June 2022 – June 2023 Annual Site Management Periodic Review Report

D.C. Rollforms Site
Jamestown, New York
NYSDEC Site No. 907019

July 14, 2023
(Revised August 17, 2023)

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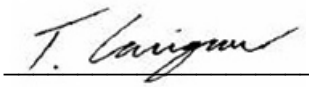
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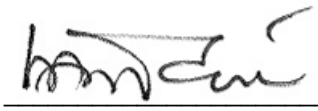
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Contents

Acronyms and Abbreviations iv
1 Introduction 1
2 Site Overview 3
2.1 Site Location and Description 3
2.2 Summary of Site Geology and Hydrogeology 3
2.3 Nature and Extent of Contamination 3
2.3.1 Surface Soil 3
2.3.2 Subsurface Soil 4
2.3.3 Groundwater 4
2.3.4 Emerging Contaminants 5
2.3.5 Soil Vapor 5
2.4 Summary of Remedial Actions 5
2.4.1 Summary of Interim Remedial Measures 5
2.4.2 Summary of Full-Scale Remedy 6
2.4.3 Engineering Controls 7
2.4.4 Institutional Controls 7
2.4.5 Remedial Enhancements 7
3 Site Operation and Maintenance Summary 8
3.1 Collection and Treatment System Operation and Maintenance 8
3.1.1 Liquid Phase Treatment 8
3.1.2 Vapor Phase Treatment 9
3.1.3 Recovery Well Inspections 9
3.1.4 Recordkeeping and Reporting 9
3.2 Non-Routine Operation and Maintenance 9
3.3 Riverbank and Cover System Inspections 10
3.3.1 Site Cover 11
3.3.2 Riverbank Inspections 11
4 Remedial System Performance Summary 12
4.1 Objectives of Monitoring 12
4.2 System Performance Data 12
4.2.1 Groundwater Recovery/Extracted Liquid Data 12

4.2.1.1 Liquid Flows 12
4.2.1.2 System Influent Liquid Phase Analytical Results 12
4.2.1.3 Treated System Liquid Phase Effluent Analytical Results 13
4.2.2 Soil Vapor Extraction Data 13
4.2.2.1 Vapor Flows 13
4.2.2.2 Applied and Induced Vacuum 13
4.2.2.3 System Vapor Influent Sampling and Analytical Results 14
4.2.3 Non-Aqueous Phase Liquid Recovery 14
5 System Evaluation 15
5.1 Mass Recovery 15
5.1.1 Dissolved Phase 15
5.1.2 Vapor Phase 15
5.1.3 Non-Aqueous Phase Liquid 15
5.1.4 Total Mass Removal Trend 15
6 Groundwater Monitoring 17
6.1 Well Inspections 17
6.2 Groundwater Monitoring Results 17
6.2.1 Groundwater Elevation Data 17
6.2.2 VOC Groundwater Analytical Results 17
6.2.3 PFAS Groundwater Analytical Results 19
7 Conclusions 21
7.1 System Performance Summary 21
7.2 Groundwater Data Summary 21
8 2023 – 2024 Goals and Recommendations 23
9 Institutional and Engineering Controls Compliance 24
10 References 25

Tables

Table 1 System Operational Data, June 2022 – June 2023
Table 2 TCE, DCE (total), and VC in System Influent Water Samples, June 2022 – June 2023
Table 3 Total VOCs, PCBs, TSS, Oil and Grease, and pH in System Effluent Water Samples, June 2022 – June 2023

Table 4 TCE, DCE (total), and VC in System Influent Vapor Samples, June 2022 – June 2023

Table 5 Cumulative Vapor Phase VOC Mass Recovery, June 2022 – June 2023

Table 6 Annual and Cumulative Mass Recovery Summary

Table 7 Cumulative Dissolved Phase VOC and TPH Mass Recovery, June 2022 – June 2023

Table 8 Summary of Groundwater Elevation Data

Table 9 Summary of TCE, DCE, and VC in Groundwater Samples

Table 10 Groundwater PFAS Sampling Results

Figures

Figure 1 Site Location Map

Figure 2 Site Plan/Remedial System Layout

Figure 3 System Influent Dissolved Phase Concentrations

Figure 4 System Influent Vapor Phase Concentrations

Figure 5 Annual Mass Recovery Trends vs. Time

Figure 6A Groundwater Contour Map, October 10, 2022

Figure 6B Groundwater Contour Map, February 6, 2023

Figure 7A Summary of Groundwater Monitoring Analytical Results

Figure 7B Summary of Groundwater Monitoring Analytical Results

Figure 7C Summary of Groundwater Monitoring Analytical Results

Figure 7D Summary of Groundwater Monitoring Analytical Results

Appendices

Appendix A Jamestown Industrial Wastewater Discharge Permit

Appendix B Site Inspection Forms

Appendix C Quarterly Treatment System Influent Laboratory Analytical Reports

Appendix D Groundwater Sampling Logs

Appendix E Recovery and Monitoring Well DTW/DTP and Inspection Logs

Appendix F Groundwater Laboratory Analytical Reports

Appendix G Site Photographs

Appendix H Institutional and Engineering Controls Certification Forms

Acronyms and Abbreviations

%	percent
µg/m^3	micrograms per cubic meter
acfm	actual cubic feet per minute
Arcadis	Arcadis of New York, Inc.
BPU	Board of Public Utilities
DAR	Division of Air Resources
DCE	dichloroethene
DNAPL	dense non-aqueous phase liquid
DRO	diesel range organics
EIMS	Environmental Information Management System
GP	Geoprobe® sample location
gpm	gallons per minute
ISCO	in-situ chemical oxidation
kg	kilograms
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NAPL	non-aqueous phase liquid
ND	non-detect
ng/L	nanogram per liter
NYCRR	New York Codes Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
O&M	operation and maintenance
OM&M	operation, maintenance, and monitoring
OM&M Plan	*Groundwater Collection and Treatment System Operation, Maintenance, and Monitoring Plan*
OWS	oil/water separator
PCB	polychlorinated biphenyl
PCE	tetrachloroethylene
PFAS	per- and polyfluoroalkyl substances

PFOS	perfluorooctane sulfonic acid
ppm	parts per million
PRR	Periodic Review Report
reporting period	June 2022 through June 2023
RI	remedial investigation
SMP	Site Management Plan
SVE	soil vapor extraction
SVOC	semi-volatile organic compound
TCE	trichloroethene
TPH	total petroleum hydrocarbons
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VEP	vacuum enhanced pumping
VOC	volatile organic compound

1 Introduction

Arcadis of New York, Inc. (Arcadis), on behalf of Trane Technologies Company LLC, has prepared this Annual Site Management Periodic Review Report (PRR) for the former D.C. Rollforms Site (New York State Department of Environmental Conservation [NYSDEC] Site Code 907019) (referred to hereafter as the Site) located in Jamestown, Chautauqua County, New York (**Figure 1**). This PRR summarizes the operational and performance monitoring data generated from June 2022 through June 2023 (reporting period) for the remedial program at the Site. The purpose of this report is to satisfy the requirements set forth in the PRR request made by the NYSDEC in a letter dated May 2, 2023.

A groundwater and soil vapor extraction (SVE) treatment system (referred to herein as "the system") was installed at the Site in 2007. The system has been operational since 2008 and consists of a vacuum enhanced pumping (VEP) system that recovers and treats Site constituents of concern, which mainly consist of chlorinated volatile organic compounds (VOCs), trichloroethene (TCE), dichloroethene (DCE), and vinyl chloride (VC).

Overall, the current remedial program has been effective in achieving the remedial goals at the Site by containing and eliminating the off-site migration of contaminated soils and groundwater and reducing the VOC concentrations in soil and groundwater. The system is currently operating 12 of the 14 recovery wells. The total flow recovered between June 16, 2022, and June 15, 2023, was 869,271 gallons of impacted groundwater. The estimated total VOCs and total petroleum hydrocarbon- (TPH-) diesel range organics (DROs) mass removal included 4.1 kilograms (kg) in the dissolved phase and 1.6 kg in the vapor phase, and 2.0 gallons of dense non-aqueous phase liquid (DNAPL) were removed.

Based on the trends in Site VOC concentrations in groundwater and soil vapor, the remedial program (including the groundwater and soil vapor recovery system that has been in operation for 16 years) and the in-situ chemical oxidation (ISCO) remedial enhancement (implemented between 2016 and 2018) have been successful at reducing the overall VOC mass in the subsurface at the Site.

All the elements defined in the *Groundwater Collection and Treatment System Operation, Maintenance, and Monitoring Plan* (OM&M Plan) (Arcadis 2021a) and the *Site Management Plan* (SMP) (Arcadis 2021b) were in compliance during the reporting period. The treatment system was operated continuously during the reporting period, except for noted routine and/or non-routine maintenance activities. No substantial changes were made regarding Site management, Site ownership, or treatment system operation during the reporting period.

This PRR also summarizes the biennial per- and polyfluoroalkyl substances (PFAS) groundwater monitoring results. The NYSDEC and the New York State Department of Health (NYSDOH) have also requested the evaluation of PFAS in relation to the on-site groundwater collection and treatment system. Several work plans (Arcadis 2021c and Arcadis 2022) were submitted and subsequently approved by the NYSDEC and NYSDOH. These work plans were implemented and included several rounds of influent sampling and a mass balance study. Sampling was performed in October 2021, April and May 2022, and August through October 2022. The results and recommendations were provided in the *Emerging Contaminants Evaluation Report* (Arcadis 2023) submitted to the NYSDEC on May 30, 2023.

This PRR is organized as follows:

- Section 2 provides a brief overview of the Site location and physical description, the Site geology/hydrogeology, the nature and extent of contamination, and a summary of remedial actions.
- Section 3 summarizes the Site operation and maintenance (O&M) and Site maintenance inspections.

- Section 4 discusses the remedial system performance.
- Section 5 provides an evaluation of the system performance.
- Section 6 summarizes the groundwater monitoring.
- Section 7 provides conclusions and summarizes the system performance and groundwater monitoring results.
- Section 8 discusses the future goals for the Site.
- Section 9 discusses the institutional and engineering controls.
- Section 10 provides a list of references.

2 Site Overview

2.1 Site Location and Description

The Site is located at 583 Allen Street in Jamestown, Chautauqua County, New York (**Figure 1**). The Site is approximately 2.38 acres in size and is a vacant parcel. The vacant parcel is owned by All Metal Press and Fabrication, Inc., which acquired the property from the Jamestown Allen Company in 2016, and is bounded by Allen Street to the east, the Weber-Knapp Company (active manufacturing plant in the State Brownfield Cleanup Program, Site No. C907048) and Jamestown Urban Renewal Agency properties to the south, and the Chadakoin River to the west and northwest. The adjacent northern parcel is owned by All Metal Press and Fabrication, Inc. This parcel contains a two-story building and a parking lot (**Figure 2**). The Site is located in a mixed residential and commercial area, which is served by a public water supply and sanitary sewer.

2.2 Summary of Site Geology and Hydrogeology

The subsurface geologic conditions at the Site consist mainly of two overburden units: a surficial layer of fill material and an underlying dense till. Along the western side of the Site and adjacent to the Chadakoin River, an approximately 2- to 4-foot-thick layer of native deposits, consisting of sand, silt, and gravel, occurs between the fill and till layers. The fill layer consists of sand, gravel, cinders, bricks, concrete, and slag and varies in thickness from 7 to 15 feet. The thickness of till varies from less than 1 foot to over 15 feet. The till is underlain by shale bedrock. The on-site surface water and groundwater flow in a west-northwesterly direction toward the Chadakoin River.

Based on slug tests in monitoring wells, the horizontal hydraulic conductivity of the surficial fill material is in the range of 10-3 to 10-4 centimeters per second, and the horizontal hydraulic conductivity of the underlying till, which is generally dense silt and clay-rich soil, is approximately 10-6 centimeters per second.

2.3 Nature and Extent of Contamination

The following sections describe the historical nature and extent of the contamination on site that was identified during the initial and previous remedial investigations (RIs). Previous investigations at the Site include Phase I and Phase II Environmental Site Assessments and a supplemental environmental investigation. Empire Soils Investigations performed these investigations for Dowcraft Corporation in 1990 and 1991 (Empire Soils Investigations 1990a, 1990b, 1991). The Phase II Environmental Site Assessment consisted of a subsurface soil and groundwater investigation. Eight test pits were excavated, and subsurface soil samples were collected from several of these test pits for analysis. Seven monitoring wells were installed, and groundwater samples were collected from these wells for analysis. To determine the nature and extent of contamination, an RI was conducted. The RI was completed by Arcadis G&M in two phases; the first phase was completed in April 1998, and the second phase was completed in February 1999. The RI results are summarized in the following sections.

2.3.1 Surface Soil

During the initial RI, surface soil samples were collected at 15 locations throughout the Site. VOCs were not detected in any of the surface soil samples. Polychlorinated biphenyls (PCBs) were detected in two of the

subsurface soil samples at concentrations ranging from 0.013 (estimated) parts per million (ppm) to 10.7 ppm, and the surrounding soil was excavated and disposed of in May 2000. Analysis of semi-volatile organic compounds (SVOCs) indicated total SVOC concentrations ranging from 2.8 milligrams per kilogram (mg/kg) to 89 mg/kg. Concentrations of metals in the surface soil samples varied considerably. The concentrations ranged for copper from 19.4 ppm to 3,090 ppm, lead from 26.6 ppm to 210 ppm, nickel from 14.2 ppm to 347 ppm, and zinc from 58 ppm to 1,840 ppm. Cyanide and cadmium were not detected in any of the surface soil samples.

Surface soils from select areas on site were removed during the remedial construction in 2007. All other remaining Site surface areas were covered with 1 foot of clean fill.

2.3.2 Subsurface Soil

During the initial 1991 investigation, eight test pits were excavated, and subsurface soil samples were collected from the six locations where visual contamination was present. Analytical results of the subsurface soil samples indicated metals contamination above the regulatory guidance levels (Technical Administrative Guidance Memorandum 4046 [NYSDEC 1994]), at that time, for arsenic, cadmium, chromium, copper, mercury, nickel, and zinc. No VOCs were detected in the unsaturated subsurface soil samples. Oil and grease in the samples varied from 0.21 to 7.1 percent (%) while cyanide ranged from non-detect (ND) to 15.4 mg/kg.

During the first phase of the RI, a subsurface soil sample collected from Geoprobe® sample location (GP)-13 in the delisted northern parcel indicated metals contamination, primarily lead (86,900 mg/kg). In February 2000, 19 additional test pits were excavated to determine the extent of lead contamination in the northern parcel. Samples collected from the test pits indicate that total lead levels ranged from 20 to 33,100 mg/kg. The results of Toxicity Characteristic Leaching Procedure lead analysis determined that the soils were not hazardous waste as the levels for lead were below the regulatory limit of 5 milligrams per liter (mg/L).

Eighteen test pits were excavated in 2000, and subsurface soil samples were collected from these locations. Analytical results of the surface soil samples indicated that total VOCs ranged from 0.024 to 66 mg/kg, compared to the regulatory cleanup guidance (Technical Administrative Guidance Memorandum 4046 [NYSDEC 1994]) value, at the time, of 10 mg/kg. Total VOCs in excess of 10 mg/kg were identified in test pits TP-11, TP-12, and TP-15. SVOC concentrations ranged from ND to 79 mg/kg.

2.3.3 Groundwater

Fifteen groundwater monitoring wells and 27 temporary GPs were installed and sampled during the RI between 1997 and 2000. VOCs, including TCE, DCE, and VC, were reported in several groundwater samples. The highest level of chlorinated solvents was reported in monitoring wells MW-8 S/D and GP-5, which are located in the former TCE, paint, and thinner storage area. At GP-5, concentrations of TCE and DCE were 830 mg/L and 34 mg/L, respectively. At MW-8S/D, levels of TCE, DCE, and VC varied from 0.096 to 920 mg/L, 7.1 to 18 mg/L, and ND to 1.6 mg/L, respectively. Tetrachloroethene was also found in MW-8D at a concentration of 1.1 mg/L. In October 1999, five additional temporary GPs were installed and were sampled during the investigation to determine the extent of total VOCs. Samples collected from these GPs indicated elevated levels of VOCs. The highest levels were found in GP-30, with VC, DCE, and TCE concentrations of 17 mg/L, 40 mg/L, and ND, respectively.

Total SVOCs, consisting primarily of polycyclic aromatic hydrocarbons, were present in most of the groundwater samples. Due to high detection limits, the comparison of individual SVOC contaminant levels to groundwater

standards is not feasible. The highest concentrations of polycyclic aromatic hydrocarbons were in GP-5 (61 mg/L) and GP-6 (249 mg/L). The concentrations of SVOCs in the remaining wells varied from ND to 3.6 mg/L.

Non-aqueous phase liquid (NAPL), consisting primarily of TPH, was observed in monitoring wells ESI-3, ESI-4, and MW-8S. The highest concentrations of TPH were recorded in monitoring well ESI-3 (421 mg/L), GP-6 (2,406 mg/L), and GP-5 (333 mg/L).

2.3.4 Emerging Contaminants

In a letter dated June 2018, the NYSDEC indicated that they were implementing a state-wide program to evaluate the presence of emerging contaminants 1,4-dioxane and PFAS. On October 4, 2018, groundwater samples were collected from existing Site monitoring wells ESI-4R (source area) and ESI-6 (upgradient). These groundwater samples were analyzed for 1,4-dioxane by United States Environmental Protection Agency (USEPA) Method 8270 Selected Ion Monitoring and for PFAS by USEPA Method 537 Modified. Concentrations of PFAS were detected at both sampling locations (ESI-4R and ESI-6). The combined concentrations of PFAS at monitoring well ESI-6 were reported at an estimated concentration of 24.6 nanograms per liter (ng/L). The combined concentrations of PFAS at monitoring well ESI-4R were reported at an estimated concentration of 2,890 ng/L. The detected individual PFAS compound estimated concentrations ranged from 1.33 to 1,190 ng/L. Neither monitoring well had detections of 1,4-dioxane.

In a letter dated April 27, 2020, the NYSDEC requested that monitoring well ESI-4R be sampled biennially for PFAS compounds to track concentrations at this location.

2.3.5 Soil Vapor

Off-site soil vapor intrusion was raised as a concern by the NYSDOH in a letter dated May 5, 2014, citing the possibility of a preferential pathway for vapor movement via the on-site treatment system's discharge pipeline bedding material. A soil vapor investigation was completed in accordance with the *Soil Vapor Investigation Work Plan* (Arcadis 2014a) and the *Response to Comments of the Soil Vapor Investigation Work Plan* (Arcadis 2014b), which were approved by the NYSDEC in an email received August 11, 2015.

Of the three Site-related chemicals (e.g., cis-1,2-DCE, TCE, and VC), only TCE was detected in soil vapor. Cis-1,2-DCE and VC were not detected in any of the soil vapor samples. Although TCE was detected in the soil vapor samples, all concentrations were below the soil vapor screening values, which were calculated using the NYSDOH Air Guideline Value for TCE.

2.4 Summary of Remedial Actions

2.4.1 Summary of Interim Remedial Measures

The interim remedial measures conducted on site are listed and briefly summarized below. Further details for each interim remedial measure can be found in the referenced historical documents.

- Manual free product recovery activities were initiated in September 1998 to collect light non-aqueous phase liquid and DNAPL in monitoring wells ESI-3 and ESI-4. In addition, manual bailing of the periodic trace DNAPL detected in monitoring well MW-8D was initiated in February 1999 (Arcadis G&M 1999).

- Lead-impacted soil removal in the area of GP-13 (located on the delisted parcel north of the building) was completed in October 1999. Approximately 18 tons of soil were removed. Following an additional investigation in January 2000, to further delineate the lead impacts, approximately 929 tons of lead-impacted soils were removed and disposed off site in May 2000.
- PCBs-impacted soils were identified/delineated near surface sample locations SS-1 and SS-1A (located near monitoring wells ESI-1, ESI-2, and ESI-7) and subsequently excavated and disposed off site in August 2000.
- An enhanced reductive dechlorination pilot test, using reagent injections, was selected and implemented in 1998 in the area of monitoring wells MW-7 and MW-8S to address the total VOC impacts in groundwater. Following the initial pilot test period, the reagent injections were continued through 2004. The injection program was discontinued following the October 2004 injection event in anticipation of the design and implementation of the remedy (Arcadis G&M 2005).

2.4.2 Summary of Full-Scale Remedy

The approved remedy for the Site was documented in the NYSDEC-approved *100% Remedial Design Work Plan* (Arcadis 2006). The final remedy for this Site was documented in the *Engineering Construction Completion Report* (Arcadis 2009), which documented the remedial construction activities that were initiated in September 2006 and completed in June 2008. The SMP (Arcadis 2021b) was finalized and approved by the NYSDEC in 2009. The final remedy implemented for the Site includes the following elements:

- Installation of a steel interlocking sheet-pile wall (i.e., vertical barrier wall) at the top of the riverbank between the Chadakoin River and the Site;
- VEP technology utilizing submersible pneumatic pumps and a regenerative blower to remediate NAPL and VOCs in groundwater and soil;
- A groundwater and soil vapor treatment system comprised of an oil/water separator (OWS), solids filtration units, carbon filtration, and air stripping technologies;
- Excavation of the soil between the vertical barrier wall and the Chadakoin River;
- Removal of abandoned Site storm water outfalls;
- Riverbank reconstruction/stabilization and restoration, including live plantings;
- Covering and reseeding disturbed areas with 12 inches of clean soil;
- Removal of sediment from the Chadakoin River; and
- Fish habitat construction (e.g., wingwall structure) in the Chadakoin River.

The remedial system layout is shown on the site plan on **Figure 2**. The groundwater collection system is designed to extract groundwater impacted by NAPL and VOCs consisting primarily of TCE, DCE, and VC. The extracted groundwater is treated via an OWS, filtration, and air stripping prior to discharge to the publicly owned treatment works sanitary sewer under an Industrial Wastewater Discharge Permit with the Jamestown Board of Public Utilities (BPU). A copy of the renewed permit has been provided in **Appendix A**.

2.4.3 Engineering Controls

As part of the remedy, engineering controls implemented and maintained at the Site include:

- Installation of a steel interlocking sheet-pile wall (i.e., vertical barrier wall) at the top of the riverbank between the Chadakoin River and the Site;
- VEP technology utilizing submersible pneumatic pumps and a regenerative blower to remediate NAPL and VOCs in groundwater and soil;
- A groundwater and soil vapor treatment system comprised an OWS, solids filtration units, carbon filtration, and air stripping technologies; and
- Following the construction of the barrier wall and groundwater and SVE systems, covering the disturbed areas of the Site with an approximate 1-foot-thick, clean soil cover and stabilizing with native grass seed.

2.4.4 Institutional Controls

Institutional controls have been implemented as part of the Remedial Action. The Declaration of Covenants and Restrictions, dated July 2005, addresses prohibitions on the property. The prohibitions set forth in the declaration are summarized as follows:

- The property is prohibited from ever being used for purposes other than commercial or industrial.
- The use of groundwater underlying the property is prohibited without rendering it safe to be used for drinking water or for industrial/commercial purposes.
- The owner of the property shall continue to not interfere with any institutional and engineering controls that the NYSDEC required Trane Technologies Company LLC (formerly Ingersoll-Rand Company) to put into place and maintain.

The covenants and restrictions run with the land and are binding upon the current owner and all future owners of the property.

2.4.5 Remedial Enhancements

An ISCO pilot study, utilizing alkaline-activated sodium persulfate as the oxidant, was conducted on site, in the area of monitoring wells MW-8, MW-12, MW-13, and MW-14, beginning October 2016. The objective of the ISCO pilot study was to destroy the VOC mass in groundwater while gathering information that can be used to improve its effectiveness as a full-scale application. As a result of the successful ISCO pilot study, a second, expanded ISCO injection event was implemented at the Site in July 2018. This expanded ISCO injection event targeted the original pilot study area and areas upgradient of monitoring wells OW-5 and OW-6. Overall, the second injection event was initially successful at reducing the VOC mass at the targeted wells. However, evidence of rebound was observed during the last several reporting periods. This data is discussed in further detail in Sections 6 and 8.

3 Site Operation and Maintenance Summary

The system is operated as documented in the OM&M Plan (Arcadis 2021a). The following sections summarize the remedial system O&M program. The remedial system was operated during the reporting period with brief periods of shutdown due to scheduled O&M activities and/or alarm conditions, as well as repairs and non-routine maintenance activities.

Monthly O&M site visits consisted of inspecting the system, recording the operating parameters, sampling the influent and effluent system, and investigating/troubleshooting any alarm conditions. System alarm verification was performed remotely via desktop software. The O&M data generated during each monthly visit are documented in field notes. O&M activities related to each of the major system components (collection system, liquid treatment, and vapor treatment) are discussed below.

3.1 Collection and Treatment System Operation and Maintenance

The following O&M tasks were performed monthly on the remedial system (pneumatic pumps, air compressor, regenerative blower, transfer pump, and related equipment).

3.1.1 Liquid Phase Treatment

The following operation, maintenance, and monitoring (OM&M) tasks were performed monthly and/or quarterly with regard to the liquid phase extraction and treatment portion of the system:

- Inspect all pipes and fittings for potential leaks.
- Check the air compressor (AC-600) oil level and pressure to assure proper operation.
- Inspect the pneumatic recovery pumps for proper operation and repair/cleaning, as needed.
- Inspect and clean the air stripper (AS-700), as needed.
- Inspect the flow meter (FQI-700) to assure proper operation.
- Monitor and record the system field gauge readings to determine if the system is operating within the designed operational ranges.
- Check and record the pressure readings at the inlet and outlet of the cartridge filters (CF-400 and 401) to ensure proper operation.
- Change out the cartridge filters (CF-400 and 401), as needed.
- Record the total volume of groundwater recovered and the average recovery flow rates.
- Maintain the sequestering agent dosing rate and change out the drum, as needed.
- Collect system influent liquid phase samples and submit them for laboratory analysis of Site-specific VOCs. These results are summarized in Section 4.2.1.2.
- Collect system effluent liquid phase samples and submit them for laboratory analysis as per the Industrial Wastewater Discharge Permit, as set forth by the Jamestown BPU. These results are summarized in Section 4.2.1.3.

3.1.2 Vapor Phase Treatment

The following OM&M tasks were performed monthly and/or quarterly with regard to the vapor extraction and treatment portion of the system:

- Inspect all pipes and fittings for potential leaks.
- Record the blower outlet temperature (TI-902).
- Record the extracted air flow rate (FIT-501 and FIT-901).
- Monitor the regenerative blower (B-900) for proper operation pressures and temperatures.
- Collect and submit influent vapor samples for laboratory analysis of Site-specific VOCs. These results are summarized in Section 4.2.2.3.
- Collect and submit influent vapor samples for laboratory analysis to monitor the system VOC emissions.

3.1.3 Recovery Well Inspections

The following O&M tasks were performed quarterly, or as needed, with regard to the system recovery wells:

- Record the applied vacuum readings at the individual VEP wells.
- Observe the pump operations at each recovery well.
- Conduct recovery well integrity surveys to observe the surface conditions around each well, the condition of the concrete surface seal, and the presence of a secure bolt-down road box.

3.1.4 Recordkeeping and Reporting

Monitoring data were recorded on OM&M checklists. Influent and effluent liquid and vapor samples were submitted quarterly for laboratory analysis. The analytical results are used to evaluate system performance and to estimate the contaminant mass removal.

3.2 Non-Routine Operation and Maintenance

During the reporting period, the following system non-routine O&M activities were performed:

- During the June 14, 2022 monthly system inspection, the air compressor's combination motor starter and overload relay were found to be faulty. A new replacement overload relay was installed by the local electrician.
- During the July 19, 2022 monthly system inspection, the air compressor was offline due to a low oil alarm. Oil was added, and the air compressor was restarted.
- During the August 16, 2022 monthly system inspection, the air compressor was offline due to a low oil alarm. Oil was added, and the air compressor was restarted. After further inspection, it was discovered that the low oil issue was related to a faulty air compressor head. A new head was ordered.
- Between September 14 and 15, 2022, the following non-routine O&M activities took place:
  - Replaced the air compressor head and supplied components.
  - Replaced the air compressor primary pressure regulator.

  - Repaired a leak on transfer pump TP-900.
  - Redeveloped wells VEP-1, 2, and 3.
  - Repaired the pumps for VEP pumping wells VEP-1, 2, and 3 and brought them back online.
  - Replaced the air supply line and valve for recovery well VEP-8.
  - Mowed the Site and cleared vegetation in preparation for the semi-annual groundwater sampling event.
- Between October 11 and 13, 2022, the following non-routine O&M activities took place:
  - On October 11, 2022, a contractor, ArborWild Environmental, was on site treating invasive species (Tree of Heaven) using glyphosate. The scope of work was being conducted throughout the Chautauqua County watershed on behalf of the Chautauqua Watershed Conservancy.
  - Missing flushmount well cover bolts were replaced on wells OW-3, RW-1, RW-2, IW-6, and IW-14 and on several VEP wells.
  - Repaired a building sump pump leak.
  - Replaced the absorbent socks in monitoring wells ESI-3 and ESI-5. The spent absorbent socks were containerized in a steel 55-gallon drum inside the treatment building.
  - A groundhog hole was identified near treatment system cleanout CO-1. The hole was filled in with one 60-pound bag of concrete. Cleanout CO-2 was damaged from Site vegetation clearing activities, and a new flushmount steel cover and concrete pad were installed.
- During the November 30, 2022 monthly system inspection, the air compressor's combination motor starter had a blown fuse. A new replacement fuse was installed by the local electrician.
- The liquid phase flow meter was found to be not working on February 14, 2022. Upon inspection by the local electrician, the flow meter was repaired and brought back online on March 24, 2022. It should be noted that the totalizer was manually adjusted during this timeframe to account for the meter's downtime.

The process and electrical equipment noted above were replaced with materials meeting the same specification. No system process modifications were made during the reporting period.

3.3 Riverbank and Cover System Inspections

As outlined in the SMP (Arcadis 2021b), the following remedial design elements were constructed at the Site:

- Twelve inches of clean soil cover/grass seed in areas disturbed during construction;
- Riverbank reconstruction, including stabilization/erosion controls;
- Construction of a wingwall structure; and
- Riverbank plantings.

Each of these areas was inspected quarterly to certify that the engineering controls are in place and functioning as designed. The cover system, riverbank, and wingwall structure were inspected for erosion, sloughing, settlement, or any other indication of loss of integrity. The riverbank plantings were observed for any signs of distress or lack of growth. During the reporting period, the Site cover material and riverbank were inspected on a quarterly basis, and the observations were recorded on inspection checklists, which are provided as **Appendix B**.

3.3.1 Site Cover

No erosion of the Site cover was observed during the reporting period. Vegetation growth across the Site was observed to be in good condition. Therefore, no soil excavations/disturbances were made on site nor materials imported during the reporting period.

3.3.2 Riverbank Inspections

The riverbank, including the plantings, riprap embankment, and wingwall deflector, was inspected quarterly during the reporting period. Based on the Site inspections and observations, the riprap stone and wingwall deflector appeared to be in place and functioning as intended. The riverbank plantings of select Dogwoods and Black Willows appeared to be in fair condition. However, signs of periodic beaver activity still exist along off-site sections of the riverbank, as indicated from some observed tree and/or vegetation damage.

As noted above in Section 3.2, an invasive species, Tree of Heaven, was identified on site along the riverbank and was being treated as part of an invasive mitigation program by the Chautauqua Watershed Conservancy.

4 Remedial System Performance Summary

The operational data collected during the monthly inspections of the system operation are summarized in the following sections. System operational data are provided in **Table 1**, and the system liquid phase influent and vapor phase sample results have been submitted to the NYSDEC's Environmental Information Management System (EIMS) Administrator in the required EQuIS Electronic Data Deliverable format. Copies of the quarterly remedial system influent laboratory analytical data are provided as **Appendix C**. System liquid phase effluent analytical results have been provided with the Industrial Wastewater Discharge Monitoring Reports, which are submitted monthly to the Jamestown BPU and the NYSDEC.

4.1 Objectives of Monitoring

During operation of the system, various data were collected and analyzed to evaluate the overall performance and effectiveness of the system. This performance monitoring is intended to achieve the following objectives:

- Evaluate the total dissolved and vapor phase VOCs and TPH, as well as NAPL, recovered during the operational period.
- Evaluate the performance of the remedial system.
- Determine if any modifications to the system are required to enhance its performance.
- Ultimately determine when remedial milestones or endpoints have been achieved.

The performance monitoring results for the reporting period are summarized below.

4.2 System Performance Data

The system operational data for the reporting period are summarized in **Table 1**. These data include the average and cumulative recovered groundwater and soil vapor flows, average applied vacuums to the recovery well network, and recovery well status.

4.2.1 Groundwater Recovery/Extracted Liquid Data

4.2.1.1 Liquid Flows

Total extracted groundwater flow readings were collected from the totalizing flowmeter (FQI-700). The average monthly system groundwater extraction flow rates are included in **Table 1**. A cumulative total of 23,495,292 gallons of groundwater has been recovered by the system from startup (January 2008) through June 15, 2023 (**Table 1**). The total flow recovered between June 16, 2022, and June 15, 2023, was 869,271 gallons, which corresponds to an average recovery rate of approximately 1.7 gallons per minute (gpm).

4.2.1.2 System Influent Liquid Phase Analytical Results

The quarterly liquid phase influent concentrations of TCE, DCE, VC, and TPH-DRO in groundwater are provided in **Table 2** and are illustrated graphically on **Figure 3**. The recovery well status during liquid phase influent sampling events has been included in **Table 2**.

Liquid phase influent concentrations during August 2022 through June 2023 ranged from 0.64 to 5.7 micrograms per liter (µg/L) for TCE, 17.8 to 69.8 µg/L for DCE, and 11.3 to 28.3 µg/L for VC. Influent concentrations of TPH-DRO ranged from 0.9 to 1.4 mg/L.

4.2.1.3 Treated System Liquid Phase Effluent Analytical Results

Pursuant to the effluent standards set by the Jamestown BPU Industrial Wastewater Discharge Permit (Permit No. 037), sampling consists of the monthly collection of four grab groundwater samples over an 8-hour period during a typical operational day. These samples are analyzed for VOCs using USEPA Method 624, oil and grease using USEPA Method 1664A, total suspended solids using USEPA Method 2540D, and PCBs using USEPA Method 608. All samples are submitted to SGS Laboratory in Dayton, New Jersey. Prior to final discharge to the local sanitary sewer manhole (3T6), a system effluent sample is collected from the sample port (SP-702) located post air stripper (AS-700). The sampling results are reported to the Jamestown BPU and the NYSDEC on a monthly basis.

During the reporting period, the effluent discharge monitoring parameters were ND or reported at quantities below the permitted effluent limits. The effluent sample results are provided in **Table 3**.

4.2.2 Soil Vapor Extraction Data

4.2.2.1 Vapor Flows

The SVE (i.e., vapor phase) system was operational during the reporting period, except for isolated shutdowns and/or temporary recovery well configuration changes due to routine O&M activities and non-routine O&M activities, which are discussed in Sections 3.1 and 3.2, respectively.

Total (i.e., extracted soil vapor and fresh air dilution) vapor flow rate readings were collected from the flowmeter (FIT-901) located in the vapor treatment system exhaust before the vapor phase granular activated carbon vessel (ASC-902) (i.e., pre-blower/fresh air dilution valve). The flow rate readings ranged from 16 to 68 actual cubic feet per minute (acfm) during the operational months for the vapor phase extraction system during the reporting period (**Table 1**). These flow ranges correspond to an average discharge rate of approximately 88 acfm for the vapor phase extraction system over the operational period of June 16, 2022, through June 15, 2023. In May 2022, vapor flow readings began to be recorded pre-dilution to better track vapor phase mass removal rates.

4.2.2.2 Applied and Induced Vacuum

The applied vacuum at the system knockout tank generated by the regenerative blower (PI-901) generally ranged from 18 to 68 inches of water column. The applied vacuum to the VEP wellheads was adjusted based on several factors, including observed vacuum at the wellhead, induced vacuum at select monitoring points, and seasonal groundwater elevations. The average monthly VEP applied wellhead vacuums are included in **Table 1**.

Induced vacuum measurements were recorded periodically throughout the reporting period at select monitoring wells.

4.2.2.3 System Vapor Influent Sampling and Analytical Results

Vapor phase treatment was taken offline in 2021, and effluent vapor sampling is no longer conducted. All vapor sampling is performed at the influent port.

The influent vapor concentrations of tetrachloroethylene (PCE), TCE, DCE, and VC are presented in **Table 4** and are illustrated graphically on **Figure 4**. The three predominant compounds detected in the influent vapor samples during the reporting period were TCE, DCE, and VC. During the reporting period, TCE concentrations ranged from 149 to 761 micrograms per cubic meter (µg/m^3), DCE concentrations ranged from 48.8 to 427 µg/m^3, and VC concentrations ranged from 13.7 to 1470 µg/m^3. All samples were analyzed by Pace Analytical Services for site specific VOCs using USEPA Method TO-15.

Based on the NYSDEC's Division of Air Resources (DAR)-1: *Guidelines for the Evaluation and Control of Ambient Air Contaminants* (NYSDEC 2021b) and under 6 New York Codes Rules and Regulations (NYCRR) Part 212, Flowchart #1, the SVE system operation is exempt from permitting and is considered trivial under 6 NYCRR Section 201-3.3 (29) – Trivial Activities. However, as a precaution, the average VOC concentrations discharged in the SVE exhaust during the reporting period were compared to the allowable short-term guideline concentration and annual guideline concentration values, as calculated using the DAR-1 calculation method and an AERSCREEN modeling analysis. Based on the analysis, the overall annual and hourly mass emission rates for PCE, TCE, and VC were estimated well below their corresponding allowable emission limits listed in 6 NYCRR Part 212-2.2, Table 2 – high toxicity air contaminant list. The calculated worst case (based on highest concentrations detected during the reporting period) pounds per year and average per hour for PCE, TCE, DCE, and VC are provided in **Table 5**.

4.2.3 Non-Aqueous Phase Liquid Recovery

During the reporting period, the VEP recovery well network recovered approximately 2.0 gallons of DNAPL, primarily from recovery wells VEP-11, VEP,12, VEP-13, and VEP-14. Measurable light non-aqueous phase liquid was not observed within any of the VEP wells or OWS during the reporting period. Since starting the system in January 2008, an estimated cumulative total of 385 gallons of DNAPL have been recovered. A summary of annual DNAPL removal is provided in **Table 6**.

5 System Evaluation

This section summarizes the remedial system performance monitoring data for the reporting period.

5.1 Mass Recovery

The estimated total mass recovered was calculated using the system influent dissolved and vapor phase analytical sampling results with the corresponding extraction flow rates and the NAPL volumes collected.

5.1.1 Dissolved Phase

Influent groundwater laboratory analytical data were used to estimate dissolved phase VOC and TPH-DRO mass recovery rates. As shown in **Table 7**, influent VOC and TPH-DRO levels and groundwater recovery rates were used to calculate the overall mass of VOCs recovered in the dissolved phase. As indicated in **Table 7**, a total estimated mass of approximately 4.1 kg of VOCs and TPH-DRO were recovered in the dissolved phase from June 16, 2022, through June 15, 2023.

As the data presented in **Table 7** indicate, total dissolved phase mass recovery rate estimates ranged from 6 to 15 grams per day. The fluctuation in the dissolved phase mass recovery rate is related to variability in influent mass concentrations in the extracted groundwater due to VEP well configurations, extraction rates, and precipitation recharge to the groundwater system. The annual dissolved phase mass recovery rates of VOCs and TPH-DRO are shown on **Figure 3**.

5.1.2 Vapor Phase

Influent vapor sampling results, molecular weights, and total vapor extraction flow rates were utilized to estimate the vapor phase VOC mass recovery rate for the reporting period. As **Table 5** shows, a total estimated mass of 1.6 kg of VOCs were removed in the vapor phase from June 16, 2022, through June 15, 2023. As expected, the mass transfer of VOCs from soil to vapor is predominantly limited to desorption and diffusion processes. Therefore, mass removal rates in the vapor phase are declining over time as the Site is remediated.

5.1.3 Non-Aqueous Phase Liquid

As noted in Section 4.2.3, approximately 2.0 gallons of DNAPL were recovered during the reporting period.

5.1.4 Total Mass Removal Trend

The VEP system has recovered a cumulative total of approximately 456.3 kg (1,006.0 pounds) and 184.5 kg (406.8 pounds) of dissolved and vapor phase VOCs, respectively, during the period of operation from startup in 2008 through June 2023 (**Table 6**). The mass removal rate had fluctuated for the liquid phase mass removed during each year of operation from 2008 through 2012. However, the liquid phase VOC/TPH mass removal rates dropped an order of magnitude in 2013, continued to decrease through 2016, and have remained relatively asymptotic through 2023, as shown on **Figure 5**. This decreasing trend is most likely partially attributed to the ISCO remedy implemented in the southern end of the Site between monitoring wells MW-8S and OW-5. The variation and overall decreasing trend in mass removal rates is also largely attributable to the decrease in TPH-

DRO in the system influent water samples. As indicated in previous reports, the rate of recovery is expected to decrease as the mass removal becomes more dependent on desorption and diffusion processes rather than advective movement and the capture of VOCs.

The vapor phase VOC/TPH mass removal rates generally dropped off after the first year of operation in 2008, plateaued during each year of operation from 2010 through 2012, and subsequently continued to drop through 2017, and have remained relatively asymptotic through 2023, as shown on **Figure 4**. The historical variation and overall decreasing trend in mass removal rates are mostly attributable to the decrease in TPH-gasoline range organics in the system influent vapor samples, as well as the lighter fraction VOC concentrations. As indicated in previous reports, the rate of recovery has decreased and is expected to continue to decrease as the mass removal becomes more dependent on desorption and diffusion processes rather than advective movement and the capture of VOCs.

As presented in **Table 6**, the dissolved and vapor phase mass recovered during the reporting period is estimated at 4.1 and 1.6 kg, respectively. **Figure 5** also depicts annual mass recovery through June 2023 for both the dissolved and vapor phases and for DNAPL.

6 Groundwater Monitoring

Groundwater monitoring activities were conducted in October 2022 and May 2023. Groundwater monitoring consisted of collecting groundwater samples from monitoring wells and measuring water levels in monitoring wells to evaluate the hydraulic influence of the system.

Sampling was conducted at 13 monitoring wells to evaluate VOC concentration trends at the Site and the overall remedial progress.

The monitoring wells were purged and sampled using low-flow sampling techniques. The low-flow techniques entailed pumping the well at a fixed rate of less than 1 gpm while maintaining a maximum drawdown of less than 0.3 feet. Groundwater samples were collected after the field water quality parameters (e.g., pH, dissolved oxygen, conductivity, turbidity, etc.) had stabilized over a minimum of 15 minutes. It should be noted that all groundwater sampling was conducted with portions of the VEP system online (i.e., operational conditions). All samples were submitted to SGS Laboratories in Dayton, New Jersey, for VOCs analysis using USEPA Method 8260. Groundwater analytical results are discussed in Section 6.2.2. A copy of the groundwater sampling logs have been provided as **Appendix D**.

6.1 Well Inspections

Recovery well and monitoring well integrity inspections are conducted quarterly to observe the surface conditions around each well, the condition of the concrete surface seal, and the presence of a secure locking cap and/or bolt-down road box. Periodically, the depth to bottom in all the wells is measured and compared to the original constructed well depth. During the reporting period, all stickup monitoring wells were in good working condition and secured with padlocks, each VEP well was found in good working condition, and each manhole cover was securely bolted in place.

6.2 Groundwater Monitoring Results

The results of the groundwater monitoring program are summarized in the following sections. The groundwater monitoring program was performed in accordance with the OM&M Plan (Arcadis 2021a) and NYSDEC requirements.

6.2.1 Groundwater Elevation Data

Water level data collected from the Site monitoring wells during the reporting period are summarized in **Table 8** and on the groundwater contour maps (**Figures 6A-6B**). The Recovery and Monitoring Well DTW (Depth to Water)/DTP (Depth to Product) and Inspection Logs from the two events during this period are provided in **Appendix E**. The groundwater elevations reflect the position of the water table within the fill material layer at the Site under pumping conditions for the sampling events conducted during the reporting period. Overall, the water level data indicated that the system influences water levels near the active VEP recovery wells, with drawdown typically in the range of 1 to 5 feet in adjacent monitoring wells.

6.2.2 VOC Groundwater Analytical Results

During the reporting period, groundwater samples were collected from 13 monitoring wells to monitor groundwater quality and evaluate the system's performance. A summary of the groundwater monitoring analytical results,

along with historical data, is provided in **Table 9**. Historical TCE, DCE, and VC concentration trends in groundwater for monitoring wells are depicted on **Figures 7A, 7B, 7C, and 7D**. The semi-annual groundwater laboratory analytical data have been submitted to the NYSDEC's EIMS Administrator in the required EQuIS Electronic Data Deliverable format. Copies of the semi-annual groundwater laboratory analytical reports have been attached as **Appendix F**.

The following observations were made with respect to the groundwater analytical data obtained from the selected monitoring wells.

Sentinel Upgradient and Downgradient Site Monitoring Wells

- **ESI-6** – Consistent with the historical Site results since the startup of the remedial system, TCE and DCE remain below the NYSDEC Class GA groundwater standards in upgradient monitoring well ESI 6.
- **MW-9** – Consistent with the historical Site results dating back to March 2013, TCE, DCE, and VC have remained below the NYSDEC Class GA groundwater standards in monitoring well MW 9, which is located at the northwestern (farthest downgradient) corner of the Site near the Chadakoin River.

Central/Upgradient Site Monitoring Wells (former ISCO Treatment Area)

- **MW-8S** – TCE (41.9 µg/L [October 2022] and 18.8 µg/L [May 2023]), DCE (5344.8 µg/L [October 2022] and 3589.1 µg/L [May 2023]), and VC (471 µg/L [October 2022] and 546 µg/L [May 2023]) concentrations at monitoring well MW-8S increased this past reporting period. This increase in concentration is most likely attributable to the startup and operation of nearby VEP wells VEP-1 and VEP-2. Overall, the total VOC concentrations have rebounded to pre-ISCO concentrations but remain stable.
- **MW-12** – TCE (64.5 µg/L [October 2022] and 42.2 µg/L [May 2023]), DCE (95.9 µg/L [October 2022] and 692.5 µg/L [May 2023]), and VC (5.3 µg/L [October 2022] and 55 µg/L [May 2023]) concentrations at monitoring well MW-12 increased slightly for the past two reporting periods. Overall, the total VOC reduction post-ISCO remains between 74 and 94%.
- **MW-13** – TCE was found at concentrations exceeding NYSDEC Class GA groundwater standards in October 2022 (83.1 µg/L) but returned to below standards in May 2023. DCE (185.5 µg/L [October 2022] and 798.8 µg/L [May 2023]) exhibited a slight increase in concentrations in May 2023; however, it remains below pre-ISCO levels. VC (25.1 µg/L [October 2022] and 162 µg/L [May 2023]) concentrations at monitoring well MW-13 have also dropped an order of magnitude following the July 2018 ISCO injection event. Overall, the total VOC reduction post-ISCO remains between 65 and 89%.
- **MW-14** – TCE (103 µg/L [October 2022] and ND [May 2023]), DCE (2197.6 µg/L [October 2022] and 1153.1 µg/L [May 2023]) and VC (435 µg/L [October 2022] and 721 µg/L [May 2023]) concentrations at monitoring well MW-14 remain stable as compared to the pre-ISCO concentrations.
- **OW-5** – TCE concentrations at monitoring well OW-5 continue to remain below NYSDEC Class GA groundwater standards. DCE and VC were detected at concentrations of 17.2 µg/L and 19.7 µg/L, respectively, in October 2022. In May 2023, DCE and VC were detected at concentrations of 188 µg/L and 370 µg/L, respectively.
- **OW-6** – TCE at monitoring well OW-6 was found at concentrations exceeding NYSDEC Class GA groundwater standards in October 2022 (14.1 µg/L) but returned to below standards in May 2023, remaining lower than concentrations prior to the July 2018 ISCO injection event. DCE concentrations (11.2 µg/L [October 2022] and 72.4 µg/L [May 2023]) have still dropped an order of magnitude following the July 2018

ISCO injection event. VC concentrations (0.53 µg/L [October 2022) and 403 µg/L [May 2023]) exhibited a higher concentration during the May 2023 sampling event. This increase in VC concentration is most likely attributable to the startup and operation of nearby VEP well VEP-3.

Groundwater and Soil Vapor Extraction Treatment Area/Adjacent Riverbank/Hydraulic Barrier Monitoring Wells

- **ESI-1** – Concentrations of TCE, DCE, and VC at monitoring well ESI-1, which is located adjacent to the Chadakoin River and upgradient from the vertical barrier wall, continue to remain below the NYSDEC Class GA groundwater standards since startup of the remedial system.
- **ESI-2** – TCE and VC concentrations at monitoring well ESI-2 during the October 2022 and May 2023 sampling events were below the NYSDEC Class GA groundwater standards. DCE (0.7 µg/L, estimated [October 2022], and 7.26 µg/L [May 2023]) was detected during both events but has continued to remain below the pre-system operation/baseline 2003 concentrations.
- **ESI-4R** – VOC concentrations at monitoring well ESI-4R continue to fluctuate within ranges established since being installed in 2010. TCE (8.3 µg/L), DCE (90.62 µg/L), and VC (3.9 µg/L) concentrations continue to remain below the historical averages at this well.
- **ESI-7** – TCE was the only VOC detected above the NYSDEC Class GA groundwater standards at a concentration of 10.3 µg/L in October 2022. DCE and VC concentrations at monitoring well ESI-7 have remained below NYSDEC Class GA groundwater standards since October 2021.
- **MW-10R** – DCE was the only VOC detected above the NYSDEC Class GA groundwater standards at a concentration of 18.3 µg/L in June 2023. TCE and VC concentrations at monitoring well MW-10R have remained below NYSDEC Class GA groundwater standards since May 2022. Overall, VOC concentrations at monitoring well MW-10R continue to indicate a downward trend, compared to the last several years of groundwater monitoring data.

6.2.3 PFAS Groundwater Analytical Results

PFAS was first sampled on site at monitoring wells ESI-4R (source area) and ESI-6 (upgradient) in 2018. In response to the detectable PFAS concentrations at ESI-4R, two subsequent groundwater sampling events were completed in November 2020 and October 2022.

On November 10, 2020, and October 10, 2022, groundwater samples were collected from monitoring well ESI-4R. The groundwater samples were analyzed for PFAS by USEPA Method 537 Modified. The full PFAS target analyte list was analyzed per the NYSDEC's *Groundwater Sampling for Emerging Contaminants* guidance document (2021a). The PFAS results are summarized below:

- November 10, 2020 – The detected individual PFAS compound concentrations ranged from 14.3 to 319 ng/L. The perfluorooctanoic acid and perfluorooctane sulfonic acid (PFOS) concentrations were detected at 14.3 and 119 ng/L, respectively.
- October 10, 2022 – The only detected individual PFAS compound was PFOS at a concentration of 117 ng/L.

The 2018, 2020, and 2022 PFAS groundwater sampling results at monitoring well ESI-4R are summarized in **Table 10**.

Based on the 2023 Addendum to the June 1998 NYSDEC Division of Water Technical Operational Guidance Series No. 1.1.1 *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations*,

the concentrations at monitoring well ESI-4R continue to exceed the guidance standard for PFOS (2.7 ng/L). However, the total PFAS concentrations at monitoring well ESI-4R have suggested a decreasing trend between 2018 and 2022, with an 86% reduction of PFOS and a 96% reduction in total PFAS. The decreasing trend may be attributable to the continuous operation and redevelopment of nearby recovery wells VEP-12, VEP-13, and VEP-14 over the last several years. Based on the current data set, the detectable PFAS concentrations do not represent a significant risk to receptors, human or ecological, through drinking water or discharge to surface water.

7 Conclusions

The following sections summarize the conclusions made from the system operation and groundwater data during the reporting period.

7.1 System Performance Summary

Data from the reporting period indicate that the VEP system operation has been effective at recovering the dissolved and vapor phase VOC mass and NAPL from the subsurface at the Site. Furthermore, the ISCO injections continue to be effective at reducing dissolved VOC concentrations within select areas of the targeted treatment zone.

The performance effectiveness of the remedial system is summarized through the following metrics:

- The average groundwater extraction rate from the VEP well network was approximately 1.7 gpm from June 16, 2022, through June 15, 2023.
- An average SVE rate of 88 acfm was achieved from the VEP well network from June 16, 2022, through June 15, 2023. It should be noted that this extraction rate includes fresh air dilution (i.e., makeup air) with the exception of May and June 2022, during which pre-dilution vapor samples were collected.
- The groundwater elevation data indicate that the VEP well network is effective at dewatering the fill material near the recovery wells, thus making more adsorbed phase mass available, via vacuum extraction, through in-situ stripping and bio-venting processes.
- As indicated by the low level VOC vapor phase concentrations in the extracted soil vapors, the induced lateral air flows in the subsurface have remediated the vast majority of available VOCs in the vadose zone.
- Approximately 2.0 gallons of DNAPL were recovered by the remedial system. Since startup, the system has recovered approximately 385.1 gallons of DNAPL.
- An estimated total mass of 4.1 and 1.6 kg was recovered in the dissolved and vapor phases between June 16, 2022, and June 15, 2023, respectively. Since system startup in January 2008, an estimated cumulative total mass of 456.3 and 184.5 kg has been recovered in the dissolved and vapor phases, respectively.

7.2 Groundwater Data Summary

The analytical results continue to show improvement in groundwater quality in several of the monitoring wells. VOC concentrations continue to remain below the NYSDEC Class GA groundwater standards in the upgradient and downgradient monitoring wells. The following highlights the groundwater analytical data for specific monitoring wells at the Site:

- VOC concentrations at upgradient monitoring well ESI-6 continue to remain below NYSDEC Class GA groundwater standards.
- VOC concentrations at downgradient monitoring well MW-9 continue to remain below NYSDEC Class GA groundwater standards.
- VOC concentrations at monitoring well ESI-1 continue to remain below NYSDEC Class GA groundwater standards.

- VOC concentrations at monitoring wells ESI-2, ESI-4R, and MW-10R indicated a downward trend, compared to the last several years of groundwater monitoring data. The total PFAS concentrations at monitoring well ESI-4R have suggested a decreasing trend between 2018 and 2022, with an 86% reduction of PFOS and a 96% reduction in total PFAS.
- VOC concentrations at monitoring well ESI-7 continue to cycle between near baseline concentrations and near or below NYSDEC Class GA groundwater standards.
- Monitoring well MW-8S responded favorably to the 2018 ISCO injections, with significant decreases in total chlorinated VOC concentrations ranging from 98 to 99%. However, during the most recent reporting periods, a rebound in VOC concentrations has been observed.
- Monitoring well MW-12 continues to indicate a reduction in total VOC concentrations post-ISCO injections.
- Monitoring well MW-13 continues to indicate a reduction in TCE concentrations with slight increases in VC concentrations post-ISCO injections.
- At monitoring wells OW-5 and OW-6, a slight increase in DCE and VC concentrations have been observed. However, TCE concentrations remain below or just above NYSDEC Class GA groundwater standards.
- VOC concentrations at MW-14 have remained stable, as compared to the 2018 baseline/pre-ISCO injection concentrations.

8 2023 – 2024 Goals and Recommendations

System operation goals and performance monitoring will continue to focus on optimizing mass removal rates through the operation of the VEP well network, evaluating individual recovery well mass removal rates, and continuing O&M of the remedial system process equipment and components.

The goals for system operational activities for the remainder of 2023 through June 2024, as well as activities already conducted in the first half of 2023, are as follows:

- Measure the water level at all monitoring wells to monitor the hydraulic influence of the system.
- Collect groundwater samples, on a semi-annual basis, from monitoring wells ESI-1, ESI-2, ESI-4R, ESI-6, ESI-7, MW-8S, MW-9, MW-10R, MW-12, MW-13, MW-14, OW-5, and OW-6.
- Continue to monitor the treatment system for mass removal efficiency and VOC breakthrough based on field screening and/or laboratory analysis of samples collected from the system influent and effluent sample points.
- Collect system effluent samples as required by the Jamestown BPU Industrial Wastewater Discharge Permit.
- Continue DNAPL recovery efforts.
- Perform O&M activities (e.g., liquid phase cartridge filter change-outs, pneumatic pump cleaning, as needed, sequestering agent drum replacement, air stripper cleaning). Replace pneumatic pumps/parts, as needed, to maintain VEP well operation.
- Continue riverbank inspections with consideration for the local beaver population and their effect on the local plantings. Based on these observations, engineering controls (e.g., fencing) may be implemented to further impede damage to the riverbank plantings.

As noted above in Section 1, Arcadis provided recommendations in the *Emerging Contaminants Evaluation Report* (Arcadis 2023) previously submitted to the NYSDEC. These recommendations included conducting a 3-month treatability study utilizing a liquid phase granular activated carbon filtration system. Additionally, based on the data gathered from the mass balance evaluation, several process upgrades would be required to implement the treatability study on site. Upon final review and approval from the NYSDEC, the treatability study would be implemented during the current reporting period.

9 Institutional and Engineering Controls Compliance

As part of the annual certification under the SMP (Arcadis 2021b) and OM&M Plan (Arcadis 2021a), the Site engineering controls have been maintained and remain in place, functioning as designed, except for noted shutdowns due to non-routine system maintenance. The engineering controls include the following:

- Soil cover and vegetative growth across the Site;
- Riverbank and stabilization erosion controls and wingwall deflector;
- A vertical hydraulic barrier wall;
- Groundwater and soil vapor recovery via the VEP (i.e., recovery) well network; and
- Remedial system O&M.

No changes in Site use were observed during the reporting period, per the SMP (Arcadis 2021b), which includes land and groundwater use restrictions. A photolog has been provided as **Appendix G**, which includes general Site features, including the riverbank. A copy of the signed Institutional and Engineering Controls Certification Forms is included in **Appendix H**.

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Tables

Table 1
System Operational Data, June 2022 - June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

System Parameters			6/22/2022	7/19/2022	8/15/2022	9/12/2022	10/10/2022	11/30/2022	12/5/2022	12/29/2022	1/23/2023	2/6/2023	3/20/2023	4/17/2023	5/24/2023	6/15/2023
SVE Blower Applied Vacuum (in.W.C.)			62	68	58	58	60	52	56	60	35	36	32	18	20	28
Pre-Dilution Vapor Extraction Flow Rate (acfm)			105	80	97	89	107	106	42	105	78	80	59	87	128	68
Post-Dilution Vapor Extraction Flow Rate (acfm)			289	255	310	303	304	321	320	306	8.54/Faulty	358	9.98/Faulty	398	404	378
Cumulative Groundwater Recovered and Treated			22,626,021	22,706,878	22,738,378	22,801,612	22,867,150	22,970,626	23,004,262	23,106,226	23,196,190	23,217,454	23,307,140	23,392,457	23,484,131	23,495,292
Monthly System Flow (gallons)			124,776	80,857	31,500	63,234	65,538	103,476	33,636	101,964	89,964	21,264	89,686	85,317	91,674	11,161
Monthly System Influent (gpm)			2.0	2.1	0.8	1.6	1.6	1.4	4.7	3.0	2.5	1.1	1.5	2.1	1.7	0.4
Recovery Well Status[1]																
Vacuum Enhanced Pumping (VEP) Wells	VEP-1	Liquid Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-2	Liquid Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-3	Liquid Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-4	Liquid Phase On (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
		Vapor Phase On (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	VEP-5	Liquid Phase On (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
		Vapor Phase On (Y/N)	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	VEP-6	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-7	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-8	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-9	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-10	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-11	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-12	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-13	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	VEP-14	Liquid Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
		Vapor Phase On (Y/N)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Notes:
1. Recovery wells for which total fluids pneumatic pumps were online but observed to be in need of routine cleaning and/or repairs and, therefore, not recovering groundwater are considered to have liquid phases in this table. Recovery well status does not necessarily reflect the recovery well configuration for the corresponding monthly influent sampling events.
2. The typical range of the SVE Blower Applied Vacuum and the Vapor Extraction Flow Rate is 18-84 (in.W.C.) and 90-370 (acfm), respectively, based on recorded values from 7/31/2019 to 6/14/2022. It should be noted that the vacuum and flowrates vary based on the fresh air dilution setting.

Definitions:
acfm - actual cubic feet per minute
gpm - gallons per minute
in.W.C. - Inches of Water Column
N - No
SVE - Soil Vapor Extraction
VEP - Vacuum Enhanced Pumping
Y - Yes

Table 2
TCE, DCE (total), VC, and TPH in System Influent Water Samples, June 2022 - June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Date	VOCs (µg/L)[1]				DRO (mg/L)	VEP Wells Online During Quarterly System Influent Sampling Event
	TCE	DCE (total)[2]	VC	Total VOCs[3]		
8/15/2022	0.88	17.8	11.3	29.98	0.926	VEP-1 through VEP-3 and VEP-6 through VEP-14
10/10/2022	5.7	31.7	28.3	70.5	1.12	VEP-1 through VEP-3 and VEP-6 through VEP-14
2/6/2023	4.8	36.2	24.6	65.6	1.38	VEP-1 through VEP-3 and VEP-6 through VEP-14
6/15/2023	0.64	69.8	26.1	100.64	1.21	VEP-1 through VEP-3 and VEP-6 through VEP-14

Notes:
1. Samples were analyzed for VOCs using USEPA Method 624. Samples were analyzed for TPH-DRO using USEPA Method 8015D.
2. DCE (total) includes the sum of 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene.
3. Total VOCs include compounds reported in the laboratory report and not only the VOCs listed in the table.

Definitions:
µg/L - micrograms per liter
DCE - Dichloroethene
DRO - Diesel Range Organics
mg/L - milligrams per liter
TCE - Trichloroethene
TPH - Total Petroleum Hydrocarbon
USEPA - United States Environmental Protection Agency
VC - Vinyl Chloride
VEP - Vacuum Enhanced Pumping
VOC - Volatile Organic Compound

Table 3
Total VOCs, PCBs, TSS, Oil and Grease, and pH in System Effluent Water Samples, June 2022 - June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

	Analyte[1]						
	Total VOCs (µg/L)	PCBs (µg/L)	TSS (mg/L)	Oil and Grease (mg/L)		pH (s.u.)	
	Local Discharge Limit						
Date	2,130	ND	350	100		5.5 - 10	
6/22/2022	<10.0	<0.050	12.0	<4.9	<5.0	7.9	8.4
				<5.0	<4.9	8.3	8.3
7/19/2022	<10.0	<0.050	6.7	<5.0	<5.0	7.1	7.9
				<4.9	<5.0	8.2	8.3
8/15/2022	<10.0	<0.053	15.5	<4.9	<4.8	9.3	9.1
				<4.9	<4.9	9.0	8.8
9/12/2022	<10.0	<0.050	<4.0	<4.9	<4.9	7.6	8.4
				<5.0	<5.0	8.6	8.6
10/10/2022	<10.0	<0.050	32.0	<4.9	<4.9	8.7	8.8
				<4.8	<4.8	8.9	8.9
12/5/2022	<10.0	<0.049	<4.0	<4.9	<5.0	8.2	8.7
				<5.0	<5.0	8.6	8.7
12/29/2022	<10.0	<0.050	<4.0	<5.0	<5.0	8.9	8.9
				<5.0	<5.0	8.8	8.7
1/23/2023	<10.0	<0.052	<4.0	<5.0	<5.0	8.8	8.8
				<5.0	<5.0	8.7	8.7
2/6/2023	<10.0	<0.053	<4.0	<5.0	<5.0	8.2	8.5
				<5.0	<5.0	8.6	8.6
3/20/2023	<10.0	<0.051	21.7	<5.0	<5.0	8.6	8.6
				<5.0	<5.0	8.6	8.7
4/17/2023	0.94 J	<0.050	<4.0	<4.9	<4.9	9.0	8.9
				<4.9	<4.9	8.8	8.7
5/24/2023	<10.0	<0.050	4	<4.9	<4.9	8.8	8.8
				<4.9	<4.9	8.8	8.9
6/15/2023	<10.0	<0.050	<4.0	<5.0	<5.0	8.6	8.8
				<4.9	<4.9	8.7	8.6

Notes:

1. System effluent water samples collected via the sample port (SP-702) are located after the air stripper. Samples analyzed for total VOCs, PCBs, and TSS consisted of four effluent samples collected during a typical operating day that were composited at the laboratory. Samples analyzed for Oil and Grease and pH were not composited. Samples were analyzed for total VOCs using USEPA Method 624. Samples were analyzed for PCB using USEPA Method 608. Samples were analyzed for TSS using USEPA Method 160.2 or Standard Method 2540D. Samples were analyzed for Oil and Grease using USEPA Method 1664. pH was measured in the field.

Definitions:

< - Indicates less the reporting limit
µg/L - micrograms per liter
J - Indicates an estimated value
mg/L - milligrams per liter
ND - Non-Detect
PCB - Polychlorinated Biphenyl
s.u. - standard units
TSS - Total Suspended Solids
USEPA - United States Environmental Protection Agency
VOC - Volatile Organic Compound

Table 4
TCE, DCE (total), and VC in System Influent Vapor Samples, June 2022 – June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Date	Sample Location [3]	VOCs (µg/m^3)				VEP Wells Online During Quarterly System Influent Sampling Event
		TCE	DCE (total)[1]	VC	Total VOCs[2]	
8/15/2022	Influent	761	119.0	140.0	1024.9	VEP-1 through VEP-3 and VEP-6 through VEP-14
11/30/2022	Influent	149	427	1470	2046.00	VEP-1 through VEP-3 and VEP-6 through VEP-14
2/6/2023	Influent	419	48.8	22.4	492.5	VEP-1 through VEP-3 and VEP-6 through VEP-14
6/15/2023	Influent	761	77.823	13.7	860.0	VEP-1 through VEP-3 and VEP-6 through VEP-14

Notes:
1. DCE (total) includes the sum of 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene.
2. Total VOCs include the compounds reported in the laboratory report and not only the VOCs listed in the table.
3. Vapor phase treatment was taken offline in 2021, and effluent vapor sampling is no longer conducted.

Definitions:
µg/m^3 - micrograms per cubic meter
DCE - Dichloroethene
TCE - Trichloroethene
VC - Vinyl Chloride
VEP - Vacuum Enhanced Pumping
VOC - Volatile Organic Compound

Table 5
Cumulative Vapor Phase VOC Mass Recovery, June 2022 – June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Date	Influent VOC Concentrations (µg/m^3)[1]				Influent VOC Concentrations (µg/L)				Vapor Extraction Flow Rate (acfm) [6]	Reporting Period		Volume Of Air Treated (L)[2,4]	Estimated Mass of Component Extracted[5] per Reporting Period (kg)				Total Estimated Mass of VOCs Extracted Per Reporting Period (kg)
										Period Duration							
	PCE	TCE	DCE (total)[4]	VC	PCE	TCE	DCE (total)[3]	VC		(days)	(min)		PCE	TCE	DCE (total)[3]	VC	
6/22/2022	--	--	--	--	--	--	--	--	105	8	11,520	34,252,001	--	--	--	--	--
8/15/2022	4.9	761.0	119.0	140.0	0.005	0.761	0.119	0.140	97	54	77,760	213,585,694	0.001	0.097	0.058	0.172	0.328
11/30/2022	0.0	149.0	427.0	1470.0	0.000	0.149	0.427	1.470	106	107	154,080	462,483,570	0.001	0.210	0.126	0.372	0.710
2/6/2023	2.3	419.0	48.8	22.4	0.002	0.419	0.049	0.022	80	68	97,920	221,822,484	0.000	0.063	0.053	0.166	0.282
6/15/2023	7.47	761.0	77.8	13.7	0.007	0.761	0.078	0.014	68	129	185,760	357,688,756	0.002	0.211	0.023	0.006	0.242
			6/16/2022 - 6/15/2023 Average Pre-Dilution SVE Extraction Rate (acfm):						**88**			**6/16/2022 - 6/15/2023 Mass Recovered (kg):**					**1.56**

Days in Period 6/14/2022 - 6/15/2023	Maximum Influent VOC Concentration per Reporting Period (µg/m^3)				Maximum Influent VOC Concentration per Reporting Period (µg/L)				Maximum Vapor Extraction Flow Rate per Reporting Period (acfm)	Reporting Period		Volume of Air Treated (L)[2,4]	Calculated Mass Discharged per Year (kg/year)[7]			
										Period Duration						
	PCE	TCE	DCE (total)[4]	VC	PCE	TCE	DCE (total)[3]	VC		(days)	(min)		PCE	TCE	DCE (total)[3]	VC
366	7.47	761.0	427.0	1470.0	0.007	0.761	0.427	1.470	128	366	527,040	1,910,283,043	0.01	1.45	0.82	2.81

	Estimated Worst Case Mass Discharged per Year (lbs/year)[7]			
6NYCRR Part 212-2.2 Table 2 - High Toxicity Air Contaminants List - Allowable Emission Limit (pounds per year)	1000	500	NS	100
	0.03	3.20	1.80	6.19
	Estimated Worst Case Mass Discharged per Year (lbs/hour)[7]			
6NYCRR Part 212-2.2 Table 2 - High Toxicity Air Contaminants List - Allowable Emission Limit (calculated average pounds per hour)	0.11	0.057	NS	0.011
	<0.001	<0.001	<0.001	<0.001

Notes:

1. Vapor results were converted to µg/m^3 and µg/L using Microseeps unit conversion factors, assuming a temperature of 25 degrees Celsius (+ 273.15 K) and gas constant, 0.08206 l*atm/(mol*K).
2. Volumes of air treated are estimated values.
3. DCE (total) is the sum of 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene.
4. The Volume of Air Treated is calculated by multiplying the vapor extraction flow rate (acfm) by the minutes elapsed between the current and previous date, and then multiplying by 28.3168 L per cubic foot.
5. The Mass of Component Recovered per Reporting Period is calculated by taking the average concentration of the current and previous date and converting from µg/L to kg/L by dividing the value by 1,000,000,000 µg/kg, and multiplying that value by the volume of air treated (L) thus providing the mass recovered (kg).
6. Vapor Extraction Flow Rate is the pre-dilution flow rate.
7. Vapor phase sampling results are compared to emission rates detailed in the Guidance on Air Emissions of VOCs at DER Remediation Sites and 6NYCRR Part 212-2.2 Table 2 - High Toxicity Air Contaminants List - Allowable Emission Limit.

Definitions:

-- - Cell not used
< - less than
µg/kg - micrograms per kilogram
µg/L - micrograms per liter
µg/m^3 - micrograms per cubic meter
acfm - actual cubic feet per minute
DCE - Dichloroethene
kg - kilograms
L - Liters
min - minutes
PCE - Tetrachloroethylene
TCE - Trichloroethene
VC - Vinyl Chloride
VOC - Volatile Organic Compound

Table 6
Annual and Cumulative Mass Recovery Summary

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Year	Estimated Annual Mass Recovery		
	Dissolved Phase (kg)	Vapor Phase (kg)	DNAPL (gallons)
2008	30.4	116.2	117
2009	90.7	27.5	135
2010	72	8.1	39
2011	133.2	8.8	18
2012	39.9	9.3	12.5
2013	8.6	3.4	2.5
December 2014	11.7	2.2	12
January 2015 - April 2016	8.1	0.6	13
April 2016 - March 2017	5.0	0.8	1.5
March 2017 - May 2018	15	3.5	4.3
May 2018 - March 2019	4.0	1.7	8.5
March 2019 - May 2020	13.8	0.7	6.4
May 2020 - May 2021	10.4	0.1	7.5
June 2021 - June 2022	9.4	0.02	6.0
June 2022 - June 2023	4.1	1.56	2.0
Total:	**456.3**	**184.5**	**385.1**

Notes:
1. The estimated cumulative mass recovery includes the mass recovered since the system was brought online at the beginning of 2008.
2. The total volume of DNAPL recovered is based on the volumes removed and containerized from the oil/water separator (OWS-200) during the reporting period.
3. The vapor phase mass removal value for 2014 was corrected from 1.1 kg to 2.2 kg.
4. The 2022 Vapor Phase value was adjusted slightly from the previous PRR value of 0.05 that was based on the previous precise PRR dates.

Definitions:
DNAPL - Dense Non-Aqueous Phase Liquid
kg - kilograms

Table 7
Cumulative Dissolved Phase VOC and TPH Mass Recovery, June 2022 – June 2023

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site # 907019

Date	VOC and TPH [DRO] Mass Removed												
	Influent VOC and TPH [DRO] Concentrations				Total Cumulative Flow (gal)[1]	Total Flow per Reporting Period (L)	Estimated Mass Removed per Reporting Period (kg)[3]				Total Mass of VOCs Recovered per Reporting Period (kg) [4]	Cumulative Days Operating	Estimated Mass Removal Rate per Reporting Period (kg/day) [5]
	TCE (µg/L)	DCE (total) (µg/L)[2]	VC (µg/L)	TPH [DRO] (mg/L)			TCE	DCE (total)[2]	VC	TPH [DRO]			
6/16/2022	--	--	--	--	22,626,021	472,328	--	--	--	--	--	1	--
8/15/2022	0.88	17.80	11.30	0.93	22,738,378	425,317	0.001	0.012	0.006	0.357	0.376	60	0.006
10/10/2022	5.70	31.70	28.30	1.12	22,867,150	487,455	0.002	0.012	0.010	0.499	0.522	116	0.009
2/6/2023	4.80	36.20	24.60	1.38	23,217,454	1,326,044	0.007	0.045	0.035	1.658	1.745	235	0.015
6/15/2023	0.64	69.80	26.10	1.21	23,495,292	1,051,731	0.003	0.056	0.027	1.362	1.447	364	0.011
Groundwater Recovered 6/16/2022 - 6/15/2023 (gal):					**869,271**		**Total VOCs & TPH-DRO Recovered 6/16/2022 - 6/15/2023 (kg)**				**4.1**		
Average Groundwater Recovery Rate 6/16/2022 - 6/15/2023 (gpm)					**1.7**								

Notes:
1. Total cumulative flow is estimated based on the system flowmeter (FQI-700).
2. DCE (total) is the sum of 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene.
3. The estimated mass removed per reporting period is calculated from the influent mass concentration and volume of groundwater recovered. Influent mass concentrations used for the calculations are the average of the concentrations from the previous and current quarterly events.
4. The Total Flow per Reporting period is calculated by taking the difference between the current cumulative flow and the previous date's cumulative flow and multiplying by 3.78541 L/gal.
5. The estimated mass removed per reporting period is calculated by converting the concentration in µg/L to kg/L by dividing the value by 1,000,000,000, and multiplying that value by the total flow per reporting period (L), thus provided the mass removed (kg).

Definitions:
-- - Cell not used
µg/L - micrograms per liter
DCE - Dichloroethene
DRO - Diesel Range Organics
gal - gallons
gpm - gallons per minute
kg - kilograms
L - Liters
mg/L - milligrams per liter
TCE - Trichloroethene
TPH - Total Petroleum Hydrocarbons
VC - Vinyl Chloride
VOC - Volatile Organic Compound

Table 8
Summary of Groundwater Elevation Data

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID	Measuring Point Elevation (ft amsl)	Operational Conditions 10/10/2022		Operational Conditions 2/6/2023	
		Depth to Water [1]	Water-Level Elevation [2]	Depth to Water [1]	Water-Level Elevation [2]
ESI-1	1295.05	7.32	1287.73	6.93	1288.12
ESI-2	1294.40	7.09	1287.31	6.68	1287.72
ESI-3	1295.75	6.55	1289.20	5.98	1289.77
ESI-4R	1295.05	11.84	1283.21	10.89	1284.16
ESI-5	1291.65	4.69	1286.96	3.93	1287.72
ESI-6	1294.76	7.74	1287.02	6.45	1288.31
ESI-7	1295.12	6.92	1288.20	6.31	1288.81
MW-4S	1294.96	11.73	1283.23	11.16	1283.80
MW-7D	1295.37	7.88	1287.49	7.02	1288.35
MW-8S	1295.21	7.30	1287.91	6.77	1288.44
MW-8D	1294.52	6.37	1288.15	5.96	1288.56
MW-9	1293.70	7.47	1286.23	7.06	1286.64
MW-10R	1295.31	8.16	1287.15	7.77	1287.54
MW-12	1294.91	6.52	1288.39	5.97	1288.94
MW-13	1294.20	5.95	1288.25	6.13	1288.07
MW-14	1294.59	6.26	1288.33	5.84	1288.75
OW-1	1295.36	8.14	1287.22	7.85	1287.51
OW-2	1296.21	8.88	1287.33	8.53	1287.68
OW-3	1292.01	4.19	1287.82	3.56	1288.45
OW-4	1294.01	7.36	1286.65	6.88	1287.13
OW-5	1295.59	7.52	1288.07	6.67	1288.92
OW-6	1295.67	7.51	1288.16	6.92	1288.75
OW-7	1294.33	6.97	1287.36	6.70	1287.63
VEP-1	1293.03	8.70	1284.33	9.03	1284.00
VEP-2	1293.05	10.09	1282.96	10.11	1282.94
VEP-3	1293.06	9.68	1283.38	9.63	1283.43
VEP-4	1293.04	4.54	1288.50	NR	NM
VEP-5	1292.66	4.90	1287.76	NR	NM
VEP-6	1293.06	8.60	1284.46	8.37	1284.69
VEP-7	1293.06	10.50	1282.56	10.96	1282.10
VEP-8	1293.06	10.56	1282.50	10.54	1282.52
VEP-9	1292.95	11.25	1281.70	3.13	1289.82
VEP-10	1293.06	10.64	1282.42	10.58	1282.48
VEP-11	1293.06	11.65	1281.41	11.62	1281.44
VEP-12	1292.88	10.90	1281.98	11.02	1281.86
VEP-13	1293.03	10.72	1282.31	8.72	1284.31
VEP-14	1292.94	10.38	1282.56	7.43	1285.51

Notes:
1. Depths to water are presented as feet below the measuring point.
2. Water level elevations are presented as ft amsl.

Definitions:
ft amsl - feet above mean sea level
NM - Not Measured
NR - Not Recorded

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	MW-8S							Well ID:	MW-9						
	Analyte (µg/L)[1]								Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs	Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--	NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	150 D	757.6 DJ	3.1 J	750 D	4.5 J	60 DJ	968	March 2008	3.4 J	6.9 J	< 25	6.9 J	< 25	3.6 J	14
June 2008	< 100	3,100 D	< 100	3,100 D	< 100	910	4,010	June 2008	10	< 5	< 5	< 5	< 5	< 5	10
September 2008	46 J	6,029 DJ	9.2 J	6,000 D	20 J	1,800	7,875	September 2008	9.8 J	2.2 J	< 25	2.2 J	< 25	< 25	12
December 2008	26	69 J	< 1	68	0.56 J	1.5	97	December 2008	6.8	0.52 J	< 1	0.52 J	< 1	< 1	7.3
March 2009	23	92	< 1	92	< 1	< 1	115	March 2009	4.8	2.7	< 1	2.7	< 1	1.4	8.9
June 2009	42	3,000	< 20	300	< 20	350	3,392	June 2009	7.2	< 1	< 1	< 1	< 1	< 1	7.2
September 2009	57	7,800 D	< 20	7,800 D	< 20	870	8,727	September 2009	11	< 1	< 1	< 1	< 1	< 1	11
December 2009	67	4,400	< 25	4,400	< 25	270	4,737	December 2009	4.1	< 1	< 1	< 1	< 1	< 1	4.1
March 2010	< 25	4,700	< 25	4,700	< 25	580	5,280	March 2010	2.1	2.7	< 1	2.7	< 1	1.9	6.7
June 2010	< 25	5,400 D	< 25	5,400 D	< 25	690	6,090	June 2010	5.3	< 1	< 1	< 1	< 1	< 1	5.3
October 2010	58	1,811	<10	1,800	11	57	1,926	October 2010	8.4	< 1	< 1	< 1	< 1	< 1	8.4
December 2010	14	66	< 1	66	< 1	< 1	80	December 2010	4.7	< 1	< 1	< 1	< 1	< 1	4.7
March 2011	25	145	< 1	142	3.3	3.0	173	March 2011	4.0	4.2	< 1	4.2	< 1	1.5	9.7
June 2011	10	3,902 D	6.9	3,850 a	45.4	334 D	4,246	June 2011	9.0	< 1	< 1	< 1	< 1	< 1	9
October 2011	12	2,744 D	1.2	2,720 a	23.1	115 D	2,871	October 2011	8.6	< 1	< 1	< 1	< 1	< 1	8.6
December 2011	16	158	< 1	156	1.5	< 1	174	December 2011	6.7	< 1	< 1	< 1	< 1	< 1	6.7
March 2012	29.5	399.5	< 1	397 a	2.5	24.2	454	March 2012	4.4	1.4	< 1	1.4	< 1	< 1	5.8
October 2012	< 1	809	< 1	809 a	< 1	1,270	2,079	October 2012	3.4	3.0	< 1	3.0	< 1	4.4	10.8
March 2013	16.7	121	< 1	121	< 1	< 1	138	March 2013	3.0	< 1	< 1	< 1	< 1	< 1	3
August 2013	1.6	3,410.1	4.0	3,330 a	76.1	242	3,654	August 2013	4.0	2.4	< 1	2.4	< 1	< 1	6.4
March 2014	16.5	134.1	< 1	133	1.1	< 1	151	March 2014	1.9	< 1	< 1	< 1	< 1	< 1	1.9
August 2014	11	4,137	5.7	4,060	71.2	631	4,779	August 2014	3.9	< 1	< 1	< 1	< 1	< 1	3.9
March 2015	9.3	34.9	< 1	34.9	< 1	< 1	44	March 2015	1.9	< 1	< 1	< 1	< 1	< 1	1.9
August 2015	2.3	1,440	0.62 J	1,440 b	1.9	0.32 J	1,443	August 2015	2.3	3.5	< 1	3.2	< 1	0.75 J	6.6
May 2016	11.2	7,446	10.5	7,420 c	16	648	8,105	May 2016	2.2	1.0	< 1	1.0	< 1	< 1	4.2
October 2016	ISCO Injection							November 2016	3.9	< 1	< 1	< 1	< 1	< 1	3.9
November 2016	< 1	39.7	< 25	39.7	< 25	< 1	40	June 2017	4.5	< 1	< 1	< 1	< 1	< 1	4.5
January 2017	2.9	10	< 1	10	< 1	2.9	16	November 2017	3.2	< 1	< 1	< 1	< 1	< 1	3.2
April 2017	2.0	9.9	< 1	9.4	0.47 J	2.2	14	June 2018	3.0	< 1	< 1	< 1	< 1	< 1	3
June 2017	30.2	72.1	< 1	70.8	1.3	6.6	109	October 2018	4.2	< 1	< 1	< 1	< 1	< 1	4.2
November 2017	3.2	32.55	< 1	31.8	0.75 J	15.5	51	May 2019	2.0	< 1	< 1	< 1	< 1	< 1	2
June 2018	0.9	642.9	1.2 J	638 c	3.7	291	935	December 2019	1.5	< 1	< 1	< 1	< 1	< 1	1.5
July 2018	ISCO Injection							May 2020	1.1	< 1	< 1	< 1	< 1	< 1	1.1
October 2018	86.1	283.7	0.9 J	280 c	2.8	14.8	385	November 2020	1.7	< 1	< 1	< 1	< 1	< 1	1.7
May 2019	20.3	80.8	< 1	79.8	1.0	7.0	108	May 2021	1.8	< 1	< 1	< 1	< 1	< 1	2
December 2019	20.3	61.2	< 1	60.4	0.8 J	1.9	83	October 2021	4.2	< 1	< 1	< 1	< 1	< 1	4
May 2020	1.8	49.73	< 1	49	0.73	49	101	May 2022	1.2	0.54 J	< 1	0.54 J	< 1	< 1	1
November 2020	29.9	3,320	< 20	3,320	< 20	291	3,641	October 2022	0.75 J	0.9 J	< 1	0.9 J	< 1	< 1	1.7
May 2021	28	607.4	< 2	603 d	4.4	146	781	May 2023	0.72 J	0.73 J	< 1	0.73 J	< 1	< 1	1.5
October 2021	19.9	404.19	0.79 J	400 b	3.4	313 b	737								
May 2022	23.7	302.77	0.67 J	300 b	2.1	36.5	363								
October 2022	41.9	5344.8	12	5290	42.8	471	5,858								
May 2023	18.8	3589.1	< 25	3570	19.1 J	546	4,154								

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	MW-10R[4]						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
June 2010	3.9	12	< 2	12	< 2	< 2	16
October 2010	56	260	< 2	260	< 2	< 2	316
December 2010	22	9.4	< 1	9.4	< 1	< 1	31
March 2011	76	17	< 1	17.3	< 1	< 1	93
June 2011	9.3	273	< 1	273	< 1	1.8	284
October 2011	86	143	< 1	143	< 1	< 1	229
December 2011	11	31	< 1	30.7	< 1	< 1	42
March 2012	17	111	< 1	111	< 1	< 1	128
May 2012	13.2	157	< 1	157	< 1	< 1	170
October 2012	< 1	1.7	< 1	1.7	< 1	< 1	2
December 2012	1.1	41	< 1	41	< 1	< 1	42
March 2013	79.3	38.6	< 1	38.6	< 1	< 1	118
June 2013	9.6	19.4	< 1	19.4	< 1	< 1	29
August 2013	< 1	23	< 1	23	< 1	< 1	23
November 2013	1.5	2.1	< 1	2.1	< 1	< 1	6
March 2014	31.4	25.8	< 1	25.8	< 1	< 1	57
May 2014	53.4	26.7	< 1	26.7	< 1	< 1	80
August 2014	13.2	41.9	< 1	41.9	< 1	1.1	56
December 2014	13	16.2	< 1	16.2	< 1	< 1	29
March 2015	19.3	7.1	< 1	7.1	< 1	< 1	26
May 2015	22.4	96	< 1	96.1	0.51 J	< 1	120
August 2015	< 1	12	< 1	12	< 1	< 1	12
May 2016	2.6	89.95	< 1	89.3	0.65 J	3.7	96
November 2016	109	54.6	< 1	54.6	< 1	< 1	164
June 2017	53.7	91.9	< 1	91.9	0.45 J	< 1	146
November 2017	96.6	39.9	< 1	39.9	< 1	< 1	137
June 2018	29.1	66.3	< 1	66.3	< 1	< 1	95
October 2018	20.3	6.9	< 1	6.9	< 1	< 1	27
May 2019	232	112	< 1	112	< 1	< 1	344
December 2019	791 b	185 b	< 1	185 b	< 1	< 1	976
May 2020	190	77.1	< 1	77.1	< 1	< 1	267
November 2020	19.4	18.3	< 1	18.3	< 1	< 1	38
May 2021	2.6	0.93 J	< 1	0.93 J	< 1	< 1	4
October 2021	3.0	34.2	< 1	34.2	< 1	< 1	37
May 2022	100	27.1	< 1	27.1	< 1	< 1	127
October 2022	3.1	2.2	< 1	2.2	< 1	< 1	5
June 2023	2.5	18.3	< 1	18.3	< 1	< 1	21

Well ID:	MW-12						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	44	1,808 DJ	3.0 J	1,800 D	5.2 J	400	2,252
June 2008	< 100	1,900	< 100	1,900	< 100	470	2,370
September 2008	< 50	810	< 50	810	< 50	410	1,220
December 2008	1,600 D	1,808 D	2.2	1,800 D	6.2	30	3,438
March 2009	540	760	< 5	760	< 5	14	1,314
June 2009	280	2,300	< 20	2,300	< 20	140	2,720
September 2009	< 20	5,800 D	< 20	5,800 D	< 20	230	6,030
December 2009	470	3,500	< 25	3,500	< 25	59	4,029
March 2010	510	3,800	< 25	3,800	< 25	140	4,450
June 2010	110	4,800	< 25	4,800	< 25	440	5,350
October 2010	36	970	< 10	970	< 10	310	1,316
December 2010	230	1,200	< 10	1,200	< 10	< 10	1,430
March 2011	127	620.4	< 1	600 a	20.4	9.4	757
June 2011	194	3,843 D	7.2	3,820 a	15.6	364 D	4,401
October 2011	1,750 D	1,942 D	< 1	1,930 a	11.9	15	3,707
December 2011	828 D	2,032 D	1.8	2,000 a	29.9	25	2,885
March 2012	188	1,580	< 1	1,530 a	50.4	25.3	1,793
May 2012	5,870	9,958	8.1	9,770 a	180	106	15,934
October 2012	< 1	2,685	< 1	2,680 a	4.8	3,860	6,545
December 2012	692	1,244	< 1	1,230 a	14	5.8	1,942
March 2013	130	745	< 2	741	3.8	< 1	875
June 2013	393	2,092	2.0	2,080 a	10	76.7	2,564
August 2013	198	1,016	< 2	1,010 a	6.4	460	1,674
November 2013	1,010	1,810	< 5	1,810	< 5	58.4	2,678
March 2014	202	809	< 5	809	< 5	< 5	1,011
May 2014	140	998.9	< 5	990	8.9	< 5	1,139
August 2014	< 5	1,387.3	< 5	1,380	7.3	1,200	2,587
December 2014	262	1,064.9	< 5	1,020	44.9	14.3	1,327
March 2015	92.1	629.2	< 5	619	5.1	< 5	716
May 2015	390	2,272	2.5	2,260 a	11.8	176	2,840
August 2015	38.7	1,541.8	1.8	1,530 c	6.1	389	1,968
May 2016	149	1,857.5	< 10	1,850	7.5 J	230	2,237
October 2016	ISCO Injection						
November 2016	58.6	510.3	< 8	454	11.2	64	633
January 2017	26.2	163	< 5	157	5.6	15.2	204
April 2017	14.4	125	< 1	122	3.2	19.9	159
June 2017	8.2	245	< 1	236 b	9.4	81.1	335
November 2017	16.6	235.5	< 1	233 b	2.5	86	338
June 2018	3.2	223.6	< 1	219 c	4.6	138	365
July 2018	ISCO Injection						
October 2018	128	489.2	1.3	482 c	5.9	67.3	685
May 2019	4.2	41.6	< 1	39.7	1.9	10.3	56
December 2019	68.8	353	< 1	342 d	11	23.8	446
May 2020	0.68 J	5.05	< 1	4.2	0.85 J	8.1	14
November 2020	1.9	92.2	< 1	90.8	1.4	71.5	166
May 2021	112	201.34	0.64 J	197	3.7	12.7	326
October 2021	14.6	819.6	< 1	815	4.6 J	119	953
May 2022	79.9	188.2	< 1	184	4.2	8.5	277
October 2022	64.5	95.9	< 1	94.1	1.8	5.3	166
May 2023	42.2	692.5	2.3	682	8.2	55	790

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	MW-13							Well ID:	MW-14						
	Analyte (µg/L)[1]								Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs	Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--	NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	2.7 J	48.36 J	< 5	48	0.36 J	24	1,351	March 2008	1.7 J	1,009 DJ	2.4 J	1,000 D	6.4 J	340	1,351
June 2008	6.7	1,306 DJ	1.8 J	1,300 D	4.4 J	85	2,350	June 2008	< 100	1,800	< 100	1,800	< 100	550	2,350
September 2008	< 100	1,700 D	< 100	1,700 D	< 100	890	5,714	September 2008	< 100	1,814 J	< 100	1,800	14 J	3,900 D	5,714
December 2008	61	523 DJ	0.74 J	520 D	2.2	200 D	1,369	December 2008	3.7	975 DJ	0.79 J	970 D	4.2	390 D	1,369
March 2009	41	1,700	< 10	1,700	< 10	630	2,371	March 2009	< 5	620	< 5	620	< 5	150	770
June 2009	< 50	6,200	< 50	6,200	< 50	1,700	7,900	June 2009	< 10	1,100	< 10	1,100	< 10	450	1,550
September 2009	< 25	2,600	< 25	2,600	< 25	170	2,770	September 2009	< 2.5	190	< 2.5	190	< 2.5	300	490
December 2009	< 5	900	< 5	900	< 5	400	1,300	December 2009	< 2.5	710 D	< 2.5	710 D	2.6	310	1,020
March 2010	< 5	510	< 5	510	< 5	170	680	March 2010	< 5	1,307 D	< 5	1,300 D	7.0	510	1,817
June 2010	< 5	1,400 D	< 5	1,400 D	< 5	530	1,930	June 2010	< 2	220	< 2	220	< 2	280	500
October 2010	< 10	5,157 D	< 10	5,100 D	67	4,500 D	9,657	October 2010	< 1	85	< 1	85	< 1	170	255
December 2010	< 25	4,500 D	< 25	4,500 D	< 25	4,300	8,800	December 2010	3.4	1,607 D	1.5	1,600 D	6.6	390 D	2,000
March 2011	5.8	363	< 1	353	10.3	612	981	March 2011	66	1,809	3.2	1,740 a	65.8	451	2,326
June 2011	5.7	325	1.1	320	4.0	377	708	June 2011	< 1	1,419 D	2.3	1,410 a	7.0	544	1,963
October 2011	85	1,538 D	< 1	1,530 a	8.0	1,310 D	2,933	October 2011	3.4	2,230 D	< 1	2,230 a	10	476 D	2,709
December 2011	79	916 D	1.8	892 a	22.6	494 D	1,489	December 2011	3.1	1,282 D	< 1	1,270 a	12.7	353	1,638
March 2012	36.7	392	< 1	387	4.7	243	672	March 2012	< 1	3,401.3	4.3	3,310 a	87.0	1,260	4,661
May 2012	495	3,116	5.6	3,100 a	10.6	682	4,293	May 2012	< 1	568	< 1	568 a	< 1	209	777
October 2012	< 1	2,554	< 10	2,010	< 10	3,100	5,110	October 2012	< 1	24.9	< 1	24.9	< 1	65	90
December 2012	72.2	316	< 1	311 a	4.9	15	403	December 2012	2.9	1,828.7	2.8	1,800 a	25.9	194	2,026
March 2013	52.8	350	< 2	350	< 2	27.7	431	March 2013	< 1	801	< 5	801	< 5	158	959
June 2013	40.9	971.3	1.6	963 a	6.7	60.2	1,072	June 2013	< 1	2,512.5	3.3	2,500 a	9.2	611	3,124
August 2013	< 1	1,564	1.7	1,550 a	12.5	1,000	2,564	August 2013	< 1	888.2	< 5	883	5.2	526	1,414
November 2013	29.5	125	< 1	125	< 1	8.2	151	November 2013	< 1	2310	< 10	2,310	< 10	1,190	3,247
March 2014	25.6	277.6	< 1	275	2.6	180	483	March 2014	< 4	1,044.9	< 4	1,040	4.9	590	1,635
May 2014	46.5	321.6	< 1	316	5.6	18.1	386	May 2014	< 10	1,640.2	< 10	1,630	10.2	1,030	2,670
August 2014	46	2,395	2.5	2,370 a	22.5	236	2,677	August 2014	912	4,016	3.1 J	4,000	12.9	204	1,116
December 2014	11.2	198	< 1	191	7.1	350	559	December 2014	< 5	1,494.2	< 5	1,450	44.2	1,970	3,464
March 2015	12.1	175.3	< 1	174	1.3	27	215	March 2015	< 5	1,236	< 5	1,230	6.0	954	2,190
May 2015	1.9	2.2	0.55 J	< 1	2.2	326	331	May 2015	1.6	427	0.65 J	427 a	3.0	523	955
August 2015	< 1	10,009	9.3	9,990 b	15	5,910	15,919	August 2015	< 5	285	< 1	283 b	2.0	453	738
May 2016	< 1	145	< 50	145 b	< 50	181	327	May 2016	< 5	788.1	< 1	785 c	3.1	871	1,664
October 2016	ISCO Injection							October 2016	ISCO Injection						
November 2016	25	121	< 5	121	< 5	48	194	November 2016	1.7	194.7	< 1	193 a	1.7	303	499
January 2017	< 2	7.0	< 2	7.0	< 2	9.3	16	January 2017	0.6	105	< 1	104	0.83 J	150	255
April 2017	< 1	1.9	< 1	1.4	0.49 J	2.4	4.3	April 2017	0.5	59	< 1	58	0.81 J	98.5	158
June 2017	< 2	1.4	< 1	1.4	< 1	1.4	2.8	June 2017	< 1	413	< 1	411 b	1.9	766	1,179
November 2017	< 1	0.85 J	< 1	0.85 J	< 1	1.1	2.0	November 2017	1.1	615	0.72 J	612 b	2.4	697	1,313
June 2018	< 1	1.1	< 1	1.1	< 1	1.1	2.2	June 2018	< 5	392.3	< 5	390	2.3 J	911	1,303
July 2018	ISCO Injection							July 2018	ISCO Injection						
October 2018	< 5	2.9 J	< 5	2.9 J	< 5	< 1	2.9	October 2018	3.4	2,626	< 5	2,620 d	6.0	446	3,075
May 2019	< 1	1.7	< 1	1.7	< 1	0.9 J	2.6	May 2019	1.2	416.4	0.7 J	413 c	2.7	755	1,173
December 2019	< 1	0.69 J	< 1	0.69 J	< 1	< 1	0.7	December 2019	8.8	3,017.8	10	3,000 b	7.8	1,020 c	4,047
May 2020	< 1	3.7	< 1	3.7	< 1	2.4	6.1	May 2020	< 2.5	1,545.9	2.1 B J	1,540 c	3.8	939 c	2,485
November 2020	< 1	3.7	< 1	3.7	< 1	< 1	3.7	November 2020	6.7	1,132.7	< 5	1,130 d	2.7 J	742	1,881
May 2021	< 1	5.8	< 1	5.8	< 1	2.8	8.6	May 2021	< 10	3040.6	10.6	3,020 c	10	784	3,825
October 2021	< 1	11.8	< 1	11.8	< 1	9.0	21	October 2021	< 10	1990	< 10	1990	< 10	774	2,764
May 2022	< 1	0.8 J	< 1	0.8 J	< 1	< 1	0.8	May 2022	< 5	1922.2	3.4 J	1910 b	8.8	2590 b	4,512
October 2022	83.1	185.5	< 1	184	1.5	25.1	294	October 2022	103	2197.6	< 1	2190	7.6	435	2,736
May 2023	.89 J	798.8	2.4	792	4.4	162	957	May 2023	< 4.0	1153.1	< 4.0	1150	3.1 J	721	1,974

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	ESI-1						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	< 50	< 50	< 50	< 50	< 50	< 50	0
June 2008	< 50	< 50	< 50	< 50	< 50	< 50	0
September 2008	< 50	< 50	< 50	< 50	< 50	< 50	0
December 2008	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2009	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2009	< 1	< 1	< 1	< 1	< 1	< 1	0
September 2009	< 1	3.2	< 1	3.2	< 1	< 1	3.2
December 2009	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2010	< 1	3.6	< 1	1.9	1.7	< 1	3.6
June 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2012	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2012	< 1	10.9	< 1	10.9	< 1	11.8	23
March 2013	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2013	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2014	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2014	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2015	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2015	< 1	< 1	< 1	< 1	< 1	< 1	3
May 2016	< 1	< 1	< 1	< 1	< 1	< 1	3
November 2016	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2017	< 1	< 1	< 1	< 1	< 1	< 1	0
November 2017	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2018	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2018	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2019	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2019	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2020	< 1	< 1	< 1	< 1	< 1	< 1	0
November 2020	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2021	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2021	1.5	< 1	< 1	< 1	< 1	< 1	1.5
May 2022	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2022	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2023	< 1	< 1	< 1	< 1	< 1	< 1	0

Well ID:	ESI-2						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	< 25	< 25	< 25	< 25	< 25	< 25	2.3
December 2008	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2009	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2011	4.1	< 1	< 1	4.1	< 1	1.1	5.2
October 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2012	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2012	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2013	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2013	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2014	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2014	0.54 J	< 1	< 1	< 1	< 1	0.89 J	1.4
March 2015	0.47 J	< 1	< 1	< 1	< 1	< 1	0.5
August 2015	< 1	2.8	< 1	2.8	< 1	1.4	5.2
May 2016	< 1	0.76 J	< 1	0.76 J	< 1	1.2	2.8
November 2016	3.7	< 1	< 1	3.7	< 1	< 1	3.7
June 2017	<1	2.3	< 1	2.3	< 1	1.3	3.6
November 2017	<1	0.64	< 1	0.64 J	< 1	<1	0
June 2018	30.6	169.4	< 1	168	1.4	6.6	207
October 2018	5.6	48.4	< 1	47.9	0.6 J	9.9	64
May 2019	2.4	39.16	< 1	38.2	0.96 J	14.9	56
December 2019	< 1	0.93 J	< 1	0.93 J	< 1	< 1	0.9
May 2020	57.5	171.4	< 1	170 b	1.4	1.0	230
November 2020	2.4	59.19	< 1	58.3	0.89 J	6.8	68
May 2021	1.6	10.5	< 1	10.5	< 1	0.99 J	13
October 2021	2.5	55.6	< 1	53.2	2.4	17.8	76
May 2022	4.8	11.8	< 1	11.8	< 1	0.91 J	18
October 2022	< 1	0.7 J	< 1	0.7 J	< 1	< 1	0.7
May 2023	2.1	7.26	< 1	6.7	.56 J	1.6	11

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	ESI-4R[3]						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
October 2010	150	186	< 5	180	< 5	38	374
December 2010	12	410	< 2.5	410	< 2.5	39	461
March 2011	134	410	1.2	399 a	9.6	52	596
June 2011	15	1,165 D	1.4	1,160 a	3.9	248 D	1,428
October 2011	4.2	391	< 1	391	< 1	102	497
December 2011	2.5	480 D	< 1	472 a	7.7	101	584
March 2012	3.5	2,070	2.1	2,040 a	28	825	2,899
August 2013	< 1	98	< 1	98.2	< 1	9.2	107
March 2014	1.2	315	< 1	313	2.0	51.9	368
August 2014	1.1	253.5	< 1	252	1.5	33.6	288
March 2015	10.1	230.8	< 1	229	1.8	86	327
August 2015	2.1	180	< 1	179	0.98 J	29.1	211
May 2016	2.1	194	< 1	193	1.2	39.5	236
November 2016	< 1	330	< 5	330	< 5	431	961
June 2017	11	143	< 1	143	0.85 J	35.7	180
November 2017	56.7	83.81	< 1	83.4	0.41 J	7.7	148
June 2018	NS	NS	NS	NS	NS	NS	NS
October 2018	27.3	103	< 1	103	< 1	3.9	134
May 2019	20.9	102.63 J	< 1	102	0.63 J	1.0	125
December 2019	11.6	102.82 J	< 1	102	0.82 J	14.9	129
May 2020	7.2	130.74	< 1	130	0.74 J	10.1	148
November 2020	1.1	49.7	< 1	49.7	< 1	2.4	53
May 2021	4.7	56.2	< 1	56.2	< 1	7.5	68
May 2022	23.2	51.6	< 1	51.6	< 1	< 1	75
October 2022	8.3	90.62	< 1	89.8	0.82 J	3.9	103

Well ID:	ESI-6						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	< 5	1.6 J	< 5	1.6 J	< 5	3.6 J	5.2
June 2008	< 5	< 5	< 5	< 5	< 5	1.5 J	1.5
September 2008	< 5	2.6 J	< 5	2.6 J	< 5	3.2 J	5.8
December 2008	< 1	2.2	< 1	2.2	< 1	1.1	3.3
March 2009	9.1	6.8	< 1	6.8	< 1	2.4	18
June 2009	1.4	1.1	< 1	1.1	< 1	< 1	2.5
September 2009	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2009	< 1	2.1	< 1	2.1	< 1	< 1	2.1
March 2010	< 1	< 1	< 1	1.1	< 1	< 1	0
June 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2010	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2010	< 1	1.6	< 1	1.6	< 1	< 1	1.6
March 2011	1.1	2.5	< 1	2.5	< 1	< 1	3.6
June 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2011	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2011	< 1	1.5	< 1	1.5	< 1	< 1	1.5
March 2012	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2012	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2013	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2013	< 1	1.3	< 1	1.3	< 1	< 1	1.3
March 2014	< 1	< 1	< 1	< 1	< 1	< 1	0
August 2014	< 1	< 1	< 1	< 1	< 1	< 1	0
March 2015	0.51 J	1.6	< 1	1.6	< 1	< 1	2.1
August 2015	< 1	0.87 J	< 1	0.87 J	< 1	0.21 J	1.1
May 2016	< 1	< 1	< 1	< 1	< 1	< 1	3
November 2016	< 1	1.5	< 1	1.5	< 1	< 1	1.5
June 2017	< 1	< 1	< 1	< 1	< 1	< 1	0
November 2017	< 1	4.6	< 1	4.6	< 1	26.8	31
June 2018	< 1	0.8 J	< 1	0.8 J	< 1	2.6	3.4
October 2018	< 1	3.1	< 1	3.1	< 1	14.6	18
May 2019	< 1	< 1	< 1	< 1	< 1	< 1	0
December 2019	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2020	< 1	< 1	< 1	< 1	< 1	< 1	0
November 2020	< 1	0.95 J	< 1	0.95 J	< 1	4.1	5.1
May 2021	< 1	< 1	< 1	< 1	< 1	< 1	0
October 2021	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2022	< 1	0 .51 J	< 1	0 .51 J	< 1	< 1	0.5
October 2022	< 1	0.59 J	< 1	0.59 J	< 1	< 1	0.6
May 2023	< 1	< 1	< 1	< 1	< 1	< 1	0

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	ESI-7						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	2.2 J	20	< 5	20	< 5	2.4 J	25
June 2008	< 5	< 5	< 5	< 5	< 5	< 5	3.0
September 2008	< 5	1.1 J	< 5	1.1 J	< 5	0.55 J	2.7
December 2008	0.79 J	3.2	< 1	3.2	< 1	< 1	5.0
March 2009	7.9	5.7	< 1	5.7	< 1	< 1	15
June 2009	< 1	< 1	< 1	< 1	< 1	< 1	3.0
September 2009	< 1	1.4	< 1	1.4	< 1	< 1	3.4
December 2009	< 1	1.8	< 1	1.8	< 1	1.4	4.2
March 2010	1.1	5.6	< 1	5.6	< 1	3.2	10
June 2010	< 1	1.1	< 1	1.1	< 1	1.2	3.3
October 2010	< 1	2.6	< 1	2.6	< 1	1.2	4.8
December 2010	7.3	13	< 1	13	< 1	< 1	21
March 2011	44	168	< 1	165	2.8	6.8	219
June 2011	< 1	1.3	< 1	1.3	< 1	1.6	3.9
October 2011	< 1	1.2	< 1	1.2	< 1	< 1	3.2
December 2011	1.2	9.1	< 1	9.1	< 1	< 1	11
March 2012	8.5	10.1	< 1	10.1	< 1	1.5	20
October 2012	< 1	2.1	< 1	2.1	< 1	4.4	7.5
March 2013	< 1	< 1	< 1	< 1	< 1	< 1	3.0
August 2013	< 1	< 1	< 1	< 1	< 1	< 1	3.0
March 2014	10.2	8.0	< 1	8.0	< 1	1.5	20
August 2014	< 1	1.3	< 1	1.3 a	< 1	0.79	3.1
March 2015	5.5	14.1	< 1	14.1	< 1	< 1	21
August 2015	< 1	3.6	< 1	3.6	< 1	0.51 J	5.1
May 2016	33.1	62.4	< 1	62.4	< 1	3.4	99
November 2016	1.9	4.8	< 1	4.8	< 1	< 1	6.7
June 2017	< 1	4.1	< 1	4.1	< 1	<1	4.1
November 2017	2.7	7.3	< 1	7.3	< 1	<1	10
June 2018	56.8	143.7	< 1	143	0.67 J	2.0	202
October 2018	17.8	101.5	< 1	100	1.5	11.2	131
May 2019	17.6	157.2	< 1	156	1.2	2.3	177
December 2019	0.72	1.7	< 1	1.7	< 1	< 1	2.4
May 2020	49.1	171.99	< 1	171 b	0.99 J	< 1	221
November 2020	18.1	19.9	< 1	19.9	< 1	< 1	38
May 2021	99.9	222.3	< 1	220 b	2.3	16.1	338
October 2021	0.71 J	7.1	< 1	5.8	1.3	16.4	24
May 2022	20.6	4.4	< 1	4.4	< 1	< 1	25
October 2022	10.3	1.6	< 1	1.6	< 1	< 1	12
May 2023	< 1	< 1	< 1	< 1	< 1	0.89 J	0

Well ID:	OW-5						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	< 5	< 5	< 5	< 5	< 5	< 5	15
June 2008	< 5	6,656 DJ	5.9	6,500 D	150 DJ	11,000 D	17,661
September 2008	< 25	7,213 DJ	5.3 J	7,200 D	7.7 J	11,000 D	18,238
December 2008	< 1	< 1	< 1	< 1	< 1	< 1	3.0
March 2009	< 1	< 1	< 1	< 1	< 1	< 1	3.0
June 2009	< 5	930	< 5	930	< 5	780	1,715
September 2009	< 5	3,200 D	< 5	3,200 D	< 5	5,400 D	8,605
December 2009	< 1	130	< 1	130	< 1	130	261
March 2010	< 1	1,709 D	1.2	1,700 D	7.7	1,400 D	3,110
June 2010	< 10	5,100 D	< 10	< 10	5,100 D	4,200 D	9,310
October 2010	< 2	46	< 2	46	< 2	110	158
December 2010	< 1	< 1	< 1	< 1	< 1	< 1	3.0
March 2011	< 1	< 1	< 1	< 1	< 1	< 1	3.0
June 2011	1.0	2,558 D	2.9	2,550 a	5.2	1,650	4,209
October 2011	< 1	187	< 1	187	< 1	137 D	325
December 2011	< 1	< 1	< 1	< 1	< 1	< 1	3.0
March 2012	< 1	1,207.5	< 1	1,180 a	27.5	1,030	2,239
October 2012	< 1	2,554.2	1.7	2,550 a	2.5	4,060	6,615
March 2013	< 1	9.3	< 1	9.3	< 1	< 1	11
August 2013	< 1	1,868.8	2.4	1,860 a	6.4	2,710	4,580
March 2014	< 1	22.9	< 1	22.9	< 1	25	49
August 2014	< 1	385.68	< 1	385	0.68 J	1,000	1,387
March 2015	3.2	< 1	< 1	< 1	< 1	< 1	5.2
August 2015	0.56 J	97.6	< 1	97.6	< 1	262	361
May 2016	< 1	171	< 1	171	< 1	463	635
November 2016	< 1	< 1	< 1	< 1	< 1	< 1	0
June 2017	< 1	514	0.53 J	514 b	0.95 J	660	1,174
November 2017	< 1	57	< 1	57	< 1	84	141
June 2018	< 1	101	< 1	101	< 1	303	404
July 2018	ISCO Injection						
October 2018	0.68 J	< 1	< 1	< 1	< 1	< 1	0.7
May 2019	< 1	0.81 J	< 1	0.81 J	< 1	1.3	2.1
December 2019	< 1	< 1	< 1	< 1	< 1	< 1	0
May 2020	< 1	< 1	< 1	< 1	< 1	1.3	1.3
November 2020	< 1	207 b	< 1	207 d	< 1	444 b	651
May 2021	< 1	1.8	< 1	1.8	< 1	< 1	2.0
October 2021	< 1	84.5	< 1	84.5	< 1	186 b	271
May 2022	< 1	49.9	< 1	49.9	< 1	50.1	100
October 2022	< 1	17.2	< 1	17.2	< 1	19.7	37
May 2023	< 1	188	< 1	188	< 1	370	558

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Well ID:	OW-6						
	Analyte (µg/L)[1]						
Date	TCE	DCE (total)[2]	1,1-DCE	cis-1,2-DCE	trans-1,2-DCE	VC	Total VOCs
NYSDEC Class GA:	5.0	--	5.0	5.0	5.0	2.0	--
March 2008	42	343 DJ	1.2 J	340 D	1.4 J	76	461
June 2008	11 J	100	< 20	100	< 20	310	421
September 2008	14 J	130	< 25	130	< 25	330	474
December 2008	230 D	98 D	< 4	98 D	< 4	0.8 J	329
March 2009	480	210	< 2.5	210	< 2.5	< 2.5	693
June 2009	94	290	< 2.5	290	< 2.5	40	424
September 2009	35	300	< 2.5	300	< 2.5	120	455
December 2009	200	640 D	< 2.5	640 D	< 2.5	9.8	850
March 2010	59	606	< 5	600	5.8	150	815
June 2010	20	420	< 2.5	420	< 2.5	120	560
October 2010	32	223	< 2	220	2.8	220	475
December 2010	190 D	180	< 1	180	< 1	1.4	371
March 2011	3.6	6.1	< 1	6.1	< 1	< 1	11
June 2011	15	249	< 1	249	< 1	17	281
October 2011	2.7	11.7	< 1	11.7	< 1	< 1	16
December 2011	610 D	362 D	< 1	359 a	3.2	< 1	973
March 2012	298	314	< 1	341	< 1	4.3	616
May 2012	66.8	414	< 1	414 a	< 1	57.5	539
October 2012	9.6	93.6	< 1	93.6	< 1	100	204
December 2012	13.8	85.5	< 1	85.5	< 1	57.6	158
March 2013	27.8	46	< 1	46	< 1	< 1	75
June 2013	35	157	< 1	157	< 1	87.5	280
August 2013	28.5	207	< 1	207	< 1	290	526
November 2013	1.0	2.1	< 1	2.1	< 1	1.6	6.7
March 2014	827	544	< 4	544	< 4	< 4	1,375
May 2014	672	358.1	< 1	351	7.1	1.8	1,032
August 2014	67	450.3	< 2	449	1.3 J	47.1	564
December 2014	17.1	48.2	< 1	48.2	< 1	0.46 J	66
March 2015	214	283	< 2	283	< 2	< 4	499
May 2015	197	5.6	1.6	< 1	3.0	176	378
August 2015	30.6	420.3	< 1	418 c	1.3	190	450
May 2016	68.1	600.2	< 2	598	2.2	108	776
November 2016	45.3	522	< 2	520	2.0	12	579
June 2017	16	479.9	< 1	478 b	1.9	405	901
November 2017	160	537.2	< 1 b	534 c	3.2 b	8.9	706
June 2018	47.2	336.2	< 1	334 c	2.2	84.2	468
July 2018	ISCO Injection						
October 2018	17	120.3	< 1	119	1.3	16.4	154
May 2019	5.4	98.66	< 1	97.8	0.86 J	15.7	120
December 2019	6.4	13	< 1	13	< 1	< 1	19
May 2020	11	52.3	< 1	52.3	< 1	1.6	65
November 2020	10.5	26.8	< 1	26.8	< 1	4.9	42
May 2021	8.5	17	< 1	17	< 1	< 1	26
October 2021	0.77 J	13.9	< 1	13.9	< 1	30.1	45
May 2022	21.6	164.5	< 1	163	1.5	3.5	190
October 2022	14.1	11.2	< 1	10.6	.6 J	0.53	26
May 2023	1.4	72.4	< 1	72.4	< 1	403	477

Table 9
Summary of TCE, DCE, and VC in Groundwater Samples

June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Notes:
1. Samples analyzed for VOCs using USEPA Method 8260.

2. DCE (total) includes the sum of 1,1-dichloroethene, cis-1,2-dichloroethene, and trans-1,2-dichloroethene.

3. The ISCO injections occurred October 2016 in the area of wells MW-8S, MW-12, MW-13, and MW-14. A second ISCO injection event occurred in July 2018 targeting monitoring v

4. ESI-4R was not sampled in May 2023 due to low groundwater levels.

5. The elevated detection limits for all analytes, including 1,1-DCE, was due to necessary sample dilution. The laboratory noted that "*Dilution was required due to a high concentratio*

6. The total VOC columns were calculated using the TCE, DCE (total), and VC concentrations.

Definitions:
< - Indicates less the reporting limit
µg/L - micrograms per liter
a, b, c - analytical results are from a laboratory re-runs (i.e., Run #2, Run #3,) for quality control.
B - indicates a results > = MDL but < RL
D - Identifies an analysis that used a secondary dilution factor
DCE - Dichloroethene
ISCO - In-Situ Chemical Oxidation
J - Indicates an estimated value
NS - Not Sampled
NYSDEC - New York State Department of Environmental Conservation
TCE - Trichloroethene
USEPA - United States Environmental Protection Agency
VC - Vinyl Chloride
VOC - Volatile Organic Compound

Table 10
Groundwater PFAS Sampling Results

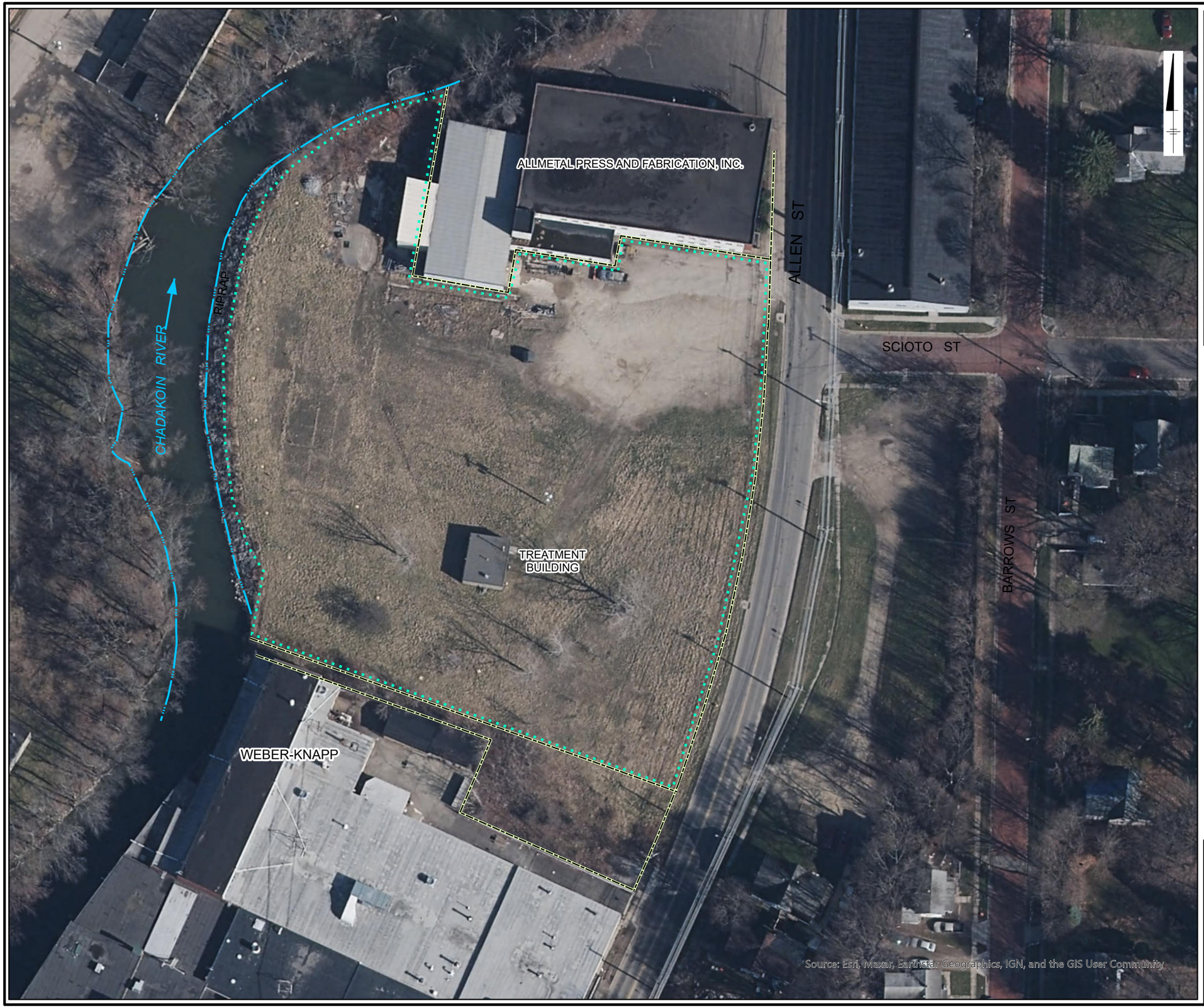
June 2022 – June 2023 Annual Site Management Periodic Review Report
D.C. Rollforms Site, Jamestown, New York
NYSDEC Site #907019

Location:	Unit	NYS Ambient Water Quality GVs[2]		ESI-6	ESI-4R		
Sample Date:		Human Health[2]	Aquatic Life	10/4/2018	10/4/2018	11/10/2020	10/10/2022
Perfluorinated Alkyl Substances[1]							
Perfluorobutanoic acid (PFBA)	ng/L	--	--	**2.79 J**	**32.3**	**28.1**	< 44
Perfluoropentanoic acid (PFPeA)	ng/L	--	--	**3.42 J**	**62.1**	**319**	< 22
Perfluorohexanoic acid (PFHxA)	ng/L	--	--	< 4.2	**92.6**	< 10	< 22
Perfluoroheptanoic acid (PFHpA)	ng/L	--	--	< 2.1	**26.6**	**49.1**	< 22
Perfluorooctanoic acid (PFOA)	ng/L	6.7	--	**1.61 J**	**91.6**	**14.3**	< 22
Perfluorononanoic acid (PFNA)	ng/L	--	--	< 2.1	**1.33 J**	< 10	< 22
Perfluorodecanoic acid (PFDA)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluoroundecanoic acid (PFUdA)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluorododecanoic acid (PFDoA)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluorotridecanoic acid (PFTrDA)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluorotetradecanoic acid (PFTeDA)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluorobutane sulfonic acid (PFBS)	ng/L	--	--	< 2.1	**265**	< 10	< 22
Perfluorohexane sulfonic acid (PFHxS)	ng/L	--	--	< 2.1	**1190**	< 10	< 22
Perfluoroheptane sulfonic acid (PFHpS)	ng/L	--	--	< 4.2	**123**	< 10	< 22
Perfluorooctane sulfonic acid (PFOS)	ng/L	2.7	160,000 / 710,000	**16.8**	**853**	**119**	**117**
Perfluorodecane sulfonic acid (PFDS)	ng/L	--	--	< 4.2	< 4.0	< 10	< 22
Perfluorooctane sulfonamide (PFOSA)	ng/L	--	--	< 4.2	< 4.0	< 20	< 44
N-Methylperfluoroocatane sulfonamidoacetic acid (MeFOSAA)	ng/L	--	--	< 21	< 20	< 20	< 44
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	ng/L	--	--	< 21	< 20	< 20	< 44
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	ng/L	--	--	< 8.3	**152**	< 40	, 89
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	ng/L	--	--	< 8.3	< 8.0	< 40	< 89
Total PFAS		--	--	24.62	2889.53	529.5	117

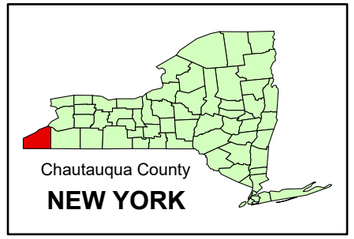
Notes:
1. Samples analyzed for Perfluorinated Alkyl Substances using USEPA Method 537 Modified.
2. Highlighted data indicates the concentration exceeds the NYSDEC Division of Water Technical Operational Guidance Series No. 1.1.1 Ambient Class GA Water Quality Guidance Values.

Definitions:
-- - No guidance value
< - Indicates less the reporting limit
GV - Guidance Value
J - Indicates an estimated value
ng/L - nanograms per liter
NYS - New York State
NYSDEC - New York State Department of Environmental Conservation
PFAS - per- and polyfluoroalkyl substances
USEPA - United States Environmental Protection Agency

Figures







LEGEND

- Property Line
- Riverbank
- Flow Direction
- Limits of Class 4 Inacative Hazardous Waste Site

0 60 120

SCALE IN FEET

PROJECTION: NAD 1983 StatePlane New York West FIPS 3103 Feet

SOURCE: NYS Orthos Online (2016).

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

2022 - 2023 PRR

Site Location Map

ARCADIS

FIGURE
1

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COM\APP\GIS\PROCESSING_ENV\INGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/27/2023



LEGEND

- Injection Well
- Monitoring Well
- Recovery Well (Pilot Test Well)
- Injection Well (inactive)
- Observation Well
- Vacuum Enhanced Pumping (VEP) Well
- VEP Valve Box
- Property Line
- Approximate Limits of Cover Soil
- Limits of Class 4 Inactive Hazardous Waste Site
- Interlocking Sheet Pile/Hydraulic Barrier Wall
- High Water Mark
- Bundled Process Line
- Discharge Line
- Recovery Well Piping
- Vacuum Line
- Overhead Electrical/Telecom Line
- Sanitary Sewer Line
- Bollard Pipe
- Effluent Pipe Clean Out
- Fire Hydrant
- Sewer Manhole
- Utility Pole

0 40 80

SCALE IN FEET

NOTES:
1. All locations are approximate.
2. VEP wells VEP-1 through VEP-4 were taken offline in 2016.
3. VEP wells VEP-5 and VEP-6 were taken offline in 2018.
4. VEP well VEP-6 brought online in 2020.
5. VEP wells VEP-1 through VEP-3 brought back online in 2022.
6. Soil Limits shown are based on as-built construction limits of disturbance.

PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103 FEET

WORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

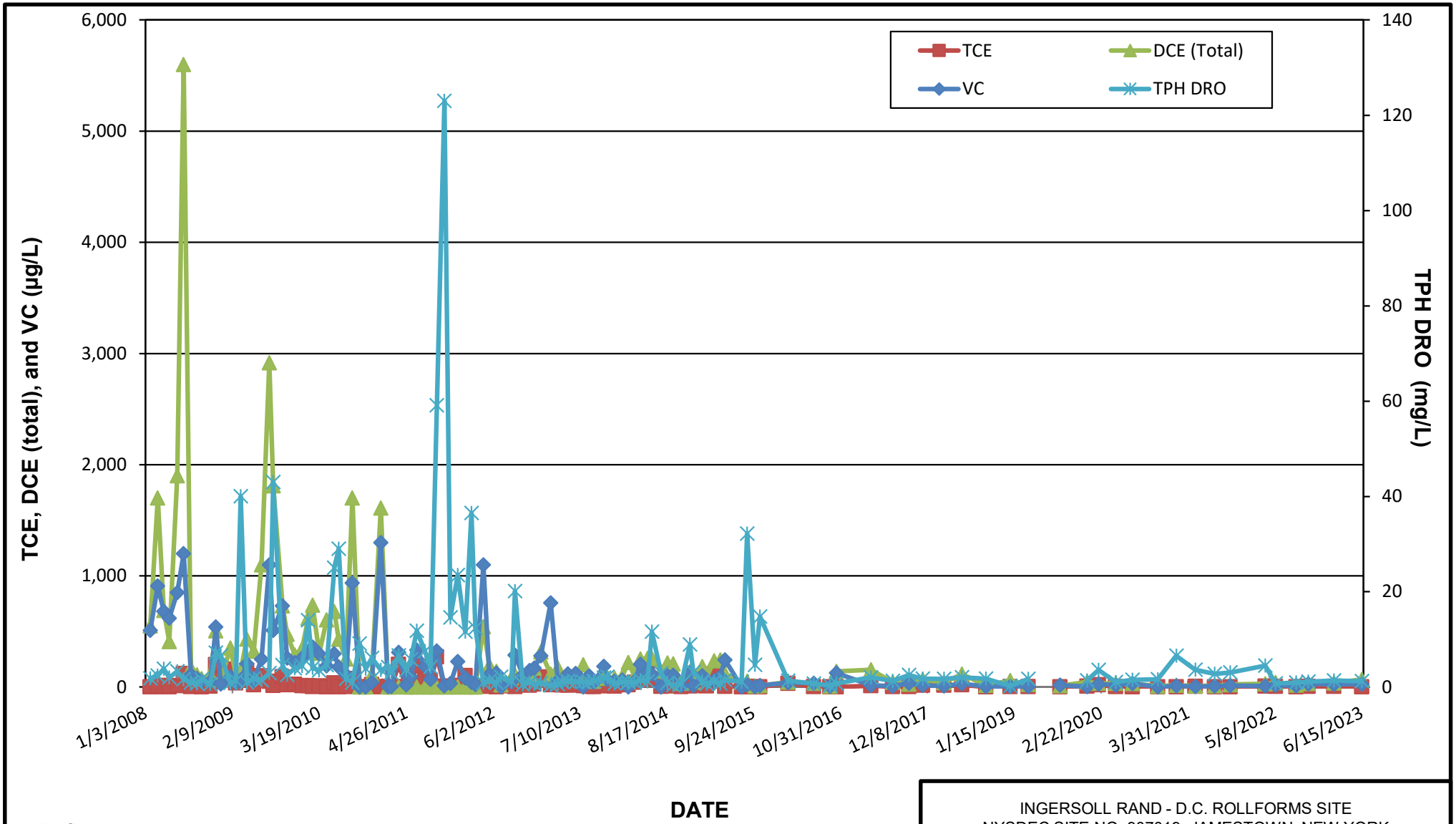
TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK
2022 - 2023 PRR

Site Plan/Remedial System Layout

ARCADIS

FIGURE
2

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COMAPP\GIS\PROCESSING_ENV\NGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/27/2023



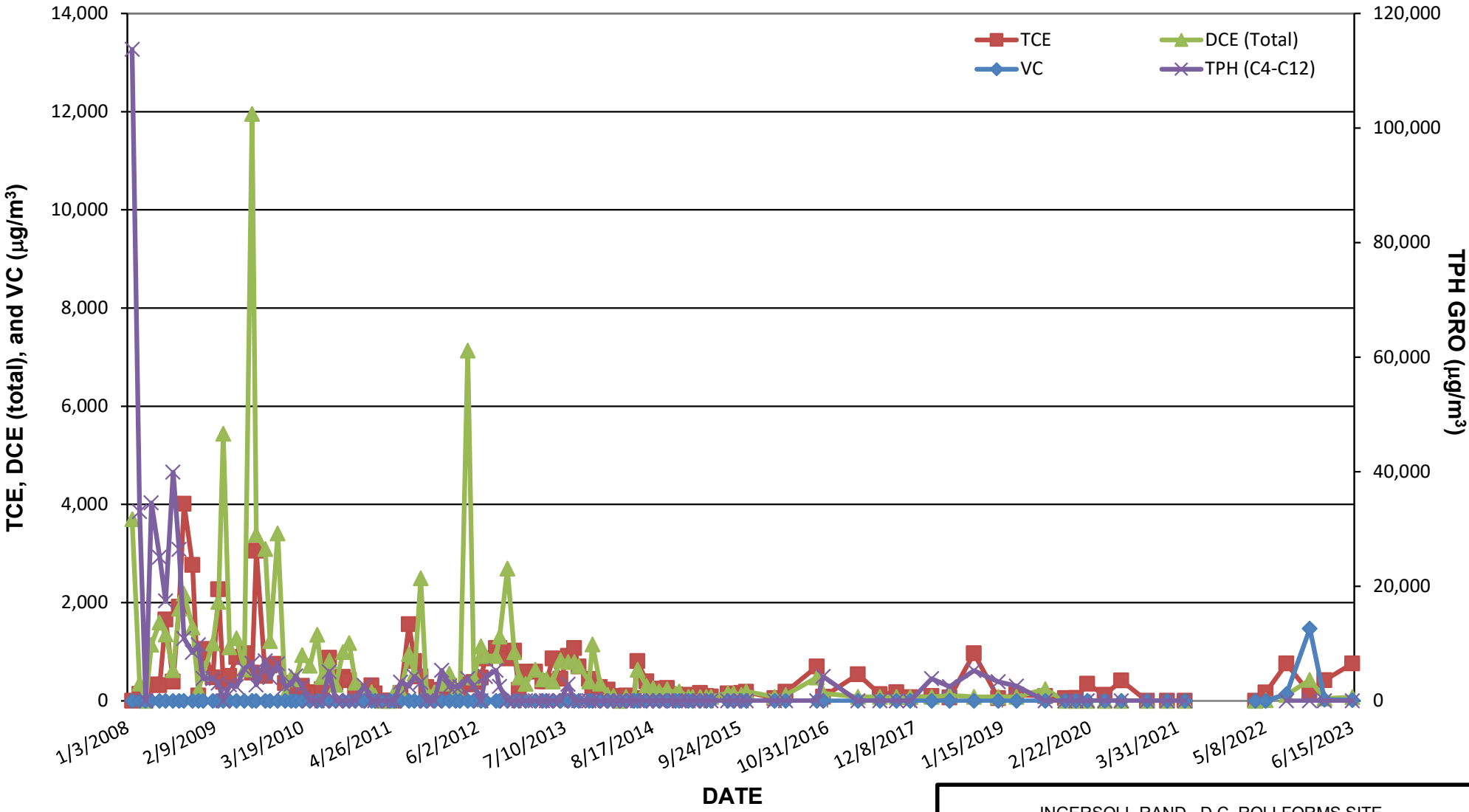
Definitions:
DCE – Dichloroethene
DRO – Diesel Range Organics
mg/L – milligrams per liter
TCE – Trichloroethene
TPH – Total Petroleum Hydrocarbons
µg/L – micrograms per liter
VC – Vinyl Chloride

INGERSOLL RAND - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK
2022 - 2023 PRR

System Influent Dissolved Phase Concentrations

ARCADIS Design & Consultancy for natural and built assets

FIGURE
3



Notes:

1. TPH GRO data is not available and/or sampled following the 2020-2021 reporting period.

Definitions:

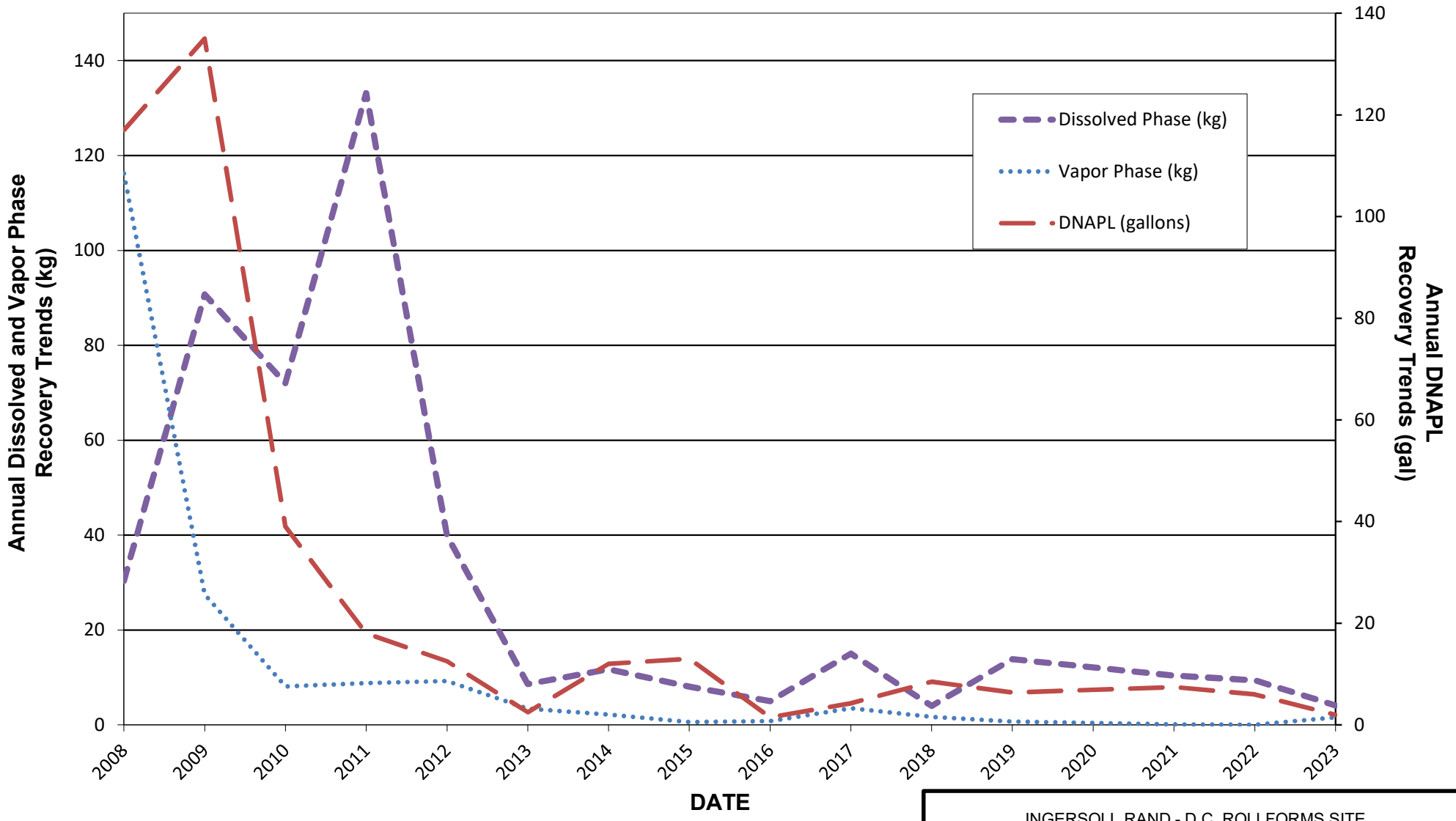
DCE – Dichloroethene
DRO – Diesel Range Organics
µg/m³ – micrograms per cubic meters
TCE – Trichloroethene
TPH – Total Petroleum Hydrocarbons
VC – Vinyl Chloride

INGERSOLL RAND - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK
2022 - 2023 PRR

System Influent Vapor Phase Concentrations

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4



Definitions:
Gal – gallons
kg – kilograms

INGERSOLL RAND - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK
2022 - 2023 PRR

Annual Mass Recovery Trends vs. Time

ARCADIS Design & Consultancy for natural and built assets

FIGURE
5



LEGEND

- Injection Well
- Monitoring Well
- Recovery Well (Pilot Test Well)
- Injection Well (inactive)
- Observation Well
- Vacuum Enhanced Pumping (VEP) Well
- VEP Valve Box
- Property Line
- Limits of Class 4 Inactive Hazardous Waste Site
- Interlocking Sheet Pile/Hydraulic Barrier Wall
- High Water Mark
- Bundled Process Line
- Discharge Line
- Recovery Well Piping
- Vacuum Line
- Overhead Electrical/Telecom Line
- Sanitary Sewer Line
- Groundwater Elevation Contour (1-foot Interval)
- Bollard Pipe
- Effluent Pipe Clean Out
- Fire Hydrant
- Sewer Manhole
- Utility Pole

0 40 80

SCALE IN FEET

NOTES:
1. All locations are approximate.
2. VEP wells VEP-1 through VEP-4 were taken offline in 2016.
3. VEP wells VEP-5 and VEP-6 were taken offline in 2018.
4. VEP well VEP-6 brought online in 2020.
5. VEP wells VEP-1 through VEP-3 brought back online in 2022.

PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103
FEETWORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK
2022 - 2023 PRR

Groundwater Contour Map
October 10, 2022

ARCADIS

FIGURE
6A

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COM\APP\GIS\PROCESSING_ENV\INGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/27/2023



LEGEND

- Injection Well
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PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103
FEETWORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

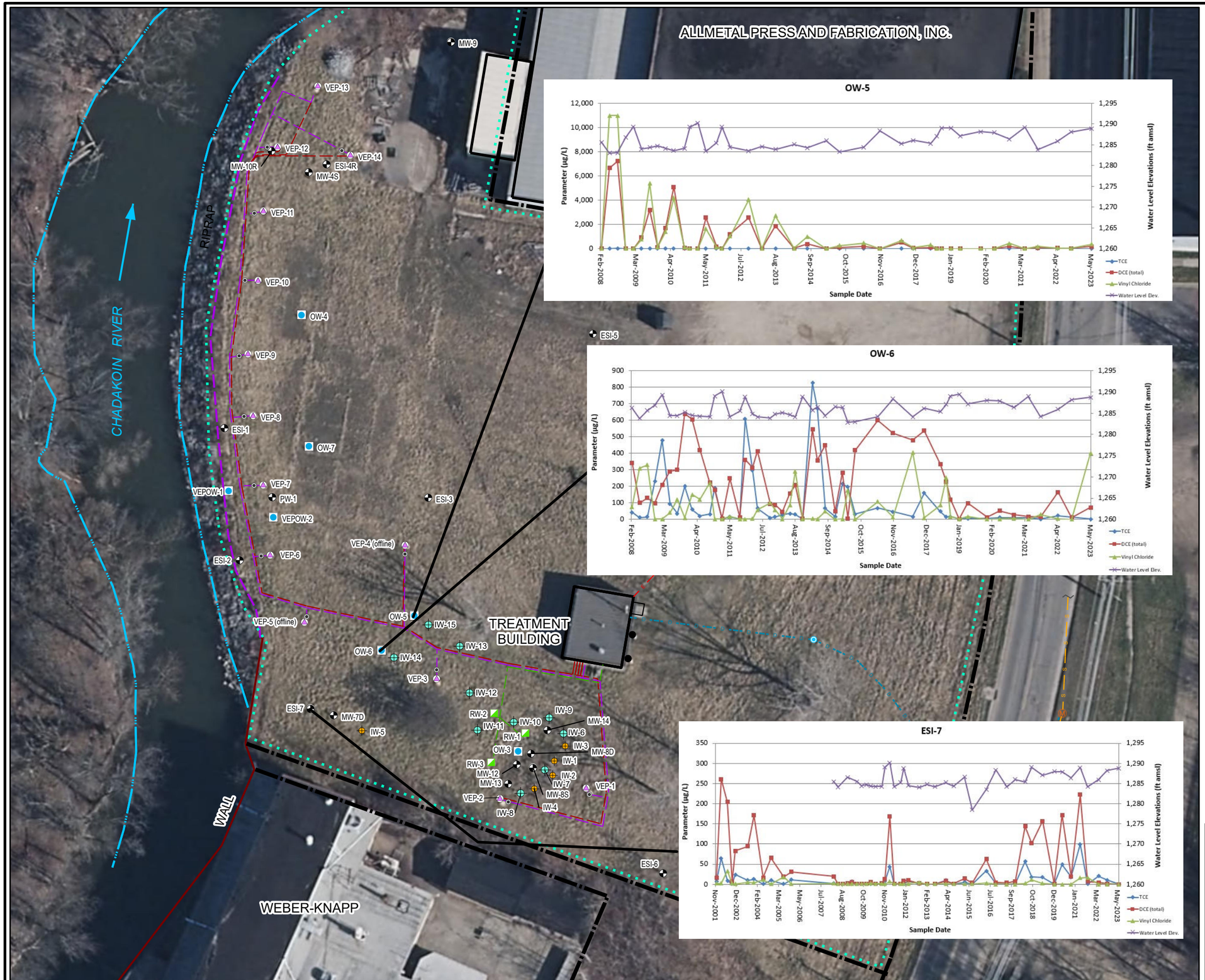
2022 - 2023 PRR

Groundwater Contour Map
February 6, 2023

ARCADIS

FIGURE
6B

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COM\APP\GIS\PROCESSING_ENV\INGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/28/2023



LEGEND

- Injection Well
- Monitoring Well
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0 40 80

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PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103 FEET

WORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

2022 - 2023 PRR

Summary of Groundwater Monitoring Analytical Results

ARCADIS

FIGURE
7A

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COMAPP\GIS\PROCESSING_ENVINGERSOLRANDIDC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/28/2023

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COMAPP\GIS\PROCESSING_ENV\NGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 8/16/2023

ALLMETAL PRESS AND FABRICATION, INC.

CHADAKOIN RIVER

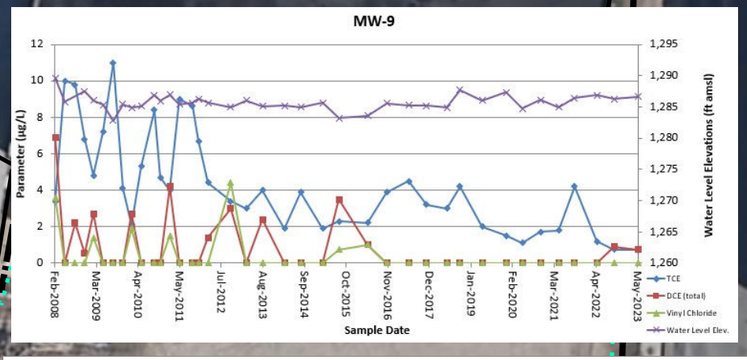
RIPRAP

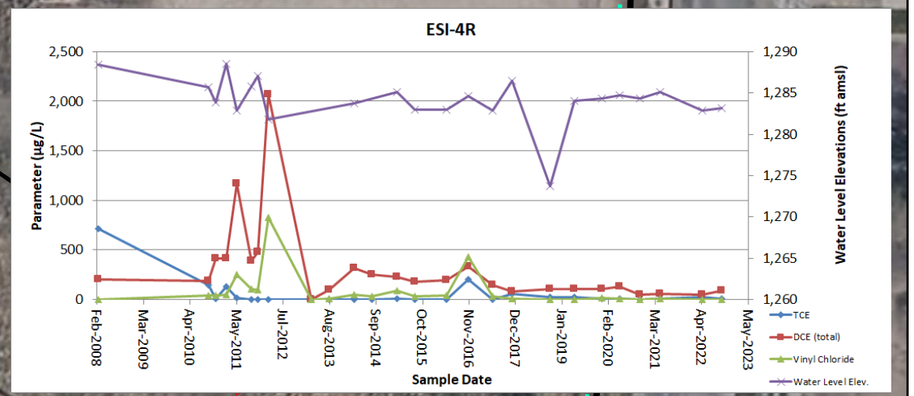
WALL

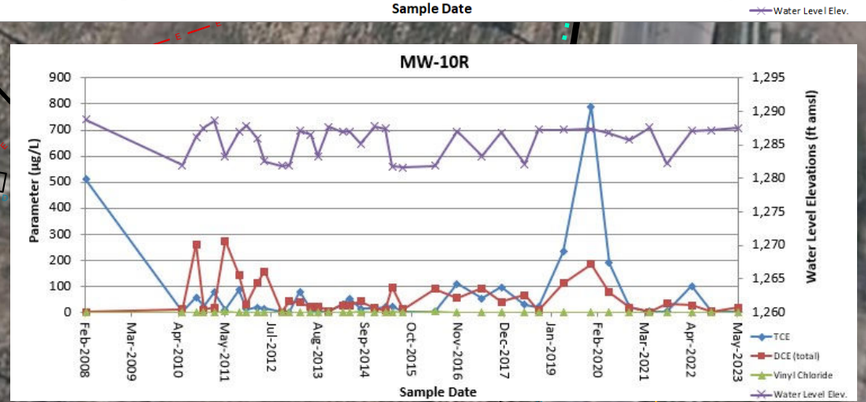
WEBER-KNAPP

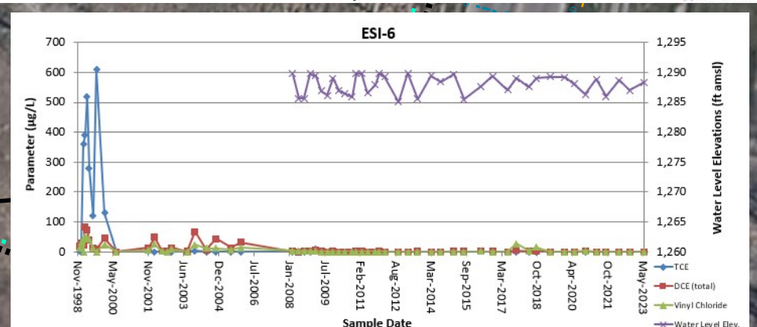
TREATMENT BUILDING

MW-9
VEP-13
VEP-12
VEP-14
MW-10R
ESI-4R
MW-4S
VEP-11
VEP-10
OW-4
ESI-5
VEP-9
VEP-8
ESI-1
OW-7
VEP-7
VEPOW-1
PW-1
ESI-3
VEPOW-2
VEP-4 (offline)
ESI-2
VEP-6
VEP-5 (offline)
OW-5
IW-15
OW-6
IW-14
IW-13
VEP-3
IW-12
ESI-7
MW-7D
IW-5
RW-2
IW-11
IW-10
IW-9
MW-14
RW-1
IW-6
IW-3
MW-8D
OW-3
RW-3
IW-1
MW-12
IW-2
MW-13
IW-7
VEP-1
MW-8S
VEP-2
IW-4
IW-8
ESI-6









LEGEND

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- Utility Pole

0 40 80

SCALE IN FEET

NOTES:
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PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103
FEETWORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

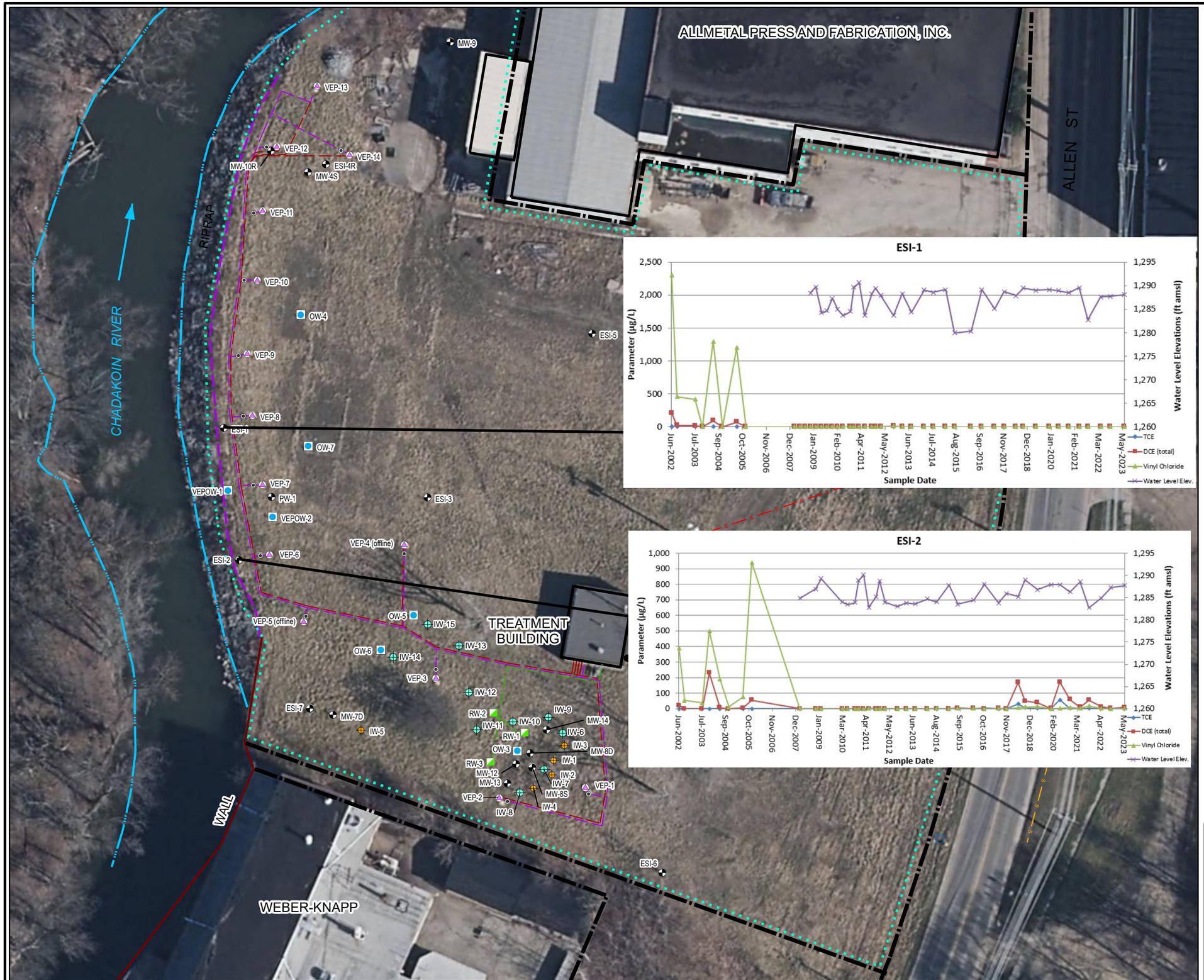
TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

2022 - 2023 PRR

Summary of Groundwater Monitoring Analytical Results

ARCADIS

FIGURE
7B



LEGEND

- Injection Well
- Monitoring Well
- Recovery Well (passive)
- Injection Well (inactive)
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PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103
FEETWORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

2022 - 2023 PRR

Summary of Groundwater Monitoring Analytical Results

ARCADIS

FIGURE
7C

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COM\APP\GIS\PROCESSING_ENV\NGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/28/2023

TM:(T.CARIGNAN) BY: LJOHNS
PROJECT: DC ROLLFORMS PATH: \\ARCADIS-US.COMAPP\GIS\PROCESSING_ENV\NGERSOLRAND\DC ROLLFORMS\MAPDOCS\2023\DCR GWMON F1-7B\DCR GWMON F1-7B.APRX SAVED: 6/28/2023

ALLMETAL PRESS AND FABRICATION, INC.

ALLEN ST

CHADAKOIN RIVER

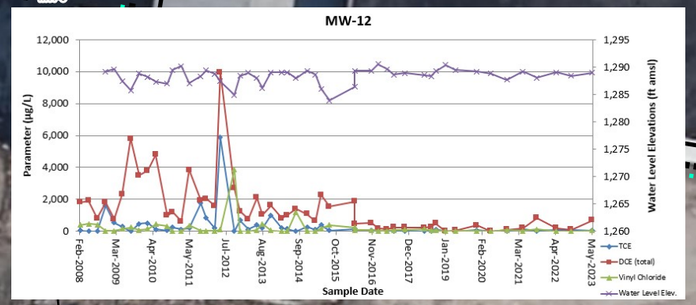
RIPRAP

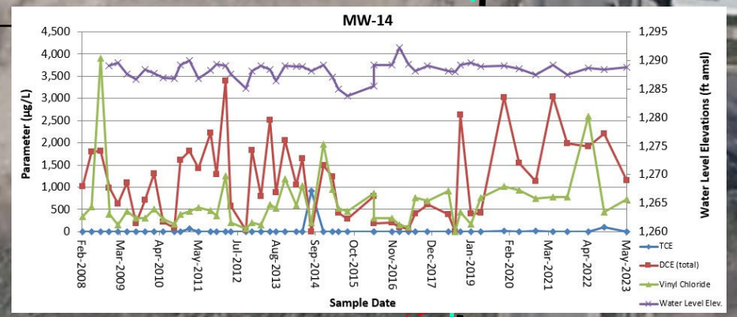
WALL

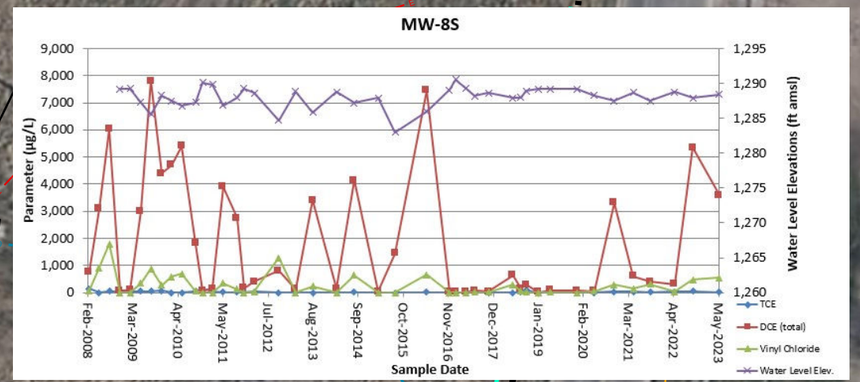
WEBER-KNAPP

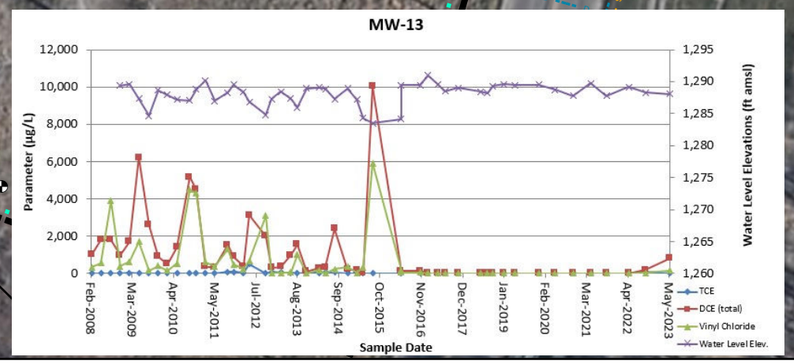
TREATMENT BUILDING

MW-9
VEP-13
VEP-12
VEP-14
MW-10R
ESI-4R
MW-4S
VEP-11
VEP-10
OW-4
VEP-9
VEP-8
ESI-1
OW-7
VEP-7
VEPOW-1
PW-1
VEPOW-2
ESI-3
VEP-4 (offline)
ESI-2
VEP-6
VEP-5 (offline)
OW-5
IW-15
IW-13
OW-6
IW-14
VEP-3
IW-12
ESI-7
MW-7D
IW-5
RW-2
IW-11
IW-10
IW-9
MW-14
RW-1
IW-6
OW-3
IW-3
MW-8D
RW-3
MW-12
MW-13
IW-1
IW-2
IW-7
MW-8S
VEP-1
VEP-2
IW-8
IW-4
ESI-5
ESI-6









LEGEND

- Injection Well
- Monitoring Well
- Recovery Well (passive)
- Injection Well (inactive)
- Observation Well
- Vacuum Enhanced Pumping (VEP) Well
- VEP Valve Box
- Property Line
- Limits of Class 4 Inactive Hazardous Waste Site
- Interlocking Sheet Pile/Hydraulic Barrier Wall
- High Water Mark
- Bundled Process Line
- Discharge Line
- Recovery Well Piping
- Vacuum Line
- Overhead Electrical/Telecom Line
- Sanitary Sewer Line
- Bollard Pipe
- Effluent Pipe Clean Out
- Fire Hydrant
- Sewer Manhole
- Utility Pole

0 40 80

SCALE IN FEET

NOTES:
1. All locations are approximate.
2. VEP wells VEP-1 through VEP-4 were taken offline in 2016.
3. VEP wells VEP-5 and VEP-6 were taken offline in 2018.
4. VEP well VEP-6 brought online in 2020.
5. VEP wells VEP-1 through VEP-3 brought back online in 2022.

PROJECTION: NAD 1983 STATEPLANE NEW YORK WEST FIPS 3103
FEETWORLD IMAGERY: NEW YORK STATE, MAXAR, MICROSOFT

TRANE TECHNOLOGIES - D.C. ROLLFORMS SITE
NYSDEC SITE NO. 907019, JAMESTOWN, NEW YORK

2022 - 2023 PRR

Summary of Groundwater Monitoring Analytical Results

ARCADIS

FIGURE
7D

Appendix A

Jamestown Industrial Wastewater Permit

JAMESTOWN BOARD OF PUBLIC UTILITIES

PO Box 700
Jamestown, NY 14702-0700
Phone (716) 661-1653

ELECTRIC
DISTRICT HEAT
WATER
WASTEWATER
SOLID WASTE

November 3, 2022

Michael Goldstein
Ingersoll Rand
800 Beaty St., Building E
Davidson, NC 28036

Dear Mr. Goldstein:

Please find enclosed a copy of your firm's renewed Industrial Waste Discharge Permit governing the wastewater discharge (s) from your facility to the Jamestown Publicly Owned Treatment Works (POTW). The effective dates of the permit are shown on the first page of the permit. This permit is subject to change should there be any additions and/or deletions made to the industrial pretreatment programs as established by the Environmental Protection Agency.

Please review your permit carefully as it may include changes from your previous permit. Should you have any questions or comments concerning your permit, please do not hesitate to contact this office.

Should you have any questions, please do not hesitate to contact this office.

Sincerely,

Keith Vanstrom
WWTP Chief Operator

CITY OF JAMESTOWN
BOARD OF PUBLIC UTILITIES
INDUSTRIAL WASTEWATER DISCHARGE PERMIT

Permit Number: 037 **SIC:** Groundwater Remediation

Date Issued: September 4, 2022 **Expiration Date:** September 3, 2027

Revision Date: N/A

Ingersoll Rand, as a Significant Industrial User (SIU) of the City of Jamestown Publicly Owned Treatment Works (POTW), is hereby issued an industrial wastewater discharge permit for it's ground water remediation site at 583 Allen St., pursuant to Chapter 24A of the Jamestown City Code (Jamestown Sewer Use Ordinance) and also with any applicable provisions of federal or state law(s) or regulations(s). Said permit shall be effective for a period of five (5) years from the date of issuance hereof.

This permit is granted in accordance with the application filed on August 22, 2007 and notice of process modifications submitted on N/A and in conformity with the plans, specifications, semi-annual self-monitoring reports, and other data submitted to the City in support of the above application, all of which are filed with and considered as part of this permit, together with the following named conditions and requirements:

Effective this 4th day of September ,20 22
To expire the 3rd day of September ,20 27

WWTP Chief Operator - Board of Public Utilities

RIGHT OF ENTRY

The permittee shall allow duly authorized employees or representatives of the City to enter the permittee's premises for the purpose of inspection, observation, measurement, sampling, and testing in accordance with Article VIII of the Jamestown Sewer Use Ordinance.

SAMPLING MANHOLE REQUIREMENTS

If, in the opinion of the General Manager, there are not adequate facilities for the acquisition of representative samples and accurate flow measurements, the General Manager may require that a sampling manhole with flow measuring device be installed by the permittee at his expense. This sampling manhole shall be approved by this office before installation. The permittee shall be responsible for all maintenance of the sampling manhole and calibration of the monitoring equipment.

BOARD OF PUBLIC UTILITES MONITORING

Compliance with the Jamestown Sewer Use Ordinance will be monitored via wastewater discharge monitoring. The City of Jamestown will monitor each SIU a minimum of one time per year. Results will be transmitted to each SIU.

SELF MONITORING

Each SIU must conduct self-monitoring and report results to the City in accordance with applicable federal and local regulations. **Self Monitoring reports are due the 28TH of each month for the operations of the previous month**. Self-monitoring for assessing continued compliance shall be conducted and reported in accordance with federal regulations (40 CFR 403.12(e)). All permit limits set forth in this permit are enforceable effluent limitations.

MONITORING LOCATION #1
NEW SOURCE

PARAMETER	SAMPLE	LOCAL	FEDERAL	FEDERAL
	Monthly	LIMIT	MAX	30 DAY AVE
		MG/L	MG/L	MG/L
FLOW	Report	-	-	-
PH (4 grabs)	X	5.5-10.0	-	-
Oil and Grease (4 Grabs)	X	100	-	-
TSS (comp)	X	350	-	-
Volatile Organics (comp)	X	2.13	-	-
PCB's (comp)	X	Non Detect	-	-

Notes :

1. Samples should be taken as **composites** of at least 4 grab samples collected during a typical production day except for pH and Oil & Grease. Four separate samples must be taken and **individually analyzed for pH and Oil & Grease.**
2. All analysis shall be preformed by a New York State Department of Health Certified Environmental Laboratory.
3. All analysis shall be performed in accordance with the latest edition of the following references:
   a. Standard Methods for the Examination of Water and Wastewater
   b. Method for Chemical Analysis of Water and Wastes, USEPA, technology Transfer, 1983

PROHIBITED DISCHARGES

The following should not be introduced into the City Sewer system:

(1) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21.
(2) Pollutants which will cause corrosive structural damage to the POTW, but in no case Discharges with pH lower than **5.5** or greater than **10.0**;
(3) Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;
(4) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW.
(5) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40 deg.C (104 deg.F) unless the Approval Authority, upon request of the POTW, approves alternate temperature limits.
(6) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
(7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
(8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.
(9) The discharge of concentrated solutions without pretreatment is strictly prohibited. Any request to discharge such wastes must be submitted to this office and is subject to the approval of the General Manager on a case by case basis.
10) Any water or waste containing fats, wax, grease, oils, or oil products, whether emulsified or not, in excess of **100 mg/l**.

HAZARDOUS WASTE DISCHARGE NOTIFICATION

For discharges of listed and characteristic hazardous wastes which are not already reported in periodic self-monitoring reports and which exceed 15 kilograms per month, the regulations require that all industrial users notify USEPA, NYSDEC, and the City of Jamestown as to the constituents of these wastes and the anticipated discharge volume of such wastes on both a monthly and an annual basis.

CHANGE IN WASTEWATER DISCHARGE

All discharges authorized herein shall comply with the terms and conditions of this permit. Any industrial facility expansions, production increases, or process modifications which result in new, different, or increased discharges of pollutants must be reported by submission of a new industrial waste disposal questionnaire. This permit may be modified to specify and limit any pollutants not previously limited. The discharge of any pollutant more frequently than or at a level in excess of that specified and authorized by this permit shall constitute a violation of the terms and conditions of this permit.

RECORDKEEPING

The permittee shall retain all records of monitoring activities and results (whether or not required by this permit) for a minimum of 3 years. These records shall be made available for inspection and copying to duly authorized employees or representatives of the City. This period of retention shall be extended during any unresolved litigation.

PERMIT MODIFICATIONS

After sufficient notice to the permittee, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

(a) Violation of any terms or conditions of this permit.
(b) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
(c) If an effluent standard is established under any state or federal law for a pollutant which is present in the discharge and such standard or prohibition s more stringent that any limitation for such pollutant in this permit.

PERMIT TRANSFER

Sewer Use Permits are issued to a specific User for a specific operation. A wastewater discharge permit shall not be reassigned or, transferred, or sold to a new owner, new User, different premise, or a new or changed operation without the approval of the City. Any succeeding Owner or User shall also comply with the terms and conditions of the existing permit.

NOTICE OF NON-COMPLIANCE

The permittee shall notify the Chief Operator of the Jamestown Wastewater Treatment Plant **immediately,** by telephone (716-661-1653), so that the plant operator can take the necessary steps to prevent damage to the wastewater treatment process and equipment in the event the permittee:

(1) Does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit.
(2) Discharges or may discharge any wastewater which may cause a slug loading to the Jamestown Wastewater Treatment Plant. This includes wastewater which may cause pass through or interference with wastewater treatment plant operations.
(3) Discharges or may discharge any material or wastewater which is prohibited from discharge as described in the City of Jamestown Local Sewer Use Ordinance or this permit.

These non-complying discharges or possible discharges may be due to:

Breakdown of industrial wastewater pretreatment equipment;
Accidents caused by human error or negligence; or
Other causes, such as acts of nature.

The General Manager shall be notified by telephone within 24 hours, and in writing within five (5) days and said notification shall include the following pertinent information:

(1) A description of the non-complying discharge;
(2) Cause of non-compliance;
(3) Anticipated time the condition of non-compliance is expected to continue, or if such condition has been corrected, the duration of the period of non-compliance;
(4) Steps taken by the permittee to reduce and eliminate the non-complying discharge; and
(5) Steps to be taken by the permittee to prevent reoccurrence of the condition of non-compliance.

The permittee must also repeat sampling for all parameters exceeding discharge limitations and submit the results of the repeat analysis within thirty (30) days of the violation(s).

Nothing in this permit shall be construed to relieve the permittee from the penalties for non-compliance of this permit for any reason subject to Article (IX) (Penalties) of the Jamestown Sewer Ordinance.

SCHEDULE OF COMPLIANCE

The permittee shall comply with the following schedule if the present discharge does not conform to the effluent limitations described within this permit:

a. By _____ the permittee shall have a registered Professional Engineer contact this office.
b. By _____ the permittee shall complete an engineering report and submit it to this office.
c. By_____ the permittee shall complete final plans and specifications for pretreatment facilities and submit them to this office for review and approval.
d. By _____ the permittee shall start construction of its approved pretreatment facilities.
e. By _____ the permittee shall complete construction of the pretreatment facilities.
f. By _____ the permittee shall attain operational levels required to achieve the effluent limits specified within this permit.

CIVIL AND CRIMINAL PENALTIES

A permittee found violating applicable local, state or federal regulations may be subject to administrative penalties, civil action, and/or criminal prosecution. If administrative penalties are warranted, a fine in an amount not exceeding $1000.00 per day per violation may be assessed. If criminal penalties are assessed, a fine in an amount not exceeding $1,000.00 per violation per day may be assessed, imprisonment for not more than 6 months, or both. Any person violating applicable local, state or federal regulations that results in expense, loss or damage to the City and its property shall be liable for all costs.

Appendix B

Site Inspection Forms

Site Cover and Riverbank Inspection Checklist

DC Rollforms Site, Jamestown, New York

Section 1: General Information

Figure Reference: Site Plan and System Layout	Weather: Clear, 75F
Date / Time Monitoring Performed: 7/19/2022, 9:30	

Cover material(s)	X Soil	X Vegetated Topsoil	X Rip Rap Stone

Section II. Observations

Observation	Yes	No	N/A	Provide Comments As Necessary (use additional space below if needed)
Erosion and Sedimentation Controls				
Are erosion and sedimentation (E&S) controls present? If yes:	X			
Are they functioning as intended?	X			
Are they still required (i.e., has a healthy stand of vegetation been established)?		X		
Vegetated Topsoil Isolation Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Is vegetation effectively covering the intended area? Provide percent growth for seeded areas.	X			
Is there any sign of distressed vegetation?		X		
Do any areas require seeding?		X		
Photograph Numbers (if applicable)	See attached photolog			
Rip Rap Stone Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Photograph Numbers (if applicable)	See attached photolog			
Wing Wall Deflector				
Are there areas of scour?		X		
Is 30" dia. Rip Rap in place?	X			
Photograph Numbers (if applicable)				
Riverbank Plantings				
Are the live stake cuttings thriving?	X			
Photograph Numbers				
Chadakoin River (USGS)				
Discharge, Cubic Feet Per Second?	54			
Gage Height, Feet?	-0.08			

Other Observations: Describe any other relevant observations noted during this monitoring period.

Performed by: Adam Svensson	Signature: Adam Svensson	Date: 7/19/2022

Site Cover and Riverbank Inspection Checklist

DC Rollforms Site, Jamestown, New York

Section I: General Information

Figure Reference: NYSDEC 907019

Weather: 36°F Sunny

Date / Time Monitoring Performed: 12/15/22 1030

Cover material(s): ☐ Soil ☐ Vegetated Topsoil ☒ Rip Rap Stone

Section II. Observations

Observation	Yes	No	N/A	Provide Comments As Necessary (use additional space below if needed)
Erosion and Sedimentation Controls				
Are erosion and sedimentation (E&S) controls present? If yes:	X			
Are they functioning as intended?	X			
Are they still required (i.e., has a healthy stand of vegetation been established)?	X			
Vegetated Topsoil Isolation Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Is vegetation effectively covering the intended area? Provide percent growth for seeded areas.			X	
Is there any sign of distressed vegetation?		X		
Do any areas require seeding?			X	
Photograph Numbers (if applicable)				
Rip Rap Stone Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Photograph Numbers (if applicable)				
Wing Wall Deflector				
Are there areas of scour?		X		
Is 30" dia. Rip Rap in place?	X			
Photograph Numbers (if applicable)				
Riverbank Plantings				
Are the live stake cuttings thriving?	X			
Photograph Numbers				
Chadakoin River (USGS)				
Discharge, Cubic Feet Per Second?	1170			
Gage Height, Feet?	3.31			

Other Observations: Describe any other relevant observations noted during this monitoring period.

Performed by: Adam Svensson | Signature: [signature] | Date: 12/15/22

Site Cover and Riverbank Inspection Checklist

DC Rollforms Site, Jamestown, New York

Section 1: General Information

Figure Reference:	Weather:
Date / Time Monitoring Performed: 2/16/23 / 1630	38°F cloudy

Cover material(s) ☐ Soil ☐ Vegetated Topsoil ☒ Rip Rap Stone

Section II. Observations

Observation	Yes	No	N/A	Provide Comments As Necessary (use additional space below if needed)
Erosion and Sedimentation Controls				
Are erosion and sedimentation (E&S) controls present? If yes:	X			
Are they functioning as intended?	X			
Are they still required (i.e., has a healthy stand of vegetation been established)?	X			
Vegetated Topsoil Isolation Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Is vegetation effectively covering the intended area? Provide percent growth for seeded areas.	X			
Is there any sign of distressed vegetation?		X		
Do any areas require seeding?		X		
Photograph Numbers (if applicable)				
Rip Rap Stone Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Photograph Numbers (if applicable)				
Wing Wall Deflector				
Are there areas of scour?		X		
Is 30" dia. Rip Rap in place?	X			
Photograph Numbers (if applicable)				
Riverbank Plantings				
Are the live stake cuttings thriving?	X			
Photograph Numbers				
Chadakoin River (USGS)				
Discharge, Cubic Feet Per Second?	595			
Gage Height, Feet?	1.96			

Other Observations: Describe any other relevant observations noted during this monitoring period.

Performed by: Adam Svensson | Signature: [signature] | Date: 2/16/23

Site Cover and Riverbank Inspection Checklist

DC Rollforms Site, Jamestown, New York

Section 1: General Information

Figure Reference: NYSDEC 907019

Date / Time Monitoring Performed: 6/15/23 / 1200

Weather: 65°F Sunny

Cover material(s): □ Soil; X Vegetated Topsoil; X Rip Rap Stone

Section II. Observations

Observation	Yes	No	N/A	Provide Comments As Necessary (use additional space below if needed)
Erosion and Sedimentation Controls				
Are erosion and sedimentation (E&S) controls present? If yes:	X			
Are they functioning as intended?	X			
Are they still required (i.e., has a healthy stand of vegetation been established)?	X			
Vegetated Topsoil Isolation Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Is vegetation effectively covering the intended area? Provide percent growth for seeded areas.	X			
Is there any sign of distressed vegetation?		X		
Do any areas require seeding?		X		
Photograph Numbers (if applicable)				
Rip Rap Stone Cover				
Are there areas of scour?		X		
Is any geotextile fabric exposed?		X		
Photograph Numbers (if applicable)				
Wing Wall Deflector				
Are there areas of scour?		X		
Is 30" dia. Rip Rap in place?	X			
Photograph Numbers (if applicable)				
Riverbank Plantings				
Are the live stake cuttings thriving?	X			
Photograph Numbers				
Chadakoin River (USGS)				
Discharge, Cubic Feet Per Second?	44.5			
Gage Height, Feet?	-0.27			

Other Observations: Describe any other relevant observations noted during this monitoring period.

Performed by: Adam Svensson | Signature: Adam Svensson | Date: 6/15/23

Appendix C

Quarterly Treatment System Influent Laboratory Analytical Reports

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

e-Hardcopy 2.0
Automated Report



Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30115866.01

SGS Job Number: JD50227

Sampling Date: 08/15/22

Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; jasmine.mullins@arcadis.com;
ATTN: Todd Carignan

Total number of pages in report: **16**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, 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

Sections: 1 2 3 4

Table of Contents

Section 1: Sample Summary **3**
Section 2: Summary of Hits **4**
Section 3: Sample Results **5**
3.1: JD50227-1: INFLUENT-001 6
3.2: JD50227-2: TRIP BLANK 10
Section 4: Misc. Forms **12**
4.1: Chain of Custody 13
4.2: Sample Tracking Chronicle 15
4.3: Internal Chain of Custody 16

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD50227

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND	= Not detected above the MDL						
JD50227-1	08/15/22	11:45	AJS	08/17/22	AQ	Influent	INFLUENT-001
JD50227-2	08/15/22	11:45		08/17/22	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JD50227
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 08/15/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD50227-1	**INFLUENT-001**					
cis-1,2-Dichloroethene		17.8	1.0	0.51	ug/l	EPA 624.1
1,2-Dichloroethene (total)		17.8	1.0	0.46	ug/l	EPA 624.1
Trichloroethene		0.88 J	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride		11.3	1.0	0.79	ug/l	EPA 624.1
TPH-DRO (C10-C28)		0.926	0.083	0.053	mg/l	SW846 8015D
JD50227-2	**TRIP BLANK**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: INFLUENT-001
Lab Sample ID: JD50227-1
Matrix: AQ - Influent
Method: EPA 624.1
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 08/15/22
Date Received: 08/17/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D120450.D	1	08/20/22 21:22	TS	n/a	n/a	V4D5349
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	17.8	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD50227-1	**Date Sampled:**	08/15/22
Matrix:	AQ - Influent	**Date Received:**	08/17/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.88	1.0	0.43	ug/l	J
75-01-4	Vinyl chloride	11.3	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	101%		80-128%
2037-26-5	Toluene-D8 (SUR)	100%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	98%		79-117%
1868-53-7	Dibromofluoromethane (S)	105%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD50227-1	**Date Sampled:**	08/15/22
Matrix:	AQ - Influent	**Date Received:**	08/17/22
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2487773.D	1	08/28/22 16:16	TL	08/26/22 09:10	OP41372	GXX7902
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	55%		10-156%
877-09-8	Tetrachloro-m-xylene	51%		10-156%
2051-24-3	Decachlorobiphenyl	20%		10-143%
2051-24-3	Decachlorobiphenyl	18%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD50227-1	**Date Sampled:**	08/15/22
Matrix:	AQ - Influent	**Date Received:**	08/17/22
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ105341.D	1	08/23/22 05:06	CP	08/22/22 11:50	OP41367	GZZ3889
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.926	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		13-117%
438-22-2	5a-Androstane	19%		10-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD50227-2	**Date Sampled:**	08/15/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/17/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D120443.D	1	08/20/22 18:03	TS	n/a	n/a	V4D5349
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD50227-2	**Date Sampled:**	08/15/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	08/17/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%		80-128%
2037-26-5	Toluene-D8 (SUR)	100%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	99%		79-117%
1868-53-7	Dibromofluoromethane (S)	106%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

MM-072522-99

Page 1 of 1

EHSA-QAC-0023-04-FORM-Standard COC

FEDEX Tracking # 5272 0644 1450

Bottle Order Control #

SGS Quote #

SGS Job # JD50227

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City State Zip: Clifton Park NY
Project Contact E-mail: Todd Carignan
Phone #: 646-248-4208
Sampler(s) Name(s) Phone #: A. Svensson

Project Information

Project Name: IR DC Roilforms
Street: 583 Allen St
City State: Jamestown NY
Project #: 30115366.01
Client Purchase Order #:
Project Manager: Todd Carignan

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

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	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Number of preserved Bottles HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only) VOCs USEPA 6241	TPH DRO USEPA 8015B	PCBs USEPA 608	LAB USE ONLY
1	Influent-001	•	8/15/22	1145	AJS	G	N	GW	7	7								3	2	2	E98
2	Trip Blank		8/8/22	0700	—	G	N	TB	2	2								2	0	0	V372
	Temp Blank		—	—	—	G	N	TB	1					1				0	0	0	

Ref: MM-072522-99
Dep:
Date: 08Aug22
Wgt: 20.00 LBS
DV: 0.00

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT
TRCK: 5272 0644 1450

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- 10 Business Days
- 5 Business Days
- 3 Business Days*
- 2 Business Days*
- 1 Business Day*
- Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- NJ Reduced (Level 3)
- Full Tier I (Level 4)
- Commercial "C"
- NJ DKQP
- NYASP Category A
- NYASP Category B
- MA MCP Criteria
- CT RCP Criteria
- State Forms
- EDD Format
- DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

August Q3-2022
(1) Cooler
Field pH: 8.2
• 2x300 mL DRO

Initial Assessment: JB
Label Verification:

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

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

	Relinquished by:	Date / Time:	Received By:	Relinquished By	Date / Time:	Received By:
1	Adam Svensson	8/16/22/1400	1 FedEx	2 FedEx	08/17/22 1025	2 Jaime Lucas
3			3	4		4
5			5	Custody Seal #	Intact / Not intact / Absent	Therm ID: See Sample Receipt Summary — On Ice ☐ — Cooler Temp °C: 1.8

JD50227: Chain of Custody
Page 1 of 2

SGS Sample Receipt Summary

Job Number: JD50227 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, 583 ALLEN STREET, JA

Date / Time Received: 8/17/2022 10:30:00 AM **Delivery Method:** Fed Ex **Airbill #'s:** 5272 0644 1450

Cooler Temps (Raw Measured) °C: Cooler 1: (1.8);

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

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD50227: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Arcadis

Job No: JD50227

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD50227-1	Collected: 15-AUG-22 11:45 By: AJS		Received: 17-AUG-22 By: JR			
INFLUENT-001						
JD50227-1	EPA 624.1	20-AUG-22 21:22	TS			V624TCL
JD50227-1	SW846 8015D	23-AUG-22 05:06	CP	22-AUG-22	DW	B8015DRO
JD50227-1	EPA 608.3	28-AUG-22 16:16	TL	26-AUG-22	TG	P608PCBLL
JD50227-2	Collected: 15-AUG-22 11:45 By:		Received: 17-AUG-22 By: JR			
TRIP BLANK						
JD50227-2	EPA 624.1	20-AUG-22 18:03	TS			V624TCL

SGS Internal Chain of Custody

Job Number: JD50227
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 08/17/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD50227-1.1	Rania Salters	Secured Storage	08/18/22 15:35	Return to Storage
JD50227-1.2	Rania Salters	Secured Storage	08/18/22 15:35	Return to Storage
JD50227-1.2	Christian King	Secured Staging Area	08/25/22 23:31	Return to Storage
stage				
JD50227-1.2	Secured Staging Area	Taylor Gorman	08/26/22 05:47	Retrieve from Storage
JD50227-1.2	Taylor Gorman		08/27/22 17:10	Depleted
JD50227-1.2.1	Taylor Gorman	Organics Prep	08/26/22 06:11	Extract from JD50227-1.2
JD50227-1.2.1	Organics Prep	Taylor Gorman	08/27/22 17:24	Extract from JD50227-1.2
JD50227-1.2.1	Taylor Gorman	Extract Storage	08/27/22 17:24	Return to Storage
JD50227-1.3	Rania Salters	Secured Storage	08/18/22 15:35	Return to Storage
JD50227-1.4	Rania Salters	Secured Storage	08/18/22 15:35	Return to Storage
JD50227-1.4	Christian King	Secured Staging Area	08/19/22 22:25	Return to Storage
stage				
JD50227-1.4	Secured Staging Area	Edward Rue	08/22/22 07:44	Retrieve from Storage
JD50227-1.4	Edward Rue		08/22/22 15:50	Depleted
JD50227-1.4.1	Edward Rue	Organics Prep	08/22/22 11:00	Extract from JD50227-1.4
JD50227-1.5	Secured Storage	Taylor Sauter	08/20/22 11:45	Retrieve from Storage
JD50227-1.5	Taylor Sauter	GCMS4D	08/20/22 11:45	Load on Instrument
JD50227-1.5	GCMS4D	Edward Durner	08/22/22 08:07	Unload from Instrument
JD50227-1.5	Edward Durner	Secured Storage	08/22/22 08:08	Return to Storage
JD50227-2.1	Secured Storage	Taylor Sauter	08/20/22 11:45	Retrieve from Storage
JD50227-2.1	Taylor Sauter	GCMS4D	08/20/22 11:45	Load on Instrument
JD50227-2.1	GCMS4D	Edward Durner	08/22/22 08:07	Unload from Instrument
JD50227-2.1	Edward Durner	Secured Storage	08/22/22 08:08	Return to Storage

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30115866

SGS Job Number: JD53489

Sampling Date: 10/10/22



Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; jasmine.mullins@arcadis.com;
ATTN: Todd Carignan

Total number of pages in report: **763**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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EHS.US.CustomerCare@sgs.com

Table of Contents

Section 1: Sample Summary **4**
Section 2: Case Narrative/Conformance Summary **5**
Section 3: Summary of Hits **7**
Section 4: Sample Results **9**
4.1: JD53489-1: INFLUENT 10
4.2: JD53489-2: PRE-FILTER 16
4.3: JD53489-3: POST-FILTER 22
4.4: JD53489-4: TRIP BLANK 28
Section 5: Misc. Forms **30**
5.1: Chain of Custody 31
5.2: Sample Tracking Chronicle 33
5.3: Internal Chain of Custody 35
Section 6: MS Volatiles - QC Data Summaries **40**
6.1: Method Blank Summary 41
6.2: Blank Spike Summary 43
6.3: Matrix Spike/Matrix Spike Duplicate Summary 45
6.4: Instrument Performance Checks (BFB) 47
6.5: Internal Standard Area Summaries 49
6.6: Surrogate Recovery Summaries 50
6.7: Initial and Continuing Calibration Summaries 51
6.8: Run Sequence Reports 65
Section 7: MS Volatiles - Raw Data **67**
7.1: Samples 68
7.2: Method Blanks 84
7.3: Blank Spikes 87
7.4: Matrix Spike/Matrix Spike Duplicates 93
7.5: Instrument Performance Checks (BFB) 104
7.6: Initial and Continuing Calibrations 108
7.7: Instrument Run Logs 155
Section 8: GC/LC Semi-volatiles - QC Data Summaries **159**
8.1: Method Blank Summary 160
8.2: Blank Spike/Blank Spike Duplicate Summary 162
8.3: GC Identification Summaries (Hits) 164
8.4: Surrogate Recovery Summaries 166
8.5: GC Surrogate Retention Time Summaries 168
8.6: Initial and Continuing Calibration Summaries 170
8.7: Run Sequence Reports 199
Section 9: GC/LC Semi-volatiles - Raw Data **204**
9.1: Samples 205
9.2: Method Blanks 251
9.3: Blank Spike/Blank Spike Duplicates 265
9.4: Retention Time Markers 297

Table of Contents

9.5: Initial and Continuing Calibrations 309
9.6: Instrument Run Logs 523
9.7: Prep Logs 531
Section 10: Metals Analysis - QC Data Summaries 533
10.1: Inst QC MA53162: Hg 534
10.2: Inst QC MA53166: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag, Na,Tl,V,Zn 545
10.3: Prep QC MP35732: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag, Na,Tl,V,Zn 587
10.4: Prep QC MP35787: Hg 597
10.5: IDL and Linear Range Summaries 601
Section 11: Metals Analysis - Raw Data 605
11.1: Raw Data MA53162 606
11.2: Raw Data MA53166 609
11.3: Prep Logs 688
Section 12: General Chemistry - QC Data Summaries 696
12.1: Method Blank and Spike Results Summary 697
12.2: Duplicate Results Summary 698
12.3: Matrix Spike Results Summary 699
12.4: Matrix Spike Duplicate Results Summary 700
12.5: Inst QC GN34551: Total Organic Carbon 701
Section 13: General Chemistry - Raw Data 705
13.1: Raw Data GN34397: Solids, Total Suspended 706
13.2: Raw Data GN34458: HEM Oil and Grease 709
13.3: Raw Data GN34551: Total Organic Carbon 713

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD53489

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies:							
Organics ND = Not detected above the MDL							
JD53489-1	10/10/22	11:15	AJS	10/12/22	AQ	Influent	INFLUENT
JD53489-2	10/10/22	12:20	AJS	10/12/22	AQ	Ground Water	PRE-FILTER
JD53489-3	10/10/22	13:00	AJS	10/12/22	AQ	Ground Water	POST-FILTER
JD53489-4	10/10/22	13:00		10/12/22	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	Arcadis	**Job No:**	JD53489
Site:	DC Rollforms, 583 Allen Street, Jamestown, NY	**Report Date**	10/20/2022 2:05:23 P

On 10/12/2022, 3 Sample(s), 1 Trip Blank(s) and 0 Field Blank(s) were received at SGS North America Inc. at a maximum corrected temperature of 1.7 C. Samples were intact and chemically preserved, unless noted below. A SGS North America Inc. Job Number of JD53489 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.

Compounds qualified as out of range in the continuing calibration summary report are acceptable as per method requirements when there is a high bias but the sample result is non-detect.

MS Volatiles By Method EPA 624.1

Matrix: AQ **Batch ID:** V4D5439

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53653-2MS, JD53653-2MSD were used as the QC samples indicated.

GC/LC Semi-volatiles By Method EPA 608.3

Matrix: AQ **Batch ID:** OP42474

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- JD53489-1 for Decachlorobiphenyl: Outside of in house control limits.
- JD53489-2 for Decachlorobiphenyl: Outside of in house control limits.
- JD53489-3 for Decachlorobiphenyl: Outside of in house control limits.

GC/LC Semi-volatiles By Method SW846 8015D

Matrix: AQ **Batch ID:** OP42470

- All samples were extracted within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.

Metals Analysis By Method SW846 6010D

Matrix: AQ **Batch ID:** MP35732

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53503-5MS, JD53503-5MSD, JD53503-5SDL were used as the QC samples for metals.
- RPD(s) for Serial Dilution for Aluminum, Cadmium are outside control limits. Percent difference acceptable due to low initial sample concentration (< 50 times IDL).
- Samples(s) JD53489-1, JD53489-2, JD53489-3: New York does not offer 3010A certification for antimony and silver. The laboratory is certified for method 3010A (Acid Digestion for Total Metals) for all other metals and is certified for the associated analytical methods of 6010C (ICP Analysis) and 6020A (ICP-MS Analysis). New York does certify for method 3005A (Acid Digestion for Total Recoverable or Dissolved Metals) for antimony and silver and the laboratory holds that certification, but that provides total recoverable rather than total metals results.
- MP35732-SD1 for Calcium: Serial dilution indicates possible matrix interference.
- MP35732-SD1 for Zinc: Serial dilution indicates possible matrix interference.

Metals Analysis By Method SW846 7470A

Matrix:	AQ	Batch ID:	MP35787

- All samples were digested within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53503-5MS, JD53503-5MSD were used as the QC samples for metals.

General Chemistry By Method EPA 1664A

Matrix:	AQ	Batch ID:	GP42871

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53486-1MS, JD53486-2DUP were used as the QC samples for HEM Oil and Grease.
- RPD(s) for Duplicate for HEM Oil and Grease are outside control limits. RPD acceptable due to low duplicate and sample concentrations.

General Chemistry By Method SM2540 D-11/15

Matrix:	AQ	Batch ID:	GN34397

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53456-1DUP were used as the QC samples for Solids, Total Suspended.
- JD53489-3 for Solids, Total Suspended: Volume was reduced from 1 liter due to nature of sample matrix.
- JD53489-1 for Solids, Total Suspended: Volume was reduced from 1 liter due to nature of sample matrix.

General Chemistry By Method SM5310 B-11/14

Matrix:	AQ	Batch ID:	GP42898

- All samples were prepared within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) JD53594-3MSD, JD53594-3MS were used as the QC samples for Total Organic Carbon.
- Matrix Spike Recovery(s) for Total Organic Carbon are outside control limits. Spike recovery indicates possible matrix interference.
- Matrix Spike Duplicate Recovery(s) for Total Organic Carbon are outside control limits. Spike recovery indicates possible matrix interference.

SGS North America Inc. 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. is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. Data release is authorized by SGS North America Inc indicated via signature on the report cover

Summary of Hits

Job Number: JD53489
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 10/10/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD53489-1	**INFLUENT**					
Acetone		4.8 J	5.0	3.0	ug/l	EPA 624.1
cis-1,2-Dichloroethene		31.7	1.0	0.51	ug/l	EPA 624.1
1,2-Dichloroethene (total)		31.7	1.0	0.46	ug/l	EPA 624.1
Trichloroethene		5.7	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride		28.3	1.0	0.79	ug/l	EPA 624.1
TPH-DRO (C10-C28)		1.12	0.083	0.053	mg/l	SW846 8015D
Arsenic		6.4	3.0		ug/l	SW846 6010D
Barium		249	200		ug/l	SW846 6010D
Calcium		113000	5000		ug/l	SW846 6010D
Copper		27.4	10		ug/l	SW846 6010D
Iron		11500	100		ug/l	SW846 6010D
Lead		3.4	3.0		ug/l	SW846 6010D
Magnesium		9600	5000		ug/l	SW846 6010D
Manganese		1590	15		ug/l	SW846 6010D
Sodium		41800	10000		ug/l	SW846 6010D
Zinc		30.4	20		ug/l	SW846 6010D
Solids, Total Suspended [a]		33.0	4.0		mg/l	SM2540 D-11/15
Total Organic Carbon		19.9	1.0		mg/l	SM5310 B-11/14
JD53489-2	**PRE-FILTER**					
Acetone		9.1	5.0	3.0	ug/l	EPA 624.1
cis-1,2-Dichloroethene		19.8	1.0	0.51	ug/l	EPA 624.1
1,2-Dichloroethene (total)		19.8	1.0	0.46	ug/l	EPA 624.1
Trichloroethene		3.0	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride		9.6	1.0	0.79	ug/l	EPA 624.1
TPH-DRO (C10-C28)		0.979	0.083	0.053	mg/l	SW846 8015D
Arsenic		9.7	3.0		ug/l	SW846 6010D
Barium		267	200		ug/l	SW846 6010D
Calcium		108000	5000		ug/l	SW846 6010D
Copper		19.4	10		ug/l	SW846 6010D
Iron		17800	100		ug/l	SW846 6010D
Magnesium		9620	5000		ug/l	SW846 6010D
Manganese		1710	15		ug/l	SW846 6010D
Sodium		43800	10000		ug/l	SW846 6010D
Zinc		22.9	20		ug/l	SW846 6010D
Solids, Total Suspended		52.0	4.0		mg/l	SM2540 D-11/15
Total Organic Carbon		27.7	1.0		mg/l	SM5310 B-11/14
JD53489-3	**POST-FILTER**					
Acetone		8.8	5.0	3.0	ug/l	EPA 624.1
cis-1,2-Dichloroethene		21.8	1.0	0.51	ug/l	EPA 624.1

Summary of Hits

Job Number: JD53489
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 10/10/22

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
1,2-Dichloroethene (total)	21.8	1.0	0.46	ug/l	EPA 624.1
Trichloroethene	3.3	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride	11.9	1.0	0.79	ug/l	EPA 624.1
TPH-DRO (C10-C28)	1.20	0.083	0.053	mg/l	SW846 8015D
Arsenic	8.0	3.0		ug/l	SW846 6010D
Barium	230	200		ug/l	SW846 6010D
Calcium	107000	5000		ug/l	SW846 6010D
Copper	14.2	10		ug/l	SW846 6010D
Iron	13600	100		ug/l	SW846 6010D
Magnesium	9480	5000		ug/l	SW846 6010D
Manganese	1480	15		ug/l	SW846 6010D
Sodium	43200	10000		ug/l	SW846 6010D
Zinc	29.6	20		ug/l	SW846 6010D
Solids, Total Suspended [a]	34.3	4.0		mg/l	SM2540 D-11/15
Total Organic Carbon	24.3	1.0		mg/l	SM5310 B-11/14

JD53489-4 TRIP BLANK

No hits reported in this sample.

(a) Volume was reduced from 1 liter due to nature of sample matrix.

Sample Results

Report of Analysis

SGS North America Inc.

Report of Analysis

Client Sample ID: INFLUENT
Lab Sample ID: JD53489-1
Matrix: AQ - Influent
Method: EPA 624.1
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D122502.D	1	10/18/22 19:17	ED	n/a	n/a	V4D5439
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.8	5.0	3.0	ug/l	J
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	31.7	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	31.7	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT		
Lab Sample ID:	JD53489-1	**Date Sampled:**	10/10/22
Matrix:	AQ - Influent	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	5.7	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	28.3	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%		80-128%
2037-26-5	Toluene-D8 (SUR)	105%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	104%		79-117%
1868-53-7	Dibromofluoromethane (S)	111%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	INFLUENT		
Lab Sample ID:	JD53489-1	**Date Sampled:**	10/10/22
Matrix:	AQ - Influent	**Date Received:**	10/12/22
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RL1508.D	1	10/17/22 17:37	MLC	10/14/22 13:00	OP42474	GRL24
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	40%		10-156%
877-09-8	Tetrachloro-m-xylene	16%		10-156%
2051-24-3	Decachlorobiphenyl	8% [a]		10-143%
2051-24-3	Decachlorobiphenyl	9% [a]		10-143%

(a) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID: INFLUENT
Lab Sample ID: JD53489-1
Matrix: AQ - Influent
Method: SW846 8015D SW846 3510C
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ105858.D	1	10/16/22 15:25	TL	10/14/22 14:00	OP42470	GZZ3912
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.12	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	47%		13-117%
438-22-2	5a-Androstane	26%		10-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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: INFLUENT
Lab Sample ID: JD53489-1
Matrix: AQ - Influent
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Arsenic	6.4	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Barium	249	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Beryllium	< 1.0	1.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Calcium	113000	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cobalt	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Copper	27.4	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Iron	11500	100	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Lead	3.4	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Magnesium	9600	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Manganese	1590	15	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	10/14/22	10/17/22	LM	SW846 7470A [1]	SW846 7470A [4]
Nickel	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Potassium	< 10000	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Sodium	41800	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Thallium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Vanadium	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Zinc	30.4	20	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA53162
(2) Instrument QC Batch: MA53166
(3) Prep QC Batch: MP35732
(4) Prep QC Batch: MP35787

RL = Reporting Limit

Report of Analysis

Client Sample ID:	INFLUENT		
Lab Sample ID:	JD53489-1	**Date Sampled:**	10/10/22
Matrix:	AQ - Influent	**Date Received:**	10/12/22
		Percent Solids:	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.0	5.0	mg/l	1	10/16/22 16:37	IH	EPA 1664A
Solids, Total Suspended [a]	33.0	4.0	mg/l	1	10/14/22 13:31	AS	SM2540 D-11/15
Total Organic Carbon	19.9	1.0	mg/l	1	10/18/22 22:24	MH	SM5310 B-11/14

(a) Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	PRE-FILTER		
Lab Sample ID:	JD53489-2	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D122503.D	1	10/18/22 19:46	ED	n/a	n/a	V4D5439
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	9.1	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	19.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	19.8	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	PRE-FILTER		
Lab Sample ID:	JD53489-2	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	3.0	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	9.6	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		80-128%
2037-26-5	Toluene-D8 (SUR)	106%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	103%		79-117%
1868-53-7	Dibromofluoromethane (S)	111%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	PRE-FILTER		
Lab Sample ID:	JD53489-2	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RL1509.D	1	10/17/22 17:53	MLC	10/14/22 13:00	OP42474	GRL24
Run #2							

	Initial Volume	Final Volume
Run #1	1030 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.049	0.033	ug/l	
11104-28-2	Aroclor 1221	ND	0.049	0.028	ug/l	
11141-16-5	Aroclor 1232	ND	0.049	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.049	0.026	ug/l	
12672-29-6	Aroclor 1248	ND	0.049	0.024	ug/l	
11097-69-1	Aroclor 1254	ND	0.049	0.033	ug/l	
11096-82-5	Aroclor 1260	ND	0.049	0.026	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	31%		10-156%
877-09-8	Tetrachloro-m-xylene	14%		10-156%
2051-24-3	Decachlorobiphenyl	7% [a]		10-143%
2051-24-3	Decachlorobiphenyl	6% [a]		10-143%

(a) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID: PRE-FILTER
Lab Sample ID: JD53489-2
Matrix: AQ - Ground Water
Method: SW846 8015D SW846 3510C
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ105859.D	1	10/16/22 15:59	TL	10/14/22 14:00	OP42470	GZZ3912
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.979	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	39%		13-117%
438-22-2	5a-Androstane	18%		10-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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: PRE-FILTER
Lab Sample ID: JD53489-2
Matrix: AQ - Ground Water
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Arsenic	9.7	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Barium	267	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Beryllium	< 1.0	1.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Calcium	108000	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cobalt	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Copper	19.4	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Iron	17800	100	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Magnesium	9620	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Manganese	1710	15	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	10/14/22	10/17/22	LM	SW846 7470A [1]	SW846 7470A [4]
Nickel	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Potassium	< 10000	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Sodium	43800	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Thallium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Vanadium	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Zinc	22.9	20	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA53162
(2) Instrument QC Batch: MA53166
(3) Prep QC Batch: MP35732
(4) Prep QC Batch: MP35787

RL = Reporting Limit

Report of Analysis

Client Sample ID:	PRE-FILTER		
Lab Sample ID:	JD53489-2	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
		Percent Solids:	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 4.9	4.9	mg/l	1	10/16/22 16:37	IH	EPA 1664A
Solids, Total Suspended	52.0	4.0	mg/l	1	10/14/22 13:31	AS	SM2540 D-11/15
Total Organic Carbon	27.7	1.0	mg/l	1	10/18/22 22:37	MH	SM5310 B-11/14

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	POST-FILTER		
Lab Sample ID:	JD53489-3	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D122504.D	1	10/18/22 20:15	ED	n/a	n/a	V4D5439
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	8.8	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	21.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	21.8	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	POST-FILTER		
Lab Sample ID:	JD53489-3	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	3.3	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	11.9	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		80-128%
2037-26-5	Toluene-D8 (SUR)	106%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	103%		79-117%
1868-53-7	Dibromofluoromethane (S)	112%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	POST-FILTER		
Lab Sample ID:	JD53489-3	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RL1510.D	1	10/17/22 18:10	MLC	10/14/22 13:00	OP42474	GRL24
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	56%		10-156%
877-09-8	Tetrachloro-m-xylene	31%		10-156%
2051-24-3	Decachlorobiphenyl	10%		10-143%
2051-24-3	Decachlorobiphenyl	9% [a]		10-143%

(a) Outside of in house control limits.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

SGS North America Inc.

Report of Analysis

Client Sample ID:	POST-FILTER		
Lab Sample ID:	JD53489-3	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZZ105860.D	1	10/16/22 16:33	TL	10/14/22 14:00	OP42470	GZZ3912
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.20	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	50%		13-117%
438-22-2	5a-Androstane	28%		10-114%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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: POST-FILTER
Lab Sample ID: JD53489-3
Matrix: AQ - Ground Water
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	< 200	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Arsenic	8.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Barium	230	200	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Beryllium	< 1.0	1.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Calcium	107000	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Cobalt	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Copper	14.2	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Iron	13600	100	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Magnesium	9480	5000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Manganese	1480	15	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	10/14/22	10/17/22	LM	SW846 7470A [1]	SW846 7470A [4]
Nickel	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Potassium	< 10000	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Sodium	43200	10000	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Thallium	< 10	10	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Vanadium	< 50	50	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]
Zinc	29.6	20	ug/l	1	10/14/22	10/15/22	ND	SW846 6010D [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA53162
(2) Instrument QC Batch: MA53166
(3) Prep QC Batch: MP35732
(4) Prep QC Batch: MP35787

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST-FILTER		
Lab Sample ID:	JD53489-3	**Date Sampled:**	10/10/22
Matrix:	AQ - Ground Water	**Date Received:**	10/12/22
		Percent Solids:	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.1	5.1	mg/l	1	10/16/22 16:37	IH	EPA 1664A
Solids, Total Suspended [a]	34.3	4.0	mg/l	1	10/14/22 13:31	AS	SM2540 D-11/15
Total Organic Carbon	24.3	1.0	mg/l	1	10/18/22 22:50	MH	SM5310 B-11/14

(a) Volume was reduced from 1 liter due to nature of sample matrix.

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID: TRIP BLANK
Lab Sample ID: JD53489-4
Matrix: AQ - Trip Blank Water
Method: EPA 624.1
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 10/10/22
Date Received: 10/12/22
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	4D122500.D	1	10/18/22 18:18	ED	n/a	n/a	V4D5439
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD53489-4	**Date Sampled:**	10/10/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/12/22
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		80-128%
2037-26-5	Toluene-D8 (SUR)	106%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	104%		79-117%
1868-53-7	Dibromofluoromethane (S)	111%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS

EHSA-QAC-0023-04-FORM-Standard COC

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

5272 0644 1575

Page 1 of 1

FED-EX Tracking # 5272 0644 1575 | Bottle Order Control # MM-072822-174
SGS Quote # | SGS Job # JD53489

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City: Clifton Park State: NY Zip:
Project Contact: Todd Carignan E-mail:
Phone #: 646-248-4208
Sampler(s) Name(s): A. Svensson Phone #:

Project Information

Project Name: IR DC Rollforms
Street: 583 Allen St
City: Jamestown State: NY
Project #: 30115866
Client Purchase Order #:
Project Manager: Todd Carignan

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

Requested Analysis

SGS Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Preserved: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	VOCs USEPA 624.1	PCBs USEPA 608	TSS USEPA 160.2	TPH DRO 8015B	HEM Oil & Grease 1664	TOC 5310	TAL Metals & Mercury (6010)/7470A	LAB USE ONLY
1	INFLUENT		10/10/22	1115	AJS	G	N	GW	14	7		1		6				4	2	2	2	2	1	1	L27
2	PRE-FILTER		10/10/22	1220	AJS	G	N	GW	14	7		1		6				4	2	2	2	2	1	1	K89
3	POST-FILTER		10/10/22	1300	AJS	G	N	GW	14	7		1		6				4	2	2	2	2	1	1	E24
4	TRIP BLANK		8/8/22	0700	—	G	N	TB	2	2		0		0				2	0	0	0	0	0	0	A11
	TEMP BLANK		—	—	—	G	N	TB	3	0		0		3				0	0	0	0	0	0	0	B02
																									V70

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

pH Check (Lab Use Only)

Ref: MM-072822-174 Dep: Date: 08Aug22 Wgt: 20.00 LBS DV: 0.00
SHIPPING: 0.00 SPECIAL: 0.00 HANDLING: 0.00 TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT Master 5272 0644 1575 TRCK: 5272 0644 1575

Ref: MM-072822-174 Dep: Date: 08Aug22 Wgt: 20.00 LBS DV: 0.00
SHIPPING: 0.00 SPECIAL: 0.00 HANDLING: 0.00 TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT Master 5272 0644 1575 TRCK: 5272 0644 1586

Ref: MM-072822-174 Dep: Date: 08Aug22 Wgt: 20.00 LBS DV: 0.00
SHIPPING: 0.00 SPECIAL: 0.00 HANDLING: 0.00 TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT Master 5272 0644 1575 TRCK: 5272 0644 1597

Initial Assessment 3A EC
Label Verification

Turn Around Tir.

