334.941	Radial	157.5084	0.05209877	0.05306852	0.05374456	0.04948324
VANADIUM	292.402	Radial	11.21611	0.01744409	0.01800315	0.01953687	0.01479224
ZINC	206.200	Axial	144.2837	0.05022925	0.04981089	0.05062195	0.05025493
CERIUM	535.353	Radial	56.56995	-0.01115913	0.02034148	-0.02712346	-0.02669542
LANTHANUM	333.749	Radial	-1.64891	0.001394868	0.003542894	0.0001580866	0.0004836228
PHOSPHORUS	177.495	Axial	3.724599	0.09423987	0.09818058	0.09567196	0.08886706
SULFUR	182.034	Axial	60.66478	0.8962369	0.8849169	0.8988076	0.9049861

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 15:07 Sequence: 15 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9024.935	9018.797	9035.939	9020.069
YTTRIUM	360.073	Axial	337927.7	337902.0	338072.5	337808.6
YTTRIUM	360.073	Radial	10454.25	10451.42	10464.28	10447.06
INDIUM	230.606	Axial	2523.099	2520.351	2525.191	2523.755

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38900.14	512.2707	511.3738	511.8393	513.5991
ANTIMONY	206.833	Axial	-4.21425	-0.01927159	-0.03071785	-0.01000847	-0.01708843
ARSENIC	189.042	Axial	-1.19622	-0.003988608	-0.005109872	-0.006987870	0.0001319164
BARIUM	233.527	Axial	11.89711	0.002770571	0.002556434	0.002633594	0.003121684
BERYLLIUM	313.042	Radial	11.33115	-0.00005485471	-0.0001158089	0.00003370941	-0.00008246462
BORON	249.678	Radial	-3.40171	-0.01308163	-0.004837967	-0.01853572	-0.01587121
CADMIUM	228.802	Axial	3.788495	0.00008938720	-0.0003281113	0.0004918757	0.0001043972
CALCIUM	373.690	Radial	269020.4	512.7862	512.7616	511.9219	513.6751
CERIUM	535.353	Radial	295.5106	1.262536	1.290665	1.217843	1.279098
CHROMIUM	267.716	Axial	18.18607	0.001795381	0.001932742	0.001564084	0.001889317
COBALT	228.616	Axial	6.734176	0.001449602	0.0009749434	0.001852693	0.001521170
COPPER	324.754	Axial	-105.983	-0.008350145	-0.008255391	-0.007941546	-0.008853499
IRON	271.441	Radial	4383.162	205.0335	204.5387	205.0261	205.5357
LANTHANUM	333.749	Radial	0.8327233	0.006309580	0.006649638	0.004079406	0.008199694
LEAD	220.353	Axial	-17.9887	-0.03199152	-0.03223117	-0.03265441	-0.03108900
LITHIUM	670.784	Radial	25.60731	0.004295885	0.004701254	0.004032782	0.004153619
MAGNESIUM	279.079	Radial	30088.10	514.0516	514.6089	513.2805	514.2655
MANGANESE	257.610	Axial	518.1852	0.007147605	0.007169166	0.007089190	0.007184460
MOLYBDENUM	202.030	Axial	4.630964	0.002846725	0.002196085	0.004087136	0.002256954
NICKEL	231.604	Axial	18.70865	0.009533711	0.008237703	0.01024096	0.01012247
PHOSPHORUS	177.495	Axial	0.3954614	0.006900232	0.03435876	-0.008556757	-0.005101310
POTASSIUM	766.490	Radial	-83.4076	-0.09269025	-0.09164558	-0.09758799	-0.08883719
SELENIUM	196.090	Axial	1.971147	0.01678457	-0.002558908	0.03626882	0.01664378
SILICON	251.611	Axial	15.77374	-0.007289969	-0.008081474	-0.007305844	-0.006482589
SILVER	328.068	Axial	-63.1184	-0.002859133	-0.002847498	-0.002994738	-0.002735163
SODIUM	589.592	Radial	112.2504	0.08138529	0.08225585	0.07977875	0.08212126
STRONTIUM	421.552	Radial	204.4137	0.003902692	0.003993125	0.003823156	0.003891793
SULFUR	182.034	Axial	0.3732860	0.007773493	0.005936495	0.01240188	0.004982106
THALLIUM	190.856	Axial	2.044080	0.01316823	0.01450920	0.003497702	0.02149778
TIN	189.989	Axial	-5.94300	-0.01723680	-0.01134391	-0.02406766	-0.01629883
TITANIUM	334.941	Radial	124.3830	0.04382336	0.04295263	0.04350725	0.04501021
VANADIUM	292.402	Radial	4.654612	0.006927908	0.006788410	0.006743992	0.007251324
ZINC	206.200	Axial	15.79628	0.006035356	0.005732432	0.005902030	0.006471607

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 15:10 Sequence: 16 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8947.132	8946.788	8961.001	8933.607
YTTRIUM	360.073	Axial	334506.2	333682.1	335083.2	334753.3
YTTRIUM	360.073	Radial	10406.49	10387.44	10440.63	10391.39
INDIUM	230.606	Axial	2507.608	2506.994	2510.064	2505.765

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38635.73	511.1245	513.1313	510.7419	509.5002
ANTIMONY	206.833	Axial	102.1602	0.4845090	0.4859321	0.4797540	0.4878408
ARSENIC	189.042	Axial	70.20012	0.5283322	0.5239388	0.5300767	0.5309811
BARIUM	233.527	Axial	1915.156	0.5153191	0.5150706	0.5141271	0.5167595
BERYLLIUM	313.042	Radial	9654.668	0.5105242	0.5112916	0.5097695	0.5105115
BORON	249.678	Radial	202.1255	1.015858	1.023984	1.018253	1.005338
CADMIUM	228.802	Axial	5183.471	1.080634	1.079306	1.080538	1.082057
CALCIUM	373.690	Radial	268188.8	513.5476	514.3533	513.2244	513.0649
CERIUM	535.353	Radial	288.0142	1.230125	1.292964	1.183180	1.214231
CHROMIUM	267.716	Axial	3018.217	0.5050518	0.5014830	0.5054544	0.5082179
COBALT	228.616	Axial	1495.505	0.4940633	0.4945985	0.4929934	0.4945981
COPPER	324.754	Axial	7566.042	0.5186385	0.5182762	0.5191153	0.5185239
IRON	271.441	Radial	4314.392	202.7427	202.6899	202.7248	202.8135
LANTHANUM	333.749	Radial	-1.69032	0.001112305	0.001312412	-0.008522089	0.01054659
LEAD	220.353	Axial	551.7066	0.9355537	0.9315050	0.9371078	0.9380483
LITHIUM	670.784	Radial	29.20913	0.004748324	0.003733784	0.004653287	0.005857902
MAGNESIUM	279.079	Radial	30020.42	515.2499	514.3488	514.6346	516.7662
MANGANESE	257.610	Axial	35571.25	0.4889786	0.4879927	0.4879967	0.4909465
MOLYBDENUM	202.030	Axial	633.7222	0.5037329	0.5033583	0.5048280	0.5030126
NICKEL	231.604	Axial	1655.346	0.9886577	0.9879602	0.9894864	0.9885266
PHOSPHORUS	177.495	Axial	0.1481498	-0.0007537725	-0.01033834	-0.02708732	0.03516434
POTASSIUM	766.490	Radial	-93.1205	-0.1184173	-0.1113341	-0.1384267	-0.1054911
SELENIUM	196.090	Axial	39.88629	0.5369599	0.5178516	0.5411939	0.5518344
SILICON	251.611	Axial	2887.733	1.007524	1.004102	1.006918	1.011552
SILVER	328.068	Axial	18535.73	1.110350	1.108746	1.110728	1.111576
SODIUM	589.592	Radial	106.7715	0.07579857	0.06512081	0.08940061	0.07287428
STRONTIUM	421.552	Radial	205.7344	0.003943274	0.003960061	0.003915970	0.003953791
SULFUR	182.034	Axial	0.1776495	0.004430237	0.008289535	0.01116869	-0.006167509
THALLIUM	190.856	Axial	69.60162	0.4564653	0.4501523	0.4531825	0.4660611
TIN	189.989	Axial	122.6235	0.4791161	0.4745211	0.4856169	0.4772103
TITANIUM	334.941	Radial	1607.551	0.5561113	0.5558056	0.5568797	0.5556485
VANADIUM	292.402	Radial	283.1654	0.5042040	0.5052275	0.5011628	0.5062217
ZINC	206.200	Axial	2259.766	0.9324326	0.9320067	0.9326134	0.9326775

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 16:36 Sequence: 43 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10166.34	10184.38	10161.58	10153.05
YTTRIUM	360.073	Axial	378891.3	377272.4	378505.0	380896.5
YTTRIUM	360.073	Radial	11236.34	11290.34	11213.07	11205.62
INDIUM	230.606	Axial	3007.027	3007.715	3002.888	3010.477

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	775.4978	9.461778	9.422177	9.495902	9.467254
ANTIMONY	206.833	Axial	115.3283	0.4813617	0.4838586	0.4838863	0.4763404
ARSENIC	189.042	Axial	151.1471	0.9967790	0.9992043	0.9981890	0.9929437
BARIUM	233.527	Axial	2148.950	0.5088758	0.5093681	0.5087774	0.5084820
BERYLLIUM	313.042	Radial	4149.412	0.2028186	0.2020911	0.2033636	0.2030011
BORON	249.678	Radial	215.0331	1.000977	0.9983991	1.010968	0.9935650
CADMIUM	228.802	Axial	2772.860	0.5083840	0.5074563	0.5090602	0.5086355
CALCIUM	373.690	Radial	26958.91	47.79105	47.59599	47.81948	47.95769
CHROMIUM	267.716	Axial	6991.142	1.030836	1.032572	1.027128	1.032808
COBALT	228.616	Axial	3574.373	0.9854880	0.9853989	0.9856650	0.9854000
COPPER	324.754	Axial	16457.77	0.9970562	0.9982801	0.9998395	0.9930489
IRON	259.940	Radial	4712.565	9.792787	9.762455	9.847810	9.768096
LEAD	220.353	Axial	345.7427	0.4881427	0.4902652	0.4861916	0.4879714
LITHIUM	670.784	Radial	8538.712	0.9634567	0.9601633	0.9659670	0.9642397
MAGNESIUM	279.079	Radial	622.5460	9.929306	9.819973	10.03139	9.936552
MANGANESE	257.610	Axial	80417.02	0.9727909	0.9701397	0.9739080	0.9743250
MOLYBDENUM	202.030	Axial	359.8693	0.2513454	0.2503813	0.2508000	0.2528549
NICKEL	231.604	Axial	2000.551	0.9964014	0.9965362	0.9949937	0.9976743
POTASSIUM	766.490	Radial	19933.03	47.22653	47.03895	47.23609	47.40456
SELENIUM	196.090	Axial	83.79592	1.001273	1.005734	0.9997346	0.9983508
SILICON	251.611	Axial	7337.526	2.268900	2.239180	2.265664	2.301856
SILVER	328.068	Axial	9495.153	0.5026482	0.5039874	0.5032701	0.5006871
SODIUM	818.326	Radial	2841.714	49.10184	49.25484	49.05748	48.99321
STRONTIUM	421.552	Radial	57914.56	0.9653641	0.9619975	0.9669524	0.9671423
SULFUR	182.034	Axial	312.5813	4.772560	4.784669	4.763994	4.769015
THALLIUM	190.856	Axial	174.9509	0.9569820	0.9512684	0.9563535	0.9633240
TIN	189.989	Axial	151.4652	0.4933530	0.4970359	0.4925890	0.4904342
TITANIUM	334.941	Radial	3215.011	1.029154	1.022838	1.032072	1.032552
VANADIUM	292.402	Radial	602.8338	0.9954269	0.9948125	0.9978606	0.9936075
ZINC	206.200	Axial	2710.120	0.9841769	0.9817173	0.9864215	0.9843918
CERIUM	535.353	Radial	68.50579	0.04362617	0.03704053	0.02805429	0.06578368
LANTHANUM	333.749	Radial	-3.43538	-0.001969233	-0.009351308	-0.002510174	0.005953784
PHOSPHORUS	177.495	Axial	36.34373	1.001070	1.010454	0.9947278	0.9980282

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 16:39 Sequence: 44

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10554.81	10546.17	10551.72	10566.54
YTTRIUM	360.073	Axial	400392.5	398137.4	401489.2	401550.8
YTTRIUM	360.073	Radial	11209.86	11209.31	11199.97	11220.29
INDIUM	230.606	Axial	3314.208	3314.574	3311.466	3316.583

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	6.576078	0.04009638	0.05779049	0.02446438	0.03803426
ANTIMONY	206.833	Axial	0.4150802	0.002193954	0.002718424	0.001503187	0.002360251
ARSENIC	189.042	Axial	-0.06197174	0.004459843	0.001758232	0.005197888	0.006423409
BARIUM	233.527	Axial	3.045103	0.0002894850	0.0002106178	0.0003547616	0.0003030756
BERYLLIUM	313.042	Radial	14.33228	0.00005238464	0.0001282754	-0.00008198746	0.0001108660
BORON	249.678	Radial	1.789233	0.01219010	0.01624260	0.01607162	0.004256075
CADMIUM	228.802	Axial	4.870731	0.0001674474	0.0002912037	-0.00001767710	0.0002288156
CALCIUM	317.933	Radial	156.4483	0.004544231	0.008133268	0.001447073	0.004052352
CERIUM	535.353	Radial	36.30254	-0.1135097	-0.1218712	-0.05044014	-0.1682177
CHROMIUM	267.716	Axial	5.736111	-0.0004132699	0.0004846074	-0.001389028	-0.0003353889
COBALT	228.616	Axial	2.547921	-0.0001267520	-0.0002009529	-0.0001251841	-0.00005411908
COPPER	324.754	Axial	19.05159	-0.00004865431	0.0001950666	-0.0002821814	-0.00005884806
IRON	259.940	Radial	3.160486	0.004621168	0.006009398	0.002725249	0.005128858
LANTHANUM	333.749	Radial	-0.5123821	0.003610823	0.007309353	0.003393422	0.0001296953
LEAD	220.353	Axial	1.582226	0.0004122965	-0.0006701882	0.002007910	-0.0001008323
LITHIUM	670.784	Radial	-11.0200	-0.00005052854	0.0002403939	0.00004095619	-0.0004329357
MAGNESIUM	279.079	Radial	-0.3053151	0.02903000	0.03853734	0.01663798	0.03191467
MANGANESE	257.610	Axial	17.68056	0.0002930526	0.0003003282	0.0003230383	0.0002557912
MOLYBDENUM	202.030	Axial	1.857402	0.0004457553	0.0001369704	0.0006984825	0.0005018132
NICKEL	231.604	Axial	4.473304	0.0004362553	0.0008980695	0.0005031712	-0.00009247472
PHOSPHORUS	177.495	Axial	0.3441003	0.003721518	-0.01493023	0.007880817	0.01821397
POTASSIUM	766.490	Radial	-29.6968	0.04881755	0.06832778	0.03427949	0.04384536
SELENIUM	196.090	Axial	0.9398009	0.0009224631	-0.007417469	0.008585359	0.001599500
SILICON	251.611	Axial	118.8530	0.02278313	0.02301394	0.02264608	0.02268936
SILVER	328.068	Axial	-22.7083	-0.0002552392	-0.0003473183	-0.0003017429	-0.0001166563
SODIUM	589.592	Radial	158.0476	0.1205787	0.1331655	0.1206632	0.1079074
STRONTIUM	421.552	Radial	-6.84840	0.0001269849	0.00003642730	0.0001759529	0.0001685744
SULFUR	182.034	Axial	1.232101	0.01947643	0.02128380	0.02568084	0.01146464
THALLIUM	190.856	Axial	0.6727794	0.003181162	0.006005470	0.009319571	-0.005781555
TIN	189.989	Axial	-0.9028009	0.002931049	0.005244861	0.001673907	0.001874379
TITANIUM	334.941	Radial	1.455164	0.001539945	0.001606646	0.001407501	0.001605687
VANADIUM	292.402	Radial	1.476659	0.001099968	0.001734819	-0.004475018	0.006040103
ZINC	206.200	Axial	1.291301	0.00002231431	-0.00002511345	-0.0002273678	0.0003194242

Sample ID: L1569102-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:42 Sequence: 45

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10310.23	10332.96	10309.60	10288.13
YTTRIUM	360.073	Axial	387283.3	387276.2	386308.6	388265.1
YTTRIUM	360.073	Radial	11331.02	11340.38	11311.07	11341.61
INDIUM	230.606	Axial	3121.619	3124.242	3126.551	3114.065

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	10.46158	0.05198417	0.04748097	0.06242538	0.04604615
ALUMINUM	308.215	Radial	15.37873	0.1462000	0.1200416	0.1516474	0.1669110
ANTIMONY	206.833	Axial	-0.2472856	-0.0004894628	-0.0005499161	-0.0005264545	-0.0003920177
ARSENIC	189.042	Axial	0.09559939	0.005471722	0.006176311	0.003822464	0.006416392
BARIUM	233.527	Axial	274.8377	0.06382004	0.06344228	0.06374260	0.06427522
BERYLLIUM	313.042	Radial	13.93560	0.00002571579	-0.00007252989	0.0001366301	0.00001304719
CADMIUM	228.802	Axial	2.882635	-0.0001716146	-0.0003998727	-0.0002775102	0.0001625389
CALCIUM	373.690	Radial	34410.32	60.49591	60.42069	60.53288	60.53416
CERIUM	535.353	Radial	67.90518	0.03787583	0.06646510	0.01977155	0.02739084
CHROMIUM	267.716	Axial	33.84854	0.003697052	0.004147940	0.004305286	0.002637930
COBALT	228.616	Axial	3.573871	0.0001851329	0.0002276505	0.0002809822	0.00004676606
COPPER	324.754	Axial	15.42653	-0.0002276280	-0.0003295468	-0.0002974972	-0.00005583998
IRON	271.441	Radial	565.0643	24.37827	24.60806	24.27010	24.25665
LANTHANUM	333.749	Radial	3.671286	0.01156603	0.009177315	0.008942084	0.01657868
LEAD	220.353	Axial	2.260366	0.001462648	0.0009835004	0.001756549	0.001647893
LITHIUM	670.784	Radial	90.24386	0.01127861	0.009891666	0.01086734	0.01307683
MAGNESIUM	279.079	Radial	480.2379	7.603377	7.563440	7.653887	7.592805
MANGANESE	257.610	Axial	157655.2	1.880431	1.876518	1.880659	1.884116
MOLYBDENUM	202.030	Axial	1.428325	0.0001776198	0.001051758	0.0005191110	-0.001038009
NICKEL	231.604	Axial	6.157675	0.001371167	0.0003194065	0.001697339	0.002096755
PHOSPHORUS	177.495	Axial	14.01038	0.3771595	0.3674773	0.3825698	0.3814315
POTASSIUM	766.490	Radial	262.6013	0.7345925	0.7051462	0.7540613	0.7445702
SELENIUM	196.090	Axial	0.8729739	0.0003905537	-0.005606866	0.009462163	-0.002683636
SILICON	251.611	Axial	19674.20	6.019735	6.001546	6.020417	6.037242
SILVER	328.068	Axial	-30.0537	-0.0006733316	-0.0006531420	-0.0007840377	-0.0005828150
SODIUM	589.592	Radial	10360.81	10.61588	10.61290	10.62960	10.60512
STRONTIUM	421.552	Radial	8046.468	0.1332110	0.1332090	0.1332161	0.1332078
SULFUR	182.034	Axial	51.11533	0.7706846	0.7699993	0.7775886	0.7644658
THALLIUM	190.856	Axial	0.2320003	0.001056552	0.002598492	0.002771615	-0.002200451
TIN	189.989	Axial	-2.14887	-0.001097484	-0.001174352	-0.0007568092	-0.001361290
TITANIUM	334.941	Radial	42.03972	0.01440579	0.01365675	0.01609019	0.01347045
VANADIUM	292.402	Radial	-2.12813	-0.004834204	-0.01243907	-0.005119921	0.003056383
ZINC	206.200	Axial	44.48759	0.01550739	0.01552858	0.01584709	0.01514648

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:44 Sequence: 46

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10257.29	10266.61	10273.53	10231.72
YTTRIUM	360.073	Axial	383498.4	385012.1	383387.2	382095.9
YTTRIUM	360.073	Radial	11335.63	11395.20	11326.84	11284.84
INDIUM	230.606	Axial	3091.718	3095.055	3094.361	3085.736

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	11.64175	0.05737303	0.05945392	0.05746454	0.05520063
ALUMINUM	308.215	Radial	12.71592	0.1137412	0.1221543	0.1212939	0.09777554
ANTIMONY	206.833	Axial	-0.7451494	-0.002556126	-0.001328410	-0.0006629974	-0.005676969
ARSENIC	189.042	Axial	-0.2983914	0.002918913	0.0002607803	0.0001131351	0.008382824
BARIUM	233.527	Axial	267.8702	0.06251459	0.06227188	0.06254914	0.06272275
BERYLLIUM	313.042	Radial	14.35480	0.00004512744	0.0002611442	-0.00004290733	-0.00008285455
CADMIUM	228.802	Axial	3.348817	-0.00008427960	-0.0002964461	-0.00006699627	0.0001106035
CALCIUM	373.690	Radial	34529.60	60.68211	60.32178	60.72057	61.00397
CERIUM	535.353	Radial	73.26213	0.06370692	0.05630632	0.1093313	0.02548311
CHROMIUM	267.716	Axial	30.07021	0.003169683	0.003957960	0.003282167	0.002268922
COBALT	228.616	Axial	2.964112	0.00003073135	0.00007418296	0.0001181639	-0.0001001529
COPPER	324.754	Axial	18.44477	-0.00003747180	-0.00007924983	0.000007219450	-0.00004038500
IRON	271.441	Radial	550.7717	23.75229	23.61593	23.73766	23.90328
LANTHANUM	333.749	Radial	0.8459093	0.006196620	0.005537473	0.01076216	0.002290229
LEAD	220.353	Axial	0.6879972	-0.0006751659	0.0009847599	-0.001206855	-0.001803403
LITHIUM	670.784	Radial	94.18638	0.01171478	0.01139036	0.01301909	0.01073489
MAGNESIUM	279.079	Radial	470.8610	7.452513	7.461317	7.435486	7.460737
MANGANESE	257.610	Axial	155550.0	1.864897	1.865333	1.861289	1.868070
MOLYBDENUM	202.030	Axial	1.261168	0.00006779104	0.0001923897	0.0002159153	-0.0002049318
NICKEL	231.604	Axial	7.241522	0.001924727	0.002452570	0.001596996	0.001724613
PHOSPHORUS	177.495	Axial	13.05967	0.3530307	0.3682549	0.3383019	0.3525353
POTASSIUM	766.490	Radial	284.3700	0.7852767	0.7991488	0.7844735	0.7722078
SELENIUM	196.090	Axial	-0.08618300	-0.01102698	-0.01485860	-0.01079551	-0.007426830
SILICON	251.611	Axial	19158.90	5.892037	5.907797	5.871316	5.896998
SILVER	328.068	Axial	-28.8266	-0.0006242026	-0.0004957867	-0.001119015	-0.0002578055
SODIUM	589.592	Radial	10243.97	10.49151	10.43863	10.52579	10.51009
STRONTIUM	421.552	Radial	8051.423	0.1332406	0.1326159	0.1334054	0.1337006
SULFUR	182.034	Axial	49.88332	0.7560419	0.7625453	0.7350457	0.7705347
THALLIUM	190.856	Axial	0.5430438	0.002729633	0.004248964	-0.001284450	0.005224385
TIN	189.989	Axial	-2.61875	-0.002635407	-0.001612007	-0.001517376	-0.004776839
TITANIUM	334.941	Radial	41.22356	0.01413769	0.01507960	0.01369200	0.01364146
VANADIUM	292.402	Radial	-0.9991213	-0.002997635	0.002185387	-0.003801374	-0.007376918
ZINC	206.200	Axial	42.60463	0.01491207	0.01484405	0.01483475	0.01505741

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-03 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:47 Sequence: 47

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9886.161	9899.449	9869.453	9889.581
YTTRIUM	360.073	Axial	372174.9	372464.7	373098.5	370961.3
YTTRIUM	360.073	Radial	11072.58	11049.50	11065.43	11102.82
INDIUM	230.606	Axial	2915.202	2916.356	2911.199	2918.051

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	20.43511	0.1000225	0.09444505	0.1024888	0.1031336
ALUMINUM	308.215	Radial	6.235399	0.03688989	0.05675352	0.03046448	0.02345166
ANTIMONY	206.833	Axial	-0.8104120	-0.002951438	0.0003415246	-0.007044529	-0.002151309
ARSENIC	189.042	Axial	-1.00515	-0.001929705	-0.005976212	-0.002805372	0.002992469
BARIUM	233.527	Axial	582.7335	0.1416115	0.1412515	0.1423419	0.1412410
BERYLLIUM	313.042	Radial	13.52191	0.00002084725	-0.00008244323	0.0001656236	-0.00002063862
CADMIUM	228.802	Axial	2.806687	-0.0001640756	0.00006735260	-0.0002017826	-0.0003577969
CALCIUM	373.690	Radial	89356.75	160.7983	160.5341	161.0829	160.7779
CERIUM	535.353	Radial	147.4749	0.4406464	0.5003225	0.3303075	0.4913092
CHROMIUM	267.716	Axial	14.43254	0.0009622863	0.0004281757	0.001171884	0.001286799
COBALT	228.616	Axial	3.685940	0.0002843230	0.0003417666	0.00008961547	0.0004215871
COPPER	324.754	Axial	14.95775	-0.0002191578	0.00003167614	-0.0004225788	-0.0002665707
IRON	259.940	Radial	4283.708	9.033010	9.005989	9.034454	9.058587
LANTHANUM	333.749	Radial	-0.4995838	0.003629285	0.004269699	0.008805962	-0.002187805
LEAD	220.353	Axial	1.499196	0.0005702892	0.00005063317	0.002714147	-0.001053913
LITHIUM	670.784	Radial	554.6138	0.06461880	0.06545463	0.06262322	0.06577853
MAGNESIUM	279.079	Radial	977.7369	15.80446	15.75244	15.81921	15.84174
MANGANESE	257.610	Axial	56461.85	0.7023894	0.7025918	0.7040060	0.7005703
MOLYBDENUM	202.030	Axial	1.515824	0.0002845617	0.0001747235	0.0003206633	0.0003582983
NICKEL	231.604	Axial	6.559068	0.001786312	0.001945590	0.001473725	0.001939621
PHOSPHORUS	177.495	Axial	0.3032977	0.003175805	0.01254739	-0.01367137	0.01065139
POTASSIUM	766.490	Radial	2061.951	5.064115	5.027520	5.078365	5.086460
SELENIUM	196.090	Axial	0.6657463	-0.001731108	0.006233132	0.01232917	-0.02375562
SILICON	251.611	Axial	27747.87	8.860218	8.881139	8.868057	8.831459
SILVER	328.068	Axial	-29.1843	-0.0006905915	-0.0006252933	-0.0001473086	-0.001299173
SODIUM	589.592	Radial	16894.53	17.74374	17.74250	17.75024	17.73849
STRONTIUM	421.552	Radial	36654.14	0.6200937	0.6180139	0.6206516	0.6216155
SULFUR	182.034	Axial	9.147052	0.1449283	0.1452536	0.1359427	0.1535884
THALLIUM	190.856	Axial	1.368419	0.007561252	0.01108758	0.008025806	0.003570373
TIN	189.989	Axial	-3.68238	-0.006665666	-0.005820029	-0.009958404	-0.004218566
TITANIUM	334.941	Radial	78.25538	0.02646725	0.02639591	0.02642434	0.02658150
VANADIUM	292.402	Radial	-1.24898	-0.003439206	-0.001950127	-0.004886478	-0.003481012
ZINC	206.200	Axial	42.20793	0.01533961	0.01523761	0.01531760	0.01546361

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569102-04 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:50 Sequence: 48

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10134.84	10148.15	10131.48	10124.88
YTTRIUM	360.073	Axial	383649.4	383716.3	383317.3	383914.5
YTTRIUM	360.073	Radial	11120.84	11125.33	11112.18	11125.01
INDIUM	230.606	Axial	3031.087	3030.225	3036.541	3026.494

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	10.72777	0.05412560	0.06536889	0.03979362	0.05721428
ALUMINUM	308.215	Radial	6.846549	0.04408645	0.09458761	0.02278059	0.01489114
ANTIMONY	206.833	Axial	-1.22167	-0.004581658	-0.005352024	-0.004944033	-0.003448918
ARSENIC	189.042	Axial	-0.4260823	0.002047985	0.002428470	0.0009530202	0.002762465
BARIUM	233.527	Axial	212.4124	0.05009092	0.04975241	0.05021502	0.05030534
BERYLLIUM	313.042	Radial	14.88045	0.00008527977	-0.00003870297	0.0001875552	0.0001069870
CADMIUM	228.802	Axial	3.321959	-0.00008182626	-0.0004794503	0.0001479458	0.00008602577
CALCIUM	373.690	Radial	37301.36	66.82023	66.63961	66.83632	66.98477
CERIUM	535.353	Radial	95.62297	0.1811465	0.2236601	0.1725611	0.1472185
CHROMIUM	267.716	Axial	14.22343	0.0008771429	0.001276018	-0.00007616132	0.001431572
COBALT	228.616	Axial	4.117852	0.0003621703	0.0006257793	0.0006390774	-0.0001783458
COPPER	324.754	Axial	29.98476	0.0006531429	0.0005079301	0.0004462026	0.001005296
IRON	259.940	Radial	671.4970	1.408186	1.392882	1.411938	1.419739
LANTHANUM	333.749	Radial	2.092836	0.008644909	0.01810227	0.009030234	-0.001197777
LEAD	220.353	Axial	2.904707	0.002460538	0.003847864	0.001591092	0.001942659
LITHIUM	670.784	Radial	241.9687	0.02874518	0.02832894	0.02769890	0.03020769
MAGNESIUM	279.079	Radial	681.3524	10.97625	10.90974	10.98855	11.03045
MANGANESE	257.610	Axial	32489.86	0.3942970	0.3937965	0.3939318	0.3951628
MOLYBDENUM	202.030	Axial	2.411598	0.0008873092	0.0008051295	0.001135562	0.0007212363
NICKEL	231.604	Axial	4.720064	0.0007468994	0.001356703	0.0009447977	-0.00006080288
PHOSPHORUS	177.495	Axial	1.025004	0.02301065	0.04013087	0.04205665	-0.01315557
POTASSIUM	766.490	Radial	1462.654	3.611695	3.549752	3.604758	3.680576
SELENIUM	196.090	Axial	0.5275554	-0.003611224	-0.006510981	-0.004533756	0.0002110642
SILICON	251.611	Axial	20861.78	6.494540	6.505088	6.480138	6.498394
SILVER	328.068	Axial	-32.2270	-0.0008014468	-0.001067353	-0.0009889474	-0.0003480398
SODIUM	589.592	Radial	18698.66	19.55781	19.48585	19.55291	19.63465
STRONTIUM	421.552	Radial	22573.53	0.3803239	0.3785678	0.3803531	0.3820510
SULFUR	182.034	Axial	7.807746	0.1209015	0.1284880	0.1101658	0.1240507
THALLIUM	190.856	Axial	1.315293	0.006976381	0.01224201	0.005241075	0.003446053
TIN	189.989	Axial	-1.88646	-0.0004581484	-0.003050818	0.0007902445	0.0008861286
TITANIUM	334.941	Radial	46.20578	0.01600265	0.01441370	0.01693365	0.01666060
VANADIUM	292.402	Radial	0.03701543	-0.001282368	-0.001390521	-0.001158608	-0.001297974
ZINC	206.200	Axial	47.97130	0.01705328	0.01663931	0.01744838	0.01707214

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-01 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:53 Sequence: 49

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10154.49	10158.83	10145.63	10159.00
YTTRIUM	360.073	Axial	380192.1	381834.8	380977.8	377763.7
YTTRIUM	360.073	Radial	11190.40	11223.32	11187.71	11160.16
INDIUM	230.606	Axial	2997.136	2993.395	2995.171	3002.842

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	42.26035	0.2006370	0.2015199	0.1959826	0.2044086
ALUMINUM	308.215	Radial	29.95357	0.3278368	0.3512200	0.3101520	0.3221385
ANTIMONY	206.833	Axial	-0.5254810	-0.001665903	-0.004850012	-0.0004897104	0.0003420150
ARSENIC	189.042	Axial	1.637603	0.01561133	0.01512998	0.01281573	0.01888828
BARIUM	233.527	Axial	21.37442	0.004665861	0.004588344	0.004663026	0.004746214
BERYLLIUM	313.042	Radial	12.92101	-0.00001573684	-0.00007686997	0.00002257375	0.000007085693
CADMIUM	228.802	Axial	4.240870	0.00008566158	0.0001739754	0.0001386470	-0.00005563768
CALCIUM	317.933	Radial	2768.485	2.613341	2.607499	2.622093	2.610430
CERIUM	535.353	Radial	48.27717	-0.05431726	-0.1374646	0.03198297	-0.05747014
CHROMIUM	267.716	Axial	441.3560	0.06400213	0.06335534	0.06409188	0.06455917
COBALT	228.616	Axial	3.549058	0.0002176800	-0.000008462109	0.0002478511	0.0004136508
COPPER	324.754	Axial	150.6147	0.007960719	0.007992636	0.008007449	0.007882074
IRON	259.940	Radial	37.73019	0.07677350	0.07952832	0.07668988	0.07410229
LANTHANUM	333.749	Radial	0.7473510	0.006036823	0.003316492	0.005632832	0.009161144
LEAD	220.353	Axial	2.024696	0.001255741	0.0005638601	0.002174120	0.001029243
LITHIUM	670.784	Radial	2908.413	0.3303000	0.3293499	0.3302675	0.3312827
MAGNESIUM	279.079	Radial	-0.5958163	0.02442182	0.02396463	-0.01384925	0.06315009
MANGANESE	257.610	Axial	306.2861	0.003796126	0.003794195	0.003812134	0.003782048
MOLYBDENUM	202.030	Axial	52.85002	0.03626610	0.03600711	0.03588183	0.03690937
NICKEL	231.604	Axial	8.025550	0.002428944	0.002561076	0.003092666	0.001633089
PHOSPHORUS	177.495	Axial	1.416720	0.03382914	0.02285524	0.02316836	0.05546382
POTASSIUM	766.490	Radial	939.2307	2.347997	2.296304	2.378812	2.368873
SELENIUM	196.090	Axial	1.856789	0.01243333	0.01690074	0.01002296	0.01037628
SILICON	251.611	Axial	70864.21	22.04894	22.03493	22.12655	21.98532
SILVER	328.068	Axial	-22.3590	-0.0002963556	-0.0006075064	-0.0001013156	-0.0001802449
SODIUM	818.326	Radial	6477.633	114.2810	113.8431	114.3781	114.6217
STRONTIUM	421.552	Radial	2873.607	0.04832516	0.04817289	0.04857755	0.04822503
SULFUR	182.034	Axial	622.8694	9.519863	9.522699	9.497220	9.539671
THALLIUM	190.856	Axial	1.203734	0.006446268	0.006416661	0.007805036	0.005117106
TIN	189.989	Axial	-0.5809211	0.003690618	0.0005418148	0.005748404	0.004781635
TITANIUM	334.941	Radial	1.654618	0.001603524	0.001945786	0.002440518	0.0004242688
VANADIUM	292.402	Radial	5.365331	0.007571022	0.003524274	0.007808052	0.01138074
ZINC	206.200	Axial	40.57095	0.01432723	0.01490216	0.01373049	0.01434903

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-02 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:56 Sequence: 50

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10347.46	10343.12	10346.66	10352.62
YTTRIUM	360.073	Axial	392137.3	392656.7	390268.8	393486.5
YTTRIUM	360.073	Radial	11272.86	11278.96	11265.14	11274.47
INDIUM	230.606	Axial	3145.392	3140.504	3147.880	3147.791

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	2.856116	0.01707295	0.01923253	0.02504397	0.006942357
ALUMINUM	308.215	Radial	6.178064	0.03479532	0.01508797	0.05355397	0.03574402
ANTIMONY	206.833	Axial	-0.7422148	-0.002513047	-0.003247824	0.00000006061108	-0.004291377
ARSENIC	189.042	Axial	-0.2084878	0.003509303	0.001501458	0.009950731	-0.0009242818
BARIUM	233.527	Axial	138.8833	0.03193241	0.03203645	0.03204085	0.03171994
BERYLLIUM	313.042	Radial	14.24143	0.00004407094	0.00003677270	0.00006644717	0.00002899296
CADMIUM	228.802	Axial	1.967012	-0.0003391208	-0.0002039490	-0.0008920916	0.00007867821
CALCIUM	317.933	Radial	15140.34	14.85793	14.88680	14.82710	14.85988
CERIUM	535.353	Radial	62.97863	0.01556642	0.007897093	0.02222293	0.01657924
CHROMIUM	267.716	Axial	71.58527	0.009153984	0.009733762	0.009410297	0.008317892
COBALT	228.616	Axial	3.580654	0.0001799694	0.0002509443	0.0004392953	-0.0001503314
COPPER	324.754	Axial	-11.1487	-0.001795909	-0.002126942	-0.001625753	-0.001635032
IRON	271.441	Radial	1001.424	43.43458	43.48640	43.15330	43.66405
LANTHANUM	333.749	Radial	0.7621169	0.006051796	-0.007386534	0.009524513	0.01601741
LEAD	220.353	Axial	1.926440	0.0009878053	0.002042117	0.0007507480	0.0001705509
LITHIUM	670.784	Radial	152.6190	0.01833738	0.01829840	0.01769377	0.01901997
MAGNESIUM	279.079	Radial	130.3078	2.098389	2.081022	2.093181	2.120964
MANGANESE	257.610	Axial	709579.9	8.432724	8.431480	8.434512	8.432181
MOLYBDENUM	202.030	Axial	0.7770008	-0.0002728051	-0.0002572914	-0.0002956898	-0.0002654342
NICKEL	231.604	Axial	7.729308	0.002098215	0.002854478	0.001743839	0.001696326
PHOSPHORUS	177.495	Axial	15.46232	0.4152808	0.4245209	0.4080627	0.4132586
POTASSIUM	766.490	Radial	364.4105	0.9775704	0.9892194	0.9713874	0.9721043
SELENIUM	196.090	Axial	1.021201	0.002108355	0.0007967183	0.004390742	0.001137604
SILICON	251.611	Axial	13029.79	3.968015	3.975084	3.957010	3.971952
SILVER	328.068	Axial	-13.2039	0.0002062004	0.0002685002	0.0001164539	0.0002336471
SODIUM	589.592	Radial	5801.558	5.955899	5.959135	5.932676	5.975886
STRONTIUM	421.552	Radial	5557.425	0.09255277	0.09264546	0.09229182	0.09272103
SULFUR	182.034	Axial	8.487808	0.1286418	0.1096048	0.1312097	0.1451109
THALLIUM	190.856	Axial	-0.7071908	-0.003863565	-0.007231532	-0.003048890	-0.001310274
TIN	189.989	Axial	-1.08040	0.002240982	-0.0001810636	0.002905670	0.003998340
TITANIUM	334.941	Radial	8.795522	0.003876797	0.003681129	0.002970601	0.004978660
VANADIUM	292.402	Radial	-1.69045	-0.004130880	0.00007088698	-0.004135558	-0.008327968
ZINC	206.200	Axial	53.09505	0.01852279	0.01857296	0.01883193	0.01816347

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-03 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 16:59 Sequence: 51

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10031.73	10042.56	10012.14	10040.49
YTTRIUM	360.073	Axial	381164.7	380862.0	380998.3	381633.7
YTTRIUM	360.073	Radial	11082.51	11083.62	11094.05	11069.85
INDIUM	230.606	Axial	2998.403	2998.551	2992.671	3003.986

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	9.423301	0.04817120	0.05025259	0.04854810	0.04571289
ALUMINUM	308.215	Radial	5.438847	0.02687649	0.02094798	0.06253305	-0.002851564
ANTIMONY	206.833	Axial	-0.9743354	-0.003594692	-0.0009737993	-0.008639856	-0.001170422
ARSENIC	189.042	Axial	-1.37895	-0.004316683	-0.007473016	-0.003040469	-0.002436566
BARIUM	233.527	Axial	317.1735	0.07577089	0.07546669	0.07642123	0.07542476
BERYLLIUM	313.042	Radial	14.27962	0.00005797413	-0.00008044607	0.00005953190	0.0001948366
CADMIUM	228.802	Axial	3.672276	-0.00001049425	-0.0001043559	0.0001099029	-0.00003702973
CALCIUM	373.690	Radial	59665.31	107.2650	107.4177	107.1702	107.2071
CERIUM	535.353	Radial	105.4870	0.2317034	0.2661968	0.2350290	0.1938843
CHROMIUM	267.716	Axial	18.48541	0.001536482	0.0009876871	0.001472247	0.002149512
COBALT	228.616	Axial	4.295397	0.0004245640	0.0006030097	0.0007862305	-0.0001155482
COPPER	324.754	Axial	9.741947	-0.0005554496	-0.0003967900	-0.0007436635	-0.0005258953
IRON	259.940	Radial	9176.541	19.33547	19.37033	19.33305	19.30302
LANTHANUM	333.749	Radial	-0.9281919	0.002792226	0.003461681	0.0004020811	0.004512916
LEAD	220.353	Axial	1.686735	0.0007746436	0.001569299	0.0006271620	0.0001274701
LITHIUM	670.784	Radial	193.6360	0.02331800	0.02452372	0.02332769	0.02210258
MAGNESIUM	279.079	Radial	886.1903	14.31511	14.32555	14.31271	14.30707
MANGANESE	257.610	Axial	92608.03	1.135279	1.134031	1.137109	1.134698
MOLYBDENUM	202.030	Axial	1.238923	0.00007161071	0.0007197335	-0.0003265009	-0.0001784004
NICKEL	231.604	Axial	5.845074	0.001335931	0.0009213642	0.001746051	0.001340378
PHOSPHORUS	177.495	Axial	0.8134224	0.01738150	0.01913734	0.01669029	0.01631687
POTASSIUM	766.490	Radial	753.1936	1.923841	1.945057	1.945268	1.881199
SELENIUM	196.090	Axial	0.4339122	-0.004697823	-0.001411530	-0.009275504	-0.003406435
SILICON	251.611	Axial	23053.66	7.252169	7.242365	7.258758	7.255386
SILVER	328.068	Axial	-24.4567	-0.0004040747	-0.0004758365	-0.0002698334	-0.0004665543
SODIUM	589.592	Radial	10034.50	10.51167	10.50793	10.49139	10.53569
STRONTIUM	421.552	Radial	24231.21	0.4096464	0.4102622	0.4092984	0.4093784
SULFUR	182.034	Axial	11.15045	0.1738534	0.1524651	0.1854071	0.1836880
THALLIUM	190.856	Axial	0.03696962	0.00004238591	-0.003489331	0.003088261	0.0005282280
TIN	189.989	Axial	-3.92267	-0.007100395	-0.006009702	-0.008028785	-0.007262699
TITANIUM	334.941	Radial	63.46814	0.02164987	0.02278856	0.02190052	0.02026052
VANADIUM	292.402	Radial	-1.21007	-0.003372941	-0.003065641	-0.003431346	-0.003621835
ZINC	206.200	Axial	43.57572	0.01561465	0.01532053	0.01589896	0.01562445

Rows shaded in gray for analytes that were not ordered.

Sample ID: L1569103-04 DF: 1x Batch: WG1977039 Units: mg/l
Analyzed: 12/21/22 17:02 Sequence: 52

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	9988.675	9983.306	9981.300	10001.42
YTTRIUM	360.073	Axial	378271.7	379608.7	374925.0	380281.3
YTTRIUM	360.073	Radial	11151.26	11193.77	11166.78	11093.24
INDIUM	230.606	Axial	2973.630	2975.536	2969.952	2975.402

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
BORON	249.678	Radial	8.879029	0.04535581	0.04653033	0.04390549	0.04563161
ALUMINUM	308.215	Radial	6.398986	0.03829794	0.04681055	0.04486455	0.02321873
ANTIMONY	206.833	Axial	-0.7339854	-0.002587187	-0.001857123	-0.002641435	-0.003263002
ARSENIC	189.042	Axial	1.286903	0.01345281	0.007606725	0.02483163	0.007920086
BARIUM	233.527	Axial	325.7729	0.07817330	0.07770110	0.07926815	0.07755066
BERYLLIUM	313.042	Radial	13.70038	0.00002468672	0.00004833512	0.00009880859	-0.00007308355
CADMIUM	228.802	Axial	0.8024988	-0.0005440049	-0.0004431158	-0.0007756209	-0.0004132779
CALCIUM	373.690	Radial	71030.20	126.9143	126.6481	126.7692	127.3255
CERIUM	535.353	Radial	110.3026	0.2523167	0.2467530	0.2233553	0.2868416
CHROMIUM	267.716	Axial	36.62470	0.004273441	0.004220398	0.003693904	0.004906020
COBALT	228.616	Axial	11.52026	0.002449810	0.002200073	0.002460637	0.002688721
COPPER	324.754	Axial	17.44150	-0.00008230021	-0.0001864874	0.0001225374	-0.0001829505
IRON	271.441	Radial	574.7520	25.19659	25.00354	25.35535	25.23089
LANTHANUM	333.749	Radial	0.9421176	0.006420272	0.004433468	0.005557259	0.009270089
LEAD	220.353	Axial	1.285380	0.0002189058	0.003261866	-0.0004867137	-0.002118435
LITHIUM	670.784	Radial	81.74693	0.01047563	0.01032720	0.01118849	0.009911198
MAGNESIUM	279.079	Radial	670.1744	10.76741	10.73732	10.78673	10.77818
MANGANESE	257.610	Axial	291530.9	3.589082	3.593270	3.586708	3.587267
MOLYBDENUM	202.030	Axial	2.185595	0.0007505780	0.0002615127	0.0006657341	0.001324487
NICKEL	231.604	Axial	9.076187	0.002989620	0.003240707	0.002380786	0.003347369
PHOSPHORUS	177.495	Axial	8.777065	0.2419640	0.2412331	0.2585036	0.2261552
POTASSIUM	766.490	Radial	905.6164	2.275848	2.248001	2.247146	2.332396
SELENIUM	196.090	Axial	0.8728918	0.0007228149	-0.01309221	0.01501422	0.0002464341
SILICON	251.611	Axial	22537.30	7.120060	7.114937	7.133108	7.112135
SILVER	328.068	Axial	-22.2783	-0.0002985361	0.0001057096	-0.0003309026	-0.0006704154
SODIUM	589.592	Radial	5541.669	5.749692	5.733086	5.744782	5.771207
STRONTIUM	421.552	Radial	18731.14	0.3147692	0.3139718	0.3149076	0.3154284
SULFUR	182.034	Axial	12.57932	0.1967892	0.2116790	0.1932562	0.1854325
THALLIUM	190.856	Axial	-0.005765837	-0.0001928698	0.001522454	0.001782846	-0.003883910
TIN	189.989	Axial	-3.14739	-0.004681690	-0.001728120	-0.006338359	-0.005978590
TITANIUM	334.941	Radial	70.86360	0.02390682	0.02419352	0.02338786	0.02413908
VANADIUM	292.402	Radial	-2.74075	-0.005894572	-0.009826071	-0.007812334	-0.00004531062
ZINC	206.200	Axial	52.08052	0.01882837	0.01870754	0.01900712	0.01877044

Rows shaded in gray for analytes that were not ordered.

Sample ID: CCV Units: mg/l
Analyzed: 12/21/22 17:08 Sequence: 54 Standard ID: 22H04650

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10021.55	10010.15	10011.38	10043.12
YTTRIUM	360.073	Axial	378111.9	377848.2	377653.3	378834.2
YTTRIUM	360.073	Radial	11227.84	11243.27	11219.17	11221.07
INDIUM	230.606	Axial	2951.437	2951.983	2947.428	2954.900

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	808.1940	9.869793	9.908374	9.867516	9.833490
ANTIMONY	206.833	Axial	116.6017	0.4937027	0.4978321	0.4938832	0.4893928
ARSENIC	189.042	Axial	152.1688	1.017917	1.022205	1.016127	1.015421
BARIUM	233.527	Axial	2070.966	0.4974867	0.4975867	0.4983645	0.4965091
BERYLLIUM	313.042	Radial	4036.323	0.1974218	0.1967970	0.1982159	0.1972525
BORON	249.678	Radial	211.1197	0.9835635	0.9905661	0.9806544	0.9794701
CADMIUM	228.802	Axial	2719.690	0.5058360	0.5050729	0.5070587	0.5053763
CALCIUM	373.690	Radial	27473.22	48.73966	48.65193	48.89574	48.67132
CHROMIUM	267.716	Axial	6594.603	0.9863666	0.9891778	0.9870373	0.9828848
COBALT	228.616	Axial	3632.008	1.020267	1.019376	1.022057	1.019368
COPPER	324.754	Axial	16889.23	1.025329	1.025444	1.027326	1.023215
IRON	259.940	Radial	4697.805	9.769464	9.738123	9.816820	9.753448
LEAD	220.353	Axial	338.5967	0.4870559	0.4875817	0.4880788	0.4855073
LITHIUM	670.784	Radial	8624.341	0.9738361	0.9721437	0.9769414	0.9724232
MAGNESIUM	279.079	Radial	600.3761	9.583958	9.495748	9.622489	9.633637
MANGANESE	257.610	Axial	79852.37	0.9799159	0.9810196	0.9813741	0.9773540
MOLYBDENUM	202.030	Axial	359.9106	0.2550171	0.2554570	0.2550244	0.2545698
NICKEL	231.604	Axial	1963.023	0.9961255	0.9952899	0.9963728	0.9967139
POTASSIUM	766.490	Radial	20483.76	48.56431	48.47161	48.71165	48.50968
SELENIUM	196.090	Axial	83.44818	1.011626	1.016697	1.002474	1.015708
SILICON	251.611	Axial	43163.45	13.60288	13.67805	13.17292	13.95767
SILVER	328.068	Axial	9278.141	0.4921866	0.4919954	0.4934472	0.4911172
SODIUM	818.326	Radial	2910.330	50.36256	50.30035	50.39765	50.38969
STRONTIUM	421.552	Radial	59028.99	0.9846739	0.9825729	0.9876243	0.9838244
SULFUR	182.034	Axial	301.3831	4.668128	4.674022	4.685086	4.645275
THALLIUM	190.856	Axial	174.3938	0.9719075	0.9710943	0.9732353	0.9713930
TIN	189.989	Axial	148.3428	0.4922947	0.4898429	0.4927560	0.4942853
TITANIUM	334.941	Radial	3141.093	1.006264	1.004481	1.007876	1.006434
VANADIUM	292.402	Radial	603.1065	0.9966391	0.9867679	1.005976	0.9971734
ZINC	206.200	Axial	2670.676	0.9838647	0.9855979	0.9837214	0.9822749
CERIUM	535.353	Radial	76.11221	0.08107803	0.1176003	0.002460956	0.1231728
LANTHANUM	333.749	Radial	-2.59185	-0.0003760625	-0.0001021792	-0.005220302	0.004194293
PHOSPHORUS	177.495	Axial	34.85668	0.9738567	0.9662711	0.9963264	0.9589725

Sample ID: CCB Units: mg/l
Analyzed: 12/21/22 17:10 Sequence: 55

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	10407.56	10396.30	10399.30	10427.08
YTTRIUM	360.073	Axial	396005.7	396425.7	395711.0	395880.5
YTTRIUM	360.073	Radial	11084.82	11106.39	11063.49	11084.57
INDIUM	230.606	Axial	3247.015	3242.743	3244.861	3253.441

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	5.478090	0.02735224	0.02693004	-0.006383413	0.06151009
ANTIMONY	206.833	Axial	0.3029018	0.001761065	0.0004807839	0.003635733	0.001166678
ARSENIC	189.042	Axial	-1.30358	-0.003501901	-0.003519557	-0.001412442	-0.005573703
BARIUM	233.527	Axial	3.746590	0.0004619417	0.0005425725	0.0006076429	0.0002356098
BERYLLIUM	313.042	Radial	13.66358	0.00002715676	-0.00002547374	-0.00001546492	0.0001224089
BORON	249.678	Radial	2.108063	0.01378590	0.003674830	0.01443294	0.02324993
CADMIUM	228.802	Axial	3.852626	-0.000003107659	-0.0001151953	-0.00006326432	0.0001691366
CALCIUM	317.933	Radial	162.6585	0.01257074	0.009323565	0.01790889	0.01047976
CERIUM	535.353	Radial	45.07940	-0.06795524	-0.08419866	-0.007370930	-0.1122961
CHROMIUM	267.716	Axial	9.402778	0.0001272795	0.0001905168	0.0004907689	-0.0002994473
COBALT	228.616	Axial	3.409802	0.0001063220	-0.0002351659	0.0001052319	0.0004489000
COPPER	324.754	Axial	38.78175	0.001107958	0.0006735655	0.001342272	0.001308037
IRON	259.940	Radial	3.272154	0.004932614	0.005568571	0.007506550	0.001722720
LANTHANUM	333.749	Radial	-0.8069612	0.003032806	-0.001137398	0.008553747	0.001682070
LEAD	220.353	Axial	0.6540326	-0.0007625552	0.0006505022	-0.001014670	-0.001923498
LITHIUM	670.784	Radial	-3.44383	0.0008008334	0.001175148	0.001336756	-0.0001094045
MAGNESIUM	279.079	Radial	-0.8157507	0.02070894	0.04662286	-0.02577586	0.04127983
MANGANESE	257.610	Axial	21.79167	0.0003445601	0.0003896498	0.0003368438	0.0003071868
MOLYBDENUM	202.030	Axial	2.674171	0.001022752	0.0009168271	0.001313614	0.0008378159
NICKEL	231.604	Axial	3.846486	0.0001889408	0.0003091935	0.0006025538	-0.0003449248
PHOSPHORUS	177.495	Axial	-0.06671904	-0.007236918	0.003260633	-0.001540594	-0.02343079
POTASSIUM	766.490	Radial	-35.6589	0.03379330	-0.005097995	0.07151447	0.03496341
SELENIUM	196.090	Axial	1.812496	0.01135876	0.006138047	0.008246623	0.01969160
SILICON	251.611	Axial	5078.839	1.530057	1.704107	1.514335	1.371731
SILVER	328.068	Axial	-25.1111	-0.0003889328	-0.0005230802	-0.00007445082	-0.0005692673
SODIUM	589.592	Radial	103.5760	0.06513946	0.07060939	0.06812170	0.05668730
STRONTIUM	421.552	Radial	-5.37150	0.0001507336	0.00008480544	0.0002259140	0.0001414813
SULFUR	182.034	Axial	0.3620506	0.006762956	0.02353461	-0.004108041	0.0008622998
THALLIUM	190.856	Axial	0.2361484	0.001033906	-0.002527464	0.005011133	0.0006180469
TIN	189.989	Axial	-1.09475	0.002304612	0.001959994	0.003250289	0.001703553
TITANIUM	334.941	Radial	0.8789526	0.001356431	0.002501552	-0.0007071876	0.002274929
VANADIUM	292.402	Radial	0.4833074	-0.0005371409	-0.0006011517	-0.005250270	0.004239998
ZINC	206.200	Axial	0.7469536	-0.0001640745	-0.00000004438757	-0.00006276965	-0.0004294096

Sample ID: ICSA Units: mg/l
Analyzed: 12/21/22 21:01 Sequence: 136 Standard ID: 22I01110

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8826.073	8815.952	8829.168	8833.100
YTTRIUM	360.073	Axial	333505.4	332911.2	333957.5	333647.5
YTTRIUM	360.073	Radial	10291.60	10295.26	10293.68	10285.84
INDIUM	230.606	Axial	2466.063	2461.553	2463.849	2472.788

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	38096.49	509.6162	509.2556	509.3735	510.2196
ANTIMONY	206.833	Axial	-4.41121	-0.02065904	-0.02266823	-0.02262429	-0.01668459
ARSENIC	189.042	Axial	-2.11392	-0.01112909	-0.01452735	-0.01240991	-0.006450003
BARIUM	233.527	Axial	13.26606	0.003215737	0.003233654	0.003007334	0.003406224
BERYLLIUM	313.042	Radial	12.75246	0.00003077524	-0.0001000671	-0.00004288126	0.0002352741
BORON	249.678	Radial	-0.6525535	0.0005651068	0.001344414	0.005343802	-0.004992896
CADMIUM	228.802	Axial	4.660747	0.0002916792	0.0002135664	0.0001369544	0.0005245168
CALCIUM	373.690	Radial	263320.3	509.8533	509.7031	509.7599	510.0968
CERIUM	535.353	Radial	293.6282	1.277034	1.194950	1.325352	1.310799
CHROMIUM	267.716	Axial	22.33777	0.002569653	0.003083565	0.002422949	0.002202444
COBALT	228.616	Axial	8.632523	0.002140057	0.002242901	0.002215198	0.001962071
COPPER	324.754	Axial	-104.853	-0.008367490	-0.008185925	-0.008866024	-0.008050521
IRON	271.441	Radial	4348.058	206.6061	205.7920	207.0290	206.9973
LANTHANUM	333.749	Radial	-3.45396	-0.002631285	0.003115322	-0.008191885	-0.002817291
LEAD	220.353	Axial	-18.9859	-0.03441945	-0.03765132	-0.03297010	-0.03263694
LITHIUM	670.784	Radial	28.33798	0.004680751	0.004616334	0.004923830	0.004502091
MAGNESIUM	279.079	Radial	29040.51	503.9956	503.9762	503.9432	504.0675
MANGANESE	257.610	Axial	527.3956	0.007435013	0.007491808	0.007439202	0.007374028
MOLYBDENUM	202.030	Axial	4.059540	0.002468243	0.001602241	0.003468239	0.002334249
NICKEL	231.604	Axial	17.83916	0.009263391	0.01012786	0.008679067	0.008983251
PHOSPHORUS	177.495	Axial	0.2144279	0.001399703	0.01473658	-0.01075102	0.0002135542
POTASSIUM	766.490	Radial	-62.8171	-0.04290559	-0.07660671	-0.03404271	-0.01806735
SELENIUM	196.090	Axial	3.302126	0.03591814	0.05861482	0.04207738	0.007062206
SILICON	251.611	Axial	24.35575	-0.004092590	-0.005734229	-0.004033375	-0.002510165
SILVER	328.068	Axial	-59.1541	-0.002670794	-0.002761994	-0.002769383	-0.002481005
SODIUM	589.592	Radial	179.5759	0.1596254	0.1717643	0.1477753	0.1593367
STRONTIUM	421.552	Radial	207.7730	0.004021616	0.004124919	0.004018841	0.003921088
SULFUR	182.034	Axial	1.330861	0.02476021	0.02946168	0.02747088	0.01734809
THALLIUM	190.856	Axial	0.8874348	0.005752626	0.008777684	-0.002483534	0.01096373
TIN	189.989	Axial	-5.07258	-0.01435184	-0.01654609	-0.01290841	-0.01360103
TITANIUM	334.941	Radial	125.1181	0.04475566	0.04296359	0.04569934	0.04560407
VANADIUM	292.402	Radial	4.180992	0.006204478	0.006011109	0.002659278	0.009943047
ZINC	206.200	Axial	16.75183	0.006581174	0.007119140	0.006606903	0.006017480

Sample ID: ICSAB Units: mg/l
Analyzed: 12/21/22 21:03 Sequence: 137 Standard ID: 22I01111

Internal Standards

Analyte	Wavelength	Mode	Mean Intensity	Intensity Rep1	Intensity Rep2	Intensity Rep3
YTTRIUM	224.306	Axial	8784.296	8771.908	8785.924	8795.057
YTTRIUM	360.073	Axial	332378.7	332216.2	331998.5	332921.4
YTTRIUM	360.073	Radial	10201.73	10153.98	10232.38	10218.83
INDIUM	230.606	Axial	2460.183	2453.859	2467.210	2459.479

Target Analytes

Analyte	Wavelength	Mode	Mean Intensity	Mean Conc. (uncorrected)	Conc. Rep1	Conc. Rep2	Conc. Rep3
ALUMINUM	308.215	Radial	37416.64	504.9319	505.3816	503.6590	505.7550
ANTIMONY	206.833	Axial	102.3588	0.4944281	0.4874678	0.4931693	0.5026471
ARSENIC	189.042	Axial	69.28185	0.5310530	0.5215549	0.5314104	0.5401937
BARIUM	233.527	Axial	1868.272	0.5120202	0.5131936	0.5136970	0.5091699
BERYLLIUM	313.042	Radial	9309.326	0.5021319	0.5024548	0.5019740	0.5019669
BORON	249.678	Radial	196.3644	1.006747	1.009734	1.026201	0.9843055
CADMIUM	228.802	Axial	5083.041	1.079339	1.080206	1.079027	1.078784
CALCIUM	373.690	Radial	259720.3	507.3146	508.0465	505.7430	508.1544
CERIUM	535.353	Radial	298.0842	1.314824	1.297243	1.297152	1.350076
CHROMIUM	267.716	Axial	2884.930	0.4916647	0.4938732	0.4903158	0.4908052
COBALT	228.616	Axial	1498.958	0.5047670	0.5049454	0.5040233	0.5053322
COPPER	324.754	Axial	7926.282	0.5468705	0.5473020	0.5441278	0.5491817
IRON	271.441	Radial	4274.798	204.9131	204.4608	204.8805	205.3980
LANTHANUM	333.749	Radial	-1.40143	0.001654214	0.008478503	-0.005657189	0.002141328
LEAD	220.353	Axial	543.1770	0.9388549	0.9394392	0.9359904	0.9411351
LITHIUM	670.784	Radial	24.20768	0.004200672	0.004803606	0.002961853	0.004836557
MAGNESIUM	279.079	Radial	28870.65	505.4639	506.5900	504.7075	505.0944
MANGANESE	257.610	Axial	35788.81	0.5010861	0.5019322	0.5008077	0.5005184
MOLYBDENUM	202.030	Axial	626.6666	0.5073654	0.5073283	0.5082618	0.5065062
NICKEL	231.604	Axial	1638.974	0.9977673	0.9971356	0.9945156	1.001651
PHOSPHORUS	177.495	Axial	0.8872882	0.02300174	0.03405998	0.02369167	0.01125359
POTASSIUM	766.490	Radial	-73.9870	-0.07333462	-0.03820915	-0.08855570	-0.09323902
SELENIUM	196.090	Axial	37.57484	0.5147988	0.5054438	0.5068927	0.5320599
SILICON	251.611	Axial	2832.133	1.006424	1.002541	1.010465	1.006266
SILVER	328.068	Axial	18797.85	1.133243	1.134212	1.132774	1.132743
SODIUM	589.592	Radial	152.5785	0.1305163	0.1070157	0.1327629	0.1517705
STRONTIUM	421.552	Radial	195.1397	0.003822841	0.003726485	0.003872777	0.003869260
SULFUR	182.034	Axial	0.4808232	0.009842477	-0.002761628	0.01487180	0.01741726
THALLIUM	190.856	Axial	71.67775	0.4791567	0.4800511	0.4713821	0.4860369
TIN	189.989	Axial	121.0942	0.4822263	0.4831816	0.4843401	0.4791572
TITANIUM	334.941	Radial	1566.224	0.5527000	0.5536009	0.5510345	0.5534646
VANADIUM	292.402	Radial	276.3371	0.5019138	0.5029506	0.4990360	0.5037546
ZINC	206.200	Axial	2203.043	0.9258762	0.9273960	0.9261582	0.9240744

3015 GW/SPLP ICP Metals Prep Benchsheet

Workgroup: WG1977039

Prep Start Date/Time: 12/20/22 12:07-12:08 **Analyst:** TAS4003 **Leachate Fluid Type:** N/A **Vessel ESC Lot ID:** 2208066 **Pipette ID:** F13409151 **Carousel ID:** 8
Microwave ID: MJ9747 **Dig. Start Date/Time:** 12/20/22 13:30:00 **Prep End Date/Time:** 12/20/22 14:50 **SOP:** ENV-SOP-MTJL-0219 **Method:** 3015 **Filter Lot#:** N/A
pH Lot #: 10BDH3021 **Analyst Verified pH:** TAS4003 **Pipette Tip Lot#:** 236276

Nitric Acid: 22L20139 Amt. Used: 4 mL Exp. Date:06/20/23 **Hydrochloric Acid:** 22L15564 Amt. Used: 1 mL Exp. Date:06/15/23
High Spike: 22L07438 Amt. Used: 0.45 mL Exp. Date:06/07/23 **High Spike 2:** 22L07439 Amt. Used: 0.45 mL Exp. Date:06/07/23

Sample Number	Prep Flags	ListType	Initial Sample Vol (mL)	Final Volume (mL)	Sample Description	Initial pH	Review Analyst	Review Date
BLANK			45	50	NANO	<2	SJM723	12/20/22 14:51:16
LCS			45	50	NANO	<2	SJM723	12/20/22 14:51:16
MS(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
MSD(L1568841-01)			45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
1. L1564959-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
2. L1565291-02		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
3. L1565381-03		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
4. L1565616-01	T2	ICP METALS	5	50	DARK GRAY WATER	<2	SJM723	12/20/22 14:51:16
5. L1568818-01		ICP METALS	5	50	WATER W/ FLOATING STUFF	<2	SJM723	12/20/22 14:51:16
6. L1568841-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
7. L1568889-01		ICP METALS	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
8. L1569097-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
9. L1569097-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
10. L1569097-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
11. L1569102-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
12. L1569102-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
13. L1569102-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
14. L1569102-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
15. L1569103-01		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
16. L1569103-02		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
17. L1569103-03		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16
18. L1569103-04		DODICP	45	50	COLORLESS	<2	SJM723	12/20/22 14:51:16

Comments:
L1565616-01 PREPPED @ 5 ML. T2 APPLIED, UNABLE TO READ PH STRIP DUE TO MATRIX. L1568818-01 PREPPED @ BOTH 1X AND 5 ML DUE TO MATRIX, 1X VENTED, REPORTED @ 5 ML. TS 12.20.22

Reviewed By:SJM723 on 12/20/22 14:51:16

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

Coef1	First Order Coefficient.
Coef2	Second Order Coefficient.
Corr.	Correlation Coefficient.
DL	Detection Limit.
Incpt	Intercept.
LOD	Limit of Detection.
LOQ	Limit of Quantitation.
Mass	Mass of parameter.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
RSD	Relative Standard Deviation.
SDG	Sample Delivery Group.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Slope	Slope of calibration curve.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Wavelength	Wavelength of parameter.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
NI	Manual Integration Code to indicate that the peak was not integrated at all by the computer software.
LT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area less than what it should be (i.e., peak area was cut).
GT	Manual Integration Code to indicate that the peak in question was inappropriately integrated to an area greater than it should be (i.e., peak tailing).
BA	Manual Integration Code to indicate that the baseline had to be adjusted correctly by the analyst.
WP	Manual Integration Code to indicate that the wrong peak was chosen.
CO	Manual Integration Code to indicate that the analyst had to split two co-eluting peaks apart that were not (or could not be) separated by the computer system.

RT	Manual Integration Code to indicate that the retention time for the peak in question has shifted from the expected retention time.
INT	Manual Integration Code to indicate that there was electronic interference (i.e., noise).

GLOSSARY OF TERMS

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO00356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

CHAIN OF CUSTODY

SGS North America Inc. - Orlando
4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 FAX: 407-425-0707
www.sgs.com/ehsusa

L1589103

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: FC1116X

Client / Reporting Information	Project Information
Company Name: SGS North America Inc.	Project Name: Griffiss AFB; Rome, NY
Street Address: 4405 Vineland Rd, Suite C-15	Street:
City: Orlando State: FL Zip: 32811	City: State:
Project Contact: muna.mohammed@sgs.com E-mail:	Project #:
Phone #: 407-425-6700 Fax #:	Client Purchase Order #:
Sampler(s) Name(s): BP Phone:	Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	AMN (350.1) ,PN (420.1) ,TKN (351.2)	Boron (6010)	LAB USE ONLY
1X	LF1MW-103-1222		12/7/22	10:15:00 AM	BP	AQ	3			X	X					X	X	-01
2X	MWSAR03-1222		12/7/22	9:20:00 AM	BP	AQ	3			X	X					X	X	-02
3X	LF1P-5-1222		12/7/22	3:00:00 PM	BP	AQ	3			X	X					X	X	-03
4X	LF1MW-11-1222		12/7/22	1:30:00 PM	BP	AQ	3			X	X					X	X	-04

Turnaround Time (Business days)

Approved By (SGS PM): / Date:

- [ ] Standard 10 Day (business)
- [ ] 5 Business Days RUSH
- [ ] 3 Business Days RUSH
- [ ] 2 Business Days RUSH
- [ ] 1 Business Day EMERGENCY
- [X] other Due 12/22/2022

Emergency & Rush T/A data available via Lablink Approval needed for RUSH/Emergency TAT

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] REDT1 (Level 3)
- [ ] FULT1 (Level 4)
- [ ] Commercial "C"
- [ ] State Forms
- [ ] EDD Format
- [ ] Other
- [X] FL

Commercial "A" = Results Onl
Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Send to Pace Mt. Juliet, TN
DOD/NY Cert
1-250ml H2SO4 Plastic Bottle
1-250ml H2SO4 Amber Bottle
1-250ml HNO3 Plastic Bottle

OK

http://www.sgs.com/en/terms-and-conditions

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		12/8/22 1200	1	2		2
3					12-9-22 0930	4
5						

Preserved where applicable ☐ Therm. ID: On Ice ☐ Cooler Temp. 2.5° to > 2.5°

Sample Receipt Checklist

		If Applicable	
COC Seal Present/Intact:	Y N	VOA Zero Headspace:	Y N
COC Signed/Accurate:	Y N	Pres.Correct/Check:	Y N
Bottles arrive intact:	Y N		
Correct bottles used:	Y N		
Sufficient volume sent:	Y N		
RAD Screen <0.5 mR/hr:	Y N		

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions (DOD)
- Chain of Custody
- QC Evaluation: DOD QSM5.x Limits

Parameter Certification Exceptions

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

The following parameters included in this report are exceptions to DOD certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
BOD, 5 Day		**SM5210 B-11**	AQ	SGS is not certified for this parameter.
Chemical Oxygen Demand		**SM5220 C-11**	AQ	SGS is not certified for this parameter.
Color, Apparent		**SM2120 B-11**	AQ	SGS is not certified for this parameter.

FC 1116 Custody Seal #s: 8815 & 8816

SGS North America Inc - Orlando

Chain of Custody

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL: 407-425-6700 FAX: 407-425-0707
www.sgs.com

SGS - ORLANDO JOB # : PAGE 1 OF 1

SGS - ORLANDO Quote # | SKIFF #

Client / Reporting Information

Company Name: Bhate
Address: 445 Union Blvd Ste 129
City: Lakewood State: CO Zip: 80228
Project Contact: Frank Gardner Email:
Phone #: 720-463-3903
Sampler(s) Name(s) (Printed) Sampler 1: Brianna Pollard Sampler 2:

Project Information

Project Name: Former Griffiss AFB NE BECOS
Street ← SAME →
City State
Project # GRFIS-BECOS
Fax #
Client Purchase Order #

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid

SGS Orlando Sample #	Field ID / Point of Collection	COLLECTION DATE	COLLECTION TIME	SAMPLED BY:	MATRIX	CONTAINER INFORMATION TOTAL # OF BOTTLES	OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI WATER	MeOH	AMN, COD	B	BOD	COD	PN	SO4, NO3, NO2, CHL, BRO, TPO4, COL, ALK, FL	TKN	TOC	xHRDCALC	v8260	LAB USE ONLY
1	LFIMW-103-1222	12/7/22	1015	BP	GW	10	0	3	2	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	O	
2	MWSAR03-1222		0920			13	0	3	5	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	X	
3	LFIP-5-1222		1500			10	0	3	2	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	X	
4	LFIMW-11-1222		1330			10	0	3	2	0	2	3	0	0	0	X	X	X	X	X	X	X	X	X	O	

Turnaround Time (Business days)

10 Day (Business) Approved By: / Date:
7 Day
5 Day
3 Day *RUSH*
2 Day *RUSH*
1 Day *RUSH*
Other
Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULLT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

INITIAL ASSESSMENT PH

LABEL VERIFICATION

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler/Affiliation	Date Time:	Received By/Affiliation	Relinquished By/Affiliation	Date Time:	Received By/Affiliation
1	BPollard/Bhate(EA)	12/7/22 1830	2 FedEx	3		4 12/8/22 930
5	Relinquished by/Affiliation	Date Time:	6 Received By/Affiliation	7 Relinquished By/Affiliation	Date Time:	8 Received By/Affiliation

Lab Use Only : Cooler Temperature (s) Celsius (corrected): 2.8C, 1.4C CTM

http://www.sgs.com/en/terms-and-conditions

ORLD-SMT-0001-03-FORM-COC (4).xls Rev 031318

6.2 6

FC1116: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: FC1116 **Client:** BHATE **Project:** FORMER GRIFFIS AFB NE BECOS

Date / Time Received: 12/8/2022 9:30:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 5700 7357 2215

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 2

Cooler Temps (Raw Measured) °C: Cooler 1: (2.8); Cooler 2: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.0); Cooler 2: (1.6);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑
	W	**or**	**S**	**N/A**
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☑	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____

Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____ _____

Residual Chlorine Test Strip Lot #: _____

Comments FOR SAMPLE -1, TIME OF SAMPLE COLLECTION ON COC IS "1015", BUT TIME ON SAMPLE ID LABELS IS "1115".

SM001
Rev. Date 05/24/17

Technician: SAMUELM Date: 12/8/2022 9:30:00 AM Reviewer: _____ Date: _____

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V5E1623	SW846 8260D						
V5E1623-BS	67-64-1	Acetone	BSP	REC	90	%	39-160
V5E1623-BS	71-43-2	Benzene	BSP	REC	97	%	79-120
V5E1623-BS	108-86-1	Bromobenzene	BSP	REC	94	%	80-120
V5E1623-BS	74-97-5	Bromochloromethane	BSP	REC	98	%	78-123
V5E1623-BS	75-27-4	Bromodichloromethane	BSP	REC	102	%	79-125
V5E1623-BS	75-25-2	Bromoform	BSP	REC	93	%	66-130
V5E1623-BS	78-93-3	2-Butanone (MEK)	BSP	REC	95	%	56-143
V5E1623-BS	104-51-8	n-Butylbenzene	BSP	REC	99	%	75-128
V5E1623-BS	135-98-8	sec-Butylbenzene	BSP	REC	110	%	77-126
V5E1623-BS	98-06-6	tert-Butylbenzene	BSP	REC	101	%	78-124
V5E1623-BS	75-15-0	Carbon Disulfide	BSP	REC	106	%	64-133
V5E1623-BS	56-23-5	Carbon Tetrachloride	BSP	REC	106	%	72-136
V5E1623-BS	108-90-7	Chlorobenzene	BSP	REC	97	%	82-118
V5E1623-BS	75-00-3	Chloroethane	BSP	REC	103	%	60-138
V5E1623-BS	67-66-3	Chloroform	BSP	REC	99	%	79-124
V5E1623-BS	95-49-8	o-Chlorotoluene	BSP	REC	100	%	79-122
V5E1623-BS	106-43-4	p-Chlorotoluene	BSP	REC	98	%	78-122
V5E1623-BS	124-48-1	Dibromochloromethane	BSP	REC	96	%	74-126
V5E1623-BS	96-12-8	1,2-Dibromo-3-chloropropane	BSP	REC	88	%	62-128
V5E1623-BS	106-93-4	1,2-Dibromoethane	BSP	REC	99	%	77-121
V5E1623-BS	75-71-8	Dichlorodifluoromethane	BSP	REC	83	%	32-152
V5E1623-BS	95-50-1	1,2-Dichlorobenzene	BSP	REC	99	%	80-119
V5E1623-BS	541-73-1	1,3-Dichlorobenzene	BSP	REC	101	%	80-119
V5E1623-BS	106-46-7	1,4-Dichlorobenzene	BSP	REC	97	%	79-118
V5E1623-BS	75-34-3	1,1-Dichloroethane	BSP	REC	104	%	77-125
V5E1623-BS	107-06-2	1,2-Dichloroethane	BSP	REC	96	%	73-128
V5E1623-BS	75-35-4	1,1-Dichloroethylene	BSP	REC	102	%	71-131
V5E1623-BS	156-59-2	cis-1,2-Dichloroethylene	BSP	REC	102	%	78-123
V5E1623-BS	156-60-5	trans-1,2-Dichloroethylene	BSP	REC	102	%	75-124
V5E1623-BS	540-59-0	1,2-Dichloroethene (total)	BSP	REC	101	%	79-121
V5E1623-BS	78-87-5	1,2-Dichloropropane	BSP	REC	90	%	78-122
V5E1623-BS	142-28-9	1,3-Dichloropropane	BSP	REC	90	%	80-119
V5E1623-BS	594-20-7	2,2-Dichloropropane	BSP	REC	86	%	60-139
V5E1623-BS	563-58-6	1,1-Dichloropropene	BSP	REC	100	%	79-125
V5E1623-BS	10061-01-5	cis-1,3-Dichloropropene	BSP	REC	99	%	75-124
V5E1623-BS	10061-02-6	trans-1,3-Dichloropropene	BSP	REC	102	%	73-127
V5E1623-BS	100-41-4	Ethylbenzene	BSP	REC	97	%	79-121
V5E1623-BS	87-68-3	Hexachlorobutadiene	BSP	REC	103	%	66-134
V5E1623-BS	591-78-6	2-Hexanone	BSP	REC	92	%	57-139
V5E1623-BS	98-82-8	Isopropylbenzene	BSP	REC	101	%	72-131
V5E1623-BS	99-87-6	p-Isopropyltoluene	BSP	REC	105	%	77-127
V5E1623-BS	74-87-3	Methyl Chloride	BSP	REC	89	%	50-139

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
V5E1623-BS	74-95-3	Methylene Bromide	BSP	REC	97	%	79-123
V5E1623-BS	75-09-2	Methylene Chloride	BSP	REC	90	%	74-124
V5E1623-BS	108-10-1	4-Methyl-2-pentanone (MIBK)	BSP	REC	91	%	67-130
V5E1623-BS	1634-04-4	Methyl Tert Butyl Ether	BSP	REC	98	%	71-124
V5E1623-BS	91-20-3	Naphthalene	BSP	REC	97	%	61-128
V5E1623-BS	103-65-1	n-Propylbenzene	BSP	REC	100	%	76-126
V5E1623-BS	100-42-5	Styrene	BSP	REC	98	%	78-123
V5E1623-BS	630-20-6	1,1,1,2-Tetrachloroethane	BSP	REC	101	%	78-124
V5E1623-BS	79-34-5	1,1,2,2-Tetrachloroethane	BSP	REC	98	%	71-121
V5E1623-BS	127-18-4	Tetrachloroethylene	BSP	REC	106	%	74-129
V5E1623-BS	108-88-3	Toluene	BSP	REC	97	%	80-121
V5E1623-BS	87-61-6	1,2,3-Trichlorobenzene	BSP	REC	102	%	69-129
V5E1623-BS	120-82-1	1,2,4-Trichlorobenzene	BSP	REC	107	%	69-130
V5E1623-BS	71-55-6	1,1,1-Trichloroethane	BSP	REC	103	%	74-131
V5E1623-BS	79-00-5	1,1,2-Trichloroethane	BSP	REC	96	%	80-119
V5E1623-BS	79-01-6	Trichloroethylene	BSP	REC	99	%	79-123
V5E1623-BS	75-69-4	Trichlorofluoromethane	BSP	REC	118	%	65-141
V5E1623-BS	96-18-4	1,2,3-Trichloropropane	BSP	REC	90	%	73-122
V5E1623-BS	95-63-6	1,2,4-Trimethylbenzene	BSP	REC	102	%	76-124
V5E1623-BS	108-67-8	1,3,5-Trimethylbenzene	BSP	REC	99	%	75-124
V5E1623-BS	108-05-4	Vinyl Acetate	BSP	REC	118	%	54-146
V5E1623-BS	75-01-4	Vinyl Chloride	BSP	REC	99	%	58-137
V5E1623-BS		m,p-Xylene	BSP	REC	97	%	80-121
V5E1623-BS	95-47-6	o-Xylene	BSP	REC	100	%	78-122
V5E1623-BS	1330-20-7	Xylene (total)	BSP	REC	98	%	79-121
V5E1623-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	102	%	80-119
V5E1623-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	104	%	81-118
V5E1623-BS	2037-26-5	Toluene-D8	BSP	SURR	98	%	89-112
V5E1623-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	101	%	85-114
FC1217-1MS*	67-64-1	Acetone	MS	REC	90	%	39-160
FC1217-1MS*	71-43-2	Benzene	MS	REC	100	%	79-120
FC1217-1MS*	108-86-1	Bromobenzene	MS	REC	96	%	80-120
FC1217-1MS*	74-97-5	Bromochloromethane	MS	REC	106	%	78-123
FC1217-1MS*	75-27-4	Bromodichloromethane	MS	REC	106	%	79-125
FC1217-1MS*	75-25-2	Bromoform	MS	REC	92	%	66-130
FC1217-1MS*	78-93-3	2-Butanone (MEK)	MS	REC	95	%	56-143
FC1217-1MS*	104-51-8	n-Butylbenzene	MS	REC	92	%	75-128
FC1217-1MS*	135-98-8	sec-Butylbenzene	MS	REC	107	%	77-126
FC1217-1MS*	98-06-6	tert-Butylbenzene	MS	REC	100	%	78-124
FC1217-1MS*	75-15-0	Carbon Disulfide	MS	REC	106	%	64-133
FC1217-1MS*	56-23-5	Carbon Tetrachloride	MS	REC	110	%	72-136
FC1217-1MS*	108-90-7	Chlorobenzene	MS	REC	98	%	82-118
FC1217-1MS*	75-00-3	Chloroethane	MS	REC	116	%	60-138
FC1217-1MS*	67-66-3	Chloroform	MS	REC	101	%	79-124
FC1217-1MS*	95-49-8	o-Chlorotoluene	MS	REC	98	%	79-122

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1217-1MS*	106-43-4	p-Chlorotoluene	MS	REC	98	%	78-122
FC1217-1MS*	124-48-1	Dibromochloromethane	MS	REC	99	%	74-126
FC1217-1MS*	96-12-8	1,2-Dibromo-3-chloropropane	MS	REC	81	%	62-128
FC1217-1MS*	106-93-4	1,2-Dibromoethane	MS	REC	99	%	77-121
FC1217-1MS*	75-71-8	Dichlorodifluoromethane	MS	REC	110	%	32-152
FC1217-1MS*	95-50-1	1,2-Dichlorobenzene	MS	REC	102	%	80-119
FC1217-1MS*	541-73-1	1,3-Dichlorobenzene	MS	REC	102	%	80-119
FC1217-1MS*	106-46-7	1,4-Dichlorobenzene	MS	REC	98	%	79-118
FC1217-1MS*	75-34-3	1,1-Dichloroethane	MS	REC	107	%	77-125
FC1217-1MS*	107-06-2	1,2-Dichloroethane	MS	REC	103	%	73-128
FC1217-1MS*	75-35-4	1,1-Dichloroethylene	MS	REC	105	%	71-131
FC1217-1MS*	156-59-2	cis-1,2-Dichloroethylene	MS	REC	105	%	78-123
FC1217-1MS*	156-60-5	trans-1,2-Dichloroethylene	MS	REC	101	%	75-124
FC1217-1MS*	540-59-0	1,2-Dichloroethene (total)	MS	REC	103	%	79-121
FC1217-1MS*	78-87-5	1,2-Dichloropropane	MS	REC	93	%	78-122
FC1217-1MS*	142-28-9	1,3-Dichloropropane	MS	REC	92	%	80-119
FC1217-1MS*	594-20-7	2,2-Dichloropropane	MS	REC	70	%	60-139
FC1217-1MS*	563-58-6	1,1-Dichloropropene	MS	REC	99	%	79-125
FC1217-1MS*	10061-01-5	cis-1,3-Dichloropropene	MS	REC	90	%	75-124
FC1217-1MS*	10061-02-6	trans-1,3-Dichloropropene	MS	REC	98	%	73-127
FC1217-1MS*	100-41-4	Ethylbenzene	MS	REC	98	%	79-121
FC1217-1MS*	87-68-3	Hexachlorobutadiene	MS	REC	96	%	66-134
FC1217-1MS*	591-78-6	2-Hexanone	MS	REC	92	%	57-139
FC1217-1MS*	98-82-8	Isopropylbenzene	MS	REC	101	%	72-131
FC1217-1MS*	99-87-6	p-Isopropyltoluene	MS	REC	102	%	77-127
FC1217-1MS*	74-87-3	Methyl Chloride	MS	REC	102	%	50-139
FC1217-1MS*	74-95-3	Methylene Bromide	MS	REC	102	%	79-123
FC1217-1MS*	75-09-2	Methylene Chloride	MS	REC	94	%	74-124
FC1217-1MS*	108-10-1	4-Methyl-2-pentanone (MIBK)	MS	REC	90	%	67-130
FC1217-1MS*	1634-04-4	Methyl Tert Butyl Ether	MS	REC	103	%	71-124
FC1217-1MS*	91-20-3	Naphthalene	MS	REC	88	%	61-128
FC1217-1MS*	103-65-1	n-Propylbenzene	MS	REC	100	%	76-126
FC1217-1MS*	100-42-5	Styrene	MS	REC	97	%	78-123
FC1217-1MS*	630-20-6	1,1,1,2-Tetrachloroethane	MS	REC	102	%	78-124
FC1217-1MS*	79-34-5	1,1,2,2-Tetrachloroethane	MS	REC	99	%	71-121
FC1217-1MS*	127-18-4	Tetrachloroethylene	MS	REC	102	%	74-129
FC1217-1MS*	108-88-3	Toluene	MS	REC	97	%	80-121
FC1217-1MS*	87-61-6	1,2,3-Trichlorobenzene	MS	REC	95	%	69-129
FC1217-1MS*	120-82-1	1,2,4-Trichlorobenzene	MS	REC	101	%	69-130
FC1217-1MS*	71-55-6	1,1,1-Trichloroethane	MS	REC	109	%	74-131
FC1217-1MS*	79-00-5	1,1,2-Trichloroethane	MS	REC	102	%	80-119
FC1217-1MS*	79-01-6	Trichloroethylene	MS	REC	105	%	79-123
FC1217-1MS*	75-69-4	Trichlorofluoromethane	MS	REC	131	%	65-141
FC1217-1MS*	96-18-4	1,2,3-Trichloropropane	MS	REC	93	%	73-122
FC1217-1MS*	95-63-6	1,2,4-Trimethylbenzene	MS	REC	99	%	76-124

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1217-1MS*	108-67-8	1,3,5-Trimethylbenzene	MS	REC	96	%	75-124
FC1217-1MS*	108-05-4	Vinyl Acetate	MS	REC	118	%	54-146
FC1217-1MS*	75-01-4	Vinyl Chloride	MS	REC	112	%	58-137
FC1217-1MS*		m,p-Xylene	MS	REC	99	%	80-121
FC1217-1MS*	95-47-6	o-Xylene	MS	REC	101	%	78-122
FC1217-1MS*	1330-20-7	Xylene (total)	MS	REC	99	%	79-121
FC1217-1MS*	1868-53-7	Dibromofluoromethane	MS	SURR	105	%	80-119
FC1217-1MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	101	%	81-118
FC1217-1MS*	2037-26-5	Toluene-D8	MS	SURR	97	%	89-112
FC1217-1MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	98	%	85-114
FC1217-1MSD*	67-64-1	Acetone	MSD	REC	95	%	39-160
FC1217-1MSD*	67-64-1	Acetone	MSD	RPD	6	%	20
FC1217-1MSD*	71-43-2	Benzene	MSD	REC	98	%	79-120
FC1217-1MSD*	71-43-2	Benzene	MSD	RPD	2	%	20
FC1217-1MSD*	108-86-1	Bromobenzene	MSD	REC	96	%	80-120
FC1217-1MSD*	108-86-1	Bromobenzene	MSD	RPD	0	%	20
FC1217-1MSD*	74-97-5	Bromochloromethane	MSD	REC	103	%	78-123
FC1217-1MSD*	74-97-5	Bromochloromethane	MSD	RPD	2	%	20
FC1217-1MSD*	75-27-4	Bromodichloromethane	MSD	REC	103	%	79-125
FC1217-1MSD*	75-27-4	Bromodichloromethane	MSD	RPD	3	%	20
FC1217-1MSD*	75-25-2	Bromoform	MSD	REC	92	%	66-130
FC1217-1MSD*	75-25-2	Bromoform	MSD	RPD	0	%	20
FC1217-1MSD*	78-93-3	2-Butanone (MEK)	MSD	REC	101	%	56-143
FC1217-1MSD*	78-93-3	2-Butanone (MEK)	MSD	RPD	7	%	20
FC1217-1MSD*	104-51-8	n-Butylbenzene	MSD	REC	93	%	75-128
FC1217-1MSD*	104-51-8	n-Butylbenzene	MSD	RPD	1	%	20
FC1217-1MSD*	135-98-8	sec-Butylbenzene	MSD	REC	107	%	77-126
FC1217-1MSD*	135-98-8	sec-Butylbenzene	MSD	RPD	0	%	20
FC1217-1MSD*	98-06-6	tert-Butylbenzene	MSD	REC	101	%	78-124
FC1217-1MSD*	98-06-6	tert-Butylbenzene	MSD	RPD	1	%	20
FC1217-1MSD*	75-15-0	Carbon Disulfide	MSD	REC	106	%	64-133
FC1217-1MSD*	75-15-0	Carbon Disulfide	MSD	RPD	1	%	20
FC1217-1MSD*	56-23-5	Carbon Tetrachloride	MSD	REC	105	%	72-136
FC1217-1MSD*	56-23-5	Carbon Tetrachloride	MSD	RPD	5	%	20
FC1217-1MSD*	108-90-7	Chlorobenzene	MSD	REC	99	%	82-118
FC1217-1MSD*	108-90-7	Chlorobenzene	MSD	RPD	1	%	20
FC1217-1MSD*	75-00-3	Chloroethane	MSD	REC	114	%	60-138
FC1217-1MSD*	75-00-3	Chloroethane	MSD	RPD	1	%	20
FC1217-1MSD*	67-66-3	Chloroform	MSD	REC	100	%	79-124
FC1217-1MSD*	67-66-3	Chloroform	MSD	RPD	1	%	20
FC1217-1MSD*	95-49-8	o-Chlorotoluene	MSD	REC	101	%	79-122
FC1217-1MSD*	95-49-8	o-Chlorotoluene	MSD	RPD	2	%	20
FC1217-1MSD*	106-43-4	p-Chlorotoluene	MSD	REC	97	%	78-122
FC1217-1MSD*	106-43-4	p-Chlorotoluene	MSD	RPD	1	%	20
FC1217-1MSD*	124-48-1	Dibromochloromethane	MSD	REC	98	%	74-126

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1217-1MSD*	124-48-1	Dibromochloromethane	MSD	RPD	1	%	20
FC1217-1MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	REC	90	%	62-128
FC1217-1MSD*	96-12-8	1,2-Dibromo-3-chloropropane	MSD	RPD	10	%	20
FC1217-1MSD*	106-93-4	1,2-Dibromoethane	MSD	REC	102	%	77-121
FC1217-1MSD*	106-93-4	1,2-Dibromoethane	MSD	RPD	3	%	20
FC1217-1MSD*	75-71-8	Dichlorodifluoromethane	MSD	REC	107	%	32-152
FC1217-1MSD*	75-71-8	Dichlorodifluoromethane	MSD	RPD	3	%	20
FC1217-1MSD*	95-50-1	1,2-Dichlorobenzene	MSD	REC	102	%	80-119
FC1217-1MSD*	95-50-1	1,2-Dichlorobenzene	MSD	RPD	0	%	20
FC1217-1MSD*	541-73-1	1,3-Dichlorobenzene	MSD	REC	102	%	80-119
FC1217-1MSD*	541-73-1	1,3-Dichlorobenzene	MSD	RPD	1	%	20
FC1217-1MSD*	106-46-7	1,4-Dichlorobenzene	MSD	REC	98	%	79-118
FC1217-1MSD*	106-46-7	1,4-Dichlorobenzene	MSD	RPD	1	%	20
FC1217-1MSD*	75-34-3	1,1-Dichloroethane	MSD	REC	105	%	77-125
FC1217-1MSD*	75-34-3	1,1-Dichloroethane	MSD	RPD	2	%	20
FC1217-1MSD*	107-06-2	1,2-Dichloroethane	MSD	REC	100	%	73-128
FC1217-1MSD*	107-06-2	1,2-Dichloroethane	MSD	RPD	3	%	20
FC1217-1MSD*	75-35-4	1,1-Dichloroethylene	MSD	REC	102	%	71-131
FC1217-1MSD*	75-35-4	1,1-Dichloroethylene	MSD	RPD	2	%	20
FC1217-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	REC	103	%	78-123
FC1217-1MSD*	156-59-2	cis-1,2-Dichloroethylene	MSD	RPD	2	%	20
FC1217-1MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	REC	102	%	75-124
FC1217-1MSD*	156-60-5	trans-1,2-Dichloroethylene	MSD	RPD	1	%	20
FC1217-1MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	REC	102	%	79-121
FC1217-1MSD*	540-59-0	1,2-Dichloroethene (total)	MSD	RPD	0	%	20
FC1217-1MSD*	78-87-5	1,2-Dichloropropane	MSD	REC	94	%	78-122
FC1217-1MSD*	78-87-5	1,2-Dichloropropane	MSD	RPD	2	%	20
FC1217-1MSD*	142-28-9	1,3-Dichloropropane	MSD	REC	91	%	80-119
FC1217-1MSD*	142-28-9	1,3-Dichloropropane	MSD	RPD	1	%	20
FC1217-1MSD*	594-20-7	2,2-Dichloropropane	MSD	REC	69	%	60-139
FC1217-1MSD*	594-20-7	2,2-Dichloropropane	MSD	RPD	1	%	20
FC1217-1MSD*	563-58-6	1,1-Dichloropropene	MSD	REC	101	%	79-125
FC1217-1MSD*	563-58-6	1,1-Dichloropropene	MSD	RPD	2	%	20
FC1217-1MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	REC	94	%	75-124
FC1217-1MSD*	10061-01-5	cis-1,3-Dichloropropene	MSD	RPD	3	%	20
FC1217-1MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	REC	98	%	73-127
FC1217-1MSD*	10061-02-6	trans-1,3-Dichloropropene	MSD	RPD	1	%	20
FC1217-1MSD*	100-41-4	Ethylbenzene	MSD	REC	98	%	79-121
FC1217-1MSD*	100-41-4	Ethylbenzene	MSD	RPD	0	%	20
FC1217-1MSD*	87-68-3	Hexachlorobutadiene	MSD	REC	92	%	66-134
FC1217-1MSD*	87-68-3	Hexachlorobutadiene	MSD	RPD	4	%	20
FC1217-1MSD*	591-78-6	2-Hexanone	MSD	REC	100	%	57-139
FC1217-1MSD*	591-78-6	2-Hexanone	MSD	RPD	9	%	20
FC1217-1MSD*	98-82-8	Isopropylbenzene	MSD	REC	102	%	72-131
FC1217-1MSD*	98-82-8	Isopropylbenzene	MSD	RPD	1	%	20

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1217-1MSD*	99-87-6	p-Isopropyltoluene	MSD	REC	103	%	77-127
FC1217-1MSD*	99-87-6	p-Isopropyltoluene	MSD	RPD	2	%	20
FC1217-1MSD*	74-87-3	Methyl Chloride	MSD	REC	98	%	50-139
FC1217-1MSD*	74-87-3	Methyl Chloride	MSD	RPD	4	%	20
FC1217-1MSD*	74-95-3	Methylene Bromide	MSD	REC	99	%	79-123
FC1217-1MSD*	74-95-3	Methylene Bromide	MSD	RPD	3	%	20
FC1217-1MSD*	75-09-2	Methylene Chloride	MSD	REC	94	%	74-124
FC1217-1MSD*	75-09-2	Methylene Chloride	MSD	RPD	1	%	20
FC1217-1MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	REC	97	%	67-130
FC1217-1MSD*	108-10-1	4-Methyl-2-pentanone (MIBK)	MSD	RPD	7	%	20
FC1217-1MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	REC	102	%	71-124
FC1217-1MSD*	1634-04-4	Methyl Tert Butyl Ether	MSD	RPD	2	%	20
FC1217-1MSD*	91-20-3	Naphthalene	MSD	REC	94	%	61-128
FC1217-1MSD*	91-20-3	Naphthalene	MSD	RPD	7	%	20
FC1217-1MSD*	103-65-1	n-Propylbenzene	MSD	REC	100	%	76-126
FC1217-1MSD*	103-65-1	n-Propylbenzene	MSD	RPD	0	%	20
FC1217-1MSD*	100-42-5	Styrene	MSD	REC	96	%	78-123
FC1217-1MSD*	100-42-5	Styrene	MSD	RPD	1	%	20
FC1217-1MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	REC	104	%	78-124
FC1217-1MSD*	630-20-6	1,1,1,2-Tetrachloroethane	MSD	RPD	2	%	20
FC1217-1MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	REC	102	%	71-121
FC1217-1MSD*	79-34-5	1,1,2,2-Tetrachloroethane	MSD	RPD	3	%	20
FC1217-1MSD*	127-18-4	Tetrachloroethylene	MSD	REC	101	%	74-129
FC1217-1MSD*	127-18-4	Tetrachloroethylene	MSD	RPD	1	%	20
FC1217-1MSD*	108-88-3	Toluene	MSD	REC	97	%	80-121
FC1217-1MSD*	108-88-3	Toluene	MSD	RPD	0	%	20
FC1217-1MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	REC	102	%	69-129
FC1217-1MSD*	87-61-6	1,2,3-Trichlorobenzene	MSD	RPD	7	%	20
FC1217-1MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	REC	103	%	69-130
FC1217-1MSD*	120-82-1	1,2,4-Trichlorobenzene	MSD	RPD	2	%	20
FC1217-1MSD*	71-55-6	1,1,1-Trichloroethane	MSD	REC	106	%	74-131
FC1217-1MSD*	71-55-6	1,1,1-Trichloroethane	MSD	RPD	2	%	20
FC1217-1MSD*	79-00-5	1,1,2-Trichloroethane	MSD	REC	102	%	80-119
FC1217-1MSD*	79-00-5	1,1,2-Trichloroethane	MSD	RPD	1	%	20
FC1217-1MSD*	79-01-6	Trichloroethylene	MSD	REC	103	%	79-123
FC1217-1MSD*	79-01-6	Trichloroethylene	MSD	RPD	2	%	20
FC1217-1MSD*	75-69-4	Trichlorofluoromethane	MSD	REC	128	%	65-141
FC1217-1MSD*	75-69-4	Trichlorofluoromethane	MSD	RPD	2	%	20
FC1217-1MSD*	96-18-4	1,2,3-Trichloropropane	MSD	REC	94	%	73-122
FC1217-1MSD*	96-18-4	1,2,3-Trichloropropane	MSD	RPD	2	%	20
FC1217-1MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	REC	100	%	76-124
FC1217-1MSD*	95-63-6	1,2,4-Trimethylbenzene	MSD	RPD	1	%	20
FC1217-1MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	REC	97	%	75-124
FC1217-1MSD*	108-67-8	1,3,5-Trimethylbenzene	MSD	RPD	1	%	20
FC1217-1MSD*	108-05-4	Vinyl Acetate	MSD	REC	122	%	54-146

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1217-1MSD*	108-05-4	Vinyl Acetate	MSD	RPD	3	%	20
FC1217-1MSD*	75-01-4	Vinyl Chloride	MSD	REC	110	%	58-137
FC1217-1MSD*	75-01-4	Vinyl Chloride	MSD	RPD	2	%	20
FC1217-1MSD*		m,p-Xylene	MSD	REC	98	%	80-121
FC1217-1MSD*		m,p-Xylene	MSD	RPD	1	%	20
FC1217-1MSD*	95-47-6	o-Xylene	MSD	REC	101	%	78-122
FC1217-1MSD*	95-47-6	o-Xylene	MSD	RPD	0	%	20
FC1217-1MSD*	1330-20-7	Xylene (total)	MSD	REC	99	%	79-121
FC1217-1MSD*	1330-20-7	Xylene (total)	MSD	RPD	1	%	20
FC1217-1MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	101	%	80-119
FC1217-1MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	104	%	81-118
FC1217-1MSD*	2037-26-5	Toluene-D8	MSD	SURR	97	%	89-112
FC1217-1MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	99	%	85-114
V5E1623-MB	1868-53-7	Dibromofluoromethane	MB	SURR	99	%	80-119
V5E1623-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	99	%	81-118
V5E1623-MB	2037-26-5	Toluene-D8	MB	SURR	99	%	89-112
V5E1623-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	103	%	85-114
FC1116-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	100	%	80-119
FC1116-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	104	%	81-118
FC1116-2	2037-26-5	Toluene-D8	SAMP	SURR	98	%	89-112
FC1116-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	102	%	85-114
VO2870	SW846 8260D						
VO2870-BS	74-83-9	Methyl Bromide	BSP	REC	87	%	53-141
VO2870-BS	1868-53-7	Dibromofluoromethane	BSP	SURR	96	%	80-119
VO2870-BS	17060-07-0	1,2-Dichloroethane-D4	BSP	SURR	93	%	81-118
VO2870-BS	2037-26-5	Toluene-D8	BSP	SURR	103	%	89-112
VO2870-BS	460-00-4	4-Bromofluorobenzene	BSP	SURR	92	%	85-114
FC1196-11MS*	74-83-9	Methyl Bromide	MS	REC	38	%	53-141
FC1196-11MS*	1868-53-7	Dibromofluoromethane	MS	SURR	95	%	80-119
FC1196-11MS*	17060-07-0	1,2-Dichloroethane-D4	MS	SURR	87	%	81-118
FC1196-11MS*	2037-26-5	Toluene-D8	MS	SURR	102	%	89-112
FC1196-11MS*	460-00-4	4-Bromofluorobenzene	MS	SURR	91	%	85-114
FC1196-11MSD*	74-83-9	Methyl Bromide	MSD	REC	54	%	53-141
FC1196-11MSD*	74-83-9	Methyl Bromide	MSD	RPD	36	%	20
FC1196-11MSD*	1868-53-7	Dibromofluoromethane	MSD	SURR	95	%	80-119
FC1196-11MSD*	17060-07-0	1,2-Dichloroethane-D4	MSD	SURR	87	%	81-118
FC1196-11MSD*	2037-26-5	Toluene-D8	MSD	SURR	101	%	89-112
FC1196-11MSD*	460-00-4	4-Bromofluorobenzene	MSD	SURR	89	%	85-114
VO2870-MB	1868-53-7	Dibromofluoromethane	MB	SURR	94	%	80-119
VO2870-MB	17060-07-0	1,2-Dichloroethane-D4	MB	SURR	97	%	81-118
VO2870-MB	2037-26-5	Toluene-D8	MB	SURR	105	%	89-112
VO2870-MB	460-00-4	4-Bromofluorobenzene	MB	SURR	91	%	85-114
FC1116-2	1868-53-7	Dibromofluoromethane	SAMP	SURR	93	%	80-119

* Sample used for QC is not from job FC1116

QC Evaluation: DOD QSM5.x Limits

Job Number: FC1116
Account: Bhate Environmental
Project: Griffiss AFB; Rome, NY
Collected: 12/07/22

QC Sample ID	CAS#	Analyte	Sample Type	Result Type	Result	Units	Limits
FC1116-2	17060-07-0	1,2-Dichloroethane-D4	SAMP	SURR	92	%	81-118
FC1116-2	2037-26-5	Toluene-D8	SAMP	SURR	108	%	89-112
FC1116-2	460-00-4	4-Bromofluorobenzene	SAMP	SURR	101	%	85-114
MP41628	SW846 6010D						
MP41628-B1	7440-70-2	Calcium	BSP	REC	102.4	%	87-113
MP41628-B1	7439-95-4	Magnesium	BSP	REC	101.6	%	85-113
MP41628-S1*	7440-70-2	Calcium	MS	REC	102.8	%	87-113
MP41628-S1*	7439-95-4	Magnesium	MS	REC	103.1	%	85-113
MP41628-S2*	7440-70-2	Calcium	MSD	REC	101.6	%	87-113
MP41628-S2*	7440-70-2	Calcium	MSD	RPD	.8	%	20
MP41628-S2*	7439-95-4	Magnesium	MSD	REC	102.3	%	85-113
MP41628-S2*	7439-95-4	Magnesium	MSD	RPD	.8	%	20
MP41628-D1*	7440-70-2	Calcium	DUP	RPD	3	%	20
MP41628-D1*	7439-95-4	Magnesium	DUP	RPD	1.6	%	20
GP38287	EPA 300/SW846 9056A						
GP38287-B1	16984-48-8	Fluoride	BSP	REC	107.2	%	88-112
GP38287-B1	16887-00-6	Chloride	BSP	REC	99.8	%	87-111
GP38287-B1	14797-65-0	Nitrogen, Nitrite	BSP	REC	106	%	87-111
GP38287-B1	24959-67-9	Bromide	BSP	REC	97.2	%	91-110
GP38287-B1	14797-55-8	Nitrogen, Nitrate	BSP	REC	106	%	88-111
GP38287-B1	14808-79-8	Sulfate	BSP	REC	101.8	%	87-112
GP38287-S1	16984-48-8	Fluoride	MS	REC	86 [a]	%	88-112
GP38287-S1	16887-00-6	Chloride	MS	REC	94.6	%	87-111
GP38287-S1	14797-65-0	Nitrogen, Nitrite	MS	REC	104.6	%	87-111
GP38287-S1	24959-67-9	Bromide	MS	REC	92.6	%	91-110
GP38287-S1	14797-55-8	Nitrogen, Nitrate	MS	REC	102.8	%	88-111
GP38287-S1	14808-79-8	Sulfate	MS	REC	87.2 [a]	%	87-112
GP38287-S2	16984-48-8	Fluoride	MSD	RPD	0	%	15
GP38287-S2	16984-48-8	Fluoride	MSD	REC	86	%	88-112
GP38287-S2	16887-00-6	Chloride	MSD	RPD	0	%	15
GP38287-S2	16887-00-6	Chloride	MSD	REC	94.6	%	87-111
GP38287-S2	14797-65-0	Nitrogen, Nitrite	MSD	RPD	0	%	15
GP38287-S2	14797-65-0	Nitrogen, Nitrite	MSD	REC	104.6	%	87-111
GP38287-S2	24959-67-9	Bromide	MSD	RPD	0	%	15
GP38287-S2	24959-67-9	Bromide	MSD	REC	92.6	%	91-110
GP38287-S2	14797-55-8	Nitrogen, Nitrate	MSD	RPD	0	%	15
GP38287-S2	14797-55-8	Nitrogen, Nitrate	MSD	REC	102.8	%	88-111
GP38287-S2	14808-79-8	Sulfate	MSD	RPD	0	%	15
GP38287-S2	14808-79-8	Sulfate	MSD	REC	87.2	%	87-112

(a) Spike recovery indicates possible matrix interference.

* Sample used for QC is not from job FC1116

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-MB [a]	5E36094.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
108-86-1	Bromobenzene	ND	1.0	0.37	ug/l	
74-97-5	Bromochloromethane	ND	1.0	0.45	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
104-51-8	n-Butylbenzene	ND	1.0	0.23	ug/l	
135-98-8	sec-Butylbenzene	ND	1.0	0.24	ug/l	
98-06-6	tert-Butylbenzene	ND	1.0	0.31	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
95-49-8	o-Chlorotoluene	ND	1.0	0.22	ug/l	
106-43-4	p-Chlorotoluene	ND	1.0	0.31	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	2.0	0.50	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
142-28-9	1,3-Dichloropropane	ND	1.0	0.31	ug/l	
594-20-7	2,2-Dichloropropane	ND	1.0	0.24	ug/l	
563-58-6	1,1-Dichloropropene	ND	1.0	0.34	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	

Method Blank Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-MB [a]	5E36094.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
87-68-3	Hexachlorobutadiene	ND	2.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
99-87-6	p-Isopropyltoluene	ND	1.0	0.21	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
74-95-3	Methylene Bromide	ND	2.0	0.37	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
91-20-3	Naphthalene	ND	5.0	1.0	ug/l	
103-65-1	n-Propylbenzene	ND	1.0	0.29	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
630-20-6	1,1,1,2-Tetrachloroethane	ND	1.0	0.28	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
87-61-6	1,2,3-Trichlorobenzene	ND	2.0	0.61	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
96-18-4	1,2,3-Trichloropropane	ND	2.0	0.63	ug/l	
95-63-6	1,2,4-Trimethylbenzene	ND	1.0	0.32	ug/l	
108-67-8	1,3,5-Trimethylbenzene	ND	1.0	0.27	ug/l	
108-05-4	Vinyl Acetate	ND	10	2.0	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
	m,p-Xylene	ND	2.0	0.47	ug/l	
95-47-6	o-Xylene	ND	1.0	0.26	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%

Method Blank Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-MB [a]	5E36094.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

(a) Sample was treated with an anti-foaming agent.

Method Blank Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2870-MB	O73025.D	1	12/14/22	AL	n/a	n/a	VO2870

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

FC1116-2

CAS No.	Compound	Result	RL	MDL	Units	Q
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	94%	83-118%
17060-07-0	1,2-Dichloroethane-D4	97%	79-125%
2037-26-5	Toluene-D8	105%	85-112%
460-00-4	4-Bromofluorobenzene	91%	83-118%

Blank Spike Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-BS	5E36091.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	113	90	50-147
71-43-2	Benzene	25	24.2	97	81-122
108-86-1	Bromobenzene	25	23.5	94	80-121
74-97-5	Bromochloromethane	25	24.4	98	76-123
75-27-4	Bromodichloromethane	25	25.6	102	79-123
75-25-2	Bromoform	25	23.2	93	66-123
78-93-3	2-Butanone (MEK)	125	119	95	56-143
104-51-8	n-Butylbenzene	25	24.8	99	79-126
135-98-8	sec-Butylbenzene	25	27.4	110	83-133
98-06-6	tert-Butylbenzene	25	25.3	101	80-133
75-15-0	Carbon Disulfide	25	26.4	106	66-148
56-23-5	Carbon Tetrachloride	25	26.4	106	76-136
108-90-7	Chlorobenzene	25	24.3	97	82-124
75-00-3	Chloroethane	25	25.8	103	62-144
67-66-3	Chloroform	25	24.7	99	80-124
95-49-8	o-Chlorotoluene	25	24.9	100	81-127
106-43-4	p-Chlorotoluene	25	24.5	98	83-130
124-48-1	Dibromochloromethane	25	24.1	96	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	22.0	88	64-123
106-93-4	1,2-Dibromoethane	25	24.8	99	75-120
75-71-8	Dichlorodifluoromethane	25	20.8	83	42-167
95-50-1	1,2-Dichlorobenzene	25	24.7	99	82-124
541-73-1	1,3-Dichlorobenzene	25	25.3	101	84-125
106-46-7	1,4-Dichlorobenzene	25	24.3	97	78-120
75-34-3	1,1-Dichloroethane	25	25.9	104	81-122
107-06-2	1,2-Dichloroethane	25	23.9	96	75-125
75-35-4	1,1-Dichloroethylene	25	25.4	102	78-137
156-59-2	cis-1,2-Dichloroethylene	25	25.4	102	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.4	102	76-127
540-59-0	1,2-Dichloroethene (total)	50	50.7	101	77-122
78-87-5	1,2-Dichloropropane	25	22.6	90	76-124
142-28-9	1,3-Dichloropropane	25	22.6	90	80-118
594-20-7	2,2-Dichloropropane	25	21.6	86	74-139
563-58-6	1,1-Dichloropropene	25	24.9	100	79-131
10061-01-5	cis-1,3-Dichloropropene	25	24.7	99	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.6	102	80-120

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-BS	5E36091.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	25	24.2	97	81-121
87-68-3	Hexachlorobutadiene	25	25.7	103	75-142
591-78-6	2-Hexanone	125	115	92	61-129
98-82-8	Isopropylbenzene	25	25.2	101	83-132
99-87-6	p-Isopropyltoluene	25	26.2	105	79-130
74-87-3	Methyl Chloride	25	22.2	89	50-159
74-95-3	Methylene Bromide	25	24.3	97	78-119
75-09-2	Methylene Chloride	25	22.4	90	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	114	91	66-122
1634-04-4	Methyl Tert Butyl Ether	25	24.6	98	72-117
91-20-3	Naphthalene	25	24.3	97	63-132
103-65-1	n-Propylbenzene	25	25.1	100	82-133
100-42-5	Styrene	25	24.5	98	78-119
630-20-6	1,1,1,2-Tetrachloroethane	25	25.2	101	77-122
79-34-5	1,1,2,2-Tetrachloroethane	25	24.6	98	72-120
127-18-4	Tetrachloroethylene	25	26.4	106	76-135
108-88-3	Toluene	25	24.2	97	80-120
87-61-6	1,2,3-Trichlorobenzene	25	25.5	102	68-131
120-82-1	1,2,4-Trichlorobenzene	25	26.7	107	73-129
71-55-6	1,1,1-Trichloroethane	25	25.7	103	75-130
79-00-5	1,1,2-Trichloroethane	25	24.1	96	76-119
79-01-6	Trichloroethylene	25	24.8	99	81-126
75-69-4	Trichlorofluoromethane	25	29.4	118	71-156
96-18-4	1,2,3-Trichloropropane	25	22.6	90	77-120
95-63-6	1,2,4-Trimethylbenzene	25	25.4	102	79-120
108-67-8	1,3,5-Trimethylbenzene	25	24.8	99	79-120
108-05-4	Vinyl Acetate	125	148	118	43-154
75-01-4	Vinyl Chloride	25	24.7	99	69-159
	m,p-Xylene	50	48.4	97	79-126
95-47-6	o-Xylene	25	25.0	100	80-127
1330-20-7	Xylene (total)	75	73.3	98	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1623-BS	5E36091.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	98%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VO2870-BS	O73023.D	1	12/14/22	AL	n/a	n/a	VO2870

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

FC1116-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
74-83-9	Methyl Bromide	25	21.7	87	59-143

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	93%	79-125%
2037-26-5	Toluene-D8	103%	85-112%
460-00-4	4-Bromofluorobenzene	92%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1217-1MS	5E36111.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1MSD	5E36112.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1 [a]	5E36097.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	FC1217-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		625	561	90	625	596	95	6	50-147/21
71-43-2	Benzene	ND		125	125	100	125	123	98	2	81-122/14
108-86-1	Bromobenzene	ND		125	120	96	125	120	96	0	80-121/14
74-97-5	Bromochloromethane	ND		125	132	106	125	129	103	2	76-123/14
75-27-4	Bromodichloromethane	ND		125	133	106	125	129	103	3	79-123/19
75-25-2	Bromoform	ND		125	115	92	125	115	92	0	66-123/21
78-93-3	2-Butanone (MEK)	ND		625	592	95	625	633	101	7	56-143/18
104-51-8	n-Butylbenzene	ND		125	115	92	125	116	93	1	79-126/16
135-98-8	sec-Butylbenzene	ND		125	134	107	125	134	107	0	83-133/16
98-06-6	tert-Butylbenzene	ND		125	125	100	125	126	101	1	80-133/16
75-15-0	Carbon Disulfide	ND		125	133	106	125	132	106	1	66-148/23
56-23-5	Carbon Tetrachloride	ND		125	138	110	125	131	105	5	76-136/23
108-90-7	Chlorobenzene	ND		125	123	98	125	124	99	1	82-124/14
75-00-3	Chloroethane	ND		125	145	116	125	143	114	1	62-144/20
67-66-3	Chloroform	ND		125	126	101	125	125	100	1	80-124/15
95-49-8	o-Chlorotoluene	ND		125	123	98	125	126	101	2	81-127/15
106-43-4	p-Chlorotoluene	ND		125	122	98	125	121	97	1	83-130/15
124-48-1	Dibromochloromethane	ND		125	124	99	125	123	98	1	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		125	101	81	125	112	90	10	64-123/18
106-93-4	1,2-Dibromoethane	ND		125	124	99	125	128	102	3	75-120/13
75-71-8	Dichlorodifluoromethane	ND		125	138	110	125	134	107	3	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		125	127	102	125	127	102	0	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		125	128	102	125	127	102	1	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		125	122	98	125	123	98	1	78-120/15
75-34-3	1,1-Dichloroethane	ND		125	134	107	125	131	105	2	81-122/15
107-06-2	1,2-Dichloroethane	ND		125	129	103	125	125	100	3	75-125/14
75-35-4	1,1-Dichloroethylene	ND		125	131	105	125	128	102	2	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		125	131	105	125	129	103	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		125	126	101	125	127	102	1	76-127/17
540-59-0	1,2-Dichloroethene (total)	ND		250	257	103	250	256	102	0	77-122/15
78-87-5	1,2-Dichloropropane	ND		125	116	93	125	118	94	2	76-124/14
142-28-9	1,3-Dichloropropane	ND		125	115	92	125	114	91	1	80-118/13
594-20-7	2,2-Dichloropropane	ND		125	87.2	70*	125	86.4	69*	1	74-139/17
563-58-6	1,1-Dichloropropene	ND		125	124	99	125	126	101	2	79-131/16
10061-01-5	cis-1,3-Dichloropropene	ND		125	113	90	125	117	94	3	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		125	123	98	125	122	98	1	80-120/22

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1217-1MS	5E36111.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1MSD	5E36112.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1 [a]	5E36097.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Compound	FC1217-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND		125	122	98	125	122	98	0	81-121/14
87-68-3	Hexachlorobutadiene	ND		125	120	96	125	115	92	4	75-142/19
591-78-6	2-Hexanone	ND		625	573	92	625	625	100	9	61-129/18
98-82-8	Isopropylbenzene	ND		125	126	101	125	127	102	1	83-132/15
99-87-6	p-Isopropyltoluene	ND		125	127	102	125	129	103	2	79-130/16
74-87-3	Methyl Chloride	ND		125	127	102	125	122	98	4	50-159/19
74-95-3	Methylene Bromide	ND		125	128	102	125	124	99	3	78-119/14
75-09-2	Methylene Chloride	ND		125	118	94	125	117	94	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		625	565	90	625	604	97	7	66-122/16
1634-04-4	Methyl Tert Butyl Ether	ND		125	129	103	125	127	102	2	72-117/14
91-20-3	Naphthalene	ND		125	110	88	125	118	94	7	63-132/25
103-65-1	n-Propylbenzene	ND		125	125	100	125	125	100	0	82-133/15
100-42-5	Styrene	ND		125	121	97	125	120	96	1	78-119/23
630-20-6	1,1,1,2-Tetrachloroethane	ND		125	128	102	125	130	104	2	77-122/19
79-34-5	1,1,2,2-Tetrachloroethane	ND		125	124	99	125	128	102	3	72-120/14
127-18-4	Tetrachloroethylene	ND		125	127	102	125	126	101	1	76-135/16
108-88-3	Toluene	ND		125	121	97	125	121	97	0	80-120/14
87-61-6	1,2,3-Trichlorobenzene	ND		125	119	95	125	127	102	7	68-131/25
120-82-1	1,2,4-Trichlorobenzene	ND		125	126	101	125	129	103	2	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		125	136	109	125	133	106	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		125	128	102	125	127	102	1	76-119/14
79-01-6	Trichloroethylene	ND		125	131	105	125	129	103	2	81-126/15
75-69-4	Trichlorofluoromethane	ND		125	164	131	125	160	128	2	71-156/21
96-18-4	1,2,3-Trichloropropane	ND		125	116	93	125	118	94	2	77-120/16
95-63-6	1,2,4-Trimethylbenzene	ND		125	124	99	125	125	100	1	79-120/18
108-67-8	1,3,5-Trimethylbenzene	ND		125	120	96	125	121	97	1	79-120/19
108-05-4	Vinyl Acetate	ND		625	737	118	625	763	122	3	43-154/14
75-01-4	Vinyl Chloride	ND		125	140	112	125	137	110	2	69-159/18
	m,p-Xylene	ND		250	247	99	250	244	98	1	79-126/15
95-47-6	o-Xylene	ND		125	126	101	125	126	101	0	80-127/14
1330-20-7	Xylene (total)	ND		375	373	99	375	370	99	1	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FC1217-1	Limits
1868-53-7	Dibromofluoromethane	105%	101%	102%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1217-1MS	5E36111.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1MSD	5E36112.D	5	12/14/22	CF	n/a	n/a	V5E1623
FC1217-1 [a]	5E36097.D	1	12/13/22	CF	n/a	n/a	V5E1623

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

FC1116-2

CAS No.	Surrogate Recoveries	MS	MSD	FC1217-1	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	104%	101%	79-125%
2037-26-5	Toluene-D8	97%	97%	98%	85-112%
460-00-4	4-Bromofluorobenzene	98%	99%	105%	83-118%

(a) Sample was treated with an anti-foaming agent.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FC1196-11MS	O73046.D	10	12/14/22	AL	n/a	n/a	VO2870
FC1196-11MSD	O73047.D	10	12/14/22	AL	n/a	n/a	VO2870
FC1196-11	O73044.D	10	12/14/22	AL	n/a	n/a	VO2870

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

FC1116-2

CAS No.	Compound	FC1196-11 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
74-83-9	Methyl Bromide	ND		250	94.3	38*	250	136	54*	36*	59-143/19

CAS No.	Surrogate Recoveries	MS	MSD	FC1196-11	Limits
1868-53-7	Dibromofluoromethane	95%	95%	92%	83-118%
17060-07-0	1,2-Dichloroethane-D4	87%	87%	89%	79-125%
2037-26-5	Toluene-D8	102%	101%	113%* [a]	85-112%
460-00-4	4-Bromofluorobenzene	91%	89%	102%	83-118%

(a) Values estimated due to surrogate failure.

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-BFB
Lab File ID: 5E35978.D
Instrument ID: GCMS5E
Injection Date: 12/08/22
Injection Time: 10:48

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	13727	25.3		Pass
75	30.0 - 60.0% of mass 95	29731	54.8		Pass
95	Base peak, 100% relative abundance	54288	100.0		Pass
96	5.0 - 9.0% of mass 95	3641	6.71		Pass
173	Less than 2.0% of mass 174	617	1.14	(1.28) [a]	Pass
174	50.0 - 100.0% of mass 95	48392	89.1		Pass
175	5.0 - 9.0% of mass 174	3371	6.21	(6.97) [a]	Pass
176	95.0 - 101.0% of mass 174	46675	86.0	(96.5) [a]	Pass
177	5.0 - 9.0% of mass 176	3157	5.82	(6.76) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1617-IC1617	5E35978.D	12/08/22	10:48	00:00	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22	11:33	00:45	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22	11:56	01:08	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22	12:19	01:31	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22	12:42	01:54	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22	13:05	02:17	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22	14:00	03:12	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22	15:25	04:37	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22	15:25	04:37	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22	16:06	05:18	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22	16:06	05:18	Blank Spike
V5E1617-MB	5E35990.D	12/08/22	17:39	06:51	Method Blank
ZZZZZZ	5E35991.D	12/08/22	18:02	07:14	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22	18:25	07:37	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22	18:48	08:00	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22	19:11	08:23	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22	19:34	08:46	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22	19:58	09:10	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22	20:21	09:33	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22	20:44	09:56	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-BFB
Lab File ID: 5E36090.D
Instrument ID: GCMS5E
Injection Date: 12/13/22
Injection Time: 19:47

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	14346	24.0		Pass
75	30.0 - 60.0% of mass 95	32459	54.3		Pass
95	Base peak, 100% relative abundance	59792	100.0		Pass
96	5.0 - 9.0% of mass 95	4018	6.72		Pass
173	Less than 2.0% of mass 174	370	0.62	(0.70) [a]	Pass
174	50.0 - 100.0% of mass 95	53056	88.7		Pass
175	5.0 - 9.0% of mass 174	4001	6.69	(7.54) [a]	Pass
176	95.0 - 101.0% of mass 174	52523	87.8	(99.0) [a]	Pass
177	5.0 - 9.0% of mass 176	3745	6.26	(7.13) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
V5E1623-CC1617	5E36090.D	12/13/22	19:47	00:00	Continuing cal 5
V5E1623-BS	5E36091.D	12/13/22	20:10	00:23	Blank Spike
V5E1623-MB	5E36094.D	12/13/22	21:20	01:33	Method Blank
ZZZZZZ	5E36095.D	12/13/22	21:43	01:56	(unrelated sample)
ZZZZZZ	5E36096.D	12/13/22	22:06	02:19	(unrelated sample)
FC1217-1	5E36097.D	12/13/22	22:30	02:43	(used for QC only; not part of job FC1116)
ZZZZZZ	5E36098.D	12/13/22	22:53	03:06	(unrelated sample)
ZZZZZZ	5E36099.D	12/13/22	23:16	03:29	(unrelated sample)
ZZZZZZ	5E36100.D	12/13/22	23:40	03:53	(unrelated sample)
ZZZZZZ	5E36101.D	12/14/22	00:03	04:16	(unrelated sample)
ZZZZZZ	5E36102.D	12/14/22	00:26	04:39	(unrelated sample)
ZZZZZZ	5E36103.D	12/14/22	00:49	05:02	(unrelated sample)
FC1116-2	5E36104.D	12/14/22	01:12	05:25	MWSAR03-1222
ZZZZZZ	5E36105.D	12/14/22	01:36	05:49	(unrelated sample)
ZZZZZZ	5E36106.D	12/14/22	01:59	06:12	(unrelated sample)
ZZZZZZ	5E36107.D	12/14/22	02:22	06:35	(unrelated sample)
ZZZZZZ	5E36108.D	12/14/22	02:45	06:58	(unrelated sample)
ZZZZZZ	5E36109.D	12/14/22	03:09	07:22	(unrelated sample)
ZZZZZZ	5E36110.D	12/14/22	03:32	07:45	(unrelated sample)
FC1217-1MS	5E36111.D	12/14/22	03:55	08:08	Matrix Spike
FC1217-1MSD	5E36112.D	12/14/22	04:18	08:31	Matrix Spike Duplicate
V5E1623-ECC1617	5E36113.D	12/14/22	04:42	08:55	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-BFB
Lab File ID: O72889.D
Instrument ID: GCMSO
Injection Date: 12/08/22
Injection Time: 09:31

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	37693	20.6		Pass
75	30.0 - 60.0% of mass 95	90992	49.6		Pass
95	Base peak, 100% relative abundance	183381	100.0		Pass
96	5.0 - 9.0% of mass 95	12483	6.81		Pass
173	Less than 2.0% of mass 174	1006	0.55	(0.63) [a]	Pass
174	50.0 - 100.0% of mass 95	160725	87.6		Pass
175	5.0 - 9.0% of mass 174	11036	6.02	(6.87) [a]	Pass
176	95.0 - 101.0% of mass 174	157312	85.8	(97.9) [a]	Pass
177	5.0 - 9.0% of mass 176	10341	5.64	(6.57) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2866-IC2866	O72890.D	12/08/22	09:56	00:25	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22	10:20	00:49	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22	10:45	01:14	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22	11:10	01:39	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22	11:35	02:04	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22	12:00	02:29	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22	12:25	02:54	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22	13:16	03:45	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22	13:16	03:45	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22	13:59	04:28	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22	13:59	04:28	Blank Spike
VO2866-MB	O72901.D	12/08/22	15:38	06:07	Method Blank
ZZZZZZ	O72902.D	12/08/22	16:02	06:31	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22	16:27	06:56	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22	16:52	07:21	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22	17:17	07:46	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22	17:42	08:11	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22	18:07	08:36	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22	18:32	09:01	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22	18:57	09:26	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22	19:22	09:51	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22	19:46	10:15	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22	20:11	10:40	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22	20:36	11:05	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2866-BFB	**Injection Date:**	12/08/22
Lab File ID:	O72889.D	**Injection Time:**	09:31
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	O72914.D	12/08/22	21:01	11:30	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22	21:26	11:55	Ending cal 5

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-BFB
Lab File ID: O73021.D
Instrument ID: GCMSO
Injection Date: 12/14/22
Injection Time: 09:17

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	15.0 - 40.0% of mass 95	23035	21.4		Pass
75	30.0 - 60.0% of mass 95	55059	51.1		Pass
95	Base peak, 100% relative abundance	107776	100.0		Pass
96	5.0 - 9.0% of mass 95	7567	7.02		Pass
173	Less than 2.0% of mass 174	569	0.53	(0.66) [a]	Pass
174	50.0 - 100.0% of mass 95	86053	79.8		Pass
175	5.0 - 9.0% of mass 174	6174	5.73	(7.17) [a]	Pass
176	95.0 - 101.0% of mass 174	83795	77.7	(97.4) [a]	Pass
177	5.0 - 9.0% of mass 176	5570	5.17	(6.65) [b]	Pass

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2870-CC2866	O73022.D	12/14/22	09:41	00:24	Continuing cal 5
VO2870-BS	O73023.D	12/14/22	10:06	00:49	Blank Spike
VO2870-MB	O73025.D	12/14/22	10:56	01:39	Method Blank
ZZZZZZ	O73026.D	12/14/22	11:21	02:04	(unrelated sample)
ZZZZZZ	O73027.D	12/14/22	11:46	02:29	(unrelated sample)
ZZZZZZ	O73028.D	12/14/22	12:11	02:54	(unrelated sample)
ZZZZZZ	O73029.D	12/14/22	12:36	03:19	(unrelated sample)
ZZZZZZ	O73031.D	12/14/22	13:25	04:08	(unrelated sample)
ZZZZZZ	O73032.D	12/14/22	13:50	04:33	(unrelated sample)
FC1116-2	O73033.D	12/14/22	14:15	04:58	MWSAR03-1222
ZZZZZZ	O73034.D	12/14/22	14:40	05:23	(unrelated sample)
ZZZZZZ	O73035.D	12/14/22	15:05	05:48	(unrelated sample)
ZZZZZZ	O73036.D	12/14/22	15:30	06:13	(unrelated sample)
ZZZZZZ	O73037.D	12/14/22	15:54	06:37	(unrelated sample)
ZZZZZZ	O73038.D	12/14/22	16:19	07:02	(unrelated sample)
ZZZZZZ	O73039.D	12/14/22	16:44	07:27	(unrelated sample)
ZZZZZZ	O73040.D	12/14/22	17:09	07:52	(unrelated sample)
ZZZZZZ	O73041.D	12/14/22	17:34	08:17	(unrelated sample)
ZZZZZZ	O73042.D	12/14/22	17:59	08:42	(unrelated sample)
ZZZZZZ	O73043.D	12/14/22	18:24	09:07	(unrelated sample)
FC1196-11	O73044.D	12/14/22	18:48	09:31	(used for QC only; not part of job FC1116)
ZZZZZZ	O73045.D	12/14/22	19:13	09:56	(unrelated sample)
FC1196-11MS	O73046.D	12/14/22	19:38	10:21	Matrix Spike
FC1196-11MSD	O73047.D	12/14/22	20:03	10:46	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample:	VO2870-BFB	**Injection Date:**	12/14/22
Lab File ID:	O73021.D	**Injection Time:**	09:17
Instrument ID:	GCMSO		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VO2870-ECC2866	O73048.D	12/14/22	20:28	11:11	Ending cal 5

Internal Standard Area Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	V5E1623-CC1617	**Injection Date:**	12/13/22
Lab File ID:	5E36090.D	**Injection Time:**	19:47
Instrument ID:	GCMS5E	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	367847	8.95	264640	12.11	129127	14.47
Check Std [b]	332134	8.95	247042	12.12	122728	14.47
Upper Limit [c]	664268	9.12	494084	12.29	245456	14.64
Lower Limit [d]	166067	8.78	123521	11.95	61364	14.30

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
V5E1623-BS	332909	8.95	243791	12.12	117852	14.47
V5E1623-MB [e]	303484	8.95	219879	12.12	103201	14.47
ZZZZZZ	298517	8.95	216886	12.12	100338	14.47
ZZZZZZ	294779	8.95	212817	12.11	102919	14.47
FC1217-1	287207	8.95	212218	12.12	103229	14.47
ZZZZZZ	308442	8.95	225938	12.12	108737	14.47
ZZZZZZ	314302	8.95	227691	12.12	116264	14.47
ZZZZZZ	309528	8.95	224038	12.12	110121	14.47
ZZZZZZ	311725	8.95	229930	12.11	112054	14.47
ZZZZZZ	300526	8.95	219495	12.12	109872	14.47
ZZZZZZ	305910	8.95	223745	12.12	107240	14.47
FC1116-2	297952	8.95	220739	12.12	101988	14.47
ZZZZZZ	288423	8.95	209024	12.12	97292	14.47
ZZZZZZ	283231	8.95	206985	12.12	104638	14.47
ZZZZZZ	290157	8.95	211321	12.12	104187	14.47
ZZZZZZ	315613	8.95	231395	12.12	107282	14.47
ZZZZZZ	292434	8.95	212156	12.12	107049	14.47
ZZZZZZ	299526	8.95	220163	12.12	102837	14.47
FC1217-1MS	296408	8.95	221569	12.12	109555	14.47
FC1217-1MSD	309544	8.95	229695	12.12	112116	14.47
V5E1623-ECC1617	327074	8.95	244592	12.12	121829	14.47

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: V5E1617-ICC1617 5E35982.D 12/08/22 12:42
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.
(e) Sample was treated with an anti-foaming agent.

Internal Standard Area Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Check Std:	VO2870-CC2866	**Injection Date:**	12/14/22
Lab File ID:	O73022.D	**Injection Time:**	09:41
Instrument ID:	GCMSO	**Method:**	SW846 8260D

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
Initial Cal [a]	828618	8.55	603499	11.72	216353	14.10
Check Std [b]	700538	8.55	508316	11.72	209683	14.10
Upper Limit [c]	1401076	8.72	1016632	11.89	419366	14.27
Lower Limit [d]	350269	8.38	254158	11.55	104842	13.93

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT
VO2870-BS	688848	8.55	481381	11.73	186247	14.10
VO2870-MB	648162	8.55	445380	11.73	169218	14.10
ZZZZZZ	633105	8.55	437796	11.73	164858	14.10
ZZZZZZ	606912	8.55	411746	11.72	141243	14.10
ZZZZZZ	689970	8.55	470426	11.73	157079	14.10
ZZZZZZ	593745	8.55	399656	11.72	145914	14.10
ZZZZZZ	656341	8.55	439731	11.73	147148	14.10
ZZZZZZ	646738	8.55	443263	11.72	156214	14.10
FC1116-2	643043	8.55	430748	11.73	131531	14.10
ZZZZZZ	646340	8.55	448674	11.72	173868	14.10
ZZZZZZ	618385	8.55	402171	11.72	117594	14.10
ZZZZZZ	629212	8.55	434632	11.72	140875	14.10
ZZZZZZ	634716	8.55	421832	11.72	137784	14.10
ZZZZZZ	612757	8.55	393650	11.72	116239	14.10
ZZZZZZ	615823	8.55	404738	11.72	127725	14.10
ZZZZZZ	609884	8.55	391753	11.72	112472	14.10
ZZZZZZ	614418	8.55	404909	11.73	122744	14.10
ZZZZZZ	621304	8.55	413327	11.73	130030	14.10
ZZZZZZ	593435	8.55	381082	11.73	109165	14.10
FC1196-11	583769	8.55	372305	11.72	104707*	14.10
ZZZZZZ	607940	8.55	415062	11.73	144210	14.10
FC1196-11MS	669704	8.55	471270	11.73	168665	14.10
FC1196-11MSD	684130	8.55	485883	11.73	190695	14.10
VO2870-ECC2866	716742	8.55	514616	11.73	200054	14.10

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4

(a) Initial Cal is: VO2866-ICC2866 O72894.D 12/08/22 11:35
(b) Check Std Limit = -50 to + 100% of initial cal area.
(c) Upper Limit = + 100% of check standard area; Retention time + 0.167 minutes.
(d) Lower Limit = -50% of check standard area; Retention time -0.167 minutes.

Surrogate Recovery Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Method: SW846 8260D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
FC1116-2	5E36104.D	100	104	98	102
FC1116-2	O73033.D	93	92	108	101
FC1196-11MS	O73046.D	95	87	102	91
FC1196-11MSD	O73047.D	95	87	101	89
FC1217-1MS	5E36111.D	105	101	97	98
FC1217-1MSD	5E36112.D	101	104	97	99
V5E1623-BS	5E36091.D	102	104	98	101
V5E1623-MB	5E36094.D	99	99	99	103
VO2870-BS	O73023.D	96	93	103	92
VO2870-MB	O73025.D	94	97	105	91

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	83-118%
S2 = 1,2-Dichloroethane-D4	79-125%
S3 = Toluene-D8	85-112%
S4 = 4-Bromofluorobenzene	83-118%

Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

Response Factor Report MSVOA20

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Calibration Files
1 =5E35978.D 2 =5E35979.D 3 =5E35980.D 4 =5E35981.D
5 =5E35982.D 6 =5E35983.D 7 =5E35984.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	ISTD								
2) Dichlorodifluorom	0.331	0.277	0.321	0.304	0.286	0.316	0.302	0.305	6.29
3)P Chloromethane	0.277	0.279	0.315	0.287	0.284	0.296	0.311	0.293	5.20
4)C Vinyl Chloride	0.288	0.298	0.338	0.305	0.304	0.317	0.325	0.311	5.56
5) 1,3-Butadiene	0.210	0.209	0.205	0.200	0.185	0.208	0.175	0.199	6.80
6) Bromomethane	0.140	0.134	0.162	0.162	0.164	0.184	0.194	0.163	13.12
7) Chloroethane	0.191	0.185	0.220	0.224	0.255	0.452	0.524	0.293	46.73
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9954									
Response Ratio = 0.00000 + 0.13976 *A + 0.19750 *A^2									
8) Trichlorofluorome	0.364	0.341	0.394	0.380	0.371	0.395	0.386	0.376	5.06
9) Ethyl Ether	0.189	0.232	0.205	0.230	0.228	0.240	0.224	0.221	7.98
10) Ethanol			0.000	0.002	0.002	0.002	0.003	0.002	46.39
11) 1,2-Dichlorotrifl	0.266	0.318	0.306	0.334	0.319	0.349	0.319	0.316	8.20
12)C 1,1-Dichloroethen	0.347	0.392	0.371	0.416	0.403	0.428	0.396	0.393	6.95
13) Freon 113	0.245	0.273	0.250	0.275	0.262	0.295	0.256	0.265	6.50
14) Carbon Disulfide	0.751	0.779	0.691	0.751	0.723	0.770	0.711	0.740	4.34
15) Iodomethane	0.193	0.285	0.326	0.376	0.384	0.392	0.382	0.334	21.90
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9986									
Response Ratio = 0.00000 + 0.35603 *A + 0.01713 *A^2									
16) Acrolein	0.036	0.043	0.047	0.052	0.052	0.054	0.049	0.048	13.24
17) Allyl chloride	0.273	0.258	0.265	0.283	0.266	0.283	0.267	0.271	3.48
18) Methylene Chlorid	0.563	0.431	0.365	0.367	0.360	0.359	0.332	0.397	19.95
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9991									
Response Ratio = 0.00000 + 0.39060 *A + -0.02825 *A^2									
19) Acetone	0.112	0.071	0.078	0.082	0.072	0.074	0.070	0.080	18.38
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9981									
Response Ratio = 0.00000 + 0.08034 *A + -0.00105 *A^2									
20) Methyl acetate	0.126	0.138	0.148	0.162	0.166	0.170	0.159	0.153	10.60
21) trans-1,2-Dichlor	0.323	0.363	0.336	0.385	0.372	0.400	0.377	0.365	7.38
22) Hexane	0.183	0.215	0.220	0.239	0.234	0.222	0.221	0.219	8.16
23) Methyl Tert Butyl	0.614	0.717	0.700	0.773	0.757	0.798	0.740	0.728	8.27
24) Acetonitrile	0.027	0.021	0.025	0.026	0.024	0.025	0.025	0.025	7.24
25) Di-isopropyl ethe	0.630	0.686	0.669	0.728	0.724	0.750	0.707	0.699	5.81
26) Chloroprene	0.321	0.317	0.327	0.335	0.322	0.348	0.322	0.328	3.23
27)P 1,1-Dichloroethan	0.468	0.467	0.448	0.504	0.496	0.519	0.487	0.484	5.07
28) Acrylonitrile	0.065	0.088	0.103	0.091	0.096	0.100	0.098	0.091	14.16
29) ETBE	0.689	0.767	0.769	0.862	0.842	0.885	0.844	0.808	8.56
30) Tert Butyl Alcoho	0.024	0.028	0.037	0.039	0.038	0.038	0.032	0.034	17.30
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9961									
Response Ratio = 0.00000 + 0.03967 *A + -0.00030 *A^2									
31) Vinyl acetate	0.367	0.450	0.474	0.467	0.498	0.537	0.536	0.476	12.26

Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

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32)  cis-1,2-Dichloroe 0.230 0.264 0.263 0.275 0.275 0.291 0.271 0.267   7.01
33)  2,2-Dichloropropa 0.340 0.395 0.373 0.394 0.396 0.418 0.390 0.387   6.29
34)  Bromochloromethan 0.093 0.134 0.123 0.147 0.139 0.143 0.130 0.130  13.97
35)  Cyclohexane       0.374 0.420 0.423 0.449 0.426 0.484 0.423 0.429   7.72
36)C Chloroform        0.430 0.497 0.438 0.487 0.480 0.500 0.464 0.471   5.91
37)  Ethyl acetate     0.203 0.215 0.246 0.232 0.249 0.258 0.241 0.235   8.39
38)  Tetrahydrofuran         0.069 0.079 0.080 0.071 0.075 0.065 0.073   8.07
39)S Dibromofluorometh 0.277 0.276 0.281 0.271 0.275 0.278 0.281 0.277   1.23
40)  Carbon Tetrachlor 0.285 0.353 0.321 0.359 0.353 0.385 0.348 0.343   9.27
41)  1,1,1-Trichloroet 0.336 0.391 0.383 0.412 0.403 0.427 0.393 0.392   7.33
42)  2-Butanone        0.135 0.102 0.114 0.128 0.117 0.122 0.107 0.118   9.70
43)  1,1-Dichloroprope 0.316 0.348 0.338 0.369 0.360 0.385 0.357 0.353   6.29
44)  tert-Butyl format 0.097 0.099 0.105 0.107 0.109             0.103   4.96
45)  Propionitrile     0.028 0.035 0.041 0.043 0.044 0.046 0.042 0.040  15.30
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9980
              Response Ratio = 0.00000 + 0.04328 *A + -0.00001 *A^2

46)  Methacrylonitrile 0.143 0.124 0.140 0.150 0.149 0.157 0.148 0.145   7.22
47)  Benzene           0.963 1.017 0.962 1.051 1.030 1.074 1.002 1.014   4.17
48)  TAME              0.583 0.695 0.688 0.763 0.763 0.808 0.751 0.722  10.26
49)S 1,2-Dichloroethan 0.312 0.316 0.322 0.317 0.320 0.319 0.321 0.318   1.03
50)  1,2-Dichloroethan 0.370 0.365 0.364 0.407 0.397 0.412 0.380 0.385   5.25
51)  tert Amyl alcohol 0.013 0.020 0.023 0.028 0.027 0.028 0.023 0.023  23.66
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9944
              Response Ratio = 0.00000 + 0.02728 *A + -0.00014 *A^2

52)  Trichloroethene   0.240 0.268 0.257 0.285 0.278 0.294 0.277 0.271   6.62
53)  Methylcyclohexane 0.372 0.384 0.400 0.458 0.441 0.507 0.433 0.428  10.94
54)  Dibromomethane    0.141 0.176 0.176 0.190 0.188 0.196 0.183 0.179  10.01
55)C 1,2-Dichloropropa 0.180 0.271 0.277 0.291 0.286 0.301 0.279 0.269  15.03
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
              Response Ratio = 0.00000 + 0.28965 *A + -0.00217 *A^2

56)  Bromodichlorometh 0.281 0.323 0.321 0.365 0.366 0.379 0.354 0.341  10.12
57)  Methyl methacryla 0.113 0.161 0.190 0.211 0.211 0.220 0.199 0.186  20.19
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
              Response Ratio = 0.00000 + 0.20724 *A + -0.00060 *A^2

58)  1,4-Dioxane             0.002 0.002 0.003 0.003 0.003 0.003 0.002  12.74
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.00235 *A + 0.00001 *A^2

59)  2-Chloroethyl vin 0.128 0.143 0.165 0.167 0.171 0.178 0.146 0.157  11.51
60)  cis-1,3-Dichlorop 0.287 0.385 0.354 0.411 0.412 0.438 0.408 0.385  13.12

61) I   Chlorobenzene-d5      ----------------ISTD--------------------
62)S Toluene-d8        1.390 1.373 1.379 1.382 1.345 1.357 1.326 1.365   1.69
63)C Toluene           1.360 1.509 1.433 1.554 1.493 1.571 1.425 1.478   5.11
64)  Isobutyl alcohol  0.013 0.013 0.014 0.015 0.014 0.015 0.013 0.014   6.92
65)  2-Nitropropane    0.072 0.093 0.096 0.112 0.112 0.118 0.103 0.101  15.36
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9959
              Response Ratio = 0.00000 + 0.11190 *A + -0.00044 *A^2

66)  4-Methyl-2-pentan 0.424 0.339 0.378 0.427 0.375 0.399 0.345 0.384   9.08
67)  trans-1,3-Dichlor 0.337 0.448 0.453 0.512 0.512 0.541 0.503 0.472  14.48
68)  Tetrachloroethene 0.288 0.368 0.358 0.391 0.375 0.397 0.365 0.363   9.91
69)  Ethyl methacrylat 0.279 0.364 0.426 0.477 0.469 0.495 0.458 0.424  18.16
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9979
              Response Ratio = 0.00000 + 0.45917 *A + 0.00655 *A^2
```

Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

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 70)  1,1,2-Trichloroet 0.244 0.297 0.283 0.304 0.301 0.305 0.276 0.287   7.67
 71)  Dibromochlorometh 0.273 0.365 0.350 0.405 0.409 0.422 0.393 0.374  13.72
 72)  1,3-Dichloropropa 0.495 0.580 0.548 0.620 0.593 0.613 0.559 0.573   7.56
 73)  1,2-Dibromoethane 0.264 0.341 0.329 0.376 0.376 0.387 0.350 0.346  12.09
 74)  3,3-Dimethyl-1-bu 0.026 0.028 0.035 0.037 0.038 0.040 0.035 0.034  15.39
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9952
               Response Ratio = 0.00000 + 0.03777 *A + -0.00002 *A^2

 75)  2-hexanone        0.276 0.224 0.261 0.297 0.270 0.277 0.242 0.264   9.22
 76)  1-Chlorohexane    0.383 0.486 0.467 0.523 0.518 0.553 0.486 0.488  11.16
 77)C Ethylbenzene      1.642 1.739 1.594 1.729 1.709 1.793 1.635 1.692   4.14
 78)P Chlorobenzene     0.908 0.985 0.925 1.035 1.003 1.049 0.965 0.981   5.39
 79)  1,1,1,2-Tetrachlo 0.279 0.335 0.316 0.364 0.358 0.372 0.339 0.338   9.48
 80)  m,p-Xylene        1.079 1.273 1.184 1.317 1.303 1.367 1.261 1.255   7.61
 81)  o-Xylene          0.993 1.197 1.152 1.283 1.251 1.307 1.198 1.197   8.76
 82)  Styrene           0.670 0.906 0.869 1.003 0.986 1.040 0.963 0.919  13.51
 83)P Bromoform         0.138 0.212 0.207 0.241 0.248 0.265 0.244 0.222  19.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.23635 *A + 0.00810 *A^2

 84)  Isopropylbenzene  1.302 1.604 1.487 1.620 1.615 1.694 1.543 1.552   8.24

 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 0.872 0.858 0.854 0.814 0.814 0.816 0.795 0.832   3.47
 87)  cis-1,4-Dichloro- 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 88)  n-Propylbenzene   3.516 4.066 3.899 4.222 4.148 4.267 3.796 3.988   6.73
 89)  Bromobenzene      0.652 0.805 0.762 0.809 0.819 0.825 0.759 0.776   7.79
 90)P 1,1,2,2-Tetrachlo 0.918 0.938 0.946 1.039 1.033 1.038 0.910 0.975   6.09
 91)  1,3,5-Trimethylbe 2.213 2.653 2.503 2.737 2.760 2.900 2.630 2.628   8.39
 92)  2-Chlorotoluene   2.333 2.538 2.273 2.521 2.510 2.588 2.370 2.448   4.91
 93)  trans-1,4-Dichlor 0.035 0.181 0.217 0.244 0.255 0.255 0.219 0.201  38.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9956
               Response Ratio = 0.00000 + 0.24720 *A + -0.00833 *A^2

 94)  1,2,3-Trichloropr 0.150 0.263 0.254 0.284 0.284 0.294 0.250 0.254  19.32
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9964
               Response Ratio = 0.00000 + 0.29199 *A + -0.01507 *A^2

 95)  Cyclohexanone           0.018 0.023 0.026 0.026 0.026 0.026 0.024  12.99
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9989
               Response Ratio = 0.00000 + 0.02412 *A + 0.00026 *A^2

 96)  4-Chlorotoluene   2.020 2.254 2.088 2.253 2.225 2.312 2.105 2.179   4.96
 97)  a-Methyl styrene                                           0.000  -1.00
 98)  tert-Butylbenzene 1.282 1.483 1.365 1.473 1.463 1.515 1.361 1.420   5.98
 99)  1,2,4-Trimethylbe 2.105 2.494 2.410 2.704 2.715 2.845 2.556 2.547   9.60
100)  Pentachloroethane 0.449 0.404 0.451 0.484 0.477 0.491 0.454 0.459   6.45
101)  sec-Butylbenzene  2.827 3.225 3.073 3.438 3.391 3.544 3.120 3.231   7.65
102)  4-Isopropyltoluen 2.379 2.788 2.683 3.018 3.012 3.158 2.788 2.832   9.17
103)  1,3-Dichlorobenze 1.257 1.420 1.429 1.518 1.514 1.579 1.426 1.449   7.15
104)  1,2,3-Trimethylbe 2.110 2.571 2.480 2.701 2.740 2.825 2.572 2.571   9.13
105)  1,4-Dichlorobenze 1.442 1.604 1.526 1.651 1.619 1.710 1.545 1.585   5.58
106)  n-Butylbenzene    1.156 1.491 1.422 1.584 1.646 1.724 1.490 1.502  12.25
107)  Benzyl Chloride   0.156 0.228 0.269 0.333 0.354 0.389       0.288  30.26
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
               Response Ratio = 0.00000 + 0.27006 *A + 0.08940 *A^2
```

Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICC1617
Lab FileID: 5E35982.D

```
108)  1,2-Dichlorobenze 1.278 1.359 1.327 1.442 1.462 1.496 1.345 1.387   5.78
109)  1,2-Dibromo-3-Chl 0.039 0.120 0.129 0.151 0.155 0.160 0.135 0.127  32.52
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9950
               Response Ratio = 0.00000 + 0.15234 *A + -0.00464 *A^2

110)  Hexachlorobutadie 0.242 0.326 0.300 0.310 0.307 0.311 0.256 0.293  10.64
111)  1,2,4-Trichlorobe 0.641 0.796 0.745 0.818 0.826 0.843 0.741 0.773   9.09
112)  Naphthalene       1.533 2.047 2.118 2.334 2.372 2.401 2.013 2.117  14.30
113)  1,2,3-Trichlorobe 0.545 0.639 0.653 0.701 0.703 0.711 0.608 0.651   9.30
 ----------------------------------------------------------------------------
 (#) = Out of Range

          appIX12-08-2022_.M        Thu Dec 08 16:36:18 2022
```

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35986.D Vial: 10
Acq On : 8 Dec 2022 3:25 pm Operator: courtnef
Sample : ICV1617-5 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	101	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.263	13.8	93	0.00	2.85
3	P	Chloromethane	0.293	0.275	6.1	98	0.00	3.22
4	C	Vinyl Chloride	0.311	0.307	1.3	102	0.00	3.37
5		1,3-Butadiene	0.199	0.223	-12.1	122	0.00	3.40
6		Bromomethane	0.163	0.175	-7.4	108	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	47.808	-19.5	156	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.396	-5.3	108	0.00	4.38
9		Ethyl Ether	0.221	0.218	1.4	97	0.00	4.87
10		Ethanol	0.002	0.002	0.0	95	0.02	5.12
11		1,2-Dichlorotrifluoroetha	0.316	0.313	0.9	99	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.374	4.8	94	0.00	5.16
13		Freon 113	0.265	0.249	6.0	96	0.00	5.22
14		Carbon Disulfide	0.740	0.738	0.3	103	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	38.031	4.9	93	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.048	0.0	93	0.00	5.63
17		Allyl chloride	0.271	0.275	-1.5	105	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	34.555	13.6	90	0.00	5.96
19		Acetone	200.000	189.683	5.2	101	0.00	6.01
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.165	-7.8	101	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.354	3.0	96	0.00	6.17
22		Hexane	0.219	0.229	-4.6	99	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.746	-2.5	100	0.00	6.29
24		Acetonitrile	0.025	0.024	4.0	100	0.00	6.62
25		Di-isopropyl ether	0.699	0.728	-4.1	102	0.00	6.76
26		Chloroprene	0.328	0.358	-9.1	112	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.487	-0.6	99	0.00	6.94
28		Acrylonitrile	0.091	0.103	-13.2	109	0.00	6.99
29		ETBE	0.808	0.820	-1.5	99	0.00	7.20

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	369.770	7.6	92	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate			NA			
32		cis-1,2-Dichloroethene	0.267	0.272	-1.9	100	0.00	7.58
33		2,2-Dichloropropane	0.387	0.356	8.0	91	0.00	7.70
34		Bromochloromethane	0.130	0.140	-7.7	102	0.00	7.81
35		Cyclohexane	0.429	0.442	-3.0	105	0.00	7.82
36	C	Chloroform	0.471	0.461	2.1	97	0.00	7.87
37		Ethyl acetate	0.235	0.267	-13.6	109	0.00	7.98
38		Tetrahydrofuran	0.073	0.072	1.4	103	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.277	0.0	102	0.00	8.08
40		Carbon Tetrachloride	0.343	0.342	0.3	98	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.391	0.3	98	0.00	8.12
42		2-Butanone	0.118	0.114	3.4	99	0.00	8.20
43		1,1-Dichloropropene	0.353	0.341	3.4	96	0.00	8.26
44		tert-Butyl formate	0.103	0.084	18.4	78	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	393.496	1.6	98	0.00	8.54
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.156	-7.6	106	0.00	8.55
47		Benzene	1.014	0.985	2.9	97	0.00	8.52
48		TAME	0.722	0.764	-5.8	101	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.314	1.3	99	0.00	8.66
50		1,2-Dichloroethane	0.385	0.377	2.1	96	0.00	8.73
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	411.326	-2.8	100	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.270	0.4	98	0.00	9.13
53		Methylcyclohexane	0.428	0.452	-5.6	104	0.00	9.13
54		Dibromomethane	0.179	0.177	1.1	95	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	37.212	7.0	95	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.362	-6.2	100	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	41.939	-4.8	104	0.00	9.84
58		1,4-Dioxane	800.000	891.935	-11.5	111	0.00	9.93
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.164	-4.5	97	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.405	-5.2	100	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	12.12
62	S	Toluene-d8	1.365	1.348	1.2	101	0.00	10.54
63	C	Toluene	1.478	1.470	0.5	99	0.00	10.60
64		Isobutyl alcohol	0.014	0.015	-7.1	103	0.00	8.68
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	203.716	-1.9	101	0.00	10.83
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY
Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

				Amount	Calc.	%Drift			
66		4-Methyl-2-pentanone		0.384	0.364	5.2	98	0.00	10.94
67		trans-1,3-Dichloropropene		0.472	0.539	-14.2	106	0.00	11.00
68		Tetrachloroethene		0.363	0.370	-1.9	100	0.00	11.00
				Amount	Calc.	%Drift			
69		Ethyl methacrylate		40.000	38.346	4.1	96	0.00	11.10
				AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane		0.287	0.294	-2.4	99	0.00	11.16
71		Dibromochloromethane		0.374	0.387	-3.5	96	0.00	11.36
72		1,3-Dichloropropane		0.573	0.550	4.0	94	0.00	11.45
73		1,2-Dibromoethane		0.346	0.362	-4.6	97	0.00	11.62
				Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol		2000.000	1822.705	8.9	90	0.00	11.71
				AvgRF	CCRF	%Dev			
75		2-hexanone		0.264	0.255	3.4	95	0.00	11.77
76		1-Chlorohexane		0.488	0.527	-8.0	103	0.00	12.06
77	C	Ethylbenzene		1.692	1.684	0.5	100	0.00	12.12
78	P	Chlorobenzene		0.981	0.990	-0.9	100	0.00	12.13
79		1,1,1,2-Tetrachloroethane		0.338	0.356	-5.3	101	0.00	12.18
80		m,p-Xylene		1.255	1.274	-1.5	99	0.00	12.26
81		o-Xylene		1.197	1.273	-6.3	103	0.00	12.71
82		Styrene		0.919	0.977	-6.3	100	0.00	12.76
				Amount	Calc.	%Drift			
83	P	Bromoform		40.000	41.573	-3.9	103	0.00	12.82
				AvgRF	CCRF	%Dev			
84		Isopropylbenzene		1.552	1.607	-3.5	101	0.00	13.01
85	I	1,4-Dichlorobenzene-d4		1.000	1.000	0.0	100	0.00	14.47
86	S	4-Bromofluorobenzene		0.832	0.843	-1.3	104	0.00	13.33
				Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene		40.000	43.242	-8.1	102	0.00	13.68
				AvgRF	CCRF	%Dev			
88		n-Propylbenzene		3.988	4.158	-4.3	101	0.00	13.43
89		Bromobenzene		0.776	0.775	0.1	95	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane		0.975	1.008	-3.4	98	0.00	13.50
91		1,3,5-Trimethylbenzene		2.628	2.734	-4.0	99	0.00	13.61
92		2-Chlorotoluene		2.448	2.476	-1.1	99	0.00	13.62
				Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute		40.000	43.242	-8.1	102	0.00	13.68
94		1,2,3-Trichloropropane		40.000	37.558	6.1	93	0.00	13.66
95		Cyclohexanone		200.000	234.198	-17.1	114	0.00	13.74
				AvgRF	CCRF	%Dev			
96		4-Chlorotoluene		2.179	2.244	-3.0	101	0.00	13.79
97		a-Methyl styrene			----------NA----------				
98		tert-Butylbenzene		1.420	1.461	-2.9	100	0.00	13.95
99		1,2,4-Trimethylbenzene		2.547	2.777	-9.0	103	0.00	14.02
100		Pentachloroethane		0.459	0.493	-7.4	104	0.00	14.01
101		sec-Butylbenzene		3.231	3.577	-10.7	106	0.00	14.13
102		4-Isopropyltoluene		2.832	3.099	-9.4	103	0.00	14.26
103		1,3-Dichlorobenzene		1.449	1.579	-9.0	105	0.00	14.40
104		1,2,3-Trimethylbenzene		2.571	2.956	-15.0	108	0.00	14.47

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35986.D

105	1,4-Dichlorobenzene	1.585	1.644	-3.7	102	0.00	14.49
106	n-Butylbenzene	1.502	1.565	-4.2	95	0.00	14.69
		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	41.057	-2.6	100	0.00	14.71
		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	1.387	1.474	-6.3	101	0.00	14.90
		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	39.855	0.4	96	0.00	15.63
		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.293	0.292	0.3	96	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.835	-8.0	101	0.00	16.22
112	Naphthalene	2.117	2.360	-11.5	100	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.699	-7.4	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Thu Dec 08 16:35:37 2022

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-08-2022\5E35987.D Vial: 11
Acq On : 8 Dec 2022 4:06 pm Operator: courtnef
Sample : ICV1617-4 Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	111	0.00	8.95
2		Dichlorodifluoromethane		----------	NA	----------		
3	P	Chloromethane		----------	NA	----------		
4	C	Vinyl Chloride		----------	NA	----------		
5		1,3-Butadiene		----------	NA	----------		
6		Bromomethane		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
7		Chloroethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
8		Trichlorofluoromethane		----------	NA	----------		
9		Ethyl Ether		----------	NA	----------		
10		Ethanol		----------	NA	----------		
11		1,2-Dichlorotrifluoroetha		----------	NA	----------		
12	C	1,1-Dichloroethene		----------	NA	----------		
13		Freon 113		----------	NA	----------		
14		Carbon Disulfide		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
16		Acrolein		----------	NA	----------		
17		Allyl chloride		----------	NA	----------		
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------	NA	----------		
19		Acetone		----------	NA	----------		
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------	NA	----------		
21		trans-1,2-Dichloroethene		----------	NA	----------		
22		Hexane		----------	NA	----------		
23		Methyl Tert Butyl Ether		----------	NA	----------		
24		Acetonitrile		----------	NA	----------		
25		Di-isopropyl ether		----------	NA	----------		
26		Chloroprene		----------	NA	----------		
27	P	1,1-Dichloroethane		----------	NA	----------		
28		Acrylonitrile		----------	NA	----------		
29		ETBE		----------	NA	----------		

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol		NA				
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.510	-7.1	121	0.00	7.21
32		cis-1,2-Dichloroethene		NA				
33		2,2-Dichloropropane		NA				
34		Bromochloromethane		NA				
35		Cyclohexane		NA				
36	C	Chloroform		NA				
37		Ethyl acetate		NA				
38		Tetrahydrofuran		NA				
39	S	Dibromofluoromethane	0.277	0.280	-1.1	114	0.00	8.08
40		Carbon Tetrachloride		NA				
41		1,1,1-Trichloroethane		NA				
42		2-Butanone		NA				
43		1,1-Dichloropropene		NA				
44		tert-Butyl formate		NA				
			Amount	Calc.	%Drift			
45		Propionitrile		NA				
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile		NA				
47		Benzene		NA				
48		TAME		NA				
49	S	1,2-Dichloroethane-d4	0.318	0.328	-3.1	115	0.00	8.66
50		1,2-Dichloroethane		NA				
			Amount	Calc.	%Drift			
51		tert Amyl alcohol		NA				
			AvgRF	CCRF	%Dev			
52		Trichloroethene		NA				
53		Methylcyclohexane		NA				
54		Dibromomethane		NA				
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane		NA				
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane		NA				
			Amount	Calc.	%Drift			
57		Methyl methacrylate		NA				
58		1,4-Dioxane		NA				
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether		NA				
60		cis-1,3-Dichloropropene		NA				
61	I	Chlorobenzene-d5	1.000	1.000	0.0	110	0.00	12.12
62	S	Toluene-d8	1.365	1.392	-2.0	111	0.00	10.54
63	C	Toluene		NA				
64		Isobutyl alcohol		NA				
			Amount	Calc.	%Drift			
65		2-Nitropropane		NA				
			AvgRF	CCRF	%Dev			

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Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

66		4-Methyl-2-pentanone		----------NA----------				
67		trans-1,3-Dichloropropene		----------NA----------				
68		Tetrachloroethene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
69		Ethyl methacrylate		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
70		1,1,2-Trichloroethane		----------NA----------				
71		Dibromochloromethane		----------NA----------				
72		1,3-Dichloropropane		----------NA----------				
73		1,2-Dibromoethane		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
74		3,3-Dimethyl-1-butanol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
75		2-hexanone		----------NA----------				
76		1-Chlorohexane		----------NA----------				
77	C	Ethylbenzene		----------NA----------				
78	P	Chlorobenzene		----------NA----------				
79		1,1,1,2-Tetrachloroethane		----------NA----------				
80		m,p-Xylene		----------NA----------				
81		o-Xylene		----------NA----------				
82		Styrene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
83	P	Bromoform		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
84		Isopropylbenzene		----------NA----------				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.853	-2.5	112	0.00	13.33
		----------	Amount	Calc.	%Drift	----------		
87		cis-1,4-Dichloro-2-butene		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
88		n-Propylbenzene		----------NA----------				
89		Bromobenzene		----------NA----------				
90	P	1,1,2,2-Tetrachloroethane		----------NA----------				
91		1,3,5-Trimethylbenzene		----------NA----------				
92		2-Chlorotoluene		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
93		trans-1,4-Dichloro-2-Bute		----------NA----------				
94		1,2,3-Trichloropropane		----------NA----------				
95		Cyclohexanone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
96		4-Chlorotoluene		----------NA----------				
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene		----------NA----------				
99		1,2,4-Trimethylbenzene		----------NA----------				
100		Pentachloroethane		----------NA----------				
101		sec-Butylbenzene		----------NA----------				
102		4-Isopropyltoluene		----------NA----------				
103		1,3-Dichlorobenzene		----------NA----------				
104		1,2,3-Trimethylbenzene		----------NA----------				

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1617-ICV1617
Lab FileID: 5E35987.D

105	1,4-Dichlorobenzene			NA	
106	n-Butylbenzene			NA	
		Amount	Calc.	%Drift	
107	Benzyl Chloride			NA	
		AvgRF	CCRF	%Dev	
108	1,2-Dichlorobenzene			NA	
		Amount	Calc.	%Drift	
109	1,2-Dibromo-3-Chloropropa			NA	
		AvgRF	CCRF	%Dev	
110	Hexachlorobutadiene			NA	
111	1,2,4-Trichlorobenzene			NA	
112	Naphthalene			NA	
113	1,2,3-Trichlorobenzene			NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
5E35981.D appIX12-08-2022_.M Thu Dec 08 16:36:09 2022

7.7.3

7

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-CC1617
Lab FileID: 5E36090.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ce...022\V5E1623\5E36090.d Vial: 31
Acq On : 13 Dec 2022 7:47 pm Operator: courtnef
Sample : CC1617-5 Inst : MSVOA20
Misc : MS53006,V5E1623,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	90	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.319	-4.6	101	0.00	2.85
3	P	Chloromethane	0.293	0.281	4.1	89	0.00	3.22
4	C	Vinyl Chloride	0.311	0.321	-3.2	95	0.00	3.37
5		1,3-Butadiene	0.199	0.222	-11.6	108	0.00	3.40
6		Bromomethane	0.163	0.109	33.1#	60	0.00	3.95
			True	Calc.	% Drift			
7		Chloroethane	40.000	40.202	-0.5	106	0.00	4.15
			AvgRF	CCRF	% Dev			
8		Trichlorofluoromethane	0.376	0.423	-12.5	103	0.00	4.38
9		Ethyl Ether	0.221	0.249	-12.7	99	0.00	4.87
10		Ethanol	0.002	0.002	0.0	100	0.00	5.10
11		1,2-Dichlorotrifluoroetha	0.316	0.362	-14.6	102	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.443	-12.7	99	0.00	5.16
13		Freon 113	0.265	0.297	-12.1	102	0.00	5.22
14		Carbon Disulfide	0.740	0.774	-4.6	97	0.00	5.21
			True	Calc.	% Drift			
15		Iodomethane	40.000	12.449	68.9#	26	0.00	5.37
			AvgRF	CCRF	% Dev			
16		Acrolein	0.048	0.054	-12.5	93	0.00	5.63
17		Allyl chloride	0.271	0.278	-2.6	94	0.00	5.82
			True	Calc.	% Drift			
18		Methylene Chloride	40.000	41.296	-3.2	95	0.00	5.96
19		Acetone	200.000	195.032	2.5	93	0.00	6.02
			AvgRF	CCRF	% Dev			
20		Methyl acetate	0.153	0.185	-20.9#	101	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.403	-10.4	98	0.00	6.17
22		Hexane	0.219	0.228	-4.1	88	0.00	6.26
23		Methyl Tert Butyl Ether	0.728	0.793	-8.9	95	0.00	6.29
24		Acetonitrile	0.025	0.027	-8.0	100	0.00	6.62
25		Di-isopropyl ether	0.699	0.757	-8.3	94	0.00	6.76
26		Chloroprene	0.328	0.346	-5.5	97	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.536	-10.7	98	0.00	6.94
28		Acrylonitrile	0.091	0.102	-12.1	96	0.00	7.00
29		ETBE	0.808	0.892	-10.4	96	0.00	7.20

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-CC1617
Lab FileID: 5E36090.D

			True	Calc.	% Drift			
30		Tert Butyl Alcohol	400.000	391.402	2.1	87	0.00	6.40
			AvgRF	CCRF	% Dev			
31		Vinyl acetate	0.476	0.534	-12.2	97	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.291	-9.0	95	0.00	7.58
33		2,2-Dichloropropane	0.387	0.386	0.3	88	0.00	7.71
34		Bromochloromethane	0.130	0.134	-3.1	87	0.00	7.81
35		Cyclohexane	0.429	0.494	-15.2	105	0.00	7.82
36	C	Chloroform	0.471	0.503	-6.8	95	0.00	7.88
37		Ethyl acetate	0.235	0.271	-15.3	98	0.00	7.98
38		Tetrahydrofuran	0.073	0.080	-9.6	102	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.276	0.4	90	0.00	8.08
40		Carbon Tetrachloride	0.343	0.383	-11.7	98	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.440	-12.2	99	0.00	8.12
42		2-Butanone	0.118	0.125	-5.9	96	0.00	8.20
43		1,1-Dichloropropene	0.353	0.385	-9.1	97	0.00	8.26
44		tert-Butyl formate	0.103	0.123	-19.4	101	0.00	8.35
			True	Calc.	% Drift			
45		Propionitrile	400.000	449.402	-12.4	99	0.00	8.54
			AvgRF	CCRF	% Dev			
46		Methacrylonitrile	0.145	0.177	-22.1#	107	0.00	8.55
47		Benzene	1.014	1.092	-7.7	96	0.00	8.52
48		TAME	0.722	0.805	-11.5	95	0.00	8.61
49	S	1,2-Dichloroethane-d4	0.318	0.324	-1.9	92	0.00	8.66
50		1,2-Dichloroethane	0.385	0.425	-10.4	97	0.00	8.74
			True	Calc.	% Drift			
51		tert Amyl alcohol	400.000	469.614	-17.4	102	0.00	8.79
			AvgRF	CCRF	% Dev			
52		Trichloroethene	0.271	0.298	-10.0	97	0.00	9.13
53		Methylcyclohexane	0.428	0.503	-17.5	103	0.00	9.13
54		Dibromomethane	0.179	0.201	-12.3	96	0.00	9.58
			True	Calc.	% Drift			
55	C	1,2-Dichloropropane	40.000	41.911	-4.8	95	0.00	9.67
			AvgRF	CCRF	% Dev			
56		Bromodichloromethane	0.341	0.376	-10.3	93	0.00	9.72
			True	Calc.	% Drift			
57		Methyl methacrylate	40.000	44.637	-11.6	99	0.00	9.83
58		1,4-Dioxane	800.000	873.367	-9.2	97	0.00	9.93
			AvgRF	CCRF	% Dev			
59		2-Chloroethyl vinyl ether	0.157	0.164	-4.5	87	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.431	-11.9	94	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00	12.12
62	S	Toluene-d8	1.365	1.331	2.5	92	0.00	10.54
63	C	Toluene	1.478	1.539	-4.1	96	0.00	10.60
64		Isobutyl alcohol	0.014	0.015	-7.1	99	0.00	8.68
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	223.193	-11.6	102	0.00	10.83
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-CC1617
Lab FileID: 5E36090.D

			True	Calc.	% Drift			
66		4-Methyl-2-pentanone	0.384	0.389	-1.3	97	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.514	-8.9	94	0.00	11.00
68		Tetrachloroethene	0.363	0.404	-11.3	101	0.00	11.00
			True	Calc.	% Drift			
69		Ethyl methacrylate	40.000	41.005	-2.5	95	0.00	11.10
			AvgRF	CCRF	% Dev			
70		1,1,2-Trichloroethane	0.287	0.309	-7.7	96	0.00	11.16
71		Dibromochloromethane	0.374	0.413	-10.4	94	0.00	11.36
72		1,3-Dichloropropane	0.573	0.616	-7.5	97	0.00	11.45
73		1,2-Dibromoethane	0.346	0.397	-14.7	98	0.00	11.63
			True	Calc.	% Drift			
74		3,3-Dimethyl-1-butanol	2000.000	2198.370	-9.9	100	0.00	11.71
			AvgRF	CCRF	% Dev			
75		2-hexanone	0.264	0.273	-3.4	94	0.00	11.77
76		1-Chlorohexane	0.488	0.538	-10.2	97	0.00	12.06
77	C	Ethylbenzene	1.692	1.757	-3.8	96	0.00	12.12
78	P	Chlorobenzene	0.981	1.031	-5.1	96	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.372	-10.1	97	0.00	12.18
80		m,p-Xylene	1.255	1.318	-5.0	94	0.00	12.26
81		o-Xylene	1.197	1.272	-6.3	95	0.00	12.71
82		Styrene	0.919	0.993	-8.1	94	0.00	12.76
			True	Calc.	% Drift			
83	P	Bromoform	40.000	41.492	-3.7	95	0.00	12.82
			AvgRF	CCRF	% Dev			
84		Isopropylbenzene	1.552	1.677	-8.1	97	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	95	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.820	1.4	96	0.00	13.33
			True	Calc.	% Drift			
87		cis-1,4-Dichloro-2-butene	40.000	36.063	9.8	81	0.00	13.68
			AvgRF	CCRF	% Dev			
88		n-Propylbenzene	3.988	4.199	-5.3	96	0.00	13.43
89		Bromobenzene	0.776	0.813	-4.8	94	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.062	-8.9	98	0.00	13.49
91		1,3,5-Trimethylbenzene	2.628	2.801	-6.6	96	0.00	13.61
92		2-Chlorotoluene	2.448	2.538	-3.7	96	0.00	13.62
			True	Calc.	% Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	36.063	9.8	81	0.00	13.68
94		1,2,3-Trichloropropane	40.000	42.214	-5.5	99	0.00	13.66
95		Cyclohexanone	200.000	226.353	-13.2	105	0.00	13.74
			AvgRF	CCRF	% Dev			
96		4-Chlorotoluene	2.179	2.235	-2.6	95	0.00	13.79
97		a-Methyl styrene	0.000	0.001	0.0	0#	0.00	10.97
98		tert-Butylbenzene	1.420	1.488	-4.8	97	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.738	-7.5	96	0.00	14.02
100		Pentachloroethane	0.459	0.453	1.3	90	0.00	14.01
101		sec-Butylbenzene	3.231	3.517	-8.9	99	0.00	14.13
102		4-Isopropyltoluene	2.832	3.094	-9.3	98	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.554	-7.2	98	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.772	-7.8	96	0.00	14.47

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-CC1617
Lab FileID: 5E36090.D

105	1,4-Dichlorobenzene	1.585	1.696	-7.0	100	0.00	14.49
106	n-Butylbenzene	1.502	1.640	-9.2	95	0.00	14.69
		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	35.899	10.3	80	0.00	14.71
		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	1.387	1.494	-7.7	97	0.00	14.90
		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	42.082	-5.2	96	0.00	15.63
		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.293	0.309	-5.5	96	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.897	-16.0	103	0.00	16.22
112	Naphthalene	2.117	2.318	-9.5	93	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.739	-13.5	100	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Wed Dec 14 01:53:00 2022

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-ECC1617
Lab FileID: 5E36113.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\12-13-2022\5E36113.D Vial: 54
Acq On : 14 Dec 2022 4:42 am Operator: courtnef
Sample : ECC1617-5 Inst : MSVOA20
Misc : MS53006,V5E1623,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624
Last Update : Thu Dec 08 16:31:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	89	0.00	8.95
2		Dichlorodifluoromethane	0.305	0.317	-3.9	98	0.00	2.85
3	P	Chloromethane	0.293	0.284	3.1	89	0.00	3.22
4	C	Vinyl Chloride	0.311	0.330	-6.1	96	0.00	3.37
5		1,3-Butadiene	0.199	0.232	-16.6	112	0.00	3.40
6		Bromomethane	0.163	0.091	44.2	49#	0.00	3.94
			Amount	Calc.	%Drift			
7		Chloroethane	40.000	38.024	4.9	96	0.00	4.15
			AvgRF	CCRF	%Dev			
8		Trichlorofluoromethane	0.376	0.425	-13.0	102	0.00	4.38
9		Ethyl Ether	0.221	0.250	-13.1	98	0.00	4.87
10		Ethanol	0.002	0.003	-50.0	135	0.00	5.10
11		1,2-Dichlorotrifluoroetha	0.316	0.362	-14.6	101	0.00	5.15
12	C	1,1-Dichloroethene	0.393	0.447	-13.7	98	0.00	5.17
13		Freon 113	0.265	0.298	-12.5	101	0.00	5.22
14		Carbon Disulfide	0.740	0.787	-6.4	97	0.00	5.21
			Amount	Calc.	%Drift			
15		Iodomethane	40.000	12.770	68.1#	27	0.00	5.37
			AvgRF	CCRF	%Dev			
16		Acrolein	0.048	0.050	-4.2	85	0.00	5.63
17		Allyl chloride	0.271	0.270	0.4	90	0.00	5.82
			Amount	Calc.	%Drift			
18		Methylene Chloride	40.000	41.966	-4.9	95	0.00	5.96
19		Acetone	200.000	185.590	7.2	87	0.00	6.02
			AvgRF	CCRF	%Dev			
20		Methyl acetate	0.153	0.183	-19.6	98	0.00	6.17
21		trans-1,2-Dichloroethene	0.365	0.408	-11.8	97	0.00	6.17
22		Hexane	0.219	0.237	-8.2	90	0.00	6.27
23		Methyl Tert Butyl Ether	0.728	0.813	-11.7	95	0.00	6.29
24		Acetonitrile	0.025	0.027	-8.0	98	0.00	6.62
25		Di-isopropyl ether	0.699	0.750	-7.3	92	0.00	6.76
26		Chloroprene	0.328	0.349	-6.4	96	0.00	6.91
27	P	1,1-Dichloroethane	0.484	0.530	-9.5	95	0.00	6.94
28		Acrylonitrile	0.091	0.100	-9.9	92	0.00	7.00
29		ETBE	0.808	0.893	-10.5	94	0.00	7.20

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-ECC1617
Lab FileID: 5E36113.D

			Amount	Calc.	%Drift			
30		Tert Butyl Alcohol	400.000	376.028	6.0	82	0.00	6.40
			AvgRF	CCRF	%Dev			
31		Vinyl acetate	0.476	0.514	-8.0	92	0.00	7.21
32		cis-1,2-Dichloroethene	0.267	0.292	-9.4	95	0.00	7.58
33		2,2-Dichloropropane	0.387	0.310	19.9	70	0.00	7.71
34		Bromochloromethane	0.130	0.137	-5.4	88	0.00	7.81
35		Cyclohexane	0.429	0.487	-13.5	102	0.00	7.82
36	C	Chloroform	0.471	0.510	-8.3	94	0.00	7.88
37		Ethyl acetate	0.235	0.260	-10.6	93	0.00	7.98
38		Tetrahydrofuran	0.073	0.077	-5.5	97	0.00	8.07
39	S	Dibromofluoromethane	0.277	0.279	-0.7	90	0.00	8.08
40		Carbon Tetrachloride	0.343	0.386	-12.5	97	0.00	8.05
41		1,1,1-Trichloroethane	0.392	0.446	-13.8	98	0.00	8.12
42		2-Butanone	0.118	0.118	0.0	90	0.00	8.20
43		1,1-Dichloropropene	0.353	0.386	-9.3	95	0.00	8.26
44		tert-Butyl formate	0.103	0.120	-16.5	98	0.00	8.35
			Amount	Calc.	%Drift			
45		Propionitrile	400.000	434.824	-8.7	95	0.00	8.54
			AvgRF	CCRF	%Dev			
46		Methacrylonitrile	0.145	0.174	-20.0	104	0.00	8.55
47		Benzene	1.014	1.094	-7.9	94	0.00	8.52
48		TAME	0.722	0.808	-11.9	94	0.00	8.60
49	S	1,2-Dichloroethane-d4	0.318	0.319	-0.3	89	0.00	8.66
50		1,2-Dichloroethane	0.385	0.426	-10.6	95	0.00	8.74
			Amount	Calc.	%Drift			
51		tert Amyl alcohol	400.000	458.193	-14.5	98	0.00	8.79
			AvgRF	CCRF	%Dev			
52		Trichloroethene	0.271	0.300	-10.7	96	0.00	9.13
53		Methylcyclohexane	0.428	0.497	-16.1	100	0.00	9.13
54		Dibromomethane	0.179	0.200	-11.7	94	0.00	9.58
			Amount	Calc.	%Drift			
55	C	1,2-Dichloropropane	40.000	42.451	-6.1	95	0.00	9.67
			AvgRF	CCRF	%Dev			
56		Bromodichloromethane	0.341	0.382	-12.0	93	0.00	9.72
			Amount	Calc.	%Drift			
57		Methyl methacrylate	40.000	41.571	-3.9	91	0.00	9.84
58		1,4-Dioxane	800.000	889.617	-11.2	97	0.00	9.92
			AvgRF	CCRF	%Dev			
59		2-Chloroethyl vinyl ether	0.157	0.152	3.2	79	0.00	10.26
60		cis-1,3-Dichloropropene	0.385	0.420	-9.1	91	0.00	10.35
61	I	Chlorobenzene-d5	1.000	1.000	0.0	92	0.00	12.12
62	S	Toluene-d8	1.365	1.309	4.1	90	0.00	10.54
63	C	Toluene	1.478	1.538	-4.1	95	0.00	10.60
64		Isobutyl alcohol	0.014	0.015	-7.1	96	0.00	8.67
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	219.017	-9.5	99	0.00	10.83
			AvgRF	CCRF	%Dev			

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: V5E1623-ECC1617
Lab FileID: 5E36113.D

66		4-Methyl-2-pentanone	0.384	0.380	1.0	93	0.00	10.94
67		trans-1,3-Dichloropropene	0.472	0.486	-3.0	88	0.00	11.00
68		Tetrachloroethene	0.363	0.425	-17.1	105	0.00	11.00
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	40.741	-1.9	93	0.00	11.10
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.287	0.308	-7.3	95	0.00	11.16
71		Dibromochloromethane	0.374	0.418	-11.8	95	0.00	11.36
72		1,3-Dichloropropane	0.573	0.605	-5.6	94	0.00	11.45
73		1,2-Dibromoethane	0.346	0.387	-11.8	95	0.00	11.62
			Amount	Calc.	%Drift			
74		3,3-Dimethyl-1-butanol	2000.000	2124.213	-6.2	96	0.00	11.71
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.264	0.262	0.8	90	0.00	11.77
76		1-Chlorohexane	0.488	0.522	-7.0	93	0.00	12.06
77	C	Ethylbenzene	1.692	1.759	-4.0	95	0.00	12.12
78	P	Chlorobenzene	0.981	1.036	-5.6	95	0.00	12.13
79		1,1,1,2-Tetrachloroethane	0.338	0.381	-12.7	98	0.00	12.18
80		m,p-Xylene	1.255	1.315	-4.8	93	0.00	12.26
81		o-Xylene	1.197	1.274	-6.4	94	0.00	12.71
82		Styrene	0.919	1.002	-9.0	94	0.00	12.76
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	41.441	-3.6	94	0.00	12.82
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.552	1.678	-8.1	96	0.00	13.01
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	94	0.00	14.47
86	S	4-Bromofluorobenzene	0.832	0.819	1.6	95	0.00	13.33
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	31.698	20.8	71	0.00	13.68
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	3.988	4.152	-4.1	94	0.00	13.43
89		Bromobenzene	0.776	0.810	-4.4	93	0.00	13.46
90	P	1,1,2,2-Tetrachloroethane	0.975	1.045	-7.2	95	0.00	13.49
91		1,3,5-Trimethylbenzene	2.628	2.760	-5.0	94	0.00	13.61
92		2-Chlorotoluene	2.448	2.510	-2.5	94	0.00	13.62
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	31.698	20.8	71	0.00	13.68
94		1,2,3-Trichloropropane	40.000	41.370	-3.4	96	0.00	13.66
95		Cyclohexanone	200.000	222.443	-11.2	102	0.00	13.74
			AvgRF	CCRF	%Dev			
96		4-Chlorotoluene	2.179	2.204	-1.1	93	0.00	13.79
97		a-Methyl styrene		----------NA----------				
98		tert-Butylbenzene	1.420	1.490	-4.9	96	0.00	13.95
99		1,2,4-Trimethylbenzene	2.547	2.726	-7.0	95	0.00	14.02
100		Pentachloroethane	0.459	0.411	10.5	81	0.00	14.01
101		sec-Butylbenzene	3.231	3.494	-8.1	97	0.00	14.13
102		4-Isopropyltoluene	2.832	3.026	-6.9	95	0.00	14.26
103		1,3-Dichlorobenzene	1.449	1.547	-6.8	96	0.00	14.40
104		1,2,3-Trimethylbenzene	2.571	2.762	-7.4	95	0.00	14.47

Continuing Calibration Summary

Job Number: FC1116
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Project: Griffiss AFB; Rome, NY

Sample: V5E1623-ECC1617
Lab FileID: 5E36113.D

105	1,4-Dichlorobenzene	1.585	1.677	-5.8	98	0.00	14.49
106	n-Butylbenzene	1.502	1.564	-4.1	90	0.00	14.68
	----------	Amount	Calc.	%Drift	----------		
107	Benzyl Chloride	40.000	25.380	36.6	53	0.00	14.71
	----------	AvgRF	CCRF	%Dev	----------		
108	1,2-Dichlorobenzene	1.387	1.513	-9.1	98	0.00	14.90
	----------	Amount	Calc.	%Drift	----------		
109	1,2-Dibromo-3-Chloropropa	40.000	41.496	-3.7	94	0.00	15.63
	----------	AvgRF	CCRF	%Dev	----------		
110	Hexachlorobutadiene	0.293	0.303	-3.4	93	0.00	16.17
111	1,2,4-Trichlorobenzene	0.773	0.873	-12.9	100	0.00	16.22
112	Naphthalene	2.117	2.177	-2.8	87	0.00	16.52
113	1,2,3-Trichlorobenzene	0.651	0.710	-9.1	95	0.00	16.69

(#) = Out of Range SPCC's out = 0 CCC's out = 0
5E35982.D appIX12-08-2022_.M Wed Dec 14 09:37:27 2022

Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

Response Factor Report MSVOA12

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Calibration Files
1 =O72890.D 2 =O72891.D 3 =O72892.D 4 =O72893.D
5 =O72894.D 6 =O72895.D 7 =O72896.D

Compound	1	2	3	4	5	6	7	Avg	%RSD
1) I Fluorobenzene	----------ISTD----------								
2) Dichlorodifluorom	0.282	0.332	0.323	0.373	0.399	0.365	0.380	0.351	11.46
3)P Chloromethane	0.250	0.291	0.275	0.327	0.354	0.317	0.339	0.308	12.07
4) 1,3-butadiene	0.329	0.357	0.319	0.272	0.294	0.296	0.294	0.309	9.14
5)C Vinyl Chloride	0.240	0.298	0.292	0.333	0.361	0.321	0.330	0.311	12.48
6) Bromomethane	0.066	0.102	0.109	0.140	0.153	0.149	0.166	0.126	27.97
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9977									
Response Ratio = 0.00000 + 0.12316 *A + 0.02148 *A^2									
7) Chloroethane	0.114	0.169	0.167	0.194	0.206	0.179	0.183	0.173	16.95
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9973									
Response Ratio = 0.00000 + 0.19140 *A + -0.00441 *A^2									
8) Trichlorofluorome	0.319	0.426	0.408	0.476	0.525	0.488	0.500	0.449	15.70
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.46750 *A + 0.01833 *A^2									
9) Ethyl Ether	0.235	0.236	0.222	0.227	0.220	0.233	0.240	0.231	3.23
10) Ethanol			0.001	0.001	0.001	0.001	0.001	0.001	10.56
11) 1,2-Dichlorotrifl	0.392	0.359	0.337	0.341	0.330	0.351	0.356	0.352	5.79
12)C 1,1-Dichloroethen	0.466	0.433	0.410	0.421	0.410	0.441	0.451	0.433	4.90
13) Freon 113	0.337	0.299	0.284	0.284	0.269	0.294	0.294	0.295	7.18
14) Carbon Disulfide	0.994	0.866	0.798	0.796	0.766	0.807	0.821	0.835	9.15
15) Iodomethane		0.025	0.035	0.078	0.128	0.183	0.225	0.112	72.18
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9968									
Response Ratio = 0.00000 + 0.03946 *A + 0.09562 *A^2									
16) Acrolein	0.031	0.048	0.055	0.045	0.049	0.046	0.047	0.046	15.66
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9980									
Response Ratio = 0.00000 + 0.04847 *A + -0.00016 *A^2									
17) Allyl chloride	0.325	0.389	0.388	0.351	0.394	0.416	0.440	0.386	9.91
18) Methylene Chlorid	0.950	0.508	0.412	0.395	0.377	0.393	0.400	0.491	42.19
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9976									
Response Ratio = 0.00000 + 0.41242 *A + -0.01007 *A^2									
19) Acetone	0.106	0.088	0.070	0.066	0.069	0.067	0.067	0.076	19.74
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987									
Response Ratio = 0.00000 + 0.07138 *A + -0.00047 *A^2									
20) Methyl acetate	0.186	0.185	0.165	0.179	0.178	0.192	0.196	0.183	5.55
21) trans-1,2-Dichlor	0.443	0.422	0.402	0.409	0.397	0.423	0.435	0.419	4.05
22) Hexane	0.230	0.195	0.187	0.182	0.191	0.198	0.194	0.197	8.03
23) Methyl Tert Butyl	0.824	0.789	0.723	0.745	0.728	0.777	0.803	0.770	5.02
24) Tert Butyl Alcoho	0.010	0.018	0.014	0.016	0.016	0.018	0.016	0.015	17.38
---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9957									

Initial Calibration Summary

Job Number: FC1116
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Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

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                Response Ratio = 0.00000 + 0.01610 *A + 0.00002 *A^2

 25)  Acetonitrile      0.030 0.031 0.029 0.026 0.028 0.028 0.027 0.028   6.22
 26)  Di-isopropyl ethe 1.003 0.943 0.894 0.918 0.885 0.950 0.976 0.938   4.56
 27)  Chloroprene       0.272 0.347 0.343 0.321 0.359 0.381 0.401 0.346  12.12
 28)P 1,1-Dichloroethan 0.564 0.514 0.481 0.497 0.476 0.507 0.516 0.508   5.75
 29)  Acrylonitrile     0.099 0.079 0.077 0.075 0.077 0.075 0.077 0.080  10.76
 30)  ETBE              0.850 0.792 0.768 0.818 0.814 0.889 0.922 0.836   6.49
 31)  Vinyl acetate     0.497 0.434 0.469 0.520 0.580 0.596 0.634 0.533  13.63
 32)  cis-1,2-Dichloroe 0.336 0.315 0.295 0.296 0.282 0.299 0.304 0.304   5.66
 33)  2,2-Dichloropropa 0.327 0.327 0.323 0.350 0.361 0.399 0.419 0.358  10.57
 34)  Bromochloromethan 0.171 0.158 0.159 0.162 0.154 0.163 0.164 0.162   3.32
 35)  Cyclohexane       0.455 0.450 0.412 0.421 0.419 0.446 0.453 0.437   4.22
 36)C Chloroform        0.585 0.547 0.521 0.520 0.498 0.526 0.539 0.534   5.11
 37)  Ethyl acetate     0.282 0.218 0.220 0.230 0.247 0.244 0.257 0.242   9.34
 38)  Tetrahydrofuran   0.081 0.086 0.066 0.071 0.068 0.071 0.071 0.073   9.85
 39)S Dibromofluorometh 0.275 0.282 0.276 0.279 0.280 0.282 0.283 0.280   1.09
 40)  Carbon Tetrachlor 0.299 0.281 0.273 0.301 0.313 0.354 0.379 0.314  12.30
 41)  1,1,1-Trichloroet 0.430 0.406 0.394 0.414 0.411 0.448 0.466 0.424   6.00
 42)  2-Butanone        0.105 0.112 0.107 0.109 0.112 0.111 0.113 0.110   2.73
 43)  1,1-Dichloroprope 0.431 0.399 0.373 0.379 0.367 0.390 0.397 0.391   5.49
 44)  tert-Butyl format 0.059 0.099 0.129 0.125 0.155 0.163 0.181 0.130  31.97
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9985
              Response Ratio = 0.00000 + 0.11749 *A + 0.00645 *A^2

 45)  Propionitrile     0.027 0.034 0.035 0.033 0.036 0.036 0.035 0.034   9.33
 46)  Methacrylonitrile 0.173 0.210 0.196 0.184 0.205 0.204 0.206 0.197   6.94
 47)  Benzene           1.263 1.138 1.084 1.084 1.033 1.106 1.123 1.119   6.45
 48)  TAME              0.716 0.712 0.685 0.721 0.704 0.751 0.778 0.724   4.29
 49)  Isobutyl alcohol  0.015 0.005 0.005 0.005 0.007 0.008 0.007 0.008  48.37
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9927
              Response Ratio = 0.00000 + 0.00692 *A + 0.00001 *A^2

 50)S 1,2-Dichloroethan 0.259 0.277 0.252 0.252 0.260 0.255 0.260 0.259   3.23
 51)  1,2-Dichloroethan 0.501 0.465 0.434 0.441 0.428 0.456 0.460 0.455   5.37
 52)  Tert Amyl Alcohol 0.005 0.013 0.008 0.011 0.011 0.013 0.012 0.011  28.67
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9939
              Response Ratio = 0.00000 + 0.01072 *A + 0.00009 *A^2

 53)  Trichloroethene   0.377 0.318 0.302 0.303 0.292 0.309 0.314 0.316   8.81
 54)  Methylcyclohexane 0.438 0.423 0.386 0.396 0.391 0.415 0.415 0.409   4.62
 55)  Dibromomethane    0.230 0.207 0.202 0.202 0.192 0.203 0.206 0.206   5.66
 56)C 1,2-Dichloropropa 0.320 0.295 0.279 0.284 0.275 0.291 0.297 0.292   5.19
 57)  Bromodichlorometh 0.357 0.344 0.331 0.364 0.354 0.389 0.407 0.364   7.13
 58)  Methyl methacryla 0.112 0.194 0.201 0.201 0.237 0.243 0.260 0.207  23.60
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9991
              Response Ratio = 0.00000 + 0.19627 *A + 0.03295 *A^2

 59)  1,4-Dioxane             0.003 0.002 0.002 0.002 0.002       0.002  13.99
 60)  2-Chloroethyl vin 0.134 0.196 0.225 0.189 0.205 0.192 0.198 0.191  14.65
 61)  cis-1,3-Dichlorop 0.346 0.375 0.384 0.409 0.404 0.444 0.457 0.403   9.65

 62) I   Chlorobenzene-d5      ----------------ISTD--------------------
 63)S Toluene-d8        1.335 1.324 1.348 1.333 1.358 1.333 1.363 1.342   1.07
 64)C Toluene           1.789 1.626 1.539 1.529 1.508 1.562 1.643 1.600   6.08
 65)  2-Nitropropane    0.028 0.038 0.030 0.036 0.040 0.048 0.057 0.039  25.12
            ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9994
              Response Ratio = 0.00000 + 0.02908 *A + 0.00272 *A^2

 66)  4-Methyl-2-pentan 0.286 0.374 0.353 0.349 0.378 0.369 0.395 0.358   9.86
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Initial Calibration Summary

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Sample: VO2866-ICC2866
Lab FileID: O72894.D

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 67)  trans-1,3-Dichlor 0.382 0.393 0.412 0.464 0.492 0.537 0.573 0.465  15.84
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9997
               Response Ratio = 0.00000 + 0.42070 *A + 0.07857 *A^2

 68)  Tetrachloroethene 0.494 0.458 0.441 0.431 0.435 0.445 0.467 0.453   4.85
 69)  Ethyl methacrylat 0.166 0.284 0.328 0.345 0.430 0.442 0.484 0.354  30.79
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9982
               Response Ratio = 0.00000 + 0.32644 *A + 0.08142 *A^2

 70)  1,1,2-Trichloroet 0.318 0.321 0.297 0.302 0.297 0.304 0.319 0.308   3.50
 71)  Dibromochlorometh 0.275 0.326 0.316 0.360 0.381 0.421 0.457 0.362  17.38
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.32195 *A + 0.06866 *A^2

 72)  1,3-Dichloropropa 0.669 0.651 0.598 0.597 0.591 0.605 0.638 0.621   4.97
 73)  1,2-Dibromoethane 0.350 0.382 0.359 0.367 0.363 0.377 0.397 0.371   4.26
 74)  3,3-dimethyl-1-bu 0.007 0.007 0.009 0.010 0.014 0.016 0.018 0.011  36.81
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9977
               Response Ratio = 0.00000 + 0.00882 *A + 0.00009 *A^2

 75)  2-hexanone        0.177 0.238 0.236 0.236 0.257 0.250 0.267 0.237  12.22
 76)  1-Chlorohexane    0.452 0.448 0.435 0.437 0.449 0.463 0.486 0.453   3.83
 77)C Ethylbenzene      1.991 1.807 1.707 1.732 1.728 1.787 1.862 1.802   5.50
 78)P Chlorobenzene     1.198 1.099 1.036 1.036 1.026 1.064 1.105 1.081   5.59
 79)  1,1,1,2-Tetrachlo 0.251 0.287 0.296 0.325 0.342 0.372 0.399 0.324  15.75
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9999
               Response Ratio = 0.00000 + 0.29572 *A + 0.05255 *A^2

 80)  m,p-Xylene        1.386 1.368 1.320 1.347 1.339 1.411 1.465 1.377   3.60
 81)  o-Xylene          1.393 1.345 1.299 1.306 1.314 1.365 1.440 1.352   3.83
 82)  Styrene           0.804 0.974 0.963 1.019 1.028 1.076 1.130 0.999  10.38
 83)P Bromoform         0.130 0.170 0.164 0.202 0.221 0.252 0.278 0.202  25.76
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
               Response Ratio = 0.00000 + 0.17211 *A + 0.05431 *A^2

 84)  Isopropylbenzene  1.580 1.602 1.545 1.566 1.561 1.617 1.691 1.594   3.07

 85) I   1,4-Dichlorobenzene-d ----------------ISTD--------------------
 86)S 4-Bromofluorobenz 1.007 0.926 1.031 0.997 1.008 0.973 1.015 0.994   3.51
 87)  cis-1,4-Dichloro- 0.164 0.247 0.301 0.293 0.376 0.369 0.436 0.312  29.04
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
               Response Ratio = 0.00000 + 0.27417 *A + 0.07945 *A^2

 88)  n-Propylbenzene   5.380 4.523 5.090 4.939 5.238 5.205 5.848 5.174   7.84
 89)  Bromobenzene      1.398 1.190 1.286 1.254 1.302 1.263 1.418 1.301   6.22
 90)P 1,1,2,2-Tetrachlo 1.181 1.245 1.170 1.177 1.221 1.187 1.330 1.216   4.70
 91)  1,3,5-Trimethylbe 3.578 3.115 3.577 3.560 3.733 3.766 4.232 3.652   9.11
 92)  2-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 93)  trans-1,4-Dichlor 0.218 0.244 0.246 0.273 0.300 0.299 0.356 0.277  16.67
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9984
               Response Ratio = 0.00000 + 0.24071 *A + 0.05475 *A^2

 94)  1,2,3-Trichloropr 0.377 0.363 0.358 0.345 0.361 0.350 0.391 0.364   4.31
 95)  Cyclohexanone           0.018 0.023 0.022 0.025 0.022 0.019 0.022  10.98
 96)  4-Chlorotoluene   3.302 2.904 3.253 3.161 3.269 3.240 3.664 3.256   6.89
 97)  tert-Butylbenzene 2.152 1.777 1.986 1.930 2.032 2.024 2.279 2.026   7.87
 98)  a-Methyl styrene                                                0.000  -1.00
 99)  1,2,4-Trimethylbe 3.509 3.111 3.512 3.455 3.651 3.624 4.084 3.564   8.14
100)  Pentachloroethane 0.205 0.305 0.429 0.435 0.586 0.608 0.725 0.470  38.61
             ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9973
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Initial Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICC2866
Lab FileID: O72894.D

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                Response Ratio = 0.00000 + 0.38525 *A + 0.17005 *A^2

101)  sec-Butylbenzene  4.194 3.607 4.037 3.909 4.082 4.042 4.503 4.053   6.71
102)  4-Isopropyltoluen 3.416 3.053 3.467 3.437 3.612 3.582 4.015 3.512   8.18
103)  1,3-Dichlorobenze 2.447 2.115 2.201 2.172 2.253 2.195 2.457 2.263   6.00
104)  1,2,3-Trimethylbe 3.628 3.219 3.565 3.527 3.698 3.709 4.162 3.644   7.74
105)  1,4-Dichlorobenze 2.707 2.216 2.400 2.280 2.382 2.329 2.592 2.415   7.23
106)  n-Butylbenzene    1.702 1.635 1.813 1.810 1.929 1.951 2.193 1.862   9.91
107)  Benzyl Chloride   0.137 0.161 0.193 0.263 0.321 0.365 0.453 0.271  42.79
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9988
                Response Ratio = 0.00000 + 0.19284 *A + 0.12965 *A^2

108)  1,2-Dichlorobenze 2.327 2.082 2.146 2.100 2.191 2.139 2.388 2.196   5.31
109)  1,2-Dibromo-3-Chl 0.071 0.137 0.137 0.156 0.174 0.188 0.218 0.155  30.12
              ---- Quadratic regr., Force(0,0) ----  Coefficient =  0.9996
                Response Ratio = 0.00000 + 0.13382 *A + 0.04157 *A^2

110)  Hexachlorobutadie 0.531 0.435 0.459 0.448 0.472 0.464 0.538 0.478   8.41
111)  1,2,4-Trichlorobe 1.372 1.233 1.282 1.296 1.373 1.360 1.553 1.353   7.62
112)  Naphthalene       3.178 3.327 3.175 3.273 3.415 3.404 3.865 3.377   6.99
113)  1,2,3-Trichlorobe 1.305 1.198 1.190 1.190 1.248 1.240 1.418 1.255   6.60
 ------------------------------------------------------------------------------
 (#) = Out of Range