Approved By (SGS PM):

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other
All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [x] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP

- [ ] NYASP Category A
- [x] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [ ] EDD Format

- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

October 2022
Mass balance
3 coolers
• 2x500mL DRO

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

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

	Relinquished by:	Date / Time:	Received By:
1	Adam Svensson	10/10/22 1800	FedEx
2	FedEx	10/12/22 9:55	James Lucy
3			
4			
5			

Custody Seal # | Intact | Not intact | Absent

Therm ID: | On Ice ☑ | See Sample Receipt Summary ☑ | Cooler Temp. °C: 1.7

5.1 5

SGS Sample Receipt Summary

Job Number: JD53489 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, MASS BALANCE, ORDE

Date / Time Received: 10/12/2022 9:55:00 AM **Delivery Method:** Fed Ex **Airbill #'s:** 5272 0644 1575

Cooler Temps (Raw Measured) °C: Cooler 1: (1.7);

Cooler Temps (Corrected) °C: Cooler 1: (1.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Internal Sample Tracking Chronicle

Arcadis

Job No: JD53489

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD53489-1	Collected: 10-OCT-22 11:15 By: AJS		Received: 12-OCT-22 By: JK			
INFLUENT						
JD53489-1	SM2540 D-11/15	14-OCT-22 13:31	AS			TSS
JD53489-1	SW846 6010D	15-OCT-22 08:32	ND	14-OCT-22	SF	AG,AL,AS,BA,BE,CA,CD,CO,CR,CU,FE,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN
JD53489-1	SW846 8015D	16-OCT-22 15:25	TL	14-OCT-22	KB	B8015DRO
JD53489-1	EPA 1664A	16-OCT-22 16:37	IH	16-OCT-22	IH	OG1664
JD53489-1	SW846 7470A	17-OCT-22 13:14	LM	14-OCT-22	LM	HG
JD53489-1	EPA 608.3	17-OCT-22 17:37	MLC	14-OCT-22	TL	P608PCBLL
JD53489-1	EPA 624.1	18-OCT-22 19:17	ED			V624TCL
JD53489-1	SM5310 B-11/14	18-OCT-22 22:24	MH	18-OCT-22	MB	TOC
JD53489-2	Collected: 10-OCT-22 12:20 By: AJS		Received: 12-OCT-22 By: JK			
PRE-FILTER						
JD53489-2	SM2540 D-11/15	14-OCT-22 13:31	AS			TSS
JD53489-2	SW846 6010D	15-OCT-22 08:37	ND	14-OCT-22	SF	AG,AL,AS,BA,BE,CA,CD,CO,CR,CU,FE,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN
JD53489-2	SW846 8015D	16-OCT-22 15:59	TL	14-OCT-22	KB	B8015DRO
JD53489-2	EPA 1664A	16-OCT-22 16:37	IH	16-OCT-22	IH	OG1664
JD53489-2	SW846 7470A	17-OCT-22 13:15	LM	14-OCT-22	LM	HG
JD53489-2	EPA 608.3	17-OCT-22 17:53	MLC	14-OCT-22	TL	P608PCBLL
JD53489-2	EPA 624.1	18-OCT-22 19:46	ED			V624TCL
JD53489-2	SM5310 B-11/14	18-OCT-22 22:37	MH	18-OCT-22	MB	TOC
JD53489-3	Collected: 10-OCT-22 13:00 By: AJS		Received: 12-OCT-22 By: JK			
POST-FILTER						
JD53489-3	SM2540 D-11/15	14-OCT-22 13:31	AS			TSS
JD53489-3	SW846 6010D	15-OCT-22 08:42	ND	14-OCT-22	SF	AG,AL,AS,BA,BE,CA,CD,CO,CR,CU,FE,K,MG,MN,NA,NI,PB,SB,SE,TL,V,ZN
JD53489-3	SW846 8015D	16-OCT-22 16:33	TL	14-OCT-22	KB	B8015DRO
JD53489-3	EPA 1664A	16-OCT-22 16:37	IH	16-OCT-22	IH	OG1664
JD53489-3	SW846 7470A	17-OCT-22 13:17	LM	14-OCT-22	LM	HG
JD53489-3	EPA 608.3	17-OCT-22 18:10	MLC	14-OCT-22	TL	P608PCBLL
JD53489-3	EPA 624.1	18-OCT-22 20:15	ED			V624TCL

Internal Sample Tracking Chronicle

Arcadis

Job No: JD53489

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD53489-3	SM5310 B-11/14	18-OCT-22 22:50	MH	18-OCT-22	MB	TOC
JD53489-4	Collected: 10-OCT-22 13:00 By: TRIP BLANK		Received: 12-OCT-22 By: JK			
JD53489-4	EPA 624.1	18-OCT-22 18:18	ED			V624TCL

SGS Internal Chain of Custody

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/12/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53489-1.1	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-1.2	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-1.2	Secured Storage	Todd Shoemaker	10/13/22 14:52	Retrieve from Storage
JD53489-1.2	Todd Shoemaker	Secured Staging Area	10/13/22 14:52	Return to Storage
JD53489-1.2	Secured Staging Area	Ischa Herald	10/15/22 16:57	Retrieve from Storage
JD53489-1.2	Ischa Herald		10/16/22 14:41	Depleted
JD53489-1.3	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.4	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.4	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-1.4	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-1.4	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-1.4	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-1.4.1	Samanth Mally	Organics Prep	10/14/22 07:45	Extract from JD53489-1.4
JD53489-1.4.1	Organics Prep	Kevin Brefo	10/14/22 14:21	Extract from JD53489-1.4
JD53489-1.4.1	Kevin Brefo	Extract Storage	10/14/22 14:21	Return to Storage
JD53489-1.4.1	Extract Storage	Thomas Lally	10/16/22 12:44	Retrieve from Storage
JD53489-1.4.1	Thomas Lally	GCZZ	10/16/22 12:44	Load on Instrument
JD53489-1.5	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.6	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.6	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-1.6	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-1.6	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-1.6	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-1.6.1	Samanth Mally	Organics Prep	10/14/22 07:55	Extract from JD53489-1.6
JD53489-1.6.1	Organics Prep	Trinette Lassiter	10/14/22 22:51	Extract from JD53489-1.6
JD53489-1.6.1	Trinette Lassiter	Extract Storage	10/14/22 22:51	Return to Storage
JD53489-1.6.1	Extract Storage	Mahalia Lercius Ceus	10/17/22 16:34	Retrieve from Storage
JD53489-1.6.1	Mahalia Lercius Ceus	GCRL	10/17/22 16:34	Load on Instrument
JD53489-1.7	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.7	Christian King	Secured Staging Area	10/13/22 22:22	Return to Storage
stage				
JD53489-1.7	Secured Staging Area	John Azer	10/14/22 07:21	Retrieve from Storage
JD53489-1.7	John Azer	Secured Storage	10/14/22 14:49	Return to Storage

SGS Internal Chain of Custody

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/12/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53489-1.7.1	John Azer	Metals Digestion	10/14/22 11:58	Digestate from JD53489-1.7
JD53489-1.7.1	Metals Digestion	John Azer	10/14/22 12:01	Digestate from JD53489-1.7
JD53489-1.7.1	John Azer	Metals Digestate Storage	10/14/22 12:01	Return to Storage
JD53489-1.8	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.9	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.9	Secured Storage	Dave Hunkele	10/14/22 09:10	Retrieve from Storage
JD53489-1.9	Dave Hunkele	Secured Staging Area	10/14/22 09:10	Return to Storage
JD53489-1.9	Secured Staging Area	Arunna Sabapathy	10/14/22 09:26	Retrieve from Storage
JD53489-1.9	Arunna Sabapathy	Secured Storage	10/14/22 19:23	Return to Storage
JD53489-1.10	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-1.10	Secured Storage	Todd Shoemaker	10/13/22 11:13	Retrieve from Storage
JD53489-1.10	Todd Shoemaker	Secured Staging Area	10/13/22 11:13	Return to Storage
JD53489-1.11	Secured Storage	Taylor Sauter	10/18/22 18:43	Retrieve from Storage
JD53489-1.11	Taylor Sauter	GCMS4D	10/18/22 18:43	Load on Instrument
JD53489-1.11	GCMS4D	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53489-1.11	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53489-2.1	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-2.2	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-2.2	Secured Storage	Todd Shoemaker	10/13/22 14:52	Retrieve from Storage
JD53489-2.2	Todd Shoemaker	Secured Staging Area	10/13/22 14:52	Return to Storage
JD53489-2.2	Secured Staging Area	Ischa Herald	10/15/22 16:57	Retrieve from Storage
JD53489-2.2	Ischa Herald		10/16/22 14:41	Depleted
JD53489-2.4	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.4	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-2.4	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-2.4	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-2.4	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-2.4.1	Samanth Mally	Organics Prep	10/14/22 07:45	Extract from JD53489-2.4
JD53489-2.4.1	Organics Prep	Kevin Brefo	10/14/22 14:21	Extract from JD53489-2.4
JD53489-2.4.1	Kevin Brefo	Extract Storage	10/14/22 14:21	Return to Storage
JD53489-2.4.1	Extract Storage	Thomas Lally	10/16/22 12:44	Retrieve from Storage
JD53489-2.4.1	Thomas Lally	GCZZ	10/16/22 12:44	Load on Instrument
JD53489-2.4.2	Samanth Mally	Organics Prep	10/14/22 07:55	Extract from JD53489-2.4
JD53489-2.4.2	Organics Prep	Trinette Lassiter	10/14/22 22:51	Extract from JD53489-2.4

SGS Internal Chain of Custody

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/12/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53489-2.4.2	Trinette Lassiter	Extract Storage	10/14/22 22:51	Return to Storage
JD53489-2.4.2	Extract Storage	Mahalia Lercius Ceus	10/17/22 16:34	Retrieve from Storage
JD53489-2.4.2	Mahalia Lercius Ceus	GCRL	10/17/22 16:34	Load on Instrument
JD53489-2.5	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.5	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-2.5	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-2.5	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-2.5	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-2.6	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.7	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.7	Christian King	Secured Staging Area	10/13/22 22:22	Return to Storage
stage				
JD53489-2.7	Secured Staging Area	John Azer	10/14/22 07:21	Retrieve from Storage
JD53489-2.7	John Azer	Secured Storage	10/14/22 14:49	Return to Storage
JD53489-2.7.1	John Azer	Metals Digestion	10/14/22 11:58	Digestate from JD53489-2.7
JD53489-2.7.1	Metals Digestion	John Azer	10/14/22 12:01	Digestate from JD53489-2.7
JD53489-2.7.1	John Azer	Metals Digestate Storage	10/14/22 12:01	Return to Storage
JD53489-2.8	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.8	Secured Storage	Dave Hunkele	10/14/22 09:10	Retrieve from Storage
JD53489-2.8	Dave Hunkele	Secured Staging Area	10/14/22 09:10	Return to Storage
JD53489-2.8	Secured Staging Area	Arunna Sabapathy	10/14/22 09:26	Retrieve from Storage
JD53489-2.8	Arunna Sabapathy	Secured Storage	10/14/22 19:23	Return to Storage
JD53489-2.9	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.10	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-2.10	Secured Storage	Todd Shoemaker	10/13/22 11:13	Retrieve from Storage
JD53489-2.10	Todd Shoemaker	Secured Staging Area	10/13/22 11:13	Return to Storage
JD53489-2.12	Secured Storage	Taylor Sauter	10/18/22 18:43	Retrieve from Storage
JD53489-2.12	Taylor Sauter	GCMS4D	10/18/22 18:43	Load on Instrument
JD53489-2.12	GCMS4D	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53489-2.12	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53489-3.1	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-3.2	Bright Boakye	Secured Storage	10/12/22 18:33	Return to Storage
JD53489-3.2	Secured Storage	Todd Shoemaker	10/13/22 14:52	Retrieve from Storage

SGS Internal Chain of Custody

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/12/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53489-3.2	Todd Shoemaker	Secured Staging Area	10/13/22 14:52	Return to Storage
JD53489-3.2	Secured Staging Area	Ischa Herald	10/15/22 16:57	Retrieve from Storage
JD53489-3.2	Ischa Herald		10/16/22 14:41	Depleted
JD53489-3.3	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.3	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-3.3	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-3.3	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-3.3	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-3.3.1	Samanth Mally	Organics Prep	10/14/22 07:45	Extract from JD53489-3.3
JD53489-3.3.1	Organics Prep	Kevin Brefo	10/14/22 14:21	Extract from JD53489-3.3
JD53489-3.3.1	Kevin Brefo	Extract Storage	10/14/22 14:21	Return to Storage
JD53489-3.3.1	Extract Storage	Thomas Lally	10/16/22 12:44	Retrieve from Storage
JD53489-3.3.1	Thomas Lally	GCZZ	10/16/22 12:44	Load on Instrument
JD53489-3.4	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.5	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.6	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.6	Christian King	Secured Staging Area	10/13/22 20:48	Return to Storage
stage				
JD53489-3.6	Secured Staging Area	Samanth Mally	10/14/22 07:19	Retrieve from Storage
JD53489-3.6	Samanth Mally	Taylor Gorman	10/14/22 16:03	Custody Transfer
JD53489-3.6	Taylor Gorman		10/19/22 07:34	Depleted
JD53489-3.6.1	Samanth Mally	Organics Prep	10/14/22 07:55	Extract from JD53489-3.6
JD53489-3.6.1	Organics Prep	Trinette Lassiter	10/14/22 22:51	Extract from JD53489-3.6
JD53489-3.6.1	Trinette Lassiter	Extract Storage	10/14/22 22:51	Return to Storage
JD53489-3.6.1	Extract Storage	Mahalia Lercius Ceus	10/17/22 16:34	Retrieve from Storage
JD53489-3.6.1	Mahalia Lercius Ceus	GCRL	10/17/22 16:34	Load on Instrument
JD53489-3.7	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.7	Christian King	Secured Staging Area	10/13/22 22:22	Return to Storage
stage				
JD53489-3.7	Secured Staging Area	John Azer	10/14/22 07:21	Retrieve from Storage
JD53489-3.7	John Azer	Secured Storage	10/14/22 14:49	Return to Storage
JD53489-3.7.1	John Azer	Metals Digestion	10/14/22 11:58	Digestate from JD53489-3.7
JD53489-3.7.1	Metals Digestion	John Azer	10/14/22 12:01	Digestate from JD53489-3.7
JD53489-3.7.1	John Azer	Metals Digestate Storage	10/14/22 12:01	Return to Storage

SGS Internal Chain of Custody

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/12/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53489-3.8	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.8	Secured Storage	Dave Hunkele	10/14/22 09:10	Retrieve from Storage
JD53489-3.8	Dave Hunkele	Secured Staging Area	10/14/22 09:10	Return to Storage
JD53489-3.8	Secured Staging Area	Arunna Sabapathy	10/14/22 09:26	Retrieve from Storage
JD53489-3.8	Arunna Sabapathy	Secured Storage	10/14/22 19:23	Return to Storage
JD53489-3.9	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.10	Bright Boakye	Secured Storage	10/12/22 18:30	Return to Storage
JD53489-3.10	Secured Storage	Todd Shoemaker	10/13/22 11:13	Retrieve from Storage
JD53489-3.10	Todd Shoemaker	Secured Staging Area	10/13/22 11:13	Return to Storage
JD53489-3.12	Secured Storage	Taylor Sauter	10/18/22 18:43	Retrieve from Storage
JD53489-3.12	Taylor Sauter	GCMS4D	10/18/22 18:43	Load on Instrument
JD53489-3.12	GCMS4D	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53489-3.12	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53489-4.1	Secured Storage	Taylor Sauter	10/18/22 18:43	Retrieve from Storage
JD53489-4.1	Taylor Sauter	GCMS4D	10/18/22 18:43	Load on Instrument
JD53489-4.1	GCMS4D	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53489-4.1	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage

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: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5439-MB	4D122484.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

Method Blank Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5439-MB	4D122484.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%	80-128%
2037-26-5	Toluene-D8 (SUR)	106%	82-113%
460-00-4	4-Bromofluorobenzene (SUR)	96%	79-117%
1868-53-7	Dibromofluoromethane (S)	105%	84-121%

CAS No.	Tentatively Identified Compounds	R.T.	Est. Conc.	Units	Q
	Total TIC, Volatile		0	ug/l	

Blank Spike Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5439-BS	4D122482A.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	80	114	143	26-198
71-43-2	Benzene	20	16.9	85	65-135
75-27-4	Bromodichloromethane	20	16.6	83	65-135
75-25-2	Bromoform	20	18.0	90	70-130
74-83-9	Bromomethane	20	15.8	79	15-185
78-93-3	2-Butanone (MEK)	80	98.8	124	50-161
75-15-0	Carbon disulfide	20	17.1	86	48-166
56-23-5	Carbon tetrachloride	20	17.3	87	70-130
108-90-7	Chlorobenzene	20	18.1	91	65-135
75-00-3	Chloroethane	20	23.5	118	40-160
67-66-3	Chloroform	20	17.2	86	70-135
74-87-3	Chloromethane	20	16.6	83	10-205
124-48-1	Dibromochloromethane	20	19.1	96	70-135
75-34-3	1,1-Dichloroethane	20	19.7	99	70-130
107-06-2	1,2-Dichloroethane	20	17.1	86	70-130
75-35-4	1,1-Dichloroethene	20	16.6	83	50-150
156-59-2	cis-1,2-Dichloroethene	20	17.9	90	72-116
156-60-5	trans-1,2-Dichloroethene	20	17.2	86	70-130
540-59-0	1,2-Dichloroethene (total)	40	35.2	88	70-119
78-87-5	1,2-Dichloropropane	20	18.3	92	35-165
10061-01-5	cis-1,3-Dichloropropene	20	17.2	86	25-175
10061-02-6	trans-1,3-Dichloropropene	20	18.8	94	50-150
100-41-4	Ethylbenzene	20	17.3	87	60-140
591-78-6	2-Hexanone	80	106	133	56-145
108-10-1	4-Methyl-2-pentanone(MIBK)	80	92.0	115	63-139
75-09-2	Methylene chloride	20	18.4	92	60-140
100-42-5	Styrene	20	17.7	89	77-117
79-34-5	1,1,2,2-Tetrachloroethane	20	20.3	102	60-140
127-18-4	Tetrachloroethene	20	20.1	101	70-130
108-88-3	Toluene	20	17.4	87	74-111
71-55-6	1,1,1-Trichloroethane	20	17.6	88	73-120
79-00-5	1,1,2-Trichloroethane	20	19.6	98	74-117
79-01-6	Trichloroethene	20	17.9	90	74-113
75-01-4	Vinyl chloride	20	15.8	79	5-195
1330-20-7	Xylenes (total)	60	53.5	89	79-114

* = Outside of Control Limits.

Blank Spike Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V4D5439-BS	4D122482A.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	97%	80-128%
2037-26-5	Toluene-D8 (SUR)	103%	82-113%
460-00-4	4-Bromofluorobenzene (SUR)	98%	79-117%
1868-53-7	Dibromofluoromethane (S)	105%	84-121%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD53653-2MS	4D122496.D	1	10/18/22	ED	n/a	n/a	V4D5439
JD53653-2MSD	4D122497.D	1	10/18/22	ED	n/a	n/a	V4D5439
JD53653-2	4D122491.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Compound	JD53653-2 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		80	115	144	80	110	138	4	10-177/26
71-43-2	Benzene	ND		20	19.4	97	20	18.5	93	5	37-151/61
75-27-4	Bromodichloromethane	ND		20	18.7	94	20	17.7	89	5	35-155/56
75-25-2	Bromoform	ND		20	17.0	85	20	18.0	90	6	45-169/42
74-83-9	Bromomethane	ND		20	14.8	74	20	14.7	74	1	10-242/61
78-93-3	2-Butanone (MEK)	ND		80	107	134	80	103	129	4	35-165/21
75-15-0	Carbon disulfide	ND		20	20.4	102	20	19.2	96	6	37-179/21
56-23-5	Carbon tetrachloride	ND		20	20.6	103	20	19.9	100	3	70-140/41
108-90-7	Chlorobenzene	ND		20	19.1	96	20	19.1	96	0	37-160/53
75-00-3	Chloroethane	ND		20	22.4	112	20	20.9	105	7	14-230/78
67-66-3	Chloroform	ND		20	19.8	99	20	18.6	93	6	51-138/54
74-87-3	Chloromethane	ND		20	14.8	74	20	13.9	70	6	10-273/60
124-48-1	Dibromochloromethane	ND		20	18.6	93	20	19.4	97	4	53-149/50
75-34-3	1,1-Dichloroethane	0.99	J	20	24.2	116	20	23.0	110	5	59-155/40
107-06-2	1,2-Dichloroethane	ND		20	19.0	95	20	18.1	91	5	49-155/59
75-35-4	1,1-Dichloroethene	ND		20	19.7	99	20	18.6	93	6	10-234/32
156-59-2	cis-1,2-Dichloroethene	ND		20	20.3	102	20	19.6	98	4	38-146/17
156-60-5	trans-1,2-Dichloroethene	ND		20	20.0	100	20	19.1	96	5	54-156/45
540-59-0	1,2-Dichloroethene (total)	ND		40	40.3	101	40	38.7	97	4	40-146/16
78-87-5	1,2-Dichloropropane	ND		20	21.2	106	20	19.8	99	7	10-210/55
10061-01-5	cis-1,3-Dichloropropene	ND		20	19.5	98	20	18.2	91	7	10-227/58
10061-02-6	trans-1,3-Dichloropropene	ND		20	19.4	97	20	19.4	97	0	17-183/86
100-41-4	Ethylbenzene	ND		20	19.2	96	20	18.9	95	2	37-162/63
591-78-6	2-Hexanone	ND		80	110	138	80	109	136	1	44-152/19
108-10-1	4-Methyl-2-pentanone(MIBK)	ND		80	102	128	80	95.4	119	7	54-146/18
75-09-2	Methylene chloride	ND		20	20.9	105	20	19.7	99	6	10-221/28
100-42-5	Styrene	ND		20	18.4	92	20	18.7	94	2	62-131/17
79-34-5	1,1,2,2-Tetrachloroethane	ND		20	21.3	107	20	20.6	103	3	46-157/61
127-18-4	Tetrachloroethene	ND		20	17.2	86	20	18.0	90	5	64-148/39
108-88-3	Toluene	ND		20	18.8	94	20	18.7	94	1	42-140/16
71-55-6	1,1,1-Trichloroethane	ND		20	21.0	105	20	19.8	99	6	56-139/17
79-00-5	1,1,2-Trichloroethane	ND		20	20.4	102	20	20.5	103	0	61-126/17
79-01-6	Trichloroethene	ND		20	19.4	97	20	19.2	96	1	37-148/15
75-01-4	Vinyl chloride	ND		20	15.2	76	20	13.9	70	9	10-251/66
1330-20-7	Xylenes (total)	ND		60	56.4	94	60	56.9	95	1	58-134/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
JD53653-2MS	4D122496.D	1	10/18/22	ED	n/a	n/a	V4D5439
JD53653-2MSD	4D122497.D	1	10/18/22	ED	n/a	n/a	V4D5439
JD53653-2	4D122491.D	1	10/18/22	ED	n/a	n/a	V4D5439

The QC reported here applies to the following samples: **Method:** EPA 624.1

JD53489-1, JD53489-2, JD53489-3, JD53489-4

CAS No.	Surrogate Recoveries	MS	MSD	JD53653-2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	105%	99%	103%	80-128%
2037-26-5	Toluene-D8 (SUR)	101%	103%	106%	82-113%
460-00-4	4-Bromofluorobenzene (SUR)	97%	98%	105%	79-117%
1868-53-7	Dibromofluoromethane (S)	112%	108%	110%	84-121%

* = Outside of Control Limits.

Instrument Performance Check (BFB)

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-BFB
Lab File ID: 4D120247.D
Instrument ID: GCMS4D
Injection Date: 08/13/22
Injection Time: 19:58

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	56496	20.6		Pass
75	30.0 - 60.0% of mass 95	141485	51.6		Pass
95	Base peak, 100% relative abundance	274069	100.0		Pass
96	5.0 - 9.0% of mass 95	18675	6.81		Pass
173	Less than 2.0% of mass 174	2724	0.99	(1.06) [a]	Pass
174	50.0 - 120.0% of mass 95	256363	93.5		Pass
175	5.0 - 9.0% of mass 174	18765	6.85	(7.32) [a]	Pass
176	95.0 - 101.0% of mass 174	245909	89.7	(95.9) [a]	Pass
177	5.0 - 9.0% of mass 176	16181	5.90	(6.58) [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
V4D5341-IC5341	4D120248.D	08/13/22	20:38	00:40	Initial cal 0.2
V4D5341-IC5341	4D120249.D	08/13/22	21:06	01:08	Initial cal 0.5
V4D5341-IC5341	4D120250.D	08/13/22	21:35	01:37	Initial cal 1
V4D5341-IC5341	4D120251.D	08/13/22	22:03	02:05	Initial cal 2
V4D5341-IC5341	4D120252.D	08/13/22	22:31	02:33	Initial cal 4
V4D5341-IC5341	4D120253.D	08/13/22	23:00	03:02	Initial cal 8
V4D5341-IC5341	4D120254.D	08/13/22	23:28	03:30	Initial cal 20
V4D5341-ICC5341	4D120255.D	08/13/22	23:56	03:58	Initial cal 50
V4D5341-IC5341	4D120256.D	08/14/22	00:25	04:27	Initial cal 100
V4D5341-IC5341	4D120257.D	08/14/22	00:53	04:55	Initial cal 200
V4D5341-ICV5341	4D120260.D	08/14/22	02:18	06:20	Initial cal verification 50
V4D5341-ICV5341	4D120261.D	08/14/22	02:46	06:48	Initial cal verification 50

Instrument Performance Check (BFB)

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5439-BFB
Lab File ID: 4D122481.D
Instrument ID: GCMS4D
Injection Date: 10/18/22
Injection Time: 09:05

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance		Pass/Fail
50	14.99 - 40.0% of mass 95	62285	21.9		Pass
75	30.0 - 60.0% of mass 95	134861	47.3		Pass
95	Base peak, 100% relative abundance	284843	100.0		Pass
96	5.0 - 9.0% of mass 95	19403	6.81		Pass
173	Less than 2.0% of mass 174	1123	0.39	(0.44) [a]	Pass
174	50.0 - 120.0% of mass 95	253653	89.1		Pass
175	5.0 - 9.0% of mass 174	19323	6.78	(7.62) [a]	Pass
176	95.0 - 101.0% of mass 174	241877	84.9	(95.4) [a]	Pass
177	5.0 - 9.0% of mass 176	16249	5.70	(6.72) [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
V4D5439-CC5341	4D122482.D	10/18/22	09:34	00:29	Continuing cal 20
V4D5439-BS	4D122482A.D	10/18/22	09:34	00:29	Blank Spike
V4D5439-MB	4D122484.D	10/18/22	10:32	01:27	Method Blank
ZZZZZZ	4D122485.D	10/18/22	11:01	01:56	(unrelated sample)
ZZZZZZ	4D122487.D	10/18/22	11:59	02:54	(unrelated sample)
ZZZZZZ	4D122488.D	10/18/22	12:28	03:23	(unrelated sample)
ZZZZZZ	4D122489.D	10/18/22	12:57	03:52	(unrelated sample)
ZZZZZZ	4D122490.D	10/18/22	13:26	04:21	(unrelated sample)
JD53653-2	4D122491.D	10/18/22	13:55	04:50	(used for QC only; not part of job JD53489)
ZZZZZZ	4D122492.D	10/18/22	14:24	05:19	(unrelated sample)
ZZZZZZ	4D122493.D	10/18/22	14:54	05:49	(unrelated sample)
ZZZZZZ	4D122494.D	10/18/22	15:23	06:18	(unrelated sample)
JD53653-2MS	4D122496.D	10/18/22	16:21	07:16	Matrix Spike
JD53653-2MSD	4D122497.D	10/18/22	16:50	07:45	Matrix Spike Duplicate
ZZZZZZ	4D122499.D	10/18/22	17:49	08:44	(unrelated sample)
JD53489-4	4D122500.D	10/18/22	18:18	09:13	TRIP BLANK
ZZZZZZ	4D122501.D	10/18/22	18:47	09:42	(unrelated sample)
JD53489-1	4D122502.D	10/18/22	19:17	10:12	INFLUENT
JD53489-2	4D122503.D	10/18/22	19:46	10:41	PRE-FILTER
JD53489-3	4D122504.D	10/18/22	20:15	11:10	POST-FILTER
ZZZZZZ	4D122505.D	10/18/22	20:44	11:39	(unrelated sample)

Internal Standard Area Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Check Std:	V4D5439-CC5341	**Injection Date:**	10/18/22
Lab File ID:	4D122482.D	**Injection Time:**	09:34
Instrument ID:	GCMS4D	**Method:**	EPA 624.1

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
Check Std	896032	8.53	942228	11.02	1310594	11.91	484746	16.93	1146946	14.82
Upper Limit [a]	1792064	9.03	1884456	11.52	2621188	12.41	969492	17.43	2293892	15.32
Lower Limit [b]	448016	8.03	471114	10.52	655297	11.41	242373	16.43	573473	14.32

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT	IS 5 AREA	RT
V4D5439-BS	896032	8.53	942228	11.02	1310594	11.91	484746	16.93	1146946	14.82
V4D5439-MB	907155	8.53	986168	11.02	1362342	11.91	502971	16.93	1172138	14.82
ZZZZZZ	923980	8.53	956354	11.02	1338388	11.91	441514	16.93	1143813	14.82
ZZZZZZ	903903	8.53	947003	11.02	1315401	11.91	492187	16.93	1144269	14.82
ZZZZZZ	852236	8.53	880936	11.02	1272981	11.91	475409	16.93	1141496	14.82
ZZZZZZ	826022	8.53	867191	11.02	1244270	11.91	470444	16.93	1129304	14.82
ZZZZZZ	830948	8.53	856882	11.02	1240947	11.91	464886	16.93	1118153	14.82
JD53653-2	813562	8.53	862088	11.02	1251081	11.91	466214	16.93	1136193	14.82
ZZZZZZ	797360	8.53	801019	11.02	1173286	11.91	446191	16.93	1074215	14.82
ZZZZZZ	747681	8.53	786439	11.02	1140130	11.91	449975	16.93	1064634	14.82
ZZZZZZ	836308	8.53	829273	11.02	951297	11.91	451347	16.93	1029165	14.82
JD53653-2MS	795987	8.53	770718	11.02	1124265	11.91	407956	16.93	1057105	14.82
JD53653-2MSD	835595	8.53	837185	11.02	1184932	11.91	452625	16.93	1047804	14.82
ZZZZZZ	867175	8.53	900182	11.02	1264649	11.91	465530	16.93	1110024	14.82
JD53489-4	815558	8.53	832423	11.02	1210223	11.91	451288	16.93	1093465	14.82
ZZZZZZ	869704	8.53	836977	11.02	1216690	11.91	460684	16.93	1100352	14.82
JD53489-1	790734	8.53	799210	11.02	1159093	11.91	431729	16.93	1050783	14.82
JD53489-2	778097	8.53	794849	11.02	1153437	11.92	427789	16.93	1037476	14.82
JD53489-3	783484	8.53	793999	11.02	1157273	11.91	437495	16.93	1049333	14.82
ZZZZZZ	828937	8.53	793619	11.02	1151868	11.91	433246	16.93	1044895	14.82

IS 1 = Tert Butyl Alcohol-D9
IS 2 = Pentafluorobenzene
IS 3 = 1,4-Difluorobenzene
IS 4 = 1,4-Dichlorobenzene-d4
IS 5 = Chlorobenzene-D5

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Surrogate Recovery Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Method: EPA 624.1 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
JD53489-1	4D122502.D	102	105	104	111
JD53489-2	4D122503.D	103	106	103	111
JD53489-3	4D122504.D	103	106	103	112
JD53489-4	4D122500.D	103	106	104	111
JD53653-2MS	4D122496.D	105	101	97	112
JD53653-2MSD	4D122497.D	99	103	98	108
V4D5439-BS	4D122482A.D	97	103	98	105
V4D5439-MB	4D122484.D	97	106	96	105

Surrogate Compounds	Recovery Limits
S1 = 1,2-Dichloroethane-D4 (SUR)	80-128%
S2 = Toluene-D8 (SUR)	82-113%
S3 = 4-Bromofluorobenzene (SUR)	79-117%
S4 = Dibromofluoromethane (S)	84-121%

Initial Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICC5341
Lab FileID: 4D120255.D

Response Factor Report MS4D

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Calibration Files
1 =4D120250.D 0.5 =4D120249.D 100 =4D120256.D 50 =4D120255.D
20 =4D120254.D 200 =4D120257.D 4 =4D120252.D 2 =4D120251.D
8 =4D120253.D 0.2 =4D120248.D = =

Compound	1	0.5	100	50	20	200	4	2	8	0.2	Avg	%RSD
1) tert butyl alcohol-d9	----------ISTD----------											
2) tertiary butyl alcohol	1.356	1.392	1.456	1.420	1.408	1.435	1.429	1.519	1.414	1.463	1.429	3.08
3) ethanol	0.129	0.111	0.149	0.148	0.140	0.145	0.137	0.142	0.141		0.138	8.49
4) 1,4-dioxane	0.124	0.105	0.130	0.129	0.127	0.126	0.128	0.135	0.130		0.126	6.68
5) I pentafluorobenzene	----------ISTD----------											
6) chlorodifluoromethane	0.524	0.541	0.584	0.554	0.527	0.573	0.556	0.575	0.531	0.533	0.550	3.98
7) dichlorodifluoromethane	0.584	0.597	0.717	0.669	0.627	0.705	0.648	0.615	0.634	0.596	0.639	7.14
8) chloromethane	0.529	0.624	0.546	0.525	0.499	0.523	0.548	0.545	0.528		0.541	6.40
9) vinyl chloride	0.520	0.517	0.560	0.531	0.515	0.526	0.531	0.529	0.526	0.551	0.531	2.71
10) 1,3-butadiene	0.465	0.481	0.485	0.494	0.476	0.443	0.508	0.532	0.488	0.465	0.484	5.08
11) bromomethane	0.345	0.374	0.317	0.280	0.263	0.300	0.330	0.354	0.303		0.318	11.31
12) chloroethane	0.255	0.258	0.306	0.289	0.273	0.295	0.287	0.281	0.278	0.267	0.279	5.77
13) trichlorofluoromethane	0.716	0.690	0.838	0.792	0.757	0.820	0.783	0.760	0.765	0.588	0.751	9.61
14) ethyl ether	0.199		0.243	0.230	0.217	0.239	0.224	0.221	0.226		0.225	6.06
15) acrolein			0.102	0.101	0.087	0.105	0.082		0.091		0.095	9.99
16) freon 113	0.313	0.334	0.377	0.365	0.356	0.365	0.370	0.370	0.351		0.356	5.73
17) 1,1-dichloroethene	0.407	0.419	0.381	0.366	0.362	0.366	0.388	0.427	0.378	0.448	0.394	7.48
18) acetone	0.029		0.053	0.053	0.050	0.051	0.044	0.045	0.045		0.046	16.91
19) acetonitrile	0.073	0.081	0.080	0.081	0.076	0.079	0.079	0.086	0.078		0.079	4.44
20) iodomethane *This compound fails EPA 624.1 Initial Calibration criteria*			0.725	0.682	0.607	0.675	0.370	0.270	0.477		0.544	32.09
----- Linear regression ----- Coefficient = 0.9980												
Response Ratio = -0.02222 + 0.69609 *A												
21) carbon disulfide	1.020	1.095	1.103	1.068	1.057	1.097	1.098	1.141	1.073	1.295	1.105	6.72

Initial Calibration Summary

Job Number: JD53489 **Sample:** V4D5341-ICC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D120255.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

22) methylene chloride
0.407 0.417 0.429 0.411 0.405 0.419 0.430 0.453 0.417 0.441 0.423 3.65
23) methyl acetate
0.428 0.419 0.379 0.430 0.364 0.347 0.374 0.392 8.60
24) methyl tert butyl ether
1.166 1.170 1.287 1.221 1.188 1.263 1.253 1.305 1.225 1.195 1.227 3.95
25) trans-1,2-dichloroethene
0.426 0.504 0.414 0.401 0.400 0.399 0.426 0.459 0.407 0.507 0.434 9.56
26) di-isopropyl ether
1.234 1.248 1.329 1.295 1.275 1.277 1.334 1.385 1.313 1.324 1.301 3.45
27) 2-butanone
0.054 0.072 0.072 0.067 0.073 0.067 0.064 0.067 0.067 9.16
28) 1,1-dichloroethane
0.687 0.693 0.756 0.726 0.709 0.738 0.751 0.783 0.725 0.620 0.719 6.31
29) chloroprene
0.476 0.479 0.597 0.571 0.549 0.588 0.566 0.559 0.555 0.486 0.543 8.36
30) acrylonitrile
0.191 0.184 0.167 0.194 0.155 0.180 0.150 0.174 9.91
31) hexane
0.229 0.223 0.269 0.257 0.246 0.268 0.259 0.262 0.248 0.250 0.251 6.10
32) vinyl acetate
0.101 0.096 0.089 0.100 0.082 0.080 0.085 0.090 9.50
33) ethyl tert-butyl ether
1.188 1.156 1.367 1.291 1.251 1.357 1.287 1.331 1.266 1.203 1.270 5.64
34) ethyl acetate
0.070 0.068 0.064 0.070 0.058 0.056 0.064 0.065 8.65
35) 2,2-dichloropropane
0.620 0.659 0.635 0.620 0.612 0.617 0.655 0.695 0.630 0.699 0.644 4.97
36) cis-1,2-dichloroethene
0.455 0.559 0.461 0.448 0.450 0.449 0.479 0.515 0.457 0.538 0.481 8.60
37) methyl acrylate
0.394 0.476 0.468 0.451 0.473 0.471 0.383 0.454 0.446 8.22
38) propionitrile
0.076 0.072 0.084 0.086 0.082 0.081 0.084 0.084 0.082 0.081 5.61
39) bromochloromethane
0.227 0.216 0.255 0.246 0.246 0.248 0.254 0.263 0.252 0.245 5.99
40) tetrahydrofuran
0.085 0.086 0.080 0.084 0.089 0.107 0.086 0.088 9.90
41) chloroform
0.562 0.670 0.522 0.501 0.495 0.513 0.543 0.585 0.512 0.545 10.21
42) t-butyl formate *This compound fails Initial Calibration criteria*
0.332 0.402 0.377 0.358 0.409 0.363 0.374 0.363 0.372 6.59
43) dibromofluoromethane (s)
0.477 0.477 0.470 0.470 0.471 0.472 0.476 0.476 0.475 0.474 0.474 0.58
44) methacrylonitrile
0.178 0.215 0.208 0.198 0.216 0.204 0.203 0.198 0.203 5.86
45) 1,1,1-trichloroethane
0.654 0.676 0.734 0.698 0.673 0.728 0.721 0.743 0.680 0.641 0.695 5.09
46) cyclohexane
0.526 0.522 0.575 0.555 0.539 0.555 0.568 0.547 0.547 0.477 0.541 5.14
47) 1,1-dichloropropene
0.491 0.518 0.561 0.540 0.531 0.544 0.568 0.594 0.537 0.550 0.544 5.18
48) isobutyl alcohol
0.004 0.004 0.004 0.004 0.004 0.004 0.004 0.004 4.90
49) carbon tetrachloride
0.621 0.642 0.683 0.658 0.645 0.669 0.678 0.705 0.663 0.633 0.660 3.80
50) tert amyl alcohol
0.028 0.029 0.029 0.030 0.027 0.029 0.030 0.029 0.028 0.029 3.19

51) I 1,4-difluorobenzene ----------ISTD----------

Initial Calibration Summary

Job Number: JD53489 **Sample:** V4D5341-ICC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D120255.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

52) 1,2-dichloroethane-d4 (s)
0.382 0.383 0.385 0.382 0.383 0.387 0.389 0.386 0.388 0.381 0.385 0.72
53) n-butyl alcohol
0.016 0.016 0.015 0.017 0.014 0.014 0.015 0.015 7.71
54) 2,2,4-trimethylpentane
0.697 0.684 0.727 0.711 0.714 0.722 0.748 0.790 0.721 0.673 0.719 4.61
55) benzene
1.097 1.098 1.180 1.143 1.137 1.137 1.200 1.263 1.164 1.078 1.150 4.80
56) tert-amyl methyl ether
0.202 0.207 0.238 0.228 0.221 0.239 0.231 0.234 0.225 0.204 0.223 6.23
57) heptane
0.145 0.142 0.171 0.165 0.162 0.173 0.169 0.175 0.158 0.162 7.28
58) isopropyl acetate
0.072 0.087 0.084 0.081 0.086 0.081 0.083 0.083 0.082 5.75
59) 1,2-dichloroethane
0.459 0.529 0.486 0.463 0.455 0.478 0.476 0.513 0.464 0.600 0.492 9.09
60) trichloroethene
0.333 0.313 0.375 0.357 0.345 0.367 0.361 0.364 0.346 0.312 0.347 6.31
61) ethyl acrylate
0.415 0.515 0.492 0.468 0.512 0.467 0.464 0.467 0.475 6.77
62) 2-nitropropane
0.135 0.136 0.173 0.162 0.146 0.181 0.147 0.154 0.137 0.152 10.87
63) 2-chloroethyl vinyl ether
0.125 0.183 0.170 0.157 0.192 0.147 0.149 0.153 0.160 13.57
64) methyl methacrylate
0.108 0.104 0.095 0.109 0.088 0.094 0.094 0.099 8.10
65) 1,2-dichloropropane
0.297 0.285 0.331 0.318 0.309 0.326 0.327 0.331 0.313 0.270 0.311 6.73
66) dibromomethane
0.242 0.218 0.251 0.240 0.240 0.249 0.244 0.265 0.239 0.257 0.245 5.16
67) methylcyclohexane
0.390 0.380 0.447 0.435 0.424 0.440 0.444 0.455 0.432 0.378 0.422 6.87
68) bromodichloromethane
0.421 0.454 0.497 0.470 0.456 0.493 0.466 0.484 0.451 0.444 0.464 5.07
69) epichlorohydrin
0.039 0.038 0.047 0.047 0.044 0.046 0.043 0.045 0.042 0.044 7.56
70) cis-1,3-dichloropropene
0.457 0.458 0.545 0.517 0.502 0.539 0.513 0.522 0.504 0.456 0.501 6.68
71) 4-methyl-2-pentanone
0.142 0.137 0.166 0.163 0.157 0.167 0.156 0.159 0.156 0.156 6.64
72) 3-methyl-1-butanol
0.016 0.016 0.014 0.016 0.013 0.011 0.013 0.014 13.14

73) I chlorobenzene-d5 ----------ISTD----------
74) toluene-d8 (s)
1.214 1.219 1.174 1.184 1.202 1.174 1.229 1.227 1.216 1.212 1.205 1.73
75) toluene
0.714 0.749 0.783 0.740 0.733 0.778 0.797 0.824 0.750 0.828 0.770 5.03
76) trans-1,3-dichloropropene
0.441 0.401 0.527 0.499 0.478 0.535 0.488 0.493 0.484 0.483 8.55
77) ethyl methacrylate
0.370 0.372 0.473 0.455 0.436 0.475 0.431 0.444 0.439 0.433 8.84
78) 1,1,2-trichloroethane
0.241 0.252 0.272 0.260 0.261 0.275 0.265 0.275 0.261 0.218 0.258 6.80
79) tetrachloroethene
0.288 0.308 0.310 0.302 0.305 0.302 0.339 0.339 0.310 0.306 0.311 5.20
80) 1,3-dichloropropane
0.469 0.461 0.519 0.495 0.484 0.524 0.505 0.526 0.495 0.397 0.487 7.93
81) 2-hexanone
0.145 0.130 0.178 0.174 0.165 0.179 0.165 0.165 0.162 0.162 9.80

Initial Calibration Summary

Job Number: JD53489 **Sample:** V4D5341-ICC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D120255.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

82) butyl acetate
0.197 0.192 0.237 0.231 0.229 0.233 0.236 0.251 0.234 0.227 8.52
83) dibromochloromethane
0.374 0.379 0.462 0.432 0.417 0.468 0.431 0.440 0.415 0.403 0.422 7.42
84) 1,2-dibromoethane
0.315 0.327 0.377 0.355 0.346 0.379 0.363 0.371 0.348 0.302 0.348 7.54
85) n-butyl ether
1.117 1.127 1.378 1.292 1.228 1.369 1.273 1.291 1.246 1.127 1.245 7.70
86) chlorobenzene
0.853 0.842 0.913 0.882 0.876 0.897 0.920 0.968 0.890 0.907 0.895 4.01
87) 1,1,1,2-tetrachloroethane
0.322 0.352 0.378 0.359 0.359 0.375 0.369 0.389 0.363 0.326 0.359 5.96
88) ethylbenzene
1.355 1.353 1.457 1.406 1.397 1.428 1.438 1.508 1.428 1.520 1.429 3.92
89) m,p-xylene
0.518 0.535 0.579 0.547 0.541 0.574 0.559 0.582 0.549 0.546 0.553 3.73
90) o-xylene
0.526 0.514 0.593 0.557 0.541 0.585 0.562 0.571 0.549 0.543 0.554 4.49
91) styrene
0.787 1.033 0.959 0.916 1.032 0.913 0.919 0.916 0.934 8.39
92) bromoform
0.278 0.297 0.368 0.343 0.322 0.376 0.316 0.324 0.316 0.307 0.325 9.31
93) butyl acrylate
0.513 0.713 0.668 0.622 0.720 0.595 0.594 0.613 0.630 10.92
94) isopropylbenzene
1.243 1.300 1.472 1.397 1.359 1.457 1.426 1.460 1.387 1.265 1.377 6.03
95) cis-1,4-dichloro-2-butene
0.137 0.121 0.104 0.150 0.090 0.092 0.116 21.32
----- Linear regression ----- Coefficient = 0.9937
Response Ratio = -0.00753 + 0.14464 *A

96) I 1,4-dichlorobenzene-d ----------ISTD----------
97) 4-bromofluorobenzene (s)
1.012 1.011 1.030 1.028 1.021 1.037 1.027 1.021 1.009 1.017 1.021 0.91
98) bromobenzene
0.848 0.818 0.990 0.936 0.922 0.976 0.925 0.968 0.918 0.902 0.920 5.90
99) 1,1,2,2-tetrachloroethane
0.907 0.912 1.085 1.028 1.003 1.080 1.026 1.063 1.002 0.950 1.006 6.43
100) trans-1,4-dichloro-2-butene
0.229 0.206 0.175 0.244 0.154 0.158 0.194 19.47
101) 1,2,3-trichloropropane
0.278 0.257 0.321 0.312 0.305 0.318 0.312 0.324 0.299 0.303 7.32
102) n-propylbenzene
3.044 3.087 3.619 3.438 3.369 3.540 3.386 3.493 3.359 3.286 3.362 5.47
103) 2-chlorotoluene
0.685 0.706 0.846 0.790 0.778 0.831 0.782 0.818 0.778 0.718 0.773 6.99
104) 4-chlorotoluene
2.064 2.103 2.321 2.173 2.125 2.313 2.239 2.278 2.147 2.221 2.198 4.09
105) 1,3,5-trimethylbenzene
2.141 2.146 2.583 2.424 2.341 2.564 2.374 2.469 2.349 2.384 2.378 6.27
106) tert-butylbenzene
0.438 0.437 0.521 0.489 0.474 0.524 0.467 0.478 0.468 0.405 0.470 7.87
107) 1,2,4-trimethylbenzene
2.126 2.204 2.577 2.422 2.326 2.549 2.376 2.444 2.341 2.556 2.392 6.27
108) sec-butylbenzene
2.405 2.410 3.002 2.822 2.724 3.013 2.710 2.807 2.711 2.602 2.720 7.68
109) 1,3-dichlorobenzene
1.404 1.384 1.640 1.546 1.514 1.617 1.557 1.582 1.537 1.473 1.525 5.52
110) p-isopropyltoluene

Initial Calibration Summary

Job Number: JD53489 **Sample:** V4D5341-ICC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D120255.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

```
       2.002 1.934 2.526 2.354 2.258 2.553 2.275 2.331 2.234 1.956  2.242    9.79
111)  1,4-dichlorobenzene
       1.479 1.605 1.677 1.572 1.536 1.681 1.616 1.709 1.570 1.644  1.609    4.45
112)  1,2,3-trimethylbenzene
       2.143 2.204 2.544 2.385 2.311 2.552 2.360 2.437 2.329 2.250  2.351    5.73
113)  benzyl chloride
       1.435       1.915 1.791 1.673 1.921 1.576 1.626 1.610        1.694   10.06
114)  1,2-dichlorobenzene
       1.318 1.237 1.592 1.500 1.462 1.588 1.479 1.502 1.452 1.249  1.438    8.90
115)  n-butylbenzene
                   1.128 1.031 0.968 1.169 0.977 0.991 0.975        1.034    7.87
116)  1,2-dibromo-3-chloropropane
                   0.308 0.293 0.262 0.312 0.255 0.244 0.249        0.275   10.53
117)  1,3,5-trichlorobenzene
       0.751 0.730 0.937 0.861 0.826 0.971 0.841 0.862 0.824        0.845    9.17
118)  1,2,4-trichlorobenzene
       0.613       0.774 0.715 0.682 0.797 0.672 0.677 0.678        0.701    8.49
119)  hexachlorobutadiene
       0.265 0.279 0.347 0.325 0.319 0.359 0.319 0.329 0.313        0.317    9.38
120)  naphthalene
       1.839 1.841 2.011 1.984 1.954 1.943 1.984 2.036 1.983 2.344  1.992    7.04
121)  1,2,3-trichlorobenzene
       0.542 0.534 0.622 0.582 0.572 0.635 0.562 0.577 0.575 0.547  0.575    5.67
122)  hexachloroethane
                   0.504 0.459 0.429 0.516 0.395 0.403 0.419        0.446   10.79
123)  2-methylnaphthalene
                   0.643 0.609 0.577 0.595 0.528 0.532 0.541        0.575    7.61

124)     pentafluorobenzene(a) ----------------ISTD---------------------
125)  Freon 143A
                   0.306 0.290 0.266 0.291 0.275 0.278 0.291        0.285    4.60
126)  Freon 142B
                   0.489 0.474 0.448 0.470 0.473 0.495 0.482        0.476    3.19
127)  Freon 141B
                   0.558 0.540 0.517 0.537 0.527 0.525 0.562        0.538    3.16
 ---------------------------------------------------------------------------
 (#) = Out of Range  ###  Number of calibration levels exceeded format  ###

           M4D5341.M         Thu Sep 22 11:30:51 2022
```

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120260.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D5341\4D120260.D Vial: 14
Acq On : 14 Aug 2022 2:18 am Operator: PrashanS
Sample : ICV5341-50 Inst : MS4D
Misc : MS61262,V4D5341,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Aug 16 11:16:58 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	8.53
2	M	tertiary butyl alcohol	1.429	1.494	-4.5	115	0.00	8.66
3		ethanol	0.138	0.148	-7.2	109	0.00	7.07
4	M	1,4-dioxane	0.126	0.127	-0.8	107	0.00	12.57
5	I	pentafluorobenzene	1.000	1.000	0.0	106	0.00	11.02
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane	0.639	0.692	-8.3	110	0.00	4.55
8	M	chloromethane	0.541	0.528	2.4	107	0.00	5.04
9	M	vinyl chloride	0.531	0.551	-3.8	110	0.00	5.29
10		1,3-butadiene	0.484	0.556	-14.9	120	0.00	5.39
11	M	bromomethane	0.318	0.359	-12.9	137	0.00	6.06
12	M	chloroethane	0.279	0.315	-12.9	116	0.00	6.29
13	M	trichlorofluoromethane	0.751	0.811	-8.0	109	0.00	6.85
14	M	ethyl ether	0.225	0.245	-8.9	113	0.00	7.38
15	M	acrolein	0.095	0.109	-14.7	115	0.00	7.58
16		freon 113	0.356	0.365	-2.5	106	0.00	7.83
17	M	1,1-dichloroethene	0.394	0.377	4.3	110	0.00	7.83
18	M	acetone	0.046	0.053	-15.2	106	0.00	7.82
19	M	acetonitrile		----------NA----------				
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane	50.000	38.056	23.9	79	0.00	8.12
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide	1.105	1.105	0.0	110	0.00	8.28
22	M	methylene chloride	0.423	0.431	-1.9	112	0.00	8.59
23	M	methyl acetate	0.392	0.465	-18.6	118	0.00	8.40
24	M	methyl tert butyl ether	1.227	1.293	-5.4	113	0.00	9.03
25	M	trans-1,2-dichloroethene	0.434	0.412	5.1	109	0.00	9.06
26	M	di-isopropyl ether	1.301	1.293	0.6	106	0.00	9.72
27	M	2-butanone	0.067	0.077	-14.9	114	0.00	10.39
28	M	1,1-dichloroethane	0.719	0.748	-4.0	110	0.00	9.66
29	M	chloroprene	0.543	0.630	-16.0	118	0.00	9.81
30	M	acrylonitrile		----------NA----------				
31		hexane	0.251	0.284	-13.1	118	0.00	9.49
32	M	vinyl acetate	0.090	0.087	3.3	96	0.00	9.66
33	M	ethyl tert-butyl ether	1.270	1.258	0.9	104	0.00	10.22
34	M	ethyl acetate	0.065	0.072	-10.8	112	0.00	10.46
35	M	2,2-dichloropropane	0.644	0.620	3.7	107	0.00	10.48
36	M	cis-1,2-dichloroethene	0.481	0.460	4.4	109	0.00	10.45
37		methyl acrylate	0.446	0.483	-8.3	110	0.00	10.53

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120260.D

38	M	propionitrile	0.081	0.085	-4.9	105	0.00	10.45
39	M	bromochloromethane	0.245	0.253	-3.3	110	0.00	10.75
40	M	tetrahydrofuran	0.088	0.088	0.0	109	0.00	10.83
41	M	chloroform	0.545	0.517	5.1	110	0.00	10.82
42	M	t-butyl formate	0.372	0.254	31.7#	72	0.00	10.90
43	S	dibromofluoromethane (s)	0.474	0.468	1.3	106	0.00	11.02
44	M	methacrylonitrile	0.203	0.222	-9.4	113	0.00	10.68
45	M	1,1,1-trichloroethane	0.695	0.716	-3.0	109	0.00	11.13
46		cyclohexane	0.541	0.565	-4.4	108	0.00	11.25
47		1,1-dichloropropene	0.544	0.555	-2.0	109	0.00	11.32
48		isobutyl alcohol	0.004	0.004	0.0	112	0.00	11.32
49		carbon tetrachloride	0.660	0.672	-1.8	109	0.00	11.36
50		tert amyl alcohol	0.029	0.031	-6.9	109	0.00	11.40
51	I	1,4-difluorobenzene	1.000	1.000	0.0	105	0.00	11.92
52	S	1,2-dichloroethane-d4 (s)	0.385	0.384	0.3	106	0.00	11.45
53	M	n-butyl alcohol	0.015	0.017	-13.3	107	0.00	11.99
54		2,2,4-trimethylpentane	0.719	0.716	0.4	106	0.00	11.65
55	M	benzene	1.150	1.185	-3.0	109	0.00	11.57
56	M	tert-amyl methyl ether	0.223	0.222	0.4	103	0.00	11.64
57	M	heptane	0.162	0.175	-8.0	112	0.00	11.81
58	M	isopropyl acetate	0.082	0.088	-7.3	110	0.00	11.50
59	M	1,2-dichloroethane	0.492	0.482	2.0	110	0.00	11.54
60	M	trichloroethene	0.347	0.370	-6.6	109	0.00	12.25
61		ethyl acrylate	0.475	0.502	-5.7	107	0.00	12.24
62	M	2-nitropropane	0.152	0.178	-17.1	116	0.00	12.90
63	M	2-chloroethyl vinyl ether	0.160	0.172	-7.5	107	0.00	12.96
64	M	methyl methacrylate	0.099	0.108	-9.1	110	0.00	12.50
65	M	1,2-dichloropropane	0.311	0.319	-2.6	106	0.00	12.47
66	M	dibromomethane	0.245	0.245	0.0	108	0.00	12.60
67	M	methylcyclohexane	0.422	0.452	-7.1	109	0.00	12.51
68	M	bromodichloromethane	0.464	0.483	-4.1	108	0.00	12.73
69		epichlorohydrin	0.044	0.047	-6.8	105	0.00	13.04
70	M	cis-1,3-dichloropropene	0.501	0.526	-5.0	107	0.00	13.16
71	M	4-methyl-2-pentanone	0.156	0.165	-5.8	107	0.00	13.26
72	M	3-methyl-1-butanol	0.014	0.016	-14.3	109	0.00	13.25
73	I	chlorobenzene-d5	1.000	1.000	0.0	105	0.00	14.82
74	S	toluene-d8 (s)	1.205	1.176	2.4	104	0.00	13.46
75		toluene	0.770	0.763	0.9	108	0.00	13.53
76		trans-1,3-dichloropropene	0.483	0.509	-5.4	107	0.00	13.66
77		ethyl methacrylate	0.433	0.463	-6.9	107	0.00	13.69
78		1,1,2-trichloroethane	0.258	0.270	-4.7	109	0.00	13.85
79	M	tetrachloroethene		----------NA----------				
80	M	1,3-dichloropropane	0.487	0.504	-3.5	107	0.00	14.03
81		2-hexanone	0.162	0.177	-9.3	106	0.00	14.03
82	M	butyl acetate	0.227	0.246	-8.4	112	0.00	14.11
83	M	dibromochloromethane	0.422	0.448	-6.2	109	0.00	14.26
84	M	1,2-dibromoethane	0.348	0.370	-6.3	109	0.00	14.41
85		n-butyl ether	1.245	1.297	-4.2	105	0.00	14.81
86	M	chlorobenzene	0.895	0.903	-0.9	107	0.00	14.85
87	M	1,1,1,2-tetrachloroethane	0.359	0.371	-3.3	108	0.00	14.90
88	M	ethylbenzene	1.429	1.451	-1.5	108	0.00	14.92
89	M	m,p-xylene	0.553	0.565	-2.2	108	0.00	15.01
90	M	o-xylene	0.554	0.570	-2.9	107	0.00	15.39
91	M	styrene	0.934	0.994	-6.4	109	0.00	15.39
92	M	bromoform	0.325	0.354	-8.9	108	0.00	15.59
93		butyl acrylate	0.630	0.693	-10.0	109	0.00	15.22
94		isopropylbenzene	1.377	1.438	-4.4	108	0.00	15.71

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120260.D

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene	50.000	47.952	4.1	113	0.00	15.71

			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	103	0.00	16.93
97	S	4-bromofluorobenzene (s)	1.021	1.035	-1.4	104	0.00	15.87
98	M	bromobenzene	0.920	0.982	-6.7	108	0.00	16.04
99	M	1,1,2,2-tetrachloroethane	1.006	1.069	-6.3	108	0.00	15.92
100	M	trans-1,4-dichloro-2-bute	0.194	0.236	-21.6	119	0.00	15.96
101	M	1,2,3-trichloropropane	0.303	0.326	-7.6	108	0.00	15.99
102	M	n-propylbenzene	3.362	3.584	-6.6	108	0.00	16.08
103	M	2-chlorotoluene	0.773	0.819	-6.0	107	0.00	16.20
104	M	4-chlorotoluene	2.198	2.266	-3.1	108	0.00	16.29
105	M	1,3,5-trimethylbenzene	2.378	2.524	-6.1	108	0.00	16.21
106	M	tert-butylbenzene	0.470	0.515	-9.6	109	0.00	16.54
107	M	1,2,4-trimethylbenzene	2.392	2.546	-6.4	109	0.00	16.57
108	M	sec-butylbenzene	2.720	2.941	-8.1	108	0.00	16.73
109	M	1,3-dichlorobenzene	1.525	1.608	-5.4	108	0.00	16.88
110	M	p-isopropyltoluene	2.242	2.463	-9.9	108	0.00	16.84
111	M	1,4-dichlorobenzene	1.609	1.627	-1.1	107	0.00	16.96
112		1,2,3-trimethylbenzene		----------NA----------				
113		benzyl chloride	1.694	1.726	-1.9	100	0.00	17.05
114	M	1,2-dichlorobenzene	1.438	1.559	-8.4	107	0.00	17.31
115	M	n-butylbenzene	1.034	1.097	-6.1	110	0.00	17.22
116	M	1,2-dibromo-3-chloropropa	0.275	0.300	-9.1	106	0.00	18.01
117		1,3,5-trichlorobenzene	0.845	0.920	-8.9	110	0.00	18.23
118	M	1,2,4-trichlorobenzene	0.701	0.750	-7.0	108	0.00	18.82
119	M	hexachlorobutadiene	0.317	0.363	-14.5	116	0.00	18.96
120	M	naphthalene	1.992	2.028	-1.8	106	0.00	19.08
121	M	1,2,3-trichlorobenzene	0.575	0.616	-7.1	109	0.00	19.31
122	m	hexachloroethane	0.446	0.495	-11.0	111	0.00	17.59
123		2-methylnaphthalene	0.575	0.609	-5.9	103	0.00	20.17

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

4D120255.D M4D5341.M Wed Aug 17 16:21:05 2022

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120261.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\V4D5341\4D120261.D Vial: 15
Acq On : 14 Aug 2022 2:46 am Operator: PrashanS
Sample : ICV5341-50 Inst : MS4D
Misc : MS61262,V4D5341,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Aug 16 11:16:58 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	109	0.00	8.53
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	113	0.00	11.02
6	M	chlorodifluoromethane	0.550	0.639	-16.2	130	0.00	4.58
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13	M	trichlorofluoromethane		----------NA----------				
14	M	ethyl ether		----------NA----------				
15	M	acrolein		----------NA----------				
16		freon 113		----------NA----------				
17	M	1,1-dichloroethene		----------NA----------				
18	M	acetone		----------NA----------				
19	M	acetonitrile	0.079	0.072	8.9	101	0.00	8.26
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide		----------NA----------				
22	M	methylene chloride		----------NA----------				
23	M	methyl acetate		----------NA----------				
24	M	methyl tert butyl ether		----------NA----------				
25	M	trans-1,2-dichloroethene		----------NA----------				
26	M	di-isopropyl ether		----------NA----------				
27	M	2-butanone		----------NA----------				
28	M	1,1-dichloroethane		----------NA----------				
29	M	chloroprene		----------NA----------				
30	M	acrylonitrile	0.174	0.159	8.6	97	0.00	8.92
31		hexane		----------NA----------				
32	M	vinyl acetate		----------NA----------				
33	M	ethyl tert-butyl ether		----------NA----------				
34	M	ethyl acetate		----------NA----------				
35	M	2,2-dichloropropane		----------NA----------				
36	M	cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120261.D

38	M	propionitrile			----------NA----------				
39	M	bromochloromethane			----------NA----------				
40	M	tetrahydrofuran			----------NA----------				
41	M	chloroform			----------NA----------				
42	M	t-butyl formate			----------NA----------				
43	S	dibromofluoromethane (s)	0.474	0.466	1.7	112	0.00	11.02	
44	M	methacrylonitrile			----------NA----------				
45	M	1,1,1-trichloroethane			----------NA----------				
46		cyclohexane			----------NA----------				
47		1,1-dichloropropene			----------NA----------				
48		isobutyl alcohol			----------NA----------				
49		carbon tetrachloride			----------NA----------				
50		tert amyl alcohol			----------NA----------				
51	I	1,4-difluorobenzene	1.000	1.000	0.0	112	0.00	11.92	
52	S	1,2-dichloroethane-d4 (s)	0.385	0.389	-1.0	114	0.00	11.45	
53	M	n-butyl alcohol			----------NA----------				
54		2,2,4-trimethylpentane			----------NA----------				
55	M	benzene			----------NA----------				
56	M	tert-amyl methyl ether			----------NA----------				
57	M	heptane			----------NA----------				
58	M	isopropyl acetate			----------NA----------				
59	M	1,2-dichloroethane			----------NA----------				
60	M	trichloroethene			----------NA----------				
61		ethyl acrylate			----------NA----------				
62	M	2-nitropropane			----------NA----------				
63	M	2-chloroethyl vinyl ether			----------NA----------				
64	M	methyl methacrylate			----------NA----------				
65	M	1,2-dichloropropane			----------NA----------				
66	M	dibromomethane			----------NA----------				
67	M	methylcyclohexane			----------NA----------				
68	M	bromodichloromethane			----------NA----------				
69		epichlorohydrin			----------NA----------				
70	M	cis-1,3-dichloropropene			----------NA----------				
71	M	4-methyl-2-pentanone			----------NA----------				
72	M	3-methyl-1-butanol			----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	106	0.00	14.82	
74	S	toluene-d8 (s)	1.205	1.237	-2.7	110	0.00	13.46	
75		toluene			----------NA----------				
76		trans-1,3-dichloropropene			----------NA----------				
77		ethyl methacrylate			----------NA----------				
78		1,1,2-trichloroethane			----------NA----------				
79	M	tetrachloroethene	0.311	0.299	3.9	104	0.00	14.07	
80	M	1,3-dichloropropane			----------NA----------				
81		2-hexanone			----------NA----------				
82	M	butyl acetate			----------NA----------				
83	M	dibromochloromethane			----------NA----------				
84	M	1,2-dibromoethane			----------NA----------				
85		n-butyl ether			----------NA----------				
86	M	chlorobenzene			----------NA----------				
87	M	1,1,1,2-tetrachloroethane			----------NA----------				
88	M	ethylbenzene			----------NA----------				
89	M	m,p-xylene			----------NA----------				
90	M	o-xylene			----------NA----------				
91	M	styrene			----------NA----------				
92	M	bromoform			----------NA----------				
93		butyl acrylate			----------NA----------				
94		isopropylbenzene			----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5341-ICV5341
Lab FileID: 4D120261.D

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene		NA				
			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	107	0.00	16.93
97	S	4-bromofluorobenzene (s)	1.021	1.028	-0.7	107	0.00	15.87
98	M	bromobenzene		NA				
99	M	1,1,2,2-tetrachloroethane		NA				
100	M	trans-1,4-dichloro-2-bute		NA				
101	M	1,2,3-trichloropropane		NA				
102	M	n-propylbenzene		NA				
103	M	2-chlorotoluene		NA				
104	M	4-chlorotoluene		NA				
105	M	1,3,5-trimethylbenzene		NA				
106	M	tert-butylbenzene		NA				
107	M	1,2,4-trimethylbenzene		NA				
108	M	sec-butylbenzene		NA				
109	M	1,3-dichlorobenzene		NA				
110	M	p-isopropyltoluene		NA				
111	M	1,4-dichlorobenzene		NA				
112		1,2,3-trimethylbenzene	2.351	2.597	-10.5	116	0.00	16.97
113		benzyl chloride		NA				
114	M	1,2-dichlorobenzene		NA				
115	M	n-butylbenzene		NA				
116	M	1,2-dibromo-3-chloropropa		NA				
117		1,3,5-trichlorobenzene		NA				
118	M	1,2,4-trichlorobenzene		NA				
119	M	hexachlorobutadiene		NA				
120	M	naphthalene		NA				
121	M	1,2,3-trichlorobenzene		NA				
122	m	hexachloroethane		NA				
123		2-methylnaphthalene		NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D120255.D M4D5341.M Wed Aug 17 16:21:07 2022

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: V4D5439-CC5341
Lab FileID: 4D122482.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\ne... due today\4d122482.d Vial: 2
Acq On : 18 Oct 2022 9:34 am Operator: edwardd
Sample : cc5341-20 Inst : MS4D
Misc : MS63085,V4D5439,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
Last Update : Tue Sep 20 14:55:55 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	R.T.
1		tert butyl alcohol-d9	1.000	1.000	0.0	178	-0.01	8.53
2	M	tertiary butyl alcohol		----------NA----------				
3		ethanol		----------NA----------				
4	M	1,4-dioxane		----------NA----------				
5	I	pentafluorobenzene	1.000	1.000	0.0	114	0.00	11.02
6	M	chlorodifluoromethane		----------NA----------				
7	M	dichlorodifluoromethane		----------NA----------				
8	M	chloromethane		----------NA----------				
9	M	vinyl chloride		----------NA----------				
10		1,3-butadiene		----------NA----------				
11	M	bromomethane		----------NA----------				
12	M	chloroethane		----------NA----------				
13	M	trichlorofluoromethane		----------NA----------				
14	M	ethyl ether		----------NA----------				
15	M	acrolein		----------NA----------				
16		freon 113		----------NA----------				
17	M	1,1-dichloroethene		----------NA----------				
18	M	acetone		----------NA----------				
19	M	acetonitrile		----------NA----------				
		----------	True	Calc.	% Drift	----------		
20	M	iodomethane		----------NA----------				
		----------	AvgRF	CCRF	% Dev	----------		
21	M	carbon disulfide		----------NA----------				
22	M	methylene chloride		----------NA----------				
23	M	methyl acetate		----------NA----------				
24	M	methyl tert butyl ether		----------NA----------				
25	M	trans-1,2-dichloroethene		----------NA----------				
26	M	di-isopropyl ether		----------NA----------				
27	M	2-butanone		----------NA----------				
28	M	1,1-dichloroethane		----------NA----------				
29	M	chloroprene		----------NA----------				
30	M	acrylonitrile		----------NA----------				
31		hexane		----------NA----------				
32	M	vinyl acetate		----------NA----------				
33	M	ethyl tert-butyl ether		----------NA----------				
34	M	ethyl acetate		----------NA----------				
35	M	2,2-dichloropropane		----------NA----------				
36	M	cis-1,2-dichloroethene		----------NA----------				
37		methyl acrylate		----------NA----------				

Continuing Calibration Summary

Job Number: JD53489 **Sample:** V4D5439-CC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D122482.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

38	M	propionitrile		----------NA----------				
39	M	bromochloromethane		----------NA----------				
40	M	tetrahydrofuran		----------NA----------				
41	M	chloroform		----------NA----------				
42	M	t-butyl formate		----------NA----------				
43	S	dibromofluoromethane (s)	0.474	0.499	-5.3	121	0.00	11.02
44	M	methacrylonitrile		----------NA----------				
45	M	1,1,1-trichloroethane		----------NA----------				
46		cyclohexane		----------NA----------				
47		1,1-dichloropropene		----------NA----------				
48		isobutyl alcohol		----------NA----------				
49		carbon tetrachloride		----------NA----------				
50		tert amyl alcohol		----------NA----------				
51	I	1,4-difluorobenzene	1.000	1.000	0.0	123	0.00	11.91
52	S	1,2-dichloroethane-d4 (s)	0.385	0.374	2.9	120	0.00	11.45
53	M	n-butyl alcohol		----------NA----------				
54		2,2,4-trimethylpentane		----------NA----------				
55	M	benzene		----------NA----------				
56	M	tert-amyl methyl ether		----------NA----------				
57	M	heptane		----------NA----------				
58	M	isopropyl acetate		----------NA----------				
59	M	1,2-dichloroethane		----------NA----------				
60	M	trichloroethene		----------NA----------				
61		ethyl acrylate		----------NA----------				
62	M	2-nitropropane		----------NA----------				
63	M	2-chloroethyl vinyl ether		----------NA----------				
64	M	methyl methacrylate		----------NA----------				
65	M	1,2-dichloropropane		----------NA----------				
66	M	dibromomethane		----------NA----------				
67	M	methylcyclohexane		----------NA----------				
68	M	bromodichloromethane		----------NA----------				
69		epichlorohydrin		----------NA----------				
70	M	cis-1,3-dichloropropene		----------NA----------				
71	M	4-methyl-2-pentanone		----------NA----------				
72	M	3-methyl-1-butanol		----------NA----------				
73	I	chlorobenzene-d5	1.000	1.000	0.0	111	0.00	14.82
74	S	toluene-d8 (s)	1.205	1.243	-3.2	115	0.00	13.46
75		toluene		----------NA----------				
76		trans-1,3-dichloropropene		----------NA----------				
77		ethyl methacrylate		----------NA----------				
78		1,1,2-trichloroethane		----------NA----------				
79	M	tetrachloroethene		----------NA----------				
80	M	1,3-dichloropropane		----------NA----------				
81		2-hexanone		----------NA----------				
82	M	butyl acetate		----------NA----------				
83	M	dibromochloromethane		----------NA----------				
84	M	1,2-dibromoethane		----------NA----------				
85		n-butyl ether		----------NA----------				
86	M	chlorobenzene		----------NA----------				
87	M	1,1,1,2-tetrachloroethane		----------NA----------				
88	M	ethylbenzene		----------NA----------				
89	M	m,p-xylene		----------NA----------				
90	M	o-xylene		----------NA----------				
91	M	styrene		----------NA----------				
92	M	bromoform		----------NA----------				
93		butyl acrylate		----------NA----------				
94		isopropylbenzene		----------NA----------				

Continuing Calibration Summary

Job Number: JD53489 **Sample:** V4D5439-CC5341
Account: AGMNYA Arcadis **Lab FileID:** 4D122482.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

			True	Calc.	% Drift			
95		cis-1,4-dichloro-2-butene		NA				
			AvgRF	CCRF	% Dev			
96	I	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.00	16.93
97	S	4-bromofluorobenzene (s)	1.021	1.002	1.9	104	0.00	15.87
98	M	bromobenzene		NA				
99	M	1,1,2,2-tetrachloroethane		NA				
100	M	trans-1,4-dichloro-2-bute		NA				
101	M	1,2,3-trichloropropane		NA				
102	M	n-propylbenzene		NA				
103	M	2-chlorotoluene		NA				
104	M	4-chlorotoluene		NA				
105	M	1,3,5-trimethylbenzene		NA				
106	M	tert-butylbenzene		NA				
107	M	1,2,4-trimethylbenzene		NA				
108	M	sec-butylbenzene		NA				
109	M	1,3-dichlorobenzene		NA				
110	M	p-isopropyltoluene		NA				
111	M	1,4-dichlorobenzene		NA				
112		1,2,3-trimethylbenzene		NA				
113		benzyl chloride		NA				
114	M	1,2-dichlorobenzene		NA				
115	M	n-butylbenzene		NA				
116	M	1,2-dibromo-3-chloropropa		NA				
117		1,3,5-trichlorobenzene		NA				
118	M	1,2,4-trichlorobenzene		NA				
119	M	hexachlorobutadiene		NA				
120	M	naphthalene		NA				
121	M	1,2,3-trichlorobenzene		NA				
122	m	hexachloroethane		NA				
123		2-methylnaphthalene		NA				
124		pentafluorobenzene(a)	1.000	1.000	0.0	78	0.00	11.02
125		Freon 143A		NA				
126		Freon 142B		NA				
127		Freon 141B		NA				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
4D120254.D M4D5341.M Tue Oct 18 17:45:38 2022

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: V4D5341	**Method:** SW846 8260D	**Instrument ID:** GCMS4D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V4D5341-BFB	4D120247.D	08/13/22 19:58	n/a	BFB Tune
V4D5341-IC5341	4D120248.D	08/13/22 20:38	n/a	Initial cal 0.2
V4D5341-IC5341	4D120249.D	08/13/22 21:06	n/a	Initial cal 0.5
V4D5341-IC5341	4D120250.D	08/13/22 21:35	n/a	Initial cal 1
V4D5341-IC5341	4D120251.D	08/13/22 22:03	n/a	Initial cal 2
V4D5341-IC5341	4D120252.D	08/13/22 22:31	n/a	Initial cal 4
V4D5341-IC5341	4D120253.D	08/13/22 23:00	n/a	Initial cal 8
V4D5341-IC5341	4D120254.D	08/13/22 23:28	n/a	Initial cal 20
V4D5341-ICC5341	4D120255.D	08/13/22 23:56	n/a	Initial cal 50
V4D5341-IC5341	4D120256.D	08/14/22 00:25	n/a	Initial cal 100
V4D5341-IC5341	4D120257.D	08/14/22 00:53	n/a	Initial cal 200
V4D5341-ICV5341	4D120260.D	08/14/22 02:18	n/a	Initial cal verification 50
V4D5341-ICV5341	4D120261.D	08/14/22 02:46	n/a	Initial cal verification 50

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: V4D5439	**Method:** EPA 624.1	**Instrument ID:** GCMS4D

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
V4D5439-BFB	4D122481.D	10/18/22 09:05	n/a	BFB Tune
V4D5439-CC5341	4D122482.D	10/18/22 09:34	n/a	Continuing cal 20
V4D5439-BS	4D122482A.D	10/18/22 09:34	n/a	Blank Spike
V4D5439-MB	4D122484.D	10/18/22 10:32	n/a	Method Blank
ZZZZZZ	4D122485.D	10/18/22 11:01	n/a	(unrelated sample)
ZZZZZZ	4D122487.D	10/18/22 11:59	n/a	(unrelated sample)
ZZZZZZ	4D122488.D	10/18/22 12:28	n/a	(unrelated sample)
ZZZZZZ	4D122489.D	10/18/22 12:57	n/a	(unrelated sample)
ZZZZZZ	4D122490.D	10/18/22 13:26	n/a	(unrelated sample)
JD53653-2	4D122491.D	10/18/22 13:55	n/a	(used for QC only; not part of job JD53489)
ZZZZZZ	4D122492.D	10/18/22 14:24	n/a	(unrelated sample)
ZZZZZZ	4D122493.D	10/18/22 14:54	n/a	(unrelated sample)
ZZZZZZ	4D122494.D	10/18/22 15:23	n/a	(unrelated sample)
JD53653-2MS	4D122496.D	10/18/22 16:21	n/a	Matrix Spike
JD53653-2MSD	4D122497.D	10/18/22 16:50	n/a	Matrix Spike Duplicate
ZZZZZZ	4D122499.D	10/18/22 17:49	n/a	(unrelated sample)
JD53489-4	4D122500.D	10/18/22 18:18	n/a	TRIP BLANK
ZZZZZZ	4D122501.D	10/18/22 18:47	n/a	(unrelated sample)
JD53489-1	4D122502.D	10/18/22 19:17	n/a	INFLUENT
JD53489-2	4D122503.D	10/18/22 19:46	n/a	PRE-FILTER
JD53489-3	4D122504.D	10/18/22 20:15	n/a	POST-FILTER
ZZZZZZ	4D122505.D	10/18/22 20:44	n/a	(unrelated sample)

MS Volatiles

Raw Data

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122502.d
Acq On : 18 Oct 2022 7:17 pm
Operator : edwardd
Sample : jd53489-1 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:27:46 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

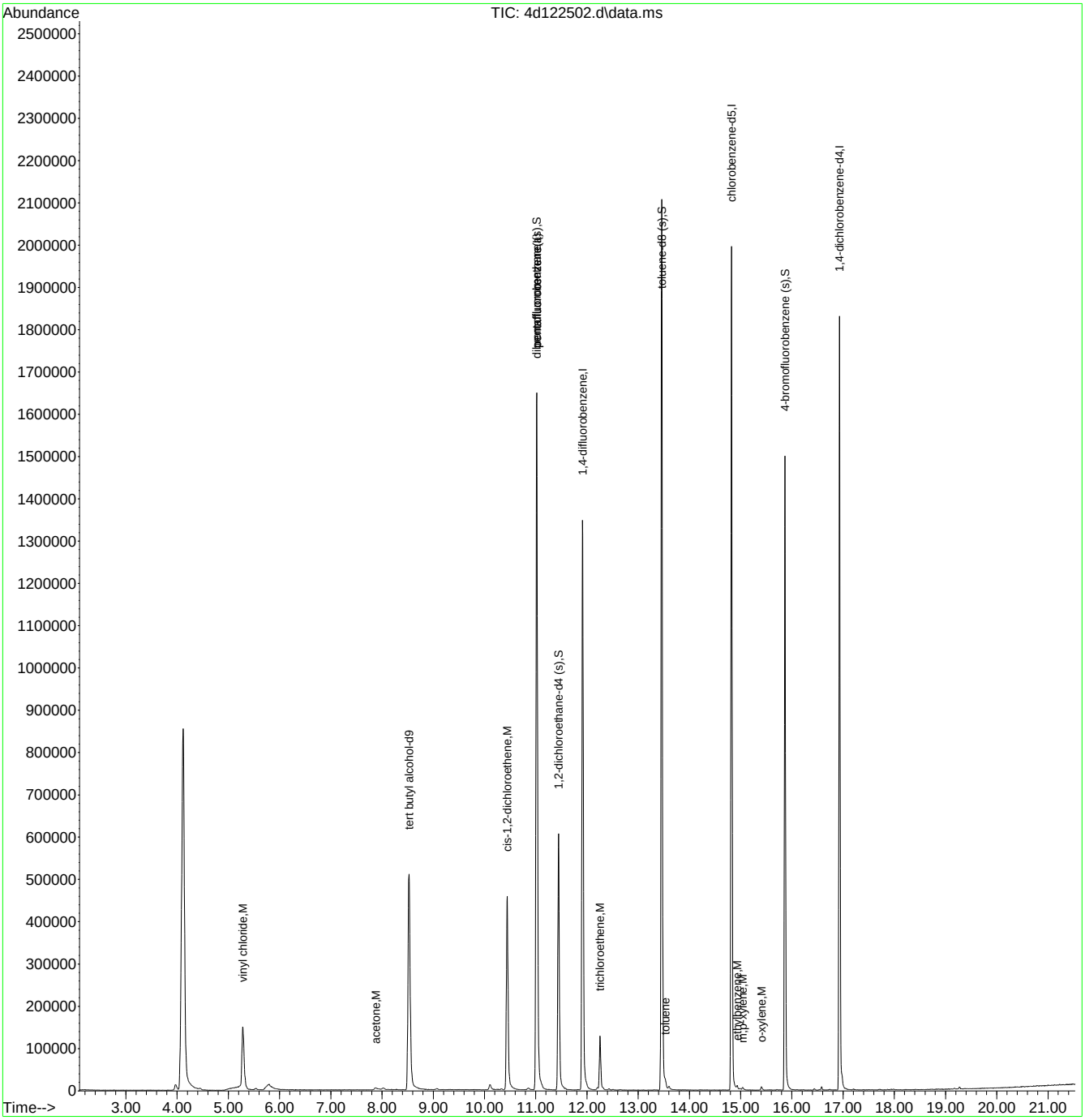
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	790734	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	799210	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1159093	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1050783	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	431729	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	799210	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	418828	55.29	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 110.58%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	456060	51.14	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.28%			
74) toluene-d8 (s)	13.459	98	1331547	52.58	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.16%			
97) 4-bromofluorobenzene (s)	15.866	95	457414	51.88	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.76%			
Target Compounds						Qvalue
9) vinyl chloride	5.280	62	239874	28.28	ug/L	97
18) acetone	7.880	58	3516	4.76	ug/L #	80
36) cis-1,2-dichloroethene	10.444	96	243433	31.66	ug/L	98
60) trichloroethene	12.253	130	45866	5.70	ug/L	97
75) toluene	13.532	92	5639	0.35	ug/L	94
88) ethylbenzene	14.932	91	6130	0.20	ug/L	95
89) m,p-xylene	15.042	106	2486	0.21	ug/L #	80
90) o-xylene	15.409	106	2846	0.24	ug/L #	65

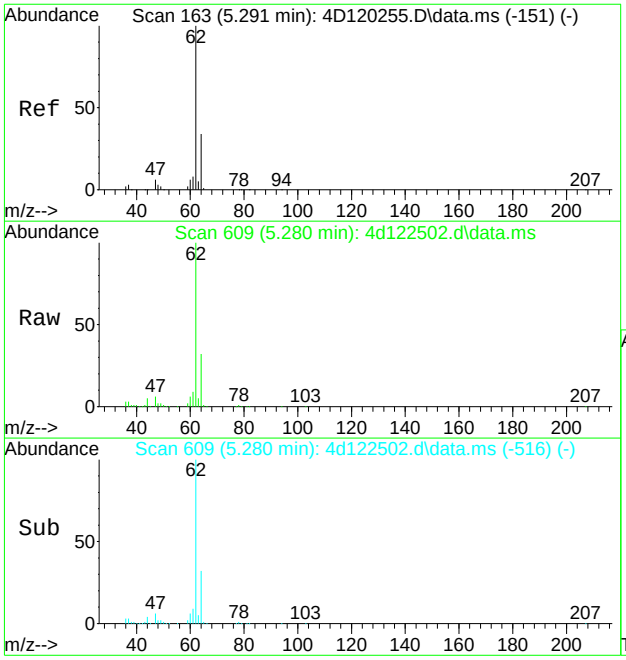
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122502.d
Acq On : 18 Oct 2022 7:17 pm
Operator : edwardd
Sample : jd53489-1 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 22 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:27:46 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

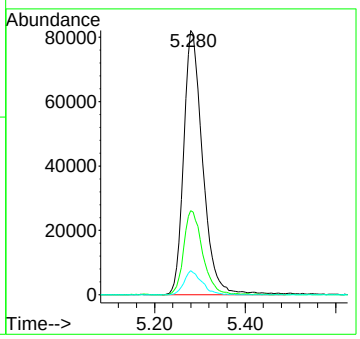


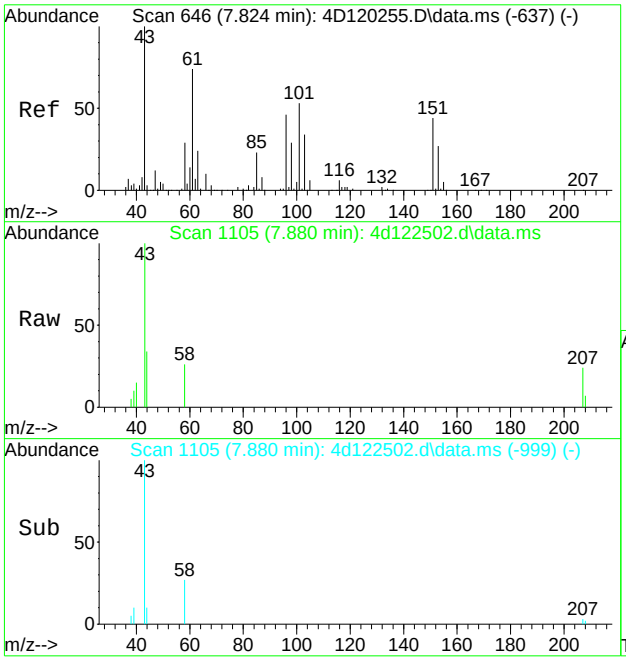


#9
vinyl chloride
Concen: 28.28 ug/L
RT: 5.280 min Scan# 609
Delta R.T. -0.011 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion: 62 Resp: 239874

Ion	Ratio	Lower	Upper
62	100		
64	31.9	4.0	64.0
61	9.1	0.0	38.3

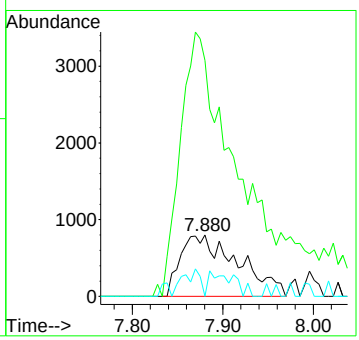


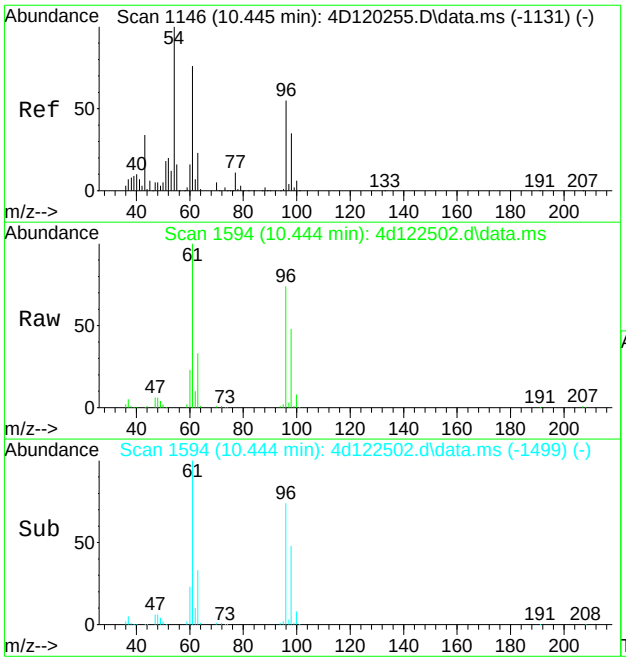


#18
acetone
Concen: 4.76 ug/L
RT: 7.880 min Scan# 1105
Delta R.T. 0.056 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion: 58 Resp: 3516

Ion	Ratio	Lower	Upper
58	100		
43	384.5	318.1	378.1#
42	0.0	0.0	58.0

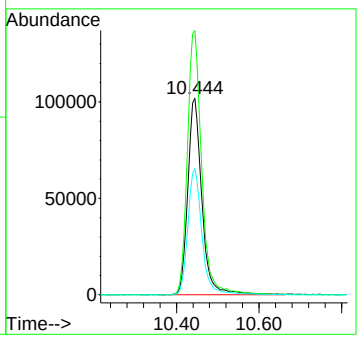


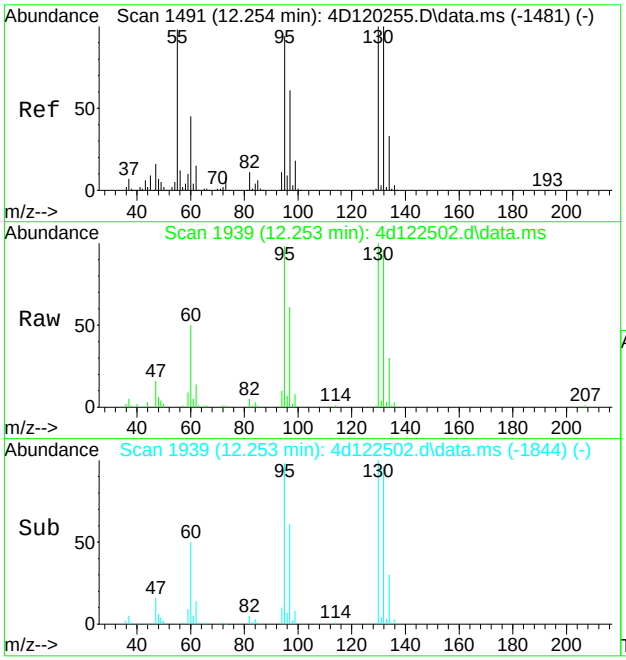


#36
cis-1,2-dichloroethene
Concen: 31.66 ug/L
RT: 10.444 min Scan# 1594
Delta R.T. -0.001 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion: 96 Resp: 243433

Ion	Ratio	Lower	Upper
96	100		
61	134.6	107.6	167.6
98	64.3	33.7	93.7

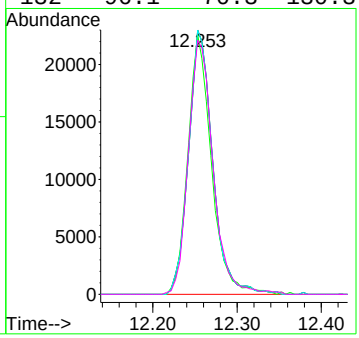


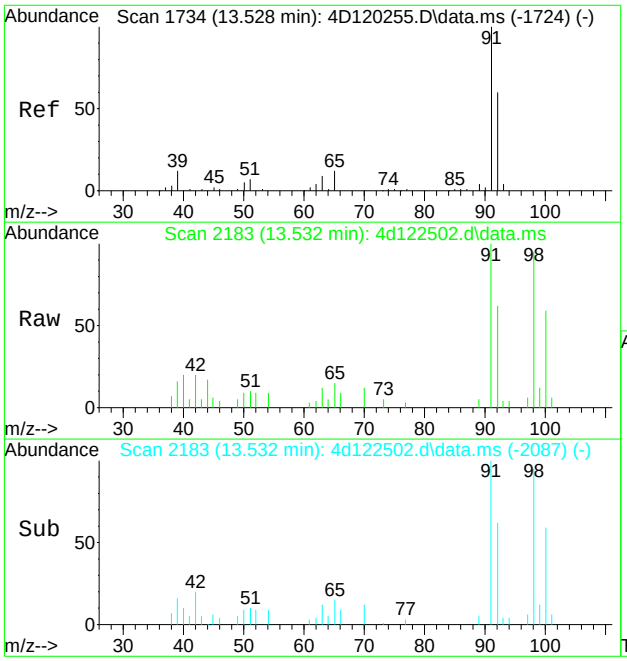


#60
trichloroethene
Concen: 5.70 ug/L
RT: 12.253 min Scan# 1939
Delta R.T. -0.001 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion:130 Resp: 45866

Ion	Ratio	Lower	Upper
130	100		
95	98.2	64.3	124.3
130	100.0	70.0	130.0
132	96.1	70.3	130.3

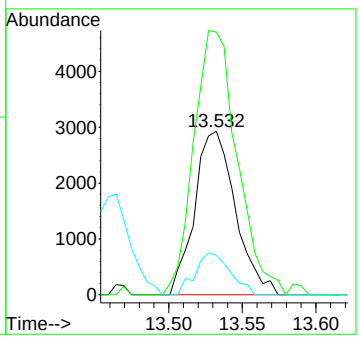


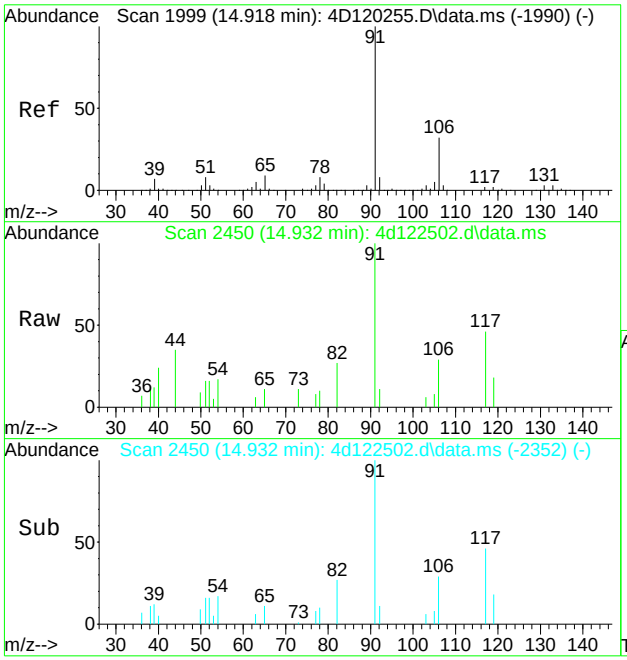


#75
toluene
Concen: 0.35 ug/L
RT: 13.532 min Scan# 2183
Delta R.T. 0.004 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion: 92 Resp: 5639

Ion	Ratio	Lower	Upper
92	100		
91	160.6	147.8	187.8
65	24.1	0.1	40.1

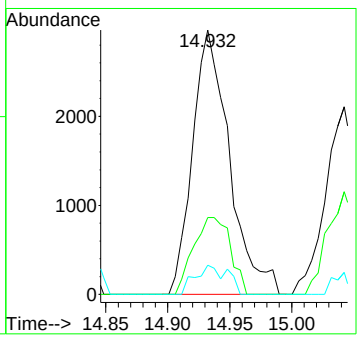


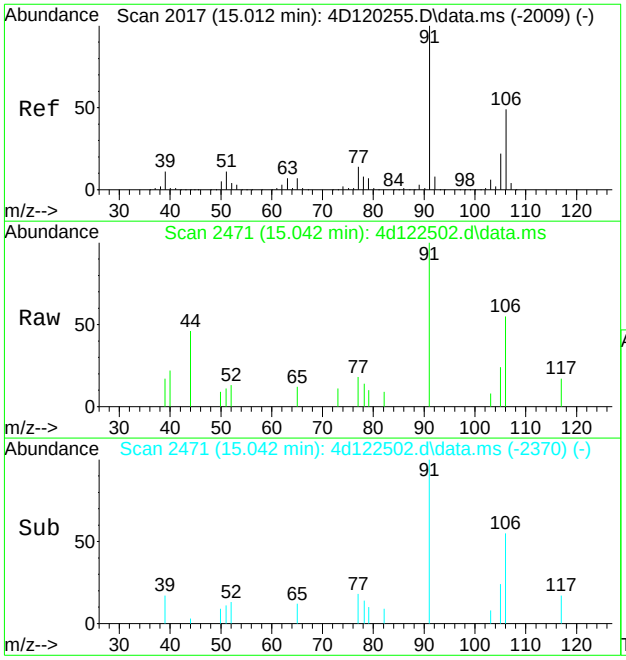


#88
ethylbenzene
Concen: 0.20 ug/L
RT: 14.932 min Scan# 2450
Delta R.T. 0.014 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion: 91 Resp: 6130

Ion	Ratio	Lower	Upper
91	100		
106	29.0	1.6	61.6
65	11.0	0.0	39.1

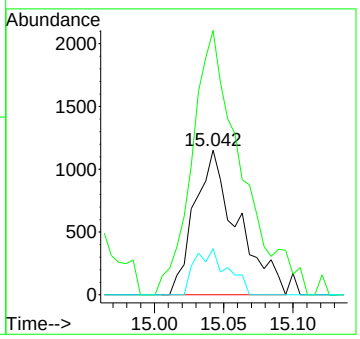


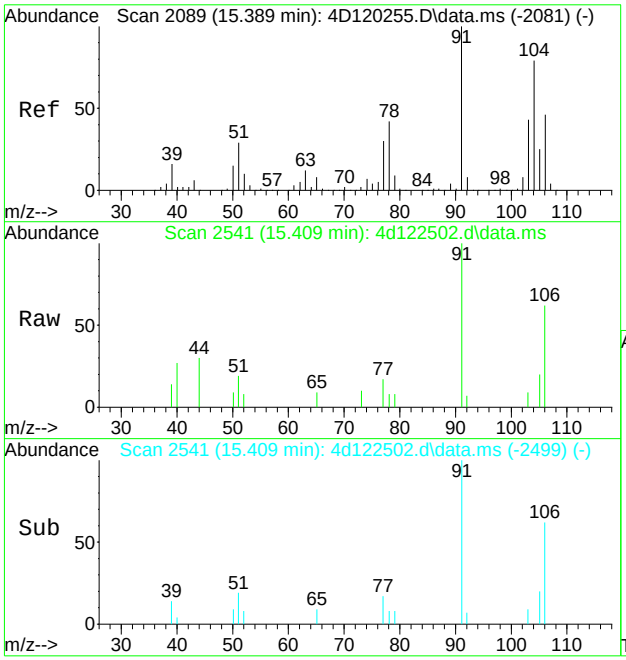


#89
m,p-xylene
Concen: 0.21 ug/L
RT: 15.042 min Scan# 2471
Delta R.T. 0.030 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion:106 Resp: 2486

Ion	Ratio	Lower	Upper
106	100		
91	169.6	173.1	233.1#
77	32.1	8.6	48.6

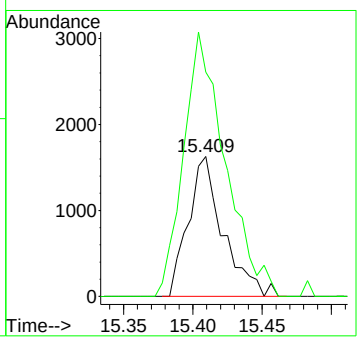




#90
o-xylene
Concen: 0.24 ug/L
RT: 15.409 min Scan# 2541
Delta R.T. 0.020 min
Lab File: 4d122502.d
Acq: 18 Oct 2022 7:17 pm

Tgt Ion:106 Resp: 2846

Ion	Ratio	Lower	Upper
106	100		
91	160.2	185.4	245.4#



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122503.d
Acq On : 18 Oct 2022 7:46 pm
Operator : edwardd
Sample : jd53489-2 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:28:33 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

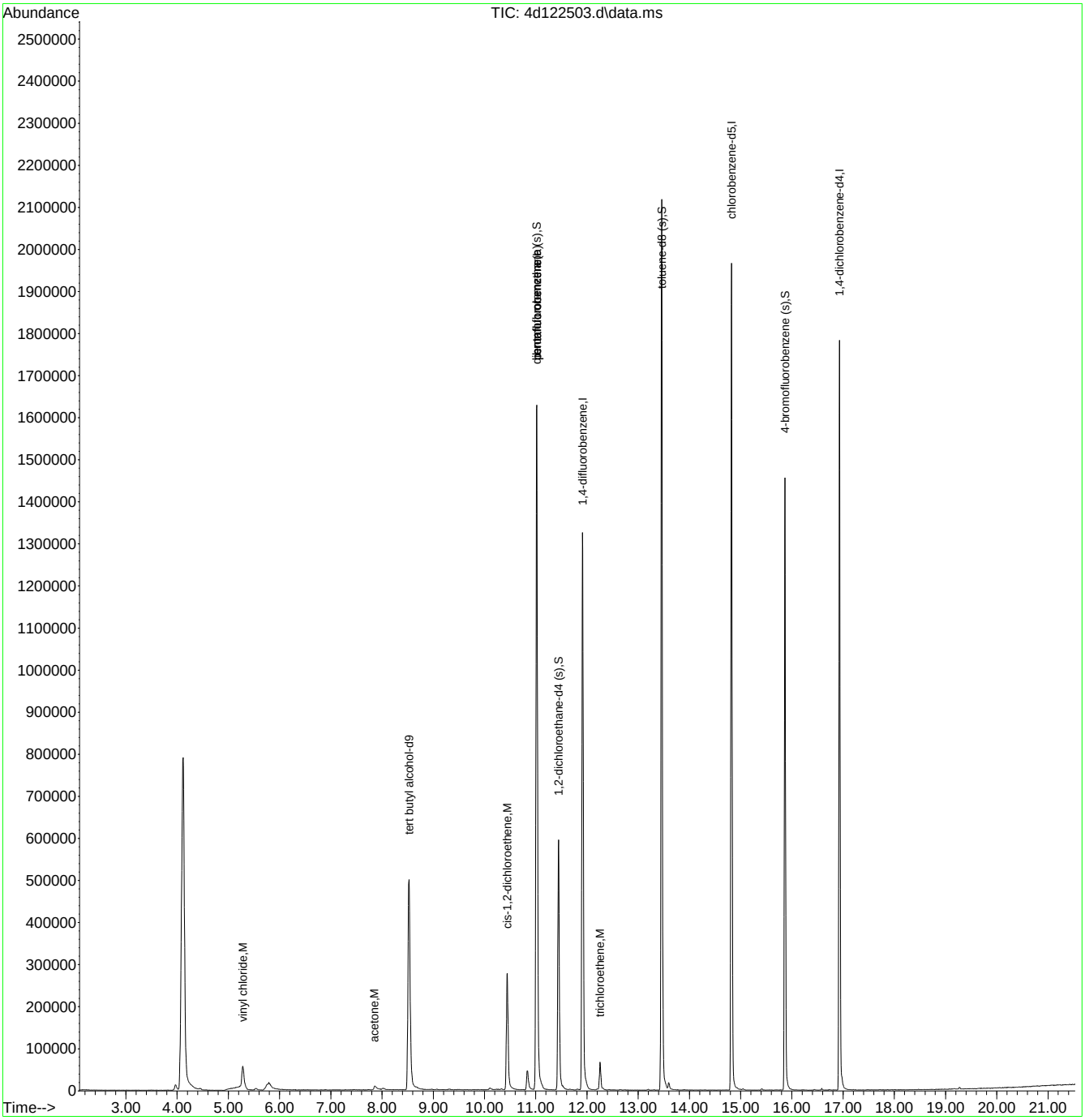
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	778097	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	794849	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.918	114	1153437	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1037476	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	427789	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	794849	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	417199	55.38	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 110.76%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	455671	51.35	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.70%			
74) toluene-d8 (s)	13.459	98	1331102	53.23	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.46%			
97) 4-bromofluorobenzene (s)	15.866	95	451880	51.72	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.44%			
Target Compounds						Qvalue
9) vinyl chloride	5.280	62	81042	9.61	ug/L	97
18) acetone	7.849	58	6698	9.11	ug/L	92
36) cis-1,2-dichloroethene	10.444	96	151070	19.76	ug/L	99
60) trichloroethene	12.253	130	24356	3.04	ug/L	97

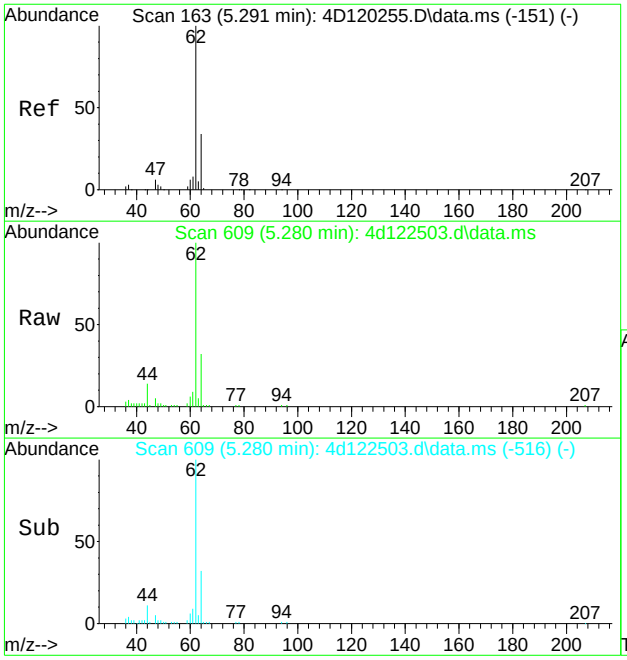
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122503.d
Acq On : 18 Oct 2022 7:46 pm
Operator : edwardd
Sample : jd53489-2 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 23 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:28:33 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

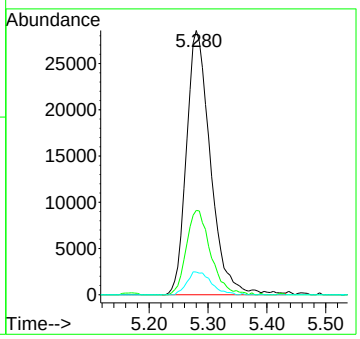


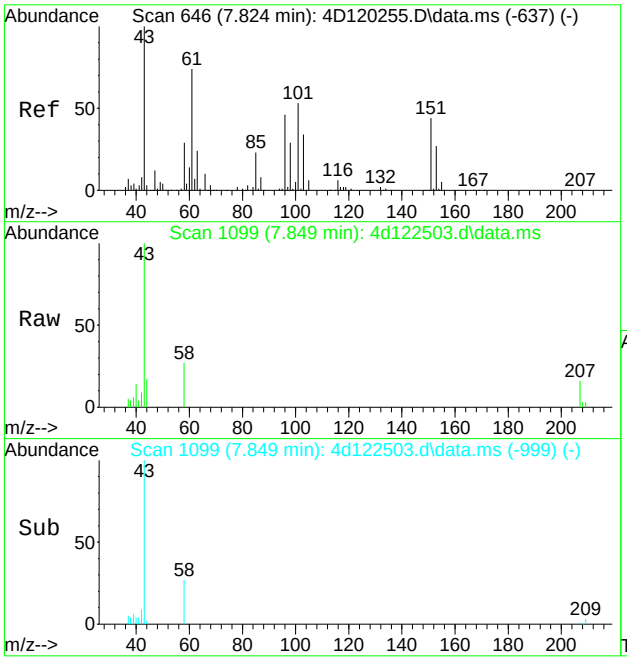


#9
vinyl chloride
Concen: 9.61 ug/L
RT: 5.280 min Scan# 609
Delta R.T. -0.011 min
Lab File: 4d122503.d
Acq: 18 Oct 2022 7:46 pm

Tgt Ion: 62 Resp: 81042

Ion	Ratio	Lower	Upper
62	100		
64	31.9	4.0	64.0
61	8.6	0.0	38.3

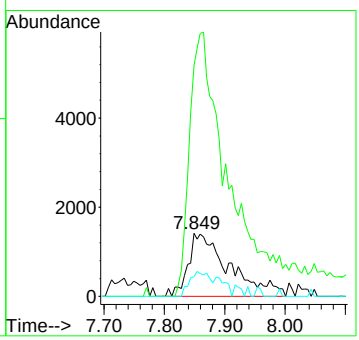


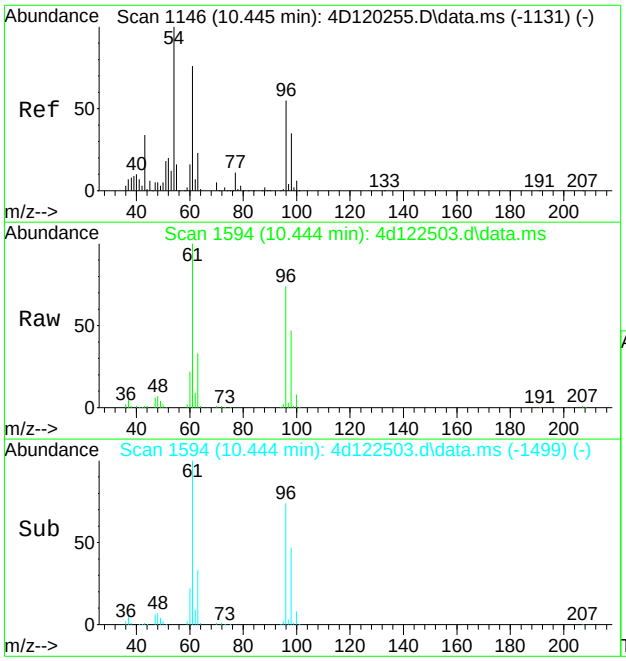


#18
acetone
Concen: 9.11 ug/L
RT: 7.849 min Scan# 1099
Delta R.T. 0.025 min
Lab File: 4d122503.d
Acq: 18 Oct 2022 7:46 pm

Tgt Ion: 58 Resp: 6698

Ion	Ratio	Lower	Upper
58	100		
43	365.9	318.1	378.1
42	31.3	0.0	58.0

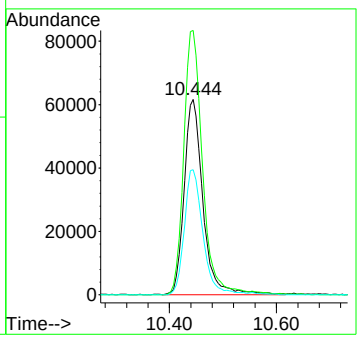


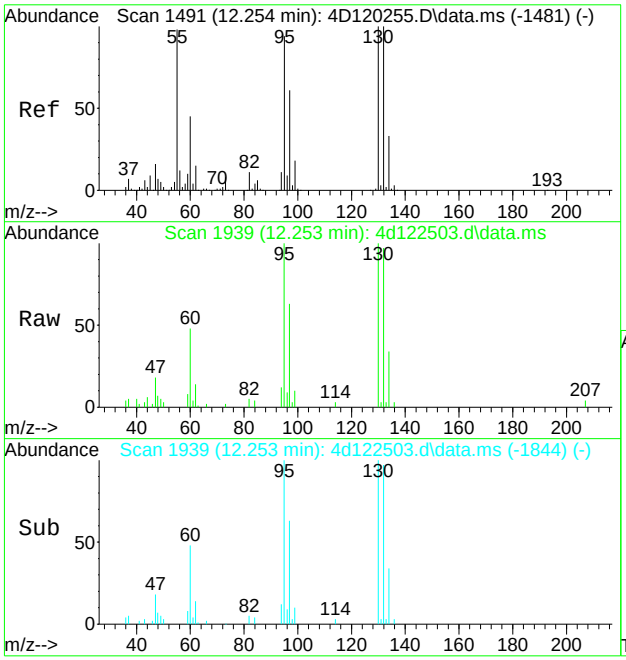


#36
cis-1,2-dichloroethene
Concen: 19.76 ug/L
RT: 10.444 min Scan# 1594
Delta R.T. -0.001 min
Lab File: 4d122503.d
Acq: 18 Oct 2022 7:46 pm

Tgt Ion: 96 Resp: 151070

Ion	Ratio	Lower	Upper
96	100		
61	135.4	107.6	167.6
98	64.0	33.7	93.7

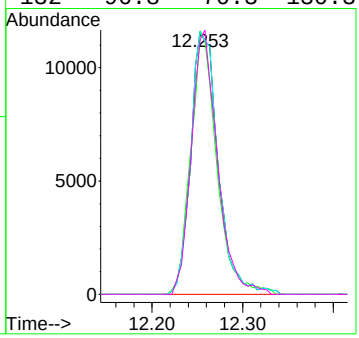




#60
trichloroethene
Concen: 3.04 ug/L
RT: 12.253 min Scan# 1939
Delta R.T. -0.001 min
Lab File: 4d122503.d
Acq: 18 Oct 2022 7:46 pm

Tgt Ion:130 Resp: 24356

Ion	Ratio	Lower	Upper
130	100		
95	100.2	64.3	124.3
130	100.0	70.0	130.0
132	96.8	70.3	130.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122504.d
Acq On : 18 Oct 2022 8:15 pm
Operator : edwardd
Sample : jd53489-3 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:29:40 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

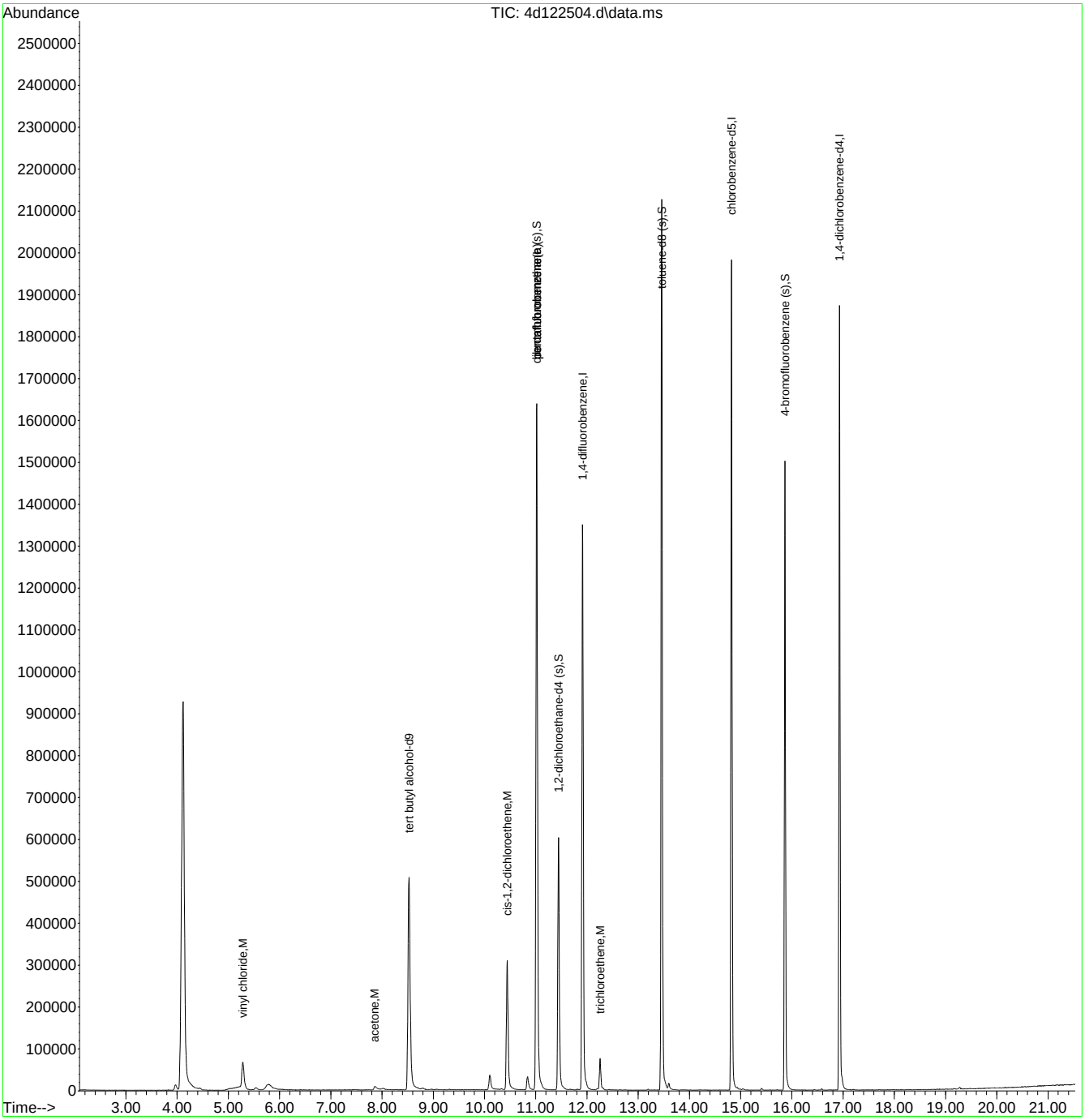
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	783484	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	793999	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1157273	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1049333	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	437495	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	793999	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	420444	55.87	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 111.74%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	459209	51.57	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 103.14%			
74) toluene-d8 (s)	13.459	98	1346030	53.22	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 106.44%			
97) 4-bromofluorobenzene (s)	15.865	95	460936	51.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.18%			
Target Compounds						Qvalue
9) vinyl chloride	5.285	62	100336	11.91	ug/L	95
18) acetone	7.854	58	6426	8.75	ug/L #	81
36) cis-1,2-dichloroethene	10.444	96	166810	21.84	ug/L	99
60) trichloroethene	12.258	130	26910	3.35	ug/L	96

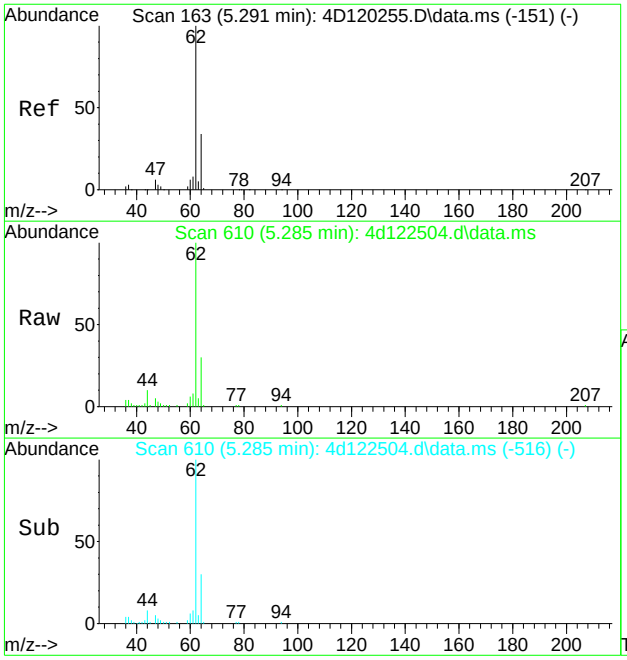
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122504.d
Acq On : 18 Oct 2022 8:15 pm
Operator : edwardd
Sample : jd53489-3 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 24 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:29:40 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

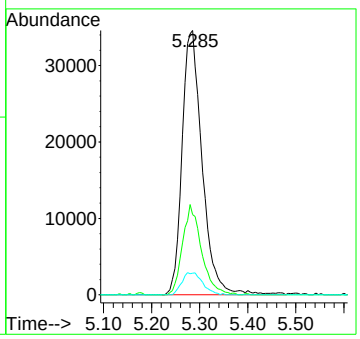


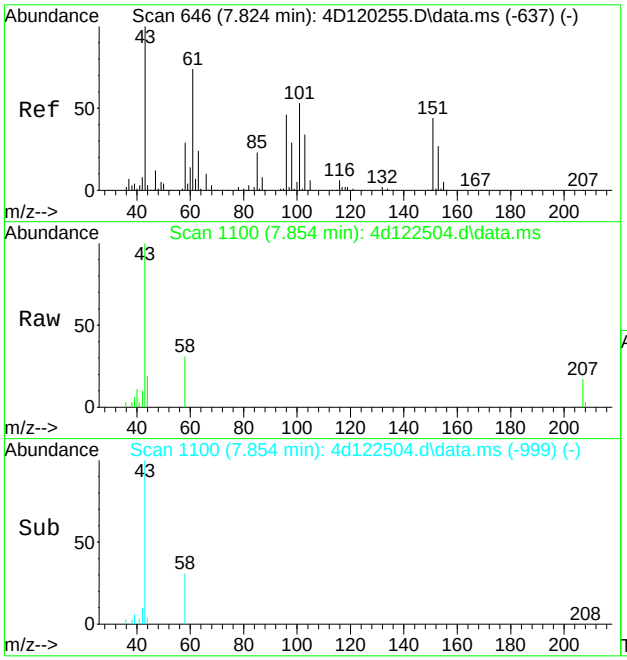


#9
vinyl chloride
Concen: 11.91 ug/L
RT: 5.285 min Scan# 610
Delta R.T. -0.006 min
Lab File: 4d122504.d
Acq: 18 Oct 2022 8:15 pm

Tgt Ion: 62 Resp: 100336

Ion	Ratio	Lower	Upper
62	100		
64	30.3	4.0	64.0
61	8.2	0.0	38.3

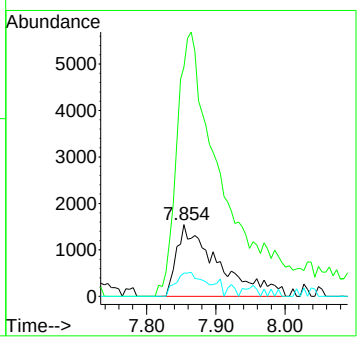


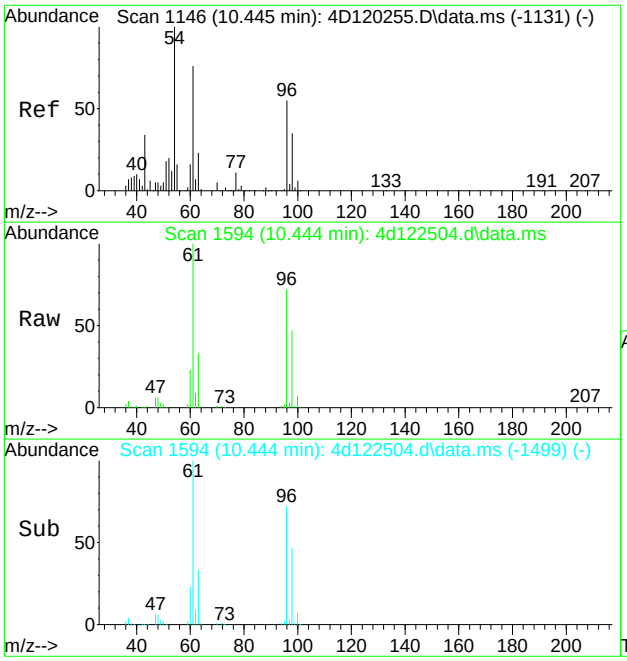


#18
acetone
Concen: 8.75 ug/L
RT: 7.854 min Scan# 1100
Delta R.T. 0.030 min
Lab File: 4d122504.d
Acq: 18 Oct 2022 8:15 pm

Tgt Ion: 58 Resp: 6426

Ion	Ratio	Lower	Upper
58	100		
43	305.7	318.1	378.1#
42	32.4	0.0	58.0

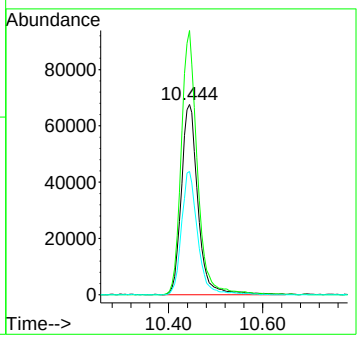


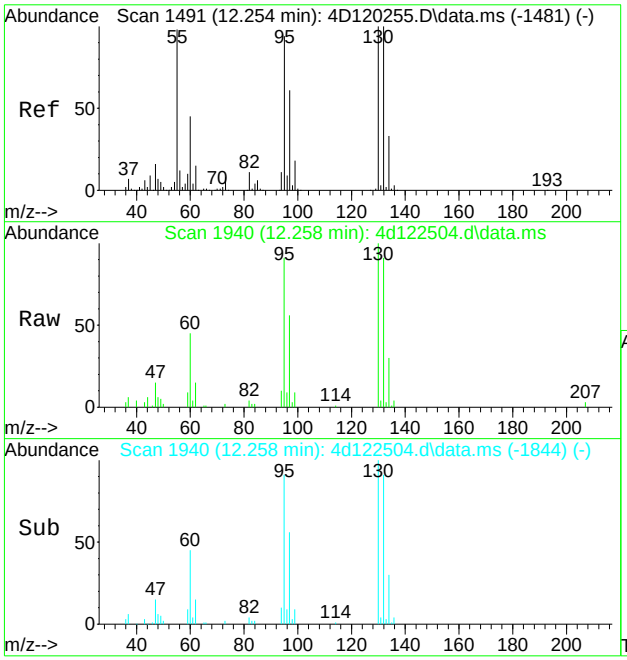


#36
cis-1,2-dichloroethene
Concen: 21.84 ug/L
RT: 10.444 min Scan# 1594
Delta R.T. -0.001 min
Lab File: 4d122504.d
Acq: 18 Oct 2022 8:15 pm

Tgt Ion: 96 Resp: 166810

Ion	Ratio	Lower	Upper
96	100		
61	138.9	107.6	167.6
98	64.7	33.7	93.7

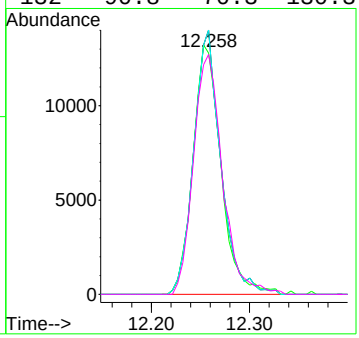




#60
trichloroethene
Concen: 3.35 ug/L
RT: 12.258 min Scan# 1940
Delta R.T. 0.004 min
Lab File: 4d122504.d
Acq: 18 Oct 2022 8:15 pm

Tgt Ion:130 Resp: 26910

Ion	Ratio	Lower	Upper
130	100		
95	91.2	64.3	124.3
130	100.0	70.0	130.0
132	90.8	70.3	130.3



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122500.d
Acq On : 18 Oct 2022 6:18 pm
Operator : edwardd
Sample : jd53489-4 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:25:10 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

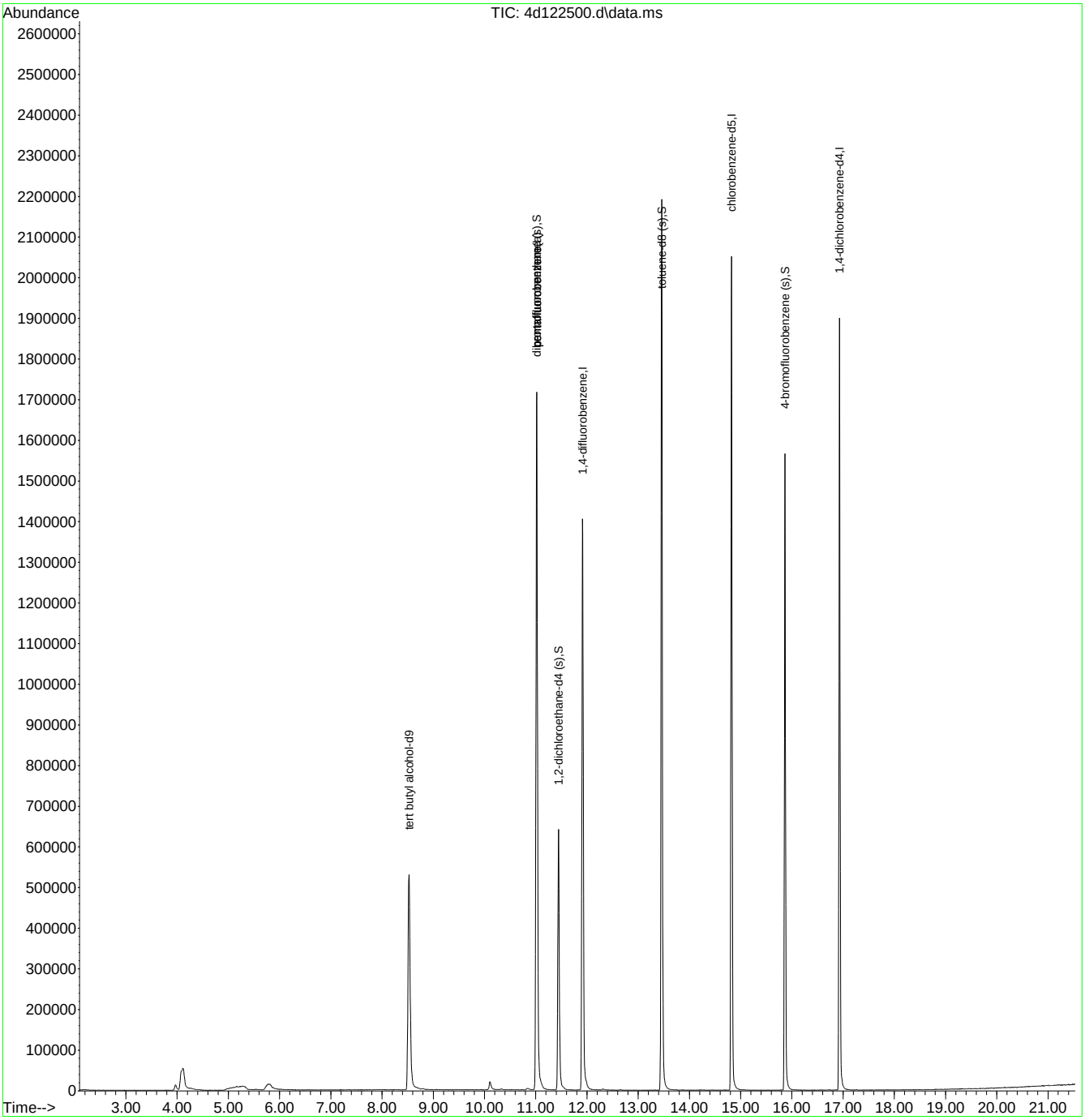
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	815558	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	832423	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1210223	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1093465	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	451288	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	832423	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	438856	55.63	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 111.26%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	477777	51.31	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 102.62%			
74) toluene-d8 (s)	13.459	98	1392116	52.82	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.64%			
97) 4-bromofluorobenzene (s)	15.865	95	480769	52.16	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 104.32%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122500.d
Acq On : 18 Oct 2022 6:18 pm
Operator : edwardd
Sample : jd53489-4 Inst : MS4D
Misc : MS63022,V4D5439,5,,,,1
ALS Vial : 20 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:25:10 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122484.d
Acq On : 18 Oct 2022 10:32 am
Operator : edwardd
Sample : mb Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:26:41 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

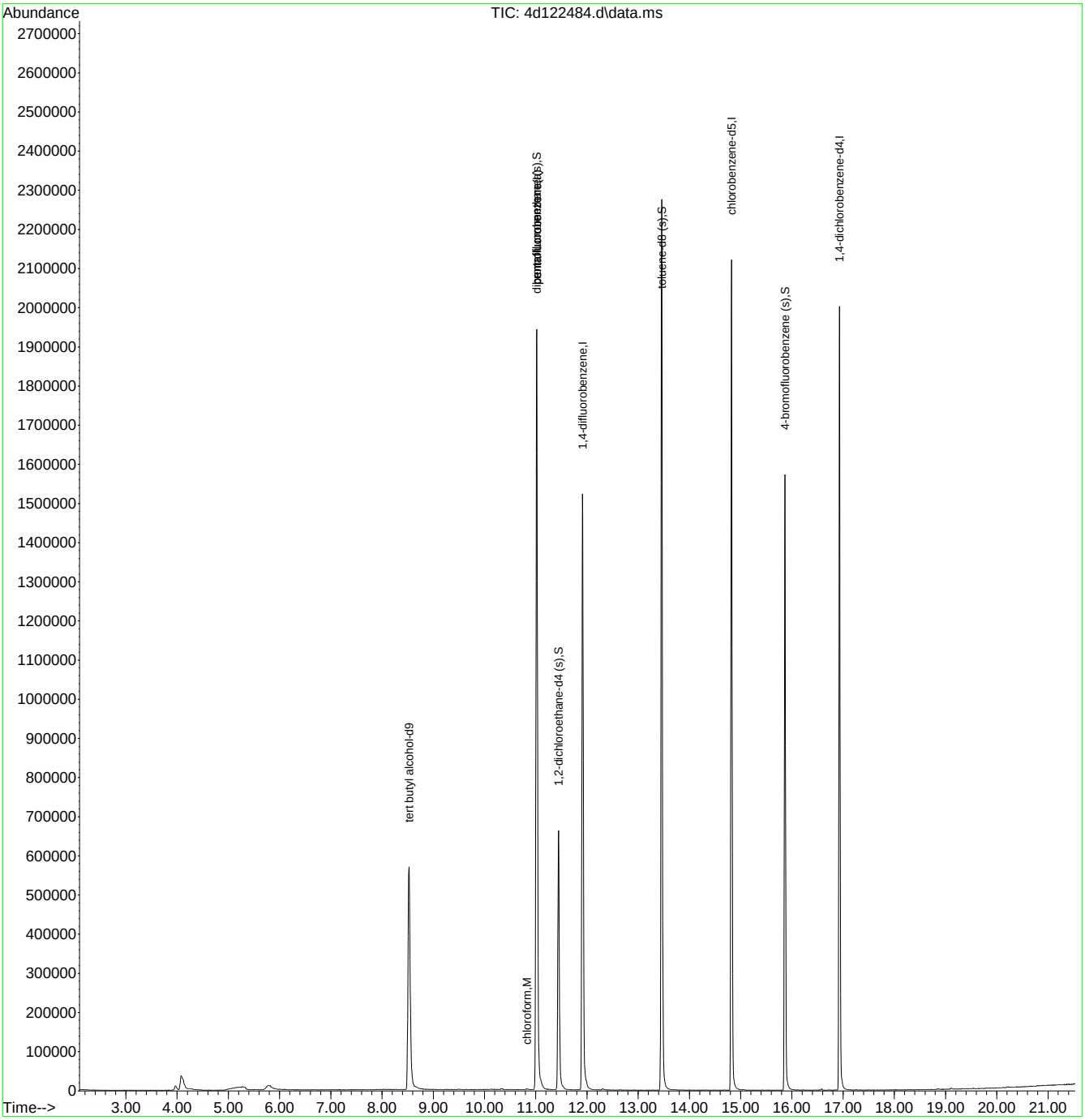
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	907155	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	986168	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1362342	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1172138	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	502971	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	986168	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	491535	52.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.18%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	508034	48.47	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 96.94%			
74) toluene-d8 (s)	13.459	98	1492643	52.84	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.68%			
97) 4-bromofluorobenzene (s)	15.866	95	494440	48.14	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.28%			
Target Compounds						Qvalue
41) chloroform	10.827	85	1175	0.11	ug/L #	78

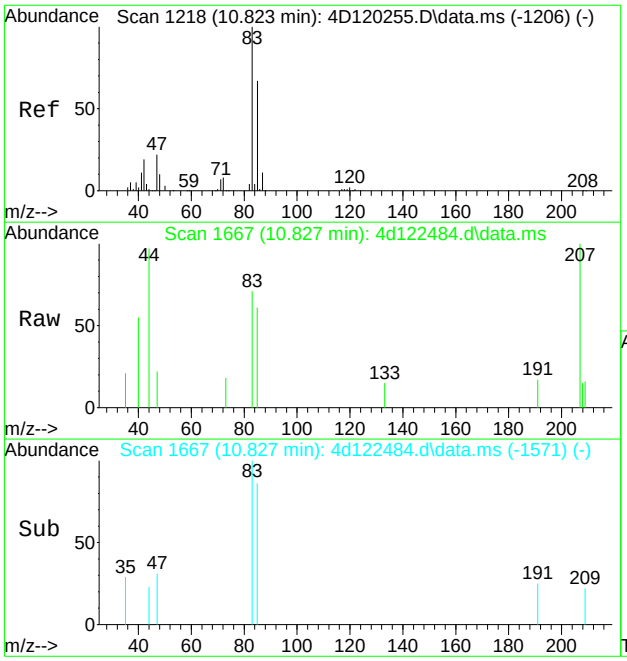
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122484.d
Acq On : 18 Oct 2022 10:32 am
Operator : edwardd
Sample : mb Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:26:41 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

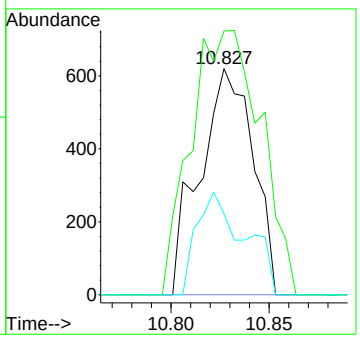




#41
chloroform
Concen: 0.11 ug/L
RT: 10.827 min Scan# 1667
Delta R.T. 0.004 min
Lab File: 4d122484.d
Acq: 18 Oct 2022 10:32 am

Tgt Ion: 85 Resp: 1175

Ion	Ratio	Lower	Upper
85	100		
83	116.6	119.7	179.7#
47	35.8	10.2	70.2



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:12:06 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	896032	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	942228	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1310594	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1146946	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	484746	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	942228	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	470380	52.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.34%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	490105	48.60	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.20%			
74) toluene-d8 (s)	13.459	98	1425549	51.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.14%			
97) 4-bromofluorobenzene (s)	15.865	95	485918	49.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.662	59	258090	100.76	ug/L	96
3) ethanol	7.068	45	574945	2325.45	ug/L	97
4) 1,4-dioxane	12.573	88	94821	419.33	ug/L	91
7) dichlorodifluoromethane	4.540	85	200077	16.61	ug/L	99
8) chloromethane	5.033	50	168738	16.56	ug/L	96
9) vinyl chloride	5.285	62	157640	15.76	ug/L	95
10) 1,3-butadiene	5.379	54	162375	17.82	ug/L	95
11) bromomethane	6.056	94	94634	15.77	ug/L	97
12) chloroethane	6.286	64	123641	23.52	ug/L	96
13) trichlorofluoromethane	6.847	101	295451	20.88	ug/L	99
14) ethyl ether	7.377	74	82800	19.53	ug/L	83
15) acrolein	7.581	56	43290	24.28	ug/L	99
16) freon 113	7.823	151	112972	16.86	ug/L	98
17) 1,1-dichloroethene	7.828	96	123409	16.61	ug/L	95
18) acetone	7.828	58	99200	113.87	ug/L	97
19) acetonitrile	8.263	41	448458	299.92	ug/L	99
20) iodomethane	8.106	142	166432	14.28	ug/L	93
21) carbon disulfide	8.274	76	354996	17.05	ug/L	98
22) methylene chloride	8.593	84	146319	18.36	ug/L	88
23) methyl acetate	8.399	43	255488	34.62	ug/L	95
24) methyl tert butyl ether	9.034	73	446749	19.32	ug/L	90
25) trans-1,2-dichloroethene	9.055	96	140960	17.22	ug/L	94
26) di-isopropyl ether	9.721	45	592249	24.15	ug/L	96
27) 2-butanone	10.392	72	124454	98.82	ug/L #	50
28) 1,1-dichloroethane	9.652	63	266359	19.67	ug/L	96
29) chloroprene	9.804	53	235581	23.04	ug/L	89
30) acrylonitrile	8.924	53	90852	27.64	ug/L	96
31) hexane	9.485	56	113576	24.01	ug/L	87
32) vinyl acetate	9.668	86	25929	15.24	ug/L #	55
33) ethyl tert-butyl ether	10.219	59	498323	20.83	ug/L	95
34) ethyl acetate	10.455	70	26515	21.81	ug/L #	83
35) 2,2-dichloropropane	10.470	77	210558	17.35	ug/L	85
36) cis-1,2-dichloroethene	10.439	96	162705	17.95	ug/L	100
37) methyl acrylate	10.533	55	224743	26.73	ug/L	95
38) propionitrile	10.439	54	435211	284.66	ug/L	98
39) bromochloromethane	10.753	128	93335	20.20	ug/L	91
40) tetrahydrofuran	10.832	72	35725	21.47	ug/L #	74
41) chloroform	10.816	85	176376	17.18	ug/L	96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:12:06 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	10.900	59	65975	9.40	ug/L		92
44) methacrylonitrile	10.675	67	87666	22.96	ug/L	#	80
45) 1,1,1-trichloroethane	11.131	97	230025	17.57	ug/L		99
46) cyclohexane	11.246	84	220009	21.58	ug/L	#	72
47) 1,1-dichloropropene	11.320	75	180923	17.66	ug/L		97
48) isobutyl alcohol	11.320	74	13123m	173.19	ug/L		
49) carbon tetrachloride	11.351	117	214823	17.28	ug/L		99
50) tert amyl alcohol	11.398	55	84626	155.54	ug/L		89
53) n-butyl alcohol	11.980	56	604477	1513.57	ug/L		96
54) 2,2,4-trimethylpentane	11.650	57	339297	18.01	ug/L		97
55) benzene	11.566	78	508447	16.87	ug/L		98
56) tert-amyl methyl ether	11.629	87	101252	17.32	ug/L		92
57) heptane	11.813	71	71633	16.86	ug/L		87
58) isopropyl acetate	11.493	87	42390	19.70	ug/L	#	65
59) 1,2-dichloroethane	11.535	62	220661	17.10	ug/L		96
60) trichloroethene	12.253	130	162950	17.90	ug/L		97
61) ethyl acrylate	12.242	55	265087	21.29	ug/L		98
62) 2-nitropropane	12.898	43	83134	20.83	ug/L		96
63) 2-chloroethyl vinyl ether	12.956	63	459584	109.91	ug/L		100
64) methyl methacrylate	12.494	100	54002	20.85	ug/L	#	82
65) 1,2-dichloropropane	12.473	63	149328	18.34	ug/L		97
66) dibromomethane	12.599	93	105489	16.45	ug/L		99
67) methylcyclohexane	12.505	83	187980	16.98	ug/L		91
68) bromodichloromethane	12.720	83	201461	16.57	ug/L		97
69) epichlorohydrin	13.039	57	147998	129.64	ug/L		98
70) cis-1,3-dichloropropene	13.160	75	226244	17.22	ug/L		99
71) 4-methyl-2-pentanone	13.254	58	376053	92.03	ug/L		88
72) 3-methyl-1-butanol	13.244	70	193607	523.41	ug/L		79
75) toluene	13.527	92	307908	17.44	ug/L		97
76) trans-1,3-dichloropropene	13.658	75	207856	18.76	ug/L		98
77) ethyl methacrylate	13.690	69	180626	18.19	ug/L		90
78) 1,1,2-trichloroethane	13.852	83	116118	19.62	ug/L		97
79) tetrachloroethene	14.072	164	143664	20.14	ug/L		96
80) 1,3-dichloropropane	14.020	76	211296	18.90	ug/L		80
81) 2-hexanone	14.025	58	396421	106.35	ug/L		91
82) butyl acetate	14.109	56	132922	25.56	ug/L		95
83) dibromochloromethane	14.261	129	184623	19.06	ug/L		98
84) 1,2-dibromoethane	14.408	107	162101	20.28	ug/L		96
85) n-butyl ether	14.812	57	550270	19.27	ug/L		96
86) chlorobenzene	14.848	112	370723	18.06	ug/L		94
87) 1,1,1,2-tetrachloroethane	14.895	131	152885	18.56	ug/L		98
88) ethylbenzene	14.916	91	567543	17.31	ug/L		98
89) m,p-xylene	15.011	106	453240	35.72	ug/L		93
90) o-xylene	15.388	106	225898	17.77	ug/L		94
91) styrene	15.388	104	378778	17.67	ug/L		94
92) bromoform	15.593	173	134204	18.03	ug/L		98
93) butyl acrylate	15.215	55	300062	20.77	ug/L		95
94) isopropylbenzene	15.703	105	545937	17.29	ug/L		97
95) cis-1,4-dichloro-2-butene	15.713	88	34328	12.95	ug/L		88
98) bromobenzene	16.044	156	165110	18.50	ug/L		90
99) 1,1,2,2-tetrachloroethane	15.918	83	198239	20.33	ug/L		96
100) trans-1,4-dichloro-2-b...	15.960	53	35165	18.68	ug/L		98
101) 1,2,3-trichloropropane	15.991	110	61556	20.96	ug/L		99
102) n-propylbenzene	16.075	91	593332	18.20	ug/L		97
103) 2-chlorotoluene	16.196	126	141626	18.90	ug/L		90
104) 4-chlorotoluene	16.285	91	374886	17.59	ug/L		97
105) 1,3,5-trimethylbenzene	16.211	105	410423	17.81	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:12:06 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

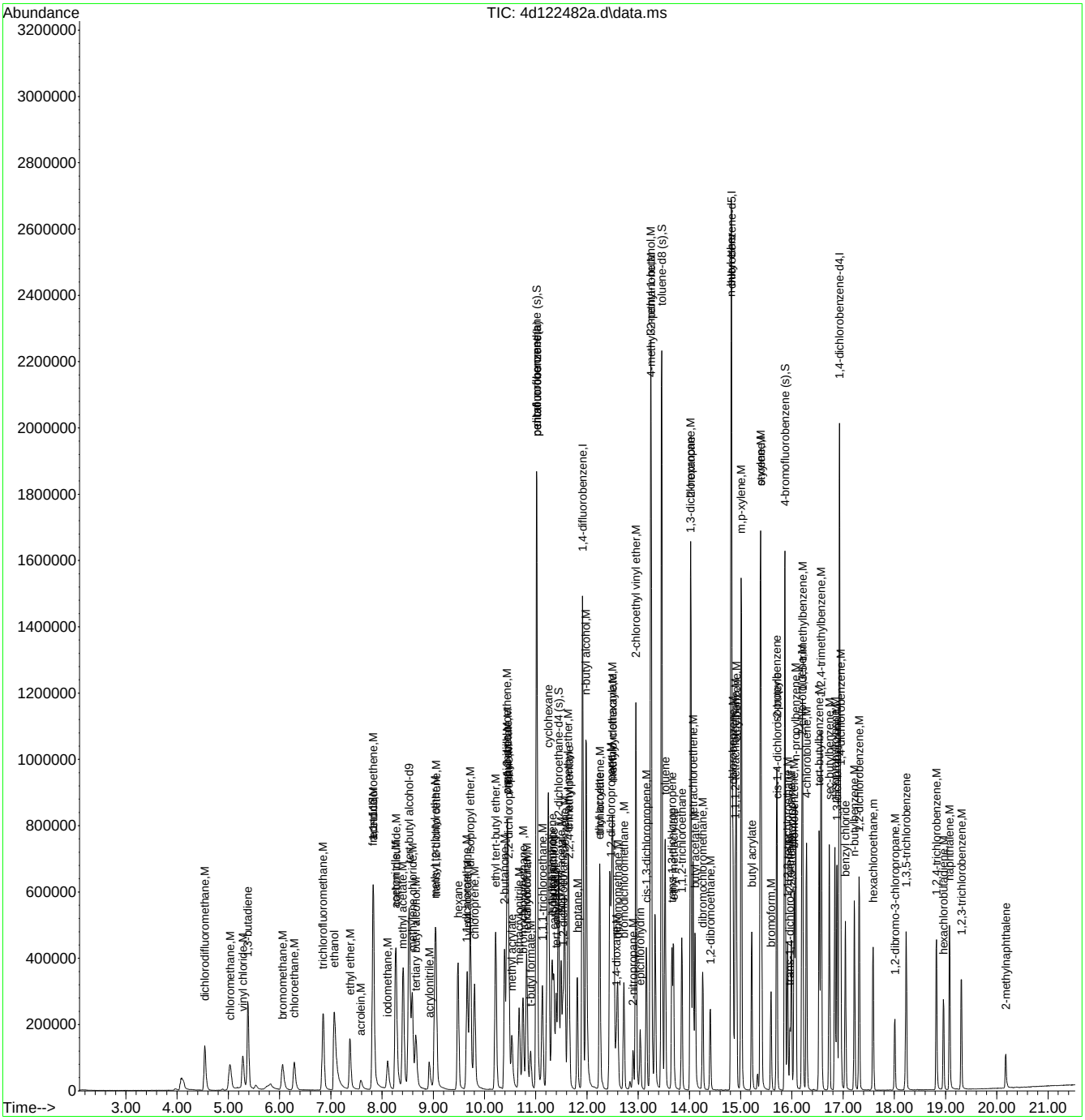
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
106) tert-butylbenzene	16.531	134	83963	18.43	ug/L	92
107) 1,2,4-trimethylbenzene	16.568	105	406064	17.51	ug/L	96
108) sec-butylbenzene	16.731	105	474840	18.00	ug/L	98
109) 1,3-dichlorobenzene	16.883	146	274669	18.57	ug/L	99
110) p-isopropyltoluene	16.841	119	405056	18.63	ug/L	97
111) 1,4-dichlorobenzene	16.951	146	274219	17.58	ug/L	99
113) benzyl chloride	17.045	91	326221	19.87	ug/L	96
114) 1,2-dichlorobenzene	17.313	146	264419	18.97	ug/L	98
115) n-butylbenzene	17.218	92	162232	16.18	ug/L	99
116) 1,2-dibromo-3-chloropr...	18.010	157	56237	21.11	ug/L	95
117) 1,3,5-trichlorobenzene	18.230	180	141625	17.29	ug/L	96
118) 1,2,4-trichlorobenzene	18.823	180	119381	17.56	ug/L	98
119) hexachlorobutadiene	18.959	225	50244	16.35	ug/L	95
120) naphthalene	19.079	128	386713	20.02	ug/L	99
121) 1,2,3-trichlorobenzene	19.310	180	103963	18.66	ug/L	97
122) hexachloroethane	17.585	201	65442	15.12	ug/L	96
123) 2-methylnaphthalene	20.175	142	57853	10.38	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

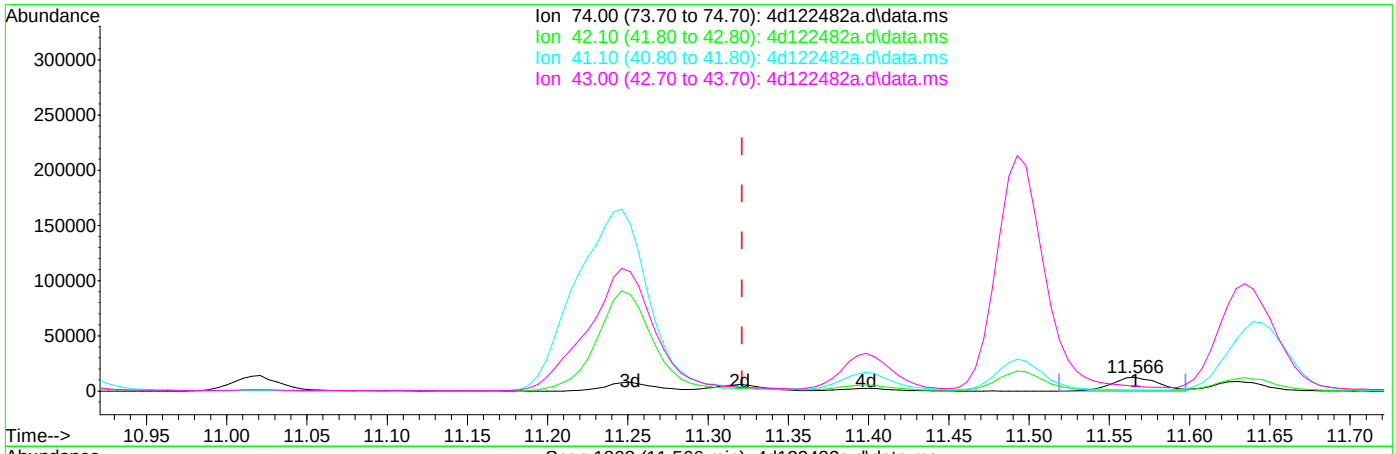
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:12:06 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

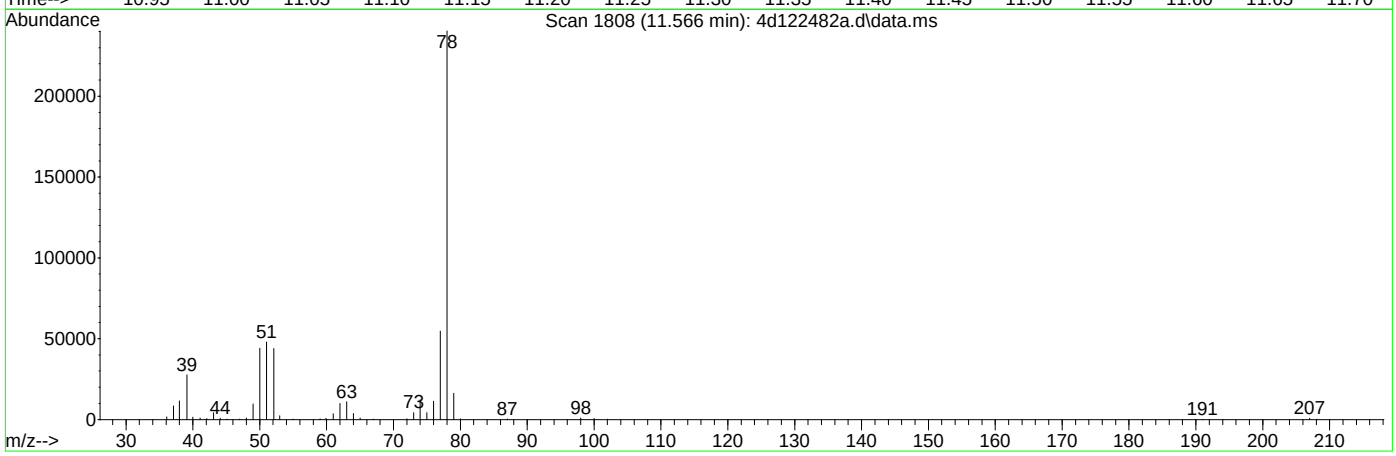


Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 10:03:52 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration





TIC: 4d122482a.d\data.ms

(48) isobutyl alcohol

11.566min (+0.245) 330.32ug/L

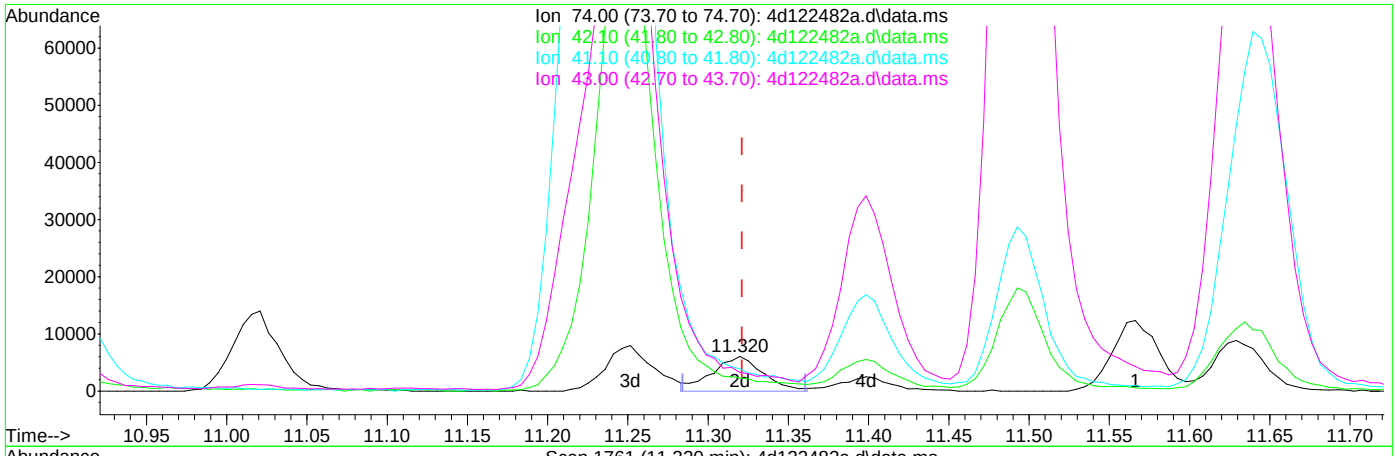
response 25030

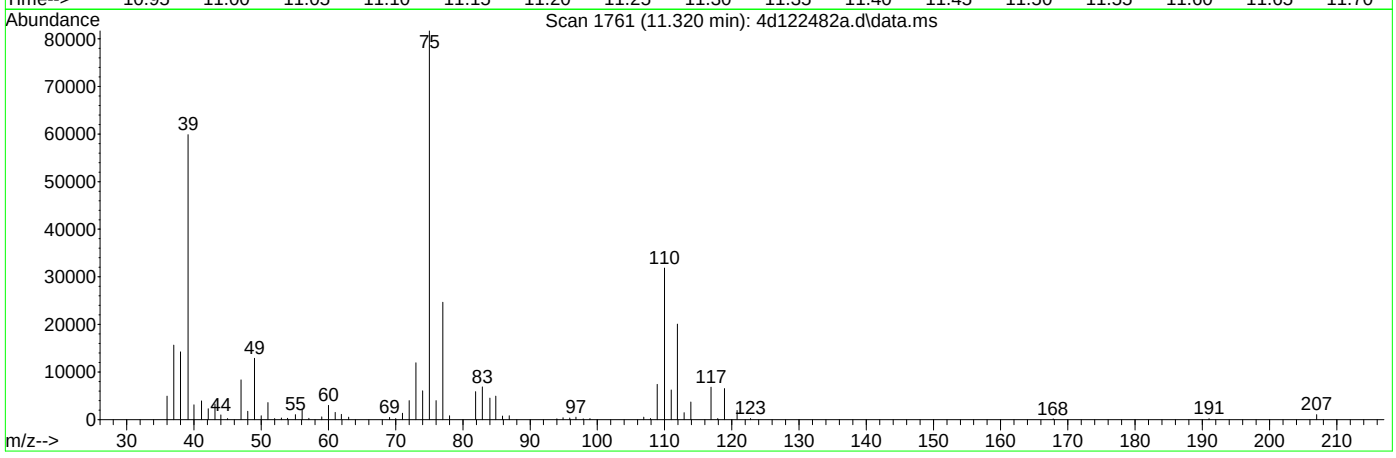
Ion	Exp%	Act%
74.00	100	100
42.10	4.90	0.00
41.10	3.20	0.00
43.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482a.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : bs Inst : MS4D
Misc : MS37615,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 10:03:52 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration





TIC: 4d122482a.d\data.ms

(48) isobutyl alcohol

11.320min (-0.001) 173.19ug/L m

response 13123

Ion	Exp%	Act%
74.00	100	100
42.10	4.90	37.31#
41.10	3.20	64.58#
43.00	0.00	53.67#

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122496.d
Acq On : 18 Oct 2022 4:21 pm
Operator : edwardd
Sample : jd53653-2ms Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:02:22 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.531	65	795987	500.00	ug/L		0.00
5) pentafluorobenzene	11.021	168	770718	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.912	114	1124265	50.00	ug/L		0.00
73) chlorobenzene-d5	14.822	117	1057105	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.930	152	407956	50.00	ug/L		0.00
124) pentafluorobenzene(a)	11.021	168	770718	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.016	113	408153	55.88	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 111.76%				
52) 1,2-dichloroethane-d4 (s)	11.446	65	455849	52.70	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 105.40%				
74) toluene-d8 (s)	13.459	98	1291676	50.70	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.40%				
97) 4-bromofluorobenzene (s)	15.866	95	403445	48.42	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 96.84%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.662	59	234758	103.17	ug/L		95
3) ethanol	7.073	45	486996	2217.30	ug/L		99
4) 1,4-dioxane	12.573	88	81983	408.12	ug/L		85
7) dichlorodifluoromethane	4.541	85	190195	19.30	ug/L		96
8) chloromethane	5.033	50	123530	14.82	ug/L		98
9) vinyl chloride	5.280	62	124719	15.25	ug/L		95
10) 1,3-butadiene	5.379	54	156356	20.97	ug/L		97
11) bromomethane	6.051	94	72788	14.83	ug/L		98
12) chloroethane	6.281	64	96110	22.35	ug/L		94
13) trichlorofluoromethane	6.853	101	227357	19.64	ug/L		97
14) ethyl ether	7.377	74	70280	20.27	ug/L	#	1
15) acrolein	7.582	56	36376	24.95	ug/L		97
16) freon 113	7.823	151	103679	18.91	ug/L		96
17) 1,1-dichloroethene	7.828	96	119945	19.74	ug/L		95
18) acetone	7.828	58	81844	114.85	ug/L		88
19) acetonitrile	8.263	41	386558	316.05	ug/L		99
20) iodomethane	8.106	142	91766	10.15	ug/L		98
21) carbon disulfide	8.274	76	348108	20.44	ug/L		99
22) methylene chloride	8.593	84	135972	20.86	ug/L		86
23) methyl acetate	8.399	43	209726	34.75	ug/L		90
24) methyl tert butyl ether	9.034	73	416510	22.02	ug/L		91
25) trans-1,2-dichloroethene	9.055	96	133720	19.98	ug/L		92
26) di-isopropyl ether	9.721	45	546366	27.24	ug/L		95
27) 2-butanone	10.392	72	110202	106.97	ug/L	#	50
28) 1,1-dichloroethane	9.653	63	268251	24.22	ug/L		97
29) chloroprene	9.805	53	233841	27.96	ug/L		91
30) acrylonitrile	8.919	53	78939	29.36	ug/L		95
31) hexane	9.485	56	89861	23.22	ug/L		86
32) vinyl acetate	9.668	86	25201	18.11	ug/L	#	55
33) ethyl tert-butyl ether	10.219	59	448177	22.90	ug/L		96
34) ethyl acetate	10.465	70	23110	23.24	ug/L	#	36
35) 2,2-dichloropropane	10.470	77	211541	21.30	ug/L		86
36) cis-1,2-dichloroethene	10.439	96	150578	20.31	ug/L		93
37) methyl acrylate	10.533	55	196911	28.63	ug/L		94
38) propionitrile	10.444	54	381459	305.02	ug/L		99
39) bromochloromethane	10.754	128	80807	21.38	ug/L	#	86
40) tetrahydrofuran	10.832	72	30797	22.62	ug/L	#	56
41) chloroform	10.822	85	166028	19.77	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122496.d
Acq On : 18 Oct 2022 4:21 pm
Operator : edwardd
Sample : jd53653-2ms Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:02:22 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	10.900	59	26607	4.64	ug/L		84
44) methacrylonitrile	10.675	67	76294	24.43	ug/L	#	76
45) 1,1,1-trichloroethane	11.131	97	225049	21.01	ug/L		98
46) cyclohexane	11.246	84	171422	20.55	ug/L	#	60
47) 1,1-dichloropropene	11.320	75	182238	21.75	ug/L		99
48) isobutyl alcohol	11.320	74	12986	209.51	ug/L		39
49) carbon tetrachloride	11.351	117	209610	20.61	ug/L		100
50) tert amyl alcohol	11.399	55	77266	173.61	ug/L		88
53) n-butyl alcohol	11.986	56	551953	1611.11	ug/L		93
54) 2,2,4-trimethylpentane	11.650	57	339770	21.02	ug/L		97
55) benzene	11.566	78	502196	19.43	ug/L		99
56) tert-amyl methyl ether	11.634	87	90889	18.13	ug/L		96
57) heptane	11.807	71	74330	20.40	ug/L		87
58) isopropyl acetate	11.493	87	37690	20.42	ug/L	#	50
59) 1,2-dichloroethane	11.535	62	210663	19.03	ug/L		95
60) trichloroethene	12.248	130	151132	19.36	ug/L		98
61) ethyl acrylate	12.243	55	246730	23.10	ug/L		97
62) 2-nitropropane	12.898	43	81946	23.93	ug/L		95
64) methyl methacrylate	12.494	100	47137	21.22	ug/L	#	75
65) 1,2-dichloropropane	12.473	63	148054	21.20	ug/L		96
66) dibromomethane	12.599	93	99507	18.09	ug/L		94
67) methylcyclohexane	12.505	83	191700	20.19	ug/L		87
68) bromodichloromethane	12.720	83	194700	18.67	ug/L		99
69) epichlorohydrin	13.045	57	118489	120.99	ug/L		94
70) cis-1,3-dichloropropene	13.160	75	219730	19.50	ug/L		98
71) 4-methyl-2-pentanone	13.255	58	356067	101.58	ug/L	#	82
72) 3-methyl-1-butanol	13.244	70	181087	570.70	ug/L	#	73
75) toluene	13.527	92	306647	18.85	ug/L		98
76) trans-1,3-dichloropropene	13.658	75	198421	19.43	ug/L		98
77) ethyl methacrylate	13.690	69	173390	18.95	ug/L		84
78) 1,1,2-trichloroethane	13.852	83	111476	20.44	ug/L		97
79) tetrachloroethene	14.072	164	113360	17.24	ug/L		95
80) 1,3-dichloropropane	14.020	76	208159	20.20	ug/L		79
81) 2-hexanone	14.025	58	378698	110.23	ug/L		92
82) butyl acetate	14.114	56	130368	27.20	ug/L		98
83) dibromochloromethane	14.261	129	166399	18.64	ug/L		100
84) 1,2-dibromoethane	14.408	107	149435	20.29	ug/L		98
85) n-butyl ether	14.812	57	565641	21.49	ug/L		96
86) chlorobenzene	14.848	112	360503	19.05	ug/L		95
87) 1,1,1,2-tetrachloroethane	14.896	131	145493	19.16	ug/L		96
88) ethylbenzene	14.917	91	580163	19.20	ug/L		99
89) m,p-xylene	15.011	106	444363	38.00	ug/L		96
90) o-xylene	15.388	106	215107	18.36	ug/L		95
91) styrene	15.388	104	364084	18.43	ug/L		93
92) bromoform	15.593	173	116785	17.02	ug/L		99
93) butyl acrylate	15.215	55	295236	22.18	ug/L		95
94) isopropylbenzene	15.703	105	496743	17.07	ug/L		98
95) cis-1,4-dichloro-2-butene	15.714	88	31620	12.94	ug/L	#	83
98) bromobenzene	16.049	156	131870	17.56	ug/L		87
99) 1,1,2,2-tetrachloroethane	15.918	83	174397	21.26	ug/L		97
100) trans-1,4-dichloro-2-b...	15.960	53	30682	19.37	ug/L		92
101) 1,2,3-trichloropropane	15.991	110	48563	19.65	ug/L		99
102) n-propylbenzene	16.075	91	541973	19.76	ug/L		99
103) 2-chlorotoluene	16.196	126	123670	19.61	ug/L		97
104) 4-chlorotoluene	16.285	91	346281	19.31	ug/L		100
105) 1,3,5-trimethylbenzene	16.212	105	365111	18.82	ug/L		99
106) tert-butylbenzene	16.531	134	71290	18.59	ug/L		90

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122496.d
Acq On : 18 Oct 2022 4:21 pm
Operator : edwardd
Sample : jd53653-2ms Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:02:22 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

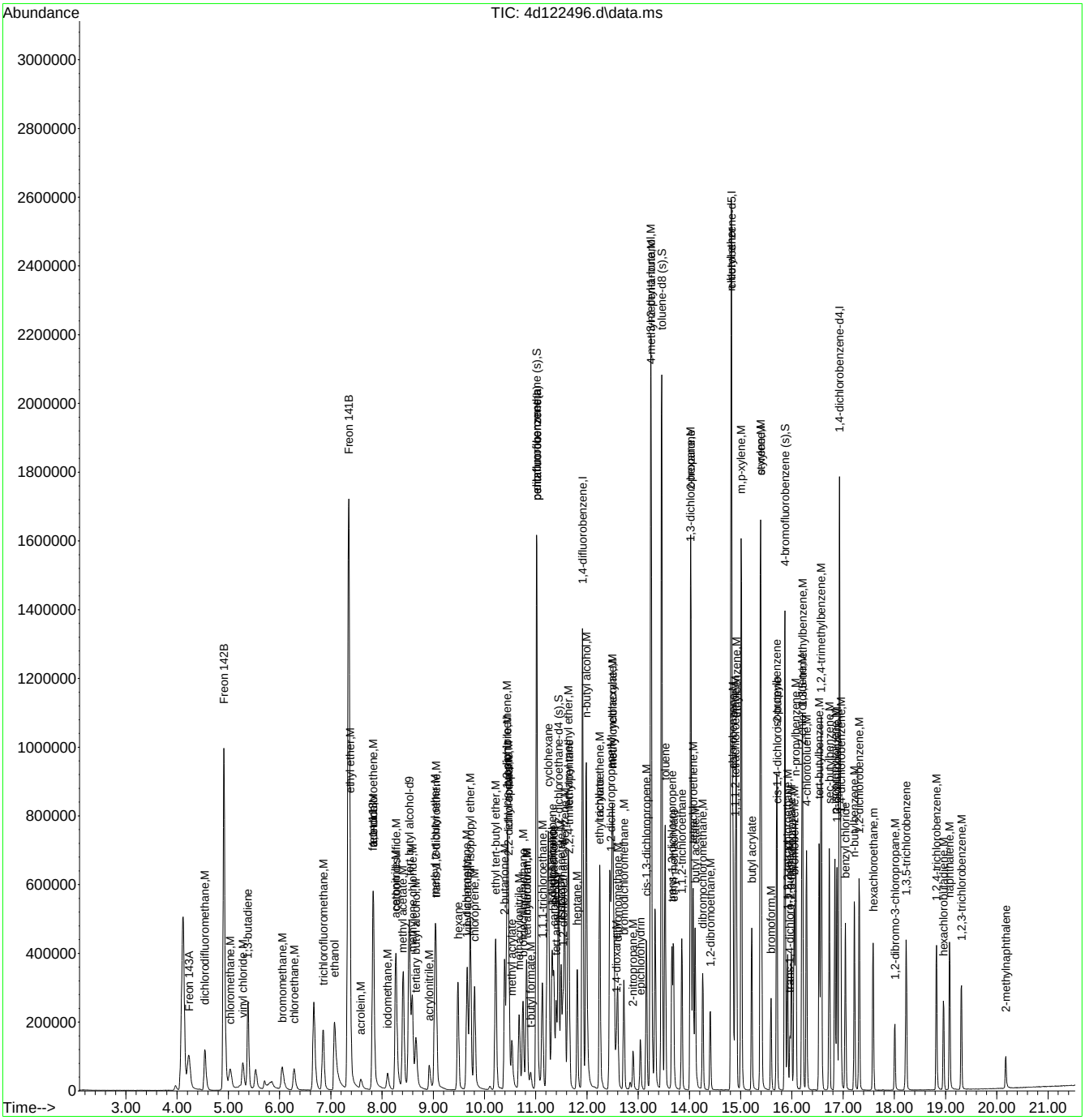
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,2,4-trimethylbenzene	16.568	105	360836	18.49	ug/L	99
108) sec-butylbenzene	16.731	105	443326	19.97	ug/L	99
109) 1,3-dichlorobenzene	16.883	146	236221	18.98	ug/L	99
110) p-isopropyltoluene	16.841	119	356096	19.46	ug/L	98
111) 1,4-dichlorobenzene	16.956	146	245896	18.73	ug/L	98
113) benzyl chloride	17.045	91	308917	22.36	ug/L	100
114) 1,2-dichlorobenzene	17.313	146	241995	20.63	ug/L	100
115) n-butylbenzene	17.218	92	155546	18.44	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.010	157	49265	21.97	ug/L	97
117) 1,3,5-trichlorobenzene	18.230	180	131609	19.09	ug/L	93
118) 1,2,4-trichlorobenzene	18.823	180	107521	18.80	ug/L	94
119) hexachlorobutadiene	18.959	225	47730	18.45	ug/L	97
120) naphthalene	19.080	128	327650	20.16	ug/L	99
121) 1,2,3-trichlorobenzene	19.310	180	91213	19.45	ug/L	99
122) hexachloroethane	17.591	201	63712	17.49	ug/L	96
123) 2-methylnaphthalene	20.175	142	50461	10.75	ug/L	96
125) Freon 143A	4.231	69	210598	47.88	ug/L	95
126) Freon 142B	4.913	65	1309895	178.56	ug/L	94
127) Freon 141B	7.351	81	1993160	240.38	ug/L	91

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122496.d
Acq On : 18 Oct 2022 4:21 pm
Operator : edwardd
Sample : jd53653-2ms Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 16 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:02:22 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration



Manual Integrations APPROVED (compounds with "m" flag)
MoHui Huang
10/19/22 21:33

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:03:56 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.530	65	835595	500.00	ug/L		0.00
5) pentafluorobenzene	11.021	168	837185	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.912	114	1184932	50.00	ug/L		0.00
73) chlorobenzene-d5	14.822	117	1047804	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.930	152	452625	50.00	ug/L		0.00
124) pentafluorobenzene(a)	11.021	168	837185	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.016	113	430113	54.21	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 108.42%				
52) 1,2-dichloroethane-d4 (s)	11.446	65	453019	49.69	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.38%				
74) toluene-d8 (s)	13.459	98	1296509	51.34	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.68%				
97) 4-bromofluorobenzene (s)	15.865	95	452716	48.98	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.96%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.662	59	253037	105.93	ug/L		96
3) ethanol	7.073	45	524246	2273.76	ug/L		98
4) 1,4-dioxane	12.573	88	87871	416.70	ug/L		90
7) dichlorodifluoromethane	4.541	85	153419	14.33	ug/L		99
8) chloromethane	5.033	50	125406	13.85	ug/L		96
9) vinyl chloride	5.285	62	123726	13.93	ug/L		97
10) 1,3-butadiene	5.385	54	154557	19.09	ug/L		97
11) bromomethane	6.051	94	78149	14.66	ug/L		96
12) chloroethane	6.281	64	97621	20.90	ug/L		96
13) trichlorofluoromethane	6.853	101	240183	19.11	ug/L		99
14) ethyl ether	7.377	74	73394	19.48	ug/L	#	1
15) acrolein	7.587	56	37900	23.93	ug/L		87
16) freon 113	7.828	151	111409	18.71	ug/L		99
17) 1,1-dichloroethene	7.828	96	122659	18.58	ug/L		96
18) acetone	7.828	58	85386	110.31	ug/L	#	83
19) acetonitrile	8.263	41	403775	303.92	ug/L		99
20) iodomethane	8.111	142	128037	12.58	ug/L		94
21) carbon disulfide	8.274	76	355717	19.23	ug/L		98
22) methylene chloride	8.588	84	139329m	19.68	ug/L		
23) methyl acetate	8.399	43	214723	32.75	ug/L		93
24) methyl tert butyl ether	9.034	73	439614	21.39	ug/L		92
25) trans-1,2-dichloroethene	9.055	96	139078	19.13	ug/L		92
26) di-isopropyl ether	9.721	45	566739	26.01	ug/L		95
27) 2-butanone	10.392	72	114890	102.67	ug/L	#	54
28) 1,1-dichloroethane	9.652	63	276198	22.95	ug/L		96
29) chloroprene	9.805	53	238634	26.27	ug/L		92
30) acrylonitrile	8.924	53	82576	28.27	ug/L		97
31) hexane	9.485	56	91453	21.76	ug/L		89
32) vinyl acetate	9.668	86	26118	17.28	ug/L	#	40
33) ethyl tert-butyl ether	10.219	59	467925	22.01	ug/L		95
34) ethyl acetate	10.460	70	24626	22.80	ug/L	#	56
35) 2,2-dichloropropane	10.470	77	215038	19.94	ug/L		85
36) cis-1,2-dichloroethene	10.439	96	157526	19.56	ug/L		96
37) methyl acrylate	10.533	55	201792	27.01	ug/L		94
38) propionitrile	10.439	54	397425	292.56	ug/L		99
39) bromochloromethane	10.754	128	84482	20.58	ug/L		89
40) tetrahydrofuran	10.832	72	33359	22.56	ug/L	#	65
41) chloroform	10.816	85	169955	18.63	ug/L		95

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:03:56 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42) t-butyl formate	10.906	59	20752	3.33	ug/L		87
44) methacrylonitrile	10.675	67	81424	24.00	ug/L	#	79
45) 1,1,1-trichloroethane	11.131	97	229912	19.76	ug/L		96
46) cyclohexane	11.246	84	176335	19.46	ug/L	#	67
47) 1,1-dichloropropene	11.320	75	185418	20.37	ug/L		98
48) isobutyl alcohol	11.315	74	12871	191.17	ug/L		49
49) carbon tetrachloride	11.351	117	219769	19.89	ug/L		98
50) tert amyl alcohol	11.398	55	80005	165.50	ug/L		84
53) n-butyl alcohol	11.986	56	582082	1612.06	ug/L		95
54) 2,2,4-trimethylpentane	11.650	57	334603	19.64	ug/L		97
55) benzene	11.566	78	504021	18.50	ug/L		100
56) tert-amyl methyl ether	11.634	87	93942	17.77	ug/L		93
57) heptane	11.813	71	72304	18.82	ug/L		85
58) isopropyl acetate	11.493	87	38420	19.75	ug/L	#	54
59) 1,2-dichloroethane	11.530	62	210715	18.06	ug/L		96
60) trichloroethene	12.253	130	158210	19.23	ug/L		98
61) ethyl acrylate	12.243	55	251781	22.37	ug/L		98
62) 2-nitropropane	12.898	43	80276	22.25	ug/L		96
64) methyl methacrylate	12.494	100	49069	20.95	ug/L	#	83
65) 1,2-dichloropropane	12.473	63	145976	19.83	ug/L		97
66) dibromomethane	12.599	93	98960	17.07	ug/L		99
67) methylcyclohexane	12.505	83	190872	19.07	ug/L		90
68) bromodichloromethane	12.720	83	194425	17.69	ug/L		99
69) epichlorohydrin	13.045	57	116356	112.73	ug/L		99
70) cis-1,3-dichloropropene	13.160	75	216098	18.19	ug/L		98
71) 4-methyl-2-pentanone	13.249	58	352437	95.39	ug/L	#	76
72) 3-methyl-1-butanol	13.244	70	185360	554.26	ug/L	#	77
75) toluene	13.527	92	301728	18.71	ug/L		98
76) trans-1,3-dichloropropene	13.658	75	196586	19.42	ug/L		98
77) ethyl methacrylate	13.690	69	171979	18.96	ug/L		87
78) 1,1,2-trichloroethane	13.852	83	110597	20.46	ug/L		99
79) tetrachloroethene	14.072	164	117537	18.03	ug/L		95
80) 1,3-dichloropropane	14.020	76	198621	19.44	ug/L		82
81) 2-hexanone	14.025	58	371179	109.00	ug/L		91
82) butyl acetate	14.109	56	127594	26.86	ug/L		96
83) dibromochloromethane	14.261	129	171983	19.44	ug/L		99
84) 1,2-dibromoethane	14.408	107	150534	20.62	ug/L		95
85) n-butyl ether	14.812	57	544811	20.88	ug/L		97
86) chlorobenzene	14.848	112	357585	19.07	ug/L		95
87) 1,1,1,2-tetrachloroethane	14.896	131	147733	19.63	ug/L		99
88) ethylbenzene	14.916	91	564794	18.86	ug/L		98
89) m,p-xylene	15.011	106	443521	38.26	ug/L		96
90) o-xylene	15.388	106	216718	18.66	ug/L		95
91) styrene	15.388	104	365645	18.67	ug/L		92
92) bromoform	15.593	173	122554	18.02	ug/L		97
93) butyl acrylate	15.215	55	300475	22.77	ug/L		95
94) isopropylbenzene	15.703	105	541306	18.76	ug/L		98
95) cis-1,4-dichloro-2-butene	15.713	88	34923	14.12	ug/L	#	84
98) bromobenzene	16.049	156	156267	18.76	ug/L		96
99) 1,1,2,2-tetrachloroethane	15.918	83	187774	20.63	ug/L		96
100) trans-1,4-dichloro-2-b...	15.960	53	34845	19.82	ug/L		98
101) 1,2,3-trichloropropane	15.991	110	56183	20.49	ug/L		98
102) n-propylbenzene	16.075	91	601609	19.77	ug/L		97
103) 2-chlorotoluene	16.196	126	138823	19.84	ug/L		89
104) 4-chlorotoluene	16.285	91	372123	18.70	ug/L		98
105) 1,3,5-trimethylbenzene	16.212	105	404548	18.80	ug/L		96
106) tert-butylbenzene	16.537	134	84126	19.77	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:03:56 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

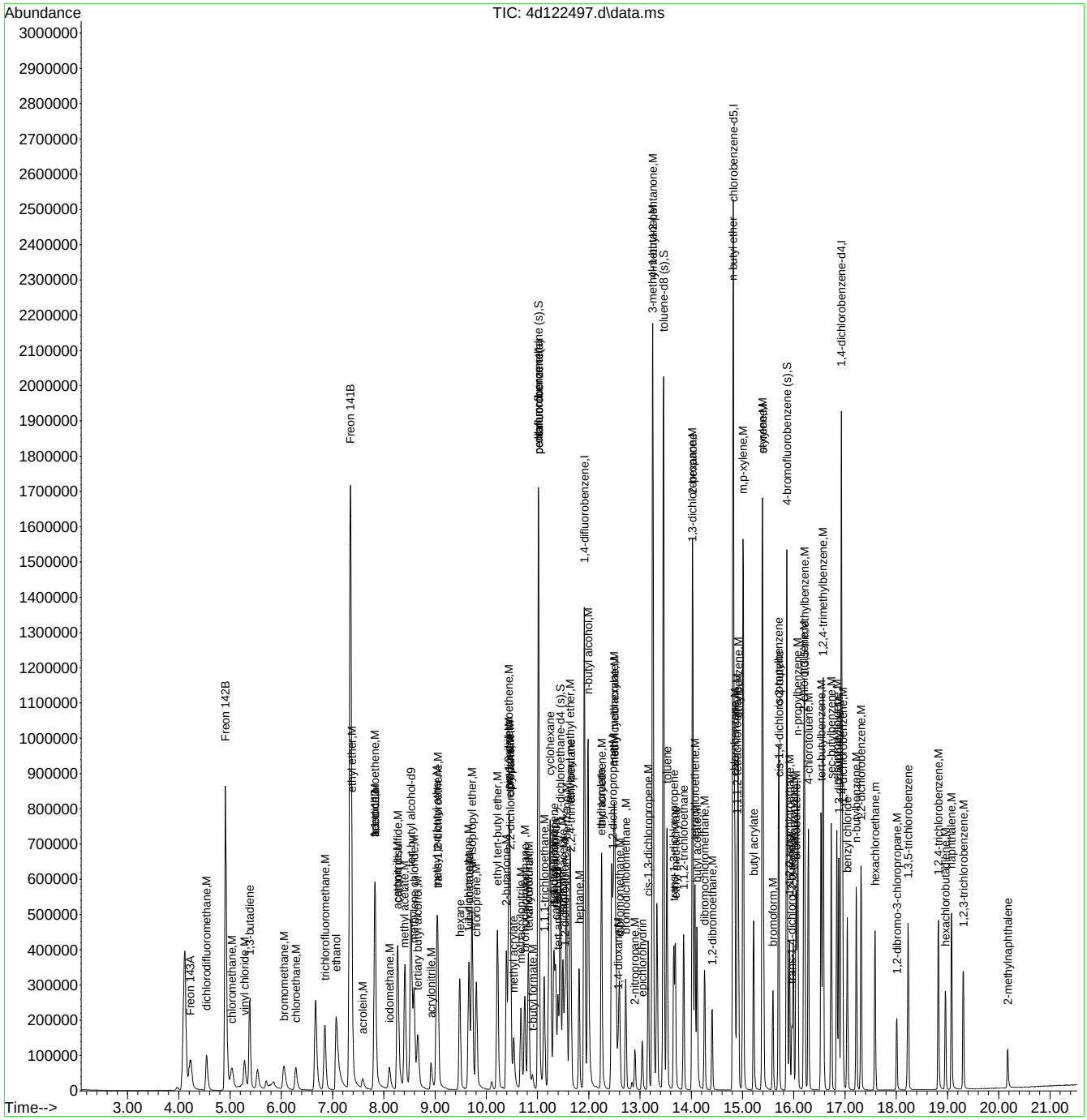
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
107) 1,2,4-trimethylbenzene	16.568	105	394964	18.24	ug/L	98
108) sec-butylbenzene	16.731	105	473843	19.24	ug/L	99
109) 1,3-dichlorobenzene	16.883	146	261915	18.97	ug/L	99
110) p-isopropyltoluene	16.841	119	398220	19.62	ug/L	97
111) 1,4-dichlorobenzene	16.956	146	261689	17.97	ug/L	97
113) benzyl chloride	17.045	91	312910	20.41	ug/L	99
114) 1,2-dichlorobenzene	17.313	146	253123	19.45	ug/L	99
115) n-butylbenzene	17.218	92	160844	17.18	ug/L	96
116) 1,2-dibromo-3-chloropr...	18.010	157	53487	21.50	ug/L	96
117) 1,3,5-trichlorobenzene	18.230	180	138404	18.10	ug/L	96
118) 1,2,4-trichlorobenzene	18.823	180	115871	18.26	ug/L	97
119) hexachlorobutadiene	18.959	225	49497	17.24	ug/L	98
120) naphthalene	19.079	128	372106	20.64	ug/L	99
121) 1,2,3-trichlorobenzene	19.310	180	99814	19.18	ug/L	95
122) hexachloroethane	17.585	201	64744	16.02	ug/L	94
123) 2-methylnaphthalene	20.175	142	59219	11.37	ug/L	98
125) Freon 143A	4.221	69	172480	36.10	ug/L	89
126) Freon 142B	4.908	65	1138045	142.81	ug/L	93
127) Freon 141B	7.346	81	2003865	222.48	ug/L	92

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 08:03:56 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration



Manual Integration Approval Summary

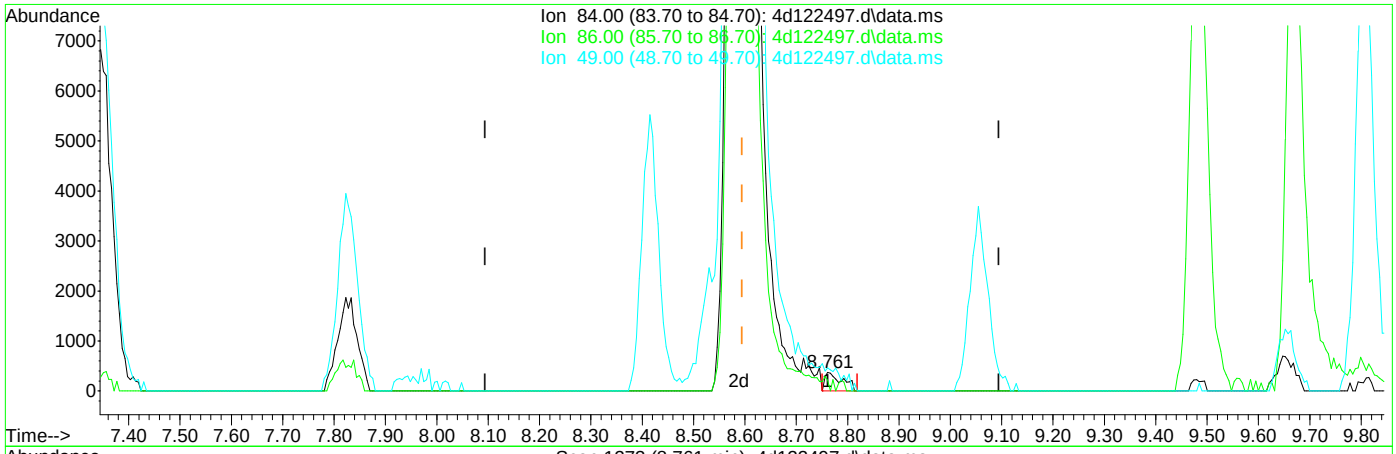
Sample Number: JD53653-2MSD
Lab FileID: 4D122497.D
Injection Time: 10/18/22 16:50
Method: EPA 624.1
Analyst approved: 10/19/22 08:33 Dave Moriente
Supervisor approved: 10/19/22 21:33 MoHui Huang

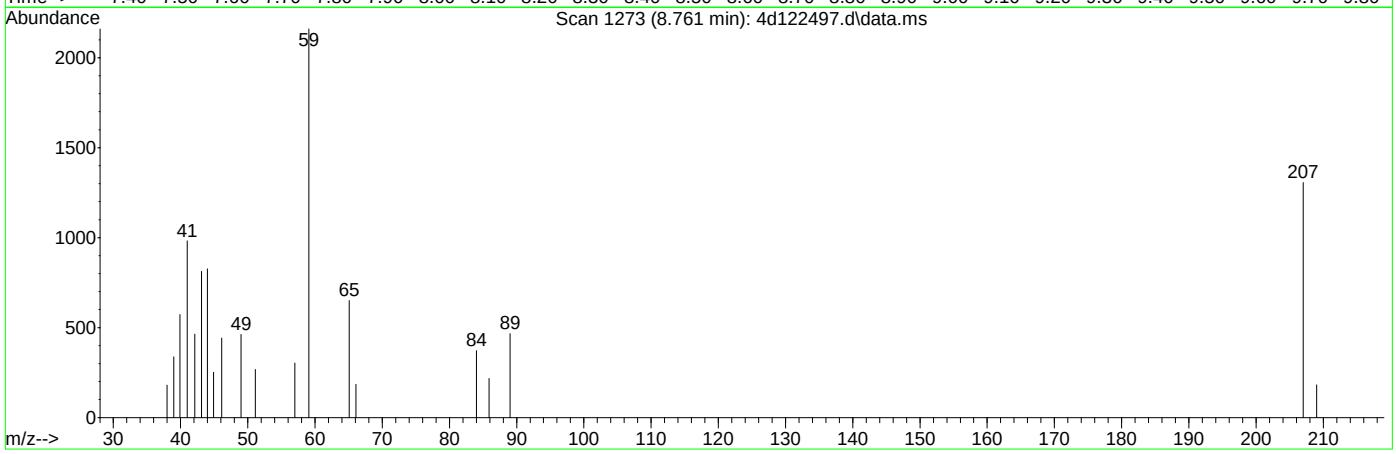
Parameter	CAS	Sig#	R.T. (min.)	Reason
Methylene chloride	75-09-2		8.59	Missed peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 07:19:00 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration





TIC: 4d122497.d\data.ms

(22) methylene chloride (M)

8.761min (+0.167) 0.12ug/L

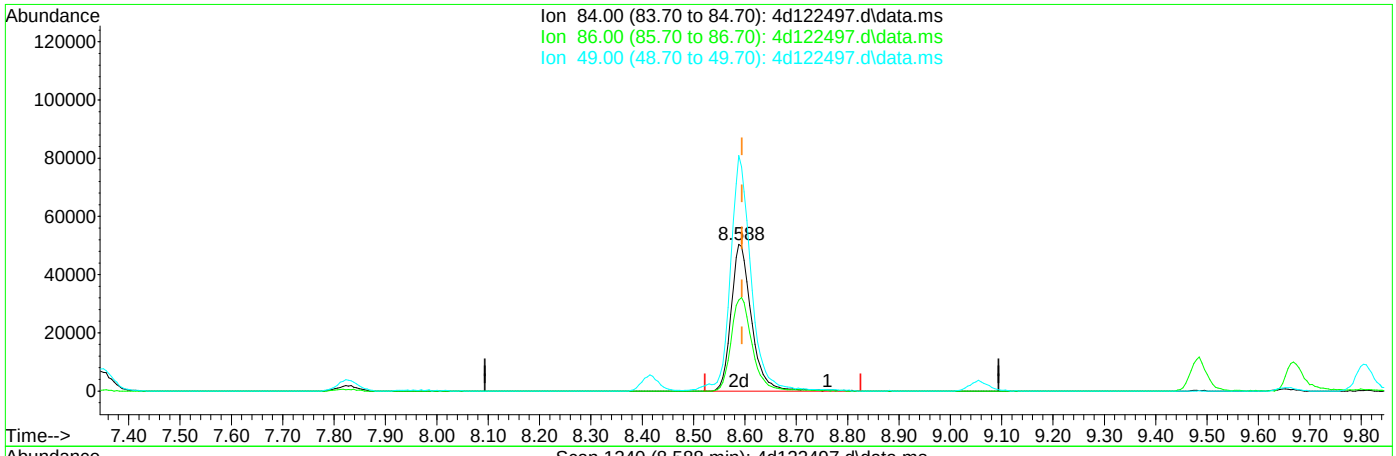
response 855

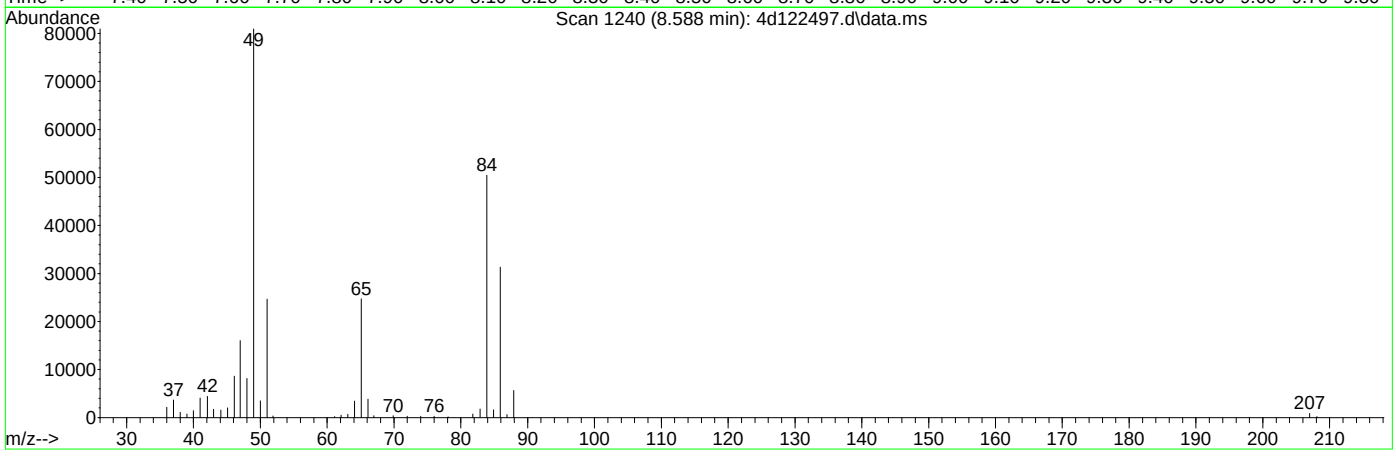
Ion	Exp%	Act%
84.00	100	100
86.00	66.20	58.49
49.00	128.40	124.53
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\davem1\10-19-22\v4d5439_10192022nf\
Data File : 4d122497.d
Acq On : 18 Oct 2022 4:50 pm
Operator : edwardd
Sample : jd53653-2msd Inst : MS4D
Misc : MS63084,V4D5439,5,,,,1
ALS Vial : 17 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 19 07:19:00 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration





TIC: 4d122497.d\data.ms

(22) methylene chloride (M)

8.588min (-0.006) 19.68ug/L m

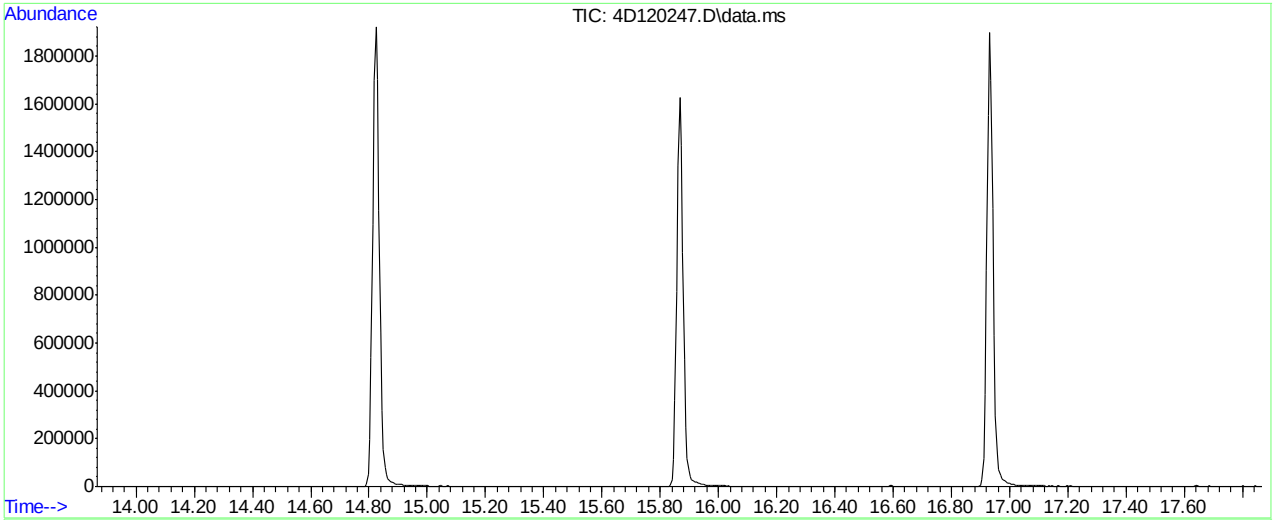
response 139329

Ion	Exp%	Act%
84.00	100	100
86.00	66.20	62.04
49.00	128.40	160.47#
0.00	0.00	0.00

SW-846 Method 8260

Data File : C:\msdchem\1\data\V4D5341\4D120247.D Vial: 1
Acq On : 13 Aug 2022 7:58 pm Operator: PrashanS
Sample : BFB Inst : MS4D
Misc : MS61262,V4D5341,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um



AutoFind: Scans 2179, 2180, 2181; Background Corrected with Scan 2171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	56496	PASS
75	95	30	60	51.6	141485	PASS
95	95	100	100	100.0	274069	PASS
96	95	5	9	6.8	18675	PASS
173	174	0.00	2	1.1	2724	PASS
174	95	50	120	93.5	256363	PASS
175	174	5	9	7.3	18765	PASS
176	174	95	101	95.9	245909	PASS
177	176	5	9	6.6	16181	PASS

4D120247.D M4D5341.M Wed Aug 17 16:12:42 2022

Average of 15.861 to 15.872 min.: 4D120247.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	2919	49.05	12715	63.00	10913	74.05	49661
37.10	16428	50.10	56496	64.05	928	75.00	141485
38.10	14294	51.05	16825	65.00	116	76.05	11874
39.10	5241	52.05	655	66.90	235	77.00	1653
40.00	214	54.95	901	67.05	504	78.05	1188
42.95	133	56.00	4910	68.00	30384	78.90	15358
44.00	2243	57.05	9419	69.00	31067	79.95	3976
45.05	2749	58.00	375	70.00	2479	80.90	15398
46.05	251	60.05	2651	71.10	55	81.95	3248
47.05	2805	61.00	14160	72.05	1555	83.00	367
48.00	1644	62.00	13694	73.00	12847	85.90	322

Average of 15.861 to 15.872 min.: 4D120247.D\data.ms
BFB
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.00	11332	104.85	471	118.90	1950	139.00	64
88.00	11179	105.90	1848	123.00	51	139.85	262
90.90	1439	106.85	367	123.85	214	140.95	3426
92.00	8441	109.90	290	124.80	54	141.95	408
93.00	13074	110.90	425	127.00	106	142.95	3719
94.00	33869	111.85	290	127.90	1139	143.90	266
95.00	274069	112.90	506	128.95	558	144.95	328
96.00	18675	114.95	311	129.95	1233	145.85	469
97.05	543	115.90	1528	130.90	512	147.00	183
102.90	237	116.95	2429	134.90	620	147.95	708
103.90	1904	117.90	1324	136.95	699	148.85	185

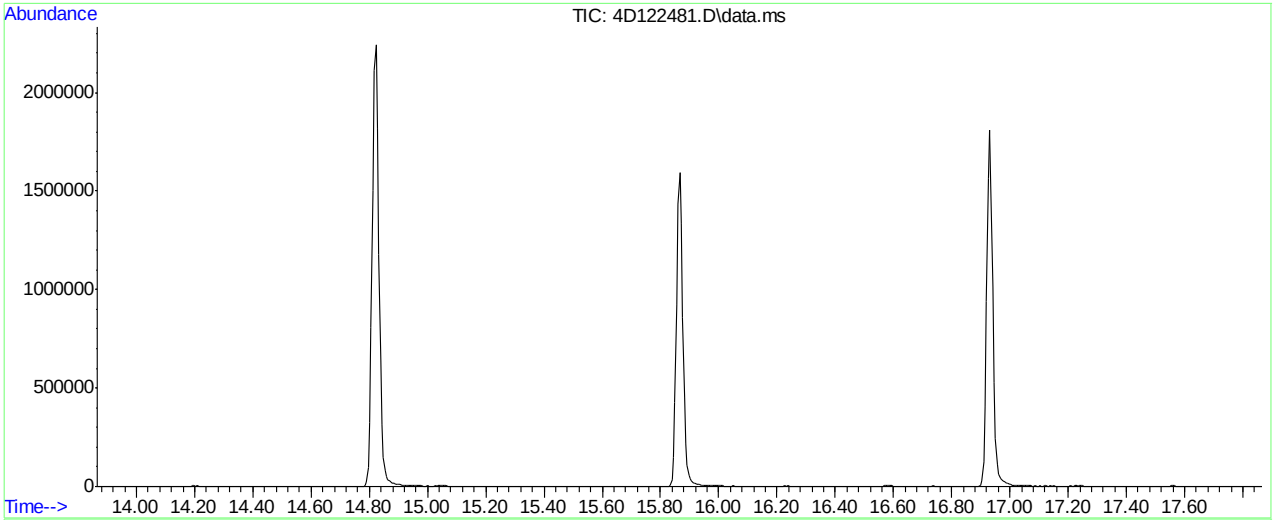
Average of 15.861 to 15.872 min.: 4D120247.D\data.ms
BFB
Modified:subtracted

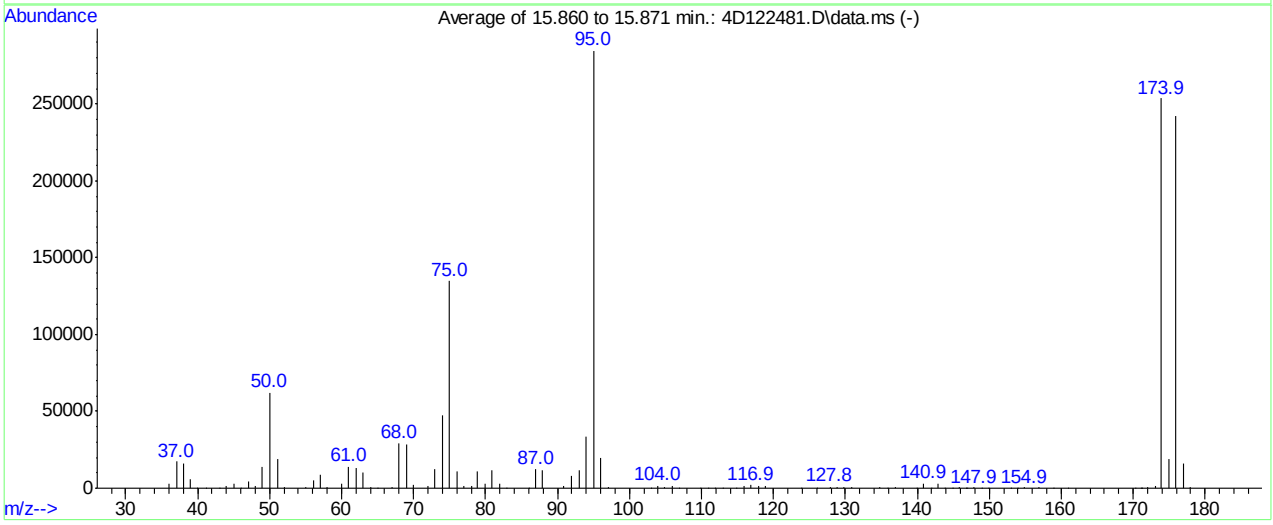
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
149.90	330	175.00	18765				
152.90	228	176.00	245909				
153.95	118	177.00	16181				
154.95	675	177.90	427				
156.95	459	207.00	115				
158.90	384						
160.90	349						
170.80	111						
172.05	555						
173.05	2724						
174.00	256363						

SW-846 Method 8260

Data File : C:\msdchem\1\data\V4D5439\4D122481.D Vial: 1
Acq On : 18 Oct 2022 9:05 am Operator: edwardd
Sample : bfb Inst : MS4D
Misc : MS63085,V4D5439,5,,,,1 Multiplr: 1.00
MS Integration Params: rteint.p

Method : C:\MSDCHEM\1\METHODS\M4D5341.M (RTE Integrator)
Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um





AutoFind: Scans 2627, 2628, 2629; Background Corrected with Scan 2618

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.9	62285	PASS
75	95	30	60	47.3	134861	PASS
95	95	100	100	100.0	284843	PASS
96	95	5	9	6.8	19403	PASS
173	174	0.00	2	0.4	1123	PASS
174	95	50	120	89.1	253653	PASS
175	174	5	9	7.6	19323	PASS
176	174	95	101	95.4	241877	PASS
177	176	5	9	6.7	16249	PASS

4D122481.D M4D5341.M Tue Oct 18 18:16:13 2022

Average of 15.860 to 15.871 min.: 4D122481.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.05	3253	48.00	1767	62.00	13422	75.00	134861
37.05	17340	49.00	13534	63.00	10426	76.05	11288
38.05	16193	50.00	62285	64.05	1022	77.00	1552
39.05	5925	51.05	19090	65.05	357	78.00	1257
39.95	44	52.00	890	66.95	686	78.90	11316
41.20	62	55.00	781	68.00	29512	79.95	3064
43.10	212	56.05	4919	69.00	28795	80.90	11503
43.95	1799	57.00	8776	70.05	2363	81.90	2619
45.00	3180	58.05	403	72.00	1482	82.95	257
46.05	200	60.05	2578	73.00	12461	85.95	284
47.05	4545	61.00	14012	74.00	47299	87.00	12582

Average of 15.860 to 15.871 min.: 4D122481.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
87.95	12041	105.90	1442	123.90	171	141.95	383
90.90	1317	106.90	262	126.00	54	142.90	3236
92.00	8144	109.85	268	127.85	1100	143.85	293
93.00	11791	110.95	293	128.85	568	144.95	350
94.00	33552	111.95	244	129.85	1088	145.90	450
95.00	284843	112.90	360	130.85	413	146.80	56
96.00	19403	114.85	371	134.85	641	147.00	148
97.05	587	115.95	1214	135.90	110	147.90	663
103.00	68	116.90	2080	136.90	596	148.90	132
103.95	1568	117.90	1378	139.90	267	149.90	343
104.90	578	118.90	1688	140.90	3281	152.95	186

Average of 15.860 to 15.871 min.: 4D122481.D\data.ms
bfb
Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
153.90	127	174.95	19323				
154.90	686	175.90	241877				
156.95	598	176.95	16249				
158.90	366	177.90	424				
160.90	363						
170.25	140						
171.00	90						
171.20	136						
172.05	539						
173.10	1123						
173.90	253653						

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120248.D
Acq On : 13 Aug 2022 8:38 pm
Operator : PrashanS
Sample : IC5341-0.2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 15:39:18 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.521	65	481455	500.00	ug/L		-0.02
5) pentafluorobenzene	11.022	168	827567	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.919	114	1083583	50.00	ug/L		0.00
73) chlorobenzene-d5	14.823	117	1029165	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.931	152	462207	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.022	113	392478	50.04	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.08%				
52) 1,2-dichloroethane-d4 (s)	11.447	65	413188	49.56	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.12%				
74) toluene-d8 (s)	13.460	98	1246887	50.27	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.54%				
97) 4-bromofluorobenzene (s)	15.867	95	470002	49.79	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.58%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.658	59	1409	1.02	ug/L	#	43
6) chlorodifluoromethane	4.584	51	1763	0.19	ug/L		61
7) dichlorodifluoromethane	4.547	85	1974	0.19	ug/L		77
9) vinyl chloride	5.281	62	1825	0.21	ug/L		82
10) 1,3-butadiene	5.386	54	1539	0.19	ug/L		91
12) chloroethane	6.298	64	884	0.19	ug/L	#	44
13) trichlorofluoromethane	6.854	101	1947	0.16	ug/L		86
17) 1,1-dichloroethene	7.840	96	1482	0.23	ug/L	#	65
19) acetonitrile	8.322	41	2707	2.06	ug/L		79
21) carbon disulfide	8.285	76	4287	0.23	ug/L		93
22) methylene chloride	8.600	84	1459	0.21	ug/L		97
24) methyl tert butyl ether	9.035	73	3955	0.19	ug/L		93
25) trans-1,2-dichloroethene	9.066	96	1679	0.23	ug/L	#	55
26) di-isopropyl ether	9.727	45	4384	0.20	ug/L		97
28) 1,1-dichloroethane	9.669	63	2052	0.17	ug/L		92
29) chloroprene	9.832	53	1609	0.18	ug/L		84
31) hexane	9.491	56	829	0.20	ug/L	#	74
33) ethyl tert-butyl ether	10.230	59	3981	0.19	ug/L		94
35) 2,2-dichloropropane	10.477	77	2314	0.22	ug/L		90
36) cis-1,2-dichloroethene	10.451	96	1781	0.22	ug/L	#	50
45) 1,1,1-trichloroethane	11.132	97	2121	0.18	ug/L	#	68
46) cyclohexane	11.242	84	1580	0.18	ug/L	#	71
47) 1,1-dichloropropene	11.326	75	1822	0.20	ug/L		87
49) carbon tetrachloride	11.358	117	2095	0.19	ug/L		84
54) 2,2,4-trimethylpentane	11.657	57	2917	0.19	ug/L		91
55) benzene	11.578	78	4672	0.19	ug/L		92
56) tert-amyl methyl ether	11.636	87	886	0.18	ug/L	#	66
59) 1,2-dichloroethane	11.546	62	2600	0.24	ug/L		89
60) trichloroethene	12.259	130	1353	0.18	ug/L		97
65) 1,2-dichloropropane	12.495	63	1169	0.17	ug/L	#	48
66) dibromomethane	12.611	93	1113	0.21	ug/L		82
67) methylcyclohexane	12.511	83	1637	0.18	ug/L		87

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120248.D
Acq On : 13 Aug 2022 8:38 pm
Operator : PrashanS
Sample : IC5341-0.2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 15:39:18 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

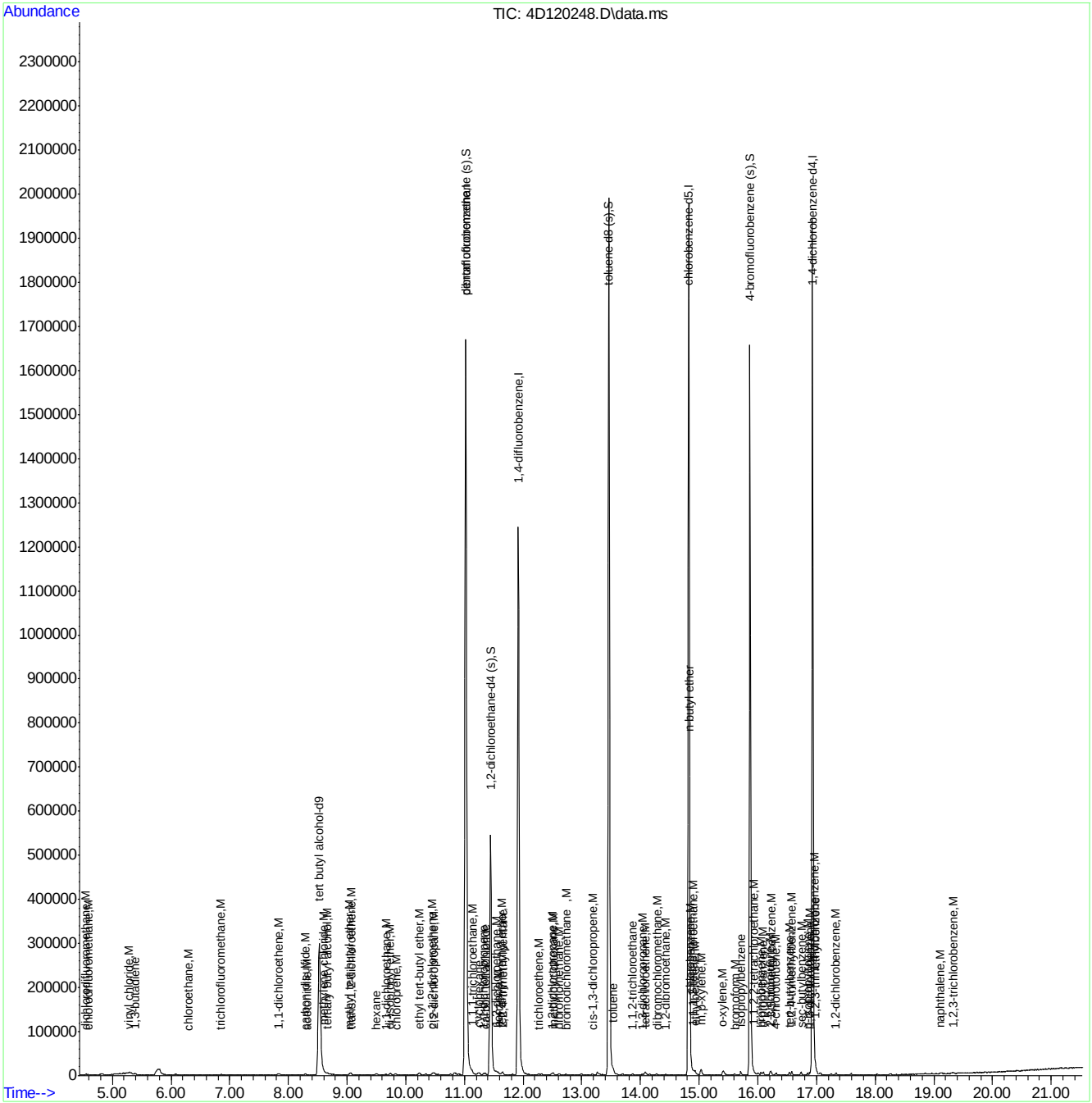
	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
68)	bromodichloromethane	12.737	83	1924	0.19	ug/L		81
70)	cis-1,3-dichloropropene	13.182	75	1976	0.18	ug/L		92
75)	toluene	13.528	92	3409	0.22	ug/L	#	84
78)	1,1,2-trichloroethane	13.864	83	897	0.17	ug/L	#	78
79)	tetrachloroethene	14.079	164	1261	0.20	ug/L		93
80)	1,3-dichloropropane	14.042	76	1634	0.16	ug/L	#	55
83)	dibromochloromethane	14.278	129	1657	0.19	ug/L		97
84)	1,2-dibromoethane	14.430	107	1245	0.17	ug/L		92
85)	n-butyl ether	14.839	57	4640	0.18	ug/L	#	1
86)	chlorobenzene	14.855	112	3735	0.20	ug/L		77
87)	1,1,1,2-tetrachloroethane	14.897	131	1343	0.18	ug/L	#	57
88)	ethylbenzene	14.933	91	6256	0.21	ug/L		97
89)	m,p-xylene	15.033	106	4493	0.39	ug/L		98
90)	o-xylene	15.405	106	2236	0.20	ug/L		89
92)	bromoform	15.610	173	1263	0.19	ug/L		80
94)	isopropylbenzene	15.715	105	5208	0.18	ug/L		95
98)	bromobenzene	16.050	156	1667	0.20	ug/L	#	84
99)	1,1,2,2-tetrachloroethane	15.924	83	1757	0.19	ug/L		92
102)	n-propylbenzene	16.092	91	6075	0.20	ug/L		92
103)	2-chlorotoluene	16.213	126	1327	0.19	ug/L	#	76
104)	4-chlorotoluene	16.307	91	4107	0.20	ug/L		90
105)	1,3,5-trimethylbenzene	16.234	105	4408	0.20	ug/L		88
106)	tert-butylbenzene	16.548	134	748	0.17	ug/L	#	64
107)	1,2,4-trimethylbenzene	16.580	105	4725	0.21	ug/L		86
108)	sec-butylbenzene	16.737	105	4811	0.19	ug/L		94
109)	1,3-dichlorobenzene	16.889	146	2723	0.19	ug/L		98
110)	p-isopropyltoluene	16.852	119	3617	0.17	ug/L		96
111)	1,4-dichlorobenzene	16.957	146	3040	0.20	ug/L		67
112)	1,2,3-trimethylbenzene	16.983	105	4160	0.19	ug/L		93
114)	1,2-dichlorobenzene	17.330	146	2309	0.17	ug/L		98
120)	naphthalene	19.112	128	4334	0.24	ug/L		85
121)	1,2,3-trichlorobenzene	19.332	180	1012	0.19	ug/L		82

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120248.D
Acq On : 13 Aug 2022 8:38 pm
Operator : PrashanS
Sample : IC5341-0.2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Aug 18 15:39:18 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120249.D
Acq On : 13 Aug 2022 9:06 pm
Operator : PrashanS
Sample : IC5341-0.5
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 15:41:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.526	65	491415	500.00	ug/L		-0.01
5) pentafluorobenzene	11.027	168	805965	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.919	114	1057569	50.00	ug/L		0.00
73) chlorobenzene-d5	14.823	117	1004723	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.931	152	460910	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.022	113	384127	50.29	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.58%				
52) 1,2-dichloroethane-d4 (s)	11.452	65	405550	49.84	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.68%				
74) toluene-d8 (s)	13.460	98	1225141	50.59	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.18%				
97) 4-bromofluorobenzene (s)	15.867	95	465790	49.48	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.96%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.663	59	3421	2.44	ug/L		79
3) ethanol	7.142	45	5452	40.21	ug/L		87
4) 1,4-dioxane	12.595	88	1293	10.43	ug/L		71
6) chlorodifluoromethane	4.578	51	4359	0.49	ug/L		81
7) dichlorodifluoromethane	4.542	85	4815	0.47	ug/L		96
8) chloromethane	5.034	50	5026	0.58	ug/L		92
9) vinyl chloride	5.291	62	4169	0.49	ug/L		94
10) 1,3-butadiene	5.386	54	3879	0.50	ug/L		97
11) bromomethane	6.073	94	3013	0.59	ug/L		91
12) chloroethane	6.293	64	2078	0.46	ug/L		91
13) trichlorofluoromethane	6.859	101	5559	0.46	ug/L		95
16) freon 113	7.840	151	2688	0.47	ug/L	#	84
17) 1,1-dichloroethene	7.840	96	3379	0.53	ug/L		81
19) acetonitrile	8.322	41	6540	5.11	ug/L		86
21) carbon disulfide	8.285	76	8826	0.50	ug/L		97
22) methylene chloride	8.595	84	3359	0.49	ug/L		96
24) methyl tert butyl ether	9.035	73	9429	0.48	ug/L		95
25) trans-1,2-dichloroethene	9.072	96	4059	0.58	ug/L		89
26) di-isopropyl ether	9.732	45	10059	0.48	ug/L		84
28) 1,1-dichloroethane	9.664	63	5584	0.48	ug/L		89
29) chloroprene	9.821	53	3860	0.44	ug/L		86
31) hexane	9.491	56	1798	0.44	ug/L		94
33) ethyl tert-butyl ether	10.225	59	9314	0.46	ug/L		91
35) 2,2-dichloropropane	10.477	77	5309	0.51	ug/L		95
36) cis-1,2-dichloroethene	10.461	96	4508	0.58	ug/L		79
38) propionitrile	10.487	54	5766	4.41	ug/L		92
39) bromochloromethane	10.770	128	1741	0.44	ug/L		87
41) chloroform	10.823	85	5403	0.62	ug/L		98
45) 1,1,1-trichloroethane	11.132	97	5446	0.49	ug/L		83
46) cyclohexane	11.253	84	4205	0.48	ug/L	#	79
47) 1,1-dichloropropene	11.326	75	4173	0.48	ug/L		94
49) carbon tetrachloride	11.358	117	5177	0.49	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120249.D
Acq On : 13 Aug 2022 9:06 pm
Operator : PrashanS
Sample : IC5341-0.5
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 15:41:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
50) tert amyl alcohol	11.421	55	1162	2.50	ug/L	#	39
54) 2,2,4-trimethylpentane	11.656	57	7237	0.48	ug/L		95
55) benzene	11.578	78	11610	0.48	ug/L		99
56) tert-amyl methyl ether	11.646	87	2192	0.46	ug/L	#	81
57) heptane	11.819	71	1507	0.44	ug/L		95
59) 1,2-dichloroethane	11.541	62	5591	0.54	ug/L		97
60) trichloroethene	12.265	130	3311	0.45	ug/L		95
62) 2-nitropropane	12.915	43	1441	0.45	ug/L		96
65) 1,2-dichloropropane	12.485	63	3014	0.46	ug/L		99
66) dibromomethane	12.611	93	2304	0.45	ug/L		82
67) methylcyclohexane	12.511	83	4016	0.45	ug/L		95
68) bromodichloromethane	12.731	83	4802	0.49	ug/L		94
69) epichlorohydrin	13.062	57	2015	2.19	ug/L		90
70) cis-1,3-dichloropropene	13.177	75	4844	0.46	ug/L		93
71) 4-methyl-2-pentanone	13.266	58	5789	1.76	ug/L	#	86
75) toluene	13.533	92	7522	0.49	ug/L		92
76) trans-1,3-dichloropropene	13.675	75	4025	0.41	ug/L		95
77) ethyl methacrylate	13.738	69	3733	0.43	ug/L	#	80
78) 1,1,2-trichloroethane	13.864	83	2532	0.49	ug/L		96
79) tetrachloroethene	14.084	164	3090	0.49	ug/L		82
80) 1,3-dichloropropane	14.042	76	4633	0.47	ug/L	#	70
81) 2-hexanone	14.063	58	5224	1.60	ug/L		87
82) butyl acetate	14.152	56	1929	0.42	ug/L	#	50
83) dibromochloromethane	14.273	129	3806	0.45	ug/L		92
84) 1,2-dibromoethane	14.420	107	3281	0.47	ug/L		89
85) n-butyl ether	14.828	57	11324	0.45	ug/L	#	1
86) chlorobenzene	14.849	112	8463	0.47	ug/L		97
87) 1,1,1,2-tetrachloroethane	14.902	131	3538	0.49	ug/L		88
88) ethylbenzene	14.928	91	13591	0.47	ug/L		95
89) m,p-xylene	15.028	106	10755	0.97	ug/L		96
90) o-xylene	15.400	106	5168	0.46	ug/L		90
92) bromoform	15.604	173	2981	0.46	ug/L		88
94) isopropylbenzene	15.709	105	13058	0.47	ug/L		95
98) bromobenzene	16.055	156	3770	0.44	ug/L		94
99) 1,1,2,2-tetrachloroethane	15.924	83	4203	0.45	ug/L		96
101) 1,2,3-trichloropropane	16.008	110	1183	0.42	ug/L		76
102) n-propylbenzene	16.092	91	14230	0.46	ug/L		98
103) 2-chlorotoluene	16.207	126	3252	0.46	ug/L		95
104) 4-chlorotoluene	16.302	91	9693	0.48	ug/L		95
105) 1,3,5-trimethylbenzene	16.223	105	9893	0.45	ug/L		96
106) tert-butylbenzene	16.543	134	2013	0.46	ug/L	#	65
107) 1,2,4-trimethylbenzene	16.580	105	10158	0.46	ug/L		98
108) sec-butylbenzene	16.737	105	11106	0.44	ug/L		99
109) 1,3-dichlorobenzene	16.889	146	6379	0.45	ug/L		99
110) p-isopropyltoluene	16.847	119	8916	0.43	ug/L		98
111) 1,4-dichlorobenzene	16.957	146	7398	0.50	ug/L		87
112) 1,2,3-trimethylbenzene	16.978	105	10157	0.47	ug/L		99
114) 1,2-dichlorobenzene	17.329	146	5701	0.43	ug/L		96
117) 1,3,5-trichlorobenzene	18.252	180	3363	0.43	ug/L		75
119) hexachlorobutadiene	18.965	225	1286	0.44	ug/L		85

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120249.D
Acq On : 13 Aug 2022 9:06 pm
Operator : PrashanS
Sample : IC5341-0.5
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 15:41:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

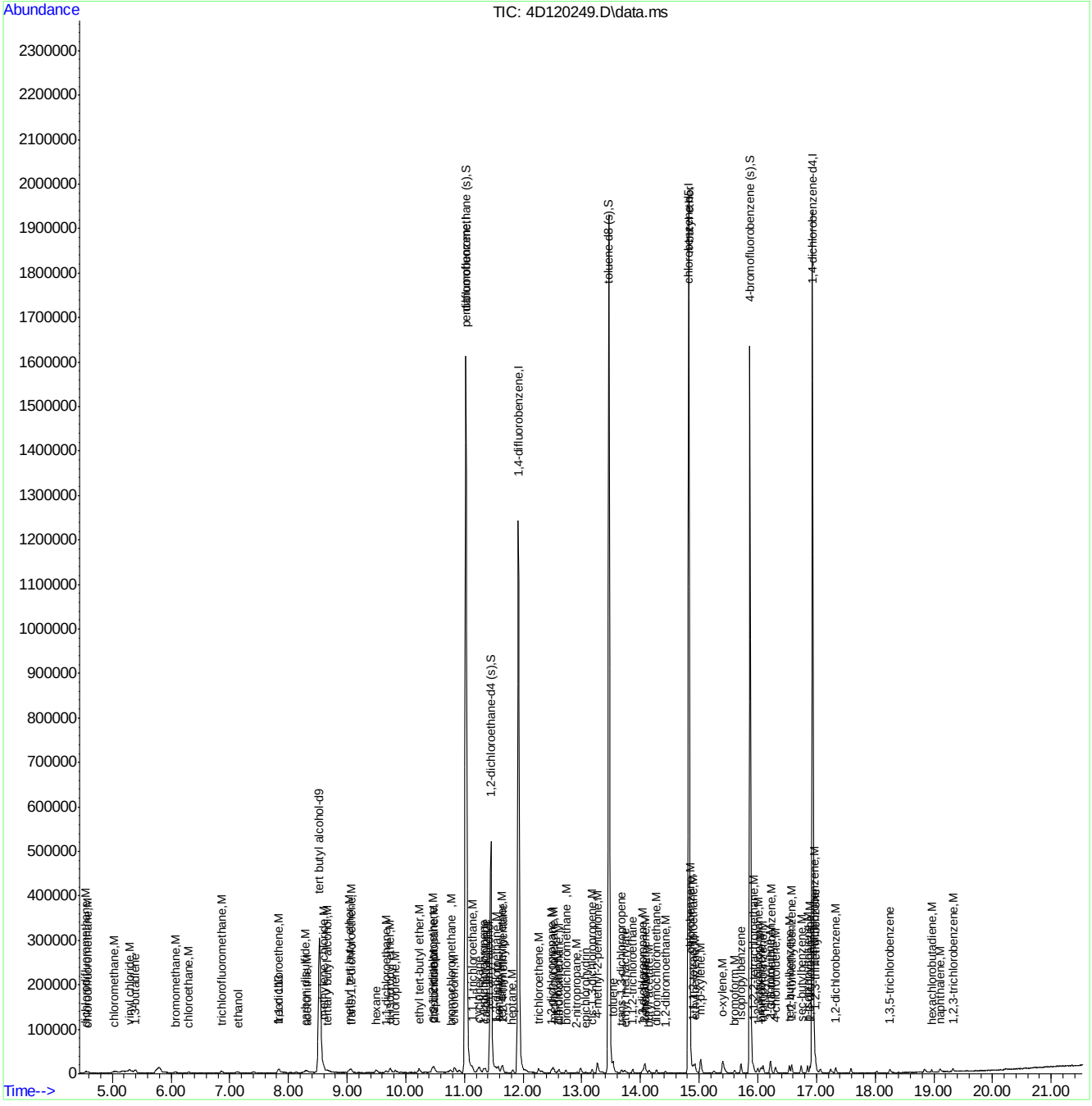
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
120) naphthalene	19.107	128	8484	0.46	ug/L	93
121) 1,2,3-trichlorobenzene	19.322	180	2462	0.46	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120249.D
Acq On : 13 Aug 2022 9:06 pm
Operator : PrashanS
Sample : IC5341-0.5
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Aug 18 15:41:45 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120250.D
Acq On : 13 Aug 2022 9:35 pm
Operator : PrashanS
Sample : IC5341-1
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 15:43:27 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.532	65	486500	500.00	ug/L		0.00
5) pentafluorobenzene	11.027	168	802031	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.919	114	1052907	50.00	ug/L		0.00
73) chlorobenzene-d5	14.823	117	1003185	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.931	152	457094	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.022	113	382742	50.35	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.70%				
52) 1,2-dichloroethane-d4 (s)	11.447	65	401990	49.62	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.24%				
74) toluene-d8 (s)	13.460	98	1217989	50.38	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.76%				
97) 4-bromofluorobenzene (s)	15.867	95	462561	49.55	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.10%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.668	59	6599	4.75	ug/L		90
3) ethanol	7.111	45	12548	93.48	ug/L		99
4) 1,4-dioxane	12.595	88	3022	24.61	ug/L		78
6) chlorodifluoromethane	4.584	51	8407	0.95	ug/L		92
7) dichlorodifluoromethane	4.558	85	9371	0.91	ug/L		93
8) chloromethane	5.040	50	8485	0.98	ug/L		91
9) vinyl chloride	5.292	62	8345	0.98	ug/L		93
10) 1,3-butadiene	5.396	54	7460	0.96	ug/L		94
11) bromomethane	6.073	94	5542	1.09	ug/L		93
12) chloroethane	6.298	64	4095	0.92	ug/L		89
13) trichlorofluoromethane	6.854	101	11483	0.95	ug/L		99
14) ethyl ether	7.394	74	3196	0.89	ug/L		76
16) freon 113	7.834	151	5027	0.88	ug/L		97
17) 1,1-dichloroethene	7.834	96	6533	1.03	ug/L	#	78
18) acetone	7.882	58	1862	2.51	ug/L	#	63
19) acetonitrile	8.312	41	11744	9.23	ug/L		99
21) carbon disulfide	8.291	76	16369	0.92	ug/L		94
22) methylene chloride	8.600	84	6530	0.96	ug/L		87
24) methyl tert butyl ether	9.040	73	18696	0.95	ug/L		97
25) trans-1,2-dichloroethene	9.067	96	6838	0.98	ug/L		93
26) di-isopropyl ether	9.732	45	19795	0.95	ug/L		80
27) 2-butanone	10.419	72	3463	3.23	ug/L	#	71
28) 1,1-dichloroethane	9.659	63	11012	0.96	ug/L		95
29) chloroprene	9.816	53	7635	0.88	ug/L		97
31) hexane	9.491	56	3671	0.91	ug/L		94
33) ethyl tert-butyl ether	10.225	59	19055	0.94	ug/L		98
35) 2,2-dichloropropane	10.477	77	9944	0.96	ug/L		98
36) cis-1,2-dichloroethene	10.461	96	7291	0.94	ug/L		85
37) methyl acrylate	10.582	55	6319	0.88	ug/L		84
38) propionitrile	10.461	54	12213	9.38	ug/L		95
39) bromochloromethane	10.765	128	3639	0.93	ug/L		81
41) chloroform	10.833	85	9020	1.03	ug/L		81

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120250.D
Acq On : 13 Aug 2022 9:35 pm
Operator : PrashanS
Sample : IC5341-1
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 15:43:27 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
42)	t-butyl formate	10.912	59	5333	0.89	ug/L		88
44)	methacrylonitrile	10.702	67	2861	0.88	ug/L	#	79
45)	1,1,1-trichloroethane	11.138	97	10494	0.94	ug/L		97
46)	cyclohexane	11.253	84	8441	0.97	ug/L	#	71
47)	1,1-dichloropropene	11.326	75	7881	0.90	ug/L		96
49)	carbon tetrachloride	11.358	117	9969	0.94	ug/L		98
50)	tert amyl alcohol	11.410	55	2236	4.83	ug/L	#	83
54)	2,2,4-trimethylpentane	11.657	57	14672	0.97	ug/L		94
55)	benzene	11.573	78	23097	0.95	ug/L		98
56)	tert-amyl methyl ether	11.641	87	4249	0.90	ug/L	#	87
57)	heptane	11.819	71	3047	0.89	ug/L		97
58)	isopropyl acetate	11.515	87	1512	0.87	ug/L	#	75
59)	1,2-dichloroethane	11.546	62	9664	0.93	ug/L		96
60)	trichloroethene	12.265	130	7005	0.96	ug/L		97
61)	ethyl acrylate	12.286	55	8736	0.87	ug/L		88
62)	2-nitropropane	12.910	43	2838	0.89	ug/L		89
63)	2-chloroethyl vinyl ether	12.973	63	13133	3.91	ug/L		99
65)	1,2-dichloropropane	12.480	63	6247	0.96	ug/L		91
66)	dibromomethane	12.611	93	5091	0.99	ug/L		97
67)	methylcyclohexane	12.511	83	8203	0.92	ug/L		95
68)	bromodichloromethane	12.726	83	8864	0.91	ug/L		97
69)	epichlorohydrin	13.062	57	4120	4.49	ug/L		98
70)	cis-1,3-dichloropropene	13.172	75	9617	0.91	ug/L		97
71)	4-methyl-2-pentanone	13.266	58	11937	3.64	ug/L		89
75)	toluene	13.534	92	14318	0.93	ug/L		99
76)	trans-1,3-dichloropropene	13.675	75	8853	0.91	ug/L		96
77)	ethyl methacrylate	13.717	69	7430	0.86	ug/L		96
78)	1,1,2-trichloroethane	13.864	83	4843	0.94	ug/L		91
79)	tetrachloroethene	14.074	164	5781	0.93	ug/L		93
80)	1,3-dichloropropane	14.032	76	9418	0.96	ug/L	#	61
81)	2-hexanone	14.053	58	11619	3.56	ug/L		95
82)	butyl acetate	14.142	56	3952	0.87	ug/L		89
83)	dibromochloromethane	14.268	129	7513	0.89	ug/L		95
84)	1,2-dibromoethane	14.414	107	6328	0.91	ug/L		99
85)	n-butyl ether	14.823	57	22408	0.90	ug/L	#	1
86)	chlorobenzene	14.855	112	17117	0.95	ug/L		92
87)	1,1,1,2-tetrachloroethane	14.902	131	6456	0.90	ug/L		89
88)	ethylbenzene	14.928	91	27192	0.95	ug/L		94
89)	m,p-xylene	15.023	106	20772	1.87	ug/L		97
90)	o-xylene	15.400	106	10551	0.95	ug/L		87
91)	styrene	15.405	104	15788	0.84	ug/L		95
92)	bromoform	15.605	173	5584	0.86	ug/L		89
93)	butyl acrylate	15.238	55	10287	0.81	ug/L		99
94)	isopropylbenzene	15.709	105	24944	0.90	ug/L		96
98)	bromobenzene	16.055	156	7756	0.92	ug/L		98
99)	1,1,2,2-tetrachloroethane	15.924	83	8291	0.90	ug/L		97
101)	1,2,3-trichloropropane	15.998	110	2545	0.92	ug/L		89
102)	n-propylbenzene	16.082	91	27825	0.91	ug/L		97
103)	2-chlorotoluene	16.208	126	6266	0.89	ug/L		89
104)	4-chlorotoluene	16.297	91	18866	0.94	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120250.D
Acq On : 13 Aug 2022 9:35 pm
Operator : PrashanS
Sample : IC5341-1
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 15:43:27 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

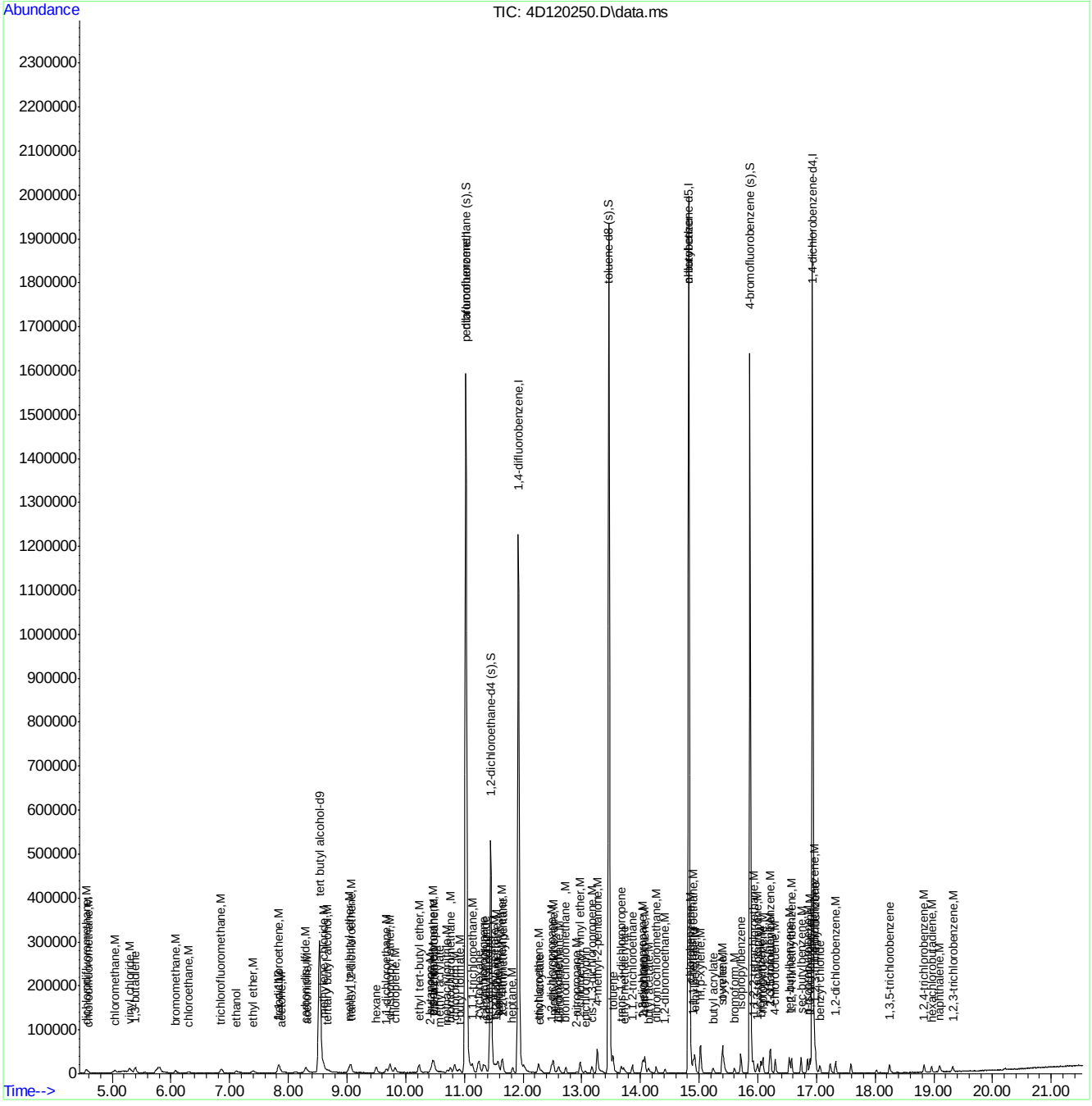
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
105) 1,3,5-trimethylbenzene	16.218	105	19569	0.90	ug/L	96
106) tert-butylbenzene	16.538	134	4007	0.93	ug/L	96
107) 1,2,4-trimethylbenzene	16.575	105	19436	0.89	ug/L	96
108) sec-butylbenzene	16.737	105	21986	0.88	ug/L	98
109) 1,3-dichlorobenzene	16.889	146	12834	0.92	ug/L	95
110) p-isopropyltoluene	16.847	119	18298	0.89	ug/L	97
111) 1,4-dichlorobenzene	16.957	146	13524	0.92	ug/L	94
112) 1,2,3-trimethylbenzene	16.978	105	19590	0.91	ug/L	99
113) benzyl chloride	17.057	91	13119	0.85	ug/L	98
114) 1,2-dichlorobenzene	17.324	146	12049	0.92	ug/L	98
117) 1,3,5-trichlorobenzene	18.242	180	6863	0.89	ug/L	93
118) 1,2,4-trichlorobenzene	18.834	180	5604	0.87	ug/L	93
119) hexachlorobutadiene	18.965	225	2420	0.83	ug/L	97
120) naphthalene	19.091	128	16810	0.92	ug/L	96
121) 1,2,3-trichlorobenzene	19.322	180	4952	0.94	ug/L	93

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120250.D
Acq On : 13 Aug 2022 9:35 pm
Operator : PrashanS
Sample : IC5341-1
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 18 15:43:27 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120251.D
Acq On : 13 Aug 2022 10:03 pm
Operator : PrashanS
Sample : IC5341-2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 15:43:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) tert butyl alcohol-d9	8.526	65	490337	500.00	ug/L		-0.01
5) pentafluorobenzene	11.027	168	815071	50.00	ug/L		0.00
51) 1,4-difluorobenzene	11.919	114	1065168	50.00	ug/L		0.00
73) chlorobenzene-d5	14.823	117	1010108	50.00	ug/L		0.00
96) 1,4-dichlorobenzene-d4	16.931	152	463517	50.00	ug/L		0.00
System Monitoring Compounds							
43) dibromofluoromethane (s)	11.022	113	388057	50.23	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.46%				
52) 1,2-dichloroethane-d4 (s)	11.452	65	410672	50.11	ug/L		0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.22%				
74) toluene-d8 (s)	13.460	98	1239298	50.91	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.82%				
97) 4-bromofluorobenzene (s)	15.867	95	473150	49.98	ug/L		0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.96%				
Target Compounds							Qvalue
2) tertiary butyl alcohol	8.668	59	14896	10.63	ug/L		92
3) ethanol	7.090	45	27947	206.56	ug/L		99
4) 1,4-dioxane	12.584	88	6626	53.55	ug/L		99
6) chlorodifluoromethane	4.584	51	18745	2.09	ug/L		96
7) dichlorodifluoromethane	4.552	85	20039	1.92	ug/L		97
8) chloromethane	5.029	50	17756	2.01	ug/L		98
9) vinyl chloride	5.291	62	17254	1.99	ug/L		98
10) 1,3-butadiene	5.391	54	17338	2.20	ug/L		92
11) bromomethane	6.073	94	11541	2.22	ug/L		97
12) chloroethane	6.293	64	9168	2.02	ug/L		93
13) trichlorofluoromethane	6.859	101	24769	2.02	ug/L		97
14) ethyl ether	7.394	74	7190	1.96	ug/L		92
16) freon 113	7.840	151	12057	2.08	ug/L		97
17) 1,1-dichloroethene	7.834	96	13923	2.17	ug/L		86
18) acetone	7.855	58	5855	7.77	ug/L	#	77
19) acetonitrile	8.290	41	28000	21.65	ug/L		91
20) iodomethane	8.117	142	8806	2.37	ug/L		97
21) carbon disulfide	8.280	76	37203	2.07	ug/L		98
22) methylene chloride	8.600	84	14781	2.14	ug/L		97
23) methyl acetate	8.437	43	11315	1.77	ug/L		90
24) methyl tert butyl ether	9.045	73	42532	2.13	ug/L		96
25) trans-1,2-dichloroethene	9.066	96	14949	2.11	ug/L		96
26) di-isopropyl ether	9.732	45	45169	2.13	ug/L		86
27) 2-butanone	10.419	72	8315	7.63	ug/L		91
28) 1,1-dichloroethane	9.664	63	25516	2.18	ug/L		99
29) chloroprene	9.816	53	18220	2.06	ug/L		98
30) acrylonitrile	8.967	53	5875	2.07	ug/L		92
31) hexane	9.491	56	8528	2.08	ug/L		98
32) vinyl acetate	9.696	86	2609	1.77	ug/L	#	82
33) ethyl tert-butyl ether	10.225	59	43393	2.10	ug/L		97
34) ethyl acetate	10.482	70	1839	1.75	ug/L	#	6
35) 2,2-dichloropropane	10.477	77	22666	2.16	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120251.D
Acq On : 13 Aug 2022 10:03 pm
Operator : PrashanS
Sample : IC5341-2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 15:43:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
36) cis-1,2-dichloroethene	10.451	96	16798	2.14	ug/L		88
37) methyl acrylate	10.571	55	12502	1.72	ug/L		95
38) propionitrile	10.461	54	27476	20.77	ug/L		97
39) bromochloromethane	10.765	128	8575	2.15	ug/L		85
40) tetrahydrofuran	10.849	72	3495	2.43	ug/L		84
41) chloroform	10.828	85	19067	2.15	ug/L		91
42) t-butyl formate	10.907	59	12182	2.01	ug/L		92
44) methacrylonitrile	10.697	67	6611	2.00	ug/L		79
45) 1,1,1-trichloroethane	11.137	97	24224	2.14	ug/L		93
46) cyclohexane	11.253	84	17840	2.02	ug/L	#	81
47) 1,1-dichloropropene	11.326	75	19372	2.19	ug/L		96
48) isobutyl alcohol	11.326	74	1312	20.02	ug/L		68
49) carbon tetrachloride	11.358	117	22969	2.14	ug/L		95
50) tert amyl alcohol	11.410	55	4796	10.19	ug/L		86
53) n-butyl alcohol	12.002	56	29773	91.73	ug/L		97
54) 2,2,4-trimethylpentane	11.656	57	33665	2.20	ug/L		94
55) benzene	11.578	78	53800	2.20	ug/L		97
56) tert-amyl methyl ether	11.635	87	9953	2.09	ug/L		94
57) heptane	11.819	71	7465	2.16	ug/L		90
58) isopropyl acetate	11.510	87	3543	2.03	ug/L	#	69
59) 1,2-dichloroethane	11.541	62	21869	2.09	ug/L		96
60) trichloroethene	12.259	130	15513	2.10	ug/L		99
61) ethyl acrylate	12.270	55	19757	1.95	ug/L		91
62) 2-nitropropane	12.915	43	6548	2.02	ug/L		88
63) 2-chloroethyl vinyl ether	12.967	63	31644	9.31	ug/L		99
64) methyl methacrylate	12.516	100	3994	1.90	ug/L	#	78
65) 1,2-dichloropropane	12.485	63	14106	2.13	ug/L		99
66) dibromomethane	12.605	93	11312	2.17	ug/L		95
67) methylcyclohexane	12.511	83	19374	2.15	ug/L		97
68) bromodichloromethane	12.726	83	20621	2.09	ug/L		99
69) epichlorohydrin	13.051	57	9651	10.40	ug/L		98
70) cis-1,3-dichloropropene	13.172	75	22233	2.08	ug/L		97
71) 4-methyl-2-pentanone	13.261	58	27171	8.18	ug/L		97
72) 3-methyl-1-butanol	13.261	70	9680	32.20	ug/L	#	70
75) toluene	13.533	92	33280	2.14	ug/L		97
76) trans-1,3-dichloropropene	13.670	75	19932	2.04	ug/L		95
77) ethyl methacrylate	13.701	69	17959	2.05	ug/L		95
78) 1,1,2-trichloroethane	13.859	83	11130	2.14	ug/L		89
79) tetrachloroethene	14.079	164	13709	2.18	ug/L		97
80) 1,3-dichloropropane	14.026	76	21250	2.16	ug/L	#	76
81) 2-hexanone	14.037	58	26646	8.12	ug/L		98
82) butyl acetate	14.131	56	10131	2.21	ug/L		88
83) dibromochloromethane	14.262	129	17797	2.09	ug/L		99
84) 1,2-dibromoethane	14.414	107	15000	2.13	ug/L		97
85) n-butyl ether	14.818	57	52148	2.07	ug/L		59
86) chlorobenzene	14.855	112	39128	2.16	ug/L		86
87) 1,1,1,2-tetrachloroethane	14.897	131	15718	2.17	ug/L		96
88) ethylbenzene	14.923	91	60941	2.11	ug/L		99
89) m,p-xylene	15.022	106	47049	4.21	ug/L		94
90) o-xylene	15.395	106	23091	2.06	ug/L		98

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120251.D
Acq On : 13 Aug 2022 10:03 pm
Operator : PrashanS
Sample : IC5341-2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 15:43:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

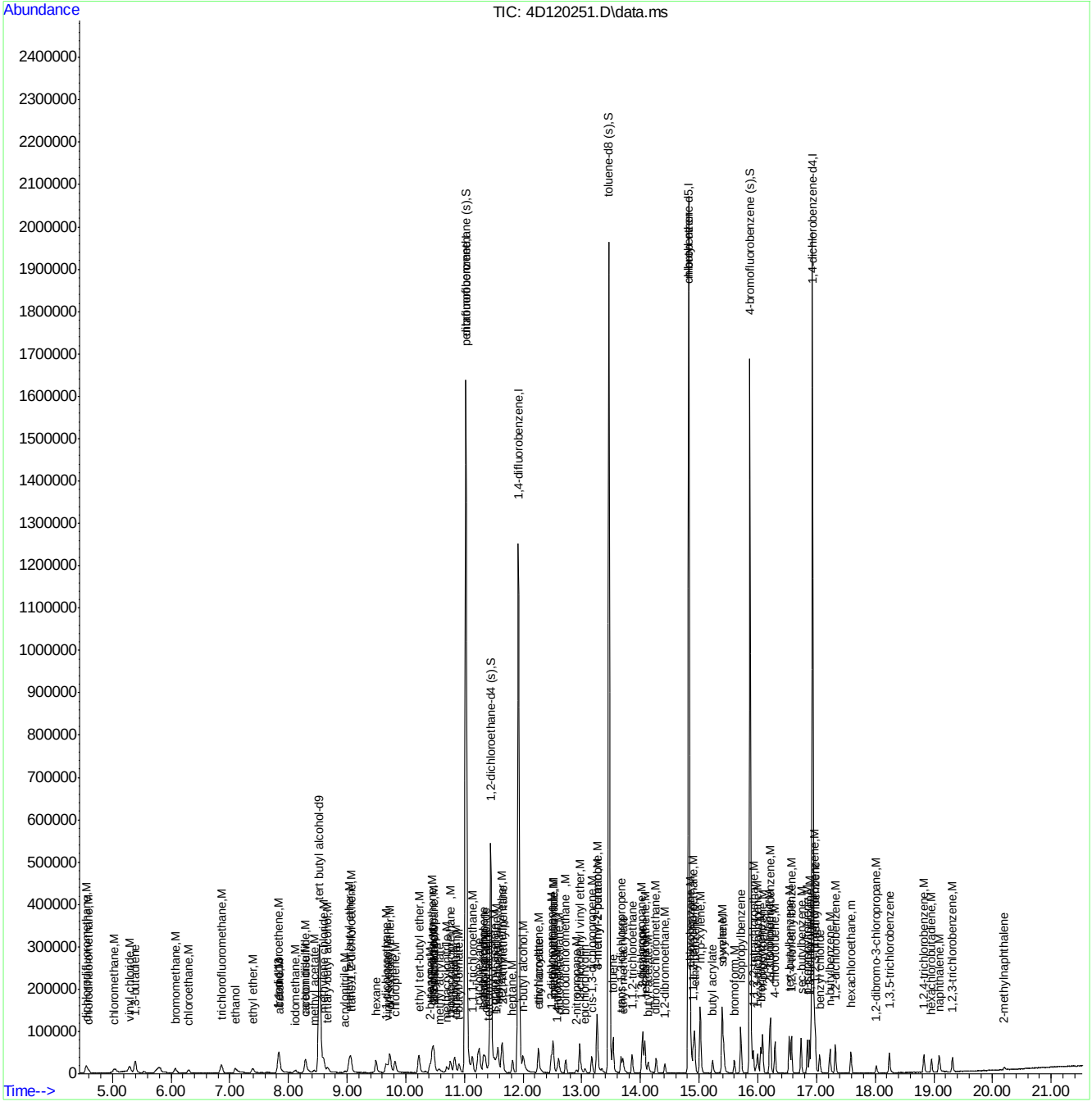
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
91) styrene	15.400	104	37133	1.97	ug/L	97
92) bromoform	15.599	173	13088	2.00	ug/L	95
93) butyl acrylate	15.232	55	23981	1.89	ug/L	96
94) isopropylbenzene	15.709	105	58990	2.12	ug/L	98
98) bromobenzene	16.050	156	17944	2.10	ug/L	85
99) 1,1,2,2-tetrachloroethane	15.924	83	19708	2.11	ug/L	98
101) 1,2,3-trichloropropane	15.998	110	6003	2.14	ug/L	99
102) n-propylbenzene	16.082	91	64760	2.08	ug/L	100
103) 2-chlorotoluene	16.202	126	15165	2.12	ug/L	97
104) 4-chlorotoluene	16.297	91	42235	2.07	ug/L	95
105) 1,3,5-trimethylbenzene	16.218	105	45786	2.08	ug/L	96
106) tert-butylbenzene	16.538	134	8870	2.04	ug/L	97
107) 1,2,4-trimethylbenzene	16.574	105	45321	2.04	ug/L	98
108) sec-butylbenzene	16.737	105	52045	2.06	ug/L	97
109) 1,3-dichlorobenzene	16.884	146	29323	2.07	ug/L	97
110) p-isopropyltoluene	16.842	119	43224	2.08	ug/L	99
111) 1,4-dichlorobenzene	16.957	146	31687	2.12	ug/L	95
112) 1,2,3-trimethylbenzene	16.978	105	45190	2.07	ug/L	99
113) benzyl chloride	17.052	91	30150	1.92	ug/L	99
114) 1,2-dichlorobenzene	17.319	146	27853	2.09	ug/L	99
115) n-butylbenzene	17.225	92	18378	1.92	ug/L	95
116) 1,2-dibromo-3-chloropr...	18.016	157	4526	1.78	ug/L	94
117) 1,3,5-trichlorobenzene	18.242	180	15978	2.04	ug/L	97
118) 1,2,4-trichlorobenzene	18.829	180	12552	1.93	ug/L	96
119) hexachlorobutadiene	18.960	225	6093	2.07	ug/L	90
120) naphthalene	19.086	128	37756	2.04	ug/L	97
121) 1,2,3-trichlorobenzene	19.317	180	10703	2.01	ug/L	96
122) hexachloroethane	17.586	201	7467	1.80	ug/L	95
123) 2-methylnaphthalene	20.197	142	4930	0.92	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120251.D
Acq On : 13 Aug 2022 10:03 pm
Operator : PrashanS
Sample : IC5341-2
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Aug 18 15:43:59 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120252.D
Acq On : 13 Aug 2022 10:31 pm
Operator : PrashanS
Sample : IC5341-4
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 08:45:49 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.526	65	479446	500.00	ug/L	-0.01
5) pentafluorobenzene	11.027	168	795861	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1040858	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	981035	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	451126	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	378542	50.18	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.36%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	404728	50.54	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.08%			
74) toluene-d8 (s)	13.460	98	1205973	51.01	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.02%			
97) 4-bromofluorobenzene (s)	15.867	95	463091	50.26	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.52%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.663	59	27412	20.00	ug/L	99
3) ethanol	7.090	45	52669	398.13	ug/L	98
4) 1,4-dioxane	12.584	88	12321	101.83	ug/L	94
6) chlorodifluoromethane	4.584	51	35406	4.05	ug/L	97
7) dichlorodifluoromethane	4.547	85	41231	4.05	ug/L	99
8) chloromethane	5.035	50	34897	4.06	ug/L	97
9) vinyl chloride	5.291	62	33794	4.00	ug/L	95
10) 1,3-butadiene	5.391	54	32352	4.20	ug/L	98
11) bromomethane	6.067	94	20994	4.14	ug/L	91
12) chloroethane	6.298	64	18273	4.12	ug/L	98
13) trichlorofluoromethane	6.859	101	49865	4.17	ug/L	98
14) ethyl ether	7.383	74	14257	3.98	ug/L	95
15) acrolein	7.619	56	5213	3.46	ug/L	90
16) freon 113	7.834	151	23537	4.16	ug/L	96
17) 1,1-dichloroethene	7.840	96	24706	3.94	ug/L	97
18) acetone	7.850	58	11257	15.30	ug/L	96
19) acetonitrile	8.280	41	50595	40.06	ug/L	94
20) iodomethane	8.123	142	23553	3.72	ug/L	96
21) carbon disulfide	8.285	76	69916	3.98	ug/L	99
22) methylene chloride	8.600	84	27403	4.07	ug/L	99
23) methyl acetate	8.427	43	23160	3.72	ug/L	95
24) methyl tert butyl ether	9.040	73	79804	4.09	ug/L	99
25) trans-1,2-dichloroethene	9.066	96	27109	3.92	ug/L	93
26) di-isopropyl ether	9.727	45	84908	4.10	ug/L	90
27) 2-butanone	10.409	72	16946	15.93	ug/L	92
28) 1,1-dichloroethane	9.659	63	47829	4.18	ug/L	95
29) chloroprene	9.816	53	36062	4.18	ug/L	99
30) acrylonitrile	8.951	53	9878	3.56	ug/L	97
31) hexane	9.496	56	16468	4.12	ug/L	91
32) vinyl acetate	9.690	86	5199	3.62	ug/L #	79
33) ethyl tert-butyl ether	10.225	59	81916	4.05	ug/L	98
34) ethyl acetate	10.472	70	3704	3.61	ug/L #	69

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120252.D
Acq On : 13 Aug 2022 10:31 pm
Operator : PrashanS
Sample : IC5341-4
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 08:45:49 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.477	77	41712	4.07	ug/L		98
36) cis-1,2-dichloroethene	10.451	96	30521	3.99	ug/L		93
37) methyl acrylate	10.555	55	29988	4.22	ug/L		95
38) propionitrile	10.456	54	53532	41.45	ug/L		97
39) bromochloromethane	10.765	128	16151	4.14	ug/L		88
40) tetrahydrofuran	10.844	72	5691	4.05	ug/L		98
41) chloroform	10.828	85	34554	3.99	ug/L		98
42) t-butyl formate	10.907	59	23080	3.90	ug/L		95
44) methacrylonitrile	10.692	67	12993	4.03	ug/L		88
45) 1,1,1-trichloroethane	11.132	97	45936	4.15	ug/L		99
46) cyclohexane	11.253	84	36136	4.20	ug/L		89
47) 1,1-dichloropropene	11.326	75	36184	4.18	ug/L		94
48) isobutyl alcohol	11.331	74	2814	43.97	ug/L		34
49) carbon tetrachloride	11.358	117	43192	4.11	ug/L		99
50) tert amyl alcohol	11.410	55	9541	20.76	ug/L	#	79
53) n-butyl alcohol	11.997	56	58403	184.13	ug/L		97
54) 2,2,4-trimethylpentane	11.651	57	62315	4.17	ug/L		96
55) benzene	11.573	78	99943	4.18	ug/L		99
56) tert-amyl methyl ether	11.635	87	19227	4.14	ug/L		94
57) heptane	11.819	71	14042	4.16	ug/L		99
58) isopropyl acetate	11.504	87	6729	3.94	ug/L	#	86
59) 1,2-dichloroethane	11.541	62	39608	3.87	ug/L		92
60) trichloroethene	12.254	130	30026	4.15	ug/L		98
61) ethyl acrylate	12.259	55	38894	3.93	ug/L		88
62) 2-nitropropane	12.910	43	12201	3.85	ug/L		94
63) 2-chloroethyl vinyl ether	12.962	63	61356	18.48	ug/L		97
64) methyl methacrylate	12.506	100	7337	3.57	ug/L	#	77
65) 1,2-dichloropropane	12.480	63	27237	4.21	ug/L		99
66) dibromomethane	12.605	93	20333	3.99	ug/L		96
67) methylcyclohexane	12.511	83	36939	4.20	ug/L		96
68) bromodichloromethane	12.726	83	38842	4.02	ug/L		98
69) epichlorohydrin	13.051	57	17932	19.78	ug/L		96
70) cis-1,3-dichloropropene	13.166	75	42706	4.09	ug/L		98
71) 4-methyl-2-pentanone	13.256	58	51984	16.02	ug/L		98
72) 3-methyl-1-butanol	13.250	70	21274	72.42	ug/L		89
75) toluene	13.533	92	62526	4.14	ug/L		95
76) trans-1,3-dichloropropene	13.665	75	38308	4.04	ug/L		99
77) ethyl methacrylate	13.696	69	33862	3.99	ug/L		98
78) 1,1,2-trichloroethane	13.859	83	20760	4.10	ug/L		93
79) tetrachloroethene	14.079	164	26629	4.36	ug/L		98
80) 1,3-dichloropropane	14.026	76	39640	4.14	ug/L		89
81) 2-hexanone	14.037	58	51806	16.25	ug/L		96
82) butyl acetate	14.126	56	18561	4.17	ug/L		90
83) dibromochloromethane	14.268	129	33846	4.09	ug/L		95
84) 1,2-dibromoethane	14.414	107	28520	4.17	ug/L		98
85) n-butyl ether	14.818	57	99913	4.09	ug/L		80
86) chlorobenzene	14.855	112	72218	4.11	ug/L		95
87) 1,1,1,2-tetrachloroethane	14.897	131	28938	4.11	ug/L		98
88) ethylbenzene	14.923	91	112830	4.02	ug/L		99
89) m,p-xylene	15.017	106	87731	8.08	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120252.D
Acq On : 13 Aug 2022 10:31 pm
Operator : PrashanS
Sample : IC5341-4
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 08:45:49 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

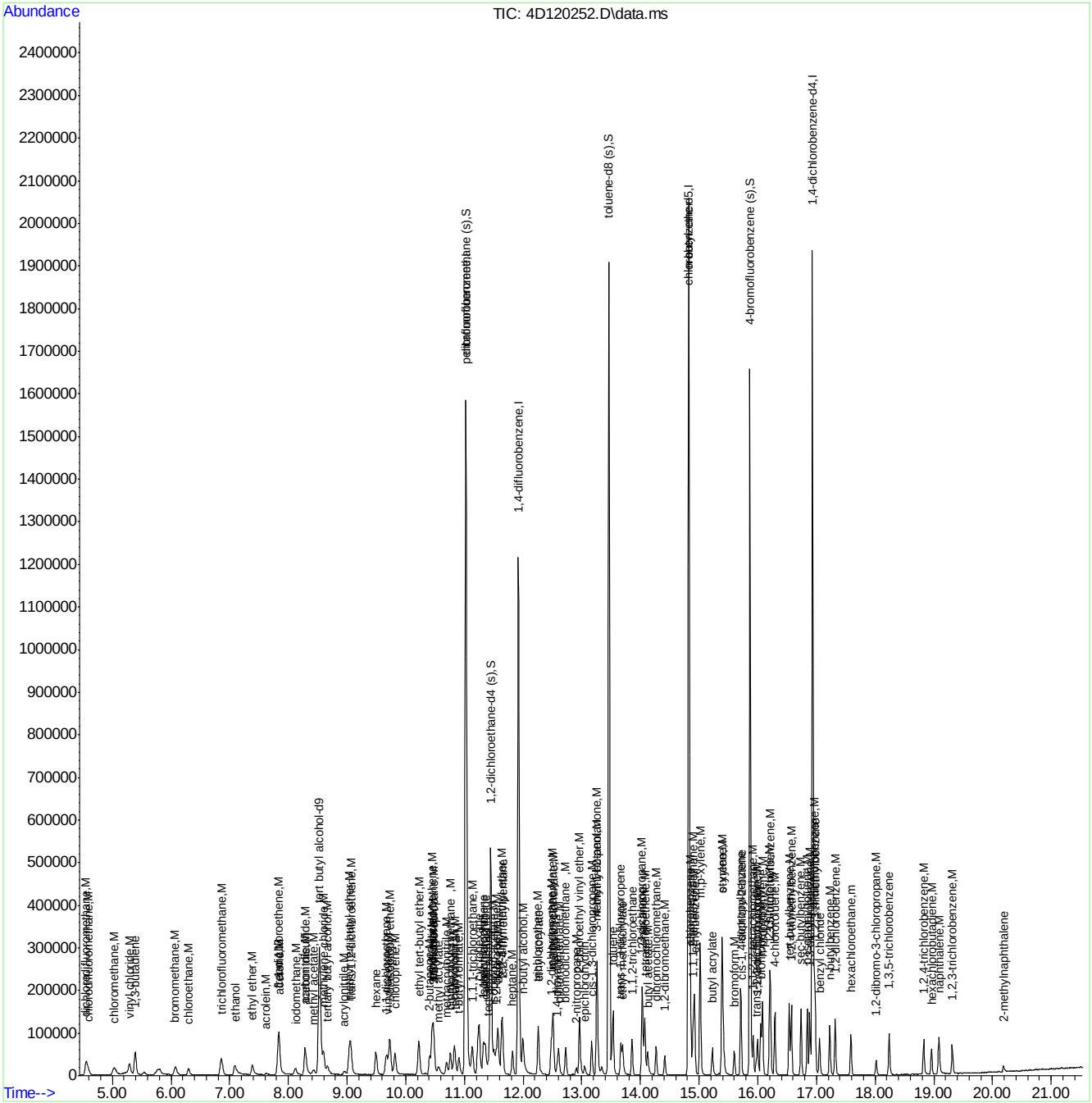
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.395	106	44130	4.06	ug/L	100
91) styrene	15.395	104	71628	3.91	ug/L	94
92) bromoform	15.599	173	24777	3.89	ug/L	97
93) butyl acrylate	15.227	55	46700	3.78	ug/L	96
94) isopropylbenzene	15.709	105	111916	4.14	ug/L	98
95) cis-1,4-dichloro-2-butene	15.720	88	7066	5.09	ug/L	95
98) bromobenzene	16.050	156	33396	4.02	ug/L	91
99) 1,1,2,2-tetrachloroethane	15.919	83	37046	4.08	ug/L	96
100) trans-1,4-dichloro-2-b...	15.971	53	5543	3.16	ug/L	97
101) 1,2,3-trichloropropane	15.998	110	11247	4.12	ug/L	98
102) n-propylbenzene	16.082	91	122206	4.03	ug/L	100
103) 2-chlorotoluene	16.202	126	28222	4.05	ug/L	99
104) 4-chlorotoluene	16.291	91	80791	4.07	ug/L	98
105) 1,3,5-trimethylbenzene	16.218	105	85665	3.99	ug/L	98
106) tert-butylbenzene	16.538	134	16840	3.97	ug/L	92
107) 1,2,4-trimethylbenzene	16.574	105	85740	3.97	ug/L	97
108) sec-butylbenzene	16.732	105	97810	3.98	ug/L	98
109) 1,3-dichlorobenzene	16.884	146	56201	4.08	ug/L	96
110) p-isopropyltoluene	16.842	119	82113	4.06	ug/L	98
111) 1,4-dichlorobenzene	16.957	146	58334	4.02	ug/L	97
112) 1,2,3-trimethylbenzene	16.973	105	85187	4.02	ug/L	96
113) benzyl chloride	17.052	91	56878	3.72	ug/L	99
114) 1,2-dichlorobenzene	17.319	146	53395	4.12	ug/L	99
115) n-butylbenzene	17.225	92	35278	3.78	ug/L	97
116) 1,2-dibromo-3-chloropr...	18.016	157	9187	3.71	ug/L	97
117) 1,3,5-trichlorobenzene	18.236	180	30367	3.98	ug/L	98
118) 1,2,4-trichlorobenzene	18.829	180	24246	3.83	ug/L	96
119) hexachlorobutadiene	18.965	225	11509	4.02	ug/L	99
120) naphthalene	19.086	128	71609	3.98	ug/L	99
121) 1,2,3-trichlorobenzene	19.317	180	20275	3.91	ug/L	98
122) hexachloroethane	17.592	201	14241	3.54	ug/L	92
123) 2-methylnaphthalene	20.187	142	9529	1.84	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120252.D
Acq On : 13 Aug 2022 10:31 pm
Operator : PrashanS
Sample : IC5341-4
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 18 08:45:49 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120253.D
Acq On : 13 Aug 2022 11:00 pm
Operator : PrashanS
Sample : IC5341-8
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 08:45:55 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.526	65	500608	500.00	ug/L	-0.01
5) pentafluorobenzene	11.022	168	813083	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1060496	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1014992	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	464543	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	386617	50.17	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.34%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	411824	50.47	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.94%			
74) toluene-d8 (s)	13.460	98	1234047	50.45	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.90%			
97) 4-bromofluorobenzene (s)	15.867	95	468680	49.40	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.80%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.668	59	56634	39.58	ug/L	99
3) ethanol	7.074	45	113023	818.23	ug/L	97
4) 1,4-dioxane	12.579	88	26012	205.90	ug/L	98
6) chlorodifluoromethane	4.584	51	69133	7.73	ug/L	99
7) dichlorodifluoromethane	4.547	85	82523	7.94	ug/L	97
8) chloromethane	5.029	50	68729	7.82	ug/L	96
9) vinyl chloride	5.286	62	68411	7.93	ug/L	98
10) 1,3-butadiene	5.396	54	63460	8.07	ug/L	97
11) bromomethane	6.073	94	39437	7.62	ug/L	95
12) chloroethane	6.298	64	36159	7.97	ug/L	96
13) trichlorofluoromethane	6.859	101	99483	8.15	ug/L	98
14) ethyl ether	7.383	74	29429	8.04	ug/L	93
15) acrolein	7.604	56	11830	7.69	ug/L	92
16) freon 113	7.834	151	45647	7.89	ug/L	96
17) 1,1-dichloroethene	7.834	96	49178	7.67	ug/L	98
18) acetone	7.834	58	23538	31.31	ug/L	97
19) acetonitrile	8.275	41	101333	78.53	ug/L	97
20) iodomethane	8.117	142	62053	7.08	ug/L	99
21) carbon disulfide	8.285	76	139632	7.77	ug/L	99
22) methylene chloride	8.600	84	54294	7.89	ug/L	98
23) methyl acetate	8.411	43	48641	7.64	ug/L	99
24) methyl tert butyl ether	9.040	73	159378	7.99	ug/L	99
25) trans-1,2-dichloroethene	9.061	96	53007	7.51	ug/L	98
26) di-isopropyl ether	9.727	45	170806	8.07	ug/L	95
27) 2-butanone	10.403	72	34978	32.18	ug/L	99
28) 1,1-dichloroethane	9.664	63	94308	8.07	ug/L	99
29) chloroprene	9.811	53	72239	8.19	ug/L	98
30) acrylonitrile	8.935	53	19504	6.88	ug/L	91
31) hexane	9.491	56	32282	7.91	ug/L	97
32) vinyl acetate	9.675	86	11047	7.52	ug/L	95
33) ethyl tert-butyl ether	10.225	59	164682	7.98	ug/L	100
34) ethyl acetate	10.466	70	8292	7.90	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120253.D
Acq On : 13 Aug 2022 11:00 pm
Operator : PrashanS
Sample : IC5341-8
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 08:45:55 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.482	77	81983	7.83	ug/L		95
36) cis-1,2-dichloroethene	10.445	96	59429	7.60	ug/L		93
37) methyl acrylate	10.545	55	59036	8.14	ug/L		99
38) propionitrile	10.445	54	106648	80.83	ug/L		98
39) bromochloromethane	10.755	128	32733	8.21	ug/L		95
40) tetrahydrofuran	10.844	72	11196	7.80	ug/L		91
41) chloroform	10.828	85	66576	7.52	ug/L		98
42) t-butyl formate	10.902	59	47224	7.80	ug/L		98
44) methacrylonitrile	10.687	67	25797	7.83	ug/L		93
45) 1,1,1-trichloroethane	11.137	97	88502	7.83	ug/L		96
46) cyclohexane	11.248	84	71144	8.09	ug/L	#	87
47) 1,1-dichloropropene	11.321	75	69922	7.91	ug/L		99
48) isobutyl alcohol	11.326	74	5285	80.82	ug/L		89
49) carbon tetrachloride	11.358	117	86303	8.04	ug/L		97
50) tert amyl alcohol	11.405	55	18156	38.67	ug/L		97
53) n-butyl alcohol	11.992	56	123606	382.49	ug/L		97
54) 2,2,4-trimethylpentane	11.651	57	122306	8.02	ug/L		97
55) benzene	11.573	78	197508	8.10	ug/L		99
56) tert-amyl methyl ether	11.641	87	38254	8.09	ug/L		96
57) heptane	11.814	71	26774	7.79	ug/L		91
58) isopropyl acetate	11.499	87	14097	8.10	ug/L	#	88
59) 1,2-dichloroethane	11.541	62	78654	7.53	ug/L		98
60) trichloroethene	12.254	130	58700	7.97	ug/L		97
61) ethyl acrylate	12.254	55	79163	7.86	ug/L		94
62) 2-nitropropane	12.904	43	23271	7.21	ug/L		94
63) 2-chloroethyl vinyl ether	12.962	63	129880	38.39	ug/L		100
64) methyl methacrylate	12.501	100	16027	7.65	ug/L	#	85
65) 1,2-dichloropropane	12.480	63	53051	8.05	ug/L		97
66) dibromomethane	12.600	93	40628	7.83	ug/L		99
67) methylcyclohexane	12.511	83	73271	8.18	ug/L		98
68) bromodichloromethane	12.726	83	76589	7.79	ug/L		99
69) epichlorohydrin	13.046	57	35842	38.80	ug/L		96
70) cis-1,3-dichloropropene	13.167	75	85463	8.04	ug/L		99
71) 4-methyl-2-pentanone	13.256	58	105696	31.97	ug/L		98
72) 3-methyl-1-butanol	13.245	70	43934	146.78	ug/L		96
75) toluene	13.528	92	121831	7.80	ug/L		99
76) trans-1,3-dichloropropene	13.665	75	78558	8.01	ug/L		99
77) ethyl methacrylate	13.691	69	71246	8.11	ug/L		98
78) 1,1,2-trichloroethane	13.853	83	42320	8.08	ug/L		98
79) tetrachloroethene	14.074	164	50386	7.98	ug/L		98
80) 1,3-dichloropropane	14.026	76	80390	8.12	ug/L		96
81) 2-hexanone	14.032	58	105165	31.88	ug/L		100
82) butyl acetate	14.116	56	37936	8.24	ug/L		98
83) dibromochloromethane	14.262	129	67447	7.87	ug/L		99
84) 1,2-dibromoethane	14.409	107	56551	8.00	ug/L		99
85) n-butyl ether	14.813	57	202298	8.01	ug/L		96
86) chlorobenzene	14.855	112	144615	7.96	ug/L		97
87) 1,1,1,2-tetrachloroethane	14.897	131	58890	8.08	ug/L		99
88) ethylbenzene	14.918	91	231944	8.00	ug/L		99
89) m,p-xylene	15.017	106	178443	15.89	ug/L		100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120253.D
Acq On : 13 Aug 2022 11:00 pm
Operator : PrashanS
Sample : IC5341-8
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 08:45:55 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

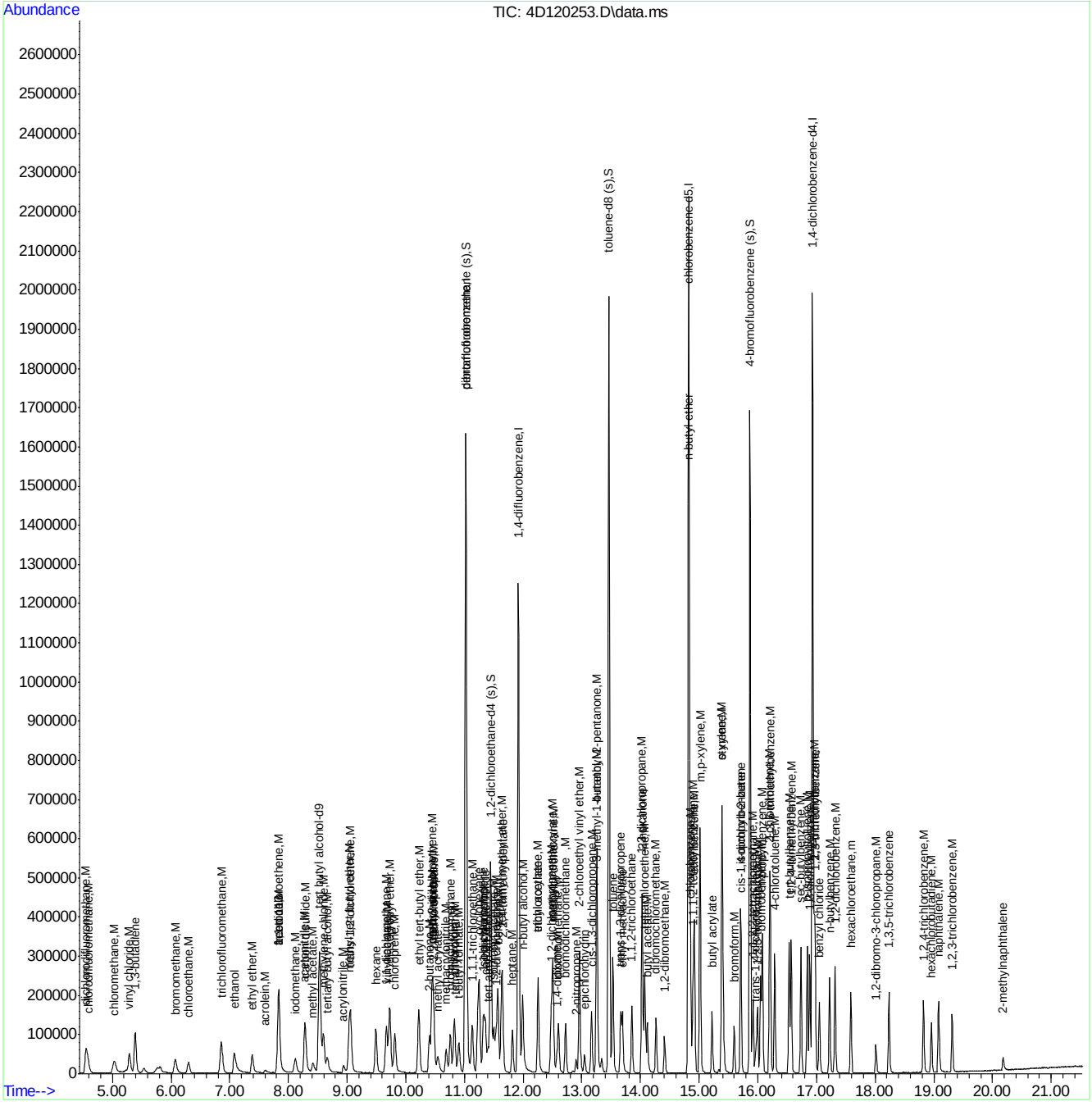
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	o-xylene	15.390	106	89132	7.92	ug/L	96
91)	styrene	15.390	104	148797	7.85	ug/L	97
92)	bromoform	15.594	173	51315	7.79	ug/L	99
93)	butyl acrylate	15.222	55	99498	7.78	ug/L	100
94)	isopropylbenzene	15.709	105	225296	8.06	ug/L	99
95)	cis-1,4-dichloro-2-butene	15.715	88	14900	7.68	ug/L	87
98)	bromobenzene	16.050	156	68220	7.98	ug/L	87
99)	1,1,2,2-tetrachloroethane	15.919	83	74502	7.97	ug/L	99
100)	trans-1,4-dichloro-2-b...	15.966	53	11729	6.50	ug/L	88
101)	1,2,3-trichloropropane	15.998	110	22223	7.90	ug/L	99
102)	n-propylbenzene	16.076	91	249684	7.99	ug/L	99
103)	2-chlorotoluene	16.202	126	57848	8.05	ug/L	99
104)	4-chlorotoluene	16.291	91	159565	7.81	ug/L	97
105)	1,3,5-trimethylbenzene	16.213	105	174577	7.90	ug/L	99
106)	tert-butylbenzene	16.538	134	34769	7.96	ug/L	98
107)	1,2,4-trimethylbenzene	16.569	105	173976	7.83	ug/L	99
108)	sec-butylbenzene	16.732	105	201484	7.97	ug/L	99
109)	1,3-dichlorobenzene	16.884	146	114227	8.06	ug/L	99
110)	p-isopropyltoluene	16.842	119	166074	7.97	ug/L	99
111)	1,4-dichlorobenzene	16.957	146	116710	7.81	ug/L	99
112)	1,2,3-trimethylbenzene	16.973	105	173125	7.92	ug/L	100
113)	benzyl chloride	17.046	91	119690	7.61	ug/L	98
114)	1,2-dichlorobenzene	17.319	146	107895	8.08	ug/L	98
115)	n-butylbenzene	17.225	92	72451	7.54	ug/L	98
116)	1,2-dibromo-3-chloropr...	18.011	157	18542	7.26	ug/L	97
117)	1,3,5-trichlorobenzene	18.237	180	61242	7.80	ug/L	96
118)	1,2,4-trichlorobenzene	18.829	180	50410	7.74	ug/L	99
119)	hexachlorobutadiene	18.960	225	23254	7.89	ug/L	99
120)	naphthalene	19.081	128	147394	7.96	ug/L	98
121)	1,2,3-trichlorobenzene	19.311	180	42739	8.00	ug/L	97
122)	hexachloroethane	17.586	201	31148	7.51	ug/L	94
123)	2-methylnaphthalene	20.182	142	20107	3.76	ug/L	95

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120253.D
Acq On : 13 Aug 2022 11:00 pm
Operator : PrashanS
Sample : IC5341-8
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Aug 18 08:45:55 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120254.D
Acq On : 13 Aug 2022 11:28 pm
Operator : PrashanS
Sample : IC5341-20
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 08:45:58 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.532	65	502456	500.00	ug/L	0.00
5) pentafluorobenzene	11.027	168	826545	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1066643	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1030100	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	459221	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	389665	49.74	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.48%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	409006	49.84	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.68%			
74) toluene-d8 (s)	13.460	98	1237958	49.86	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.72%			
97) 4-bromofluorobenzene (s)	15.867	95	468854	49.99	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.98%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.663	59	141467	98.49	ug/L	99
3) ethanol	7.069	45	281206	2028.29	ug/L	96
4) 1,4-dioxane	12.574	88	63821	503.31	ug/L	100
6) chlorodifluoromethane	4.578	51	174221	19.17	ug/L	98
7) dichlorodifluoromethane	4.547	85	207396	19.62	ug/L	99
8) chloromethane	5.035	50	164914	18.45	ug/L	98
9) vinyl chloride	5.291	62	170219	19.40	ug/L	99
10) 1,3-butadiene	5.391	54	157211	19.66	ug/L	99
11) bromomethane	6.067	94	86812	16.49	ug/L	98
12) chloroethane	6.293	64	90268	19.58	ug/L	100
13) trichlorofluoromethane	6.859	101	250316	20.17	ug/L	100
14) ethyl ether	7.378	74	71803	19.31	ug/L	99
15) acrolein	7.593	56	28615	18.30	ug/L	98
16) freon 113	7.834	151	117813	20.04	ug/L	98
17) 1,1-dichloroethene	7.834	96	119760	18.38	ug/L	96
18) acetone	7.829	58	65582	85.81	ug/L	94
19) acetonitrile	8.264	41	252645	192.61	ug/L	99
20) iodomethane	8.112	142	200788	19.05	ug/L	96
21) carbon disulfide	8.280	76	349337	19.13	ug/L	100
22) methylene chloride	8.595	84	133994	19.17	ug/L	99
23) methyl acetate	8.406	43	125338	19.36	ug/L	99
24) methyl tert butyl ether	9.040	73	392901	19.37	ug/L	97
25) trans-1,2-dichloroethene	9.061	96	132163	18.41	ug/L	95
26) di-isopropyl ether	9.727	45	421671	19.60	ug/L	98
27) 2-butanone	10.398	72	87983	79.64	ug/L	99
28) 1,1-dichloroethane	9.659	63	234429	19.73	ug/L	98
29) chloroprene	9.811	53	181442	20.23	ug/L	97
30) acrylonitrile	8.925	53	55249	19.16	ug/L	98
31) hexane	9.491	56	81445	19.62	ug/L	99
32) vinyl acetate	9.669	86	29356	19.67	ug/L	95
33) ethyl tert-butyl ether	10.220	59	413553	19.71	ug/L	99
34) ethyl acetate	10.461	70	21309	19.98	ug/L #	89

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120254.D
Acq On : 13 Aug 2022 11:28 pm
Operator : PrashanS
Sample : IC5341-20
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 08:45:58 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.477	77	202255	18.99	ug/L		96
36) cis-1,2-dichloroethene	10.445	96	148643	18.69	ug/L		97
37) methyl acrylate	10.540	55	149168	20.22	ug/L		98
38) propionitrile	10.445	54	269974	201.30	ug/L		97
39) bromochloromethane	10.755	128	81495	20.11	ug/L		92
40) tetrahydrofuran	10.839	72	26599	18.22	ug/L		99
41) chloroform	10.823	85	163670	18.18	ug/L		100
42) t-butyl formate	10.902	59	118402	19.24	ug/L		97
44) methacrylonitrile	10.681	67	65553	19.57	ug/L		97
45) 1,1,1-trichloroethane	11.137	97	222454	19.37	ug/L		99
46) cyclohexane	11.253	84	178120	19.91	ug/L		96
47) 1,1-dichloropropene	11.321	75	175503	19.53	ug/L		98
48) isobutyl alcohol	11.326	74	12935	194.60	ug/L		82
49) carbon tetrachloride	11.358	117	213384	19.56	ug/L		99
50) tert amyl alcohol	11.400	55	45310	94.93	ug/L		98
53) n-butyl alcohol	11.987	56	313766	965.34	ug/L		99
54) 2,2,4-trimethylpentane	11.656	57	304834	19.88	ug/L		91
55) benzene	11.573	78	485068	19.78	ug/L		100
56) tert-amyl methyl ether	11.636	87	94446	19.85	ug/L		98
57) heptane	11.814	71	68934	19.94	ug/L		100
58) isopropyl acetate	11.499	87	34470	19.68	ug/L		95
59) 1,2-dichloroethane	11.536	62	194303	18.50	ug/L		100
60) trichloroethene	12.254	130	147293	19.89	ug/L		100
61) ethyl acrylate	12.249	55	199640	19.70	ug/L		96
62) 2-nitropropane	12.904	43	62421	19.22	ug/L		95
63) 2-chloroethyl vinyl ether	12.957	63	334434	98.27	ug/L		99
64) methyl methacrylate	12.495	100	40450	19.19	ug/L	#	92
65) 1,2-dichloropropane	12.480	63	131899	19.91	ug/L		99
66) dibromomethane	12.600	93	102600	19.66	ug/L		96
67) methylcyclohexane	12.511	83	180857	20.07	ug/L		98
68) bromodichloromethane	12.726	83	194700	19.68	ug/L		98
69) epichlorohydrin	13.046	57	93174	100.28	ug/L		97
70) cis-1,3-dichloropropene	13.161	75	213976	20.01	ug/L		99
71) 4-methyl-2-pentanone	13.256	58	268494	80.73	ug/L		98
72) 3-methyl-1-butanol	13.245	70	119319	396.35	ug/L		96
75) toluene	13.528	92	302103	19.06	ug/L		99
76) trans-1,3-dichloropropene	13.659	75	197011	19.80	ug/L		99
77) ethyl methacrylate	13.691	69	179679	20.15	ug/L		99
78) 1,1,2-trichloroethane	13.853	83	107415	20.21	ug/L		99
79) tetrachloroethene	14.074	164	125748	19.63	ug/L		100
80) 1,3-dichloropropane	14.026	76	199230	19.84	ug/L		98
81) 2-hexanone	14.026	58	271990	81.25	ug/L		99
82) butyl acetate	14.115	56	94393	20.21	ug/L		99
83) dibromochloromethane	14.262	129	171940	19.77	ug/L		98
84) 1,2-dibromoethane	14.409	107	142655	19.87	ug/L		99
85) n-butyl ether	14.813	57	506111	19.73	ug/L		98
86) chlorobenzene	14.855	112	360847	19.57	ug/L		97
87) 1,1,1,2-tetrachloroethane	14.897	131	148071	20.01	ug/L		99
88) ethylbenzene	14.918	91	575750	19.56	ug/L		99
89) m,p-xylene	15.017	106	446099	39.15	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120254.D
Acq On : 13 Aug 2022 11:28 pm
Operator : PrashanS
Sample : IC5341-20
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 08:45:58 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

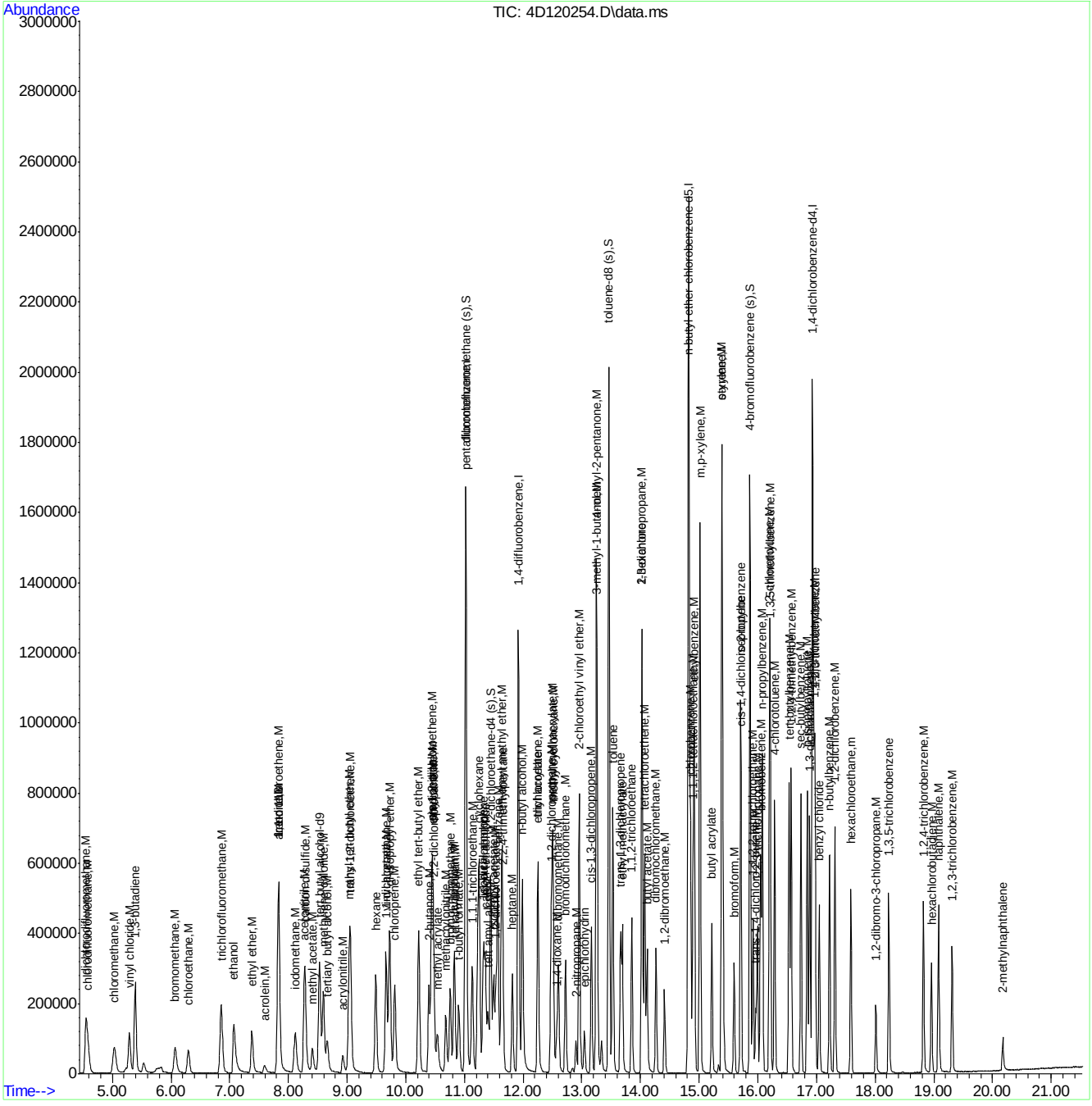
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.390	106	222928	19.52	ug/L	100
91) styrene	15.390	104	377286	19.60	ug/L	98
92) bromoform	15.594	173	132558	19.83	ug/L	99
93) butyl acrylate	15.217	55	256355	19.76	ug/L	99
94) isopropylbenzene	15.709	105	559873	19.74	ug/L	99
95) cis-1,4-dichloro-2-butene	15.715	88	42902	17.00	ug/L	98
98) bromobenzene	16.050	156	169316	20.03	ug/L	90
99) 1,1,2,2-tetrachloroethane	15.919	83	184166	19.94	ug/L	99
100) trans-1,4-dichloro-2-b...	15.966	53	32182	18.05	ug/L	89
101) 1,2,3-trichloropropane	15.993	110	55985	20.12	ug/L	99
102) n-propylbenzene	16.076	91	618865	20.04	ug/L	100
103) 2-chlorotoluene	16.202	126	142948	20.13	ug/L	100
104) 4-chlorotoluene	16.286	91	390277	19.33	ug/L	100
105) 1,3,5-trimethylbenzene	16.213	105	430013	19.69	ug/L	99
106) tert-butylbenzene	16.538	134	87038	20.16	ug/L	96
107) 1,2,4-trimethylbenzene	16.569	105	427245	19.45	ug/L	100
108) sec-butylbenzene	16.732	105	500322	20.02	ug/L	99
109) 1,3-dichlorobenzene	16.884	146	278114	19.85	ug/L	98
110) p-isopropyltoluene	16.842	119	414690	20.14	ug/L	99
111) 1,4-dichlorobenzene	16.957	146	282109	19.09	ug/L	98
112) 1,2,3-trimethylbenzene	16.973	105	424500	19.66	ug/L	100
113) benzyl chloride	17.046	91	307293	19.76	ug/L	100
114) 1,2-dichlorobenzene	17.314	146	268580	20.34	ug/L	99
115) n-butylbenzene	17.219	92	177833	18.72	ug/L	97
116) 1,2-dibromo-3-chloropr...	18.011	157	48058	19.04	ug/L	96
117) 1,3,5-trichlorobenzene	18.237	180	151718	19.55	ug/L	99
118) 1,2,4-trichlorobenzene	18.824	180	125320	19.46	ug/L	98
119) hexachlorobutadiene	18.965	225	58522	20.10	ug/L	96
120) naphthalene	19.081	128	358965	19.62	ug/L	99
121) 1,2,3-trichlorobenzene	19.311	180	104982	19.89	ug/L	98
122) hexachloroethane	17.586	201	78862	19.24	ug/L	98
123) 2-methylnaphthalene	20.176	142	53018	10.04	ug/L	96

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120254.D
Acq On : 13 Aug 2022 11:28 pm
Operator : PrashanS
Sample : IC5341-20
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 18 08:45:58 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120255.D
Acq On : 13 Aug 2022 11:56 pm
Operator : PrashanS
Sample : ICC5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 08:46:01 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.537	65	530256	500.00	ug/L	0.00
5) pentafluorobenzene	11.022	168	821289	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1067453	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1046017	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	468061	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	386016	49.59	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.18%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	407559	49.62	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.24%			
74) toluene-d8 (s)	13.460	98	1238297	49.12	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.24%			
97) 4-bromofluorobenzene (s)	15.867	95	480977	50.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.64%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.663	59	376502	248.39	ug/L	100
3) ethanol	7.069	45	782572	5348.64	ug/L	100
4) 1,4-dioxane	12.574	88	171639	1282.63	ug/L	100
6) chlorodifluoromethane	4.584	51	455257	50.41	ug/L	100
7) dichlorodifluoromethane	4.547	85	549174	52.30	ug/L	100
8) chloromethane	5.040	50	430893	48.52	ug/L	100
9) vinyl chloride	5.291	62	436508	50.08	ug/L	100
10) 1,3-butadiene	5.391	54	405476	51.04	ug/L	100
11) bromomethane	6.057	94	229741	43.93	ug/L	100
12) chloroethane	6.293	64	237409	51.82	ug/L	100
13) trichlorofluoromethane	6.854	101	650192	52.72	ug/L	100
14) ethyl ether	7.378	74	189163	51.19	ug/L	100
15) acrolein	7.577	56	82969	53.39	ug/L	100
16) freon 113	7.829	151	300027	51.36	ug/L	100
17) 1,1-dichloroethene	7.834	96	300365	46.38	ug/L	100
18) acetone	7.824	58	175195	230.71	ug/L	100
19) acetonitrile	8.264	41	666128	511.09	ug/L	100
20) iodomethane	8.117	142	560294	50.60	ug/L	100
21) carbon disulfide	8.280	76	876778	48.32	ug/L	100
22) methylene chloride	8.594	84	337143	48.53	ug/L	100
23) methyl acetate	8.400	43	344269	53.52	ug/L	100
24) methyl tert butyl ether	9.040	73	1002890	49.75	ug/L	100
25) trans-1,2-dichloroethene	9.061	96	329448	46.18	ug/L	100
26) di-isopropyl ether	9.727	45	1063205	49.74	ug/L	100
27) 2-butanone	10.393	72	236048	215.02	ug/L	100
28) 1,1-dichloroethane	9.659	63	596401	50.52	ug/L	100
29) chloroprene	9.811	53	468755	52.59	ug/L	100
30) acrylonitrile	8.920	53	151445	52.85	ug/L	100
31) hexane	9.486	56	210907	51.14	ug/L	100
32) vinyl acetate	9.669	86	79069	53.32	ug/L	100
33) ethyl tert-butyl ether	10.220	59	1060216	50.84	ug/L	100
34) ethyl acetate	10.456	70	56154	52.99	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120255.D
Acq On : 13 Aug 2022 11:56 pm
Operator : PrashanS
Sample : ICC5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 08:46:01 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 2,2-dichloropropane	10.477	77	508948	48.10	ug/L	100
36) cis-1,2-dichloroethene	10.445	96	367873	46.56	ug/L	100
37) methyl acrylate	10.534	55	383982	52.39	ug/L	100
38) propionitrile	10.445	54	705207	529.17	ug/L	100
39) bromochloromethane	10.755	128	202030	50.16	ug/L	100
40) tetrahydrofuran	10.833	72	70342	48.49	ug/L	100
41) chloroform	10.823	85	411302	45.97	ug/L	100
42) t-butyl formate	10.901	59	310035	50.70	ug/L	100
44) methacrylonitrile	10.676	67	171119	51.42	ug/L	100
45) 1,1,1-trichloroethane	11.132	97	573417	50.25	ug/L	100
46) cyclohexane	11.253	84	456173	51.33	ug/L	100
47) 1,1-dichloropropene	11.321	75	443412	49.66	ug/L	100
48) isobutyl alcohol	11.321	74	31142	471.50	ug/L	100
49) carbon tetrachloride	11.358	117	540642	49.88	ug/L	100
50) tert amyl alcohol	11.400	55	122305	257.89	ug/L	100
53) n-butyl alcohol	11.987	56	871595	2679.52	ug/L	100
54) 2,2,4-trimethylpentane	11.651	57	758861	49.46	ug/L	100
55) benzene	11.567	78	1220112	49.71	ug/L	100
56) tert-amyl methyl ether	11.635	87	243696	51.18	ug/L	100
57) heptane	11.814	71	175943	50.85	ug/L	100
58) isopropyl acetate	11.494	87	89421	51.02	ug/L	100
59) 1,2-dichloroethane	11.536	62	493989	47.01	ug/L	100
60) trichloroethene	12.254	130	380562	51.34	ug/L	100
61) ethyl acrylate	12.244	55	525497	51.82	ug/L	100
62) 2-nitropropane	12.904	43	173099	53.25	ug/L	100
63) 2-chloroethyl vinyl ether	12.957	63	908845	266.86	ug/L	100
64) methyl methacrylate	12.495	100	110660	52.46	ug/L	100
65) 1,2-dichloropropane	12.474	63	339073	51.13	ug/L	100
66) dibromomethane	12.600	93	256043	49.04	ug/L	100
67) methylcyclohexane	12.511	83	464501	51.52	ug/L	100
68) bromodichloromethane	12.726	83	502061	50.71	ug/L	100
69) epichlorohydrin	13.041	57	250559	269.46	ug/L	100
70) cis-1,3-dichloropropene	13.161	75	552400	51.62	ug/L	100
71) 4-methyl-2-pentanone	13.256	58	694007	208.52	ug/L	100
72) 3-methyl-1-butanol	13.245	70	332236	1102.77	ug/L	100
75) toluene	13.528	92	774232	48.09	ug/L	100
76) trans-1,3-dichloropropene	13.659	75	521803	51.65	ug/L	100
77) ethyl methacrylate	13.691	69	476042	52.57	ug/L	100
78) 1,1,2-trichloroethane	13.853	83	272271	50.45	ug/L	100
79) tetrachloroethene	14.073	164	316408	48.63	ug/L	100
80) 1,3-dichloropropane	14.021	76	517712	50.76	ug/L	100
81) 2-hexanone	14.026	58	729404	214.57	ug/L	100
82) butyl acetate	14.110	56	241585	50.95	ug/L	100
83) dibromochloromethane	14.262	129	451464	51.11	ug/L	100
84) 1,2-dibromoethane	14.409	107	371460	50.96	ug/L	100
85) n-butyl ether	14.813	57	1351961	51.91	ug/L	100
86) chlorobenzene	14.849	112	922560	49.27	ug/L	100
87) 1,1,1,2-tetrachloroethane	14.897	131	375604	49.99	ug/L	100
88) ethylbenzene	14.918	91	1470285	49.18	ug/L	100
89) m,p-xylene	15.012	106	1145162	98.96	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120255.D
Acq On : 13 Aug 2022 11:56 pm
Operator : PrashanS
Sample : ICC5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 08:46:01 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

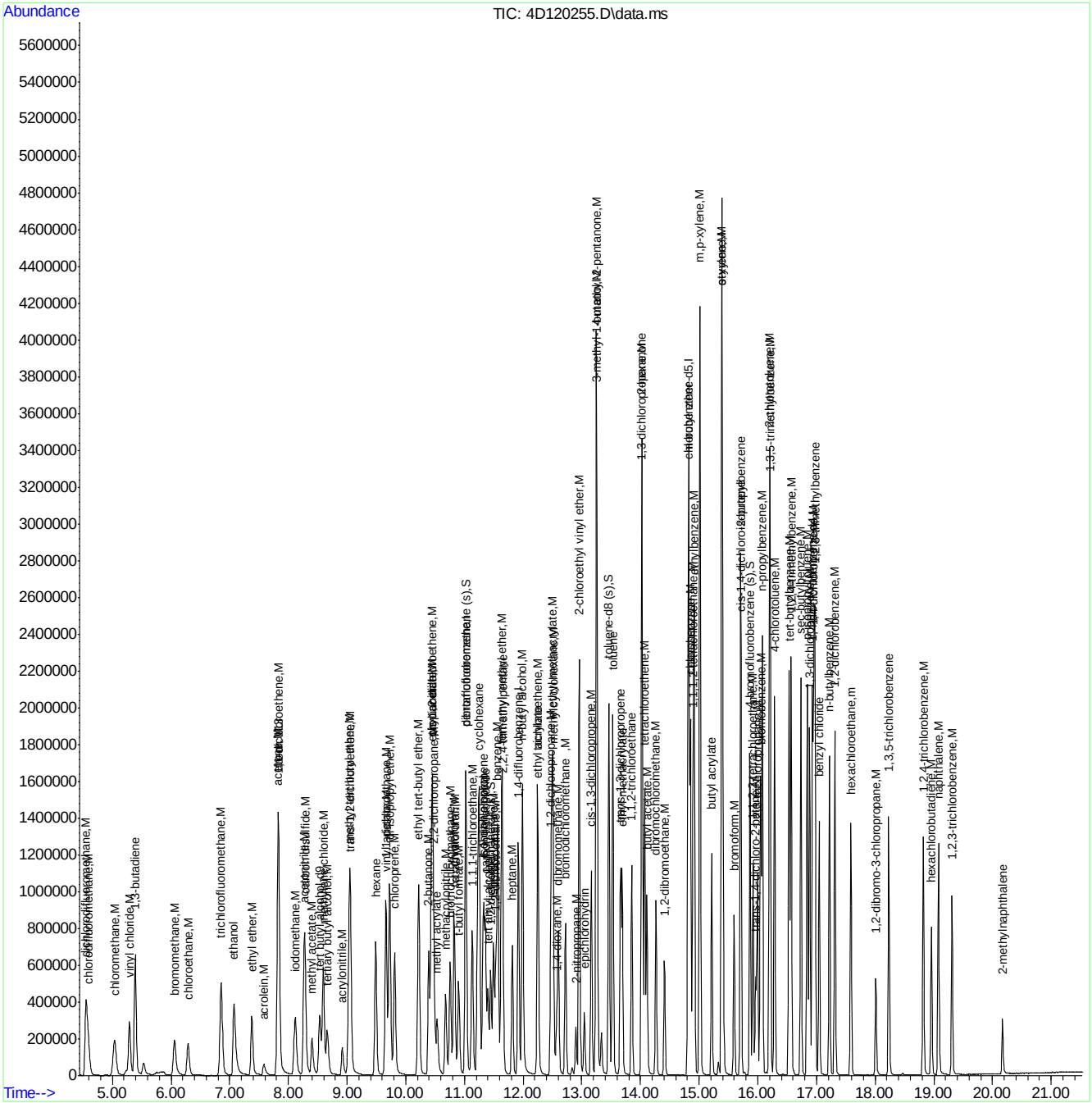
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.389	106	583060	50.28	ug/L	100
91) styrene	15.389	104	1003457	51.34	ug/L	100
92) bromoform	15.594	173	358267	52.77	ug/L	100
93) butyl acrylate	15.216	55	699034	53.07	ug/L	100
94) isopropylbenzene	15.704	105	1461277	50.74	ug/L	100
95) cis-1,4-dichloro-2-butene	15.715	88	127088	44.60	ug/L	100
98) bromobenzene	16.050	156	438240	50.87	ug/L	100
99) 1,1,2,2-tetrachloroethane	15.919	83	480966	51.09	ug/L	100
100) trans-1,4-dichloro-2-b...	15.961	53	96225	52.94	ug/L	100
101) 1,2,3-trichloropropane	15.992	110	146144	51.54	ug/L	100
102) n-propylbenzene	16.076	91	1609405	51.13	ug/L	100
103) 2-chlorotoluene	16.202	126	369660	51.08	ug/L	100
104) 4-chlorotoluene	16.286	91	1017187	49.43	ug/L	100
105) 1,3,5-trimethylbenzene	16.213	105	1134651	50.98	ug/L	100
106) tert-butylbenzene	16.538	134	228866	52.02	ug/L	100
107) 1,2,4-trimethylbenzene	16.569	105	1133711	50.63	ug/L	100
108) sec-butylbenzene	16.732	105	1320722	51.86	ug/L	100
109) 1,3-dichlorobenzene	16.884	146	723645	50.68	ug/L	100
110) p-isopropyltoluene	16.842	119	1101965	52.49	ug/L	100
111) 1,4-dichlorobenzene	16.952	146	735670	48.84	ug/L	100
112) 1,2,3-trimethylbenzene	16.973	105	1116155	50.71	ug/L	100
113) benzyl chloride	17.046	91	838376	52.88	ug/L	100
114) 1,2-dichlorobenzene	17.314	146	702210	52.17	ug/L	100
115) n-butylbenzene	17.219	92	482467	49.84	ug/L	100
116) 1,2-dibromo-3-chloropr...	18.011	157	137190	53.34	ug/L	100
117) 1,3,5-trichlorobenzene	18.231	180	402945	50.95	ug/L	100
118) 1,2,4-trichlorobenzene	18.824	180	334715	51.00	ug/L	100
119) hexachlorobutadiene	18.960	225	151950	51.19	ug/L	100
120) naphthalene	19.081	128	928624	49.80	ug/L	100
121) 1,2,3-trichlorobenzene	19.311	180	272589	50.66	ug/L	100
122) hexachloroethane	17.592	201	215018	51.46	ug/L	100
123) 2-methylnaphthalene	20.171	142	142560	26.48	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120255.D
Acq On : 13 Aug 2022 11:56 pm
Operator : PrashanS
Sample : ICC5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Aug 18 08:46:01 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120256.D
Acq On : 14 Aug 2022 12:25 am
Operator : PrashanS
Sample : IC5341-100
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 08:46:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.542	65	528843	500.00	ug/L	0.00
5) pentafluorobenzene	11.022	168	822620	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1070629	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1054634	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	468509	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	386889	49.62	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.24%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	412479	50.07	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.14%			
74) toluene-d8 (s)	13.460	98	1237738	48.70	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.40%			
97) 4-bromofluorobenzene (s)	15.867	95	482356	50.41	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.82%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.673	59	770101	509.41	ug/L	99
3) ethanol	7.079	45	1572986	10779.60	ug/L	98
4) 1,4-dioxane	12.579	88	343870	2576.56	ug/L	95
6) chlorodifluoromethane	4.578	51	961314	106.27	ug/L	99
7) dichlorodifluoromethane	4.547	85	1179807	112.17	ug/L	99
8) chloromethane	5.040	50	898038	100.96	ug/L	100
9) vinyl chloride	5.291	62	920990	105.49	ug/L	98
10) 1,3-butadiene	5.391	54	797252	100.20	ug/L	99
11) bromomethane	6.041	94	521268	99.51	ug/L	99
12) chloroethane	6.277	64	502810	109.57	ug/L	100
13) trichlorofluoromethane	6.849	101	1378422	111.59	ug/L	99
14) ethyl ether	7.373	74	399572	107.96	ug/L	99
15) acrolein	7.572	56	168594	108.32	ug/L	97
16) freon 113	7.829	151	619791	105.93	ug/L	99
17) 1,1-dichloroethene	7.829	96	626949	96.65	ug/L	99
18) acetone	7.824	58	346518	455.58	ug/L	97
19) acetonitrile	8.264	41	1322928	1013.39	ug/L	99
20) iodomethane	8.112	142	1192394	105.71	ug/L	99
21) carbon disulfide	8.280	76	1814372	99.83	ug/L	100
22) methylene chloride	8.594	84	705867	101.45	ug/L	98
23) methyl acetate	8.395	43	704350	109.33	ug/L	100
24) methyl tert butyl ether	9.035	73	2117409	104.87	ug/L	99
25) trans-1,2-dichloroethene	9.056	96	681753	95.42	ug/L	97
26) di-isopropyl ether	9.727	45	2185745	102.08	ug/L	99
27) 2-butanone	10.393	72	474894	431.90	ug/L	98
28) 1,1-dichloroethane	9.654	63	1243232	105.15	ug/L	98
29) chloroprene	9.811	53	982260	110.03	ug/L	99
30) acrylonitrile	8.914	53	313666	109.28	ug/L	99
31) hexane	9.486	56	442916	107.23	ug/L	99
32) vinyl acetate	9.664	86	165425	111.37	ug/L	98
33) ethyl tert-butyl ether	10.220	59	2249165	107.68	ug/L	99
34) ethyl acetate	10.456	70	115531	108.84	ug/L	93

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120256.D
Acq On : 14 Aug 2022 12:25 am
Operator : PrashanS
Sample : IC5341-100
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 08:46:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
35) 2,2-dichloropropane	10.477	77	1045016	98.61	ug/L	100
36) cis-1,2-dichloroethene	10.445	96	757978	95.78	ug/L	100
37) methyl acrylate	10.529	55	782492	106.59	ug/L	99
38) propionitrile	10.445	54	1377103	1031.68	ug/L	99
39) bromochloromethane	10.755	128	419332	103.95	ug/L	98
40) tetrahydrofuran	10.833	72	140190	96.49	ug/L	96
41) chloroform	10.823	85	858112	95.75	ug/L	98
42) t-butyl formate	10.901	59	661478	108.00	ug/L	99
44) methacrylonitrile	10.676	67	353571	106.07	ug/L	98
45) 1,1,1-trichloroethane	11.132	97	1206900	105.58	ug/L	99
46) cyclohexane	11.253	84	945411	106.20	ug/L	92
47) 1,1-dichloropropene	11.321	75	923541	103.26	ug/L	99
48) isobutyl alcohol	11.321	74	64761	978.92	ug/L	77
49) carbon tetrachloride	11.358	117	1123181	103.47	ug/L	100
50) tert amyl alcohol	11.410	55	241055	507.47	ug/L	98
53) n-butyl alcohol	11.992	56	1764122	5407.31	ug/L	100
54) 2,2,4-trimethylpentane	11.651	57	1555989	101.11	ug/L	98
55) benzene	11.567	78	2526070	102.62	ug/L	100
56) tert-amyl methyl ether	11.635	87	510479	106.90	ug/L	97
57) heptane	11.814	71	365920	105.44	ug/L	98
58) isopropyl acetate	11.494	87	185978	105.80	ug/L	100
59) 1,2-dichloroethane	11.536	62	1040514	98.72	ug/L	99
60) trichloroethene	12.254	130	802740	107.97	ug/L	99
61) ethyl acrylate	12.244	55	1103254	108.48	ug/L	99
62) 2-nitropropane	12.899	43	370441	113.61	ug/L	98
63) 2-chloroethyl vinyl ether	12.957	63	1958394	573.33	ug/L	99
64) methyl methacrylate	12.495	100	231500	109.41	ug/L	96
65) 1,2-dichloropropane	12.474	63	709266	106.64	ug/L	99
66) dibromomethane	12.600	93	537367	102.61	ug/L	98
67) methylcyclohexane	12.511	83	957482	105.87	ug/L	99
68) bromodichloromethane	12.721	83	1064252	107.17	ug/L	100
69) epichlorohydrin	13.041	57	505492	542.02	ug/L	97
70) cis-1,3-dichloropropene	13.161	75	1166919	108.73	ug/L	98
71) 4-methyl-2-pentanone	13.256	58	1424239	426.66	ug/L	99
72) 3-methyl-1-butanol	13.245	70	682360	2258.20	ug/L	98
75) toluene	13.528	92	1652018	101.78	ug/L	98
76) trans-1,3-dichloropropene	13.659	75	1112273	109.19	ug/L	99
77) ethyl methacrylate	13.691	69	997032	109.21	ug/L	98
78) 1,1,2-trichloroethane	13.853	83	573819	105.45	ug/L	98
79) tetrachloroethene	14.073	164	653090	99.56	ug/L	99
80) 1,3-dichloropropane	14.021	76	1094431	106.44	ug/L	96
81) 2-hexanone	14.026	58	1501825	438.18	ug/L	97
82) butyl acetate	14.110	56	499672	104.51	ug/L	98
83) dibromochloromethane	14.262	129	974442	109.42	ug/L	99
84) 1,2-dibromoethane	14.409	107	794846	108.15	ug/L	99
85) n-butyl ether	14.813	57	2906382	110.69	ug/L	100
86) chlorobenzene	14.849	112	1925976	102.03	ug/L	99
87) 1,1,1,2-tetrachloroethane	14.897	131	797178	105.22	ug/L	98
88) ethylbenzene	14.918	91	3074171	101.99	ug/L	99
89) m,p-xylene	15.012	106	2442653	209.37	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120256.D
Acq On : 14 Aug 2022 12:25 am
Operator : PrashanS
Sample : IC5341-100
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 08:46:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

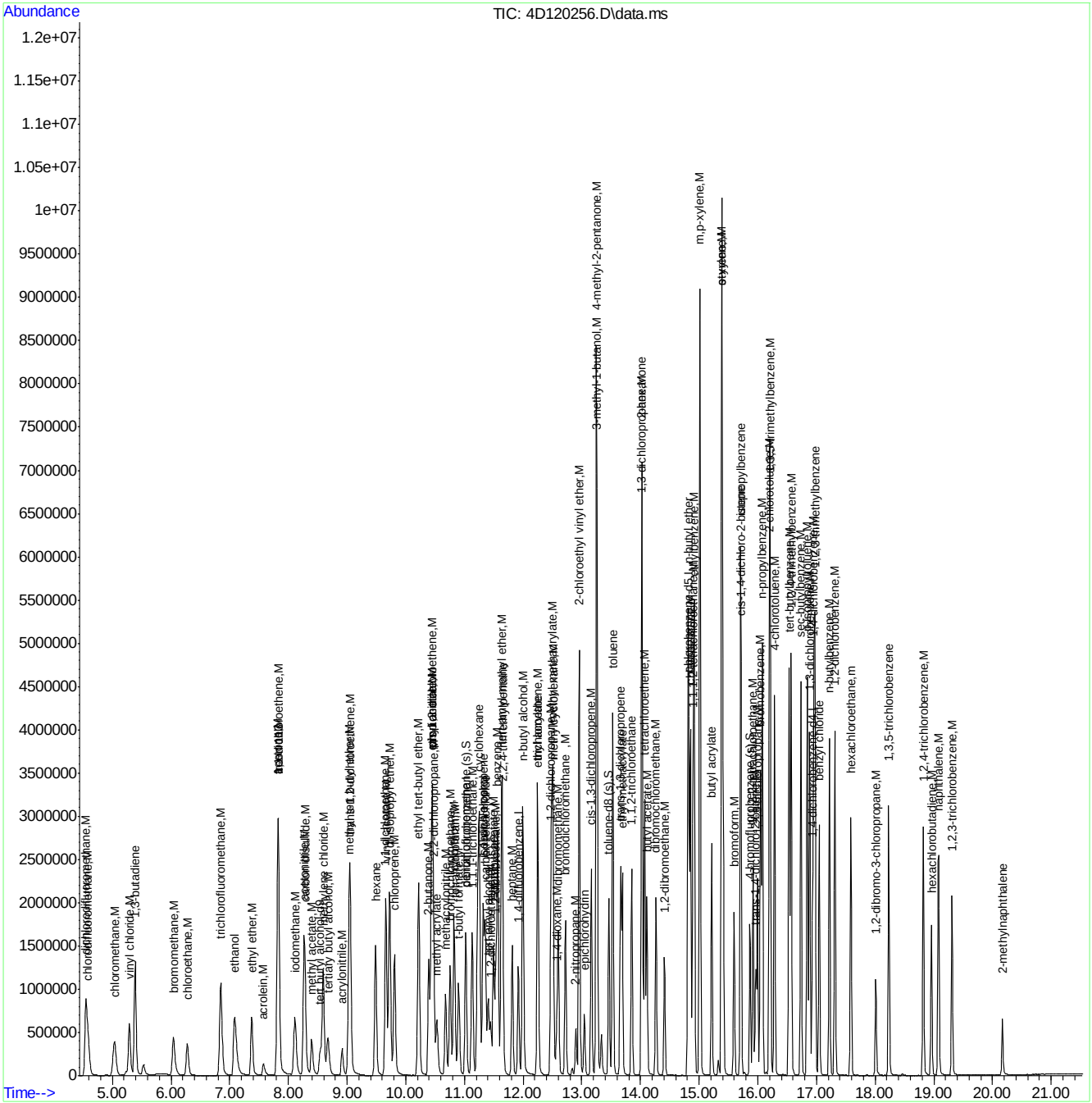
	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90)	o-xylene	15.389	106	1251655	107.06	ug/L	98
91)	styrene	15.389	104	2178658	110.55	ug/L	98
92)	bromoform	15.594	173	775412	113.28	ug/L	100
93)	butyl acrylate	15.216	55	1503466	113.20	ug/L	99
94)	isopropylbenzene	15.704	105	3104597	106.92	ug/L	100
95)	cis-1,4-dichloro-2-butene	15.715	88	289159	97.38	ug/L	99
98)	bromobenzene	16.045	156	927715	107.58	ug/L	94
99)	1,1,2,2-tetrachloroethane	15.919	83	1016299	107.86	ug/L	100
100)	trans-1,4-dichloro-2-b...	15.961	53	214387	117.84	ug/L	94
101)	1,2,3-trichloropropane	15.992	110	301213	106.13	ug/L	98
102)	n-propylbenzene	16.076	91	3391174	107.64	ug/L	99
103)	2-chlorotoluene	16.197	126	792344	109.38	ug/L	99
104)	4-chlorotoluene	16.286	91	2174599	105.57	ug/L	99
105)	1,3,5-trimethylbenzene	16.213	105	2420647	108.65	ug/L	100
106)	tert-butylbenzene	16.538	134	488202	110.86	ug/L	95
107)	1,2,4-trimethylbenzene	16.569	105	2414598	107.73	ug/L	99
108)	sec-butylbenzene	16.732	105	2812600	110.33	ug/L	100
109)	1,3-dichlorobenzene	16.884	146	1536854	107.53	ug/L	99
110)	p-isopropyltoluene	16.842	119	2366677	112.63	ug/L	100
111)	1,4-dichlorobenzene	16.952	146	1571057	104.21	ug/L	99
112)	1,2,3-trimethylbenzene	16.973	105	2383496	108.18	ug/L	99
113)	benzyl chloride	17.046	91	1794614	113.09	ug/L	100
114)	1,2-dichlorobenzene	17.314	146	1491904	110.72	ug/L	98
115)	n-butylbenzene	17.219	92	1056532	109.04	ug/L	100
116)	1,2-dibromo-3-chloropr...	18.011	157	289008	112.25	ug/L	100
117)	1,3,5-trichlorobenzene	18.231	180	878130	110.94	ug/L	100
118)	1,2,4-trichlorobenzene	18.824	180	724827	110.34	ug/L	99
119)	hexachlorobutadiene	18.965	225	325267	109.48	ug/L	100
120)	naphthalene	19.081	128	1883960	100.94	ug/L	100
121)	1,2,3-trichlorobenzene	19.306	180	582967	108.24	ug/L	98
122)	hexachloroethane	17.586	201	471789	112.79	ug/L	99
123)	2-methylnaphthalene	20.171	142	301448	55.94	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120256.D
Acq On : 14 Aug 2022 12:25 am
Operator : PrashanS
Sample : IC5341-100
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 18 08:46:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120257.D
Acq On : 14 Aug 2022 12:53 am
Operator : PrashanS
Sample : IC5341-200
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 19 12:33:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.573	65	536131	500.00	ug/L	0.04
5) pentafluorobenzene	11.022	168	811801	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1063342	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1042462	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	466954	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	383006	49.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 99.56%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	411714	50.32	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 100.64%			
74) toluene-d8 (s)	13.460	98	1224219	48.73	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.46%			
97) 4-bromofluorobenzene (s)	15.867	95	484418	50.80	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.60%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.699	59	1538235	1003.68	ug/L	99
3) ethanol	7.116	45	3101759	20967.25	ug/L	99
4) 1,4-dioxane	12.584	88	676016	4996.41	ug/L	97
6) chlorodifluoromethane	4.584	51	1859365	208.29	ug/L	99
7) dichlorodifluoromethane	4.547	85	2290242	220.65	ug/L	99
8) chloromethane	5.040	50	1697920	193.43	ug/L	100
9) vinyl chloride	5.291	62	1707180	198.15	ug/L	99
10) 1,3-butadiene	5.391	54	1439659	183.35	ug/L	99
11) bromomethane	6.015	94	975035	188.61	ug/L	98
12) chloroethane	6.261	64	958542	211.67	ug/L	99
13) trichlorofluoromethane	6.843	101	2663394	218.48	ug/L	100
14) ethyl ether	7.378	74	777443	212.85	ug/L	100
15) acrolein	7.572	56	340126	221.45	ug/L	99
16) freon 113	7.824	151	1185299	205.28	ug/L	98
17) 1,1-dichloroethene	7.829	96	1189302	185.79	ug/L	99
18) acetone	7.829	58	661366	881.12	ug/L	94
19) acetonitrile	8.269	41	2552060	1980.98	ug/L	99
20) iodomethane	8.112	142	2191129	195.47	ug/L	100
21) carbon disulfide	8.275	76	3562658	198.63	ug/L	99
22) methylene chloride	8.594	84	1359077	197.93	ug/L	99
23) methyl acetate	8.395	43	1396415	219.64	ug/L	99
24) methyl tert butyl ether	9.040	73	4100291	205.78	ug/L	99
25) trans-1,2-dichloroethene	9.056	96	1294485	183.59	ug/L	97
26) di-isopropyl ether	9.727	45	4148001	196.31	ug/L	98
27) 2-butanone	10.398	72	943340	869.36	ug/L	100
28) 1,1-dichloroethane	9.659	63	2395558	205.31	ug/L	98
29) chloroprene	9.806	53	1908922	216.69	ug/L	98
30) acrylonitrile	8.914	53	629138	222.12	ug/L	98
31) hexane	9.481	56	868821	213.14	ug/L	99
32) vinyl acetate	9.664	86	323913	220.98	ug/L	99
33) ethyl tert-butyl ether	10.220	59	4407101	213.81	ug/L	100
34) ethyl acetate	10.461	70	228090	217.75	ug/L #	60

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120257.D
Acq On : 14 Aug 2022 12:53 am
Operator : PrashanS
Sample : IC5341-200
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 19 12:33:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
35) 2,2-dichloropropane	10.477	77	2002627	191.48	ug/L		95
36) cis-1,2-dichloroethene	10.445	96	1456714	186.53	ug/L		98
37) methyl acrylate	10.534	55	1536389	212.07	ug/L		99
38) propionitrile	10.451	54	2628612	1995.52	ug/L		98
39) bromochloromethane	10.755	128	805728	202.40	ug/L		95
40) tetrahydrofuran	10.833	72	273412	190.69	ug/L		97
41) chloroform	10.823	85	1666069	188.38	ug/L		99
42) t-butyl formate	10.901	59	1327525	219.64	ug/L		98
44) methacrylonitrile	10.681	67	700692	213.01	ug/L		97
45) 1,1,1-trichloroethane	11.132	97	2363310	209.50	ug/L		99
46) cyclohexane	11.247	84	1802755	205.21	ug/L	#	85
47) 1,1-dichloropropene	11.321	75	1767949	200.31	ug/L		99
48) isobutyl alcohol	11.321	74	129896	1989.67	ug/L		46
49) carbon tetrachloride	11.358	117	2171915	202.74	ug/L		99
50) tert amyl alcohol	11.420	55	476287	1016.04	ug/L		96
53) n-butyl alcohol	12.008	56	3522895	10872.22	ug/L		97
54) 2,2,4-trimethylpentane	11.651	57	3069789	200.84	ug/L		97
55) benzene	11.567	78	4835389	197.78	ug/L		100
56) tert-amyl methyl ether	11.635	87	1015108	214.03	ug/L		97
57) heptane	11.814	71	733881	212.92	ug/L		99
58) isopropyl acetate	11.499	87	367819	210.68	ug/L		98
59) 1,2-dichloroethane	11.536	62	2033963	194.30	ug/L		99
60) trichloroethene	12.254	130	1561236	211.43	ug/L		100
61) ethyl acrylate	12.244	55	2178559	215.67	ug/L		99
62) 2-nitropropane	12.904	43	768263	237.24	ug/L		99
63) 2-chloroethyl vinyl ether	12.962	63	4093863	1206.71	ug/L		98
64) methyl methacrylate	12.495	100	462695	220.18	ug/L		95
65) 1,2-dichloropropane	12.480	63	1385988	209.82	ug/L		99
66) dibromomethane	12.600	93	1059010	203.60	ug/L		98
67) methylcyclohexane	12.511	83	1872218	208.44	ug/L		99
68) bromodichloromethane	12.726	83	2098179	212.73	ug/L		99
69) epichlorohydrin	13.046	57	984568	1062.95	ug/L		97
70) cis-1,3-dichloropropene	13.161	75	2293781	215.19	ug/L		100
71) 4-methyl-2-pentanone	13.261	58	2843415	857.63	ug/L		94
72) 3-methyl-1-butanol	13.256	70	1380090	4598.57	ug/L		99
75) toluene	13.528	92	3244032	202.19	ug/L		97
76) trans-1,3-dichloropropene	13.659	75	2231552	221.63	ug/L		99
77) ethyl methacrylate	13.691	69	1980715	219.49	ug/L		97
78) 1,1,2-trichloroethane	13.853	83	1146511	213.15	ug/L		98
79) tetrachloroethene	14.073	164	1258437	194.08	ug/L		99
80) 1,3-dichloropropane	14.026	76	2185036	214.99	ug/L		93
81) 2-hexanone	14.031	58	2977855	878.98	ug/L		92
82) butyl acetate	14.110	56	972878	205.86	ug/L		96
83) dibromochloromethane	14.262	129	1952491	221.81	ug/L		100
84) 1,2-dibromoethane	14.409	107	1580063	217.50	ug/L		99
85) n-butyl ether	14.813	57	5709487	219.99	ug/L		100
86) chlorobenzene	14.849	112	3740450	200.46	ug/L		98
87) 1,1,1,2-tetrachloroethane	14.897	131	1563469	208.78	ug/L		98
88) ethylbenzene	14.918	91	5953776	199.83	ug/L		99
89) m,p-xylene	15.017	106	4789898	415.35	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120257.D
Acq On : 14 Aug 2022 12:53 am
Operator : PrashanS
Sample : IC5341-200
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 19 12:33:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

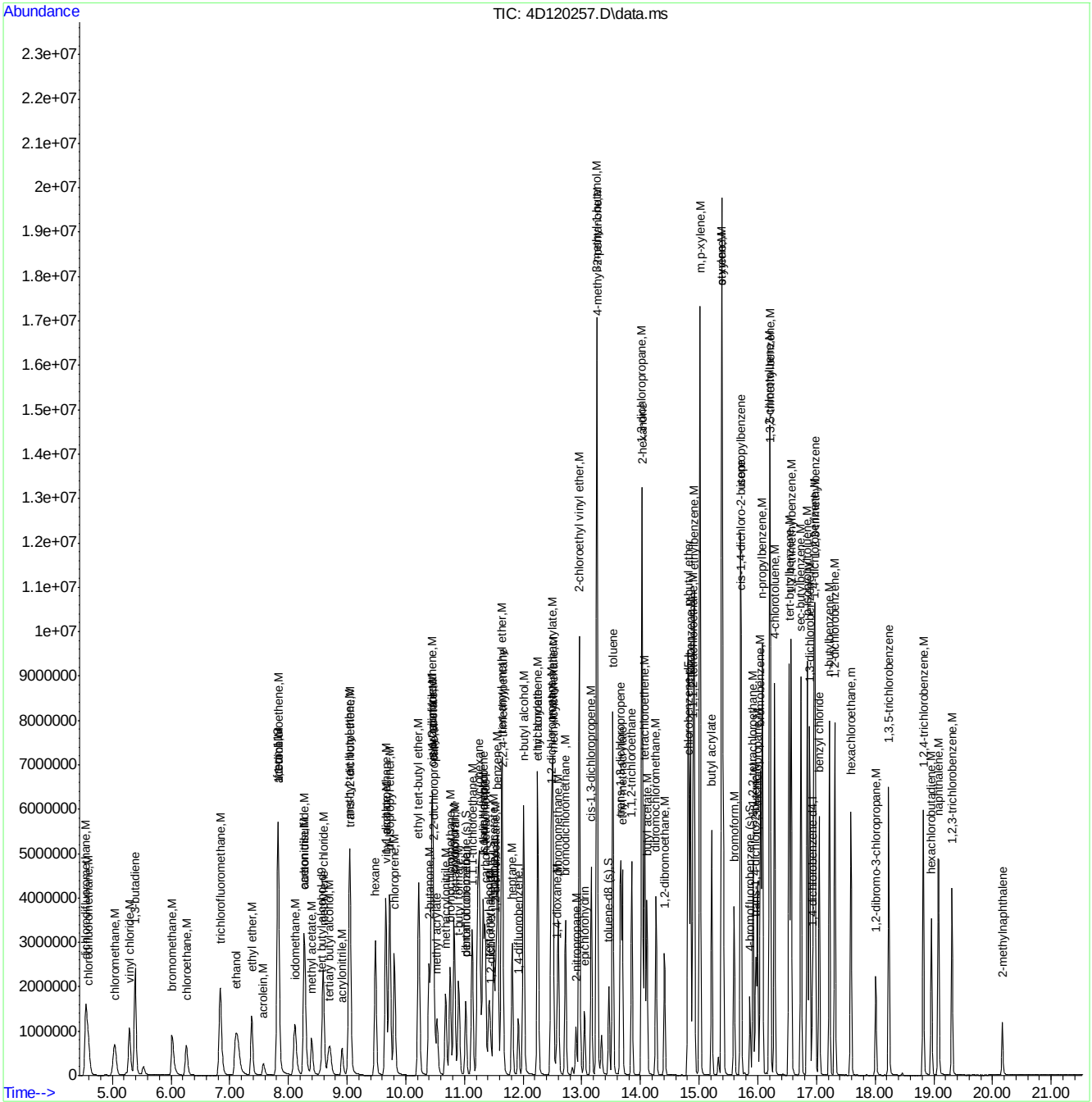
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
90) o-xylene	15.389	106	2438775	211.04	ug/L	99
91) styrene	15.389	104	4302956	220.89	ug/L	98
92) bromoform	15.594	173	1567906	231.73	ug/L	99
93) butyl acrylate	15.216	55	3003151	228.76	ug/L	99
94) isopropylbenzene	15.709	105	6076979	211.73	ug/L	99
95) cis-1,4-dichloro-2-butene	15.715	88	626164	210.24	ug/L	99
98) bromobenzene	16.045	156	1823363	212.14	ug/L	86
99) 1,1,2,2-tetrachloroethane	15.919	83	2017378	214.82	ug/L	100
100) trans-1,4-dichloro-2-b...	15.961	53	455776	251.35	ug/L	93
101) 1,2,3-trichloropropane	15.992	110	594335	210.10	ug/L	100
102) n-propylbenzene	16.076	91	6611939	210.57	ug/L	99
103) 2-chlorotoluene	16.202	126	1551486	214.88	ug/L	97
104) 4-chlorotoluene	16.286	91	4321114	210.47	ug/L	99
105) 1,3,5-trimethylbenzene	16.213	105	4789955	215.72	ug/L	100
106) tert-butylbenzene	16.538	134	977825	222.78	ug/L	97
107) 1,2,4-trimethylbenzene	16.569	105	4761496	213.14	ug/L	100
108) sec-butylbenzene	16.732	105	5627946	221.51	ug/L	99
109) 1,3-dichlorobenzene	16.884	146	3019790	211.99	ug/L	99
110) p-isopropyltoluene	16.842	119	4769296	227.74	ug/L	99
111) 1,4-dichlorobenzene	16.957	146	3140513	209.00	ug/L	98
112) 1,2,3-trimethylbenzene	16.973	105	4765974	217.03	ug/L	98
113) benzyl chloride	17.046	91	3588799	226.91	ug/L	100
114) 1,2-dichlorobenzene	17.314	146	2966103	220.87	ug/L	99
115) n-butylbenzene	17.219	92	2182938	226.04	ug/L	100
116) 1,2-dibromo-3-chloropr...	18.011	157	582946	227.17	ug/L	99
117) 1,3,5-trichlorobenzene	18.231	180	1814426	229.98	ug/L	99
118) 1,2,4-trichlorobenzene	18.824	180	1489568	227.51	ug/L	99
119) hexachlorobutadiene	18.960	225	670764	226.52	ug/L	99
120) naphthalene	19.081	128	3629488	195.10	ug/L	100
121) 1,2,3-trichlorobenzene	19.306	180	1185184	220.79	ug/L	98
122) hexachloroethane	17.592	201	963977	231.23	ug/L	98
123) 2-methylnaphthalene	20.171	142	555859	103.49	ug/L	98

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120257.D
Acq On : 14 Aug 2022 12:53 am
Operator : PrashanS
Sample : IC5341-200
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 19 12:33:07 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120260.D
Acq On : 14 Aug 2022 2:18 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 15:44:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.532	65	577569	500.00	ug/L	0.00
5) pentafluorobenzene	11.022	168	874487	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1125169	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1097217	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	483925	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	409012	49.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.70%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	432475	49.96	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 99.92%			
74) toluene-d8 (s)	13.460	98	1289918	48.78	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 97.56%			
97) 4-bromofluorobenzene (s)	15.867	95	500889	50.68	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 101.36%			
Target Compounds						Qvalue
2) tertiary butyl alcohol	8.663	59	431494	261.35	ug/L	98
3) ethanol	7.069	45	856720	5375.75	ug/L	98
4) 1,4-dioxane	12.574	88	182930	1255.03	ug/L	98
7) dichlorodifluoromethane	4.547	85	605556	54.16	ug/L	100
8) chloromethane	5.040	50	461587	48.82	ug/L	98
9) vinyl chloride	5.291	62	481521	51.88	ug/L	99
10) 1,3-butadiene	5.391	54	486537	57.52	ug/L	100
11) bromomethane	6.057	94	314361	56.45	ug/L	98
12) chloroethane	6.288	64	275845	56.55	ug/L	99
13) trichlorofluoromethane	6.854	101	709576	54.04	ug/L	100
14) ethyl ether	7.378	74	214425	54.50	ug/L	98
15) acrolein	7.577	56	95244	57.57	ug/L	100
16) freon 113	7.829	151	319079	51.30	ug/L	98
17) 1,1-dichloroethene	7.834	96	329363	47.76	ug/L	98
18) acetone	7.824	58	185741	229.72	ug/L	99
20) iodomethane	8.117	142	443880	38.06	ug/L	99
21) carbon disulfide	8.280	76	966471	50.02	ug/L	99
22) methylene chloride	8.595	84	376680	50.93	ug/L	98
23) methyl acetate	8.401	43	406266	59.32	ug/L	99
24) methyl tert butyl ether	9.035	73	1130893	52.69	ug/L	99
25) trans-1,2-dichloroethene	9.061	96	360237	47.43	ug/L	98
26) di-isopropyl ether	9.722	45	1130567	49.67	ug/L	100
27) 2-butanone	10.393	72	268401	229.62	ug/L	99
28) 1,1-dichloroethane	9.659	63	653932	52.03	ug/L	98
29) chloroprene	9.811	53	550866	58.05	ug/L	98
31) hexane	9.486	56	248742	56.65	ug/L	97
32) vinyl acetate	9.664	86	75789	48.00	ug/L	98
33) ethyl tert-butyl ether	10.220	59	1099791	49.53	ug/L	100
34) ethyl acetate	10.456	70	63028	55.86	ug/L	96
35) 2,2-dichloropropane	10.477	77	542072	48.12	ug/L	100
36) cis-1,2-dichloroethene	10.445	96	402087	47.79	ug/L	99
37) methyl acrylate	10.534	55	422246	54.11	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120260.D
Acq On : 14 Aug 2022 2:18 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 15:44:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
38) propionitrile	10.445	54	739779	521.35	ug/L	99
39) bromochloromethane	10.755	128	221382	51.63	ug/L	97
40) tetrahydrofuran	10.833	72	76804	49.73	ug/L	96
41) chloroform	10.823	85	452423	47.49	ug/L	99
42) t-butyl formate	10.901	59	221773	34.06	ug/L	97
44) methacrylonitrile	10.676	67	194199	54.80	ug/L	96
45) 1,1,1-trichloroethane	11.132	97	625839	51.50	ug/L	99
46) cyclohexane	11.248	84	494404	52.24	ug/L	91
47) 1,1-dichloropropene	11.321	75	485035	51.02	ug/L	98
48) isobutyl alcohol	11.321	74	34762	494.29	ug/L	82
49) carbon tetrachloride	11.358	117	587579	50.92	ug/L	99
50) tert amyl alcohol	11.400	55	133814	265.00	ug/L	97
53) n-butyl alcohol	11.987	56	931581	2717.03	ug/L	99
54) 2,2,4-trimethylpentane	11.651	57	805755	49.82	ug/L	99
55) benzene	11.567	78	1332940	51.52	ug/L	99
56) tert-amyl methyl ether	11.635	87	250176	49.85	ug/L	96
57) heptane	11.814	71	196988	54.01	ug/L	97
58) isopropyl acetate	11.499	87	98533	53.34	ug/L	99
59) 1,2-dichloroethane	11.536	62	542773	49.00	ug/L	99
60) trichloroethene	12.254	130	416173	53.26	ug/L	99
61) ethyl acrylate	12.244	55	564497	52.81	ug/L	99
62) 2-nitropropane	12.904	43	200524	58.52	ug/L	99
63) 2-chloroethyl vinyl ether	12.957	63	969519	270.07	ug/L	99
64) methyl methacrylate	12.495	100	121925	54.83	ug/L	95
65) 1,2-dichloropropane	12.474	63	359114	51.38	ug/L	100
66) dibromomethane	12.600	93	275758	50.10	ug/L	98
67) methylcyclohexane	12.511	83	508254	53.48	ug/L	100
68) bromodichloromethane	12.726	83	543800	52.11	ug/L	99
69) epichlorohydrin	13.041	57	263171	268.51	ug/L	99
70) cis-1,3-dichloropropene	13.161	75	591713	52.46	ug/L	98
71) 4-methyl-2-pentanone	13.256	58	744632	212.25	ug/L	99
72) 3-methyl-1-butanol	13.245	70	363242	1143.84	ug/L	99
75) toluene	13.528	92	837061	49.57	ug/L	100
76) trans-1,3-dichloropropene	13.659	75	557971	52.65	ug/L	99
77) ethyl methacrylate	13.691	69	507724	53.46	ug/L	98
78) 1,1,2-trichloroethane	13.853	83	296003	52.29	ug/L	99
80) 1,3-dichloropropane	14.026	76	552473	51.65	ug/L	96
81) 2-hexanone	14.026	58	775772	217.56	ug/L	99
82) butyl acetate	14.110	56	270195	54.32	ug/L	98
83) dibromochloromethane	14.262	129	491181	53.02	ug/L	99
84) 1,2-dibromoethane	14.409	107	405466	53.03	ug/L	100
85) n-butyl ether	14.813	57	1422882	52.09	ug/L	99
86) chlorobenzene	14.849	112	990420	50.43	ug/L	99
87) 1,1,1,2-tetrachloroethane	14.897	131	407087	51.65	ug/L	99
88) ethylbenzene	14.918	91	1592400	50.78	ug/L	100
89) m,p-xylene	15.012	106	1240433	102.19	ug/L	99
90) o-xylene	15.390	106	625542	51.43	ug/L	97
91) styrene	15.390	104	1090536	53.19	ug/L	99
92) bromoform	15.594	173	388024	54.49	ug/L	98
93) butyl acrylate	15.216	55	760115	55.01	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120260.D
Acq On : 14 Aug 2022 2:18 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 15:44:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

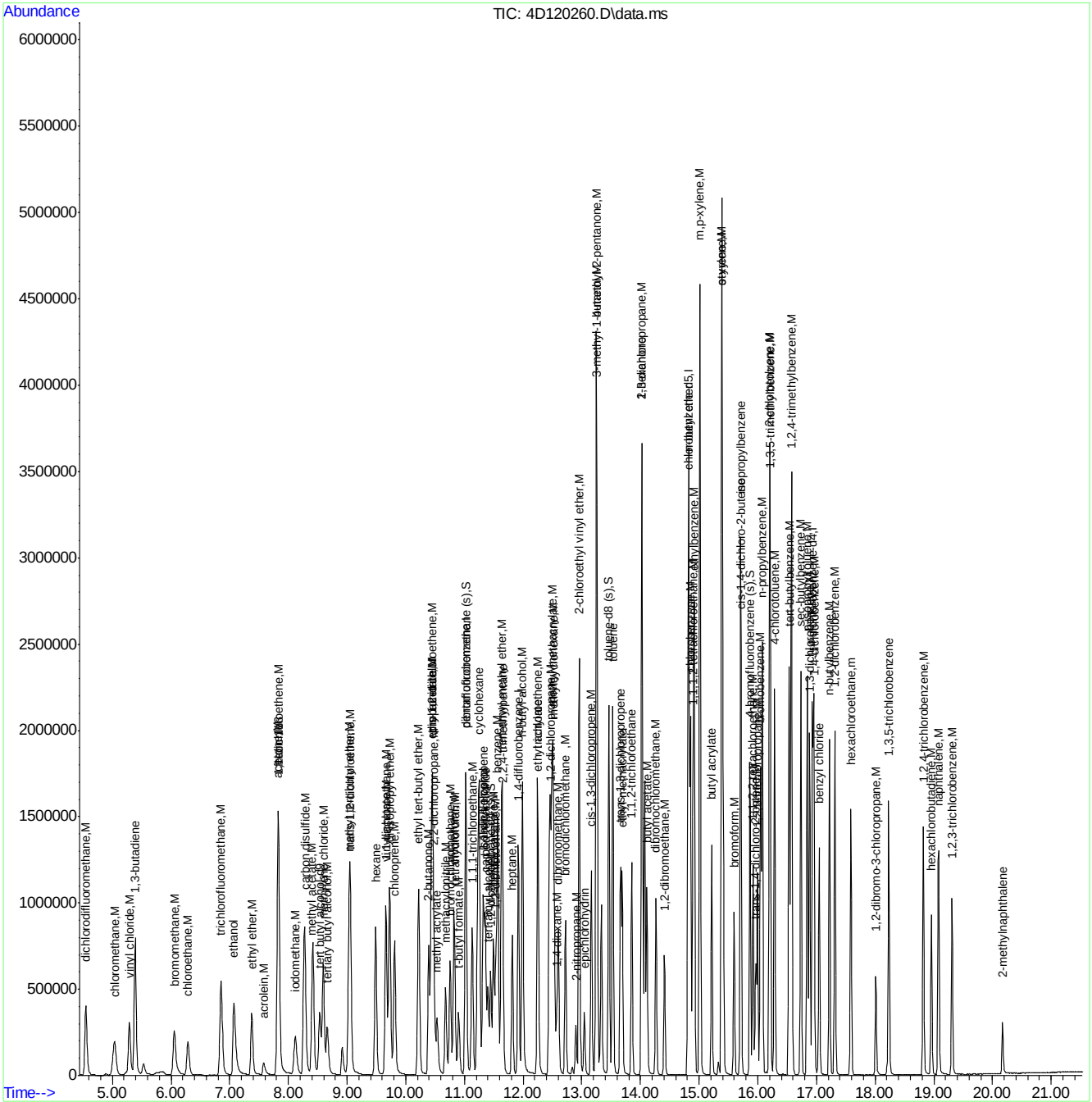
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
94) isopropylbenzene	15.709	105	1577309	52.21	ug/L	100
95) cis-1,4-dichloro-2-butene	15.715	88	143940	47.95	ug/L	99
98) bromobenzene	16.045	156	475205	53.35	ug/L	87
99) 1,1,2,2-tetrachloroethane	15.919	83	517132	53.13	ug/L	99
100) trans-1,4-dichloro-2-b...	15.961	53	114192	60.77	ug/L	92
101) 1,2,3-trichloropropane	15.992	110	157558	53.74	ug/L	100
102) n-propylbenzene	16.076	91	1734300	53.30	ug/L	99
103) 2-chlorotoluene	16.202	126	396442	52.98	ug/L	98
104) 4-chlorotoluene	16.286	91	1096635	51.54	ug/L	99
105) 1,3,5-trimethylbenzene	16.213	105	1221594	53.09	ug/L	100
106) tert-butylbenzene	16.538	134	249014	54.74	ug/L	96
107) 1,2,4-trimethylbenzene	16.569	105	1232303	53.23	ug/L	100
108) sec-butylbenzene	16.732	105	1423214	54.05	ug/L	99
109) 1,3-dichlorobenzene	16.884	146	777958	52.70	ug/L	99
110) p-isopropyltoluene	16.842	119	1192130	54.93	ug/L	100
111) 1,4-dichlorobenzene	16.957	146	787148	50.55	ug/L	98
113) benzyl chloride	17.046	91	835368	50.97	ug/L	100
114) 1,2-dichlorobenzene	17.314	146	754224	54.19	ug/L	100
115) n-butylbenzene	17.219	92	530917	53.05	ug/L	98
116) 1,2-dibromo-3-chloropr...	18.011	157	145227	54.61	ug/L	98
117) 1,3,5-trichlorobenzene	18.231	180	445145	54.44	ug/L	98
118) 1,2,4-trichlorobenzene	18.824	180	362845	53.48	ug/L	99
119) hexachlorobutadiene	18.960	225	175718	57.26	ug/L	98
120) naphthalene	19.081	128	981575	50.91	ug/L	100
121) 1,2,3-trichlorobenzene	19.311	180	298252	53.61	ug/L	99
122) hexachloroethane	17.586	201	239377	55.41	ug/L	99
123) 2-methylnaphthalene	20.171	142	147372	26.48	ug/L	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120260.D
Acq On : 14 Aug 2022 2:18 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 18 15:44:36 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120261.D
Acq On : 14 Aug 2022 2:46 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 15:45:18 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration

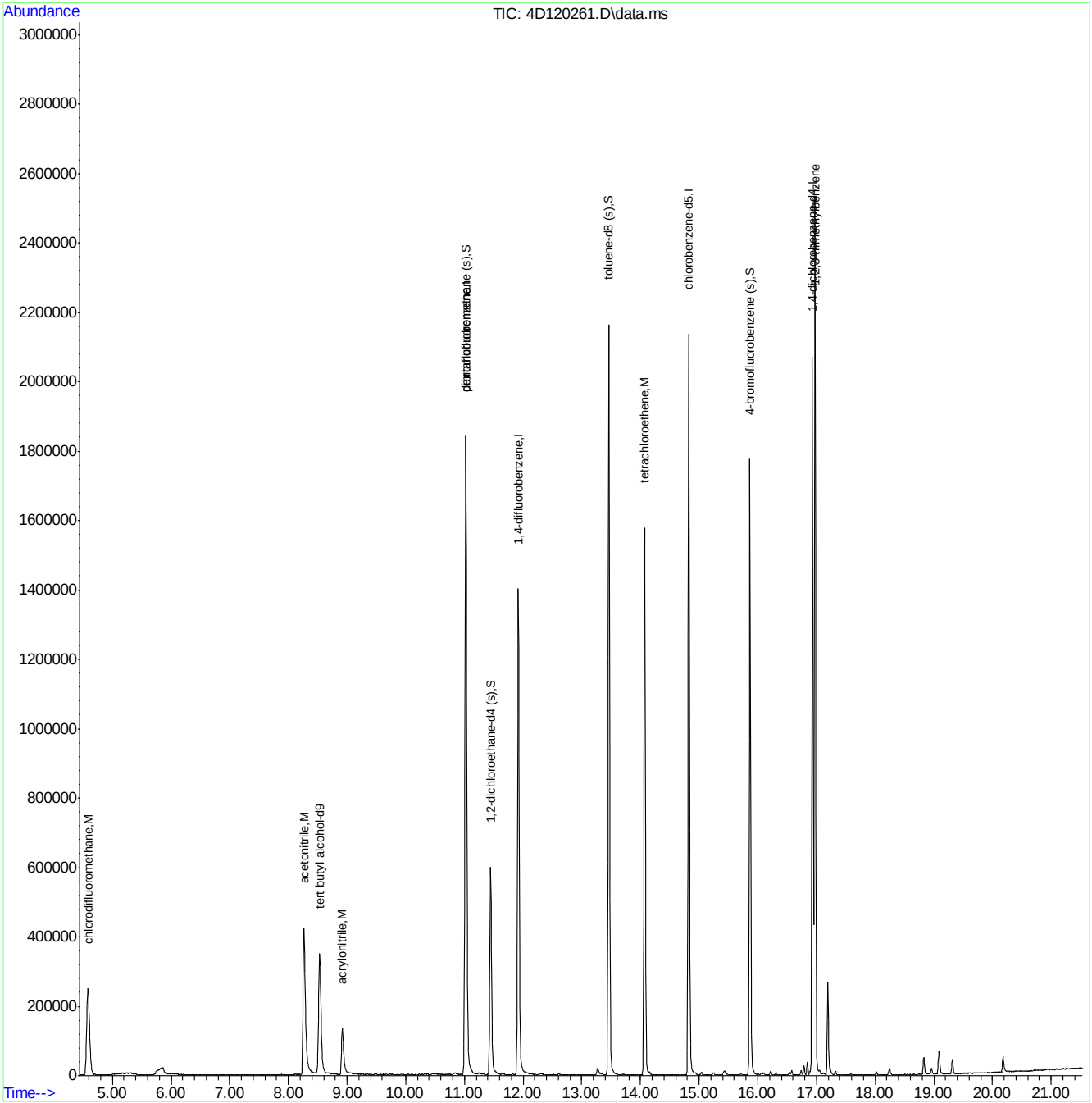
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.532	65	576396	500.00	ug/L	0.00
5) pentafluorobenzene	11.022	168	929926	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.919	114	1197308	50.00	ug/L	0.00
73) chlorobenzene-d5	14.823	117	1104478	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.931	152	499197	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.022	113	433589	49.20	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.40%			
52) 1,2-dichloroethane-d4 (s)	11.447	65	465975	50.58	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 101.16%			
74) toluene-d8 (s)	13.460	98	1366096	51.32	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 102.64%			
97) 4-bromofluorobenzene (s)	15.867	95	513309	50.35	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 100.70%			
Target Compounds						Qvalue
6) chlorodifluoromethane	4.584	51	594002	58.09	ug/L	97
19) acetonitrile	8.264	41	670169	454.12	ug/L	99
30) acrylonitrile	8.920	53	147632	45.50	ug/L	99
79) tetrachloroethene	14.074	164	330444	48.10	ug/L	99
112) 1,2,3-trimethylbenzene	16.973	105	1296313	55.22	ug/L	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\V4D5341\
Data File : 4D120261.D
Acq On : 14 Aug 2022 2:46 am
Operator : PrashanS
Sample : ICV5341-50
Misc : MS61262,V4D5341,5,,,,1
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Aug 18 15:45:18 2022
Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Aug 16 11:16:58 2022
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : cc5341-20 Inst : MS4D
Misc : MS63085,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:10:27 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration

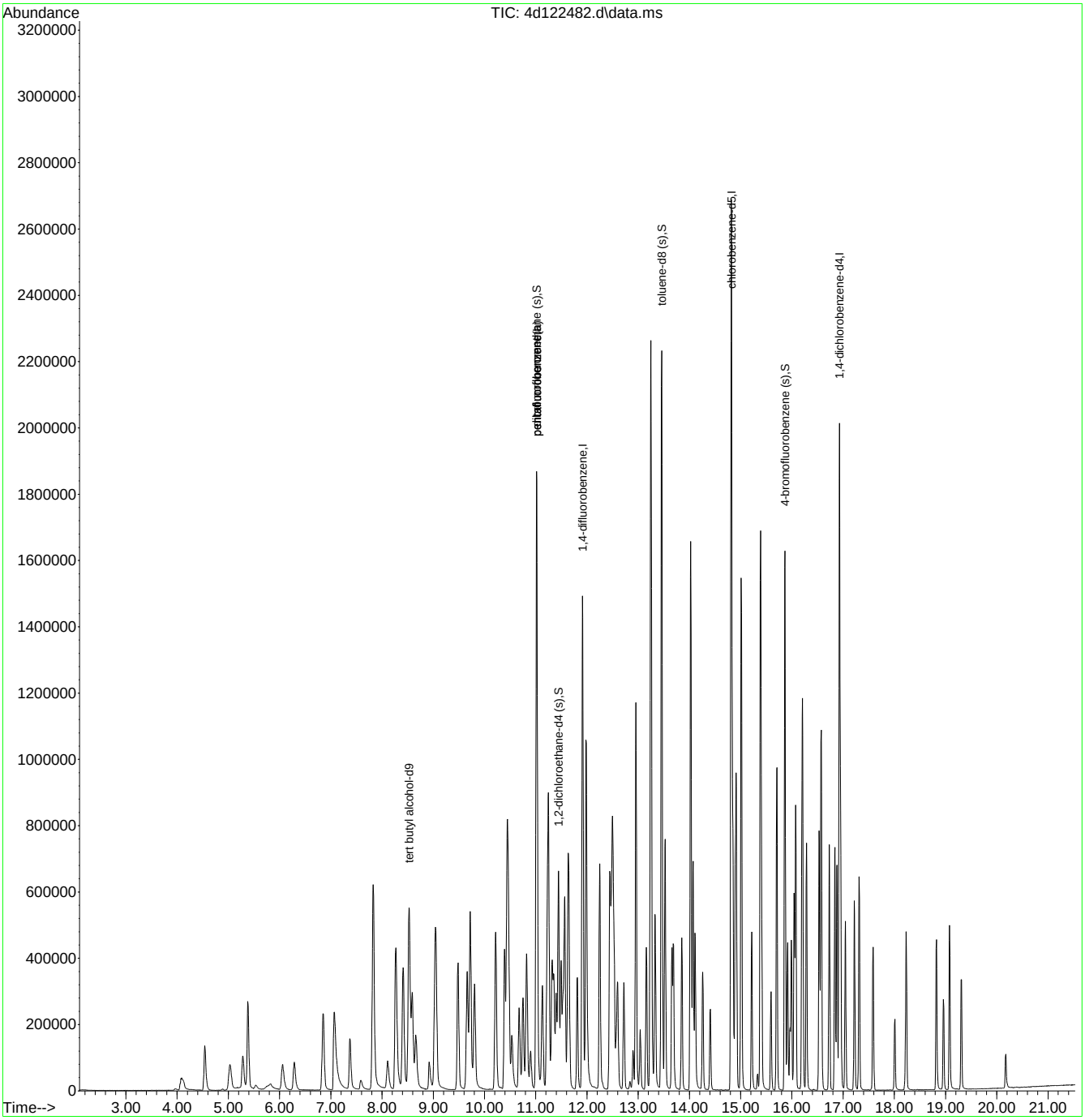
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) tert butyl alcohol-d9	8.525	65	896032	500.00	ug/L	-0.01
5) pentafluorobenzene	11.021	168	942228	50.00	ug/L	0.00
51) 1,4-difluorobenzene	11.912	114	1310594	50.00	ug/L	0.00
73) chlorobenzene-d5	14.822	117	1146946	50.00	ug/L	0.00
96) 1,4-dichlorobenzene-d4	16.930	152	484746	50.00	ug/L	0.00
124) pentafluorobenzene(a)	11.021	168	942228	50.00	ug/L	0.00
System Monitoring Compounds						
43) dibromofluoromethane (s)	11.016	113	470380	52.67	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 105.34%			
52) 1,2-dichloroethane-d4 (s)	11.446	65	490105	48.60	ug/L	0.00
Spiked Amount 50.000	Range 81 - 124		Recovery = 97.20%			
74) toluene-d8 (s)	13.459	98	1425549	51.57	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 103.14%			
97) 4-bromofluorobenzene (s)	15.865	95	485918	49.08	ug/L	0.00
Spiked Amount 50.000	Range 80 - 120		Recovery = 98.16%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\nelsonf\October\10-19-22\v4d5439- due today\
Data File : 4d122482.d
Acq On : 18 Oct 2022 9:34 am
Operator : edwardd
Sample : cc5341-20 Inst : MS4D
Misc : MS63085,V4D5439,5,,,,1
ALS Vial : 2 Sample Multiplier: 1

Quant Method : C:\MSDCHEM\1\METHODS\M4D5341.M
Quant Results File: M4D5341.RES
Quant Time: Oct 18 17:10:27 2022
Quant Title : SW846 8260C/D/ EPA 624.1, DB-624 60 m x 0.25 mm x 1.4 um
QLast Update : Tue Sep 20 14:55:55 2022
Response via : Initial Calibration



GCMS Volatile Run Log

Standard / Reagents	Lot #				Column	Rxi-624(30mx0.25mmx1.4um)
Standard	ABK: V022-2752-36.37	EC: V022-2752-59.6	AA: V022-2752-40.25	EXT.chlorodifluoromethane:V022-2752-31	Method	V8260D
Standard Concentration	100-10,000ppm	100ppm	100ppm	100PPM	Init Calib Date	8/13/2022
Expiration Date	8/23/22	8/18/2022	8/28/22	8/21/2022		
Standard	EXT.ABK:V022-2752-29.4	EXT.EC:V022-2752-61.3	EXT Acrolein:V022-2752-39.6	Ext.PA:V022-2752-38.9		
Standard Concentration	100-10000PPM	100PPM	100PPM	100PPM	Analysis Date	8/13/2022
Expiration Date	8/18/2022	8/19/2022	8/26/2022	8/26/2022	Sequence loaded by	prashant
Internal Surrogate	V022-2747-48				Data processed by	Bridget K
Internal Surrogate Concentration	50/500ppm				Batch ID	V4D5341
Expiration Date	9/4/2022				Matrix	AQ
					Approved By:	KANYAV
pH paper Lot# (wide range):	222221	Exp. Date: 8/1/2024	Initial Calibration Method	M4D5341	Approved Date:	8/18/2022 12:03:12 PM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
4d	120247	BFB		NA		tune	5			1	ok	7:58P.M.
4d	120248	IC5341-0.2		NA		ICC 8260 water	5			2	ok	1uL ABK, AA, EC / 500mL
4d	120249	IC5341-0.5		NA		ICC 8260 water	5			3	ok	1uL ABK, AA, EC / 200mL
4d	120250	IC5341-1.0		NA		ICC 8260 water	5			4	ok	1uL ABK, AA, EC / 100mL
4d	120251	IC5341-2		NA		ICC 8260 water	5			5	ok	2uL ABK, AA, EC / 100mL
4d	120252	IC5341-4		NA		ICC 8260 water	5			6	ok	4uL ABK, AA, EC / 100mL
4d	120253	IC5341-8		NA		ICC 8260 water	5			7	ok	8uL ABK, AA, EC / 100mL
4d	120254	IC5341-20		NA		ICC 8260 water	5			8	ok	20uL ABK, AA, EC / 100mL
4d	120255	IC5341-50		NA		ICC 8260 water	5			9	ok	50uL ABK, AA, EC / 100mL
4d	120256	IC5341-100		NA		ICC 8260 water	5			10	ok	100uL ABK, AA, EC / 100mL
4d	120257	IC5341-200		NA		ICC 8260 water	5			11	ok	200uL ABK, AA, EC / 100mL

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
4d	120258	IB		NA			5			12	ok	
4d	120259	IB		NA			5			13	ok	
4d	120260	ICV5341-50		NA		ICV 8260 water	5			14	ok	50uL ext. ABK, Acrolein, EC / 100mL
4d	120261	ICV5341-50		NA		ICV 8260 water	5			15	ok	50uL ext. PA, Chlorodifluoromethane / 100mL
4d	120262	IB		NA			5			16	ok	

GCMS Volatile Run Log

Standard / Reagents	Lot #					
Standard lot#	EXT ABK: V022-2752-144.1	EXT EC: V022-2752-147.1	EXT Acrolein: V022-2752-128.3	EXT F143A: V022-2756-5	Column	Rxi-624(30mx0.25mmx1.4um)
Standard concentration	100-10,000ppm	100ppm	100ppm	100ppm	Method	v624.1
Standard expiration date	11/8/2022	10/18/2022	10/27/2022	11/14/2022	Init Calib Date	8/13/2022
Internal/surrogate lot#	V022-2752-136		Standard lot#	EXT F141B+F142B: V022-2756-4		
Internal/surrogate concentration	50/500ppm		Standard concentration	100 ppm	Analysis Date	10/18/2022
Internal/surrogate expiration date	10/30/2022		Standard expiration date	11/14/2022	Sequence loaded by	taylors
					Data processed by	nelsonf/davem1
					Batch ID	V4D5439
Rough reviewed by					Matrix	AQ
					Approved By:	MOHUI
pH Paper(narrow-range) lot# 222221	Exp. Date: 8/1/2024		Initial Calibration Method	M4D5341, M4D5389	Approved Date:	10/20/2022 9:30:04 AM

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
4D	122481	BFB		NA			5			1	OK	9:05am
4D	122482	CC5341-20/BS		NA			5			2	OK/OK	20 ul ext abk, ext ec, ext acrolein / 100 ml
4D	122483	CC5389-20/BS2		NA			5			3	OK	20 ul ext F143A, ext F141B+F142B / 100 ml
4D	122484	MB		NA			5			4	OK	
4D	122485	JD53490-1	2	NA	MS63026	V624TTO	5		1.5	5	OK	+4D122366
4D	122486	JD53394-5	10	50x	MS62951	COMPVOA, PPL	1/50		1.5	6	rr	o/d
4D	122487	JD53659-6	6	NA	MS63085	V624TCL11+10	5		1.5	7	OK	+4D122450
4D	122488	JD53653-7	5	NA	MS63084	V624TCL11+10	5		1.5	8	OK	F141B, F142B, F143A
4D	122489	JD53394-6	1	NA	MS62951	V624PPL	5		1.5	9	OK	
4D	122490	JD53394-5	10	NA	MS62951	COMPVOA, PPL	5		1.5	10	OK	
4D	122491	JD53653-2	12	NA	MS63084	V624TCL11+10	5		1.5	11	OK	F141B, F142B, F143A

Data File		Sample ID	Bot #	Dil	Workgroup #	Test	Purge Vol (ml)	IS/Surr	pH	ALS #	Status	Comments
4D	122492	JD53653-1	6	NA	MS63084	V624TCL11+10	5		1.5	12	rr	F141B, F142B, F143A, f/d 20x
4D	122493	JD53653-3	5	NA	MS63084	V624TCL11+10	5		1.5	13	rr	F141B, F142B, F143A, f/d 50x
4D	122494	JD53653-4	6	NA	MS63084	V624TCL11+10	5		1.5	14	rr	F141B, F142B, F143A, f/d 50x
4D	122495	JD53653-5	4	NA	MS63084	V624TCL11+10	5		1.5	15	rr	F141B, F142B, F143A, c/o 1x
4D	122496	JD53653-2MS	13	NA	MS63084	V624TCL11+10	5		1.5	16	OK	8 ul ext abk, ext ec, ext acrolein, ext F143A, ext F141B+F142B / 40 ml sample
4D	122497	JD53653-2MSD	14	NA	MS63084	V624TCL11+10	5		1.5	17	OK	8 ul ext abk, ext ec, ext acrolein, ext F143A, ext F141B+F142B / 40 ml sample
4D	122498	IB		NA			5			18	OK	
4D	122499	JD53653-8	1	NA	MS63084	V624TCL11+10	5		1.5	19	OK	F141B, F142B, F143A
4D	122500	JD53489-4	1	NA	MS63022	V624TCL	5		1.5	20	OK	
4D	122501	JD53653-6	4	NA	MS63084	V624TCL11+10	5		1.5	21	OK	F141B, F142B, F143A
4D	122502	JD53489-1	11	NA	MS63022	V624TCL	5		1.5	22	OK	
4D	122503	JD53489-2	12	NA	MS63022	V624TCL	5		1.5	23	OK	
4D	122504	JD53489-3	12	NA	MS63022	V624TCL	5		1.5	24	OK	
4D	122505	JD53759-2	6	NA	MS63132	V624BENZ, PCE, T12DCE, TCE, VC	5		1.5	25	OK	8:44pm

GC/LC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- GC Identification Summaries (Hits)
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries
- Run Sequence Reports

Method Blank Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP42474-MB1	RL1504.D	1	10/17/22	MLC	10/14/22	OP42474	GRL24

The QC reported here applies to the following samples: **Method:** EPA 608.3

JD53489-1, JD53489-2, JD53489-3

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	38%	10-156%
877-09-8	Tetrachloro-m-xylene	42%	10-156%
2051-24-3	Decachlorobiphenyl	43%	10-143%
2051-24-3	Decachlorobiphenyl	51%	10-143%

Method Blank Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP42470-MB1	ZZ105855.D	1	10/16/22	TL	10/14/22	OP42470	GZZ3912

The QC reported here applies to the following samples: **Method:** SW846 8015D

JD53489-1, JD53489-2, JD53489-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	63%	13-117%
438-22-2	5a-Androstane	48%	10-114%

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP42474-BS1	RL1505.D	1	10/17/22	MLC	10/14/22	OP42474	GRL24
OP42474-BSD	RL1506.D	1	10/17/22	MLC	10/14/22	OP42474	GRL24

The QC reported here applies to the following samples: **Method:** EPA 608.3

JD53489-1, JD53489-2, JD53489-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	BSD ug/l	BSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	0.2	0.12	60	0.10	50	18	42-160/37
11104-28-2	Aroclor 1221		ND		ND		nc	70-130/30
11141-16-5	Aroclor 1232		ND		ND		nc	70-130/30
53469-21-9	Aroclor 1242		ND		ND		nc	70-130/30
12672-29-6	Aroclor 1248		ND		ND		nc	70-130/30
11097-69-1	Aroclor 1254		ND		ND		nc	70-130/30
11096-82-5	Aroclor 1260	0.2	0.13	65	0.10	50	26	41-158/40

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
877-09-8	Tetrachloro-m-xylene	49%	41%	10-156%
877-09-8	Tetrachloro-m-xylene	57%	46%	10-156%
2051-24-3	Decachlorobiphenyl	47%	39%	10-143%
2051-24-3	Decachlorobiphenyl	55%	47%	10-143%

* = Outside of Control Limits.

Blank Spike/Blank Spike Duplicate Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP42470-BS1	ZZ105856.D	1	10/16/22	TL	10/14/22	OP42470	GZZ3912
OP42470-BSD	ZZ105857.D	1	10/16/22	TL	10/14/22	OP42470	GZZ3912

The QC reported here applies to the following samples: **Method:** SW846 8015D

JD53489-1, JD53489-2, JD53489-3

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH-DRO (C10-C28)	3.33	1.82	55	2.34	70	25	39-98/37

CAS No.	Surrogate Recoveries	BSP	BSD	Limits
84-15-1	o-Terphenyl	57%	75%	13-117%
438-22-2	5a-Androstane	53%	72%	10-114%

* = Outside of Control Limits.

GC Identification Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Check Std:	GRL24-CC5	**Injection Date:**	10/17/22
Lab File ID:	RL1502.D	**Injection Time:**	16:00
Instrument ID:	GCRL	**Method:**	EPA 608.3

Sample ID:	OP42474-BS1	**Injection Date:**	10/17/22
Lab File ID:	RL1505.D	**Injection Time:**	16:48
Client ID:	Blank Spike		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 [a]			0.12		ug/l	15.4
Aroclor 1016	2			0.14		ug/l	
AR1016-A	1	3.82	3.82	0.13		ug/l	
AR1016-A	2	4.80	4.80	0.20		ug/l	
AR1016-B	1	4.27	4.27	0.12		ug/l	
AR1016-B	2	5.39	5.39	0.13		ug/l	
AR1016-C	1	4.87	4.87	0.11		ug/l	
AR1016-C	2	6.06	6.05	0.13		ug/l	
AR1016-D	1	5.05	5.05	0.12		ug/l	
AR1016-D	2	6.25	6.25	0.12		ug/l	
AR1016-E	1	5.59	5.59	0.13		ug/l	
AR1016-E	2	6.93	6.94	0.13		ug/l	
Aroclor 1260	1 [a]			0.13		ug/l	7.4
Aroclor 1260	2			0.14		ug/l	
AR1260-A	1	7.67	7.67	0.13		ug/l	
AR1260-A	2	9.06	9.06	0.14		ug/l	
AR1260-B	1	8.22	8.22	0.13		ug/l	
AR1260-B	2	9.72	9.72	0.15		ug/l	
AR1260-C	1	8.57	8.57	0.13		ug/l	
AR1260-C	2	10.16	10.17	0.14		ug/l	
AR1260-D	1	9.01	9.01	0.12		ug/l	
AR1260-D	2	10.51	10.51	0.13		ug/l	

(a) QC results reported from this column.

GC Identification Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Check Std:	GRL24-CC5	**Injection Date:**	10/17/22
Lab File ID:	RL1502.D	**Injection Time:**	16:00
Instrument ID:	GCRL	**Method:**	EPA 608.3

Sample ID:	OP42474-BSD	**Injection Date:**	10/17/22
Lab File ID:	RL1506.D	**Injection Time:**	17:05
Client ID:	Blank Spike Duplicate		

Compound	Column	RT	StdRT	Conc	Q	Units	RPD Conc
Aroclor 1016	1 [a]			0.10		ug/l	18.2
Aroclor 1016	2			0.12		ug/l	
AR1016-A	1	3.82	3.82	0.11		ug/l	
AR1016-A	2	4.80	4.80	0.18		ug/l	
AR1016-B	1	4.27	4.27	0.10		ug/l	
AR1016-B	2	5.39	5.39	0.11		ug/l	
AR1016-C	1	4.87	4.87	0.093		ug/l	
AR1016-C	2	6.05	6.05	0.10		ug/l	
AR1016-D	1	5.05	5.05	0.097		ug/l	
AR1016-D	2	6.25	6.25	0.099		ug/l	
AR1016-E	1	5.59	5.59	0.098		ug/l	
AR1016-E	2	6.94	6.94	0.11		ug/l	
Aroclor 1260	1 [a]			0.10		ug/l	9.5
Aroclor 1260	2			0.11		ug/l	
AR1260-A	1	7.67	7.67	0.11		ug/l	
AR1260-A	2	9.06	9.06	0.11		ug/l	
AR1260-B	1	8.22	8.22	0.11		ug/l	
AR1260-B	2	9.72	9.72	0.11		ug/l	
AR1260-C	1	8.57	8.57	0.10		ug/l	
AR1260-C	2	10.16	10.17	0.11		ug/l	
AR1260-D	1	9.01	9.01	0.096		ug/l	
AR1260-D	2	10.51	10.51	0.11		ug/l	

(a) QC results reported from this column.

Surrogate Recovery Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Method: EPA 608.3 **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S1 [b]	S2 [a]	S2 [b]
JD53489-1	RL1508.D	40	16	8* [c]	9* [c]
JD53489-2	RL1509.D	31	14	7* [c]	6* [c]
JD53489-3	RL1510.D	56	31	10	9* [c]
OP42474-BS1	RL1505.D	49	57	47	55
OP42474-BSD	RL1506.D	41	46	39	47
OP42474-MB1	RL1504.D	38	42	43	51

Surrogate Compounds	Recovery Limits
S1 = Tetrachloro-m-xylene	10-156%
S2 = Decachlorobiphenyl	10-143%

(a) Recovery from GC signal #1
(b) Recovery from GC signal #2
(c) Outside of in house control limits.

Surrogate Recovery Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Method: SW846 8015D **Matrix:** AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 [a]	S2 [a]
JD53489-1	ZZ105858.D	47	26
JD53489-2	ZZ105859.D	39	18
JD53489-3	ZZ105860.D	50	28
OP42470-BS1	ZZ105856.D	57	53
OP42470-BSD	ZZ105857.D	75	72
OP42470-MB1	ZZ105855.D	63	48

Surrogate Compounds	Recovery Limits
S1 = o-Terphenyl	13-117%
S2 = 5a-Androstane	10-114%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Check Std:	GRL24-CC5	**Injection Date:**	10/17/22
Lab File ID:	RL1502.D	**Injection Time:**	16:00
Instrument ID:	GCRL	**Method:**	EPA 608.3

	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
Check Std	3.39	4.10	10.98	12.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S1 [b] RT	S2 [a] RT	S2 [b] RT
OP42474-MB1	RL1504.D	10/17/22	16:32	3.39	4.10	10.98	12.78
OP42474-BS1	RL1505.D	10/17/22	16:48	3.39	4.10	10.98	12.78
OP42474-BSD	RL1506.D	10/17/22	17:05	3.39	4.10	10.98	12.78
ZZZZZZ	RL1507.D	10/17/22	17:21	3.38	4.10	10.98	12.78
JD53489-1	RL1508.D	10/17/22	17:37	3.37	4.10	10.97	12.78
JD53489-2	RL1509.D	10/17/22	17:53	3.35	4.10	10.98	12.78
JD53489-3	RL1510.D	10/17/22	18:10	3.35	4.10	10.97	12.77

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1
(b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Check Std:	GZZ3912-CC3675	**Injection Date:**	10/16/22
Lab File ID:	ZZ105852.D	**Injection Time:**	11:46
Instrument ID:	GCZZ	**Method:**	SW846 8015D

	S1 [a] RT	S2 [a] RT
Check Std	8.82	9.26

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 [a] RT	S2 [a] RT
GZZ3912-RT	ZZ105854.D	10/16/22	13:10		
OP42470-MB1	ZZ105855.D	10/16/22	13:44	8.81	9.26
OP42470-BS1	ZZ105856.D	10/16/22	14:18	8.80	9.26
OP42470-BSD	ZZ105857.D	10/16/22	14:51	8.80	9.26
JD53489-1	ZZ105858.D	10/16/22	15:25	8.81	9.26
JD53489-2	ZZ105859.D	10/16/22	15:59	8.81	9.26
JD53489-3	ZZ105860.D	10/16/22	16:33	8.80	9.26

Surrogate Compounds

S1 = o-Terphenyl
S2 = 5a-Androstane

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICC5
Lab FileID: RL168.D

Response Factor Report GCRL

Method : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title :
Last Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration

Calibration Files
50 =rl165.d 250 =rl166.d 500 =rl167.d 1000=rl168.d
2000=rl169.d 3000=rl170.d 5000=rl171.d 10k =rl172.d
20k =rl173.d =

Compound	50	250	500	1000	2000	3000	5000	10k	20k	Avg	%RSD
1) Tetrachloro-m-xylene	2.879	3.060	2.866	2.863	2.708	2.690	2.616			2.812 E6	5.35
2) AR1221-A				2.745						2.745 E4	0.00
3) AR1221-B				3.842						3.842 E4	0.00
4) AR1221-C				1.067						1.067 E5	0.00
5) AR1221-D				2.162						2.162 E4	0.00
6) AR1221-E				2.355						2.355 E4	0.00
7) AR1232-A				8.465						8.465 E4	0.00
8) AR1232-B				6.033						6.033 E4	0.00
9) AR1232-C				1.127						1.127 E5	0.00
10) AR1232-D				4.464						4.464 E4	0.00
11) AR1232-E				4.447						4.447 E4	0.00
12) AR1242-A				9.111						9.111 E4	0.00
13) AR1242-B				1.861						1.861 E5	0.00
14) AR1242-C				7.225						7.225 E4	0.00
15) AR1242-D				7.815						7.815 E4	0.00
16) AR1242-E				6.145						6.145 E4	0.00
17) AR1248-A				4.668						4.668 E4	0.00
18) AR1248-B				1.096						1.096 E5	0.00
19) AR1248-C				1.266						1.266 E5	0.00
20) AR1248-D				1.169						1.169 E5	0.00
21) AR1248-E				6.364						6.364 E4	0.00
22) AR1248-F				9.668						9.668 E4	0.00
23) AR1248-G											

Initial Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICC5
Lab FileID: RL168.D

			8.557								8.557 E4	0.00
24)	AR1254-A											
			8.582								8.582 E4	0.00
25)	AR1254-B											
			1.783								1.783 E5	0.00
26)	AR1254-C											
			9.336								9.336 E4	0.00
27)	AR1254-D											
			1.571								1.571 E5	0.00
28)	AR1254-E											
			1.199								1.199 E5	0.00
29)	AR1254-F											
			7.066								7.066 E4	0.00
30)	AR1254-G											
			1.601								1.601 E5	0.00
31)	AR1262-A											
			1.290								1.290 E5	0.00
32)	AR1262-B											
			1.512								1.512 E5	0.00
33)	AR1262-C											
			1.442								1.442 E5	0.00
34)	AR1262-D											
			2.846								2.846 E5	0.00
35)	AR1262-E											
			3.432								3.432 E5	0.00
36)	AR1268-A											
			2.956								2.956 E5	0.00
37)	AR1268-B											
			2.761								2.761 E5	0.00
38)	AR1268-C											
			2.265								2.265 E5	0.00
39)	AR1268-D											
			1.089								1.089 E5	0.00
40)	AR1268-E											
			6.862								6.862 E5	0.00
41)	AR1016-A											
		6.480	7.031	6.384	6.295	5.670	5.451	5.085	4.671	4.500	5.730 E4	15.28
42)	AR1016-B											
		1.383	1.288	1.137	1.077	0.972	0.939	0.888	0.836	0.819	1.038 E5	19.24
43)	AR1016-C											
		2.606	2.539	2.286	2.221	2.113	2.094	2.041	1.977	1.927	2.200 E5	10.85
44)	AR1016-D											
		1.062	1.009	0.901	0.867	0.788	0.767	0.735	0.705	0.696	0.837 E5	15.82
45)	AR1016-E											
		1.122	1.067	0.948	0.902	0.818	0.796	0.758	0.724	0.713	0.872 E5	17.01
46)	AR1260-A											
		2.174	1.809	1.589	1.550	1.456	1.445	1.412	1.363	1.298	1.566 E5	17.39
47)	AR1260-B											
		1.347	1.128	0.980	0.946	0.870	0.855	0.828	0.798	0.770	0.947 E5	19.62
48)	AR1260-C											
		1.466	1.238	1.087	1.056	0.983	0.969	0.946	0.917	0.888	1.061 E5	17.47
49)	AR1260-D											
		2.788	2.426	2.178	2.186	2.107	2.109	2.064	1.964	1.810	2.181 E5	12.93
50)	AR1260-E											
		3.251	2.912	2.548	2.466	2.290	2.252	2.170	2.104	2.050	2.449 E5	16.38
51)	Decachlorobiphenyl											
		2.446	2.095	1.980	1.799	1.757	1.688				1.961 E6	14.35

Signal #2

Initial Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICC5
Lab FileID: RL168.D

1)	Tetrachloro-m-xylene				
	2.597 2.582 2.414 2.446 2.334 2.337 2.295		2.429 E6	4.98	
2)	AR1221-A				
		2.348	2.348 E4	0.00	
3)	AR1221-B				
		3.190	3.190 E4	0.00	
4)	AR1221-C				
		7.384	7.384 E4	0.00	
5)	AR1221-D				
		2.858	2.858 E4	0.00	
6)	AR1221-E				
		2.100	2.100 E4	0.00	
7)	AR1232-A				
		6.147	6.147 E4	0.00	
8)	AR1232-B				
		4.942	4.942 E4	0.00	
9)	AR1232-C				
		9.238	9.238 E4	0.00	
10)	AR1232-D				
		3.797	3.797 E4	0.00	
11)	AR1232-E				
		2.717	2.717 E4	0.00	
12)	AR1242-A				
		8.270	8.270 E4	0.00	
13)	AR1242-B				
		1.541	1.541 E5	0.00	
14)	AR1242-C				
		6.105	6.105 E4	0.00	
15)	AR1242-D				
		4.814	4.814 E4	0.00	
16)	AR1242-E				
		5.638	5.638 E4	0.00	
17)	AR1248-A				
		4.085	4.085 E4	0.00	
18)	AR1248-B				
		1.003	1.003 E5	0.00	
19)	AR1248-C				
		5.985	5.985 E4	0.00	
20)	AR1248-D				
		7.613	7.613 E4	0.00	
21)	AR1248-E				
		7.230	7.230 E4	0.00	
22)	AR1248-F				
		9.738	9.738 E4	0.00	
23)	AR1248-G				
		9.427	9.427 E4	0.00	
24)	AR1254-A				
		8.599	8.599 E4	0.00	
25)	AR1254-B				
		9.383	9.383 E4	0.00	
26)	AR1254-C				
		7.701	7.701 E4	0.00	
27)	AR1254-D				
		1.446	1.446 E5	0.00	
28)	AR1254-E				
		1.022	1.022 E5	0.00	
29)	AR1254-F				
		1.193	1.193 E5	0.00	
30)	AR1254-G				
		1.078	1.078 E5	0.00	

Initial Calibration Summary

Job Number: JD53489 **Sample:** GRL5-ICC5
Account: AGMNYA Arcadis **Lab FileID:** RL168.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

```
31)  AR1262-A
                          9.643                                  9.643 E4    0.00
32)  AR1262-B
                          1.268                                  1.268 E5    0.00
33)  AR1262-C
                          1.211                                  1.211 E5    0.00
34)  AR1262-D
                          2.355                                  2.355 E5    0.00
35)  AR1262-E
                          2.617                                  2.617 E5    0.00
36)  AR1268-A
                          2.460                                  2.460 E5    0.00
37)  AR1268-B
                          2.299                                  2.299 E5    0.00
38)  AR1268-C
                          1.854                                  1.854 E5    0.00
39)  AR1268-D
                          8.646                                  8.646 E4    0.00
40)  AR1268-E
                          5.586                                  5.586 E5    0.00
41)  AR1016-A
          5.584 5.712 4.877 4.718 4.273 4.115 3.869 3.596 3.489   4.470 E4   18.14
42)  AR1016-B
          1.160 1.168 1.022 0.978 0.891 0.868 0.824 0.781 0.766   0.940 E5   16.19
43)  AR1016-C
          2.339 2.128 1.873 1.847 1.762 1.759 1.731 1.118 1.659   1.802 E5   18.60
44)  AR1016-D
          9.453 8.899 7.514 7.315 6.761 6.647 6.430 6.212 6.155   7.265 E4   16.28
45)  AR1016-E
          7.166 6.711 5.816 5.651 5.213 5.123 4.951 4.791 4.763   5.576 E4   15.38
46)  AR1260-A
          1.367 1.208 1.066 1.046 1.003 0.996 0.977 0.950 0.917   1.059 E5   13.48
47)  AR1260-B
          1.126 0.958 0.829 0.807 0.753 0.745 0.727 0.707 0.689   0.816 E5   17.42
48)  AR1260-C
          1.163 1.069 0.946 0.937 0.882 0.880 0.863 0.848 0.834   0.936 E5   11.87
49)  AR1260-D
          2.286 2.053 1.841 1.870 1.816 1.832 1.808 1.741 1.630   1.875 E5   10.15
50)  AR1260-E
          2.337 2.208 1.976 1.948 1.840 1.807 1.762 1.737 1.720   1.926 E5   11.29
51)  Decachlorobiphenyl
                1.825 1.524 1.503 1.379 1.338 1.328               1.483 E6   12.62
-------------------------------------------------------------------------------
(#) = Out of Range  ###  Number of calibration levels exceeded format  ###

          pcbGCRL5.m        Wed Sep 21 23:49:24 2022
```

8.6.1

8

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL174.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\grl005\rl174.d\ECD1A.ch Vial: 12
Acq On : 21 Sep 2022 02:22 am Operator: rebeccak
Sample : icv5-1000 Inst : GCRL
Misc : op41640,grl5,10.0,,,10,1 Multiplr: 1.00
IntFile : autoint1.e

Data File : C:\msdchem\1\data\grl005\rl174.d\ECD2B.ch Vial: 12
Acq On : 21 Sep 2022 02:22 am Operator: rebeccak
Sample : ic5-1000 Inst : GCRL
Misc : op41640,grl5,10.0,,,10,1 Multiplr: 1.00
IntFile : autoint2.e

Method : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title :
Last Update : Wed Sep 21 23:16:45 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	2.812	3.161 E6	-12.4	110	0.00	3.37- 3.43
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL174.D

37		AR1268-B			----------NA----------					
38		AR1268-C			----------NA----------					
39		AR1268-D			----------NA----------					
40		AR1268-E			----------NA----------					
41		AR1016-A	57.296	64.490	E3	-12.6	102	0.00	3.79-	3.85
42		AR1016-B	103.769	117.197	E3	-12.9	109	0.00	4.24-	4.30
43		AR1016-C	220.044	242.395	E3	-10.2	109	0.00	4.84-	4.90
44		AR1016-D	83.669	94.206	E3	-12.6	109	0.00	5.02-	5.08
45		AR1016-E	87.193	97.520	E3	-11.8	108	0.00	5.56-	5.63
46		AR1260-A	156.629	180.620	E3	-15.3	117	0.00	7.63-	7.69
47		AR1260-B	94.693	90.048	E3	4.9	95	0.00	8.19-	8.25
48		AR1260-C	106.111	101.333	E3	4.5	96	0.00	8.53-	8.60
49		AR1260-D	218.145	215.577	E3	1.2	99	0.00	8.97-	9.03
50		AR1260-E	244.910	237.071	E3	3.2	96	0.00	9.37-	9.43
51	S	Decachlorobiphenyl	1.961	2.172	E6	-10.8	110	0.00	10.93-	11.00

***** Signal #2 *****

1	S	Tetrachloro-m-xylene	2.429	2.798	E6	-15.2	114	0.00	4.08-	4.14
2		AR1221-A			----------NA----------					
3		AR1221-B			----------NA----------					
4		AR1221-C			----------NA----------					
5		AR1221-D			----------NA----------					
6		AR1221-E			----------NA----------					
7		AR1232-A			----------NA----------					
8		AR1232-B			----------NA----------					
9		AR1232-C			----------NA----------					
10		AR1232-D			----------NA----------					
11		AR1232-E			----------NA----------					
12		AR1242-A			----------NA----------					
13		AR1242-B			----------NA----------					
14		AR1242-C			----------NA----------					
15		AR1242-D			----------NA----------					
16		AR1242-E			----------NA----------					
17		AR1248-A			----------NA----------					
18		AR1248-B			----------NA----------					
19		AR1248-C			----------NA----------					
20		AR1248-D			----------NA----------					
21		AR1248-E			----------NA----------					
22		AR1248-F			----------NA----------					
23		AR1248-G			----------NA----------					
24		AR1254-A			----------NA----------					
25		AR1254-B			----------NA----------					
26		AR1254-C			----------NA----------					
27		AR1254-D			----------NA----------					
28		AR1254-E			----------NA----------					
29		AR1254-F			----------NA----------					
30		AR1254-G			----------NA----------					
31		AR1262-A			----------NA----------					
32		AR1262-B			----------NA----------					
33		AR1262-C			----------NA----------					
34		AR1262-D			----------NA----------					
35		AR1262-E			----------NA----------					
36		AR1268-A			----------NA----------					
37		AR1268-B			----------NA----------					
38		AR1268-C			----------NA----------					
39		AR1268-D			----------NA----------					
40		AR1268-E			----------NA----------					
41		AR1016-A	44.702	49.658	E3	-11.1	105	0.00	4.79-	4.85
42		AR1016-B	93.961	106.387	E3	-13.2	109	0.00	5.37-	5.43

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL174.D

43		AR1016-C	180.195	202.403	E3	-12.3	110	0.00	6.04- 6.10
44		AR1016-D	72.651	79.796	E3	-9.8	109	0.00	6.23- 6.29
45		AR1016-E	55.760	60.756	E3	-9.0	108	0.00	6.92- 6.98
46		AR1260-A	105.892	120.651	E3	-13.9	115	0.00	9.04- 9.10
47		AR1260-B	81.559	77.456	E3	5.0	96	0.00	9.70- 9.76
48		AR1260-C	93.577	95.255	E3	-1.8	102	0.00	10.14-10.20
49		AR1260-D	187.539	185.152	E3	1.3	99	0.00	10.49-10.55
50		AR1260-E	192.605	186.741	E3	3.0	96	0.00	11.05-11.11
51	S	Decachlorobiphenyl	1.483	1.624	E6	-9.5	108	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl168.d pcbGCRL5.m Wed Sep 21 23:44:21 2022

8.6.2

8

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL179.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\grl005\rl179.d\ECD1A.ch    Vial: 17
Signal #2 : C:\msdchem\1\data\grl005\rl179.d\ECD2B.ch
Acq On    : 21 Sep 2022  03:57 am                    Operator: rebeccak
Sample    : icv5-1000                                Inst    : GCRL
Misc      : op41640,grl5,10.0,,,10,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title        :
Last Update  : Wed Sep 21 23:16:45 2022
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	2.812	3.816 E6	-35.7#	133	0.00	3.37- 3.43
2		AR1221-A	27.448	28.040 E3	-2.2	102	0.00	2.70- 2.90
3		AR1221-B	38.417	40.130 E3	-4.5	104	0.00	3.49- 3.69
4		AR1221-C	106.657	108.324 E3	-1.6	102	0.00	3.72- 3.92
5		AR1221-D	21.625	20.014 E3	7.4	93	0.00	4.17- 4.37
6		AR1221-E	23.551	20.952 E3	11.0	89	0.00	4.77- 4.97
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A	85.820	94.675 E3	-10.3	110	0.00	6.01- 6.21
25		AR1254-B	178.331	193.218 E3	-8.3	108	0.00	6.37- 6.57
26		AR1254-C	93.361	102.495 E3	-9.8	110	0.00	6.75- 6.95
27		AR1254-D	157.073	173.063 E3	-10.2	110	0.00	6.92- 7.12
28		AR1254-E	119.910	131.028 E3	-9.3	109	0.00	7.31- 7.51
29		AR1254-F	70.659	76.733 E3	-8.6	109	0.00	7.69- 7.89
30		AR1254-G	160.114	176.754 E3	-10.4	110	0.00	7.96- 8.16
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL179.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	1.961	2.296	E6	-17.1	116	0.00	10.93-11.00
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	3.120	E6	-28.4#	128	0.00	4.08- 4.14
2		AR1221-A	23.478	25.788	E3	-9.8	110	0.00	3.45- 3.51
3		AR1221-B	31.905	31.975	E3	-0.2	100	0.00	4.42- 4.62
4		AR1221-C	73.838	74.739	E3	-1.2	101	0.00	4.71- 4.91
5		AR1221-D	28.577	28.187	E3	1.4	99	0.00	5.38- 5.58
6		AR1221-E	21.004	18.830	E3	10.4	90	0.00	5.96- 6.16
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A	85.994	95.424	E3	-11.0	111	0.00	7.46- 7.66
25		AR1254-B	93.831	103.303	E3	-10.1	110	0.00	7.71- 7.91
26		AR1254-C	77.012	84.251	E3	-9.4	109	0.00	8.24- 8.44
27		AR1254-D	144.596	159.309	E3	-10.2	110	0.00	8.40- 8.60
28		AR1254-E	102.204	110.422	E3	-8.0	108	0.00	8.72- 8.92
29		AR1254-F	119.256	130.851	E3	-9.7	110	0.00	9.25- 9.45
30		AR1254-G	107.782	119.175	E3	-10.6	111	0.00	9.51- 9.71
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

8.6.3

8

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL179.D

48		AR1260-C			----------NA----------			
49		AR1260-D			----------NA----------			
50		AR1260-E			----------NA----------			
51	S	Decachlorobiphenyl	1.483	1.824 E6	-23.0#	121	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl168.d pcbGCRL5.m Wed Sep 21 23:44:24 2022

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL180.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\grl005\rl180.d\ECD1A.ch Vial: 18
Signal #2 : C:\msdchem\1\data\grl005\rl180.d\ECD2B.ch
Acq On : 21 Sep 2022 04:16 am Operator: rebeccak
Sample : icv5-1000 Inst : GCRL
Misc : op41640,grl5,10.0,,,10,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title :
Last Update : Wed Sep 21 23:16:45 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	2.812	3.473 E6	-23.5#	121	0.00	3.37- 3.43
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A	84.654	85.580 E3	-1.1	101	0.00	3.72- 3.92
8	AR1232-B	60.331	61.755 E3	-2.4	102	0.00	4.17- 4.37
9	AR1232-C	112.661	114.957 E3	-2.0	102	0.00	4.77- 4.97
10	AR1232-D	44.642	45.827 E3	-2.7	103	0.00	4.95- 5.15
11	AR1232-E	44.467	45.534 E3	-2.4	102	0.00	5.50- 5.70
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A	128.955	127.604 E3	1.0	99	0.00	7.56- 7.76
32	AR1262-B	151.190	156.525 E3	-3.5	104	0.00	8.12- 8.32
33	AR1262-C	144.167	142.909 E3	0.9	99	0.00	8.46- 8.66
34	AR1262-D	284.578	281.487 E3	1.1	99	0.00	8.90- 9.10
35	AR1262-E	343.185	338.436 E3	1.4	99	0.00	9.35- 9.55
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL180.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	1.961	2.084 E6	-6.3	105	0.00	10.93-11.00	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	2.886 E6	-18.8	118	0.00	4.08- 4.14	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A	61.465	61.644 E3	-0.3	100	0.00	4.71- 4.91	
8		AR1232-B	49.425	49.002 E3	0.9	99	0.00	5.30- 5.50	
9		AR1232-C	92.380	94.531 E3	-2.3	102	0.00	5.96- 6.16	
10		AR1232-D	37.971	38.796 E3	-2.2	102	0.00	6.16- 6.36	
11		AR1232-E	27.169	27.858 E3	-2.5	103	0.00	6.85- 7.05	
12		AR1242-A			----------NA----------				
13		AR1242-B			----------NA----------				
14		AR1242-C			----------NA----------				
15		AR1242-D			----------NA----------				
16		AR1242-E			----------NA----------				
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A	96.433	96.026 E3	0.4	100	0.00	8.97- 9.17	
32		AR1262-B	126.814	126.310 E3	0.4	100	0.00	9.63- 9.83	
33		AR1262-C	121.084	121.109 E3	-0.0	100	0.00	10.08-10.28	
34		AR1262-D	235.454	235.032 E3	0.2	100	0.00	10.42-10.62	
35		AR1262-E	261.725	268.513 E3	-2.6	103	0.00	10.95-11.15	
36		AR1268-A			----------NA----------				
37		AR1268-B			----------NA----------				
38		AR1268-C			----------NA----------				
39		AR1268-D			----------NA----------				
40		AR1268-E			----------NA----------				
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL180.D

48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	1.483	1.595 E6	-7.6	106	0.00	12.76-12.82	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl168.d pcbGCRL5.m Wed Sep 21 23:44:27 2022

8.6.4

8

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL181.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\grl005\rl181.d\ECD1A.ch    Vial: 19
Signal #2 : C:\msdchem\1\data\grl005\rl181.d\ECD2B.ch
Acq On    : 21 Sep 2022  04:35 am                    Operator: rebeccak
Sample    : icv5-1000                                Inst    : GCRL
Misc      : op41640,grl5,10.0,,,10,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title        :
Last Update  : Wed Sep 21 23:16:45 2022
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	2.812	3.430 E6	-22.0#	120	0.00	3.37- 3.43
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A	91.108	107.767 E3	-18.3	118	0.00	4.17- 4.37
13	AR1242-B	186.103	220.261 E3	-18.4	118	0.00	4.77- 4.97
14	AR1242-C	72.254	85.100 E3	-17.8	118	0.00	4.95- 5.15
15	AR1242-D	78.150	89.993 E3	-15.2	115	0.00	5.50- 5.70
16	AR1242-E	61.454	69.442 E3	-13.0	113	0.00	6.11- 6.31
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A	295.617	312.487 E3	-5.7	106	0.00	9.35- 9.55
37	AR1268-B	276.138	292.247 E3	-5.8	106	0.00	9.41- 9.61
38	AR1268-C	226.514	242.022 E3	-6.8	107	0.00	9.69- 9.89
39	AR1268-D	108.886	114.212 E3	-4.9	105	0.00	10.19-10.39
40	AR1268-E	686.152	732.743 E3	-6.8	107	0.00	10.60-10.80
41	AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL181.D

42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				
48		AR1260-C			----------NA----------				
49		AR1260-D			----------NA----------				
50		AR1260-E			----------NA----------				
51	S	Decachlorobiphenyl	1.961	5.610 E6	-186.1#	283#	0.00	10.93-11.00	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	2.990 E6	-23.1#	122	0.00	4.08- 4.14	
2		AR1221-A			----------NA----------				
3		AR1221-B			----------NA----------				
4		AR1221-C			----------NA----------				
5		AR1221-D			----------NA----------				
6		AR1221-E			----------NA----------				
7		AR1232-A			----------NA----------				
8		AR1232-B			----------NA----------				
9		AR1232-C			----------NA----------				
10		AR1232-D			----------NA----------				
11		AR1232-E			----------NA----------				
12		AR1242-A	82.702	97.958 E3	-18.4	118	0.00	5.30- 5.50	
13		AR1242-B	154.065	181.847 E3	-18.0	118	0.00	5.97- 6.17	
14		AR1242-C	61.047	71.918 E3	-17.8	118	0.00	6.16- 6.36	
15		AR1242-D	48.143	55.697 E3	-15.7	116	0.00	6.85- 7.05	
16		AR1242-E	56.377	62.918 E3	-11.6	112	0.00	7.46- 7.66	
17		AR1248-A			----------NA----------				
18		AR1248-B			----------NA----------				
19		AR1248-C			----------NA----------				
20		AR1248-D			----------NA----------				
21		AR1248-E			----------NA----------				
22		AR1248-F			----------NA----------				
23		AR1248-G			----------NA----------				
24		AR1254-A			----------NA----------				
25		AR1254-B			----------NA----------				
26		AR1254-C			----------NA----------				
27		AR1254-D			----------NA----------				
28		AR1254-E			----------NA----------				
29		AR1254-F			----------NA----------				
30		AR1254-G			----------NA----------				
31		AR1262-A			----------NA----------				
32		AR1262-B			----------NA----------				
33		AR1262-C			----------NA----------				
34		AR1262-D			----------NA----------				
35		AR1262-E			----------NA----------				
36		AR1268-A	245.991	260.823 E3	-6.0	106	0.00	10.95-11.15	
37		AR1268-B	229.882	243.380 E3	-5.9	106	0.00	11.02-11.22	
38		AR1268-C	185.378	199.016 E3	-7.4	107	0.00	11.40-11.60	
39		AR1268-D	86.462	94.428 E3	-9.2	109	0.00	11.80-12.00	
40		AR1268-E	558.567	586.818 E3	-5.1	105	0.00	12.29-12.49	
41		AR1016-A			----------NA----------				
42		AR1016-B			----------NA----------				
43		AR1016-C			----------NA----------				
44		AR1016-D			----------NA----------				
45		AR1016-E			----------NA----------				
46		AR1260-A			----------NA----------				
47		AR1260-B			----------NA----------				

8.6.5

8

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL181.D

48		AR1260-C			----------NA----------			
49		AR1260-D			----------NA----------			
50		AR1260-E			----------NA----------			
51	S	Decachlorobiphenyl	1.483	4.259 E6	-187.2#	283#	0.00	12.76-12.82

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl168.d pcbGCRL5.m Wed Sep 21 23:44:30 2022

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL182.D

Evaluate Continuing Calibration Report

```
Signal #1 : C:\msdchem\1\data\grl005\rl182.d\ECD1A.ch    Vial: 20
Signal #2 : C:\msdchem\1\data\grl005\rl182.d\ECD2B.ch
Acq On    : 21 Sep 2022  04:54 am                    Operator: rebeccak
Sample    : icv5-1000                                Inst    : GCRL
Misc      : op41640,grl5,10.0,,,10,1                 Multiplr: 1.00
IntFile Signal #1: autoint1.e   IntFile Signal #2: autoint2.e

Method       : C:\msdchem\1\methods\pcbGCRL5.m (ChemStation Integrator)
Title        :
Last Update  : Wed Sep 21 23:16:45 2022
Response via : Multiple Level Calibration

Min. RRF     :   0.000  Min. Rel. Area :  50%  Max. R.T. Dev  0.10min
Max. RRF Dev :  20%     Max. Rel. Area : 150%
```

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	2.812	3.201 E6	-13.8	112	0.00	3.37- 3.43
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A	46.678	48.497 E3	-3.9	104	0.00	4.17- 4.37
18		AR1248-B	109.638	113.624 E3	-3.6	104	0.00	4.77- 4.97
19		AR1248-C	126.633	126.627 E3	0.0	100	0.00	5.20- 5.40
20		AR1248-D	116.876	121.677 E3	-4.1	104	0.00	5.50- 5.70
21		AR1248-E	63.642	65.328 E3	-2.6	103	0.00	5.61- 5.81
22		AR1248-F	96.676	101.358 E3	-4.8	105	0.00	6.11- 6.31
23		AR1248-G	85.570	87.371 E3	-2.1	102	0.00	6.38- 6.58
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A		----------NA----------				

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL182.D

42		AR1016-B		----------NA----------					
43		AR1016-C		----------NA----------					
44		AR1016-D		----------NA----------					
45		AR1016-E		----------NA----------					
46		AR1260-A		----------NA----------					
47		AR1260-B		----------NA----------					
48		AR1260-C		----------NA----------					
49		AR1260-D		----------NA----------					
50		AR1260-E		----------NA----------					
51	S	Decachlorobiphenyl	1.961	2.035 E6	-3.8	103	0.00	10.93-11.00	
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	2.857 E6	-17.6	117	0.00	4.08- 4.14	
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A	40.852	42.480 E3	-4.0	104	0.00	5.30- 5.50	
18		AR1248-B	100.257	102.906 E3	-2.6	103	0.00	5.96- 6.16	
19		AR1248-C	59.847	62.315 E3	-4.1	104	0.00	6.44- 6.64	
20		AR1248-D	76.125	79.404 E3	-4.3	104	0.00	6.85- 7.05	
21		AR1248-E	72.302	75.124 E3	-3.9	104	0.00	7.03- 7.23	
22		AR1248-F	97.376	101.816 E3	-4.6	105	0.00	7.46- 7.66	
23		AR1248-G	94.274	98.441 E3	-4.4	104	0.00	7.80- 8.00	
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A		----------NA----------					
42		AR1016-B		----------NA----------					
43		AR1016-C		----------NA----------					
44		AR1016-D		----------NA----------					
45		AR1016-E		----------NA----------					
46		AR1260-A		----------NA----------					
47		AR1260-B		----------NA----------					

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL5-ICV5
Lab FileID: RL182.D

48		AR1260-C				----------NA----------			
49		AR1260-D				----------NA----------			
50		AR1260-E				----------NA----------			
51	S	Decachlorobiphenyl	1.483	1.701 E6	-14.7	113	0.00	12.76-12.82	

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl168.d pcbGCRL5.m Wed Sep 21 23:44:33 2022

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL24-CC5
Lab FileID: RL1502.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\grl24\RL1502.D\ECD1A.ch Vial: 24
Signal #2 : C:\msdchem\1\data\grl24\RL1502.D\ECD2B.ch
Acq On : 17 Oct 2022 04:00 pm Operator: mahalial
Sample : cc5-1000 Inst : GCRL
Misc : op42472,grl24,1000.0,,,5,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\data\grl24\pcbgcrl5.m (ChemStation Integrator)
Title :
Last Update : Tue Oct 18 23:49:35 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1 S	Tetrachloro-m-xylene	2.812	2.628 E6	6.5	92	0.00	3.36- 3.42
2	AR1221-A		----------NA----------				
3	AR1221-B		----------NA----------				
4	AR1221-C		----------NA----------				
5	AR1221-D		----------NA----------				
6	AR1221-E		----------NA----------				
7	AR1232-A		----------NA----------				
8	AR1232-B		----------NA----------				
9	AR1232-C		----------NA----------				
10	AR1232-D		----------NA----------				
11	AR1232-E		----------NA----------				
12	AR1242-A		----------NA----------				
13	AR1242-B		----------NA----------				
14	AR1242-C		----------NA----------				
15	AR1242-D		----------NA----------				
16	AR1242-E		----------NA----------				
17	AR1248-A		----------NA----------				
18	AR1248-B		----------NA----------				
19	AR1248-C		----------NA----------				
20	AR1248-D		----------NA----------				
21	AR1248-E		----------NA----------				
22	AR1248-F		----------NA----------				
23	AR1248-G		----------NA----------				
24	AR1254-A		----------NA----------				
25	AR1254-B		----------NA----------				
26	AR1254-C		----------NA----------				
27	AR1254-D		----------NA----------				
28	AR1254-E		----------NA----------				
29	AR1254-F		----------NA----------				
30	AR1254-G		----------NA----------				
31	AR1262-A		----------NA----------				
32	AR1262-B		----------NA----------				
33	AR1262-C		----------NA----------				
34	AR1262-D		----------NA----------				
35	AR1262-E		----------NA----------				
36	AR1268-A		----------NA----------				
37	AR1268-B		----------NA----------				
38	AR1268-C		----------NA----------				
39	AR1268-D		----------NA----------				
40	AR1268-E		----------NA----------				
41	AR1016-A	57.296	57.372 E3	-0.1	91	0.00	3.79- 3.85

8.6.7

8

Continuing Calibration Summary

Job Number: JD53489 **Sample:** GRL24-CC5
Account: AGMNYA Arcadis **Lab FileID:** RL1502.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

42		AR1016-B	103.769	101.393	E3	2.3	94	0.00	4.23- 4.29
43		AR1016-C	220.044	208.907	E3	5.1	94	0.00	4.84- 4.90
44		AR1016-D	83.669	80.672	E3	3.6	93	0.00	5.02- 5.08
45		AR1016-E	87.193	82.298	E3	5.6	91	0.00	5.56- 5.63
46		AR1260-A	156.629	143.716	E3	8.2	93	0.00	7.63- 7.69
47		AR1260-B	94.693	87.626	E3	7.5	93	0.00	8.19- 8.25
48		AR1260-C	106.111	95.651	E3	9.9	91	0.00	8.53- 8.60
49		AR1260-D	218.145	202.060	E3	7.4	92	0.00	8.97- 9.03
50		AR1260-E	244.910	225.341	E3	8.0	91	0.00	9.38- 9.44
51	S	Decachlorobiphenyl	1.961	1.881	E6	4.1	95	0.00	10.94-11.01
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	2.511	E6	-3.4	103	0.00	4.07- 4.13
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	44.702	49.022	E3	-9.7	104	0.00	4.77- 4.83
42		AR1016-B	93.961	100.860	E3	-7.3	103	0.00	5.36- 5.42
43		AR1016-C	180.195	191.150	E3	-6.1	103	0.00	6.03- 6.09
44		AR1016-D	72.651	74.875	E3	-3.1	102	0.00	6.22- 6.28
45		AR1016-E	55.760	57.830	E3	-3.7	102	0.00	6.90- 6.96
46		AR1260-A	105.892	112.954	E3	-6.7	108	0.00	9.03- 9.09
47		AR1260-B	81.559	86.123	E3	-5.6	107	0.00	9.69- 9.75

Continuing Calibration Summary

Job Number: JD53489 **Sample:** GRL24-CC5
Account: AGMNYA Arcadis **Lab FileID:** RL1502.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

48		AR1260-C	93.577	99.322	E3	-6.1	106	0.00	10.13-10.19
49		AR1260-D	187.539	201.610	E3	-7.5	108	0.00	10.48-10.54
50		AR1260-E	192.605	212.023	E3	-10.1	109	0.00	11.04-11.10
51	S	Decachlorobiphenyl	1.483	1.677	E6	-13.1	112	0.00	12.74-12.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
RL1274.D pcbgcrl5.m Wed Oct 19 00:21:08 2022

8.6.7

8

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL24-CC5
Lab FileID: RL1513.D

Evaluate Continuing Calibration Report

Signal #1 : C:\msdchem\1\data\grl24\RL1513.D\ECD1A.ch Vial: 32
Signal #2 : C:\msdchem\1\data\grl24\RL1513.D\ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm Operator: mahalial
Sample : cc5-500 Inst : GCRL
Misc : op42474,grl24,1000.0,,,1,1 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\msdchem\1\data\grl24\pcbgcrl5.m (ChemStation Integrator)
Title :
Last Update : Tue Oct 18 23:49:35 2022
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	S	Tetrachloro-m-xylene	2.812	2.921 E6	-3.9	102	0.00	3.36- 3.42
2		AR1221-A		----------NA----------				
3		AR1221-B		----------NA----------				
4		AR1221-C		----------NA----------				
5		AR1221-D		----------NA----------				
6		AR1221-E		----------NA----------				
7		AR1232-A		----------NA----------				
8		AR1232-B		----------NA----------				
9		AR1232-C		----------NA----------				
10		AR1232-D		----------NA----------				
11		AR1232-E		----------NA----------				
12		AR1242-A		----------NA----------				
13		AR1242-B		----------NA----------				
14		AR1242-C		----------NA----------				
15		AR1242-D		----------NA----------				
16		AR1242-E		----------NA----------				
17		AR1248-A		----------NA----------				
18		AR1248-B		----------NA----------				
19		AR1248-C		----------NA----------				
20		AR1248-D		----------NA----------				
21		AR1248-E		----------NA----------				
22		AR1248-F		----------NA----------				
23		AR1248-G		----------NA----------				
24		AR1254-A		----------NA----------				
25		AR1254-B		----------NA----------				
26		AR1254-C		----------NA----------				
27		AR1254-D		----------NA----------				
28		AR1254-E		----------NA----------				
29		AR1254-F		----------NA----------				
30		AR1254-G		----------NA----------				
31		AR1262-A		----------NA----------				
32		AR1262-B		----------NA----------				
33		AR1262-C		----------NA----------				
34		AR1262-D		----------NA----------				
35		AR1262-E		----------NA----------				
36		AR1268-A		----------NA----------				
37		AR1268-B		----------NA----------				
38		AR1268-C		----------NA----------				
39		AR1268-D		----------NA----------				
40		AR1268-E		----------NA----------				
41		AR1016-A	57.296	59.946 E3	-4.6	94	0.00	3.79- 3.85

Continuing Calibration Summary

Job Number: JD53489 **Sample:** GRL24-CC5
Account: AGMNYA Arcadis **Lab FileID:** RL1513.D
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

42		AR1016-B	103.769	119.369	E3	-15.0	105	0.00	4.23- 4.29
43		AR1016-C	220.044	234.032	E3	-6.4	102	0.00	4.84- 4.90
44		AR1016-D	83.669	92.974	E3	-11.1	103	0.00	5.02- 5.08
45		AR1016-E	87.193	95.577	E3	-9.6	101	0.00	5.56- 5.63
46		AR1260-A	156.629	159.396	E3	-1.8	100	0.00	7.63- 7.69
47		AR1260-B	94.693	97.951	E3	-3.4	100	0.00	8.19- 8.25
48		AR1260-C	106.111	105.506	E3	0.6	97	0.00	8.53- 8.60
49		AR1260-D	218.145	214.811	E3	1.5	99	0.00	8.97- 9.03
50		AR1260-E	244.910	248.803	E3	-1.6	98	0.00	9.38- 9.44
51	S	Decachlorobiphenyl	1.961	2.044	E6	-4.2	98	0.00	10.94-11.01
*****		Signal #2 *****							
1	S	Tetrachloro-m-xylene	2.429	2.758	E6	-13.5	114	0.00	4.07- 4.13
2		AR1221-A		----------NA----------					
3		AR1221-B		----------NA----------					
4		AR1221-C		----------NA----------					
5		AR1221-D		----------NA----------					
6		AR1221-E		----------NA----------					
7		AR1232-A		----------NA----------					
8		AR1232-B		----------NA----------					
9		AR1232-C		----------NA----------					
10		AR1232-D		----------NA----------					
11		AR1232-E		----------NA----------					
12		AR1242-A		----------NA----------					
13		AR1242-B		----------NA----------					
14		AR1242-C		----------NA----------					
15		AR1242-D		----------NA----------					
16		AR1242-E		----------NA----------					
17		AR1248-A		----------NA----------					
18		AR1248-B		----------NA----------					
19		AR1248-C		----------NA----------					
20		AR1248-D		----------NA----------					
21		AR1248-E		----------NA----------					
22		AR1248-F		----------NA----------					
23		AR1248-G		----------NA----------					
24		AR1254-A		----------NA----------					
25		AR1254-B		----------NA----------					
26		AR1254-C		----------NA----------					
27		AR1254-D		----------NA----------					
28		AR1254-E		----------NA----------					
29		AR1254-F		----------NA----------					
30		AR1254-G		----------NA----------					
31		AR1262-A		----------NA----------					
32		AR1262-B		----------NA----------					
33		AR1262-C		----------NA----------					
34		AR1262-D		----------NA----------					
35		AR1262-E		----------NA----------					
36		AR1268-A		----------NA----------					
37		AR1268-B		----------NA----------					
38		AR1268-C		----------NA----------					
39		AR1268-D		----------NA----------					
40		AR1268-E		----------NA----------					
41		AR1016-A	44.702	56.547	E3	-26.5#	116	0.00	4.77- 4.83
42		AR1016-B	93.961	115.954	E3	-23.4#	113	0.00	5.36- 5.42
43		AR1016-C	180.195	209.197	E3	-16.1	112	0.00	6.03- 6.09
44		AR1016-D	72.651	83.901	E3	-15.5	112	0.00	6.22- 6.28
45		AR1016-E	55.760	64.023	E3	-14.8	110	0.00	6.90- 6.96
46		AR1260-A	105.892	120.270	E3	-13.6	113	0.00	9.03- 9.09
47		AR1260-B	81.559	91.322	E3	-12.0	110	0.00	9.69- 9.75

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GRL24-CC5
Lab FileID: RL1513.D

48		AR1260-C	93.577	103.976	E3	-11.1	110	0.00	10.13-10.19
49		AR1260-D	187.539	199.071	E3	-6.1	108	0.00	10.48-10.54
50		AR1260-E	192.605	217.103	E3	-12.7	110	0.00	11.04-11.10
51	S	Decachlorobiphenyl	1.483	1.745	E6	-17.7	115	0.00	12.74-12.80

(#) = Out of Range SPCC's out = 0 CCC's out = 0
rl901.d pcbgcrl5.m Wed Oct 19 00:22:45 2022

Initial Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GZZ3675-ICC3675
Lab FileID: ZZ99786.D

Response Factor Report HP G1530A

Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M (Chemstation Integrator)
Title : GCTPHS
Last Update : Wed Jul 14 12:52:24 2021
Response via : Initial Calibration

Calibration Files
5000=zz99788.D 250 =zz99784.D 1000=zz99786.D 500 =zz99785.D
10k =zz99789.D 100 =zz99783.D 25 =zz99781.D 50k =zz99790.D
2500=zz99787.D 50 =zz99782.D = =

Compound	5000	250	1000	500	10k	100	25	50k	2500	50	Avg	%RSD
1) TPH-DRO	1.441	1.423	1.430	1.417	1.341	1.417	1.490	1.442	1.402	1.469	1.427 E6	2.80
2) TPH-DRO (C10-C44)	1.441	1.423	1.430	1.417	1.341	1.417	1.490	1.442	1.402	1.469	1.427 E6	2.80
3) TPH-ORO (>C28-C40)	1.441	1.423	1.430	1.417	1.341	1.417	1.490	1.442	1.402	1.469	1.427 E6	2.80
4) TPH-DRO (C10-C20)	1.441	1.423	1.430	1.417	1.341	1.417	1.490	1.442	1.402	1.469	1.427 E6	2.80
5) TPH-ORO (C20-C34)	1.441	1.423	1.430	1.417	1.341	1.417	1.490	1.442	1.402	1.469	1.427 E6	2.80
6) o-TERPHENYL	1.688	1.769	1.743	1.737		1.769	1.786		1.668	1.813	1.747 E6	2.80
7) 5a-ANDROSTANE	1.729	1.651	1.643	1.623		1.681	1.751		1.603	1.713	1.674 E6	3.17
8) TETRACOSANE-d50											0.000	-1.00

(#) = Out of Range ### Number of calibration levels exceeded format ###

DROZZ3675.M Wed Jul 14 12:53:41 2021

Initial Calibration Verification

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GZZ3675-ICV3675
Lab FileID: ZZ99792.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\DATA\GZZ3675\zz99792.D Vial: 17
Acq On : 14 Jul 2021 10:03 am Operator: thomasl
Sample : icv3675-1000 Inst : HP G1530A
Misc : op34260,gzz3675,320,,,1,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M (Chemstation Integrator)
Title : GCTPHS
Last Update : Wed Jul 14 12:52:24 2021
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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.427	1.221 E6	14.4	85	0.00	4.59-11.49
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-DRO (C10-C20)		----------NA----------				
5	H	TPH-ORO (C20-C34)		----------NA----------				
6	S	o-TERPHENYL		----------NA----------				
7	S	5a-ANDROSTANE		----------NA----------				
8	S	TETRACOSANE-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
zz99786.D DROZZ3675.M Thu Jul 15 16:18:06 2021

8.6.10

8

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GZZ3912-CC3675
Lab FileID: ZZ105852.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\syrap\GZZ3912\zz105852.D Vial: 3
Acq On : 16 Oct 2022 11:46 am Operator: thomasl
Sample : cc3675-500 Inst : HP G1530A
Misc : op42446,gzz3912,10.8,,,1,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\msdchem\1\dat...3912\drozz3675.m (ChemStation Integrator)
Title : GCTPHS
Last Update : Tue Oct 18 08:27:38 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.427	1.424 E6	0.2	100	0.00	4.41-11.25
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-DRO (C10-C20)		----------NA----------				
5	H	TPH-ORO (C20-C34)		----------NA----------				
6	S	o-TERPHENYL	1.747	1.500 E6	14.1	86	0.00	8.79- 8.85
7	S	5a-ANDROSTANE	1.674	1.601 E6	4.4	99	0.00	9.23- 9.29
8	S	TETRACOSANE-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
zz105821.D drozz3675.m Tue Oct 18 08:29:53 2022

8.6.11

8

Continuing Calibration Summary

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Sample: GZZ3912-CC3675
Lab FileID: ZZ105861.D

Evaluate Continuing Calibration Report

Data File : C:\msdchem\1\data\syrap\GZZ3912\zz105861.D Vial: 4
Acq On : 16 Oct 2022 5:07 pm Operator: thomasl
Sample : cc3675-1000 Inst : HP G1530A
Misc : op42470,gzz3912,300,,,1,1 Multiplr: 1.00
IntFile : autoint1.e

Method : C:\msdchem\1\dat...3912\drozz3675.m (ChemStation Integrator)
Title : GCTPHS
Last Update : Tue Oct 18 08:27:38 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 : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)	RT Window
1	H	TPH-DRO	1.427	1.400 E6	1.9	98	0.00	4.41-11.25
2	H	TPH-DRO (C10-C44)		----------NA----------				
3	H	TPH-ORO (>C28-C40)		----------NA----------				
4	H	TPH-DRO (C10-C20)		----------NA----------				
5	H	TPH-ORO (C20-C34)		----------NA----------				
6	S	o-TERPHENYL	1.747	1.586 E6	9.2	91	0.00	8.78- 8.84
7	S	5a-ANDROSTANE	1.674	1.524 E6	9.0	93	0.00	9.23- 9.29
8	S	TETRACOSANE-d50		----------NA----------				

(#) = Out of Range SPCC's out = 0 CCC's out = 0
zz99786.D drozz3675.m Tue Oct 18 08:39:58 2022

8.6.12

8

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: GRL24 **Method:** SW846 8082A **Instrument ID:** GCRL

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GRL24-CC5	RL1491.D	10/17/22 12:37	n/a	Continuing cal 500
OP42472-MB1	RL1493.D	10/17/22 13:34	OP42472	Method Blank
OP42472-BS1	RL1494.D	10/17/22 13:50	OP42472	Blank Spike
OP42472-BSD	RL1495.D	10/17/22 14:06	OP42472	Blank Spike Duplicate
ZZZZZZ	RL1496.D	10/17/22 14:22	OP42472	(unrelated sample)
ZZZZZZ	RL1497.D	10/17/22 14:39	OP42472	(unrelated sample)
ZZZZZZ	RL1498.D	10/17/22 14:55	OP42472	(unrelated sample)
ZZZZZZ	RL1499.D	10/17/22 15:11	OP42474	(unrelated sample)
GRL24-CC5	RL1502.D	10/17/22 16:00	n/a	Continuing cal 1000
OP42474-MB1	RL1504.D	10/17/22 16:32	OP42474	Method Blank
OP42474-BS1	RL1505.D	10/17/22 16:48	OP42474	Blank Spike
OP42474-BSD	RL1506.D	10/17/22 17:05	OP42474	Blank Spike Duplicate
ZZZZZZ	RL1507.D	10/17/22 17:21	OP42474	(unrelated sample)
JD53489-1	RL1508.D	10/17/22 17:37	OP42474	INFLUENT
JD53489-2	RL1509.D	10/17/22 17:53	OP42474	PRE-FILTER
JD53489-3	RL1510.D	10/17/22 18:10	OP42474	POST-FILTER
GRL24-CC5	RL1513.D	10/17/22 18:58	n/a	Continuing cal 500
OP42477-MB1	RL1515.D	10/17/22 19:31	OP42477	Method Blank
OP42477A-MB1	RL1515.D	10/17/22 19:31	OP42477A	Method Blank
OP42477-BS1	RL1516.D	10/17/22 19:47	OP42477	Blank Spike
OP42477A-BS1	RL1516.D	10/17/22 19:47	OP42477A	Blank Spike
OP42477-BSD	RL1517.D	10/17/22 20:03	OP42477	Blank Spike Duplicate
OP42477A-BSD	RL1517.D	10/17/22 20:03	OP42477A	Blank Spike Duplicate
ZZZZZZ	RL1519.D	10/17/22 20:36	OP42477	(unrelated sample)
ZZZZZZ	RL1520.D	10/17/22 20:52	OP42477A	(unrelated sample)
ZZZZZZ	RL1521.D	10/17/22 21:08	OP42474	(unrelated sample)
GRL24-CC5	RL1524.D	10/17/22 21:57	n/a	Continuing cal 1000
OP42183-MB1	RL1526.D	10/18/22 00:51	OP42183	Method Blank
OP42183-BS1	RL1527.D	10/18/22 01:08	OP42183	Blank Spike
OP42183-MS	RL1528.D	10/18/22 02:18	OP42183	Matrix Spike
OP42183-MSD	RL1529.D	10/18/22 02:35	OP42183	Matrix Spike Duplicate
ZZZZZZ	RL1530.D	10/18/22 02:51	OP42183	(unrelated sample)
ZZZZZZ	RL1531.D	10/18/22 03:07	OP42183	(unrelated sample)
ZZZZZZ	RL1532.D	10/18/22 03:23	OP42183	(unrelated sample)
GRL24-CC5	RL1535.D	10/18/22 04:12	n/a	Continuing cal 500
JD52744-33	RL1537.D	10/18/22 04:44	OP42183	(used for QC only; not part of job JD53489)
ZZZZZZ	RL1538.D	10/18/22 05:01	OP42183	(unrelated sample)
ZZZZZZ	RL1539.D	10/18/22 05:17	OP42183	(unrelated sample)
ZZZZZZ	RL1540.D	10/18/22 05:33	OP42183	(unrelated sample)
ZZZZZZ	RL1541.D	10/18/22 05:49	OP42183	(unrelated sample)
ZZZZZZ	RL1542.D	10/18/22 06:06	OP42183	(unrelated sample)
ZZZZZZ	RL1543.D	10/18/22 06:22	OP42183	(unrelated sample)
GRL24-CC5	RL1546.D	10/18/22 07:11	n/a	Continuing cal 1000
ZZZZZZ	RL1548.D	10/18/22 07:43	OP42183	(unrelated sample)
ZZZZZZ	RL1549.D	10/18/22 07:59	OP42183	(unrelated sample)
ZZZZZZ	RL1550.D	10/18/22 08:16	OP42183	(unrelated sample)

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: GRL24	**Method:** SW846 8082A	**Instrument ID:** GCRL

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
ZZZZZZ	RL1551.D	10/18/22 08:32	OP42183	(unrelated sample)
ZZZZZZ	RL1552.D	10/18/22 08:48	OP42183	(unrelated sample)
ZZZZZZ	RL1553.D	10/18/22 09:04	OP42183	(unrelated sample)
ZZZZZZ	RL1554.D	10/18/22 09:20	OP42183	(unrelated sample)
GRL24-CC5	RL1557.D	10/18/22 10:35	n/a	Continuing cal 500
ZZZZZZ	RL1559.D	10/18/22 11:08	OP42183	(unrelated sample)
ZZZZZZ	RL1560.D	10/18/22 11:24	OP42183	(unrelated sample)
ZZZZZZ	RL1561.D	10/18/22 11:40	OP42183	(unrelated sample)
GRL24-CC5	RL1564.D	10/18/22 12:40	n/a	Continuing cal 1000

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: GRL5 **Method:** SW846 8082A **Instrument ID:** GCRL

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GRL5-IC5	RL165.D	09/20/22 23:42	n/a	Initial cal 50
GRL5-IC5	RL166.D	09/21/22 00:00	n/a	Initial cal 250
GRL5-IC5	RL167.D	09/21/22 00:17	n/a	Initial cal 500
GRL5-ICC5	RL168.D	09/21/22 00:34	n/a	Initial cal 1000
GRL5-IC5	RL169.D	09/21/22 00:51	n/a	Initial cal 2000
GRL5-IC5	RL170.D	09/21/22 01:08	n/a	Initial cal 3000
GRL5-IC5	RL171.D	09/21/22 01:25	n/a	Initial cal 5000
GRL5-IC5	RL172.D	09/21/22 01:44	n/a	Initial cal 10000
GRL5-IC5	RL173.D	09/21/22 02:03	n/a	Initial cal 20000
GRL5-ICV5	RL174.D	09/21/22 02:22	n/a	Initial cal verification 1000
GRL5-IC5	RL175.D	09/21/22 02:41	n/a	Initial cal 1000
GRL5-IC5	RL176.D	09/21/22 03:00	n/a	Initial cal 1000
GRL5-IC5	RL177.D	09/21/22 03:19	n/a	Initial cal 1000
GRL5-IC5	RL178.D	09/21/22 03:38	n/a	Initial cal 1000
GRL5-ICV5	RL179.D	09/21/22 03:57	n/a	Initial cal verification 1000
GRL5-ICV5	RL180.D	09/21/22 04:16	n/a	Initial cal verification 1000
GRL5-ICV5	RL181.D	09/21/22 04:35	n/a	Initial cal verification 1000
GRL5-ICV5	RL182.D	09/21/22 04:54	n/a	Initial cal verification 1000