           VO_12-08-2022.M        Thu Dec 08 15:43:02 2022
```

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72898.D Vial: 10
Acq On : 8 Dec 2022 1:16 pm Operator: adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1 I	Fluorobenzene	1.000	1.000	0.0	110	0.00	8.55
2	Dichlorodifluoromethane		----------NA----------				
3 P	Chloromethane	0.308	0.259	15.9	80	0.00	3.01
4	1,3-butadiene	0.309	0.324	-4.9	121	0.00	3.18
5 C	Vinyl Chloride	0.311	0.270	13.2	82	0.00	3.15
	----------	Amount	Calc.	%Drift	----------		
6	Bromomethane	40.000	38.177	4.6	95	0.00	3.68
7	Chloroethane	40.000	34.583	13.5	87	0.00	3.88
8	Trichlorofluoromethane	40.000	35.132	12.2	88	0.00	4.10
	----------	AvgRF	CCRF	%Dev	----------		
9	Ethyl Ether	0.231	0.211	8.7	105	0.00	4.55
10	Ethanol	0.001	0.001	0.0	83	0.00	4.77
11	1,2-Dichlorotrifluoroetha	0.352	0.310	11.9	103	0.00	4.82
12 C	1,1-Dichloroethene	0.433	0.376	13.2	100	0.00	4.82
13	Freon 113	0.295	0.245	16.9	100	0.00	4.88
14	Carbon Disulfide	0.835	0.763	8.6	109	0.00	4.86
	----------	Amount	Calc.	%Drift	----------		
15	Iodomethane	40.000	36.923	7.7	87	0.00	5.02
16	Acrolein	200.000	170.858	14.6	91	0.00	5.27
	----------	AvgRF	CCRF	%Dev	----------		
17	Allyl chloride	0.386	0.412	-6.7	115	0.00	5.45
	----------	Amount	Calc.	%Drift	----------		
18	Methylene Chloride	40.000	35.648	10.9	105	0.00	5.59
19	Acetone	200.000	192.124	3.9	107	0.00	5.65
	----------	AvgRF	CCRF	%Dev	----------		
20	Methyl acetate	0.183	0.186	-1.6	114	0.00	5.81
21	trans-1,2-Dichloroethene	0.419	0.374	10.7	103	0.00	5.79
22	Hexane	0.197	0.180	8.6	103	0.00	5.88
23	Methyl Tert Butyl Ether	0.770	0.723	6.1	109	0.00	5.92
	----------	Amount	Calc.	%Drift	----------		
24	Tert Butyl Alcohol	400.000	389.813	2.5	109	0.00	6.02
	----------	AvgRF	CCRF	%Dev	----------		
25	Acetonitrile	0.028	0.025	10.7	95	0.00	6.23
26	Di-isopropyl ether	0.938	0.913	2.7	113	0.00	6.37

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

27		Chloroprene	0.346	0.402	-16.2	123	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.476	6.3	110	0.00	6.54
29		Acrylonitrile	0.080	0.074	7.5	105	0.00	6.60
30		ETBE	0.836	0.819	2.0	110	0.00	6.80
31		Vinyl acetate	0.533	0.632	-18.6	119	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.281	7.6	109	0.00	7.18
33		2,2-Dichloropropane	0.358	0.341	4.7	103	0.00	7.30
34		Bromochloromethane	0.162	0.155	4.3	110	0.00	7.40
35		Cyclohexane	0.437	0.415	5.0	108	0.00	7.41
36	C	Chloroform	0.534	0.484	9.4	106	0.00	7.48
37		Ethyl acetate	0.242	0.244	-0.8	108	0.00	7.59
38		Tetrahydrofuran	0.073	0.072	1.4	116	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.278	0.7	109	0.00	7.68
40		Carbon Tetrachloride	0.314	0.307	2.2	107	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.403	5.0	107	0.00	7.71
42		2-Butanone	0.110	0.108	1.8	106	0.00	7.81
43		1,1-Dichloropropene	0.391	0.343	12.3	102	0.00	7.85
			Amount	Calc.	%Drift			
44		tert-Butyl formate	200.000	162.330	18.8	79	0.00	7.96
			AvgRF	CCRF	%Dev			
45		Propionitrile	0.034	0.033	2.9	100	0.00	8.14
46		Methacrylonitrile	0.197	0.196	0.5	104	0.00	8.16
47		Benzene	1.119	0.994	11.2	105	0.00	8.12
48		TAME	0.724	0.713	1.5	111	0.00	8.21
			Amount	Calc.	%Drift			
49		Isobutyl alcohol	800.000	717.414	10.3	95	0.00	8.30
			AvgRF	CCRF	%Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.262	-1.2	111	0.00	8.26
51		1,2-Dichloroethane	0.455	0.419	7.9	107	0.00	8.34
			Amount	Calc.	%Drift			
52		Tert Amyl Alcohol	400.000	392.452	1.9	107	0.00	8.40
			AvgRF	CCRF	%Dev			
53		Trichloroethene	0.316	0.280	11.4	105	0.00	8.73
54		Methylcyclohexane	0.409	0.386	5.6	108	0.00	8.73
55		Dibromomethane	0.206	0.184	10.7	105	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.259	11.3	103	0.00	9.27
57		Bromodichloromethane	0.364	0.360	1.1	111	0.00	9.33
			Amount	Calc.	%Drift			
58		Methyl methacrylate	40.000	44.369	-10.9	116	0.00	9.46
			AvgRF	CCRF	%Dev			
59		1,4-Dioxane		----------NA----------				
60		2-Chloroethyl vinyl ether	0.191	0.191	0.0	102	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.397	1.5	107	0.00	9.96
62	I	Chlorobenzene-d5	1.000	1.000	0.0	107	0.00	11.72
63	S	Toluene-d8	1.342	1.382	-3.0	109	0.00	10.15
64	C	Toluene	1.600	1.504	6.0	106	0.00	10.21
			Amount	Calc.	%Drift			
65		2-Nitropropane	200.000	194.033	3.0	104	0.00	10.44
			AvgRF	CCRF	%Dev			

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

66		4-Methyl-2-pentanone	0.358	0.366	-2.2	103	0.00	10.56
			Amount	Calc.	%Drift			
67		trans-1,3-Dichloropropene	40.000	44.217	-10.5	117	0.00	10.62
			AvgRF	CCRF	%Dev			
68		Tetrachloroethene	0.453	0.433	4.4	106	0.00	10.60
			Amount	Calc.	%Drift			
69		Ethyl methacrylate	40.000	42.379	-5.9	104	0.00	10.73
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane	0.308	0.305	1.0	109	0.00	10.78
			Amount	Calc.	%Drift			
71		Dibromochloromethane	40.000	40.761	-1.9	108	0.00	10.97
			AvgRF	CCRF	%Dev			
72		1,3-Dichloropropane	0.621	0.562	9.5	101	0.00	11.07
73		1,2-Dibromoethane	0.371	0.366	1.3	107	0.00	11.23
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol	2000.000	1934.383	3.3	93	0.00	11.34
			AvgRF	CCRF	%Dev			
75		2-hexanone	0.237	0.248	-4.6	103	0.00	11.40
76		1-Chlorohexane	0.453	0.467	-3.1	111	0.00	11.68
77	C	Ethylbenzene	1.802	1.738	3.6	107	0.00	11.74
78	P	Chlorobenzene	1.081	1.040	3.8	108	0.00	11.74
			Amount	Calc.	%Drift			
79		1,1,1,2-Tetrachloroethane	40.000	41.810	-4.5	111	0.00	11.79
			AvgRF	CCRF	%Dev			
80		m,p-Xylene	1.377	1.355	1.6	108	0.00	11.88
81		o-Xylene	1.352	1.358	-0.4	110	0.00	12.32
82		Styrene	0.999	1.036	-3.7	107	0.00	12.38
			Amount	Calc.	%Drift			
83	P	Bromoform	40.000	42.906	-7.3	113	0.00	12.43
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene	1.594	1.595	-0.1	109	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	105	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	1.028	-3.4	107	0.00	12.94
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene	40.000	41.553	-3.9	99	0.00	12.99
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene	5.174	5.413	-4.6	108	0.00	13.05
89		Bromobenzene	1.301	1.270	2.4	102	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.270	-4.4	109	0.00	13.13
91		1,3,5-Trimethylbenzene	3.652	3.779	-3.5	106	0.00	13.24
92		2-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute	40.000	45.969	-14.9	117	0.00	13.31

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72898.D

		AvgRF	CCRF	%Dev			
94	1,2,3-Trichloropropane	0.364	0.342	6.0	99	0.00	13.29
95	Cyclohexanone	0.022	0.021	4.5	87	0.00	13.35
96	4-Chlorotoluene	3.256	3.431	-5.4	110	0.00	13.41
97	tert-Butylbenzene	2.026	2.118	-4.5	109	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.779	-6.0	108	0.00	13.65

		Amount	Calc.	%Drift			
100	Pentachloroethane	40.000	46.781	-17.0	114	0.00	13.63

		AvgRF	CCRF	%Dev			
101	sec-Butylbenzene	4.053	4.413	-8.9	113	0.00	13.76
102	4-Isopropyltoluene	3.512	3.802	-8.3	110	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.358	-4.2	110	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	4.097	-12.4	116	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.444	-1.2	107	0.00	14.11
106	n-Butylbenzene	1.862	1.928	-3.5	105	0.00	14.33

		Amount	Calc.	%Drift			
107	Benzyl Chloride	40.000	46.210	-15.5	118	0.00	14.35

		AvgRF	CCRF	%Dev			
108	1,2-Dichlorobenzene	2.196	2.254	-2.6	108	0.00	14.54

		Amount	Calc.	%Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	41.952	-4.9	107	0.00	15.29

		AvgRF	CCRF	%Dev			
110	Hexachlorobutadiene	0.478	0.467	2.3	104	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.412	-4.4	108	0.00	15.89
112	Naphthalene	3.377	3.558	-5.4	109	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.295	-3.2	109	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Thu Dec 08 15:41:55 2022

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\2\data\2022-12-08\O72899.D Vial: 11
Acq On : 8 Dec 2022 1:59 pm Operator: adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	108	0.00	8.55
2		Dichlorodifluoromethane	0.351	0.273	22.2#	79	0.00	2.69
3	P	Chloromethane		----------NA----------				
4		1,3-butadiene		----------NA----------				
5	C	Vinyl Chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
6		Bromomethane		----------NA----------				
7		Chloroethane		----------NA----------				
8		Trichlorofluoromethane		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
9		Ethyl Ether		----------NA----------				
10		Ethanol		----------NA----------				
11		1,2-Dichlorotrifluoroetha		----------NA----------				
12	C	1,1-Dichloroethene		----------NA----------				
13		Freon 113		----------NA----------				
14		Carbon Disulfide		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
15		Iodomethane		----------NA----------				
16		Acrolein		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
17		Allyl chloride		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
18		Methylene Chloride		----------NA----------				
19		Acetone		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
20		Methyl acetate		----------NA----------				
21		trans-1,2-Dichloroethene		----------NA----------				
22		Hexane		----------NA----------				
23		Methyl Tert Butyl Ether		----------NA----------				
		----------	Amount	Calc.	%Drift	----------		
24		Tert Butyl Alcohol		----------NA----------				
		----------	AvgRF	CCRF	%Dev	----------		
25		Acetonitrile		----------NA----------				
26		Di-isopropyl ether		----------NA----------				

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

27		Chloroprene		----------NA----------					
28	P	1,1-Dichloroethane		----------NA----------					
29		Acrylonitrile		----------NA----------					
30		ETBE		----------NA----------					
31		Vinyl acetate		----------NA----------					
32		cis-1,2-Dichloroethene		----------NA----------					
33		2,2-Dichloropropane		----------NA----------					
34		Bromochloromethane		----------NA----------					
35		Cyclohexane		----------NA----------					
36	C	Chloroform		----------NA----------					
37		Ethyl acetate		----------NA----------					
38		Tetrahydrofuran		----------NA----------					
39	S	Dibromofluoromethane	0.280	0.279	0.4	108	0.00	7.68	
40		Carbon Tetrachloride		----------NA----------					
41		1,1,1-Trichloroethane		----------NA----------					
42		2-Butanone		----------NA----------					
43		1,1-Dichloropropene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
44		tert-Butyl formate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
45		Propionitrile		----------NA----------					
46		Methacrylonitrile		----------NA----------					
47		Benzene		----------NA----------					
48		TAME		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
49		Isobutyl alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
50	S	1,2-Dichloroethane-d4	0.259	0.254	1.9	109	0.00	8.26	
51		1,2-Dichloroethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
52		Tert Amyl Alcohol		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
53		Trichloroethene		----------NA----------					
54		Methylcyclohexane		----------NA----------					
55		Dibromomethane		----------NA----------					
56	C	1,2-Dichloropropane		----------NA----------					
57		Bromodichloromethane		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
58		Methyl methacrylate		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			
59		1,4-Dioxane	0.002	0.002	0.0	83	0.00	9.54	
60		2-Chloroethyl vinyl ether		----------NA----------					
61		cis-1,3-Dichloropropene		----------NA----------					
62	I	Chlorobenzene-d5	1.000	1.000	0.0	101	0.00	11.72	
63	S	Toluene-d8	1.342	1.390	-3.6	105	0.00	10.15	
64	C	Toluene		----------NA----------					
		----------	Amount	Calc.	%Drift	----------			
65		2-Nitropropane		----------NA----------					
		----------	AvgRF	CCRF	%Dev	----------			

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

66		4-Methyl-2-pentanone		NA				
			Amount	Calc.	%Drift			
67		trans-1,3-Dichloropropene		NA				
			AvgRF	CCRF	%Dev			
68		Tetrachloroethene		NA				
			Amount	Calc.	%Drift			
69		Ethyl methacrylate		NA				
			AvgRF	CCRF	%Dev			
70		1,1,2-Trichloroethane		NA				
			Amount	Calc.	%Drift			
71		Dibromochloromethane		NA				
			AvgRF	CCRF	%Dev			
72		1,3-Dichloropropane		NA				
73		1,2-Dibromoethane		NA				
			Amount	Calc.	%Drift			
74		3,3-dimethyl-1-butanol		NA				
			AvgRF	CCRF	%Dev			
75		2-hexanone		NA				
76		1-Chlorohexane		NA				
77	C	Ethylbenzene		NA				
78	P	Chlorobenzene		NA				
			Amount	Calc.	%Drift			
79		1,1,1,2-Tetrachloroethane		NA				
			AvgRF	CCRF	%Dev			
80		m,p-Xylene		NA				
81		o-Xylene		NA				
82		Styrene		NA				
			Amount	Calc.	%Drift			
83	P	Bromoform		NA				
			AvgRF	CCRF	%Dev			
84		Isopropylbenzene		NA				
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	101	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.988	0.6	100	0.00	12.94
			Amount	Calc.	%Drift			
87		cis-1,4-Dichloro-2-butene		NA				
			AvgRF	CCRF	%Dev			
88		n-Propylbenzene		NA				
89		Bromobenzene		NA				
90	P	1,1,2,2-Tetrachloroethane		NA				
91		1,3,5-Trimethylbenzene		NA				
92		2-Chlorotoluene		NA				
			Amount	Calc.	%Drift			
93		trans-1,4-Dichloro-2-Bute		NA				

Initial Calibration Verification

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2866-ICV2866
Lab FileID: O72899.D

		AvgRF	CCRF	%Dev
94	1,2,3-Trichloropropane		NA	
95	Cyclohexanone		NA	
96	4-Chlorotoluene		NA	
97	tert-Butylbenzene		NA	
98	a-Methyl styrene		NA	
99	1,2,4-Trimethylbenzene		NA	

		Amount	Calc.	%Drift
100	Pentachloroethane		NA	

		AvgRF	CCRF	%Dev
101	sec-Butylbenzene		NA	
102	4-Isopropyltoluene		NA	
103	1,3-Dichlorobenzene		NA	
104	1,2,3-Trimethylbenzene		NA	
105	1,4-Dichlorobenzene		NA	
106	n-Butylbenzene		NA	

		Amount	Calc.	%Drift
107	Benzyl Chloride		NA	

		AvgRF	CCRF	%Dev
108	1,2-Dichlorobenzene		NA	

		Amount	Calc.	%Drift
109	1,2-Dibromo-3-Chloropropa		NA	

		AvgRF	CCRF	%Dev
110	Hexachlorobutadiene		NA	
111	1,2,4-Trichlorobenzene		NA	
112	Naphthalene		NA	
113	1,2,3-Trichlorobenzene		NA	

(#) = Out of Range SPCC's out = 4 CCC's out = 6
O72893.D VO_12-08-2022.M Thu Dec 08 15:42:40 2022

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-CC2866
Lab FileID: O73022.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2022\vo2870\O73022.d Vial: 3
Acq On : 14 Dec 2022 9:41 am Operator: adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	85	0.00	8.55
2		Dichlorodifluoromethane	0.351	0.356	-1.4	76	0.00	2.69
3	P	Chloromethane	0.308	0.319	-3.6	76	0.00	3.02
4		1,3-butadiene	0.309	0.369	-19.4	106	0.00	3.19
5	C	Vinyl Chloride	0.311	0.365	-17.4	85	0.00	3.16
			True	Calc.	% Drift			
6		Bromomethane	40.000	34.878	12.8	67	0.00	3.68
7		Chloroethane	40.000	44.428	-11.1	86	0.00	3.89
8		Trichlorofluoromethane	40.000	41.521	-3.8	81	0.00	4.10
			AvgRF	CCRF	% Dev			
9		Ethyl Ether	0.231	0.234	-1.3	90	0.00	4.56
10		Ethanol	0.001	0.001	0.0	81	0.00	4.78
11		1,2-Dichlorotrifluoroetha	0.352	0.366	-4.0	94	0.00	4.83
12	C	1,1-Dichloroethene	0.433	0.442	-2.1	91	0.00	4.83
13		Freon 113	0.295	0.298	-1.0	94	0.00	4.88
14		Carbon Disulfide	0.835	0.863	-3.4	95	0.00	4.87
			True	Calc.	% Drift			
15		Iodomethane	40.000	46.336	-15.8	98	0.00	5.03
16		Acrolein	200.000	190.041	5.0	78	0.00	5.28
			AvgRF	CCRF	% Dev			
17		Allyl chloride	0.386	0.414	-7.3	89	0.00	5.46
			True	Calc.	% Drift			
18		Methylene Chloride	40.000	41.858	-4.6	95	0.00	5.59
19		Acetone	200.000	194.654	2.7	83	0.00	5.66
			AvgRF	CCRF	% Dev			
20		Methyl acetate	0.183	0.196	-7.1	93	0.00	5.81
21		trans-1,2-Dichloroethene	0.419	0.425	-1.4	90	0.00	5.80
22		Hexane	0.197	0.210	-6.6	93	0.00	5.89
23		Methyl Tert Butyl Ether	0.770	0.752	2.3	87	0.00	5.92
			True	Calc.	% Drift			
24		Tert Butyl Alcohol	400.000	376.294	5.9	81	0.00	6.03
			AvgRF	CCRF	% Dev			
25		Acetonitrile	0.028	0.028	0.0	82	0.00	6.23
26		Di-isopropyl ether	0.938	0.947	-1.0	90	0.00	6.37

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-CC2866
Lab FileID: O73022.D

27		Chloroprene	0.346	0.371	-7.2	87	0.00	6.52
28	P	1,1-Dichloroethane	0.508	0.519	-2.2	92	0.00	6.55
29		Acrylonitrile	0.080	0.076	5.0	83	0.00	6.60
30		ETBE	0.836	0.849	-1.6	88	0.00	6.80
31		Vinyl acetate	0.533	0.600	-12.6	87	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.312	-2.6	93	0.00	7.18
33		2,2-Dichloropropane	0.358	0.388	-8.4	91	0.00	7.31
34		Bromochloromethane	0.162	0.168	-3.7	92	0.00	7.41
35		Cyclohexane	0.437	0.462	-5.7	93	0.00	7.41
36	C	Chloroform	0.534	0.544	-1.9	92	0.00	7.48
37		Ethyl acetate	0.242	0.245	-1.2	84	0.00	7.59
38		Tetrahydrofuran	0.073	0.071	2.7	87	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.268	4.3	81	0.00	7.68
40		Carbon Tetrachloride	0.314	0.379	-20.7#	103	0.00	7.65
41		1,1,1-Trichloroethane	0.424	0.466	-9.9	96	0.00	7.72
42		2-Butanone	0.110	0.112	-1.8	85	0.00	7.81
43		1,1-Dichloropropene	0.391	0.400	-2.3	92	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	209.760	-4.9	83	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.037	-8.8	85	0.00	8.14
46		Methacrylonitrile	0.197	0.213	-8.1	88	0.00	8.16
47		Benzene	1.119	1.169	-4.5	96	0.00	8.12
48		TAME	0.724	0.734	-1.4	88	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	835.367	-4.4	86	0.00	8.30
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.237	8.5	77	0.00	8.26
51		1,2-Dichloroethane	0.455	0.448	1.5	88	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	399.470	0.1	84	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.321	-1.6	93	0.00	8.73
54		Methylcyclohexane	0.409	0.435	-6.4	94	0.00	8.73
55		Dibromomethane	0.206	0.210	-1.9	93	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.298	-2.1	92	0.00	9.27
57		Bromodichloromethane	0.364	0.396	-8.8	95	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	40.552	-1.4	81	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.001	50.0#	69	0.00	9.54
60		2-Chloroethyl vinyl ether	0.191	0.197	-3.1	81	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.450	-11.7	94	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	84	0.00	11.72
63	S	Toluene-d8	1.342	1.329	1.0	82	0.00	10.15
64	C	Toluene	1.600	1.711	-6.9	96	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	305.868	-52.9#	149	0.00	10.44
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-CC2866
Lab FileID: O73022.D

66		4-Methyl-2-pentanone	0.358	0.379	-5.9	84	0.00	10.57
		----------	True	Calc.	% Drift	----------		
67		trans-1,3-Dichloropropene	40.000	44.928	-12.3	94	0.00	10.62
		----------	AvgRF	CCRF	% Dev	----------		
68		Tetrachloroethene	0.453	0.479	-5.7	93	0.00	10.60
		----------	True	Calc.	% Drift	----------		
69		Ethyl methacrylate	40.000	46.029	-15.1	90	0.00	10.73
		----------	AvgRF	CCRF	% Dev	----------		
70		1,1,2-Trichloroethane	0.308	0.330	-7.1	94	0.00	10.78
		----------	True	Calc.	% Drift	----------		
71		Dibromochloromethane	40.000	46.412	-16.0	99	0.00	10.97
		----------	AvgRF	CCRF	% Dev	----------		
72		1,3-Dichloropropane	0.621	0.654	-5.3	93	0.00	11.07
73		1,2-Dibromoethane	0.371	0.405	-9.2	94	0.00	11.23
		----------	True	Calc.	% Drift	----------		
74		3,3-dimethyl-1-butanol	2000.000	2511.796	-25.6#	104	0.00	11.34
		----------	AvgRF	CCRF	% Dev	----------		
75		2-hexanone	0.237	0.261	-10.1	86	0.00	11.40
76		1-Chlorohexane	0.453	0.502	-10.8	94	0.00	11.68
77	C	Ethylbenzene	1.802	1.959	-8.7	95	0.00	11.74
78	P	Chlorobenzene	1.081	1.170	-8.2	96	0.00	11.74
		----------	True	Calc.	% Drift	----------		
79		1,1,1,2-Tetrachloroethane	40.000	46.503	-16.3	99	0.00	11.80
		----------	AvgRF	CCRF	% Dev	----------		
80		m,p-Xylene	1.377	1.520	-10.4	96	0.00	11.88
81		o-Xylene	1.352	1.454	-7.5	93	0.00	12.32
82		Styrene	0.999	1.148	-14.9	94	0.00	12.38
		----------	True	Calc.	% Drift	----------		
83	P	Bromoform	40.000	46.541	-16.4	99	0.00	12.43
		----------	AvgRF	CCRF	% Dev	----------		
84		Isopropylbenzene	1.594	1.745	-9.5	94	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.874	12.1	84	0.00	12.94
		----------	True	Calc.	% Drift	----------		
87		cis-1,4-Dichloro-2-butene	40.000	39.223	1.9	85	0.00	12.99
		----------	AvgRF	CCRF	% Dev	----------		
88		n-Propylbenzene	5.174	5.168	0.1	96	0.00	13.05
89		Bromobenzene	1.301	1.244	4.4	93	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.196	1.6	95	0.00	13.13
91		1,3,5-Trimethylbenzene	3.652	3.647	0.1	95	0.00	13.24
92		2-Chlorotoluene	3.256	3.182	2.3	94	0.00	13.41
		----------	True	Calc.	% Drift	----------		
93		trans-1,4-Dichloro-2-Bute	40.000	39.767	0.6	91	0.00	13.31

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-CC2866
Lab FileID: O73022.D

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.348	4.4	93	0.00	13.29
95	Cyclohexanone	0.022	0.019	13.6	72	0.00	13.35
96	4-Chlorotoluene	3.256	3.182	2.3	94	0.00	13.41
97	tert-Butylbenzene	2.026	1.961	3.2	94	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.546	0.5	94	0.00	13.65

		True	Calc.	% Drift			
100	Pentachloroethane	40.000	45.241	-13.1	101	0.00	13.63

		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	4.102	-1.2	97	0.00	13.76
102	4-Isopropyltoluene	3.512	3.562	-1.4	96	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.189	3.3	94	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.608	1.0	95	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.349	2.7	96	0.00	14.11
106	n-Butylbenzene	1.862	1.927	-3.5	97	0.00	14.33

		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	44.269	-10.7	103	0.00	14.35

		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	2.122	3.4	94	0.00	14.54

		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	40.534	-1.3	95	0.00	15.29

		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.441	7.7	91	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.229	9.2	87	0.00	15.89
112	Naphthalene	3.377	3.163	6.3	90	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.139	9.2	88	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Thu Dec 15 01:27:32 2022

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-ECC2866
Lab FileID: O73048.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\jo...-2022\vo2870\O73048.d Vial: 29
Acq On : 14 Dec 2022 8:28 pm Operator: adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B
Last Update : Thu Dec 08 14:27:47 2022
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1	I	Fluorobenzene	1.000	1.000	0.0	86	0.00	8.55
2		Dichlorodifluoromethane	0.351	0.318	9.4	69	0.00	2.68
3	P	Chloromethane	0.308	0.294	4.5	72	0.00	3.01
4		1,3-butadiene	0.309	0.351	-13.6	103	0.00	3.18
5	C	Vinyl Chloride	0.311	0.327	-5.1	78	0.00	3.15
			True	Calc.	% Drift			
6		Bromomethane	40.000	25.393	36.5	48	0.00	3.68
7		Chloroethane	40.000	41.215	-3.0	81	0.00	3.88
8		Trichlorofluoromethane	40.000	36.504	8.7	72	0.00	4.10
			AvgRF	CCRF	% Dev			
9		Ethyl Ether	0.231	0.213	7.8	84	0.00	4.55
10		Ethanol	0.001	0.001	0.0	88	-0.01	4.77
11		1,2-Dichlorotrifluoroetha	0.352	0.327	7.1	86	0.00	4.82
12	C	1,1-Dichloroethene	0.433	0.391	9.7	83	0.00	4.82
13		Freon 113	0.295	0.261	11.5	84	0.00	4.88
14		Carbon Disulfide	0.835	0.757	9.3	86	0.00	4.86
			True	Calc.	% Drift			
15		Iodomethane	40.000	45.796	-14.5	98	0.00	5.02
16		Acrolein	200.000	152.511	23.7	64	0.00	5.28
			AvgRF	CCRF	% Dev			
17		Allyl chloride	0.386	0.362	6.2	79	0.00	5.45
			True	Calc.	% Drift			
18		Methylene Chloride	40.000	38.070	4.8	88	0.00	5.59
19		Acetone	200.000	177.109	11.4	78	0.00	5.65
			AvgRF	CCRF	% Dev			
20		Methyl acetate	0.183	0.182	0.5	88	0.00	5.81
21		trans-1,2-Dichloroethene	0.419	0.382	8.8	83	0.00	5.79
22		Hexane	0.197	0.170	13.7	77	0.00	5.88
23		Methyl Tert Butyl Ether	0.770	0.685	11.0	81	0.00	5.92
			True	Calc.	% Drift			
24		Tert Butyl Alcohol	400.000	353.736	11.6	78	0.00	6.03
			AvgRF	CCRF	% Dev			
25		Acetonitrile	0.028	0.027	3.6	82	0.00	6.23
26		Di-isopropyl ether	0.938	0.866	7.7	85	0.00	6.37

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-ECC2866
Lab FileID: O73048.D

27		Chloroprene	0.346	0.327	5.5	79	0.00	6.51
28	P	1,1-Dichloroethane	0.508	0.470	7.5	85	0.00	6.54
29		Acrylonitrile	0.080	0.069	13.7	78	0.00	6.60
30		ETBE	0.836	0.781	6.6	83	0.00	6.80
31		Vinyl acetate	0.533	0.541	-1.5	81	0.00	6.82
32		cis-1,2-Dichloroethene	0.304	0.282	7.2	86	0.00	7.18
33		2,2-Dichloropropane	0.358	0.306	14.5	73	0.00	7.30
34		Bromochloromethane	0.162	0.155	4.3	87	0.00	7.40
35		Cyclohexane	0.437	0.410	6.2	85	0.00	7.41
36	C	Chloroform	0.534	0.494	7.5	86	0.00	7.48
37		Ethyl acetate	0.242	0.223	7.9	78	0.00	7.59
38		Tetrahydrofuran	0.073	0.070	4.1	88	0.00	7.67
39	S	Dibromofluoromethane	0.280	0.269	3.9	83	0.00	7.68
40		Carbon Tetrachloride	0.314	0.330	-5.1	91	0.00	7.64
41		1,1,1-Trichloroethane	0.424	0.408	3.8	86	0.00	7.71
42		2-Butanone	0.110	0.102	7.3	79	0.00	7.81
43		1,1-Dichloropropene	0.391	0.357	8.7	84	0.00	7.85
			True	Calc.	% Drift			
44		tert-Butyl formate	200.000	187.668	6.2	74	0.00	7.96
			AvgRF	CCRF	% Dev			
45		Propionitrile	0.034	0.031	8.8	75	0.00	8.14
46		Methacrylonitrile	0.197	0.195	1.0	82	0.00	8.16
47		Benzene	1.119	1.055	5.7	88	0.00	8.12
48		TAME	0.724	0.678	6.4	83	0.00	8.21
			True	Calc.	% Drift			
49		Isobutyl alcohol	800.000	782.391	2.2	82	0.00	8.29
			AvgRF	CCRF	% Dev			
50	S	1,2-Dichloroethane-d4	0.259	0.229	11.6	76	0.00	8.26
51		1,2-Dichloroethane	0.455	0.414	9.0	84	0.00	8.34
			True	Calc.	% Drift			
52		Tert Amyl Alcohol	400.000	362.203	9.4	78	0.00	8.40
			AvgRF	CCRF	% Dev			
53		Trichloroethene	0.316	0.292	7.6	87	0.00	8.73
54		Methylcyclohexane	0.409	0.377	7.8	84	0.00	8.73
55		Dibromomethane	0.206	0.191	7.3	86	0.00	9.18
56	C	1,2-Dichloropropane	0.292	0.271	7.2	85	0.00	9.27
57		Bromodichloromethane	0.364	0.354	2.7	87	0.00	9.33
			True	Calc.	% Drift			
58		Methyl methacrylate	40.000	37.753	5.6	76	0.00	9.46
			AvgRF	CCRF	% Dev			
59		1,4-Dioxane	0.002	0.002	0.0	73	0.00	9.53
60		2-Chloroethyl vinyl ether	0.191	0.180	5.8	76	0.00	9.88
61		cis-1,3-Dichloropropene	0.403	0.397	1.5	85	0.00	9.97
62	I	Chlorobenzene-d5	1.000	1.000	0.0	85	0.00	11.73
63	S	Toluene-d8	1.342	1.357	-1.1	85	0.00	10.15
64	C	Toluene	1.600	1.545	3.4	87	0.00	10.21
			True	Calc.	% Drift			
65		2-Nitropropane	200.000	242.508	-21.3	110	0.00	10.44
			AvgRF	CCRF	% Dev			

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-ECC2866
Lab FileID: O73048.D

66		4-Methyl-2-pentanone	0.358	0.348	2.8	79	0.00	10.56
		----------	True	Calc.	% Drift	----------		
67		trans-1,3-Dichloropropene	40.000	40.606	-1.5	85	0.00	10.62
		----------	AvgRF	CCRF	% Dev	----------		
68		Tetrachloroethene	0.453	0.444	2.0	87	0.00	10.60
		----------	True	Calc.	% Drift	----------		
69		Ethyl methacrylate	40.000	43.007	-7.5	84	0.00	10.73
		----------	AvgRF	CCRF	% Dev	----------		
70		1,1,2-Trichloroethane	0.308	0.309	-0.3	89	0.00	10.78
		----------	True	Calc.	% Drift	----------		
71		Dibromochloromethane	40.000	42.405	-6.0	90	0.00	10.97
		----------	AvgRF	CCRF	% Dev	----------		
72		1,3-Dichloropropane	0.621	0.605	2.6	87	0.00	11.07
73		1,2-Dibromoethane	0.371	0.376	-1.3	88	0.00	11.23
		----------	True	Calc.	% Drift	----------		
74		3,3-dimethyl-1-butanol	2000.000	2386.861	-19.3	98	0.00	11.34
		----------	AvgRF	CCRF	% Dev	----------		
75		2-hexanone	0.237	0.235	0.8	78	0.00	11.40
76		1-Chlorohexane	0.453	0.440	2.9	83	0.00	11.68
77	C	Ethylbenzene	1.802	1.769	1.8	87	0.00	11.74
78	P	Chlorobenzene	1.081	1.064	1.6	88	0.00	11.74
		----------	True	Calc.	% Drift	----------		
79		1,1,1,2-Tetrachloroethane	40.000	42.712	-6.8	91	0.00	11.79
		----------	AvgRF	CCRF	% Dev	----------		
80		m,p-Xylene	1.377	1.366	0.8	87	0.00	11.88
81		o-Xylene	1.352	1.325	2.0	86	0.00	12.32
82		Styrene	0.999	1.037	-3.8	86	0.00	12.38
		----------	True	Calc.	% Drift	----------		
83	P	Bromoform	40.000	40.981	-2.5	86	0.00	12.43
		----------	AvgRF	CCRF	% Dev	----------		
84		Isopropylbenzene	1.594	1.585	0.6	87	0.00	12.63
85	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	92	0.00	14.10
86	S	4-Bromofluorobenzene	0.994	0.893	10.2	82	0.00	12.94
		----------	True	Calc.	% Drift	----------		
87		cis-1,4-Dichloro-2-butene	40.000	32.061	19.8	64	0.00	12.99
		----------	AvgRF	CCRF	% Dev	----------		
88		n-Propylbenzene	5.174	4.890	5.5	86	0.00	13.05
89		Bromobenzene	1.301	1.210	7.0	86	0.00	13.07
90	P	1,1,2,2-Tetrachloroethane	1.216	1.167	4.0	88	0.00	13.13
91		1,3,5-Trimethylbenzene	3.652	3.486	4.5	86	0.00	13.24
92		2-Chlorotoluene	3.256	3.073	5.6	87	0.00	13.41
		----------	True	Calc.	% Drift	----------		
93		trans-1,4-Dichloro-2-Bute	40.000	32.144	19.6	68	0.00	13.31

Continuing Calibration Summary

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Sample: VO2870-ECC2866
Lab FileID: O73048.D

		AvgRF	CCRF	% Dev			
94	1,2,3-Trichloropropane	0.364	0.337	7.4	86	0.00	13.29
95	Cyclohexanone	0.022	0.019	13.6	69	0.00	13.35
96	4-Chlorotoluene	3.256	3.073	5.6	87	0.00	13.41
97	tert-Butylbenzene	2.026	1.883	7.1	86	0.00	13.58
98	a-Methyl styrene		----------NA----------				
99	1,2,4-Trimethylbenzene	3.564	3.422	4.0	87	0.00	13.65
		True	Calc.	% Drift			
100	Pentachloroethane	40.000	40.649	-1.6	84	0.00	13.63
		AvgRF	CCRF	% Dev			
101	sec-Butylbenzene	4.053	3.887	4.1	88	0.00	13.76
102	4-Isopropyltoluene	3.512	3.390	3.5	87	0.00	13.90
103	1,3-Dichlorobenzene	2.263	2.122	6.2	87	0.00	14.02
104	1,2,3-Trimethylbenzene	3.644	3.517	3.5	88	0.00	14.11
105	1,4-Dichlorobenzene	2.415	2.265	6.2	88	0.00	14.11
106	n-Butylbenzene	1.862	1.780	4.4	85	0.00	14.33
		True	Calc.	% Drift			
107	Benzyl Chloride	40.000	34.778	13.1	71	0.00	14.35
		AvgRF	CCRF	% Dev			
108	1,2-Dichlorobenzene	2.196	2.059	6.2	87	0.00	14.54
		True	Calc.	% Drift			
109	1,2-Dibromo-3-Chloropropa	40.000	38.380	4.0	85	0.00	15.29
		AvgRF	CCRF	% Dev			
110	Hexachlorobutadiene	0.478	0.398	16.7	78	0.00	15.84
111	1,2,4-Trichlorobenzene	1.353	1.179	12.9	79	0.00	15.89
112	Naphthalene	3.377	3.056	9.5	83	0.00	16.18
113	1,2,3-Trichlorobenzene	1.255	1.090	13.1	81	0.00	16.35

(#) = Out of Range SPCC's out = 0 CCC's out = 0
O72894.D VO_12-08-2022.M Thu Dec 15 01:28:00 2022

Run Sequence Report

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1617 **Method:** SW846 8260D **Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1617-BFB	5E35978.D	12/08/22 10:48	n/a	BFB Tune
V5E1617-IC1617	5E35978.D	12/08/22 10:48	n/a	Initial cal 1
V5E1617-IC1617	5E35979.D	12/08/22 11:33	n/a	Initial cal 2
V5E1617-IC1617	5E35980.D	12/08/22 11:56	n/a	Initial cal 3
V5E1617-IC1617	5E35981.D	12/08/22 12:19	n/a	Initial cal 4
V5E1617-ICC1617	5E35982.D	12/08/22 12:42	n/a	Initial cal 5
V5E1617-IC1617	5E35983.D	12/08/22 13:05	n/a	Initial cal 6
V5E1617-IC1617	5E35984.D	12/08/22 14:00	n/a	Initial cal 7
V5E1617-ICV1617	5E35986.D	12/08/22 15:25	n/a	Initial cal verification 5
V5E1617-CC1617	5E35986A.D	12/08/22 15:25	n/a	Continuing cal 5
V5E1617-ICV1617	5E35987.D	12/08/22 16:06	n/a	Initial cal verification 4
V5E1617-BS	5E35987A.D	12/08/22 16:06	n/a	Blank Spike
V5E1617-MB	5E35990.D	12/08/22 17:39	n/a	Method Blank
ZZZZZZ	5E35991.D	12/08/22 18:02	n/a	(unrelated sample)
ZZZZZZ	5E35992.D	12/08/22 18:25	n/a	(unrelated sample)
ZZZZZZ	5E35993.D	12/08/22 18:48	n/a	(unrelated sample)
ZZZZZZ	5E35994.D	12/08/22 19:11	n/a	(unrelated sample)
ZZZZZZ	5E35995.D	12/08/22 19:34	n/a	(unrelated sample)
ZZZZZZ	5E35996.D	12/08/22 19:58	n/a	(unrelated sample)
ZZZZZZ	5E35997.D	12/08/22 20:21	n/a	(unrelated sample)
V5E1617-ECC1617	5E35998.D	12/08/22 20:44	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: V5E1623 **Method:** SW846 8260D **Instrument ID:** GCMS5E

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V5E1623-BFB	5E36090.D	12/13/22 19:47	n/a	BFB Tune
V5E1623-CC1617	5E36090.D	12/13/22 19:47	n/a	Continuing cal 5
V5E1623-BS	5E36091.D	12/13/22 20:10	n/a	Blank Spike
V5E1623-MB	5E36094.D	12/13/22 21:20	n/a	Method Blank
ZZZZZZ	5E36095.D	12/13/22 21:43	n/a	(unrelated sample)
ZZZZZZ	5E36096.D	12/13/22 22:06	n/a	(unrelated sample)
FC1217-1	5E36097.D	12/13/22 22:30	n/a	(used for QC only; not part of job FC1116)
ZZZZZZ	5E36098.D	12/13/22 22:53	n/a	(unrelated sample)
ZZZZZZ	5E36099.D	12/13/22 23:16	n/a	(unrelated sample)
ZZZZZZ	5E36100.D	12/13/22 23:40	n/a	(unrelated sample)
ZZZZZZ	5E36101.D	12/14/22 00:03	n/a	(unrelated sample)
ZZZZZZ	5E36102.D	12/14/22 00:26	n/a	(unrelated sample)
ZZZZZZ	5E36103.D	12/14/22 00:49	n/a	(unrelated sample)
FC1116-2	5E36104.D	12/14/22 01:12	n/a	MWSAR03-1222
ZZZZZZ	5E36105.D	12/14/22 01:36	n/a	(unrelated sample)
ZZZZZZ	5E36106.D	12/14/22 01:59	n/a	(unrelated sample)
ZZZZZZ	5E36107.D	12/14/22 02:22	n/a	(unrelated sample)
ZZZZZZ	5E36108.D	12/14/22 02:45	n/a	(unrelated sample)
ZZZZZZ	5E36109.D	12/14/22 03:09	n/a	(unrelated sample)
ZZZZZZ	5E36110.D	12/14/22 03:32	n/a	(unrelated sample)
FC1217-1MS	5E36111.D	12/14/22 03:55	n/a	Matrix Spike
FC1217-1MSD	5E36112.D	12/14/22 04:18	n/a	Matrix Spike Duplicate
V5E1623-ECC1617	5E36113.D	12/14/22 04:42	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2866 **Method:** SW846 8260D **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2866-BFB	O72889.D	12/08/22 09:31	n/a	BFB Tune
VO2866-IC2866	O72890.D	12/08/22 09:56	n/a	Initial cal 1
VO2866-IC2866	O72891.D	12/08/22 10:20	n/a	Initial cal 2
VO2866-IC2866	O72892.D	12/08/22 10:45	n/a	Initial cal 3
VO2866-IC2866	O72893.D	12/08/22 11:10	n/a	Initial cal 4
VO2866-ICC2866	O72894.D	12/08/22 11:35	n/a	Initial cal 5
VO2866-IC2866	O72895.D	12/08/22 12:00	n/a	Initial cal 6
VO2866-IC2866	O72896.D	12/08/22 12:25	n/a	Initial cal 7
VO2866-ICV2866	O72898.D	12/08/22 13:16	n/a	Initial cal verification 5
VO2866-CC2866	O72898A.D	12/08/22 13:16	n/a	Continuing cal 5
VO2866-ICV2866	O72899.D	12/08/22 13:59	n/a	Initial cal verification 4
VO2866-BS	O72899A.D	12/08/22 13:59	n/a	Blank Spike
VO2866-MB	O72901.D	12/08/22 15:38	n/a	Method Blank
ZZZZZZ	O72902.D	12/08/22 16:02	n/a	(unrelated sample)
ZZZZZZ	O72903.D	12/08/22 16:27	n/a	(unrelated sample)
ZZZZZZ	O72904.D	12/08/22 16:52	n/a	(unrelated sample)
ZZZZZZ	O72905.D	12/08/22 17:17	n/a	(unrelated sample)
ZZZZZZ	O72906.D	12/08/22 17:42	n/a	(unrelated sample)
ZZZZZZ	O72907.D	12/08/22 18:07	n/a	(unrelated sample)
ZZZZZZ	O72908.D	12/08/22 18:32	n/a	(unrelated sample)
ZZZZZZ	O72909.D	12/08/22 18:57	n/a	(unrelated sample)
ZZZZZZ	O72910.D	12/08/22 19:22	n/a	(unrelated sample)
ZZZZZZ	O72911.D	12/08/22 19:46	n/a	(unrelated sample)
ZZZZZZ	O72912.D	12/08/22 20:11	n/a	(unrelated sample)
ZZZZZZ	O72913.D	12/08/22 20:36	n/a	(unrelated sample)
ZZZZZZ	O72914.D	12/08/22 21:01	n/a	(unrelated sample)
VO2866-ECC2866	O72915.D	12/08/22 21:26	n/a	Ending cal 5

Run Sequence Report

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Run ID: VO2870 **Method:** SW846 8260D **Instrument ID:** GCMSO

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
VO2870-BFB	O73021.D	12/14/22 09:17	n/a	BFB Tune
VO2870-CC2866	O73022.D	12/14/22 09:41	n/a	Continuing cal 5
VO2870-BS	O73023.D	12/14/22 10:06	n/a	Blank Spike
VO2870-MB	O73025.D	12/14/22 10:56	n/a	Method Blank
ZZZZZZ	O73026.D	12/14/22 11:21	n/a	(unrelated sample)
ZZZZZZ	O73027.D	12/14/22 11:46	n/a	(unrelated sample)
ZZZZZZ	O73028.D	12/14/22 12:11	n/a	(unrelated sample)
ZZZZZZ	O73029.D	12/14/22 12:36	n/a	(unrelated sample)
ZZZZZZ	O73031.D	12/14/22 13:25	n/a	(unrelated sample)
ZZZZZZ	O73032.D	12/14/22 13:50	n/a	(unrelated sample)
FC1116-2	O73033.D	12/14/22 14:15	n/a	MWSAR03-1222
ZZZZZZ	O73034.D	12/14/22 14:40	n/a	(unrelated sample)
ZZZZZZ	O73035.D	12/14/22 15:05	n/a	(unrelated sample)
ZZZZZZ	O73036.D	12/14/22 15:30	n/a	(unrelated sample)
ZZZZZZ	O73037.D	12/14/22 15:54	n/a	(unrelated sample)
ZZZZZZ	O73038.D	12/14/22 16:19	n/a	(unrelated sample)
ZZZZZZ	O73039.D	12/14/22 16:44	n/a	(unrelated sample)
ZZZZZZ	O73040.D	12/14/22 17:09	n/a	(unrelated sample)
ZZZZZZ	O73041.D	12/14/22 17:34	n/a	(unrelated sample)
ZZZZZZ	O73042.D	12/14/22 17:59	n/a	(unrelated sample)
ZZZZZZ	O73043.D	12/14/22 18:24	n/a	(unrelated sample)
FC1196-11	O73044.D	12/14/22 18:48	n/a	(used for QC only; not part of job FC1116)
ZZZZZZ	O73045.D	12/14/22 19:13	n/a	(unrelated sample)
FC1196-11MS	O73046.D	12/14/22 19:38	n/a	Matrix Spike
FC1196-11MSD	O73047.D	12/14/22 20:03	n/a	Matrix Spike Duplicate
VO2870-ECC2866	O73048.D	12/14/22 20:28	n/a	Ending cal 5

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36104.d
Acq On : 14 Dec 2022 1:12 am
Operator : courtnef
Sample : FC1116-2
Misc : MS53006,V5E1623,,,,,
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Dec 14 02:12:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

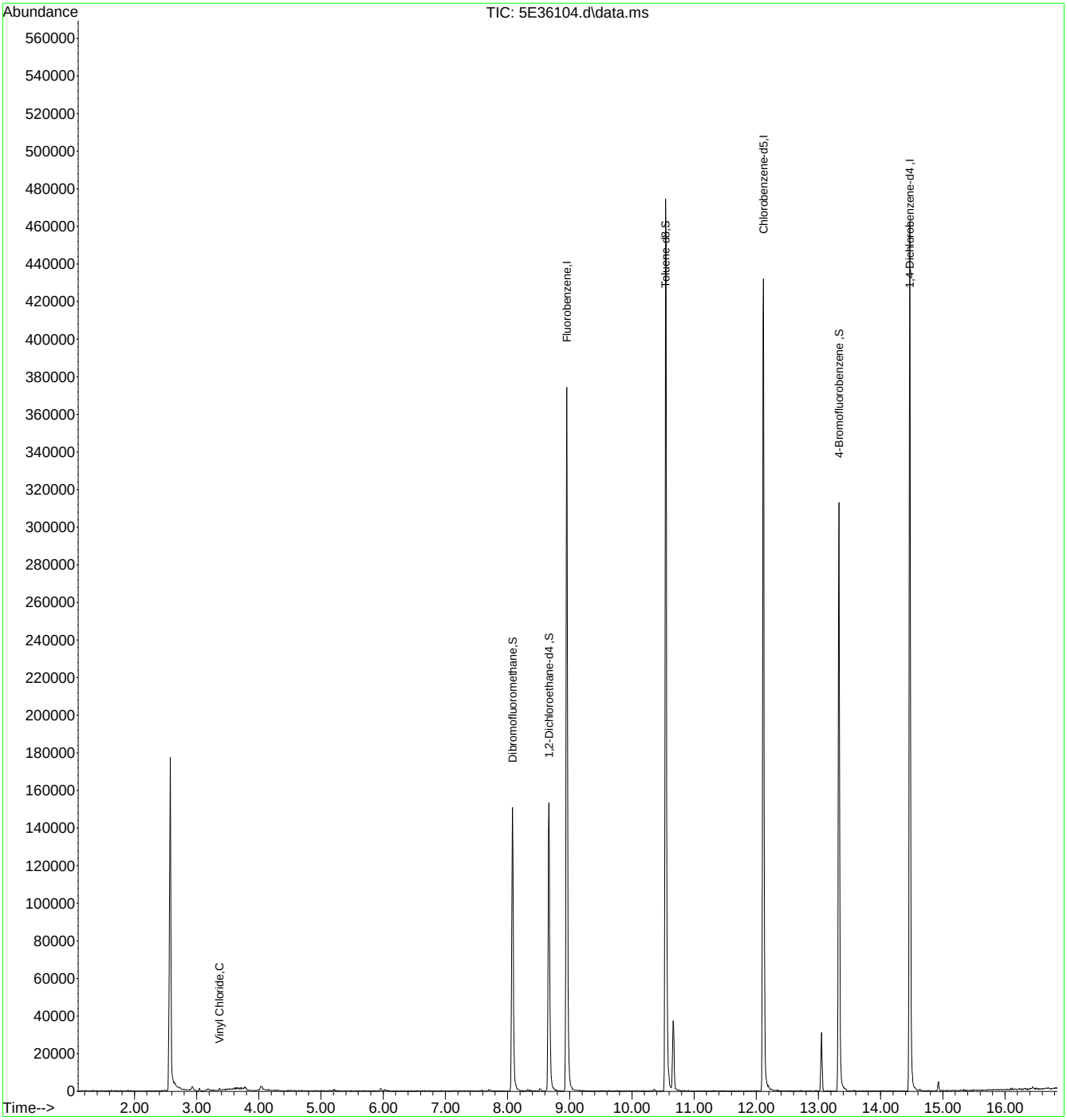
Compound		R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards							
1) Fluorobenzene		8.951	96	297952	50.00	ug/L	0.00
61) Chlorobenzene-d5		12.115	117	220739	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4		14.468	152	101988	50.00	ug/L	0.00
System Monitoring Compounds							
39) Dibromofluoromethane		8.079	113	82587	50.03	ug/L	0.00
Spiked Amount	50.000	Range 83 - 118		Recovery =	100.06%		
49) 1,2-Dichloroethane-d4		8.665	65	98481	51.96	ug/L	0.00
Spiked Amount	50.000	Range 79 - 125		Recovery =	103.92%		
62) Toluene-d8		10.542	98	295900	49.12	ug/L	0.00
Spiked Amount	50.000	Range 85 - 112		Recovery =	98.24%		
86) 4-Bromofluorobenzene		13.328	95	86579	51.03	ug/L	0.00
Spiked Amount	50.000	Range 83 - 118		Recovery =	102.06%		
Target Compounds							Qvalue
4) Vinyl Chloride		3.367	62	898	0.48	ug/L	62

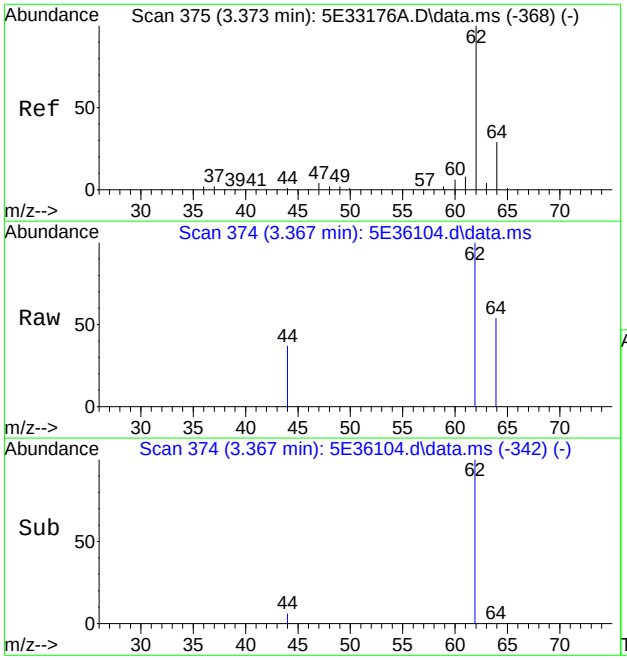
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36104.d
Acq On : 14 Dec 2022 1:12 am
Operator : courtnef
Sample : FC1116-2
Misc : MS53006,V5E1623,,,,,
ALS Vial : 45 Sample Multiplier: 1

Quant Time: Dec 14 02:12:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

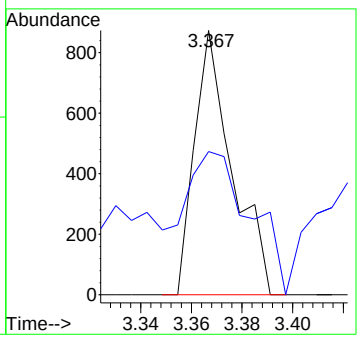




#4
Vinyl Chloride
Concen: 0.48 ug/L
RT: 3.367 min Scan# 374
Delta R.T. -0.006 min
Lab File: 5E36104.d
Acq: 14 Dec 2022 1:12 am

Tgt Ion: 62 Resp: 898

Ion	Ratio	Lower	Upper
62	100		
64	54.2	2.9	62.9



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73033.d
Acq On : 14 Dec 2022 2:15 pm
Operator : adelardl
Sample : FC1116-2 Inst : MSVOA12
Misc : MS53006,VO2870,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:21:14 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

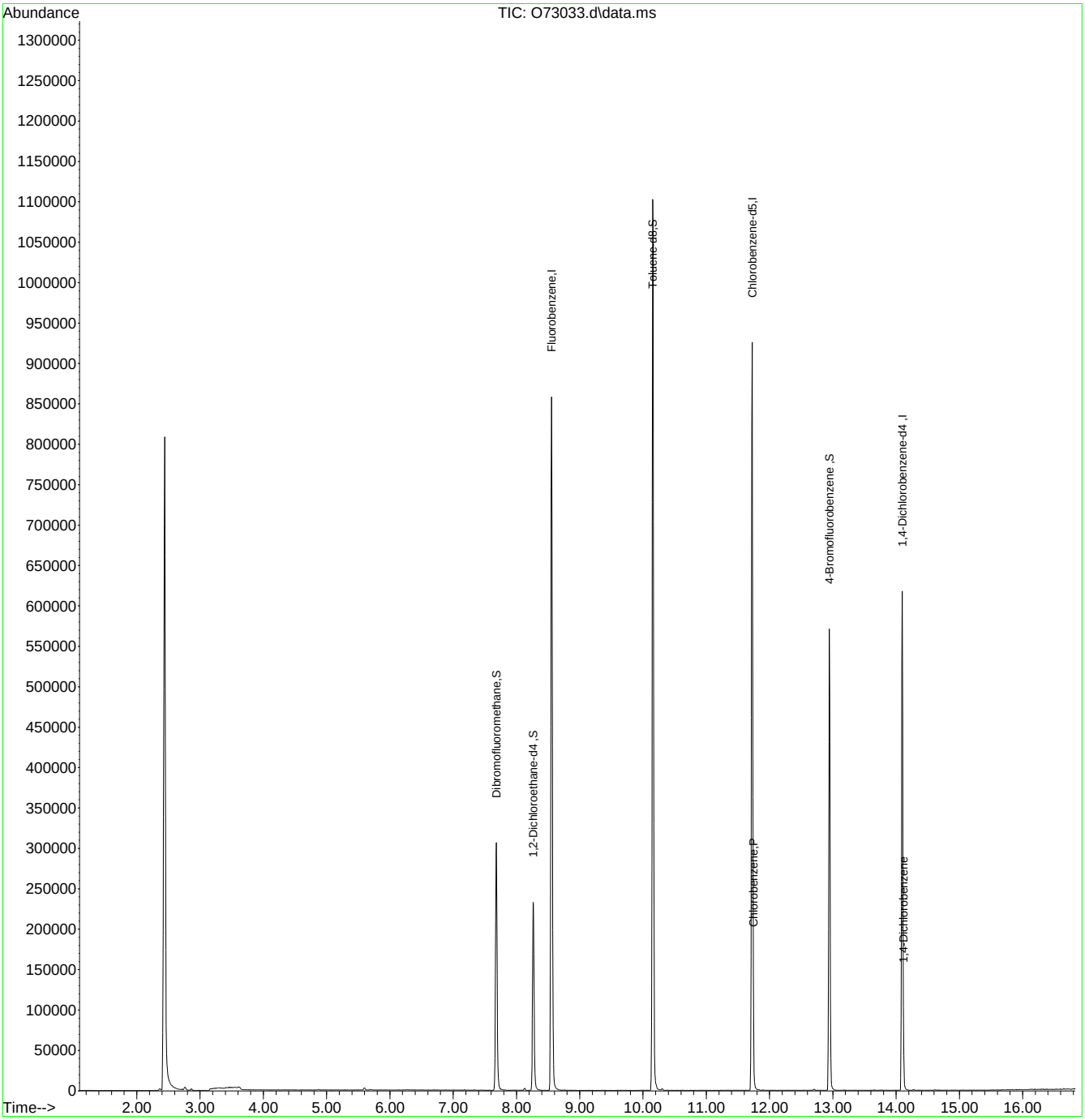
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	643043	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	430748	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	131531	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.683	113	167913	46.68	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.36%			
50) 1,2-Dichloroethane-d4	8.262	65	153131	45.94	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 91.88%			
63) Toluene-d8	10.152	98	622999	53.89	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 107.78%			
86) 4-Bromofluorobenzene	12.944	174	131437	50.27	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.54%			
Target Compounds						Qvalue
78) Chlorobenzene	11.743	112	4110	0.44	ug/L	97
105) 1,4-Dichlorobenzene	14.115	146	11815	1.86	ug/L	93

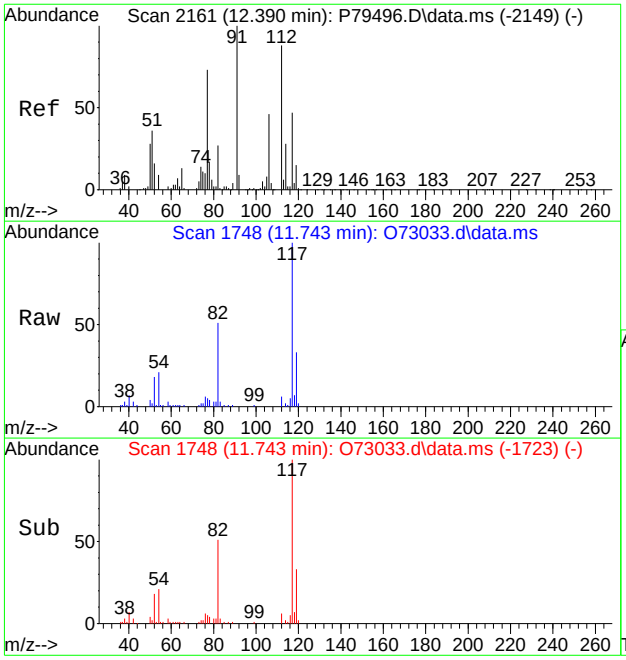
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73033.d
Acq On : 14 Dec 2022 2:15 pm
Operator : adelardl
Sample : FC1116-2 Inst : MSVOA12
Misc : MS53006,VO2870,,,,,
ALS Vial : 14 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:21:14 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

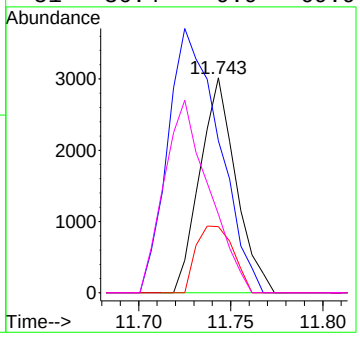


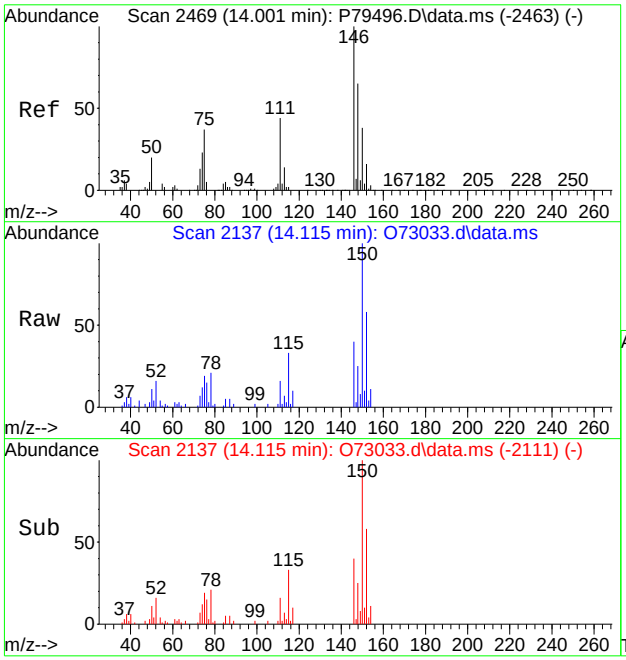


#78
Chlorobenzene
Concen: 0.44 ug/L
RT: 11.743 min Scan# 1748
Delta R.T. 0.000 min
Lab File: O73033.d
Acq: 14 Dec 2022 2:15 pm

Tgt Ion:112 Resp: 4110

Ion	Ratio	Lower	Upper
112	100		
77	70.6	41.8	101.8
114	30.7	2.3	62.3
51	36.4	9.9	69.9

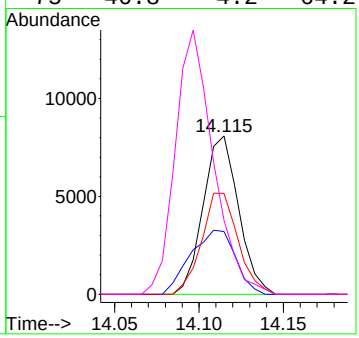




#105
1,4-Dichlorobenzene
Concen: 1.86 ug/L
RT: 14.115 min Scan# 2137
Delta R.T. 0.006 min
Lab File: O73033.d
Acq: 14 Dec 2022 2:15 pm

Tgt Ion:146 Resp: 11815

Ion	Ratio	Lower	Upper
146	100		
111	39.7	7.3	67.3
148	63.7	32.6	92.6
75	46.8	4.2	64.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36094.d
Acq On : 13 Dec 2022 9:20 pm
Operator : courtnef
Sample : MB
Misc : MS53006,V5E1623,,,,,
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 14 01:58:26 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

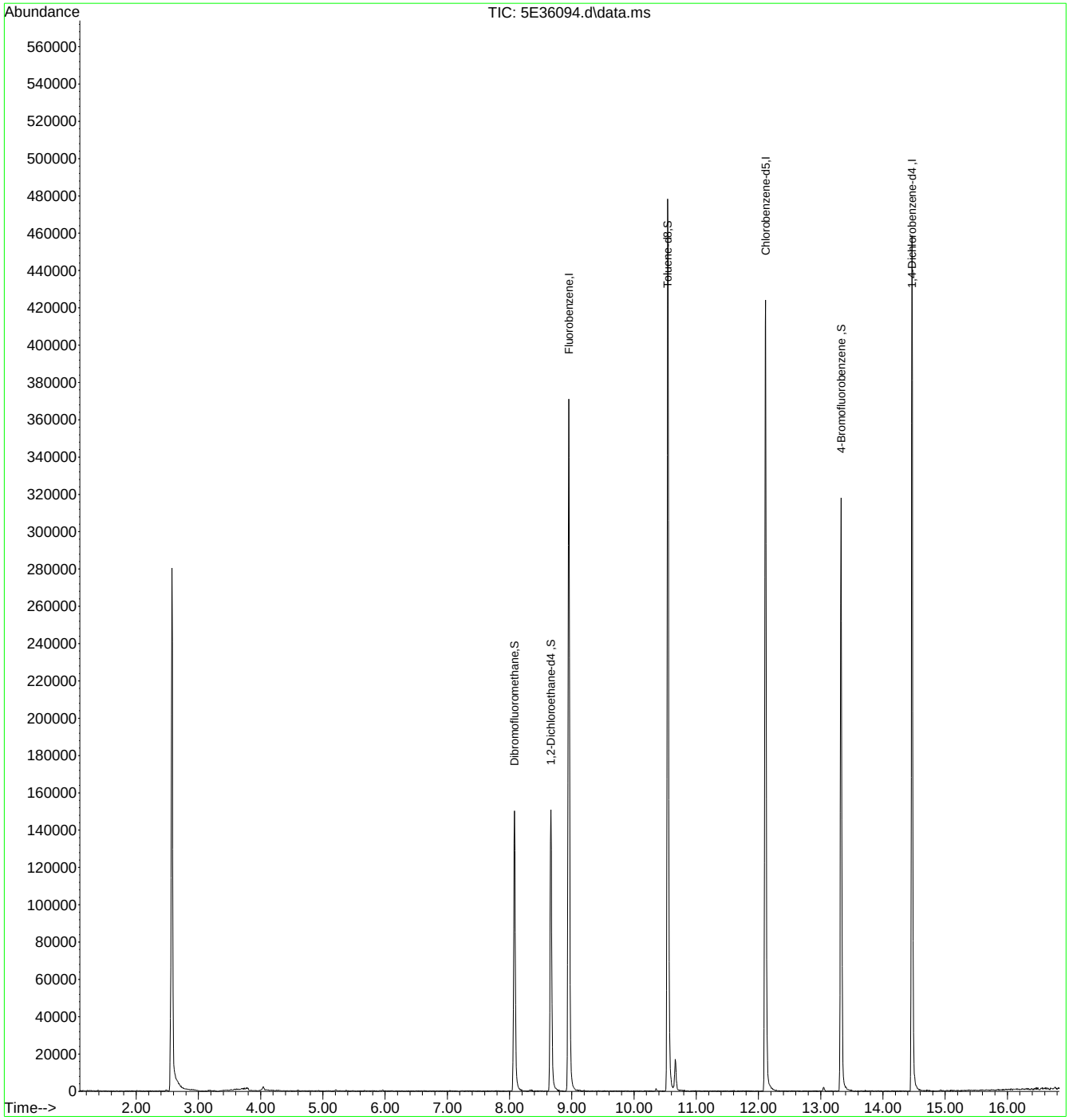
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	303484	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	219879	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	103201	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	82982	49.35	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.70%			
49) 1,2-Dichloroethane-d4	8.664	65	95733	49.59	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 99.18%			
62) Toluene-d8	10.542	98	297646	49.60	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.20%			
86) 4-Bromofluorobenzene	13.328	95	88685	51.66	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.32%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36094.d
Acq On : 13 Dec 2022 9:20 pm
Operator : courtnef
Sample : MB
Misc : MS53006,V5E1623,,,,,
ALS Vial : 35 Sample Multiplier: 1

Quant Time: Dec 14 01:58:26 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73025.d
Acq On : 14 Dec 2022 10:56 am
Operator : adelardl
Sample : MB Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:17:31 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	648162	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	445380	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	169218	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	169721	46.81	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.62%			
50) 1,2-Dichloroethane-d4	8.262	65	163064	48.54	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 97.08%			
63) Toluene-d8	10.152	98	627895	52.53	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 105.06%			
86) 4-Bromofluorobenzene	12.944	174	153411	45.61	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 91.22%			

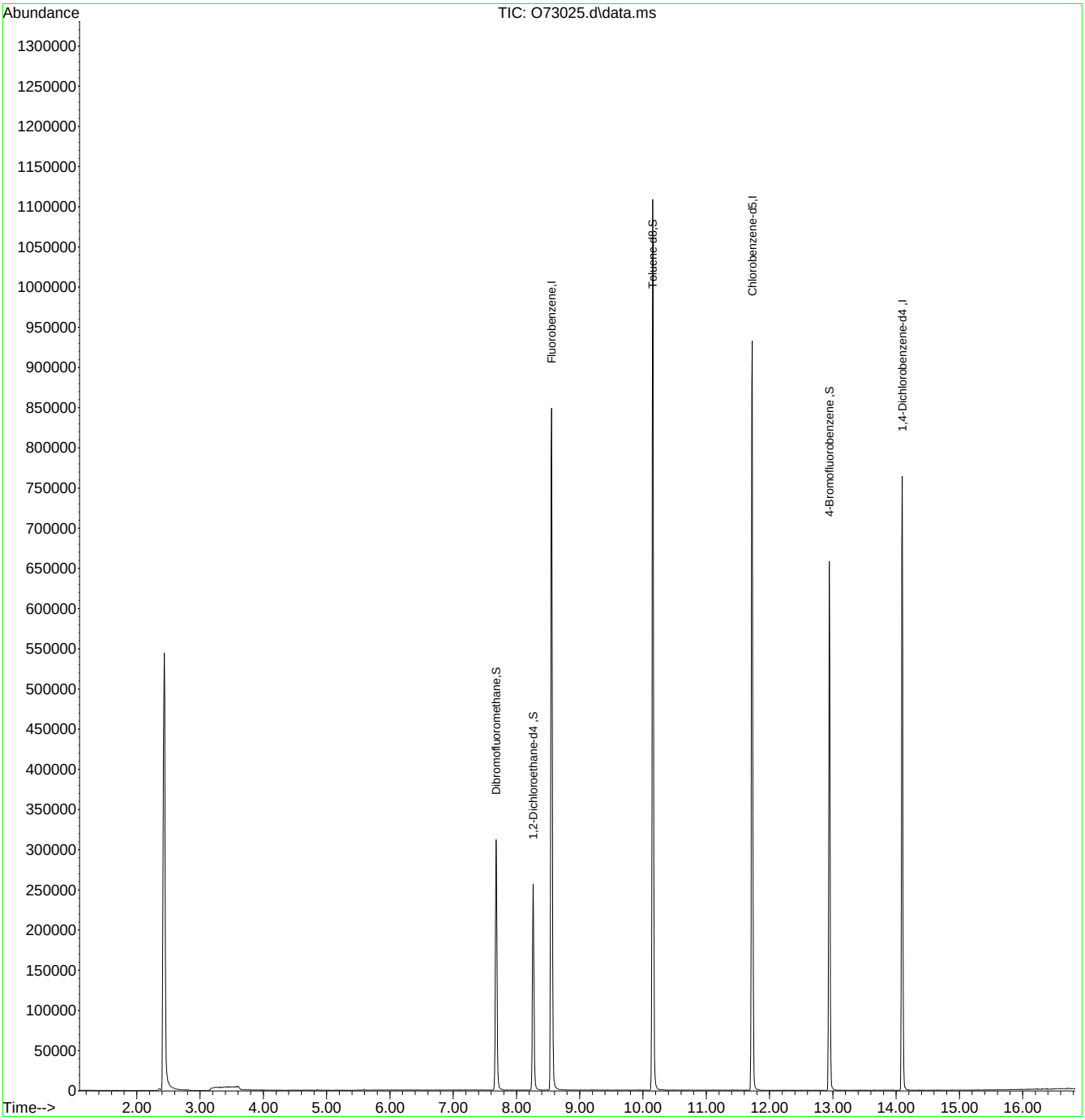
Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73025.d
Acq On : 14 Dec 2022 10:56 am
Operator : adelardl
Sample : MB Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:17:31 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira
12/15/22 03:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 01:51:44 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	332909	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	243791	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	117852	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	93737	50.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.64%			
49) 1,2-Dichloroethane-d4	8.664	65	109637	51.77	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.54%			
62) Toluene-d8	10.542	98	326205	49.03	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.06%			
86) 4-Bromofluorobenzene	13.328	95	99009	50.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.00%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	42208	20.76	ug/L	94
3) Chloromethane	3.220	50	43299	22.21	ug/L	99
4) Vinyl Chloride	3.373	62	51217	24.74	ug/L	98
5) 1,3-Butadiene	3.403	39	46230	34.93	ug/L	93
6) Bromomethane	3.940	94	15994	14.74	ug/L	91
7) Chloroethane	4.153	64	41418	25.76	ug/L	97
8) Trichlorofluoromethane	4.385	101	73555	29.38	ug/L	99
9) Ethyl Ether	4.873	59	35189	23.90	ug/L	99
10) Ethanol	5.110	45	4973	422.59	ug/L	89
11) 1,2-Dichlorotrifluoroe...	5.153	67	55697	26.48	ug/L	97
12) 1,1-Dichloroethene	5.159	61	66467	25.39	ug/L	97
13) Freon 113	5.220	101	48634	27.56	ug/L	96
14) Carbon Disulfide	5.208	76	130125	26.43	ug/L	98
15) Iodomethane	5.366	142	19541	8.18	ug/L	97
16) Acrolein	5.635	56	32231	101.88	ug/L	98
17) Allyl chloride	5.817	41	47021	26.09	ug/L	97
18) Methylene Chloride	5.958	49	56367	22.40	ug/L	96
19) Acetone	6.019	43	58833	113.35	ug/L	98
20) Methyl acetate	6.171	43	137799	135.42	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	61662	25.36	ug/L	96
22) Hexane	6.263	56	37012m	25.35	ug/L	
23) Methyl Tert Butyl Ether	6.293	73	119488	24.64	ug/L	97
24) Acetonitrile	6.616	41	39906	239.98	ug/L	90
25) Di-isopropyl ether	6.756	45	115820	24.88	ug/L	98
26) Chloroprene	6.909	53	64207	29.44	ug/L	97
27) 1,1-Dichloroethane	6.939	63	83494	25.90	ug/L	97
28) Acrylonitrile	7.000	53	80811	132.68	ug/L	98
29) ETBE	7.195	59	135092	25.10	ug/L	97
30) Tert Butyl Alcohol	6.391	59	55686	217.88	ug/L	96
31) Vinyl acetate	7.214	43	468329	147.92	ug/L	100
32) cis-1,2-Dichloroethene	7.579	96	45112	25.38	ug/L	95
33) 2,2-Dichloropropane	7.707	77	55565	21.58	ug/L	94
34) Bromochloromethane	7.811	128	21072	24.37	ug/L	93
35) Cyclohexane	7.823	56	82223	28.82	ug/L	94
36) Chloroform	7.872	83	77309	24.66	ug/L	99
37) Ethyl acetate	7.976	43	211949	135.58	ug/L	99
38) Tetrahydrofuran	8.067	42	12841	26.41	ug/L	90
40) Carbon Tetrachloride	8.055	117	60470	26.44	ug/L	99
41) 1,1,1-Trichloroethane	8.122	97	67162	25.72	ug/L	97
42) 2-Butanone	8.201	43	93696	119.28	ug/L	99
43) 1,1-Dichloropropene	8.256	75	58610	24.92	ug/L	98
44) tert-Butyl formate	8.354	59	147445	214.26	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 01:51:44 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45) Propionitrile	8.536	54	68868	239.37	ug/L		92
46) Methacrylonitrile	8.555	41	262012	272.18	ug/L		98
47) Benzene	8.524	78	163761	24.25	ug/L		99
48) TAME	8.604	73	121550	25.30	ug/L		98
50) 1,2-Dichloroethane	8.738	62	61282	23.89	ug/L		98
51) tert Amyl alcohol	8.786	59	43062	243.17	ug/L		98
52) Trichloroethene	9.134	95	44800	24.79	ug/L		96
53) Methylcyclohexane	9.134	83	86609	30.41	ug/L		97
54) Dibromomethane	9.579	93	28951	24.35	ug/L		96
55) 1,2-Dichloropropane	9.670	63	43354	22.56	ug/L		99
56) Bromodichloromethane	9.719	83	58222	25.62	ug/L		97
57) Methyl methacrylate	9.835	41	37371	27.13	ug/L		94
58) 1,4-Dioxane	9.926	88	8137	501.77	ug/L		91
59) 2-Chloroethyl vinyl ether	10.262	63	134194	128.58	ug/L		99
60) cis-1,3-Dichloropropene	10.353	75	63416	24.74	ug/L		94
63) Toluene	10.597	91	174263	24.18	ug/L		100
64) Isobutyl alcohol	8.671	43	32062	467.50	ug/L		95
65) 2-Nitropropane	10.829	41	66067	122.27	ug/L		98
66) 4-Methyl-2-pentanone	10.938	43	213908	114.28	ug/L		99
67) trans-1,3-Dichloropropene	10.999	75	58873	25.57	ug/L		87
68) Tetrachloroethene	10.999	166	46792	26.40	ug/L		96
69) Ethyl methacrylate	11.103	69	48950	21.73	ug/L		99
70) 1,1,2-Trichloroethane	11.164	83	33722	24.08	ug/L		90
71) Dibromochloromethane	11.359	129	43932	24.10	ug/L		98
72) 1,3-Dichloropropane	11.451	76	63168	22.62	ug/L		98
73) 1,2-Dibromoethane	11.627	107	41796	24.76	ug/L		98
74) 3,3-Dimethyl-1-butanol	11.707	57	210093	1151.55	ug/L		99
75) 2-hexanone	11.768	43	147678	114.72	ug/L		98
76) 1-Chlorohexane	12.060	91	63482	26.68	ug/L		96
77) Ethylbenzene	12.121	91	199526	24.19	ug/L		99
78) Chlorobenzene	12.127	112	116261	24.30	ug/L		98
79) 1,1,1,2-Tetrachloroethane	12.182	131	41519	25.23	ug/L		96
80) m,p-Xylene	12.261	91	295971	48.38	ug/L		99
81) o-Xylene	12.706	91	145771	24.97	ug/L		98
82) Styrene	12.755	104	109618	24.45	ug/L		98
83) Bromoform	12.822	173	27179	23.22	ug/L		98
84) Isopropylbenzene	13.005	105	190802	25.21	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	11643	20.26	ug/L	#	77
88) n-Propylbenzene	13.426	91	235676	25.07	ug/L		96
89) Bromobenzene	13.456	156	42969	23.50	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.499	83	56456	24.58	ug/L		98
91) 1,3,5-Trimethylbenzene	13.609	105	153712	24.81	ug/L		96
92) 2-Chlorotoluene	13.621	91	143650	24.90	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.682	53	11643	20.26	ug/L	#	77
94) 1,2,3-Trichloropropane	13.664	110	15198	22.61	ug/L		96
95) Cyclohexanone	13.737	55	7602	130.07	ug/L		95
96) 4-Chlorotoluene	13.792	91	126024	24.53	ug/L		96
98) tert-Butylbenzene	13.950	91	84699	25.30	ug/L		96
99) 1,2,4-Trimethylbenzene	14.017	105	152291	25.37	ug/L		99
100) Pentachloroethane	14.005	167	25852	23.92	ug/L		99
101) sec-Butylbenzene	14.133	105	208813	27.42	ug/L		99
102) 4-Isopropyltoluene	14.261	119	175069	26.22	ug/L		99
103) 1,3-Dichlorobenzene	14.401	146	86460	25.32	ug/L		97
104) 1,2,3-Trimethylbenzene	14.474	105	161672	26.68	ug/L		100
105) 1,4-Dichlorobenzene	14.487	146	90766	24.29	ug/L		98
106) n-Butylbenzene	14.682	92	87641	24.76	ug/L		99
107) Benzyl Chloride	14.712	126	15774	21.67	ug/L	#	89
108) 1,2-Dichlorobenzene	14.901	146	80897	24.74	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 01:51:44 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

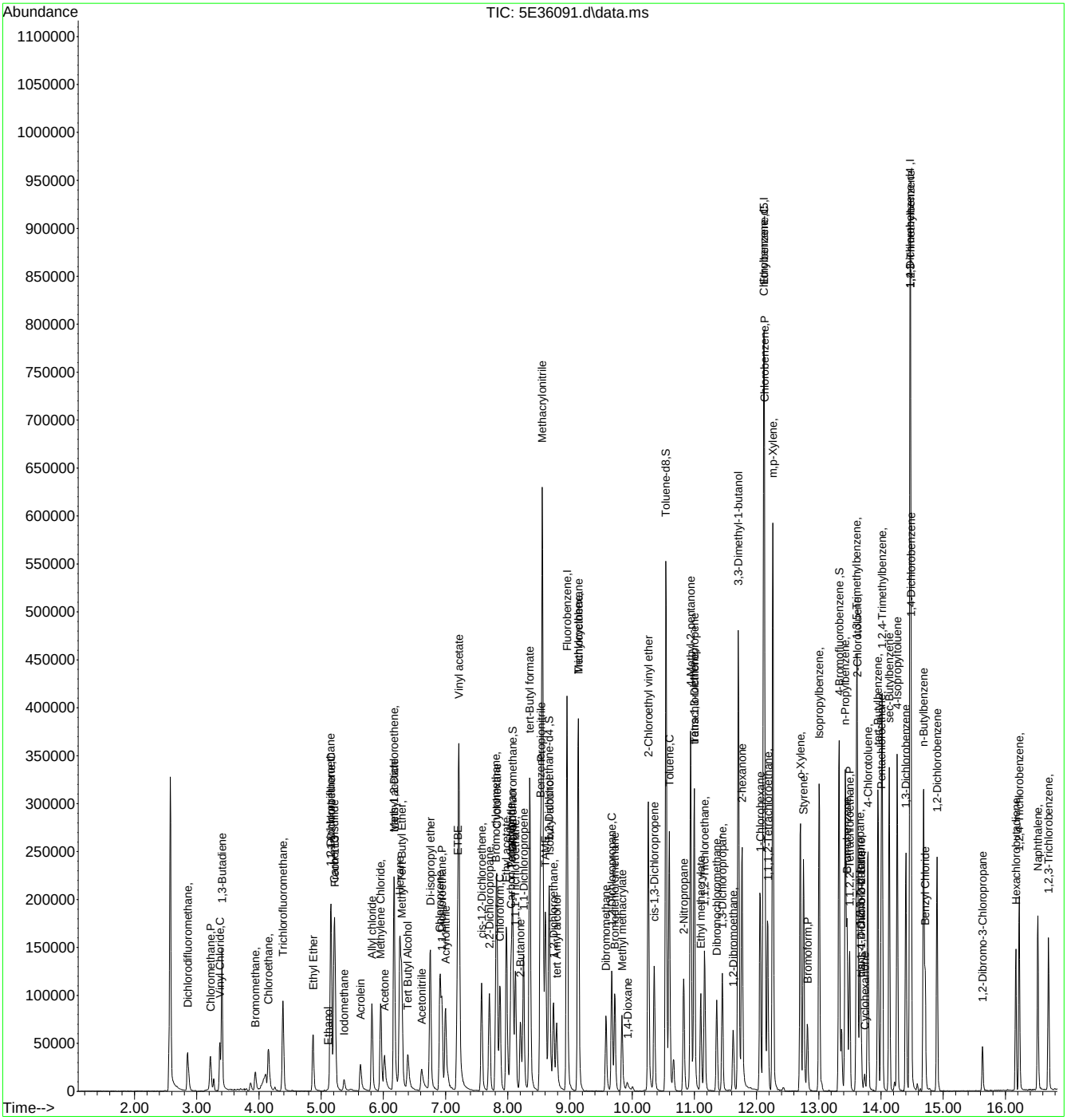
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) 1,2-Dibromo-3-Chloropr...	15.633	75	7792	22.00	ug/L	92
110) Hexachlorobutadiene	16.169	225	17721	25.65	ug/L	96
111) 1,2,4-Trichlorobenzene	16.224	180	48725	26.74	ug/L	96
112) Naphthalene	16.523	128	121074	24.27	ug/L	98
113) 1,2,3-Trichlorobenzene	16.693	180	39105	25.47	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 01:51:44 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1623-BS
Lab FileID: 5E36091.D
Injection Time: 12/13/22 20:10

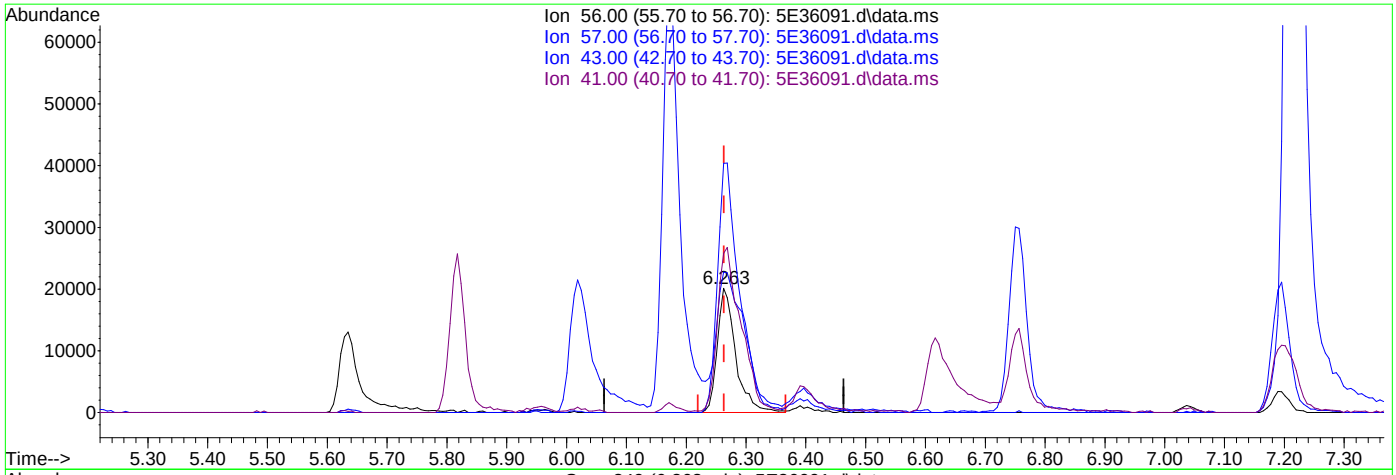
Method: SW846 8260D
Analyst approved: 12/14/22 01:56 Celine Celis
Supervisor approved: 12/15/22 03:51 Jennifer Fereira

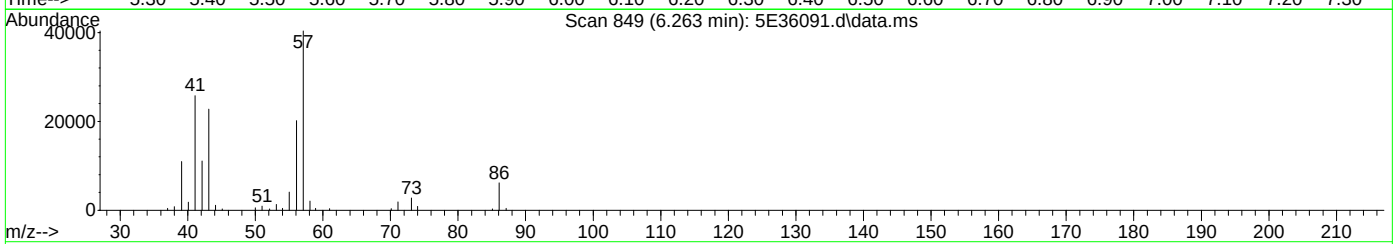
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.26	Overlapping peak

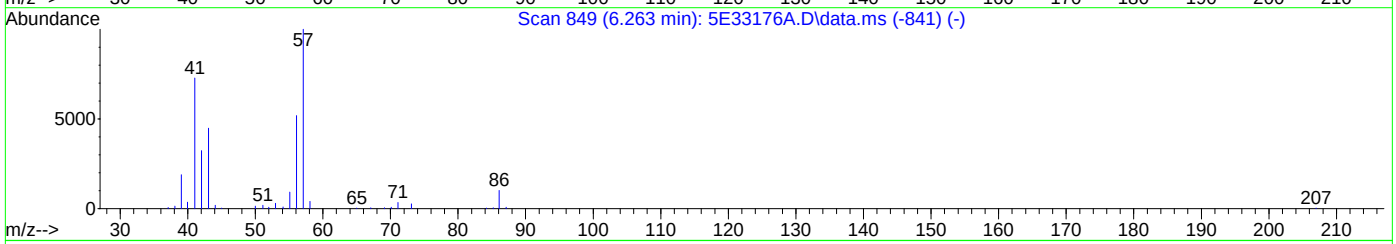
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 00:47:56 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36091.d\data.ms

(22) Hexane

6.263min (-0.000) 29.66ug/L

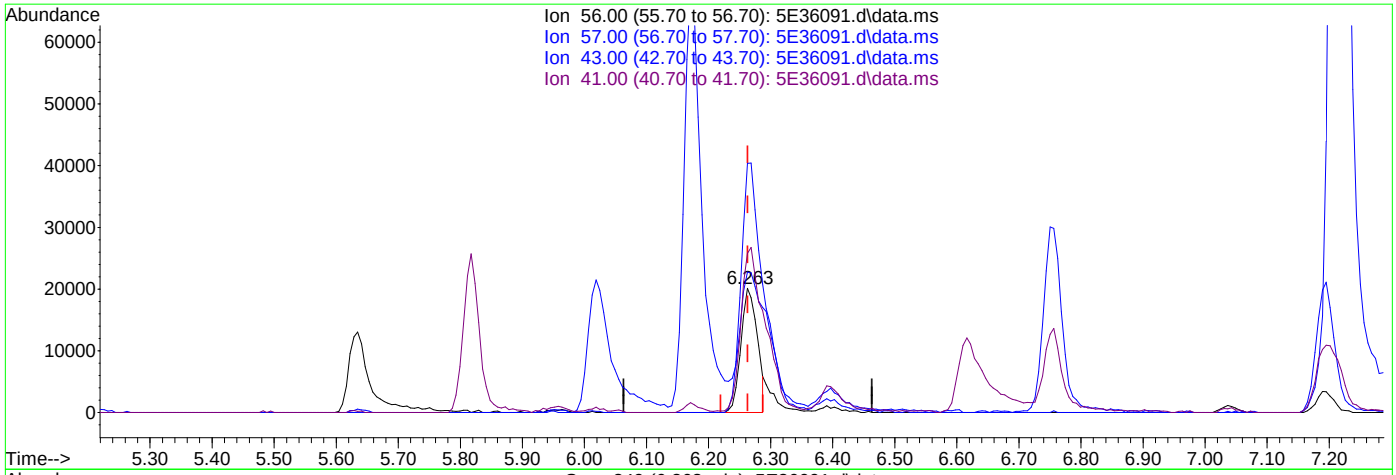
response 43309

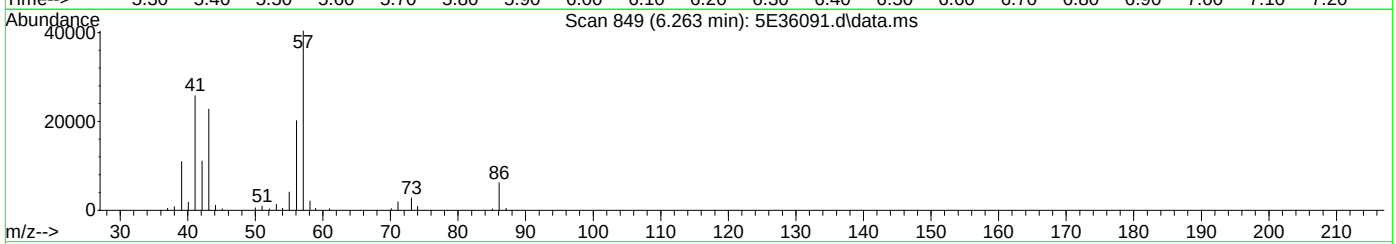
Ion	Exp%	Act%
56.00	100	100
57.00	189.50	200.48
43.00	107.20	105.63
41.00	123.50	126.94

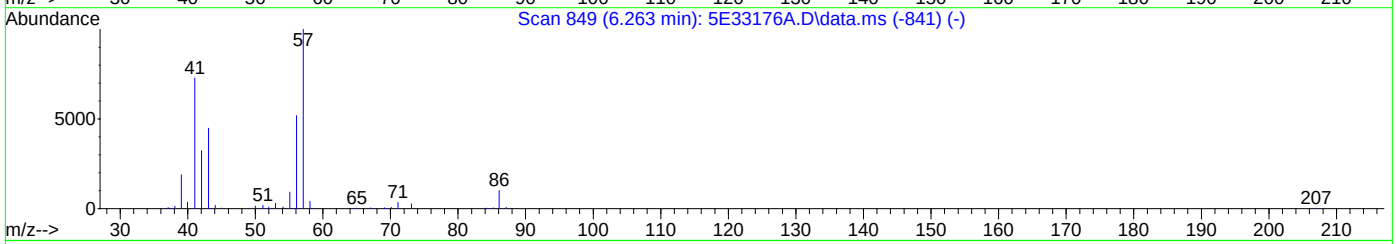
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36091.d
Acq On : 13 Dec 2022 8:10 pm
Operator : courtnef
Sample : BS
Misc : MS53006,V5E1623,,,,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Dec 14 00:47:56 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36091.d\data.ms

(22) Hexane

6.263min (-0.000) 25.35ug/L m

response 37012

Ion	Exp%	Act%
56.00	100	100
57.00	189.50	200.48
43.00	107.20	113.03
41.00	123.50	128.12

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:24:29 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	688848	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	481381	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	186247	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	184904	47.99	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.98%			
50) 1,2-Dichloroethane-d4	8.262	65	166156	46.54	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 93.08%			
63) Toluene-d8	10.152	98	665886	51.54	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.08%			
86) 4-Bromofluorobenzene	12.944	174	169630	45.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 91.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	94565	19.58	ug/L	98
3) Chloromethane	3.019	50	96968	22.89	ug/L	99
4) 1,3-butadiene	3.190	39	153386	36.06	ug/L	98
5) Vinyl Chloride	3.160	62	115040	26.87	ug/L	100
6) Bromomethane	3.684	94	39702	21.75	ug/L	99
7) Chloroethane	3.885	64	70253	26.98	ug/L	98
8) Trichlorofluoromethane	4.098	101	170958	26.01	ug/L	98
9) Ethyl Ether	4.556	59	68978	21.72	ug/L	97
10) Ethanol	4.781	45	9583	653.49	ug/L	99
11) 1,2-Dichlorotrifluoroe...	4.824	67	115600	23.82	ug/L	100
12) 1,1-Dichloroethene	4.830	61	133195	22.33	ug/L	98
13) Freon 113	4.885	101	96018	23.66	ug/L	96
14) Carbon Disulfide	4.867	76	282832	24.57	ug/L	99
15) Iodomethane	5.025	142	43619	31.66	ug/L	95
16) Acrolein	5.281	56	58274	87.77	ug/L	97
17) Allyl chloride	5.458	41	141747	26.64	ug/L	99
18) Methylene Chloride	5.592	49	126862	22.58	ug/L	99
19) Acetone	5.659	43	119799	123.83	ug/L	98
20) Methyl acetate	5.805	43	319425	126.75	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	129147	22.39	ug/L	96
22) Hexane	5.891	56	65089m	24.03	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	231633	21.83	ug/L	98
24) Tert Butyl Alcohol	6.031	59	58519	261.83	ug/L	92
25) Acetonitrile	6.232	41	89818	229.87	ug/L	99
26) Di-isopropyl ether	6.372	45	298723	23.11	ug/L	99
27) Chloroprene	6.519	53	137617	28.86	ug/L	98
28) 1,1-Dichloroethane	6.543	63	164446	23.50	ug/L	99
29) Acrylonitrile	6.610	52	131838	119.65	ug/L	96
30) ETBE	6.799	59	258186	22.41	ug/L	99
31) Vinyl acetate	6.824	43	1127018	153.46	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	98279	23.47	ug/L	99
33) 2,2-Dichloropropane	7.299	77	113660	23.04	ug/L	98
34) Bromochloromethane	7.403	128	52490	23.56	ug/L	97
35) Cyclohexane	7.415	56	155140	25.79	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:24:29 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	166827	22.69	ug/L	96
37) Ethyl acetate	7.592	43	435779	130.50	ug/L	100
38) Tetrahydrofuran	7.671	42	25325	25.02	ug/L	98
40) Carbon Tetrachloride	7.647	117	119098	27.52	ug/L	100
41) 1,1,1-Trichloroethane	7.720	97	142432	24.38	ug/L	99
42) 2-Butanone	7.811	43	191951	127.06	ug/L	100
43) 1,1-Dichloropropene	7.848	75	122050	22.66	ug/L	98
44) tert-Butyl formate	7.957	59	206950	113.67	ug/L	96
45) Propionitrile	8.140	54	120469	258.64	ug/L	96
46) Methacrylonitrile	8.165	41	678641	250.31	ug/L	99
47) Benzene	8.122	78	354203	22.98	ug/L	99
48) TAME	8.213	73	227030	22.77	ug/L	97
49) Isobutyl alcohol	8.299	43	53938m	558.55	ug/L	
51) 1,2-Dichloroethane	8.335	62	137253	21.90	ug/L	99
52) Tert Amyl Alcohol	8.402	59	40466	262.01	ug/L	94
53) Trichloroethene	8.732	95	99710	22.87	ug/L	98
54) Methylcyclohexane	8.726	83	148785	26.39	ug/L	99
55) Dibromomethane	9.177	93	62198	21.90	ug/L	96
56) 1,2-Dichloropropane	9.274	63	88249	21.96	ug/L	99
57) Bromodichloromethane	9.329	83	121437	24.23	ug/L	99
58) Methyl methacrylate	9.457	41	80590	27.30	ug/L	99
59) 1,4-Dioxane	9.530	88	13909	498.70	ug/L	93
60) 2-Chloroethyl vinyl ether	9.878	63	372773	141.36	ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	131973	23.79	ug/L	99
64) Toluene	10.207	91	378932	24.60	ug/L	98
65) 2-Nitropropane	10.445	41	70831	187.29	ug/L	98
66) 4-Methyl-2-pentanone	10.567	43	446424	129.67	ug/L	98
67) trans-1,3-Dichloropropene	10.615	75	126563	28.26	ug/L	91
68) Tetrachloroethene	10.603	166	107655	24.68	ug/L	99
69) Ethyl methacrylate	10.731	69	100788	28.12	ug/L	98
70) 1,1,2-Trichloroethane	10.780	83	74897	25.24	ug/L	96
71) Dibromochloromethane	10.975	129	91933	26.63	ug/L	95
72) 1,3-Dichloropropane	11.067	76	135331	22.62	ug/L	99
73) 1,2-Dibromoethane	11.231	107	89429	25.04	ug/L	99
74) 3,3-dimethyl-1-butanol	11.341	57	231105	1941.14	ug/L	99
75) 2-hexanone	11.396	43	308295	135.06	ug/L	99
76) 1-Chlorohexane	11.682	91	119248m	27.35	ug/L	
77) Ethylbenzene	11.743	91	431852	24.89	ug/L	99
78) Chlorobenzene	11.743	112	259437	24.94	ug/L	99
79) 1,1,1,2-Tetrachloroethane	11.792	131	87920	28.08	ug/L	96
80) m,p-Xylene	11.884	91	666759	50.30	ug/L	99
81) o-Xylene	12.322	91	326220	25.07	ug/L	100
82) Styrene	12.377	104	245538	25.52	ug/L	99
83) Bromoform	12.432	173	53855	27.67	ug/L	97
84) Isopropylbenzene	12.633	105	398592	25.96	ug/L	98
87) cis-1,4-Dichloro-2-butene	12.993	53	28106	24.14	ug/L	97
88) n-Propylbenzene	13.054	91	474792	24.63	ug/L	99
89) Bromobenzene	13.066	156	107146	22.10	ug/L	97
90) 1,1,2,2-Tetrachloroethane	13.127	83	110892	24.49	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	324392	23.85	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:24:29 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

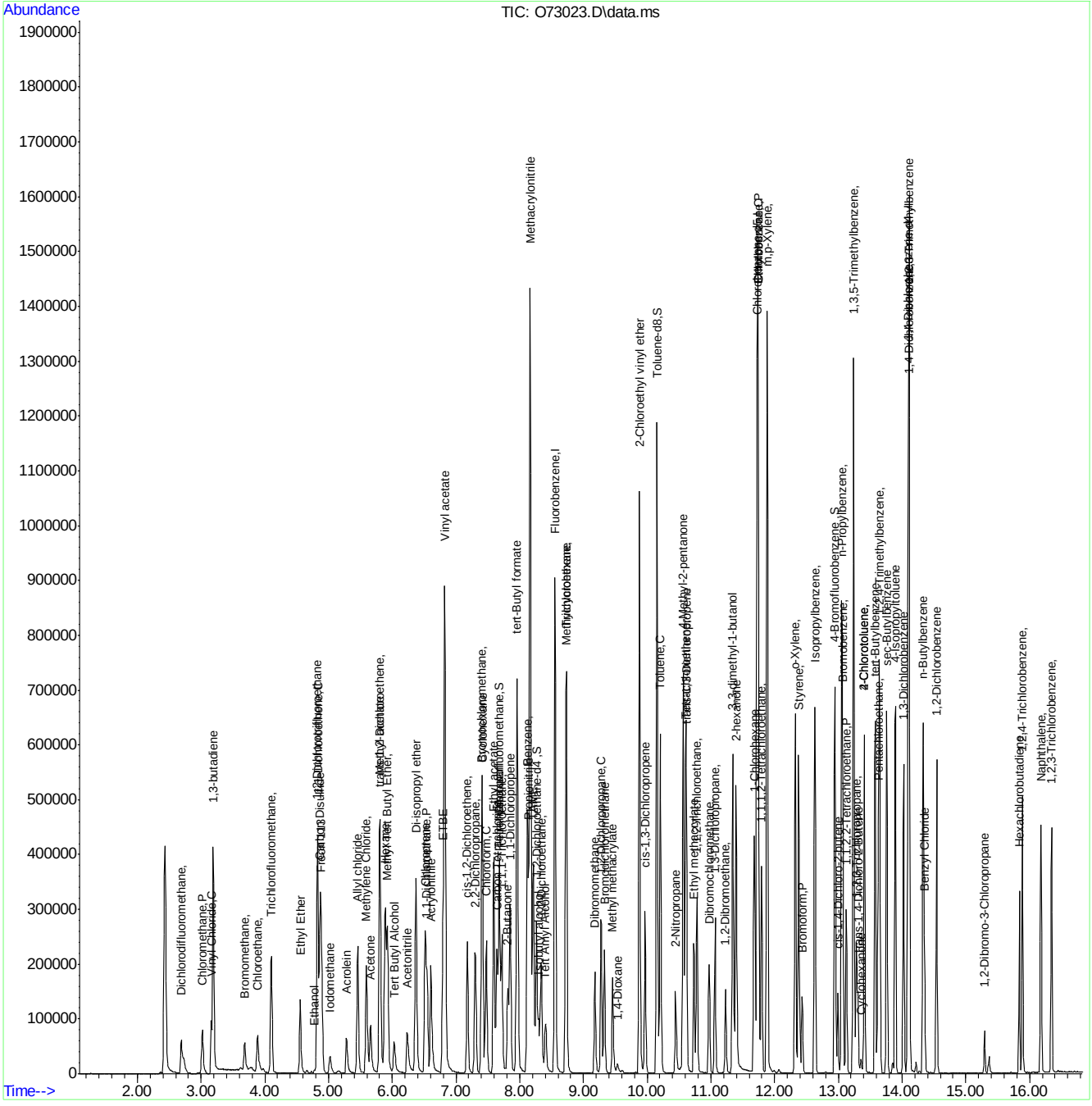
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	294296	24.26	ug/L	98
93) trans-1,4-Dichloro-2-B...	13.310	53	26717	26.58	ug/L	91
94) 1,2,3-Trichloropropane	13.286	110	30049	22.18	ug/L	96
95) Cyclohexanone	13.359	55	10288	127.85	ug/L	96
96) 4-Chlorotoluene	13.408	91	294296	24.26	ug/L	99
97) tert-Butylbenzene	13.578	91	182854	24.23	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	329067	24.79	ug/L	99
100) Pentachloroethane	13.627	167	56085	30.74	ug/L	99
101) sec-Butylbenzene	13.761	105	401078	26.56	ug/L	99
102) 4-Isopropyltoluene	13.895	119	335049	25.61	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	202359	24.01	ug/L	99
104) 1,2,3-Trimethylbenzene	14.109	105	349038	25.71	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	213596	23.74	ug/L	97
106) n-Butylbenzene	14.328	92	167794	24.19	ug/L	97
107) Benzyl Chloride	14.353	126	26937	27.40	ug/L	94
108) 1,2-Dichlorobenzene	14.542	146	193893	23.70	ug/L	100
109) 1,2-Dibromo-3-Chloropr...	15.291	75	13976	24.35	ug/L	93
110) Hexachlorobutadiene	15.840	225	40961	23.00	ug/L	93
111) 1,2,4-Trichlorobenzene	15.889	180	112312	22.29	ug/L	98
112) Naphthalene	16.181	128	291544	23.18	ug/L	99
113) 1,2,3-Trichlorobenzene	16.346	180	102611	21.94	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:24:29 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

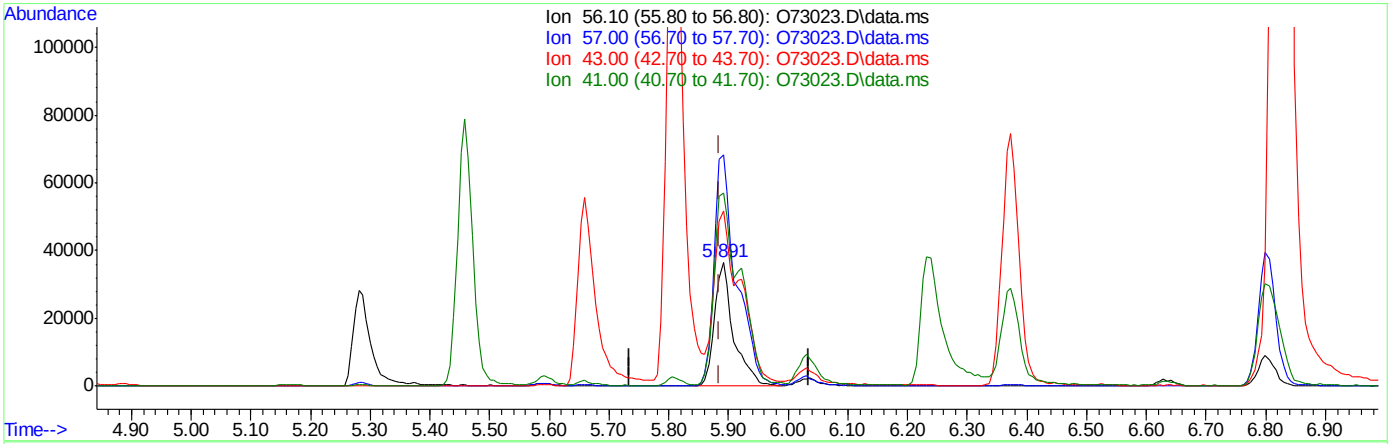
Sample Number: VO2870-BS
Lab FileID: O73023.D
Injection Time: 12/14/22 10:06
Method: SW846 8260D
Analyst approved: 12/14/22 10:25 Adelard Lefebvre
Supervisor approved: 12/15/22 13:17 Karen Watson

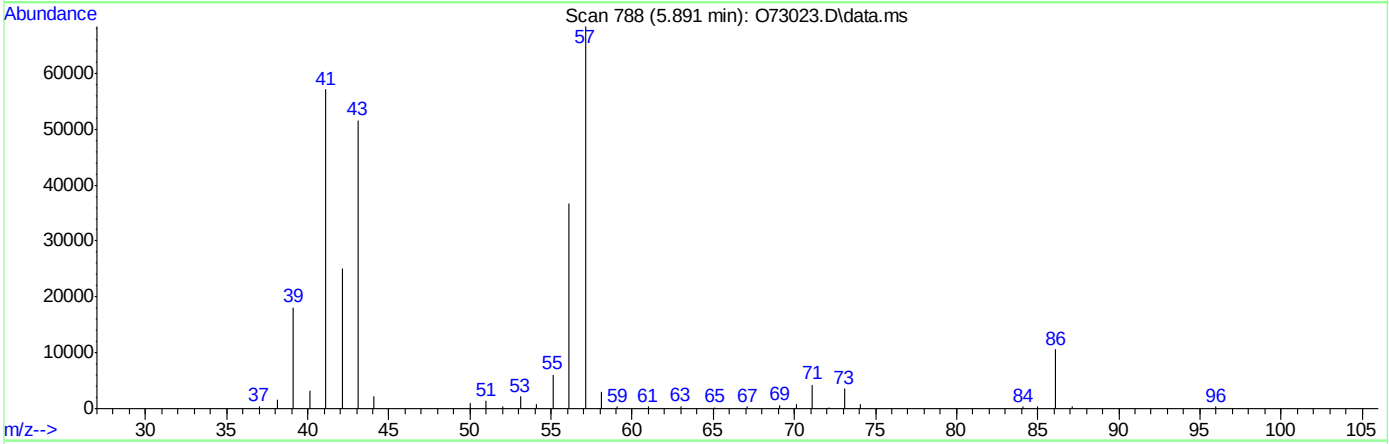
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(22) Hexane

5.891min (+0.006) 29.86ug/L

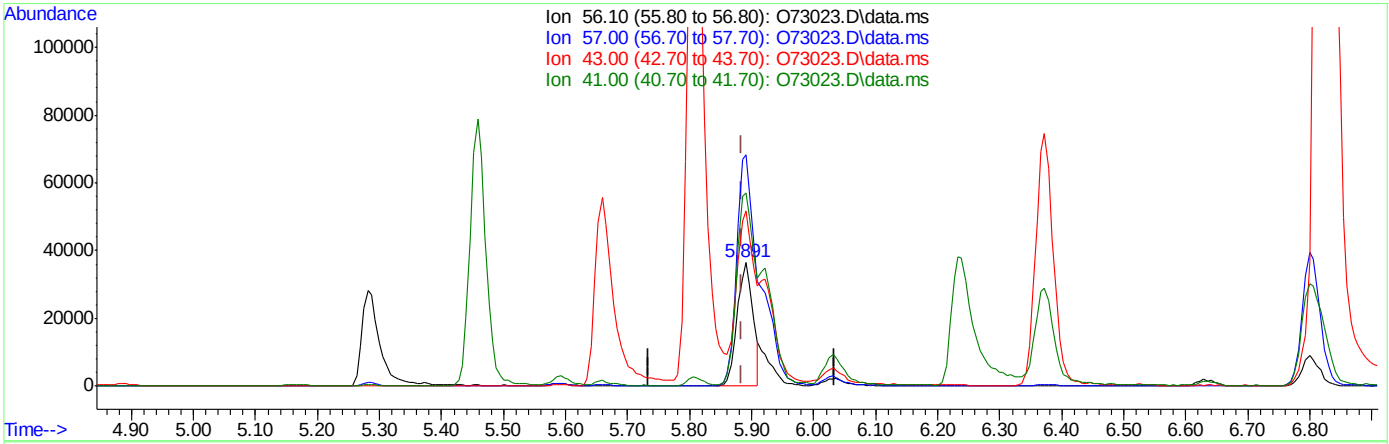
response 80885

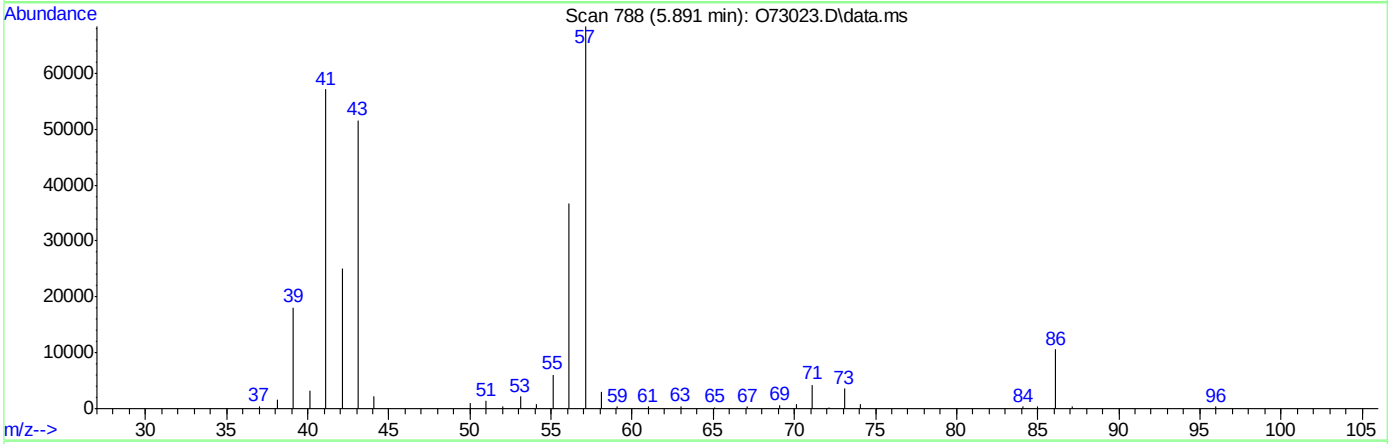
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	186.50
43.00	143.30	136.41
41.00	165.60	154.24

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(22) Hexane

5.891min (+0.006) 24.03ug/L m

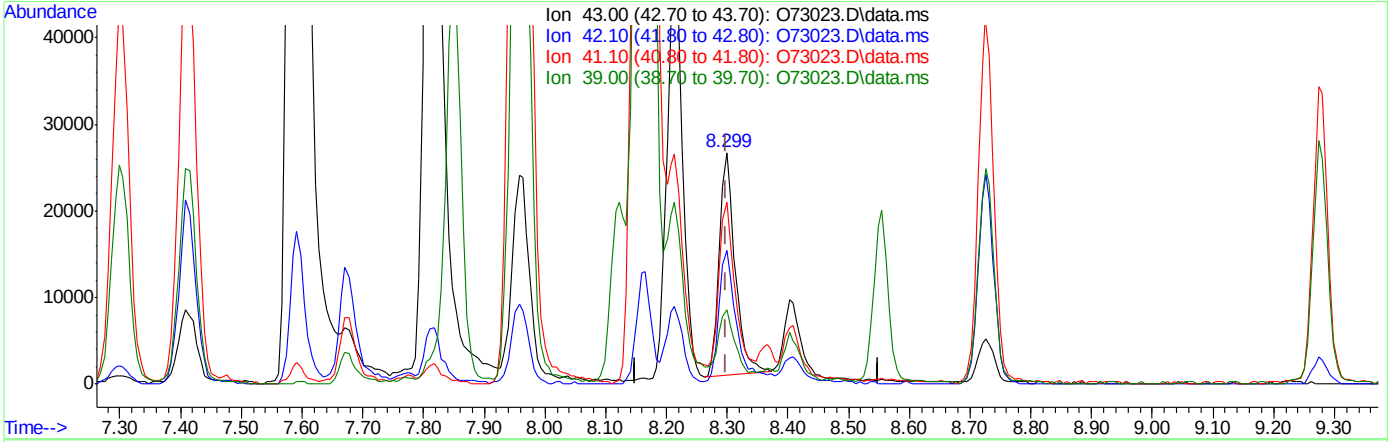
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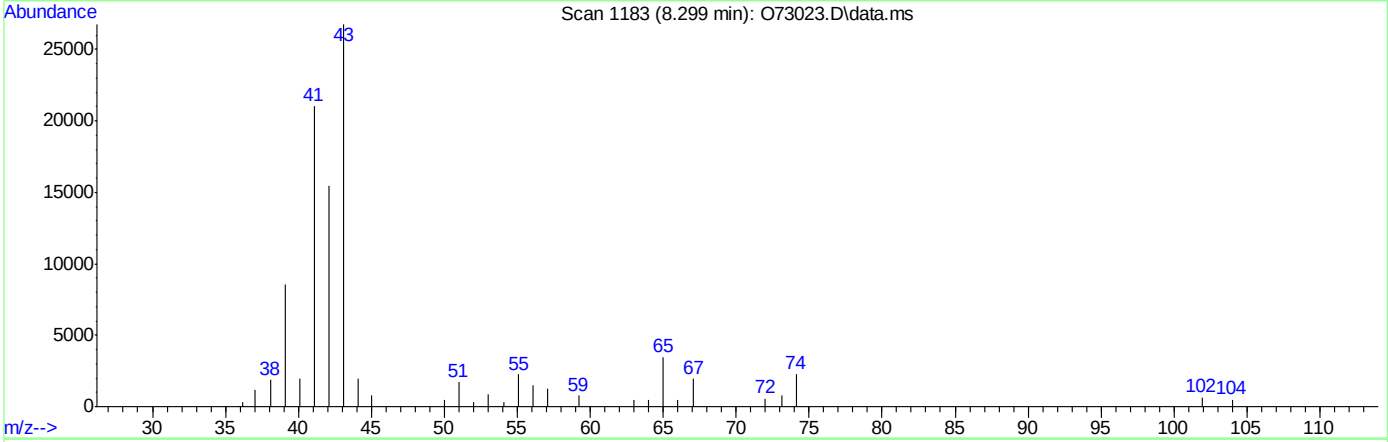
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	186.50
43.00	143.30	140.77
41.00	165.60	155.69

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 481.88ug/L

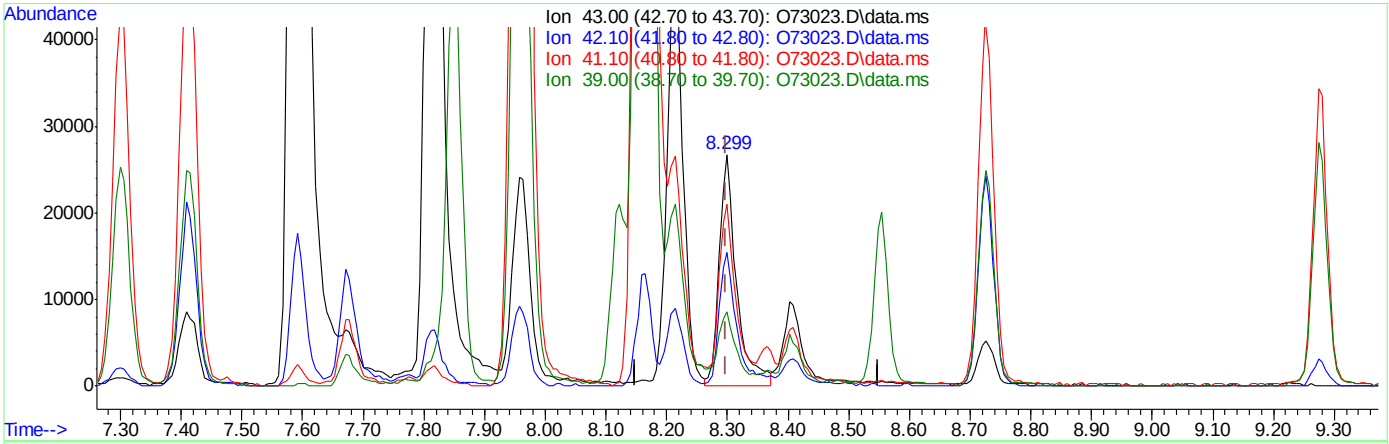
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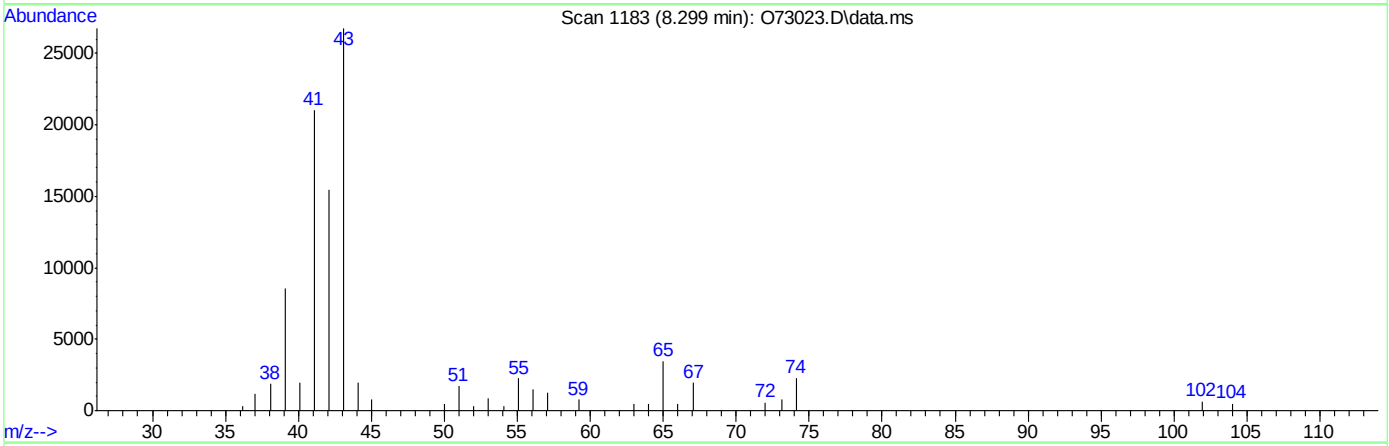
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	58.47
41.10	73.80	72.48
39.00	31.30	26.39

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 558.55ug/L m

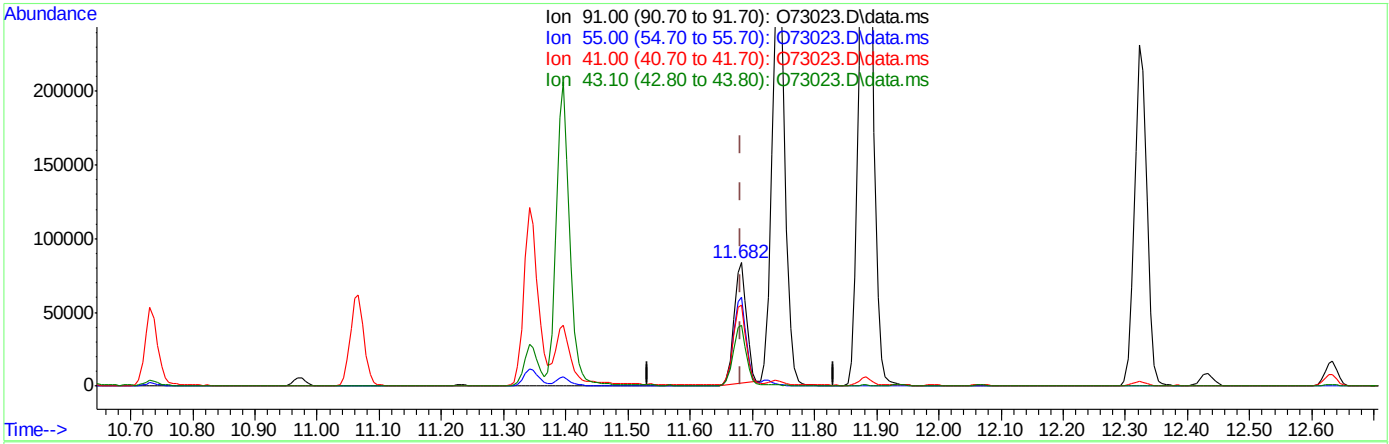
response 53938

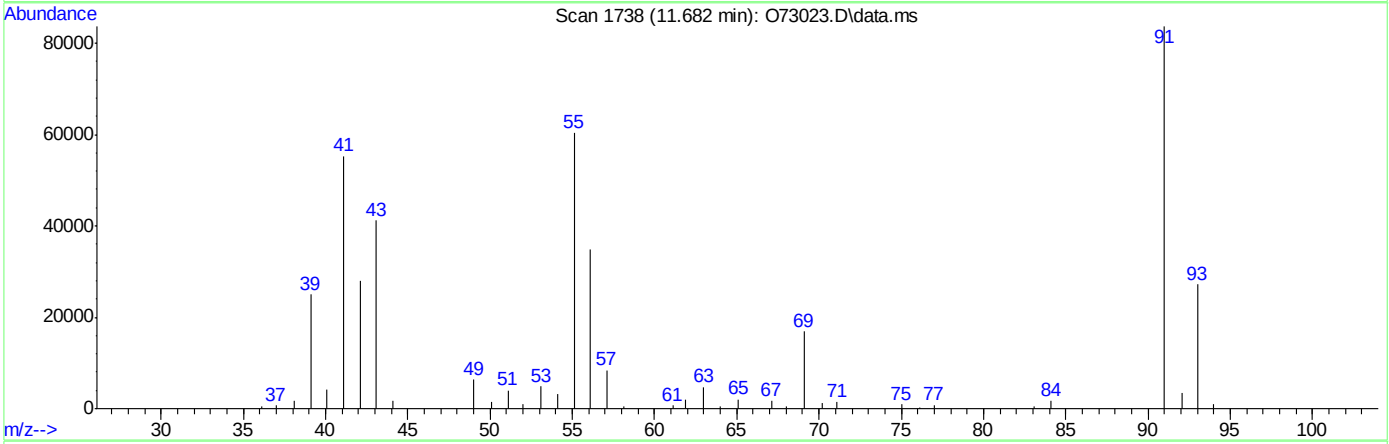
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	57.71
41.10	73.80	78.71
39.00	31.30	31.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 26.10ug/L

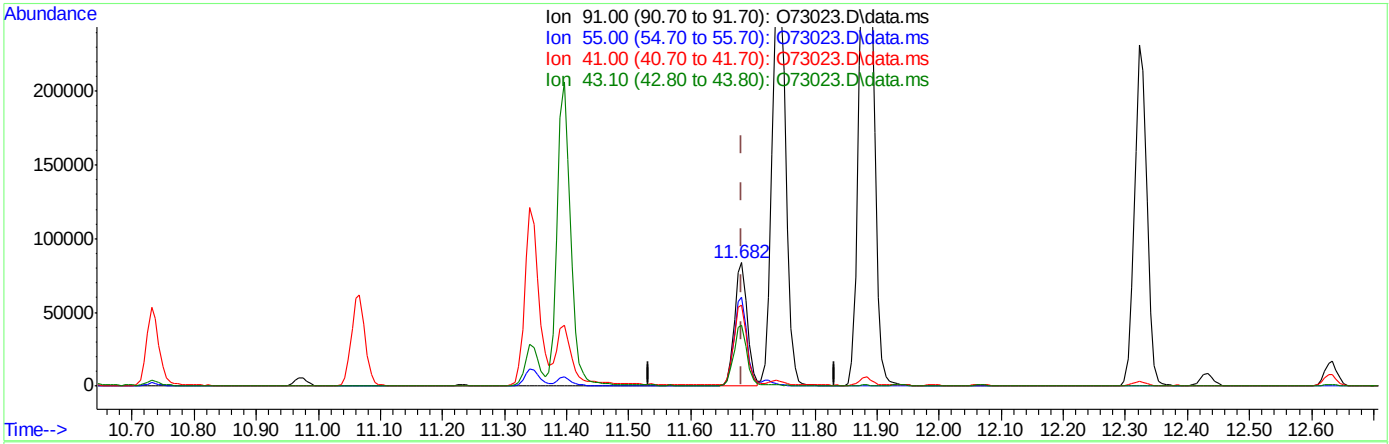
response 113783

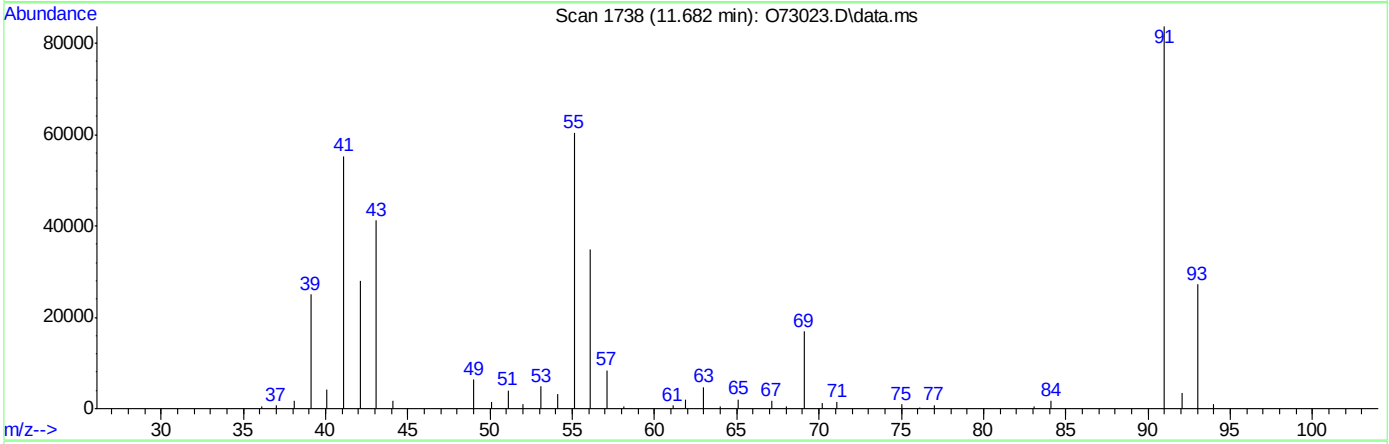
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.77
41.00	64.60	64.98
43.10	48.40	48.57

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-14\
Data File : O73023.D
Acq On : 14 Dec 2022 10:06 am
Operator : adelardl
Sample : BS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 14 10:23:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73023.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 27.35ug/L m

response 119248

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.12
41.00	64.60	66.13
43.10	48.40	49.25

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36111.D
Acq On : 14 Dec 2022 3:55 am
Operator : courtnef
Sample : FC1217-1MS, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 14 07:55:05 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	296408	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	221569	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	109555	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	86104	52.43	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 104.86%			
49) 1,2-Dichloroethane-d4	8.665	65	95515	50.65	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.30%			
62) Toluene-d8	10.542	98	293282	48.50	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 97.00%			
86) 4-Bromofluorobenzene	13.328	95	89091	48.89	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.78%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	49894	27.57	ug/L	94
3) Chloromethane	3.221	50	44147	25.44	ug/L	98
4) Vinyl Chloride	3.373	62	51509	27.95	ug/L	99
5) 1,3-Butadiene	3.403	39	42941	36.44	ug/L	90
6) Bromomethane	3.940	94	5216	5.40	ug/L	94
7) Chloroethane	4.153	64	43637	28.96	ug/L	97
8) Trichlorofluoromethane	4.385	101	73109	32.80	ug/L	92
9) Ethyl Ether	4.873	59	31789	24.25	ug/L	98
10) Ethanol	5.104	45	4421	421.95	ug/L	82
11) 1,2-Dichlorotrifluoroe...	5.153	67	52827	28.21	ug/L	99
12) 1,1-Dichloroethene	5.159	61	61103	26.21	ug/L	97
13) Freon 113	5.220	101	44181	28.12	ug/L	94
14) Carbon Disulfide	5.208	76	116965	26.68	ug/L	99
15) Iodomethane	5.366	142	10648	5.02	ug/L	96
16) Acrolein	5.635	56	31700	112.54	ug/L	92
17) Allyl chloride	5.818	41	40593	25.30	ug/L	98
18) Methylene Chloride	5.958	49	52639	23.53	ug/L	91
19) Acetone	6.019	43	51911	112.30	ug/L	99
20) Methyl acetate	6.171	43	124254	137.14	ug/L	99
21) trans-1,2-Dichloroethene	6.171	61	54498	25.18	ug/L	96
22) Hexane	6.263	56	35995	27.69	ug/L	91
23) Methyl Tert Butyl Ether	6.293	73	110983	25.70	ug/L	98
24) Acetonitrile	6.616	41	37973	256.48	ug/L	94
25) Di-isopropyl ether	6.756	45	106599	25.72	ug/L	97
26) Chloroprene	6.909	53	55235	28.45	ug/L	98
27) 1,1-Dichloroethane	6.939	63	77021	26.84	ug/L	99
28) Acrylonitrile	7.000	53	75185	138.64	ug/L	98
29) ETBE	7.195	59	120062	25.06	ug/L	99
30) Tert Butyl Alcohol	6.397	59	59379	262.75	ug/L	99
31) Vinyl acetate	7.214	43	415688	147.47	ug/L	99
32) cis-1,2-Dichloroethene	7.579	96	41521	26.23	ug/L	96
33) 2,2-Dichloropropane	7.707	77	39968	17.43	ug/L	96
34) Bromochloromethane	7.811	128	20305	26.37	ug/L	96
35) Cyclohexane	7.823	56	75537	29.74	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36111.D
Acq On : 14 Dec 2022 3:55 am
Operator : courtnef
Sample : FC1217-1MS, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 14 07:55:05 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.878	83	70395	25.21	ug/L		98
37) Ethyl acetate	7.982	43	189854	136.40	ug/L		98
38) Tetrahydrofuran	8.073	42	11927	27.56	ug/L		93
40) Carbon Tetrachloride	8.049	117	56056	27.53	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	63378	27.26	ug/L		94
42) 2-Butanone	8.207	43	82823	118.43	ug/L		96
43) 1,1-Dichloropropene	8.256	75	51873	24.77	ug/L		98
44) tert-Butyl formate	8.360	59	26144	42.67	ug/L		95
45) Propionitrile	8.537	54	62513	244.04	ug/L		92
46) Methacrylonitrile	8.555	41	235352	274.59	ug/L		98
47) Benzene	8.524	78	149858	24.92	ug/L		98
48) TAME	8.604	73	110210	25.77	ug/L		98
50) 1,2-Dichloroethane	8.738	62	58818	25.75	ug/L		96
51) tert Amyl alcohol	8.787	59	38966	247.25	ug/L		96
52) Trichloroethene	9.134	95	42029	26.12	ug/L		96
53) Methylcyclohexane	9.134	83	75968	29.96	ug/L		96
54) Dibromomethane	9.579	93	27020	25.52	ug/L		92
55) 1,2-Dichloropropane	9.671	63	39621	23.15	ug/L		97
56) Bromodichloromethane	9.719	83	53653	26.52	ug/L		95
57) Methyl methacrylate	9.835	41	29338	23.91	ug/L		97
58) 1,4-Dioxane	9.914	88	8055	555.77	ug/L		91
59) 2-Chloroethyl vinyl ether	10.359	63	267	0.29	ug/L	#	1
60) cis-1,3-Dichloropropene	10.353	75	51567	22.60	ug/L		97
63) Toluene	10.597	91	157863	24.10	ug/L		96
64) Isobutyl alcohol	8.677	43	28861	463.03	ug/L		97
65) 2-Nitropropane	10.829	41	61856	126.00	ug/L		92
66) 4-Methyl-2-pentanone	10.939	43	192133	112.94	ug/L		100
67) trans-1,3-Dichloropropene	11.000	75	51468	24.59	ug/L		84
68) Tetrachloroethene	11.000	166	40843	25.36	ug/L		99
69) Ethyl methacrylate	11.103	69	44668	21.82	ug/L		99
70) 1,1,2-Trichloroethane	11.164	83	32652	25.65	ug/L		94
71) Dibromochloromethane	11.359	129	41024	24.76	ug/L		99
72) 1,3-Dichloropropane	11.451	76	58284	22.97	ug/L		98
73) 1,2-Dibromoethane	11.627	107	37913	24.71	ug/L		99
74) 3,3-Dimethyl-1-butanol	11.707	57	206155	1244.23	ug/L		100
75) 2-hexanone	11.768	43	134025	114.55	ug/L		97
76) 1-Chlorohexane	12.060	91	57471	26.58	ug/L		97
77) Ethylbenzene	12.121	91	182656	24.37	ug/L		98
78) Chlorobenzene	12.133	112	106860	24.57	ug/L		89
79) 1,1,1,2-Tetrachloroethane	12.182	131	38214	25.55	ug/L		99
80) m,p-Xylene	12.261	91	274807	49.42	ug/L		99
81) o-Xylene	12.707	91	133582	25.18	ug/L		99
82) Styrene	12.755	104	98269	24.12	ug/L		97
83) Bromoform	12.822	173	24562	23.09	ug/L		95
84) Isopropylbenzene	13.005	105	173552	25.23	ug/L		99
87) cis-1,4-Dichloro-2-butene	13.682	53	8724	16.29	ug/L	#	76
88) n-Propylbenzene	13.426	91	219053	25.07	ug/L		97
89) Bromobenzene	13.456	156	40658	23.92	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.493	83	52918	24.78	ug/L		99
91) 1,3,5-Trimethylbenzene	13.609	105	138395	24.03	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36111.D
Acq On : 14 Dec 2022 3:55 am
Operator : courtnef
Sample : FC1217-1MS, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 14 07:55:05 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

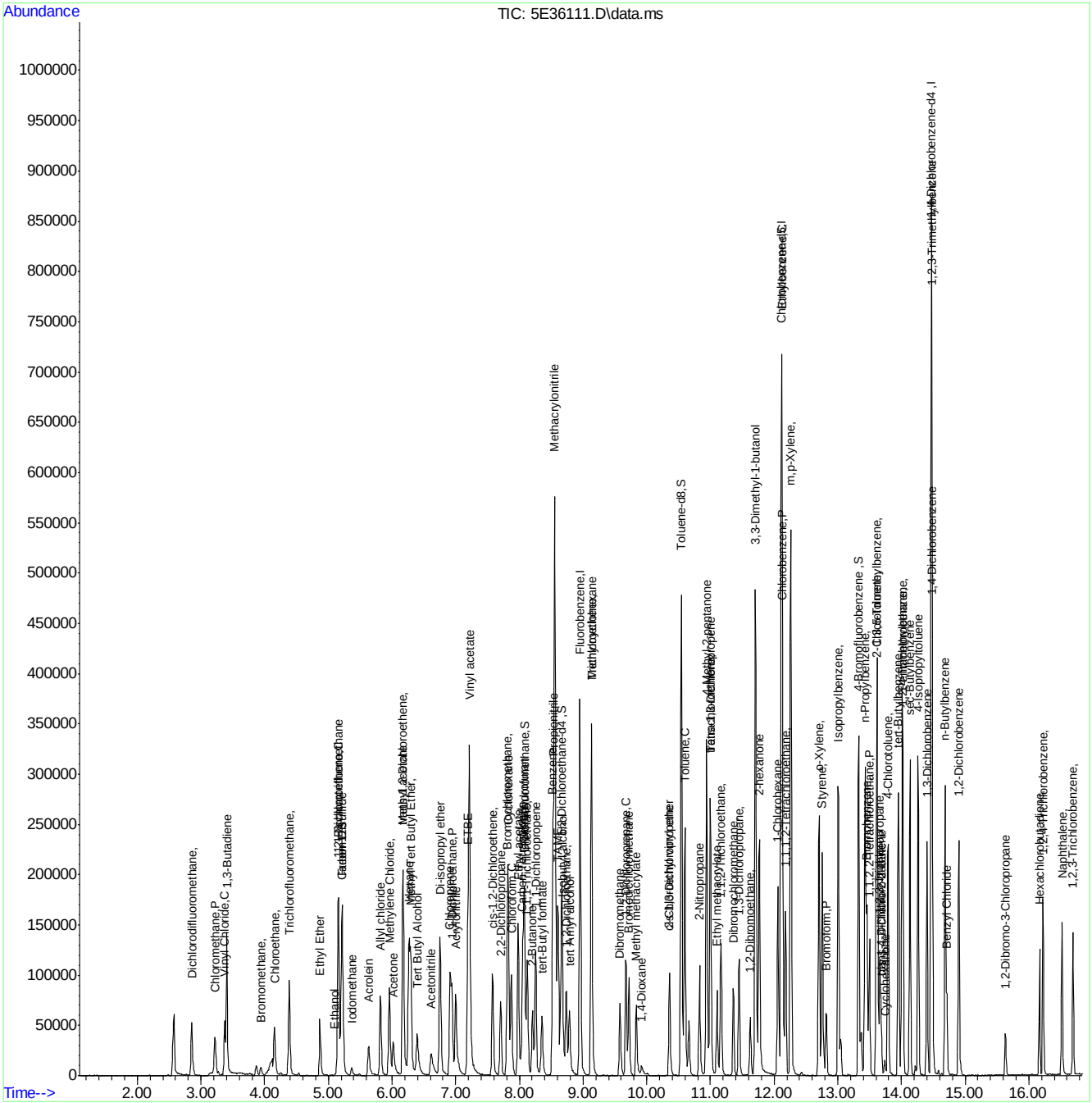
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	131538	24.53	ug/L		99
93)	trans-1,4-Dichloro-2-B...	13.682	53	8724	16.29	ug/L	#	74
94)	1,2,3-Trichloropropane	13.664	110	14494	23.21	ug/L		96
95)	Cyclohexanone	13.737	55	6445	118.90	ug/L		89
96)	4-Chlorotoluene	13.792	91	116076	24.31	ug/L		99
98)	tert-Butylbenzene	13.950	91	77801	25.00	ug/L		99
99)	1,2,4-Trimethylbenzene	14.023	105	138891	24.89	ug/L		96
100)	Pentachloroethane	14.011	167	24607	24.49	ug/L		88
101)	sec-Butylbenzene	14.133	105	189113	26.71	ug/L		99
102)	4-Isopropyltoluene	14.261	119	157597	25.39	ug/L		98
103)	1,3-Dichlorobenzene	14.401	146	81095	25.54	ug/L		99
104)	1,2,3-Trimethylbenzene	14.474	105	147946	26.26	ug/L		99
105)	1,4-Dichlorobenzene	14.487	146	85032	24.48	ug/L		97
106)	n-Butylbenzene	14.688	92	75995	23.10	ug/L		95
107)	Benzyl Chloride	14.712	126	8798	13.64	ug/L	#	59
108)	1,2-Dichlorobenzene	14.901	146	77433	25.48	ug/L		98
109)	1,2-Dibromo-3-Chloropr...	15.633	75	6661	20.20	ug/L		87
110)	Hexachlorobutadiene	16.169	225	15373	23.94	ug/L		97
111)	1,2,4-Trichlorobenzene	16.224	180	42689	25.20	ug/L		95
112)	Naphthalene	16.523	128	102129	22.02	ug/L		99
113)	1,2,3-Trichlorobenzene	16.694	180	34047	23.86	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36111.D
Acq On : 14 Dec 2022 3:55 am
Operator : courtnef
Sample : FC1217-1MS, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 52 Sample Multiplier: 1

Quant Time: Dec 14 07:55:05 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36112.D
Acq On : 14 Dec 2022 4:18 am
Operator : courtnef
Sample : FC1217-1MSD, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 14 07:55:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	309544	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	229695	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	112116	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	86717	50.56	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.12%			
49) 1,2-Dichloroethane-d4	8.665	65	102101	51.85	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.70%			
62) Toluene-d8	10.542	98	303877	48.48	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 96.96%			
86) 4-Bromofluorobenzene	13.328	95	92636	49.67	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.34%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	50564	26.75	ug/L	98
3) Chloromethane	3.227	50	44232	24.40	ug/L	99
4) Vinyl Chloride	3.373	62	52900	27.48	ug/L	98
5) 1,3-Butadiene	3.403	39	43386	35.26	ug/L	91
6) Bromomethane	3.940	94	8210	8.14	ug/L	93
7) Chloroethane	4.153	64	44666	28.56	ug/L	98
8) Trichlorofluoromethane	4.385	101	74457	31.99	ug/L	93
9) Ethyl Ether	4.873	59	33554	24.51	ug/L	97
10) Ethanol	5.110	45	5855	535.10	ug/L	90
11) 1,2-Dichlorotrifluoroe...	5.153	67	55730	28.50	ug/L	98
12) 1,1-Dichloroethene	5.159	61	62132	25.52	ug/L	98
13) Freon 113	5.220	101	46545	28.37	ug/L	98
14) Carbon Disulfide	5.208	76	121138	26.46	ug/L	99
15) Iodomethane	5.366	142	12581	5.68	ug/L	92
16) Acrolein	5.635	56	34973	118.89	ug/L	92
17) Allyl chloride	5.818	41	43021	25.68	ug/L	95
18) Methylene Chloride	5.958	49	54796	23.46	ug/L	97
19) Acetone	6.019	43	57481	119.30	ug/L	93
20) Methyl acetate	6.171	43	133729	141.34	ug/L	97
21) trans-1,2-Dichloroethene	6.171	61	57208	25.31	ug/L	96
22) Hexane	6.263	56	36393	26.81	ug/L	95
23) Methyl Tert Butyl Ether	6.293	73	114521	25.39	ug/L	98
24) Acetonitrile	6.622	41	40485	261.84	ug/L	93
25) Di-isopropyl ether	6.756	45	109218	25.23	ug/L	100
26) Chloroprene	6.909	53	60318	29.75	ug/L	94
27) 1,1-Dichloroethane	6.939	63	78742	26.27	ug/L	96
28) Acrylonitrile	7.000	53	80709	142.51	ug/L	97
29) ETBE	7.195	59	126344	25.25	ug/L	95
30) Tert Butyl Alcohol	6.397	59	64939	275.71	ug/L	95
31) Vinyl acetate	7.214	43	449420	152.67	ug/L	98
32) cis-1,2-Dichloroethene	7.579	96	42642	25.80	ug/L	94
33) 2,2-Dichloropropane	7.707	77	41368	17.28	ug/L	94
34) Bromochloromethane	7.811	128	20783	25.85	ug/L	96
35) Cyclohexane	7.823	56	78050	29.42	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36112.D
Acq On : 14 Dec 2022 4:18 am
Operator : courtnef
Sample : FC1217-1MSD, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 14 07:55:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.878	83	72900	25.00	ug/L		98
37) Ethyl acetate	7.982	43	205270	141.22	ug/L		98
38) Tetrahydrofuran	8.067	42	12938	28.62	ug/L		95
40) Carbon Tetrachloride	8.049	117	55635	26.16	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	64669	26.64	ug/L		95
42) 2-Butanone	8.207	43	92513	126.67	ug/L		97
43) 1,1-Dichloropropene	8.256	75	55274	25.27	ug/L		98
44) tert-Butyl formate	8.360	59	25971	40.59	ug/L		95
45) Propionitrile	8.537	54	69978	261.62	ug/L		97
46) Methacrylonitrile	8.555	41	255587	285.55	ug/L		97
47) Benzene	8.524	78	154631	24.63	ug/L		98
48) TAME	8.610	73	115680	25.90	ug/L		96
50) 1,2-Dichloroethane	8.738	62	59529	24.96	ug/L		97
51) tert Amyl alcohol	8.786	59	44031	268.12	ug/L		97
52) Trichloroethene	9.134	95	43439	25.85	ug/L		97
53) Methylcyclohexane	9.134	83	77000	29.08	ug/L		97
54) Dibromomethane	9.579	93	27334	24.72	ug/L		96
55) 1,2-Dichloropropane	9.670	63	42093	23.56	ug/L		96
56) Bromodichloromethane	9.719	83	54632	25.86	ug/L		98
57) Methyl methacrylate	9.835	41	34451	26.89	ug/L		92
58) 1,4-Dioxane	9.927	88	8512	562.13	ug/L		86
59) 2-Chloroethyl vinyl ether	10.365	63	265	0.27	ug/L	#	1
60) cis-1,3-Dichloropropene	10.359	75	55988	23.50	ug/L		100
63) Toluene	10.597	91	164207	24.19	ug/L		95
64) Isobutyl alcohol	8.677	43	33447	517.63	ug/L		96
65) 2-Nitropropane	10.829	41	66248	130.21	ug/L		94
66) 4-Methyl-2-pentanone	10.938	43	212890	120.72	ug/L		98
67) trans-1,3-Dichloropropene	10.999	75	52945	24.40	ug/L		88
68) Tetrachloroethene	10.999	166	42150	25.24	ug/L		97
69) Ethyl methacrylate	11.103	69	47819	22.52	ug/L		96
70) 1,1,2-Trichloroethane	11.164	83	33453	25.35	ug/L		98
71) Dibromochloromethane	11.359	129	42371	24.67	ug/L		98
72) 1,3-Dichloropropane	11.451	76	59803	22.73	ug/L		96
73) 1,2-Dibromoethane	11.627	107	40760	25.63	ug/L		96
74) 3,3-Dimethyl-1-butanol	11.707	57	222038	1293.20	ug/L		96
75) 2-hexanone	11.768	43	151697	125.07	ug/L		99
76) 1-Chlorohexane	12.060	91	59288	26.45	ug/L		97
77) Ethylbenzene	12.121	91	189431	24.38	ug/L		99
78) Chlorobenzene	12.133	112	111936	24.83	ug/L		88
79) 1,1,1,2-Tetrachloroethane	12.182	131	40408	26.06	ug/L		95
80) m,p-Xylene	12.261	91	281043	48.75	ug/L		99
81) o-Xylene	12.706	91	138991	25.27	ug/L		99
82) Styrene	12.755	104	101303	23.98	ug/L		99
83) Bromoform	12.822	173	25261	22.91	ug/L		95
84) Isopropylbenzene	13.005	105	181598	25.47	ug/L		100
87) cis-1,4-Dichloro-2-butene	13.676	53	10380	18.97	ug/L		90
88) n-Propylbenzene	13.426	91	224161	25.07	ug/L		97
89) Bromobenzene	13.456	156	41672	23.95	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.493	83	55993	25.62	ug/L		97
91) 1,3,5-Trimethylbenzene	13.609	105	142353	24.16	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36112.D
Acq On : 14 Dec 2022 4:18 am
Operator : courtnef
Sample : FC1217-1MSD, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 14 07:55:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

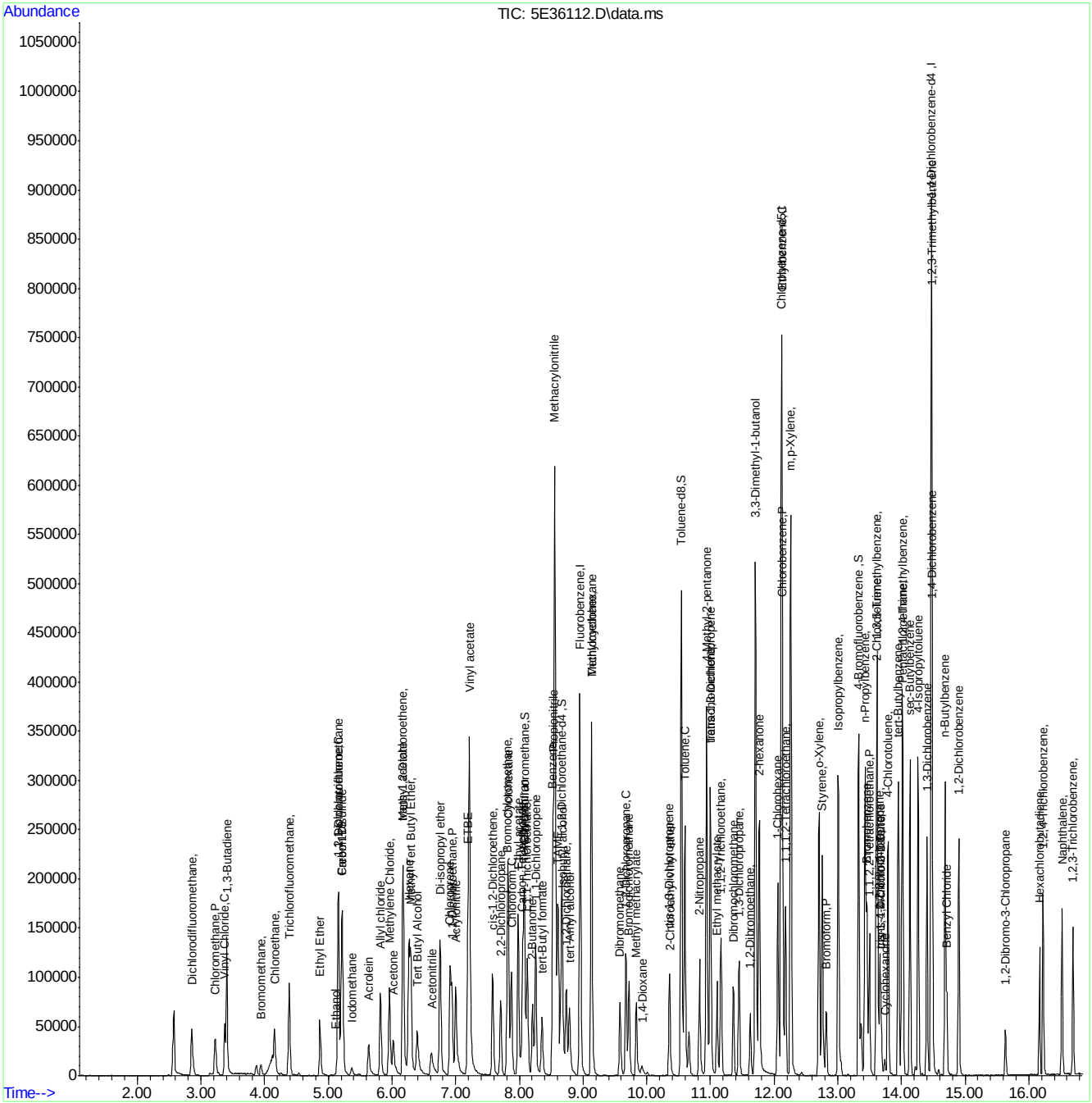
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.621	91	138183	25.18	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.676	53	10380	18.97	ug/L	90
94) 1,2,3-Trichloropropane	13.664	110	15069	23.59	ug/L	98
95) Cyclohexanone	13.737	55	7274	130.80	ug/L	96
96) 4-Chlorotoluene	13.792	91	118141	24.17	ug/L	98
98) tert-Butylbenzene	13.950	91	80407	25.25	ug/L	97
99) 1,2,4-Trimethylbenzene	14.017	105	142841	25.01	ug/L	98
100) Pentachloroethane	14.011	167	26132	25.41	ug/L	90
101) sec-Butylbenzene	14.133	105	193990	26.78	ug/L	99
102) 4-Isopropyltoluene	14.261	119	163583	25.76	ug/L	97
103) 1,3-Dichlorobenzene	14.401	146	82695	25.45	ug/L	98
104) 1,2,3-Trimethylbenzene	14.474	105	155106	26.90	ug/L	99
105) 1,4-Dichlorobenzene	14.487	146	87618	24.65	ug/L	96
106) n-Butylbenzene	14.688	92	78386	23.28	ug/L	92
107) Benzyl Chloride	14.712	126	9684	14.58	ug/L	92
108) 1,2-Dichlorobenzene	14.901	146	78917	25.37	ug/L	97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	7543	22.39	ug/L	93
110) Hexachlorobutadiene	16.169	225	15159	23.07	ug/L	90
111) 1,2,4-Trichlorobenzene	16.224	180	44718	25.80	ug/L	95
112) Naphthalene	16.523	128	112271	23.65	ug/L	99
113) 1,2,3-Trichlorobenzene	16.693	180	37102	25.41	ug/L	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36112.D
Acq On : 14 Dec 2022 4:18 am
Operator : courtnef
Sample : FC1217-1MSD, 5X
Misc : MS53006,V5E1623,,,,,5
ALS Vial : 53 Sample Multiplier: 1

Quant Time: Dec 14 07:55:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:25:39 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	669704	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	471270	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	168665	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	177213	47.31	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 94.62%			
50) 1,2-Dichloroethane-d4	8.262	65	151402	43.62	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 87.24%			
63) Toluene-d8	10.152	98	643212	50.85	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.70%			
86) 4-Bromofluorobenzene	12.944	174	152902	45.60	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 91.20%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	101950	21.71	ug/L	97
3) Chloromethane	3.019	50	92501	22.46	ug/L	97
4) 1,3-butadiene	3.190	39	149806	36.22	ug/L	97
5) Vinyl Chloride	3.160	62	108418	26.04	ug/L	99
6) Bromomethane	3.684	94	16070	9.43	ug/L	96
7) Chloroethane	3.885	64	65190	25.73	ug/L	96
8) Trichlorofluoromethane	4.098	101	154204	24.17	ug/L	98
9) Ethyl Ether	4.556	59	59853	19.38	ug/L	98
10) Ethanol	4.781	45	6330	444.00	ug/L	95
11) 1,2-Dichlorotrifluoroe...	4.824	67	104387	22.12	ug/L	97
12) 1,1-Dichloroethene	4.824	61	130807	22.56	ug/L	99
13) Freon 113	4.885	101	81724	20.71	ug/L	96
14) Carbon Disulfide	4.867	76	241003	21.54	ug/L	99
15) Iodomethane	5.025	142	19274	18.99	ug/L	90
16) Acrolein	5.281	56	50479	78.15	ug/L	99
17) Allyl chloride	5.458	41	119414	23.08	ug/L	97
18) Methylene Chloride	5.592	49	117608	21.52	ug/L	98
19) Acetone	5.659	43	95497	101.22	ug/L	99
20) Methyl acetate	5.805	43	278193	113.55	ug/L	99
21) trans-1,2-Dichloroethene	5.799	61	126180	22.50	ug/L	95
22) Hexane	5.885	56	55124m	20.93	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	201801	19.57	ug/L	98
24) Tert Butyl Alcohol	6.025	59	42798	197.32	ug/L	94
25) Acetonitrile	6.232	41	79702	209.81	ug/L	96
26) Di-isopropyl ether	6.372	45	258592	20.58	ug/L	99
27) Chloroprene	6.513	53	119264	25.73	ug/L	99
28) 1,1-Dichloroethane	6.543	63	194071	28.52	ug/L	99
29) Acrylonitrile	6.604	52	122133	114.01	ug/L	99
30) ETBE	6.799	59	218747	19.53	ug/L	98
31) Vinyl acetate	6.824	43	1032319	144.59	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	313879	77.10	ug/L	96
33) 2,2-Dichloropropane	7.299	77	93834	19.56	ug/L	97
34) Bromochloromethane	7.403	128	47664	22.00	ug/L	99
35) Cyclohexane	7.415	56	138929	23.75	ug/L	97
36) Chloroform	7.476	83	155888	21.81	ug/L	98
37) Ethyl acetate	7.592	43	405743	124.98	ug/L	99
38) Tetrahydrofuran	7.671	42	22357	22.72	ug/L	98
40) Carbon Tetrachloride	7.640	117	105875	25.17	ug/L	99
41) 1,1,1-Trichloroethane	7.720	97	195809	34.47	ug/L	99
42) 2-Butanone	7.811	43	159797	108.80	ug/L	99
43) 1,1-Dichloropropene	7.848	75	113730	21.72	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:25:39 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) tert-Butyl formate	7.957	59	128124	75.21	ug/L	89
45) Propionitrile	8.140	54	104488	230.74	ug/L	96
46) Methacrylonitrile	8.165	41	593207	225.05	ug/L	98
47) Benzene	8.122	78	337776	22.54	ug/L	99
48) TAME	8.214	73	209416	21.60	ug/L	95
49) Isobutyl alcohol	8.299	43	40528m	432.98	ug/L	
51) 1,2-Dichloroethane	8.335	62	128856	21.15	ug/L	98
52) Tert Amyl Alcohol	8.409	59	30541	205.34	ug/L	85
53) Trichloroethene	8.732	95	122230	28.84	ug/L	99
54) Methylcyclohexane	8.726	83	132501	24.17	ug/L	99
55) Dibromomethane	9.177	93	57441	20.81	ug/L	93
56) 1,2-Dichloropropane	9.274	63	81521	20.86	ug/L	98
57) Bromodichloromethane	9.329	83	110481	22.68	ug/L	98
58) Methyl methacrylate	9.457	41	65867	23.24	ug/L	96
59) 1,4-Dioxane	9.536	88	9481	349.66	ug/L	96
60) 2-Chloroethyl vinyl ether	9.884	63	14769	5.76	ug/L	92
61) cis-1,3-Dichloropropene	9.969	75	112430	20.84	ug/L	99
64) Toluene	10.207	91	353828	23.47	ug/L	100
65) 2-Nitropropane	10.451	41	48438	140.00	ug/L	98
66) 4-Methyl-2-pentanone	10.567	43	376265	111.63	ug/L	98
67) trans-1,3-Dichloropropene	10.616	75	107995	24.92	ug/L	89
68) Tetrachloroethene	10.603	166	96906	22.69	ug/L	98
69) Ethyl methacrylate	10.737	69	83060	24.10	ug/L	95
70) 1,1,2-Trichloroethane	10.780	83	69920	24.07	ug/L	99
71) Dibromochloromethane	10.969	129	79877	23.89	ug/L	96
72) 1,3-Dichloropropane	11.067	76	125904	21.50	ug/L	98
73) 1,2-Dibromoethane	11.231	107	81617	23.35	ug/L	100
74) 3,3-dimethyl-1-butanol	11.341	57	150859	1405.40	ug/L	98
75) 2-hexanone	11.396	43	255334	114.26	ug/L	99
76) 1-Chlorohexane	11.682	91	104433m	24.47	ug/L	
77) Ethylbenzene	11.743	91	404966	23.84	ug/L	100
78) Chlorobenzene	11.743	112	241231	23.68	ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.792	131	77872	25.61	ug/L	98
80) m,p-Xylene	11.884	91	617199	47.56	ug/L	99
81) o-Xylene	12.322	91	300789	23.61	ug/L	99
82) Styrene	12.377	104	225435	23.93	ug/L	98
83) Bromoform	12.432	173	44675	23.93	ug/L	97
84) Isopropylbenzene	12.633	105	358792	23.87	ug/L	98
87) cis-1,4-Dichloro-2-butene	12.993	53	18711	18.29	ug/L	91
88) n-Propylbenzene	13.054	91	443319	25.40	ug/L	99
89) Bromobenzene	13.066	156	100121	22.81	ug/L	98
90) 1,1,2,2-Tetrachloroethane	13.127	83	100965	24.62	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	298529	24.24	ug/L	98
92) 2-Chlorotoluene	13.408	91	268790	24.47	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	17517	19.79	ug/L	87
94) 1,2,3-Trichloropropane	13.286	110	27273	22.23	ug/L	97
95) Cyclohexanone	13.353	55	7538	103.44	ug/L	94
96) 4-Chlorotoluene	13.408	91	268790	24.47	ug/L	99
97) tert-Butylbenzene	13.578	91	167048	24.44	ug/L	98
99) 1,2,4-Trimethylbenzene	13.645	105	301096	25.05	ug/L	99
100) Pentachloroethane	13.627	167	47312	28.99	ug/L	99
101) sec-Butylbenzene	13.761	105	364856	26.68	ug/L	99
102) 4-Isopropyltoluene	13.895	119	304167	25.68	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	187712	24.59	ug/L	99
104) 1,2,3-Trimethylbenzene	14.109	105	322379	26.23	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	195883	24.05	ug/L	97
106) n-Butylbenzene	14.328	92	148784	23.69	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:25:39 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

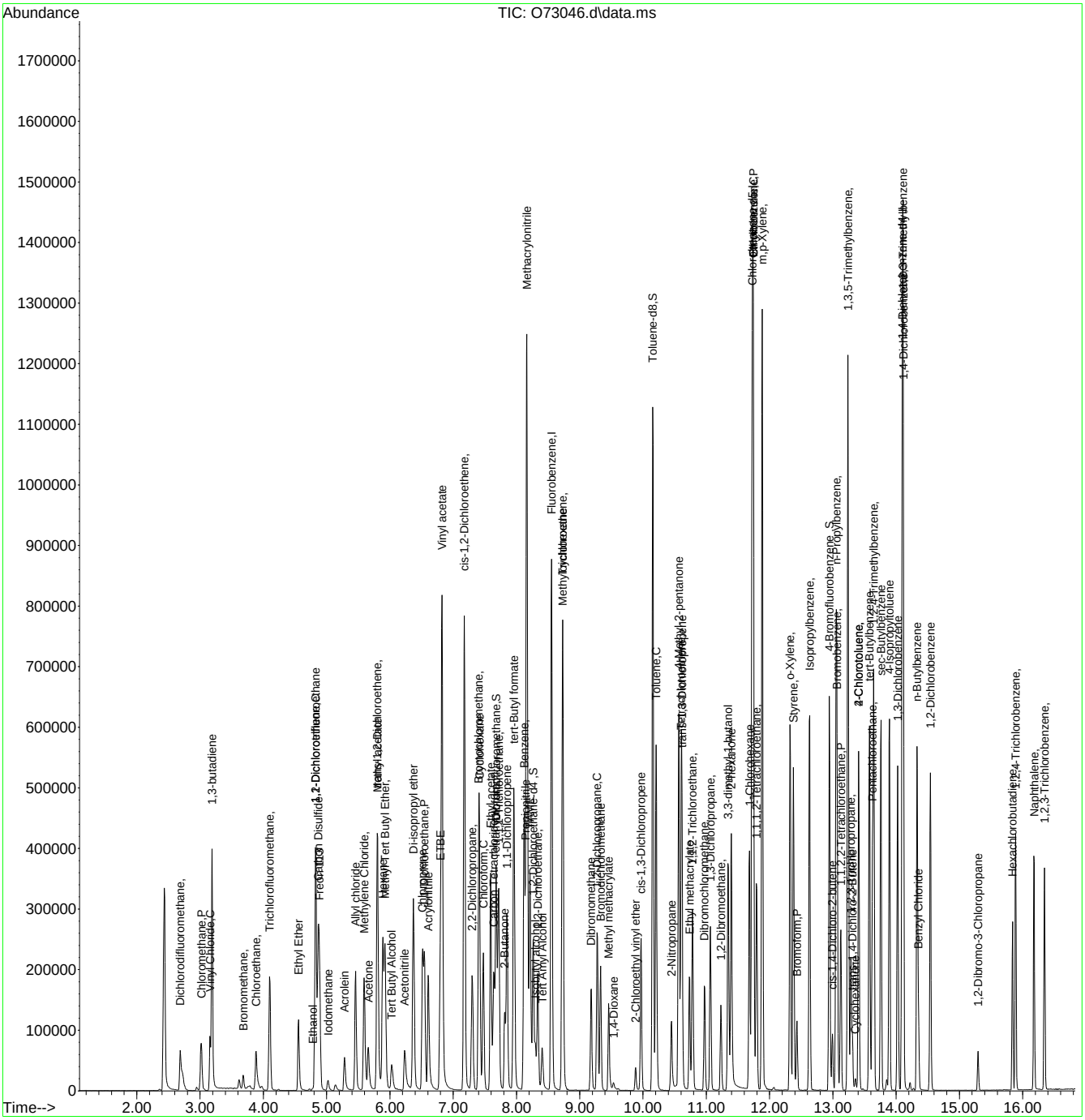
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) Benzyl Chloride	14.353	126	15442	18.92	ug/L	#	74
108) 1,2-Dichlorobenzene	14.542	146	175285	23.66	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.297	75	11914	23.08	ug/L		94
110) Hexachlorobutadiene	15.840	225	32944	20.43	ug/L		93
111) 1,2,4-Trichlorobenzene	15.889	180	93495	20.49	ug/L		97
112) Naphthalene	16.181	128	239528	21.03	ug/L		100
113) 1,2,3-Trichlorobenzene	16.346	180	85265	20.13	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:25:39 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

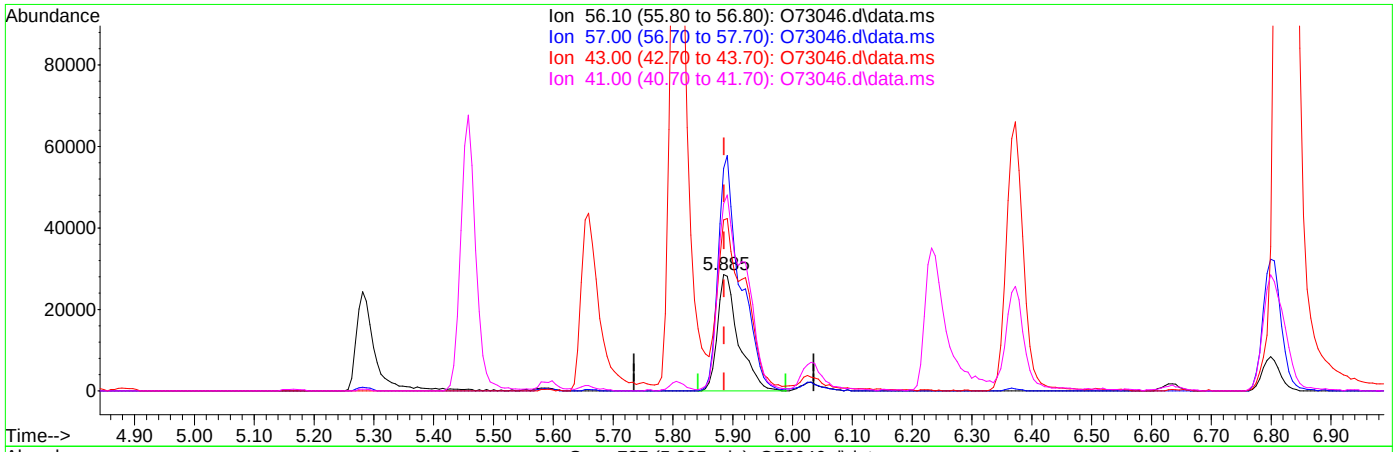
Sample Number: FC1196-11MS
Lab FileID: O73046.D
Injection Time: 12/14/22 19:38
Method: SW846 8260D
Analyst approved: 12/15/22 02:51 Jennifer Fereira
Supervisor approved: 12/15/22 13:17 Karen Watson

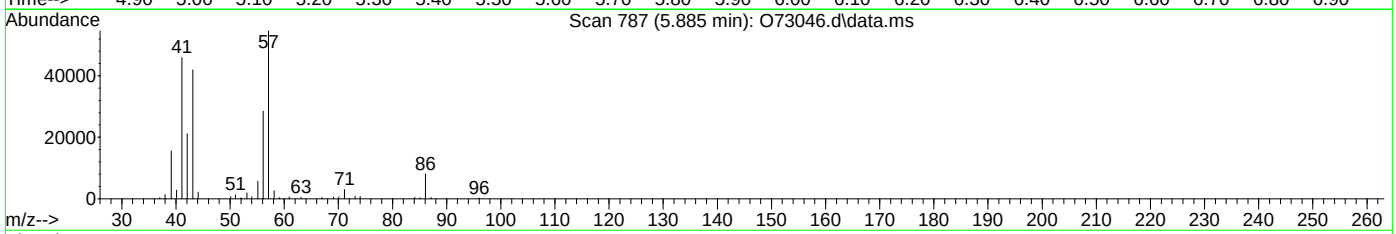
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

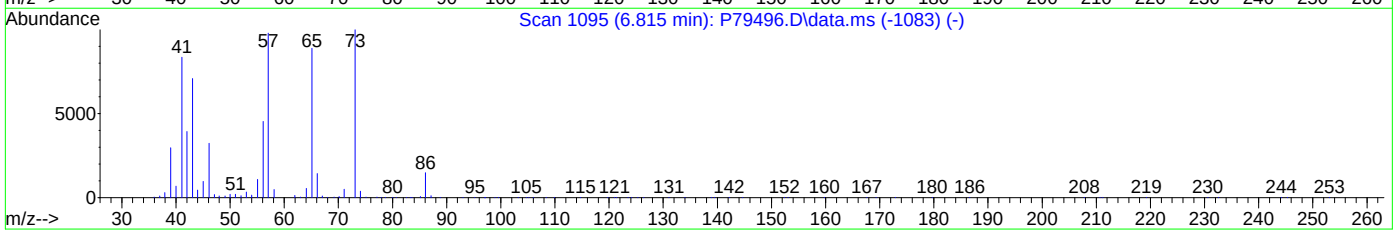
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73046.d\data.ms

(22) Hexane

5.885min (-0.000) 26.46ug/L

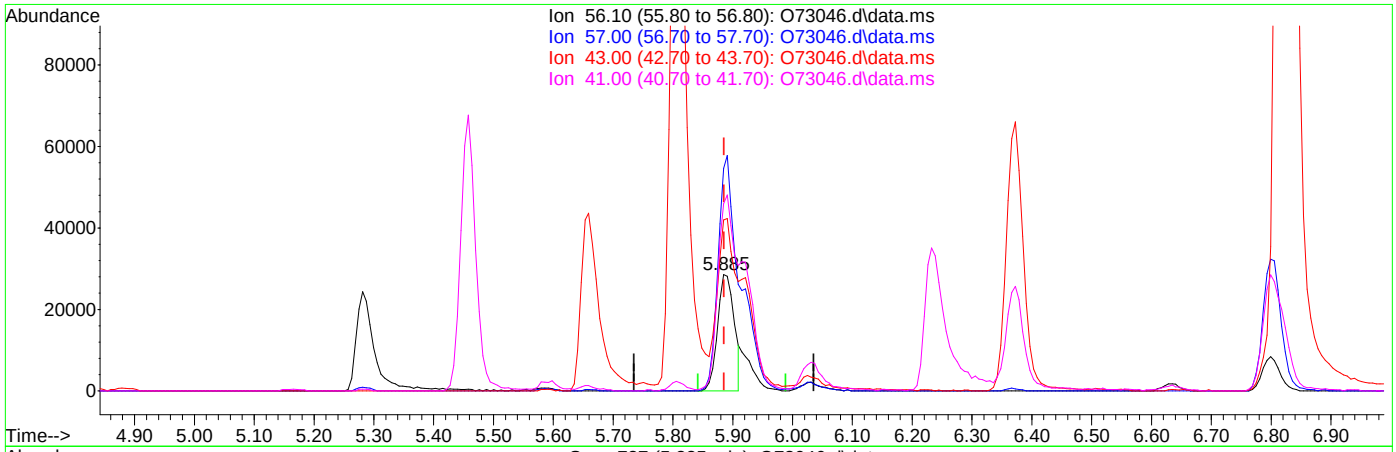
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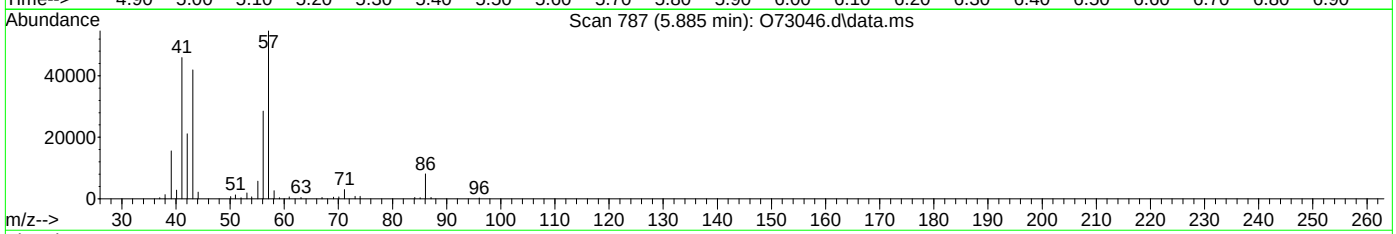
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	191.45
43.00	143.30	142.67
41.00	165.60	159.91

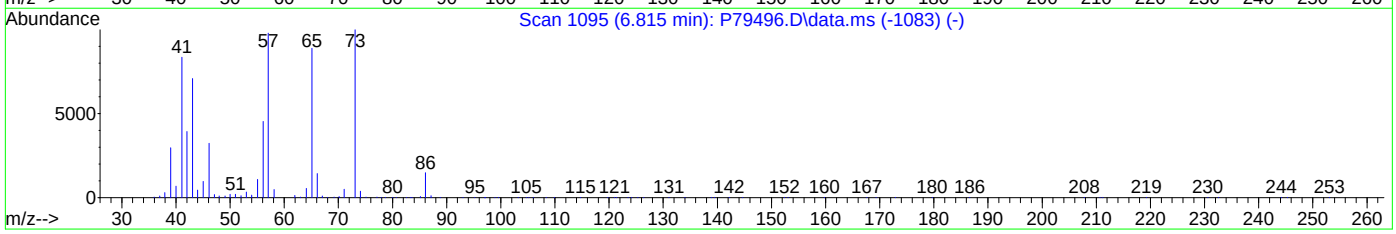
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73046.d\data.ms

(22) Hexane

5.885min (-0.000) 20.93ug/L m

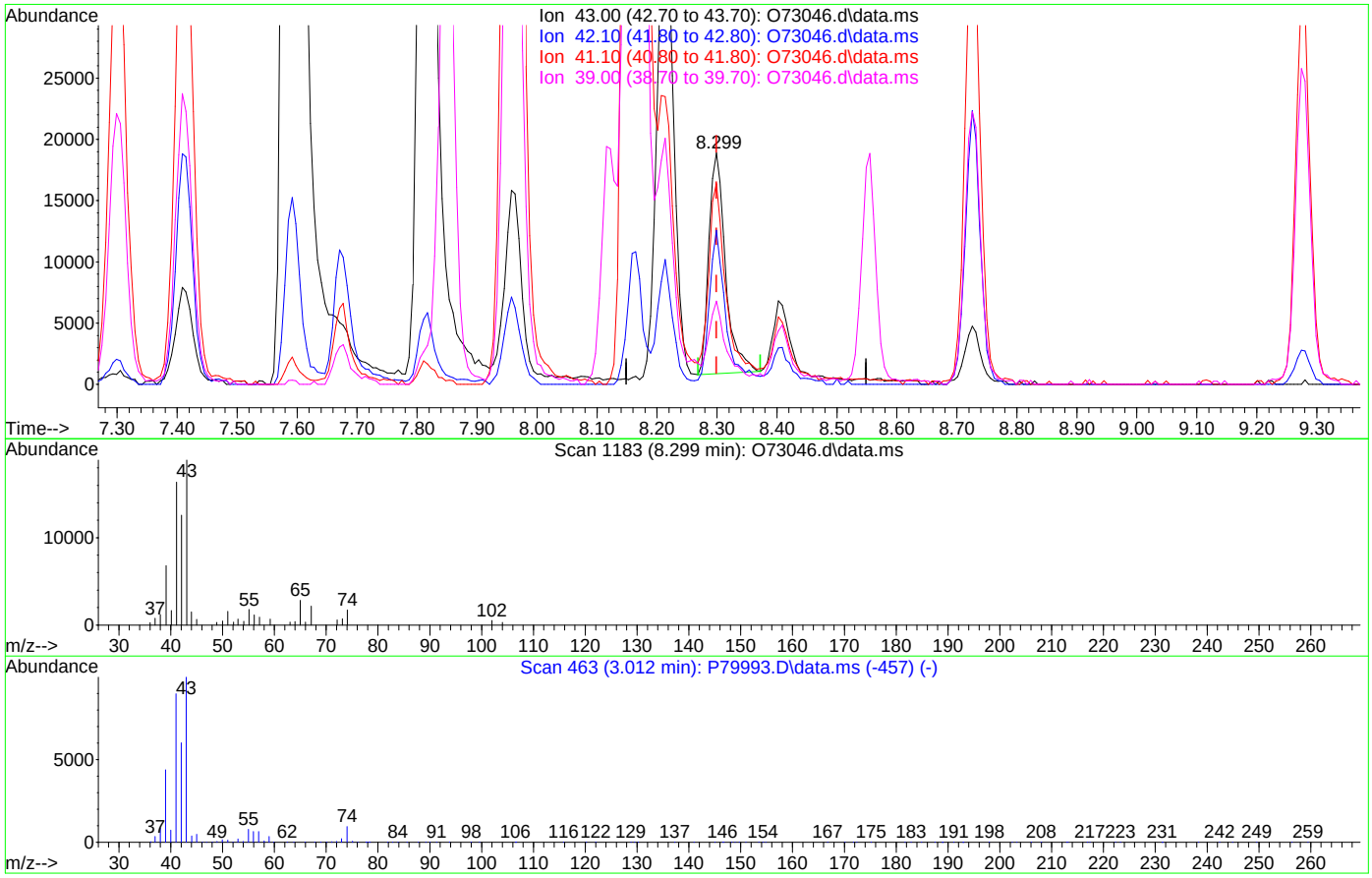
response 55124

Ion	Exp%	Act%
56.10	100	100
57.00	191.60	191.45
43.00	143.30	146.97
41.00	165.60	161.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73046.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 371.64ug/L

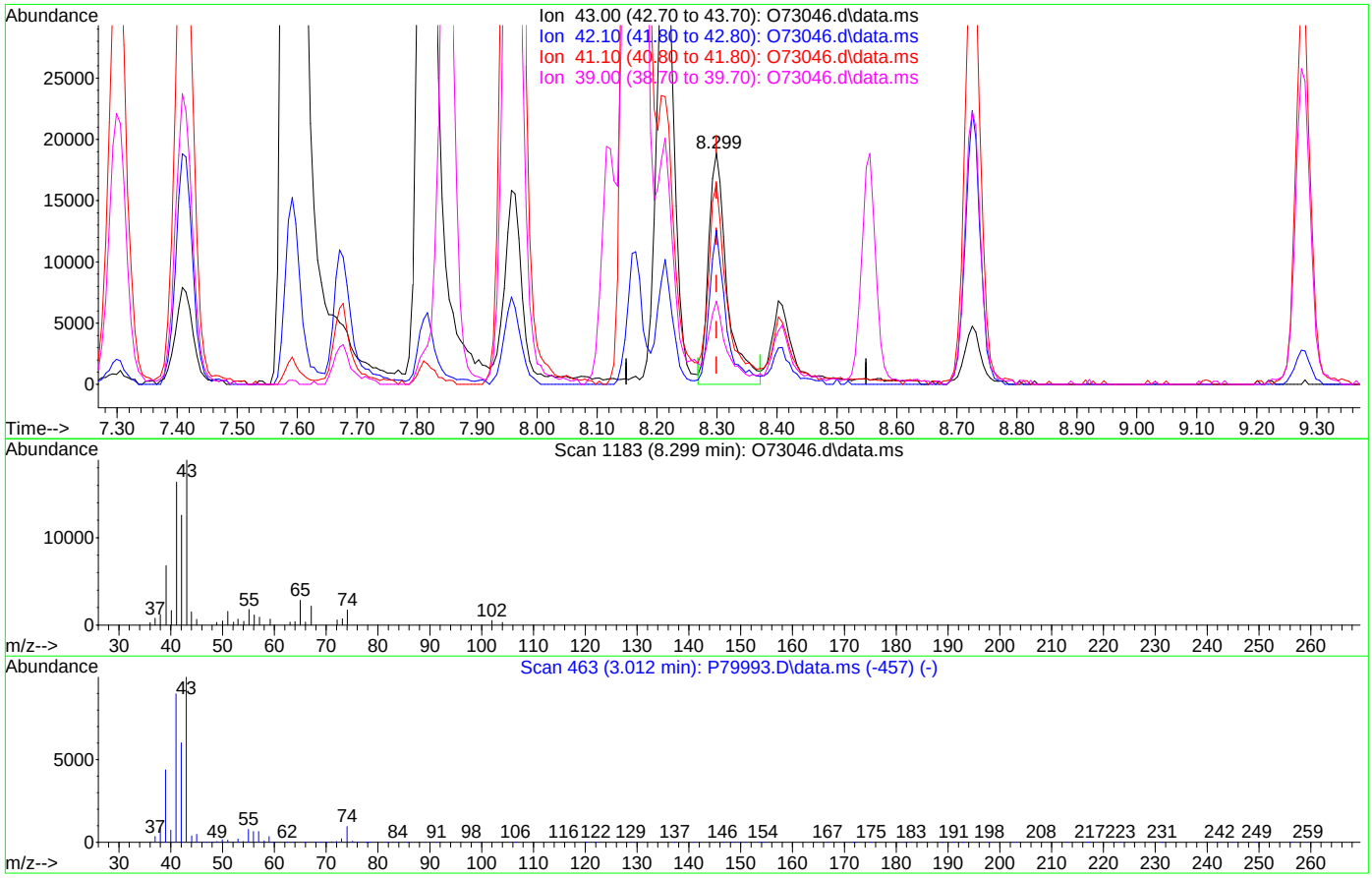
response 34735

Ion	Exp%	Act%
43.00	100	100
42.10	58.40	67.41
41.10	73.80	83.37
39.00	31.30	32.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73046.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 432.98ug/L m

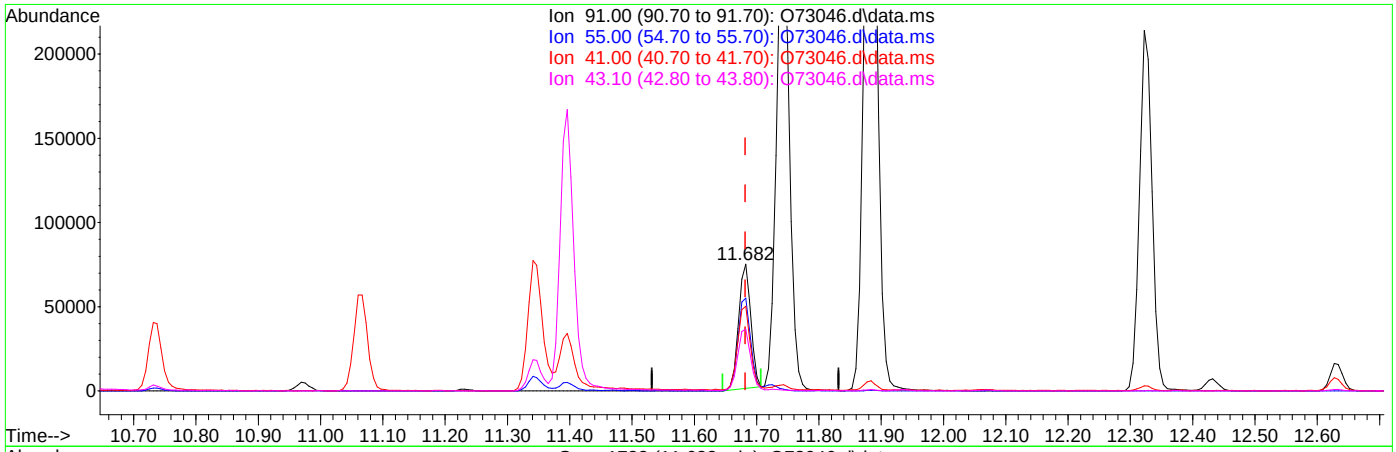
response 40528

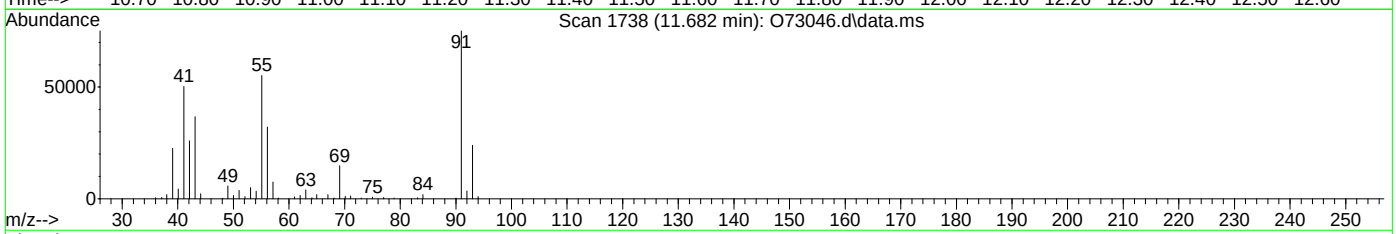
Ion	Exp%	Act%
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42.10	58.40	66.53
41.10	73.80	86.62
39.00	31.30	36.02

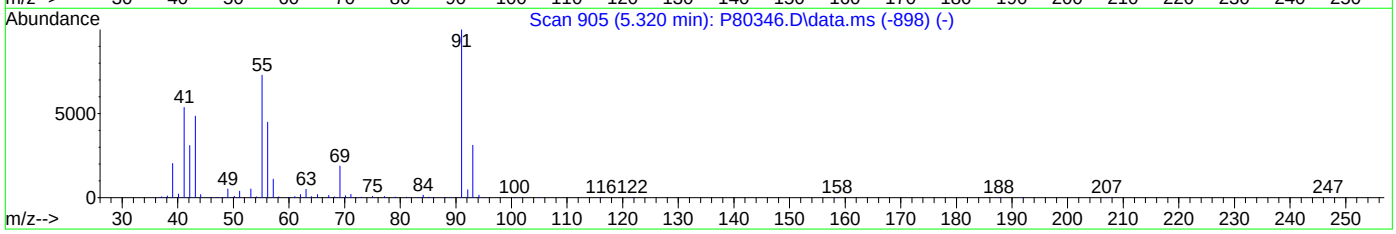
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73046.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 23.35ug/L

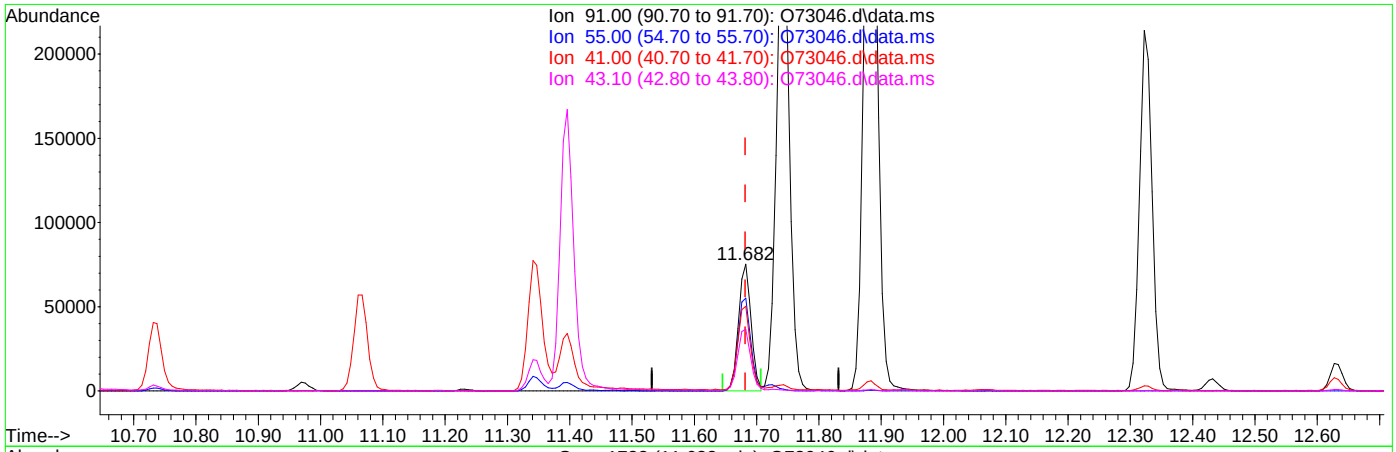
response 99656

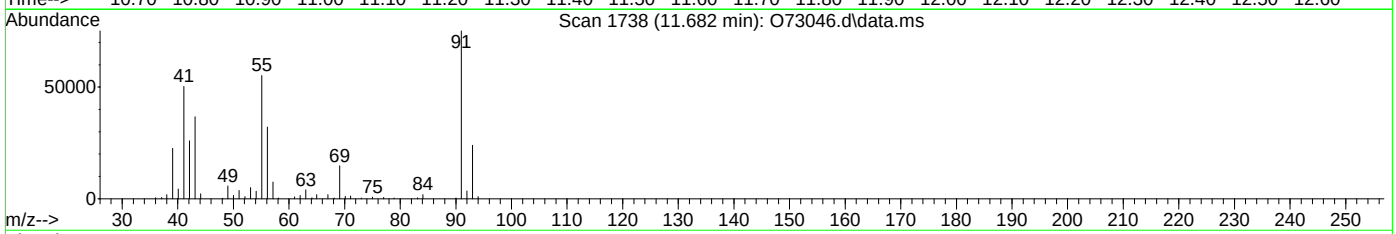
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	73.37
41.00	64.60	65.80
43.10	48.40	48.30

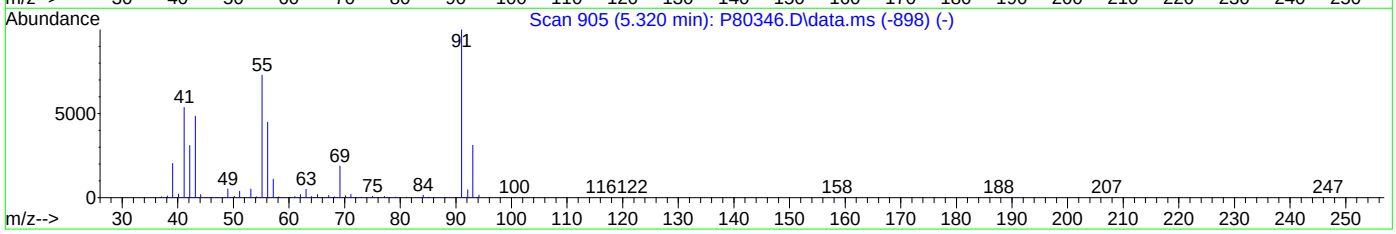
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73046.d
Acq On : 14 Dec 2022 7:38 pm
Operator : adelardl
Sample : FC1196-11MS Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 27 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:50 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73046.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 24.47ug/L m

response 104433

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	73.37
41.00	64.60	66.83
43.10	48.40	48.82

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:16 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	684130	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	485883	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	190695	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.683	113	181872	47.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.06%			
50) 1,2-Dichloroethane-d4	8.262	65	154320	43.52	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 87.04%			
63) Toluene-d8	10.152	98	656922	50.38	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.76%			
86) 4-Bromofluorobenzene	12.944	174	168909	44.56	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 89.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	118571	24.72	ug/L	99
3) Chloromethane	3.019	50	109560	26.04	ug/L	98
4) 1,3-butadiene	3.190	39	152103	36.00	ug/L	100
5) Vinyl Chloride	3.160	62	124888	29.37	ug/L	100
6) Bromomethane	3.684	94	23995	13.59	ug/L	97
7) Chloroethane	3.885	64	76101	29.46	ug/L	97
8) Trichlorofluoromethane	4.105	101	175994	26.94	ug/L	98
9) Ethyl Ether	4.556	59	63460	20.12	ug/L	96
10) Ethanol	4.775	45	7989	548.55	ug/L	89
11) 1,2-Dichlorotrifluoroe...	4.824	67	109428	22.70	ug/L	97
12) 1,1-Dichloroethene	4.830	61	137818	23.26	ug/L	99
13) Freon 113	4.885	101	87654	21.74	ug/L	96
14) Carbon Disulfide	4.867	76	254687	22.28	ug/L	100
15) Iodomethane	5.025	142	33130	26.73	ug/L	93
16) Acrolein	5.281	56	54253	82.25	ug/L	99
17) Allyl chloride	5.458	41	127157	24.06	ug/L	99
18) Methylene Chloride	5.592	49	123142	22.06	ug/L	98
19) Acetone	5.659	43	101131	104.99	ug/L	99
20) Methyl acetate	5.805	43	286733	114.57	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	132433	23.12	ug/L	95
22) Hexane	5.891	56	61146m	22.73	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	215205	20.43	ug/L	99
24) Tert Butyl Alcohol	6.031	59	48973	220.88	ug/L	88
25) Acetonitrile	6.232	41	86581	223.12	ug/L	96
26) Di-isopropyl ether	6.372	45	274470	21.38	ug/L	99
27) Chloroprene	6.519	53	125126	26.42	ug/L	96
28) 1,1-Dichloroethane	6.543	63	202586	29.15	ug/L	99
29) Acrylonitrile	6.610	52	119568	109.27	ug/L	96
30) ETBE	6.799	59	232955	20.36	ug/L	99
31) Vinyl acetate	6.824	43	1015663	139.25	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	319084	76.72	ug/L	97
33) 2,2-Dichloropropane	7.299	77	100711	20.56	ug/L	99
34) Bromochloromethane	7.409	128	48412	21.87	ug/L	96
35) Cyclohexane	7.415	56	146192	24.47	ug/L	96
36) Chloroform	7.476	83	164375	22.51	ug/L	97
37) Ethyl acetate	7.592	43	382769	115.42	ug/L	100
38) Tetrahydrofuran	7.671	42	23211	23.09	ug/L	97
40) Carbon Tetrachloride	7.647	117	112030	26.07	ug/L	97
41) 1,1,1-Trichloroethane	7.720	97	204159	35.19	ug/L	99
42) 2-Butanone	7.811	43	167995	111.97	ug/L	99
43) 1,1-Dichloropropene	7.848	75	120659	22.56	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:16 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
44) tert-Butyl formate	7.957	59	135469	77.65	ug/L		90
45) Propionitrile	8.140	54	105682	228.46	ug/L		98
46) Methacrylonitrile	8.165	41	612201	227.36	ug/L		99
47) Benzene	8.122	78	352988	23.06	ug/L		99
48) TAME	8.213	73	220911	22.31	ug/L		97
49) Isobutyl alcohol	8.299	43	45216m	472.43	ug/L		
51) 1,2-Dichloroethane	8.335	62	133715	21.48	ug/L		98
52) Tert Amyl Alcohol	8.409	59	33454	219.66	ug/L		82
53) Trichloroethene	8.732	95	127985	29.56	ug/L		100
54) Methylcyclohexane	8.726	83	136979	24.46	ug/L		98
55) Dibromomethane	9.177	93	60576	21.48	ug/L		95
56) 1,2-Dichloropropane	9.274	63	85819	21.50	ug/L		97
57) Bromodichloromethane	9.329	83	115003	23.11	ug/L		98
58) Methyl methacrylate	9.457	41	71156	24.48	ug/L		99
59) 1,4-Dioxane	9.536	88	11684	421.82	ug/L		91
60) 2-Chloroethyl vinyl ether	9.884	63	12043	4.60	ug/L		92
61) cis-1,3-Dichloropropene	9.969	75	120128	21.80	ug/L		99
64) Toluene	10.207	91	367245	23.62	ug/L		98
65) 2-Nitropropane	10.445	41	51183	142.88	ug/L		98
66) 4-Methyl-2-pentanone	10.567	43	389632	112.12	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	114670	25.60	ug/L		88
68) Tetrachloroethene	10.603	166	100513	22.83	ug/L		96
69) Ethyl methacrylate	10.731	69	89334	25.04	ug/L		99
70) 1,1,2-Trichloroethane	10.780	83	72536	24.22	ug/L		97
71) Dibromochloromethane	10.975	129	85174	24.64	ug/L		99
72) 1,3-Dichloropropane	11.067	76	128787	21.33	ug/L		99
73) 1,2-Dibromoethane	11.231	107	83806	23.25	ug/L		99
74) 3,3-dimethyl-1-butanol	11.341	57	164568	1471.44	ug/L		98
75) 2-hexanone	11.396	43	265157	115.09	ug/L		99
76) 1-Chlorohexane	11.682	91	110771m	25.17	ug/L		
77) Ethylbenzene	11.743	91	419484	23.96	ug/L		99
78) Chlorobenzene	11.743	112	253513	24.14	ug/L		98
79) 1,1,1,2-Tetrachloroethane	11.792	131	82468	26.25	ug/L		98
80) m,p-Xylene	11.884	91	645174	48.22	ug/L		98
81) o-Xylene	12.322	91	313554	23.87	ug/L		100
82) Styrene	12.377	104	236611	24.36	ug/L		98
83) Bromoform	12.432	173	47444	24.56	ug/L		98
84) Isopropylbenzene	12.633	105	379021	24.46	ug/L		98
87) cis-1,4-Dichloro-2-butene	12.993	53	20339	17.65	ug/L		95
88) n-Propylbenzene	13.054	91	454601	23.04	ug/L		99
89) Bromobenzene	13.066	156	103440	20.84	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.127	83	104520	22.54	ug/L		99
91) 1,3,5-Trimethylbenzene	13.237	105	313078	22.48	ug/L		99
92) 2-Chlorotoluene	13.408	91	282500	22.75	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	18884	18.94	ug/L	#	85
94) 1,2,3-Trichloropropane	13.286	110	28151	20.30	ug/L		96
95) Cyclohexanone	13.359	55	8454	102.61	ug/L		93
96) 4-Chlorotoluene	13.408	91	282500	22.75	ug/L		99
97) tert-Butylbenzene	13.578	91	173719	22.48	ug/L		99
99) 1,2,4-Trimethylbenzene	13.645	105	315323	23.20	ug/L		99
100) Pentachloroethane	13.627	167	49378	27.12	ug/L		98
101) sec-Butylbenzene	13.761	105	383732	24.82	ug/L		99
102) 4-Isopropyltoluene	13.895	119	315494	23.56	ug/L		99
103) 1,3-Dichlorobenzene	14.023	146	195987	22.71	ug/L		99
104) 1,2,3-Trimethylbenzene	14.109	105	335926	24.17	ug/L		99
105) 1,4-Dichlorobenzene	14.115	146	202495	21.99	ug/L		97
106) n-Butylbenzene	14.328	92	154876	21.81	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:16 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

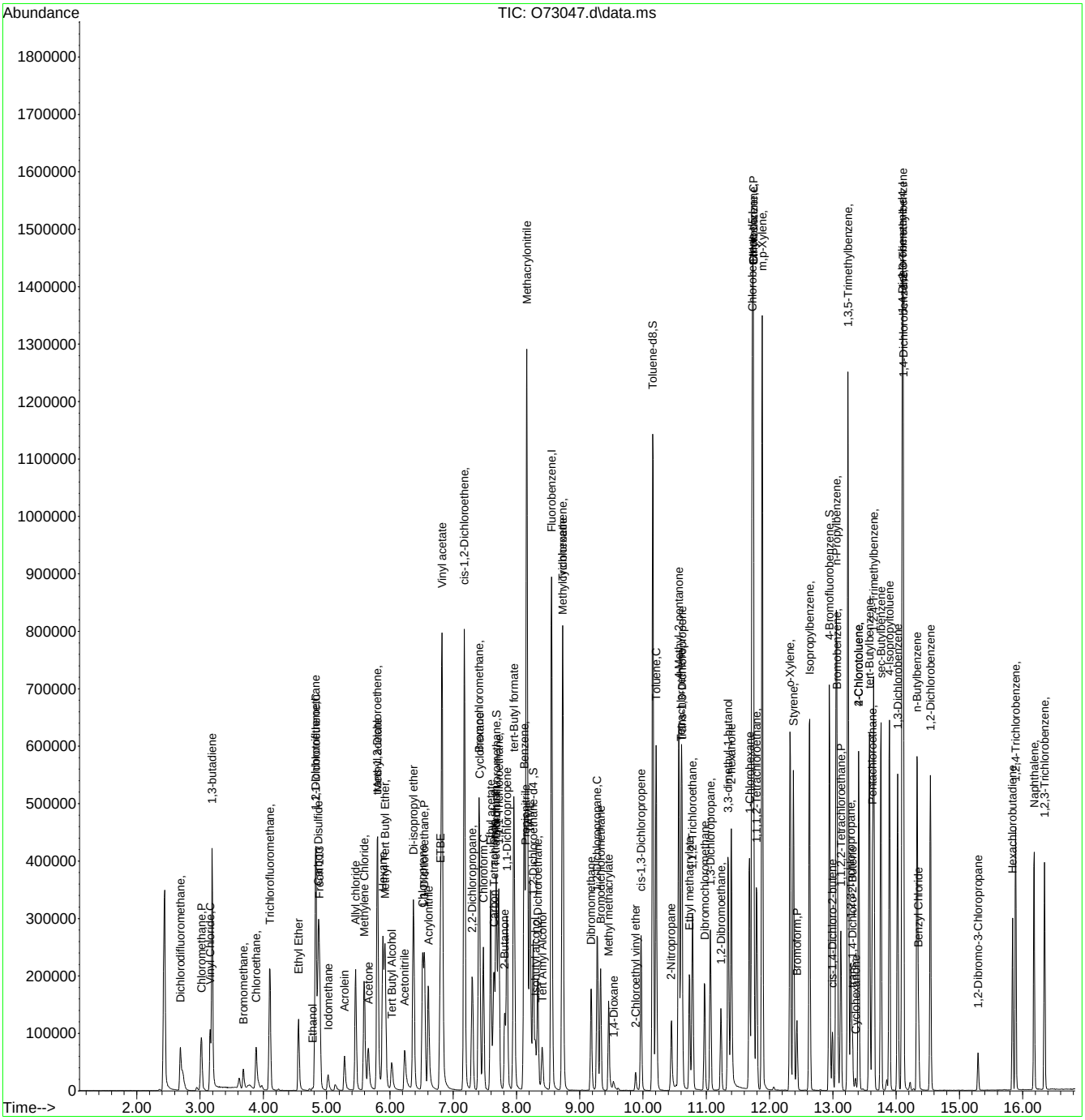
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) Benzyl Chloride	14.353	126	16477	18.03	ug/L	#	70
108) 1,2-Dichlorobenzene	14.542	146	183353	21.89	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.297	75	11986	20.80	ug/L		96
110) Hexachlorobutadiene	15.840	225	35240	19.33	ug/L		90
111) 1,2,4-Trichlorobenzene	15.889	180	100237	19.43	ug/L		97
112) Naphthalene	16.181	128	251965	19.56	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	91004	19.01	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:16 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

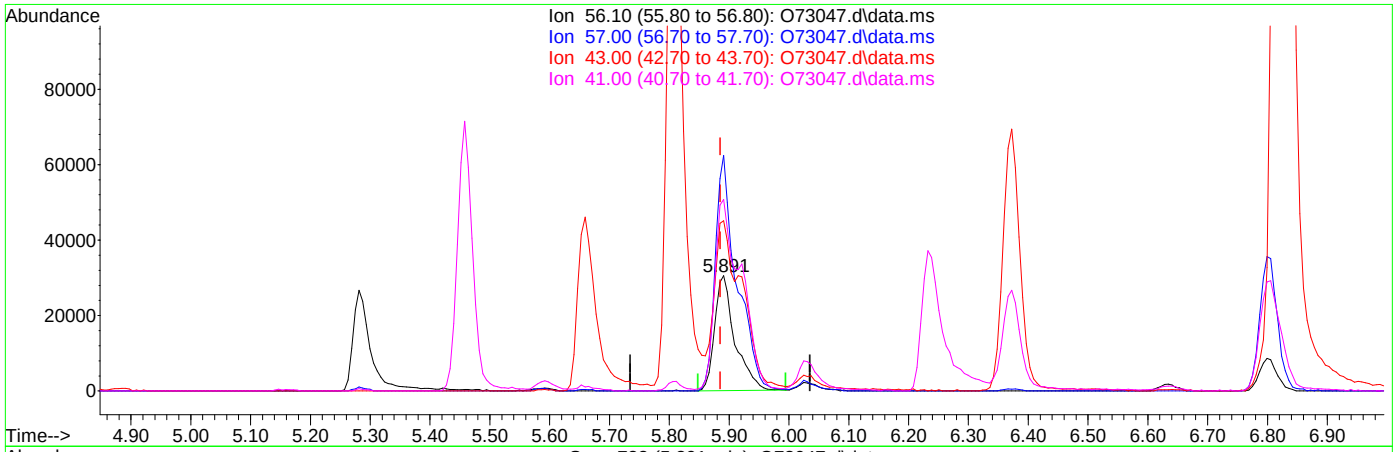
Sample Number: FC1196-11MSD
Lab FileID: O73047.D
Injection Time: 12/14/22 20:03
Method: SW846 8260D
Analyst approved: 12/15/22 02:51 Jennifer Fereira
Supervisor approved: 12/15/22 13:17 Karen Watson

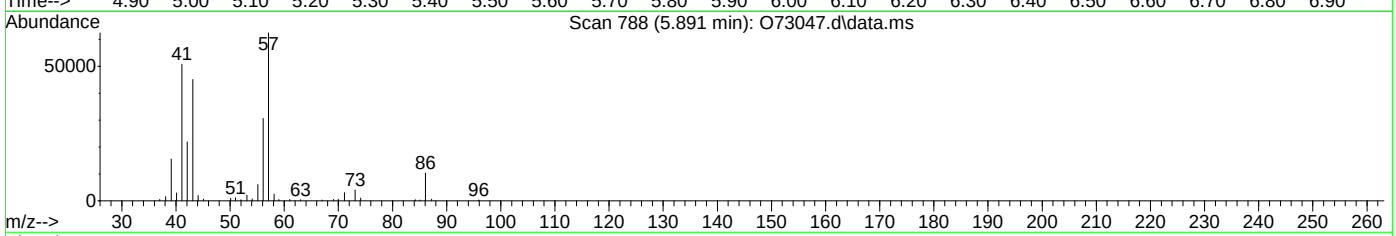
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

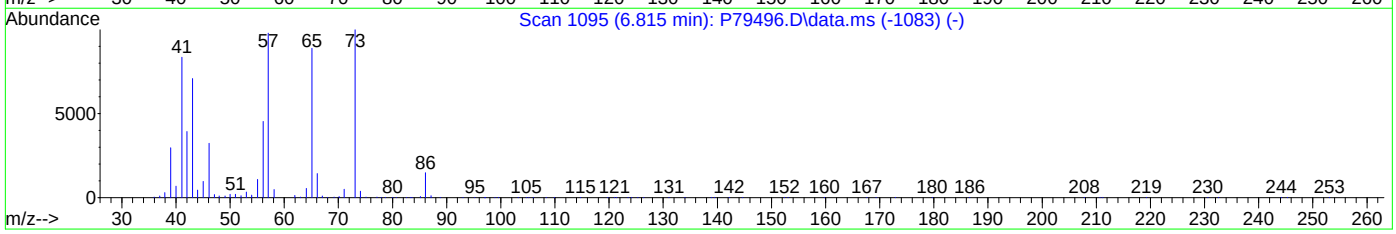
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73047.d\data.ms

(22) Hexane

5.891min (+0.006) 26.69ug/L

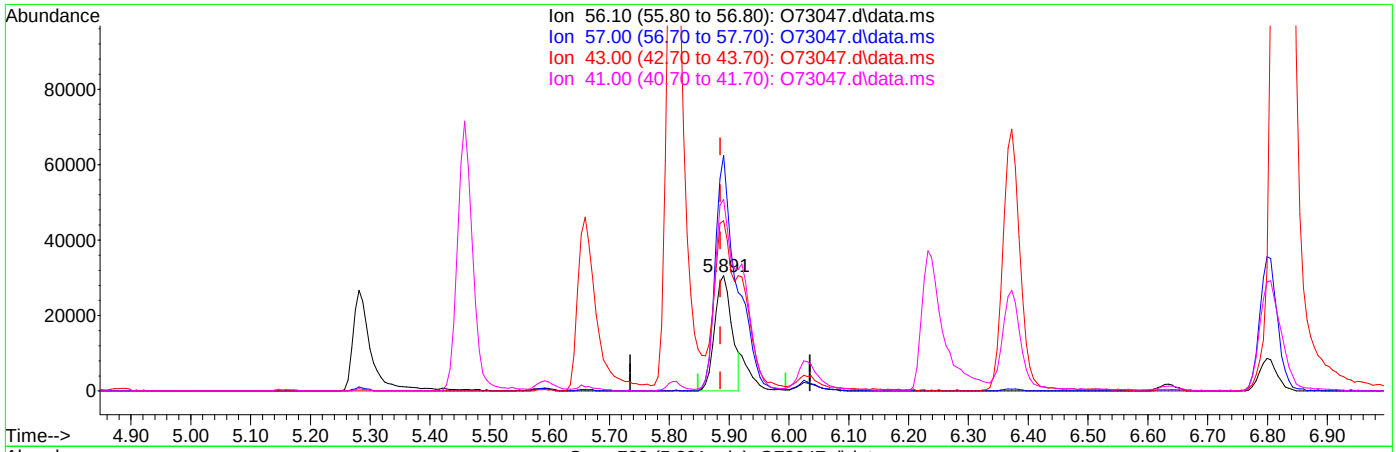
response 71800

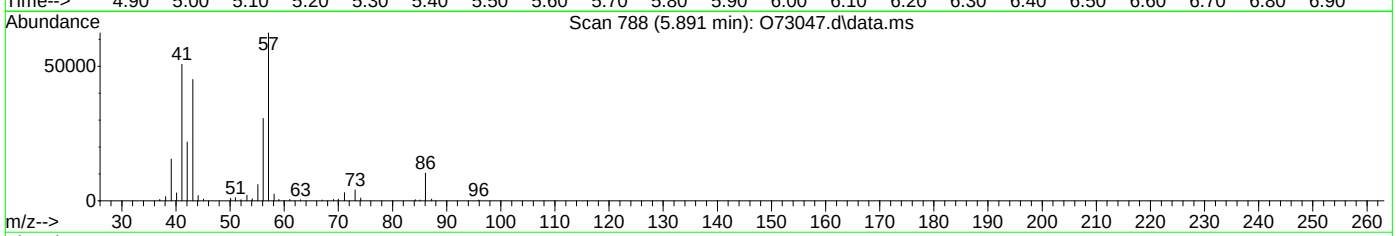
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	204.40
43.00	143.30	143.87
41.00	165.60	164.44

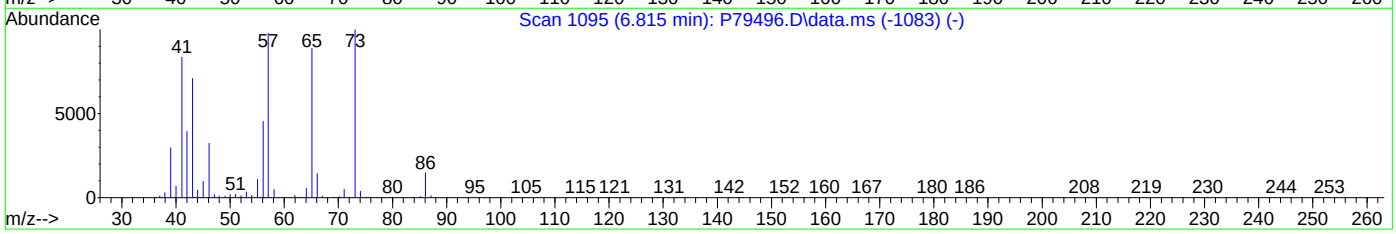
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73047.d\data.ms

(22) Hexane

5.891min (+0.006) 22.73ug/L m

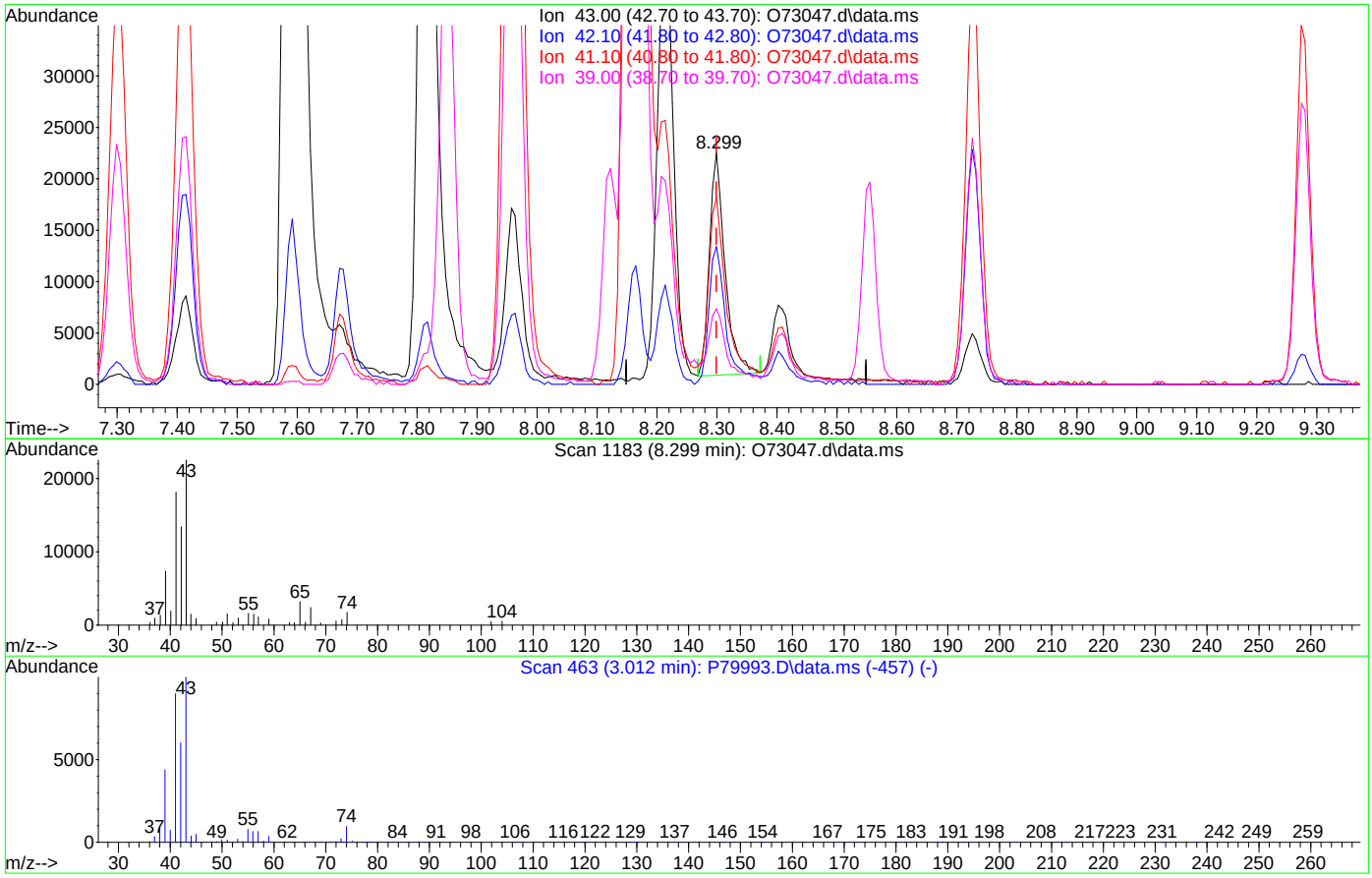
response 61146

Ion	Exp%	Act%
56.10	100	100
57.00	191.60	204.40
43.00	143.30	147.66
41.00	165.60	166.14

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73047.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 410.27ug/L

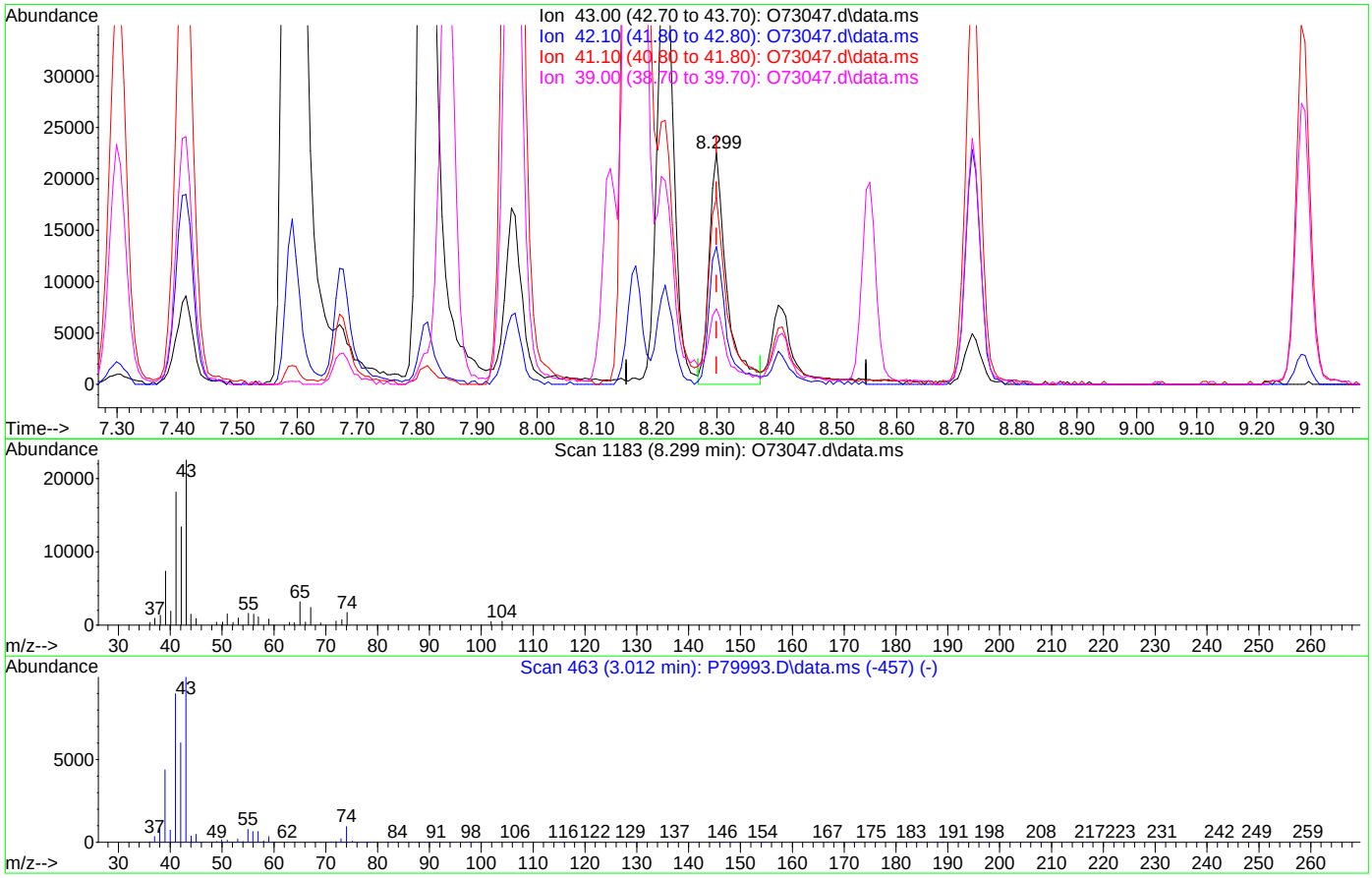
response 39208

Ion	Exp%	Act%
43.00	100	100
42.10	58.40	60.39
41.10	73.80	77.95
39.00	31.30	31.27

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73047.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 472.43ug/L m

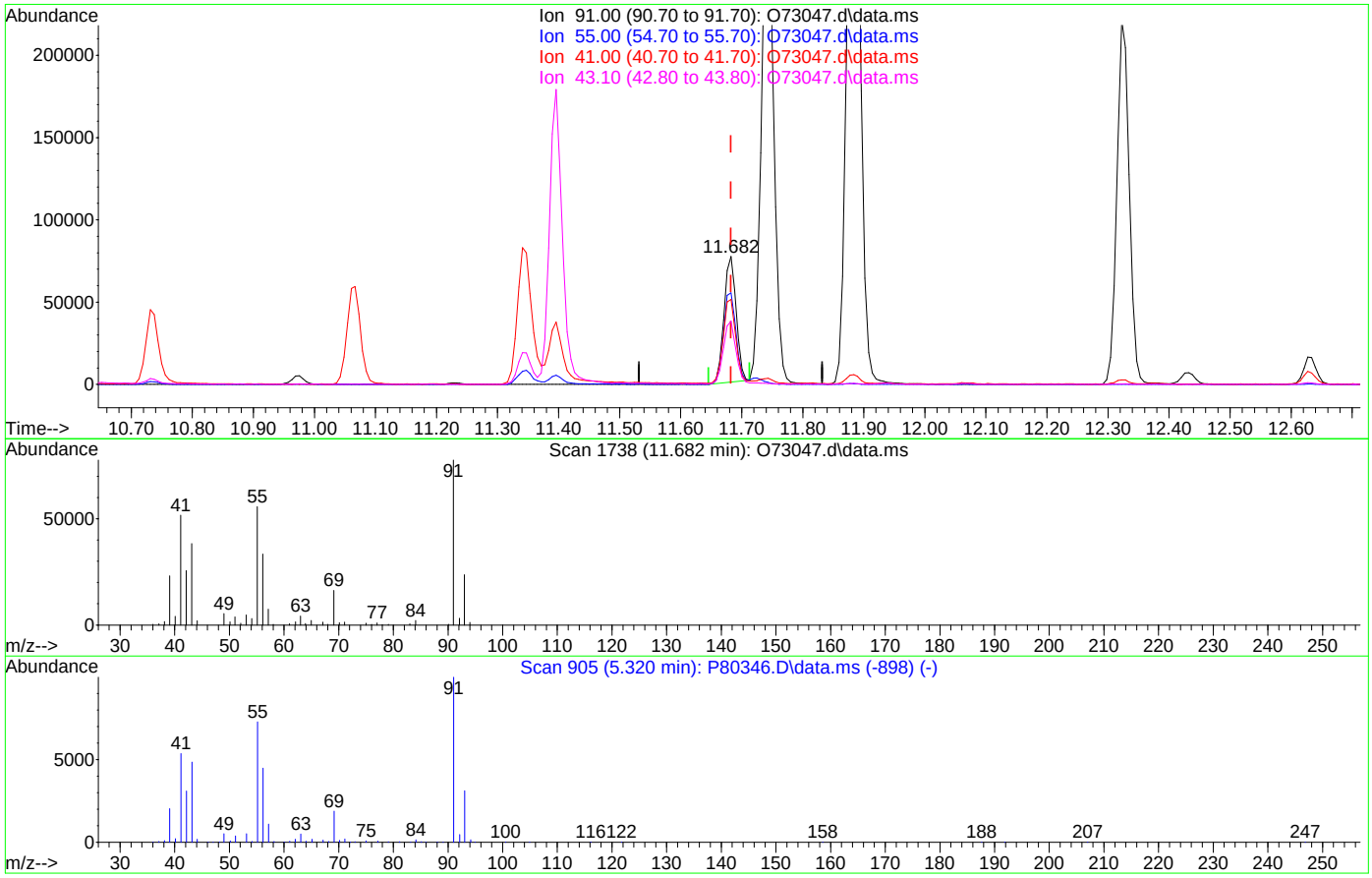
response 45216

Ion	Exp%	Act%
43.00	100	100
42.10	58.40	59.51
41.10	73.80	80.50
39.00	31.30	32.63

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73047.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 24.01ug/L

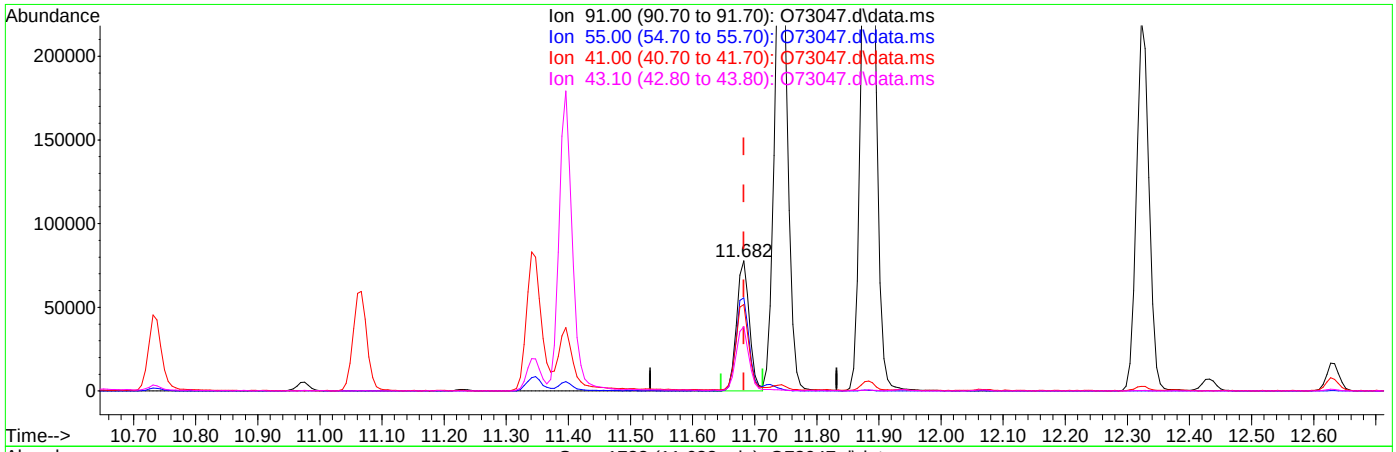
response 105669

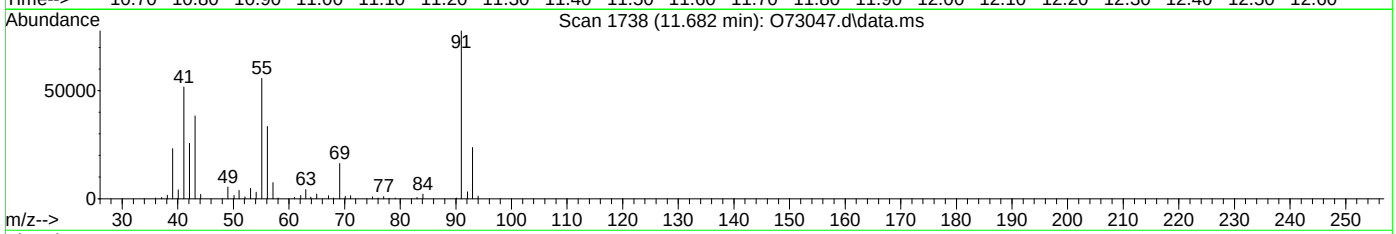
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.69
41.00	64.60	65.51
43.10	48.40	48.88

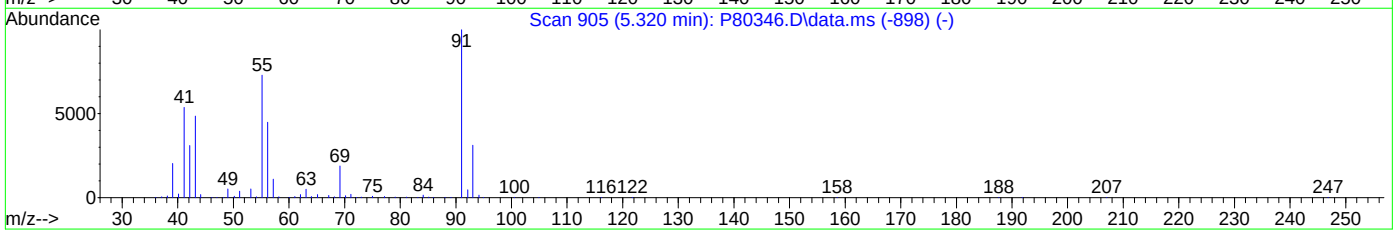
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73047.d
Acq On : 14 Dec 2022 8:03 pm
Operator : adelardl
Sample : FC1196-11MSD Inst : MSVOA12
Misc : MS53002,VO2870,,,,,10
ALS Vial : 28 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:13:59 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73047.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 25.17ug/L m

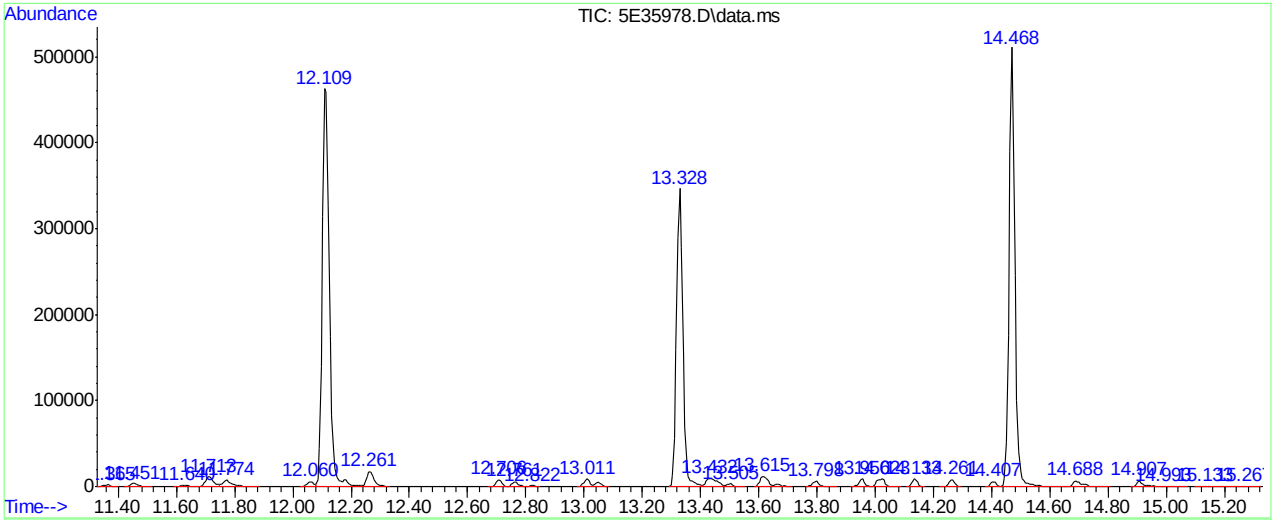
response 110771

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.69
41.00	64.60	66.54
43.10	48.40	49.36

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\12-08-2022\5E35978.D Vial: 2
Acq On : 8 Dec 2022 10:48 am Operator: courtnef
Sample : BFB Inst : MSVOA20
Misc : MS52751,V5E1617,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624



AutoFind: Scans 2007, 2008, 2009; Background Corrected with Scan 2000

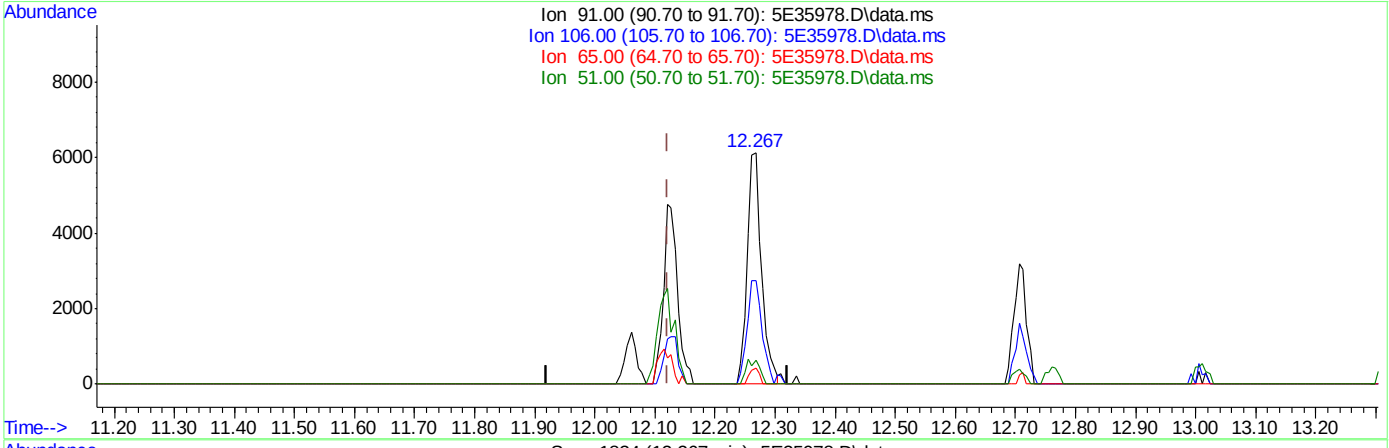
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.3	13727	PASS
75	95	30	60	54.8	29731	PASS
95	95	100	100	100.0	54288	PASS
96	95	5	9	6.7	3641	PASS
173	174	0.00	2	1.3	617	PASS
174	95	50	100	89.1	48392	PASS
175	174	5	9	7.0	3371	PASS
176	174	95	101	96.5	46675	PASS
177	176	5	9	6.8	3157	PASS

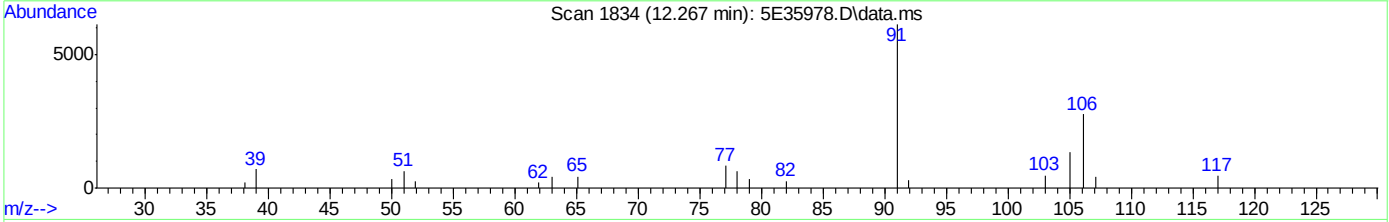
5E35978.D appIX12-08-2022_.M Thu Dec 08 12:25:54 2022

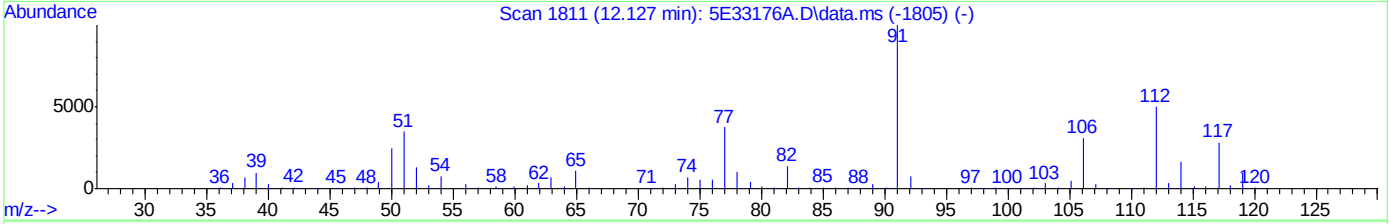
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.267min (+0.146) 1.29ug/L

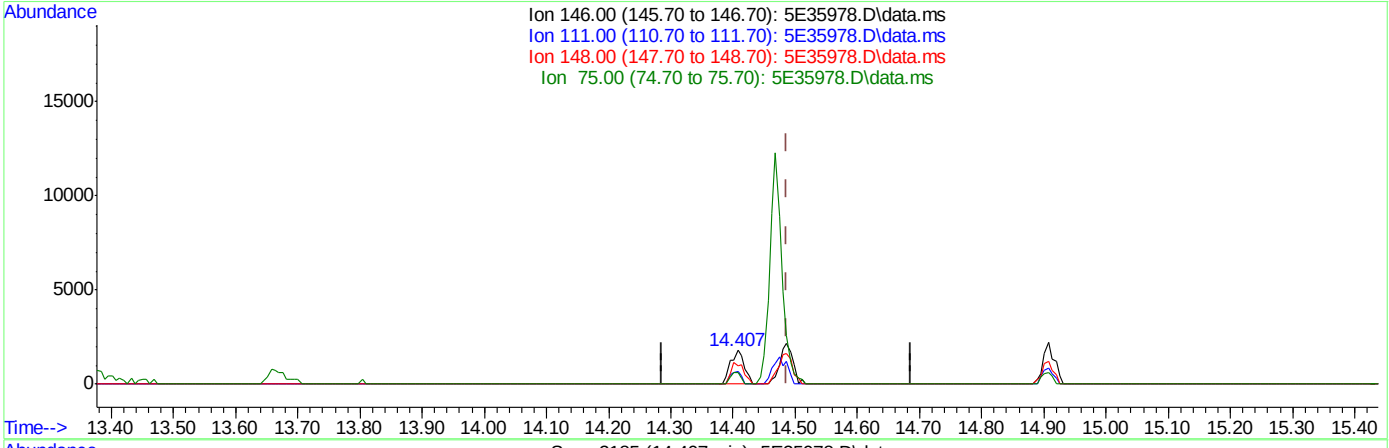
response 10050

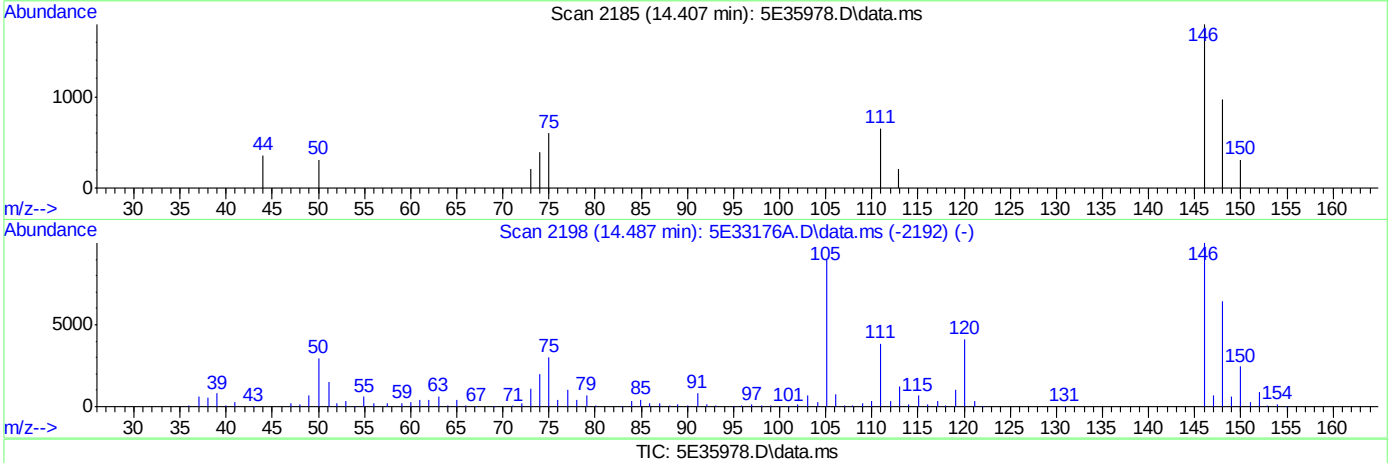
Ion	Exp%	Act%
91.00	100	100
106.00	31.60	44.90
65.00	8.20	6.96
51.00	19.20	10.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.407min (-0.080) 0.74ug/L

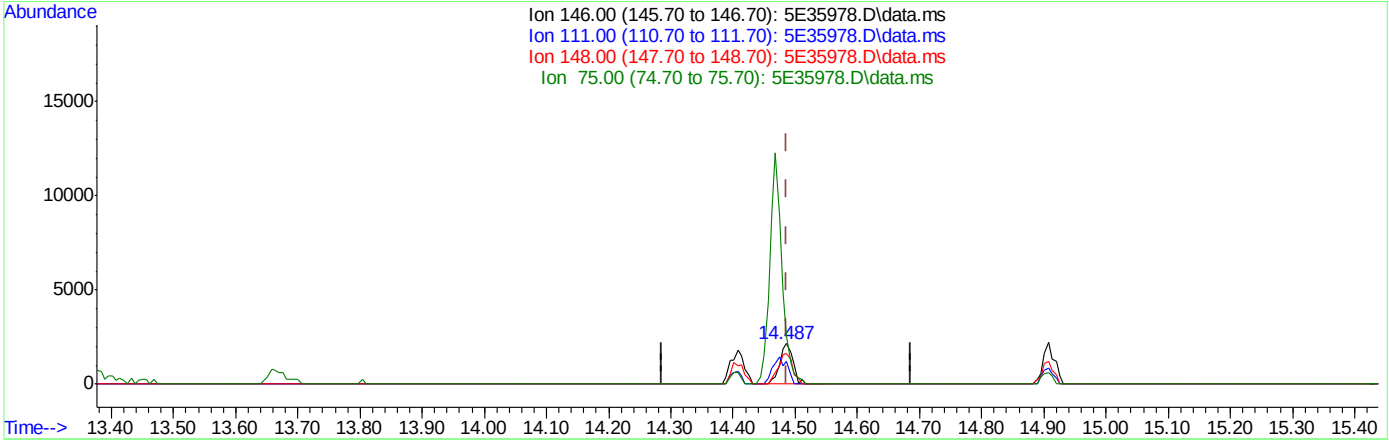
response 2749

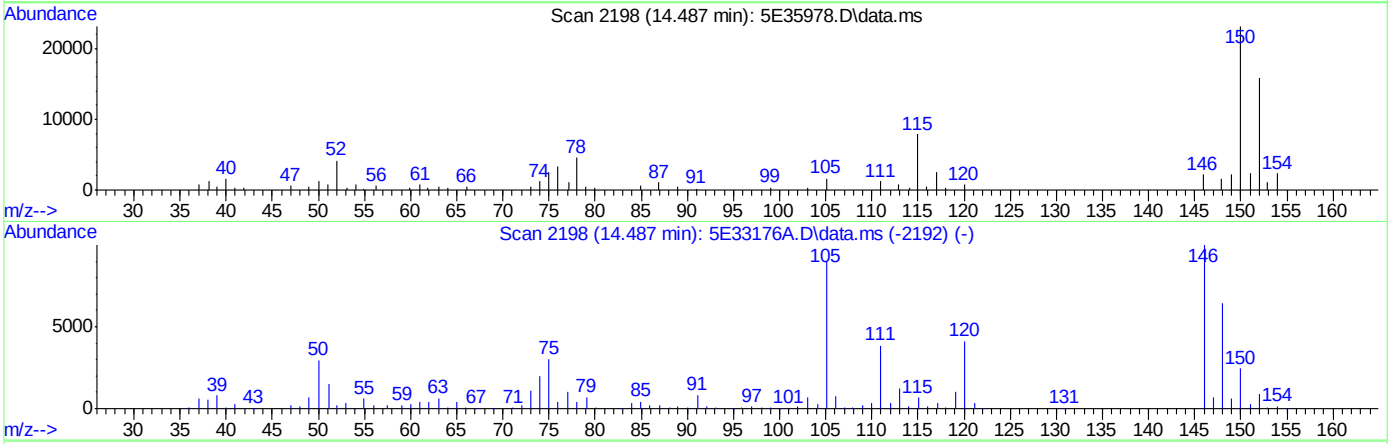
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	36.53
148.00	63.20	53.90
75.00	24.70	33.57

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.487min (-0.000) 0.85ug/L m

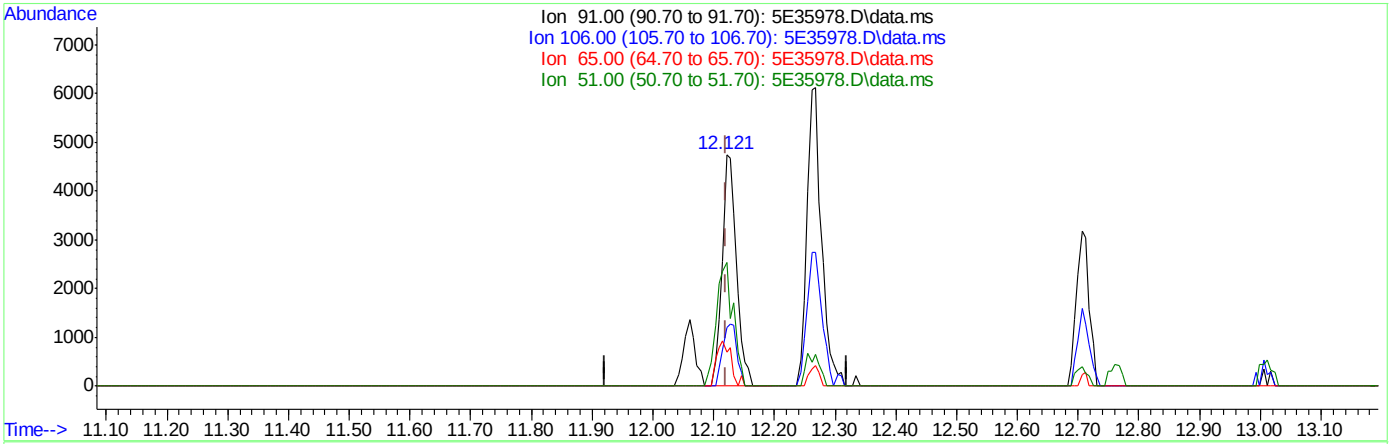
response 3153

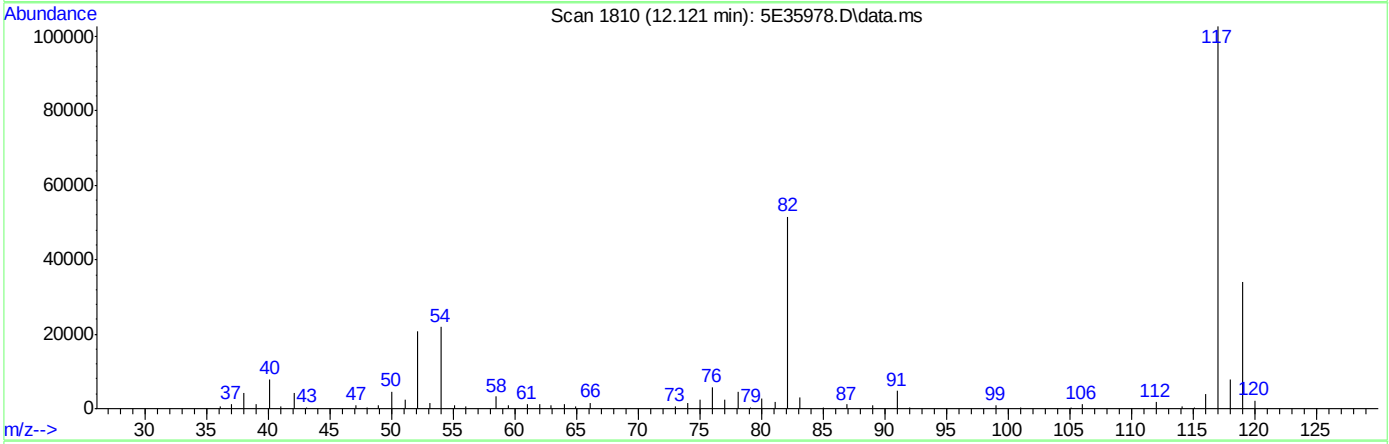
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	56.27
148.00	63.20	76.39
75.00	24.70	120.21#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.121min (+0.000) 0.99ug/L m

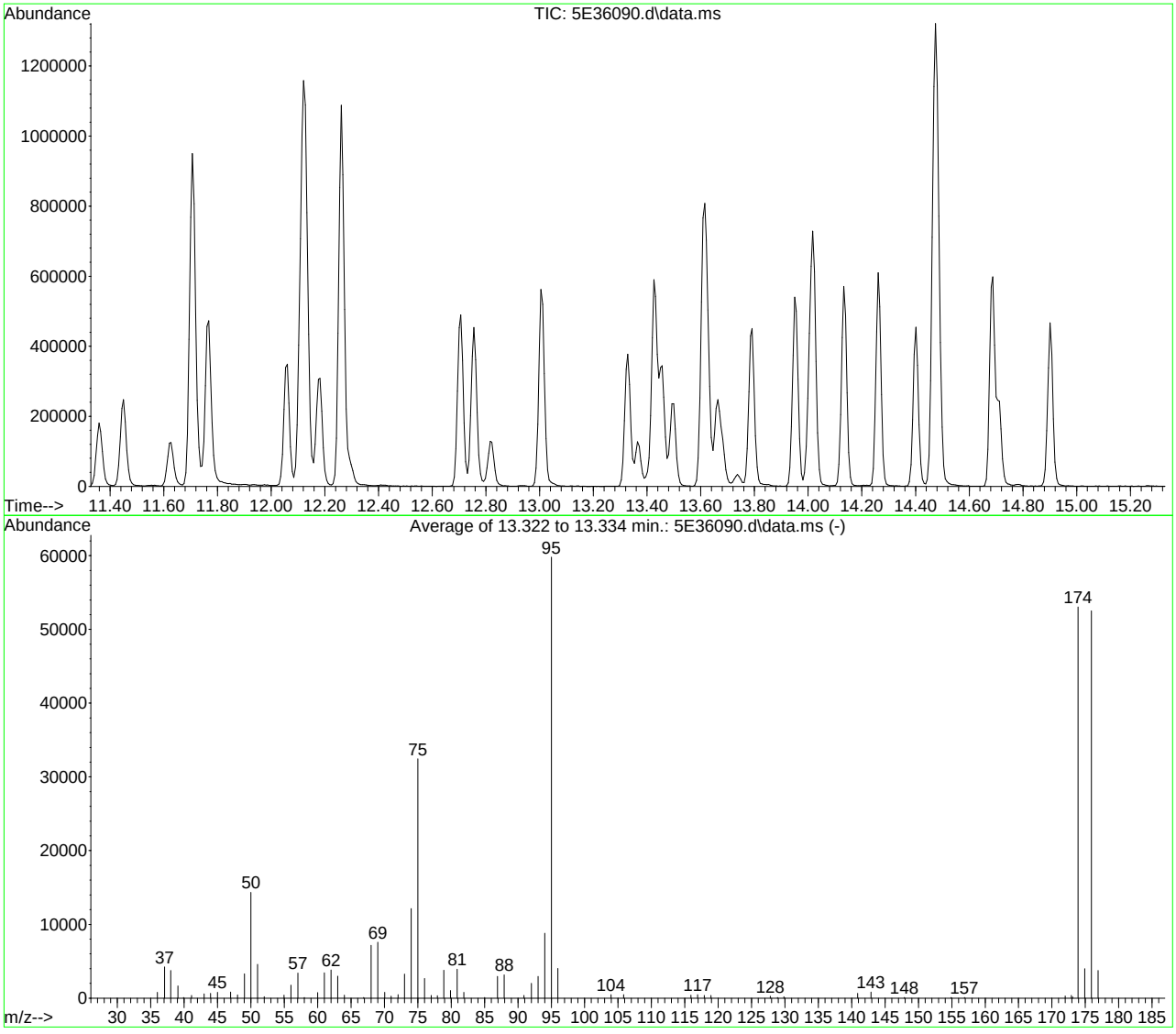
response 7721

Ion	Exp%	Act%
91.00	100	100
106.00	31.60	25.44
65.00	8.20	14.79
51.00	19.20	53.21#

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\ce...022\V5E1623\5E36090.d Vial: 31
Acq On : 13 Dec 2022 7:47 pm Operator: courtnef
Sample : BFB Inst : MSVOA20
Misc : MS53006,V5E1623,,,,, Multiplr: 1.00
MS Integration Params: ult...ll.p

Method : C:\msdchem\1\met...pIX12-08-2022_.M (RTE Integrator)
Title : SW-846 Method 5030B/8260B & EPA 624



AutoFind: Scans 2007, 2008, 2009; Background Corrected with Scan 2000

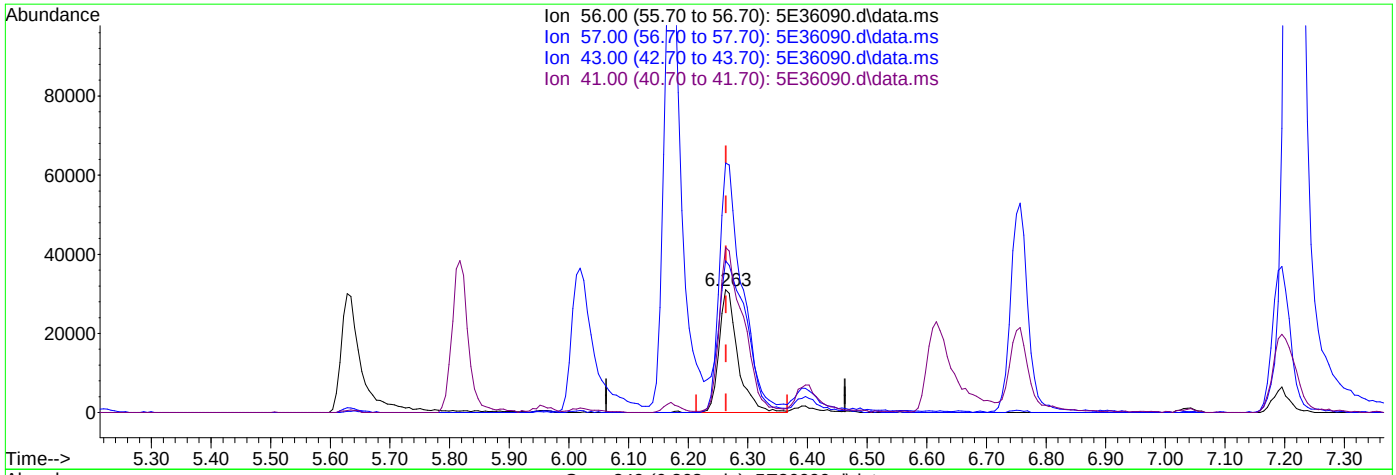
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.0	14346	PASS
75	95	30	60	54.3	32459	PASS
95	95	100	100	100.0	59792	PASS
96	95	5	9	6.7	4018	PASS
173	174	0.00	2	0.7	370	PASS
174	95	50	100	88.7	53056	PASS
175	174	5	9	7.5	4001	PASS
176	174	95	101	99.0	52523	PASS
177	176	5	9	7.1	3745	PASS

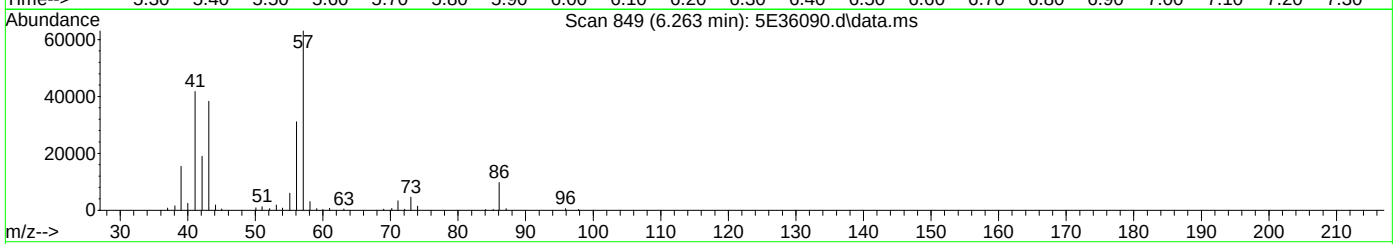
5E36090.d appIX12-08-2022_.M Wed Dec 14 01:46:01 2022

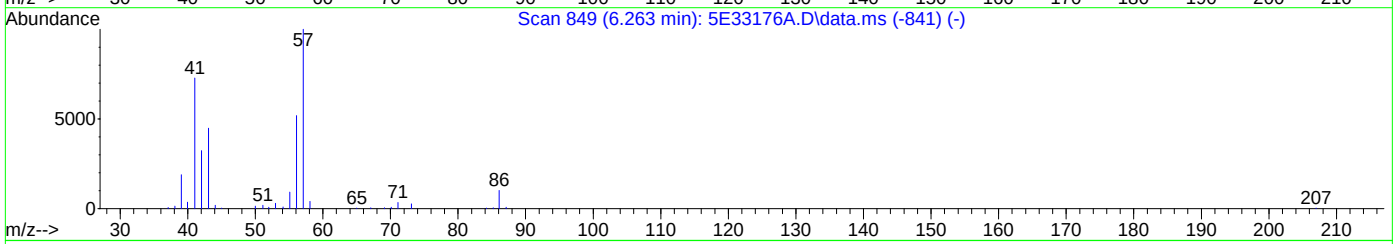
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 00:47:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36090.d\data.ms

(22) Hexane

6.263min (-0.000) 46.72ug/L

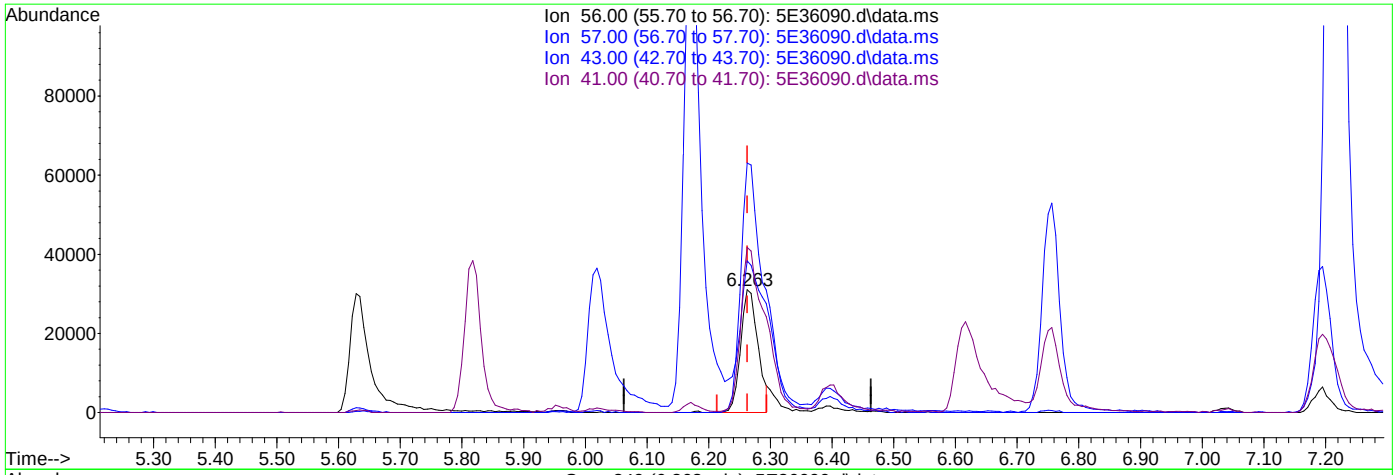
response 68056

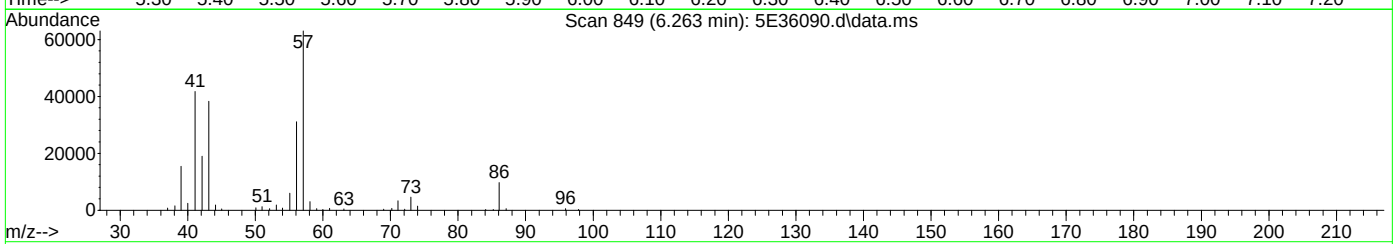
Ion	Exp%	Act%
56.00	100	100
57.00	189.50	202.99
43.00	107.20	116.84
41.00	123.50	133.26

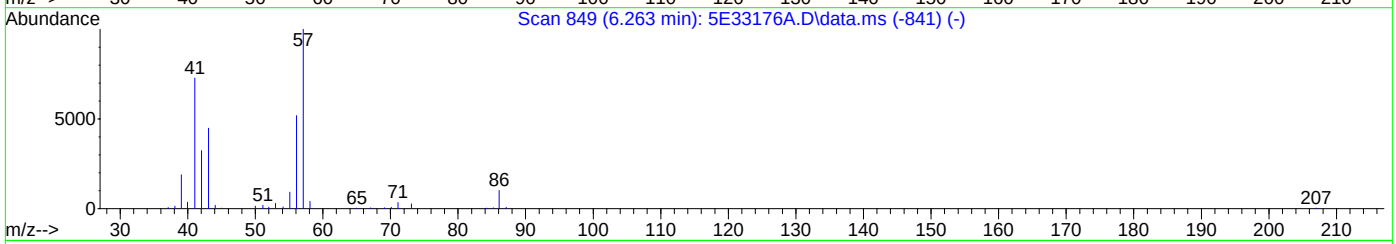
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 00:47:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36090.d\data.ms

(22) Hexane

6.263min (-0.000) 41.60ug/L m

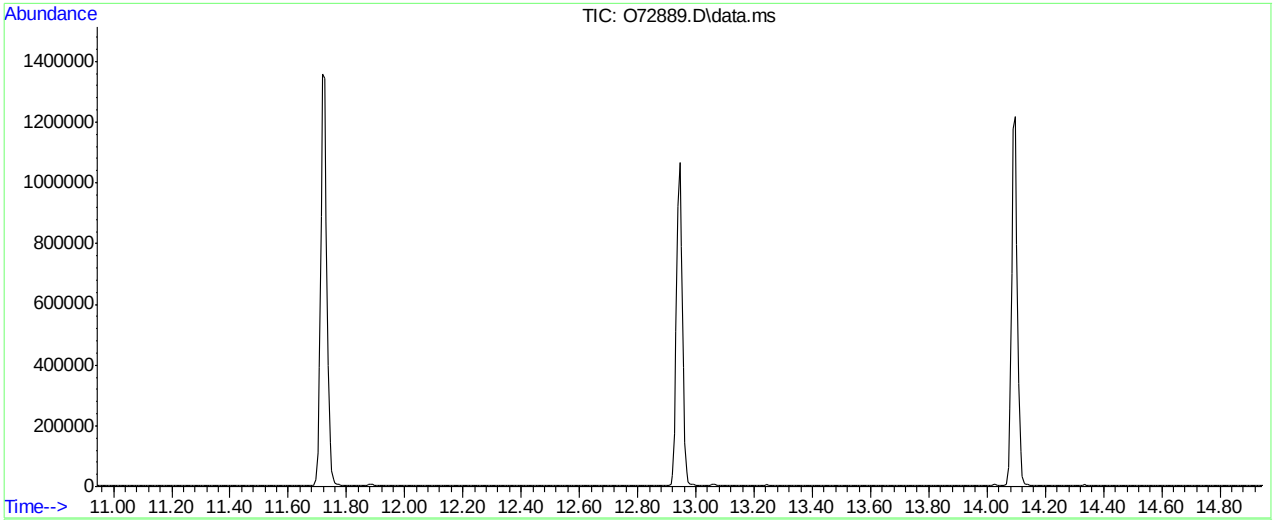
response 60593

Ion	Exp%	Act%
56.00	100	100
57.00	189.50	202.99
43.00	107.20	123.27
41.00	123.50	134.21

Methods: SW-846 8260B

Data File : C:\msdchem\2\data\2022-12-08\O72889.D Vial: 1
Acq On : 8 Dec 2022 9:31 am Operator: adelardl
Sample : BFB Inst : MSVOA12
Misc : MS52645,VO2866,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\2\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B



AutoFind: Scans 1944, 1945, 1946; Background Corrected with Scan 1937

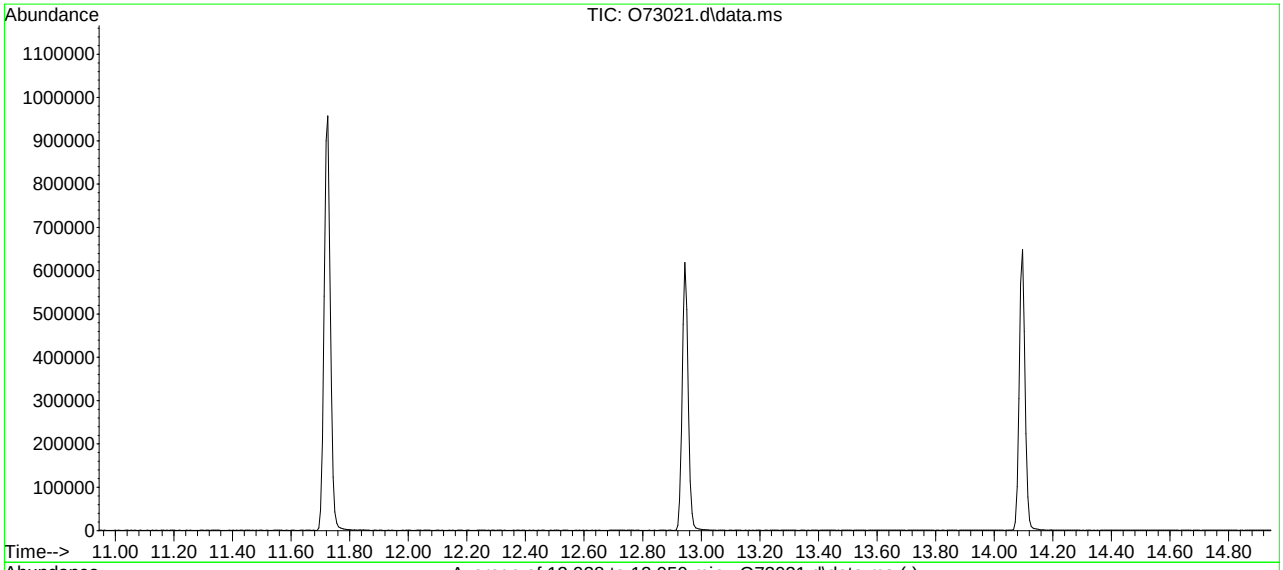
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	37693	PASS
75	95	30	60	49.6	90992	PASS
95	95	100	100	100.0	183381	PASS
96	95	5	9	6.8	12483	PASS
173	174	0.00	2	0.6	1006	PASS
174	95	50	100	87.6	160725	PASS
175	174	5	9	6.9	11036	PASS
176	174	95	101	97.9	157312	PASS
177	176	5	9	6.6	10341	PASS

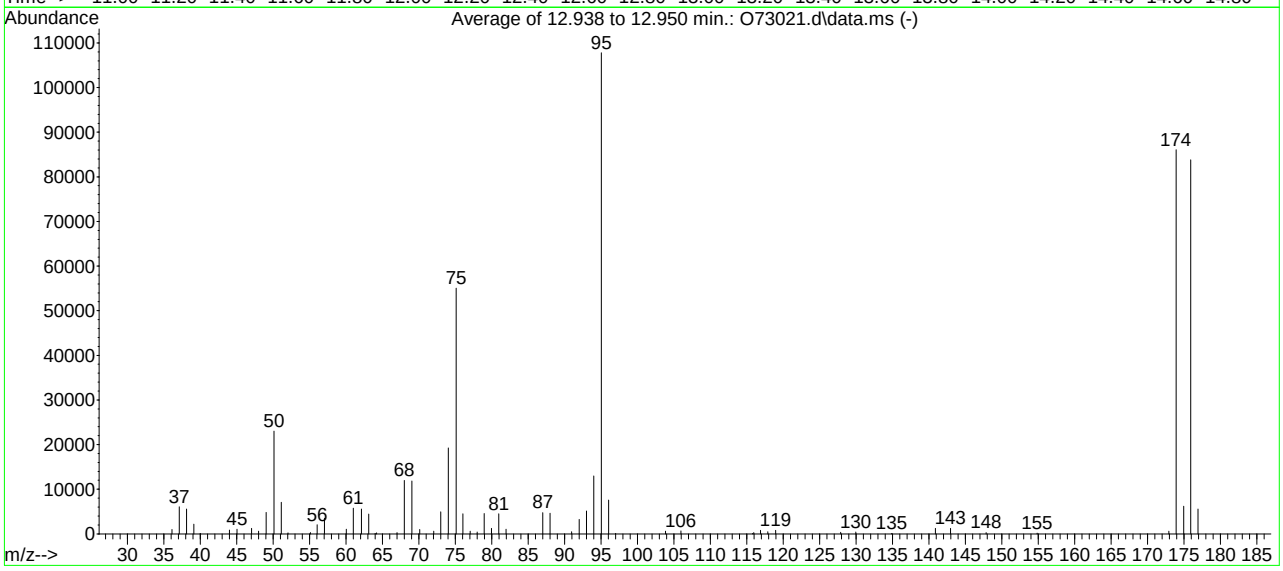
O72889.D VO_12-08-2022.M Thu Dec 08 15:34:22 2022

Methods: SW-846 8260B

Data File : C:\msdchem\1\data\jo...-2022\vo2870\O73021.d Vial: 2
Acq On : 14 Dec 2022 9:17 am Operator: adelardl
Sample : BFB Inst : MSVOA12
Misc : MS53002,VO2870,,,,, Multiplr: 1.00
MS Integration Params: big.p

Method : C:\msdchem\1\met...\VO_12-08-2022.M (RTE Integrator)
Title : SW-846 Method 5035A/8260B





AutoFind: Scans 1944, 1945, 1946; Background Corrected with Scan 1937

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.4	23035	PASS
75	95	30	60	51.1	55059	PASS
95	95	100	100	100.0	107776	PASS
96	95	5	9	7.0	7567	PASS
173	174	0.00	2	0.7	569	PASS
174	95	50	100	79.8	86053	PASS
175	174	5	9	7.2	6174	PASS
176	174	95	101	97.4	83795	PASS
177	176	5	9	6.6	5570	PASS

O73021.d VO_12-08-2022.M Thu Dec 15 01:15:09 2022

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	334730	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	235123	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	109352	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	92786	47.84	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.68%				
49) 1,2-Dichloroethane-d4	8.665	65	104516	53.29	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 106.58%				
62) Toluene-d8	10.542	98	326882	55.27	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 110.54%				
86) 4-Bromofluorobenzene	13.328	95	95349	55.07	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 110.14%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.855	85	2217	1.25	ug/L		84
3) Chloromethane	3.220	50	1854	1.05	ug/L		72
4) Vinyl Chloride	3.373	62	1927	1.03	ug/L		86
5) 1,3-Butadiene	3.409	39	1404	0.89	ug/L		95
6) Bromomethane	3.946	94	938	1.08	ug/L		90
7) Chloroethane	4.153	64	1276	0.92	ug/L		73
8) Trichlorofluoromethane	4.385	101	2439	0.90	ug/L		92
9) Ethyl Ether	4.873	59	1268	0.90	ug/L	#	76
11) 1,2-Dichlorotrifluoroe...	5.147	67	1781	0.92	ug/L	#	73
12) 1,1-Dichloroethene	5.165	61	2320	1.03	ug/L		91
13) Freon 113	5.220	101	1639	0.87	ug/L	#	87
14) Carbon Disulfide	5.208	76	5030	0.93	ug/L		89
15) Iodomethane	5.372	142	1295	0.71	ug/L		78
16) Acrolein	5.635	56	1209	3.38	ug/L		87
17) Allyl chloride	5.830	41	1828	0.87	ug/L		88
18) Methylene Chloride	5.958	49	3768	1.59	ug/L		95
19) Acetone	6.031	43	3736	6.80	ug/L		90
20) Methyl acetate	6.177	43	4221	3.59	ug/L		83
21) trans-1,2-Dichloroethene	6.171	61	2164	1.00	ug/L		89
22) Hexane	6.263	56	1228	1.01	ug/L	#	67
23) Methyl Tert Butyl Ether	6.287	73	4112	0.80	ug/L		74
24) Acetonitrile	6.634	41	1813	9.84	ug/L	#	69
25) Di-isopropyl ether	6.756	45	4220	0.88	ug/L		93
26) Chloroprene	6.915	53	2151	0.94	ug/L		96
27) 1,1-Dichloroethane	6.945	63	3130	1.07	ug/L		82
28) Acrylonitrile	7.019	53	2161	3.46	ug/L		87
29) ETBE	7.189	59	4613	0.88	ug/L		84
30) Tert Butyl Alcohol	6.391	59	1631	6.14	ug/L	#	41
31) Vinyl acetate	7.220	43	12287	3.34	ug/L		97
32) cis-1,2-Dichloroethene	7.579	96	1542	0.80	ug/L		96
33) 2,2-Dichloropropane	7.707	77	2279	0.87	ug/L		73
34) Bromochloromethane	7.805	128	622	0.63	ug/L		89
35) Cyclohexane	7.823	56	2503	1.01	ug/L		83
36) Chloroform	7.878	83	2879	0.92	ug/L		79

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.988	43	6784	3.88	ug/L		89
40) Carbon Tetrachloride	8.049	117	1907	0.79	ug/L		95
41) 1,1,1-Trichloroethane	8.122	97	2249	0.81	ug/L		78
42) 2-Butanone	8.213	43	4528	5.69	ug/L		88
43) 1,1-Dichloropropene	8.256	75	2114	0.93	ug/L		86
44) tert-Butyl formate	8.354	59	6526	12.55	ug/L		90
45) Propionitrile	8.543	54	1895	6.98	ug/L	#	39
46) Methacrylonitrile	8.561	41	9567	8.14	ug/L		85
47) Benzene	8.524	78	6444	0.96	ug/L		94