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: GZZ3675 **Method:** SW846 8015D **Instrument ID:** GCZZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GZZ3675-RT	ZZ99778.D	07/13/21 13:59	n/a	Retention Time Marker
GZZ3675-IC3675	ZZ99781.D	07/13/21 15:50	n/a	Initial cal 25
GZZ3675-IC3675	ZZ99782.D	07/13/21 16:24	n/a	Initial cal 50
GZZ3675-IC3675	ZZ99783.D	07/13/21 16:58	n/a	Initial cal 100
GZZ3675-IC3675	ZZ99784.D	07/13/21 17:32	n/a	Initial cal 250
GZZ3675-IC3675	ZZ99785.D	07/13/21 18:06	n/a	Initial cal 500
GZZ3675-ICC3675	ZZ99786.D	07/13/21 18:40	n/a	Initial cal 1000
GZZ3675-IC3675	ZZ99787.D	07/13/21 19:14	n/a	Initial cal 2500
GZZ3675-IC3675	ZZ99788.D	07/13/21 19:48	n/a	Initial cal 5000
GZZ3675-IC3675	ZZ99789.D	07/13/21 20:21	n/a	Initial cal 10000
GZZ3675-IC3675	ZZ99790.D	07/13/21 20:55	n/a	Initial cal 50000
GZZ3675-ICV3675	ZZ99792.D	07/14/21 10:03	n/a	Initial cal verification 1000

Run Sequence Report

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Run ID: GZZ3912 **Method:** SW846 8015D **Instrument ID:** GCZZ

Lab Sample ID	Lab File ID	Date/Time Analyzed	Prep QC Batch	Client Sample ID
GZZ3912-CC3675	ZZ105852.D	10/16/22 11:46	n/a	Continuing cal 500
GZZ3912-RT	ZZ105854.D	10/16/22 13:10	n/a	Retention Time Marker
OP42470-MB1	ZZ105855.D	10/16/22 13:44	OP42470	Method Blank
OP42470-BS1	ZZ105856.D	10/16/22 14:18	OP42470	Blank Spike
OP42470-BSD	ZZ105857.D	10/16/22 14:51	OP42470	Blank Spike Duplicate
JD53489-1	ZZ105858.D	10/16/22 15:25	OP42470	INFLUENT
JD53489-2	ZZ105859.D	10/16/22 15:59	OP42470	PRE-FILTER
JD53489-3	ZZ105860.D	10/16/22 16:33	OP42470	POST-FILTER
GZZ3912-CC3675	ZZ105861.D	10/16/22 17:07	n/a	Continuing cal 1000

GC/LC Semi-volatiles

Raw Data

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:42:30 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.374f	4.103	45237752	15996249	16.089m	6.585 #
	Spiked Amount 40.000			Recovery	=	40.22%	16.46%
51)	S Decachlor...	10.975	12.778	6292782	5067484	3.209m	3.418m
	Spiked Amount 40.000			Recovery	=	8.02%	8.54%
	Target Compounds						

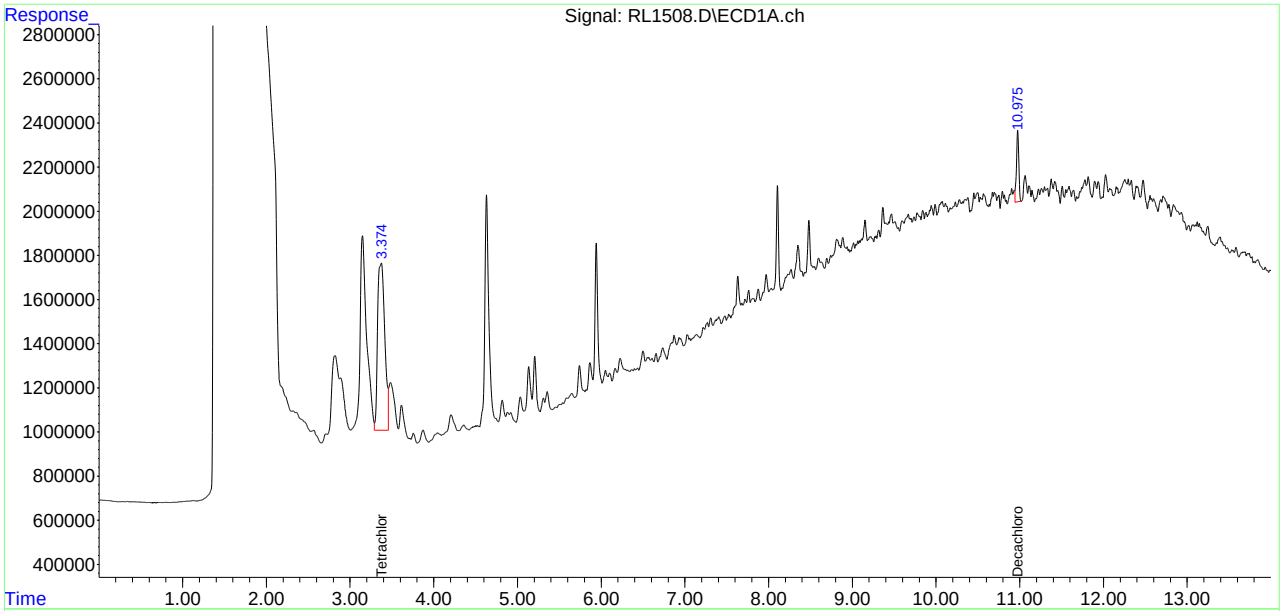
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

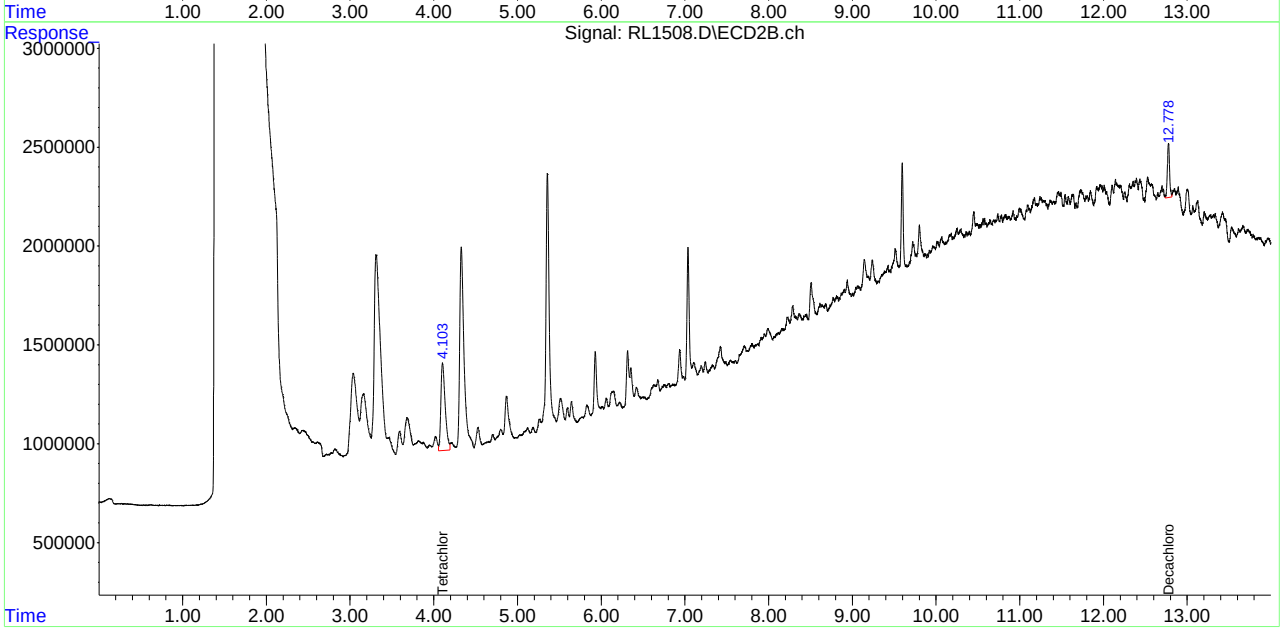
Quantitation Report (QT Reviewed)

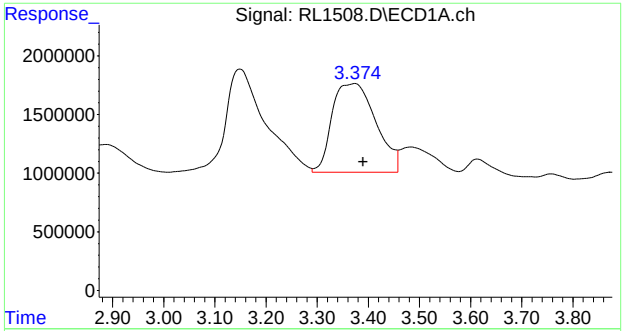
Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:42:30 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

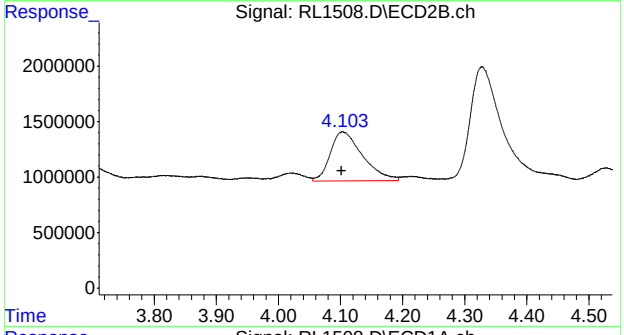






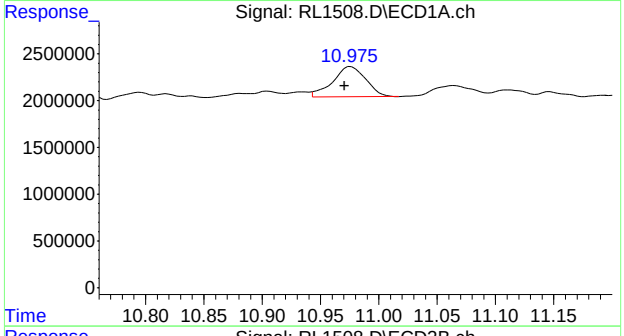
#1 Tetrachloro-m-xylene

R.T.: 3.374 min
Delta R.T.: -0.016 min
Response: 45237752
Conc: 16.09 ppb m



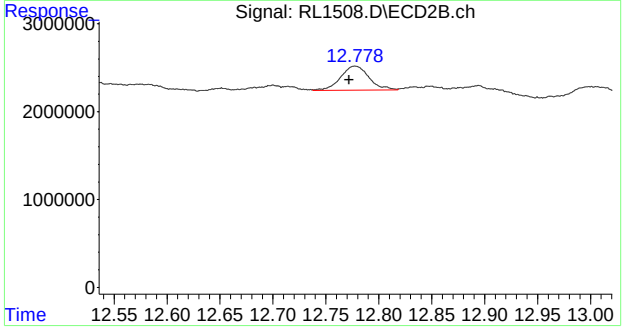
#1 Tetrachloro-m-xylene

R.T.: 4.103 min
Delta R.T.: 0.002 min
Response: 15996249
Conc: 6.58 ppb



#51 Decachlorobiphenyl

R.T.: 10.975 min
Delta R.T.: 0.004 min
Response: 6292782
Conc: 3.21 ppb m



#51 Decachlorobiphenyl

R.T.: 12.778 min
Delta R.T.: 0.006 min
Response: 5067484
Conc: 3.42 ppb m

Manual Integration Approval Summary

Sample Number: JD53489-1
Lab FileID: RL1508.D
Injection Time: 10/17/22 17:37

Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

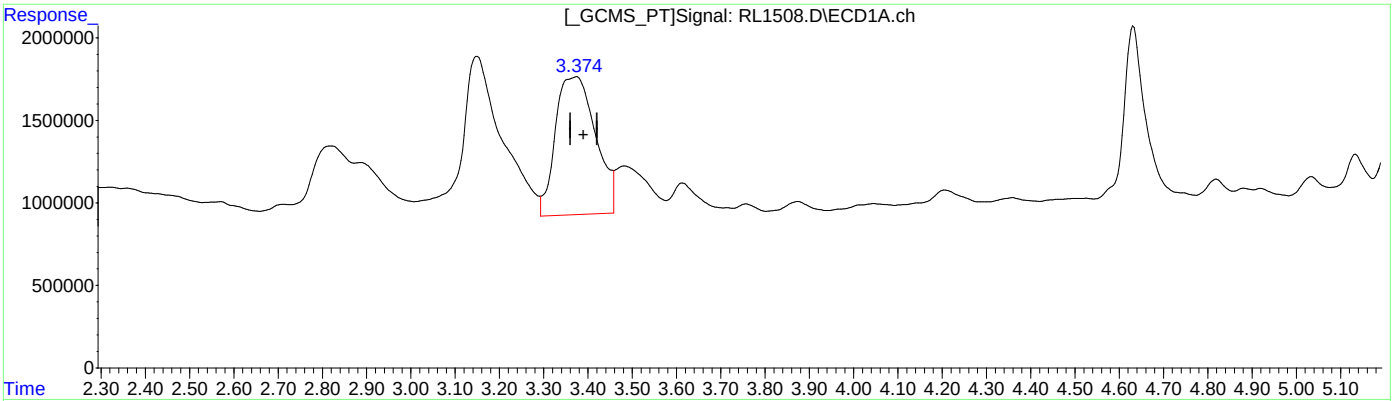
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.37	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.97	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	12.78	Poorly defined baseline

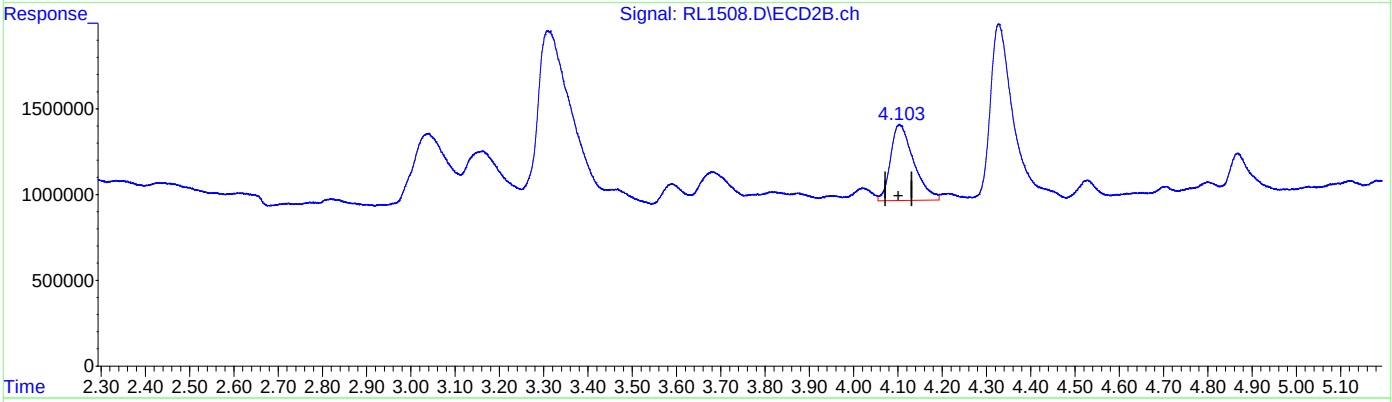
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:27 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.375min 18.785 ppb

response 52817351

(1) Tetrachloro-m-xylene #2 (S)

4.103min 6.585 ppb

response 15996249

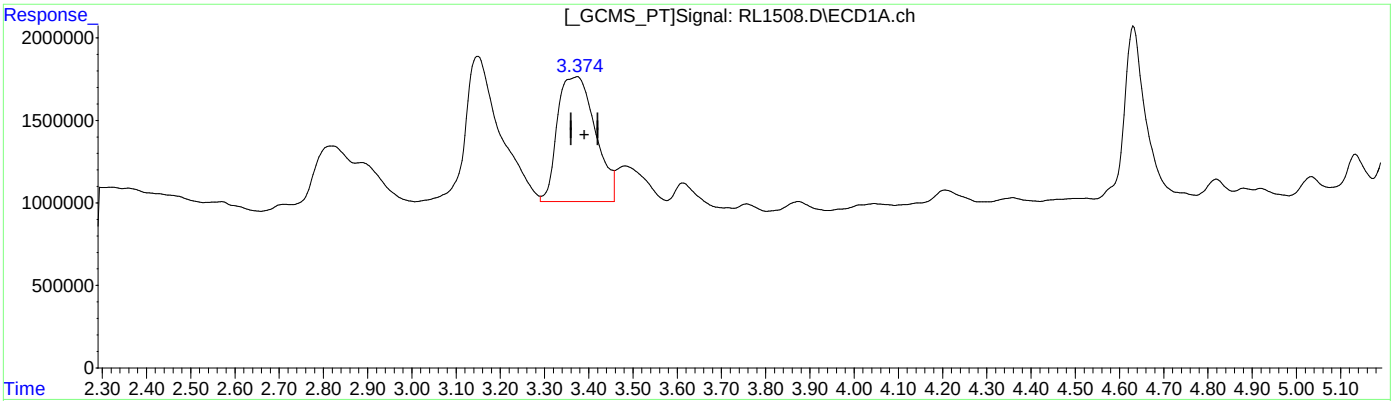
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:41:43 2022

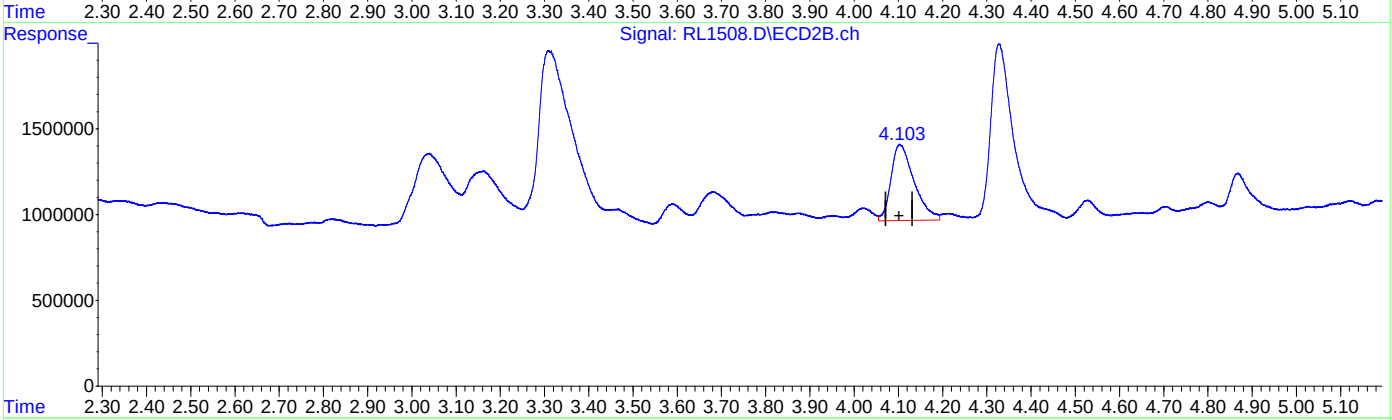
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:27 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.374min 16.089 ppb m

response 45237752

(1) Tetrachloro-m-xylene #2 (S)

4.103min 6.585 ppb

response 15996249

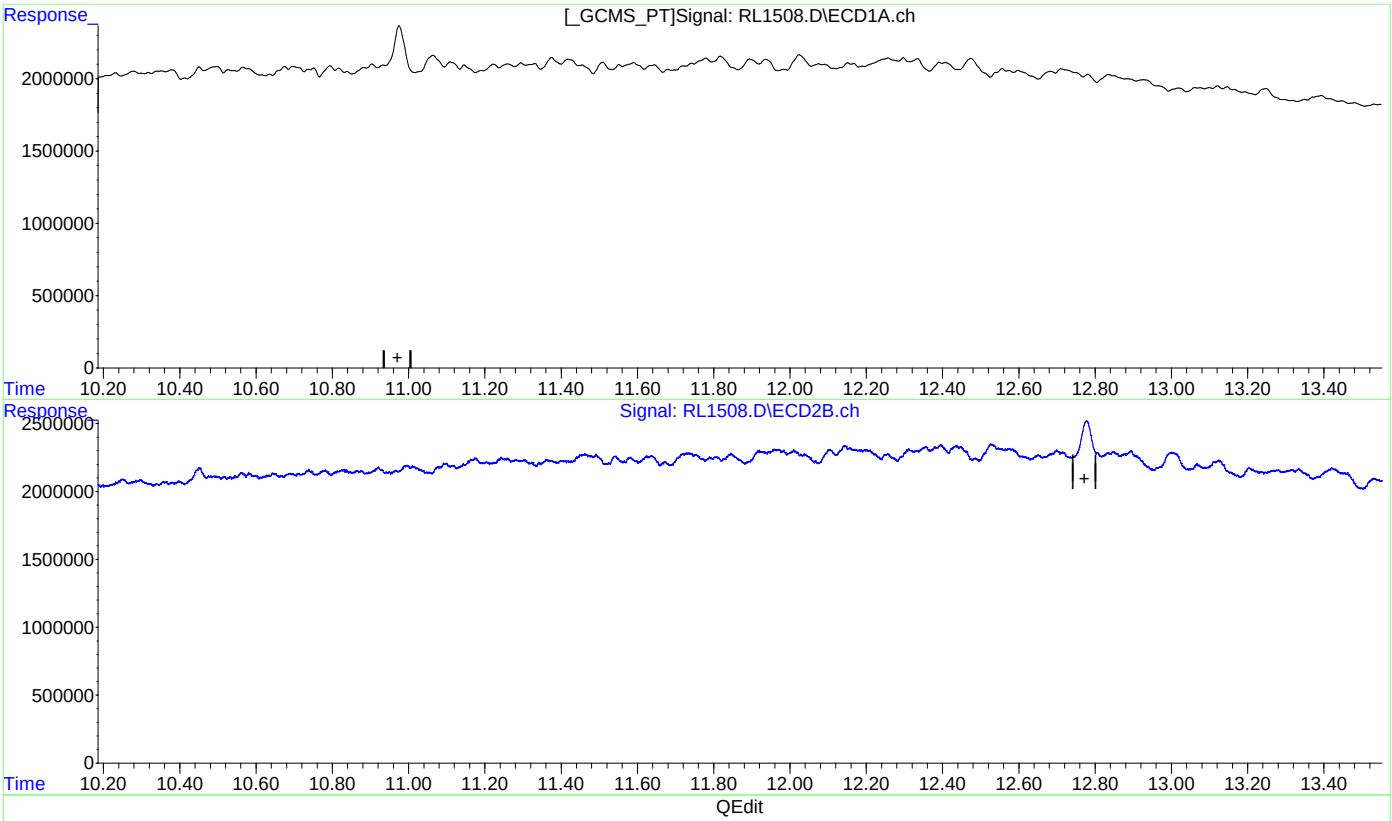
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:41:55 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:27 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)

0.000min 0.000 ppb

response 0

(51) Decachlorobiphenyl #2 (S)

0.000min 0.000 ppb

response 0

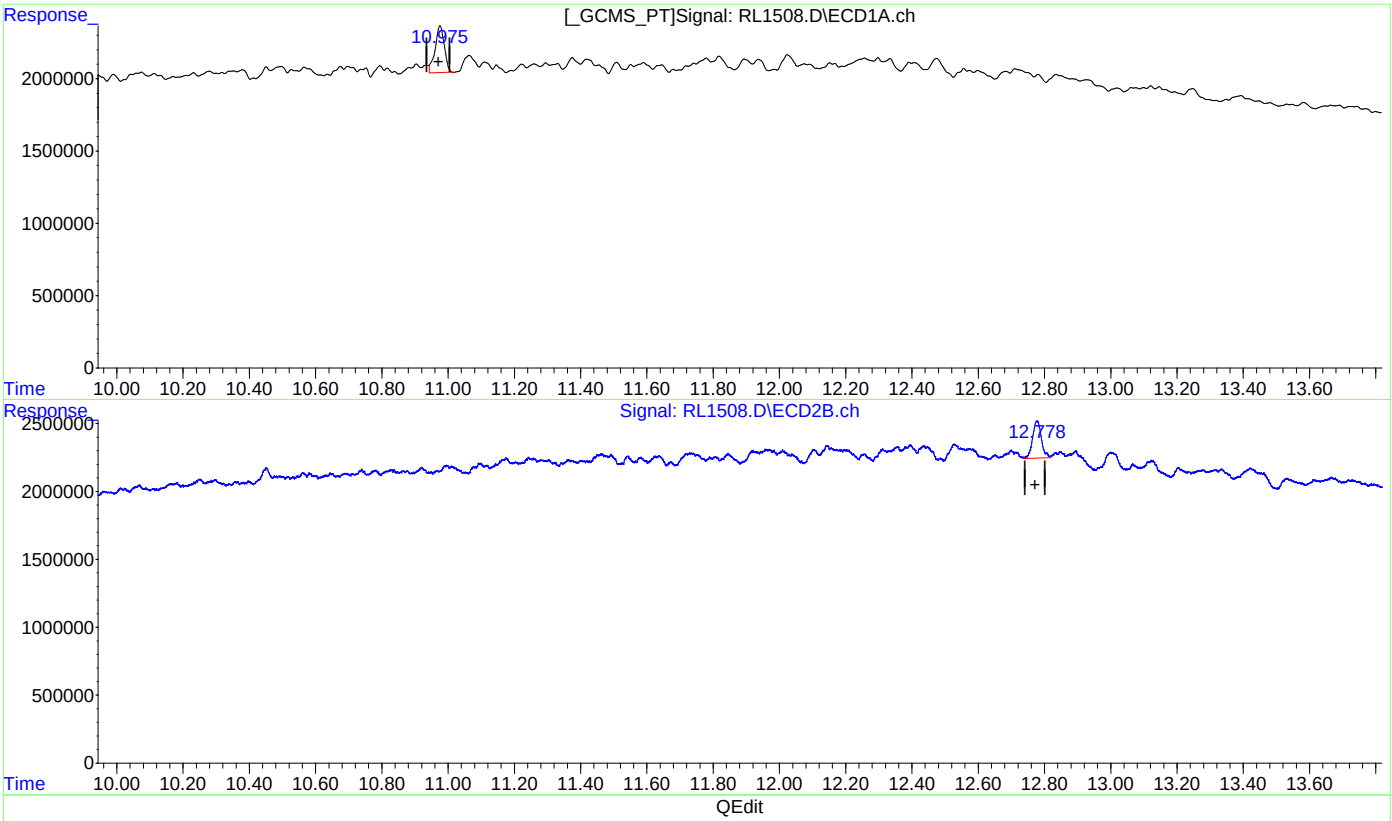
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:41:58 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1508.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:37 pm
Operator : mahalial
Sample : jd53489-1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 29 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:27 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.975min 3.209 ppb m

response 6292782

(51) Decachlorobiphenyl #2 (S)

12.778min 3.418 ppb m

response 5067484

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:42:12 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:43:26 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.351f	4.099	34748528	13262615	12.359m	5.459m#
	Spiked Amount 40.000			Recovery	=	30.90%	13.65%
51)	S Decachlor...	10.975	12.776	5210823	3433105	2.658m	2.315m
	Spiked Amount 40.000			Recovery	=	6.64%	5.79%
	Target Compounds						

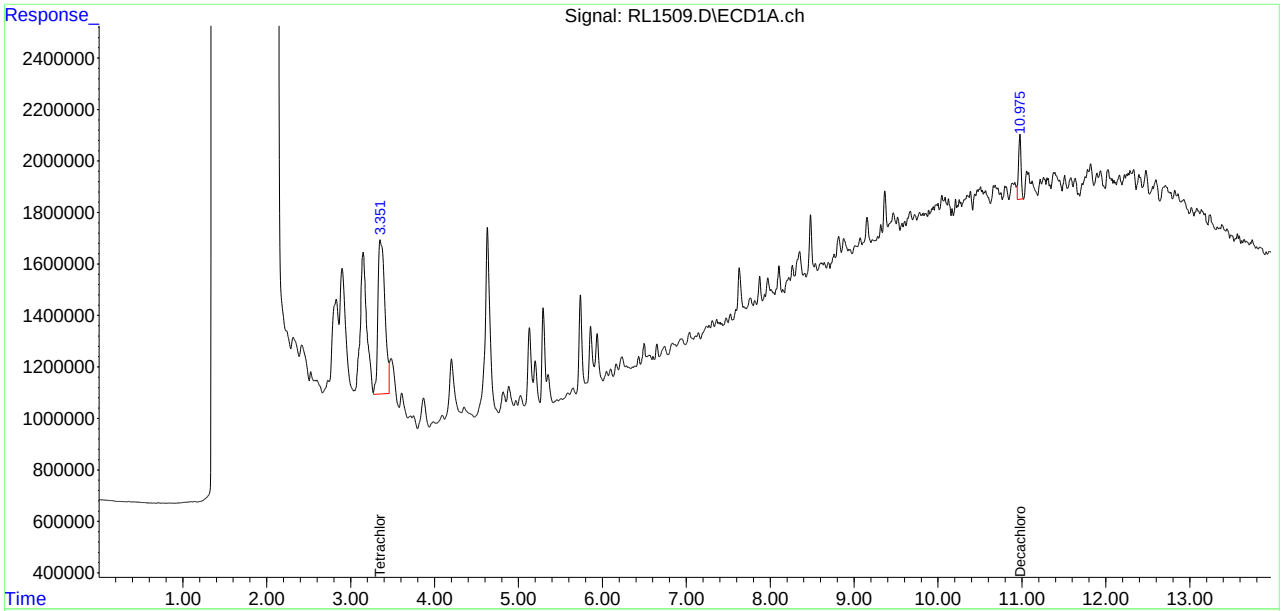
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

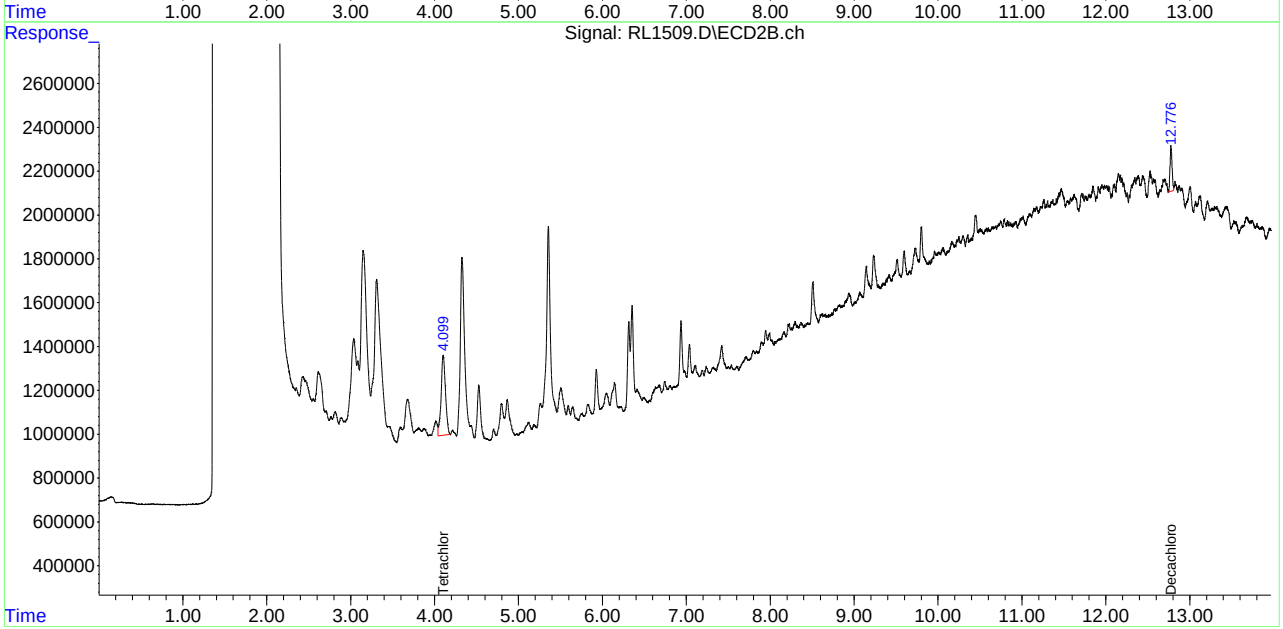
Quantitation Report (QT Reviewed)

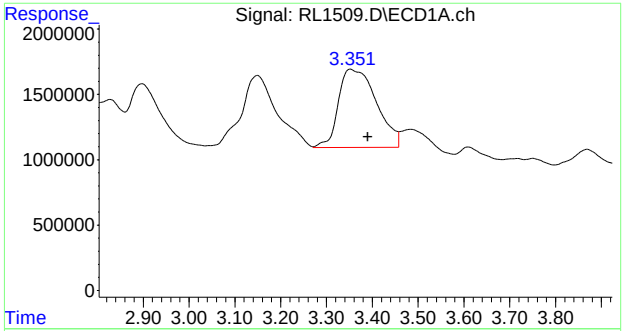
Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:43:26 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

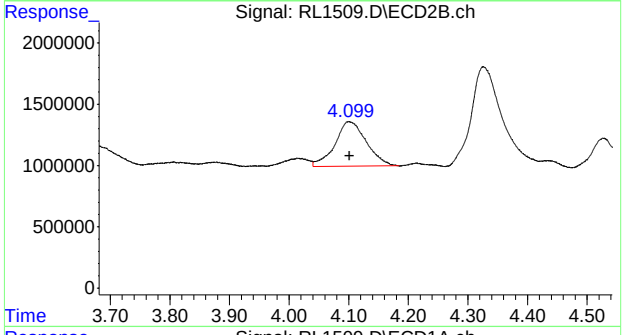






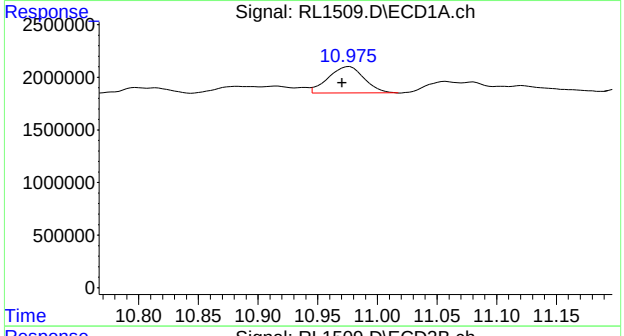
#1 Tetrachloro-m-xylene

R.T.: 3.351 min
Delta R.T.: -0.039 min
Response: 34748528
Conc: 12.36 ppb m



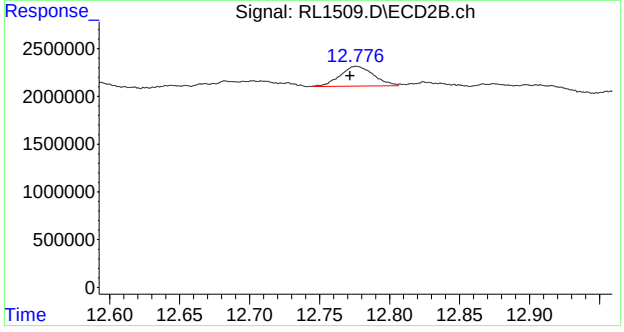
#1 Tetrachloro-m-xylene

R.T.: 4.099 min
Delta R.T.: -0.002 min
Response: 13262615
Conc: 5.46 ppb m



#51 Decachlorobiphenyl

R.T.: 10.975 min
Delta R.T.: 0.005 min
Response: 5210823
Conc: 2.66 ppb m



#51 Decachlorobiphenyl

R.T.: 12.776 min
Delta R.T.: 0.004 min
Response: 3433105
Conc: 2.32 ppb m

Manual Integration Approval Summary

Sample Number: JD53489-2
Lab FileID: RL1509.D
Injection Time: 10/17/22 17:53
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

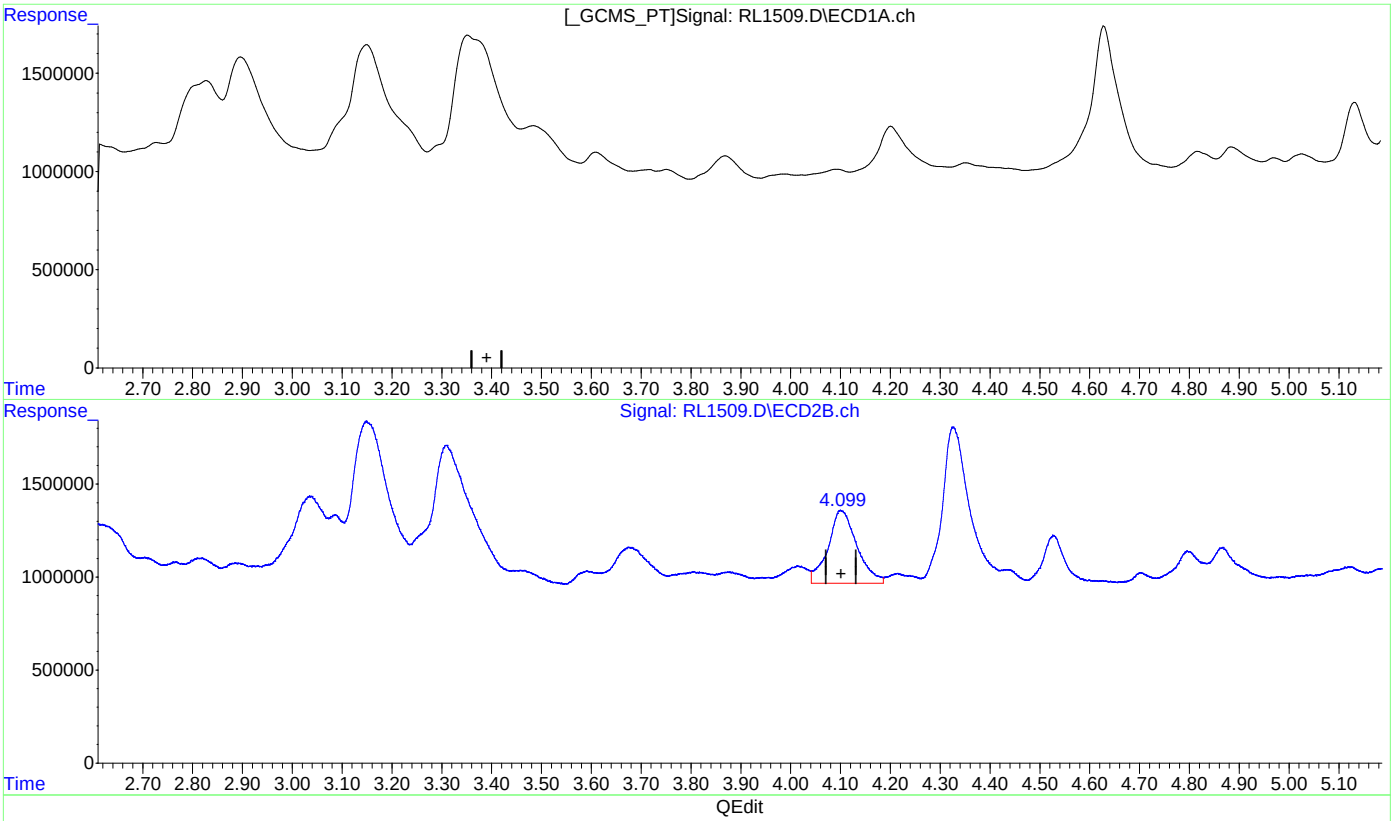
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.35	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	4.10	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.98	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	12.78	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:34 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)

0.000min 0.000 ppb

response 0

(1) Tetrachloro-m-xylene #2 (S)

4.101min 6.474 ppb

response 15728256

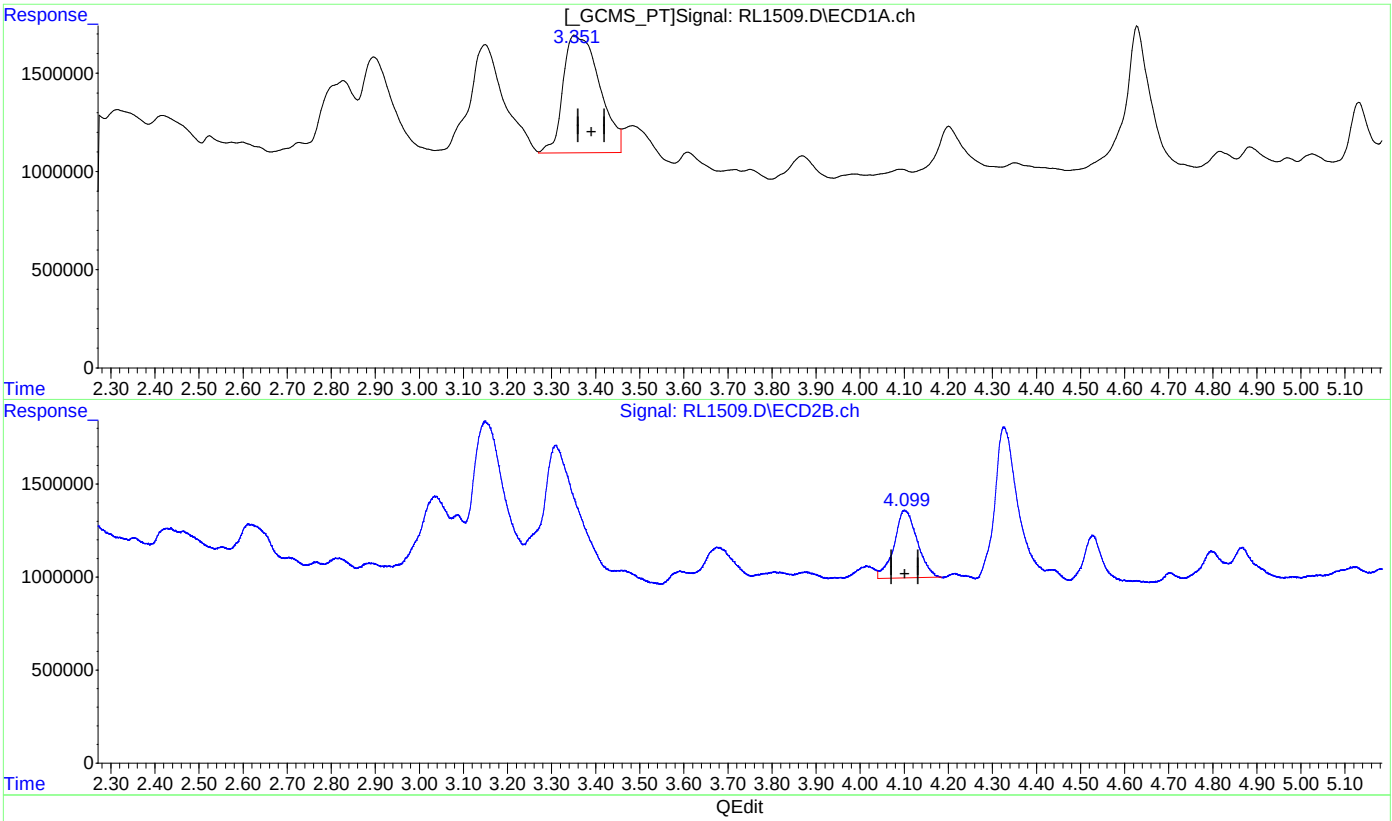
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:42:38 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:34 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(1) Tetrachloro-m-xylene (S)

3.351min 12.359 ppb m

response 34748528

(1) Tetrachloro-m-xylene #2 (S)

4.099min 5.459 ppb m

response 13262615

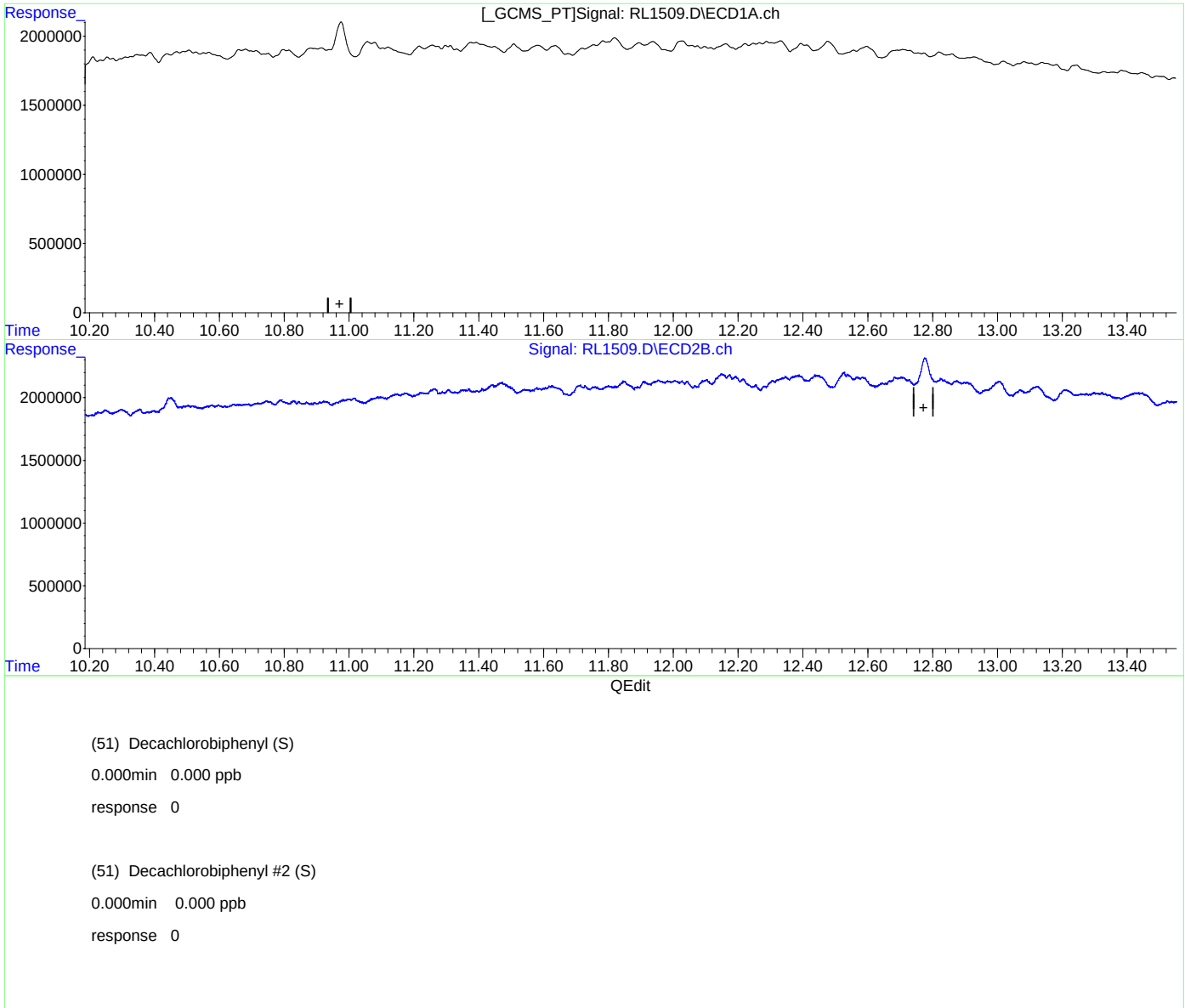
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:42:54 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:34 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

0.000min 0.000 ppb

response 0

(51) Decachlorobiphenyl #2 (S)

0.000min 0.000 ppb

response 0

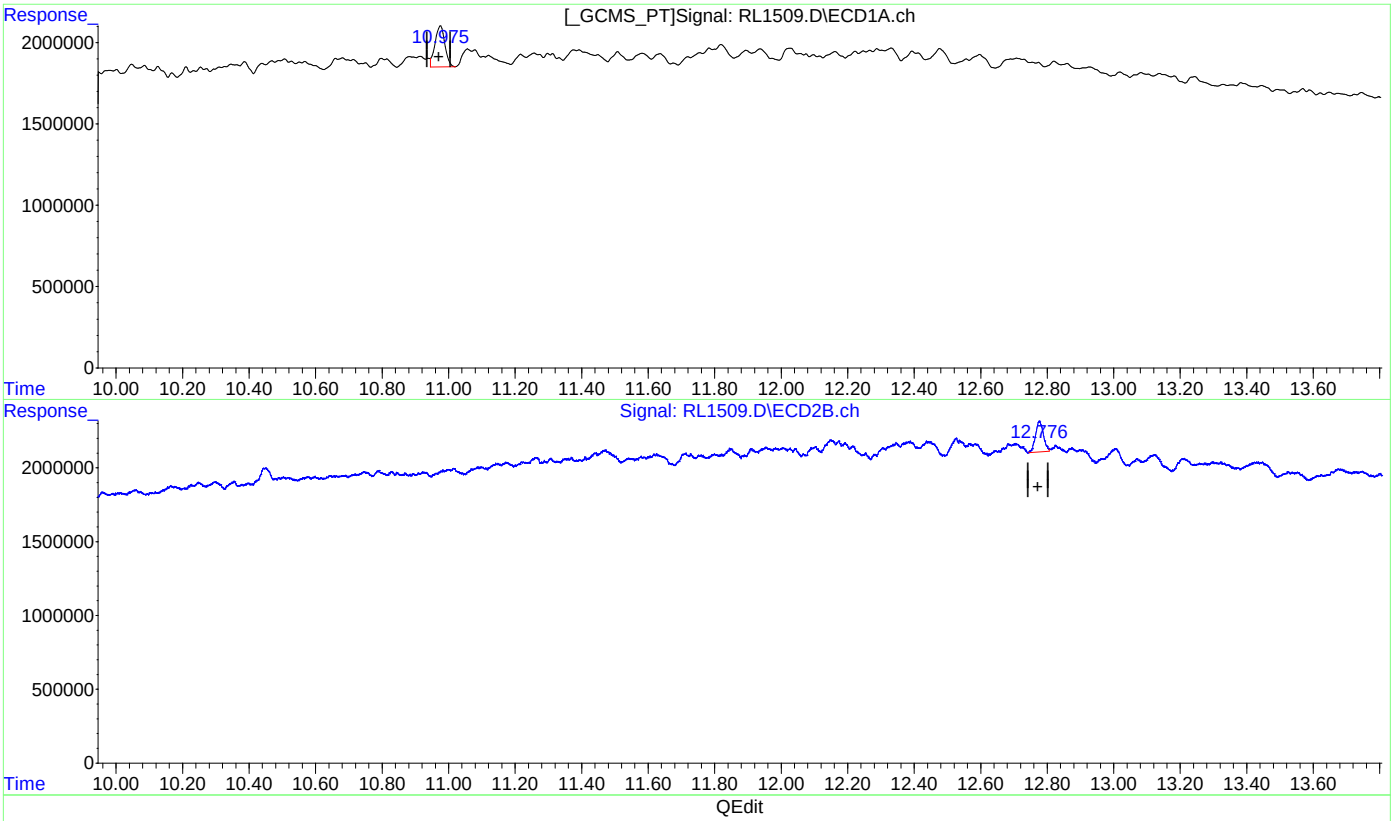
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:42:57 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1509.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:53 pm
Operator : mahalial
Sample : jd53489-2
Misc : op42474,grl24,1025.0,,,1,1
ALS Vial : 30 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:34 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)

10.975min 2.658 ppb m

response 5210823

(51) Decachlorobiphenyl #2 (S)

12.776min 2.315 ppb m

response 3433105

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:43:08 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:44:26 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.353f	4.099	63127567	30318789	22.452m	12.480m#
	Spiked Amount 40.000			Recovery	=	56.13%	31.20%
51)	S Decachlor...	10.975	12.775	8126572	5510002	4.145m	3.716m
	Spiked Amount 40.000			Recovery	=	10.36%	9.29%
	Target Compounds						

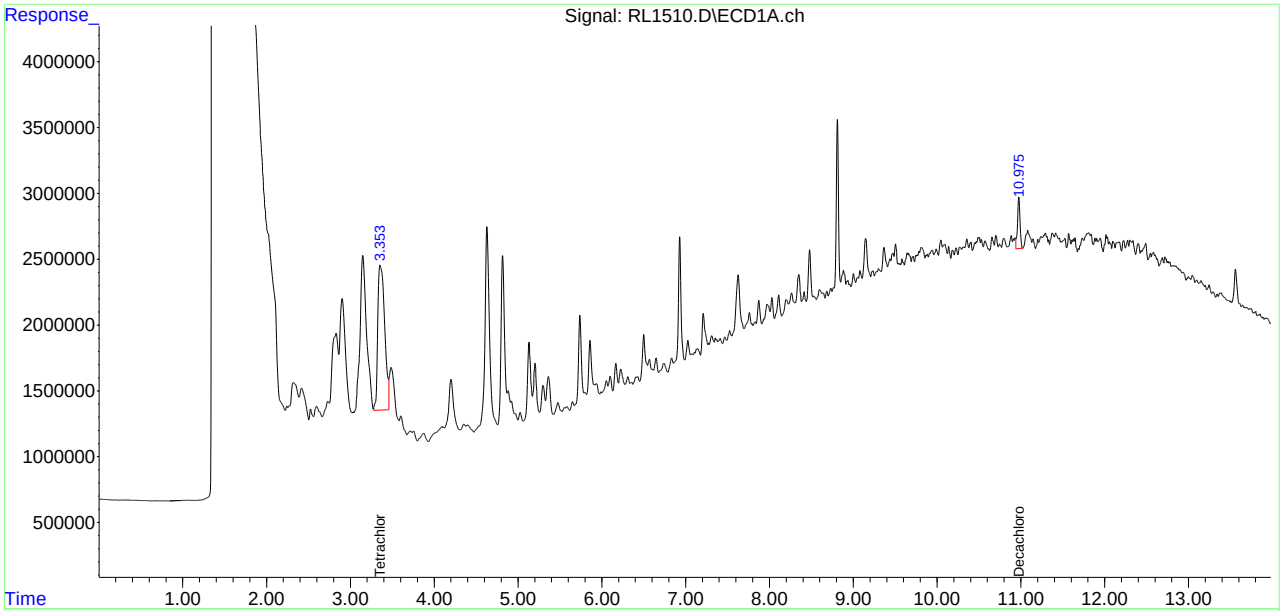
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

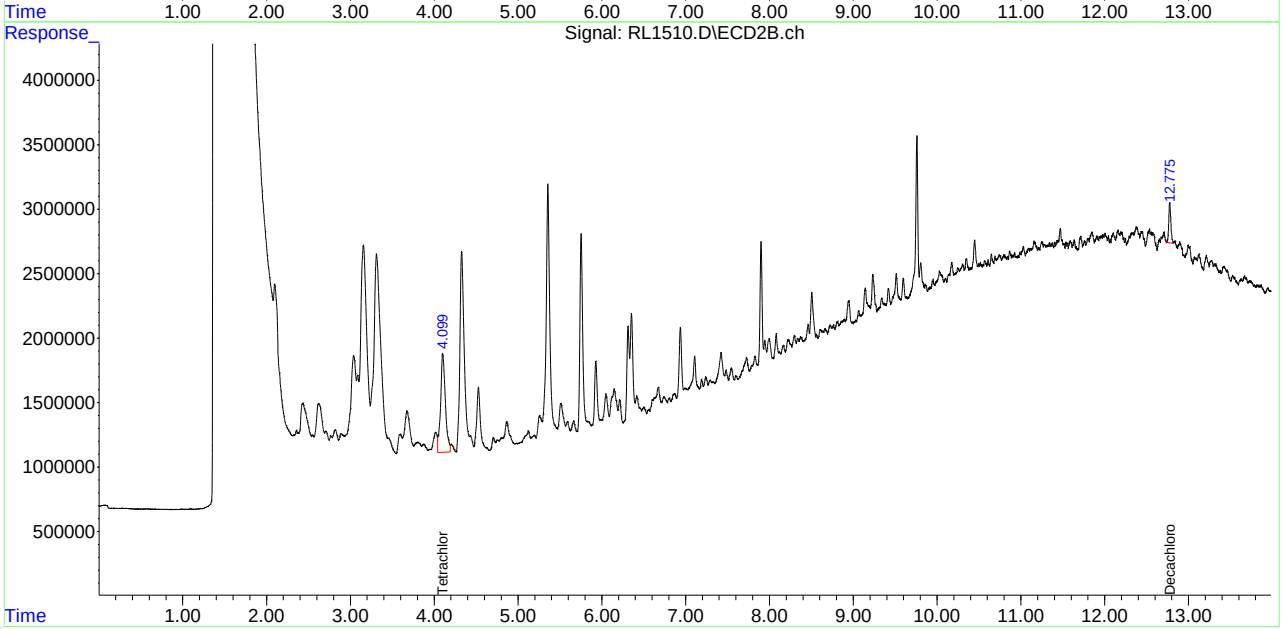
Quantitation Report (QT Reviewed)

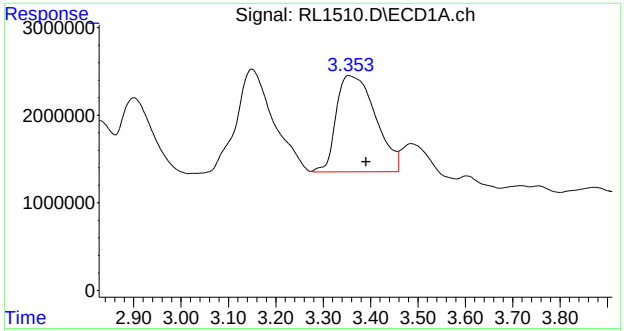
Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:44:26 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

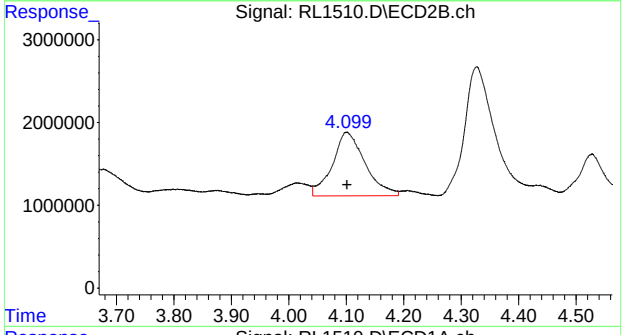






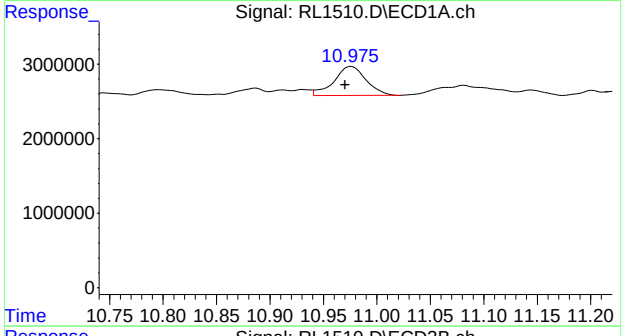
#1 Tetrachloro-m-xylene

R.T.: 3.353 min
Delta R.T.: -0.037 min
Response: 63127567
Conc: 22.45 ppb m



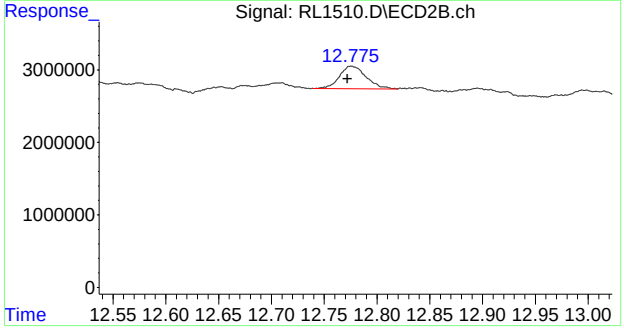
#1 Tetrachloro-m-xylene

R.T.: 4.099 min
Delta R.T.: -0.002 min
Response: 30318789
Conc: 12.48 ppb m



#51 Decachlorobiphenyl

R.T.: 10.975 min
Delta R.T.: 0.005 min
Response: 8126572
Conc: 4.14 ppb m



#51 Decachlorobiphenyl

R.T.: 12.775 min
Delta R.T.: 0.003 min
Response: 5510002
Conc: 3.72 ppb m

Manual Integration Approval Summary

Sample Number: JD53489-3
Lab FileID: RL1510.D
Injection Time: 10/17/22 18:10
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

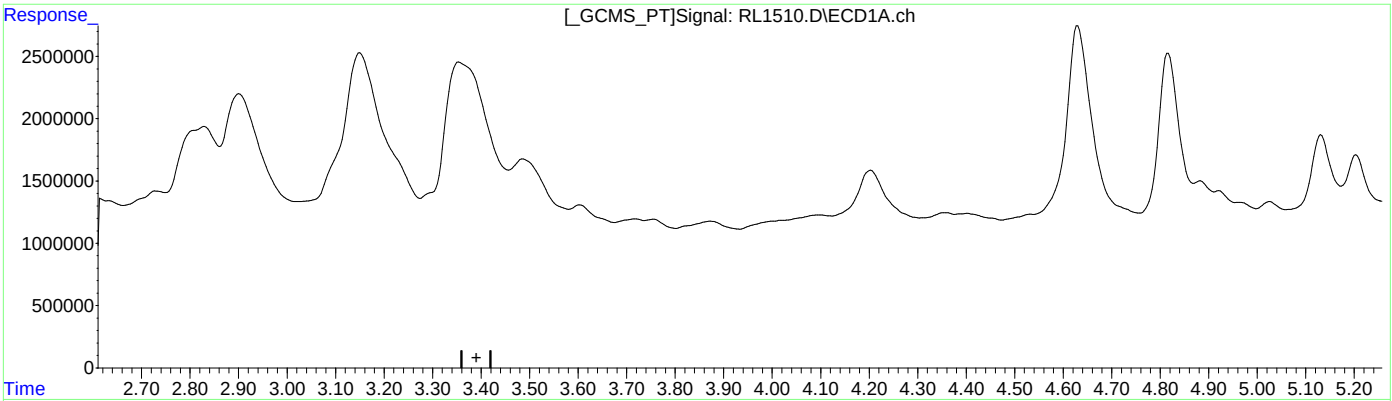
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.35	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	4.10	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.97	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	12.77	Poorly defined baseline

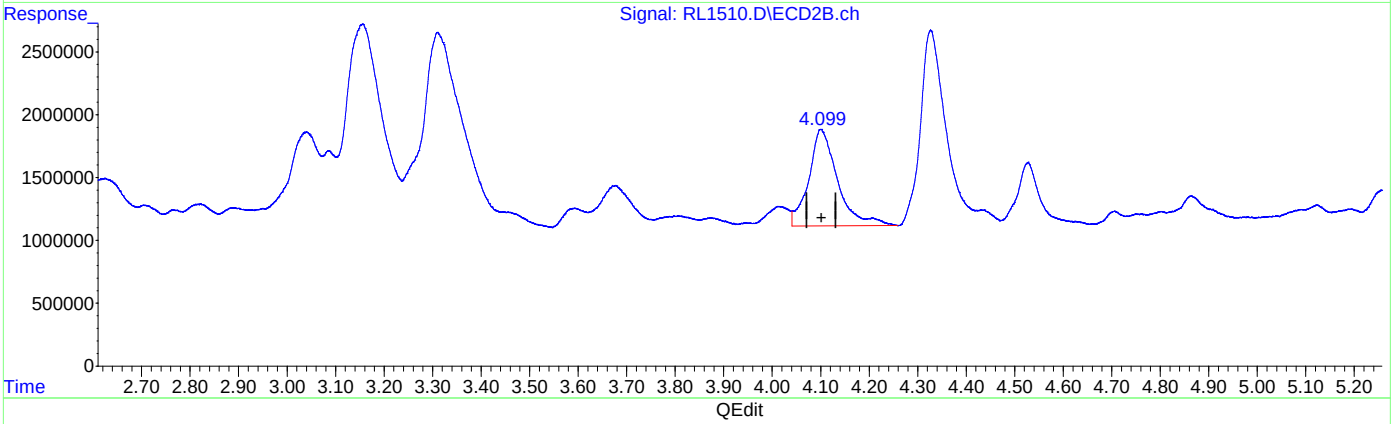
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:41 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

0.000min 0.000 ppb

response 0

(1) Tetrachloro-m-xylene #2 (S)

4.101min 13.059 ppb

response 31724985

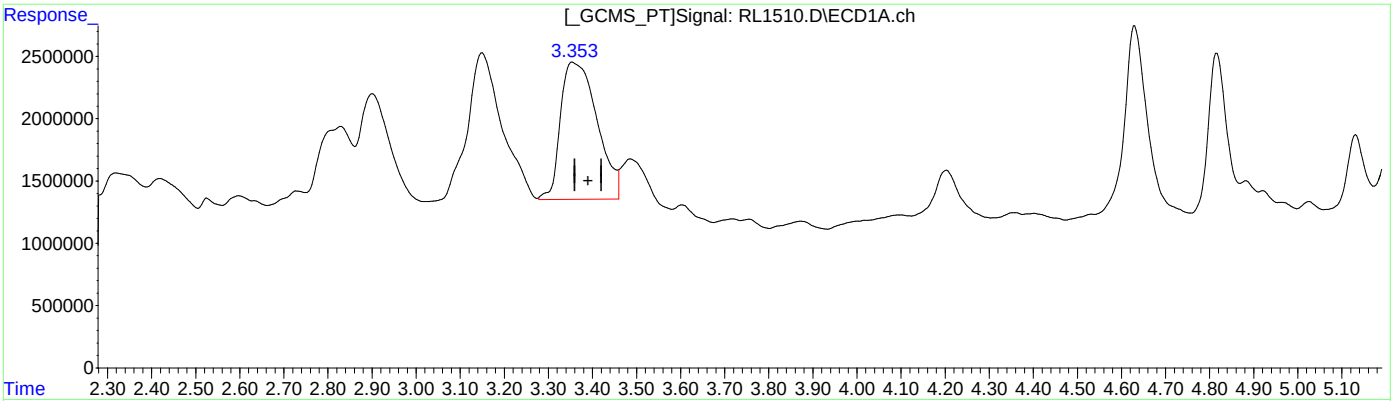
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:43:34 2022

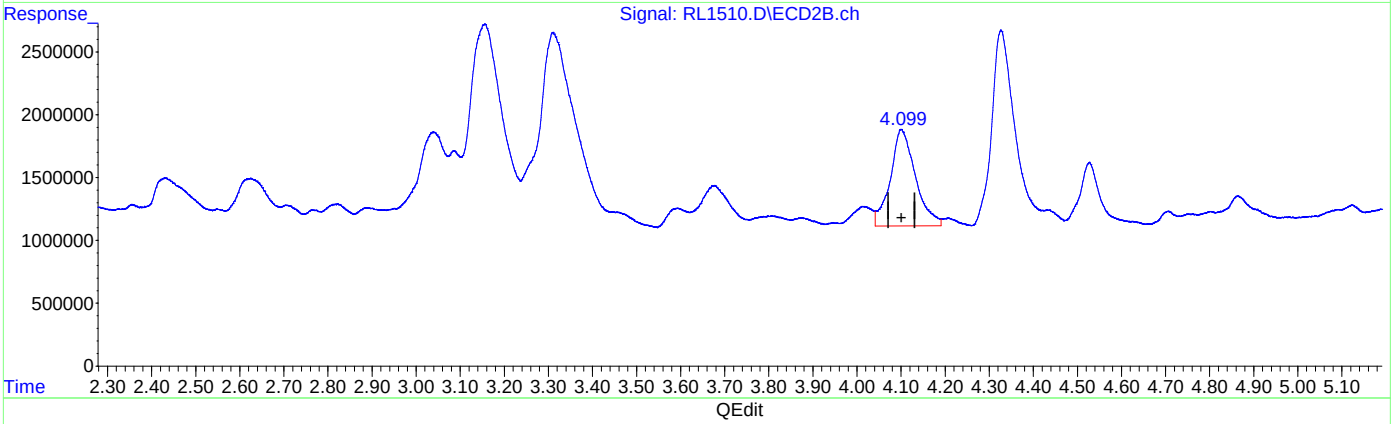
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:41 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.353min 22.452 ppb m

response 63127567

(1) Tetrachloro-m-xylene #2 (S)

4.099min 12.480 ppb m

response 30318789

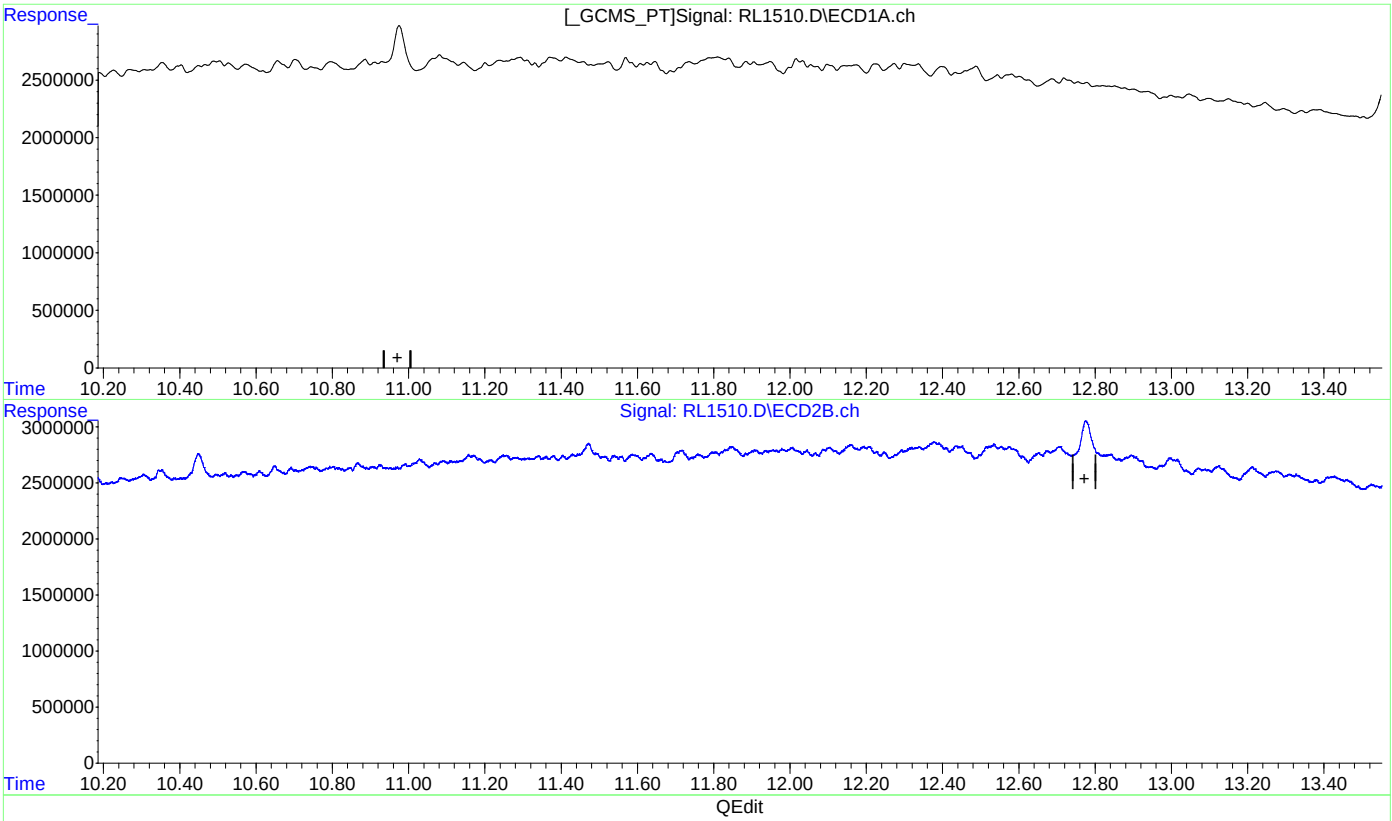
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:43:47 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:41 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)

0.000min 0.000 ppb

response 0

(51) Decachlorobiphenyl #2 (S)

0.000min 0.000 ppb

response 0

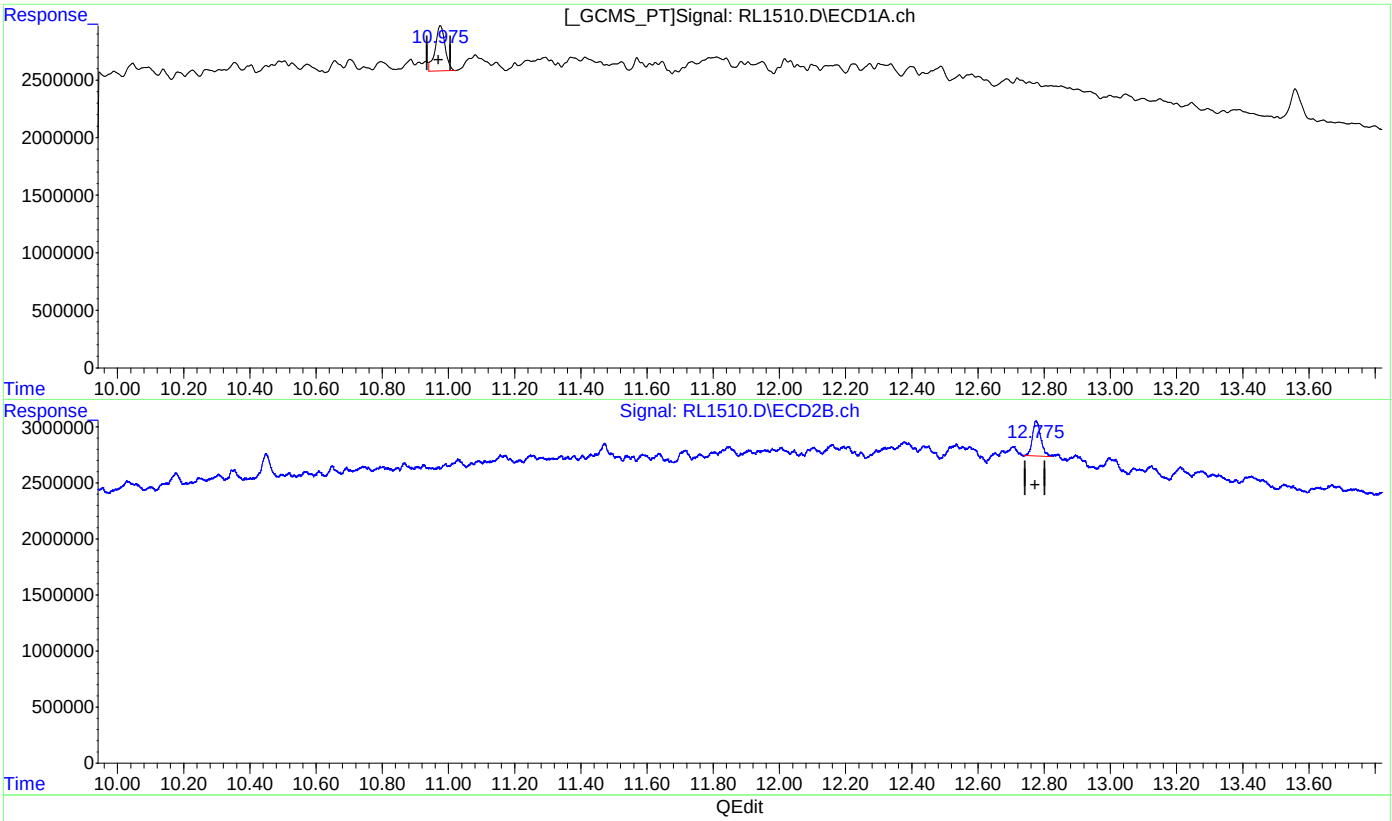
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:43:51 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1510.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:10 pm
Operator : mahalial
Sample : jd53489-3
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 31 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:41 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.975min 4.145 ppb m

response 8126572

(51) Decachlorobiphenyl #2 (S)

12.775min 3.716 ppb m

response 5510002

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:44:03 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:35:11 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.805	41203021	23.591	PPM	m
Spiked Amount 50.000		Recovery = 47.18%			
7) S 5a-ANDROSTANE	9.262	21788570	13.014	PPM	m
Spiked Amount 50.000		Recovery = 26.03%			
Target Compounds					
1) H TPH-DRO	7.830	479320872	335.803	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

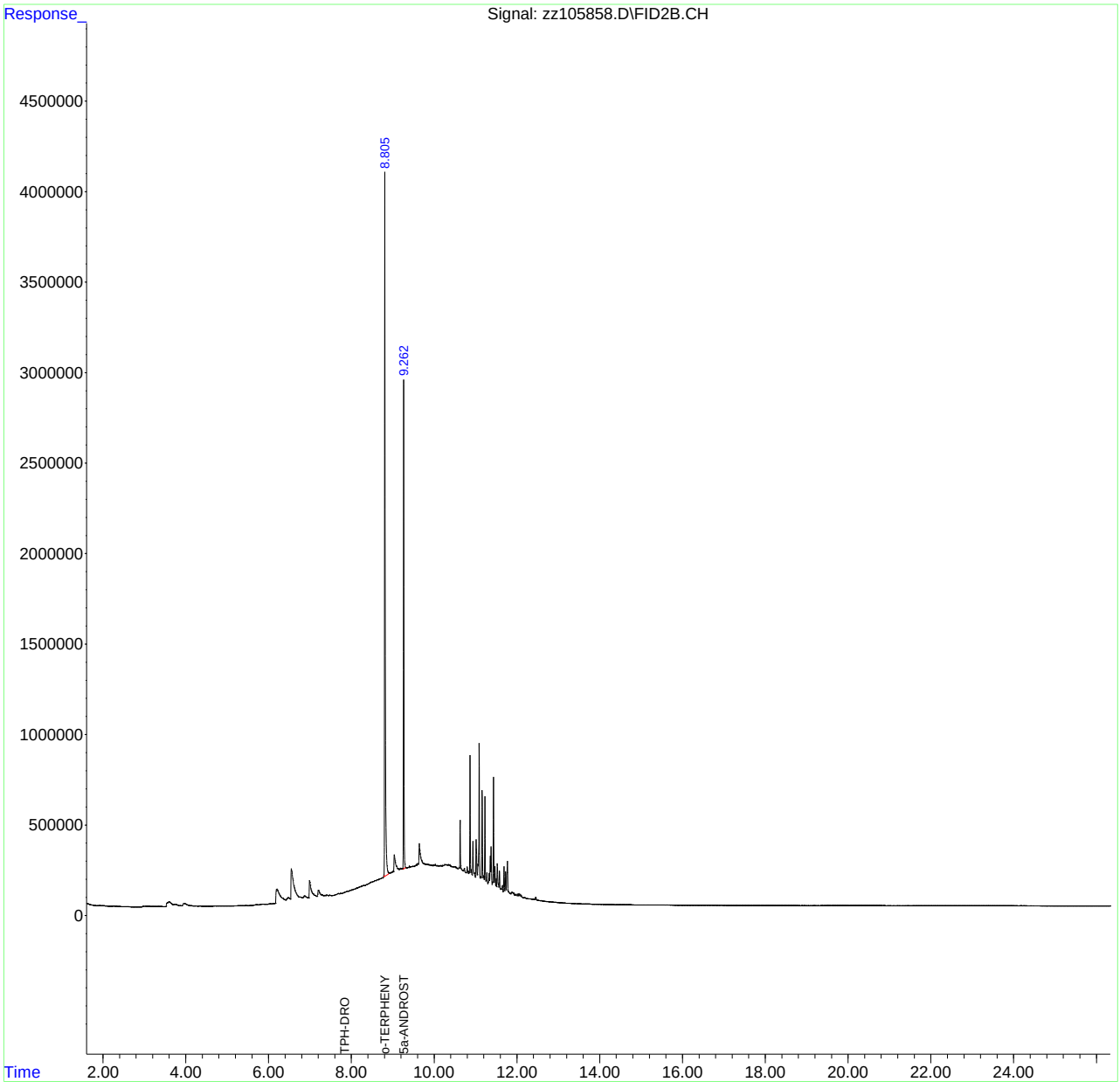
9.1.4
9

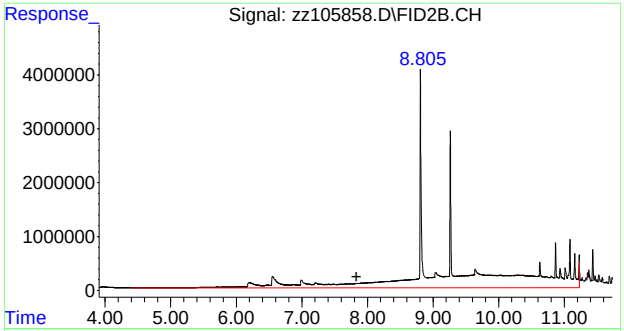
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:35:11 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

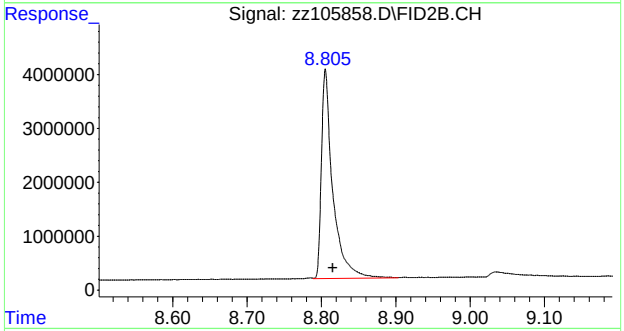
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





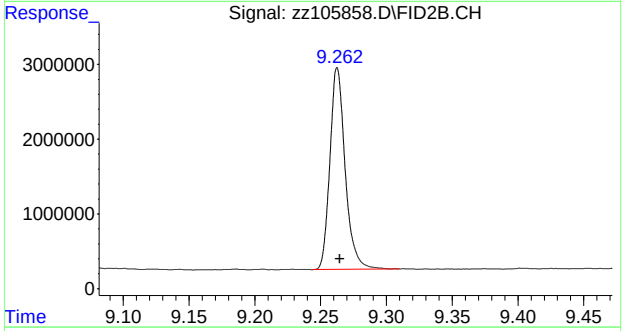
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 479320872
Conc: 335.80 PPM



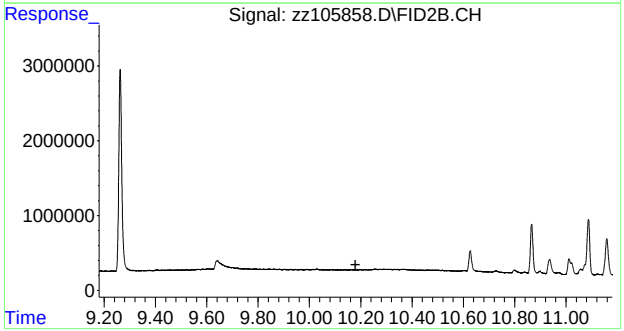
#6 o-TERPHENYL

R.T.: 8.805 min
Delta R.T.: -0.010 min
Response: 41203021
Conc: 23.59 PPM m



#7 5a-ANDROSTANE

R.T.: 9.262 min
Delta R.T.: -0.002 min
Response: 21788570
Conc: 13.01 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: JD53489-1
Lab FileID: ZZ105858.D
Injection Time: 10/16/22 15:25
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

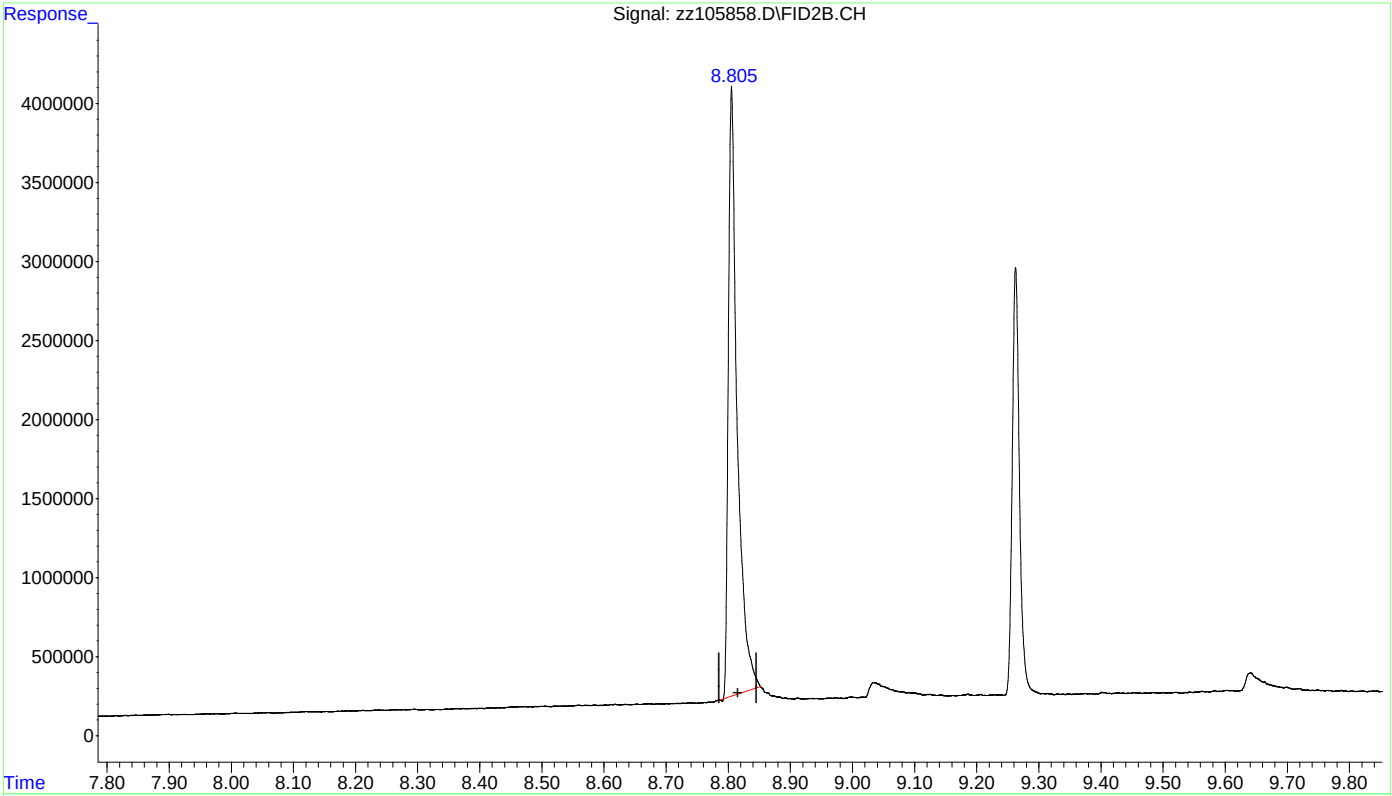
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.81	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:18 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.806min 21.960 PPM

response 38354038

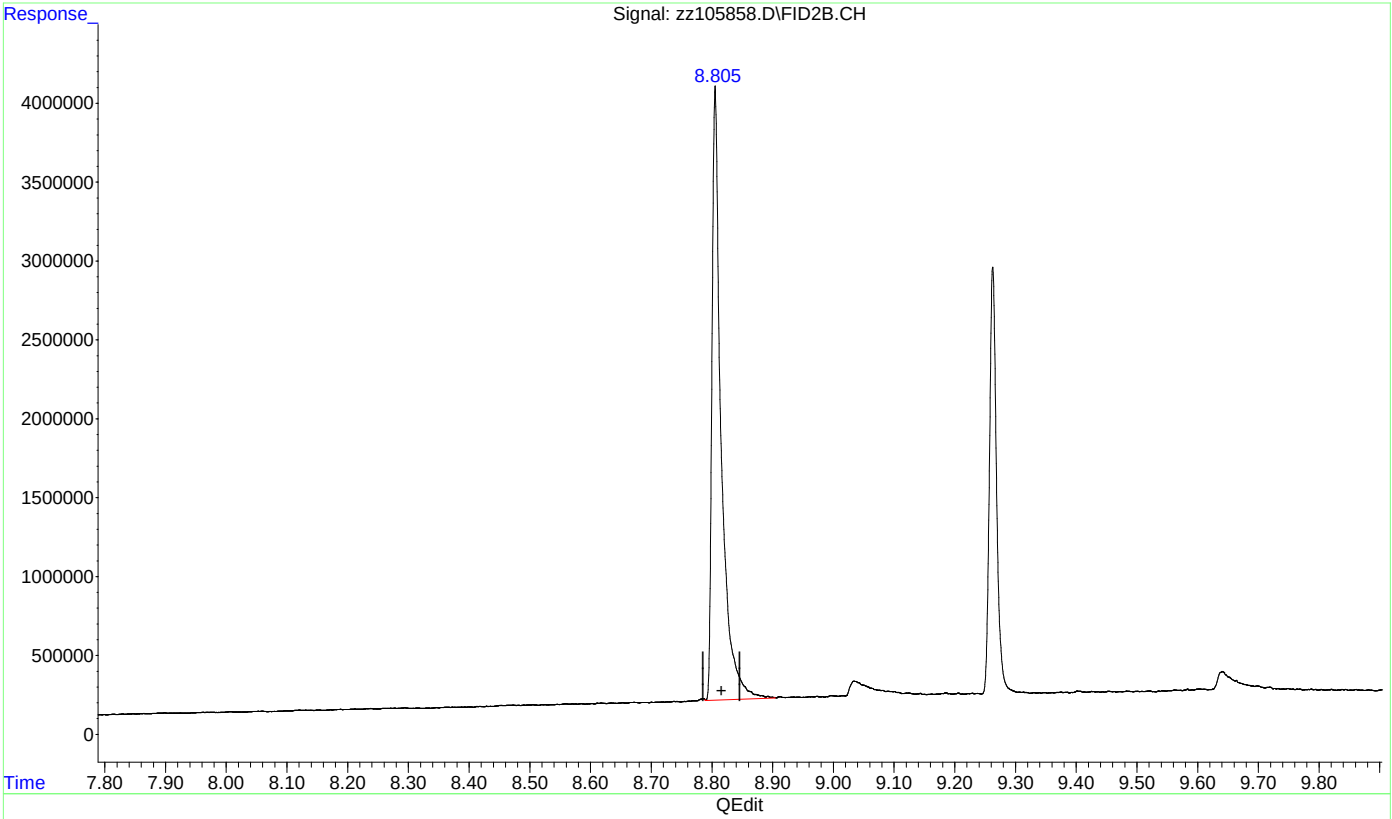
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:34:55 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:18 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.805min 23.591 PPM m

response 41203021

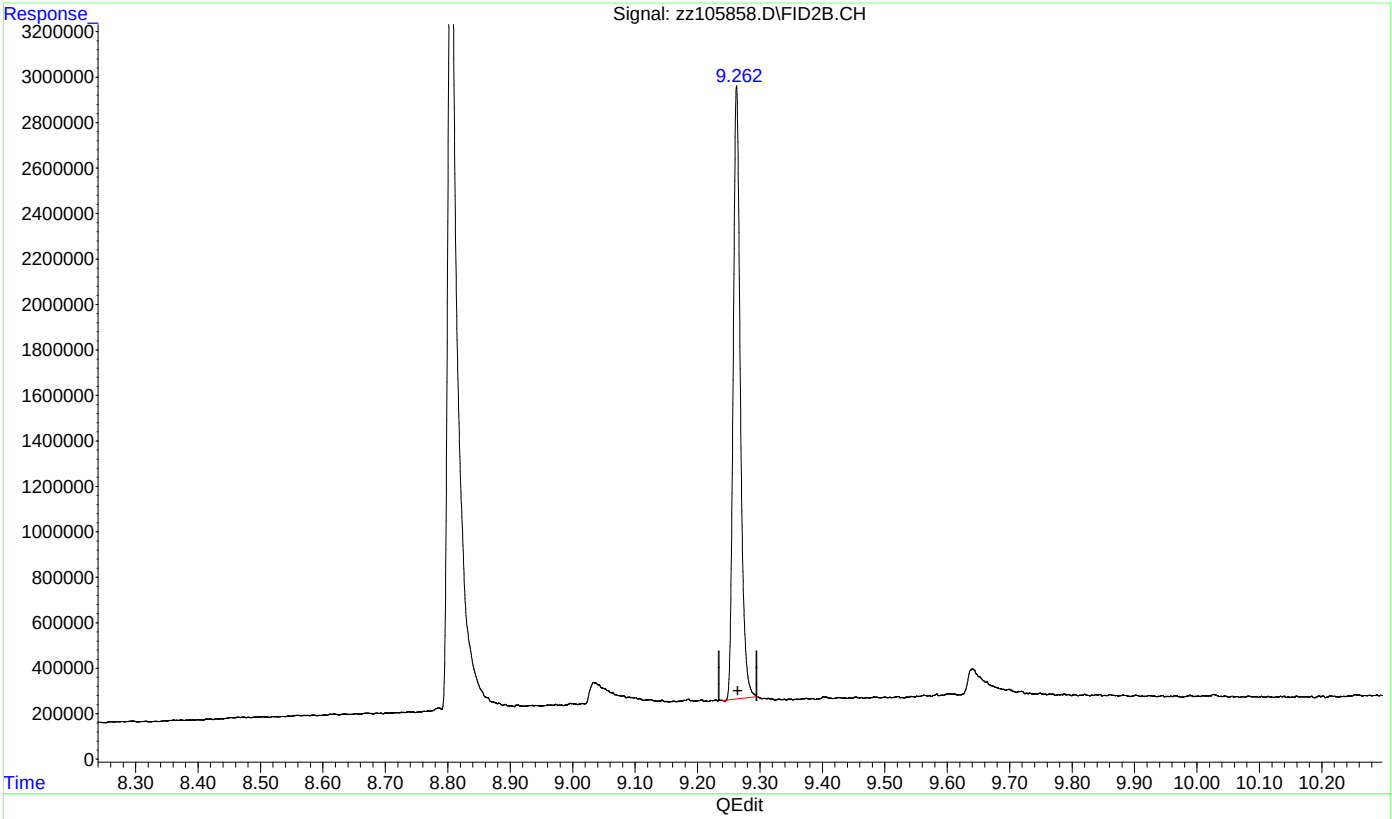
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:03 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:18 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 12.840 PPM

response 21495939

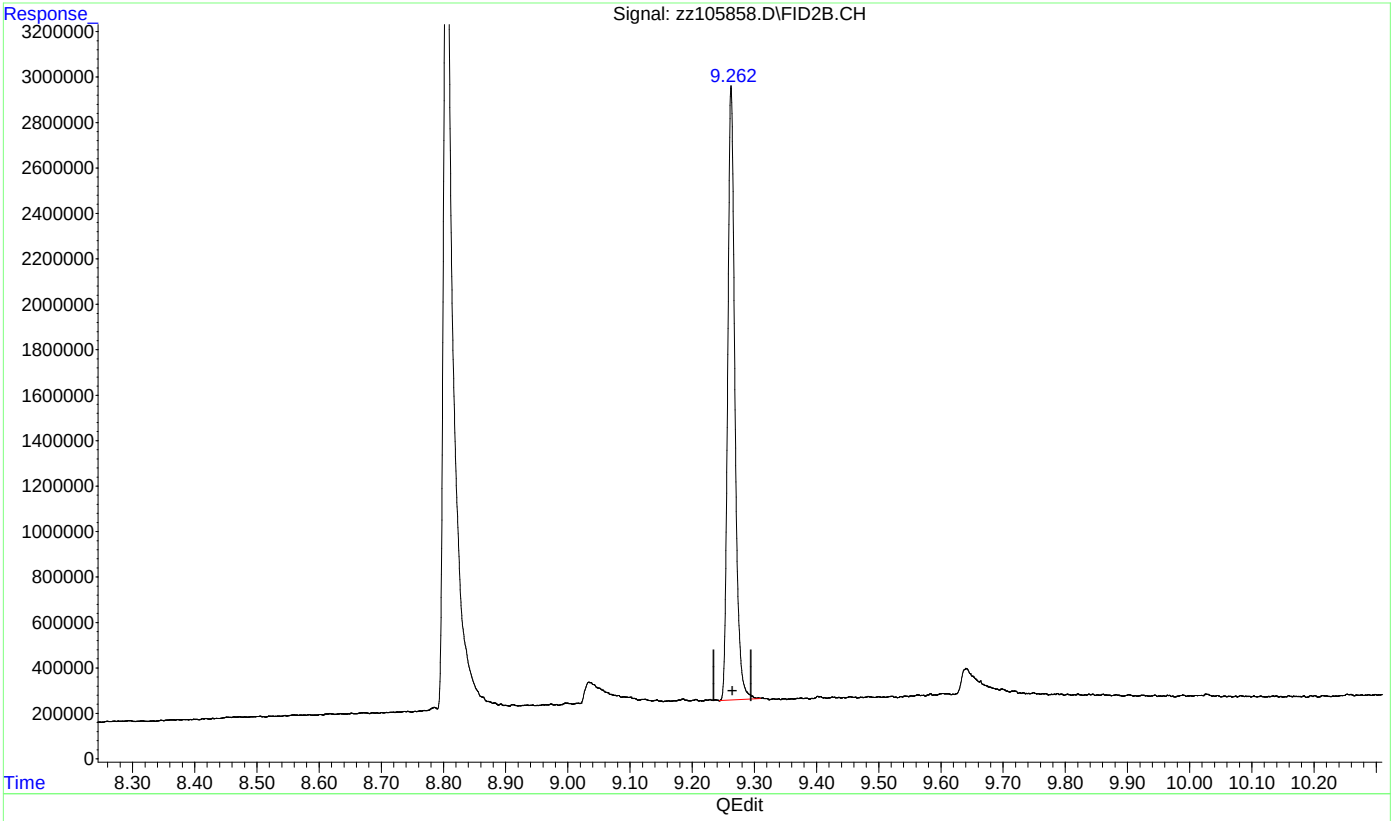
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:06 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105858.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:25 pm
Operator : thomasl
Sample : jd53489-1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 74 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:18 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.262min 13.014 PPM m

response 21788570

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:13 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:36:42 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.808	34157752	19.557	PPM	m
Spiked Amount 50.000		Recovery = 39.11%			
7) S 5a-ANDROSTANE	9.262	15238506	9.102	PPM	m
Spiked Amount 50.000		Recovery = 18.20%			
Target Compounds					
1) H TPH-DRO	7.830	419413204	293.833	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

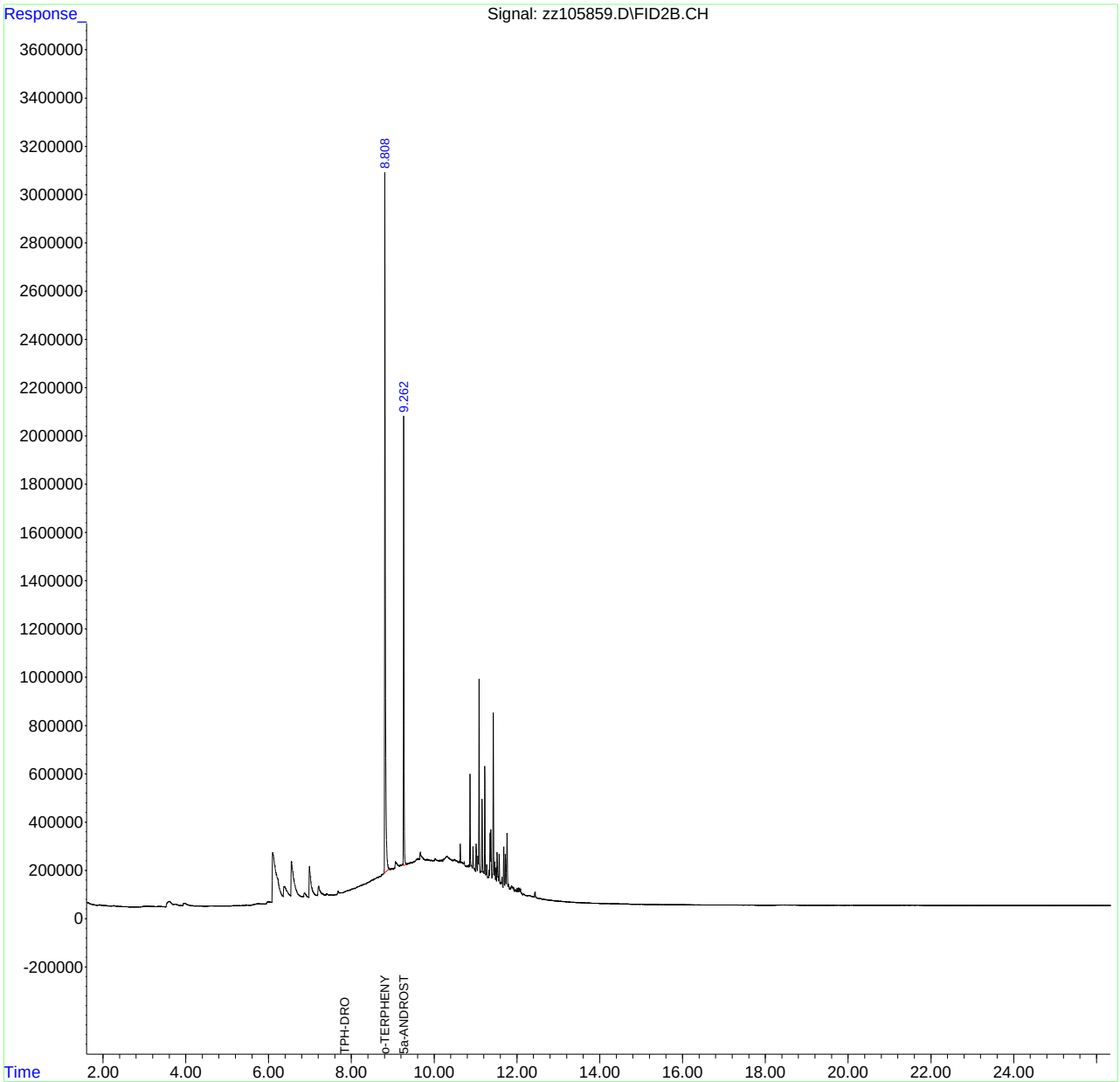
9.1.5
9

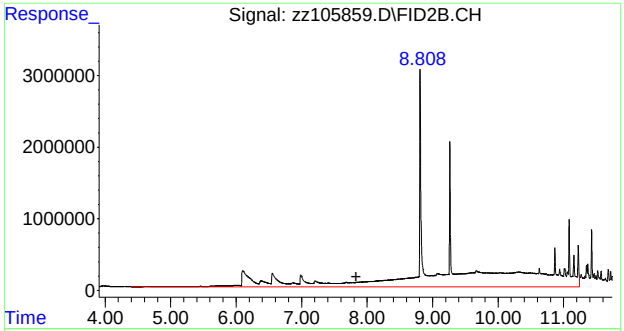
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:36:42 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

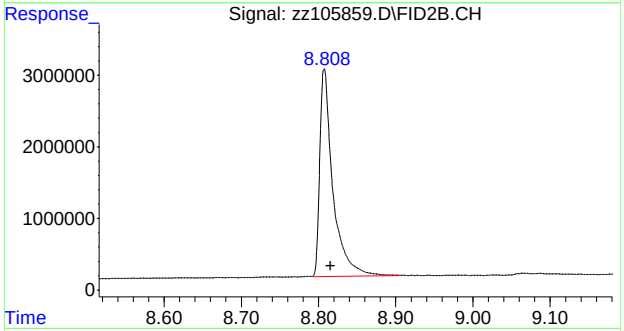
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





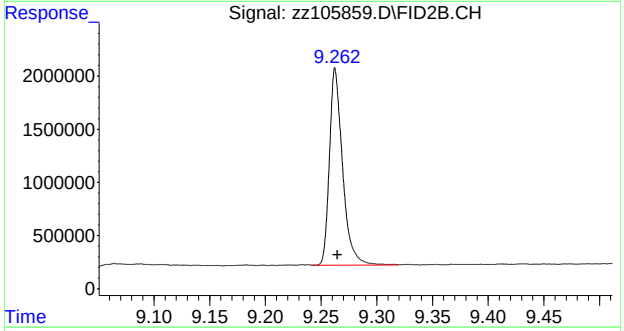
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 419413204
Conc: 293.83 PPM



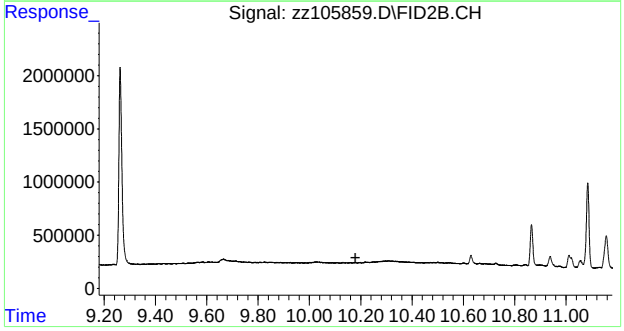
#6 o-TERPHENYL

R.T.: 8.808 min
Delta R.T.: -0.008 min
Response: 34157752
Conc: 19.56 PPM m



#7 5a-ANDROSTANE

R.T.: 9.262 min
Delta R.T.: -0.002 min
Response: 15238506
Conc: 9.10 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: JD53489-2
Lab FileID: ZZ105859.D
Injection Time: 10/16/22 15:59
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

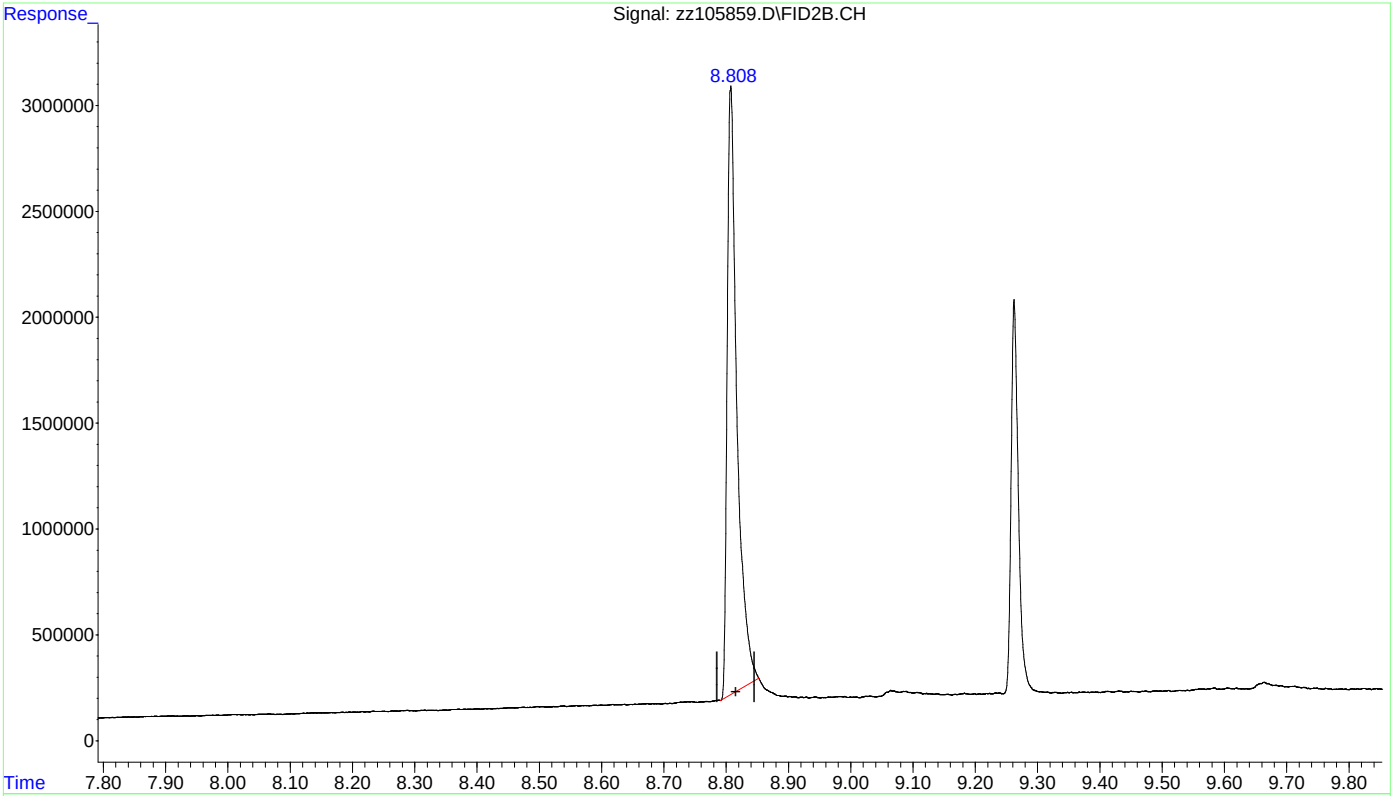
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.81	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:21 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.808min 17.999 PPM

response 31435757

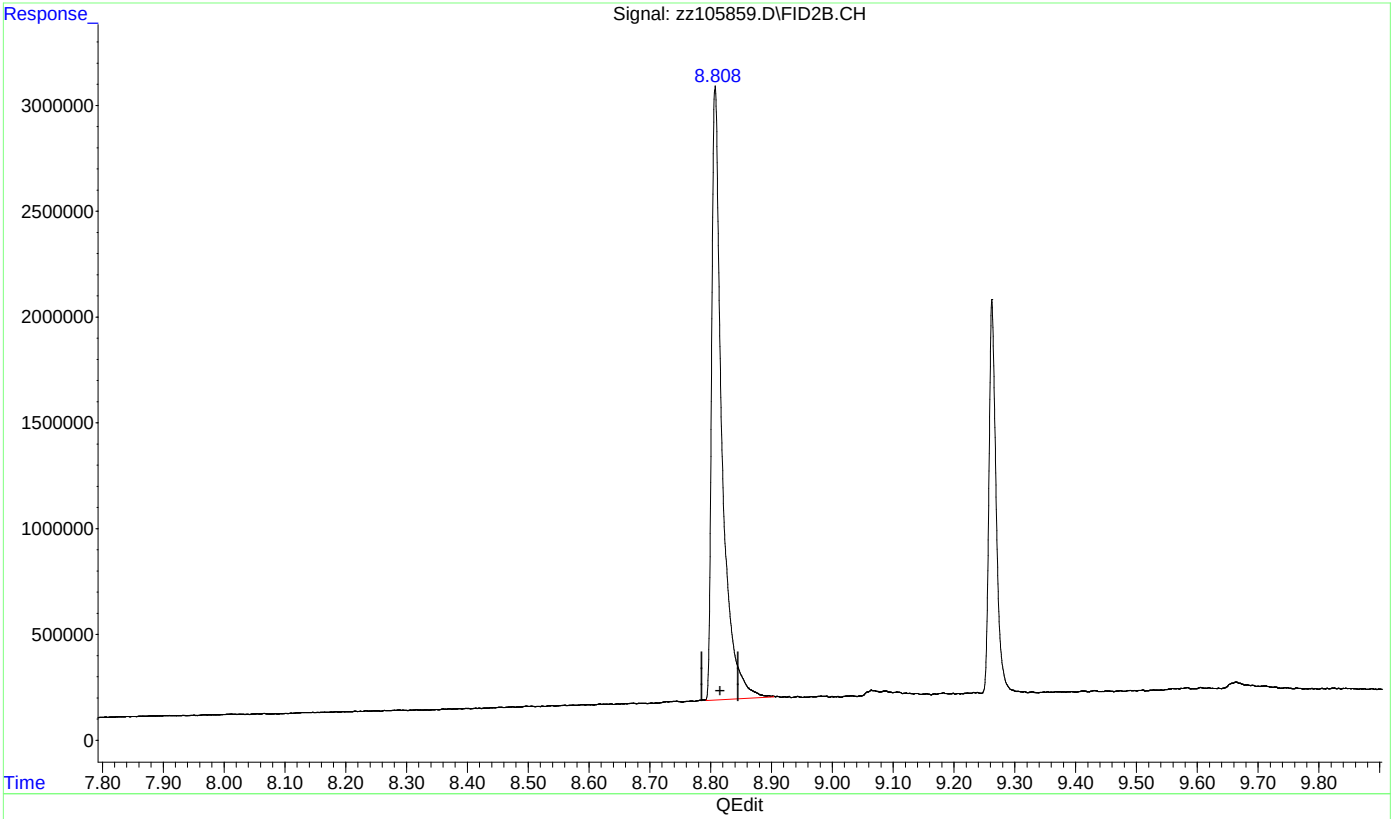
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:47 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:21 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.808min 19.557 PPM m

response 34157752

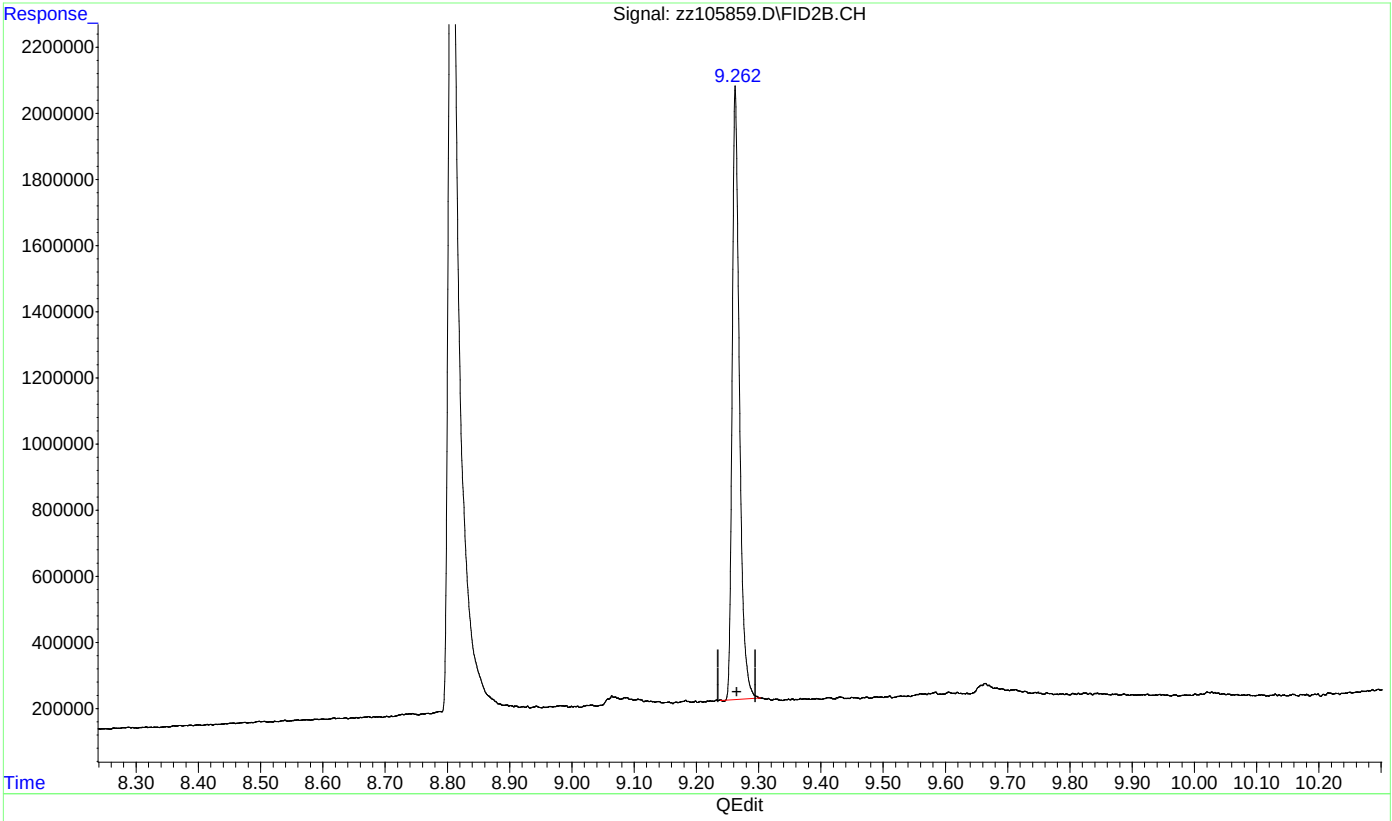
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:53 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:21 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 8.923 PPM

response 14939300

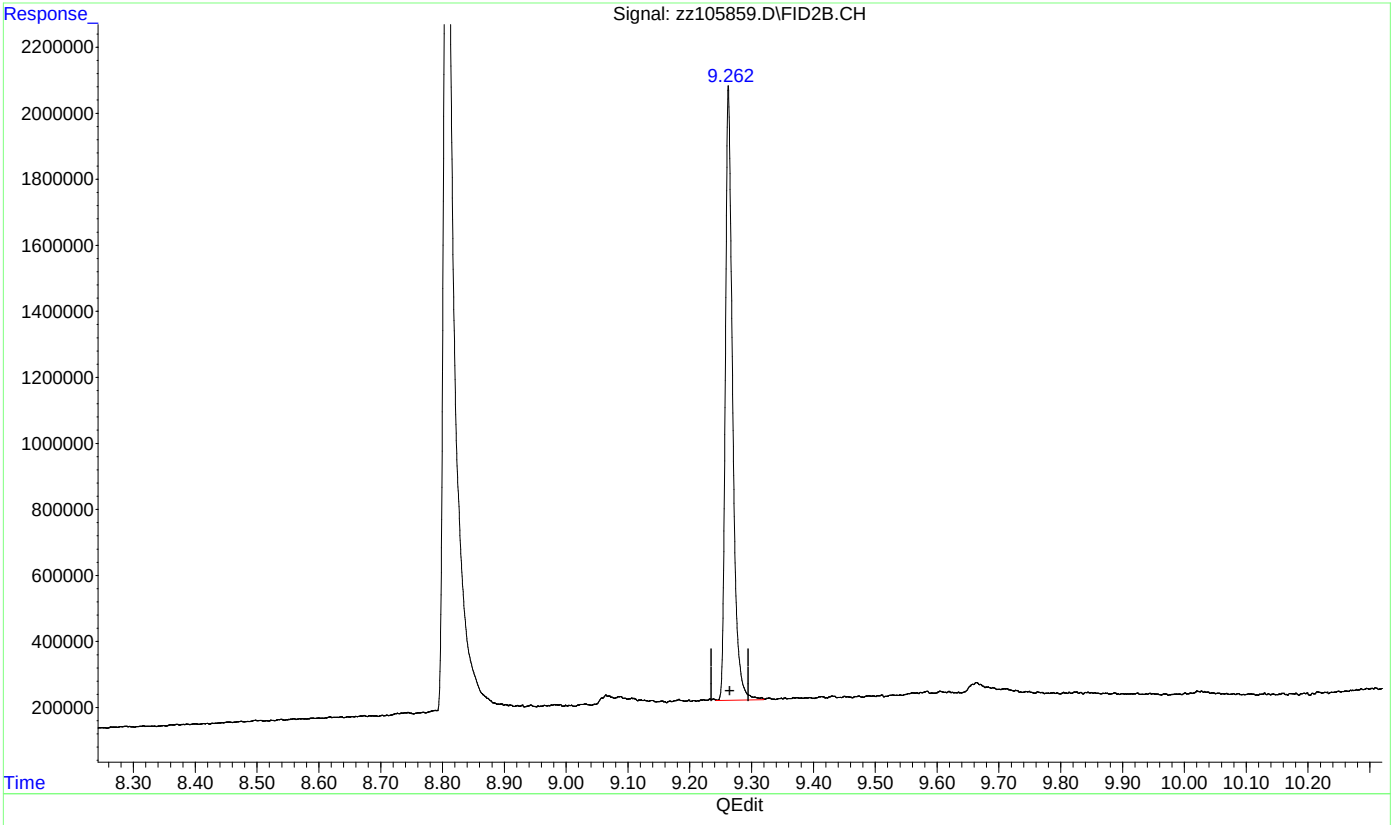
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:35:55 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105859.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 3:59 pm
Operator : thomasl
Sample : jd53489-2
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 75 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:21 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.262min 9.102 PPM m

response 15238506

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:36:01 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105860.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 4:33 pm
Operator : thomasl
Sample : jd53489-3
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:37:39 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.804	43865006	25.115	PPM	m
Spiked Amount 50.000		Recovery = 50.23%			
7) S 5a-ANDROSTANE	9.261	23308985	13.923	PPM	
Spiked Amount 50.000		Recovery = 27.85%			
Target Compounds					
1) H TPH-DRO	7.830	514268088	360.286	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

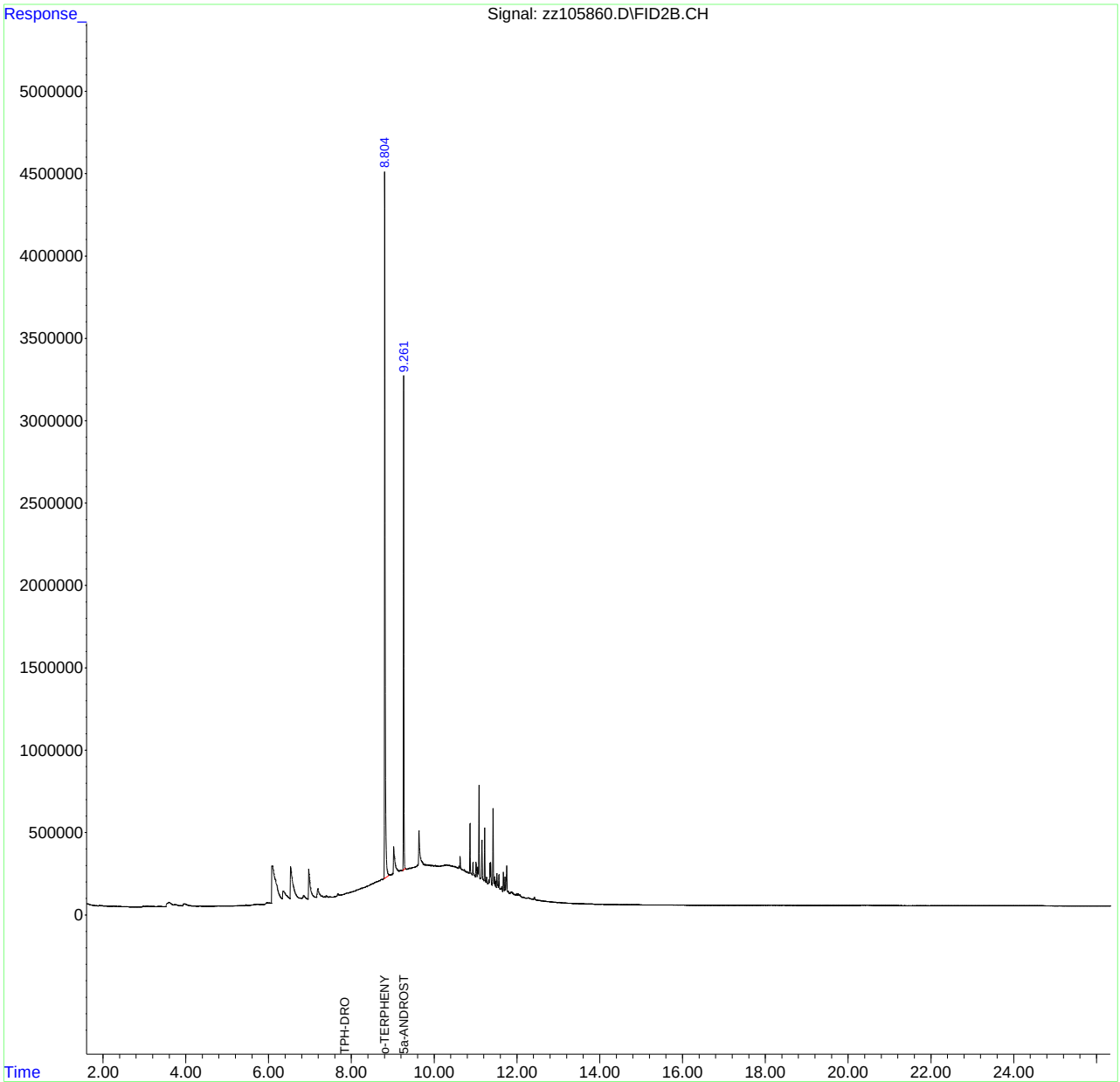
9.1.6

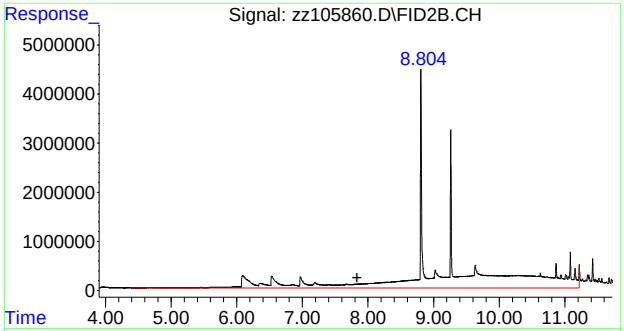
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105860.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 4:33 pm
Operator : thomasl
Sample : jd53489-3
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:37:39 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

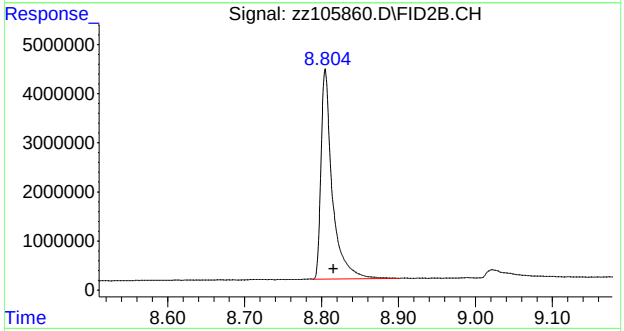
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





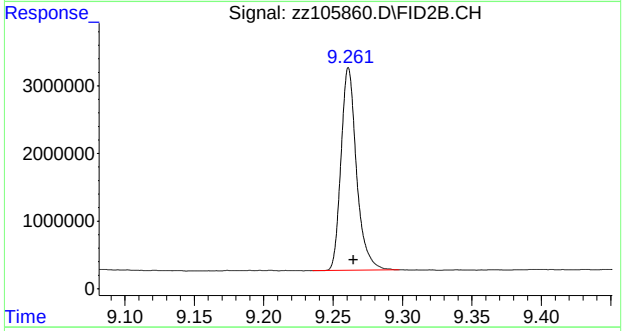
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 514268088
Conc: 360.29 PPM



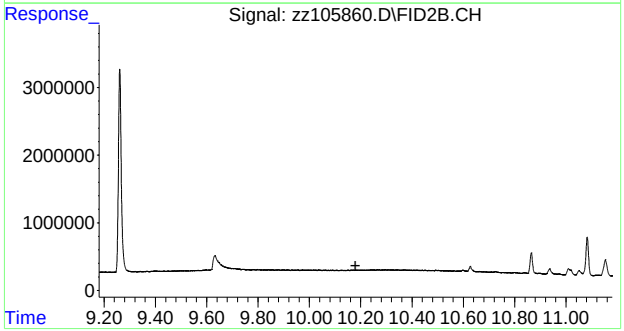
#6 o-TERPHENYL

R.T.: 8.804 min
Delta R.T.: -0.011 min
Response: 43865006
Conc: 25.12 PPM m



#7 5a-ANDROSTANE

R.T.: 9.261 min
Delta R.T.: -0.003 min
Response: 23308985
Conc: 13.92 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: JD53489-3
Lab FileID: ZZ105860.D
Injection Time: 10/16/22 16:33
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

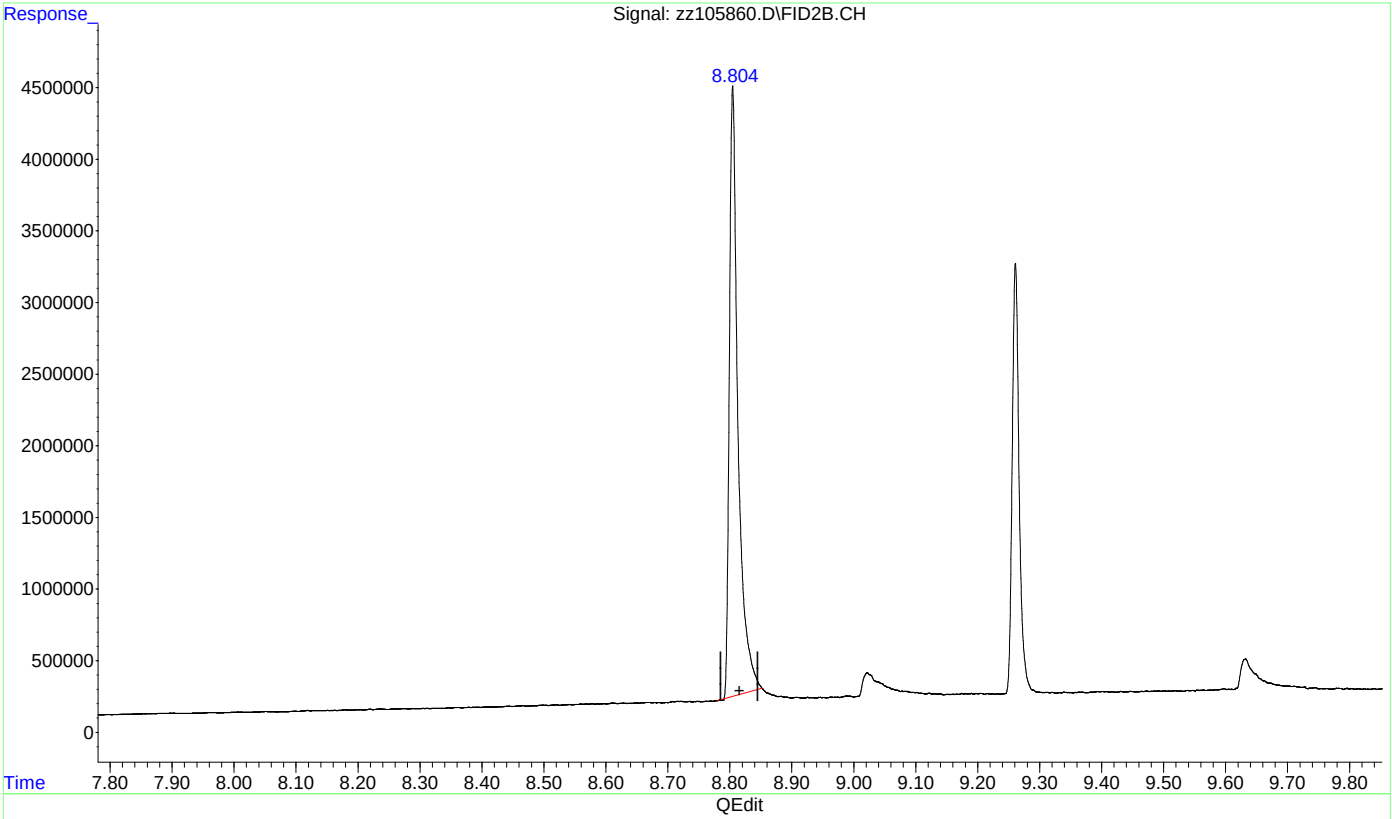
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.80	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105860.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 4:33 pm
Operator : thomasl
Sample : jd53489-3
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:24 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.805min 23.703 PPM

response 41397655

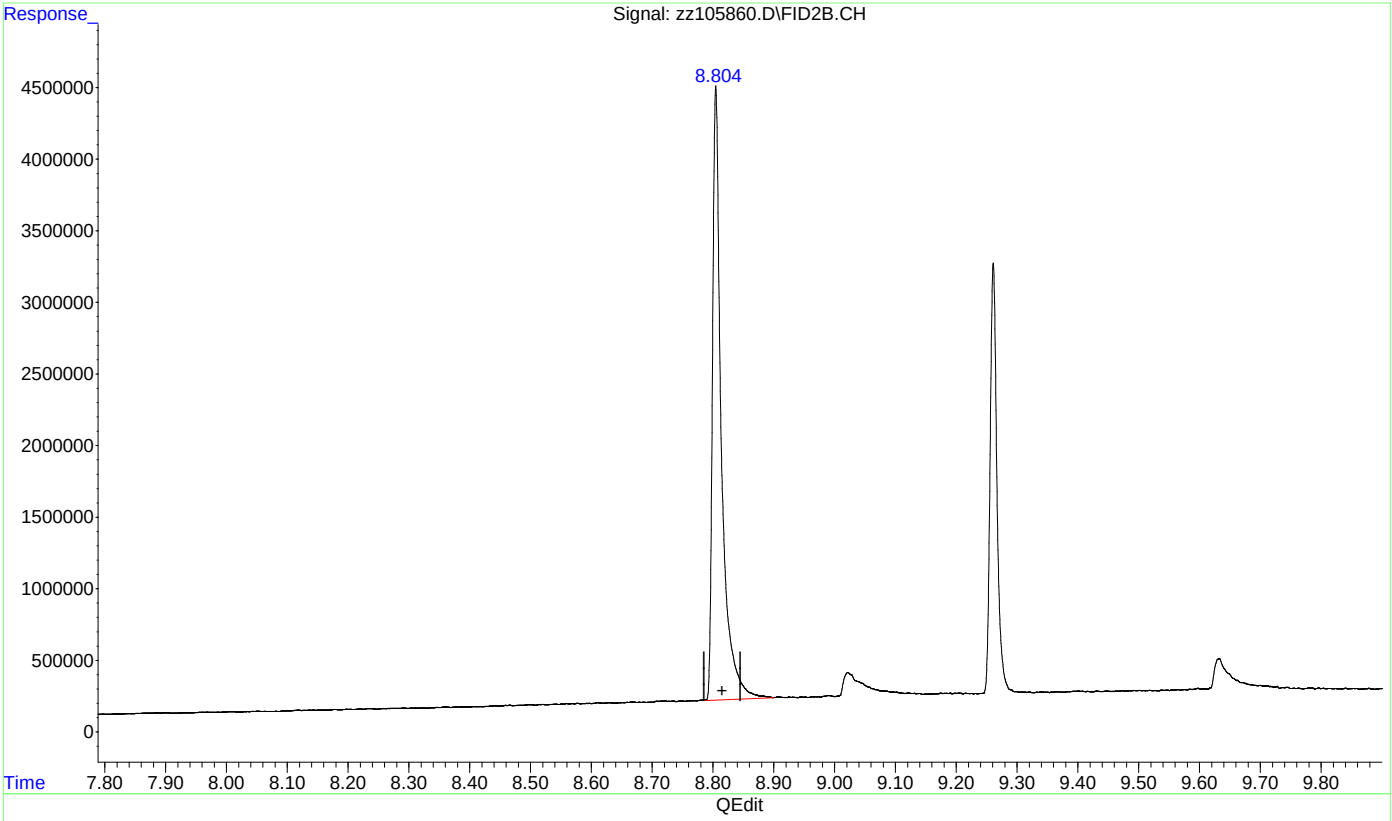
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:37:34 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105860.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 4:33 pm
Operator : thomasl
Sample : jd53489-3
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 76 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:24 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.804min 25.115 PPM m

response 43865006

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:37:44 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1504.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:32 pm
Operator : mahalial
Sample : op42474-mb1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:38:24 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.390	4.100	43226972	40753429	15.374m	16.776m
	Spiked Amount 40.000			Recovery =		38.44%	41.94%
51) S	Decachlor...	10.979	12.779	33896073	30517419	17.287	20.582
	Spiked Amount 40.000			Recovery =		43.22%	51.46%
	Target Compounds						

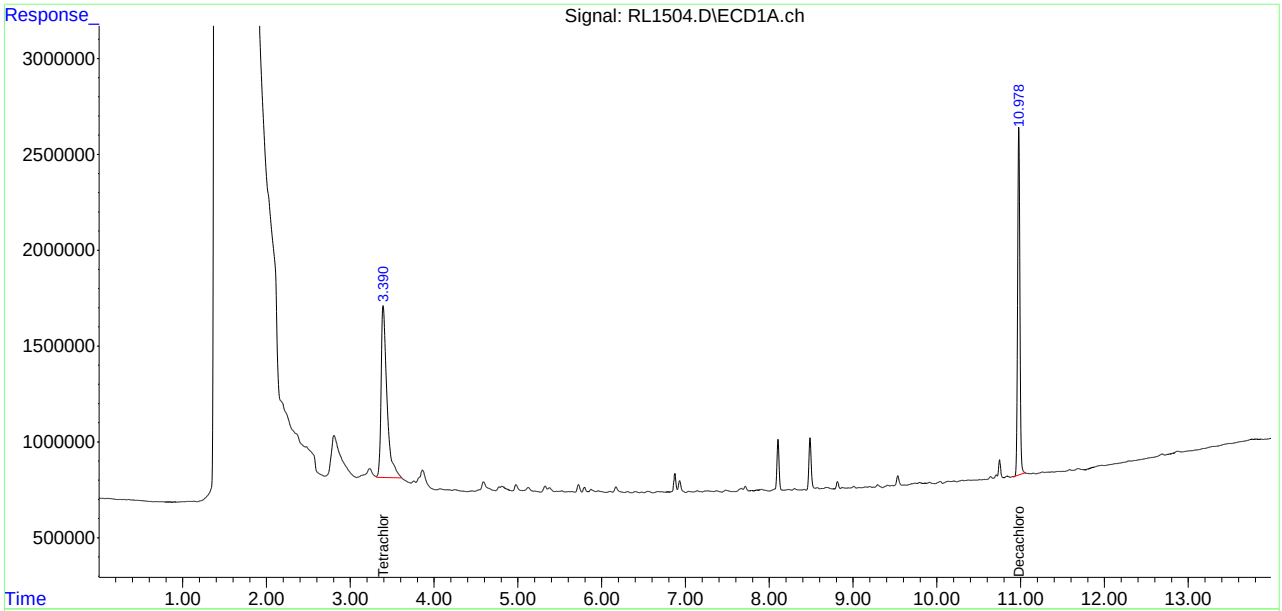
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

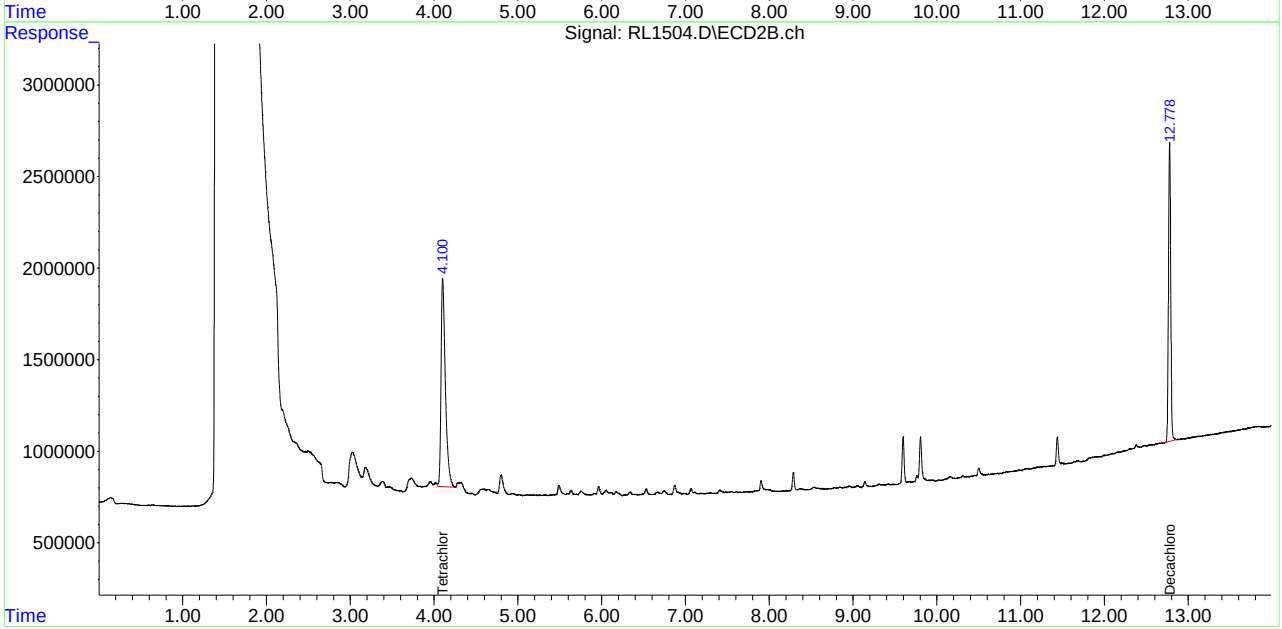
Quantitation Report (QT Reviewed)

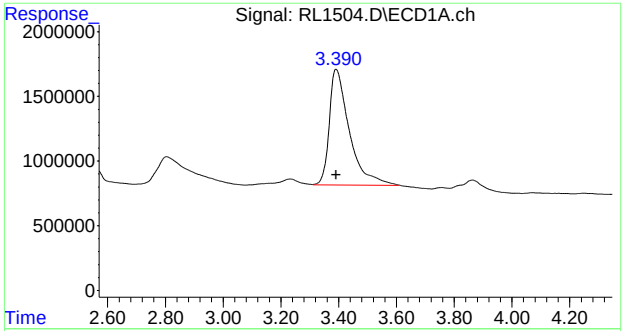
Data Path : C:\msdchem\1\data\grl24\
Data File : RL1504.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:32 pm
Operator : mahalial
Sample : op42474-mb1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:38:24 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

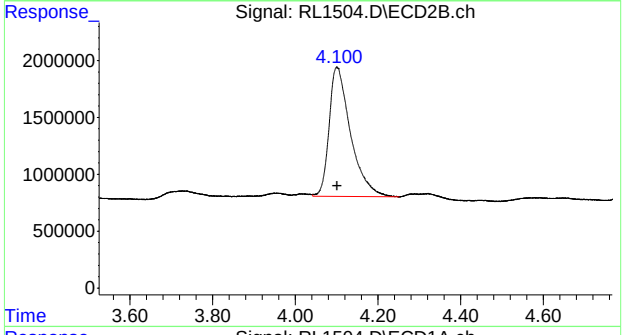






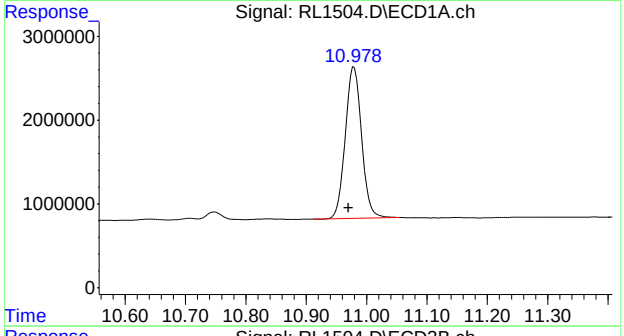
#1 Tetrachloro-m-xylene

R.T.: 3.390 min
Delta R.T.: 0.000 min
Response: 43226972
Conc: 15.37 ppb m



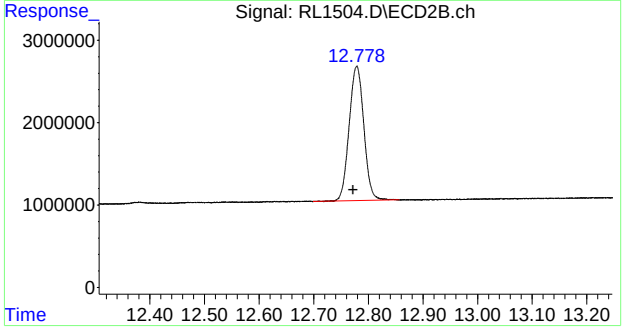
#1 Tetrachloro-m-xylene

R.T.: 4.100 min
Delta R.T.: -0.002 min
Response: 40753429
Conc: 16.78 ppb m



#51 Decachlorobiphenyl

R.T.: 10.979 min
Delta R.T.: 0.009 min
Response: 33896073
Conc: 17.29 ppb



#51 Decachlorobiphenyl

R.T.: 12.779 min
Delta R.T.: 0.007 min
Response: 30517419
Conc: 20.58 ppb

Manual Integration Approval Summary

Sample Number: OP42474-MB1
Lab FileID: RL1504.D
Injection Time: 10/17/22 16:32
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

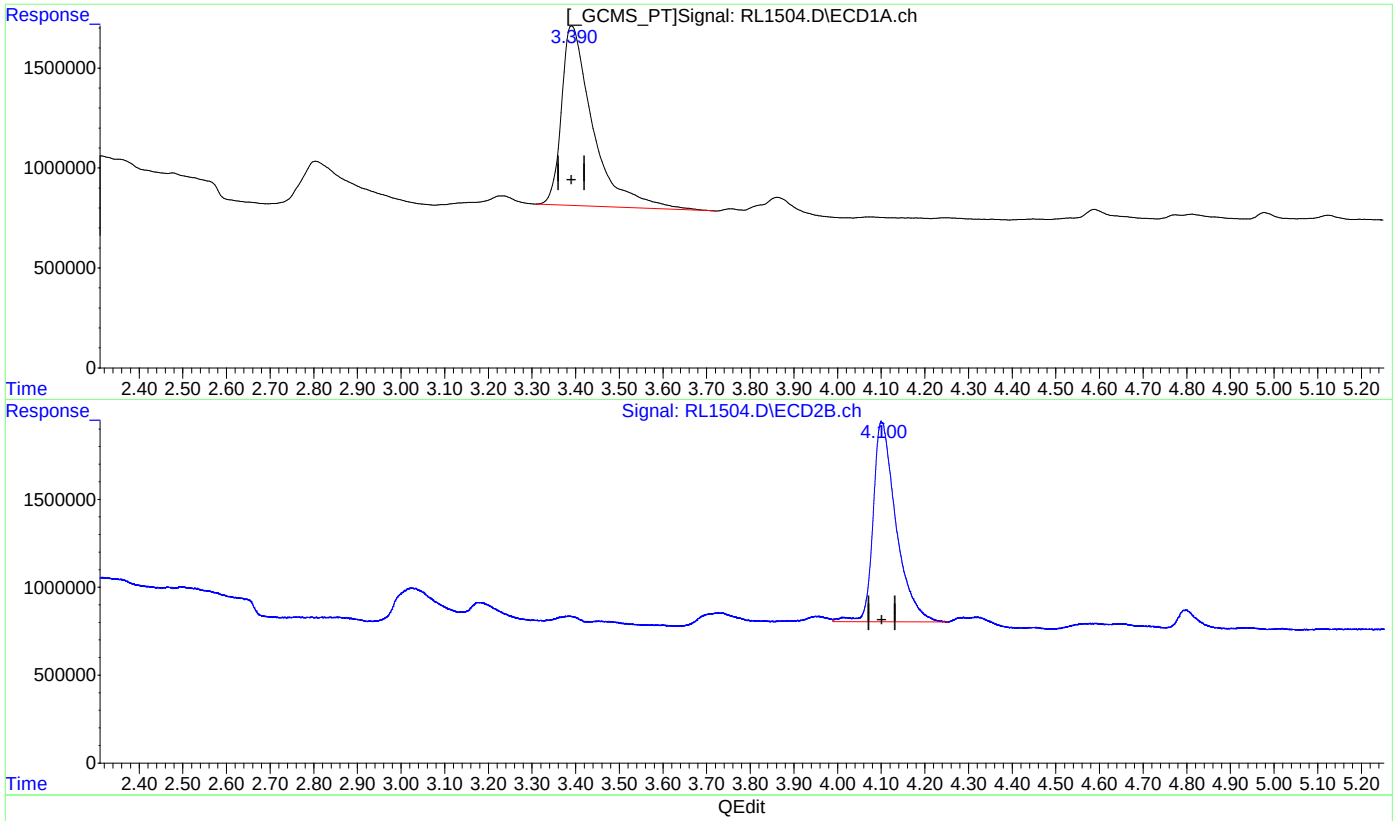
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.39	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	4.10	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1504.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:32 pm
Operator : mahalial
Sample : op42474-mb1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:24:57 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)

3.392min 16.019 ppb

response 45038903

(1) Tetrachloro-m-xylene #2 (S)

4.102min 17.141 ppb

response 41640055

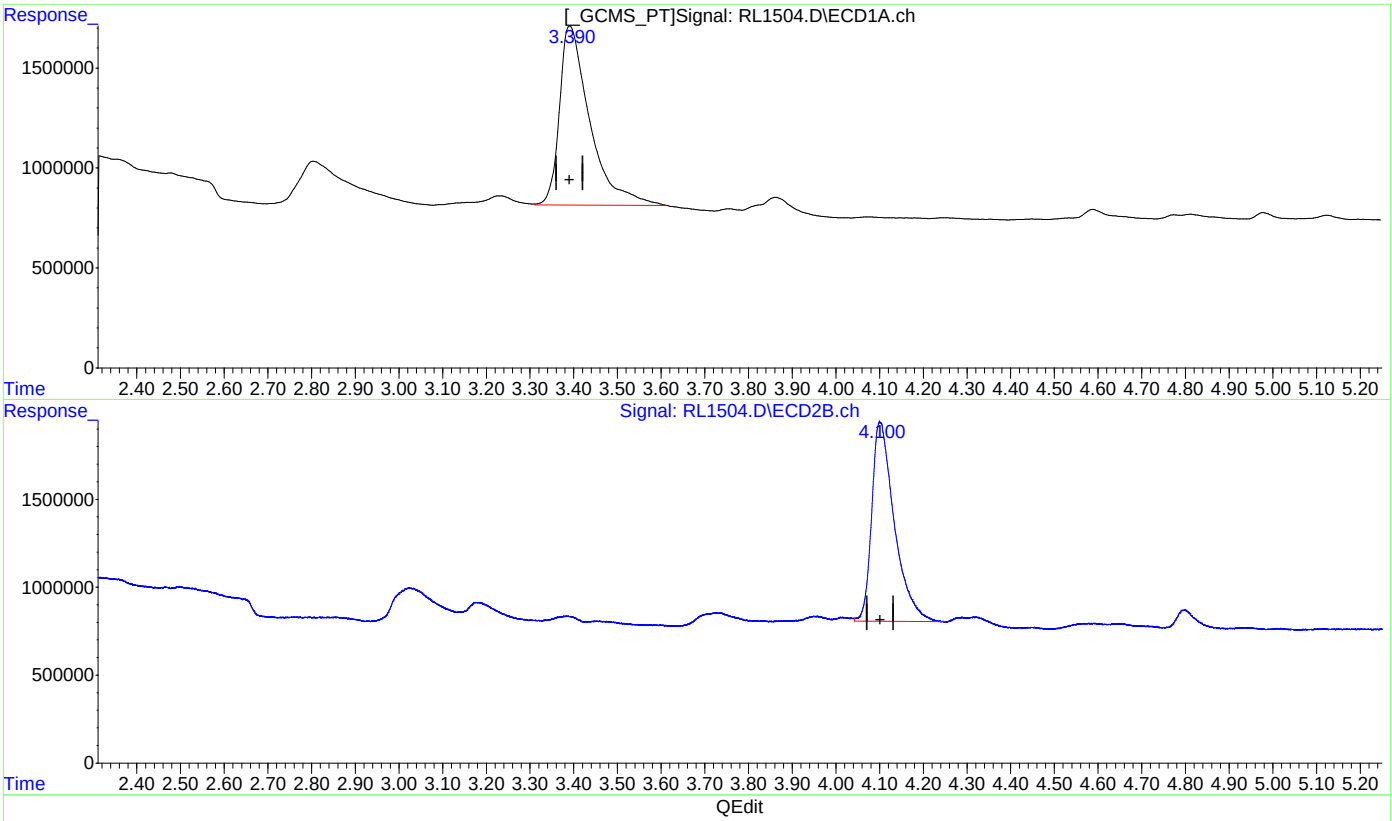
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:38:00 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1504.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:32 pm
Operator : mahalial
Sample : op42474-mb1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 25 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:24:57 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(1) Tetrachloro-m-xylene (S)

3.390min 15.374 ppb m

response 43226972

(1) Tetrachloro-m-xylene #2 (S)

4.100min 16.776 ppb m

response 40753429

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:38:12 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:32:16 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.808	54792689	31.372	PPM	m
Spiked Amount 50.000		Recovery = 62.74%			
7) S 5a-ANDROSTANE	9.263	40129469	23.970	PPM	m
Spiked Amount 50.000		Recovery = 47.94%			
Target Compounds					

(f)=RT Delta > 1/2 Window (m)=manual int.

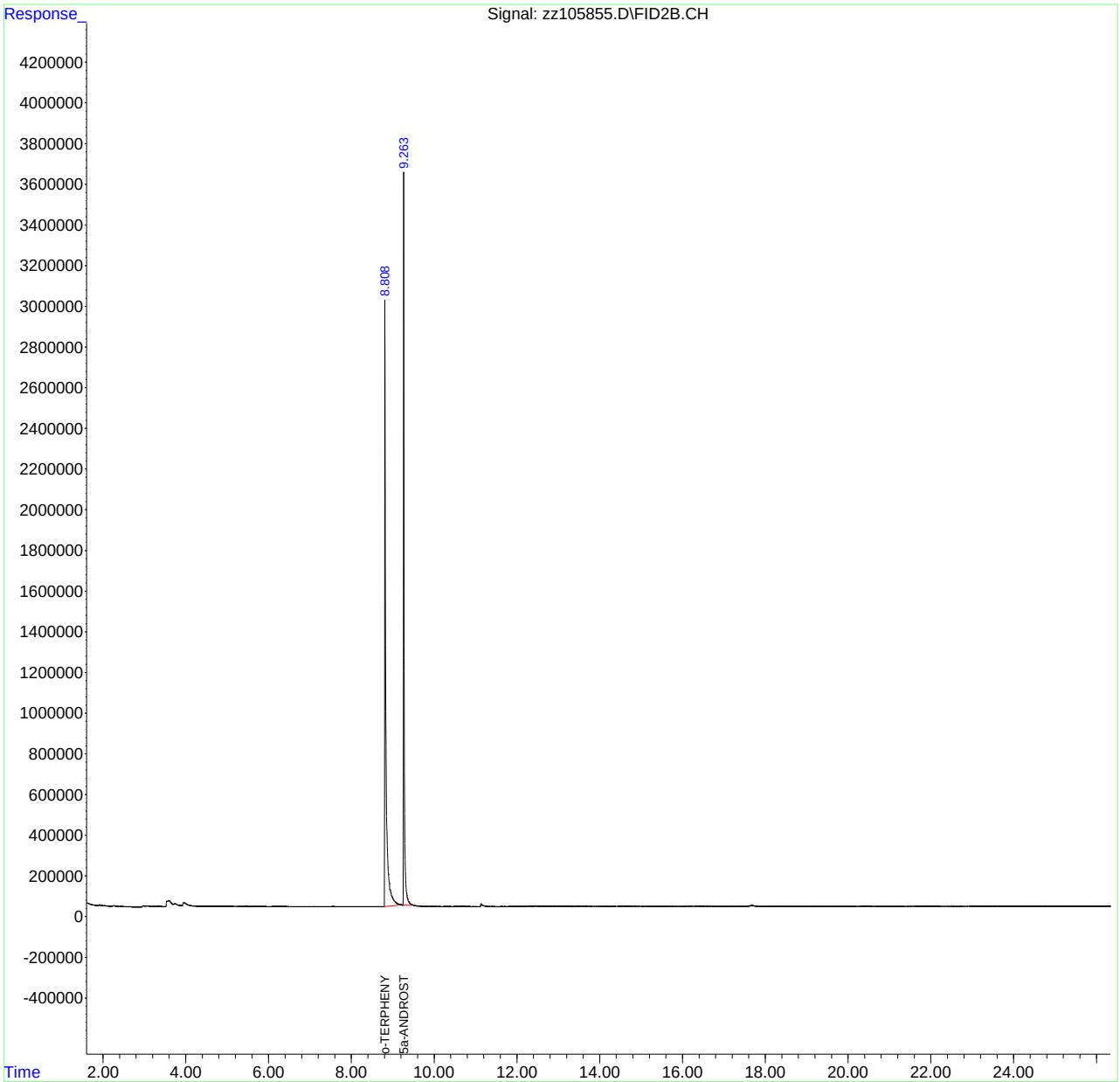
9.2.2
9

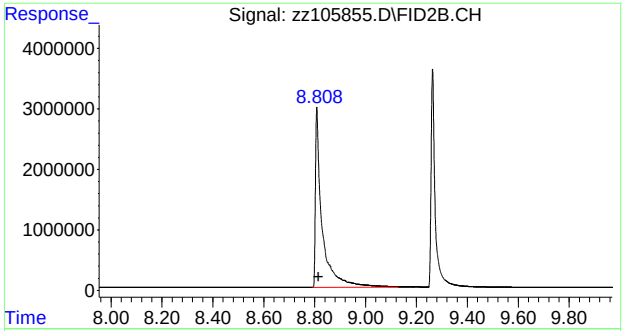
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:32:16 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

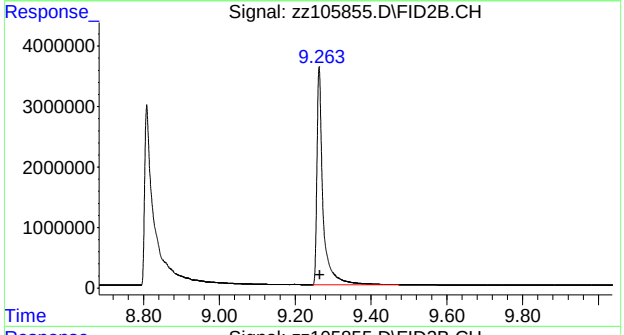
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





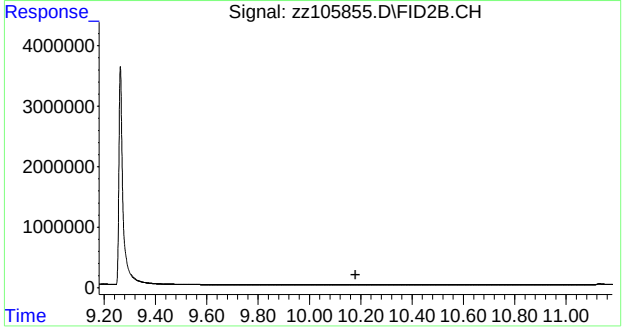
#6 o-TERPHENYL

R.T.:	8.808 min
Delta R.T.:	-0.007 min
Response:	54792689
Conc:	31.37 PPM m



#7 5a-ANDROSTANE

R.T.:	9.263 min
Delta R.T.:	-0.002 min
Response:	40129469
Conc:	23.97 PPM m



#8 TETRACOSANE-d50

R.T.:	0.000 min
Exp R.T. :	10.180 min
Response:	0
Conc:	N.D.

Manual Integration Approval Summary

Sample Number: OP42470-MB1
Lab FileID: ZZ105855.D
Injection Time: 10/16/22 13:44
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

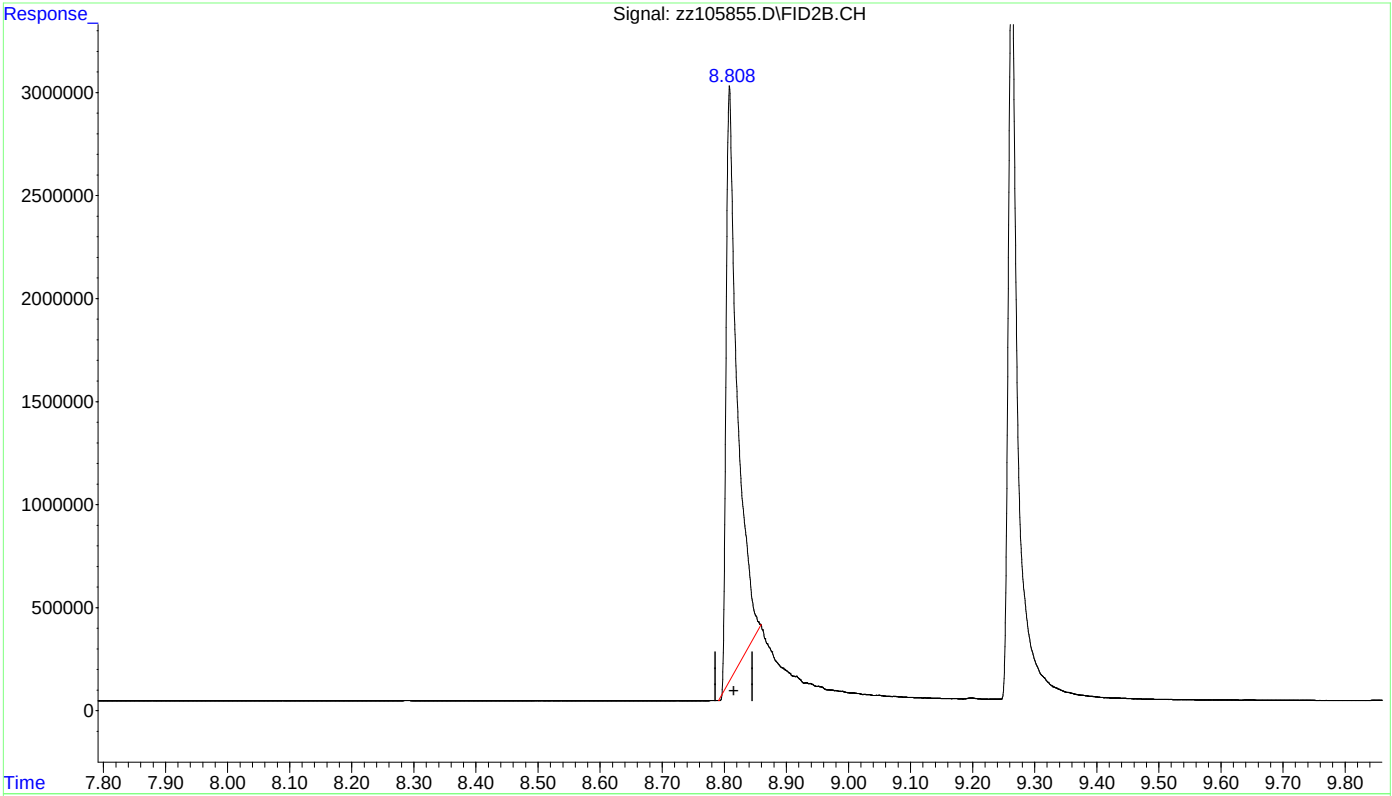
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.81	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:08 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.809min 20.533 PPM

response 35861900

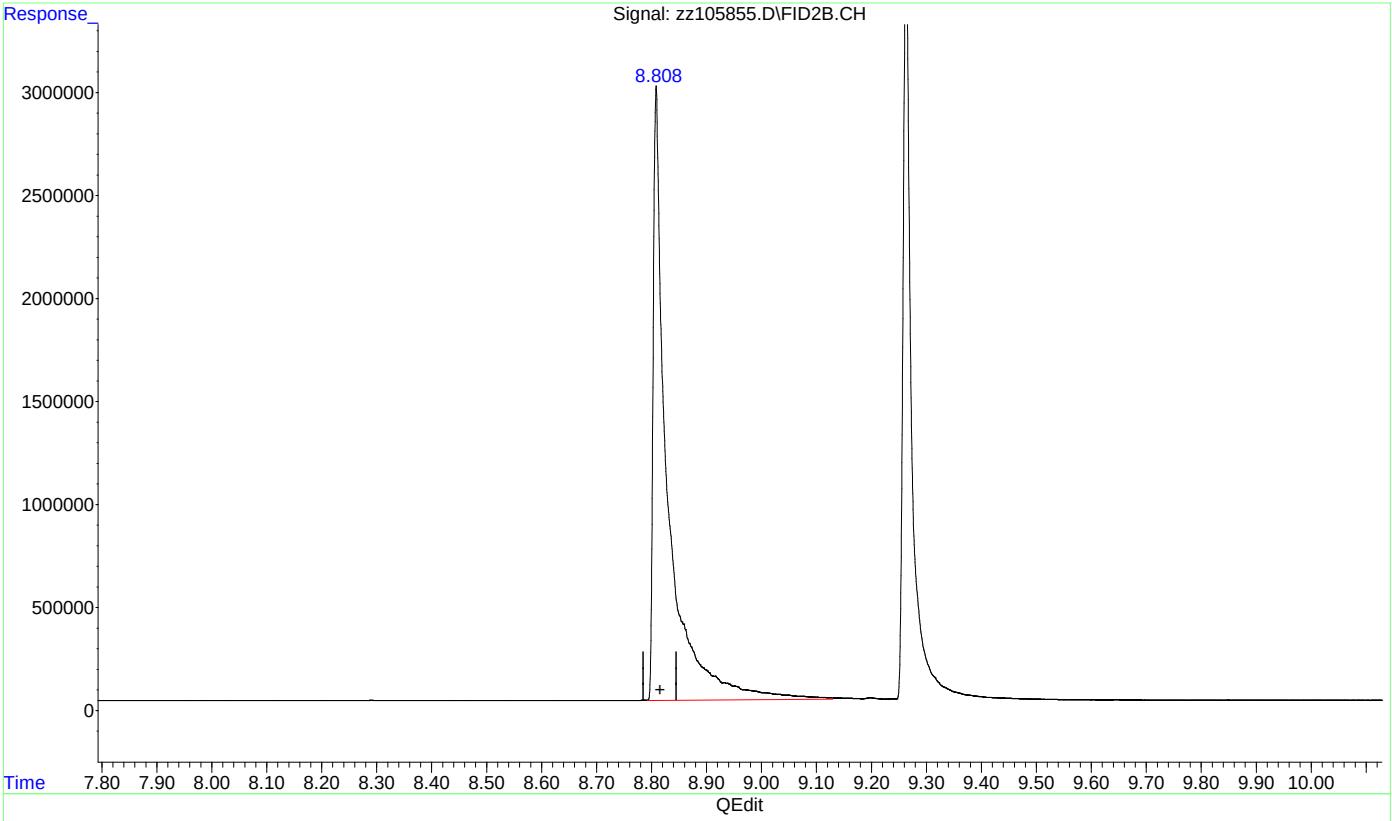
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:31:48 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:08 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.808min 31.372 PPM m

response 54792689

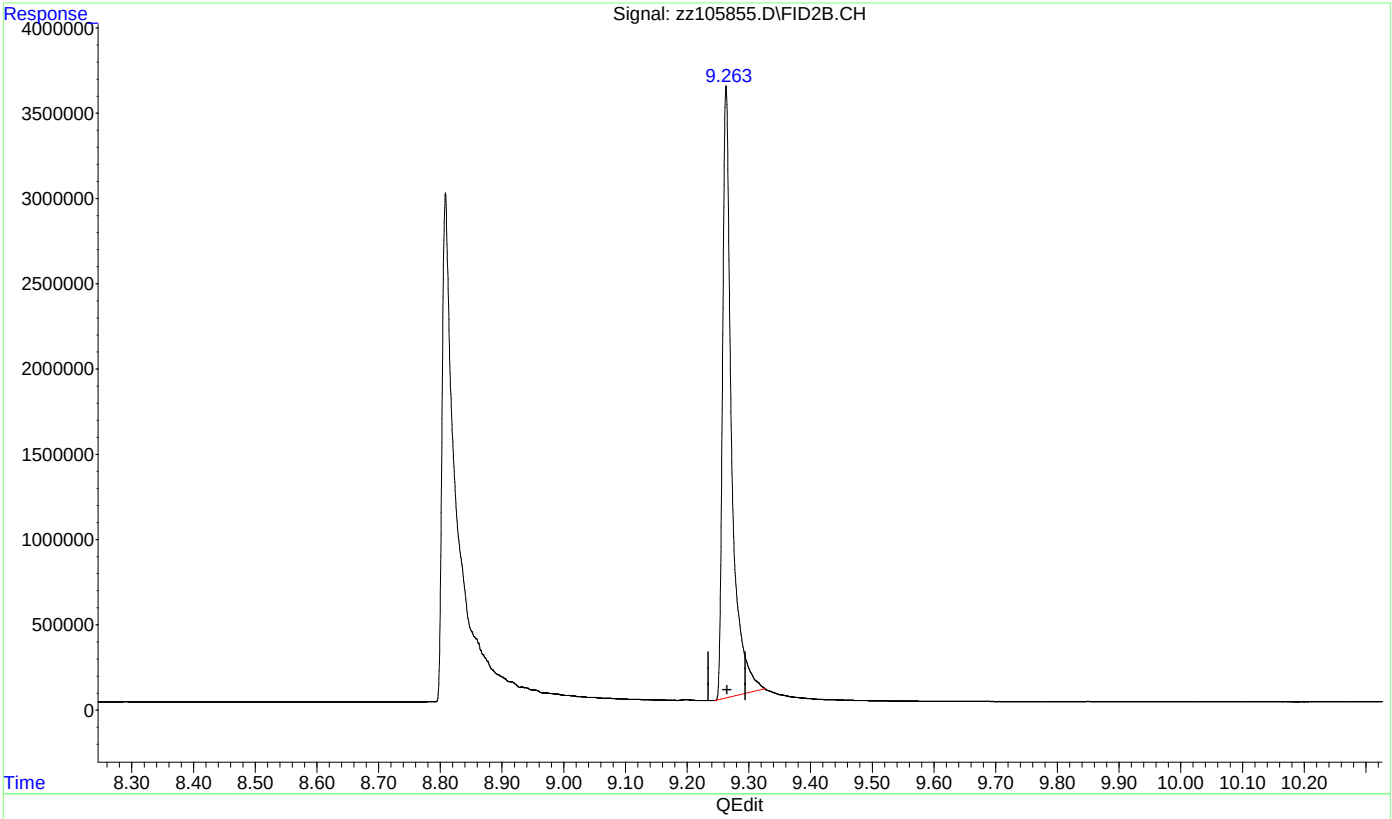
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:05 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:08 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 21.973 PPM

response 36787288

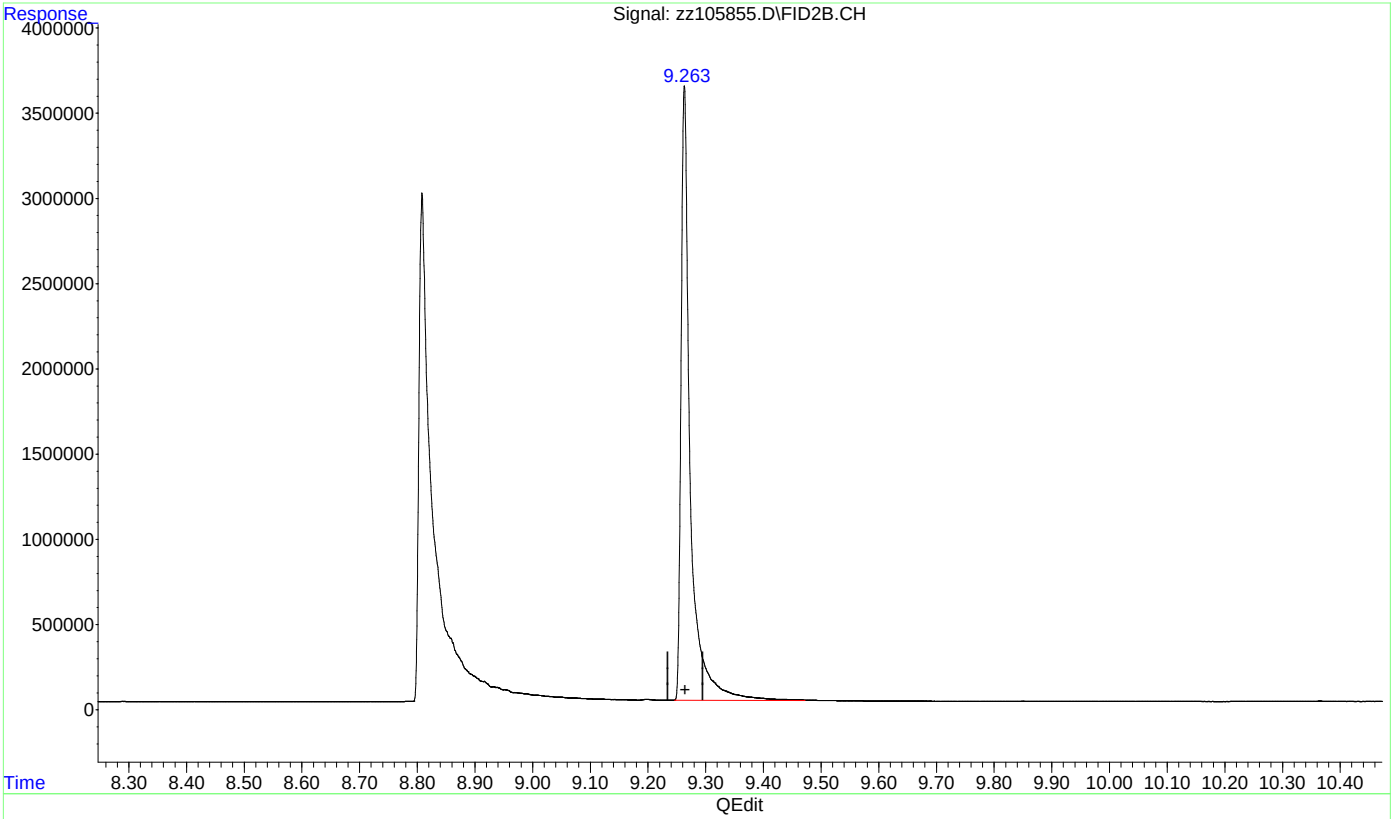
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:07 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105855.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:44 pm
Operator : thomasl
Sample : op42470-mb1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 71 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:08 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 23.970 PPM m

response 40129469

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:22 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:39:33 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.391	4.100	54641720	55780781	19.434m	22.962m
	Spiked Amount 40.000			Recovery	=	48.59%	57.40%
51) S	Decachlor...	10.978	12.778	37025290	32754247	18.883m	22.091
	Spiked Amount 40.000			Recovery	=	47.21%	55.23%
	Target Compounds						
41)	AR1016-A	3.818	4.802	7605102	9161029	132.733	204.933 #
42)	AR1016-B	4.266	5.392	12498758	11906916	120.448	126.722
43)	AR1016-C	4.868	6.055	25264966	22660139	114.818	125.753
44)	AR1016-D	5.048	6.253	10119373	8761820	120.946	120.601
45)	AR1016-E	5.595	6.934	10946670	7374863	125.546	132.261
46)	AR1260-A	7.668	9.058	20999010	15271224	134.068	144.215
47)	AR1260-B	8.223	9.720	12773099	11840667	134.890	145.180
48)	AR1260-C	8.571	10.165	13929093	13388865	131.269	143.079
49)	AR1260-D	9.008	10.510	26760602	25277988	122.674m	134.788

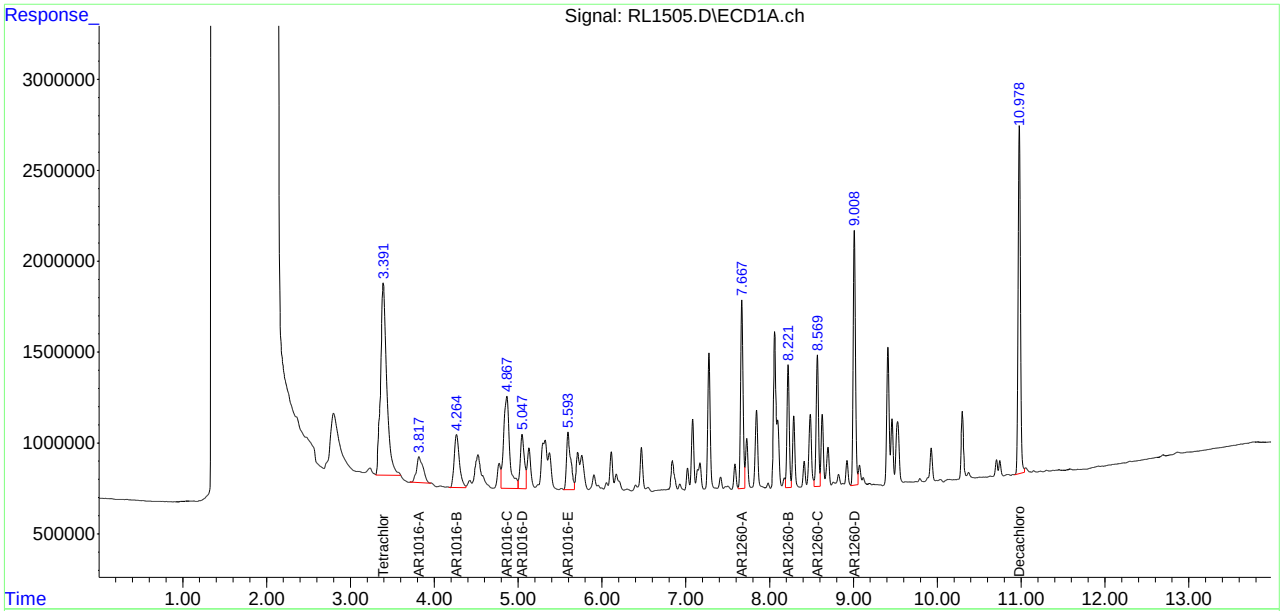
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

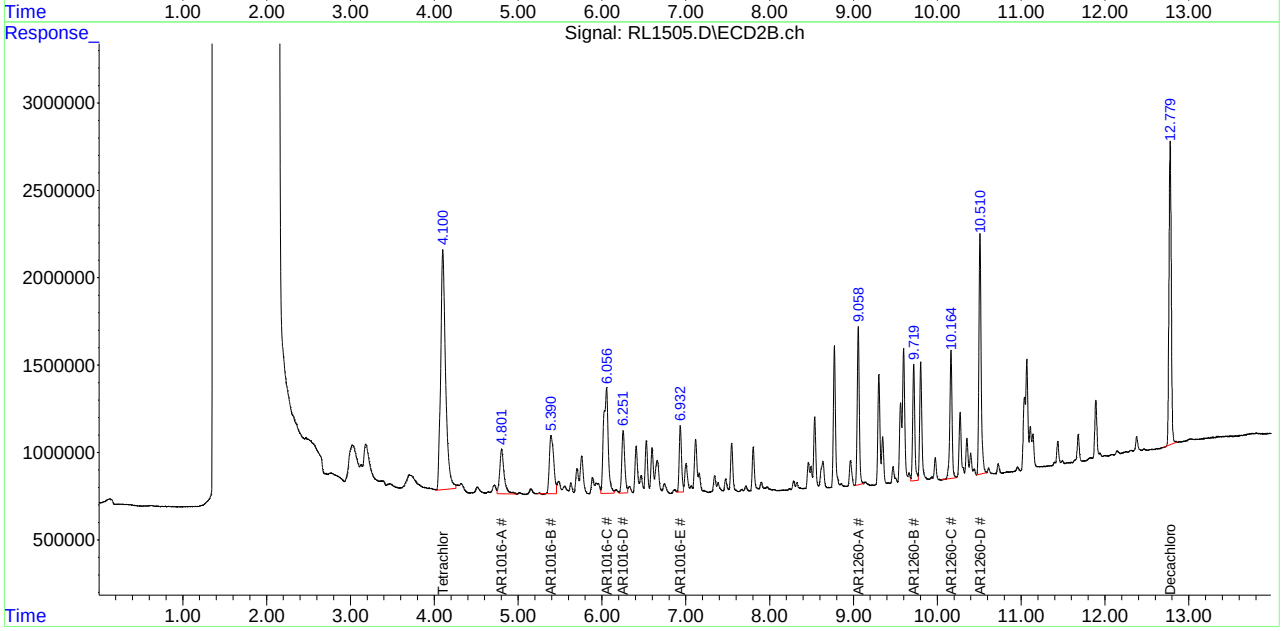
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:39:33 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: OP42474-BS1
Lab FileID: RL1505.D
Injection Time: 10/17/22 16:48
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

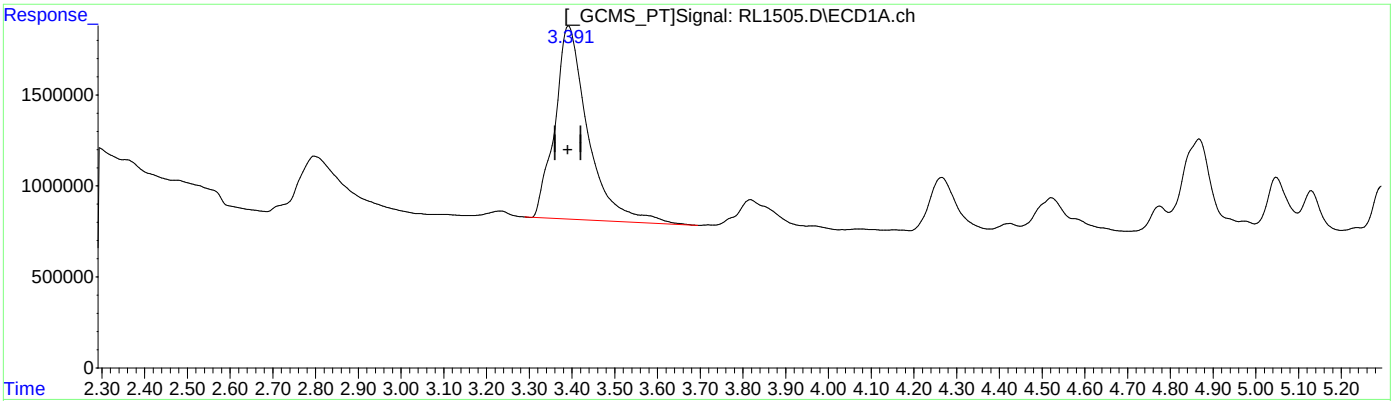
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	1	3.39	Poorly defined baseline
Tetrachloro-m-xylene	877-09-8	2	4.10	Poorly defined baseline
AR1260-D		1	9.01	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	1	10.98	Poorly defined baseline

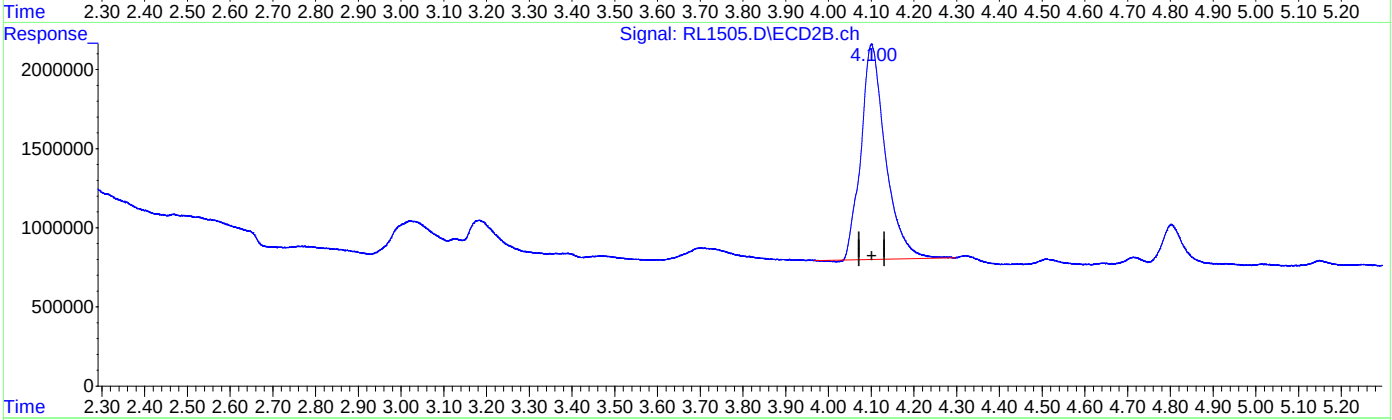
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.392min 20.358 ppb

response 57238977

(1) Tetrachloro-m-xylene #2 (S)

4.101min 22.234 ppb

response 54013055

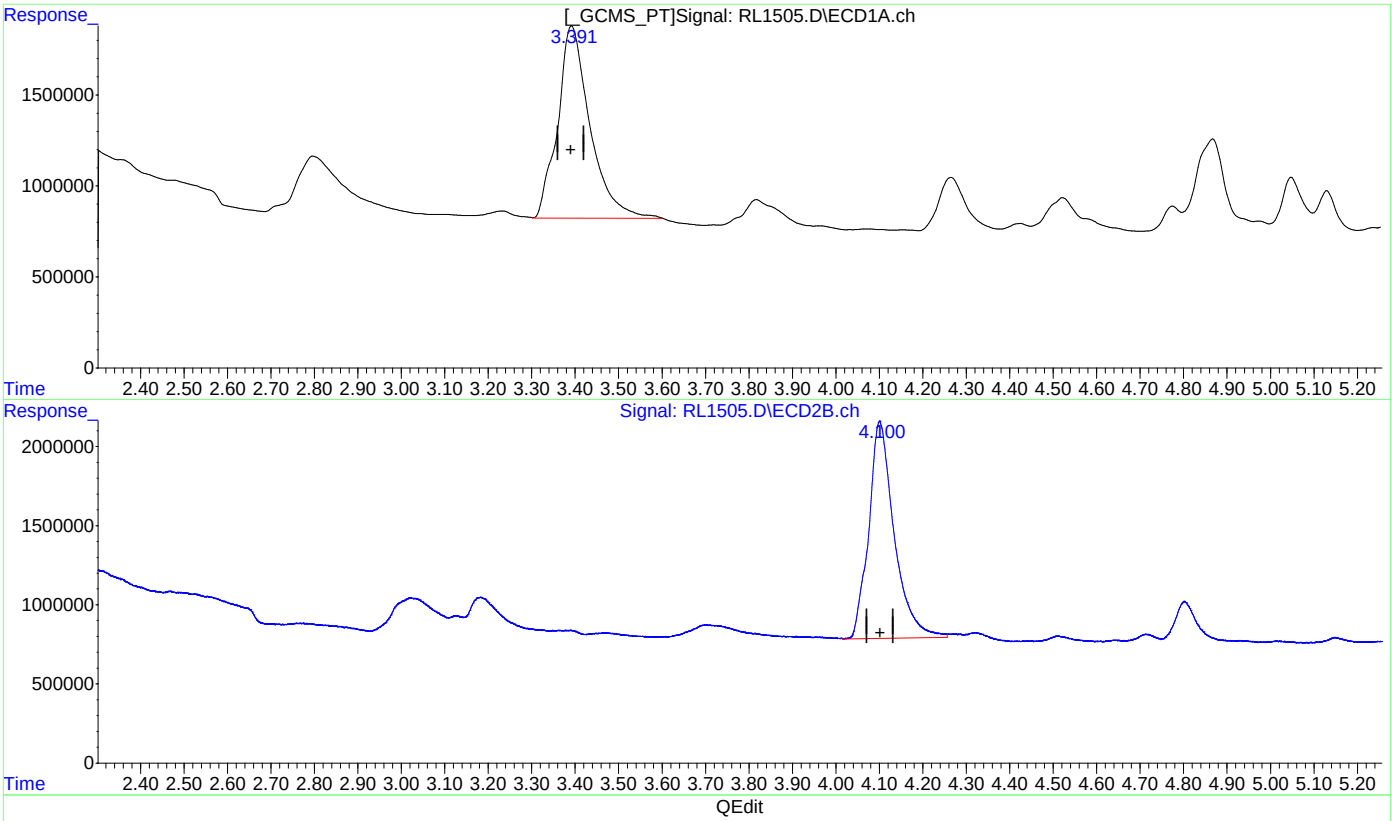
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:38:37 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(1) Tetrachloro-m-xylene (S)

3.391min 19.434 ppb m

response 54641720

(1) Tetrachloro-m-xylene #2 (S)

4.100min 22.962 ppb m

response 55780781

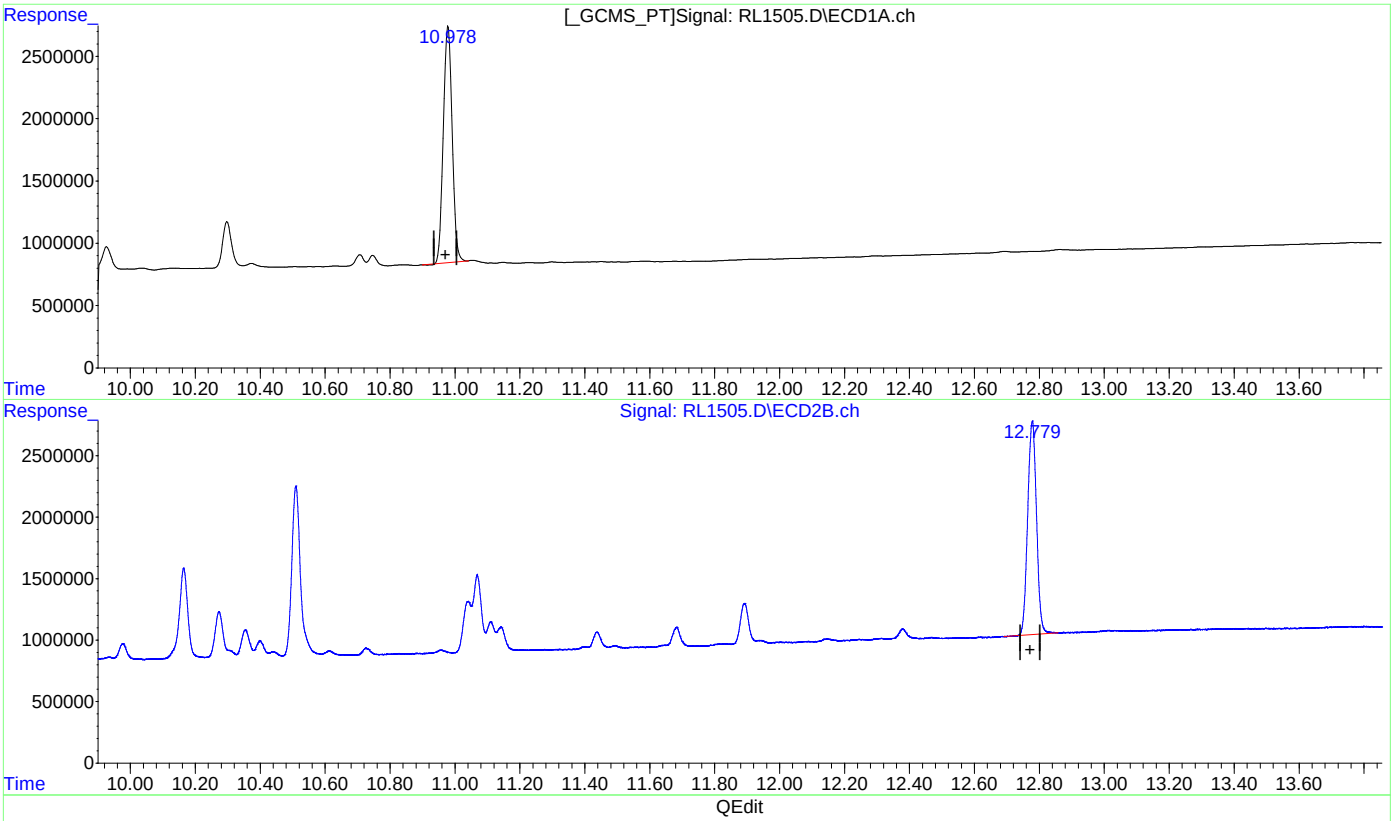
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:38:50 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(51) Decachlorobiphenyl (S)

10.979min 18.371 ppb

response 36021242

(51) Decachlorobiphenyl #2 (S)

12.778min 22.091 ppb

response 32754247

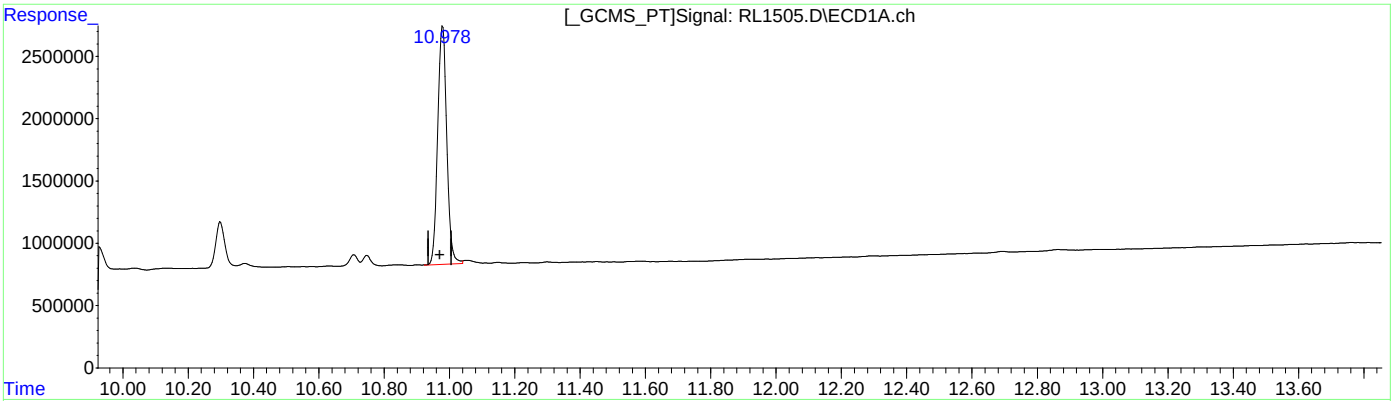
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:38:55 2022

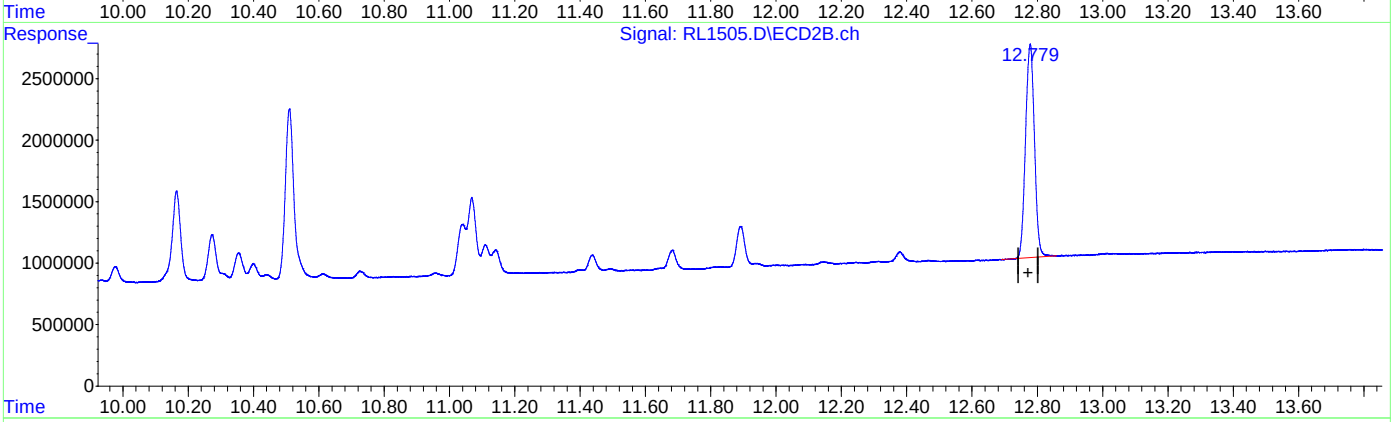
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.978min 18.883 ppb m

response 37025290

(51) Decachlorobiphenyl #2 (S)

12.778min 22.091 ppb

response 32754247

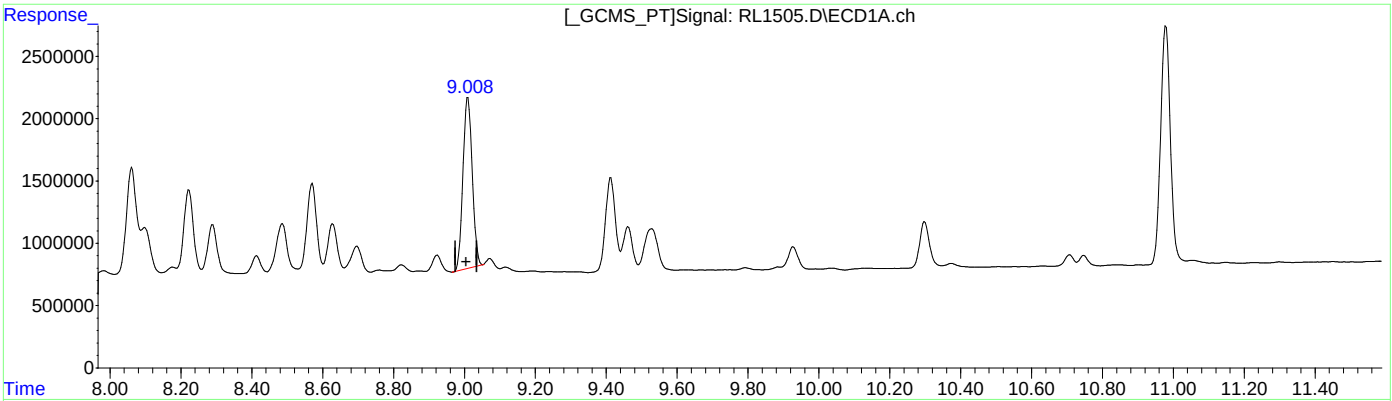
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:39:05 2022

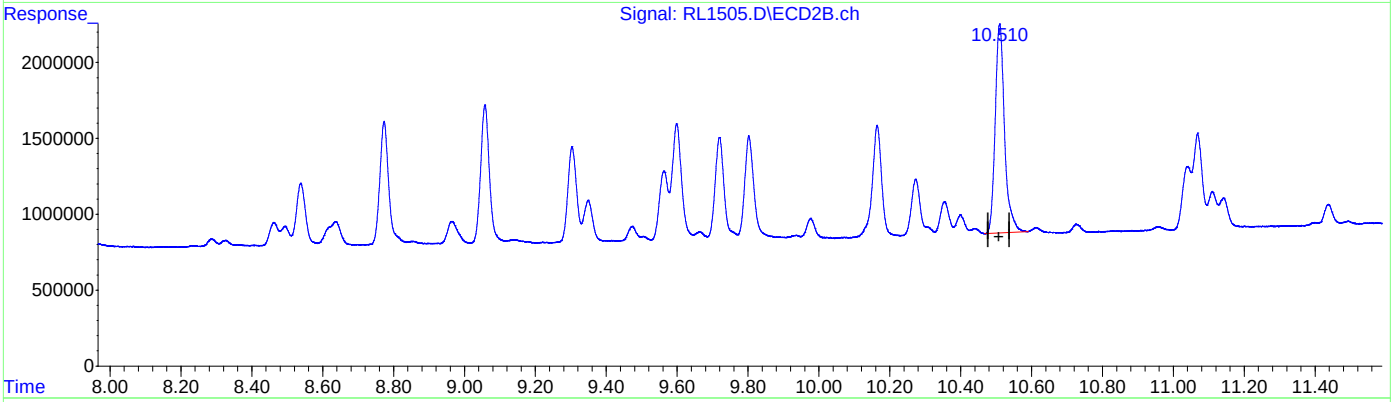
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D

9.010min 114.658 PPB

response 25011970

(49) AR1260-D #2

10.510min 134.788 PPB

response 25277988

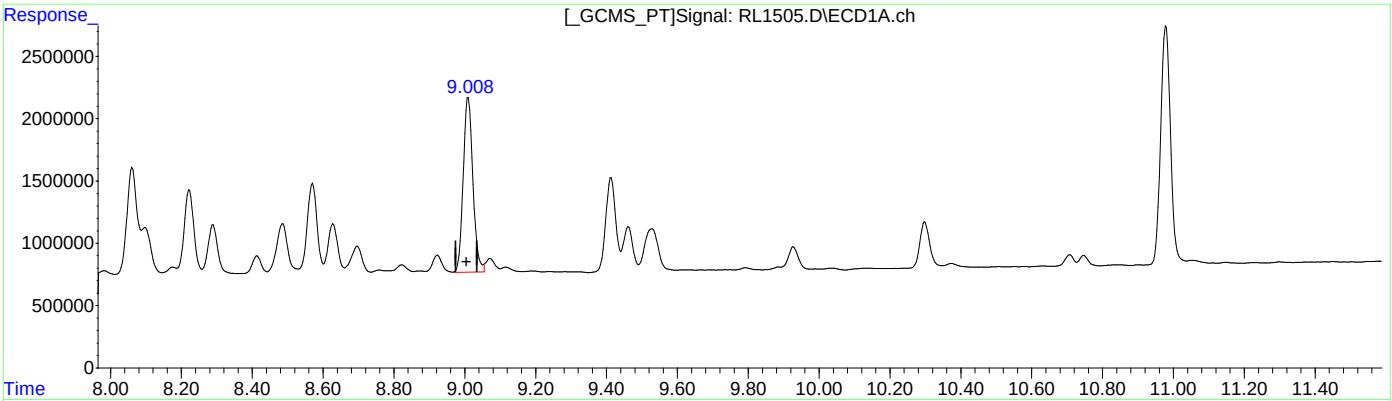
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:39:16 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1505.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:48 pm
Operator : mahalial
Sample : op42474-bs1
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 26 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:01 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(49) AR1260-D

9.008min 122.674 PPB m

response 26760602

(49) AR1260-D #2

10.510min 134.788 PPB

response 25277988

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:39:23 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:40:20 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.392	4.099	46625569	45090708	16.583	18.561m
	Spiked Amount 40.000			Recovery	=	41.46%	46.40%
51) S	Decachlor...	10.980	12.777	30668708	27579664	15.641	18.601
	Spiked Amount 40.000			Recovery	=	39.10%	46.50%
	Target Compounds						
41)	AR1016-A	3.817	4.802	6465932	8071662	112.851	180.564 #
42)	AR1016-B	4.266	5.391	10498123	10140927	101.168	107.927
43)	AR1016-C	4.867	6.055	20455193	18400047	92.960	102.112
44)	AR1016-D	5.048	6.253	8124507	7186055	97.103	98.911
45)	AR1016-E	5.594	6.936	8558869	6150620	98.160	110.306
46)	AR1260-A	7.669	9.058	16574164	12089208	105.818	114.166
47)	AR1260-B	8.223	9.719	10408313	9340334	109.917	114.523
48)	AR1260-C	8.571	10.164	11097107	10605607	104.580	113.336
49)	AR1260-D	9.009	10.510	20996007	19919646	96.248m	106.216

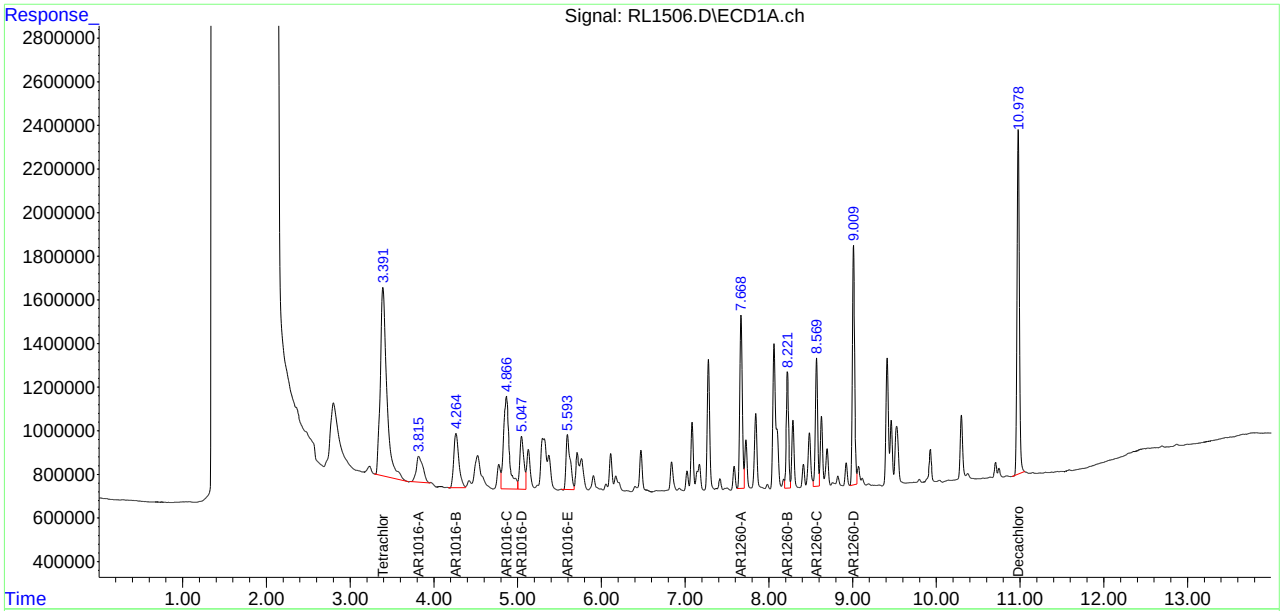
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

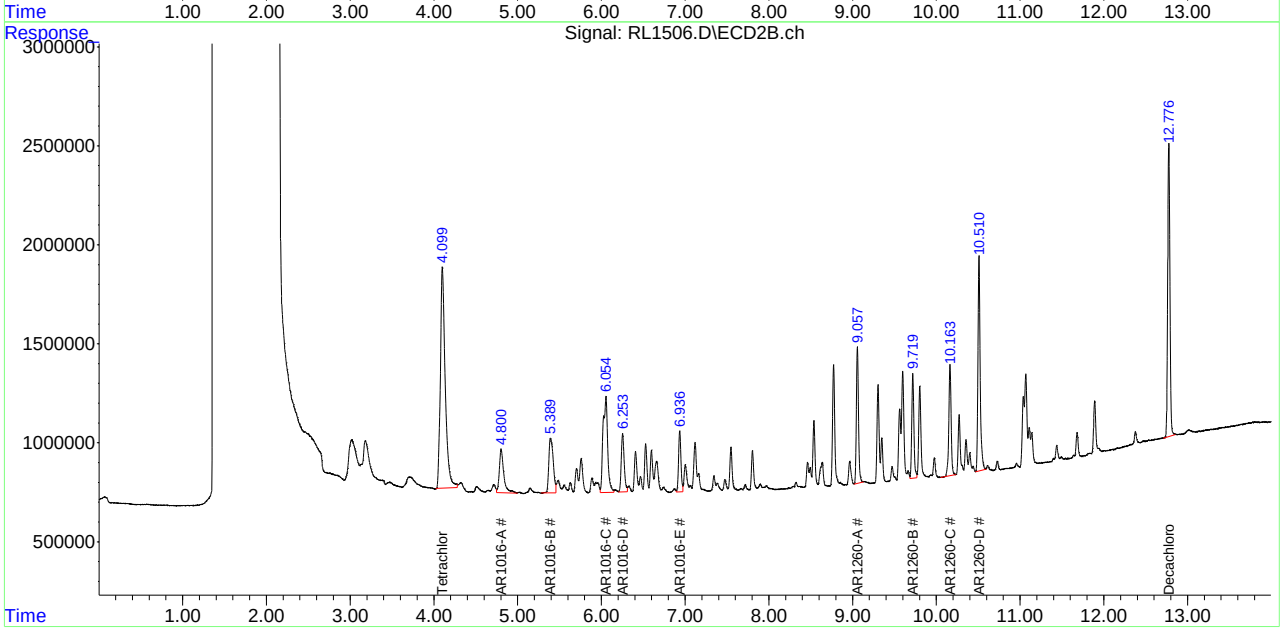
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:40:20 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: OP42474-BSD
Lab FileID: RL1506.D
Injection Time: 10/17/22 17:05
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

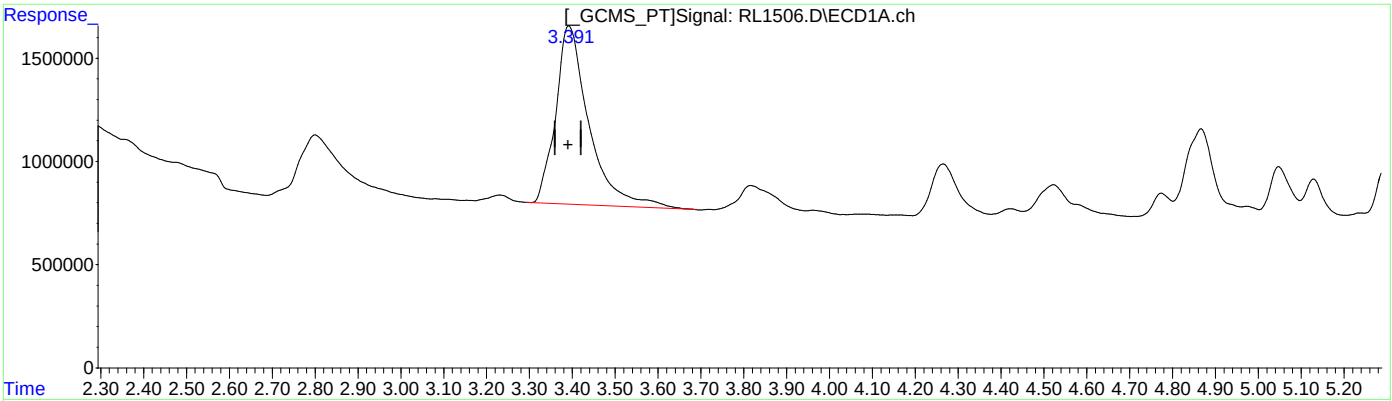
Parameter	CAS	Sig#	R.T. (min.)	Reason
Tetrachloro-m-xylene	877-09-8	2	4.10	Poorly defined baseline
AR1260-D		1	9.01	Poorly defined baseline

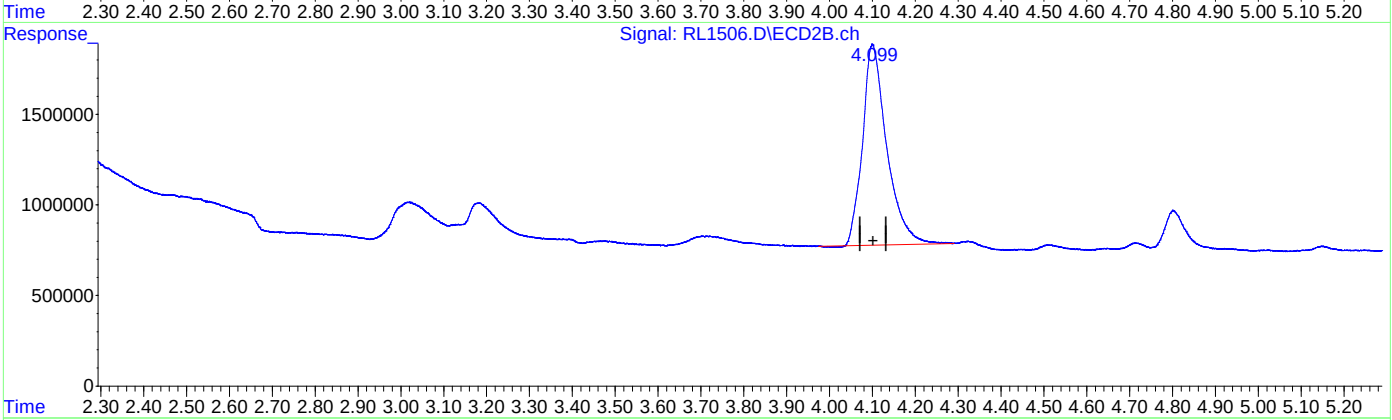
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.392min 16.583 ppb

response 46625569

(1) Tetrachloro-m-xylene #2 (S)

4.100min 17.958 ppb

response 43624424

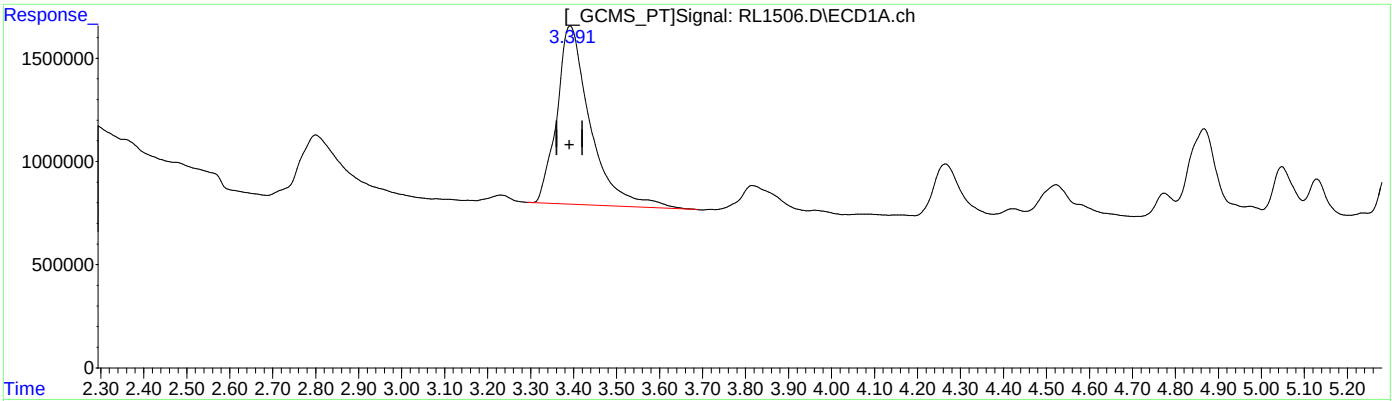
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:39:41 2022

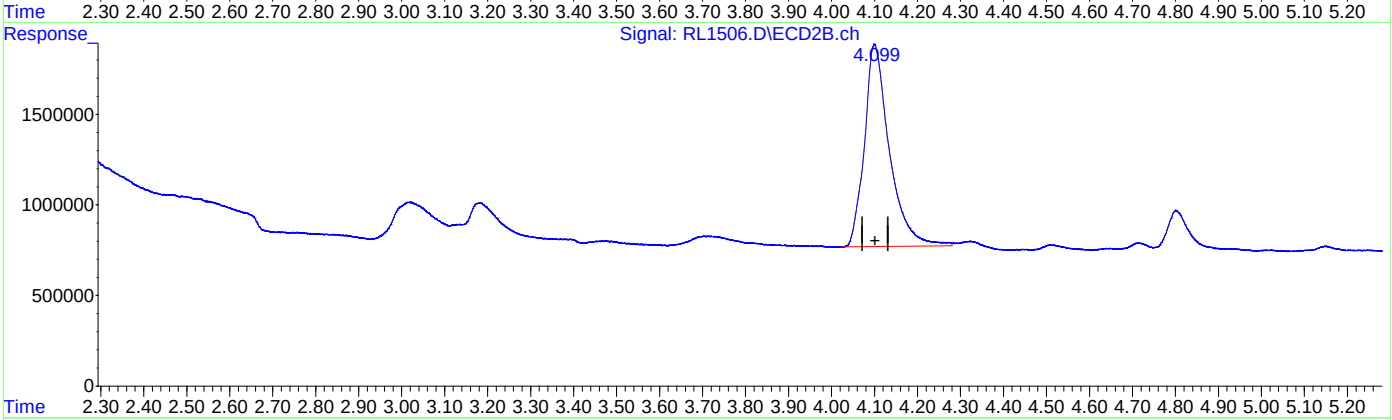
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(1) Tetrachloro-m-xylene (S)

3.392min 16.583 ppb

response 46625569

(1) Tetrachloro-m-xylene #2 (S)

4.099min 18.561 ppb m

response 45090708

(+) = Expected Retention Time

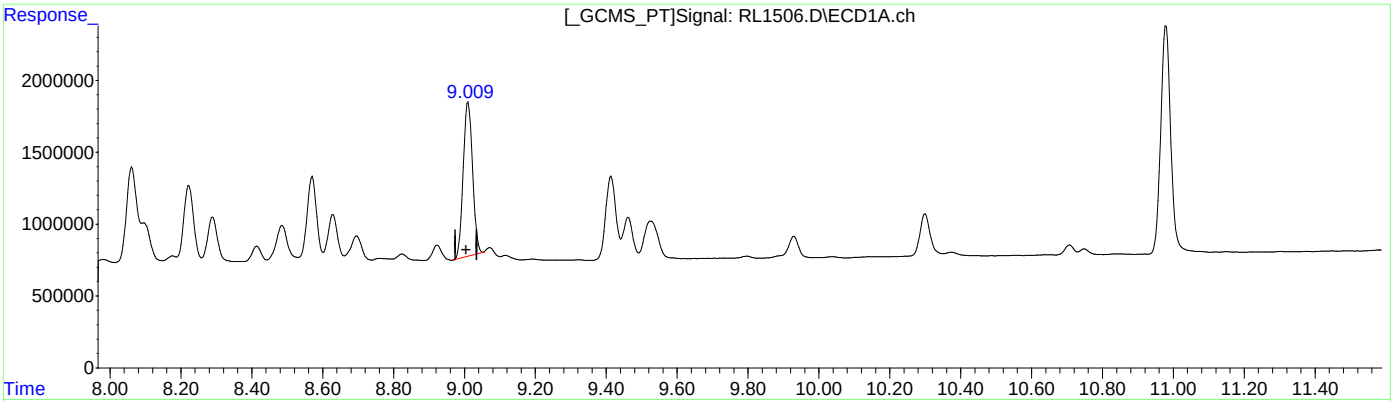
pcbgcrl5.m Wed Oct 19 00:39:48 2022 Page: 1

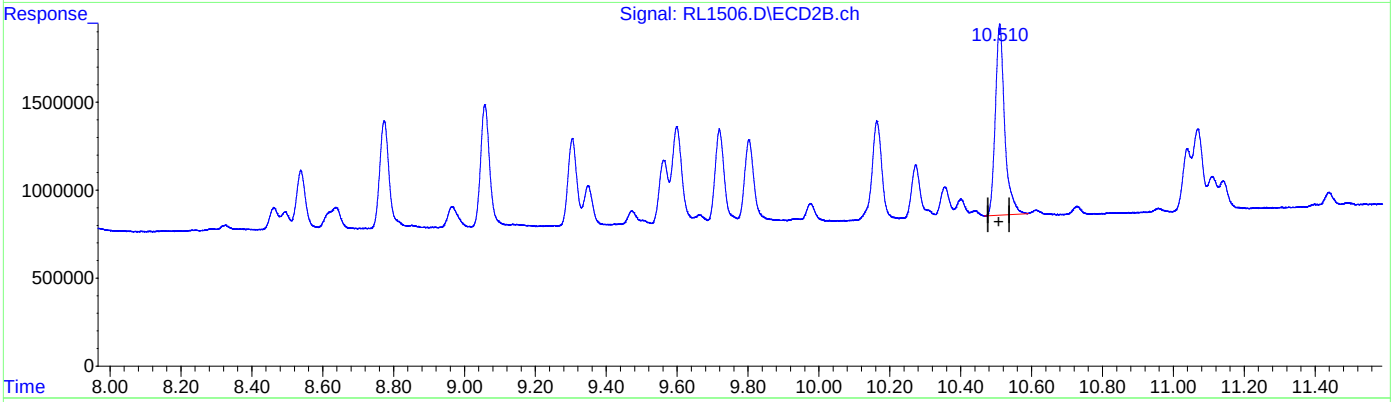
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D

9.010min 90.413 PPB

response 19723197

(49) AR1260-D #2

10.510min 106.216 PPB

response 19919646

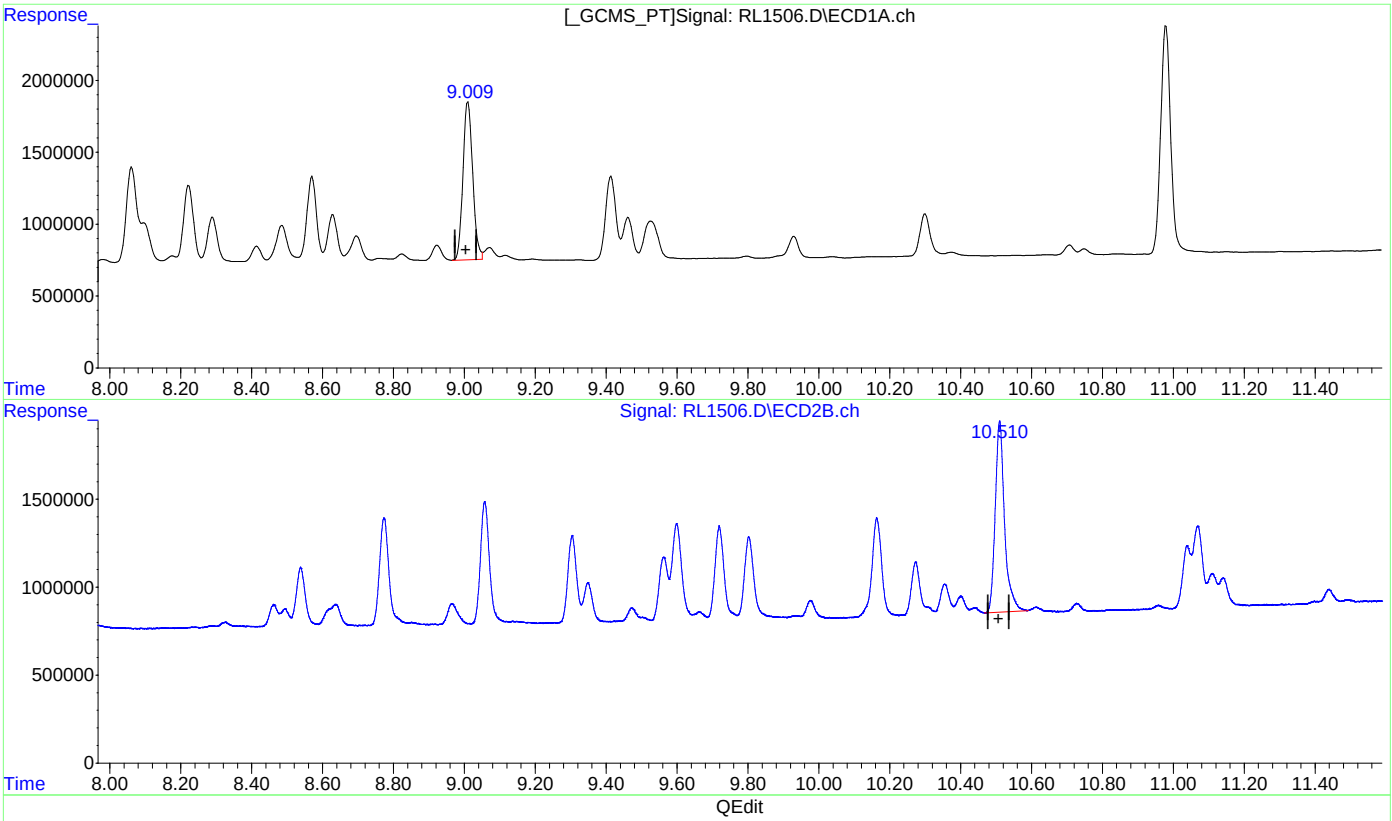
(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:40:02 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1506.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 05:05 pm
Operator : mahalial
Sample : op42474-bsd
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 27 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 19 00:25:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(49) AR1260-D

9.009min 96.248 PPB m

response 20996007

(49) AR1260-D #2

10.510min 106.216 PPB

response 19919646

(+) = Expected Retention Time
pcbgcrl5.m Wed Oct 19 00:40:10 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:33:05 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.805	49418422	28.295	PPM	m
Spiked Amount 50.000		Recovery = 56.59%			
7) S 5a-ANDROSTANE	9.262	44203588	26.403	PPM	m
Spiked Amount 50.000		Recovery = 52.81%			
Target Compounds					
1) H TPH-DRO	7.830	780014507	546.463	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

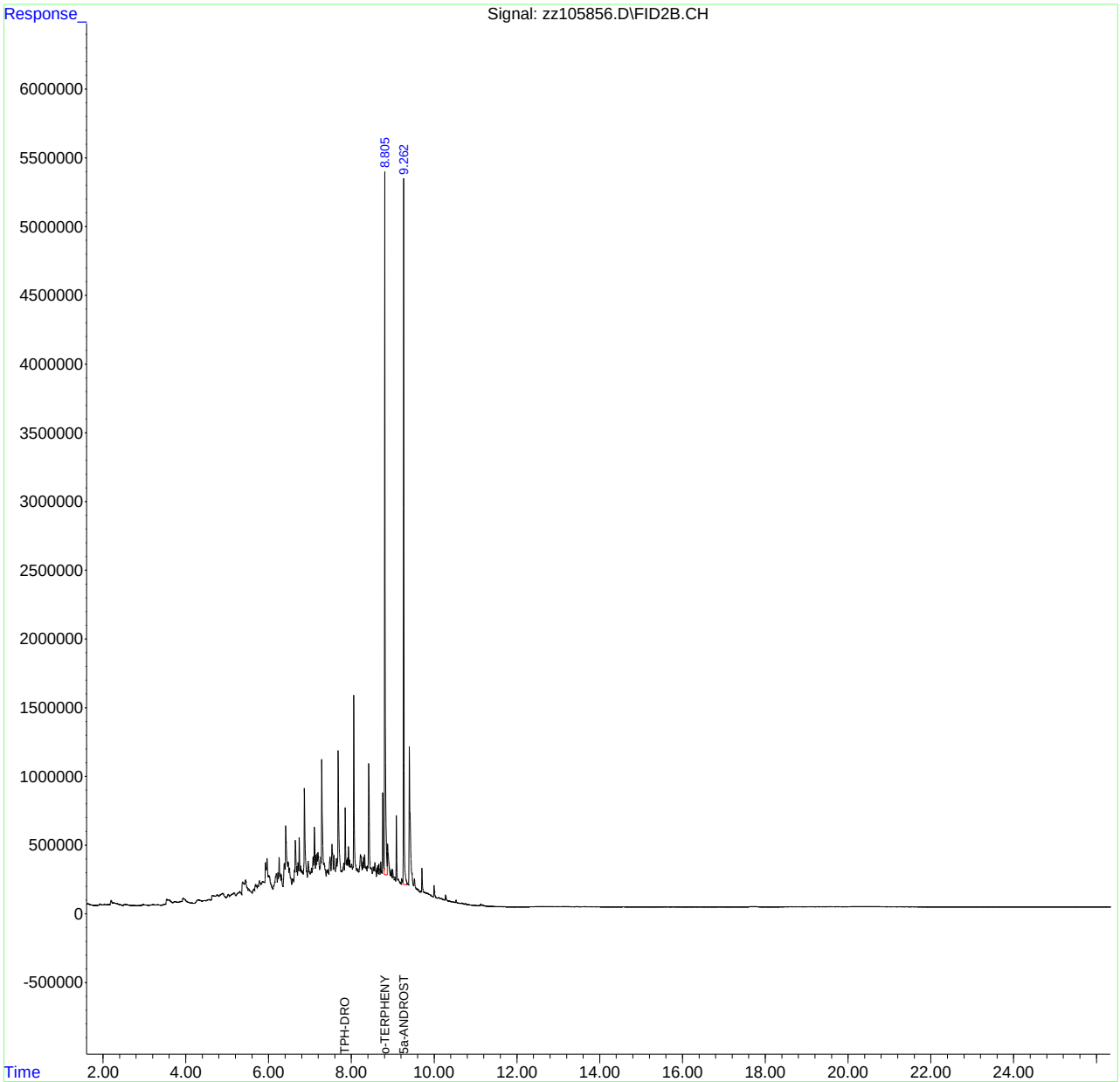
9.3.3

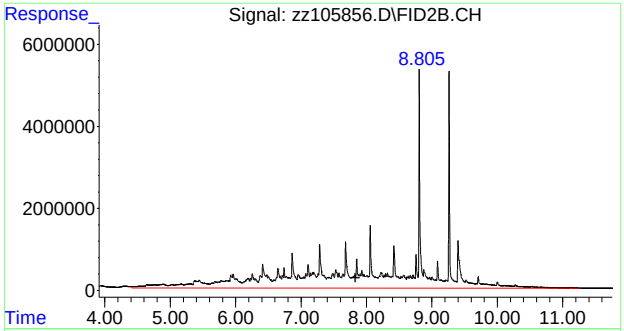
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:33:05 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

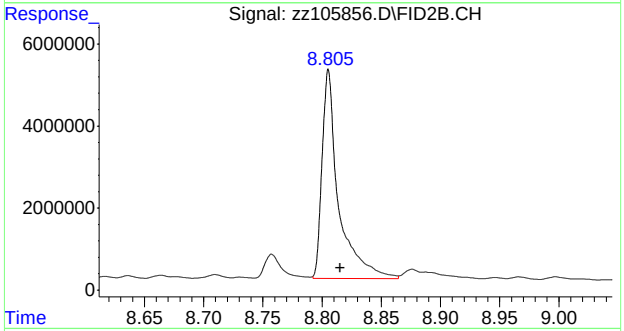
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





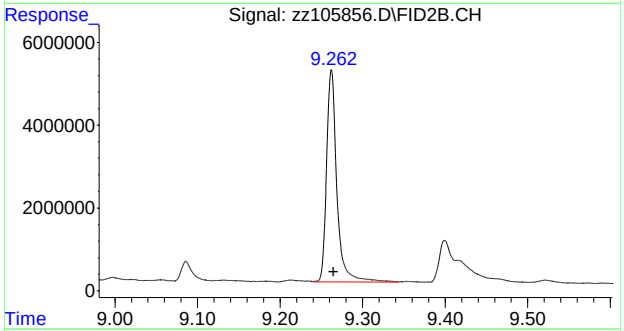
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 780014507
Conc: 546.46 PPM



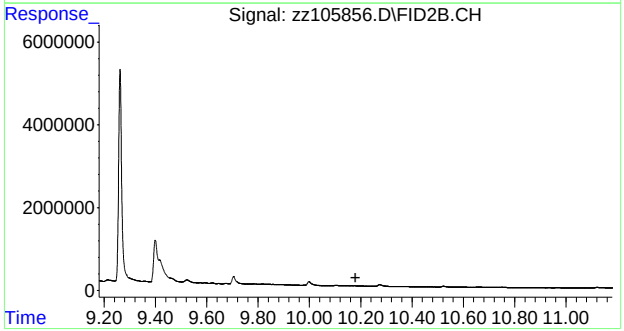
#6 o-TERPHENYL

R.T.: 8.805 min
Delta R.T.: -0.010 min
Response: 49418422
Conc: 28.30 PPM m



#7 5a-ANDROSTANE

R.T.: 9.262 min
Delta R.T.: -0.003 min
Response: 44203588
Conc: 26.40 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: OP42470-BS1
Lab FileID: ZZ105856.D
Injection Time: 10/16/22 14:18
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

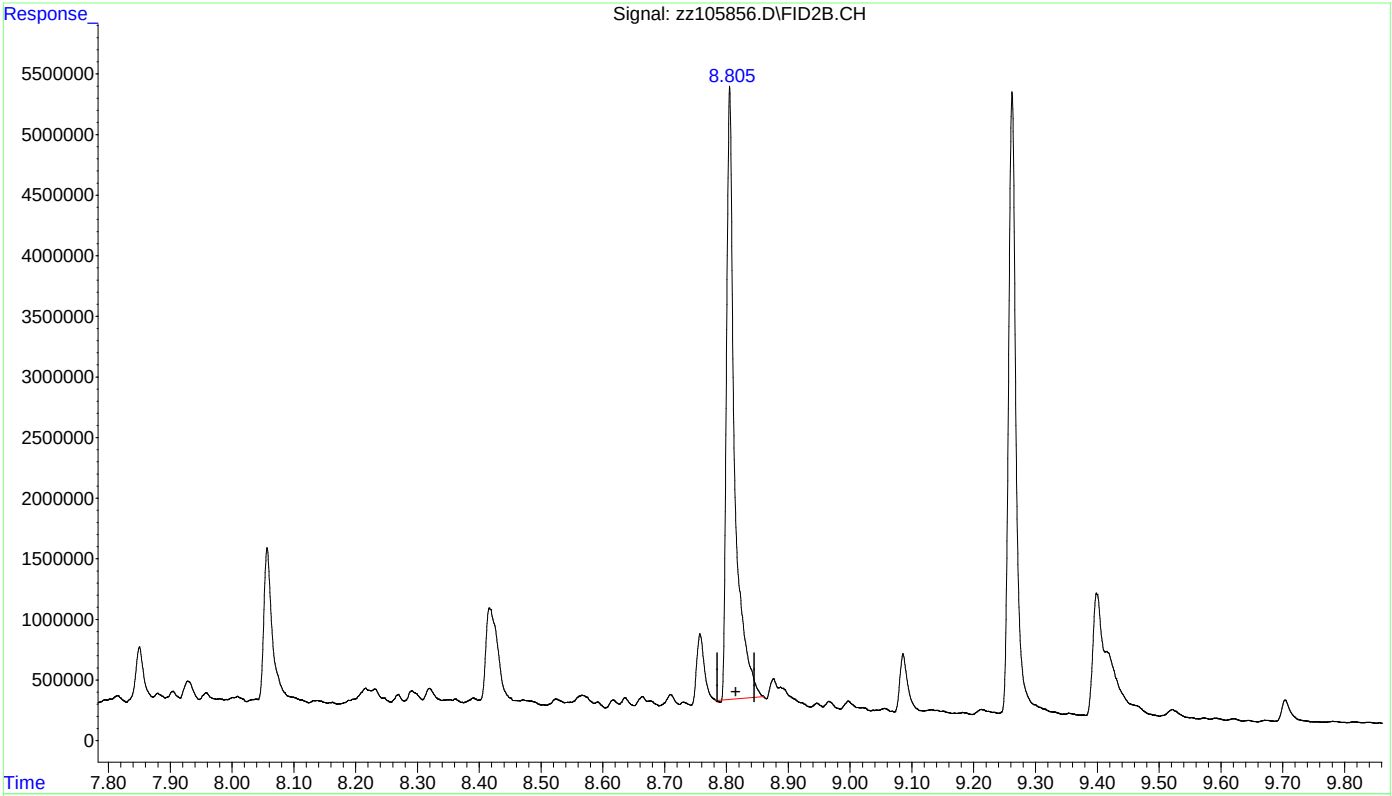
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.80	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:12 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.805min 26.639 PPM

response 46525660

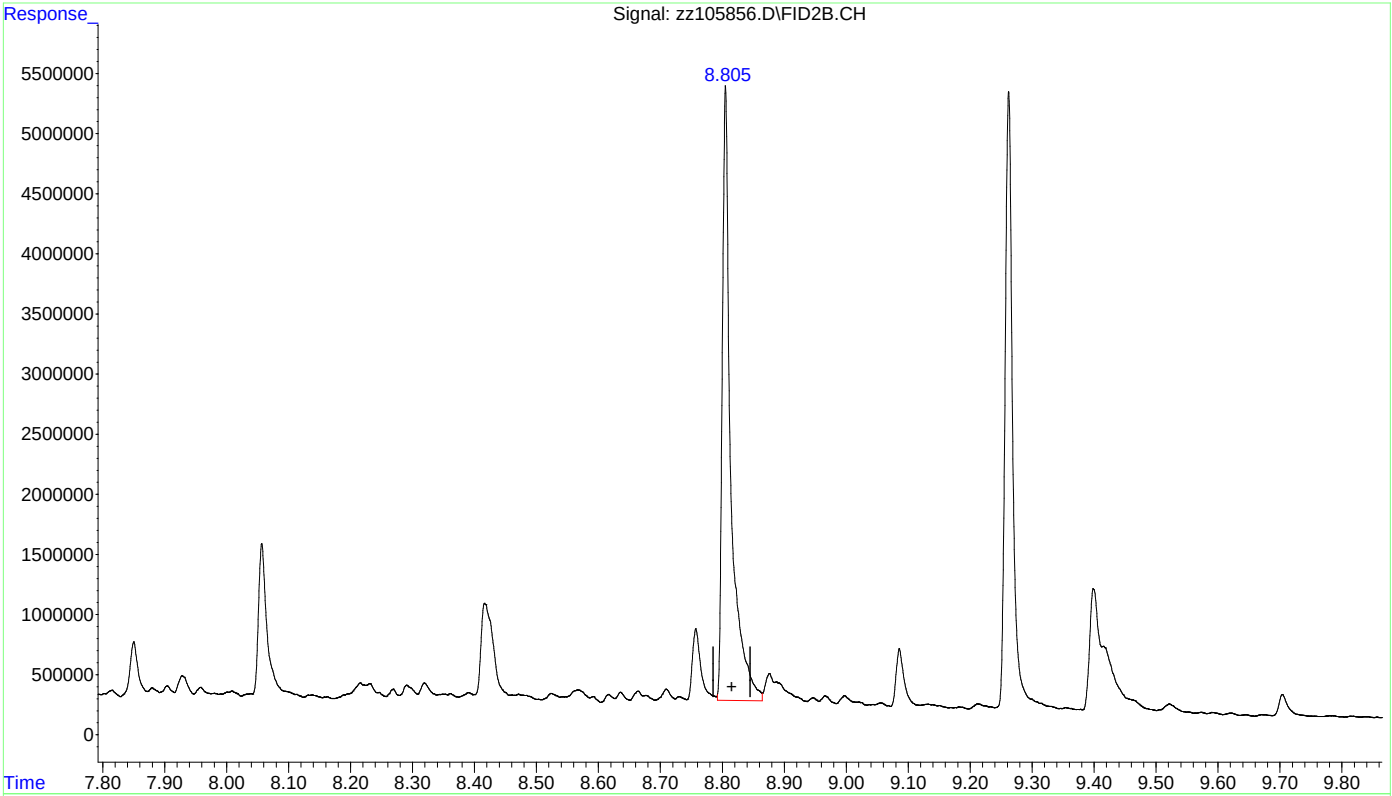
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:45 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:12 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.805min 28.295 PPM m

response 49418422

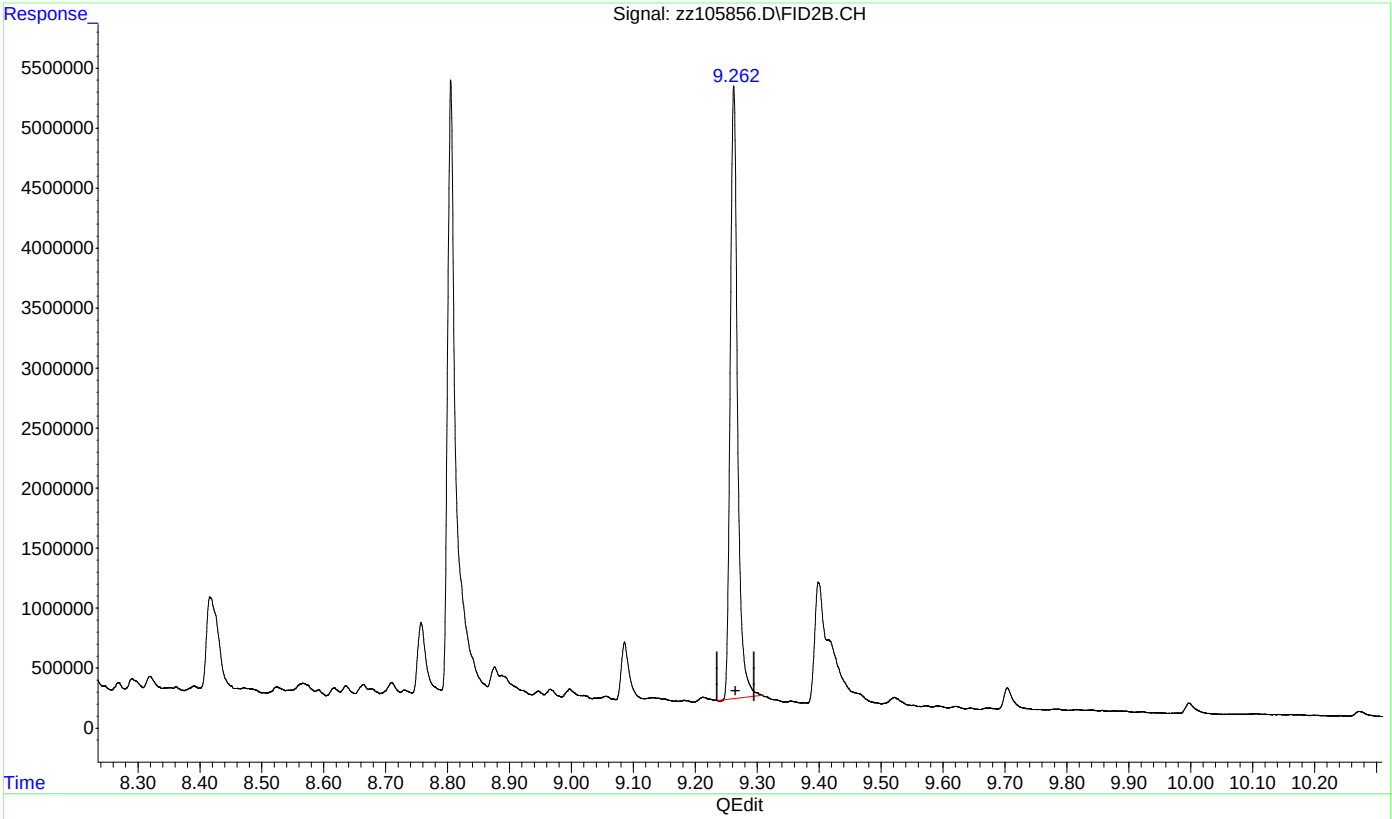
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:56 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:12 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.262min 25.094 PPM

response 42011863

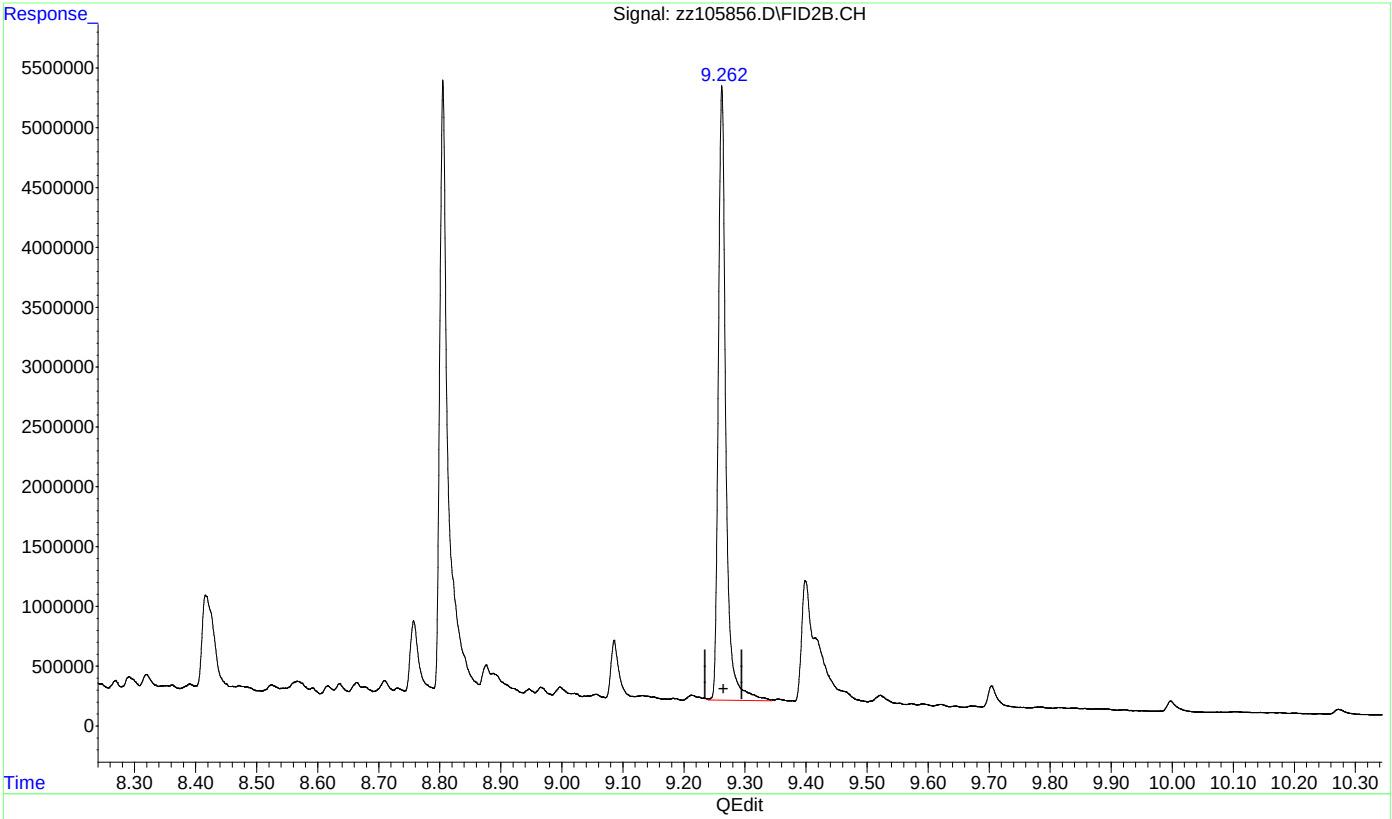
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:32:58 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105856.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:18 pm
Operator : thomasl
Sample : op42470-bs1
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 72 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:12 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.262min 26.403 PPM m

response 44203588

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:33:07 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:33:44 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.804	65907434	37.736	PPM	m
Spiked Amount 50.000		Recovery = 75.47%			
7) S 5a-ANDROSTANE	9.263	60467531	36.118	PPM	m
Spiked Amount 50.000		Recovery = 72.24%			
Target Compounds					
1) H TPH-DRO	7.830	1003458031	703.003	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

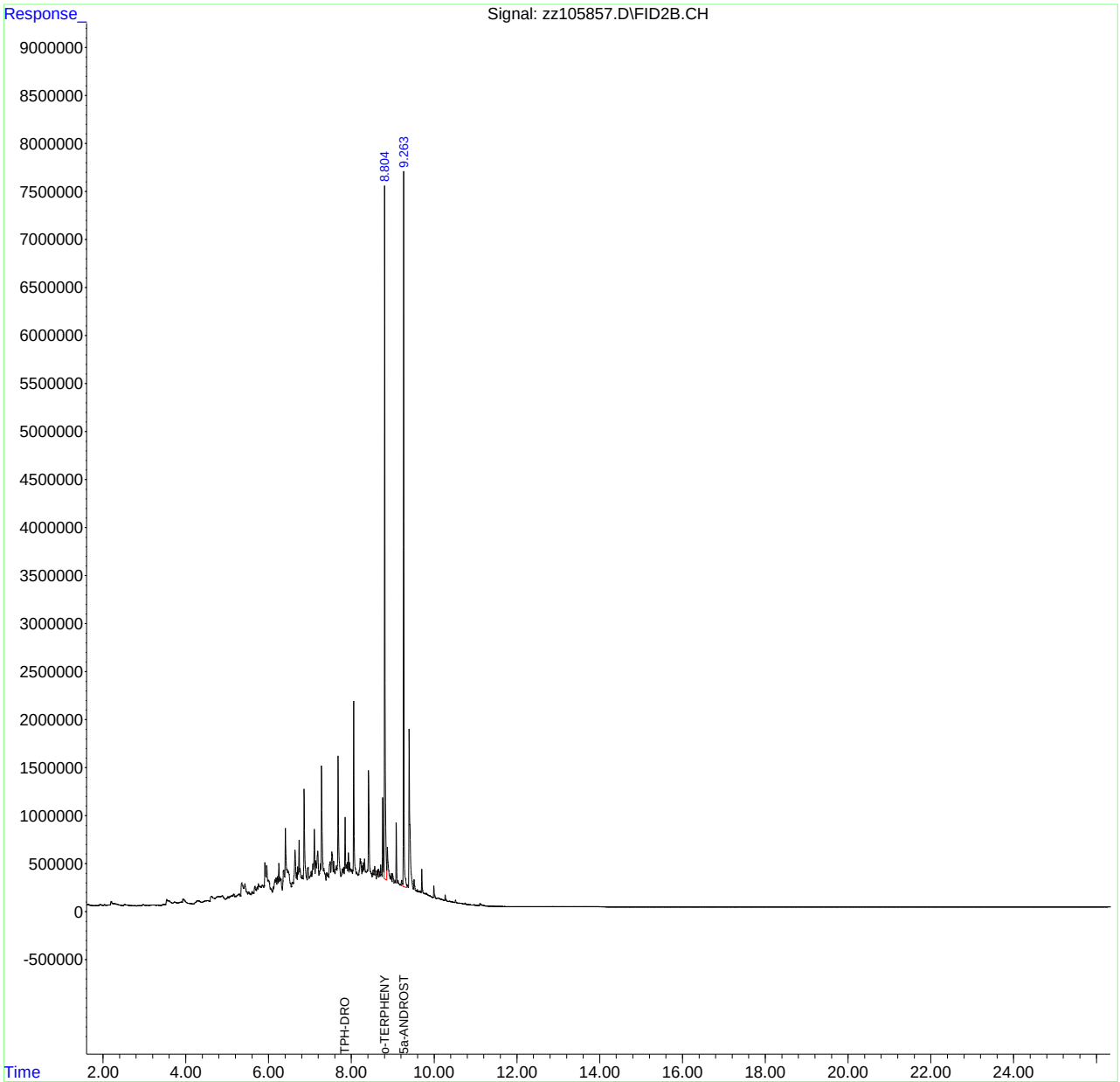
9.3.4

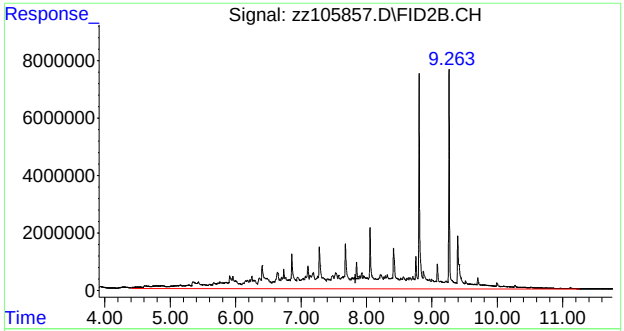
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:33:44 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

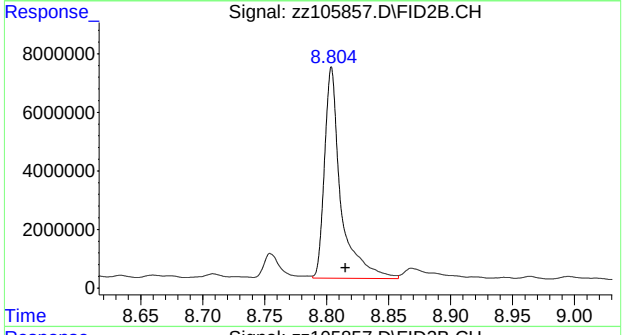
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





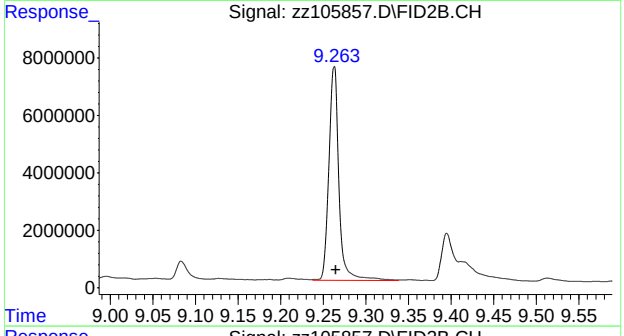
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 1003458031
Conc: 703.00 PPM



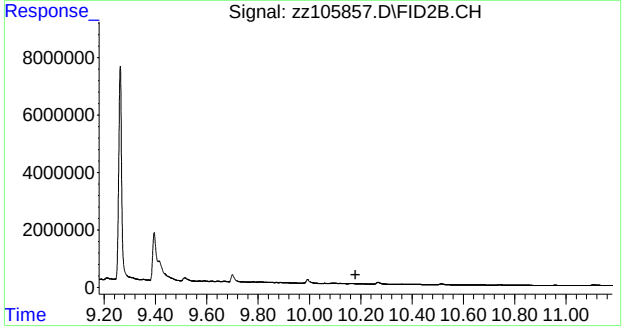
#6 o-TERPHENYL

R.T.: 8.804 min
Delta R.T.: -0.012 min
Response: 65907434
Conc: 37.74 PPM m



#7 5a-ANDROSTANE

R.T.: 9.263 min
Delta R.T.: -0.002 min
Response: 60467531
Conc: 36.12 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: OP42470-BSD
Lab FileID: ZZ105857.D
Injection Time: 10/16/22 14:51
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

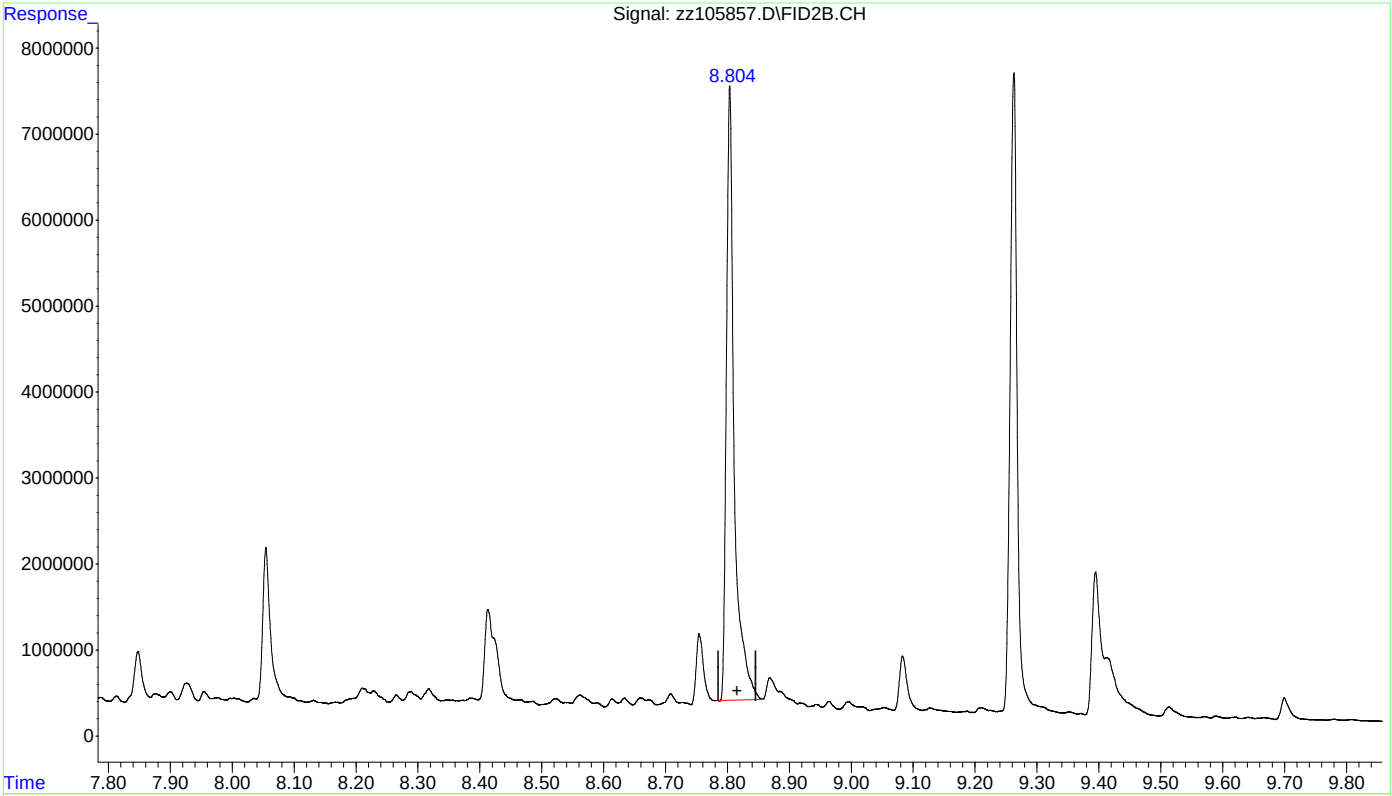
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.80	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:15 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.804min 35.773 PPM

response 62479221

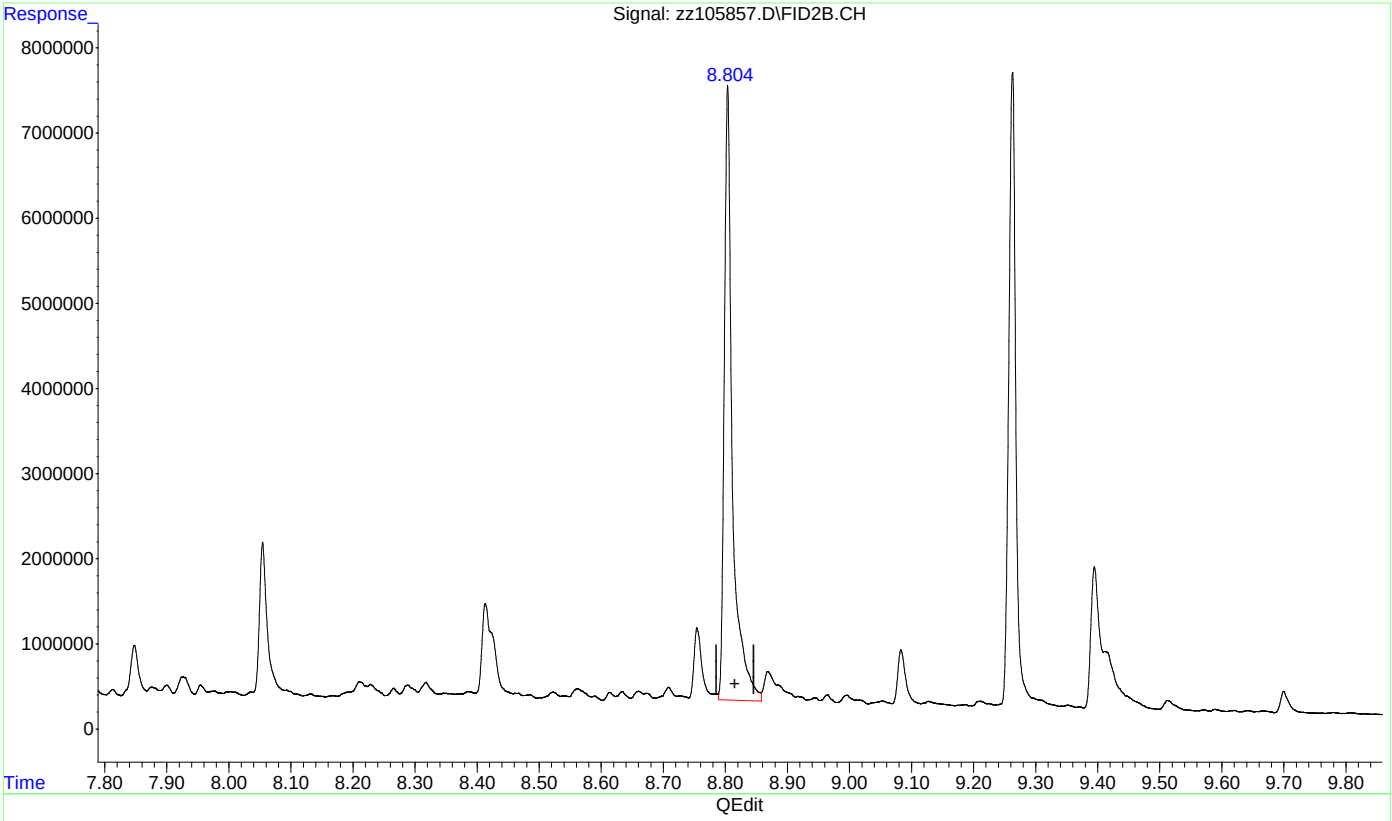
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:33:22 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:15 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.804min 37.736 PPM m

response 65907434

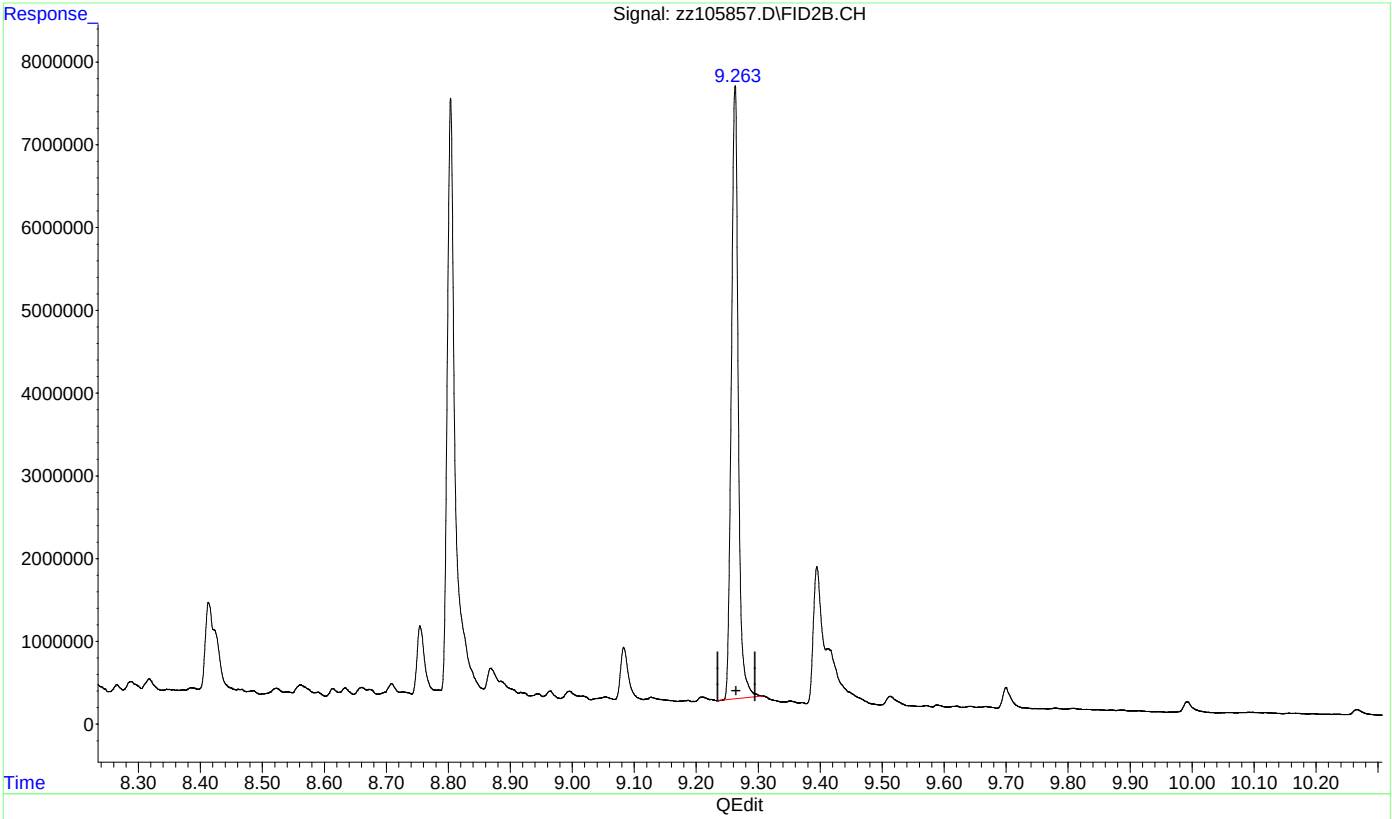
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:33:36 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:15 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 34.241 PPM

response 57325503

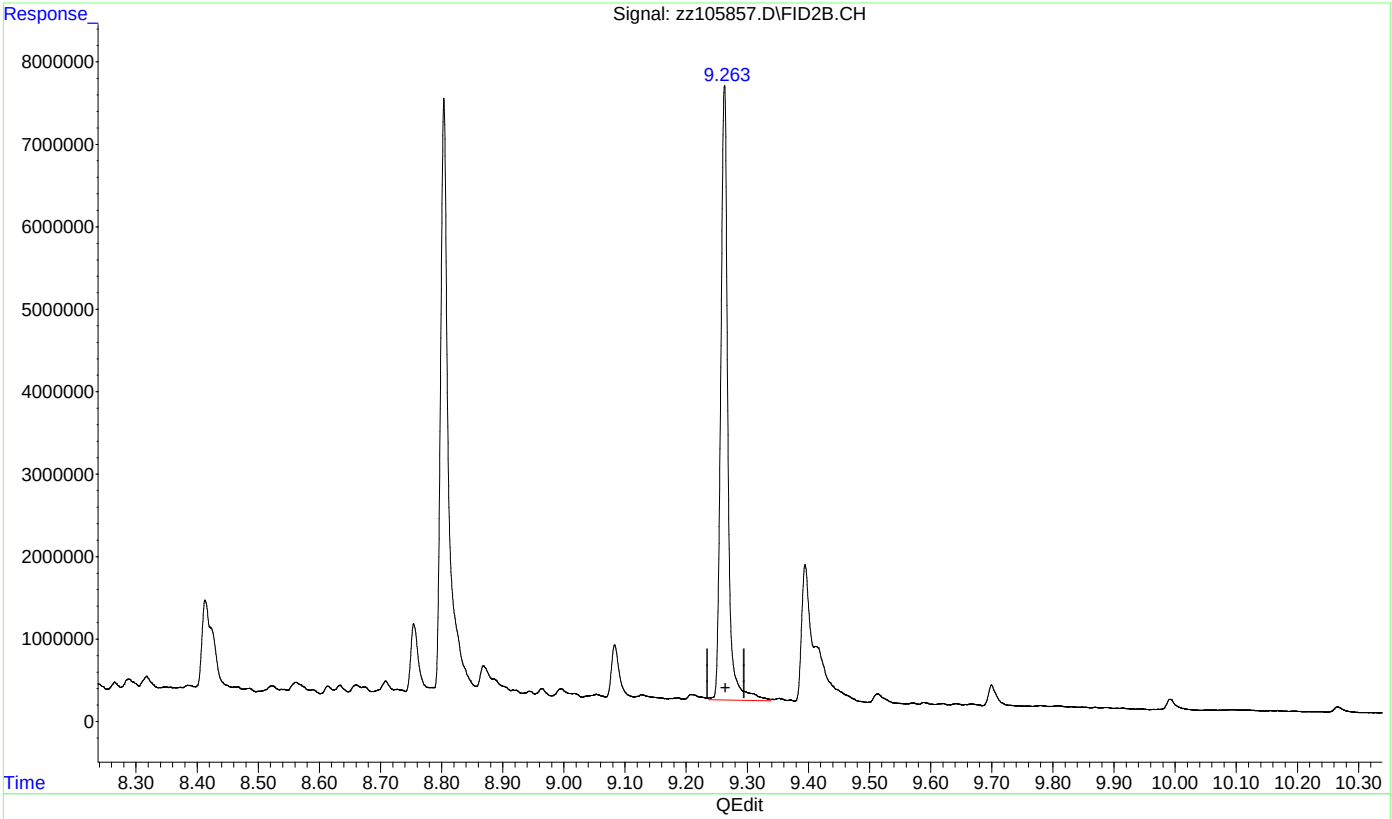
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:33:37 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105857.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 2:51 pm
Operator : thomasl
Sample : op42470-bsd
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 73 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:15 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 36.118 PPM m

response 60467531

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:33:47 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99778.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 1:59 pm
Operator : thomasl
Sample : rt
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:07:54 2021
Quant Method : C:\msdchem\1\METHODS\RT-ZZ.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:02:31 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um

	Compound	R.T.	Response	Conc Units
	Target Compounds			
1) T	c10	4.777	11344909	411.051 PPM
2) T	c12	6.099	11583891	341.838 PPM
3) T	c14	7.072	11638307	345.684 PPM
4) T	c16	7.905	11953356	356.722 PPM
5) T	c18	8.648	12004292	361.132 PPM
6) T	c20	9.321	12146811	369.800 PPM
7) T	C22	9.937	12134790	377.614 PPM
8) T	c24	10.482	12301102	360.605 PPM
9) T	c26	10.948	12522132	404.647 PPM
10) T	c28	11.392	12609007	416.229 PPM
11) T	c30	11.853	12712976	430.493 PPM
12) T	c32	12.320	12719036	434.019 PPM
13) T	c34	12.819	12827451	451.780 PPM
14) T	c36	13.461	12642595	375.082 PPM
15) T	c38	14.330	12086244	432.732 PPM
16) T	c40	15.537	11461717	397.336 PPM
17) T	c44	19.505	3709587	204.898 PPM

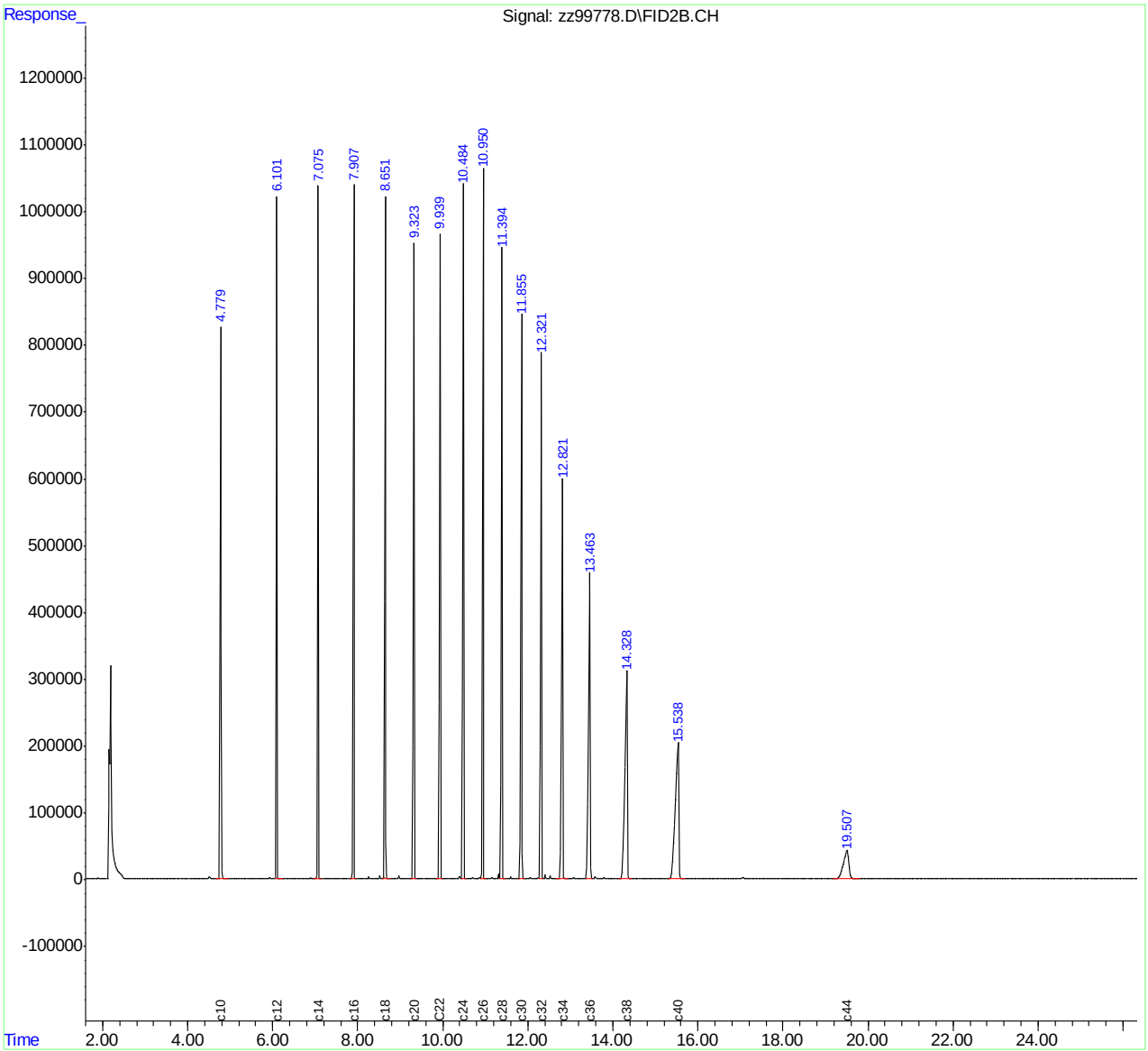
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99778.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 1:59 pm
Operator : thomasl
Sample : rt
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:07:54 2021
Quant Method : C:\msdchem\1\METHODS\RT-ZZ.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:02:31 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um



Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105854.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:10 pm
Operator : thomasl
Sample : rt
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:18:20 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\rt-zz.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:18:04 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um

	Compound	R.T.	Response	Conc	Units	
Target Compounds						
1) T	c10	4.501	9764179	353.778	PPM	m
2) T	c12	5.873	10495032	309.706	PPM	
3) T	c14	6.855	10767183	319.810	PPM	
4) T	c16	7.686	10915498	325.750	PPM	
5) T	c18	8.427	11132445	334.903	PPM	
6) T	c20	9.098	11417949	347.611	PPM	
7) T	C22	9.710	11272867	350.793	PPM	
8) T	c24	10.267	11345209	332.583	PPM	
9) T	c26	10.733	11495433	371.470	PPM	
10) T	c28	11.153	11498542	379.572	PPM	
11) T	c30	11.573	11656359	394.713	PPM	
12) T	c32	12.003	11466585	391.281	PPM	
13) T	c34	12.437	10464772	368.567	PPM	
14) T	c36	12.956	9236214	274.021	PPM	
15) T	c38	13.641	7452550	266.829	PPM	
16) T	c40	14.570	5404271	187.347	PPM	
17) T	c44	17.663	1811206	100.041	PPM	

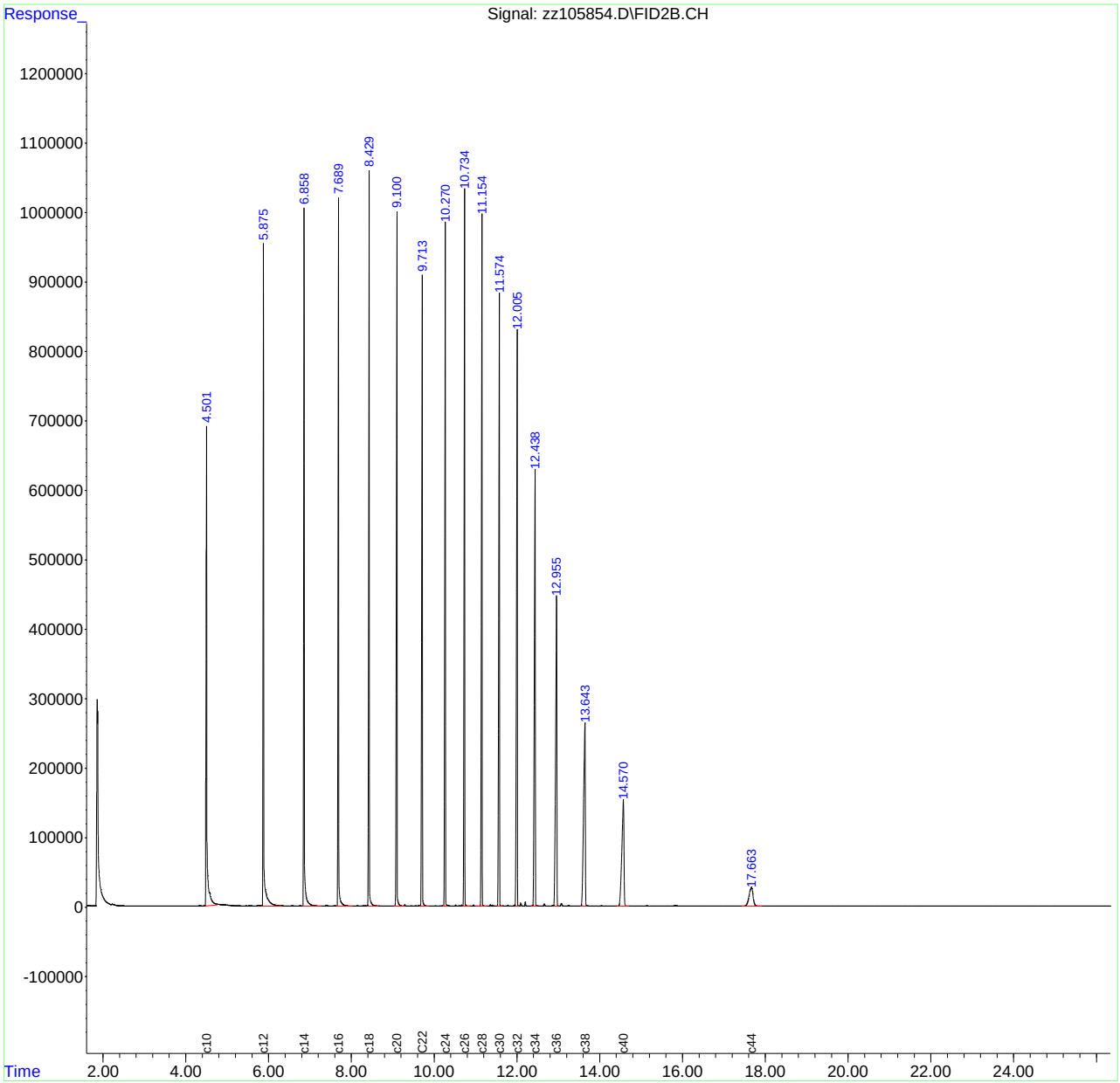
(f)=RT Delta > 1/2 Window (m)=manual int.

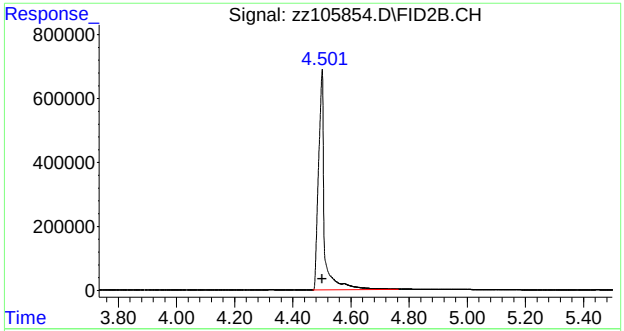
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105854.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:10 pm
Operator : thomasl
Sample : rt
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:18:20 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\rt-zz.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:18:04 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

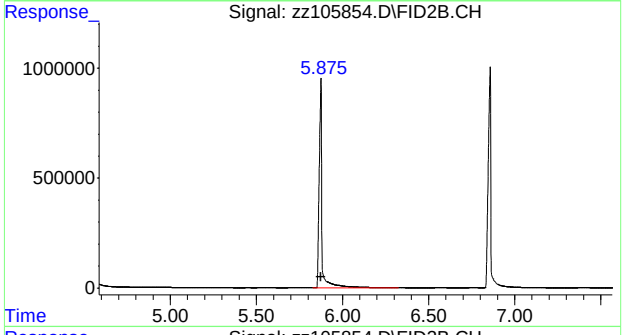
Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um





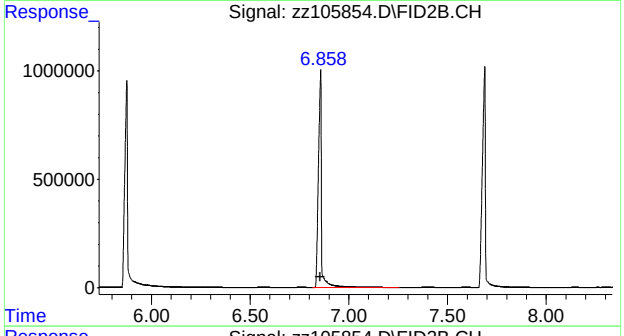
#1 c10

R.T.: 4.501 min
Delta R.T.: 0.000 min
Response: 9764179
Conc: 353.78 PPM m



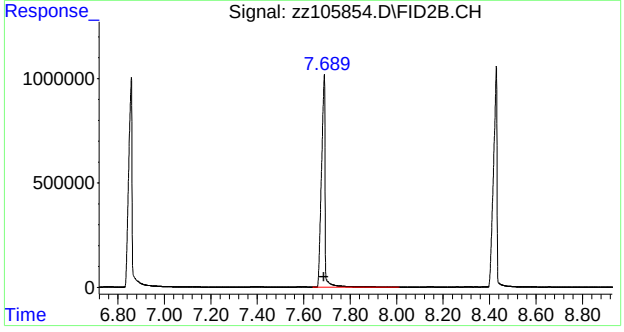
#2 c12

R.T.: 5.873 min
Delta R.T.: 0.000 min
Response: 10495032
Conc: 309.71 PPM



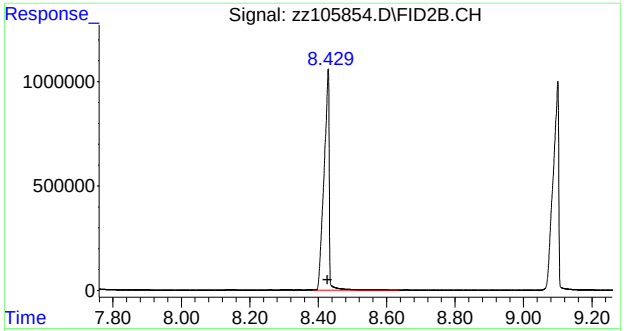
#3 c14

R.T.: 6.855 min
Delta R.T.: 0.000 min
Response: 10767183
Conc: 319.81 PPM



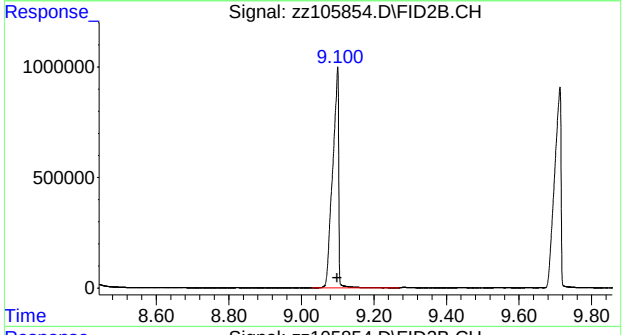
#4 c16

R.T.: 7.686 min
Delta R.T.: 0.000 min
Response: 10915498
Conc: 325.75 PPM



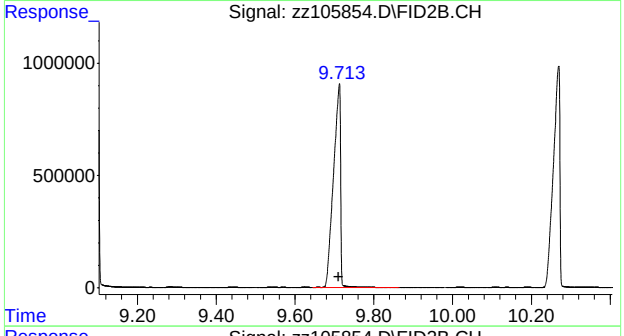
#5 c18

R.T.: 8.427 min
Delta R.T.: 0.000 min
Response: 11132445
Conc: 334.90 PPM



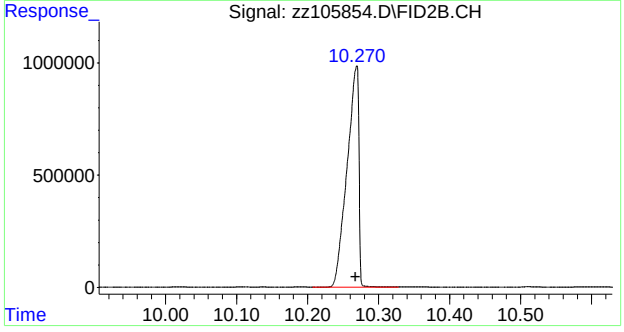
#6 c20

R.T.: 9.098 min
Delta R.T.: 0.000 min
Response: 11417949
Conc: 347.61 PPM



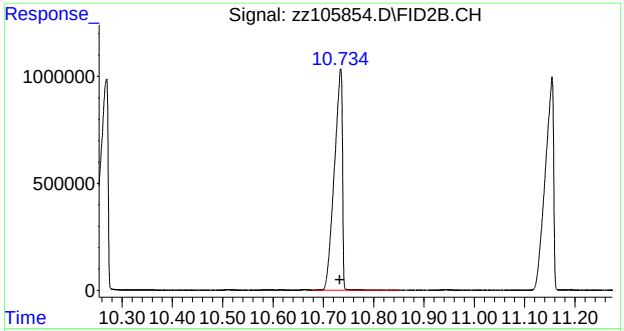
#7 C22

R.T.: 9.710 min
Delta R.T.: 0.000 min
Response: 11272867
Conc: 350.79 PPM



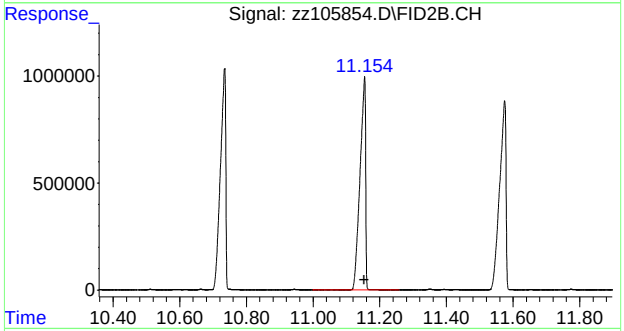
#8 c24

R.T.: 10.267 min
Delta R.T.: 0.000 min
Response: 11345209
Conc: 332.58 PPM



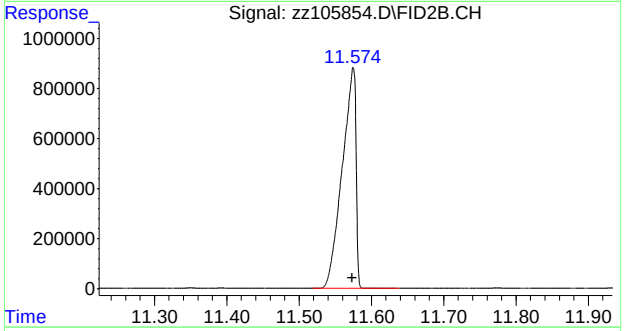
#9 c26

R.T.: 10.733 min
Delta R.T.: 0.000 min
Response: 11495433
Conc: 371.47 PPM



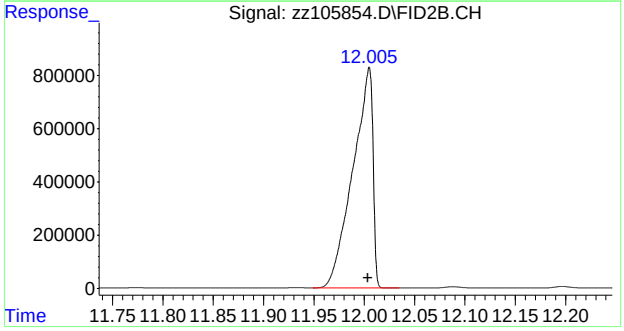
#10 c28

R.T.: 11.153 min
Delta R.T.: 0.000 min
Response: 11498542
Conc: 379.57 PPM



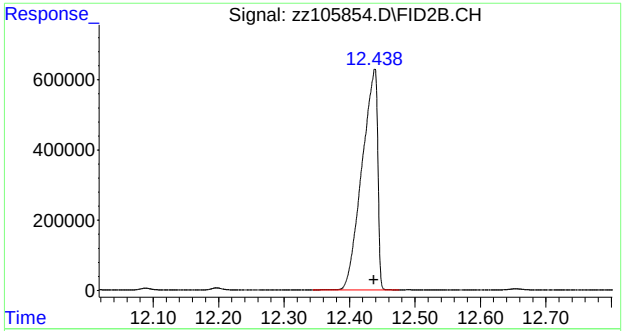
#11 c30

R.T.: 11.573 min
Delta R.T.: 0.000 min
Response: 11656359
Conc: 394.71 PPM



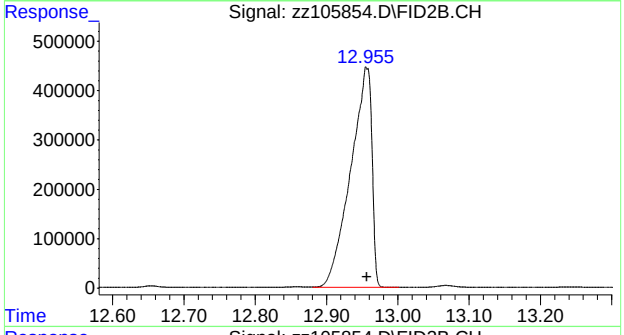
#12 c32

R.T.: 12.003 min
Delta R.T.: 0.000 min
Response: 11466585
Conc: 391.28 PPM



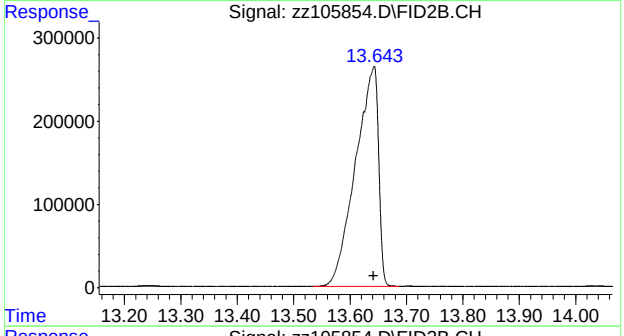
#13 c34

R.T.: 12.437 min
Delta R.T.: 0.000 min
Response: 10464772
Conc: 368.57 PPM



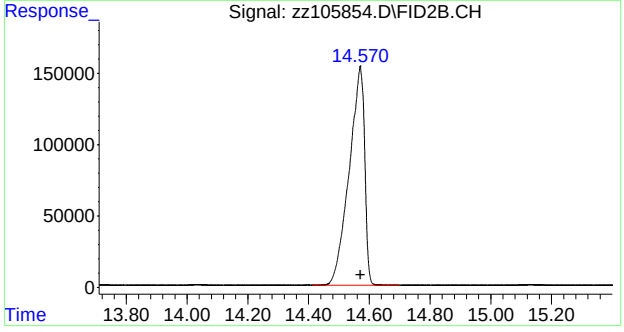
#14 c36

R.T.: 12.956 min
Delta R.T.: 0.000 min
Response: 9236214
Conc: 274.02 PPM



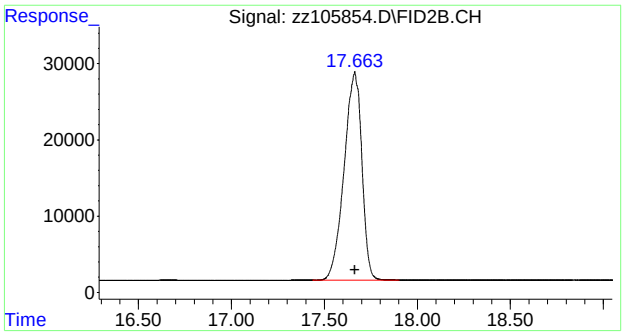
#15 c38

R.T.: 13.641 min
Delta R.T.: 0.000 min
Response: 7452550
Conc: 266.83 PPM



#16 c40

R.T.: 14.570 min
Delta R.T.: 0.000 min
Response: 5404271
Conc: 187.35 PPM



#17 c44

R.T.: 17.663 min
Delta R.T.: 0.000 min
Response: 1811206
Conc: 100.04 PPM

Manual Integration Approval Summary

Sample Number:	GZZ3912-RT	**Method:**	SW846 8015D
Lab FileID:	ZZ105854.D	**Analyst approved:**	10/18/22 04:44 Syra Marie Pacheco
Injection Time:	10/16/22 13:10	**Supervisor approved:**	10/18/22 17:45 Gwendolyn Burns

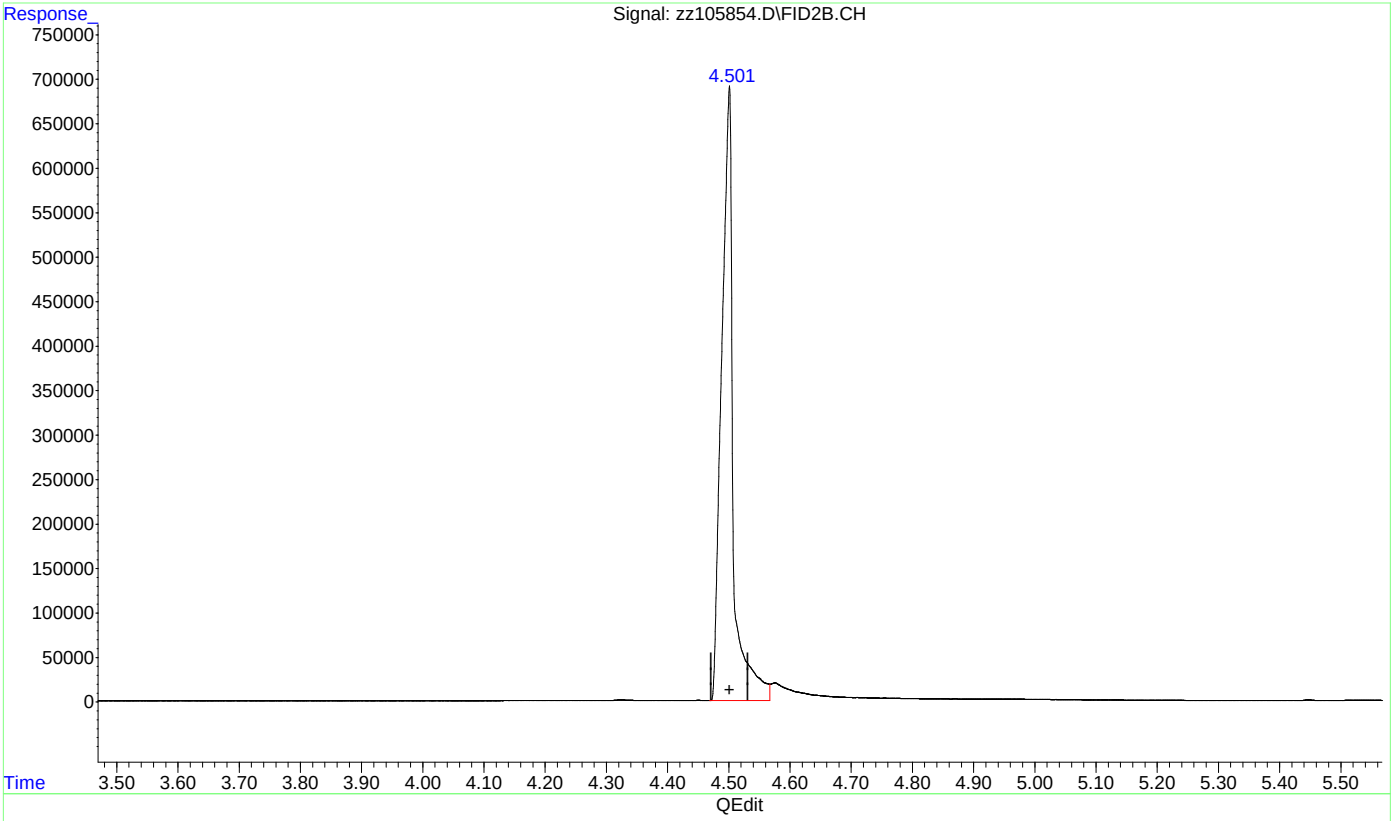
Parameter	CAS	Sig#	R.T. (min.)	Reason
C10		1	4.50	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105854.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:10 pm
Operator : thomasl
Sample : rt
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:18:07 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\rt-zz.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:18:04 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um



(1) c10 (T)

4.500min 329.786 PPM

response 9102008

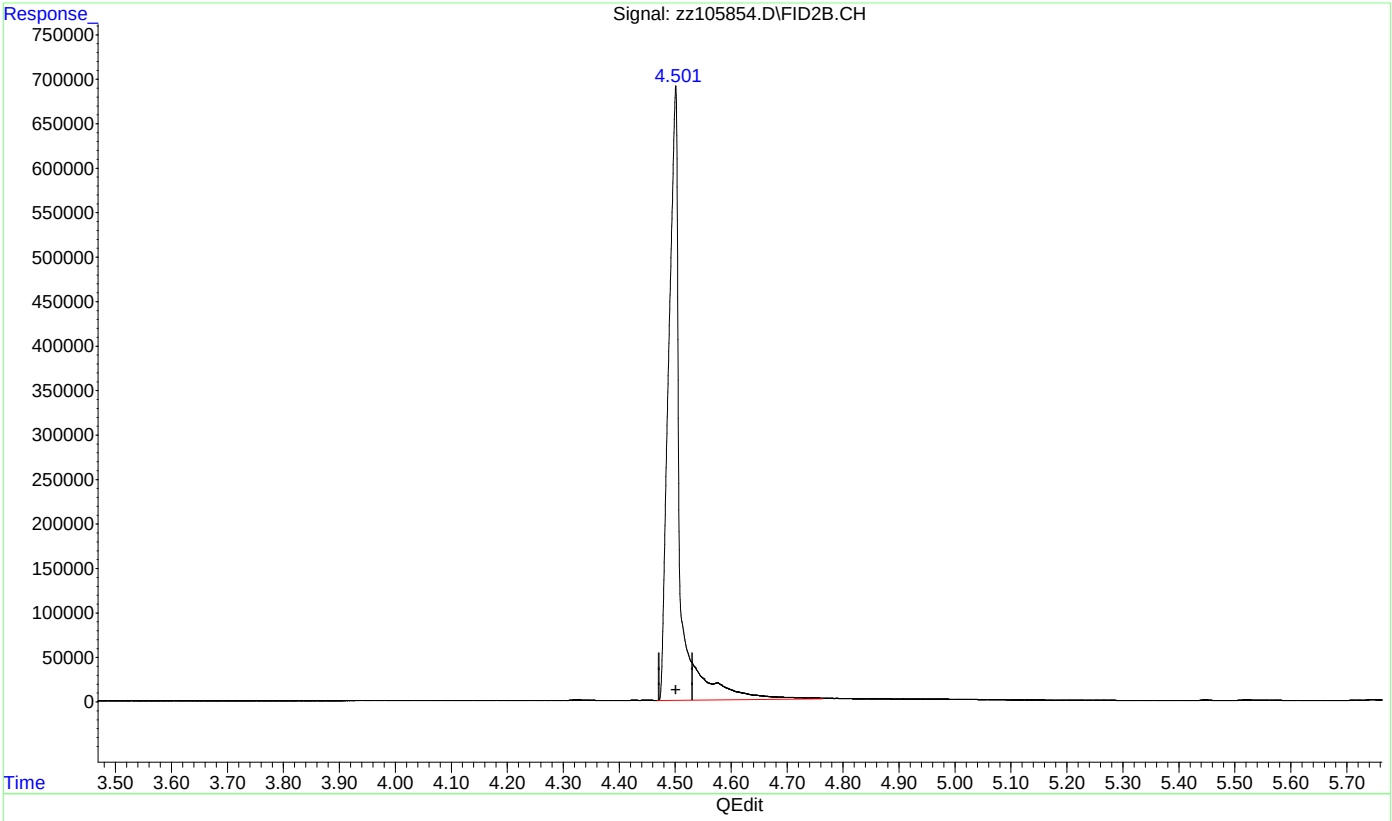
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105854.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 1:10 pm
Operator : thomasl
Sample : rt
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 2 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:18:07 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\rt-zz.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:18:04 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Small noise peaks clipped

Volume Inj. : 1ul
Signal Phase : RTX-5
Signal Info : 30mx.32mmx.25um



(1) c10 (T)

4.501min 353.778 PPM m

response 9764179

(+) = Expected Retention Time
rt-zz.m Tue Oct 18 08:18:22 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:13:25 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.401	4.106	5758978	5194664	2.116	2.015
	Spiked Amount 40.000			Recovery	=	5.29%	5.04%
51)	S Decachlor...	10.973	12.789	5735392	4553437	3.124	3.810m
	Spiked Amount 40.000			Recovery	=	7.81%	9.53%
	Target Compounds						
41)	AR1016-A	3.828	4.812	3240054	2792080	84291.814	56.409 #
42)	AR1016-B	4.278	5.397	6917445	5800129	64.518	55.194m
43)	AR1016-C	4.879	6.063	13031508	11695930	59.364	59.726
44)	AR1016-D	5.057	6.262	5309533	4726285	62.493	60.468
45)	AR1016-E	5.604	6.946	5608600	3582785	63.786	60.120
46)	AR1260-A	7.672	9.067	10871219	6834628	71.367	62.375
47)	AR1260-B	8.225	9.730	6736946	5629974	68.113	69.333
48)	AR1260-C	8.572	10.176	7332362	5814218	72.660	61.841
49)	AR1260-D	9.009	10.519	13938863	11431602	68.216	61.812
50)	AR1260-E	9.409	11.078	16255675	11686639	70.325m	63.392m

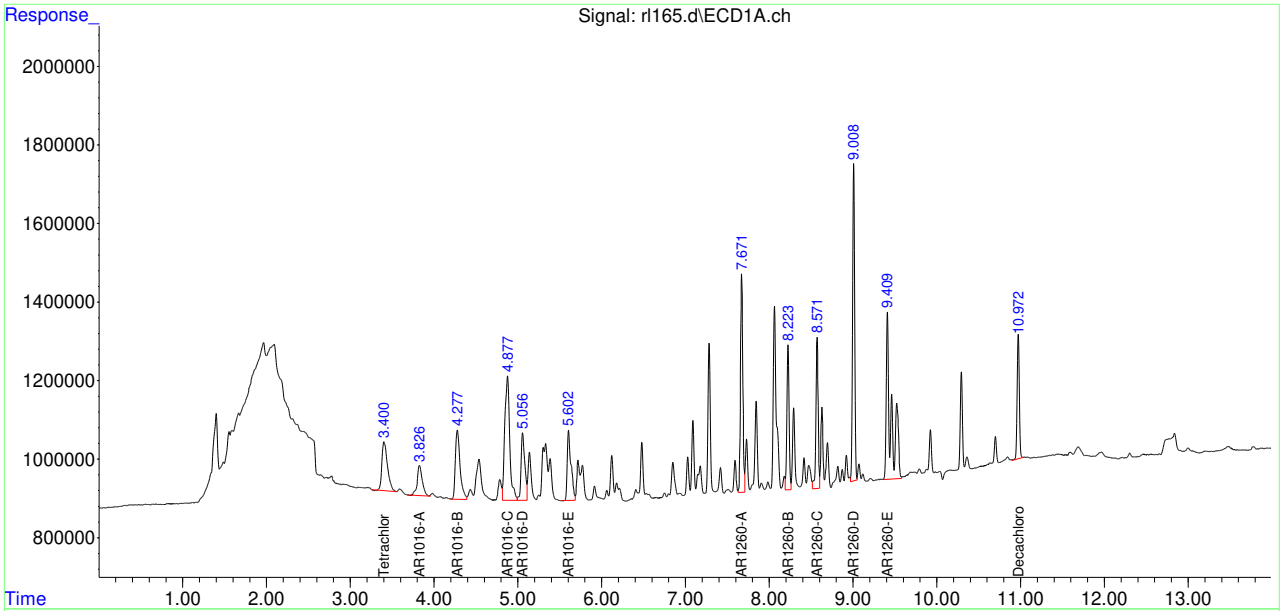
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

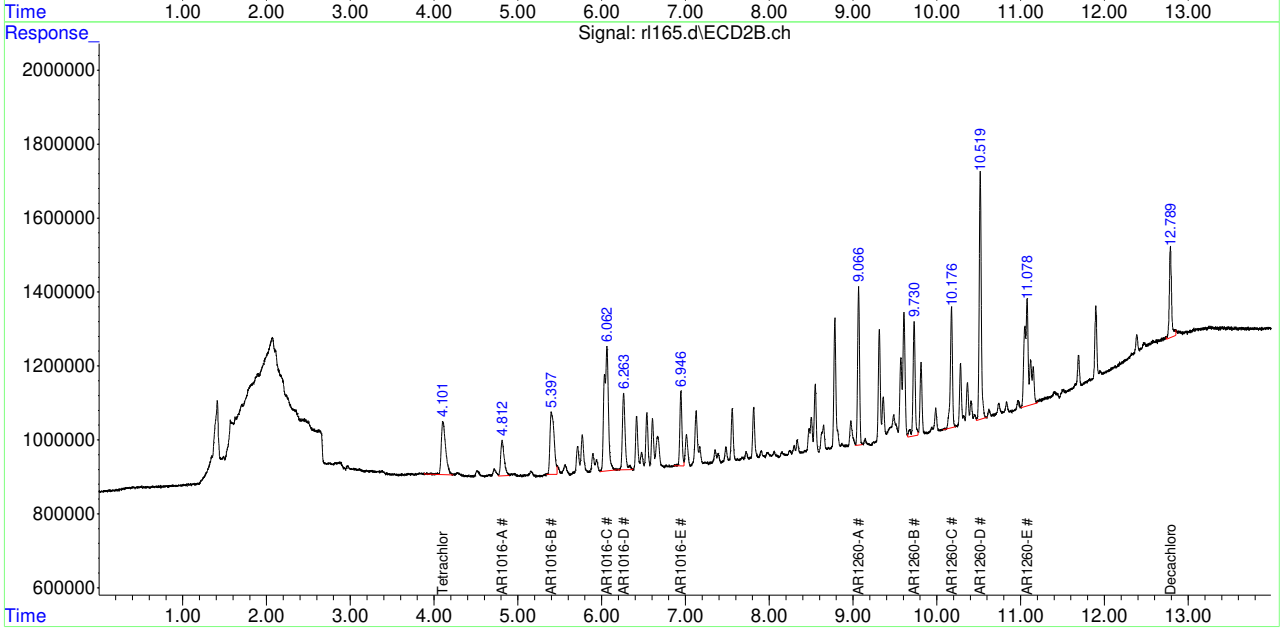
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:13:25 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL165.D
Injection Time: 09/20/22 23:42
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

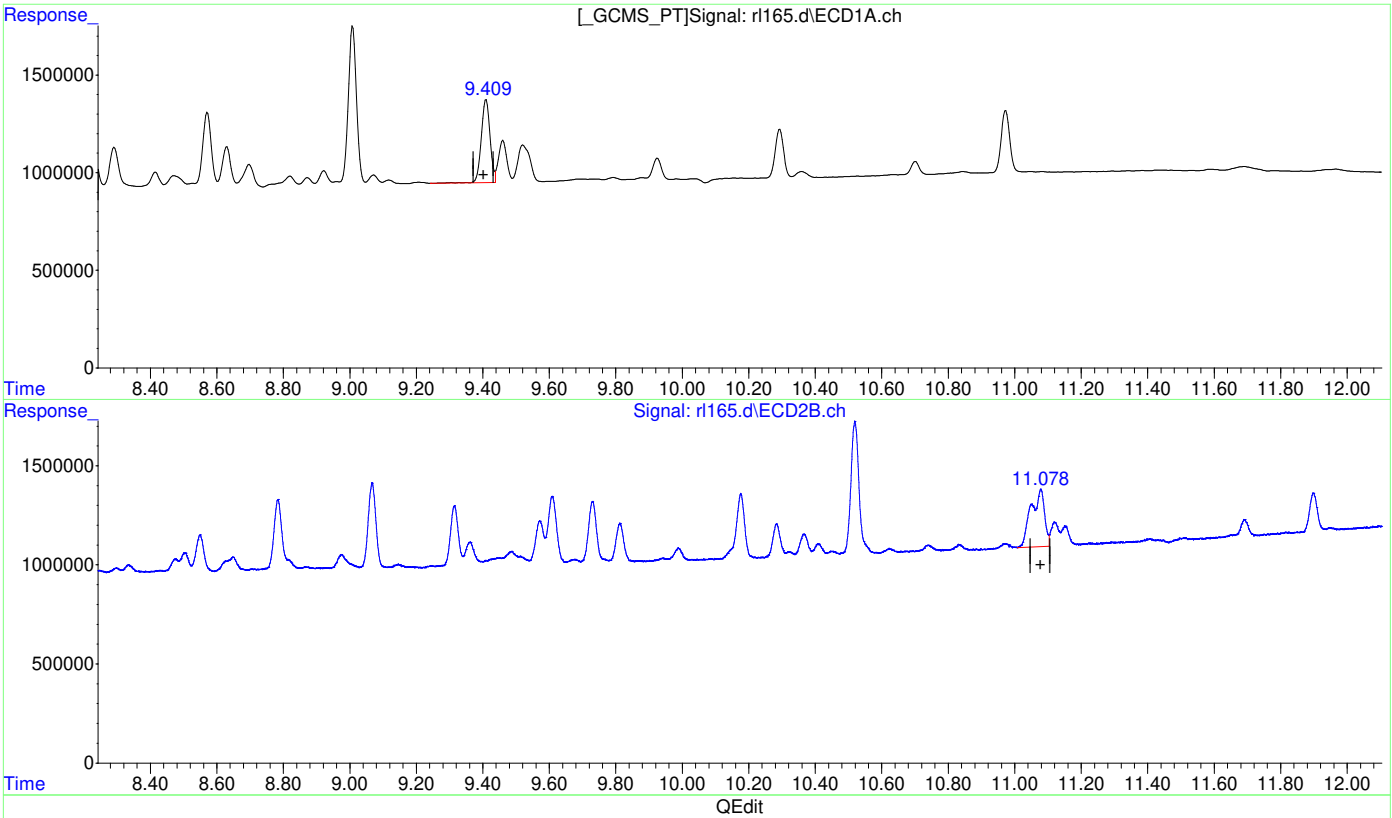
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-B		2	5.40	Poorly defined baseline
AR1260-E		1	9.41	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:19:21 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E

9.410min 33.297 PPB

response 7696638

(50) AR1260-E #2

11.078min 44.643 PPB

response 8230224

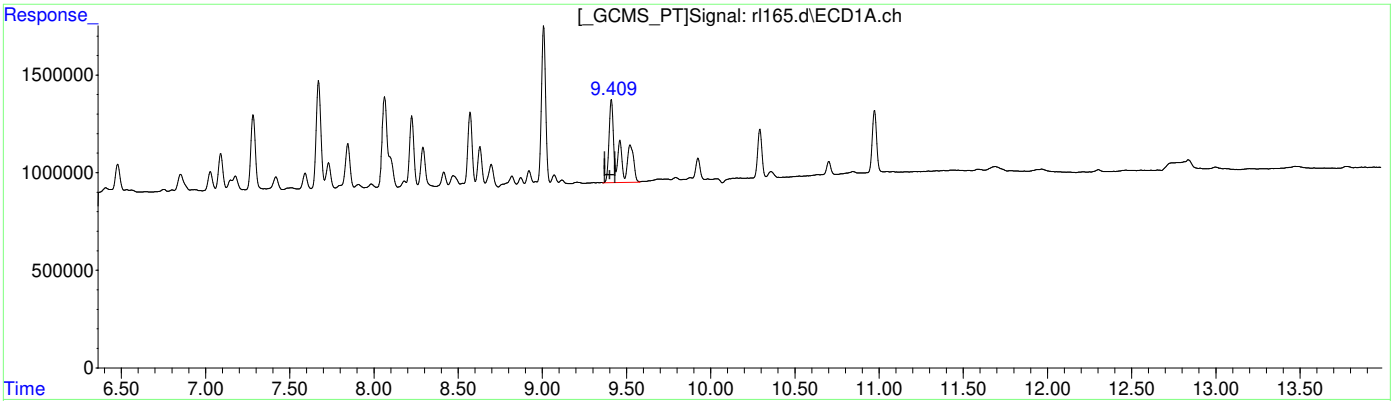
(+) = Expected Retention Time

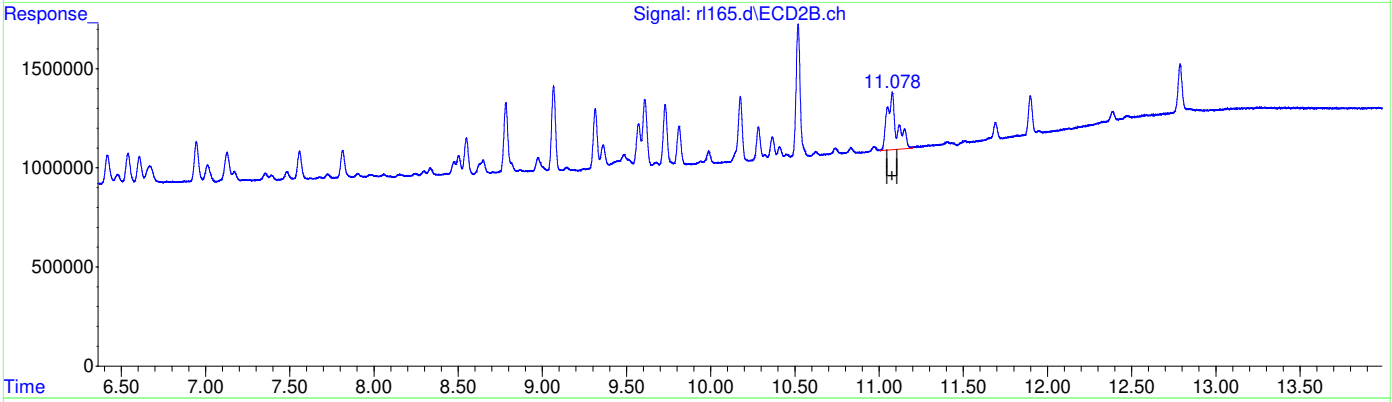
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:19:21 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.409min 70.325 PPB m

response 16255675

(50) AR1260-E #2

11.078min 63.392 PPB m

response 11686639

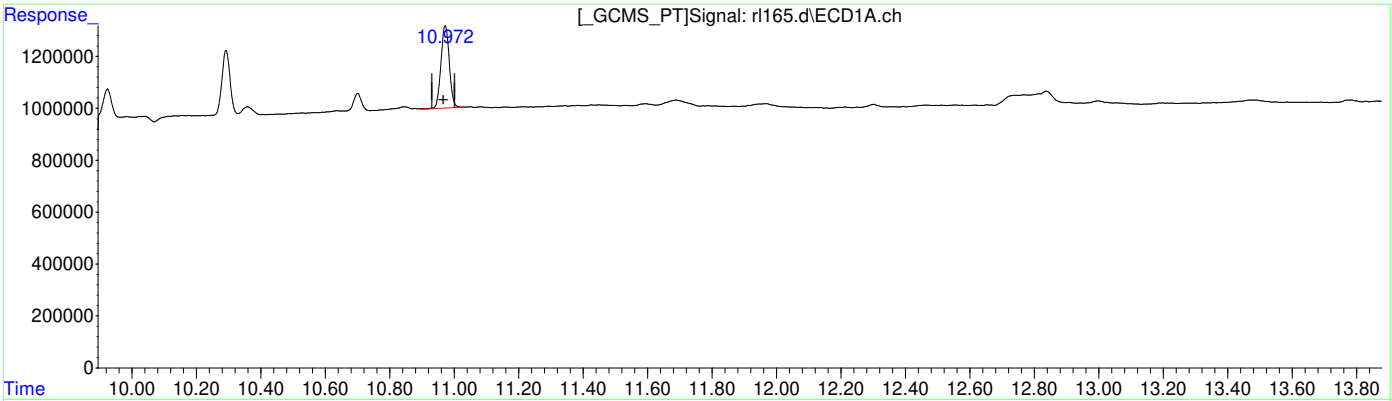
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:20:00 2022

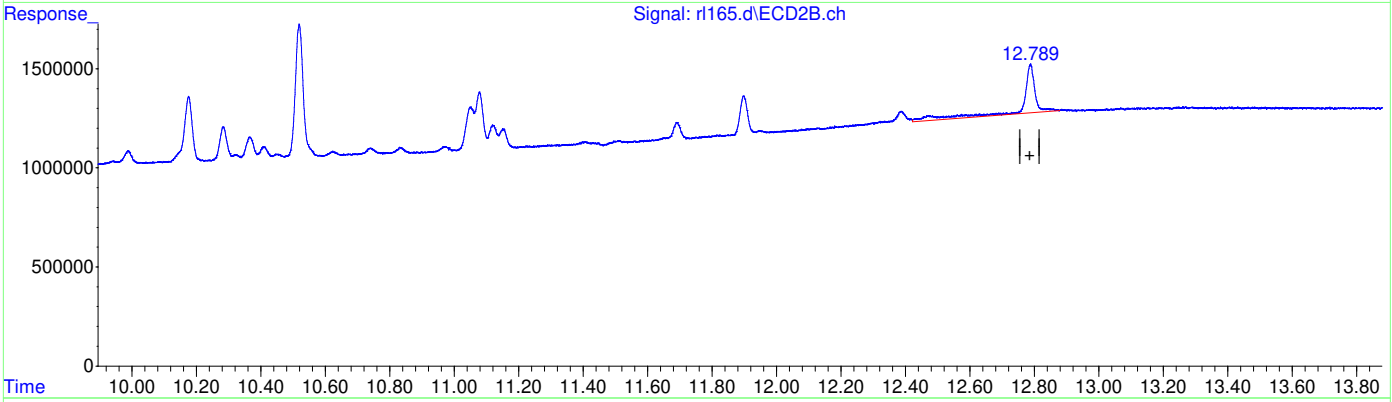
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:19:21 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.973min 3.124 ppb

response 5735392

(51) Decachlorobiphenyl #2 (S)

12.788min 5.470 ppb

response 6536824

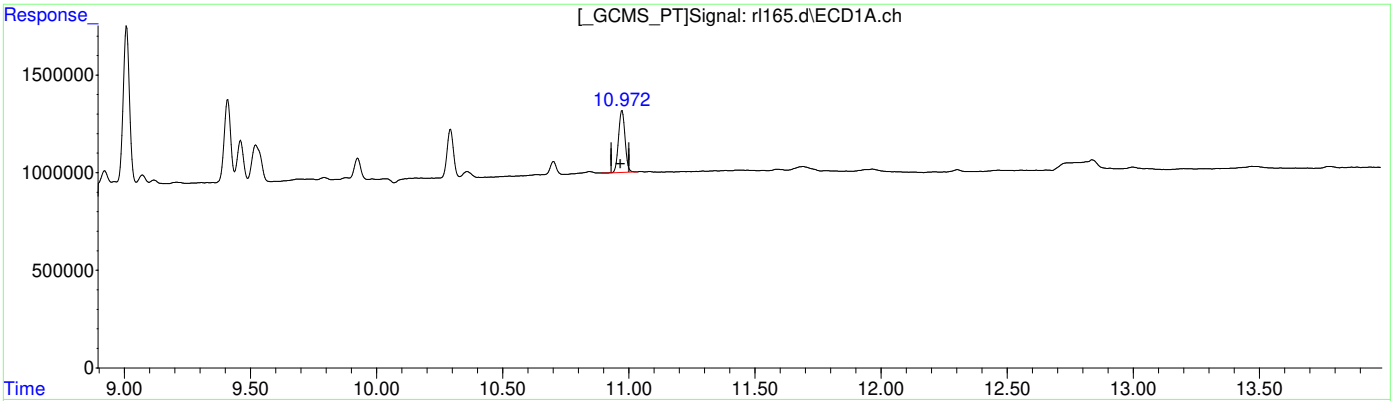
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:20:03 2022

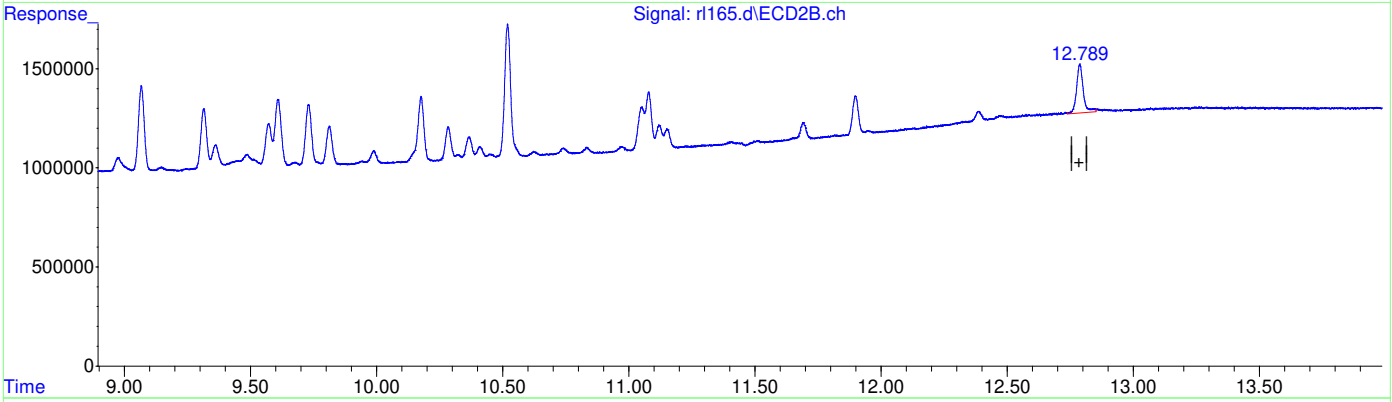
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:19:21 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.973min 3.124 ppb

response 5735392

(51) Decachlorobiphenyl #2 (S)

12.789min 3.810 ppb m

response 4553437

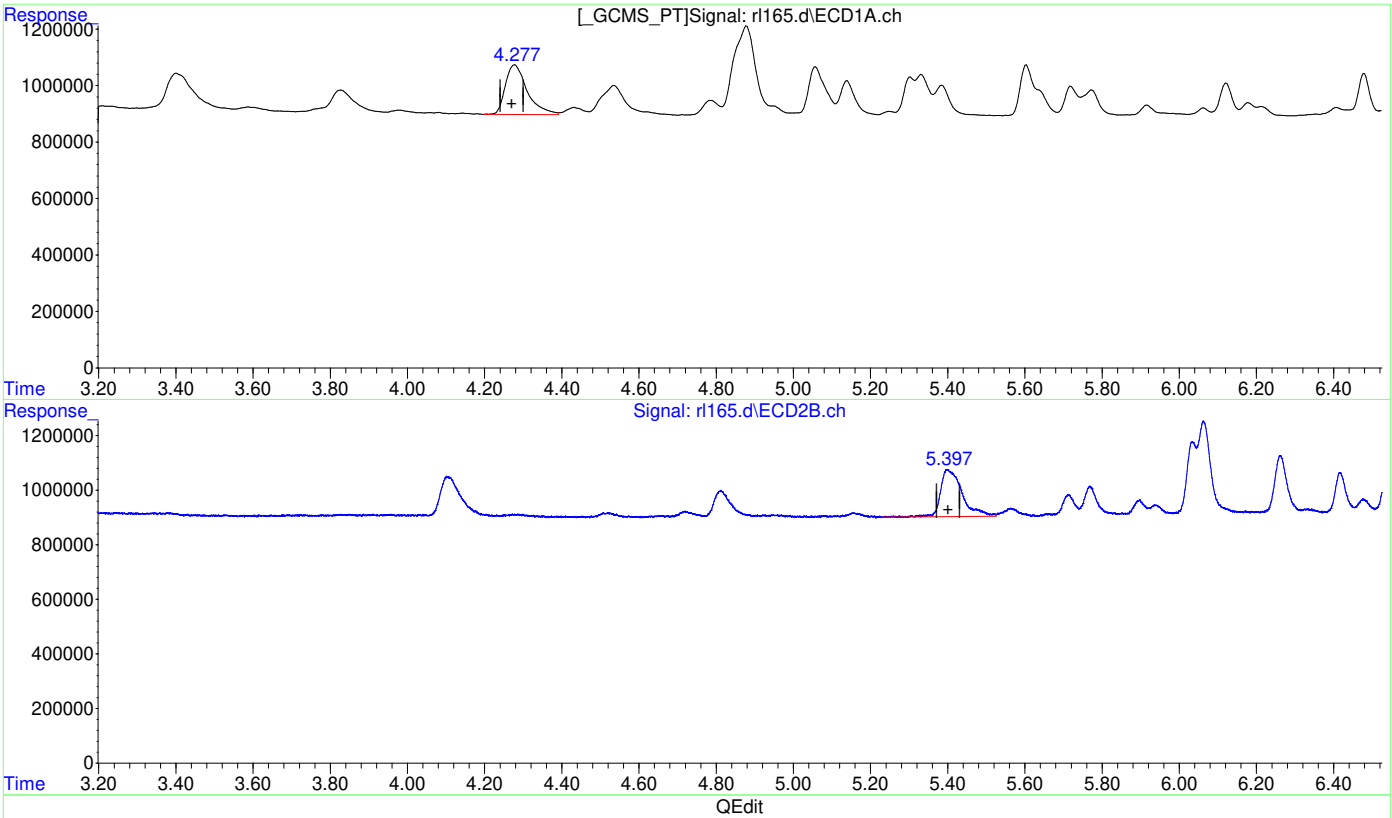
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:20:07 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(42) AR1016-B

4.278min 64.518 PPB

response 6917445

(42) AR1016-B #2

5.401min 64.025 PPB

response 6728137

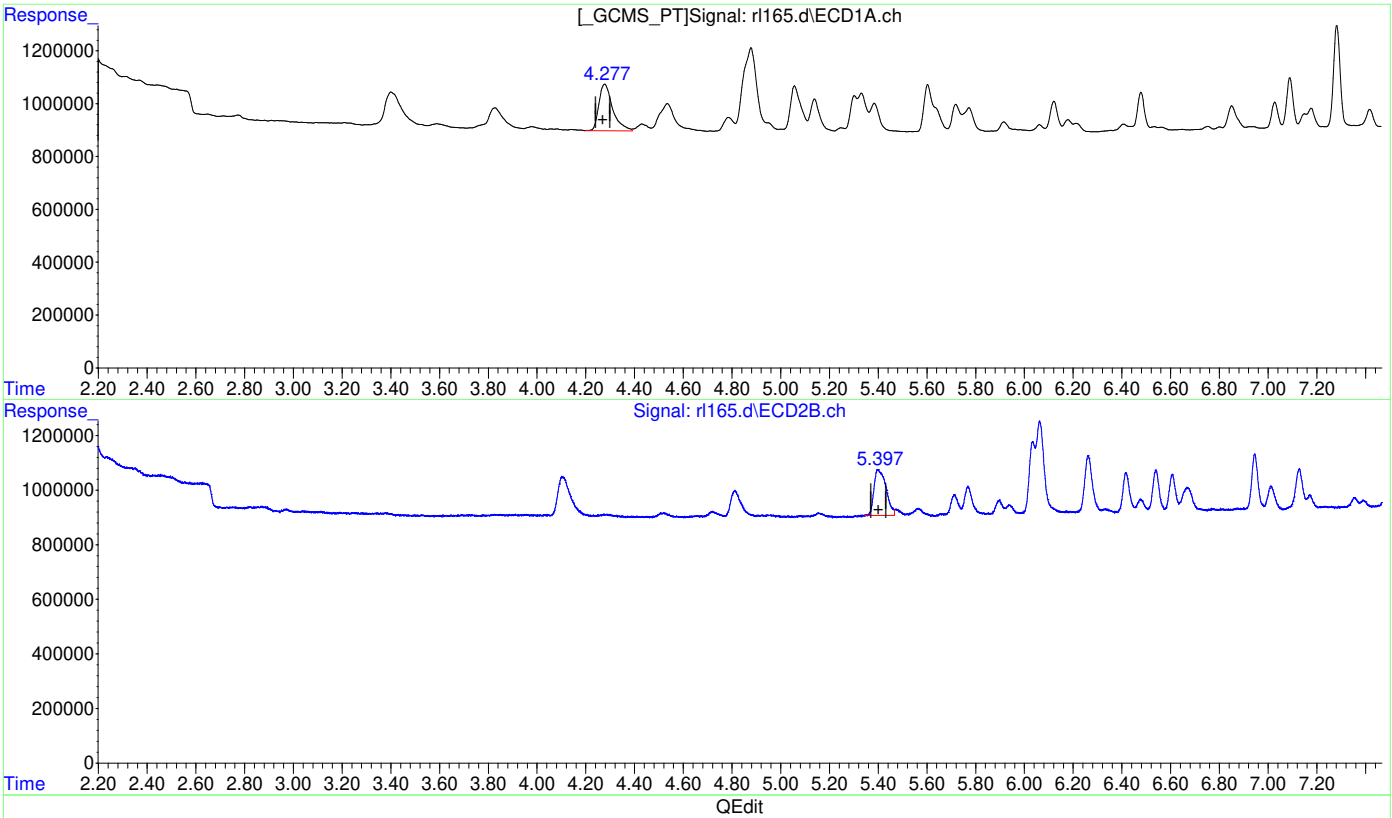
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl165.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 20 Sep 2022 11:42 pm
Operator : rebeccak
Sample : ic5-50
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 3 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:20:07 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(42) AR1016-B

4.278min 64.518 PPB

response 6917445

(42) AR1016-B #2

5.397min 55.194 PPB m

response 5800129

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:26 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.399	4.111	30595395	25822699	11.243	10.014	
	Spiked Amount 40.000			Recovery	=	28.11%	25.03%	
51)	S Decachlor...	10.967	12.785	24458699	18252201	13.324	15.273m	
	Spiked Amount 40.000			Recovery	=	33.31%	38.18%	
	Target Compounds							
41)	AR1016-A	3.820	4.817	17578176	14280000	208.221	288.500	#
42)	AR1016-B	4.270	5.405	32196793	29188808	300.293	277.761	
43)	AR1016-C	4.871	6.067	63467948	53205845	289.121	271.701	
44)	AR1016-D	5.050	6.266	25233206	22248617	296.993	284.651	
45)	AR1016-E	5.596	6.949	26663327	16778190	303.241	281.540	
46)	AR1260-A	7.663	9.068	45229783	30199324	296.923	275.610	
47)	AR1260-B	8.217	9.731	28190110	23944525	285.014	294.877	
48)	AR1260-C	8.563	10.176	30951601	26720856	306.716	284.206	
49)	AR1260-D	9.002	10.519	60637673	51333232	296.757	277.565	
50)	AR1260-E	9.400	11.077	72789568	55190687	314.901m	299.371	

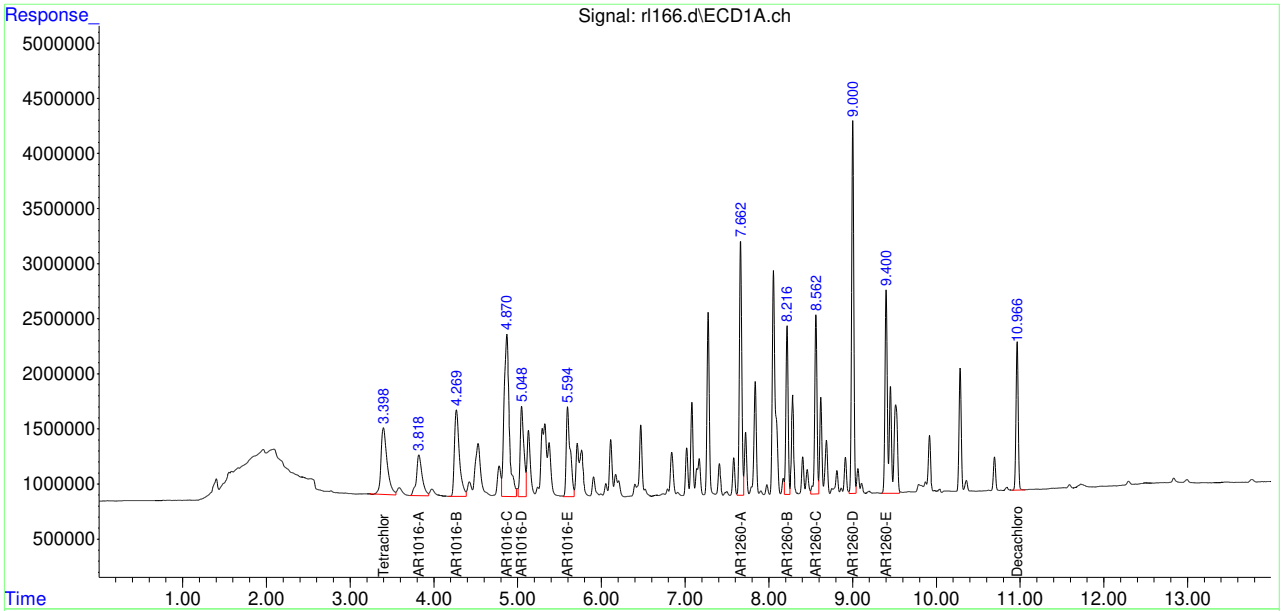
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

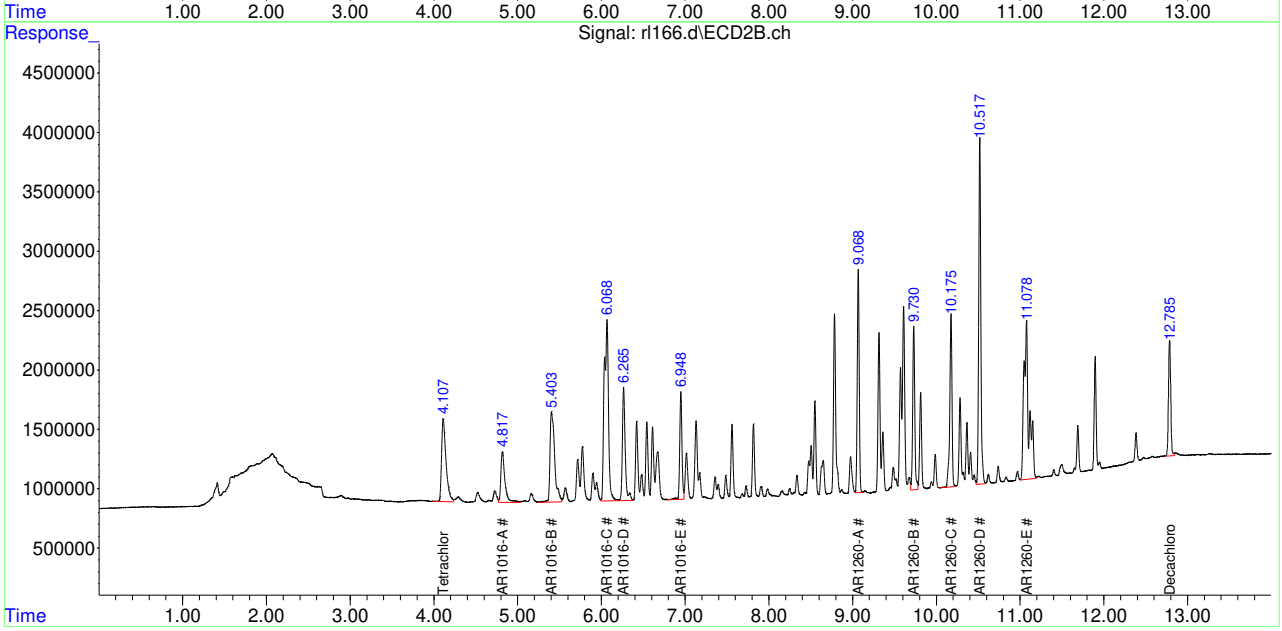
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:26 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL166.D
Injection Time: 09/21/22 00:00
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

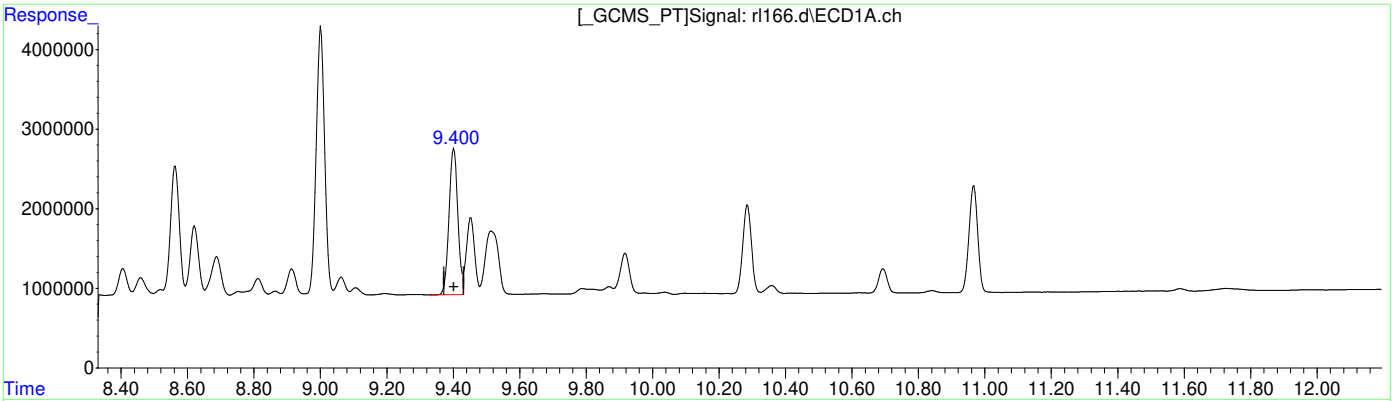
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
Decachlorobiphenyl	2051-24-3	2	12.78	Poorly defined baseline

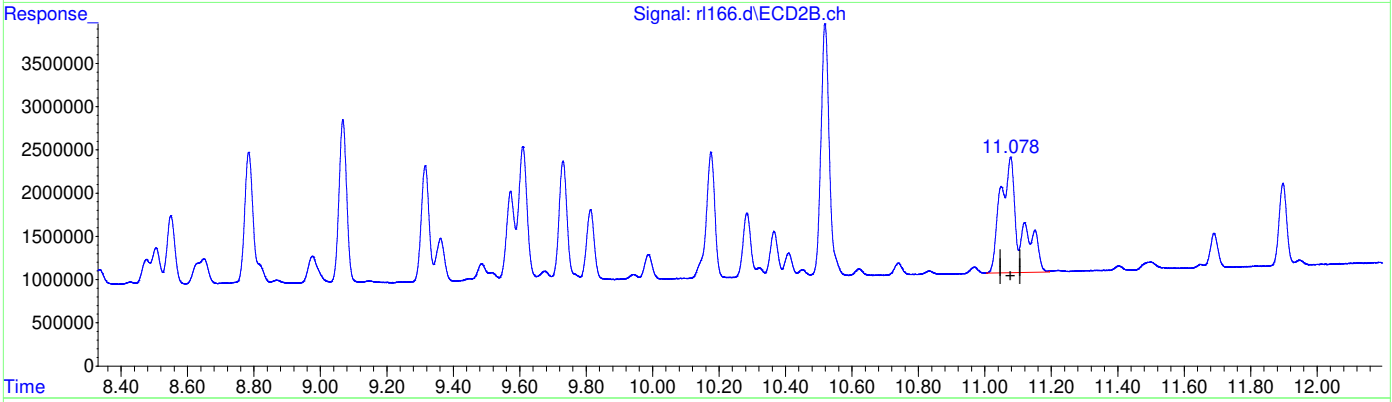
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:21:48 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.402min 147.203 PPB

response 34026130

(50) AR1260-E #2

11.077min 299.371 PPB

response 55190687

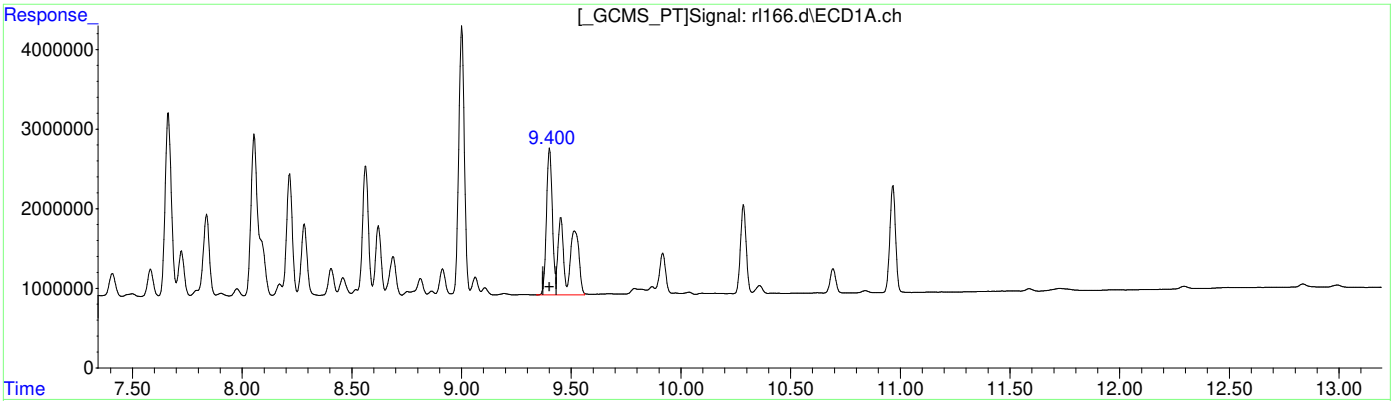
(+) = Expected Retention Time

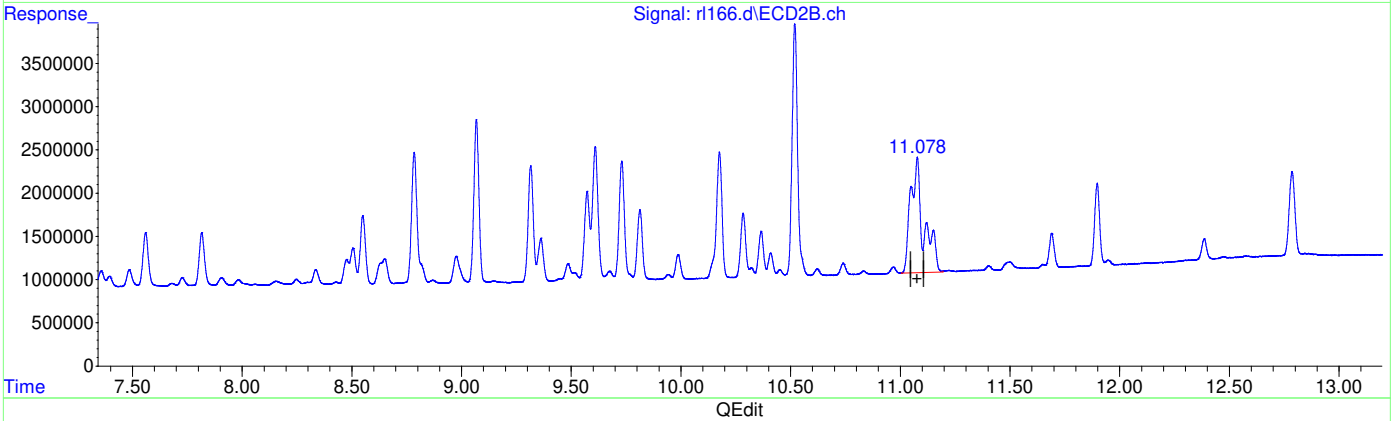
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:21:48 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.400min 314.901 PPB m

response 72789568

(50) AR1260-E #2

11.077min 299.371 PPB

response 55190687

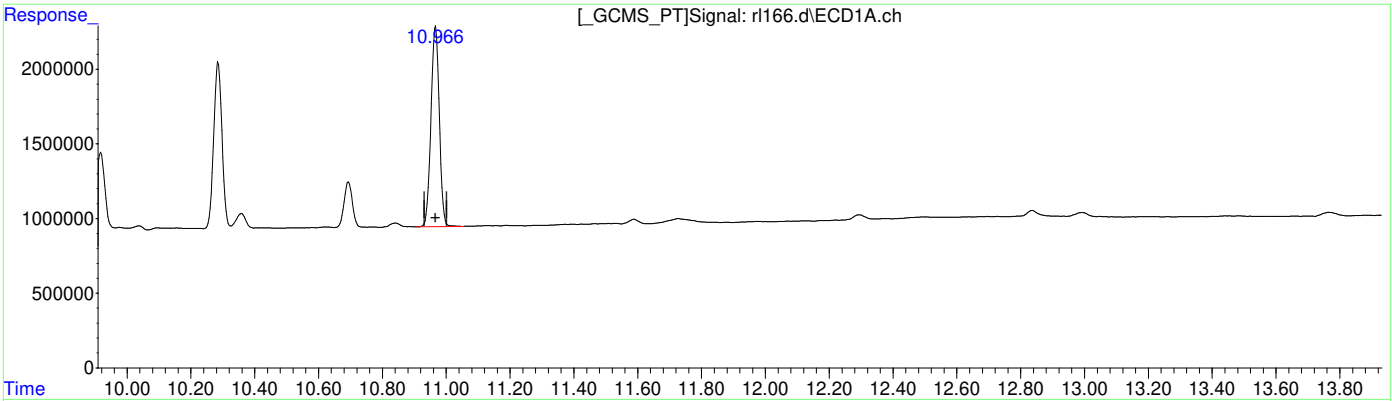
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:22:19 2022

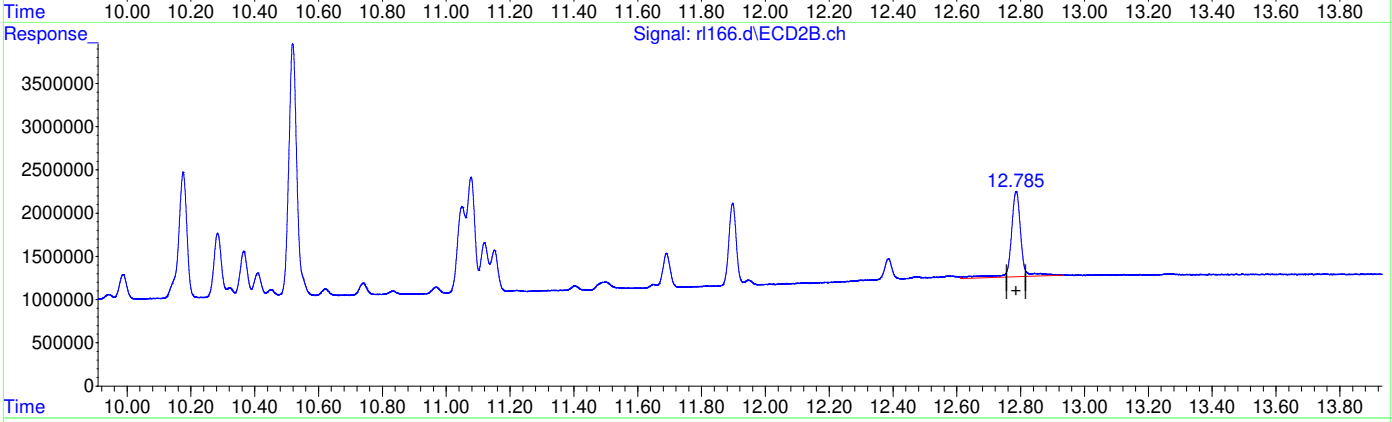
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:21:48 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 13.324 ppb

response 24458699

(51) Decachlorobiphenyl #2 (S)

12.786min 17.903 ppb

response 21395367

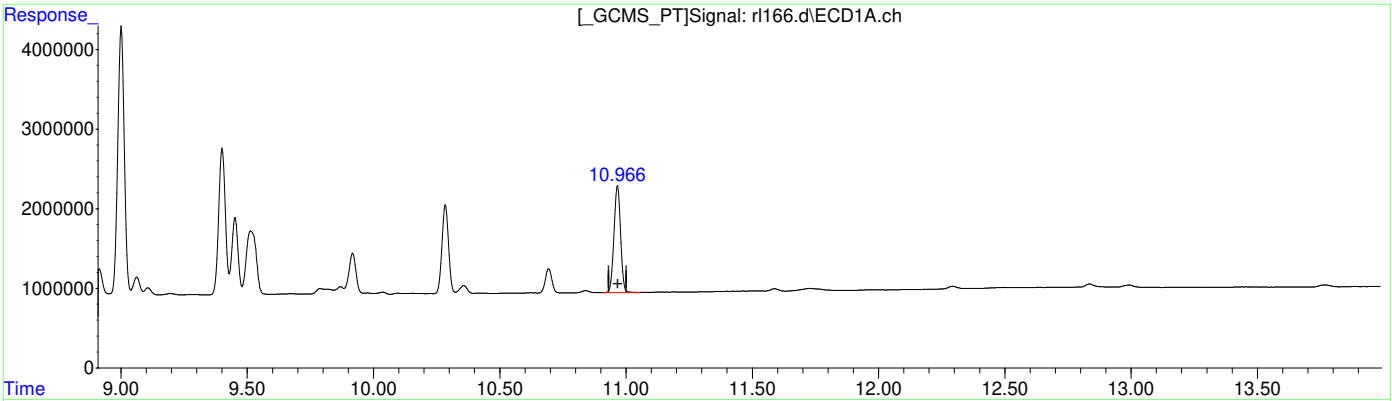
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:22:23 2022

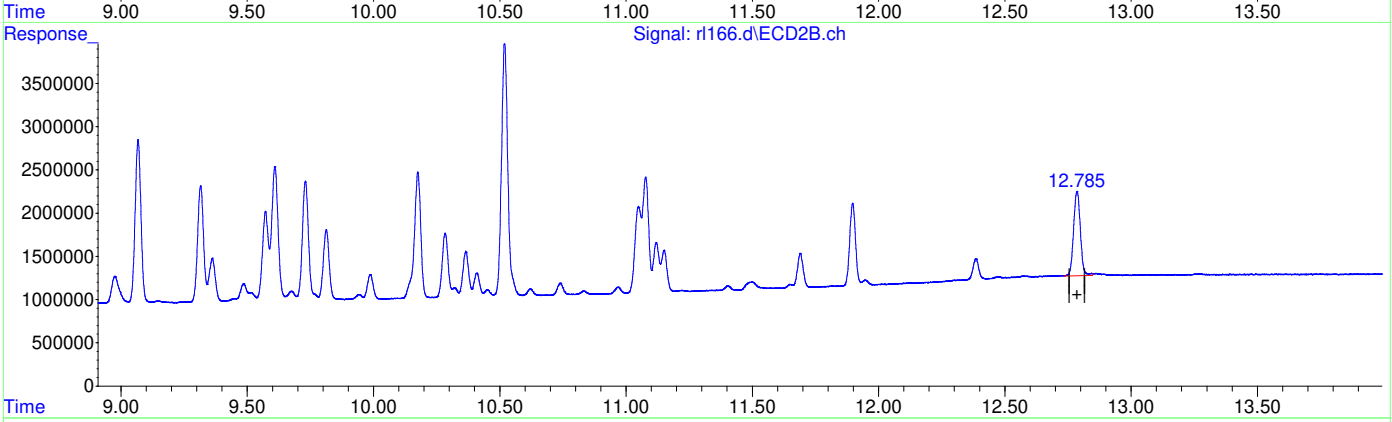
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl166.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:00 am
Operator : rebeccak
Sample : ic5-250
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 4 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:21:48 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 13.324 ppb

response 24458699

(51) Decachlorobiphenyl #2 (S)

12.785min 15.273 ppb m

response 18252201

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:22:30 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:23:47 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.398	4.111	57326165	48284017	21.066	18.725
	Spiked Amount 40.000			Recovery	=	52.66%	46.81%
51)	S Decachlor...	10.964	12.786	41900199	30470144	22.825	25.497m
	Spiked Amount 40.000			Recovery	=	57.06%	63.74%
	Target Compounds						
41)	AR1016-A	3.821	4.817	31918752	24383607	494.165	492.623
42)	AR1016-B	4.270	5.404	56851973	51093971	530.247	486.211
43)	AR1016-C	4.870	6.068	114.3E6	93650381	520.673	478.235m
44)	AR1016-D	5.050	6.266	45031793	37570411	530.021	480.679
45)	AR1016-E	5.595	6.948	47421205	29078181	539.319	487.935
46)	AR1260-A	7.662	9.068	79442397	53310757	521.521	486.534
47)	AR1260-B	8.216	9.730	49014638	41428384	495.558	510.191
48)	AR1260-C	8.562	10.175	54332134	47299256	538.407	503.079
49)	AR1260-D	9.000	10.519	108.9E6	92057957	532.977	497.768
50)	AR1260-E	9.399	11.077	127.4E6	98808987	551.052m	535.971m

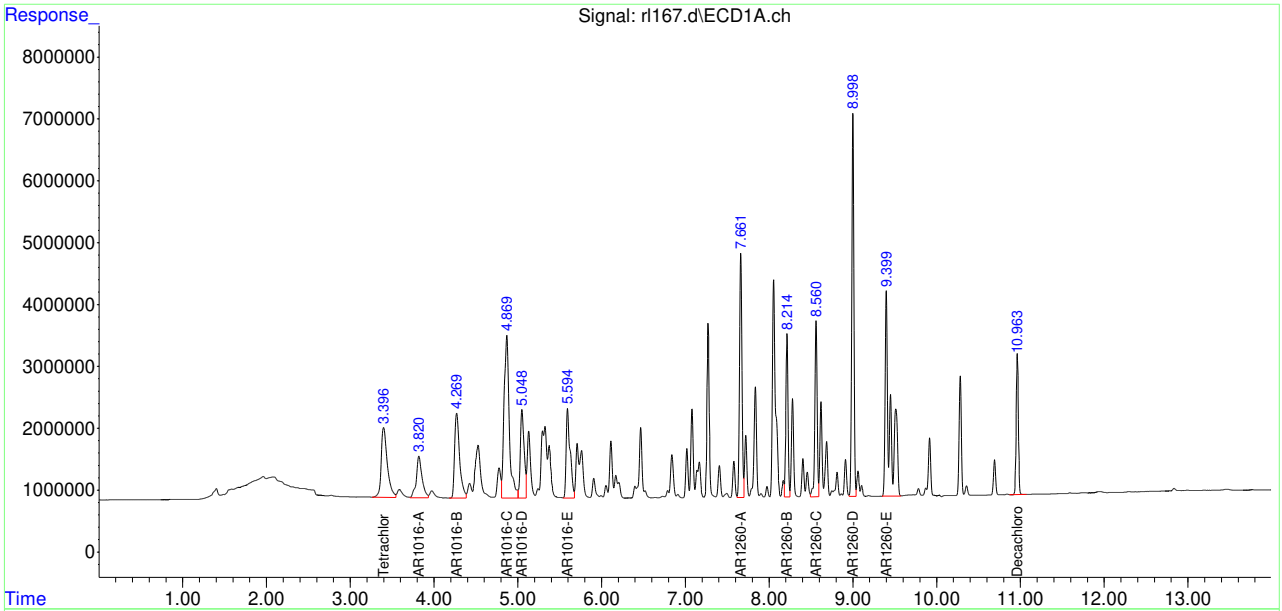
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

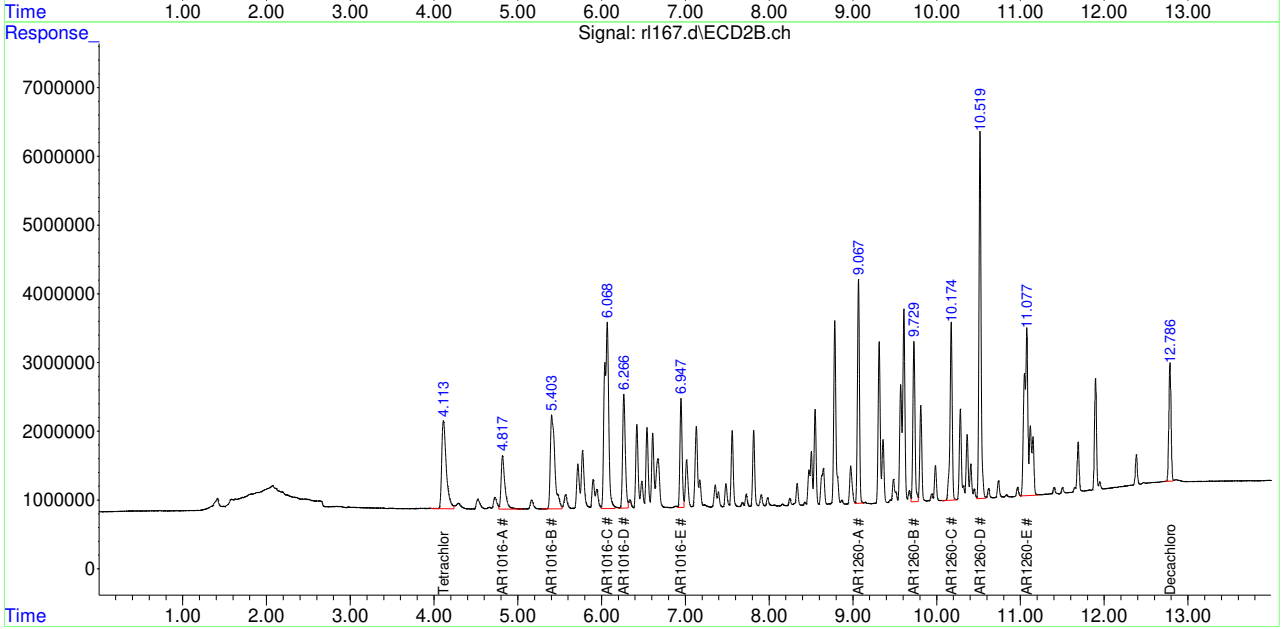
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:23:47 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL167.D
Injection Time: 09/21/22 00:17
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

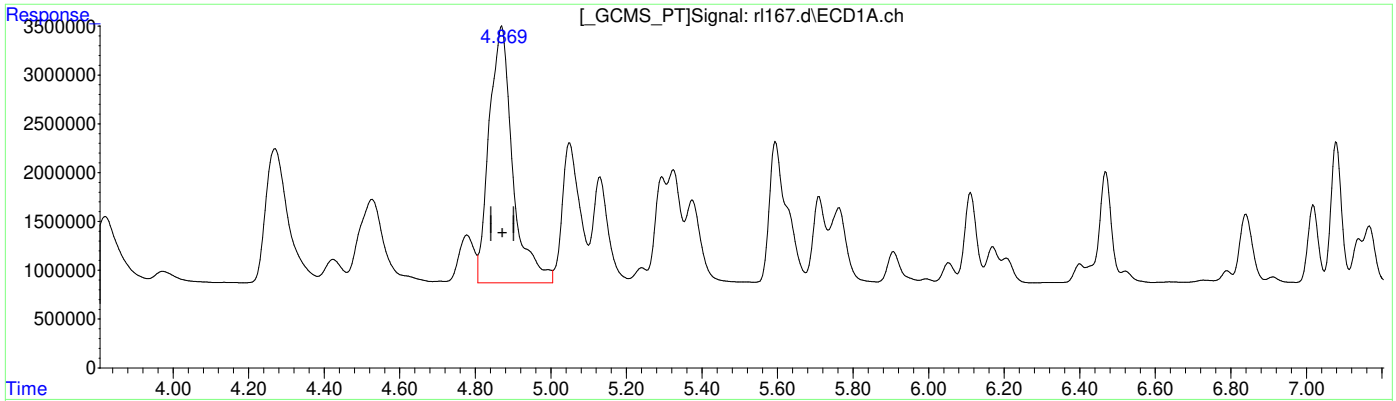
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.07	Split peak
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

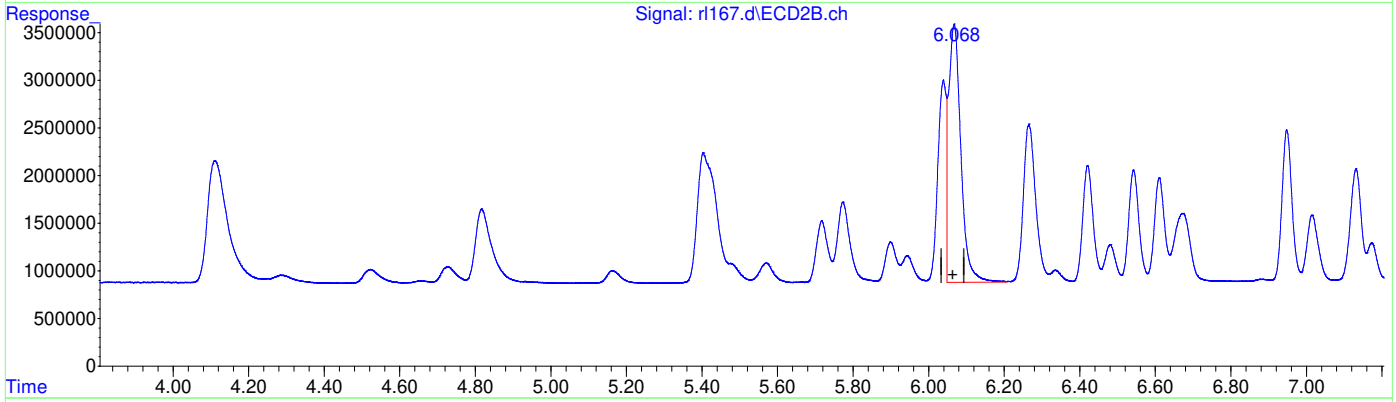
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(43) AR1016-C

4.870min 520.673 PPB

response 114298347

(43) AR1016-C #2

6.068min 310.178 PPB

response 60740657

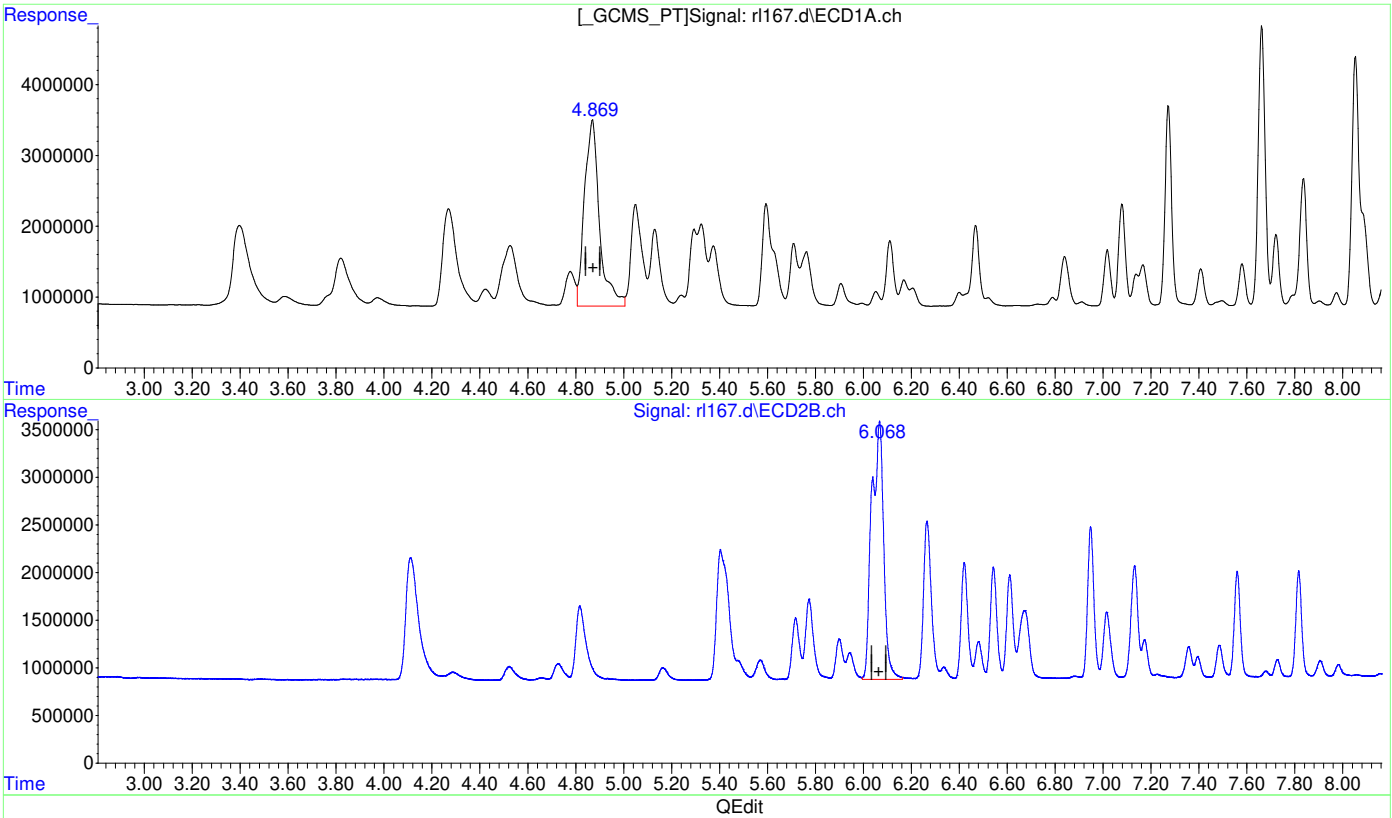
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:23:08 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.870min 520.673 PPB

response 114298347

(43) AR1016-C #2

6.068min 478.235 PPB m

response 93650381

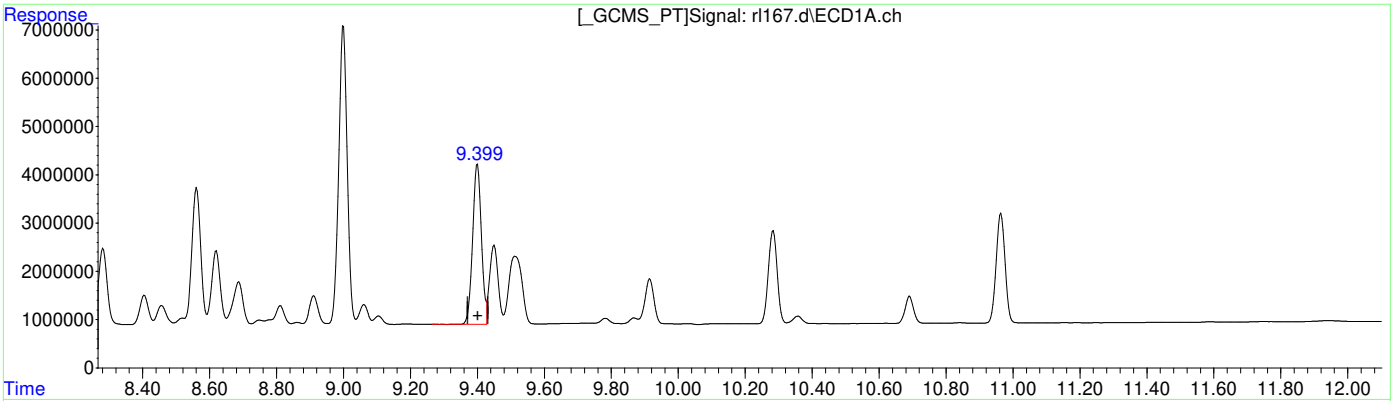
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.400min 259.576 PPB

response 60001114

(50) AR1260-E #2

11.077min 217.287 PPB

response 40058065

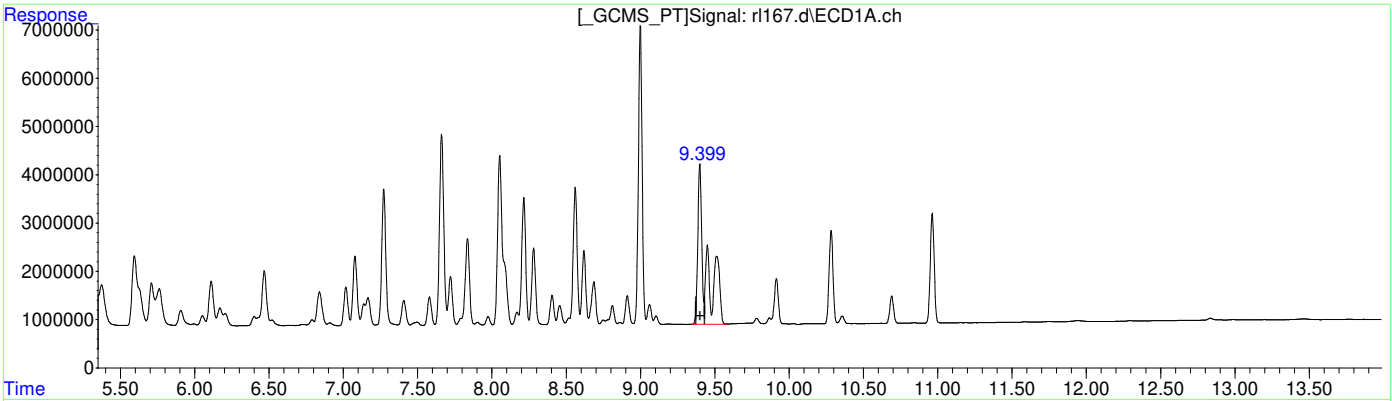
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:23:25 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.399min 551.052 PPB m

response 127376062

(50) AR1260-E #2

11.077min 535.971 PPB m

response 98808987

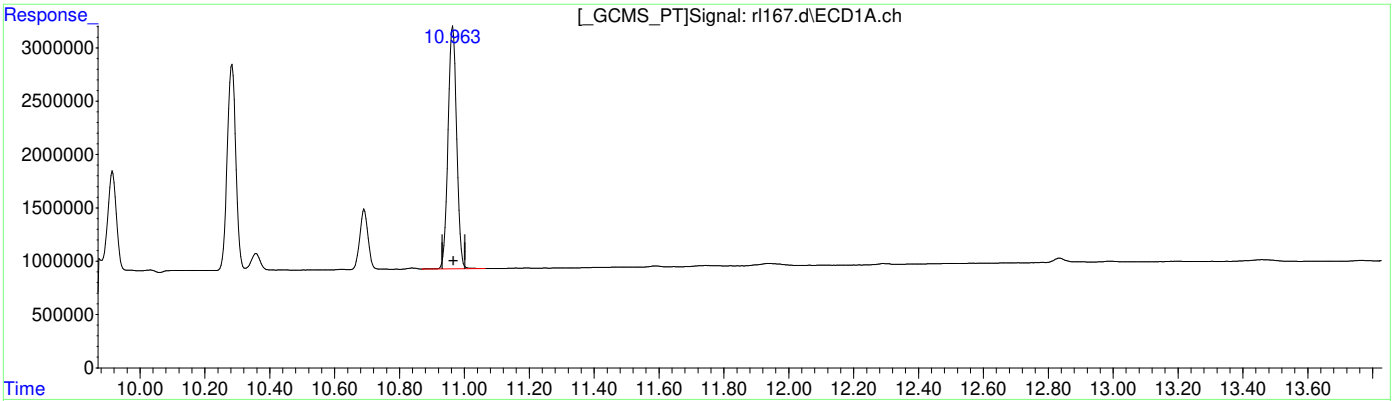
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:23:40 2022

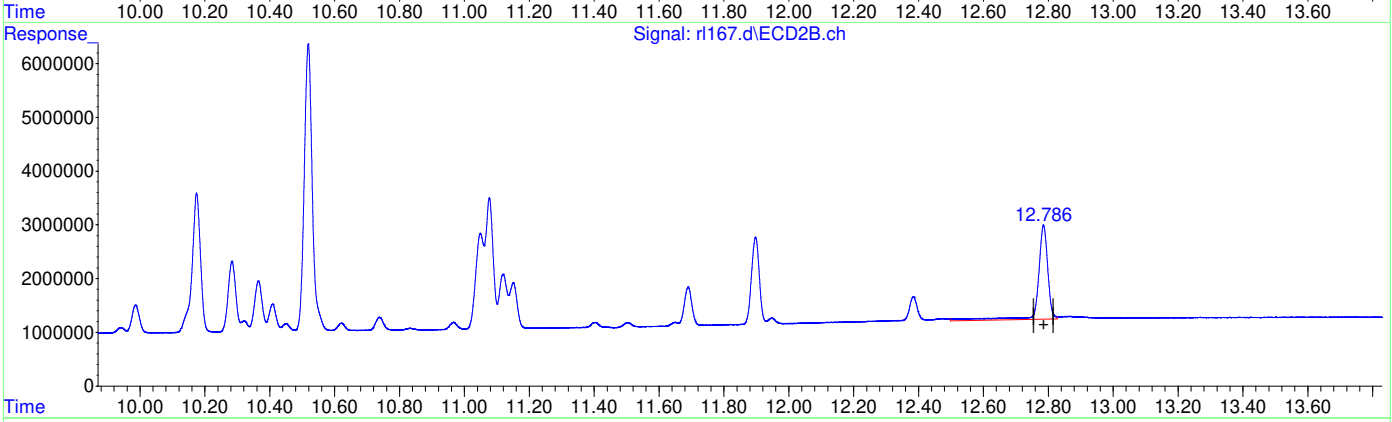
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 22.825 ppb

response 41900199

(51) Decachlorobiphenyl #2 (S)

12.786min 30.514 ppb

response 36466293

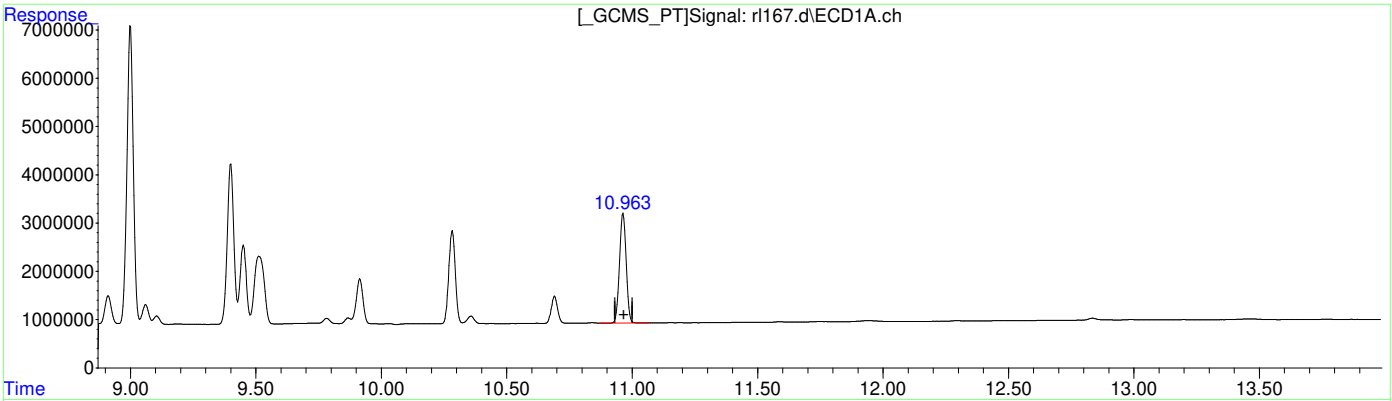
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:23:44 2022

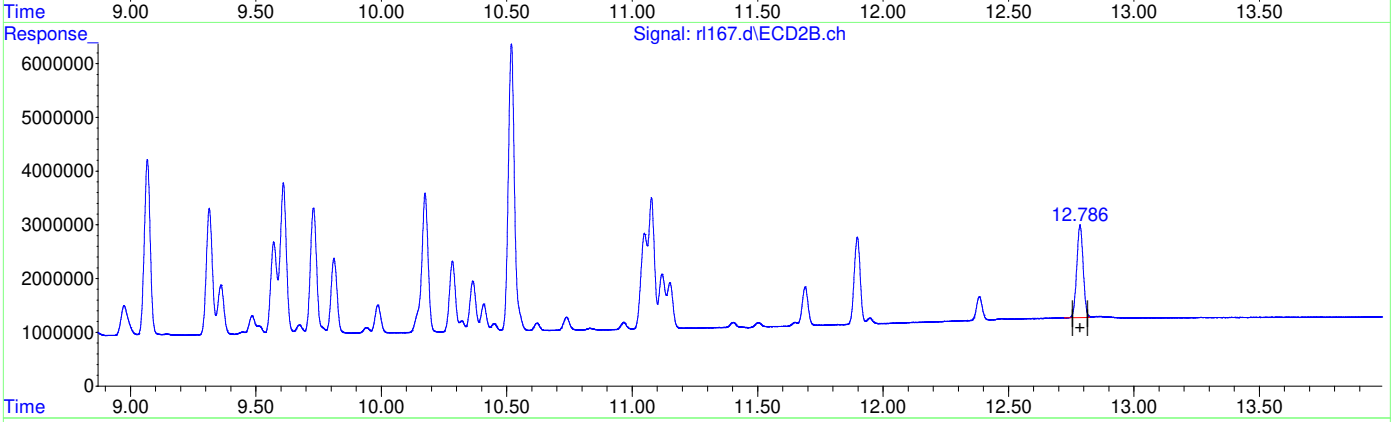
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl167.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:17 am
Operator : rebeccak
Sample : ic5-500
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 5 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:22:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 22.825 ppb

response 41900199

(51) Decachlorobiphenyl #2 (S)

12.786min 25.497 ppb m

response 30470144

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:23:50 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:34 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.398	4.112	114.5E6	97847585	42.079	37.946
	Spiked Amount 40.000			Recovery	=	105.20%	94.86%
51)	S Decachlor...	10.965	12.785	79205978	60100924	43.147	50.292m
	Spiked Amount 40.000			Recovery	=	107.87%	125.73%
	Target Compounds						
41)	AR1016-A	3.821	4.819	62946518	47178308	1119.671	953.146
42)	AR1016-B	4.269	5.406	107.7E6	97762968	1004.888	930.314
43)	AR1016-C	4.871	6.069	222.1E6	184.7E6	1011.615	943.343m
44)	AR1016-D	5.048	6.267	86726940	73151796	1020.769	935.910
45)	AR1016-E	5.594	6.950	90213520	56507220	1025.993	948.198
46)	AR1260-A	7.662	9.068	155.0E6	104.6E6	1017.629	954.367
47)	AR1260-B	8.214	9.731	94613458	80743095	956.582	994.352
48)	AR1260-C	8.562	10.175	105.6E6	93705914	1046.508	996.665
49)	AR1260-D	8.999	10.519	218.6E6	187.0E6	1069.865	1011.350
50)	AR1260-E	9.398	11.077	246.6E6	194.8E6	1066.974m	1056.659m

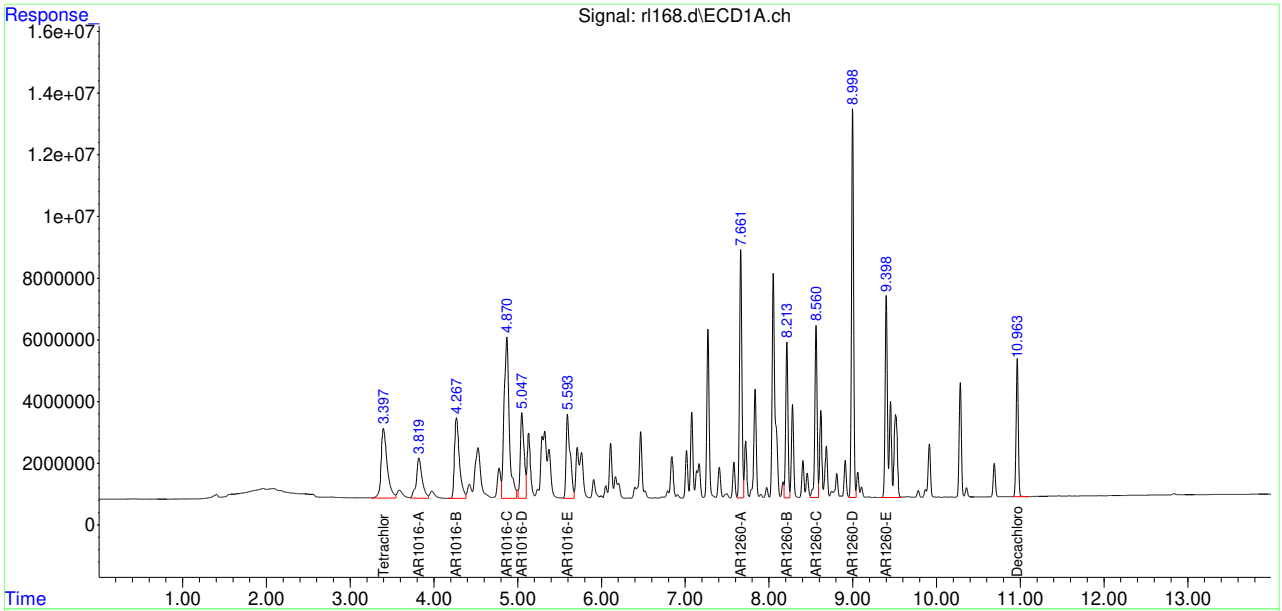
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

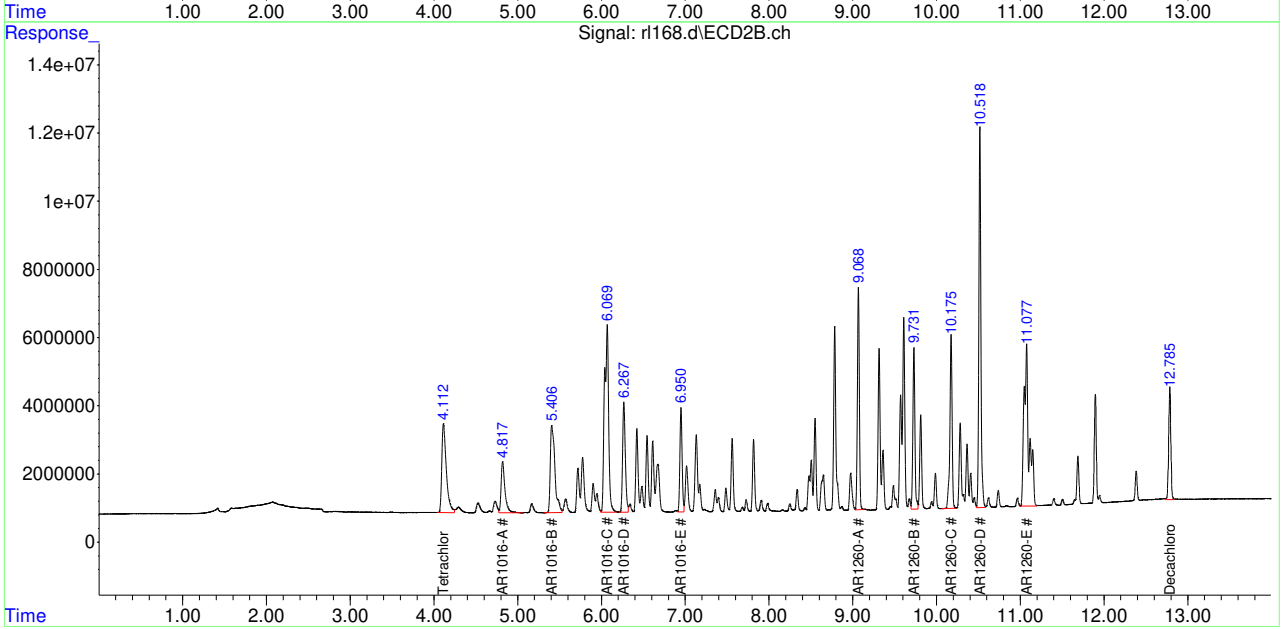
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:34 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICC5
Lab FileID: RL168.D
Injection Time: 09/21/22 00:34
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

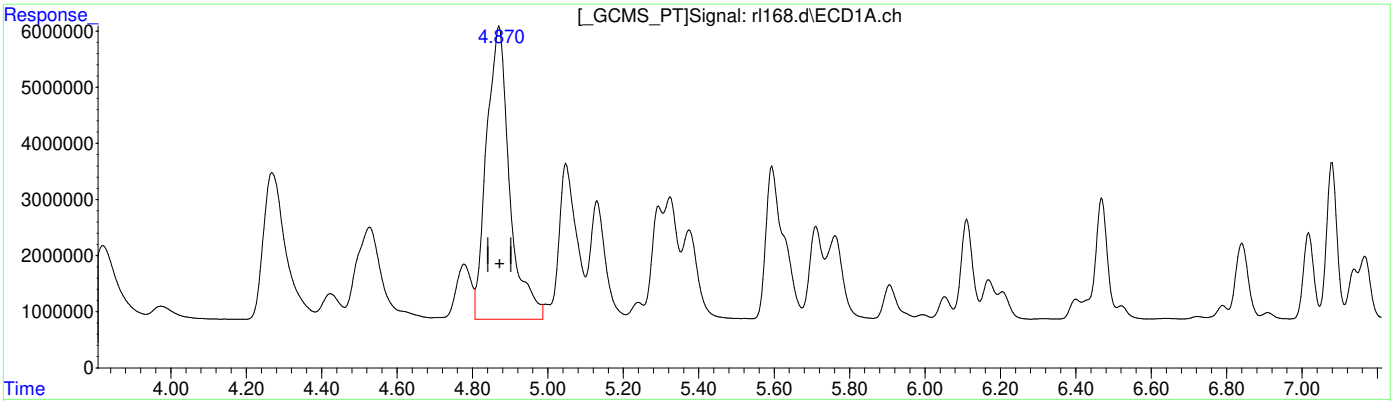
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.07	Split peak
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

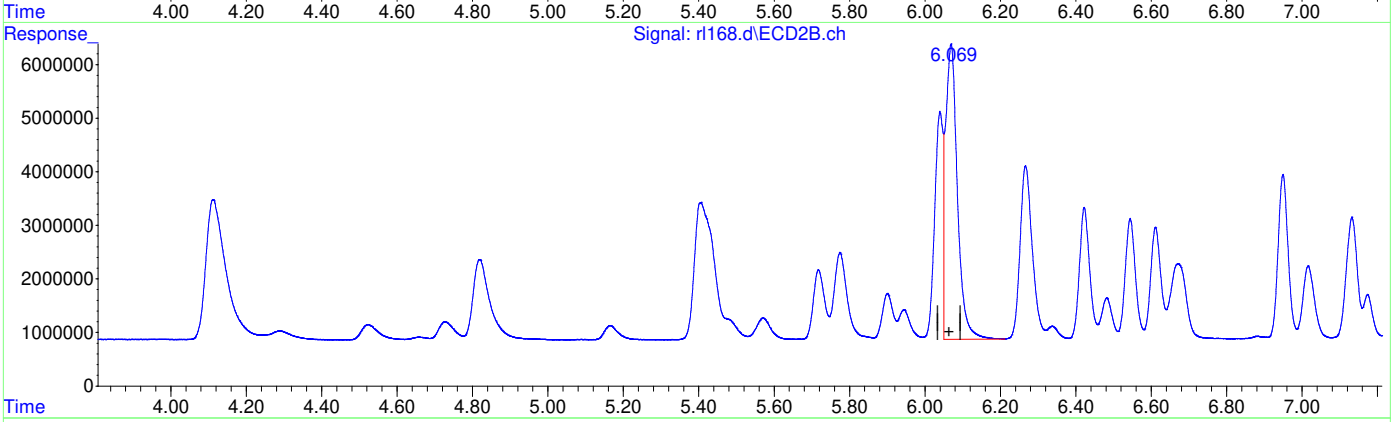
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(43) AR1016-C

4.871min 1011.615 PPB

response 222070177

(43) AR1016-C #2

6.069min 614.794 PPB

response 120391988

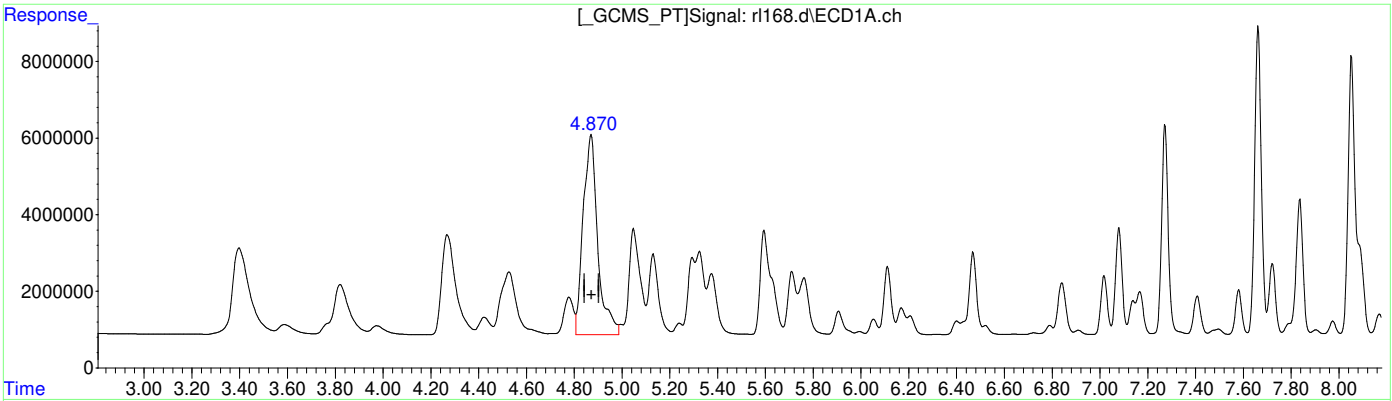
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:11:48 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.871min 1011.615 PPB

response 222070177

(43) AR1016-C #2

6.069min 943.343 PPB m

response 184730164

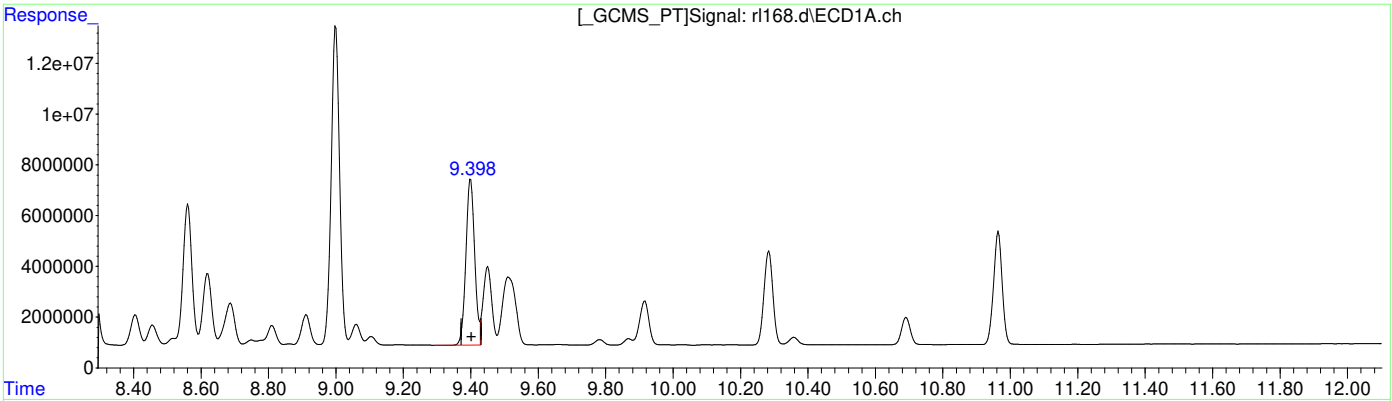
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:12:03 2022

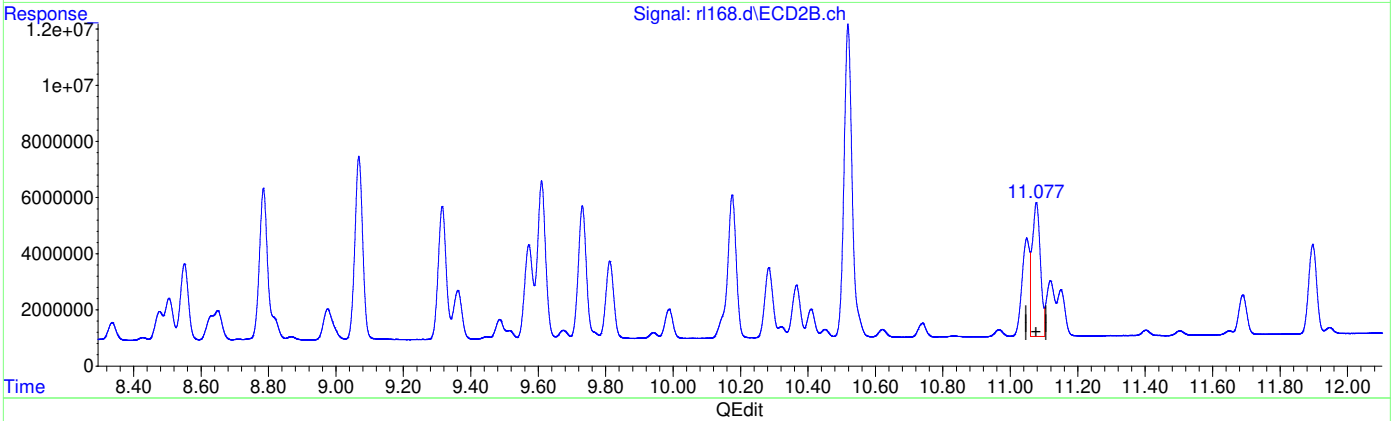
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.400min 509.976 PPB

response 117881482

(50) AR1260-E #2

11.078min 439.342 PPB

response 80994899

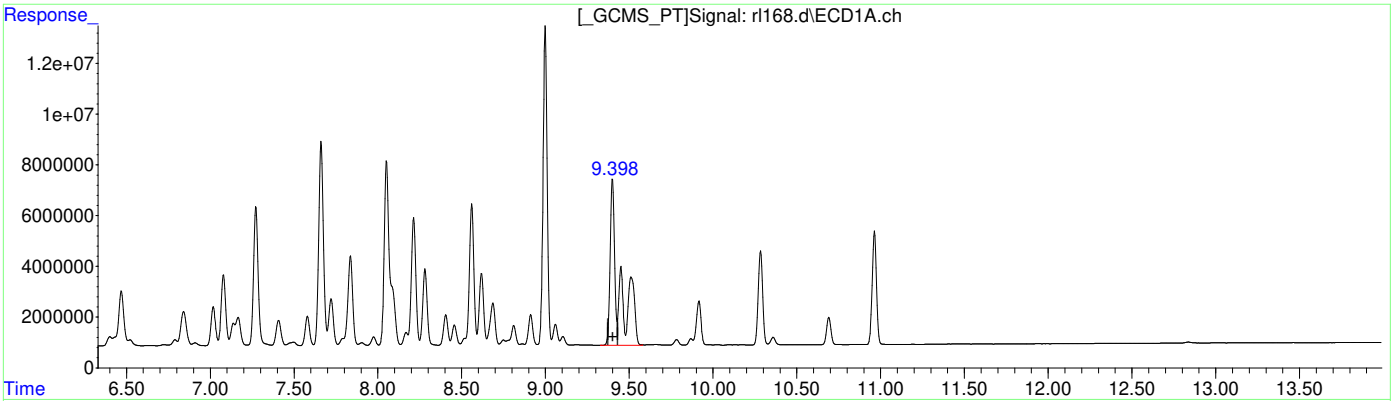
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:12:11 2022

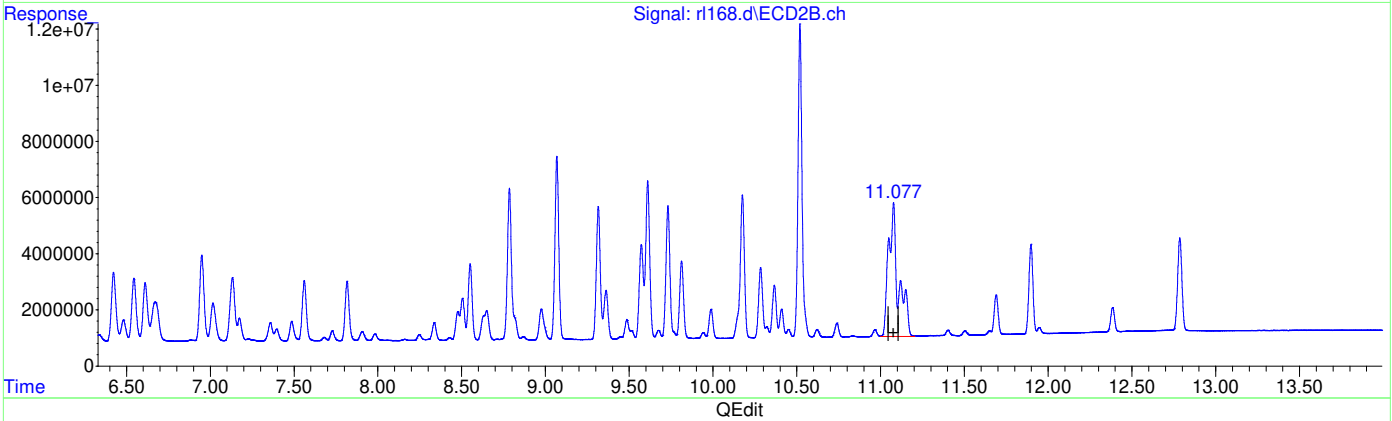
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.398min 1066.974 PPB m

response 246631887

(50) AR1260-E #2

11.077min 1056.659 PPB m

response 194800643

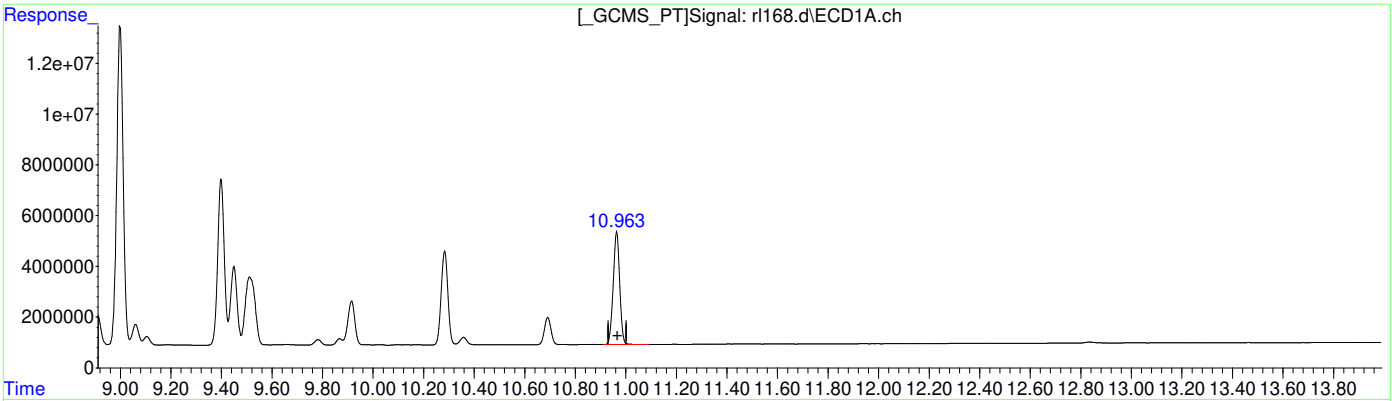
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:12:23 2022

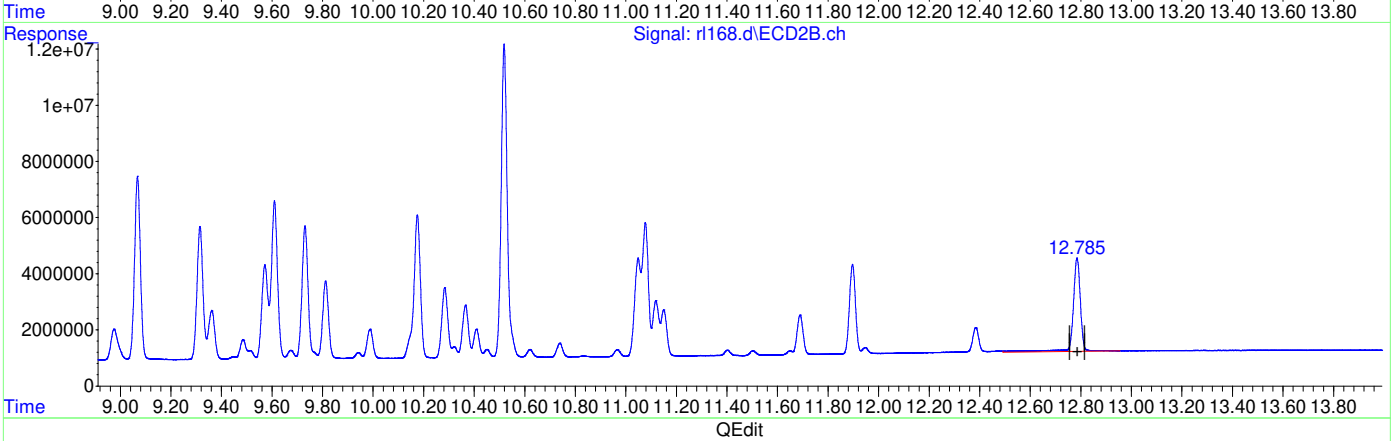
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.965min 43.147 ppb

response 79205978

(51) Decachlorobiphenyl #2 (S)

12.785min 55.990 ppb

response 66911386

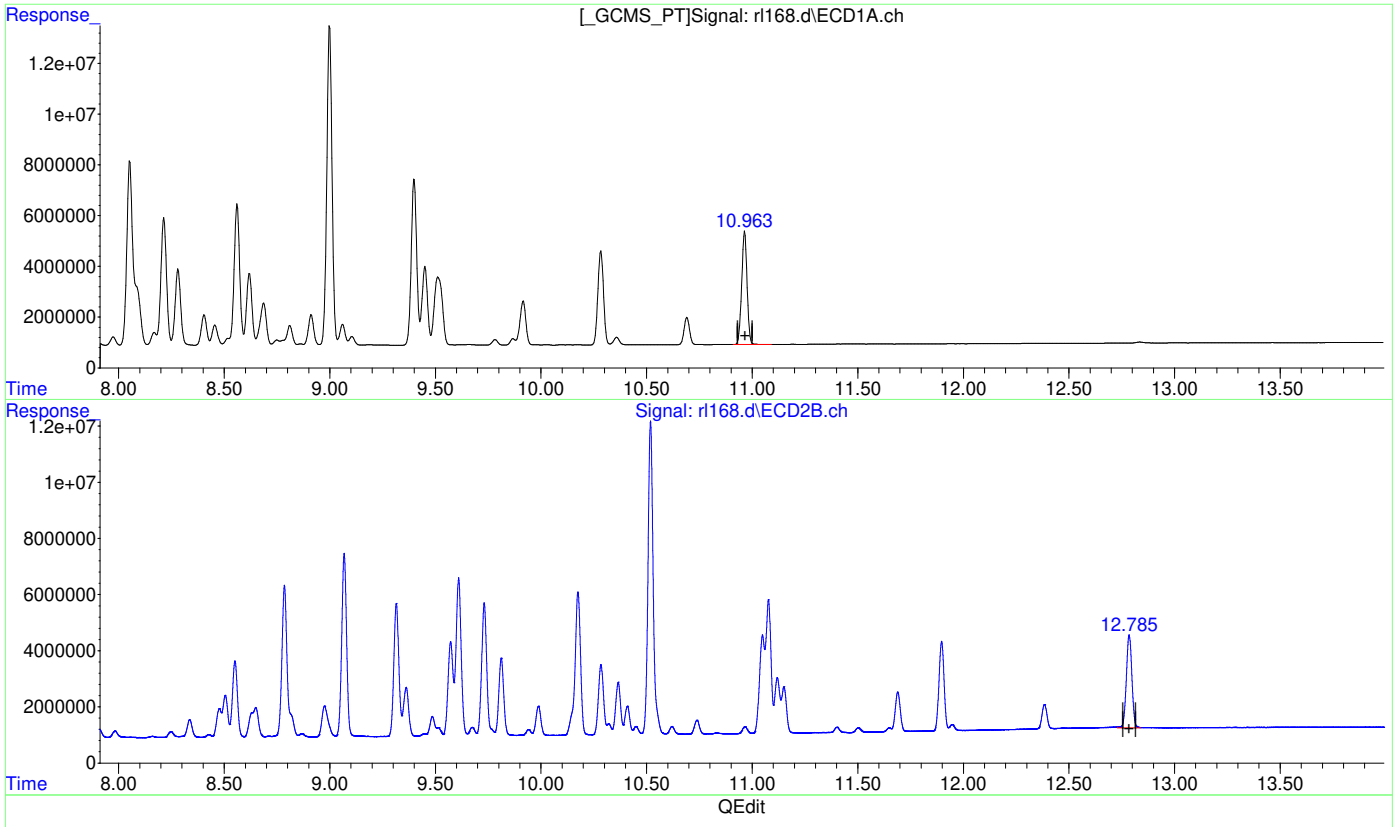
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:12:28 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl168.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:34 am
Operator : rebeccak
Sample : icc5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 6 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:10:32 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.965min 43.147 ppb

response 79205978

(51) Decachlorobiphenyl #2 (S)

12.785min 50.292 ppb m

response 60100924

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:12:36 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.398	4.112	216.6E6	186.7E6	79.604	72.409
	Spiked Amount 40.000			Recovery	= 199.01%	181.02%	
51) S	Decachlor...	10.964	12.786	143.9E6	110.3E6	78.383	92.285m
	Spiked Amount 40.000			Recovery	= 195.96%	230.71%	
	Target Compounds						
41)	AR1016-A	3.820	4.819	113.4E6	85453223	2157.855	1726.417
42)	AR1016-B	4.270	5.406	194.4E6	178.3E6	1813.095	1696.299
43)	AR1016-C	4.870	6.069	422.6E6	352.4E6	1925.152	1799.561
44)	AR1016-D	5.049	6.267	157.5E6	135.2E6	1854.319	1730.047
45)	AR1016-E	5.595	6.950	163.7E6	104.3E6	1861.374	1749.567
46)	AR1260-A	7.661	9.069	291.2E6	200.7E6	1911.822	1831.367
47)	AR1260-B	8.215	9.731	174.1E6	150.6E6	1760.035	1854.039
48)	AR1260-C	8.561	10.176	196.6E6	176.5E6	1947.809	1876.859
49)	AR1260-D	8.999	10.519	421.5E6	363.2E6	2062.612	1963.979
50)	AR1260-E	9.399	11.077	457.9E6	367.9E6	1981.139m	1995.622m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

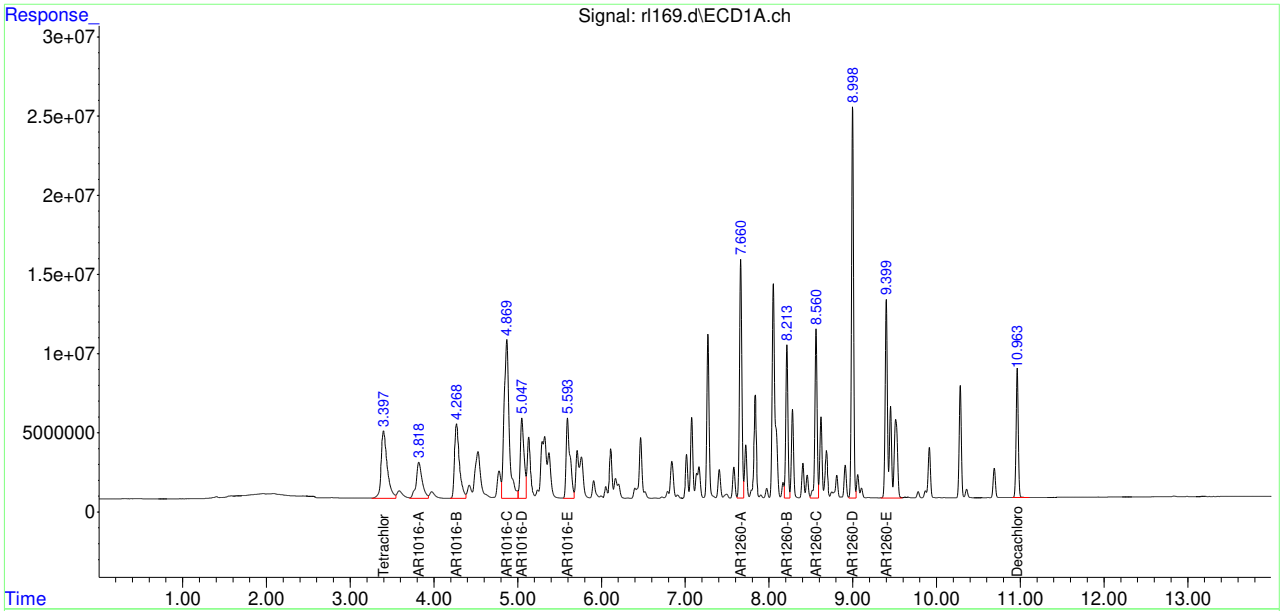
9.5.5
6

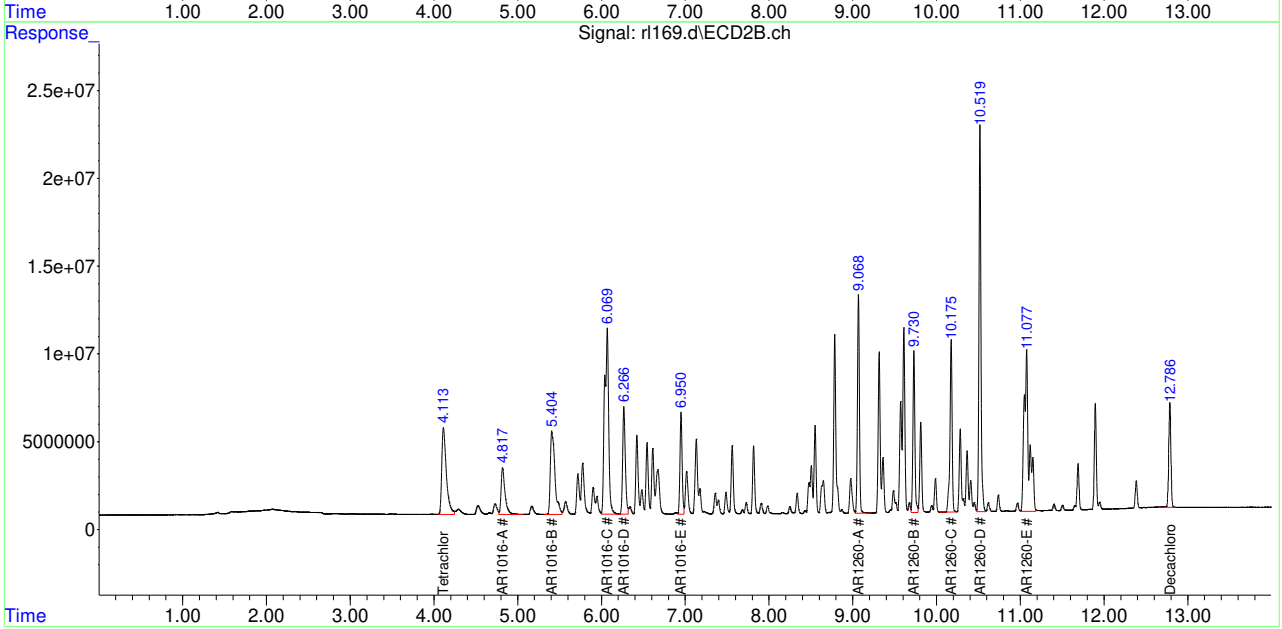
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL169.D
Injection Time: 09/21/22 00:51
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

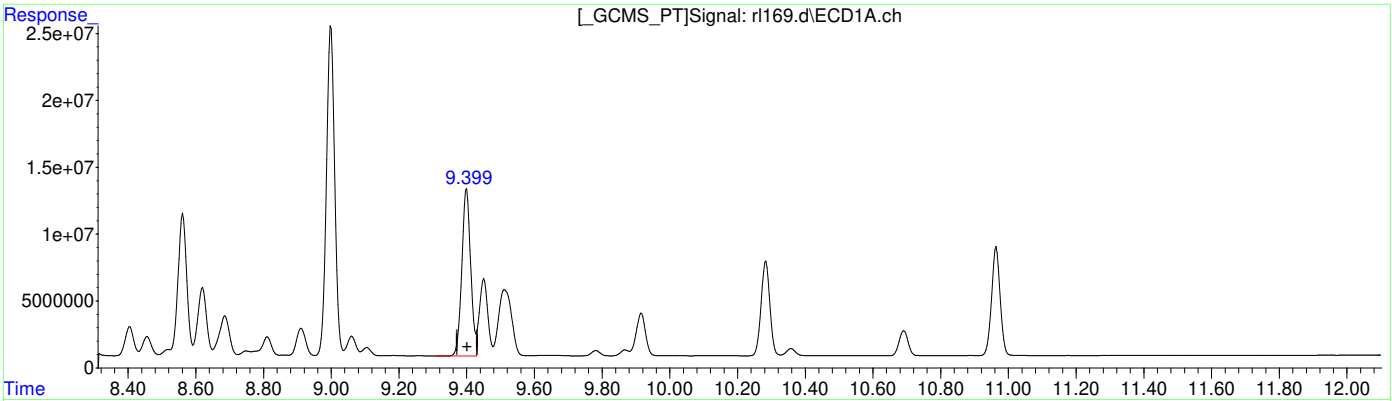
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

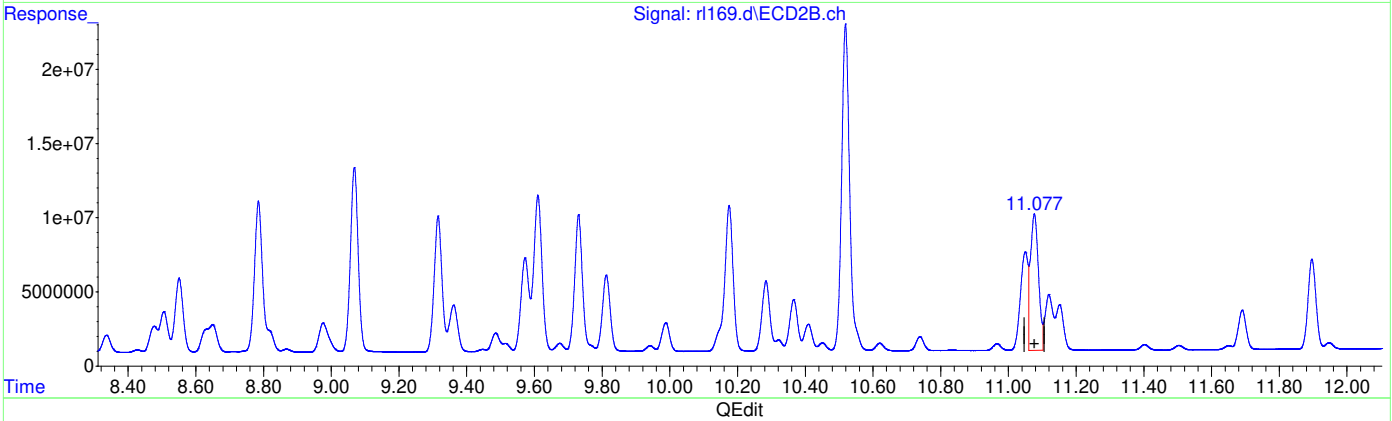
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:53 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.400min 964.152 PPB

response 222864644

(50) AR1260-E #2

11.077min 834.171 PPB

response 153783818

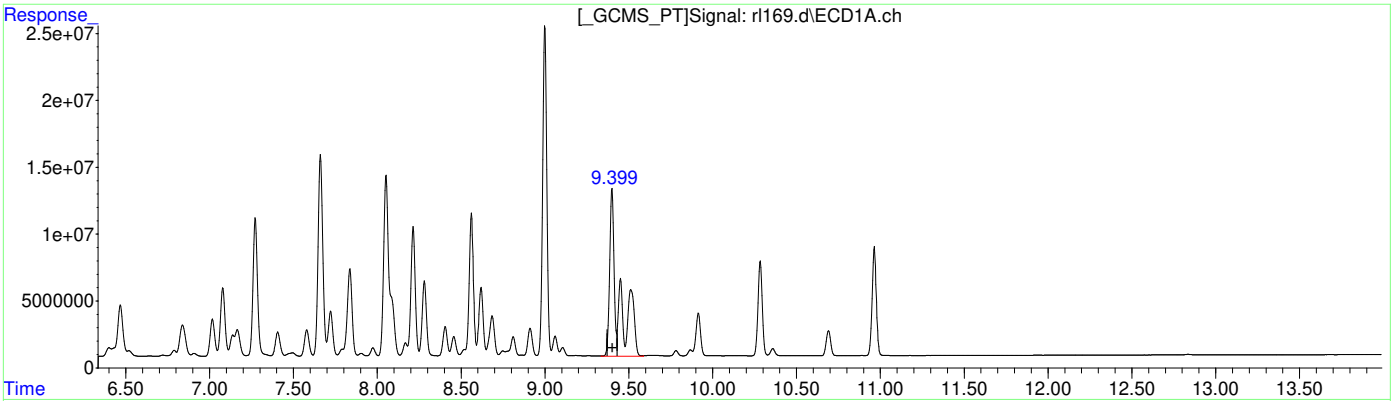
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:13:51 2022

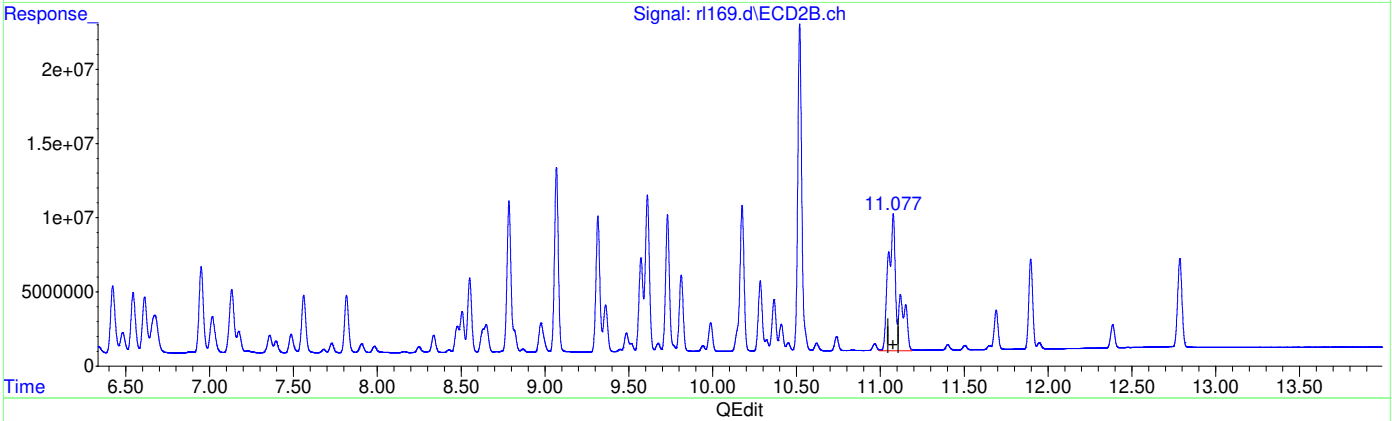
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:53 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.399min 1981.139 PPB m

response 457941895

(50) AR1260-E #2

11.077min 1995.622 PPB m

response 367903348

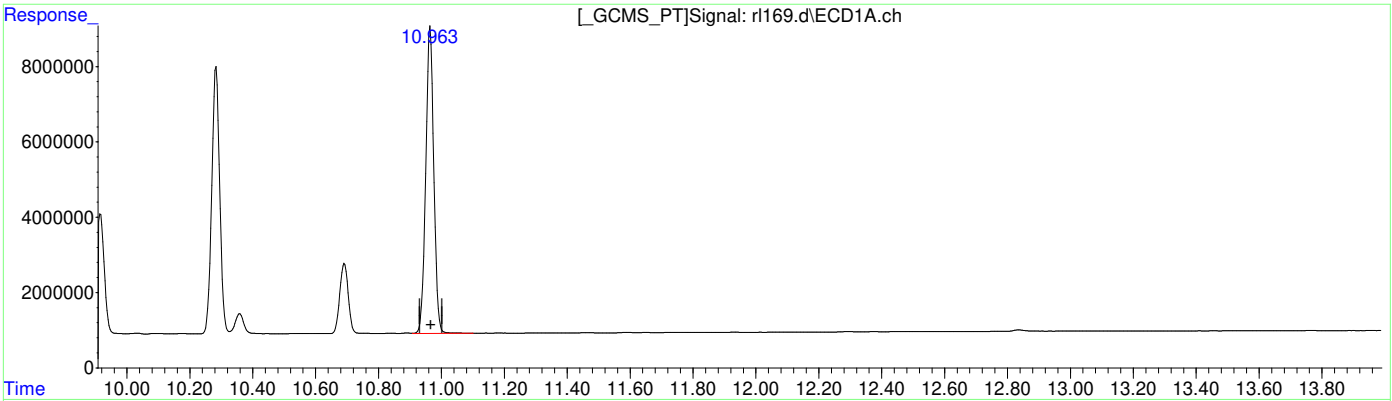
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:14:04 2022

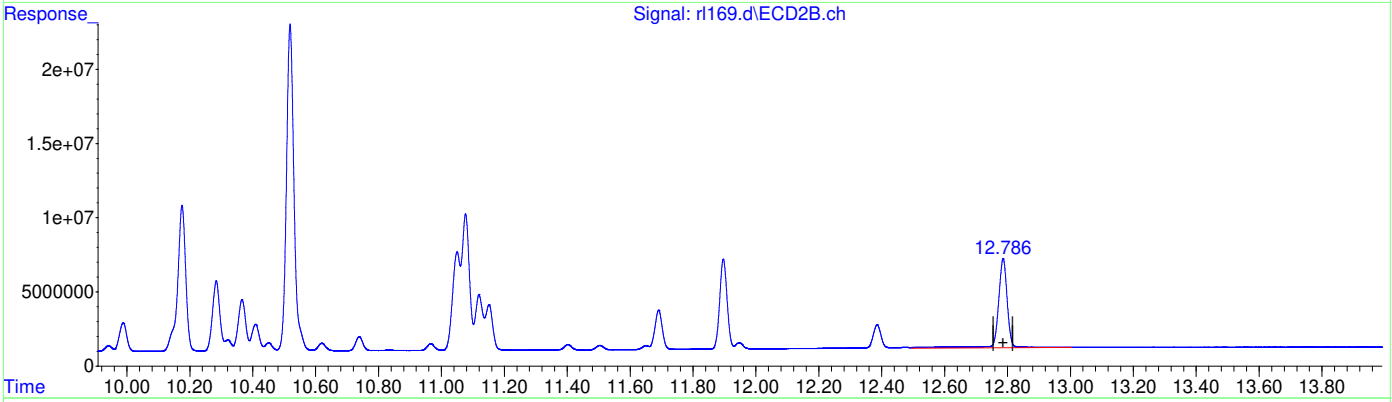
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:53 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 78.383 ppb

response 143890059

(51) Decachlorobiphenyl #2 (S)

12.786min 101.469 ppb

response 121260882

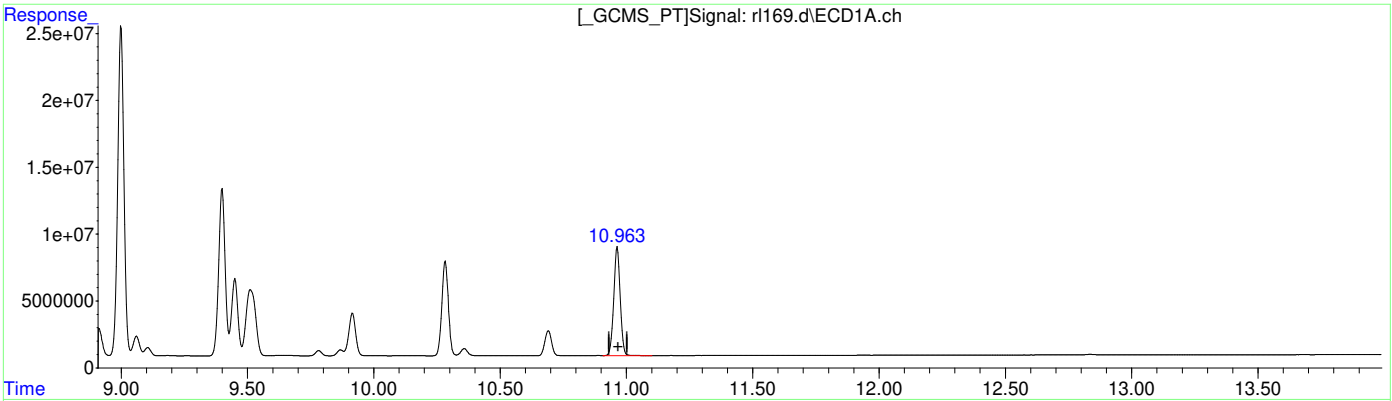
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:14:07 2022