48) TAME	8.604	73	3901	0.77	ug/L	#	63
50) 1,2-Dichloroethane	8.738	62	2480	1.04	ug/L		90
51) tert Amyl alcohol	8.786	59	850	5.31	ug/L	#	51
52) Trichloroethene	9.134	95	1609	0.84	ug/L		91
53) Methylcyclohexane	9.134	83	2492	0.85	ug/L		89
54) Dibromomethane	9.579	93	947	0.72	ug/L	#	71
55) 1,2-Dichloropropane	9.677	63	1207	0.73	ug/L		98
56) Bromodichloromethane	9.725	83	1880	0.75	ug/L	#	85
57) Methyl methacrylate	9.835	41	759	0.52	ug/L	#	44
59) 2-Chloroethyl vinyl ether	10.268	63	4279	21.81	ug/L		86
60) cis-1,3-Dichloropropene	10.359	75	1922	0.71	ug/L		71
63) Toluene	10.597	91	6397	0.94	ug/L		91
64) Isobutyl alcohol	8.677	43	1180	17.44	ug/L	#	11
65) 2-Nitropropane	10.829	41	1701	3.27	ug/L	#	70
66) 4-Methyl-2-pentanone	10.945	43	9971	6.05	ug/L		90
67) trans-1,3-Dichloropropene	11.006	75	1586	0.73	ug/L		95
68) Tetrachloroethene	11.006	166	1355	0.73	ug/L		94
69) Ethyl methacrylate	11.109	69	1314	0.60	ug/L	#	78
70) 1,1,2-Trichloroethane	11.170	83	1147	0.87	ug/L		98
71) Dibromochloromethane	11.365	129	1282	0.64	ug/L	#	58
72) 1,3-Dichloropropane	11.451	76	2327	0.91	ug/L		90
73) 1,2-Dibromoethane	11.640	107	1242	0.71	ug/L		70
74) 3,3-Dimethyl-1-butanol	11.707	57	6111	43.65	ug/L		90
75) 2-hexanone	11.774	43	6497	5.59	ug/L		79
76) 1-Chlorohexane	12.060	91	1802	0.81	ug/L		88
77) Ethylbenzene	12.121	91	7721m	0.99	ug/L		
78) Chlorobenzene	12.127	112	4271	0.94	ug/L		88
79) 1,1,1,2-Tetrachloroethane	12.176	131	1314	0.76	ug/L		91
80) m,p-Xylene	12.267	91	10152	1.72	ug/L		93
81) o-Xylene	12.706	91	4670	0.81	ug/L		93
82) Styrene	12.761	104	3152	0.70	ug/L		95
83) Bromoform	12.816	173	649	0.49	ug/L		85
84) Isopropylbenzene	13.011	105	6124	0.82	ug/L		99
87) cis-1,4-Dichloro-2-butene	13.688	53	76	0.21	ug/L	#	1
88) n-Propylbenzene	13.432	91	7689	0.96	ug/L		98
89) Bromobenzene	13.456	156	1427	0.80	ug/L		85
90) 1,1,2,2-Tetrachloroethane	13.499	83	2007	0.99	ug/L		81
91) 1,3,5-Trimethylbenzene	13.615	105	4839	0.86	ug/L		98
92) 2-Chlorotoluene	13.627	91	5103	1.02	ug/L		98
93) trans-1,4-Dichloro-2-B...	13.688	53	76	0.21	ug/L	#	1
94) 1,2,3-Trichloropropane	13.670	110	327	0.55	ug/L		93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

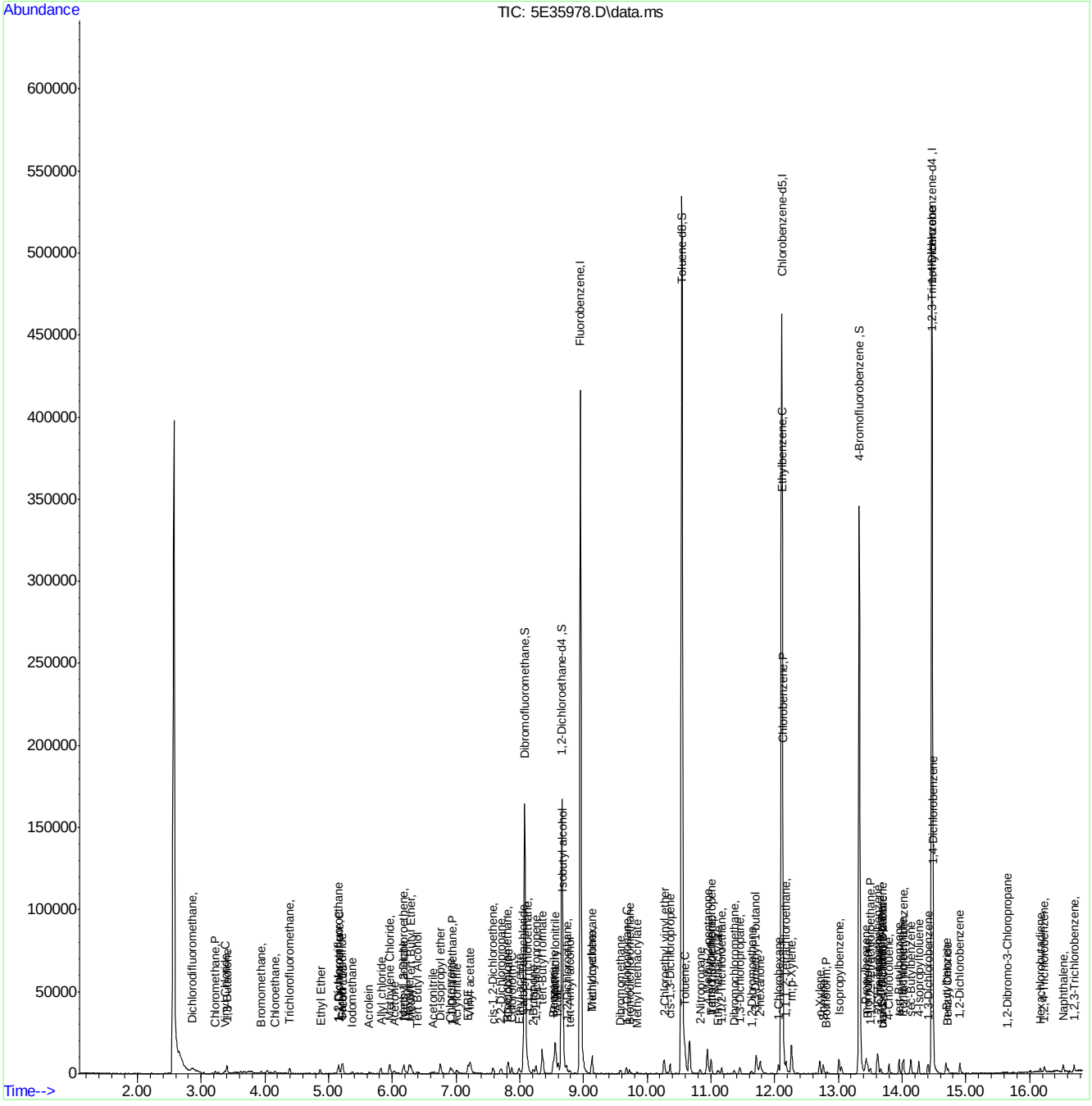
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
96) 4-Chlorotoluene	13.798	91	4417	0.98	ug/L		96
98) tert-Butylbenzene	13.950	91	2804	0.93	ug/L		95
99) 1,2,4-Trimethylbenzene	14.023	105	4604	0.83	ug/L		97
100) Pentachloroethane	14.011	167	983	0.90	ug/L		78
101) sec-Butylbenzene	14.139	105	6182	0.91	ug/L		95
102) 4-Isopropyltoluene	14.261	119	5204	0.87	ug/L		98
103) 1,3-Dichlorobenzene	14.407	146	2749	0.83	ug/L		90
104) 1,2,3-Trimethylbenzene	14.474	105	4615	0.80	ug/L	#	46
105) 1,4-Dichlorobenzene	14.487	146	3153m	0.85	ug/L		
106) n-Butylbenzene	14.694	92	2528	0.80	ug/L	#	68
107) Benzyl Chloride	14.718	126	342	0.50	ug/L	#	41
108) 1,2-Dichlorobenzene	14.907	146	2796	0.87	ug/L		94
109) 1,2-Dibromo-3-Chloropr...	15.645	75	86	0.26	ug/L	#	24
110) Hexachlorobutadiene	16.169	225	530	0.82	ug/L	#	79
111) 1,2,4-Trichlorobenzene	16.230	180	1402	0.77	ug/L		86
112) Naphthalene	16.529	128	3352	0.64	ug/L		86
113) 1,2,3-Trichlorobenzene	16.700	180	1191	0.79	ug/L		82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

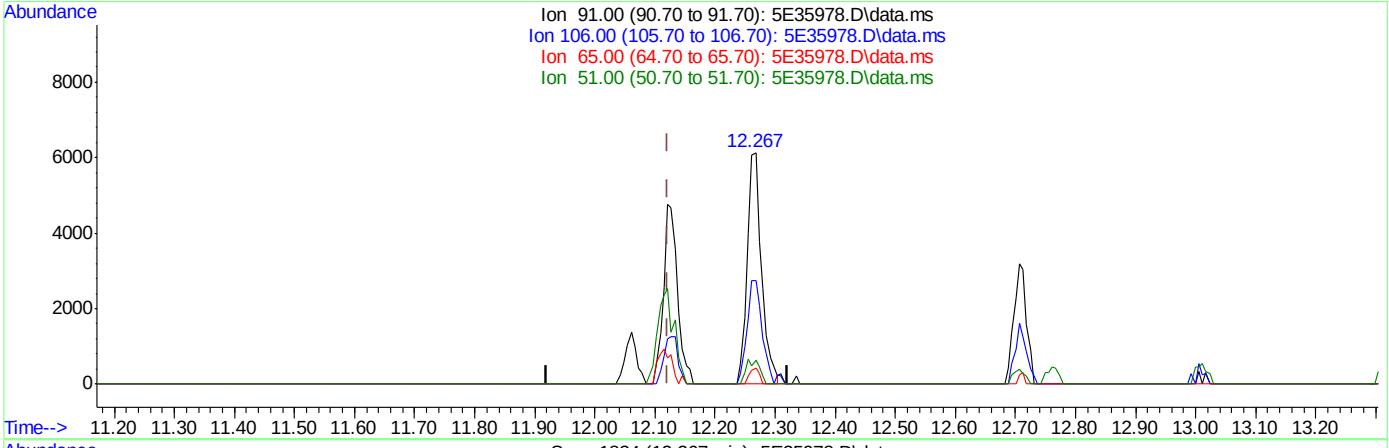
Sample Number: V5E1617-IC1617
Lab FileID: 5E35978.D
Injection Time: 12/08/22 10:48
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

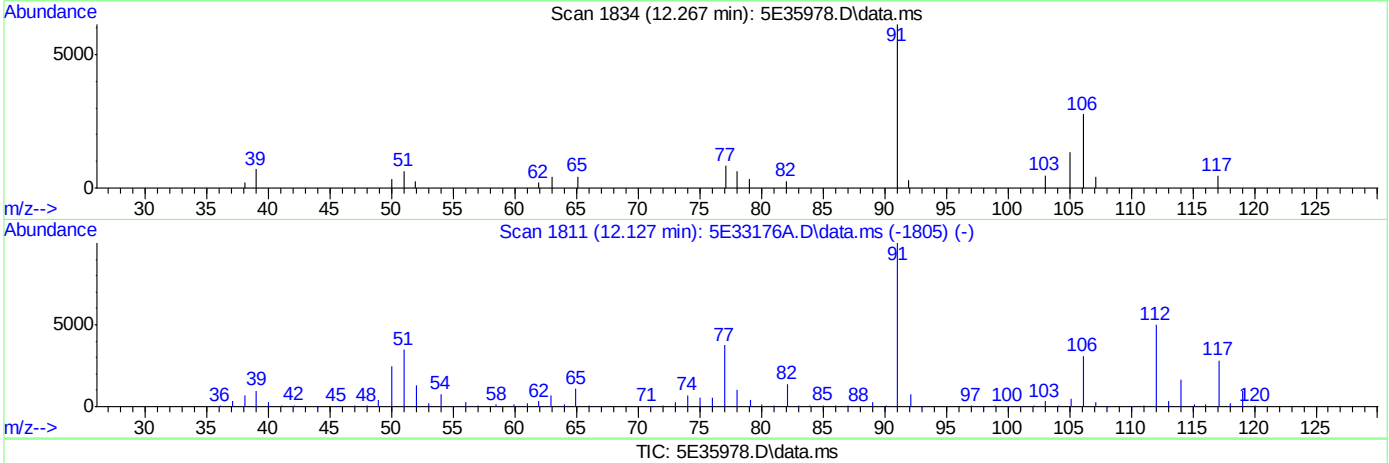
Parameter	CAS	Sig#	R.T. (min.)	Reason
Ethylbenzene	100-41-4		12.12	Missed peak
1,4-Dichlorobenzene	106-46-7		14.49	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.267min (+0.146) 1.29ug/L

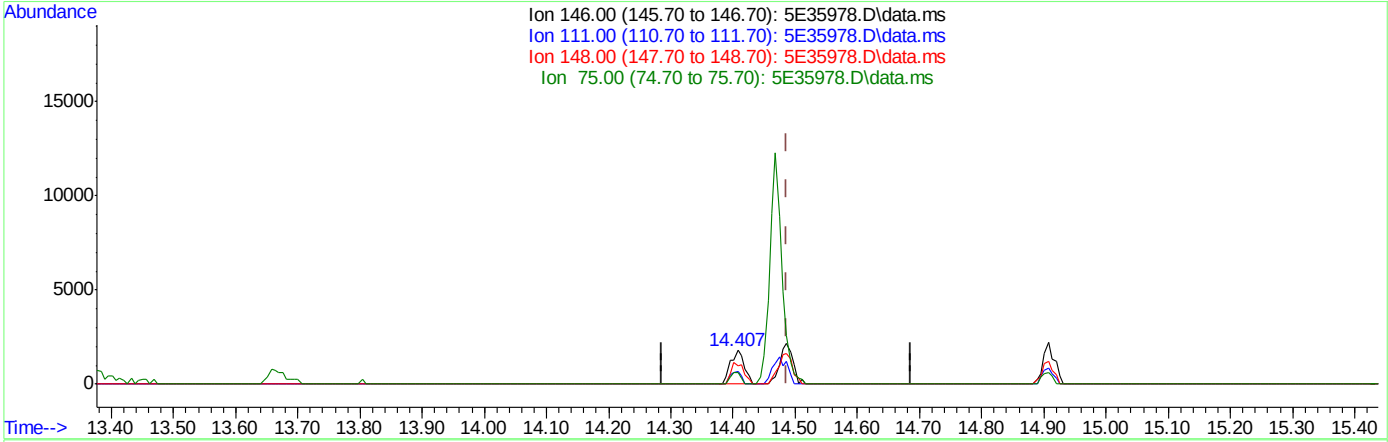
response 10050

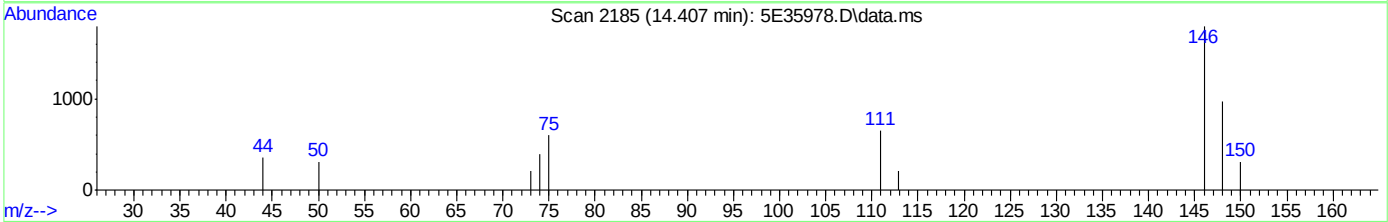
Ion	Exp%	Act%
91.00	100	100
106.00	31.60	44.90
65.00	8.20	6.96
51.00	19.20	10.48

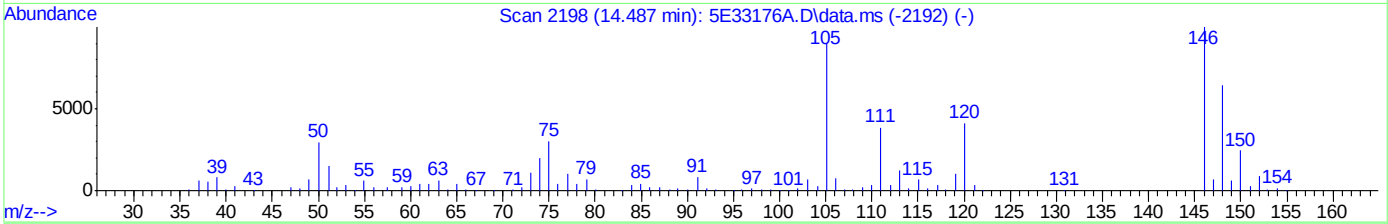
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.407min (-0.080) 0.74ug/L

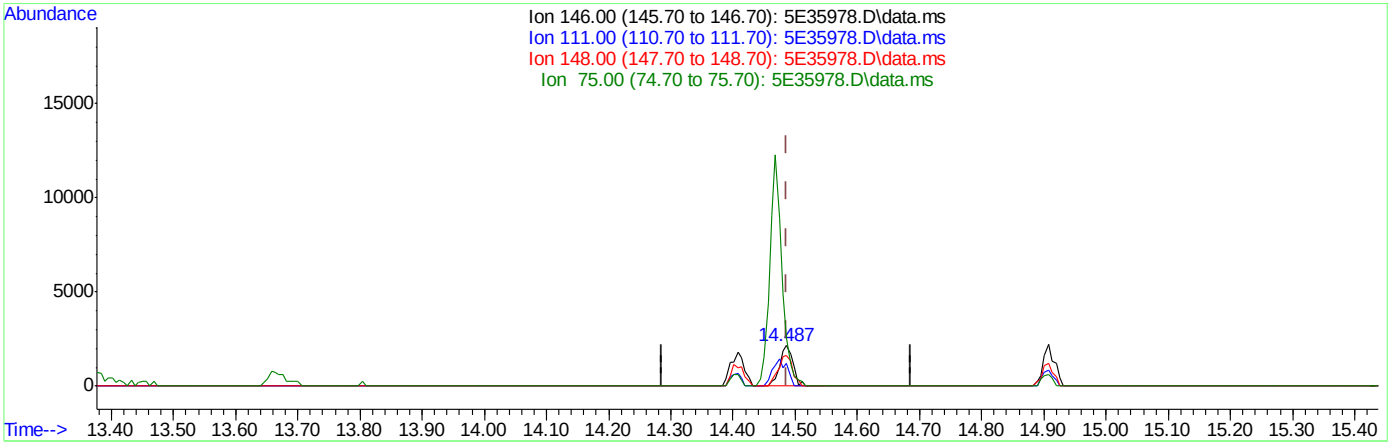
response 2749

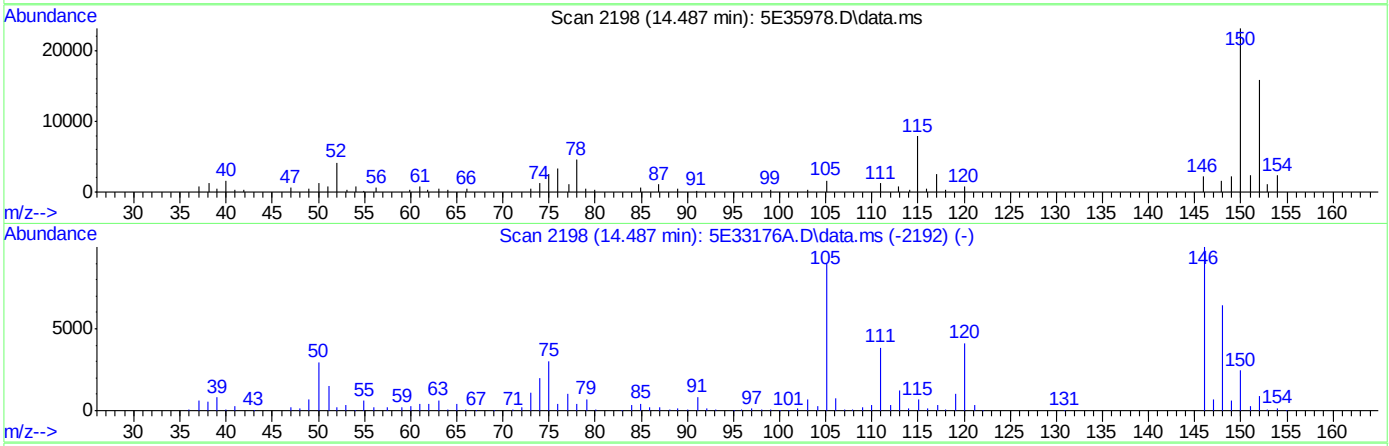
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	36.53
148.00	63.20	53.90
75.00	24.70	33.57

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:05:24 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(105) 1,4-Dichlorobenzene

14.487min (-0.000) 0.85ug/L m

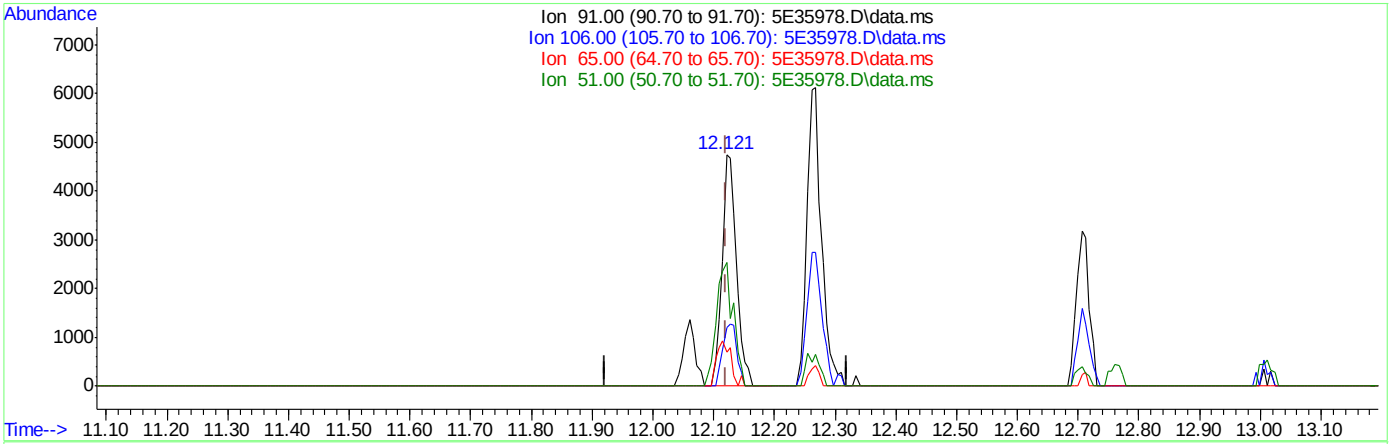
response 3153

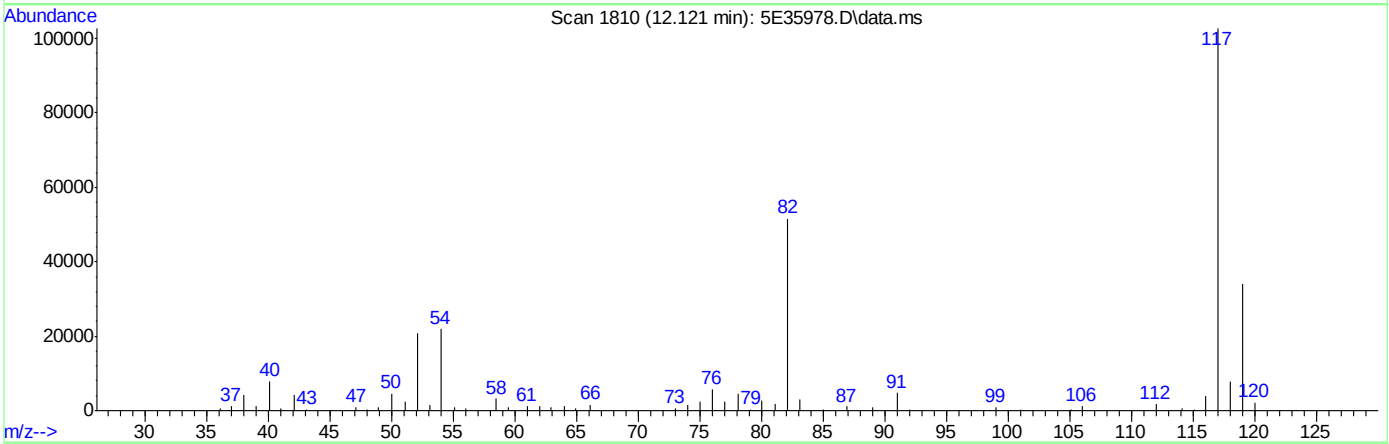
Ion	Exp%	Act%
146.00	100	100
111.00	32.80	56.27
148.00	63.20	76.39
75.00	24.70	120.21#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35978.D
Acq On : 8 Dec 2022 10:48 am
Operator : courtnef
Sample : IC1617-1
Misc : MS52751,V5E1617,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 11:07:37 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35978.D\data.ms

(77) Ethylbenzene (C)

12.121min (+0.000) 0.99ug/L m

response 7721

Ion	Exp%	Act%
91.00	100	100
106.00	31.60	25.44
65.00	8.20	14.79
51.00	19.20	53.21#

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	347220	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	240750	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	113739	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.073	113	95693	47.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.14%			
49) 1,2-Dichloroethane-d4	8.659	65	109774	53.96	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 107.92%			
62) Toluene-d8	10.542	98	330650	54.60	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.20%			
86) 4-Bromofluorobenzene	13.328	95	97585	54.19	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 108.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	9613	5.24	ug/L	96
3) Chloromethane	3.221	50	9681	5.31	ug/L	98
4) Vinyl Chloride	3.373	62	10347	5.32	ug/L	92
5) 1,3-Butadiene	3.403	39	7260	4.44	ug/L	96
6) Bromomethane	3.946	94	4659	5.12	ug/L	91
7) Chloroethane	4.153	64	6426	4.42	ug/L	97
8) Trichlorofluoromethane	4.391	101	11850	4.23	ug/L	99
9) Ethyl Ether	4.867	59	8051	5.50	ug/L	94
11) 1,2-Dichlorotrifluoroe...	5.147	67	11028	5.48	ug/L	95
12) 1,1-Dichloroethene	5.159	61	13625	5.83	ug/L	91
13) Freon 113	5.214	101	9482	4.85	ug/L #	82
14) Carbon Disulfide	5.208	76	27057	4.82	ug/L	96
15) Iodomethane	5.367	142	9902	5.22	ug/L	99
16) Acrolein	5.635	56	7420	19.98	ug/L	91
17) Allyl chloride	5.818	41	8945	4.11	ug/L	93
18) Methylene Chloride	5.952	49	14967	6.11	ug/L	90
19) Acetone	6.019	43	12305	21.60	ug/L	90
20) Methyl acetate	6.171	43	23892	19.58	ug/L	95
21) trans-1,2-Dichloroethene	6.171	61	12593	5.59	ug/L	87
22) Hexane	6.269	56	7470m	5.95	ug/L	
23) Methyl Tert Butyl Ether	6.293	73	24908	4.65	ug/L	98
24) Acetonitrile	6.622	41	7421	38.65	ug/L	85
25) Di-isopropyl ether	6.750	45	23813	4.77	ug/L	95
26) Chloroprene	6.909	53	10994	4.62	ug/L	95
27) 1,1-Dichloroethane	6.939	63	16232	5.36	ug/L	98
28) Acrylonitrile	7.000	53	15251	23.55	ug/L	93
29) ETBE	7.195	59	26617	4.91	ug/L	95
30) Tert Butyl Alcohol	6.385	59	9588	34.80	ug/L	88
31) Vinyl acetate	7.214	43	78154	20.50	ug/L	96
32) cis-1,2-Dichloroethene	7.580	96	9166	4.56	ug/L	89
33) 2,2-Dichloropropane	7.701	77	13728	5.04	ug/L	92
34) Bromochloromethane	7.811	128	4666	4.56	ug/L	86
35) Cyclohexane	7.817	56	14593	5.70	ug/L	90
36) Chloroform	7.872	83	17247	5.29	ug/L	92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.976	43	37320	20.57	ug/L		99
38) Tetrahydrofuran	8.073	42	2409	4.47	ug/L		93
40) Carbon Tetrachloride	8.055	117	12251	4.91	ug/L		98
41) 1,1,1-Trichloroethane	8.122	97	13588	4.71	ug/L		95
42) 2-Butanone	8.207	43	17733	21.50	ug/L		96
43) 1,1-Dichloropropene	8.250	75	12083	5.13	ug/L		90
44) tert-Butyl formate	8.354	59	34248	62.36	ug/L		92
45) Propionitrile	8.537	54	12173	43.21	ug/L		81
46) Methacrylonitrile	8.555	41	43221m	35.47	ug/L		
47) Benzene	8.524	78	35318	5.06	ug/L		96
48) TAME	8.604	73	24134	4.60	ug/L		96
50) 1,2-Dichloroethane	8.732	62	12687	5.13	ug/L		93
51) tert Amyl alcohol	8.787	59	6797	40.61	ug/L		90
52) Trichloroethene	9.134	95	9308	4.71	ug/L		91
53) Methylcyclohexane	9.134	83	13334	4.39	ug/L		85
54) Dibromomethane	9.579	93	6110	4.51	ug/L		89
55) 1,2-Dichloropropane	9.671	63	9402	5.47	ug/L		94
56) Bromodichloromethane	9.719	83	11203	4.32	ug/L		99
57) Methyl methacrylate	9.841	41	5588	3.69	ug/L		91
58) 1,4-Dioxane	9.927	88	1304	63.74	ug/L		77
59) 2-Chloroethyl vinyl ether	10.262	63	24827	121.98	ug/L		96
60) cis-1,3-Dichloropropene	10.359	75	13370	4.73	ug/L		90
63) Toluene	10.597	91	36328	5.22	ug/L		96
64) Isobutyl alcohol	8.671	43	6467	92.74	ug/L	#	81
65) 2-Nitropropane	10.829	41	11207	21.02	ug/L		99
66) 4-Methyl-2-pentanone	10.945	43	40781	24.16	ug/L		99
67) trans-1,3-Dichloropropene	11.000	75	10777	4.83	ug/L		93
68) Tetrachloroethene	11.000	166	8868	4.67	ug/L		94
69) Ethyl methacrylate	11.103	69	8757	3.89	ug/L		91
70) 1,1,2-Trichloroethane	11.164	83	7153	5.27	ug/L		97
71) Dibromochloromethane	11.365	129	8797	4.28	ug/L		98
72) 1,3-Dichloropropane	11.451	76	13974	5.33	ug/L		96
73) 1,2-Dibromoethane	11.627	107	8218	4.57	ug/L		94
74) 3,3-Dimethyl-1-butanol	11.707	57	33581	231.23	ug/L		94
75) 2-hexanone	11.768	43	27021	22.72	ug/L		93
76) 1-Chlorohexane	12.060	91	11705	5.11	ug/L		91
77) Ethylbenzene	12.121	91	41872	5.23	ug/L		95
78) Chlorobenzene	12.133	112	23709	5.08	ug/L		97
79) 1,1,1,2-Tetrachloroethane	12.182	131	8056	4.57	ug/L		89
80) m,p-Xylene	12.262	91	61272	10.13	ug/L		97
81) o-Xylene	12.707	91	28812	4.88	ug/L		99
82) Styrene	12.755	104	21801	4.70	ug/L		97
83) Bromoform	12.822	173	5098	3.75	ug/L		88
84) Isopropylbenzene	13.005	105	38624	5.04	ug/L		95
87) cis-1,4-Dichloro-2-butene	13.682	53	2055	5.32	ug/L	#	90
88) n-Propylbenzene	13.426	91	46242	5.58	ug/L		98
89) Bromobenzene	13.456	156	9151	4.94	ug/L		87
90) 1,1,2,2-Tetrachloroethane	13.499	83	10666	5.05	ug/L		96
91) 1,3,5-Trimethylbenzene	13.609	105	30173	5.13	ug/L		99
92) 2-Chlorotoluene	13.621	91	28868	5.53	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

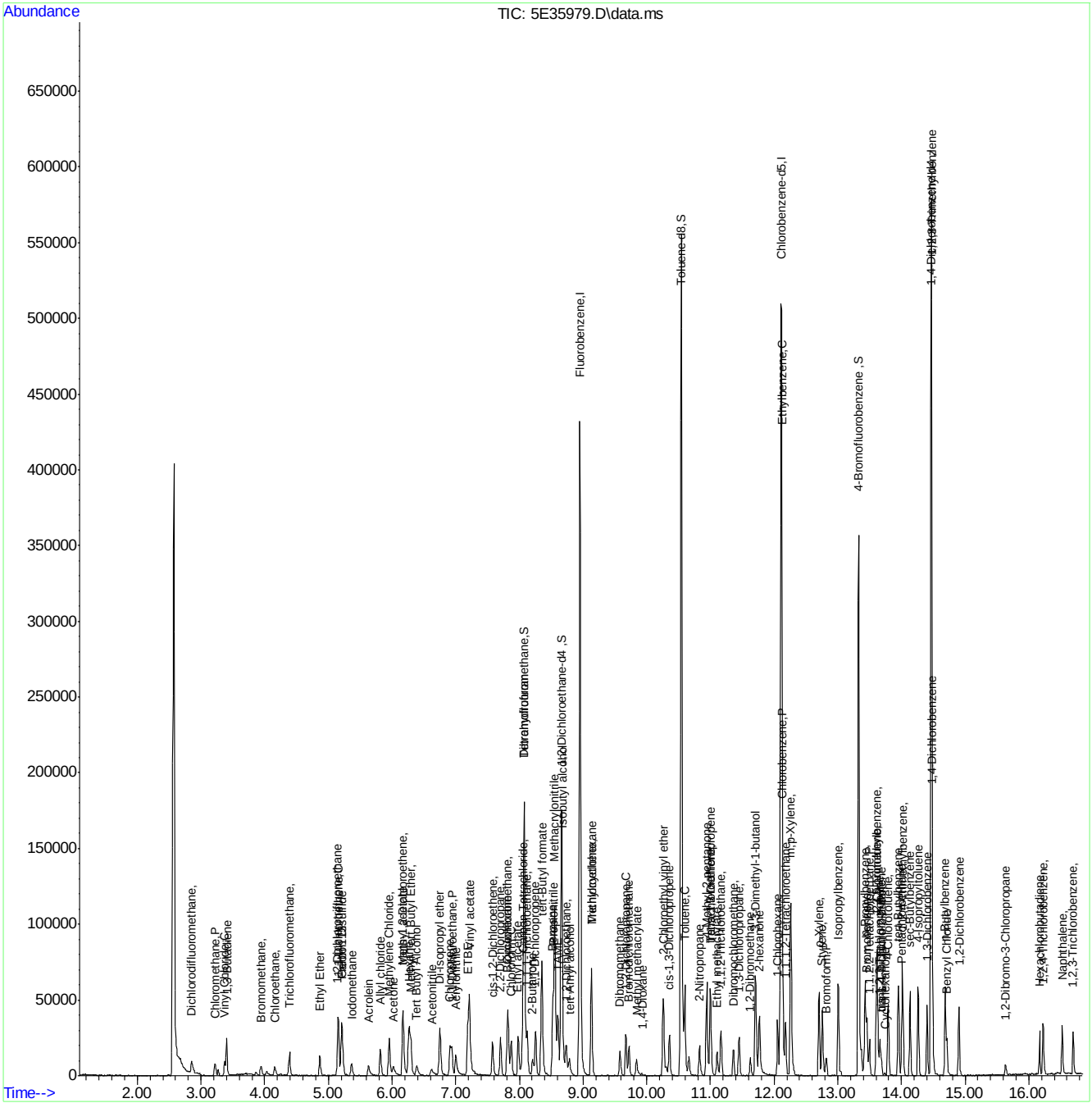
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93) trans-1,4-Dichloro-2-B...	13.682	53	2055	5.32	ug/L		92
94) 1,2,3-Trichloropropane	13.664	110	2991	4.88	ug/L		86
95) Cyclohexanone	13.737	55	1043	15.07	ug/L	#	65
96) 4-Chlorotoluene	13.792	91	25633	5.47	ug/L		98
98) tert-Butylbenzene	13.950	91	16864	5.39	ug/L		96
99) 1,2,4-Trimethylbenzene	14.023	105	28368	4.89	ug/L		90
100) Pentachloroethane	14.005	167	4590	4.04	ug/L		92
101) sec-Butylbenzene	14.133	105	36682	5.19	ug/L		97
102) 4-Isopropyltoluene	14.261	119	31711	5.08	ug/L		97
103) 1,3-Dichlorobenzene	14.401	146	16154	4.68	ug/L		92
104) 1,2,3-Trimethylbenzene	14.475	105	29242	4.89	ug/L		87
105) 1,4-Dichlorobenzene	14.487	146	18246	4.75	ug/L		91
106) n-Butylbenzene	14.688	92	16955	5.16	ug/L		99
107) Benzyl Chloride	14.712	126	2589	3.65	ug/L	#	78
108) 1,2-Dichlorobenzene	14.907	146	15458	4.60	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.639	75	1364	3.88	ug/L	#	81
110) Hexachlorobutadiene	16.169	225	3708	5.49	ug/L		90
111) 1,2,4-Trichlorobenzene	16.230	180	9054	4.78	ug/L		97
112) Naphthalene	16.523	128	23282	4.26	ug/L		97
113) 1,2,3-Trichlorobenzene	16.694	180	7266	4.64	ug/L		94

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:48:16 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35979.D
Injection Time: 12/08/22 11:33

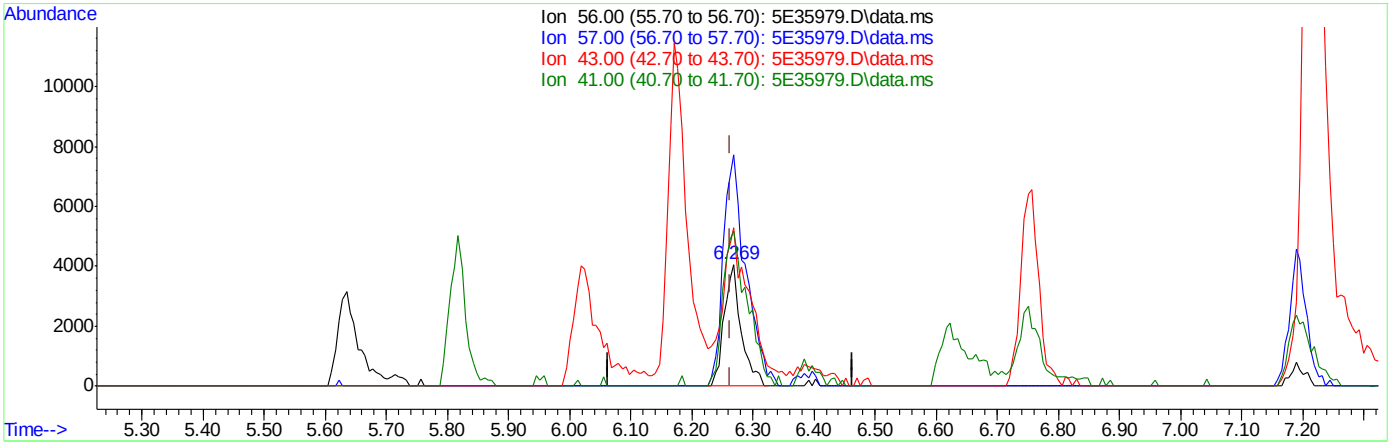
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

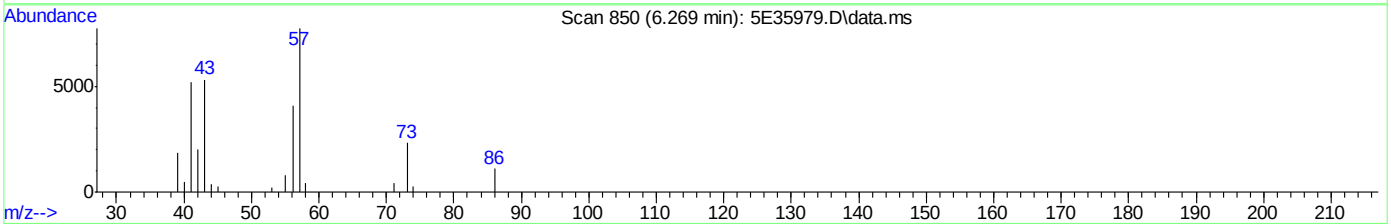
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.27	Overlapping peak
Methacrylonitrile	126-98-7		8.55	Overlapping peak

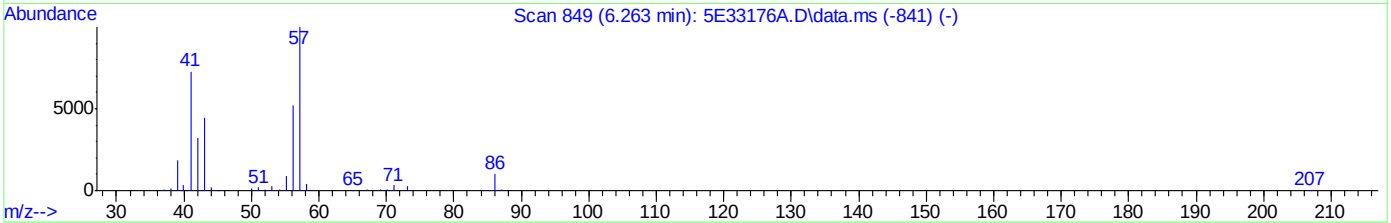
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35979.D\data.ms

(22) Hexane

6.269min (+0.006) 6.23ug/L

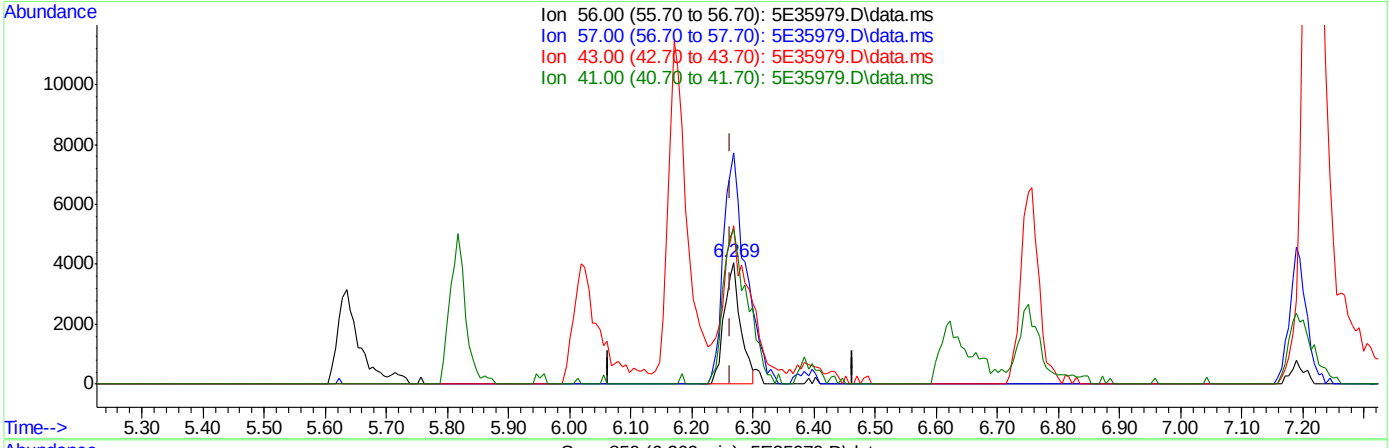
response 7813

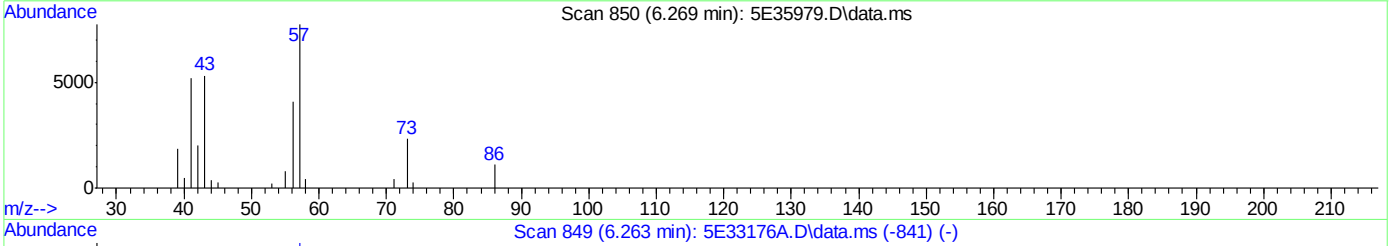
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	189.86
43.00	128.00	113.26
41.00	148.90	127.50#

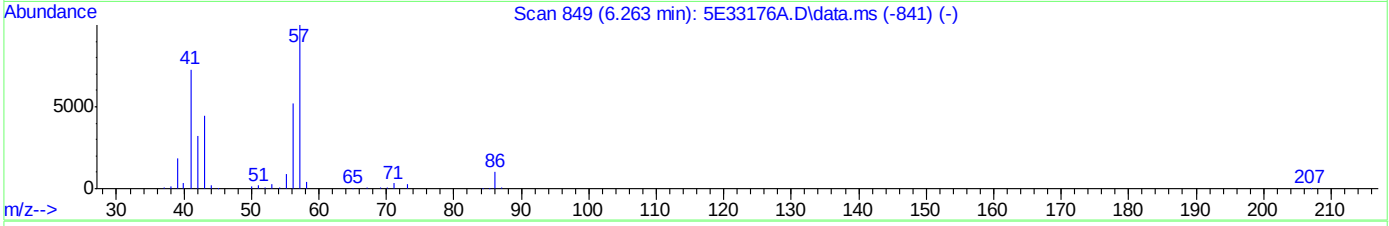
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35979.D\data.ms

(22) Hexane

6.269min (+0.006) 5.95ug/L m

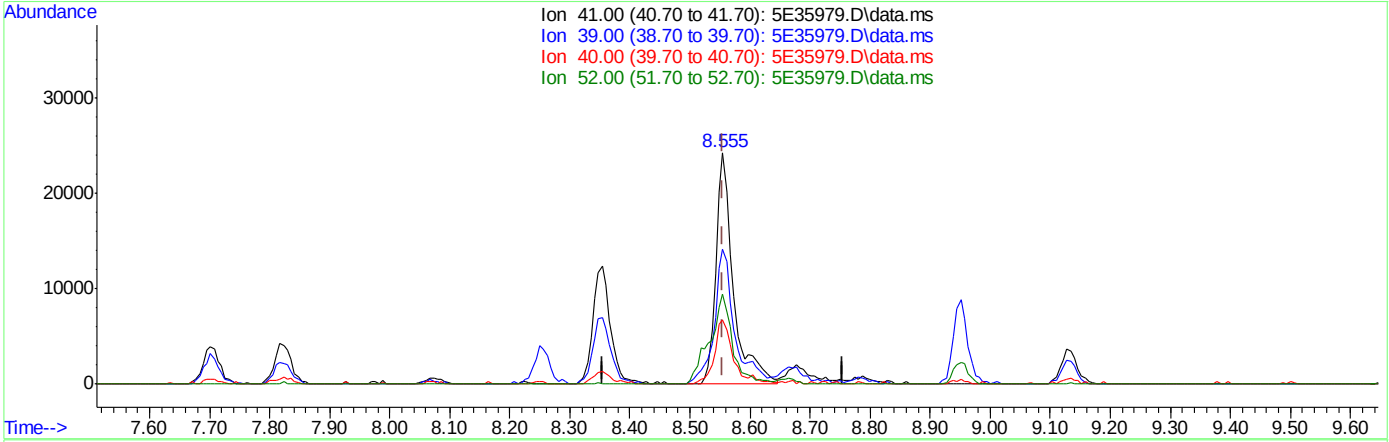
response 7470

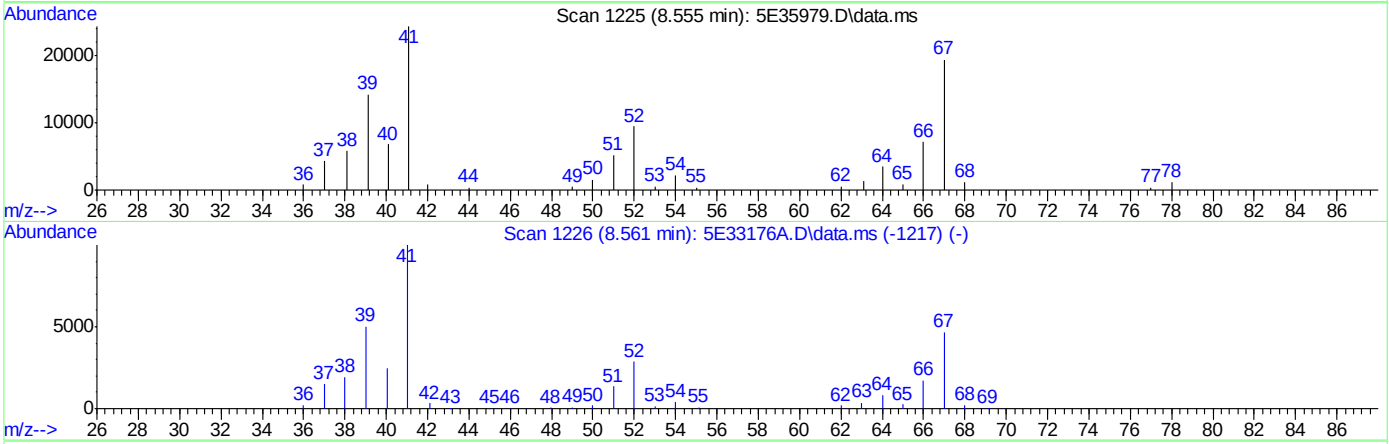
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	189.86
43.00	128.00	130.25
41.00	148.90	127.50#

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35979.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 40.05ug/L

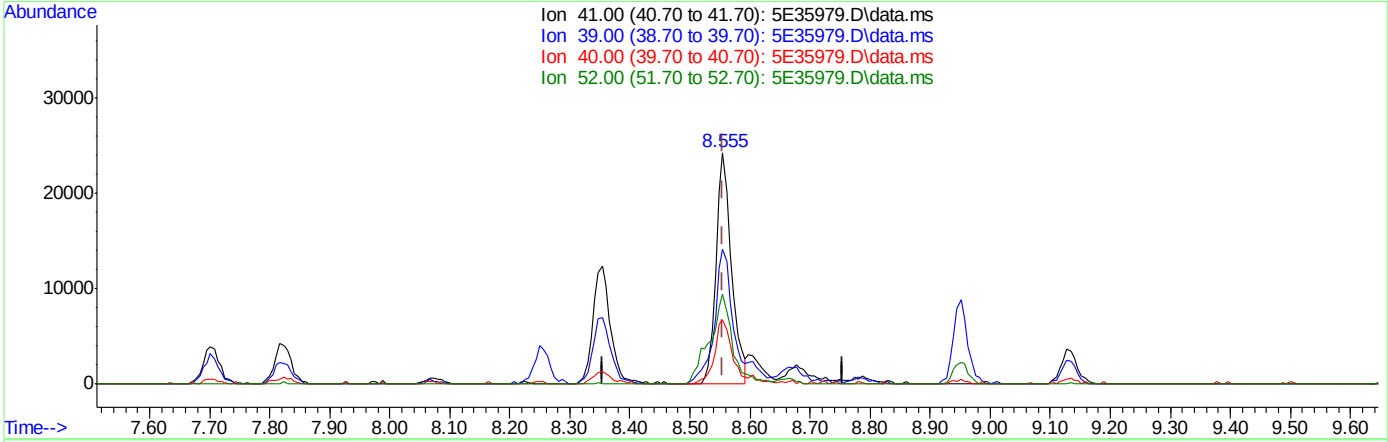
response 48810

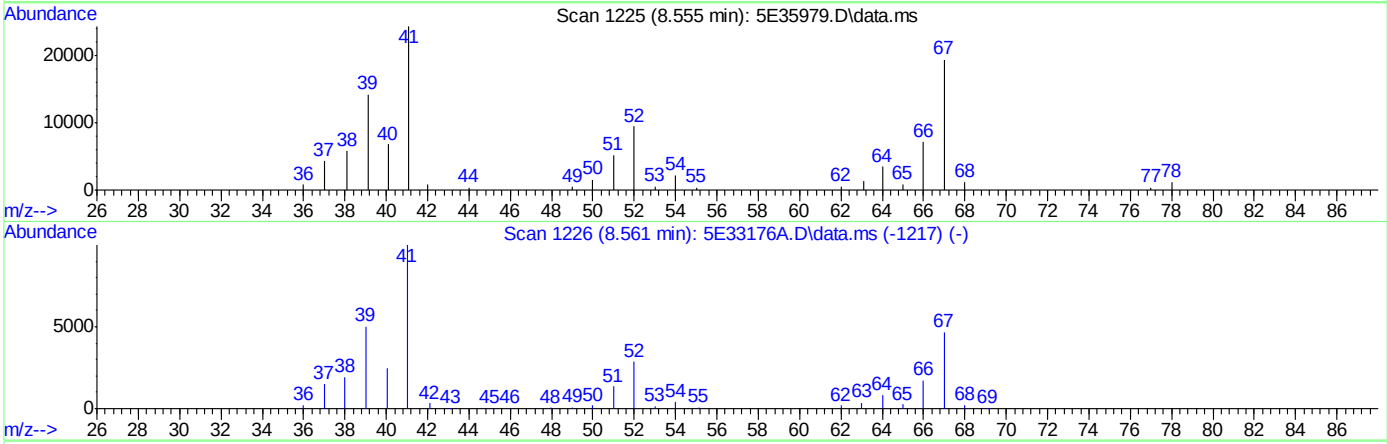
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	54.68
40.00	26.50	26.94
52.00	33.80	37.20

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35979.D
Acq On : 8 Dec 2022 11:33 am
Operator : courtnef
Sample : IC1617-2
Misc : MS52751,V5E1617,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 13:46:54 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35979.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 35.47ug/L m

response 43221

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.35
40.00	26.50	27.83
52.00	33.80	38.73

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	332285	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	234022	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	110165	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	93223	48.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.84%			
49) 1,2-Dichloroethane-d4	8.664	65	106836	54.88	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.76%			
62) Toluene-d8	10.542	98	322752	54.83	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.66%			
86) 4-Bromofluorobenzene	13.328	95	94035	53.91	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 107.82%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	21315	12.15	ug/L	94
3) Chloromethane	3.220	50	20911	11.98	ug/L	94
4) Vinyl Chloride	3.373	62	22495	12.09	ug/L	90
5) 1,3-Butadiene	3.403	39	13612	8.76	ug/L	96
6) Bromomethane	3.946	94	10799	12.18	ug/L	96
7) Chloroethane	4.153	64	14629	10.27	ug/L	92
8) Trichlorofluoromethane	4.391	101	26202	9.77	ug/L	95
9) Ethyl Ether	4.866	59	13605	9.72	ug/L	99
10) Ethanol	5.208	45	627	33.37	ug/L	70
11) 1,2-Dichlorotrifluoroe...	5.147	67	20359	10.57	ug/L	85
12) 1,1-Dichloroethene	5.159	61	24663	11.02	ug/L	93
13) Freon 113	5.220	101	16599	8.89	ug/L	92
14) Carbon Disulfide	5.208	76	45924	8.54	ug/L	99
15) Iodomethane	5.366	142	21689	11.80	ug/L	98
16) Acrolein	5.628	56	15539	43.72	ug/L	96
17) Allyl chloride	5.817	41	17635	8.47	ug/L	87
18) Methylene Chloride	5.958	49	24284	10.38	ug/L	98
19) Acetone	6.019	43	25833	47.37	ug/L	92
20) Methyl acetate	6.171	43	49282	42.21	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	22351	10.37	ug/L	90
22) Hexane	6.263	56	14615	12.17	ug/L	89
23) Methyl Tert Butyl Ether	6.293	73	46499	9.07	ug/L	92
24) Acetonitrile	6.610	41	16780	90.58	ug/L	86
25) Di-isopropyl ether	6.756	45	44475	9.31	ug/L	96
26) Chloroprene	6.909	53	21764	9.56	ug/L	93
27) 1,1-Dichloroethane	6.939	63	29770	10.26	ug/L	94
28) Acrylonitrile	7.000	53	34249	55.25	ug/L	95
29) ETBE	7.189	59	51089	9.85	ug/L	93
30) Tert Butyl Alcohol	6.391	59	24857	94.26	ug/L	96
31) Vinyl acetate	7.214	43	157551	43.18	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	17464	9.08	ug/L	83
33) 2,2-Dichloropropane	7.707	77	24794	9.51	ug/L	96
34) Bromochloromethane	7.805	128	8196	8.38	ug/L #	84
35) Cyclohexane	7.823	56	28111	11.47	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.878	83	29121	9.34	ug/L		95
37) Ethyl acetate	7.982	43	81831	47.13	ug/L		98
38) Tetrahydrofuran	8.073	42	5234	10.14	ug/L		92
40) Carbon Tetrachloride	8.055	117	21344	8.94	ug/L		93
41) 1,1,1-Trichloroethane	8.122	97	25454	9.23	ug/L		92
42) 2-Butanone	8.207	43	37996	48.13	ug/L		92
43) 1,1-Dichloropropene	8.256	75	22479	9.97	ug/L		96
44) tert-Butyl formate	8.354	59	69582	129.24	ug/L		98
45) Propionitrile	8.536	54	27204	100.91	ug/L	#	77
46) Methacrylonitrile	8.555	41	93128m	79.86	ug/L		
47) Benzene	8.524	78	63955	9.57	ug/L		98
48) TAME	8.604	73	45729	9.10	ug/L		97
50) 1,2-Dichloroethane	8.738	62	24175	10.22	ug/L		94
51) tert Amyl alcohol	8.786	59	15107	93.27	ug/L		92
52) Trichloroethene	9.134	95	17086	9.04	ug/L		92
53) Methylcyclohexane	9.134	83	26560	9.14	ug/L		97
54) Dibromomethane	9.579	93	11707	9.02	ug/L		94
55) 1,2-Dichloropropane	9.670	63	18411	11.20	ug/L		95
56) Bromodichloromethane	9.725	83	21355	8.60	ug/L		95
57) Methyl methacrylate	9.841	41	12610	8.65	ug/L		89
58) 1,4-Dioxane	9.920	88	2964	150.43	ug/L		90
59) 2-Chloroethyl vinyl ether	10.256	63	54682	280.75	ug/L		96
60) cis-1,3-Dichloropropene	10.353	75	23499	8.69	ug/L		96
63) Toluene	10.597	91	67069	9.91	ug/L		99
64) Isobutyl alcohol	8.677	43	13385	195.68	ug/L		90
65) 2-Nitropropane	10.829	41	22559	43.53	ug/L		91
66) 4-Methyl-2-pentanone	10.938	43	88541	53.95	ug/L		95
67) trans-1,3-Dichloropropene	10.999	75	21184	9.77	ug/L		92
68) Tetrachloroethene	10.999	166	16779	9.09	ug/L		97
69) Ethyl methacrylate	11.103	69	19933	9.12	ug/L		86
70) 1,1,2-Trichloroethane	11.170	83	13266	10.06	ug/L		95
71) Dibromochloromethane	11.359	129	16383	8.20	ug/L		93
72) 1,3-Dichloropropane	11.451	76	25656	10.07	ug/L		94
73) 1,2-Dibromoethane	11.627	107	15401	8.81	ug/L		97
74) 3,3-Dimethyl-1-butanol	11.707	57	81117	561.74	ug/L		91
75) 2-hexanone	11.768	43	61114	52.86	ug/L		92
76) 1-Chlorohexane	12.060	91	21846	9.81	ug/L		94
77) Ethylbenzene	12.121	91	74600	9.59	ug/L		95
78) Chlorobenzene	12.127	112	43288	9.55	ug/L		91
79) 1,1,1,2-Tetrachloroethane	12.176	131	14801	8.64	ug/L		88
80) m,p-Xylene	12.261	91	110856	18.86	ug/L		99
81) o-Xylene	12.706	91	53896	9.39	ug/L		96
82) Styrene	12.755	104	40667	9.01	ug/L		96
83) Bromoform	12.816	173	9695	7.34	ug/L		94
84) Isopropylbenzene	13.005	105	69612	9.35	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	4788	12.59	ug/L	#	86
88) n-Propylbenzene	13.426	91	85909	10.69	ug/L		96
89) Bromobenzene	13.456	156	16792	9.36	ug/L		84
90) 1,1,2,2-Tetrachloroethane	13.499	83	20850	10.20	ug/L		98
91) 1,3,5-Trimethylbenzene	13.609	105	55157	9.68	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

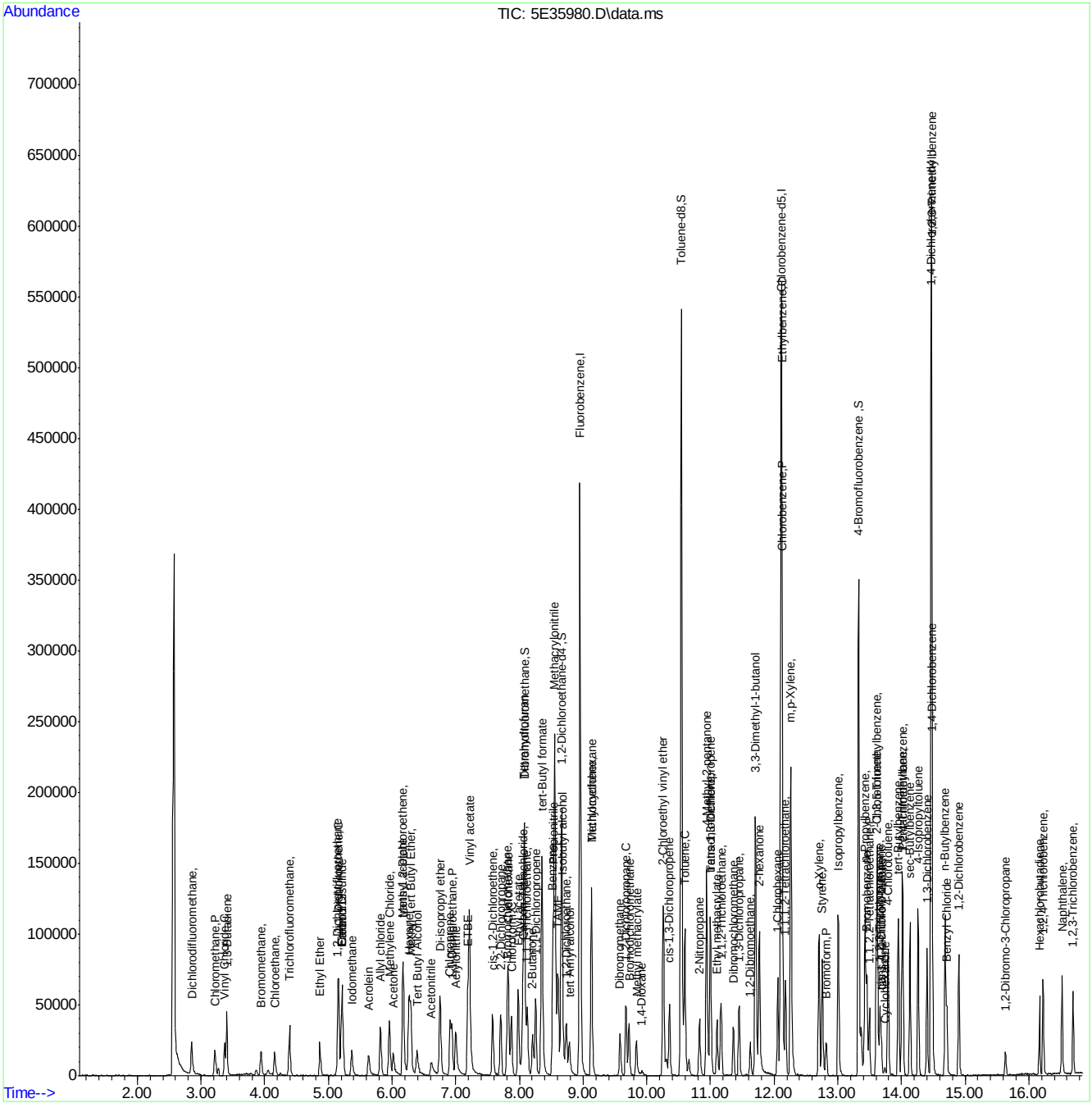
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	50084	9.91	ug/L		98
93)	trans-1,4-Dichloro-2-B...	13.682	53	4788	12.59	ug/L	#	80
94)	1,2,3-Trichloropropane	13.664	110	5592	9.42	ug/L		96
95)	Cyclohexanone	13.737	55	2543	37.93	ug/L		96
96)	4-Chlorotoluene	13.792	91	46002	10.14	ug/L		95
98)	tert-Butylbenzene	13.950	91	30071	9.92	ug/L		95
99)	1,2,4-Trimethylbenzene	14.023	105	53103	9.45	ug/L		92
100)	Pentachloroethane	14.011	167	9931	9.01	ug/L		88
101)	sec-Butylbenzene	14.133	105	67711	9.90	ug/L		98
102)	4-Isopropyltoluene	14.261	119	59105	9.77	ug/L		98
103)	1,3-Dichlorobenzene	14.401	146	31482	9.41	ug/L		98
104)	1,2,3-Trimethylbenzene	14.474	105	54631	9.42	ug/L		97
105)	1,4-Dichlorobenzene	14.487	146	33631	9.04	ug/L		93
106)	n-Butylbenzene	14.688	92	31326	9.83	ug/L		97
107)	Benzyl Chloride	14.712	126	5923	8.52	ug/L	#	63
108)	1,2-Dichlorobenzene	14.901	146	29244	8.98	ug/L		96
109)	1,2-Dibromo-3-Chloropr...	15.639	75	2847	8.34	ug/L		90
110)	Hexachlorobutadiene	16.169	225	6609	10.10	ug/L		97
111)	1,2,4-Trichlorobenzene	16.224	180	16416	8.95	ug/L		95
112)	Naphthalene	16.523	128	46658	8.82	ug/L		98
113)	1,2,3-Trichlorobenzene	16.693	180	14392	9.48	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:53:08 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

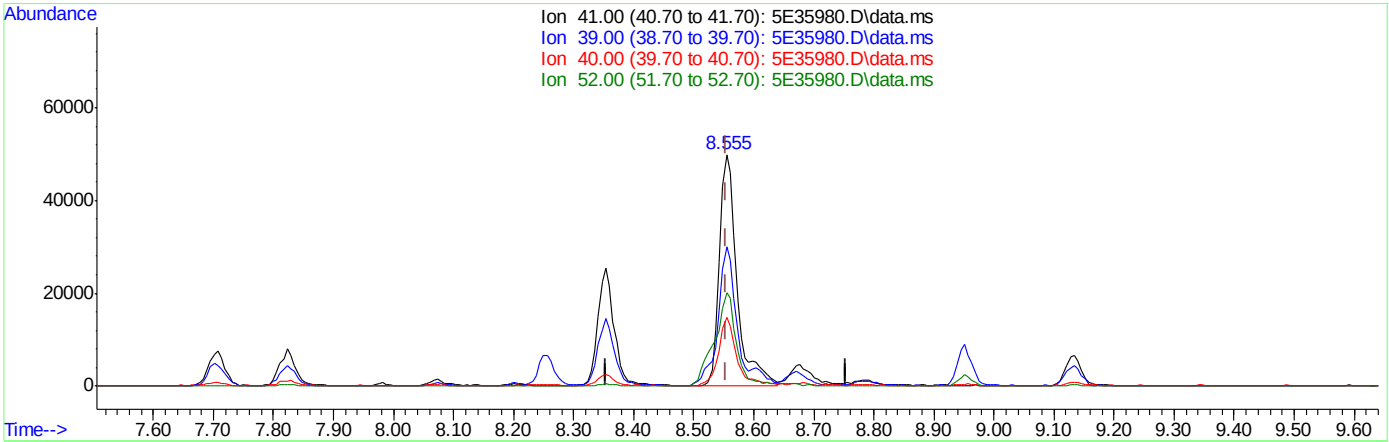
Sample Number:	V5E1617-IC1617	**Method:**	SW846 8260D
Lab FileID:	5E35980.D	**Analyst approved:**	12/08/22 16:36 Courtney Failla
Injection Time:	12/08/22 11:56	**Supervisor approved:**	12/09/22 10:44 Karen Watson

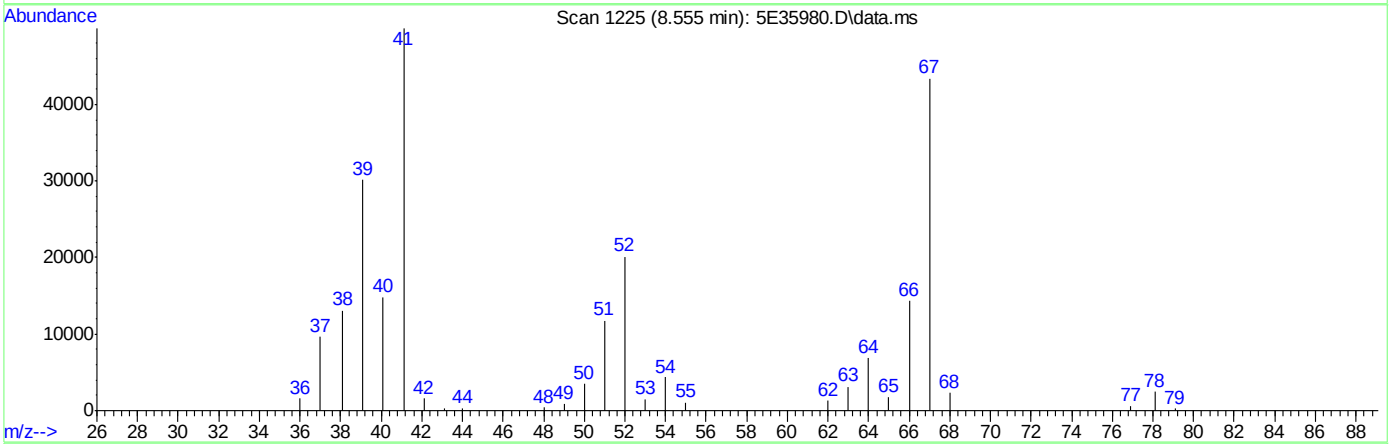
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:46:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35980.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 87.46ug/L

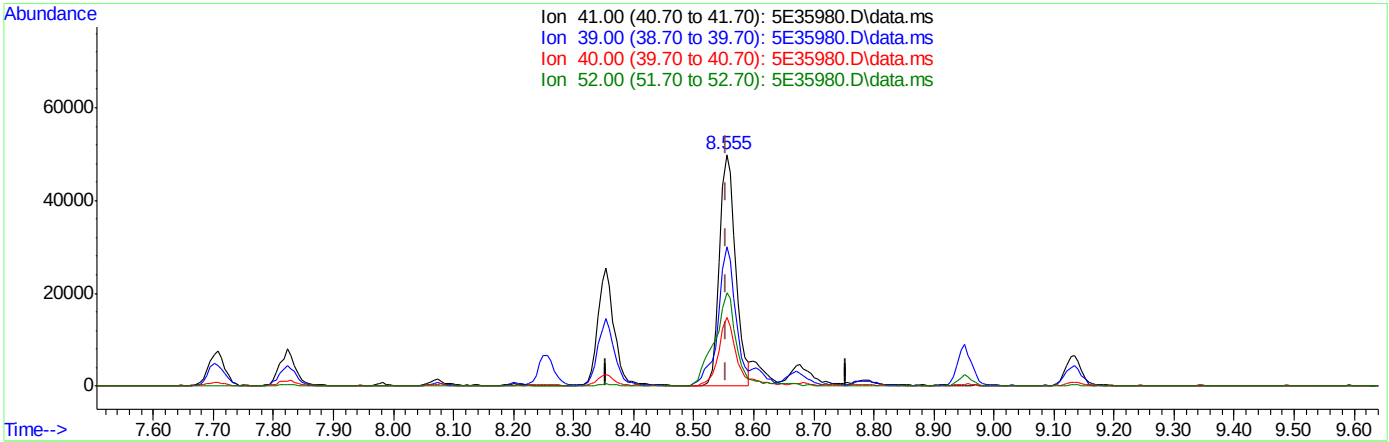
response 101992

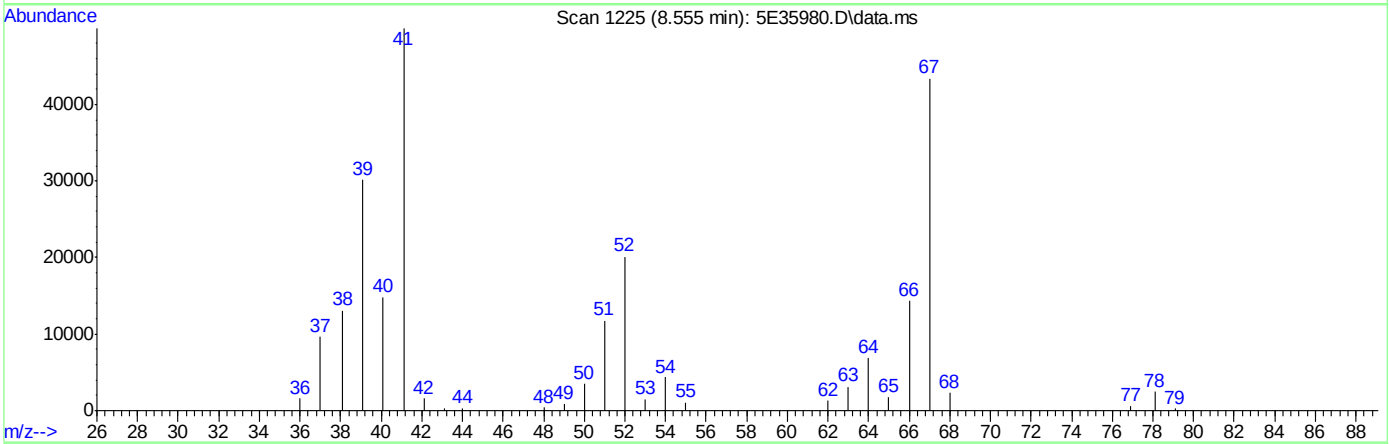
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.65
40.00	26.50	29.65
52.00	33.80	39.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35980.D
Acq On : 8 Dec 2022 11:56 am
Operator : courtnef
Sample : IC1617-3
Misc : MS52751,V5E1617,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 13:46:57 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35980.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 79.86ug/L m

response 93128

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	60.35
40.00	26.50	29.65
52.00	33.80	40.20

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	348214	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	246209	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	120891	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	94470	46.82	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 93.64%				
49) 1,2-Dichloroethane-d4	8.665	65	110344	54.09	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 108.18%				
62) Toluene-d8	10.542	98	340139	54.92	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 109.84%				
86) 4-Bromofluorobenzene	13.328	95	98392	51.40	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.80%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.849	85	52951	28.81	ug/L		93
3) Chloromethane	3.221	50	50017	27.35	ug/L		94
4) Vinyl Chloride	3.367	62	53175	27.28	ug/L		99
5) 1,3-Butadiene	3.403	39	34791	21.84	ug/L		85
6) Bromomethane	3.940	94	28173	29.02	ug/L		91
7) Chloroethane	4.153	64	39074	24.74	ug/L		100
8) Trichlorofluoromethane	4.385	101	66135	23.52	ug/L		97
9) Ethyl Ether	4.867	59	40008	27.27	ug/L		96
10) Ethanol	5.098	45	6208	315.31	ug/L		96
11) 1,2-Dichlorotrifluoroe...	5.153	67	58080	28.78	ug/L		89
12) 1,1-Dichloroethene	5.159	61	72368	30.86	ug/L		92
13) Freon 113	5.220	101	47871	24.57	ug/L		94
14) Carbon Disulfide	5.208	76	130841	23.22	ug/L		95
15) Iodomethane	5.366	142	65481	32.69	ug/L		98
16) Acrolein	5.635	56	45676	122.65	ug/L		91
17) Allyl chloride	5.818	41	49207	22.55	ug/L		91
18) Methylene Chloride	5.958	49	63938	26.33	ug/L		91
19) Acetone	6.019	43	71687	125.45	ug/L		99
20) Methyl acetate	6.171	43	141240	115.43	ug/L		99
21) trans-1,2-Dichloroethene	6.171	61	66952	29.65	ug/L		92
22) Hexane	6.263	56	41585	33.04	ug/L	#	88
23) Methyl Tert Butyl Ether	6.293	73	134537	25.05	ug/L		93
24) Acetonitrile	6.616	41	45448	229.17	ug/L		96
25) Di-isopropyl ether	6.750	45	126664	25.30	ug/L		99
26) Chloroprene	6.909	53	58275	24.43	ug/L		95
27) 1,1-Dichloroethane	6.939	63	87711	28.86	ug/L		96
28) Acrylonitrile	6.994	53	79207	121.94	ug/L		95
29) ETBE	7.189	59	150049	27.60	ug/L		93
30) Tert Butyl Alcohol	6.391	59	67803	245.37	ug/L		99
31) Vinyl acetate	7.214	43	406143	106.22	ug/L		97
32) cis-1,2-Dichloroethene	7.579	96	47843	23.73	ug/L		87
33) 2,2-Dichloropropane	7.701	77	68581	25.10	ug/L		97
34) Bromochloromethane	7.811	128	25597	24.97	ug/L		90
35) Cyclohexane	7.823	56	78104	30.41	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.872	83	84836	25.97	ug/L	95
37) Ethyl acetate	7.976	43	201963	111.00	ug/L	98
38) Tetrahydrofuran	8.067	42	13906	25.61	ug/L	93
40) Carbon Tetrachloride	8.055	117	62475	24.96	ug/L	97
41) 1,1,1-Trichloroethane	8.122	97	71783	24.83	ug/L	95
42) 2-Butanone	8.201	43	111230	134.44	ug/L	97
43) 1,1-Dichloropropene	8.256	75	64255	27.20	ug/L	94
44) tert-Butyl formate	8.354	59	185595	309.20	ug/L	95
45) Propionitrile	8.537	54	75286	266.49	ug/L	83
46) Methacrylonitrile	8.555	41	261394m	213.89	ug/L	
47) Benzene	8.524	78	183068	26.14	ug/L	99
48) TAME	8.610	73	132765	25.21	ug/L	98
50) 1,2-Dichloroethane	8.738	62	70916	28.61	ug/L	95
51) tert Amyl alcohol	8.787	59	47949	272.21	ug/L	93
52) Trichloroethene	9.134	95	49576	25.02	ug/L	93
53) Methylcyclohexane	9.134	83	79721	26.14	ug/L	92
54) Dibromomethane	9.579	93	33027	24.29	ug/L	94
55) 1,2-Dichloropropane	9.671	63	50669	29.42	ug/L	94
56) Bromodichloromethane	9.725	83	63620	24.46	ug/L	98
57) Methyl methacrylate	9.835	41	36803	23.78	ug/L	95
58) 1,4-Dioxane	9.920	88	9084	431.00	ug/L	88
59) 2-Chloroethyl vinyl ether	10.262	63	145283	711.79	ug/L	94
60) cis-1,3-Dichloropropene	10.353	75	71492	25.22	ug/L	98
63) Toluene	10.597	91	191256	26.87	ug/L	97
64) Isobutyl alcohol	8.671	43	37754	510.55	ug/L	91
65) 2-Nitropropane	10.829	41	68770	126.13	ug/L	97
66) 4-Methyl-2-pentanone	10.939	43	262614	152.11	ug/L	95
67) trans-1,3-Dichloropropene	10.999	75	63037	27.62	ug/L	82
68) Tetrachloroethene	10.999	166	48182	24.80	ug/L	94
69) Ethyl methacrylate	11.103	69	58730	25.54	ug/L	94
70) 1,1,2-Trichloroethane	11.164	83	37465	27.01	ug/L	92
71) Dibromochloromethane	11.359	129	49881	23.73	ug/L	99
72) 1,3-Dichloropropane	11.451	76	76342	28.49	ug/L	99
73) 1,2-Dibromoethane	11.627	107	46247	25.15	ug/L	92
74) 3,3-Dimethyl-1-butanol	11.707	57	227373	1414.87	ug/L	95
75) 2-hexanone	11.768	43	183062	150.51	ug/L	92
76) 1-Chlorohexane	12.060	91	64323	27.45	ug/L	95
77) Ethylbenzene	12.121	91	212789	26.00	ug/L	98
78) Chlorobenzene	12.127	112	127390	26.71	ug/L	94
79) 1,1,1,2-Tetrachloroethane	12.176	131	44754	24.82	ug/L	98
80) m,p-Xylene	12.261	91	324150	52.41	ug/L	99
81) o-Xylene	12.706	91	157993	26.15	ug/L	99
82) Styrene	12.755	104	123440	26.01	ug/L	94
83) Bromoform	12.822	173	29667	21.36	ug/L	98
84) Isopropylbenzene	13.005	105	199466	25.46	ug/L	97
87) cis-1,4-Dichloro-2-butene	13.682	53	14737	33.70	ug/L	93
88) n-Propylbenzene	13.426	91	255185	28.95	ug/L	97
89) Bromobenzene	13.456	156	48873	24.81	ug/L	87
90) 1,1,2,2-Tetrachloroethane	13.499	83	62776	27.98	ug/L	98
91) 1,3,5-Trimethylbenzene	13.609	105	165425	26.46	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

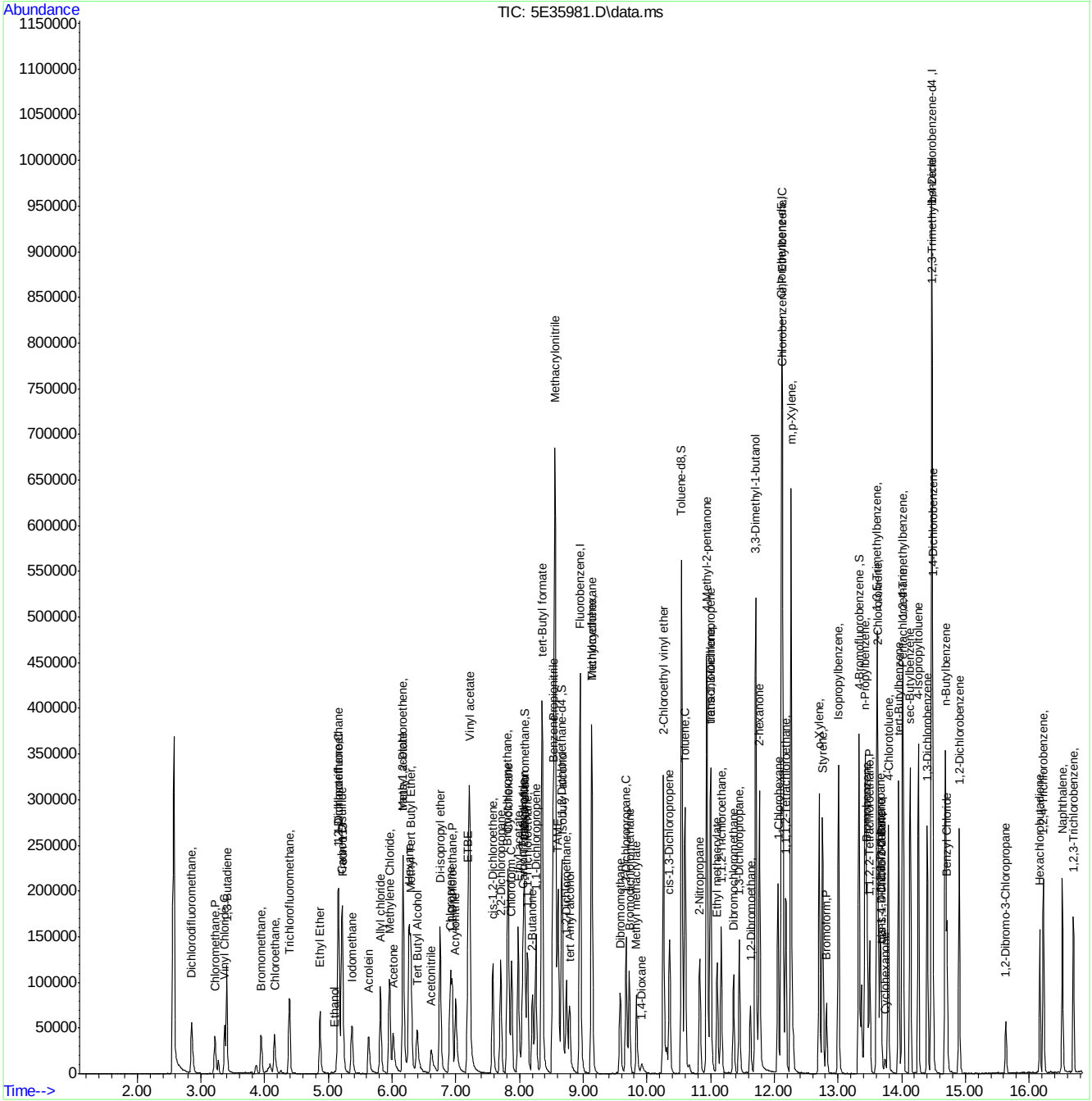
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	152364	27.47	ug/L		97
93) trans-1,4-Dichloro-2-B...	13.682	53	14737	33.70	ug/L		91
94) 1,2,3-Trichloropropane	13.664	110	17172	26.35	ug/L		90
95) Cyclohexanone	13.737	55	7752	105.37	ug/L		87
96) 4-Chlorotoluene	13.792	91	136193	27.36	ug/L		96
98) tert-Butylbenzene	13.950	91	89064	26.76	ug/L		96
99) 1,2,4-Trimethylbenzene	14.017	105	163462	26.52	ug/L		98
100) Pentachloroethane	14.011	167	29275	24.21	ug/L		89
101) sec-Butylbenzene	14.133	105	207815	27.69	ug/L		98
102) 4-Isopropyltoluene	14.261	119	182434	27.49	ug/L		99
103) 1,3-Dichlorobenzene	14.401	146	91731	24.98	ug/L		95
104) 1,2,3-Trimethylbenzene	14.474	105	163244	25.66	ug/L		98
105) 1,4-Dichlorobenzene	14.487	146	99777	24.45	ug/L		94
106) n-Butylbenzene	14.688	92	95733	27.39	ug/L		98
107) Benzyl Chloride	14.712	126	20137	25.41	ug/L	#	89
108) 1,2-Dichlorobenzene	14.901	146	87133	24.39	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	9136	24.09	ug/L		91
110) Hexachlorobutadiene	16.169	225	18710	26.06	ug/L		97
111) 1,2,4-Trichlorobenzene	16.224	180	49474	24.58	ug/L		95
112) Naphthalene	16.523	128	141106	24.31	ug/L		99
113) 1,2,3-Trichlorobenzene	16.694	180	42352	25.43	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:51:07 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35981.D
Injection Time: 12/08/22 12:19

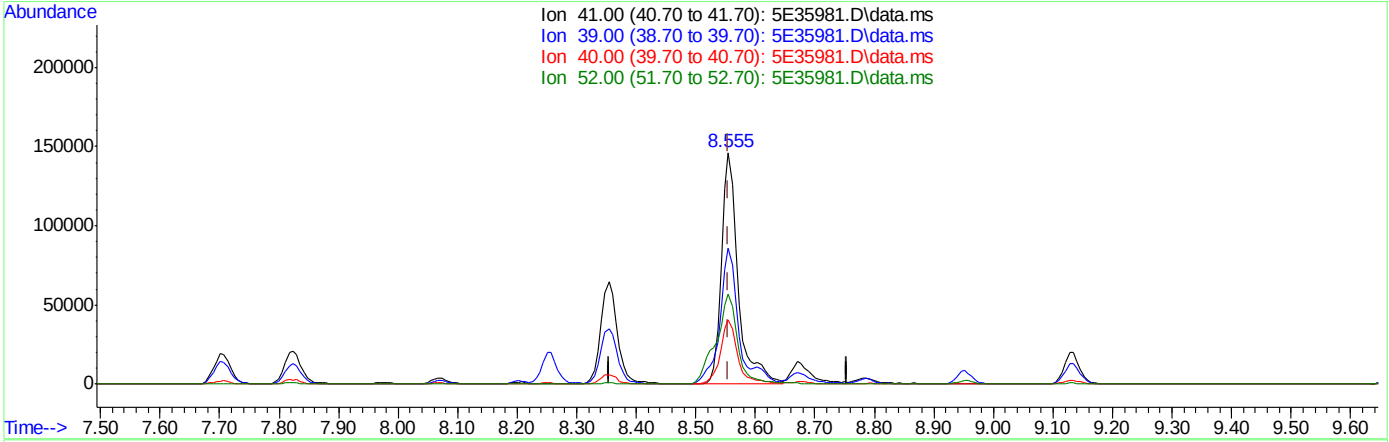
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

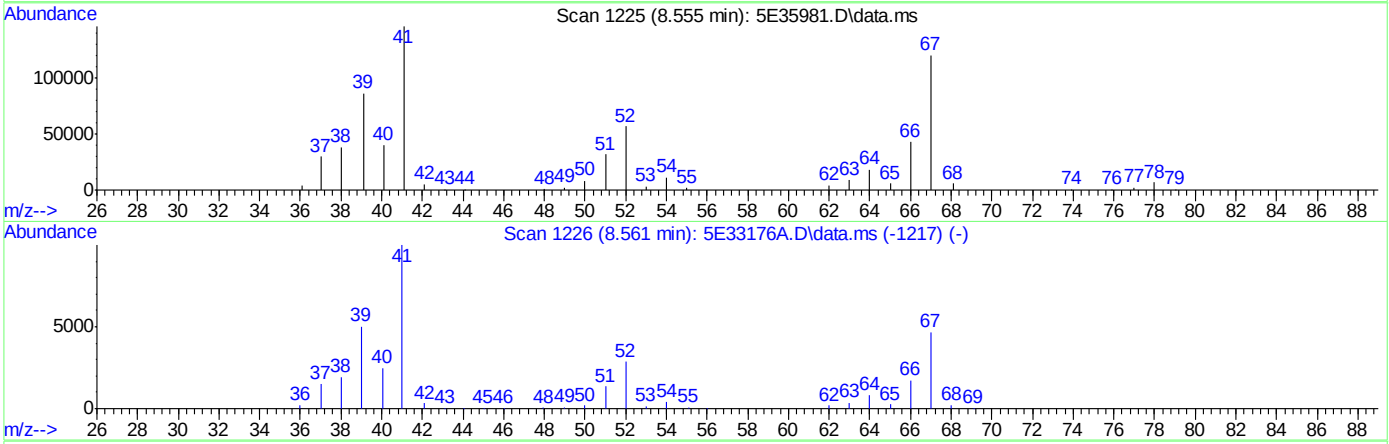
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:46:59 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35981.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 233.06ug/L

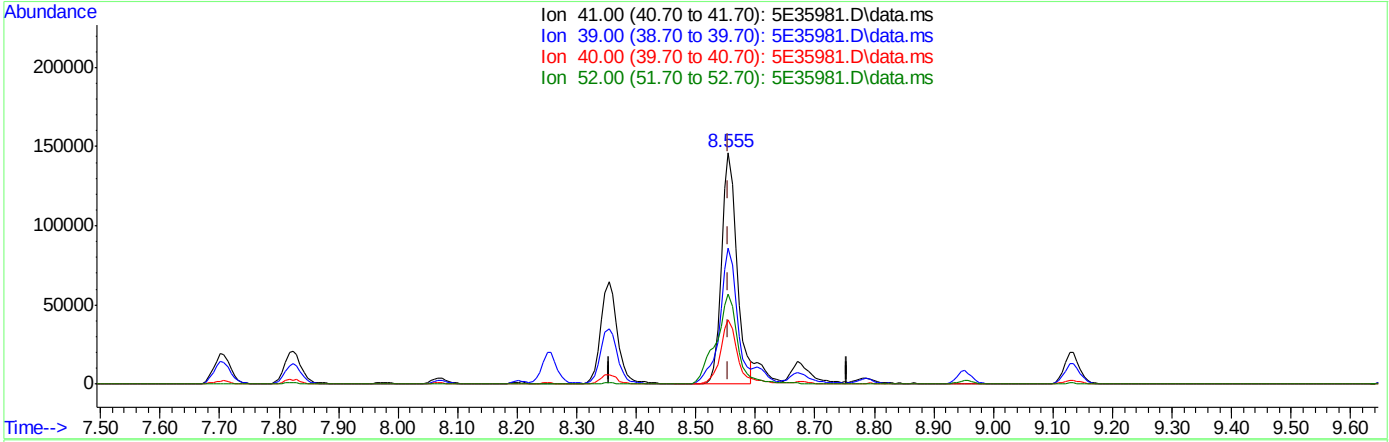
response 284812

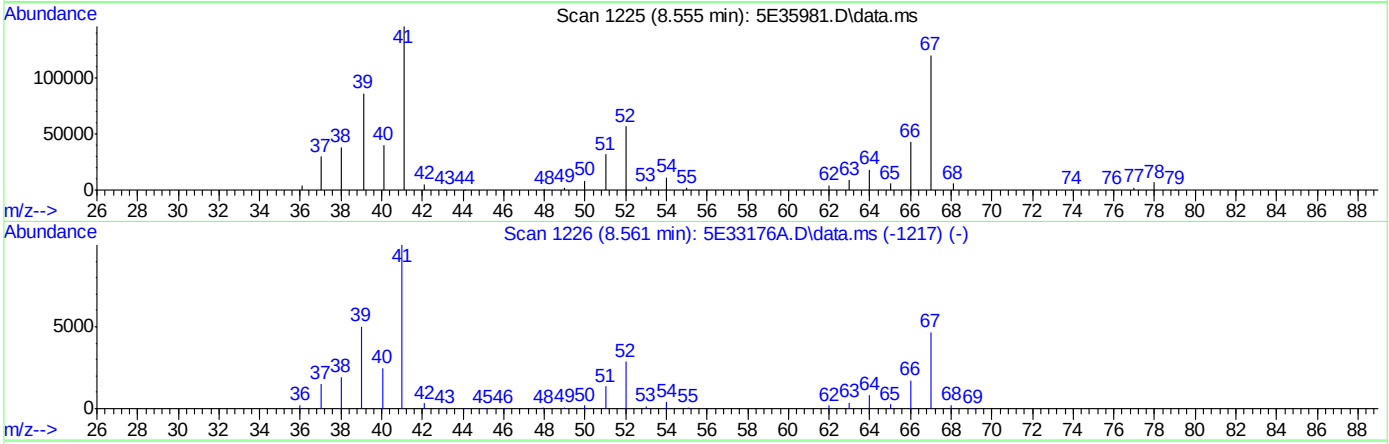
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.78
40.00	26.50	27.69
52.00	33.80	38.50

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35981.D
Acq On : 8 Dec 2022 12:19 pm
Operator : courtnef
Sample : IC1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 13:46:59 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35981.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 213.89ug/L m

response 261394

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	58.92
40.00	26.50	27.69
52.00	33.80	38.76

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	367847	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.109	117	264640	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129127	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	101237	47.50	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.00%			
49) 1,2-Dichloroethane-d4	8.665	65	117582	54.56	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.12%			
62) Toluene-d8	10.542	98	355837	53.46	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 106.92%			
86) 4-Bromofluorobenzene	13.328	95	105053	51.38	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.76%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	84203	43.36	ug/L	96
3) Chloromethane	3.221	50	83608	43.28	ug/L	96
4) Vinyl Chloride	3.373	62	89412	43.42	ug/L	98
5) 1,3-Butadiene	3.404	39	54463	32.98	ug/L	82
6) Bromomethane	3.946	94	48326	45.25	ug/L	92
7) Chloroethane	4.153	64	74963	42.15	ug/L	99
8) Trichlorofluoromethane	4.385	101	109209	36.77	ug/L	94
9) Ethyl Ether	4.873	59	67132	43.32	ug/L	93
10) Ethanol	5.098	45	9792	470.80	ug/L	92
11) 1,2-Dichlorotrifluoroe...	5.153	67	93874	44.04	ug/L	89
12) 1,1-Dichloroethene	5.159	61	118642	47.89	ug/L	92
13) Freon 113	5.220	101	77057	37.57	ug/L	92
14) Carbon Disulfide	5.208	76	212896	35.77	ug/L	93
15) Iodomethane	5.367	142	113009	51.60	ug/L	95
16) Acrolein	5.629	56	76274	193.88	ug/L	99
17) Allyl chloride	5.818	41	78262	33.96	ug/L	94
18) Methylene Chloride	5.958	49	105856	41.64	ug/L	90
19) Acetone	6.019	43	106657	176.68	ug/L	99
20) Methyl acetate	6.171	43	243863	188.66	ug/L	99
21) trans-1,2-Dichloroethene	6.171	61	109542	45.93	ug/L	93
22) Hexane	6.263	56	68915	51.83	ug/L #	85
23) Methyl Tert Butyl Ether	6.293	73	222844	39.28	ug/L	96
24) Acetonitrile	6.616	41	71347	335.15	ug/L	97
25) Di-isopropyl ether	6.757	45	212929	40.26	ug/L	98
26) Chloroprene	6.909	53	94854	37.65	ug/L	95
27) 1,1-Dichloroethane	6.939	63	145964	45.46	ug/L	96
28) Acrylonitrile	7.000	53	141107	205.64	ug/L	99
29) ETBE	7.195	59	247901	43.16	ug/L	98
30) Tert Butyl Alcohol	6.397	59	111905	383.35	ug/L	97
31) Vinyl acetate	7.214	43	732361	181.32	ug/L	96
32) cis-1,2-Dichloroethene	7.580	96	80932	38.00	ug/L	88
33) 2,2-Dichloropropane	7.701	77	116571	40.38	ug/L	95
34) Bromochloromethane	7.811	128	40933	37.79	ug/L	87
35) Cyclohexane	7.823	56	125501	46.25	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.872	83	141359	40.96	ug/L		96
37) Ethyl acetate	7.976	43	365869	190.35	ug/L		98
38) Tetrahydrofuran	8.067	42	20789	36.14	ug/L		96
40) Carbon Tetrachloride	8.049	117	104020	39.34	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	118637	38.84	ug/L		94
42) 2-Butanone	8.201	43	172145	196.96	ug/L		99
43) 1,1-Dichloropropene	8.256	75	106016	42.48	ug/L		96
44) tert-Butyl formate	8.354	59	321804	480.13	ug/L		97
45) Propionitrile	8.537	54	129519	433.99	ug/L		93
46) Methacrylonitrile	8.555	41	438397m	339.58	ug/L		
47) Benzene	8.524	78	303234	40.98	ug/L		99
48) TAME	8.604	73	224667	40.38	ug/L		98
50) 1,2-Dichloroethane	8.738	62	116861	44.62	ug/L		96
51) tert Amyl alcohol	8.787	59	79729	416.25	ug/L		95
52) Trichloroethene	9.134	95	81900	39.13	ug/L		93
53) Methylcyclohexane	9.134	83	129690	40.22	ug/L		94
54) Dibromomethane	9.579	93	55294	38.50	ug/L		94
55) 1,2-Dichloropropane	9.671	63	84253	46.30	ug/L		95
56) Bromodichloromethane	9.725	83	107595	39.15	ug/L		98
57) Methyl methacrylate	9.835	41	62014	37.48	ug/L		95
58) 1,4-Dioxane	9.921	88	15001	662.64	ug/L		94
59) 2-Chloroethyl vinyl ether	10.256	63	251001	1164.10	ug/L		95
60) cis-1,3-Dichloropropene	10.353	75	121155	40.45	ug/L		99
63) Toluene	10.597	91	316072	41.31	ug/L		99
64) Isobutyl alcohol	8.677	43	60715	748.69	ug/L		95
65) 2-Nitropropane	10.829	41	118651	202.47	ug/L		99
66) 4-Methyl-2-pentanone	10.939	43	397483	214.19	ug/L		95
67) trans-1,3-Dichloropropene	11.000	75	108483	44.23	ug/L		93
68) Tetrachloroethene	11.000	166	79439	38.05	ug/L		95
69) Ethyl methacrylate	11.103	69	99295	40.17	ug/L		94
70) 1,1,2-Trichloroethane	11.164	83	63623	42.67	ug/L		91
71) Dibromochloromethane	11.359	129	86502	38.28	ug/L		98
72) 1,3-Dichloropropane	11.451	76	125524	43.59	ug/L		97
73) 1,2-Dibromoethane	11.621	107	79692	40.31	ug/L		100
74) 3,3-Dimethyl-1-butanol	11.707	57	402798	2217.88	ug/L		94
75) 2-hexanone	11.768	43	286166	218.90	ug/L		91
76) 1-Chlorohexane	12.060	91	109706	43.56	ug/L		95
77) Ethylbenzene	12.121	91	361875	41.13	ug/L		98
78) Chlorobenzene	12.127	112	212352	41.43	ug/L		95
79) 1,1,1,2-Tetrachloroethane	12.182	131	75816	39.12	ug/L		95
80) m,p-Xylene	12.262	91	551780	83.00	ug/L		99
81) o-Xylene	12.707	91	264919	40.80	ug/L		98
82) Styrene	12.755	104	208811	40.93	ug/L		97
83) Bromoform	12.816	173	52455	35.13	ug/L		95
84) Isopropylbenzene	13.005	105	341883	40.61	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.676	53	26366	54.06	ug/L	#	74
88) n-Propylbenzene	13.426	91	428504	45.51	ug/L		96
89) Bromobenzene	13.456	156	84651	40.24	ug/L		91
90) 1,1,2,2-Tetrachloroethane	13.493	83	106749	44.55	ug/L		97
91) 1,3,5-Trimethylbenzene	13.609	105	285130	42.70	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

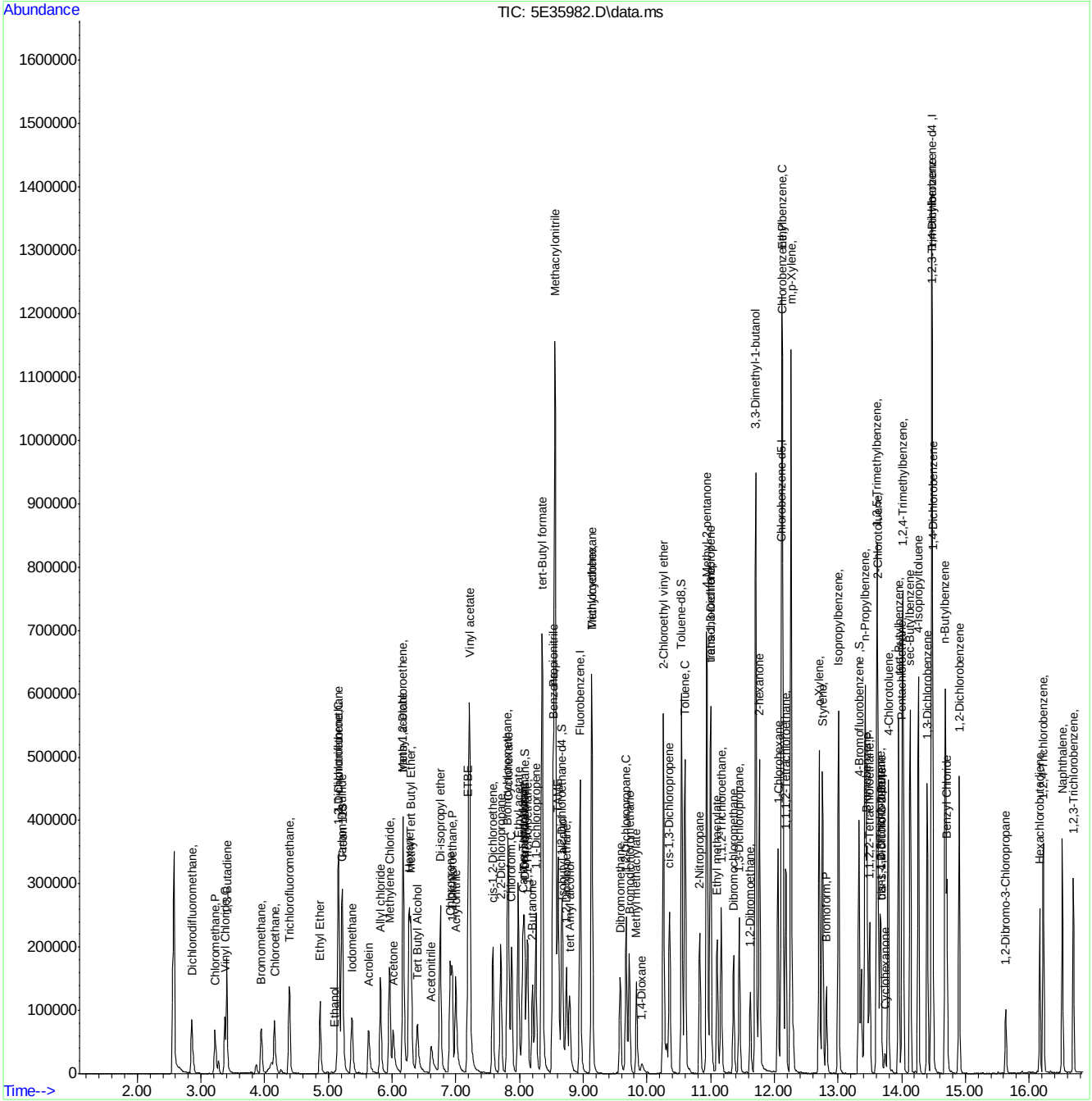
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	259271	43.76	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.676	53	26366	54.06	ug/L	#	76
94) 1,2,3-Trichloropropane	13.664	110	29350	42.17	ug/L		87
95) Cyclohexanone	13.737	55	13429	170.90	ug/L		93
96) 4-Chlorotoluene	13.792	91	229843	43.23	ug/L		98
98) tert-Butylbenzene	13.950	91	151181	42.53	ug/L		98
99) 1,2,4-Trimethylbenzene	14.017	105	280510	42.60	ug/L		96
100) Pentachloroethane	14.005	167	49260	38.15	ug/L		93
101) sec-Butylbenzene	14.133	105	350263	43.69	ug/L		98
102) 4-Isopropyltoluene	14.261	119	311187	43.90	ug/L		98
103) 1,3-Dichlorobenzene	14.401	146	156423	39.88	ug/L		95
104) 1,2,3-Trimethylbenzene	14.475	105	283029	41.65	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	167269	38.37	ug/L		96
106) n-Butylbenzene	14.682	92	170010	45.54	ug/L		96
107) Benzyl Chloride	14.712	126	36616	41.75	ug/L		93
108) 1,2-Dichlorobenzene	14.901	146	151068	39.58	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	15991	39.01	ug/L		90
110) Hexachlorobutadiene	16.169	225	31671	41.30	ug/L		93
111) 1,2,4-Trichlorobenzene	16.224	180	85378	39.72	ug/L		94
112) Naphthalene	16.523	128	245052	39.53	ug/L		100
113) 1,2,3-Trichlorobenzene	16.694	180	72596	40.80	ug/L		96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:54:21 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

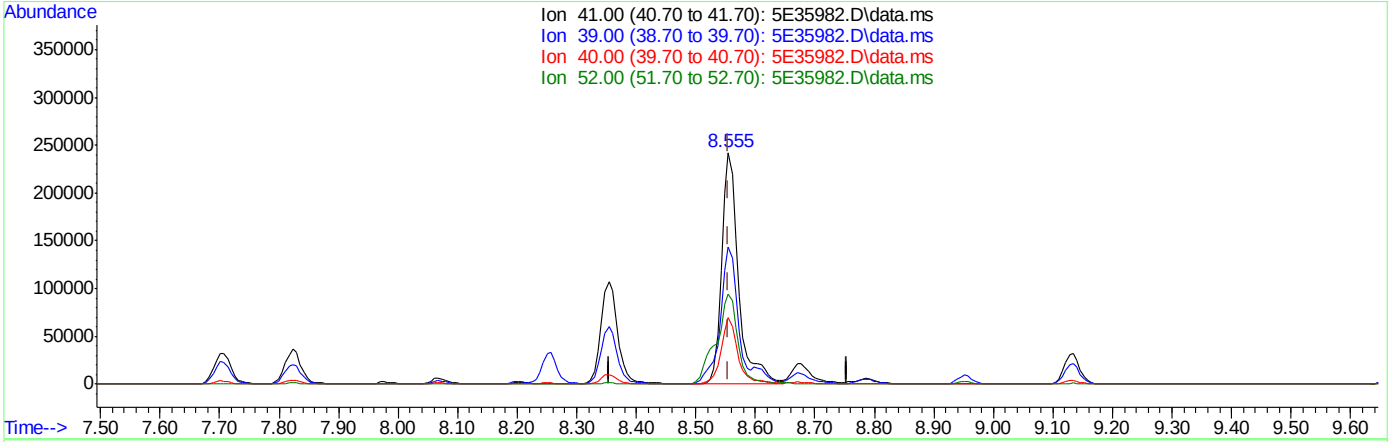
Sample Number:	V5E1617-ICC1617	**Method:**	SW846 8260D
Lab FileID:	5E35982.D	**Analyst approved:**	12/08/22 16:36 Courtney Failla
Injection Time:	12/08/22 12:42	**Supervisor approved:**	12/09/22 10:44 Karen Watson

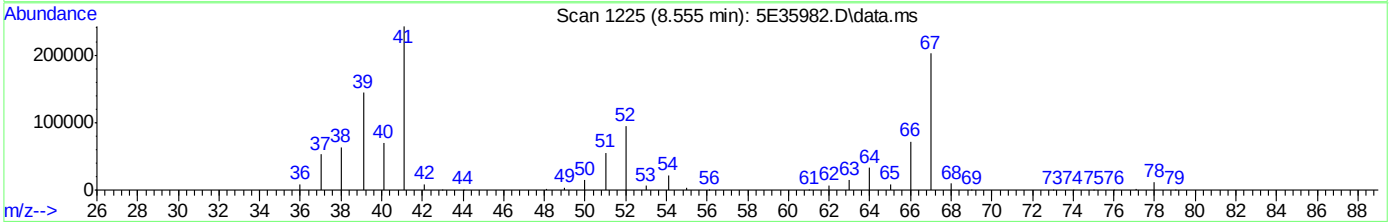
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

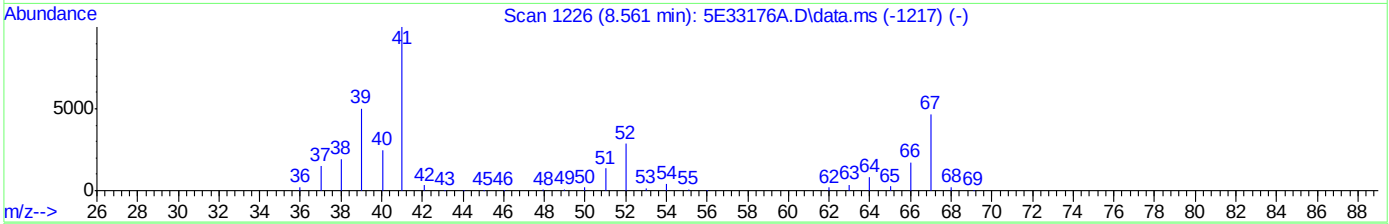
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:47:01 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35982.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 369.66ug/L

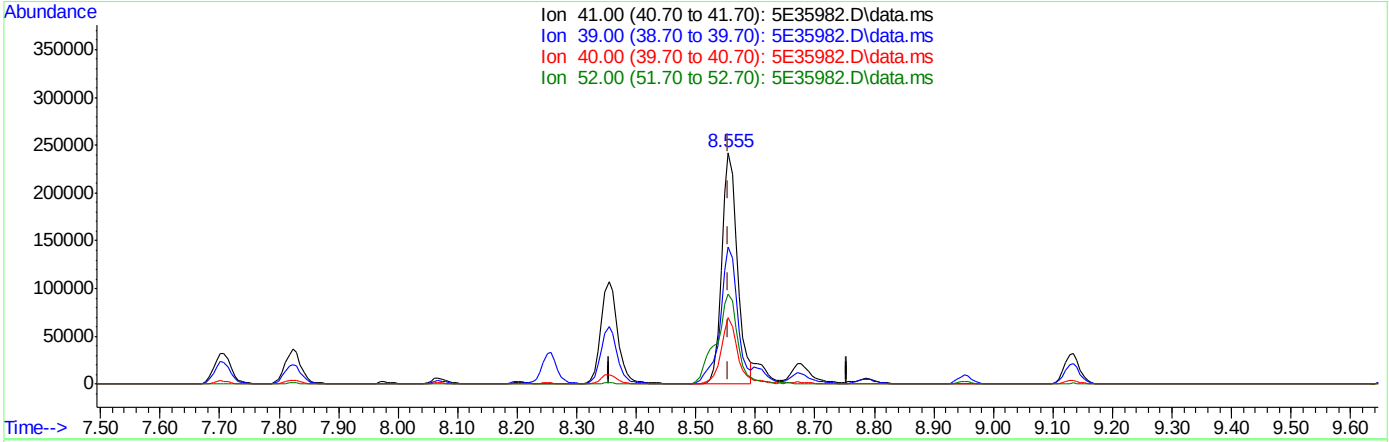
response 477228

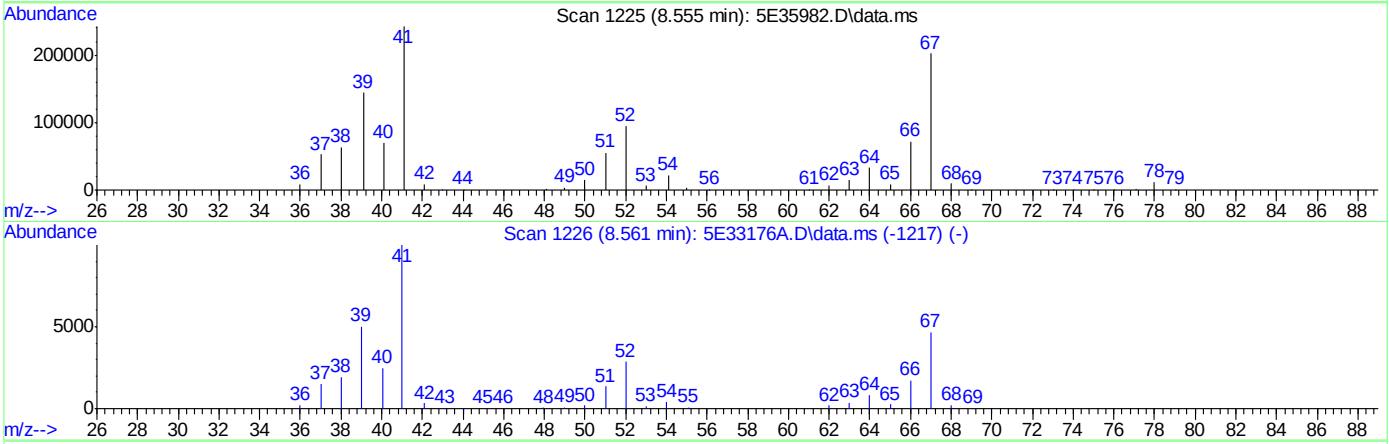
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.10
40.00	26.50	28.46
52.00	33.80	38.83

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35982.D
Acq On : 8 Dec 2022 12:42 pm
Operator : courtnef
Sample : ICC1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 13:47:01 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35982.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 339.58ug/L m

response 438397

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.39
40.00	26.50	28.55
52.00	33.80	39.11

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	375819	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	270880	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	134063	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	104555	48.02	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.04%			
49) 1,2-Dichloroethane-d4	8.665	65	119811	54.41	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 108.82%			
62) Toluene-d8	10.542	98	367537	53.94	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 107.88%			
86) 4-Bromofluorobenzene	13.328	95	109372	51.52	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.04%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	166369	83.86	ug/L	97
3) Chloromethane	3.221	50	155783	78.93	ug/L	97
4) Vinyl Chloride	3.373	62	166967	79.36	ug/L	98
5) 1,3-Butadiene	3.403	39	109327	69.10	ug/L	90
6) Bromomethane	3.946	94	96637	81.38	ug/L	94
7) Chloroethane	4.153	64	238075	106.65	ug/L	98
8) Trichlorofluoromethane	4.379	101	207774	68.47	ug/L	99
9) Ethyl Ether	4.873	59	126132	79.67	ug/L	94
10) Ethanol	5.104	45	24361	1146.42	ug/L	95
11) 1,2-Dichlorotrifluoroe...	5.153	67	183768	84.38	ug/L	88
12) 1,1-Dichloroethene	5.159	61	225155	88.96	ug/L	94
13) Freon 113	5.220	101	155054	74.77	ug/L	92
14) Carbon Disulfide	5.208	76	404900	66.59	ug/L	94
15) Iodomethane	5.366	142	206093	86.69	ug/L	97
16) Acrolein	5.629	56	141403	351.80	ug/L	93
17) Allyl chloride	5.818	41	148830	63.21	ug/L	93
18) Methylene Chloride	5.958	49	188989	74.21	ug/L	94
19) Acetone	6.019	43	195204	316.51	ug/L	100
20) Methyl acetate	6.171	43	448238	339.41	ug/L	100
21) trans-1,2-Dichloroethene	6.171	61	210233	86.27	ug/L	93
22) Hexane	6.263	56	116992m	86.12	ug/L	
23) Methyl Tert Butyl Ether	6.293	73	420050	72.47	ug/L	98
24) Acetonitrile	6.616	41	133539	591.28	ug/L	99
25) Di-isopropyl ether	6.756	45	394796	73.06	ug/L	98
26) Chloroprene	6.909	53	182982	71.08	ug/L	96
27) 1,1-Dichloroethane	6.939	63	273098	83.24	ug/L	99
28) Acrylonitrile	6.994	53	263114	375.31	ug/L	98
29) ETBE	7.195	59	465667	79.35	ug/L	97
30) Tert Butyl Alcohol	6.397	59	200755	673.13	ug/L	97
31) Vinyl acetate	7.214	43	1411887	342.14	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	153267	70.44	ug/L	88
33) 2,2-Dichloropropane	7.707	77	220116	74.63	ug/L	96
34) Bromochloromethane	7.811	128	75124	67.89	ug/L	88
35) Cyclohexane	7.823	56	254556	91.83	ug/L	94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.872	83	262998	74.60	ug/L		97
37) Ethyl acetate	7.976	43	678434	345.48	ug/L		99
38) Tetrahydrofuran	8.067	42	39387	66.48	ug/L		95
40) Carbon Tetrachloride	8.049	117	202408	74.92	ug/L		98
41) 1,1,1-Trichloroethane	8.122	97	224510	71.94	ug/L		93
42) 2-Butanone	8.201	43	320516	358.95	ug/L		99
43) 1,1-Dichloropropene	8.256	75	202488	79.41	ug/L		98
44) tert-Butyl formate	8.354	59	618874	816.91	ug/L		98
45) Propionitrile	8.537	54	240126	787.54	ug/L		94
46) Methacrylonitrile	8.555	41	828107m	627.85	ug/L		
47) Benzene	8.524	78	565061	74.75	ug/L		99
48) TAME	8.604	73	425237	74.81	ug/L		99
50) 1,2-Dichloroethane	8.738	62	216945	81.08	ug/L		97
51) tert Amyl alcohol	8.787	59	145211	702.30	ug/L		94
52) Trichloroethene	9.134	95	154519	72.27	ug/L		95
53) Methylcyclohexane	9.134	83	266646	80.73	ug/L		96
54) Dibromomethane	9.579	93	102987	70.18	ug/L		91
55) 1,2-Dichloropropane	9.671	63	158302	85.15	ug/L		96
56) Bromodichloromethane	9.719	83	199443	71.03	ug/L		97
57) Methyl methacrylate	9.835	41	115875	66.85	ug/L		97
58) 1,4-Dioxane	9.920	88	26733	1119.40	ug/L		92
59) 2-Chloroethyl vinyl ether	10.256	63	468718	2127.72	ug/L		95
60) cis-1,3-Dichloropropene	10.353	75	230499	75.33	ug/L		98
63) Toluene	10.597	91	595816	76.09	ug/L		98
64) Isobutyl alcohol	8.677	43	113920	1310.91	ug/L		96
65) 2-Nitropropane	10.829	41	224214	373.78	ug/L		99
66) 4-Methyl-2-pentanone	10.939	43	755809	397.89	ug/L		97
67) trans-1,3-Dichloropropene	11.000	75	205106	81.70	ug/L		92
68) Tetrachloroethene	11.000	166	150609	70.47	ug/L		96
69) Ethyl methacrylate	11.103	69	187743	74.20	ug/L		96
70) 1,1,2-Trichloroethane	11.164	83	115785	75.87	ug/L		93
71) Dibromochloromethane	11.359	129	160133	69.23	ug/L		97
72) 1,3-Dichloropropane	11.451	76	232658	78.93	ug/L		97
73) 1,2-Dibromoethane	11.621	107	146713	72.51	ug/L		99
74) 3,3-Dimethyl-1-butanol	11.707	57	760751	3744.29	ug/L		95
75) 2-hexanone	11.768	43	525156	392.45	ug/L		92
76) 1-Chlorohexane	12.060	91	209762	81.38	ug/L		95
77) Ethylbenzene	12.121	91	679943	75.51	ug/L		97
78) Chlorobenzene	12.127	112	397964	75.85	ug/L		92
79) 1,1,1,2-Tetrachloroethane	12.182	131	141165	71.17	ug/L		97
80) m,p-Xylene	12.261	91	1036590	152.33	ug/L		99
81) o-Xylene	12.707	91	495475	74.55	ug/L		99
82) Styrene	12.755	104	394350	75.51	ug/L		97
83) Bromoform	12.816	173	100543	65.79	ug/L		95
84) Isopropylbenzene	13.005	105	642478	74.55	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.676	53	47865	88.26	ug/L	#	71
88) n-Propylbenzene	13.426	91	800860	81.93	ug/L		98
89) Bromobenzene	13.456	156	154852	70.90	ug/L		87
90) 1,1,2,2-Tetrachloroethane	13.493	83	194842	78.32	ug/L		99
91) 1,3,5-Trimethylbenzene	13.609	105	544293	78.52	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

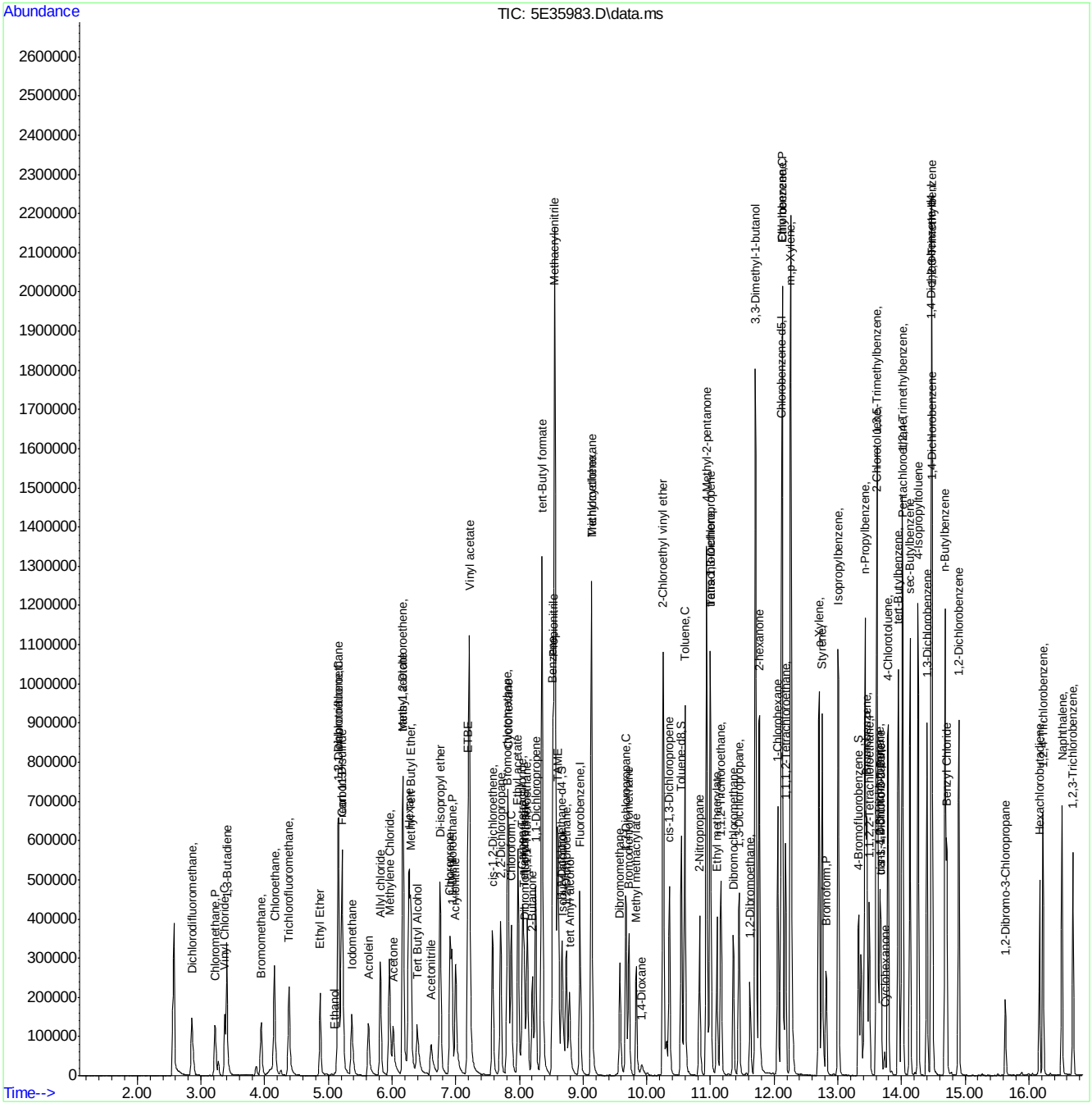
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	485790	78.98	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.676	53	47865	88.26	ug/L	#	73
94) 1,2,3-Trichloropropane	13.664	110	55259	76.47	ug/L		87
95) Cyclohexanone	13.737	55	24482	300.09	ug/L		95
96) 4-Chlorotoluene	13.792	91	433982	78.63	ug/L		98
98) tert-Butylbenzene	13.950	91	284386	77.05	ug/L		98
99) 1,2,4-Trimethylbenzene	14.017	105	534051	78.12	ug/L		98
100) Pentachloroethane	14.011	167	92180	68.76	ug/L	#	84
101) sec-Butylbenzene	14.133	105	665105	79.91	ug/L		99
102) 4-Isopropyltoluene	14.261	119	592775	80.55	ug/L		98
103) 1,3-Dichlorobenzene	14.401	146	296273	72.75	ug/L		96
104) 1,2,3-Trimethylbenzene	14.474	105	530133	75.14	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	320857	70.90	ug/L		96
106) n-Butylbenzene	14.682	92	323529	83.47	ug/L		96
107) Benzyl Chloride	14.712	126	73075	74.95	ug/L		96
108) 1,2-Dichlorobenzene	14.901	146	280861	70.88	ug/L		96
109) 1,2-Dibromo-3-Chloropr...	15.633	75	30000	68.90	ug/L		94
110) Hexachlorobutadiene	16.169	225	58351	73.29	ug/L		97
111) 1,2,4-Trichlorobenzene	16.224	180	158282	70.92	ug/L		95
112) Naphthalene	16.523	128	450609	70.01	ug/L		100
113) 1,2,3-Trichlorobenzene	16.694	180	133369	72.20	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:55:50 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1617-IC1617
Lab FileID: 5E35983.D
Injection Time: 12/08/22 13:05

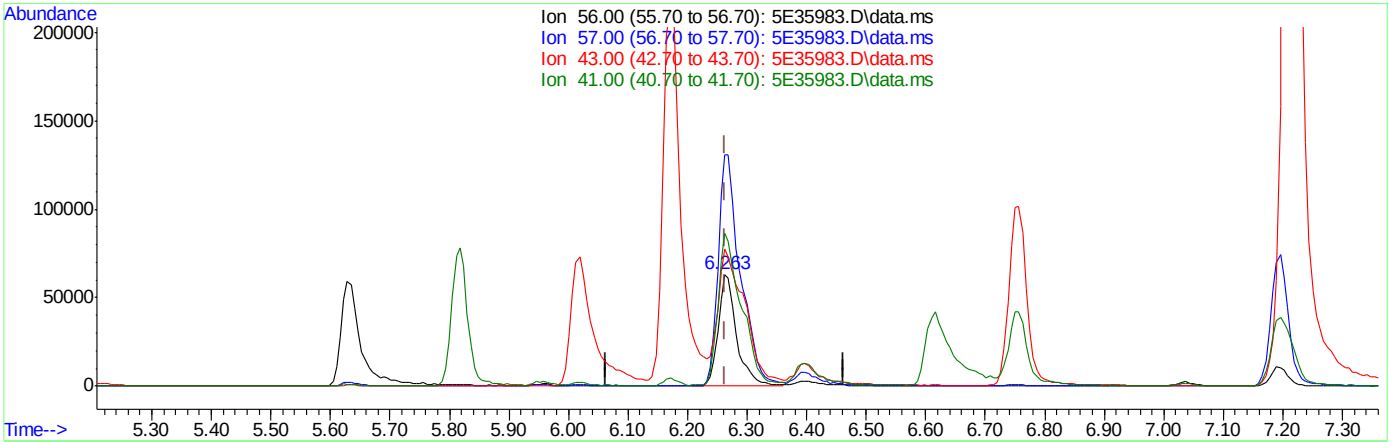
Method: SW846 8260D
Analyst approved: 12/08/22 16:36 Courtney Failla
Supervisor approved: 12/09/22 10:44 Karen Watson

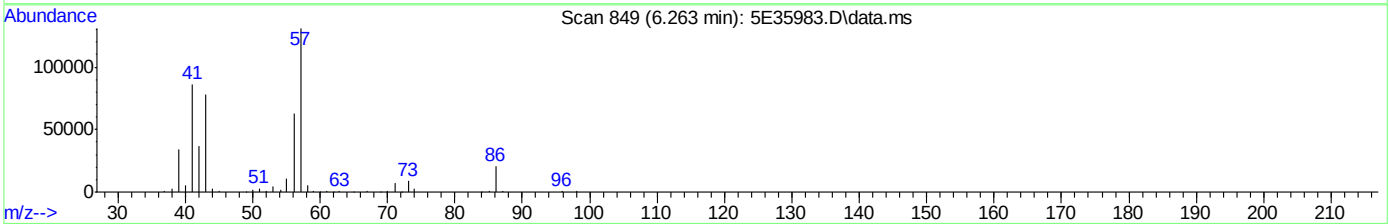
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.26	Overlapping peak
Methacrylonitrile	126-98-7		8.55	Overlapping peak

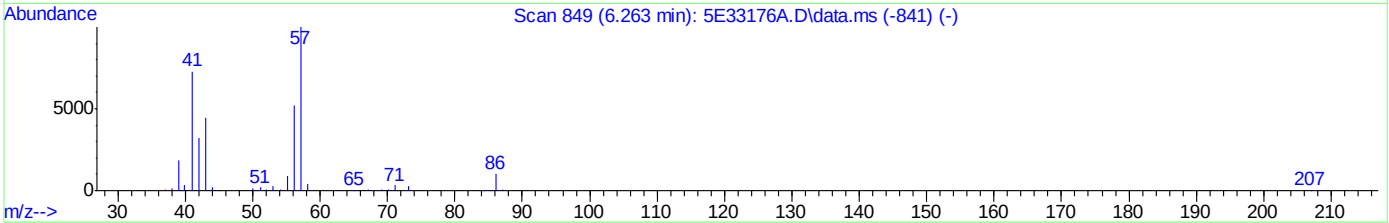
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35983.D\data.ms

(22) Hexane

6.263min (-0.000) 99.51ug/L

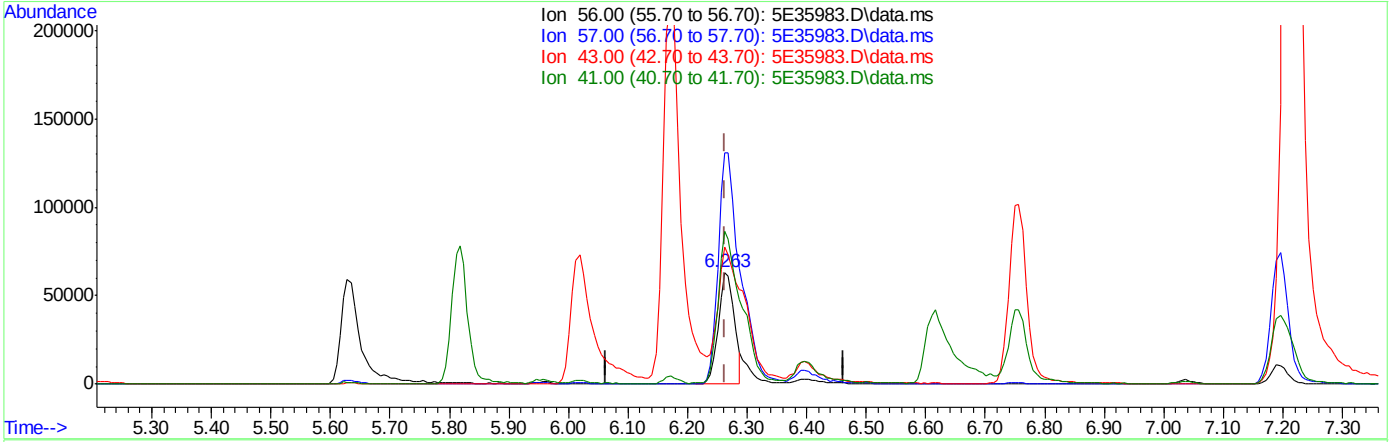
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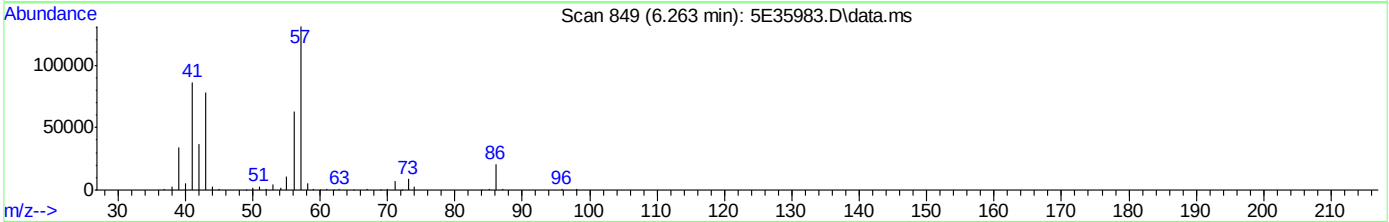
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	207.14
43.00	128.00	116.98
41.00	148.90	135.42

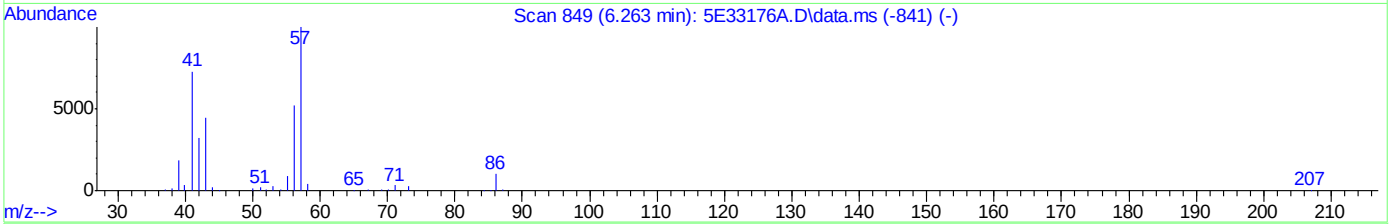
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35983.D\data.ms

(22) Hexane

6.263min (-0.000) 86.12ug/L m

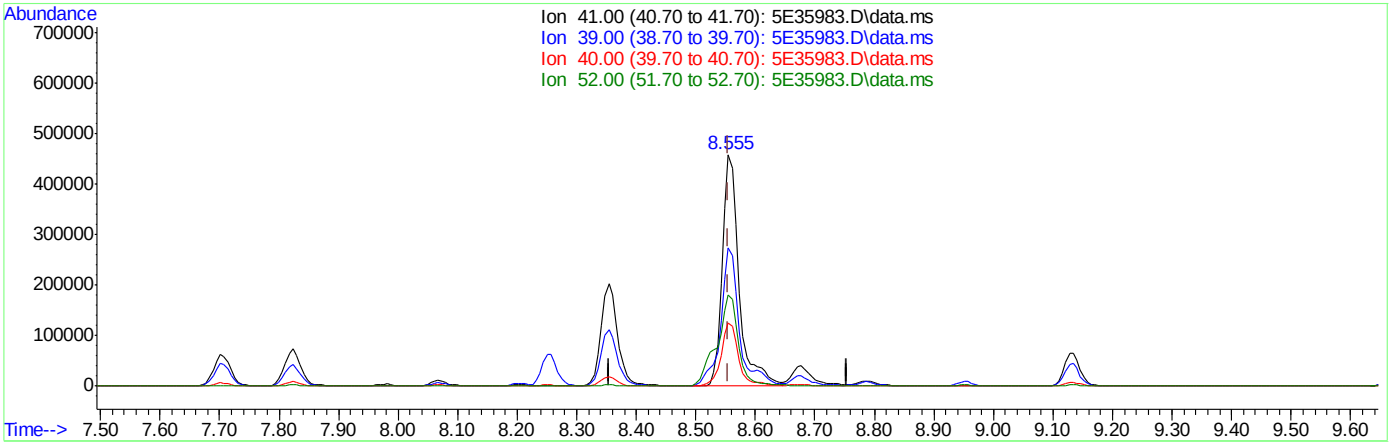
response 116992

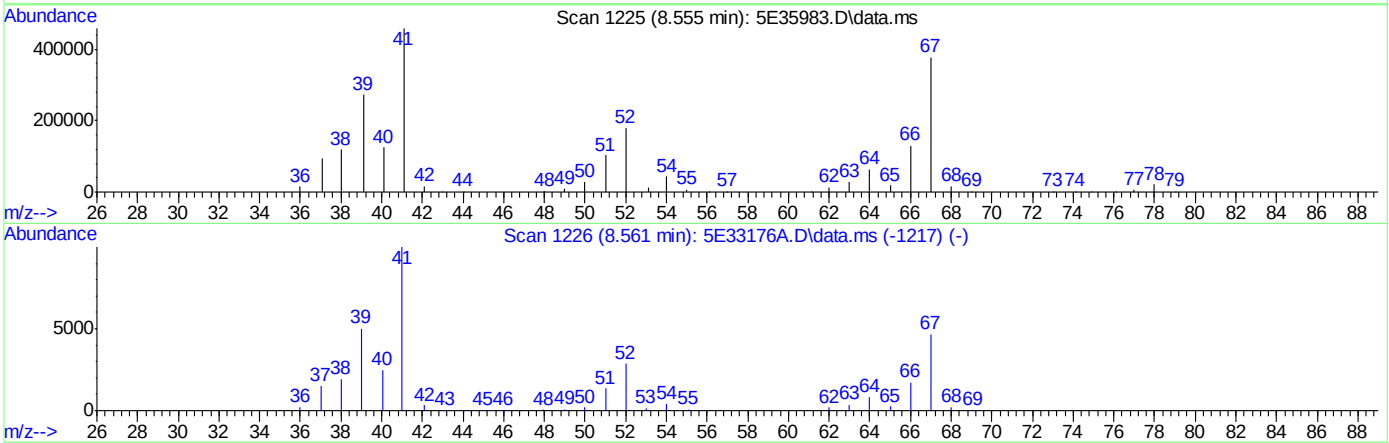
Ion	Exp%	Act%
56.00	100	100
57.00	202.40	207.14
43.00	128.00	122.79
41.00	148.90	136.36

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35983.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 683.39ug/L

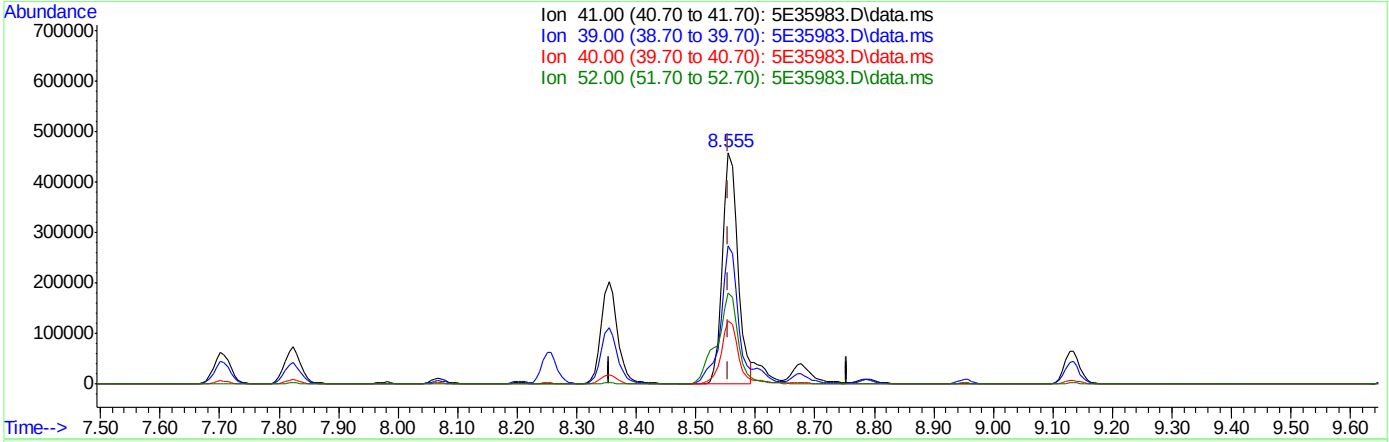
response 901372

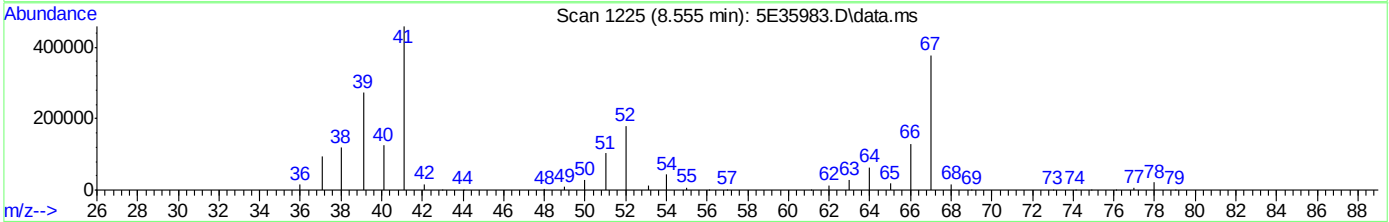
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.41
40.00	26.50	27.30
52.00	33.80	39.13

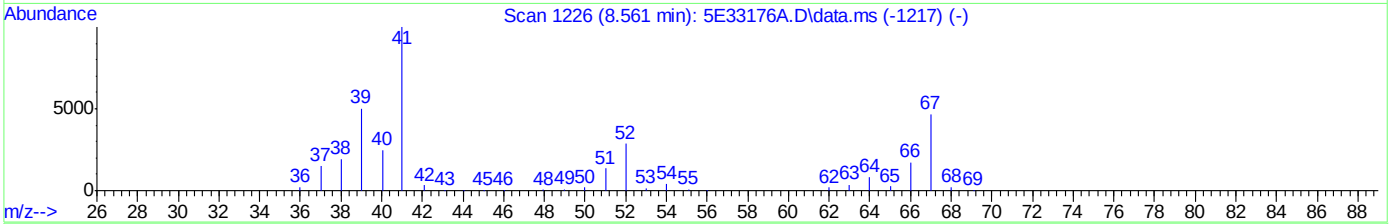
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35983.D
Acq On : 8 Dec 2022 1:05 pm
Operator : courtnef
Sample : IC1617-6
Misc : MS52751,V5E1617,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 13:47:03 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration







TIC: 5E35983.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 627.85ug/L m

response 828107

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	59.58
40.00	26.50	27.30
52.00	33.80	39.38

5E35984.D

Manual Integrations APPROVED (compounds with "m" flag)

Karen Watson
12/09/22 10:44

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	387978	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	284780	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	143535	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	109101	48.53	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.06%			
49) 1,2-Dichloroethane-d4	8.665	65	124668	54.84	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 109.68%			
62) Toluene-d8	10.542	98	377649	52.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 105.44%			
86) 4-Bromofluorobenzene	13.328	95	114169	50.23	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.849	85	234367	114.43	ug/L	99
3) Chloromethane	3.220	50	241651	118.59	ug/L	96
4) Vinyl Chloride	3.373	62	252472	116.24	ug/L	100
5) 1,3-Butadiene	3.409	39	135848	85.80	ug/L	86
6) Bromomethane	3.940	94	150504	114.31	ug/L	94
7) Chloroethane	4.147	64	406821	154.94	ug/L	97
8) Trichlorofluoromethane	4.373	101	299571	95.62	ug/L	97
9) Ethyl Ether	4.873	59	173957	106.44	ug/L	94
10) Ethanol	5.110	45	40409	1842.04	ug/L	87
11) 1,2-Dichlorotrifluoroe...	5.153	67	247749	110.19	ug/L	90
12) 1,1-Dichloroethene	5.159	61	307103	117.53	ug/L	93
13) Freon 113	5.214	101	198538	93.22	ug/L	92
14) Carbon Disulfide	5.208	76	551617	87.87	ug/L	94
15) Iodomethane	5.366	142	296489	115.28	ug/L	95
16) Acrolein	5.629	56	189800	457.41	ug/L	98
17) Allyl chloride	5.811	41	207251	85.26	ug/L	98
18) Methylene Chloride	5.958	49	257677	99.55	ug/L	95
19) Acetone	6.019	43	269824	423.79	ug/L	97
20) Methyl acetate	6.171	43	618582	453.72	ug/L	100
21) trans-1,2-Dichloroethene	6.171	61	292890	116.43	ug/L	92
22) Hexane	6.263	56	171624	122.38	ug/L	90
23) Methyl Tert Butyl Ether	6.293	73	573828	95.90	ug/L	97
24) Acetonitrile	6.616	41	197020	818.20	ug/L	98
25) Di-isopropyl ether	6.756	45	548642	98.35	ug/L	96
26) Chloroprene	6.909	53	250137	94.12	ug/L	93
27) 1,1-Dichloroethane	6.939	63	377899	111.58	ug/L	98
28) Acrylonitrile	7.000	53	380056	525.13	ug/L	98
29) ETBE	7.195	59	655116	108.13	ug/L	95
30) Tert Butyl Alcohol	6.403	59	251200	815.88	ug/L	95
31) Vinyl acetate	7.214	43	2080273	488.31	ug/L	97
32) cis-1,2-Dichloroethene	7.579	96	210026	93.50	ug/L	87
33) 2,2-Dichloropropane	7.701	77	302753	99.43	ug/L	98
34) Bromochloromethane	7.811	128	100656	88.11	ug/L	86
35) Cyclohexane	7.823	56	328592	114.82	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.872	83	360140	98.95	ug/L	98
37) Ethyl acetate	7.976	43	935344	461.38	ug/L	98
38) Tetrahydrofuran	8.061	42	50099	81.58	ug/L	94
40) Carbon Tetrachloride	8.049	117	270394	96.95	ug/L	98
41) 1,1,1-Trichloroethane	8.122	97	304721	94.58	ug/L	93
42) 2-Butanone	8.201	43	416875	452.23	ug/L	98
43) 1,1-Dichloropropene	8.250	75	276911	105.20	ug/L	97
44) tert-Butyl formate	8.354	59	828646	1005.44	ug/L	97
45) Propionitrile	8.537	54	323202	1026.79	ug/L	97
46) Methacrylonitrile	8.555	41	1148782m	843.68	ug/L	
47) Benzene	8.524	78	777473	99.62	ug/L	99
48) TAME	8.604	73	582481	99.26	ug/L	98
50) 1,2-Dichloroethane	8.738	62	295204	106.88	ug/L	98
51) tert Amyl alcohol	8.786	59	179912	824.07	ug/L	95
52) Trichloroethene	9.128	95	215292	97.53	ug/L	90
53) Methylcyclohexane	9.134	83	335823	98.37	ug/L	95
54) Dibromomethane	9.579	93	142101	93.80	ug/L	92
55) 1,2-Dichloropropane	9.670	63	216199	112.65	ug/L	96
56) Bromodichloromethane	9.719	83	274647	94.75	ug/L	98
57) Methyl methacrylate	9.835	41	154145	84.85	ug/L	97
58) 1,4-Dioxane	9.920	88	41884	1639.97	ug/L	92
59) 2-Chloroethyl vinyl ether	10.256	63	567028	2493.33	ug/L	96
60) cis-1,3-Dichloropropene	10.353	75	316778	100.28	ug/L	98
63) Toluene	10.597	91	811781	98.61	ug/L	98
64) Isobutyl alcohol	8.677	43	153668	1639.11	ug/L	98
65) 2-Nitropropane	10.829	41	292371	463.62	ug/L	96
66) 4-Methyl-2-pentanone	10.938	43	983114	492.29	ug/L	95
67) trans-1,3-Dichloropropene	10.999	75	286510	108.55	ug/L	96
68) Tetrachloroethene	10.999	166	208145	92.64	ug/L	94
69) Ethyl methacrylate	11.103	69	260929	98.10	ug/L	96
70) 1,1,2-Trichloroethane	11.164	83	157191	97.97	ug/L	94
71) Dibromochloromethane	11.359	129	223795	92.03	ug/L	100
72) 1,3-Dichloropropane	11.451	76	318133	102.66	ug/L	96
73) 1,2-Dibromoethane	11.621	107	199473	93.77	ug/L	99
74) 3,3-Dimethyl-1-butanol	11.707	57	982845	4431.58	ug/L	95
75) 2-hexanone	11.768	43	687776	488.89	ug/L	92
76) 1-Chlorohexane	12.060	91	276547	102.05	ug/L	94
77) Ethylbenzene	12.121	91	931139	98.36	ug/L	98
78) Chlorobenzene	12.127	112	549600	99.64	ug/L	94
79) 1,1,1,2-Tetrachloroethane	12.182	131	192894	92.50	ug/L	96
80) m,p-Xylene	12.261	91	1436384	200.78	ug/L	100
81) o-Xylene	12.706	91	682282	97.65	ug/L	99
82) Styrene	12.755	104	548215	99.85	ug/L	97
83) Bromoform	12.822	173	138721	86.34	ug/L	99
84) Isopropylbenzene	13.005	105	878710	96.99	ug/L	99
87) cis-1,4-Dichloro-2-butene	13.682	53	62887	104.91	ug/L	96
88) n-Propylbenzene	13.426	91	1089853	104.13	ug/L	99
89) Bromobenzene	13.456	156	217871	93.17	ug/L	87
90) 1,1,2,2-Tetrachloroethane	13.499	83	261197	98.07	ug/L	99
91) 1,3,5-Trimethylbenzene	13.609	105	755114	101.74	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration

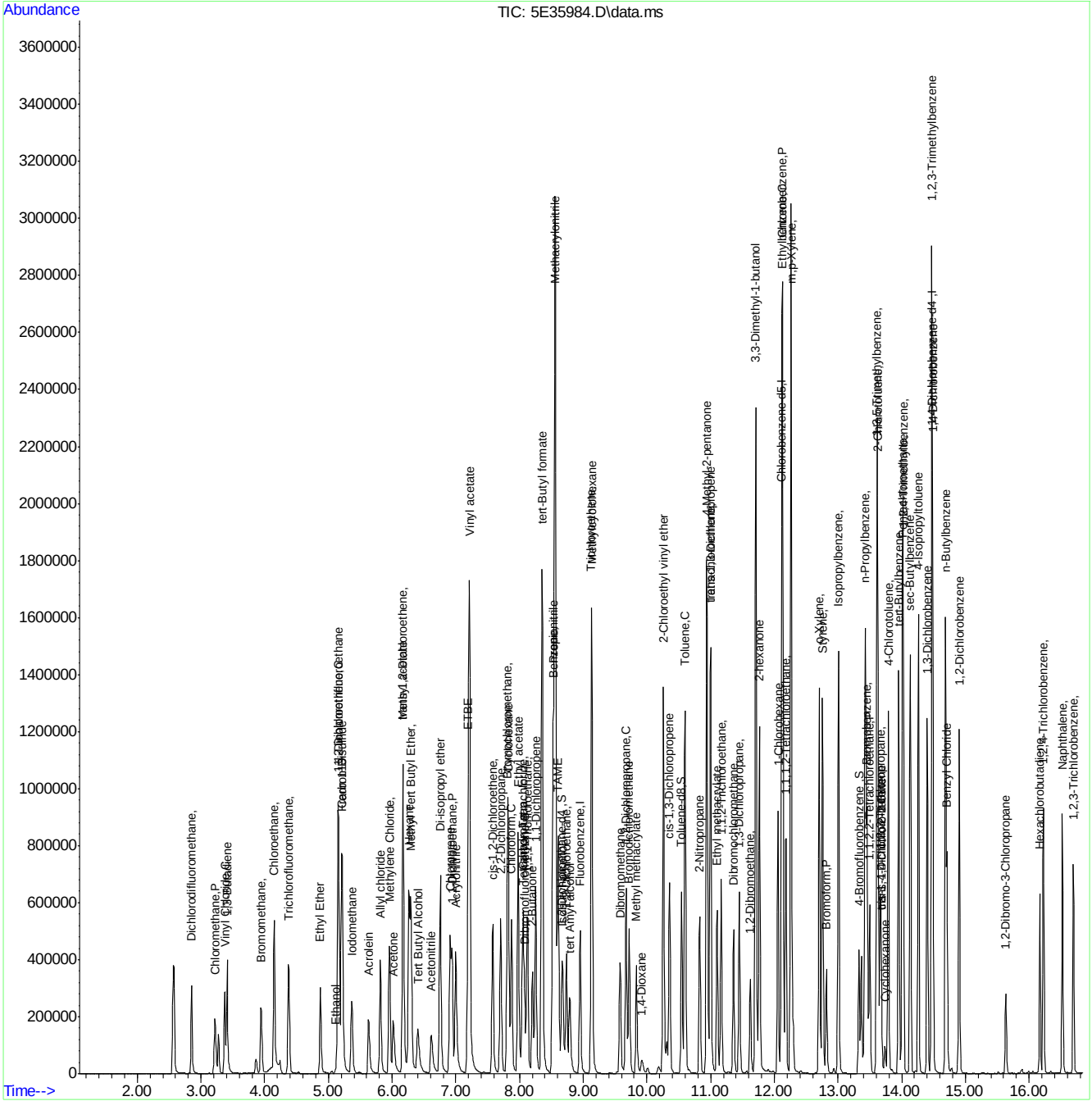
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.621	91	680422	103.33	ug/L		98
93) trans-1,4-Dichloro-2-B...	13.682	53	62887	104.91	ug/L		97
94) 1,2,3-Trichloropropane	13.664	110	71797	92.80	ug/L		88
95) Cyclohexanone	13.737	55	38016	435.23	ug/L		94
96) 4-Chlorotoluene	13.792	91	604174	102.24	ug/L		99
98) tert-Butylbenzene	13.950	91	390617	98.85	ug/L		97
99) 1,2,4-Trimethylbenzene	14.023	105	733655	100.24	ug/L		97
100) Pentachloroethane	14.011	167	130358	90.81	ug/L		84
101) sec-Butylbenzene	14.133	105	895687	100.51	ug/L		98
102) 4-Isopropyltoluene	14.261	119	800209	101.56	ug/L		97
103) 1,3-Dichlorobenzene	14.401	146	409300	93.87	ug/L		97
104) 1,2,3-Trimethylbenzene	14.474	105	738466	97.77	ug/L		99
105) 1,4-Dichlorobenzene	14.487	146	443527	91.54	ug/L		95
106) n-Butylbenzene	14.688	92	427696	103.06	ug/L		97
107) Benzyl Chloride	14.712	126	92611	86.69	ug/L	#	90
108) 1,2-Dichlorobenzene	14.901	146	386159	91.02	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.633	75	38884	82.55	ug/L		90
110) Hexachlorobutadiene	16.169	225	73558	86.29	ug/L		97
111) 1,2,4-Trichlorobenzene	16.224	180	212609	88.98	ug/L		97
112) Naphthalene	16.523	128	577984	83.88	ug/L		99
113) 1,2,3-Trichlorobenzene	16.693	180	174602	88.29	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration



Manual Integration Approval Summary

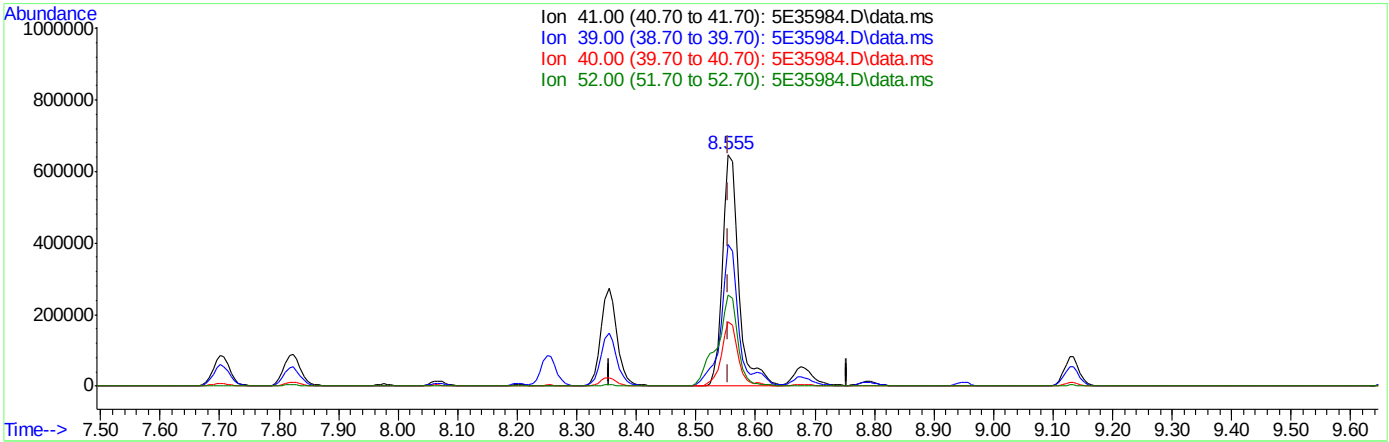
Sample Number:	V5E1617-IC1617	**Method:**	SW846 8260D
Lab FileID:	5E35984.D	**Analyst approved:**	12/08/22 16:36 Courtney Failla
Injection Time:	12/08/22 14:00	**Supervisor approved:**	12/09/22 10:44 Karen Watson

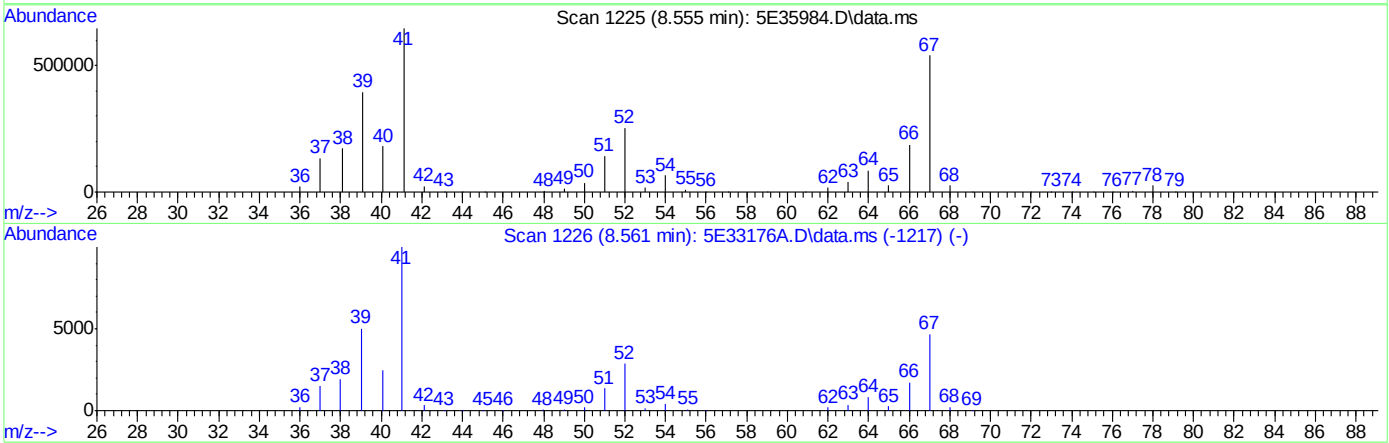
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methacrylonitrile	126-98-7		8.55	Overlapping peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:10 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35984.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 902.20ug/L

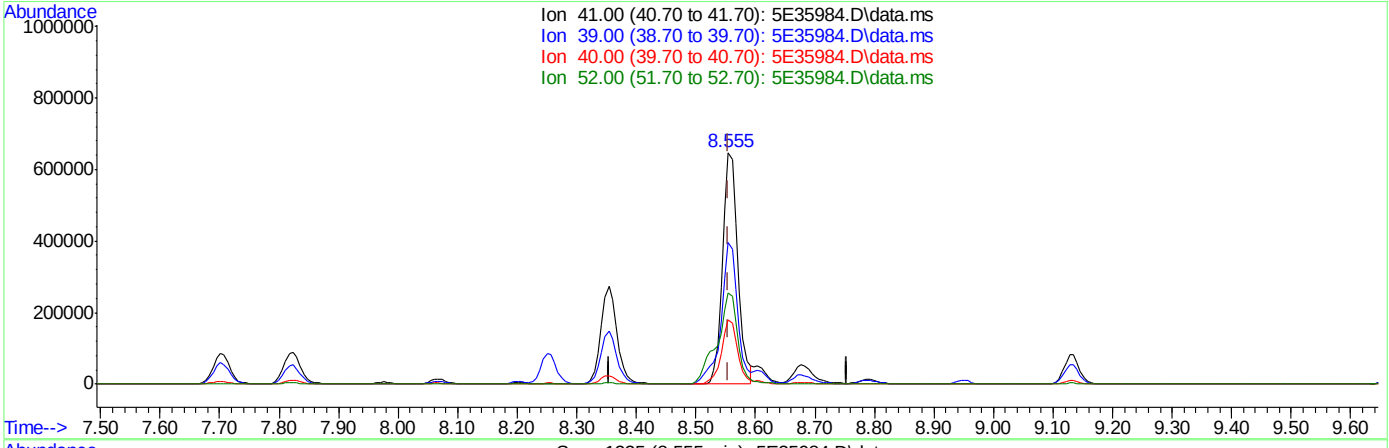
response 1228461

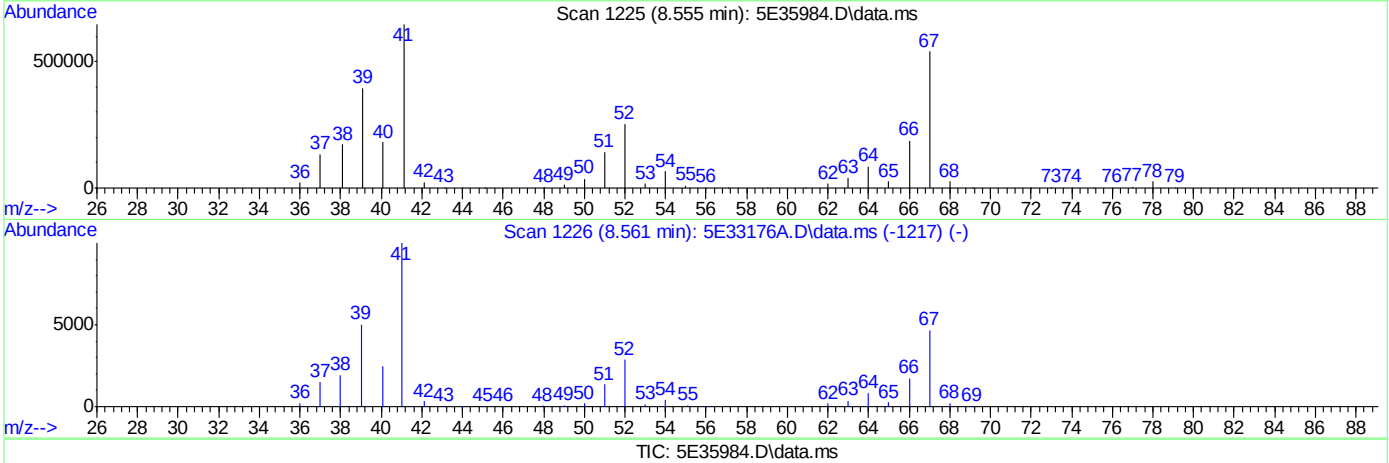
Ion	Exp%	Act%
41.00	100	100
39.00	58.40	60.88
40.00	26.50	27.84
52.00	33.80	39.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35984.D
Acq On : 8 Dec 2022 2:00 pm
Operator : courtnef
Sample : IC1617-7
Misc : MS52751,V5E1617,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 14:33:10 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Wed Nov 16 15:40:39 2022
Response via : Initial Calibration





TIC: 5E35984.D\data.ms

(46) Methacrylonitrile

8.555min (-0.000) 843.68ug/L m

response 1148782

Ion	Exp%	Act%
41.00	100	100
39.00	58.40	61.09
40.00	26.50	27.86
52.00	33.80	39.36

5E35984.D edits: Methacrylonitrile

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Fluorobenzene	8.951	96	372429	50.00	ug/L		0.00
61) Chlorobenzene-d5	12.115	117	267287	50.00	ug/L		0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129481	50.00	ug/L		0.00
System Monitoring Compounds							
39) Dibromofluoromethane	8.079	113	103058	49.94	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.88%				
49) 1,2-Dichloroethane-d4	8.665	65	116889	49.34	ug/L		0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.68%				
62) Toluene-d8	10.542	98	360399	49.41	ug/L		0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.82%				
86) 4-Bromofluorobenzene	13.328	95	109114	50.66	ug/L		0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.32%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	2.855	85	78343	34.45	ug/L		91
3) Chloromethane	3.220	50	82081	37.64	ug/L		99
4) Vinyl Chloride	3.373	62	91450	39.49	ug/L		95
5) 1,3-Butadiene	3.403	39	66425	44.86	ug/L		98
6) Bromomethane	3.940	94	52225	43.04	ug/L		94
7) Chloroethane	4.147	64	117014	47.81	ug/L		98
8) Trichlorofluoromethane	4.379	101	117850	42.08	ug/L		95
9) Ethyl Ether	4.866	59	64836	39.37	ug/L		97
10) Ethanol	5.123	45	9255	703.01	ug/L		82
11) 1,2-Dichlorotrifluoroe...	5.153	67	93383	39.69	ug/L		97
12) 1,1-Dichloroethene	5.159	61	111523	38.08	ug/L		98
13) Freon 113	5.220	101	74094	37.54	ug/L		95
14) Carbon Disulfide	5.208	76	219861	39.91	ug/L		98
15) Iodomethane	5.366	142	104547	38.03	ug/L		99
16) Acrolein	5.629	56	71046	200.74	ug/L		99
17) Allyl chloride	5.818	41	81845	40.60	ug/L		93
18) Methylene Chloride	5.958	49	95509	34.56	ug/L		92
19) Acetone	6.013	43	107870	189.68	ug/L		97
20) Methyl acetate	6.171	43	246457	216.50	ug/L		99
21) trans-1,2-Dichloroethene	6.171	61	105420	38.76	ug/L		97
22) Hexane	6.263	56	68097	41.69	ug/L	#	88
23) Methyl Tert Butyl Ether	6.293	73	222351	40.98	ug/L		96
24) Acetonitrile	6.616	41	71467	384.18	ug/L		95
25) Di-isopropyl ether	6.756	45	216822	41.64	ug/L		98
26) Chloroprene	6.909	53	106679	43.73	ug/L		98
27) 1,1-Dichloroethane	6.939	63	145104	40.24	ug/L		97
28) Acrylonitrile	6.994	53	153740	225.63	ug/L		97
29) ETBE	7.195	59	244441	40.60	ug/L		97
30) Tert Butyl Alcohol	6.397	59	103257	369.77	ug/L		99
32) cis-1,2-Dichloroethene	7.579	96	81172	40.82	ug/L		98
33) 2,2-Dichloropropane	7.701	77	105979	36.79	ug/L		98
34) Bromochloromethane	7.811	128	41845	43.25	ug/L		98
35) Cyclohexane	7.823	56	131580	41.23	ug/L		98
36) Chloroform	7.872	83	137441	39.18	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.976	43	397473	227.28	ug/L		100
38) Tetrahydrofuran	8.067	42	21451	39.44	ug/L		97
40) Carbon Tetrachloride	8.049	117	101752	39.77	ug/L		99
41) 1,1,1-Trichloroethane	8.122	97	116421	39.86	ug/L		99
42) 2-Butanone	8.201	43	169913	193.36	ug/L		95
43) 1,1-Dichloropropene	8.256	75	101634	38.62	ug/L		98
44) tert-Butyl formate	8.354	59	249452	324.03	ug/L		99
45) Propionitrile	8.537	54	126524	393.50	ug/L		93
46) Methacrylonitrile	8.555	41	465645	432.39	ug/L		99
47) Benzene	8.524	78	293582	38.86	ug/L		99
48) TAME	8.604	73	227609	42.35	ug/L		100
50) 1,2-Dichloroethane	8.732	62	112255	39.12	ug/L		97
51) tert Amyl alcohol	8.786	59	80030	411.33	ug/L		97
52) Trichloroethene	9.134	95	80306	39.73	ug/L		96
53) Methylcyclohexane	9.134	83	134745	42.29	ug/L		98
54) Dibromomethane	9.579	93	52743	39.65	ug/L		96
55) 1,2-Dichloropropane	9.670	63	79838	37.21	ug/L		96
56) Bromodichloromethane	9.719	83	107925	42.46	ug/L		99
57) Methyl methacrylate	9.835	41	64582	41.94	ug/L		94
58) 1,4-Dioxane	9.926	88	16626	891.93	ug/L		93
59) 2-Chloroethyl vinyl ether	10.262	63	244249	209.20	ug/L		98
60) cis-1,3-Dichloropropene	10.353	75	120787	42.13	ug/L		98
63) Toluene	10.597	91	314298	39.78	ug/L		97
64) Isobutyl alcohol	8.677	43	62777	834.90	ug/L		99
65) 2-Nitropropane	10.829	41	119895	203.72	ug/L		100
66) 4-Methyl-2-pentanone	10.938	43	389217	189.66	ug/L		99
67) trans-1,3-Dichloropropene	10.999	75	115355	45.69	ug/L		96
68) Tetrachloroethene	10.999	166	79189	40.76	ug/L		98
69) Ethyl methacrylate	11.103	69	95154	38.35	ug/L		98
70) 1,1,2-Trichloroethane	11.164	83	62828	40.92	ug/L		92
71) Dibromochloromethane	11.359	129	82697	41.38	ug/L		99
72) 1,3-Dichloropropane	11.451	76	117653	38.43	ug/L		98
73) 1,2-Dibromoethane	11.621	107	77414	41.82	ug/L		98
74) 3,3-Dimethyl-1-butanol	11.707	57	362600	1822.70	ug/L		98
75) 2-hexanone	11.768	43	272999	193.42	ug/L		99
76) 1-Chlorohexane	12.060	91	112724	43.22	ug/L		98
77) Ethylbenzene	12.121	91	360166	39.83	ug/L		100
78) Chlorobenzene	12.133	112	211635	40.34	ug/L		91
79) 1,1,1,2-Tetrachloroethane	12.182	131	76218	42.24	ug/L		99
80) m,p-Xylene	12.261	91	544930	81.24	ug/L		99
81) o-Xylene	12.706	91	272141	42.52	ug/L		99
82) Styrene	12.755	104	208808	42.48	ug/L		98
83) Bromoform	12.816	173	54022	41.57	ug/L		98
84) Isopropylbenzene	13.005	105	343672	41.42	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	26875	43.24	ug/L	#	72
88) n-Propylbenzene	13.426	91	430654	41.70	ug/L		98
89) Bromobenzene	13.456	156	80256	39.94	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.499	83	104448	41.39	ug/L		98
91) 1,3,5-Trimethylbenzene	13.609	105	283154	41.61	ug/L		99
92) 2-Chlorotoluene	13.621	91	256442	40.46	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

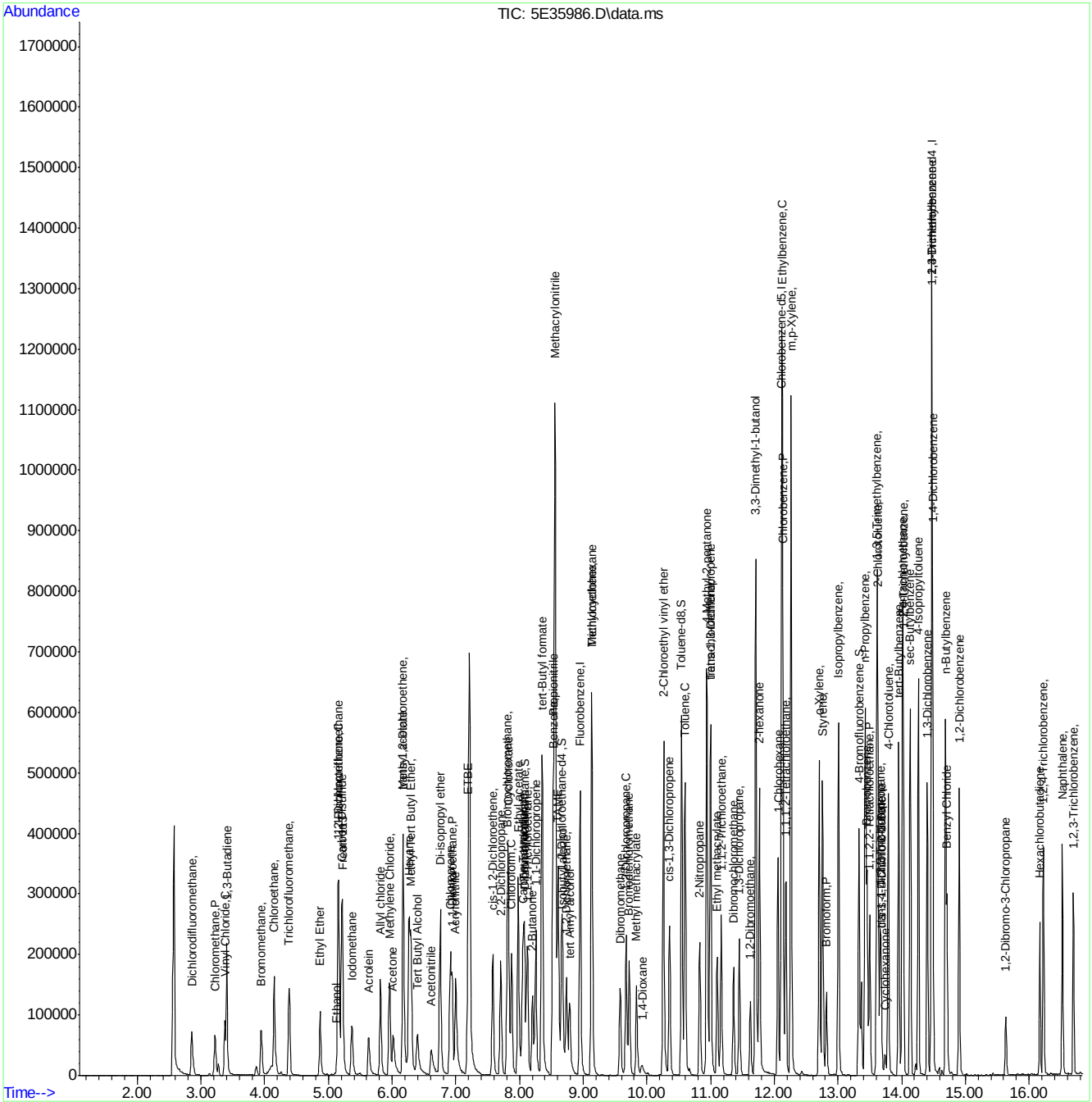
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93)	trans-1,4-Dichloro-2-B...	13.682	53	26875	43.24	ug/L	#	73
94)	1,2,3-Trichloropropane	13.664	110	27298	37.56	ug/L		94
95)	Cyclohexanone	13.737	55	15367	234.20	ug/L		96
96)	4-Chlorotoluene	13.792	91	232492	41.19	ug/L		98
98)	tert-Butylbenzene	13.950	91	151358	41.15	ug/L		98
99)	1,2,4-Trimethylbenzene	14.023	105	287695	43.62	ug/L		95
100)	Pentachloroethane	14.011	167	51020	42.96	ug/L		92
101)	sec-Butylbenzene	14.133	105	370555	44.29	ug/L		99
102)	4-Isopropyltoluene	14.261	119	321036	43.77	ug/L		99
103)	1,3-Dichlorobenzene	14.401	146	163567	43.59	ug/L		97
104)	1,2,3-Trimethylbenzene	14.474	105	306145	45.98	ug/L		98
105)	1,4-Dichlorobenzene	14.487	146	170290	41.48	ug/L		97
106)	n-Butylbenzene	14.688	92	162112	41.69	ug/L		94
107)	Benzyl Chloride	14.712	126	36518	41.06	ug/L		93
108)	1,2-Dichlorobenzene	14.901	146	152720	42.51	ug/L		99
109)	1,2-Dibromo-3-Chloropr...	15.633	75	15341	39.86	ug/L		91
110)	Hexachlorobutadiene	16.169	225	30247	39.85	ug/L		93
111)	1,2,4-Trichlorobenzene	16.224	180	86500	43.21	ug/L		96
112)	Naphthalene	16.523	128	244506	44.60	ug/L		99
113)	1,2,3-Trichlorobenzene	16.693	180	72400	42.93	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35986.D
Acq On : 8 Dec 2022 3:25 pm
Operator : courtnef
Sample : ICV1617-5
Misc : MS52751,V5E1617,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 16:32:32 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35987.D
Acq On : 8 Dec 2022 4:06 pm
Operator : courtnef
Sample : ICV1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 16:33:48 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

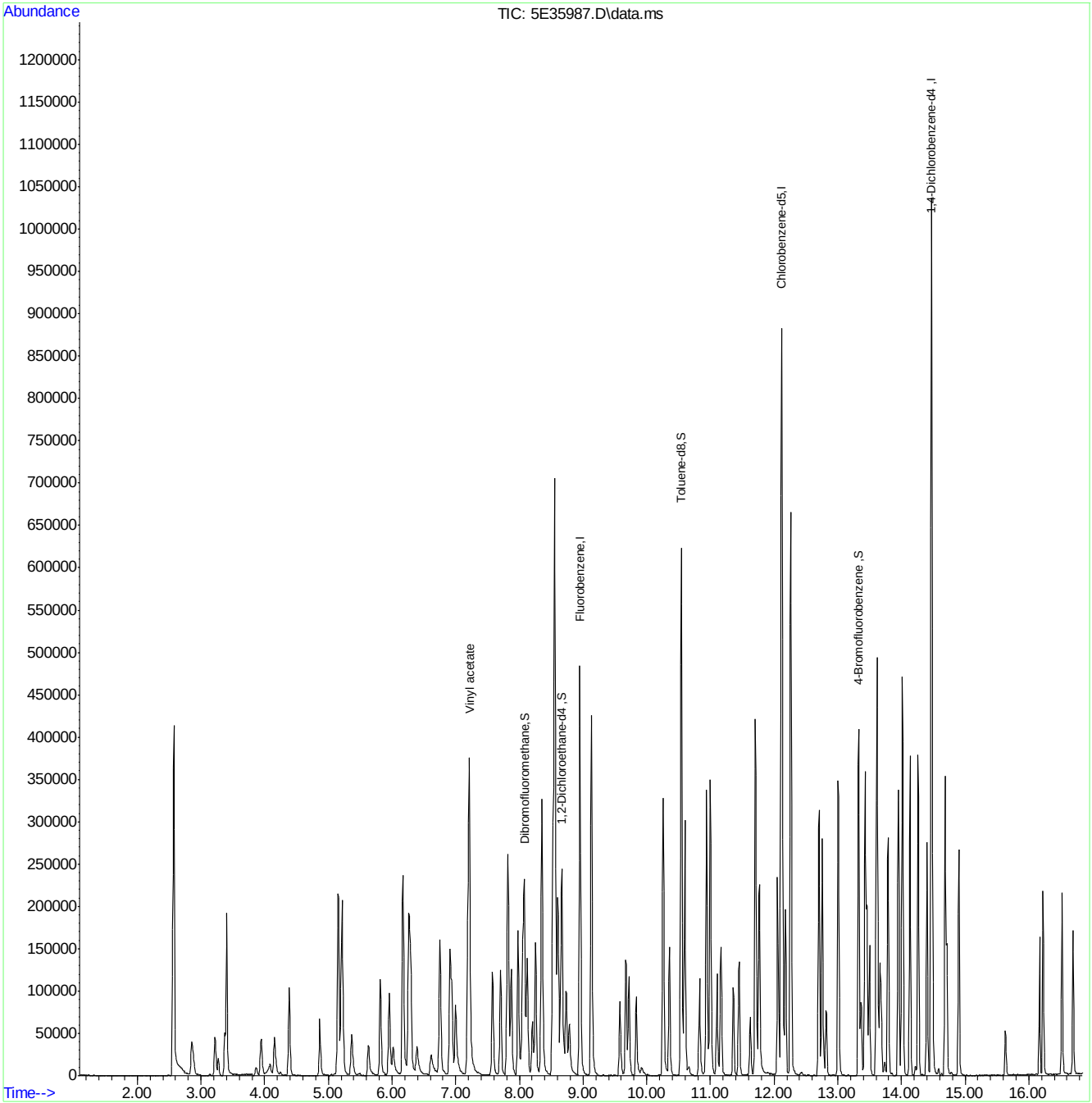
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	386293	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	270797	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	129275	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	107995	50.46	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.92%			
49) 1,2-Dichloroethane-d4	8.665	65	126557	51.50	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 103.00%			
62) Toluene-d8	10.542	98	376881	51.00	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 102.00%			
86) 4-Bromofluorobenzene	13.328	95	110225	51.26	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 102.52%			
Target Compounds						Qvalue
31) Vinyl acetate	7.214	43	492954	134.19	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-08-2022\
Data File : 5E35987.D
Acq On : 8 Dec 2022 4:06 pm
Operator : courtnef
Sample : ICV1617-4
Misc : MS52751,V5E1617,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 16:33:48 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Jennifer Fereira 12/15/22 03:51

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 01:51:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	332134	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	247042	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	122728	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	91584	49.77	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	99.54%		
49) 1,2-Dichloroethane-d4	8.664	65	107641	50.94	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery =	101.88%		
62) Toluene-d8	10.542	98	328700	48.75	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery =	97.50%		
86) 4-Bromofluorobenzene	13.328	95	100636	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery =	98.58%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	84748	41.79	ug/L	94
3) Chloromethane	3.220	50	74721	38.42	ug/L	97
4) Vinyl Chloride	3.373	62	85304	41.31	ug/L	98
5) 1,3-Butadiene	3.403	39	59077	44.74	ug/L	89
6) Bromomethane	3.946	94	28907	26.71	ug/L	96
7) Chloroethane	4.153	64	79729	40.20	ug/L	99
8) Trichlorofluoromethane	4.385	101	112341	44.98	ug/L	98
9) Ethyl Ether	4.873	59	66283	45.13	ug/L	95
10) Ethanol	5.098	45	9800	834.72	ug/L	90
11) 1,2-Dichlorotrifluoroe...	5.153	67	96190	45.84	ug/L	98
12) 1,1-Dichloroethene	5.159	61	117599	45.02	ug/L	97
13) Freon 113	5.220	101	78926	44.84	ug/L	94
14) Carbon Disulfide	5.208	76	205657	41.86	ug/L	98
15) Iodomethane	5.372	142	29795	12.45	ug/L	91
16) Acrolein	5.628	56	71298	225.90	ug/L	99
17) Allyl chloride	5.817	41	73888	41.10	ug/L	96
18) Methylene Chloride	5.958	49	100746	41.30	ug/L	93
19) Acetone	6.019	43	98766	195.03	ug/L	96
20) Methyl acetate	6.171	43	246402	242.71	ug/L	98
21) trans-1,2-Dichloroethene	6.171	61	107052	44.13	ug/L	97
22) Hexane	6.263	56	60593m	41.60	ug/L	
23) Methyl Tert Butyl Ether	6.293	73	210732	43.55	ug/L	94
24) Acetonitrile	6.616	41	71225	429.33	ug/L	93
25) Di-isopropyl ether	6.756	45	201025	43.29	ug/L	99
26) Chloroprene	6.915	53	91891	42.24	ug/L	98
27) 1,1-Dichloroethane	6.939	63	142410	44.28	ug/L	97
28) Acrylonitrile	7.000	53	135700	223.32	ug/L	96
29) ETBE	7.195	59	237060	44.15	ug/L	99
30) Tert Butyl Alcohol	6.397	59	97140	391.40	ug/L	98
31) Vinyl acetate	7.214	43	709403	224.59	ug/L	98
32) cis-1,2-Dichloroethene	7.579	96	77232	43.55	ug/L	99
33) 2,2-Dichloropropane	7.707	77	102569	39.92	ug/L	98
34) Bromochloromethane	7.811	128	35504	41.15	ug/L	97
35) Cyclohexane	7.823	56	131198	46.09	ug/L	98
36) Chloroform	7.878	83	133775	42.76	ug/L	99
37) Ethyl acetate	7.976	43	360170	230.93	ug/L	98
38) Tetrahydrofuran	8.067	42	21302	43.92	ug/L	92
40) Carbon Tetrachloride	8.055	117	101813	44.62	ug/L	95
41) 1,1,1-Trichloroethane	8.122	97	116964	44.90	ug/L	98
42) 2-Butanone	8.201	43	166090	211.94	ug/L	99
43) 1,1-Dichloropropene	8.256	75	102322	43.60	ug/L	99
44) tert-Butyl formate	8.354	59	326502	475.57	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 01:51:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
45)	Propionitrile	8.536	54	128819	449.40	ug/L		100
46)	Methacrylonitrile	8.555	41	469640	489.00	ug/L		99
47)	Benzene	8.524	78	290082	43.05	ug/L		100
48)	TAME	8.610	73	214011	44.65	ug/L		98
50)	1,2-Dichloroethane	8.738	62	113048	44.17	ug/L		99
51)	tert Amyl alcohol	8.786	59	80971	469.61	ug/L		99
52)	Trichloroethene	9.134	95	79311	43.99	ug/L		97
53)	Methylcyclohexane	9.134	83	133529	47.00	ug/L		98
54)	Dibromomethane	9.579	93	53321	44.95	ug/L		97
55)	1,2-Dichloropropane	9.670	63	80135	41.91	ug/L		96
56)	Bromodichloromethane	9.719	83	99803	44.03	ug/L		99
57)	Methyl methacrylate	9.835	41	61290	44.64	ug/L		94
58)	1,4-Dioxane	9.926	88	14500	873.37	ug/L		89
59)	2-Chloroethyl vinyl ether	10.262	63	217513	208.91	ug/L		98
60)	cis-1,3-Dichloropropene	10.353	75	114444	44.76	ug/L		97
63)	Toluene	10.597	91	304243	41.67	ug/L		97
64)	Isobutyl alcohol	8.677	43	60359	868.52	ug/L		92
65)	2-Nitropropane	10.829	41	121218	223.19	ug/L		97
66)	4-Methyl-2-pentanone	10.938	43	384698	202.83	ug/L		99
67)	trans-1,3-Dichloropropene	10.999	75	101526	43.51	ug/L		95
68)	Tetrachloroethene	10.999	166	79855	44.47	ug/L		96
69)	Ethyl methacrylate	11.103	69	94116	41.01	ug/L		98
70)	1,1,2-Trichloroethane	11.164	83	60974	42.96	ug/L		95
71)	Dibromochloromethane	11.359	129	81620	44.19	ug/L		99
72)	1,3-Dichloropropane	11.451	76	121824	43.06	ug/L		99
73)	1,2-Dibromoethane	11.627	107	78408	45.83	ug/L		99
74)	3,3-Dimethyl-1-butanol	11.707	57	402966	2198.37	ug/L		99
75)	2-hexanone	11.768	43	270237	207.16	ug/L		98
76)	1-Chlorohexane	12.060	91	106258	44.08	ug/L		98
77)	Ethylbenzene	12.121	91	347289	41.55	ug/L		99
78)	Chlorobenzene	12.127	112	203708	42.01	ug/L		98
79)	1,1,1,2-Tetrachloroethane	12.182	131	73540	44.09	ug/L		97
80)	m,p-Xylene	12.261	91	520818	84.01	ug/L		99
81)	o-Xylene	12.706	91	251469	42.51	ug/L		99
82)	Styrene	12.755	104	196337	43.22	ug/L		98
83)	Bromoform	12.822	173	49831	41.49	ug/L		97
84)	Isopropylbenzene	13.005	105	331457	43.22	ug/L		98
87)	cis-1,4-Dichloro-2-butene	13.682	53	21350	36.06	ug/L	#	76
88)	n-Propylbenzene	13.426	91	412276	42.12	ug/L		97
89)	Bromobenzene	13.456	156	79815	41.91	ug/L		95
90)	1,1,2,2-Tetrachloroethane	13.493	83	104273	43.59	ug/L		96
91)	1,3,5-Trimethylbenzene	13.609	105	274991	42.63	ug/L		100
92)	2-Chlorotoluene	13.621	91	249171	41.47	ug/L		99
93)	trans-1,4-Dichloro-2-B...	13.682	53	21350	36.06	ug/L	#	76
94)	1,2,3-Trichloropropane	13.664	110	28936	42.21	ug/L		96
95)	Cyclohexanone	13.737	55	14055	226.35	ug/L		95
96)	4-Chlorotoluene	13.792	91	219454	41.02	ug/L		98
98)	tert-Butylbenzene	13.950	91	146081	41.90	ug/L		98
99)	1,2,4-Trimethylbenzene	14.017	105	268779	42.99	ug/L		99
100)	Pentachloroethane	14.011	167	44466	39.50	ug/L		87
101)	sec-Butylbenzene	14.133	105	345333	43.54	ug/L		99
102)	4-Isopropyltoluene	14.261	119	303763	43.69	ug/L		100
103)	1,3-Dichlorobenzene	14.401	146	152530	42.89	ug/L		96
104)	1,2,3-Trimethylbenzene	14.474	105	272165	43.13	ug/L		98
105)	1,4-Dichlorobenzene	14.487	146	166469	42.78	ug/L		99
106)	n-Butylbenzene	14.688	92	160979	43.67	ug/L		94
107)	Benzyl Chloride	14.712	126	29453	35.90	ug/L	#	91
108)	1,2-Dichlorobenzene	14.901	146	146682	43.08	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 01:51:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

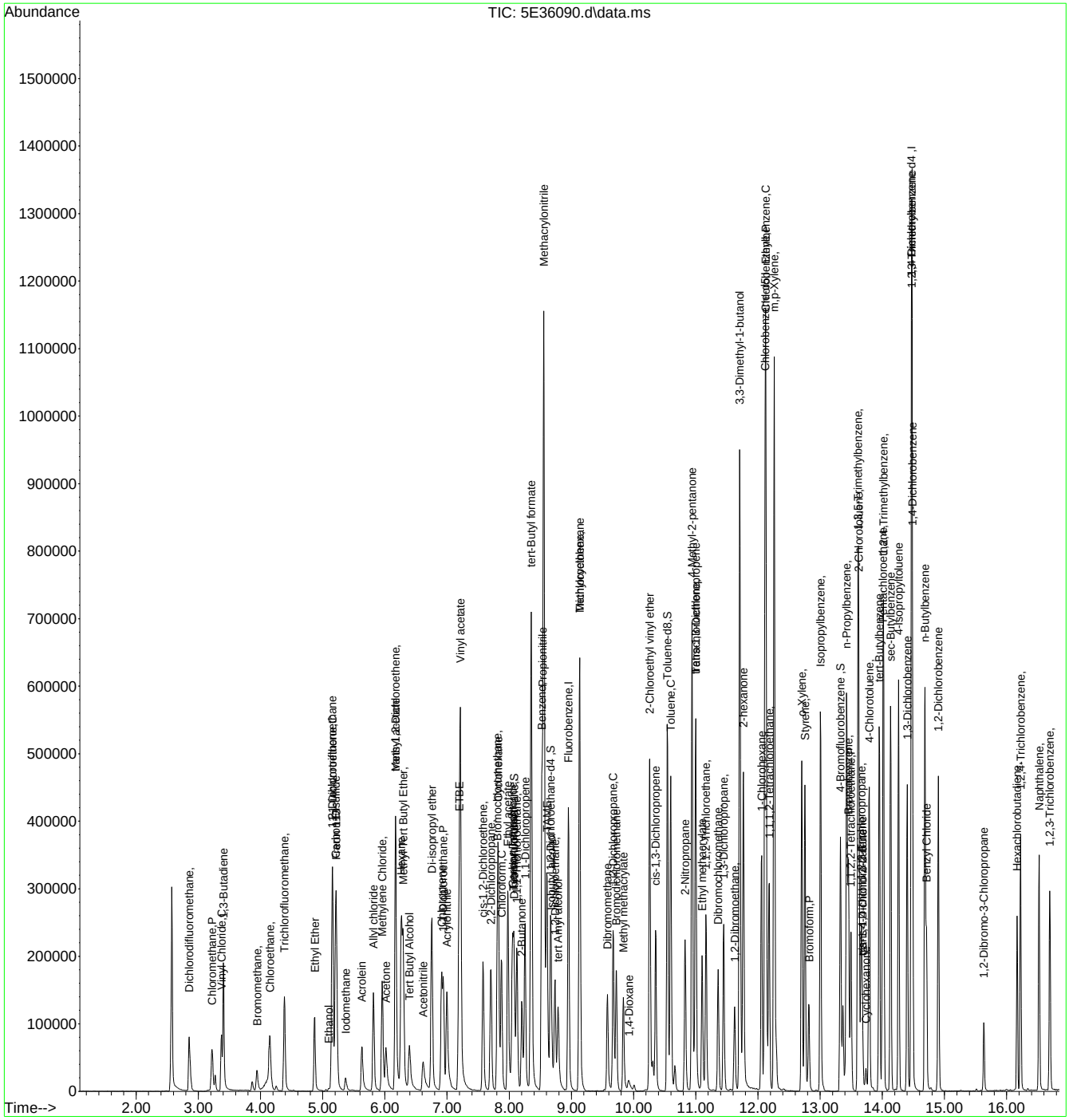
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
109) 1,2-Dibromo-3-Chloropr...	15.633	75	15332	42.08	ug/L	96
110) Hexachlorobutadiene	16.169	225	30340	42.18	ug/L	94
111) 1,2,4-Trichlorobenzene	16.224	180	88112	46.44	ug/L	96
112) Naphthalene	16.523	128	227548	43.79	ug/L	99
113) 1,2,3-Trichlorobenzene	16.693	180	72591	45.41	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 01:51:04 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

Sample Number: V5E1623-CC1617
Lab FileID: 5E36090.D
Injection Time: 12/13/22 19:47

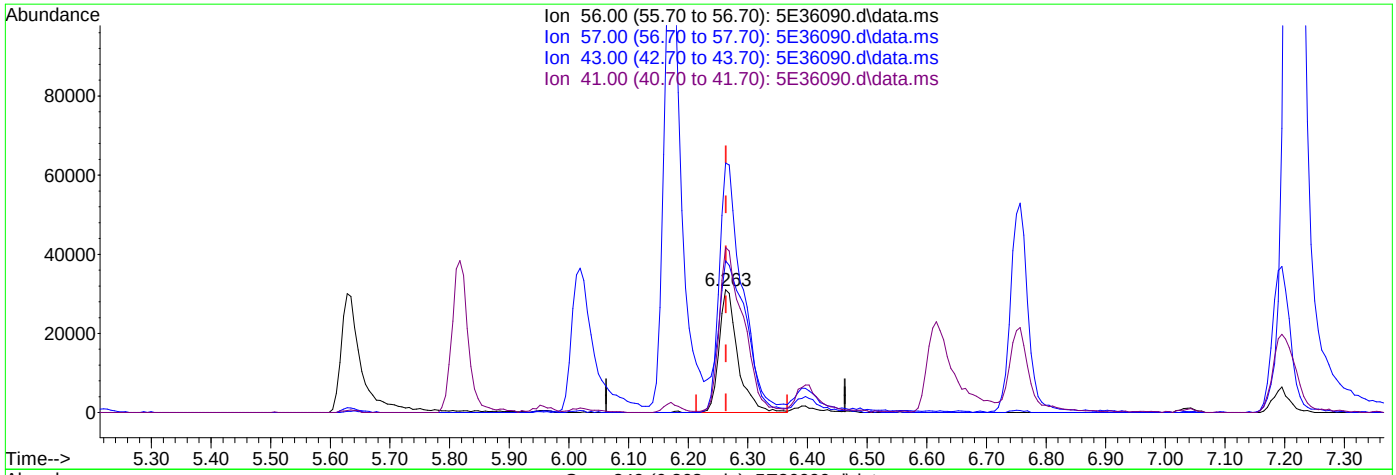
Method: SW846 8260D
Analyst approved: 12/14/22 01:56 Celine Celis
Supervisor approved: 12/15/22 03:51 Jennifer Fereira

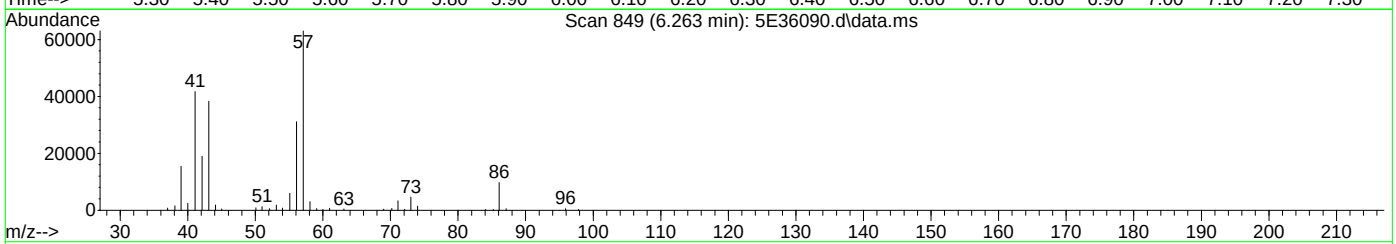
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		6.26	Overlapping peak

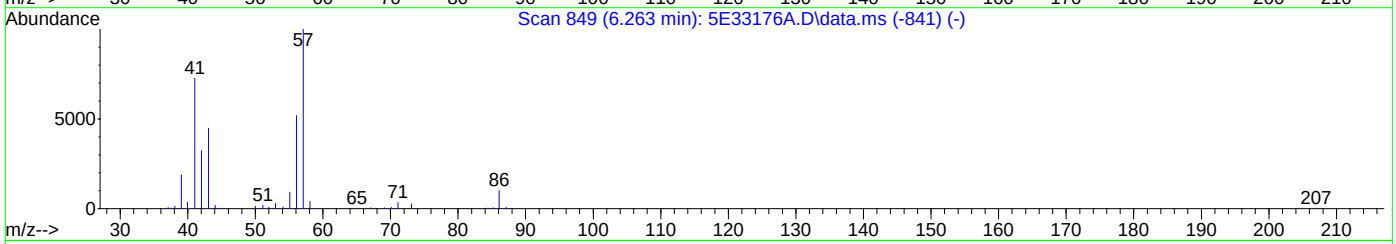
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 00:47:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36090.d\data.ms

(22) Hexane

6.263min (-0.000) 46.72ug/L

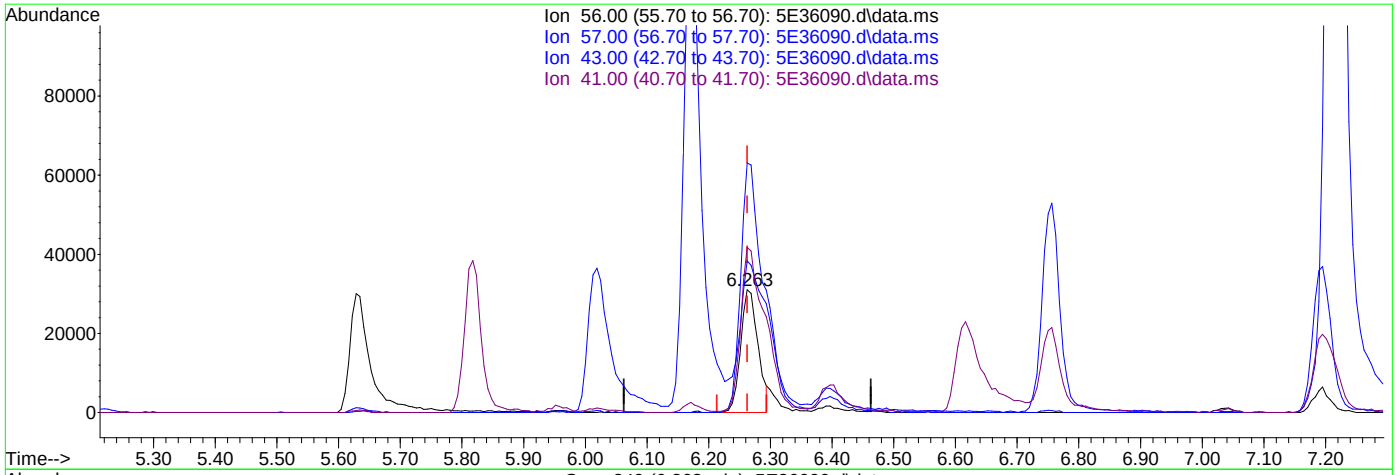
response 68056

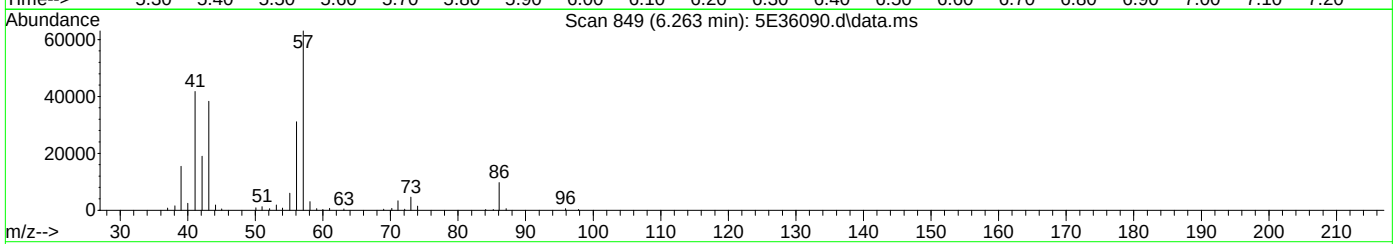
Ion	Exp%	Act%
56.00	100	100
57.00	189.50	202.99
43.00	107.20	116.84
41.00	123.50	133.26

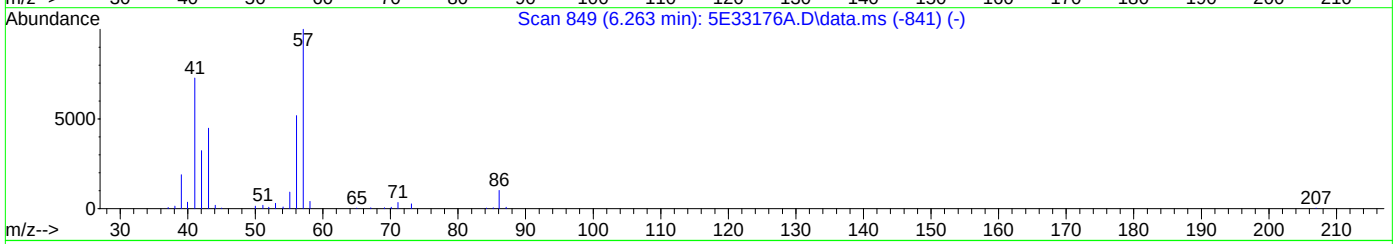
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\celinec\2022\December 2022\12-14-2022\V5E1623\
Data File : 5E36090.d
Acq On : 13 Dec 2022 7:47 pm
Operator : courtnef
Sample : CC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Dec 14 00:47:53 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration







TIC: 5E36090.d\data.ms

(22) Hexane

6.263min (-0.000) 41.60ug/L m

response 60593

Ion	Exp%	Act%
56.00	100	100
57.00	189.50	202.99
43.00	107.20	123.27
41.00	123.50	134.21

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36113.D
Acq On : 14 Dec 2022 4:42 am
Operator : courtnef
Sample : ECC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 14 09:36:52 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.951	96	327074	50.00	ug/L	0.00
61) Chlorobenzene-d5	12.115	117	244592	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.468	152	121829	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	8.079	113	91412	50.44	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.88%			
49) 1,2-Dichloroethane-d4	8.665	65	104284	50.12	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 100.24%			
62) Toluene-d8	10.542	98	320201	47.97	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 95.94%			
86) 4-Bromofluorobenzene	13.328	95	99764	49.23	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.46%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.855	85	82937	41.53	ug/L	98
3) Chloromethane	3.220	50	74313	38.80	ug/L	98
4) Vinyl Chloride	3.373	62	86268	42.42	ug/L	98
5) 1,3-Butadiene	3.403	39	60815	46.77	ug/L	95
6) Bromomethane	3.940	94	23728	22.26	ug/L	97
7) Chloroethane	4.153	64	72121	38.02	ug/L	96
8) Trichlorofluoromethane	4.385	101	111159	45.20	ug/L	99
9) Ethyl Ether	4.867	59	65468	45.26	ug/L	98
10) Ethanol	5.104	45	13217	1143.18	ug/L	86
11) 1,2-Dichlorotrifluoroe...	5.153	67	94634	45.80	ug/L	98
12) 1,1-Dichloroethene	5.165	61	116859	45.43	ug/L	99
13) Freon 113	5.220	101	78009	45.00	ug/L	97
14) Carbon Disulfide	5.208	76	206020	42.58	ug/L	98
15) Iodomethane	5.372	142	30107	12.77	ug/L	95
16) Acrolein	5.629	56	64857	208.67	ug/L	99
17) Allyl chloride	5.818	41	70598	39.88	ug/L	97
18) Methylene Chloride	5.958	49	100717	41.97	ug/L	91
19) Acetone	6.019	43	92794	185.59	ug/L	98
20) Methyl acetate	6.171	43	239513	239.57	ug/L	99
21) trans-1,2-Dichloroethene	6.171	61	106641	44.65	ug/L	98
22) Hexane	6.269	56	61931	43.17	ug/L	92
23) Methyl Tert Butyl Ether	6.293	73	212798	44.66	ug/L	99
24) Acetonitrile	6.616	41	69795	427.22	ug/L	93
25) Di-isopropyl ether	6.756	45	196211	42.90	ug/L	96
26) Chloroprene	6.909	53	91195	42.57	ug/L	98
27) 1,1-Dichloroethane	6.939	63	138694	43.80	ug/L	98
28) Acrylonitrile	7.000	53	130197	217.58	ug/L	96
29) ETBE	7.195	59	233790	44.22	ug/L	98
30) Tert Butyl Alcohol	6.397	59	92126	376.03	ug/L	98
31) Vinyl acetate	7.214	43	672474	216.19	ug/L	98
32) cis-1,2-Dichloroethene	7.579	96	76499	43.80	ug/L	96
33) 2,2-Dichloropropane	7.707	77	81081	32.05	ug/L	93
34) Bromochloromethane	7.811	128	35972	42.34	ug/L	95
35) Cyclohexane	7.823	56	127418	45.46	ug/L	95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36113.D
Acq On : 14 Dec 2022 4:42 am
Operator : courtnef
Sample : ECC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 14 09:36:52 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.878	83	133516	43.34	ug/L		97
37) Ethyl acetate	7.976	43	339771	221.22	ug/L		99
38) Tetrahydrofuran	8.067	42	20119	42.12	ug/L		95
40) Carbon Tetrachloride	8.049	117	101030	44.97	ug/L		97
41) 1,1,1-Trichloroethane	8.122	97	116825	45.54	ug/L		96
42) 2-Butanone	8.201	43	154154	199.75	ug/L		98
43) 1,1-Dichloropropene	8.256	75	101030	43.72	ug/L		95
44) tert-Butyl formate	8.354	59	314425	465.06	ug/L		98
45) Propionitrile	8.537	54	122753	434.82	ug/L		95
46) Methacrylonitrile	8.555	41	454145	480.19	ug/L		98
47) Benzene	8.524	78	286199	43.14	ug/L		99
48) TAME	8.604	73	211305	44.77	ug/L		98
50) 1,2-Dichloroethane	8.738	62	111553	44.26	ug/L		97
51) tert Amyl alcohol	8.786	59	77895	458.19	ug/L		98
52) Trichloroethene	9.134	95	78423	44.18	ug/L		95
53) Methylcyclohexane	9.134	83	130106	46.50	ug/L		98
54) Dibromomethane	9.579	93	52220	44.70	ug/L		97
55) 1,2-Dichloropropane	9.670	63	79923	42.45	ug/L		99
56) Bromodichloromethane	9.719	83	99894	44.75	ug/L		98
57) Methyl methacrylate	9.835	41	56221	41.57	ug/L		96
58) 1,4-Dioxane	9.920	88	14561	889.62	ug/L		95
59) 2-Chloroethyl vinyl ether	10.256	63	198546	193.64	ug/L		99
60) cis-1,3-Dichloropropene	10.353	75	109908	43.65	ug/L		99
63) Toluene	10.597	91	301035	41.64	ug/L		98
64) Isobutyl alcohol	8.671	43	58585	851.44	ug/L		95
65) 2-Nitropropane	10.829	41	117810	219.02	ug/L		98
66) 4-Methyl-2-pentanone	10.938	43	371627	197.90	ug/L		99
67) trans-1,3-Dichloropropene	10.999	75	95185	41.20	ug/L		95
68) Tetrachloroethene	10.999	166	83175	46.78	ug/L		97
69) Ethyl methacrylate	11.103	69	92575	40.74	ug/L		98
70) 1,1,2-Trichloroethane	11.164	83	60288	42.91	ug/L		92
71) Dibromochloromethane	11.359	129	81758	44.70	ug/L		96
72) 1,3-Dichloropropane	11.451	76	118373	42.26	ug/L		96
73) 1,2-Dibromoethane	11.621	107	75777	44.74	ug/L		99
74) 3,3-Dimethyl-1-butanol	11.707	57	385746	2124.21	ug/L		98
75) 2-hexanone	11.768	43	256254	198.41	ug/L		99
76) 1-Chlorohexane	12.060	91	102164	42.80	ug/L		94
77) Ethylbenzene	12.121	91	344094	41.58	ug/L		99
78) Chlorobenzene	12.127	112	202716	42.22	ug/L		99
79) 1,1,1,2-Tetrachloroethane	12.182	131	74467	45.10	ug/L		96
80) m,p-Xylene	12.261	91	514802	83.87	ug/L		99
81) o-Xylene	12.706	91	249329	42.57	ug/L		99
82) Styrene	12.755	104	196067	43.59	ug/L		99
83) Bromoform	12.816	173	49274	41.44	ug/L		94
84) Isopropylbenzene	13.005	105	328368	43.24	ug/L		98
87) cis-1,4-Dichloro-2-butene	13.682	53	18685	31.70	ug/L	#	84
88) n-Propylbenzene	13.426	91	404668	41.65	ug/L		98
89) Bromobenzene	13.456	156	78948	41.76	ug/L		96
90) 1,1,2,2-Tetrachloroethane	13.493	83	101883	42.91	ug/L		100
91) 1,3,5-Trimethylbenzene	13.609	105	269041	42.02	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36113.D
Acq On : 14 Dec 2022 4:42 am
Operator : courtnef
Sample : ECC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 14 09:36:52 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration

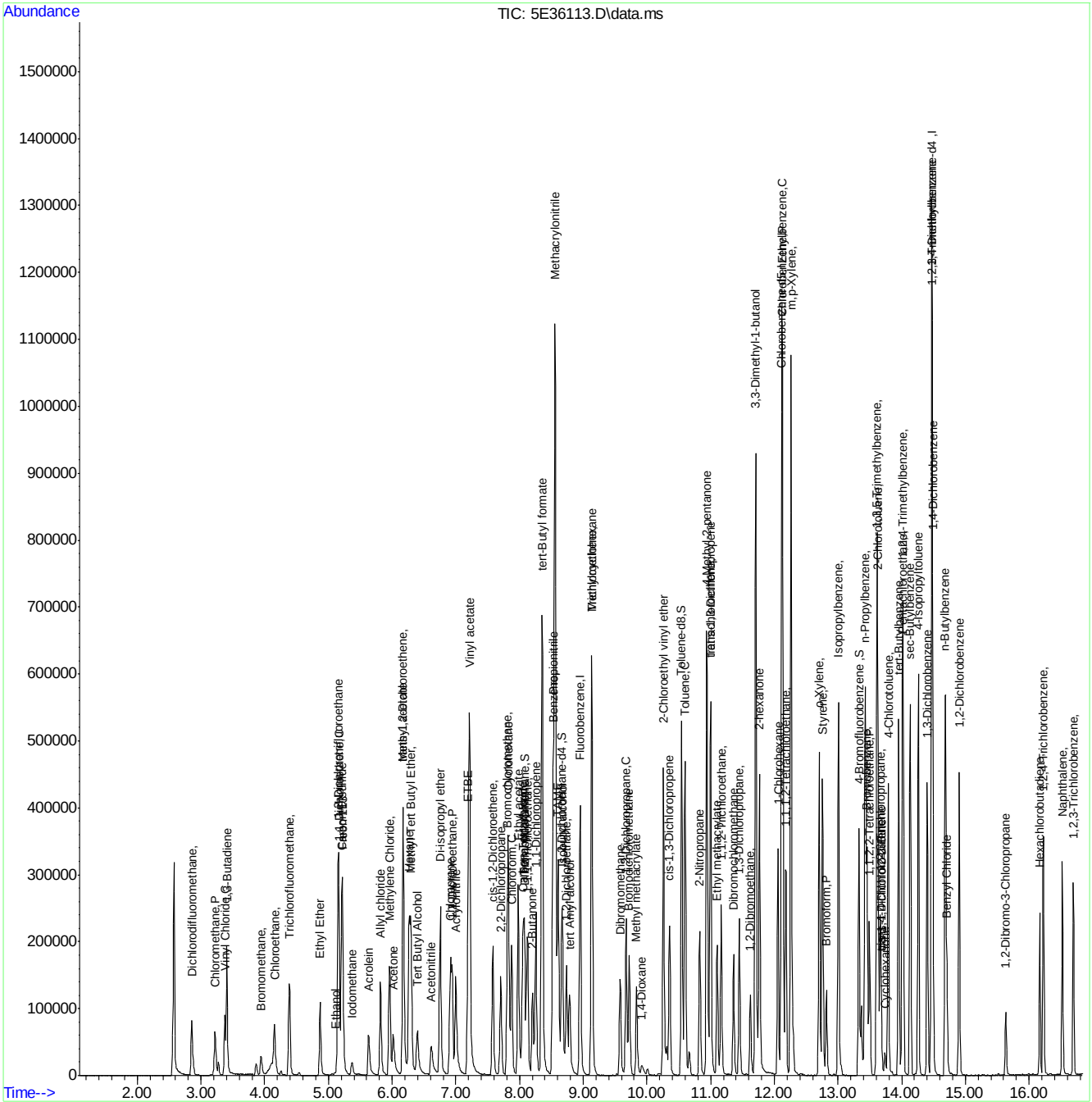
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92)	2-Chlorotoluene	13.621	91	244622	41.02	ug/L		97
93)	trans-1,4-Dichloro-2-B...	13.682	53	18685	31.70	ug/L	#	83
94)	1,2,3-Trichloropropane	13.664	110	28176	41.37	ug/L		96
95)	Cyclohexanone	13.737	55	13700	222.44	ug/L		95
96)	4-Chlorotoluene	13.792	91	214779	40.44	ug/L		97
98)	tert-Butylbenzene	13.950	91	145236	41.97	ug/L		100
99)	1,2,4-Trimethylbenzene	14.017	105	265716	42.81	ug/L		97
100)	Pentachloroethane	14.011	167	40022	35.82	ug/L		92
101)	sec-Butylbenzene	14.133	105	340555	43.26	ug/L		99
102)	4-Isopropyltoluene	14.261	119	294964	42.74	ug/L		100
103)	1,3-Dichlorobenzene	14.401	146	150823	42.72	ug/L		96
104)	1,2,3-Trimethylbenzene	14.474	105	269174	42.97	ug/L		99
105)	1,4-Dichlorobenzene	14.487	146	163483	42.32	ug/L		99
106)	n-Butylbenzene	14.682	92	152441	41.66	ug/L		99
107)	Benzyl Chloride	14.712	126	19507	25.38	ug/L	#	90
108)	1,2-Dichlorobenzene	14.901	146	147477	43.63	ug/L		96
109)	1,2-Dibromo-3-Chloropr...	15.633	75	15013	41.50	ug/L		97
110)	Hexachlorobutadiene	16.169	225	29552	41.38	ug/L		95
111)	1,2,4-Trichlorobenzene	16.224	180	85040	45.15	ug/L		98
112)	Naphthalene	16.523	128	212200	41.14	ug/L		100
113)	1,2,3-Trichlorobenzene	16.693	180	69174	43.59	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\12-13-2022\
Data File : 5E36113.D
Acq On : 14 Dec 2022 4:42 am
Operator : courtnef
Sample : ECC1617-5
Misc : MS53006,V5E1623,,,,,
ALS Vial : 54 Sample Multiplier: 1

Quant Time: Dec 14 09:36:52 2022
Quant Method : C:\msdchem\1\methods\appIX12-08-2022_.M
Quant Title : SW-846 Method 5030B/8260B & EPA 624
QLast Update : Thu Dec 08 16:31:47 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	789594	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	593096	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	213340	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	217425	49.17	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.34%			
50) 1,2-Dichloroethane-d4	8.262	65	204248	52.08	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.16%			
63) Toluene-d8	10.152	98	791990	49.80	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.60%			
86) 4-Bromofluorobenzene	12.944	174	214911	50.54	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.08%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	4461	0.98	ug/L	94
3) Chloromethane	3.013	50	3950	0.89	ug/L	91
4) 1,3-butadiene	3.184	39	5195	1.12	ug/L	94
5) Vinyl Chloride	3.153	62	3789	0.82	ug/L	85
6) Bromomethane	3.672	94	1047	0.73	ug/L	70
7) Chloroethane	3.885	64	1800	0.71	ug/L	96
8) Trichlorofluoromethane	4.098	101	5039	0.76	ug/L	99
9) Ethyl Ether	4.556	59	3717	1.09	ug/L	92
11) 1,2-Dichlorotrifluoroe...	4.824	67	6187	1.17	ug/L	96
12) 1,1-Dichloroethene	4.824	61	7356	1.13	ug/L	98
13) Freon 113	4.885	101	5323	1.29	ug/L	94
14) Carbon Disulfide	4.860	76	15702	1.28	ug/L	93
16) Acrolein	5.293	56	2467	3.44	ug/L	82
17) Allyl chloride	5.458	41	5137	0.88	ug/L	97
18) Methylene Chloride	5.592	49	14996	2.26	ug/L	91
19) Acetone	5.665	43	8355	7.39	ug/L	98
20) Methyl acetate	5.811	43	14650	4.90	ug/L	98
21) trans-1,2-Dichloroethene	5.799	61	6999	1.11	ug/L	90
22) Hexane	5.891	56	3638m	1.51	ug/L	
23) Methyl Tert Butyl Ether	5.927	73	13006	1.09	ug/L	93
24) Tert Butyl Alcohol	6.031	59	1621m	5.13	ug/L	
25) Acetonitrile	6.250	41	4659	11.78	ug/L	80
26) Di-isopropyl ether	6.372	45	15839	1.11	ug/L	98
27) Chloroprene	6.519	53	4289	0.84	ug/L	90
28) 1,1-Dichloroethane	6.543	63	8908	1.16	ug/L	95
29) Acrylonitrile	6.610	52	7837	7.19	ug/L	96
30) ETBE	6.799	59	13427	1.00	ug/L	95
31) Vinyl acetate	6.830	43	39252	4.34	ug/L	91
32) cis-1,2-Dichloroethene	7.177	96	5306	1.18	ug/L	94
33) 2,2-Dichloropropane	7.299	77	5160	0.84	ug/L	96
34) Bromochloromethane	7.403	128	2702	1.17	ug/L	98
35) Cyclohexane	7.415	56	7183	1.13	ug/L	97
36) Chloroform	7.470	83	9234	1.14	ug/L	90
37) Ethyl acetate	7.598	43	22247	5.88	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
38) Tetrahydrofuran	7.689	42	1275m	1.05	ug/L		
40) Carbon Tetrachloride	7.646	117	4717	0.78	ug/L		89
41) 1,1,1-Trichloroethane	7.720	97	6788	0.97	ug/L		96
42) 2-Butanone	7.829	43	8277	4.73	ug/L		92
43) 1,1-Dichloropropene	7.848	75	6814	1.17	ug/L		82
44) tert-Butyl formate	7.963	59	4632	1.55	ug/L	#	60
45) Propionitrile	8.152	54	4316	8.85	ug/L	#	45
46) Methacrylonitrile	8.165	41	27254	9.34	ug/L		98
47) Benzene	8.122	78	19949	1.19	ug/L		96
48) TAME	8.213	73	11303	0.97	ug/L		91
49) Isobutyl alcohol	8.213	43	4877	38.43	ug/L	#	67
51) 1,2-Dichloroethane	8.335	62	7904	1.15	ug/L		98
52) Tert Amyl Alcohol	8.421	59	771m	3.46	ug/L		
53) Trichloroethene	8.732	95	5947	1.28	ug/L		90
54) Methylcyclohexane	8.726	83	6912	1.21	ug/L		96
55) Dibromomethane	9.177	93	3634	1.20	ug/L		84
56) 1,2-Dichloropropane	9.274	63	5060	1.17	ug/L		96
57) Bromodichloromethane	9.329	83	5644	0.96	ug/L		95
58) Methyl methacrylate	9.469	41	1769	0.52	ug/L	#	69
60) 2-Chloroethyl vinyl ether	9.884	63	10579	3.42	ug/L		93
61) cis-1,3-Dichloropropene	9.969	75	5462	0.83	ug/L		99
64) Toluene	10.207	91	21221	1.19	ug/L		98
65) 2-Nitropropane	10.451	41	1682	1.40	ug/L		92
66) 4-Methyl-2-pentanone	10.567	43	16939	4.00	ug/L		94
67) trans-1,3-Dichloropropene	10.615	75	4530	0.80	ug/L		85
68) Tetrachloroethene	10.609	166	5862	1.18	ug/L		93
69) Ethyl methacrylate	10.737	69	1974m	0.38	ug/L		
70) 1,1,2-Trichloroethane	10.786	83	3774	1.11	ug/L		99
71) Dibromochloromethane	10.975	129	3262	0.67	ug/L		87
72) 1,3-Dichloropropane	11.067	76	7936	1.16	ug/L		91
73) 1,2-Dibromoethane	11.237	107	4156	0.99	ug/L		86
74) 3,3-dimethyl-1-butanol	11.347	57	4168	15.50	ug/L		91
75) 2-hexanone	11.402	43	10499	3.70	ug/L		96
76) 1-Chlorohexane	11.682	91	5367m	1.08	ug/L		
77) Ethylbenzene	11.743	91	23617	1.18	ug/L		97
78) Chlorobenzene	11.743	112	14212	1.20	ug/L		97
79) 1,1,1,2-Tetrachloroethane	11.792	131	2978	0.70	ug/L		92
80) m,p-Xylene	11.883	91	32893	2.16	ug/L		96
81) o-Xylene	12.328	91	16521	1.12	ug/L		94
82) Styrene	12.383	104	9535	0.89	ug/L		95
83) Bromoform	12.438	173	1544	0.52	ug/L		92
84) Isopropylbenzene	12.633	105	18740	1.07	ug/L		97
87) cis-1,4-Dichloro-2-butene	12.993	53	700m	0.49	ug/L		
88) n-Propylbenzene	13.054	91	22955	1.06	ug/L		93
89) Bromobenzene	13.066	156	5963	0.83	ug/L		93
90) 1,1,2,2-Tetrachloroethane	13.127	83	5037	0.94	ug/L		84
91) 1,3,5-Trimethylbenzene	13.237	105	15265	1.03	ug/L		97
92) 2-Chlorotoluene	13.414	91	14088	1.03	ug/L		96
93) trans-1,4-Dichloro-2-B...	13.316	53	932m	0.78	ug/L		
94) 1,2,3-Trichloropropane	13.292	110	1610	1.07	ug/L		92

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

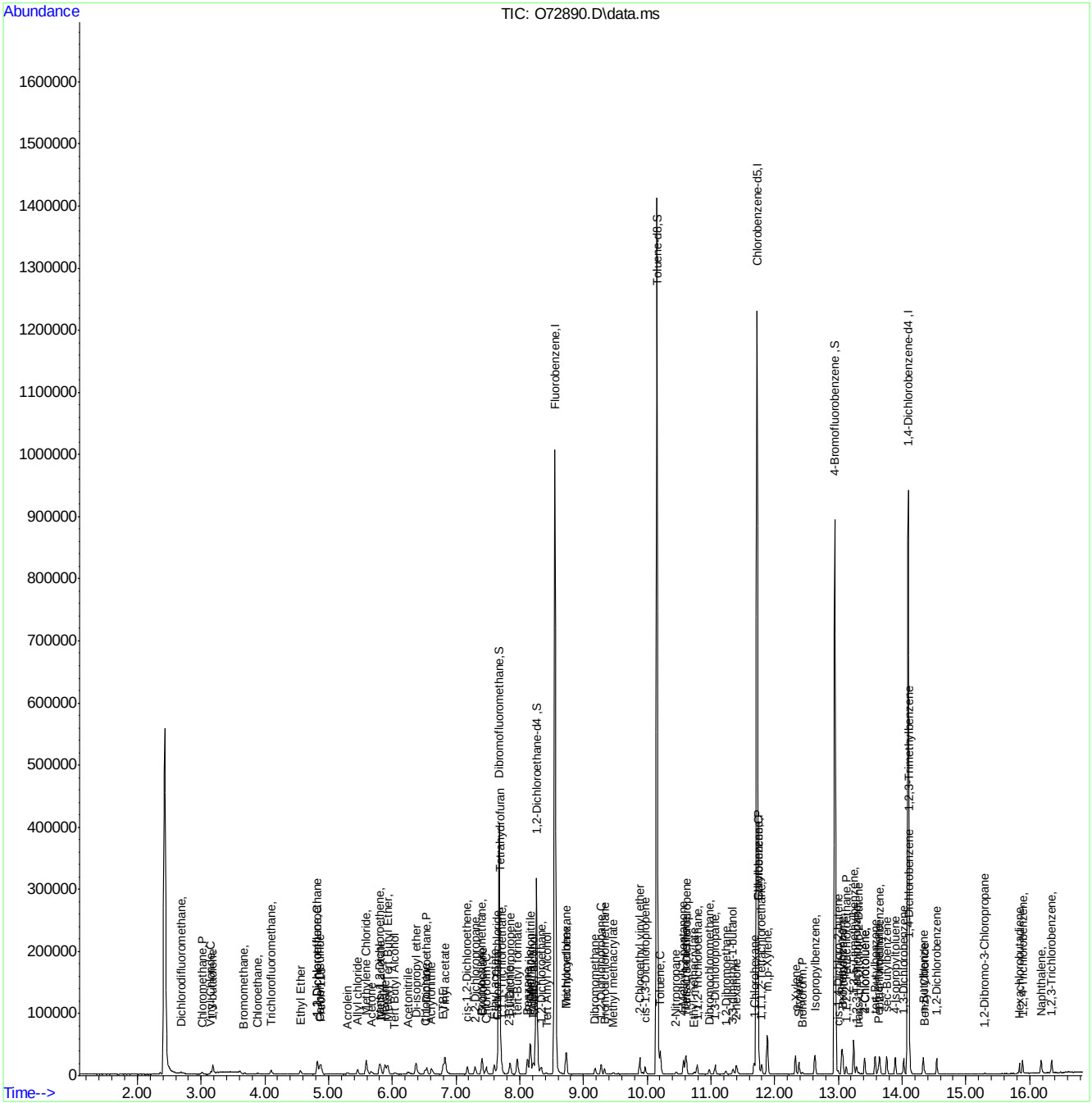
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
96) 4-Chlorotoluene	13.414	91	14088	1.03	ug/L	98
97) tert-Butylbenzene	13.572	91	9181	1.09	ug/L	89
99) 1,2,4-Trimethylbenzene	13.645	105	14973	1.03	ug/L	87
100) Pentachloroethane	13.627	167	876m	0.33	ug/L	
101) sec-Butylbenzene	13.761	105	17896	1.08	ug/L	97
102) 4-Isopropyltoluene	13.895	119	14576	1.03	ug/L	92
103) 1,3-Dichlorobenzene	14.029	146	10442	1.13	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	15482	1.05	ug/L	88
105) 1,4-Dichlorobenzene	14.115	146	11549	1.18	ug/L	93
106) n-Butylbenzene	14.334	92	7264	0.98	ug/L	90
107) Benzyl Chloride	14.352	126	586m	0.40	ug/L	
108) 1,2-Dichlorobenzene	14.548	146	9928	1.13	ug/L	94
109) 1,2-Dibromo-3-Chloropr...	15.291	75	305m	0.40	ug/L	
110) Hexachlorobutadiene	15.840	225	2267	1.29	ug/L	89
111) 1,2,4-Trichlorobenzene	15.895	180	5856	1.12	ug/L	98
112) Naphthalene	16.181	128	13559	1.02	ug/L	97
113) 1,2,3-Trichlorobenzene	16.346	180	5567	1.17	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:26:49 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

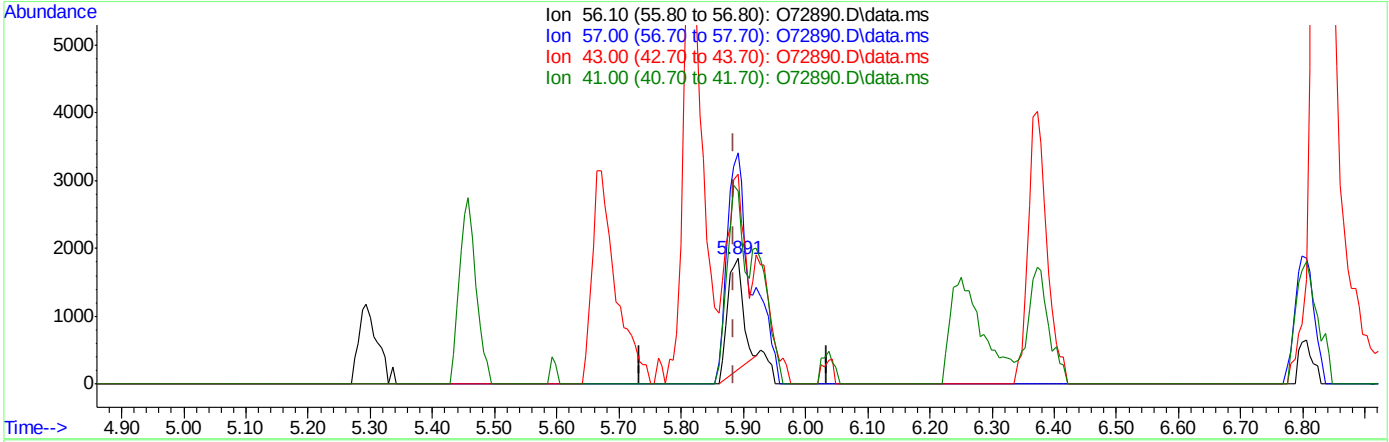
Sample Number: VO2866-IC2866
Lab FileID: O72890.D
Injection Time: 12/08/22 09:56
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

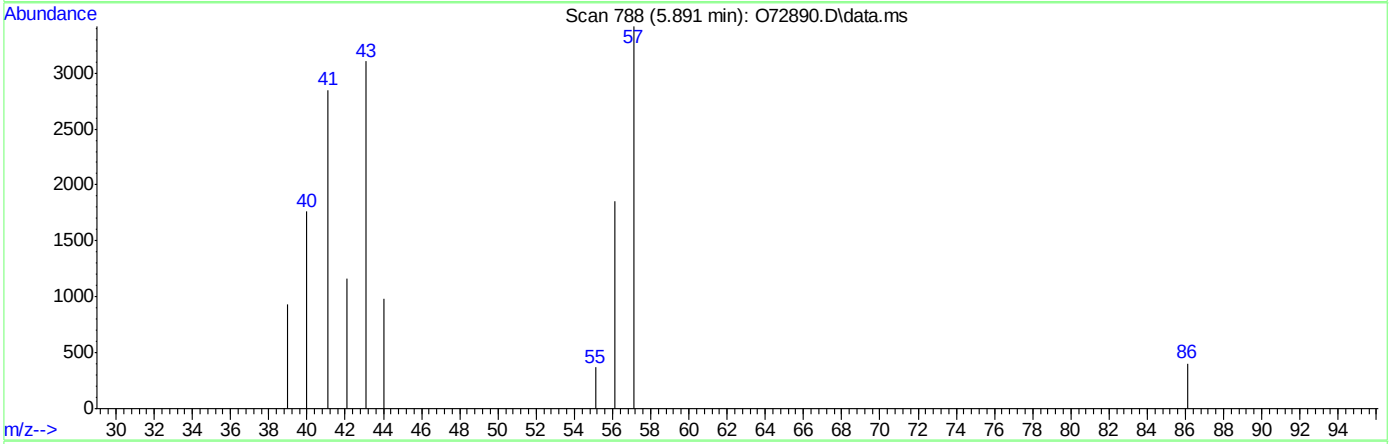
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Poor instrument integration
Tert-Butyl Alcohol	75-65-0		6.03	Missed peak
Tetrahydrofuran	109-99-9		7.69	Missed peak
Tert-Amyl Alcohol	75-85-4		8.42	Missed peak
Ethyl Methacrylate	97-63-2		10.74	Missed peak
1-Chlorohexane	544-10-5		11.68	Poor instrument integration
cis-1,4-Dichloro-2-Butene	1476-11-5		12.99	Missed peak
trans-1,4-Dichloro-2-Butene	110-57-6		13.32	Missed peak
Pentachloroethane	76-01-7		13.63	Missed peak
Benzyl Chloride	100-44-7		14.35	Missed peak
1,2-Dibromo-3-chloropropane	96-12-8		15.29	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(22) Hexane

5.891min (+0.006) 1.20ug/L

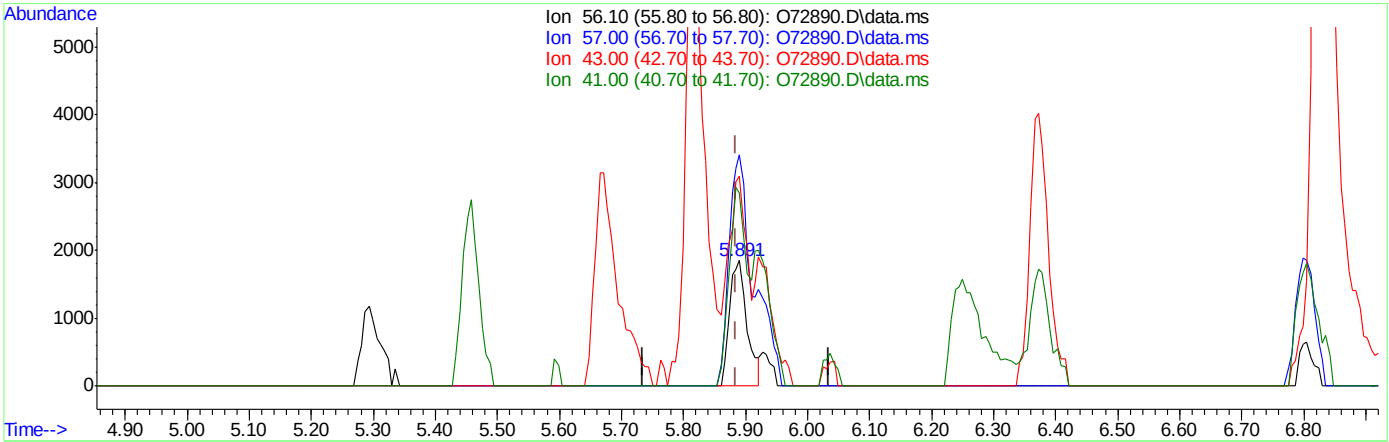
response 2881

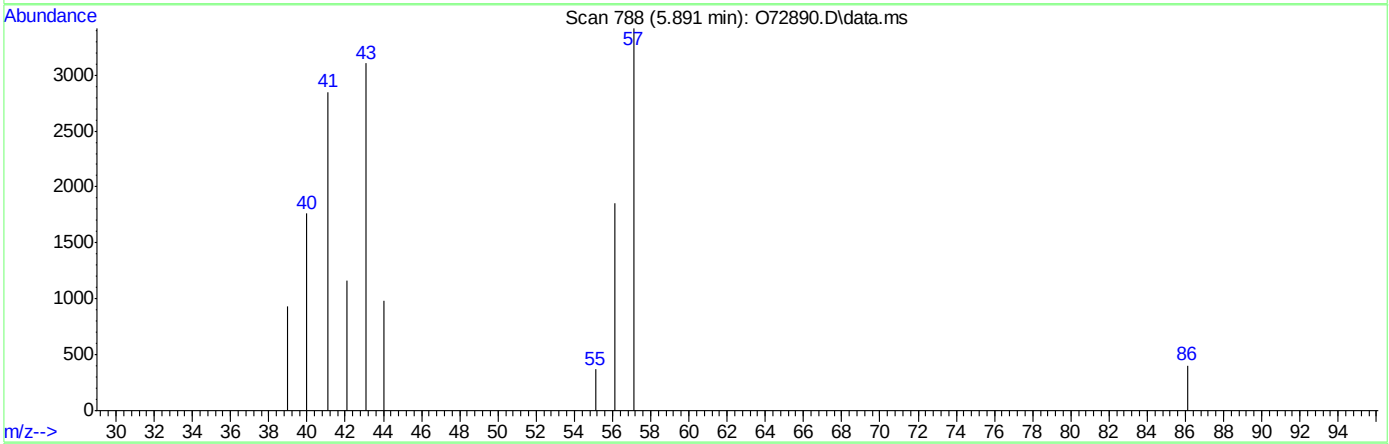
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	166.92#
43.00	149.90	110.79#
41.00	165.70	139.34#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(22) Hexane

5.891min (+0.006) 1.51ug/L m

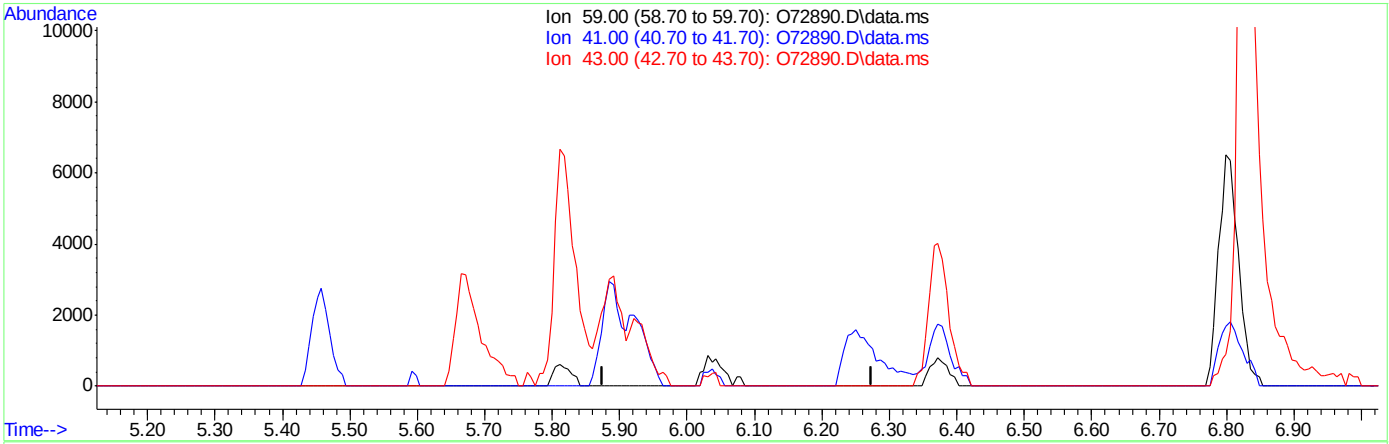
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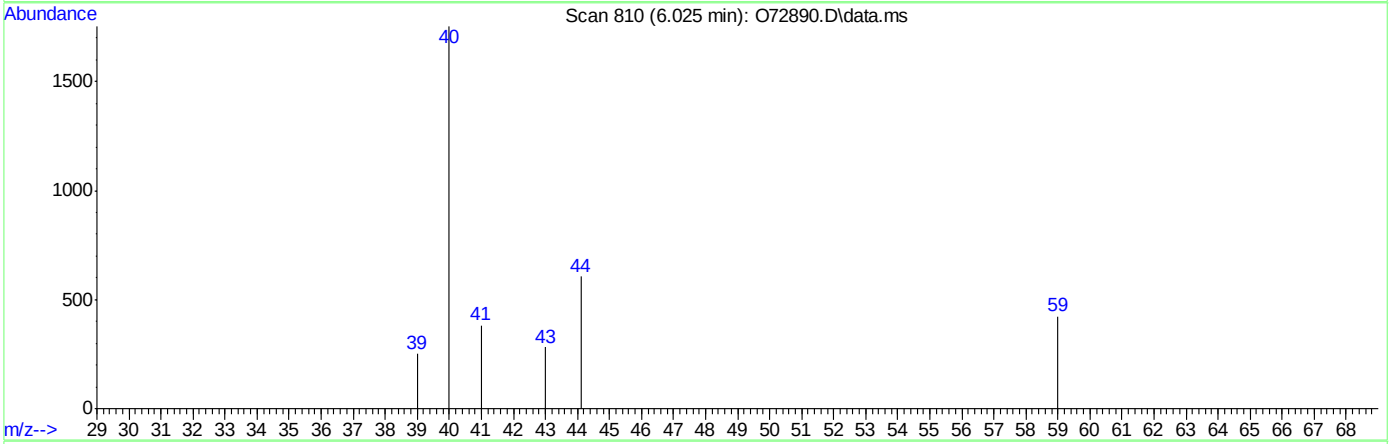
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	184.40
43.00	149.90	167.46
41.00	165.70	153.86

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(24) Tert Butyl Alcohol

6.025min (-6.025) 0.00ug/L

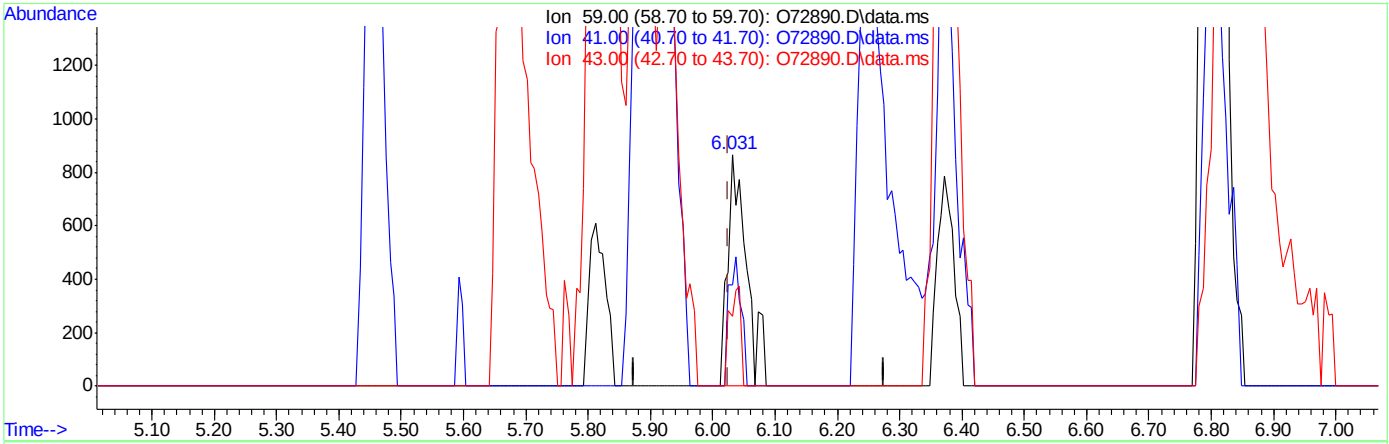
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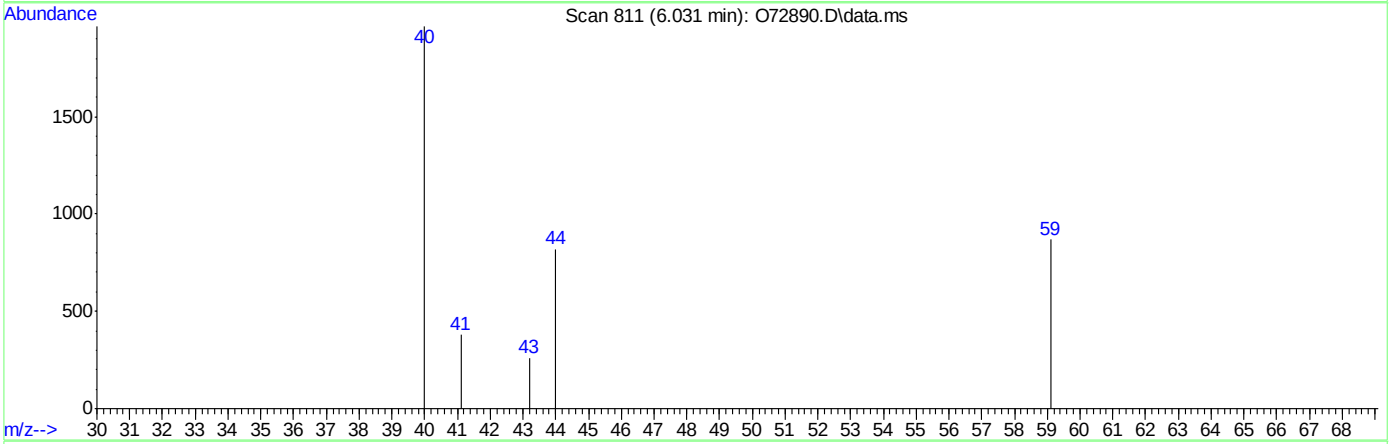
Ion	Exp%	Act%
59.00	100	0.00
41.00	28.00	0.00#
43.00	19.80	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(24) Tert Butyl Alcohol

6.031min (+0.006) 5.13ug/L m

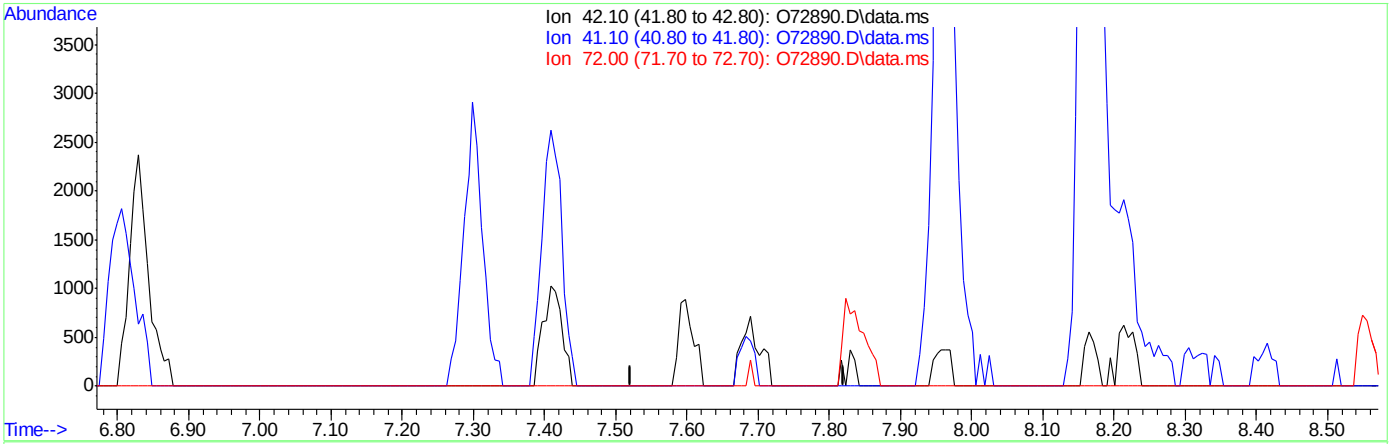
response 1621

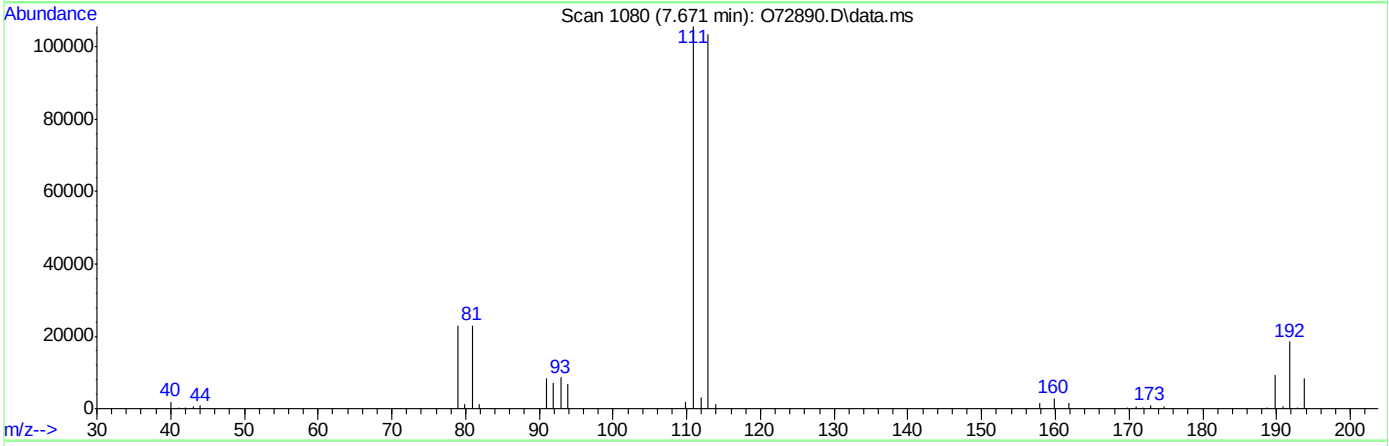
Ion	Exp%	Act%
59.00	100	100
41.00	28.00	43.60
43.00	19.80	30.10
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(38) Tetrahydrofuran

7.671min (-7.671) 0.00ug/L

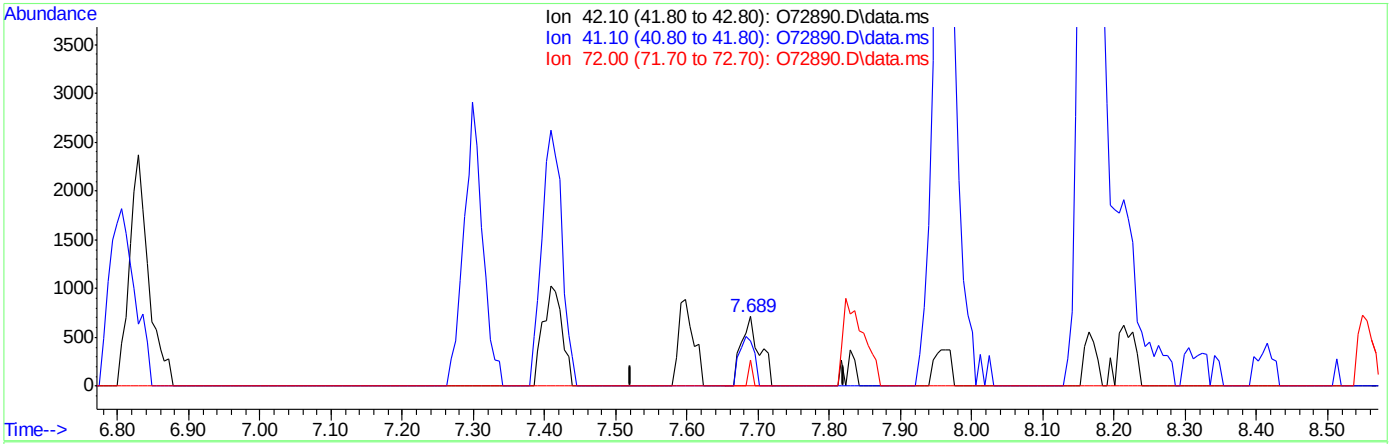
response 0

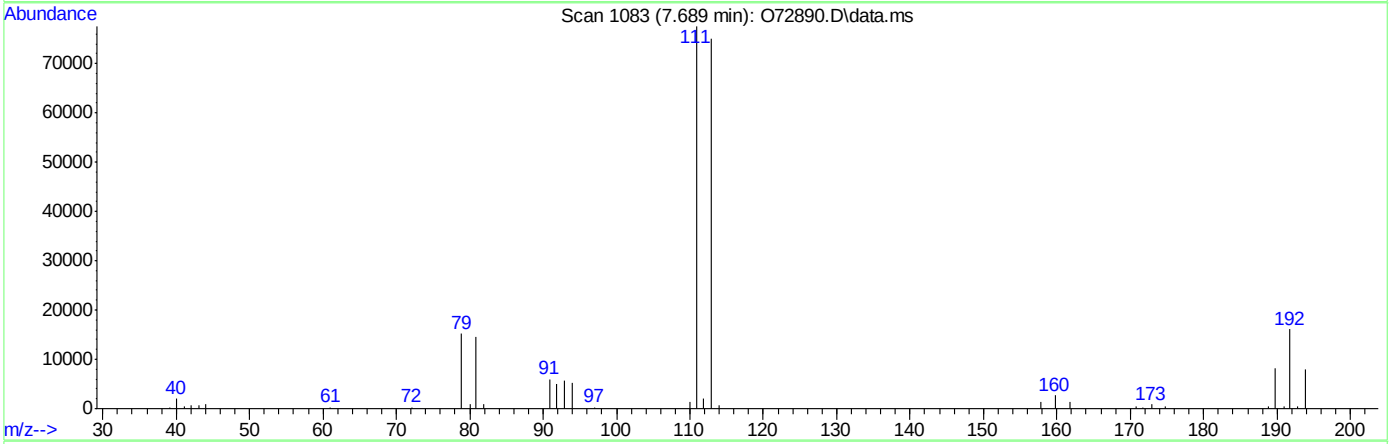
Ion	Exp%	Act%
42.10	100	0.00
41.10	55.40	0.00#
72.00	37.20	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(38) Tetrahydrofuran

7.689min (+0.018) 1.05ug/L m

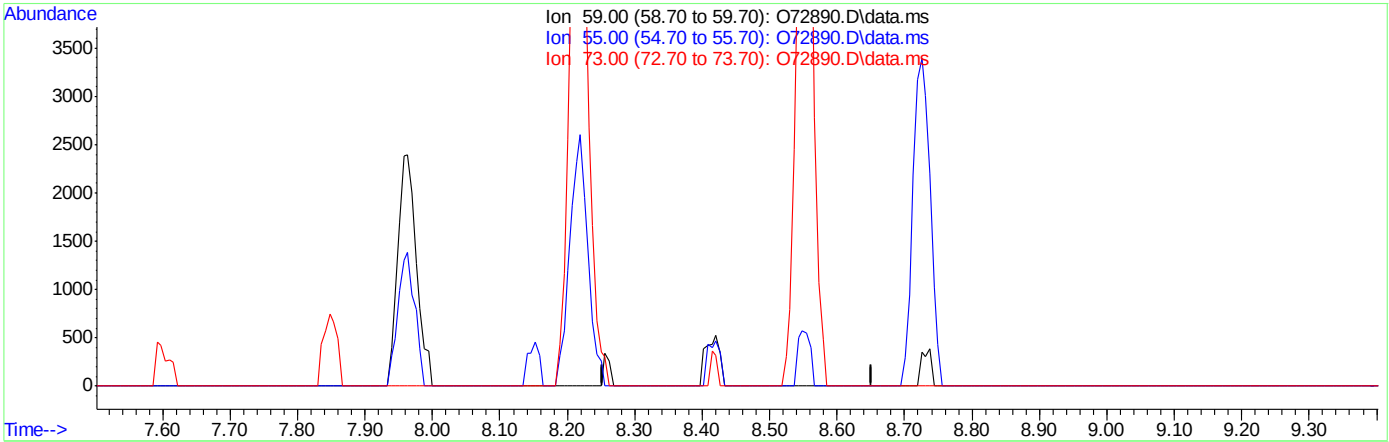
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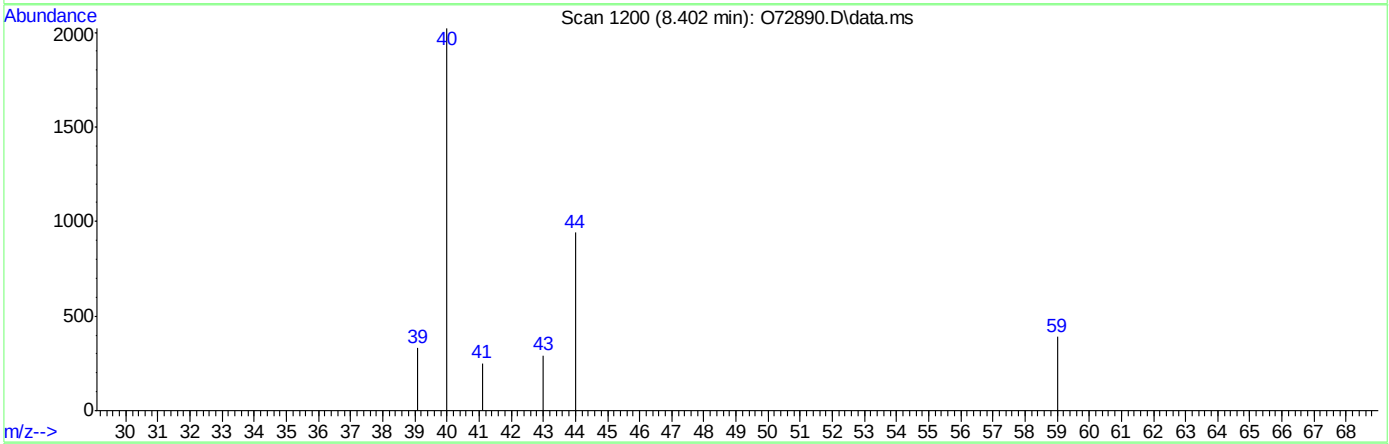
Ion	Exp%	Act%
42.10	100	100
41.10	55.40	64.34
72.00	37.20	37.48
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(52) Tert Amyl Alcohol

8.402min (-8.402) 0.00ug/L

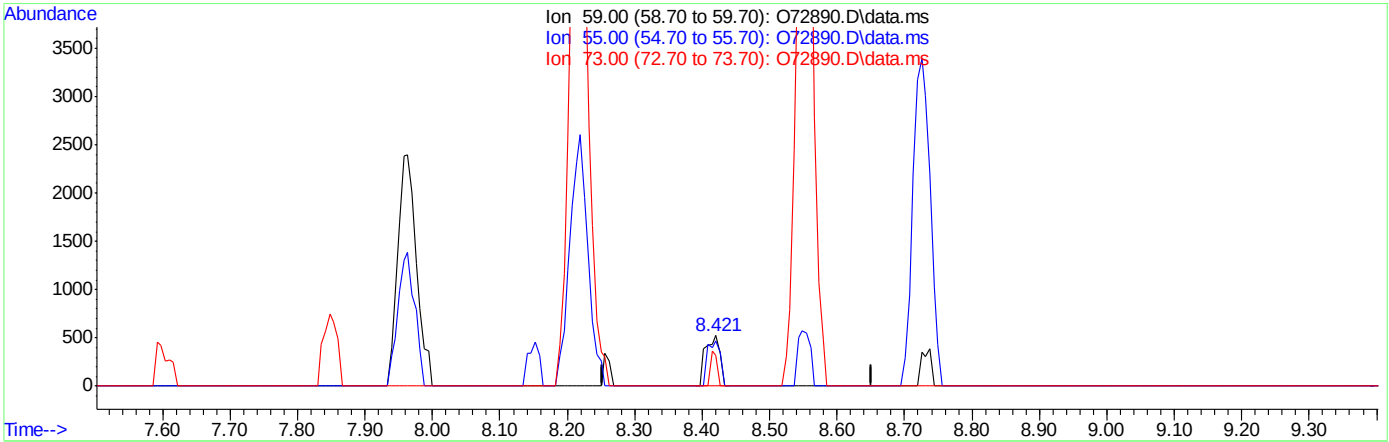
response 0

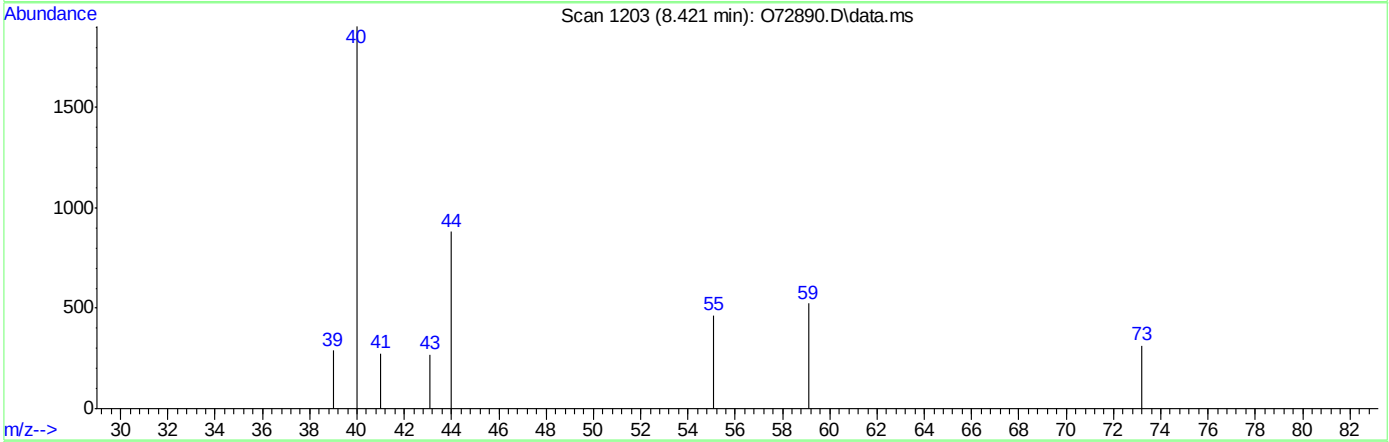
Ion	Exp%	Act%
59.00	100	0.00
55.00	59.10	0.00#
73.00	59.90	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(52) Tert Amyl Alcohol

8.421min (+0.018) 3.46ug/L m

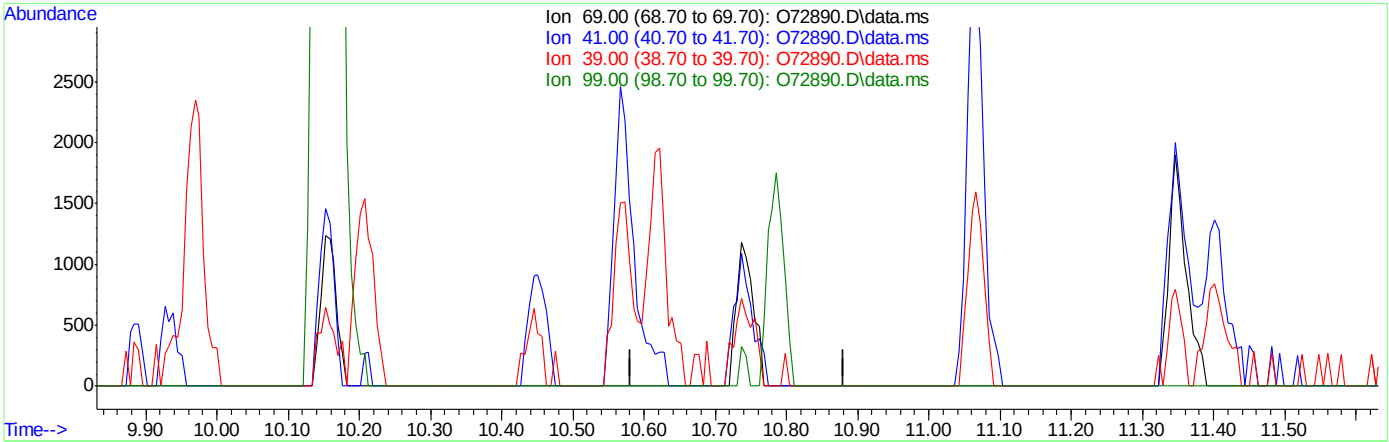
response 771

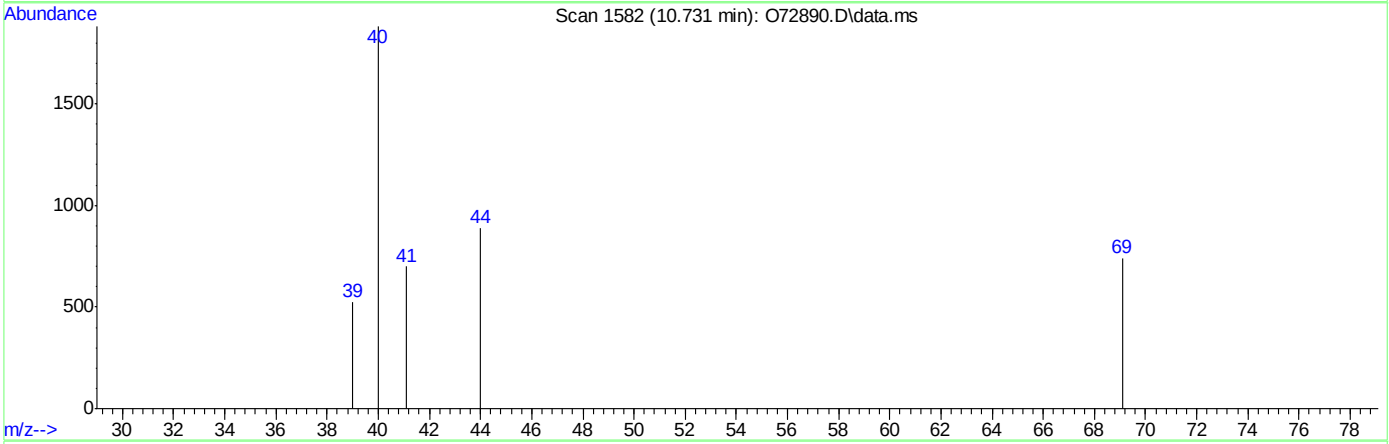
Ion	Exp%	Act%
59.00	100	100
55.00	59.10	88.91
73.00	59.90	60.23
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(69) Ethyl methacrylate

10.731min (-10.731) 0.00ug/L

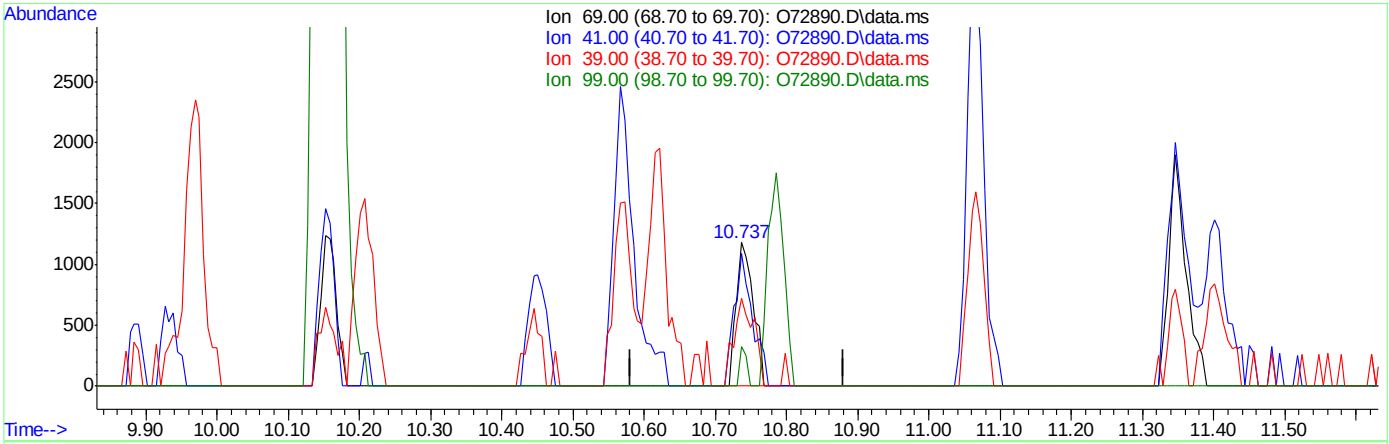
response 0

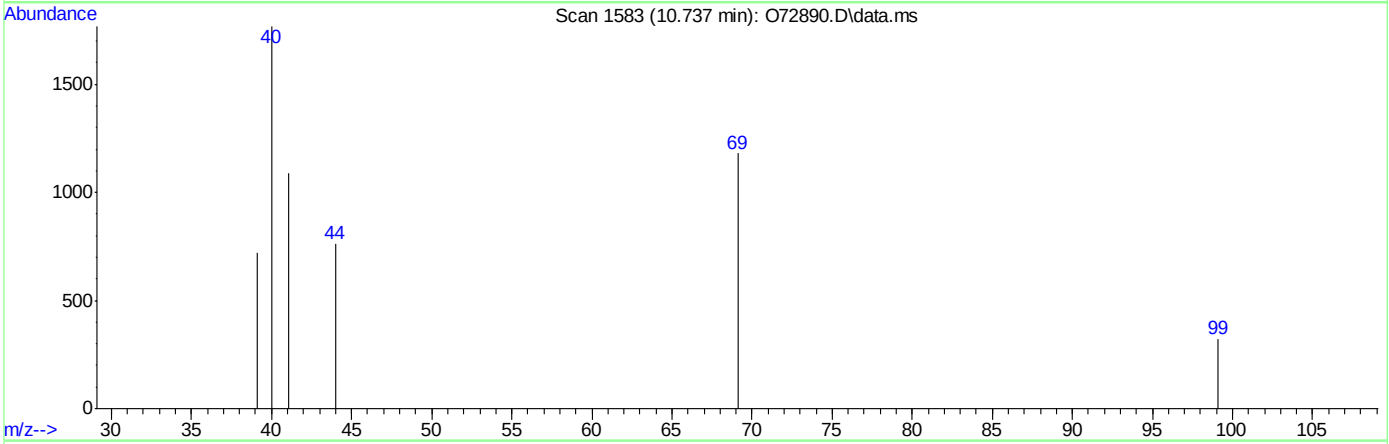
Ion	Exp%	Act%
69.00	100	0.00
41.00	80.20	0.00#
39.00	47.00	0.00#
99.00	18.40	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(69) Ethyl methacrylate

10.737min (+0.006) 0.38ug/L m

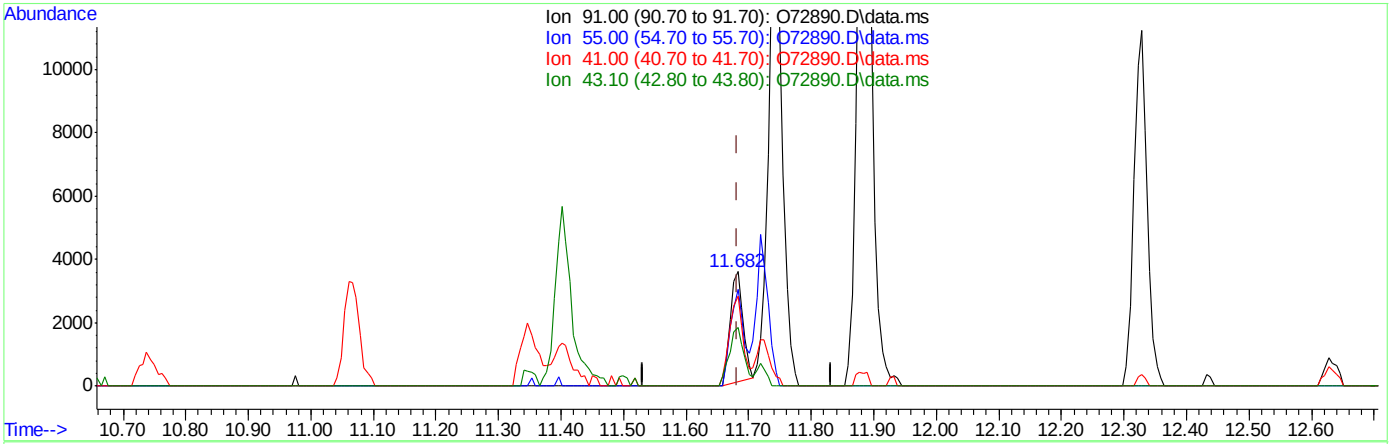
response 1974

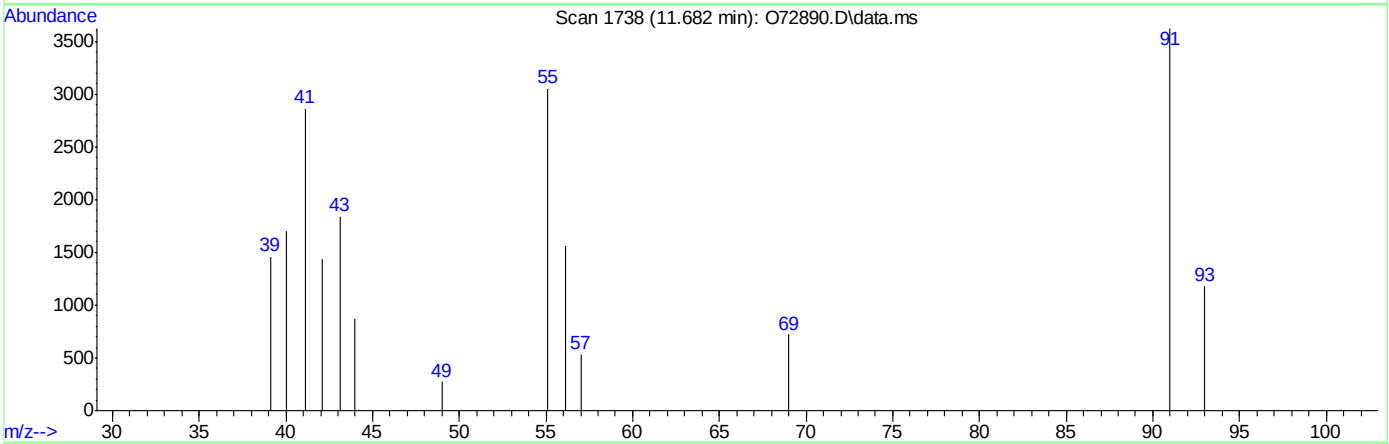
Ion	Exp%	Act%
69.00	100	100
41.00	80.20	92.12
39.00	47.00	61.27
99.00	18.40	27.37

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 1.00ug/L

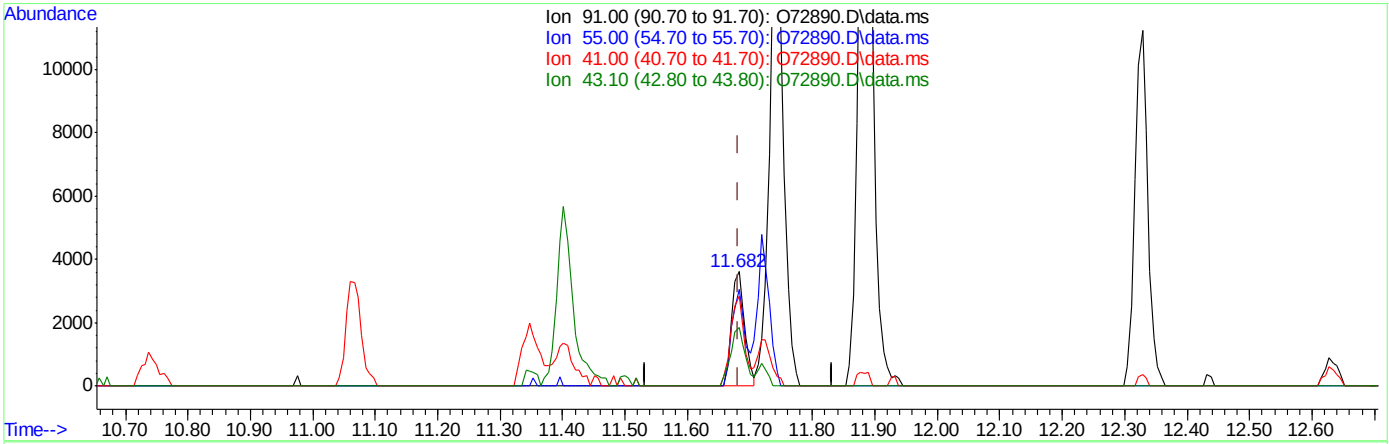
response 4975

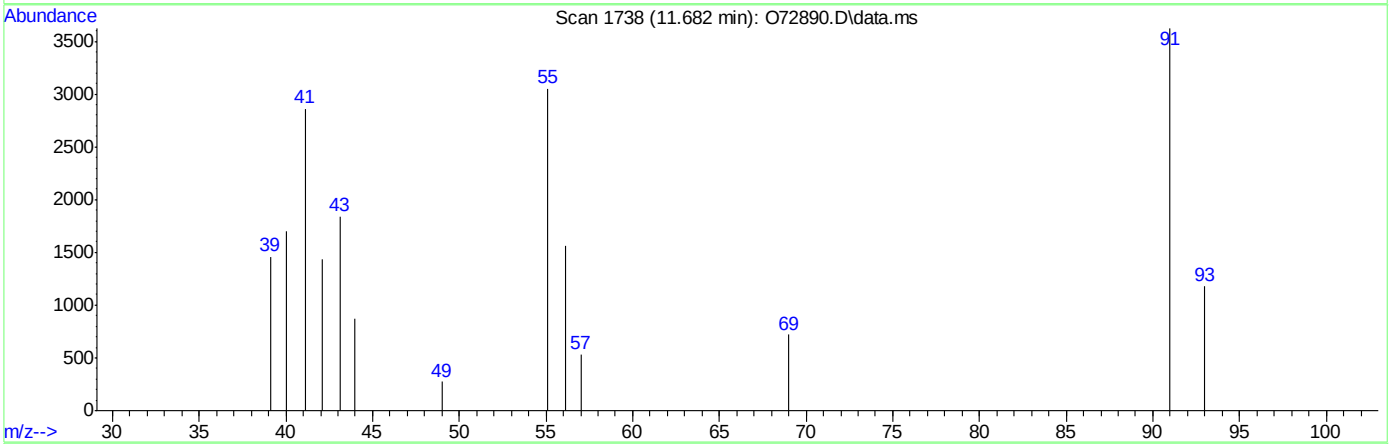
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	84.18
41.00	64.00	70.41
43.10	51.10	42.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 1.08ug/L m

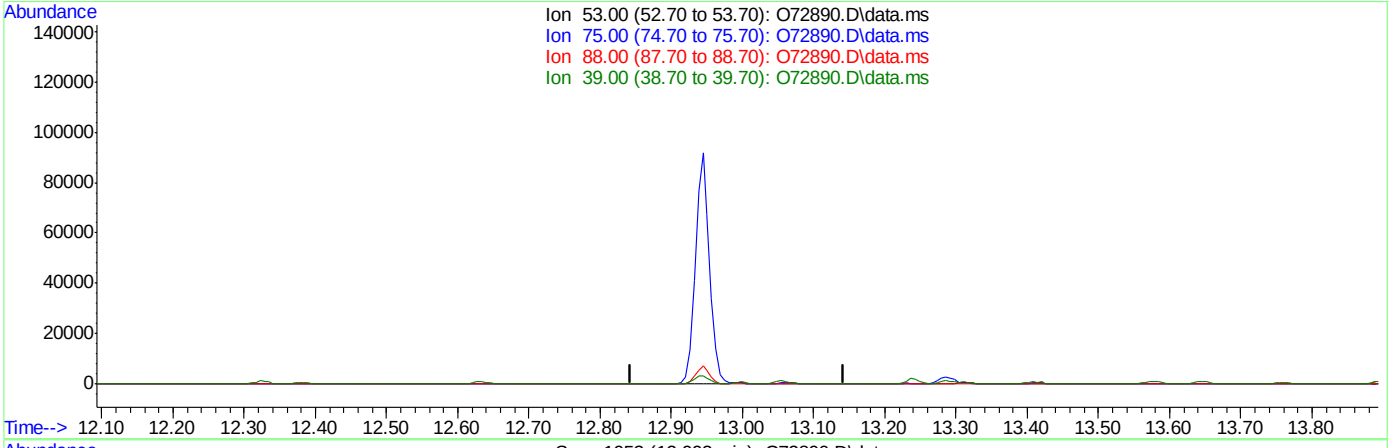
response 5367

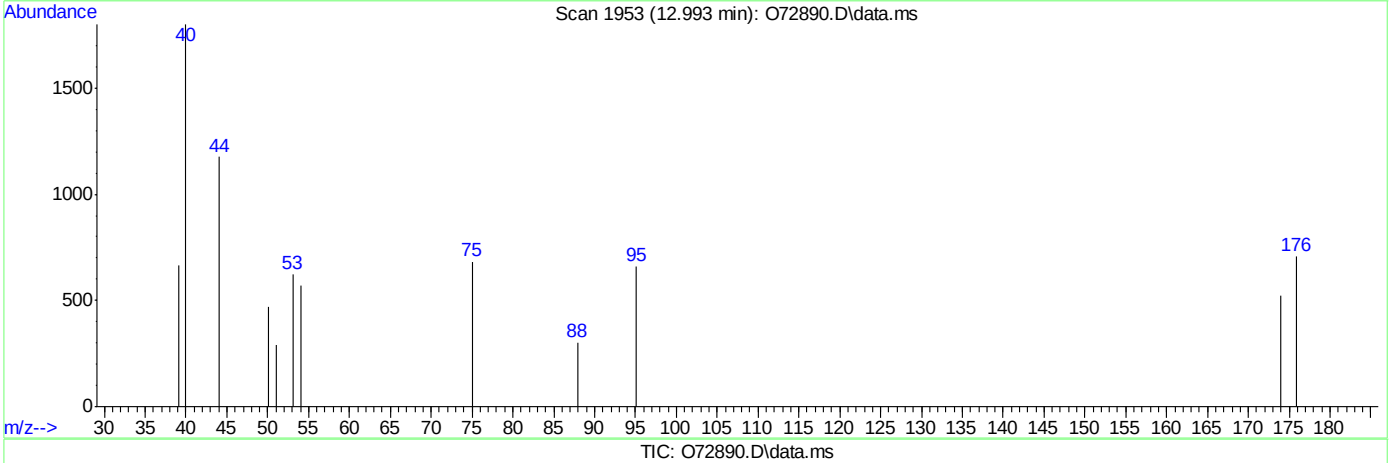
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	84.18
41.00	64.00	78.91
43.10	51.10	50.87

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(87) cis-1,4-Dichloro-2-butene

12.993min (-12.993) 0.00ug/L

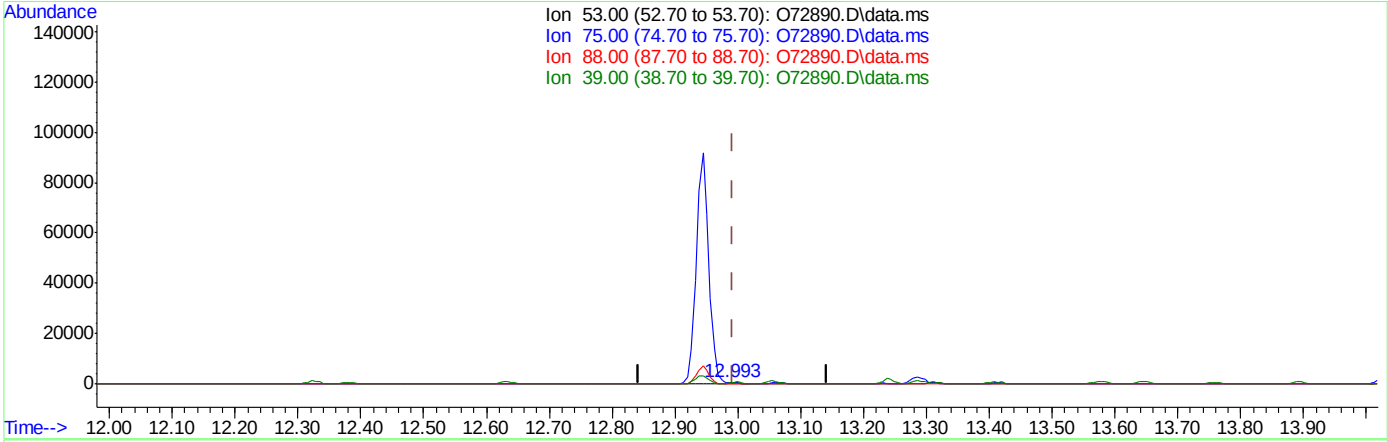
response 0

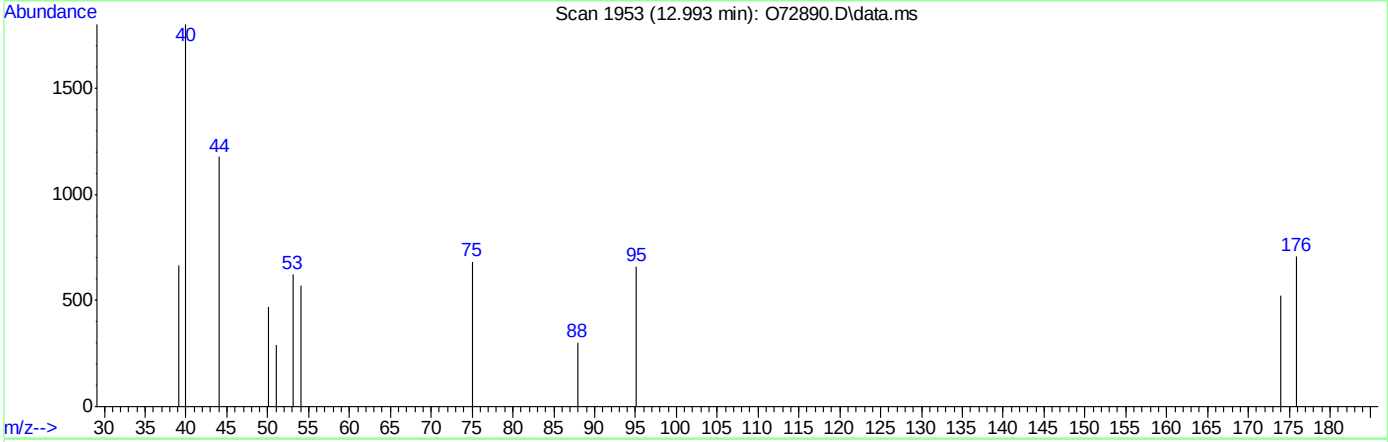
Ion	Exp%	Act%
53.00	100	0.00
75.00	94.00	0.00#
88.00	106.10	0.00#
39.00	52.70	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(87) cis-1,4-Dichloro-2-butene

12.993min (-0.000) 0.49ug/L m

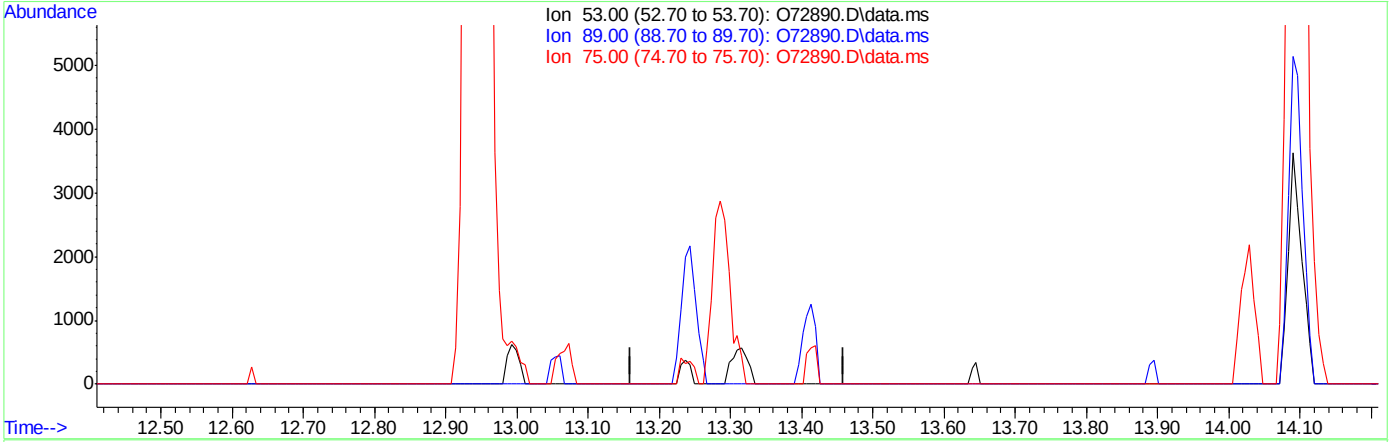
response 700

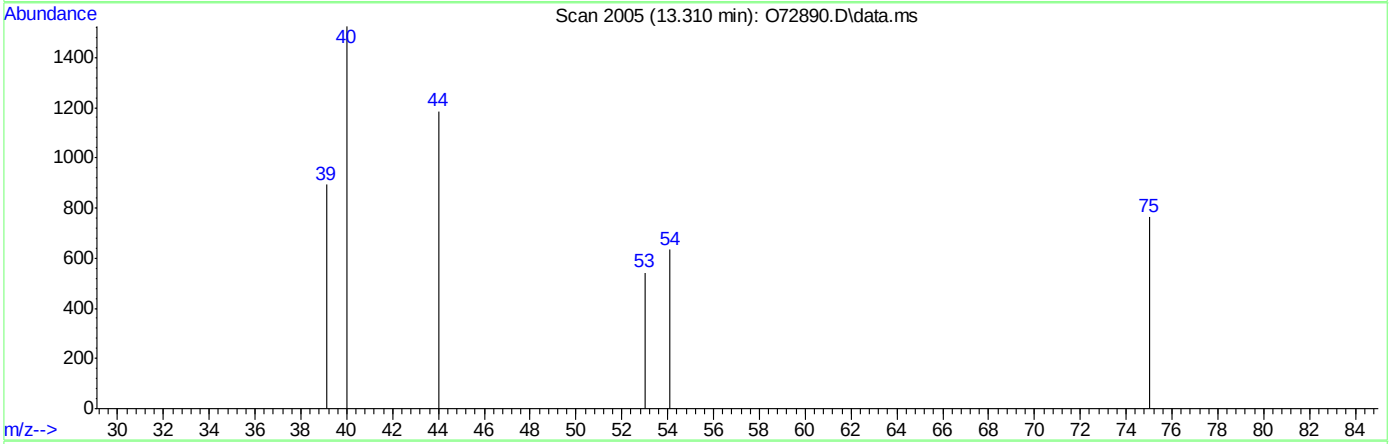
Ion	Exp%	Act%
53.00	100	100
75.00	94.00	109.29
88.00	106.10	48.56#
39.00	52.70	106.41#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(93) trans-1,4-Dichloro-2-Butene

13.310min (-13.310) 0.00ug/L

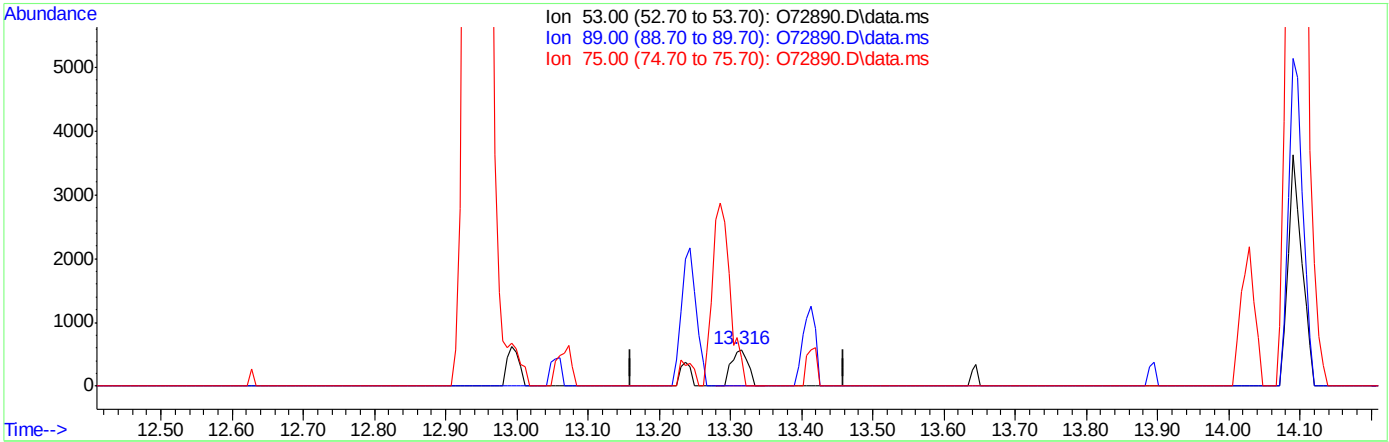
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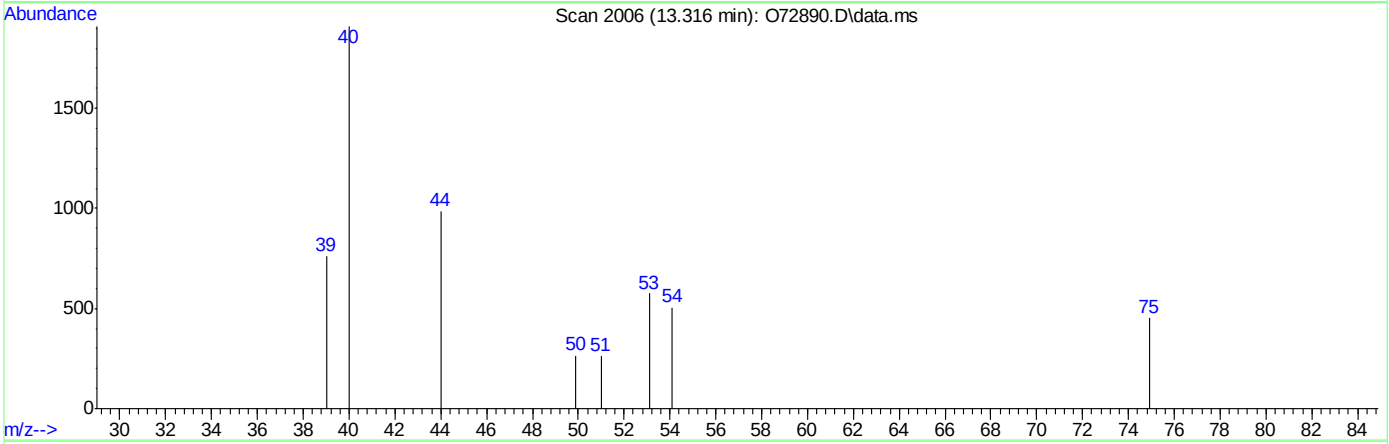
Ion	Exp%	Act%
53.00	100	0.00
89.00	62.50	0.00#
75.00	127.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(93) trans-1,4-Dichloro-2-Butene

13.316min (+0.006) 0.78ug/L m

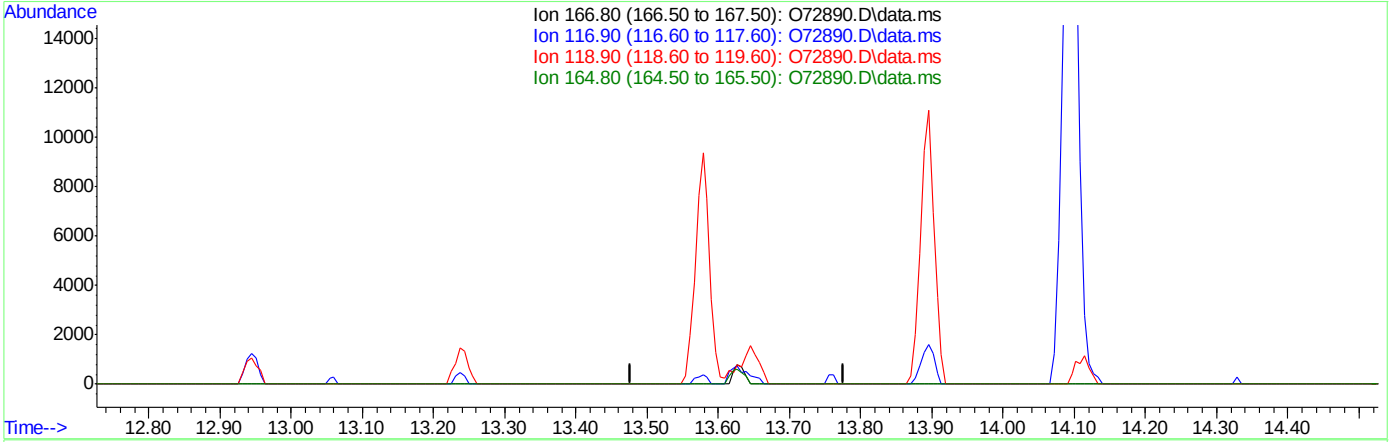
response 932

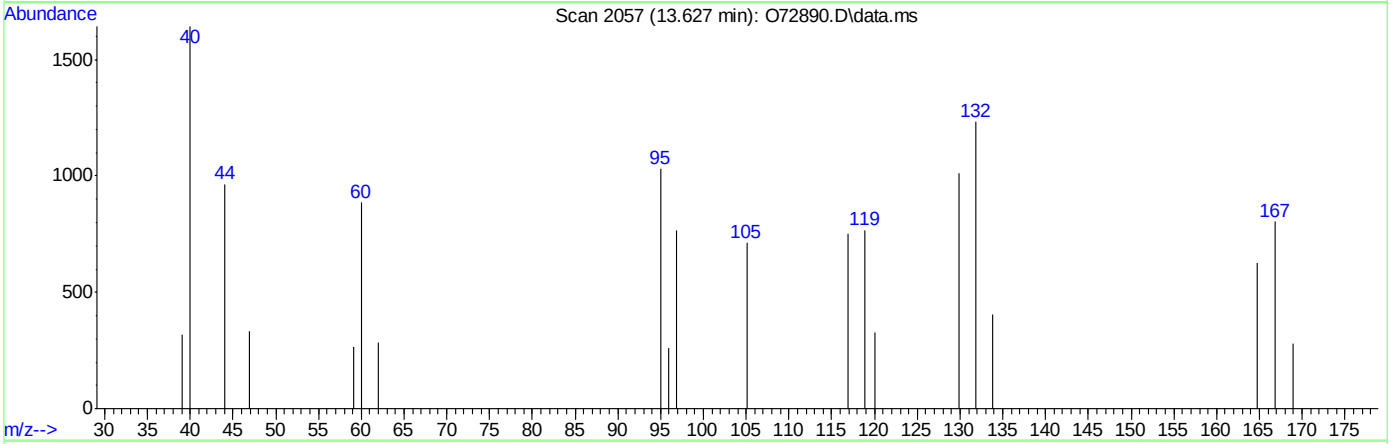
Ion	Exp%	Act%
53.00	100	100
89.00	62.50	0.00#
75.00	127.10	78.30#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(100) Pentachloroethane ( )

13.627min (-13.627) 0.00ug/L

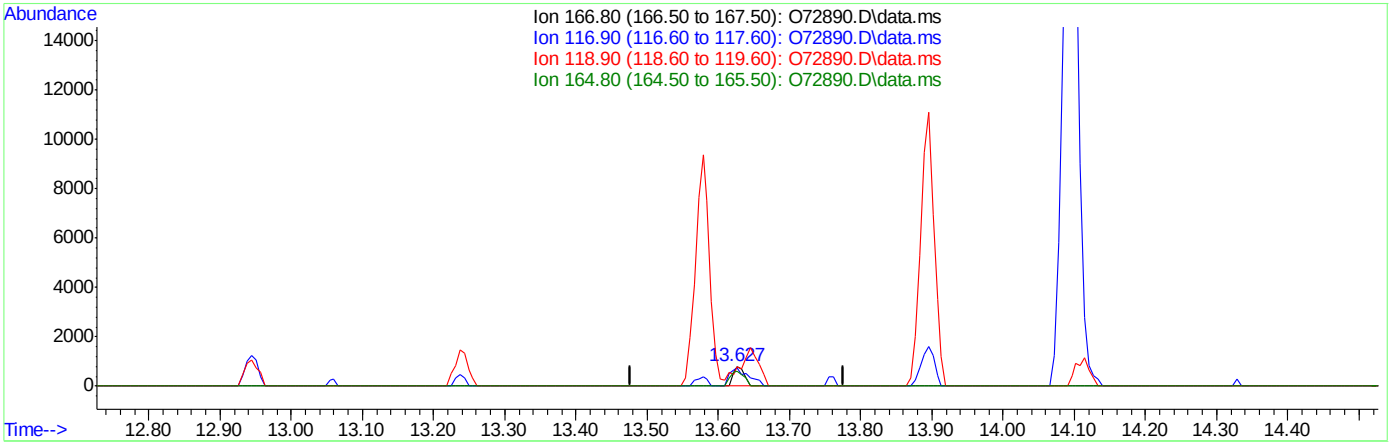
response 0

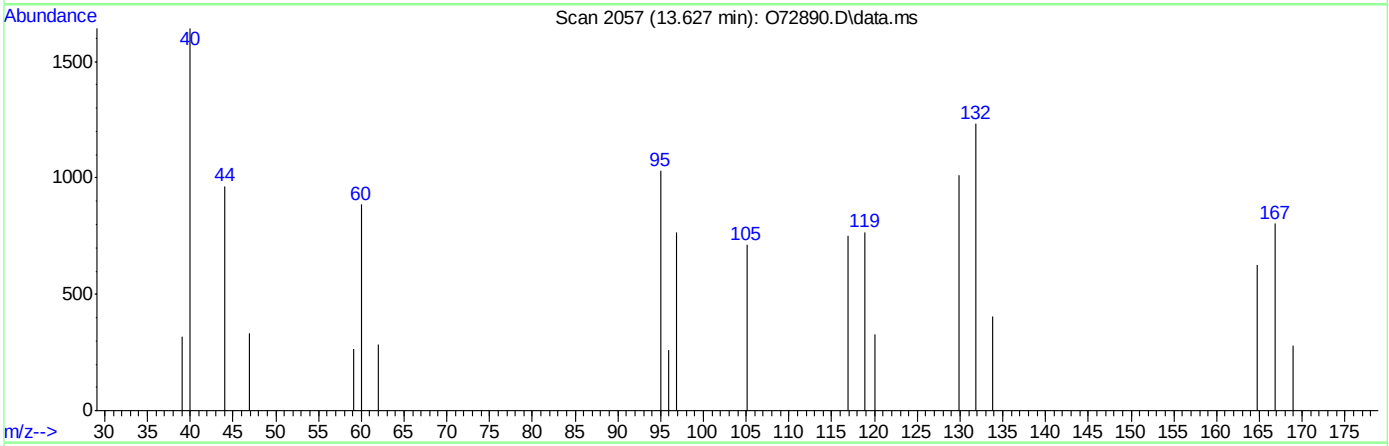
Ion	Exp%	Act%
166.80	100	0.00
116.90	96.70	0.00#
118.90	95.40	0.00#
164.80	79.80	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(100) Pentachloroethane ( )

13.627min (-0.000) 0.33ug/L m

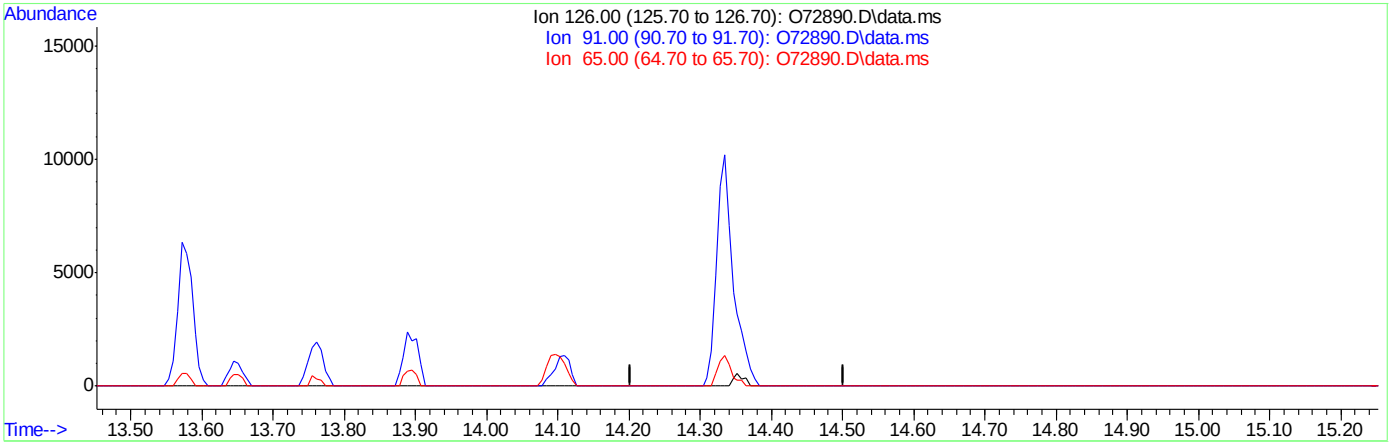
response 876

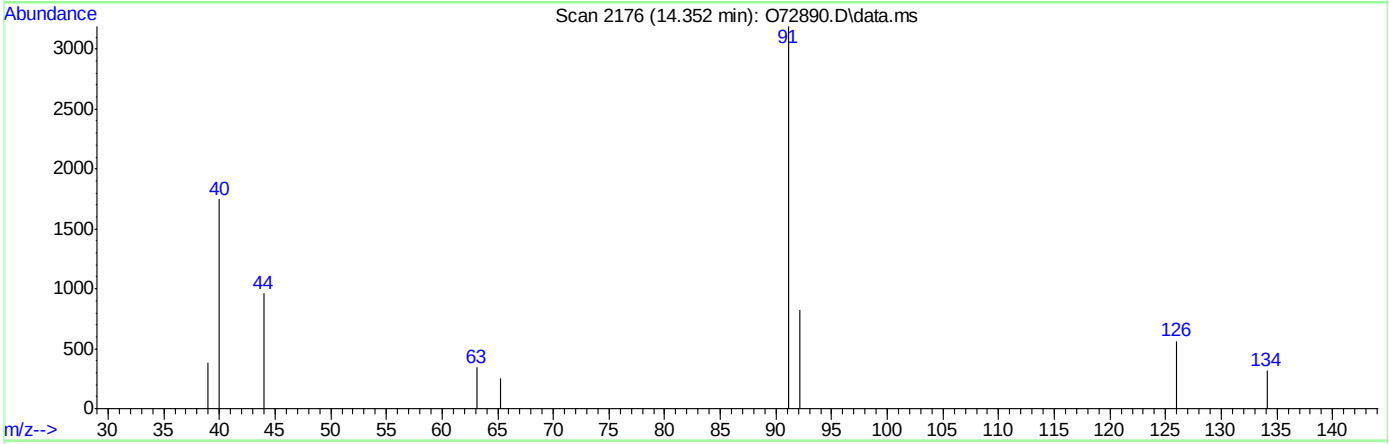
Ion	Exp%	Act%
166.80	100	100
116.90	96.70	93.77
118.90	95.40	95.64
164.80	79.80	77.96

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(107) Benzyl Chloride

14.352min (-14.352) 0.00ug/L

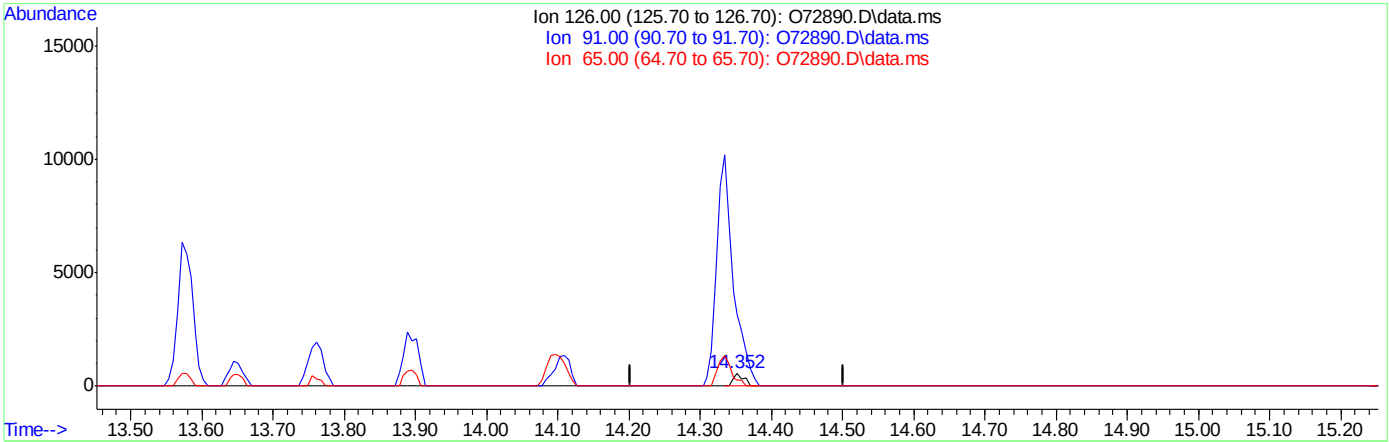
response 0

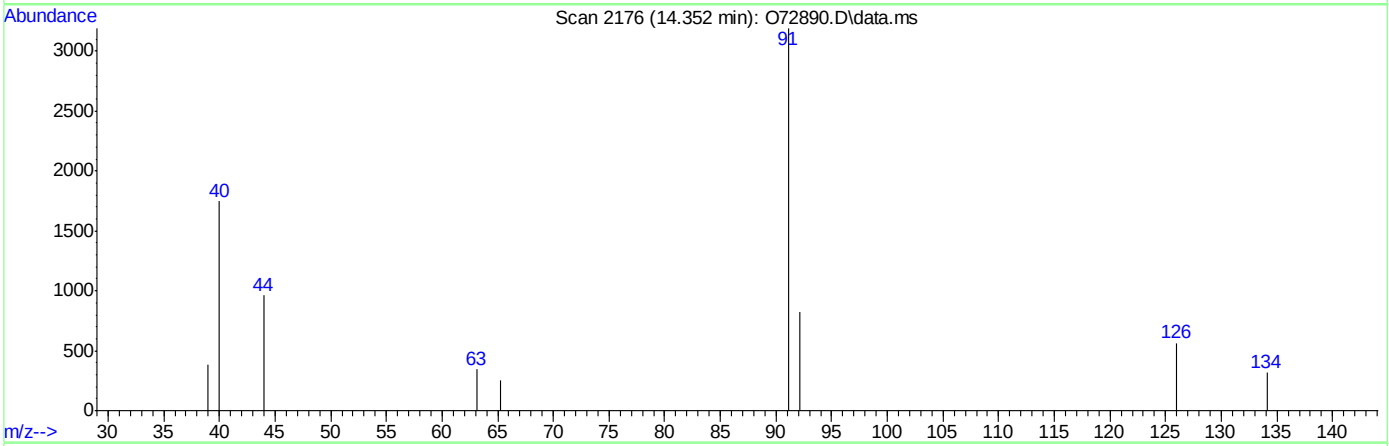
Ion	Exp%	Act%
126.00	100	0.00
91.00	484.40	0.00#
65.00	60.10	0.00#
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(107) Benzyl Chloride

14.352min (-0.000) 0.40ug/L m

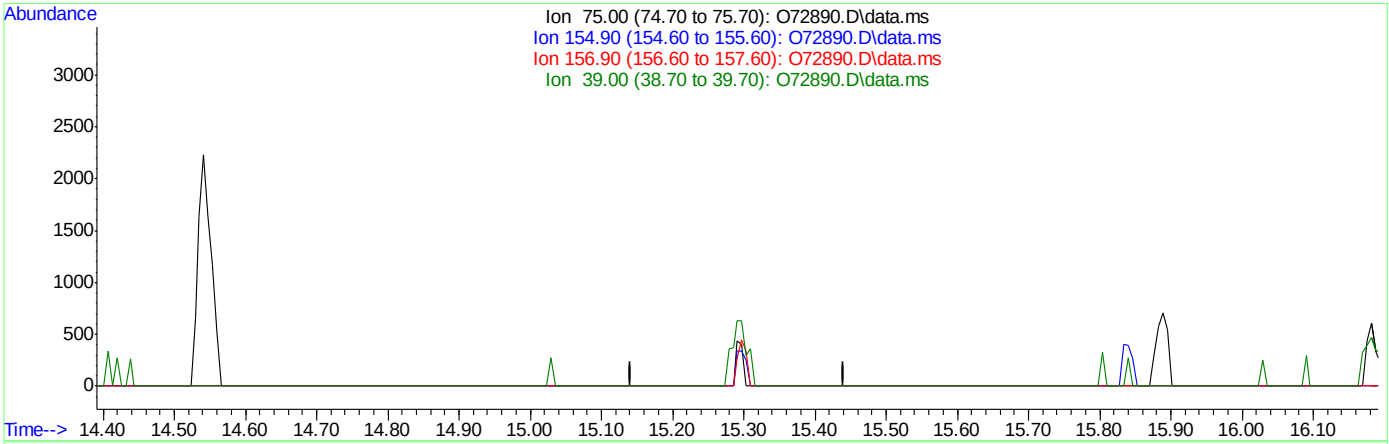
response 586

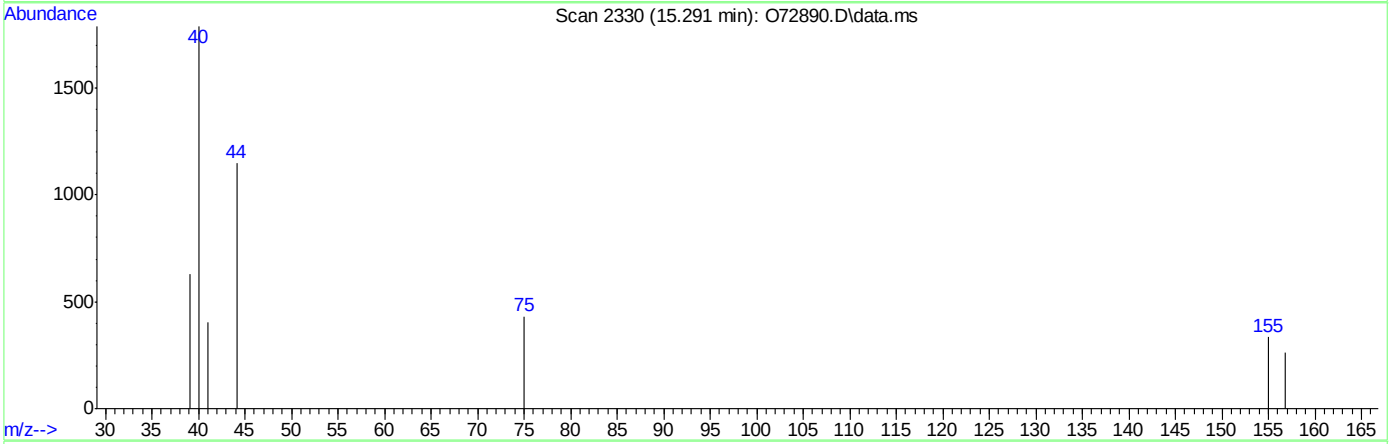
Ion	Exp%	Act%
126.00	100	100
91.00	484.40	563.60#
65.00	60.10	44.70
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(109) 1,2-Dibromo-3-Chloropropane

15.291min (-15.291) 0.00ug/L

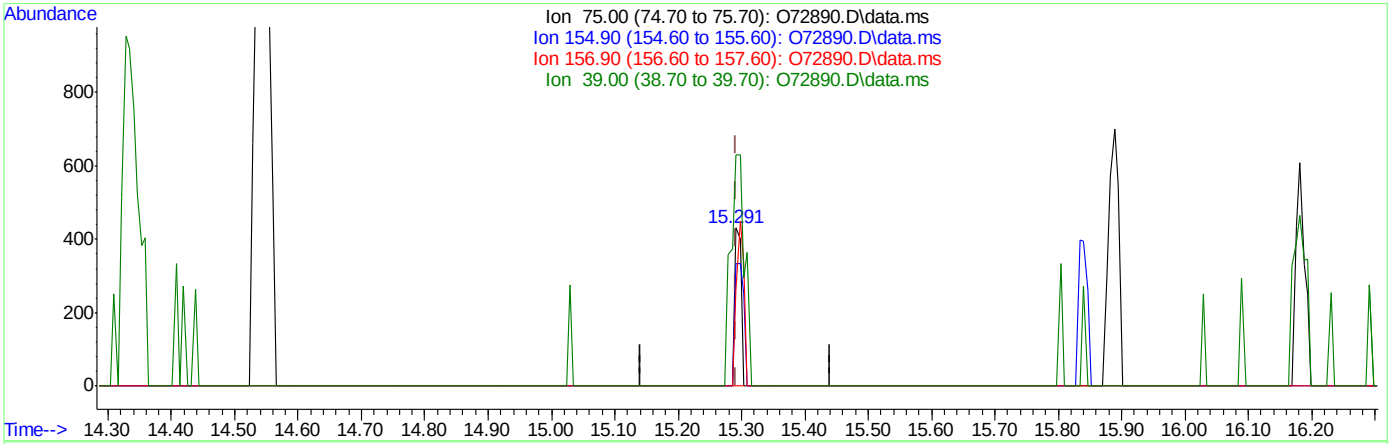
response 0

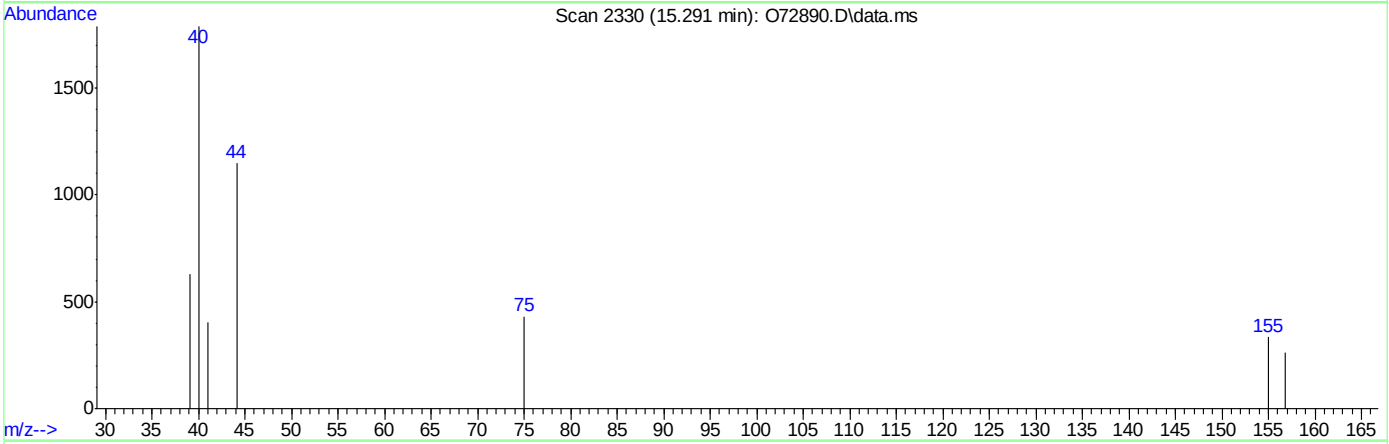
Ion	Exp%	Act%
75.00	100	0.00
154.90	83.70	0.00#
156.90	110.60	0.00#
39.00	89.40	0.00#

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72890.D
Acq On : 8 Dec 2022 9:56 am
Operator : adelardl
Sample : IC2866-1 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Dec 08 10:17:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72890.D\data.ms

(109) 1,2-Dibromo-3-Chloropropane

15.291min (-0.000) 0.40ug/L m

response 305

Ion	Exp%	Act%
75.00	100	100
154.90	83.70	77.49
156.90	110.60	61.02#
39.00	89.40	146.40#

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.549	96	778800	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	585735	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	246319	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	219708	50.37	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.74%			
50) 1,2-Dichloroethane-d4	8.262	65	215396	55.69	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 111.38%			
63) Toluene-d8	10.152	98	775652	49.39	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 98.78%			
86) 4-Bromofluorobenzene	12.944	174	228074	46.46	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 92.92%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	25838	5.77	ug/L	97
3) Chloromethane	3.013	50	22629	5.19	ug/L	96
4) 1,3-butadiene	3.184	39	27787	6.08	ug/L	96
5) Vinyl Chloride	3.153	62	23207	5.12	ug/L	100
6) Bromomethane	3.678	94	7936	5.57	ug/L	96
7) Chloroethane	3.885	64	13174	5.23	ug/L	97
8) Trichlorofluoromethane	4.098	101	33139	5.06	ug/L	98
9) Ethyl Ether	4.556	59	18360	5.45	ug/L	91
11) 1,2-Dichlorotrifluoroe...	4.824	67	27996	5.37	ug/L	97
12) 1,1-Dichloroethene	4.824	61	33725	5.27	ug/L	96
13) Freon 113	4.879	101	23324	5.73	ug/L	95
14) Carbon Disulfide	4.860	76	67468	5.59	ug/L	98
15) Iodomethane	5.013	142	1923	1.72	ug/L	75
16) Acrolein	5.281	56	18512	26.14	ug/L	96
17) Allyl chloride	5.452	41	30277	5.28	ug/L	96
18) Methylene Chloride	5.586	49	39539	6.07	ug/L	97
19) Acetone	5.659	43	34158	30.63	ug/L	94
20) Methyl acetate	5.805	43	72017	24.43	ug/L	96
21) trans-1,2-Dichloroethene	5.793	61	32853	5.30	ug/L	96
22) Hexane	5.885	56	15154m	6.33	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	61470	5.23	ug/L	94
24) Tert Butyl Alcohol	6.037	59	13940	44.74	ug/L	96
25) Acetonitrile	6.238	41	24112	61.79	ug/L	94
26) Di-isopropyl ether	6.372	45	73408	5.23	ug/L	97
27) Chloroprene	6.513	53	26986	5.36	ug/L	98
28) 1,1-Dichloroethane	6.543	63	40042	5.30	ug/L	98
29) Acrylonitrile	6.610	52	30693	28.57	ug/L	94
30) ETBE	6.799	59	61667	4.67	ug/L	97
31) Vinyl acetate	6.823	43	169186	18.97	ug/L	98
32) cis-1,2-Dichloroethene	7.177	96	24537	5.51	ug/L	94
33) 2,2-Dichloropropane	7.299	77	25487	4.19	ug/L	99
34) Bromochloromethane	7.403	128	12327	5.41	ug/L	91
35) Cyclohexane	7.409	56	35083	5.58	ug/L	96
36) Chloroform	7.476	83	42589	5.34	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) Ethyl acetate	7.592	43	84779	22.72	ug/L		99
38) Tetrahydrofuran	7.677	42	6713	5.64	ug/L		95
40) Carbon Tetrachloride	7.640	117	21896	3.66	ug/L		97
41) 1,1,1-Trichloroethane	7.720	97	31644	4.58	ug/L		98
42) 2-Butanone	7.817	43	43680	25.32	ug/L		95
43) 1,1-Dichloropropene	7.848	75	31072	5.40	ug/L		98
44) tert-Butyl formate	7.957	59	38443	13.02	ug/L	#	62
45) Propionitrile	8.140	54	26199	54.50	ug/L		94
46) Methacrylonitrile	8.165	41	163237	56.75	ug/L		98
47) Benzene	8.122	78	88634	5.35	ug/L		99
48) TAME	8.213	73	55412	4.82	ug/L		92
49) Isobutyl alcohol	8.299	43	7281m	58.16	ug/L		
51) 1,2-Dichloroethane	8.335	62	36181	5.34	ug/L		98
52) Tert Amyl Alcohol	8.408	59	10171	46.32	ug/L		85
53) Trichloroethene	8.732	95	24746	5.38	ug/L		98
54) Methylcyclohexane	8.726	83	32975	5.83	ug/L		95
55) Dibromomethane	9.177	93	16106	5.39	ug/L		96
56) 1,2-Dichloropropane	9.274	63	22971	5.38	ug/L		97
57) Bromodichloromethane	9.329	83	26779	4.60	ug/L		95
58) Methyl methacrylate	9.457	41	15077	4.46	ug/L		96
59) 1,4-Dioxane	9.536	88	3914	146.64	ug/L		92
60) 2-Chloroethyl vinyl ether	9.878	63	76139	24.99	ug/L		97
61) cis-1,3-Dichloropropene	9.969	75	29193	4.52	ug/L		98
64) Toluene	10.207	91	95234	5.41	ug/L		98
65) 2-Nitropropane	10.445	41	11120	9.36	ug/L		89
66) 4-Methyl-2-pentanone	10.567	43	109574	26.20	ug/L		98
67) trans-1,3-Dichloropropene	10.615	75	23023	4.10	ug/L		87
68) Tetrachloroethene	10.603	166	26849	5.48	ug/L		97
69) Ethyl methacrylate	10.737	69	16616	3.27	ug/L		97
70) 1,1,2-Trichloroethane	10.780	83	18804	5.60	ug/L		98
71) Dibromochloromethane	10.969	129	19121	4.00	ug/L		96
72) 1,3-Dichloropropane	11.067	76	38146	5.62	ug/L		97
73) 1,2-Dibromoethane	11.231	107	22378	5.41	ug/L		100
74) 3,3-dimethyl-1-butanol	11.341	57	21138	79.59	ug/L		93
75) 2-hexanone	11.396	43	69721	24.85	ug/L		98
76) 1-Chlorohexane	11.682	91	26247m	5.36	ug/L		
77) Ethylbenzene	11.743	91	105815	5.36	ug/L		99
78) Chlorobenzene	11.743	112	64364	5.50	ug/L		99
79) 1,1,1,2-Tetrachloroethane	11.792	131	16837	4.00	ug/L		97
80) m,p-Xylene	11.883	91	160313	10.65	ug/L		99
81) o-Xylene	12.322	91	78766	5.40	ug/L		100
82) Styrene	12.377	104	57079	5.41	ug/L		98
83) Bromoform	12.432	173	9951	3.40	ug/L		97
84) Isopropylbenzene	12.633	105	93808	5.41	ug/L		99
87) cis-1,4-Dichloro-2-butene	12.993	53	6080	3.70	ug/L	#	68
88) n-Propylbenzene	13.054	91	111408	4.44	ug/L		98
89) Bromobenzene	13.066	156	29301	3.58	ug/L		97
90) 1,1,2,2-Tetrachloroethane	13.127	83	30662	4.98	ug/L		98
91) 1,3,5-Trimethylbenzene	13.237	105	76723	4.46	ug/L		99
92) 2-Chlorotoluene	13.408	91	71533	4.53	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

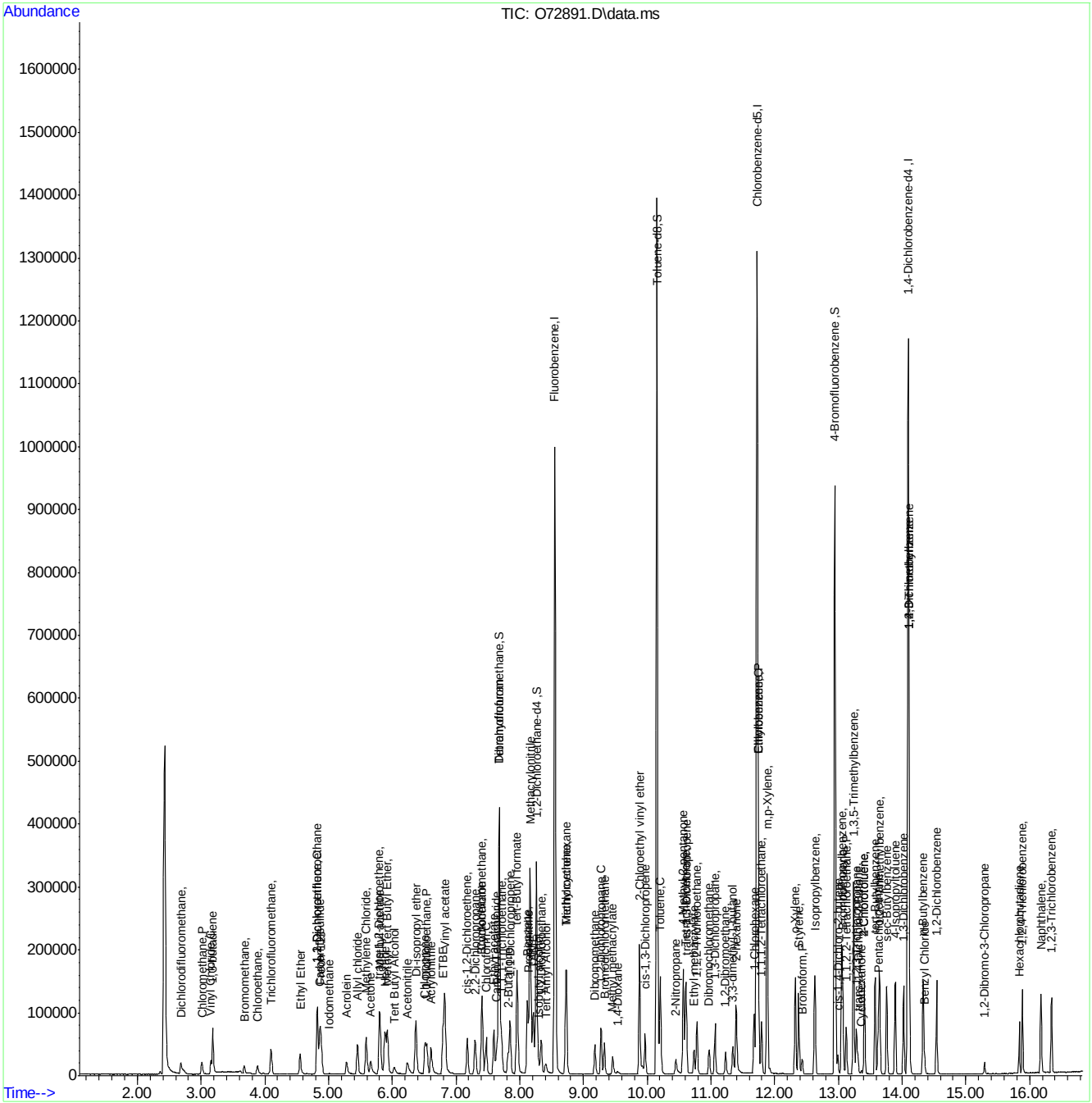
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
93) trans-1,4-Dichloro-2-B...	13.310	53	6012	4.34	ug/L	#	68
94) 1,2,3-Trichloropropane	13.286	110	8943	5.13	ug/L		99
95) Cyclohexanone	13.353	55	2272	20.21	ug/L	#	81
96) 4-Chlorotoluene	13.408	91	71533	4.53	ug/L		99
97) tert-Butylbenzene	13.578	91	43783	4.50	ug/L		95
99) 1,2,4-Trimethylbenzene	13.645	105	76631	4.55	ug/L		99
100) Pentachloroethane	13.627	167	7502	2.45	ug/L	#	71
101) sec-Butylbenzene	13.761	105	88850	4.66	ug/L		99
102) 4-Isopropyltoluene	13.895	119	75196	4.60	ug/L		98
103) 1,3-Dichlorobenzene	14.023	146	52102	4.90	ug/L		98
104) 1,2,3-Trimethylbenzene	14.109	105	79279	4.67	ug/L		97
105) 1,4-Dichlorobenzene	14.109	146	54583	4.82	ug/L		93
106) n-Butylbenzene	14.328	92	40264	4.71	ug/L		90
107) Benzyl Chloride	14.352	126	3972	2.32	ug/L	#	52
108) 1,2-Dichlorobenzene	14.541	146	51291	5.08	ug/L		97
109) 1,2-Dibromo-3-Chloropr...	15.291	75	3368	3.79	ug/L	#	81
110) Hexachlorobutadiene	15.840	225	10727	5.27	ug/L		96
111) 1,2,4-Trichlorobenzene	15.889	180	30365	5.03	ug/L		96
112) Naphthalene	16.181	128	81944	5.34	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	29500	5.38	ug/L		95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 11:10:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

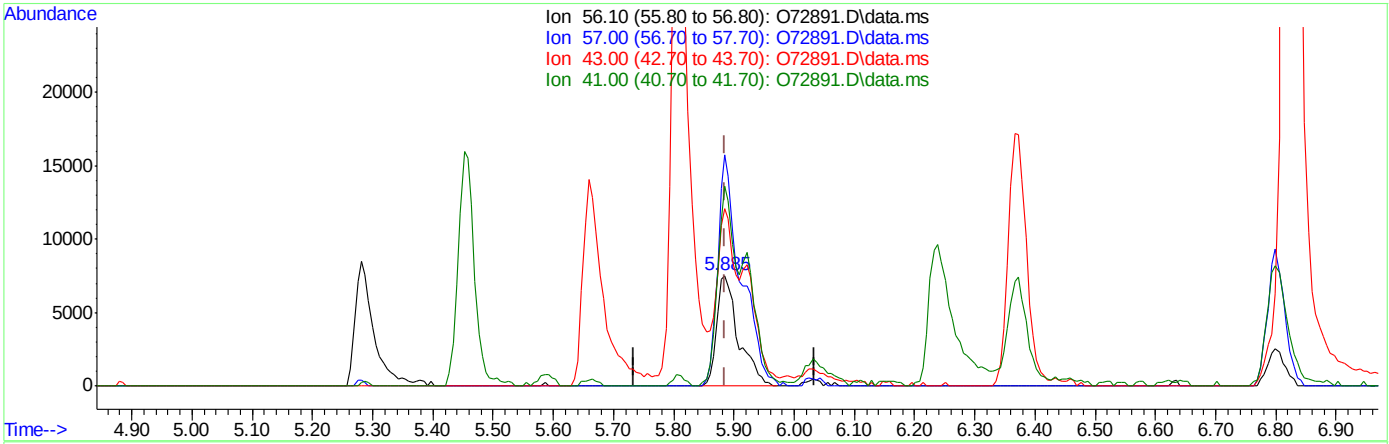
Sample Number: VO2866-IC2866
Lab FileID: O72891.D
Injection Time: 12/08/22 10:20
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

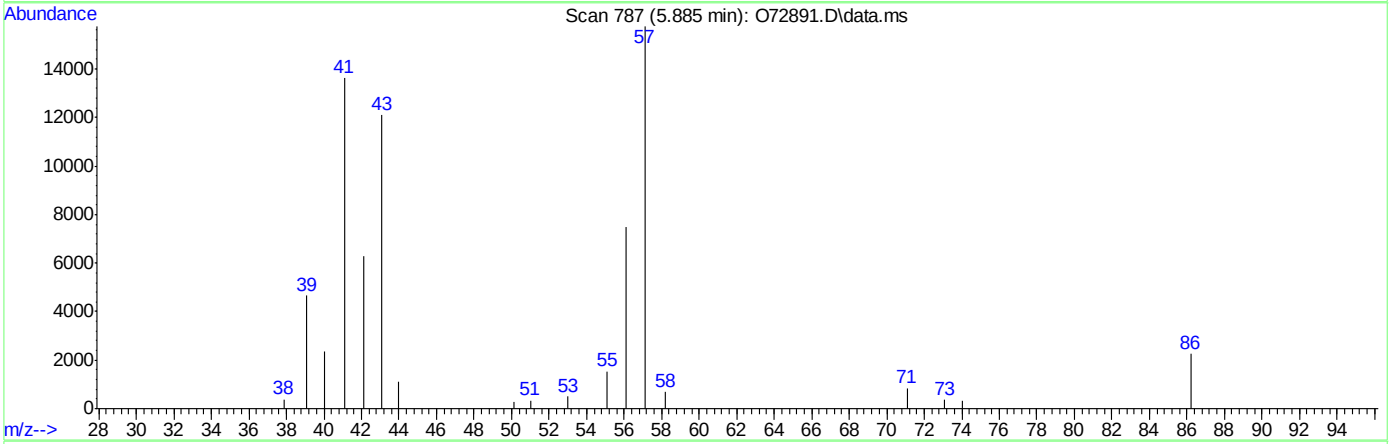
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(22) Hexane

5.885min (-0.000) 7.92ug/L

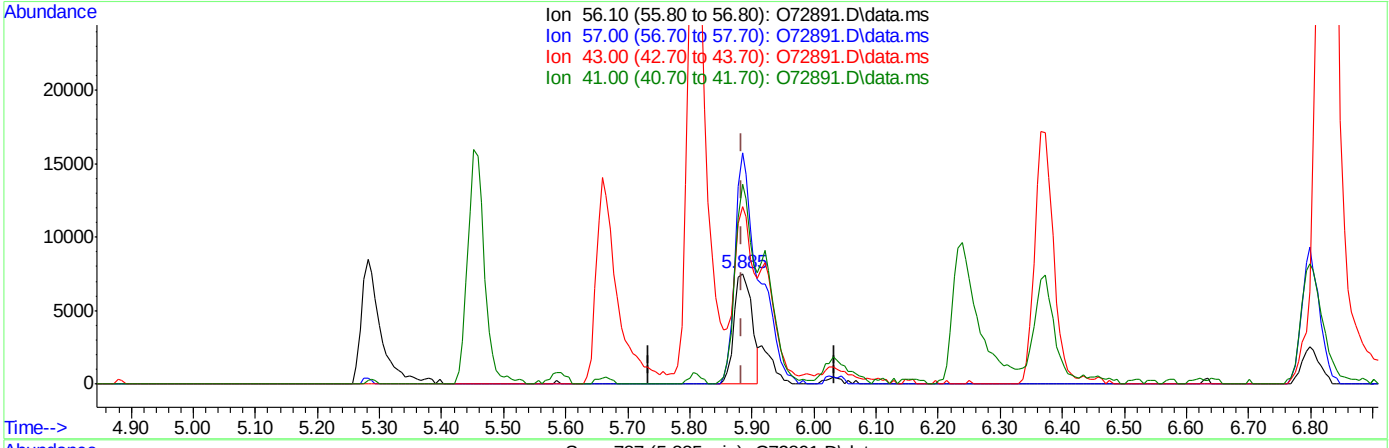
response 18995

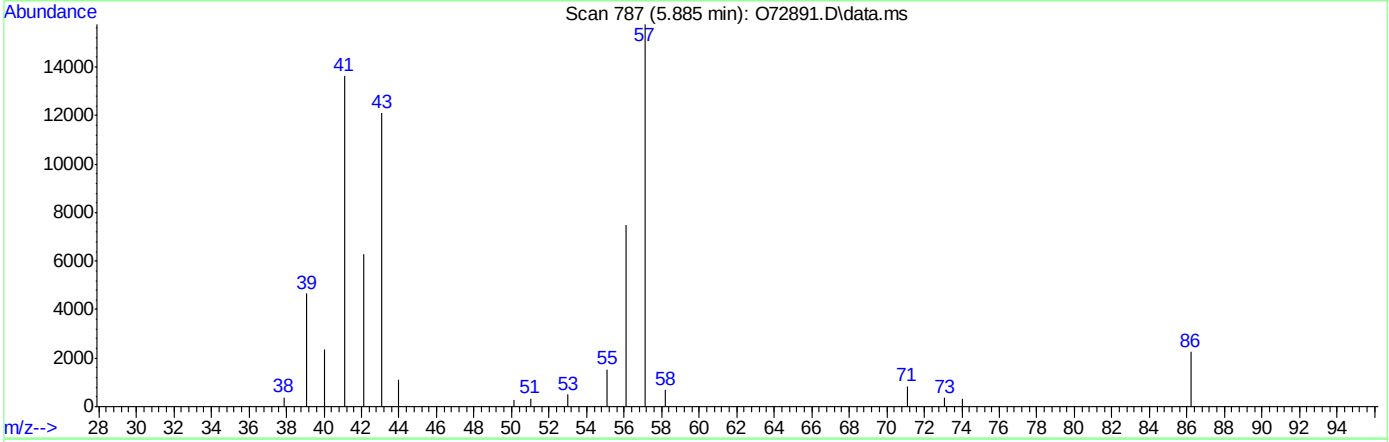
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	210.02
43.00	149.90	152.55
41.00	165.70	181.49

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(22) Hexane

5.885min (-0.000) 6.33ug/L m

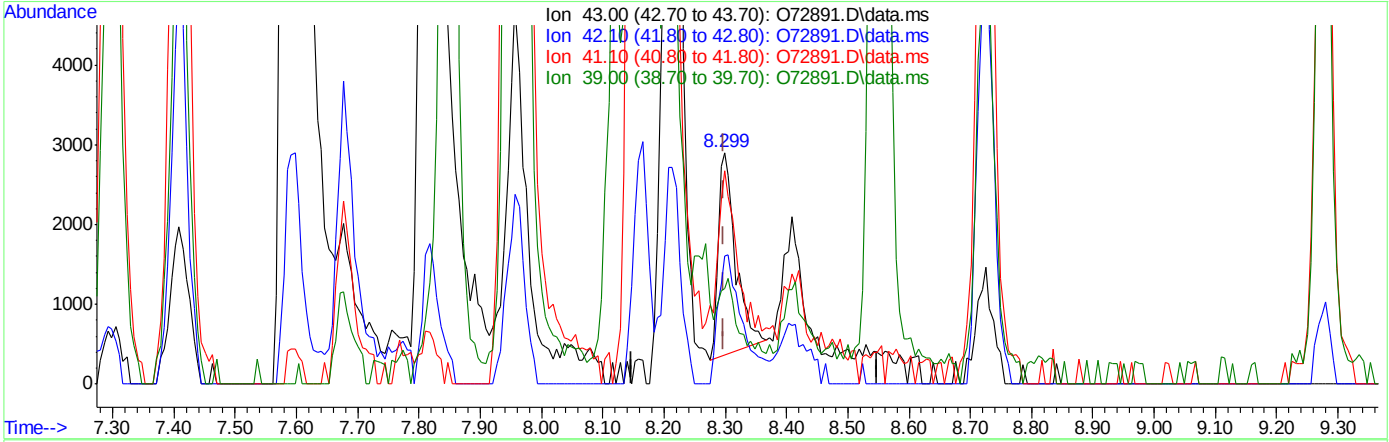
response 15154

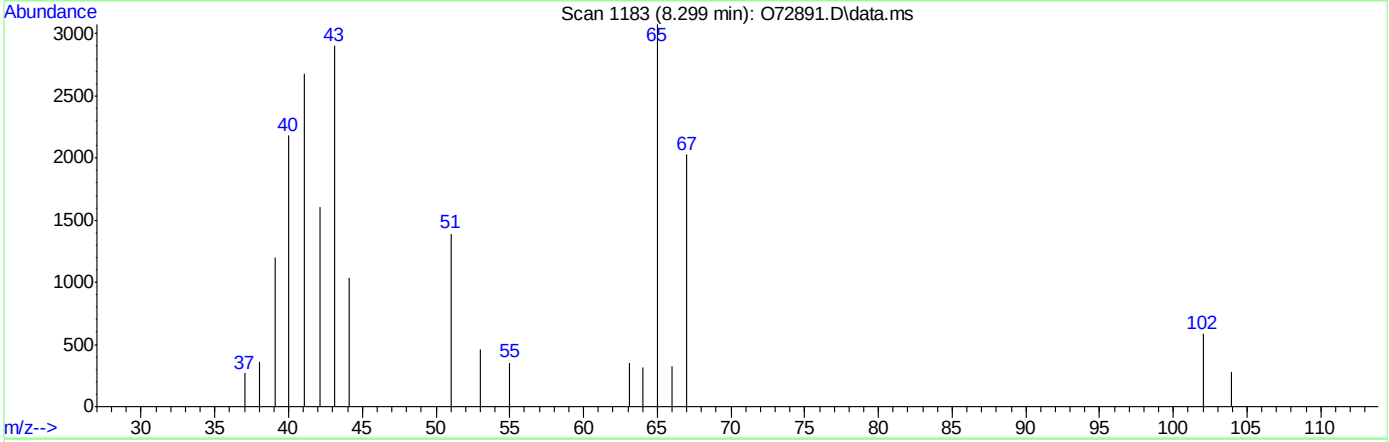
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	210.02
43.00	149.90	161.11
41.00	165.70	181.49

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 39.27ug/L

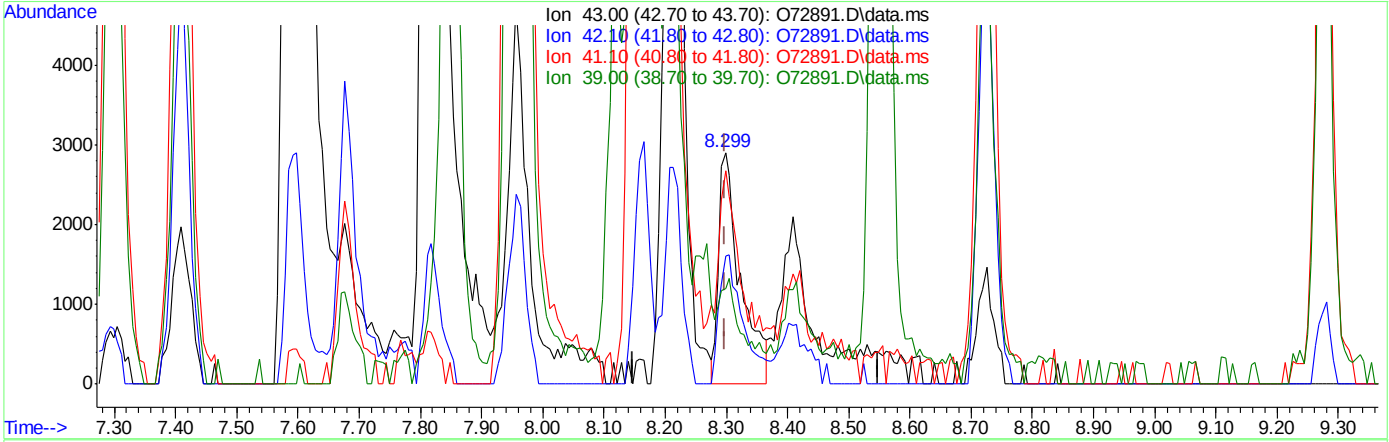
response 4916

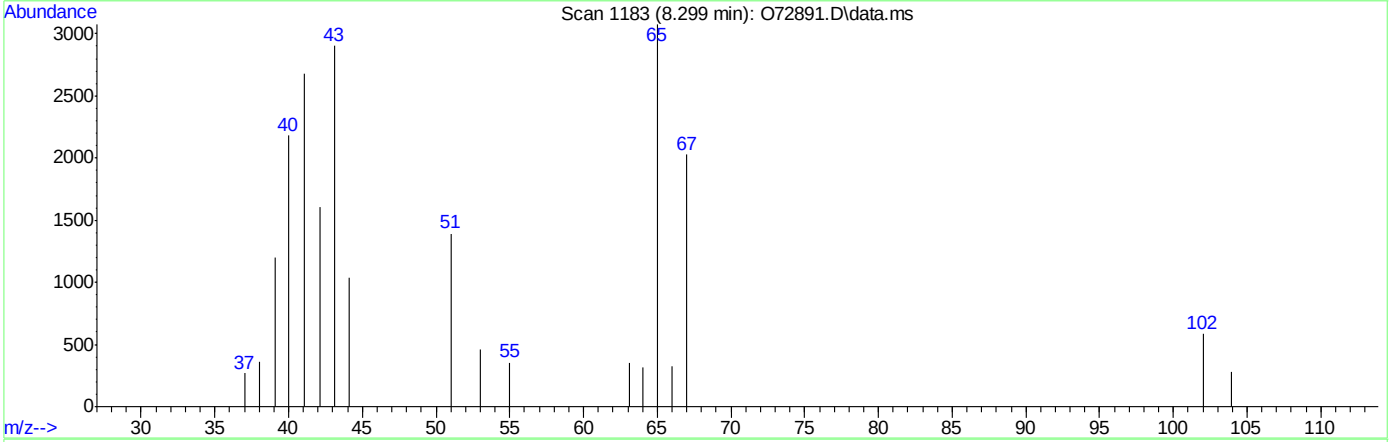
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.59
41.10	78.00	75.86
39.00	30.80	31.64

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 58.16ug/L m

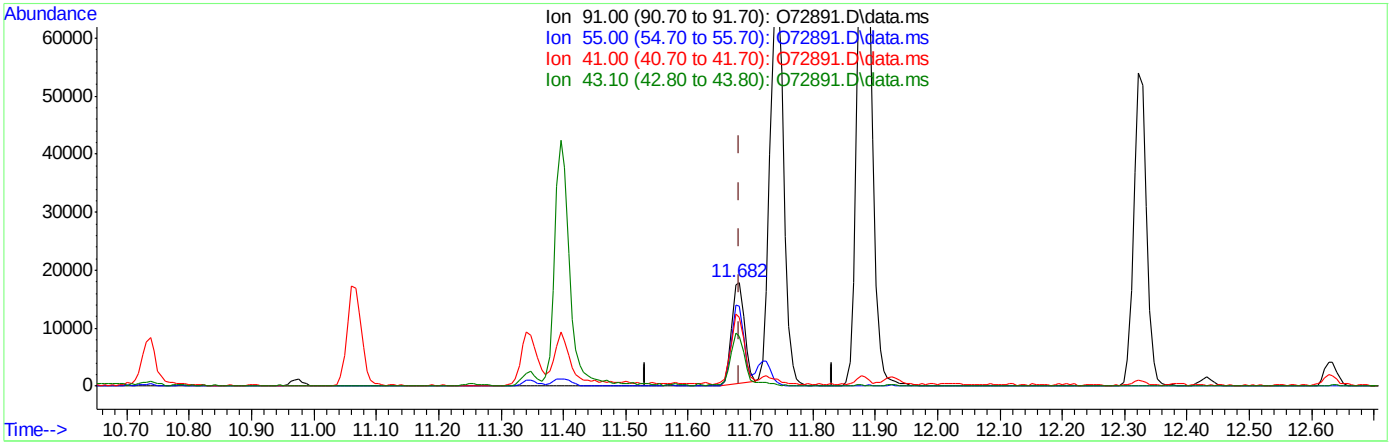
response 7281

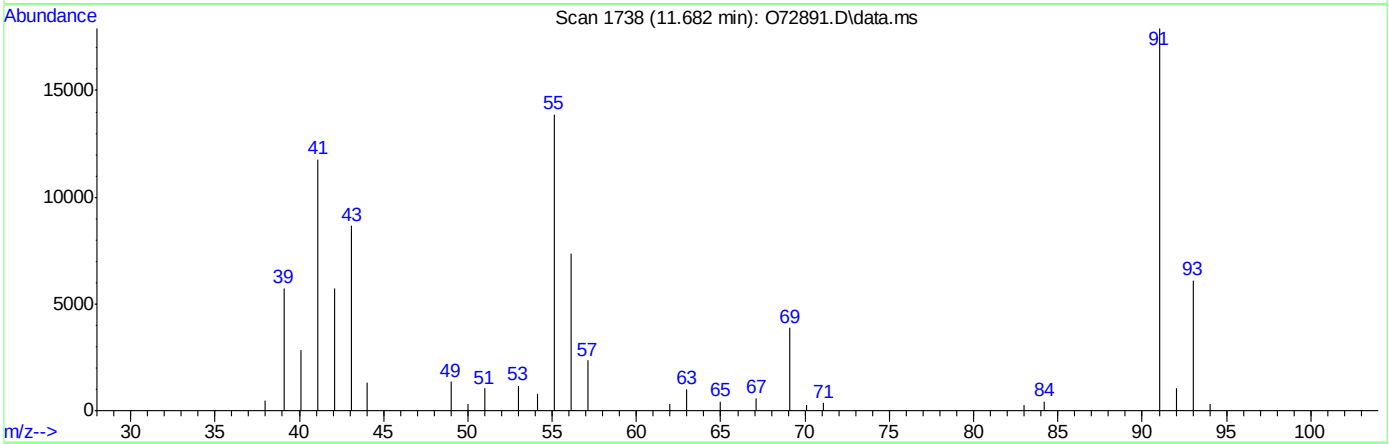
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	55.18
41.10	78.00	92.32
39.00	30.80	41.47

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 5.04ug/L

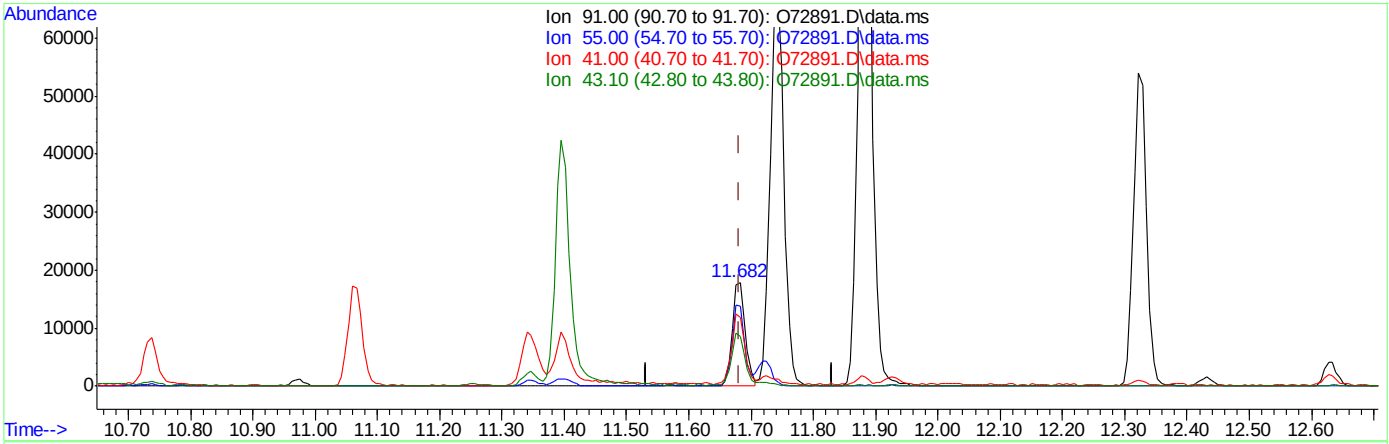
response 24710

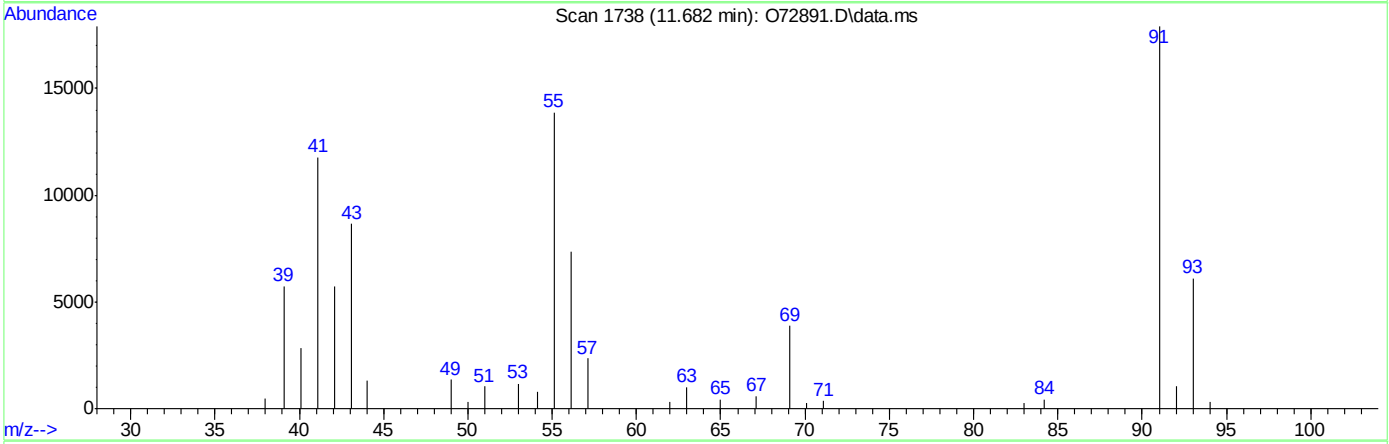
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	77.48
41.00	64.00	62.46
43.10	51.10	46.40

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72891.D
Acq On : 8 Dec 2022 10:20 am
Operator : adelardl
Sample : IC2866-2 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Dec 08 10:37:54 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72891.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 5.36ug/L m

response 26247

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	77.48
41.00	64.00	65.79
43.10	51.10	48.33

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	813672	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	603955	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	215968	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	224601	49.29	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 98.58%			
50) 1,2-Dichloroethane-d4	8.262	65	205003	50.73	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.46%			
63) Toluene-d8	10.152	98	813872	50.26	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 100.52%			
86) 4-Bromofluorobenzene	12.944	174	222748	51.75	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.50%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	52509	11.22	ug/L	98
3) Chloromethane	3.019	50	44753	9.82	ug/L	97
4) 1,3-butadiene	3.190	39	51971	10.93	ug/L	99
5) Vinyl Chloride	3.160	62	47543	10.04	ug/L	100
6) Bromomethane	3.684	94	17689	11.89	ug/L	93
7) Chloroethane	3.891	64	27217	10.35	ug/L	97
8) Trichlorofluoromethane	4.104	101	66461	9.71	ug/L	98
9) Ethyl Ether	4.556	59	36192	10.29	ug/L	97
10) Ethanol	4.812	45	3236	152.49	ug/L	98
11) 1,2-Dichlorotrifluoroe...	4.824	67	54775	10.06	ug/L	99
12) 1,1-Dichloroethene	4.830	61	66660	9.97	ug/L	95
13) Freon 113	4.885	101	46296	10.89	ug/L	97
14) Carbon Disulfide	4.867	76	129868	10.30	ug/L	99
15) Iodomethane	5.025	142	5628	4.67	ug/L	96
16) Acrolein	5.287	56	44542	60.20	ug/L	100
17) Allyl chloride	5.458	41	63077	10.54	ug/L	98
18) Methylene Chloride	5.592	49	67060	9.92	ug/L	98
19) Acetone	5.665	43	56673	48.64	ug/L	96
20) Methyl acetate	5.811	43	134107	43.54	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	65431	10.10	ug/L	95
22) Hexane	5.891	56	30421m	12.07	ug/L	
23) Methyl Tert Butyl Ether	5.927	73	117704	9.58	ug/L	99
24) Tert Butyl Alcohol	6.031	59	22108	67.91	ug/L	91
25) Acetonitrile	6.238	41	47118	115.58	ug/L	98
26) Di-isopropyl ether	6.372	45	145464	9.93	ug/L	97
27) Chloroprene	6.519	53	55834	10.62	ug/L	98