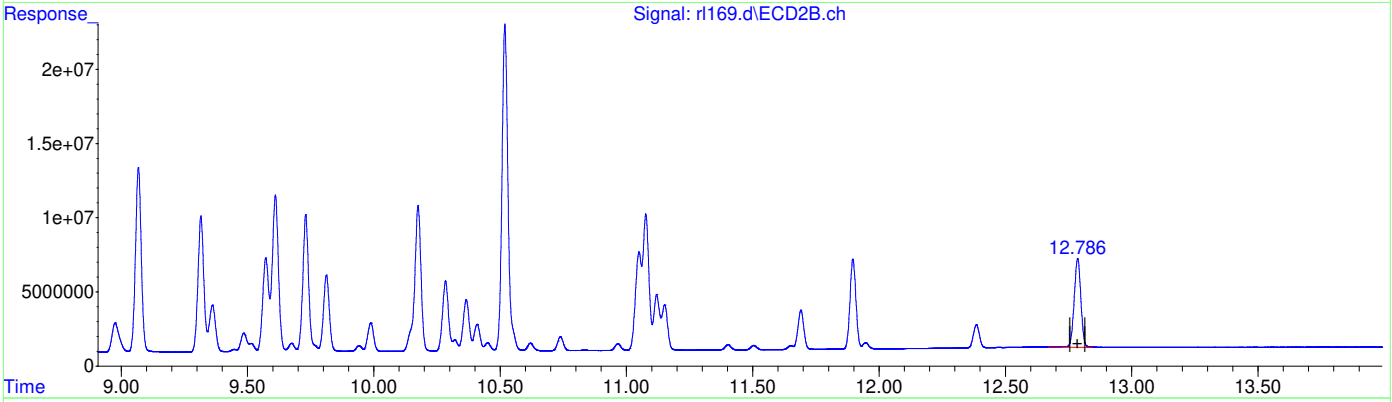
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl169.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 12:51 am
Operator : rebeccak
Sample : ic5-2000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 7 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:12:53 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 78.383 ppb

response 143890059

(51) Decachlorobiphenyl #2 (S)

12.786min 92.285 ppb m

response 110285177

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:29 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.398	4.113	322.8E6	280.4E6	118.611	108.736
	Spiked Amount 40.000			Recovery	=	296.53%	271.84%
51)	S Decachlor...	10.964	12.787	210.8E6	160.5E6	114.848	134.338m
	Spiked Amount 40.000			Recovery	=	287.12%	335.84%
	Target Compounds						
41)	AR1016-A	3.819	4.818	163.5E6	123.4E6	3216.258	2493.833
42)	AR1016-B	4.270	5.405	281.6E6	260.3E6	2626.709	2477.463
43)	AR1016-C	4.870	6.069	628.2E6	527.7E6	2861.852	2694.886
44)	AR1016-D	5.048	6.267	230.0E6	199.4E6	2707.542	2551.378
45)	AR1016-E	5.595	6.949	238.7E6	153.7E6	2714.474	2579.156
46)	AR1260-A	7.662	9.068	433.6E6	298.9E6	2846.475	2728.213
47)	AR1260-B	8.215	9.731	256.4E6	223.5E6	2592.307	2752.225
48)	AR1260-C	8.561	10.175	290.8E6	263.9E6	2881.709	2806.586
49)	AR1260-D	8.999	10.519	632.8E6	549.7E6	3096.754	2972.100
50)	AR1260-E	9.399	11.078	675.5E6	542.1E6	2922.344m	2940.550m

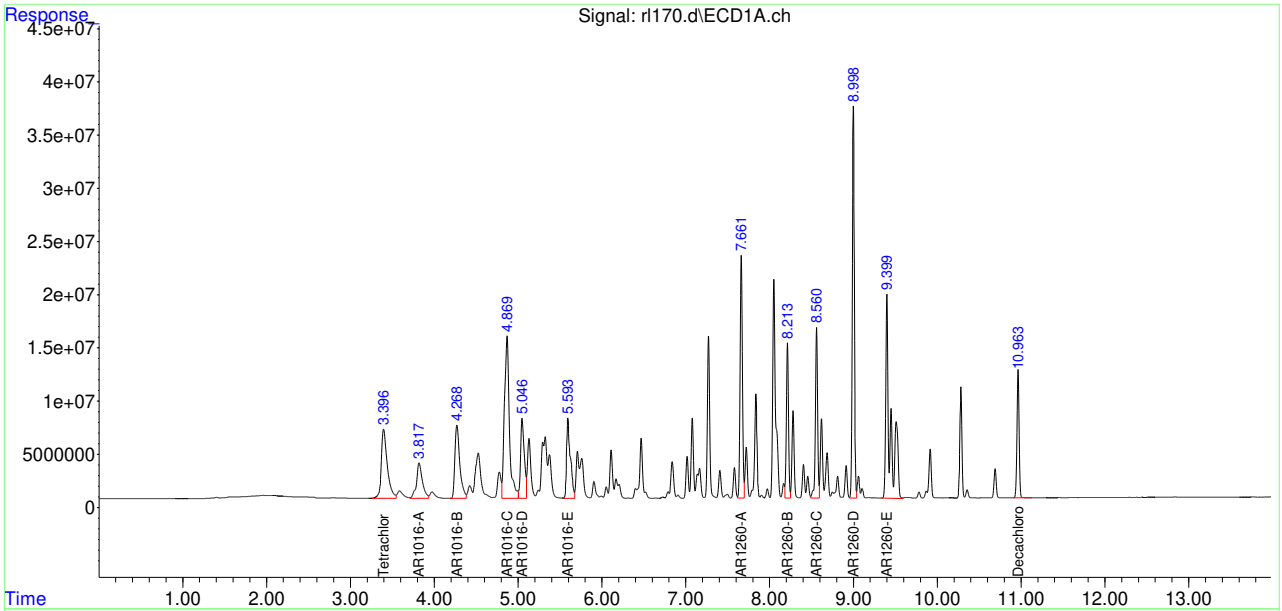
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

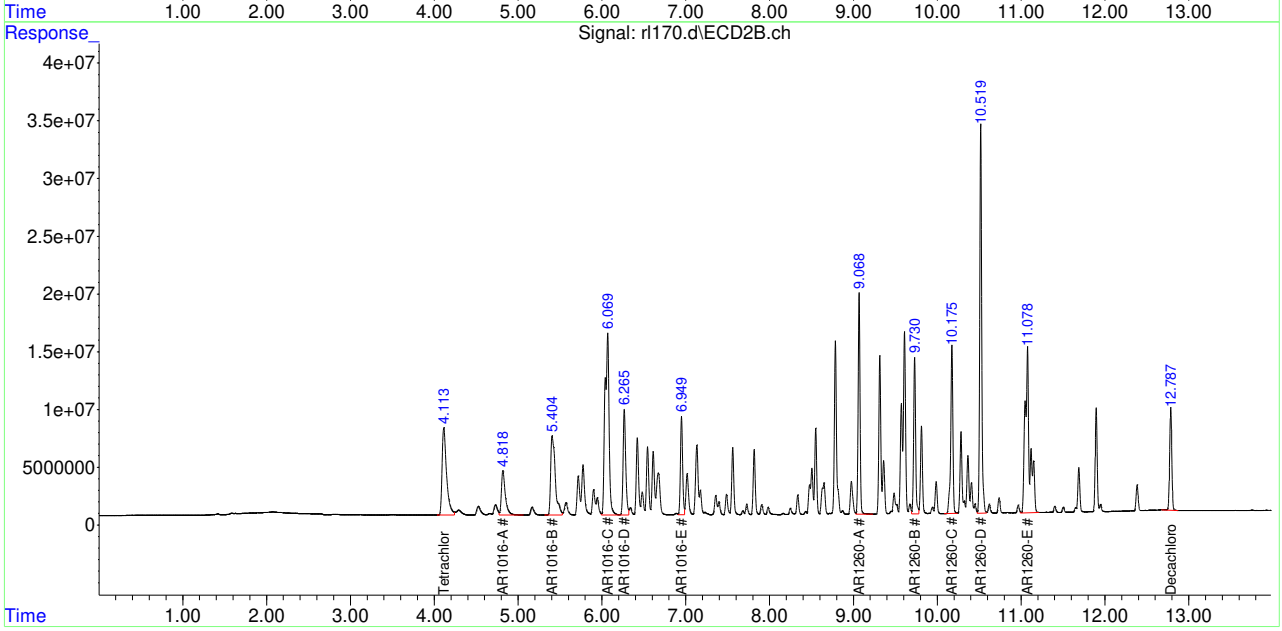
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:29 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL170.D
Injection Time: 09/21/22 01:08
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

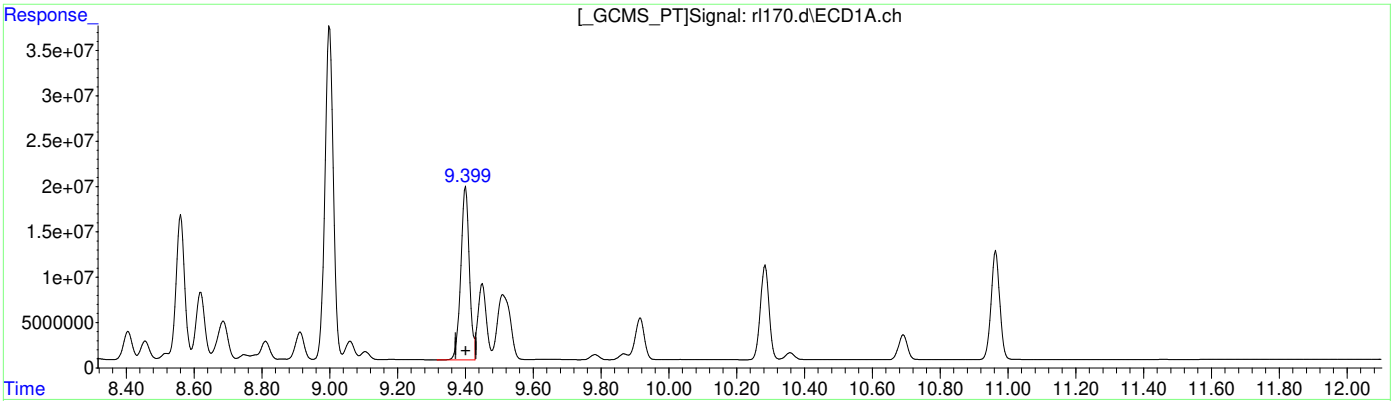
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

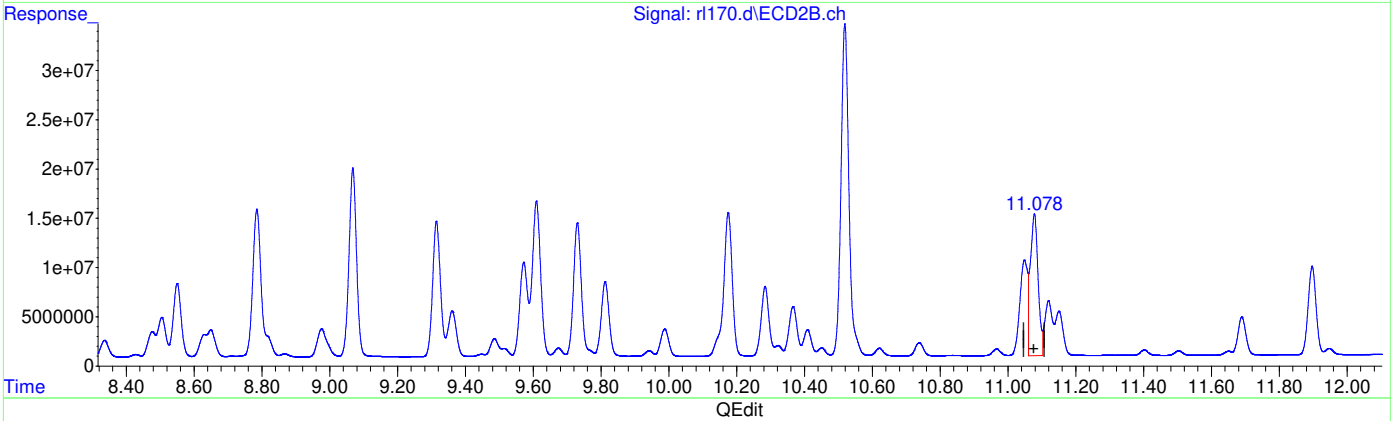
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:28 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.401min 1437.431 PPB

response 332263303

(50) AR1260-E #2

11.078min 1260.218 PPB

response 232327770

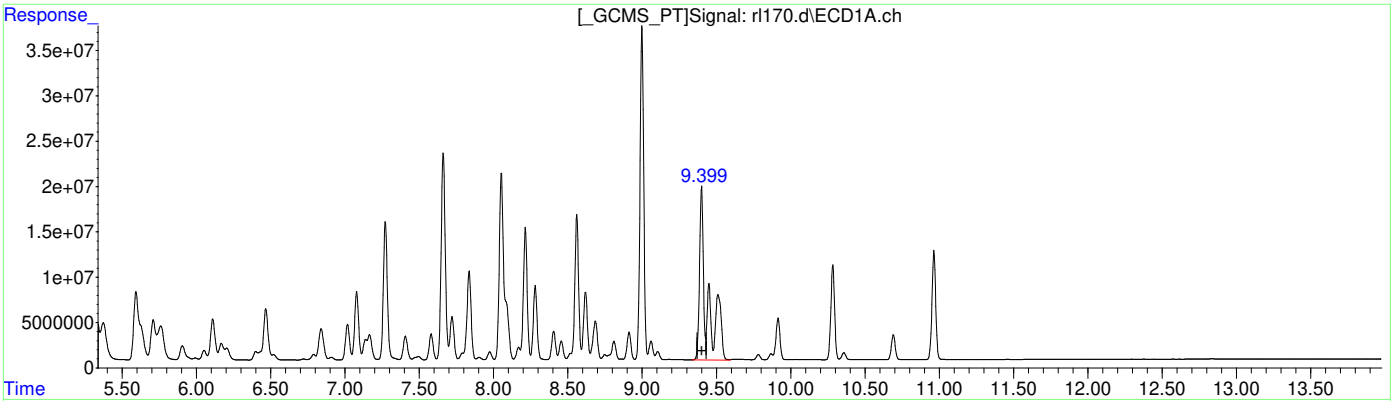
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:14:59 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:28 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.399min 2922.344 PPB m

response 675502157

(50) AR1260-E #2

11.078min 2940.550 PPB m

response 542105647

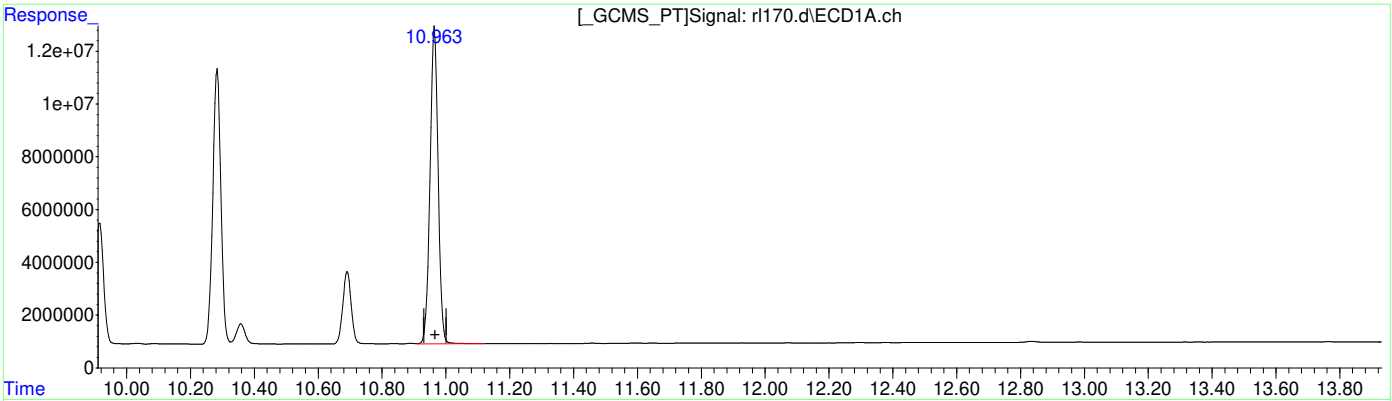
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:15:22 2022

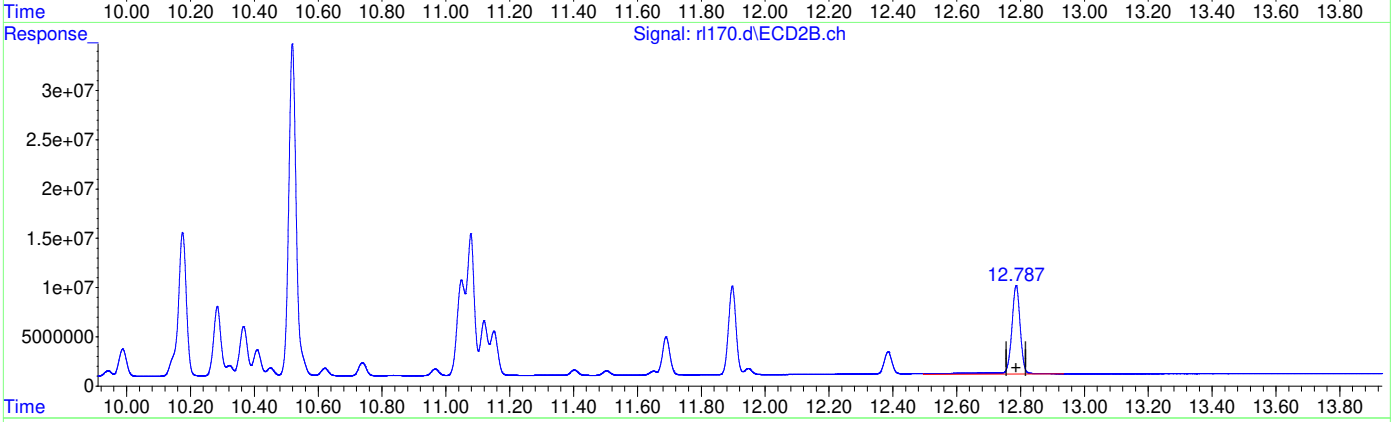
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:28 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 114.848 ppb

response 210829198

(51) Decachlorobiphenyl #2 (S)

12.786min 145.761 ppb

response 174191800

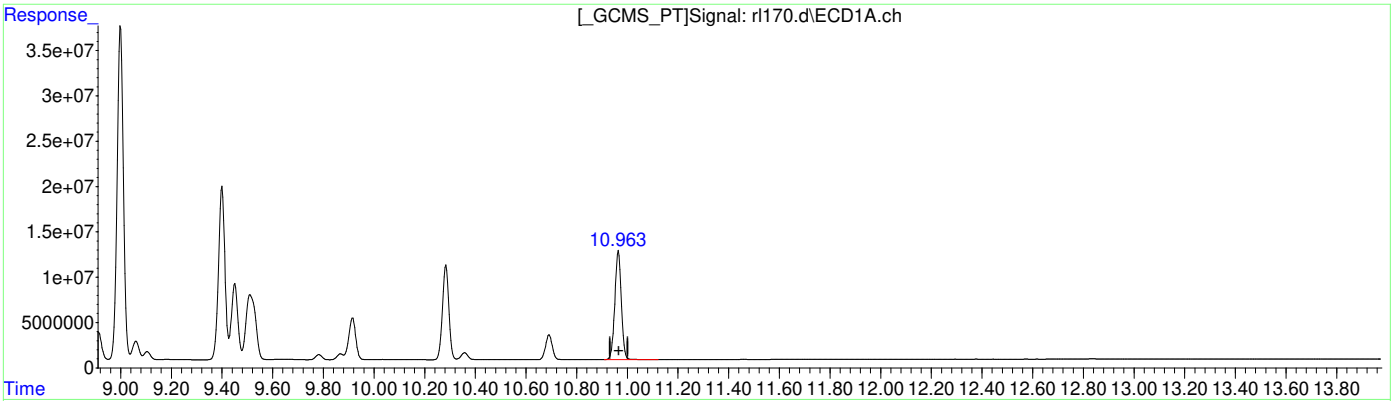
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:15:26 2022

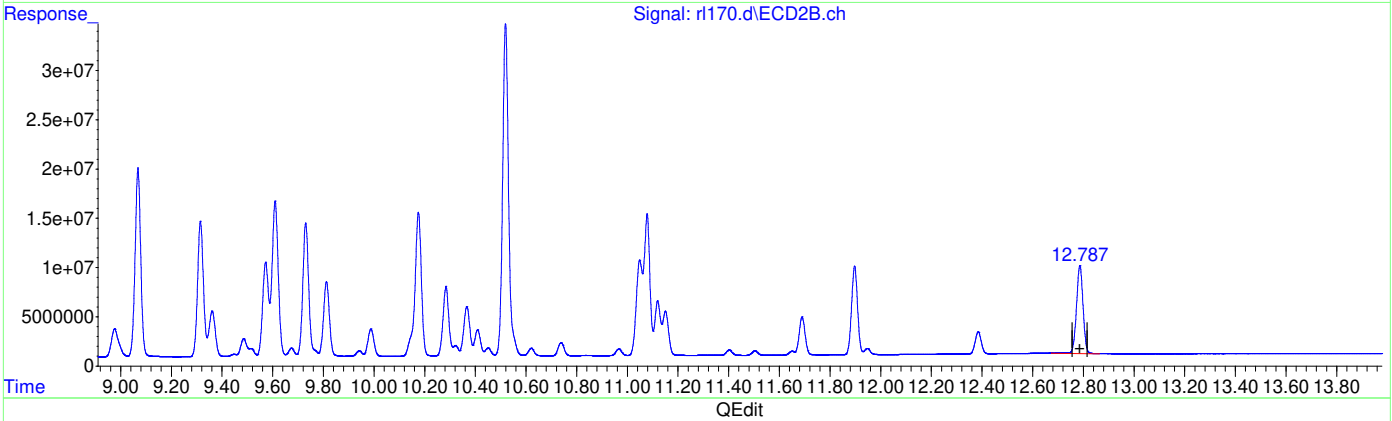
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl170.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:08 am
Operator : rebeccak
Sample : ic5-3000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 8 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:14:28 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.964min 114.848 ppb

response 210829198

(51) Decachlorobiphenyl #2 (S)

12.787min 134.338 ppb m

response 160540659

(+) = Expected Retention Time

RL171.D

Manual Integrations APPROVED (compounds with "m" flag)

Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:16:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.398	4.113	523.2E6	458.9E6	192.272	177.977
	Spiked Amount 40.000			Recovery	= 480.68%		444.94%
51)	S Decachlor...	10.965	12.786	337.6E6	265.7E6	183.925	222.329
	Spiked Amount 40.000			Recovery	= 459.81%		555.82%
	Target Compounds						
41)	AR1016-A	3.821	4.819	254.3E6	193.4E6	5209.799	3908.231
42)	AR1016-B	4.270	5.406	443.9E6	412.0E6	4140.556	3920.149
43)	AR1016-C	4.871	6.068	1020.4E6	865.7E6	4648.462	4420.789m
44)	AR1016-D	5.049	6.267	367.7E6	321.5E6	4328.023	4113.563
45)	AR1016-E	5.595	6.950	378.9E6	247.5E6	4309.587	4153.644
46)	AR1260-A	7.662	9.068	705.8E6	488.4E6	4633.526	4457.145
47)	AR1260-B	8.215	9.731	414.1E6	363.3E6	4186.747	4474.332
48)	AR1260-C	8.561	10.176	472.8E6	431.5E6	4684.907	4589.243
49)	AR1260-D	8.999	10.519	1032.0E6	904.1E6	5050.732	4888.631
50)	AR1260-E	9.399	11.077	1085.0E6	881.0E6	4694.037m	4778.999m

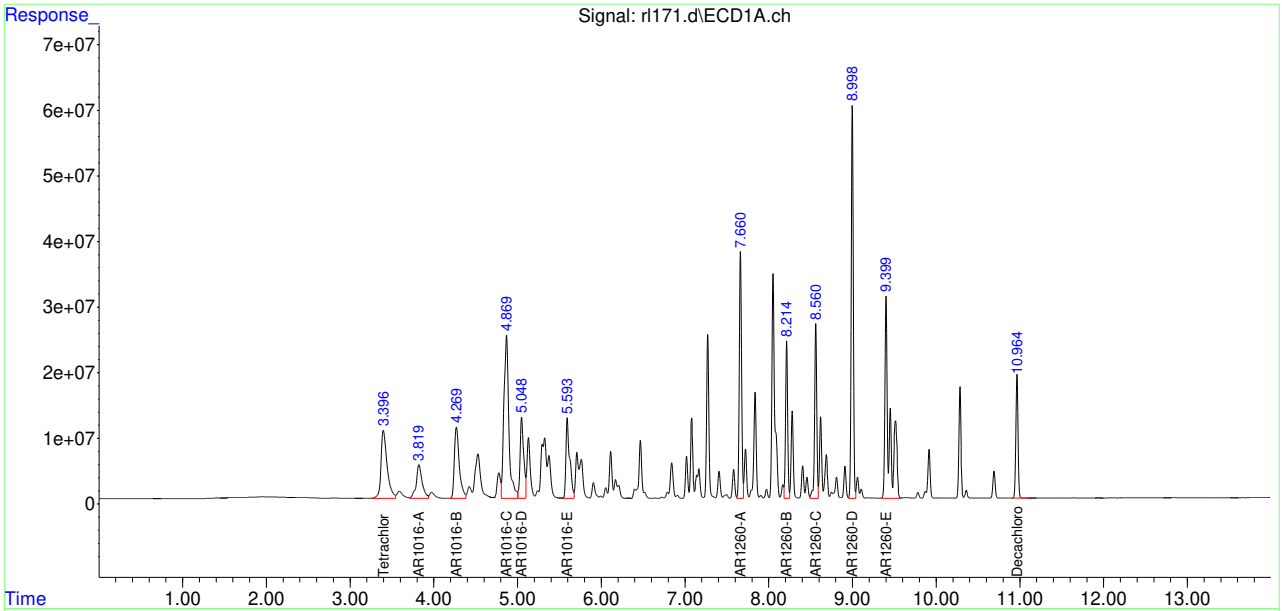
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

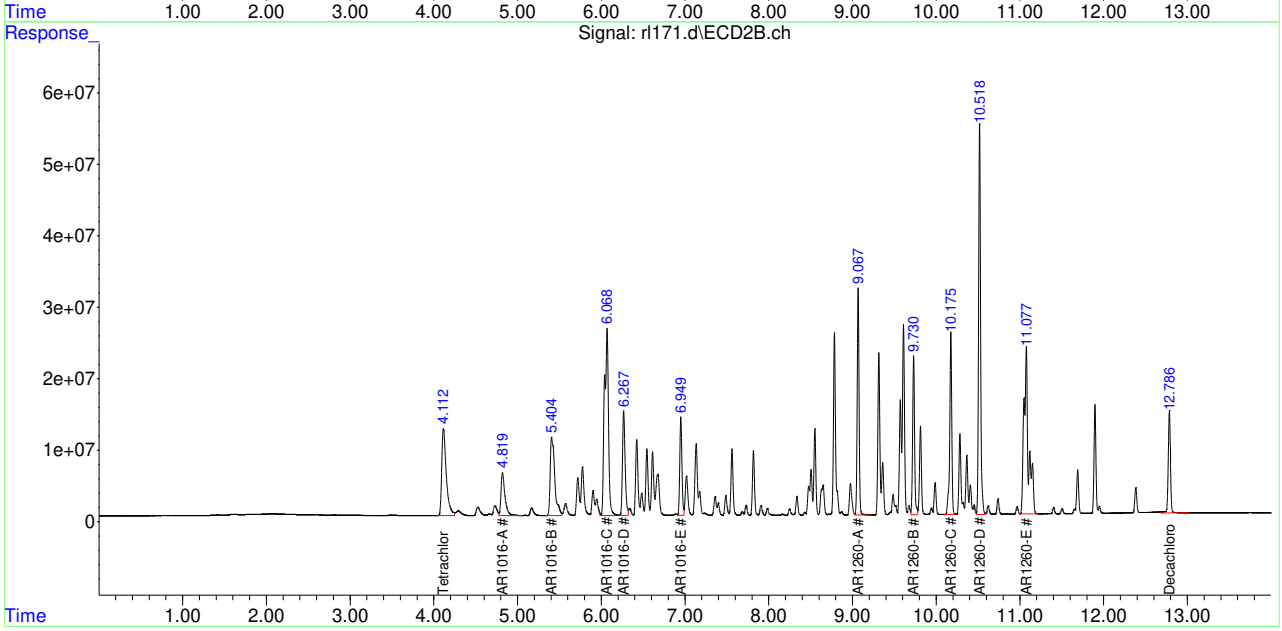
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:16:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GRL5-IC5	**Method:**	SW846 8082A
Lab FileID:	RL171.D	**Analyst approved:**	09/21/22 23:50 Rebecca Krug
Injection Time:	09/21/22 01:25	**Supervisor approved:**	09/28/22 19:34 Gwendolyn Burns

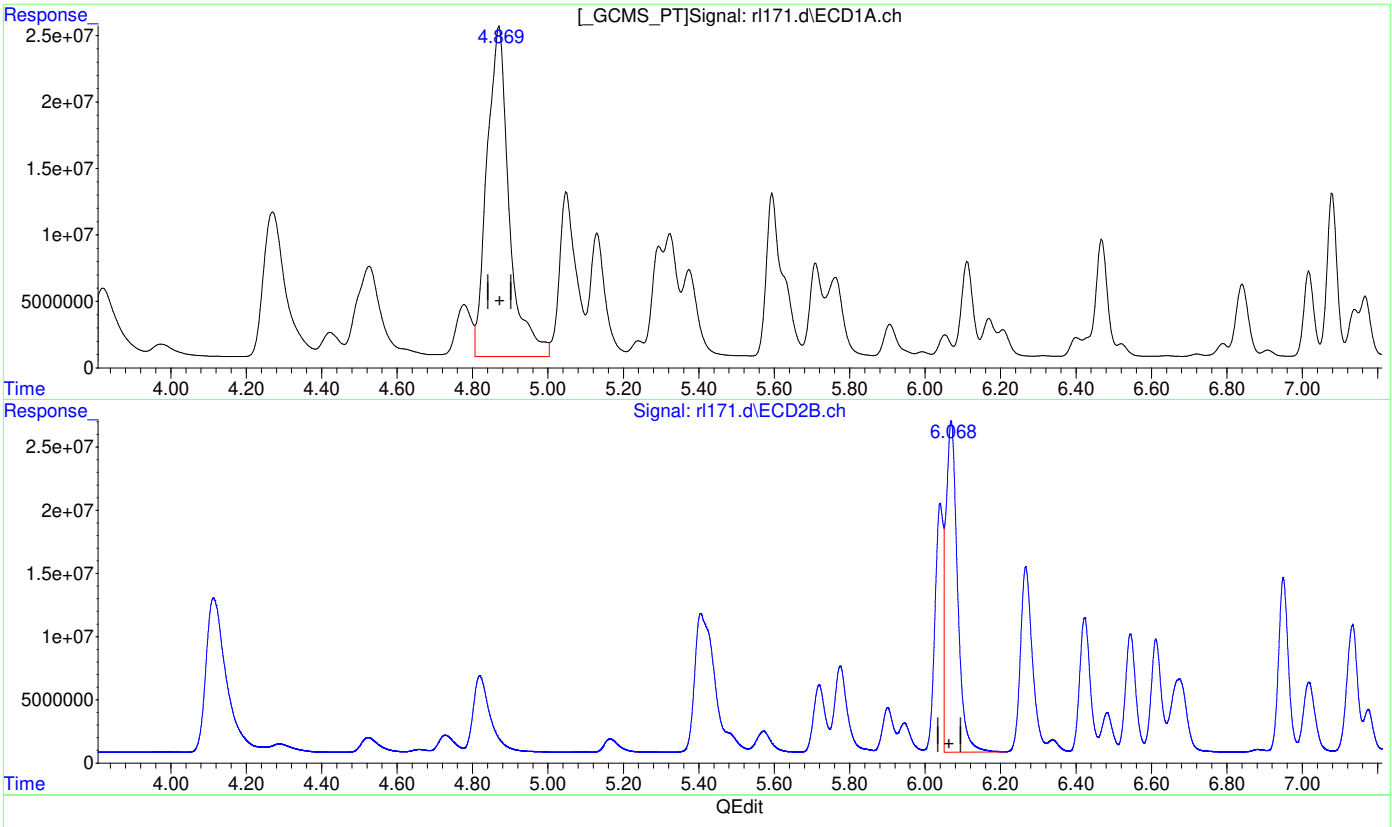
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.07	Split peak
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:45 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.871min 4648.462 PPB

response 1020432266

(43) AR1016-C #2

6.069min 2897.443 PPB

response 567391709

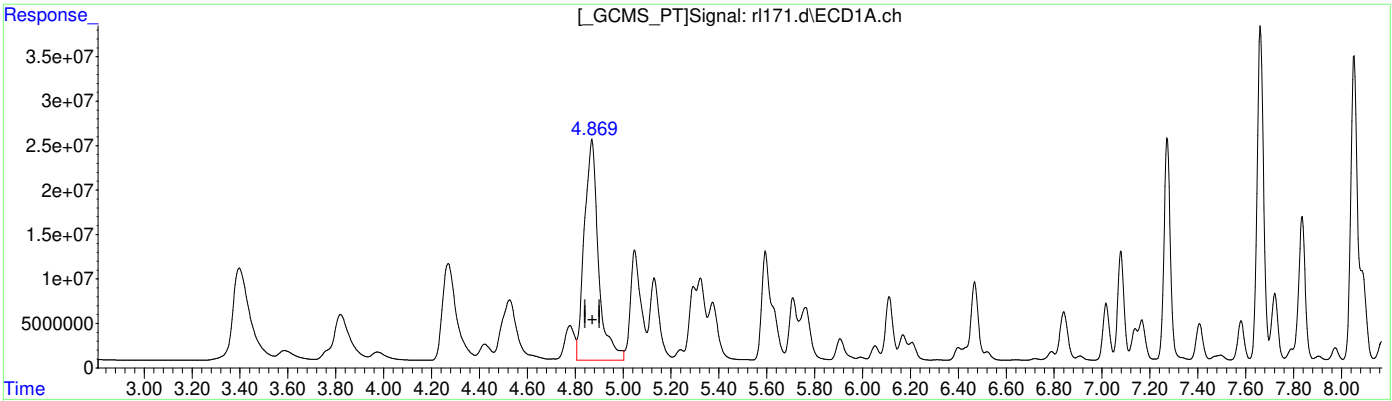
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:16:06 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:45 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.871min 4648.462 PPB

response 1020432266

(43) AR1016-C #2

6.068min 4420.789 PPB m

response 865700823

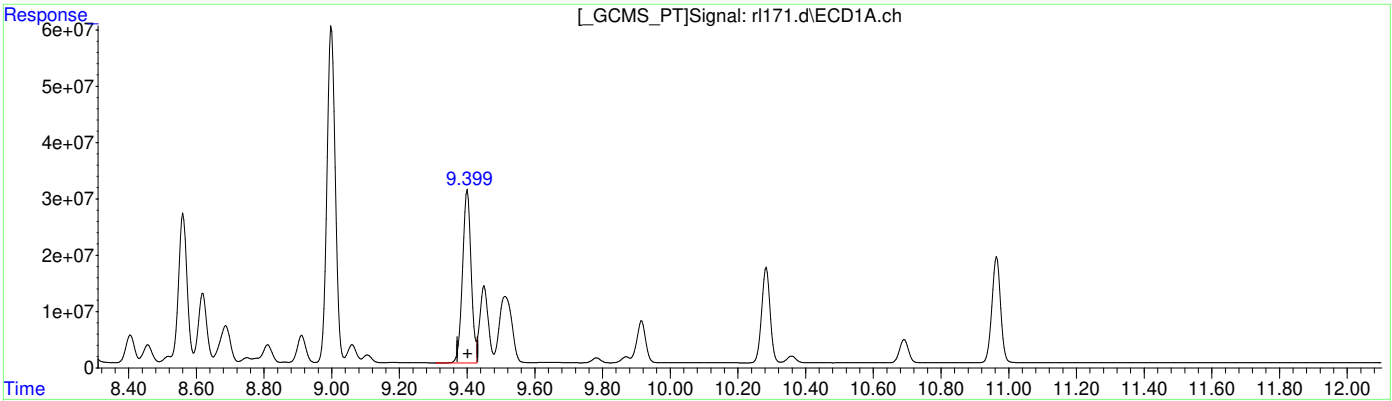
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:16:12 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:45 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.401min 2347.742 PPB

response 542682585

(50) AR1260-E #2

11.077min 2092.080 PPB

response 385685863

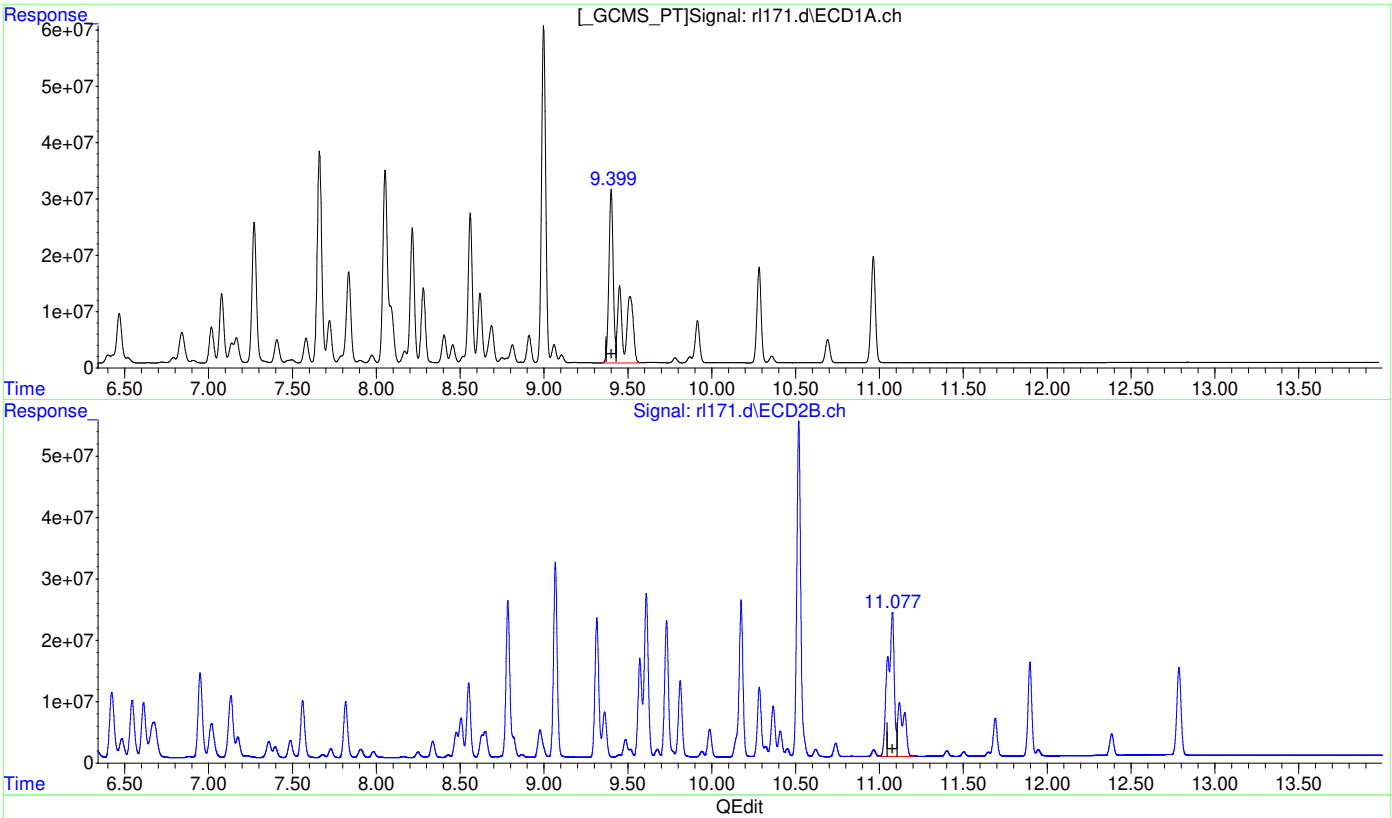
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:16:18 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl171.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:25 am
Operator : rebeccak
Sample : ic5-5000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 9 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:15:45 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.399min 4694.037 PPB m

response 1085030552

(50) AR1260-E #2

11.077min 4778.999 PPB m

response 881033293

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:16:29 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl172.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:44 am
Operator : rebeccak
Sample : ic5-10000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.398	4.110	1016.8E6	912.0E6	373.660	353.677	
	Spiked Amount 40.000			Recovery	=	934.15%	884.19%	
51)	S Decachlor...	10.966	12.786	650.7E6	510.0E6	354.453	426.734	
	Spiked Amount 40.000			Recovery	=	886.13%	1066.84%	
	Target Compounds							
41)	AR1016-A	3.822	4.815	467.1E6	359.6E6	10375.124	7265.347	#
42)	AR1016-B	4.273	5.402	836.0E6	780.9E6	7797.371	7430.659	
43)	AR1016-C	4.873	6.067	1976.9E6	1118.3E6	9005.443	5710.768	#
44)	AR1016-D	5.051	6.264	705.0E6	621.2E6	8298.306	7947.101	
45)	AR1016-E	5.598	6.948	723.7E6	479.1E6	8230.396	8038.745	
46)	AR1260-A	7.665	9.067	1362.9E6	949.8E6	8947.277	8667.933	
47)	AR1260-B	8.218	9.731	797.8E6	706.9E6	8066.455	8705.647	
48)	AR1260-C	8.565	10.175	916.8E6	847.9E6	9085.042	9018.172	
49)	AR1260-D	9.003	10.519	1964.5E6	1741.0E6	9613.917	9413.802	
50)	AR1260-E	9.402	11.078	2103.9E6	1736.6E6	9101.805m	9419.709m	

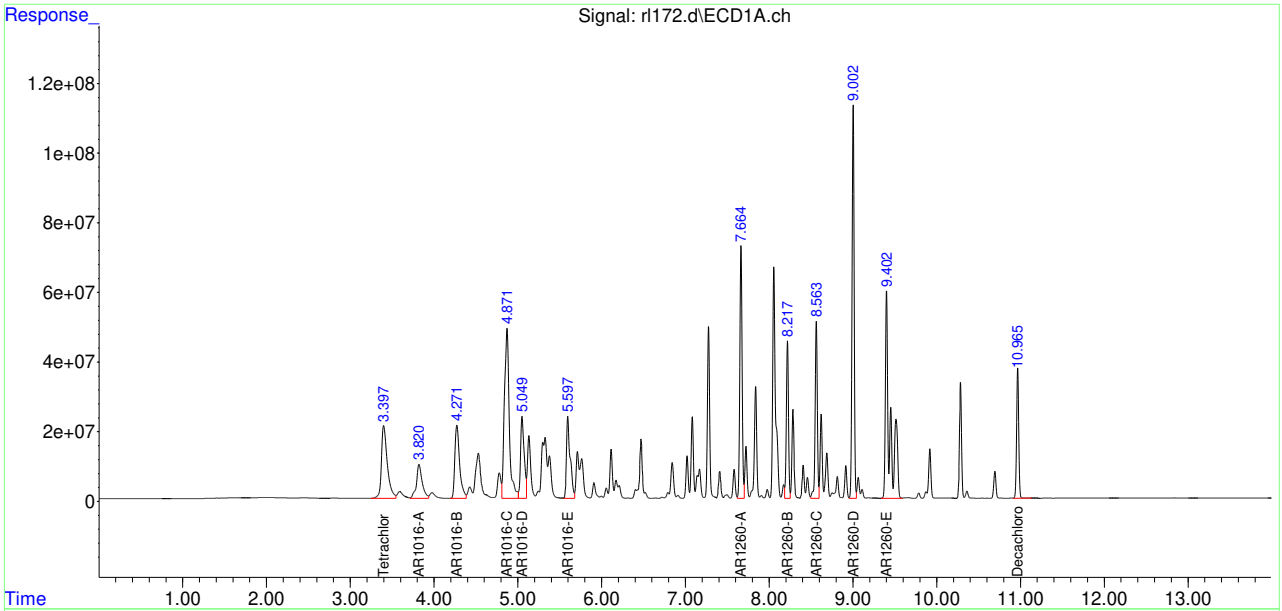
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

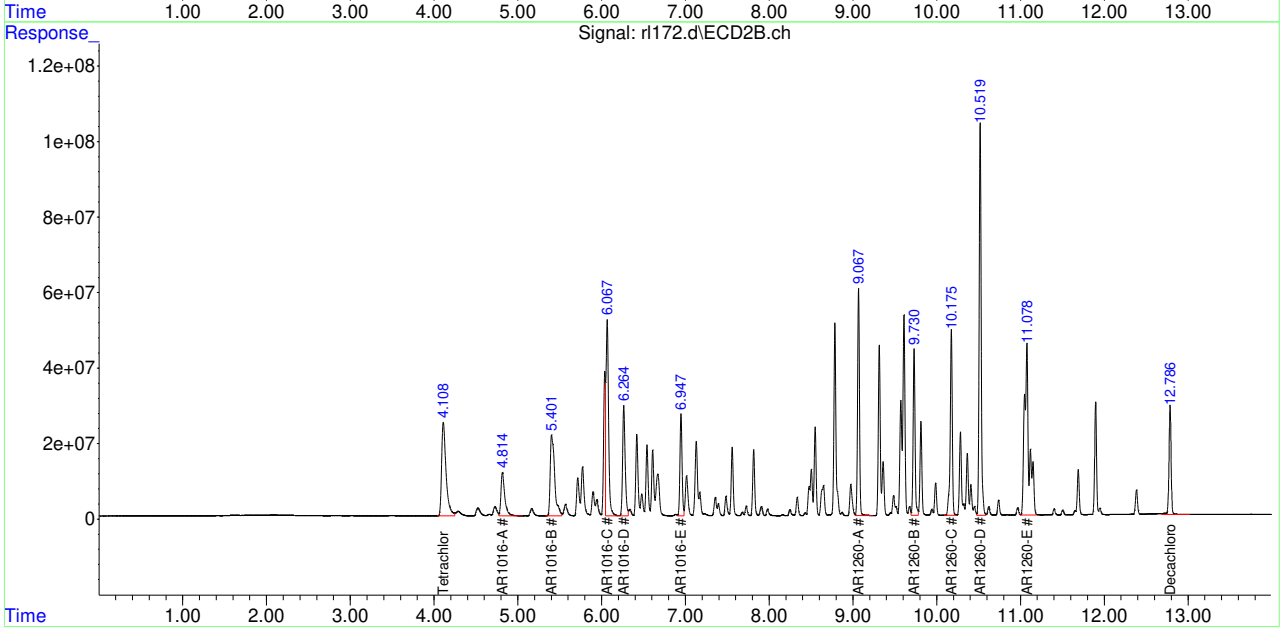
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl172.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:44 am
Operator : rebeccak
Sample : ic5-10000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL172.D
Injection Time: 09/21/22 01:44
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

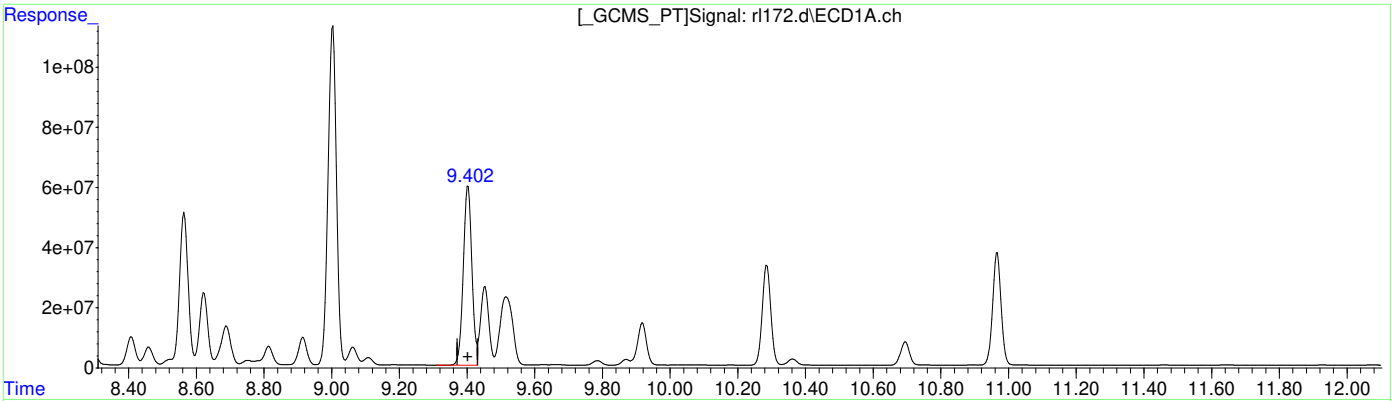
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl172.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:44 am
Operator : rebeccak
Sample : ic5-10000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:16:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.403min 4576.450 PPB

response 1057850328

(50) AR1260-E #2

11.078min 4149.400 PPB

response 764963359

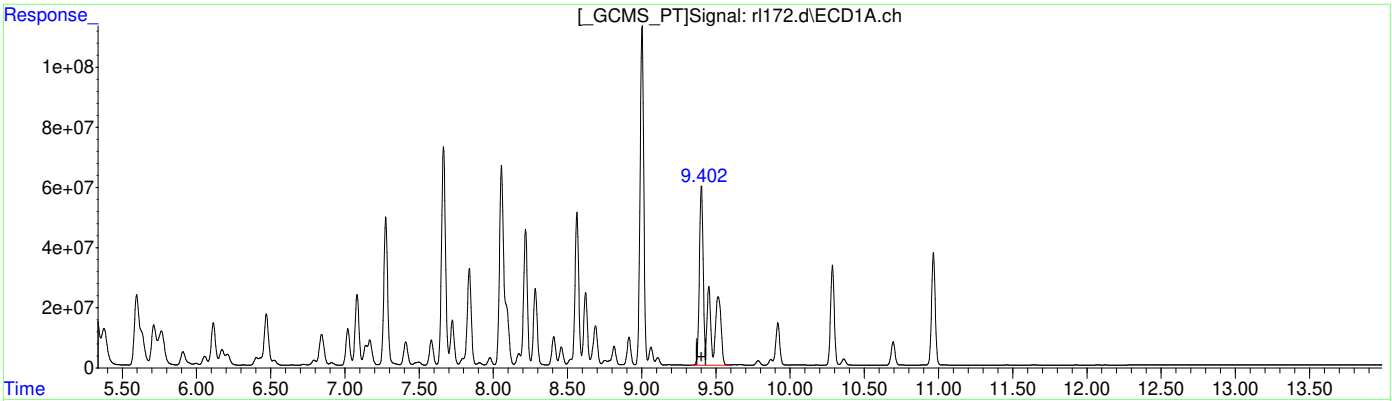
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:17:10 2022

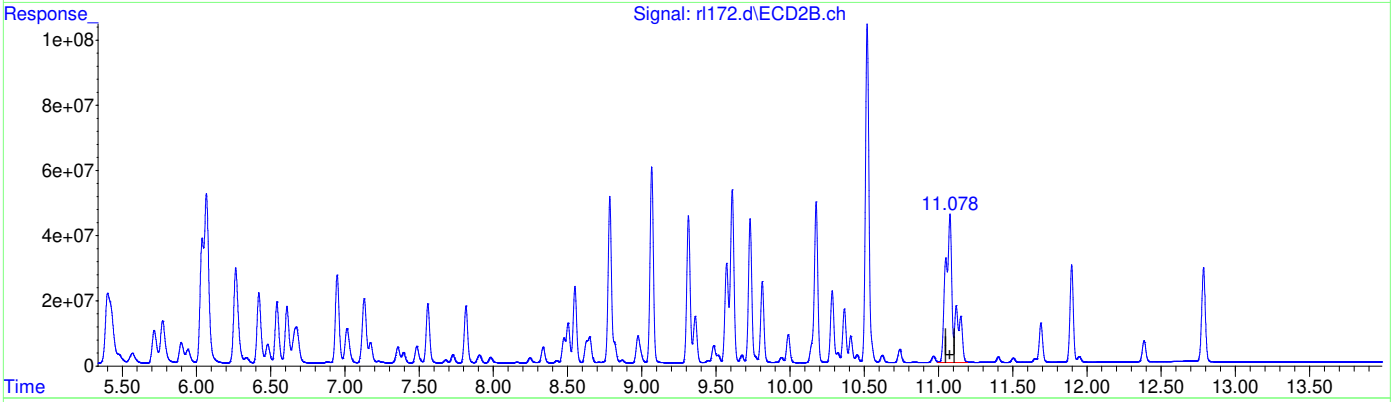
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl172.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 01:44 am
Operator : rebeccak
Sample : ic5-10000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 10 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:16:46 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.402min 9101.805 PPB m

response 2103889795

(50) AR1260-E #2

11.078min 9419.709 PPB m

response 1736572155

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:17:38 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:18:54 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.402	4.110	2044.6E6	1844.0E6	751.354	715.096
	Spiked Amount 40.000			Recovery	= 1878.39%		1787.74%
51) S	Decachlor...	10.967	12.787	1270.2E6	970.5E6	691.951	812.071m
	Spiked Amount 40.000			Recovery	= 1729.88%		2030.18%
	Target Compounds						
41)	AR1016-A	3.825	4.817	899.9E6	697.8E6	25187.164	14098.135 #
42)	AR1016-B	4.274	5.403	1637.5E6	1531.0E6	15272.308	14569.421
43)	AR1016-C	4.874	6.066	3854.7E6	3318.1E6	17559.572	16944.404m
44)	AR1016-D	5.052	6.265	1392.1E6	1230.9E6	16384.403	15748.647
45)	AR1016-E	5.598	6.948	1426.1E6	952.5E6	16219.111	15983.731
46)	AR1260-A	7.666	9.068	2596.4E6	1834.2E6	17044.582	16739.699
47)	AR1260-B	8.218	9.731	1539.6E6	1378.5E6	15566.264	16975.671
48)	AR1260-C	8.564	10.175	1776.6E6	1668.9E6	17605.705	17750.358
49)	AR1260-D	9.002	10.520	3620.9E6	3259.5E6	17720.303	17624.760
50)	AR1260-E	9.403	11.078	4100.0E6	3440.3E6	17737.464m	18661.128m

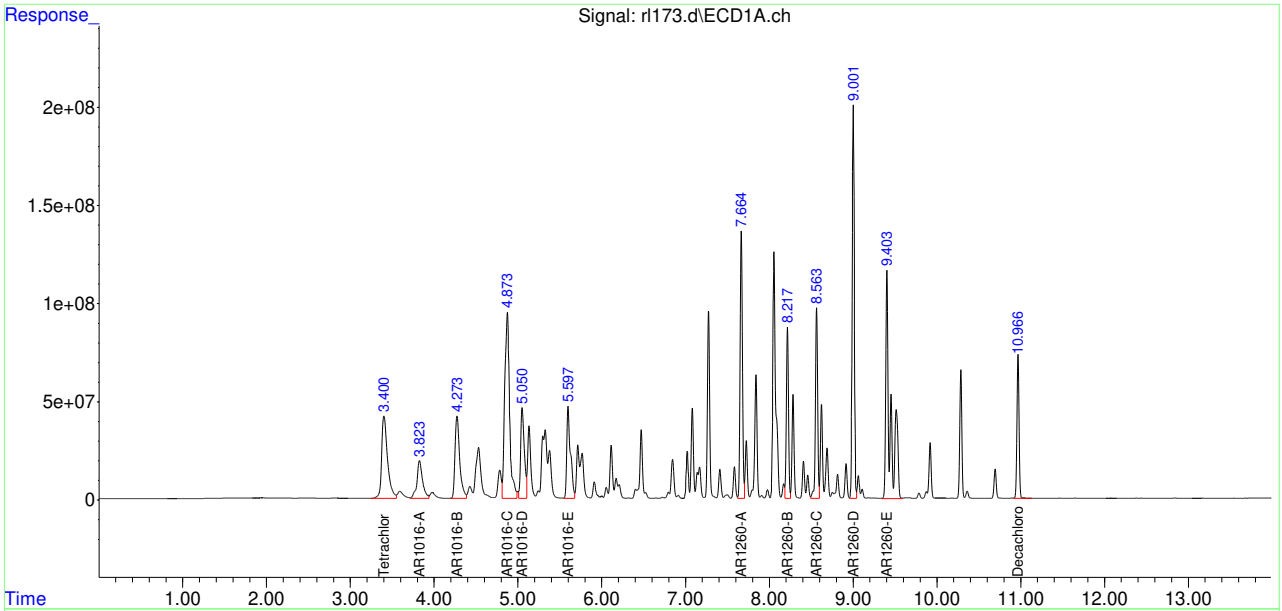
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

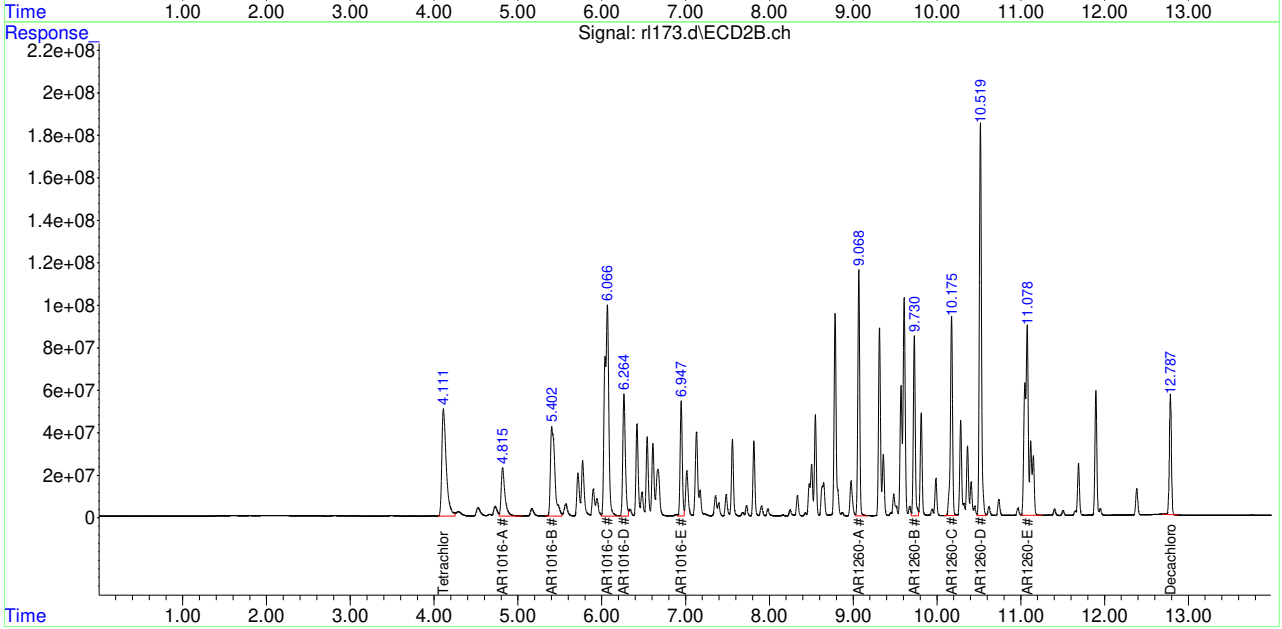
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:18:54 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL173.D
Injection Time: 09/21/22 02:03
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

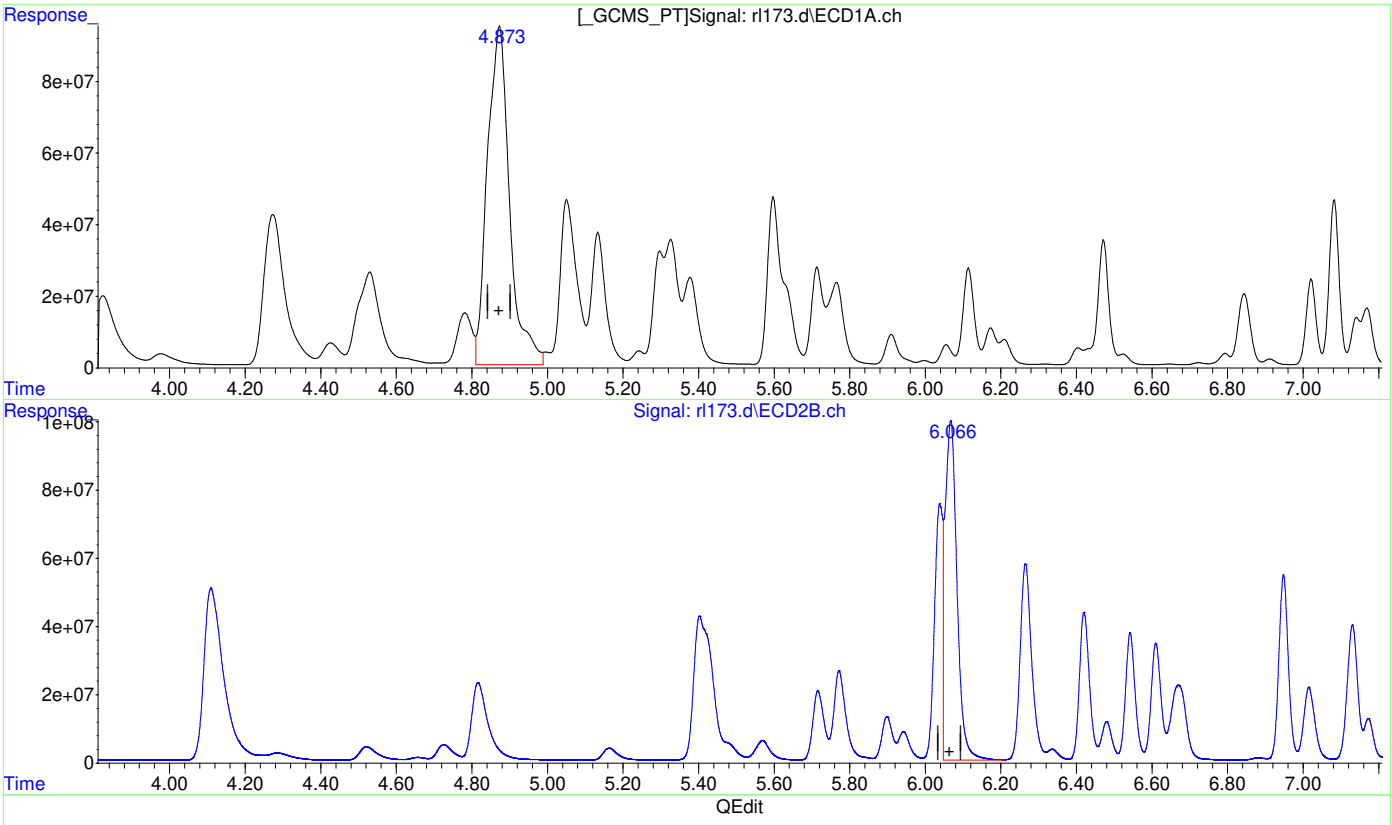
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1016-C		2	6.07	Split peak
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.874min 17559.572 PPB

response 3854684102

(43) AR1016-C #2

6.067min 11214.877 PPB

response 2196152821

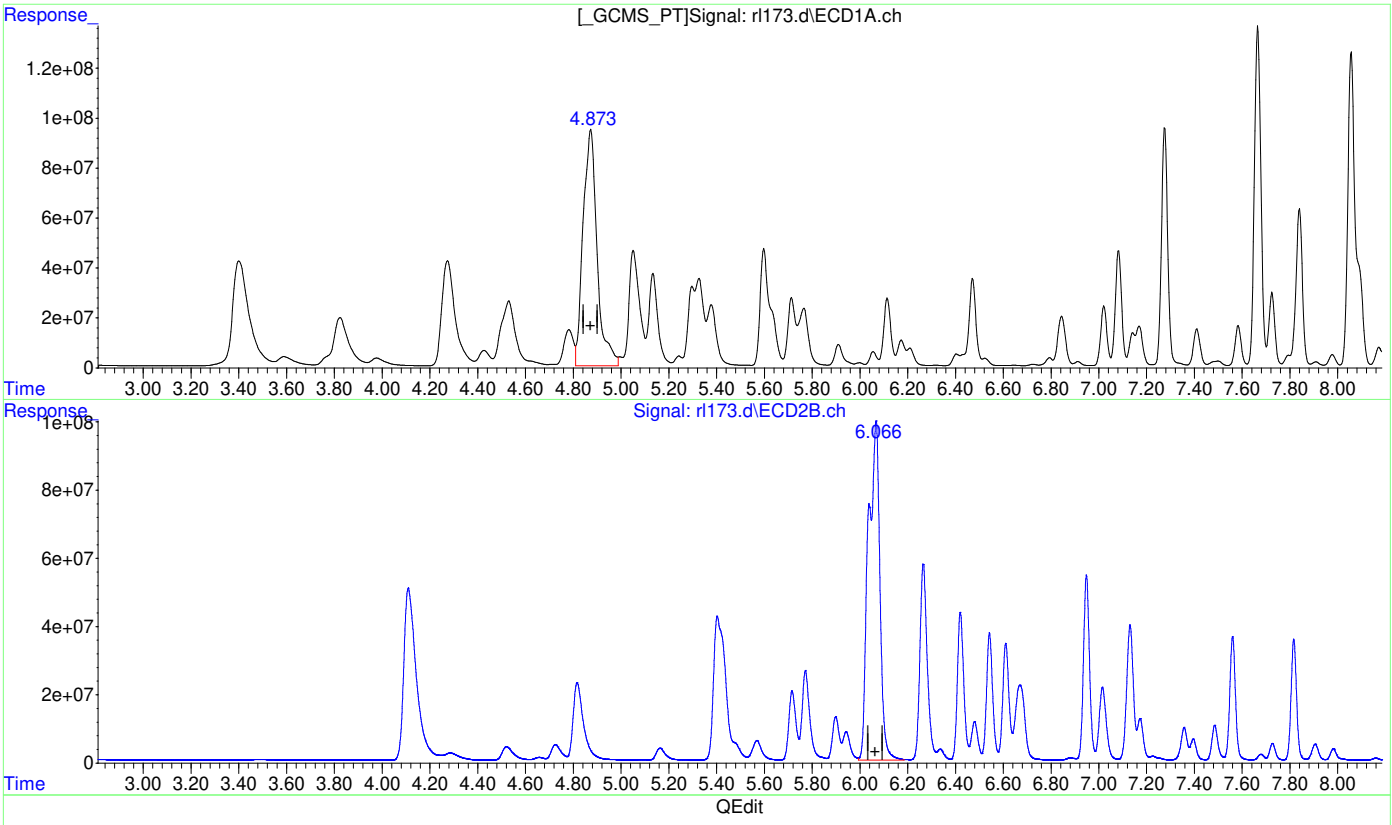
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(43) AR1016-C

4.874min 17559.572 PPB

response 3854684102

(43) AR1016-C #2

6.066min 16944.404 PPB m

response 3318137320

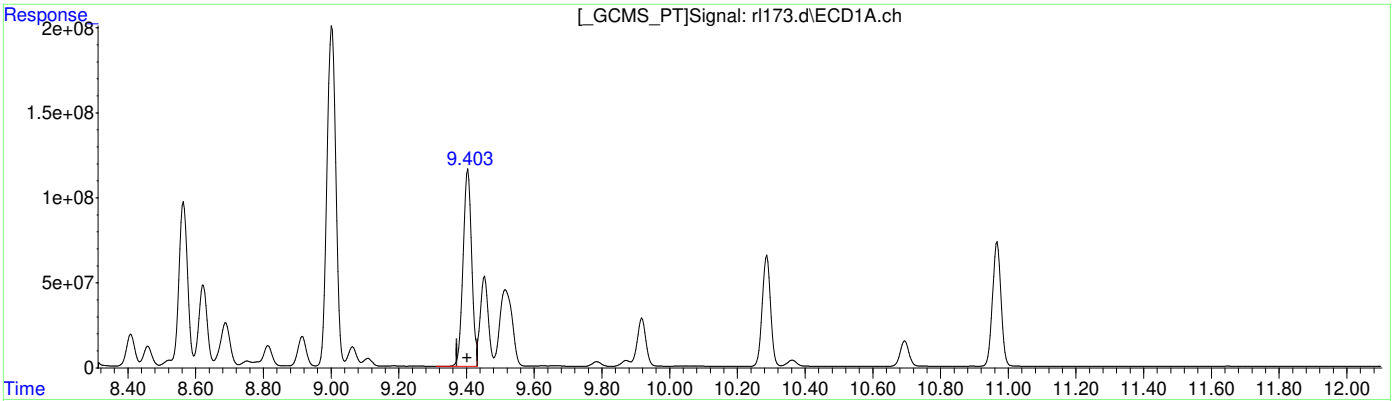
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:18:19 2022

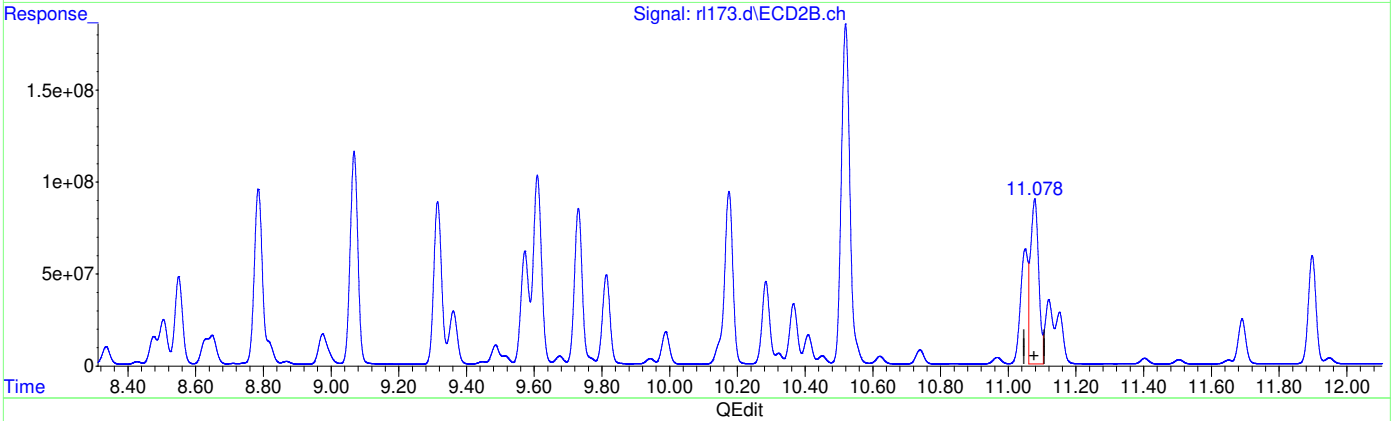
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.404min 8870.479 PPB

response 2050418550

(50) AR1260-E #2

11.078min 8260.971 PPB

response 1522952903

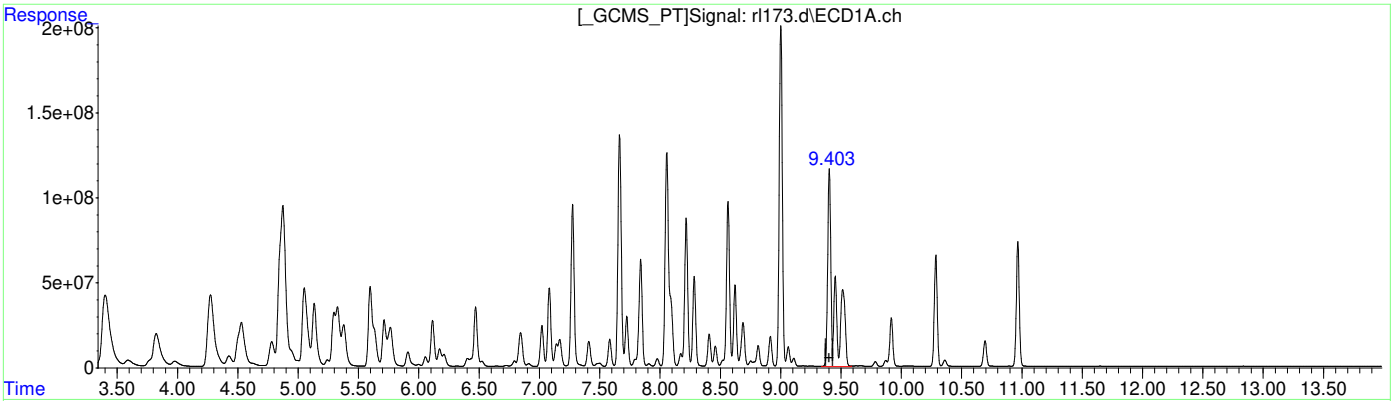
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:18:25 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.403min 17737.464 PPB m

response 4100029539

(50) AR1260-E #2

11.078min 18661.128 PPB m

response 3440275676

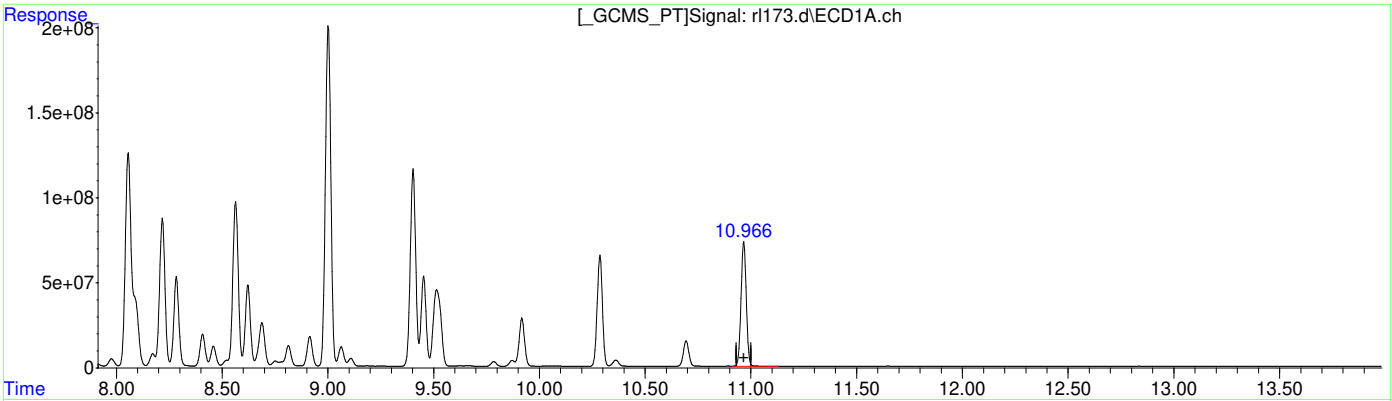
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:18:41 2022

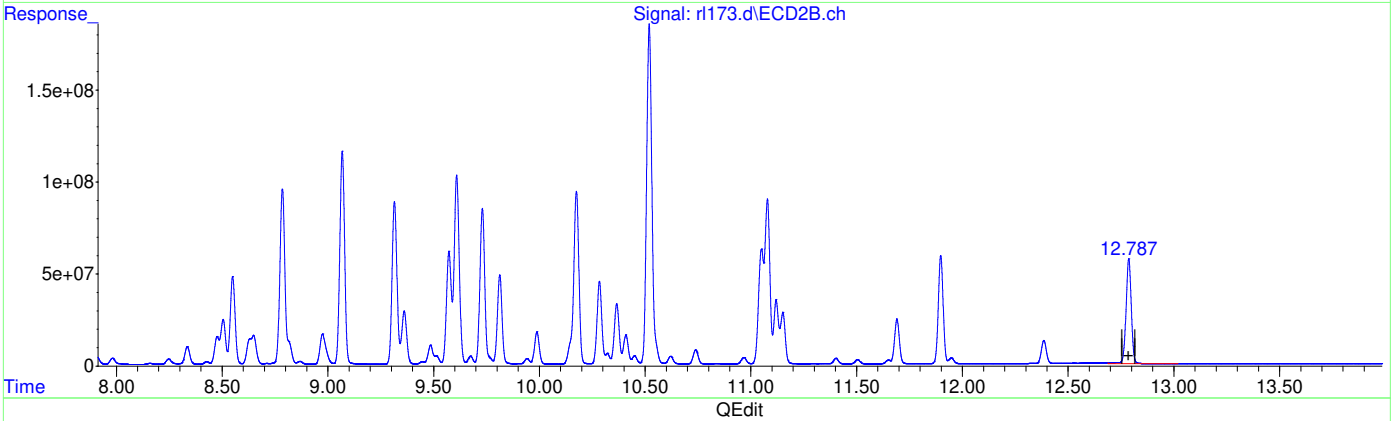
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 691.951 ppb

response 1270236229

(51) Decachlorobiphenyl #2 (S)

12.787min 838.482 ppb

response 1002029014

(+) = Expected Retention Time

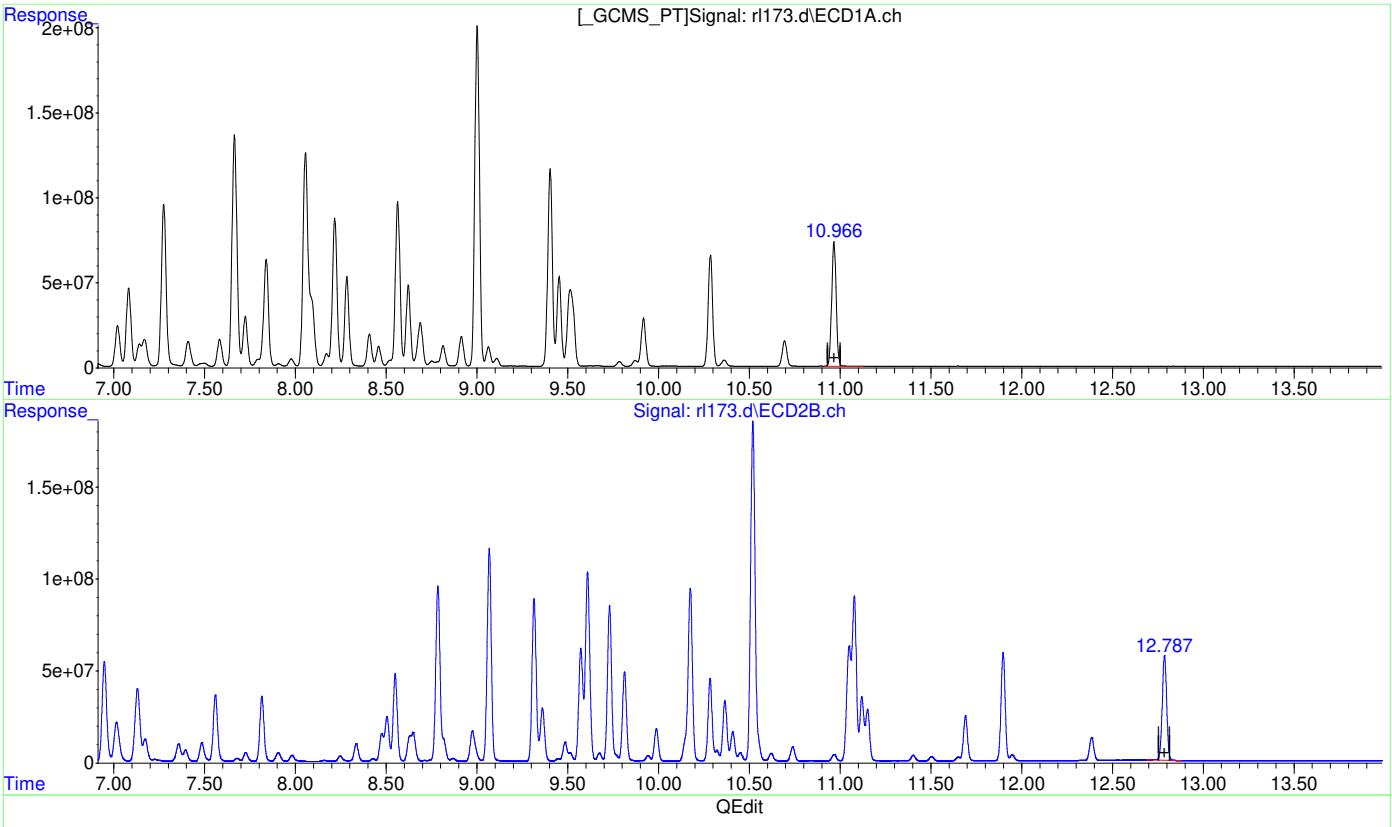
pcbRL003.m Wed Sep 21 22:18:48 2022 Page: 1

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl173.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:03 am
Operator : rebeccak
Sample : ic5-20000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 11 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:17:52 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:07:43 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.967min 691.951 ppb

response 1270236229

(51) Decachlorobiphenyl #2 (S)

12.787min 812.071 ppb m

response 970466219

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:18:58 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:29:55 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.397	4.109	121.6E6	97815162	44.698	37.933
	Spiked Amount 40.000			Recovery	=	111.75%	94.83%
51)	S Decachlor...	10.967	12.787	79471992	59805651	43.292	50.044m
	Spiked Amount 40.000			Recovery	=	108.23%	125.11%
	Target Compounds						
2)	AR1221-A	2.801	3.479	27447848	23477888	373.083	468.304 #
3)	AR1221-B	3.589	4.518	38417393	31904548	339.800	307.504
4)	AR1221-C	3.821	4.814	106.7E6	73837513	390.419	300.837
5)	AR1221-D	4.272	5.479f	21624636	28576824	385.115m	558.763m#
6)	AR1221-E	4.872	6.066	23550654	21003740	344.993	299.608m
24)	AR1254-A	6.115	7.559	85820314	85994470	284.316	234.346
25)	AR1254-B	6.470	7.816	178.3E6	93830732	289.244m	219.699
26)	AR1254-C	6.853	8.336	93360957	77012378	273.145	233.010
27)	AR1254-D	7.022	8.505	157.1E6	144.6E6	267.861	224.841
28)	AR1254-E	7.409	8.818	119.9E6	102.2E6	244.892	183.446 #
29)	AR1254-F	7.794	9.346	70658518	119.3E6	166.647	219.843m#
30)	AR1254-G	8.058	9.609	160.1E6	107.8E6	255.876	190.680 #

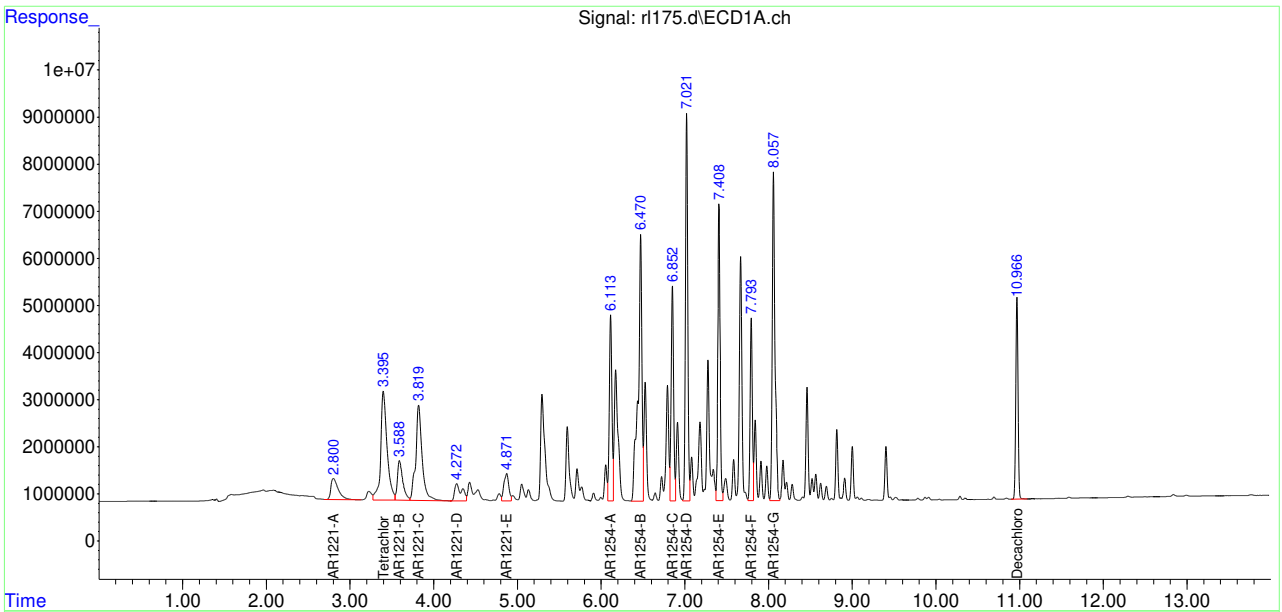
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

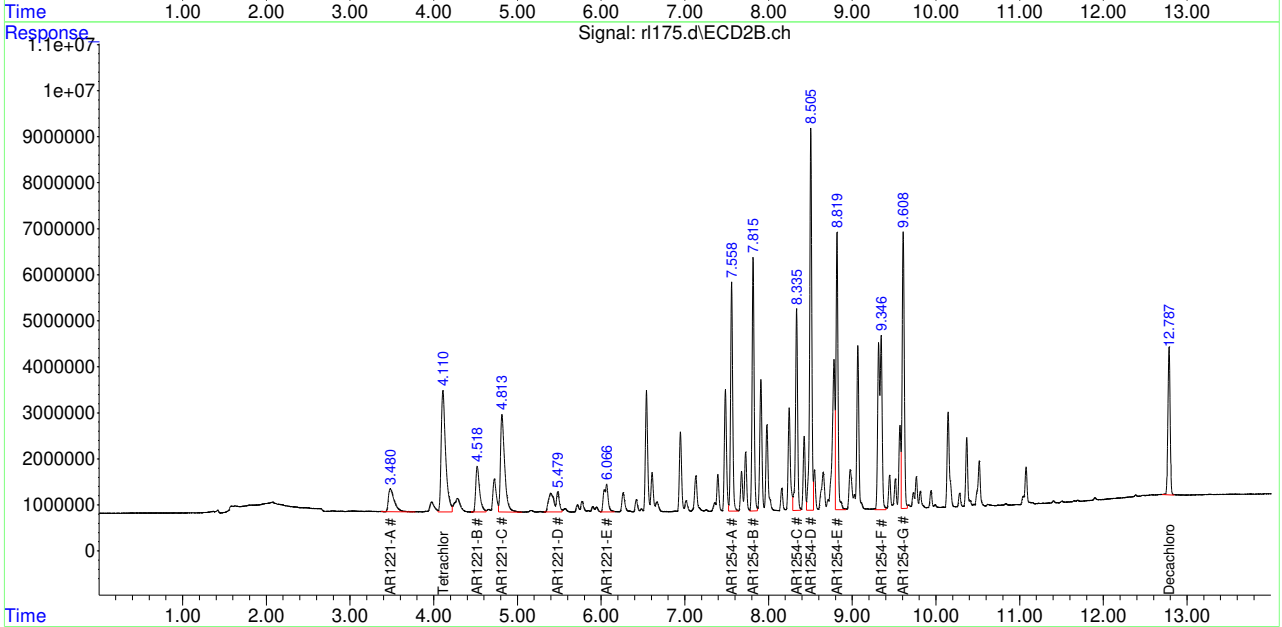
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:29:55 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number:	GRL5-IC5	**Method:**	SW846 8082A
Lab FileID:	RL175.D	**Analyst approved:**	09/21/22 23:50 Rebecca Krug
Injection Time:	09/21/22 02:41	**Supervisor approved:**	09/28/22 19:34 Gwendolyn Burns

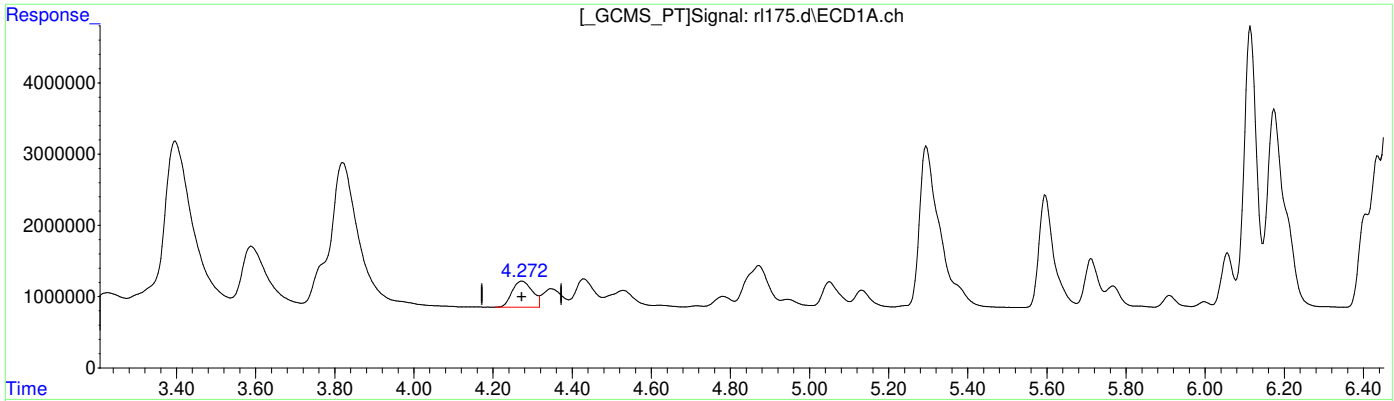
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1221-D		1	4.27	Split peak
AR1221-D		2	5.48	Split peak
AR1221-E		2	6.07	Split peak
AR1254-B		1	6.47	Split peak
AR1254-F		2	9.35	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

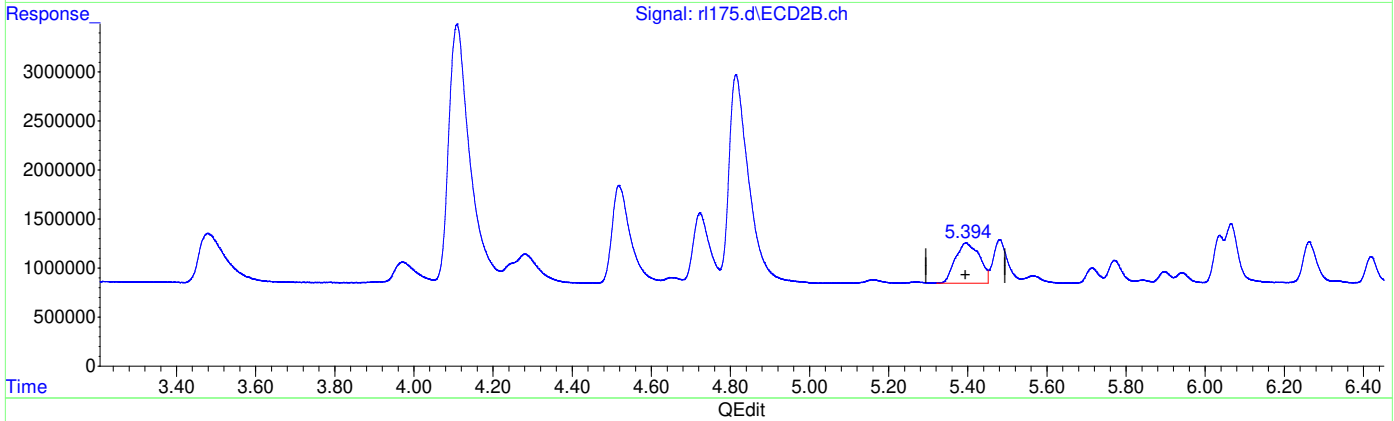
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(5) AR1221-D

4.274min 231.057 PPB

response 12974096

(5) AR1221-D #2

5.395min 341.909 PPB

response 17486270

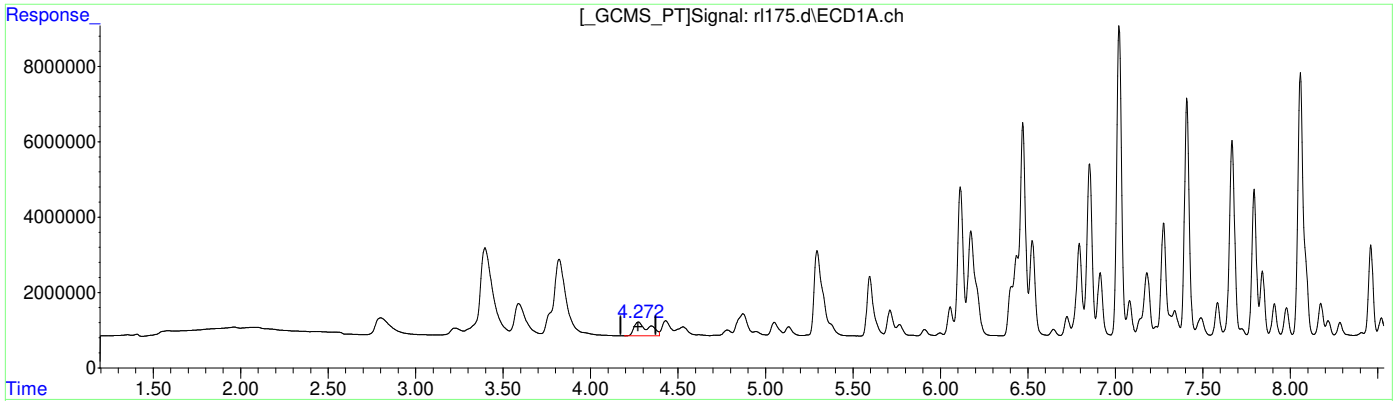
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:27:38 2022

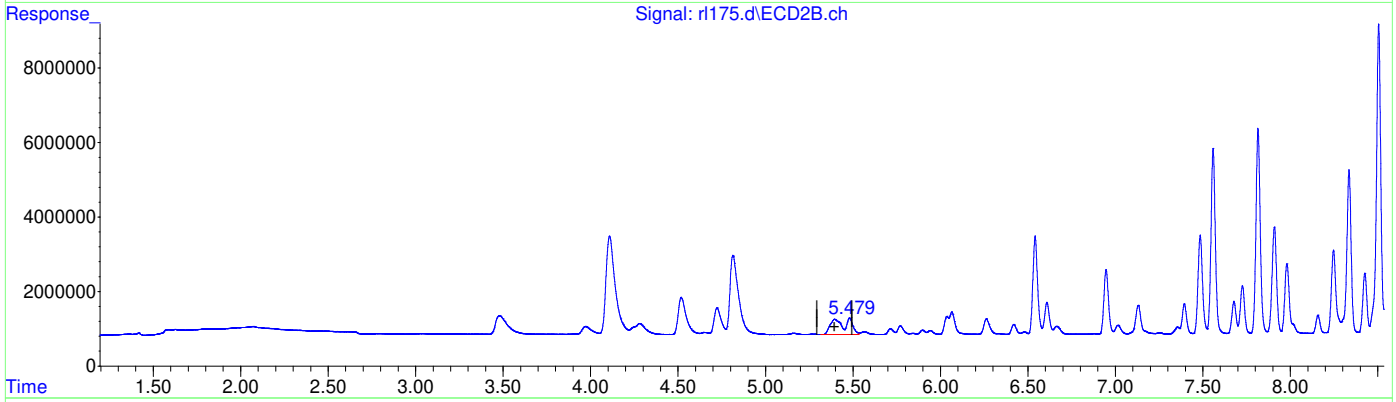
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(5) AR1221-D

4.272min 385.115 PPB m

response 21624636

(5) AR1221-D #2

5.479min 558.763 PPB m

response 28576824

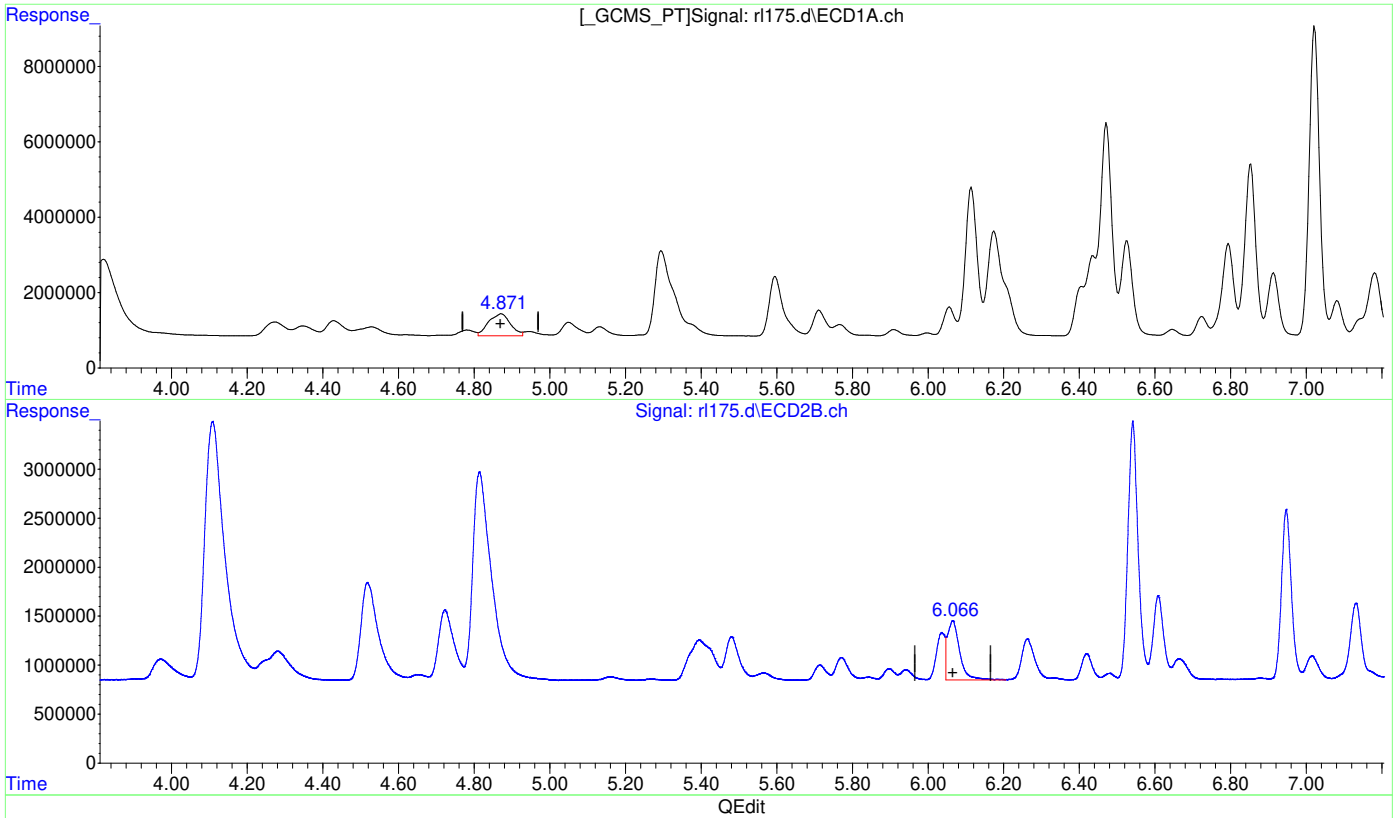
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:28:10 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(6) AR1221-E

4.872min 344.993 PPB

response 23550654

(6) AR1221-E #2

6.065min 194.531 PPB

response 13637426

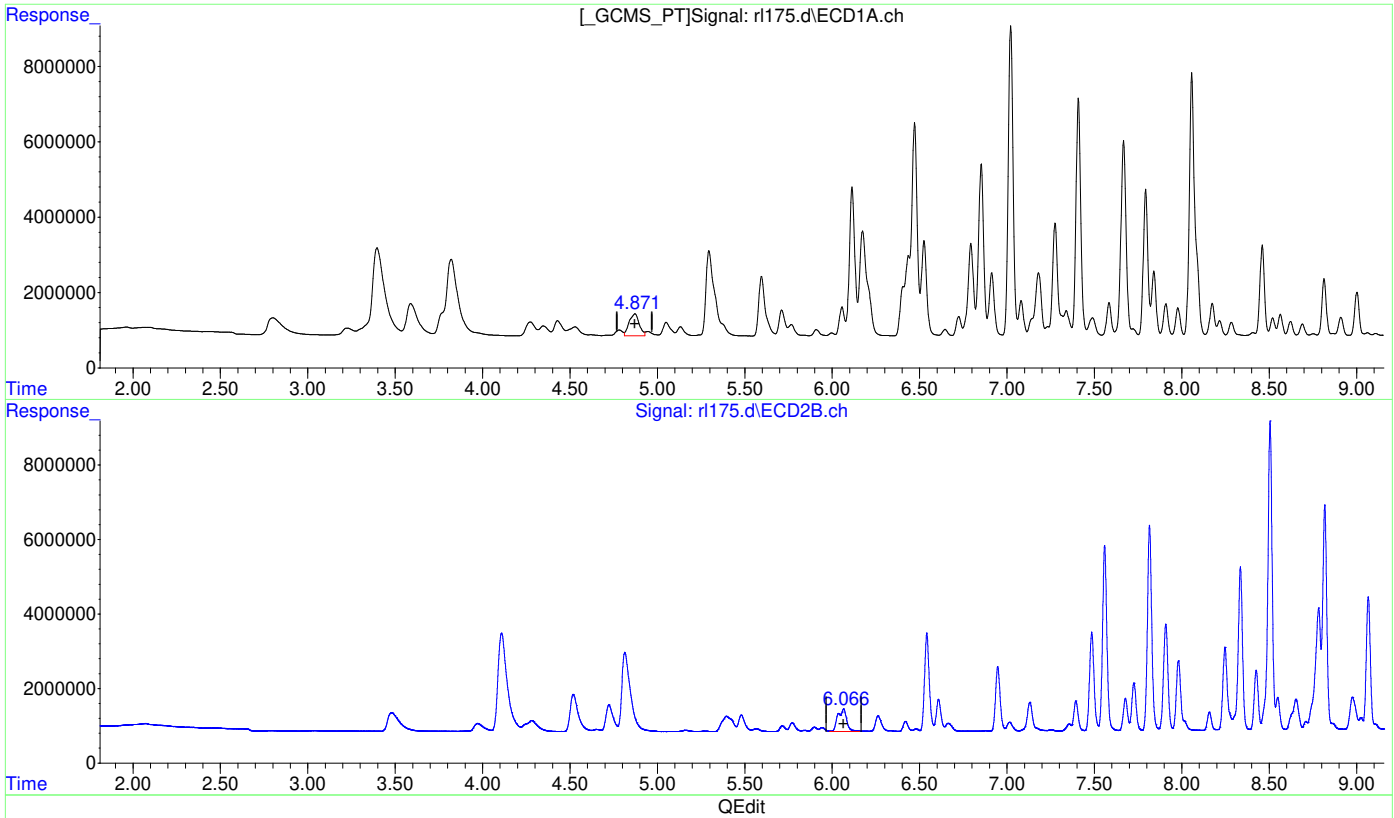
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:28:27 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(6) AR1221-E

4.872min 344.993 PPB

response 23550654

(6) AR1221-E #2

6.066min 299.608 PPB m

response 21003740

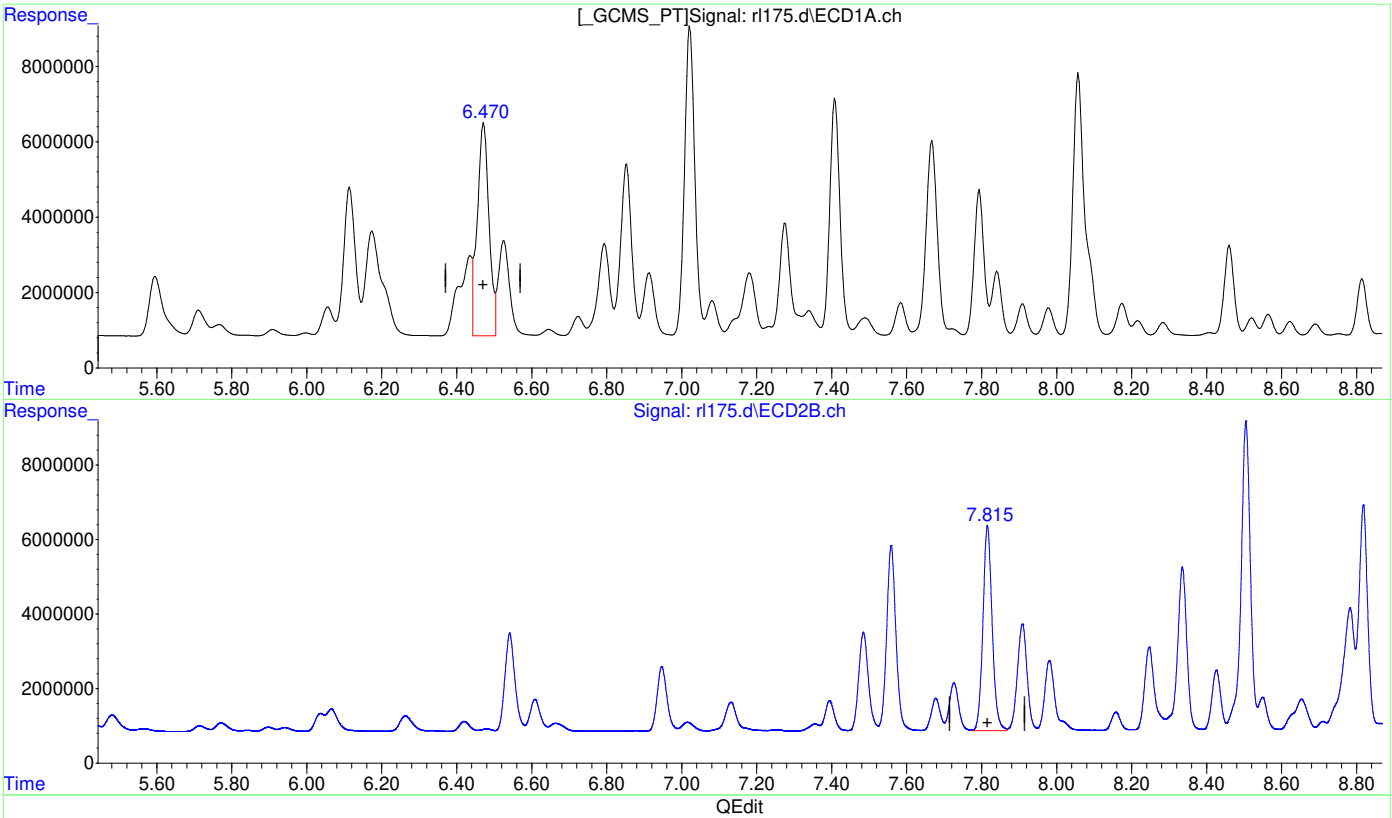
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:28:38 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(25) AR1254-B

6.472min 200.436 PPB

response 123577104

(25) AR1254-B #2

7.816min 219.699 PPB

response 93830732

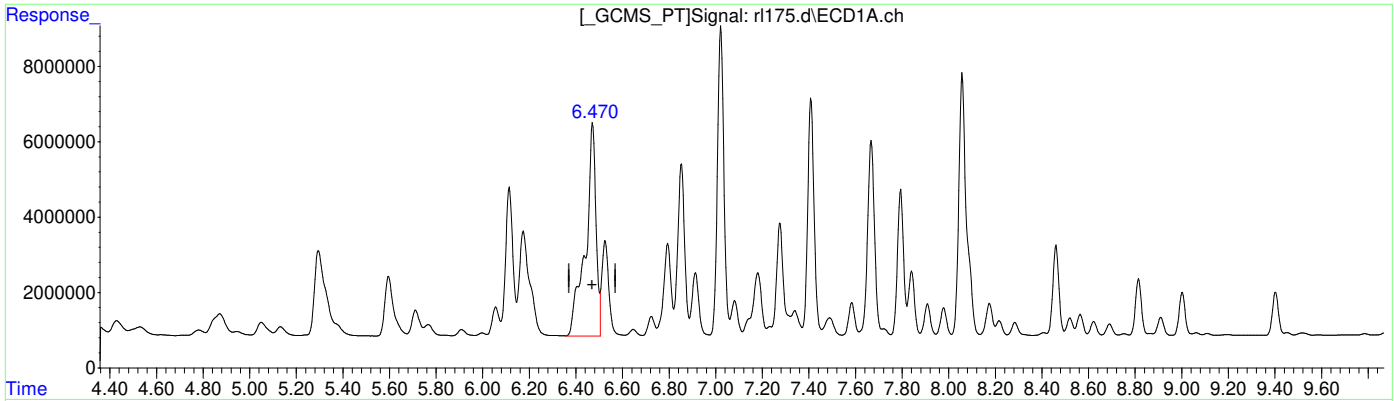
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:28:51 2022

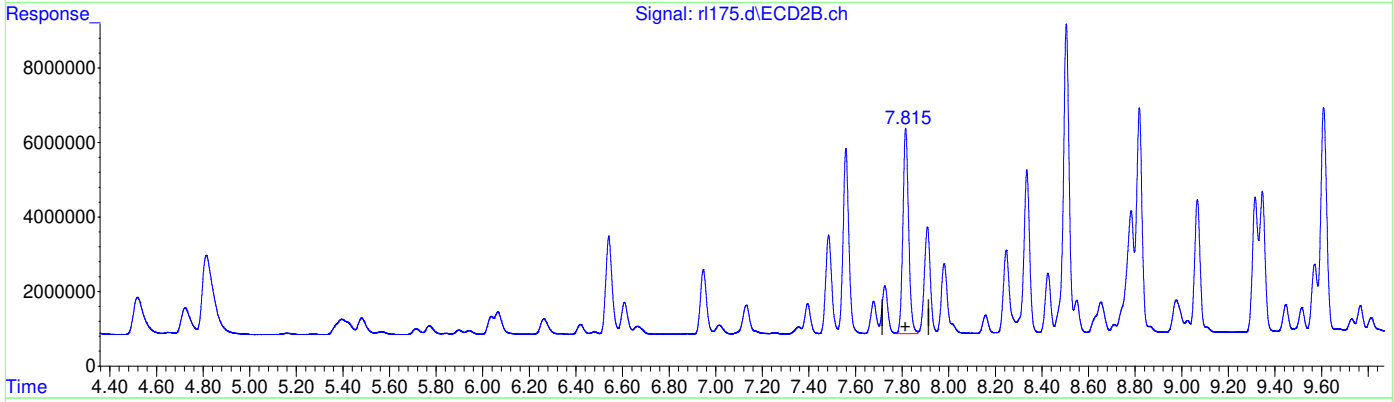
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(25) AR1254-B

6.470min 289.244 PPB m

response 178331304

(25) AR1254-B #2

7.816min 219.699 PPB

response 93830732

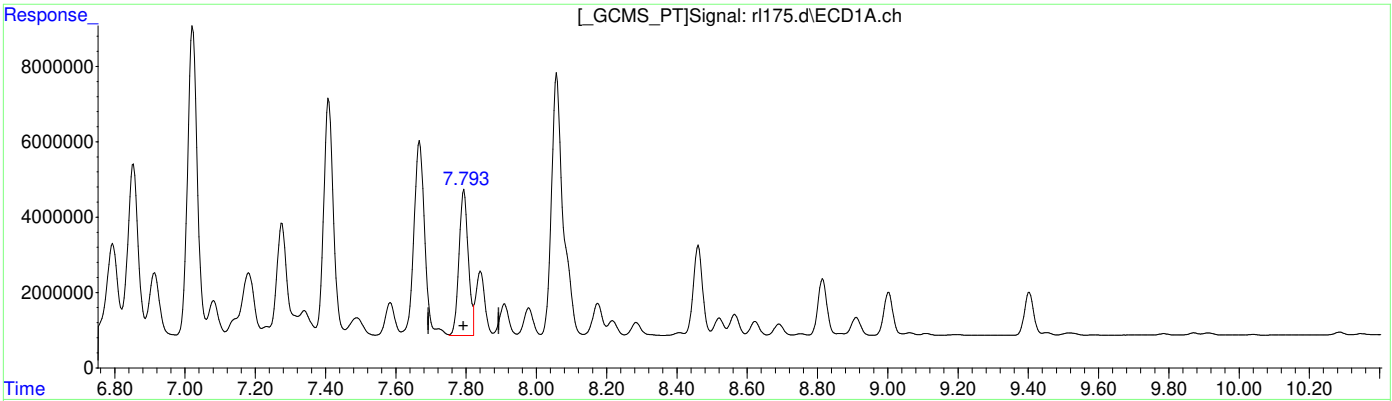
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:29:15 2022

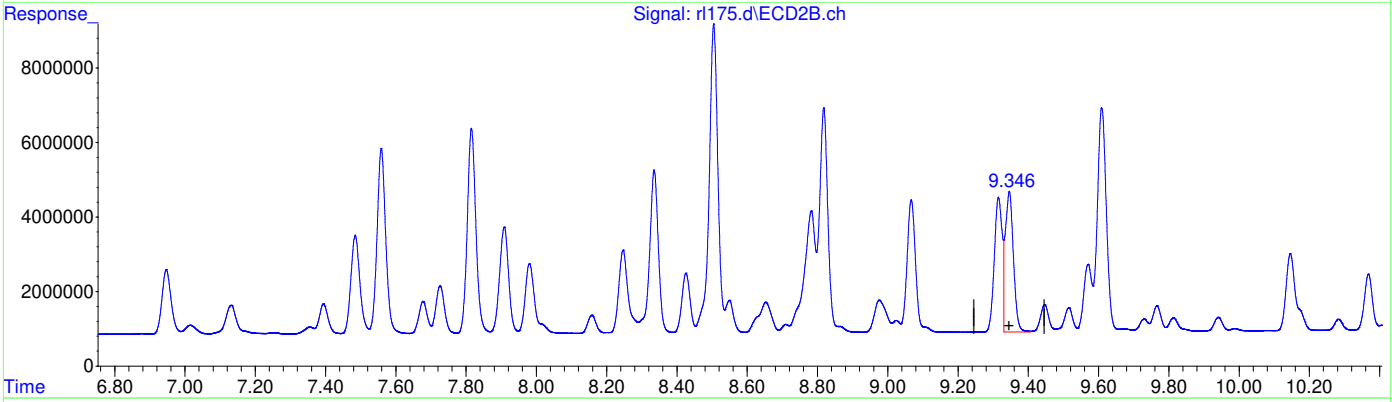
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F

7.794min 166.647 PPB

response 70658518

(29) AR1254-F #2

9.346min 112.449 PPB

response 60998850

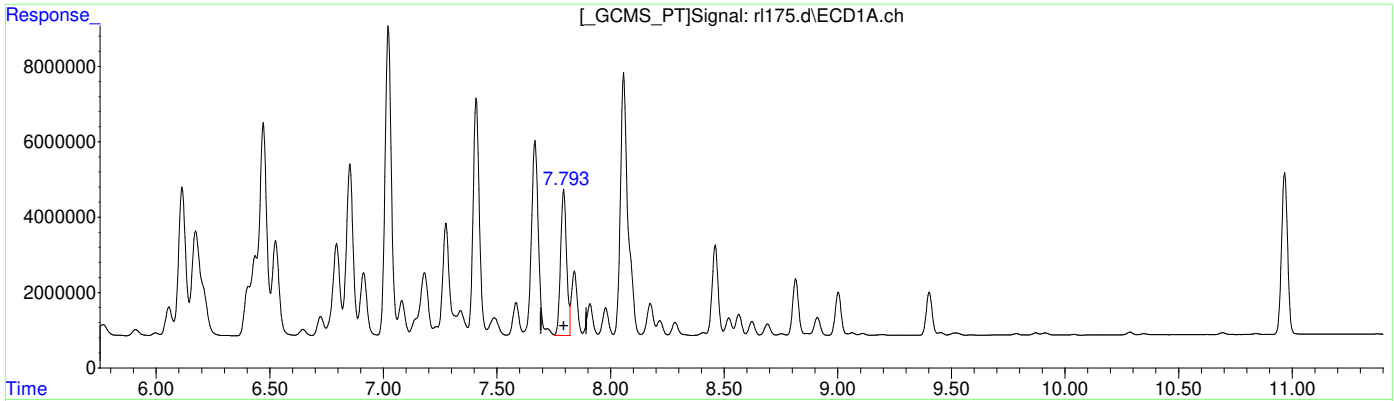
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:29:21 2022

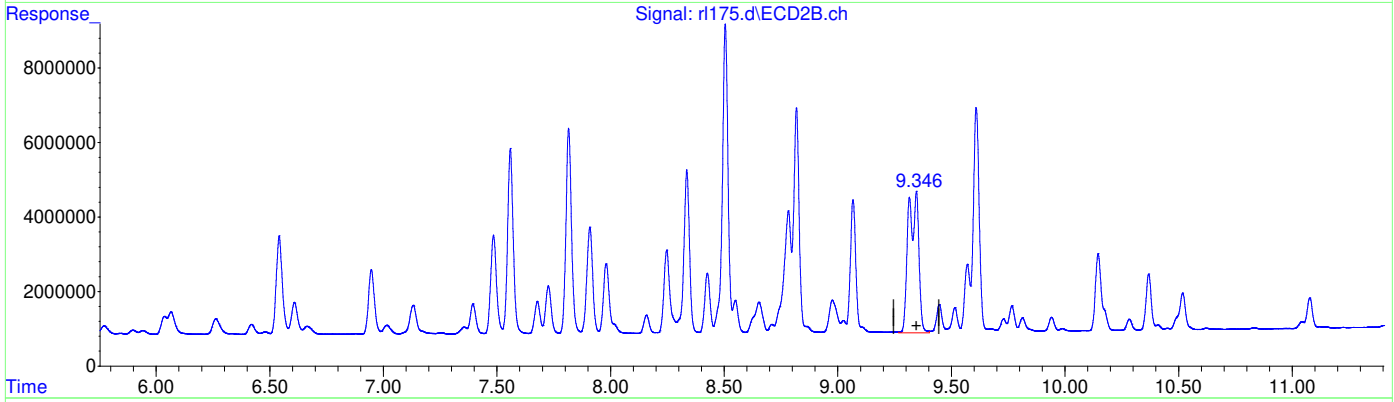
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F

7.794min 166.647 PPB

response 70658518

(29) AR1254-F #2

9.346min 219.843 PPB m

response 119256072

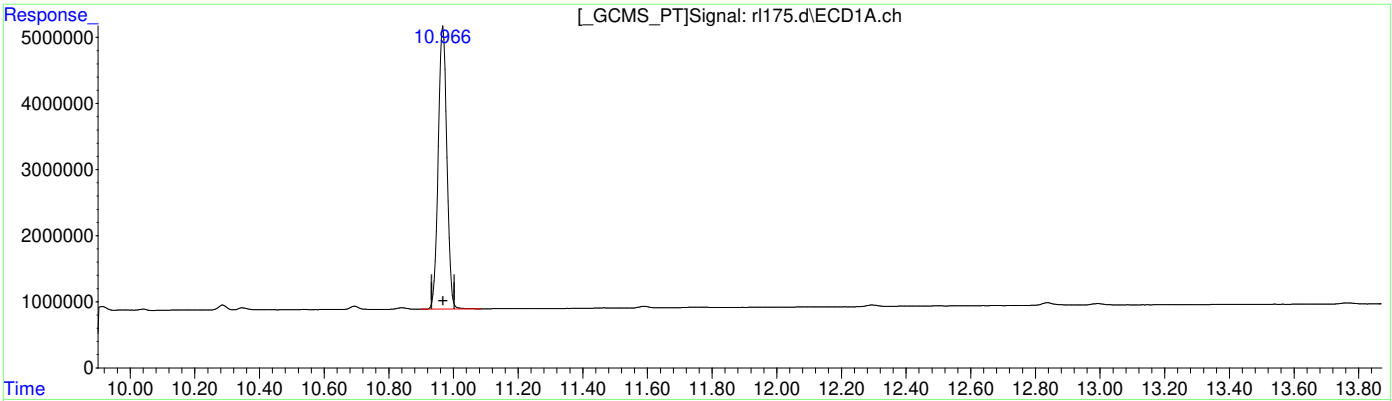
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:29:31 2022

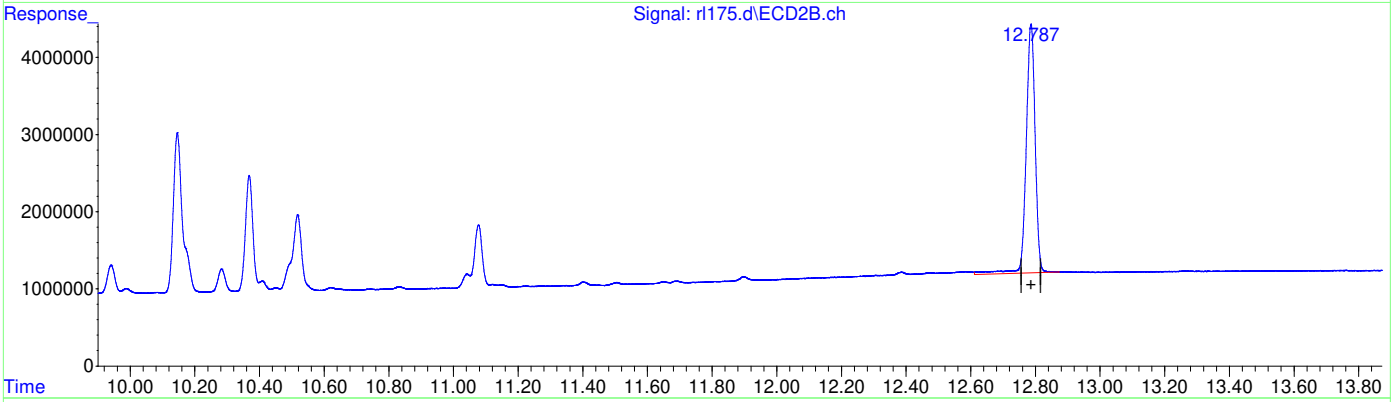
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 43.292 ppb

response 79471992

(51) Decachlorobiphenyl #2 (S)

12.787min 52.283 ppb

response 62480529

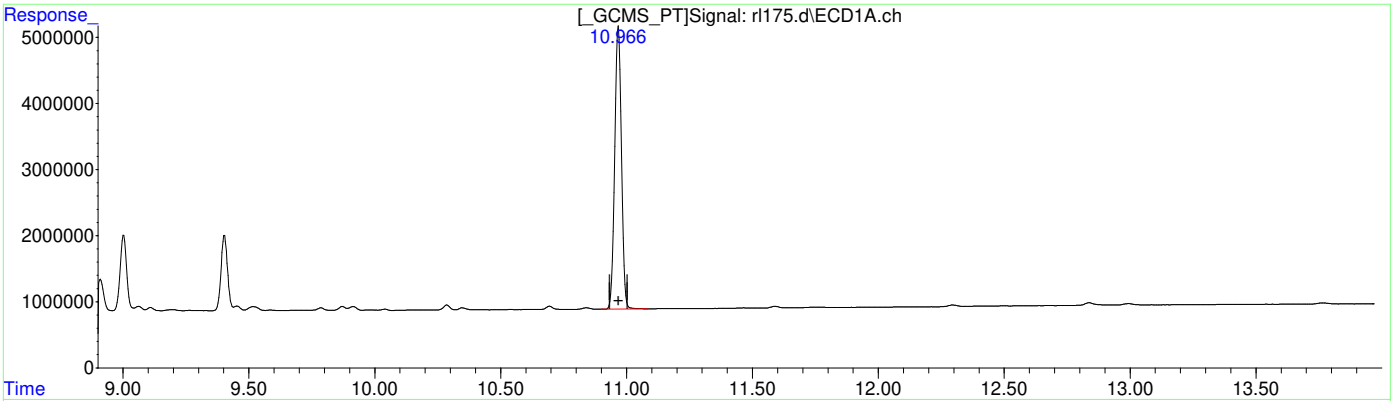
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:29:51 2022

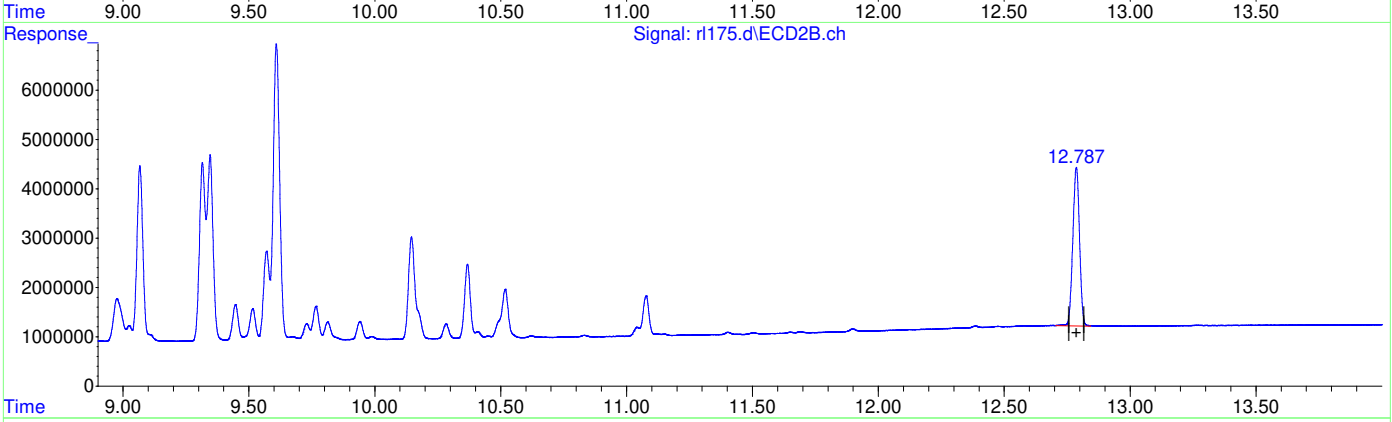
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl175.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:41 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 13 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:27:19 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:27:12 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 43.292 ppb

response 79471992

(51) Decachlorobiphenyl #2 (S)

12.787min 50.044 ppb m

response 59805651

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:29:58 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:56:10 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.396	4.108	125.6E6	104.1E6	46.163	40.375
	Spiked Amount 40.000			Recovery	= 115.41%		100.94%
51)	S Decachlor...	10.966	12.785	84992976	55897207	46.299	46.774m
	Spiked Amount 40.000			Recovery	= 115.75%		116.94%
	Target Compounds						
7)	AR1232-A	3.818	4.815	84653618	61465151	384.817	311.771
8)	AR1232-B	4.271	5.401	60331096	49424752	380.874	309.883
9)	AR1232-C	4.872	6.066	112.7E6	92379933	336.237	267.547m
10)	AR1232-D	5.050	6.263	44641695	37971353	315.943	269.286
11)	AR1232-E	5.596	6.947	44466759	27168633	464.153	280.338 #
31)	AR1262-A	7.664	9.068	129.0E6	96432783	282.364	161.593 #
32)	AR1262-B	8.218	9.730	151.2E6	126.8E6	260.576	134.268 #
33)	AR1262-C	8.564	10.176	144.2E6	121.1E6	258.310	173.048 #
34)	AR1262-D	9.003	10.519	284.6E6	235.5E6	215.712	138.089 #
35)	AR1262-E	9.453	11.050	343.2E6	261.7E6	239.340m	145.289m#

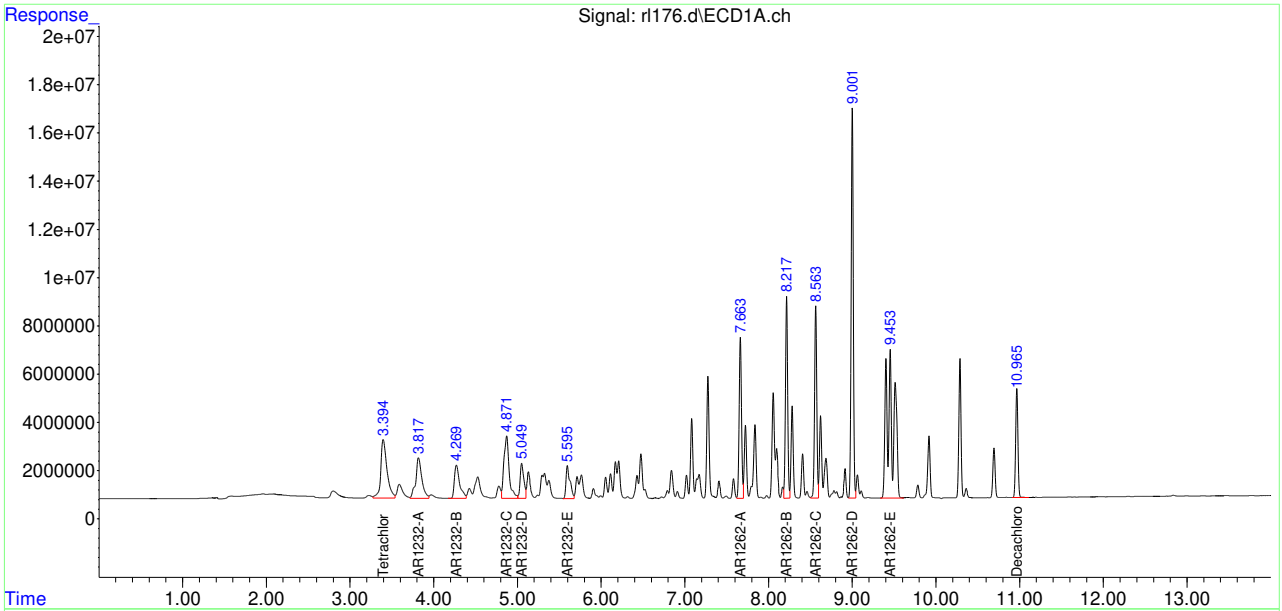
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

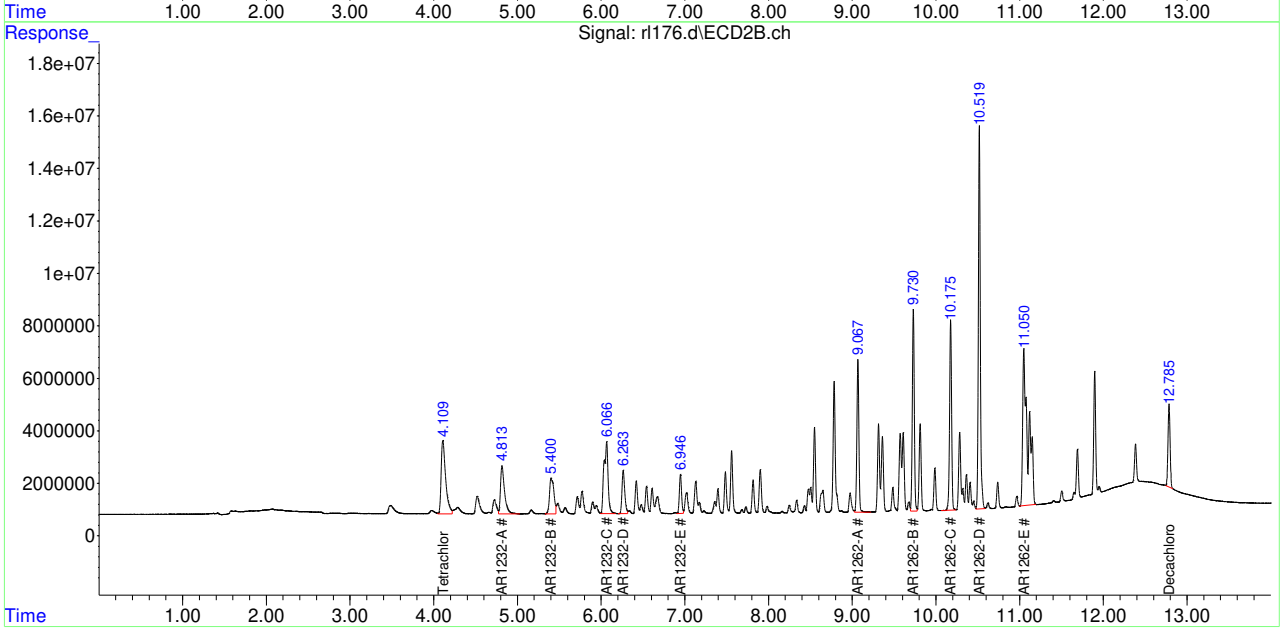
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:56:10 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL176.D
Injection Time: 09/21/22 03:00
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

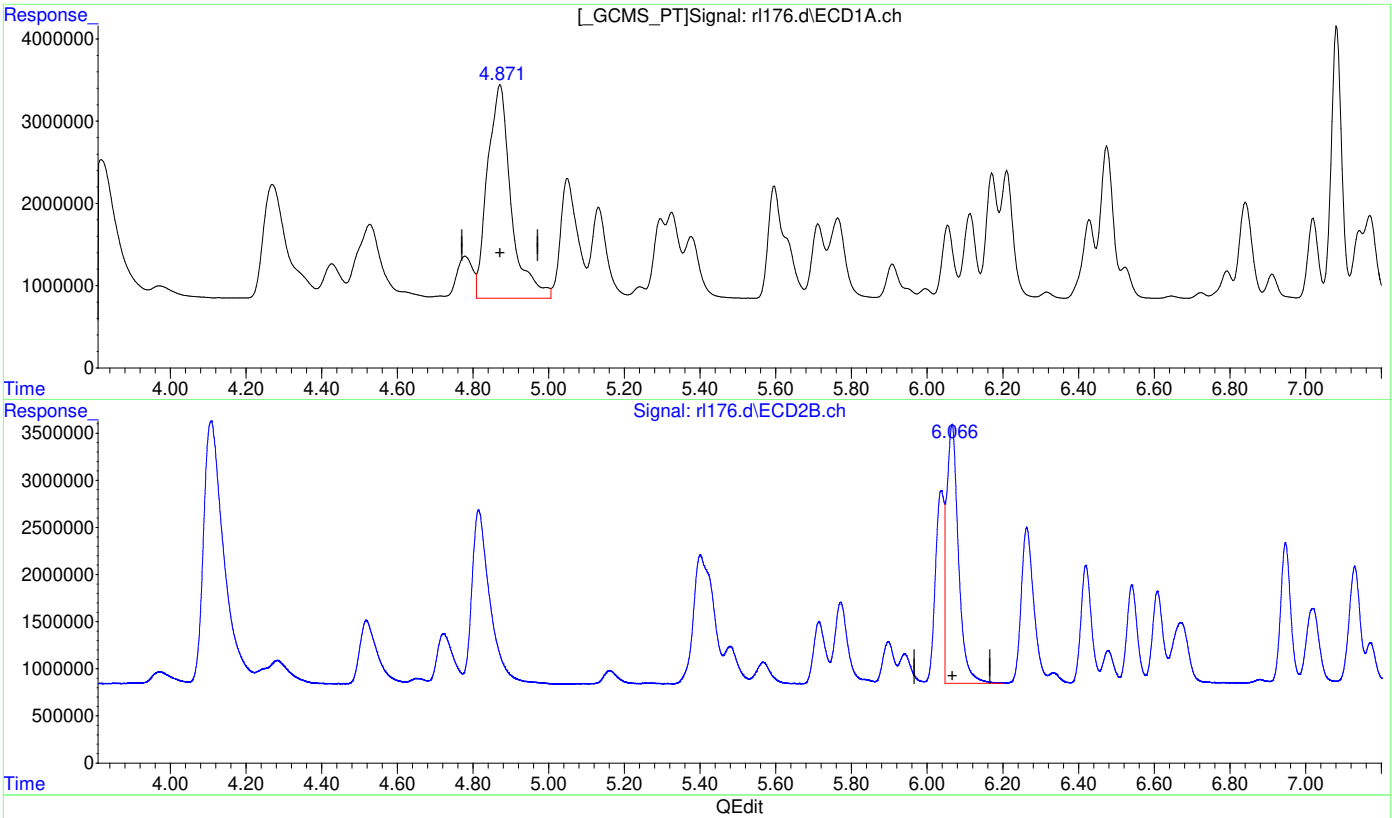
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1232-C		2	6.07	Split peak
AR1262-E		1	9.45	Split peak
AR1262-E		2	11.05	Split peak
Decachlorobiphenyl	2051-24-3	2	12.78	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(9) AR1232-C

4.872min 336.237 PPB

response 112661195

(9) AR1232-C #2

6.066min 173.958 PPB

response 60065204

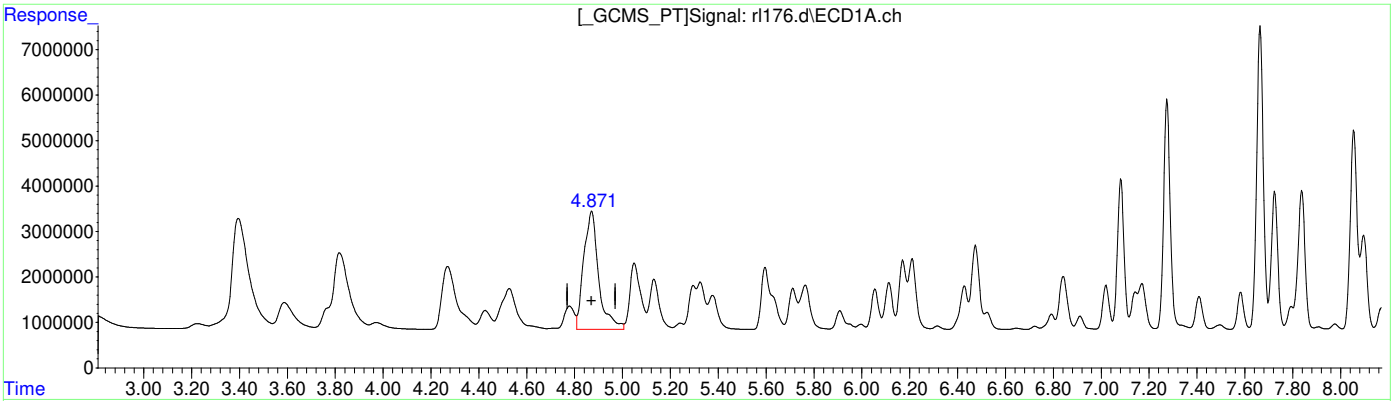
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:53:39 2022

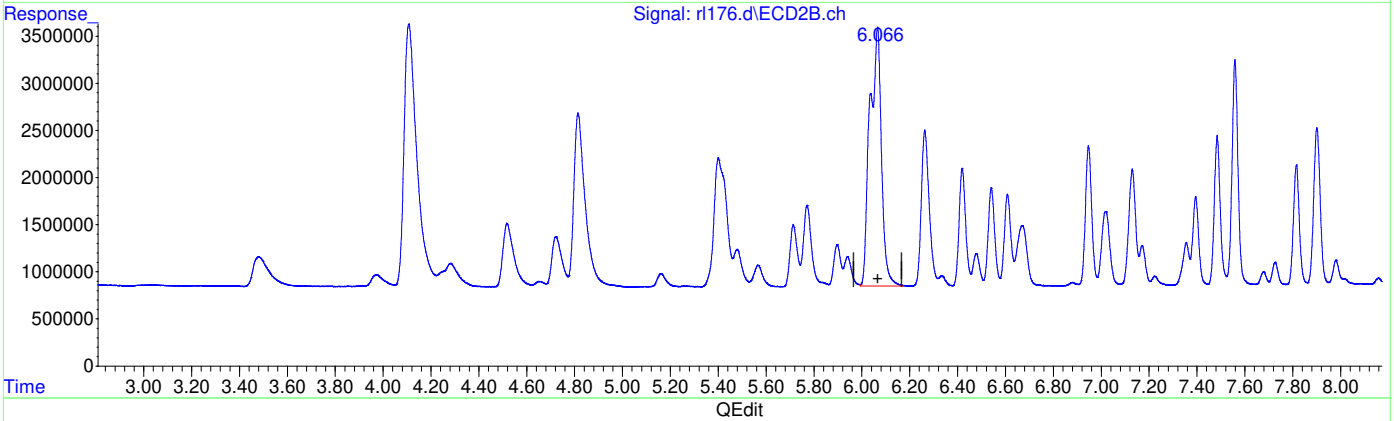
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(9) AR1232-C

4.872min 336.237 PPB

response 112661195

(9) AR1232-C #2

6.066min 267.547 PPB m

response 92379933

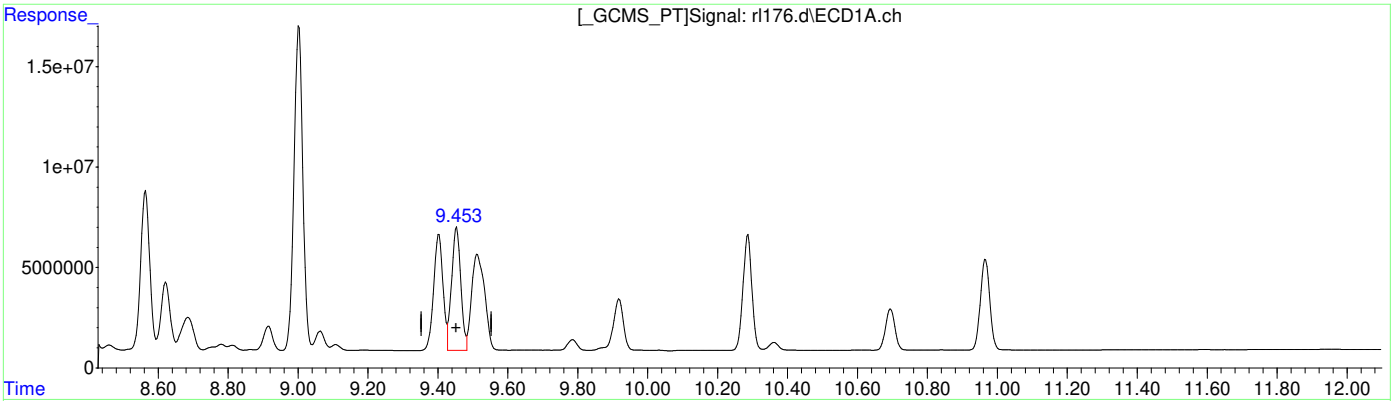
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:55:00 2022

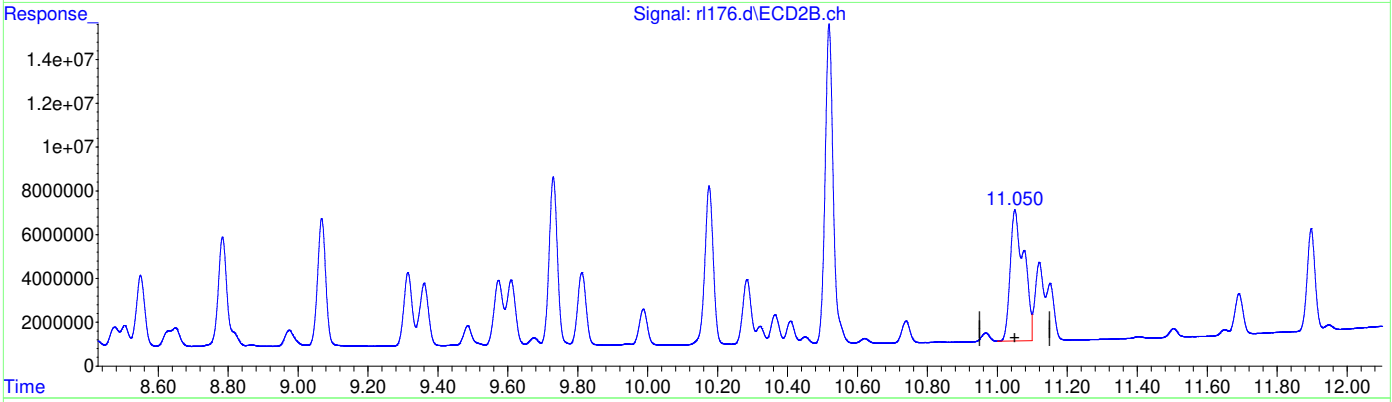
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(35) AR1262-E

9.454min 78.096 PPB

response 111980308

(35) AR1262-E #2

11.050min 91.482 PPB

response 164796827

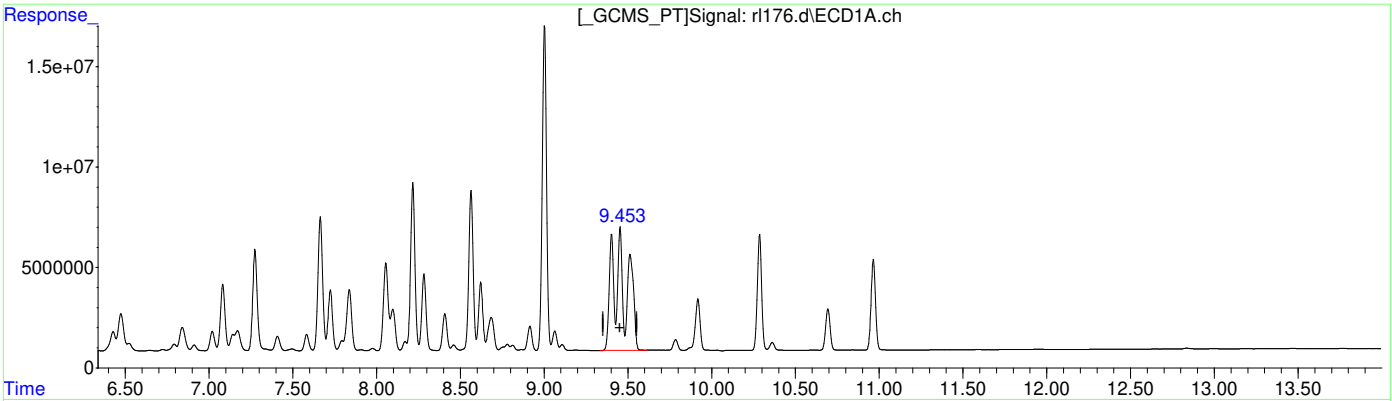
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:55:25 2022

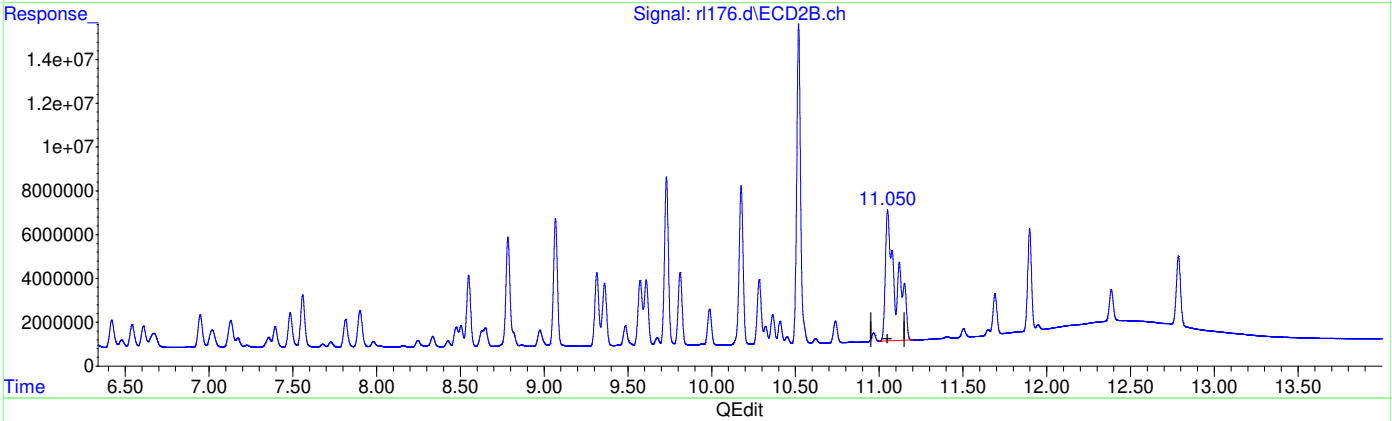
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(35) AR1262-E

9.453min 239.340 PPB m

response 343185321

(35) AR1262-E #2

11.050min 145.289 PPB m

response 261724920

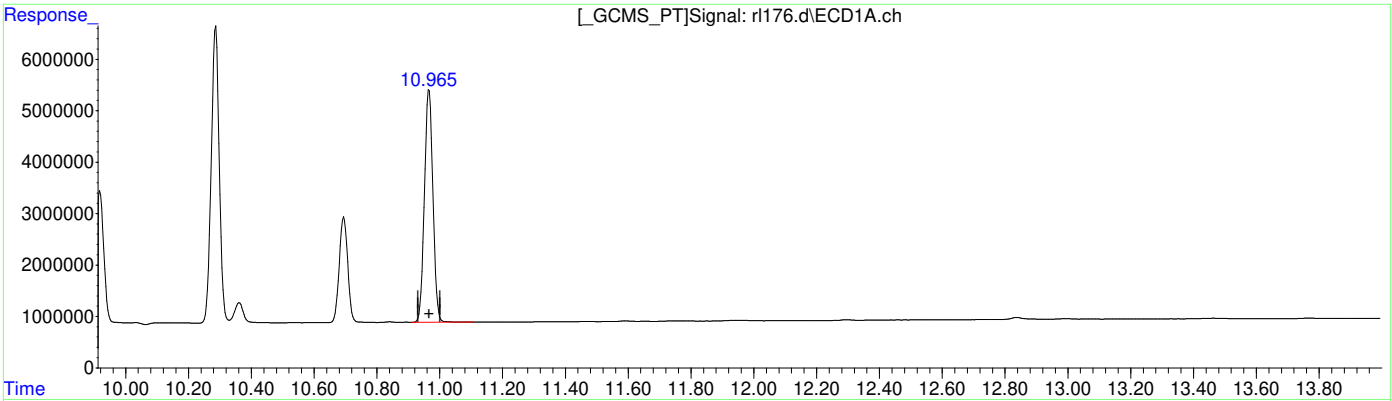
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:55:49 2022

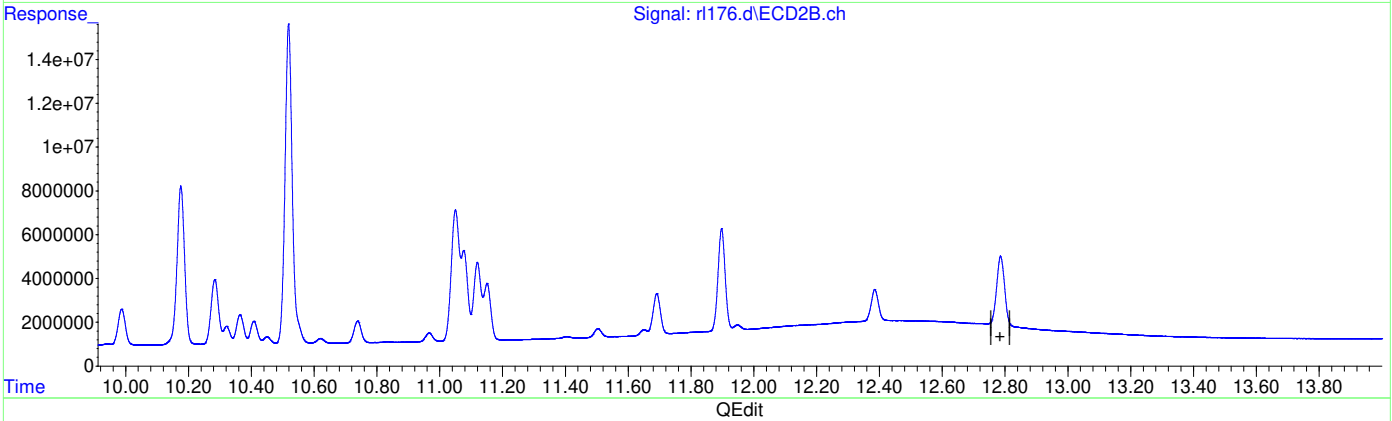
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.966min 46.299 ppb

response 84992976

(51) Decachlorobiphenyl #2 (S)

12.786min -41.246 ppb

response -49291656

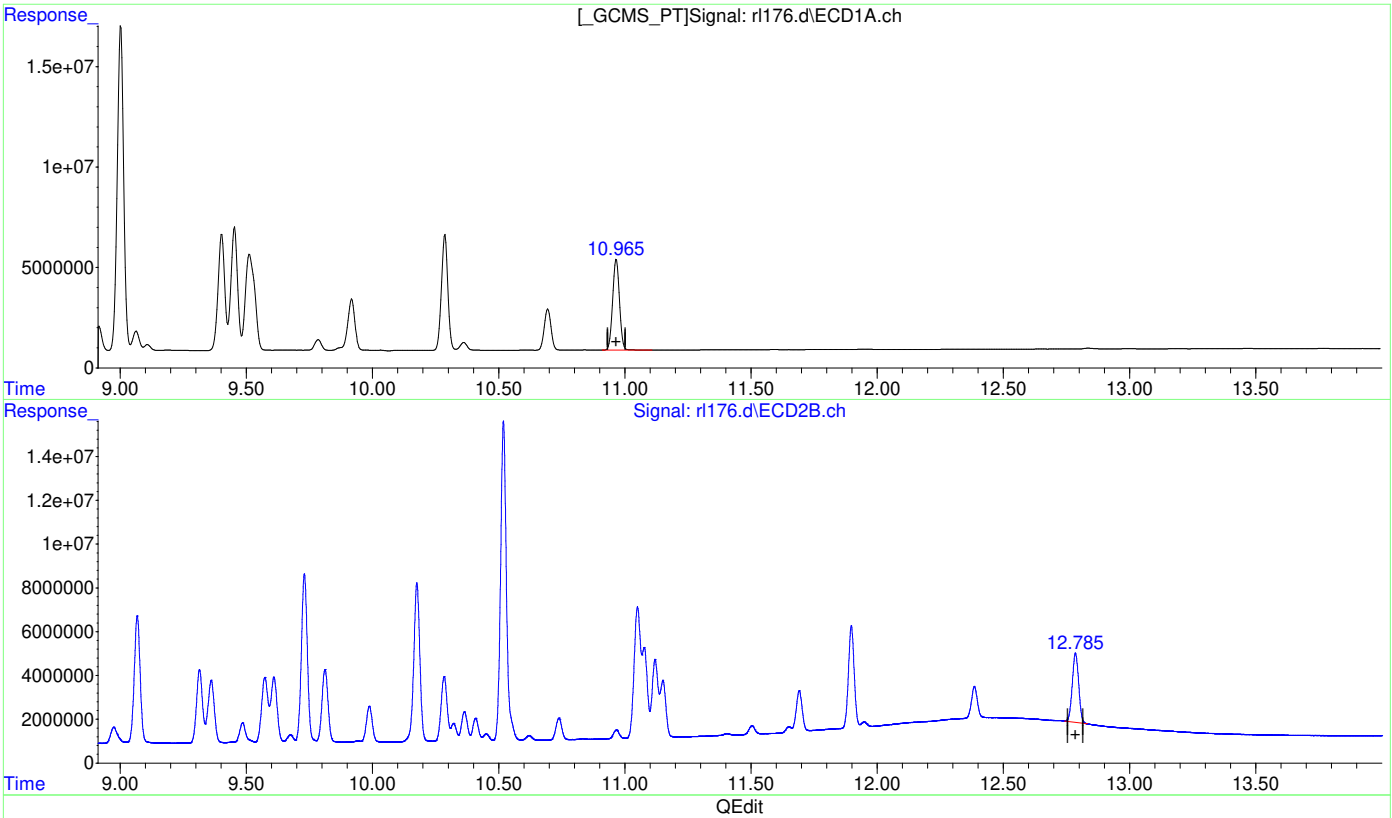
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 22:56:03 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl176.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:00 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 14 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 22:53:27 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 22:53:15 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.966min 46.299 ppb

response 84992976

(51) Decachlorobiphenyl #2 (S)

12.785min 46.774 ppb m

response 55897207

(+) = Expected Retention Time

pcbRL003.m Wed Sep 21 22:56:13 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:01:43 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.398	4.108	118.2E6	102.3E6	43.440	39.656	
	Spiked Amount 40.000			Recovery	=	108.60%	99.14%	
51)	S Decachlor...	10.967	12.785	212.4E6	159.8E6	115.730	133.755m	
	Spiked Amount 40.000			Recovery	=	289.32%	334.39%	
	Target Compounds							
12)	AR1242-A	4.271	5.402	91107943	82701898	320.971	312.819	
13)	AR1242-B	4.872	6.065	186.1E6	154.1E6	318.175	251.588m	
14)	AR1242-C	5.050	6.263	72254247	61046911	292.890	263.662	
15)	AR1242-D	5.596	6.947	78149650	48143317	428.128	261.798	#
16)	AR1242-E	6.211	7.559	61453977	56377153	281.959	238.498	
36)	AR1268-A	9.454	11.051	295.6E6	246.0E6	232.482	125.332	#
37)	AR1268-B	9.509	11.119	276.1E6	229.9E6	194.595	134.880	#
38)	AR1268-C	9.786	11.503	226.5E6	185.4E6	202.411	125.047	#
39)	AR1268-D	10.287	11.898	108.9E6	86461999	218.278	146.658	#
40)	AR1268-E	10.695	12.386	686.2E6	558.6E6	184.217	128.059	#

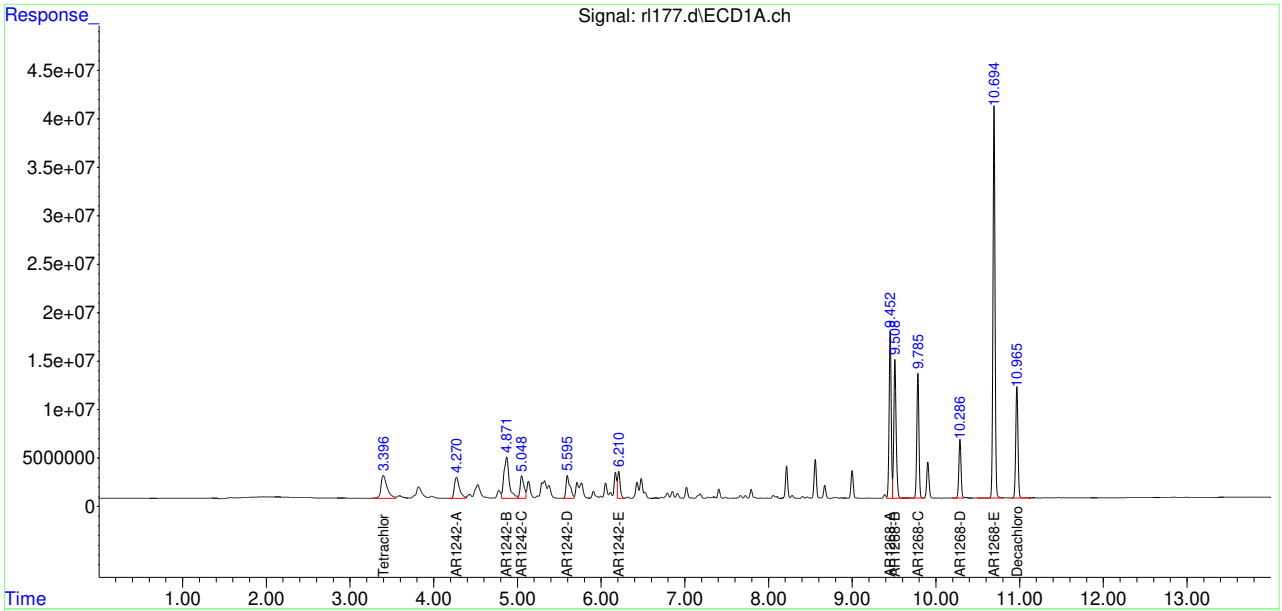
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

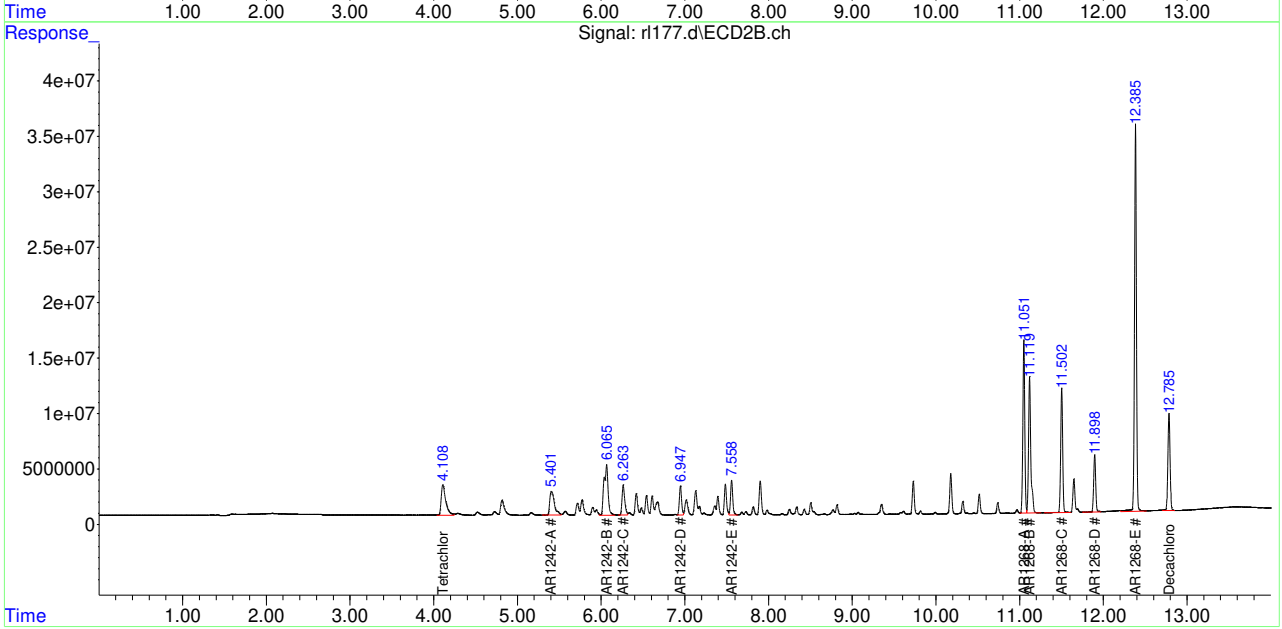
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:01:43 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL177.D
Injection Time: 09/21/22 03:19
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

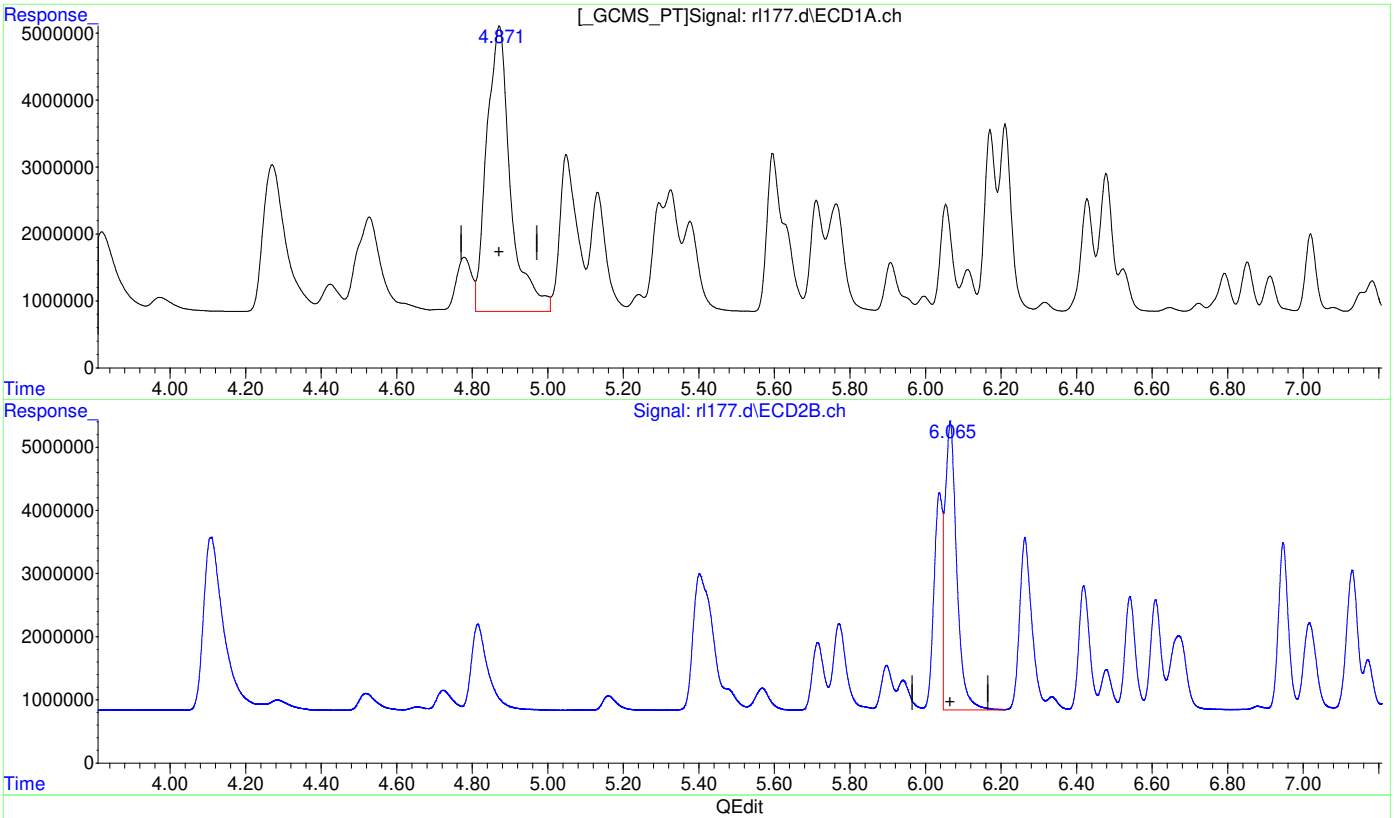
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1242-B		2	6.06	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:00:15 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(13) AR1242-B

4.872min 318.175 PPB

response 186103005

(13) AR1242-B #2

6.066min 161.900 PPB

response 99142276

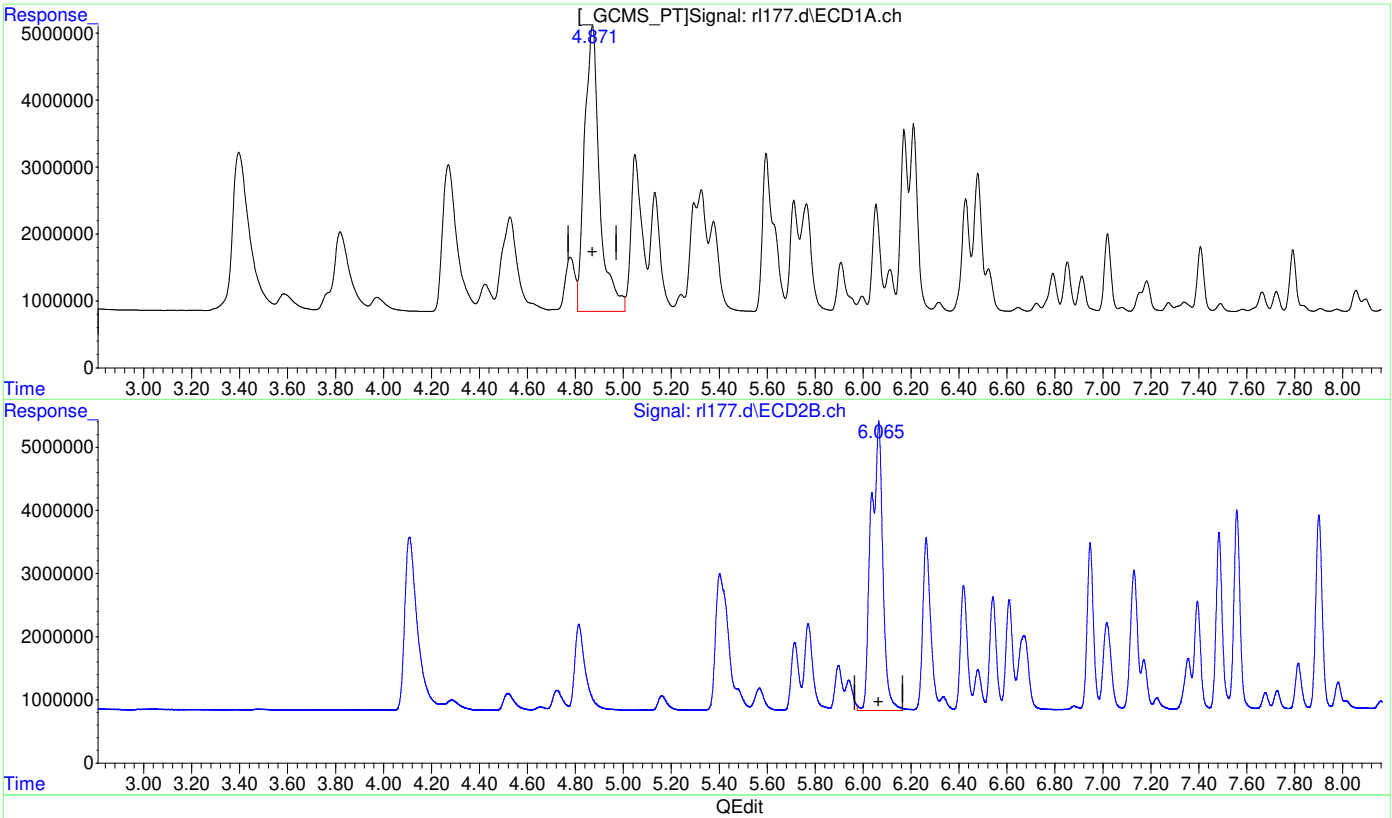
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:00:57 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:00:15 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(13) AR1242-B

4.872min 318.175 PPB

response 186103005

(13) AR1242-B #2

6.065min 251.588 PPB m

response 154064653

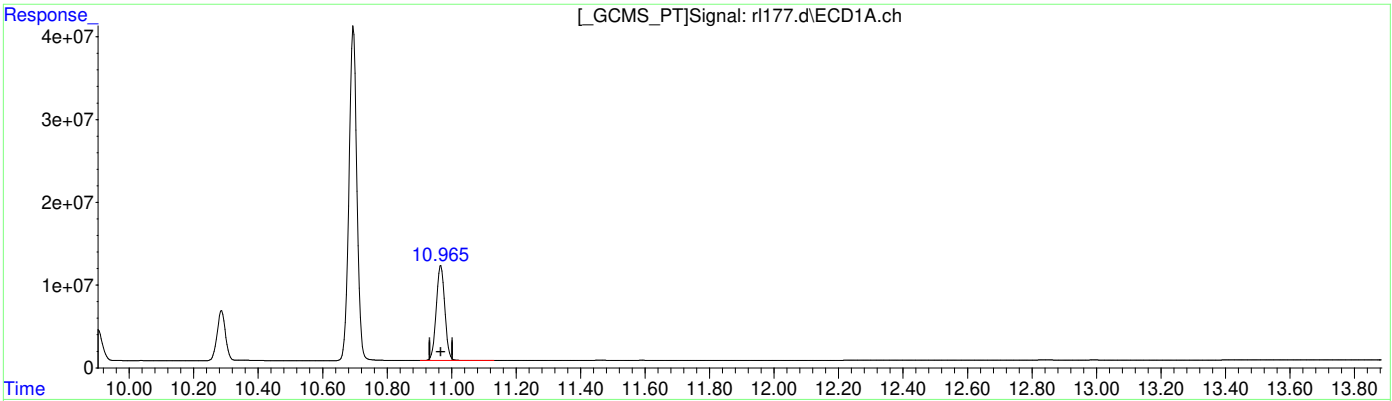
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:01:16 2022

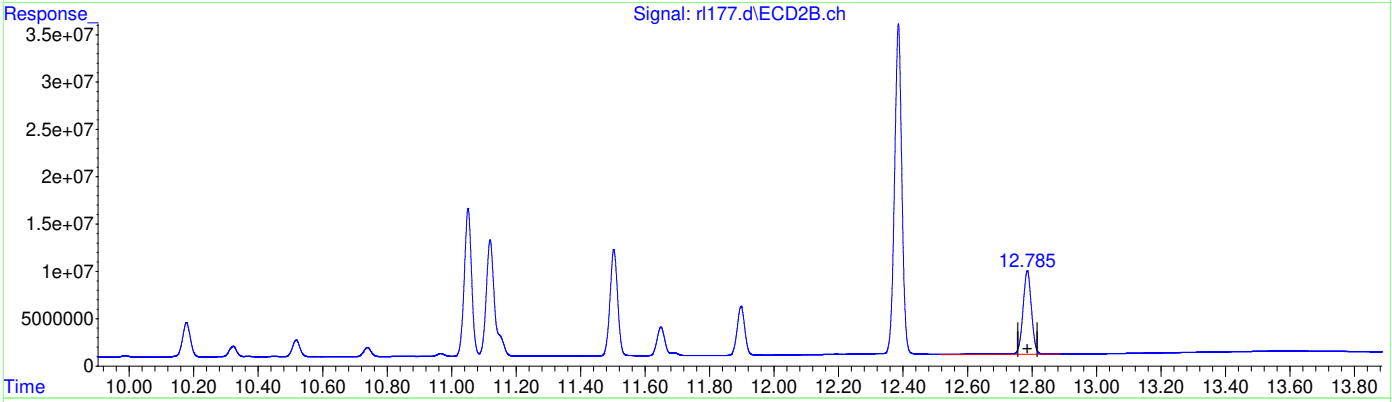
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:00:15 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 115.730 ppb

response 212448521

(51) Decachlorobiphenyl #2 (S)

12.786min 138.183 ppb

response 165136017

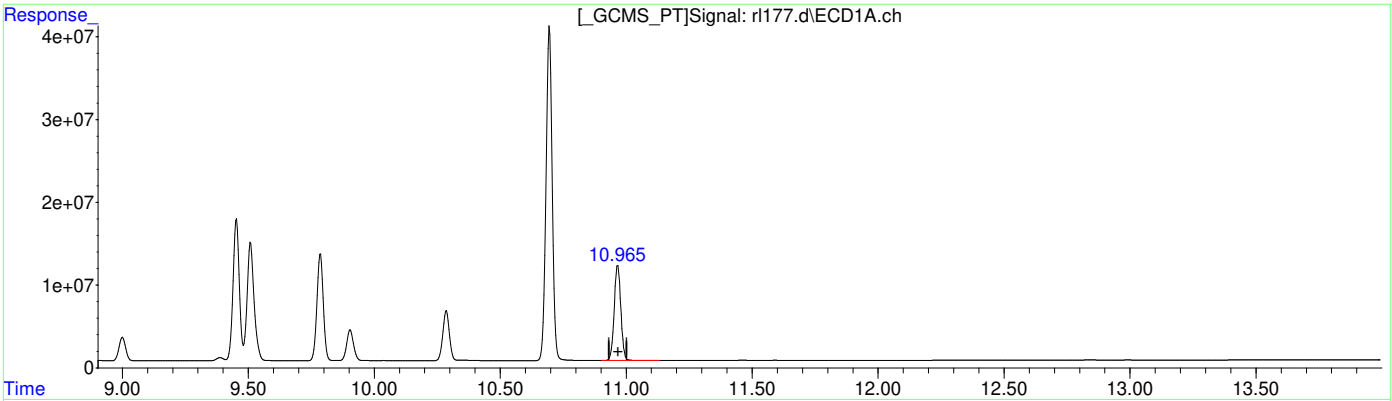
(+) = Expected Retention Time

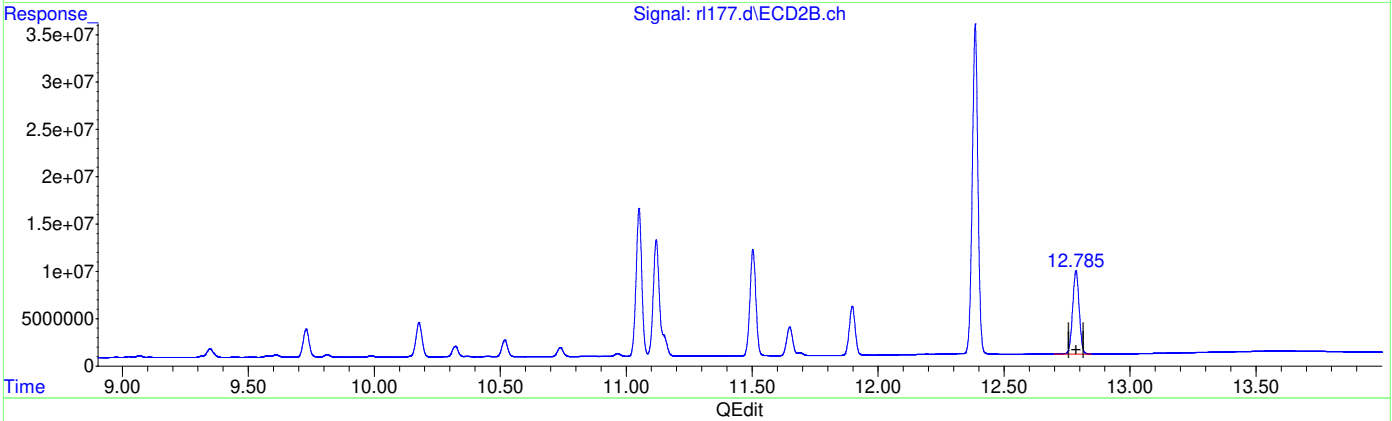
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl177.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:19 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 15 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:00:15 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:00:09 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 115.730 ppb

response 212448521

(51) Decachlorobiphenyl #2 (S)

12.785min 133.755 ppb m

response 159844190

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:01:45 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : ic5-1000 (Sig #1); icv5-1000 (Sig #2)
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:06:05 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb	
	System Monitoring Compounds							
1)	S Tetrachlo...	3.399	4.108	116.9E6	103.4E6	42.948	40.107	
	Spiked Amount 40.000			Recovery	=	107.37%	100.27%	
51)	S Decachlor...	10.968	12.787	81365376	61256729	44.323	51.259m	
	Spiked Amount 40.000			Recovery	=	110.81%	128.15%	
	Target Compounds							
17)	AR1248-A	4.268	5.401	46677975	40852393	345.335	315.669	
18)	AR1248-B	4.870	6.066	109.6E6	100.3E6	300.061	263.758m	
19)	AR1248-C	5.295	6.541	126.6E6	59846811	313.750m	264.497	
20)	AR1248-D	5.597	6.948	116.9E6	76125194	392.959	253.061	#
21)	AR1248-E	5.713	7.131	63642275	72302423	300.675	207.810	#
22)	AR1248-F	6.211	7.559	96675580	97376467	269.199	227.073	
23)	AR1248-G	6.478	7.902	85569770	94274116	291.962	237.003	

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

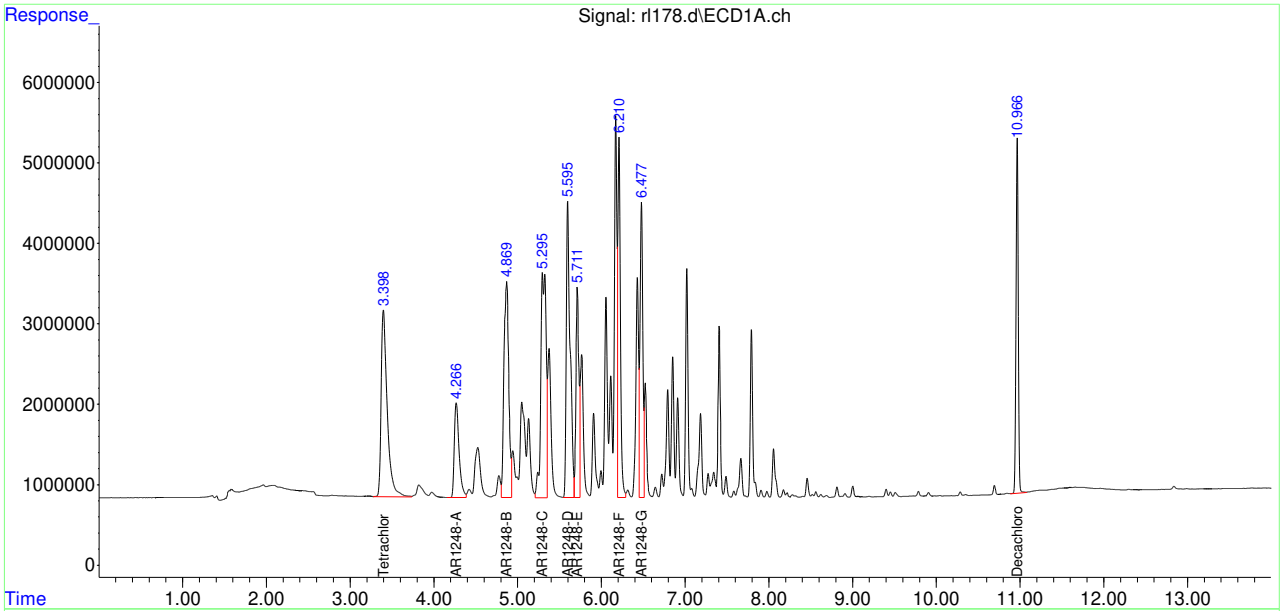
9.5.13
9

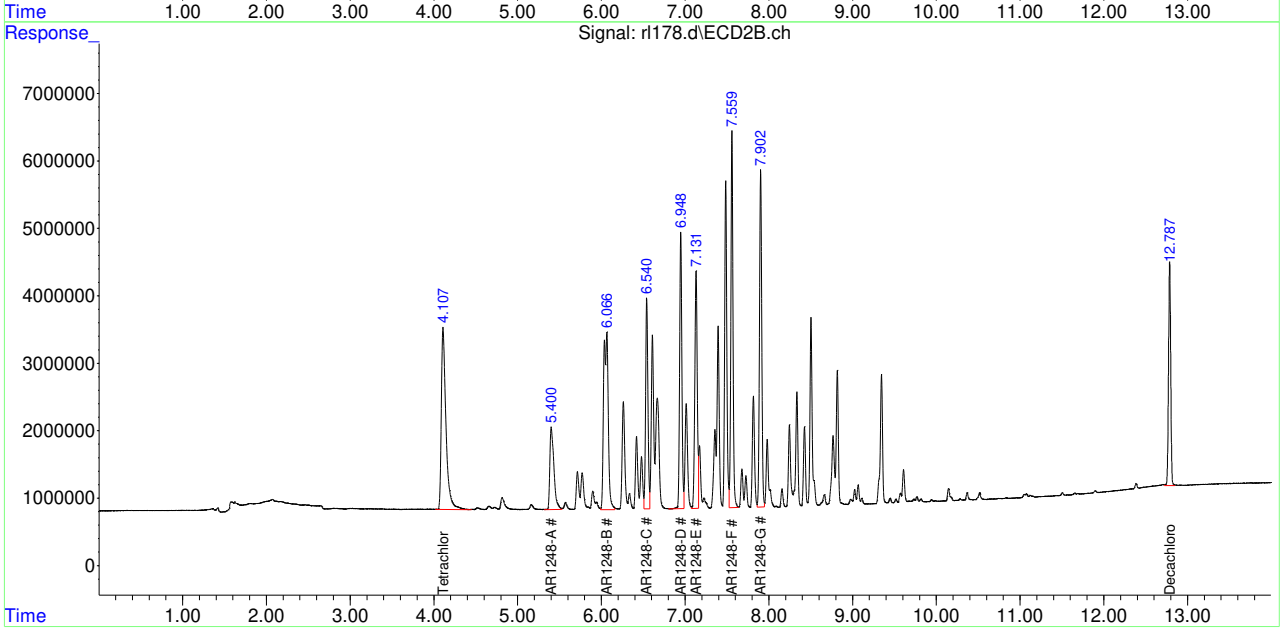
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : ic5-1000 (Sig #1); icv5-1000 (Sig #2)
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:06:05 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-IC5
Lab FileID: RL178.D
Injection Time: 09/21/22 03:38
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

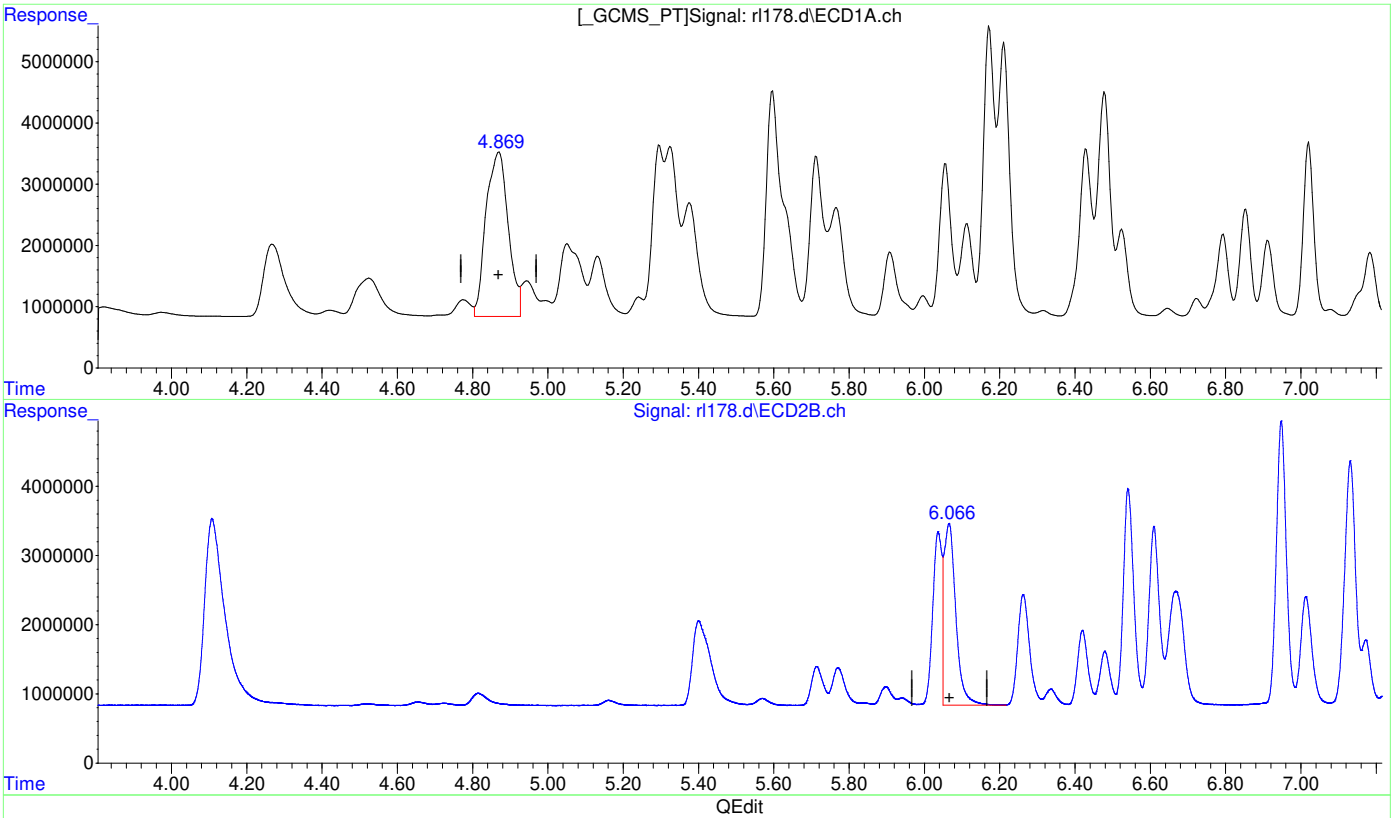
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1248-C		1	5.29	Split peak
AR1248-B		2	6.07	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(18) AR1248-B

4.870min 300.061 PPB

response 109637694

(18) AR1248-B #2

6.065min 149.823 PPB

response 56949432

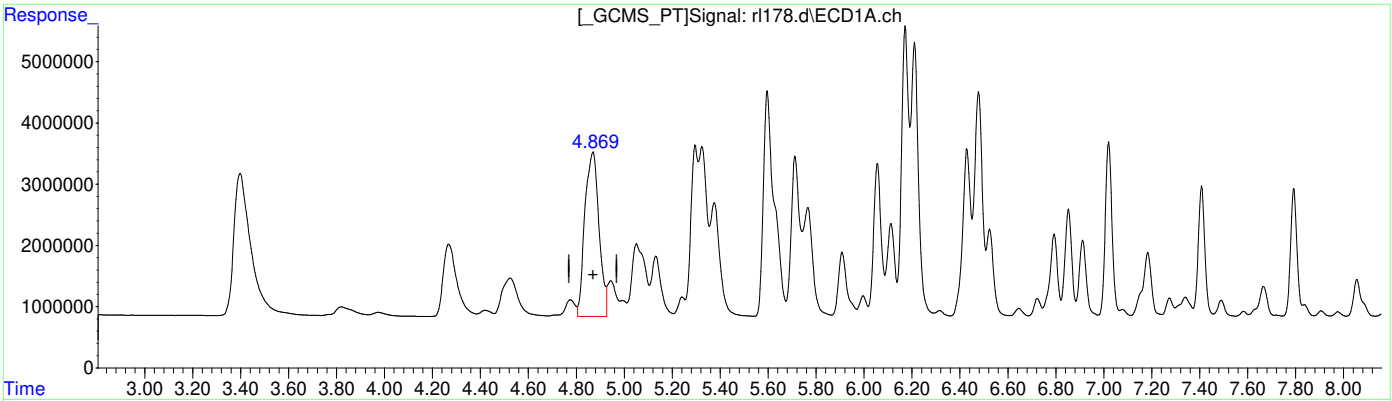
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:05:25 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(18) AR1248-B

4.870min 300.061 PPB

response 109637694

(18) AR1248-B #2

6.066min 263.758 PPB m

response 100257335

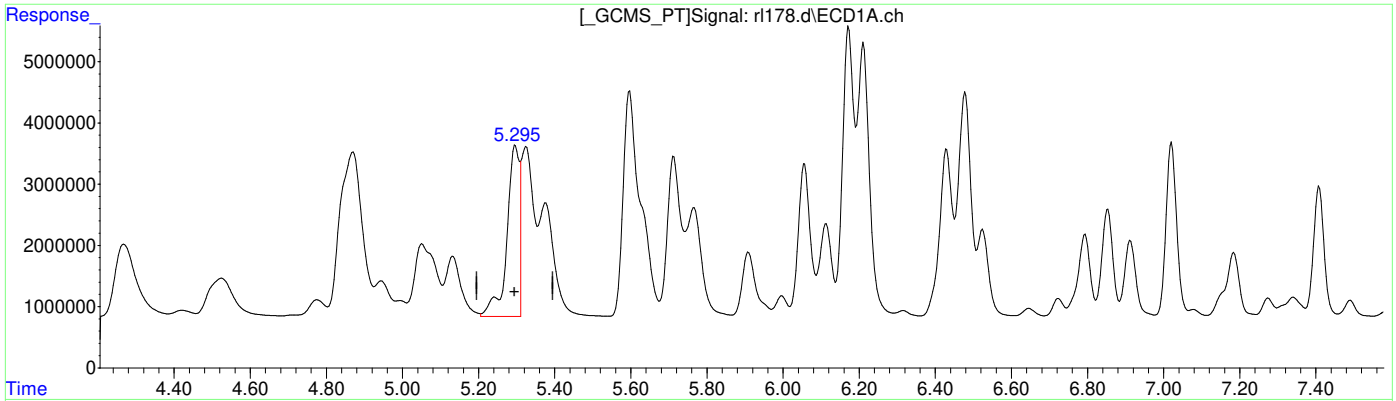
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(19) AR1248-C

5.297min 155.012 PPB

response 62564444

(19) AR1248-C #2

6.541min 264.497 PPB

response 59846811

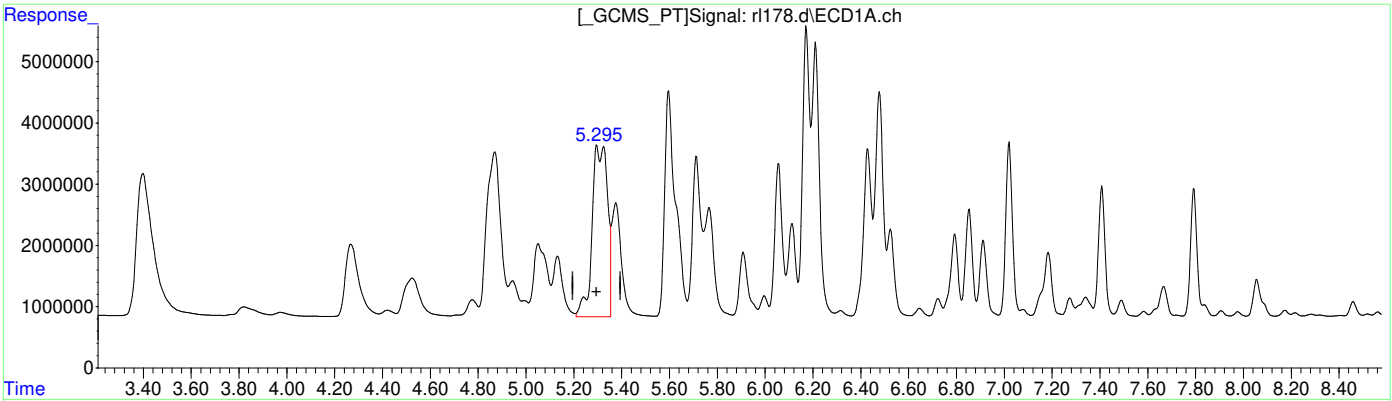
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:05:37 2022

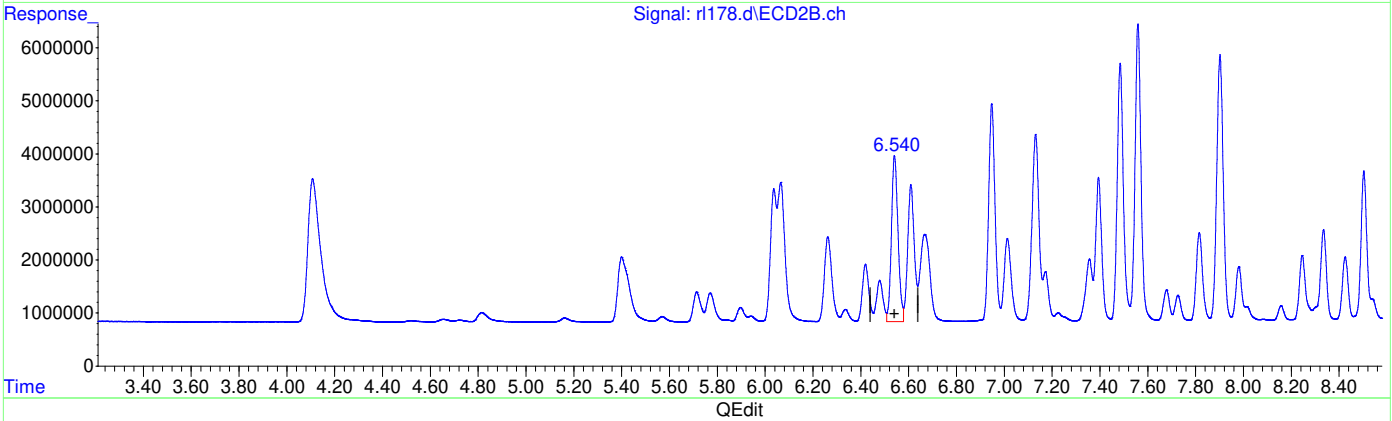
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(19) AR1248-C

5.295min 313.750 PPB m

response 126632984

(19) AR1248-C #2

6.541min 264.497 PPB

response 59846811

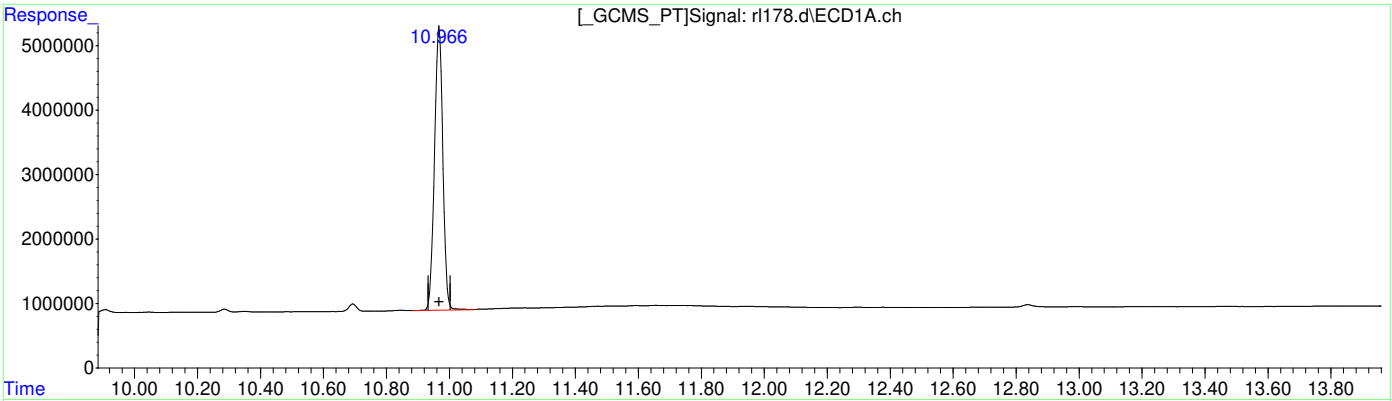
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:05:45 2022

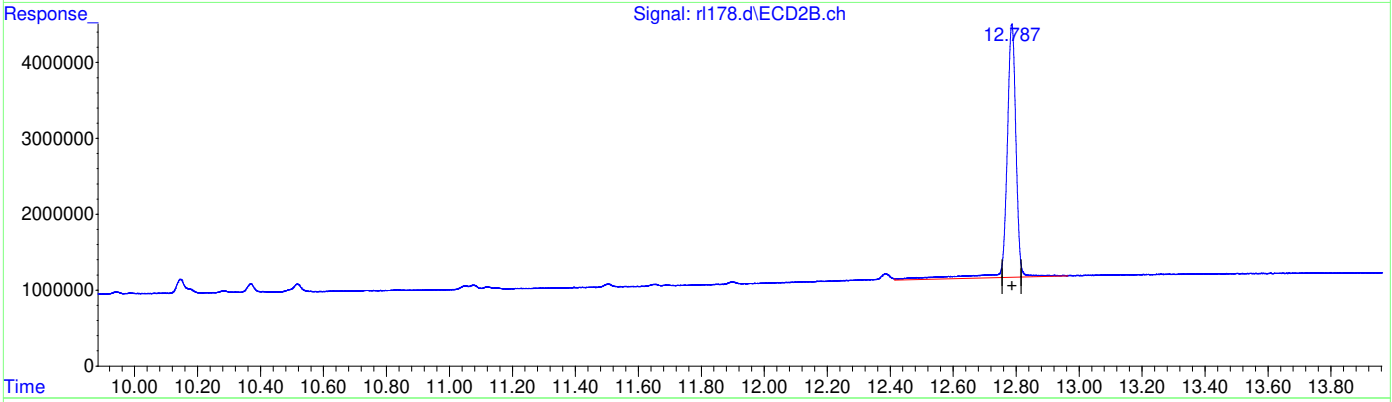
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.968min 44.323 ppb

response 81365376

(51) Decachlorobiphenyl #2 (S)

12.787min 57.111 ppb

response 68250972

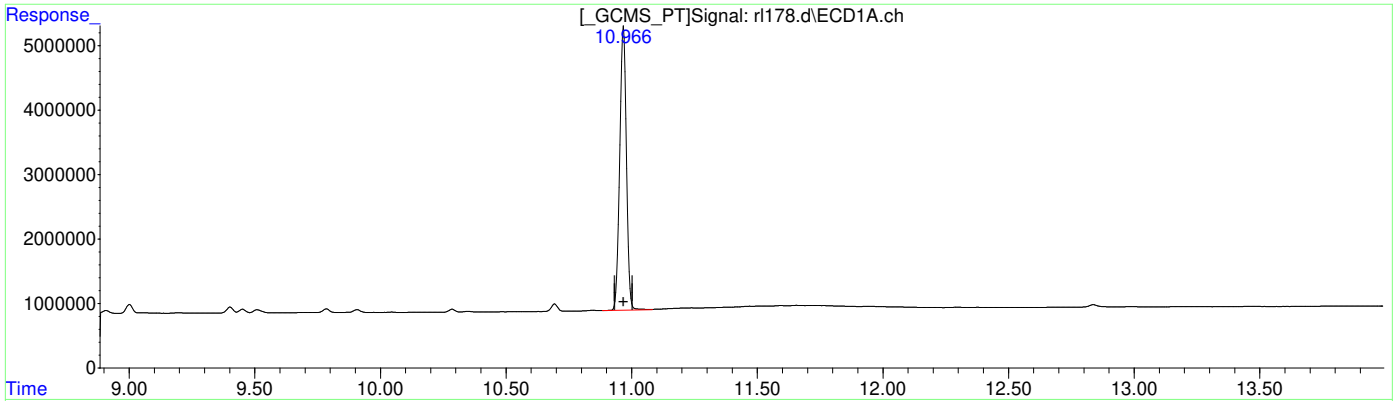
(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:06:01 2022

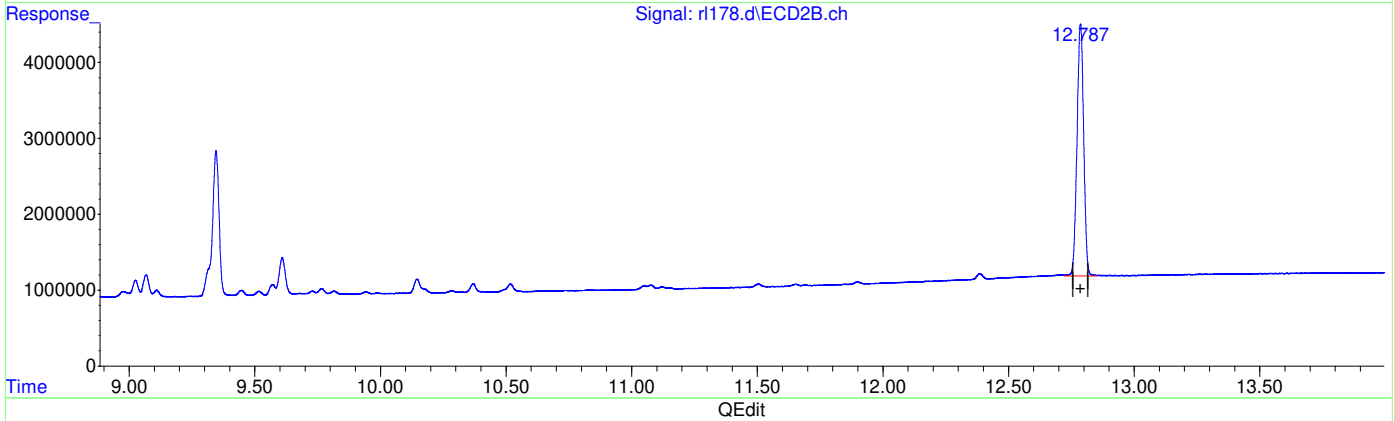
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl178.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:38 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 16 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:05:11 2022
Quant Method : C:\msdchem\1\methods\pcbRL003.m
Quant Title :
QLast Update : Wed Sep 21 23:05:05 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.968min 44.323 ppb

response 81365376

(51) Decachlorobiphenyl #2 (S)

12.787min 51.259 ppb m

response 61256729

(+) = Expected Retention Time
pcbRL003.m Wed Sep 21 23:06:07 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : icv5-1000 (Sig #1); ic5-1000 (Sig #2)
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:17:56 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.397	4.108	126.4E6	111.9E6	44.971	46.074
	Spiked Amount 40.000			Recovery	=	112.43%	115.19%
51)	S Decachlor...	10.966	12.785	86872945	64971614	44.305	43.820m
	Spiked Amount 40.000			Recovery	=	110.76%	109.55%
	Target Compounds						
41)	AR1016-A	3.821	4.815	64489540	49658495	1125.543	1110.867
42)	AR1016-B	4.271	5.402	117.2E6	106.4E6	1129.401	1132.252
43)	AR1016-C	4.873	6.065	242.4E6	202.4E6	1101.576	1123.239
44)	AR1016-D	5.051	6.264	94205952	79795989	1125.940	1098.340
45)	AR1016-E	5.597	6.947	97520047	60756035	1118.442	1089.602
46)	AR1260-A	7.665	9.067	180.6E6	120.7E6	1153.172	1139.380
47)	AR1260-B	8.217	9.730	90048414	77455931	950.954	949.697
48)	AR1260-C	8.564	10.175	101.3E6	95254766	954.970	1017.934
49)	AR1260-D	9.001	10.518	215.6E6	185.2E6	988.232	987.269
50)	AR1260-E	9.401	11.077	237.1E6	186.7E6	967.993m	969.555m

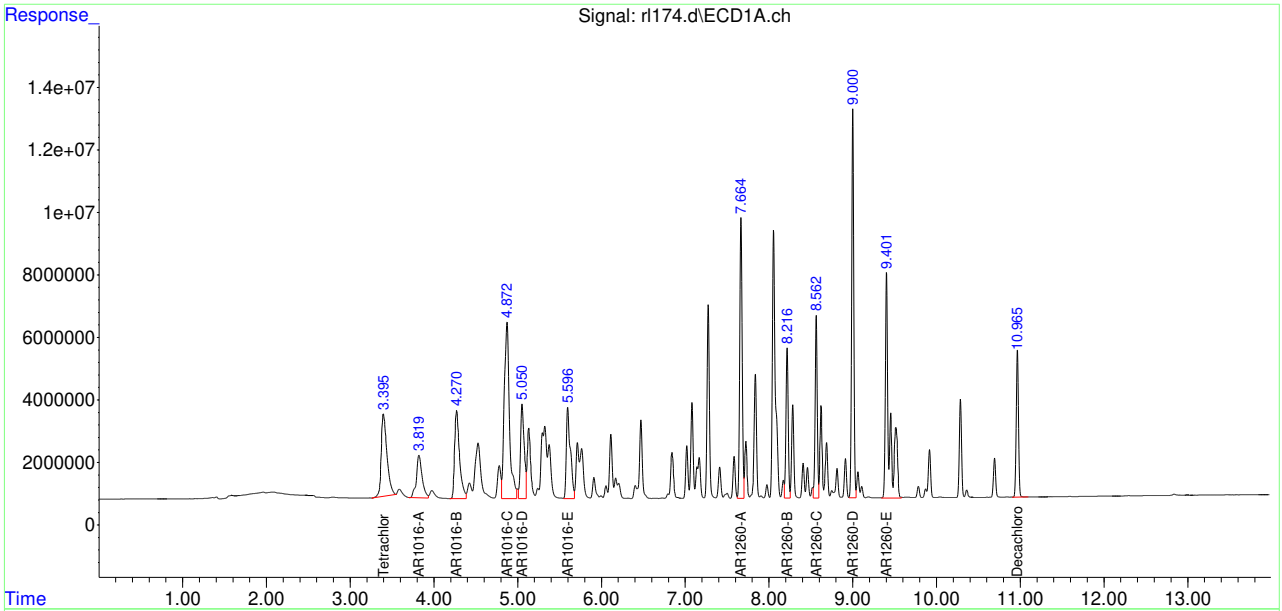
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

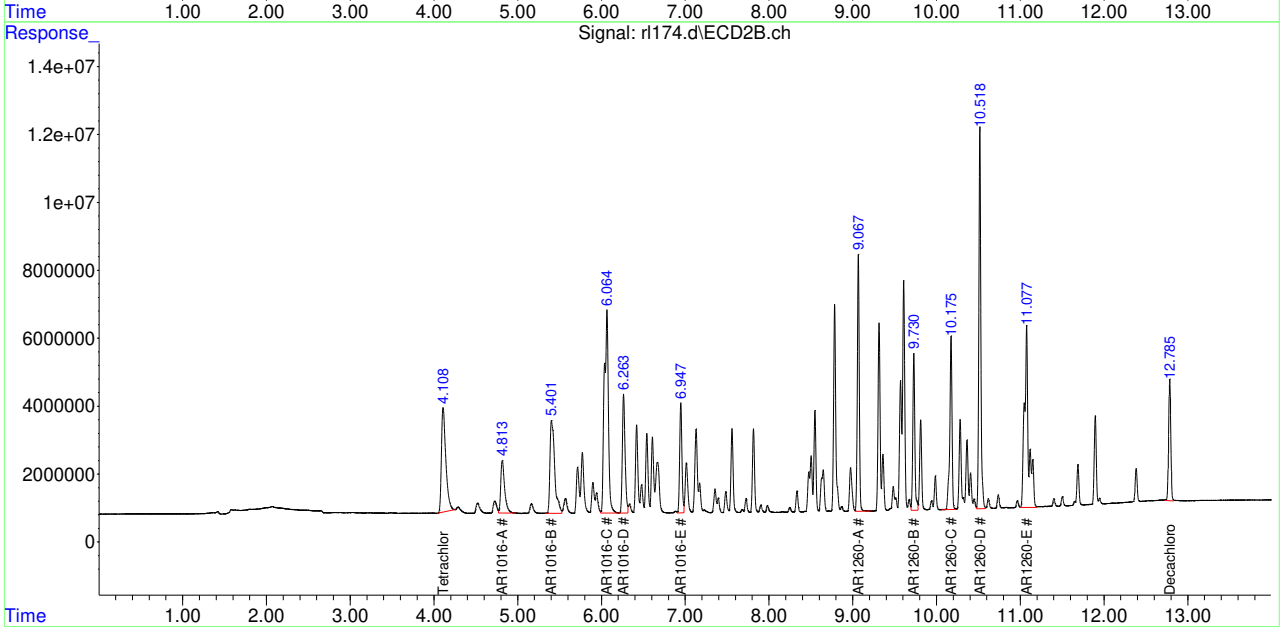
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : icv5-1000 (Sig #1); ic5-1000 (Sig #2)
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:17:56 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICV5
Lab FileID: RL174.D
Injection Time: 09/21/22 02:22

Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

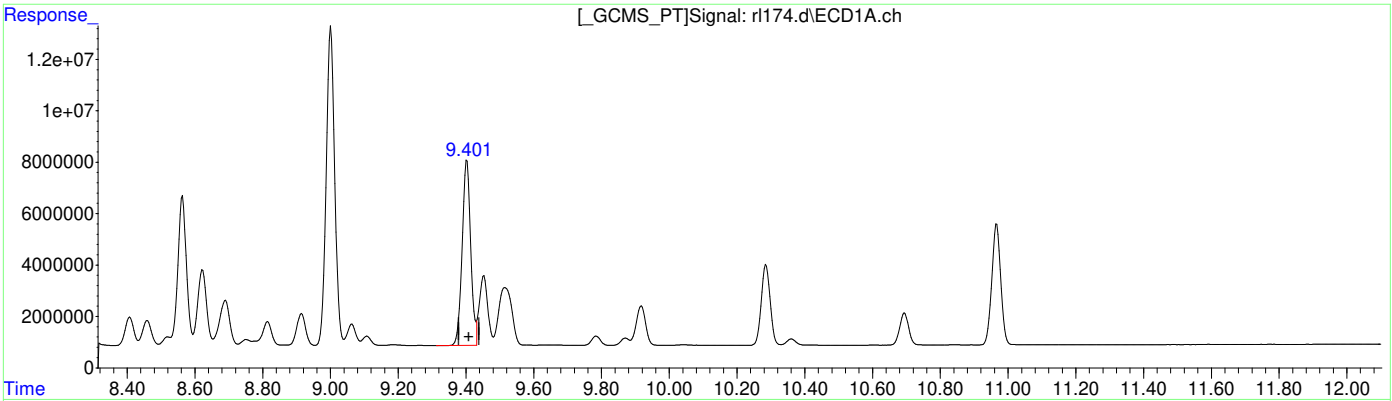
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.40	Split peak
AR1260-E		2	11.08	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