28) 1,1-Dichloroethane	6.549	63	78336	9.93	ug/L	100
29) Acrylonitrile	6.610	52	62490	55.67	ug/L	97
30) ETBE	6.805	59	125027	9.06	ug/L	98
31) Vinyl acetate	6.823	43	381829	40.97	ug/L	99
32) cis-1,2-Dichloroethene	7.177	96	48067	10.33	ug/L	99
33) 2,2-Dichloropropane	7.299	77	52590	8.28	ug/L	95
34) Bromochloromethane	7.409	128	25811	10.84	ug/L	96
35) Cyclohexane	7.415	56	67059	10.21	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.476	83	84843	10.19	ug/L		99
37) Ethyl acetate	7.592	43	178916	45.89	ug/L		99
38) Tetrahydrofuran	7.677	42	10754	8.68	ug/L		93
40) Carbon Tetrachloride	7.640	117	44369	7.11	ug/L		97
41) 1,1,1-Trichloroethane	7.720	97	64042	8.86	ug/L		98
42) 2-Butanone	7.817	43	86851	48.18	ug/L		97
43) 1,1-Dichloropropene	7.854	75	60734	10.11	ug/L		95
44) tert-Butyl formate	7.963	59	104599	33.91	ug/L	#	71
45) Propionitrile	8.146	54	57038	113.56	ug/L		80
46) Methacrylonitrile	8.165	41	319300	106.24	ug/L		99
47) Benzene	8.122	78	176419	10.19	ug/L		98
48) TAME	8.213	73	111424	9.28	ug/L		96
49) Isobutyl alcohol	8.299	43	17489m	133.72	ug/L		
51) 1,2-Dichloroethane	8.335	62	70634	9.99	ug/L		98
52) Tert Amyl Alcohol	8.409	59	12991	56.62	ug/L		81
53) Trichloroethene	8.732	95	49099	10.22	ug/L		99
54) Methylcyclohexane	8.732	83	62751	10.62	ug/L		94
55) Dibromomethane	9.177	93	32937	10.54	ug/L		97
56) 1,2-Dichloropropane	9.274	63	45388	10.18	ug/L		97
57) Bromodichloromethane	9.329	83	53944	8.86	ug/L		99
58) Methyl methacrylate	9.457	41	32737	9.27	ug/L		98
59) 1,4-Dioxane	9.536	88	6372	228.50	ug/L		88
60) 2-Chloroethyl vinyl ether	9.878	63	183389	57.61	ug/L		99
61) cis-1,3-Dichloropropene	9.969	75	62508	9.27	ug/L		97
64) Toluene	10.207	91	185911	10.24	ug/L		100
65) 2-Nitropropane	10.451	41	18223	14.88	ug/L		86
66) 4-Methyl-2-pentanone	10.567	43	213052	49.40	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	49806	8.60	ug/L		87
68) Tetrachloroethene	10.603	166	53272	10.54	ug/L		98
69) Ethyl methacrylate	10.731	69	39638	7.59	ug/L		99
70) 1,1,2-Trichloroethane	10.780	83	35889	10.37	ug/L		99
71) Dibromochloromethane	10.975	129	38229	7.76	ug/L		99
72) 1,3-Dichloropropane	11.067	76	72226	10.33	ug/L		97
73) 1,2-Dibromoethane	11.231	107	43340	10.16	ug/L		97
74) 3,3-dimethyl-1-butanol	11.341	57	53618	195.79	ug/L		97
75) 2-hexanone	11.396	43	142528	49.28	ug/L		99
76) 1-Chlorohexane	11.682	91	52511m	10.40	ug/L		
77) Ethylbenzene	11.743	91	206190	10.12	ug/L		100
78) Chlorobenzene	11.743	112	125097	10.37	ug/L		96
79) 1,1,1,2-Tetrachloroethane	11.792	131	35712	8.22	ug/L		99
80) m,p-Xylene	11.883	91	318897	20.55	ug/L		99
81) o-Xylene	12.322	91	156871	10.43	ug/L		99
82) Styrene	12.377	104	116304	10.69	ug/L		99
83) Bromoform	12.432	173	19772	6.56	ug/L		95
84) Isopropylbenzene	12.633	105	186643	10.44	ug/L		97
87) cis-1,4-Dichloro-2-butene	12.993	53	13011	9.04	ug/L	#	68
88) n-Propylbenzene	13.054	91	219847	10.00	ug/L		99
89) Bromobenzene	13.066	156	55541	7.92	ug/L		99
90) 1,1,2,2-Tetrachloroethane	13.127	83	50554	9.36	ug/L		94
91) 1,3,5-Trimethylbenzene	13.237	105	154500	10.25	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

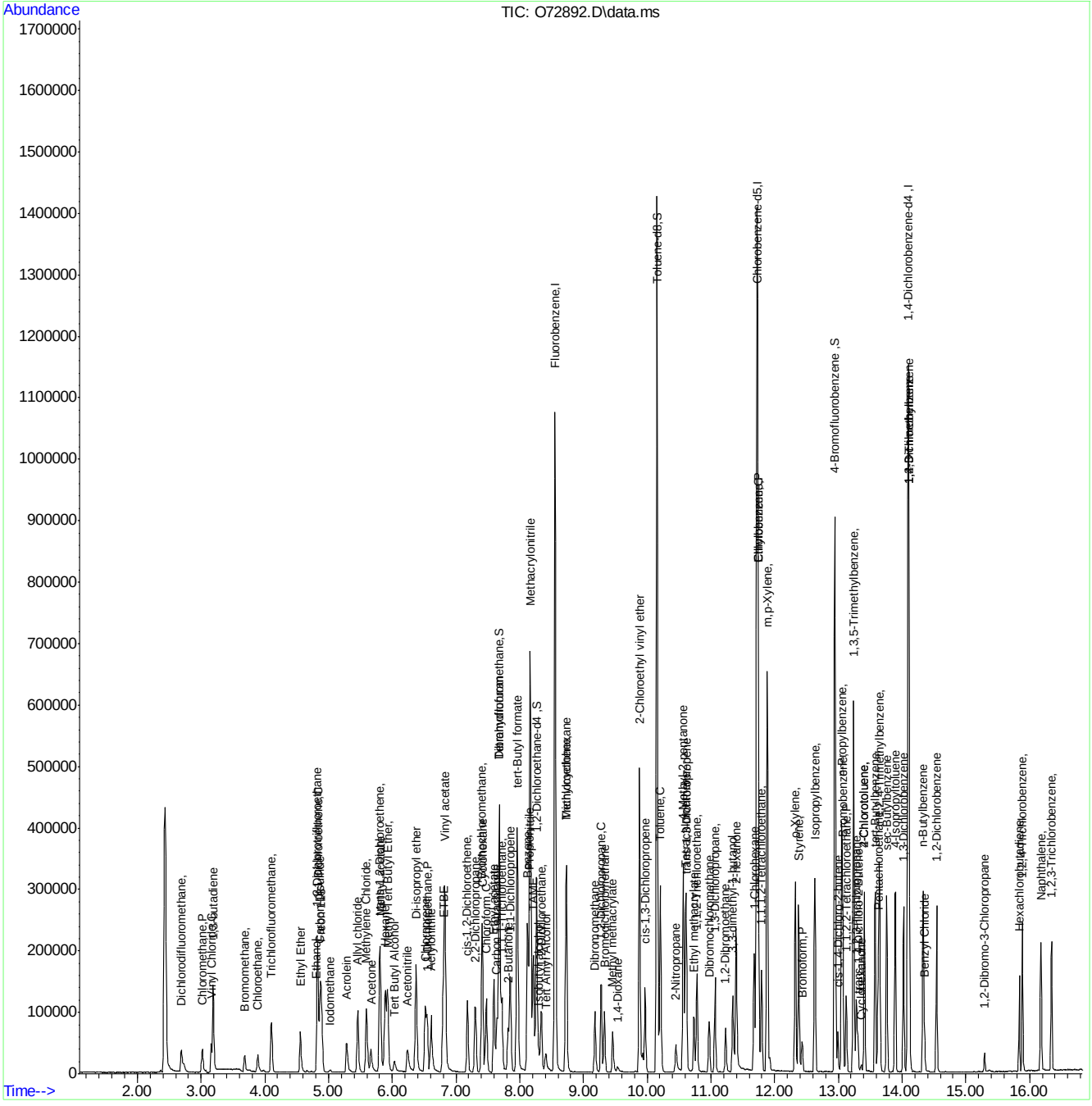
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.408	91	140502	10.16	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	10643	8.76	ug/L	#	71
94) 1,2,3-Trichloropropane	13.286	110	15477	10.13	ug/L		97
95) Cyclohexanone	13.359	55	4941	50.14	ug/L		92
96) 4-Chlorotoluene	13.408	91	140502	10.16	ug/L		100
97) tert-Butylbenzene	13.578	91	85799	10.06	ug/L		99
99) 1,2,4-Trimethylbenzene	13.645	105	151704	10.27	ug/L		98
100) Pentachloroethane	13.627	167	18530	6.90	ug/L		90
101) sec-Butylbenzene	13.761	105	174359	10.43	ug/L		99
102) 4-Isopropyltoluene	13.895	119	149749	10.44	ug/L		99
103) 1,3-Dichlorobenzene	14.023	146	95072	10.19	ug/L		98
104) 1,2,3-Trimethylbenzene	14.109	105	153986	10.34	ug/L		100
105) 1,4-Dichlorobenzene	14.109	146	103655	10.44	ug/L		97
106) n-Butylbenzene	14.328	92	78292	10.45	ug/L		98
107) Benzyl Chloride	14.352	126	8355	5.57	ug/L	#	84
108) 1,2-Dichlorobenzene	14.541	146	92690	10.47	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.297	75	5939	7.62	ug/L		95
110) Hexachlorobutadiene	15.840	225	19818	11.10	ug/L		94
111) 1,2,4-Trichlorobenzene	15.889	180	55363	10.47	ug/L		99
112) Naphthalene	16.181	128	137127	10.18	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	51383	10.70	ug/L		98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:13:38 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

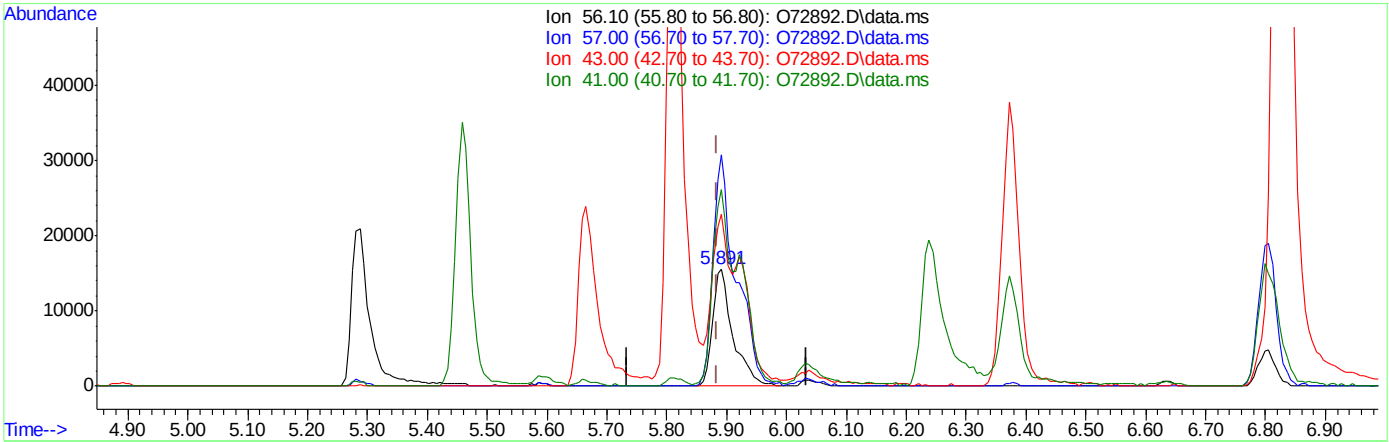
Sample Number: VO2866-IC2866
Lab FileID: O72892.D
Injection Time: 12/08/22 10:45
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

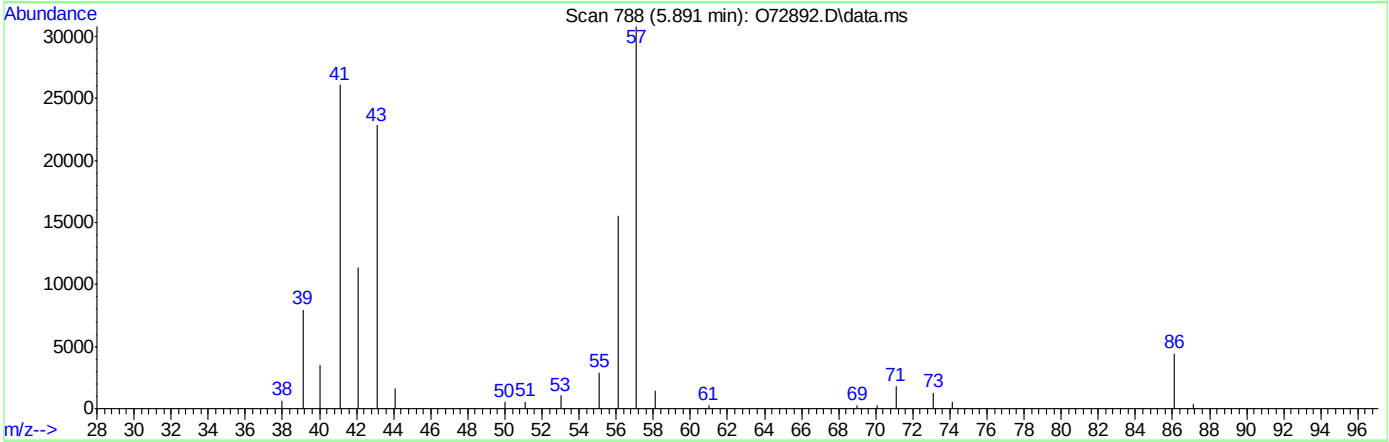
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(22) Hexane

5.891min (+0.006) 14.48ug/L

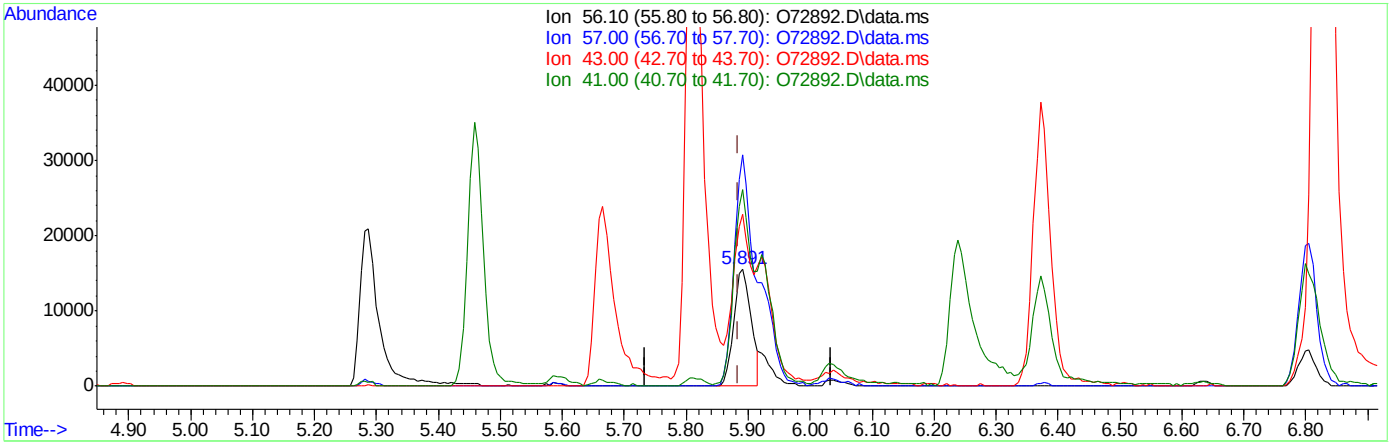
response 36629

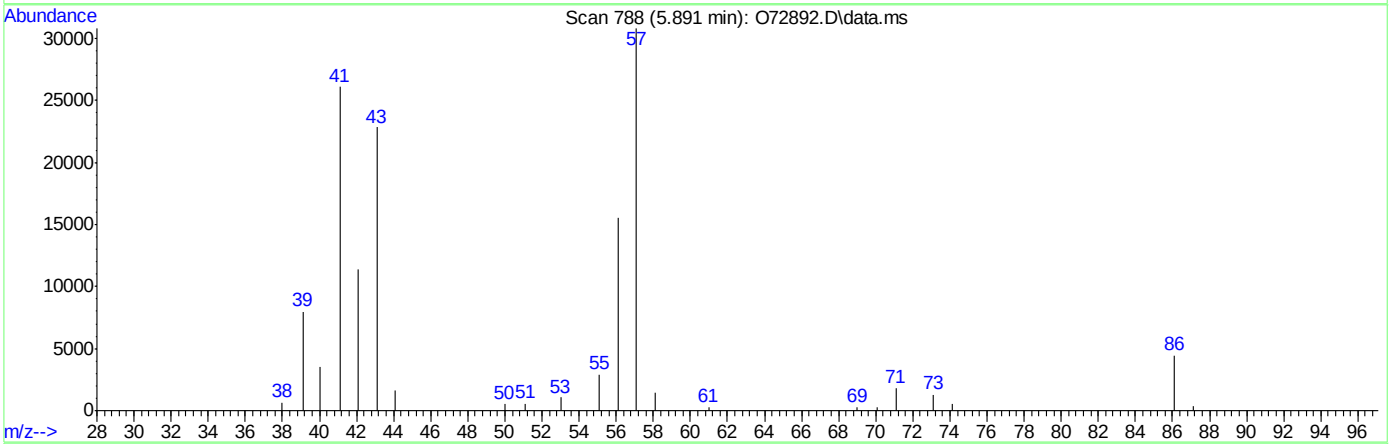
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.93
43.00	149.90	141.47
41.00	165.70	165.35

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(22) Hexane

5.891min (+0.006) 12.07ug/L m

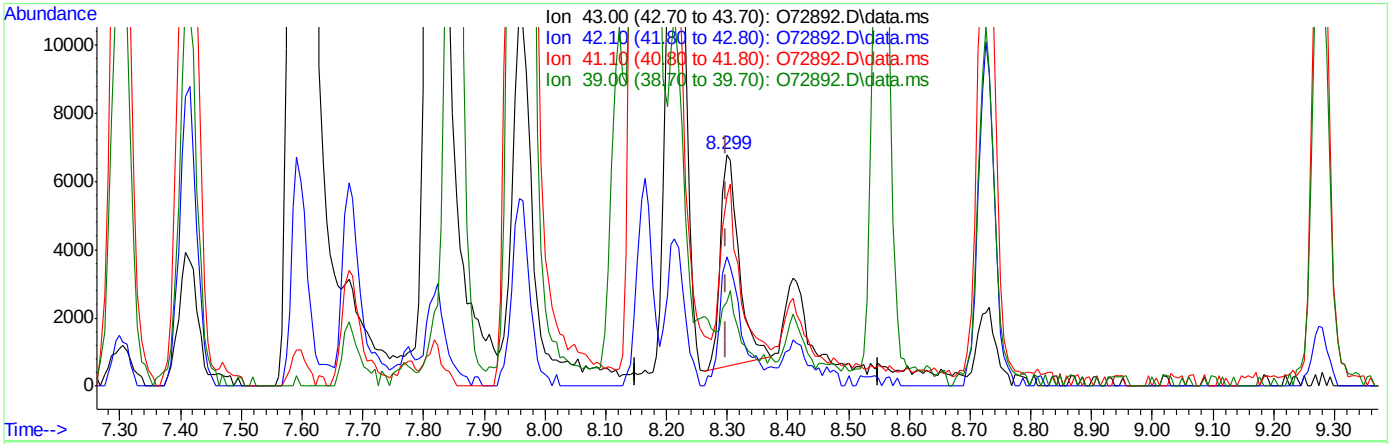
response 30421

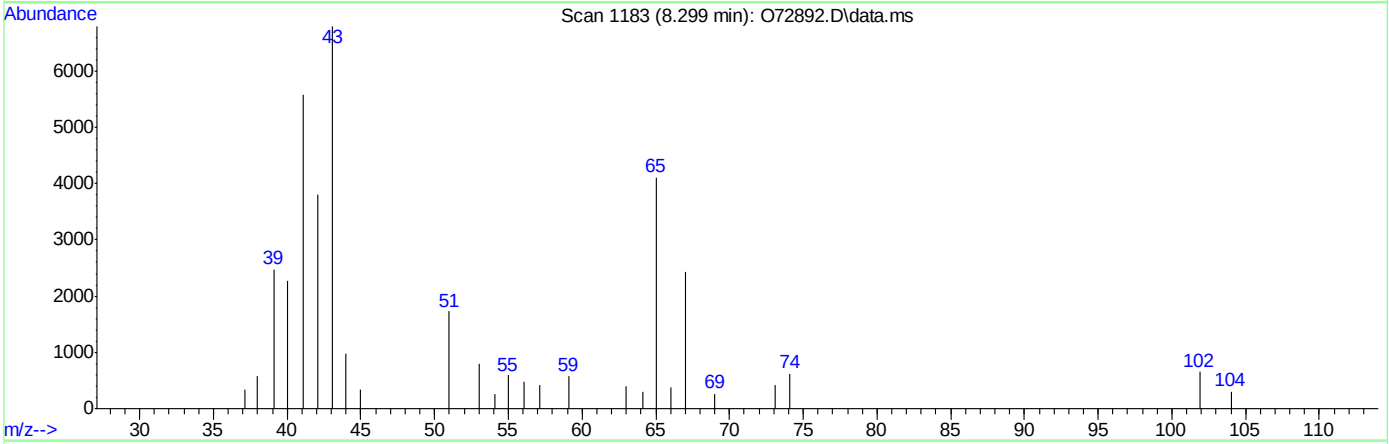
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.93
43.00	149.90	146.74
41.00	165.70	167.61

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 100.70ug/L

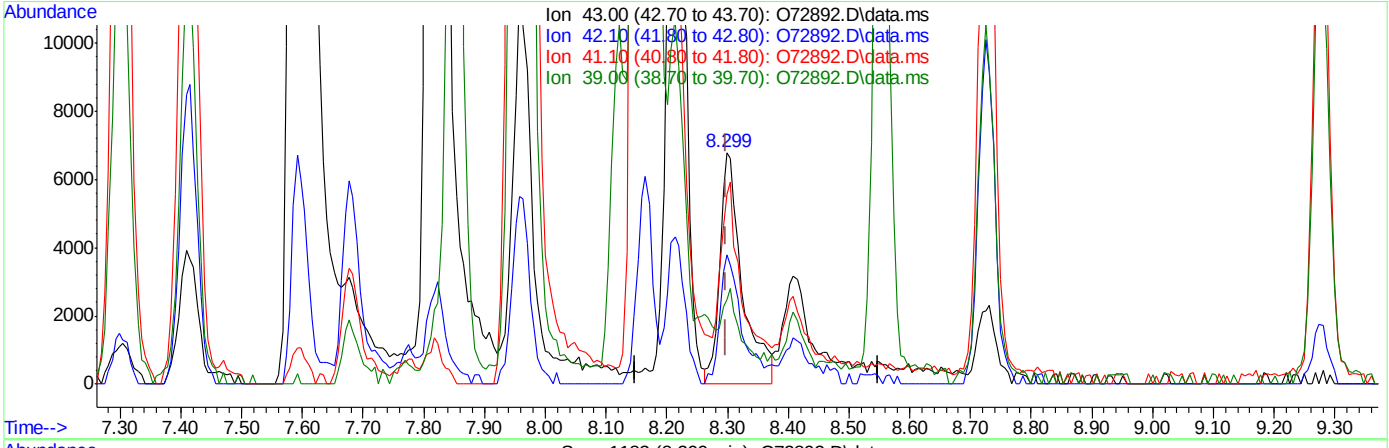
response 13170

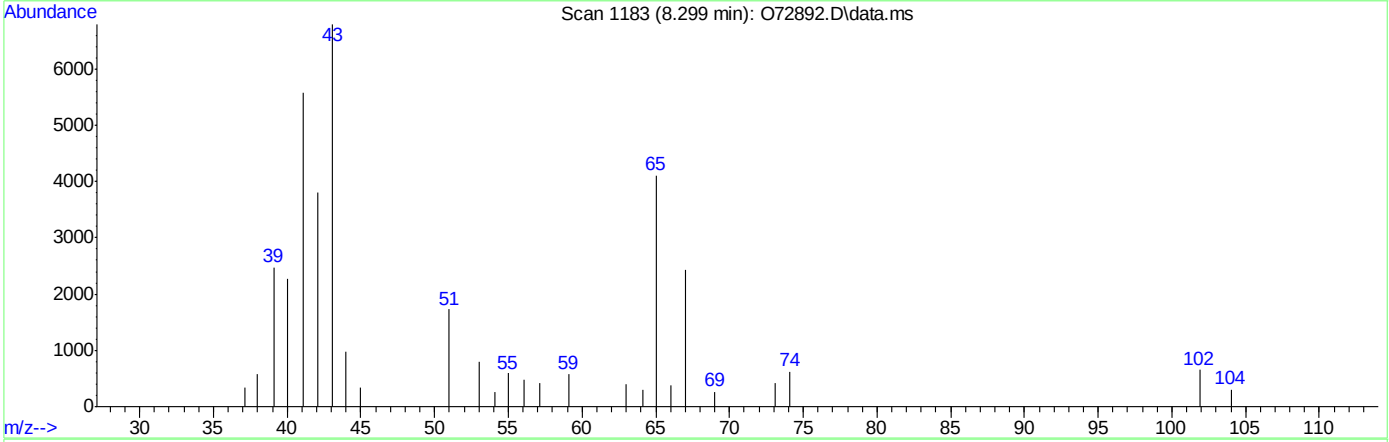
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.95
41.10	78.00	70.78
39.00	30.80	25.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 133.72ug/L m

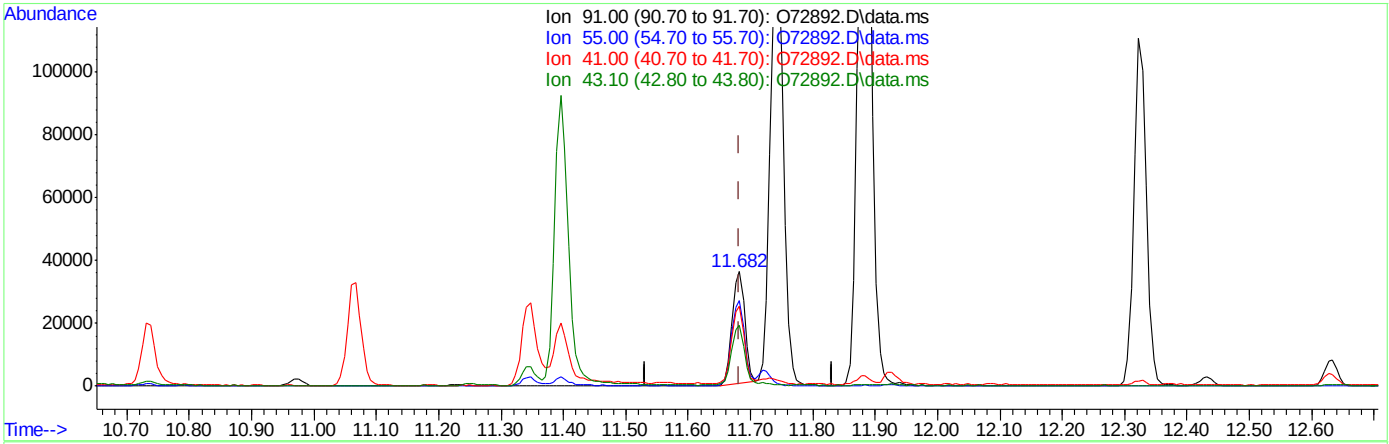
response 17489

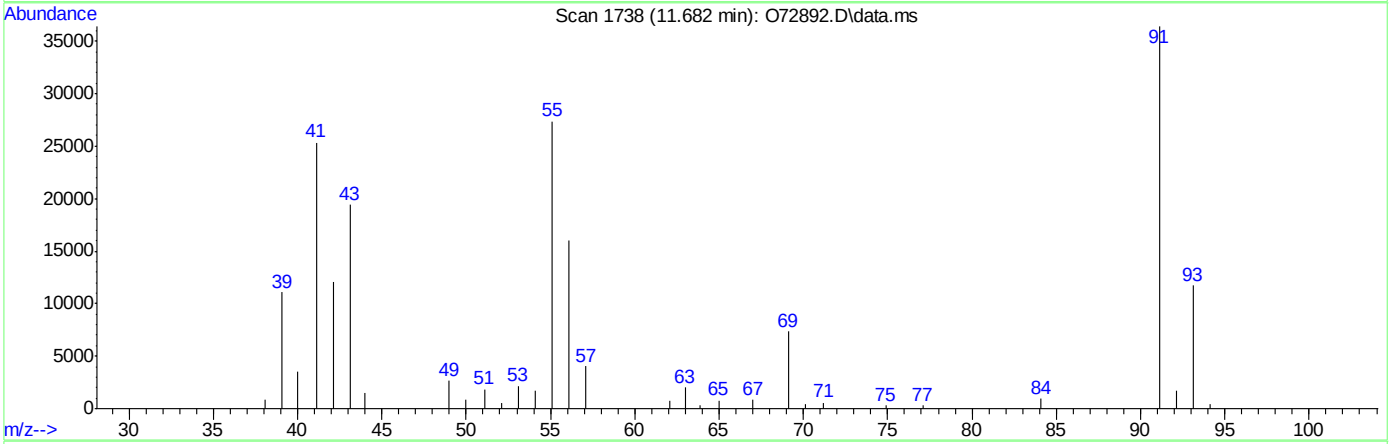
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	55.99
41.10	78.00	81.98
39.00	30.80	36.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 9.93ug/L

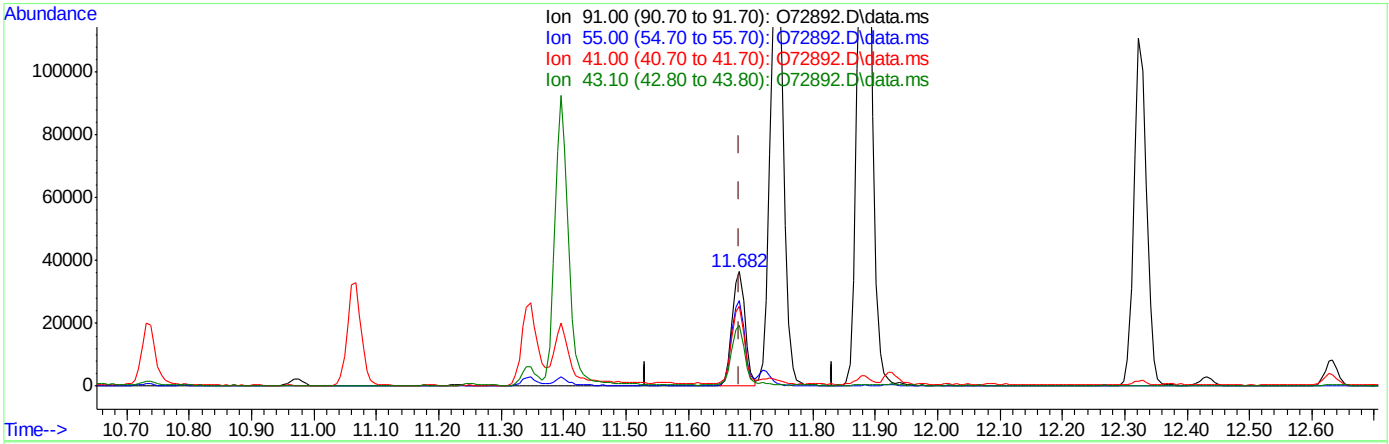
response 50168

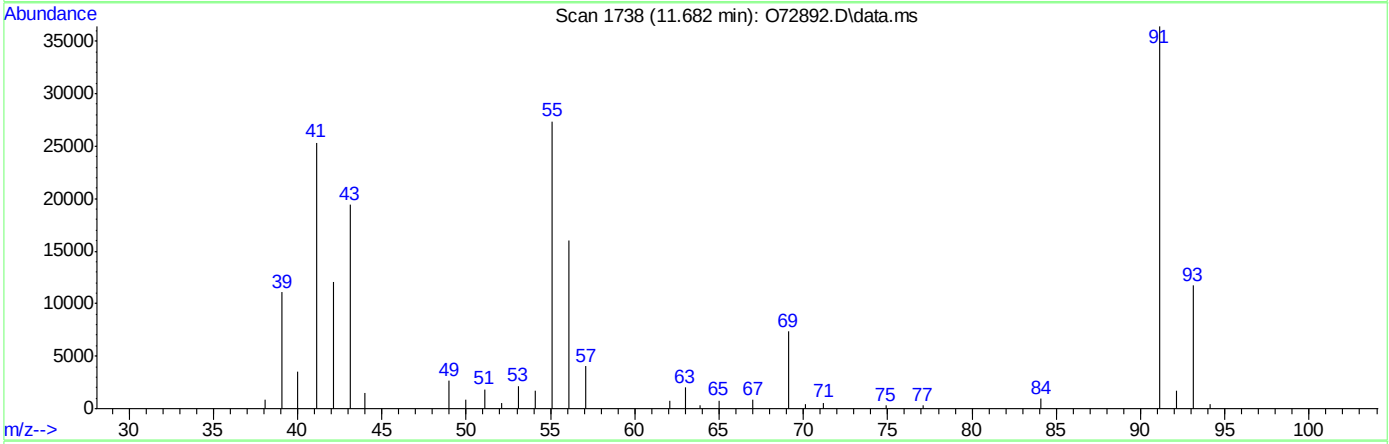
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	74.27
41.00	64.00	66.14
43.10	51.10	51.39

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72892.D
Acq On : 8 Dec 2022 10:45 am
Operator : adelardl
Sample : IC2866-3 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Dec 08 11:08:23 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72892.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 10.40ug/L m

response 52511

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	75.19
41.00	64.00	69.63
43.10	51.10	53.25

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	833479	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	626115	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	234505	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	232591	49.83	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.66%			
50) 1,2-Dichloroethane-d4	8.262	65	210335	50.81	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.62%			
63) Toluene-d8	10.152	98	834354	49.70	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.40%			
86) 4-Bromofluorobenzene	12.944	174	233753	50.01	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.02%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	155248	32.40	ug/L	97
3) Chloromethane	3.019	50	136120	29.15	ug/L	97
4) 1,3-butadiene	3.190	39	113241	23.54	ug/L	98
5) Vinyl Chloride	3.153	62	138849	28.63	ug/L	100
6) Bromomethane	3.684	94	58252	38.22	ug/L	98
7) Chloroethane	3.885	64	80697	29.96	ug/L	96
8) Trichlorofluoromethane	4.098	101	198230	28.29	ug/L	98
9) Ethyl Ether	4.556	59	94571	26.24	ug/L	98
10) Ethanol	4.775	45	8453	388.86	ug/L	96
11) 1,2-Dichlorotrifluoroe...	4.824	67	142264	25.50	ug/L	98
12) 1,1-Dichloroethene	4.824	61	175294	25.58	ug/L	98
13) Freon 113	4.885	101	118452	27.20	ug/L	99
14) Carbon Disulfide	4.867	76	331537	25.66	ug/L	99
15) Iodomethane	5.025	142	32477	21.96	ug/L	96
16) Acrolein	5.281	56	94159	124.24	ug/L	98
17) Allyl chloride	5.458	41	146478	23.89	ug/L	99
18) Methylene Chloride	5.592	49	164698	24.37	ug/L	98
19) Acetone	5.659	43	138550	116.08	ug/L	99
20) Methyl acetate	5.805	43	373563	118.41	ug/L	98
21) trans-1,2-Dichloroethene	5.799	61	170240	25.64	ug/L	95
22) Hexane	5.891	56	75772m	28.67	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	310594	24.68	ug/L	97
24) Tert Butyl Alcohol	6.031	59	67709	203.03	ug/L	99
25) Acetonitrile	6.232	41	106564	255.18	ug/L	100
26) Di-isopropyl ether	6.372	45	382481	25.48	ug/L	98
27) Chloroprene	6.519	53	133740	24.84	ug/L	98
28) 1,1-Dichloroethane	6.543	63	207052	25.63	ug/L	100
29) Acrylonitrile	6.604	52	156001	135.68	ug/L	99
30) ETBE	6.799	59	341041	24.13	ug/L	100
31) Vinyl acetate	6.823	43	1083622	113.50	ug/L	99
32) cis-1,2-Dichloroethene	7.177	96	123244	25.86	ug/L	99
33) 2,2-Dichloropropane	7.299	77	146010	22.45	ug/L	98
34) Bromochloromethane	7.403	128	67684	27.74	ug/L	96
35) Cyclohexane	7.409	56	175497	26.10	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) Chloroform	7.476	83	216654	25.40	ug/L		98
37) Ethyl acetate	7.592	43	478238	119.76	ug/L		99
38) Tetrahydrofuran	7.671	42	29594	23.73	ug/L		99
40) Carbon Tetrachloride	7.640	117	125528	19.63	ug/L		98
41) 1,1,1-Trichloroethane	7.720	97	172387	23.29	ug/L		99
42) 2-Butanone	7.811	43	226197	122.51	ug/L		100
43) 1,1-Dichloropropene	7.848	75	158028	25.67	ug/L		98
44) tert-Butyl formate	7.963	59	260354	82.41	ug/L	#	82
45) Propionitrile	8.140	54	136271	264.86	ug/L		93
46) Methacrylonitrile	8.165	41	766922	249.12	ug/L		99
47) Benzene	8.122	78	451542	25.46	ug/L		98
48) TAME	8.213	73	300561	24.44	ug/L		96
49) Isobutyl alcohol	8.299	43	45070m	336.41	ug/L		
51) 1,2-Dichloroethane	8.335	62	183665	25.35	ug/L		99
52) Tert Amyl Alcohol	8.409	59	46953	199.78	ug/L		96
53) Trichloroethene	8.732	95	126283	25.65	ug/L		97
54) Methylcyclohexane	8.726	83	165233	27.31	ug/L		97
55) Dibromomethane	9.177	93	84071	26.27	ug/L		98
56) 1,2-Dichloropropane	9.274	63	118512	25.96	ug/L		98
57) Bromodichloromethane	9.329	83	151568	24.31	ug/L		99
58) Methyl methacrylate	9.457	41	83725	23.15	ug/L		99
59) 1,4-Dioxane	9.530	88	16515	578.17	ug/L		97
60) 2-Chloroethyl vinyl ether	9.878	63	393563	120.69	ug/L		99
61) cis-1,3-Dichloropropene	9.969	75	170352	24.67	ug/L		98
64) Toluene	10.207	91	478792	25.44	ug/L		100
65) 2-Nitropropane	10.451	41	55651	43.83	ug/L		87
66) 4-Methyl-2-pentanone	10.567	43	546985	122.35	ug/L		99
67) trans-1,3-Dichloropropene	10.615	75	145371	24.21	ug/L		91
68) Tetrachloroethene	10.603	166	135053	25.77	ug/L		98
69) Ethyl methacrylate	10.731	69	107866	20.04	ug/L		98
70) 1,1,2-Trichloroethane	10.780	83	94439	26.31	ug/L		95
71) Dibromochloromethane	10.975	129	112734	22.06	ug/L		98
72) 1,3-Dichloropropane	11.067	76	187023	25.79	ug/L		99
73) 1,2-Dibromoethane	11.231	107	114997	26.00	ug/L		99
74) 3,3-dimethyl-1-butanol	11.341	57	157923	556.25	ug/L		98
75) 2-hexanone	11.396	43	368726	122.97	ug/L		99
76) 1-Chlorohexane	11.682	91	136703m	26.11	ug/L		
77) Ethylbenzene	11.743	91	542270	25.68	ug/L		99
78) Chlorobenzene	11.743	112	324484	25.94	ug/L		97
79) 1,1,1,2-Tetrachloroethane	11.792	131	101681	22.59	ug/L		99
80) m,p-Xylene	11.883	91	843135	52.41	ug/L		100
81) o-Xylene	12.322	91	408744	26.20	ug/L		98
82) Styrene	12.377	104	319054	28.28	ug/L		99
83) Bromoform	12.432	173	63225	20.23	ug/L		98
84) Isopropylbenzene	12.627	105	490130	26.45	ug/L		99
87) cis-1,4-Dichloro-2-butene	12.993	53	34356	21.97	ug/L	#	79
88) n-Propylbenzene	13.054	91	579068	24.25	ug/L		100
89) Bromobenzene	13.066	156	146990	20.58	ug/L		98
90) 1,1,2,2-Tetrachloroethane	13.121	83	138015	23.53	ug/L		99
91) 1,3,5-Trimethylbenzene	13.237	105	417441	25.51	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
92) 2-Chlorotoluene	13.408	91	370615	24.67	ug/L		99
93) trans-1,4-Dichloro-2-B...	13.310	53	32014	24.26	ug/L		83
94) 1,2,3-Trichloropropane	13.286	110	40505	24.41	ug/L		98
95) Cyclohexanone	13.359	55	12798	119.60	ug/L		92
96) 4-Chlorotoluene	13.408	91	370615	24.67	ug/L		99
97) tert-Butylbenzene	13.578	91	226296	24.45	ug/L		96
99) 1,2,4-Trimethylbenzene	13.645	105	405103	25.26	ug/L		99
100) Pentachloroethane	13.627	167	50952	17.46	ug/L		93
101) sec-Butylbenzene	13.761	105	458312	25.24	ug/L		99
102) 4-Isopropyltoluene	13.895	119	402951	25.87	ug/L		100
103) 1,3-Dichlorobenzene	14.023	146	254663	25.14	ug/L		99
104) 1,2,3-Trimethylbenzene	14.109	105	413494	25.57	ug/L		99
105) 1,4-Dichlorobenzene	14.109	146	267311	24.80	ug/L		99
106) n-Butylbenzene	14.328	92	212242	26.09	ug/L		98
107) Benzyl Chloride	14.352	126	30807	18.93	ug/L	#	89
108) 1,2-Dichlorobenzene	14.541	146	246281	25.61	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	18349	21.67	ug/L		90
110) Hexachlorobutadiene	15.840	225	52483	27.07	ug/L		95
111) 1,2,4-Trichlorobenzene	15.889	180	151926	26.46	ug/L		99
112) Naphthalene	16.175	128	383811	26.25	ug/L		99
113) 1,2,3-Trichlorobenzene	16.346	180	139577	26.76	ug/L		99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

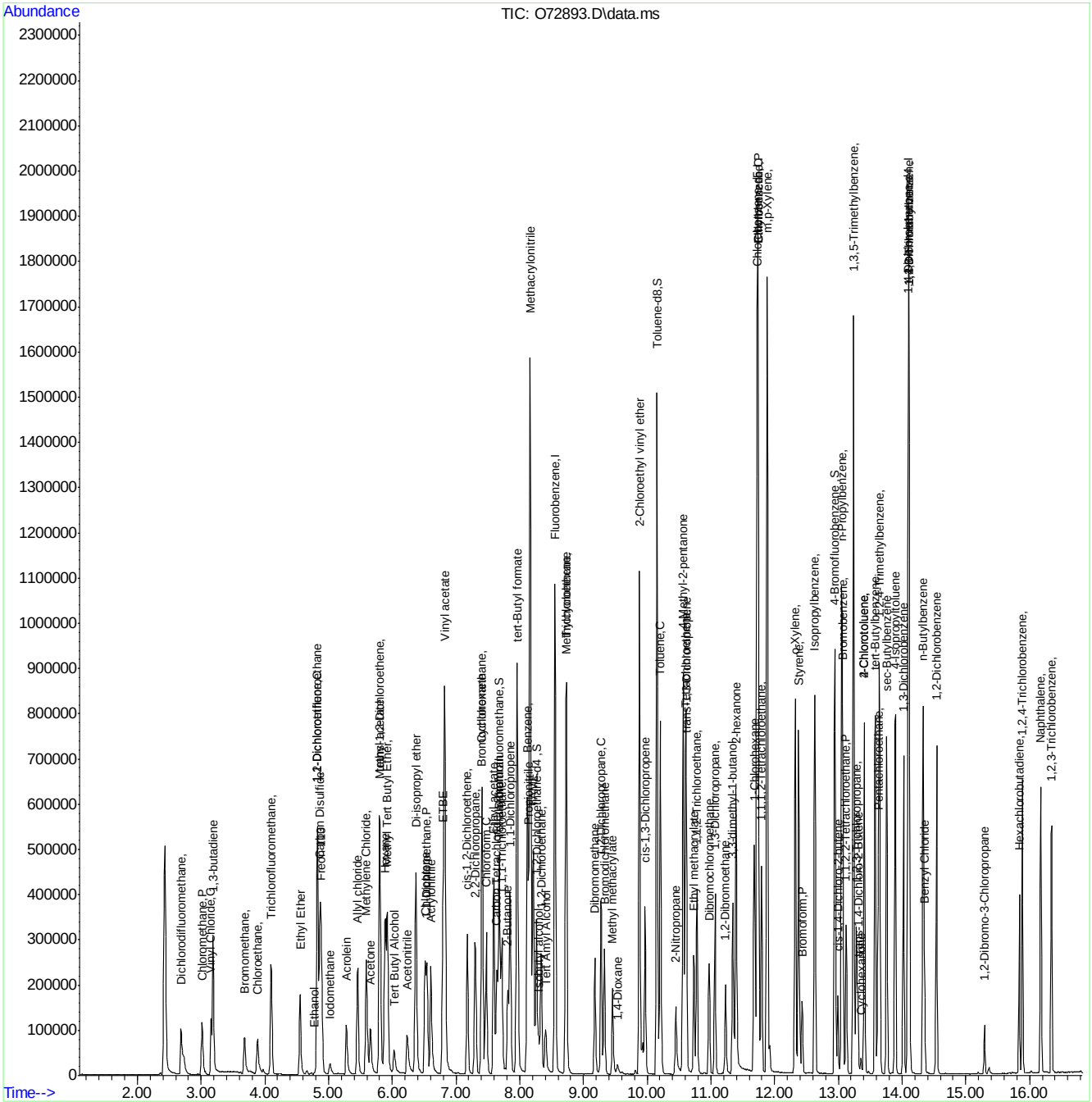
8.6.15

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 12:44:19 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

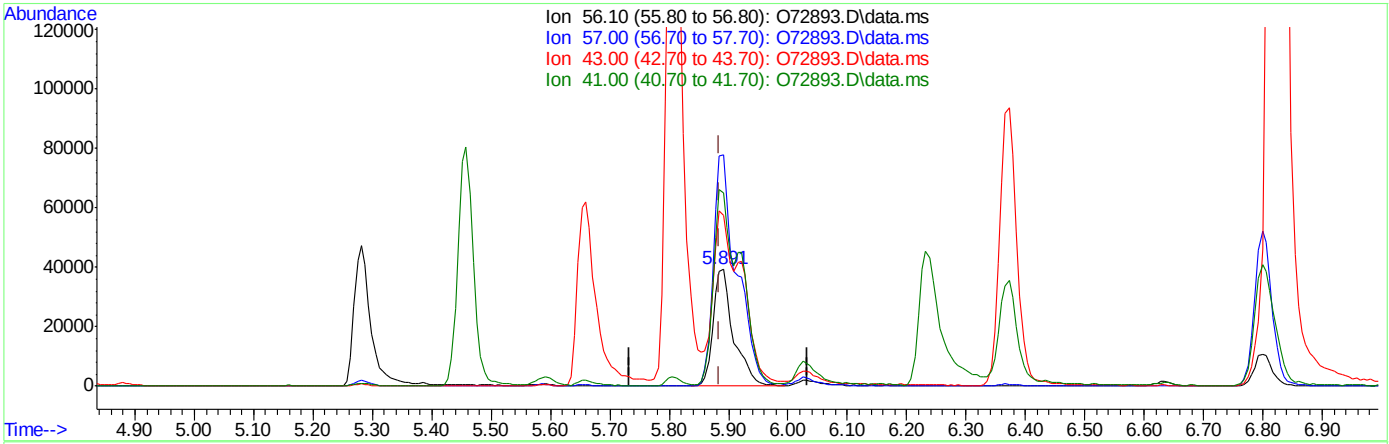
Sample Number: VO2866-IC2866
Lab FileID: O72893.D
Injection Time: 12/08/22 11:10
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

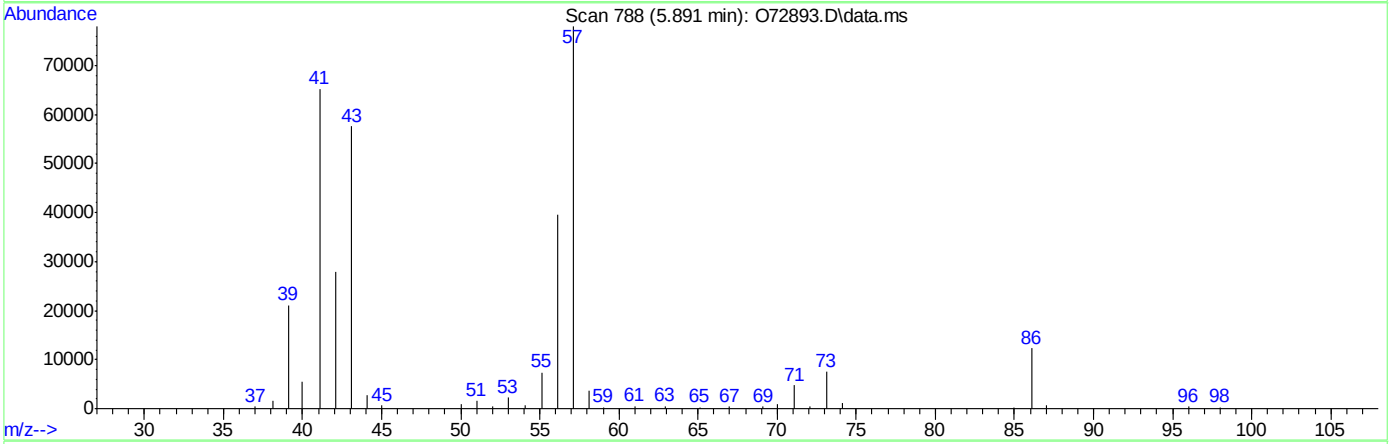
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(22) Hexane

5.891min (+0.006) 35.17ug/L

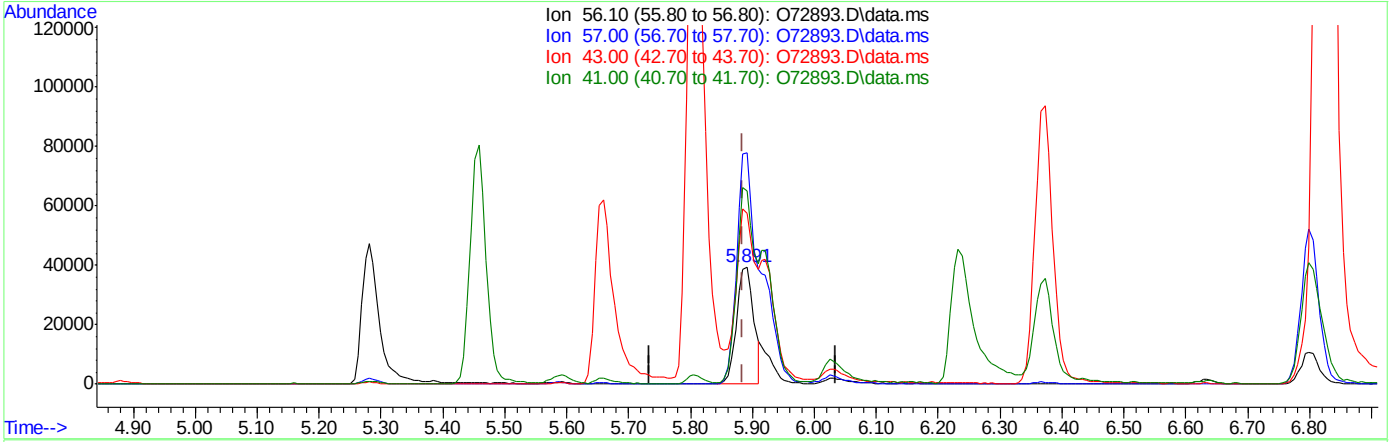
response 93787

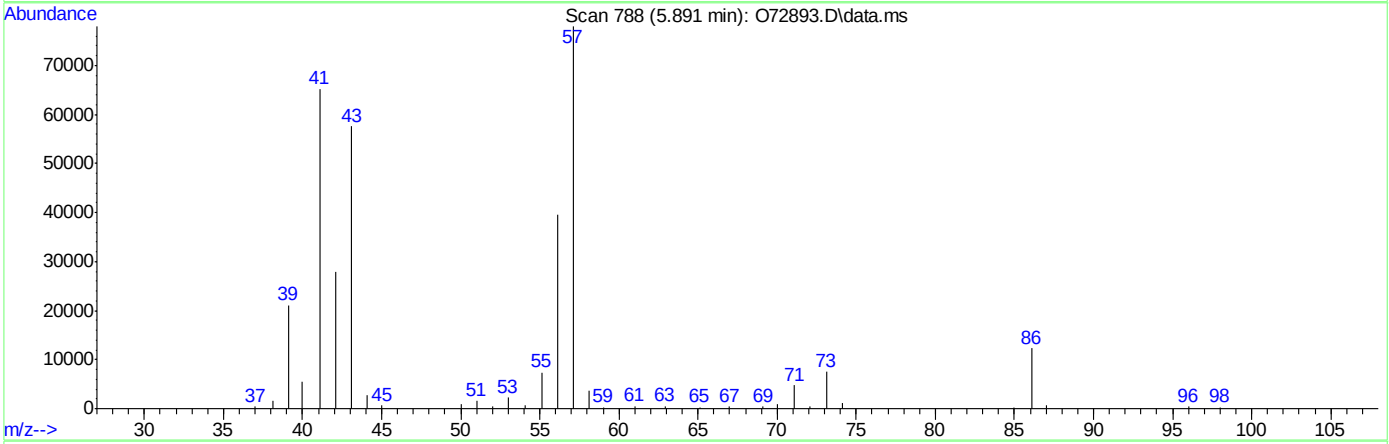
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.53
43.00	149.90	141.72
41.00	165.70	163.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(22) Hexane

5.891min (+0.006) 28.67ug/L m

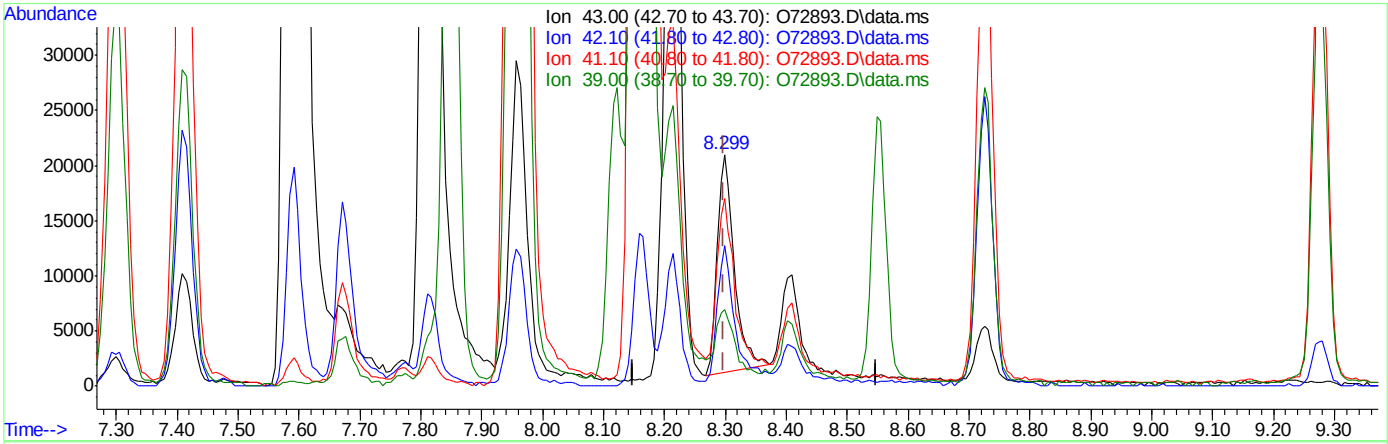
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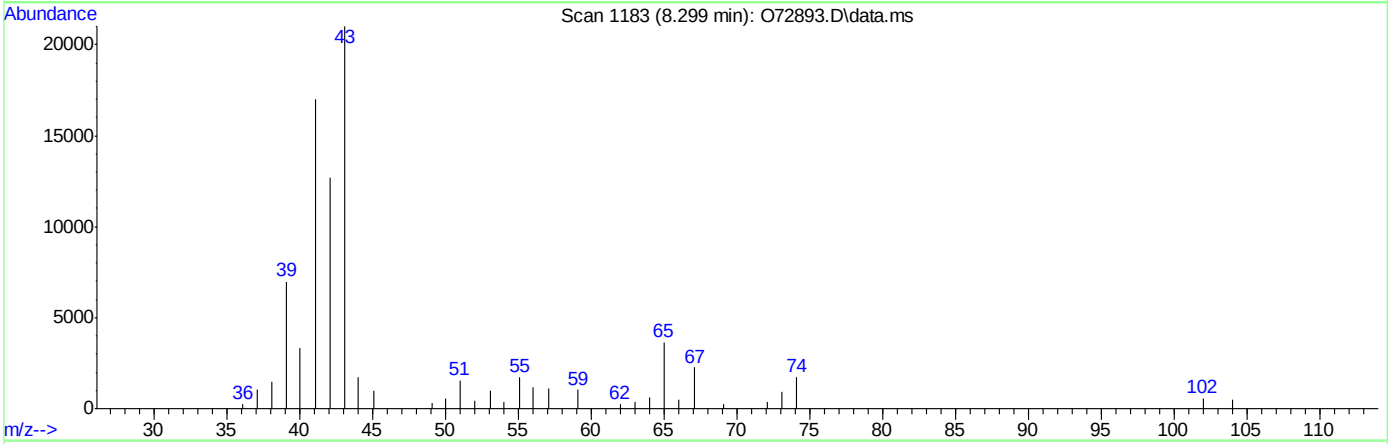
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	197.53
43.00	149.90	145.71
41.00	165.70	165.19

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 286.11ug/L

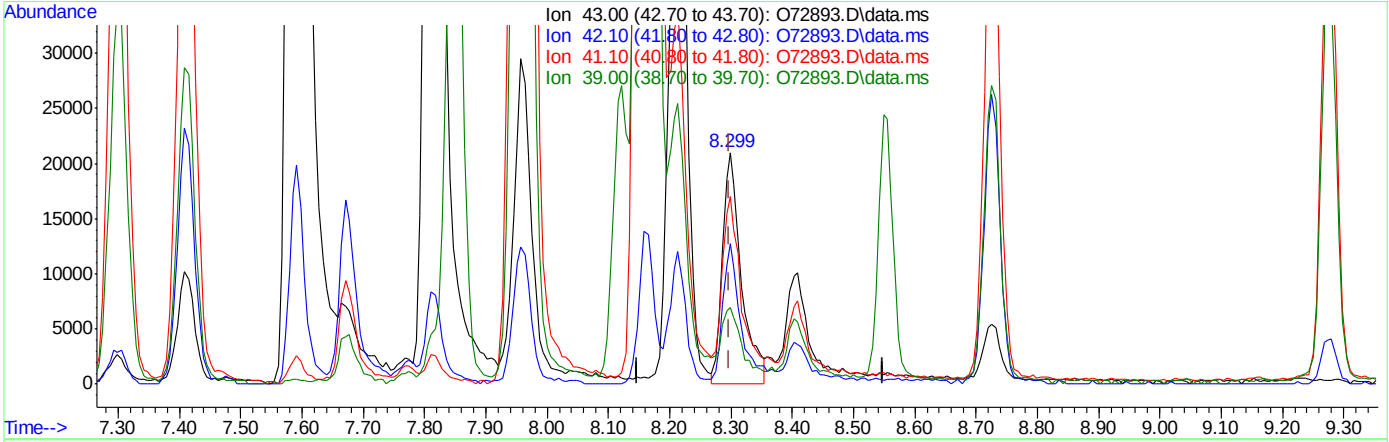
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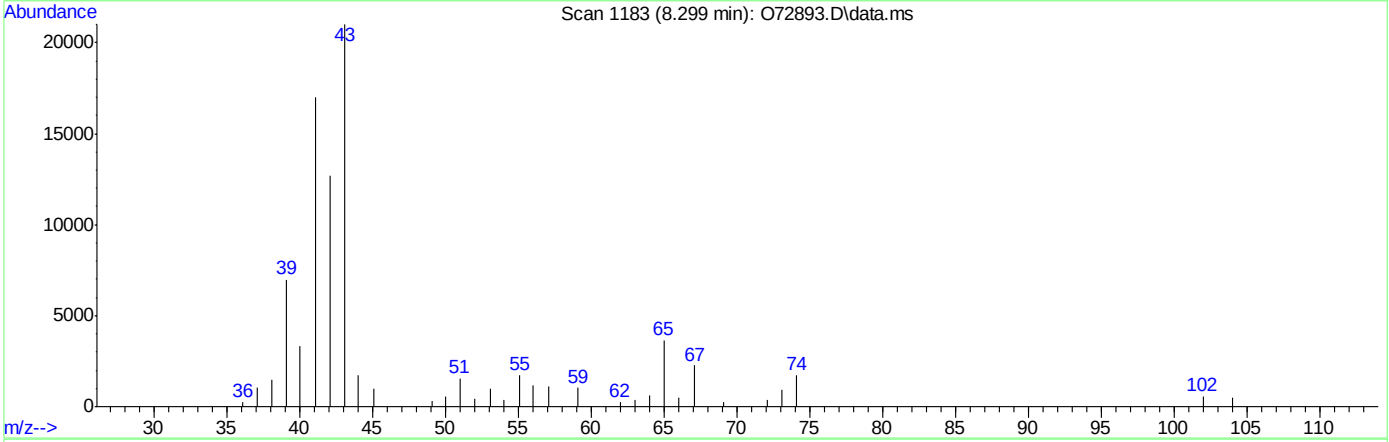
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.07
41.10	78.00	75.40
39.00	30.80	28.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 336.41ug/L m

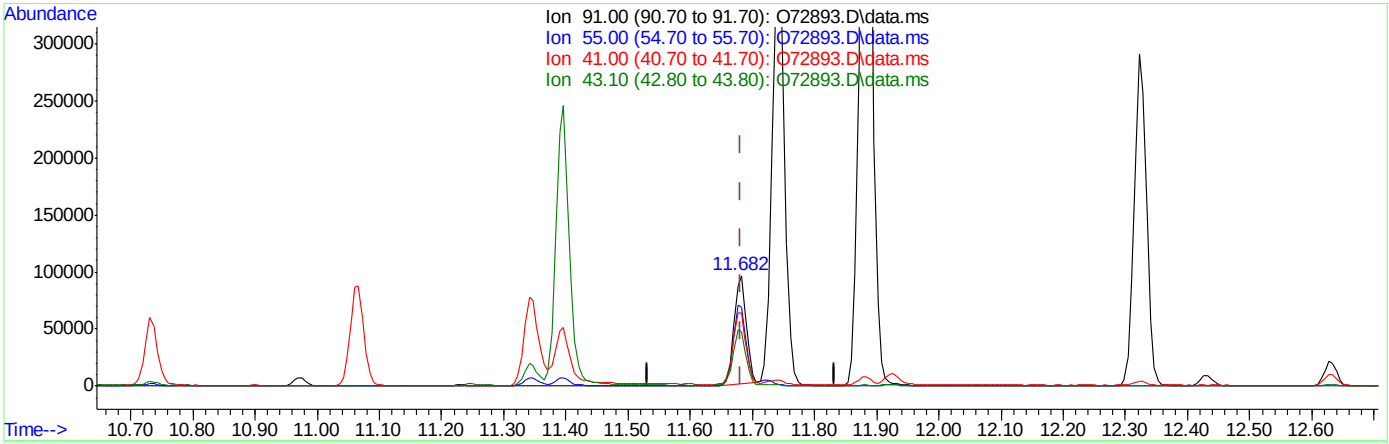
response 45070

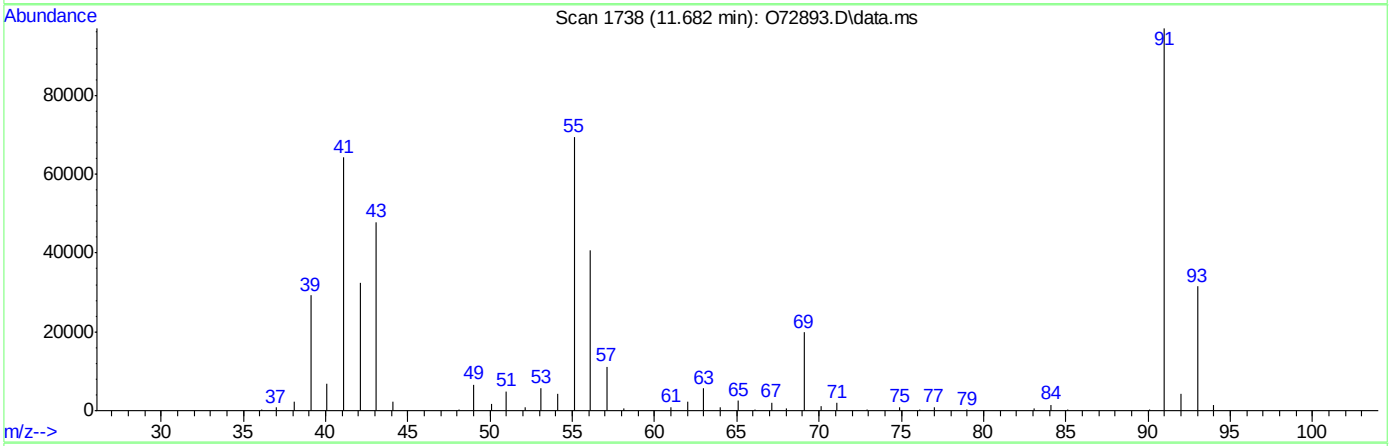
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	60.49
41.10	78.00	80.96
39.00	30.80	33.18

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 25.09ug/L

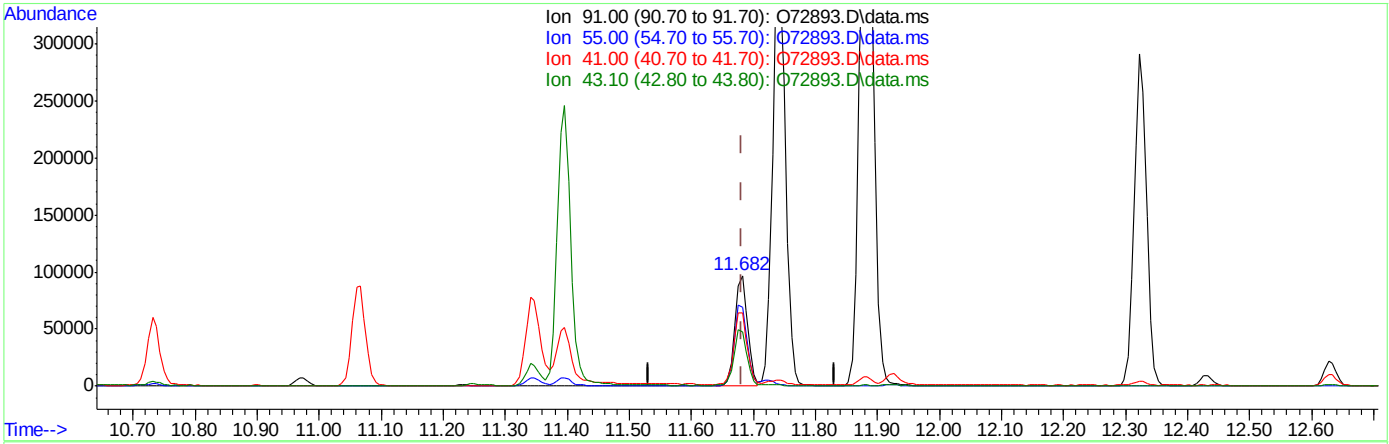
response 131379

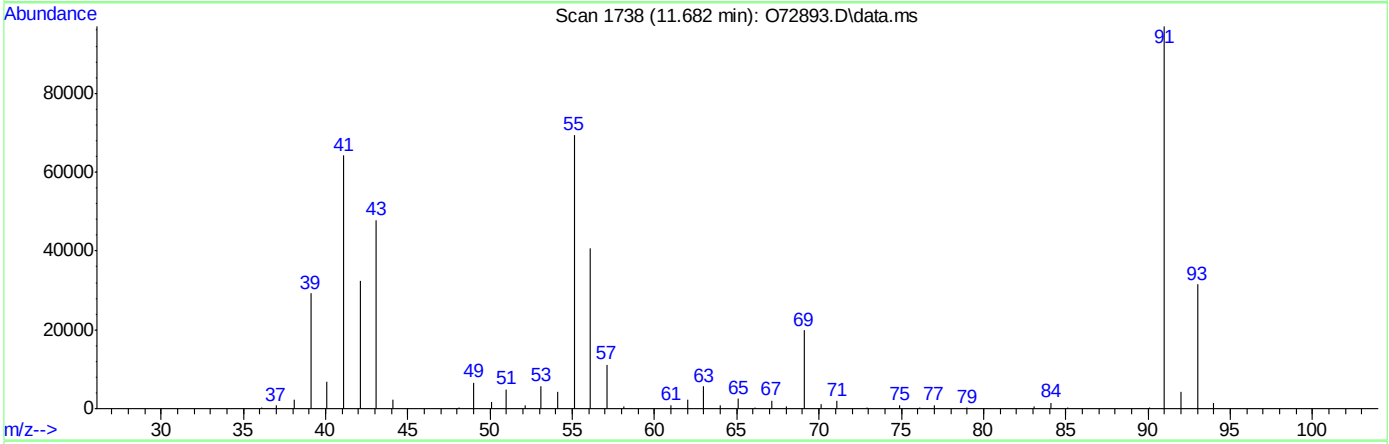
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	71.10
41.00	64.00	64.30
43.10	51.10	48.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72893.D
Acq On : 8 Dec 2022 11:10 am
Operator : adelardl
Sample : IC2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Dec 08 11:27:40 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72893.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 26.11ug/L m

response 136703

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	71.67
41.00	64.00	66.24
43.10	51.10	49.35

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	828618	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	603499	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	216353	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	231947	49.98	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.96%			
50) 1,2-Dichloroethane-d4	8.262	65	215191	52.29	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.58%			
63) Toluene-d8	10.152	98	819493	50.64	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.28%			
86) 4-Bromofluorobenzene	12.944	174	218060	50.57	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.14%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	264537	55.53	ug/L	99
3) Chloromethane	3.013	50	234745	50.56	ug/L	100
4) 1,3-butadiene	3.184	39	195086	41.52	ug/L	100
5) Vinyl Chloride	3.153	62	239194	49.61	ug/L	97
6) Bromomethane	3.678	94	101499	66.98	ug/L	99
7) Chloroethane	3.879	64	136461	50.96	ug/L	97
8) Trichlorofluoromethane	4.098	101	348319	49.99	ug/L	99
9) Ethyl Ether	4.550	59	145972	40.75	ug/L	99
10) Ethanol	4.781	45	15513	717.82	ug/L	99
11) 1,2-Dichlorotrifluoroe...	4.824	67	218742	39.44	ug/L	99
12) 1,1-Dichloroethene	4.824	61	271671	39.88	ug/L	99
13) Freon 113	4.885	101	178410	41.21	ug/L	99
14) Carbon Disulfide	4.860	76	507670	39.52	ug/L	100
15) Iodomethane	5.019	142	85155	46.80	ug/L	98
16) Acrolein	5.275	56	164018	217.69	ug/L	98
17) Allyl chloride	5.452	41	261377	42.88	ug/L	99
18) Methylene Chloride	5.592	49	249831	38.07	ug/L	99
19) Acetone	5.653	43	227786	191.96	ug/L	97
20) Methyl acetate	5.805	43	590954	188.42	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	263416	39.91	ug/L	100
22) Hexane	5.885	56	126691m	47.02	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	482694	38.57	ug/L	98
24) Tert Butyl Alcohol	6.025	59	105544	318.34	ug/L	96
25) Acetonitrile	6.232	41	188854	454.88	ug/L	99
26) Di-isopropyl ether	6.366	45	586559	39.31	ug/L	100
27) Chloroprene	6.513	53	238006	44.47	ug/L	98
28) 1,1-Dichloroethane	6.543	63	315386	39.26	ug/L	98
29) Acrylonitrile	6.604	52	256372	224.28	ug/L	99
30) ETBE	6.799	59	539907	38.42	ug/L	99
31) Vinyl acetate	6.823	43	1923623	202.67	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	187263	39.53	ug/L	100
33) 2,2-Dichloropropane	7.299	77	239240	37.00	ug/L	99
34) Bromochloromethane	7.403	128	102343	42.19	ug/L	97
35) Cyclohexane	7.409	56	277780	41.55	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	330315	38.95	ug/L	98
37) Ethyl acetate	7.592	43	818403	206.14	ug/L	99
38) Tetrahydrofuran	7.671	42	45347	37.16	ug/L	96
40) Carbon Tetrachloride	7.640	117	207159	32.59	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	272511	37.04	ug/L	98
42) 2-Butanone	7.811	43	369828	201.47	ug/L	99
43) 1,1-Dichloropropene	7.848	75	243332	39.76	ug/L	98
44) tert-Butyl formate	7.957	59	513500	163.49	ug/L	90
45) Propionitrile	8.140	54	240847	470.86	ug/L	96
46) Methacrylonitrile	8.159	41	1359991	444.35	ug/L	99
47) Benzene	8.116	78	684695	38.83	ug/L	99
48) TAME	8.213	73	466976	38.20	ug/L	98
49) Isobutyl alcohol	8.299	43	96229m	722.48	ug/L	
51) 1,2-Dichloroethane	8.335	62	283584	39.37	ug/L	99
52) Tert Amyl Alcohol	8.402	59	76051	325.49	ug/L	97
53) Trichloroethene	8.732	95	193724	39.58	ug/L	99
54) Methylcyclohexane	8.726	83	259038	43.06	ug/L	96
55) Dibromomethane	9.177	93	127292	40.00	ug/L	99
56) 1,2-Dichloropropane	9.274	63	182046	40.11	ug/L	98
57) Bromodichloromethane	9.329	83	234809	37.88	ug/L	99
58) Methyl methacrylate	9.457	41	156781	43.60	ug/L	98
59) 1,4-Dioxane	9.530	88	23713	835.03	ug/L	100
60) 2-Chloroethyl vinyl ether	9.878	63	680411	209.87	ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	268054	39.04	ug/L	98
64) Toluene	10.207	91	728157	40.14	ug/L	100
65) 2-Nitropropane	10.445	41	95625	78.14	ug/L	91
66) 4-Methyl-2-pentanone	10.561	43	912089	211.65	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	237694	41.08	ug/L	97
68) Tetrachloroethene	10.603	166	210052	41.58	ug/L	99
69) Ethyl methacrylate	10.731	69	207827	40.47	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	143301	41.42	ug/L	99
71) Dibromochloromethane	10.969	129	183822	37.32	ug/L	99
72) 1,3-Dichloropropane	11.067	76	285555	40.86	ug/L	98
73) 1,2-Dibromoethane	11.231	107	175493	41.17	ug/L	98
74) 3,3-dimethyl-1-butanol	11.341	57	329710	1204.85	ug/L	99
75) 2-hexanone	11.396	43	619236	214.25	ug/L	99
76) 1-Chlorohexane	11.682	91	216984m	42.99	ug/L	
77) Ethylbenzene	11.743	91	834233	40.98	ug/L	99
78) Chlorobenzene	11.743	112	495507	41.10	ug/L	97
79) 1,1,1,2-Tetrachloroethane	11.792	131	164899	38.00	ug/L	98
80) m,p-Xylene	11.883	91	1293410	83.41	ug/L	100
81) o-Xylene	12.322	91	634596	42.21	ug/L	100
82) Styrene	12.377	104	496476	45.65	ug/L	99
83) Bromoform	12.432	173	106478	35.34	ug/L	99
84) Isopropylbenzene	12.627	105	753853	42.21	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	65012	45.07	ug/L	91
88) n-Propylbenzene	13.054	91	906552	41.15	ug/L	100
89) Bromobenzene	13.066	156	225380	37.57	ug/L	98
90) 1,1,2,2-Tetrachloroethane	13.121	83	211332	39.05	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	646148	42.81	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

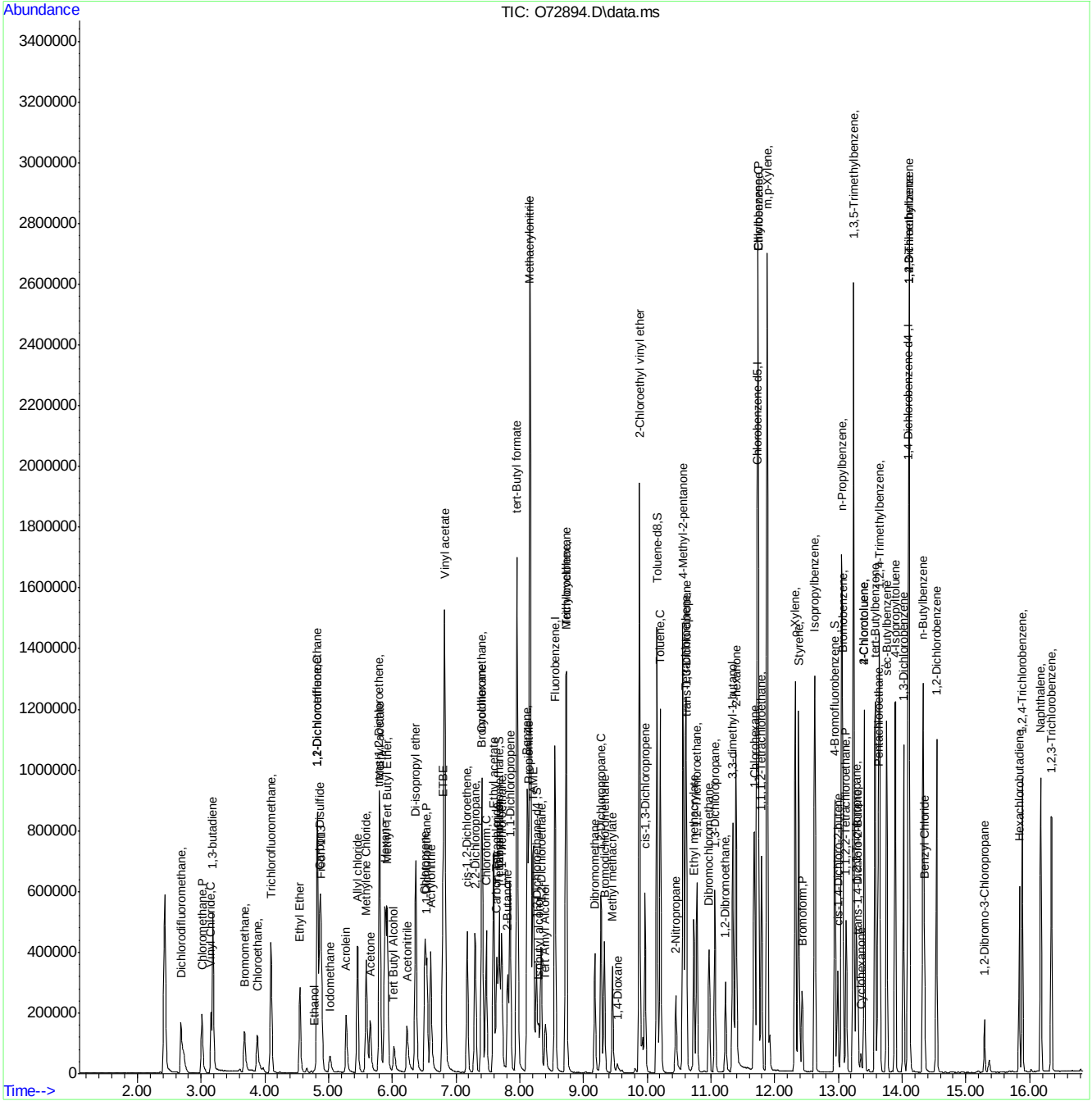
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	565751	40.82	ug/L	100
93) trans-1,4-Dichloro-2-B...	13.304	53	51871	42.60	ug/L	95
94) 1,2,3-Trichloropropane	13.286	110	62521	40.84	ug/L	98
95) Cyclohexanone	13.353	55	21515	217.93	ug/L	92
96) 4-Chlorotoluene	13.408	91	565751	40.82	ug/L	100
97) tert-Butylbenzene	13.578	91	351765	41.19	ug/L	98
99) 1,2,4-Trimethylbenzene	13.645	105	631861	42.71	ug/L	99
100) Pentachloroethane	13.627	167	101396	37.67	ug/L	98
101) sec-Butylbenzene	13.761	105	706459	42.18	ug/L	99
102) 4-Isopropyltoluene	13.895	119	625255	43.51	ug/L	100
103) 1,3-Dichlorobenzene	14.023	146	389918	41.72	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	640030	42.90	ug/L	99
105) 1,4-Dichlorobenzene	14.109	146	412266	41.45	ug/L	99
106) n-Butylbenzene	14.328	92	333898	44.48	ug/L	100
107) Benzyl Chloride	14.352	126	55588	37.02	ug/L	99
108) 1,2-Dichlorobenzene	14.541	146	379263	42.75	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	30038	38.45	ug/L	93
110) Hexachlorobutadiene	15.840	225	81628	45.64	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	237641	44.86	ug/L	98
112) Naphthalene	16.175	128	591088	43.82	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	216039	44.89	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 12:45:30 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

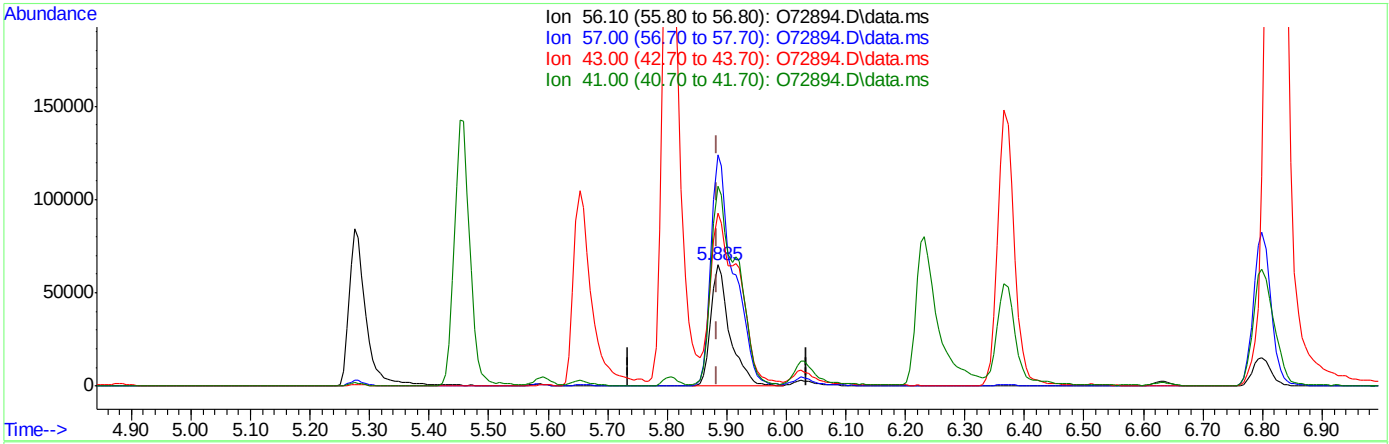
Sample Number: VO2866-ICC2866
Lab FileID: O72894.D
Injection Time: 12/08/22 11:35
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

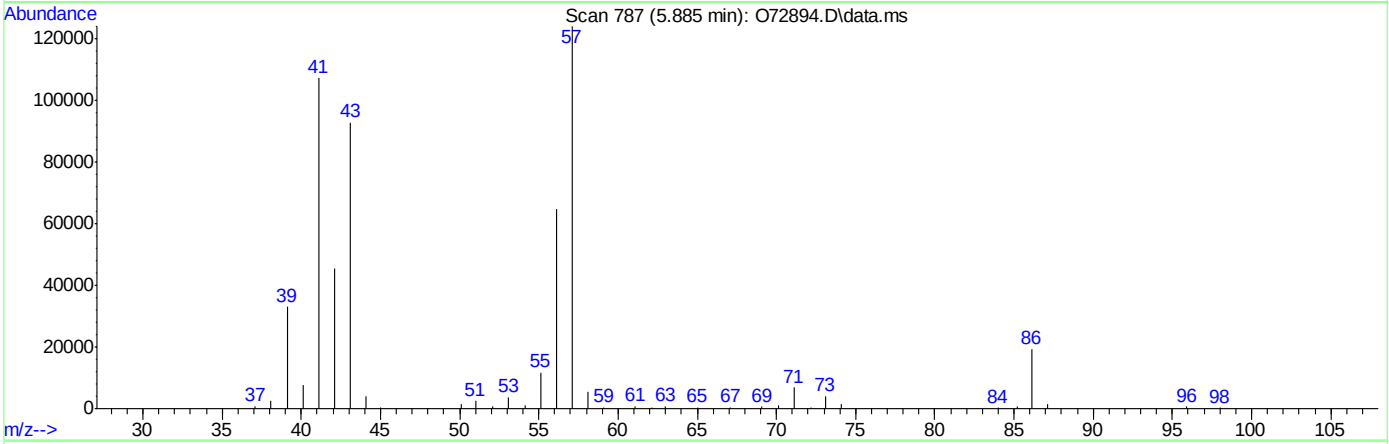
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(22) Hexane

5.885min (0.000) 52.66ug/L

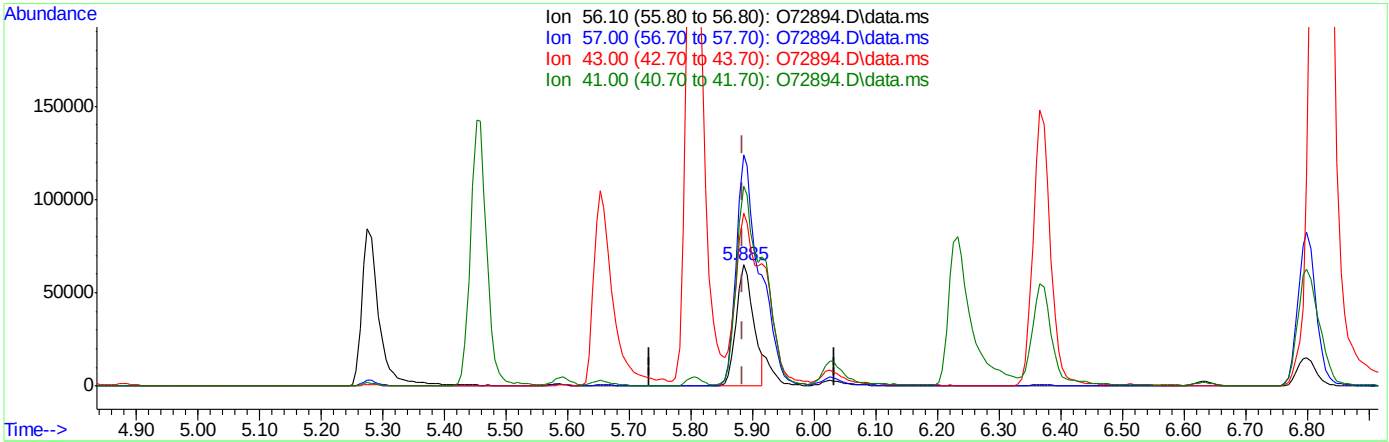
response 142976

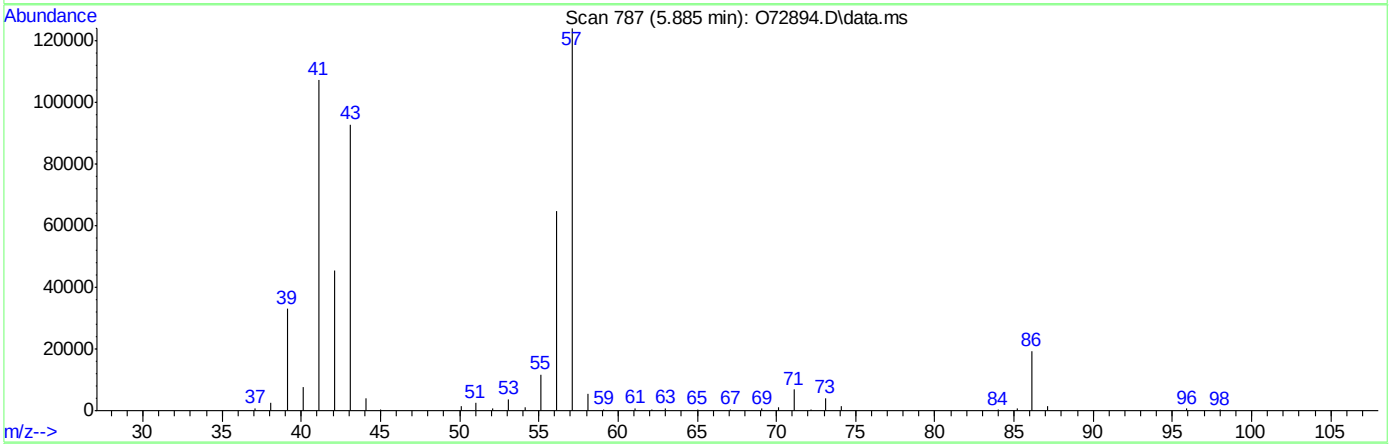
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	191.59
43.00	149.90	140.17
41.00	165.70	164.42

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(22) Hexane

5.885min (0.000) 47.02ug/L m

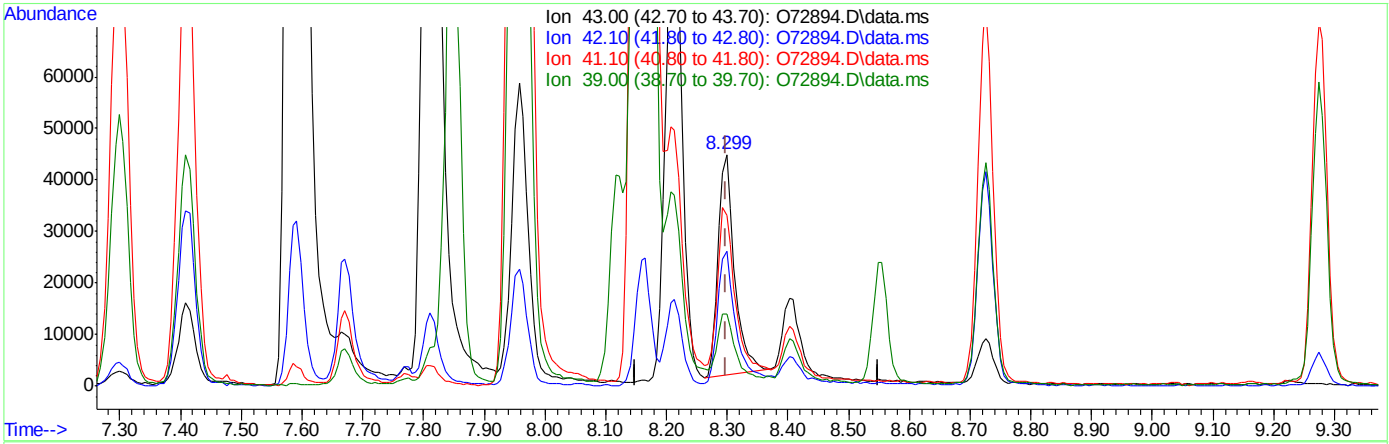
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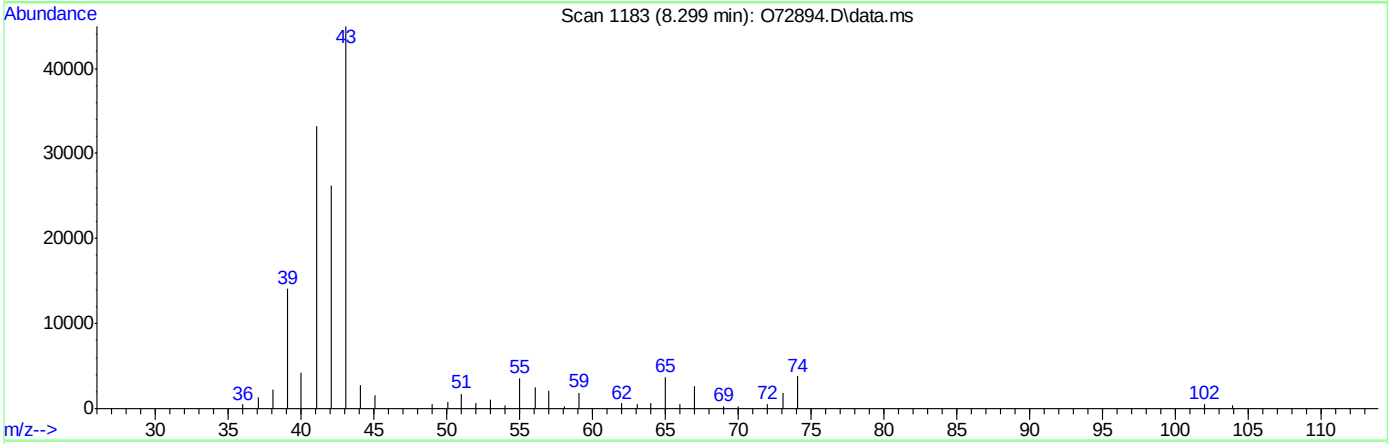
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	191.59
43.00	149.90	143.34
41.00	165.70	165.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(49) Isobutyl alcohol

8.299min (0.000) 603.91ug/L

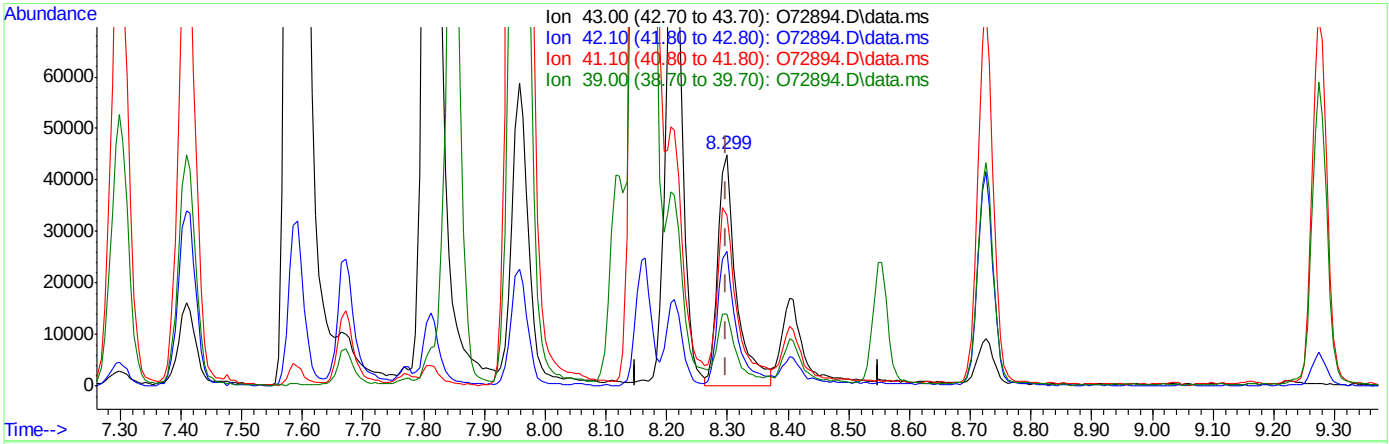
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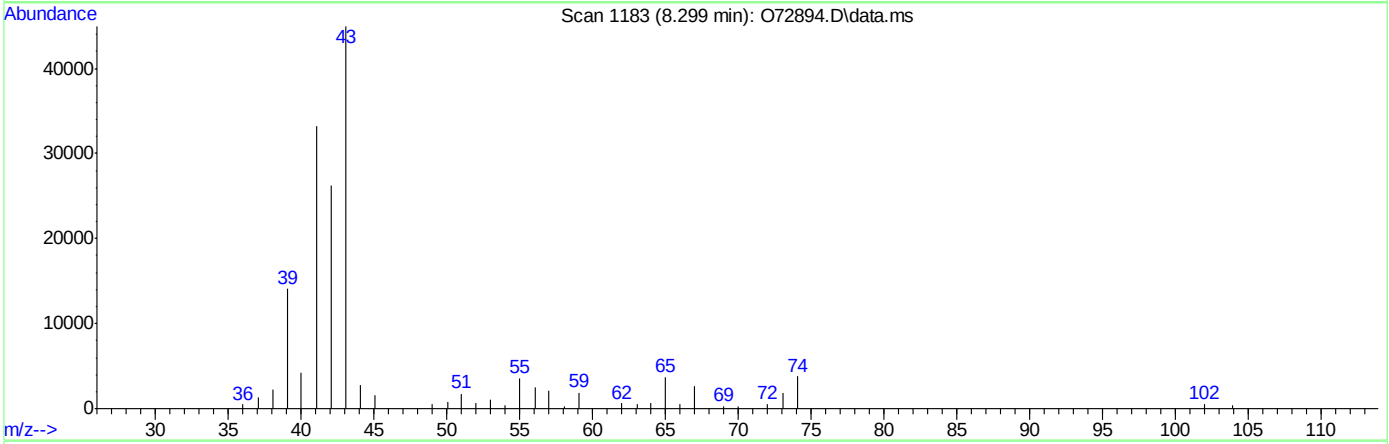
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.11
41.10	78.00	69.31
39.00	30.80	28.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(49) Isobutyl alcohol

8.299min (0.000) 722.48ug/L m

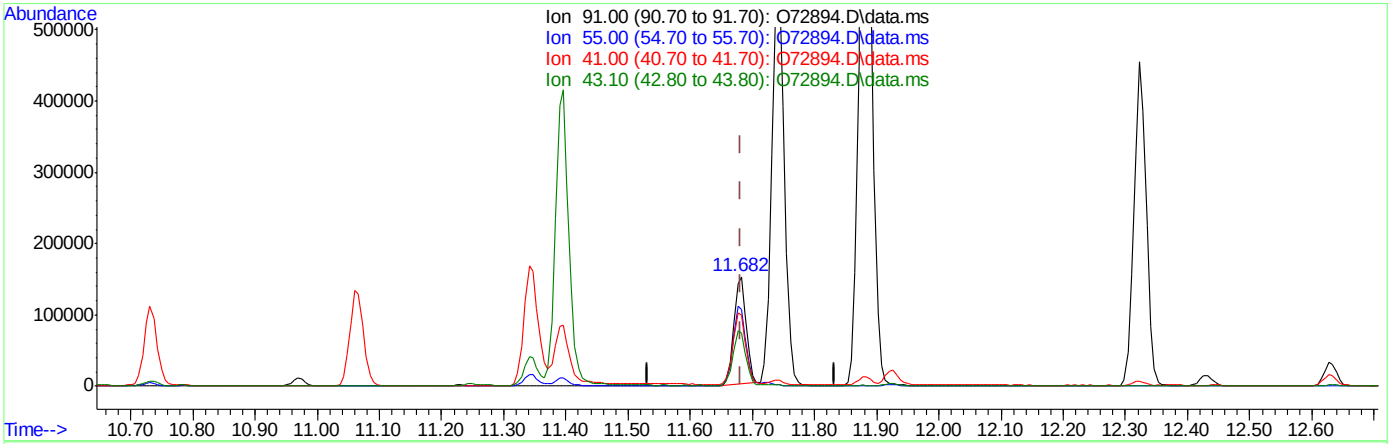
response 96229

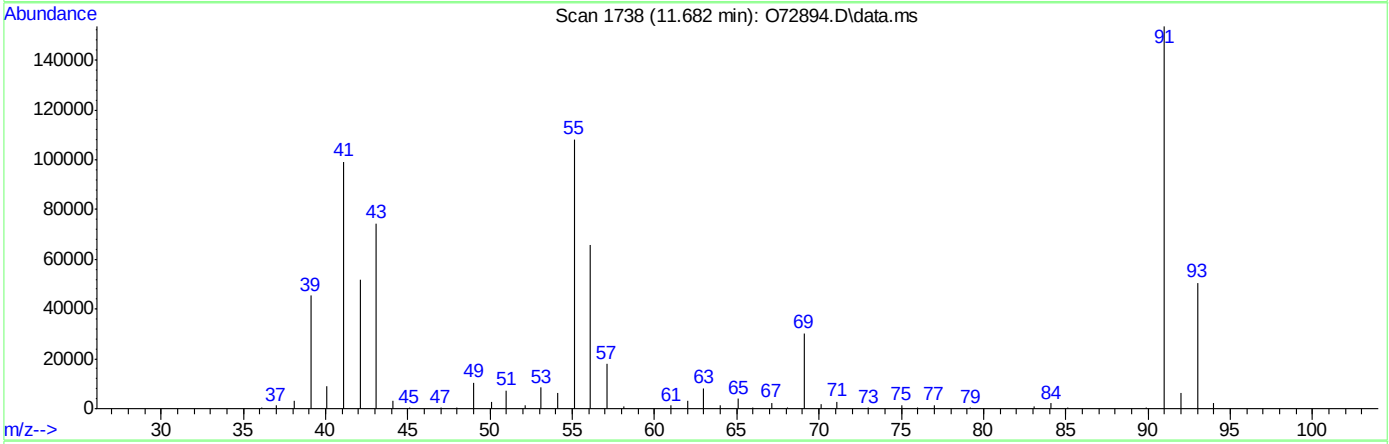
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	58.37
41.10	78.00	73.77
39.00	30.80	31.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 41.31ug/L

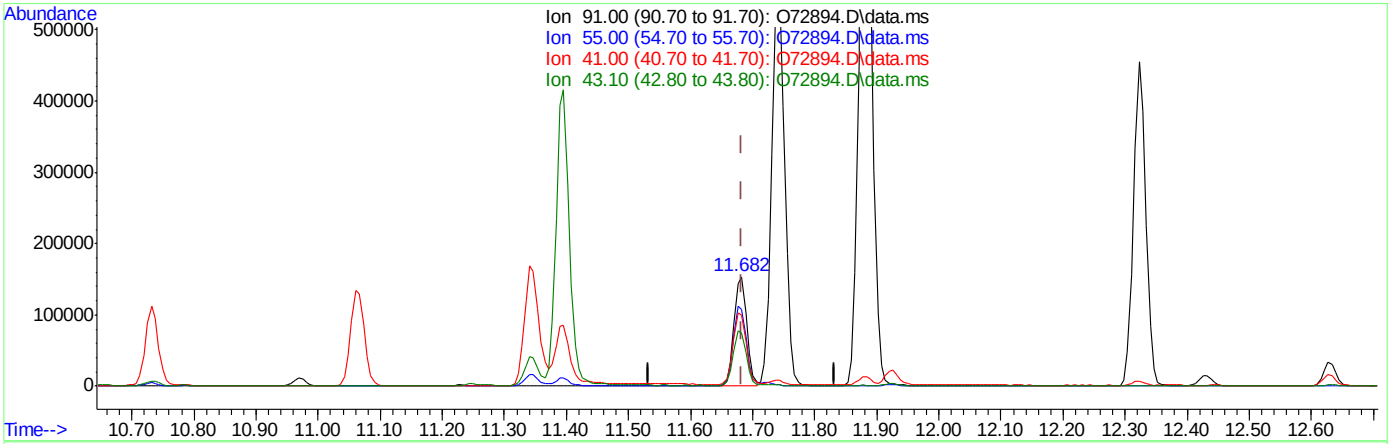
response 208477

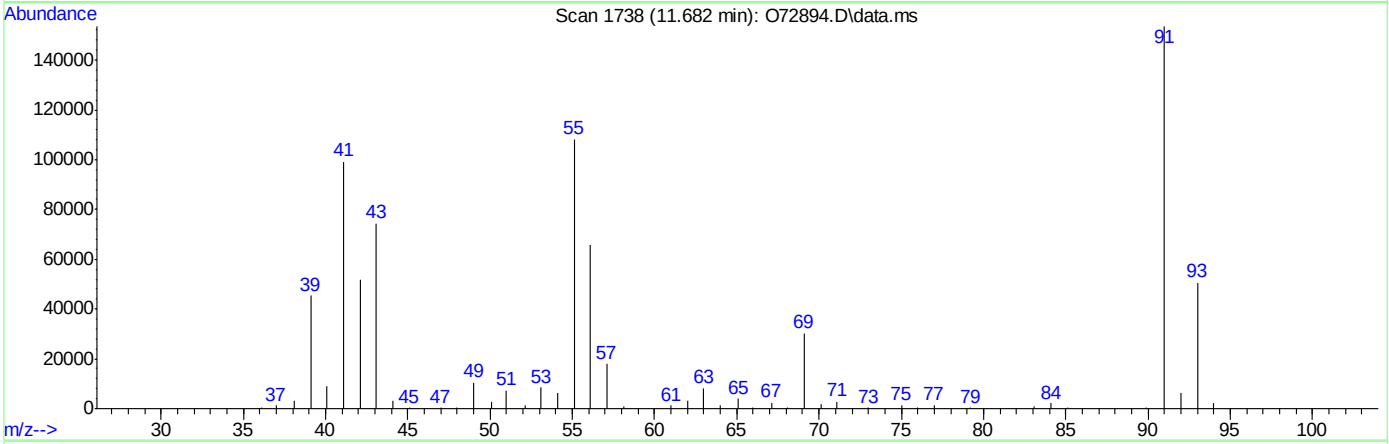
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	69.93
41.00	64.00	62.82
43.10	51.10	47.67

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72894.D
Acq On : 8 Dec 2022 11:35 am
Operator : adelardl
Sample : ICC2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Dec 08 11:52:27 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72894.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 42.99ug/L m

response 216984

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	70.40
41.00	64.00	64.58
43.10	51.10	48.39

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	876904	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	654946	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	245865	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	247634	50.42	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 100.84%			
50) 1,2-Dichloroethane-d4	8.262	65	223479	51.31	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 102.62%			
63) Toluene-d8	10.152	98	873089	49.72	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.44%			
86) 4-Bromofluorobenzene	12.944	174	239228	48.82	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 97.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	448575	88.98	ug/L	98
3) Chloromethane	3.013	50	389177	79.21	ug/L	96
4) 1,3-butadiene	3.184	39	363610	75.69	ug/L	99
5) Vinyl Chloride	3.153	62	394488	77.32	ug/L	96
6) Bromomethane	3.678	94	183416	114.37	ug/L	99
7) Chloroethane	3.879	64	220064	77.65	ug/L	98
8) Trichlorofluoromethane	4.092	101	599610	81.32	ug/L	100
9) Ethyl Ether	4.550	59	286275	75.51	ug/L	99
10) Ethanol	4.769	45	29411	1285.98	ug/L	89
11) 1,2-Dichlorotrifluoroe...	4.824	67	430378	73.33	ug/L	98
12) 1,1-Dichloroethene	4.824	61	541072	75.06	ug/L	97
13) Freon 113	4.879	101	360341	78.66	ug/L	98
14) Carbon Disulfide	4.860	76	990560	72.87	ug/L	100
15) Iodomethane	5.019	142	224870	88.41	ug/L	99
16) Acrolein	5.275	56	284350	356.61	ug/L	100
17) Allyl chloride	5.452	41	510398	79.11	ug/L	99
18) Methylene Chloride	5.586	49	482192	74.05	ug/L	97
19) Acetone	5.653	43	414330	329.94	ug/L	97
20) Methyl acetate	5.799	43	1176709	354.53	ug/L	99
21) trans-1,2-Dichloroethene	5.793	61	519093	74.32	ug/L	99
22) Hexane	5.885	56	242813m	81.37	ug/L	
23) Methyl Tert Butyl Ether	5.915	73	954384	72.07	ug/L	95
24) Tert Butyl Alcohol	6.025	59	218319	622.23	ug/L	98
25) Acetonitrile	6.226	41	346749	789.21	ug/L	99
26) Di-isopropyl ether	6.366	45	1165990	73.83	ug/L	98
27) Chloroprene	6.513	53	467392	82.52	ug/L	99
28) 1,1-Dichloroethane	6.543	63	623022	73.29	ug/L	99
29) Acrylonitrile	6.604	52	462132	382.03	ug/L	97
30) ETBE	6.799	59	1091903	73.42	ug/L	99
31) Vinyl acetate	6.817	43	3657342	364.11	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	367341	73.27	ug/L	99
33) 2,2-Dichloropropane	7.299	77	490141	71.63	ug/L	100
34) Bromochloromethane	7.403	128	200149	77.97	ug/L	97
35) Cyclohexane	7.409	56	547987	77.45	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
36) Chloroform	7.476	83	645757	71.96	ug/L	98
37) Ethyl acetate	7.586	43	1494989	355.82	ug/L	99
38) Tetrahydrofuran	7.665	42	87531	70.62	ug/L	99
40) Carbon Tetrachloride	7.640	117	434328	64.56	ug/L	99
41) 1,1,1-Trichloroethane	7.714	97	550466	70.70	ug/L	99
42) 2-Butanone	7.811	43	682464	351.31	ug/L	98
43) 1,1-Dichloropropene	7.848	75	478879	73.94	ug/L	99
44) tert-Butyl formate	7.957	59	999516	300.71	ug/L	94
45) Propionitrile	8.140	54	446577	825.00	ug/L	95
46) Methacrylonitrile	8.165	41	2503555	772.95	ug/L	99
47) Benzene	8.122	78	1358140	72.78	ug/L	100
48) TAME	8.213	73	922570	71.32	ug/L	98
49) Isobutyl alcohol	8.293	43	187829m	1332.55	ug/L	
51) 1,2-Dichloroethane	8.335	62	560417	73.51	ug/L	99
52) Tert Amyl Alcohol	8.402	59	159315	644.31	ug/L	96
53) Trichloroethene	8.732	95	379822	73.33	ug/L	99
54) Methylcyclohexane	8.726	83	509709	80.07	ug/L	99
55) Dibromomethane	9.177	93	249605	74.12	ug/L	99
56) 1,2-Dichloropropane	9.274	63	357629	74.46	ug/L	97
57) Bromodichloromethane	9.329	83	477120	72.73	ug/L	99
58) Methyl methacrylate	9.457	41	298562	78.45	ug/L	99
59) 1,4-Dioxane	9.530	88	46195	1537.13	ug/L	91
60) 2-Chloroethyl vinyl ether	9.878	63	1181393	344.34	ug/L	98
61) cis-1,3-Dichloropropene	9.969	75	544537	74.94	ug/L	99
64) Toluene	10.207	91	1432648	72.77	ug/L	100
65) 2-Nitropropane	10.445	41	219616	165.36	ug/L	93
66) 4-Methyl-2-pentanone	10.561	43	1689772	361.32	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	492398	78.41	ug/L	87
68) Tetrachloroethene	10.603	166	408112	74.45	ug/L	99
69) Ethyl methacrylate	10.731	69	404838	73.91	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	278455	74.16	ug/L	98
71) Dibromochloromethane	10.969	129	386294	72.27	ug/L	99
72) 1,3-Dichloropropane	11.067	76	554537	73.12	ug/L	100
73) 1,2-Dibromoethane	11.231	107	345610	74.71	ug/L	99
74) 3,3-dimethyl-1-butanol	11.347	57	719205	2421.73	ug/L	100
75) 2-hexanone	11.396	43	1144256	364.80	ug/L	99
76) 1-Chlorohexane	11.682	91	424502m	77.50	ug/L	
77) Ethylbenzene	11.743	91	1638245	74.16	ug/L	100
78) Chlorobenzene	11.743	112	975767	74.58	ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.792	131	341278	72.47	ug/L	99
80) m,p-Xylene	11.883	91	2587710	153.76	ug/L	100
81) o-Xylene	12.322	91	1251246	76.68	ug/L	100
82) Styrene	12.377	104	987038	83.63	ug/L	99
83) Bromoform	12.432	173	231131	70.69	ug/L	99
84) Isopropylbenzene	12.627	105	1482660	76.50	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	127091	77.53	ug/L	94
88) n-Propylbenzene	13.054	91	1791566	71.55	ug/L	100
89) Bromobenzene	13.066	156	434660	98.67	ug/L	99
90) 1,1,2,2-Tetrachloroethane	13.127	83	408592	66.43	ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	1296274	75.57	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

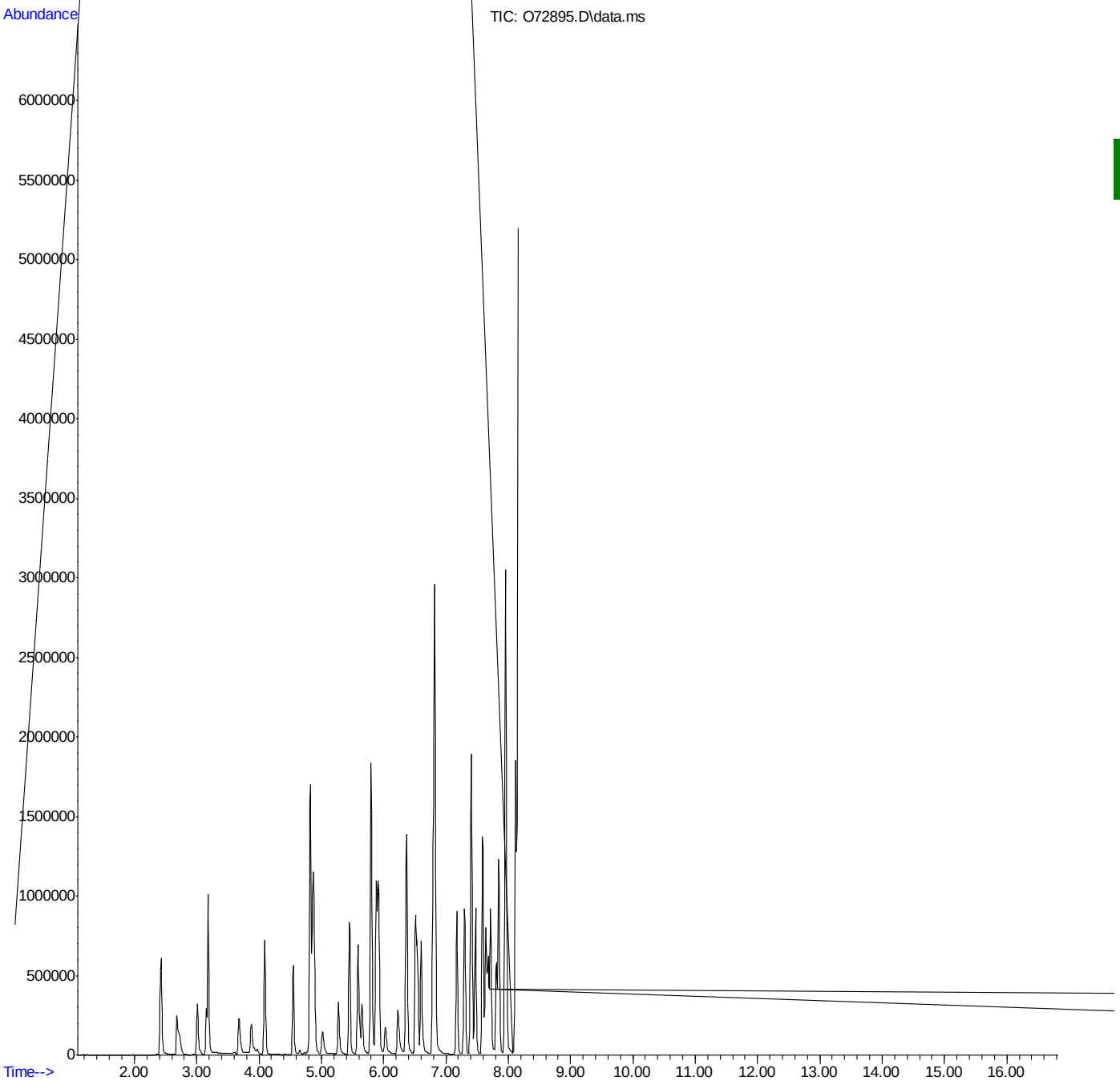
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	1115369	70.82	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	103070	74.49	ug/L	96
94) 1,2,3-Trichloropropane	13.286	110	120372	69.19	ug/L	99
95) Cyclohexanone	13.353	55	38414	342.40	ug/L	95
96) 4-Chlorotoluene	13.408	91	1115369	70.82	ug/L	98
97) tert-Butylbenzene	13.578	91	696708	71.79	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	1247263	74.18	ug/L	99
100) Pentachloroethane	13.627	167	209300	68.42	ug/L	98
101) sec-Butylbenzene	13.761	105	1391343	73.09	ug/L	99
102) 4-Isopropyltoluene	13.895	119	1233066	75.50	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	755430	71.13	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	1276742	75.30	ug/L	99
105) 1,4-Dichlorobenzene	14.109	146	801575	70.93	ug/L	99
106) n-Butylbenzene	14.328	92	671564	78.73	ug/L	100
107) Benzyl Chloride	14.352	126	125764	73.70	ug/L	94
108) 1,2-Dichlorobenzene	14.541	146	736404	73.05	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	64780	72.96	ug/L	99
110) Hexachlorobutadiene	15.840	225	159870	78.66	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	467961	77.73	ug/L	99
112) Naphthalene	16.175	128	1171810	76.45	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	426653	78.01	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:46:16 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



8.6.17

8

Manual Integration Approval Summary

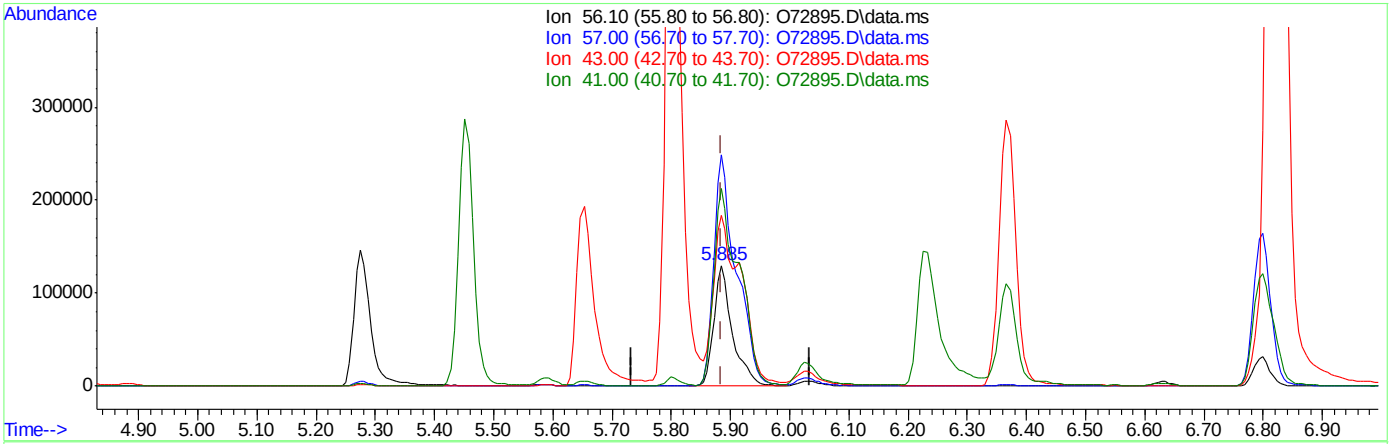
Sample Number: VO2866-IC2866
Lab FileID: O72895.D
Injection Time: 12/08/22 12:00
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

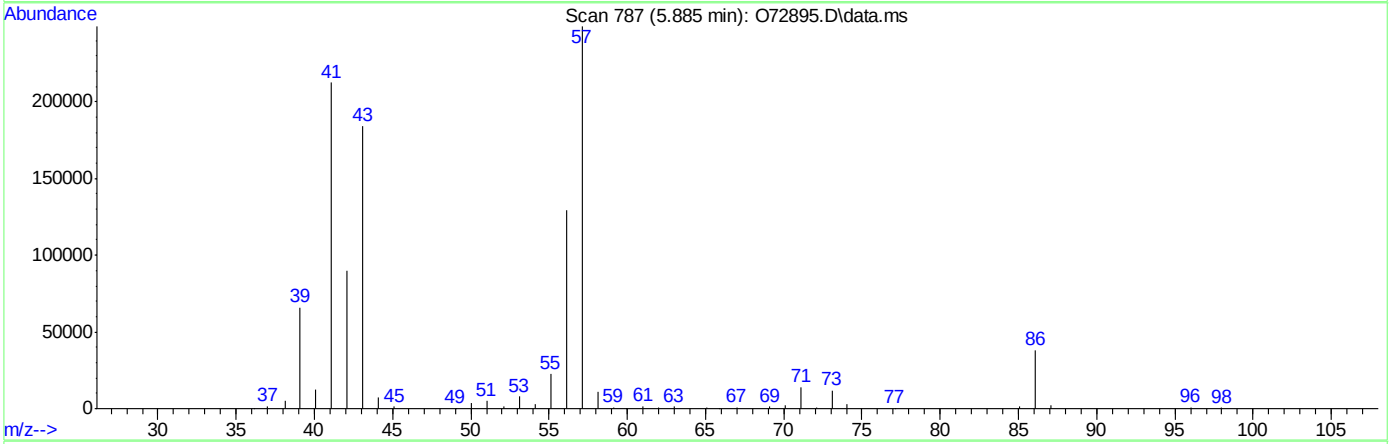
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.29	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(22) Hexane

5.885min (0.000) 93.00ug/L

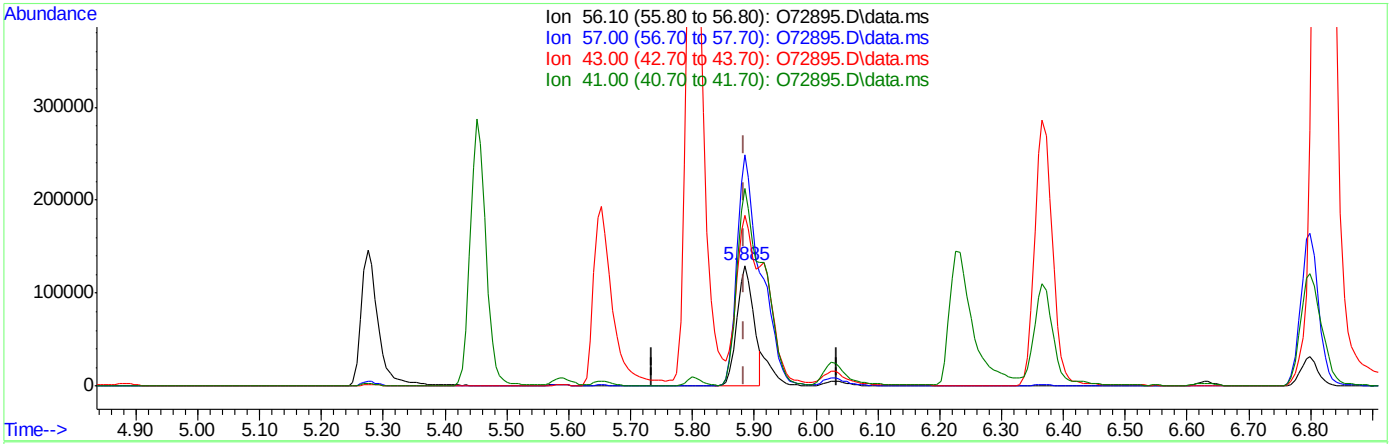
response 281686

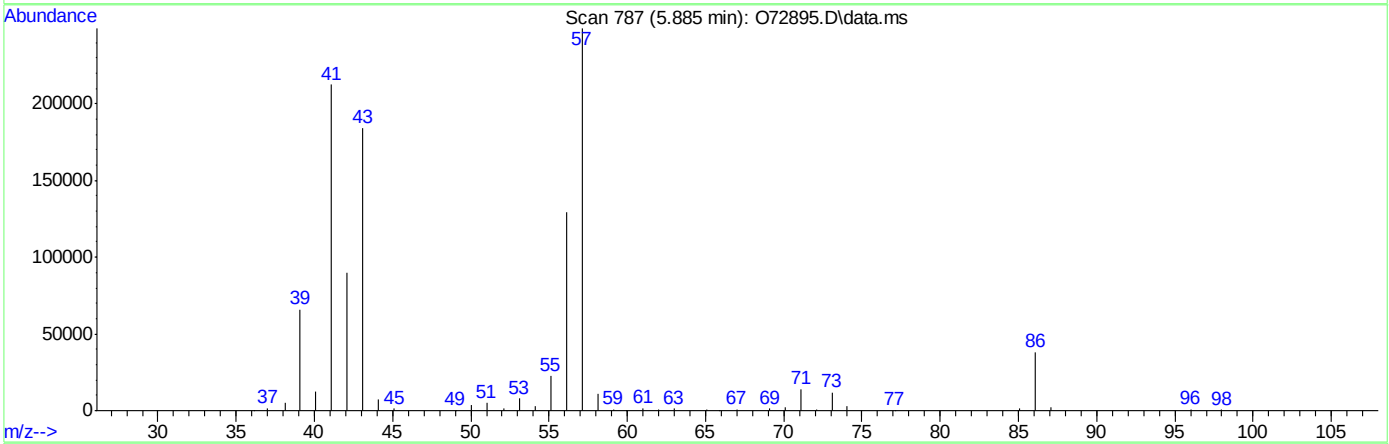
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	192.21
43.00	149.90	138.66
41.00	165.70	162.91

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(22) Hexane

5.885min (0.000) 81.37ug/L m

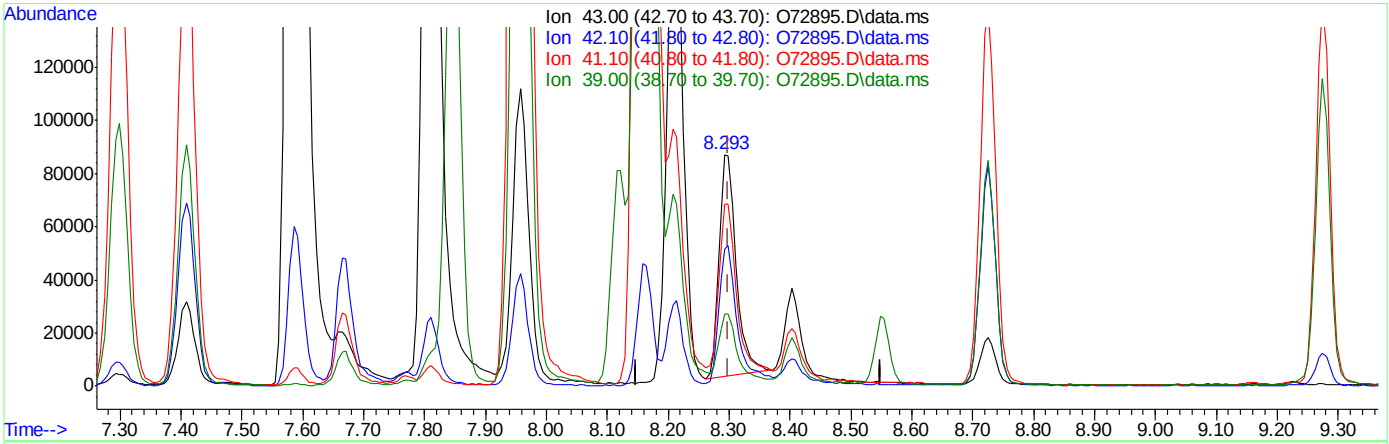
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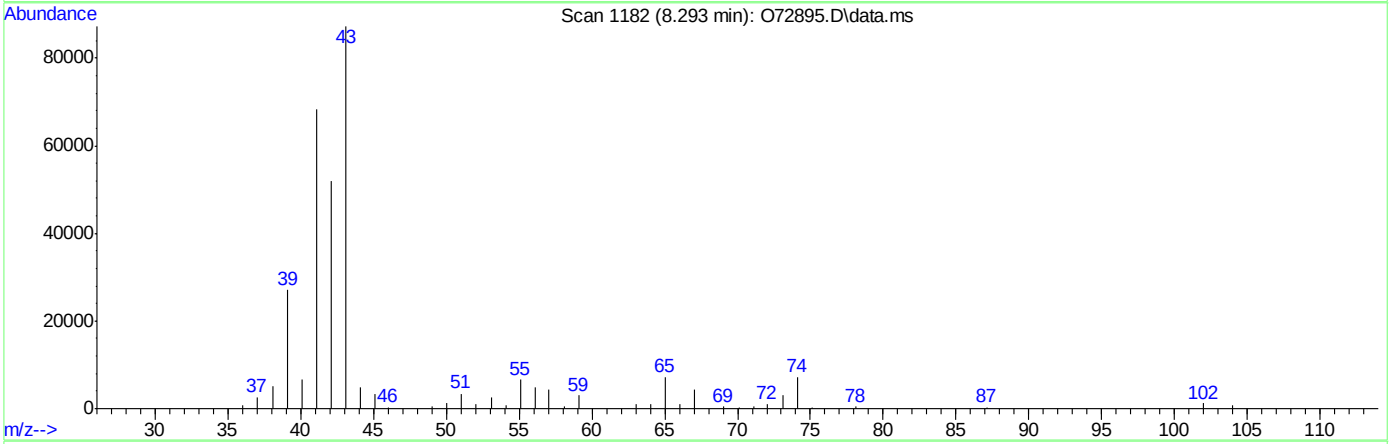
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	192.21
43.00	149.90	142.05
41.00	165.70	164.02

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 1152.34ug/L

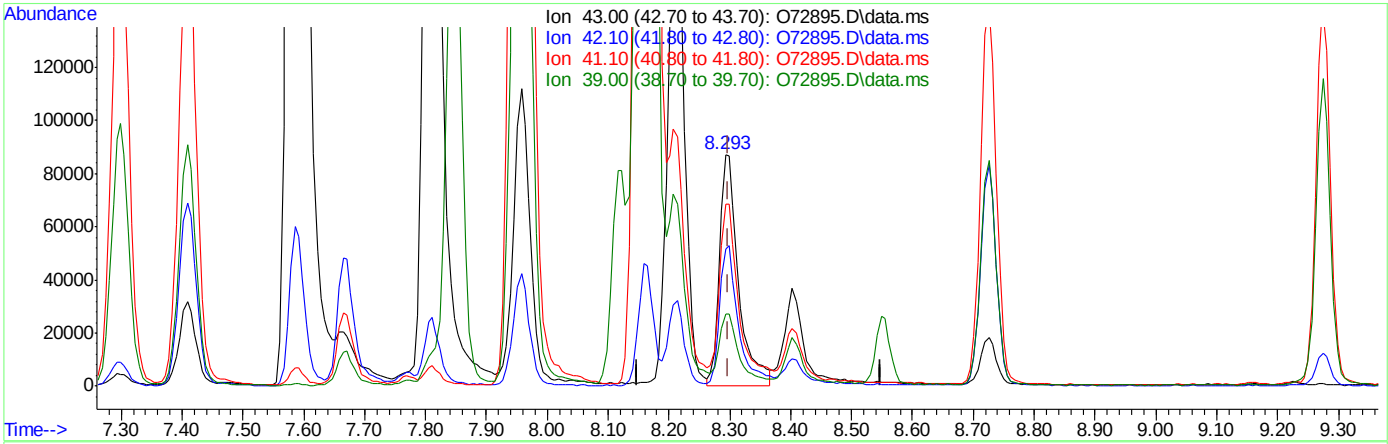
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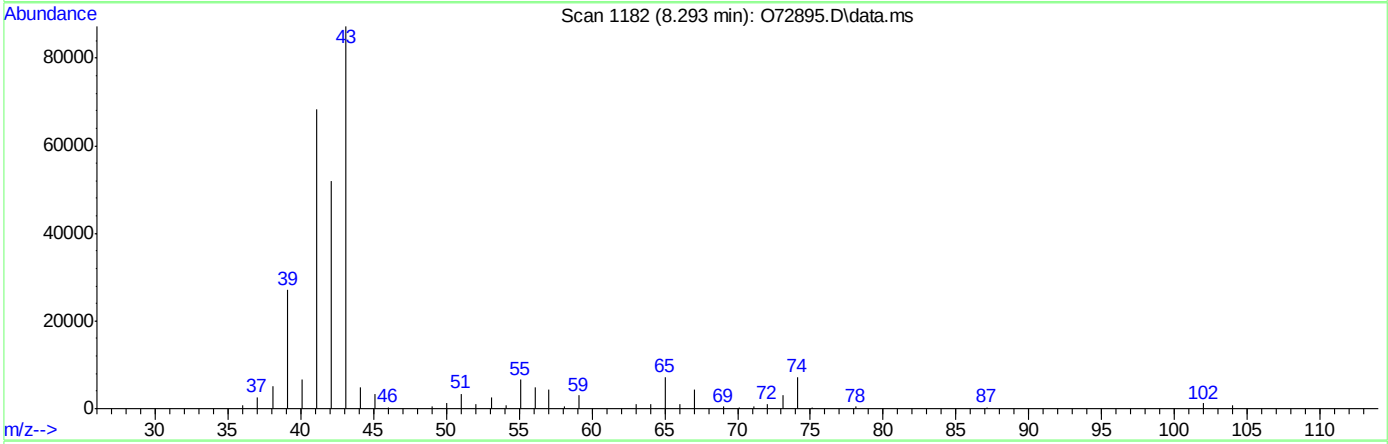
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	60.32
41.10	78.00	73.47
39.00	30.80	28.73

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 1332.55ug/L m

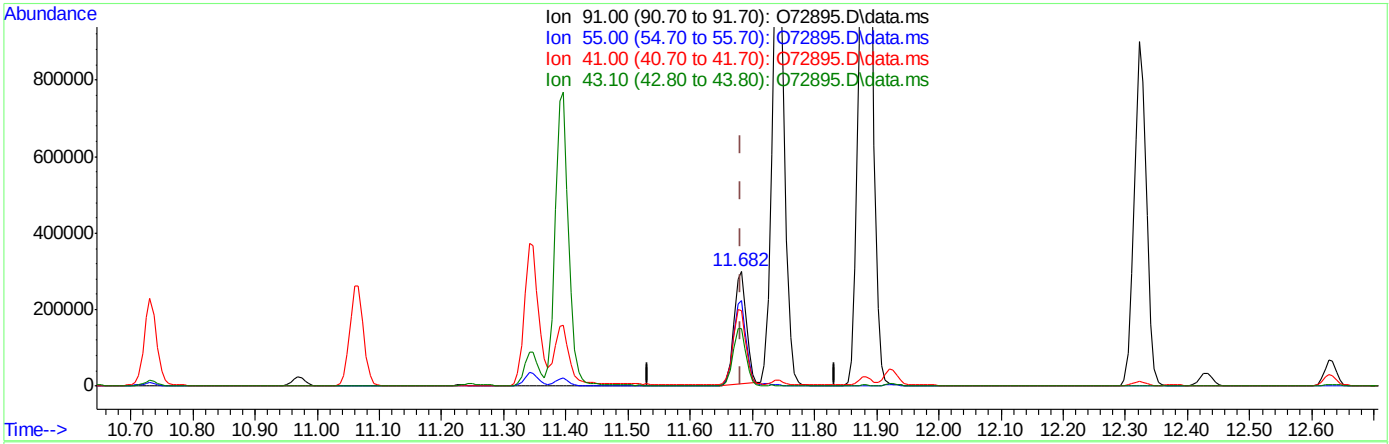
response 187829

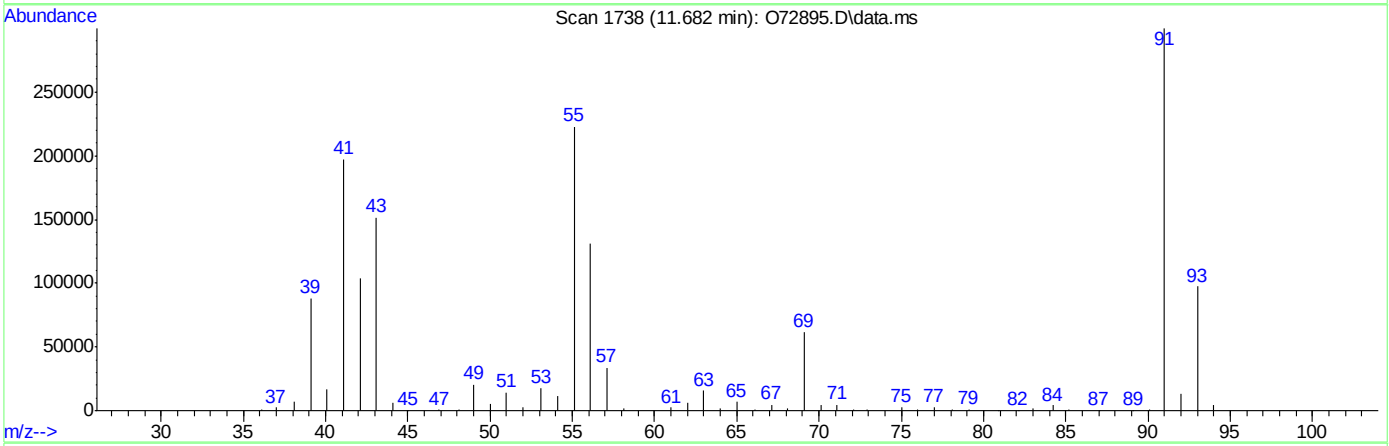
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	59.42
41.10	78.00	78.42
39.00	30.80	31.07

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 74.53ug/L

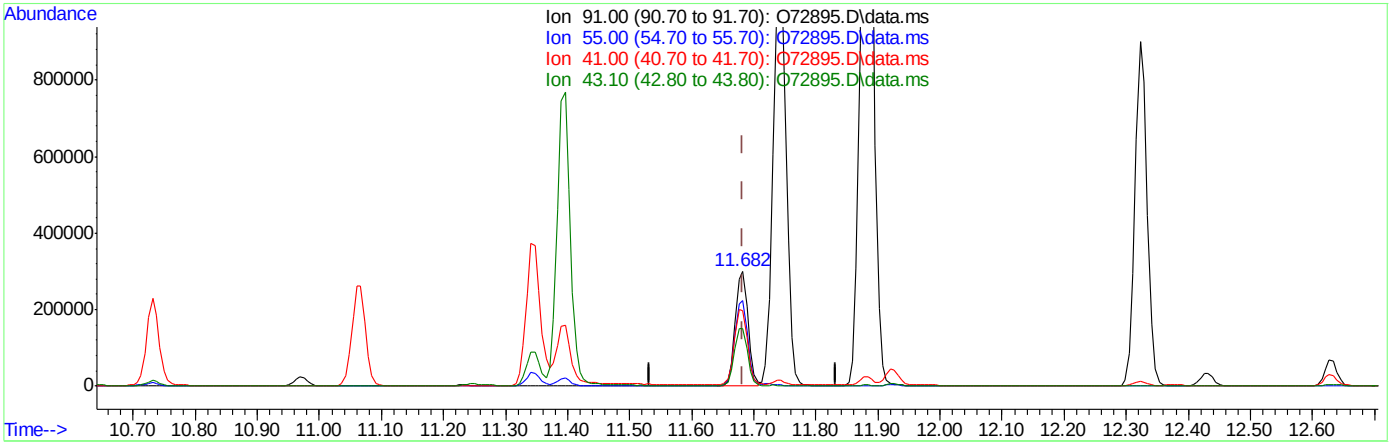
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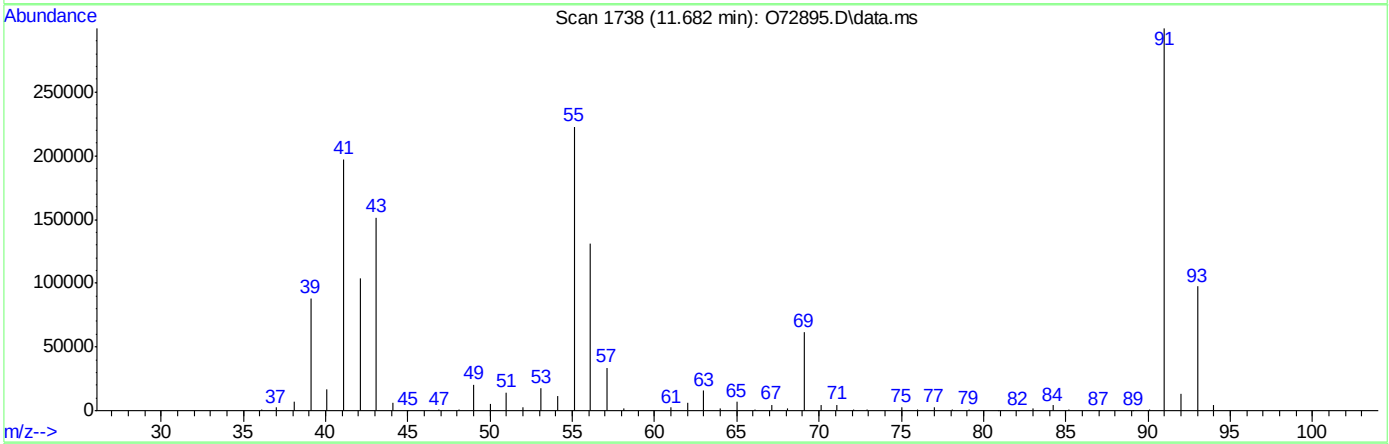
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	73.94
41.00	64.00	64.61
43.10	51.10	49.89

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72895.D
Acq On : 8 Dec 2022 12:00 pm
Operator : adelardl
Sample : IC2866-6 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Dec 08 12:35:22 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72895.D\data.ms

(76) 1-Chlorohexane

11.682min (0.000) 77.50ug/L m

response 424502

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	74.27
41.00	64.00	65.82
43.10	51.10	50.54

O72896.D

Manual Integrations APPROVED (compounds with "m" flag)

Karen Watson 12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	873217	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	634594	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	221224	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	246992	50.51	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.02%			
50) 1,2-Dichloroethane-d4	8.262	65	227094	52.36	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 104.72%			
63) Toluene-d8	10.152	98	864760	50.82	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.64%			
86) 4-Bromofluorobenzene	12.944	174	224538	50.92	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 101.84%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	663599	132.18	ug/L	98
3) Chloromethane	3.019	50	592194	121.03	ug/L	99
4) 1,3-butadiene	3.190	39	513604	111.48	ug/L	100
5) Vinyl Chloride	3.160	62	576767	113.52	ug/L	97
6) Bromomethane	3.684	94	289602	181.35	ug/L	98
7) Chloroethane	3.879	64	318983	113.03	ug/L	98
8) Trichlorofluoromethane	4.098	101	873877	119.02	ug/L	100
9) Ethyl Ether	4.550	59	419137	111.02	ug/L	98
10) Ethanol	4.775	45	33030	1450.32	ug/L	100
11) 1,2-Dichlorotrifluoroe...	4.824	67	622523	106.52	ug/L	99
12) 1,1-Dichloroethene	4.824	61	787950	109.77	ug/L	99
13) Freon 113	4.885	101	514026	112.68	ug/L	99
14) Carbon Disulfide	4.867	76	1434461	105.97	ug/L	99
15) Iodomethane	5.025	142	392539	126.66	ug/L	98
16) Acrolein	5.281	56	412853	519.95	ug/L	99
17) Allyl chloride	5.458	41	768958	119.69	ug/L	99
18) Methylene Chloride	5.592	49	698307	117.00	ug/L	98
19) Acetone	5.653	43	587940	470.16	ug/L	99
20) Methyl acetate	5.805	43	1710134	517.41	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	759315	109.17	ug/L	98
22) Hexane	5.885	56	338276m	109.81	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	1402867	106.38	ug/L	99
24) Tert Butyl Alcohol	6.031	59	278870	798.17	ug/L	95
25) Acetonitrile	6.232	41	468142	1070.00	ug/L	100
26) Di-isopropyl ether	6.372	45	1703921	108.35	ug/L	99
27) Chloroprene	6.513	53	699983	124.11	ug/L	99
28) 1,1-Dichloroethane	6.543	63	901344	106.48	ug/L	99
29) Acrylonitrile	6.604	52	676387	561.51	ug/L	99
30) ETBE	6.799	59	1609567	108.68	ug/L	99
31) Vinyl acetate	6.823	43	5538840	553.76	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	530623	106.28	ug/L	98
33) 2,2-Dichloropropane	7.299	77	731450	107.35	ug/L	98
34) Bromochloromethane	7.403	128	287133	112.33	ug/L	97
35) Cyclohexane	7.409	56	791121	112.28	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
36) Chloroform	7.476	83	941191	105.32 ug/L	99
37) Ethyl acetate	7.592	43	2247136	537.10 ug/L	100
38) Tetrahydrofuran	7.671	42	123298	104.29 ug/L	96
40) Carbon Tetrachloride	7.640	117	661305	98.72 ug/L	100
41) 1,1,1-Trichloroethane	7.720	97	813279	104.89 ug/L	99
42) 2-Butanone	7.811	43	982648	507.98 ug/L	98
43) 1,1-Dichloropropene	7.848	75	692742	107.41 ug/L	98
44) tert-Butyl formate	7.957	59	1576464	476.29 ug/L	97
45) Propionitrile	8.140	54	615321	1141.53 ug/L	97
46) Methacrylonitrile	8.165	41	3598282	1115.63 ug/L	100
47) Benzene	8.122	78	1961734	105.56 ug/L	99
48) TAME	8.213	73	1358198	105.43 ug/L	99
49) Isobutyl alcohol	8.299	43	247787m	1765.34 ug/L	
51) 1,2-Dichloroethane	8.335	62	804084	105.92 ug/L	99
52) Tert Amyl Alcohol	8.409	59	212149	861.60 ug/L	97
53) Trichloroethene	8.732	95	548552	106.35 ug/L	99
54) Methylcyclohexane	8.726	83	725402	114.43 ug/L	99
55) Dibromomethane	9.177	93	360387	107.47 ug/L	99
56) 1,2-Dichloropropane	9.274	63	519422	108.60 ug/L	98
57) Bromodichloromethane	9.329	83	710260	108.73 ug/L	99
58) Methyl methacrylate	9.457	41	454665	119.97 ug/L	99
59) 1,4-Dioxane	9.530	88	45934	1534.90 ug/L	91
60) 2-Chloroethyl vinyl ether	9.878	63	1732406	507.07 ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	798910	110.42 ug/L	99
64) Toluene	10.207	91	2085892	109.35 ug/L	100
65) 2-Nitropropane	10.445	41	358614	278.67 ug/L	94
66) 4-Methyl-2-pentanone	10.567	43	2505624	552.95 ug/L	98
67) trans-1,3-Dichloropropene	10.615	75	727749	119.60 ug/L	96
68) Tetrachloroethene	10.603	166	592126	111.48 ug/L	99
69) Ethyl methacrylate	10.731	69	614552	118.55 ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	404972	111.32 ug/L	97
71) Dibromochloromethane	10.969	129	580076	112.01 ug/L	100
72) 1,3-Dichloropropane	11.067	76	809167	110.11 ug/L	98
73) 1,2-Dibromoethane	11.231	107	504420	112.53 ug/L	100
74) 3,3-dimethyl-1-butanol	11.347	57	1116987	3881.78 ug/L	99
75) 2-hexanone	11.396	43	1693455	557.21 ug/L	99
76) 1-Chlorohexane	11.682	91	616462m	116.16 ug/L	
77) Ethylbenzene	11.743	91	2363046	110.40 ug/L	99
78) Chlorobenzene	11.743	112	1402576	110.63 ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.798	131	506089	110.92 ug/L	99
80) m,p-Xylene	11.883	91	3719804	228.12 ug/L	100
81) o-Xylene	12.322	91	1827873	115.61 ug/L	99
82) Styrene	12.377	104	1434690	125.45 ug/L	99
83) Bromoform	12.432	173	352914	111.40 ug/L	98
84) Isopropylbenzene	12.627	105	2145993	114.27 ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	193010	130.86 ug/L	98
88) n-Propylbenzene	13.054	91	2587293	114.85 ug/L	99
89) Bromobenzene	13.066	156	627336	Below Cal	98
90) 1,1,2,2-Tetrachloroethane	13.127	83	588502	106.34 ug/L	99
91) 1,3,5-Trimethylbenzene	13.237	105	1872467	121.32 ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
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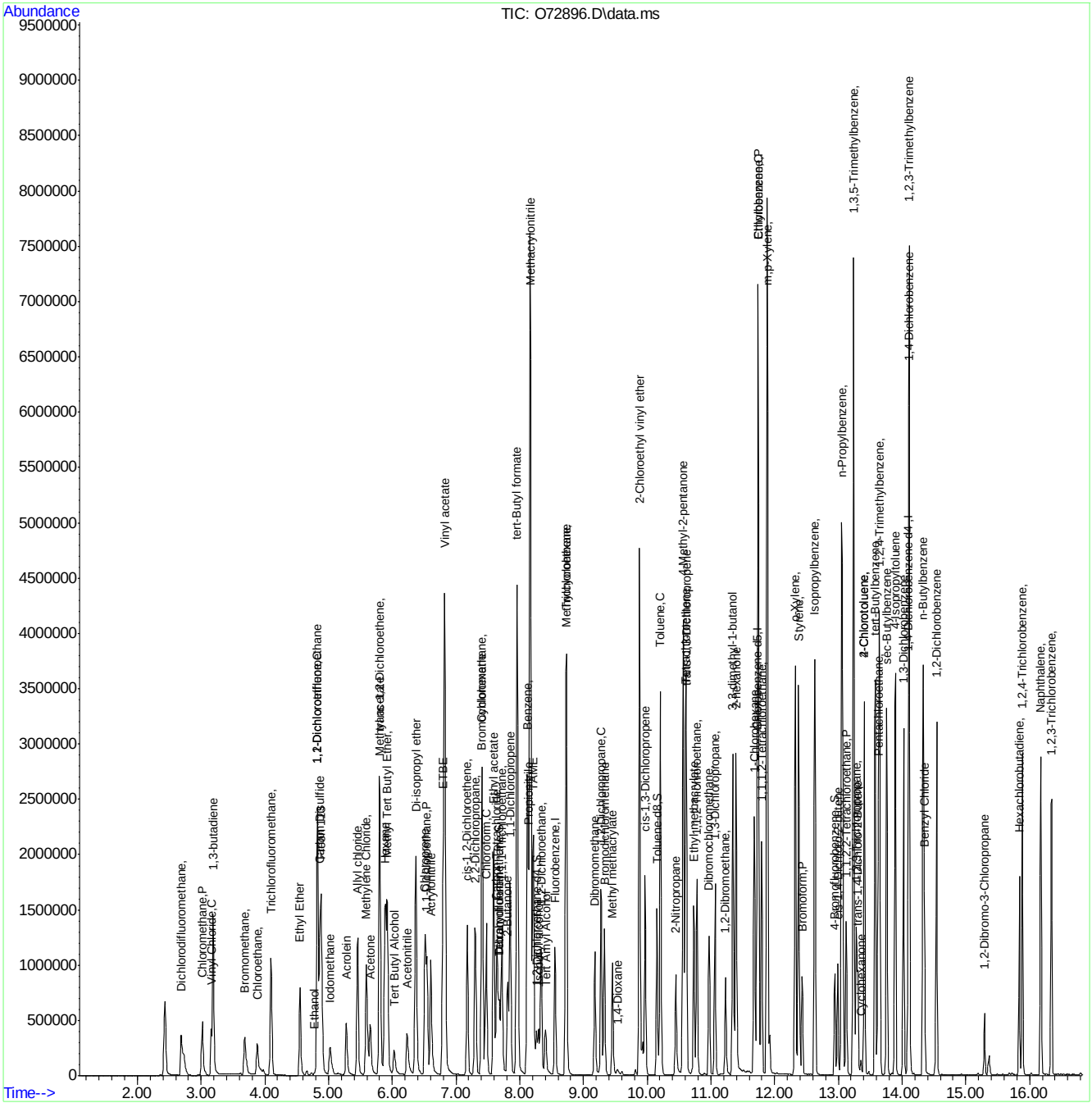
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
92) 2-Chlorotoluene	13.408	91	1621184	114.41	ug/L	98
93) trans-1,4-Dichloro-2-B...	13.304	53	157655	126.63	ug/L	91
94) 1,2,3-Trichloropropane	13.286	110	172800	110.39	ug/L	98
95) Cyclohexanone	13.353	55	42657	422.57	ug/L	97
96) 4-Chlorotoluene	13.408	91	1621184	114.41	ug/L	98
97) tert-Butylbenzene	13.578	91	1008298	115.47	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	1807167	119.46	ug/L	99
100) Pentachloroethane	13.627	167	320740	116.53	ug/L	98
101) sec-Butylbenzene	13.761	105	1992519	116.33	ug/L	100
102) 4-Isopropyltoluene	13.895	119	1776300	120.88	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	1087306	113.79	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	1841667	120.72	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	1146683	112.76	ug/L	97
106) n-Butylbenzene	14.328	92	970245	126.42	ug/L	99
107) Benzyl Chloride	14.352	126	200279	130.44	ug/L	99
108) 1,2-Dichlorobenzene	14.541	146	1056470	116.47	ug/L	98
109) 1,2-Dibromo-3-Chloropr...	15.291	75	96339	120.59	ug/L	95
110) Hexachlorobutadiene	15.840	225	237836	130.05	ug/L	97
111) 1,2,4-Trichlorobenzene	15.889	180	687159	126.86	ug/L	99
112) Naphthalene	16.175	128	1710270	124.01	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	627555	127.52	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:47:41 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration



Manual Integration Approval Summary

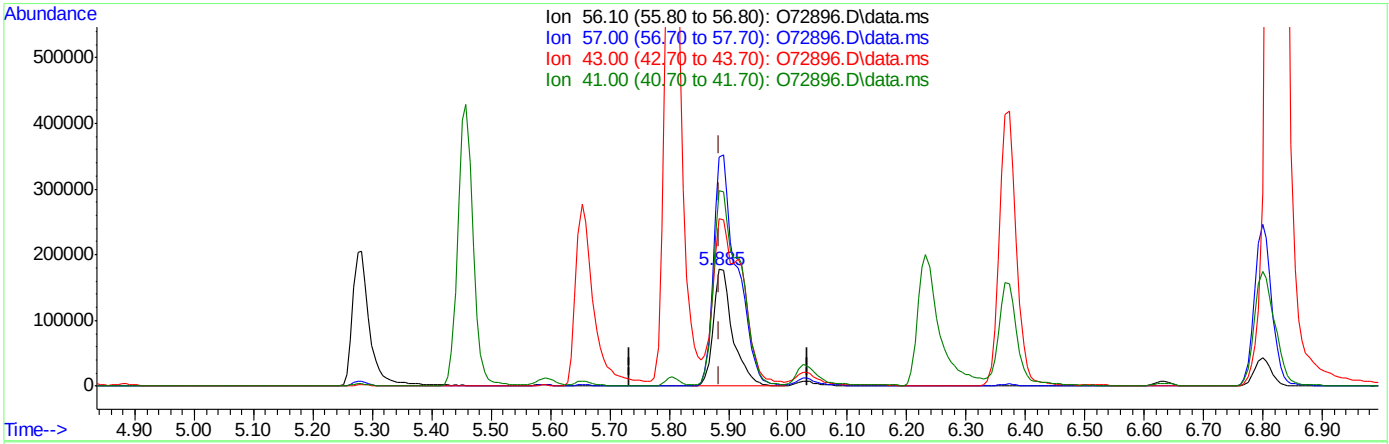
Sample Number: VO2866-IC2866
Lab FileID: O72896.D
Injection Time: 12/08/22 12:25
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

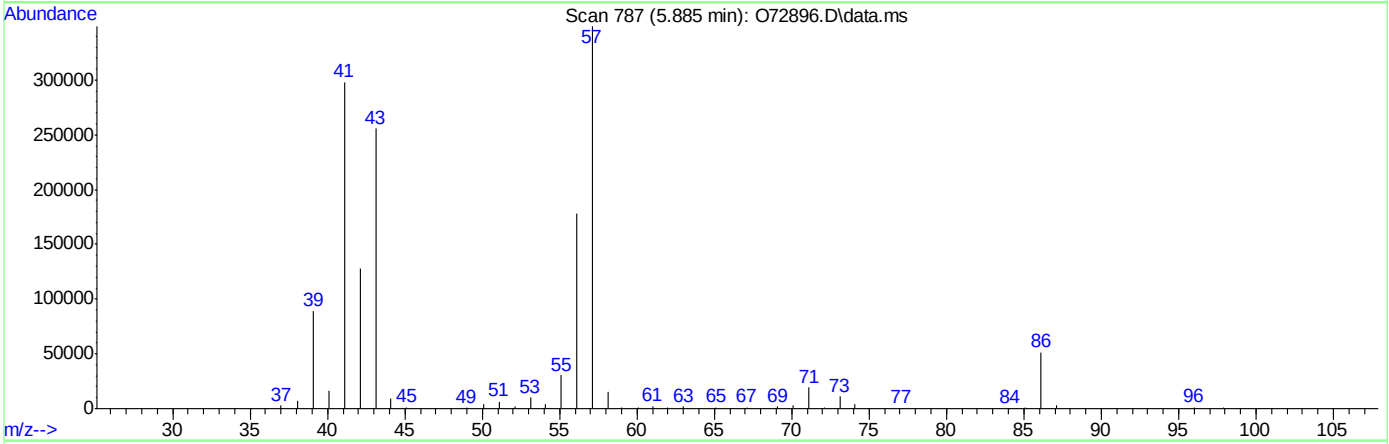
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(22) Hexane

5.885min (-0.000) 127.53ug/L

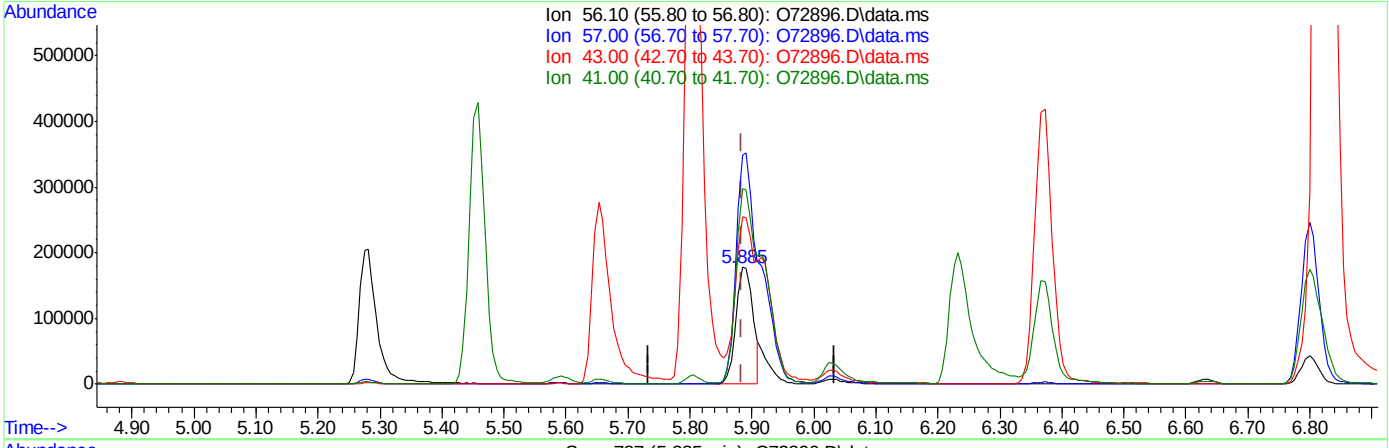
response 401553

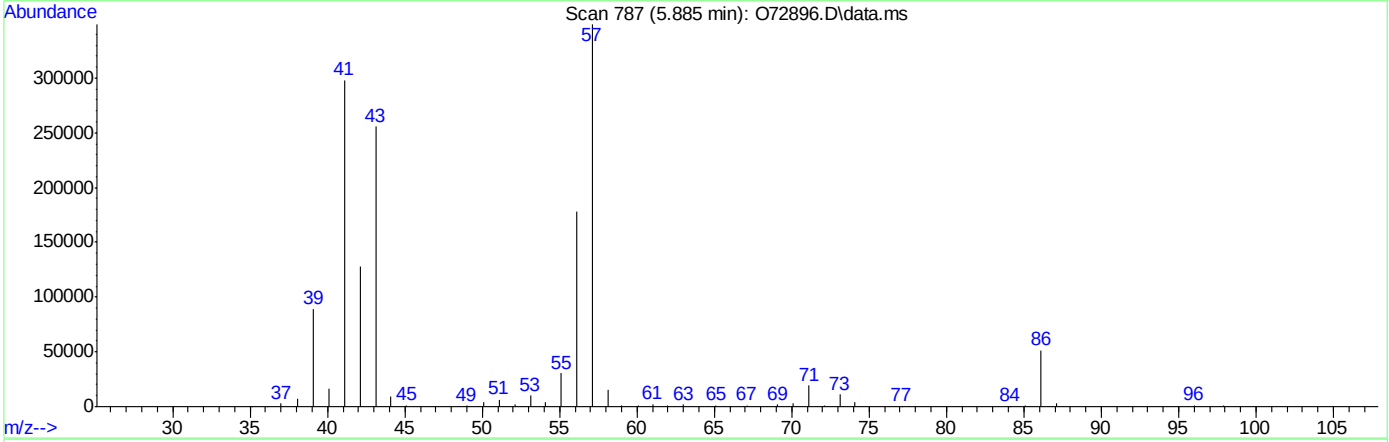
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	196.05
43.00	149.90	140.17
41.00	165.70	166.53

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(22) Hexane

5.885min (-0.000) 109.81ug/L m

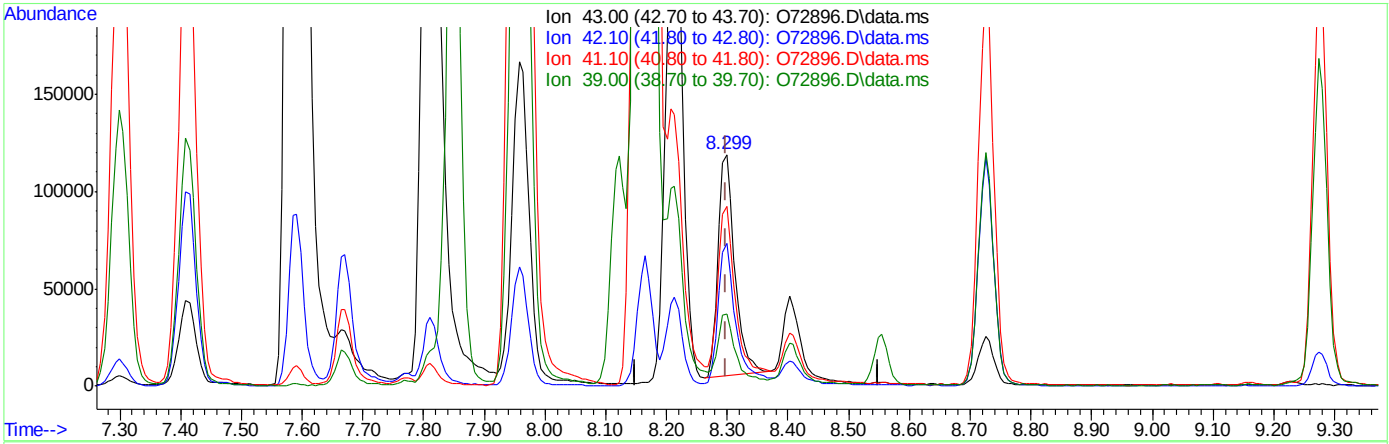
response 338276

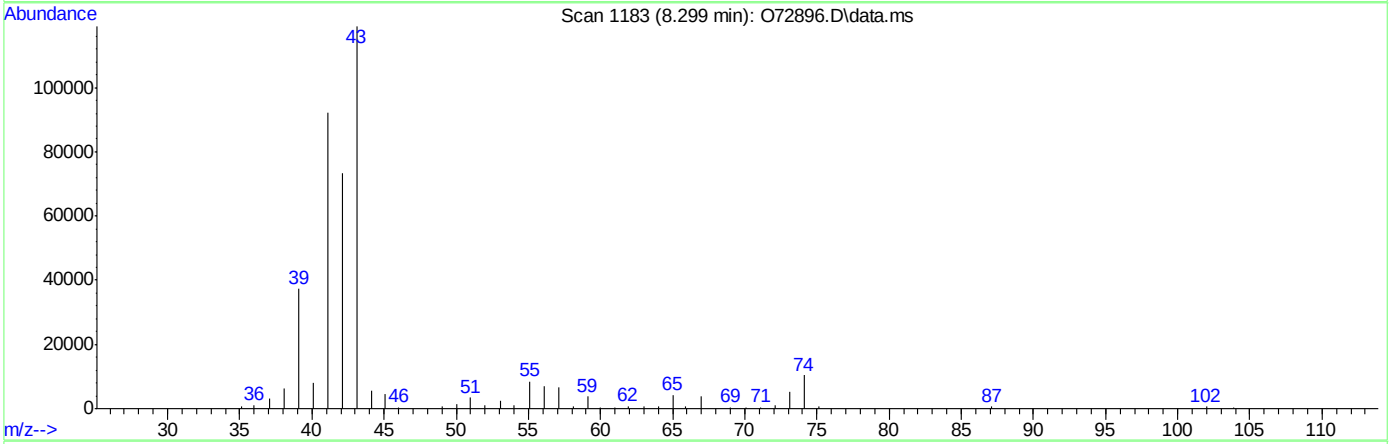
Ion	Exp%	Act%
56.10	100	100
57.00	193.70	196.05
43.00	149.90	143.60
41.00	165.70	167.54

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 1545.01ug/L

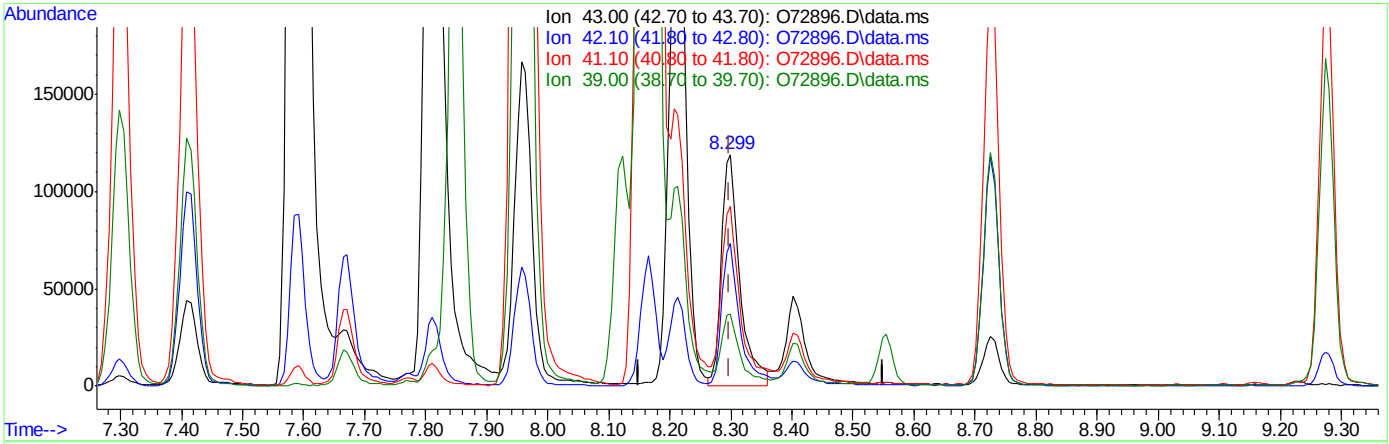
response 216860

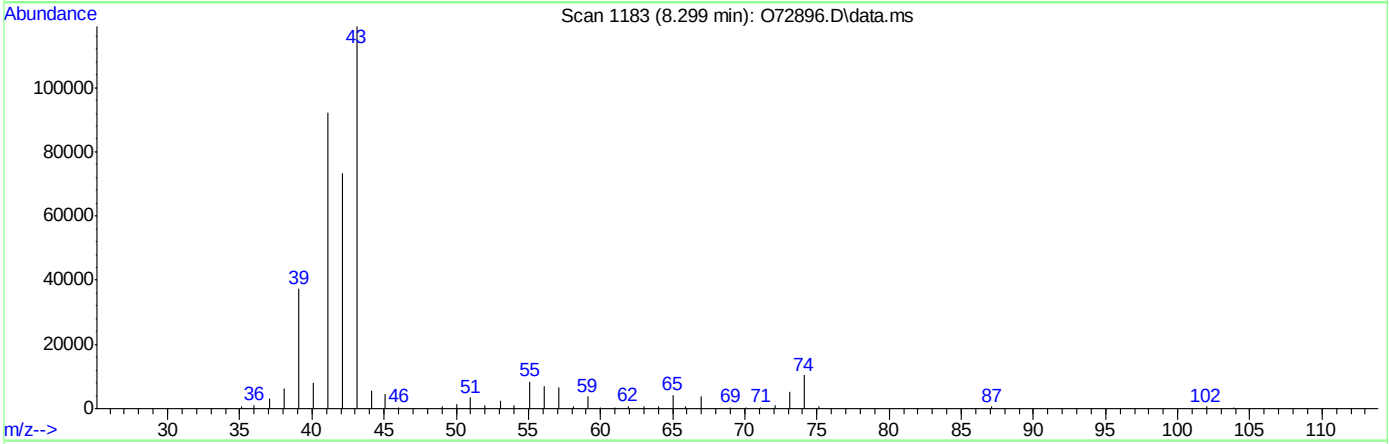
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	62.63
41.10	78.00	73.92
39.00	30.80	29.33

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 1765.34ug/L m

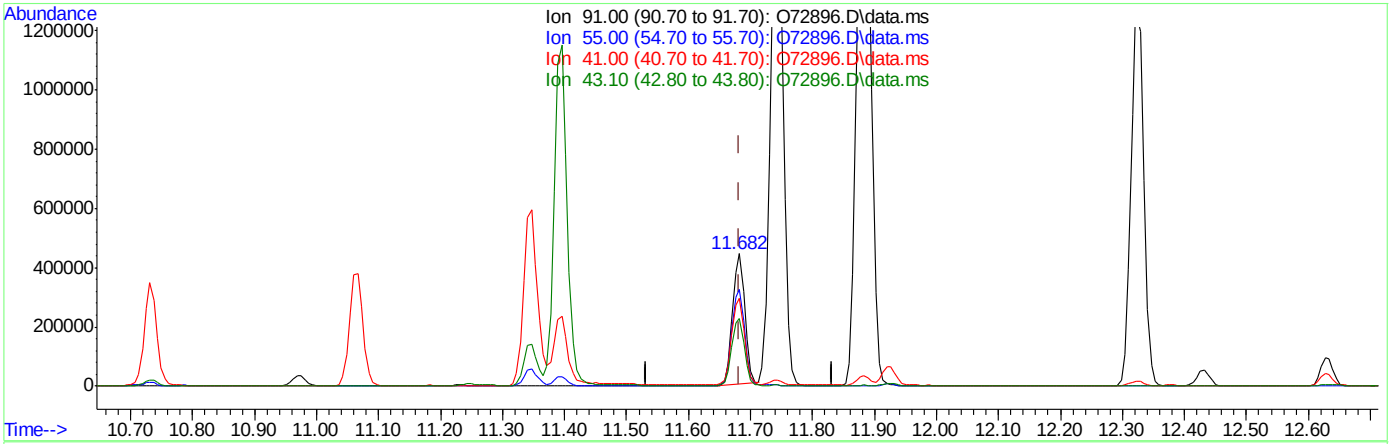
response 247787

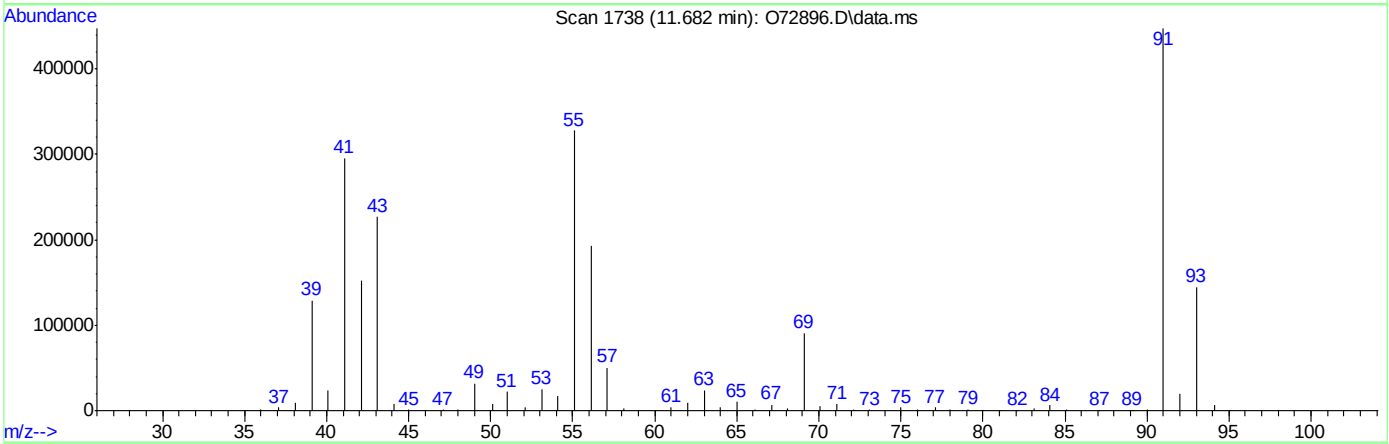
Ion	Exp%	Act%
43.00	100	100
42.10	61.30	61.59
41.10	78.00	77.56
39.00	30.80	31.30

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 112.56ug/L

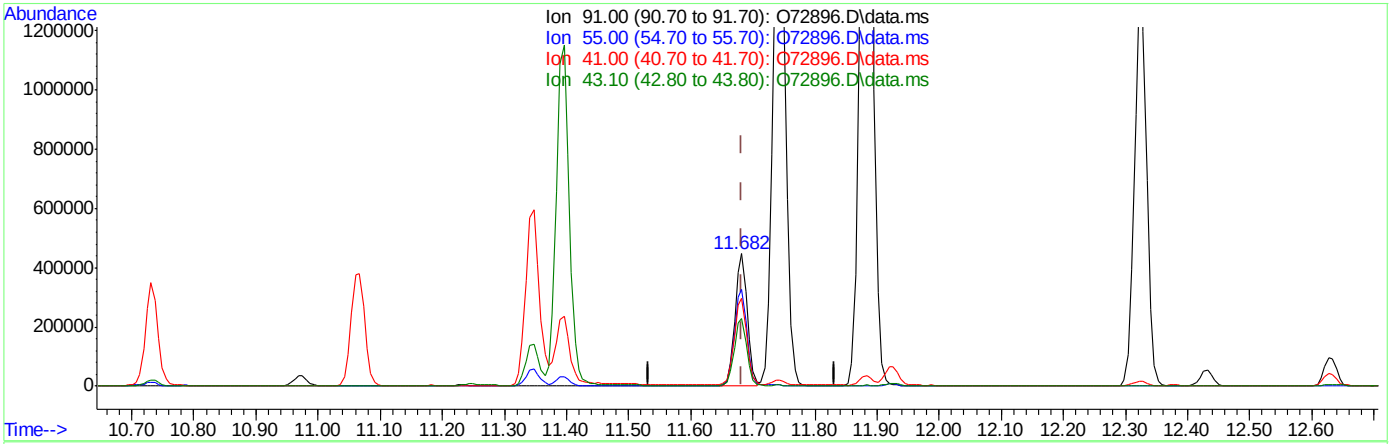
response 597382

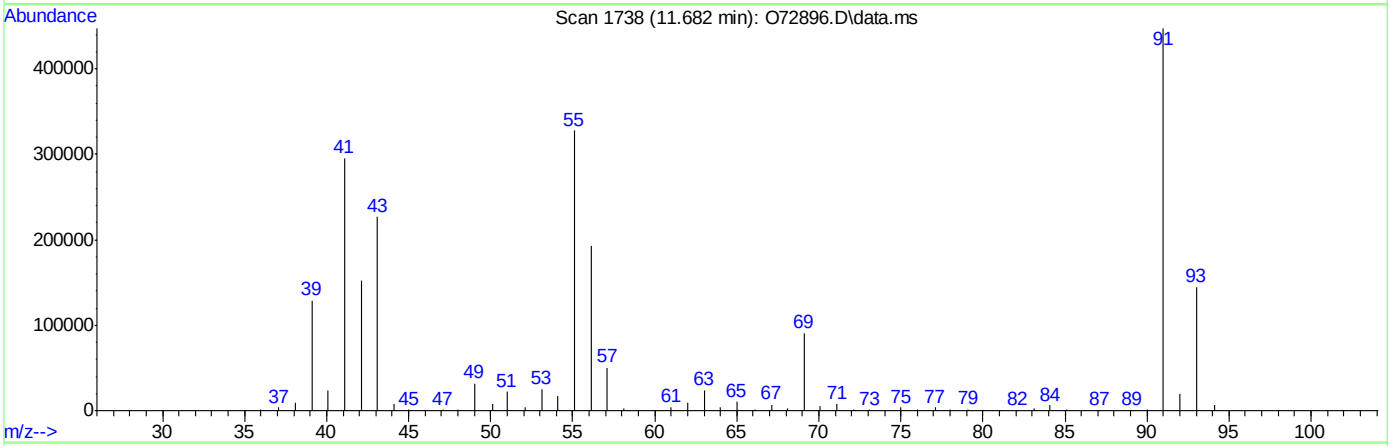
Ion	Exp%	Act%
91.00	100	100
55.00	72.50	72.92
41.00	64.00	64.98
43.10	51.10	50.11

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72896.D
Acq On : 8 Dec 2022 12:25 pm
Operator : adelardl
Sample : IC2866-7 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Dec 08 12:42:44 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Wed Dec 07 14:46:51 2022
Response via : Initial Calibration





TIC: O72896.D\data.ms

(76) 1-Chlorohexane

11.682min (-0.000) 116.16ug/L m

response 616462

Ion	Exp%	Act%
91.00	100	100
55.00	72.50	73.26
41.00	64.00	66.13
43.10	51.10	50.72

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/09/22 16:19

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	907648	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	643262	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	226630	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	252728	49.78	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.56%			
50) 1,2-Dichloroethane-d4	8.262	65	238162	50.62	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 101.24%			
63) Toluene-d8	10.152	98	889229	51.51	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.02%			
86) 4-Bromofluorobenzene	12.944	174	233031	51.73	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 103.46%			
Target Compounds						Qvalue
3) Chloromethane	3.013	50	187909	33.66	ug/L	98
4) 1,3-butadiene	3.184	39	235097	41.94	ug/L	100
5) Vinyl Chloride	3.153	62	196066	34.75	ug/L	98
6) Bromomethane	3.678	94	96717	38.18	ug/L	99
7) Chloroethane	3.879	64	118242	34.58	ug/L	98
8) Trichlorofluoromethane	4.098	101	306363	35.13	ug/L	99
9) Ethyl Ether	4.549	59	153310	36.63	ug/L	99
10) Ethanol	4.775	45	12858	665.46	ug/L	93
11) 1,2-Dichlorotrifluoroe...	4.824	67	225357	35.24	ug/L	98
12) 1,1-Dichloroethene	4.824	61	272826	34.71	ug/L	99
13) Freon 113	4.885	101	178193	33.32	ug/L	99
14) Carbon Disulfide	4.860	76	554315	36.55	ug/L	99
15) Iodomethane	5.019	142	73778	36.92	ug/L	93
16) Acrolein	5.275	56	148670	170.86	ug/L	99
17) Allyl chloride	5.452	41	299280	42.69	ug/L	100
18) Methylene Chloride	5.592	49	262235	35.65	ug/L	98
19) Acetone	5.653	43	242688	192.12	ug/L	99
20) Methyl acetate	5.805	43	674346	203.09	ug/L	100
21) trans-1,2-Dichloroethene	5.793	61	271874	35.77	ug/L	99
22) Hexane	5.885	56	130583m	36.59	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	525124	37.57	ug/L	97
24) Tert Butyl Alcohol	6.025	59	115206	389.81	ug/L	97
25) Acetonitrile	6.232	41	179901	349.43	ug/L	98
26) Di-isopropyl ether	6.366	45	662999	38.93	ug/L	99
27) Chloroprene	6.512	53	291564	46.41	ug/L	99
28) 1,1-Dichloroethane	6.543	63	345473	37.47	ug/L	98
29) Acrylonitrile	6.604	52	269103	185.36	ug/L	98
30) ETBE	6.799	59	594578	39.16	ug/L	98
31) Vinyl acetate	6.823	43	2295110	237.18	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	203834	36.94	ug/L	100
33) 2,2-Dichloropropane	7.299	77	247459	38.07	ug/L	98
34) Bromochloromethane	7.403	128	112682	38.38	ug/L	99
35) Cyclohexane	7.409	56	301035	37.97	ug/L	99
36) Chloroform	7.476	83	351154	36.24	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) Ethyl acetate	7.591	43	885793	201.32	ug/L	99
38) Tetrahydrofuran	7.671	42	52596	39.43	ug/L	99
40) Carbon Tetrachloride	7.640	117	222598	39.04	ug/L	96
41) 1,1,1-Trichloroethane	7.713	97	292306	37.97	ug/L	99
42) 2-Butanone	7.811	43	392104	196.98	ug/L	100
43) 1,1-Dichloropropene	7.848	75	249377	35.14	ug/L	100
44) tert-Butyl formate	7.957	59	407892	162.33	ug/L	99
45) Propionitrile	8.140	54	239975	391.01	ug/L	98
46) Methacrylonitrile	8.158	41	1421062	397.79	ug/L	100
47) Benzene	8.122	78	722056	35.55	ug/L	99
48) TAME	8.213	73	517979	39.42	ug/L	100
49) Isobutyl alcohol	8.299	43	91633m	717.41	ug/L	
51) 1,2-Dichloroethane	8.335	62	304317	36.85	ug/L	98
52) Tert Amyl Alcohol	8.402	59	81605	392.45	ug/L	98
53) Trichloroethene	8.732	95	203454	35.42	ug/L	99
54) Methylcyclohexane	8.725	83	280530	37.76	ug/L	97
55) Dibromomethane	9.177	93	133513	35.68	ug/L	97
56) 1,2-Dichloropropane	9.274	63	187875	35.48	ug/L	98
57) Bromodichloromethane	9.329	83	261284	39.57	ug/L	98
58) Methyl methacrylate	9.457	41	181635	44.37	ug/L	98
60) 2-Chloroethyl vinyl ether	9.878	63	694800	199.96	ug/L	100
61) cis-1,3-Dichloropropene	9.963	75	288136	39.41	ug/L	96
64) Toluene	10.207	91	774041	37.61	ug/L	100
65) 2-Nitropropane	10.445	41	98977	194.03	ug/L	97
66) 4-Methyl-2-pentanone	10.560	43	941506	204.65	ug/L	100
67) trans-1,3-Dichloropropene	10.615	75	278846	44.22	ug/L	98
68) Tetrachloroethene	10.603	166	222807	38.22	ug/L	98
69) Ethyl methacrylate	10.731	69	215600	42.38	ug/L	98
70) 1,1,2-Trichloroethane	10.780	83	156714	39.52	ug/L	98
71) Dibromochloromethane	10.969	129	198183	40.76	ug/L	97
72) 1,3-Dichloropropane	11.066	76	288971	36.15	ug/L	99
73) 1,2-Dibromoethane	11.231	107	188289	39.46	ug/L	97
74) 3,3-dimethyl-1-butanol	11.341	57	307441	1934.38	ug/L	98
75) 2-hexanone	11.396	43	638180	209.23	ug/L	98
76) 1-Chlorohexane	11.682	91	240150m	41.22	ug/L	
77) Ethylbenzene	11.743	91	894462	38.59	ug/L	100
78) Chlorobenzene	11.743	112	535093	38.49	ug/L	99
79) 1,1,1,2-Tetrachloroethane	11.792	131	182701	41.81	ug/L	97
80) m,p-Xylene	11.883	91	1394635	78.74	ug/L	100
81) o-Xylene	12.322	91	698913	40.19	ug/L	99
82) Styrene	12.377	104	533279	41.48	ug/L	99
83) Bromoform	12.432	173	120732	42.91	ug/L	99
84) Isopropylbenzene	12.627	105	821046	40.02	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	64074	41.55	ug/L	99
88) n-Propylbenzene	13.054	91	981354	41.84	ug/L	99
89) Bromobenzene	13.066	156	230310	39.05	ug/L	97
90) 1,1,2,2-Tetrachloroethane	13.127	83	230281	41.79	ug/L	98
91) 1,3,5-Trimethylbenzene	13.237	105	685145	41.40	ug/L	99
92) 2-Chlorotoluene	13.407	91	621988	42.14	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	60643	45.97	ug/L	86

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

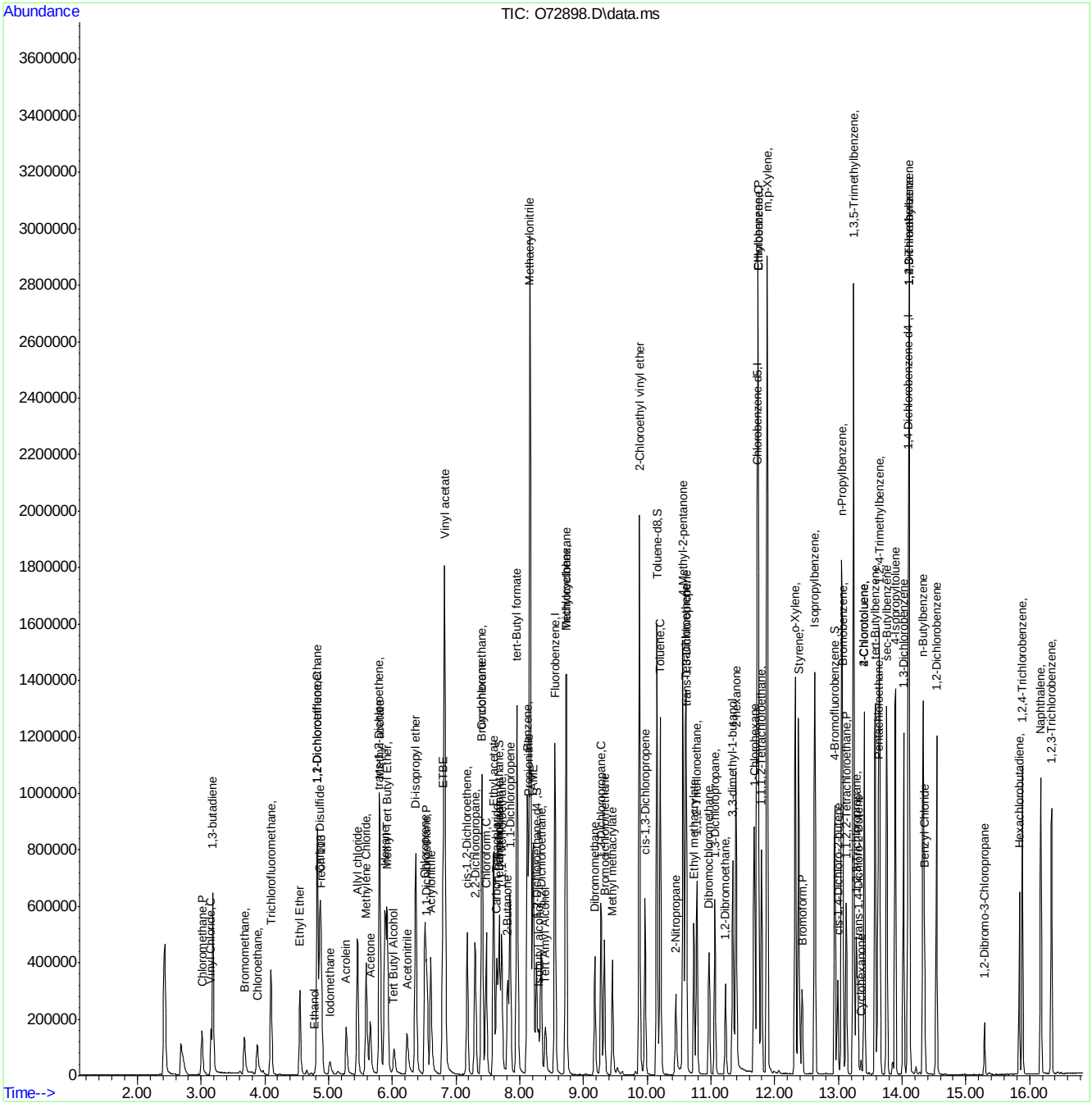
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) 1,2,3-Trichloropropane	13.286	110	62063	37.65	ug/L	97
95) Cyclohexanone	13.353	55	18649	190.45	ug/L	93
96) 4-Chlorotoluene	13.407	91	621988	42.14	ug/L	99
97) tert-Butylbenzene	13.578	91	383959	41.81	ug/L	98
99) 1,2,4-Trimethylbenzene	13.645	105	685087	42.41	ug/L	100
100) Pentachloroethane	13.627	167	115426	46.78	ug/L	97
101) sec-Butylbenzene	13.761	105	800131	43.55	ug/L	100
102) 4-Isopropyltoluene	13.895	119	689230	43.30	ug/L	100
103) 1,3-Dichlorobenzene	14.023	146	427439	41.67	ug/L	99
104) 1,2,3-Trimethylbenzene	14.109	105	742860	44.98	ug/L	100
105) 1,4-Dichlorobenzene	14.109	146	443038	40.48	ug/L	97
106) n-Butylbenzene	14.328	92	349520	41.42	ug/L	100
107) Benzyl Chloride	14.352	126	65487	46.21	ug/L	98
108) 1,2-Dichlorobenzene	14.541	146	408582	41.04	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	32079	41.95	ug/L	97
110) Hexachlorobutadiene	15.840	225	84684	39.08	ug/L	98
111) 1,2,4-Trichlorobenzene	15.889	180	255935	41.75	ug/L	98
112) Naphthalene	16.175	128	644995	42.14	ug/L	100
113) 1,2,3-Trichlorobenzene	16.346	180	234774	41.26	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 15:35:14 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

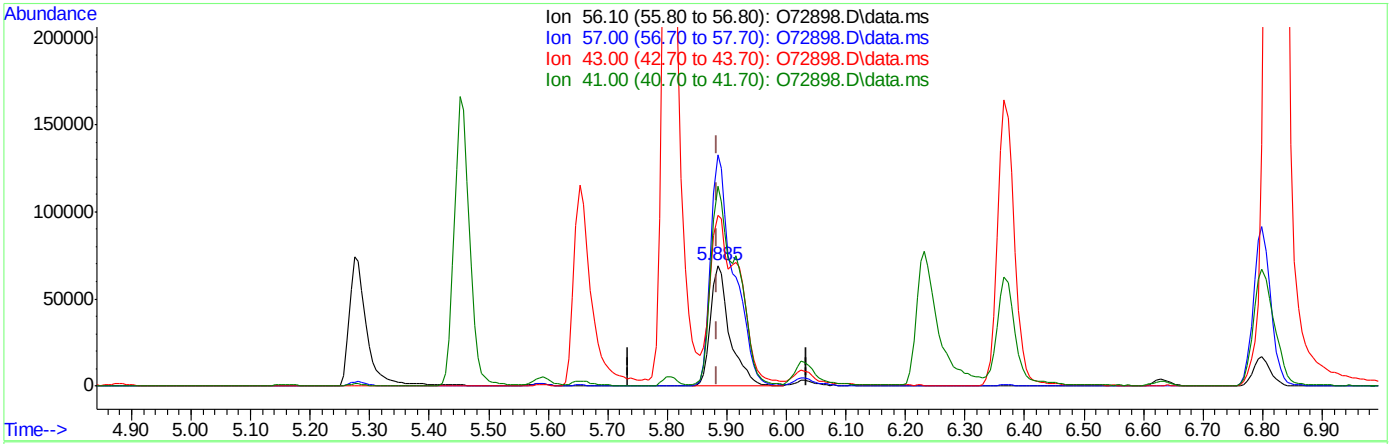
Sample Number: VO2866-ICV2866
Lab FileID: O72898.D
Injection Time: 12/08/22 13:16
Method: SW846 8260D
Analyst approved: 12/08/22 15:43 Adelard Lefebvre
Supervisor approved: 12/09/22 16:19 Karen Watson

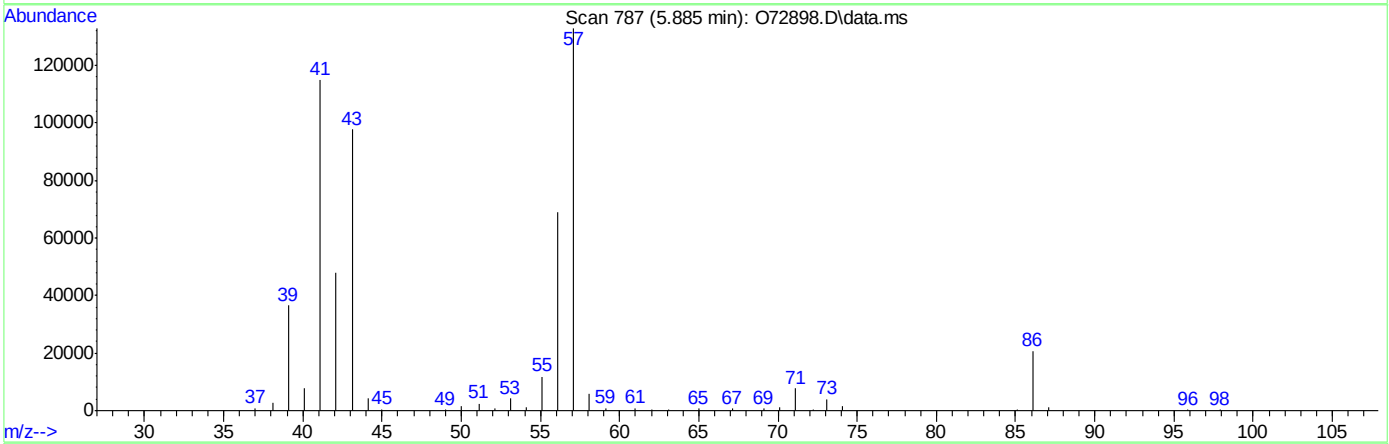
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Missed peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 43.31ug/L

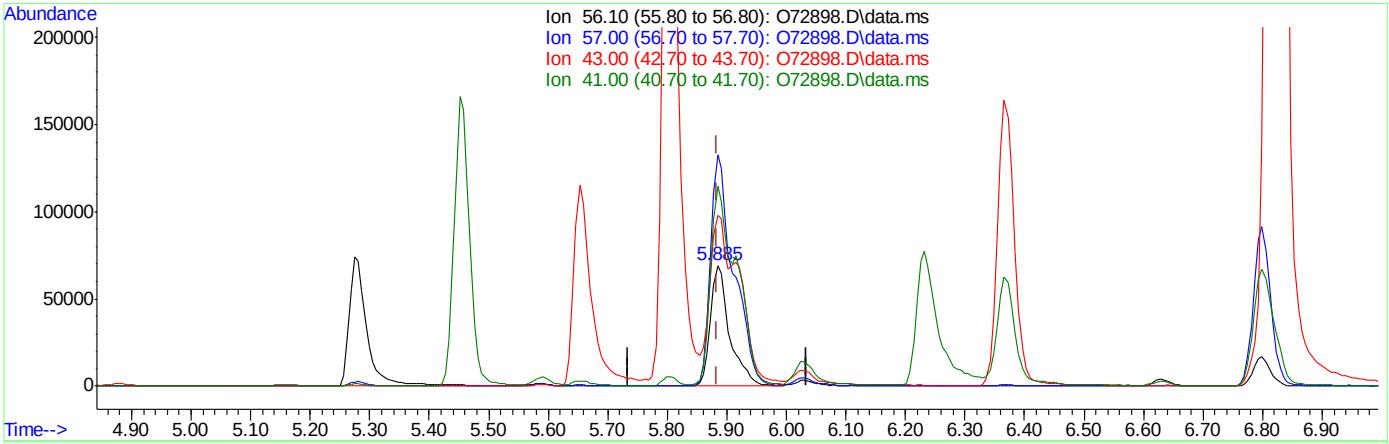
response 154572

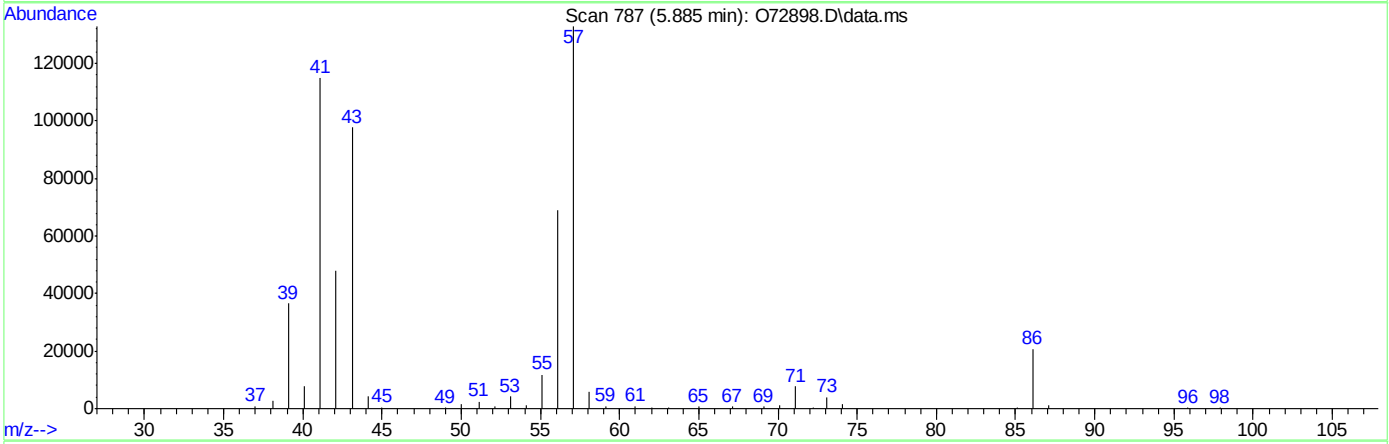
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	137.39
41.00	165.60	165.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 43.31ug/L

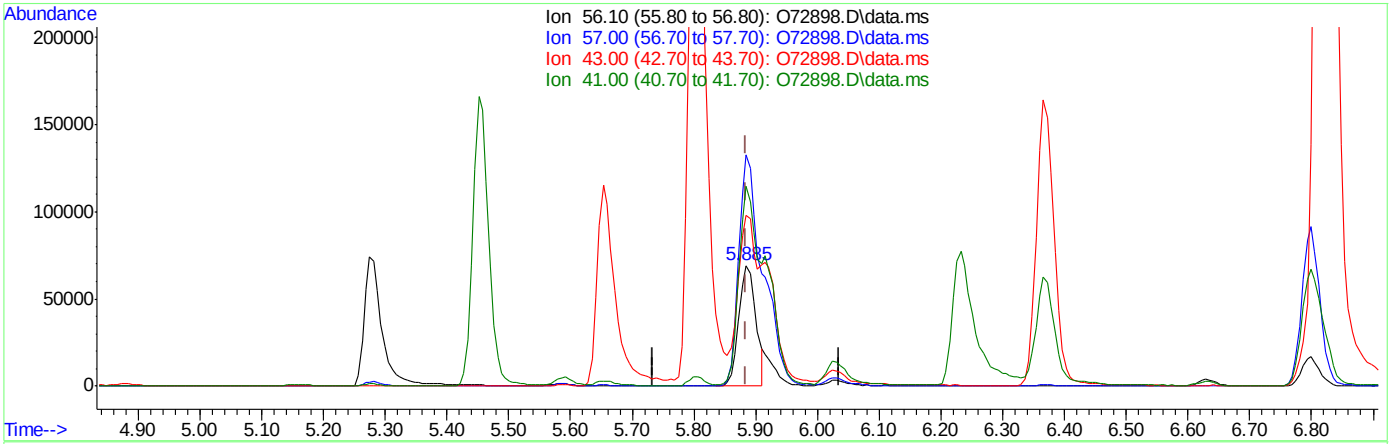
response 154572

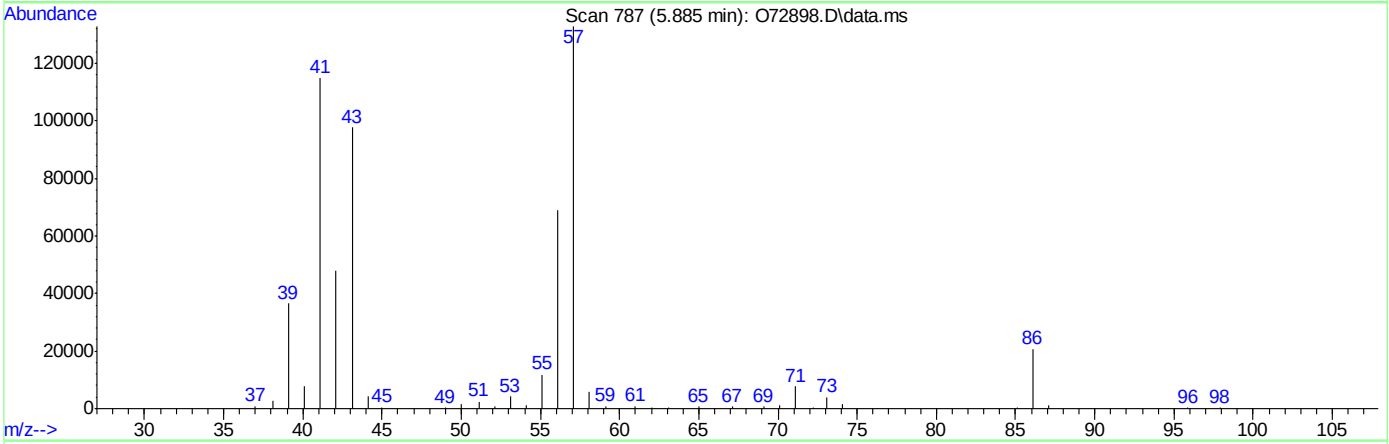
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	137.39
41.00	165.60	165.28

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(22) Hexane

5.885min (-0.000) 36.59ug/L m

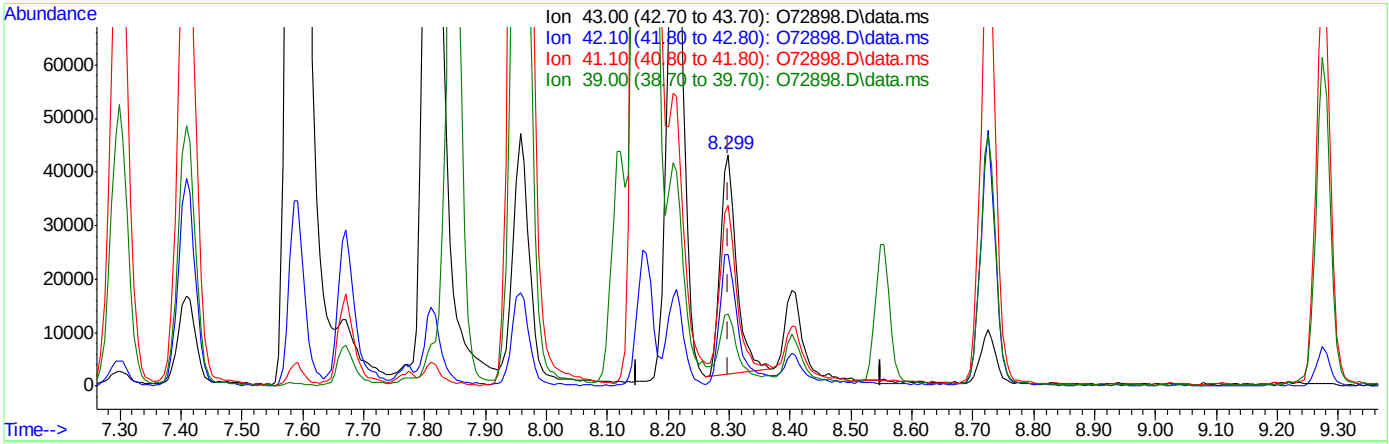
response 130583

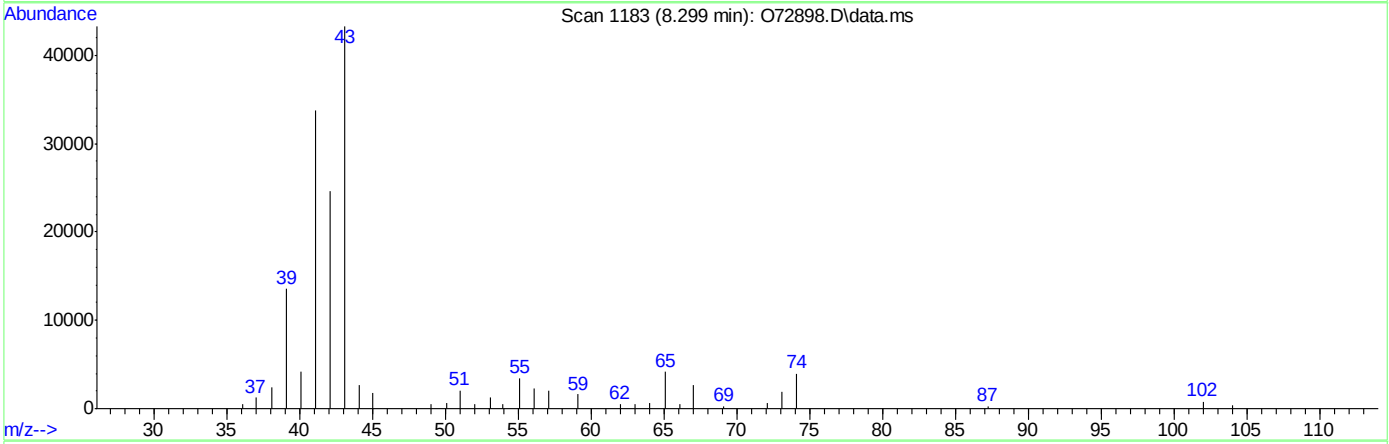
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	192.16
43.00	143.30	141.43
41.00	165.60	166.16

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 600.66ug/L

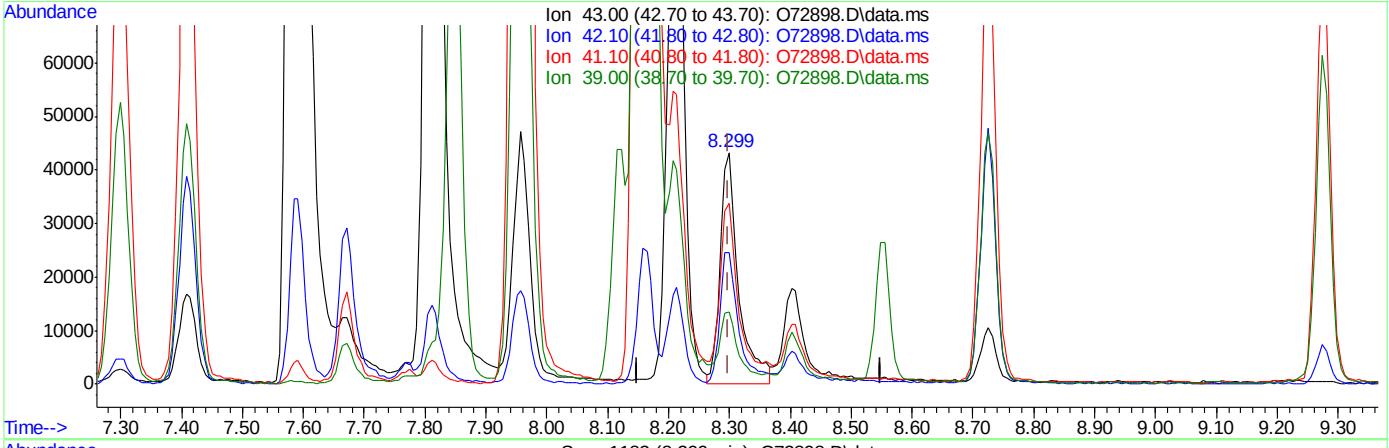
response 76506

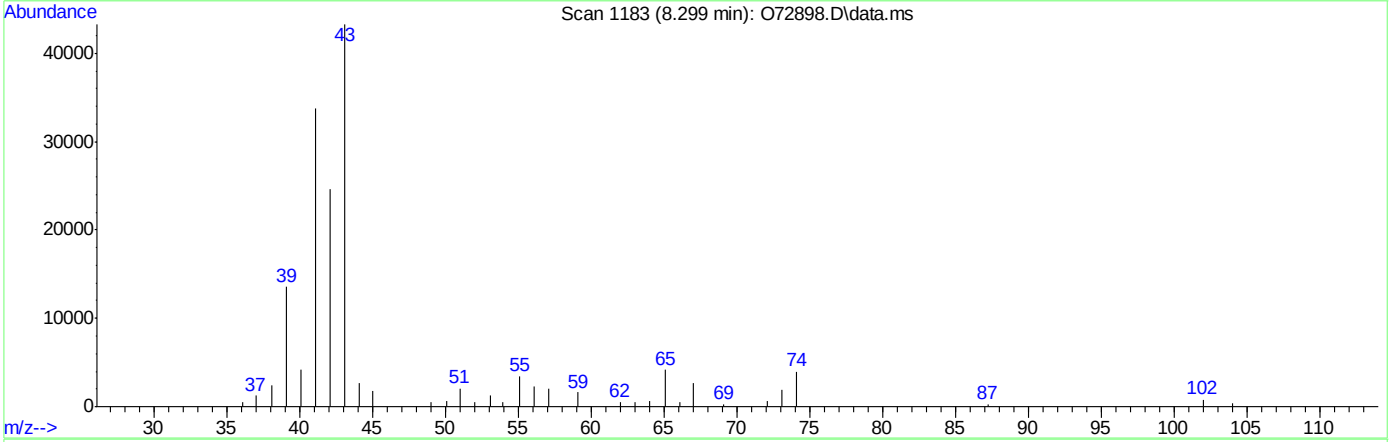
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	58.31
41.10	73.80	71.99
39.00	31.30	27.68

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 717.41ug/L m

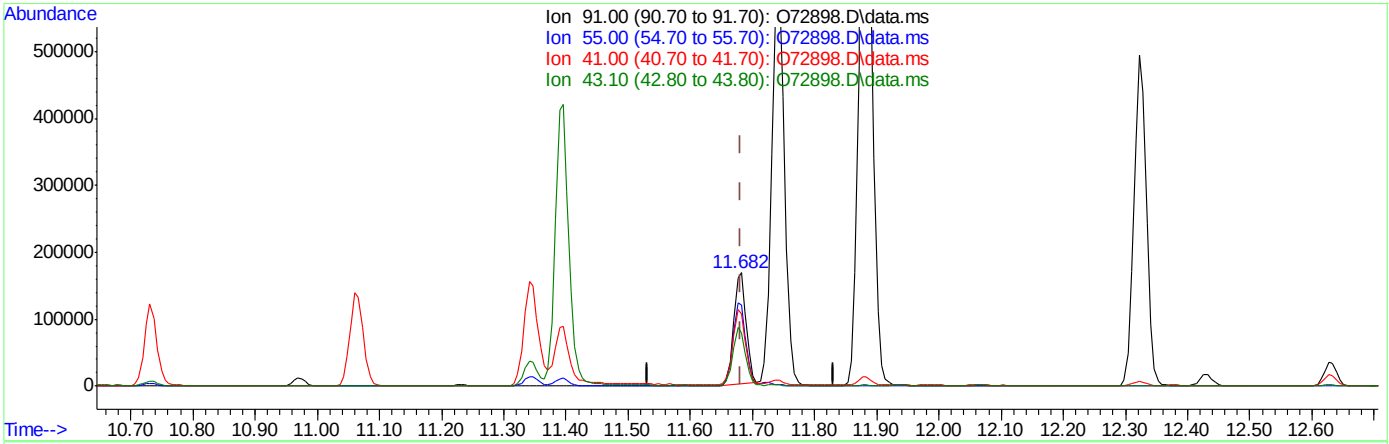
response 91633

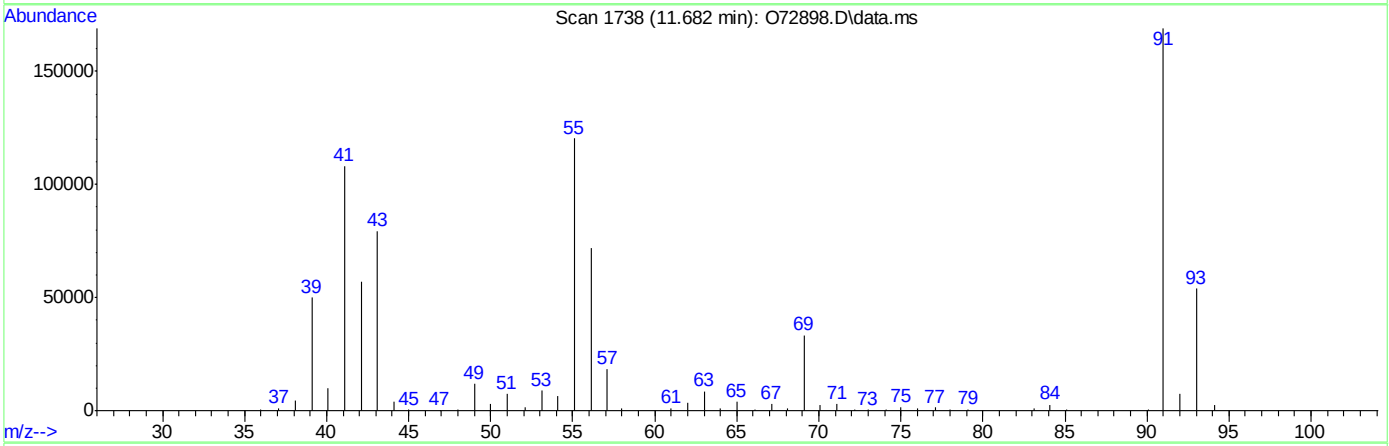
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	56.90
41.10	73.80	78.03
39.00	31.30	31.25

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 39.63ug/L

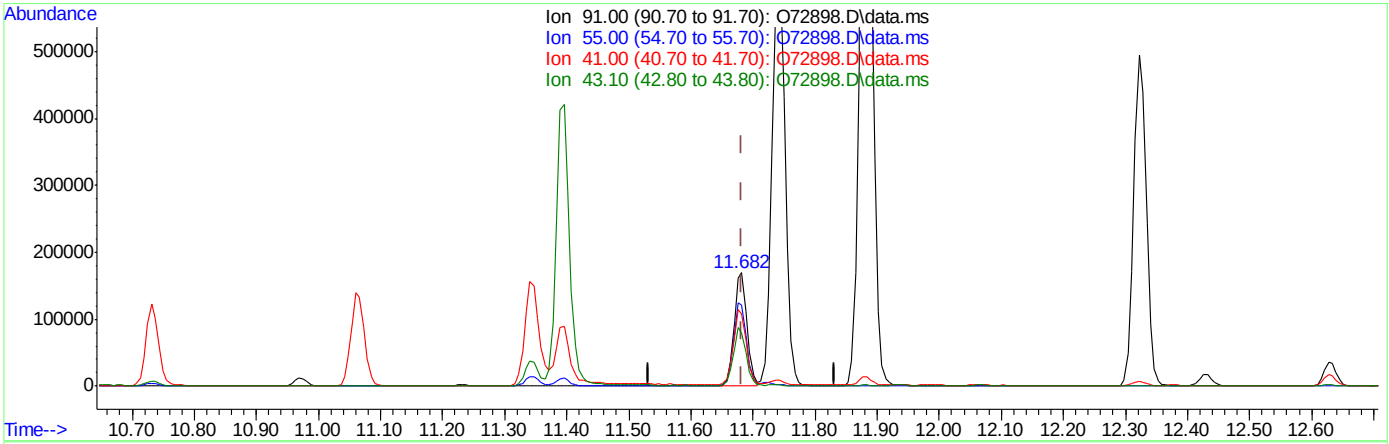
response 230888

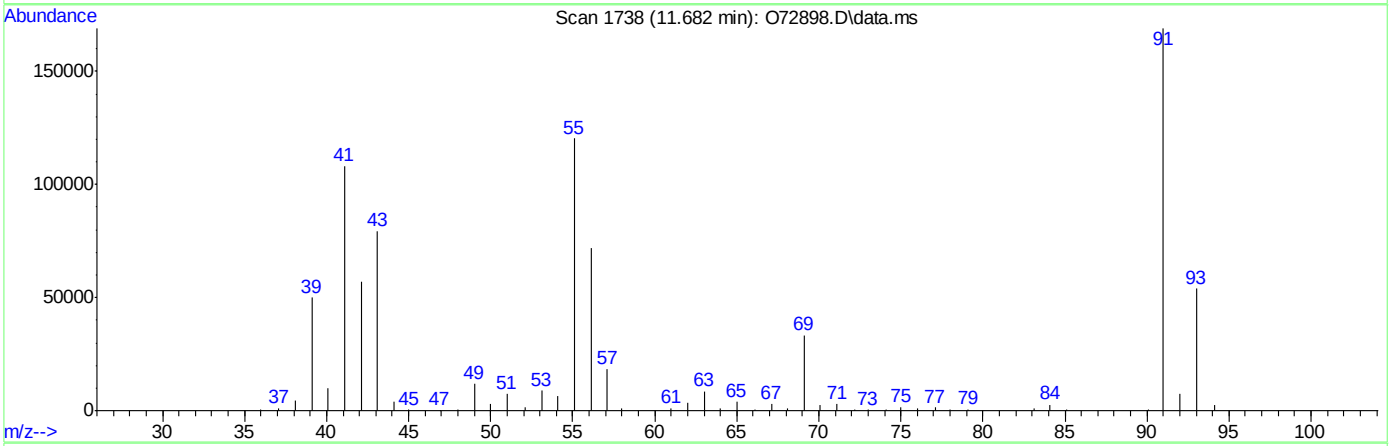
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	70.98
41.00	64.60	62.62
43.10	48.40	46.41

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72898.D
Acq On : 8 Dec 2022 1:16 pm
Operator : adelardl
Sample : ICV2866-5 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Dec 08 14:54:33 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72898.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 41.22ug/L m

response 240150

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.23
41.00	64.60	64.01
43.10	48.40	47.04

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 15:36:35 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

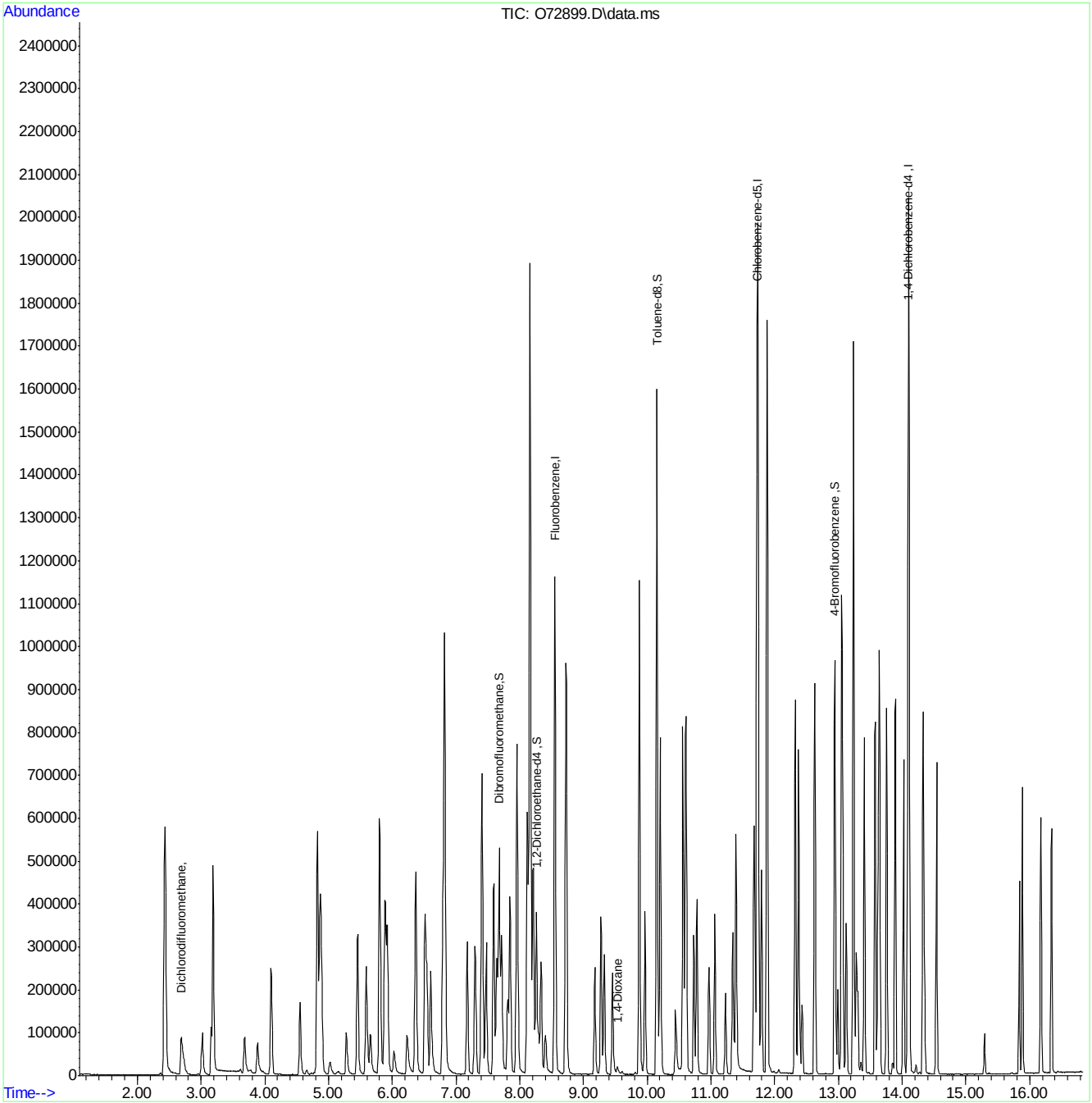
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	903727	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	632401	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	237409	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	251786	49.81	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.62%			
50) 1,2-Dichloroethane-d4	8.262	65	229612	49.02	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 98.04%			
63) Toluene-d8	10.152	98	878775	51.78	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 103.56%			
86) 4-Bromofluorobenzene	12.944	174	234664	49.72	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 99.44%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	123257	19.45	ug/L	97
59) 1,4-Dioxane	9.536	88	13633	372.58	ug/L	89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

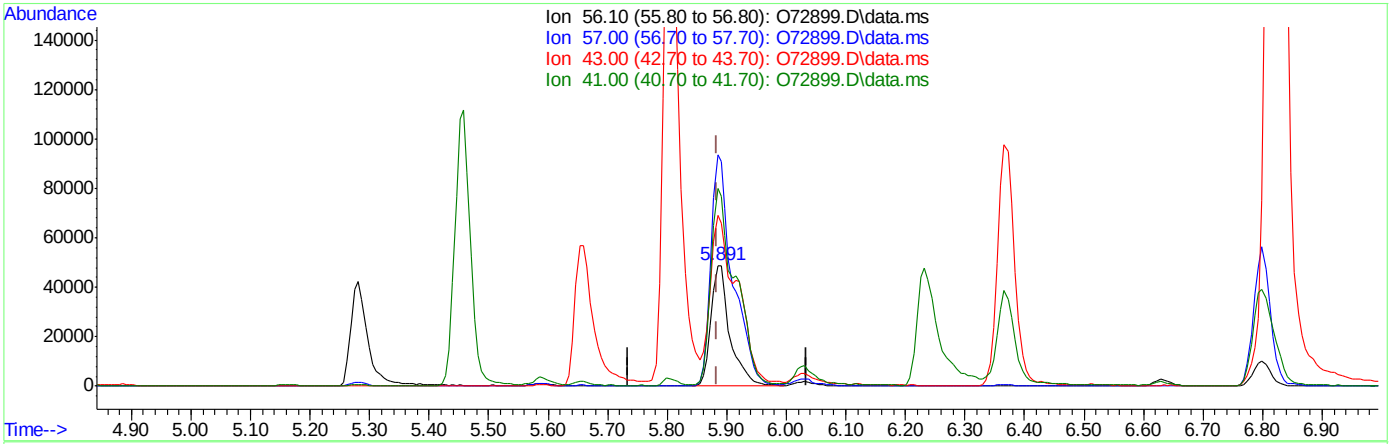
Quant Time: Dec 08 15:36:35 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

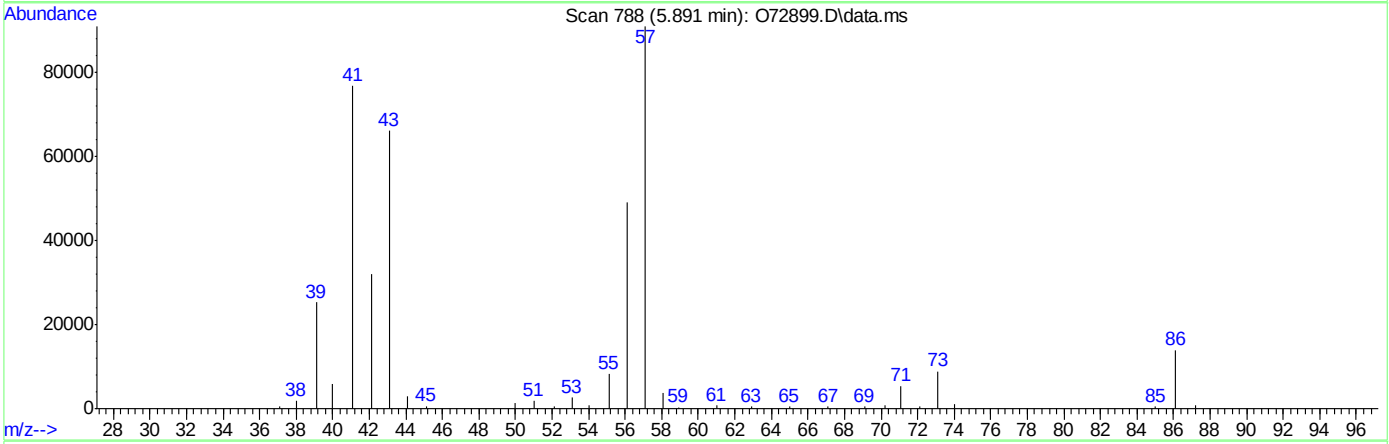


Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(22) Hexane

5.891min (+0.006) 30.26ug/L

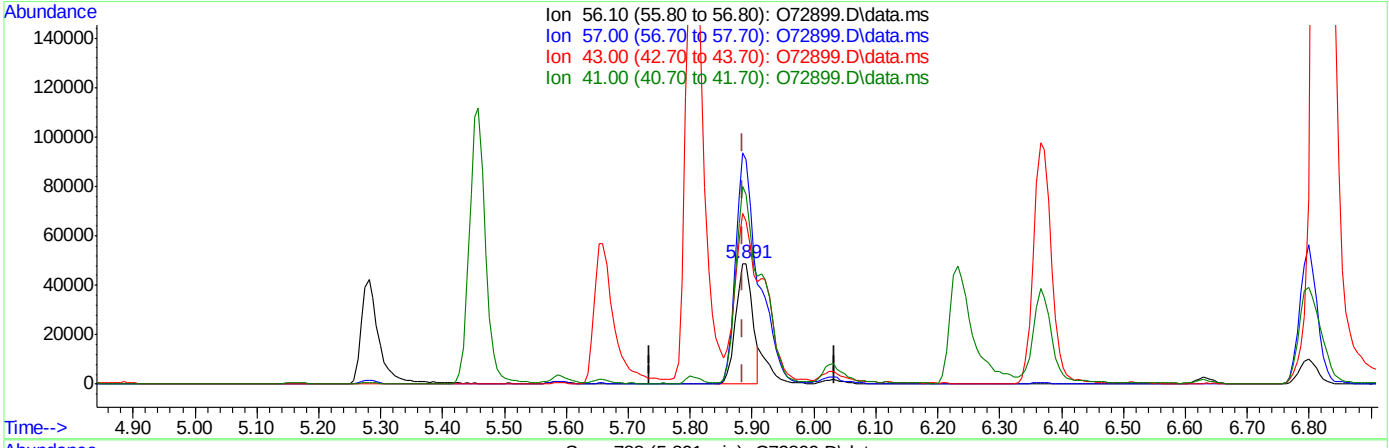
response 107523

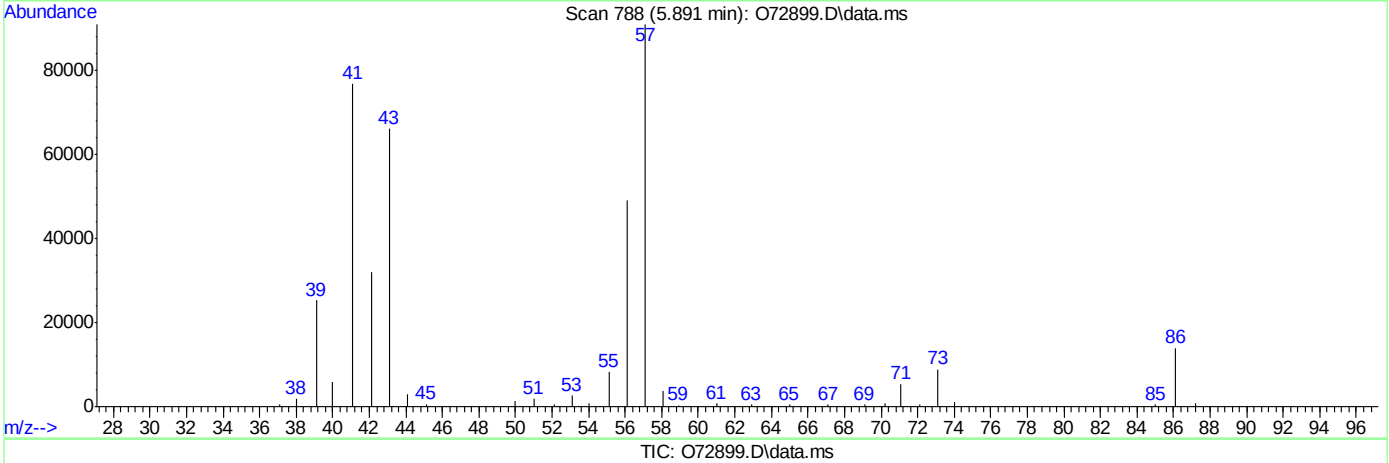
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	185.72
43.00	143.30	131.45
41.00	165.60	155.48

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(22) Hexane

5.891min (+0.006) 25.98ug/L m

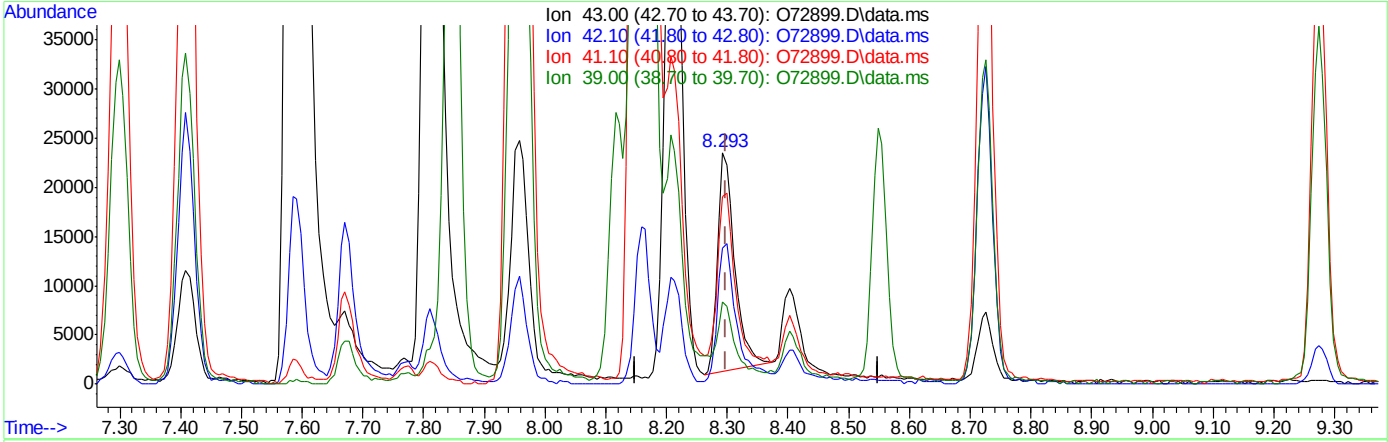
response 92314

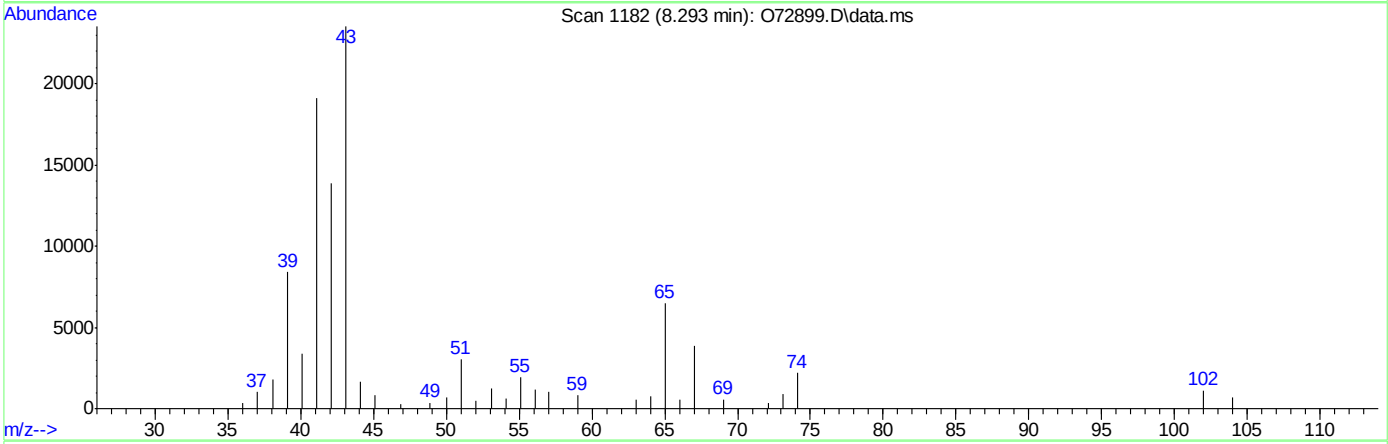
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	185.72
43.00	143.30	134.97
41.00	165.60	156.62

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 342.96ug/L

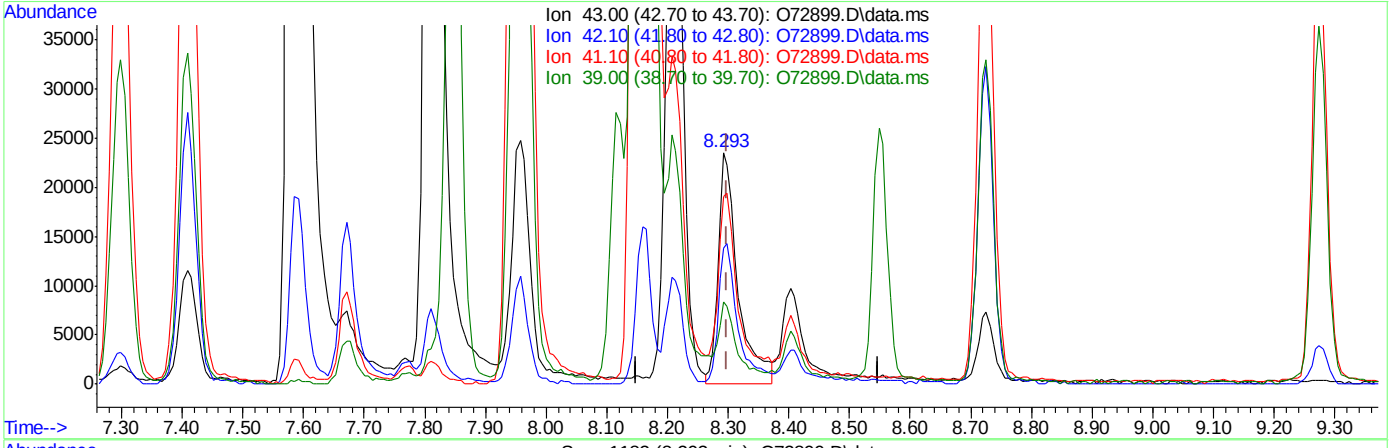
response 43225

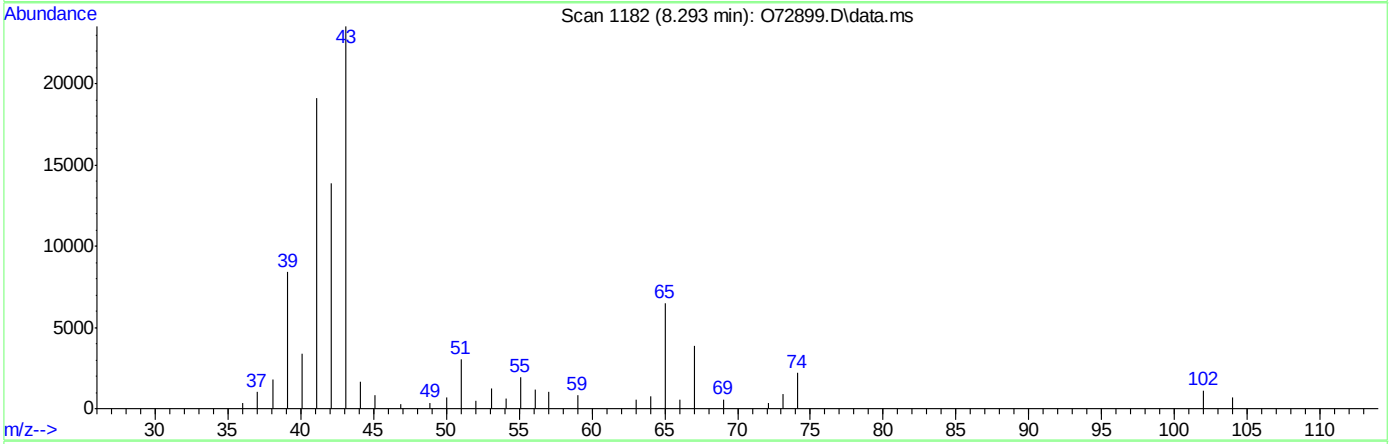
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	60.26
41.10	73.80	74.70
39.00	31.30	30.99

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 425.12ug/L m

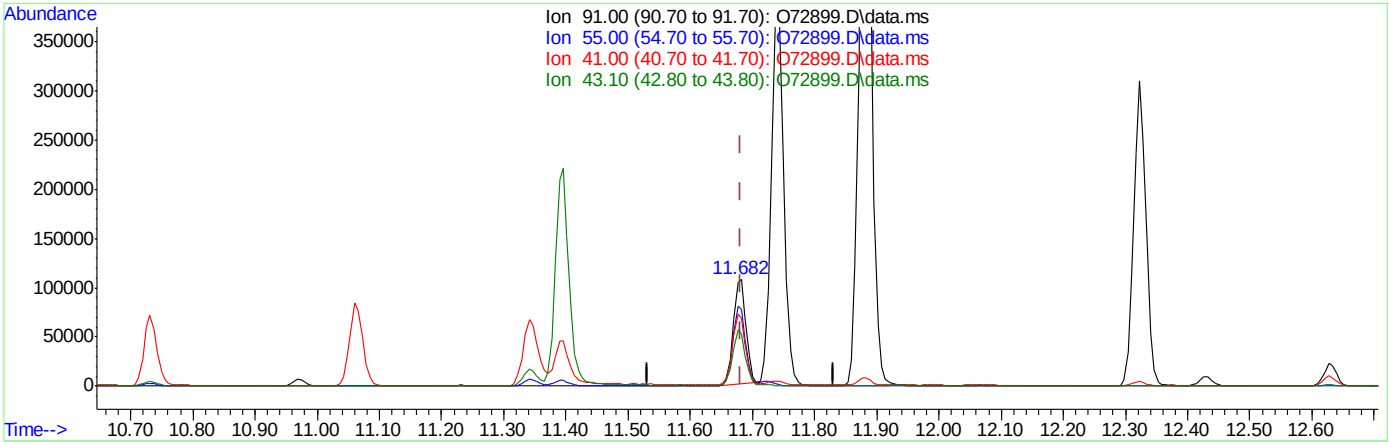
response 53687

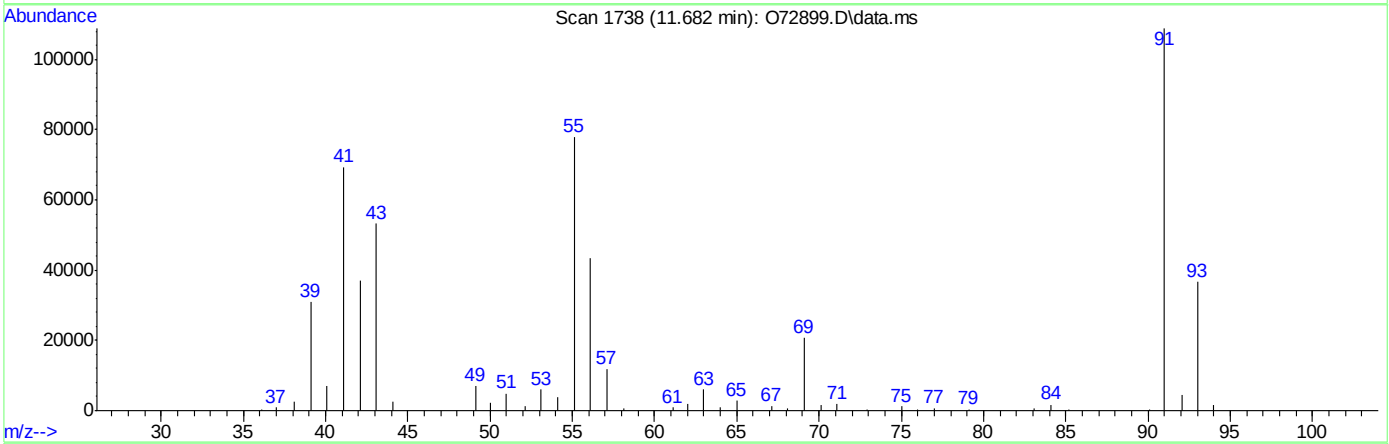
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	58.90
41.10	73.80	81.10
39.00	31.30	35.74

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 26.28ug/L

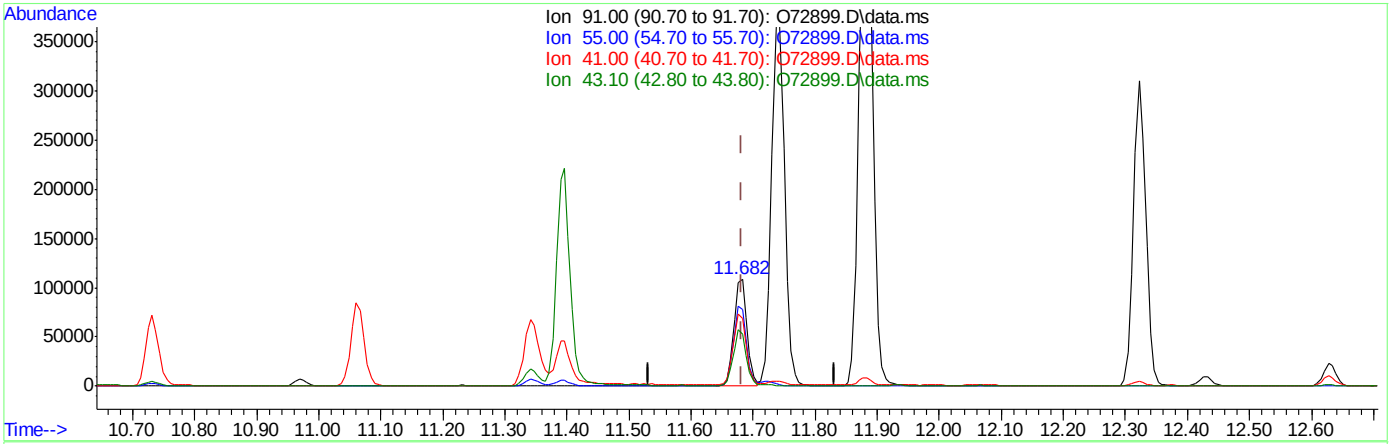
response 150543

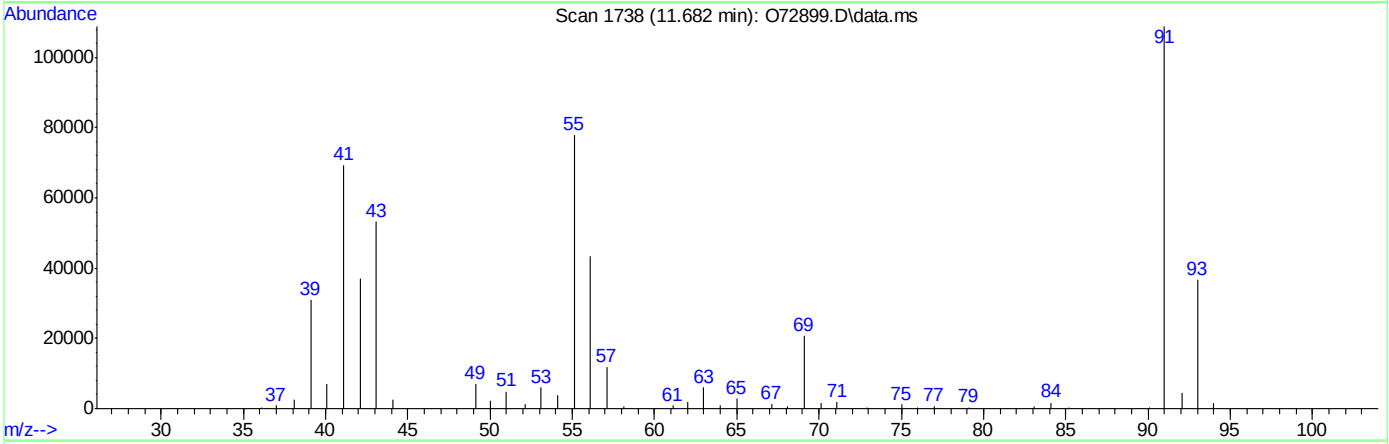
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.28
41.00	64.60	62.23
43.10	48.40	48.26

Quantitation Report (Qedit)

Data Path : C:\msdchem\2\data\2022-12-08\
Data File : O72899.D
Acq On : 8 Dec 2022 1:59 pm
Operator : adelardl
Sample : ICV2866-4 Inst : MSVOA12
Misc : MS52645,VO2866,,,,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Dec 08 14:53:58 2022
Quant Method : C:\msdchem\2\methods\VO_12-08-2022.M
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O72899.D\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 27.37ug/L m

response 156790

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.63
41.00	64.60	63.72
43.10	48.40	48.91

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:16:25 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	700538	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	508316	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.096	152	209683	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	187596	47.87	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 95.74%			
50) 1,2-Dichloroethane-d4	8.262	65	166353	45.81	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 91.62%			
63) Toluene-d8	10.152	98	675707	49.53	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 99.06%			
86) 4-Bromofluorobenzene	12.944	174	183362	43.99	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 87.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.690	85	199751	40.67	ug/L	97
3) Chloromethane	3.019	50	178739	41.49	ug/L	99
4) 1,3-butadiene	3.190	39	206709	47.78	ug/L	96
5) Vinyl Chloride	3.160	62	204296	46.91	ug/L	98
6) Bromomethane	3.684	94	67505	34.88	ug/L	99
7) Chloroethane	3.885	64	116702	44.43	ug/L	99
8) Trichlorofluoromethane	4.104	101	280823	41.52	ug/L	99
9) Ethyl Ether	4.556	59	131222	40.62	ug/L	98
10) Ethanol	4.775	45	12625	846.57	ug/L	86
11) 1,2-Dichlorotrifluoroe...	4.830	67	205114	41.55	ug/L	99
12) 1,1-Dichloroethene	4.830	61	247764	40.84	ug/L	98
13) Freon 113	4.885	101	167097	40.48	ug/L	97
14) Carbon Disulfide	4.867	76	483646	41.32	ug/L	100
15) Iodomethane	5.025	142	83146	46.34	ug/L	93
16) Acrolein	5.281	56	127470	190.04	ug/L	98
17) Allyl chloride	5.458	41	232141	42.90	ug/L	98
18) Methylene Chloride	5.592	49	236923	41.86	ug/L	99
19) Acetone	5.659	43	189713	194.65	ug/L	98
20) Methyl acetate	5.805	43	547962	213.81	ug/L	100
21) trans-1,2-Dichloroethene	5.799	61	238124	40.60	ug/L	95
22) Hexane	5.891	56	117693m	42.72	ug/L	
23) Methyl Tert Butyl Ether	5.921	73	421189	39.04	ug/L	98
24) Tert Butyl Alcohol	6.031	59	85802	376.29	ug/L	98
25) Acetonitrile	6.232	41	155048	390.20	ug/L	100
26) Di-isopropyl ether	6.372	45	530803	40.38	ug/L	99
27) Chloroprene	6.519	53	207871	42.87	ug/L	98
28) 1,1-Dichloroethane	6.549	63	290942	40.88	ug/L	99
29) Acrylonitrile	6.604	52	211675	188.91	ug/L	98
30) ETBE	6.799	59	475727	40.60	ug/L	98
31) Vinyl acetate	6.823	43	1681955	225.21	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	174780	41.04	ug/L	98
33) 2,2-Dichloropropane	7.305	77	217264	43.31	ug/L	99
34) Bromochloromethane	7.409	128	93980	41.47	ug/L	96
35) Cyclohexane	7.415	56	258662	42.28	ug/L	96
36) Chloroform	7.476	83	305009	40.79	ug/L	96
37) Ethyl acetate	7.592	43	685455	201.84	ug/L	99
38) Tetrahydrofuran	7.671	42	39623	38.49	ug/L	93
40) Carbon Tetrachloride	7.646	117	212528	48.29	ug/L	99
41) 1,1,1-Trichloroethane	7.720	97	260967	43.92	ug/L	98
42) 2-Butanone	7.811	43	312979	203.72	ug/L	100
43) 1,1-Dichloropropene	7.848	75	224076	40.91	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:16:25 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) tert-Butyl formate	7.957	59	424771	209.76	ug/L	99
45) Propionitrile	8.140	54	205193	433.18	ug/L	98
46) Methacrylonitrile	8.165	41	1195334	433.53	ug/L	99
47) Benzene	8.122	78	655398	41.81	ug/L	99
48) TAME	8.213	73	411309	40.56	ug/L	98
49) Isobutyl alcohol	8.299	43	82584m	835.37	ug/L	
51) 1,2-Dichloroethane	8.335	62	250794	39.35	ug/L	99
52) Tert Amyl Alcohol	8.402	59	64184	399.47	ug/L	90
53) Trichloroethene	8.732	95	180002	40.61	ug/L	99
54) Methylcyclohexane	8.726	83	243589	42.49	ug/L	98
55) Dibromomethane	9.177	93	117905	40.83	ug/L	96
56) 1,2-Dichloropropane	9.274	63	166866	40.83	ug/L	98
57) Bromodichloromethane	9.329	83	222067	43.58	ug/L	99
58) Methyl methacrylate	9.457	41	126698	40.55	ug/L	97
59) 1,4-Dioxane	9.536	88	16413	578.66	ug/L	93
60) 2-Chloroethyl vinyl ether	9.878	63	551125	205.50	ug/L	99
61) cis-1,3-Dichloropropene	9.969	75	251943	44.65	ug/L	98
64) Toluene	10.207	91	695940	42.79	ug/L	99
65) 2-Nitropropane	10.445	41	142235	305.87	ug/L	98
66) 4-Methyl-2-pentanone	10.567	43	770399	211.91	ug/L	99
67) trans-1,3-Dichloropropene	10.615	75	224399	44.93	ug/L	89
68) Tetrachloroethene	10.603	166	194623	42.25	ug/L	99
69) Ethyl methacrylate	10.731	69	187825	46.03	ug/L	99
70) 1,1,2-Trichloroethane	10.780	83	134337	42.87	ug/L	99
71) Dibromochloromethane	10.969	129	181983	46.41	ug/L	99
72) 1,3-Dichloropropane	11.067	76	265860	42.09	ug/L	99
73) 1,2-Dibromoethane	11.231	107	164553	43.64	ug/L	98
74) 3,3-dimethyl-1-butanol	11.341	57	342367	2511.80	ug/L	99
75) 2-hexanone	11.396	43	530899	220.26	ug/L	98
76) 1-Chlorohexane	11.682	91	203973m	44.30	ug/L	
77) Ethylbenzene	11.743	91	796593	43.49	ug/L	100
78) Chlorobenzene	11.743	112	475950	43.32	ug/L	98
79) 1,1,1,2-Tetrachloroethane	11.798	131	162913	46.50	ug/L	97
80) m,p-Xylene	11.883	91	1236411	88.33	ug/L	99
81) o-Xylene	12.322	91	591310	43.03	ug/L	100
82) Styrene	12.377	104	466802	45.95	ug/L	99
83) Bromoform	12.432	173	105354	46.54	ug/L	99
84) Isopropylbenzene	12.627	105	709755	43.78	ug/L	99
87) cis-1,4-Dichloro-2-butene	12.993	53	55350	39.22	ug/L	97
88) n-Propylbenzene	13.054	91	866987	39.95	ug/L	100
89) Bromobenzene	13.066	156	208750	38.25	ug/L	98
90) 1,1,2,2-Tetrachloroethane	13.127	83	200547	39.33	ug/L	98
91) 1,3,5-Trimethylbenzene	13.237	105	611821	39.95	ug/L	99
92) 2-Chlorotoluene	13.408	91	533704	39.08	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	47406	39.77	ug/L	89
94) 1,2,3-Trichloropropane	13.286	110	58439	38.32	ug/L	98
95) Cyclohexanone	13.353	55	15570	171.86	ug/L	96
96) 4-Chlorotoluene	13.408	91	533704	39.08	ug/L	99
97) tert-Butylbenzene	13.578	91	329001	38.73	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	594803	39.80	ug/L	99
100) Pentachloroethane	13.627	167	102284	45.24	ug/L	97
101) sec-Butylbenzene	13.761	105	688093	40.48	ug/L	99
102) 4-Isopropyltoluene	13.895	119	597520	40.57	ug/L	99
103) 1,3-Dichlorobenzene	14.023	146	367142	38.69	ug/L	99
104) 1,2,3-Trimethylbenzene	14.109	105	605307	39.61	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	394017	38.91	ug/L	96
106) n-Butylbenzene	14.328	92	323193	41.39	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:16:25 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

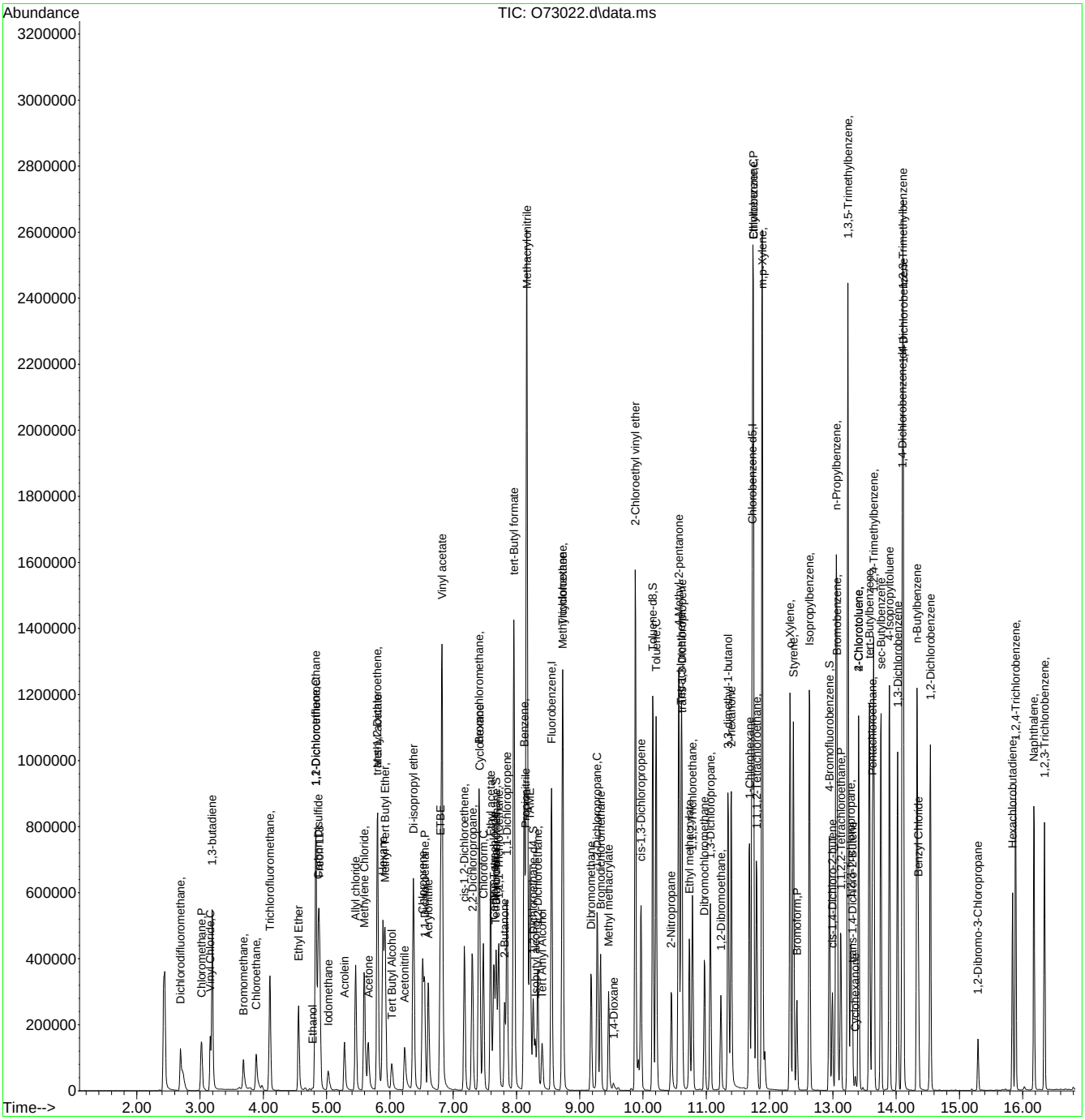
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) Benzyl Chloride	14.352	126	57111	44.27	ug/L	96
108) 1,2-Dichlorobenzene	14.541	146	355980	38.65	ug/L	99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	28477	40.53	ug/L	95
110) Hexachlorobutadiene	15.840	225	74017	36.91	ug/L	95
111) 1,2,4-Trichlorobenzene	15.889	180	206144	36.34	ug/L	99
112) Naphthalene	16.175	128	530572	37.47	ug/L	99
113) 1,2,3-Trichlorobenzene	16.346	180	191099	36.30	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:16:25 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

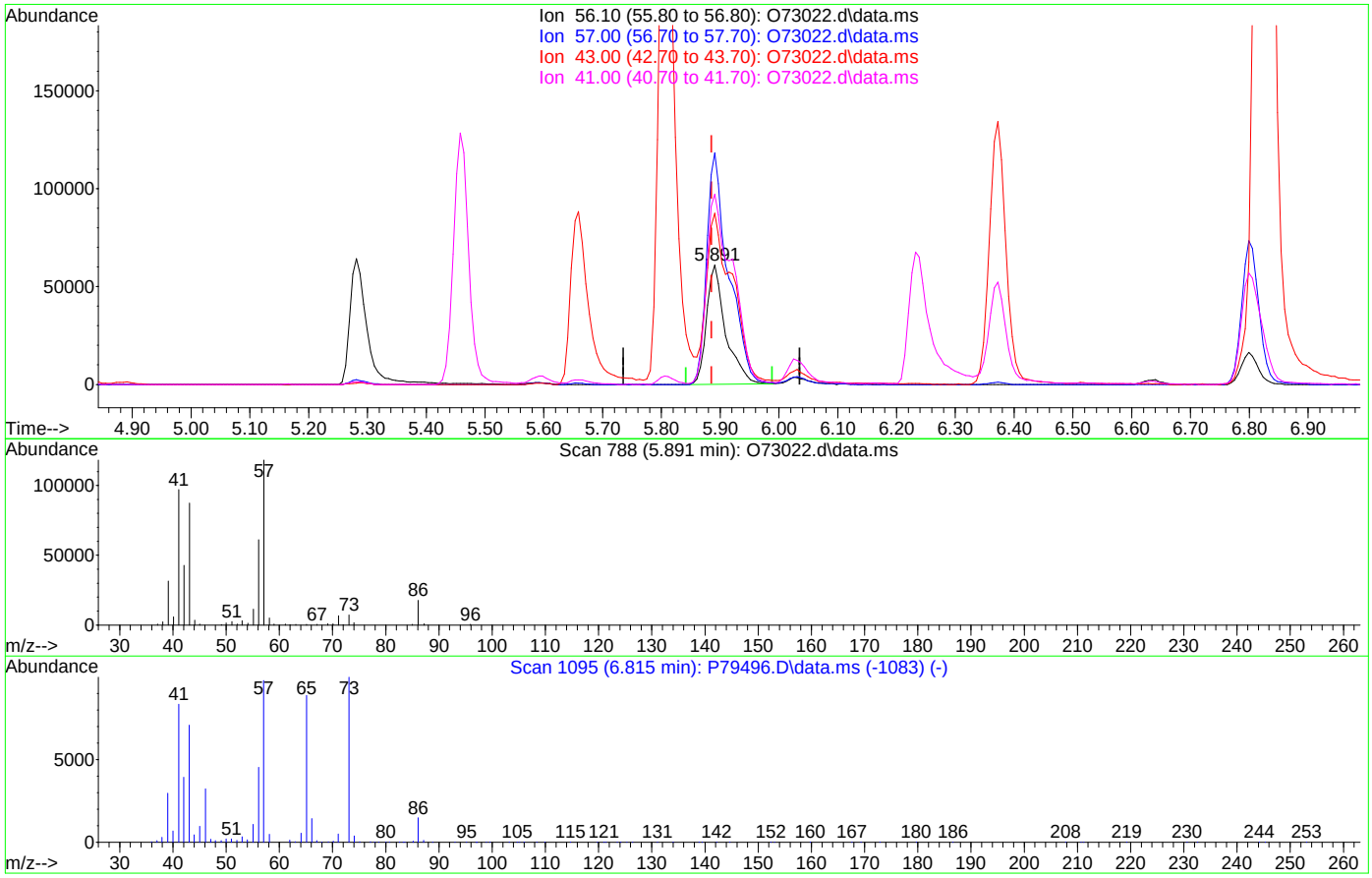
Sample Number: VO2870-CC2866
Lab FileID: O73022.D
Injection Time: 12/14/22 09:41
Method: SW846 8260D
Analyst approved: 12/15/22 02:51 Jennifer Fereira
Supervisor approved: 12/15/22 13:17 Karen Watson

Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.89	Overlapping peak
Isobutyl Alcohol	78-83-1		8.30	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73022.d\data.ms

(22) Hexane

5.891min (+0.006) 49.95ug/L

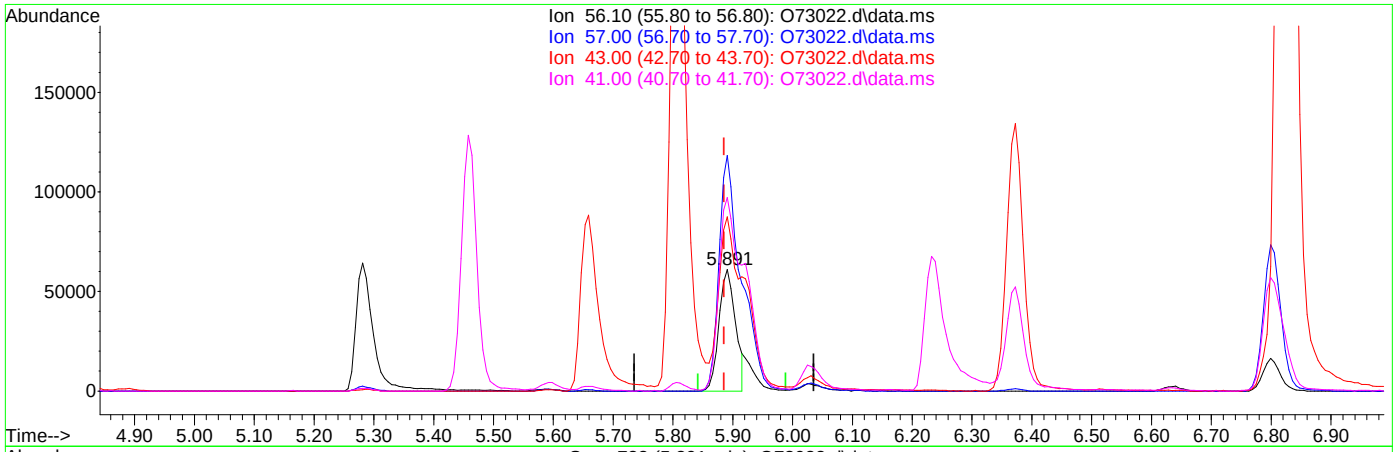
response 137586

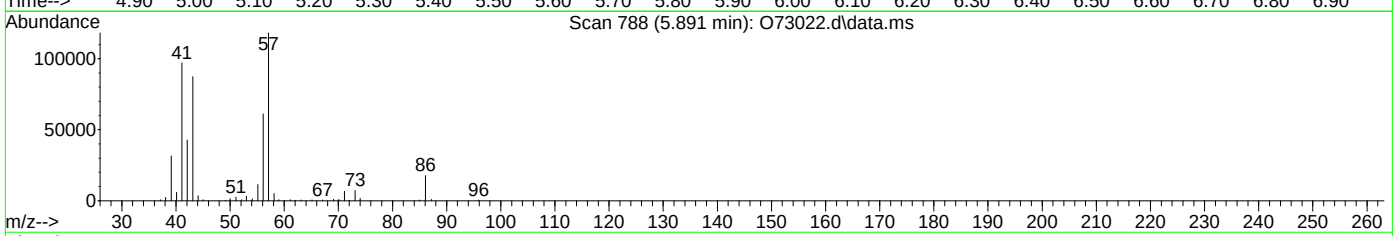
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	193.72
43.00	143.30	139.80
41.00	165.60	158.27

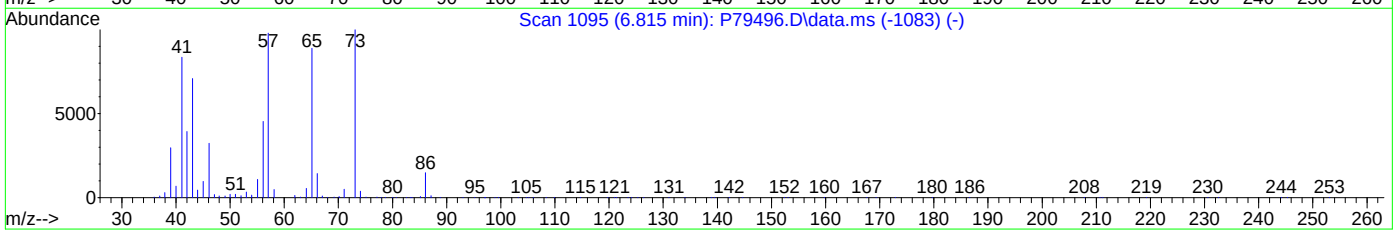
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73022.d\data.ms

(22) Hexane

5.891min (+0.006) 42.72ug/L m

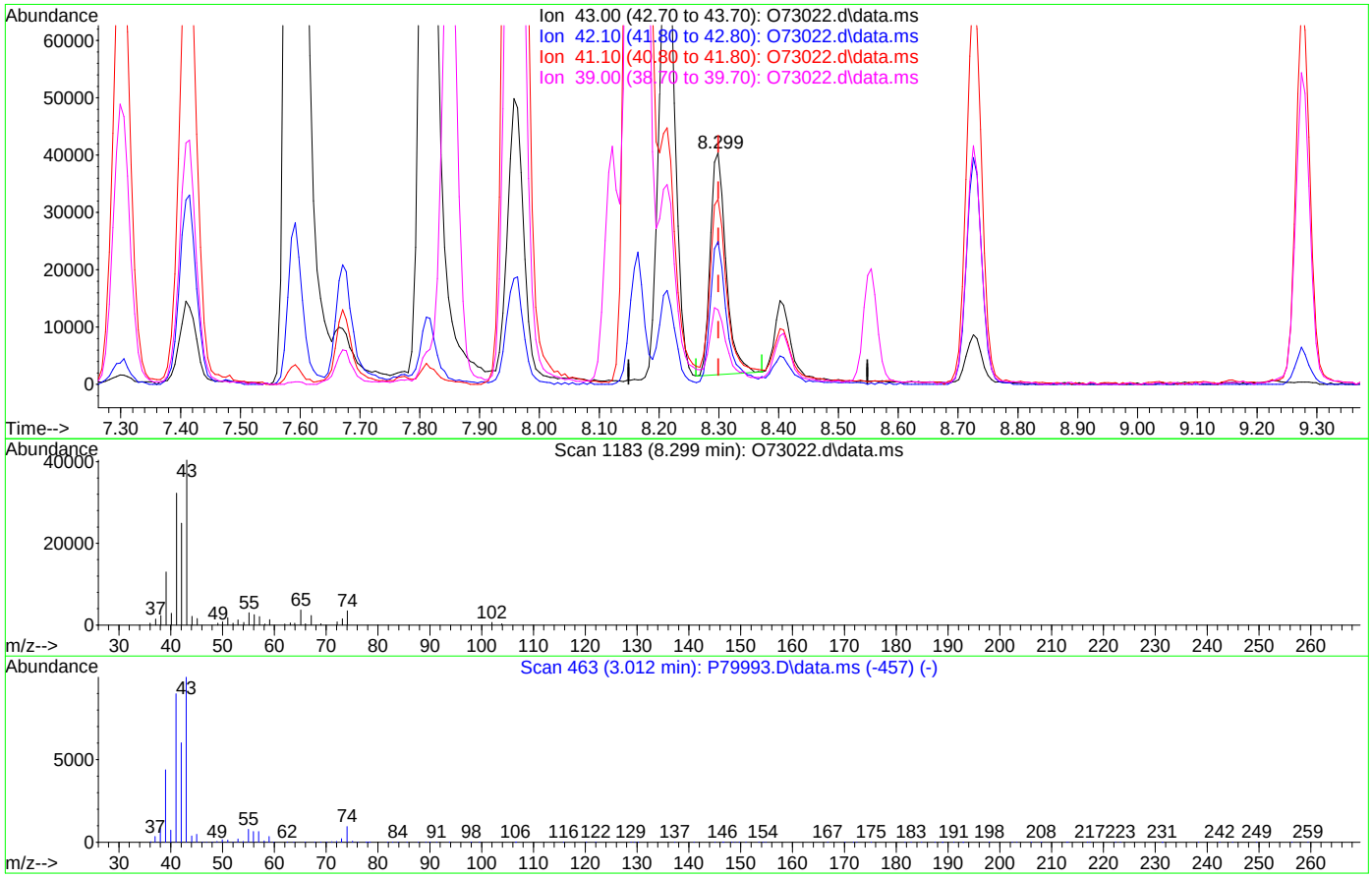
response 117693

Ion	Exp%	Act%
56.10	100	100
57.00	191.60	193.72
43.00	143.30	143.18
41.00	165.60	159.09

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73022.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 716.09ug/L

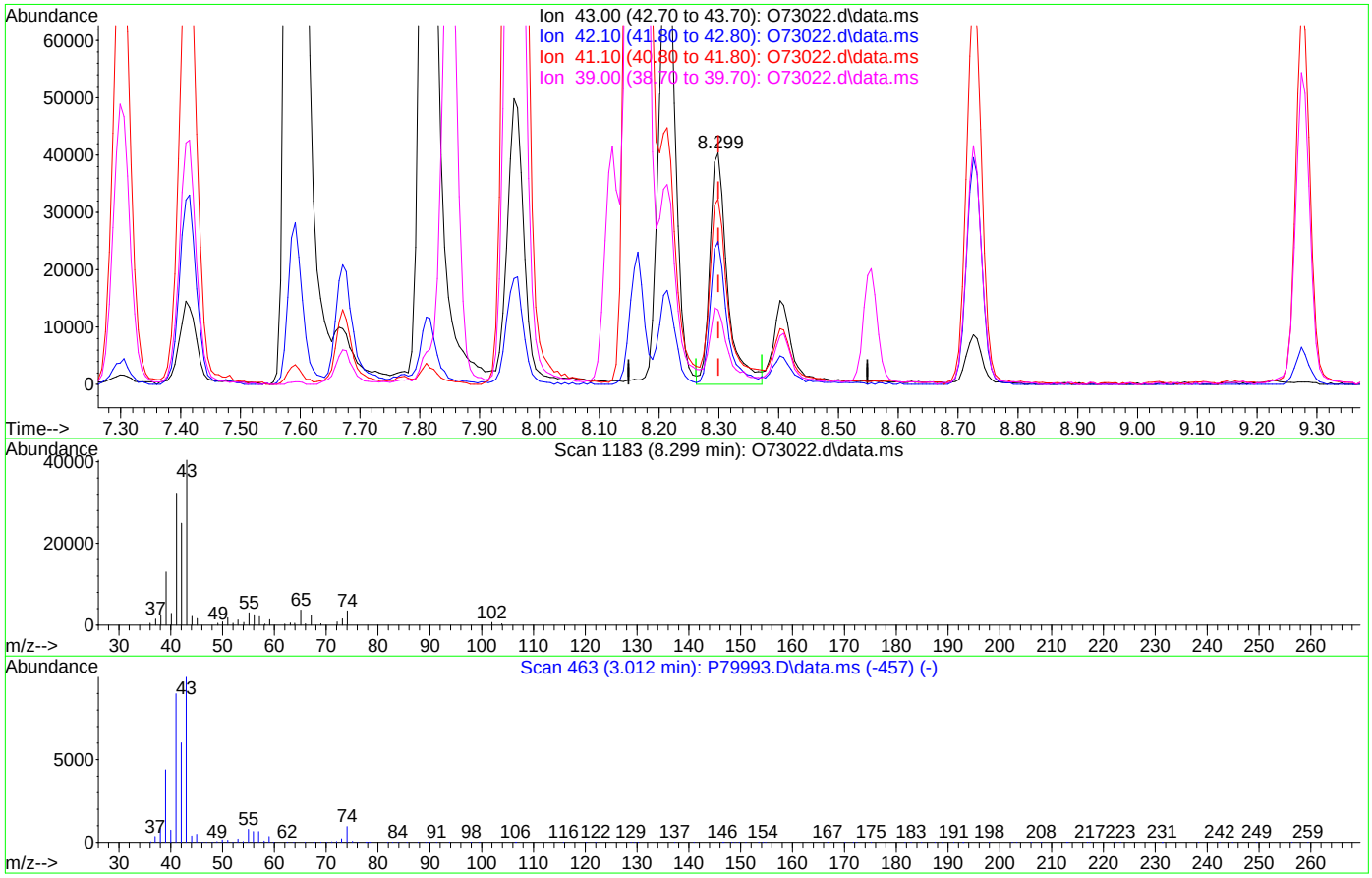
response 70591

Ion	Exp%	Act%
43.00	100	100
42.10	58.40	63.22
41.10	73.80	76.51
39.00	31.30	30.45

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73022.d\data.ms

(49) Isobutyl alcohol

8.299min (-0.000) 835.37ug/L m

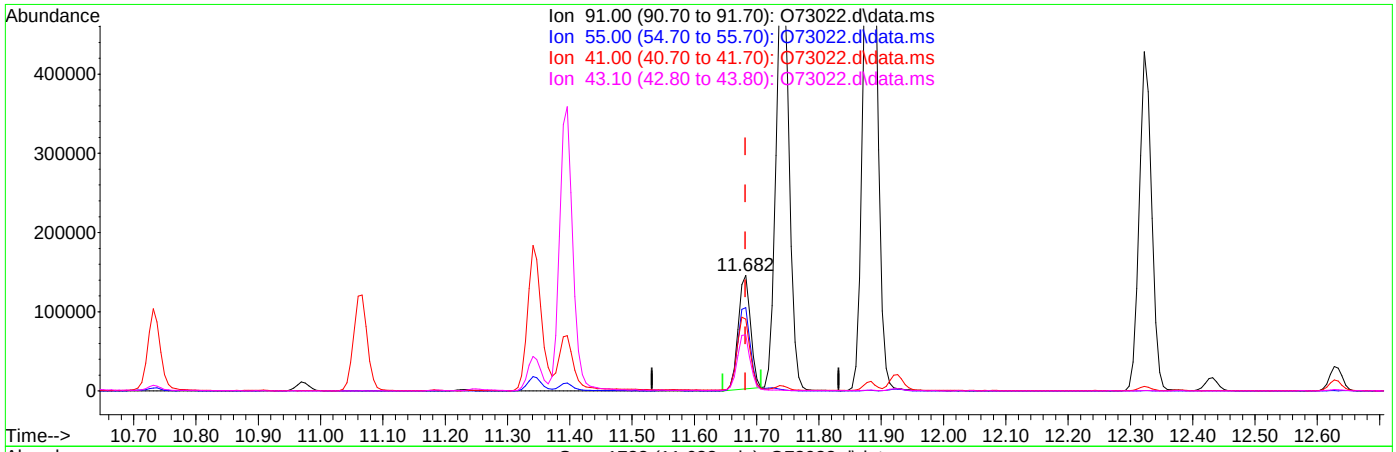
response 82584

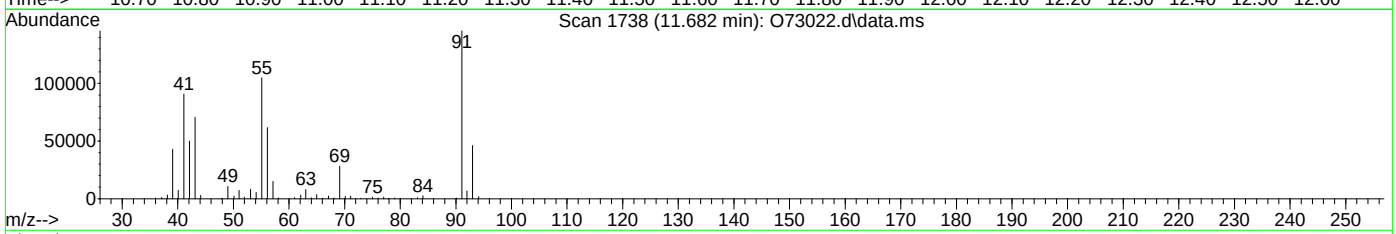
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	61.67
41.10	73.80	79.96
39.00	31.30	32.19

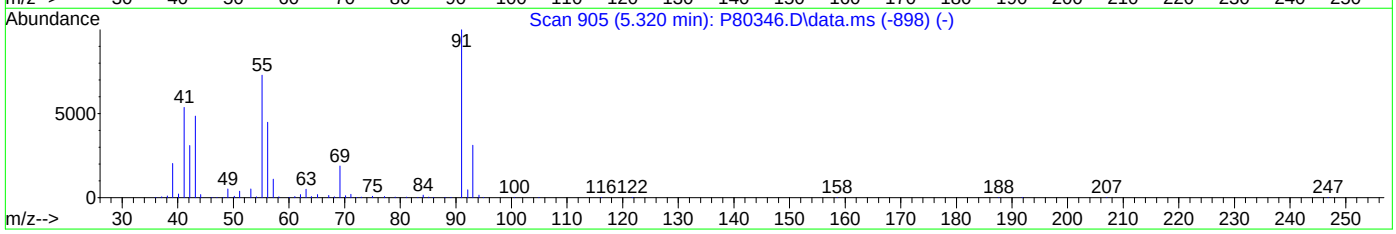
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73022.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 42.60ug/L

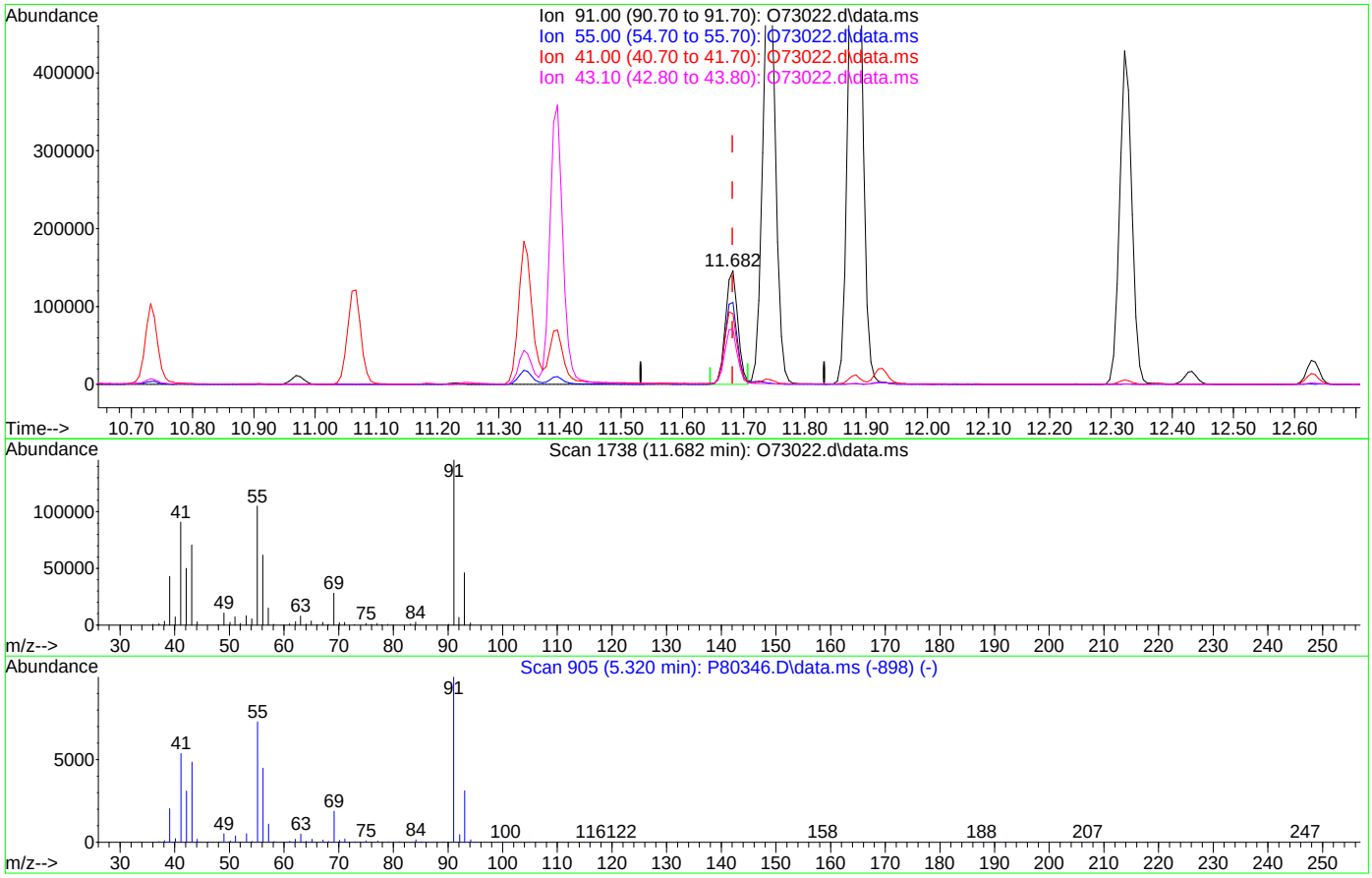
response 196151

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.71
41.00	64.60	61.25
43.10	48.40	47.90

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73022.d
Acq On : 14 Dec 2022 9:41 am
Operator : adelardl
Sample : CC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 3 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:11:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



TIC: O73022.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 44.30ug/L m

response 203973

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	72.10
41.00	64.60	62.32
43.10	48.40	48.55

Manual Integrations APPROVED (compounds with "m" flag)
Karen Watson
12/15/22 13:17

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:43 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	8.555	96	716742	50.00	ug/L	0.00
62) Chlorobenzene-d5	11.725	117	514616	50.00	ug/L	0.00
85) 1,4-Dichlorobenzene-d4	14.097	152	200054	50.00	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	7.677	113	192499	48.02	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 96.04%			
50) 1,2-Dichloroethane-d4	8.262	65	164214	44.20	ug/L	0.00
Spiked Amount 50.000	Range 79 - 125		Recovery = 88.40%			
63) Toluene-d8	10.152	98	698111	50.55	ug/L	0.00
Spiked Amount 50.000	Range 85 - 112		Recovery = 101.10%			
86) 4-Bromofluorobenzene	12.944	174	178558	44.90	ug/L	0.00
Spiked Amount 50.000	Range 83 - 118		Recovery = 89.80%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	2.684	85	182548	36.33	ug/L	98
3) Chloromethane	3.013	50	168707	38.27	ug/L	98
4) 1,3-butadiene	3.184	39	201547	45.53	ug/L	99
5) Vinyl Chloride	3.154	62	187640	42.12	ug/L	98
6) Bromomethane	3.678	94	48801	25.39	ug/L	99
7) Chloroethane	3.879	64	110933	41.21	ug/L	97
8) Trichlorofluoromethane	4.099	101	251634	36.50	ug/L	99
9) Ethyl Ether	4.550	59	122216	36.98	ug/L	97
10) Ethanol	4.769	45	13626	893.04	ug/L	99
11) 1,2-Dichlorotrifluoroe...	4.824	67	187475	37.12	ug/L	98
12) 1,1-Dichloroethene	4.824	61	224372	36.15	ug/L	98
13) Freon 113	4.879	101	149537	35.41	ug/L	96
14) Carbon Disulfide	4.861	76	434301	36.26	ug/L	98
15) Iodomethane	5.019	142	83399	45.80	ug/L	96
16) Acrolein	5.275	56	104919	152.51	ug/L	99
17) Allyl chloride	5.452	41	207380	37.46	ug/L	98
18) Methylene Chloride	5.586	49	220883	38.07	ug/L	96
19) Acetone	5.653	43	177022	177.11	ug/L	100
20) Methyl acetate	5.806	43	520947	198.68	ug/L	100
21) trans-1,2-Dichloroethene	5.793	61	218909	36.48	ug/L	98
22) Hexane	5.885	56	97317m	34.53	ug/L	
23) Methyl Tert Butyl Ether	5.915	73	393024	35.61	ug/L	95
24) Tert Butyl Alcohol	6.025	59	82472	353.74	ug/L	94
25) Acetonitrile	6.226	41	155253	381.88	ug/L	98
26) Di-isopropyl ether	6.366	45	496810	36.94	ug/L	99
27) Chloroprene	6.513	53	187618	37.82	ug/L	99
28) 1,1-Dichloroethane	6.543	63	269248	36.98	ug/L	99
29) Acrylonitrile	6.604	52	199131	173.69	ug/L	97
30) ETBE	6.799	59	447579	37.33	ug/L	99
31) Vinyl acetate	6.818	43	1550848	202.96	ug/L	100
32) cis-1,2-Dichloroethene	7.177	96	161880	37.15	ug/L	95
33) 2,2-Dichloropropane	7.299	77	175227	34.14	ug/L	99
34) Bromochloromethane	7.403	128	89070	38.41	ug/L	98
35) Cyclohexane	7.409	56	235171	37.57	ug/L	98
36) Chloroform	7.476	83	283014	36.99	ug/L	97
37) Ethyl acetate	7.586	43	639771	184.13	ug/L	99
38) Tetrahydrofuran	7.671	42	40104	38.08	ug/L	95
40) Carbon Tetrachloride	7.641	117	189359	42.06	ug/L	97
41) 1,1,1-Trichloroethane	7.714	97	233961	38.49	ug/L	99
42) 2-Butanone	7.811	43	293745	186.87	ug/L	98
43) 1,1-Dichloropropene	7.848	75	204420	36.48	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:43 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
44) tert-Butyl formate	7.958	59	381164	187.67	ug/L	98
45) Propionitrile	8.140	54	179694	370.78	ug/L	95
46) Methacrylonitrile	8.159	41	1118594	396.53	ug/L	100
47) Benzene	8.122	78	604871	37.72	ug/L	99
48) TAME	8.214	73	388858	37.48	ug/L	98
49) Isobutyl alcohol	8.293	43	79036m	782.39	ug/L	
51) 1,2-Dichloroethane	8.336	62	237136	36.36	ug/L	98
52) Tert Amyl Alcohol	8.403	59	59180	362.20	ug/L	88
53) Trichloroethene	8.732	95	167633	36.96	ug/L	98
54) Methylcyclohexane	8.726	83	216354	36.88	ug/L	97
55) Dibromomethane	9.177	93	109523	37.07	ug/L	98
56) 1,2-Dichloropropane	9.274	63	155466	37.18	ug/L	98
57) Bromodichloromethane	9.329	83	203211	38.98	ug/L	98
58) Methyl methacrylate	9.457	41	119682	37.75	ug/L	98
59) 1,4-Dioxane	9.530	88	17294	595.94	ug/L	97
60) 2-Chloroethyl vinyl ether	9.878	63	514690	187.58	ug/L	98
61) cis-1,3-Dichloropropene	9.969	75	227895	39.48	ug/L	99
64) Toluene	10.207	91	636239	38.64	ug/L	99
65) 2-Nitropropane	10.445	41	105555	242.51	ug/L	97
66) 4-Methyl-2-pentanone	10.561	43	717335	194.90	ug/L	98
67) trans-1,3-Dichloropropene	10.616	75	202491	40.61	ug/L	90
68) Tetrachloroethene	10.603	166	182618	39.16	ug/L	98
69) Ethyl methacrylate	10.731	69	175491	43.01	ug/L	100
70) 1,1,2-Trichloroethane	10.780	83	127110	40.07	ug/L	99
71) Dibromochloromethane	10.969	129	165928	42.40	ug/L	97
72) 1,3-Dichloropropane	11.067	76	249207	38.97	ug/L	99
73) 1,2-Dibromoethane	11.231	107	154595	40.50	ug/L	100
74) 3,3-dimethyl-1-butanol	11.341	57	323770	2386.86	ug/L	99
75) 2-hexanone	11.396	43	483450	198.12	ug/L	98
76) 1-Chlorohexane	11.682	91	181047m	38.84	ug/L	
77) Ethylbenzene	11.743	91	728389	39.28	ug/L	100
78) Chlorobenzene	11.743	112	437930	39.37	ug/L	99
79) 1,1,1,2-Tetrachloroethane	11.792	131	149735	42.71	ug/L	99
80) m,p-Xylene	11.884	91	1124392	79.35	ug/L	99
81) o-Xylene	12.323	91	545435	39.21	ug/L	99
82) Styrene	12.377	104	426805	41.49	ug/L	98
83) Bromoform	12.432	173	91371	40.98	ug/L	99
84) Isopropylbenzene	12.633	105	652373	39.75	ug/L	98
87) cis-1,4-Dichloro-2-butene	12.993	53	41705	32.06	ug/L	94
88) n-Propylbenzene	13.054	91	782687	37.80	ug/L	100
89) Bromobenzene	13.066	156	193627	37.19	ug/L	98
90) 1,1,2,2-Tetrachloroethane	13.127	83	186800	38.40	ug/L	98
91) 1,3,5-Trimethylbenzene	13.237	105	557885	38.19	ug/L	100
92) 2-Chlorotoluene	13.408	91	491808	37.75	ug/L	99
93) trans-1,4-Dichloro-2-B...	13.310	53	35485	32.14	ug/L	93
94) 1,2,3-Trichloropropane	13.286	110	53879	37.03	ug/L	98
95) Cyclohexanone	13.353	55	14817	171.42	ug/L	97
96) 4-Chlorotoluene	13.408	91	491808	37.75	ug/L	98
97) tert-Butylbenzene	13.578	91	301343	37.18	ug/L	99
99) 1,2,4-Trimethylbenzene	13.645	105	547686	38.41	ug/L	99
100) Pentachloroethane	13.627	167	85143	40.65	ug/L	98
101) sec-Butylbenzene	13.761	105	622025	38.35	ug/L	99
102) 4-Isopropyltoluene	13.895	119	542608	38.62	ug/L	100
103) 1,3-Dichlorobenzene	14.023	146	339587	37.51	ug/L	98
104) 1,2,3-Trimethylbenzene	14.109	105	562801	38.60	ug/L	99
105) 1,4-Dichlorobenzene	14.115	146	362443	37.51	ug/L	97
106) n-Butylbenzene	14.328	92	284823	38.23	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:43 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
107) Benzyl Chloride	14.353	126	39382	34.78	ug/L	#	90
108) 1,2-Dichlorobenzene	14.542	146	329571	37.50	ug/L		99
109) 1,2-Dibromo-3-Chloropr...	15.291	75	25450	38.38	ug/L		91
110) Hexachlorobutadiene	15.840	225	63627	33.26	ug/L		96
111) 1,2,4-Trichlorobenzene	15.889	180	188742	34.88	ug/L		96
112) Naphthalene	16.175	128	489166	36.21	ug/L		100
113) 1,2,3-Trichlorobenzene	16.346	180	174478	34.73	ug/L		97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

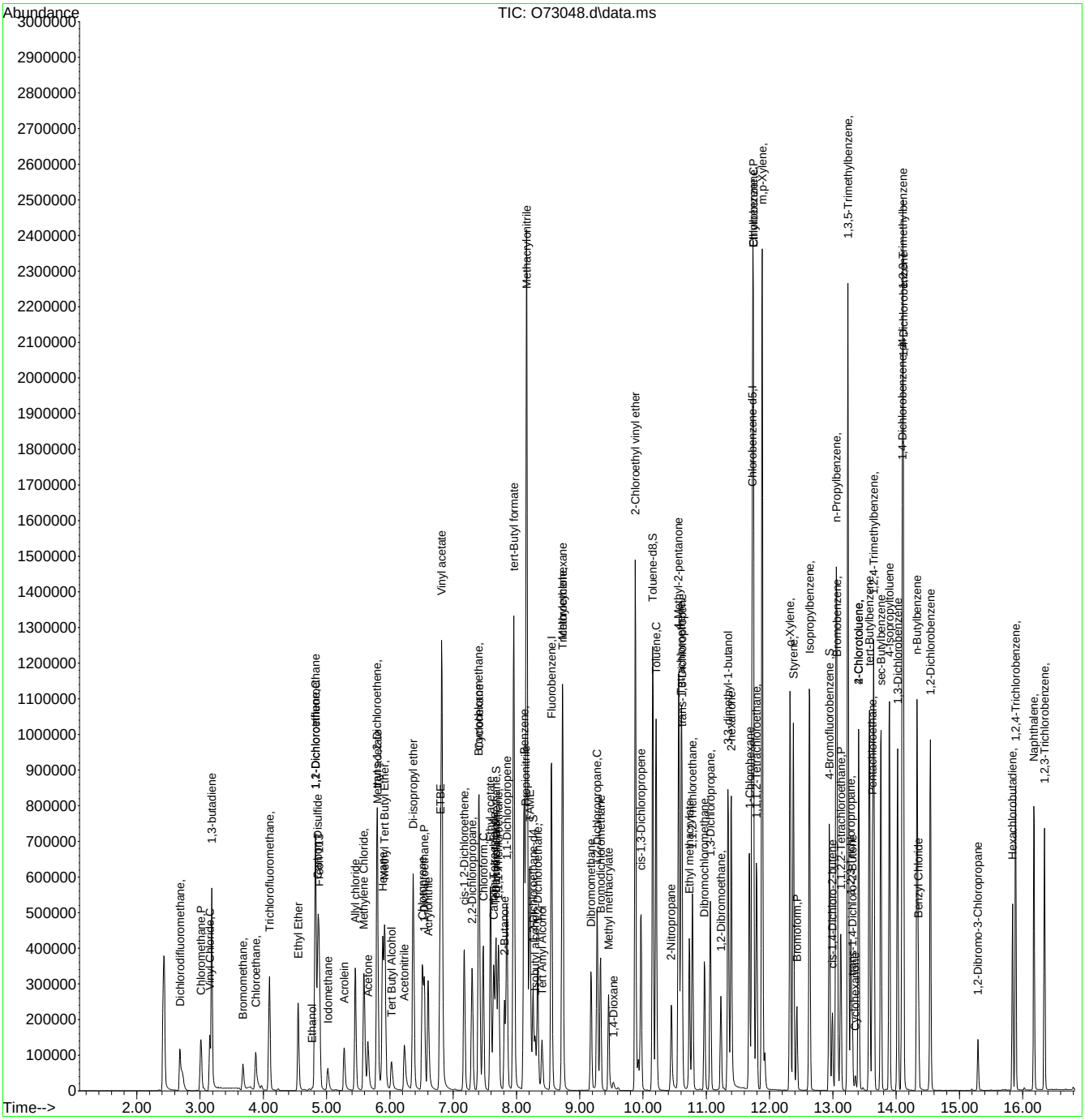
8.6.22

8

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:26:43 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration



Manual Integration Approval Summary

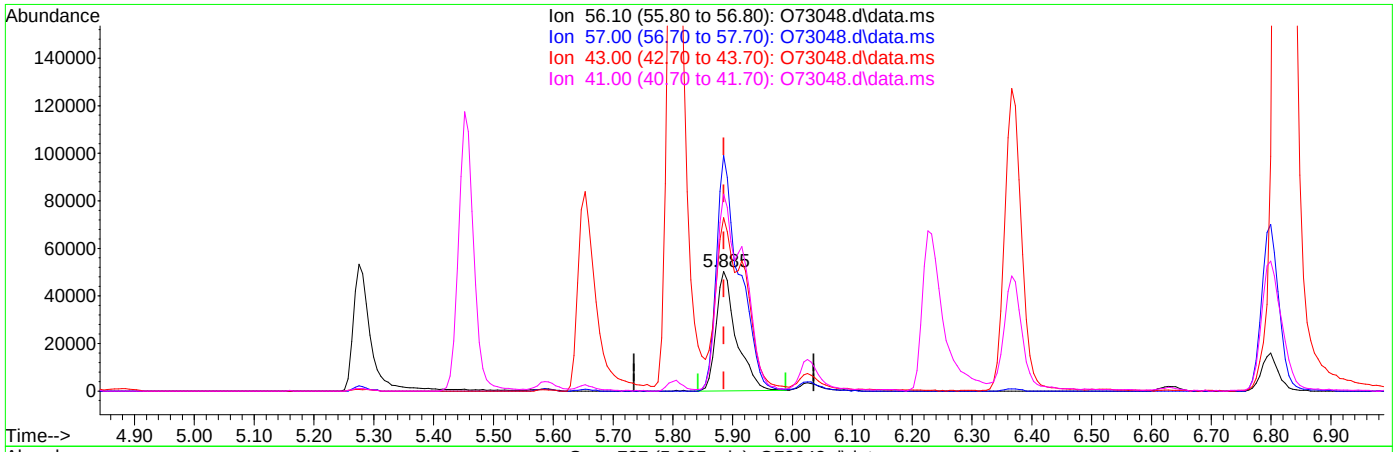
Sample Number: VO2870-ECC2866
Lab FileID: O73048.D
Injection Time: 12/14/22 20:28
Method: SW846 8260D
Analyst approved: 12/15/22 02:51 Jennifer Fereira
Supervisor approved: 12/15/22 13:17 Karen Watson

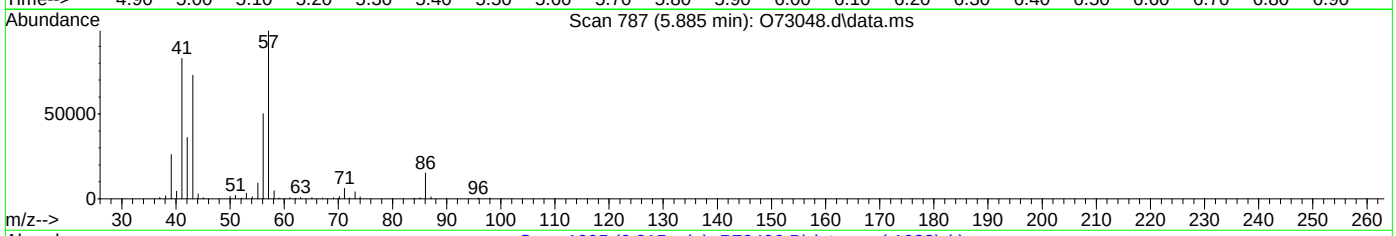
Parameter	CAS	Sig#	R.T. (min.)	Reason
Hexane	110-54-3		5.88	Overlapping peak
Isobutyl Alcohol	78-83-1		8.29	Poor instrument integration
1-Chlorohexane	544-10-5		11.68	Poor instrument integration

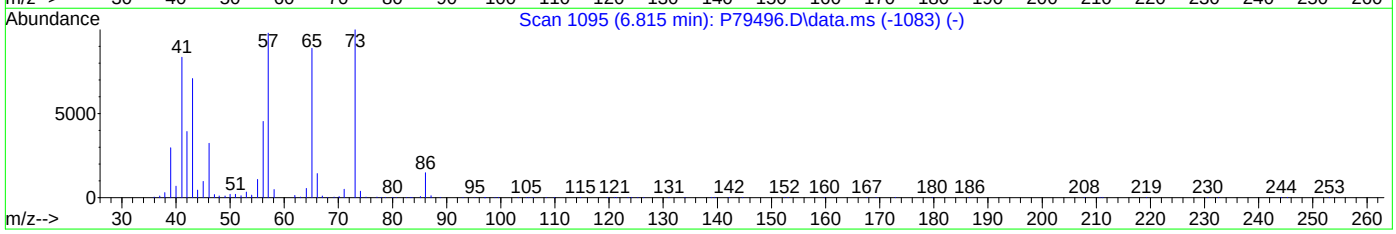
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:14:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73048.d\data.ms

(22) Hexane

5.885min (-0.000) 41.77ug/L

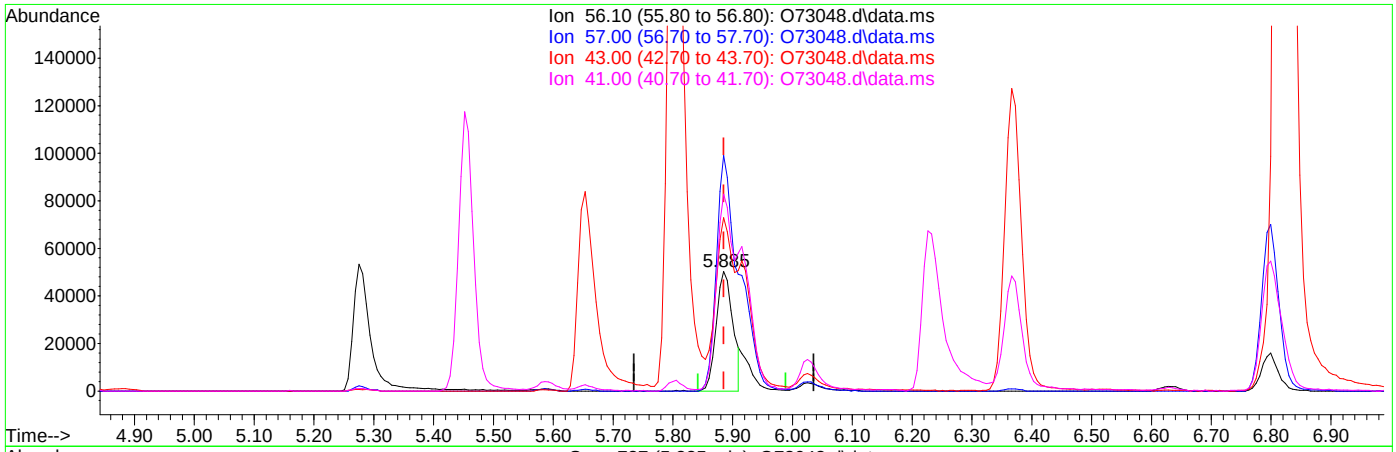
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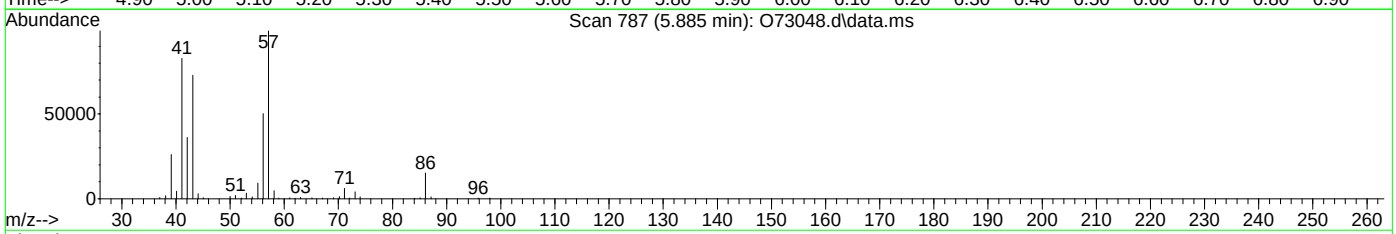
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	197.12
43.00	143.30	141.35
41.00	165.60	163.53

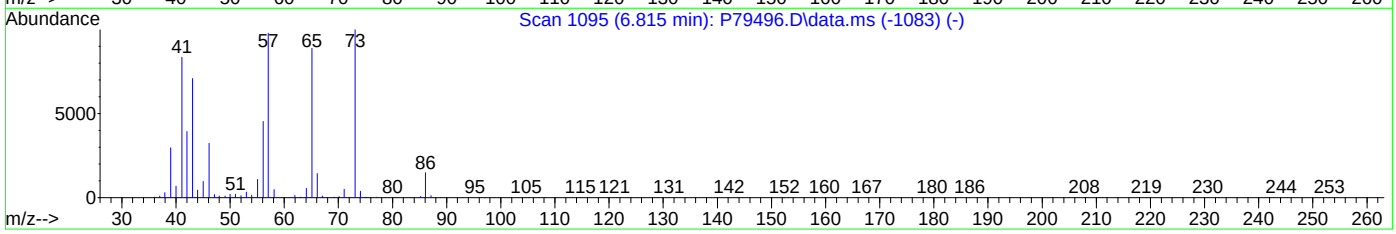
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:14:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73048.d\data.ms

(22) Hexane

5.885min (-0.000) 34.53ug/L m

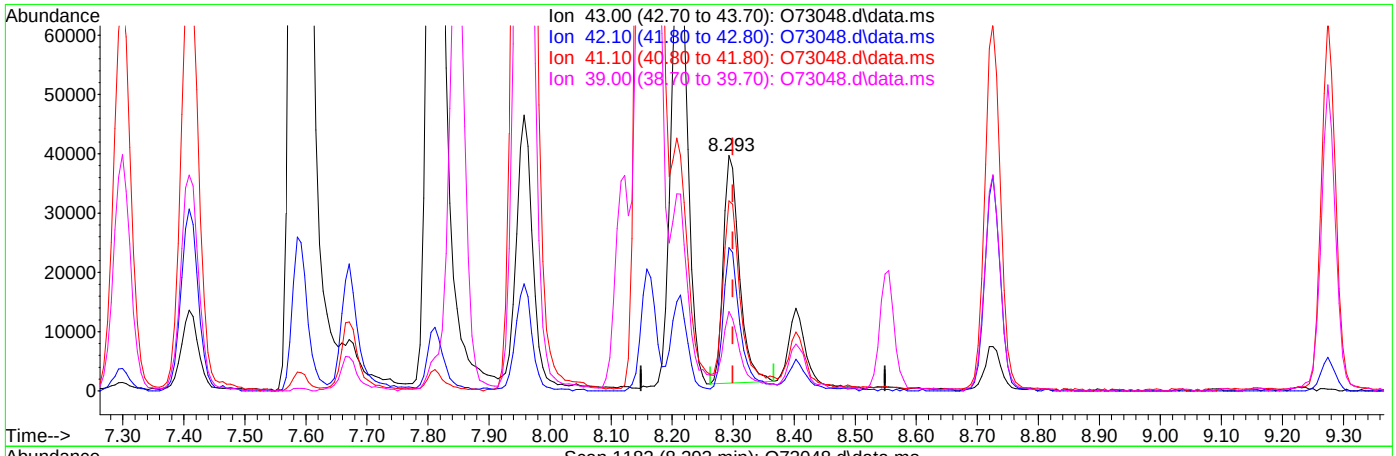
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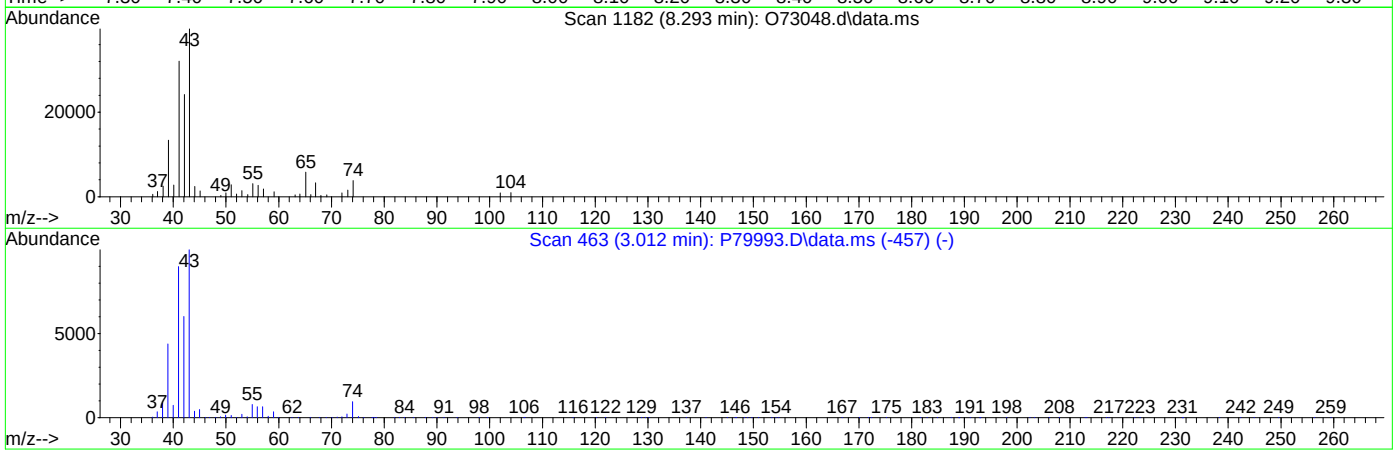
Ion	Exp%	Act%
56.10	100	100
57.00	191.60	197.12
43.00	143.30	144.99
41.00	165.60	164.70

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
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Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration





TIC: O73048.d\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 697.28ug/L

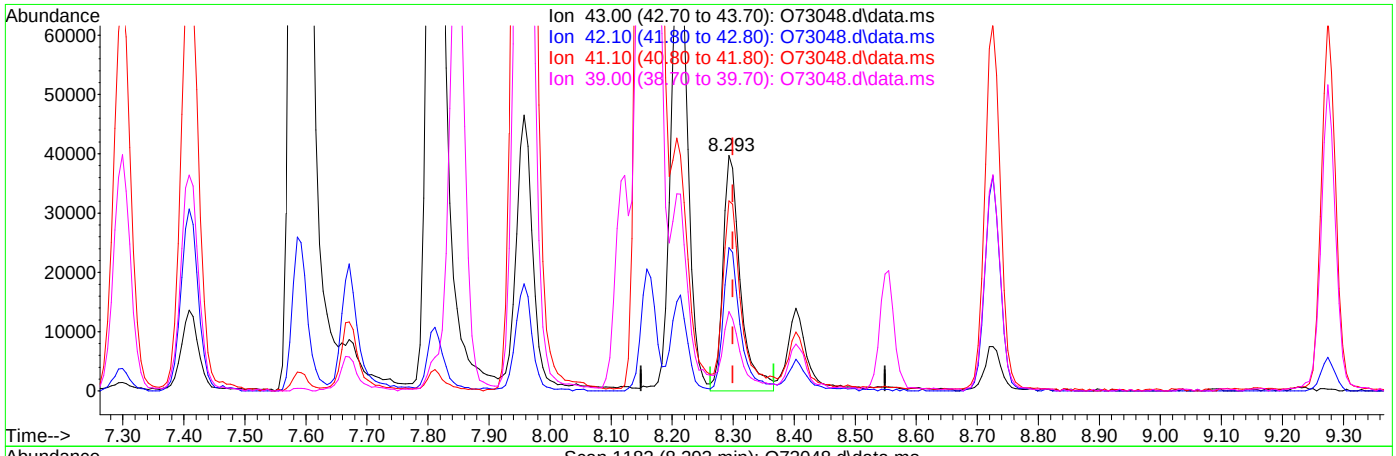
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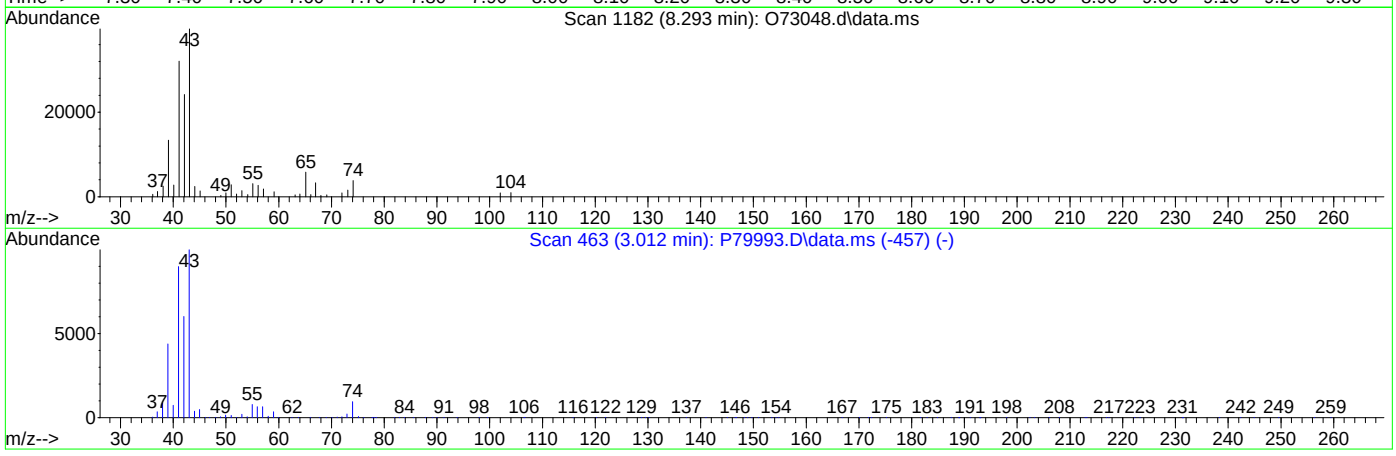
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	61.78
41.10	73.80	77.01
39.00	31.30	31.58

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:14:24 2022
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Response via : Initial Calibration





TIC: O73048.d\data.ms

(49) Isobutyl alcohol

8.293min (-0.006) 782.39ug/L m

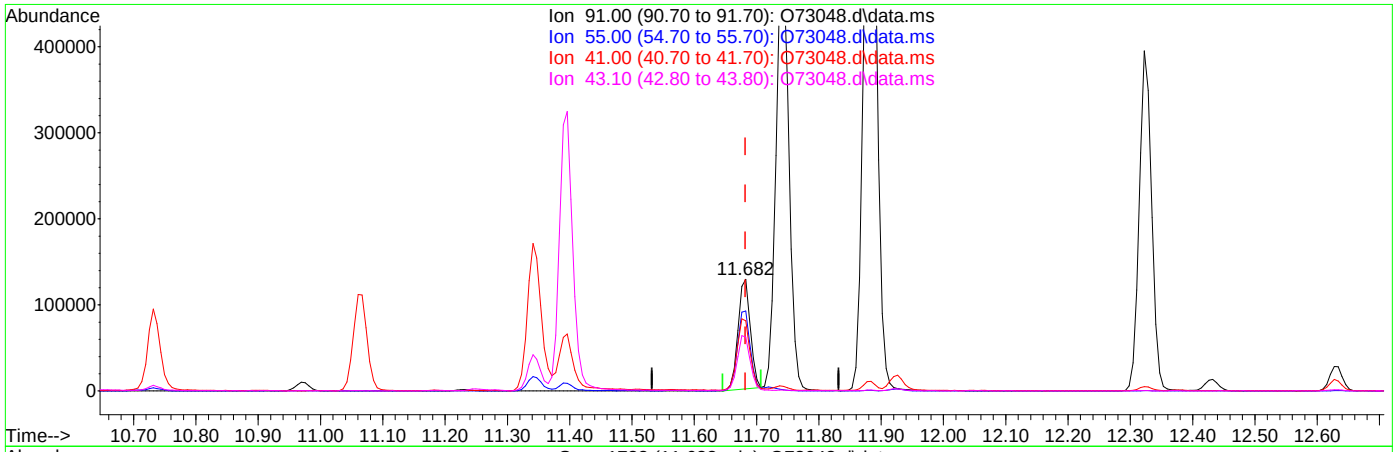
response 79036

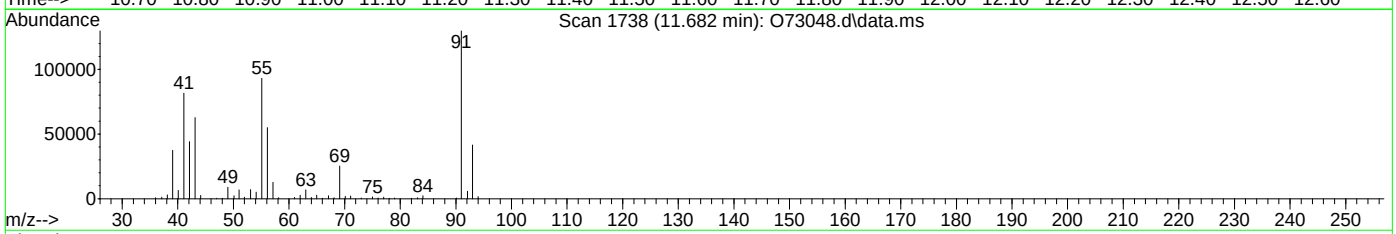
Ion	Exp%	Act%
43.00	100	100
42.10	58.40	60.85
41.10	73.80	80.70
39.00	31.30	33.72

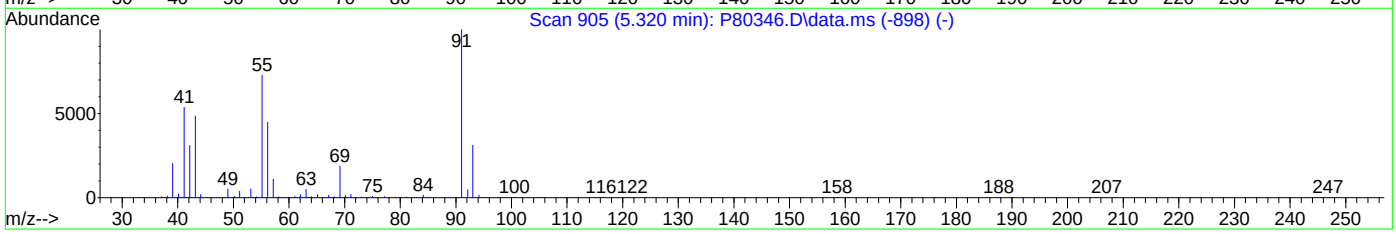
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:14:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73048.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 37.29ug/L

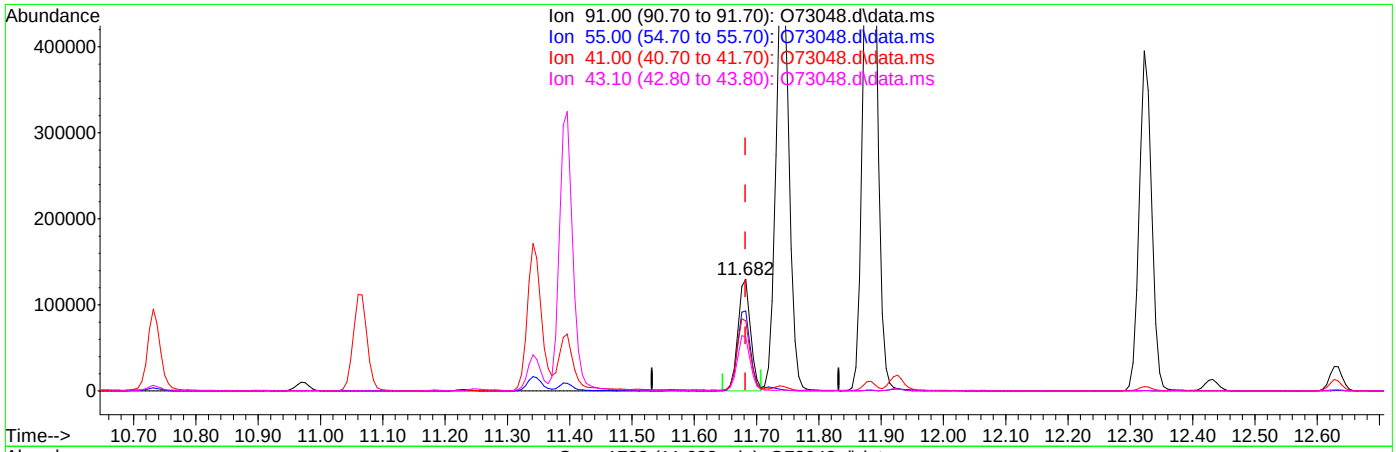
response 173814

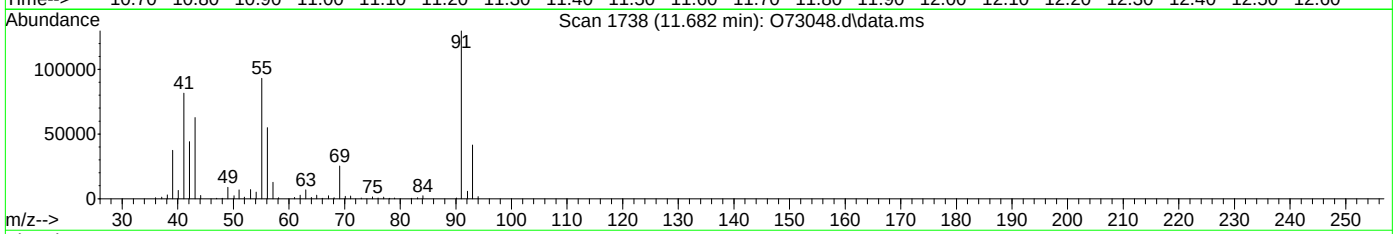
Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.27
41.00	64.60	61.85
43.10	48.40	47.69

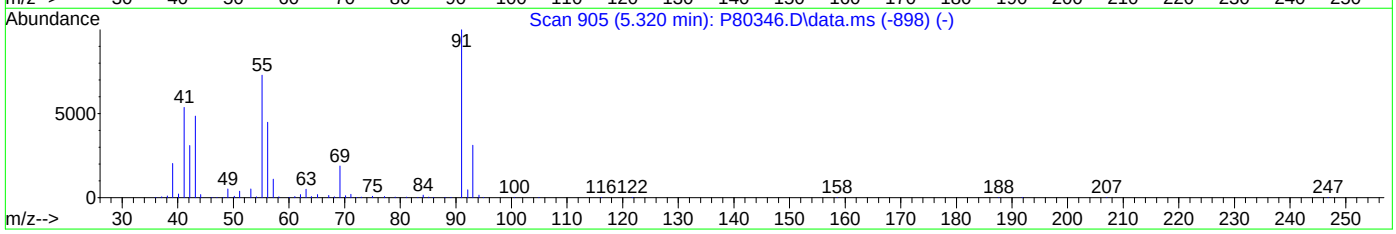
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\johnm\December 2022\12-15-2022\vo2870\
Data File : O73048.d
Acq On : 14 Dec 2022 8:28 pm
Operator : adelardl
Sample : ECC2866-5 Inst : MSVOA12
Misc : MS53002,VO2870,,,,,
ALS Vial : 29 Sample Multiplier: 1

Quant Method : C:\msdchem\1\methods\VO_12-08-2022.M
Quant Results File: VO_12-08-2022.RES
Quant Time: Dec 15 01:14:24 2022
Quant Title : SW-846 Method 5035A/8260B
QLast Update : Thu Dec 08 14:27:47 2022
Response via : Initial Calibration







TIC: O73048.d\data.ms

(76) 1-Chlorohexane

11.682min (+0.000) 38.84ug/L m

response 181047

Ion	Exp%	Act%
91.00	100	100
55.00	70.40	71.63
41.00	64.60	62.78
43.10	48.40	48.39

SGS -ORLANDO

MSVOA20-5E-ANALYSIS LOG

DATE:	12/8/2022
COLUMN TYPE:	RTXVMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA20-5E
PURGE PRESSURE:	11 PSI
PURGE VOLUME:	5 mL
ANALYST:	Courtney F

METHODS:*	8260
METHOD FILE:	applX12-08-2022.M
CALIB. DATE:	12/8/2022
EM VOLTAGE:	1482V
ACQ. METHOD:	8260VMSVI
BFB RESPONSE:	526601
Run ID:	V5E1617

BFB:	VS2676
ICAL/CC:	VS2655, VS2687, VS2692
	VS2693, VS2694, VS2688
ISTD/SUR:	VS2676
ICV/QC:	VS2641, VS2691, VS2695
	VS2696, VS2690, VS2684, VS2697
AFA:	VS2664A

Data File	Sample ID	Dil.	Vial #	Matrix	ALS Pos.	Sample Method	Manually Integrated Peaks Rationale, Peak#	pH	CI ?
5E35977	BLANK	-	-	W	1	8260		-	-
5E35978	BFB/IC1617-1	-	-	W	2	8260		-	-
5E35979	IC1617-2	-	-	W	3	8260		-	-
5E35980	IC1617-3	-	-	W	4	8260		-	-
5E35981	IC1617-4	-	-	W	5	8260		-	-
5E35982	ICC1617-5	-	-	W	6	8260		-	-
5E35983	IC1617-6	-	-	W	7	8260		-	-
5E35984	IC1617-7	-	-	W	8	8260		-	-
5E35985	BLANK	-	-	W	9	8260		-	-
5E35986A	ICV1617-5/CC1617-5	-	-	W	10	8260		-	-
5E35987A	ICV1617-4/BS	-	-	W	11	8260		-	-
5E35988	CC1617-1	-	-	W	12	8260		-	-
5E35989	BLANK	-	-	W	13	8260		-	-
5E35990	MB	-	-	W	14	8260		-	-
5E35991	FC925-7	1x	1	W	15	8260		7	N
5E35992	FC925-1	1x	3	W	16	8260		7	N
5E35993	FC925-2	1x	3	W	17	8260		7	N
5E35994	FC925-3	1x	3	W	18	8260		6	N
5E35995	FC925-4	2x	3	W	19	8260	25mL(-)50mL	7	N
5E35996	FC925-5	1x	3	W	20	8260		7	N
5E35997	FC925-6	1x	3	W	21	8260		7	N
5E35998	ECC1617-5	-	-	W	22	8260		-	-

CF 12/9/22

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueus Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rational SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument

SGS -ORLANDO

MSVOA20-5E-ANALYSIS LOG

DATE:	12/13/2022
COLUMN TYPE:	RTXVMS
DETECTOR:	5975 MSD
INSTRUMENT:	MSVOA20-5E
PURGE PRESSURE:	11 PSI
PURGE VOLUME:	5 mL
ANALYST:	Courtney F

METHODS:*	8260
METHOD FILE:	appIX12-08-2022.M
CALIB. DATE:	12/8/2022
EM VOLTAGE:	1482V
ACQ. METHOD:	8260VMSVI
BFB RESPONSE:	1530663
Run ID:	V5E1623

BFB:	VS2676
ICAL/CC:	VS2655, VS2687, VS2692
	VS2693, VS2694, VS2688
ISTD/SUR:	VS2676
ICV/QC:	VS2641, VS2691, VS2695
	VS2696, VS2690, VS2684, VS2697
AFA:	VS2664c

pH LOT: 230320, 230418
KI PAPER LOT: 07062021
Data Processed By:
Celine C.
Sample ID Verified By:
Courtney F
Date verfied: 12/13/2022

Data File	Sample ID	Dil.	Vial #	Matrix	ALS Pos.	Sample Method	Manually Integrated Peaks Rationale, Peak#	pH	CI ?	RR	Comments
5E36089	BLANK	-	-	W	30	8260		-	-	-	Passed autofind ✓
5E36090	BFB/CC1617-5	-	-	W	31	8260		-	-	-	Passed autofind; 20uL→ 50mL ✓
5E36091	BS	-	-	W	32	8260		-	-	-	12.5uL→ 40mL ✓
5E36092	CC1617-1	-	-	W	33	8260		-	-	-	1uL→ 100mL; all CCV low peaks present ✓
5E36093	BLANK	-	-	W	34	8260		-	-	-	✓
5E36094	MB	-	-	W	35	8260	AFA	-	-	-	ND ✓
5E36095	FC1213-7	1x	2	W	36	8260	Bubble > 6mm	1	N	1x	DOD: MBr (CCV) low
5E36096	FC1217-8	1x	2	W	37	8260	Bubble > 6mm	1	N	-	Acetone hit (trip blank w/ detection)
5E36097	FC1217-1	1x	1	W	38	8260	AFA	1	N	-	ND ✓
5E36098	FC1217-2	1x	1	W	39	8260	AFA	1	N	-	ND ✓
5E36099	FC1217-3	1x	1	W	40	8260	AFA	1	N	-	ND ✓
5E36100	FC1217-4	1x	1	W	41	8260	AFA	1	N	-	ND ✓
5E36101	FC1217-5	1x	1	W	42	8260	AFA	1	N	-	ND ✓
5E36102	FC1217-6	1x	1	W	43	8260	AFA	6	N	-	ND ✓
5E36103	FC1217-7	1x	1	W	44	8260	AFA	1	N	5x	cis-1,2-DCE high
5E36104	FC1116-2	1x	4	W	45	8260		1	N	1x	DOD: MBr (CCV) low
5E36105	FC1174-5	1x	2	W	46	8260		1	N	1x	DOD: MBr (CCV) low
5E36106	FC1213-1	1x	5	W	47	8260	AFA	1	N	1x	DOD: MBr (CCV) low
5E36107	FC1213-2	1x	4	W	48	8260	AFA	1	N	1x	DOD: MBr (CCV) low
5E36108	FC1213-3	1x	5	W	49	8260	AFA	1	N	1x	DOD: MBr (CCV) low
5E36109	FC1213-4	1x	4	W	50	8260	AFA	1	N	1x	DOD: MBr (CCV) low
5E36110	FC1213-5	1x	5	W	51	8260	AFA	1	N	1x	DOD: MBr (CCV) low
5E36111	FC1217-1MS	5x	2	W	52	8260	20mL(-)100mL	1	N	-	12.5uL→ 50mL ✓
5E36112	FC1217-1MSD	5x	2	W	53	8260	20mL(-)100mL	1	N	-	12.5uL→ 50mL ✓
5E36113	ECC1617-5	-	-	W	54	8260		-	-	-	20uL→ 50mL ✓

CJ 12/14/22

* For NELAC purposes, Method 8260 includes anlytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aquous Liquid, and "TCLP" or "SPLP" for Leachate.

Manual Integration Rational SOP QA029: **MP** Missed Peak, **OP** Overlapping Peak, **SP** Split Peak, **PDB** Poorly Defined Baseline, **BR** Baseline Ripple, **PII** Poor Instrument

Analyst's Signature: CJ

SGS -ORLANDO

MSVOA13-2P ANALYSIS LOG

Date:	12/08/2022
Column Type:	RTX-VMS
Detector:	5975C-MSD
Instrument:	MSVOA12-1O
Purge Pressure:	10.6 psi
Purge Volume:	5 mL
Analyst:	Adelard L

Method(s):*	8260
Method File:	VO_12-08-2022.M
Calibration Date:	12/08/2022
Acq. Method:	8260VMS.M
EM Voltage:	1576V
BFB Response:	1503171
Run ID:	VO2866

BFB:	VS2679
ICAL/CC:	VS2655, VS2687, VS2692
VS2693, VS2694, VS2688	
ICV/QC:	VS2641, VS2691, VS2695
VS2696, VS2690, VS2689, VS2684	
ISTD/Surr.:	VS2679

(0-3) pH Paper Lot#:	212521
(1-12) pH Paper Lot#:	230320
KI Paper Lot#:	30317
AFA Lot#:	VS2455C
Data processed by:	ABL
Sample ID Ver. by:	ABL
Date Verified:	12/08/2022

Data File	Sample ID	Dilution Factor	Vial #	Matrix	A.S. Pos.	Work Group	pH	CI? (Y/N)	RR	Comments / Manual Integrations (Peak# & Justification)
O72889	BFB	-	-	Water	1	-	-	-	-	Passed Autofind✓
O72890	IC2866-1	-	-	Water	2	-	-	-	-	1uL(-)100mL; Passed autofind; #22,76(PII); #24,38,52,69,87,93,100,107,109(MP)✓
O72891	IC2866-2	-	-	Water	3	-	-	-	-	5uL (-) 100mL; #22(OP); #49,76(PII)✓
O72892	IC2866-3	-	-	Water	4	-	-	-	-	5uL (-) 50mL; #22(OP); #49,76(PII)✓
O72893	IC2866-4	-	-	Water	5	-	-	-	-	12.5uL (-) 50mL; #22(OP); #49,76(PII)✓
O72894	ICC2866-5	-	-	Water	6	-	-	-	-	20uL (-) 50mL; #22(OP); #49,76(PII)✓
O72895	IC2866-6	-	-	Water	7	-	-	-	-	35uL (-) 50mL; #22(OP); 49,76(PII)✓
O72896	IC2866-7	-	-	Water	8	-	-	-	-	50uL (-) 50mL; #22(OP); #49,76(PII)✓
O72897	BLANK	-	-	Water	9	-	-	-	-	-
O72898	ICV2866-5	-	-	Water	10	-	-	-	-	25uL (-) 50mL; #22(OP); #49,76(PII)✓
O72898A	CC2866-5	-	-	Water	10	-	-	-	-	25uL (-) 50mL; #22(OP); #49,76(PII)✓
O72899	ICV2866-4	-	-	Water	11	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)✓
O72899A	BS	-	-	Water	11	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)✓
O72900	BLANK	-	-	Water	12	-	-	-	-	-
O72901	MB	-	-	Water	13	-	-	-	-	ND ✓
O72902	FC811-8	1X	2	Water	14	MS52894	6	N	-	Lot#✓
O72903	FC850-5	1X	2	Water	15	MS52925	6	N	-	Lot#✓
O72904	FC811-1	1X	3	Water	16	MS52894	6	N	-	✓
O72905	FC850-4	1X	2	Water	17	MS52925	6	N	-	✓
O72906	FC811-2	2X	3	Water	18	MS52894	6	N	-	25mL(-)50mL✓
O72907	FC811-3	10X	3	Water	19	MS52894	6	N	-	5mL(-)50mL✓
O72908	FC811-4	20X	3	Water	20	MS52894	6	N	-	2.5mL(-)50mL✓
O72909	FC811-5	50X	3	Water	21	MS52894	6	N	-	1mL(-)50mL✓
O72910	FC811-6	2X	3	Water	22	MS52894	6	N	-	25mL(-)50mL✓
O72911	FC811-7	50X	3	Water	23	MS52894	6	N	-	1mL(-)50mL✓
O72912	FC850-1	20X	2	Water	24	MS52925	6	N	-	2.5mL(-)50mL✓
O72913	FC850-2	50X	2	Water	25	MS52925	6	N	-	1mL(-)50mL✓
O72914	FC850-3	5X	2	Water	26	MS52925	6	N	-	10mL(-)50mL✓
O72915	ECC2866-5	-	-	Water	27	-	-	-	-	20uL(-)50mL✓

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

SGS -ORLANDO

MSVOA13-2P ANALYSIS LOG

Date:	12/14/2022
Column Type:	RTX-VMS
Detector:	5975C-MSD
Instrument:	MSVOA12-1O
Purge Pressure:	10.6 psi
Purge Volume:	5 mL
Analyst:	Adelard L

Method(s):*	8260
Method File:	VO_12-08-2022.M
Calibration Date:	12/08/2022
Acq. Method:	8260VMS.M
EM Voltage:	1576V
BFB Response:	873230
Run ID:	VO2870

BFB:	VS2679
ICAL/CC:	VS2655, VS2687, VS2692
	VS2693, VS2694, VS2688
ICV/QC:	VS2641, VS2691, VS2695
	VS2696, VS2690, VS2689, VS2684
ISTD/Surr.:	VS2679

(0-3) pH Paper Lot#:	212521
(1-12) pH Paper Lot#:	230320
KI Paper Lot#:	30317
AFA Lot#:	VS2455C
Data processed by:	JM/KG
Sample ID Ver. by:	ABL
Date Verified:	12/14/2022

Data File	Sample ID	Dilution Factor	Vial #	Matrix	A.S. Pos.	Work Group	pH	CI? (Y/N)	RR	Comments / Manual Integrations (Peak# & Justification)
O73020	BLANK	-	-	Water	1	-	-	-	-	Passed Autofind✓
O73021	BLANK	-	-	Water	2	-	-	-	-	Passed Autofind✓
O73022	CC2866-5/BFB	-	-	Water	3	-	-	-	-	20uL (-) 50mL;Passed autofind; #22(OP); #49,76(PII)✓
O73023	BS	-	-	Water	4	-	-	-	-	12.5uL (-) 40mL; #22(OP); #49,76(PII)
O73024	CC2866-1	-	-	Water	5	-	-	-	-	1uL(-)100mL; 14D present ✓
O73025	MB	-	-	Water	6	-	-	-	-	ND ✓
O73026	FC1213-7	1X	1	Water	7	MS53006	1	N	-	HS ND✓
O73027	FC1196-7	1X	9	Water	8	MS53002	1	N	-	✓
O73028	FC1196-12	1X	6	Water	9	MS53002	1	N	-	Bubble > 6mm✓
O73029	FC1196-13	1X	5	Water	10	MS53002	1	N	-	Bubble > 6mm✓
O73030	FC1196-16	1X	3	Water	11	MS53002	1	N	-	✓
O73031	FC1196-17	1X	9	Water	12	MS53002	1	N	-	✓
O73032	FC1196-19	1X	5	Water	13	MS53002	1	N	-	✓
O73033	FC1116-2	1X	5	Water	14	MS53006	1	N	-	✓
O73034	FC1174-5	1X	3	Water	15	MS53006	1	N	-	✓
O73035	FC1213-1	1X	6	Water	16	MS53006	1	N	-	✓
O73036	FC1213-2	1X	6	Water	17	MS53006	1	N	-	✓
O73037	FC1213-3	1X	4	Water	18	MS53006	1	N	-	Bubble > 6mm✓
O73038	FC1213-4	1X	6	Water	19	MS53006	1	N	-	SS failure✓
O73039	FC1213-5	1X	4	Water	20	MS53006	1	N	-	Bubble > 6mm✓
O73040	FC996-4	1X	9	Water	21	MS52979	1	N	-	✓
O73041	FC1217-7	5X	3	Water	22	MS53006	1	N	-	10mL(-)50mL; E-combine✓
O73042	FC1196-2	2X	9	Water	23	MS53002	1	N	-	25mL(-)50mL; E-combine✓
O73043	FC1196-6	2X	4	Water	24	MS53002	1	N	-	25mL(-)50mL; E-combine✓
O73044	FC1196-11	10X	3	Water	25	MS53002	1	N	-	5mL(-)50mL✓
O73045	FC1196-15	10X	3	Water	26	MS53002	1	N	-	5mL(-)50mL; E-combine✓
O73046	FC1196-11MS	10X	3	Water	27	MS53002	1	N	-	10mL(-)100mL; 12.5uL(-)40mL✓
O73047	FC1196-11MSD	10X	3	Water	28	MS53002	1	N	-	10mL(-)100mL; 12.5uL(-)40mL✓
O73048	ECC2866-5	-	-	Water	29	-	-	-	-	20uL(-)50mL✓

KG 12/15/22

* For NELAC purposes, Method 8260 includes analytes by SOP MS005 Matrix: Designate "W" for Water "S" for soil, "O" for Oil, "Liq" for Non-aqueous Liquid, and "TCLP" or "SPLP" for Leachate.

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries
- IDL and Linear Range Summaries

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:12	MA19112-STD1	1		STDC
10:16	MA19112-STD2	1		STDD
10:20	MA19112-STD3	1		STDE
10:24	MA19112-STD4	1		STDF
10:28	MA19112-STD5	1		STDG
10:36	MA19112-STD6	1		STDA
10:41	MA19112-STD7	1		STDB
10:46	MA19112-CRIA1	1		
10:50	MA19112-CRIA2	1		
10:57	MA19112-HSTD1	1		
11:04	MA19112-ICV1	1		
11:17	MA19112-ICB1	1		
11:21	MA19112-ICSA1	1		
11:39	MA19112-ICSAB1	1		
11:47	MA19112-CCV1	1		
11:57	MA19112-CCB1	1		
12:07	MP41628-MB1	1		
12:12	MP41628-B1	1		
12:17	MP41631-MB1	1		
12:22	MP41631-B1	1		
12:27	FC1080-1	1		(sample used for QC only; not part of login FC1116)
12:32	MP41631-D1	1		
12:37	MP41631-SD1	5		
12:42	MP41631-S1	1		
12:47	MP41631-S2	1		
12:52	MA19112-CCV2	1		
12:57	MA19112-CCB2	1		
13:02	ZZZZZZ	1		
13:08	FC1090-1F	1		(sample used for QC only; not part of login FC1116)
13:13	MP41628-D1	1		
13:18	MP41628-SD1	5		
13:23	MP41628-PS1	1		
13:27	MP41628-S1	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:32	MP41628-S2	1		
13:37	ZZZZZZ	1		
13:42	ZZZZZZ	1		
13:47	ZZZZZZ	1		
13:52	MA19112-CCV3	1		
13:57	MA19112-CCB3	1		
14:02	ZZZZZZ	1		
14:07	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:27	ZZZZZZ	1		
14:32	ZZZZZZ	1		
14:37	FC1116-1	1		
14:42	FC1116-2	1		
14:48	FC1116-3	1		
14:53	MA19112-CCV4	1		
14:58	MA19112-CCB4	1		
15:03	FC1116-4	1		
---------->	Last reportable sample/prep for job FC1116			
15:08	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:33	MP41623-B1	1		
15:38	MP41623-D1	1		
15:43	MP41623-S1	1		
15:48	MP41623-S2	1		
15:53	MA19112-CCV5	1		
15:58	MA19112-CCB5	1		
---------->	Last reportable CCB for job FC1116			
16:03	MP41623-PS1	1		
16:08	MP41623-SD1	5		
16:13	ZZZZZZ	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:18	ZZZZZZ	10		
16:23	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:49	ZZZZZZ	1		
16:54	MA19112-CCV6	1		
16:59	MA19112-CCB6	1		
17:04	MP41630-MB1	1		
17:09	MP41630-B1	1		
17:14	FC1261-12	1		(sample used for QC only; not part of login FC1116)
17:19	MP41630-D1	1		
17:24	MP41630-SD1	5		
17:29	MP41630-PS1	1		
17:34	MP41630-S1	1		
17:39	MP41630-S2	1		
17:43	ZZZZZZ	1		
17:49	ZZZZZZ	1		
17:53	MA19112-CCV7	1		
17:59	MA19112-CCB7	1		
18:04	ZZZZZZ	1		
18:09	ZZZZZZ	1		
18:29	ZZZZZZ	5		
18:44	ZZZZZZ	1		
18:49	ZZZZZZ	1		
18:54	MA19112-CCV8	1		
18:59	MA19112-CCB8	1		
19:04	ZZZZZZ	1		
19:09	ZZZZZZ	1		
19:14	ZZZZZZ	1		
19:19	ZZZZZZ	1		
19:24	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:29	ZZZZZZ	1		
19:34	ZZZZZZ	1		
19:39	MP41635-MB1	1		
19:44	MP41635-B1	1		
19:49	FC1123-1F	1		(sample used for QC only; not part of login FC1116)
19:54	MA19112-CCV9	1		
19:59	MA19112-CCB9	1		
20:04	MP41635-D1	1		
20:09	MP41635-SD1	5		
20:14	MP41635-PS1	1		
20:19	MP41635-S1	1		
20:24	MP41635-S2	1		
20:29	ZZZZZZ	1		
20:34	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:44	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:54	MA19112-CCV10	1		
20:59	MA19112-CCB10	1		
21:04	ZZZZZZ	1		
21:09	ZZZZZZ	1		
21:14	ZZZZZZ	1		
21:19	ZZZZZZ	1		
21:24	ZZZZZZ	1		
21:29	ZZZZZZ	1		
21:34	ZZZZZZ	1		
21:39	ZZZZZZ	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19112-CCV11	1		
21:59	MA19112-CCB11	1		
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:14	ZZZZZZ	1		
22:19	MA19112-CCV12	1		
22:24	MA19112-CCB12	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
10:46	MA19112-CRIA1	1	X	X	
10:50	MA19112-CRIA2	1			
10:57	MA19112-HSTD1	1	X	X	
11:04	MA19112-ICV1	1	X	X	
11:17	MA19112-ICB1	1	X	X	
11:21	MA19112-ICSA1	1	X	X	
11:39	MA19112-ICSAB1	1	X	X	
11:47	MA19112-CCV1	1	X	X	
11:57	MA19112-CCB1	1	X	X	
12:07	MP41628-MB1	1	X	X	
12:12	MP41628-B1	1	X	X	
12:17	MP41631-MB1	1			
12:22	MP41631-B1	1			
12:27	FC1080-1	1			(a)
12:32	MP41631-D1	1			
12:37	MP41631-SD1	5			
12:42	MP41631-S1	1			
12:47	MP41631-S2	1			
12:52	MA19112-CCV2	1	X	X	
12:57	MA19112-CCB2	1	X	X	
13:02	ZZZZZZ	1			
13:08	FC1090-1F	1	X	X	(a)
13:13	MP41628-D1	1	X	X	
13:18	MP41628-SD1	5	X	X	
13:23	MP41628-PS1	1	X	X	
13:27	MP41628-S1	1	X	X	
13:32	MP41628-S2	1	X	X	
13:37	ZZZZZZ	1			
13:42	ZZZZZZ	1			
13:47	ZZZZZZ	1			
13:52	MA19112-CCV3	1	X	X	
13:57	MA19112-CCB3	1	X	X	
14:02	ZZZZZZ	1			
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg
14:07	ZZZZZZ	1		
14:12	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:22	ZZZZZZ	1		
14:27	ZZZZZZ	1		
14:32	ZZZZZZ	1		
14:37	FC1116-1	1	X	X
14:42	FC1116-2	1	X	X
14:48	FC1116-3	1	X	X
14:53	MA19112-CCV4	1	X	X
14:58	MA19112-CCB4	1	X	X
15:03	FC1116-4	1	X	X
15:08	ZZZZZZ	1		
15:13	ZZZZZZ	1		
15:18	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:28	ZZZZZZ	1		
15:33	MP41623-B1	1	X	X
15:38	MP41623-D1	1	X	X
15:43	MP41623-S1	1	X	X
15:48	MP41623-S2	1	X	X
15:53	MA19112-CCV5	1	X	X
15:58	MA19112-CCB5	1	X	X
16:03	MP41623-PS1	1	X	X
16:08	MP41623-SD1	5	X	X
16:13	ZZZZZZ	10		
16:18	ZZZZZZ	10		
16:23	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:34	ZZZZZZ	1		
16:39	ZZZZZZ	1		
16:44	ZZZZZZ	1		
16:49	ZZZZZZ	1		
		Element:	Ca	Mg

REPORTED ELEMENTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	Ca	Mg	
16:54	MA19112-CCV6	1	X	X	
16:59	MA19112-CCB6	1	X	X	
17:04	MP41630-MB1	1	X	X	
17:09	MP41630-B1	1	X	X	
17:14	FC1261-12	1			(a)
17:19	MP41630-D1	1	X	X	
17:24	MP41630-SD1	5	X	X	
17:29	MP41630-PS1	1	X	X	
17:34	MP41630-S1	1	X	X	
17:39	MP41630-S2	1	X	X	
17:43	ZZZZZZ	1			
17:49	ZZZZZZ	1			
17:53	MA19112-CCV7	1	X	X	
17:59	MA19112-CCB7	1	X	X	
18:04	ZZZZZZ	1			
18:09	ZZZZZZ	1			
18:29	ZZZZZZ	5			
18:44	ZZZZZZ	1			
18:49	ZZZZZZ	1			
18:54	MA19112-CCV8	1	X	X	
18:59	MA19112-CCB8	1	X	X	
19:04	ZZZZZZ	1			
19:09	ZZZZZZ	1			
19:14	ZZZZZZ	1			
19:19	ZZZZZZ	1			
19:24	ZZZZZZ	1			
19:29	ZZZZZZ	1			
19:34	ZZZZZZ	1			
19:39	MP41635-MB1	1			
19:44	MP41635-B1	1			
19:49	FC1123-1F	1			(a)
19:54	MA19112-CCV9	1	X	X	
19:59	MA19112-CCB9	1	X	X	
		Element:	Ca	Mg	

REPORTED ELEMENTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Element: Dilution	C a	M g
20:04	MP41635-D1	1		
20:09	MP41635-SD1	5		
20:14	MP41635-PS1	1		
20:19	MP41635-S1	1		
20:24	MP41635-S2	1		
20:29	ZZZZZZ	1		
20:34	ZZZZZZ	1		
20:39	ZZZZZZ	1		
20:44	ZZZZZZ	1		
20:49	ZZZZZZ	1		
20:54	MA19112-CCV10	1	X	X
20:59	MA19112-CCB10	1	X	X
21:04	ZZZZZZ	1		
21:09	ZZZZZZ	1		
21:14	ZZZZZZ	1		
21:19	ZZZZZZ	1		
21:24	ZZZZZZ	1		
21:29	ZZZZZZ	1		
21:34	ZZZZZZ	1		
21:39	ZZZZZZ	1		
21:44	ZZZZZZ	1		
21:49	ZZZZZZ	1		
21:54	MA19112-CCV11	1	X	X
21:59	MA19112-CCB11	1	X	X
22:04	ZZZZZZ	1		
22:09	ZZZZZZ	1		
22:14	ZZZZZZ	1		
22:19	MA19112-CCV12	1	X	X
22:24	MA19112-CCB12	1	X	X

(a) Sample used for QC only; not part of login FC1116.

Element:	C a	M g

INTERNAL STANDARD SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
10:12	MA19112-STD1	6874	38100	5198	2797
10:16	MA19112-STD2	6718	37146	5176	2686
10:20	MA19112-STD3	6608	36726	5128	2573
10:24	MA19112-STD4	6462	36336	5149	2428
10:28	MA19112-STD5	6208	35455	5065	2239
10:36	MA19112-STD6	6810	37823	5098	2925
10:41	MA19112-STD7	6814	38062	5254	2820
10:46	MA19112-CRIA1	6703	37349	5159	2762
10:50	MA19112-CRIA2				2780
10:57	MA19112-HSTD1	6268	35513	5106	2258
11:04	MA19112-ICV1	6488	36323	5104	2439
11:17	MA19112-ICB1	6825 R	38310 R	5207 R	2950 R
11:21	MA19112-ICSA1	6134	33657	5073	2005
11:39	MA19112-ICSAB1	6059	33046	5017	2061
11:47	MA19112-CCV1	6424	36041	5141	2453
11:57	MA19112-CCB1	6832	38056	5185	2947
12:07	MP41628-MB1	6952	39437	5394	2970
12:12	MP41628-B1	6740	37948	5333	2641
12:17	MP41631-MB1	6924	39196	5399	2974
12:22	MP41631-B1	6716	37565	5322	2632
12:27	FC1080-1	6547	36521	5267	2584
12:32	MP41631-D1	6481	36472	5209	2570
12:37	MP41631-SD1	6776	37812	5287	2795
12:42	MP41631-S1	6597	36618	5305	2492
12:47	MP41631-S2	6523	36569	5326	2475
12:52	MA19112-CCV2	6454	36657	5204	2470
12:57	MA19112-CCB2	6827	38629	5284	2965
13:02	ZZZZZZ	6577	36867	5297	2624
13:08	FC1090-1F	6790	38449	5393	2893
13:13	MP41628-D1	6937	39624	5536	2960
13:18	MP41628-SD1	6845	39202	5366	2986
13:23	MP41628-PS1	6841	38516	5380	2823
13:27	MP41628-S1	6619	36991	5295	2594

INTERNAL STANDARD SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
13:32	MP41628-S2	6654	37107	5302	2601
13:37	ZZZZZZ	6825	38801	5410	2897
13:42	ZZZZZZ	6928	39138	5388	2966
13:47	ZZZZZZ	6903	39196	5443	2935
13:52	MA19112-CCV3	6491	36634	5262	2483
13:57	MA19112-CCB3	6880	39111	5378	2983
14:02	ZZZZZZ	6971	39526	5454	2978
14:07	ZZZZZZ	6958	39226	5433	2974
14:12	ZZZZZZ	6514	36439	5291	2580
14:17	ZZZZZZ	6937	39612	5430	2976
14:22	ZZZZZZ	6976	39673	5433	2990
14:27	ZZZZZZ	6837	38234	5399	2752
14:32	ZZZZZZ	6432	35673	5176	2495
14:37	FC1116-1	6769	37647	5255	2681
14:42	FC1116-2	6911	38818	5377	2848
14:48	FC1116-3	6726	37366	5344	2675
14:53	MA19112-CCV4	6554	37009	5237	2488
14:58	MA19112-CCB4	6941	39427	5325	2994
15:03	FC1116-4	6678	37756	5342	2673
15:08	ZZZZZZ	6791	38153	5393	2808
15:13	ZZZZZZ	6736	37873	5321	2755
15:18	ZZZZZZ	6848	38400	5364	2827
15:23	ZZZZZZ	6709	37590	5278	2724
15:28	ZZZZZZ	6655	37448	5264	2693
15:33	MP41623-B1	6780	37846	5272	2640
15:38	MP41623-D1	7172	40048	5482	2820
15:43	MP41623-S1	6999	38843	5499	2582
15:48	MP41623-S2	7044	38480	5566	2609
15:53	MA19112-CCV5	6566	37136	5216	2490
15:58	MA19112-CCB5	7083	39513	5413	3034
16:03	MP41623-PS1	7168	39468	5572	2791
16:08	MP41623-SD1	7012	40067	5583	2988
16:13	ZZZZZZ	5602	30838	5331	2064

INTERNAL STANDARD SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
16:18	ZZZZZZ	5544	30356	5309	1974
16:23	ZZZZZZ	6818	38831	5542	2904
16:28	ZZZZZZ	6880	39240	5371	2951
16:34	ZZZZZZ	6953	39286	5475	2966
16:39	ZZZZZZ	6976	39841	5480	3008
16:44	ZZZZZZ	6867	39062	5423	2907
16:49	ZZZZZZ	6950	39680	5417	2975
16:54	MA19112-CCV6	6459	36559	5207	2465
16:59	MA19112-CCB6	6926	39259	5343	2992
17:04	MP41630-MB1	6888	39162	5371	2949
17:09	MP41630-B1	6606	37277	5230	2580
17:14	FC1261-12	6977	38669	5398	2690
17:19	MP41630-D1	6994	38767	5400	2697
17:24	MP41630-SD1	7026	39224	5370	2902
17:29	MP41630-PS1	6959	38419	5403	2641
17:34	MP41630-S1	6818	37438	5413	2459
17:39	MP41630-S2	6858	37633	5420	2507
17:43	ZZZZZZ	6994	38984	5448	2695
17:49	ZZZZZZ	7051	39259	5565	2688
17:53	MA19112-CCV7	6657	37956	5188	2537
17:59	MA19112-CCB7	7084	40240	5458	3066
18:04	ZZZZZZ	7127	38890	5574	2624
18:09	ZZZZZZ	7142	39416	5575	2668
18:29	ZZZZZZ	9703 !a	53746 !a	7807 !a	2524
18:44	ZZZZZZ	7266	40582	5686	2870
18:49	ZZZZZZ	7135	40152	5637	2862
18:54	MA19112-CCV8	6703	37691	5361	2565
18:59	MA19112-CCB8	7055	40357	5472	3075
19:04	ZZZZZZ	7788	43392	6056	2815
19:09	ZZZZZZ	7376	40256	5806	2649
19:14	ZZZZZZ	7173	39799	5636	2733
19:19	ZZZZZZ	7480	41632	5835	2778
19:24	ZZZZZZ	7684	42047	6052	2594

INTERNAL STANDARD SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
19:29	ZZZZZZ	7614	41996	5943	2711
19:34	ZZZZZZ	7299	40599	5700	2769
19:39	MP41635-MB1	7128	40769	5500	3083
19:44	MP41635-B1	6927	37653	5494	2729
19:49	FC1123-1F	6710	37645	5394	2658
19:54	MA19112-CCV9	6647	37875	5380	2548
19:59	MA19112-CCB9	7059	40324	5470	3085
20:04	MP41635-D1	6683	37685	5388	2662
20:09	MP41635-SD1	6913	39211	5505	2878
20:14	MP41635-PS1	6637	37577	5406	2612
20:19	MP41635-S1	6699	37536	5439	2541
20:24	MP41635-S2	6706	37630	5497	2540
20:29	ZZZZZZ	6628	37608	5434	2632
20:34	ZZZZZZ	6857	39160	5449	2835
20:39	ZZZZZZ	6992	39703	5568	2874
20:44	ZZZZZZ	6870	38980	5482	2873
20:49	ZZZZZZ	6797	38481	5438	2814
20:54	MA19112-CCV10	6573	37529	5331	2527
20:59	MA19112-CCB10	7085	40534	5532	3104
21:04	ZZZZZZ	6915	39626	5510	2914
21:09	ZZZZZZ	6671	38139	5396	2763
21:14	ZZZZZZ	6708	37997	5368	2767
21:19	ZZZZZZ	6759	37964	5456	2732
21:24	ZZZZZZ	6640	37619	5352	2666
21:29	ZZZZZZ	6621	37830	5361	2664
21:34	ZZZZZZ	6732	38370	5453	2717
21:39	ZZZZZZ	7081	40387	5571	2986
21:44	ZZZZZZ	6888	39097	5493	2775
21:49	ZZZZZZ	7016	40138	5776	2925
21:54	MA19112-CCV11	6538	37861	5643	2592
21:59	MA19112-CCB11	6931	40236	5770	3117
22:04	ZZZZZZ	6609	37757	5759	2720
22:09	ZZZZZZ	6822	39163	5866	2837

INTERNAL STANDARD SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
Analyst: LM Run ID: MA19112
Parameters: Ca,Mg

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:14	ZZZZZZ	6822	38902	5816	2872
22:19	MA19112-CCV12	6669	37945	5696	2612
22:24	MA19112-CCB12	7221	40816	5618	3118

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	60-125 %
Istd#2	Yttrium (3600)	60-125 %
Istd#3	Yttrium (3710)	60-125 %
Istd#4	Indium	60-125 %

(a) No sample results reported from this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19112 Units: ug/l

Time: / Sample ID:			11:17 ICB1		11:57 CCB1		12:57 CCB2		13:57 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	14	anr							
Antimony	20	1	anr							
Arsenic	10	1.3	anr							
Barium	200	.5	anr							
Beryllium	5.0	.1	anr							
Boron	100	5								
Cadmium	4.0	.1	anr							
Calcium	5000	50	-1.10	<5000	-0.500	<5000	19.3	<5000	13.9	<5000
Chromium	10	.5	anr							
Cobalt	50	.2	anr							
Copper	25	1	anr							
Iron	300	15	anr							
Lead	20	1	anr							
Magnesium	5000	35	9.80	<5000	-4.10	<5000	1.40	<5000	4.00	<5000
Manganese	15	.25	anr							
Molybdenum	50	.3	anr							
Nickel	40	.4	anr							
Potassium	10000	100	anr							
Selenium	20	2	anr							
Silver	10	.5	anr							
Sodium	10000	250	anr							
Strontium	10	.25								
Thallium	10	1	anr							
Tin	50	.5	anr							
Titanium	10	.5								
Vanadium	50	.5	anr							
Zinc	20	3	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: result < RL Run ID: MA19112 Units: ug/l

Time:			14:58		15:58	
Sample ID:			CCB4		CCB5	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	14	anr			
Antimony	20	1	anr			
Arsenic	10	1.3	anr			
Barium	200	.5	anr			
Beryllium	5.0	.1	anr			
Boron	100	5				
Cadmium	4.0	.1	anr			
Calcium	5000	50	18.7	<5000	21.9	<5000
Chromium	10	.5	anr			
Cobalt	50	.2	anr			
Copper	25	1	anr			
Iron	300	15	anr			
Lead	20	1	anr			
Magnesium	5000	35	-4.80	<5000	-1.60	<5000
Manganese	15	.25	anr			
Molybdenum	50	.3	anr			
Nickel	40	.4	anr			
Potassium	10000	100	anr			
Selenium	20	2	anr			
Silver	10	.5	anr			
Sodium	10000	250	anr			
Strontium	10	.25				
Thallium	10	1	anr			
Tin	50	.5	anr			
Titanium	10	.5				
Vanadium	50	.5	anr			
Zinc	20	3	anr			

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19112 Units: ug/l

Time:		11:04			11:47			12:52	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	41200	103.0	40000	40000	100.0	40000	39700	99.3
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	40900	102.3	40000	39800	99.5	40000	39500	98.8
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA19112 Units: ug/l

Time:		13:52			14:53			15:53	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	anr								
Antimony	anr								
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	40000	39400	98.5	40000	39800	99.5	40000	39500	98.8
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	40000	39500	98.8	40000	39700	99.3	40000	40100	100.3
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium	anr								
Tin	anr								
Titanium									
Vanadium	anr								
Zinc	anr								

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA19112 Units: ug/l

Time:		10:57	
Sample ID:	HSTD	HSTD1	
Metal	True	Results	% Rec
Aluminum	anr		
Antimony	anr		
Arsenic	anr		
Barium	anr		
Beryllium	anr		
Boron			
Cadmium	anr		
Calcium	80000	79500	99.4
Chromium	anr		
Cobalt	anr		
Copper	anr		
Iron	anr		
Lead	anr		
Magnesium	80000	78800	98.5
Manganese	anr		
Molybdenum	anr		
Nickel	anr		
Potassium	anr		
Selenium	anr		
Silver	anr		
Sodium	anr		
Strontium			
Thallium	anr		
Tin	anr		
Titanium			
Vanadium	anr		
Zinc	anr		

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: CRI 70-130% CRIA 70-130% Run ID: MA19112 Units: ug/l

Time:			10:46		10:50	
Sample ID:	CRI	CRIA	CRIA1		CRIA2	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	400	200	anr			
Antimony	10	5.0	anr			
Arsenic	20	10	anr			
Barium	400	200	anr			
Beryllium	10	5.0	anr			
Boron	100	50				
Cadmium	10	5.0	anr			
Calcium	2000	1000	974	97.4		
Chromium	20	10	anr			
Cobalt	100	50	anr			
Copper	50	25	anr			
Iron	600	300	anr			
Lead	10	5.0	anr			
Magnesium	10000	5000	4920	98.4		
Manganese	30	15	anr			
Molybdenum	100	50	anr			
Nickel	80	40	anr			
Potassium	20000	10000	anr			
Selenium	20	10	anr			
Silver	20	10	anr			
Sodium	20000	10000	anr			
Strontium	20	10				
Thallium	20	10				
Tin	100	50	anr			
Titanium	20	10				
Vanadium	100	50	anr			
Zinc	40	20	anr			

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: SA122122M1.ICP Date Analyzed: 12/21/22 Methods: SW846 6010C, SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA19112 Units: ug/l

Time:			11:21		11:39	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	514000	102.8	512000	102.4
Antimony		1000	0.00		941	94.1
Arsenic		1000	0.00		928	92.8
Barium		500	0.00		497	99.4
Beryllium		500	-0.100		496	99.2
Boron		1000	-0.200		-13.9	0.0*
Cadmium		1000	0.00		962	96.2
Calcium	500000	500000	466000	93.2	472000	94.4
Chromium		500	-0.500		488	97.6
Cobalt		500	-0.900		471	94.2
Copper		500	-0.800		532	106.4
Iron	500000	200000	494000	98.8	188000	94.0
Lead		1000	0.00		1090	109.0
Magnesium	500000	500000	505000	101.0	511000	102.2
Manganese		500	0.00		519	103.8
Molybdenum		1000	0.100		882	88.2
Nickel		1000	0.00		905	90.5
Potassium			296		185	
Selenium		1000	0.00		887	88.7
Silver		1000	0.100		1100	110.0
Sodium			401		382	
Strontium		1000	0.200		943	94.3
Thallium		1000	0.300		913	91.3
Tin		1000	0.00		849	84.9
Titanium		1000	-0.100		1040	104.0
Vanadium		500	0.00		515	103.0
Zinc		1000	0.500		926	92.6

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/20/22

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	14	14		
Antimony	6.0	1	1		
Arsenic	10	1.3	1.3		
Barium	200	.5	1		
Beryllium	4.0	.1	.2		
Boron	100	5	10		
Cadmium	5.0	.1	.2		
Calcium	1000	50	50	20.0	<1000
Chromium	10	.5	1		
Cobalt	50	.2	.2		
Copper	25	1	1		
Iron	300	15	17		
Lead	5.0	1	1.1		
Magnesium	5000	35	35	6.3	<5000
Manganese	15	.25	1		
Molybdenum	50	.3	.3		
Nickel	40	.4	.4		
Potassium	10000	100	200		
Selenium	10	2	2.9		
Silver	10	.5	.7		
Sodium	10000	250	500		
Strontium	10	.25	.5		
Thallium	10	1	1.4		
Tin	50	.5	1		
Titanium	10	.5	1		
Vanadium	50	.5	.6		
Zinc	20	3	4.4		

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date:			12/20/22					12/20/22	
Metal	FC1090-1F Original	DUP	RPD	QC Limits	FC1090-1F Original	MS	Spikelot MPFLICP2 % Rec	QC Limits	
Aluminum	anr								
Antimony									
Arsenic	anr								
Barium	anr								
Beryllium	anr								
Boron									
Cadmium	anr								
Calcium	10000	10300	3.0	0-20	10000	35700	25000	102.8	80-120
Chromium	anr								
Cobalt	anr								
Copper	anr								
Iron	anr								
Lead	anr								
Magnesium	730	742	1.6	0-20	730	26500	25000	103.1	80-120
Manganese	anr								
Molybdenum	anr								
Nickel	anr								
Potassium	anr								
Selenium	anr								
Silver	anr								
Sodium	anr								
Strontium									
Thallium									
Tin									
Titanium									
Vanadium	anr								
Zinc	anr								

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628 Methods: SW846 6010D
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 12/20/22

Metal	FC1090-1F Original	MSD	Spikelot MPFLICP2	% Rec	MSD RPD	QC Limit
Aluminum	anr					
Antimony						
Arsenic	anr					
Barium	anr					
Beryllium	anr					
Boron						
Cadmium	anr					
Calcium	10000	35400	25000	101.6	0.8	20
Chromium	anr					
Cobalt	anr					
Copper	anr					
Iron	anr					
Lead	anr					
Magnesium	730	26300	25000	102.3	0.8	20
Manganese	anr					
Molybdenum	anr					
Nickel	anr					
Potassium	anr					
Selenium	anr					
Silver	anr					
Sodium	anr					
Strontium						
Thallium						
Tin						
Titanium						
Vanadium	anr					
Zinc	anr					

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/20/22

Metal	BSP Result	Spikelot MPFLICP2	% Rec	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	25600	25000	102.4	80-120
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	25400	25000	101.6	80-120
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/20/22

Metal	FC1090-1F Original	SDL 1:5	%DIF	QC Limits
Aluminum	anr			
Antimony				
Arsenic	anr			
Barium	anr			
Beryllium	anr			
Boron				
Cadmium	anr			
Calcium	10000	10200	1.8	0-10
Chromium	anr			
Cobalt	anr			
Copper	anr			
Iron	anr			
Lead	anr			
Magnesium	730	701	4.0	0-10
Manganese	anr			
Molybdenum	anr			
Nickel	anr			
Potassium	anr			
Selenium	anr			
Silver	anr			
Sodium	anr			
Strontium				
Thallium				
Tin				
Titanium				
Vanadium	anr			
Zinc	anr			

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

POST DIGESTATE SPIKE SUMMARY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

QC Batch ID: MP41628
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 12/20/22

Metal	Sample ml	Final ml	FC1090-1F Raw	Corr.**	PS ug/l	Spike ml	Spike ug/ml	Spike ug/l	% Rec	QC Limits
Aluminum										
Antimony										
Arsenic										
Barium										
Beryllium										
Boron										
Cadmium										
Calcium	9.8	10	10010	9809.8	14550	0.2	250	5000	94.8	80-120
Chromium										
Cobalt										
Copper										
Iron										
Lead										
Magnesium	9.8	10	729.7	715.106	5573	0.2	250	5000	97.2	80-120
Manganese										
Molybdenum										
Nickel										
Potassium										
Selenium										
Silver										
Sodium										
Strontium										
Thallium										
Tin										
Titanium										
Vanadium										
Zinc										

Associated samples MP41628: FC1116-1, FC1116-2, FC1116-3, FC1116-4

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(**) Corr. sample result = Raw * (sample volume / final volume)
(anr) Analyte not requested

Instrument Detection Limits

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	IDL ug/l
Aluminum	14
Antimony	1
Arsenic	1.3
Barium	.5
Beryllium	.1
Boron	5
Cadmium	.1
Calcium	50
Chromium	.5
Cobalt	.2
Copper	1
Iron	15
Lead	1
Lithium	.5
Magnesium	35
Manganese	.25
Molybdenum	.3
Nickel	.4
Potassium	100
Selenium	2
Silicon	5
Silver	.5
Sodium	250
Strontium	.25
Sulfur	5
Thallium	1
Tin	.5
Titanium	.5
Vanadium	.5
Zinc	3

The above applies to the following instrument runs:
MA19112

Instrument Linear Ranges

Job Number: FC1116
Account: BHATALB Bhate Environmental
Project: Griffiss AFB; Rome, NY

Instrument ID: SSTRACE1 **Effective Date:** 09/01/22

Analyte	Linear Range ug/l
Aluminum	500000
Antimony	10000
Arsenic	10000
Barium	10000
Beryllium	10000
Boron	10000
Cadmium	10000
Calcium	500000
Chromium	10000
Cobalt	10000
Copper	10000
Iron	500000
Lead	10000
Lithium	10000
Magnesium	500000
Manganese	10000
Molybdenum	10000
Nickel	10000
Potassium	80000
Selenium	10000
Silver	1000
Sodium	80000
Strontium	10000
Sulfur	10000
Thallium	10000
Tin	10000
Titanium	10000
Vanadium	10000
Zinc	10000

The above applies to the following instrument runs:
MA19112

Metals Analysis

Raw Data

Zoom In ▶ Zoom Out

Sample Name: STDC Acquired: 12/21/2022 10:12:40 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0229**	**1.123**	**.0325**	**.0525**	**3.055**	**3.618**	**2.748**	**1.568**	**.7651**
Stddev	.0003	.003	.0002	.0006	.001	.004	.002	.003	.0014
%RSD	1.465	.2980	.5930	1.195	.0430	.1134	.0816	.2047	.1836
#1	.0232	1.119	.0327	.0532	3.055	3.617	2.751	1.565	.7636
#2	.0229	1.124	.0325	.0521	3.057	3.615	2.747	1.570	.7656
#3	.0225	1.126	.0323	.0521	3.054	3.623	2.746	1.570	.7663

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.2016**	**.2555**	**1.299**	**.5792**	**.5808**	**.3195**	**1.061**	**.2107**	**1.921**
Stddev	.0002	.0004	.002	.0053	.0028	.0007	.001	.0003	.005
%RSD	.1104	.1619	.1147	.9190	.4780	.2116	.0765	.1391	.2447
#1	.2017	.2559	1.297	.5852	.5805	.3198	1.061	.2104	1.923
#2	.2013	.2551	1.300	.5770	.5782	.3188	1.061	.2110	1.915
#3	.2018	.2554	1.300	.5752	.5837	.3200	1.060	.2108	1.923

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4976**	**.3528**	**.0512**	**.0248**	**.0874**	**.0948**	**3.657**	**.5451**	**.0663**
Stddev	.0011	.0002	.0001	.0003	.0003	.0002	.003	.0018	.0004
%RSD	.2160	.0666	.2037	1.235	.3438	.1900	.0693	.3224	.5738
#1	.4963	.3526	.0511	.0247	.0871	.0947	3.660	.5470	.0659
#2	.4983	.3529	.0512	.0251	.0875	.0950	3.656	.5449	.0663
#3	.4980	.3530	.0513	.0245	.0877	.0946	3.655	.5435	.0667

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.3001**	**.8923**
Stddev	.0011	.0020
%RSD	.3510	.2210
#1	.3009	.8902
#2	.3006	.8941
#3	.2989	.8925

Zoom In ▶ Zoom Out

Sample Name: STDC Acquired: 12/21/2022 10:12:40 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2796.5**	**6873.6**	**38100.**	**5197.5**
Stddev	1.1	14.5	142.	4.5
%RSD	.04096	.21063	.37294	.08689
#1	2797.1	6890.1	38019.	5192.4
#2	2795.2	6863.0	38264.	5199.4
#3	2797.3	6867.8	38017.	5200.8

Zoom In ▶ Zoom Out

Sample Name: STDD Acquired: 12/21/2022 10:16:55 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0468**	**2.252**	**.0661**	**.1077**	**6.125**	**7.365**	**5.522**	**3.170**	**1.537**
Stddev	.0003	.011	.0001	.0015	.044	.033	.029	.006	.003
%RSD	.6029	.4962	.1964	1.393	.7158	.4519	.5197	.1949	.1614
#1	.0465	2.264	.0662	.1081	6.169	7.399	5.552	3.176	1.539
#2	.0468	2.251	.0662	.1061	6.123	7.364	5.521	3.171	1.538
#3	.0471	2.242	.0660	.1090	6.082	7.332	5.495	3.164	1.534

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.4064**	**.5029**	**2.620**	**1.127**	**1.141**	**.6426**	**2.142**	**.4290**	**3.915**
Stddev	.0018	.0004	.017	.006	.004	.0026	.002	.0005	.032
%RSD	.4489	.0736	.6566	.5799	.3593	.4087	.0970	.1071	.8102
#1	.4043	.5034	2.638	1.134	1.146	.6456	2.142	.4288	3.948
#2	.4076	.5027	2.616	1.121	1.139	.6413	2.140	.4295	3.911
#3	.4073	.5027	2.605	1.126	1.138	.6409	2.144	.4287	3.885

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.9947**	**.7262**	**.1022**	**.0503**	**.1743**	**.1915**	**7.410**	**1.104**	**.1344**
Stddev	.0014	.0010	.0006	.0003	.0004	.0004	.036	.002	.0012
%RSD	.1397	.1423	.6327	.6467	.2196	.2180	.4809	.1401	.8640
#1	.9963	.7260	.1029	.0506	.1746	.1919	7.443	1.105	.1354
#2	.9942	.7274	.1018	.0503	.1745	.1914	7.414	1.102	.1332
#3	.9936	.7254	.1018	.0500	.1739	.1911	7.372	1.103	.1347

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**.6096**	**1.795**
Stddev	.0005	.005
%RSD	.0901	.2579
#1	.6090	1.800
#2	.6101	1.793
#3	.6096	1.792

Zoom In ▶ Zoom Out

Sample Name: STDD Acquired: 12/21/2022 10:16:55 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2686.1**	**6717.6**	**37146.**	**5175.9**
Stddev	5.6	11.5	62.	46.0
%RSD	.20738	.17185	.16811	.88893
#1	2685.6	6709.1	37120.	5135.5
#2	2692.0	6730.8	37217.	5166.3
#3	2680.9	6712.9	37101.	5226.0

Zoom In Zoom Out

Sample Name: STDE Acquired: 12/21/2022 10:20:47 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0876**	**4.414**	**.1369**	**.2196**	**12.46**	**14.96**	**10.87**	**6.484**	**3.120**
Stddev	.0004	.016	.0003	.0016	.03	.02	.03	.012	.007
%RSD	.5024	.3557	.2295	.7401	.2659	.1511	.2630	.1840	.2144
#1	.0880	4.397	.1372	.2180	12.43	14.94	10.84	6.492	3.123
#2	.0871	4.417	.1367	.2197	12.49	14.96	10.87	6.470	3.113
#3	.0878	4.428	.1367	.2212	12.48	14.98	10.89	6.488	3.125

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.8197**	**.9960**	**5.089**	**2.174**	**2.273**	**1.262**	**4.363**	**.8771**	**7.818**
Stddev	.0019	.0027	.005	.001	.011	.003	.013	.0011	.023
%RSD	.2341	.2669	.0918	.0613	.4671	.2199	.2938	.1282	.2900
#1	.8174	.9930	5.084	2.176	2.272	1.259	4.368	.8778	7.793
#2	.8207	.9981	5.090	2.173	2.263	1.264	4.348	.8758	7.837
#3	.8208	.9969	5.093	2.174	2.284	1.263	4.372	.8777	7.825

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2.017**	**1.512**	**.2088**	**.1040**	**.3835**	**.3909**	**15.20**	**2.272**	**.2797**
Stddev	.002	.004	.0006	.0001	.0011	.0010	.00	.004	.0008
%RSD	.0764	.2926	.2635	.1085	.2970	.2684	.0313	.1734	.2765
#1	2.017	1.515	.2094	.1039	.3844	.3914	15.19	2.276	.2804
#2	2.016	1.507	.2084	.1039	.3822	.3897	15.20	2.268	.2798
#3	2.019	1.514	.2087	.1041	.3837	.3916	15.20	2.272	.2789

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**1.255**	**3.679**
Stddev	.004	.005
%RSD	.3145	.1343
#1	1.254	3.684
#2	1.251	3.674
#3	1.259	3.678

Zoom In Zoom Out

Sample Name: STDE Acquired: 12/21/2022 10:20:47 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2573.3**	**6608.1**	**36726.**	**5128.0**
Stddev	6.9	23.2	72.	20.9
%RSD	.26722	.35068	.19545	.40838
#1	2577.4	6628.4	36696.	5140.0
#2	2577.3	6613.0	36808.	5103.8
#3	2565.4	6582.9	36674.	5140.2

Zoom In Zoom Out

Sample Name: STDF Acquired: 12/21/2022 10:24:37 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1759**	**8.648**	**.2774**	**.4437**	**24.66**	**29.36**	**21.39**	**12.92**	**6.206**
Stddev	.0007	.094	.0006	.0079	.25	.27	.24	.03	.018
%RSD	.3834	1.088	.2125	1.782	1.006	.9257	1.102	.2696	.2951
#1	.1757	8.586	.2780	.4483	24.54	29.29	21.28	12.96	6.227
#2	.1766	8.602	.2769	.4346	24.50	29.13	21.23	12.90	6.194
#3	.1753	8.757	.2773	.4482	24.95	29.66	21.66	12.90	6.196

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1.638**	**1.974**	**9.960**	**4.240**	**4.403**	**2.449**	**8.548**	**1.757**	**15.48**
Stddev	.006	.007	.105	.039	.041	.023	.106	.005	.16
%RSD	.3884	.3651	1.055	.9250	.9197	.9466	1.241	.2865	1.020
#1	1.631	1.966	9.898	4.216	4.371	2.434	8.555	1.763	15.38
#2	1.642	1.975	9.901	4.219	4.390	2.437	8.650	1.754	15.39
#3	1.642	1.980	10.08	4.285	4.449	2.475	8.438	1.754	15.66

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**4.012**	**3.103**	**.4188**	**.2084**	**.7661**	**.7732**	**30.05**	**4.523**	**.5688**
Stddev	.006	.010	.0009	.0007	.0028	.0030	.28	.020	.0005
%RSD	.1470	.3231	.2127	.3271	.3654	.3826	.9465	.4410	.0806
#1	4.018	3.104	.4198	.2092	.7693	.7765	29.94	4.535	.5692
#2	4.006	3.093	.4184	.2084	.7640	.7724	29.84	4.535	.5683
#3	4.011	3.112	.4182	.2078	.7651	.7708	30.38	4.500	.5690

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	**2.505**	**7.342**
Stddev	.007	.006
%RSD	.2624	.0801
#1	2.507	7.348
#2	2.510	7.336
#3	2.497	7.341

Zoom In Zoom Out

Sample Name: STDF Acquired: 12/21/2022 10:24:37 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2428.3**	**6462.0**	**36336.**	**5148.7**
Stddev	5.5	5.2	293.	75.1
%RSD	.22715	.08099	.80617	1.4594
#1	2430.6	6456.2	36461.	5229.6
#2	2432.3	6463.6	36001.	5081.1
#3	2422.0	6466.3	36545.	5135.4

Zoom In Zoom Out

Sample Name: STDG Acquired: 12/21/2022 10:28:46 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3653	17.62	.5625	.9007	50.06	59.31	43.48	25.70	12.36
Stddev	.0007	.06	.0002	.0089	.20	1.08	.14	.02	.01
%RSD	.1861	.3299	.0370	.9904	.3911	1.812	.3289	.0682	.0528
#1	.3655	17.69	.5625	.8998	50.24	59.57	43.61	25.71	12.36
#2	.3646	17.60	.5628	.8922	50.08	60.24	43.51	25.68	12.35
#3	.3660	17.57	.5624	.9100	49.85	58.13	43.33	25.71	12.37

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	3.229	3.876	20.04	8.644	8.883	4.924	16.83	3.530	31.56
Stddev	.008	.003	.06	.017	.024	.011	.18	.004	.14
%RSD	.2424	.0835	.3192	.1992	.2641	.2253	1.077	.1010	.4562
#1	3.238	3.875	20.11	8.663	8.910	4.936	16.65	3.531	31.67
#2	3.225	3.874	20.03	8.636	8.866	4.914	16.84	3.526	31.61
#3	3.224	3.880	19.98	8.632	8.874	4.922	17.01	3.532	31.40

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7.990	6.433	.8397	.4204	1.258	1.534	61.34	8.956	1.159
Stddev	.003	.006	.0013	.0005	.001	.003	.96	.071	.001
%RSD	.0350	.0923	.1518	.1087	.0551	.1832	1.563	.7956	.1158
#1	7.988	6.429	.8397	.4208	1.258	1.533	61.72	9.015	1.158
#2	7.993	6.440	.8385	.4199	1.257	1.531	62.04	8.876	1.161
#3	7.990	6.432	.8410	.4206	1.259	1.537	60.25	8.976	1.159

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	5.007	14.62
Stddev	.018	.01
%RSD	.3495	.0742
#1	5.027	14.62
#2	4.998	14.62
#3	4.995	14.60

Zoom In Zoom Out

Sample Name: STDG Acquired: 12/21/2022 10:28:46 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2239.2	6207.9	35455.	5064.7
Stddev	4.5	22.5	108.	54.0
%RSD	.20053	.36306	.30482	1.0656
#1	2234.1	6185.9	35497.	5035.9
#2	2242.5	6230.9	35535.	5031.2
#3	2241.1	6206.9	35332.	5126.9

Zoom In Zoom Out

Sample Name: STDA Acquired: 12/21/2022 10:36:43 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	.0004	-.0001	.0021	-.0006	.0012	-.0034	.0000	.0004
Stddev	.000	.0015	.0000	.0005	.0032	.0006	.0009	.000	.0002
%RSD	215.6	326.9	35.22	25.45	524.8	53.61	25.17	310.2	51.54
#1	-.0001	-.0012	-.0001	.0025	.0024	.0015	-.0025	.0001	.0002
#2	.0000	.0013	-.0001	.0015	-.0003	.0005	-.0042	-.0002	.0004
#3	-.0001	.0012	-.0001	.0022	-.0039	.0016	-.0035	-.0001	.0005

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0001	.0151	.0002	.0577	.0222	-.0004	.0002	.0004	-.0548
Stddev	.0001	.0005	.0008	.0037	.0056	.0002	.0002	.0001	.0041
%RSD	99.54	3.563	340.5	6.363	25.23	50.81	132.8	27.23	7.470
#1	.0002	.0146	-.0003	.0619	.0158	-.0002	.0003	.0006	-.0591
#2	.0002	.0152	-.0001	.0564	.0252	-.0004	.0002	.0004	-.0543
#3	.0000	.0156	.0012	.0549	.0257	-.0006	-.0001	.0003	-.0510

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0000	-.0071	.0011	-.0004	.0020	.0005	.0002	.0035	-.0011
Stddev	.000	.0010	.0005	.0001	.0001	.0001	.0002	.0004	.0002
%RSD	1575.	13.87	47.35	34.99	6.838	11.29	120.0	10.81	22.62
#1	-.0003	-.0064	.0016	-.0003	.0021	.0004	.0000	.0032	-.0011
#2	.0001	-.0066	.0012	-.0003	.0020	.0004	.0004	.0039	-.0008
#3	.0001	-.0082	.0006	-.0006	.0019	.0005	.0002	.0034	-.0013

Elem	V_2924	Zn2062
Units	Cts/S	Cts/S
Avg	.0000	.0002
Stddev	.000	.0001
%RSD	398.9	69.16
#1	.0001	.0004
#2	.0000	.0001
#3	-.0002	.0001

Zoom In Zoom Out

Sample Name: STDA Acquired: 12/21/2022 10:36:43 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	2925.4	6809.7	37823.	5098.3
Stddev	2.7	13.2	76.	17.3
%RSD	.09323	.19311	.20082	.33974
#1	2928.5	6824.3	37799.	5113.6
#2	2923.3	6798.8	37908.	5079.5
#3	2924.4	6806.0	37761.	5101.8

Zoom In Zoom Out

Sample Name: STDB Acquired: 12/21/2022 10:41:33 Type: Cal
Method: 60102007_COMBO_102422(v109) Mode: IR Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	Ba4554	Be3130	Ca3179	Cd2265	Co2286	Cr2677
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0066**	**.0434**	**.0011**	**2.316**	**.0668**	**.5130**	**.0299**	**.1479**	**.0076**
Stddev	.0003	.0013	.0001	.005	.0001	.0032	.0002	.0007	.0002
%RSD	4.209	3.042	7.902	.2123	.0766	.6179	.5918	.4493	2.367
#1	.0068	.0443	.0011	2.317	.0667	.5163	.0297	.1480	.0076
#2	.0067	.0441	.0012	2.320	.0668	.5100	.0300	.1485	.0078
#3	.0063	.0419	.0010	2.310	.0668	.5128	.0300	.1472	.0074

Elem	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0378**	**.0697**	**1.036**	**.0202**	**.2944**	**.0614**	**.0418**	**3.354**	**.0763**
Stddev	.0007	.0004	.006	.0053	.0011	.0001	.0001	.005	.0004
%RSD	1.816	.6002	.5710	26.06	.3763	.1884	.2286	.1400	.5429
#1	.0370	.0692	1.030	.0263	.2931	.0613	.0418	3.356	.0766
#2	.0383	.0698	1.037	.0170	.2950	.0615	.0419	3.349	.0765
#3	.0380	.0700	1.042	.0174	.2951	.0612	.0417	3.358	.0758

Elem	Pb2203	Sb2068	Se1960	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0012**	**.0021**	**.0005**	**.0191**	**.1421**	**.0250**	**.0012**	**.0578**	**.0692**
Stddev	.0004	.0004	.0002	.0003	.0021	.0004	.0004	.0004	.0003
%RSD	38.75	17.41	35.36	1.437	1.471	1.448	38.25	.7413	.3763
#1	-.0008	.0017	.0007	.0191	.1402	.0246	.0007	.0573	.0695
#2	-.0010	.0024	.0004	.0194	.1444	.0251	.0014	.0582	.0690
#3	-.0017	.0023	.0005	.0188	.1418	.0253	.0015	.0578	.0691

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2820.4**	**6814.2**	**38062.**	**5254.0**
Stddev	9.6	32.5	451.	34.8
%RSD	.34001	.47710	1.1857	.66297
#1	2817.4	6795.4	38579.	5273.1
#2	2812.7	6795.5	37860.	5275.1
#3	2831.1	6851.7	37747.	5213.8

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/21/2022 10:46:11 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0087**	**.2058**	**.0097**	**.0090**	**.1910**	**.0045**	**.9736**	**.0047**
Stddev	.0004	.0149	.0006	.0007	.0010	.0001	.0071	.0000
%RSD	4.947	7.222	6.633	8.189	.5170	1.836	.7294	.7639
#1	.0089	.2059	.0091	.0082	.1906	.0046	.9799	.0047
#2	.0089	.1909	.0097	.0092	.1902	.0046	.9659	.0048
#3	.0082	.2207	.0104	.0096	.1921	.0044	.9750	.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0487**	**.0095**	**.0238**	**.2877**	**9.525**	F **-.0047**	**4.915**	**.0148**
Stddev	.0002	.0002	.0004	.0044	.031	.0018	.013	.0000
%RSD	.3761	2.239	1.671	1.535	.3209	39.05	.2587	.1037
#1	.0486	.0093	.0238	.2923	9.559	-.0026	4.902	.0148
#2	.0486	.0094	.0242	.2835	9.518	-.0058	4.917	.0148
#3	.0489	.0097	.0234	.2874	9.499	-.0058	4.927	.0148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0100		
Range						-20.00%		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0481**	**8.921**	**.0390**	**.0044**	**.0048**	**.0092**	**.1042**	**.0492**
Stddev	.0004	.003	.0001	.0004	.0020	.0009	.0012	.0010
%RSD	.8214	.0348	.3571	9.401	40.71	9.585	1.166	1.964
#1	.0482	8.924	.0392	.0043	.0043	.0082	.1037	.0493
#2	.0476	8.923	.0389	.0040	.0032	.0100	.1033	.0482
#3	.0484	8.918	.0389	.0048	.0070	.0094	.1055	.0501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/21/2022 10:46:11 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm
Avg	**.0096**	**.0098**	**.0477**	**.0196**
Stddev	.0001	.0001	.0005	.0001
%RSD	1.010	.7266	.9603	.4113
#1	.0095	.0099	.0473	.0195
#2	.0097	.0098	.0482	.0197
#3	.0096	.0098	.0476	.0196
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				
Range				

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2761.6**	**6703.3**	**37349.**	**5159.2**
Stddev	12.4	38.7	142.	27.0
%RSD	.45059	.57755	.37933	.52280
#1	2775.1	6744.5	37509.	5133.8
#2	2759.2	6697.8	37242.	5156.3
#3	2750.6	6667.7	37295.	5187.5

Zoom In Zoom Out

Sample Name: CRIA Acquired: 12/21/2022 10:50:39 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Tl1908
Units	ppm
Avg	**.0083**
Stddev	.0024
%RSD	29.13
#1	.0102
#2	.0092
#3	.0056
Check ?	Chk Pass
Value	
Range	

Int. Std.	In2306
Units	Cts/S
Avg	**2779.8**
Stddev	8.2
%RSD	.29517
#1	2777.6
#2	2772.9
#3	2788.9

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/21/2022 10:57:13 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5043**	**79.52**	**4.037**	F **4.007**	**3.996**	**3.925**	**79.53**	**3.972**	**3.968**
Stddev	.0010	.31	.011	.022	.005	.034	.13	.005	.004
%RSD	.2061	.3856	.2677	.5427	.1320	.8771	.1585	.1238	.1097
#1	.5032	79.52	4.042	4.002	3.998	3.954	79.55	3.976	3.972
#2	.5042	79.83	4.044	4.031	3.999	3.933	79.64	3.973	3.969
#3	.5053	79.22	4.025	3.988	3.990	3.887	79.39	3.967	3.964
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.5000					
Range				5.000%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.945**	**3.949**	**78.90**	**80.45**	**3.961**	**78.76**	**3.965**	**3.998**	**80.22**
Stddev	.016	.015	.20	.30	.010	.23	.046	.006	.09
%RSD	.4151	.3706	.2559	.3675	.2423	.2866	1.156	.1600	.1161
#1	3.958	3.957	78.91	80.42	3.963	78.69	3.972	4.004	80.26
#2	3.927	3.932	79.10	80.75	3.969	79.01	3.916	3.999	80.30
#3	3.951	3.957	78.69	80.17	3.950	78.58	4.007	3.991	80.12
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**3.967**	**4.085**	**4.003**	**4.010**	**3.624**	**3.965**	**4.038**	**4.035**	**4.046**
Stddev	.003	.005	.001	.012	.004	.007	.074	.041	.008
%RSD	.0642	.1226	.0295	.2923	.1163	.1664	1.835	1.015	.1897
#1	3.969	4.079	4.003	4.015	3.627	3.970	4.106	4.025	4.037
#2	3.967	4.088	4.004	4.019	3.626	3.967	3.959	3.999	4.050
#3	3.964	4.088	4.001	3.997	3.619	3.957	4.048	4.080	4.049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: HSTD Acquired: 12/21/2022 10:57:13 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**3.988**	**3.978**
Stddev	.005	.008
%RSD	.1250	.2071
#1	3.990	3.984
#2	3.982	3.982
#3	3.991	3.969
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2257.8**	**6267.8**	**35513.**	**5106.2**
Stddev	5.7	17.9	278.	17.0
%RSD	.25258	.28528	.78181	.33215
#1	2263.0	6265.0	35545.	5091.5
#2	2251.7	6251.4	35773.	5124.8
#3	2258.7	6286.9	35221.	5102.3

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/21/2022 11:04:04 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2515**	**40.98**	**2.068**	F **2.011**	**2.093**	**2.079**	**41.15**	**2.074**	**2.071**
Stddev	.0002	.17	.001	.010	.009	.002	.13	.000	.002
%RSD	.0944	.4059	.0545	.4907	.4149	.0890	.3044	.0127	.0846
#1	.2513	40.85	2.070	2.009	2.085	2.078	41.05	2.074	2.070
#2	.2518	40.93	2.069	2.002	2.092	2.079	41.12	2.074	2.070
#3	.2515	41.17	2.067	2.021	2.102	2.081	41.29	2.075	2.073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.075**	**2.071**	**40.59**	**41.46**	**2.053**	**40.90**	**2.091**	**2.029**	**41.66**
Stddev	.002	.002	.15	.18	.001	.09	.012	.003	.15
%RSD	.0976	.0716	.3642	.4305	.0575	.2175	.5773	.1236	.3486
#1	2.075	2.071	40.50	41.27	2.053	40.80	2.105	2.029	41.50
#2	2.076	2.071	40.50	41.51	2.052	40.95	2.081	2.027	41.67
#3	2.072	2.069	40.76	41.62	2.054	40.95	2.089	2.032	41.79
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.069**	**2.045**	**2.068**	**2.071**	**1.971**	**2.035**	**2.063**	**2.071**	**2.058**
Stddev	.001	.001	.001	.004	.001	.004	.005	.003	.003
%RSD	.0478	.0443	.0697	.2111	.0606	.1719	.2640	.1573	.1268
#1	2.069	2.045	2.070	2.076	1.971	2.037	2.057	2.074	2.055
#2	2.069	2.045	2.068	2.070	1.970	2.031	2.063	2.068	2.060
#3	2.070	2.044	2.067	2.067	1.972	2.037	2.068	2.072	2.059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICV Acquired: 12/21/2022 11:04:04 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.039**	**2.073**
Stddev	.003	.001
%RSD	.1462	.0316
#1	2.043	2.073
#2	2.037	2.073
#3	2.038	2.072
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2439.3**	**6488.1**	**36323.**	**5104.4**
Stddev	3.2	11.2	46.	9.6
%RSD	.12965	.17250	.12561	.18722
#1	2443.0	6496.3	36362.	5109.5
#2	2437.8	6492.6	36273.	5093.4
#3	2437.2	6475.3	36334.	5110.3

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/21/2022 11:17:35 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0036**	**.0008**	F **-.0037**	**-.0002**	**-.0001**	**-.0011**	**-.0001**
Stddev	.0004	.0107	.0004	.0014	.0001	.0001	.0029	.0000
%RSD	732.2	297.9	52.59	37.78	59.98	67.19	264.3	26.45
#1	.0005	.0125	.0003	-.0036	-.0003	-.0001	-.0039	-.0001
#2	-.0001	-.0082	.0011	-.0023	-.0002	.0000	-.0013	-.0001
#3	-.0002	.0064	.0010	-.0051	-.0001	-.0002	.0019	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0000**	**-.0007**	**-.0019**	**-.1172**	F **-.0041**	**.0098**	**-.0001**
Stddev	.0000	.000	.0006	.0018	.0392	.0011	.0282	.0001
%RSD	48.16	1794.	84.27	95.67	33.43	27.22	287.8	75.81
#1	-.0001	.0004	-.0001	.0001	-.0726	-.0034	.0114	.0000
#2	.0000	-.0004	-.0007	-.0035	-.1332	-.0035	.0371	-.0001
#3	-.0001	-.0001	-.0013	-.0022	-.1459	-.0054	-.0192	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0479**	**-.0003**	**-.0005**	**-.0006**	**.0015**	**-.0002**	**.0002**
Stddev	.0000	.0153	.0002	.0002	.0015	.0018	.0004	.0005
%RSD	19.69	31.88	83.16	47.84	241.7	119.4	202.8	232.6
#1	-.0002	-.0456	-.0002	-.0007	.0008	-.0005	-.0003	.0006
#2	-.0002	-.0641	-.0005	-.0002	-.0005	.0028	-.0006	-.0004
#3	-.0001	-.0339	-.0001	-.0006	-.0021	.0022	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICB Acquired: 12/21/2022 11:17:35 Type: QC
Method: 60102007_COMBO_102422(v109) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**-.0002**	**-.0005**	**.0007**
Stddev	.0002	.000	.0007	.0004	.0001
%RSD	211.8	214.6	407.7	70.77	17.60
#1	.0003	.0000	-.0002	-.0005	.0006
#2	-.0001	.0000	-.0008	-.0002	.0007
#3	.0001	.0000	.0005	-.0009	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2950.1**	**6824.5**	**38310.**	**5207.3**
Stddev	5.1	23.1	143.	19.9
%RSD	.17333	.33841	.37426	.38272
#1	2949.6	6798.1	38159.	5189.1
#2	2955.5	6834.5	38444.	5228.6
#3	2945.3	6841.0	38328.	5204.1

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/21/2022 11:21:53 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**514.3**	**.0000**	**-.0002**	**.0000**	**-.0001**	**465.9**	**.0000**
Stddev	.0004	8.1	.001	.0061	.0003	.0001	6.4	.0002
%RSD	571.6	1.572	4903.	4033.	1055.	37.29	1.376	2285.
#1	-.0004	519.7	-.0014	-.0019	.0000	-.0001	472.7	.0002
#2	.0003	505.0	.0001	.0067	-.0003	-.0002	464.9	.0000
#3	.0004	518.2	.0012	-.0052	.0004	-.0001	460.0	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**-.0005**	**-.0008**	F **493.6**	**.2964**	F **-.0050**	**505.1**	**.0000**
Stddev	.0001	.0002	.0011	2.6	.0494	.0017	3.0	.0005
%RSD	12.58	39.89	141.0	.5303	16.67	34.67	.5963	3290.
#1	-.0010	-.0007	-.0007	491.3	.2976	-.0065	507.7	.0001
#2	-.0008	-.0006	.0003	493.1	.3451	-.0053	501.8	-.0005
#3	-.0010	-.0003	-.0018	496.5	.2463	-.0031	505.7	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail	Chk Pass	Chk Pass
High Limit				240.0		.0010		
Low Limit				160.0		-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.4011**	**.0000**	**.0000**	**.0000**	**.0000**	**.1121**	**.0000**
Stddev	.0002	.0173	.001	.003	.0032	.003	.0016	.000
%RSD	286.8	4.313	1664.	28850.	6553.	15000.	1.414	1104.
#1	.0002	.3836	-.0003	.0003	-.0036	.0031	.1111	-.0002
#2	.0002	.4182	-.0004	.0028	.0020	.0006	.1112	.0005
#3	-.0002	.4015	.0006	-.0031	.0018	-.0037	.1139	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ICSA Acquired: 12/21/2022 11:21:53 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0001**	**.0003**	**.0000**	**.0005**
Stddev	.0001	.0002	.0021	.0003	.0001
%RSD	50.93	386.2	820.7	2040.	24.52
#1	.0002	-.0001	-.0004	.0001	.0005
#2	.0001	-.0002	-.0014	-.0004	.0007
#3	.0002	.0002	.0026	.0003	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2004.8**	**6134.1**	**33657.**	**5072.5**
Stddev	5.7	2.4	2004.	33.1
%RSD	.28618	.03952	5.9542	.65322
#1	1999.1	6136.7	33727.	5046.6
#2	2004.8	6131.8	31618.	5109.9
#3	2010.6	6133.9	35625.	5061.0

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/21/2022 11:39:55 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.095**	**511.8**	**.9283**	F **-.0139**	**.4969**	**.4958**	**471.9**	**.9622**
Stddev	.001	4.9	.0020	.0037	.0004	.0017	6.7	.0016
%RSD	.0944	.9610	.2143	26.42	.0815	.3353	1.422	.1690
#1	1.096	511.3	.9299	-.0110	.4972	.4939	467.4	.9604
#2	1.094	517.0	.9261	-.0180	.4964	.4968	479.6	.9637
#3	1.095	507.2	.9288	-.0126	.4971	.4967	468.8	.9624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				1.000				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4709**	**.4882**	**.5316**	**188.3**	**.1849**	**.9682**	**510.8**	**.5190**
Stddev	.0007	.0009	.0017	.4	.0367	.0029	1.3	.0008
%RSD	.1581	.1864	.3116	.1904	19.84	.2954	.2626	.1487
#1	.4701	.4873	.5315	187.9	.2064	.9651	509.4	.5199
#2	.4715	.4882	.5300	188.3	.2059	.9707	511.1	.5187
#3	.4712	.4891	.5333	188.7	.1426	.9688	512.0	.5185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8820**	**.3819**	**.9050**	**1.089**	**.9411**	**.8872**	**.1500**	**.8488**
Stddev	.0014	.0052	.0002	.004	.0025	.0023	.0002	.0018
%RSD	.1627	1.349	.0241	.3731	.2641	.2607	.1565	.2172
#1	.8805	.3862	.9047	1.093	.9419	.8861	.1503	.8469
#2	.8834	.3832	.9052	1.086	.9431	.8899	.1499	.8506
#3	.8820	.3762	.9050	1.086	.9383	.8857	.1498	.8490
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 12/21/2022 11:39:55 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.9434**	**1.037**	**.9126**	**.5146**	**.9261**
Stddev	.0006	.003	.0018	.0004	.0007
%RSD	.0676	.2369	.1927	.0805	.0792
#1	.9427	1.040	.9128	.5151	.9264
#2	.9440	1.035	.9143	.5144	.9267
#3	.9434	1.036	.9108	.5144	.9253
Check ?	None	None	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2061.3**	**6058.7**	**33046.**	**5017.4**
Stddev	3.1	11.1	269.	41.5
%RSD	.15259	.18263	.81255	.82754
#1	2059.1	6070.1	32971.	5060.5
#2	2060.0	6048.0	33344.	4977.6
#3	2064.9	6058.2	32823.	5014.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 11:47:19 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2468**	**39.46**	**2.020**	F **2.034**	**2.026**	**2.014**	**40.01**	**2.041**	**2.048**
Stddev	.0004	.06	.004	.021	.007	.001	.13	.001	.002
%RSD	.1663	.1637	.1711	1.015	.3613	.0654	.3227	.0675	.0922
#1	.2472	39.46	2.023	2.034	2.031	2.014	40.07	2.042	2.049
#2	.2464	39.40	2.022	2.013	2.018	2.014	39.86	2.042	2.050
#3	.2469	39.53	2.016	2.055	2.030	2.016	40.10	2.040	2.046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.002**	**2.027**	**39.52**	**40.14**	**1.985**	**39.76**	**2.053**	**2.049**	**40.48**
Stddev	.005	.006	.05	.18	.004	.08	.015	.002	.13
%RSD	.2615	.3129	.1352	.4429	.2167	.1935	.7170	.1182	.3288
#1	2.008	2.032	39.46	40.22	1.986	39.67	2.070	2.052	40.60
#2	1.998	2.029	39.54	39.94	1.989	39.82	2.046	2.049	40.34
#3	1.999	2.020	39.57	40.27	1.981	39.79	2.043	2.047	40.50
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.025**	**1.975**	**2.036**	**2.037**	**2.266**	**2.057**	**2.037**	**2.053**	**1.982**
Stddev	.003	.002	.003	.004	.002	.003	.011	.003	.002
%RSD	.1285	.1031	.1519	.2018	.0787	.1366	.5169	.1280	.1037
#1	2.027	1.974	2.039	2.041	2.268	2.059	2.041	2.055	1.981
#2	2.027	1.974	2.036	2.036	2.265	2.058	2.025	2.050	1.985
#3	2.022	1.977	2.033	2.033	2.265	2.053	2.045	2.053	1.982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 11:47:19 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.028**	**2.014**
Stddev	.003	.002
%RSD	.1569	.1016
#1	2.032	2.015
#2	2.027	2.015
#3	2.026	2.012
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2453.4**	**6424.2**	**36041.**	**5140.8**
Stddev	3.0	11.2	167.	36.3
%RSD	.12139	.17489	.46281	.70674
#1	2454.6	6411.2	35867.	5120.1
#2	2455.6	6430.9	36199.	5119.7
#3	2450.0	6430.4	36057.	5182.8

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 11:57:26 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0071**	**.0004**	F **-.0059**	**-.0004**	**-.0002**	**-.0005**	**-.0001**
Stddev	.0004	.0119	.0005	.0012	.0004	.0000	.0041	.0000
%RSD	422.9	167.8	126.2	20.77	120.5	24.23	791.6	13.89
#1	.0005	-.0197	.0010	-.0049	.0001	-.0002	-.0052	-.0001
#2	-.0002	.0039	.0001	-.0073	-.0004	-.0002	.0027	-.0001
#3	-.0001	-.0054	.0001	-.0055	-.0008	-.0001	.0009	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0001**	**-.0002**	**-.0013**	**-.1744**	F **-.0049**	**-.0041**	**-.0001**
Stddev	.0001	.0000	.0004	.0017	.0170	.0003	.0096	.0000
%RSD	107.8	45.77	173.6	127.4	9.741	6.219	237.0	5.772
#1	.0000	.0000	.0002	-.0011	-.1577	-.0047	-.0022	-.0001
#2	-.0002	.0001	-.0006	-.0031	-.1917	-.0048	.0045	-.0001
#3	.0000	.0001	-.0002	.0003	-.1737	-.0052	-.0145	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0466**	**-.0001**	**.0003**	**.0002**	**-.0005**	**-.0003**	**.0002**
Stddev	.0001	.0137	.0000	.0007	.0013	.0026	.0002	.0003
%RSD	133.3	29.36	17.57	237.0	525.8	499.5	63.35	153.2
#1	.0000	-.0584	-.0001	.0004	-.0010	-.0031	-.0001	.0005
#2	-.0003	-.0498	-.0001	-.0005	.0016	-.0005	-.0004	.0001
#3	-.0001	-.0316	-.0001	.0009	.0001	.0021	-.0004	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 11:57:26 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0002**	**.0006**	**-.0001**	**.0009**
Stddev	.0001	.0000	.0004	.0003	.0004
%RSD	88.21	17.46	55.77	234.2	43.76
#1	.0000	-.0002	.0008	-.0005	.0005
#2	.0003	-.0001	.0009	.0000	.0013
#3	.0001	-.0002	.0002	.0001	.0008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2946.5**	**6831.9**	**38056.**	**5184.8**
Stddev	4.6	11.4	440.	41.7
%RSD	.15772	.16728	1.1571	.80484
#1	2950.1	6844.6	38525.	5149.3
#2	2941.3	6822.6	37992.	5174.3
#3	2948.2	6828.4	37652.	5230.7

Zoom In Zoom Out

Sample Name: MP41628-MB1 Acquired: 12/21/2022 12:07:46 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**-.0013**	**-.0004**	**-.0048**	**.0002**	**-.0002**	**.0200**	**-.0001**	**-.0003**
Stddev	.0004	.0097	.0007	.0020	.0001	.0000	.0051	.0000	.0001
%RSD	54.08	775.8	159.1	42.16	58.38	19.32	25.34	26.41	36.63
#1	-.0003	-.0059	-.0010	-.0049	.0001	-.0002	.0143	-.0001	-.0002
#2	-.0006	.0099	-.0006	-.0068	.0004	-.0001	.0241	-.0001	-.0004
#3	-.0010	-.0077	.0003	-.0027	.0002	-.0002	.0217	-.0001	-.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0007**	**.0771**	**-.1754**	**-.0027**	**.0063**	**.0002**	**-.0001**	**-.0119**
Stddev	.0001	.0002	.0024	.0713	.0020	.0029	.0001	.0001	.0113
%RSD	48.40	23.49	3.068	40.64	73.92	45.92	21.53	71.49	95.12
#1	.0002	-.0007	.0744	-.1185	-.0004	.0076	.0002	-.0002	-.0112
#2	.0001	-.0005	.0786	-.2554	-.0042	.0083	.0002	-.0002	-.0236
#3	.0002	-.0008	.0784	-.1523	-.0035	.0030	.0003	.0000	-.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0004**	**.0002**	**.0015**	**.0032**	**.0001**	**.0000**	**-.0001**	**.0008**
Stddev	.0002	.0003	.0006	.0016	.0003	.0001	.0001	.0001	.0011
%RSD	202.8	73.38	248.4	106.6	8.468	140.8	160.8	264.1	138.6
#1	.0002	-.0008	-.0004	.0034	.0034	.0000	.0001	-.0002	-.0005
#2	-.0003	-.0003	.0004	.0002	.0029	.0001	.0001	.0001	.0014
#3	-.0002	-.0002	.0007	.0010	.0032	.0001	.0000	.0000	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: MP41628-MB1 Acquired: 12/21/2022 12:07:46 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**-.0003**	**.0024**
Stddev	.0001	.0005
%RSD	29.20	21.45
#1	-.0002	.0020
#2	-.0003	.0022
#3	-.0004	.0030
Check ?	Chk Pass	Chk Pass
High Limit		
Low Limit		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2969.9**	**6951.5**	**39437.**	**5394.1**
Stddev	3.6	4.7	192.	53.5
%RSD	.12261	.06696	.48778	.99173
#1	2968.3	6950.4	39282.	5332.8
#2	2967.3	6956.6	39652.	5418.1
#3	2974.0	6947.5	39376.	5431.4

Zoom In Zoom Out

Sample Name: MP41628-B1 Acquired: 12/21/2022 12:12:46 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0515**	**27.17**	**1.960**	F **.0235**	**2.035**	**.0501**	**25.60**	**.0500**
Stddev	.0006	.13	.002	.0014	.008	.0002	.10	.0000
%RSD	1.145	.4602	.1128	5.848	.3845	.4013	.3716	.0594
#1	.0510	27.03	1.959	.0250	2.026	.0499	25.49	.0500
#2	.0522	27.21	1.963	.0228	2.038	.0500	25.65	.0500
#3	.0514	27.27	1.959	.0225	2.040	.0503	25.65	.0500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0500				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5103**	**.2019**	**.2561**	**25.91**	**25.24**	F **-.0016**	**25.41**	**.5140**
Stddev	.0001	.0009	.0004	.13	.11	.0026	.09	.0003
%RSD	.0262	.4319	.1751	.5136	.4333	160.9	.3458	.0577
#1	.5104	.2022	.2566	25.76	25.11	-.0022	25.31	.5142
#2	.5102	.2026	.2560	26.00	25.30	.0012	25.48	.5141
#3	.5102	.2009	.2558	25.97	25.30	-.0038	25.44	.5136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0500		
Range						-20.00%		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5158**	**23.72**	**.5032**	**.4798**	**.4955**	**1.997**	**.3559**	**.5125**
Stddev	.0002	.09	.0002	.0007	.0012	.004	.0008	.0010
%RSD	.0404	.3587	.0301	.1417	.2420	.1827	.2236	.2007
#1	.5156	23.62	.5031	.4790	.4965	1.997	.3563	.5136
#2	.5160	23.76	.5034	.4801	.4959	2.000	.3550	.5119
#3	.5158	23.77	.5031	.4803	.4942	1.993	.3564	.5118
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: MP41628-B1 Acquired: 12/21/2022 12:12:46 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5130**	**.5128**	**1.959**	**.5017**	**.4925**
Stddev	.0021	.0008	.003	.0010	.0005
%RSD	.4135	.1544	.1272	.1978	.1116
#1	.5107	.5130	1.958	.5027	.4928
#2	.5134	.5136	1.957	.5018	.4918
#3	.5149	.5120	1.962	.5007	.4927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2640.5**	**6740.1**	**37948.**	**5332.5**
Stddev	7.0	8.6	108.	26.3
%RSD	.26692	.12770	.28372	.49236
#1	2641.7	6741.7	38006.	5349.3
#2	2646.9	6747.8	37824.	5346.1
#3	2633.0	6730.8	38015.	5302.3

Zoom In Zoom Out

Sample Name: MP41631-MB1 Acquired: 12/21/2022 12:17:39 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0044**	**.0000**	F **-.0063**	**.0002**	**-.0002**	**.0150**	**-.0001**
Stddev	.0001	.0227	.0008	.0024	.0001	.0001	.0021	.0000
%RSD	133.9	514.0	2438.	37.45	64.29	50.17	14.28	39.65
#1	.0000	.0046	-.0001	-.0057	.0001	-.0003	.0127	-.0001
#2	.0001	-.0183	-.0007	-.0043	.0001	-.0002	.0170	-.0001
#3	.0002	.0270	.0009	-.0089	.0003	-.0001	.0152	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0050				
Low Limit				-.0050				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0002**	**-.0003**	**.0179**	**-.1616**	**-.0025**	**-.0116**	**.0001**
Stddev	.0001	.0002	.0004	.0042	.0567	.0024	.0024	.0001
%RSD	67.01	93.61	130.0	23.37	35.08	94.72	20.31	82.59
#1	-.0001	.0003	-.0002	.0224	-.2269	-.0053	-.0092	.0000
#2	-.0002	.0004	-.0007	.0141	-.1250	-.0008	-.0117	.0001
#3	-.0001	.0000	.0000	.0172	-.1329	-.0015	-.0139	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0253**	**-.0003**	**-.0001**	**.0007**	**-.0002**	**.0042**	**.0004**
Stddev	.0003	.0132	.0001	.0004	.0008	.0027	.0007	.0001
%RSD	1276000.	52.15	50.40	651.4	128.9	1588.	16.02	29.67
#1	.0002	-.0380	-.0004	-.0004	.0011	.0027	.0037	.0002
#2	-.0003	-.0262	-.0001	.0003	.0011	-.0026	.0049	.0005
#3	.0001	-.0117	-.0002	-.0001	-.0003	-.0006	.0039	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: MP41631-MB1 Acquired: 12/21/2022 12:17:39 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0001**	**.0003**	**-.0003**	**.0028**
Stddev	.0000	.0002	.0010	.0001	.0002
%RSD	57.96	159.3	363.7	22.67	7.604
#1	.0000	.0000	-.0008	-.0003	.0027
#2	.0001	-.0003	.0005	-.0004	.0031
#3	.0001	.0000	.0011	-.0003	.0028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2973.9**	**6924.0**	**39196.**	**5398.6**
Stddev	10.1	12.7	86.	10.9
%RSD	.34031	.18348	.21882	.20225
#1	2975.6	6929.6	39136.	5411.2
#2	2963.1	6909.4	39158.	5391.8
#3	2983.1	6932.8	39294.	5392.8

Zoom In Zoom Out

Sample Name: MP41631-B1 Acquired: 12/21/2022 12:22:39 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0514**	**27.09**	**1.951**	F **.0231**	**2.026**	**.0497**	**25.56**	**.0496**
Stddev	.0005	.16	.005	.0018	.011	.0001	.13	.0001
%RSD	1.052	.5934	.2401	7.682	.5465	.2969	.4985	.2860
#1	.0520	27.01	1.947	.0241	2.025	.0496	25.54	.0496
#2	.0509	26.98	1.956	.0211	2.015	.0497	25.44	.0498
#3	.0514	27.27	1.950	.0242	2.038	.0499	25.69	.0495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0500				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5076**	**.2011**	**.2549**	**25.78**	**25.08**	F **-.0008**	**25.32**	**.5119**
Stddev	.0012	.0005	.0008	.19	.03	.0018	.17	.0009
%RSD	.2273	.2665	.3125	.7336	.1276	239.3	.6755	.1838
#1	.5077	.2017	.2546	25.71	25.05	.0013	25.21	.5128
#2	.5086	.2006	.2558	25.64	25.11	-.0015	25.24	.5119
#3	.5063	.2010	.2542	26.00	25.08	-.0022	25.52	.5109
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0500		
Range						-20.00%		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5155**	**23.69**	**.5007**	**.4778**	**.4936**	**1.984**	**.3570**	**.5123**
Stddev	.0010	.14	.0006	.0003	.0011	.005	.0023	.0017
%RSD	.1869	.5716	.1269	.0730	.2220	.2411	.6533	.3411
#1	.5164	23.66	.5007	.4778	.4935	1.982	.3549	.5124
#2	.5156	23.57	.5014	.4775	.4947	1.990	.3595	.5140
#3	.5145	23.84	.5001	.4782	.4925	1.981	.3566	.5105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Zoom In Zoom Out

Sample Name: MP41631-B1 Acquired: 12/21/2022 12:22:39 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5141**	**.5143**	**1.948**	**.4991**	**.4906**
Stddev	.0021	.0017	.004	.0015	.0010
%RSD	.4032	.3229	.2085	.2916	.2011
#1	.5140	.5161	1.947	.5000	.4905
#2	.5120	.5138	1.944	.4998	.4917
#3	.5162	.5129	1.952	.4974	.4897
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2631.7**	**6716.4**	**37565.**	**5321.6**
Stddev	12.3	34.6	258.	56.3
%RSD	.46874	.51455	.68673	1.0575
#1	2622.7	6700.6	37479.	5368.3
#2	2626.7	6692.6	37361.	5337.4
#3	2645.8	6756.1	37855.	5259.1

Zoom In Zoom Out

Sample Name: FC1080-1 Acquired: 12/21/2022 12:27:33 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.3459**	**-.0004**	**.0019**	**.5033**	**-.0001**	**167.2**	**-.0001**	**.0000**
Stddev	.0005	.0078	.0012	.0017	.0002	.0001	1.2	.0000	.0001
%RSD	92.83	2.244	301.5	87.69	.0457	74.26	.7162	16.59	546.5
#1	-.0001	.3416	-.0012	.0017	.5034	-.0001	166.0	-.0001	.0001
#2	-.0011	.3412	.0009	.0003	.5030	-.0002	168.4	-.0001	-.0001
#3	-.0004	.3548	-.0009	.0037	.5034	.0000	167.1	-.0001	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0001**	**.0010**	**19.51**	**.0106**	**.0298**	**.0000**	**.0020**	**66.02**
Stddev	.0001	.0005	.0011	.05	.0023	.0105	.000	.0001	.09
%RSD	4.579	692.3	109.0	.2430	21.43	35.09	78.77	4.834	.1328
#1	.0012	.0005	.0010	19.46	.0119	.0372	.0000	.0019	66.12
#2	.0011	-.0005	.0022	19.51	.0120	.0344	.0000	.0021	65.99
#3	.0011	.0002	-.0001	19.56	.0080	.0179	.0000	.0021	65.96

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0025**	**.0018**	**.0007**	**.1182**	**.0004**	**.3714**	**.0022**	**-.0009**
Stddev	.0001	.0006	.0015	.0040	.0010	.0003	.0006	.0002	.0011
%RSD	22.44	23.10	83.08	590.9	.8165	76.26	.1526	8.244	130.3
#1	-.0005	-.0029	.0013	-.0006	.1171	.0004	.3717	.0023	-.0003
#2	-.0003	-.0018	.0007	.0052	.1187	.0001	.3716	.0020	-.0001
#3	-.0004	-.0027	.0036	-.0026	.1188	.0007	.3707	.0023	-.0022

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0001**	**.0024**
Stddev	.0001	.0002
%RSD	135.2	8.761
#1	-.0002	.0022
#2	.0001	.0024
#3	-.0002	.0026

Zoom In Zoom Out

Sample Name: FC1080-1 Acquired: 12/21/2022 12:27:33 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2584.0**	**6547.3**	**36521.**	**5267.1**
Stddev	1.3	5.0	81.	35.4
%RSD	.04842	.07650	.22292	.67123
#1	2583.7	6541.8	36573.	5260.5
#2	2582.8	6551.6	36427.	5235.5
#3	2585.3	6548.6	36563.	5305.3

Zoom In Zoom Out

Sample Name: MP41631-D1 Acquired: 12/21/2022 12:32:42 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.3213**	**.0003**	**.0023**	**.5042**	**-.0002**	**164.8**	**.0000**	**.0000**
Stddev	.0004	.0041	.0010	.0022	.0019	.0001	2.5	.000	.000
%RSD	249.6	1.279	369.7	99.38	.3702	38.26	1.495	102.3	107.1
#1	-.0002	.3166	.0006	.0004	.5034	-.0003	164.7	-.0001	.0000
#2	.0005	.3242	.0010	.0016	.5064	-.0002	167.3	.0000	.0000
#3	.0001	.3231	-.0009	.0048	.5030	-.0001	162.3	.0000	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0001**	**.0007**	**19.72**	**.0126**	**.0257**	**.0000**	**.0020**	**66.32**
Stddev	.0002	.0002	.0006	.03	.0046	.0136	.0001	.0001	.23
%RSD	15.10	171.4	93.65	.1380	36.38	52.85	207.3	7.300	.3508
#1	.0014	.0003	.0004	19.69	.0154	.0413	.0001	.0022	66.24
#2	.0010	-.0001	.0014	19.74	.0151	.0192	.0000	.0020	66.58
#3	.0013	.0002	.0002	19.73	.0073	.0166	.0000	.0019	66.14

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0022**	**.0007**	**-.0013**	**.1187**	**.0002**	**.3730**	**.0021**	**-.0016**
Stddev	.0001	.0005	.0015	.0028	.0011	.0003	.0014	.0000	.0016
%RSD	23.00	22.21	216.3	208.6	.9061	124.0	.3664	1.466	99.72
#1	-.0004	-.0021	.0012	-.0020	.1198	.0005	.3718	.0021	-.0001
#2	-.0006	-.0017	.0018	-.0038	.1186	.0001	.3745	.0021	-.0015
#3	-.0005	-.0027	-.0010	.0017	.1176	.0000	.3726	.0021	-.0033

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0001**	**.0018**
Stddev	.0003	.0001
%RSD	467.2	3.145
#1	.0002	.0017
#2	-.0004	.0018
#3	.0001	.0018

Zoom In Zoom Out

Sample Name: MP41631-D1 Acquired: 12/21/2022 12:32:42 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2569.5**	**6480.7**	**36472.**	**5208.5**
Stddev	4.9	16.7	129.	20.3
%RSD	.18977	.25791	.35315	.38973
#1	2570.7	6468.9	36589.	5195.6
#2	2564.2	6473.5	36334.	5197.9
#3	2573.7	6499.9	36492.	5231.9

Zoom In Zoom Out

Sample Name: MP41631-SD1 Acquired: 12/21/2022 12:37:49 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.3655**	**-.0015**	**-.0168**	**.5228**	**-.0012**	**174.1**	**-.0004**	**-.0005**
Stddev	.0017	.0244	.0035	.0102	.0009	.0003	.1	.0002	.0002
%RSD	1436.	6.670	232.8	60.60	.1661	22.13	.0668	53.88	47.69
#1	.0011	.3375	-.0032	-.0183	.5228	-.0009	174.3	-.0002	-.0004
#2	.0011	.3772	.0025	-.0059	.5237	-.0013	174.1	-.0007	-.0003
#3	-.0018	.3819	-.0038	-.0261	.5220	-.0014	174.1	-.0004	-.0007

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**-.0048**	**-.0257**	**20.18**	**-.0154**	**.0082**	**-.0004**	**.0014**	**69.14**
Stddev	.0013	.0004	.0111	.08	.0096	.0495	.0003	.0004	.06
%RSD	73.21	8.593	42.96	.4017	62.25	606.8	65.36	30.46	.0891
#1	.0026	-.0045	-.0181	20.20	-.0055	.0603	-.0007	.0011	69.07
#2	.0025	-.0052	-.0384	20.26	-.0246	.0023	-.0001	.0013	69.19
#3	.0003	-.0045	-.0207	20.10	-.0162	-.0382	-.0005	.0019	69.15

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0020**	**-.0006**	**.0005**	**-.0084**	**.1246**	**-.0006**	**.3868**	**.0095**	**-.0020**
Stddev	.0001	.0038	.0066	.0141	.0050	.0030	.0012	.0004	.0042
%RSD	6.885	651.4	1279.	168.2	3.973	502.0	.3042	3.696	208.1
#1	-.0019	-.0016	-.0053	-.0069	.1294	-.0037	.3856	.0093	.0019
#2	-.0021	-.0037	-.0009	.0049	.1249	-.0004	.3879	.0099	-.0065
#3	-.0020	.0036	.0078	-.0232	.1195	.0023	.3870	.0092	-.0015

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0015**	**.0012**
Stddev	.0004	.0001
%RSD	29.48	9.858
#1	-.0011	.0011
#2	-.0014	.0011
#3	-.0019	.0013

Zoom In Zoom Out

Sample Name: MP41631-SD1 Acquired: 12/21/2022 12:37:49 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2795.1**	**6776.3**	**37812.**	**5286.8**
Stddev	7.1	22.8	125.	29.9
%RSD	.25345	.33675	.33060	.56584
#1	2799.1	6789.4	37876.	5291.3
#2	2786.9	6750.0	37893.	5254.9
#3	2799.3	6789.6	37668.	5314.3

Zoom In Zoom Out

Sample Name: MP41631-S1 Acquired: 12/21/2022 12:42:49 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0512**	**27.08**	**1.969**	**.0345**	**2.490**	**.0498**	**189.2**	**.0487**	**.4946**
Stddev	.0006	.12	.003	.0035	.006	.0002	2.4	.0001	.0006
%RSD	1.149	.4265	.1440	10.30	.2448	.4288	1.283	.1323	.1165
#1	.0507	27.21	1.968	.0317	2.495	.0500	186.4	.0488	.4944
#2	.0518	26.98	1.973	.0385	2.483	.0496	190.9	.0487	.4941
#3	.0511	27.06	1.968	.0332	2.492	.0498	190.1	.0486	.4952

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1999**	**.2520**	**25.46**	**44.69**	**.0078**	**24.59**	**.5054**	**.5047**	F **88.50**
Stddev	.0004	.0006	.12	.18	.0033	.10	.0019	.0008	.23
%RSD	.2004	.2389	.4712	.4097	43.02	.3906	.3699	.1645	.2576
#1	.2002	.2522	25.54	44.84	.0077	24.69	.5071	.5038	88.71
#2	.2002	.2525	25.32	44.49	.0045	24.50	.5055	.5050	88.26
#3	.1995	.2513	25.51	44.74	.0112	24.58	.5034	.5053	88.54

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4861**	**.4771**	**.4917**	**2.007**	**.4714**	**.4912**	**.8690**	**.5069**	**1.915**
Stddev	.0007	.0003	.0027	.002	.0041	.0007	.0030	.0020	.008
%RSD	.1422	.0573	.5527	.0996	.8787	.1500	.3487	.3903	.3991
#1	.4854	.4768	.4926	2.009	.4684	.4908	.8696	.5088	1.907
#2	.4861	.4774	.4886	2.007	.4696	.4907	.8658	.5070	1.922
#3	.4868	.4771	.4939	2.005	.4761	.4920	.8718	.5048	1.914

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5013**	**.4824**
Stddev	.0029	.0005
%RSD	.5796	.1126
#1	.5040	.4818
#2	.5018	.4824
#3	.4982	.4829

Zoom In Zoom Out

Sample Name: MP41631-S1 Acquired: 12/21/2022 12:42:49 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2492.2**	**6597.2**	**36618.**	**5304.9**
Stddev	8.4	12.2	375.	53.7
%RSD	.33546	.18486	1.0231	1.0122
#1	2500.4	6605.3	36186.	5255.9
#2	2492.6	6603.1	36827.	5362.3
#3	2483.7	6583.2	36842.	5296.6

Zoom In Zoom Out

Sample Name: MP41631-S2 Acquired: 12/21/2022 12:47:50 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0504**	**26.42**	**1.962**	**.0320**	**2.470**	**.0495**	**183.7**	**.0487**	**.4939**
Stddev	.0006	.12	.001	.0037	.013	.0001	2.8	.0002	.0015
%RSD	1.127	.4632	.0665	11.55	.5329	.1734	1.528	.3344	.3046
#1	.0510	26.56	1.961	.0361	2.485	.0494	180.9	.0485	.4922
#2	.0502	26.36	1.963	.0291	2.464	.0496	183.8	.0489	.4952
#3	.0500	26.34	1.961	.0307	2.460	.0495	186.6	.0487	.4942

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1973**	**.2492**	**24.74**	**44.07**	**.0066**	**23.95**	**.5008**	**.5101**	F **87.56**
Stddev	.0004	.0005	.08	.18	.0017	.07	.0007	.0011	.49
%RSD	.2037	.1980	.3273	.3976	25.53	.3133	.1358	.2198	.5542
#1	.1976	.2491	24.81	44.24	.0077	24.03	.5004	.5088	88.12
#2	.1974	.2497	24.76	44.09	.0046	23.93	.5016	.5109	87.34
#3	.1969	.2488	24.65	43.89	.0073	23.89	.5004	.5106	87.23

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4845**	**.4736**	**.4904**	**1.999**	**.4731**	**.4956**	**.8707**	**.5089**	**1.900**
Stddev	.0004	.0005	.0020	.007	.0002	.0022	.0051	.0004	.002
%RSD	.0914	.1125	.4127	.3564	.0432	.4459	.5894	.0809	.0914
#1	.4840	.4735	.4909	1.991	.4729	.4933	.8765	.5094	1.898
#2	.4848	.4731	.4922	2.000	.4733	.4977	.8689	.5088	1.901
#3	.4846	.4742	.4882	2.006	.4731	.4960	.8667	.5086	1.901

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.4967**	**.4796**
Stddev	.0015	.0005
%RSD	.2934	.1004
#1	.4973	.4792
#2	.4978	.4794
#3	.4950	.4801

Zoom In Zoom Out

Sample Name: MP41631-S2 Acquired: 12/21/2022 12:47:50 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2474.9**	**6523.1**	**36569.**	**5326.0**
Stddev	5.4	22.0	223.	29.6
%RSD	.21797	.33714	.61014	.55606
#1	2480.6	6548.3	36818.	5292.8
#2	2474.5	6507.8	36386.	5335.4
#3	2469.8	6513.2	36505.	5349.7

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 12:52:52 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2450**	**39.01**	**2.014**	F **2.033**	**2.007**	**2.003**	**39.71**	**2.040**	**2.051**
Stddev	.0001	.16	.002	.005	.008	.011	.16	.004	.003
%RSD	.0471	.4179	.0807	.2515	.4012	.5364	.3969	.1713	.1363
#1	.2449	39.13	2.013	2.038	2.015	2.008	39.85	2.036	2.047
#2	.2451	39.08	2.015	2.031	2.007	2.010	39.75	2.042	2.052
#3	.2450	38.82	2.013	2.028	1.999	1.991	39.54	2.042	2.052
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.981**	**2.011**	**39.07**	**39.82**	**1.969**	**39.50**	**2.045**	**2.050**	**40.18**
Stddev	.006	.009	.27	.09	.009	.21	.010	.002	.15
%RSD	.3273	.4652	.6983	.2199	.4506	.5256	.5051	.0856	.3767
#1	1.988	2.021	39.21	39.90	1.976	39.65	2.033	2.048	40.34
#2	1.980	2.008	39.24	39.82	1.972	39.59	2.053	2.052	40.18
#3	1.975	2.004	38.76	39.73	1.959	39.26	2.048	2.051	40.03
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**1.967**	**2.030**	**2.044**	**2.263**	**2.059**	**2.021**	**2.045**	**1.968**
Stddev	.002	.003	.004	.007	.003	.004	.007	.000	.002
%RSD	.1141	.1362	.1775	.3473	.1340	.1754	.3543	.0195	.0952
#1	2.015	1.967	2.026	2.036	2.260	2.055	2.027	2.045	1.966
#2	2.019	1.964	2.032	2.047	2.264	2.062	2.023	2.045	1.969
#3	2.019	1.970	2.032	2.049	2.265	2.060	2.013	2.044	1.970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 12:52:52 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.014**	**2.004**
Stddev	.001	.002
%RSD	.0715	.0963
#1	2.013	2.002
#2	2.015	2.006
#3	2.014	2.004
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2470.2**	**6454.1**	**36657.**	**5204.1**
Stddev	8.6	25.3	88.	23.1
%RSD	.34954	.39196	.24017	.44434
#1	2475.0	6477.0	36749.	5220.9
#2	2475.5	6458.5	36574.	5213.6
#3	2460.3	6427.0	36649.	5177.7

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 12:57:51 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0000**	**-.0005**	F **-.0058**	**.0004**	**.0000**	**.0193**	**.0000**
Stddev	.0004	.006	.0005	.0020	.0000	.000	.0018	.0000
%RSD	136.6	64680.	93.50	33.66	5.709	145.0	9.259	472.6
#1	-.0008	.0063	-.0008	-.0036	.0004	-.0001	.0198	.0000
#2	-.0002	-.0047	.0000	-.0073	.0004	.0000	.0173	.0000
#3	.0000	-.0017	-.0007	-.0066	.0004	.0000	.0207	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0001**	**-.0005**	**-.0002**	**-.1547**	**-.0006**	**.0014**	**.0001**
Stddev	.0001	.0001	.0002	.0020	.0085	.0010	.0133	.0000
%RSD	122.6	138.6	34.60	1051.	5.512	157.8	967.6	20.06
#1	.0000	-.0003	-.0007	.0021	-.1635	-.0008	-.0057	.0001
#2	-.0001	-.0001	-.0004	-.0018	-.1465	.0004	-.0069	.0001
#3	-.0002	.0000	-.0004	-.0009	-.1541	-.0014	.0167	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0006**	**-.0002**	**-.0002**	**-.0012**	**-.0002**	**.0001**	**-.0001**
Stddev	.0001	.0197	.0002	.0010	.0004	.0036	.0004	.0005
%RSD	136.9	3271.	77.50	418.2	33.32	2050.	388.5	492.3
#1	.0000	-.0220	-.0002	-.0008	-.0014	.0035	.0000	.0003
#2	.0002	.0167	-.0001	.0009	-.0015	-.0037	.0006	-.0007
#3	.0001	.0035	-.0004	-.0008	-.0008	-.0003	-.0002	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 12:57:51 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0019**	**.0001**	**.0013**
Stddev	.0001	.0001	.0013	.0001	.0001
%RSD	34.59	3981.	72.19	192.0	4.100
#1	.0002	-.0001	.0015	.0000	.0013
#2	.0003	.0001	.0033	.0002	.0013
#3	.0001	.0000	.0007	.0000	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2965.0**	**6826.5**	**38629.**	**5283.8**
Stddev	15.1	24.4	118.	34.3
%RSD	.50823	.35759	.30582	.64896
#1	2956.7	6813.7	38562.	5311.3
#2	2955.8	6811.3	38766.	5245.4
#3	2982.3	6854.7	38561.	5294.8

Zoom In Zoom Out

Sample Name: FC1201-9 Acquired: 12/21/2022 13:02:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0152**	**.0003**	**.0114**	**.0687**	**-.0002**	**21.80**	**.0000**	**-.0001**
Stddev	.0004	.0039	.0003	.0043	.0002	.0000	.04	.000	.0001
%RSD	474.3	25.45	99.29	37.76	.3072	20.61	.1678	71.21	155.1
#1	.0002	.0187	.0005	.0164	.0686	-.0003	21.78	-.0001	.0000
#2	.0004	.0110	.0004	.0087	.0690	-.0002	21.84	.0000	-.0001
#3	-.0003	.0159	.0000	.0091	.0686	-.0002	21.77	.0000	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0131**	**.0028**	**.0172**	**.7150**	**.0022**	**2.386**	**.0352**	**.0000**	**F 141.7**
Stddev	.0001	.0002	.0020	.0301	.0021	.016	.0001	.000	.6
%RSD	1.125	6.836	11.46	4.213	93.18	.6481	.3333	382.1	.4267
#1	.0131	.0030	.0153	.6808	.0045	2.402	.0353	-.0002	142.3
#2	.0132	.0027	.0192	.7268	.0004	2.385	.0351	-.0001	141.8
#3	.0129	.0027	.0170	.7375	.0018	2.371	.0351	.0001	141.1

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0124**	**.0001**	**.0003**	**.0001**	**1.185**	**.0005**	**.0696**	**.0024**	**-.0012**
Stddev	.0002	.0002	.0016	.0010	.001	.0004	.0001	.0001	.0023
%RSD	1.510	234.3	481.2	1078.	.1155	74.82	.1786	4.924	199.3
#1	.0122	-.0001	.0004	-.0008	1.186	.0005	.0697	.0025	.0015
#2	.0126	.0000	.0019	.0012	1.185	.0008	.0696	.0023	-.0026
#3	.0125	.0003	-.0013	-.0001	1.184	.0001	.0695	.0025	-.0025

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0009**	**.0089**
Stddev	.0001	.0001
%RSD	11.97	1.570
#1	.0009	.0088
#2	.0009	.0089
#3	.0007	.0091

Zoom In Zoom Out

Sample Name: FC1201-9 Acquired: 12/21/2022 13:02:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2623.8**	**6577.4**	**36867.**	**5297.0**
Stddev	1.0	11.1	135.	8.7
%RSD	.03970	.16841	.36749	.16334
#1	2622.7	6584.1	36763.	5289.1
#2	2624.8	6564.6	36818.	5295.5
#3	2623.9	6583.5	37020.	5306.3

Zoom In Zoom Out

Sample Name: FC1090-1F Acquired: 12/21/2022 13:08:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0310**	**-.0003**	**-.0033**	**.0038**	**-.0001**	**10.01**	**-.0001**	**-.0002**
Stddev	.0004	.0088	.0004	.0019	.0001	.0001	.02	.0001	.0002
%RSD	141.8	28.35	130.4	58.98	1.991	58.58	.1865	95.21	73.44
#1	-.0001	.0225	-.0004	-.0022	.0038	-.0002	10.01	-.0001	-.0003
#2	-.0007	.0304	-.0007	-.0021	.0037	-.0001	9.999	.0000	.0000
#3	.0000	.0400	.0001	-.0055	.0038	-.0002	10.03	-.0001	-.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0020**	**.0252**	**1.192**	**.0033**	**.7297**	**.0331**	**.0002**	**5.841**
Stddev	.0003	.0004	.0020	.057	.0007	.0163	.0001	.0001	.009
%RSD	30.34	19.39	7.913	4.783	20.70	2.229	.3420	51.13	.1517
#1	.0011	.0025	.0234	1.255	.0041	.7428	.0330	.0003	5.844
#2	.0007	.0017	.0273	1.144	.0028	.7349	.0332	.0001	5.831
#3	.0014	.0019	.0247	1.177	.0030	.7115	.0331	.0002	5.848

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**-.0013**	**.0010**	**-.0001**	**8.083**	**.0002**	**.0774**	**.0015**	**.0003**
Stddev	.0001	.0003	.0014	.0027	.018	.0000	.0003	.0001	.0006
%RSD	5.667	25.34	131.3	2409.	.2183	18.93	.3564	9.532	185.2
#1	.0016	-.0011	-.0004	.0026	8.101	.0002	.0771	.0015	.0009
#2	.0015	-.0012	.0011	-.0027	8.065	.0003	.0774	.0017	-.0001
#3	.0016	-.0017	.0024	-.0003	8.082	.0002	.0776	.0014	.0000

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0000**	**.0152**
Stddev	.0001	.0001
%RSD	229.9	.7061
#1	.0000	.0153
#2	.0002	.0152
#3	.0000	.0151

Zoom In Zoom Out

Sample Name: FC1090-1F Acquired: 12/21/2022 13:08:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2893.3**	**6790.0**	**38449.**	**5393.2**
Stddev	3.7	11.6	149.	19.9
%RSD	.12670	.17098	.38784	.36816
#1	2889.8	6780.5	38603.	5412.3
#2	2897.1	6802.9	38438.	5372.7
#3	2893.0	6786.5	38305.	5394.7

Zoom In Zoom Out

Sample Name: MP41628-D1 Acquired: 12/21/2022 13:13:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0085**	**.0007**	**-.0036**	**.0041**	**-.0002**	**10.26**	**-.0001**	**-.0001**
Stddev	.0003	.0012	.0003	.0018	.0002	.0000	.02	.0001	.0000
%RSD	72.04	13.84	45.39	49.72	3.793	17.54	.1569	73.26	32.87
#1	-.0002	.0074	.0010	-.0056	.0039	-.0003	10.24	-.0001	-.0001
#2	-.0004	.0098	.0005	-.0021	.0042	-.0002	10.27	.0000	-.0001
#3	-.0008	.0083	.0005	-.0031	.0042	-.0002	10.27	-.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0020**	**.8352**	**1.224**	**-.0037**	**.7418**	**.0371**	**.0002**	**5.991**
Stddev	.0001	.0002	.0036	.035	.0031	.0157	.0000	.0002	.022
%RSD	14.79	8.749	.4269	2.823	84.63	2.111	.0560	96.29	.3694
#1	.0011	.0019	.8311	1.195	-.0026	.7274	.0371	.0002	5.998
#2	.0008	.0018	.8368	1.215	-.0013	.7396	.0371	.0003	5.966
#3	.0010	.0022	.8377	1.262	-.0073	.7585	.0371	.0000	6.009

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**-.0015**	**.0010**	**.0006**	**8.369**	**.0004**	**.0793**	**.0012**	**-.0010**
Stddev	.0002	.0004	.0010	.0004	.020	.0002	.0003	.0001	.0001
%RSD	14.83	28.58	95.24	75.64	.2372	62.16	.3628	6.318	12.85
#1	.0015	-.0011	.0018	.0002	8.376	.0004	.0793	.0012	-.0011
#2	.0017	-.0019	-.0001	.0011	8.346	.0001	.0790	.0013	-.0010
#3	.0012	-.0014	.0013	.0005	8.384	.0006	.0796	.0012	-.0008

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0001**	**.0169**
Stddev	.0005	.0001
%RSD	546.0	.3792
#1	-.0004	.0169
#2	.0006	.0169
#3	.0001	.0168

Zoom In Zoom Out

Sample Name: MP41628-D1 Acquired: 12/21/2022 13:13:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2960.0**	**6937.1**	**39624.**	**5536.1**
Stddev	4.6	15.4	346.	49.4
%RSD	.15458	.22127	.87205	.89261
#1	2961.8	6949.3	40020.	5589.9
#2	2963.4	6942.0	39470.	5525.9
#3	2954.8	6919.8	39383.	5492.6

Zoom In Zoom Out

Sample Name: MP41628-SD1 Acquired: 12/21/2022 13:18:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.0419**	**.0000**	**-.0307**	**.0041**	**-.0007**	**10.19**	**-.0003**	**-.0007**
Stddev	.0017	.0476	.004	.0084	.0013	.0002	.02	.0001	.0003
%RSD	183.7	113.5	15200.	27.28	31.62	29.93	.2298	22.37	35.62
#1	-.0029	.0820	-.0038	-.0366	.0031	-.0009	10.22	-.0003	-.0010
#2	-.0001	-.0106	.0035	-.0211	.0037	-.0005	10.19	-.0004	-.0005
#3	.0002	.0544	.0002	-.0343	.0056	-.0007	10.17	-.0004	-.0008

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**-.0038**	**.0133**	**.3049**	**-.0151**	**.7008**	**.0335**	**-.0001**	**5.797**
Stddev	.0007	.0017	.0007	.1120	.0069	.0340	.0002	.0003	.049
%RSD	49.52	44.70	5.380	36.74	46.03	4.846	.7182	346.5	.8436
#1	.0014	-.0050	.0139	.3204	-.0151	.6686	.0337	-.0004	5.742
#2	.0021	-.0047	.0125	.4084	-.0081	.6976	.0332	.0002	5.813
#3	.0007	-.0019	.0135	.1859	-.0220	.7363	.0335	-.0001	5.835

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0027**	**.0045**	**-.0071**	**8.143**	**-.0002**	**.0783**	**.0011**	**.0049**
Stddev	.0001	.0024	.0055	.0124	.021	.0019	.0001	.0011	.0032
%RSD	646.1	92.21	123.6	175.8	.2569	989.0	.1810	102.2	65.98
#1	.0001	-.0034	.0041	.0068	8.164	.0020	.0785	.0020	.0018
#2	.0000	-.0046	-.0009	-.0173	8.122	-.0012	.0782	-.0001	.0047
#3	.0000	.0001	.0102	-.0108	8.143	-.0014	.0783	.0013	.0082

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0012**	**.0169**
Stddev	.0004	.0005
%RSD	33.54	3.165
#1	-.0014	.0164
#2	-.0013	.0169
#3	-.0007	.0174

Zoom In Zoom Out

Sample Name: MP41628-SD1 Acquired: 12/21/2022 13:18:00 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 5.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2986.0**	**6845.4**	**39202.**	**5366.4**
Stddev	4.0	16.2	554.	45.7
%RSD	.13465	.23646	1.4141	.85136
#1	2990.4	6850.4	38792.	5314.1
#2	2985.0	6858.6	39833.	5386.8
#3	2982.6	6827.3	38982.	5398.3

Zoom In Zoom Out

Sample Name: MP41628-PS1 Acquired: 12/21/2022 13:23:01 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0482**	**2.349**	**.0932**	**-.0035**	**.2396**	**.0476**	**14.55**	**.0480**	**.0492**
Stddev	.0005	.022	.0015	.0026	.0006	.0002	.04	.0002	.0002
%RSD	1.029	.9352	1.633	74.82	.2552	.3935	.2459	.4864	.3620
#1	.0478	2.325	.0933	-.0065	.2389	.0474	14.51	.0483	.0494
#2	.0488	2.367	.0916	-.0015	.2401	.0475	14.57	.0478	.0490
#3	.0480	2.357	.0946	-.0026	.2396	.0477	14.57	.0479	.0492

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0480**	**.0989**	**2.778**	**10.21**	**-.0005**	**5.573**	**.0818**	**.0935**	**14.31**
Stddev	.0003	.0003	.015	.04	.0014	.005	.0001	.0004	.03
%RSD	.6492	.2787	.5378	.4263	275.6	.0862	.0927	.4080	.1840
#1	.0483	.0990	2.761	10.17	.0008	5.575	.0817	.0939	14.29
#2	.0477	.0992	2.784	10.20	-.0004	5.575	.0817	.0933	14.34
#3	.0480	.0986	2.789	10.26	-.0020	5.567	.0818	.0932	14.29

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0980**	**.0418**	**.0970**	**.0905**	**7.974**	**.0491**	**.1234**	**.0995**	**.0876**
Stddev	.0005	.0004	.0016	.0035	.034	.0003	.0005	.0004	.0032
%RSD	.4869	.8688	1.609	3.856	.4221	.5804	.3968	.3586	3.599
#1	.0985	.0422	.0988	.0930	8.013	.0494	.1229	.0998	.0897
#2	.0981	.0418	.0961	.0865	7.954	.0489	.1234	.0994	.0839
#3	.0975	.0415	.0962	.0919	7.955	.0490	.1239	.0991	.0890

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0481**	**.2443**
Stddev	.0001	.0011
%RSD	.2909	.4636
#1	.0483	.2455
#2	.0481	.2440
#3	.0480	.2433

Zoom In Zoom Out

Sample Name: MP41628-PS1 Acquired: 12/21/2022 13:23:01 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2822.5**	**6840.7**	**38516.**	**5380.4**
Stddev	7.9	14.9	240.	18.1
%RSD	.27905	.21830	.62367	.33564
#1	2814.6	6823.7	38261.	5362.9
#2	2822.5	6847.0	38551.	5379.3
#3	2830.3	6851.5	38738.	5399.0

Zoom In Zoom Out

Sample Name: MP41628-S1 Acquired: 12/21/2022 13:27:57 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0521**	**27.39**	**1.995**	**.0260**	**2.054**	**.0511**	**35.68**	**.0510**	**.5203**
Stddev	.0004	.03	.005	.0019	.004	.0002	.02	.0002	.0013
%RSD	.7090	.1181	.2508	7.273	.2059	.3420	.0636	.3408	.2439
#1	.0525	27.36	1.992	.0249	2.053	.0509	35.70	.0508	.5197
#2	.0521	27.42	1.992	.0250	2.051	.0512	35.66	.0510	.5195
#3	.0518	27.40	2.001	.0282	2.059	.0511	35.69	.0511	.5218

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2053**	**.2623**	**26.18**	**26.82**	**.0020**	**26.47**	**.5563**	**.5275**	**29.63**
Stddev	.0007	.0009	.05	.05	.0054	.05	.0014	.0016	.08
%RSD	.3363	.3487	.1877	.1969	275.7	.2067	.2479	.3038	.2643
#1	.2061	.2629	26.17	26.77	.0072	26.46	.5575	.5258	29.61
#2	.2049	.2628	26.24	26.80	-.0037	26.53	.5566	.5276	29.56
#3	.2048	.2613	26.14	26.88	.0024	26.42	.5548	.5290	29.72

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5110**	**.4855**	**.5051**	**2.032**	**8.457**	**.5266**	**.5956**	**.5269**	**1.971**
Stddev	.0014	.0021	.0026	.002	.019	.0019	.0013	.0013	.009
%RSD	.2709	.4228	.5084	.1154	.2228	.3629	.2245	.2435	.4724
#1	.5102	.4841	.5078	2.032	8.444	.5255	.5962	.5282	1.967
#2	.5102	.4845	.5026	2.030	8.450	.5254	.5941	.5269	1.966
#3	.5126	.4879	.5048	2.034	8.479	.5288	.5966	.5257	1.982

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5103**	**.5113**
Stddev	.0005	.0017
%RSD	.1043	.3420
#1	.5109	.5103
#2	.5102	.5103
#3	.5099	.5133

Zoom In Zoom Out

Sample Name: MP41628-S1 Acquired: 12/21/2022 13:27:57 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2593.8**	**6618.9**	**36991.**	**5294.6**
Stddev	13.7	22.8	75.	37.7
%RSD	.52794	.34431	.20275	.71272
#1	2602.5	6637.9	36905.	5298.6
#2	2600.8	6625.2	37030.	5330.3
#3	2578.0	6593.7	37039.	5255.1

Zoom In Zoom Out

Sample Name: MP41628-S2 Acquired: 12/21/2022 13:32:52 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0520**	**27.16**	**1.988**	**.0270**	**2.047**	**.0507**	**35.41**	**.0508**	**.5196**
Stddev	.0002	.07	.003	.0004	.003	.0003	.03	.0001	.0003
%RSD	.3475	.2512	.1410	1.412	.1591	.5889	.0848	.1056	.0576
#1	.0521	27.08	1.991	.0266	2.048	.0504	35.42	.0508	.5199
#2	.0518	27.21	1.986	.0274	2.044	.0510	35.38	.0507	.5197
#3	.0520	27.18	1.988	.0270	2.050	.0507	35.43	.0508	.5193

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2054**	**.2626**	**27.73**	**26.67**	**.0015**	**26.32**	**.5616**	**.5274**	**29.46**
Stddev	.0006	.0012	.05	.04	.0042	.11	.0010	.0002	.04
%RSD	.2923	.4547	.1702	.1516	279.4	.4311	.1733	.0317	.1457
#1	.2052	.2636	27.68	26.62	.0017	26.19	.5627	.5276	29.46
#2	.2050	.2629	27.77	26.69	.0056	26.40	.5612	.5272	29.42
#3	.2061	.2612	27.73	26.69	-.0028	26.38	.5610	.5274	29.51

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5097**	**.4855**	**.5036**	**2.030**	**8.336**	**.5262**	**.5948**	**.5283**	**1.973**
Stddev	.0005	.0011	.0011	.002	.003	.0015	.0013	.0010	.006
%RSD	.0916	.2362	.2236	.1084	.0345	.2853	.2111	.1980	.2860
#1	.5100	.4854	.5030	2.028	8.339	.5280	.5953	.5293	1.973
#2	.5092	.4844	.5049	2.030	8.335	.5253	.5934	.5282	1.967
#3	.5100	.4867	.5029	2.033	8.333	.5254	.5957	.5272	1.978

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5108**	**.5097**
Stddev	.0007	.0003
%RSD	.1341	.0573
#1	.5114	.5100
#2	.5101	.5094
#3	.5108	.5097

Zoom In Zoom Out

Sample Name: MP41628-S2 Acquired: 12/21/2022 13:32:52 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2600.8**	**6653.9**	**37107.**	**5302.2**
Stddev	1.3	5.1	118.	30.2
%RSD	.04966	.07728	.31839	.57007
#1	2599.6	6651.2	36971.	5273.8
#2	2602.2	6650.6	37183.	5334.0
#3	2600.7	6659.8	37167.	5298.8

Zoom In Zoom Out

Sample Name: FC1090-2F Acquired: 12/21/2022 13:37:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.1583**	**.0055**	**-.0039**	**.0026**	**-.0002**	**12.77**	**-.0001**	**.0002**
Stddev	.0002	.0167	.0010	.0013	.0002	.0001	.05	.0001	.0000
%RSD	60.96	10.57	18.29	32.64	6.874	36.64	.3785	64.98	19.41
#1	-.0006	.1771	.0067	-.0025	.0026	-.0001	12.71	.0000	.0002
#2	-.0001	.1531	.0051	-.0043	.0024	-.0003	12.79	-.0001	.0001
#3	-.0004	.1449	.0048	-.0049	.0028	-.0002	12.80	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0011**	**.0637**	**2.188**	**-.0044**	**.6896**	**.0551**	**.0010**	**4.139**
Stddev	.0002	.0003	.0019	.045	.0020	.0158	.0002	.0001	.026
%RSD	59.98	27.72	2.976	2.073	46.09	2.292	.2842	7.816	.6186
#1	.0001	.0013	.0630	2.172	-.0025	.6847	.0552	.0011	4.121
#2	.0004	.0008	.0659	2.239	-.0065	.7072	.0549	.0010	4.169
#3	.0004	.0013	.0623	2.153	-.0041	.6767	.0551	.0011	4.128

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0003**	**-.0007**	**.0008**	**2.618**	**.0000**	**.0539**	**.0015**	**.0000**
Stddev	.0003	.0003	.0007	.0024	.003	.000	.0004	.0001	.001
%RSD	16.38	83.58	103.3	322.4	.0940	348.5	.7062	4.706	3671.
#1	.0017	.0000	.0000	-.0019	2.619	.0001	.0536	.0015	-.0003
#2	.0018	.0005	-.0014	.0014	2.621	-.0001	.0543	.0014	-.0003
#3	.0013	.0004	-.0005	.0028	2.616	-.0001	.0538	.0016	.0005

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0004**	**.0037**
Stddev	.0002	.0001
%RSD	41.49	1.454
#1	.0002	.0037
#2	.0006	.0037
#3	.0005	.0036

Zoom In Zoom Out

Sample Name: FC1090-2F Acquired: 12/21/2022 13:37:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2897.1**	**6825.1**	**38801.**	**5410.3**
Stddev	5.2	2.6	293.	33.5
%RSD	.17810	.03776	.75494	.61886
#1	2902.2	6822.6	38906.	5448.8
#2	2897.3	6827.7	39027.	5393.5
#3	2891.9	6824.8	38470.	5388.5

Zoom In Zoom Out

Sample Name: FC1090-3F Acquired: 12/21/2022 13:42:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0022**	**-.0003**	**-.0027**	**.0027**	**-.0002**	**3.712**	**-.0001**	**-.0001**
Stddev	.0005	.0124	.0004	.0025	.0003	.0001	.005	.0001	.0000
%RSD	316.3	557.8	114.3	92.90	11.94	48.03	.1272	82.24	54.47
#1	.0004	-.0117	-.0004	-.0033	.0024	-.0002	3.717	-.0001	.0000
#2	-.0006	.0119	-.0007	-.0048	.0026	-.0003	3.710	.0000	-.0001
#3	-.0003	.0065	.0001	.0001	.0030	-.0001	3.709	.0000	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0005**	**.0185**	**.4602**	**.0005**	**.9684**	**.0021**	**-.0001**	**2.113**
Stddev	.0001	.0000	.0026	.0480	.0021	.0171	.0000	.0002	.023
%RSD	38.27	6.188	13.82	10.43	404.9	1.771	1.699	135.7	1.087
#1	.0004	-.0005	.0157	.4142	-.0007	.9835	.0021	-.0002	2.097
#2	.0002	-.0006	.0190	.5100	.0030	.9498	.0021	.0001	2.139
#3	.0005	-.0006	.0208	.4566	-.0007	.9720	.0021	-.0003	2.102

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**-.0007**	**.0003**	**-.0012**	**3.864**	**.0003**	**.0204**	**.0002**	**.0008**
Stddev	.0001	.0002	.0007	.0027	.005	.0004	.0003	.0001	.0015
%RSD	5.615	24.15	274.0	224.3	.1283	111.4	1.530	44.41	200.8
#1	.0014	-.0006	-.0005	-.0025	3.864	.0003	.0201	.0001	-.0009
#2	.0014	-.0006	.0010	-.0030	3.869	.0008	.0208	.0003	.0020
#3	.0013	-.0009	.0004	.0019	3.859	.0000	.0204	.0003	.0013

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0003**	**.0090**
Stddev	.0001	.0001
%RSD	42.03	.9206
#1	-.0001	.0091
#2	-.0004	.0091
#3	-.0003	.0090

Zoom In Zoom Out

Sample Name: FC1090-3F Acquired: 12/21/2022 13:42:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2965.8**	**6927.6**	**39138.**	**5387.5**
Stddev	8.2	19.1	184.	32.6
%RSD	.27496	.27569	.46935	.60564
#1	2974.2	6949.6	39262.	5388.7
#2	2965.2	6917.0	39227.	5354.2
#3	2957.9	6916.1	38927.	5419.5

Zoom In Zoom Out

Sample Name: FC1090-4F Acquired: 12/21/2022 13:47:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0058**	**.0004**	**-.0016**	**.0029**	**-.0002**	**5.778**	**-.0001**	**-.0001**
Stddev	.0003	.0123	.0004	.0042	.0001	.0001	.014	.0000	.0001
%RSD	63.90	210.9	99.04	262.9	2.964	63.83	.2347	43.95	71.05
#1	-.0005	.0082	.0008	-.0059	.0030	-.0003	5.794	-.0001	-.0001
#2	-.0006	-.0075	.0003	-.0013	.0028	-.0002	5.771	-.0001	-.0002
#3	-.0001	.0167	.0000	.0024	.0028	-.0001	5.769	-.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**-.0005**	**.0102**	**1.039**	**.0031**	**1.400**	**.0013**	**.0000**	**3.625**
Stddev	.0003	.0001	.0028	.042	.0018	.026	.0000	.000	.013
%RSD	28.15	27.70	26.92	4.080	57.31	1.846	1.906	520.9	.3523
#1	.0007	-.0006	.0078	1.085	.0014	1.372	.0013	.0001	3.611
#2	.0012	-.0004	.0132	1.032	.0049	1.422	.0013	.0000	3.634
#3	.0009	-.0006	.0097	1.001	.0031	1.407	.0013	-.0001	3.632

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0010**	**-.0005**	**.0006**	**5.576**	**.0004**	**.0411**	**.0003**	**-.0015**
Stddev	.0001	.0004	.0010	.0012	.005	.0003	.0003	.0002	.0007
%RSD	45.93	36.91	183.6	215.5	.0908	62.41	.7520	55.15	49.41
#1	-.0001	-.0008	.0004	-.0008	5.571	.0002	.0412	.0003	-.0009
#2	-.0002	-.0007	-.0016	.0008	5.577	.0003	.0413	.0005	-.0013
#3	-.0001	-.0014	-.0004	.0017	5.581	.0007	.0407	.0001	-.0023

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0001**	**.0024**
Stddev	.0002	.0001
%RSD	171.9	3.166
#1	.0001	.0024
#2	-.0004	.0024
#3	-.0001	.0025

Zoom In Zoom Out

Sample Name: FC1090-4F Acquired: 12/21/2022 13:47:44 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2935.4**	**6903.2**	**39196.**	**5442.9**
Stddev	4.4	6.9	169.	21.4
%RSD	.14852	.09945	.43019	.39253
#1	2936.3	6902.4	39122.	5419.9
#2	2930.7	6910.5	39077.	5446.6
#3	2939.3	6896.8	39389.	5462.1

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 13:52:44 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2441**	**38.85**	**2.010**	F **2.014**	**1.991**	**2.010**	**39.44**	**2.042**	**2.052**
Stddev	.0004	.17	.005	.022	.010	.009	.21	.004	.004
%RSD	.1755	.4358	.2519	1.077	.4912	.4251	.5329	.1774	.1943
#1	.2444	38.92	2.008	2.005	1.993	2.016	39.51	2.044	2.053
#2	.2436	38.97	2.016	1.999	1.999	2.014	39.60	2.044	2.056
#3	.2443	38.66	2.007	2.039	1.980	2.000	39.20	2.038	2.048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.983**	**2.025**	**38.94**	**39.52**	**1.971**	**39.54**	**2.032**	**2.053**	**39.70**
Stddev	.006	.008	.20	.15	.006	.18	.016	.006	.21
%RSD	.3249	.4160	.5223	.3884	.3271	.4436	.7749	.2828	.5297
#1	1.987	2.032	39.08	39.56	1.976	39.69	2.045	2.055	39.77
#2	1.975	2.016	39.03	39.66	1.973	39.58	2.037	2.058	39.86
#3	1.985	2.028	38.70	39.36	1.964	39.34	2.014	2.047	39.46
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.016**	**1.966**	**2.031**	**2.037**	**2.263**	**2.062**	**2.002**	**2.040**	**1.968**
Stddev	.002	.002	.003	.004	.003	.004	.013	.004	.004
%RSD	.0776	.1218	.1510	.1879	.1511	.1971	.6339	.2036	.1858
#1	2.015	1.967	2.033	2.038	2.266	2.063	2.005	2.044	1.972
#2	2.018	1.963	2.033	2.039	2.265	2.065	2.012	2.041	1.966
#3	2.015	1.967	2.028	2.032	2.259	2.057	1.988	2.036	1.965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 13:52:44 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.009**	**2.002**
Stddev	.003	.001
%RSD	.1524	.0504
#1	2.013	2.002
#2	2.008	2.003
#3	2.007	2.001
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2483.0**	**6491.0**	**36634.**	**5261.7**
Stddev	4.0	1.3	140.	60.8
%RSD	.15917	.02066	.38316	1.1549
#1	2481.4	6492.3	36666.	5219.4
#2	2487.5	6490.9	36481.	5234.3
#3	2480.2	6489.7	36757.	5331.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 13:57:44 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**-.0034**	**-.0005**	F **-.0041**	**.0000**	**.0000**	**.0139**	**.0000**
Stddev	.0005	.0081	.0006	.0007	.0003	.000	.0018	.0000
%RSD	85.76	242.7	135.7	17.15	643.6	66.61	12.87	119.0
#1	-.0011	.0058	-.0006	-.0038	.0004	-.0001	.0143	.0000
#2	-.0004	-.0098	-.0011	-.0036	.0000	.0000	.0154	.0000
#3	-.0002	-.0061	.0002	-.0049	-.0002	.0000	.0119	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0001**	**-.0011**	**.0035**	**-.1441**	F **-.0036**	**.0040**	**.0000**
Stddev	.0002	.0002	.0003	.0007	.0459	.0026	.0015	.0000
%RSD	142.1	145.3	25.28	20.37	31.85	72.07	37.64	96.88
#1	-.0003	.0003	-.0012	.0030	-.1896	-.0028	.0027	.0000
#2	-.0001	.0003	-.0008	.0044	-.0978	-.0015	.0057	.0001
#3	.0000	-.0001	-.0013	.0032	-.1450	-.0066	.0038	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0456**	**-.0002**	**-.0001**	**-.0002**	**.0003**	**-.0001**	**-.0001**
Stddev	.000	.0158	.0002	.0004	.0015	.0006	.0006	.0008
%RSD	1143.	34.75	109.6	864.2	751.1	242.8	732.8	862.9
#1	-.0001	-.0483	-.0001	-.0005	.0010	-.0004	-.0006	-.0010
#2	-.0001	-.0599	-.0004	.0000	-.0019	.0004	.0006	.0004
#3	.0002	-.0286	.0000	.0004	.0003	.0008	-.0002	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 13:57:44 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0008**	**-.0004**	**.0013**
Stddev	.0002	.0000	.0004	.0001	.0000
%RSD	117.6	134.9	54.28	14.61	3.058
#1	.0001	.0000	.0005	-.0004	.0013
#2	.0004	.0000	.0013	-.0004	.0013
#3	.0000	.0000	.0006	-.0003	.0013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2983.2**	**6879.9**	**39111.**	**5378.0**
Stddev	6.1	6.7	217.	44.9
%RSD	.20569	.09729	.55514	.83430
#1	2988.5	6873.2	39000.	5423.7
#2	2984.7	6886.6	38972.	5334.0
#3	2976.5	6879.9	39361.	5376.2

Zoom In Zoom Out

Sample Name: FC1090-5F Acquired: 12/21/2022 14:02:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**-.0011**	**.0006**	**-.0042**	**.0025**	**-.0001**	**3.609**	**.0000**	**-.0002**
Stddev	.0001	.0036	.0007	.0007	.0001	.0001	.018	.000	.0000
%RSD	31.76	323.1	103.4	17.33	2.449	70.61	.4969	80.55	19.97
#1	-.0005	-.0041	-.0001	-.0047	.0025	-.0001	3.604	-.0001	-.0001
#2	-.0003	.0028	.0010	-.0034	.0024	.0000	3.629	.0000	-.0001
#3	-.0004	-.0021	.0010	-.0047	.0025	-.0001	3.594	.0000	-.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0005**	**.0059**	**.4361**	**-.0063**	**.9216**	**.0019**	**.0000**	**2.032**
Stddev	.0003	.0004	.0019	.0563	.0011	.0181	.0001	.0000	.014
%RSD	105.1	89.68	33.05	12.92	16.75	1.961	3.183	113.7	.6735
#1	.0006	.0000	.0065	.4991	-.0051	.9231	.0020	.0001	2.022
#2	.0001	-.0009	.0074	.3906	-.0066	.9388	.0019	.0000	2.047
#3	.0001	-.0006	.0037	.4185	-.0072	.9027	.0019	.0000	2.027

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0001**	**-.0001**	**.0022**	**3.752**	**.0004**	**.0199**	**.0004**	**-.0006**
Stddev	.0000	.0002	.0010	.0019	.007	.0004	.0002	.0001	.0012
%RSD	3.586	153.3	1038.	88.07	.2008	91.27	.7963	23.23	195.6
#1	.0011	-.0003	-.0009	.0037	3.751	.0007	.0199	.0003	.0006
#2	.0012	.0001	-.0004	.0028	3.760	.0000	.0200	.0004	-.0018
#3	.0011	-.0002	.0010	.0000	3.745	.0006	.0197	.0003	-.0006

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0001**	**.0082**
Stddev	.0002	.0000
%RSD	316.6	.4744
#1	-.0001	.0082
#2	.0002	.0082
#3	-.0003	.0081

Zoom In Zoom Out

Sample Name: FC1090-5F Acquired: 12/21/2022 14:02:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2977.9**	**6970.6**	**39526.**	**5454.4**
Stddev	7.3	1.9	111.	44.8
%RSD	.24427	.02784	.28149	.82055
#1	2984.8	6972.8	39481.	5457.9
#2	2978.7	6969.6	39444.	5408.0
#3	2970.3	6969.3	39653.	5497.4

Zoom In Zoom Out

Sample Name: FC1090-6F Acquired: 12/21/2022 14:07:47 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0025**	**.0002**	**-.0040**	**.0002**	**-.0002**	**.0336**	**-.0001**	**-.0002**
Stddev	.000	.0091	.0015	.0025	.0002	.0001	.0019	.0001	.0001
%RSD	1469.	369.6	869.3	62.24	102.0	43.03	5.806	65.90	47.71
#1	.0000	-.0028	.0016	-.0014	.0000	-.0003	.0313	-.0001	-.0001
#2	-.0001	-.0114	.0003	-.0064	.0003	-.0003	.0345	.0000	-.0002
#3	.0001	.0068	-.0014	-.0043	.0002	-.0001	.0349	-.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0014**	**-.0003**	**-.1508**	**.0008**	**-.0012**	**.0000**	**.0001**	**.1397**
Stddev	.0003	.0002	.0016	.0780	.0023	.0020	.0000	.0000	.0197
%RSD	139.2	11.43	544.7	51.68	300.7	172.1	40.67	5.328	14.08
#1	.0000	-.0014	-.0002	-.1324	-.0003	-.0030	.0000	.0001	.1389
#2	.0001	-.0012	.0013	-.0838	-.0008	-.0016	.0000	.0001	.1204
#3	.0005	-.0015	-.0020	-.2364	.0034	.0010	.0001	.0001	.1598

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0001**	**.0004**	**.0006**	**.0024**	**.0000**	**.0002**	**-.0003**	**.0000**
Stddev	.0001	.0005	.0005	.0020	.0007	.0005	.0002	.0001	.001
%RSD	27.94	381.8	119.7	343.9	27.57	1111.	98.39	36.58	10610.
#1	-.0002	-.0005	.0008	-.0015	.0019	.0005	.0003	-.0002	.0005
#2	-.0004	.0005	.0004	.0026	.0031	.0000	.0001	-.0003	.0003
#3	-.0003	.0004	-.0001	.0006	.0021	-.0004	.0000	-.0004	-.0008

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0005**	**.0008**
Stddev	.0002	.0000
%RSD	47.63	5.527
#1	-.0008	.0008
#2	-.0003	.0007
#3	-.0006	.0008

Zoom In Zoom Out

Sample Name: FC1090-6F Acquired: 12/21/2022 14:07:47 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2974.1**	**6958.1**	**39226.**	**5433.4**
Stddev	8.9	15.2	58.	23.3
%RSD	.29933	.21876	.14726	.42931
#1	2973.7	6953.1	39175.	5431.8
#2	2965.5	6946.0	39215.	5457.6
#3	2983.3	6975.2	39289.	5411.0

Zoom In Zoom Out

Sample Name: FC1068-9F Acquired: 12/21/2022 14:12:48 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0223**	**.0022**	F **1.139**	**.0588**	**-.0002**	**50.63**	**.0000**	**-.0002**
Stddev	.0003	.0073	.0009	.004	.0005	.0000	.31	.000	.0001
%RSD	96.36	32.63	39.85	.3515	.8201	15.16	.6028	96.14	29.61
#1	-.0005	.0240	.0031	1.143	.0591	-.0002	50.91	.0000	-.0001
#2	-.0004	.0285	.0018	1.140	.0589	-.0002	50.67	.0000	-.0002
#3	.0000	.0143	.0015	1.135	.0582	-.0001	50.30	.0000	-.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0098**	**-.0002**	**.0190**	**.4701**	**.0379**	**71.56**	**.0017**	**.0014**	F **112.1**
Stddev	.0003	.0002	.0020	.0366	.0013	.57	.0000	.0000	.5
%RSD	2.977	100.9	10.56	7.793	3.410	.8026	2.574	3.297	.4701
#1	.0100	-.0003	.0172	.4283	.0379	72.10	.0017	.0013	112.6
#2	.0094	-.0004	.0211	.4853	.0367	71.63	.0016	.0014	112.1
#3	.0098	.0000	.0186	.4966	.0393	70.96	.0017	.0014	111.5

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0033**	**.0005**	**.0004**	**13.02**	**.0007**	**1.086**	**.0026**	**-.0006**
Stddev	.0001	.0006	.0012	.0005	.01	.0001	.004	.0001	.0006
%RSD	145.4	19.27	220.9	114.4	.0622	19.17	.3460	2.320	90.49
#1	.0001	-.0032	.0009	.0010	13.03	.0008	1.090	.0027	-.0002
#2	.0001	-.0027	.0014	.0001	13.02	.0006	1.086	.0026	-.0013
#3	.0000	-.0039	-.0008	.0002	13.01	.0006	1.082	.0026	-.0003

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0095**	**.0170**
Stddev	.0003	.0000
%RSD	3.347	.1257
#1	.0091	.0171
#2	.0096	.0170
#3	.0098	.0170

Zoom In Zoom Out

Sample Name: FC1068-9F Acquired: 12/21/2022 14:12:48 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2579.5**	**6514.3**	**36439.**	**5291.4**
Stddev	6.3	24.0	261.	23.4
%RSD	.24338	.36884	.71564	.44263
#1	2573.0	6499.3	36167.	5279.3
#2	2579.9	6501.7	36687.	5276.4
#3	2585.6	6542.0	36462.	5318.4

Zoom In Zoom Out

Sample Name: FC1068-11F Acquired: 12/21/2022 14:17:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0136**	**-.0002**	**-.0015**	**.0002**	**-.0002**	**.1372**	**-.0001**	**-.0002**
Stddev	.0003	.0059	.0006	.0007	.0001	.0000	.0042	.0000	.0001
%RSD	85.08	43.76	352.5	46.09	32.68	14.84	3.040	15.91	59.06
#1	-.0007	.0200	-.0007	-.0022	.0003	-.0001	.1413	-.0001	-.0002
#2	.0000	.0083	-.0001	-.0011	.0002	-.0002	.1373	-.0001	-.0001
#3	-.0005	.0124	.0004	-.0010	.0001	-.0002	.1329	-.0001	-.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0008**	**.0018**	**-.1406**	**-.0039**	**.0251**	**.0003**	**-.0001**	**.2883**
Stddev	.0002	.0004	.0020	.0352	.0010	.0119	.0000	.0002	.0108
%RSD	132.5	48.97	115.0	25.07	26.29	47.41	9.277	157.9	3.745
#1	-.0001	-.0013	-.0004	-.1741	-.0027	.0136	.0003	-.0003	.2967
#2	.0002	-.0009	.0036	-.1038	-.0045	.0244	.0003	.0001	.2761
#3	.0004	-.0004	.0022	-.1438	-.0046	.0374	.0003	-.0003	.2921

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0004**	**.0014**	**.0002**	**.0614**	**-.0001**	**.0005**	**-.0001**	**-.0011**
Stddev	.0001	.0003	.0007	.0017	.0001	.0002	.0003	.0002	.0011
%RSD	34.59	72.80	46.28	1090.	.2109	195.3	58.76	136.8	95.02
#1	-.0003	.0001	.0007	-.0011	.0613	.0001	.0004	.0000	-.0022
#2	-.0002	.0007	.0016	.0021	.0616	-.0003	.0003	-.0003	-.0001
#3	-.0003	.0006	.0019	-.0006	.0613	-.0002	.0009	-.0001	-.0011

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0002**	**.0111**
Stddev	.0003	.0000
%RSD	137.3	.2194
#1	.0000	.0110
#2	-.0001	.0111
#3	-.0006	.0111

Zoom In Zoom Out

Sample Name: FC1068-11F Acquired: 12/21/2022 14:17:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2975.9**	**6936.7**	**39612.**	**5430.0**
Stddev	8.3	3.3	125.	23.7
%RSD	.28040	.04791	.31488	.43726
#1	2970.1	6939.6	39560.	5449.3
#2	2972.1	6937.6	39754.	5403.5
#3	2985.5	6933.1	39522.	5437.1

Zoom In Zoom Out

Sample Name: FC1068-12F Acquired: 12/21/2022 14:22:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**.0140**	**-.0011**	**-.0043**	**.0002**	**-.0002**	**.0534**	**-.0001**	**-.0002**
Stddev	.0006	.0087	.0005	.0015	.0002	.0001	.0045	.0001	.0001
%RSD	182.0	62.15	44.88	35.55	110.0	32.43	8.446	47.52	64.67
#1	-.0003	.0222	-.0009	-.0034	.0005	-.0003	.0497	-.0001	-.0002
#2	.0003	.0049	-.0017	-.0060	.0001	-.0002	.0585	-.0001	.0000
#3	-.0009	.0148	-.0008	-.0034	.0000	-.0002	.0521	-.0002	-.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**-.0012**	**.0360**	**-.2060**	**-.0074**	**-.0032**	**.0002**	**-.0001**	**.0625**
Stddev	.0002	.0004	.0004	.0209	.0019	.0202	.0000	.0002	.0093
%RSD	42.16	36.51	1.044	10.16	25.28	621.5	22.04	227.5	14.83
#1	.0003	-.0011	.0361	-.2148	-.0060	.0101	.0002	.0001	.0709
#2	.0007	-.0008	.0355	-.2211	-.0095	.0066	.0002	-.0002	.0639
#3	.0004	-.0017	.0363	-.1821	-.0066	-.0264	.0002	-.0001	.0526

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0001**	**.0010**	**.0004**	**.0224**	**.0004**	**.0002**	**-.0001**	**-.0004**
Stddev	.0001	.0003	.0017	.0005	.0005	.0002	.0002	.0001	.0014
%RSD	57.17	459.2	168.3	127.3	2.306	60.15	68.35	192.1	380.5
#1	-.0004	-.0004	.0013	.0010	.0229	.0002	.0002	.0000	-.0014
#2	-.0003	.0002	.0026	.0003	.0223	.0003	.0001	-.0002	-.0009
#3	-.0001	.0000	-.0008	.0000	.0219	.0006	.0004	.0000	.0012

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**-.0003**	**.0117**
Stddev	.0002	.0001
%RSD	76.04	.7779
#1	-.0003	.0118
#2	.0000	.0117
#3	-.0004	.0116

Zoom In Zoom Out

Sample Name: FC1068-12F Acquired: 12/21/2022 14:22:46 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2989.6**	**6976.2**	**39673.**	**5433.2**
Stddev	8.0	21.7	329.	22.4
%RSD	.26917	.31144	.82826	.41188
#1	2991.5	6967.8	39989.	5429.8
#2	2996.6	7000.8	39696.	5457.0
#3	2980.8	6959.9	39333.	5412.7

Zoom In Zoom Out

Sample Name: FC1113-1 Acquired: 12/21/2022 14:27:48 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.5153**	**-.0006**	F **4.070**	**.0036**	**-.0001**	**3.078**	**-.0001**	**.0012**
Stddev	.000	.0146	.0011	.029	.0003	.0001	.010	.0000	.0000
%RSD	274.1	2.834	196.3	.7022	7.630	109.1	.3380	23.44	.6632
#1	.0001	.5025	-.0009	4.098	.0033	.0000	3.067	.0000	.0012
#2	-.0001	.5312	.0007	4.071	.0039	-.0001	3.080	.0000	.0012
#3	-.0001	.5123	-.0014	4.041	.0035	-.0001	3.088	-.0001	.0012

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**.0326**	**1.028**	**3.175**	**-.0006**	**.5381**	**.0152**	**.0560**	**62.05**
Stddev	.0003	.0004	.004	.060	.0025	.0174	.0001	.0000	.21
%RSD	25.95	1.336	.4162	1.895	405.7	3.233	.5273	.0774	.3350
#1	.0014	.0324	1.025	3.106	-.0034	.5375	.0153	.0560	61.86
#2	.0008	.0330	1.033	3.216	.0014	.5209	.0153	.0560	62.02
#3	.0011	.0322	1.026	3.203	.0002	.5557	.0152	.0561	62.27

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**-.0008**	**.0004**	**.0008**	**3.750**	**.0005**	**.0306**	**.0008**	**.0003**
Stddev	.0002	.0004	.0006	.0014	.011	.0002	.0001	.0001	.0009
%RSD	4.640	46.35	138.9	174.9	.2787	32.93	.4455	13.43	300.8
#1	.0033	-.0008	.0008	.0020	3.749	.0005	.0305	.0008	.0012
#2	.0034	-.0004	.0006	.0013	3.739	.0004	.0306	.0008	.0003
#3	.0036	-.0012	-.0002	-.0008	3.760	.0007	.0308	.0010	-.0006

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0004**	**.0273**
Stddev	.0003	.0001
%RSD	75.20	.2090
#1	.0006	.0273
#2	.0001	.0272
#3	.0006	.0273

Zoom In Zoom Out

Sample Name: FC1113-1 Acquired: 12/21/2022 14:27:48 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2751.6**	**6836.9**	**38234.**	**5398.5**
Stddev	4.0	9.1	112.	54.0
%RSD	.14627	.13253	.29344	1.0011
#1	2752.1	6829.9	38286.	5446.1
#2	2747.3	6833.8	38105.	5409.6
#3	2755.3	6847.2	38309.	5339.7

Zoom In Zoom Out

Sample Name: FC1113-2 Acquired: 12/21/2022 14:32:47 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.1345**	**-.0003**	F **.8395**	**.0138**	**-.0001**	**70.13**	**.0000**	**.0001**
Stddev	.001	.0132	.0009	.0091	.0002	.0000	.07	.0000	.0001
%RSD	3900.	9.851	326.9	1.087	1.580	22.24	.0950	93.02	101.7
#1	.0005	.1494	.0005	.8445	.0136	-.0001	70.13	.0000	.0000
#2	-.0002	.1302	-.0012	.8290	.0140	-.0001	70.06	.0000	.0002
#3	-.0004	.1239	-.0001	.8450	.0139	-.0001	70.19	.0000	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0247**	**1.984**	**23.47**	**.0066**	**7.802**	**.0423**	**.0129**	F **224.1**
Stddev	.0002	.0001	.007	.06	.0011	.026	.0001	.0003	4.7
%RSD	18.69	.4987	.3511	.2667	16.56	.3340	.3393	2.494	2.086
#1	.0008	.0246	1.988	23.40	.0078	7.804	.0422	.0133	219.0
#2	.0011	.0248	1.988	23.49	.0062	7.826	.0425	.0127	228.0
#3	.0010	.0246	1.976	23.52	.0057	7.775	.0423	.0127	225.4

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**-.0023**	**.0008**	**.0003**	**3.555**	**.0005**	**.5926**	**.0055**	**-.0007**
Stddev	.0002	.0006	.0011	.0007	.007	.0006	.0021	.0009	.0014
%RSD	8.344	24.74	136.4	259.9	.1915	117.8	.3559	16.76	202.0
#1	.0020	-.0025	.0019	-.0002	3.561	.0005	.5931	.0052	-.0014
#2	.0018	-.0027	-.0002	.0000	3.548	.0011	.5903	.0065	.0009
#3	.0021	-.0016	.0007	.0011	3.556	-.0001	.5944	.0047	-.0017

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0002**	**.0549**
Stddev	.0004	.0001
%RSD	185.1	.1781
#1	-.0002	.0550
#2	.0002	.0548
#3	.0007	.0550

Zoom In Zoom Out

Sample Name: FC1113-2 Acquired: 12/21/2022 14:32:47 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2494.6**	**6431.7**	**35673.**	**5176.0**
Stddev	4.0	21.5	216.	48.2
%RSD	.16228	.33483	.60465	.93152
#1	2490.8	6406.9	35871.	5217.8
#2	2498.9	6443.3	35443.	5123.2
#3	2494.1	6445.0	35704.	5186.9

Zoom In Zoom Out

Sample Name: FC1116-1 Acquired: 12/21/2022 14:37:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.3208**	**.0094**	**.1878**	**.0042**	**-.0001**	**2.782**	**.0001**	**-.0001**
Stddev	.0003	.0070	.0005	.0011	.0001	.0000	.010	.0000	.0002
%RSD	282.8	2.172	4.870	.5737	2.082	45.14	.3517	3.169	178.3
#1	-.0004	.3131	.0089	.1875	.0043	-.0001	2.793	.0001	-.0003
#2	.0001	.3227	.0097	.1870	.0042	-.0001	2.777	.0001	-.0001
#3	.0000	.3266	.0097	.1890	.0041	-.0001	2.776	.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0658**	**.0076**	**.0946**	**2.453**	**.3564**	**.0255**	**.0030**	**.0369**	F **109.1**
Stddev	.0001	.0004	.0033	.037	.0028	.0088	.0000	.0003	.4
%RSD	.1619	4.672	3.515	1.498	.7887	34.44	.8937	.8051	.3443
#1	.0659	.0073	.0983	2.483	.3532	.0203	.0029	.0372	109.5
#2	.0657	.0076	.0935	2.412	.3579	.0357	.0030	.0366	108.8
#3	.0658	.0080	.0920	2.464	.3581	.0206	.0030	.0368	108.9

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0028**	**.0031**	**.0017**	**17.55**	**.0007**	**.0506**	**.0006**	**-.0008**
Stddev	.0002	.0004	.0005	.0012	.05	.0005	.0003	.0000	.0023
%RSD	12.40	15.12	17.55	71.09	.2790	62.09	.6051	3.519	284.0
#1	.0014	-.0032	.0026	.0031	17.60	.0006	.0509	.0006	-.0012
#2	.0011	-.0028	.0037	.0012	17.50	.0004	.0503	.0006	-.0029
#3	.0012	-.0024	.0030	.0009	17.55	.0012	.0506	.0006	.0017

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0092**	**.0167**
Stddev	.0001	.0000
%RSD	1.498	.0967
#1	.0091	.0167
#2	.0091	.0167
#3	.0094	.0167

Zoom In Zoom Out

Sample Name: FC1116-1 Acquired: 12/21/2022 14:37:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2680.8**	**6769.1**	**37647.**	**5254.5**
Stddev	2.3	26.5	283.	40.9
%RSD	.08607	.39200	.75268	.77907
#1	2678.2	6749.9	37495.	5255.6
#2	2682.7	6799.4	37472.	5213.1
#3	2681.3	6758.0	37974.	5294.9

Zoom In Zoom Out

Sample Name: FC1116-2 Acquired: 12/21/2022 14:42:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0085**	**.0035**	**.0017**	**.0336**	**-.0002**	**16.03**	**-.0001**
Stddev	.0002	.0174	.0012	.0024	.0004	.0000	.06	.0000
%RSD	145.8	204.5	34.57	146.9	1.328	21.16	.4008	8.550
#1	.0000	.0271	.0021	.0031	.0332	-.0002	15.97	-.0002
#2	.0000	.0057	.0040	.0030	.0334	-.0001	16.03	-.0001
#3	.0005	-.0073	.0043	-.0012	.0341	-.0002	16.09	-.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0014**	**-.0012**	**41.97**	**.8296**	**.0165**	**2.254**	F **9.108**
Stddev	.0002	.0001	.0003	.22	.0059	.0029	.009	.139
%RSD	41.73	8.385	27.11	.5334	.7128	17.54	.3837	1.525
#1	-.0002	.0015	-.0010	41.73	.8305	.0136	2.245	9.243
#2	-.0006	.0013	-.0015	42.00	.8232	.0194	2.255	9.115
#3	-.0004	.0015	-.0010	42.18	.8350	.0166	2.262	8.965

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**5.674**	**-.0005**	F **-.0110**	**.0007**	**.0052**	**3.212**	**.0003**
Stddev	.0002	.030	.0002	.0005	.0014	.0030	.008	.0002
%RSD	29.32	.5307	33.80	4.667	189.7	58.27	.2499	56.35
#1	-.0005	5.639	-.0004	-.0108	-.0001	.0086	3.218	.0002
#2	-.0010	5.689	-.0007	-.0106	.0024	.0035	3.214	.0005
#3	-.0008	5.693	-.0005	-.0116	-.0001	.0033	3.203	.0002

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0983**	**.0012**	**.0156**	**.0013**	**.0159**
Stddev	.0004	.0001	.0006	.0001	.0000
%RSD	.4186	4.491	3.927	6.797	.1981
#1	.0982	.0012	.0155	.0014	.0159
#2	.0980	.0013	.0150	.0014	.0160
#3	.0988	.0012	.0162	.0012	.0159

Zoom In Zoom Out

Sample Name: FC1116-2 Acquired: 12/21/2022 14:42:53 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2848.4**	**6910.9**	**38818.**	**5377.3**
Stddev	7.4	25.4	357.	61.3
%RSD	.25880	.36806	.91899	1.1408
#1	2855.3	6935.0	38603.	5447.4
#2	2840.6	6884.3	38621.	5351.4
#3	2849.3	6913.3	39230.	5333.2

Zoom In Zoom Out

Sample Name: FC1116-3 Acquired: 12/21/2022 14:48:01 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0258**	**.0003**	**.0348**	**.0816**	**-.0001**	**121.2**	**-.0001**
Stddev	.0002	.0105	.0005	.0014	.0003	.0001	.1	.0000
%RSD	41.27	40.82	153.8	3.958	.3624	57.91	.1105	23.39
#1	-.0004	.0378	-.0002	.0338	.0816	.0000	121.3	-.0001
#2	-.0004	.0186	.0007	.0343	.0813	-.0002	121.1	-.0001
#3	-.0008	.0209	.0005	.0364	.0819	-.0001	121.1	-.0002

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0007**	**.0045**	**22.46**	**1.849**	**.0225**	**16.40**	**1.341**
Stddev	.0001	.0001	.0002	.08	.053	.0021	.06	.002
%RSD	32.58	14.45	4.995	.3509	2.864	9.534	.3564	.1326
#1	-.0003	.0006	.0047	22.45	1.791	.0224	16.42	1.341
#2	-.0002	.0008	.0043	22.39	1.861	.0247	16.33	1.342
#3	-.0002	.0008	.0046	22.54	1.894	.0205	16.44	1.339

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**10.69**	**-.0005**	F **-.0090**	**.0006**	**-.0003**	**6.174**	**.0003**
Stddev	.0001	.01	.0001	.0001	.0002	.0009	.004	.0002
%RSD	145.8	.0862	14.55	1.388	25.84	342.4	.0720	76.03
#1	.0001	10.69	-.0004	-.0090	.0008	-.0013	6.175	.0003
#2	.0002	10.68	-.0004	-.0089	.0006	.0003	6.169	.0005
#3	.0000	10.70	-.0005	-.0091	.0005	.0002	6.178	.0001

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.4575**	**.0023**	**.0028**	**-.0001**	**.0217**
Stddev	.0012	.0002	.0010	.0002	.0001
%RSD	.2534	6.987	35.61	296.6	.3115
#1	.4579	.0022	.0026	.0002	.0216
#2	.4561	.0025	.0039	-.0002	.0217
#3	.4583	.0023	.0019	-.0002	.0218

Zoom In Zoom Out

Sample Name: FC1116-3 Acquired: 12/21/2022 14:48:01 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2674.5**	**6726.2**	**37366.**	**5343.6**
Stddev	10.4	16.2	291.	38.6
%RSD	.38715	.24142	.77847	.72252
#1	2678.7	6727.0	37533.	5385.0
#2	2662.7	6709.6	37030.	5337.3
#3	2682.0	6742.1	37534.	5308.6

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 14:53:08 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2446**	**39.32**	**1.999**	F **2.008**	**2.009**	**2.008**	**39.80**	**2.015**	**2.021**
Stddev	.0008	.22	.002	.023	.005	.007	.11	.003	.004
%RSD	.3466	.5499	.0841	1.127	.2504	.3396	.2643	.1318	.2040
#1	.2450	39.33	1.997	2.005	2.008	2.007	39.74	2.016	2.022
#2	.2436	39.11	2.000	2.032	2.006	2.003	39.75	2.017	2.024
#3	.2451	39.54	2.000	1.987	2.015	2.016	39.93	2.012	2.016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.991**	**2.015**	**39.50**	**39.76**	**1.973**	**39.70**	**2.014**	**2.020**	**39.94**
Stddev	.009	.006	.23	.14	.008	.24	.018	.003	.08
%RSD	.4634	.3226	.5851	.3645	.4274	.5949	.9126	.1511	.2089
#1	1.996	2.017	39.51	39.77	1.977	39.81	2.026	2.023	39.92
#2	1.981	2.007	39.26	39.61	1.964	39.43	1.992	2.021	39.86
#3	1.997	2.020	39.72	39.90	1.979	39.87	2.022	2.017	40.02
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.006**	**1.965**	**2.011**	**2.016**	**2.237**	**2.026**	**2.013**	**2.026**	**1.970**
Stddev	.001	.003	.001	.002	.001	.004	.003	.005	.005
%RSD	.0534	.1656	.0449	.0968	.0483	.2214	.1707	.2299	.2327
#1	2.005	1.965	2.010	2.015	2.238	2.026	2.009	2.027	1.965
#2	2.007	1.961	2.011	2.018	2.238	2.031	2.014	2.021	1.969
#3	2.005	1.968	2.012	2.014	2.236	2.022	2.016	2.030	1.974
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 14:53:08 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**2.008**	**1.998**
Stddev	.007	.001
%RSD	.3504	.0467
#1	2.009	1.999
#2	2.001	1.999
#3	2.015	1.997
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2487.6**	**6554.4**	**37009.**	**5236.8**
Stddev	5.4	23.9	327.	51.4
%RSD	.21526	.36416	.88295	.98177
#1	2481.7	6538.8	36918.	5221.9
#2	2489.0	6542.6	37371.	5294.0
#3	2492.1	6581.9	36737.	5194.4

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 14:58:09 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0057**	**-.0004**	F **-.0032**	**.0002**	**-.0001**	**.0187**	**.0000**
Stddev	.0004	.0223	.0007	.0008	.0003	.0001	.0006	.0001
%RSD	410.7	393.0	177.4	24.53	167.4	103.7	3.377	2822.
#1	-.0002	.0201	-.0001	-.0038	.0005	-.0001	.0181	-.0001
#2	-.0004	.0169	-.0012	-.0036	.0002	.0000	.0194	.0000
#3	.0003	-.0200	.0001	-.0023	-.0001	-.0001	.0185	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0002**	**-.0007**	**-.0007**	**-.1745**	F **.0019**	**-.0048**	**.0000**
Stddev	.0001	.0002	.0003	.0004	.0314	.0007	.0100	.0001
%RSD	116.1	96.07	49.58	60.14	18.00	36.23	209.4	189.0
#1	.0000	.0005	-.0010	-.0002	-.2093	.0023	.0035	.0000
#2	-.0002	.0001	-.0007	-.0009	-.1659	.0011	-.0158	.0001
#3	-.0002	.0001	-.0004	-.0009	-.1483	.0022	-.0019	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0338**	**-.0001**	**.0003**	**.0009**	**-.0006**	**.0003**	**.0001**
Stddev	.0002	.0099	.0002	.0008	.0010	.0018	.0007	.0001
%RSD	139.4	29.26	116.8	234.8	110.4	284.0	267.8	55.72
#1	.0002	-.0236	.0000	.0004	.0004	-.0018	.0011	.0000
#2	.0003	-.0434	-.0001	.0011	.0021	.0015	-.0003	.0002
#3	-.0001	-.0344	-.0003	-.0005	.0003	-.0016	.0000	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 14:58:09 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0001**	**.0001**	**-.0002**	**.0014**