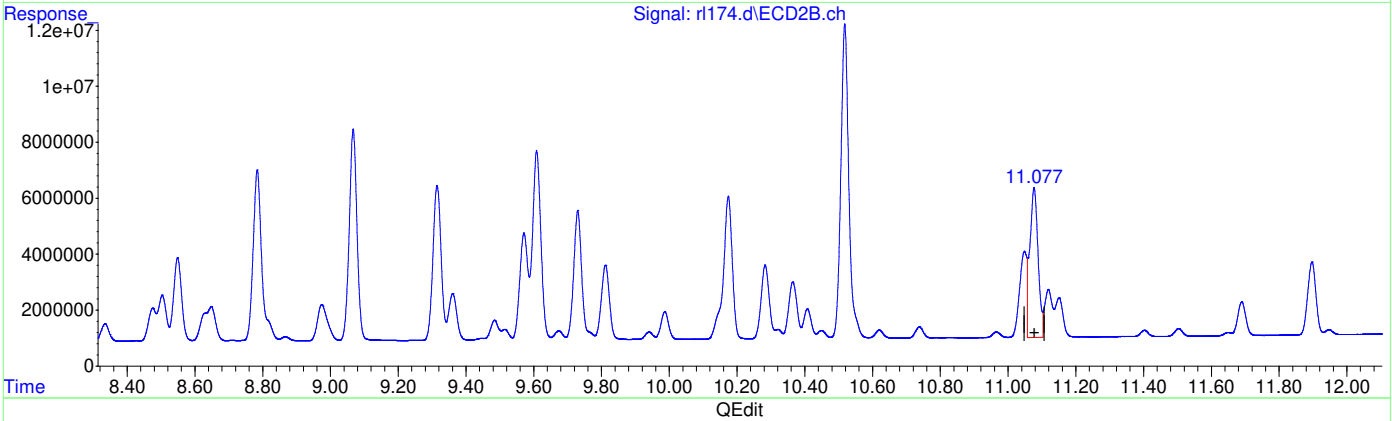
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:16:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.403min 516.098 PPB

response 126397573

(50) AR1260-E #2

11.077min 472.877 PPB

response 91078507

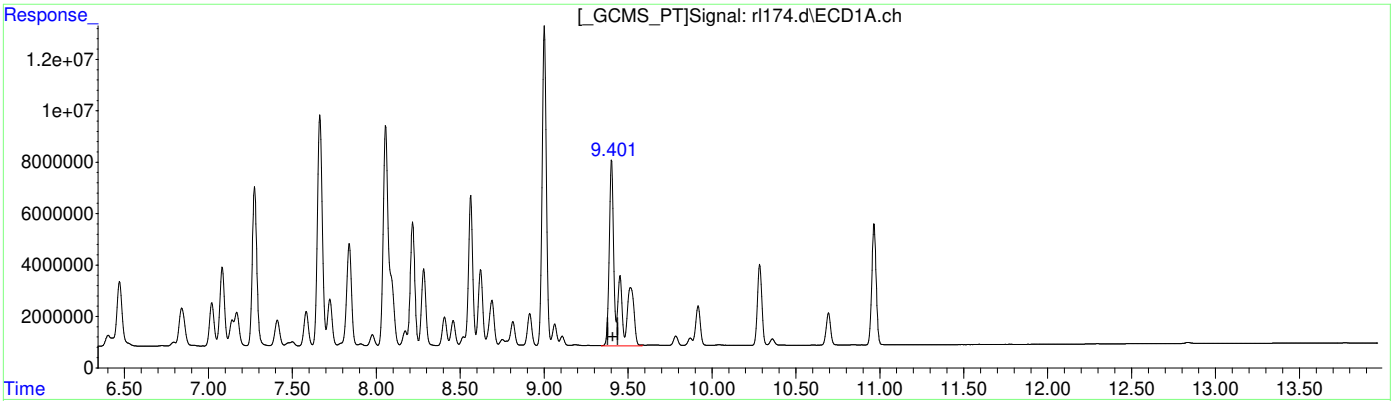
(+) = Expected Retention Time

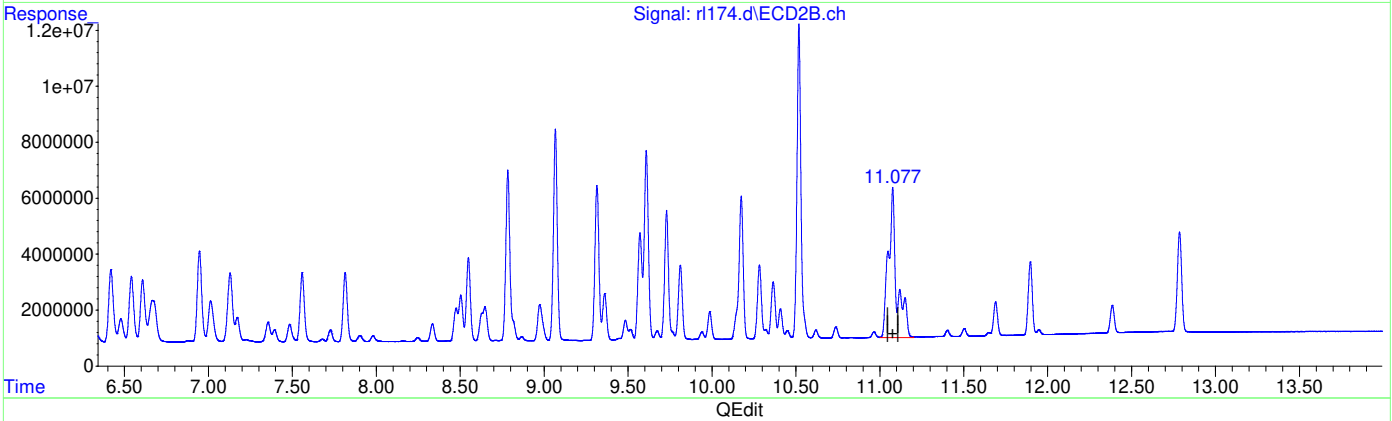
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:16:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.401min 967.993 PPB m

response 237071324

(50) AR1260-E #2

11.077min 969.555 PPB m

response 186741200

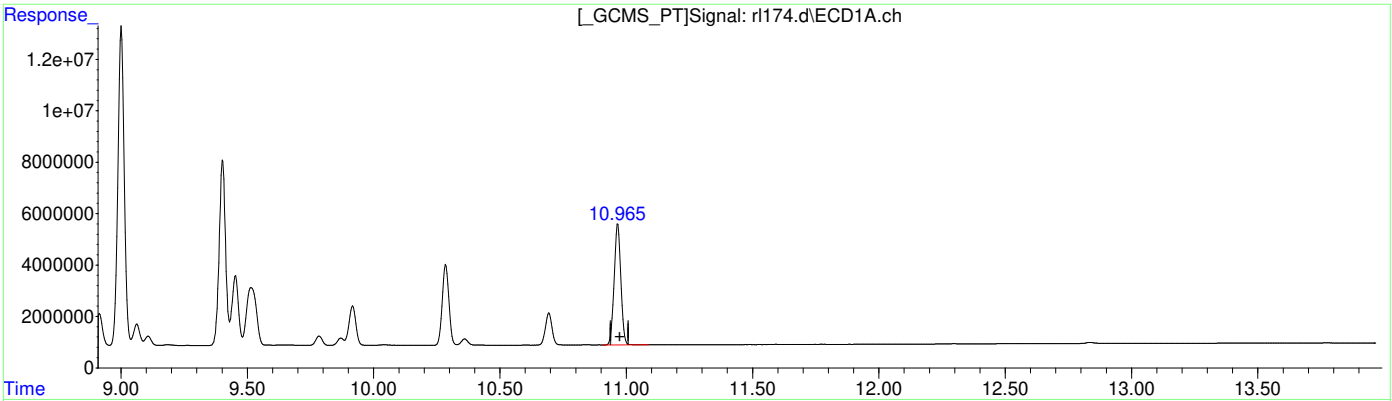
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:17:45 2022

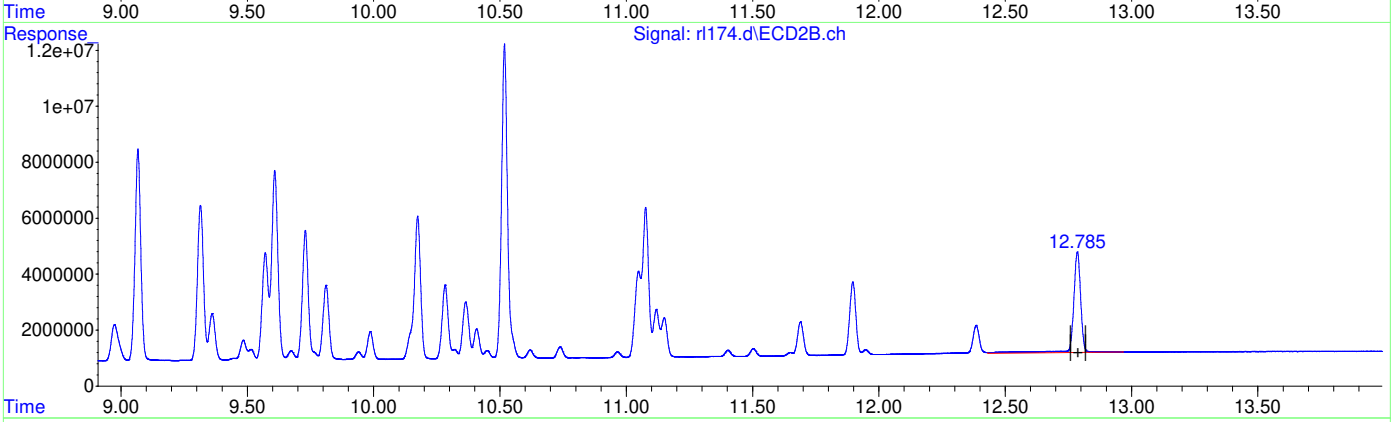
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:16:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.966min 44.305 ppb

response 86872945

(51) Decachlorobiphenyl #2 (S)

12.786min 50.119 ppb

response 74311449

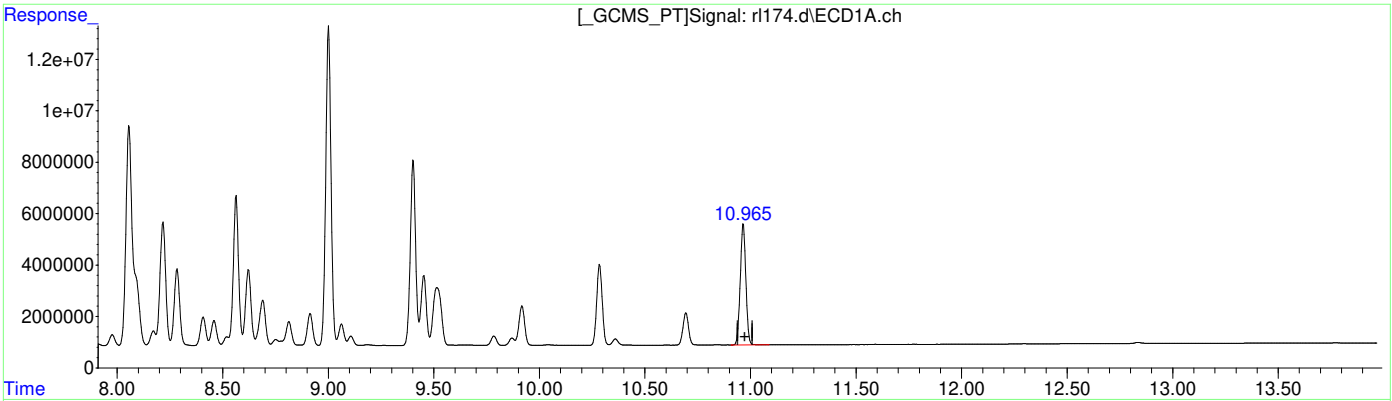
(+) = Expected Retention Time

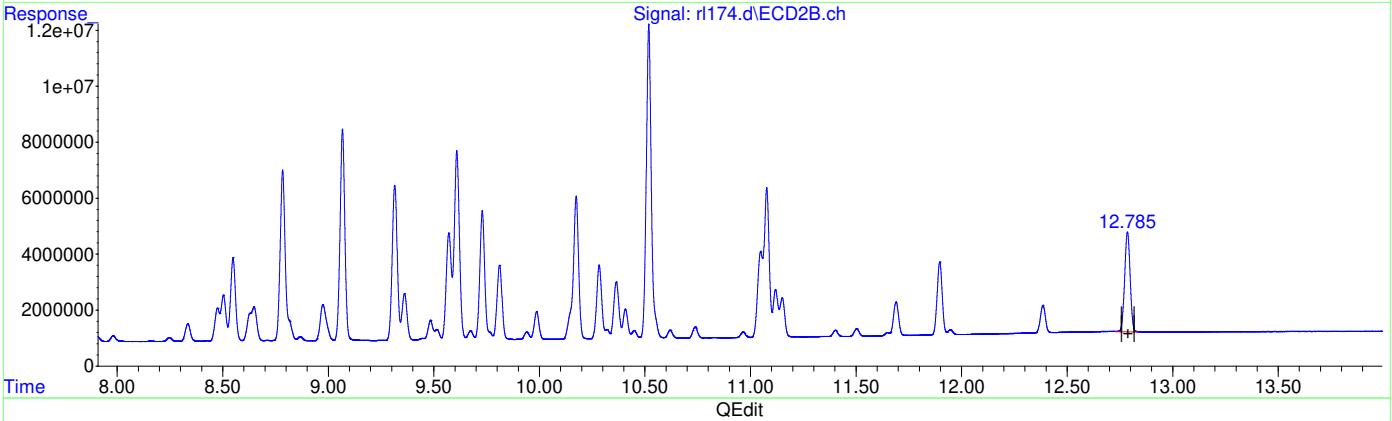
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl174.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 02:22 am
Operator : rebeccak
Sample : ic5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 12 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:16:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.966min 44.305 ppb

response 86872945

(51) Decachlorobiphenyl #2 (S)

12.785min 43.820 ppb m

response 64971614

(+) = Expected Retention Time

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:03 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.397	4.108	152.7E6	124.8E6	54.293	51.373
	Spiked Amount 40.000			Recovery	=	135.73%	128.43%
51) S	Decachlor...	10.966	12.786	91826782	72952681	46.831	49.203
	Spiked Amount 40.000			Recovery	=	117.08%	123.01%
	Target Compounds						
2)	AR1221-A	2.799	3.479	28040379	25788252	1021.588	1098.406
3)	AR1221-B	3.589	4.519	40129919	31974634	1044.577	1002.197
4)	AR1221-C	3.819	4.814	108.3E6	74738945	1015.630	1012.208
5)	AR1221-D	4.270	5.478	20014274	28186968	925.531m	986.358m
6)	AR1221-E	4.872	6.063	20951913	18830425	889.653	896.527m
24)	AR1254-A	6.114	7.559	94674949	95423584	1103.176	1109.648
25)	AR1254-B	6.471	7.815	193.2E6	103.3E6	1083.480	1100.948
26)	AR1254-C	6.852	8.335	102.5E6	84251198	1097.831	1093.996
27)	AR1254-D	7.021	8.505	173.1E6	159.3E6	1101.805	1101.755
28)	AR1254-E	7.408	8.818	131.0E6	110.4E6	1092.721	1080.409
29)	AR1254-F	7.793	9.345	76732853	130.9E6	1085.967	1097.227m
30)	AR1254-G	8.057	9.609	176.8E6	119.2E6	1103.928	1105.704

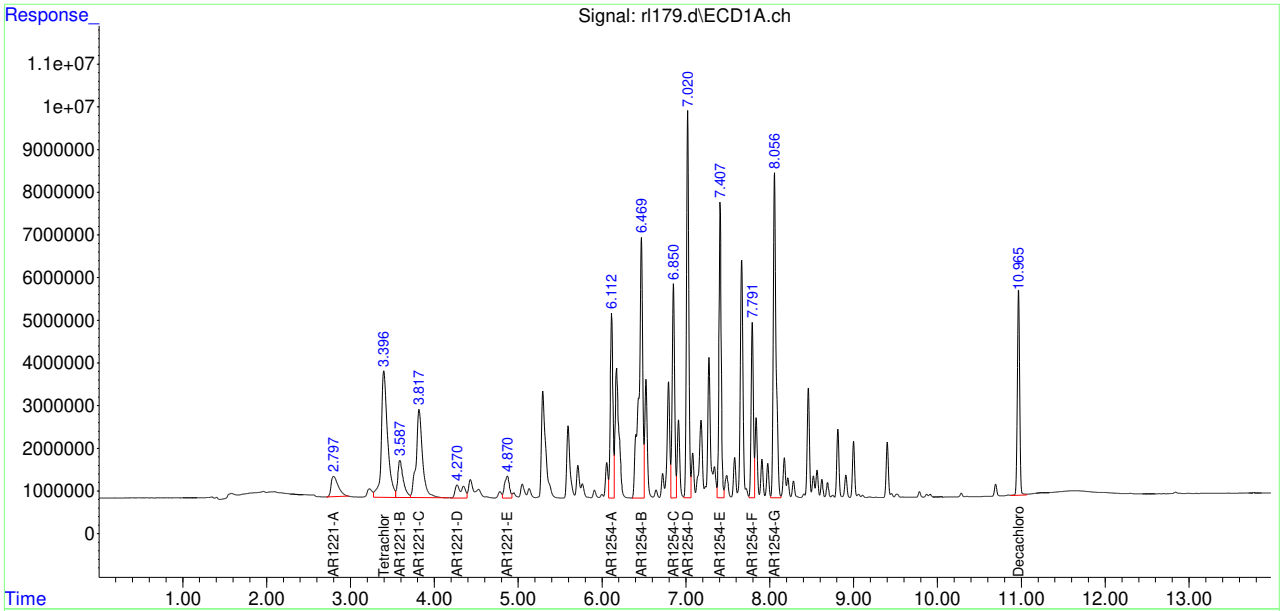
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

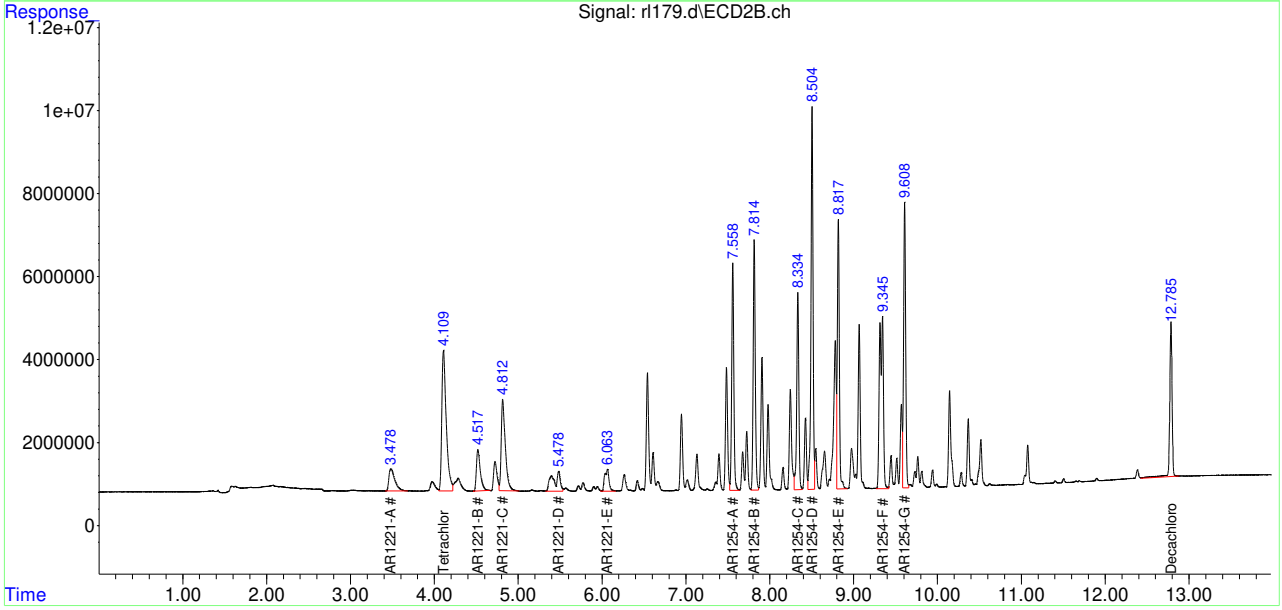
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:03 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICV5
Lab FileID: RL179.D
Injection Time: 09/21/22 03:57
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

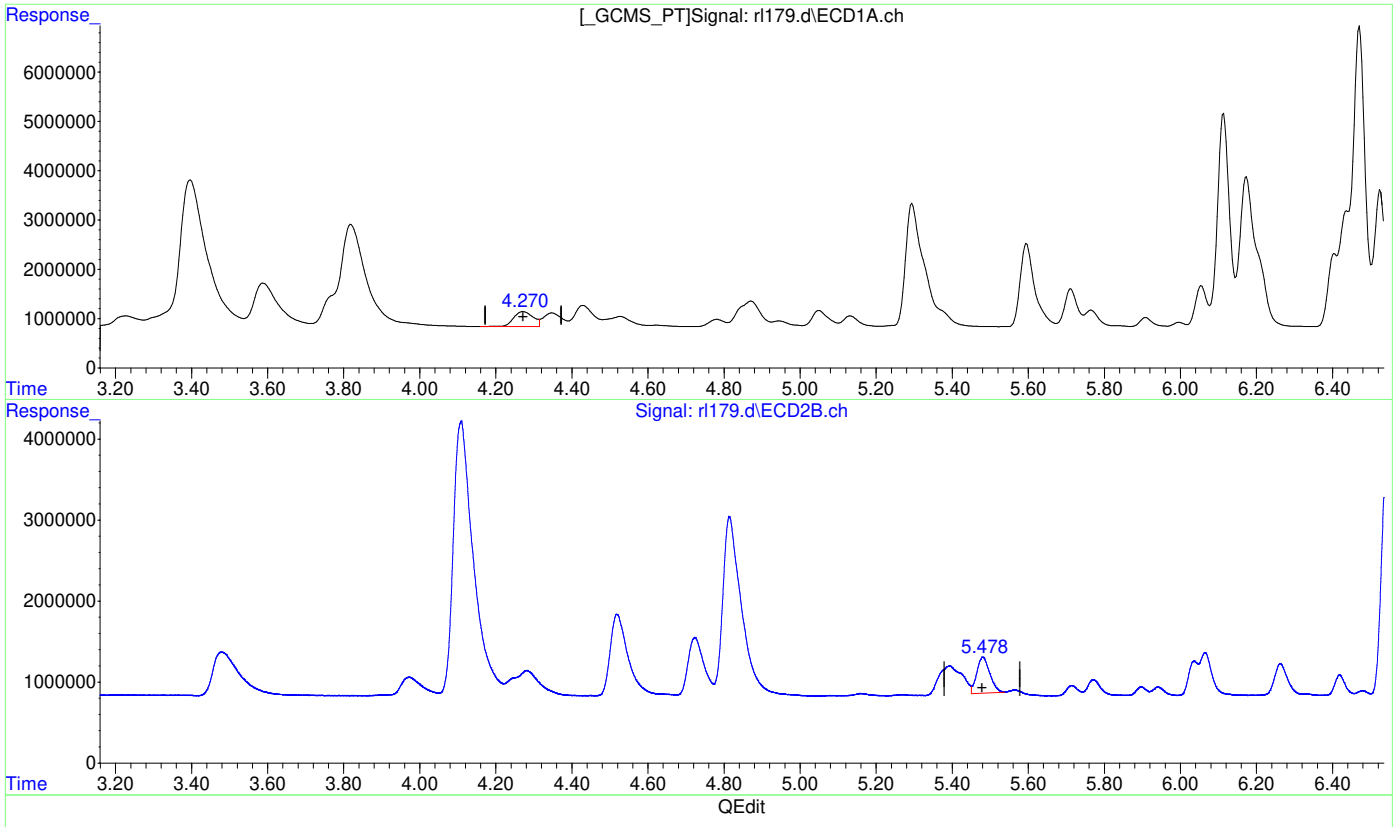
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1221-D		1	4.27	Split peak
AR1221-D		2	5.48	Split peak
AR1221-E		2	6.06	Split peak
AR1254-F		2	9.35	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(5) AR1221-D

4.271min 499.304 PPB

response 10797265

(5) AR1221-D #2

5.481min 365.931 PPB

response 10457142

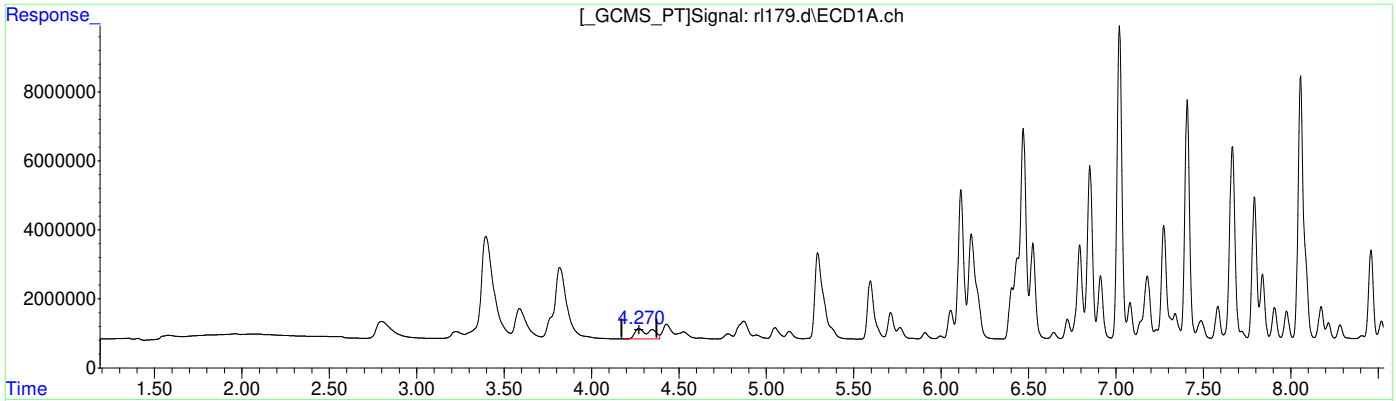
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:31:52 2022

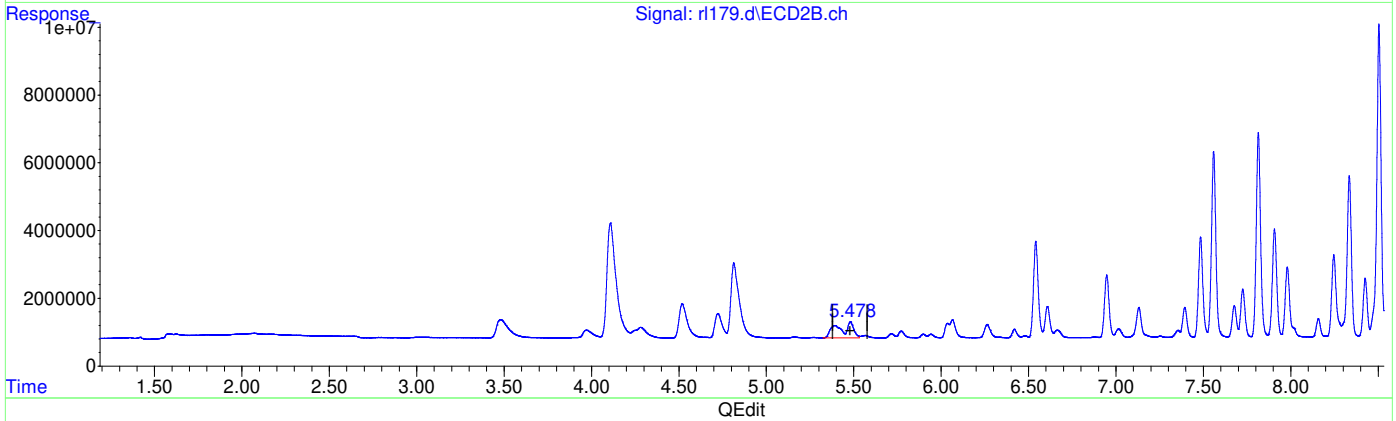
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(5) AR1221-D

4.270min 925.531 PPB m

response 20014274

(5) AR1221-D #2

5.478min 986.358 PPB m

response 28186968

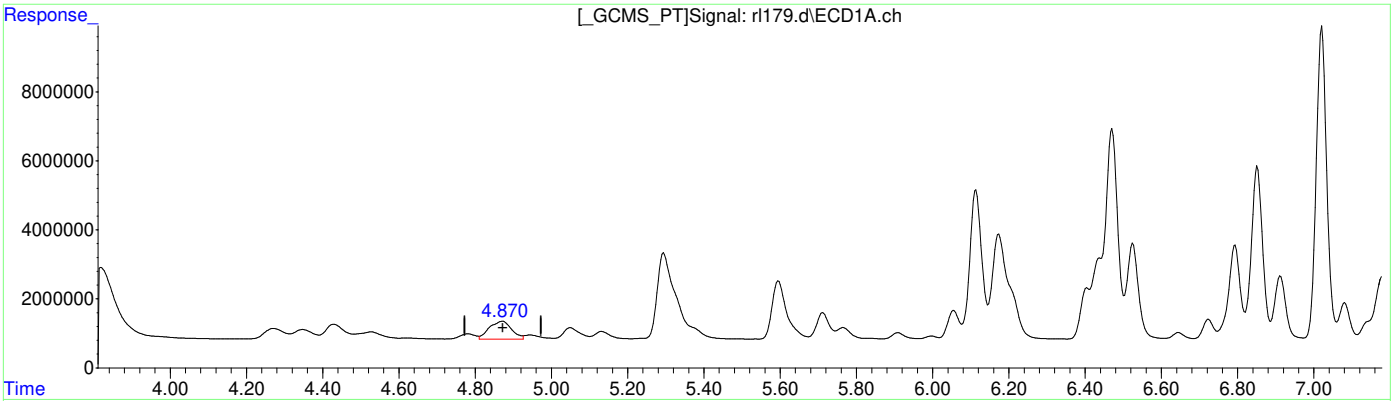
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:32:08 2022

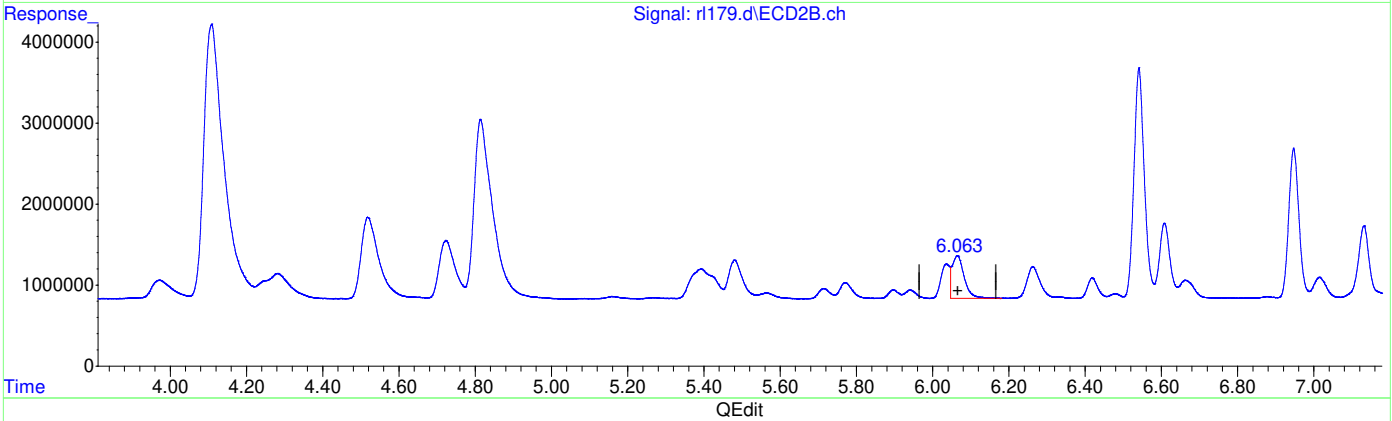
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(6) AR1221-E

4.872min 889.653 PPB

response 20951913

(6) AR1221-E #2

6.065min 559.090 PPB

response 11742988

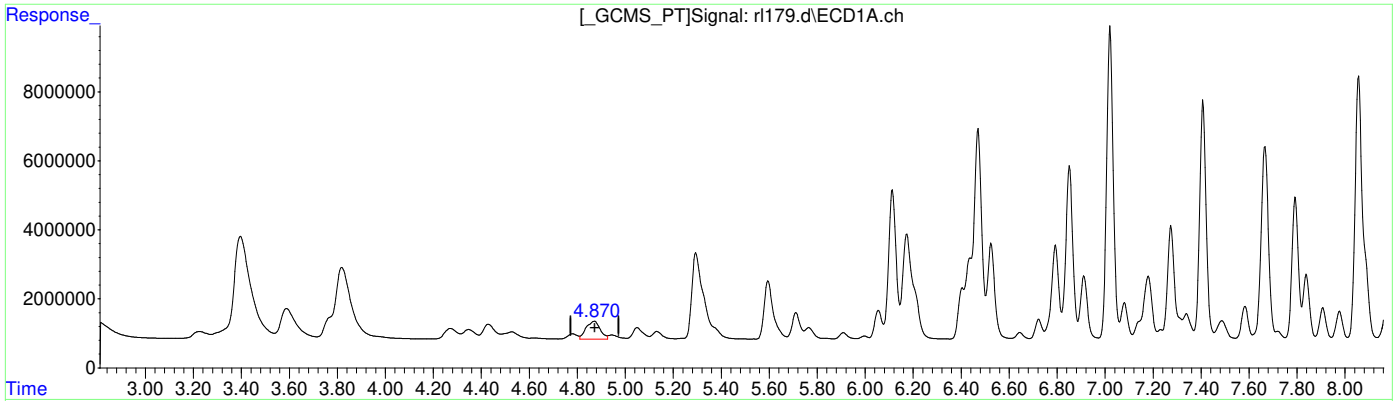
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:32:13 2022

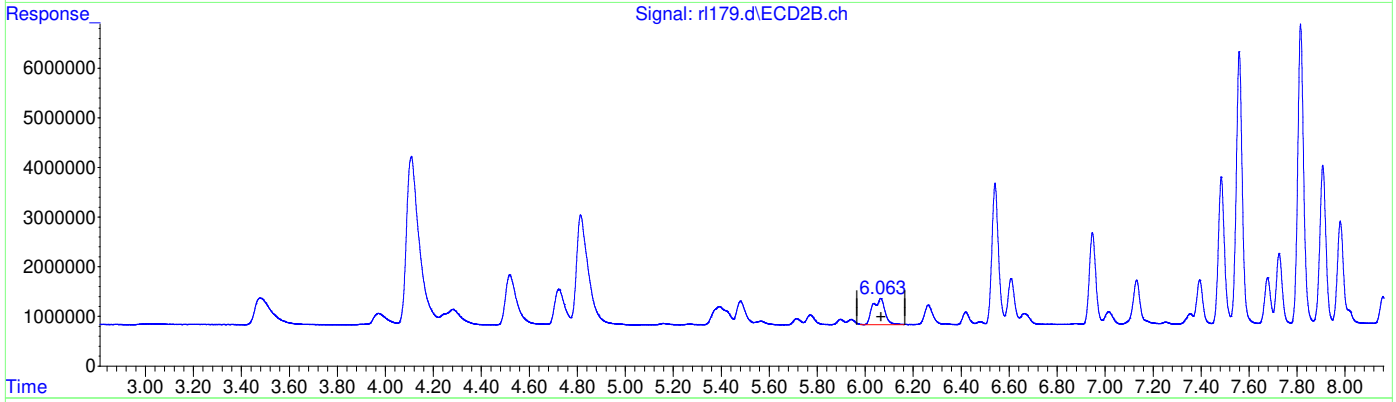
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(6) AR1221-E

4.872min 889.653 PPB

response 20951913

(6) AR1221-E #2

6.063min 896.527 PPB m

response 18830425

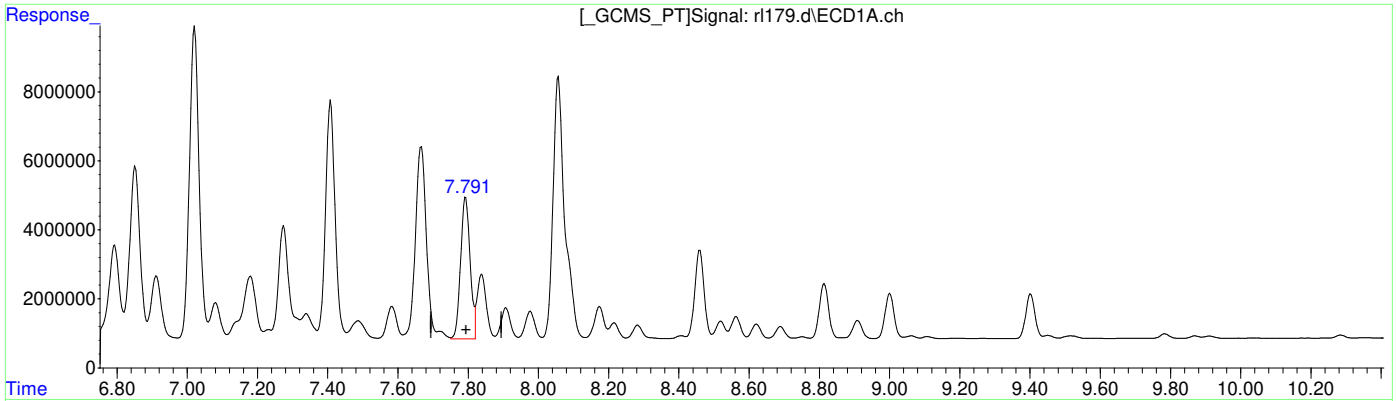
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:32:23 2022

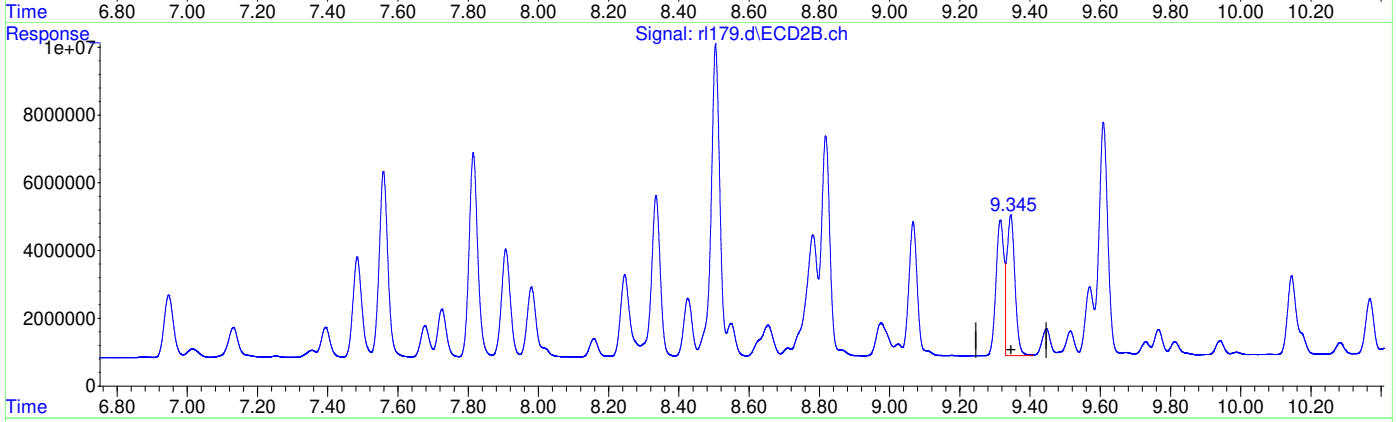
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F

7.793min 1085.967 PPB

response 76732853

(29) AR1254-F #2

9.345min 557.516 PPB

response 66487151

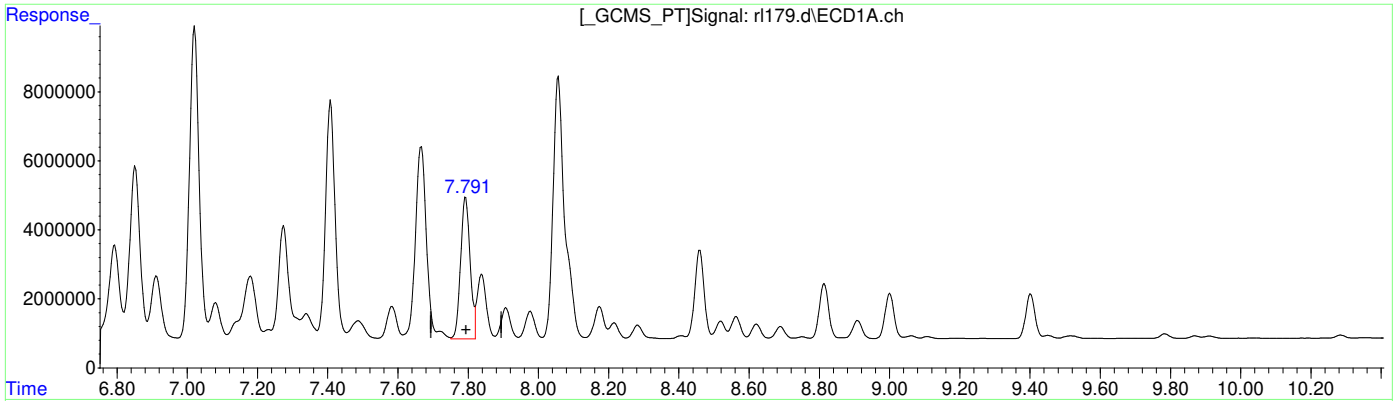
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:32:44 2022

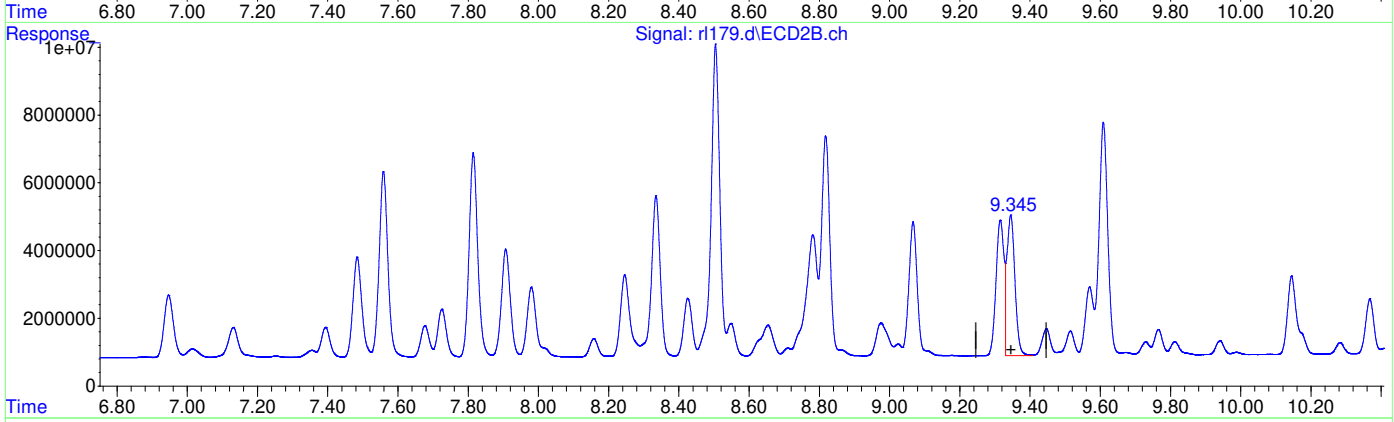
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F

7.793min 1085.967 PPB

response 76732853

(29) AR1254-F #2

9.345min 557.516 PPB

response 66487151

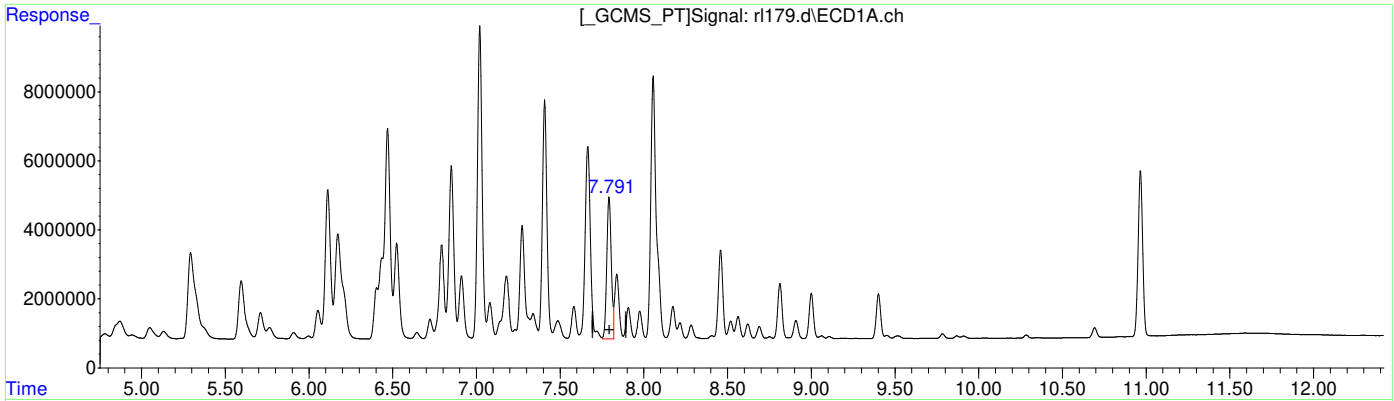
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:32:52 2022

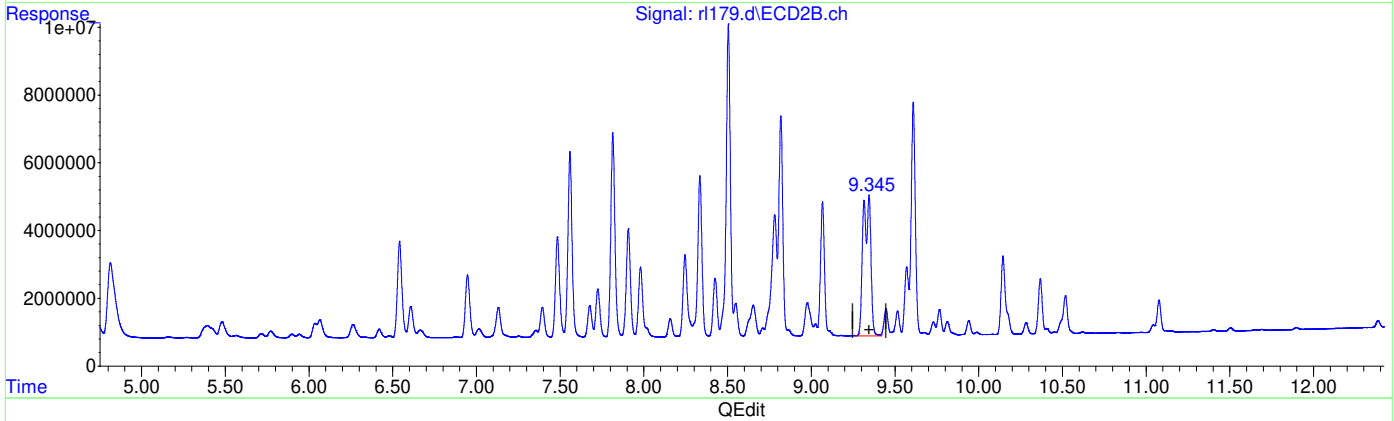
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl179.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 03:57 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 17 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:31:40 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(29) AR1254-F

7.793min 1085.967 PPB

response 76732853

(29) AR1254-F #2

9.345min 1097.227 PPB m

response 130851009

(+) = Expected Retention Time

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:35:58 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.399	4.108	138.9E6	115.4E6	49.408	47.516
	Spiked Amount 40.000			Recovery	=	123.52%	118.79%
51)	S Decachlor...	10.966	12.786	83357719	63813609	42.512m	43.039m
	Spiked Amount 40.000			Recovery	=	106.28%	107.60%
	Target Compounds						
7)	AR1232-A	3.821	4.814	85579846	61643586	1010.941	1002.903
8)	AR1232-B	4.272	5.402	61755452	49002088	1023.609	991.448
9)	AR1232-C	4.873	6.065	115.0E6	94531223	1020.375	1023.287
10)	AR1232-D	5.052	6.263	45826539	38795619	1026.541	1021.708
11)	AR1232-E	5.598	6.946	45533639	27858405	1023.993	1025.389
31)	AR1262-A	7.665	9.067	127.6E6	96026446	989.524	995.786
32)	AR1262-B	8.218	9.729	156.5E6	126.3E6	1035.284	996.021
33)	AR1262-C	8.565	10.175	142.9E6	121.1E6	991.277	1000.202
34)	AR1262-D	9.002	10.519	281.5E6	235.0E6	989.140	998.206
35)	AR1262-E	9.453	11.049	338.4E6	268.5E6	986.161m	1025.936m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

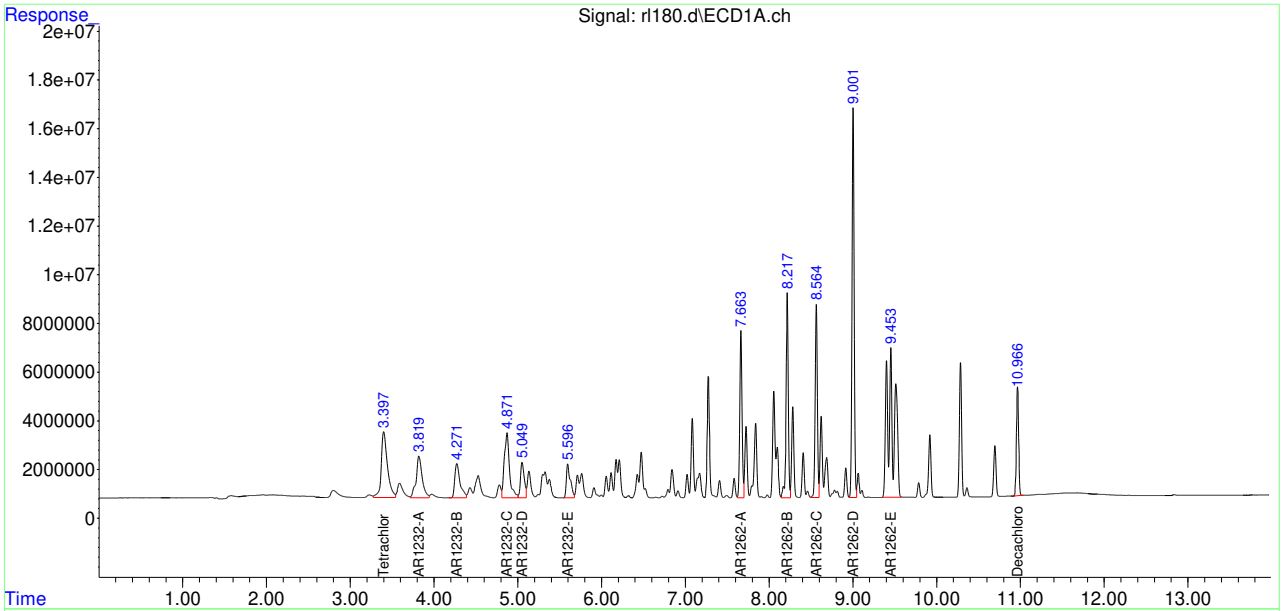
9.5.16
6

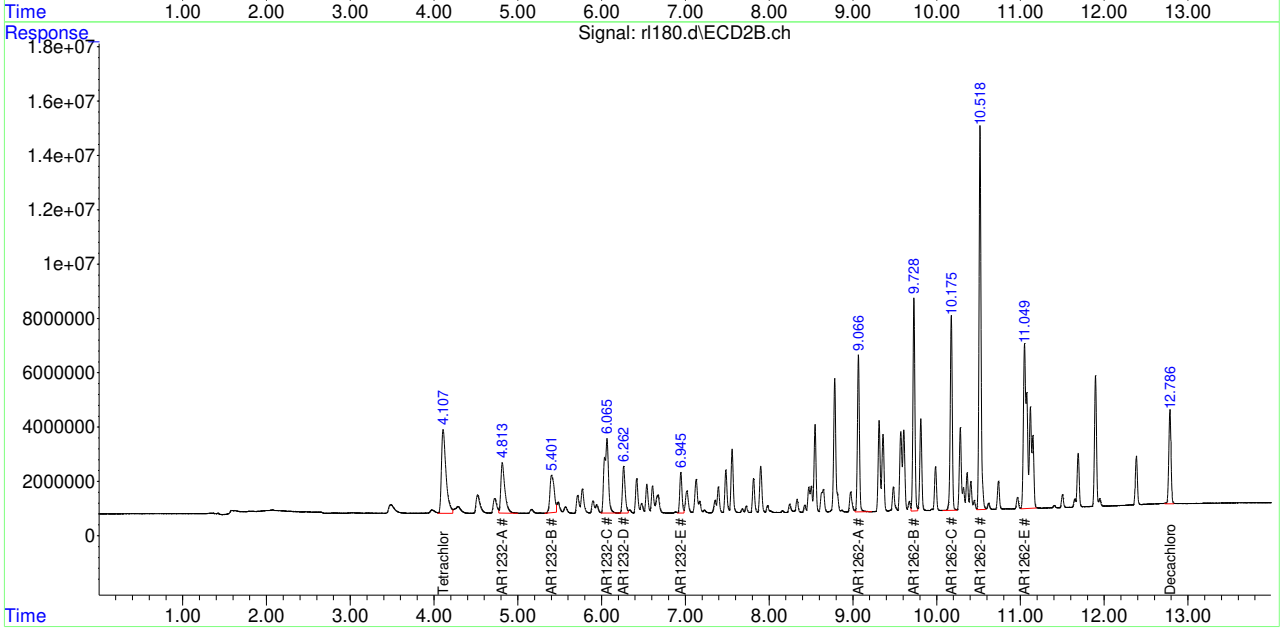
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:35:58 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICV5
Lab FileID: RL180.D
Injection Time: 09/21/22 04:16
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

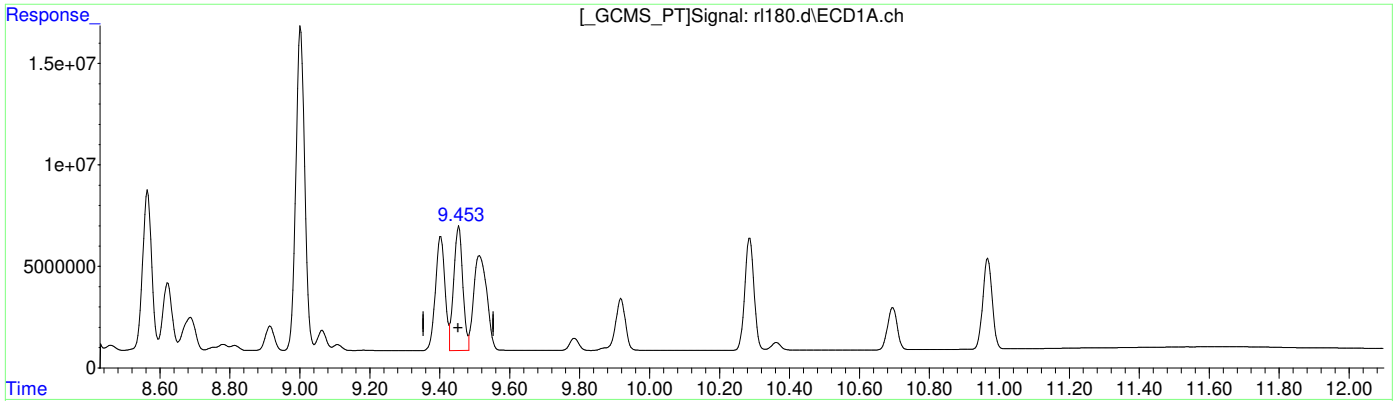
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1262-E		1	9.45	Split peak
Decachlorobiphenyl	2051-24-3	1	10.97	Poorly defined baseline
AR1262-E		2	11.05	Split peak
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

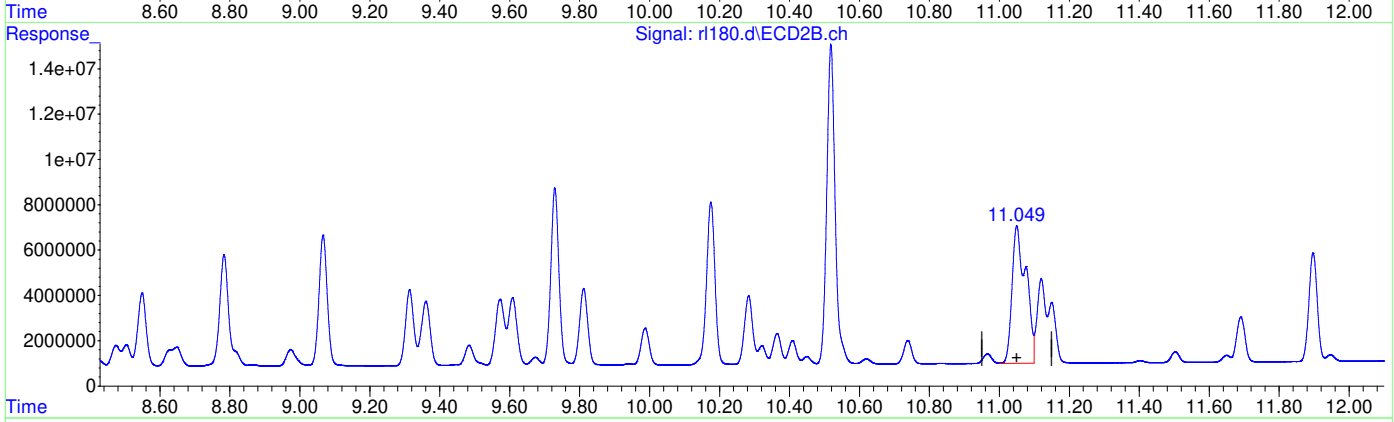
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:55 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(35) AR1262-E

9.455min 322.345 PPB

response 110624063

(35) AR1262-E #2

11.050min 639.102 PPB

response 167269023

(+) = Expected Retention Time

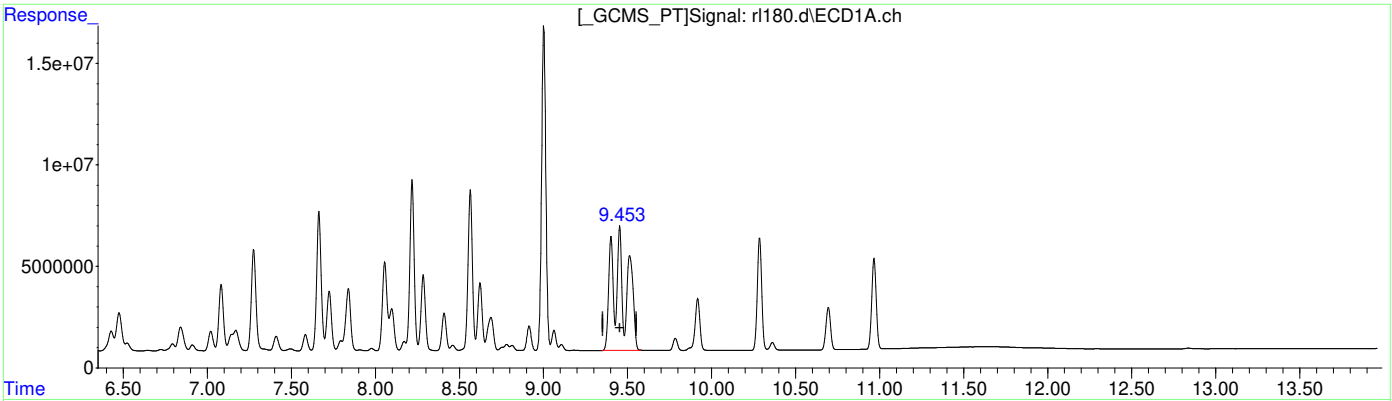
pcbGCRL5.m Wed Sep 21 23:35:29 2022 Page: 1

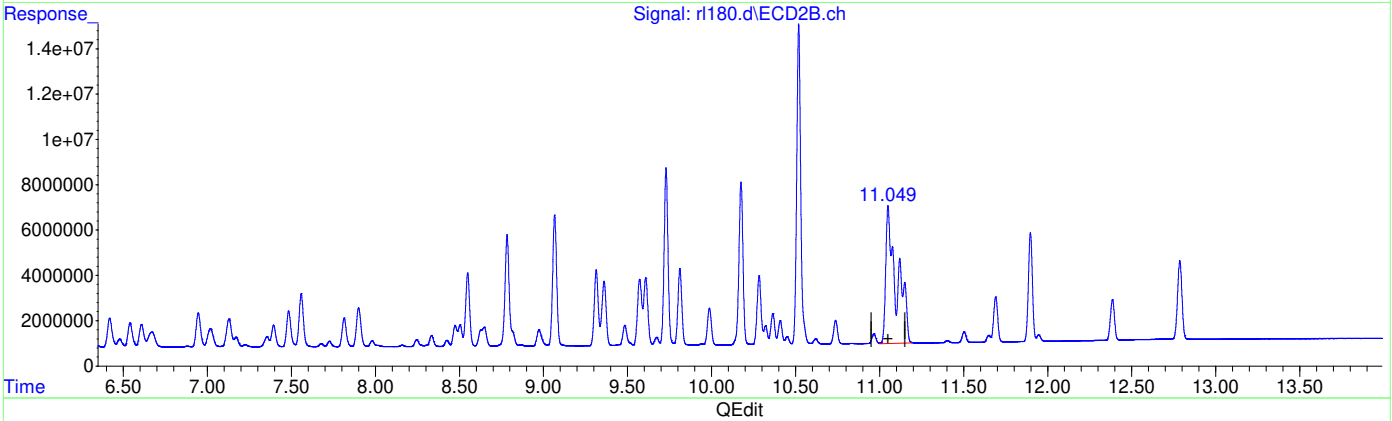
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:55 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(35) AR1262-E

9.453min 986.161 PPB m

response 338435969

(35) AR1262-E #2

11.049min 1025.936 PPB m

response 268513079

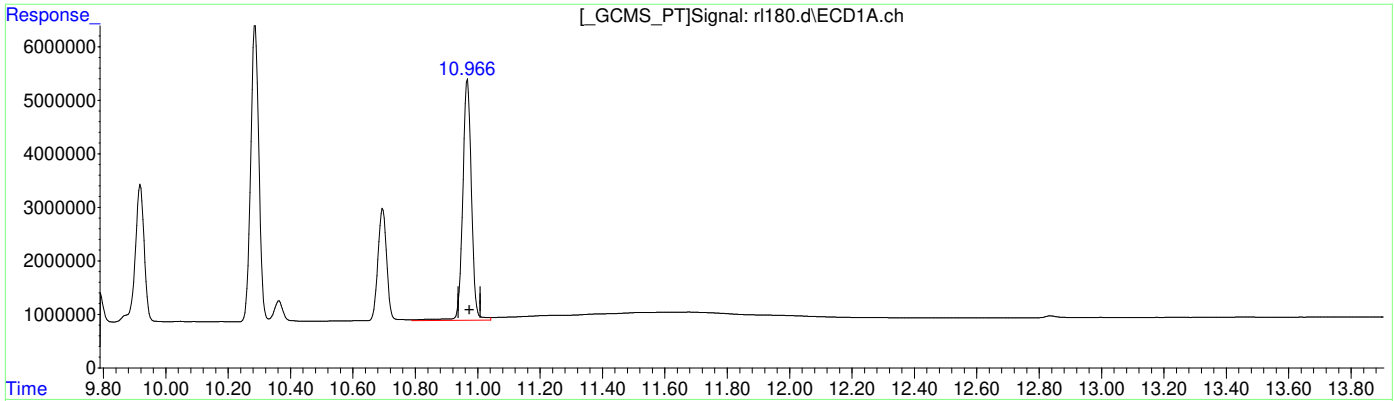
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:35:40 2022

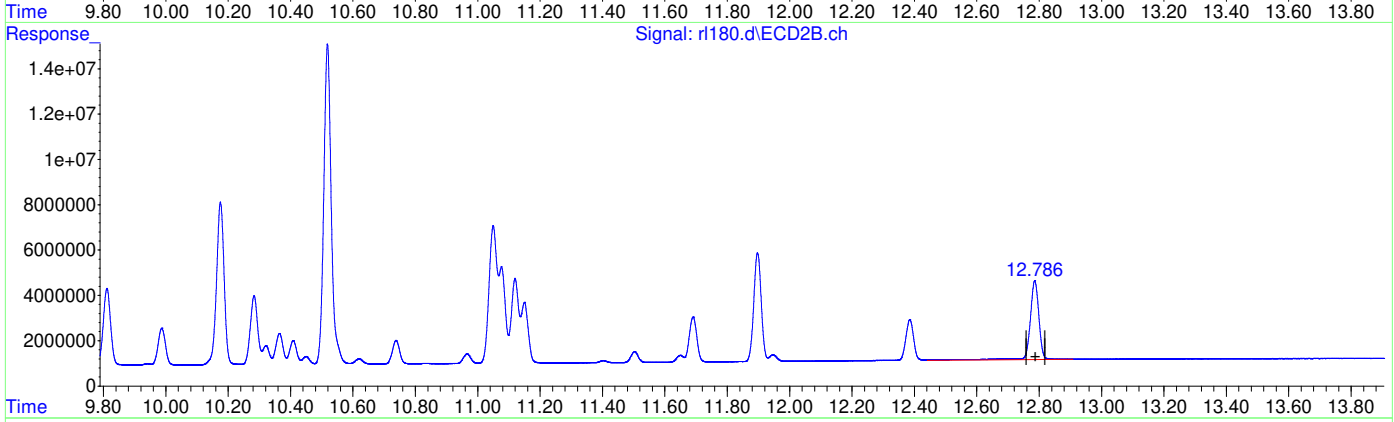
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:55 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 44.790 ppb

response 87823929

(51) Decachlorobiphenyl #2 (S)

12.786min 46.270 ppb

response 68603882

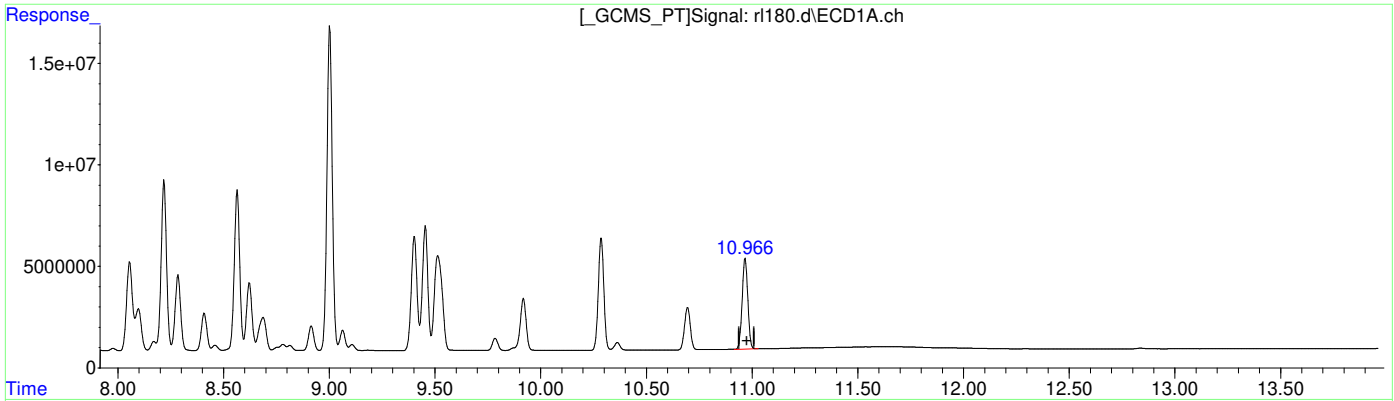
(+) = Expected Retention Time

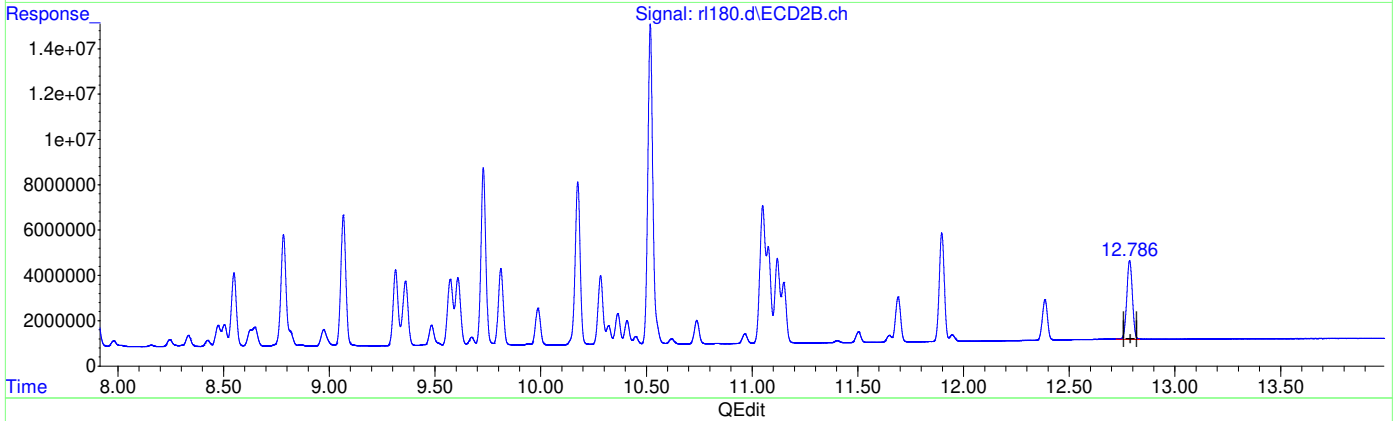
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl180.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:16 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 18 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:34:55 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.966min 42.512 ppb m

response 83357719

(51) Decachlorobiphenyl #2 (S)

12.786min 43.039 ppb m

response 63813609

(+) = Expected Retention Time

pcbGCRL5.m Wed Sep 21 23:36:00 2022

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns
09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:02 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.397	4.106	137.2E6	119.6E6	48.795	49.226
	Spiked Amount 40.000			Recovery	=	121.99%	123.07%
51)	S Decachlor...	10.967	12.785	224.4E6	170.4E6	114.452	114.912m
	Spiked Amount 40.000			Recovery	=	286.13%	287.28%
	Target Compounds						
12)	AR1242-A	4.272	5.400	107.8E6	97958022	1182.851	1184.471
13)	AR1242-B	4.872	6.065	220.3E6	181.8E6	1183.541	1180.327m
14)	AR1242-C	5.050	6.263	85100407	71918380	1177.791	1178.084
15)	AR1242-D	5.597	6.946	89993371	55696685	1151.552	1156.893
16)	AR1242-E	6.211	7.559	69442050	62918313	1129.985	1116.025
36)	AR1268-A	9.454	11.051	312.5E6	260.8E6	1057.067	1060.293
37)	AR1268-B	9.510	11.119	292.2E6	243.4E6	1058.338	1058.718
38)	AR1268-C	9.786	11.503	242.0E6	199.0E6	1068.462	1073.568
39)	AR1268-D	10.287	11.898	114.2E6	94428444	1048.914	1092.138
40)	AR1268-E	10.696	12.386	732.7E6	586.8E6	1067.901	1050.578m

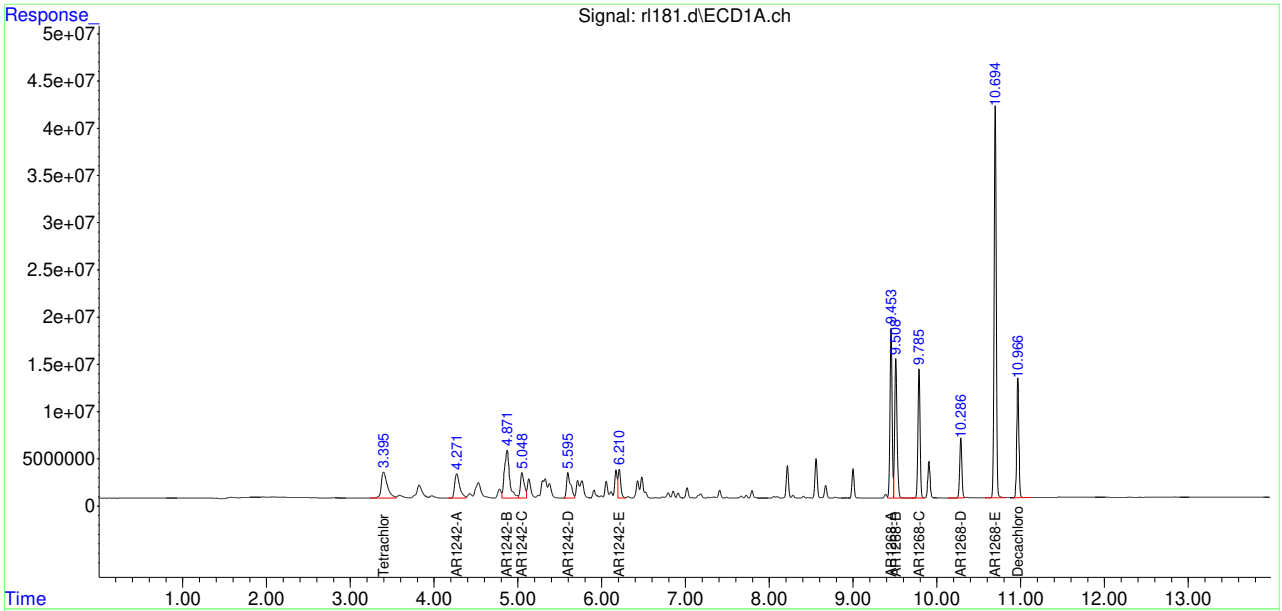
(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

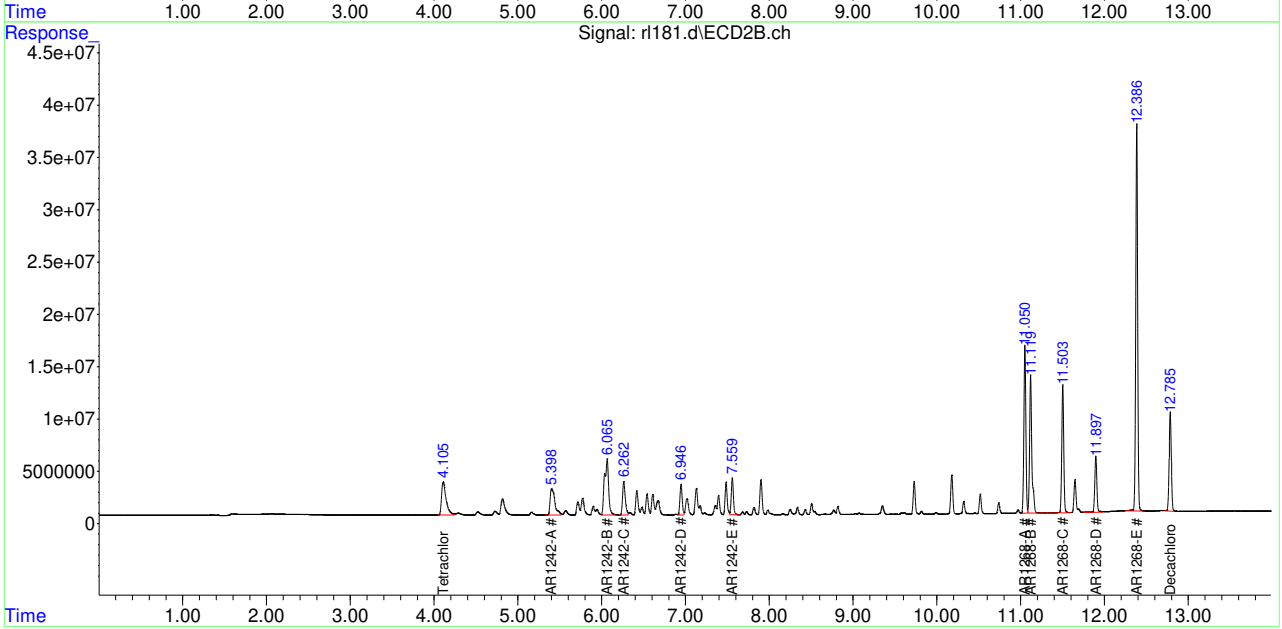
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:02 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICV5
Lab FileID: RL181.D
Injection Time: 09/21/22 04:35
Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

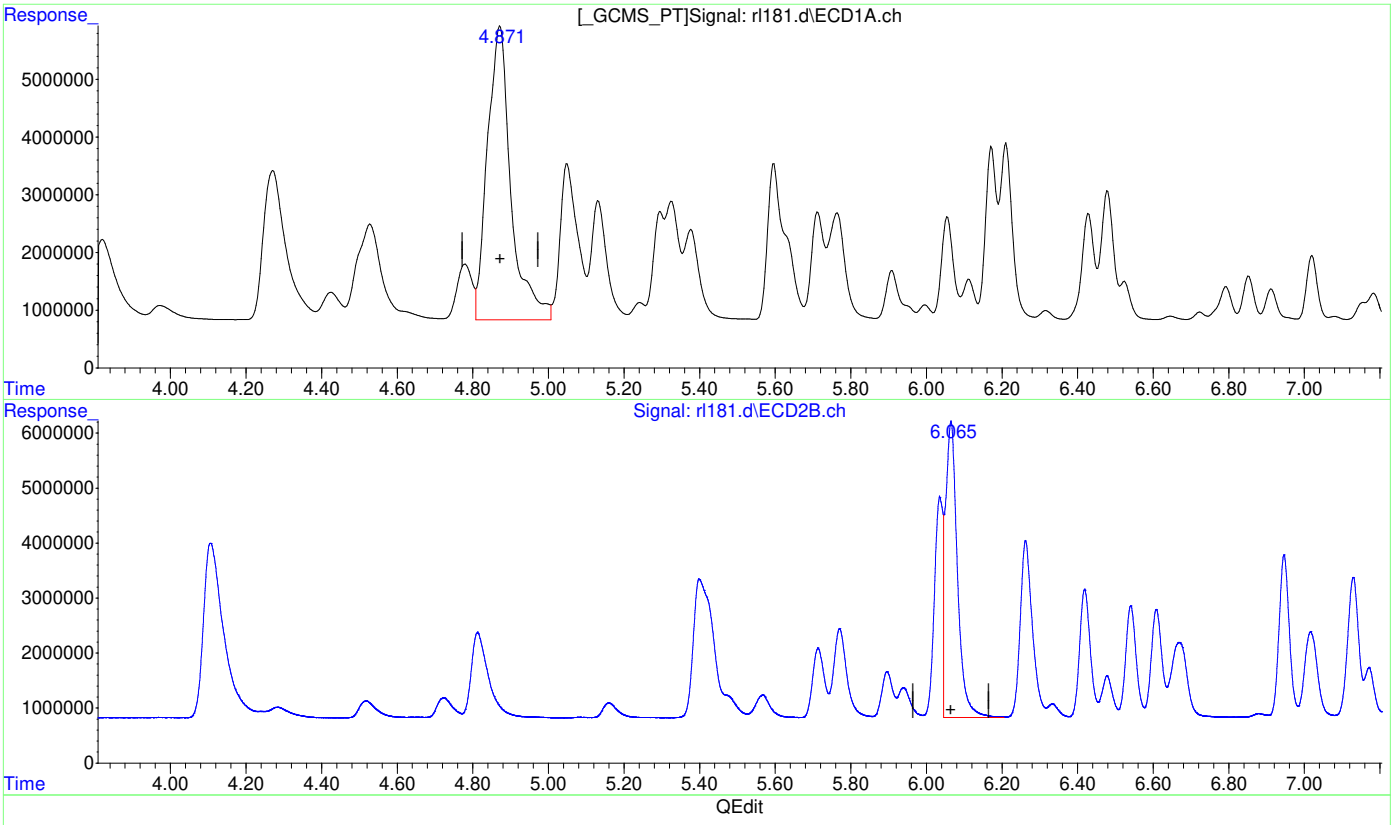
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1242-B		2	6.07	Split peak
AR1268-E		2	12.39	Poorly defined baseline
Decachlorobiphenyl	2051-24-3	2	12.79	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:28 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(13) AR1242-B

4.872min 1183.541 PPB

response 220260606

(13) AR1242-B #2

6.065min 770.591 PPB

response 118720903

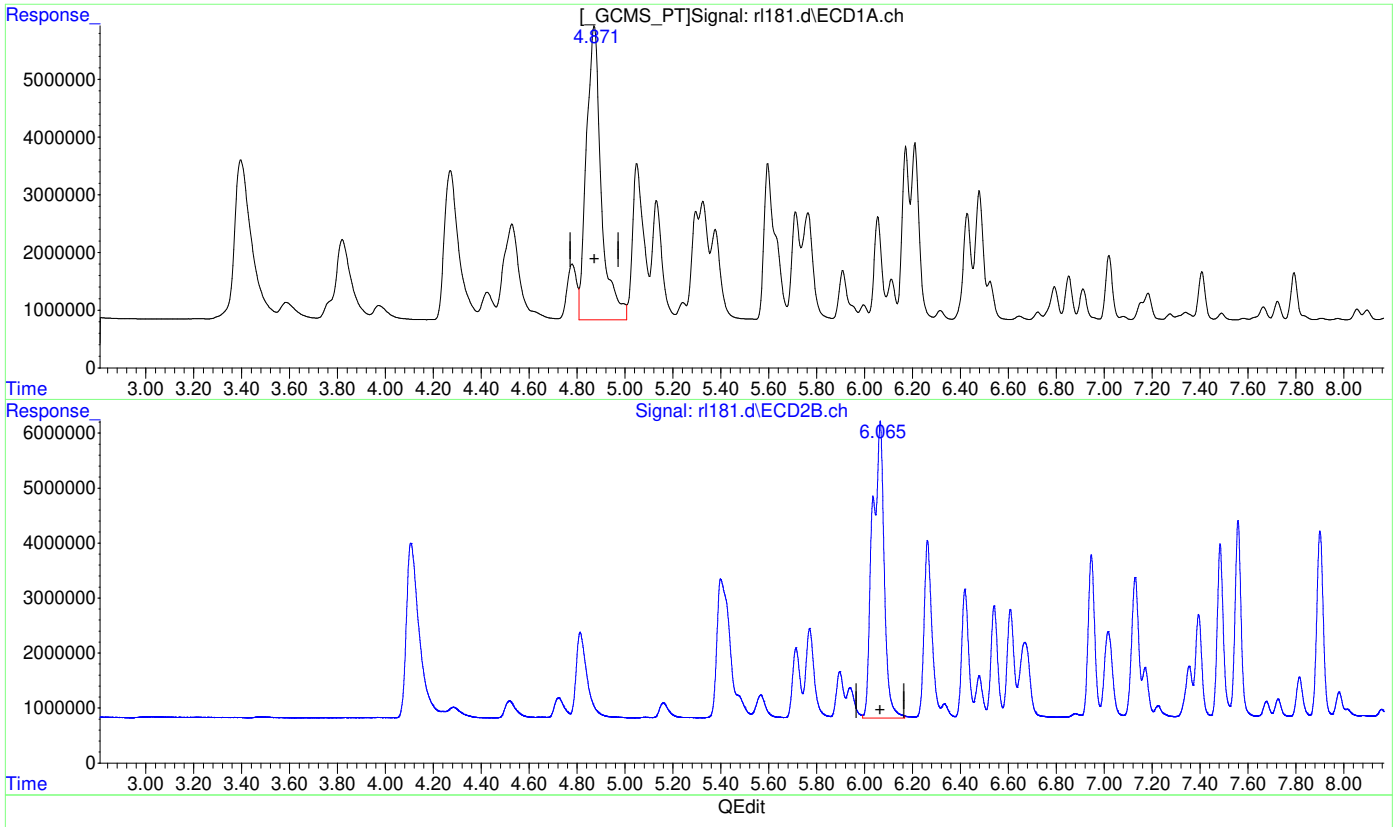
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:28 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(13) AR1242-B

4.872min 1183.541 PPB

response 220260606

(13) AR1242-B #2

6.065min 1180.327 PPB m

response 181846732

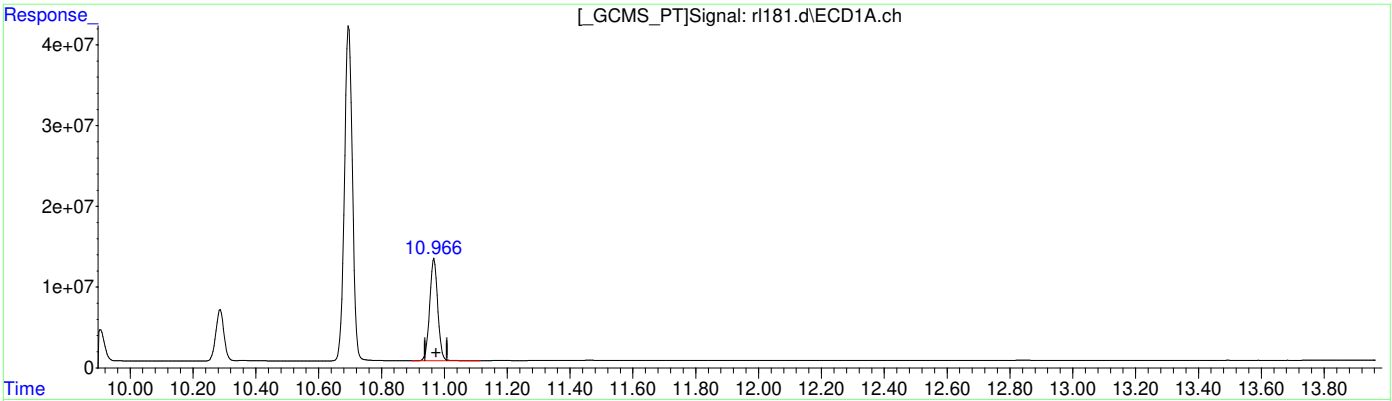
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:36:51 2022

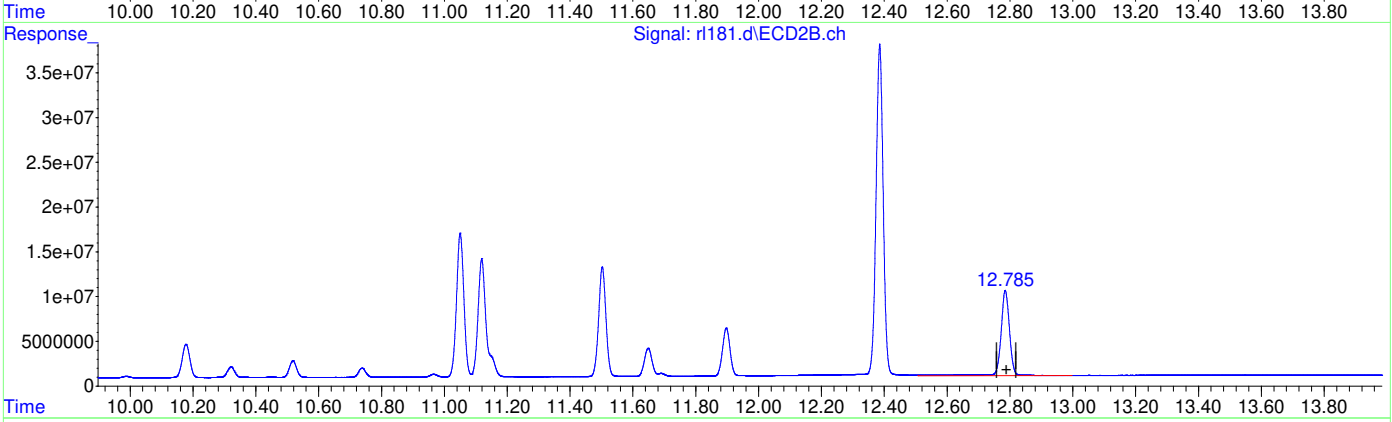
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(51) Decachlorobiphenyl (S)

10.967min 114.452 ppb

response 224415588

(51) Decachlorobiphenyl #2 (S)

12.786min 124.671 ppb

response 184847736

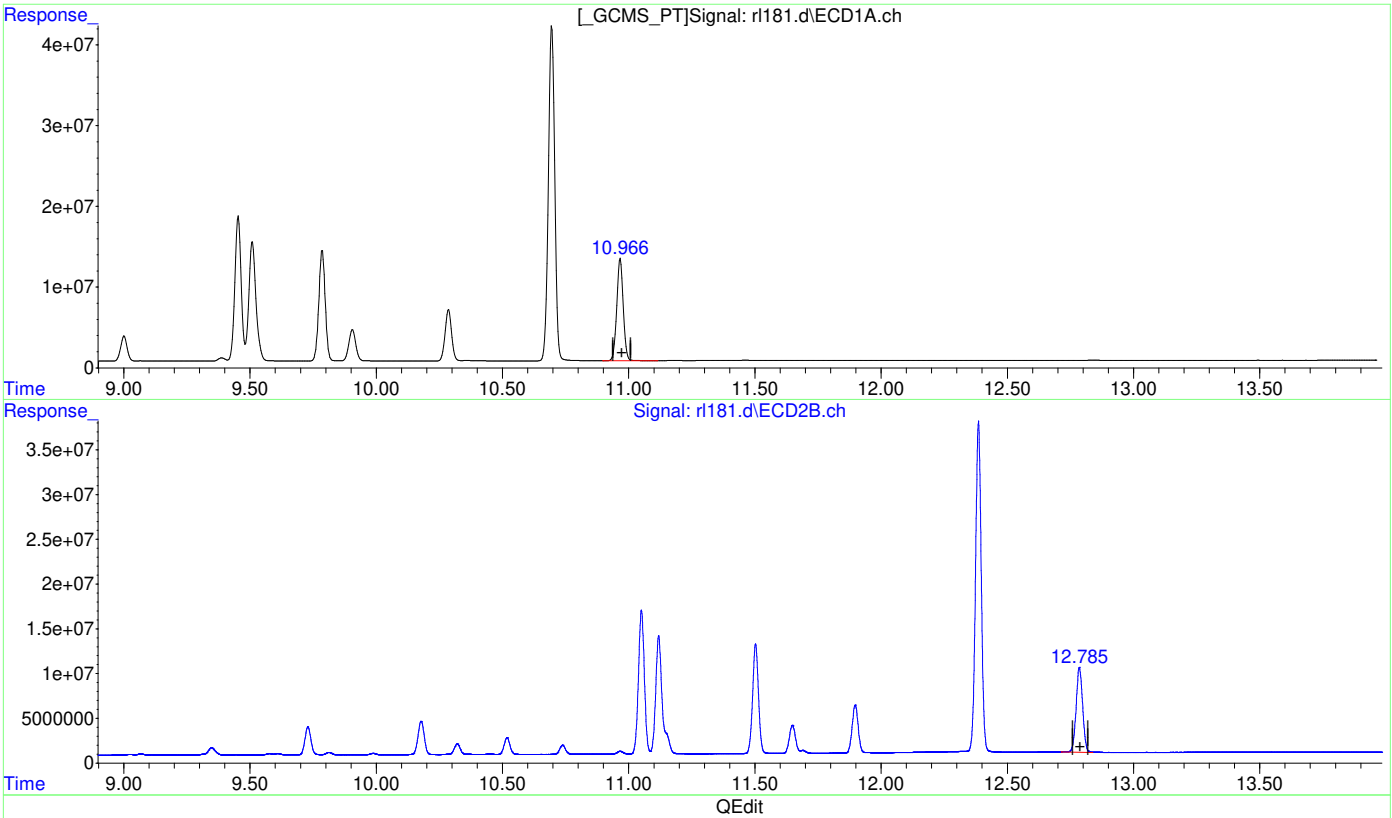
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:37:49 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(51) Decachlorobiphenyl (S)

10.967min 114.452 ppb

response 224415588

(51) Decachlorobiphenyl #2 (S)

12.785min 114.912 ppb m

response 170379328

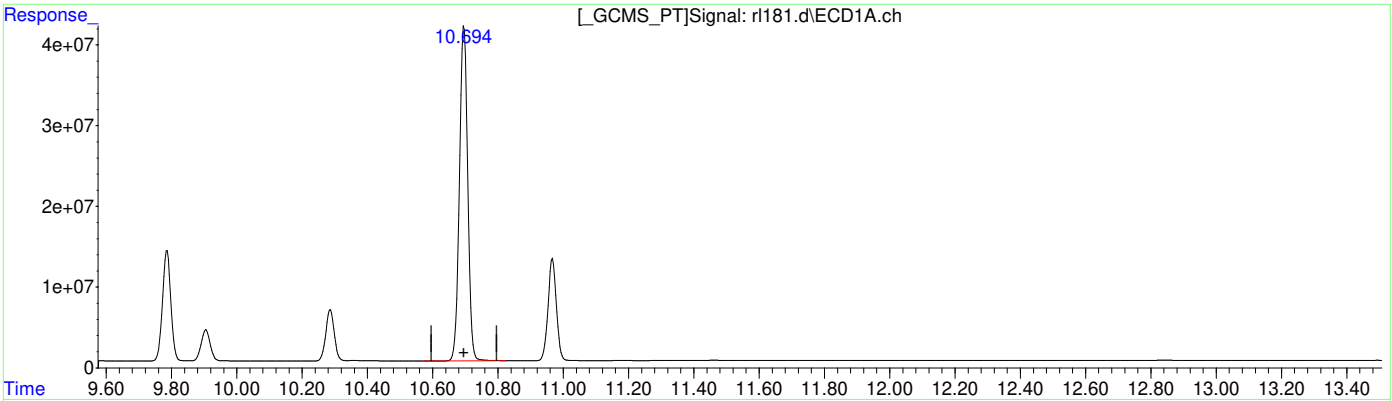
(+) = Expected Retention Time

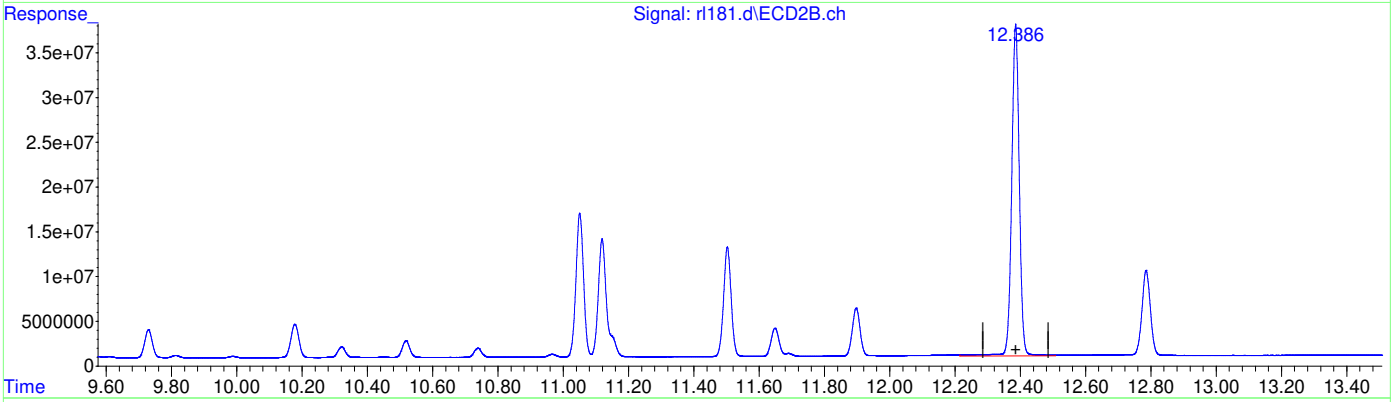
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(40) AR1268-E

10.696min 1067.901 PPB

response 732742839

(40) AR1268-E #2

12.386min 1082.164 PPB

response 604460487

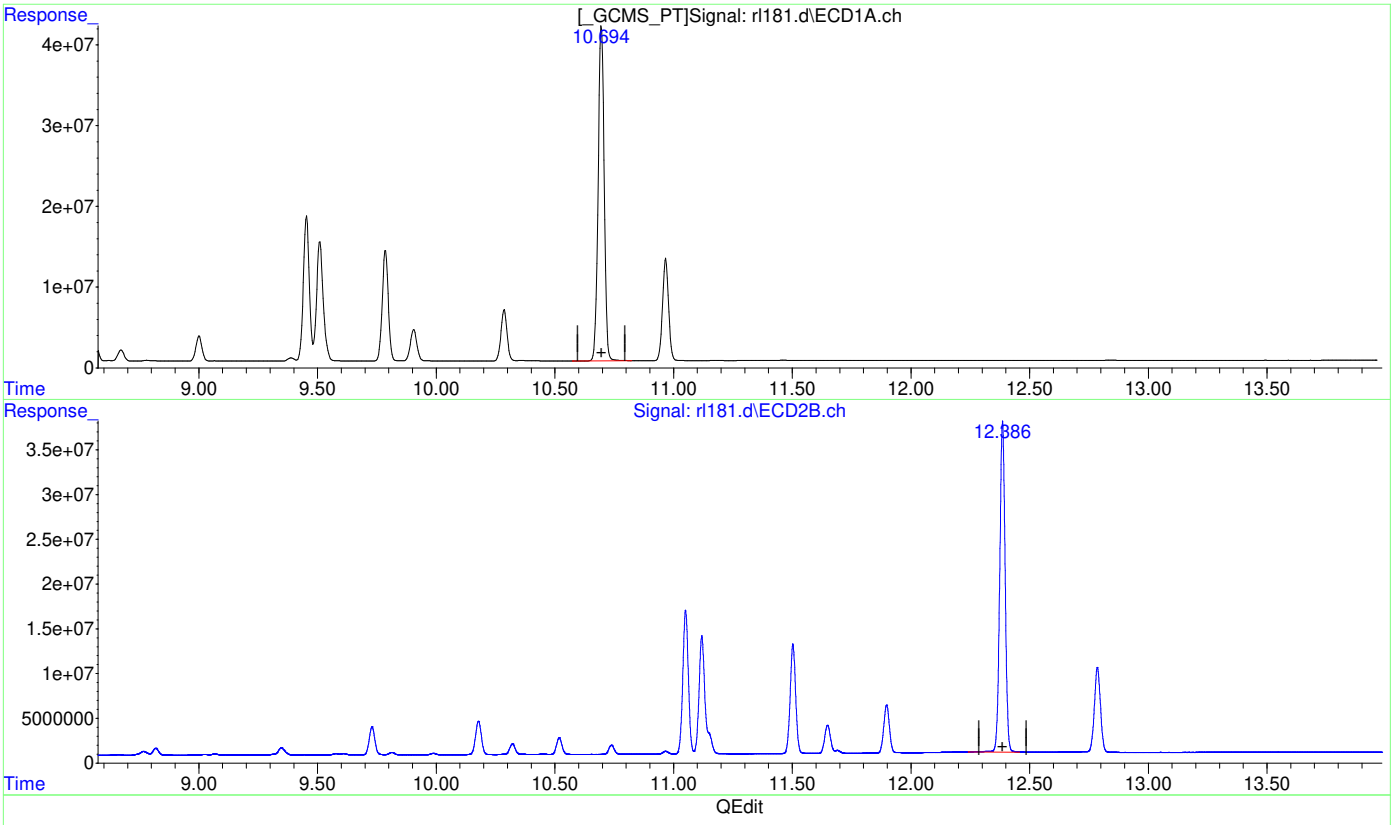
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:37:58 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl181.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:35 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 19 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:36:48 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(40) AR1268-E

10.696min 1067.901 PPB

response 732742839

(40) AR1268-E #2

12.386min 1050.578 PPB m

response 586818003

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 09/28/22 19:34

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:39:25 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1)	S Tetrachlo...	3.398	4.107	128.0E6	114.3E6	45.539	47.039
	Spiked Amount 40.000			Recovery	= 113.85%	117.60%	
51)	S Decachlor...	10.966	12.786	81408489	68031462	41.518	45.884
	Spiked Amount 40.000			Recovery	= 103.79%	114.71%	
	Target Compounds						
17)	AR1248-A	4.269	5.400	48497047	42479728	1038.971	1039.835
18)	AR1248-B	4.870	6.064	113.6E6	102.9E6	1036.356	1026.418m
19)	AR1248-C	5.296	6.541	126.6E6	62314991	999.949m	1041.242
20)	AR1248-D	5.597	6.947	121.7E6	79403565	1041.077	1043.066
21)	AR1248-E	5.713	7.130	65328339	75124115	1026.493	1039.026
22)	AR1248-F	6.212	7.559	101.4E6	101.8E6	1048.435	1045.594
23)	AR1248-G	6.479	7.901	87371016	98441363	1021.050	1044.204

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.5.18

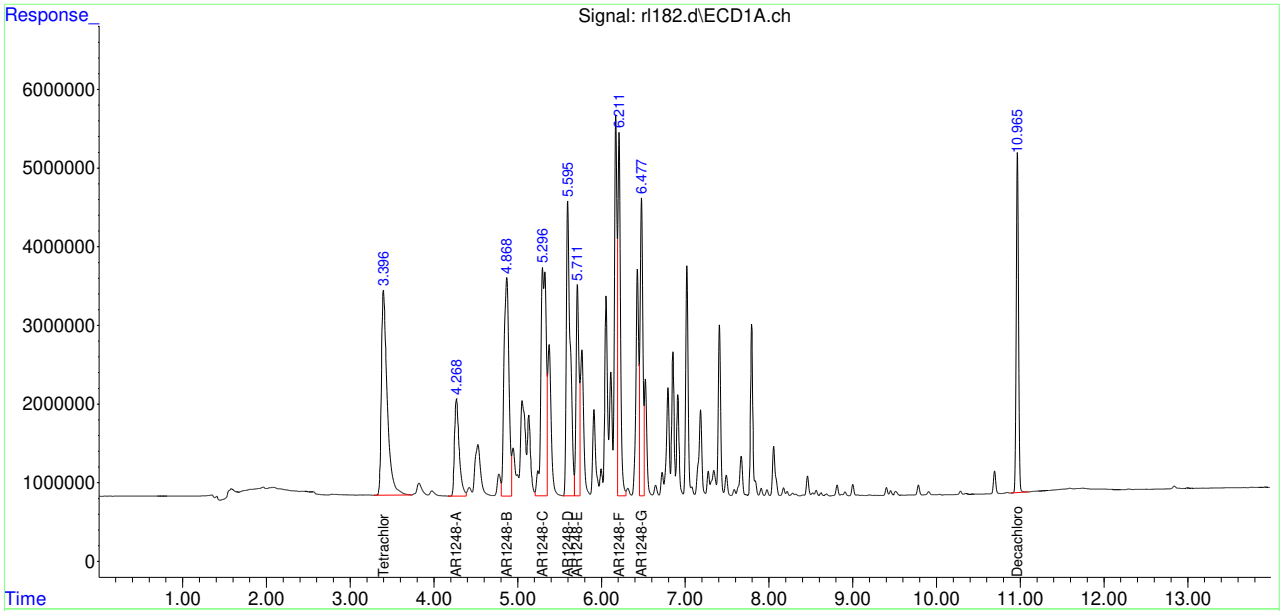
6

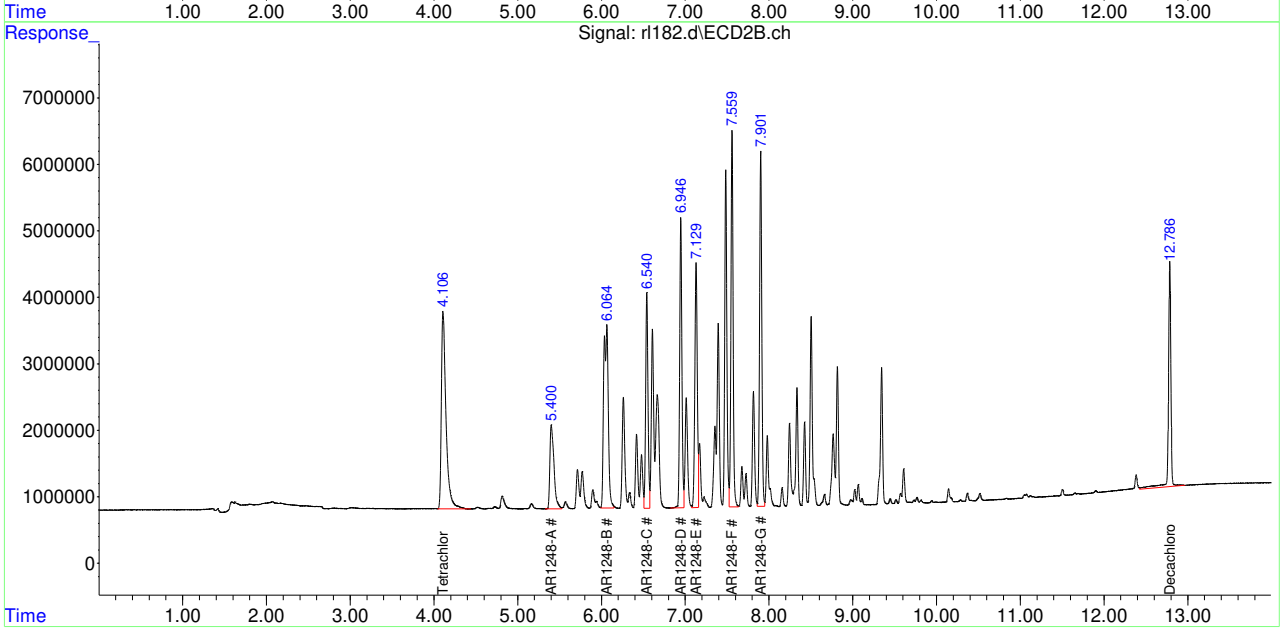
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:39:25 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL5-ICV5
Lab FileID: RL182.D
Injection Time: 09/21/22 04:54

Method: SW846 8082A
Analyst approved: 09/21/22 23:50 Rebecca Krug
Supervisor approved: 09/28/22 19:34 Gwendolyn Burns

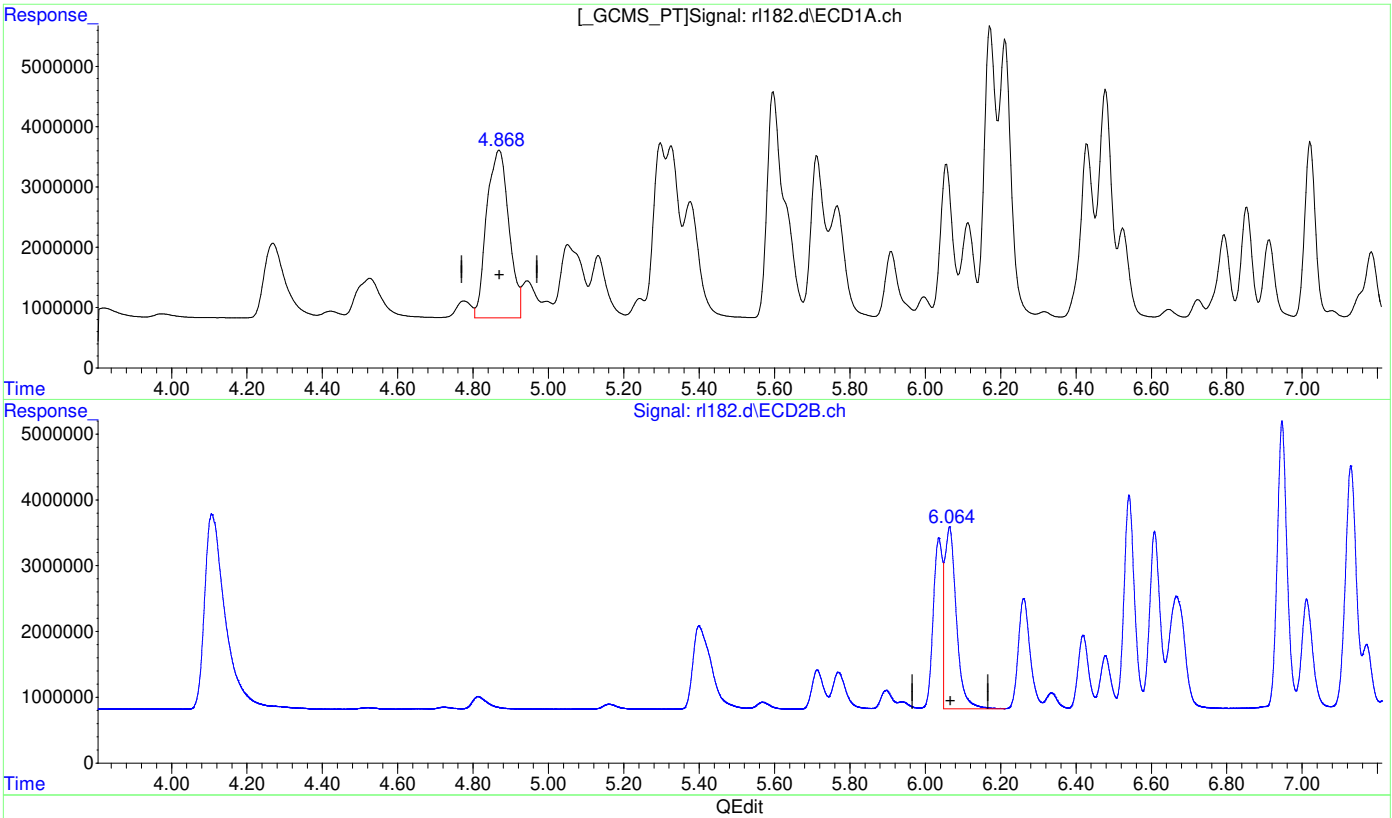
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1248-C		1	5.30	Split peak
AR1248-B		2	6.06	Split peak

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:20 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(18) AR1248-B

4.870min 1036.356 PPB

response 113623651

(18) AR1248-B #2

6.064min 593.075 PPB

response 59460136

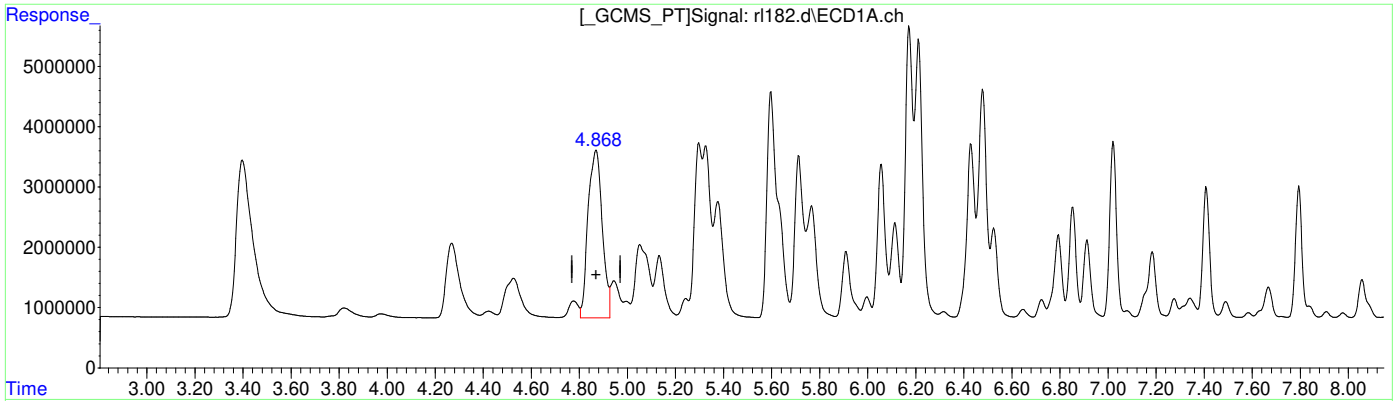
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:38:32 2022

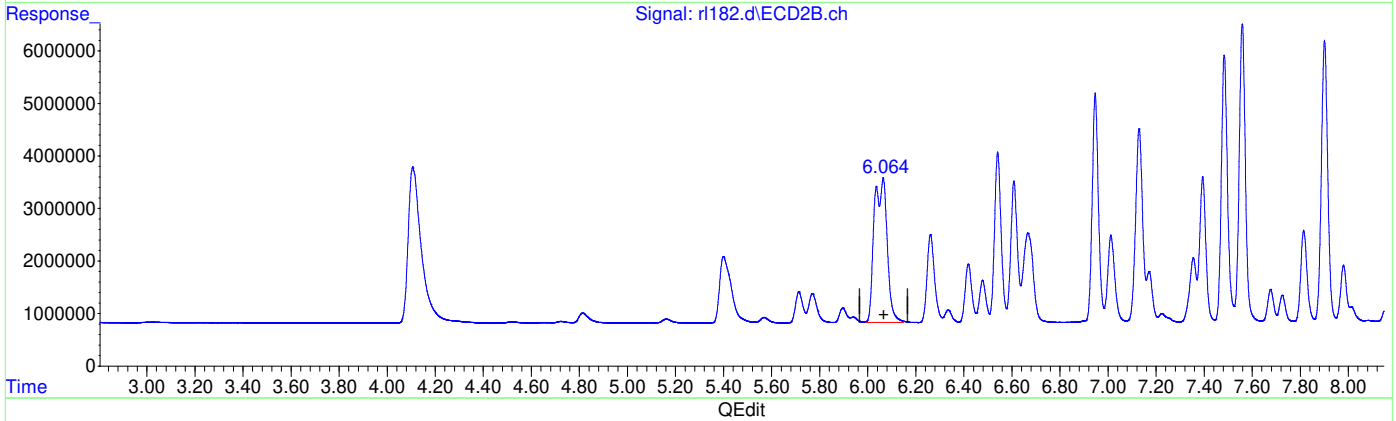
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:20 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(18) AR1248-B

4.870min 1036.356 PPB

response 113623651

(18) AR1248-B #2

6.064min 1026.418 PPB m

response 102905907

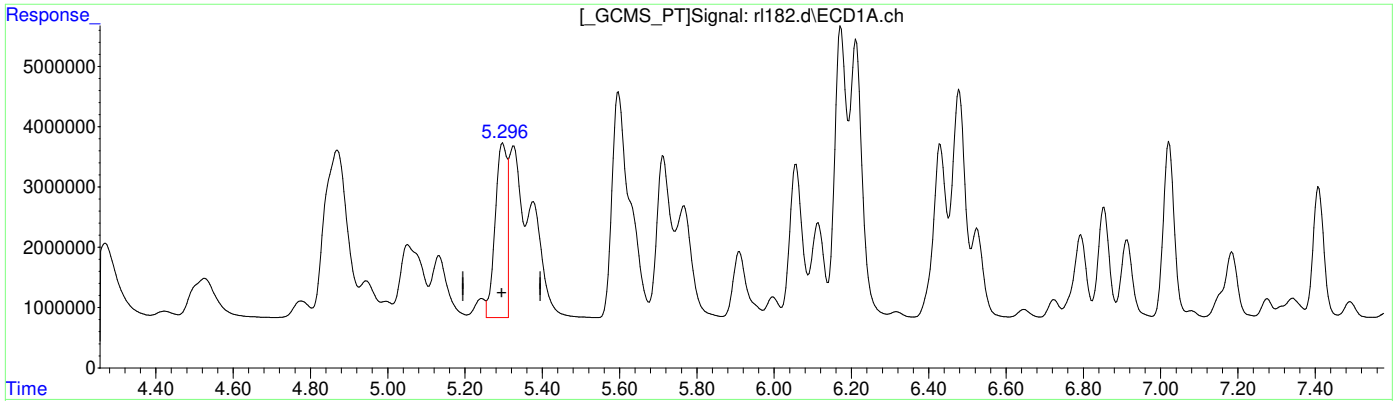
(+) = Expected Retention Time

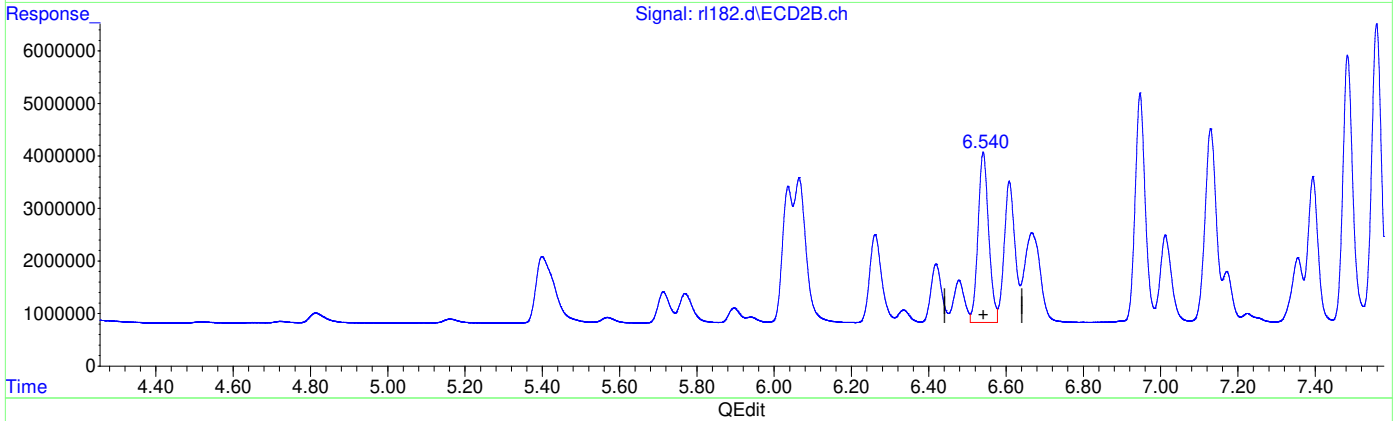
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:20 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(19) AR1248-C

5.298min 483.338 PPB

response 61206516

(19) AR1248-C #2

6.541min 1041.242 PPB

response 62314991

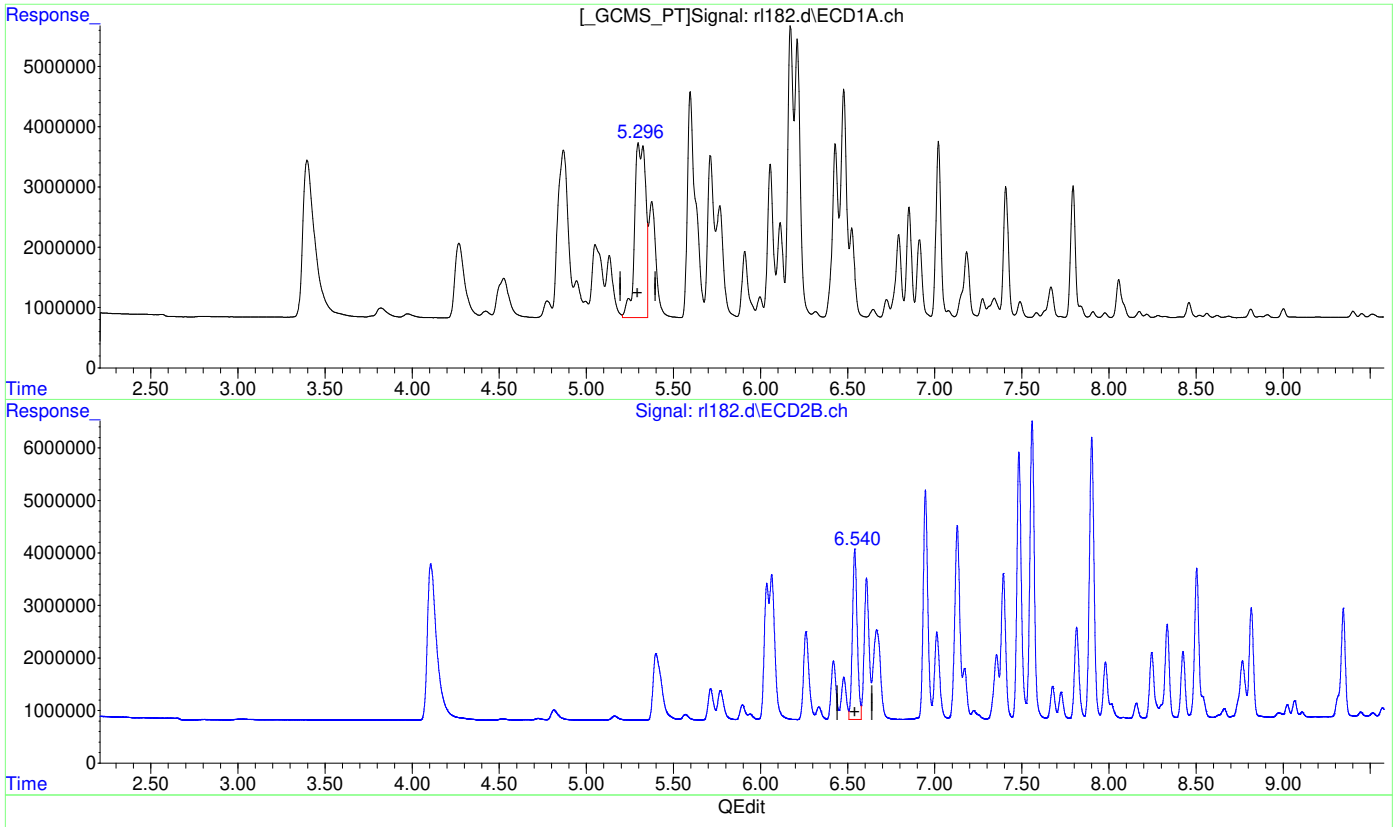
(+) = Expected Retention Time
pcbGCRL5.m Wed Sep 21 23:38:42 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl005\
Data File : rl182.d
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 21 Sep 2022 04:54 am
Operator : rebeccak
Sample : icv5-1000
Misc : op41640,grl5,10.0,,,10,1
ALS Vial : 20 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 21 23:38:20 2022
Quant Method : C:\msdchem\1\methods\pcbGCRL5.m
Quant Title :
QLast Update : Wed Sep 21 23:16:45 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(19) AR1248-C

5.296min 999.949 PPB m

response 126626559

(19) AR1248-C #2

6.541min 1041.242 PPB

response 62314991

(+) = Expected Retention Time

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1502.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:00 pm
Operator : mahalial
Sample : cc5-1000
Misc : op42472,grl24,1000.0,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:52:39 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.391	4.099	105.1E6	100.4E6	37.390	41.343
	Spiked Amount 40.000			Recovery	=	93.47%	103.36%
51) S	Decachlor...	10.980	12.778	75256189	67083022	38.381	45.244
	Spiked Amount 40.000			Recovery	=	95.95%	113.11%
	Target Compounds						
41)	AR1016-A	3.815	4.804	57371681	49022122	1001.314	1096.632
42)	AR1016-B	4.266	5.391	101.4E6	100.9E6	977.101	1073.429
43)	AR1016-C	4.868	6.055	208.9E6	191.1E6	949.387	1060.793
44)	AR1016-D	5.047	6.253	80672353	74874789	964.188	1030.603
45)	AR1016-E	5.595	6.936	82297691	57830320	943.859	1037.132
46)	AR1260-A	7.669	9.058	143.7E6	113.0E6	917.559	1066.689
47)	AR1260-B	8.223	9.720	87625527	86123429	925.367	1055.971
48)	AR1260-C	8.570	10.166	95651133	99321541	901.422	1061.394
49)	AR1260-D	9.011	10.511	202.1E6	201.6E6	926.266	1075.028
50)	AR1260-E	9.412	11.070	225.3E6	212.0E6	920.098m	1100.819m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

9.5.19

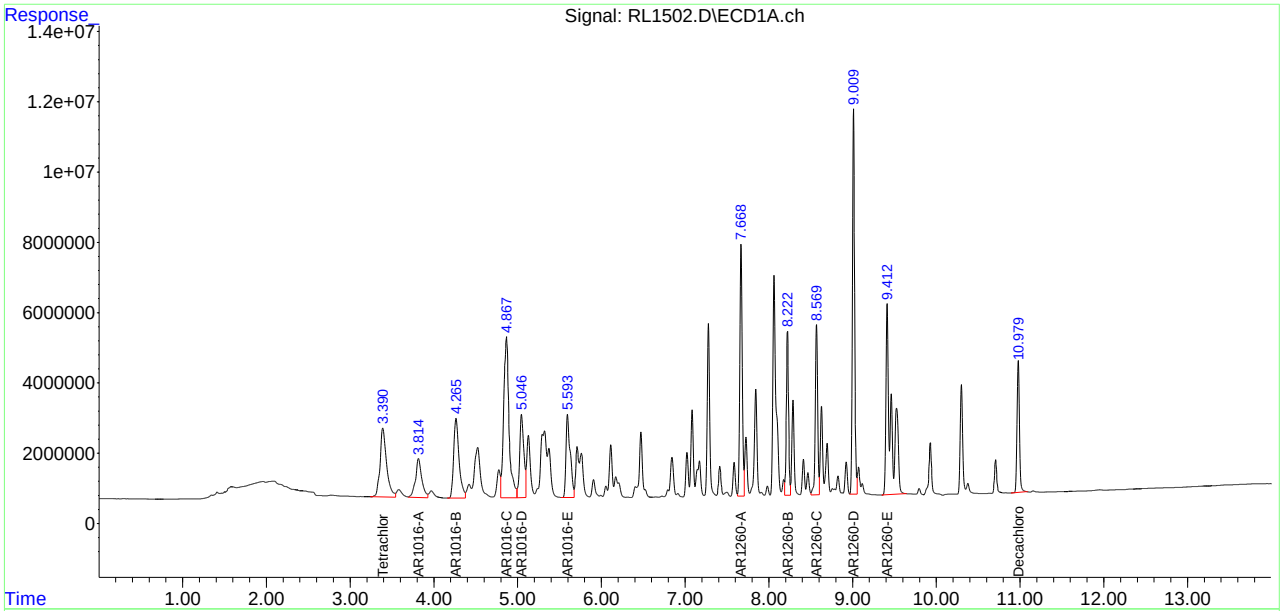
6

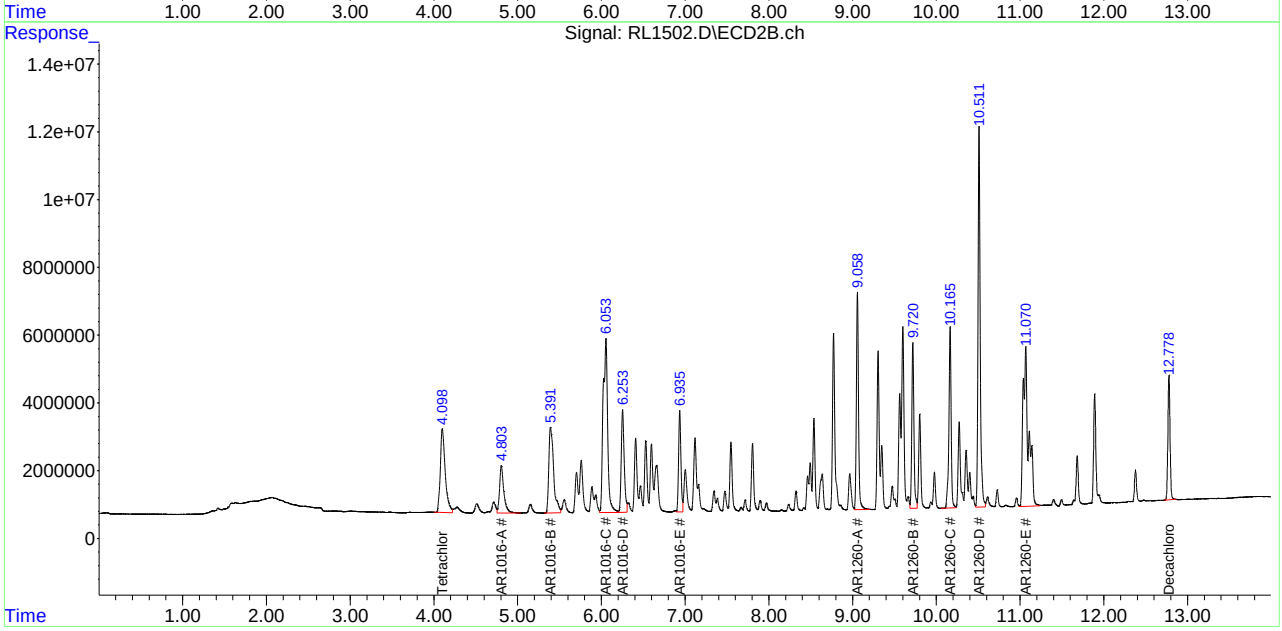
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1502.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:00 pm
Operator : mahalial
Sample : cc5-1000
Misc : op42472,grl24,1000.0,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:52:39 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL24-CC5
Lab FileID: RL1502.D
Injection Time: 10/17/22 16:00
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

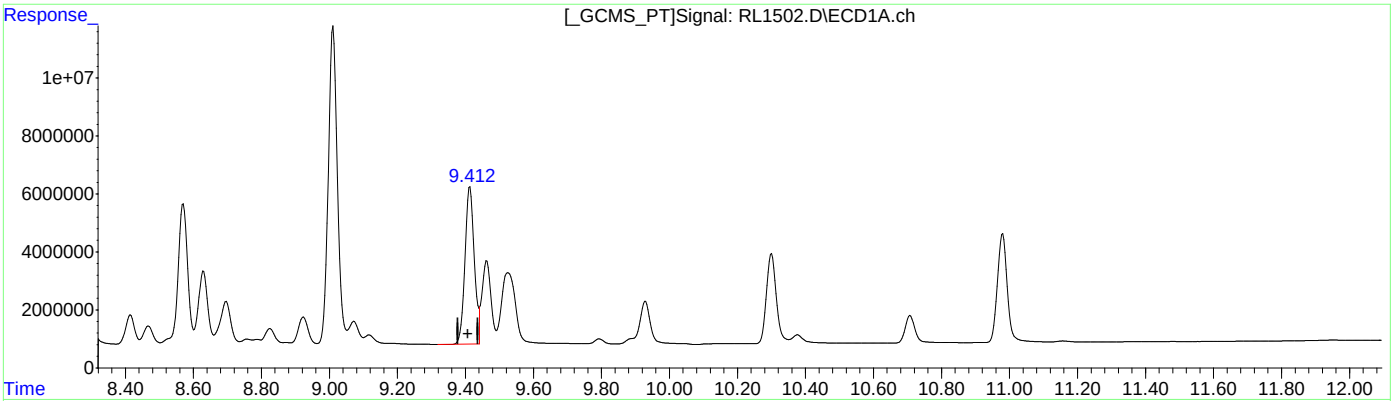
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-E		1	9.41	Poorly defined baseline
AR1260-E		2	11.07	Poorly defined baseline

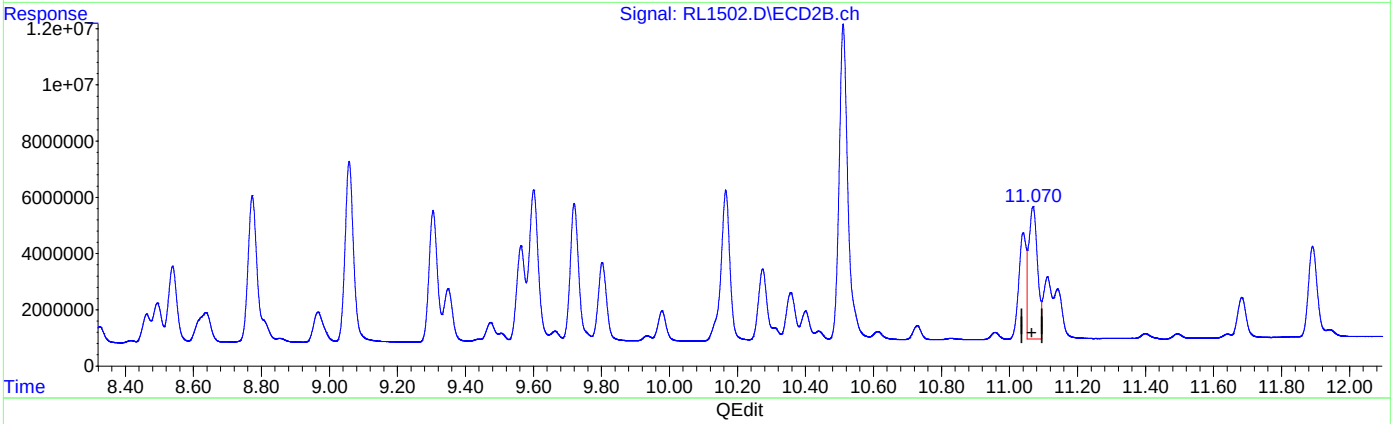
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1502.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:00 pm
Operator : mahalial
Sample : cc5-1000
Misc : op42472,grl24,1000.0,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:51:46 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(50) AR1260-E

9.413min 422.416 PPB

response 103453997

(50) AR1260-E #2

11.069min 442.326 PPB

response 85194185

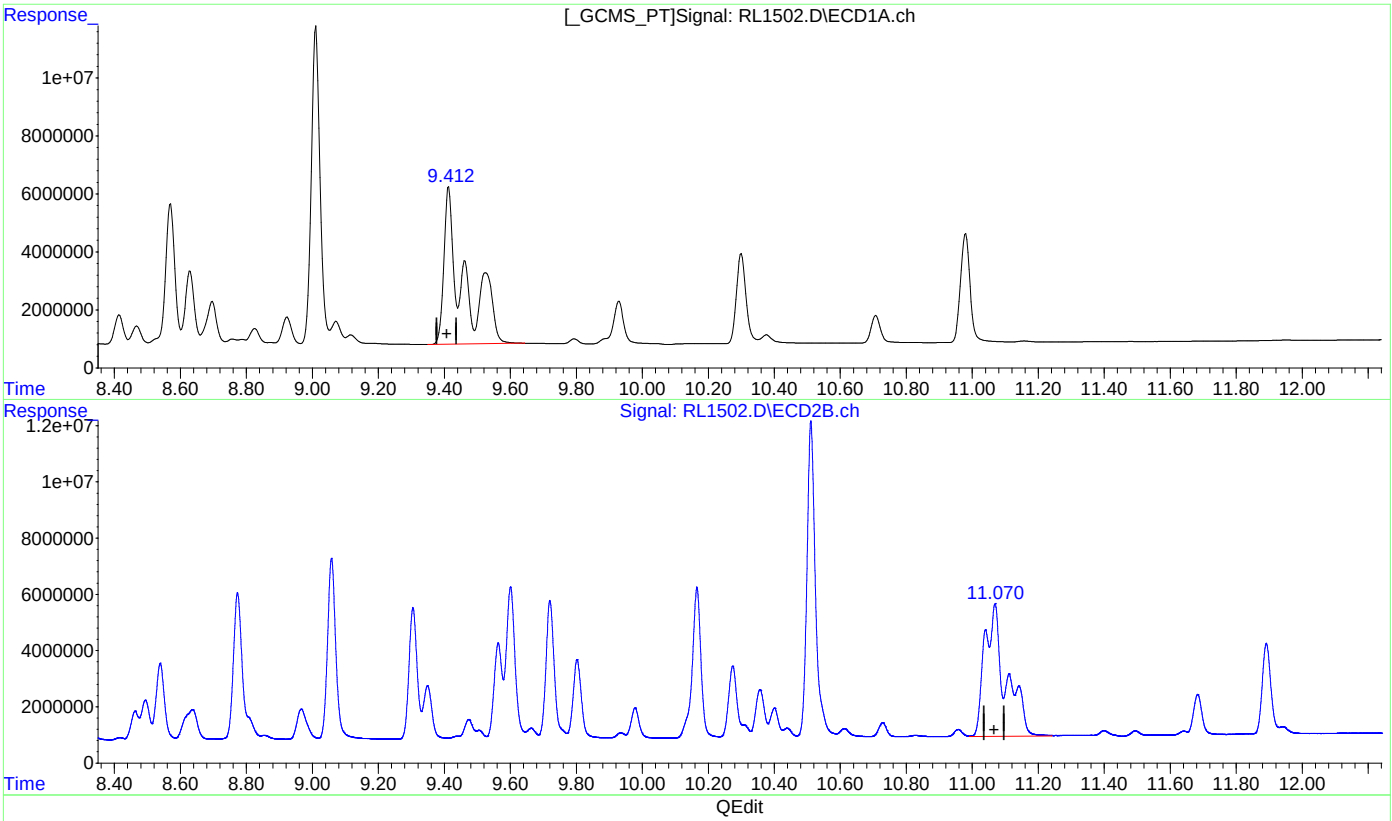
(+) = Expected Retention Time
pcbgcrl5.m Tue Oct 18 23:52:09 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1502.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 04:00 pm
Operator : mahalial
Sample : cc5-1000
Misc : op42472,grl24,1000.0,,,5,1
ALS Vial : 24 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:51:46 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



QEdit

(50) AR1260-E

9.412min 920.098 PPB m

response 225341173

(50) AR1260-E #2

11.070min 1100.819 PPB m

response 212023262

(+) = Expected Retention Time

pcbgcrl5.m Tue Oct 18 23:52:27 2022 Page: 1

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/19/22 11:29

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:54:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)

	Compound	RT#1	RT#2	Resp#1	Resp#2	ppb	ppb
	System Monitoring Compounds						
1) S	Tetrachlo...	3.392	4.102	58414823	55168214	20.776	22.709
	Spiked Amount 40.000			Recovery	=	51.94%	56.77%
51) S	Decachlor...	10.980	12.780	40870312	34893084	20.844	23.534
	Spiked Amount 40.000			Recovery	=	52.11%	58.83%
	Target Compounds						
41)	AR1016-A	3.816	4.805	29973136	28273568	523.124	632.484
42)	AR1016-B	4.266	5.394	59684645	57977063	575.169	617.034
43)	AR1016-C	4.869	6.057	117.0E6	104.6E6	531.786	580.473
44)	AR1016-D	5.049	6.255	46487246	41950254	555.611	577.418
45)	AR1016-E	5.596	6.937	47788674	32011666	548.081	574.099
46)	AR1260-A	7.670	9.059	79697998	60134824	508.833	567.889
47)	AR1260-B	8.224	9.721	48975542	45661099	517.205	559.857
48)	AR1260-C	8.571	10.166	52752754	51988123	497.145	555.568
49)	AR1260-D	9.010	10.512	107.4E6	99535441	492.359m	530.745
50)	AR1260-E	9.413	11.070	124.4E6	108.6E6	507.948m	563.595m

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.

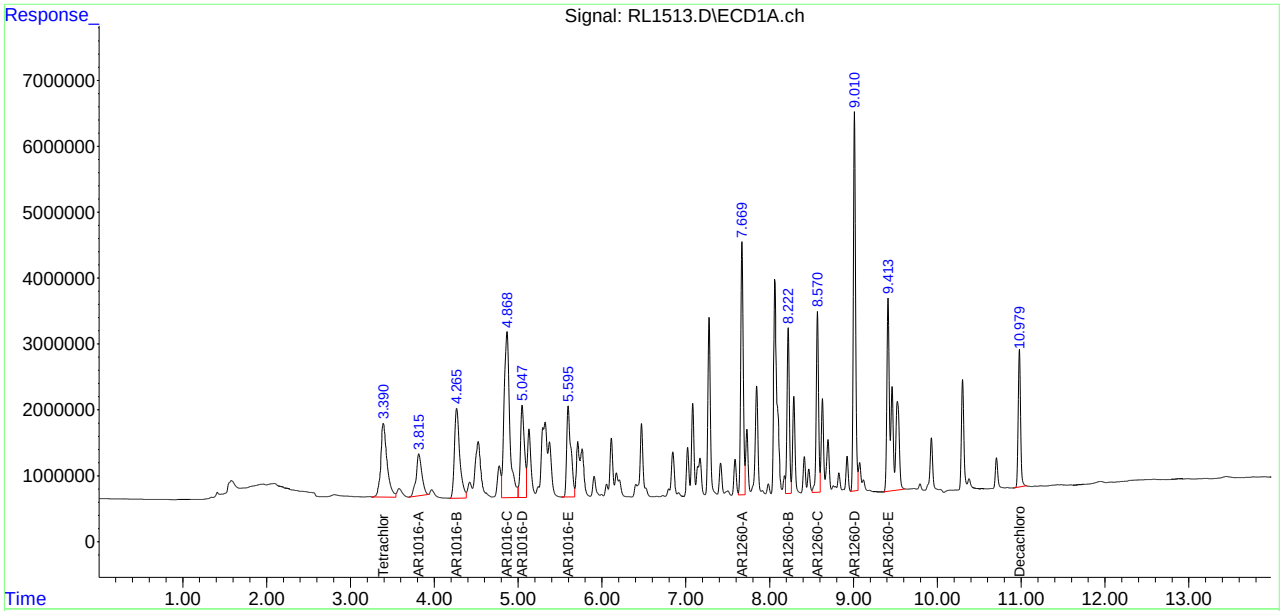
9.5.20
9

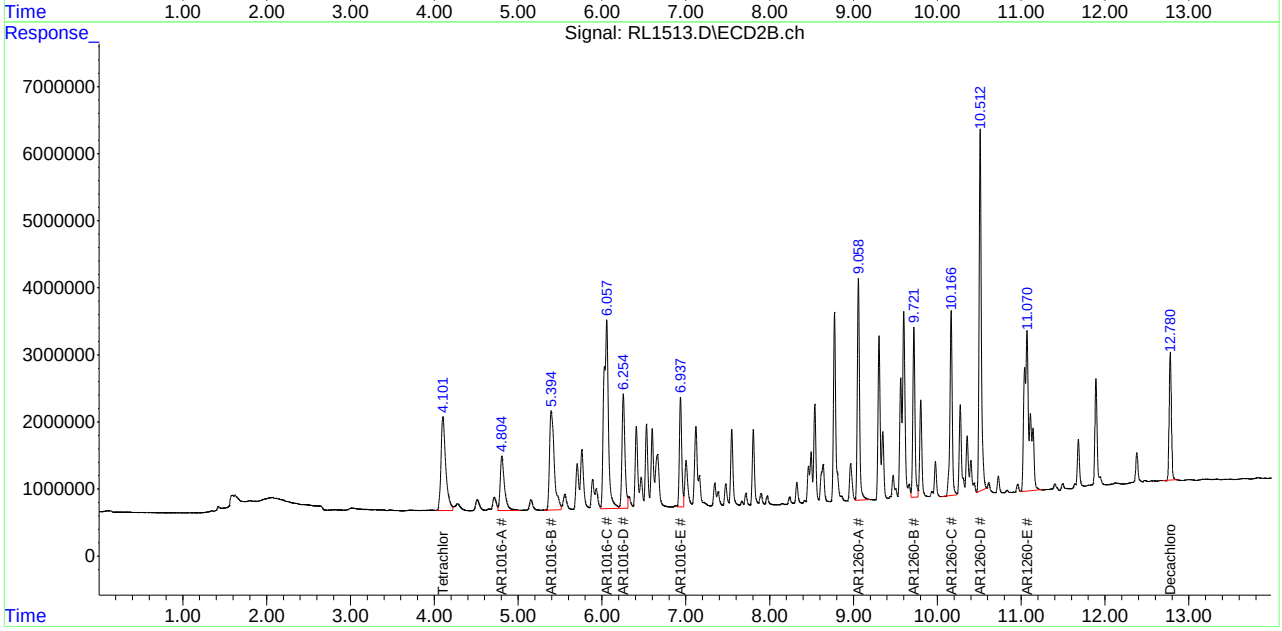
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:54:10 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





Manual Integration Approval Summary

Sample Number: GRL24-CC5
Lab FileID: RL1513.D
Injection Time: 10/17/22 18:58
Method: EPA 608.3
Analyst approved: 10/18/22 21:33 Sarah Cruz
Supervisor approved: 10/19/22 11:29 Gwendolyn Burns

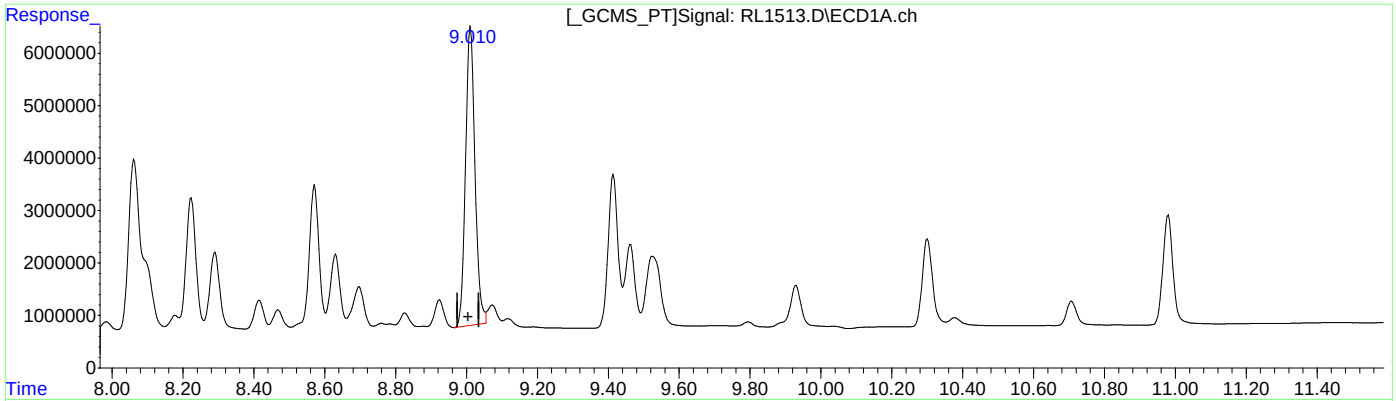
Parameter	CAS	Sig#	R.T. (min.)	Reason
AR1260-D		1	9.01	Poorly defined baseline
AR1260-E		1	9.41	Poorly defined baseline
AR1260-E		2	11.07	Poorly defined baseline

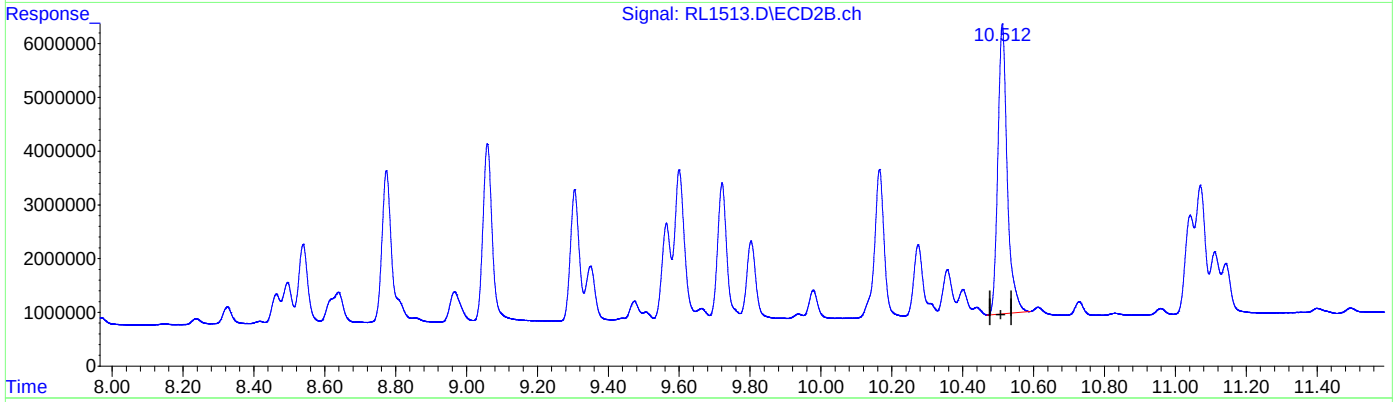
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:53:00 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D

9.011min 481.795 PPB

response 105101008

(49) AR1260-D #2

10.512min 530.745 PPB

response 99535441

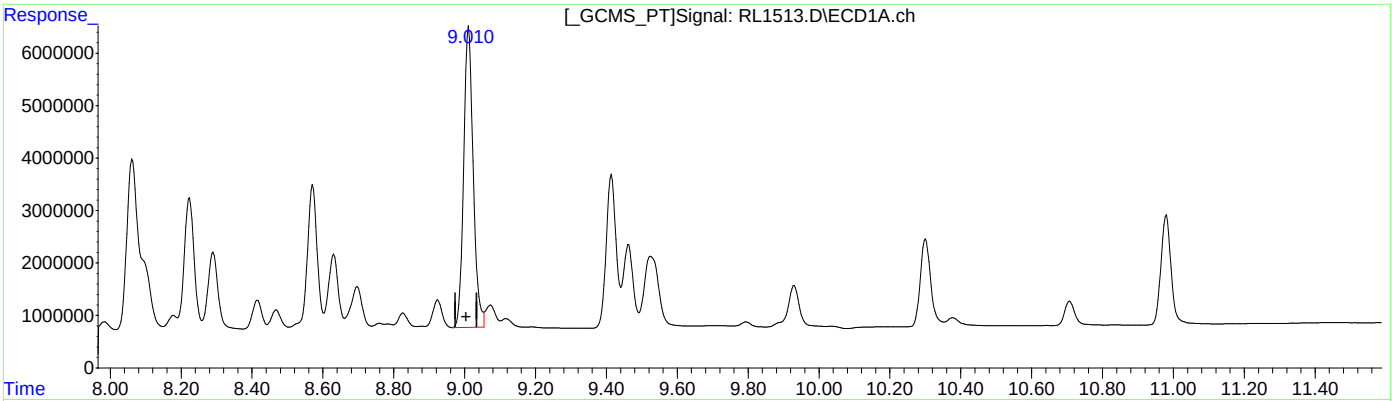
(+) = Expected Retention Time
pcbgcrl5.m Tue Oct 18 23:53:34 2022

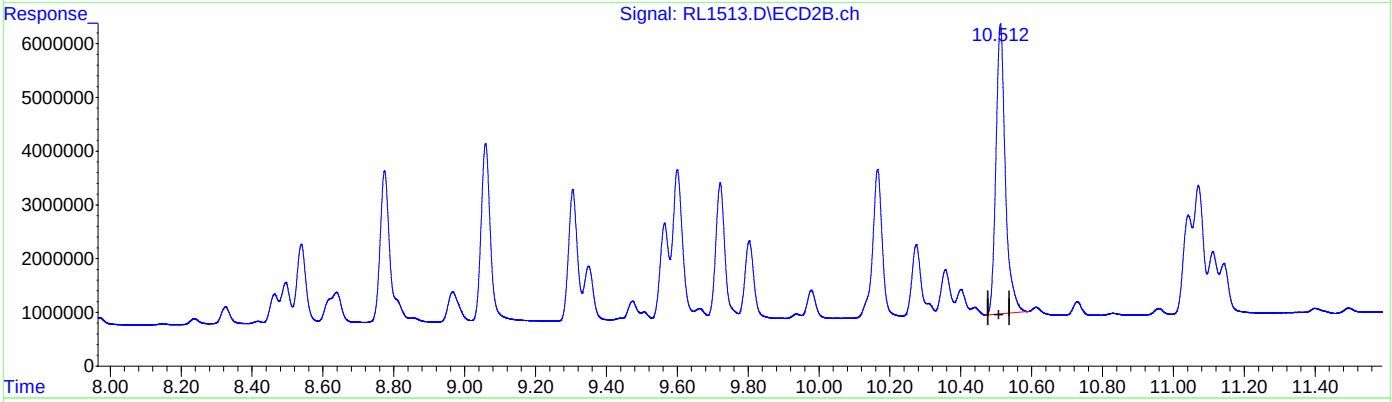
Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:53:00 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)





QEdit

(49) AR1260-D

9.010min 492.359 PPB m

response 107405473

(49) AR1260-D #2

10.512min 530.745 PPB

response 99535441

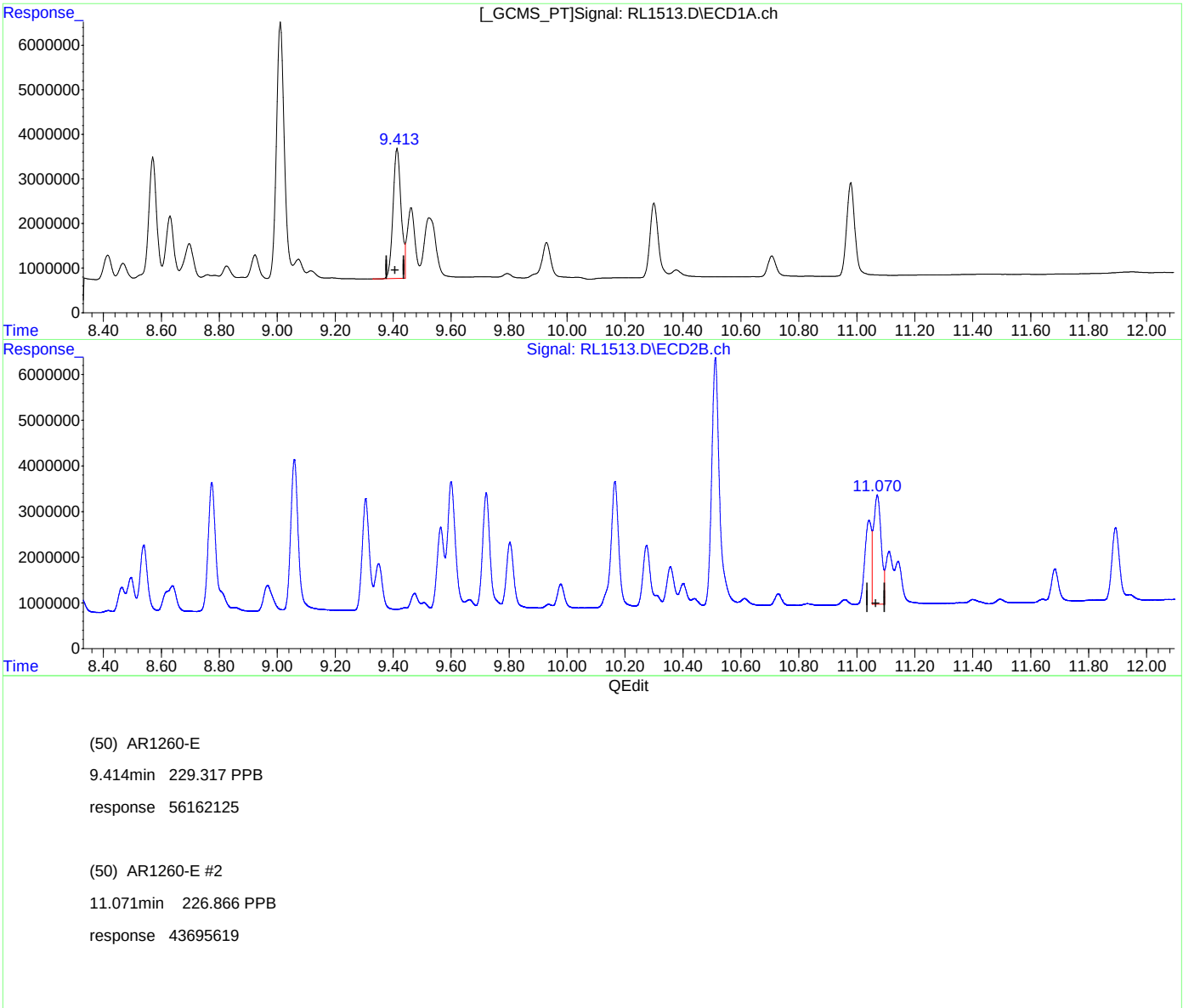
(+) = Expected Retention Time
pcbgcrl5.m Tue Oct 18 23:53:45 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:53:00 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.414min 229.317 PPB

response 56162125

(50) AR1260-E #2

11.071min 226.866 PPB

response 43695619

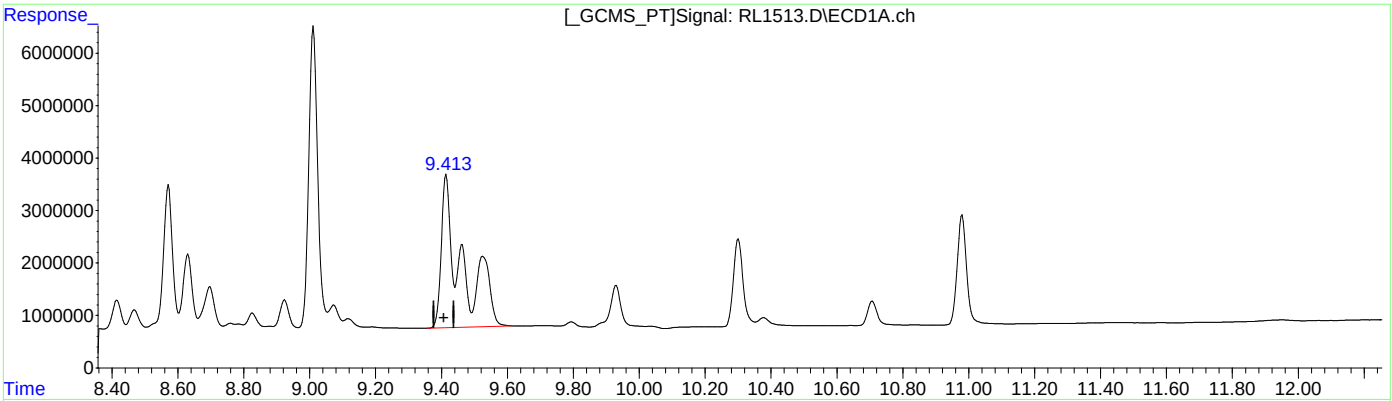
(+) = Expected Retention Time
pcbgcrl5.m Tue Oct 18 23:53:48 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\grl24\
Data File : RL1513.D
Signal(s) : Signal #1: ECD1A.ch Signal #2: ECD2B.ch
Acq On : 17 Oct 2022 06:58 pm
Operator : mahalial
Sample : cc5-500
Misc : op42474,grl24,1000.0,,,1,1
ALS Vial : 32 Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Oct 18 23:53:00 2022
Quant Method : C:\msdchem\1\data\grl24\pcbgcrl5.m
Quant Title :
QLast Update : Tue Oct 18 23:49:35 2022
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1ul
Signal #1 Phase : ZB-CLP1 Signal #2 Phase: ZB-CLP2
Signal #1 Info : 30m X 0.32mm(.32u Signal #2 Info : 30m X 0.32 mm (.25um)



(50) AR1260-E

9.413min 507.948 PPB m

response 124401598

(50) AR1260-E #2

11.070min 563.595 PPB m

response 108551296

(+) = Expected Retention Time
pcbgcrl5.m Tue Oct 18 23:54:01 2022

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99781.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 3:50 pm
Operator : thomasl
Sample : ic3675-25
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:18:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	8.988	892954	0.533 PPM
Spiked Amount 50.000		Recovery =	1.07%
7) S 5a-ANDROSTANE	9.465	875559	0.558 PPM
Spiked Amount 50.000		Recovery =	1.12%
Target Compounds			
1) H TPH-DRO	8.040	37258233	26.932 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.21

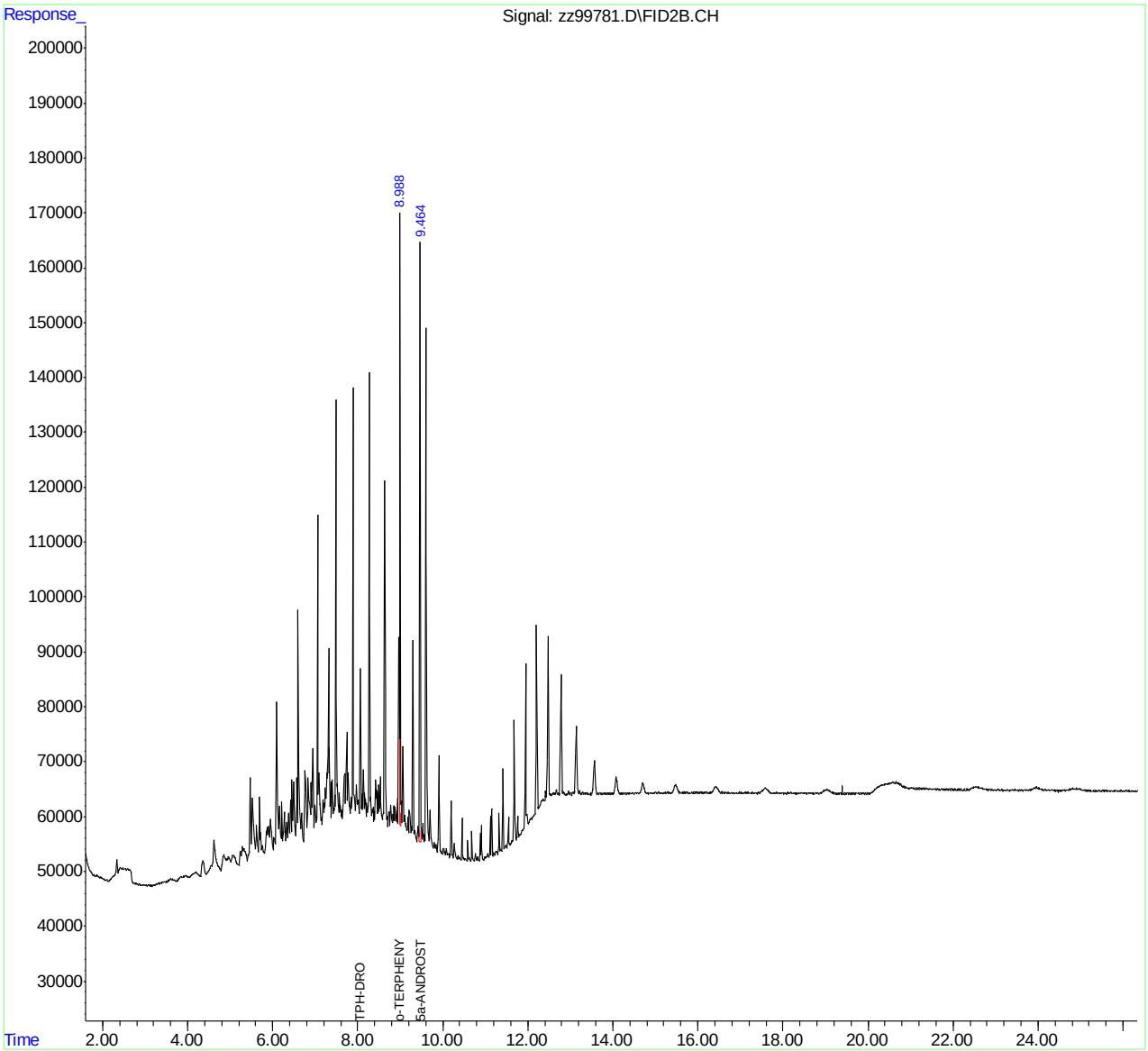
9

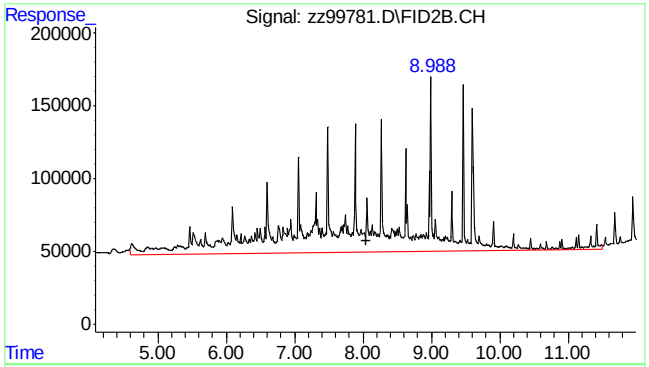
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99781.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 3:50 pm
Operator : thomasl
Sample : ic3675-25
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 7 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:18:36 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

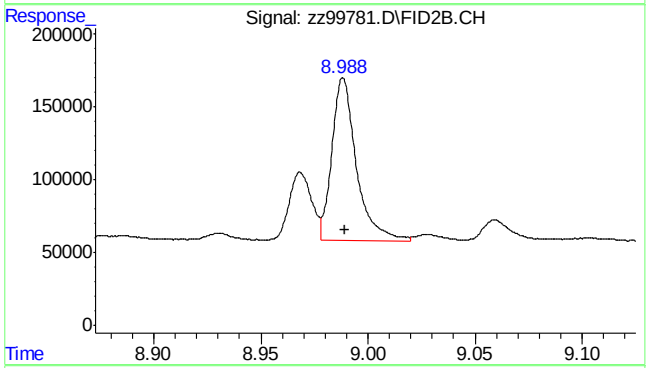
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





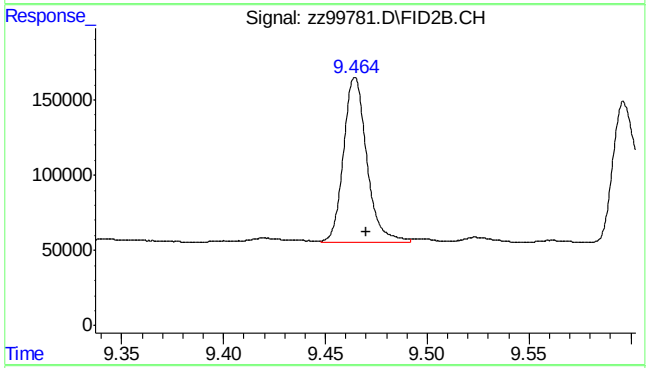
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 37258233
Conc: 26.93 PPM m



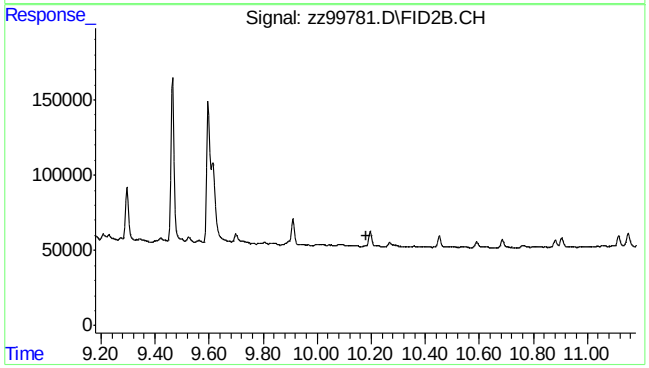
#6 o-TERPHENYL

R.T.: 8.988 min
Delta R.T.: 0.000 min
Response: 892954
Conc: 0.53 PPM



#7 5a-ANDROSTANE

R.T.: 9.465 min
Delta R.T.: -0.005 min
Response: 875559
Conc: 0.56 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 07/15/21 16:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99782.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:24 pm
Operator : thomasl
Sample : ic3675-50
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:20:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	8.987	1812851	1.082 PPM
Spiked Amount 50.000		Recovery =	2.16%
7) S 5a-ANDROSTANE	9.464	1713427	1.092 PPM m
Spiked Amount 50.000		Recovery =	2.18%
Target Compounds			
1) H TPH-DRO	8.040	73431835	53.080 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

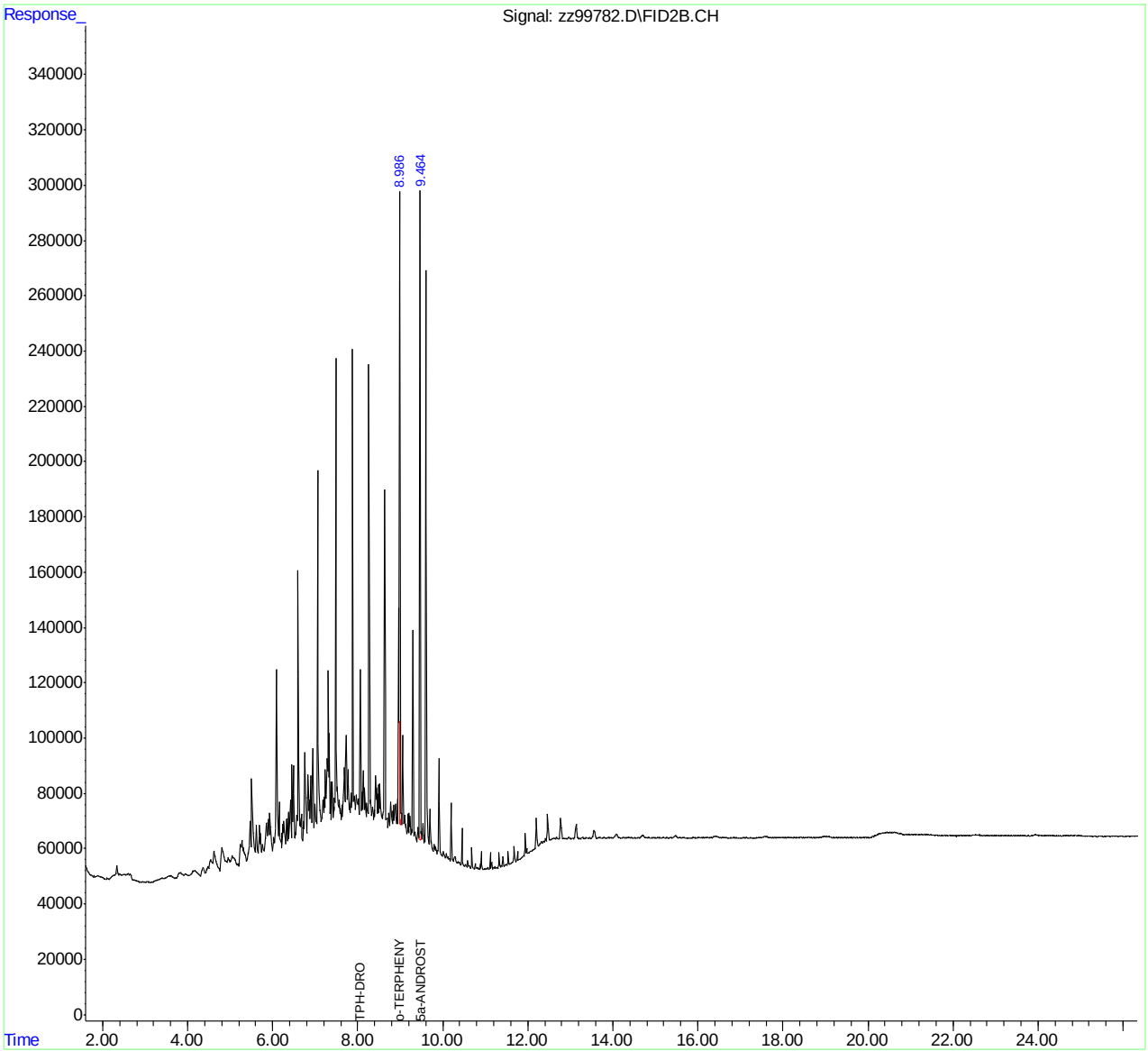
9.5.22
9

Quantitation Report (QT Reviewed)

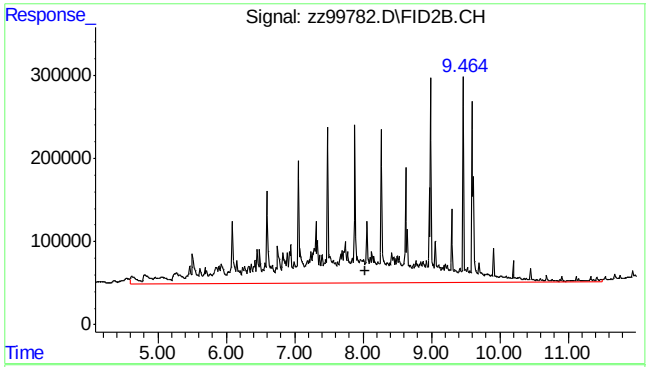
Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99782.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:24 pm
Operator : thomasl
Sample : ic3675-50
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:20:48 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

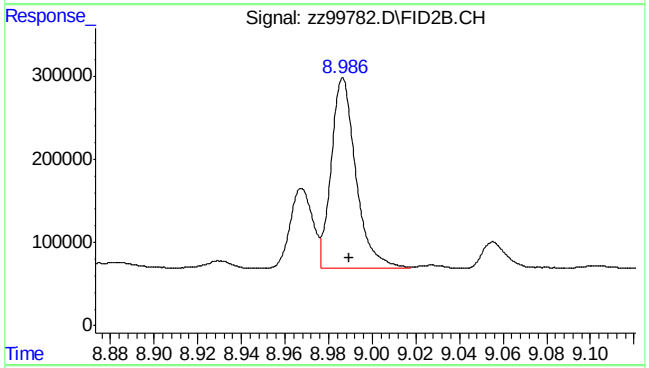


9.5.22
9



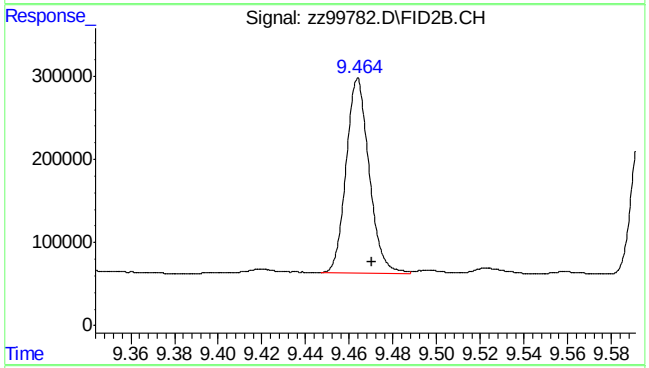
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 73431835
Conc: 53.08 PPM m



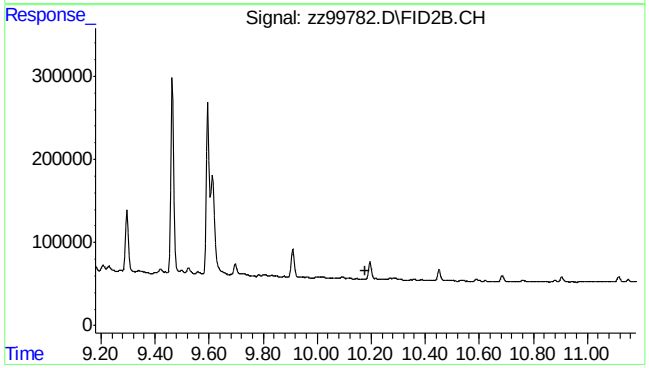
#6 o-TERPHENYL

R.T.: 8.987 min
Delta R.T.: -0.003 min
Response: 1812851
Conc: 1.08 PPM



#7 5a-ANDROSTANE

R.T.: 9.464 min
Delta R.T.: -0.006 min
Response: 1713427
Conc: 1.09 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: GZZ3675-IC3675
Lab FileID: ZZ99782.D
Injection Time: 07/13/21 16:24
Method: SW846 8015D
Analyst approved: 07/14/21 12:55 Thomas Lally
Supervisor approved: 07/15/21 16:26 Gwendolyn Burns

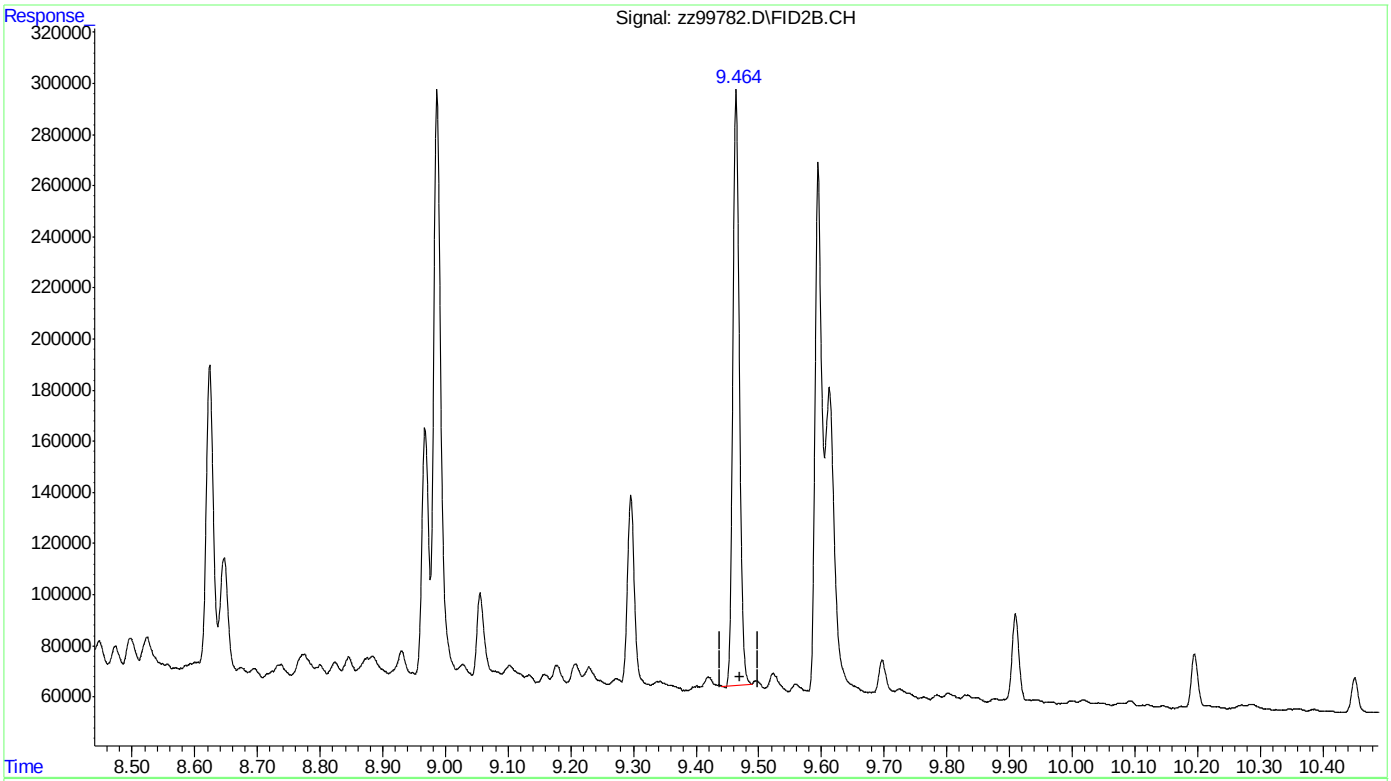
Parameter	CAS	Sig#	R.T. (min.)	Reason
5a-Androstane	438-22-2	1	9.46	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99782.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:24 pm
Operator : thomasl
Sample : ic3675-50
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:20:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.464min 1.069PPM

response 1677565

(+) = Expected Retention Time

DROZZ3675.M Wed Jul 14 10:20:31 2021 Page: 1

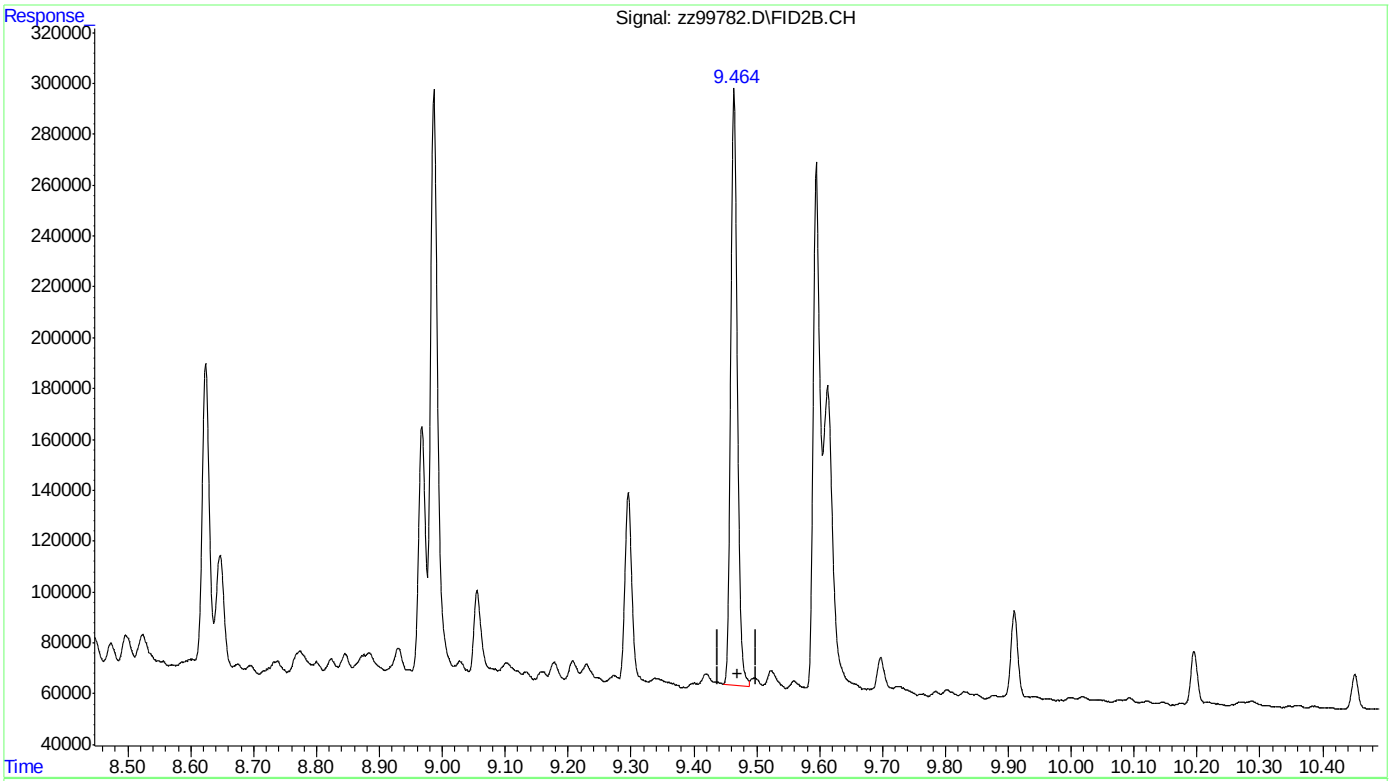
ZZ99782.D edits: 5a-ANDROSTANE

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99782.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:24 pm
Operator : thomasl
Sample : ic3675-50
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 8 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:20:08 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.464min 1.092PPM m

response 1713427

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99783.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:58 pm
Operator : thomasl
Sample : ic3675-100
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:22:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound		R.T.	Response	Conc Units
System Monitoring Compounds				
6) S	o-TERPHENYL	8.985	3537606	2.112 PPM
Spiked Amount	50.000		Recovery =	4.22%
7) S	5a-ANDROSTANE	9.463	3361230	2.142 PPM
Spiked Amount	50.000		Recovery =	4.28%
Target Compounds				
1) H	TPH-DRO	8.040	141663432	102.401 PPM

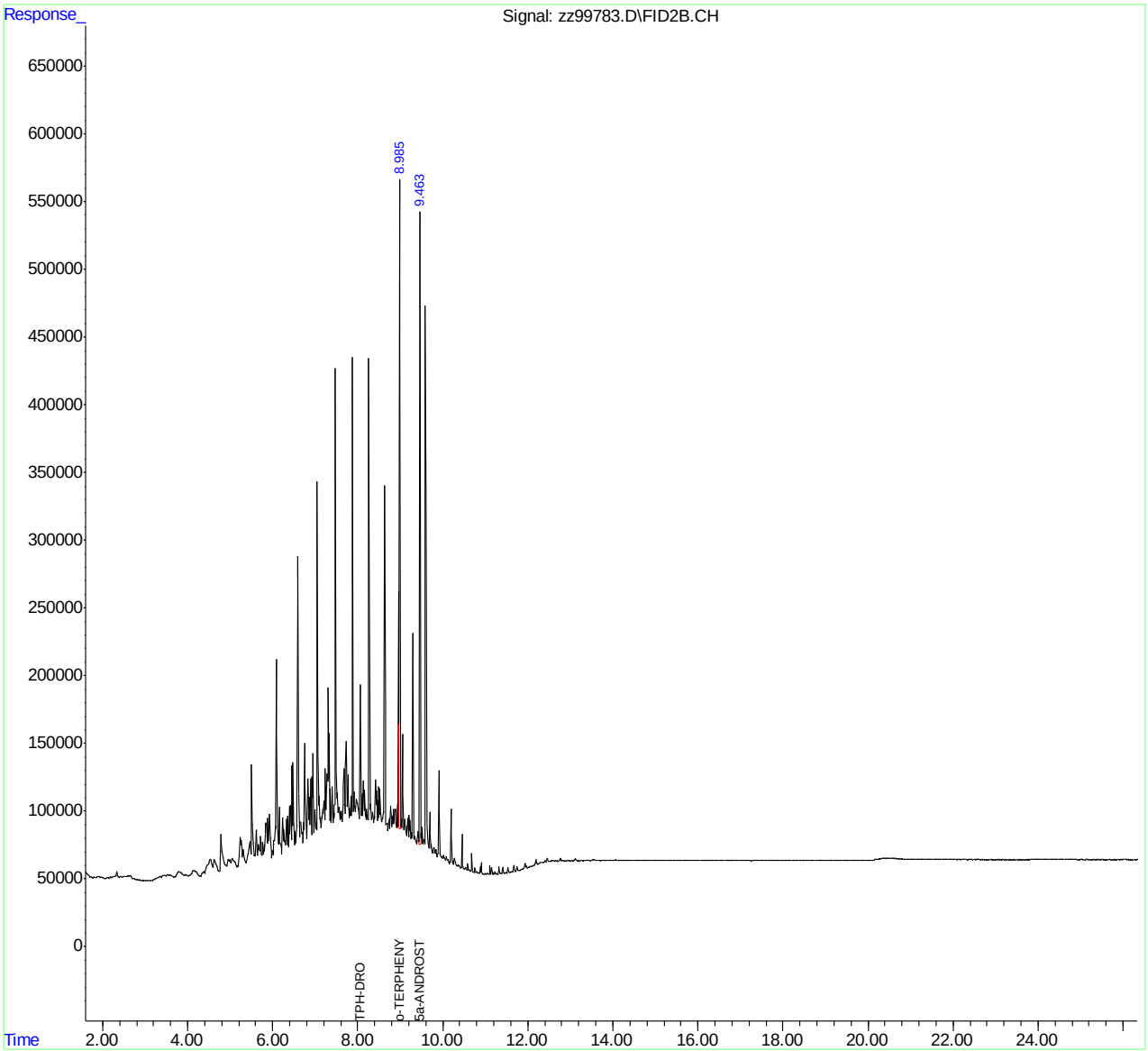
(f)=RT Delta > 1/2 Window (m)=manual int.

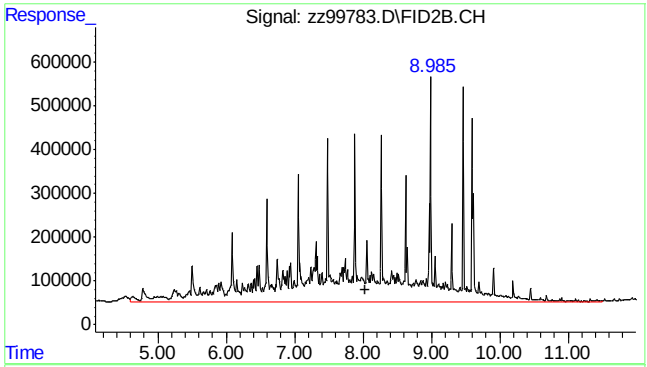
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99783.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 4:58 pm
Operator : thomasl
Sample : ic3675-100
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 9 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:22:56 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

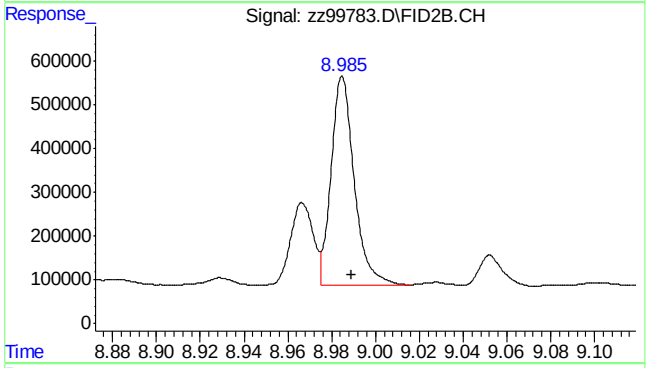
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





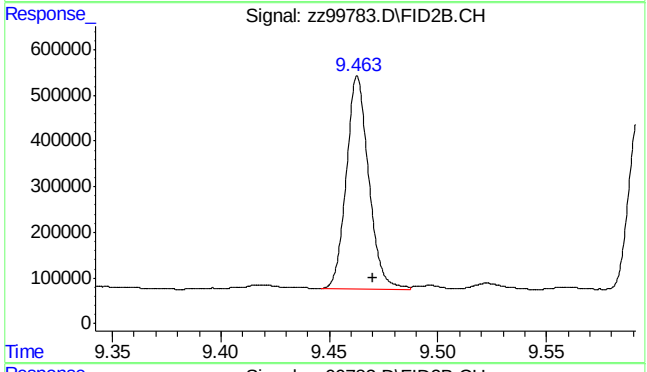
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 141663432
Conc: 102.40 PPM m



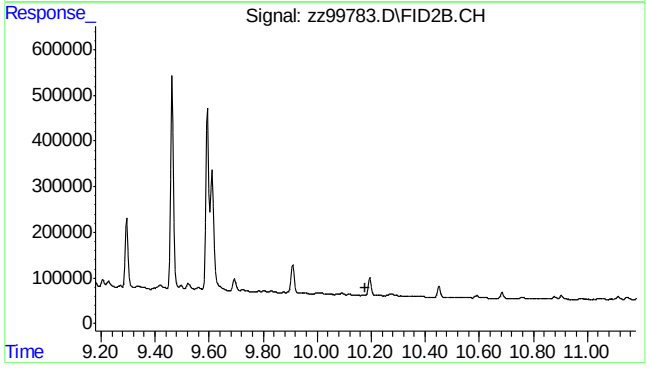
#6 o-TERPHENYL

R.T.: 8.985 min
Delta R.T.: -0.004 min
Response: 3537606
Conc: 2.11 PPM



#7 5a-ANDROSTANE

R.T.: 9.463 min
Delta R.T.: -0.007 min
Response: 3361230
Conc: 2.14 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integrations APPROVED (compounds with "m" flag)
Gwendolyn Burns 07/15/21 16:26

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99784.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 5:32 pm
Operator : thomasl
Sample : ic3675-250
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:25:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound		R.T.	Response	Conc	Units	
System Monitoring Compounds						
6) S	o-TERPHENYL	8.985	8843491	5.281	PPM	
Spiked Amount	50.000		Recovery =	10.56%		
7) S	5a-ANDROSTANE	9.464	8257022	5.262	PPM	m
Spiked Amount	50.000		Recovery =	10.52%		
Target Compounds						
1) H	TPH-DRO	8.040	355845275	257.222	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

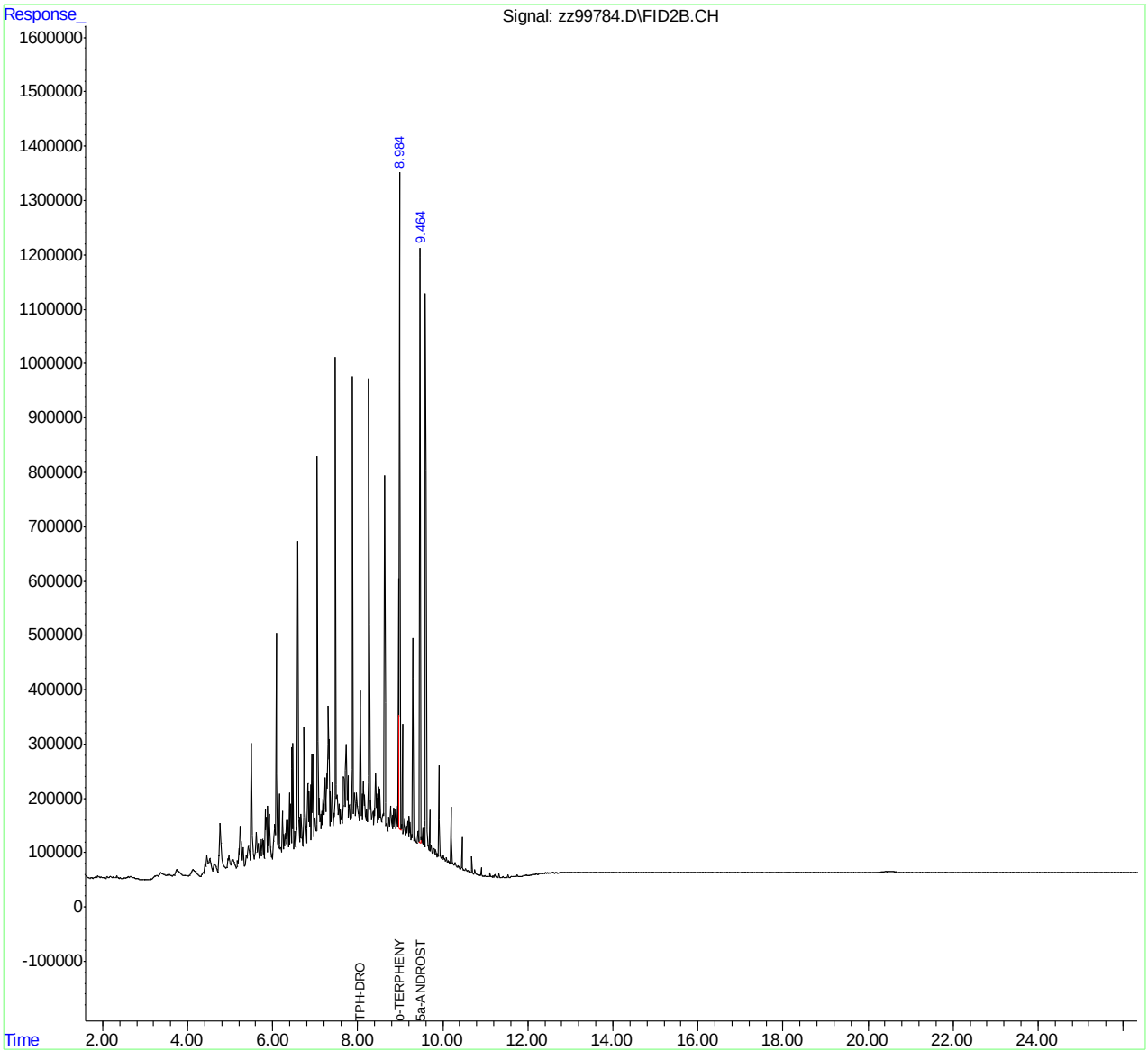
9.5.24
9

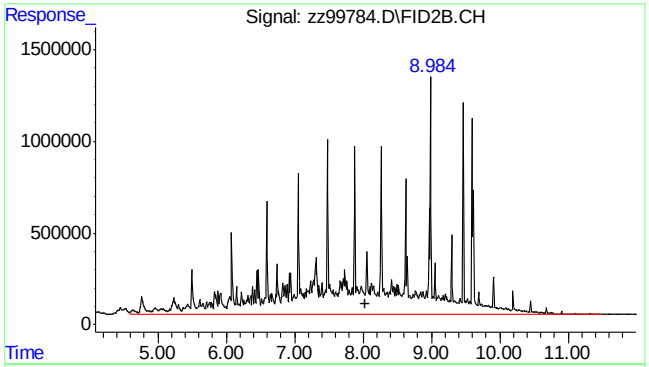
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99784.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 5:32 pm
Operator : thomasl
Sample : ic3675-250
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:25:20 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

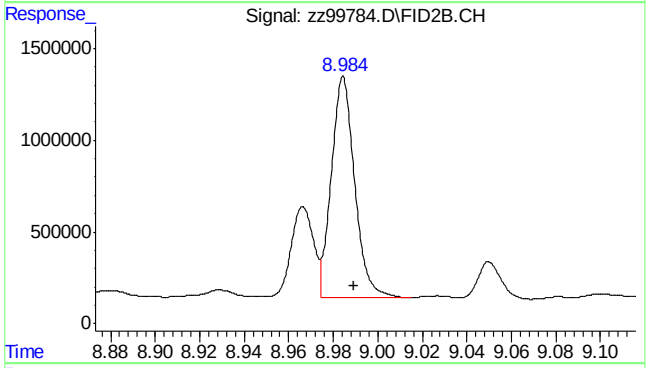
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





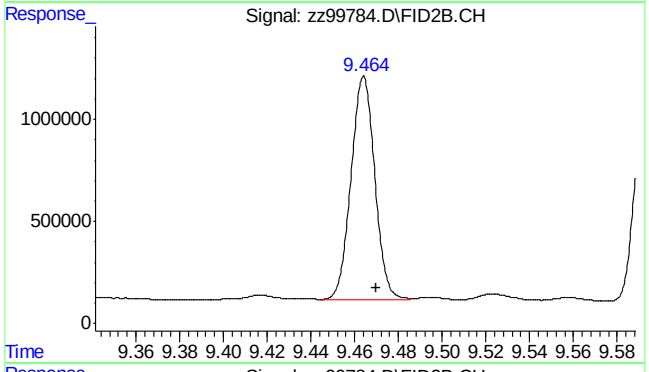
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 355845275
Conc: 257.22 PPM m



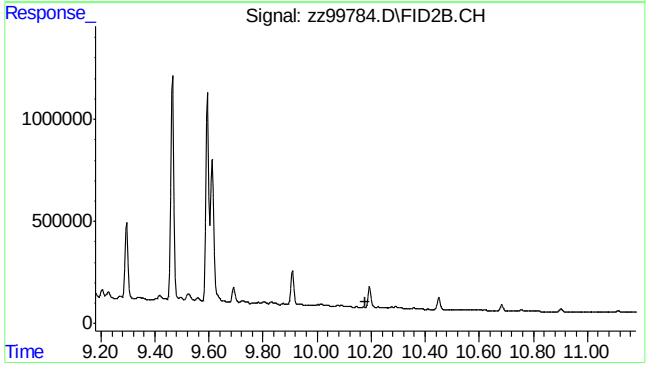
#6 o-TERPHENYL

R.T.: 8.985 min
Delta R.T.: -0.005 min
Response: 8843491
Conc: 5.28 PPM



#7 5a-ANDROSTANE

R.T.: 9.464 min
Delta R.T.: -0.006 min
Response: 8257022
Conc: 5.26 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number:	GZZ3675-IC3675	**Method:**	SW846 8015D
Lab FileID:	ZZ99784.D	**Analyst approved:**	07/14/21 12:55 Thomas Lally
Injection Time:	07/13/21 17:32	**Supervisor approved:**	07/15/21 16:26 Gwendolyn Burns

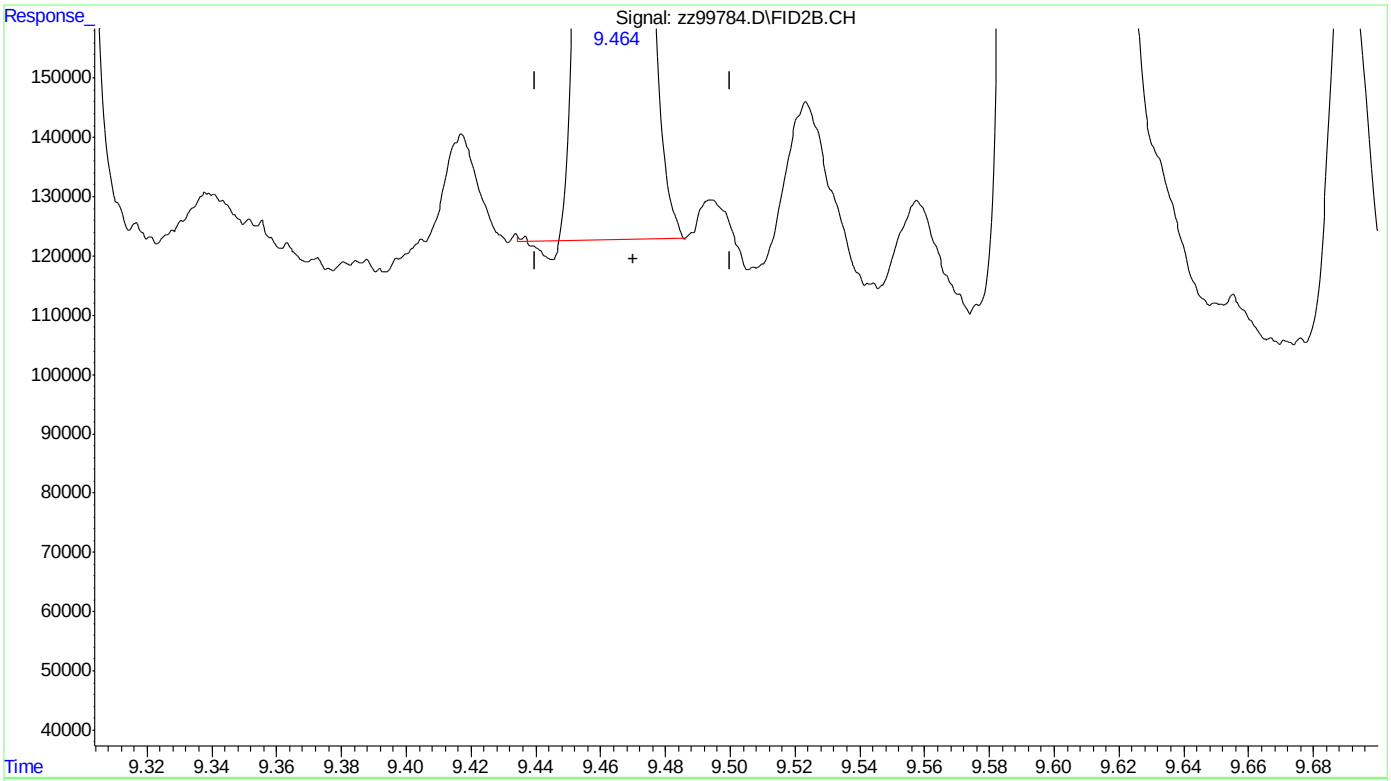
Parameter	CAS	Sig#	R.T. (min.)	Reason
5a-Androstane	438-22-2	1	9.46	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99784.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 5:32 pm
Operator : thomasl
Sample : ic3675-250
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:25:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.464min 5.183PPM

response 8133679

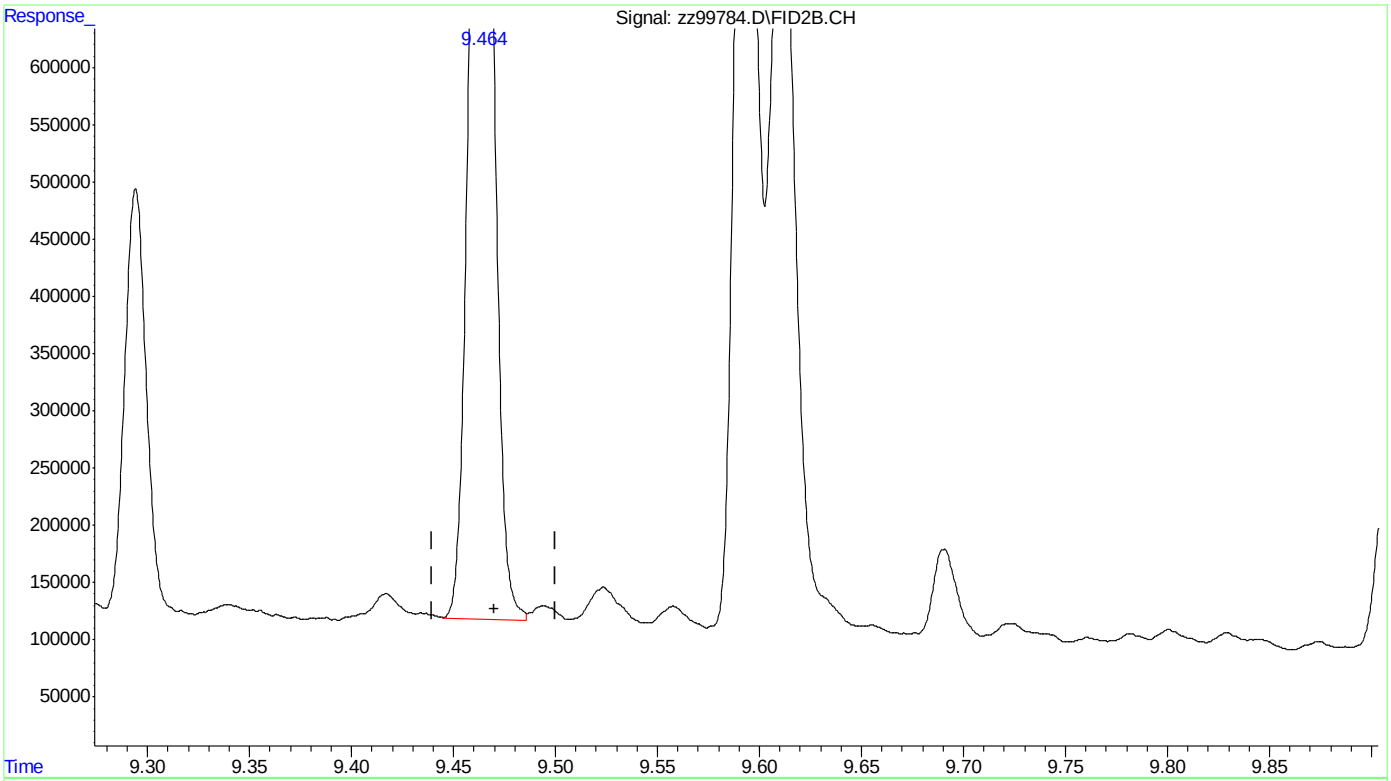
(+) = Expected Retention Time

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99784.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 5:32 pm
Operator : thomasl
Sample : ic3675-250
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 10 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:25:02 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.464min 5.262PPM m

response 8257022

(+) = Expected Retention Time

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99785.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 6:06 pm
Operator : thomasl
Sample : ic3675-500
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:26:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	8.985	17374067	10.374 PPM
Spiked Amount 50.000		Recovery =	20.75%
7) S 5a-ANDROSTANE	9.465	16226912	10.341 PPM
Spiked Amount 50.000		Recovery =	20.68%
Target Compounds			
1) H TPH-DRO	8.040	708618024	512.223 PPM

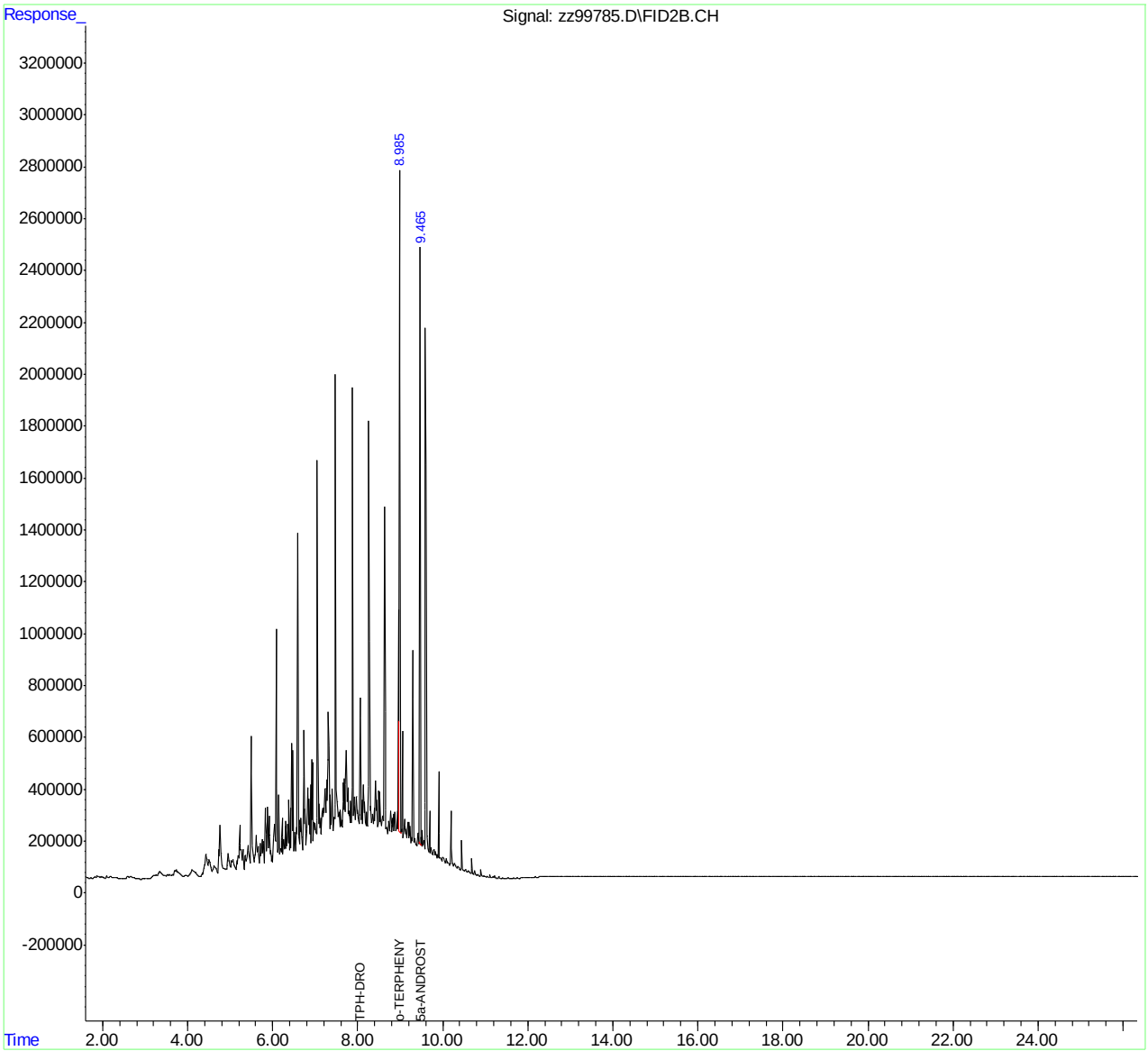
(f)=RT Delta > 1/2 Window (m)=manual int.