Stddev	.0001	.0001	.0009	.0004	.0001
%RSD	86.21	156.3	639.7	210.5	4.270
#1	.0001	-.0001	.0004	-.0006	.0013
#2	.0003	.0001	.0008	-.0002	.0014
#3	.0001	-.0002	-.0008	.0002	.0014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2993.6**	**6940.8**	**39427.**	**5324.9**
Stddev	16.0	40.1	202.	34.7
%RSD	.53574	.57804	.51333	.65188
#1	2982.8	6929.5	39298.	5316.9
#2	2986.0	6907.6	39322.	5294.9
#3	3012.0	6985.4	39660.	5362.9

Zoom In Zoom Out

Sample Name: FC1116-4 Acquired: 12/21/2022 15:03:09 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0571**	**.0076**	**.0347**	**.0755**	**-.0001**	**130.4**	**-.0001**
Stddev	.0004	.0148	.0013	.0014	.0003	.0001	2.4	.0000
%RSD	535.4	25.90	17.51	4.156	.3377	95.47	1.847	35.07
#1	.0005	.0677	.0087	.0363	.0757	.0000	127.6	-.0001
#2	-.0003	.0634	.0061	.0336	.0754	-.0001	131.5	-.0001
#3	.0001	.0402	.0080	.0341	.0753	-.0002	132.0	-.0001

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
IS Ref	(Y_2243)	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0022**	**.0012**	**-.0003**	**22.85**	**2.094**	**.0108**	**11.13**	**3.652**
Stddev	.0000	.0001	.0000	.07	.023	.0012	.03	.024
%RSD	1.093	11.94	15.36	.3246	1.108	11.27	.2829	.6636
#1	.0022	.0011	-.0003	22.94	2.112	.0112	11.14	3.657
#2	.0022	.0012	-.0003	22.80	2.068	.0094	11.09	3.673
#3	.0022	.0014	-.0002	22.82	2.104	.0118	11.15	3.626

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
IS Ref	(Y_2243)	(Y_3710)	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**5.191**	**.0016**	F **-.0079**	**-.0005**	**-.0005**	**5.621**	**.0004**
Stddev	.0003	.012	.0001	.0008	.0004	.0019	.011	.0001
%RSD	88.81	.2277	8.545	9.872	78.20	348.8	.1927	30.28
#1	.0006	5.185	.0016	-.0070	-.0008	-.0019	5.627	.0005
#2	.0001	5.183	.0014	-.0086	-.0007	.0016	5.609	.0003
#3	.0003	5.204	.0017	-.0080	-.0001	-.0013	5.628	.0004

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
IS Ref	(Y_3710)	(Y_3600)	(In2306)	(Y_3600)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.3198**	**.0027**	**.0066**	**.0005**	**.0203**
Stddev	.0006	.0002	.0007	.0001	.0001
%RSD	.2032	8.991	10.28	28.61	.3245
#1	.3206	.0024	.0073	.0006	.0203
#2	.3193	.0027	.0060	.0003	.0202
#3	.3196	.0029	.0065	.0005	.0204

Zoom In Zoom Out

Sample Name: FC1116-4 Acquired: 12/21/2022 15:03:09 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2672.8**	**6677.7**	**37756.**	**5341.9**
Stddev	8.9	22.2	44.	21.2
%RSD	.33118	.33289	.11778	.39759
#1	2666.7	6652.7	37797.	5365.2
#2	2668.8	6695.2	37709.	5323.7
#3	2683.0	6685.1	37763.	5336.8

Zoom In Zoom Out

Sample Name: FC1267-6 Acquired: 12/21/2022 15:08:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0475**	**.0075**	**.0163**	**.0065**	**-.0002**	**40.21**	**-.0001**	**.0000**
Stddev	.001	.0073	.0021	.0009	.0002	.0000	.08	.0000	.000
%RSD	1056.	15.35	27.44	5.341	2.485	23.34	.2080	38.27	534.2
#1	.0003	.0476	.0085	.0170	.0064	-.0001	40.12	-.0001	-.0001
#2	.0001	.0402	.0052	.0153	.0065	-.0001	40.22	-.0001	.0000
#3	-.0006	.0548	.0090	.0167	.0067	-.0002	40.29	-.0001	.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0007**	**.0245**	**1.393**	**-.0048**	**1.539**	**.0037**	**.0087**	**12.83**
Stddev	.0002	.0003	.0013	.008	.0007	.007	.0000	.0001	.03
%RSD	42.57	46.33	5.252	.5702	13.64	.4385	.4094	1.002	.2070
#1	.0004	-.0005	.0241	1.400	-.0055	1.533	.0037	.0087	12.81
#2	.0005	-.0005	.0259	1.395	-.0045	1.537	.0037	.0086	12.81
#3	.0002	-.0010	.0234	1.385	-.0043	1.546	.0037	.0088	12.86

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0002**	**.0125**	**.0010**	**1.424**	**-.0001**	**.5782**	**.0020**	**-.0009**
Stddev	.0001	.0003	.0009	.0016	.004	.0002	.0006	.0001	.0013
%RSD	24.21	176.1	7.555	167.9	.2631	160.5	.0964	3.296	149.7
#1	.0002	-.0005	.0122	-.0002	1.421	-.0003	.5780	.0020	-.0021
#2	.0002	.0002	.0136	.0003	1.428	.0001	.5779	.0020	-.0009
#3	.0003	-.0003	.0118	.0028	1.424	-.0001	.5789	.0019	.0004

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0120**	**.0083**
Stddev	.0001	.0000
%RSD	.7233	.5177
#1	.0119	.0083
#2	.0120	.0084
#3	.0120	.0083

Zoom In Zoom Out

Sample Name: FC1267-6 Acquired: 12/21/2022 15:08:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2807.6**	**6791.2**	**38153.**	**5392.5**
Stddev	10.7	15.5	246.	36.5
%RSD	.38037	.22885	.64583	.67781
#1	2819.1	6805.1	38180.	5426.2
#2	2805.8	6794.1	37895.	5397.5
#3	2797.9	6774.5	38385.	5353.6

Zoom In Zoom Out

Sample Name: FC1267-7 Acquired: 12/21/2022 15:13:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0301**	**.0009**	**.0253**	**.0072**	**-.0002**	**67.79**	**-.0001**	**.0000**
Stddev	.0005	.0107	.0010	.0022	.0003	.0001	.16	.0000	.0001
%RSD	216.2	35.45	113.3	8.765	4.578	37.98	.2379	49.06	283.7
#1	.0003	.0193	.0003	.0278	.0069	-.0002	67.98	.0000	-.0001
#2	-.0005	.0406	.0003	.0245	.0073	-.0002	67.72	-.0001	.0000
#3	-.0005	.0303	.0020	.0236	.0075	-.0001	67.68	-.0001	.0002

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0005**	**.0113**	**2.077**	**-.0044**	**2.568**	**.0077**	**.0076**	**17.46**
Stddev	.0004	.0003	.0026	.018	.0009	.017	.0001	.0002	.05
%RSD	106.4	61.92	22.62	.8889	19.38	.6708	.8374	2.814	.2948
#1	.0002	-.0003	.0088	2.098	-.0036	2.567	.0078	.0077	17.51
#2	.0008	-.0009	.0112	2.065	-.0053	2.586	.0077	.0074	17.42
#3	.0001	-.0004	.0139	2.067	-.0043	2.551	.0077	.0079	17.43

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0006**	**.0041**	**.0035**	**1.527**	**.0011**	**.9738**	**.0024**	**-.0009**
Stddev	.0002	.0007	.0004	.0011	.002	.0005	.0044	.0001	.0012
%RSD	53.75	125.1	8.956	32.63	.1397	47.35	.4535	4.722	131.8
#1	.0005	.0002	.0042	.0047	1.529	.0006	.9787	.0024	-.0020
#2	.0001	-.0009	.0043	.0025	1.529	.0016	.9702	.0023	-.0010
#3	.0004	-.0010	.0036	.0033	1.525	.0011	.9724	.0026	.0003

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0039**	**.0154**
Stddev	.0003	.0001
%RSD	8.579	.6033
#1	.0035	.0155
#2	.0039	.0153
#3	.0042	.0154

Zoom In Zoom Out

Sample Name: FC1267-7 Acquired: 12/21/2022 15:13:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2754.8**	**6736.3**	**37873.**	**5320.7**
Stddev	8.6	22.1	228.	39.9
%RSD	.31382	.32836	.60215	.74980
#1	2746.4	6711.9	37887.	5292.5
#2	2763.7	6754.9	38094.	5303.2
#3	2754.2	6742.1	37639.	5366.3

Zoom In Zoom Out

Sample Name: FC1267-8 Acquired: 12/21/2022 15:18:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0473**	**-.0005**	**.0151**	**.0047**	**-.0001**	**44.08**	**-.0001**	**.0000**
Stddev	.0001	.0125	.0002	.0011	.0002	.0000	.08	.0000	.0000
%RSD	21.13	26.45	44.61	7.244	3.372	28.63	.1770	45.43	2388.
#1	-.0005	.0599	-.0007	.0141	.0048	-.0001	44.11	-.0001	.0000
#2	-.0008	.0472	-.0004	.0163	.0046	-.0001	44.14	-.0001	.0000
#3	-.0006	.0349	-.0004	.0148	.0049	-.0002	43.99	.0000	.0000

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0004**	**-.0009**	**.7468**	**-.0010**	**1.231**	**.0027**	**.0051**	**7.374**
Stddev	.0001	.0003	.0005	.0238	.0014	.009	.0000	.0001	.029
%RSD	27.33	60.15	56.36	3.191	136.2	.6944	1.141	1.166	.3940
#1	.0004	-.0002	-.0010	.7285	.0006	1.240	.0027	.0050	7.375
#2	.0006	-.0004	-.0004	.7383	-.0017	1.223	.0026	.0050	7.403
#3	.0004	-.0007	-.0014	.7738	-.0019	1.232	.0027	.0051	7.345

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0008**	**-.0002**	**.0014**	**1.297**	**.0003**	**.5101**	**.0021**	**-.0001**
Stddev	.000	.0005	.0014	.0004	.001	.0004	.0010	.0001	.0014
%RSD	684.9	63.03	627.4	28.96	.0945	147.1	.1877	7.092	1280.
#1	-.0002	-.0003	-.0018	.0012	1.299	-.0001	.5102	.0020	-.0015
#2	.0001	-.0014	.0003	.0012	1.297	.0007	.5110	.0023	.0012
#3	.0000	-.0008	.0008	.0018	1.296	.0003	.5091	.0020	.0000

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0057**	**.0161**
Stddev	.0002	.0000
%RSD	3.967	.1753
#1	.0059	.0162
#2	.0058	.0161
#3	.0055	.0162

Zoom In Zoom Out

Sample Name: FC1267-8 Acquired: 12/21/2022 15:18:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2827.2**	**6847.8**	**38400.**	**5363.7**
Stddev	5.3	15.8	324.	18.4
%RSD	.18833	.23046	.84492	.34286
#1	2832.2	6858.6	38334.	5384.8
#2	2821.6	6829.7	38114.	5355.6
#3	2827.8	6855.2	38752.	5350.7

Zoom In Zoom Out

Sample Name: FC1267-9 Acquired: 12/21/2022 15:23:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0168**	**.0010**	**.0348**	**.0102**	**-.0002**	**96.42**	**-.0001**	**.0004**
Stddev	.0001	.0053	.0011	.0026	.0001	.0001	.05	.0000	.0001
%RSD	108.2	31.34	110.0	7.347	1.134	35.58	.0542	6.103	25.60
#1	.0000	.0185	.0023	.0372	.0102	-.0002	96.43	-.0001	.0003
#2	-.0001	.0109	.0001	.0321	.0101	-.0001	96.37	-.0001	.0005
#3	-.0003	.0210	.0007	.0350	.0103	-.0002	96.47	-.0001	.0003

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0001**	**.0758**	**1.736**	**-.0005**	**2.729**	**.0074**	**.0035**	**13.20**
Stddev	.0003	.0007	.0056	.016	.0025	.022	.0001	.0002	.01
%RSD	98.93	619.4	7.382	.8964	473.1	.8202	.6904	6.202	.0875
#1	.0001	.0003	.0720	1.738	.0018	2.724	.0074	.0033	13.22
#2	.0006	-.0009	.0733	1.720	-.0002	2.709	.0075	.0035	13.19
#3	.0001	.0002	.0823	1.751	-.0032	2.753	.0074	.0037	13.20

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0021**	**.0031**	**.0021**	**2.123**	**.0001**	**.8555**	**.0023**	**-.0010**
Stddev	.0002	.0005	.0006	.0005	.003	.0004	.0004	.0002	.0015
%RSD	37.90	23.97	18.41	22.94	.1367	449.6	.0411	9.806	147.4
#1	.0004	-.0016	.0033	.0018	2.125	-.0002	.8556	.0021	-.0027
#2	.0006	-.0019	.0025	.0027	2.123	.0006	.8558	.0022	-.0005
#3	.0003	-.0026	.0036	.0019	2.120	-.0001	.8551	.0026	.0002

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0101**	**.0118**
Stddev	.0002	.0000
%RSD	1.671	.3102
#1	.0103	.0118
#2	.0101	.0118
#3	.0100	.0118

Zoom In Zoom Out

Sample Name: FC1267-9 Acquired: 12/21/2022 15:23:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2724.1**	**6709.4**	**37590.**	**5278.4**
Stddev	4.3	24.2	198.	32.9
%RSD	.15792	.36037	.52677	.62293
#1	2719.3	6681.6	37522.	5245.1
#2	2725.7	6721.8	37813.	5310.9
#3	2727.4	6725.0	37435.	5279.2

Zoom In Zoom Out

Sample Name: FC1267-10 Acquired: 12/21/2022 15:28:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0132**	**-.0005**	**.0443**	**.0197**	**-.0002**	**114.6**	**-.0001**	**.0004**
Stddev	.0003	.0125	.0009	.0004	.0003	.0001	.4	.0000	.0000
%RSD	79.43	94.67	181.8	.8573	1.477	48.86	.3704	73.69	4.380
#1	.0000	.0009	.0005	.0447	.0195	-.0001	115.0	-.0001	.0005
#2	.0004	.0129	-.0010	.0444	.0195	-.0002	114.6	.0000	.0004
#3	.0005	.0259	-.0010	.0439	.0200	-.0002	114.1	-.0001	.0004

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0003**	**.1662**	**2.009**	**.0014**	**3.919**	**.0189**	**.0104**	**16.71**
Stddev	.0003	.0003	.0035	.012	.0014	.014	.0000	.0001	.04
%RSD	165.3	92.52	2.112	.6158	98.23	.3469	.2534	1.388	.2644
#1	-.0001	.0000	.1678	1.997	.0018	3.935	.0189	.0105	16.75
#2	.0002	.0003	.1622	2.022	-.0001	3.909	.0189	.0104	16.73
#3	.0004	.0006	.1687	2.007	.0025	3.913	.0188	.0102	16.67

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**-.0018**	**.0004**	**.0004**	**2.708**	**-.0001**	**1.308**	**.0023**	**-.0006**
Stddev	.0001	.0001	.0005	.0002	.001	.0003	.002	.0001	.0016
%RSD	15.40	6.434	115.3	40.73	.0501	520.1	.1200	3.394	267.8
#1	.0009	-.0017	.0009	.0004	2.706	.0002	1.309	.0024	-.0024
#2	.0007	-.0018	-.0001	.0006	2.708	-.0005	1.310	.0023	.0001
#3	.0009	-.0020	.0004	.0003	2.709	.0001	1.307	.0023	.0006

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0003**	**.0157**
Stddev	.0003	.0000
%RSD	85.08	.2505
#1	.0006	.0158
#2	.0003	.0157
#3	.0001	.0158

Zoom In Zoom Out

Sample Name: FC1267-10 Acquired: 12/21/2022 15:28:26 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2692.8**	**6654.9**	**37448.**	**5264.4**
Stddev	3.8	9.6	294.	28.1
%RSD	.14200	.14391	.78442	.53367
#1	2696.5	6665.6	37678.	5244.5
#2	2693.2	6647.2	37548.	5252.3
#3	2688.8	6651.8	37117.	5296.5

Sample Name: MP41623-B1 Acquired: 12/21/2022 15:33:27 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0511**	**27.47**	**1.961**	F **.0210**	**2.052**	**.0505**	**25.80**	**.0499**
Stddev	.0006	.02	.005	.0022	.004	.0002	.03	.0001
%RSD	1.251	.0776	.2336	10.43	.2096	.2991	.1303	.2156
#1	.0514	27.47	1.960	.0197	2.050	.0507	25.77	.0499
#2	.0515	27.45	1.957	.0235	2.049	.0504	25.79	.0498
#3	.0503	27.49	1.966	.0197	2.057	.0504	25.84	.0500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.0500				
Range				-20.00%				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5100**	**.2041**	**.2571**	**26.28**	**25.40**	F **-.0059**	**25.79**	**.5158**
Stddev	.0007	.0004	.0001	.03	.11	.0010	.01	.0005
%RSD	.1387	.1978	.0418	.1047	.4218	17.42	.0383	.0919
#1	.5101	.2037	.2570	26.28	25.45	-.0050	25.79	.5154
#2	.5093	.2045	.2572	26.26	25.47	-.0070	25.79	.5156
#3	.5107	.2042	.2570	26.31	25.27	-.0057	25.78	.5163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
Value						.0500		
Range						-20.00%		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5145**	**23.79**	**.5043**	**.4846**	**.4955**	**1.998**	**.3549**	**.5130**
Stddev	.0013	.04	.0003	.0018	.0011	.005	.0008	.0008
%RSD	.2618	.1854	.0511	.3818	.2260	.2735	.2263	.1464
#1	.5139	23.76	.5045	.4834	.4942	1.992	.3552	.5125
#2	.5135	23.78	.5040	.4835	.4961	2.002	.3555	.5127
#3	.5160	23.84	.5044	.4867	.4961	2.001	.3540	.5139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value								
Range								

Sample Name: MP41623-B1 Acquired: 12/21/2022 15:33:27 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5143**	**.5154**	**1.971**	**.5034**	**.4938**
Stddev	.0012	.0001	.003	.0009	.0004
%RSD	.2358	.0279	.1550	.1705	.0737
#1	.5133	.5155	1.968	.5028	.4941
#2	.5139	.5153	1.972	.5030	.4934
#3	.5156	.5153	1.974	.5044	.4938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value					
Range					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2640.3**	**6779.7**	**37846.**	**5272.1**
Stddev	7.0	7.3	128.	19.3
%RSD	.26655	.10801	.33689	.36616
#1	2644.6	6784.7	37977.	5250.1
#2	2644.2	6783.0	37722.	5279.8
#3	2632.2	6771.3	37839.	5286.3

Sample Name: MP41623-D1 Acquired: 12/21/2022 15:38:22 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**33.17**	**.0029**	**.0149**	**.0474**	**.0013**	**2.562**	**.0000**	**.0000**
Stddev	.0002	.24	.0007	.0019	.0007	.0000	.016	.0001	.000
%RSD	25.04	.7189	23.72	13.00	1.468	1.987	.6062	481.6	414.7
#1	-.0008	33.44	.0028	.0149	.0481	.0014	2.576	.0000	-.0001
#2	-.0005	33.01	.0036	.0130	.0472	.0013	2.545	.0000	.0001
#3	-.0006	33.05	.0022	.0168	.0468	.0013	2.564	-.0001	-.0001

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0671**	**.0067**	**1.993**	**1.871**	**.0056**	**.6933**	**.0101**	**.0041**	**4.248**
Stddev	.0004	.0008	.014	.017	.0021	.0117	.0001	.0001	.027
%RSD	.6223	12.61	.7151	.9078	36.68	1.686	1.448	2.827	.6443
#1	.0671	.0060	2.009	1.886	.0068	.7059	.0100	.0040	4.274
#2	.0676	.0063	1.983	1.874	.0069	.6828	.0103	.0042	4.219
#3	.0667	.0076	1.987	1.852	.0032	.6913	.0101	.0041	4.250

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0022**	**.0385**	**.0002**	**.0071**	**10.36**	**.0010**	**.0317**	**.0398**	**-.0027**
Stddev	.0001	.0003	.0008	.0009	.04	.0003	.0003	.0010	.0009
%RSD	3.342	.6553	422.1	13.39	.3640	26.31	1.058	2.502	32.47
#1	.0022	.0388	-.0004	.0063	10.40	.0013	.0320	.0401	-.0031
#2	.0022	.0383	-.0001	.0081	10.33	.0009	.0314	.0407	-.0017
#3	.0021	.0383	.0011	.0069	10.34	.0008	.0318	.0387	-.0032

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.0705**	**.0088**
Stddev	.0003	.0000
%RSD	.3852	.2834
#1	.0703	.0088
#2	.0708	.0088
#3	.0703	.0088

Sample Name: MP41623-D1 Acquired: 12/21/2022 15:38:22 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2820.4**	**7172.4**	**40048.**	**5481.7**
Stddev	6.6	8.8	227.	13.9
%RSD	.23229	.12241	.56645	.25348
#1	2824.1	7169.5	40152.	5467.1
#2	2812.9	7165.4	39787.	5494.7
#3	2824.3	7182.3	40204.	5483.4

Zoom In Zoom Out

Sample Name: MP41623-S1 Acquired: 12/21/2022 15:43:21 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0487**	**61.81**	**1.837**	**.0417**	**1.995**	**.0499**	**27.02**	**.0474**	**.4849**
Stddev	.0002	.40	.004	.0028	.011	.0001	.13	.0000	.0002
%RSD	.4164	.6480	.2206	6.688	.5239	.2395	.4688	.1046	.0358
#1	.0486	62.26	1.841	.0385	2.007	.0500	27.17	.0474	.4849
#2	.0485	61.67	1.835	.0436	1.991	.0498	26.97	.0474	.4847
#3	.0489	61.50	1.834	.0430	1.988	.0499	26.93	.0475	.4850

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2565**	**.2563**	**27.47**	**26.17**	**.0088**	**25.84**	**.4985**	**.4881**	**26.61**
Stddev	.0009	.0007	.18	.09	.0029	.16	.0008	.0013	.12
%RSD	.3508	.2922	.6556	.3350	32.65	.6279	.1575	.2635	.4648
#1	.2567	.2556	27.67	26.26	.0074	26.03	.4994	.4881	26.74
#2	.2555	.2562	27.42	26.08	.0121	25.75	.4978	.4867	26.59
#3	.2573	.2570	27.32	26.17	.0069	25.75	.4984	.4893	26.50

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4799**	**.5294**	**.3025**	**1.886**	**16.84**	**.3806**	**.6387**	**.7405**	**1.942**
Stddev	.0002	.0029	.0016	.004	.12	.0011	.0026	.0034	.003
%RSD	.0327	.5518	.5436	.1991	.7119	.2770	.4001	.4621	.1637
#1	.4801	.5324	.3030	1.890	16.92	.3804	.6417	.7438	1.943
#2	.4799	.5293	.3039	1.884	16.90	.3797	.6371	.7407	1.945
#3	.4798	.5266	.3007	1.883	16.71	.3818	.6374	.7370	1.939

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5450**	**.4747**
Stddev	.0004	.0003
%RSD	.0789	.0733
#1	.5452	.4751
#2	.5445	.4747
#3	.5452	.4744

Zoom In Zoom Out

Sample Name: MP41623-S1 Acquired: 12/21/2022 15:43:21 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2582.0**	**6999.3**	**38843.**	**5499.4**
Stddev	5.5	12.3	66.	80.8
%RSD	.21400	.17554	.17068	1.4688
#1	2575.7	6997.5	38786.	5406.5
#2	2584.8	7012.4	38916.	5538.3
#3	2585.6	6988.0	38826.	5553.3

Zoom In Zoom Out

Sample Name: MP41623-S2 Acquired: 12/21/2022 15:48:14 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
IS Ref	(Y_3600)	(Y_3710)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0516**	**63.18**	**1.940**	**.0413**	**2.108**	**.0530**	**27.02**	**.0502**	**.5132**
Stddev	.0007	1.22	.003	.0055	.034	.0009	.48	.0000	.0003
%RSD	1.437	1.935	.1375	13.21	1.627	1.752	1.784	.0409	.0542
#1	.0516	62.69	1.941	.0374	2.095	.0527	26.82	.0503	.5135
#2	.0523	64.57	1.942	.0389	2.147	.0540	27.57	.0502	.5130
#3	.0508	62.28	1.937	.0475	2.083	.0522	26.66	.0502	.5132

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
IS Ref	(Y_3600)	(Y_3600)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3710)	(Y_3600)	(Y_2243)	(Y_3710)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2746**	**.2759**	**27.56**	**26.25**	**.0029**	**25.83**	**.5316**	**.4869**	**26.60**
Stddev	.0038	.0048	.55	.52	.0013	.50	.0095	.0002	.41
%RSD	1.375	1.723	1.992	1.987	43.79	1.925	1.795	.0455	1.525
#1	.2718	.2727	27.30	26.06	.0044	25.66	.5259	.4872	26.44
#2	.2789	.2814	28.19	26.83	.0023	26.40	.5426	.4869	27.06
#3	.2731	.2736	27.18	25.84	.0021	25.45	.5262	.4867	26.30

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
IS Ref	(Y_2243)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_2243)	(Y_3710)	(Y_3600)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5073**	**.5588**	**.3041**	**1.990**	**15.41**	**.3787**	**.6503**	**.4389**	**2.046**
Stddev	.0002	.0008	.0001	.004	.01	.0015	.0100	.0078	.001
%RSD	.0444	.1450	.0355	.1928	.0613	.3839	1.540	1.786	.0529
#1	.5071	.5596	.3042	1.993	15.42	.3799	.6474	.4348	2.046
#2	.5075	.5580	.3040	1.991	15.42	.3771	.6614	.4479	2.046
#3	.5075	.5589	.3040	1.986	15.40	.3790	.6420	.4340	2.048

Elem	V_2924	Zn2062
IS Ref	(Y_3600)	(Y_2243)
Units	ppm	ppm
Avg	**.5779**	**.5033**
Stddev	.0103	.0006
%RSD	1.783	.1175
#1	.5715	.5035
#2	.5898	.5026
#3	.5723	.5038

Zoom In Zoom Out

Sample Name: MP41623-S2 Acquired: 12/21/2022 15:48:14 Type: Unk
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2608.8**	**7043.7**	**38480.**	**5565.6**
Stddev	7.6	27.3	424.	78.2
%RSD	.29148	.38771	1.1009	1.4050
#1	2613.4	7057.4	38756.	5581.7
#2	2613.1	7061.4	37992.	5480.6
#3	2600.1	7012.2	38693.	5634.5

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 15:53:08 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265	Co2286
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2421**	**39.29**	**1.983**	F **1.970**	**1.987**	**2.017**	**39.47**	**2.008**	**2.010**
Stddev	.0005	.09	.016	.007	.002	.006	.06	.018	.018
%RSD	.2186	.2273	.8128	.3816	.1079	.3028	.1496	.9102	.9138
#1	.2421	39.39	1.990	1.977	1.986	2.022	39.50	2.017	2.018
#2	.2425	39.24	1.965	1.962	1.989	2.018	39.50	1.987	1.989
#3	.2415	39.23	1.995	1.971	1.985	2.010	39.40	2.019	2.023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value				.2500					
Range				10.00%					

Elem	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576	Mo2020	Na5895
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.984**	**2.027**	**39.61**	**39.66**	**1.988**	**40.05**	**2.006**	**2.005**	**39.56**
Stddev	.007	.008	.08	.13	.008	.15	.043	.018	.07
%RSD	.3684	.4052	.2085	.3276	.3957	.3622	2.169	.8958	.1773
#1	1.988	2.035	39.71	39.80	1.992	40.21	2.051	2.013	39.51
#2	1.988	2.028	39.56	39.61	1.993	40.02	2.001	1.984	39.64
#3	1.976	2.019	39.57	39.55	1.979	39.93	1.965	2.017	39.53
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.993**	**1.957**	**2.000**	**2.004**	**2.228**	**2.019**	**1.980**	**2.011**	**1.966**
Stddev	.019	.017	.018	.018	.020	.017	.004	.001	.023
%RSD	.9499	.8893	.8817	.9083	.9028	.8271	.1916	.0519	1.178
#1	2.002	1.965	2.008	2.012	2.234	2.026	1.978	2.013	1.971
#2	1.971	1.938	1.979	1.983	2.206	2.000	1.984	2.011	1.941
#3	2.006	1.970	2.011	2.016	2.244	2.031	1.977	2.011	1.987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: CCV Acquired: 12/21/2022 15:53:08 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	V_2924	Zn2062
Units	ppm	ppm
Avg	**1.989**	**1.991**
Stddev	.006	.020
%RSD	.3023	.9866
#1	1.993	2.003
#2	1.992	1.968
#3	1.982	2.001
Check ?	Chk Pass	Chk Pass
Value		
Range		

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**2490.4**	**6565.9**	**37136.**	**5215.6**
Stddev	17.5	41.7	227.	4.9
%RSD	.70314	.63452	.61153	.09435
#1	2478.7	6541.2	36925.	5213.3
#2	2510.5	6614.0	37108.	5221.3
#3	2481.9	6542.6	37376.	5212.3

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 15:58:09 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Ag3280	Al3961	As1890	B_2497	Ba4554	Be3130	Ca3179	Cd2265
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0003**	**-.0024**	**.0000**	F **-.0050**	**.0000**	**.0000**	**.0219**	**.0000**
Stddev	.0002	.0086	.001	.0005	.000	.000	.0006	.0001
%RSD	84.77	361.2	4615.	10.13	671.9	230.8	2.839	159.9
#1	-.0002	-.0119	-.0011	-.0047	.0000	-.0002	.0215	.0001
#2	-.0005	.0045	.0007	-.0056	.0000	.0000	.0217	.0000
#3	-.0001	.0003	.0003	-.0048	-.0001	.0000	.0226	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit				.0010				
Low Limit				-.0010				

Elem	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0002**	**-.0008**	**.0011**	**-.1991**	F **-.0013**	**-.0016**	**.0001**
Stddev	.0001	.0001	.0005	.0027	.0239	.0026	.0102	.0000
%RSD	59.34	49.25	54.65	249.0	11.99	203.0	630.4	42.71
#1	.0001	.0003	-.0006	-.0019	-.1815	.0002	.0084	.0001
#2	.0001	.0001	-.0005	.0034	-.1895	-.0042	-.0119	.0001
#3	.0002	.0003	-.0014	.0017	-.2262	.0003	-.0013	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0010		
Low Limit						-.0010		

Elem	Mo2020	Na5895	Ni2316	Pb2203	Sb2068	Se1960	Si2124	Sn1899
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0437**	**-.0002**	**-.0002**	**.0002**	**.0012**	**.0010**	**.0001**
Stddev	.000	.0166	.0001	.0006	.0006	.0002	.0010	.0004
%RSD	1623.	38.03	34.78	282.9	308.2	19.69	94.88	496.3
#1	-.0001	-.0618	-.0001	.0003	.0008	.0012	.0011	.0001
#2	.0000	-.0402	-.0002	-.0009	-.0005	.0014	.0020	.0004
#3	.0001	-.0291	-.0002	-.0001	.0003	.0010	.0000	-.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: CCB Acquired: 12/21/2022 15:58:09 Type: QC
Method: 60102007_COMBO_102422(v110) Mode: CONC Corr. Factor: 1.000000
User: admin SSTRACE01: : :
Comment:

Elem	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0001**	**.0016**	**-.0002**	**.0020**
Stddev	.0002	.0002	.0007	.0001	.0000
%RSD	48.61	127.6	43.99	44.27	.5979
#1	.0002	-.0001	.0023	-.0002	.0020
#2	.0005	.0000	.0009	-.0003	.0020
#3	.0003	-.0003	.0015	-.0001	.0020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3710
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3033.9**	**7083.3**	**39513.**	**5412.8**
Stddev	12.4	27.4	492.	73.8
%RSD	.40778	.38649	1.2464	1.3639
#1	3025.8	7058.7	40007.	5352.4
#2	3048.1	7112.8	39022.	5391.0
#3	3027.8	7078.5	39509.	5495.1

NOTE: The remaining raw data for this batch is not relevant to this job. As such it has been omitted.

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Ag 328.068 {103}	☒	2	V	-0.005817	0.000000	No
			Fe	-0.000014	0.000000	No
Al 396.152 { 85}	☒	1	Mo	0.040336	0.000000	No
As 189.042 {478}	☒	4	Fe	-0.000040	0.000000	No
			Cr	-0.000653	0.000000	No
			Mo	0.000444	0.000000	No
			Al	0.000001	0.000000	No
B 249.773 {135}	☒	1	Fe	0.002061	0.000000	No
Ba 455.403 { 74}	☒	4	Fe	-0.000029	0.000000	No
			Al	0.000025	0.000000	No
			Ca	0.000016	0.000000	No
			Mg	0.000016	0.000000	No
Be 313.042 {108}	☒	2	V	0.000089	0.000000	No
			Ti	-0.000289	0.000000	No
Ca 317.933 {106}	☒	None				
Cd 226.502 {449}	☒	4	Fe	0.000066	0.000000	No
			Ca	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ti	0.000103	0.000000	No
Co 228.616 {447}	☒	3	Mo	-0.001220	0.000000	No
			Ti	0.002210	0.000000	No
			Fe	0.000005	0.000000	No
Cr 267.716 {126}	☒	4	Al	0.000003	0.000000	No
			Fe	-0.000016	0.000000	No
			Ca	0.000002	0.000000	No
			Cd	-0.000120	0.000000	No
Cu 324.754 {104}	☒	10	Mo	0.000189	0.000000	No
			Sn	-0.000012	0.000000	No
			V	-0.000158	0.000000	No
			Al	0.000003	0.000000	No
			Mg	0.000003	0.000000	No
			Co	-0.000547	0.000000	No
			Cd	0.000190	0.000000	No
			Fe	0.000007	0.000000	No
			Ca	0.000001	0.000000	No
			Ti	-0.000268	0.000000	No
Fe 259.940 {130}	☒	None				
In 230.606 {446}*	☒	None				
K 766.490 { 44}	☒	None				
Li 670.784 { 50}	☒	4	Ca	0.000004	0.000000	No
			Fe	0.000031	0.000000	No
			Al	-0.000009	0.000000	No
			Mg	-0.000006	0.000000	No
Mg 279.079 {121}	☒	None				
Mn 257.610 {131}	☒	2	Fe	-0.000014	0.000000	No
			Mg	0.000000	0.000000	No
Mo 202.030 {467}	☒	3	Fe	-0.000000	0.000000	No
			Al	-0.000002	0.000000	No
			Ca	-0.000003	0.000000	No
Na 589.592 { 57}	☒	None				
Ni 231.604 {445}	☒	7	Fe	-0.000032	0.000000	No
			Co	0.000112	0.000000	No
			Mo	0.000980	0.000000	No
			Sb	-0.000120	0.000000	No
			Al	0.000003	0.000000	No
			Be	-0.000304	0.000000	No
			Tl	0.000172	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Pb 220.353 {453}	☒	9	Al	0.000153	0.000000	No
				Fe	0.000296	0.000000	No
				Mo	-0.002189	0.000000	No
				Cu	0.000467	0.000000	No
				Ti	0.000036	0.000000	No
				Si	0.000182	0.000000	No
				Ca	0.000012	0.000000	No
				Cr	-0.000260	0.000000	No
				Mg	0.000002	0.000000	No
	Sb 206.833 {463}	☒	11	Fe	0.000002	0.000000	No
				Cr	0.011486	0.000000	No
				Mo	-0.002538	0.000000	No
				V	-0.002735	0.000000	No
				Sn	-0.008695	0.000000	No
				Ti	0.000278	0.000000	No
				Ca	0.000001	0.000000	No
				Ni	-0.000818	0.000000	No
				Al	0.000005	0.000000	No
				Mn	-0.000133	0.000000	No
				Mg	-0.000002	0.000000	No
	Se 196.090 {472}	☒	12	Fe	-0.000052	0.000000	No
				Ca	0.000006	0.000000	No
				Mn	0.000331	0.000000	No
				Mo	0.000111	0.000000	No
				Al	0.000001	0.000000	No
				V	0.000000	0.000000	No
				Zn	0.000000	0.000000	No
				Sr	-0.000111	0.000000	No
				As	0.000125	0.000000	No
				Cd	-0.000250	0.000000	No
				Mg	0.000002	0.000000	No
				Cr	-0.000326	0.000000	No
	Si 212.412 {459}	☒	1	Mo	0.000000	0.000000	No
	Sn 189.989 {477}	☒	1	Fe	0.000003	0.000000	No
	Sr 407.771 { 83}	☒	2	Ca	-0.000001	0.000000	No
				Al	0.000012	0.000000	No
	Ti 334.941 {101}	☒	1	Ca	-0.000003	0.000000	No
	Tl 190.856 {477}	☒	10	Co	0.004099	0.000000	No
				Fe	-0.000037	0.000000	No
				Al	0.000000	0.000000	No
				Ba	-0.000051	0.000000	No
				Ti	-0.000648	0.000000	No
				Sb	0.000167	0.000000	No
				Ca	0.000001	0.000000	No
				Cr	0.000340	0.000000	No
				Mg	-0.000002	0.000000	No
				V	0.000015	0.000000	No
	V 292.402 {115}	☒	5	Fe	-0.000011	0.000000	No
				Cr	-0.003634	0.000000	No
				Mo	-0.009536	0.000000	No
				Ti	0.000303	0.000000	No
				Mn	-0.000333	0.000000	No
	Y 224.306 {450}*	☒	None				
	Y 360.073 { 94}*	☒	None				
	Y 371.030 { 91}*	☒	None				
	Zn 206.200 {463}	☒	5	Cr	-0.001305	0.000000	No
				Al	0.000014	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Ca	0.000003	0.000000	No
				Fe	-0.000009	0.000000	No
				As	0.001105	0.000000	No

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000032	0.757396	0.000000	1.000000
Al 396.152 { 85}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000445	0.219266	0.000000	1.000000
As 189.042 {478}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000086	0.138930	0.000000	1.000000
B 249.773 {135}	12/21/2022 11:39:33	12/21/2022 10:40:16	Linear	1/Conc	0.002079	0.212382	0.000000	1.000000
Ba 455.403 { 74}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000826	12.406392	0.000000	1.000000
Be 313.042 {108}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.001191	14.789959	0.000000	1.000000
Ca 317.933 {106}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.003396	0.541948	0.000000	1.000000
Cd 226.502 {449}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000047	6.422895	0.000000	1.000000
Co 228.616 {447}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000346	3.090946	0.000000	1.000000
Cr 267.716 {126}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000133	0.812344	0.000000	1.000000
Cu 324.754 {104}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.015139	0.971552	0.000000	1.000000
Fe 259.940 {130}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000239	0.251632	0.000000	1.000000
In 230.606 {446}*	12/21/2022 11:39:33	5/5/2010 12:30:54	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
K 766.490 { 44}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.057674	0.105784	0.000000	1.000000
Li 670.784 { 50}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.022196	2.211823	0.000000	1.000000
Mg 279.079 {121}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000405	0.061833	0.000000	1.000000
Mn 257.610 {131}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000153	4.251766	0.000000	1.000000
Mo 202.030 {467}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000428	0.877326	0.000000	1.000000
Na 589.592 { 57}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.054972	0.390137	0.000000	1.000000
Ni 231.604 {445}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000019	2.000448	0.000000	1.000000
Pb 220.353 {453}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.007066	1.557486	0.000000	1.000000
Sb 206.833 {463}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.001111	0.209059	0.000000	1.000000
Se 196.090 {472}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000410	0.104602	0.000000	1.000000
Si 212.412 {459}	12/21/2022 11:39:33	12/21/2022 10:40:17	Linear	1/Conc	0.002024	0.343144	0.000000	1.000000
Sn 189.989 {477}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000461	0.384658	0.000000	1.000000
Sr 407.771 { 83}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000145	15.176613	0.000000	1.000000
Ti 334.941 {101}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.003516	2.242915	0.000000	1.000000
Tl 190.856 {477}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.001071	0.284659	0.000000	1.000000
V 292.402 {115}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	-0.000045	1.264914	0.000000	1.000000
Y 224.306 {450}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	<not fit>	<Never Calibrated>	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Zn 206.200 {463}	12/21/2022 11:39:33	12/21/2022 10:45:05	Linear	1/Conc	0.000194	3.654031	0.000000	1.000000

	Element, Wavelength and Order	Correlation	Std Error of Est	Predicted MDL	Predicted MQL	Status	Reslope		QC Norm	
							Slope	Y-int	Slope factor	Offset
	Ag 328.068 {103}	0.999721	0.000063	0.000521	0.001735	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	0.999936	0.000518	0.009671	0.032236	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	0.999798	0.000029	0.001128	0.003760	OK.	1.000000	0.000000	1	0
	B 249.773 {135}	0.999727	0.000278	0.002540	0.008467	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	0.999911	0.007780	0.000234	0.000779	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	0.999970	0.000837	0.000064	0.000212	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	0.999952	0.002484	0.002174	0.007246	OK.	1.000000	0.000000	1	0
	Cd 226.502 {449}	0.999975	0.000335	0.000049	0.000162	OK.	1.000000	0.000000	1	0
	Co 228.616 {447}	0.999984	0.000404	0.000115	0.000385	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	0.999971	0.000065	0.000343	0.001144	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}	0.999966	0.000133	0.000447	0.001489	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	0.999896	0.000926	0.002079	0.006931	OK.	1.000000	0.000000	1	0
	In 230.606 {446}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	K 766.490 { 44}	0.999755	0.002510	0.033016	0.110052	OK.	1.000000	0.000000	1	0
	Li 670.784 { 50}	0.999265	0.000839	0.001756	0.005852	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	0.999853	0.001119	0.012287	0.040955	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	0.999922	0.000679	0.000056	0.000187	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	0.999937	0.000230	0.000205	0.000683	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	0.999458	0.013792	0.009530	0.031766	OK.	1.000000	0.000000	1	0
	Ni 231.604 {445}	0.999987	0.000213	0.000180	0.000600	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	0.999481	0.000372	0.000449	0.001497	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	0.999932	0.000018	0.001413	0.004711	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	0.999933	0.000013	0.002339	0.007797	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	0.995703	0.001718	0.000628	0.002094	OK.	1.000000	0.000000	1	0
	Sn 189.989 {477}	0.999969	0.000070	0.000422	0.001408	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	0.999918	0.002031	0.000113	0.000377	OK.	1.000000	0.000000	1	0
	Ti 334.941 {101}	0.999951	0.000230	0.000176	0.000588	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	0.999749	0.000067	0.001061	0.003536	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	0.999935	0.000331	0.000304	0.001013	OK.	1.000000	0.000000	1	0
	Y 224.306 {450}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 360.073 { 94}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Y 371.030 { 91}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0
	Zn 206.200 {463}	0.999971	0.000407	0.000060	0.000201	OK.	1.000000	0.000000	1	0

SGS Orlando

Date:	12/20/22
Time	16:15

[24hr]

Analysts Name:	Adam K
MP Batch ID:	41628
Method	SW846-3010A

Reagent / Lot Number		Spk.Soln(A)	Vol. Used (ml)	Pipette Number
Conc. HNO3 (B)	22330073	ACC1362	0.5	KU15244
Conc. HCl (B)	22C1662007	ACC1346	0.25	KU15244
NA	NA	MET7303	0.25	KU15244
NA	NA	NA	NA	NA

HotBlock I.D.	9	Therm ID	204	Temp. C	95	Corr. Factor	-2	Corrected Observed Temp. C	93
pH Paper Lot Number	230320			Filter Lot Number		280632432		Digestion Tube Lot Number	2208066

	Bot#	Sample #	Initial Vol.(ml)	Final Vol.(ml)	pH<2	Comments
	NA	Method Blank(MB)	50	50	NA	
	NA	Spike Blank(SB)	50	50	NA	
	1	Matrix Spike(MS)	50	50	Y	
	1	Matrix Spike Dup(MSD)	50	50	Y	
	1	Duplicate(DUP)	50	50	Y	
1(QC) C	1	FC1090-1F	50	50	Y	
2	1	FC1090-2F	50	50	Y	
3	3	FC1090-3F	50	50	Y	
4	1	FC1090-4F	50	50	Y	
5	1	FC1090-5F	50	50	Y	
6	1	FC1090-6F	50	50	Y	
7	7	FC1068-9F	50	50	Y	
8	10	FC1068-11F	50	50	Y	
9	7	FC1068-12F	50	50	Y	
10	4	FC1113-1	50	50	Y	
11	1	FC1113-2	50	50	Y	
12	5	FC1116-1	50	50	Y	
13	8	FC1116-2	50	50	Y	
14	5	FC1116-3	50	50	Y	
15	5	FC1116-4	50	50	Y	
16	10	FC1267-6	50	50	Y	
17	10	FC1267-7	50	50	Y	
18	10	FC1267-8	50	50	Y	
19	10	FC1267-9	50	50	Y	
20	10	FC1267-10	50	50	Y	
21 [D]						
22 [D]						
23 [D]						
24 [D]						

Protected Worksheet

A Used for SB, MS, MSD
B For reagent volumes used refer to SOP MET 103, current verion
C Parent sample used to prepare MS, MSD, DUP
D Additional matrix QC

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Instrument Runlogs/QC

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Alkalinity, Total as CaCO3	GN93010			mg/l	250	253	101.0	85-115%
BOD, 5 Day	GP38284/GN93004	2.0	0.0	mg/l	198	217	109.3	85-115%
Bromide	GP38287/GN92969	0.50	0.0	mg/l	10	9.72	97.2	90-110%
Chemical Oxygen Demand	GP38286/GN92967	20	0.0	mg/l	50.0	51.5	103.1	85-115%
Chloride	GP38287/GN92969	2.0	0.0	mg/l	50	49.9	99.8	90-110%
Color, Apparent	GN92962	5	0	CU				
Fluoride	GP38287/GN92969	0.20	0.0	mg/l	2.5	2.68	107.2	90-110%
Nitrogen, Nitrate	GP38287/GN92969	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Nitrogen, Nitrite	GP38287/GN92969	0.10	0.0	mg/l	2.5	2.65	106.0	90-110%
Phosphate, Ortho	GP38285/GN92966	0.10	0	mg/l	0.300	0.301	100.2	83-116%
Solids, Total Dissolved	GN92999	50	0.0	mg/l				
Sulfate	GP38287/GN92969	2.0	0.0	mg/l	50	50.9	101.8	90-110%
Total Organic Carbon	GP38294/GN92992	2.0	0.0	mg/l	15	15.1	100.7	90-110%

Associated Samples:
Batch GN92962: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GN92999: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GN93010: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38284: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38285: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38286: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38287: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38294: FC1116-1, FC1116-2, FC1116-3, FC1116-4
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Alkalinity, Total as CaCO3	GN93010	FC1123-1	mg/l	378	378	0.0	0-20%
BOD, 5 Day	GP38284/GN93004	FC1113-2	mg/l	81.6	111	30.1(a)	0-30%
Color, Apparent	GN92962	FC1116-1	CU	15	15	0.0	0-20%
Solids, Total Dissolved	GN92999	FC1123-1	mg/l	738	706	4.4	0-5%

Associated Samples:
Batch GN92962: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GN92999: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GN93010: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38284: FC1116-1, FC1116-2, FC1116-3, FC1116-4
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP38287/GN92969	FC1116-1	mg/l	0.24	10	9.5	92.6	90-110%
Chemical Oxygen Demand	GP38286/GN92967	FC1052-4	mg/l	5.3 U	50.0	56.4	103.1	85-115%
Chloride	GP38287/GN92969	FC1116-1	mg/l	12.6	50	59.9	94.6	90-110%
Fluoride	GP38287/GN92969	FC1116-1	mg/l	0.85	2.5	3.0	86.0N(a)	90-110%
Nitrogen, Nitrate	GP38287/GN92969	FC1116-1	mg/l	0.43	2.5	3.0	102.8	90-110%
Nitrogen, Nitrite	GP38287/GN92969	FC1116-1	mg/l	0.085	2.5	2.7	104.6	90-110%
Phosphate, Ortho	GP38285/GN92966	FC1116-1	mg/l	0.062	0.300	0.363	100.2	83-116%
Sulfate	GP38287/GN92969	FC1116-1	mg/l	30.0	50	73.6	87.2N(a)	90-110%
Total Organic Carbon	GP38294/GN92992	FC1123-1	mg/l	0.83	15	15.0(b)	94.5(b)	90-110%

Associated Samples:
Batch GP38285: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38286: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38287: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38294: FC1116-1, FC1116-2, FC1116-3, FC1116-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike recovery indicates possible matrix interference.
(b) Sample was not preserved to a pH < 2.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP38287/GN92969	FC1116-1	mg/l	0.24	10	9.5	0.0	15%
Chemical Oxygen Demand	GP38286/GN92967	FC1052-4	mg/l	5.3 U	50.0	56.4	0.0	5%
Chloride	GP38287/GN92969	FC1116-1	mg/l	12.6	50	59.9	0.0	15%
Fluoride	GP38287/GN92969	FC1116-1	mg/l	0.85	2.5	3.0	0.0	15%
Nitrogen, Nitrate	GP38287/GN92969	FC1116-1	mg/l	0.43	2.5	3.0	0.0	15%
Nitrogen, Nitrite	GP38287/GN92969	FC1116-1	mg/l	0.085	2.5	2.7	0.0	15%
Phosphate, Ortho	GP38285/GN92966	FC1116-1	mg/l	0.062	0.300	0.363	0.0	26%
Sulfate	GP38287/GN92969	FC1116-1	mg/l	30.0	50	73.6	0.0	15%
Total Organic Carbon	GP38294/GN92992	FC1123-1	mg/l	0.83	15	15.5(a)	3.3(a)	20%

Associated Samples:
Batch GP38285: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38286: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38287: FC1116-1, FC1116-2, FC1116-3, FC1116-4
Batch GP38294: FC1116-1, FC1116-2, FC1116-3, FC1116-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Sample was not preserved to a pH < 2.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120801.CSV Date Analyzed: 12/08/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92969
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:48	GN92969-STD1	1		STDA
12:09	GN92969-STD2	1		STDB
12:30	GN92969-STD3	1		STDC
12:50	GN92969-STD4	1		STDD
13:11	GN92969-STD5	1		STDE
13:31	GN92969-STD6	1		STDF
13:52	GN92969-STD7	1		STDG
14:12	GN92969-STD8	1		STDH
14:33	GN92969-STD9	1		STDI
14:53	GN92969-STD10	1		STDJ
15:14	GN92969-STD11	1		STDK
15:42	GN92969-ICV1	1		
16:02	GN92969-ICB1	1		
16:23	GN92969-CRI1	1		
16:43	GN92969-CCV1	1		
17:04	GN92969-CCB1	1		
17:25	GN92969-CCV2	1		
17:45	GN92969-CCB2	1		
18:06	GP38287-MB1	1		
18:26	GP38287-B1	1		
18:47	FC1116-1	1		
19:07	GP38287-S1	1		
19:28	GP38287-S2	1		
19:48	FC1116-2	1		
20:09	FC1116-3	1		
20:29	FC1116-4	1		
20:50	ZZZZZZ	10		
21:10	ZZZZZZ	1		
21:31	GN92969-CCV3	1		
21:51	GN92969-CCB3	1		
22:12	ZZZZZZ	1		
22:33	FC1123-1	10		(sample used for QC only; not part of login FC1116)
22:53	GP38287-S3	10		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120801.CSV Date Analyzed: 12/08/22 Methods: EPA 300/SW846 9056A
Analyst: JB Run ID: GN92969
Parameters: Bromide,Chloride,Fluoride,Nitrogen, Nitrate,Nitrogen, Nitrite,Sulfate

Time	Sample Description	Dilution Factor	PS Recov	Comments
23:13	GP38287-S4	10		
23:33	ZZZZZZ	1		
23:54	ZZZZZZ	1		
00:15	ZZZZZZ	10		
00:35	ZZZZZZ	1		
00:55	ZZZZZZ	25		
01:16	ZZZZZZ	10		
01:36	GN92969-CCV4	1		
01:57	GN92969-CCB4	1		
02:17	ZZZZZZ	500		
02:37	ZZZZZZ	25		
02:58	ZZZZZZ	5		
03:18	ZZZZZZ	5		
03:38	ZZZZZZ	25		
03:58	ZZZZZZ	5		
04:19	GP38288-MB1	1		
04:39	GP38288-B1	1		
05:41	GN92969-CCV5	1		
06:01	GN92969-CCB5	1		
07:44	FC1069-6	25		(sample used for QC only; not part of login FC1116)
08:04	GP38288-S1	25		
08:25	GP38288-S2	25		
08:45	ZZZZZZ	5		
09:06	GN92969-CCV6	1		
09:26	GN92969-CCB6	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120801.CSV Date Analyzed: 12/08/22 Methods: EPA 300/SW846 9056A
Run ID: GN92969 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92969-ICV1	Fluoride	2.39	0.20	0.060	2.5	95.6	90-110
GN92969-ICV1	Chloride	49.6	2.0	0.80	50	99.2	90-110
GN92969-ICV1	Nitrogen, Nitrite	2.63	0.10	0.040	2.5	105.2	90-110
GN92969-ICV1	Bromide	9.68	0.50	0.12	10	96.8	90-110
GN92969-ICV1	Nitrogen, Nitrate	2.64	0.10	0.040	2.5	105.6	90-110
GN92969-ICV1	Sulfate	48.9	2.0	0.60	50	97.8	90-110
GN92969-ICB1	Fluoride	0.060 U	0.20	0.060			
GN92969-ICB1	Chloride	0.80 U	2.0	0.80			
GN92969-ICB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-ICB1	Bromide	0.12 U	0.50	0.12			
GN92969-ICB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-ICB1	Sulfate	0.60 U	2.0	0.60			
GN92969-CRI1	Fluoride	0.0800	0.20	0.060	.1	80.0	50-150
GN92969-CRI1	Chloride	1.04	2.0	0.80	1	104.0	50-150
GN92969-CRI1	Nitrogen, Nitrite	0.110	0.10	0.040	.1	110.0	50-150
GN92969-CRI1	Bromide	0.249	0.50	0.12	.2	124.5	50-150
GN92969-CRI1	Nitrogen, Nitrate	0.117	0.10	0.040	.1	117.0	50-150
GN92969-CRI1	Sulfate	0.688	2.0	0.60	1	68.8	50-150
GN92969-CCV1	Fluoride	2.59	0.20	0.060	2.5	103.6	90-110
GN92969-CCV1	Chloride	48.9	2.0	0.80	50	97.8	90-110
GN92969-CCV1	Nitrogen, Nitrite	2.49	0.10	0.040	2.5	99.6	90-110
GN92969-CCV1	Bromide	10.1	0.50	0.12	10	101.0	90-110
GN92969-CCV1	Nitrogen, Nitrate	2.36	0.10	0.040	2.5	94.4	90-110
GN92969-CCV1	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92969-CCB1	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB1	Chloride	0.80 U	2.0	0.80			
GN92969-CCB1	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB1	Bromide	0.12 U	0.50	0.12			
GN92969-CCB1	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB1	Sulfate	0.60 U	2.0	0.60			
GN92969-CCV2	Fluoride	2.59	0.20	0.060	2.5	103.6	90-110
GN92969-CCV2	Chloride	48.9	2.0	0.80	50	97.8	90-110
GN92969-CCV2	Nitrogen, Nitrite	2.49	0.10	0.040	2.5	99.6	90-110
GN92969-CCV2	Bromide	10.1	0.50	0.12	10	101.0	90-110
GN92969-CCV2	Nitrogen, Nitrate	2.36	0.10	0.040	2.5	94.4	90-110
GN92969-CCV2	Sulfate	49.8	2.0	0.60	50	99.6	90-110
GN92969-CCB2	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB2	Chloride	0.80 U	2.0	0.80			
GN92969-CCB2	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB2	Bromide	0.12 U	0.50	0.12			
GN92969-CCB2	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB2	Sulfate	0.60 U	2.0	0.60			
GN92969-CCV3	Fluoride	2.44	0.20	0.060	2.5	97.6	90-110
GN92969-CCV3	Chloride	49.0	2.0	0.80	50	98.0	90-110
GN92969-CCV3	Nitrogen, Nitrite	2.50	0.10	0.040	2.5	100.0	90-110
GN92969-CCV3	Bromide	10.1	0.50	0.12	10	101.0	90-110
GN92969-CCV3	Nitrogen, Nitrate	2.37	0.10	0.040	2.5	94.8	90-110
GN92969-CCV3	Sulfate	48.7	2.0	0.60	50	97.4	90-110
GN92969-CCB3	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB3	Chloride	0.80 U	2.0	0.80			
GN92969-CCB3	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB3	Bromide	0.12 U	0.50	0.12			
GN92969-CCB3	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB3	Sulfate	0.60 U	2.0	0.60			
GN92969-CCV4	Fluoride	2.45	0.20	0.060	2.5	98.0	90-110
GN92969-CCV4	Chloride	49.1	2.0	0.80	50	98.2	90-110
GN92969-CCV4	Nitrogen, Nitrite	2.50	0.10	0.040	2.5	100.0	90-110
GN92969-CCV4	Bromide	10.1	0.50	0.12	10	101.0	90-110
GN92969-CCV4	Nitrogen, Nitrate	2.37	0.10	0.040	2.5	94.8	90-110

Instrument QC Summary
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: 42022120801.CSV Date Analyzed: 12/08/22 Methods: EPA 300/SW846 9056A
Run ID: GN92969 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92969-CCV4	Sulfate	48.8	2.0	0.60	50	97.6	90-110
GN92969-CCB4	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB4	Chloride	0.80 U	2.0	0.80			
GN92969-CCB4	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB4	Bromide	0.12 U	0.50	0.12			
GN92969-CCB4	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB4	Sulfate	0.60 U	2.0	0.60			
GN92969-CCV5	Fluoride	2.45	0.20	0.060	2.5	98.0	90-110
GN92969-CCV5	Chloride	49.2	2.0	0.80	50	98.4	90-110
GN92969-CCV5	Nitrogen, Nitrite	2.51	0.10	0.040	2.5	100.4	90-110
GN92969-CCV5	Bromide	10.2	0.50	0.12	10	102.0	90-110
GN92969-CCV5	Nitrogen, Nitrate	2.38	0.10	0.040	2.5	95.2	90-110
GN92969-CCV5	Sulfate	48.9	2.0	0.60	50	97.8	90-110
GN92969-CCB5	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB5	Chloride	0.80 U	2.0	0.80			
GN92969-CCB5	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB5	Bromide	0.12 U	0.50	0.12			
GN92969-CCB5	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB5	Sulfate	0.60 U	2.0	0.60			
GN92969-CCV6	Fluoride	2.99	0.20	0.060	2.5	119.6!(a)	90-110
GN92969-CCV6	Chloride	48.5	2.0	0.80	50	97.0	90-110
GN92969-CCV6	Nitrogen, Nitrite	2.44	0.10	0.040	2.5	97.6	90-110
GN92969-CCV6	Bromide	9.89	0.50	0.12	10	98.9	90-110
GN92969-CCV6	Nitrogen, Nitrate	2.44	0.10	0.040	2.5	97.6	90-110
GN92969-CCV6	Sulfate	51.5	2.0	0.60	50	103.0	90-110
GN92969-CCB6	Fluoride	0.060 U	0.20	0.060			
GN92969-CCB6	Chloride	0.80 U	2.0	0.80			
GN92969-CCB6	Nitrogen, Nitrite	0.040 U	0.10	0.040			
GN92969-CCB6	Bromide	0.12 U	0.50	0.12			
GN92969-CCB6	Nitrogen, Nitrate	0.040 U	0.10	0.040			
GN92969-CCB6	Sulfate	0.60 U	2.0	0.60			

(!) Outside of QC limits
(a) No samples for F reported in the area bracketed by this CCV.

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Analyst: FN Run ID: GN92992
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:57	GN92992-CCV1	1		
18:20	GP38294-MB1	1		
18:42	GP38294-B1	1		
19:05	FC1116-1	1		
19:25	FC1116-2	1		
19:46	FC1116-3	1		
20:08	FC1116-4	1		
20:31	ZZZZZZ	1		
20:53	ZZZZZZ	1		
21:16	ZZZZZZ	1		
21:39	ZZZZZZ	1		
22:02	GN92992-CCV2	1		
22:25	GN92992-CCB1	1		
22:49	FC1123-1	1		(sample used for QC only; not part of login FC1116)
23:11	GP38294-S1	1		
23:34	GP38294-S2	1		
23:58	ZZZZZZ	1		
00:21	ZZZZZZ	1		
00:44	ZZZZZZ	1		
01:03	ZZZZZZ	1		
01:29	ZZZZZZ	1		
01:51	ZZZZZZ	1		
02:14	ZZZZZZ	1		
02:38	GN92992-CCV3	1		
02:59	GN92992-CCB2	1		
03:24	ZZZZZZ	1		
03:45	ZZZZZZ	1		
04:08	FC1215-1	1		(sample used for QC only; not part of login FC1116)
04:32	GP38294-S3	1		
04:50	GP38294-S4	1		
05:32	ZZZZZZ	1		
05:58	ZZZZZZ	1		
06:46	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Analyst: FN Run ID: GN92992
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
07:08	ZZZZZZ	1		
07:34	GN92992-CCV4	1		
07:56	GP38295-MB1	1		
08:21	GP38295-B1	1		
08:46	FC1214-3	1		(sample used for QC only; not part of login FC1116)
09:10	GP38295-S1	1		
09:28	GP38295-S2	1		
10:10	ZZZZZZ	1		
10:36	ZZZZZZ	1		
11:00	ZZZZZZ	1		
11:23	ZZZZZZ	1		
14:11	GN92992-CCV5	1		
14:36	GN92992-CCB3	1		
14:56	ZZZZZZ	5		
15:20	GN92992-CCV6	1		
15:43	GN92992-CCB4	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: FC1116
Account: BHATALB - Bhate Environmental
Project: Griffiss AFB; Rome, NY

File ID: B21212W1.TXT Date Analyzed: 12/12/22 Methods: SM5310 B-11/SW9060A
Run ID: GN92992 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN92992-CCV1	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCV2	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCB1	Total Organic Carbon	0.54 U	2.0	0.54			
GN92992-CCV3	Total Organic Carbon	15.4	2.0	0.54	15	102.7	90-110
GN92992-CCB2	Total Organic Carbon	0.54 U	2.0	0.54			
GN92992-CCV4	Total Organic Carbon	15.6	2.0	0.54	15	104.0	90-110
GN92992-CCV5	Total Organic Carbon	15.5	2.0	0.54	15	103.3	90-110
GN92992-CCB3	Total Organic Carbon	0.546(a)	2.0	0.54			
GN92992-CCV6	Total Organic Carbon	15.3	2.0	0.54	15	102.0	90-110
GN92992-CCB4	Total Organic Carbon	0.54 U	2.0	0.54			

(!) Outside of QC limits
(a) CCBis > 1/2 RL but is < RL.

General Chemistry

Raw Data

Apparent Color Analysis Log

Method: SM 2120B - 2001

RL: 5 CU

pH Meter ID: H05883
Calibration Stock Lot#: WC2005
Date of Curve(mm-dd-yy): 12/2/22
NaOH Lot#: /
ICV Lot#: WC2003
CCV Lot#: WC2005
HCL Lot#: /
GN#: 92962
Date (mm-dd-yy): 12/8/22
Time (24:00): 14:00

Sample ID	Bottle #	pH, su	pH, su adj	Result, CU	Dilut'n	Final Result, CU	RL, CU	Comments
ICV	-	-	N/A	35	1	35	5	
CCV	-	-		35		35		
FC1116-1 Dup	10	9.66		15		15		%RPD 0%
-1	↓	↓		15		15		
-2	13	5.42		15		15	↓	
-3	10	6.38		20	10 ①	200	50	
-4	11	6.34		15	↓ ↓	150	50	
MB	-	-	↓	0	1	0	5	
CCV	-	-	-	35	1	35	5	
Dup								%RPD
CCV								

GT 12/8/22

GT 12/8/22

Comments: ① Samples diluted due to turbidity

Analyst Signature: Gina Taylor
Date: 12/8/22

QC Reviewer: [signature]
Date: 12/8/22

EXCEL Spreadsheet Calculation

Excel 006.5
Rev: 0318 SI
Page 1 of 2

Test Title: OPO4

Analyst: FN / BW
Prep Date/Time: 12/08/22 15:30
GP Batch: GP38285

EPA 365.3
Analysis Date/Time: 12/08/22 16:00
GN Batch: GN92966

Calibration Summary **Cal. Date:** 11/16/22 **Spec #:** 1

STD	Cal. Blk.	STD 1	STD 2	STD 3	STD 4	STD 5
Conc(mg/l)	0.000	0.100	0.200	0.300	0.400	0.500
Abs.	0.000	0.040	0.081	0.120	0.163	0.200

Corr. Coef: 0.9999 **Slope:** 2.49 **Intercept:** 0.000

Sample		Abs.	Conc.	Final Vol. (ml)	Sam. Vol (ml)	Dilution	Final Conc.	Units	RL	MDL	LOD
QC Section											
ICV			#VALUE!				#VALUE!	mg/l	#######	######	######
CCV		0.124	0.308	50.0	50.0	1	**0.308**	mg/l	0.10	0.019	0.04
MB	(F)	0.001	0.002	50.0	50.0	1	**0.002**	mg/l	0.10	0.019	0.04
BS	(F)	0.121	0.301	50.0	50.0	1	**0.301**	mg/l	0.10	0.019	0.04
MS	F C 1116 - 1.4	0.146	0.363	50.0	50.0	1	**0.363**	mg/l	0.10	0.019	0.04
MSD	F C 1116 - 1.4	0.146	0.363	50.0	50.0	1	**0.363**	mg/l	0.10	0.019	0.04
QC1.	F C 1116 - 1.4	0.025	0.062	50.0	50.0	1	**0.062**	mg/l	0.10	0.019	0.04
Samples											
1	F C 1116 - 2.7	0.011	0.027	50.0	50.0	1	**0.027**	mg/l	0.10	0.019	0.04
2	F C 1116 - 3.4	0.015	0.037	50.0	50.0	1	**0.037**	mg/l	0.10	0.019	0.04
3	F C 1116 - 4.4	0.013	0.032	50.0	50.0	1	**0.032**	mg/l	0.10	0.019	0.04
4			#VALUE!				#VALUE!	mg/l	#######	######	######
5			#VALUE!				#VALUE!	mg/l	#######	######	######
CCV		0.124	0.308	50.0	50.0	1	**0.308**	mg/l	0.10	0.019	0.04
6			#VALUE!				#VALUE!	mg/l	#######	######	######
7			#VALUE!				#VALUE!	mg/l	#######	######	######
8			#VALUE!				#VALUE!	mg/l	#######	######	######
9			#VALUE!				#VALUE!	mg/l	#######	######	######
10			#VALUE!				#VALUE!	mg/l	#######	######	######
11			#VALUE!				#VALUE!	mg/l	#######	######	######
12			#VALUE!				#VALUE!	mg/l	#######	######	######
13			#VALUE!				#VALUE!	mg/l	#######	######	######
14			#VALUE!				#VALUE!	mg/l	#######	######	######
15			#VALUE!				#VALUE!	mg/l	#######	######	######
CCV			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04
16			#VALUE!				#VALUE!	mg/l	#######	######	######
17			#VALUE!				#VALUE!	mg/l	#######	######	######
18			#VALUE!				#VALUE!	mg/l	#######	######	######
19			#VALUE!				#VALUE!	mg/l	#######	######	######
20			#VALUE!				#VALUE!	mg/l	#######	######	######
CCV			#VALUE!	50.0	50.0	1	#VALUE!	mg/l	0.10	0.019	0.04

Serial # OPO4 12/08/22

SGS Accutest - Orlando

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QC Summary Report

1.0	Matrix Spike Result	0.363	REC =	100.2		
	Matrix Spike Dup	0.363	REC =	100.2	RPD =	0.0
	Spike Amount	0.300				
	Sample Result	0.062				
	MB Result	0.002				
	Blank Spike Result	0.301	REC =	100.2		
	Spike Amount	0.300				

2.0

Primary Std Lot# :	WC1994	Primary Std Conc:	1000 mg/l		
Secondary Std Lot# :	WC1929	Sec'dary Std Conc:	1000 mg/l		
Primary Intermediate Lot# :	GN34338	Conc:	10 mg/l	Vol Spike Added:	1.5 ml
Secondary Intermediate Lot# :	GN34339	Conc:	10 mg/l	Vol Spike Added:	1.5 ml

3.0 Daily Standards are Prepared by:

1.0 ml of Primary (1000 mg/l) Standard to final volume of 100 ml in DI water	**10.0 mg/l**
1.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.100 mg/l**
2.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.200 mg/l**
3.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.300 mg/l**
4.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.400 mg/l**
5.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI water	**0.500 mg/l**
CCV = 3.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI	**0.300 mg/l**
CCV2 = 1.0 ml of 10.0 mg/l Primary Intermediate to final volume of 100 ml in DI	**0.100 mg/l**
1.0 ml of Secondary (1000 mg/l) Standard to final volume of 100 ml in DI water	**10.0 mg/l**
ICV = 3.0 ml of 10.0 mg/l Secondary Intermediate to final volume of 100 ml in DI	**0.300 mg/l**

Comments:_____

Analyst's Signature: Frida N. Date: 12/08/22

Reviewer's Signature: [signature] Date: 12/08/22

Serial # OPO4 12/08/22

Colorimetric Absorbance Data

Test Title: ORTHOPHOSPHATE **Matrix:** WATER

Wavelength: 650nm

Method: EPA 365.3

Analyst: F.N.
Prep Date: 12-08-22
Prep Time: 15:30
GP Batch: 38285

Analysis Date: 12-08-22
Analysis Time: 16:00
GN Batch: 92966

Spec. ID # 1
Digestion Tube Lot # 2208066
Calib. Date: 11-16-22

	Samp ID.Bot#	Abs.	Dilution
Calib BLK			
0.10mg/l			
0.20mg/l			
0.30mg/l		*	
0.40mg/l			
0.50mg/l			
ICV			
CCV		0.124	1
MB	(F)	0.001	1
BS	(F)	0.121	1
MS	FC1116 - 1.4	0.146	1
MSD	-1.4	0.146	1
QC1	-1.4	0.025	1
	FC1116 - 2.7	0.011	1
	-3.4	0.015	1
	-4.4	0.013	1
	*		
CCV		0.124	1
CCV	* F.N.	12/08/22	
CCV			

Stock Solutions **Lot #**

Calib. Stk WC1994
MS/MSD/BS Stk WC1929
Primary Intermediate GN34338
ICV Stk WC1929
Secondary Intermediate GN34338

REAGENTS

11N Sulfuric acid GN34020
Ascorbic acid soln GN34334
Ammonium molybdate-antimony K tartrate soln GN34
Filter Lot# 306067223

PIPETTES

ID#1 NU04977
ID#2 TU11245
ID#3 PU13805

Comments: STDS & SAMPLES WERE FILTERED IN LAB PRIOR ANALYSIS.

Analyst's Signature: Frida N. Date: 12/08/22

opo4 w absorbance 1018 Rev 1018 08262021 DM SGS - Orlando

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EXCEL Spreadsheet Calculation

Excel 014.2
Rev: 0116 LM
Page 1 of 1

Test Title: COD

Method: SM5220C
Matrix: water

	Ave FAS N:	0.012270		
Standardization of FAS	Ave FAS Vol:	4.075		
undigested blk 1	0.00	4.10	4.10	
undigested blk 2	0.00	4.05	4.05	

Prep Temp: 150
Prep Date: 12/8/2022
Prep Time: 15:40
Analysis Date: 12/9/2022
Analysis Time: 15:30
GP Batch: GP38286
GN Batch: GN92967
MB (A) 4.000

	Sample ID.Bottle#	Init. Vol. ml (C)	Final Vol ml (D)	D-C=B	A-B	Results mg/l	Dilution Factor	Final Result mg/l	RL mg/l	MDL mg/l	LOD mg/l
	MB1	0.00	4.00	4.00	0.000	0.00	1	0.00	20	5.3	10
	SB1 (50mg/l)	0.00	2.95	2.95	1.050	51.53	1	51.53	20	5.3	10
MS1	F C 1052 - 4.1	0.00	2.85	2.85	1.150	56.44	1	56.44	20	5.3	10
MSD1	F C 1052 - 4.1	0.00	2.85	2.85	1.150	56.44	1	56.44	20	5.3	10
QC1	F C 1052 - 4.1	0.00	3.90	3.90	0.100	4.91	1	4.91	20	5.3	10
2	F C 1052 - 5.1	0.00	3.95	3.95	0.050	2.45	1	2.45	20	5.3	10
3	F C 1065 - 2.12	0.00	3.80	3.80	0.200	9.82	1	9.82	20	5.3	10
4	F C 1065 - 3.12	0.00	3.80	3.80	0.200	9.82	1	9.82	20	5.3	10
5	F C 1065 - 4.12	0.00	3.75	3.75	0.250	12.27	1	12.27	20	5.3	10
6	F C 1065 - 5.12	0.00	3.90	3.90	0.100	4.91	1	4.91	20	5.3	10
7	F C 1071 - 1.2	0.00	3.90	3.90	0.100	4.91	1	4.91	20	5.3	10
8	F C 1071 - 2.2	0.00	3.90	3.90	0.100	4.91	1	4.91	20	5.3	10
9	F C 1071 - 3.2	0.00	2.30	2.30	1.700	83.44	1	83.44	20	5.3	10
10	F C 1071 - 4.2	0.00	2.70	2.70	1.300	63.80	1	63.80	20	5.3	10
MS2				#VALUE!	#VALUE!	#VALUE!	1	#VALUE!	20	5.3	10
MSD2				#VALUE!	#VALUE!	#VALUE!	1	#VALUE!	20	5.3	10
QC2				#VALUE!	#VALUE!	#VALUE!	1	#VALUE!	20	5.3	10
12	F C 1071 - 5.2	0.00	2.95	2.95	1.050	51.53	1	51.53	20	5.3	10
13	F C 1082 - 1.1	0.00	2.80	2.80	1.200	58.90	1	58.90	20	5.3	10
14	F C 1082 - 2.1	0.00	3.05	3.05	0.950	46.63	1	46.63	20	5.3	10
15	F C 1116 - 1.9	0.00	3.80	3.80	0.200	9.82	1	9.82	20	5.3	10
16	F C 1116 - 2.12	0.00	3.75	3.75	0.250	12.27	1	12.27	20	5.3	10
17	F C 1116 - 3.9	0.00	3.55	3.55	0.450	22.09	1	22.09	20	5.3	10
18	F C 1116 - 4.9	0.00	3.80	3.80	0.200	9.82	1	9.82	20	5.3	10
19				#VALUE!	#VALUE!	#VALUE!	1	#VALUE!	20	5.3	10
20				#VALUE!	#VALUE!	#VALUE!	1	#VALUE!	20	5.3	10

QC SUMMARY REPORT

MB Result	0.00		
Blank Spike Result	51.53	REC= 103.07	
Spike Amount	50.00		
QC1 Sample Result	4.91		
Matrix Spike1 Result	56.44	MS REC= 103.07	
Matrix Spike Dup1 Result	56.44	MS REC= 103.07	RPD= 0
Spike Amount	50.00		
QC2 Sample Result	#VALUE!		
Matrix Spike2 Result	#VALUE!	MS REC= #VALUE!	
Matrix Spike Dup2 Result	#VALUE!	MS REC= #VALUE!	RPD= #VALUE!
Spike Amount	50.00		

Stock Sol Lot#: WC2006 Stock Conc: 1000 ppm
Spike Conc: 50mg/l Vol Spike Added: 0.5 ml

Comments: _____

Analyst's Signature: Frida N. Date: 12/09/22

Reviewer's Signature: [signature] Date: 12/12/22

SGS Accutest - Orlando

Serial# COD: 12/09/22

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COD Analysis Log

Method: SM 5220C - 1997
Reporting Limit: 20.0 mg/l AQ / 200 mg/kg SO

Matrix (circle one) (AQ) / SO

Prep Batch # : GP	38286
Prep Date (mm-dd-yy):	12-08-22
Start Prep Time (24:00):	15:40
End Prep Time (24:00):	17:40
Tubes (circle one):	(Low) / Mid
FAS Standardization Date (mm-dd-yy):	12-09-22

	Init. Vol, ml	Final Vol, ml
undigested blank 1	0.00	4.10
undigested blank 2	0.00	4.05

Analytical Batch #: GN	92967
Analysis Date (mm-dd-yy):	12-09-22
Analysis Time (24:00):	15:30
COD Vial Lot #	WC2013
KHP Lot#	WC2006
Ferroin Indicator Lot#	WC1892
Potassium Dichromate FAS Standardization Solution Lot#	GN34083
Sulfuric Acid Lot#	2022041285
FAS Lot#	WC1798

Digestor ID #	COD - 1	Correction Factor:	N/A
Thermometer ID#	SN09.5/000501	Temp Criteria: 150C +/- 2C	
Observed Temp, C:	150 °C		
Corrected Temp, C:	150°C		

Sample ID	Bot #	Digest Amt (ml)/(gm)	Initial Titrant Vol (ml) C	Final Titrant Vol (ml) D	Dilution Factor	Comments
Method Blank	—	2.00	0.00	4.00	1	
Spike Blank	—	2.00	0.00	2.95	1	
GP 38286 -S1	1	2.00	0.00	2.85	1	
GP 38286 -S2	1	2.00	0.00	2.85	1	
1-FC1052-4 -QC	1	2.00	0.00	3.90	1	
2- -5	1	2.00	0.00	3.95	1	
3-FC1065-2	12	2.00	0.00	3.80	1	
4- -3	12	2.00	0.00	3.80	1	*
5- -4	12	2.00	0.00	3.75	1	
6- -5	12	2.00	0.00	3.90	1	
7-FC1071-1	2	2.00	0.00	3.90	1	
8- -2	2	2.00	0.00	3.90	1	
9- -3	2	2.00	0.00	2.30	1	
10- -4	2	2.00	0.00	2.70	1	
-S1						
-S2				* F.N.	12/09/22	
11- -QC						
12-FC1071-5	2	2.00	0.00	2.95	1	
13-FC1082-1	1	2.00	0.00	2.80	1	
14- -2	1	2.00	0.00	3.05	1	
15-FC1116-1	9	2.00	0.00	3.80	1	*
16- -2	12	2.00	0.00	3.75	1	
17- -3	9	2.00	0.00	3.55	1	
18- -4	9	2.00	0.00	3.80	1	
19-			*			
20-						

Comments:

Analyst's Signature: Frida N. Date (mm-dd-yy): 12/09/22

QC Review Signature: _____ Date (mm-dd-yy): _____

IC STANDARDS PREP LOG

STANDARD NAME	ANALYTES	STOCK MFG. #	STOCK LOT #	STOCK EXP. DATE	STOCK CONC. (mg/l)	VOLUME ADDED (ml)	TOTAL VOLUME (ml)	STANDARD CONC. (mg/l)	PREP DATE	INITIALS	STD LOT #	EXP. DATE
B1	NO_2/NO_3	IC0142367	Ref	12-6-22	100	2.5	100	2.5	12-6-22	JL	IC0142391	12-6-22
	SO_4	GN31296	↓	1-30-23	1000	5	↓	50	↓	↓	↓	↓
	Cl	↓ 7	↓	↓	↓	↓		↓				
	F	WC1995	Spex	9-30-23	↓	0.25		2.5				
	Br	GN31290	Ref	1-30-23		1	↓	10				
1°NO_2	NO_2	WC1975	Absolute	5-18-24	1000	2.5	25	100	12-7-22	JL	IC0142401	12-8-22
1°NO_3	NO_3	WC1809	↓	11-3-24	↓	↓	↓	↓	↓	↓	↓ 1	↓
2°NO_2	NO_2	WC1877		11-10-23							2	
2°NO_3	NO_3	WC1982	↓	5-12-25	↓	↓	↓	↓	↓	↓	3	↓
CN	NO_2/NO_3	IC0142401	Ref	12-8-22	100	5	200	2.5			IC0142414	
	SO_4	WC1982	Ricca	11-1-23	1000	10		50				
	Cl	WC2002	Fisher	8-1-24		↓		↓				
	F	WC1970	LGC	6-30-23		0.5		2.5				
	Br	WC1968	Spex	↓	↓	2	↓	10			↓	
B1	NO_2/NO_3	IC0142423	Ref	12-8-22	100	2.5	100	2.5			IC0142415	
	SO_4	GN31296	↓	1-30-23	1000	5		50				
	Cl	↓ 7	↓	↓	↓	↓		↓				
	F	WC1995	Spex	9-30-23		0.25		2.5				
	Br	GN34298	Ref	1-30-23	↓	1	↓	10			↓	
Std 10	NO_2/NO_3	IC0142401	Ref	12-8-22	100	5	50	10	12-8-22	JL	IC0142426	12-8-22
	SO_4	WC1982	Ricca	11-1-23	1000	↓		100	↓	↓	↓	↓
	Cl	WC2002	Fisher	8-1-24				↓				
	F	WC1970	LGC	6-30-23		0.5		10				
	Br	WC1968	Spex	↓	↓	1	↓	20	↓	↓	↓	↓

IC Instrument Log

Method: ~~EPA300.0 / SW846 9056A~~ (circle one)

+JR 12/8/22

*JR 12/8/22

Date: 12/8/22 @ 11:23	
Analyst: JR	
Instrument: #4	
Inst. File Name: 420221208O1.CNV	

Prep Batchs:	388287/8
Analytical Batch:	92049
Calibration Date:	~~12/6/22~~ 12/8/22
Pump pressure:	9.73

Vial lot#	720370-F23497
Cap lot#	—
Syringe lot#	—
Filter lot#	—

Standards	
ICAL:	ICV142446
ICV:	↓ 5
CCV:	ICV142447
QC:	↓ 5

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed ①F	Cl	NO2	Br	NO3	SO4	Comments
Rinse	-	-	-	-														
CCV stdA	-	AQ	-	1	N													① OK unless marked
MB1 stdB	-		-															Calibration
B1 stdC	-		-															
Std D	N/A		N/A															
E																		
F																		
G																		
H																		
I																		
J																		
K																		
ICV																		
ICB																		
CCV1																		
CCV																		
CCV3																		
CCV																		
CCV3																		
MB1																		
B1	↓		↓															
FC1116-1	10		529															
-1S1	↓		↓															
-1S2	↓		↓															
-2	13		262															
-3	10		127															
-4	11		651	↓		↓	↓	↓	↓	↓	↓							
FC1124-1	7		107	10														
↓ -2	↓	↓	433	1	↓													

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12/8/22 (10mL)
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
CW	-	AQ	-	1	N													
CWB	-		-															
FC1124-3	12		1682µS															
FC1123-1	13		1050µS	10														
-153																		
-154																		
FC1109-1	6		6044µS	1														
-2			227µS															
-3			2272µS	10														
-4			161µS	1														
-5			41mS	85														
-6			1946µS	10														
CW	-		-	1														
CWB	-		-															
FC1109-7	6		25mS	500														
FC1121-1	8		3mS	25														
FC1049-2	4		534µS	5														
-3			508µS															
-7			2mS	25														
-8			450µS	5														
MB1	-		-	1														
B1	-		-									F↑						
FC1010-1	35		1076µS									RR						
-151																		
CW	-		-															
CWB	-		-															
FC1010-152	35		1276µS									R1						
-2	12		1616µS															

IC Instrument Log

Method: EPA300.0 / SW846 9056A (circle one)

Date:	12/8/22 (cont.)
Analyst:	
Instrument:	
Inst. File Name:	

Prep Batchs:	
Analytical Batch:	
Calibration Date:	
Pump pressure:	

Vial lot#	
Cap lot#	
Syringe lot#	
Filter lot#	

Standards	
ICAL:	
ICV:	
CCV:	
QC:	

Sample#	Bot#	Matrix	Scon	DF	Filter (y/n)	Ions Needed F	Cl	NO2	Br	NO3	SO4	Results OK or Dilution Needed F	Cl	NO2	Br	NO3	SO4	Comments
FC1010-5	18	AQ	400uS	1	N	—						ee						
↓ -6	↓		502uS	↓		—						↓						
FC1019-6	4		1899uS	25							—							
-6S3			↓	↓		—			—		—							
-6S4			↓	↓		—			—		—							
-9			506uS	5							—							
-10			916uS	↓							—							
-11	↓		1515uS	25							—							DNR → Did not run
QLN	-		-	1		—	—		—		—	FT						↓
CLB	-		-	↓		—	—		—		—							
FC1135-1	18		582uS	1		—	—		—		—							DNR → Did not run
FC1142-3	21	↓	914uS	5	↓						—							↓

JR 12/9/22

MagIC Net

2022-12-09 9:53:24

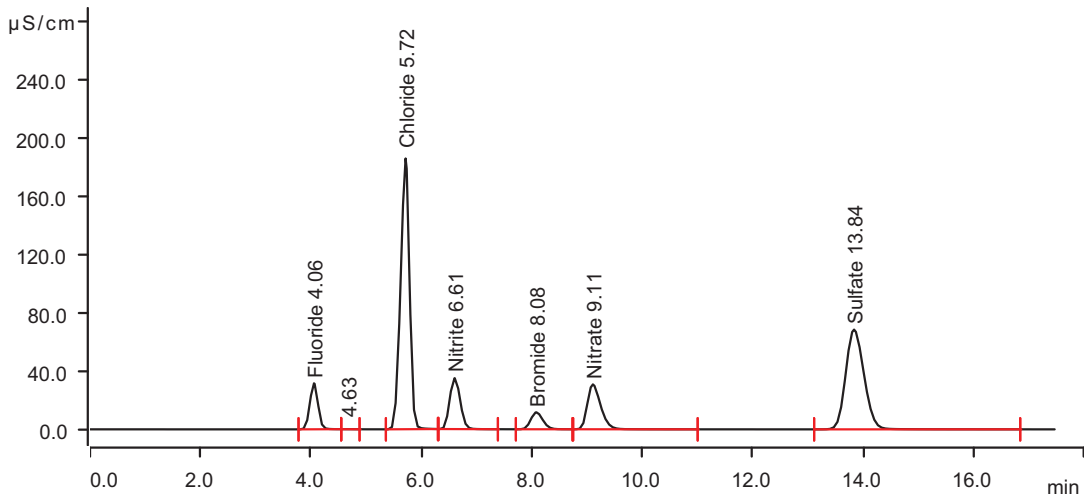
Sample data

Ident	STDK
Sample type	Standard 10
Determination start	2022-12-08 15:14:18 UTC-5
Method	SGS In-Vial Anions191003A
Operator	JR

Anions

Data source	Conductivity detector 1 (930 Compact IC Flex 1)	
Channel	Conductivity	
Recording time	17.5	min
Integration	Automatically	
Column type	Metrosep A Supp 5 - 150/4.0	
Eluent composition	not defined	
Flow	0.700	mL/min
Maximum flow monitored	yes	
Pressure	9.51	MPa
Maximum pressure monitored	yes	
Temperature	30.0	°C

Anions

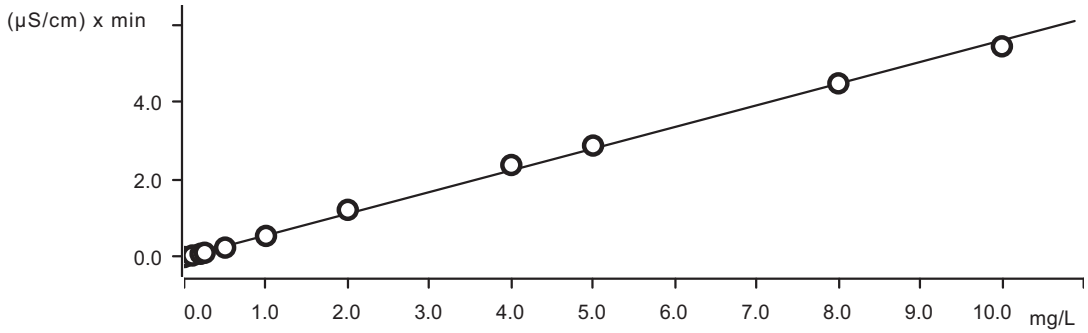


Peak number	Retention time min	Area (µS/cm) x min	Height µS/cm	Concentration mg/L	Component name
1	4.057	5.4347	31.534	9.722	Fluoride
2	4.632	0.0048	0.024	invalid	
3	5.715	34.7879	185.718	98.995	Chloride
4	6.605	7.7415	34.916	9.764	Nitrite
5	8.083	2.9645	11.649	20.332	Bromide
6	9.107	8.6031	30.782	10.055	Nitrate
7	13.835	26.2433	68.430	99.641	Sulfate

MagIC Net

2022-12-09 9:53:24

Fluoride (Anions)



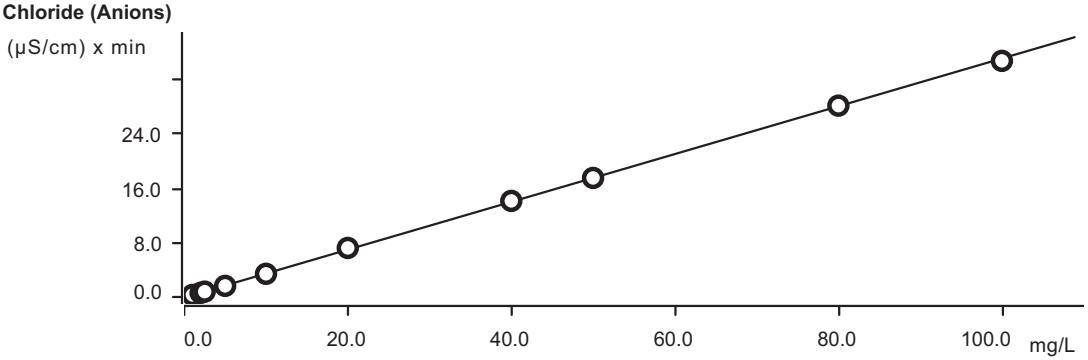
Function: . . . . . *A = 2.31582E-6 + 0.0279509× Q*

Relative standard deviation . . . . . *5.293658 %*

Correlation coefficient *0.999165*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	0.0006	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0405	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.0845	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.1108	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.2437	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.5456	STDF	2022-12-08 13:31:37 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	1.2180	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	2.3746	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	2.8755	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	4.4805	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	5.4347	STDK	2022-12-08 15:14:18 UTC-5

Chloride (Anions)



MagIC Net

2022-12-09 9:53:24

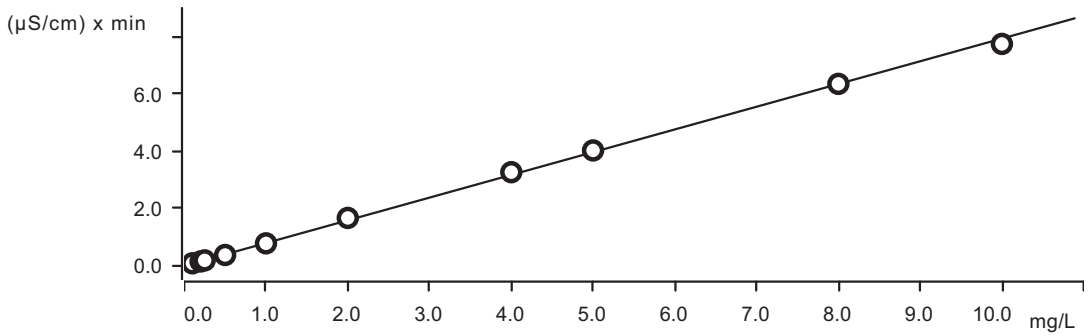
Function: . . . . . *A = - 0.0793457 + 0.0176105× Q*

Relative standard deviation . . . . . *1.537074 %*

Correlation coefficient *0.999920*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	1.000	20.0	1.0	1.0	0.2971	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	2.000	20.0	1.0	1.0	0.5989	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	2.500	20.0	1.0	1.0	0.7750	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	5.000	20.0	1.0	1.0	1.6297	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	10.000	20.0	1.0	1.0	3.4075	STDF	2022-12-08 13:31:37 UTC-5
Standard 6	1	20.000	20.0	1.0	1.0	7.2169	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	40.000	20.0	1.0	1.0	14.1491	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	50.000	20.0	1.0	1.0	17.5353	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	80.000	20.0	1.0	1.0	28.1906	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	100.000	20.0	1.0	1.0	34.7879	STDK	2022-12-08 15:14:18 UTC-5

Nitrite (Anions)



Function: . . . . . *A = - 0.0242312 + 0.0397660× Q*

Relative standard deviation . . . . . *3.402278 %*

Correlation coefficient *0.999606*

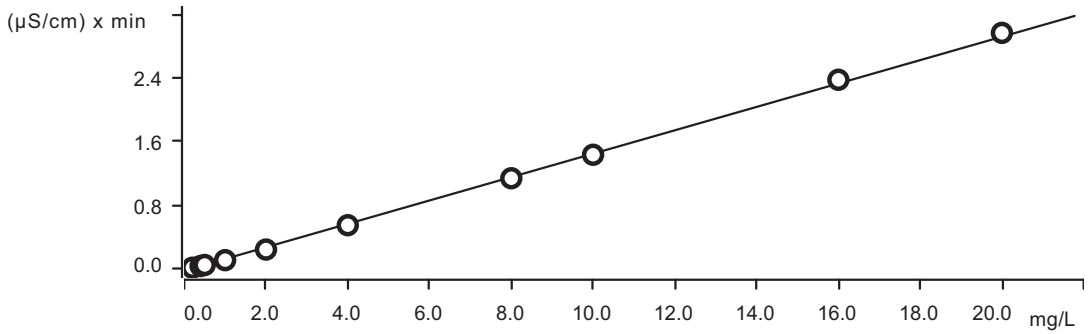
Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0625	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.1272	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.1652	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.3534	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.7606	STDF	2022-12-08 13:31:37 UTC-5

MagIC Net

2022-12-09 9:53:24

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 6	1	2.000	20.0	1.0	1.0	1.6501	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	3.2513	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	4.0128	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	6.3432	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	7.7415	STDK	2022-12-08 15:14:18 UTC-5

Bromide (Anions)



Function: . . . . . *A = - 0.0140526 + 7.32479E-3× Q*

Relative standard deviation . . . . . *3.151192 %*

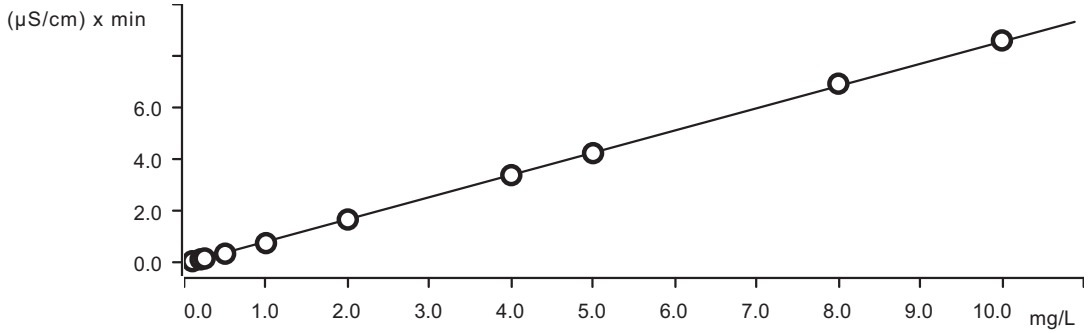
Correlation coefficient *0.999686*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	0.200	20.0	1.0	1.0	0.0224	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	0.400	20.0	1.0	1.0	0.0442	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	0.500	20.0	1.0	1.0	0.0566	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	1.000	20.0	1.0	1.0	0.1171	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	2.000	20.0	1.0	1.0	0.2500	STDF	2022-12-08 13:31:37 UTC-5
Standard 6	1	4.000	20.0	1.0	1.0	0.5549	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	8.000	20.0	1.0	1.0	1.1431	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	10.000	20.0	1.0	1.0	1.4376	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	16.000	20.0	1.0	1.0	2.3768	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	20.000	20.0	1.0	1.0	2.9645	STDK	2022-12-08 15:14:18 UTC-5

MagIC Net

2022-12-09 9:53:24

Nitrate (Anions)



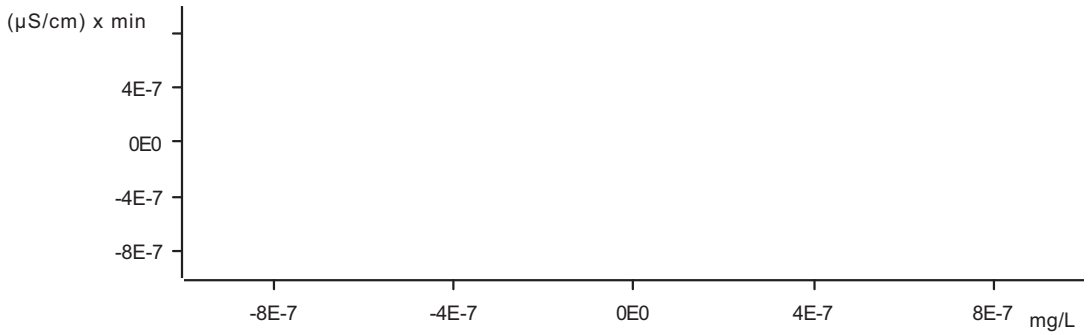
Function: . . . . . *A = - 0.0385421 + 0.0429716× Q*

Relative standard deviation . . . . . *1.735208 %*

Correlation coefficient *0.999903*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	0.0622	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	0.1337	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	0.1663	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	0.3525	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	0.7605	STDF	2022-12-08 13:31:37 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	1.6745	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	3.3910	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	4.2415	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	6.9296	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	8.6031	STDK	2022-12-08 15:14:18 UTC-5

Phosphate (Anions)



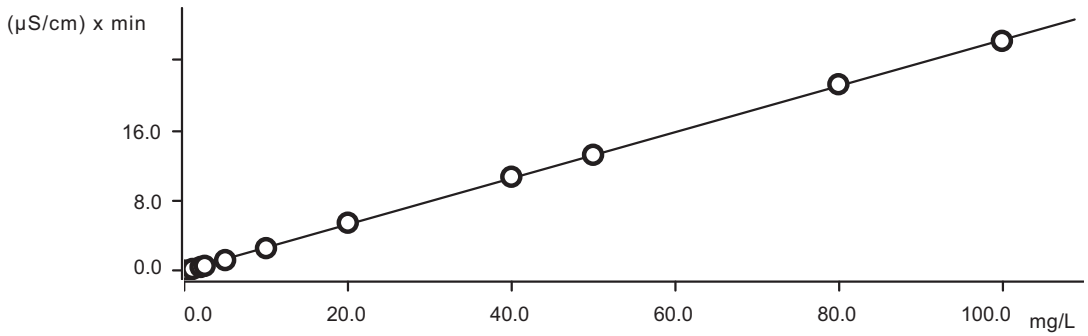
Function: . . . . . .

Relative standard deviation . . . . . *invalid %*

Correlation coefficient . . . . . *invalid*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	n. d.	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	0.100	20.0	1.0	1.0	n. d.	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	0.200	20.0	1.0	1.0	n. d.	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	0.250	20.0	1.0	1.0	n. d.	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	0.500	20.0	1.0	1.0	n. d.	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	1.000	20.0	1.0	1.0	n. d.	STDF	2022-12-08 13:31:37 UTC-5
Standard 6	1	2.000	20.0	1.0	1.0	n. d.	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	4.000	20.0	1.0	1.0	n. d.	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	5.000	20.0	1.0	1.0	n. d.	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	8.000	20.0	1.0	1.0	n. d.	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	10.000	20.0	1.0	1.0	n. d.	STDK	2022-12-08 15:14:18 UTC-5

Sulfate (Anions)



Function: . . . . . *A = 2.96329E-4 + 0.0131688× Q*

Relative standard deviation . . . . . *1.929724 %*

Correlation coefficient *0.999892*

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 100	1	0.000	20.0	1.0	1.0	0.0037	STDA	2022-12-08 11:48:55 UTC-5
Standard 1	1	1.000	20.0	1.0	1.0	0.1877	STDB	2022-12-08 12:09:30 UTC-5
Standard 2	1	2.000	20.0	1.0	1.0	0.4176	STDC	2022-12-08 12:30:03 UTC-5
Standard 3	1	2.500	20.0	1.0	1.0	0.5488	STDD	2022-12-08 12:50:34 UTC-5
Standard 4	1	5.000	20.0	1.0	1.0	1.2041	STDE	2022-12-08 13:11:06 UTC-5
Standard 5	1	10.000	20.0	1.0	1.0	2.5690	STDF	2022-12-08 13:31:37 UTC-5

MagIC Net

2022-12-09 9:53:24

Sample type	Index	Conc.	Volume	Dilution	Sample amount	Area	Ident	Date
Standard 6	1	20.000	20.0	1.0	1.0	5.4735	STDG	2022-12-08 13:52:09 UTC-5
Standard 7	1	40.000	20.0	1.0	1.0	10.7228	STDH	2022-12-08 14:12:40 UTC-5
Standard 8	1	50.000	20.0	1.0	1.0	13.2313	STDI	2022-12-08 14:33:14 UTC-5
Standard 9	1	80.000	20.0	1.0	1.0	21.2909	STDJ	2022-12-08 14:53:45 UTC-5
Standard 10	1	100.000	20.0	1.0	1.0	26.2433	STDK	2022-12-08 15:14:18 UTC-5

MagIC Net

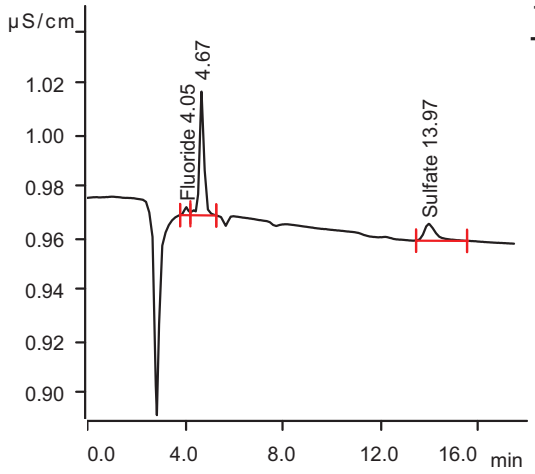
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDA
Sample type . . . . . Standard 100
Determination start 2022-12-08 11:48:55
Dilution factor 1.00

Anions

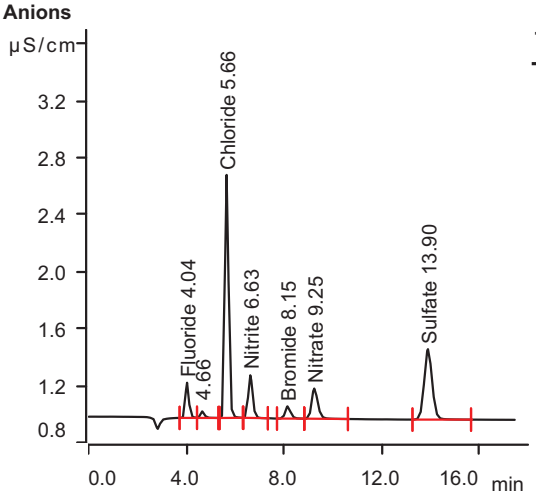


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0006	0.001	0.001
13.97	Sulfate	0.0037	0.013	0.013

Sample data

Ident . . . . . STDB
Sample type . . . . . Standard 1
Determination start 2022-12-08 12:09:30
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0405	0.072	0.072
5.66	Chloride	0.2971	1.069	1.069
6.63	Nitrite	0.0625	0.109	0.109
8.15	Bromide	0.0224	0.249	0.249
9.25	Nitrate	0.0622	0.117	0.117
13.90	Sulfate	0.1877	0.711	0.711

MagIC Net

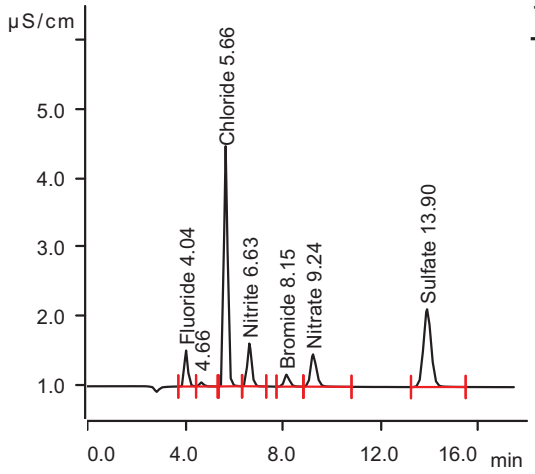
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDC
Sample type . . . . . Standard 2
Determination start 2022-12-08 12:30:03
Dilution factor 1.00

Anions

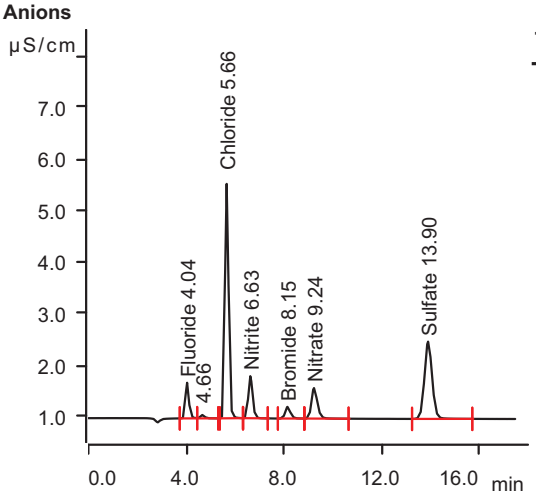


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0845	0.151	0.151
5.66	Chloride	0.5989	1.926	1.926
6.63	Nitrite	0.1272	0.190	0.190
8.15	Bromide	0.0442	0.398	0.398
9.24	Nitrate	0.1337	0.200	0.200
13.90	Sulfate	0.4176	1.584	1.584

Sample data

Ident . . . . . STDD
Sample type . . . . . Standard 3
Determination start 2022-12-08 12:50:34
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.1108	0.198	0.198
5.66	Chloride	0.7750	2.426	2.426
6.63	Nitrite	0.1652	0.238	0.238
8.15	Bromide	0.0566	0.482	0.482
9.24	Nitrate	0.1663	0.238	0.238
13.90	Sulfate	0.5488	2.083	2.083

MagIC Net

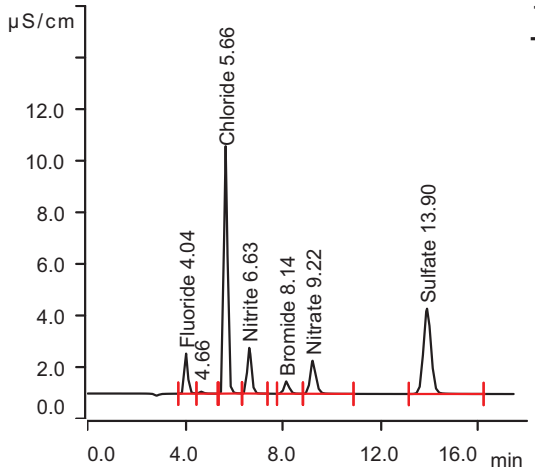
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDE
Sample type . . . . . Standard 4
Determination start 2022-12-08 13:11:06
Dilution factor 1.00

Anions

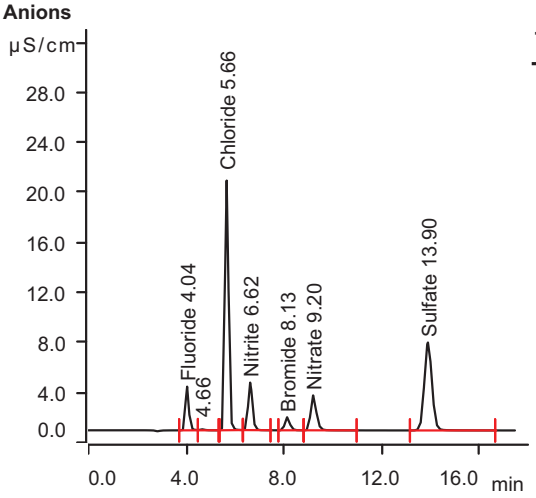


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.2437	0.436	0.436
5.66	Chloride	1.6297	4.852	4.852
6.63	Nitrite	0.3534	0.475	0.475
8.14	Bromide	0.1171	0.895	0.895
9.22	Nitrate	0.3525	0.455	0.455
13.90	Sulfate	1.2041	4.571	4.571

Sample data

Ident . . . . . STDF
Sample type . . . . . Standard 5
Determination start 2022-12-08 13:31:37
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.5456	0.976	0.976
5.66	Chloride	3.4075	9.900	9.900
6.62	Nitrite	0.7606	0.987	0.987
8.13	Bromide	0.2500	1.802	1.802
9.20	Nitrate	0.7605	0.930	0.930
13.90	Sulfate	2.5690	9.753	9.753

MagIC Net

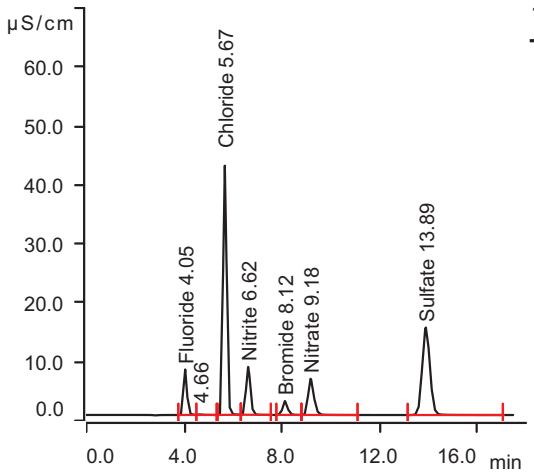
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDG
Sample type . . . . . Standard 6
Determination start 2022-12-08 13:52:09
Dilution factor 1.00

Anions

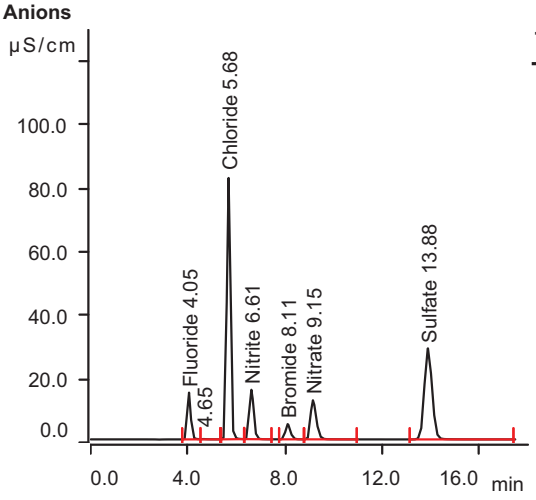


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	1.2180	2.179	2.179
5.67	Chloride	7.2169	20.716	20.716
6.62	Nitrite	1.6501	2.105	2.105
8.12	Bromide	0.5549	3.884	3.884
9.18	Nitrate	1.6745	1.993	1.993
13.89	Sulfate	5.4735	20.781	20.781

Sample data

Ident . . . . . STDH
Sample type . . . . . Standard 7
Determination start 2022-12-08 14:12:40
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	2.3746	4.248	4.248
5.68	Chloride	14.1491	40.397	40.397
6.61	Nitrite	3.2513	4.119	4.119
8.11	Bromide	1.1431	7.899	7.899
9.15	Nitrate	3.3910	3.990	3.990
13.88	Sulfate	10.7228	40.712	40.712

MagIC Net

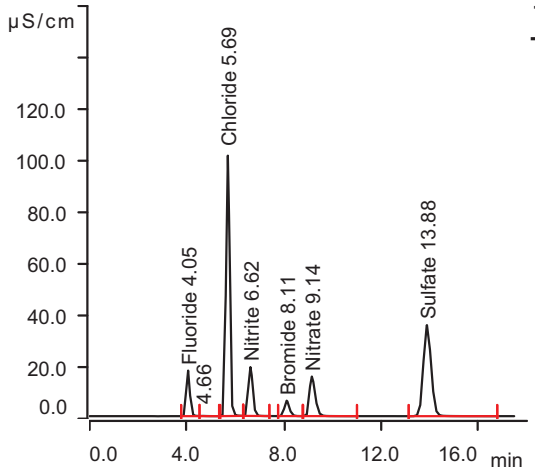
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDI
Sample type . . . . . Standard 8
Determination start 2022-12-08 14:33:14
Dilution factor 1.00

Anions

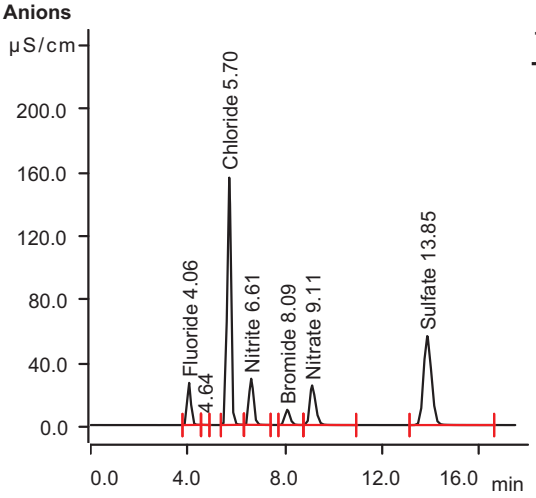


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	2.8755	5.144	5.144
5.69	Chloride	17.5353	50.012	50.012
6.62	Nitrite	4.0128	5.076	5.076
8.11	Bromide	1.4376	9.909	9.909
9.14	Nitrate	4.2415	4.980	4.980
13.88	Sulfate	13.2313	50.236	50.236

Sample data

Ident . . . . . STDJ
Sample type . . . . . Standard 9
Determination start 2022-12-08 14:53:45
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.06	Fluoride	4.4805	8.015	8.015
5.70	Chloride	28.1906	80.264	80.264
6.61	Nitrite	6.3432	8.006	8.006
8.09	Bromide	2.3768	16.320	16.320
9.11	Nitrate	6.9296	8.108	8.108
13.85	Sulfate	21.2909	80.837	80.837

MagIC Net

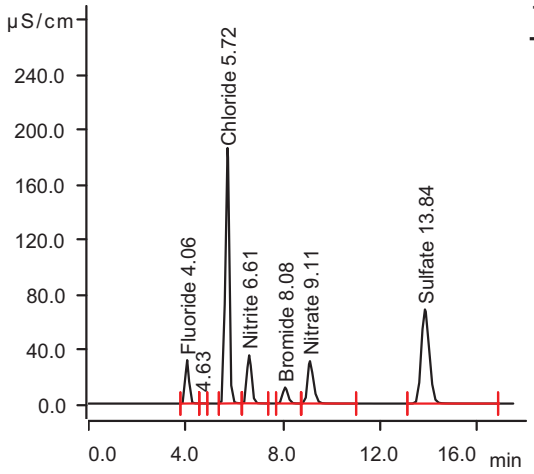
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . STDK
Sample type . . . . . Standard 10
Determination start 2022-12-08 15:14:18
Dilution factor 1.00

Anions

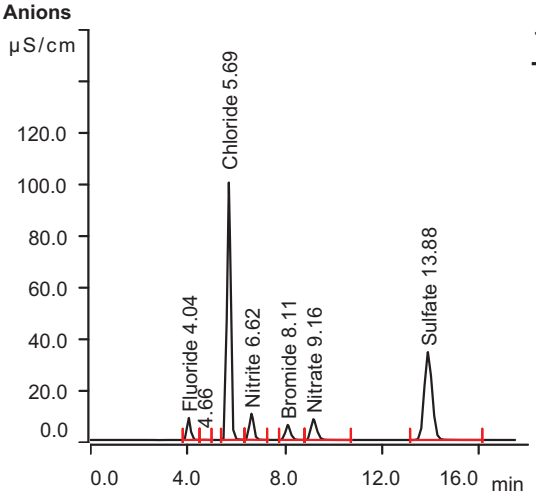


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.06	Fluoride	5.4347	9.722	9.722
5.72	Chloride	34.7879	98.995	98.995
6.61	Nitrite	7.7415	9.764	9.764
8.08	Bromide	2.9645	20.332	20.332
9.11	Nitrate	8.6031	10.055	10.055
13.84	Sulfate	26.2433	99.641	99.641

Sample data

Ident ICV
Sample type . . . . . Sample
Determination start 2022-12-08 15:42:22
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.3367	2.391	2.391
5.69	Chloride	17.4055	49.643	49.643
6.62	Nitrite	2.0666	2.629	2.629
8.11	Bromide	1.4043	9.682	9.682
9.16	Nitrate	2.2293	2.639	2.639
13.88	Sulfate	12.8856	48.924	48.924

MagIC Net

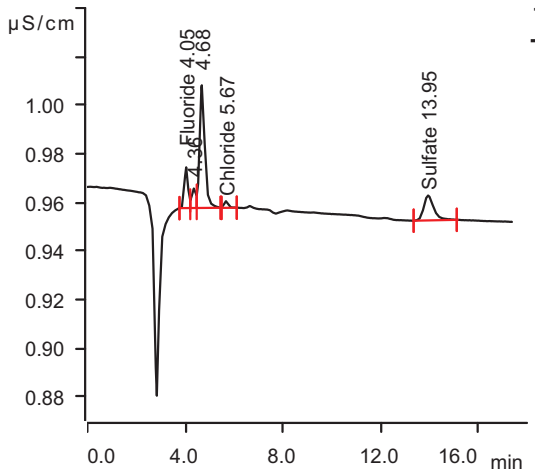
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident . . . . . ICB
Sample type . . . . . Sample
Determination start 2022-12-08 16:02:53
Dilution factor 1.00

Anions

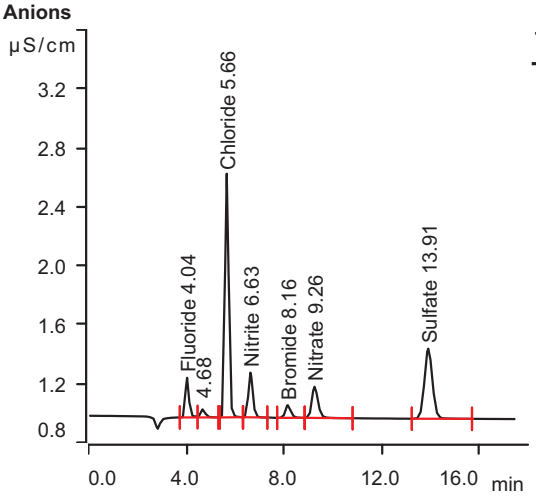


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0029	0.005	0.005
5.67	Chloride	0.0005	0.227	0.227
13.95	Sulfate	0.0049	0.017	0.017

Sample data

Ident . . . . . CRI
Sample type . . . . . Sample
Determination start 2022-12-08 16:23:24
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0445	0.080	0.080
5.66	Chloride	0.2875	1.042	1.042
6.63	Nitrite	0.0634	0.110	0.110
8.16	Bromide	0.0225	0.249	0.249
9.26	Nitrate	0.0622	0.117	0.117
13.91	Sulfate	0.1816	0.688	0.688

MagIC Net

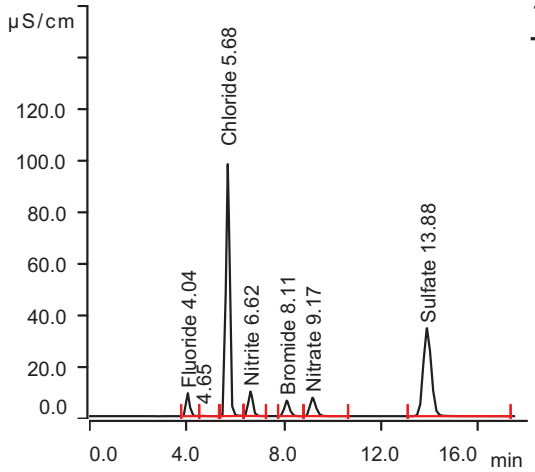
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-08 16:43:56
Dilution factor 1.00

Anions

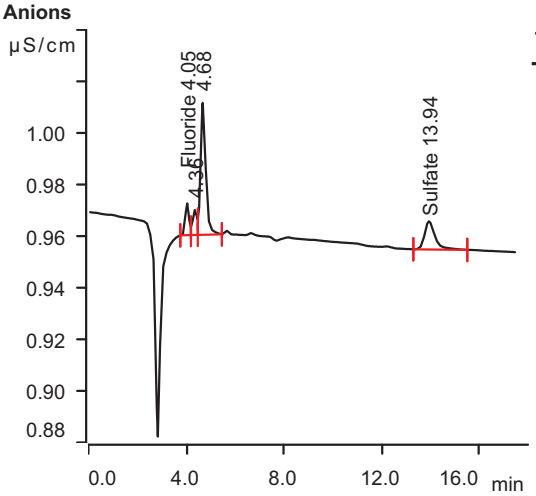


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.4480	2.590	2.590
5.68	Chloride	17.1457	48.906	48.906
6.62	Nitrite	1.9561	2.490	2.490
8.11	Bromide	1.4621	10.076	10.076
9.17	Nitrate	1.9883	2.358	2.358
13.88	Sulfate	13.1282	49.844	49.844

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-08 17:04:33
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0021	0.004	0.004
13.94	Sulfate	0.0055	0.020	0.020

MagIC Net

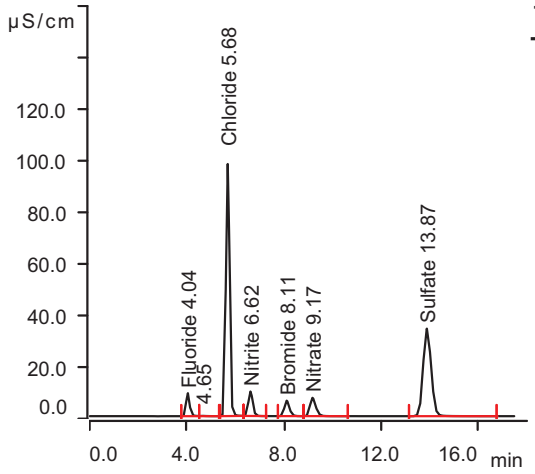
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-08 17:25:04
Dilution factor 1.00

Anions

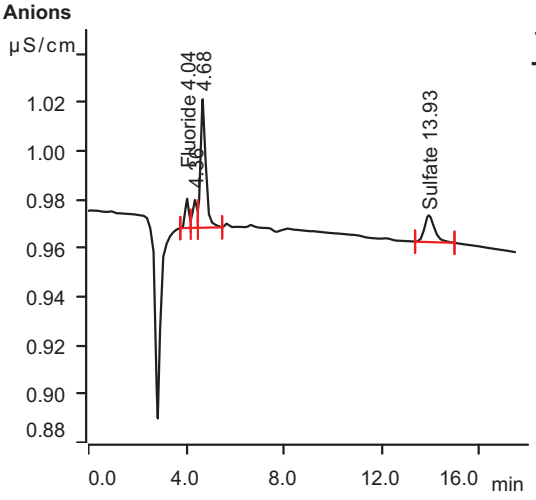


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.4499	2.594	2.594
5.68	Chloride	17.1463	48.907	48.907
6.62	Nitrite	1.9570	2.491	2.491
8.11	Bromide	1.4611	10.070	10.070
9.17	Nitrate	1.9870	2.357	2.357
13.87	Sulfate	13.1272	49.841	49.841

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-08 17:45:36
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0020	0.004	0.004
13.93	Sulfate	0.0053	0.019	0.019

MagIC Net

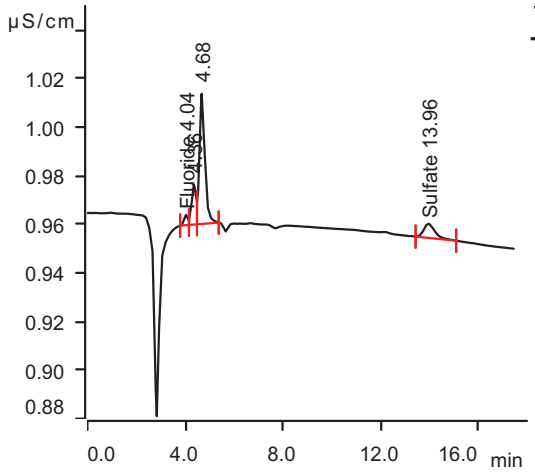
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident MB1
Sample type . . . . . Sample
Determination start 2022-12-08 18:06:08
Dilution factor 1.00

Anions

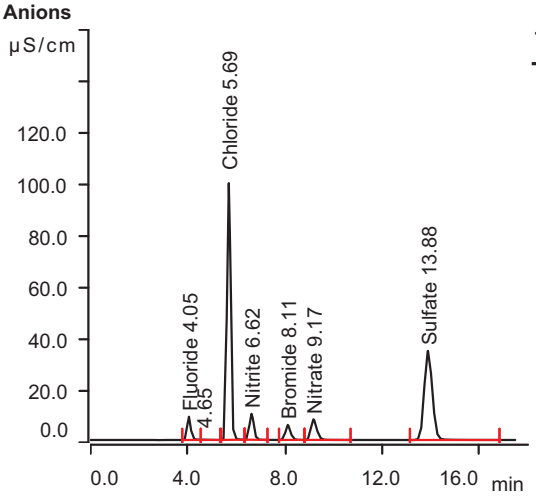


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0007	0.001	0.001
13.96	Sulfate	0.0031	0.011	0.011

Sample data

Ident B1
Sample type . . . . . Sample
Determination start 2022-12-08 18:26:45
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	1.4963	2.677	2.677
5.69	Chloride	17.5048	49.925	49.925
6.62	Nitrite	2.0828	2.649	2.649
8.11	Bromide	1.4102	9.722	9.722
9.17	Nitrate	2.2350	2.645	2.645
13.88	Sulfate	13.4192	50.949	50.949

MagIC Net

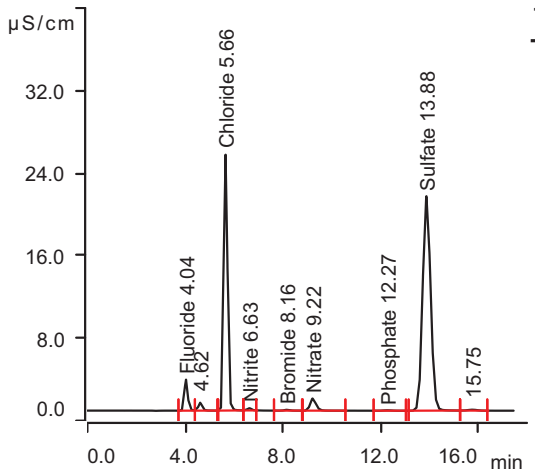
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1116-1
Sample type . . . . . Sample
Determination start 2022-12-08 18:47:15
Dilution factor 1.00

Anions

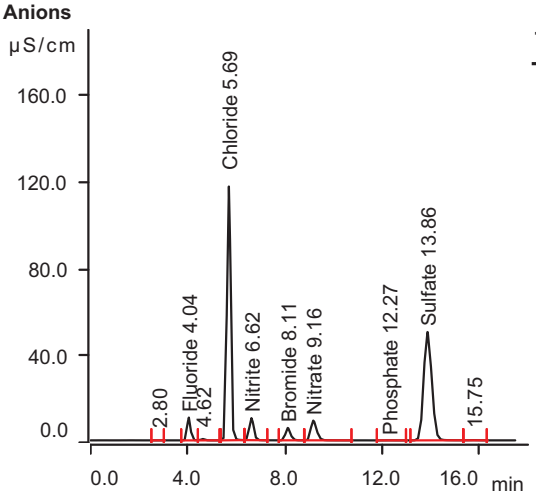


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.4767	0.853	0.853
5.66	Chloride	4.3559	12.592	12.592
6.63	Nitrite	0.0431	0.085	0.085
8.16	Bromide	0.0207	0.237	0.237
9.22	Nitrate	0.3330	0.432	0.432
12.27	Phosphate	0.0151	invalid	invalid
13.88	Sulfate	7.9069	30.020	30.020

Sample data

Ident FC1116-1S1
Sample type . . . . . Sample
Determination start 2022-12-08 19:07:47
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.6959	3.034	3.034
5.69	Chloride	21.0030	59.857	59.857
6.62	Nitrite	2.1250	2.702	2.702
8.11	Bromide	1.3750	9.482	9.482
9.16	Nitrate	2.5600	3.024	3.024
12.27	Phosphate	0.0114	invalid	invalid
13.86	Sulfate	19.3784	73.576	73.576

MagIC Net

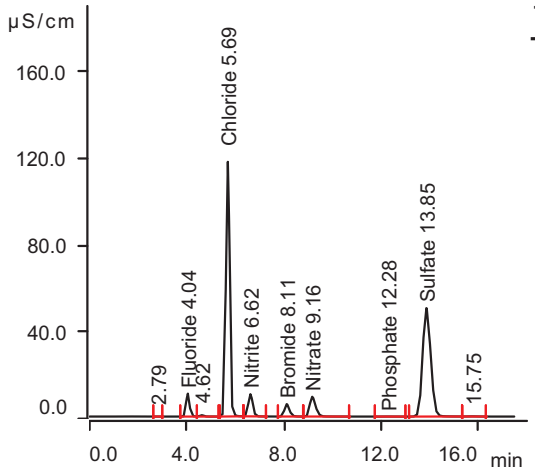
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1116-1S2
Sample type . . . . . Sample
Determination start 2022-12-08 19:28:21
Dilution factor 1.00

Anions

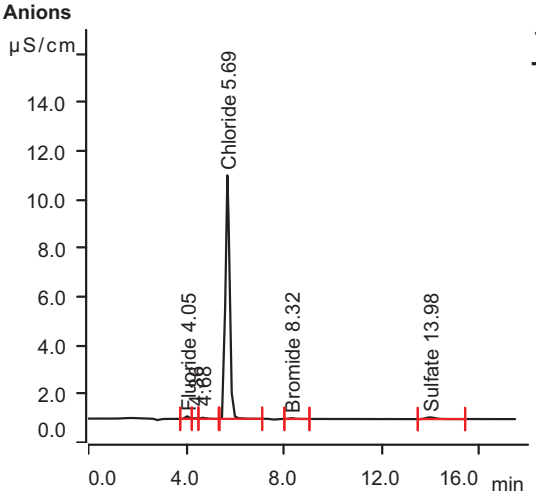


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.6964	3.035	3.035
5.69	Chloride	21.0075	59.870	59.870
6.62	Nitrite	2.1317	2.711	2.711
8.11	Bromide	1.3762	9.490	9.490
9.16	Nitrate	2.5616	3.025	3.025
12.28	Phosphate	0.0108	invalid	invalid
13.85	Sulfate	19.3804	73.583	73.583

Sample data

Ident FC1116-2
Sample type . . . . . Sample
Determination start 2022-12-08 19:48:54
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0187	0.034	0.034
5.69	Chloride	1.9403	5.734	5.734
8.32	Bromide	0.0074	0.146	0.146
13.98	Sulfate	0.0322	0.121	0.121

MagIC Net

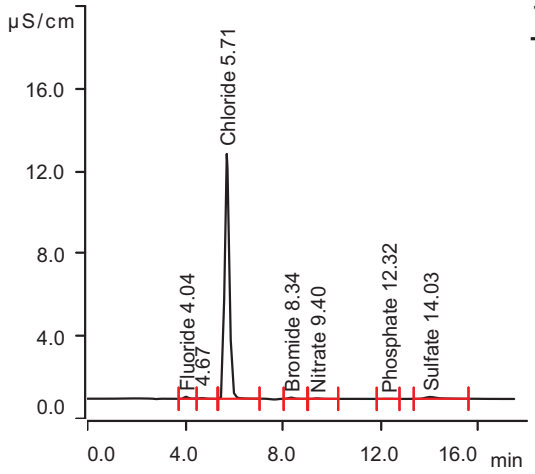
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1116-3
Sample type . . . . . Sample
Determination start 2022-12-08 20:09:23
Dilution factor 1.00

Anions

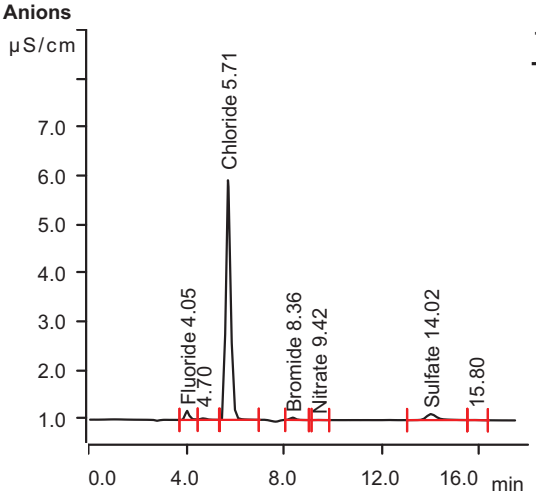


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0210	0.038	0.038
5.71	Chloride	2.5980	7.602	7.602
8.34	Bromide	0.0146	0.196	0.196
9.40	Nitrate	0.0071	0.053	0.053
12.32	Phosphate	0.0022	invalid	invalid
14.03	Sulfate	0.0546	0.206	0.206

Sample data

Ident FC1116-4
Sample type . . . . . Sample
Determination start 2022-12-08 20:29:54
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0364	0.065	0.065
5.71	Chloride	1.1370	3.453	3.453
8.36	Bromide	0.0121	0.179	0.179
9.42	Nitrate	0.0007	0.046	0.046
14.02	Sulfate	0.0641	0.242	0.242

MagIC Net

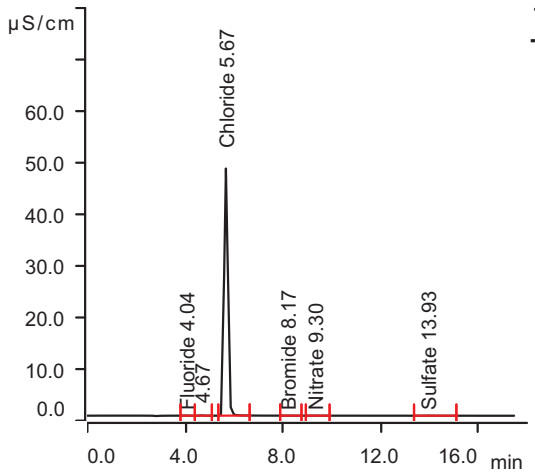
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1124-1
Sample type . . . . . Sample
Determination start 2022-12-08 20:50:27
Dilution factor 10.00

Anions

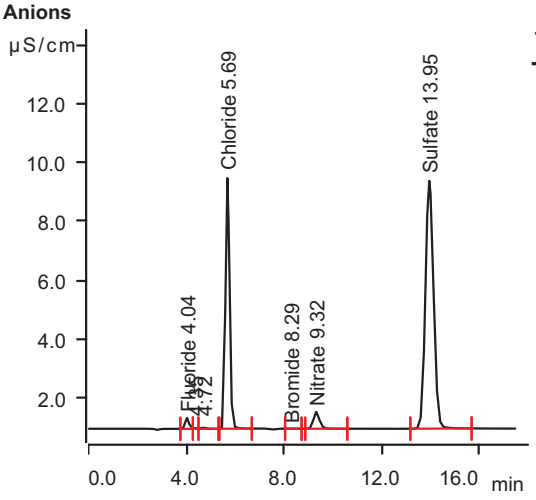


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0055	0.010	0.098
5.67	Chloride	8.3661	23.978	239.784
8.17	Bromide	0.0011	0.104	1.037
9.30	Nitrate	0.0022	0.047	0.474
13.93	Sulfate	0.0084	0.031	0.307

Sample data

Ident FC1124-2
Sample type . . . . . Sample
Determination start 2022-12-08 21:10:43
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0626	0.112	0.112
5.69	Chloride	1.6243	4.837	4.837
8.29	Bromide	0.0007	0.101	0.101
9.32	Nitrate	0.1646	0.236	0.236
13.95	Sulfate	3.2603	12.378	12.378

MagIC Net

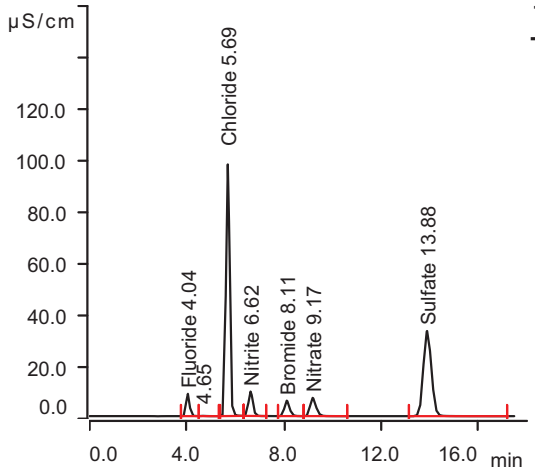
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-08 21:31:20
Dilution factor 1.00

Anions

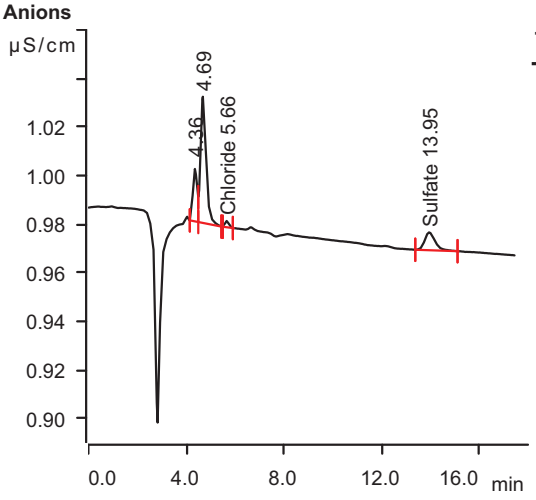


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.3651	2.442	2.442
5.69	Chloride	17.1725	48.982	48.982
6.62	Nitrite	1.9611	2.496	2.496
8.11	Bromide	1.4657	10.101	10.101
9.17	Nitrate	1.9942	2.365	2.365
13.88	Sulfate	12.8205	48.676	48.676

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-08 21:51:58
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.66	Chloride	0.0004	0.227	0.227
13.95	Sulfate	0.0037	0.013	0.013

MagIC Net

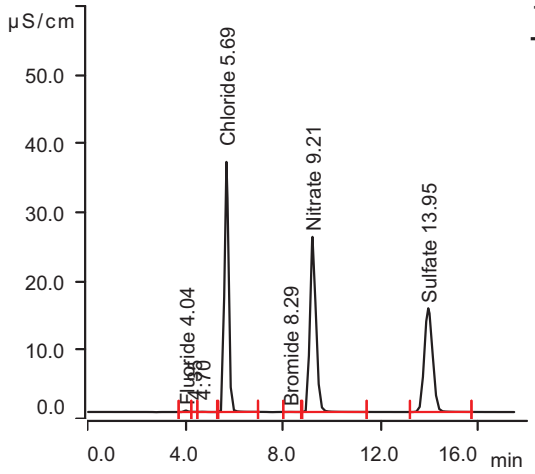
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1124-3
Sample type . . . . . Sample
Determination start 2022-12-08 22:12:29
Dilution factor 1.00

Anions

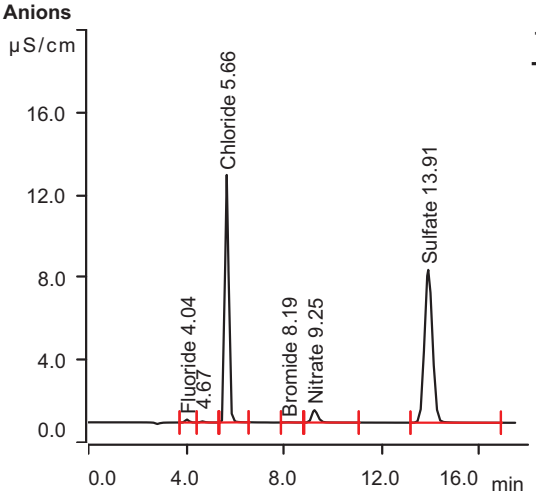


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0374	0.067	0.067
5.69	Chloride	7.0075	20.121	20.121
8.29	Bromide	0.0020	0.109	0.109
9.21	Nitrate	7.2946	8.533	8.533
13.95	Sulfate	5.9906	22.744	22.744

Sample data

Ident FC1123-1
Sample type . . . . . Sample
Determination start 2022-12-08 22:33:10
Dilution factor 10.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0239	0.043	0.427
5.66	Chloride	2.1101	6.216	62.163
8.19	Bromide	0.0024	0.112	1.124
9.25	Nitrate	0.1759	0.249	2.495
13.91	Sulfate	2.8416	10.788	107.881

MagIC Net

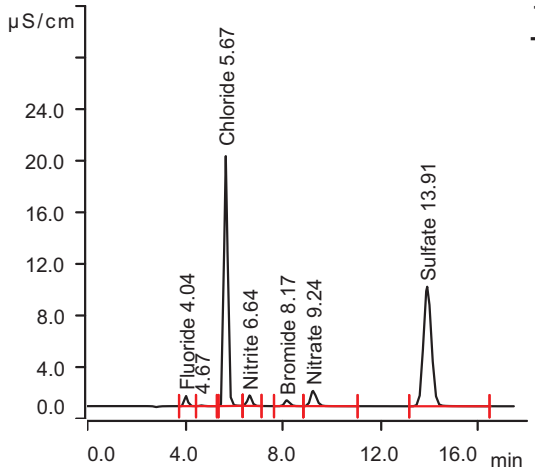
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1123-1S3
Sample type . . . . . Sample
Determination start 2022-12-08 22:53:26
Dilution factor 10.00

Anions

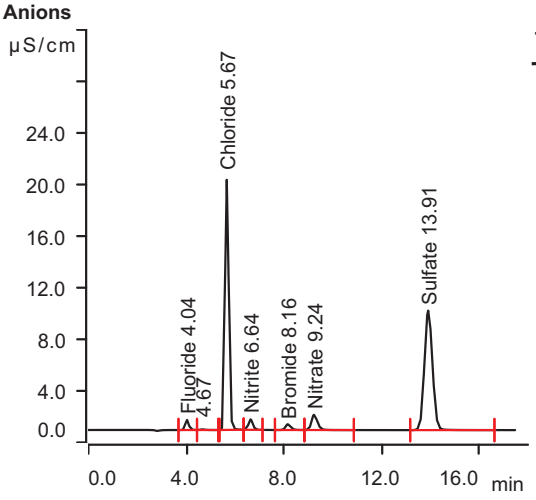


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.1246	0.223	2.229
5.67	Chloride	3.4128	9.915	99.150
6.64	Nitrite	0.1701	0.244	2.444
8.17	Bromide	0.1126	0.865	8.648
9.24	Nitrate	0.3375	0.438	4.375
13.91	Sulfate	3.5648	13.534	135.339

Sample data

Ident FC1123-1S4
Sample type . . . . . Sample
Determination start 2022-12-08 23:13:43
Dilution factor 10.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.1249	0.223	2.234
5.67	Chloride	3.4132	9.916	99.162
6.64	Nitrite	0.1694	0.243	2.435
8.16	Bromide	0.1125	0.864	8.637
9.24	Nitrate	0.3368	0.437	4.367
13.91	Sulfate	3.5691	13.550	135.502

MagIC Net

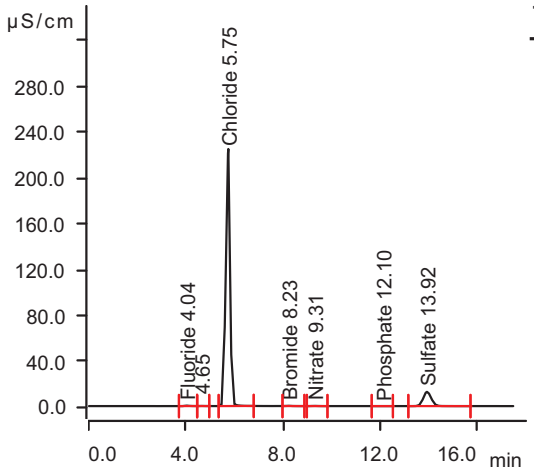
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1109-1
Sample type . . . . . Sample
Determination start 2022-12-08 23:33:58
Dilution factor 1.00

Anions

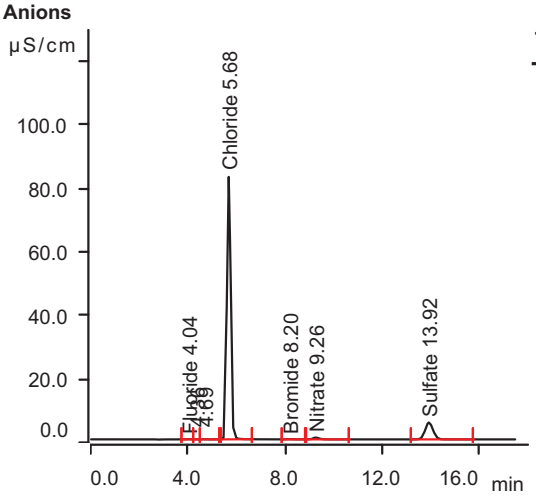


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0742	0.133	0.133
5.75	Chloride	45.5918	129.670	129.670
8.23	Bromide	0.0453	0.405	0.405
9.31	Nitrate	0.0362	0.087	0.087
12.10	Phosphate	0.0046	invalid	invalid
13.92	Sulfate	4.7971	18.213	18.213

Sample data

Ident FC1109-2
Sample type . . . . . Sample
Determination start 2022-12-08 23:54:36
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0122	0.022	0.022
5.68	Chloride	14.8026	42.253	42.253
8.20	Bromide	0.0148	0.197	0.197
9.26	Nitrate	0.1640	0.236	0.236
13.92	Sulfate	2.0336	7.720	7.720

MagIC Net

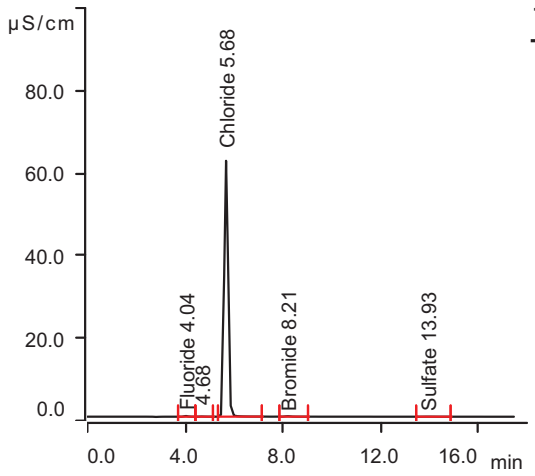
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1109-3
Sample type . . . . . Sample
Determination start 2022-12-09 00:15:06
Dilution factor 10.00

Anions

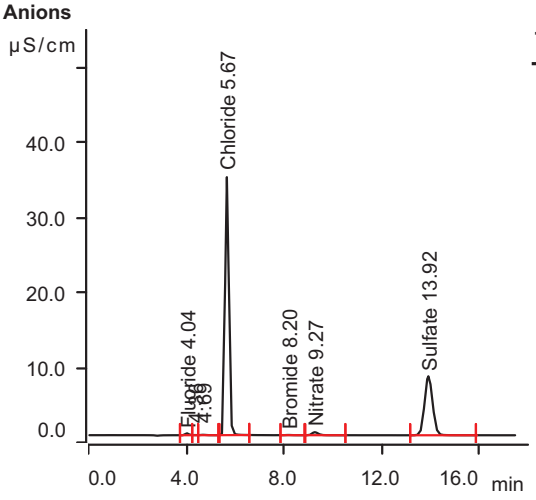


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0272	0.049	0.487
5.68	Chloride	11.1645	31.924	319.236
8.21	Bromide	0.0265	0.277	2.766
13.93	Sulfate	0.0078	0.028	0.284

Sample data

Ident FC1109-4
Sample type . . . . . Sample
Determination start 2022-12-09 00:35:22
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0415	0.074	0.074
5.67	Chloride	6.0646	17.444	17.444
8.20	Bromide	0.0074	0.146	0.146
9.27	Nitrate	0.1173	0.181	0.181
13.92	Sulfate	3.0122	11.436	11.436

MagIC Net

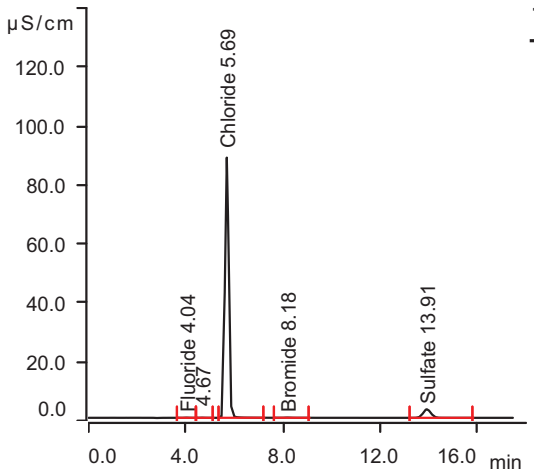
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1109-5
Sample type . . . . . Sample
Determination start 2022-12-09 00:55:59
Dilution factor 25.00

Anions

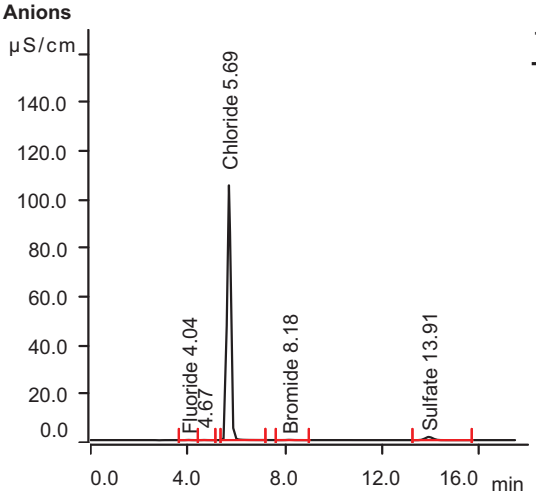


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0106	0.019	0.475
5.69	Chloride	15.6623	44.694	1117.348
8.18	Bromide	0.0199	0.231	5.786
13.91	Sulfate	1.0999	4.175	104.376

Sample data

Ident FC1109-6
Sample type . . . . . Sample
Determination start 2022-12-09 01:16:14
Dilution factor 10.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0135	0.024	0.242
5.69	Chloride	18.7157	53.363	533.632
8.18	Bromide	0.0253	0.268	2.684
13.91	Sulfate	0.5005	1.899	18.993

MagIC Net

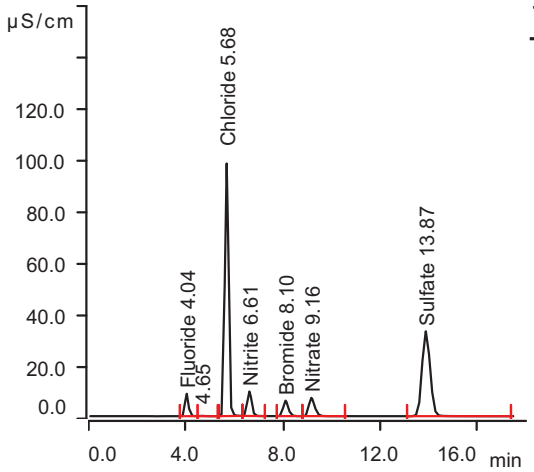
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-09 01:36:30
Dilution factor 1.00

Anions

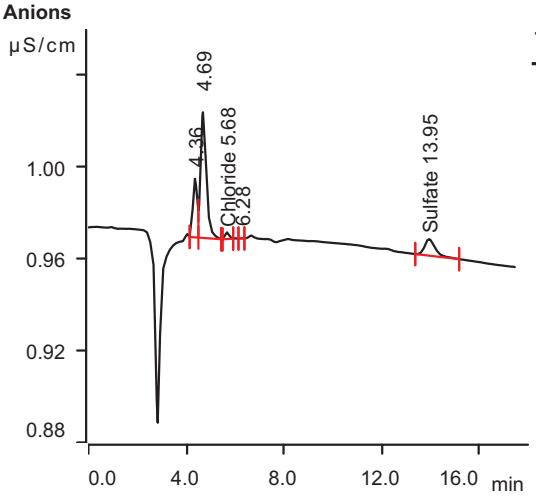


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.3697	2.450	2.450
5.68	Chloride	17.2106	49.090	49.090
6.61	Nitrite	1.9601	2.495	2.495
8.10	Bromide	1.4677	10.115	10.115
9.16	Nitrate	1.9972	2.369	2.369
13.87	Sulfate	12.8505	48.790	48.790

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-09 01:57:05
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.68	Chloride	0.0005	0.227	0.227
13.95	Sulfate	0.0036	0.013	0.013

MagIC Net

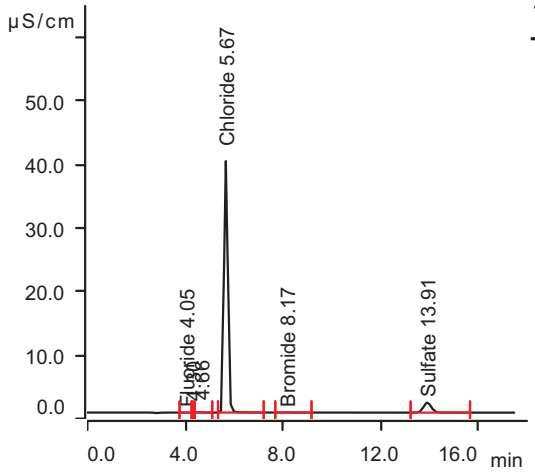
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1109-7
Sample type . . . . . Sample
Determination start 2022-12-09 02:17:37
Dilution factor 500.00

Anions

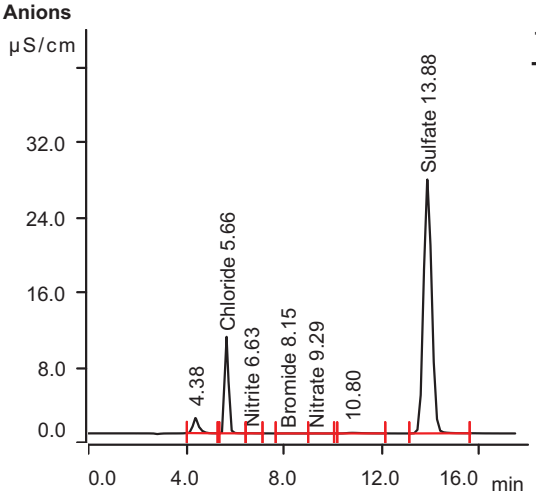


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0005	0.001	0.474
5.67	Chloride	6.9178	19.866	9933.245
8.17	Bromide	0.0082	0.152	76.072
13.91	Sulfate	0.5984	2.271	1135.419

Sample data

Ident FC1121-1
Sample type . . . . . Sample
Determination start 2022-12-09 02:37:53
Dilution factor 25.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
5.66	Chloride	1.7774	5.272	131.792
6.63	Nitrite	0.0025	0.034	0.840
8.15	Bromide	0.0023	0.112	2.790
9.29	Nitrate	0.0013	0.046	1.160
13.88	Sulfate	10.4787	39.785	994.624

MagIC Net

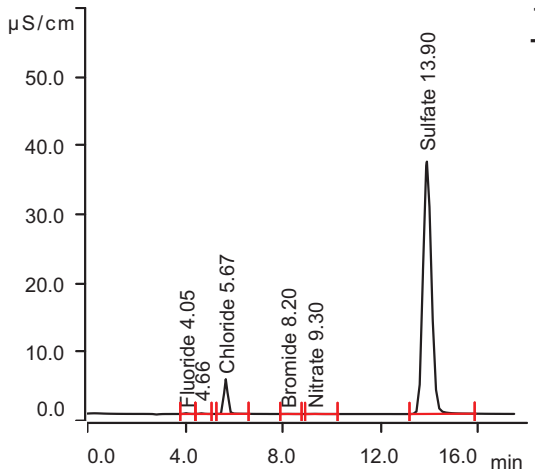
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1069-2
Sample type . . . . . Sample
Determination start 2022-12-09 02:58:08
Dilution factor 5.00

Anions

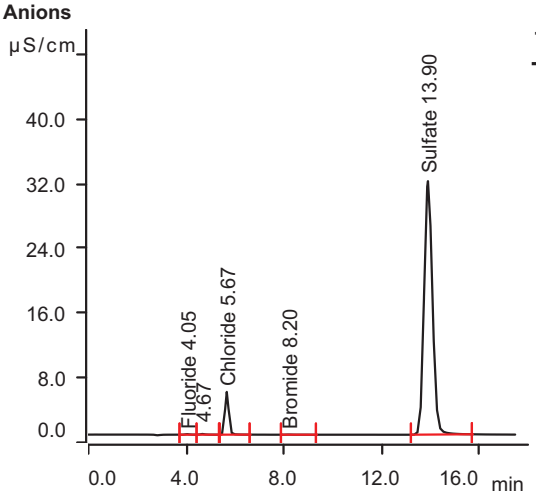


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0182	0.032	0.162
5.67	Chloride	0.8964	2.770	13.852
8.20	Bromide	0.0037	0.121	0.605
9.30	Nitrate	0.0066	0.052	0.262
13.90	Sulfate	14.7245	55.906	279.528

Sample data

Ident FC1069-3
Sample type . . . . . Sample
Determination start 2022-12-09 03:18:24
Dilution factor 5.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0123	0.022	0.110
5.67	Chloride	0.9213	2.841	14.205
8.20	Bromide	0.0052	0.131	0.656
13.90	Sulfate	12.4538	47.284	236.419

MagIC Net

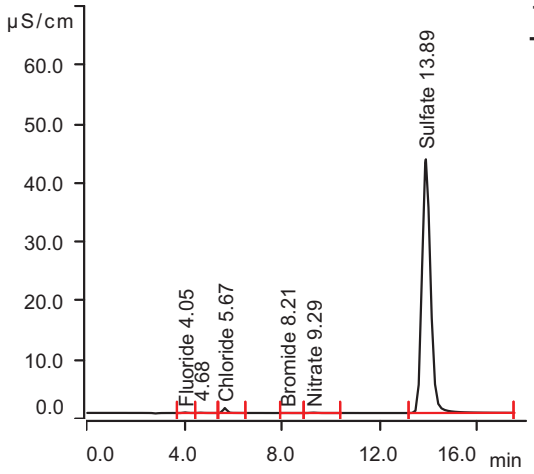
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1069-7
Sample type . . . . . Sample
Determination start 2022-12-09 03:38:40
Dilution factor 25.00

Anions

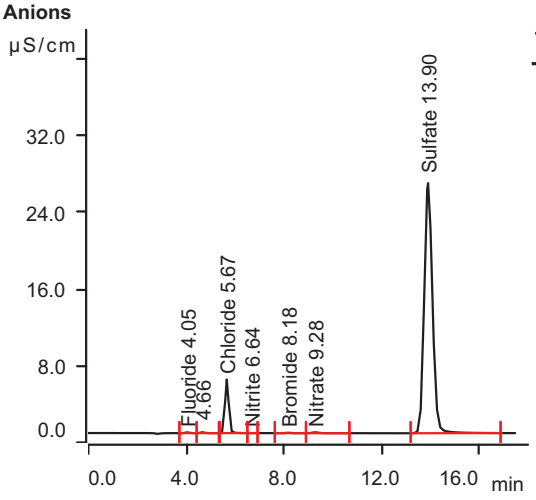


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0174	0.031	0.777
5.67	Chloride	0.1514	0.655	16.376
8.21	Bromide	0.0016	0.107	2.669
9.29	Nitrate	0.0183	0.066	1.654
13.89	Sulfate	17.5988	66.819	1670.473

Sample data

Ident FC1069-8
Sample type . . . . . Sample
Determination start 2022-12-09 03:58:56
Dilution factor 5.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0143	0.026	0.128
5.67	Chloride	0.9544	2.935	14.675
6.64	Nitrite	0.0005	0.031	0.156
8.18	Bromide	0.0121	0.178	0.892
9.28	Nitrate	0.0265	0.076	0.378
13.90	Sulfate	10.2007	38.729	193.646

MagIC Net

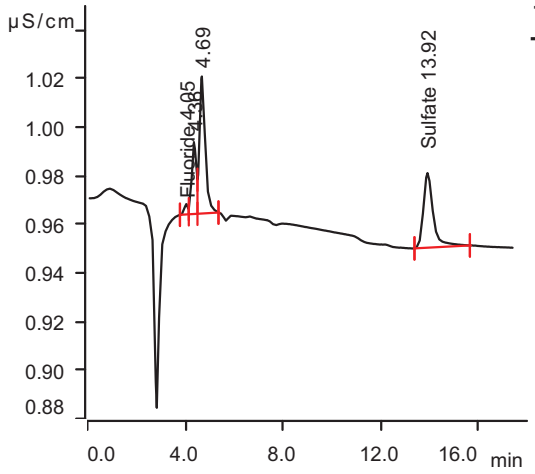
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident MB1
Sample type . . . . . Sample
Determination start 2022-12-09 04:19:12
Dilution factor 1.00

Anions

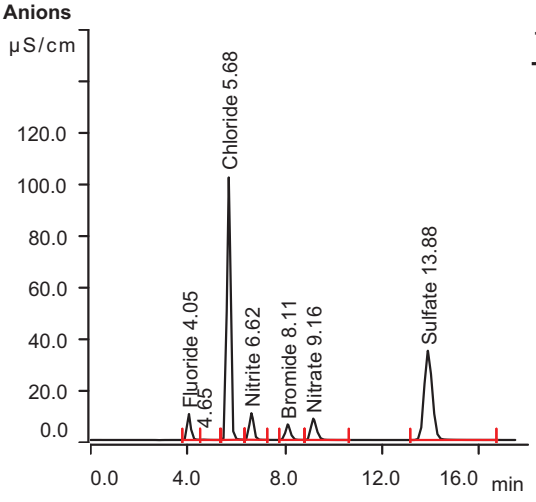


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0007	0.001	0.001
13.92	Sulfate	0.0143	0.053	0.053

Sample data

Ident B1
Sample type . . . . . Sample
Determination start 2022-12-09 04:39:49
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	1.6429	2.939	2.939
5.68	Chloride	17.5577	50.075	50.075
6.62	Nitrite	2.0919	2.661	2.661
8.11	Bromide	1.4197	9.787	9.787
9.16	Nitrate	2.2460	2.658	2.658
13.88	Sulfate	13.4317	50.997	50.997

MagIC Net

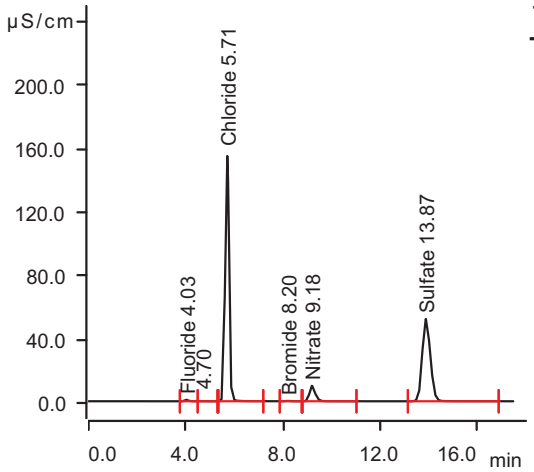
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1010-1
Sample type . . . . . Sample
Determination start 2022-12-09 05:00:21
Dilution factor 1.00

Anions

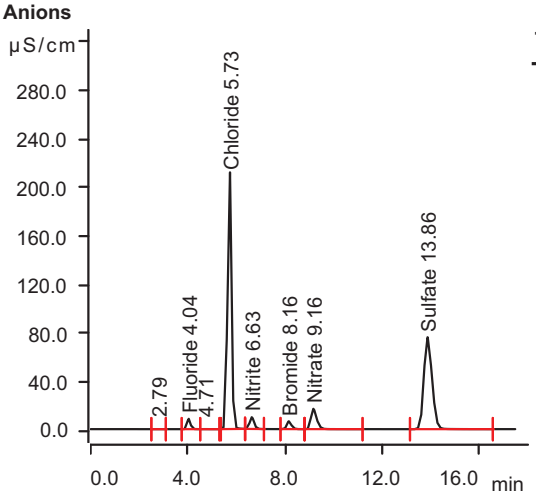


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.03	Fluoride	0.1527	0.273	0.273
5.71	Chloride	28.5289	81.225	81.225
8.20	Bromide	0.0423	0.385	0.385
9.18	Nitrate	2.6372	3.113	3.113
13.87	Sulfate	20.1988	76.690	76.690

Sample data

Ident FC1010-1S1
Sample type . . . . . Sample
Determination start 2022-12-09 05:20:52
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.3999	2.504	2.504
5.73	Chloride	41.0295	116.717	116.717
6.63	Nitrite	2.0574	2.617	2.617
8.16	Bromide	1.4058	9.692	9.692
9.16	Nitrate	4.5425	5.330	5.330
13.86	Sulfate	29.6469	112.564	112.564

MagIC Net

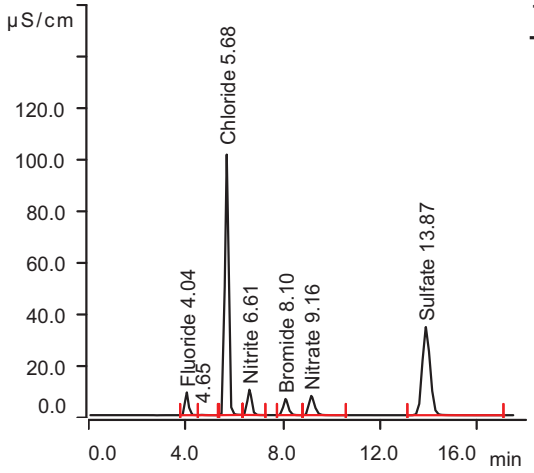
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-09 05:41:24
Dilution factor 1.00

Anions

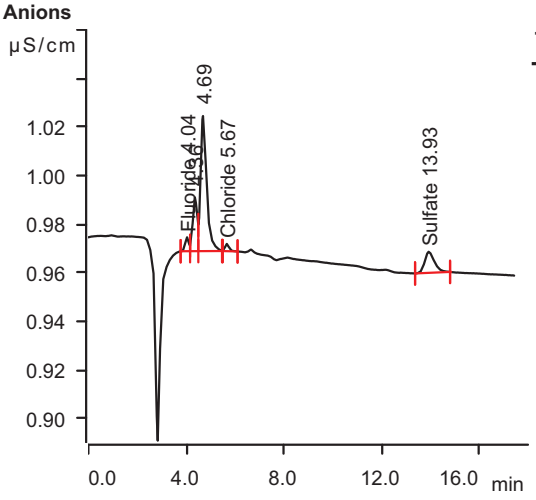


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.3712	2.453	2.453
5.68	Chloride	17.2616	49.235	49.235
6.61	Nitrite	1.9700	2.507	2.507
8.10	Bromide	1.4750	10.164	10.164
9.16	Nitrate	2.0072	2.380	2.380
13.87	Sulfate	12.8919	48.947	48.947

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-09 06:01:56
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0009	0.002	0.002
5.67	Chloride	0.0005	0.227	0.227
13.93	Sulfate	0.0040	0.014	0.014

MagIC Net

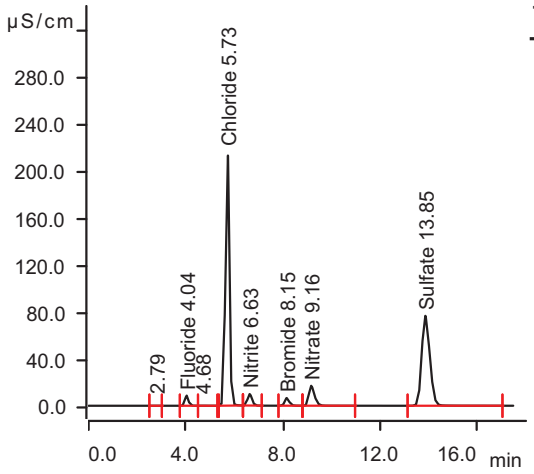
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1010-1S2
Sample type . . . . . Sample
Determination start 2022-12-09 06:22:26
Dilution factor 1.00

Anions

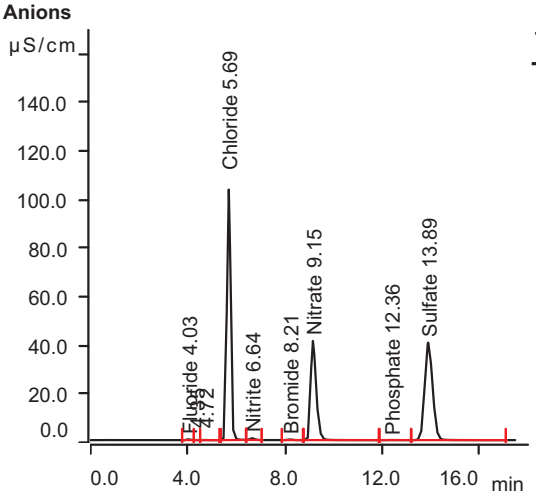


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	1.4060	2.515	2.515
5.73	Chloride	40.9915	116.609	116.609
6.63	Nitrite	2.0598	2.620	2.620
8.15	Bromide	1.4063	9.696	9.696
9.16	Nitrate	4.5402	5.328	5.328
13.85	Sulfate	29.6520	112.583	112.583

Sample data

Ident FC1010-2
Sample type . . . . . Sample
Determination start 2022-12-09 06:43:04
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.03	Fluoride	0.0564	0.101	0.101
5.69	Chloride	18.4502	52.609	52.609
6.64	Nitrite	0.1523	0.222	0.222
8.21	Bromide	0.0567	0.483	0.483
9.15	Nitrate	10.7960	12.607	12.607
12.36	Phosphate	0.0203	invalid	invalid
13.89	Sulfate	15.2292	57.822	57.822

MagIC Net

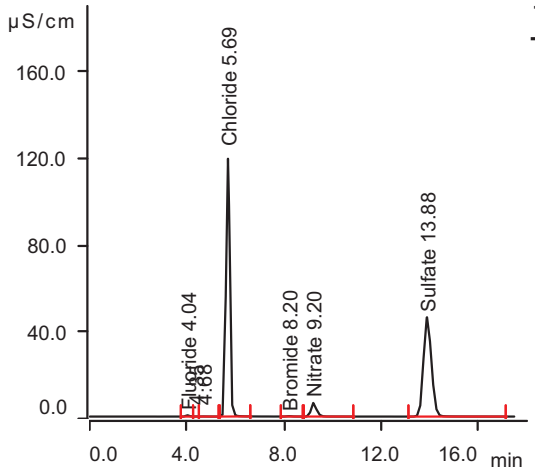
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1010-5
Sample type . . . . . Sample
Determination start 2022-12-09 07:03:41
Dilution factor 1.00

Anions

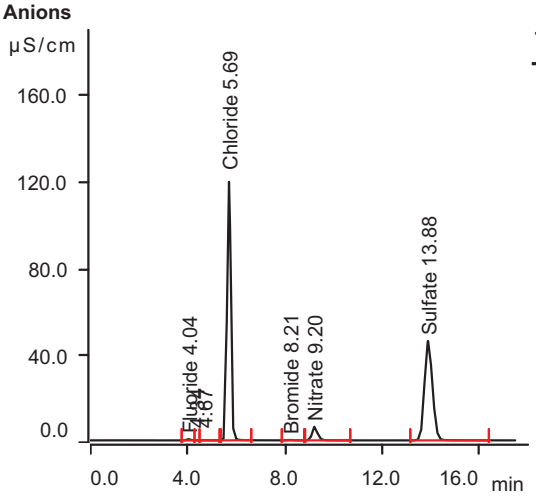


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0950	0.170	0.170
5.69	Chloride	21.2442	60.542	60.542
8.20	Bromide	0.0401	0.370	0.370
9.20	Nitrate	1.6658	1.983	1.983
13.88	Sulfate	17.5177	66.511	66.511

Sample data

Ident FC1010-6
Sample type . . . . . Sample
Determination start 2022-12-09 07:24:12
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0954	0.171	0.171
5.69	Chloride	21.2918	60.677	60.677
8.21	Bromide	0.0401	0.370	0.370
9.20	Nitrate	1.6645	1.982	1.982
13.88	Sulfate	17.5343	66.574	66.574

MagIC Net

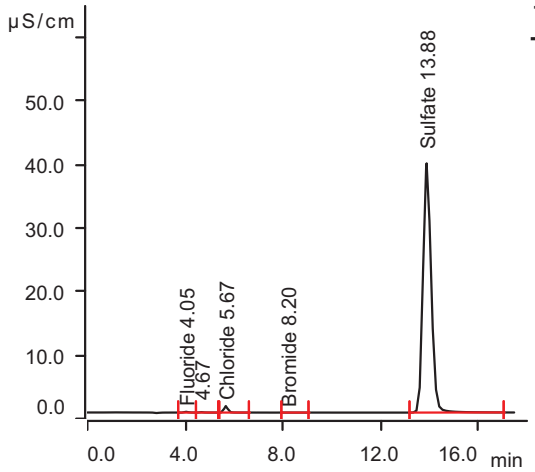
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1069-6
Sample type . . . . . Sample
Determination start 2022-12-09 07:44:43
Dilution factor 25.00

Anions

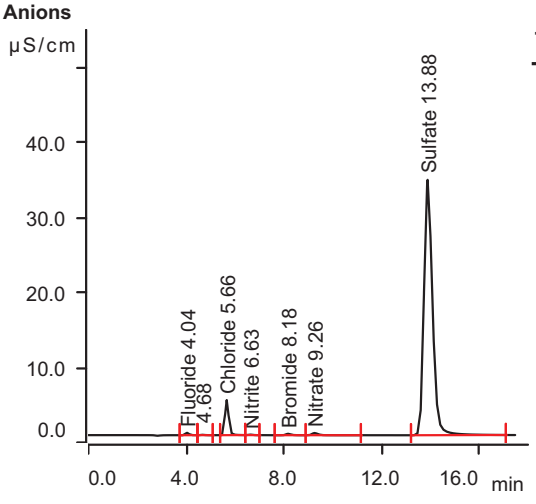


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0223	0.040	0.996
5.67	Chloride	0.1802	0.737	18.425
8.20	Bromide	0.0013	0.105	2.615
13.88	Sulfate	15.3036	58.104	1452.611

Sample data

Ident FC1069-6S3
Sample type . . . . . Sample
Determination start 2022-12-09 08:04:58
Dilution factor 25.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.04	Fluoride	0.0528	0.094	2.359
5.66	Chloride	0.8074	2.518	62.944
6.63	Nitrite	0.0135	0.047	1.186
8.18	Bromide	0.0479	0.423	10.579
9.26	Nitrate	0.0856	0.144	3.612
13.88	Sulfate	13.8256	52.492	1312.310

MagIC Net

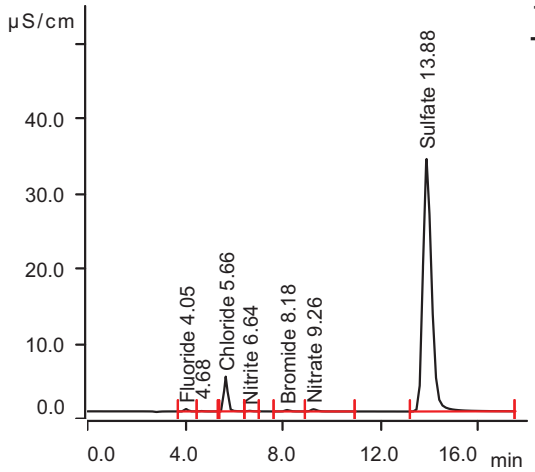
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident FC1069-6S4
Sample type . . . . . Sample
Determination start 2022-12-09 08:25:15
Dilution factor 25.00

Anions

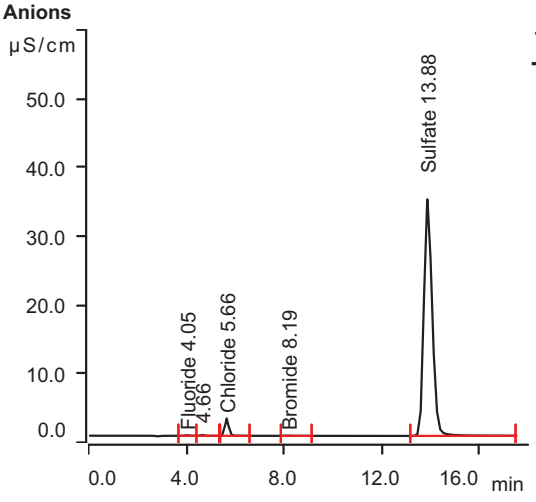


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0555	0.099	2.482
5.66	Chloride	0.8029	2.505	62.623
6.64	Nitrite	0.0130	0.047	1.172
8.18	Bromide	0.0473	0.419	10.475
9.26	Nitrate	0.0844	0.143	3.576
13.88	Sulfate	13.9730	53.052	1326.305

Sample data

Ident FC1069-9
Sample type . . . . . Sample
Determination start 2022-12-09 08:45:33
Dilution factor 5.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0159	0.028	0.142
5.66	Chloride	0.4312	1.449	7.247
8.19	Bromide	0.0059	0.136	0.682
13.88	Sulfate	13.6278	51.742	258.708

MagIC Net

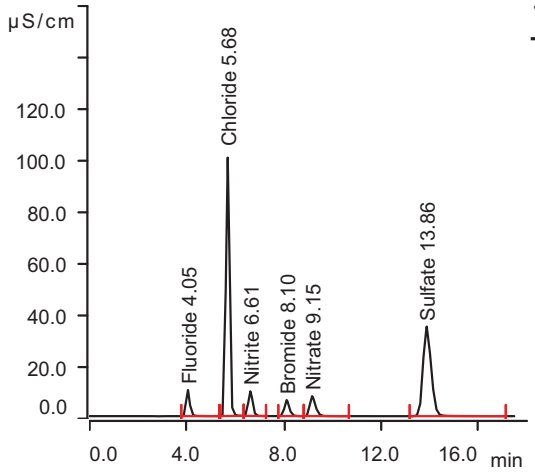
Summary Report

2022-12-09 9:53:32
MagIC Net 3.2 - 123

Sample data

Ident CCV
Sample type . . . . . Sample
Determination start 2022-12-09 09:06:06
Dilution factor 1.00

Anions

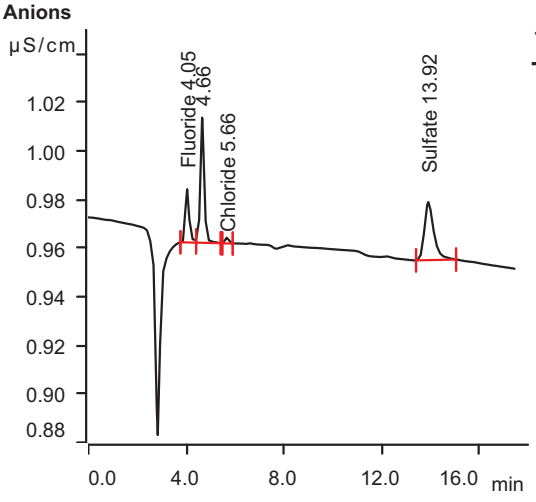


Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	1.6738	2.994	2.994
5.68	Chloride	17.0172	48.541	48.541
6.61	Nitrite	1.9126	2.435	2.435
8.10	Bromide	1.4345	9.888	9.888
9.15	Nitrate	2.0561	2.437	2.437
13.86	Sulfate	13.5693	51.520	51.520

Sample data

Ident . . . . . CCB
Sample type . . . . . Sample
Determination start 2022-12-09 09:26:31
Dilution factor 1.00

Anions



Retention Time (min)	Component Name	Area uS*min	Conc. on Column (mg/L)	Final Conc. (mg/L)
4.05	Fluoride	0.0039	0.007	0.007
5.66	Chloride	0.0004	0.226	0.226
13.92	Sulfate	0.0107	0.039	0.039

TOC ANALYSIS LOG, Aqueous

DATE:	12-12-2022
ANALYST:	F.N.
INSTRUMENT:	TOC2
INST. FILE NAME:	12121201.txt
Filter Lot#:	—

METHODS:	SM5310B SW846 9060A
METHOD FILE:	NPOC-MET
CALIB. DATE:	11-30-2022
GN BATCH:	GN92992

pH paper lot#	230320
pipette ID#	TU 11245
pipette ID#	PU 13805
pipette ID#	—

STANDARDS	
ICAL:	LIST INDIVIDUALLY IN COMMENTS
ICV:	TOC 407
CCV:	TOC 407
QC:	WC1799

Autosampler position	Sample ID	Bottle #	pH, su	Injected Volume, ml	Manual Dilution	Instrument Dilution	GP BATCH	COMMENTS
1	BLANK	—	—	50 ml	1x	1x		
2	CCV	—	1.5					
3	MB1	—	—				38294	
4	B1	—	1.5					
5	FC1116-1	1	1.5					
6	-2	1	1.5					
7	-3	1	1.0*					
8	-4	1	1.0*					* ⇒ INITIAL PH ≥ 2, ADDED DROPS CONC. HCL TO ACIDIFY
9	FC1120-1	1	1.0*					
10	-2	1	1.5					
11	-3	1	1.0*					
12	FC1123-7	1	1.5					
13	CCV	—	1.5					
14	CCB	—	—					
15	FC1123-1	1	1.0*				38294	
16	S1 (FC1123-1)	2	1.0*					
17	S2 (FC1123-1)	3	1.0*					
18	FC1123-8	1	1.5					
19	FC1124-1	1	1.5					
20	-2	1	1.5					
21	-3	1	1.5					
22	-4	1	1.5					
23	FC1135-1	1	1.5					
24	FC1142-3	1	1.5					
25	CCV	—	1.5					
26	CCB	—	—					

Notes: (1 of 2) ACID LOT ID#: 22G166007 (CONC. HCL)

Analyst Signature: Frida N.

TOC ANALYSIS LOG, Aqueous

DATE:	12-12-2022
ANALYST:	F. N.
INSTRUMENT:	TOC2
INST. FILE NAME:	12121101.txt
Filter Lot#:	—

METHODS:	SM5310B SW846 9060A
METHOD FILE:	NPOC-MET
CALIB. DATE:	11-30-2022
GN BATCH:	GN92992

pH paper lot#	230320
pipette ID#	TV11245
pipette ID#	PV13805
pipette ID#	—

STANDARDS	
ICAL:	LIST INDIVIDUALLY IN COMMENTS
ICV:	TOC 4071
CCV:	TOC 4072
QC:	WC1799

Autosampler position	Sample ID	Bottle #	pH, su	Injected Volume, ml	Manual Dilution	Instrument Dilution	GP BATCH	COMMENTS
27	FC1159-1	1	1.5	50.mL	1X	1X	38294	
28	-2	1	1.5					
29	FC1215-1	1	1.0*					
30	S3(FC1215-1)	2	1.0*					
30	S4(FC1215-1)	2	1.0*					
31	FC1215-2	1	1.0*					
32	FC1203-1	1	1.0*				38295	
33	FC1214-1	1	1.0*					DNR! ⇒ NEEDS HIGHER DIL
34	-2	1	1.0*					
35	-4	1	1.0*					
36	CCV	—	1.5					
37	MB1	—	—				38295	
38	B1	—	1.5					
39	FC1214-3	1	1.0*					
40	S1(FC1214-3)	2	1.0*					
40	S2(FC1214-3)	2	1.0*					
41	LA85729-1	1	1.5					
42	LA85979-1	1	1.5					
43	LA85980-1	1	1.5					
44	LA85982-3	1	1.5					
45	LA85983-1	1	1.0*					DNR! ⇒ FOR CONF. ONLY.
46	-1	1	1.0		100X			DNR! ⇒ NEEDS HIGHER DIL./ SCH. TO RE-RUN
47	CCV	—	1.5		1X			
48	CCB	—	—		1X			
49	FC1214-1	1	1.0		5X~~1X~~(*)		38295	
47/48	CCV/CCB	—/—	1.5/—		1X/1X			

Notes: (2 of 2)

Analyst Signature (*) Farida N

SGS Accutest - Orlando Organic Carbon Standards Preparation Log

SGS Std. #	Name Description	Parent Std. #	Parent Name	Parent Vendor	Parent Exp. Date	Parent Conc(mg/l)	Weight(g) / Vol.(ml) used	Bal.ID**/ pipette ID	Final Vol.(ml)	Final Conc(mg/l)	pH paper lot#	Prep. Date	Exp. Date	Initials
TOC 4065	Cal #1 STD 1.0 ppm	WC 1908	TOC KHP-1	INORG. VENTUR.	02/15/23	1000	0.1 ml	NU 04977	100	1.0	230 320	11/30/22	12/30/22	F.N
TOC 4066	Cal # 2 STD 2.0 ppm						0.2 ml			2.0				
TOC 4067	Cal #3 STD 5.0 ppm						0.5 ml	TU 11245		5.0				
TOC 4068	Cal #4 STD 10.0 ppm						1.0 ml			10.0				
TOC 4069	Cal #5 STD 20.0 ppm						2.0 ml			20.0				
TOC 4070	Cal #6 STD 30.0 ppm						3.0 ml			30.0				
TOC 4071	ICV - STD 15.0 ppm	WC 1799	TOC KHP1	INORG. VENTUR.	01/03/23	1000	1.5 ml		100	15.0	230 320	11/30/22	12/30/22	F.N
TOC 4072	CCV - STD 15.0 ppm						3.75 ml	PU 13806	250	15.0		12/05/22	01/03/23	F.N.

** Record ANALYTICAL balance sequential number

C:\TOC3201\Data\toc 2 aq 12-12-2022.t32

	Type	Analysis	Sample Name	Origin	Manual Dilution	Result	Comment	Status	Date / Time	Vial
1	Unknown	NPOC	BLANK	NPOC.met	1.000	NPOC:0.1252mg/L	SM5310B SW846 9060A	Completed	12/12/2022 5:41:01 PM	1
2	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.46mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:05:12 PM	2
3	Unknown	NPOC	GP38294-MB1	NPOC.met	1.000	NPOC:0.1365mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:26:32 PM	3
4	Unknown	NPOC	GP38294-B1	NPOC.met	1.000	NPOC:15.06mg/L	SM5310B SW846 9060A	Completed	12/12/2022 6:50:13 PM	4
5	Unknown	NPOC	FC1116-1	NPOC.met	1.000	NPOC:1.690mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:12:16 PM	5
6	Unknown	NPOC	FC1116-2	NPOC.met	1.000	NPOC:1.167mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:31:37 PM	6
7	Unknown	NPOC	FC1116-3	NPOC.met	1.000	NPOC:2.376mg/L	SM5310B SW846 9060A	Completed	12/12/2022 7:53:27 PM	7
8	Unknown	NPOC	FC1116-4	NPOC.met	1.000	NPOC:6.405mg/L	SM5310B SW846 9060A	Completed	12/12/2022 8:16:03 PM	8
9	Unknown	NPOC	FC1020-1	NPOC.met	1.000	NPOC:2.148mg/L	SM5310B SW846 9060A	Completed	12/12/2022 8:38:22 PM	9
10	Unknown	NPOC	FC1020-2	NPOC.met	1.000	NPOC:4.864mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:00:53 PM	10
11	Unknown	NPOC	FC1020-3	NPOC.met	1.000	NPOC:3.183mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:23:35 PM	11
12	Unknown	NPOC	FC1123-7	NPOC.met	1.000	NPOC:9.114mg/L	SM5310B SW846 9060A	Completed	12/12/2022 9:46:25 PM	12
13	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.51mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:12:30 PM	13
14	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.2157mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:34:07 PM	14
15	Unknown	NPOC	FC1123-1	NPOC.met	1.000	NPOC:0.8250mg/L	SM5310B SW846 9060A	Completed	12/12/2022 10:55:26 PM	15
16	Unknown	NPOC	GP38294-S1	NPOC.met	1.000	NPOC:14.98mg/L	SM5310B SW846 9060A	Completed	12/12/2022 11:18:57 PM	16
17	Unknown	NPOC	GP38294-S2	NPOC.met	1.000	NPOC:15.50mg/L	SM5310B SW846 9060A	Completed	12/12/2022 11:42:27 PM	17
18	Unknown	NPOC	FC1123-8	NPOC.met	1.000	NPOC:16.08mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:05:52 AM	18
19	Unknown	NPOC	FC1124-1	NPOC.met	1.000	NPOC:5.479mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:29:05 AM	19
20	Unknown	NPOC	FC1124-2	NPOC.met	1.000	NPOC:0.6559mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:50:55 AM	20
21	Unknown	NPOC	FC1124-3	NPOC.met	1.000	NPOC:0.7739mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:13:35 AM	21
22	Unknown	NPOC	FC1124-4	NPOC.met	1.000	NPOC:1.320mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:35:35 AM	22
23	Unknown	NPOC	FC1135-1	NPOC.met	1.000	NPOC:1.825mg/L	SM5310B SW846 9060A	Completed	12/13/2022 1:57:58 AM	23
24	Unknown	NPOC	FC1142-3	NPOC.met	1.000	NPOC:7.195mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:21:38 AM	24
25	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.40mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:46:05 AM	25
26	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.2252mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:08:16 AM	26
27	Unknown	NPOC	FC1159-1	NPOC.met	1.000	NPOC:20.82mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:31:51 AM	27
28	Unknown	NPOC	FC1159-2	NPOC.met	1.000	NPOC:3.686mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:55:18 AM	28
29	Unknown	NPOC	FC1215-1	NPOC.met	1.000	NPOC:7.645mg/L	SM5310B SW846 9060A	Completed	12/13/2022 4:16:15 AM	29
30	Unknown	NPOC	GP38294-S3	NPOC.met	1.000	NPOC:22.74mg/L	SM5310B SW846 9060A	Completed	12/13/2022 4:41:12 AM	30
31	Unknown	NPOC	GP38294-S4	NPOC.met	1.000	NPOC:23.49mg/L	SM5310B SW846 9060A	Completed	12/13/2022 5:18:44 AM	30
32	Unknown	NPOC	FC1215-2	NPOC.met	1.000	NPOC:15.96mg/L	SM5310B SW846 9060A	Completed	12/13/2022 5:43:12 AM	31
33	Unknown	NPOC	FC1203-1	NPOC.met	1.000	NPOC:4.447mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:06:49 AM	32
34	Unknown	NPOC	FC1214-1	NPOC.met	1.000	NPOC:99.26mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:31:03 AM	33
35	Unknown	NPOC	FC1214-2	NPOC.met	1.000	NPOC:20.40mg/L	SM5310B SW846 9060A	Completed	12/13/2022 6:54:51 AM	34
36	Unknown	NPOC	FC1214-4	NPOC.met	1.000	NPOC:8.219mg/L	SM5310B SW846 9060A	Completed	12/13/2022 7:18:30 AM	35
37	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.59mg/L	SM5310B SW846 9060A	Completed	12/13/2022 7:42:57 AM	36
38	Unknown	NPOC	GP38295-MB1	NPOC.met	1.000	NPOC:0.3076mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:04:57 AM	37

12/13/2022 4:12:25 PM

C:\TOC3201\Data\toc 2 aq 12-12-2022.t32

	Type	Analysis	Sample Name	Origin	Manual Dilution	Result	Comment	Status	Date / Time	Vial
39	Unknown	NPOC	GP38295-B1	NPOC.met	1.000	NPOC:14.99mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:29:40 AM	38
40	Unknown	NPOC	FC1214-3	NPOC.met	1.000	NPOC:11.43mg/L	SM5310B SW846 9060A	Completed	12/13/2022 8:53:41 AM	39
41	Unknown	NPOC	GP38295-S1	NPOC.met	1.000	NPOC:26.17mg/L	SM5310B SW846 9060A	Completed	12/13/2022 9:18:47 AM	40
42	Unknown	NPOC	GP38295-S2	NPOC.met	1.000	NPOC:26.79mg/L	SM5310B SW846 9060A	Completed	12/13/2022 9:57:00 AM	40
43	Unknown	NPOC	LA85729-1	NPOC.met	1.000	NPOC:4.844mg/L	SM5310B SW846 9060A	Completed	12/13/2022 10:20:25 AM	41
44	Unknown	NPOC	LA85979-1	NPOC.met	1.000	NPOC:9.555mg/L	SM5310B SW846 9060A	Completed	12/13/2022 10:44:39 AM	42
45	Unknown	NPOC	LA85980-1	NPOC.met	1.000	NPOC:6.543mg/L	SM5310B SW846 9060A	Completed	12/13/2022 11:07:55 AM	43
46	Unknown	NPOC	LA85982-3	NPOC.met	1.000	NPOC:4.878mg/L	SM5310B SW846 9060A	Completed	12/13/2022 11:31:49 AM	44
47	Unknown	NPOC	LA85983-1	NPOC.met	1.000	NPOC:1814mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:07:18 PM	45
48	Unknown	NPOC	LA85983-1	NPOC.met	100.0	NPOC:8097mg/L	SM5310B SW846 9060A	Completed	12/13/2022 12:46:45 PM	46
49	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.52mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:19:44 PM	47
50	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.5461mg/L	SM5310B SW846 9060A	Completed	12/13/2022 2:43:00 PM	48
51	Unknown	NPOC	FC1214-1	NPOC.met	5.000	NPOC:136.3mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:04:17 PM	49
52	Unknown	NPOC	CCV	NPOC.met	1.000	NPOC:15.27mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:28:11 PM	47
53	Unknown	NPOC	CCB	NPOC.met	1.000	NPOC:0.3478mg/L	SM5310B SW846 9060A	Completed	12/13/2022 3:50:03 PM	48

12/13/2022 4:02:04 PM

Instr.Information

System	TOC-2
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Sample

Sample Name:	BLANK
Sample ID:	Untitled
Origin:	NPOC.met
Status	Completed
Chk. Result	

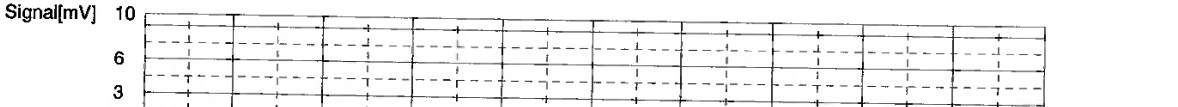
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1252mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.402	0.2679mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:32:26 PM
2	1.099	0.1838mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:34:52 PM
3	0.8260	0.1080mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:36:55 PM
4	0.8679	0.1196mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:38:58 PM
5	0.7594	0.08952mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:41:01 PM

Mean Area	0.8881
Mean Conc.	0.1252mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

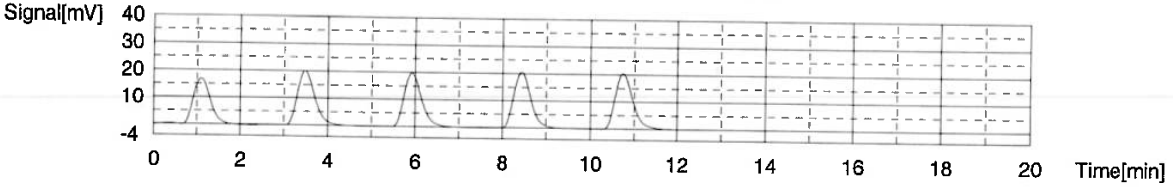
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.46mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.52	12.79mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:54:29 PM
2	55.75	15.36mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:57:04 PM
3	55.36	15.25mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 5:59:44 PM
4	56.03	15.43mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:02:12 PM
5	57.31	15.79mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:05:12 PM

Mean Area 56.11
Mean Conc. 15.46mg/L



Sample

Sample Name: GP38294-MB1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

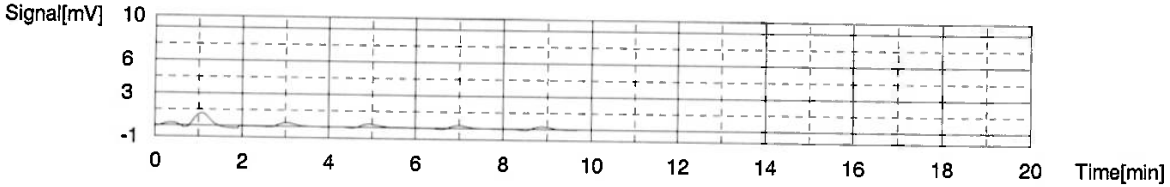
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1365mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.742	0.9176mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:18:12 PM
2	0.9856	0.1523mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:20:15 PM
3	0.9939	0.1546mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:22:26 PM
4	0.8650	0.1188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:24:29 PM
5	0.8705	0.1204mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:26:32 PM

Mean Area 0.9287
Mean Conc. 0.1365mg/L



Sample

Sample Name: GP38294-B1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

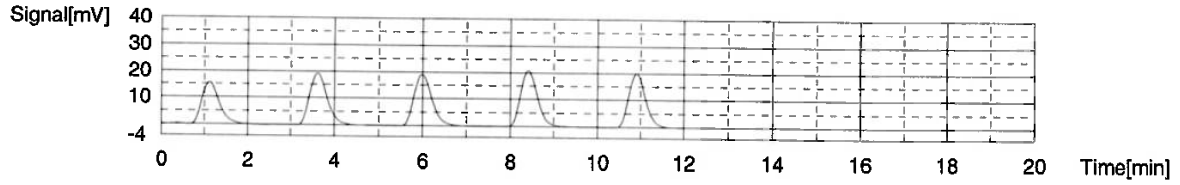
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	44.73	12.30mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:40:07 PM
2	53.81	14.82mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:42:39 PM
3	53.82	14.82mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:45:14 PM
4	56.93	15.68mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:47:51 PM
5	54.15	14.91mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 6:50:13 PM

Mean Area 54.68
Mean Conc. 15.06mg/L



Sample

Sample Name: FC1116-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

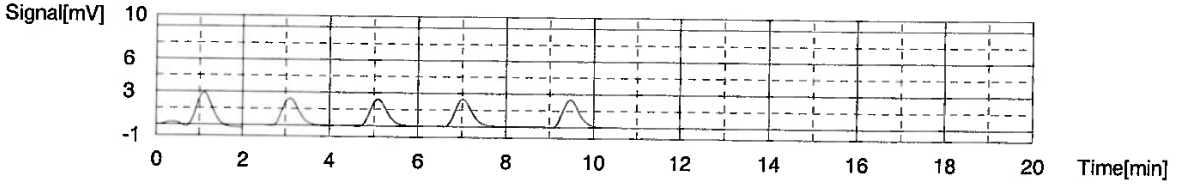
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.690mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.137	2.138mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:03:18 PM
2	6.521	1.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:05:26 PM
3	6.489	1.680mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:07:32 PM
4	6.521	1.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:10:08 PM
5	6.559	1.700mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:12:16 PM

Mean Area 6.523
Mean Conc. 1.690mg/L



Sample

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QC Reports:
GN92992
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FC1116
12.5 12

Sample Name: FC1116-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

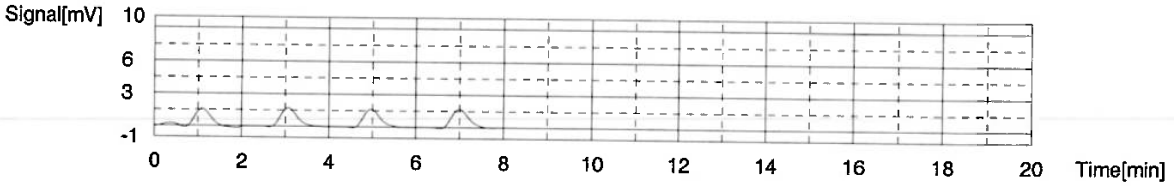
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.167mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.654	1.171mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:25:19 PM
2	4.626	1.163mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:27:23 PM
3	4.566	1.146mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:29:31 PM
4	4.716	1.188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:31:37 PM

Mean Area 4.641
Mean Conc. 1.167mg/L



Sample

Sample Name: FC1116-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.376mg/L

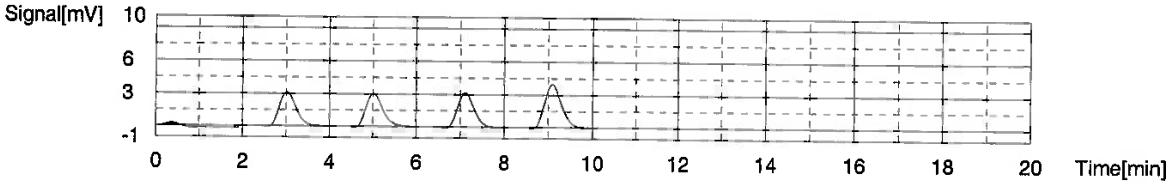
1. Det

Anal.: NPOC

Raw Data GN92992: Total Organic Carbon page 10 of 48
QC Reports:
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FC1116
12.5 12

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5299	0.02580mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:44:41 PM
2	8.415	2.215mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:46:52 PM
3	8.408	2.213mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:49:06 PM
4	8.386	2.207mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:51:14 PM
5	10.77	2.869mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 7:53:27 PM

Mean Area 8.995
Mean Conc. 2.376mg/L



Sample

Sample Name: FC1116-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.405mg/L

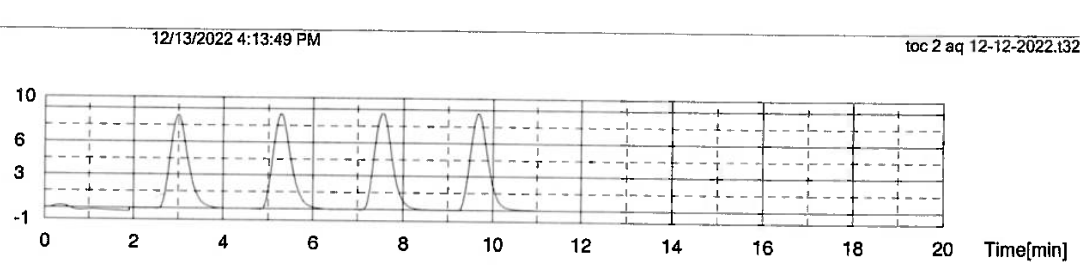
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3827	-0.01507mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:06:26 PM
2	23.24	6.331mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:08:51 PM
3	23.88	6.509mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:11:16 PM
4	23.28	6.342mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:13:33 PM
5	23.62	6.437mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:16:03 PM

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QC Reports:
GN92992
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FC1116
12.5 12

Mean Area 23.51
Mean Conc. 6.405mg/L



Sample

Sample Name: FC1020-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

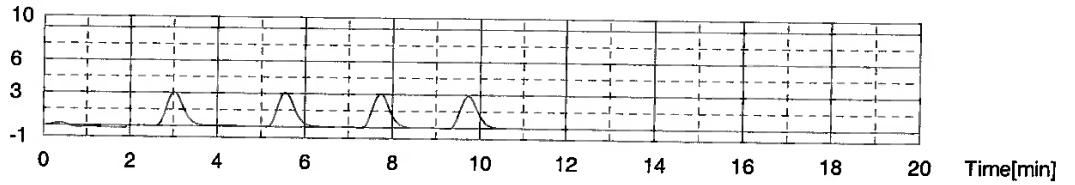
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.148mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4139	-0.00641mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:29:02 PM
2	8.263	2.173mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:31:44 PM
3	8.317	2.188mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:34:03 PM
4	8.076	2.121mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:36:12 PM
5	8.042	2.111mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:38:22 PM

Mean Area 8.175
Mean Conc. 2.148mg/L



Sample

Sample Name: FC1020-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

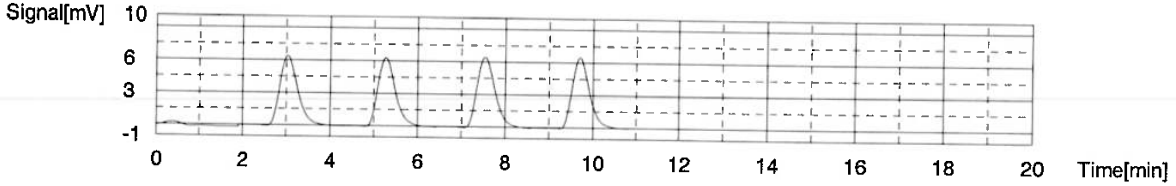
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.864mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4789	0.01164mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:51:21 PM
2	18.11	4.907mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:53:46 PM
3	17.50	4.737mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:56:10 PM
4	18.24	4.943mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 8:58:30 PM
5	17.98	4.871mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:00:53 PM

Mean Area 17.96
Mean Conc. 4.864mg/L



Sample

Sample Name: FC1020-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

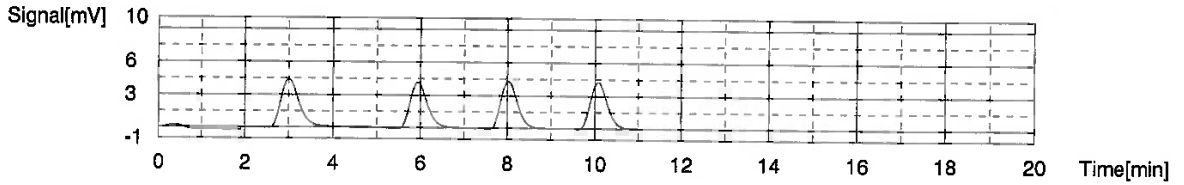
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.183mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5818	0.04021mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:13:52 PM
2	12.97	3.480mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:16:59 PM
3	11.44	3.055mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:19:11 PM
4	11.64	3.110mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:21:23 PM
5	11.56	3.088mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:23:35 PM

Mean Area 11.90
Mean Conc. 3.183mg/L



Sample

Sample Name: FC1123-7
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.114mg/L

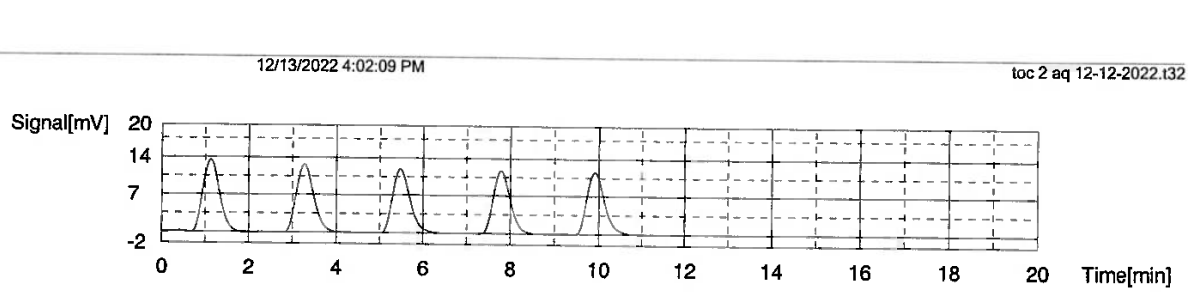
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.58	10.03mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:36:48 PM
2	35.05	9.610mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:39:11 PM
3	33.30	9.124mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:41:39 PM
4	31.92	8.741mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:43:55 PM
5	32.79	8.983mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 9:46:25 PM

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Mean Area 33.27
Mean Conc. 9.114mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

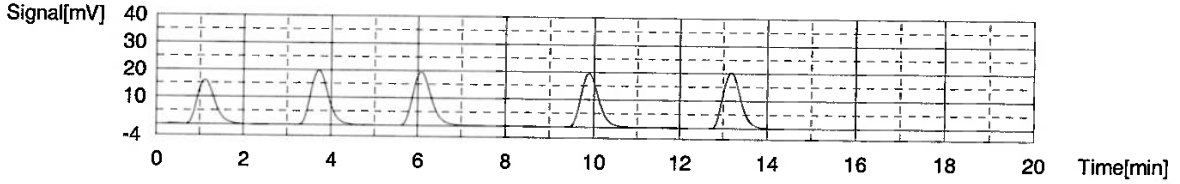
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.51mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.03	12.66mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:00:05 PM
2	55.23	15.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:02:35 PM
3	58.06	16.00mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:06:34 PM
4	55.41	15.26mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:09:59 PM
5	56.51	15.57mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:12:30 PM

Mean Area 56.30
Mean Conc. 15.51mg/L



Sample

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Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

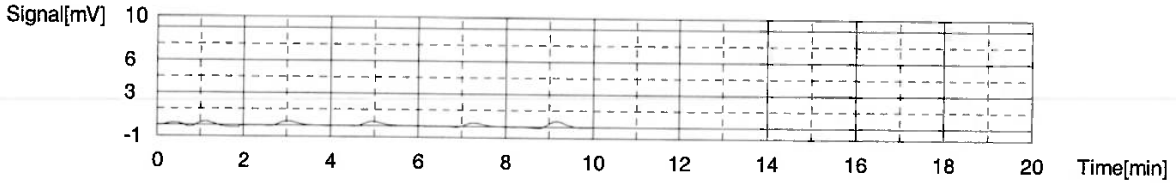
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2157mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.467	0.2860mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:25:29 PM
2	1.112	0.1874mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:27:34 PM
3	1.233	0.2210mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:30:01 PM
4	1.044	0.1685mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:32:04 PM
5	1.551	0.3093mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:34:07 PM

Mean Area 1.214
Mean Conc. 0.2157mg/L



Sample

Sample Name: FC1123-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8250mg/L

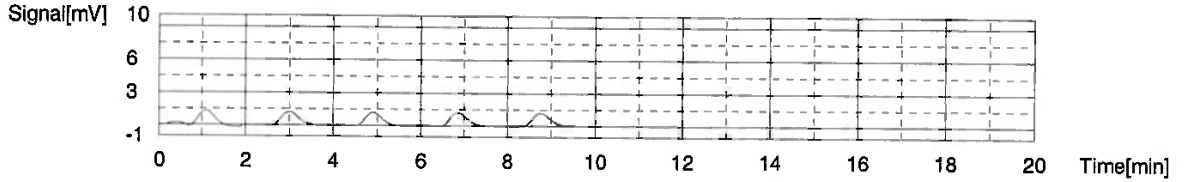
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.238	1.055mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:47:06 PM
2	3.388	0.8193mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:49:09 PM
3	3.361	0.8118mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:51:14 PM
4	3.407	0.8246mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:53:18 PM
5	3.478	0.8443mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 10:55:26 PM

Mean Area 3.409
Mean Conc. 0.8250mg/L



Sample

Sample Name: GP38294-S1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.98mg/L

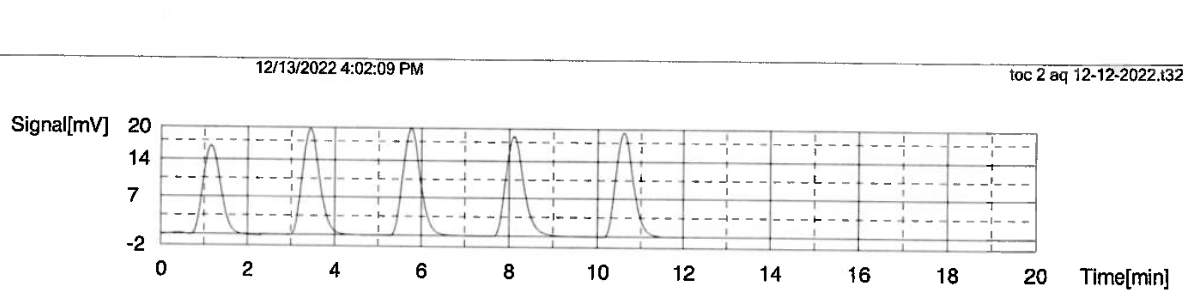
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.27	12.73mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:08:50 PM
2	54.31	14.96mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:11:16 PM
3	55.83	15.38mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:13:48 PM
4	53.46	14.72mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:16:27 PM
5	54.01	14.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:18:57 PM

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Mean Area 54.40
Mean Conc. 14.98mg/L



Sample

Sample Name: GP38294-S2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

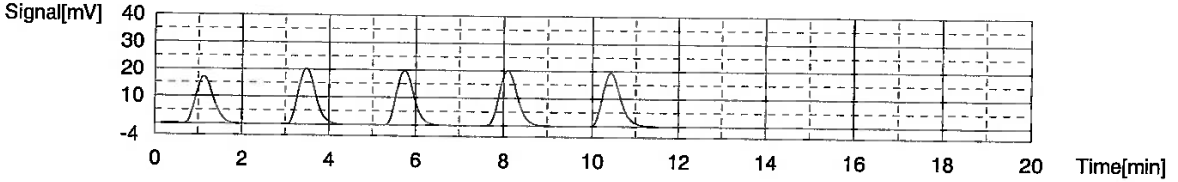
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	48.33	13.30mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:32:23 PM
2	56.07	15.45mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:34:49 PM
3	54.92	15.13mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:37:16 PM
4	57.97	15.97mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:39:47 PM
5	56.14	15.47mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:42:27 PM

Mean Area 56.28
Mean Conc. 15.50mg/L



Sample

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Sample Name: FC1123-8
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

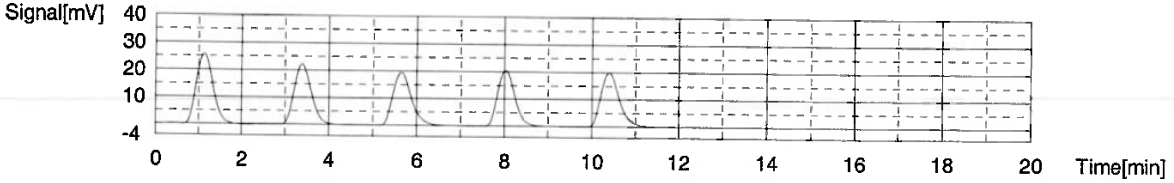
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	70.85	19.55mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:55:48 PM
2	60.90	16.79mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/12/2022 11:58:13 PM
3	56.90	15.68mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:00:45 AM
4	56.27	15.50mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:03:14 AM
5	59.41	16.37mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:05:52 AM

Mean Area 58.37
Mean Conc. 16.08mg/L



Sample

Sample Name: FC1124-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.479mg/L

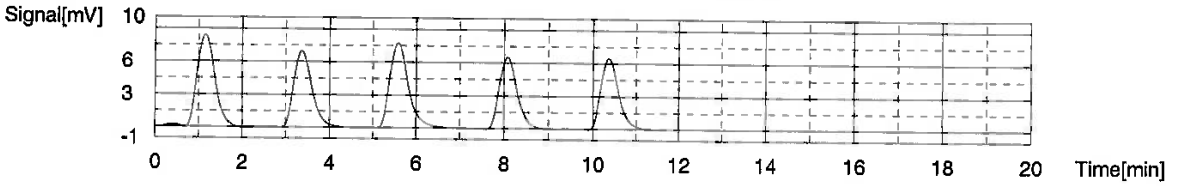
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	24.45	6.667mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:19:11 AM
2	20.00	5.432mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:21:35 AM
3	22.95	6.251mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:24:12 AM
4	18.95	5.140mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:26:38 AM
5	18.79	5.096mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:29:05 AM

Mean Area 20.17
Mean Conc. 5.479mg/L



Sample

Sample Name: FC1124-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

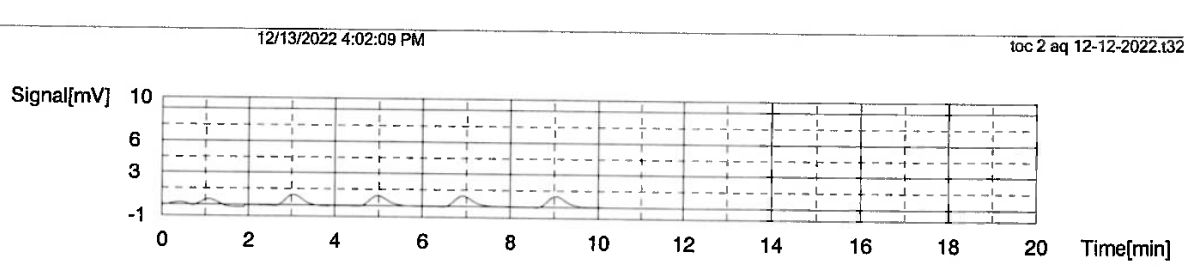
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.6559mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.118	0.4667mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:42:04 AM
2	2.808	0.6583mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:44:10 AM
3	2.684	0.6239mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:46:16 AM
4	2.790	0.6533mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:48:32 AM
5	2.916	0.6883mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:50:55 AM

Mean Area 2.800
Mean Conc. 0.6559mg/L



Sample

Sample Name: FC1124-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

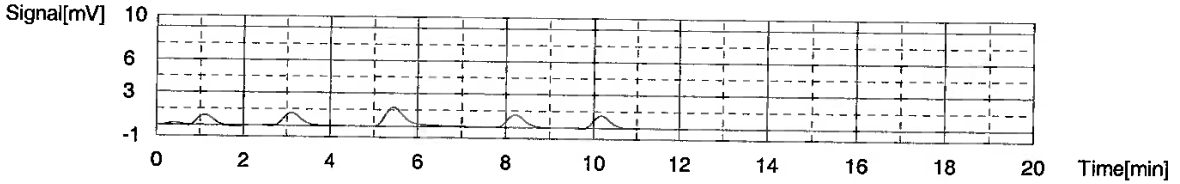
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7739mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.158	0.7555mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:03:57 AM
2	3.278	0.7888mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:06:30 AM
3	5.285	1.346mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:09:22 AM
4	3.217	0.7719mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:11:27 AM
5	3.245	0.7796mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:13:35 AM

Mean Area 3.224
Mean Conc. 0.7739mg/L



Sample

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Sample Name: FC1124-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

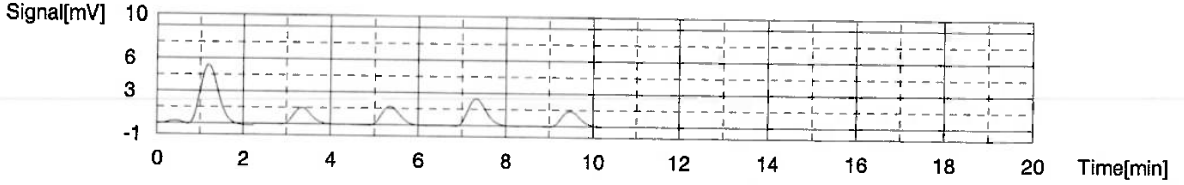
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.320mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.35	4.418mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:26:54 AM
2	4.261	1.062mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:29:00 AM
3	5.012	1.270mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:31:10 AM
4	7.355	1.921mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:33:26 AM
5	4.144	1.029mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:35:35 AM

Mean Area 5.193
Mean Conc. 1.320mg/L



Sample

Sample Name: FC1135-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

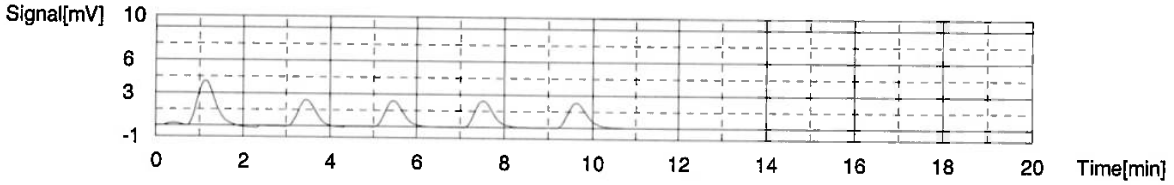
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.825mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.92	3.466mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:49:00 AM
2	7.053	1.837mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:51:09 AM
3	6.967	1.813mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:53:23 AM
4	7.036	1.832mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:55:37 AM
5	6.979	1.816mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 1:57:58 AM

Mean Area 7.009
Mean Conc. 1.825mg/L



Sample

Sample Name: FC1142-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.195mg/L

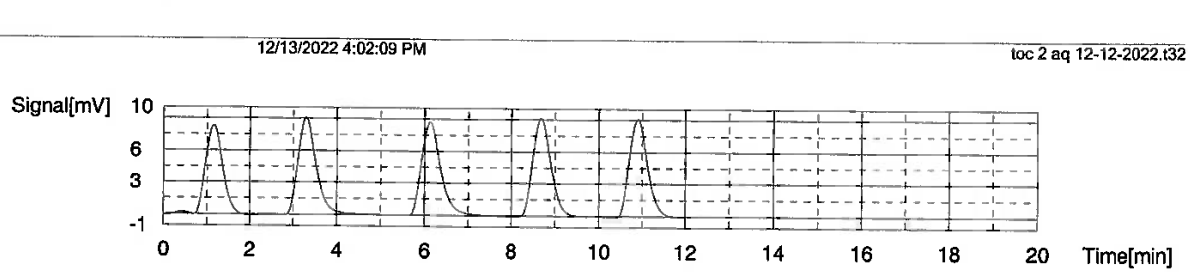
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	23.81	6.489mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:11:14 AM
2	26.41	7.211mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:14:11 AM
3	26.34	7.192mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:16:53 AM
4	26.38	7.203mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:19:16 AM
5	26.27	7.172mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:21:38 AM

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Mean Area 26.35
Mean Conc. 7.195mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

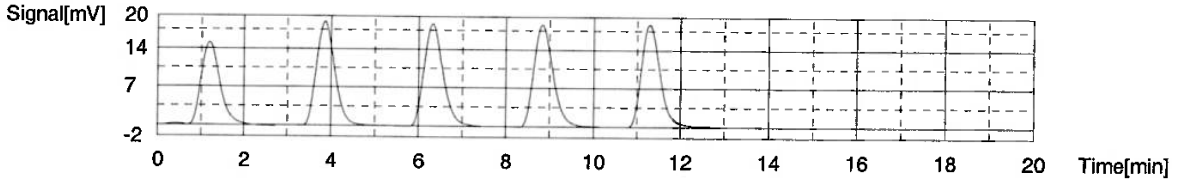
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	46.93	12.91mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:35:26 AM
2	55.13	15.19mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:38:00 AM
3	56.64	15.60mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:40:40 AM
4	56.20	15.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:43:18 AM
5	55.71	15.35mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:46:05 AM

Mean Area 55.92
Mean Conc. 15.40mg/L



Sample

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Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

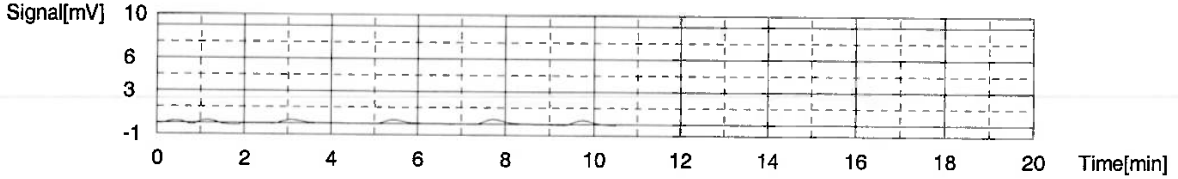
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2252mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.341	0.2510mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:59:04 AM
2	0.9780	0.1502mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:01:35 AM
3	1.073	0.1766mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:04:03 AM
4	1.360	0.2563mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:06:13 AM
5	1.219	0.2171mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:08:16 AM

Mean Area 1.248
Mean Conc. 0.2252mg/L



Sample

Sample Name: FC1159-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

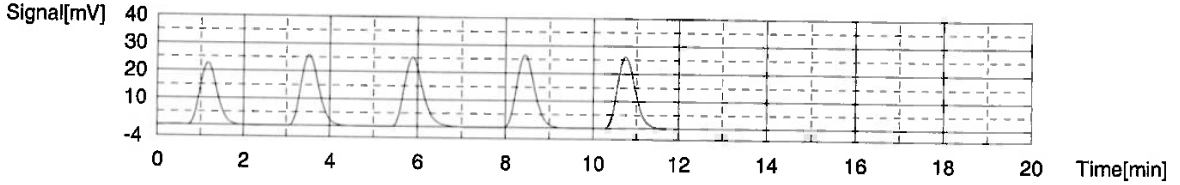
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.82mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	65.08	17.95mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:21:43 AM
2	74.24	20.49mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:24:15 AM
3	75.13	20.74mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:26:55 AM
4	76.40	21.09mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:29:23 AM
5	75.87	20.94mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:31:51 AM

Mean Area 75.41
Mean Conc. 20.82mg/L



Sample

Sample Name: FC1159-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.686mg/L

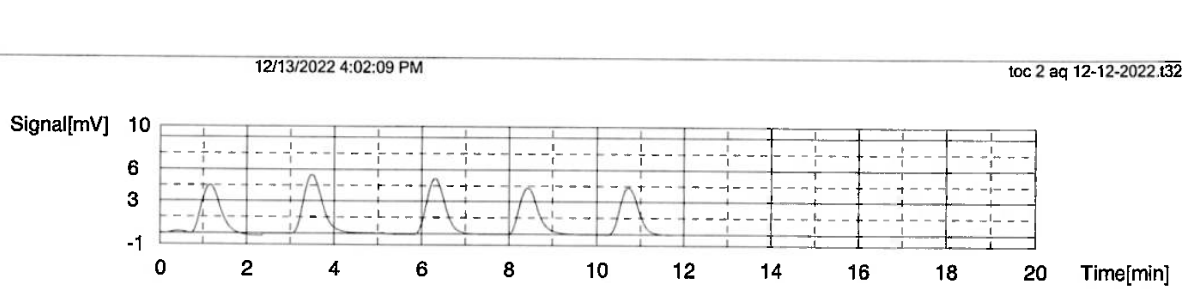
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.35	3.863mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:45:18 AM
2	16.40	4.432mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:48:15 AM
3	15.02	4.049mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:50:32 AM
4	12.89	3.457mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:52:58 AM
5	12.59	3.374mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:55:18 AM

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Mean Area 13.71
Mean Conc. 3.686mg/L



Sample

Sample Name: FC1215-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

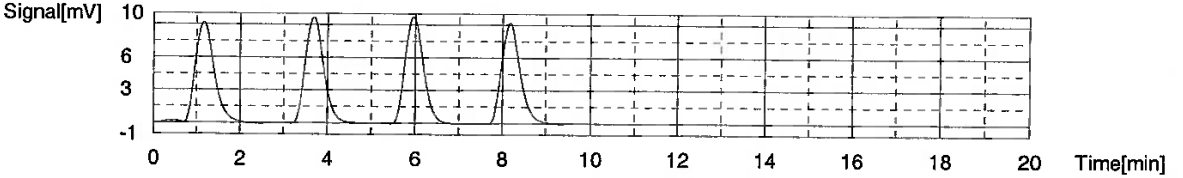
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.645mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	28.13	7.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:08:55 AM
2	28.13	7.689mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:11:20 AM
3	28.27	7.728mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:13:43 AM
4	27.36	7.475mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:16:15 AM

Mean Area 27.97
Mean Conc. 7.645mg/L



Sample

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Sample Name: GP38294-S3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

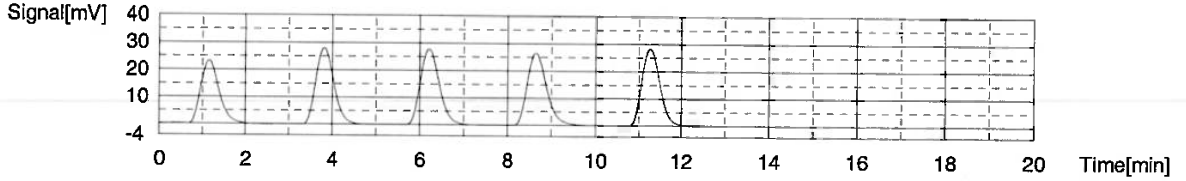
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.74mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	69.78	19.25mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:30:04 AM
2	81.61	22.54mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:32:36 AM
3	83.55	23.08mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:35:11 AM
4	81.40	22.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:37:58 AM
5	82.80	22.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:41:12 AM

Mean Area 82.34
Mean Conc. 22.74mg/L



Sample

Sample Name: GP38294-S4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.49mg/L

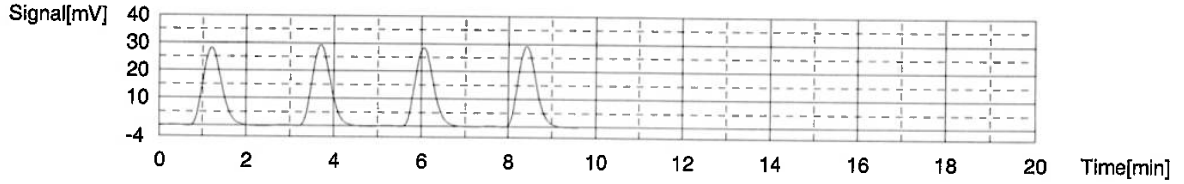
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.70	23.39mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 4:50:41 AM
2	86.31	23.84mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:00:02 AM
3	83.47	23.05mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:09:23 AM
4	85.65	23.66mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:18:44 AM

Mean Area 85.03
Mean Conc. 23.49mg/L



Sample

Sample Name: FC1215-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

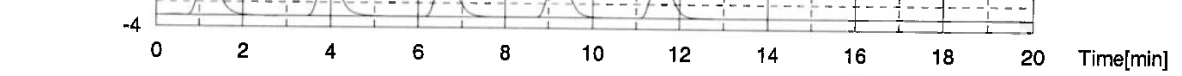
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.96mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.88	15.95mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:32:39 AM
2	61.68	17.00mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:35:26 AM
3	58.75	16.19mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:38:09 AM
4	57.55	15.86mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:40:41 AM
5	57.44	15.83mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:43:12 AM

Mean Area 57.91
Mean Conc. 15.96mg/L



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Sample

Sample Name: FC1203-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

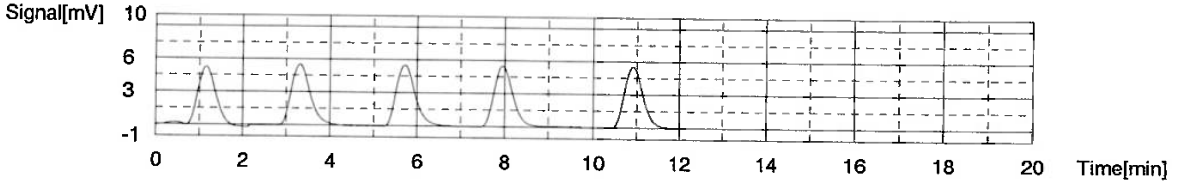
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.447mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	15.67	4.229mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:56:27 AM
2	16.57	4.479mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 5:58:59 AM
3	16.58	4.482mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:01:22 AM
4	16.49	4.457mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:04:27 AM
5	16.18	4.371mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:06:49 AM

Mean Area 16.46
Mean Conc. 4.447mg/L



Sample

Sample Name: FC1214-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:99.26mg/L

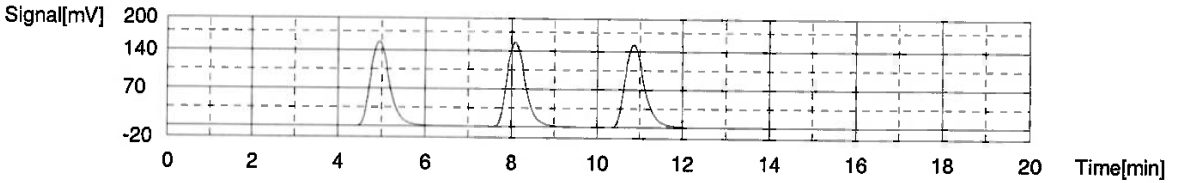
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5674	0.03621mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:19:50 AM
2	0.000	-0.1213mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:21:53 AM
3	476.2	132.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:25:09 AM
4	472.7	131.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:28:02 AM
5	482.3	133.8mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:31:03 AM

Mean Area 357.9
Mean Conc. 99.26mg/L



Sample

Sample Name: FC1214-2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

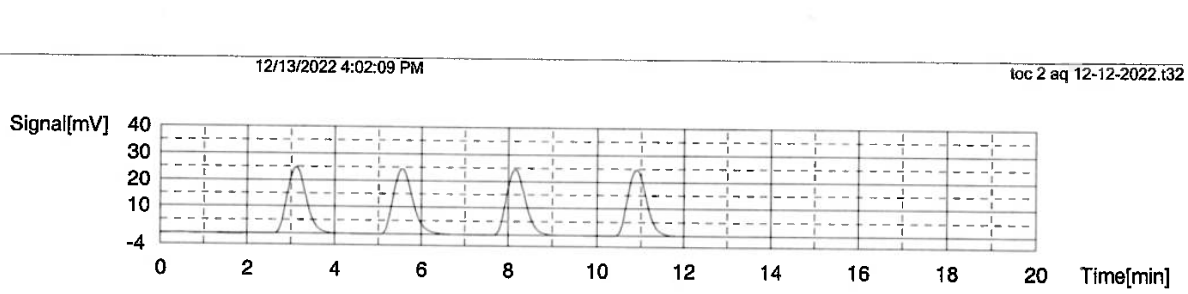
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9389	0.1394mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:44:04 AM
2	74.23	20.49mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:46:41 AM
3	75.27	20.78mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:49:26 AM
4	73.31	20.23mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:52:18 AM
5	72.89	20.12mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 6:54:51 AM

Mean Area 73.92
Mean Conc. 20.40mg/L



Sample

Sample Name: FC1214-4
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

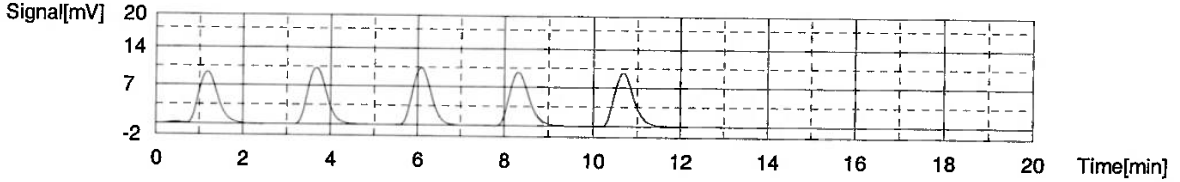
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.219mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.42	8.047mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:08:26 AM
2	30.61	8.377mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:10:58 AM
3	31.39	8.594mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:13:24 AM
4	30.28	8.286mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:15:54 AM
5	29.85	8.166mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:18:30 AM

Mean Area 30.04
Mean Conc. 8.219mg/L



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Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

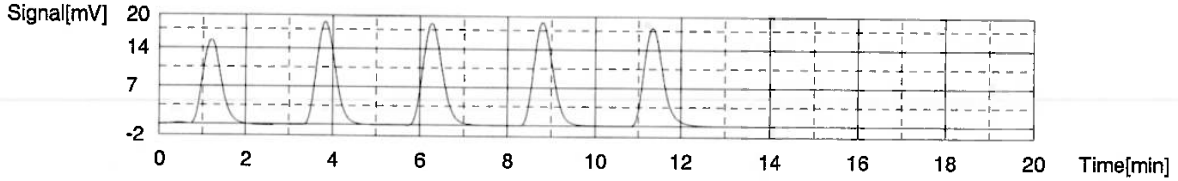
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.59mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.01	12.93mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:32:15 AM
2	56.13	15.46mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:34:49 AM
3	57.26	15.78mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:37:31 AM
4	56.78	15.64mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:40:12 AM
5	56.18	15.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:42:57 AM

Mean Area 56.59
Mean Conc. 15.59mg/L



Sample

Sample Name: GP38295-MB1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3076mg/L

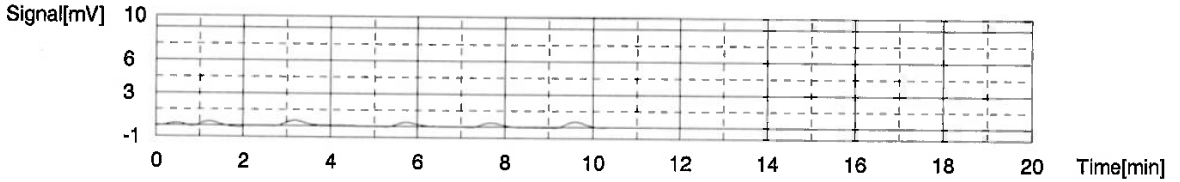
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.718	0.3557mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:56:02 AM
2	1.624	0.3296mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 7:58:46 AM
3	1.153	0.1988mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:00:50 AM
4	1.245	0.2243mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:02:54 AM
5	1.593	0.3210mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:04:57 AM

Mean Area 1.545
Mean Conc. 0.3076mg/L



Sample

Sample Name: GP38295-B1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

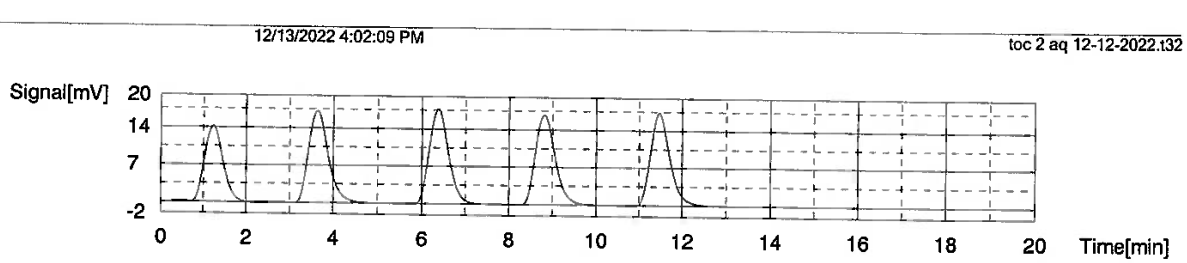
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:14.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.90	12.07mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:18:30 AM
2	54.38	14.98mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:21:22 AM
3	55.02	15.15mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:23:59 AM
4	53.05	14.61mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:26:46 AM
5	55.29	15.23mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:29:40 AM

Mean Area 54.44
Mean Conc. 14.99mg/L



Sample

Sample Name: FC1214-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

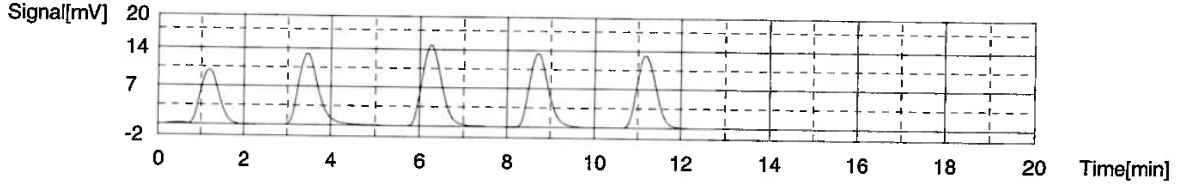
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	30.03	8.216mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:43:03 AM
2	40.83	11.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:46:01 AM
3	44.87	12.34mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:48:36 AM
4	40.99	11.26mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:51:13 AM
5	39.69	10.90mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 8:53:41 AM

Mean Area 41.60
Mean Conc. 11.43mg/L



Sample

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Sample Name: GP38295-S1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

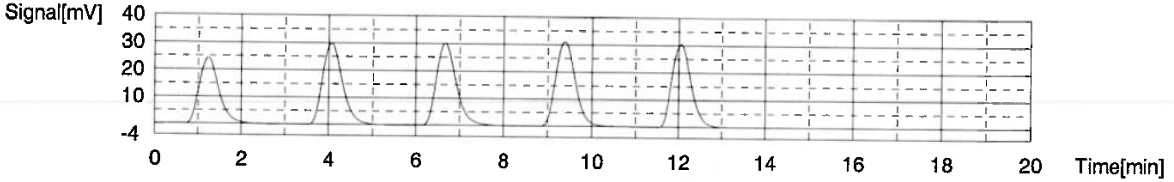
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.17mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	78.54	21.68mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:07:38 AM
2	94.49	26.11mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:10:23 AM
3	95.60	26.42mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:13:13 AM
4	95.65	26.44mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:16:04 AM
5	93.09	25.72mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:18:47 AM

Mean Area 94.71
Mean Conc. 26.17mg/L



Sample

Sample Name: GP38295-S2
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:26.79mg/L

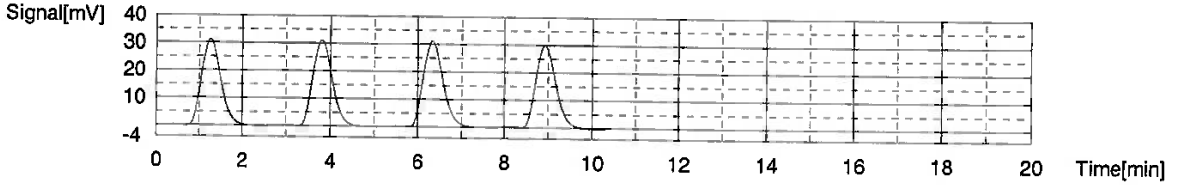
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	97.59	26.97mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:28:20 AM
2	95.93	26.51mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:37:50 AM
3	98.43	27.21mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:47:24 AM
4	95.81	26.48mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 9:57:00 AM

Mean Area 96.94
Mean Conc. 26.79mg/L



Sample

Sample Name: LA85729-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

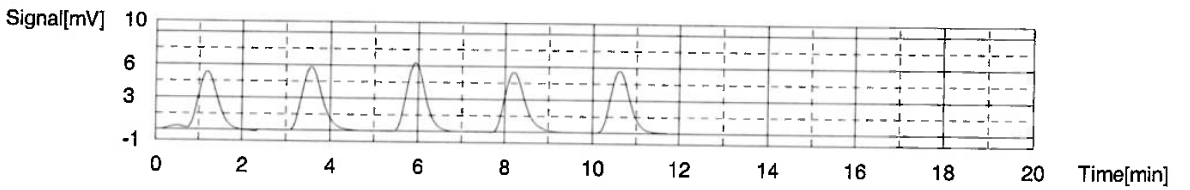
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.844mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	17.68	4.787mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:10:28 AM
2	18.40	4.987mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:13:00 AM
3	19.17	5.201mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:15:25 AM
4	18.02	4.882mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:17:59 AM
5	17.44	4.721mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:20:25 AM

Mean Area 17.88
Mean Conc. 4.844mg/L



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Sample

Sample Name: LA85979-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

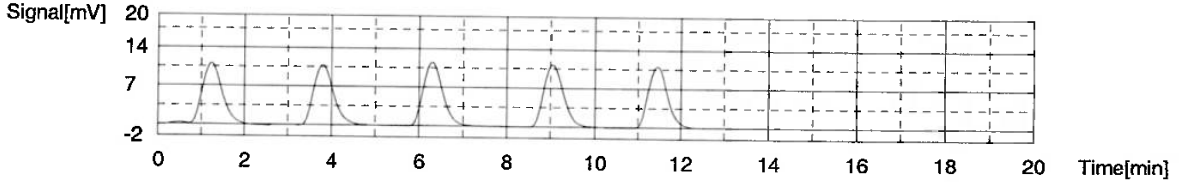
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.555mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.67	10.06mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:34:07 AM
2	34.69	9.510mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:36:44 AM
3	35.55	9.749mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:39:39 AM
4	34.52	9.463mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:42:10 AM
5	34.65	9.499mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:44:39 AM

Mean Area 34.85
Mean Conc. 9.555mg/L



Sample

Sample Name: LA85980-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.543mg/L

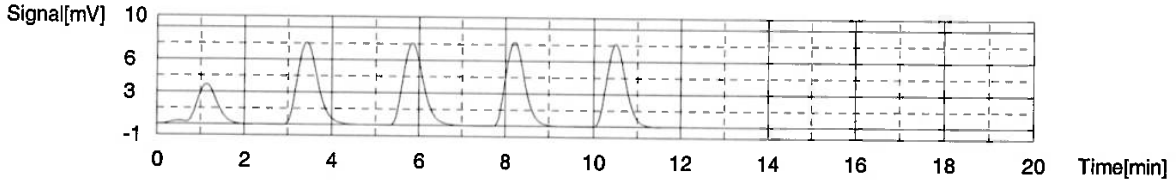
Raw Data GN92992: Total Organic Carbon page 38 of 48
QC Reports:
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1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	12.36	3.310mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 10:57:56 AM
2	24.54	6.692mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:00:32 AM
3	24.32	6.631mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:03:04 AM
4	23.93	6.523mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:05:29 AM
5	23.22	6.326mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:07:55 AM

Mean Area 24.00
Mean Conc. 6.543mg/L



Sample

Sample Name: LA85982-3
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

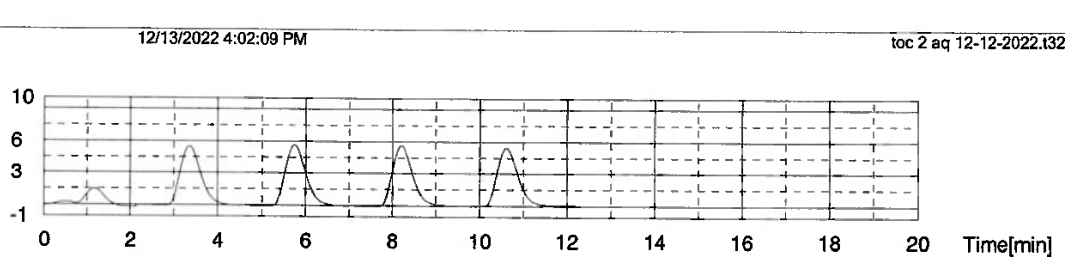
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.878mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.548	1.419mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:21:10 AM
2	17.87	4.840mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:23:41 AM
3	18.30	4.960mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:26:18 AM
4	18.02	4.882mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:28:51 AM
5	17.83	4.829mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:31:49 AM

Mean Area 18.00
Mean Conc. 4.878mg/L



Sample

Sample Name: LA85983-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

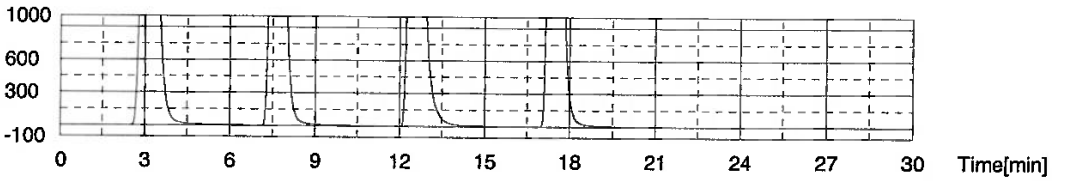
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1814mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7104	0.07591mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:44:49 AM
2	6926	1923mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:49:37 AM
3	6163	1711mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 11:54:56 AM
4	6791	1885mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:01:19 PM
5	6252	1736mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:07:18 PM

Mean Area 6533
Mean Conc. 1814mg/L



Sample

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Sample Name: LA85983-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

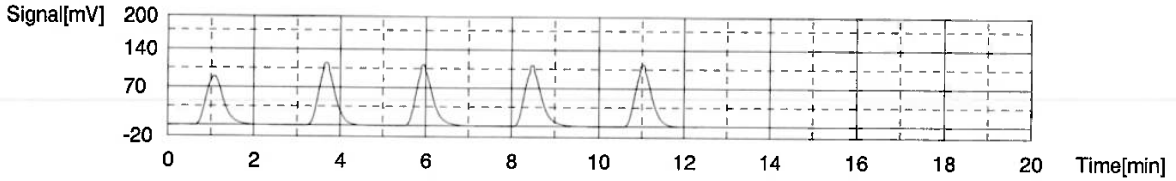
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:8097mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	250.8	6951mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:36:27 PM
2	294.4	8162mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:38:54 PM
3	292.9	8120mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:41:34 PM
4	291.0	8067mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:44:15 PM
5	290.0	8039mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 12:46:45 PM

Mean Area 292.1
Mean Conc. 8097mg/L



Sample

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.52mg/L

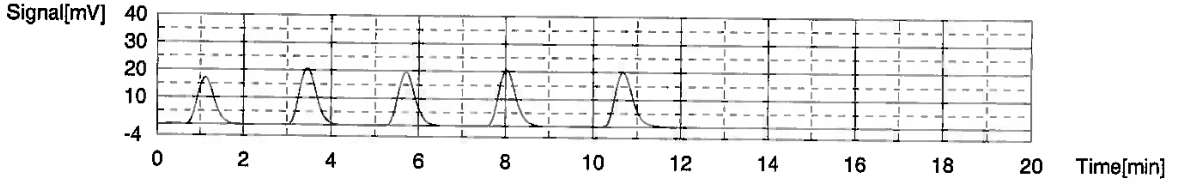
1. Det

Anal.: NPOC

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.49	13.06mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:09:20 PM
2	56.60	15.59mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:11:45 PM
3	54.22	14.93mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:14:11 PM
4	57.58	15.87mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:17:01 PM
5	56.89	15.67mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:19:44 PM

Mean Area 56.32
Mean Conc. 15.52mg/L



Sample

Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

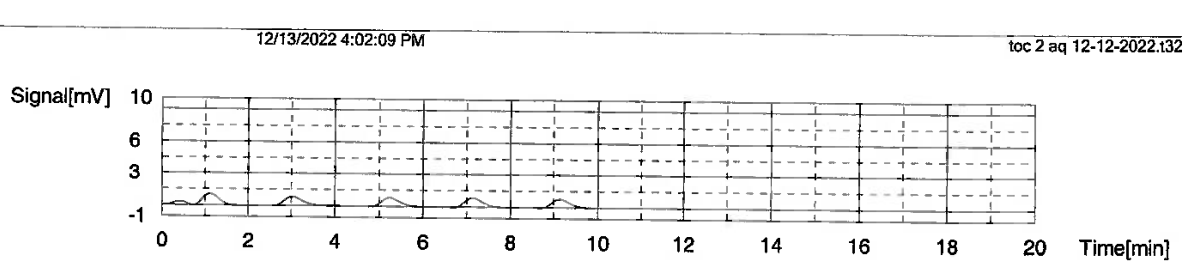
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5461mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.494	0.8488mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:34:23 PM
2	2.431	0.5536mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:36:46 PM
3	2.328	0.5250mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:38:50 PM
4	2.527	0.5803mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:40:57 PM
5	2.330	0.5256mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:43:00 PM

Mean Area 2.404
Mean Conc. 0.5461mg/L



Sample

Sample Name: FC1214-1
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

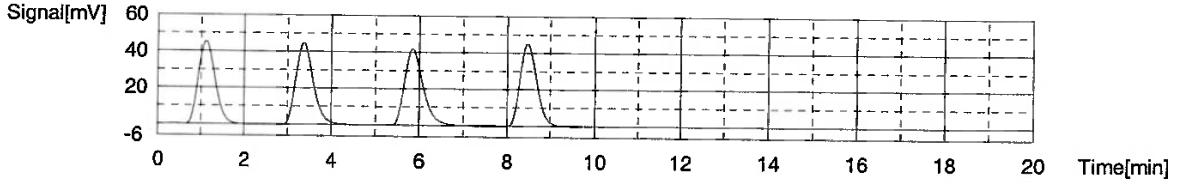
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:136.3mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	122.7	135.8mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:56:24 PM
2	124.8	138.1mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 2:59:02 PM
3	122.2	135.2mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:01:47 PM
4	123.1	136.2mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:04:17 PM

Mean Area 123.2
Mean Conc. 136.3mg/L



Sample

Raw Data GN92992: Total Organic Carbon page 43 of 48
QC Reports:
GN92992
SGS
780 of 794
FC1116
12.5 12

Sample Name: CCV
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

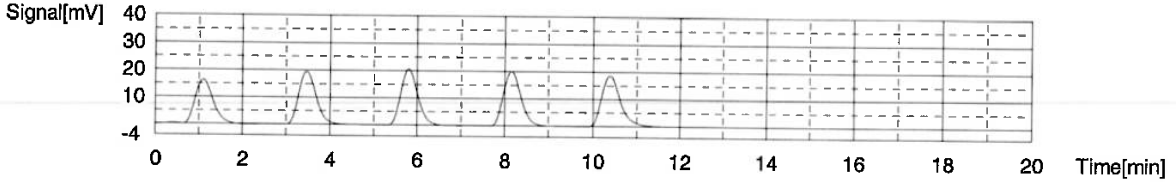
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.27mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	47.40	13.04mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:18:04 PM
2	53.64	14.77mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:20:32 PM
3	57.02	15.71mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:23:02 PM
4	55.36	15.25mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:25:25 PM
5	55.70	15.34mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:28:11 PM

Mean Area 55.43
Mean Conc. 15.27mg/L



Sample

Sample Name: CCB
Sample ID: Untitled
Origin: NPOC.met
Status Completed
Chk. Result

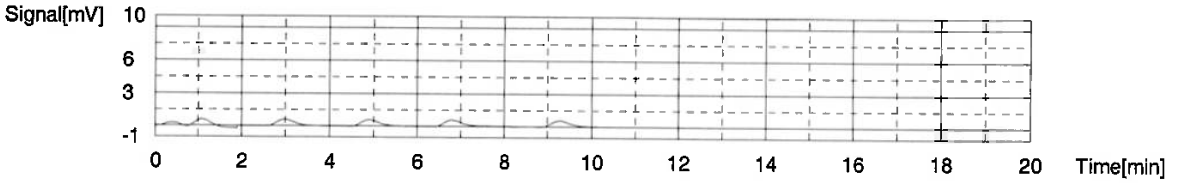
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.3478mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.470	0.5645mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:41:12 PM
2	1.662	0.3401mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:43:15 PM
3	1.647	0.3360mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:45:19 PM
4	1.802	0.3790mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:47:55 PM
5	1.648	0.3362mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal	12/13/2022 3:50:03 PM

Mean Area 1.690
Mean Conc. 0.3478mg/L



Instr.Information

System	TOC-2
Instrument Options	TOC/ASI/
Catalyst	Regular Sensitivity

Cal. Curve

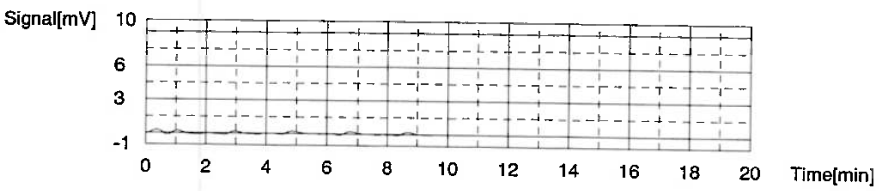
Sample Name:	NPOC METHOD
Sample ID:	Untitled
Cal. Curve:	toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	1.039	50uL	1	*******	E	11/30/2022 4:20:51 PM
2	0.6210	50uL	1	*******		11/30/2022 4:22:54 PM
3	0.6237	50uL	1	*******		11/30/2022 4:24:57 PM
4	0.5785	50uL	1	*******		11/30/2022 4:27:00 PM
5	0.6045	50uL	1	*******		11/30/2022 4:29:04 PM

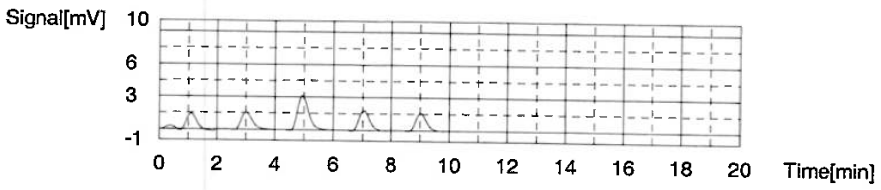
Acid Add.	0.000%
Sp. Time	360.0sec
Mean Area	0.6069



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.224	50uL	1	*******		11/30/2022 4:42:05 PM
2	4.128	50uL	1	*******		11/30/2022 4:44:11 PM
3	8.232	50uL	1	*******	E	11/30/2022 4:46:24 PM
4	4.660	50uL	1	*******		11/30/2022 4:48:31 PM
5	4.124	50uL	1	*******		11/30/2022 4:50:35 PM

Acid Add.	0.000%
Sp. Time	360.0sec
Mean Area	4.284

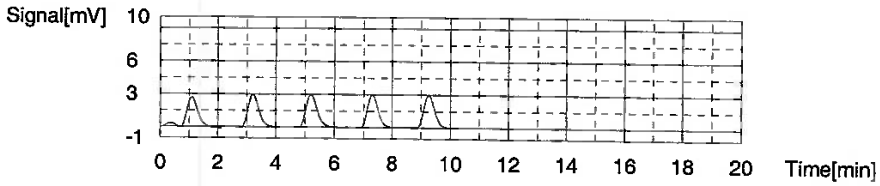


Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.835	50uL	1	*******		11/30/2022 5:03:47 PM
2	7.762	50uL	1	*******		11/30/2022 5:05:56 PM
3	8.131	50uL	1	*******	E	11/30/2022 5:08:12 PM
4	7.838	50uL	1	*******		11/30/2022 5:10:18 PM
5	7.866	50uL	1	*******		11/30/2022 5:12:26 PM

12/13/2022 4:02:31 PM tc 2 - toc 2 aq Cal-Curves 11-30-2022.t32

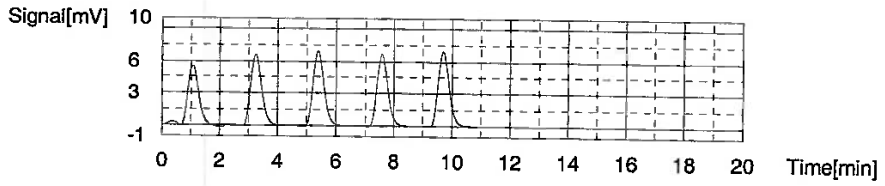
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 7.825



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	15.35	50uL	1	*******	E	11/30/2022 5:25:40 PM
2	17.57	50uL	1	*******		11/30/2022 5:27:57 PM
3	18.21	50uL	1	*******		11/30/2022 5:30:17 PM
4	18.09	50uL	1	*******		11/30/2022 5:32:34 PM
5	18.19	50uL	1	*******		11/30/2022 5:34:48 PM

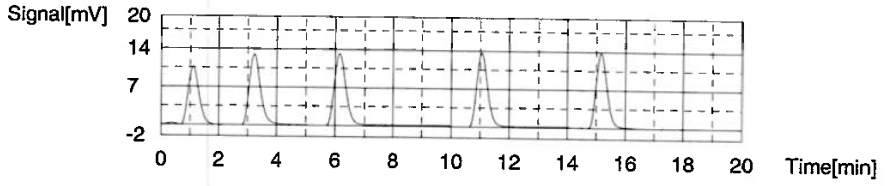
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 18.02



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	28.78	50uL	1	*******	E	11/30/2022 5:48:03 PM
2	35.20	50uL	1	*******		11/30/2022 5:51:06 PM
3	36.85	50uL	1	T*******		11/30/2022 5:56:09 PM
4	36.53	50uL	1	*******		11/30/2022 6:00:25 PM
5	36.11	50uL	1	*******		11/30/2022 6:02:53 PM

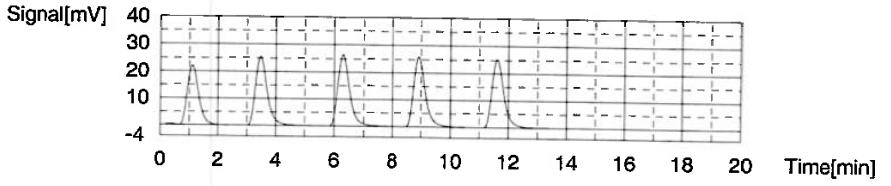
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 36.17



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	61.23	50uL	1	*******	E	11/30/2022 6:16:21 PM
2	72.35	50uL	1	*******		11/30/2022 6:19:20 PM
3	73.19	50uL	1	*******		11/30/2022 6:22:06 PM
4	72.33	50uL	1	*******		11/30/2022 6:24:55 PM
5	71.63	50uL	1	*******		11/30/2022 6:27:58 PM

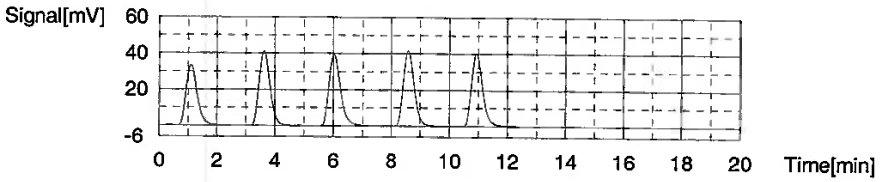
Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 72.38



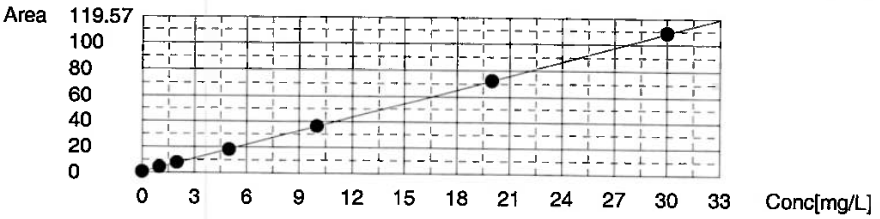
Conc: 30.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	91.08	50uL	1	*******	E	11/30/2022 6:41:36 PM
2	108.8	50uL	1	*******		11/30/2022 6:44:09 PM
3	107.9	50uL	1	*******		11/30/2022 6:46:52 PM
4	108.6	50uL	1	*******		11/30/2022 6:49:21 PM
5	109.5	50uL	1	*******		11/30/2022 6:51:58 PM

Acid Add. 0.000%
Sp. Time 360.0sec
Mean Area 108.7



Slope: 3.602
Intercept 0.4370
r^2 1.0000
r 1.0000
Zero Shift No



Sample

Sample Name: ICV
Sample ID: Untitled
Origin: toc 2 aq cal-curve 11-30-2022.2022_11_30_16_08_42.cal
Status Completed
Chk. Result

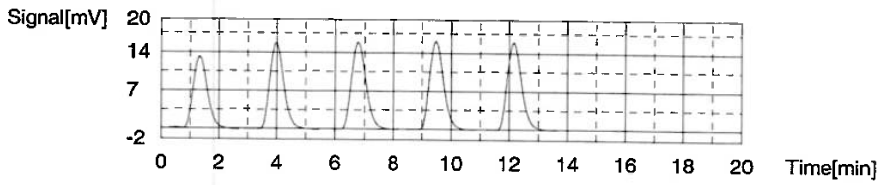
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.01mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.89	12.62mg/L	50uL	1	E	toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:09:47 AM
2	53.33	14.69mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:12:42 AM
3	54.57	15.03mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:15:34 AM
4	55.00	15.15mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:18:23 AM
5	55.04	15.16mg/L	50uL	1		toc 2 aq cal-curve 11-30-2022.2022_11_30_16	12/1/2022 9:21:19 AM

Mean Area 54.48
Mean Conc. 15.01mg/L



TDS Worksheet

Method: SM2540C-11

GN Batch ID:	92999	Filter Lot#	115519		
Analyst:	BW	Date (mm/dd/yy)	12/14/2022	12/14/2022	
Filter Date:	12/13/2022	Time (24hr)(Start/Finish)	12:01-13:01	14:14-15:14	
Balance ID:	AS-120S	Temp Deg C (Start/Finish)	180/180	180/180	

All recorded temperatures are in corrected temperature.

104 Oven ID	oven#3			
180 Oven ID	oven#4			
Therm ID (Oven 3)	919106	Corr. Factor, C	0	
Therm ID (Oven 4)	919218	Corr. Factor, C	0	

	Bottle #	Sample ID	Dish #	Volume Filtered (ml)	Filter tare weight (g)	Initial weight after drying at 180 deg C (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	TDS (mg/l)	RL (mg/l)	Scon(Umhos/cm)
MB	-	Method Blank	1201	50	48.0065	48.0070	48.0069	NO		FALSE		FALSE	8.0	50.0	-
QC1	21	FC1123-1	437	50	48.0708	48.1079	48.1077	NO		FALSE		FALSE	738.0	50.0	1150
D1	21	FC1123-1	3	50	48.0071	48.0420	48.0424	NO		FALSE		FALSE	706.0	50.0	1150
	-	Blank Spike	46	50	50.9882	51.0907	51.0910	NO		FALSE		FALSE	2056.0	50.0	-
	10	FC1116-1	50	50	48.2393	48.2595	48.2595	NO		FALSE		FALSE	404.0	50.0	528
	13	FC1116-2	8	50	48.3386	48.3460	48.3464	NO		FALSE		FALSE	156.0	50.0	262
	10	FC1116-3	27	50	48.2160	48.2370	48.2374	NO		FALSE		FALSE	428.0	50.0	627
	11	FC1116-4	77	50	47.4890	47.5114	47.5118	NO		FALSE		FALSE	456.0	50.0	651
	7	FC1123-7	13	50	47.4174	47.4241	47.4244	NO		FALSE		FALSE	139.8	50.0	197
	7	FC1123-8	32	50	47.4501	47.4608	47.4610	NO		FALSE		FALSE	218.0	50.0	217
	3	FC1227-2	43	50	48.3308	48.3949	48.3950	NO		FALSE		FALSE	1284.0	50.0	2100
	3	FC1227-3	40	50	69.1036	69.1132	69.1136	NO		FALSE		FALSE	200.0	50.0	300
QC2	3	FC1227-1	1117	50	66.4070	66.4165	66.4167	NO		FALSE		FALSE	194.0	50.0	275
D2	3	FC1227-1	20	50	48.3473	48.3568	48.3571	NO		FALSE		FALSE	196.0	50.0	275
	3	FC1227-4	26	50	48.8874	48.9013	48.9015	NO		FALSE		FALSE	282.0	50.0	375
	3	FC1227-5	110	50	69.0573	69.0708	69.0706	NO		FALSE		FALSE	266.0	50.0	380
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	

Duplicate 1 RPD	4.432
Duplicate 2 RPD	1.026

Analyst's Signature: BMarie Wallace Date: 12/14/22

Reviewer's Signature: [signature] Date: 12/15/22

TDS Worksheet

Method: SM2540C-11

GN Batch ID:	92999	Filter Lot#	115519
Analyst:	BW	Date (mm/dd/yy):	
Filter Date:	12/13/2022	Time (24hr)(Start/Finish):	
Balance ID:	AS-120S	Temp Deg C (Start/Finish):	

All recorded temperatures are in corrected temperature.

104 Oven ID	oven#3
180 Oven ID	oven#4
Therm ID (Oven 3)	919106
Therm ID (Oven 4)	919218

Corr. Factor, C: 0

Corr. Factor, C: 0

	Bottle #	Sample ID	Dish #	Volume Filtered (ml)	Filter tare weight (g)	Initial weight after drying at 180 deg C (g)	Redry 1 Constant Weight in g (a)	Redry ?	Redry 2 Constant Weight in g (a)	Redry ?	Redry 3 Constant Weight in g (a)	Redry ?	TDS (mg/l)	RL (mg/l)	Scon(Umhos/cm)
MB	-	Method Blank	1201	50	48.0065			FALSE		FALSE		FALSE		50.0	-
QC1	21	FC1123-1	437	50	48.0708			FALSE		FALSE		FALSE		50.0	1150
D1	21	FC1123-1	3	50	48.0071			FALSE		FALSE		FALSE		50.0	1150
	-	Blank Spike	46	50	50.9882			FALSE		FALSE		FALSE		50.0	-
	10	FC1116-1	50	50	48.2393			FALSE		FALSE		FALSE		50.0	526
	13	FC1116-2	8	50	48.3386			FALSE		FALSE		FALSE		50.0	262
	10	FC1116-3	27	50	48.2160			FALSE		FALSE		FALSE		50.0	627
	11	FC1116-4	77	50	47.4890			FALSE		FALSE		FALSE		50.0	651
	7	FC1123-7	13	50	47.4174			FALSE		FALSE		FALSE		50.0	197
	7	FC1123-8	32	50	47.4501			FALSE		FALSE		FALSE		50.0	217
	3	FC1227-2	43	50	48.3308			FALSE		FALSE		FALSE		50.0	2100
	3	FC1227-3	40	50	69.1036			FALSE		FALSE		FALSE		50.0	300
QC2	3	FC1227-1	1117	50	66.4070			FALSE		FALSE		FALSE		50.0	275
D2	3	FC1227-1	20	50	48.3473			FALSE		FALSE		FALSE		50.0	275
	3	FC1227-4	26	50	48.8874			FALSE		FALSE		FALSE		50.0	375
	3	FC1227-5	110	50	69.0573			FALSE		FALSE		FALSE		50.0	380
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	
								FALSE		FALSE		FALSE		#DIV/0!	

Duplicate 1 RPD	#VALUE!
Duplicate 2 RPD	#VALUE!

Analyst's Signature:_____ Date:_____

Reviewer's Signature:_____ Date:_____

-started @ 12:18
-BW 12/13/22

BOD/CBOD Calculations

Method: SM5210B-2001

Limits:
MB ≤ 0.2mg/l

SC=0.6 to 1 mg/l

	Day1Read	Day5Read	Depletion	Seed result
MB	8.69	8.65	0.04	
Seed 10			0.00	0.00
Seed 15	8.88	5.62	3.26	0.22
Seed 20	8.91	4.17	4.74	0.24
Seed 25	8.91	3.37	5.54	0.22
Seed 30	8.95	1.99	6.96	0.23

Seed correction=(Average of seed results with valid seed depletions)x4 0.910

GP Batch: 38284
Prep Date: 12/08/22
Prep Time: 12:39

GN Batch: 93004
Analysis Date: 12/13/22
Analysis Time: 11:28

SB Result 216.5
SB %Rec 109.3

	Samp#.bot#	SampVol,m	DIL	Day1Read	Day5Read (≥1)	Depletion (≥2)	RL,mg/L	BOD,mg/L		
	BS1	6	50	8.86	3.48	5.38	100	223.50		
	BS2	6	50	8.94	3.64	5.30	100	219.50		
	BS3	6	50	8.97	3.93	5.04	100	206.50		
DUP	FC1113-2.5	1	300.0	8.90	6.94	1.96	600	315.00	110.50	
		3	100.0	8.95	6.70	2.25	200	134.00	30.09	DupRPD
		10	30.0	8.93	5.12	3.81	60	87.00		
		30	10.0	8.62	0.80	7.82	20	69.10		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
QC	FC1113-2.5	1	300.0	8.84	7.29	1.55	600	192.00	81.60	
		3	100.0	8.92	6.96	1.96	200	105.00		
		10	30.0	8.89	5.26	3.63	60	81.60		
		30	10.0	8.47	0.62	7.85	20	69.40		
	FC1116-1.1	6	50.0	8.92	7.39	1.53	100	31.00		
		20	15.0	8.98	7.83	1.15	30	3.60		
		50	6.0	9.12	8.07	1.05	12	0.84		
		150	2.0	9.39	8.25	1.14	4	0.46		
	FC1116-2.1	6	50.0	8.97	7.80	1.17	100	13.00		
		20	15.0	8.82	7.48	1.34	30	6.45		
		50	6.0	8.62	5.80	2.82	12	11.46		
		150	2.0	7.62	0.88	6.74	4	11.66		
	FC1116-3.1	6	50.0	8.82	7.72	1.10	100	9.50		
		20	15.0	8.94	7.79	1.15	30	3.60		
		50	6.0	8.69	6.68	2.01	12	6.60	5.83	
		150	2.0	7.29	3.85	3.44	4	5.06		
	FC1116-4.1	6	50.0	8.88	7.47	1.41	100	25.00		
		20	15.0	8.92	7.27	1.65	30	11.10		
		50	6.0	8.67	5.58	3.09	12	13.08		
		150	2.0	6.99	0.91	6.08	4	10.34		
	FC1117-6.1	3	100.0	8.9	7.2	1.70	200	79.00		
		10	30.0	8.99	6.09	2.90	60	59.70	57.45	
		30	10.0	9.07	2.6	6.47	20	55.60		
		75	4.0	9.13	0.81	8.32	8	29.64		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		
			#DIV/0!			0.00	#DIV/0!	#DIV/0!		

Analyst's Initials JR Date 12/13/22 Reviewer's Initials DM Date 12/14/22

12-08-22.xls SI

SGS - Orlando

BOD / CBOD Log

BOD / CBOD (circle one) by SM 5210B-2001

GP# 38284
GN# ~~120919~~ JR 12/13/22 GM93004

Winkler Verification Date ____ (performed monthly) (mm-dd-yy)

Date Set 12/8/22 (mm-dd-yy) Time Set 12:39 (24:00) DO Meter Cal Day 1 8.70 By: JC Init
764.3 mmHg/21.0°C

Date Read 12/13/22 (mm-dd-yy) Time Read 11:28 (24:00) DO Meter Cal Day 5 8.90 By: JC Init
762.3 mmHg/20.9°C

DO Meter ID DM150 Incubator ID #2 pH ~~Meter~~ Probe ID 0921

Dilution Water Lot WH34336 GGA Lot WC1988 Inhibitor Lot ____

0.025N Na2SO3 Lot ____ 1N H2SO4 Lot ____ 1N NaOH Lot ____

Seed Start Time: 11:27 (24:00) Seed Exp Time: 17:27 (24:00) Seed Lot GM34337

Sample ID	Bottle #	Chlorine present Y/N	Na2SO3 added Y/N	Initial pH, su	Adjusted pH, 7.0 - 7.2, su	Volume, ml	Day 1 DO, mg/l	Day 5 DO, mg/l	Comments (clients, sample appearance, etc.)
MB	N/A	N	N	N/A	N/A	N/A	8.69	8.65	
Vessel 15							8.88	5.42	
20							8.91	4.17	
25							8.91	3.37	
30							8.95	1.99	
BS1						6 *	8.86	3.48	*JR 12/8/22
2							3.94	3.64	
3						44	8.97	3.93	
Dup FC1113-2 ②	5			7.0		①1	8.90	6.94	① 5x serial dilution
						3	8.95	6.70	② History: 30x dil
						10	8.93	5.12	
						30	8.62	0.80	
QC FC1113-2						①1	8.84	7.29	
						3	8.92	6.96	
						10	8.89	5.26	
						30	8.47	0.62	
FC1116-1	11			7.8		6	8.92	7.39	
						80	8.98	7.83	
						50	9.12	8.07	
						150	9.39	8.25	
FC1116-2	14			6.6		6	8.97	7.80	
						20	8.82	7.48	
						50	8.42	5.80	
						150	7.62	0.88	
				JR	12/8/22				

Analyst Signature [signature] Date 12/8/22 (mm-dd-yy)

Reviewer Signature ____ Date ____ (mm-dd-yy)

BOD / CBOD Log

BOD / CBOD (circle one) by SM 5210B-2001

Winkler Verification Date _____ (mm-dd-yy) (performed monthly)

Date Set 12/8/22 (Cont'd) (mm-dd-yy) Time Set _____ (24:00)

Date Read _____ (mm-dd-yy) Time Read _____ (24:00)

DO Meter ID _____ Incubator ID _____

Dilution Water Lot _____ GGA Lot _____

0.025N Na2SO3 Lot _____ 1N H2SO4 Lot _____

Seed Start Time: _____ (24:00) Seed Exp Time: _____ (24:00)

GP# _____

GN# _____

DO Meter Cal Day 1 _____ By: _____ init

DO Meter Cal Day 5 _____ By: _____ init

pH meter ID _____

Inhibitor Lot _____

1N NaOH Lot _____

Seed Lot _____

Sample ID	Bottle #	Chlorine present Y/N	Na2SO3 added Y/N	Initial pH, su	Adjusted pH, 7.0 - 7.2, su	Volume, ml	Day 1 DO, mg/l	Day 5 DO, mg/l	Comments (clients, sample appearance, etc.)
FC1116-3	11	N	N	7.0	N/A	6	8.82	7.72	
	↓	↓	↓	↓	↓	20	8.94	7.79	
	↓	↓	↓	↓	↓	50	8.09	6.48	
	↓	↓	↓	↓	↓	150	7.29	3.85	
FC1116-4	10			6.9		6	8.88	7.47	
	↓			↓		20	8.92	7.27	
	↓			↓		50	8.67	5.58	
	↓			↓		150	6.99	0.91	
FC1117-5(1)	1			7.4		3	8.90	7.20	(1) History ranges
	↓			↓		10	8.99	6.09	between 4 & 30x
	↓			↓		30	9.07	2.60	dilutions
	↓	↓	↓	↓	↓	75	9.13	0.81	

JL 12/13/22

Analyst Signature _____ Date 12/8/22 (mm-dd-yy)

Reviewer Signature _____ Date _____ (mm-dd-yy)

Rev. 0116 LM

SGS Accutest - Orlando

16 of 50

12.7 12

tiamo 2.5 Build 116
License ID: 14676229

① Low level determination required.

Computer name: US0000049

User (short name): New User
Printed: 2022-12-14 10:21:43 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk
1		2022-12-13 15:56:18 UTC-5	855 pH Cal 171016jpm					
2	System Prep-250mg/L	2022-12-13 16:44:54 UTC-5	Total Alkalinity-All Forms 210115jpm	10.60	10.60		8.85	252.8
3	BSP-250mg/L	2022-12-13 17:00:37 UTC-5	Total Alkalinity-All Forms 210115jpm	10.70	10.71		8.84	252.6
4	FC1123-1.13	2022-12-13 17:12:26 UTC-5	Total Alkalinity-All Forms 210115jpm	7.89	7.89		13.24	378.3
5	FC1123-1.13DUP	2022-12-13 17:27:23 UTC-5	Total Alkalinity-All Forms 210115jpm	7.89	7.89		13.24	378.4
6	FC1123-7.7	2022-12-13 17:41:28 UTC-5	Total Alkalinity-All Forms 210115jpm	7.56	7.57		3.15	90.0
7	FC1123-8.7	2022-12-13 17:49:11 UTC-5	Total Alkalinity-All Forms 210115jpm	7.58	7.59		3.64	104.0
8	FC1203-1.19	2022-12-13 17:57:15 UTC-5	Total Alkalinity-All Forms 210115jpm	7.02	7.01		11.58	331.0
9	FC1142-3.21	2022-12-13 18:16:20 UTC-5	Total Alkalinity-All Forms 210115jpm	7.01	7.01		8.03	229.6
10	FC1116-1.10	2022-12-13 18:28:46 UTC-5	Total Alkalinity-All Forms 210115jpm	6.47	6.46		3.92	112.1
11	FC1116-2.13	2022-12-13 18:42:21 UTC-5	Total Alkalinity-All Forms 210115jpm	6.36	6.36		3.84	109.7
12	FC1116-3.10	2022-12-13 18:50:56 UTC-5	Total Alkalinity-All Forms 210115jpm	7.17	7.16		13.19	376.8
13	FC1116-4.11	2022-12-13 19:10:51 UTC-5	Total Alkalinity-All Forms 210115jpm	7.04	7.03		13.36	381.6
14	FC1068-3.6	2022-12-13 19:31:00 UTC-5	Total Alkalinity-All Forms 210115jpm	7.86	7.86		13.07	373.4
15	FC1068-5.6	2022-12-13 19:47:12 UTC-5	Total Alkalinity-All Forms 210115jpm	8.06	8.06		15.02	429.1
16	FC1068-8.6	2022-12-13 20:04:24 UTC-5	Total Alkalinity-All Forms 210115jpm	7.94	7.94		16.38	467.9
17	FC1068-9.6	2022-12-13 20:22:44 UTC-5	Total Alkalinity-All Forms 210115jpm	7.98	7.98		16.39	468.2
18	FC1068-11.9 ①	2022-12-13 20:41:06 UTC-5	Total Alkalinity-All Forms 210115jpm	6.04	6.12		0.10	2.9
19	FC1068-12.6 ①	2022-12-13 20:52:10 UTC-5	Total Alkalinity-All Forms 210115jpm	6.19	6.27		0.09	2.6
20	FC1224-1.5	2022-12-13 21:02:32 UTC-5	Total Alkalinity-All Forms 210115jpm	7.99	8.03		1.47	41.9

GN93010
Metrohm 85609125

Sodium Carbonate Spike: GN34331

0.02 N H_2SO_4 GN34347

BI Recovery: 101.04%.

Duplicate RPD: 0.03%.

Brian Wallace 12/14/22

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-14 10:21:43 UTC-5

Determination overview

	Sample ID	Determination start	Method name	Initial pH	pH	Cond uS	mL at EP	Total Alk
21	FC1224-2.5	2022-12-13 21:11:52 UTC-5	Total Alkalinity-All Forms 210115jpm	7.66	7.67		1.46	41.8

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-14 10:21:43 UTC-5

Determination overview

	Temp	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Zero Pt	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
1	20.8	22.6	98.50		6.90					
2	20.8	22.6				112.2	28.5	224.3	0.00	
3	20.8	22.6				116.6	19.4	233.1	0.00	
4	20.9	22.7				0.0	378.3	0.0	0.00	
5	20.8	22.6				0.0	378.4	0.0	0.00	
6	20.6	22.4				0.0	90.0	0.0	0.00	
7	20.8	22.6				0.0	104.0	0.0	0.00	
8	20.7	22.5				0.0	331.0	0.0	0.00	
9	20.6	22.4				0.0	229.6	0.0	0.00	
10	20.7	22.5				0.0	112.1	0.0	0.00	
11	20.7	22.5				0.0	109.7	0.0	0.00	
12	20.8	22.6				0.0	376.8	0.0	0.00	
13	20.9	22.7				0.0	381.6	0.0	0.00	
14	20.9	22.7				0.0	373.4	0.0	0.00	
15	21.0	22.8				0.0	429.1	0.0	0.00	
16	21.0	22.8				0.0	467.9	0.0	0.00	
17	21.0	22.8				0.0	468.2	0.0	0.00	
18	21.1	22.9				0.0	2.9	0.0	0.00	
19	21.1	22.9				0.0	2.6	0.0	0.00	
20	20.9	22.7				0.0	41.9	0.0	0.00	

tiamo 2.5 Build 116
License ID: 14676229

Computer name: US0000049

User (short name): New User
Printed: 2022-12-14 10:21:43 UTC-5

Determination overview

	Temp	Correct...	Slope/Cell Const.	Cond Check uS	pH Cal Zero Pt	p-Alk	Bicarb Alk	Carb Alk	OH Alk	Remarks
21	21.2	23.0				0.0	41.8	0.0	0.00	

Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	FC1020
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	SGS North America, Inc., Orlando, FL
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S4VEM
Primary Data Reviewer:	Mark Lund, Project Scientist
Second Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 04, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2120B	A2320B	A2340B	A2540C	A5210B	A5220C	E365.3	SW8260D	SW9056A	SW9060A
LF1SW-1-1222	FC1020-1	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1SW-2SMC-1222	FC1020-3	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1SW-3-1222	FC1020-2	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1-TB-120522	FC1020-4	Water	Trip Blank/TB								X		

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S4VEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by SGS North America, Inc., Orlando, FL and were reported under sample delivery group (SDG) FC1020. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 144 results (45.86%) out of the 314 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2120B	The laboratory noted that Color, Apparent SM2120 B-11 AQ SGS is not certified for this parameter.
A2320B	No additional comments; see Checklist for detail.
A2340B	No additional comments; see Checklist for detail.
A2540C	No additional comments; see Checklist for detail.
A5210B	The laboratory noted that RPD for Duplicate for BOD, 5 Day is outside control limits for sample GP38277-D1. RPD acceptable due to low duplicate and sample concentrations. FC1020-1, 2, and 3 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria BOD, 5 Day SM5210 B-11 AQ SGS is not certified for this parameter.
A5220C	The laboratory noted that Chemical Oxygen Demand SM5220 C-11 AQ SGS is not certified for this parameter.
E365.3	The laboratory noted that Matrix Spike Recovery for Phosphate, Ortho is outside control limits. Spike recovery indicates possible matrix interference.
SW8260D	The laboratory noted that FC1020-4: Sample vial(s) contained significant headspace. FC1020-3: Sample vial(s) contained bubbles greater than 6mm. RPD for MSD for Methyl Bromide is outside control limits for sample FC1020-3MSD. Probable cause is due to sample non-homogeneity. FC1020-3 for Dichlorodifluoromethane: Associated ICV outside DOD QSM control limits low. Matrix Spike Recoveries for 1,2,4-Trimethylbenzene, Methyl Bromide are outside control limits. Probable cause is due to matrix interference. Matrix Spike Duplicate Recovery for Methyl Bromide is outside control limits. Probable cause is due to matrix interference. FC1020-1 and FC1020-2 for Chloroethane: Associated CCV outside of DOD QSM control limits high, sample is ND.
SW9056A	The laboratory noted that Matrix Spike Recovery for Fluoride is outside control limits. Spike recovery indicates possible matrix interference.

SW9060A	The laboratory noted that FC1020-1 for Total Organic Carbon: Sample was not preserved to a pH < 2. FC1020-3 for Total Organic Carbon: Sample was not preserved to a pH < 2.

Reviewed by Mark Lund, Project Scientist, Synectics, Sacramento, CA — February 21, 2023

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA — March 04, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW8260D, Initial Calibration Verification

Compliance requirements for satisfactory continuing calibration are established to ensure that the instrument is capable of producing acceptable qualitative and quantitative data. Continuing calibration is performed to verify and evaluate instrument performance during sample analysis. Summary forms were evaluated against project acceptance criteria, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
ICV2866-4 (IV)	Dichlorodifluoromethane	77.8	80 - 120	50 - 150	percent	J/UJ	V1	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Initial Calibration Verification for SW8260D

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-2SMC-1222 FC1020-3	N	Dichlorodifluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P/V1

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW8260D, MS RPD

The objective of matrix spikes/matrix spike duplicates (MS/MSD) RPD analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. MS/MSD analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Matrix spikes/matrix spike duplicates results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1SW-2SMC-1222 (SD)	Bromomethane	23.6	< 19	< 19	rpd	J/None	D	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

No results associated with this QC element required qualification.

Quality Control Outliers for test method SW9056A, Lab Blank

The purpose of laboratory blanks is to determine the existence and magnitude of cross-contamination problems resulting from laboratory activities. Reported results were evaluated to determine compliance with the required acceptance criteria. Summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and contaminants found in laboratory blanks are listed below along with any associated qualified results.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
GP38275-MB1 (LB)	Fluoride	0.0710	< 0.06	< 0.2	mg/l	U/None*	L	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

*Blank flags displayed in the above table identify qualification of the sample result when it is less than or equal to the LOQ/RL. Sample results above the LOD or LOQ will be qualified based on the validation guidance assigned in the project setup.

Qualified Results associated with the Lab Blank for SW9056A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-1-1222 FC1020-1	N	Fluoride	0.200	0.110 J	0.200 U		mg/l	L
LF1SW-2SMC-1222 FC1020-3	N	Fluoride	0.200	0.120 J	0.200 U		mg/l	L
LF1SW-3-1222 FC1020-2	N	Fluoride	0.200	0.100 J	0.200 U		mg/l	L

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: A5210B		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-1-1222 FC1020-1	N	Biochemical Oxygen Demand, 5-Day	4.00	4.00 U	4.00 UJ		mg/l	P2
LF1SW-2SMC-1222 FC1020-3	N	Biochemical Oxygen Demand, 5-Day	4.00	4.00 U	4.00 UJ		mg/l	P2
LF1SW-3-1222 FC1020-2	N	Biochemical Oxygen Demand, 5-Day	4.00	4.00 U	4.00 UJ		mg/l	P2

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-2SMC-1222 FC1020-3	N	1,1,1,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1,1-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1,2,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,1-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2,3-Trichloropropane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2,4-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dibromo-3-chloropropane	5.00	2.00 U	2.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,3,5-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,3-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,3-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	1,4-Dichlorobenzene	1.00	0.940 J	0.940 J	-	ug/l	TR/P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-2SMC-1222 FC1020-3	N	2,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	2-Butanone (MEK)	5.00	3.50 U	3.50 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	2-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	2-Hexanone	10.0	5.00 U	5.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	4-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	4-Methyl-2-pentanone (MIBK)	5.00	2.00 U	2.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Acetone	25.0	20.0 U	20.0 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Benzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Bromobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Bromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Bromodichloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Bromoform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Bromomethane	5.00	4.00 U	4.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Carbon Tetrachloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Chlorobenzene	1.00	0.480 J	0.480 J	-	ug/l	TR/P
LF1SW-2SMC-1222 FC1020-3	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Chloroform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	cis-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	cis-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Cumene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Dibromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Dibromomethane	2.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Dichlorodifluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P/V1
LF1SW-2SMC-1222 FC1020-3	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Hexachlorobutadiene	2.00	1.00 U	1.00 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-2SMC-1222 FC1020-3	N	m,p-Xylene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Methyl tert-butyl ether (MTBE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Methylene chloride	5.00	4.00 U	4.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Naphthalene	5.00	2.00 U	2.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	n-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	n-Propylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	o-Xylene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	p-Cymene (p-Isopropyltoluene)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	sec-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	tert-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Tetrachloroethene (PCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Toluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	trans-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	trans-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Trichloroethene (TCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Vinyl acetate	10.0	5.00 U	5.00 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Vinyl chloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1SW-2SMC-1222 FC1020-3	N	Xylenes, Total	3.00	1.50 U	1.50 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1,1,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1,1-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1,2,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,1-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1-TB-120522 FC1020-4	TB	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2,3-Trichloropropane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2,4-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dibromo-3-chloropropane	5.00	2.00 U	2.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,3,5-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,3-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,3-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	1,4-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	2,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	2-Butanone (MEK)	5.00	3.50 U	3.50 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	2-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	2-Hexanone	10.0	5.00 U	5.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	4-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	4-Methyl-2-pentanone (MIBK)	5.00	2.00 U	2.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Acetone	25.0	20.0 U	20.0 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Benzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Bromobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Bromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Bromodichloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Bromoform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Bromomethane	5.00	4.00 U	4.00 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1-TB-120522 FC1020-4	TB	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Carbon Tetrachloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Chlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Chloroform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	cis-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	cis-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Cumene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Dibromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Dibromomethane	2.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Dichlorodifluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Hexachlorobutadiene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	m,p-Xylene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Methyl tert-butyl ether (MTBE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Methylene chloride	5.00	4.00 U	4.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Naphthalene	5.00	2.00 U	2.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	n-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	n-Propylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	o-Xylene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	p-Cymene (p-Isopropyltoluene)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	sec-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Styrene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	tert-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Tetrachloroethene (PCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Toluene	1.00	0.500 U	0.500 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1-TB-120522 FC1020-4	TB	trans-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	trans-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Trichloroethene (TCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Vinyl acetate	10.0	5.00 U	5.00 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Vinyl chloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1-TB-120522 FC1020-4	TB	Xylenes, Total	3.00	1.50 U	1.50 UJ		ug/l	P

Test Method: SW9056A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-1-1222 FC1020-1	N	Fluoride	0.200	0.110 J	0.200 U		mg/l	L
LF1SW-2SMC-1222 FC1020-3	N	Fluoride	0.200	0.120 J	0.200 U		mg/l	L
LF1SW-3-1222 FC1020-2	N	Fluoride	0.200	0.100 J	0.200 U		mg/l	L

Test Method: SW9060A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1SW-1-1222 FC1020-1	N	Total Organic Carbon	2.00	2.10	2.10 J		mg/l	P
LF1SW-2SMC-1222 FC1020-3	N	Total Organic Carbon	2.00	3.20	3.20 J		mg/l	P

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D	MS RPD
L	Lab Blank
P	Sample preservation/collection requirement not met.
P2	Improper preparation/extraction
TR	Trace Level Detect
V1	ICV

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Some LOQs were raised due to dilutions. Various compounds are reported non-detect at levels greater than the project PQGs.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?			•	
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?			•	
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?			•	Data was reviewed. No calculations.
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?			•	
Were target analytes in the method blank less than DL?			•	
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?			•	
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		
Were LCS/LCSD recoveries within project acceptance limits?			•	
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?			•	
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An :LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?			•	
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?			•	
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?			•	Data reviewed. No calculations.
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			As it was noted by the laboratory samples #1-3 had oxygen depletion outside acceptable data the results were qualified J with a P2 reason code. See All Qualified Result table.
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•	•		
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))				
Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?			•	
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The laboratory case narrative indicated that recoveries were outside control limits; however, it was for a non-SDG sample and no action is required on this basis.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))				
Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		Samples FC1020-4 and FC1020-3 vial(s) contained significant headspace and were qualified J/UJ with a P reason code. See All Qualified Results table.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		LOQs were raised above project specifications in association with undiluted analyses that reported non-detect.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?	•			
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?		•		See QC Outliers.
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?		•		FC1293-8MS surrogate 1,2-Dichloroethane-D4 was not within project acceptance limits.
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?		•		See QC outliers
Were CCVs run at the required frequency and within project acceptance criteria?		•		V1P3648-CC3646 CC3646-CCV recoveries were outside control limits with a high bias for chloroethane, trichlorofluoromethane, carbon tetrachloride, and 2,2-dichloropropane and the associated samples non-detect, no action was taken on this basis. VY2765-CC2755 - CCV recoveries were outside control limits with a high bias for chloroethane and the associated samples non-detect, no action was taken on this basis.
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability and documentation of standard solution preparation provided?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Were Relative Retention Times (RRTs) within ± 0.06 RRT units and updated with the latest daily CCV?	•			
Were chromatograms checked for peak integration? (10% of automated integration and 100% of manual integrations)	•			
Were chromatograms checked for correct baseline/peak integration and possible interferences?	•			
Were qualitative ion mass present?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?		•		ICV/CCV recoveries were outside control limits and the associated samples were not re-analyzed.
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9056A (Anion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?		•		See QC Outliers.
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The laboratory case narrative indicated that recoveries were outside control limits; however, it was for a non-SDG sample and no action is required on this basis.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: SW9056A (Anion Chromatography)				
Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9060A (Total Organic Carbon)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		Samples FC1020-1 and FC1020-3 were pH > 2; however, they were adjusted upon receipt at the laboratory. No action was required on this basis.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?	•			
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			An LCSD was not analyzed.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		non-SDG sample
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: SW9060A (Total Organic Carbon)				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?		•		
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Tier 3
Laboratory Control Sample

SDG #:	FC1020	Date:	2/21/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: SM2320B
Matrix: Water

LCS ID:	GN92993	LCS/LCSD ID:	.
Analyte ID:	Alkalinity, Total (as CaCO3)	Analyte ID:	.
Recovery:	102.2	RPD:	.

$$\% \text{ Recovery} = \frac{\text{Conc. LCS}}{\text{LCS Spike Conc.}} \times 100 \qquad \text{RPD} = \frac{|\text{LCS Conc.} - \text{LCSD Conc.}|}{(\text{LCS Conc.} + \text{LCSD Conc.})/2} \times 100$$

Conc. LCS =	256	LCS Conc. =	.
LCS Spike Conc. =	250	LCSD Conc. =	.
% Recovery =	102.4 Match	RPD =	####### Match

Comments: An LCSD was not analyzed.

Tier 3
Sample Result Verification

SDG #:	FC1020	Date:	2/21/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: SM2320B

Sample ID: FC1020-1
Compound ID: Alkalinity, Total (as CaCO3)
Reported Result: 366 mg/L p 17

Alkalinity In Sample = $\frac{\text{(ml H2SO4 @pH 4.5 x (Normality) x (500000)}}{\text{(Sample Volume in mL)}}$

ml H_2SO_4 @pH 4.5 =	12.82	mL titrant	p 1020
Normality =	0.02	N	p 1021
Sample Volume =	35	mL	

Conc. In Sample = 366 mg/L Match

Comment:

Comments -

Level 4
Sample Result Verification

SDG #:	FC1020	Date:	2/19/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM
Method:	2340B		
Matrix:	water		

CALCULATIONS

hardness = (Calcium * 2.497) + (Magnesium * 4.118)

Sample ID: FC1020-1

Reported result	368	mg/L as CaCO3	p 16
calcium =	131000	ug/L	p 878
magnesium =	9990	ug/L	p 878
hardness =	368	mg/L as CaCO3	Match

Comments

Level 4
Sample Result Verification

SDG #:	FC1020	Date:	2/19/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 2540C
Matrix: solids

CALCULATIONS

solids = Dry Weight / Wet Weight

Sample ID: FC1020-1 p 970

Reported result =	442	mg/L	
volume	50	mL	
tare weight =	48.3308	g	
weight after drying =	48.3529	g	
difference =	0.0221	g	
solids =	442	mg/L	Match

Comments

Laboratory Control Sample

SDG #:	FC1020	Date:	2/19/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: SM5220C

LCS ID:	LCS 2/8/2022	p 915	LCS/LCSD ID:		
Analyte ID:	COD		Analyte ID:		
Recovery:	105		RPD:		

% Recovery = $\frac{\text{Conc. LCS}}{\text{LCS Spike Conc.}}$ X 100

RPD= $\frac{|\text{LCS Conc. - LCSD Conc.}|}{(\text{LCS Conc. + LCSD Conc.})/2}$ x 100

Conc. LCS =	52.5	p 915	LCS Conc. =		
LCS Spike Conc. =	50.0	p 915	LCSD Conc. =		
% Recovery =	105.0	Match	RPD =	#DIV/0!	Match

Comments: An LCSD was not analyzed.

Matrix Spike

SDG #:	FC1020	Date:	2/19/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: SM5220C

Sample ID:	FC1020-1MS1	MS/MSD ID:	, FC1020-1MSD1
Analyte ID:	COD	Analyte ID:	COD
Recovery:	105 P 900	RPD:	4.3

$$\%\ Rec = \frac{\text{Conc. MS - Conc. Unspiked Sample}}{\text{MS Spike Conc.}} \times 100$$

$$RPD = \frac{|\text{MS Conc. - MSD Conc.}|}{(\text{MS Conc. + MSD Conc.})/2} \times 100$$

Conc. MS Sample =	60.00	p 915	MS Conc. =	60
Unspiked Samp. =	7.500	p 915	MSD Conc. =	57.5
MS Spike Conc. =	50.0	p 915		
			RPD =	4.3 Matches
% Recovery =	105	Matches		

Comment:

Sample Result Verification

SDG #:	FC1020	Date:	2/19/23
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: SW5220C

Sample ID:	FC1020		
Compound ID:	COD		
Reported Result:	7.5 J	mg/L	

COD $\frac{\text{(ml titrant) x normallity of titrant}}{\text{(Sample Volume in mL)}}$

			p 915
ml sample titrant =	3.75	mL	p 915
Normality titrant =	0.0125	N	p 915
Sample Volume =	50	mL	p 915

Conc. In Sample =	7.5	mg/L	Match

Level 4
Initial Calibration

SDG #:	FC1020	Date:	7/23/21
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 9056

CALCULATIONS

Cal ID:	CICK 03/13/2021 16:55	Correlation Coeff:	0.9999
Analyte:	sulfate	Slope:	
		Intercept:	

	(y) area	(x) conc
Level 1 =	0.0033	0
Level 2 =	0.2612	1
Level 3 =	0.5081	2
Level 4 =	0.6636	2.5
Level 5 =	1.4835	5
Level 6 =	3.2287	10
Level 7 =	6.7809	20
Level 8 =	13.2891	40
Level 9 =	16.1297	50
Level 10 =	26.291	80
Level 11 =	32.3964	100

Corr Coef =	0.99988	Match
Slope =	0.326546	
Y-Int =	-0.032464	

Comments:

Level 4
Initial Calibration Verification

SDG #:	FC1020	Date:	7/23/21
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 9056

CALCULATIONS

ICV Standard ID: ICV 680-659446/1072 p 905
Analyte ID: sulfate
ICV % D: 2.4

True ICV Conc. =	50.0	
Found ICV Conc. =	48.8	
Calculated % D =	-2.4	Match

Level 4
Continuing Calibration

SDG #:	FC1020	Date:	7/23/21
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 9056

CALCULATIONS

CCV Standard ID: GN92948-CCV1
Analyte ID: sulfate
%D: 101.6

Result = 50.8
True value = 50.0

Calculated % Recovery = 101.6 Match

Comments:

Level 4
Laboratory Control Sample

SDG #:	FC1020	Date:	7/23/21
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 9056

CALCULATIONS

LCS ID:	GP38275/GN92948	LCS/LCSD ID:	
Analyte ID:	sulfate	Analyte ID:	
Recovery:	93.4 p 898	RPD:	

% Recovery = Conc. LCS / LCS Spike Conc. X 100

RPD = |LCS Conc. - LCSD Conc.| / (LCS Conc. + LCSD Conc.)/2 X 100

Conc. LCS =	46.7	LCS Conc. =	
LCS Spike Conc. =	50.0	LCSD Conc. =	
% Recovery =	93.4 Match	RPD =	#VALUE!

Comments: An LCSD was not analyzed.

Level 4
Sample Result Verification

SDG #:	FC1020	Date:	7/23/21
Lab:	SGS	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: 9056

CALCULATIONS

Sample ID: FC1020-1
Compound ID: sulfate
Reported Result: 2.60 mg/L

Conc. In Sample = (((Analyte Response) * Slope) - (y intercept)) * (Final Amt/Initial Amt) * DF

Inst. Resp. = 0.854700
Slope = 0.320000
Y-Int = 6.90E-04
Initial Amount (ml) = 1.00
Dilution Factor = 1.0
Final Amount(ml)= 1.00
Conc. In Sample = 2.67 mg/L Close Match

Comments:

GC/MS VALIDATION WORKSHEET
INSTRUMENT PERFORMANCE CHECK

SDG #:	680-202905-1	Date:	2/13/23
Lab:	SGS Orlando FL	Page:	1 of 1
Client:	Bhate Environmental	Validated by:	ML
		Second Review by:	EM

Tune ID: V1P3648-BFB
Recalculated Ion Ratio: 174:95
Reported Ratio: 70.9% p 92

Relative Abundance (Ion Ratio) = $\frac{\text{Response of Target Mass}}{\text{Response of Reference Mass}} \times 100$

Target Mass Response = 151421 p 92
Reference Mass Response = 213610 p 92

Relative Abundance = 70.89% Match

Comments:

GC/MS VALIDATION WORKSHEET
INITIAL CALIBRATION

SDG #: 680-202905-1
Lab: SGS Orlando FL
Client: Bhate Environmental

Date: 2/13/23
Page: 1 of 1
Validated by: ML
Second Review by: EM

RRF Standard ID: ICC2866-5
Compound ID: chlorobenzene
Reported Result: 1.0260 p 149

RRF = Compound Area X I.S. Conc. / I.S. Area X Compound Conc.

Compound Area = 495507 p 617
I.S. Area = 603499 p 616
Compound Conc. = 40.0 p 617
I.S. Conc. = 50.00 p 616

RRF = 1.026

Calibration ID: VO2867-CC2866
Compound ID: chlorobenzene
%RSD: 5.59% p 149
Average RRF = 1.081 p 149

%RSD = Standard Deviation / Average RRF X 100

RF Level 1 =	1.198	RF Level 6 =	1.064 p 149
RF Level 2 =	1.099	RF Level 7 =	1.105 p 149
RF Level 3 =	1.036	RF Level 8 =	p 149
RF Level 4 =	1.036	RF Level 9 =	p 149
RF Level 5 =	1.026	RF Level 10 =	p 149

Match

Standard Deviation = 0.060
Average RRF = 1.0806 Match
%RSD = Match

Comments:

GC/MS VALIDATION WORKSHEET
INITIAL/CONTINUING CALIBRATION VERIFICATION

SDG #: 680-202905-1 | Date: 2/13/23
Lab: SGS Orlando FL | Page: 1 of 1
Client: Bhate Environmental | Validated by: ML
Second Review by: EM

ICV Sample ID: VO2866-ICV2866
Compound ID: chlorobenzene
%D: 3.8 p 153

%D = Average RRF - CCV RRF X 100
Average RRF

Average RRF = 1.0810 p 153
ICV RRF = 1.0400 p 153

% D = -3.8 Match

RRF Standard ID: VO2867-CC2866
Compound ID: chlorobenzene
Reported Result: 1.0730 p 161

%D Standard ID: VO2867-CC2866
Compound ID: chlorobenzene
Reported %D: 0.7% p 161

CCV RRF = Compound Area X I.S. Conc.
I.S. Area X Compound Conc.

Compound Area = 506885 p 670
I.S. Area = 590347 p 699
Compound Conc. = 40.0 p 670
I.S. Conc. = 50.00 p 699

CCV RRF = 1.07328 Match

%D = Average RRF - CCV RRF X 100
Average RRF

Average RRF = 1.0810 p 161
CCV RRF = 1.0730 p 161

%D = 0.7 Match

%D Indicating Bias = -0.7

Comments:

GC/MS VALIDATION WORKSHEET
SURROGATE SPIKES/SYSTEM MONITORING COMPOUNDS - WATER SAMPLES

SDG #:	680-202905-1	Date:	2/13/23
Lab:	SGS Orlando FL	Page:	1 of 1
Client:	Bhate Environmental	Validated by:	ML
		Second Review by:	EM

Lab ID : FC1020-1 p 196
Compound ID: Toluene-d8
Reported Result: 102.76 %

$$\% \text{ Recovery} = \frac{\text{Conc. Surr. In Sample}}{\text{Conc. Surr. Spiked}} \times 100$$

Conc. In Sample = 51.4
Surr. Spike Conc. = 50.0

% Recovery = 102.76 % Match

Comments:

GC/MS VALIDATION WORKSHEET
LABORATORY CONTROL SAMPLES

SDG #: 680-202905-1
Lab: SGS Orlando FL
Client: Bhate Environmental

Date: 2/13/23
Page: 1 of 1
Validated by: ML
Second Review by: EM

Sample ID: VY2765-BS p 75
Compound ID: chlorobenzeve
Recovery: 104%

Sample ID:
Compound ID:
RPD:

% Recovery = Conc. LCS / LCS Spike Conc. X 100

RPD = |LCS Conc. - LCSD Conc.| / (LCS Conc. + LCSD Conc.)/2 X 100

Conc. LCS = 26.10
LCS Spike Conc. = 25.0

LCS Conc. =
LCSD Conc. = .

% Recovery = 104 Match

RPD = #VALUE! Match

Comments: An LCSD was not analyzed.

GC/MS VALIDATION WORKSHEET - MATRIX SPIKES/DUPLICATES

SDG #:	680-202905-1	Date:	2/13/23
Lab:	SGS Orlando FL	Page:	1 of 1
Client:	Bhate Environmental	Validated by:	ML
		Second Review by:	EM

Sample ID:	FC1005-3MS	Sample ID:	FC1005-3MS, FC1005-3MSD	p 84
Compound ID:	chlorobenzene	Compound ID:	chlorobenzene	
Recovery:	96	RPD:	1	

% Recovery = $\frac{\text{Conc. MS - Conc. Unspiked Sample}}{\text{MS Spike Conc.}} \times 100$

RPD = $\frac{|\text{MS Conc. - MSD Conc.}|}{(\text{MS Conc. + MSD Conc.})/2} \times 100$

Conc. MS =	240.0	MS Conc. =	240.0
Unspiked Samp. =		MSD Conc. =	238.0
MS Spike Conc. =	250.0		
		RPD =	0.84 Match
% Recovery =	96.0 Match		

Comments:

GC/MS VALIDATION WORKSHEET
TARGET COMPOUND QUANTITATION

SDG #:	680-202905-1	Date:	2/13/23
Lab:	SGS Orlando FL	Page:	1 of 1
Client:	Bhate Environmental	Validated by:	ML
		Second Review by:	EM

Sample ID:	FC1020-3	
Compound ID:	chlorobenzene	
Reported Result:	0.48 J	ug/L

Conc. In Sample = $\frac{\text{Area Cmpd. In Sample}}{\text{Area of I.S.}} \times \frac{\text{Conc. of I.S.}}{\text{Average RRF}} \times \frac{\text{Final Volume}}{\text{Initial Amount}} \times \text{Dilution Factor}$

		Units	
Area Sample =	5031	Area	p 205
Area I.S. =	483913	Area	p 205
Conc. I.S. =	50.0		p 205
Average RRF =	1.081	NA	p 149
Final Volume =	5.00	mL	
Initial Amount =	5.00		p 23
Dilution Factor =	1.0	NA	p 810

Conc. In Sample = 0.48 ug/L Match

Comments

Level 4
Initial Calibration

SDG #:	FC1020	Date:	2/20/23
Lab:	SDG	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: E365.3

CALCULATIONS

Cal ID:	44901	Correlation Coeff:	0.9999
Analyte:	orthophosphate	Slope:	2.49
		Intercept:	0.00

	(x) Response	(y) Conc	
Level 1 =	0	0	p 912
Level 2 =	0.1	0.04	
Level 3 =	0.2	0.081	
Level 4 =	0.3	0.12	
Level 5 =	0.4	0.163	
Level 6 =	0.5	0.2	
Level 7 =			
Level 8 =			

Corr Coef =	0.99989	Matches
Slope =	2.485	Matches
Y-Int =	-0.00018	Matches

Comments:

Level 4
Continuing Calibration

SDG #:	20A194	Date:	2/22/20
Lab:	Emax	Page:	1 of 1
Client:	Arcadis	Validated by:	ML
		Second Review by:	EM

Method: SM3500

CALCULATIONS

CCV Standard ID: CCV 12/06/22
Analyte ID: orthophosphate
%Rec: not reported

Spiked Conc= 0.300 p 912
Reptd Conc= 0.301 p 912

Calculated % Recovery = 100.3

Comments:

Level 4
Laboratory Control Sample

SDG #:	FC1020	Date:	2/20/23
Lab:	SDG	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: E365.3

CALCULATIONS

LCS ID:	BS 12/06/22	p 898	LCS/LCSD ID:		
Analyte ID:	orthophosphate		Analyte ID:		
Recovery:	98.5		RPD:		

% Recovery = (Conc. LCS / LCS Spike Conc.) X 100

RPD = (|LCS Conc. - LCSD Conc.| / (LCS Conc. + LCSD Conc.)/2) X 100

Conc. LCS =	0.296	p 898	LCS Conc. =		
LCS Spike Conc. =	0.300	p 898	LCSD Conc. =		
% Recovery =	98.67	Matches	RPD =	#DIV/0!	Matches

Comments: An LCSD was not analyzed.

Level 4
Sample Result Verification

SDG #:	FC1020	Date:	2/20/23
Lab:	SDG	Page:	1 of 1
Client:	Bhate	Validated by:	ML
		Second Review by:	EM

Method: E365.3

CALCULATIONS

Sample ID: FC1020-1
Compound ID: orthophosphate
Reported Result: 0.040 U

Conc. In Sample = ((Response /slope)- Y-Intercept))*(Final Amt/Initial Amt) * DF

Inst. Resp. =	0.012		p 912
Slope =	2.49		p 912
Y-Int =	0.00		p 912
Initial Amount (ml) =	50.00		p 912
Dilution Factor =	1.0		p 912
Final Amount(ml)=	50.00		p 912
Conc. In Sample =	0.0048	Matches	

Comments: All samples were non-detect.

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Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	L1569097
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S4VEM
Primary Data Reviewer:	James Parker, Data Review Chemist
Second Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 04, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	E350.1	E351.2	E420.4	SW6010D
LF1SW-1-1222	L1569097-01	Water	Field Sample/N	X	X	X	X
LF1SW-2SMC-1222	L1569097-03	Water	Field Sample/N	X	X	X	X
LF1SW-3-1222	L1569097-02	Water	Field Sample/N	X	X	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S4VEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN and were reported under sample delivery group (SDG) L1569097. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Test Hold Time

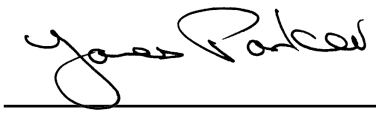
Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 0 results (0.00%) out of the 12 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Field sample LF1SW-2SMC-1222 (L1569097-03) has LF1SW-25MC-1222 on the Chain of Custody

Analytical Method	Data Reviewer Comment
E350.1	No additional comments; see Checklist for detail.
E351.2	No additional comments; see Checklist for detail.
E420.4	No additional comments; see Checklist for detail.
SW6010D	No additional comments; see Checklist for detail.



Reviewed by James Parker, Data Review Chemist, Synectics, Sacramento, CA — February 17, 2023

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.



Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA — March 04, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

No Outliers were associated with this sample delivery group.

Qualified Results

No results associated with this sample delivery group required qualification.

Reason Code Definitions

Code	Definition
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?	•			See SDG Details
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?				
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?				
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			There were no Field Replicates, but the lab did analyze and report a Lab Duplicate
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))				
Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?	•			See SDG Details
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))				
Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?	•			An ICB was not reported, but the samples were analyzed on a different date as the initial Calibration, and all CCBs were reported and were non-detect
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			The recalculated slope, y-Intercept and correlation coefficient did not match the lab results exactly. The lab slope and y-Intercept were used to recalculated a reported result. The lab reported a negative value for the y-Intercept, but assumed a positive value for the equation used to calculated the result.
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?	•			See SDG Details
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)				
Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			The lab reported a negative value for the y-Intercept, but assumed a positive value for the equation used to calculated the result.
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?	•			See SDG Details
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?	•			LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	MS/MSD were not analyzed for these samples, therefore Post Spike also was not analyzed
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	Performed on a sample from another SDG
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were Interference Check Solutions (ICS) or Spectral Interference Checks (SIC) performed at the requried frequency and within project acceptance limits?	•			
Were internal standard retention times and recoveries within method requirements?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?				
Were certificates of standard traceability provided and documentation of standard solution preparation?		•		
Were recalculation of QC Elements and Sample Results performed?	•			
Were 3 readings (replicates) used to determine the average single analyte result for a given sample and within project/method acceptance limits (typically less than 5 percent)?	•			
Were forms provided to indicate the interelement correction factors for Spectral Interferences?	•			
Were Instrument Detection Limits (IDLs) and Linear Ranges (LR) forms provided?	•			
Was information provided to qualitatively review instrument outputs to verify that S/N is appropriate to produce quantitative data?		•		
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Level 4
Initial Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 351.2

CALCULATIONS

Cal ID:
Analyte: Kjeldahl Nitrogen

Correlation Coeff : 0.99926 *p.68*
Slope : 0.2260 *p.68*
Intercept : -0.0801 *p.68*

Response (y) = Slope (m) * Conc. (x) + Y-Intercept (b)

	(x) Conc.	(y) Area *p.72*
Level 1 =	20	80.5
Level 2 =	10	47.3
Level 3 =	5	24.4
Level 4 =	2.50	13.1
Level 5 =	1.00	5.68
Level 6 =	0.50	2.380
Level 7 =	0.25	1.35
Level 8 =	0.00	0.118

Corr Coef =	0.996162	***~Matches (rounding)***
Slope =	0.24321	***~Matches (rounding)***
Y-Int =	-0.40881	***~Matches (rounding)***

Comments:

Level 4
Continuing Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 351.2

CALCULATIONS

ICV Standard ID:	ICV		CCV Standard ID:	CCV LACHAT6122222100947	
Analyte ID:	Kjeldahl Nitrogen		Analyte ID:	Kjeldahl Nitrogen	
%Rec:	108.0%	*p.54*	%Rec:	107.0%	*p.54*
Spiked Conc=	10.0	*p.54*	Spiked Conc=	10.00	*p.54*
Reptd Conc=	10.8	*p.71*	Reptd Conc=	10.7	*p.71*
Calculated % Recovery =	108.0%	***Matches***	Calculated % Recovery =	107.0%	***Matches***

Comments:

Level 4
Laboratory Control Sample

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 351.2

CALCULATIONS

LCS ID: LCS R3874770-2
Analyte ID: Kjeldahl Nitrogen
Recovery: 92.7% *p.60*

LCS/LCSD ID:
Analyte ID: Kjeldahl Nitrogen
RPD:

$$\% \text{ Recovery} = \frac{\text{Conc. LCS}}{\text{LCS Spike Conc.}} \times 100 \qquad \text{RPD} = \frac{|\text{LCS Conc.} - \text{LCSD Conc.}|}{(\text{LCS Conc.} + \text{LCSD Conc.})/2} \times 100$$

Conc. LCS = 19.1 *p.60*
LCS Spike Conc. = 20.6 *p.60*

LCS Conc. =
LCD Conc. =

% Recovery = 92.7% ***Matches***

RPD = #DIV/0!

Comments: The lab did not analyze an LCSD

Level 4
Sample Result Verification

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 351.2

CALCULATIONS

KN= (((Area x Slope) + (y-Intercept)) x (Final Vol/Initial Vol.)) x (DF)) ÷ Percent Solid

Sample ID:	LF1SW-2SMC-1222 (L1569097-03)		
Compound ID:	Kjeldahl Nitrogen		
Reported Result:	1.07 mg/L	*p.46*	
Slope:	0.226	*p.68*	
y-Intercept:	0.0801	*p.68*	
Area:	5.09	*p.71*	
DF:	1	*p.12*	
Volume Sample:	20	ml	*p.73*
Final Volume:	20	ml	*p.73*
Percent Solids:	100.0%	Sample is liquid	
Ammonia=	1.07	mg/L	***Match***

Comment: Lab reported a negative value for y-Intercept, but the equation used to recalculate sample result assumed y-Intercept to be a positive value, not negative

Level 4
Initial Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 420.4

CALCULATIONS

Cal ID:
Analyte: Phenol

Correlation Coeff : 0.99999 *p.100*
Slope : 0.384 *p.100*
Intercept : -0.0060 *p.100*

Response (y) = Slope (m) * Conc. (x) + Y-Intercept (b)

	(x) Conc.	(y) Area *p.101*
Level 1 =	2	5.18
Level 2 =	1	2.63
Level 3 =	0.5	1.34
Level 4 =	0.10	0.284
Level 5 =	0.04	0.121
Level 6 =	0.00	9.350E-03
Level 7 =		
Level 8 =		

Corr Coef = 0.999965 ***Matches***
Slope = 0.3869 ***Matches***
Y-Int = -0.01010
~Matches (rounding)

Comments:

Level 4
Continuing Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 420.4

CALCULATIONS

ICV Standard ID:	ICV		CCV Standard ID:	CCV LACHAT5122022233247	
Analyte ID:	Phenol		Analyte ID:	Phenol	
%Rec:	100.0%	*p.85*	%Rec:	101.0%	*p.85*
Spiked Conc=	1.0	*p.85*	Spiked Conc=	1.00	*p.85*
Reptd Conc=	1.01	*p.101*	Reptd Conc=	1.0	*p.103*
Calculated % Recovery =	101.0%		Calculated % Recovery =	101.0%	***Matches***

~Matches (rounding)

Comments:

Level 4
Laboratory Control Sample

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 420.4

CALCULATIONS

LCS ID: LCS R3874135-2
Analyte ID: Phenol
Recovery: 97.2% *p.93*

LCS/LCSD ID:
Analyte ID: Phenol
RPD:

$$\% \text{ Recovery} = \frac{\text{Conc. LCS}}{\text{LCS Spike Conc.}} \times 100$$

$$\text{RPD} = \frac{|\text{LCS Conc.} - \text{LCSD Conc.}|}{(\text{LCS Conc.} + \text{LCSD Conc.})/2} \times 100$$

Conc. LCS = 0.486 *p.93*
LCS Spike Conc. = 0.5 *p.93*

% Recovery = 97.2% ***Matches***

LCS Conc. =
LCD Conc. =

RPD = #DIV/0!

Comments: The lab did not analyze an LCSD

Level 4
Sample Result Verification

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 420.4

CALCULATIONS

KN= (((Area x Slope) + (y-Intercept)) x (Final Vol/Initial Vol.)) x (DF)) ÷ Percent Solid

Sample ID:	LCS R3874135-2		
Compound ID:	Phenol		
Reported Result:	0.486	*p.93*	
Slope:	0.384	*p.100*	
y-Intercept:	0.00599	*p.100*	
Area:	1.28	*p.103*	
DF:	1	*p.79*	
Volume Sample:	50	ml	*p.79*
Final Volume:	50	ml	*p.79*
Percent Solids:	100.0%	Sample is liquid	
Ammonia=	0.486	mg/L	***Match***

Comment: All samples reported non-detects, therefore the LCS was recalculated. The lab reportred a negative value for the y-Intercept, but in the equation to calculated sample concentration, the y-Intercept was given a positive value

Level 4
Initial Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 350.1

CALCULATIONS

Cal ID:
Analyte: Ammonia

Correlation Coeff : 0.999882 *p.33*
Slope : 58084.0 *p.33*
Intercept : 1536.6 *p.33*

Response (y) = Slope (m) * Conc. (x) + Y-Intercept (b)

	(x) Conc.	(y) Area *p.34*
Level 1 =	0	643
Level 2 =	0.1	6327
Level 3 =	1	58545
Level 4 =	2.50	146030
Level 5 =	5.00	298765
Level 6 =	10.00	579263.000
Level 7 =		

Corr Coef = 0.999882 ***Matches***
Slope = 58083.5 ***Matches***
Y-Int = 1536.55 ***Matches***

Comments:

Level 4
Continuing Calibration

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 350.1

CALCULATIONS

ICV Standard ID:	ICV FS3100-01		CCV Standard ID:	CCV FS3100-01	
Analyte ID:	Ammonia		Analyte ID:	Ammonia	
%Rec:	98.9%	*p.20*	%Rec:	97.7%	*p.20*
Spiked Conc=	5.000	*p.20*	Spiked Conc=	5.00	
Reptd Conc=	4.945000	*p.20*	Reptd Conc=	4.88	
Calculated % Recovery =	98.9%	***Matches***	Calculated % Recovery =	97.7%	***Matches***

Comments:

Level 4
Laboratory Control Sample

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 350.1

CALCULATIONS

LCS ID: LCS R3873985-2 — LCS/LCSD ID:
Analyte ID: Ammonia — Analyte ID: Ammonia
Recovery: 97.7% *p.27* — RPD:

% Recovery = Conc. LCS / LCS Spike Conc. X 100

RPD= |LCS Conc. - LCSD Conc.| x 100 / (LCS Conc. + LCSD Conc.)/2

Conc. LCS = 7.33 *p.27* — LCS Conc. =
LCS Spike Conc. = 7.5 *p.27* — LCD Conc. =

% Recovery = 97.7% ***Matches*** — RPD = #DIV/0!

Comments: The lab did not analyze an LCSD

Level 4
Matrix Spike

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM

Method: 350.1

CALCULATIONS

Parent Sample ID: LF1SW-1-1222 (L1569097-01)
Lab ID: R3873985-3
Analyte ID: Ammonia
Recovery: 93.7% *p.23*

MS/MSD ID: MS R3873985-3 & MSD R3873985-4
Analyte ID: Ammonia
RPD: 2.96% *p.23*

$$\%\ Rec = \frac{\text{Conc. MS - Conc. Unspiked Sample}}{\text{MS Spike Conc.}} \times 100$$

$$RPD = \frac{|\text{MS Conc. - MSD Conc.}|}{(\text{MS Conc. + MSD Conc.})/2} \times 100$$

Conc. MS Sample = 4.69 *p.23*
Unspiked Samp. = 0.00 *p.10*
MS Spike Conc. = 5.00 *p.23*

% Recovery = 93.8% ***Matches***

MS Conc. = 4.69 *p.23*
MSD Conc. = 4.83 *p.23*

RPD = 2.941% ***Matches***

Comment:

Level 4
%RPD Duplicate

SDG #: L1569097
Lab: Pace
Client: Bhate
Matrix: Water

Date: 02/17/23

Validated by: JP
Second Review by: EM

Method: 350.1

$$RPD = \frac{|\text{Parent Conc.} - \text{Duplicate Conc.}|}{(\text{Parent Conc.} + \text{Duplicate Conc.})/2} \times 100$$

Parent Sample ID: LF1SW-3-1222 (L1569097-02)
Duplicate ID: R3873985-5
Reported %RPD: 4% *p.376*

Result Parent: 0.075 *p.25*
Result Duplicate: 0.075 *p.25*
%RPD: 0.0% ***Matches***

Comment: Both sample analyses reported non-detect at the LOQ

Level 4
Sample Result Verification

SDG #:	L1569097	Date:	2/17/23
Lab:	Pace	Page:	1 of 1
Client:	Bhate	Validated by:	JP
Matrix:	Water	Second Review by:	EM
Method:	350.1		

CALCULATIONS

KN= (((Abs - y Int)/(Slope) x (Final Vol/Initial Vol.)) x (DF)) ÷ Percent Solid

Sample ID:	LF1SW-2SMC-1222 (L1569097-03)		
Compound ID:	Ammonia		
Reported Result:	0.478 mg/L	*p.12*	
Slope:	58084	*p.33*	
y-Intercept:	1536.6	*p.33*	
Area:	29314	*p.37*	
DF:	1	*p.12*	
Volume Sample:	10	ml	*p.12*
Final Volume:	10	ml	*p.12*
Percent Solids:	100.0%	Sample is liquid	
Ammonia=	0.478	mg/L	***Matches***

Comment:

S4VEM
INITIAL CALIBRATION
Metals - SW 6020A

SDG #: **L1599097** **Date:** **17 Feb 23**
Lab: **Pace**
Client: **Bhate Environmental** **Validated by:** **JP**
Matrix: **Water** **Second Review by:** **EM**

CALCULATIONS

Cal ID:
Analyte: B
Int Std: Y (Radial)
Response (y) = [Slope × Conc (x)] + Intercept

	(y) Intensity	(x) Conc	
Level 1:	-0.2078	0	*p.145*
Level 2:	46.036	0.2	*p.146*
Level 3:	113.731	0.5	*p.147*
Level 4:	226.170	1	*p.148*
Level 5:	451.673	2	*p.149*
Level 6:			
Level 7:			
Level 8:			
Level 9:			
	pp.		

Reported Calibration Results: *p.143*
Slope: 217.1361
Intercept: -0.208227
Correlation Coefficient: **0.999966**

Calculated Calibration Results: [a]
Slope = **225.670** ***~Match***
Intercept = **0.4843** ***~ Match***
r^2 = **0.9999935**
r = **0.9999967** ***Match***

Comments: [a] Linear regression performed using the Microsoft Excel regression functions.

S4VEM
INITIAL - CONTINUING CALIBRATION VERIFICATION
Metals - SW 6020A

SDG #:	**L1599097**	**Date:**	**17 Feb 23**
Lab:	**Pace**		
Client:	**Bhate Environmental**	**Validated by:**	**JP**
Matrix:	**Water**	**Second Review by:**	**EM**

CALCULATIONS

%Recovery = (Reported Conc / True Conc) × 100%

ICV:

ICV Standard ID: ICV-2
Analyte: B

Reported %Recovery: **102%** *p.117*

True ICV Conc: 1.0 *p.117*
Found ICV Conc: 1.019 *p.153*

Calculated %Recovery = **101.9%** ***Match***

CCV:

CCV Standard ID: CCV CP121221221310-3
Analyte: B

Reported %Recovery: **100%** *p.118*

True CCV Conc: 1.0 *p.118*
Found CCV Conc: 1.0036 *p.177*

Calculated %Recovery = **100.4%** ***Match***

LLCCV:

LLCCV Standard ID: ICVLL ICP121221221505-3
Analyte: B

Reported %Recovery: **104%** *p.120*

True CCV Conc: 0.2 *p.120*
Found CCV Conc: 0.2075596 *p.196*

Calculated %Recovery = **103.8%** ***Match***

Comments:

S4VEM
INTERFERENCE CHECK SAMPLES
Metals - SW 6020A

SDG #:	**L1599097**	**Date:**	**17 Feb 23**
Lab:	**Pace**		
Client:	**Bhate Environmental**	**Validated by:**	**JP**
Matrix:	**Water**	**Second Review by:**	**EM**

Unspiked ICS-A analytes exceeding the MDL are listed below:

CALCULATIONS

%Recovery = 100% × (Found Conc / True Conc)

ICS Standard ID: ICSAB1
Analyte ID: B

Reported	%Recovery:	**98.9%**	*p.125*
	True Conc:	1	*p.125*
	Found Conc:	0.989256	*p.157*
Calculated	%Recovery =	**98.93%**	***Match***

Comments:

S4VEM
LABORATORY CONTROL SAMPLE
Metals - SW 6020A

SDG #: **L1599097** **Date:** **17 Feb 23**
Lab: **Pace**
Client: **Bhate Environmental** **Validated by:** **JP**
Matrix: **Water** **Second Review by:** **EM**

CALCULATIONS

Verifying %Recovery:

$$\%Recovery = \frac{Conc\ LCS}{LCS\ Spike\ Conc} \times 100\%$$

LCS Sample ID: LCS R3874405-2
Analyte: B

Reported %Recovery: **99.5%** *p.131*

LCS Spike Conc: 1000 *p.131*
Conc LCS: 995 *p.131*

Calculated %Recovery = **99.5%** ***Match***

Verifying RPD:

$$RPD = \frac{|LCS\ Conc - LCSD\ Conc|}{(LCS\ Conc + LCSD\ Conc)/2} \times 100\%$$

LCS / LCSD Sample ID:
Analyte:

Reported RPD: _____ *p.*

LCS Conc: *p.*
LCSD Conc: *p.*

Calculated RPD = _____

Comments: The lab did not analyze an LCSD for either prep batch

S4VEM
SAMPLE RESULT VERIFICATION
Metals - SW 6020A

SDG #: L1599097 **Date:** 17 Feb 23
Lab: Pace
Client: Bhate Environmental **Validated by:** JP
Matrix: Water **Second Review by:** EM

CALCULATIONS

Sample: LF1SW-1-1222 (L1569097-01)

Analyte	Reported Conc (µg/L) p.109	DL (µg/L) p.109	LOD (µg/L) p.109	LOQ (µg/L) p.109	Raw Conc (µg/L) p. 181	Percent Solids Water	Initial Amount (ml) p.211	Final Volume (mL) p.211	Dilution Factor [DF] p.109	Percent Solids p.109	Calculated Conc (µg/L)	Final Conc (µg/L)
Aluminum						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Antimony						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Arsenic						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Barium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Beryllium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Boron	**40.2**	**39.600**	**100.000**	**200**	0.0362016	100.0%	45.00	50.00	1	100.0%	40.224	**40.22**
Cadmium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Calcium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Chromium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Cobalt						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Copper						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Iron						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Lead						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Magnesium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Manganese						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Nickel						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Potassium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Selenium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Silver						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Sodium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Thallium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Vanadium						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**
Zinc						100.0%	1.11	50.00	1		#DIV/0!	**#DIV/0!**

Match

Comments: The lab reported a 2X dilution, but the raw data took the 2X dilution into account, and internally multiplied the measured result by 2, therefore a DF of 1 was used in the table above

Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	FC1065
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	SGS North America, Inc., Orlando, FL
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S2BVEM
Primary Data Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 04, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2120B	A2320B	A2340B	A2540C	A5210B	A5220C	E365.3	SW8260D	SW9056A	SW9060A
LF1MW-13-1222	FC1065-3	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1MW-13-1222-A	FC1065-2	Water	Field Duplicate/FD	X	X	X	X	X	X	X	X	X	X
LF1MW-6-1222	FC1065-5	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1P-2-1222	FC1065-4	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X
LF1-TB-120622	FC1065-1	Water	Trip Blank/TB								X		

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by SGS North America, Inc., Orlando, FL and were reported under sample delivery group (SDG) FC1065. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Field Duplicate RPD
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time
- Trip Blank

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 73 results (18.43%) out of the 396 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2120B	No additional comments; see Checklist for detail.
A2320B	No additional comments; see Checklist for detail.
A2340B	No additional comments; see Checklist for detail.
A2540C	The laboratory noted the following: RPD(s) for Duplicate for Solids, Total Dissolved are outside control limits for sample GN92987-D2. RPD acceptable due to low duplicate and sample concentrations. *Reviewers Note - as the results were greater than the LOQ, RPD was used for evaluation and found to be out of control.
A5210B	The laboratory noted the following: RPD(s) for Duplicate for BOD, 5 Day are outside control limits for sample GP38277-D1. RPD acceptable due to low duplicate and sample concentrations. *Note that this was a non-SDG sample and no action is required on this basis. FC1065-2, 3, and 5 for BOD, 5 Day: Estimated value, oxygen depletion outside of acceptable BOD criteria.
A5220C	No additional comments; see Checklist for detail.
E365.3	No additional comments; see Checklist for detail.
SW8260D	No additional comments; see Checklist for detail.
SW9056A	The laboratory noted the following: Matrix Spike Recovery(s) for Fluoride are outside control limits. Spike recovery indicates possible matrix interference.
SW9060A	No additional comments; see Checklist for detail.

Evin McKinney

March 04, 2023

Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method A2120B, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1MW-13-1222-A (N)	Color	40.0	< 30	< 30	rpd	J/None	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for A2120B

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 FC1065-3	N	Color	25.0	100	100 J		color unit	D3
LF1MW-13-1222-A FC1065-2	FD	Color	25.0	150	150 J		color unit	D3

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method A2540C, Lab Replicate RPD

The objective of duplicate sample (LR) analysis is to demonstrate acceptable method precision by the laboratory at the time of analysis. Duplicate analyses are also performed to generate data that determines the long-term precision of the analytical method on various matrices. Non-homogenous samples can impact the apparent method precision. Summary forms were evaluated and compared to electronic data deliverables. Laboratory duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1MW-13-1222-A (LR)	Total Dissolved Solids	11.9	< 5	< 5	rpd	J/UJ	D1	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Lab Replicate RPD for A2540C

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222-A FC1065-2	FD	Total Dissolved Solids	50.0	254	254 J		mg/l	D1

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Quality Control Outliers for test method SW9056A, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1MW-13-1222-A (MS)	Fluoride	86.0	90 - 110	90 - 110	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW9056A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 FC1065-3	N	Fluoride	0.200	0.130 J	0.130 J	-	mg/l	M/TR
LF1MW-13-1222-A FC1065-2	FD	Fluoride	0.200	0.140 J	0.140 J	-	mg/l	M/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: A2120B		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 FC1065-3	N	Color	25.0	100	100 J		color unit	D3
LF1MW-13-1222-A FC1065-2	FD	Color	25.0	150	150 J		color unit	D3

Test Method: A2540C		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222-A FC1065-2	FD	Total Dissolved Solids	50.0	254	254 J		mg/l	D1

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1P-2-1222 FC1065-4	N	1,1,1,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1,1-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1,2,2-Tetrachloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1,2-Trichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,1-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2,3-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2,3-Trichloropropane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2,4-Trichlorobenzene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2,4-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dibromo-3-chloropropane	5.00	2.00 U	2.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dibromoethane (EDB)	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dichloroethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dichloroethene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,3,5-Trimethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,3-Dichlorobenzene	1.00	0.500 U	0.500 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1P-2-1222 FC1065-4	N	1,3-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	1,4-Dichlorobenzene	1.00	1.30	1.30 J	-	ug/l	P
LF1P-2-1222 FC1065-4	N	2,2-Dichloropropane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	2-Butanone (MEK)	5.00	3.50 U	3.50 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	2-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	2-Hexanone	10.0	5.00 U	5.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	4-Chlorotoluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	4-Methyl-2-pentanone (MIBK)	5.00	2.00 U	2.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Acetone	25.0	20.0 U	20.0 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Benzene	1.00	0.330 J	0.330 J	-	ug/l	TR/P
LF1P-2-1222 FC1065-4	N	Bromobenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Bromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Bromodichloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Bromoform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Bromomethane	5.00	4.00 U	4.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Carbon disulfide	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Carbon Tetrachloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Chlorobenzene	1.00	0.890 J	0.890 J	-	ug/l	TR/P
LF1P-2-1222 FC1065-4	N	Chloroethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Chloroform	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Chloromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	cis-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	cis-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Cumene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Dibromochloromethane	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Dibromomethane	2.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Dichlorodifluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P

Table of All Qualified Results

Test Method: SW8260D		Extraction Method: SW5030B						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1P-2-1222 FC1065-4	N	Ethylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Hexachlorobutadiene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	m,p-Xylene	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Methyl tert-butyl ether (MTBE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Methylene chloride	5.00	4.00 U	4.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Naphthalene	5.00	2.00 U	2.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	n-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	n-Propylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	o-Xylene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	p-Cymene (p-Isopropyltoluene)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	sec-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Styrene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	tert-Butylbenzene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Tetrachloroethene (PCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Toluene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	trans-1,2-Dichloroethene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	trans-1,3-Dichloropropene	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Trichloroethene (TCE)	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Trichlorofluoromethane	2.00	1.00 U	1.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Vinyl acetate	10.0	5.00 U	5.00 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Vinyl chloride	1.00	0.500 U	0.500 UJ		ug/l	P
LF1P-2-1222 FC1065-4	N	Xylenes, Total	3.00	1.50 U	1.50 UJ		ug/l	P

Test Method: SW9056A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 FC1065-3	N	Fluoride	0.200	0.130 J	0.130 J	-	mg/l	M/TR

Table of All Qualified Results

Test Method: SW9056A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222-A FC1065-2	FD	Fluoride	0.200	0.140 J	0.140 J	-	mg/l	M/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D1	Lab Replicate RPD
D3	Field Duplicate RPD
M	MS Recovery
P	Sample preservation/collection requirement not met.
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Various compounds are reported with detections at levels (LOQs) greater than the project PQGs. Additionally, it was noted that LOQs were greater than project PALs.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		No LCS/LCSD prepared for this method.
Were LCS/LCSD recoveries within project acceptance limits?			•	
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this method.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		See QC outliers.
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	No calibration data included in this method.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?		•		No ICB/CCB data included in this method.
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?		•		No LLCCV included in this method.
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?		•		No method blank included in this method.
Were target analytes in the method blank less than DL?			•	
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this method.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	No calibration data included in this method.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	No ICV data included in this method.
Were CCVs run at the required frequency and within project acceptance criteria?			•	No CCV data included in this method.
Were ICB/CCBs run at the required frequency?			•	No ICB/CCB data included in this method.

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	No LLCCV data included in this method.
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			Method blank sample MP41624-MB1 was included in analysis with project samples but it was not included in the EDD.
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only. LCS sample MP41624-B1 was included in analysis with project samples but it was not included in the EDD.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?	•			
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were internal standard recoveries within project acceptance limits?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		No LCS/LCSD included in this method.
Were LCS/LCSD recoveries within project acceptance limits?			•	
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this method.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	No calibration data included in this method.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	
Were ICB/CCBs run at the required frequency?			•	No ICB/CCB data included in this method.

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	No LLCCV data included in this method.
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	No calibration data included in this method.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	No ICV data included in this method.
Were CCVs run at the required frequency and within project acceptance criteria?			•	No CCV data included in this method.
Were ICB/CCBs run at the required frequency?			•	No ICB/CCB data included in this method.

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	No LLCCV data included in this method.
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			The laboratory noted that oxygen depletion outside of acceptable BOD criteria and samples were qualified on this basis with a P2 reason code. See All Qualified Results table.
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	No calibration data included in this method.
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	No ICV data included in this method.
Were CCVs run at the required frequency and within project acceptance criteria?			•	No CCV data included in this method.

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	No ICB/CCB data included in this method.
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	No LLCCV data included in this method.
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	No ICV data included in this method.
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?			•	No ICB/CCB data included in this method,

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		The laboratory noted that FC1065-4: Sample vial (s) contained bubbles greater than 6mm. The sample was qualified J/UJ with a P reason code on this basis. See All Qualified Results Table.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Various compounds are reported with detections and non-detects at levels (LOQs) greater than the project PQGs. Additionally, it was noted that LOQs were greater than project PALs.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?	•			
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the GC/MS system properly tuned based on method criteria?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9056A (Anion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Various compounds are reported with detections at levels (LOQs) greater than the project PQGs. Additionally, it was noted that LOQs were greater than project PALs.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		See QC outliers.
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: SW9056A (Anion Chromatography)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9060A (Total Organic Carbon)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		The laboratory noted the following: FC1065-4 for Total Organic Carbon: Sample was not preserved to a pH < 2.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	No ICV data included in this method. No action taken on this basis.

Review Questions

Method: SW9060A (Total Organic Carbon)

Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

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Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	L1569102
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S2BVEM
Primary Data Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 04, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	E350.1	E351.2	E420.4	SW6010D
LF1MW-13-1222	L1569102-02	Water	Field Sample/N	X	X	X	X
LF1MW-13-1222-A	L1569102-01	Water	Field Duplicate/FD	X	X	X	X
LF1MW-6-1222	L1569102-04	Water	Field Sample/N	X	X	X	X
LF1P-2-1222	L1569102-03	Water	Field Sample/N	X	X	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN and were reported under sample delivery group (SDG) L1569102. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Field Duplicate RPD
- Lab Blank
- LCS Recovery
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 2 results (12.50%) out of the 16 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
E350.1	No additional comments; see Checklist for detail.
E351.2	No additional comments; see Checklist for detail.
E420.4	No additional comments; see Checklist for detail.
SW6010D	No additional comments; see Checklist for detail.

Evin McKinney

March 04, 2023

Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Quality Control Outliers for test method E351.2, Field Duplicate RPD

Field duplicate analyses are performed in order to assess sample collection/laboratory precision for each sample matrix. Summary forms were evaluated and compared to electronic data deliverables. Field duplicate results that were outside of the acceptance criteria are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1MW-13-1222-A (N)	Total Kjeldahl Nitrogen	70.0	< 20	< 20	rpd	J/None	D3	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the Field Duplicate RPD for E351.2

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 L1569102-02	N	Total Kjeldahl Nitrogen	0.600	0.785	0.785 J		mg/l	D3
LF1MW-13-1222-A L1569102-01	FD	Total Kjeldahl Nitrogen	0.600	0.378 J	0.378 J		mg/l	D3/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: E351.2		Extraction Method: METHOD						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-13-1222 L1569102-02	N	Total Kjeldahl Nitrogen	0.600	0.785	0.785 J		mg/l	D3
LF1MW-13-1222-A L1569102-01	FD	Total Kjeldahl Nitrogen	0.600	0.378 J	0.378 J		mg/l	D3/TR

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
D3	Field Duplicate RPD
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?		•		See QC outliers.
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were Interference Check Solutions (ICS) or Spectral Interference Checks (SIC) performed at the requried frequency and within project acceptance limits?	•			
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	FC1116
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	SGS North America, Inc., Orlando, FL
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S2BVEM
Primary Data Reviewer:	Calvin Tanaka, Data Review Chemist
Second Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 01, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	A2120B	A2320B	A2340B	A2540C	A5210B	A5220C	E365.3	SW8260D	SW9056A	SW9060A
LF1MW-103-1222	FC1116-1	Water	Field Sample/N	X	X	X	X	X	X	X		X	X
LF1MW-11-1222	FC1116-4	Water	Field Sample/N	X	X	X	X	X	X	X		X	X
LF1P-5-1222	FC1116-3	Water	Field Sample/N	X	X	X	X	X	X	X		X	X
MWSAR03-1222	FC1116-2	Water	Field Sample/N	X	X	X	X	X	X	X	X	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by SGS North America, Inc., Orlando, FL and were reported under sample delivery group (SDG) FC1116. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- MS RPD
- Prep Hold Time
- Surrogate
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 2 results (1.61%) out of the 124 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
A2120B	No additional comments; see Checklist for detail.
A2320B	No additional comments; see Checklist for detail.
A2340B	No additional comments; see Checklist for detail.
A2540C	BS result not provided
A5210B	No additional comments; see Checklist for detail.
A5220C	No additional comments; see Checklist for detail.
E365.3	No additional comments; see Checklist for detail.
SW8260D	No additional comments; see Checklist for detail.
SW9056A	No additional comments; see Checklist for detail.
SW9060A	No additional comments; see Checklist for detail.

Reviewed by Calvin Tanaka, Data Review Chemist, Synectics, Sacramento, CA

February 13, 2023

As the First Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA

March 06, 2023

As the Second Reviewer, I certify that I have performed a quality assurance review of the report generated by the First Reviewer.

Quality Control Outliers for test method SW9056A, MS Recovery

Data for matrix spikes/matrix spike duplicates (MS/MSD) are generated to determine long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. These data alone cannot be used to evaluate the precision and accuracy of individual samples. However, when exercising professional judgment, MS/MSD data can be used in conjunction with other available QC information. Reported results were evaluated to determine compliance with the required acceptance criteria, and summary forms were evaluated and compared to electronic data deliverables. Findings of this review, and any associated qualified results, are listed below.

Sample ID/ Lab Sample ID	Analyte	Result	Warning Limits	Control Limits	Units	Qualifier	Reason Code	Comment
LF1MW-103-1222 (MS)	Fluoride	86.0	90 - 110	90 - 110	percent	J/UJ	M	
LF1MW-103-1222 (SD)	Fluoride	86.0	90 - 110	90 - 110	percent	J/UJ	M	
LF1MW-103-1222 (MS)	Sulfate	87.0	90 - 110	90 - 110	percent	J/UJ	M	
LF1MW-103-1222 (SD)	Sulfate	87.0	90 - 110	90 - 110	percent	J/UJ	M	

Where two qualifiers are listed, such as 'J/UJ', the first applies to positive results, and the second to non-detect results.
Upper and Lower Warning and Control Limits are abbreviated UWL, LWL, UCL, and LCL in the Comment field.

Qualified Results associated with the MS Recovery for SW9056A

FieldSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-103-1222 FC1116-1	N	Fluoride	0.200	0.850	0.850 J	-	mg/l	M
LF1MW-103-1222 FC1116-1	N	Sulfate	2.00	30.0	30.0 J	-	mg/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOD) or (LOQ) based on the sample concentration and the validation guidance. In instances where no LOD is provided, results are reported down to the LOQ.

Table of All Qualified Results

Test Method: SW9056A		Extraction Method: NONE						
FieldSample ID / LabSample ID	Type	Analyte	LOQ	Lab Result	Qualified Result	Bias	Units	Reason
LF1MW-103-1222 FC1116-1	N	Fluoride	0.200	0.850	0.850 J	-	mg/l	M
LF1MW-103-1222 FC1116-1	N	Sulfate	2.00	30.0	30.0 J	-	mg/l	M

Analytes not found in project samples are reported as not detected at the limit of detection (LOD) unless blank contamination occurs and then the sample may be reported as not detected at the (LOQ) based on the sample concentration.
In instances where no LOD is provided, results are reported down to the LOQ.
Trace values are not included in the qualified results table unless additional reason codes are associated.

Reason Code Definitions

Code	Definition
M	MS Recovery
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Various compounds are reported with detections at levels (LOQs) greater than project PQGs and project PALs were not met.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?			•	
Were LCS/LCSD recoveries within project acceptance limits?			•	
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?			•	
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: A2120B (Color)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?			•	
Were target analytes in the method blank less than DL?			•	
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?			•	
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	non SDG sample
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	

Review Questions

Method: A2320B (Alkalinity by Titrimetric Method)				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			An associated method blank was included in the laboratory report but not included in the EDD. The method blank was in control.
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		An associated LCS was included in the laboratory report but was not included in the EDD. The LCS was in control.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		Non-SDG sample
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?		•		Non-SDG sample.
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: A2340B (Hardness by Calculation)

Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were internal standard recoveries within project acceptance limits?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?			•	
Were LCS/LCSD recoveries within project acceptance limits?			•	
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this method.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	

Review Questions

Method: A2540C (Total Dissolved Solids, Dried at 180 C)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		No project MS/MSD included in this method.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	

Review Questions

Method: A5210B (5-Day BOD Test)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		Non-SDG sample
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?			•	
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?			•	

Review Questions

Method: A5220C (Wet Chemistry Chemical Oxygen Demand (COD))

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?			•	
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E365.3 (Phosphorus, All Forms (Colorimetric, Ascorbic Acid, Two Reagent))

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?			•	
Were target analytes in the ICBs/CCBs non-detect?			•	
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Various compounds are reported with detections and non-detects at levels (LOQs) greater than project PQGs and project PALs were not met.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		Non-SDG sample.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were surrogate recoveries within project acceptance limits?	•			
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the GC/MS system properly tuned based on method criteria?	•			
Was instrument tuning completed every 12 hours during sample analysis?	•			
Was the Calibration within project acceptance criteria?	•			

Review Questions

Method: SW8260D (Volatile Organic Compounds by GC/MS)				
Review Questions	Yes	No	NA	Comment
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were internal standard retention times and area criteria within project acceptance criteria?	•			
Were internal standards spiked for every sample, standard, and QC sample?	•			
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			The laboratory noted that MS recoveries and RPDs were outside control limits; however, the MS was a non-project sample.
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9056A (Anion Chromatography)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?	•			
Were MS/MSD recoveries within project acceptance limits?		•		See QC outliers.
Was the MS/MSD RPD within project acceptance limits?	•			
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: SW9056A (Anion Chromatography)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			The laboratory noted that MS recoveries were outside control limits. Spike recovery indicates possible matrix interference.
Were DoD QSM corrective actions followed if deviations were noted?	•			
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW9060A (Total Organic Carbon)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?	•			The laboratory noted that for sample #1, time of sample collection on COC is "1015", but time on sample ID label is "1115"
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?		•		Samples #3 and #4 were not preserved at pH <2.
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		Non SDG sample
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: SW9060A (Total Organic Carbon)

Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?	•			
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Facility:	Griffiss Air Force Base, BECOS
Event:	2022 LF001 Event
SDG:	L1569103
Guidance Document:	Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022
Prime Contractor:	Bhate Environmental Associates, Inc.
Project Manager:	Frank Gardner
Contract Laboratory(ies):	Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN
Data Review Contractor:	Synectics, Sacramento, CA
Data Review Level:	S2BVEM
Primary Data Reviewer:	Evin McKinney, Senior Scientist
Date Submitted:	March 04, 2023

Field Sample ID	Lab Sample ID	Matrix	Type/Type Code	E350.1	E351.2	E420.4	SW6010D
LF1MW-103-1222	L1569103-01	Water	Field Sample/N	X	X	X	X
LF1MW-11-1222	L1569103-04	Water	Field Sample/N	X	X	X	X
LF1P-5-1222	L1569103-03	Water	Field Sample/N	X	X	X	X
MWSAR03-1222	L1569103-02	Water	Field Sample/N	X	X	X	X

This report assesses the analytical data quality associated with the analyses listed on the preceding cover page at S2BVEM data validation level. This assessment has been made through a combination of automated data review (ADR) and supplemental manual review, the details of which are described below. The approach taken in the review of this data set is consistent with the requirements contained in the Final Basewide Uniform Federal Policy Quality Assurance Project Plan, Long Term Monitoring, Former Griffiss Air Force Base, Rome, New York, April 2022 and the additional guidance documents incorporated by reference to the extent possible. Where definitive guidance is not provided, results have been evaluated in a conservative manner using professional judgment.

Sample collection was managed and directed by Bhate Environmental Associates, Inc.; analyses were performed by Pace Analytical National Center for Testing and Innovation, Mount Juliet, TN and were reported under sample delivery group (SDG) L1569103. Data have been evaluated electronically based on electronic data deliverables (EDDs) provided by the laboratory, and hard copy data summary forms have also been reviewed during this effort and compared to the automated review output by the reviewers whose signatures appear on the following page. Findings based on the automated data submission and manual data verification processes are detailed in the ADR narrative and throughout this report.

All quality control (QC) elements associated with this SDG have been reviewed by a project chemist in accordance with the requirements defined for the project. This review is documented in the attached Data Review Checklists. The QC elements listed below were supported by the electronic deliverable and were evaluated using ADR processes.

- Blank - Negative
- Lab Blank
- Lab Replicate RPD
- LCS Recovery
- MS Recovery
- Prep Hold Time
- Test Hold Time

Results of the ADR process were subsequently reviewed and updated as applicable by the data review chemists identified on the signature page. Quality control elements that were not included in the electronic deliverable were reviewed manually and findings are documented within this report. Summaries of findings and associated qualified results are documented throughout this report.

A total of 0 results (0.00%) out of the 16 results (sample and field QC samples) reported are qualified based on review and 0 results (0.00%) have been rejected or deemed a serious deficiency (X qualifier). Trace values, defined as results that are qualified as estimated because they fall between the detection limit and the reporting limit/limit of quantitation, are not counted as qualified results in the above count. The qualified results are detailed throughout this report and discussed in the narrative below, where appropriate.

Narrative Comments

Analytical Method	Data Reviewer Comment
E350.1	No additional comments; see Checklist for detail.
E351.2	No additional comments; see Checklist for detail.
E420.4	No additional comments; see Checklist for detail.
SW6010D	No additional comments; see Checklist for detail.

Evin McKinney

March 04, 2023

Reviewed by Evin McKinney, Senior Scientist, Synectics, Sacramento, CA

As the Reviewer, I certify that I have performed a data review process in accordance with the requirements of the project guidance document, and have compared the electronic data to the laboratory's hard copy report and have verified the consistency of the reported sample results and method quality control data between the two deliverables.

No Outliers were associated with this sample delivery group.

Qualified Results

No results associated with this sample delivery group required qualification.

Reason Code Definitions

Code	Definition
TR	Trace Level Detect

Flag Code and Definitions

Flag	Definition
J	Estimated Value
N	The analysis indicates the presence of an analyte for which there was presumptive evidence to make a tentative identification.
NJ	The analyte has been tentatively identified or presumptively as present and the associated numerical value was the estimated concentration in the sample.
R	The data are rejected due to deficiencies in meeting QC criteria and may not be used for decision making.
U	Undetected: The analyte was analyzed for, but not detected.
UJ	The analyte was not detected; however, the result is estimated due to discrepancies in meeting certain analyte-specific quality control criteria.
X	Result may require rejection; PDT attention required

Bias

-	The result may be biased low
+	The result may be biased high

Note - The bias field is a separate field; however, it is an integral part of the final flag (qualifier) on the sample result

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)		•		Some LOQs were raised due to dilutions needed; however, all raised LOQs had detections associated.
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		MS only.
Were MS/MSD recoveries within project acceptance limits?	•			
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?	•			
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			

Review Questions

Method: E350.1 (Nitrogen (Ammonia - Colorimetric, Automated Phenate))

Review Questions	Yes	No	NA	Comment
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E351.2 (Nitrogen, Kjeldahl, Total (Colorimetric, Semi-Automated Block Digester, AAII))				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)

Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			
Were CCVs run at the required frequency and within project acceptance criteria?	•			

Review Questions

Method: E420.4 (Determination of Total Recoverable Phenolics by Semi-Automated Colorimetry)				
Review Questions	Yes	No	NA	Comment
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?			•	
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were there discrepancies between the COC and the samples received?		•		
Were there discrepancies between the COC and the sample labels?		•		
Were samples relinquished properly on the COC?	•			
Were all samples properly preserved?	•			
Were sampling dates/times, date and time of laboratory receipt of samples, and sample conditions upon receipt at the laboratory (including preservation, pH, and temperature) documented?	•			
Were sample results reported with percent moisture correction if required?			•	
Were analytical methods performed and analysis dates present?	•			
Were all requested target analytes reported?	•			
Were QAPP specified Project Quantitation Limit Goals achieved? (The laboratory LOQ is compared to the QAPP Project Quantitation Goal)	•			
Were holding times met?	•			
Were trip blanks analyzed at the proper frequency and in control?			•	
Were field blanks analyzed at the proper frequency and in control?			•	
Were equipment blanks analyzed at the proper frequency and in control?			•	
Was a method blank prepared and analyzed with each batch?	•			
Were target analytes in the method blank less than DL?	•			
Was an LCS/LCSD pair prepared and analyzed with each batch?		•		LCS only.
Were LCS/LCSD recoveries within project acceptance limits?	•			
Was the LCS/LCSD RPD within project acceptance limits?			•	
Was a MS/MSD pair prepared with each batch?		•		The MS/MSD samples included in this method are from a different SDG.
Were MS/MSD recoveries within project acceptance limits?			•	
Was the MS/MSD RPD within project acceptance limits?			•	
Were Post Spike (PS) recoveries within project acceptance limits?			•	
Was a Dilution Test/Serial Dilution performed and within project acceptance criteria?			•	
If ISM ws used for sample collection, were laboratory triplicates analyzed and within project acceptance limits?			•	
Were field replicates (duplicates, triplicates, etc.) analyzed at the proper frequency and in control?			•	
Were reported sample concentrations within calibration range?	•			
Was the Calibration within project acceptance criteria?	•			
Was a ICV performed after each ICAL prior to sample analysis and within project acceptance criteria?	•			

Review Questions

Method: SW6010D (Trace Metals by Inductively Coupled Plasma/Atomic Emission Spectrometry)				
Review Questions	Yes	No	NA	Comment
Were CCVs run at the required frequency and within project acceptance criteria?	•			
Were ICB/CCBs run at the required frequency?	•			
Were target analytes in the ICBs/CCBs non-detect?	•			
Was a Low Level Calibration Check Verification (LLCCV) analyzed prior to sample and within acceptance criteria?	•			
Were Interference Check Solutions (ICS) or Spectral Interference Checks (SIC) performed at the requried frequency and within project acceptance limits?	•			
Were internal standard recoveries within project acceptance limits?			•	
Were instrument run logs present and filled out appropriately?	•			
Were sample preparation sheets present and filled out appropriately?			•	
Have all Laboratory Case Narrative comments/findings been addressed in the data review process?	•			
Were DoD QSM corrective actions followed if deviations were noted?			•	
Were any data recommended for exclusion in the data validation process?		•		

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APPENDIX A – HISTORICAL LANDFILL GAS MONITORING RESULTS

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Appendix A-1 LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)

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Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	February 2010				May 2010			
	Barometric Pressure (in.) = 29.45-29.50				Barometric Pressure (in.) = 29.04-29.23			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	>100	45.5	2.1	20.6	>100	32.4	2.5	18.8
LF1GMP-02	0	0.0	14.4	2.1	>100	8.1	0.0	12.8
LF1GMP-03	>100	5.7	8.1	8.1	>100	18.2	0.0	22.1
LF1GMP-04	10	0.5	14.3	4.5	>100	17.6	0.0	24.2
LF1GMP-06	>100	70.8	0.0	4.3	>100	44.8	0.0	6.3
LF1GMP-08	0	0.0	20.5	1.1	0	0.0	16.3	2.5
LF1GMP-09	47	2.4	7.7	4.0	>100	11.2	0.0	12.5
LF1GMP-10	>100	9.0	6.8	10.7	>100	10.2	0.5	15.1
LF1GMP-11	0	0.0	23.8	0.1	0	0.0	16.1	2.3
LF1GMP-12	0	0.0	21.4	1.5	0	0.0	18.5	1.5
LF1GMP-13	0	0.0	18.1	1.3	0	0.0	15.1	2.2
LF1GMP-14	0	0.0	21.6	0.6	0	0.0	19.0	0.5
LF1GMP-15	0	0.0	22.3	0.1	0	0.0	19.2	0.5
LF1GMP-16	0	0.0	19.9	1.5	0	0.0	19.1	1.6
LF1GMP-17	0	0.0	19.6	1.5	0	0.0	19.4	1.5
LF1GMP-18	0	0.0	22.0	0.1	0	0.0	19.6	0.2
LF1GMP-19	0	0.0	22.0	0.3	0	0.0	18.6	0.7
LF1GMP-20	2	0.1	22.7	0.1	0	0.0	19.6	0.0
LF1GV-01	0	0.0	22.1	0.2	>100	8.0	13.6	8.1
LF1GV-02	2	0.1	21.3	0.5	>100	7.6	12.5	9.8
LF1GV-03	3	0.1	21.0	0.7	>100	5.4	14.0	6.8
LF1GV-04	0	0.0	22.0	0.3	>100	15.2	0.3	20.9
LF1GV-05	>100	6.1	19.5	8.8	>100	5.7	14.8	6.7
LF1GV-06	>100	7.4	2.9	17.1	>100	8.2	6.8	12.2
LF1GV-07	>100	6.6	14.6	7.3	3	0.1	20.9	0.1
LF1GV-08	>100	6.5	17.0	4.8	13	0.6	20.6	0.5
LF1GV-09	47	2.3	19.2	2.1	16	0.8	20.6	0.7
LF1GV-10	>100	5.0	8.4	11.8	2	0.1	20.7	0.2
LF1GV-11	79	3.9	18.4	3.1	3	0.1	20.8	0.2
LF1GV-12	60	3.0	16.9	4.2	3	0.2	20.6	0.3
LF1GV-13	>100	20.4	0.4	22.5	2	0.1	20.3	0.9
LF1GV-14	>100	5.0	17.5	3.9	46	2.3	19.7	1.3
LF1GV-15	24	1.2	17.9	2.8	5	0.2	20.6	0.4
LF1GV-16	6	0.3	18.3	1.9	0	0.0	20.9	0.0
LF1GV-17	31	1.5	21.1	1.3	37	1.7	19.9	1.4
LF1GV-18	22	1.1	20.6	1.4	21	1.0	20.0	0.9
LF1GV-19	52	2.5	17.5	3.3	8	0.3	20.5	0.5
LF1GV-20	58	2.9	18.7	1.9	28	1.4	20.1	0.6
LF1GV-21	>100	5.9	18.9	2.4	76	3.8	19.6	1.1
LF1GV-22	>100	7.3	16.0	5.5	12	0.6	20.6	0.5
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0.0	22.3	0.1	0	0.0	14.9	1.9
LF1GV-25	0	0.0	22.2	0.1	0	0.0	16.1	2.8
LF1GV-26	0	0.0	22.1	0.2	0	0.0	19.8	0.1
LF1GV-27	0	0.0	21.8	0.1	0	0.0	19.6	0.2
LF1GV-28	0	0.0	22.0	0.1	0	0.0	17.7	1.4
LF1GV-29	0	0.0	19.6	1.6	0	0.0	19.9	0.1
LF1GV-30	0	0.0	21.9	0.1	0	0.0	19.6	0.3
LF1GV-31	0	0.0	21.8	0.1	0	0.0	14.2	4.1

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	August 2010				October 2010			
	Barometric Pressure (in.) = 29.40-29.29				Barometric Pressure (in.) = 29.13-29.20			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	>100	52.5	0.9	24.6	>100	48.4	2.4	24.7
LF1GMP-02	>100	28.6	0.1	18.1	26	1.3	7.9	3.6
LF1GMP-03	>100	43.7	0.1	34.6	>100	46.1	0.8	34.0
LF1GMP-04	>100	53.8	0.1	40.9	>100	24.8	8.6	20.4
LF1GMP-06	>100	79.5	0.3	8.9	>100	24.2	12.9	3.5
LF1GMP-08	0	0.0	7.4	8.4	0	0.0	18.8	0.8
LF1GMP-09	>100	45.7	0.3	22.9	60	3.0	17.5	1.8
LF1GMP-10	>100	18.1	0.3	21.6	0	0.0	18.8	0.5
LF1GMP-11	0	0.0	15.2	3.3	0	0.0	20.1	0.4
LF1GMP-12	0	0.0	17.9	2.3	0	0.0	19.9	0.7
LF1GMP-13	0	0.0	7.4	7.1	0	0.0	19.1	0.4
LF1GMP-14	0	0.0	15.6	2.0	0	0.0	18.9	0.4
LF1GMP-15	0	0.0	18.6	1.3	0	0.0	18.6	0.8
LF1GMP-16	0	0.0	17.7	2.5	0	0.0	18.7	1.7
LF1GMP-17	0	0.0	17.5	2.5	1	0.1	19.7	0.8
LF1GMP-18	0	0.0	17.5	2.4	0	0.0	19.6	1.0
LF1GMP-19	53	2.6	7.1	5.2	0	0.0	20.2	0.3
LF1GMP-20	0	0.0	20.1	0.0	0	0.0	20.3	0.3
LF1GV-01	>100	26.3	8.8	23.2	9	0.5	15.4	6.4
LF1GV-02	>100	11.8	14.7	9.6	32	1.6	15.3	6.7
LF1GV-03	>100	27.5	8.0	21.0	>100	8.5	12.9	9.1
LF1GV-04	>100	24.2	5.5	22.2	>100	10.3	9.7	13.3
LF1GV-05	>100	23.7	10.0	19.3	17	0.9	14.8	7.6
LF1GV-06	>100	32.8	4.3	25.3	56	2.8	10.8	13.2
LF1GV-07	>100	16.1	13.6	14.2	15	0.9	15.7	6.4
LF1GV-08	>100	9.5	16.7	6.2	14	0.7	15.7	5.1
LF1GV-09	>100	9.8	16.4	6.8	8	0.4	15.4	5.7
LF1GV-10	>100	15.4	13.4	13.0	76	3.8	11.8	13.4
LF1GV-11	>100	5.2	18.0	3.9	11	0.6	15.9	5.6
LF1GV-12	>100	14.5	13.1	12.4	28	1.4	14.4	8.0
LF1GV-13	>100	13.5	12.8	11.4	90	4.3	9.8	14.6
LF1GV-14	>100	5.0	18.2	3.5	11	0.6	15.2	5.9
LF1GV-15	>100	6.5	16.6	6.9	0	0.0	16.8	3.4
LF1GV-16	>100	8.8	14.0	7.5	34	1.7	11.2	9.6
LF1GV-17	>100	5.8	17.5	5.1	17	0.9	15.4	6.2
LF1GV-18	>100	9.3	15.9	6.9	13	0.7	15.7	4.8
LF1GV-19	>100	15.4	12.5	10.3	63	3.1	10.8	10.0
LF1GV-20	>100	10.1	13.5	6.5	62	3.1	9.9	9.5
LF1GV-21	>100	17.5	14.0	6.7	47	2.4	13.0	6.6
LF1GV-22	>100	8.6	15.9	6.8	34	1.9	13.7	8.2
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	>100	18.9	0.4	21.3	0	0.0	19.6	0.5
LF1GV-25	>100	26.9	0.2	26.5	39	1.9	17.0	3.2
LF1GV-26	>100	10.8	12.0	10.4	68	3.4	17.8	3.2
LF1GV-27	33	1.7	18.7	2.9	>100	10.7	13.6	8.0
LF1GV-28	5	0.2	19.7	0.3	11	0.6	20.2	0.4
LF1GV-29	26	1.3	17.8	2.4	>100	8.8	11.4	8.2
LF1GV-30	>100	8.6	10.4	11.7	0	0.0	20.2	0.4
LF1GV-31	>100	5.6	9.5	9.0	0	0.0	19.5	0.7

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	May 2011				October 2011			
	Barometric Pressure (in.) = 29.41-29.21				Barometric Pressure (in.) = 29.11-29.14			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	>100	36.9	0.8	22.2	0	0.0	21.2	0.0
LF1GMP-02	>100	11.7	2.6	12.9	0	0.0	21.2	0.0
LF1GMP-03	>100	25.9	0.0	25.4	>100	44.3	0.6	35.2
LF1GMP-04	>100	32.7	0.0	27.4	>100	44.6	0.4	39.5
LF1GMP-06	>100	70.1	0.0	3.5	0	0.0	20.8	0.2
LF1GMP-08	0	0.0	14.4	3.4	0	0.0	20.0	1.0
LF1GMP-09	>100	20.5	1.1	7.6	59	2.8	17.4	1.8
LF1GMP-10	>100	11.2	0.6	15.9	>100	16.2	2.1	18.1
LF1GMP-11	0	0.0	17.1	1.1	0	0.0	20.3	0.8
LF1GMP-12	0	0.0	19.1	0.5	0	0.0	20.2	1.6
LF1GMP-13	0	0.0	13.5	1.7	0	0.0	12.4	4.4
LF1GMP-14	0	0.0	18.4	0.4	0	0.0	19.6	0.6
LF1GMP-15	0	0.0	18.8	1.3	0	0.0	20.6	0.6
LF1GMP-16	0	0.0	18.7	1.4	0	0.0	21.1	0.0
LF1GMP-17	0	0.0	18.4	1.4	0	0.0	21.1	0.0
LF1GMP-18	0	0.0	19.7	0.0	0	0.0	21.0	0.5
LF1GMP-19	0	0.0	17.0	0.4	0	0.0	21.2	0.1
LF1GMP-20	0	0.0	19.9	0.0	0	0.0	21.4	0.0
LF1GV-01	>100	7.2	15.9	5.9	0	0.0	21.5	0.1
LF1GV-02	>100	14.0	10.5	12.7	0	0.0	20.2	1.6
LF1GV-03	>100	32.7	0.0	28.6	0	0.0	21.0	0.4
LF1GV-04	>100	20.8	4.4	20.4	0	0.0	21.2	0.3
LF1GV-05	>100	14.5	13.5	12.3	0	0.0	21.2	0.6
LF1GV-06	>100	20.3	7.9	17.8	0	0.0	21.4	0.2
LF1GV-07	>100	12.6	15.0	8.4	0	0.0	21.9	0.0
LF1GV-08	>100	6.6	17.8	4.3	0	0.0	21.8	0.0
LF1GV-09	>100	10.7	16.6	4.6	0	0.0	21.8	0.0
LF1GV-10	>100	11.3	14.0	9.6	0	0.0	21.6	0.1
LF1GV-11	>100	8.4	17.2	4.5	0	0.0	22.0	0.0
LF1GV-12	81	4.0	18.3	4.1	0	0.0	22.0	0.0
LF1GV-13	>100	13.0	11.3	10.7	19	0.9	17.0	4.1
LF1GV-14	>100	6.7	16.9	4.3	6	0.3	21.1	0.7
LF1GV-15	77	4.0	17.5	3.6	0	0.0	21.8	0.1
LF1GV-16	62	3.5	15.1	4.7	0	0.0	21.9	0.0
LF1GV-17	>100	6.0	17.7	4.0	10	0.5	20.2	1.4
LF1GV-18	74	3.7	18.4	2.9	0	0.0	21.6	0.1
LF1GV-19	>100	9.9	14.2	7.2	0	0.0	20.0	1.8
LF1GV-20	>100	11.2	11.8	7.0	0	0.0	21.4	0.1
LF1GV-21	>100	19.5	12.5	7.1	0	0.0	21.3	0.1
LF1GV-22	>100	7.6	15.7	5.2	0	0.0	21.3	0.3
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0.0	2.6	10.9	0	0.0	21.1	0.0
LF1GV-25	5	0.8	13.1	4.4	0	0.0	21.5	0.0
LF1GV-26	0	0.0	20.5	0.0	0	0.0	21.6	0.0
LF1GV-27	53	2.2	15.8	4.4	0	0.0	21.3	0.3
LF1GV-28	0	0.0	20.4	0.0	0	0.0	21.6	0.0
LF1GV-29	0	0.0	20.4	0.0	0	0.0	21.6	0.0
LF1GV-30	0	0.0	20.6	0.0	0	0.0	21.5	0.5
LF1GV-31	0	0.0	19.3	1.2	0	0.0	20.1	1.3

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	May 2012				October 2012			
	Barometric Pressure (in.) = 29.02-29.34				Barometric Pressure (in.) = 29.49-29.56			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	>100	20.4	0.9	22.5	>100	30.5	3.9	19.4
LF1GMP-02	>100	21.7	0.0	13.9	>100	16.3	2.3	9.7
LF1GMP-03	>100	24.3	0.0	28.1	>100	38.2	1.3	30.8
LF1GMP-04	>100	31.4	0.0	28.4	56	2.8	19.3	3.1
LF1GMP-06	>100	52.9	0.0	5.0	>100	77.3	0.2	8.7
LF1GMP-08	0	0.0	13.4	3.4	0	0.0	20.6	0.4
LF1GMP-09	>100	19.2	0.0	11.5	>100	43.5	1.5	24.4
LF1GMP-10	>100	13.0	0.2	15.1	53	2.5	17.1	4.1
LF1GMP-11	0	0.0	17.4	2.7	0	0.0	20.9	0.2
LF1GMP-12	0	0.0	20.5	1.6	0	0.0	20.7	0.6
LF1GMP-13	0	0.0	18.3	1.7	0	0.0	20.5	0.3
LF1GMP-14	0	0.0	21.5	0.3	0	0.0	20.7	0.7
LF1GMP-15	0	0.0	21.2	0.6	0	0.0	20.0	0.9
LF1GMP-16	0	0.0	22.0	0.0	0	0.0	20.7	0.2
LF1GMP-17	0	0.0	18.3	1.7	0	0.0	20.7	0.1
LF1GMP-18	0	0.0	20.5	1.7	0	0.0	15.0	3.4
LF1GMP-19	0	0.0	20.4	0.5	0	0.0	17.9	1.9
LF1GMP-20	0	0.0	21.9	0.0	0	0.0	21.2	0.0
LF1GV-01	>100	6.0	18.9	5.0	>100	18.9	4.4	21.7
LF1GV-02	>100	7.4	17.9	6.4	>100	25.4	2.6	26.3
LF1GV-03	74	3.8	19.8	3.0	>100	24.9	6.2	23.8
LF1GV-04	0	0.0	22.0	0.1	>100	17.0	12.9	14.7
LF1GV-05	>100	24.9	8.5	21.6	>100	26.7	6.6	25.2
LF1GV-06	>100	25.5	2.3	26.0	>100	20.7	3.1	23.9
LF1GV-07	>100	9.5	17.4	7.3	>100	20.4	10.7	18.5
LF1GV-08	>100	22.4	11.8	12.4	>100	13.2	14.4	8.4
LF1GV-09	>100	28.4	9.1	18.0	>100	12.3	13.4	10.2
LF1GV-10	>100	17.8	11.9	16.9	>100	33.3	2.5	31.5
LF1GV-11	>100	7.3	18.3	5.4	>100	18.5	9.2	16.2
LF1GV-12	>100	32.6	8.5	23.7	>100	15.0	9.7	15.8
LF1GV-13	>100	18.6	11.4	14.7	>100	21.0	8.2	18.5
LF1GV-14	>100	9.8	16.4	6.8	62	3.0	18.8	3.0
LF1GV-15	>100	8.3	17.3	4.7	25	1.2	19.5	1.5
LF1GV-16	>100	8.5	15.7	5.7	0	0.0	21.1	0.0
LF1GV-17	>100	23.2	10.9	14.9	0	0.0	21.2	0.0
LF1GV-18	>100	6.4	18.5	4.1	0	0.0	21.0	0.1
LF1GV-19	>100	7.7	17.8	4.4	0	0.0	21.2	0.0
LF1GV-20	>100	6.0	18.3	2.8	0	0.0	21.2	0.0
LF1GV-21	>100	10.3	18.5	2.7	0	0.1	21.1	0.0
LF1GV-22	>100	17.2	11.6	13.2	0	0.0	21.2	0.0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	>100	5.8	6.1	7.6	>100	14.7	1.6	22.7
LF1GV-25	2	0.1	22.0	0.1	6	0.3	20.9	0.3
LF1GV-26	0	0.0	21.9	0.0	0	0.0	21.1	0.0
LF1GV-27	>100	12.2	12.3	8.8	0	0.0	21.1	0.0
LF1GV-28	0	0.0	21.9	0.0	0	0.0	21.1	0.0
LF1GV-29	0	0.0	22.0	0.0	0	0.0	21.1	0.0
LF1GV-30	2	0.2	21.9	0.0	0	0.0	21.2	0.0
LF1GV-31	0	0.0	20.5	0.2	4	0.2	20.5	0.6

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	April 2013				October 2013			
	Barometric Pressure (in.) = 29.59-29.63				Barometric Pressure (in.) = 29.35-29.41			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	0	0.0	20.8	0.1	>100	23.5	4.9	16.7
LF1GMP-02	0	0.0	20.9	0.1	61	3.0	16.9	3.0
LF1GMP-03	0	0.0	20.9	0.0	>100	21.9	8.2	15.8
LF1GMP-04	0	0.0	20.8	0.2	>100	21.8	0.2	25.6
LF1GMP-06	>100	25.0	9.2	3.1	>100	7.8	11.4	2.4
LF1GMP-08	0	0.0	18.8	1.6	28	1.3	0.9	13.2
LF1GMP-09	3	0.1	20.7	0.2	>100	44.2	0.4	18.5
LF1GMP-10	25	1.2	18.8	0.5	>100	13.9	2.1	11.7
LF1GMP-11	0	0.0	18.6	1.9	0	0.0	18.5	1.8
LF1GMP-12	0	0.0	19.7	1.2	0	0.0	19.7	1.2
LF1GMP-13	0	0.0	19.9	0.8	0	0.0	20.0	1.3
LF1GMP-14	0	0.0	20.9	0.0	0	0.0	13.1	4.5
LF1GMP-15	0	0.0	17.5	1.6	0	0.0	18.8	1.1
LF1GMP-16	0	0.0	19.8	1.3	0	0.0	19.2	1.2
LF1GMP-17	0	0.0	19.7	1.3	0	0.0	20.8	0.7
LF1GMP-18	0	0.0	20.8	0.1	0	0.0	19.6	1.9
LF1GMP-19	0	0.0	20.9	0.0	0	0.0	20.8	0.4
LF1GMP-20	0	0.0	20.8	0.0	0	0.0	20.7	0.0
LF1GV-01	0	0.0	20.9	0.0	79	3.9	16.2	6.3
LF1GV-02	0	0.0	20.8	0.0	>100	6.4	12.1	10.5
LF1GV-03	0	0.0	20.7	0.0	59	3.0	15.4	5.8
LF1GV-04	0	0.0	20.7	0.0	>100	6.7	8.8	12.5
LF1GV-05	0	0.0	21.1	0.0	>100	6.2	15.2	7.6
LF1GV-06	0	0.0	21.1	0.0	>100	6.8	8.2	12.8
LF1GV-07	0	0.0	21.1	0.0	68	3.9	17.9	4.2
LF1GV-08	5	0.2	21.1	0.1	>100	7.3	16.0	6.9
LF1GV-09	2	0.1	21.1	0.1	79	4.0	15.8	3.7
LF1GV-10	0	0.0	20.9	0.0	>100	9.0	9.7	12.4
LF1GV-11	0	0.0	20.9	0.0	>100	6.0	16.6	4.0
LF1GV-12	0	0.0	21.1	0.0	>100	5.2	9.5	11.1
LF1GV-13	1	0.1	21.0	0.0	>100	5.3	16.8	4.6
LF1GV-14	0	0.0	21.0	0.0	47	2.4	19.0	2.1
LF1GV-15	0	0.0	21.0	0.0	20	1.0	20.4	1.0
LF1GV-16	0	0.0	21.2	0.0	65	3.3	9.1	8.6
LF1GV-17	0	0.0	21.1	0.0	80	4.2	17.9	3.7
LF1GV-18	0	0.0	21.3	0.0	93	4.7	15.5	5.3
LF1GV-19	0	0.0	21.2	0.0	>100	10.5	5.3	14.9
LF1GV-20	0	0.0	21.2	0.0	>100	5.3	16.6	3.7
LF1GV-21	2	0.1	21.1	0.0	>100	9.7	15.3	4.9
LF1GV-22	0	0.0	21.1	0.0	>100	6.2	15.1	6.9
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0.0	19.3	0.9	0	0.0	17.2	2.0
LF1GV-25	0	0.0	20.9	0.1	3	0.2	20.9	0.4
LF1GV-26	0	0.0	21.1	0.0	9	0.5	20.4	0.4
LF1GV-27	0	0.0	20.4	0.4	0	0.0	20.5	1.1
LF1GV-28	0	0.0	21.2	0.0	0	0.0	21.4	0.1
LF1GV-29	0	0.0	21.1	0.0	0	0.0	17.9	1.8
LF1GV-30	0	0.0	21.1	0.0	0	0.0	21.3	0.1
LF1GV-31	0	0.0	19.9	0.6	0	0.0	20.5	0.5

Notes:
> = greater than
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LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	May 2014				November 2014			
	Barometric Pressure (in.) = 29.51-29.62				Barometric Pressure (in.) = 29.49-29.51			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	0	0.0	20.8	0.0	>100	23.0	4.1	17.2
LF1GMP-02	0	0.0	20.8	0.0	0	0.0	14.8	2.4
LF1GMP-03	55	2.7	8.6	6.0	>100	25.6	0.0	16.1
LF1GMP-04	0	0.0	20.8	0.0	>100	36.1	1.4	14.8
LF1GMP-06	3	0.1	20.5	0.1	0	0.0	19.7	0.6
LF1GMP-08	0	0.0	20.5	0.1	0	0.0	20.1	0.1
LF1GMP-09	43	2.1	17.8	0.7	>100	8.1	12.3	5.8
LF1GMP-10	29	1.4	16.8	0.3	>100	10.3	0.9	14.4
LF1GMP-11	0	0.0	20.3	0.4	0	0.0	20.9	0.6
LF1GMP-12	0	0.0	19.6	1.5	0	0.0	20.9	0.2
LF1GMP-13	0	0.0	19.5	0.7	0	0.0	20.7	1.3
LF1GMP-14	0	0.0	16.7	1.8	0	0.0	18.8	0.7
LF1GMP-15	0	0.0	19.7	0.6	0	0.0	19.1	0.0
LF1GMP-16	0	0.0	20.1	1.0	0	0.0	19.4	0.1
LF1GMP-17	0	0.0	20.8	0.2	0	0.0	18.7	0.5
LF1GMP-18	0	0.0	20.9	0.0	0	0.0	18.0	1.1
LF1GMP-19	0	0.0	20.7	0.0	0	0.0	20.1	0.0
LF1GMP-20	0	0.0	20.7	0.0	0	0.0	19.9	1.2
LF1GV-01	3	0.1	20.0	0.3	>100	8.2	13.4	7.2
LF1GV-02	7	0.3	19.0	1.3	>100	6.2	16.8	5.0
LF1GV-03	7	0.4	17.9	2.5	14	0.7	20.1	0.6
LF1GV-04	14	0.7	15.2	6.4	0	0.0	20.3	0.0
LF1GV-05	5	0.2	19.7	0.4	0	0.0	19.9	0.1
LF1GV-06	9	0.4	10.3	7.2	0	0.0	21.2	0.0
LF1GV-07	>100	5.2	11.7	9.2	0	0.0	21.1	0.0
LF1GV-08	46	2.3	17.6	2.9	22	1.5	14.8	5.3
LF1GV-09	63	3.1	15.7	4.0	0	0.0	19.9	0.0
LF1GV-10	3	0.1	16.1	2.8	0	0.0	19.7	0.1
LF1GV-11	29	1.4	17.9	1.4	0	0.0	19.8	0.1
LF1GV-12	7	0.3	16.9	2.4	0	0.0	20.1	0.0
LF1GV-13	82	4.1	13.6	5.7	51	2.6	2.4	13.8
LF1GV-14	87	4.4	13.9	5.2	0	0.0	20.1	0.0
LF1GV-15	5	0.2	18.1	1.3	0	0.0	18.8	0.5
LF1GV-16	0	0.0	16.8	1.9	0	0.0	19.1	0.0
LF1GV-17	75	4.0	17.1	2.7	0	0.0	20.3	0.0
LF1GV-18	>100	8.0	5.7	11.7	0	0.0	18.9	0.7
LF1GV-19	45	2.3	8.3	9.7	0	0.0	19.5	0.0
LF1GV-20	30	1.5	17.5	1.3	0	0.0	19.4	0.0
LF1GV-21	>100	6.0	14.8	3.6	0	0.0	19.5	0.0
LF1GV-22	>100	7.9	9.3	9.1	0	0.0	20.2	0.0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0.0	19.1	1.2	0	0.0	20.1	0.0
LF1GV-25	0	0.0	20.8	0.0	0	0.0	20.0	0.9
LF1GV-26	0	0.0	20.8	0.0	0	0.0	20.0	0.0
LF1GV-27	0	0.0	20.9	0.0	0	0.0	18.7	0.8
LF1GV-28	0	0.0	20.9	0.0	0	0.0	18.8	1.5
LF1GV-29	0	0.0	20.8	0.2	0	0.0	21.0	0.0
LF1GV-30	0	0.0	20.3	0.5	0	0.0	19.5	1.0
LF1GV-31	0	0.0	20.6	0.4	0	0.0	20.0	0.0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	May 2015				September 2015			
	Barometric Pressure (in.) = 29.28-29.62				Barometric Pressure (in.) = 29.36-29.54			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	0	0 0	20.8	0.0	> 100	25.4	0.1	24.1
LF1GMP-02	0	0.0	20.2	0.0	> 100	31.6	0.0	15.2
LF1GMP-03	31	18	18.5	3.7	> 100	40.8	0.0	36.6
LF1GMP-04	0	0 0	21.1	0.0	> 100	47.3	0.0	41.5
LF1GMP-06	> 100	32.2	8.1	3.6	> 100	77.0	0.1	7.3
LF1GMP-08	0	0 0	21.3	0.0	0	0.0	15.3	4.4
LF1GMP-09	0	0 0	21.0	0.0	> 100	34.9	0.1	20.6
LF1GMP-10	0	0 0	20.8	0.0	> 100	14.1	2.0	18.5
LF1GMP-11	0	0 0	21.2	0.0	1	0.0	1 4.2	6.4
LF1GMP-12	0	0. 0	20.4	0.8	2	0.1	20.0	0.7
LF1GMP-13	0	0 0	19.8	1.0	1	0.0	19.6	1.0
LF1GMP-14	0	0 0	20.9	0.0	0	0.0	17.4	2.9
LF1GMP-15	0	0 0	20.8	0.1	0	0.0	19.6	1.2
LF1GMP-16	0	0 0	20.3	1.0	0	0.0	20.3	0.2
LF1GMP-17	0	0 0	20.0	1.5	1	0.0	20.4	0.1
LF1GMP-18	0	0 0	20.9	0.0	1	0.0	13.1	0.8
LF1GMP-19	0	0 0	21.2	0.0	3	0.1	18.7	1.5
LF1GMP-20	0	0. 0	21.3	0.0	1	0.0	20.4	0.1
LF1GV-01	> 100	31.7	1.5	31.7	0	0.0	20.6	0.1
LF1GV-02	> 100	5.7	16.6	6.7	0	0.0	20.7	0.0
LF1GV-03	> 100	7.5	15.7	5.9	0	0.0	20.7	0.0
LF1GV-04	0	0 0	21.2	0.0	0	0.0	20.7	0.0
LF1GV-05	5	0.3	21.1	0.1	0	0.0	21	0.0
LF1GV-06	> 100	18.9	7.3	20.3	1	0.0	20.5	0.0
LF1GV-07	64	3.5	19.5	3.7	0	0.0	21.0	0.0
LF1GV-08	> 100	14.8	15.5	10.3	0	0.0	21.3	0.0
LF1GV-09	> 100	13.9	11.7	10.5	0	0.0	21.2	0.0
LF1GV-10	> 100	5 3	17.8	5.7	1	0.1	21.1	0.0
LF1GV-11	> 100	4.3	18.9	4.9	0	0.0	21.1	0.0
LF1GV-12	> 100	6.5	17.6	6.8	0	0.0	20.5	0.0
LF1GV-13	> 100	12.2	13.8	12.3	1	0.0	21.0	0.0
LF1GV-14	> 100	11.4	14.7	8.4	0	0.0	20.7	0.0
LF1GV-15	63	3.1	19.3	4.2	1	0.0	20.7	0.0
LF1GV-16	17	0.9	20.1	2.6	0	0.0	20.7	0.0
LF1GV-17	> 100	13.70	15.3	8.6	1	0.0	20.5	0.0
LF1GV-18	> 100	15.4	16.4	7.2	1	0.0	20.6	0.0
LF1GV-19	> 100	8.6	17.9	5.9	0	0.0	20.6	0.0
LF1GV-20	> 100	17.9	9.5	9.3	0	0.0	20.6	0.0
LF1GV-21	> 100	11.1	18.5	4.3	0	0.0	20.7	0.0
LF1GV-22	> 100	10.6	16.5	6.6	1	0.0	20.5	0.0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	> 100	5.5	1.1	11.7	14	0.3	19.4	2.3
LF1GV-25	> 100	10.5	5.2	8.9	0	0.1	20.2	0.0
LF1GV-26	0	0.0	21.7	0.1	0	0.0	20.1	0.0
LF1GV-27	> 100	9.5	9.3	12.4	5	0.7	21.3	0.0
LF1GV-28	0	0.0	21.7	0.0	0	0.0	21.3	0.0
LF1GV-29	2	0.1	21.5	0.0	0	0.0	21.2	0.0
LF1GV-30	0	0 0	21.1	2.5	0	0.0	21.3	0.0
LF1GV-31	0	0 0	17.3	3.0	0	0.0	20.1	0.9

Notes:
> = greater than
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LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	December 2016				November 2017			
	Barometric Pressure (in.) = 29.53-29.54				Barometric Pressure (in.) = 29.51 - 29.51			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	0	0	21.1	0.1	0.0	0.0	21.4	0.1
LF1GMP-02	43	2.1	1	10.1	> 100	25.2	0.7	15.3
LF1GMP-03	> 100	9.4	6.3	15.3	> 100	19.6	9.0	17.8
LF1GMP-04	0	0	21.1	0.4	14.0	0.7	16.5	1.9
LF1GMP-06	> 100	9.1	14.6	3.2	> 100	40.0	2.6	5.0
LF1GMP-08	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-09	> 100	22.7	7.7	7.5	0.0	0.0	21.2	0.0
LF1GMP-10	21	1	19.3	0.4	0.0	0.0	21.2	0.0
LF1GMP-11	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-12	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-13	0	0	18.7	1.5	0.0	0.0	19.4	1.6
LF1GMP-14	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-15	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-16	0	0	19.8	1.7	0.0	0.0	21.5	0.0
LF1GMP-17	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-18	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-19	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-20	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-01	0	0	21.3	0.1	0.0	0.0	21.4	0.1
LF1GV-02	0	0	21.2	0.4	0.0	0.0	21.3	0.2
LF1GV-03	0	0	21.3	0.1	0.0	0.0	21.3	0.1
LF1GV-04	0	0	21.4	0	0.0	0.0	21.2	0.0
LF1GV-05	0	0	20.5	1	0.0	0.0	21.5	0.0
LF1GV-06	0	0	20.9	0.2	0.0	0.0	21.4	0.0
LF1GV-07	0	0	20.6	0.7	0.0	0.0	21.5	0.1
LF1GV-08	0	0	20.7	0.5	0.0	0.0	21.5	0.0
LF1GV-09	0	0	21.1	0.1	0.0	0.0	21.3	0.1
LF1GV-10	0	0	0.8	20	0.0	0.0	21.4	0.1
LF1GV-11	5	0.2	2.6	18.4	0.0	0.0	21.5	0.1
LF1GV-12	0	0	20.9	0.1	0.0	0.0	21.2	0.0
LF1GV-13	0	0	20.7	1	0.0	0.0	21.4	0.1
LF1GV-14	8	0.4	14.6	7.4	0.0	0.0	21.4	0.2
LF1GV-15	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-16	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-17	13	0.6	17.6	1.9	0.0	0.0	21.3	0.3
LF1GV-18	0	0	21	0.1	0.0	0.0	21.4	0.1
LF1GV-19	1	0	17	4.7	0.0	0.0	21.3	0.2
LF1GV-20	9	0.4	18.9	1.7	0.0	0.0	21.3	0.2
LF1GV-21	3	0.1	20.2	0.7	1.0	0.0	21.3	0.1
LF1GV-22	0	0	19.2	2	0.0	0.0	21.4	0.1
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0	21.2	0	0.0	0.0	21.5	0.0
LF1GV-25	0	0	20.8	0.6	0.0	0.0	20.6	1.0
LF1GV-26	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-27	0	0	19.8	0.9	0.0	0.0	21.5	0.0
LF1GV-28	0	0	20.3	0.4	- -	- -	- -	- -
LF1GV-29	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-30	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-31	- -	- -	- -	- -	- -	- -	- -	- -

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2018				October 2019			
	Barometric Pressure (in.) = 29.58 - 29.57				Barometric Pressure (in.) = 29.34 - 29.38			
Sample Location	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF1GMP-01	0	>5	15.98	0	3.0	<0.1	21.0	0.1
LF1GMP-02	0	<0.1	20.9	0	<100	23.4	8.9	5.6
LF1GMP-03	0	<0.1	20.9	0	2.0	<0.1	21.2	0.0
LF1GMP-04	0	0.2	20.9	0	<100	56.2	2.6	5.6
LF1GMP-06	0	0.25	20.9	0	<100	24.6	8.2	4.7
LF1GMP-08	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-09	0	<0.1	20.9	0	7	0.3	20.6	0.2
LF1GMP-10	0	<0.1	20.9	0	2.0	<0.1	20.8	0.0
LF1GMP-11	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-12	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-13	0	<0.1	20.9	0	1	<0.1	19.2	1.4
LF1GMP-14	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-15	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-16	0	<0.1	19.6	0	2	<0.1	21	0.0
LF1GMP-17	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-18	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-19	- -	- -	- -	- -	- -	- -	- -	- -
LF1GMP-20	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-01	0	<0.1	20.9	0	2	<0.1	21.3	0.0
LF1GV-02	0	<0.1	20.9	0	2	<0.1	21.2	0.0
LF1GV-03	0	<0.1	20.9	0	2	<0.1	21.2	0.0
LF1GV-04	0	<0.1	20.9	0	2	<0.1	21.0	0.0
LF1GV-05	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-06	0	<0.1	20.9	0	2	<0.1	20.9	0.0
LF1GV-07	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-08	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-09	0	0.1	20.9	0	2	<0.1	20.9	0.0
LF1GV-10	0	0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-11	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-12	0	<0.1	20.9	0	2	<0.1	20.9	0.0
LF1GV-13	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-14	0	0.2	20.9	0	2	<0.1	21.1	0.0
LF1GV-15	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-16	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-17	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-18	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-19	0	<0.1	20.9	0	2	<0.1	21.00	0.0
LF1GV-20	0	<0.1	20.9	0	2	<0.1	20.9	0.0
LF1GV-21	0	<0.1	20.9	0	2	<0.1	21.0	0.0
LF1GV-22	0	<0.1	20.9	0	2	<0.1	21.2	0.0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	<0.1	20.9	0	2	<0.1	21.2	0.0
LF1GV-25	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-26	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-27	0	<0.1	20.9	0	2	<0.1	21.1	0.0
LF1GV-28	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-29	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-30	- -	- -	- -	- -	- -	- -	- -	- -
LF1GV-31	- -	- -	- -	- -	- -	- -	- -	- -

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

Sample Location	September 2020 Barometric Pressure (in.) = 30.0 - 30.3 Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF1GMP-01	0.5	3.5	7.7	5	130.2
LF1GMP-02	0	>5	12.7	0	39.3
LF1GMP-03	0.5	4.4	7.2	5	6
LF1GMP-04	0	2.8	3.2	12	0
LF1GMP-06	0	>5	18.1	0	0
LF1GMP-08	- -	- -	- -	- -	- -
LF1GMP-09	0	4.2	12.1	3	18.6
LF1GMP-10	0	>5	3.6	8	5.1
LF1GMP-11	- -	- -	- -	- -	- -
LF1GMP-12	- -	- -	- -	- -	- -
LF1GMP-13	0.5	0	21.2	0	0
LF1GMP-14	- -	- -	- -	- -	- -
LF1GMP-15	- -	- -	- -	- -	- -
LF1GMP-16	0	0	20.9	0	0
LF1GMP-17	- -	- -	- -	- -	- -
LF1GMP-18	- -	- -	- -	- -	- -
LF1GMP-19	- -	- -	- -	- -	- -
LF1GMP-20	- -	- -	- -	- -	- -
LF1GV-01	0	>5	20.8	0	0
LF1GV-02	0	>5	18.4	0	0
LF1GV-03	0	>5	19.2	0	0
LF1GV-04	0	3.2	19.1	0	0
LF1GV-05	0	>5	16.1	0	0
LF1GV-06	0	>5	18.4	0	0.9
LF1GV-07	0	>5	21.2	0	0
LF1GV-08	0	>5	15.6	0	3.5
LF1GV-09	0	>5	15.5	0	0
LF1GV-10	0	>5	14	0	0
LF1GV-11	0	3.0	20.8	0	0
LF1GV-12	0	>5	18.9	0	0
LF1GV-13	0	>5	18.9	0	0
LF1GV-14	0	3.5	20.3	0	0
LF1GV-15	- -	- -	- -	- -	- -
LF1GV-16	- -	- -	- -	- -	- -
LF1GV-17	0	>5	20.4	0	0
LF1GV-18	0	4.7	20.4	0	0
LF1GV-19	0	>5	17.7	0	0
LF1GV-20	0	3.7	18.8	0	0
LF1GV-21	0	4.6	20.9	0	0
LF1GV-22	0	3.5	20.9	0	0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0	21.8	0	0
LF1GV-25	0	0.9	20.9	0	0
LF1GV-26	- -	- -	- -	- -	- -
LF1GV-27	0	0	21.7	0	0.4
LF1GV-28	- -	- -	- -	- -	- -
LF1GV-29	- -	- -	- -	- -	- -
LF1GV-30	- -	- -	- -	- -	- -
LF1GV-31	- -	- -	- -	- -	- -

Notes:
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% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

Sample Location	December 2021 Barometric Pressure (in.) = 30.0 - 30.1 Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF1GMP-01	0	>5	8.5	0	49.6
LF1GMP-02	0	>5	9.3	0	8.3
LF1GMP-03	0	>5	19.3	0	5.6
LF1GMP-04	0	0	20.9	0	0
LF1GMP-06	0	0	20.3	0	0
LF1GMP-08	- -	- -	- -	- -	- -
LF1GMP-09	0	0	20.9	0	0
LF1GMP-10	0	0	20.9	0	0.1
LF1GMP-11	- -	- -	- -	- -	- -
LF1GMP-12	- -	- -	- -	- -	- -
LF1GMP-13	0	0	20.9	0	0
LF1GMP-14	- -	- -	- -	- -	- -
LF1GMP-15	- -	- -	- -	- -	- -
LF1GMP-16	0	0	19.2	0	0
LF1GMP-17	- -	- -	- -	- -	- -
LF1GMP-18	- -	- -	- -	- -	- -
LF1GMP-19	- -	- -	- -	- -	- -
LF1GMP-20	- -	- -	- -	- -	- -
LF1GV-01	0	0	20.9	0	0
LF1GV-02	0	0	20.9	0	0
LF1GV-03	0	0	20.9	0	0.1
LF1GV-04	0	0	20.9	0	0.1
LF1GV-05	0	0	20.9	0	0
LF1GV-06	0	0	20.9	0	0.1
LF1GV-07	0	0	20.9	0	0
LF1GV-08	0	0	20.9	0	0
LF1GV-09	0	0	20.9	0	0.1
LF1GV-10	0	0	20.9	0	0
LF1GV-11	0	0	20.9	0	0
LF1GV-12	0	0	20.9	0	0
LF1GV-13	0	0	20.9	0	0
LF1GV-14	0	0	20.9	0	0
LF1GV-15	- -	- -	- -	- -	- -
LF1GV-16	- -	- -	- -	- -	- -
LF1GV-17	0	0	20.9	0	0
LF1GV-18	0	0	20.9	0	0
LF1GV-19	0	0	20.9	0	0
LF1GV-20	0	0	20.9	0	0
LF1GV-21	0	0	20.9	0	0
LF1GV-22	0	0	20.9	0	0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0	0	20.9	0	0
LF1GV-25	0	0	20.9	0	0
LF1GV-26	- -	- -	- -	- -	- -
LF1GV-27	0	0	20.9	0	0
LF1GV-28	- -	- -	- -	- -	- -
LF1GV-29	- -	- -	- -	- -	- -
LF1GV-30	- -	- -	- -	- -	- -
LF1GV-31	- -	- -	- -	- -	- -

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-1
LF001 (Landfill 1 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2022				
	Barometric Pressure (in.) = 29.99 on 10/6 and 29.89 on 10/15				
Sample Location	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF1GMP-01	0.0	Over	3.3	0	20.7
LF1GMP-02	0.0	Over	13.9	0	8.7
LF1GMP-03	0.0	Over	1.6	0	1.4
LF1GMP-04	0.0	Over	1.3	0	2.0
LF1GMP-06	0.0	Over	10.1	0	0.4
LF1GMP-08	- -	- -	- -	- -	- -
LF1GMP-09	0.0	Over	12.1	0	2.5
LF1GMP-10	0.0	Over	1.6	0	2.1
LF1GMP-11	- -	- -	- -	- -	- -
LF1GMP-12	- -	- -	- -	- -	- -
LF1GMP-13	0.0	0	19.1	0	0.0
LF1GMP-14	- -	- -	- -	- -	- -
LF1GMP-15	- -	- -	- -	- -	- -
LF1GMP-16	0.0	0	19.4	0	0.0
LF1GMP-17	- -	- -	- -	- -	- -
LF1GMP-18	- -	- -	- -	- -	- -
LF1GMP-19	- -	- -	- -	- -	- -
LF1GMP-20	- -	- -	- -	- -	- -
LF1GV-01	0.0	Over	13.9	0	0.0
LF1GV-02	0.0	30	17.4	0	0.0
LF1GV-03	0.0	30	18.1	0	0.0
LF1GV-04	0.0	6	16.7	0	0.0
LF1GV-05	0.0	Over	12.6	0	0.0
LF1GV-06	0.0	51	10.1	0	0.1
LF1GV-07	0.0	39	19.6	0	0.0
LF1GV-08	0.0	Over	17.0	0	0.8
LF1GV-09	0.0	30	18.3	0	1.0
LF1GV-10	0.0	Over	15.8	0	0.0
LF1GV-11	0.0	53	18.1	0	0.6
LF1GV-12	0.0	0	19.6	0	0.0
LF1GV-13	0.0	Over	19.3	0	0.2
LF1GV-14	0.0	61	18.7	0	0.0
LF1GV-15	- -	- -	- -	- -	- -
LF1GV-16	- -	- -	- -	- -	- -
LF1GV-17	0.0	Over	17.2	0	0.0
LF1GV-18	0.0	46	18.1	0	0.0
LF1GV-19	0.0	47	17.2	0	0.0
LF1GV-20	0.0	Over	13.0	0	0.1
LF1GV-21	0.0	Over	16.8	0	0.0
LF1GV-22	0.0	Over	16.2	0	0.0
LF1GV-23	Abandoned	Abandoned	Abandoned	Abandoned	Abandoned
LF1GV-24	0.0	0	18.2	0	0.0
LF1GV-25	0.0	4	20.7	0	0.2
LF1GV-26	- -	- -	- -	- -	- -
LF1GV-27	0.0	Over	11.0	0	0.5
LF1GV-28	- -	- -	- -	- -	- -
LF1GV-29	- -	- -	- -	- -	- -
LF1GV-30	- -	- -	- -	- -	- -
LF1GV-31	- -	- -	- -	- -	- -

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2 LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)

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Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	February 2010				May 2010				October 2010				May 2011			
	Barometric Pressure (in.) = 29.34				Barometric Pressure (in.) = 29.05-29.06				Barometric Pressure (in.) = 29.24				Barometric Pressure (in.) = 29.21			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF2GMP-01	0	0.0	21.1	0.1	0	0.0	16.9	2.2	0	0.0	18.5	1.6	0	0.0	20.2	0.5
LF2GMP-02	0	0.0	21.5	0.0	>100	5.4	1.0	16.3	0	0.0	15.8	4.8	4	0.2	18.4	1.4
LF2GMP-03	3	0.1	21.1	0.4	0	0.0	21.0	0.0	0	0.0	17.4	2.5	0	0.0	19.5	1.3
LF2GMP-04	14	0.7	19.1	1.9	0	0.0	21.0	0.0	0	0.0	18.1	1.8	0	0.0	20.6	0.0
LF2GMP-05	0	0.0	22.0	0.1	0	0.0	21.0	0.0	0	0.0	18.4	1.5	0	0.0	11.7	2.1
LF2GMP-06	0	0.0	10.3	6.9	0	0.0	21.3	0.0	3	0.2	17.4	2.2	0	0.0	8.8	5.3
LF2GMP-07	0	0.0	21.3	1.2	0	0.0	20.9	0.5	5	0.3	18.1	2.3	0	0.0	18.7	1.5
LF2GMP-08	0	0.0	21.8	0.4	0	0.0	20.5	0.6	0	0.0	18.4	1.8	0	0.0	19.9	0.8
LF2GMP-09	0	0.0	21.9	0.3	0	0.0	21.0	0.3	0	0.0	18.9	1.3	0	0.0	20.3	0.3
LF2VENT-01	34	1.7	19.9	0.9	43	2.1	18.4	1.1	0	0.0	19.5	0.6	51	2.5	17.0	1.1
LF2VENT-02	0	0.0	21.9	0.2	0	0.0	21.0	0.0	0	0.0	19.4	0.6	2	0.1	20.0	0.0
LF2VENT-03	55	2.8	19.9	1.0	7	0.3	20.4	0.3	0	0.0	19.4	0.7	16	0.7	19.1	0.4
LF2VENT-04	11	0.5	19.4	1.7	41	2.0	14.2	5.2	1	0.0	19.1	0.9	86	5.2	16.6	1.2
LF2VENT-05	11	0.6	21.6	0.5	77	3.8	16.7	3.8	0	0.0	19.1	0.9	45	2.6	18.2	1.4
LF2VENT-06	>100	6.8	14.7	6.8	>100	7.1	12.0	7.9	0	0.0	18.8	1.3	>100	9.5	9.5	8.5
LF2VENT-07	0	0.0	22.0	0.1	2	0.1	17.2	1.1	0	0.0	19.5	0.6	5	0.3	17.7	0.5
LF2VENT-08	0	0.0	22.1	0.1	0	0.0	19.0	1.0	6	0.3	19.1	1.1	3	0.1	16.0	1.6
LF2VENT-09	0	0.0	22.1	0.1	0	0.0	18.4	1.8	7	0.4	19.4	0.8	3	0.1	12.7	2.1
LF2VENT-10	0	0.0	22.0	0.1	0	0.0	20.8	0.1	0	0.0	19.5	0.7	0	0.0	18.2	0.3
LF2VENT-11	2	0.1	21.5	0.3	6	0.3	17.5	1.4	0	0.0	19.5	0.7	12	0.6	14.7	1.5
LF2VENT-12	4	0.2	21.3	0.4	15	0.7	18.4	1.4	0	0.0	19.5	0.7	76	4.0	14.9	1.0
LF2VENT-13	9	0.4	21.0	0.4	36	1.8	18.4	0.9	0	0.0	19.4	0.6	37	1.8	17.3	0.7
LF2VENT-14	92	4.6	16.4	1.7	34	1.7	14.5	2.5	0	0.0	19.5	0.6	76	4.0	14.9	1.0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2011				May 2012				October 2012				May 2013			
	Barometric Pressure (in.) = 29.11-29.14				Barometric Pressure (in.) = 28.89-28.95				Barometric Pressure (in.) = 29.43-29.57				Barometric Pressure (in.) = 29.71-29.81			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF2GMP-01	0	0.0	16.3	2.8	0	0.0	21.7	0.0	0	0.0	17.3	2.4	0	0.0	18.5	1.6
LF2GMP-02	>100	7.6	4.6	16.6	0	0.0	22.0	0.0	>100	8.4	0.0	21.7	0	0.0	21.0	0.0
LF2GMP-03	0	0.0	19.0	2.3	0	0.0	22.0	0.0	0	0.0	20.8	0.0	0	0.0	20.8	0.0
LF2GMP-04	0	0.0	21.2	0.2	31	1.6	20.8	0.4	0	0.0	20.8	0.0	0	0.0	20.8	0.0
LF2GMP-05	>100	7.6	0.5	12.3	9	0.4	21.4	0.2	63	3.0	3.3	13.9	0	0.0	20.9	0.0
LF2GMP-06	0	0.0	6.2	10.2	>100	12.9	10.8	9.4	0	0.0	20.6	0.5	0	0.0	20.7	0.1
LF2GMP-07	0	0.0	19.2	2.9	0	0.0	21.5	0.1	0	0.0	19.0	2.3	0	0.0	20.7	0.3
LF2GMP-08	0	0.0	21.1	0.9	32	1.9	18.1	1.2	0	0.0	20.6	0.5	0	0.0	20.2	0.6
LF2GMP-09	0	0.0	21.8	0.0	0	0.0	22.3	0.1	0	0.0	20.6	0.3	0	0.0	20.7	0.3
LF2VENT-01	33	1.6	18.8	1.4	0	0.0	22.1	0.0	0	0.0	20.9	0.0	4	0.2	20.7	0.1
LF2VENT-02	0	0.0	21.9	0.0	0	0.0	22.3	0.1	0	0.0	21.0	0.0	0	0.0	20.9	0.0
LF2VENT-03	0	0.0	21.8	0.0	0	0.0	22.6	0.1	0	0.0	21.0	0.0	0	0.0	20.9	0.0
LF2VENT-04	60	2.8	17.6	1.9	2	0.1	22.1	0.1	4	0.2	18.7	1.1	2	0.1	20.8	0.0
LF2VENT-05	20	1.0	18.8	1.6	0	0.0	22.3	0.1	12	0.6	20.3	0.7	3	0.1	20.8	0.0
LF2VENT-06	>100	13.2	12.2	9.3	0	0.0	17.1	3.0	92	4.6	10.3	10.3	10	0.4	19.4	0.4
LF2VENT-07	0	0.0	22.0	0.0	75	3.6	3.8	14.2	0	0.0	21.0	0.0	2	0.1	20.8	0.0
LF2VENT-08	0	0.0	16.3	2.3	0	0.0	21.7	0.1	0	0.0	21.0	0.0	2	0.1	20.4	0.1
LF2VENT-09	10	0.5	11.1	4.1	4	0.2	21.5	0.4	0	0.0	21.0	0.0	0	0.0	19.3	0.4
LF2VENT-10	0	0.0	20.3	0.4	0	0.0	22.2	0.1	0	0.0	21.0	0.0	0	0.0	20.6	0.0
LF2VENT-11	0	0.0	20.0	0.6	0	0.0	22.7	0.0	0	0.0	21.0	0.0	0	0.0	20.7	0.0
LF2VENT-12	0	0.0	21.7	0.1	0	0.0	21.0	1.9	2	0.1	20.0	0.2	0	0.0	20.7	0.0
LF2VENT-13	13	0.6	19.1	0.9	0	0.0	21.2	1.0	0	0.0	21.0	0.0	0	0.0	20.9	0.0
LF2VENT-14	2	0.1	21.4	0.1	0	0.0	22.1	0.4	0	0.0	20.9	0.0	0	0.0	20.8	0.0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2013				May 2014				November 2014				May 2015			
	Barometric Pressure (in.) = 29.48-29.65				Barometric Pressure (in.) = 29.48-29.51				Barometric Pressure (in.) = 29.57				Barometric Pressure (in.) = 29.42-29.49			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF2GMP-01	0	0.0	20.3	0.4	0	0.0	20.4	0.3	0	0.0	20.1	1.2	0	0.0	18.6	2.0
LF2GMP-02	>100	10.2	0.2	19.4	17	0.9	1.5	12.6	0	0.0	20.2	0.1	0	0.0	21.4	0.0
LF2GMP-03	0	0.0	20.4	0.9	0	0.0	19.4	0.0	0	0.0	18.9	0.6	0	0.0	21.6	0.0
LF2GMP-04	0	0.0	20.9	0.3	0	0.0	19.2	0.0	0	0.0	19.5	0.0	0	0.0	21.7	0.0
LF2GMP-05	>100	7.6	0.0	10.3	0	0.0	14.9	1.2	12	0.7	16.1	0.9	0	0.0	21.8	0.0
LF2GMP-06	0	0.0	8.0	0.9	0	0.0	19.0	0.0	20	1.0	15.0	1.2	10	0.8	18.7	0.9
LF2GMP-07	0	0.0	18.9	2.5	0	0.0	19.1	1.2	0	0.0	19.7	0.3	0	0.0	20.1	0.1
LF2GMP-08	0	0.0	20.7	0.7	0	0.0	20.1	0.5	0	0.0	19.9	0.0	0	0.0	21.2	0.0
LF2GMP-09	0	0.0	21.0	0.4	0	0.0	20.7	0.3	0	0.0	19.9	0.0	0	0.0	20.4	0.0
LF2VENT-01	2	0.2	20.8	0.4	7	0.4	19.2	0.1	0	0.0	20.1	0.1	0	0.0	21.5	0.0
LF2VENT-02	1	0.1	21.5	0.0	0	0.0	19.5	0.0	0	0.0	20.2	0.0	0	0.0	21.5	0.0
LF2VENT-03	0	0.0	21.3	0.0	0	0.0	20.5	0.1	0	0.0	20.1	0.2	0	0.0	21.4	0.0
LF2VENT-04	35	1.8	19.8	0.8	0	0.0	20.8	0.1	0	0.0	19.9	0.6	0	0.0	21.2	0.0
LF2VENT-05	15	0.8	20.3	0.7	0	0.0	19.3	0.0	0	0.0	19.6	0.0	0	0.0	21.6	0.0
LF2VENT-06	>100	15.2	10.9	10.3	0	0.0	11.3	5.9	0	0.1	20.1	0.3	4	0.3	16	3.2
LF2VENT-07	0	0.0	21.5	0.0	0	0.0	20.5	0.0	6	0.3	18.1	0.6	0	0.0	20.7	0.2
LF2VENT-08	0	0.0	21.1	0.1	0	0.0	20.9	0.0	0	0.0	18.9	0.0	0	0.0	21.6	0.0
LF2VENT-09	0	0.0	18.8	1.4	0	0.0	12.7	1.9	0	0.0	19.5	0.0	0	0.0	21.5	0.0
LF2VENT-10	0	0.0	21.2	0.2	0	0.0	20.5	0.1	0	0.0	19.5	0.0	0	0.0	21.5	0.0
LF2VENT-11	0	0.0	19.6	0.7	0	0.0	20.2	0.0	0	0.0	20.1	0.0	0	0.0	21.5	0.0
LF2VENT-12	5	0.3	18.8	1.4	0	0.0	20.6	0.0	0	0.0	19.7	0.1	0	0.0	21.5	0.0
LF2VENT-13	5	0.3	20.4	0.3	2	0.1	19.4	0.0	18	0.8	14.2	2.4	3	0.2	21.1	0.0
LF2VENT-14	86	4.3	15.7	1.8	0	0.0	20.5	0.0	12	0.5	15.1	1.7	0	0.0	11.2	4.4

Notes:
> = greater than
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LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	September 2015				December 2016				November 2017				October 2018			
	Barometric Pressure (in.) = 29.33-29.42				Barometric Pressure (in.) = 29.48-29.46				Barometric Pressure (in.) = 29.51 - 29.51				Barometric Pressure (in.) = 29.54-29.55			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)
LF2GMP-01	0	0.0	20.4	0.1	0	0	20.1	0.1	--	--	--	--	--	--	--	--
LF2GMP-02	> 100	8.4	0.1	20.0	15	0.7	8.1	11.7	0.0	0.0	19.0	3.1	0	<0.1	20.9	0
LF2GMP-03	0	0.0	20.6	0.0	0	0	19.3	0.9	0.0	0.0	21.4	0.0	0	<0.1	20.9	0
LF2GMP-04	0	0.0	20.6	0.0	0	0	20.6	0.3	--	--	--	--	--	--	--	--
LF2GMP-05	> 100	11.4	0.3	10	0	0	13.9	5.5	0.0	0.0	10.3	4.5	0	<0.1	20.9	0
LF2GMP-06	0	0.0	18.8	1.4	0	0	7.5	8.6	0.0	0.0	9.5	4.7	0	<0.1	20.9	0
LF2GMP-07	0	0.0	20.4	00	0	0	19.5	1.2	--	--	--	--	--	--	--	--
LF2GMP-08	0	0.1	20.4	0.3	3	0.1	18.2	1.9	0.0	0.0	21.2	0.0	0	<0.1	20.9	0
LF2GMP-09	0	0.0	20.7	0.0	0	0	20.7	0.3	--	--	--	--	--	--	--	--
LF2VENT-01	0	0.0	20.8	0.0	7	0.3	19.7	0.4	2.0	0.1	19.6	0.6	0	<0.1	20.9	0
LF2VENT-02	0	0.0	20.8	0.0	0	0	20.8	0	0.0	0.0	21.2	0.1	0	<0.1	20.9	0
LF2VENT-03	0	0.0	20.8	0.0	0	0	21	0	--	--	--	--	--	--	--	--
LF2VENT-04	0	0.0	20.8	0.0	28	1.4	19.2	0.6	40.0	1.1	20.3	0.7	0	<0.1	20.9	0
LF2VENT-05	0	0.0	20.7	0.0	5	0.2	20	0.4	60.0	2.7	16.4	2.5	0	<0.1	20.9	0
LF2VENT-06	0	0.0	20.8	0.0	90	4.5	17.2	3.1	> 100	17.6	7.8	12.0	0	<0.1	20.9	0
LF2VENT-07	0	0.0	20.8	0.0	0	0	20.3	0.9	0.0	0.0	21.3	0.1	0	<0.1	20.9	0
LF2VENT-08	0	0.0	20.8	0.0	0	0	20.5	0	0.0	0.0	20.6	0.3	0	<0.1	20.9	0
LF2VENT-09	0	0.0	20.8	0.0	0	0	14	2	--	--	--	--	--	--	--	--
LF2VENT-10	0	0.0	20.8	0.0	0	0	20.4	0.1	--	--	--	--	--	--	--	--
LF2VENT-11	0	0.0	20.8	0.0	0	0	19.7	0.2	--	--	--	--	--	--	--	--
LF2VENT-12	0	0.0	20.8	0.0	0	0	19.9	0.2	0.0	0.0	20.2	0.8	0	<0.1	20.9	0
LF2VENT-13	0	0.0	20.8	0.0	5	0.3	18.9	0.5	0.0	0.0	20.0	0.4	0	<0.1	20.9	0
LF2VENT-14	0	0.0	20.8	0.0	0	0	20.9	0	0.0	0.0	21.3	0.0	0	<0.1	20.9	0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2019				September 2020					December 2021				
	Barometric Pressure (in.) = 29.22 - 29.25				Barometric Pressure (in.) = 30.0 - 30.3					Barometric Pressure (in.) = 30.1 - 30.1				
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF2GMP-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2GMP-02	17	0.8	18.7	1.7	0	1.85	15.3	1	0	0	0	20.0	0	0.1
LF2GMP-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2GMP-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2GMP-05	73	3.6	13.6	3.0	0	0	20.6	0	0.1	0	0	19.1	0	0
LF2GMP-06	2	<0.1	21.1	0.0	0	0	20.5	0	0	0	0	20.4	0	0
LF2GMP-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2GMP-08	2	<0.1	20.5	0.8	0	0	20.9	0	0	0	0	20.3	0	0
LF2GMP-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-01	2	<0.1	20.6	0.0	0	0	19.9	0	0	0	0	20.9	0	0
LF2VENT-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-04	31	1.5	20.1	0.9	0	0.6	16.1	0	3.8	0	0	20.9	0	0
LF2VENT-05	43	2.2	19.0	1.8	0.5	>5	14.5	2	2.0	0	8.0	20.9	0	0
LF2VENT-06	8	0.4	20.8	0.1	1.0	>5	17.4	0	0.6	0	0	20.9	0	0
LF2VENT-07	2	<0.1	20.8	0.0	0	0	16.7	0	0.1	0	0	20.9	0	0
LF2VENT-08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF2VENT-12	7	0.3	20.6	0.2	0	>5	15.5	0	0	0	0	20.9	0	0
LF2VENT-13	2	<0.1	20.6	0.0	0	0	18.2	0	0.1	0	0	20.9	0	0.1
LF2VENT-14	2	<0.1	20.8	0.0	0	0	20.2	0	0	0	0	20.9	0	0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-2
LF002 (Landfill 2/3 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2022				
	Barometric Pressure (in.) = 29.84				
Sample Location	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF2GMP-01	--	--	--	--	--
LF2GMP-02	0.0	8	19.9	0	0.0
LF2GMP-03	--	--	--	--	--
LF2GMP-04	--	--	--	--	--
LF2GMP-05	0.0	0	11.0	0	0.0
LF2GMP-06	0.0	0	18.7	0	0.0
LF2GMP-07	--	--	--	--	--
LF2GMP-08	0.0	0	20.2	0	0.0
LF2GMP-09	--	--	--	--	--
LF2VENT-01	0.0	0	19.2	0	0.0
LF2VENT-02	--	--	--	--	--
LF2VENT-03	--	--	--	--	--
LF2VENT-04	0.0	13	20.1	0	0.1
LF2VENT-05	0.0	12	20.9	0	0.1
LF2VENT-06	0.0	0	20.9	0	0.0
LF2VENT-07	0.0	6	19.9	0	0.0
LF2VENT-08	--	--	--	--	--
LF2VENT-09	--	--	--	--	--
LF2VENT-10	--	--	--	--	--
LF2VENT-11	--	--	--	--	--
LF2VENT-12	0.0	21	17.1	0	0.0
LF2VENT-13	0.0	0	20.3	0	0.0
LF2VENT-14	0.0	0	20.9	0	0.0

Notes:
> = greater than
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-3 LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)

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Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	February 2010				May 2010				October 2010				May 2011			
	Barometric Pressure (in.) = NS				Barometric Pressure (in.) = 29.18-29.38				Barometric Pressure (in.) = 29.19-29.20				Barometric Pressure (in.) = 29.14-29.19			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF6GMP-01	NS	NS	NS	NS	0	0.0	20.6	0.1	0	0.0	19.4	0.5	0	0.0	19.4	0.3
LF6GMP-02	NS	NS	NS	NS	0	0.0	20.9	0.1	0	0.0	11.8	6.6	0	0.0	20.9	0.1
LF6GMP-03	NS	NS	NS	NS	0	0.0	20.9	0.0	0	0.0	15.6	2.7	0	0.0	20.6	0.1
LF6GMP-04	NS	NS	NS	NS	0	0.0	20.9	0.0	0	0.0	19.4	1.0	0	0.0	20.8	0.0
LF6GMP-05	NS	NS	NS	NS	0	0.0	20.9	0.0	0	0.0	20.6	0.2	0	0.0	20.8	0.0
LF6GMP-06	NS	NS	NS	NS	0	0.0	19.7	0.9	0	0.0	20.4	0.4	0	0.0	20.8	0.1
LF6GMP-07	NS	NS	NS	NS	0	0.0	17.6	3.4	0	0.0	16.3	4.6	0	0.0	20.8	0.0
LF6GMP-08	NS	NS	NS	NS	0	0.0	10.2	9.2	0	0.0	5.4	13.8	0	0.0	12.7	5.5
LF6GMP-09	NS	NS	NS	NS	0	0.0	17.4	3.1	0	0.0	14.2	5.9	0	0.0	14.6	5.2
LF6GMP-10	NS	NS	NS	NS	0	0.0	19.8	1.0	0	0.0	19.7	1.0	0	0.0	20.8	0.0
LF6GMP-11	NS	NS	NS	NS	0	0.0	19.9	1.1	0	0.0	18.0	2.7	0	0.0	18.9	2.1
LF6GMP-12	NS	NS	NS	NS	0	0.0	20.3	0.6	0	0.0	18.8	1.9	0	0.0	18.2	2.1
LF6GMP-13	NS	NS	NS	NS	0	0.0	20.2	0.7	0	0.0	18.9	1.5	0	0.0	18.5	2.5
LF6GMP-14	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
LF6GMP-15S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-15D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6VENT-01	NS	NS	NS	NS	0	0.0	19.7	0.7	0	0.0	20.7	0.1	0	0.0	20.3	0.6
LF6VENT-02	NS	NS	NS	NS	0	0.0	20.4	0.1	0	0.0	20.6	0.0	0	0.0	20.7	0.0
LF6VENT-03	NS	NS	NS	NS	0	0.0	20.2	0.5	0	0.0	20.6	0.1	0	0.0	20.7	0.2
LF6VENT-04	NS	NS	NS	NS	0	0.0	18.5	1.6	0	0.0	20.7	0.0	0	0.0	20.8	0.1
LF6VENT-05	NS	NS	NS	NS	0	0.0	20.1	0.8	0	0.0	20.2	0.2	0	0.0	20.9	0.0
LF6VENT-06	NS	NS	NS	NS	0	0.0	20.2	0.4	0	0.0	20.7	0.0	0	0.0	20.8	0.0
LF6VENT-07	NS	NS	NS	NS	0	0.0	19.4	0.8	0	0.0	20.2	0.0	0	0.0	20.4	0.0
LF6VENT-08	NS	NS	NS	NS	0	0.0	19.8	0.6	0	0.0	20.3	0.0	0	0.0	20.4	0.0
LF6VENT-09	NS	NS	NS	NS	0	0.0	19.5	0.7	0	0.0	20.4	0.0	0	0.0	19.9	0.6
LF6VENT-10	NS	NS	NS	NS	0	0.0	19.6	0.9	0	0.0	20.4	0.1	0	0.0	20.5	0.0
LF6VENT-11	NS	NS	NS	NS	0	0.0	19.5	0.9	0	0.0	20.6	0.0	0	0.0	20.7	0.0
LF6VENT-12	NS	NS	NS	NS	0	0.0	20.1	0.7	0	0.0	20.5	0.0	0	0.0	20.3	0.5
LF6VENT-13	NS	NS	NS	NS	0	0.0	17.3	2.0	0	0.0	20.6	0.0	0	0.0	20.4	0.3
LF6VENT-14	NS	NS	NS	NS	0	0.0	19.2	1.4	0	0.0	20.6	0.0	0	0.0	20.5	0.4
LF6VENT-15	NS	NS	NS	NS	0	0.0	18.7	1.5	0	0.0	20.6	0.0	0	0.0	18.3	2.8
LF6VENT-16	NS	NS	NS	NS	0	0.0	15.7	4.1	0	0.0	20.7	0.0	0	0.0	13.4	5.7

Notes:
NI = Not Installed
NS = Not Sampled
- - = Not Monitored
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2011				May 2012				October 2012				May 2013			
	Barometric Pressure (in.) = 29.11-29.14				Barometric Pressure (in.) = 28.99-29.32				Barometric Pressure (in.) = 29.44				Barometric Pressure (in.) = 29.73-29.85			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF6GMP-01	0	0.0	12.0	7.0	0	0.0	19.3	0.8	0	0.0	11.0	2.4	0	0.0	20.6	0.0
LF6GMP-02	0	0.0	19.7	0.8	0	0.0	22.8	0.1	0	0.0	12.4	6.7	0	0.0	20.3	0.0
LF6GMP-03	0	0.0	16.1	3.0	0	0.0	22.2	0.1	0	0.0	16.3	2.7	0	0.0	20.6	0.0
LF6GMP-04	0	0.0	14.8	5.7	0	0.0	22.4	0.1	0	0.0	15.3	5.4	0	0.0	20.6	0.0
LF6GMP-05	0	0.0	18.8	2.7	0	0.0	22.7	0.1	0	0.0	18.8	2.0	0	0.0	20.6	0.0
LF6GMP-06	0	0.0	19.0	2.6	0	0.0	22.8	0.2	0	0.0	18.6	2.4	0	0.0	20.5	0.1
LF6GMP-07	0	0.0	16.6	5.2	0	0.0	23.0	0.1	0	0.0	17.0	4.2	0	0.0	20.0	0.5
LF6GMP-08	0	0.0	4.6	14.7	0	0.0	23.0	0.1	0	0.0	11.4	8.5	0	0.0	12.2	5.8
LF6GMP-09	0	0.0	14.1	6.2	0	0.0	20.2	1.8	0	0.0	15.3	5.2	0	0.0	18	1.7
LF6GMP-10	0	0.0	20.5	1.4	0	0.0	22.9	0.1	0	0.0	19.5	1.2	0	0.0	20.3	0.0
LF6GMP-11	0	0.0	18.5	3.0	0	0.0	23.0	0.1	0	0.0	18.5	2.5	0	0.0	20.0	0.7
LF6GMP-12	0	0.0	18.4	3.4	0	0.0	22.8	0.2	0	0.0	18.3	2.6	0	0.0	18.6	1.3
LF6GMP-13	0	0.0	18.3	3.4	0	0.0	22.2	0.7	0	0.0	17.8	3.0	0	0.0	19.0	1.3
LF6GMP-14	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
LF6GMP-15S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-15D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6VENT-01	0	0.0	14.0	2.2	0	0.0	21.9	0.2	0	0.0	11.0	2.4	0	0.0	20.1	0.3
LF6VENT-02	24	1.2	6.2	0.4	0	0.0	21.4	0.7	35	1.7	4.1	0.6	0	0.0	19.6	0.0
LF6VENT-03	14	0.7	4.7	8.1	0	0.0	20.5	1.0	16	0.8	4.4	9.2	5	0.2	17.8	1.1
LF6VENT-04	>100	10.7	0.3	6.0	0	0.0	19.4	1.6	>100	8.1	0.7	7.4	0	0.0	19.6	0.7
LF6VENT-05	0	0.0	9.9	6.8	0	0.0	21.6	0.6	0	0.0	8.1	8.7	0	0.0	19.9	0.6
LF6VENT-06	2	0.0	8.9	1.3	0	0.0	22.4	0.0	0	0.0	8.5	0.8	0	0.0	20.0	0.2
LF6VENT-07	0	0.0	14.5	5.9	0	0.0	20.6	0.7	0	0.0	13.6	5.3	0	0.0	20.5	0.5
LF6VENT-08	0	0.0	16.2	4.5	0	0.0	19.7	1.8	0	0.0	15.5	3.7	0	0.0	20.7	0.4
LF6VENT-09	0	0.0	17.7	2.9	0	0.0	21.5	0.9	0	0.0	16.7	3.0	0	0.0	20.4	0.4
LF6VENT-10	0	0.0	14.6	5.2	0	0.0	21.1	0.8	0	0.0	11.0	6.4	0	0.0	20.3	0.6
LF6VENT-11	0	0.0	16.7	3.7	0	0.0	22.5	0.1	0	0.0	16.0	3.8	0	0.0	20.5	0.5
LF6VENT-12	0	0.0	14.6	5.2	0	0.0	22.2	0.2	0	0.0	11.6	5.7	0	0.0	19.0	1.3
LF6VENT-13	0	0.0	13.8	6.4	0	0.0	20.3	1.5	0	0.0	12.1	7.1	0	0.0	20.4	0.6
LF6VENT-14	0	0.0	16.3	4.0	0	0.0	22.2	0.1	0	0.0	16.4	3.3	0	0.0	20.2	0.5
LF6VENT-15	0	0.0	10.7	7.0	0	0.0	21.9	0.4	0	0.0	5.8	9.7	0	0.0	19.4	1.1
LF6VENT-16	0	0.0	10.0	7.7	0	0.0	16.4	3.0	0	0.0	8.3	7.3	0	0.0	18.2	1.9

Notes:
NI = Not Installed
NS = Not Sampled
- - = Not Monitored
% = percent
in. = inches
LEL = Lower Explosive Limit
ppm = parts per million
VOC = volatile organic compound
- - = Not Monitored

Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2013				May 2014				November 2014				May 2015			
	Barometric Pressure (in.) = 29.47-29.58				Barometric Pressure (in.) = 29.48-29.57				Barometric Pressure (in.) = 29.52-29.60				Barometric Pressure (in.) = 29.67-29.75			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)
LF6GMP-01	0	0.0	14.4	4.4	0	0.0	19.5	0.2	0	0.0	19.5	2.0	0	0.0	19.9	0.7
LF6GMP-02	0	0.0	11.6	7.1	0	0.0	13.0	4.3	0	0.0	15.7	4.8	0	0.0	15.8	3.7
LF6GMP-03	0	0.0	16.5	2.7	0	0.0	17.2	1.6	0	0.0	18.1	1.7	0	0.0	20.9	0.2
LF6GMP-04	0	0.0	15.6	5.4	0	0.0	17.1	2.8	0	0.0	17.8	3.3	0	0.0	18.4	2.9
LF6GMP-05	0	0.0	19.0	2.0	0	0.0	19.5	8.0	0	0.0	16.2	3.7	0	0.0	20.5	0.9
LF6GMP-06	0	0.0	18.7	2.5	0	0.0	19.0	12.0	0	0.0	18.5	2.9	0	0.0	20.3	1.4
LF6GMP-07	0	0.0	17.1	4.6	0	0.0	20.3	0.1	0	0.0	19.1	2.1	0	0.0	20.2	1.3
LF6GMP-08	0	0.0	7.3	12.7	0	0.0	20.0	0.2	0	0.0	11.0	9.5	0	0.0	14.0	5.8
LF6GMP-09	0	0.0	16.5	4.6	0	0.0	17.8	1.9	0	0.0	18.2	3.7	0	0.0	20.1	1.4
LF6GMP-10	0	0.0	19.4	2.2	0	0.0	20.5	0.0	0	0.0	16.1	3.8	0	0.0	21.4	0.0
LF6GMP-11	0	0.0	19.2	2.2	0	0.0	19.7	0.9	0	0.0	14.5	4.0	0	0.0	20.9	1.2
LF6GMP-12	0	0.0	18.3	2.9	0	0.0	18.3	1.7	0	0.0	19.4	2.1	0	0.0	19.8	l.8
LF6GMP-13	0	0.0	18.5	2.9	0	0.0	19.0	1.3	0	0.0	20.0	1.8	0	0.0	20.5	1.5
LF6GMP-14	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI	NI
LF6GMP-15S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-15D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-16D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17S	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6GMP-17D	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -
LF6VENT-01	0	0.0	12.3	2.5	0	0.0	17.4	1.1	0	0.0	19.1	1.5	0	0.1	19.8	1.1
LF6VENT-02	58	2.9	4.5	0.4	0	0.0	12.3	0.0	0	0.0	19.8	0.2	0	0.0	20.9	0.0
LF6VENT-03	58	2.9	5.4	9.2	0	0.0	13.8	3.1	0	0.0	19.9	0.6	0	0.1	20.5	0.9
LF6VENT-04	>100	10.5	4.8	4.5	80	4.0	5.3	3.3	0	0.0	19.9	0.5	0	0.0	20.3	0.5
LF6VENT-05	0	0.0	10.1	6.8	0	0.0	13.9	3.1	0	0.0	20.0	0.5	0	0.0	19.7	1.7
LF6VENT-06	17	0.9	5.2	1.1	0	0.0	12.4	0.7	0	0.0	20.6	0.2	0	0.2	20.8	0.0
LF6VENT-07	0	0.0	13.4	5.8	0	0.0	17.7	2.1	0	0.0	20.6	0.3	0	0.1	20.7	0.9
LF6VENT-08	0	0.0	12.4	6.1	0	0.0	15.8	2.9	0	0.0	20.7	0.3	0	0.1	20.9	0.6
LF6VENT-09	0	0.0	17.2	3.0	0	0.0	18.8	1.3	0	0.0	20.6	0.3	0	0.0	20.9	0.3
LF6VENT-10	0	0.0	9.2	8.5	0	0.0	16.6	2.6	0	0.0	20.5	0.2	0	0.1	20.6	0.7
LF6VENT-11	0	0.0	17.3	3.3	0	0.0	19.1	1.3	0	0.0	20.7	0.2	0	0.1	20.6	0.5
LF6VENT-12	0	0.0	8.4	9.4	0	0.0	15.7	2.7	0	0.0	20.2	0.2	0	0.0	20.5	1.0
LF6VENT-13	0	0.0	13.8	6.7	0	0.0	16.6	3.6	0	0.0	19.8	0.5	0	0.0	18.9	2.3
LF6VENT-14	0	0.0	16.6	3.5	0	0.0	18.8	1.6	0	0.0	19.5	0.2	0	0.1	20.4	1.2
LF6VENT-15	0	0.0	18.6	2.5	0	0.0	15.3	4.2	0	0.0	19.6	0.2	0	0.0	19.0	3.2
LF6VENT-16	0	0.0	12.5	6.6	0	0.0	14.9	4.8	0	0.0	19.4	0.5	0	0.0	18.1	3.7

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Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	September 2015				November 2016				November 2017				October 2018			
	Barometric Pressure (in.) = 29.32-29.48				Barometric Pressure (in.) = 29.87-29.75				Barometric Pressure (in.) = 29.49 - 29.49				Barometric Pressure (in.) = 30.03 - 29.96			
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)
LF6GMP-01	0	0.0	18.9	1.5	0	0	20.7	0.2	--	--	--	--	--	--	--	--
LF6GMP-02	0	0.0	20.6	0.1	0	0	13.2	6.4	--	--	--	--	--	--	--	--
LF6GMP-03	0	0.0	20.7	0.0	0	0	20.4	0.5	--	--	--	--	--	--	--	--
LF6GMP-04	0	0.0	20.7	0.0	0	0	16.6	4.9	--	--	--	--	--	--	--	--
LF6GMP-05	0	0.0	20.6	0.0	0	0	18.7	2.6	--	--	--	--	--	--	--	--
LF6GMP-06	0	0.0	20.5	0.1	0	0	18.3	3.3	--	--	--	--	--	--	--	--
LF6GMP-07	0	0.0	20.5	0.1	0	0	20.7	0.3	--	--	--	--	--	--	--	--
LF6GMP-08	0	0.0	20.1	0.8	0	0	8.8	11.1	--	--	--	--	--	--	--	--
LF6GMP-09	0	0.0	20.0	0.9	0	0	20	1.1	--	--	--	--	--	--	--	--
LF6GMP-10	0	0.0	20.3	0.4	0	0	20.3	1.2	--	--	--	--	--	--	--	--
LF6GMP-11	0	0.0	20.7	0.1	0	0	20.1	1.4	--	--	--	--	--	--	--	--
LF6GMP-12	0	0.0	20.7	0.1	0	0	18.6	2.9	--	--	--	--	--	--	--	--
LF6GMP-13	0	0.0	20.4	0.4	0	0	20.2	1	--	--	--	--	--	--	--	--
LF6GMP-14	NI	NI	NI	NI	NI	NI	NI	NI	--	--	--	--	--	--	--	--
LF6GMP-15S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-15D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-16S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-16D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-17S	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-17D	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-01	1	0.0	20.9	0.0	0	0	16.7	2.4	--	--	--	--	--	--	--	--
LF6VENT-02	0	0.0	20.8	0.0	3	0.1	13.4	0.4	0.0	0.0	18.8	0.4	0	1	7	0
LF6VENT-03	0	0.0	20.7	0.0	0	0	15.1	4.3	0.0	0.0	18.5	2.2	0	0.2	9.5	0
LF6VENT-04	0	0.0	20.8	0.0	3	0.1	12.8	2.6	0.0	0.0	19.1	1.7	0	3.4	8.8	0
LF6VENT-05	1	0.0	20.8	0.0	0	0	17	3.3	--	--	--	--	--	--	--	--
LF6VENT-06	0	0.2	20.8	0.0	0	0	16.3	0.9	0.0	0.0	19.7	0.6	0	<0.1	14.8	0
LF6VENT-07	1	0.0	20.8	0.0	0	0	16.4	4.4	--	--	--	--	--	--	--	--
LF6VENT-08	1	0.0	20.7	0.0	0	0	21	0.1	--	--	--	--	--	--	--	--
LF6VENT-09	1	0.0	19.9	0.7	0	0	17.5	3.3	--	--	--	--	--	--	--	--
LF6VENT-10	1	0.0	12.8	5.9	0	0	11.1	7.5	--	--	--	--	--	--	--	--
LF6VENT-11	1	0.0	18.2	2.2	0	0	17.4	3.7	--	--	--	--	--	--	--	--
LF6VENT-12	0	0.0	12.3	7.4	0	0	14.5	5	--	--	--	--	--	--	--	--
LF6VENT-13	0	0.0	13.7	6.2	0	0	14.4	5.6	--	--	--	--	--	--	--	--
LF6VENT-14	0	0.0	17.4	2.4	0	0	20.8	0.1	--	--	--	--	--	--	--	--
LF6VENT-15	2	0.1	3.8	17.4	0	0	9.2	10.2	--	--	--	--	--	--	--	--
LF6VENT-16	2	0.1	5.7	12.6	0	0	9.7	9.9	--	--	--	--	--	--	--	--

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Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2019				September 2020					December 2021				
	Barometric Pressure (in.) = 29.38				Barometric Pressure (in.) = 30.0 - 30.3					Barometric Pressure (in.) = 29.7 - 29.8				
Sample Location	LEL (%)	Methane (%)	Oxygen (%)	Carbon Dioxide (%)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF6GMP-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-04	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-06	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-15S	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-15D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-16S	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-16D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-17S	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6GMP-17D	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-01	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-02	2	<0.1	20.8	0.0	0	2.6	12.5	0	0	0	18.0	8.3	0	0.4
LF6VENT-03	2	<0.1	20.6	0.0	0	0.75	13.1	0	0	0	0	20.9	0	0
LF6VENT-04	2	<0.1	20.7	0.0	0	4.35	18.4	0	0	0	8.0	11.9	0	0.2
LF6VENT-05	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-06	2	<0.1	20.7	0.0	0	0	15.8	0	0	0	0	15.9	0	0
LF6VENT-07	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-08	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-09	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-10	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-11	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-12	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-13	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-14	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-15	--	--	--	--	--	--	--	--	--	--	--	--	--	--
LF6VENT-16	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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Appendix A-3
LF009 (Landfill 6 AOC) Landfill Gas Monitoring Results (2010-2022)
Former Griffiss Air Force Base
Rome, New York

	October 2022				
	Barometric Pressure (in.) = 29.89				
Sample Location	Hydrogen Sulfide (ppm)	Methane (%)	Oxygen (%)	Carbon Monoxide (ppm)	VOC (ppm)
LF6GMP-01	- -	- -	- -	- -	- -
LF6GMP-02	- -	- -	- -	- -	- -
LF6GMP-03	- -	- -	- -	- -	- -
LF6GMP-04	- -	- -	- -	- -	- -
LF6GMP-05	- -	- -	- -	- -	- -
LF6GMP-06	- -	- -	- -	- -	- -
LF6GMP-07	- -	- -	- -	- -	- -
LF6GMP-08	- -	- -	- -	- -	- -
LF6GMP-09	- -	- -	- -	- -	- -
LF6GMP-10	- -	- -	- -	- -	- -
LF6GMP-11	- -	- -	- -	- -	- -
LF6GMP-12	- -	- -	- -	- -	- -
LF6GMP-13	- -	- -	- -	- -	- -
LF6GMP-14	- -	- -	- -	- -	- -
LF6GMP-15S	- -	- -	- -	- -	- -
LF6GMP-15D	- -	- -	- -	- -	- -
LF6GMP-16S	- -	- -	- -	- -	- -
LF6GMP-16D	- -	- -	- -	- -	- -
LF6GMP-17S	- -	- -	- -	- -	- -
LF6GMP-17D	- -	- -	- -	- -	- -
LF6VENT-01	- -	- -	- -	- -	- -
LF6VENT-02	0	0	20.9	0	0
LF6VENT-03	down	down	down	down	down
LF6VENT-04	0	0	20.9	0	0
LF6VENT-05	- -	- -	- -	- -	- -
LF6VENT-06	0	0	20.9	0	0
LF6VENT-07	- -	- -	- -	- -	- -
LF6VENT-08	- -	- -	- -	- -	- -
LF6VENT-09	- -	- -	- -	- -	- -
LF6VENT-10	- -	- -	- -	- -	- -
LF6VENT-11	- -	- -	- -	- -	- -
LF6VENT-12	- -	- -	- -	- -	- -
LF6VENT-13	- -	- -	- -	- -	- -
LF6VENT-14	- -	- -	- -	- -	- -
LF6VENT-15	- -	- -	- -	- -	- -
LF6VENT-16	- -	- -	- -	- -	- -

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