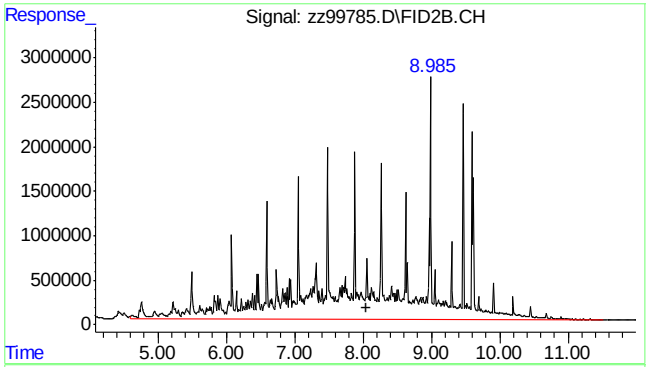
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99785.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 6:06 pm
Operator : thomasl
Sample : ic3675-500
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 11 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:26:41 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

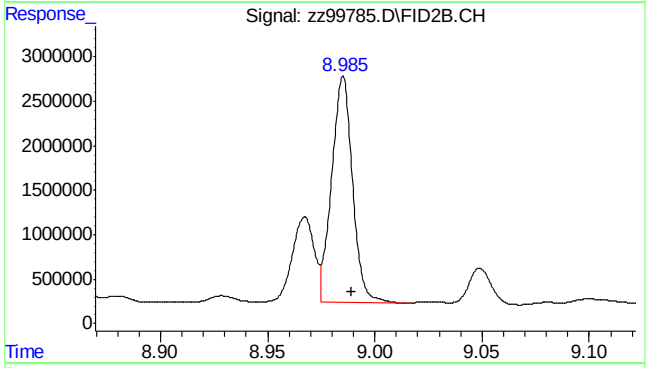
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





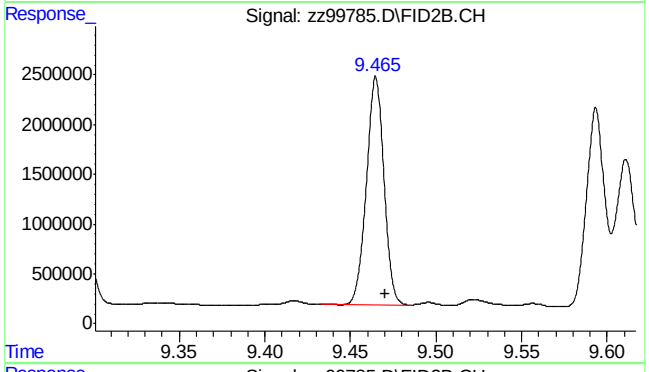
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 708618024
Conc: 512.22 PPM m



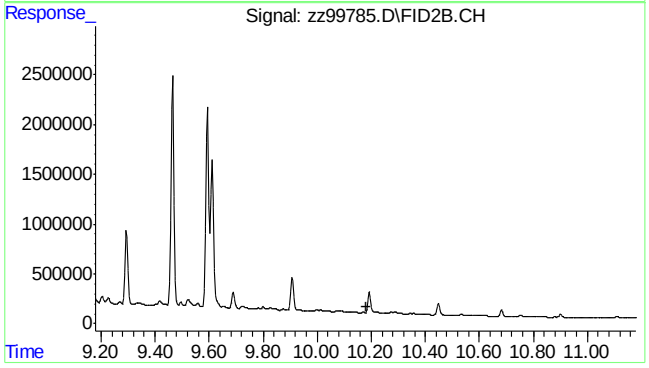
#6 o-TERPHENYL

R.T.: 8.985 min
Delta R.T.: -0.004 min
Response: 17374067
Conc: 10.37 PPM



#7 5a-ANDROSTANE

R.T.: 9.465 min
Delta R.T.: -0.005 min
Response: 16226912
Conc: 10.34 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99786.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 6:40 pm
Operator : thomasl
Sample : icc3675-1000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:27:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	8.988	34863119	20.817 PPM
Spiked Amount 50.000		Recovery =	41.63%
7) S 5a-ANDROSTANE	9.468	32860583	20.941 PPM
Spiked Amount 50.000		Recovery =	41.88%
Target Compounds			
1) H TPH-DRO	8.040	1430471990	1034.015 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.26

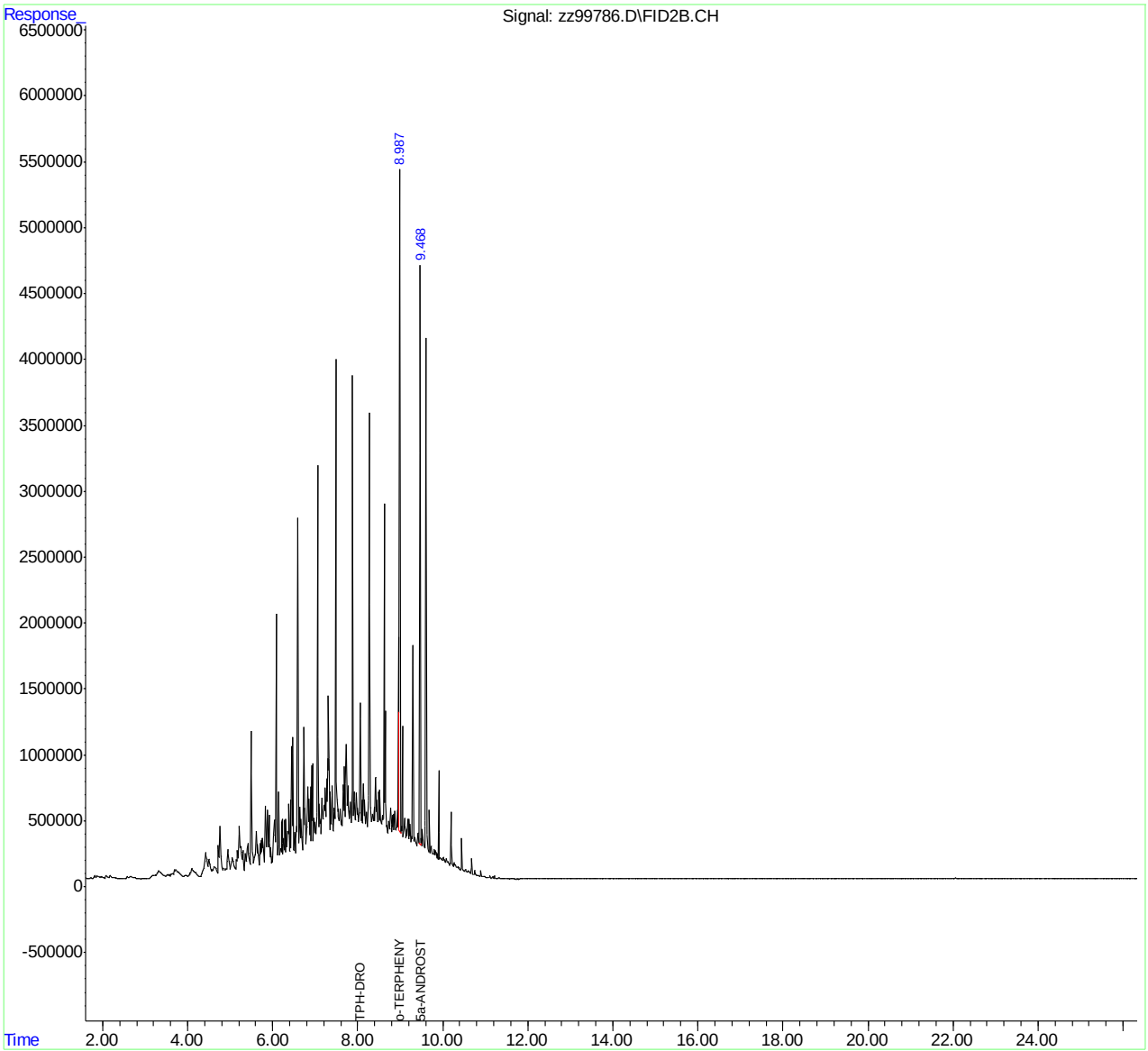
9

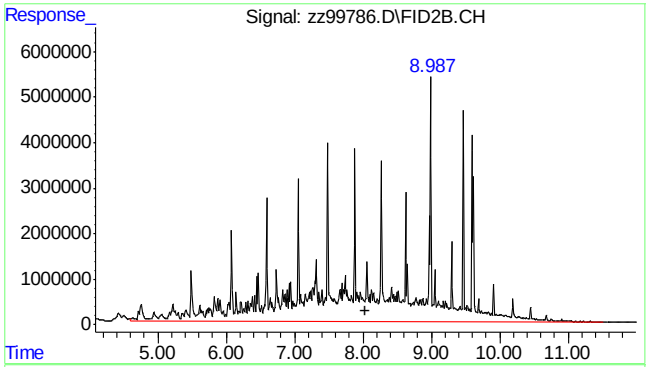
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99786.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 6:40 pm
Operator : thomasl
Sample : icc3675-1000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 12 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:27:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

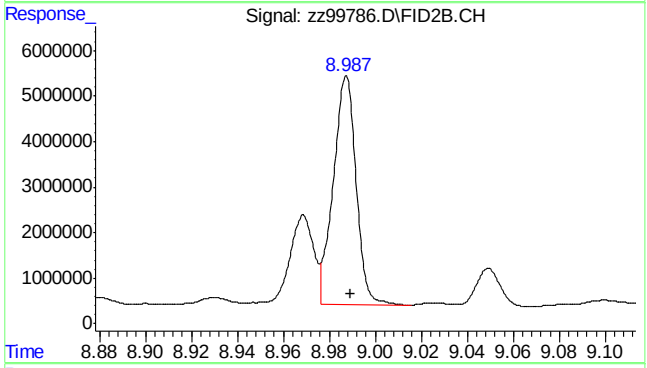
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





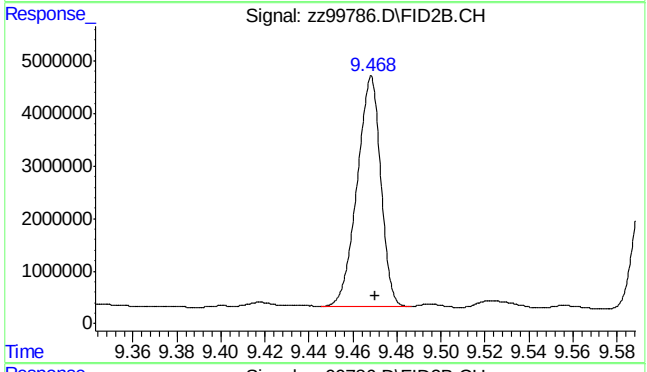
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 1430471990
Conc: 1034.01 PPM m



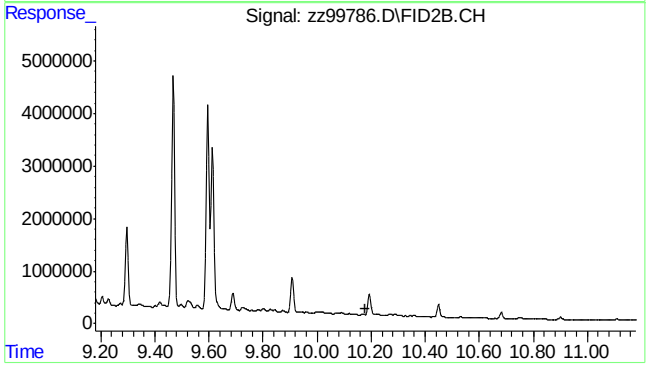
#6 o-TERPHENYL

R.T.: 8.988 min
Delta R.T.: -0.002 min
Response: 34863119
Conc: 20.82 PPM



#7 5a-ANDROSTANE

R.T.: 9.468 min
Delta R.T.: -0.002 min
Response: 32860583
Conc: 20.94 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99787.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 7:14 pm
Operator : thomasl
Sample : ic3675-2500
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:29:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound		R.T.	Response	Conc Units
System Monitoring Compounds				
6) S	o-TERPHENYL	8.994	83393119	49.796 PPM
Spiked Amount	50.000		Recovery =	99.59%
7) S	5a-ANDROSTANE	9.475	80133800	51.066 PPM
Spiked Amount	50.000		Recovery =	102.13%
Target Compounds				
1) H	TPH-DRO	8.040	3505959314	2534.278 PPM

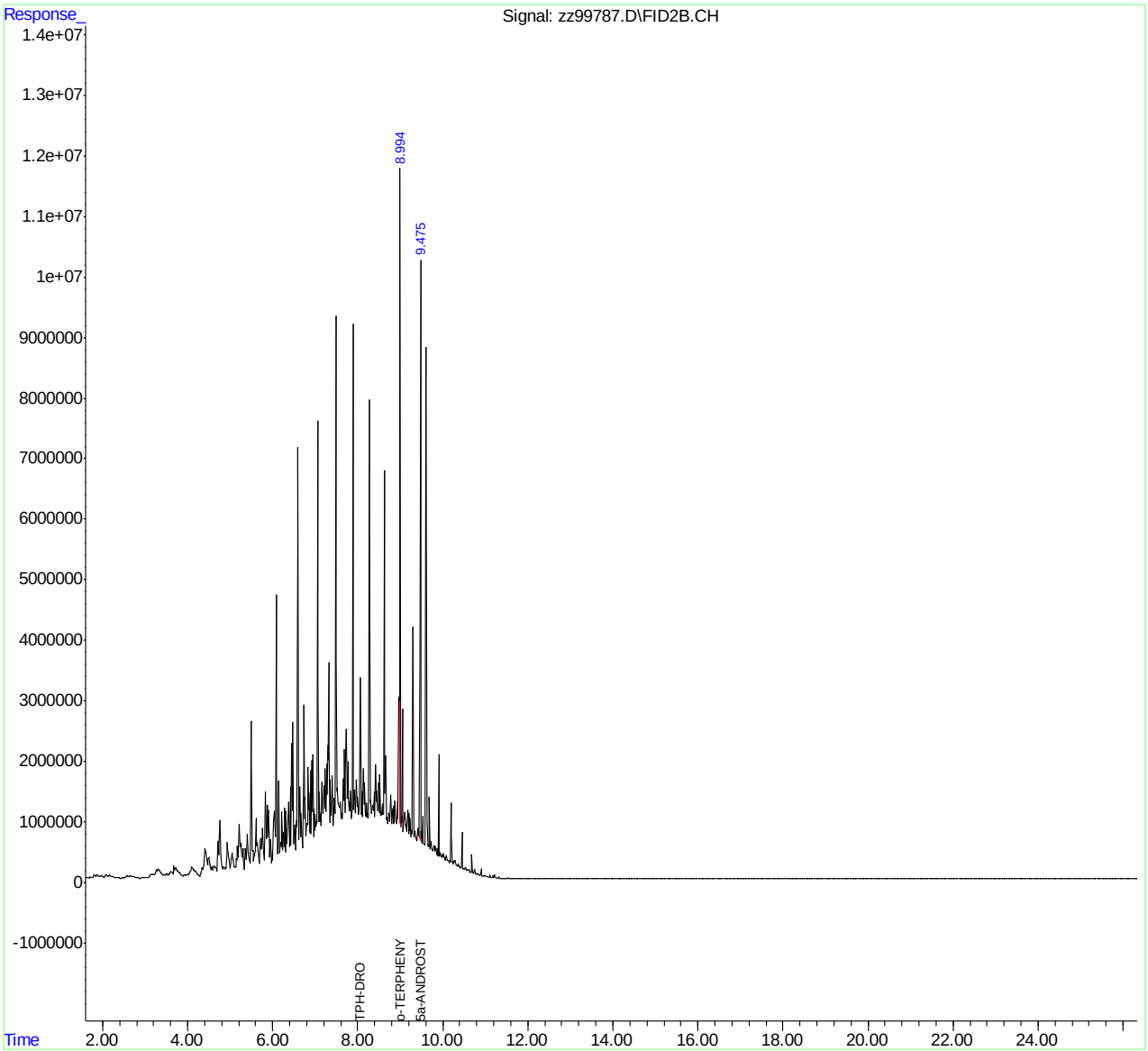
(f)=RT Delta > 1/2 Window (m)=manual int.

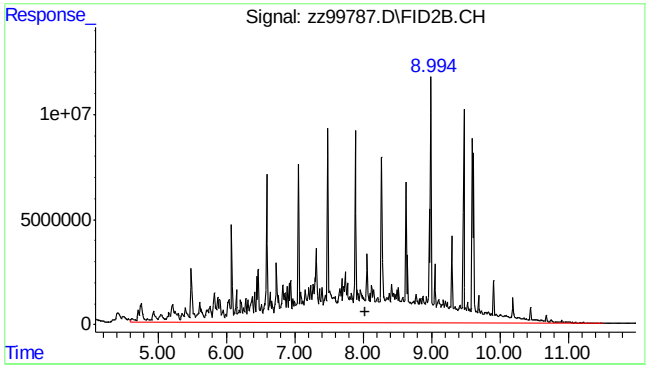
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99787.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 7:14 pm
Operator : thomasl
Sample : ic3675-2500
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 13 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:29:00 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:12:33 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

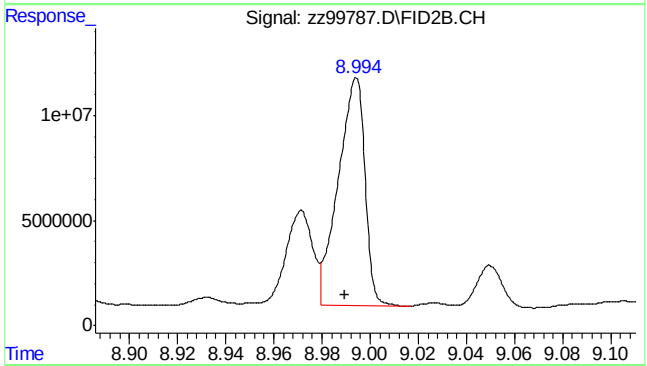
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





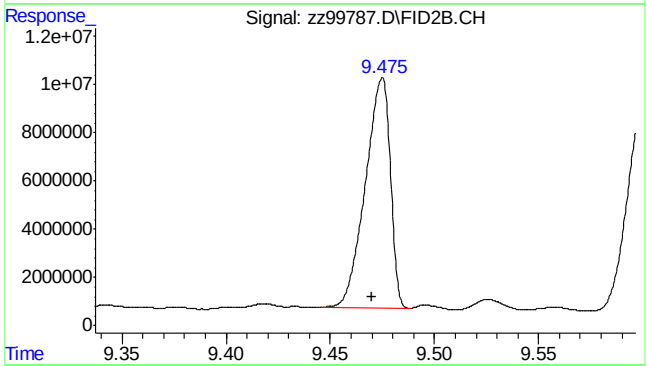
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 3505959314
Conc: 2534.28 PPM m



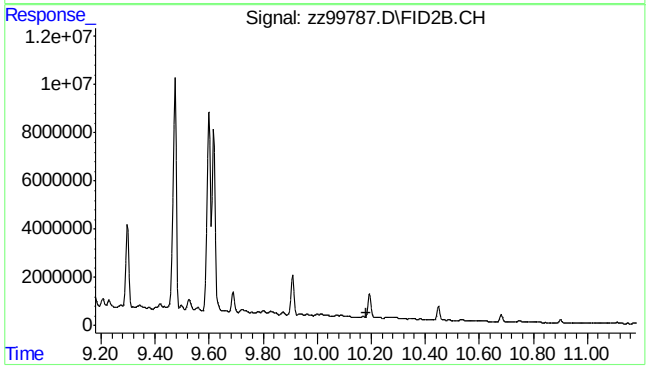
#6 o-TERPHENYL

R.T.: 8.994 min
Delta R.T.: 0.005 min
Response: 83393119
Conc: 49.80 PPM



#7 5a-ANDROSTANE

R.T.: 9.475 min
Delta R.T.: 0.005 min
Response: 80133800
Conc: 51.07 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99788.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 7:48 pm
Operator : thomasl
Sample : ic3675-5000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:30:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	9.005	168761071	100.771 PPM
Spiked Amount 50.000		Recovery	= 201.54%
7) S 5a-ANDROSTANE	9.486	172854262	110.153 PPM
Spiked Amount 50.000		Recovery	= 220.31%
Target Compounds			
1) H TPH-DRO	8.040	7206772393	5209.405 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

9.5.28

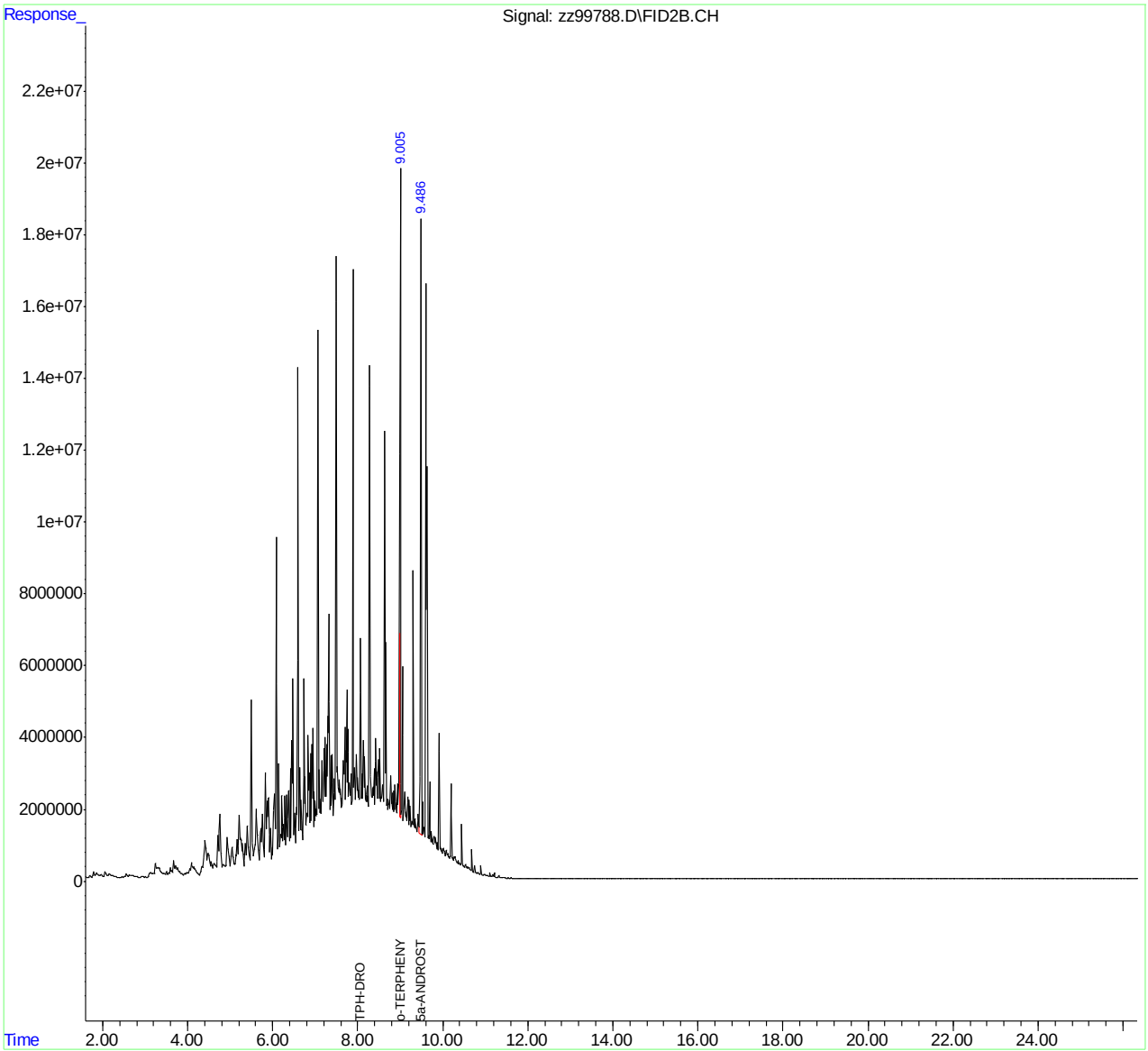
9

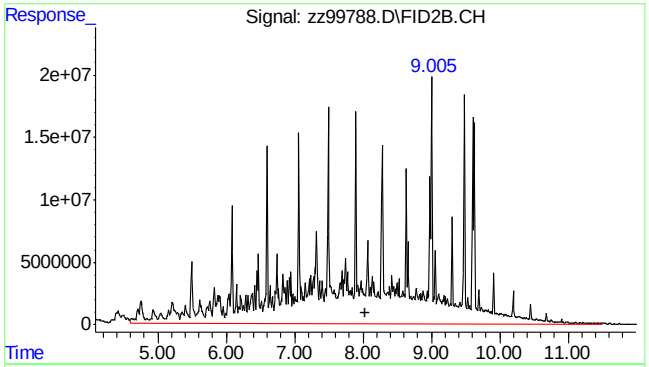
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99788.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 7:48 pm
Operator : thomasl
Sample : ic3675-5000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 14 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:30:50 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

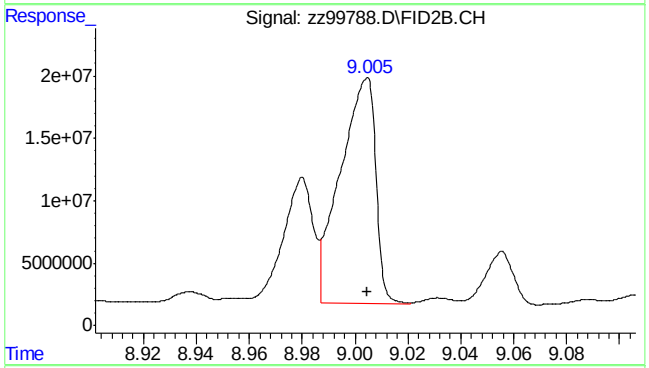
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





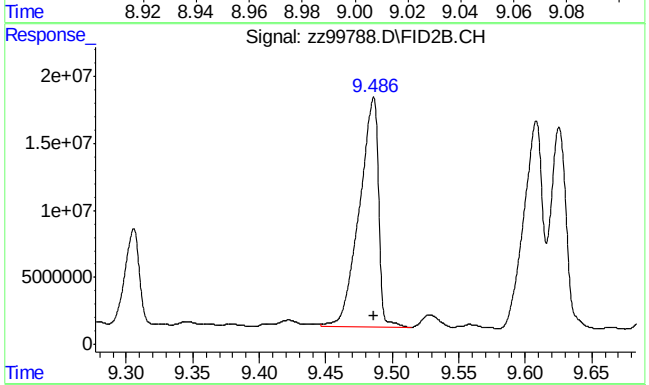
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 7206772393
Conc: 5209.40 PPM m



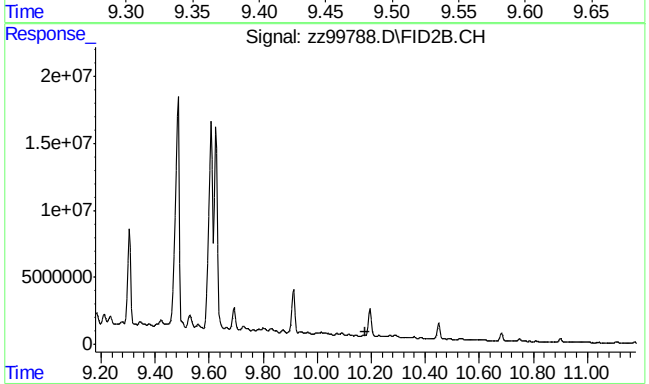
#6 o-TERPHENYL

R.T.: 9.005 min
Delta R.T.: 0.000 min
Response: 168761071
Conc: 100.77 PPM



#7 5a-ANDROSTANE

R.T.: 9.486 min
Delta R.T.: 0.000 min
Response: 172854262
Conc: 110.15 PPM



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

9.5.28
9

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99789.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 8:21 pm
Operator : thomasl
Sample : ic3675-10000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:31:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
1) H TPH-DRO	8.040	13411080863	9694.180	PPM

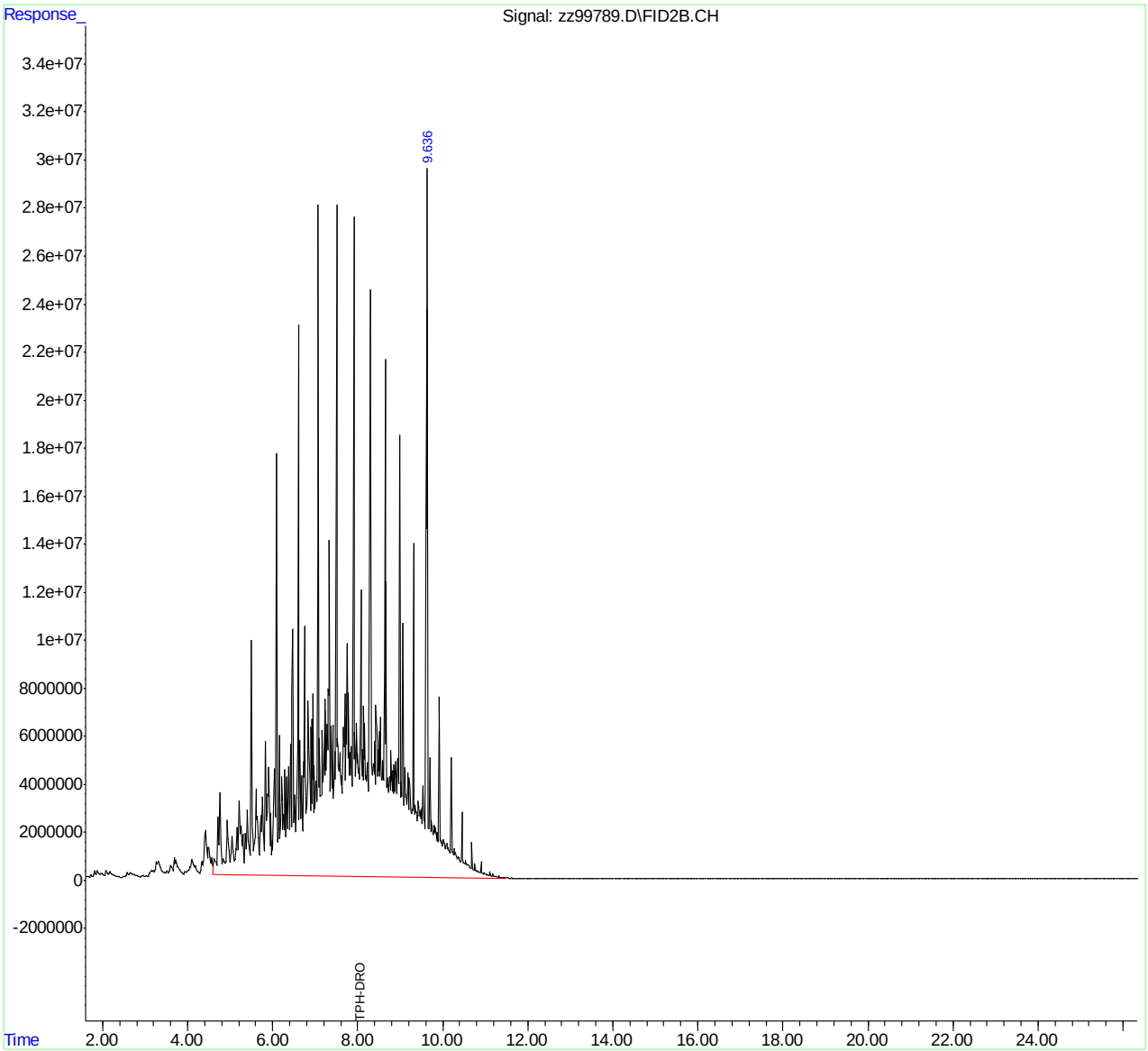
(f)=RT Delta > 1/2 Window (m)=manual int.

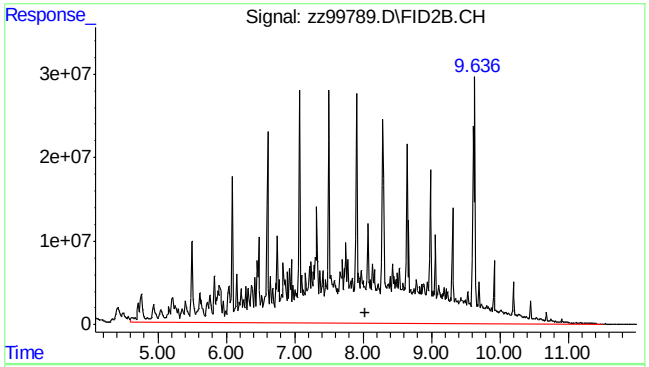
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99789.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 8:21 pm
Operator : thomasl
Sample : ic3675-10000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 15 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:31:12 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

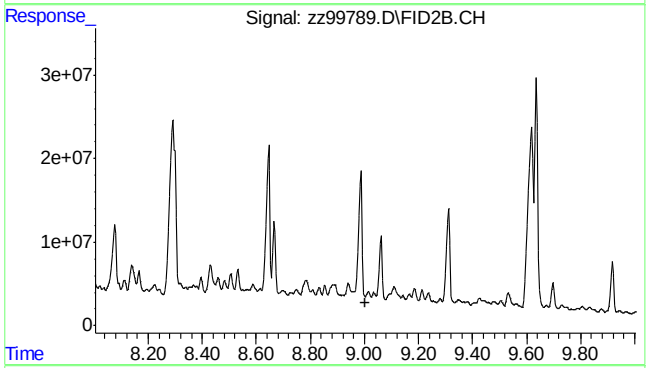
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





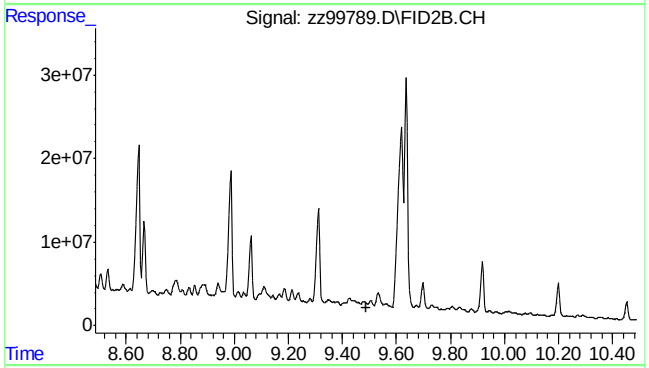
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 13411080863
Conc: 9694.18 PPM m



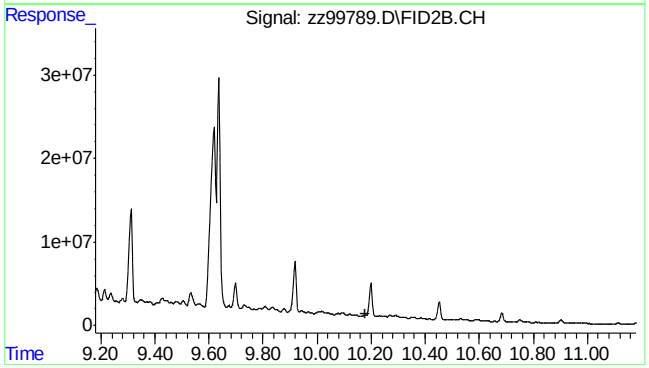
#6 o-TERPHENYL

R.T.: 0.000 min
Exp R.T. : 9.005 min
Response: 0
Conc: N.D.



#7 5a-ANDROSTANE

R.T.: 0.000 min
Exp R.T. : 9.486 min
Response: 0
Conc: N.D.



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99790.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 8:55 pm
Operator : thomasl
Sample : ic3675-50000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:31:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units
System Monitoring Compounds				
Target Compounds				
1) H TPH-DRO	8.040	72116831964	52129.546	PPM

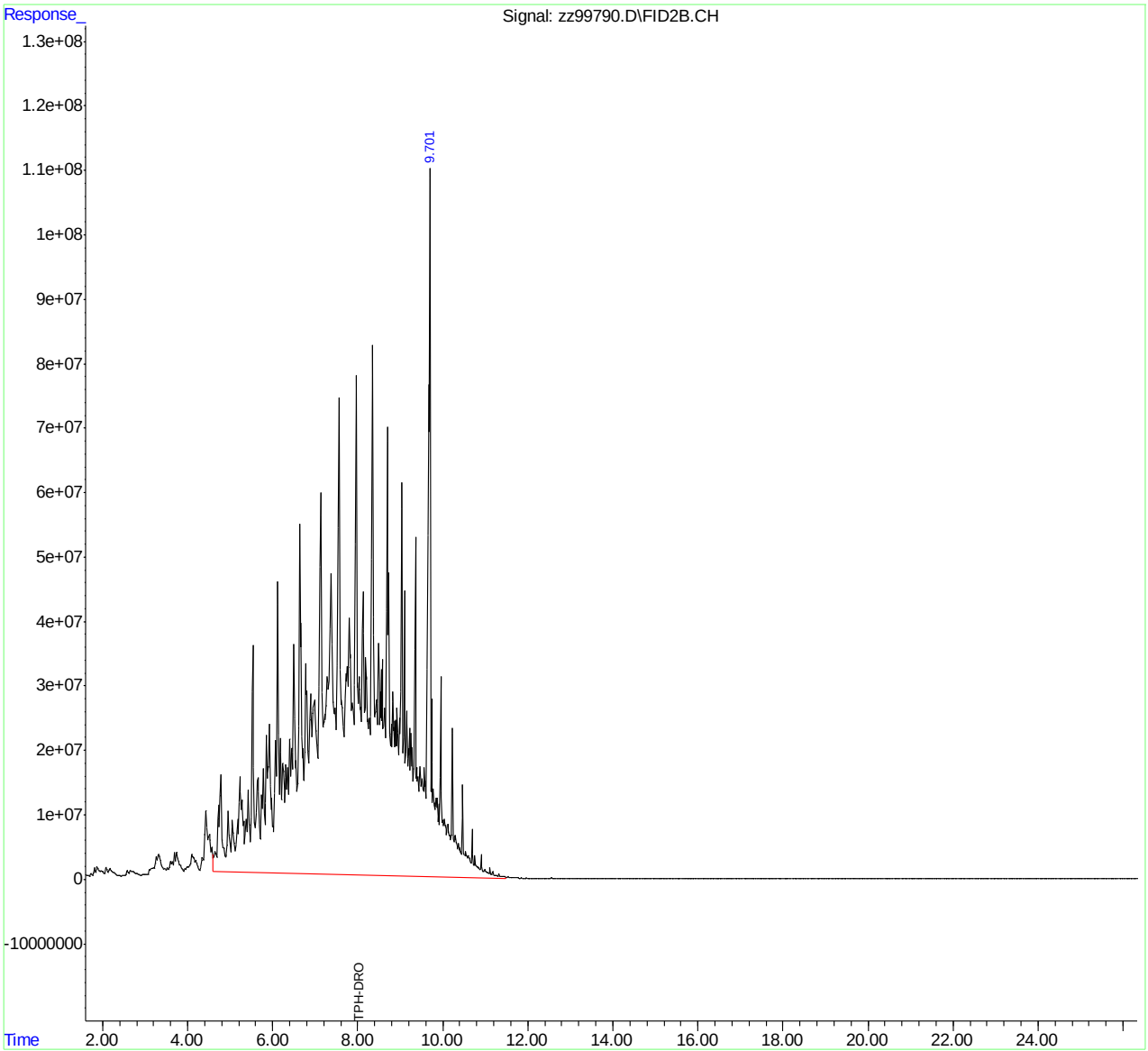
(f)=RT Delta > 1/2 Window (m)=manual int.

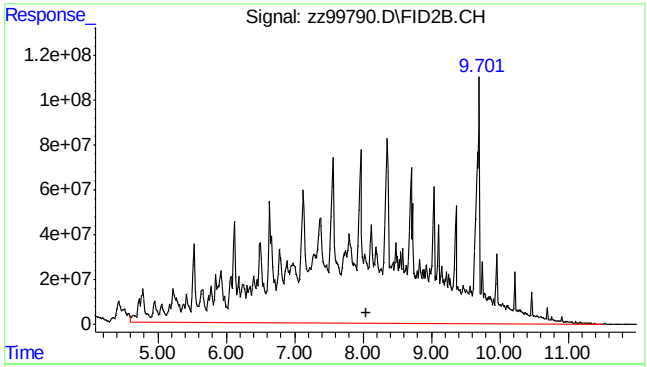
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99790.D
Signal(s) : FID2B.CH
Acq On : 13 Jul 2021 8:55 pm
Operator : thomasl
Sample : ic3675-50000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 16 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 10:31:33 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 10:30:42 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

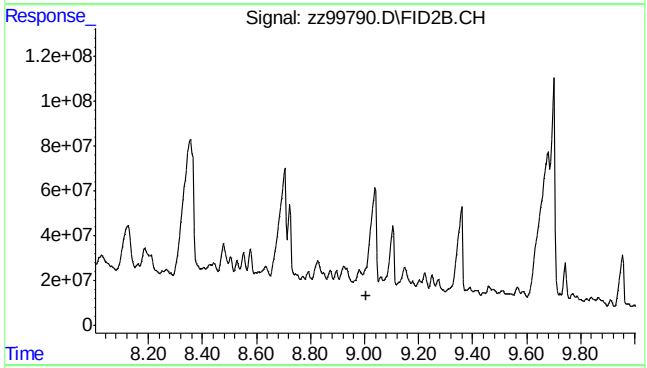
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





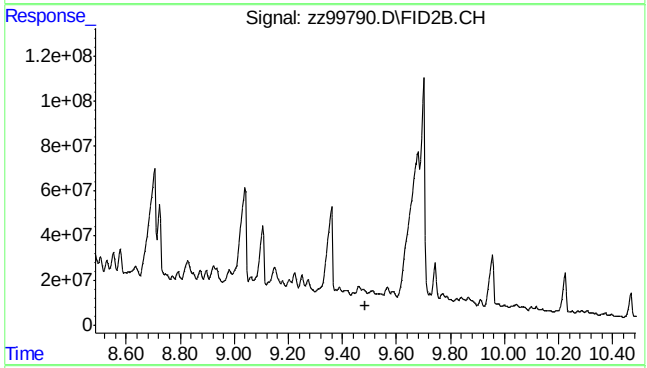
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 72116831964
Conc: 52129.55 PPM m



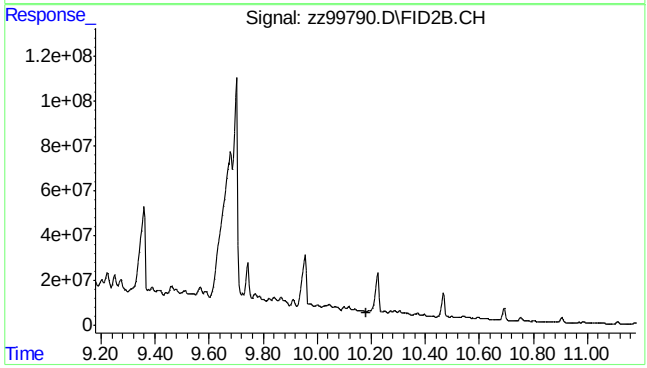
#6 o-TERPHENYL

R.T.: 0.000 min
Exp R.T. : 9.005 min
Response: 0
Conc: N.D.



#7 5a-ANDROSTANE

R.T.: 0.000 min
Exp R.T. : 9.486 min
Response: 0
Conc: N.D.



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99792.D
Signal(s) : FID2B.CH
Acq On : 14 Jul 2021 10:03 am
Operator : thomasl
Sample : icv3675-1000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 12:52:46 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 12:52:24 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
Target Compounds			
1) H TPH-DRO	8.040	1220836159	855.294 PPM

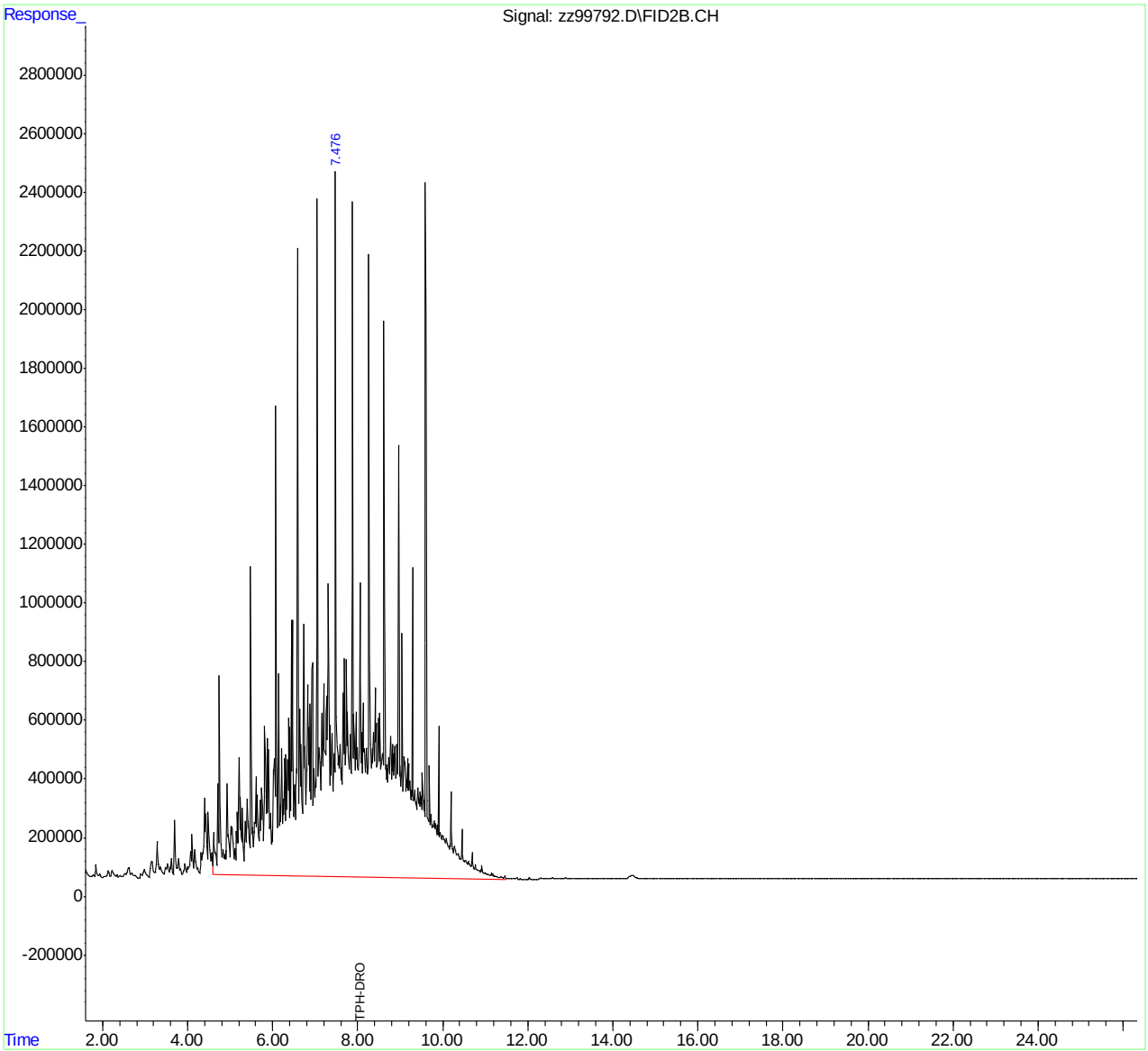
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

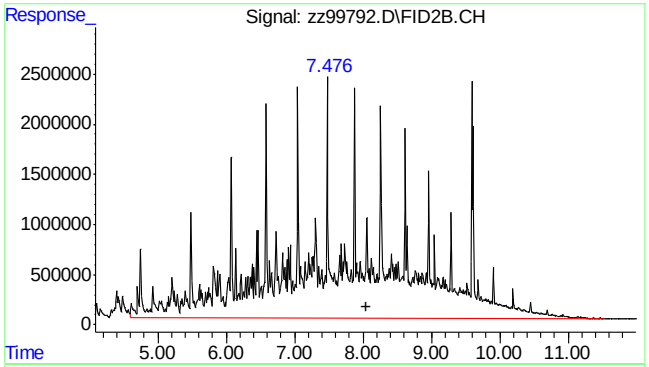
Data Path : C:\msdchem\1\DATA\GZZ3675\
Data File : zz99792.D
Signal(s) : FID2B.CH
Acq On : 14 Jul 2021 10:03 am
Operator : thomasl
Sample : icv3675-1000
Misc : op34260,gzz3675,320,,,1,1
ALS Vial : 17 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Jul 14 12:52:46 2021
Quant Method : C:\MSDCHEM\1\METHODS\DROZZ3675.M
Quant Title : GCTPHS
QLast Update : Wed Jul 14 12:52:24 2021
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

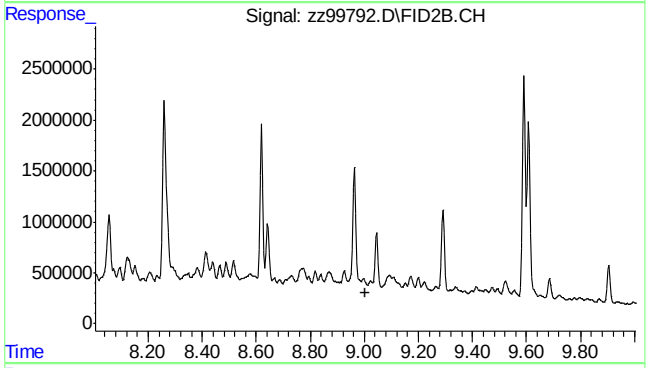


DROZZ3675.M Thu Jul 15 16:18:31 2021 Page: 2



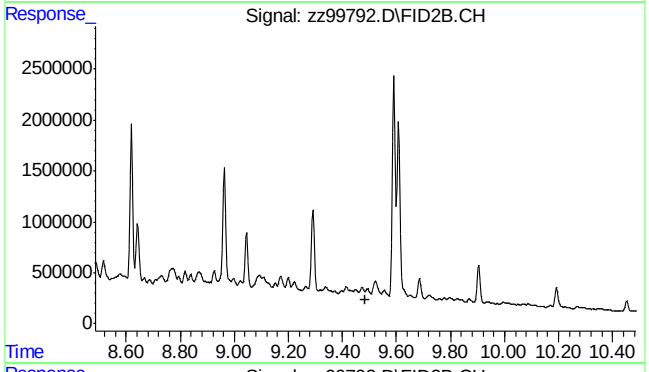
#1 TPH-DRO

R.T.: 8.040 min
Delta R.T.: 0.000 min
Response: 1220836159
Conc: 855.29 PPM m



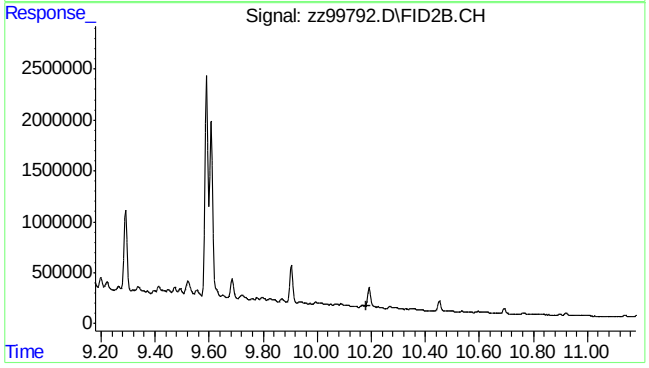
#6 o-TERPHENYL

R.T.: 0.000 min
Exp R.T. : 9.005 min
Response: 0
Conc: N.D.



#7 5a-ANDROSTANE

R.T.: 0.000 min
Exp R.T. : 9.486 min
Response: 0
Conc: N.D.



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:29:32 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc Units
System Monitoring Compounds			
6) S o-TERPHENYL	8.815	14995897	8.586 PPM m
Spiked Amount 50.000		Recovery = 17.17%	
7) S 5a-ANDROSTANE	9.265	16014730	9.566 PPM m
Spiked Amount 50.000		Recovery = 19.13%	
Target Compounds			
1) H TPH-DRO	7.830	712067680	498.861 PPM

(f)=RT Delta > 1/2 Window (m)=manual int.

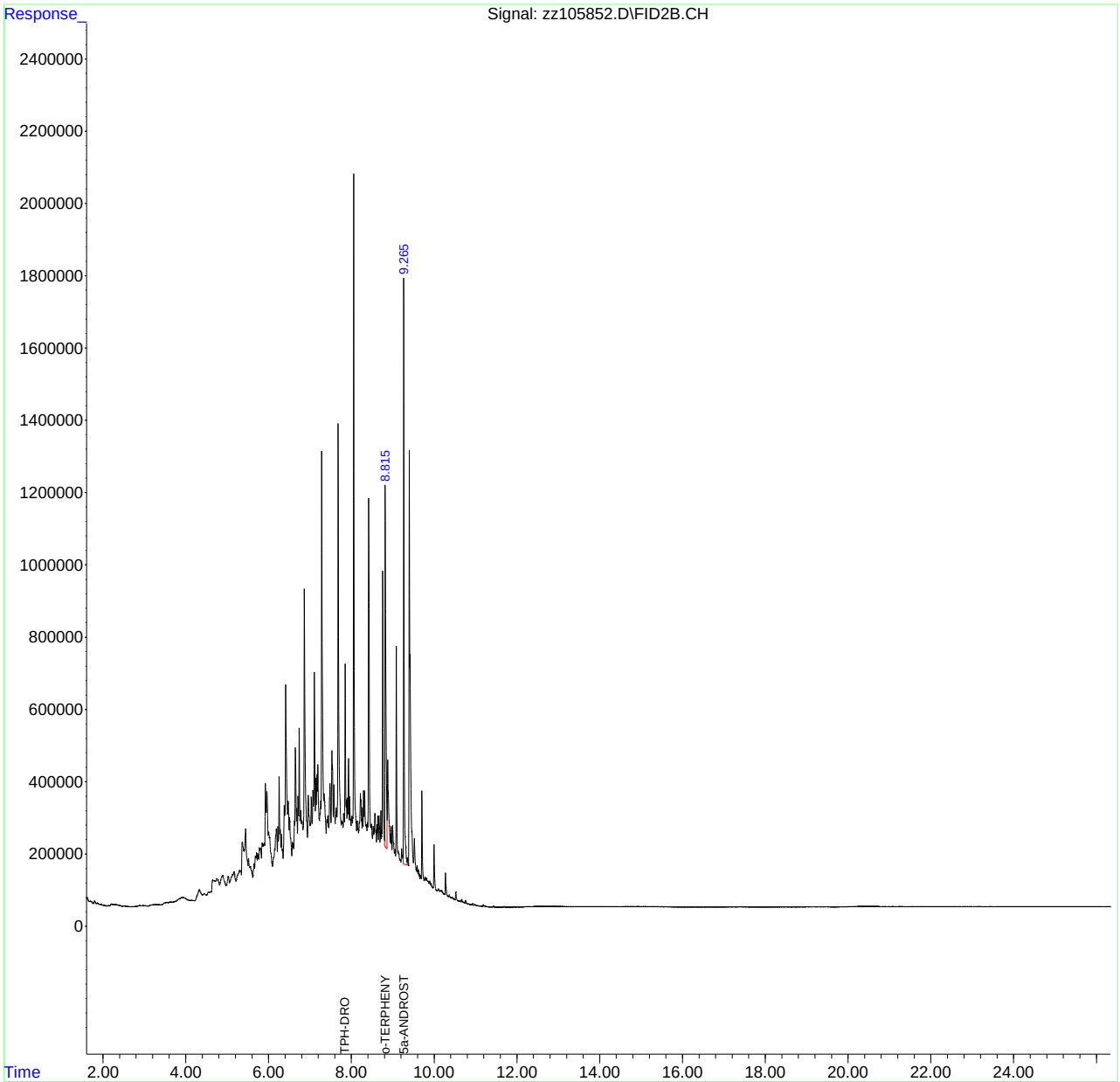
9.5.32
9

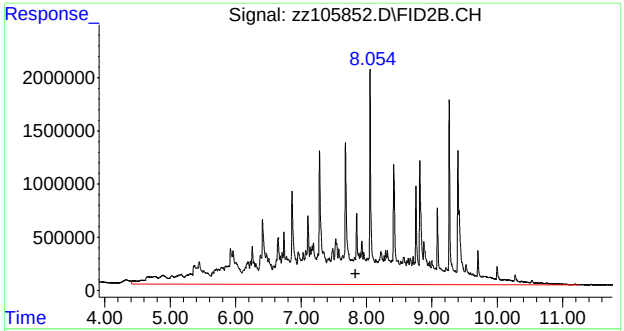
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:29:32 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

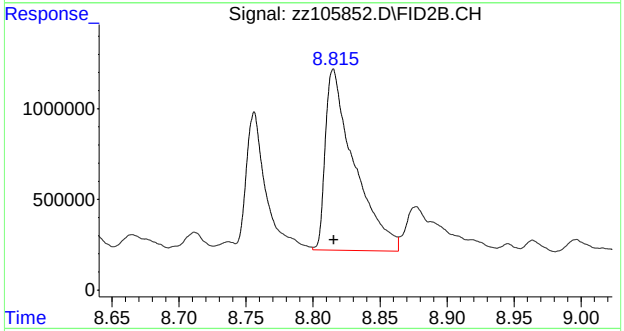
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





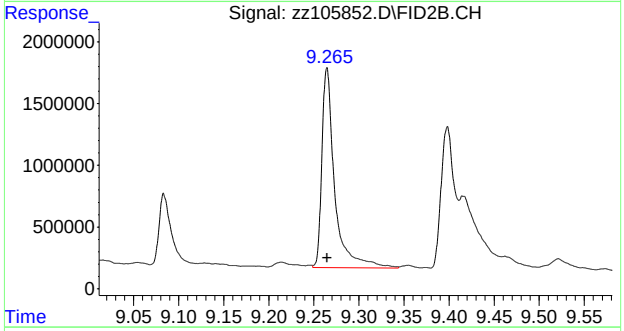
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 712067680
Conc: 498.86 PPM



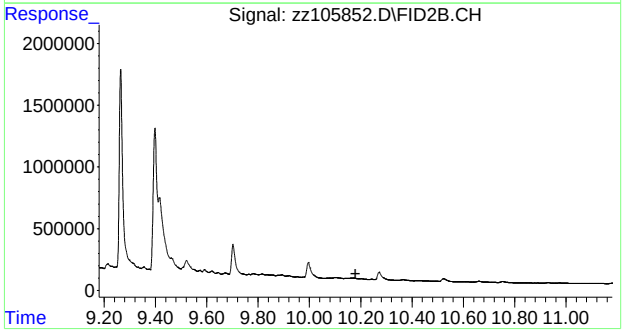
#6 o-TERPHENYL

R.T.: 8.815 min
Delta R.T.: 0.000 min
Response: 14995897
Conc: 8.59 PPM m



#7 5a-ANDROSTANE

R.T.: 9.265 min
Delta R.T.: 0.000 min
Response: 16014730
Conc: 9.57 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: GZZ3912-CC3675
Lab FileID: ZZ105852.D
Injection Time: 10/16/22 11:46
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

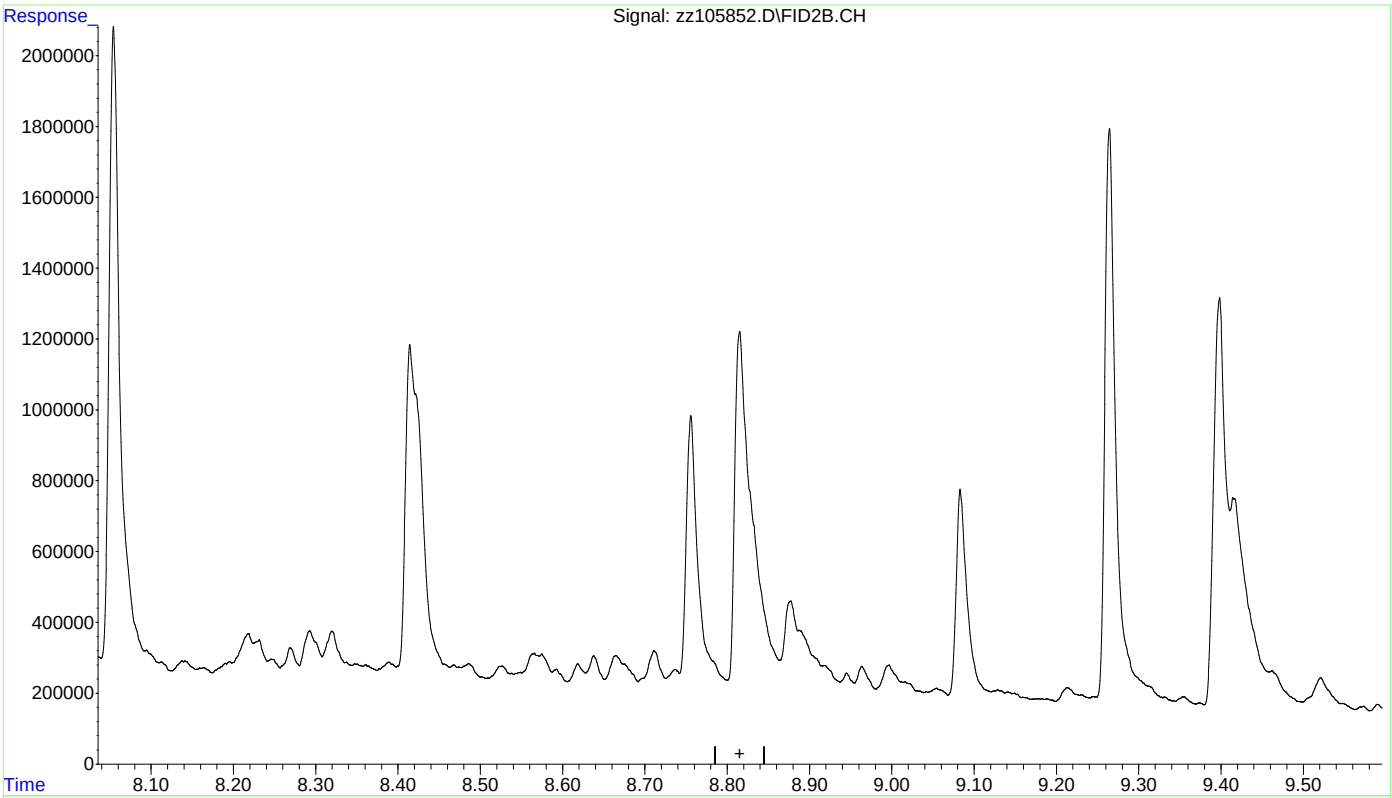
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.82	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:27:54 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.815min 0.000 PPM

response 0

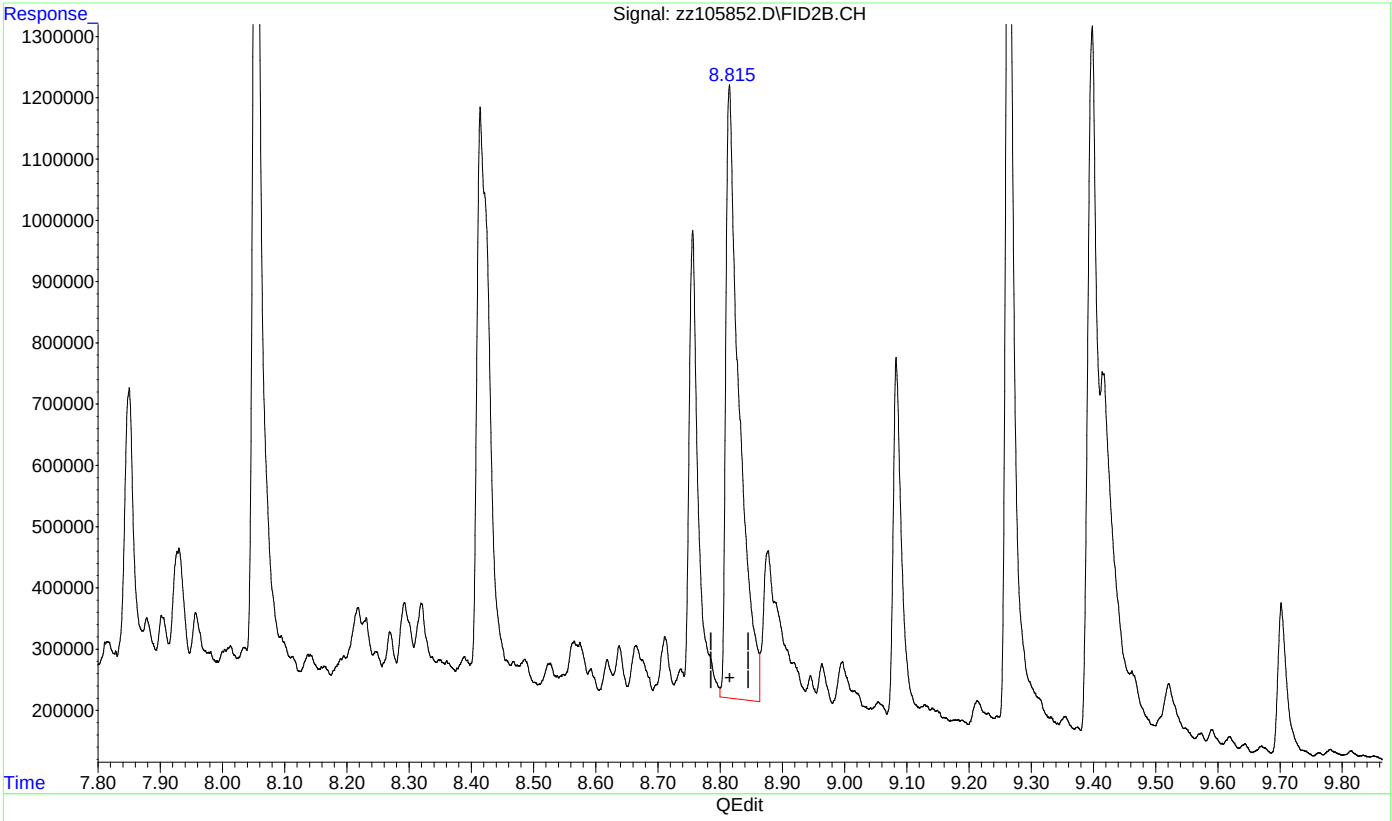
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:28:58 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:27:54 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.815min 8.586 PPM m

response 14995897

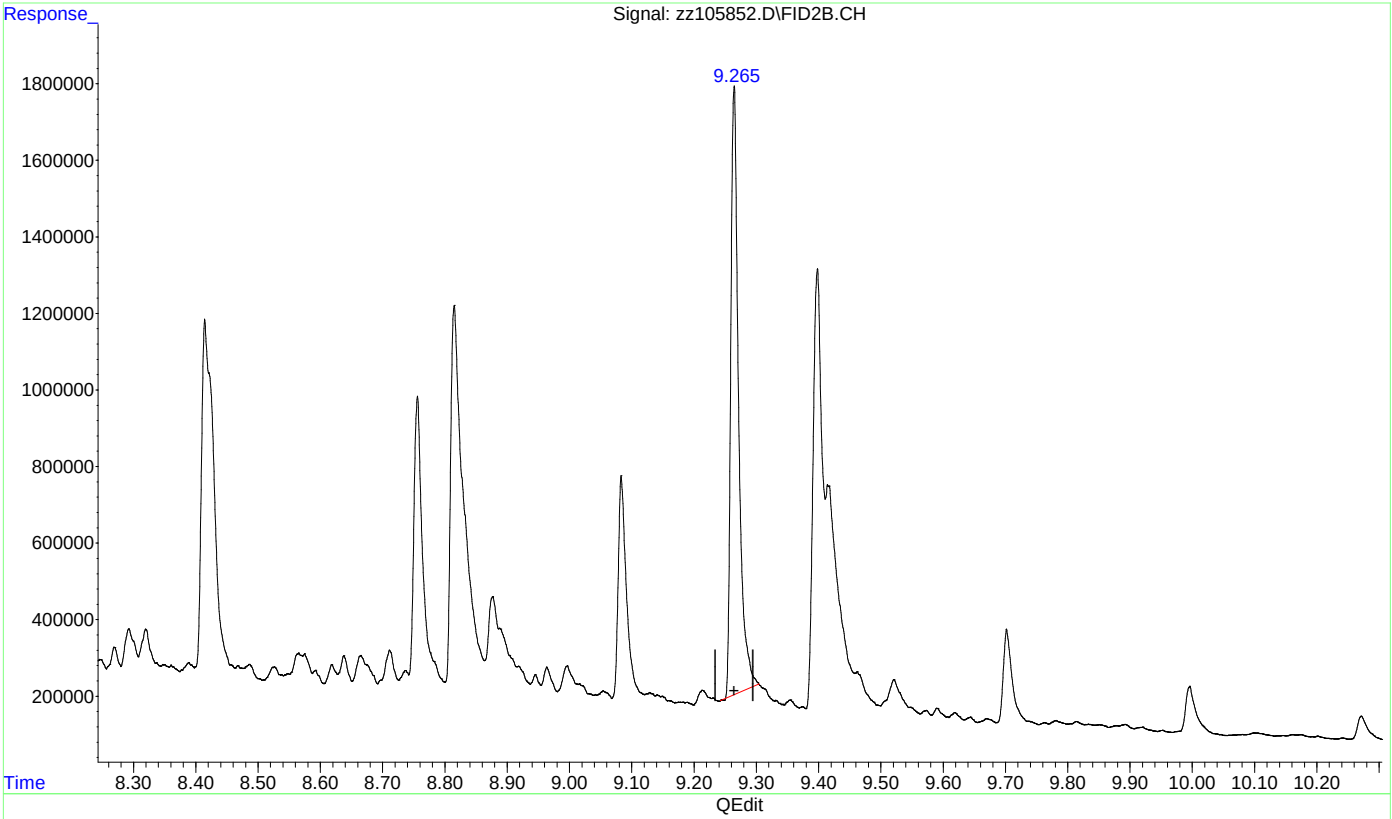
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:29:21 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:27:54 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.265min 8.324 PPM

response 13935872

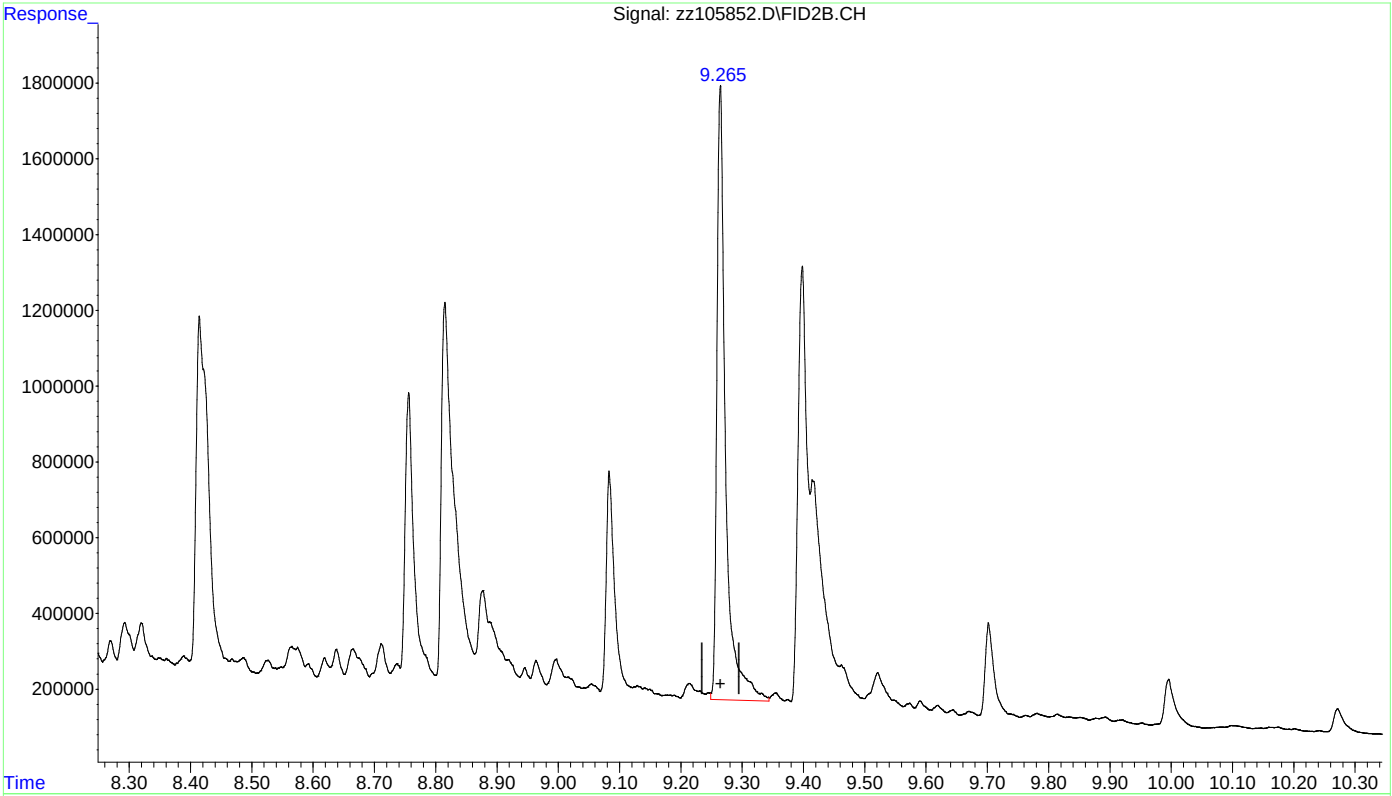
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:29:25 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105852.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 11:46 am
Operator : thomasl
Sample : cc3675-500
Misc : op42446,gzz3912,10.8,,,1,1
ALS Vial : 3 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:27:54 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.265min 9.566 PPM m

response 16014730

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:29:36 2022

Manual Integrations APPROVED
(compounds with "m" flag)
Gwendolyn Burns
10/18/22 17:45

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:39:31 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID

Compound	R.T.	Response	Conc	Units	
System Monitoring Compounds					
6) S o-TERPHENYL	8.806	31711840	18.157	PPM	m
Spiked Amount 50.000		Recovery = 36.31%			
7) S 5a-ANDROSTANE	9.263	30483034	18.208	PPM	m
Spiked Amount 50.000		Recovery = 36.42%			
Target Compounds					
1) H TPH-DRO	7.830	1400238651	980.980	PPM	

(f)=RT Delta > 1/2 Window (m)=manual int.

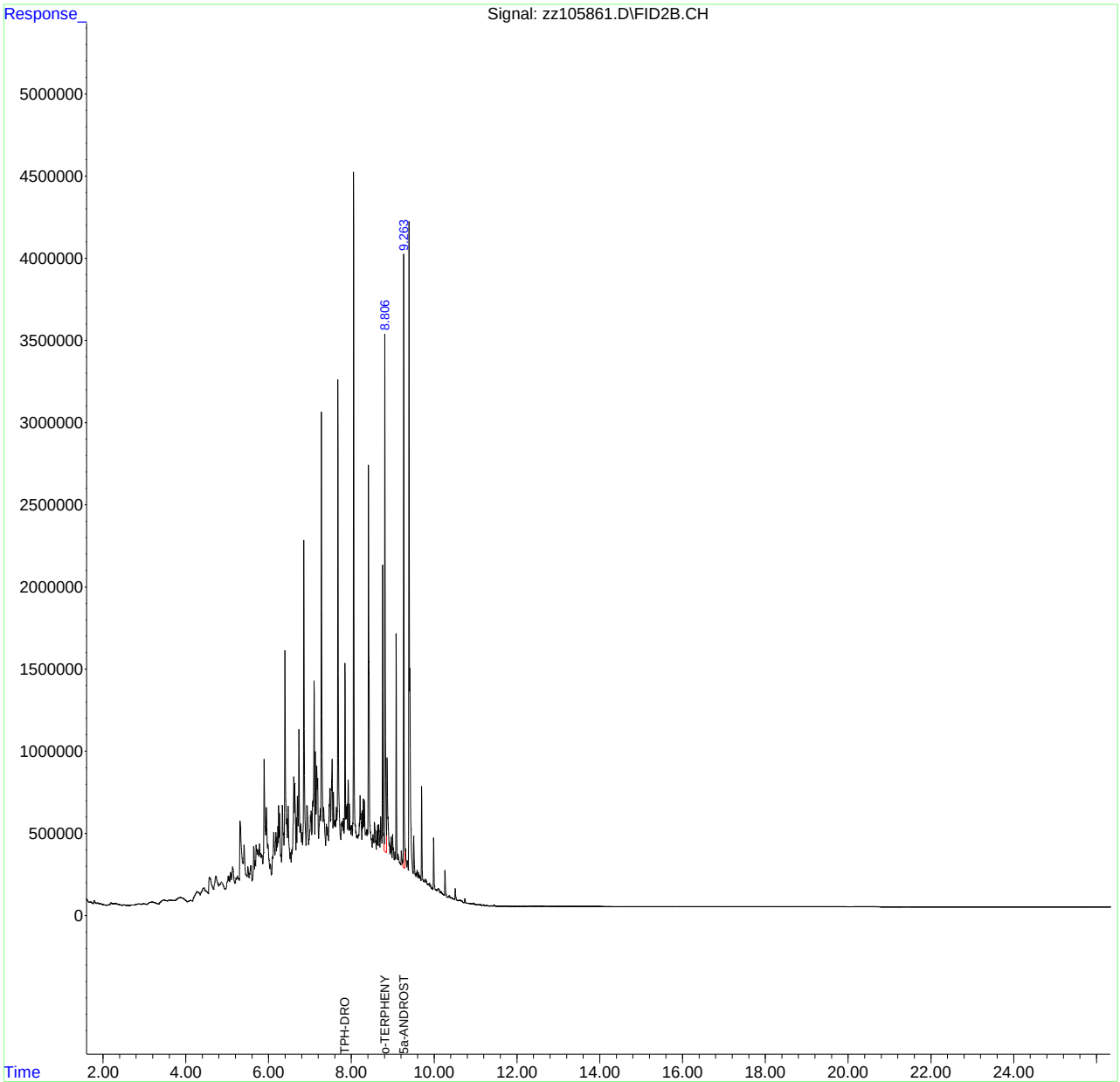
9.5.33
9

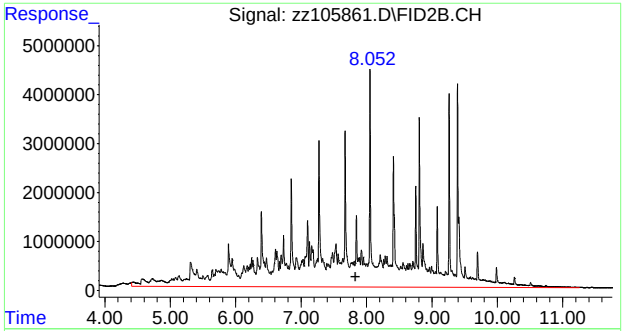
Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:39:31 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

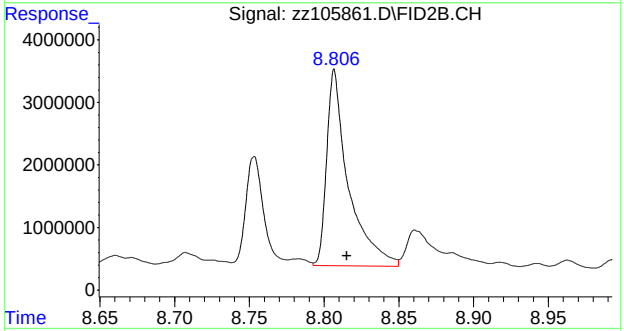
Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID





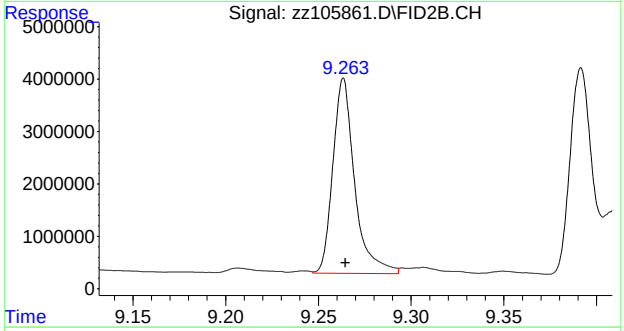
#1 TPH-DRO

R.T.: 7.830 min
Delta R.T.: 0.000 min
Response: 1400238651
Conc: 980.98 PPM



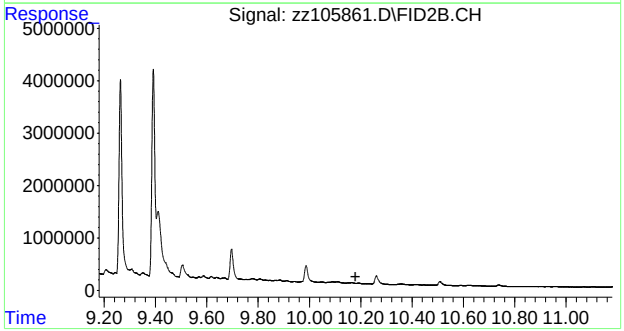
#6 o-TERPHENYL

R.T.: 8.806 min
Delta R.T.: -0.009 min
Response: 31711840
Conc: 18.16 PPM m



#7 5a-ANDROSTANE

R.T.: 9.263 min
Delta R.T.: -0.001 min
Response: 30483034
Conc: 18.21 PPM m



#8 TETRACOSANE-d50

R.T.: 0.000 min
Exp R.T. : 10.180 min
Response: 0
Conc: N.D.

Manual Integration Approval Summary

Sample Number: GZZ3912-CC3675
Lab FileID: ZZ105861.D
Injection Time: 10/16/22 17:07
Method: SW846 8015D
Analyst approved: 10/18/22 04:44 Syra Marie Pacheco
Supervisor approved: 10/18/22 17:45 Gwendolyn Burns

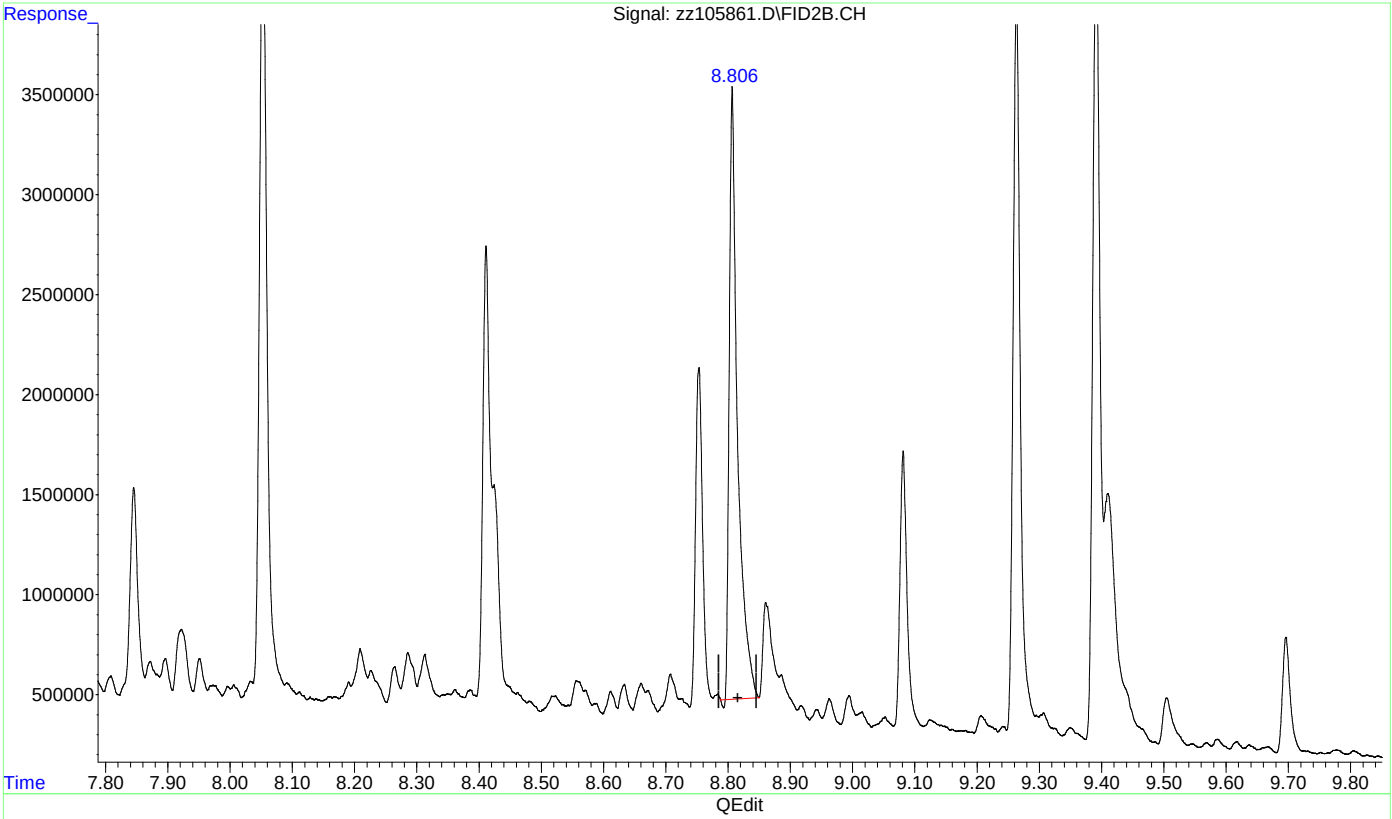
Parameter	CAS	Sig#	R.T. (min.)	Reason
o-Terphenyl	84-15-1	1	8.81	Poorly defined baseline
5a-Androstane	438-22-2	1	9.26	Poorly defined baseline

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:27 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.807min 16.319 PPM

response 28500935

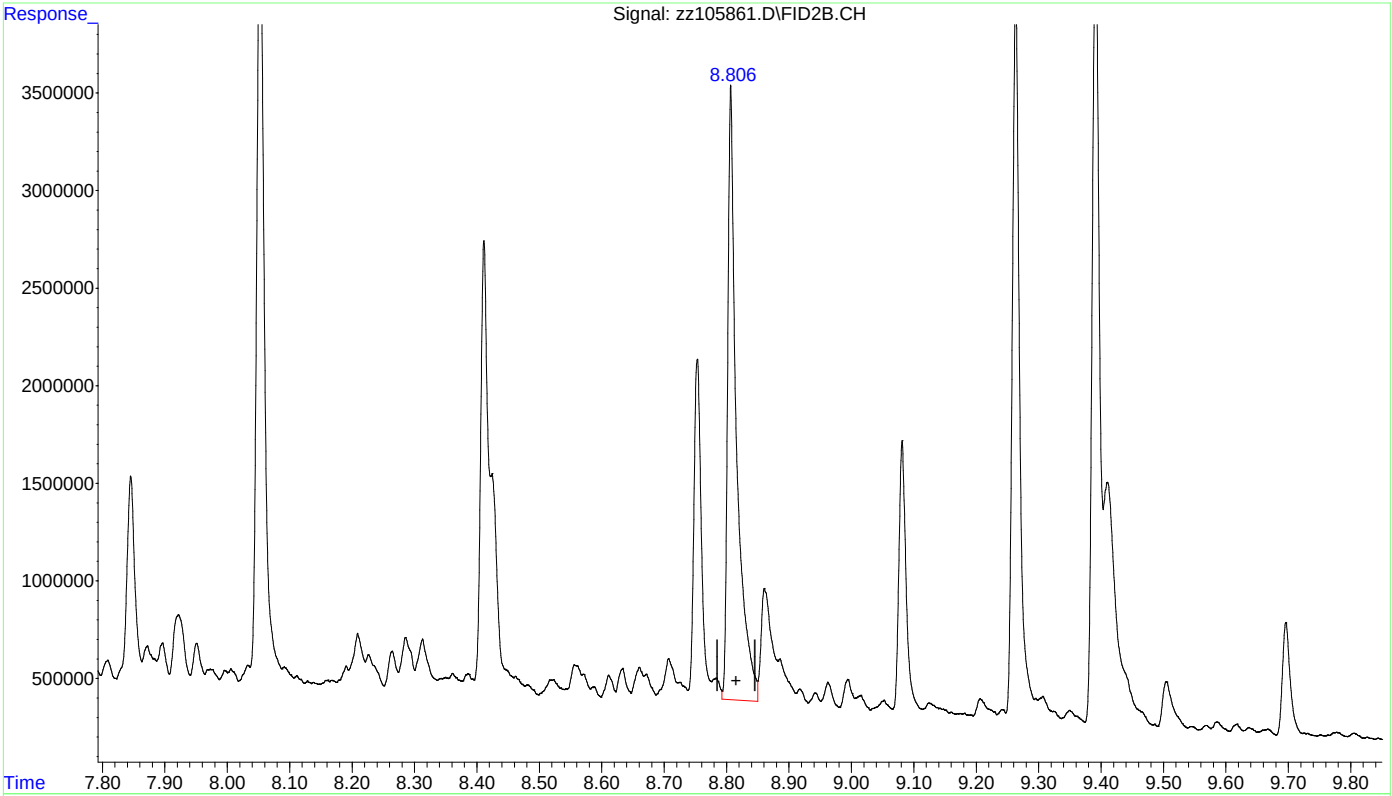
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:38:51 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:27 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(6) o-TERPHENYL (S)

8.806min 18.157 PPM m

response 31711840

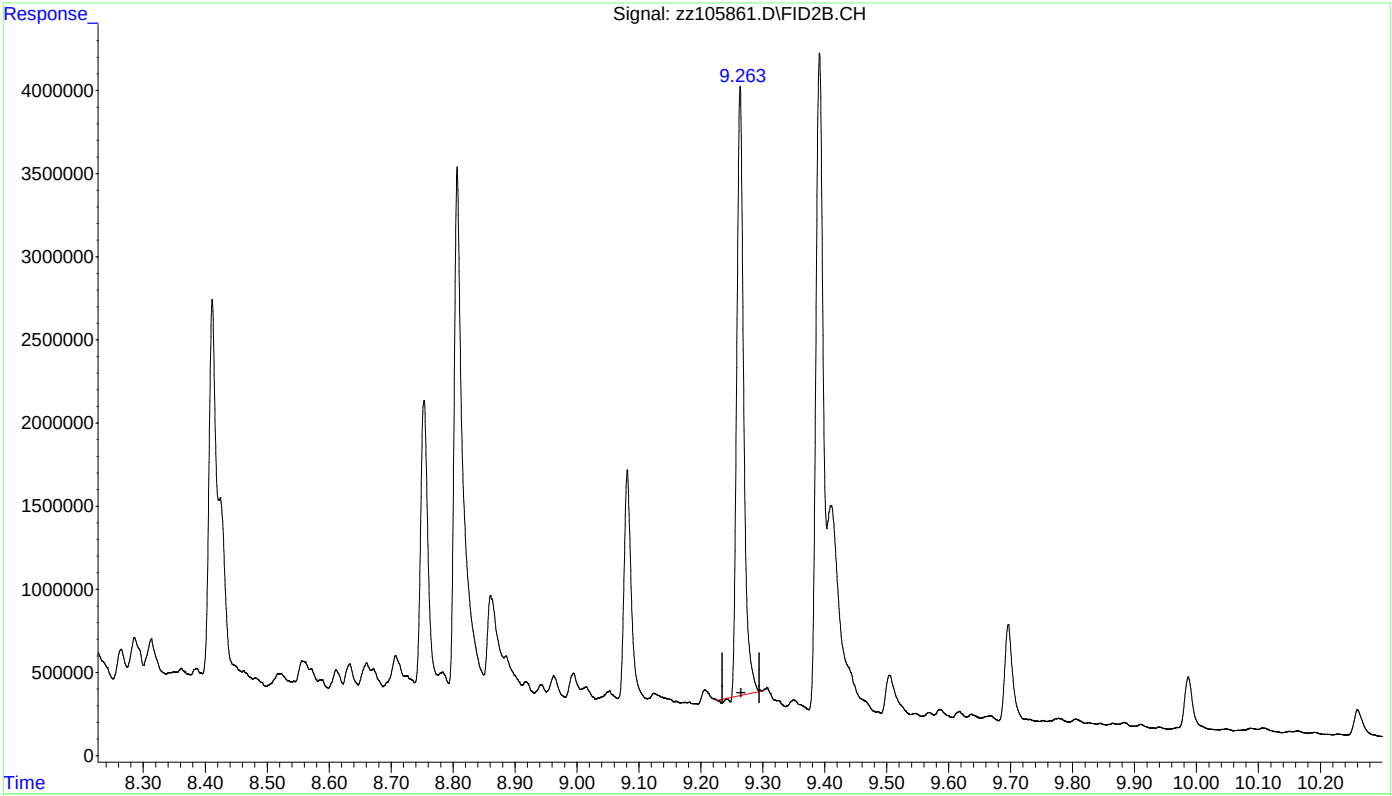
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:39:17 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:27 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.264min 16.908 PPM

response 28306921

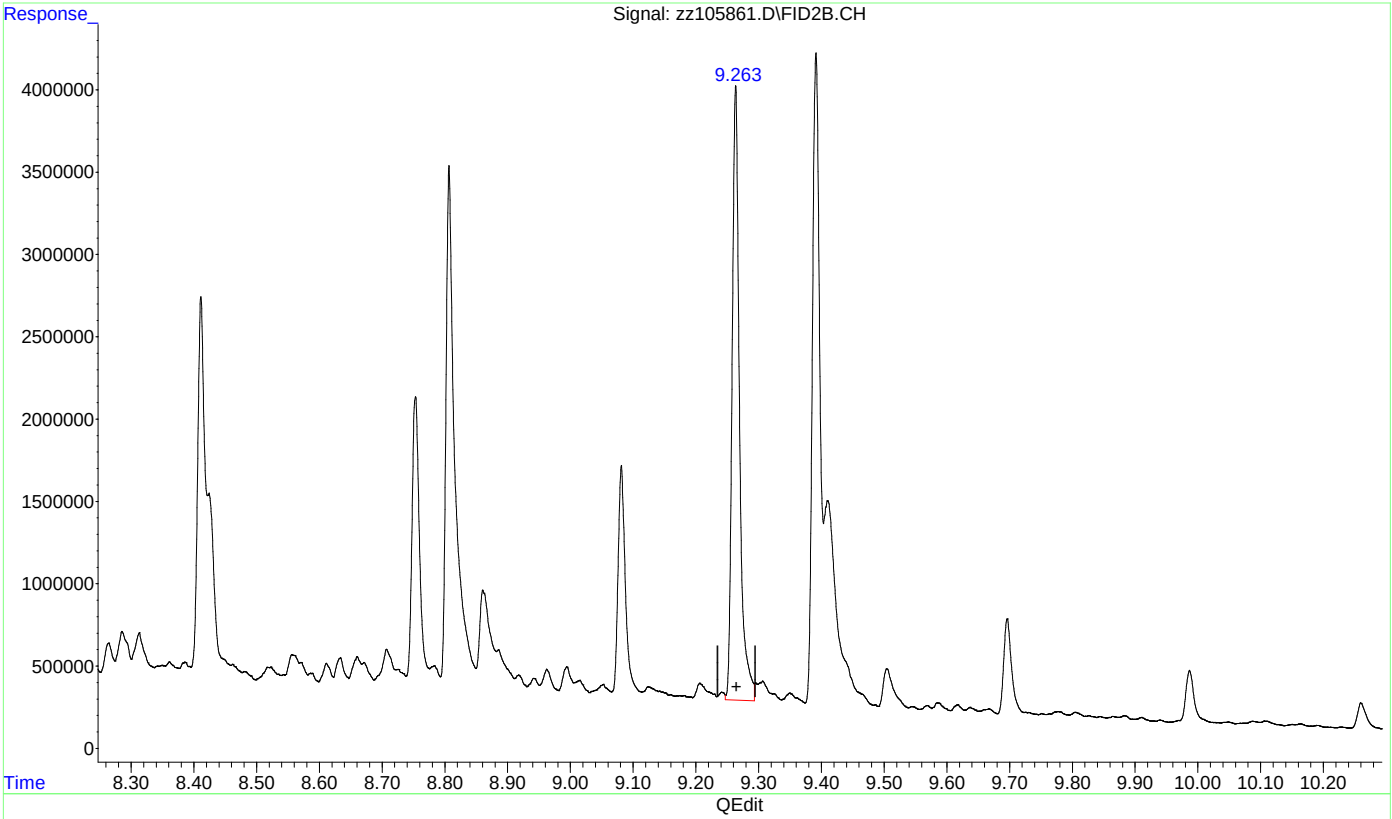
(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:39:19 2022

Quantitation Report (Qedit)

Data Path : C:\msdchem\1\data\syrap\GZZ3912\
Data File : zz105861.D
Signal(s) : FID2B.CH
Acq On : 16 Oct 2022 5:07 pm
Operator : thomasl
Sample : cc3675-1000
Misc : op42470,gzz3912,300,,,1,1
ALS Vial : 4 Sample Multiplier: 1

Integration File: autoint1.e
Quant Time: Oct 18 08:30:27 2022
Quant Method : C:\msdchem\1\data\syrap\GZZ3912\drozz3675.m
Quant Title : GCTPHS
QLast Update : Tue Oct 18 08:27:38 2022
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. : 1 ul
Signal Phase : ZB-5
Signal Info : .25 mm ID



(7) 5a-ANDROSTANE (S)

9.263min 18.208 PPM m

response 30483034

(+) = Expected Retention Time
drozz3675.m Tue Oct 18 08:39:34 2022

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GRL24

Print Analyst Name: Mahalia L. Ceus

Date: 10/17/22

Analyst Signature: MLC

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 22.2928.67A	Arl016/1260	500 PPB
.67B	↓	1000 ↓
.20	IB	20 ↓
223504	Hexane (Fisher)	-

Columns: ZB CLP I/ZB CLP II

Method 8082

Initial Cal. Method PCBRL5

Injection Volume: 1.0 uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JL Date: 10/24/22

R	Data File	Sample ID TL 10/17	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	RL1490	cc5-500				16			↑	NG	
	491	cc5-500				16			✓	ok	
MLC initial	492 ~~450~~	IB				2			✓	ok	
	493	OP42472-MB1	42472	608	W	17			✓	Ok	
	494	-BS1				18			✓	ok	
	495	-BSD				19			✓	OK	
	496	JD53434-2				20			✓	ok	
	497	JD53441-2				21			✓	ok	
	498	JD53378-1				22			✓	Ok	
	499	JD53590-1	42474	608	W	23			✓	Ok	
	500/501	Mix				100			✓	Ok	
	502	cc5-1000				24			✓	Ok	
	503	ib				2			✓	Ok	
	504	OP42474-MB1	42474	608	W	25			✓	Ok	
	505	-BS1				26			✓	Ok	
	506	-BSD				27			✓	Ok	
	507	JD53394-5				28			✓	Ok	
	508	JD53489-1				29			✓	Ok	
	509	JD53489-2				30			✓	Ok	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

145

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GRL24

Print Analyst Name: Mahalia L. Cens

Date: 10/17/22

Analyst Signature: MLC

Columns: ZBCLPT / ZBCLPT

Method 8082

Initial Cal. Method PCBRL5

Injection Volume: 1.0uL

Date Archived:

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	see pg. 145	

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: VJL Date: 10/24/22

R	Data File	Sample ID (MLC 10/17/22)	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	RL14510	JD53489-3	OP42474	608	W	31			✓	OK	
	511/512	Hex				100			✓	OK	
	513	cc-5-500				32			✓	OK	
	514	IB				2			✓	OK	
	515	OP42477-MB1	42477	608	W	33			✓	OK	
	516	-BS1				34			✓	OK	
	517	-BSD				35			✓	OK	
	518	JD53534-1				36			✓	RR	Need TBA
	519	JD53533-1				37			✓	OK	
	520	JD53498-1				38			✓	OK	
MLC 10/17/22	521	~~IB~~ LA84117-1	42474	608	W	39			✓	OK	
	522/523	Hex				100			✓	OK	
	524	cc5-1000				40			✓	OK	
	525	IB				2			✓	OK	
	526	OP42483-MB1	42483	8082	S	41			✓	OK	
	527	-BS1				42			✓	OK	
	528	-MS				43			✓	OK	
	529	-MSD				44			✓	OK	
	530	jd52744.17				45			✓	OK	

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

147

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GRL24

Print Analyst Name: CHRISTINE PHILLIPS

Date: 10/18/22

Analyst Signature: CNP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SEE PAGE 145	

Columns: 35QAPI / 7BCAPIF

Method 8082

Initial Cal. Method PCBRLS

Injection Volume: 1.0uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: JL Date: 10/24/22

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	RL1531	jd52744.21	42183	8082	S	46			✓	OK	
	532	.32				47			✓	OK	
	533/534	HEXANE				100			✓	OK	
	535	CC5.500				48			✓	OK	
	536	IB				2			✓	OK	
	537	jd52744.33	42183	8082	S	49			✓	OK	
	538	.34				50			✓	OK	
	539	.35				51			✓	OK	
	540	.36				52			✓	RR	Need 5x
	541	.37				53			✓	OK	
	542	.38				54			✓	OK	
	543	.39				55			✓	OK	
	544/545	HEXANE				100			✓	OK	
	546	CC5.1000				56			✓	OK	
	547	IB				2			✓	OK	
	548	jd52744.40	42183	8082	S	57			✓	OK	
	549	.41				58			✓	OK	
	550	.42				59			✓	OK	
	551	.43				60			✓	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

149

Form: OR016.09

Rev. Date: 5/25/17

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GRL24

Print Analyst Name: CHRISTINE PHILLIPS

Date: 10/18/22

Analyst Signature: CAP

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
	SEE PAGE 145	

Columns: ZBCLPI/ZBCLPII

Method 8082

Initial Cal. Method PCBRL5

Injection Volume: 1.0uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: TL

Date: 10/24/22

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	RL1552	jd52744.44	42183	8082	S	61			✓	OK	
	553	.45				62			✓	OK	
	554	.46				63			✓	OK	
	555/556	HEXANE				100			✓	OK	
	557	CC 5.500				64			✓	OK	
	558	IB				2			✓	OK	
	559	jd52744.47	42183	8082	S	65			✓	OK	
	560	.48				66			✓	OK	
	561	.49				67			✓	OK	
	562/563	HEXANE				100			✓	OK	
	564	CC 5.1000				68			✓	OK	
	565	IB				2			✓	OK	

TL 10/24

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

151

Form: OR016-09
Rev. Date: 5/25/17

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GRL5

Print Analyst Name: Rebecca Krug

Analyst Signature: RK

Date: 09/28/22

Columns: ZBCLPI/ZBCLPII

Method 8082

Initial Cal. Method PCBGCRL5

Injection Volume: 1.0 µL

Date Archived:

Standard Data

	Lot #	Description	Conc.
SV	21-2835.13B	Ar1016/1260	20 PPM
	-140A	Ar1221/1254	1000PPB
	-140B	Ar1232/1262	↓
	-140C	Ar1242/1268	
	-140D	Ar1248	
SV	22-2928.10	IB	20 PPB

Standard Data

	Lot #	Description	Conc.
SV	21-2835.141A	Ar1016/1260 2nd	1000PPB
	-141B	Ar1221/1254 2nd	↓
	-141C	Ar1232/1262 2nd	
	-141D	Ar1242/1268 2nd	
	-141E	Ar1248 2nd	
	223504	hexane (Fisher)	—

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: Date: 09/23/22

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	RL164	IB				2			/	OK	
	165	IC5 -50	Ar1016/1260	1st source		3	400x		/	OK	
	166	-250	↓	↓		4	80x		/	OK	
	167	-500				5	40x		/	OK	
	168	-1000				6	20x		/	OK	
	169	-2000				7	10x		/	OK	
	170	-3000				8	150uL/1mL		/	OK	
	171	-5000				9	4x		/	OK	
	172	-10000				10	2x		/	OK	
	173	-20000		↓		11			/	OK	
	174	ICV5 -1000	↓	2nd source		12			/	OK	
	175	IC5 -1000	Ar1221/1254	1st source		13			/	OK	
	176	-1000	Ar1232/1262	↓		14			/	OK	
	177	-1000	Ar1242/1268			15			/	OK	
	178	IC5 ICV5 -1000 RK	Ar1248	↓		16			/	OK	
	179	ICV5 -1000	Ar1221/1254	2nd source		17			/	OK	
	180	-1000	Ar1232/1262	↓		18			/	OK	
	181	-1000	Ar1242/1268			19			/	OK	
	182	ICV 5 -1000	Ar1248	↓		20			/	OK	
	183	Pest Mix				21			/	OK	

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR01609
Rev. Date: 5/25/17

1

9.6.2 9

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: GZZ3675

Print Analyst Name: Thomas Lally

Date: 7/13/21

Analyst Signature: TL

Standard Data

	Lot #	Description	Conc.
SV	21-2783-85A	DRO Std	25 ppm
	-85B		50 ppm
	-85C		100 ppm
	-85D		250 ppm
	-85E		500 ppm
	-85F		1000 ppm
	-85G	↓	2500 ppm

Standard Data

	Lot #	Description	Conc.
SV	21-2783-85H	DRO Std	5000 ppm
	-86A	↓	10000 ppm
	-86B	↓	50000 ppm
OP	21-2630-71	DRO 2nd Source	1000 ppm
SV	21-2783-131	IB	50 ppm
	-132	RT Window	250 ppm
	204700	dcm (Fisher)	—

Columns: Rxi-5Sil MS

Method DRO 3675

Initial Cal. Method DRO zz3626 TL 7/14

Injection Volume: 1.0 µL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: TL Date: 7/15/21

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	zz94777	RT				2				Not using	
	778	RT				2			✓	ok	
	779	IB				1			✓	ok	
	780	MB				6				Not using	
	781	IC3675-25				7			✓	ok	
	782	-50				8			✓	ok	
	783	-100				9			✓	ok	
	784	-250				10			✓	ok	
	785	-500				11			✓	ok	
	786	IC3675-1000				12			✓	ok	
	787	IC3675-2500				13			✓	ok	
	788	-5000				14			✓	ok	
	789	IC3675-10000				15			✓	ok	
	790	-50000				16			✓	ok	
	791	ICV3676-1000				17				Not using	wrong vial
	792	ICV3676-1000				17			✓	ok	

TL 7/14

MTX = Matrix. Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.
Sample volume/weight refer to extraction log.
All strikeouts must be initialed, dated, and reason applied if not transcription error

Form: OR016-09
Rev. Date: 5/25/17

133

RETENTION TIME WINDOW DETERMINATION

Instrument ID: GCZZ
Method: SW846 8015D

	Lab FileID	Date/Time	Sample Number	Analyst
Std#1	ZZ99786.D	07/13/21 18:40	GZZ3675-ICC3675	THOMASL
Std#2	ZZ99793.D	07/14/21 10:37	GZZ3676-CC3675	THOMASL
Std#3	ZZ99804.D	07/14/21 17:08	GZZ3676-CC3675	THOMASL

Compound	Sig#	Type	RT#1	RT#2	RT#3	Mean	Actual StdDev	Window (+ /- 3*StdDev)
o-Terphenyl	1	SURR	8.99	8.98	8.99	8.99	0.006	+/- 0.030 [a]
5a-Androstane	1	SURR	9.47	9.46	9.47	9.47	0.006	+/- 0.030 [a]
TPH-DRO (C10-C28)	1	REG	8.04	8.04	8.04	8.04	0.000	+/- 0.030 [a]

(a) Default minimum StdDev of .01 minutes employed.

SEMIVOLATILE by GC ANALYSIS LOG

Batch ID: Gzz3912

Print Analyst Name: Thomas Lally

Date: 10/16/22

Analyst Signature: TL

Standard Data

Lot #	Description	Conc.

Standard Data

Lot #	Description	Conc.
SV 22-2928-15C	DRO Std	500 ppm
-15D	↓	1000 ppm
-11	RT Window	250 ppm
-12	IB	50 ppm
223128	dcm (Fisher)	—

Columns: Rxi5silms

Method DRO

Initial Cal. Method DROzz3675

Injection Volume: 1.0uL

Date Archived:

Manually integrated chromatographic peaks in the following reportable files have been reviewed and verified to comply with the criteria of Accutest SOP EQA044.

Supervisor Signature: TL Date: 10/24/22

R	Data File	Sample ID	Ext. Batch	Test	MTX	ALS #	Dilution	IS	SU	Status (Data)	Comments
	zz105852	cc3675-500				3			/	OK	
	853	IB				1			/	OK	
	854	RT				2			/	OK	
	855	OP42470-MB1	42470	DRO RVE	W	71			/	OK	
	856	-BS1				72			/	OK	
	857	-BSD				73			/	OK	
	858	JD53489-1				74			/	OK	
	859	-2				75			/	OK	
	860	-3				76			/	OK	
	861	cc3675-1000				4			/	OK	
	862	IB				1			/	OK	

TL 10/24

MTX = Matrix . Designate W for water, S for soil, O for oil.. IS = Internal Standard Area. (if used) SU = Surrogate.

Sample volume/weight refer to extraction log.

All strikeouts must be initialed, dated, and reason applied if not transcription error

179

Form: OR016-09

Rev. Date: 5/25/17

9.6.4

9

LOGBOOK ID:

Aqueous Extraction Logbook (Mixed Waters)

Date Started: 10-14-2022 Time Started: 0915
Date Finished: 10/14/22 Time Finished: 1400

Extract Method (*CHECK OFF "√" /DO NOT CIRCLE*):
Separatory Funnel: SW846 3510C/CLP/other ____ EPA 600 series____ SIM____
Continuous Liquid Liquid: SW846 3520C/CLP/other____

BATCH #	GC OP42470	RACK#	R-57
Set-up by:	BBB, DS, SM		
Extracted by:	BBB, DS, SM		
Concentrated by:	JG.		
Final Vol. Top-up:			
Vialed by:	KB		
Supervisor Review:	NIT 10-17-2022		

Special Client Spike Instructions					
QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN: SPIKE SIGN

Manager/Supervisor/Team Lead Approval:

Sample #	Analysis Type (RUE)	Sample Bottle #	pH	Sample Description	Sample Volume (mL)	pH Adjust (mL) <2 HCl	pH Adjust (mL) >11 NaOH	Final Extract Color	Final Extract Vol(mL)	Comments
MBI	DRO			DI H2O	306	1		Clear	1	
BSI				DI H2O	300	1		Clear	1	
BSD ~~MS~~				DiH2O	306	1		Clear	1	
MSD										
BS										
MS										
MSD										
1 JDS3489-1	DRO	6		Yellow	300	1		L.Yellow	1	+
2 -2		5		Yellow	300	1		L.Yellow	1	+
3 -3		6		Yellow	300	1		L.Yellow	1	+
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	2	65	—	—	OK
Buchi Chiller	B2	10.4	—	—	OK
Waterbath (70-80°C)	5	75	+2	77	OK
Waterbath Chiller (GPM)	P2	11	—	—	OK
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppm)	AMT (mL)
DRO	212742-94I01	1,000	1.0
EPH			

WITNESS SIGN DS SPIKE SIGN NIT

MATRIX SPIKE	LOT #	CONC (ppm)	AMT (mL)
DRO	212742-94	50	1.0
EPH			

WITNESS SIGN. DS SPIKE SIGN NIT

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	222606	Fisher	3x60
HEXANE	~~223304~~	Fisher	~~90~~

15 TC 10/14/22

REAGENT	LOT #	BAKE BATCH #	BRAND
37% HCl			
SODIUM SULFATE	214945	8/11/22	Fisher
GLASS WOOL	0211		Lab
FILTER PAPER			
VIALS	22046678	—	Agilent

SPECIAL PROCESSING INSTRUCTIONS

Rx Reason:

Spiking:

Weights/Volumes:

Required MS/MSD:

Final Volume:

Other: HT 10/17 Due 10/19

COMMENTS: QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:

+Sediment in bottle

SGS
Form: OP001-14
Rev. Date: 4/19/22

37

LOGBOOK ID:

EPA608 Pest/PCB Extraction Log - Aqueous

Date Started: 10/14/22 Time Started: 13:00
Date Finished: 10/14/22 Time Finished: 22:00

Extract Method (CHECK OFF "√" /DO NOT CIRCLE):
Separatory Funnel: EPA608 ✓ 3510c Special Spikes

Special Client Spike Instructions

QC ID# for Special Spike	Amt to Spike	Spike ID	Lot #	Conc.	Amt. Spiked

WITNESS SIGN SPIKE SIGN
Manager/Supervisor/Team Lead Approval

SPECIAL PROCESSING INSTRUCTIONS
Rx Reason:
Spiking:
Weights/Volumes:
Required MS/MSD:
Final Volume:
Other: Due: 10/18

	Sample #	LL Analysis Type	Sample Bottle #	Sample Description	Sample Volume (mL)	pH Check	608 Rxs Chlorine ("+" or "-")	Final Extract Color	Final Extract Vol(mL)	Extract Cleanup Copper	Extract Cleanup H2SO4	Extract Cleanup Florisil	Comments
	MB1	PCB		DI H_2O	1000			clear	1	✓			
	BS1			DI H_2O	1000			clear	1	✓	✓		
	BSD ~~MS~~			DI H_2O	1000			clear	1	✓	✓		
	MSD												
	BS												
	MS												
	MSD												
1	JD53394 -5	PCB	1	Yellow	1000								
2	JD53489 -1		4	Yellow	1000			clear	1	✓			•
3	-2		4	Orange	1025			clear	1	✓			•
4	-3		3	Orange	1000			clear	1	✓			•
5	LA84117 -1		2	Clear	1050			clear	1	✓			•
6	JD53590-1		4	Clear	975			clear	1	✓			•
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													

Comments: QC Samples (MS, MSD, LINK and/or DUP, Link) Confirmed by:
• Sediment
ALL final Volumes 1.0mL

BATCH # GC 0P42474 RACK/Pos 25

Set-up by:	DS, SM, MSK, BBB, TG
Extracted by:	DS, SM, MSK, BBB, TG, JB, LC
Concentrated by:	AL
Final Vol. Top-up:	
Vialed by:	AL, LC
Vials:	
Supervisor Review:	TG 10/14/22

Equipment/ Range	ID	Observed Temp (°C)	Correction Factor (°C)	Corrected Temp (°C)	Pressure/ Flowrate
Buchi (65-71°C)	8, 10	65, 65	—	—	OK
Buchi Chiller	4, 5	10.0, 10.0	—	—	OK
Waterbath (70-80°C)	5, 6	76.0, 75.0	+2, +1	78.0, 76.0	OK
Waterbath Chiller (GPM)	F-3	2.2	—	—	OK
NEVAP (32-38°C, LPM)					

SURROGATE	LOT #	CONC (ppb)	AMT (mL)
PPCB			
PPCB LL	212742-85	400	0.1

WITNESS SIGN MSK SPIKE SIGN TG

MATRIX SPIKE	LOT #	CONC	AMT (mL)
PEST			
PEST LL			
PCB			
PCB LL	212742-86	2ppm	0.1

WITNESS SIGN MSK SPIKE SIGN TG

SOLVENT	LOT #	BRAND	AMT (mL)
METH CHLOR	223495	Fisher	360
HEXANE	223504	Fisher	50 mL

REAGENT	LOT #	BAKE BATCH #	BRAND
Sodium Sulfate	216994	10/13/22	Fisher
Glass Wool	034410		Lab
Filter Paper	22.0.224		Hydrion
Copper	221630-Pak		Restek
Florisil			
Disposable Vials	220561549		Agilent
Chlorine Strips			

Cleanup

SGS
Form: OP052-05
Rev Date: 5/16/22

13

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:11	MA53162-STD1	1		b=1.7121e-004,c=1.9275e-001,rho=0.9997936
12:12	MA53162-STD2	1		STDB
12:14	MA53162-STD3	1		STDC
12:15	MA53162-STD4	1		STDD
12:17	MA53162-STD5	1		STDE
12:19	MA53162-STD6	1		STDF
12:36	ZZZZZZ	1		
12:38	MA53162-ICV1	1		
12:39	MA53162-ICB1	1		
12:41	MA53162-CCV1	1		
12:42	MA53162-CCB1	1		
12:44	MA53162-CRI1	1		
12:45	MP35787-MB1	1		
12:47	MP35787-B1	1		
12:48	MP35787-S1	1		
12:50	MP35787-S2	1		
12:52	JD53503-5	1		(sample used for QC only; not part of login JD53489)
12:53	ZZZZZZ	1		
12:55	ZZZZZZ	1		
12:56	MA53162-CCV2	1		
12:57	MA53162-CCB2	1		
12:59	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:08	ZZZZZZ	1		
13:09	MA53162-CCV3	1		
13:11	MA53162-CCB3	1		
13:12	ZZZZZZ	1		
13:14	JD53489-1	1		
13:15	JD53489-2	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

	Time	Sample Description	Dilution Factor	PS Recov	Comments
	13:17	JD53489-3	1		
----------->		Last reportable sample/prep for job JD53489			
	13:18	ZZZZZZ	1		
	13:20	ZZZZZZ	1		
	13:21	ZZZZZZ	1		
	13:23	MA53162-CCV4	1		
	13:24	MA53162-CCB4	1		
----------->		Last reportable CCB for job JD53489			
	13:26	MP35788-MB1	1		
	13:27	MP35788-B1	1		
	13:29	MP35788-S1	1		
	13:30	MP35788-S2	1		
	13:32	JD53535-3	1		(sample used for QC only; not part of login JD53489)
	13:34	ZZZZZZ	1		
	13:35	MA53162-CCV5	1		
	13:37	MA53162-CCB5	1		
	13:38	ZZZZZZ	1		
	13:40	ZZZZZZ	1		
	13:41	ZZZZZZ	1		
	13:43	ZZZZZZ	1		
	13:44	ZZZZZZ	1		
	13:45	ZZZZZZ	1		
	13:47	MA53162-CCV6	1		
	13:48	MA53162-CCB6	1		
	14:02	MP35794-MB1	1		
	14:03	MP35794-B1	1		
	14:04	MP35794-S1	1		
	14:06	MP35794-S2	1		
	14:08	JD53166-7A	1		(sample used for QC only; not part of login JD53489)
	14:09	MA53162-CCV7	1		
	14:11	MA53162-CCB7	1		
	14:13	ZZZZZZ	1		
	14:14	ZZZZZZ	1		
	14:15	ZZZZZZ	1		
	14:17	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:18	ZZZZZZ	1		
14:20	ZZZZZZ	1		
14:21	MA53162-CCV8	1		
14:22	MA53162-CCB8	1		
14:24	ZZZZZZ	1		
14:26	ZZZZZZ	1		
14:27	ZZZZZZ	1		
14:28	ZZZZZZ	1		
14:30	ZZZZZZ	1		
14:31	ZZZZZZ	1		
14:33	MA53162-CCV9	1		
14:35	MA53162-CCB9	1		
14:50	ZZZZZZ	5		
14:52	MA53162-CCV10	1		
14:53	MA53162-CCB10	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
12:36	ZZZZZZ	1		
12:38	MA53162-ICV1	1	X	
12:39	MA53162-ICB1	1	X	
12:41	MA53162-CCV1	1	X	
12:42	MA53162-CCB1	1	X	
12:44	MA53162-CRI1	1	X	
12:45	MP35787-MB1	1	X	
12:47	MP35787-B1	1	X	
12:48	MP35787-S1	1	X	
12:50	MP35787-S2	1	X	
12:52	JD53503-5	1	X	(a)
12:53	ZZZZZZ	1		
12:55	ZZZZZZ	1		
12:56	MA53162-CCV2	1	X	
12:57	MA53162-CCB2	1	X	
12:59	ZZZZZZ	1		
13:01	ZZZZZZ	1		
13:02	ZZZZZZ	1		
13:04	ZZZZZZ	1		
13:05	ZZZZZZ	1		
13:06	ZZZZZZ	1		
13:08	ZZZZZZ	1		
13:09	MA53162-CCV3	1	X	
13:11	MA53162-CCB3	1	X	
13:12	ZZZZZZ	1		
13:14	JD53489-1	1	X	
13:15	JD53489-2	1	X	
13:17	JD53489-3	1	X	
13:18	ZZZZZZ	1		
13:20	ZZZZZZ	1		
13:21	ZZZZZZ	1		
13:23	MA53162-CCV4	1	X	
13:24	MA53162-CCB4	1	X	
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

Time	Sample Description	Element: Dilution	Hg	
13:26	MP35788-MB1	1	X	
13:27	MP35788-B1	1	X	
13:29	MP35788-S1	1	X	
13:30	MP35788-S2	1	X	
13:32	JD53535-3	1	X	(a)
13:34	ZZZZZZ	1		
13:35	MA53162-CCV5	1	X	
13:37	MA53162-CCB5	1	X	
13:38	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:41	ZZZZZZ	1		
13:43	ZZZZZZ	1		
13:44	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:47	MA53162-CCV6	1	X	
13:48	MA53162-CCB6	1	X	
14:02	MP35794-MB1	1	X	
14:03	MP35794-B1	1	X	
14:04	MP35794-S1	1	X	
14:06	MP35794-S2	1	X	
14:08	JD53166-7A	1	X	(a)
14:09	MA53162-CCV7	1	X	
14:11	MA53162-CCB7	1	X	
14:13	ZZZZZZ	1		
14:14	ZZZZZZ	1		
14:15	ZZZZZZ	1		
14:17	ZZZZZZ	1		
14:18	ZZZZZZ	1		
14:20	ZZZZZZ	1		
14:21	MA53162-CCV8	1	X	
14:22	MA53162-CCB8	1	X	
14:24	ZZZZZZ	1		
14:26	ZZZZZZ	1		
		Element:	Hg	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
Analyst: LM Run ID: MA53162
Parameters: Hg

Time	Sample Description	Element: Dilution	H g
14:27	ZZZZZZ	1	
14:28	ZZZZZZ	1	
14:30	ZZZZZZ	1	
14:31	ZZZZZZ	1	
14:33	MA53162-CCV9	1	X
14:35	MA53162-CCB9	1	X
14:50	ZZZZZZ	5	
14:52	MA53162-CCV10	1	X
14:53	MA53162-CCB10	1	X

(a) Sample used for QC only; not part of login JD53489.

Element: H
g

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA53162 Units: ug/l

Time: / Sample ID:			12:39 ICB1		12:42 CCB1		12:57 CCB2		13:11 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Mercury	0.20	.024	0.0373	<0.20	-0.0120	<0.20	0.0198	<0.20	-0.000700	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA53162 Units: ug/l

Time:			13:24	
Sample ID:			CCB4	
Metal	RL	IDL	raw	final
Mercury	0.20	.024	-0.0238	<0.20

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA53162 Units: ug/l

Time:		12:38			12:41			12:56	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Mercury	3	3.02	100.7	2.5	2.51	100.4	2.5	2.50	100.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
QC Limits: 90 to 110 % Recovery Run ID: MA53162 Units: ug/l

Time:		13:09			13:23	
Sample ID:	CCV	CCV3		CCV	CCV4	
Metal	True	Results	% Rec	True	Results	% Rec
Mercury	2.5	2.49	99.6	2.5	2.49	99.6

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: H8101722W1.CSV Date Analyzed: 10/17/22 Methods: SW846 7470A
QC Limits: 70 to 130 % Recovery Run ID: MA53162 Units: ug/l

Time:			12:44	
Sample ID:	CRI	CRIA	CRI1	
Metal	True	True	Results	% Rec
Mercury	0.20		0.202	101.0

(*) Outside of QC limits
(anr) Analyte not requested

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:16	MA53166-STD1	1		STDA
22:21	MA53166-STD2	1		STDB
22:26	MA53166-ICV1	1		
22:34	MA53166-ICB1	1		
22:39	MA53166-CCV1	1		
22:44	MA53166-CCB1	1		
22:49	MA53166-CRI1	1		
22:54	MA53166-CRID1	1		
22:59	MA53166-ICSA1	1		
23:04	MA53166-ICSAB1	1		
23:09	MA53166-HSTD1	1		
23:14	MA53166-HSTD2	1		
23:19	ZZZZZZ	1		
23:25	ZZZZZZ	1		
23:30	MA53166-CRID2	1		
23:35	ZZZZZZ	1		
23:40	MA53166-CCV2	1		
23:45	MA53166-CCB2	1		
23:50	MP35740-MB1	1		
23:55	MP35740-B1	1		batch to redigest, all elements out
00:00	MP35740-S1	1		
00:05	MP35740-S2	1		
00:10	JD53364-49	1		(sample used for QC only; not part of login JD53489)
00:15	MP35740-SD1	5		
00:20	MP35740-PS1	1		
00:24	ZZZZZZ	1		
00:29	ZZZZZZ	1		
00:34	ZZZZZZ	1		
00:39	MA53166-CCV3	1		
00:44	MA53166-CCB3	1		
00:49	ZZZZZZ	1		
00:54	ZZZZZZ	1		
00:59	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:04	ZZZZZZ	1		
01:09	ZZZZZZ	1		
01:14	ZZZZZZ	1		
01:19	ZZZZZZ	1		
01:24	ZZZZZZ	1		
01:29	ZZZZZZ	1		
01:34	ZZZZZZ	1		
01:39	MA53166-CCV4	1		
01:44	MA53166-CCB4	1		
01:49	ZZZZZZ	1		
01:54	ZZZZZZ	1		
01:59	MP35738-B1	1		
02:04	MP35738-MB1	1		
02:09	MP35738-S1	1		
02:14	MP35738-S2	1		
02:18	JD53364-5	1		(sample used for QC only; not part of login JD53489)
02:23	MP35738-SD1	5		
02:28	MP35738-PS1	1		
02:33	MA53166-CCV5	1		
02:38	MA53166-CCB5	1		
02:43	ZZZZZZ	1		
02:48	ZZZZZZ	1		
02:53	ZZZZZZ	1		
02:58	ZZZZZZ	1		
03:03	ZZZZZZ	1		
03:08	ZZZZZZ	1		
03:13	ZZZZZZ	1		
03:18	ZZZZZZ	1		
03:23	ZZZZZZ	1		
03:28	MA53166-CCV6	1		
03:32	MA53166-CCB6	1		
03:38	ZZZZZZ	1		
03:43	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
03:48	ZZZZZZ	1		
03:53	ZZZZZZ	1		
03:58	ZZZZZZ	1		
04:02	ZZZZZZ	1		
04:07	ZZZZZZ	1		
04:12	ZZZZZZ	1		
04:17	MA53166-CCV7	1		
04:22	MA53166-CCB7	1		
04:27	MP35739-MB1	1		
04:32	MP35739-B1	1		
04:37	MP35739-S1	1		
04:42	MP35739-S2	1		
04:47	JD53364-27	1		(sample used for QC only; not part of login JD53489)
04:52	MP35739-SD1	5		
04:57	ZZZZZZ	1		
05:02	ZZZZZZ	1		
05:07	ZZZZZZ	1		
05:12	ZZZZZZ	1		
05:17	MA53166-CCV8	1		
05:21	MA53166-CCB8	1		
05:27	ZZZZZZ	1		
05:31	ZZZZZZ	1		
05:36	ZZZZZZ	1		
05:41	ZZZZZZ	1		
05:46	ZZZZZZ	1		
05:51	ZZZZZZ	1		
05:56	ZZZZZZ	1		
06:01	ZZZZZZ	1		
06:06	ZZZZZZ	1		
06:11	ZZZZZZ	1		
06:16	MA53166-CCV9	1		
06:21	MA53166-CCB9	1		
06:26	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
06:31	ZZZZZZ	1		
06:36	ZZZZZZ	1		
06:41	ZZZZZZ	1		
06:46	ZZZZZZ	1		
06:51	MP35752-LB1	1		
06:57	MP35752-MB1	1		
07:02	MP35752-B1	1		
07:07	MP35752-LS1	1		
07:12	MA53166-CCV10	1		
07:16	MA53166-CCB10	1		
07:22	MA53166-CRID3	1		
07:27	MP35732-MB1	1		
07:32	MP35732-B1	1		
07:37	MP35732-S1	1		
07:41	MP35732-S2	1		
07:46	JD53503-5	1		(sample used for QC only; not part of login JD53489)
07:51	MP35732-SD1	5		
07:56	ZZZZZZ	1		
08:01	ZZZZZZ	1		
08:07	ZZZZZZ	1		
08:12	MA53166-CCV11	1		
08:17	MA53166-CCB11	1		
08:22	ZZZZZZ	1		
08:27	ZZZZZZ	1		
08:32	JD53489-1	1		
08:37	JD53489-2	1		
08:42	JD53489-3	1		
08:47	ZZZZZZ	1		
08:53	ZZZZZZ	1		
08:58	ZZZZZZ	1		
09:03	ZZZZZZ	1		
09:08	MA53166-CCV12	1		
09:13	MA53166-CCB12	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
09:18	ZZZZZZ	1		
09:23	ZZZZZZ	1		
09:28	ZZZZZZ	1		
09:33	ZZZZZZ	1		
09:38	ZZZZZZ	1		
09:44	MP35732-MB1	1		
---------->	Last reportable sample/prep for job JD53489			
09:49	MA53166-CCV13	1		
09:54	MA53166-CCB13	1		
---------->	Last reportable CCB for job JD53489			
09:59	MP35752-S1	1		
10:04	MP35752-S2	1		
10:09	JD53325-1	1		(sample used for QC only; not part of login JD53489)
10:14	MP35752-SD1	5		
10:19	ZZZZZZ	1		
10:24	ZZZZZZ	1		
10:29	ZZZZZZ	1		
10:35	ZZZZZZ	1		
10:40	ZZZZZZ	1		
10:45	MA53166-CCV14	1		
10:50	MA53166-CCB14	1		
10:55	ZZZZZZ	1		
11:01	ZZZZZZ	1		
11:06	ZZZZZZ	1		
11:11	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:22	ZZZZZZ	1		
11:27	ZZZZZZ	1		
11:33	ZZZZZZ	1		
11:38	ZZZZZZ	1		
11:43	MA53166-CCV15	1		
11:48	MA53166-CCB15	1		
11:53	ZZZZZZ	1		
11:58	ZZZZZZ	1		
12:04	ZZZZZZ	1		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:09	ZZZZZZ	1		
12:14	ZZZZZZ	1		
12:19	MP35751-MB1	1		
12:25	MP35751-LB1	1		
12:30	MP35751-B1	1		
12:35	MP35751-LS1	1		
12:39	MA53166-CCV16	1		
12:44	MA53166-CCB16	1		
12:49	MP35751-S1	1		
12:54	MP35751-S2	1		
12:59	JD53050-1A	1		(sample used for QC only; not part of login JD53489)
13:04	MP35751-SD1	5		
13:09	ZZZZZZ	1		
13:14	ZZZZZZ	1		
13:19	ZZZZZZ	1		
13:24	MA53166-CCV17	1		
13:29	MA53166-CCB17	1		
13:34	ZZZZZZ	1		
13:40	ZZZZZZ	1		
13:45	ZZZZZZ	1		
13:50	ZZZZZZ	1		
13:55	MA53166-CCV18	1		
14:00	MA53166-CCB18	1		

Refer to raw data for calibration curve and standards.

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn
22:26	MA53166-ICV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:34	MA53166-ICB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:39	MA53166-CCV1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:44	MA53166-CCB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:49	MA53166-CRI1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
22:54	MA53166-CRID1	1																						
22:59	MA53166-ICSA1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:04	MA53166-ICSAB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:09	MA53166-HSTD1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:14	MA53166-HSTD2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:19	ZZZZZZ	1																						
23:25	ZZZZZZ	1																						
23:30	MA53166-CRID2	1																						
23:35	ZZZZZZ	1																						
23:40	MA53166-CCV2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:45	MA53166-CCB2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
23:50	MP35740-MB1	1																						
23:55	MP35740-B1	1	batch to redigest, all elements out																					
00:00	MP35740-S1	1																						
00:05	MP35740-S2	1																						
00:10	JD53364-49	1																						
00:15	MP35740-SD1	5																						
00:20	MP35740-PS1	1																						
00:24	ZZZZZZ	1																						
00:29	ZZZZZZ	1																						
00:34	ZZZZZZ	1																						
00:39	MA53166-CCV3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:44	MA53166-CCB3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
00:49	ZZZZZZ	1																						
00:54	ZZZZZZ	1																						
00:59	ZZZZZZ	1																						
01:04	ZZZZZZ	1																						
01:09	ZZZZZZ	1																						
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
01:14	ZZZZZZ	1																							
01:19	ZZZZZZ	1																							
01:24	ZZZZZZ	1																							
01:29	ZZZZZZ	1																							
01:34	ZZZZZZ	1																							
01:39	MA53166-CCV4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:44	MA53166-CCB4	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
01:49	ZZZZZZ	1																							
01:54	ZZZZZZ	1																							
01:59	MP35738-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:04	MP35738-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:09	MP35738-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
02:14	MP35738-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
02:18	JD53364-5	1								X															(a)
02:23	MP35738-SD1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:28	MP35738-PS1	1		X																					
02:33	MA53166-CCV5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:38	MA53166-CCB5	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
02:43	ZZZZZZ	1																							
02:48	ZZZZZZ	1																							
02:53	ZZZZZZ	1																							
02:58	ZZZZZZ	1																							
03:03	ZZZZZZ	1																							
03:08	ZZZZZZ	1																							
03:13	ZZZZZZ	1																							
03:18	ZZZZZZ	1																							
03:23	ZZZZZZ	1																							
03:28	MA53166-CCV6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
03:32	MA53166-CCB6	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
03:38	ZZZZZZ	1																							
03:43	ZZZZZZ	1																							
03:48	ZZZZZZ	1																							
03:53	ZZZZZZ	1																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
03:58	ZZZZZZ	1																							
04:02	ZZZZZZ	1																							
04:07	ZZZZZZ	1																							
04:12	ZZZZZZ	1																							
04:17	MA53166-CCV7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
04:22	MA53166-CCB7	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
04:27	MP35739-MB1	1			X	X		X		X				X						X	X				
04:32	MP35739-B1	1			X	X		X		X				X						X	X				
04:37	MP35739-S1	1			X	X		X		X				X						X	X				
04:42	MP35739-S2	1			X	X		X		X				X						X	X				
04:47	JD53364-27	1								X															(a)
04:52	MP35739-SD1	5			X	X		X		X				X						X	X				
04:57	ZZZZZZ	1																							
05:02	ZZZZZZ	1																							
05:07	ZZZZZZ	1																							
05:12	ZZZZZZ	1																							
05:17	MA53166-CCV8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
05:21	MA53166-CCB8	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
05:27	ZZZZZZ	1																							
05:31	ZZZZZZ	1																							
05:36	ZZZZZZ	1																							
05:41	ZZZZZZ	1																							
05:46	ZZZZZZ	1																							
05:51	ZZZZZZ	1																							
05:56	ZZZZZZ	1																							
06:01	ZZZZZZ	1																							
06:06	ZZZZZZ	1																							
06:11	ZZZZZZ	1																							
06:16	MA53166-CCV9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
06:21	MA53166-CCB9	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
06:26	ZZZZZZ	1																							
06:31	ZZZZZZ	1																							
06:36	ZZZZZZ	1																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
06:41	ZZZZZZ	1																							
06:46	ZZZZZZ	1																							
06:51	MP35752-LB1	1																							
06:57	MP35752-MB1	1			X	X		X		X				X					X	X					
07:02	MP35752-B1	1			X	X		X		X				X					X	X					
07:07	MP35752-LS1	1			X	X		X		X				X					X	X					
07:12	MA53166-CCV10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:16	MA53166-CCB10	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:22	MA53166-CRID3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:27	MP35732-MB1	1																							
07:32	MP35732-B1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:37	MP35732-S1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:41	MP35732-S2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:46	JD53503-5	1	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	(a)
07:51	MP35732-SD1	5	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
07:56	ZZZZZZ	1																							
08:01	ZZZZZZ	1																							
08:07	ZZZZZZ	1																							
08:12	MA53166-CCV11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:17	MA53166-CCB11	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:22	ZZZZZZ	1																							
08:27	ZZZZZZ	1																							
08:32	JD53489-1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:37	JD53489-2	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:42	JD53489-3	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
08:47	ZZZZZZ	1																							
08:53	ZZZZZZ	1																							
08:58	ZZZZZZ	1																							
09:03	ZZZZZZ	1																							
09:08	MA53166-CCV12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:13	MA53166-CCB12	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:18	ZZZZZZ	1																							
09:23	ZZZZZZ	1																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
09:28	ZZZZZZ	1																							
09:33	ZZZZZZ	1																							
09:38	ZZZZZZ	1																							
09:44	MP35732-MB1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:49	MA53166-CCV13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:54	MA53166-CCB13	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
09:59	MP35752-S1	1			X	X		X		X				X						X	X				
10:04	MP35752-S2	1			X	X		X		X				X						X	X				
10:09	JD53325-1	1			X	X		X		X				X						X	X				(a)
10:14	MP35752-SD1	5			X	X		X		X				X						X	X				
10:19	ZZZZZZ	1																							
10:24	ZZZZZZ	1																							
10:29	ZZZZZZ	1																							
10:35	ZZZZZZ	1																							
10:40	ZZZZZZ	1																							
10:45	MA53166-CCV14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10:50	MA53166-CCB14	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10:55	ZZZZZZ	1																							
11:01	ZZZZZZ	1																							
11:06	ZZZZZZ	1																							
11:11	ZZZZZZ	1																							
11:17	ZZZZZZ	1																							
11:22	ZZZZZZ	1																							
11:27	ZZZZZZ	1																							
11:33	ZZZZZZ	1																							
11:38	ZZZZZZ	1																							
11:43	MA53166-CCV15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:48	MA53166-CCB15	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
11:53	ZZZZZZ	1																							
11:58	ZZZZZZ	1																							
12:04	ZZZZZZ	1																							
12:09	ZZZZZZ	1																							
12:14	ZZZZZZ	1																							
		Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	

REPORTED ELEMENTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Element: Dilution	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn	
12:19	MP35751-MB1	1			X	X		X		X				X					X	X					
12:25	MP35751-LB1	1																							
12:30	MP35751-B1	1			X	X		X		X				X					X	X					
12:35	MP35751-LS1	1			X	X		X		X				X					X	X					
12:39	MA53166-CCV16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:44	MA53166-CCB16	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
12:49	MP35751-S1	1			X	X		X		X				X					X	X					
12:54	MP35751-S2	1			X	X		X		X				X					X	X					
12:59	JD53050-1A	1			X	X		X		X				X					X	X					(a)
13:04	MP35751-SD1	5			X	X		X		X				X					X	X					
13:09	ZZZZZZ	1																							
13:14	ZZZZZZ	1																							
13:19	ZZZZZZ	1																							
13:24	MA53166-CCV17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:29	MA53166-CCB17	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
13:34	ZZZZZZ	1																							
13:40	ZZZZZZ	1																							
13:45	ZZZZZZ	1																							
13:50	ZZZZZZ	1																							
13:55	MA53166-CCV18	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
14:00	MA53166-CCB18	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

(a) Sample used for QC only; not part of login JD53489.

Element:	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Ni	K	Se	Ag	Na	Tl	V	Zn

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
22:16	MA53166-STD1	2687 R	70881 R	9686 R	7533 R
22:21	MA53166-STD2	2563	67346	9532	6424
22:26	MA53166-ICV1	2641	69493	9694	6768
22:34	MA53166-ICB1	2713	71596	9829	7614
22:39	MA53166-CCV1	2633	68973	9676	6754
22:44	MA53166-CCB1	2698	71267	9756	7570
22:49	MA53166-CRI1	2686	70902	9691	7434
22:54	MA53166-CRID1	No results reported for the elements associated with this internal standard.			
22:59	MA53166-ICSA1	2407	63900	9482	5765
23:04	MA53166-ICSAB1	2440	64085	9542	5846
23:09	MA53166-HSTD1	2681	71153	9910	7328
23:14	MA53166-HSTD2	2470	65627	9557	5916
23:19	ZZZZZZ	2676	71088	9829	7460
23:25	ZZZZZZ	2671	72320	9880	7609
23:30	MA53166-CRID2	No results reported for the elements associated with this internal standard.			
23:35	ZZZZZZ	2729	72224	9938	7648
23:40	MA53166-CCV2	2648	69447	9769	6769
23:45	MA53166-CCB2	2743	72359	9892	7678
23:50	MP35740-MB1	No results reported for the elements associated with this internal standard.			
23:55	MP35740-B1	No results reported for the elements associated with this internal standard.			
00:00	MP35740-S1	No results reported for the elements associated with this internal standard.			
00:05	MP35740-S2	No results reported for the elements associated with this internal standard.			
00:10	JD53364-49	No results reported for the elements associated with this internal standard.			
00:15	MP35740-SD1	No results reported for the elements associated with this internal standard.			
00:20	MP35740-PS1	No results reported for the elements associated with this internal standard.			
00:24	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:29	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:34	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:39	MA53166-CCV3	2647	69215	9748	6771
00:44	MA53166-CCB3	2718	71639	9850	7614
00:49	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:54	ZZZZZZ	No results reported for the elements associated with this internal standard.			
00:59	ZZZZZZ	No results reported for the elements associated with this internal standard.			

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
01:04	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:09	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:14	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:19	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:24	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:29	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:34	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:39	MA53166-CCV4	2640	69596	9821	6771
01:44	MA53166-CCB4	2736	72300	9850	7680
01:49	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:54	ZZZZZZ	No results reported for the elements associated with this internal standard.			
01:59	MP35738-B1	2644	70098	9719	6974
02:04	MP35738-MB1	2708	71962	9946	7668
02:09	MP35738-S1	2600	69049	9950	6539
02:14	MP35738-S2	2605	68726	9909	6561
02:18	JD53364-5	2688	70870	10022	7056
02:23	MP35738-SD1	2738	71365	9905	7413
02:28	MP35738-PS1	2648	69954	10002	6754
02:33	MA53166-CCV5	2638	69284	9758	6755
02:38	MA53166-CCB5	2719	70910	9741	7621
02:43	ZZZZZZ	2622	70426	10131	6447
02:48	ZZZZZZ	2638	69485	10107	6476
02:53	ZZZZZZ	2792	72936	10318	7218
02:58	ZZZZZZ	2748	72559	10284	7062
03:03	ZZZZZZ	2738	71921	10197	7108
03:08	ZZZZZZ	2770	72435	10214	7356
03:13	ZZZZZZ	2749	72005	10097	7310
03:18	ZZZZZZ	2758	72026	10138	7346
03:23	ZZZZZZ	2759	72208	10129	7285
03:28	MA53166-CCV6	2652	69151	9789	6769
03:32	MA53166-CCB6	2734	71930	9870	7631
03:38	ZZZZZZ	2731	70425	10137	7271
03:43	ZZZZZZ	2730	70750	9988	7251

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
03:48	ZZZZZZ	2743	71177	9919	7352
03:53	ZZZZZZ	2710	70534	10065	7162
03:58	ZZZZZZ	2791	72574	10488	6761
04:02	ZZZZZZ	2686	70470	9985	7103
04:07	ZZZZZZ	2727	71553	10253	7115
04:12	ZZZZZZ	2728	71202	10110	7230
04:17	MA53166-CCV7	2649	68989	9751	6746
04:22	MA53166-CCB7	2738	71609	9793	7625
04:27	MP35739-MB1	2734	71835	9911	7657
04:32	MP35739-B1	2696	70200	9879	7040
04:37	MP35739-S1	2695	70108	9958	6872
04:42	MP35739-S2	2699	70291	9999	6892
04:47	JD53364-27	2798	72500	10130	7367
04:52	MP35739-SD1	2765	71537	9885	7533
04:57	ZZZZZZ	2733	71347	10133	7081
05:02	ZZZZZZ	2779	72267	10014	7499
05:07	ZZZZZZ	2725	71273	10064	7063
05:12	ZZZZZZ	2777	71935	10014	7454
05:17	MA53166-CCV8	2662	68875	9616	6763
05:21	MA53166-CCB8	2738	71338	9683	7609
05:27	ZZZZZZ	2776	72427	10202	7018
05:31	ZZZZZZ	2765	71618	10021	7435
05:36	ZZZZZZ	2752	71545	9977	7380
05:41	ZZZZZZ	2765	72250	10131	7301
05:46	ZZZZZZ	2781	72321	10038	7376
05:51	ZZZZZZ	2793	72144	10045	7605
05:56	ZZZZZZ	2764	72281	10236	7037
06:01	ZZZZZZ	2707	72404	10279	6754
06:06	ZZZZZZ	2887	73634	10458	7085
06:11	ZZZZZZ	2801	71181	10165	7035
06:16	MA53166-CCV9	2679	69181	9727	6808
06:21	MA53166-CCB9	2746	71532	9786	7629
06:26	ZZZZZZ	2859	73139	10352	7162

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
06:31	ZZZZZZ	2806	71252	10345	6932
06:36	ZZZZZZ	2800	71803	10275	6978
06:41	ZZZZZZ	2777	71044	10098	7052
06:46	ZZZZZZ	2780	71641	9911	7287
06:51	MP35752-LB1	2406	63198	9416	5758
06:57	MP35752-MB1	2724	71605	9762	7594
07:02	MP35752-B1	2676	69857	9752	6947
07:07	MP35752-LS1	2468	64461	9511	5720
07:12	MA53166-CCV10	2670	68940	9629	6788
07:16	MA53166-CCB10	2734	70645	9616	7594
07:22	MA53166-CRID3	2738	71190	9726	7583
07:27	MP35732-MB1	No results reported for the elements associated with this internal standard.			
07:32	MP35732-B1	2678	69626	9817	6939
07:37	MP35732-S1	2634	68708	9716	6675
07:41	MP35732-S2	2630	68888	9691	6675
07:46	JD53503-5	2661	69755	9734	6996
07:51	MP35732-SD1	2728	70768	9696	7451
07:56	ZZZZZZ	2586	68236	9601	6679
08:01	ZZZZZZ	3137	81649	11613	6456
08:07	ZZZZZZ	2605	69051	10020	5781
08:12	MA53166-CCV11	2675	69143	9580	6792
08:17	MA53166-CCB11	2758	71683	9634	7670
08:22	ZZZZZZ	2687	70869	9840	7271
08:27	ZZZZZZ	2702	71393	9840	7413
08:32	JD53489-1	2589	69530	9686	6852
08:37	JD53489-2	2628	69795	9734	6921
08:42	JD53489-3	2591	69568	9749	6862
08:47	ZZZZZZ	2675	70909	9747	7218
08:53	ZZZZZZ	2662	70721	9759	7116
08:58	ZZZZZZ	2668	71226	9771	7242
09:03	ZZZZZZ	2668	70577	9743	7217
09:08	MA53166-CCV12	2663	69606	9629	6806
09:13	MA53166-CCB12	2728	72250	9709	7652

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
09:18	ZZZZZZ	2673	71096	9813	7328
09:23	ZZZZZZ	2715	72585	9930	7635
09:28	ZZZZZZ	2657	70835	9844	7191
09:33	ZZZZZZ	2576	69429	9885	6556
09:38	ZZZZZZ	2493	69987	9800	6350
09:44	MP35732-MB1	2713	71789	9789	7631
09:49	MA53166-CCV13	2652	67677	9823	6807
09:54	MA53166-CCB13	2710	71663	9846	7624
09:59	MP35752-S1	2362	62665	9555	5515
10:04	MP35752-S2	2359	63479	9484	5515
10:09	JD53325-1	2315	62455	9371	5506
10:14	MP35752-SD1	2532	67647	9758	6428
10:19	ZZZZZZ	2257	62266	9341	5476
10:24	ZZZZZZ	2376	63820	9626	5707
10:29	ZZZZZZ	2382	63814	9591	999999 !a
10:35	ZZZZZZ	2385	64319	9586	5791
10:40	ZZZZZZ	2369	62323	9087	5712
10:45	MA53166-CCV14	2608	69004	9626	6747
10:50	MA53166-CCB14	2690	71008	9752	7609
10:55	ZZZZZZ	2249	61736	9257	5371
11:01	ZZZZZZ	2233	61437	9275	5353
11:06	ZZZZZZ	2229	61243	9276	5342
11:11	ZZZZZZ	2243	60465	9284	5354
11:17	ZZZZZZ	2389	63935	9609	5748
11:22	ZZZZZZ	2387	63921	9546	5754
11:27	ZZZZZZ	2384	63767	9537	5742
11:33	ZZZZZZ	2283	62393	9352	5444
11:38	ZZZZZZ	2263	61909	9253	5400
11:43	MA53166-CCV15	2602	69003	9719	6721
11:48	MA53166-CCB15	2676	71462	9802	7572
11:53	ZZZZZZ	2242	61852	9279	5378
11:58	ZZZZZZ	2362	63383	9486	5672
12:04	ZZZZZZ	2341	63220	9441	5616

INTERNAL STANDARD SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
Analyst: ND Run ID: MA53166
Parameters: Al,Sb,As,Ba,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Ni,K,Se,Ag,Na,Tl,V,Zn

Time	Sample Description	Istd#1	Istd#2	Istd#3	Istd#4
12:09	ZZZZZZ	2360	62280	9561	5719
12:14	ZZZZZZ	2362	63675	9604	5739
12:19	MP35751-MB1	2675	70767	9853	7583
12:25	MP35751-LB1	2673	71151	9774	7586
12:30	MP35751-B1	2632	69994	9837	6948
12:35	MP35751-LS1	2631	69573	9905	6927
12:39	MA53166-CCV16	2607	68816	9692	6707
12:44	MA53166-CCB16	2686	71288	9696	7563
12:49	MP35751-S1	2562	68101	9568	6470
12:54	MP35751-S2	2549	68191	9879	6438
12:59	JD53050-1A	2578	69164	9818	6732
13:04	MP35751-SD1	2647	70688	9785	7288
13:09	ZZZZZZ	2594	69775	9850	6974
13:14	ZZZZZZ	2594	69865	9842	6964
13:19	ZZZZZZ	2541	68044	9779	6744
13:24	MA53166-CCV17	2611	68883	9738	6700
13:29	MA53166-CCB17	2683	71017	9765	7551
13:34	ZZZZZZ	2704	71700	9858	7586
13:40	ZZZZZZ	2680	71100	9778	7519
13:45	ZZZZZZ	2678	71383	9816	7518
13:50	ZZZZZZ	2447	66191	9418	6375
13:55	MA53166-CCV18	2614	68827	9729	6709
14:00	MA53166-CCB18	2697	71217	9878	7581

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium (2243)	70-130 %
Istd#2	Yttrium (3600)	70-130 %
Istd#3	Yttrium (3710)	70-130 %
Istd#4	Indium	70-130 %

(a) No samples reported for the elements associated with this internal standard.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time: / Sample ID:			22:34 ICB1		22:44 CCB1		23:45 CCB2		00:44 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	16	-2.30	<200	0.900	<200	-1.40	<200	1.10	<200
Antimony	6.0	2.5	0.00	<6.0	0.800	<6.0	0.800	<6.0	0.500	<6.0
Arsenic	3.0	2	-0.800	<3.0	-0.100	<3.0	-1.40	<3.0	0.00	<3.0
Barium	200	.4	-0.200	<200	-0.100	<200	0.00	<200	-0.100	<200
Beryllium	1.0	.1	0.00	<1.0	0.100	<1.0	0.100	<1.0	0.200	<1.0
Bismuth	20	3.6								
Boron	100	1.9	anr							
Cadmium	3.0	.4	0.00	<3.0	0.00	<3.0	0.100	<3.0	0.100	<3.0
Calcium	5000	5.6	-0.400	<5000	-2.30	<5000	1.10	<5000	-0.800	<5000
Cerium	100									
Chromium	10	.5	0.00	<10	0.100	<10	-0.200	<10	-0.100	<10
Cobalt	50	.5	0.100	<50	0.300	<50	0.200	<50	0.100	<50
Copper	10	1	0.100	<10	-0.400	<10	0.200	<10	0.300	<10
Iron	100	11	0.400	<100	2.10	<100	0.700	<100	3.60	<100
Lead	3.0	1.2	-0.100	<3.0	1.00	<3.0	0.700	<3.0	-0.100	<3.0
Lithium	50	2.3	anr							
Magnesium	5000	65	-30.7	<5000	-19.3	<5000	-36.5	<5000	-30.2	<5000
Manganese	15	.2	0.00	<15	0.00	<15	0.00	<15	0.00	<15
Molybdenum	20	.4	anr							
Nickel	10	.3	0.00	<10	-0.200	<10	0.100	<10	-0.300	<10
Phosphorus	50	4.1	anr							
Potassium	10000	55	3.90	<10000	10.2	<10000	1.20	<10000	11.2	<10000
Selenium	10	3.5	2.10	<10	0.300	<10	0.200	<10	-0.700	<10
Silicon	200	1.6								
Silver	10	1.1	0.500	<10	0.400	<10	0.300	<10	0.600	<10
Sodium	10000	11	0.100	<10000	-6.10	<10000	-23.2	<10000	-41.4	<10000
Strontium	10	.1	anr							
Sulfur	50	4.4								
Thallium	10	2.5	-1.10	<10	-1.30	<10	-1.00	<10	-0.500	<10
Tin	10	1	anr							
Titanium	10	.4	anr							
Tungsten	50	2.8								
Vanadium	50	.6	0.100	<50	0.00	<50	0.200	<50	0.300	<50

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time: / Sample ID:			22:34 ICB1		22:44 CCB1		23:45 CCB2		00:44 CCB3	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zinc	20	.1	-1.00	<20	-0.900	<20	-0.800	<20	-1.30	<20
Zirconium	10	.4								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time: / Sample ID:			01:44 CCB4		02:38 CCB5		03:32 CCB6		04:22 CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	16	0.200	<200	7.00	<200	-3.10	<200	4.70	<200
Antimony	6.0	2.5	0.900	<6.0	1.30	<6.0	0.800	<6.0	1.00	<6.0
Arsenic	3.0	2	-1.80	<3.0	-0.500	<3.0	-0.400	<3.0	-1.10	<3.0
Barium	200	.4	-0.100	<200	0.00	<200	0.00	<200	0.00	<200
Beryllium	1.0	.1	0.00	<1.0	0.100	<1.0	0.100	<1.0	0.00	<1.0
Bismuth	20	3.6								
Boron	100	1.9	anr							
Cadmium	3.0	.4	0.300	<3.0	0.100	<3.0	0.200	<3.0	0.300	<3.0
Calcium	5000	5.6	-3.30	<5000	0.100	<5000	-2.20	<5000	-0.600	<5000
Cerium	100									
Chromium	10	.5	0.00	<10	0.100	<10	-0.400	<10	-0.200	<10
Cobalt	50	.5	0.00	<50	0.100	<50	0.00	<50	0.00	<50
Copper	10	1	-0.100	<10	0.400	<10	0.100	<10	0.00	<10
Iron	100	11	3.50	<100	2.20	<100	4.90	<100	4.00	<100
Lead	3.0	1.2	0.700	<3.0	0.600	<3.0	0.600	<3.0	0.600	<3.0
Lithium	50	2.3	anr							
Magnesium	5000	65	-21.2	<5000	-30.9	<5000	-20.6	<5000	-36.1	<5000
Manganese	15	.2	0.00	<15	0.00	<15	0.00	<15	0.100	<15
Molybdenum	20	.4	anr							
Nickel	10	.3	0.00	<10	0.100	<10	-0.200	<10	0.200	<10
Phosphorus	50	4.1	anr							
Potassium	10000	55	0.400	<10000	8.00	<10000	0.500	<10000	-11.1	<10000
Selenium	10	3.5	0.200	<10	-0.100	<10	0.100	<10	1.80	<10
Silicon	200	1.6								
Silver	10	1.1	0.500	<10	0.300	<10	0.100	<10	-0.100	<10
Sodium	10000	11	-47.1	<10000	-56.6	<10000	-60.2	<10000	-70.5	<10000
Strontium	10	.1	anr							
Sulfur	50	4.4								
Thallium	10	2.5	-0.800	<10	-0.100	<10	-0.500	<10	-1.00	<10
Tin	10	1	anr							
Titanium	10	.4	anr							
Tungsten	50	2.8								
Vanadium	50	.6	0.200	<50	0.500	<50	0.200	<50	0.300	<50

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time:			01:44		02:38		03:32		04:22	
Sample ID:			CCB4		CCB5		CCB6		CCB7	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zinc	20	.1	-1.10	<20	-1.10	<20	-1.20	<20	-0.900	<20
Zirconium	10	.4								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time: / Sample ID:			05:21 CCB8		06:21 CCB9		07:16 CCB10		08:17 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Aluminum	200	16	-1.40	<200	-5.70	<200	3.00	<200	-5.40	<200
Antimony	6.0	2.5	1.20	<6.0	0.600	<6.0	1.70	<6.0	0.100	<6.0
Arsenic	3.0	2	-0.600	<3.0	0.100	<3.0	-0.100	<3.0	-0.700	<3.0
Barium	200	.4	0.100	<200	0.00	<200	0.200	<200	0.100	<200
Beryllium	1.0	.1	0.100	<1.0	0.100	<1.0	0.100	<1.0	0.100	<1.0
Bismuth	20	3.6								
Boron	100	1.9	anr							
Cadmium	3.0	.4	0.200	<3.0	0.100	<3.0	0.300	<3.0	0.200	<3.0
Calcium	5000	5.6	-4.50	<5000	-2.10	<5000	-1.90	<5000	-0.200	<5000
Cerium	100									
Chromium	10	.5	0.100	<10	-0.100	<10	0.300	<10	0.300	<10
Cobalt	50	.5	0.00	<50	-0.100	<50	0.100	<50	0.00	<50
Copper	10	1	-0.100	<10	-0.100	<10	-0.100	<10	0.00	<10
Iron	100	11	3.80	<100	6.10	<100	4.50	<100	5.90	<100
Lead	3.0	1.2	0.200	<3.0	0.600	<3.0	0.200	<3.0	1.10	<3.0
Lithium	50	2.3	anr							
Magnesium	5000	65	-23.3	<5000	-20.9	<5000	-12.5	<5000	-16.5	<5000
Manganese	15	.2	0.100	<15	0.00	<15	0.100	<15	0.100	<15
Molybdenum	20	.4	anr							
Nickel	10	.3	0.200	<10	0.100	<10	-0.200	<10	0.00	<10
Phosphorus	50	4.1	anr							
Potassium	10000	55	13.2	<10000	2.20	<10000	19.1	<10000	-8.40	<10000
Selenium	10	3.5	1.20	<10	0.00	<10	-0.900	<10	1.90	<10
Silicon	200	1.6								
Silver	10	1.1	0.100	<10	-0.100	<10	-0.200	<10	0.200	<10
Sodium	10000	11	-74.8	<10000	-80.6	<10000	16.4	<10000	-51.0	<10000
Strontium	10	.1	anr							
Sulfur	50	4.4								
Thallium	10	2.5	-1.90	<10	-0.300	<10	-1.10	<10	-0.700	<10
Tin	10	1	anr							
Titanium	10	.4	anr							
Tungsten	50	2.8								
Vanadium	50	.6	0.200	<50	0.400	<50	0.300	<50	0.300	<50

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time: / Sample ID:			05:21 CCB8		06:21 CCB9		07:16 CCB10		08:17 CCB11	
Metal	RL	IDL	raw	final	raw	final	raw	final	raw	final
Zinc	20	.1	-1.10	<20	-1.20	<20	-1.20	<20	-1.10	<20
Zirconium	10	.4								

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time:			09:13		09:54	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Aluminum	200	16	-2.50	<200	4.80	<200
Antimony	6.0	2.5	0.400	<6.0	0.700	<6.0
Arsenic	3.0	2	-0.800	<3.0	-1.10	<3.0
Barium	200	.4	0.100	<200	0.00	<200
Beryllium	1.0	.1	0.200	<1.0	0.200	<1.0
Bismuth	20	3.6				
Boron	100	1.9	anr			
Cadmium	3.0	.4	0.200	<3.0	0.300	<3.0
Calcium	5000	5.6	1.60	<5000	-1.00	<5000
Cerium	100					
Chromium	10	.5	0.00	<10	-0.100	<10
Cobalt	50	.5	0.00	<50	0.200	<50
Copper	10	1	0.100	<10	0.200	<10
Iron	100	11	6.00	<100	3.50	<100
Lead	3.0	1.2	-0.400	<3.0	0.100	<3.0
Lithium	50	2.3	anr			
Magnesium	5000	65	-26.6	<5000	-26.4	<5000
Manganese	15	.2	0.100	<15	0.100	<15
Molybdenum	20	.4	anr			
Nickel	10	.3	0.00	<10	0.00	<10
Phosphorus	50	4.1	anr			
Potassium	10000	55	-14.2	<10000	-16.1	<10000
Selenium	10	3.5	0.800	<10	2.30	<10
Silicon	200	1.6				
Silver	10	1.1	0.400	<10	0.600	<10
Sodium	10000	11	-61.4	<10000	-60.6	<10000
Strontium	10	.1	anr			
Sulfur	50	4.4				
Thallium	10	2.5	-0.700	<10	-0.700	<10
Tin	10	1	anr			
Titanium	10	.4	anr			
Tungsten	50	2.8				
Vanadium	50	.6	0.300	<50	0.00	<50

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: result < RL Run ID: MA53166 Units: ug/l

Time:			09:13		09:54	
Sample ID:			CCB12		CCB13	
Metal	RL	IDL	raw	final	raw	final
Zinc	20	.1	-1.10	<20	-1.20	<20
Zirconium	10	.4				

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		22:26			22:39			23:40	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38900	97.3	40000	39000	97.5	40000	39500	98.8
Antimony	2000	2000	100.0	2000	2010	100.5	2000	2030	101.5
Arsenic	2000	1990	99.5	2000	1980	99.0	2000	2010	100.5
Barium	2000	1970	98.5	2000	1970	98.5	2000	2000	100.0
Beryllium	2000	1990	99.5	2000	1980	99.0	2000	2020	101.0
Bismuth									
Boron	anr								
Cadmium	2000	2000	100.0	2000	2000	100.0	2000	2020	101.0
Calcium	40000	39500	98.8	40000	39600	99.0	40000	39900	99.8
Cerium									
Chromium	2000	1990	99.5	2000	2000	100.0	2000	2020	101.0
Cobalt	2000	1970	98.5	2000	1960	98.0	2000	2000	100.0
Copper	2000	1920	96.0	2000	1920	96.0	2000	1950	97.5
Iron	40000	39600	99.0	40000	39600	99.0	40000	40300	100.8
Lead	2000	2020	101.0	2000	2010	100.5	2000	2050	102.5
Lithium	anr								
Magnesium	40000	39100	97.8	40000	39200	98.0	40000	39700	99.3
Manganese	2000	2010	100.5	2000	2010	100.5	2000	2040	102.0
Molybdenum	anr								
Nickel	2000	1990	99.5	2000	1990	99.5	2000	2030	101.5
Phosphorus	anr								
Potassium	40000	38700	96.8	40000	38800	97.0	40000	39200	98.0
Selenium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Silicon									
Silver	250	242	96.8	250	243	97.2	250	246	98.4
Sodium	40000	39000	97.5	40000	39200	98.0	40000	39800	99.5
Strontium	anr								
Sulfur									
Thallium	2000	2050	102.5	2000	2050	102.5	2000	2080	104.0
Tin	anr								
Titanium	anr								
Tungsten									
Vanadium	2000	1980	99.0	2000	1990	99.5	2000	2010	100.5

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		22:26			22:39			23:40	
Sample ID:	ICV	ICV1		CCV	CCV1		CCV	CCV2	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zinc	2000	2020	101.0	2000	2020	101.0	2000	2050	102.5
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		00:39			01:39			02:33	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38800	97.0	40000	38800	97.0	40000	39100	97.8
Antimony	2000	2020	101.0	2000	2010	100.5	2000	2010	100.5
Arsenic	2000	1990	99.5	2000	1990	99.5	2000	1990	99.5
Barium	2000	1960	98.0	2000	1970	98.5	2000	1980	99.0
Beryllium	2000	1980	99.0	2000	1970	98.5	2000	1990	99.5
Bismuth									
Boron	anr								
Cadmium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Calcium	40000	39200	98.0	40000	39100	97.8	40000	39500	98.8
Cerium									
Chromium	2000	2000	100.0	2000	1980	99.0	2000	2010	100.5
Cobalt	2000	1970	98.5	2000	1960	98.0	2000	1980	99.0
Copper	2000	1920	96.0	2000	1910	95.5	2000	1930	96.5
Iron	40000	39500	98.8	40000	39300	98.3	40000	39600	99.0
Lead	2000	2010	100.5	2000	2010	100.5	2000	2020	101.0
Lithium	anr								
Magnesium	40000	38900	97.3	40000	38700	96.8	40000	39000	97.5
Manganese	2000	2010	100.5	2000	2000	100.0	2000	2020	101.0
Molybdenum	anr								
Nickel	2000	2000	100.0	2000	1990	99.5	2000	2000	100.0
Phosphorus	anr								
Potassium	40000	38700	96.8	40000	38700	96.8	40000	39000	97.5
Selenium	2000	2010	100.5	2000	2000	100.0	2000	2000	100.0
Silicon									
Silver	250	243	97.2	250	241	96.4	250	244	97.6
Sodium	40000	39300	98.3	40000	39300	98.3	40000	39600	99.0
Strontium	anr								
Sulfur									
Thallium	2000	2070	103.5	2000	2050	102.5	2000	2060	103.0
Tin	anr								
Titanium	anr								
Tungsten									
Vanadium	2000	1990	99.5	2000	1970	98.5	2000	2000	100.0

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		00:39			01:39			02:33	
Sample ID:	CCV	CCV3		CCV	CCV4		CCV	CCV5	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zinc	2000	2020	101.0	2000	2020	101.0	2000	2030	101.5
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		03:28			04:17			05:17	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38800	97.0	40000	38800	97.0	40000	38900	97.3
Antimony	2000	2020	101.0	2000	2020	101.0	2000	2020	101.0
Arsenic	2000	1990	99.5	2000	1990	99.5	2000	2000	100.0
Barium	2000	1960	98.0	2000	1960	98.0	2000	1960	98.0
Beryllium	2000	1980	99.0	2000	1980	99.0	2000	1990	99.5
Bismuth									
Boron	anr								
Cadmium	2000	2000	100.0	2000	2000	100.0	2000	2000	100.0
Calcium	40000	39200	98.0	40000	39300	98.3	40000	39500	98.8
Cerium									
Chromium	2000	2010	100.5	2000	2030	101.5	2000	2040	102.0
Cobalt	2000	1980	99.0	2000	2000	100.0	2000	2000	100.0
Copper	2000	1920	96.0	2000	1930	96.5	2000	1940	97.0
Iron	40000	39300	98.3	40000	39400	98.5	40000	39700	99.3
Lead	2000	2020	101.0	2000	2040	102.0	2000	2040	102.0
Lithium	anr								
Magnesium	40000	38800	97.0	40000	38800	97.0	40000	39100	97.8
Manganese	2000	2020	101.0	2000	2030	101.5	2000	2040	102.0
Molybdenum	anr								
Nickel	2000	2000	100.0	2000	2010	100.5	2000	2020	101.0
Phosphorus	anr								
Potassium	40000	38700	96.8	40000	38700	96.8	40000	38700	96.8
Selenium	2000	2010	100.5	2000	2010	100.5	2000	2000	100.0
Silicon									
Silver	250	243	97.2	250	246	98.4	250	246	98.4
Sodium	40000	39300	98.3	40000	39400	98.5	40000	39500	98.8
Strontium	anr								
Sulfur									
Thallium	2000	2070	103.5	2000	2080	104.0	2000	2080	104.0
Tin	anr								
Titanium	anr								
Tungsten									
Vanadium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		03:28			04:17			05:17	
Sample ID:	CCV	CCV6		CCV	CCV7		CCV	CCV8	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zinc	2000	2030	101.5	2000	2050	102.5	2000	2040	102.0
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		06:16			07:12			08:12	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	38800	97.0	40000	39200	98.0	40000	39300	98.3
Antimony	2000	2000	100.0	2000	2020	101.0	2000	2020	101.0
Arsenic	2000	1980	99.0	2000	2000	100.0	2000	2000	100.0
Barium	2000	1960	98.0	2000	1980	99.0	2000	1980	99.0
Beryllium	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Bismuth									
Boron	anr								
Cadmium	2000	1980	99.0	2000	2000	100.0	2000	2000	100.0
Calcium	40000	39300	98.3	40000	39800	99.5	40000	40000	100.0
Cerium									
Chromium	2000	2030	101.5	2000	2050	102.5	2000	2040	102.0
Cobalt	2000	1990	99.5	2000	2000	100.0	2000	2010	100.5
Copper	2000	1920	96.0	2000	1930	96.5	2000	1940	97.0
Iron	40000	39600	99.0	40000	39900	99.8	40000	40000	100.0
Lead	2000	2030	101.5	2000	2050	102.5	2000	2060	103.0
Lithium	anr								
Magnesium	40000	38900	97.3	40000	39500	98.8	40000	39800	99.5
Manganese	2000	2030	101.5	2000	2050	102.5	2000	2050	102.5
Molybdenum	anr								
Nickel	2000	2000	100.0	2000	2020	101.0	2000	2020	101.0
Phosphorus	anr								
Potassium	40000	38600	96.5	40000	38900	97.3	40000	39100	97.8
Selenium	2000	1980	99.0	2000	2010	100.5	2000	2000	100.0
Silicon									
Silver	250	244	97.6	250	246	98.4	250	246	98.4
Sodium	40000	39400	98.5	40000	39000	97.5	40000	39700	99.3
Strontium	anr								
Sulfur									
Thallium	2000	2070	103.5	2000	2080	104.0	2000	2080	104.0
Tin	anr								
Titanium	anr								
Tungsten									
Vanadium	2000	2000	100.0	2000	2020	101.0	2000	2010	100.5

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		06:16			07:12			08:12	
Sample ID:	CCV	CCV9		CCV	CCV10		CCV	CCV11	
Metal	True	Results	% Rec	True	Results	% Rec	True	Results	% Rec
Zinc	2000	2030	101.5	2000	2060	103.0	2000	2060	103.0
Zirconium									

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		09:08			09:49	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum	40000	39400	98.5	40000	39100	97.8
Antimony	2000	2020	101.0	2000	2020	101.0
Arsenic	2000	2010	100.5	2000	2000	100.0
Barium	2000	1990	99.5	2000	1980	99.0
Beryllium	2000	2000	100.0	2000	1990	99.5
Bismuth						
Boron	anr					
Cadmium	2000	2020	101.0	2000	2010	100.5
Calcium	40000	40100	100.3	40000	39600	99.0
Cerium						
Chromium	2000	2010	100.5	2000	2080	104.0
Cobalt	2000	1990	99.5	2000	1980	99.0
Copper	2000	1930	96.5	2000	2010	100.5
Iron	40000	40200	100.5	40000	39800	99.5
Lead	2000	2040	102.0	2000	2030	101.5
Lithium	anr					
Magnesium	40000	39700	99.3	40000	39200	98.0
Manganese	2000	2030	101.5	2000	2100	105.0
Molybdenum	anr					
Nickel	2000	2020	101.0	2000	2010	100.5
Phosphorus	anr					
Potassium	40000	39300	98.3	40000	39100	97.8
Selenium	2000	2020	101.0	2000	2020	101.0
Silicon						
Silver	250	244	97.6	250	252	100.8
Sodium	40000	39800	99.5	40000	39600	99.0
Strontium	anr					
Sulfur						
Thallium	2000	2080	104.0	2000	2060	103.0
Tin	anr					
Titanium	anr					
Tungsten						
Vanadium	2000	2000	100.0	2000	2070	103.5

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 95 to 105 % Recovery Run ID: MA53166 Units: ug/l

Time:		09:08			09:49	
Sample ID:	CCV	CCV12		CCV	CCV13	
Metal	True	Results	% Rec	True	Results	% Rec
Zinc	2000	2050	102.5	2000	2030	101.5
Zirconium						

(*) Outside of QC limits
(anr) Analyte not requested

HIGH STANDARD CHECK SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA53166 Units: ug/l

Time:		23:09			23:14	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Aluminum				300000	292000	97.3
Antimony	8000	7910	98.9			
Arsenic	8000	7740	96.8			
Barium	8000	7770	97.1			
Beryllium	8000	7880	98.5			
Bismuth						
Boron	anr					
Cadmium	8000	7660	95.8			
Calcium				200000	190000	95.0
Cerium						
Chromium	8000	8020	100.3			
Cobalt	8000	7690	96.1			
Copper	8000	7820	97.8			
Iron				200000	189000	94.5
Lead	8000	7760	97.0			
Lithium	anr					
Magnesium				300000	292000	97.3
Manganese	8000	7730	96.6			
Molybdenum	anr					
Nickel	8000	7640	95.5			
Phosphorus	anr					
Potassium				200000	194000	97.0
Selenium	8000	7860	98.3			
Silicon						
Silver	625	595	95.2			
Sodium				200000	191000	95.5
Strontium	anr					
Sulfur						
Thallium	8000	8010	100.1			
Tin	anr					
Titanium	anr					
Tungsten						
Vanadium	8000	7910	98.9			

HIGH STANDARD CHECK SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 90 to 110 % Recovery Run ID: MA53166 Units: ug/l

Time:		23:09			23:14	
Sample ID:	HSTD	HSTD1		HSTD	HSTD2	
Metal	True	Results	% Rec	True	Results	% Rec
Zinc	8000	8110	101.4			
Zirconium						

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA53166 Units: ug/l

Time:				22:49		07:22	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec
Aluminum	200	500	100	203	101.5	94.9	94.9
Antimony	6.0	20	3.0	5.10	85.0		
Arsenic	8.0	20	3.0	8.60	107.5	3.30	110.0
Barium	200		4.0	194	97.0	3.80	95.0
Beryllium	2.0		1.0	2.00	100.0	1.10	110.0
Bismuth	20						
Boron	100		10	anr			
Cadmium	3.0		1.0	3.10	103.3	1.00	100.0
Calcium	5000	2000	1000	5060	101.2	996	99.6
Cerium							
Chromium	10		2.0	9.60	96.0	1.90	95.0
Cobalt	50		3.0	46.9	93.8	2.90	96.7
Copper	10		2.0	9.50	95.0		
Iron	100	500		103	103.0		
Lead	3.0	20	2.5	2.80	93.3		
Lithium	50			anr			
Magnesium	5000	2000	100	4980	99.6		
Manganese	15		3.0	15.1	100.7	3.00	100.0
Molybdenum	20			anr			
Nickel	10		4.0	9.50	95.0	3.80	95.0
Phosphorus	50			anr			
Potassium	5000		2000	4860	97.2	1940	97.0
Selenium	10	20	5.0	10.0	100.0	5.10	102.0
Silicon	200						
Silver	5.0		2.0	5.60	112.0		
Sodium	5000		1000	4920	98.4	958	95.8
Strontium	10			anr			
Sulfur	50						
Thallium	10		2.0	9.30	93.0		
Tin	10			anr			
Titanium	10			anr			
Tungsten	50						
Vanadium	50		2.0	49.3	98.6	2.10	105.0

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: CRI 80-120% CRIA 80-120% Run ID: MA53166 Units: ug/l

Time:				22:49		07:22	
Sample ID:	CRI	CRIA	CRID	CRI1		CRID3	
Metal	True	True	True	Results	% Rec	Results	% Rec
Zinc	20		10	20.0	100.0	9.30	93.0
Zirconium	10						

(*) Outside of QC limits
(anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA53166 Units: ug/l

Time:			22:59		23:04	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Aluminum	500000	500000	498000	99.6	494000	98.8
Antimony		1000	0.100		1000	100.0
Arsenic		1000	-1.30		981	98.1
Barium		500	-9.80		465	93.0
Beryllium		500	-0.300		475	95.0
Bismuth		500	3.30		480	96.0
Boron		500	-3.40		483	96.6
Cadmium		1000	0.100		1000	100.0
Calcium	400000	400000	388000	97.0	372000	93.0
Cerium			146*		638*	
Chromium		500	-2.90		465	93.0
Cobalt		500	-0.800		471	94.2
Copper		500	3.50		506	101.2
Iron	200000	200000	195000	97.5	190000	95.0
Lead		1000	0.100		929	92.9
Lithium		500	-1.40		508	101.6
Magnesium	500000	500000	487000	97.4	486000	97.2
Manganese		500	2.80		490	98.0
Molybdenum		500	-1.60		459	91.8
Nickel		1000	-2.10		917	91.7
Phosphorus		500	21.5		486	97.2
Potassium			191		207	
Selenium		1000	1.10		912	91.2
Silicon		500	-5.10		598	119.6
Silver		1000	2.80		997	99.7
Sodium			-21.0		10.8	
Strontium		500	-1.30		467	93.4
Sulfur		500	5.40		479	95.8
Thallium		1000	-3.60		897	89.7
Tin		500	-3.50		448	89.6
Titanium		500	-0.100		480	96.0
Tungsten		500	4.90		459	91.8
Vanadium		500	-1.10		483	96.6

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: SE101422M2.ICP Date Analyzed: 10/14/22 Methods: SW846 6010D
QC Limits: 80 to 120 % Recovery Run ID: MA53166 Units: ug/l

Time:			22:59		23:04	
Sample ID:	ICSA	ICSAB	ICSA1		ICSAB1	
Metal	True	True	Results	% Rec	Results	% Rec
Zinc		1000	1.80		947	94.7
Zirconium		500	-6.00		416	83.2

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	RL	IDL	MDL	MB raw	final
Aluminum	200	16	150	-2.1	<200
Antimony	6.0	2.5	4.7	0.20	<6.0
Arsenic	3.0	2	2.8	-0.10	<3.0
Barium	200	.4	13	-0.10	<200
Beryllium	1.0	.1	.5	0.10	<1.0
Bismuth	20	3.6	8.6		
Boron	100	1.9	10		
Cadmium	3.0	.4	1	0.0	<3.0
Calcium	5000	5.6	99	2.2	<5000
Cerium	100				
Chromium	10	.5	2	1.2	<10
Cobalt	50	.5	2.6	-0.10	<50
Copper	10	1	5.9	0.30	<10
Iron	100	11	32	1.2	<100
Lead	3.0	1.2	1.8	0.40	<3.0
Lithium	50	2.3	7.3		
Magnesium	5000	65	140	-17	<5000
Manganese	15	.2	1.4	0.0	<15
Molybdenum	20	.4	3.6		
Nickel	10	.3	1.7	0.0	<10
Phosphorus	50	4.1	18		
Potassium	10000	55	200	-20	<10000
Selenium	10	3.5	4.9	0.40	<10
Silicon	200	1.6	32		
Silver	10	1.1	6.1	0.40	<10
Sodium	10000	11	570	-52	<10000
Strontium	10	.1	2.7		
Sulfur	50	4.4	45		
Thallium	10	2.5	1.8	-0.10	<10
Tin	10	1	3.7		
Titanium	10	.4	2.5		
Tungsten	50	2.8	40		
Vanadium	50	.6	1.8	0.30	<50

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	RL	IDL	MDL	MB raw	final
Zinc	20	.1	6.9	0.40	<20
Zirconium	10	.4	4.1		

Associated samples MP35732: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	196	24500	25000	97.2	75-125
Antimony	0.0	1920	2000	96.0	75-125
Arsenic	0.0	1910	2000	95.5	75-125
Barium	160	2020	2000	93.0	75-125
Beryllium	1.1	1900	2000	94.9	75-125
Bismuth					
Boron	anr				
Cadmium	0.50	1890	2000	94.5	75-125
Calcium	12600	36900	25000	97.2	75-125
Cerium					
Chromium	0.0	1930	2000	96.5	75-125
Cobalt	13.4	1910	2000	94.8	75-125
Copper	13.1	1840	2000	91.3	75-125
Iron	266	25000	25000	98.9	75-125
Lead	0.0	1920	2000	96.0	75-125
Lithium	anr				
Magnesium	9770	33900	25000	96.5	75-125
Manganese	260	2170	2000	95.5	75-125
Molybdenum	anr				
Nickel	29.5	1940	2000	95.5	75-125
Phosphorus	anr				
Potassium	4560	28700	25000	96.6	75-125
Selenium	0.0	1870	2000	93.5	75-125
Silicon					
Silver	0.0	239	250	95.6	75-125
Sodium	77700	101000	25000	93.2	75-125
Strontium	anr				
Sulfur					
Thallium	0.0	1940	2000	97.0	75-125
Tin	anr				
Titanium	anr				
Tungsten					
Vanadium	0.0	1910	2000	95.5	75-125

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MS	Spikelot MPSPK2	% Rec	QC Limits
Zinc	97.2	2020	2000	96.1	75-125
Zirconium					

Associated samples MP35732: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Aluminum	196	24600	25000	97.6	0.4	20
Antimony	0.0	1950	2000	97.5	1.6	20
Arsenic	0.0	1930	2000	96.5	1.0	20
Barium	160	2030	2000	93.5	0.5	20
Beryllium	1.1	1910	2000	95.4	0.5	20
Bismuth						
Boron	anr					
Cadmium	0.50	1900	2000	95.0	0.5	20
Calcium	12600	37200	25000	98.4	0.8	20
Cerium						
Chromium	0.0	1930	2000	96.5	0.0	20
Cobalt	13.4	1920	2000	95.3	0.5	20
Copper	13.1	1850	2000	91.8	0.5	20
Iron	266	25100	25000	99.3	0.4	20
Lead	0.0	1930	2000	96.5	0.5	20
Lithium	anr					
Magnesium	9770	34200	25000	97.7	0.9	20
Manganese	260	2180	2000	96.0	0.5	20
Molybdenum	anr					
Nickel	29.5	1950	2000	96.0	0.5	20
Phosphorus	anr					
Potassium	4560	28800	25000	97.0	0.3	20
Selenium	0.0	1880	2000	94.0	0.5	20
Silicon						
Silver	0.0	238	250	95.2	0.4	20
Sodium	77700	103000	25000	101.2	2.0	20
Strontium	anr					
Sulfur						
Thallium	0.0	1950	2000	97.5	0.5	20
Tin	anr					
Titanium	anr					
Tungsten						
Vanadium	0.0	1910	2000	95.5	0.0	20

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MSD	Spikelot MPSPK2	% Rec	MSD RPD	QC Limit
Zinc	97.2	2030	2000	96.6	0.5	20
Zirconium						

Associated samples MP35732: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Aluminum	24700	25000	98.8	80-120
Antimony	1950	2000	97.5	80-120
Arsenic	1910	2000	95.5	80-120
Barium	1890	2000	94.5	80-120
Beryllium	1920	2000	96.0	80-120
Bismuth				
Boron	anr			
Cadmium	1900	2000	95.0	80-120
Calcium	25100	25000	100.4	80-120
Cerium				
Chromium	1960	2000	98.0	80-120
Cobalt	1900	2000	95.0	80-120
Copper	1850	2000	92.5	80-120
Iron	25300	25000	101.2	80-120
Lead	1940	2000	97.0	80-120
Lithium	anr			
Magnesium	24600	25000	98.4	80-120
Manganese	1950	2000	97.5	80-120
Molybdenum	anr			
Nickel	1910	2000	95.5	80-120
Phosphorus	anr			
Potassium	24500	25000	98.0	80-120
Selenium	1870	2000	93.5	80-120
Silicon				
Silver	237	250	94.8	80-120
Sodium	25100	25000	100.4	80-120
Strontium	anr			
Sulfur				
Thallium	1990	2000	99.5	80-120
Tin	anr			
Titanium	anr			
Tungsten				
Vanadium	1930	2000	96.5	80-120

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	BSP Result	Spikelot MPSPK2	% Rec	QC Limits
Zinc	1940	2000	97.0	80-120
Zirconium				

Associated samples MP35732: JD53489-1, JD53489-2, JD53489-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	SDL 1:5	%DIF	QC Limits
Aluminum	196	258	31.4 (a)	0-10
Antimony	0.00	0.00	NC	0-10
Arsenic	0.00	0.00	NC	0-10
Barium	160	172	7.1	0-10
Beryllium	1.10	1.10	0.0	0-10
Bismuth				
Boron	anr			
Cadmium	0.500	0.00	100.0(a)	0-10
Calcium	12600	14200	12.9*(b)	0-10
Cerium				
Chromium	0.00	0.00	NC	0-10
Cobalt	13.4	14.4	7.5	0-10
Copper	13.1	13.4	2.3	0-10
Iron	266	284	6.8	0-10
Lead	0.00	6.00	NC	0-10
Lithium	anr			
Magnesium	9770	10600	8.3	0-10
Manganese	260	283	8.7	0-10
Molybdenum	anr			
Nickel	29.5	31.4	6.4	0-10
Phosphorus	anr			
Potassium	4560	4950	8.4	0-10
Selenium	0.00	0.00	NC	0-10
Silicon				
Silver	0.00	0.00	NC	0-10
Sodium	77700	83400	7.3	0-10
Strontium	anr			
Sulfur				
Thallium	0.00	0.00	NC	0-10
Tin	anr			
Titanium	anr			
Tungsten				
Vanadium	0.00	0.00	NC	0-10

SERIAL DILUTION RESULTS SUMMARY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35732
Matrix Type: AQUEOUS

Methods: SW846 6010D
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	SDL 1:5	%DIF	QC Limits
Zinc	97.2	118	21.1*(b)	0-10
Zirconium				

Associated samples MP35732: JD53489-1, JD53489-2, JD53489-3

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).
(b) Serial dilution indicates possible matrix interference.

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35787
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/14/22

Metal	RL	IDL	MDL	MB raw	final
Mercury	0.20	.024	.095	0.016	<0.20

Associated samples MP35787: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35787
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MS	Spikelot HGPW3	% Rec	QC Limits
Mercury	0.0	2.0	2	100.0	75-125

Associated samples MP35787: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35787 Methods: SW846 7470A
Matrix Type: AQUEOUS Units: ug/l

Prep Date: 10/14/22

Metal	JD53503-5 Original	MSD	Spikelot HGPW3	% Rec	MSD RPD	QC Limit
Mercury	0.0	2.0	2	100.0	0.0	20

Associated samples MP35787: JD53489-1, JD53489-2, JD53489-3

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

QC Batch ID: MP35787
Matrix Type: AQUEOUS

Methods: SW846 7470A
Units: ug/l

Prep Date: 10/14/22

Metal	BSP Result	Spikelot HGPW3	% Rec	QC Limits
Mercury	1.9	2	95.0	80-120

Associated samples MP35787: JD53489-1, JD53489-2, JD53489-3

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

Instrument Detection Limits

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Instrument ID: LEEMANHG8 **Effective Date:** 01/12/21

Analyte	IDL ug/l
Mercury	.0237

The above applies to the following instrument runs:
MA53162

Instrument Detection Limits

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Instrument ID: SSTRACE5 **Effective Date:** 02/11/21

Analyte	IDL ug/l
Aluminum	15.9
Antimony	2.5
Arsenic	2
Barium	.4
Beryllium	.1
Bismuth	3.6
Boron	1.9
Cadmium	.4
Calcium	5.6
Chromium	.5
Cobalt	.5
Copper	1
Iron	11.1
Lead	1.2
Lithium	2.3
Magnesium	64.9
Manganese	.2
Molybdenum	.4
Nickel	.3
Phosphorus	4.1
Potassium	55.1
Selenium	3.5
Silicon	1.6
Silver	1.1
Sodium	11.1
Sulfur	4.4
Strontium	.1
Thallium	2.5
Tin	1
Titanium	.4
Tungsten	2.8
Vanadium	.6
Zinc	.1
Zirconium	.4

The above applies to the following instrument runs:
MA53166

Instrument Linear Ranges

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Instrument ID: LEEMANHG8 **Effective Date:** 03/10/17

Analyte	Linear Range ug/l
Mercury	5

The above applies to the following instrument runs:
MA53162

Instrument Linear Ranges

Job Number: JD53489
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Instrument ID: SSTRACE5 **Effective Date:** 08/22/19

Analyte	Linear Range ug/l
Aluminum	300000
Antimony	8000
Arsenic	8000
Barium	8000
Beryllium	8000
Bismuth	8000
Boron	8000
Cadmium	8000
Calcium	200000
Cerium	8000
Chromium	8000
Cobalt	8000
Copper	8000
Iron	200000
Lead	8000
Lithium	8000
Magnesium	300000
Manganese	8000
Molybdenum	8000
Nickel	8000
Palladium	8000
Phosphorus	8000
Potassium	200000
Selenium	8000
Silicon	25000
Silver	625
Sodium	200000
Sulfur	100000
Strontium	8000
Thallium	8000
Tin	8000
Titanium	8000
Tungsten	8000
Vanadium	8000
Zinc	8000
Zirconium	8000

The above applies to the following instrument runs:
MA53166

Metals Analysis

Raw Data

MA53162

Method: SGS Operator: Admin Date of Analysis: 17 Oct 2022 11:59:42

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
STDA - 1	17 Oct 2022 12:11:32	S	ug/l	-	-845	1.000	1.000
STDB - 1	17 Oct 2022 12:12:57	S	ug/l	-	93	1.000	1.000
STDC - 1	17 Oct 2022 12:14:24	S	ug/l	-	1729	1.000	1.000
STDD - 1	17 Oct 2022 12:15:51	S	ug/l	-	4609	1.000	1.000
STDE - 1	17 Oct 2022 12:17:24	S	ug/l	-	13122	1.000	1.000
STDF - 1	17 Oct 2022 12:19:01	S	ug/l	-	28271	1.000	1.000
SAMPLECONF - 1	17 Oct 2022 12:36:44	U	ug/l	0.0118	-1057	1.000	1.000
ICV - 1	17 Oct 2022 12:38:05	C	ug/l	3.0202	16514	1.000	1.000
ICB - 1	17 Oct 2022 12:39:31	C	ug/l	0.0373	-908	1.000	1.000
CCV - 1	17 Oct 2022 12:41:17	C	ug/l	2.5069	13516	1.000	1.000
CCB - 1	17 Oct 2022 12:42:41	C	ug/l	-0.0120	-1196	1.000	1.000
CRI - 1	17 Oct 2022 12:44:24	C	ug/l	0.2022	55	1.000	1.000
MP35787-MB1 - 1	17 Oct 2022 12:45:48	U	ug/l	0.0155	-1035	1.000	1.000
MP35787-B1 - 1	17 Oct 2022 12:47:17	U	ug/l	1.8876	9899	1.000	1.000
MP35787-S1 - 1	17 Oct 2022 12:48:40	U	ug/l	1.9753	10411	1.000	1.000
MP35787-S2 - 1	17 Oct 2022 12:50:22	U	ug/l	2.0162	10650	1.000	1.000
JD53503-5 - 1	17 Oct 2022 12:52:07	U	ug/l	-0.0163	-1221	1.000	1.000
JD53503-1 - 1	17 Oct 2022 12:53:49	U	ug/l	0.0128	-1051	1.000	1.000
JD53503-2 - 1	17 Oct 2022 12:55:13	U	ug/l	0.0147	-1040	1.000	1.000
CCV - 1	17 Oct 2022 12:56:35	C	ug/l	2.5024	13490	1.000	1.000
CCB - 1	17 Oct 2022 12:57:59	C	ug/l	0.0198	-1010	1.000	1.000
JD53503-3 - 1	17 Oct 2022 12:59:46	U	ug/l	0.0109	-1062	1.000	1.000
JD53503-4 - 1	17 Oct 2022 13:01:12	U	ug/l	0.0125	-1053	1.000	1.000
JD53503-6 - 1	17 Oct 2022 13:02:39	U	ug/l	0.0178	-1022	1.000	1.000
JD53503-7 - 1	17 Oct 2022 13:04:02	U	ug/l	0.0232	-990	1.000	1.000
JD53503-9 - 1	17 Oct 2022 13:05:28	U	ug/l	0.0337	-929	1.000	1.000
JD53129-1A - 1	17 Oct 2022 13:06:51	U	ug/l	0.0106	-1064	1.000	1.000
JD53507-2 - 1	17 Oct 2022 13:08:12	U	ug/l	1.2618	6244	1.000	1.000
CCV - 1	17 Oct 2022 13:09:36	C	ug/l	2.4862	13395	1.000	1.000
CCB - 1	17 Oct 2022 13:11:16	C	ug/l	-0.0007	-1130	1.000	1.000
JD53507-3 - 1	17 Oct 2022 13:12:58	U	ug/l	0.1585	-200	1.000	1.000
JD53489-1 - 1	17 Oct 2022 13:14:25	U	ug/l	0.0051	-1096	1.000	1.000
JD53489-2 - 1	17 Oct 2022 13:15:51	U	ug/l	0.0229	-992	1.000	1.000
JD53489-3 - 1	17 Oct 2022 13:17:15	U	ug/l	0.0164	-1030	1.000	1.000
JD53516-5 - 1	17 Oct 2022 13:18:38	U	ug/l	1.5020	7647	1.000	1.000
JD53516-6 - 1	17 Oct 2022 13:20:03	U	ug/l	0.0404	-890	1.000	1.000
JD53516-7 - 1	17 Oct 2022 13:21:43	U	ug/l	0.1366	-328	1.000	1.000
CCV - 1	17 Oct 2022 13:23:09	C	ug/l	2.4930	13435	1.000	1.000
CCB - 1	17 Oct 2022 13:24:36	C	ug/l	-0.0238	-1265	1.000	1.000
MP35788-MB1 - 1	17 Oct 2022 13:26:15	U	ug/l	-0.0120	-1196	1.000	1.000
MP35788-B1 - 1	17 Oct 2022 13:27:41	U	ug/l	1.9910	10503	1.000	1.000
MP35788-S1 - 1	17 Oct 2022 13:29:05	U	ug/l	1.9760	10415	1.000	1.000
MP35788-S2 - 1	17 Oct 2022 13:30:46	U	ug/l	2.0234	10692	1.000	1.000
JD53535-3 - 1	17 Oct 2022 13:32:35	U	ug/l	-0.0425	-1374	1.000	1.000
JD53535-1 - 1	17 Oct 2022 13:34:17	U	ug/l	0.0166	-1029	1.000	1.000
CCV - 1	17 Oct 2022 13:35:42	C	ug/l	2.4790	13353	1.000	1.000
CCB - 1	17 Oct 2022 13:37:07	C	ug/l	0.0101	-1067	1.000	1.000
JD53535-2 - 1	17 Oct 2022 13:38:52	U	ug/l	0.0345	-924	1.000	1.000
JD53535-4 - 1	17 Oct 2022 13:40:16	U	ug/l	0.1013	-534	1.000	1.000
JD53535-5 - 1	17 Oct 2022 13:41:40	U	ug/l	0.1517	-240	1.000	1.000
JD53535-6 - 1	17 Oct 2022 13:43:05	U	ug/l	0.1606	-188	1.000	1.000
JD53535-7 - 1	17 Oct 2022 13:44:32	U	ug/l	0.1321	-354	1.000	1.000
JD53535-9 - 1	17 Oct 2022 13:45:59	U	ug/l	0.1205	-422	1.000	1.000
CCV - 1	17 Oct 2022 13:47:27	C	ug/l	2.4702	13302	1.000	1.000
CCB - 1	17 Oct 2022 13:48:53	C	ug/l	0.0241	-985	1.000	1.000
MP35794-MB1 - 1	17 Oct 2022 14:02:00	U	ug/l	0.0479	-846	1.000	1.000
MP35794-B1 - 1	17 Oct 2022 14:03:26	U	ug/l	2.0415	10798	1.000	1.000
MP35794-S1 - 1	17 Oct 2022 14:04:51	U	ug/l	2.0343	10756	1.000	1.000

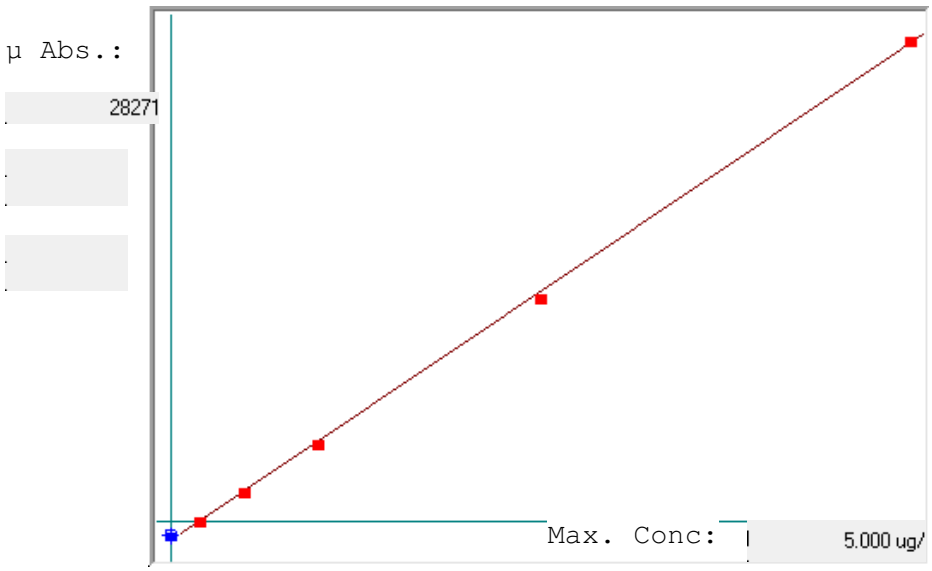
MA53162

Method: SGS Operator: Admin Date of Analysis: 17 Oct 2022 11:59:42

Sample ID	Date	Type	Units	Conc.	µ Abs.	Wt.	Vol.
MP35794-S2 - 1	17 Oct 2022 14:06:30	U	ug/l	2.0681	10953	1.000	1.000
JD53166-7A - 1	17 Oct 2022 14:08:10	U	ug/l	0.0113	-1060	1.000	1.000
CCV - 1	17 Oct 2022 14:09:58	C	ug/l	2.4578	13229	1.000	1.000
CCB - 1	17 Oct 2022 14:11:22	C	ug/l	0.0005	-1123	1.000	1.000
JD53166-8A - 1	17 Oct 2022 14:13:06	U	ug/l	0.0251	-979	1.000	1.000
JD53178-1 - 1	17 Oct 2022 14:14:31	U	ug/l	0.0775	-673	1.000	1.000
JD53120-1 - 1	17 Oct 2022 14:15:55	U	ug/l	0.0344	-925	1.000	1.000
JD53120-2 - 1	17 Oct 2022 14:17:19	U	ug/l	0.0380	-904	1.000	1.000
JD53120-3 - 1	17 Oct 2022 14:18:43	U	ug/l	0.0310	-945	1.000	1.000
JD53228-1 - 1	17 Oct 2022 14:20:07	U	ug/l	0.0553	-803	1.000	1.000
CCV - 1	17 Oct 2022 14:21:33	C	ug/l	2.4798	13358	1.000	1.000
CCB - 1	17 Oct 2022 14:22:58	C	ug/l	-0.0012	-1133	1.000	1.000
JD53228-2 - 1	17 Oct 2022 14:24:41	U	ug/l	0.0239	-986	1.000	1.000
JD53228-3 - 1	17 Oct 2022 14:26:06	U	ug/l	0.0412	-885	1.000	1.000
JD53228-4 - 1	17 Oct 2022 14:27:32	U	ug/l	0.0786	-667	1.000	1.000
JD53228-5 - 1	17 Oct 2022 14:28:59	U	ug/l	0.0152	-1037	1.000	1.000
JD53230-1 - 1	17 Oct 2022 14:30:22	U	ug/l	0.0272	-967	1.000	1.000
JD53255-1 - 1	17 Oct 2022 14:31:45	U	ug/l	16.4003	94662	1.000	1.000
CCV - 1	17 Oct 2022 14:33:11	C	ug/l	2.3968	12873	1.000	1.000
CCB - 1	17 Oct 2022 14:35:14	C	ug/l	-0.0196	-1240	1.000	1.000
JD53255-1 - 1	17 Oct 2022 14:50:37	U	ug/l	18.8069	20843	1.000	5.000
CCV - 1	17 Oct 2022 14:52:07	C	ug/l	2.4245	13035	1.000	1.000
CCB - 1	17 Oct 2022 14:53:50	C	ug/l	0.0354	-919	1.000	1.000

SGS

Linear



A=	0.0000e+000
B=	1.7121e-004
C=	1.9275e-001
Rho=	0.9997936
Accept=	Accepted

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
STDA	0.000	0.048	0.048	-845	0.000	-845				
STDB	0.200	0.209	0.009	93	0.0 %	93				
STDC	0.500	0.489	-0.011	1729	0.0 %	1729				
STDD	1.000	0.982	-0.018	4609	0.0 %	4609				
STDE	2.500	2.439	-0.061	13122	0.0 %	13122				
STDF	5.000	5.033	0.033	28271	0.0 %	28271				

Zoom In ▶ Zoom Out

Sample Name: STDA Acquired: 10/14/2022 22:16:21 Type: Cal
Method: SGS 070219(v296) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.0002**	**-.0013**	**-.0007**	**.0006**	**.0038**	**.0001**	**-.0008**	**.0046**	**.0003**
Stddev	.0000	.0002	.0001	.0002	.0004	.0001	.0001	.0001	.0002
%RSD	8.112	17.53	13.89	25.06	10.77	50.84	14.02	2.065	50.97
#1	-.0002	-.0012	-.0007	.0008	.0034	.0000	-.0007	.0046	.0005
#2	-.0002	-.0016	-.0006	.0005	.0042	.0001	-.0009	.0047	.0002
#3	-.0002	-.0012	-.0008	.0006	.0038	.0001	-.0008	.0045	.0003

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0001**	**-.0004**	**.0000**	**.0049**	**.0002**	**.0014**	**-.0026**	**.0001**	**.0001**
Stddev	.0000	.0000	.0000	.0001	.0001	.0012	.0007	.0001	.0000
%RSD	6.307	11.21	882.2	2.602	22.06	82.89	26.25	147.4	24.11
#1	.0001	-.0003	.0000	.0047	.0003	.0001	-.0028	.0002	.0000
#2	.0001	-.0004	.0000	.0050	.0002	.0022	-.0019	.0001	.0001
#3	.0001	-.0004	-.0000	.0049	.0002	.0020	-.0032	-.0001	.0001

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**.0095**	**-.0003**	**-.0094**	**-.0004**	**-.0022**	**-.0006**	**.0005**	**.0048**
Stddev	.0001	.0005	.0000	.0001	.0001	.0002	.0001	.0001	.0002
%RSD	49.90	4.796	8.742	.7049	29.77	10.87	23.06	28.27	4.844
#1	.0004	.0100	-.0004	-.0094	-.0005	-.0024	-.0007	.0004	.0047
#2	.0003	.0093	-.0003	-.0094	-.0003	-.0020	-.0005	.0006	.0047
#3	.0001	.0092	-.0003	-.0093	-.0004	-.0021	-.0005	.0004	.0051

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0003**	**.0003**	**-.0000**	**-.0002**	**-.0001**	**.0011**	**.0019**	**.0001**
Stddev	.0001	.0004	.0000	.0000	.0000	.0002	.0002	.0000
%RSD	20.11	111.9	150.2	2.115	60.41	17.73	8.563	31.82
#1	.0003	-.0001	-.0000	-.0002	-.0001	.0013	.0018	.0001
#2	.0002	.0006	-.0001	-.0002	-.0000	.0009	.0021	.0001
#3	.0003	.0005	-.0000	-.0002	-.0000	.0012	.0020	.0001

◀ Zoom In ▶ Zoom Out

Sample Name: STDA Acquired: 10/14/2022 22:16:21 Type: Cal
Method: SGS 070219(v296) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7533.0**	**70881.**	**9685.9**	**2686.7**
Stddev	11.0	84.	25.2	2.7
%RSD	.14628	.11918	.26010	.10033
#1	7542.3	70928.	9713.9	2687.0
#2	7535.9	70783.	9665.2	2689.3
#3	7520.9	70931.	9678.5	2683.9

◀ Zoom In ▶ Zoom Out

Sample Name: STDB Acquired: 10/14/2022 22:21:30 Type: Cal
Method: SGS 070219(v296) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.0611**	**3.019**	**.5238**	**.9534**	**8.872**	**6.533**	**1.062**	**4.140**	**4.239**
Stddev	.0005	.006	.0008	.0019	.006	.018	.003	.006	.004
%RSD	.8790	.1949	.1608	.1988	.0634	.2776	.2820	.1475	.1067
#1	.0608	3.024	.5228	.9513	8.869	6.551	1.059	4.144	4.234
#2	.0607	3.012	.5245	.9540	8.868	6.515	1.062	4.133	4.242
#3	.0617	3.019	.5240	.9550	8.878	6.533	1.065	4.144	4.240

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.1390**	**1.712**	**.3588**	**.9093**	**3.590**	**3.093**	**3.650**	**.4352**	**2.747**
Stddev	.0008	.001	.0030	.0068	.009	.003	.003	.0014	.021
%RSD	.5937	.0556	.8279	.7513	.2477	.0840	.0761	.3331	.7657
#1	.1383	1.712	.3565	.9079	3.599	3.094	3.653	.4367	2.729
#2	.1386	1.713	.3578	.9032	3.581	3.090	3.647	.4338	2.742
#3	.1399	1.712	.3622	.9167	3.590	3.095	3.651	.4352	2.770

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**3.773**	**9.993**	**1.274**	**.6025**	**.5595**	**.1756**	**.8130**	**.4219**	**2.643**
Stddev	.007	.011	.001	.0014	.0010	.0006	.0012	.0008	.005
%RSD	.1876	.1047	.0558	.2397	.1719	.3212	.1489	.1857	.2077
#1	3.765	10.00	1.275	.6008	.5606	.1751	.8117	.4211	2.637
#2	3.778	9.984	1.274	.6034	.5591	.1762	.8134	.4220	2.647
#3	3.776	9.991	1.273	.6033	.5588	.1755	.8140	.4226	2.645

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.7947**	**12.90**	**.4905**	**.2329**	**.5718**	**1.876**	**3.973**	**1.342**
Stddev	.0013	.01	.0036	.0001	.0042	.004	.004	.009
%RSD	.1678	.0560	.7286	.0458	.7358	.2386	.1059	.7085
#1	.7933	12.89	.4881	.2329	.5681	1.871	3.969	1.334
#2	.7951	12.90	.4888	.2330	.5710	1.878	3.977	1.339
#3	.7958	12.91	.4946	.2328	.5764	1.880	3.974	1.352

◀ Zoom In ▶ Zoom Out

Sample Name: STDB Acquired: 10/14/2022 22:21:30 Type: Cal
Method: SGS 070219(v296) Mode: IR Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6424.3**	**67346.**	**9532.0**	**2562.6**
Stddev	3.4	379.	21.5	2.0
%RSD	.05293	.56237	.22551	.07805
#1	6420.9	67600.	9514.2	2564.9
#2	6427.7	67528.	9555.9	2561.2
#3	6424.2	66911.	9526.0	2561.7

Zoom In Zoom Out

Sample Name: icv 7 Acquired: 10/14/2022 22:26:15 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2424**	**38.92**	**1.985**	**2.023**	**1.971**	**1.989**	**2.086**	**39.46**	**2.004**
Stddev	.0012	.05	.004	.002	.006	.001	.004	.10	.002
%RSD	.4802	.1327	.2261	.0976	.2938	.0655	.1944	.2465	.0753
#1	.2429	38.98	1.987	2.023	1.977	1.989	2.089	39.52	2.005
#2	.2432	38.89	1.980	2.021	1.966	1.990	2.081	39.50	2.002
#3	.2410	38.90	1.988	2.025	1.969	1.988	2.087	39.34	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.995**	**1.967**	**1.988**	**1.919**	**39.63**	**38.73**	**1.957**	**39.14**	**2.010**
Stddev	.004	.006	.006	.002	.08	.14	.008	.09	.003
%RSD	.1762	.3241	.3101	.1176	.1995	.3722	.4178	.2405	.1220
#1	1.996	1.974	1.985	1.921	39.64	38.90	1.966	39.20	2.010
#2	1.998	1.962	1.995	1.917	39.70	38.62	1.951	39.18	2.012
#3	1.991	1.965	1.983	1.918	39.54	38.69	1.954	39.03	2.007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**39.03**	**1.992**	**1.981**	**2.017**	**1.952**	**1.996**	**1.991**	**5.041**
Stddev	.004	.15	.003	.004	.006	.003	.002	.008	.006
%RSD	.1712	.3957	.1611	.2139	.2927	.1380	.1092	.4095	.1171
#1	2.022	39.21	1.995	1.982	2.024	1.955	1.997	1.996	5.047
#2	2.015	38.93	1.992	1.977	2.016	1.951	1.994	1.996	5.039
#3	2.017	38.96	1.989	1.985	2.013	1.950	1.998	1.982	5.036
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: icv 7 Acquired: 10/14/2022 22:26:15 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.037**	**1.977**	**1.981**	**2.052**	**1.979**	**2.003**	**2.020**	**1.969**
Stddev	.005	.006	.002	.003	.004	.005	.006	.000
%RSD	.2276	.3082	.0856	.1597	.2007	.2519	.2888	.0110
#1	2.042	1.984	1.983	2.055	1.977	2.009	2.026	1.969
#2	2.036	1.973	1.982	2.053	1.984	2.000	2.015	1.969
#3	2.033	1.974	1.979	2.049	1.977	2.000	2.019	1.969
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6767.7**	**69493.**	**9693.5**	**2640.6**
Stddev	3.0	159.	25.0	1.3
%RSD	.04503	.22906	.25817	.04806
#1	6765.7	69514.	9696.6	2639.7
#2	6766.1	69324.	9667.1	2639.9
#3	6771.2	69640.	9716.8	2642.0

Zoom In Zoom Out

Sample Name: icb 7 Acquired: 10/14/2022 22:34:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**-.0023**	**-.0008**	**.0021**	**-.0002**	**-.0000**	**.0004**	**-.0004**	**.0000**
Stddev	.0001	.0045	.0015	.0009	.0002	.0000	.0017	.0045	.0001
%RSD	25.36	199.4	190.7	40.47	100.8	152.5	369.0	1165.	885.8
#1	.0003	-.0063	.0007	.0011	.0000	-.0001	-.0000	.0039	-.0000
#2	.0005	-.0030	-.0024	.0025	-.0003	-.0000	.0023	-.0050	.0001
#3	.0006	.0026	-.0008	.0027	-.0003	.0000	-.0009	-.0001	-.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0001**	**-.0000**	**.0001**	**.0004**	**.0039**	**.0009**	**-.0307**	**-.0000**
Stddev	.0040	.0002	.0003	.0003	.0016	.0179	.0008	.0117	.0000
%RSD	387.5	168.7	1135.	328.1	414.0	462.5	93.99	38.09	142.4
#1	-.0031	-.0001	.0001	.0004	-.0001	.0205	.0007	-.0172	.0000
#2	.0013	.0002	-.0004	.0000	.0022	-.0151	.0018	-.0371	-.0000
#3	.0049	.0002	.0002	-.0002	-.0009	.0063	.0001	-.0378	-.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0001**	**-.0000**	**.0013**	**-.0001**	**-.0019**	**.0000**	**.0021**	**.0004**
Stddev	.0001	.0045	.0001	.0005	.0009	.0025	.0006	.0020	.0009
%RSD	28.46	8208.	374.8	39.80	636.1	133.7	11540.	97.84	231.7
#1	.0006	.0034	.0001	.0018	-.0010	-.0008	-.0004	.0042	-.0005
#2	.0004	-.0051	-.0001	.0013	-.0002	-.0001	-.0003	.0001	.0012
#3	.0005	.0018	-.0000	.0008	.0008	-.0047	.0007	.0020	.0005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: icb 7 Acquired: 10/14/2022 22:34:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.0000**	**.0007**	**-.0011**	**.0001**	**.0003**	**-.0010**	**.0001**
Stddev	.0007	.0000	.0001	.0003	.0001	.0010	.0001	.0001
%RSD	189.8	454.9	22.08	27.23	165.9	355.0	14.48	115.4
#1	-.0005	-.0000	.0006	-.0012	-.0001	.0014	-.0010	.0000
#2	-.0010	.0001	.0008	-.0014	.0002	-.0001	-.0009	.0002
#3	.0004	-.0000	.0006	-.0008	.0001	-.0004	-.0012	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7613.9**	**71596.**	**9829.0**	**2712.5**
Stddev	11.6	187.	16.9	4.9
%RSD	.15181	.26061	.17145	.17979
#1	7600.5	71653.	9844.5	2706.8
#2	7620.9	71747.	9811.1	2715.6
#3	7620.2	71388.	9831.6	2714.9

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/14/2022 22:39:17 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2425**	**39.00**	**1.984**	**2.012**	**1.969**	**1.983**	**2.101**	**39.55**	**1.995**
Stddev	.0004	.04	.005	.007	.001	.002	.005	.03	.006
%RSD	.1693	.0958	.2546	.3493	.0689	.0906	.2642	.0872	.2929
#1	.2425	39.04	1.990	2.020	1.970	1.981	2.107	39.59	2.001
#2	.2420	38.99	1.982	2.009	1.969	1.985	2.096	39.53	1.994
#3	.2428	38.97	1.980	2.007	1.967	1.982	2.099	39.54	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.994**	**1.964**	**1.997**	**1.917**	**39.63**	**38.83**	**1.954**	**39.21**	**2.013**
Stddev	.006	.004	.002	.003	.02	.03	.002	.04	.003
%RSD	.3112	.2116	.1098	.1711	.0547	.0765	.1142	.1097	.1428
#1	1.999	1.968	1.998	1.919	39.60	38.86	1.957	39.21	2.016
#2	1.987	1.965	1.995	1.914	39.64	38.80	1.954	39.17	2.012
#3	1.995	1.960	1.998	1.920	39.64	38.84	1.952	39.25	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**39.21**	**1.989**	**1.988**	**2.008**	**1.954**	**2.005**	**1.998**	**5.009**
Stddev	.004	.03	.005	.007	.007	.004	.002	.002	.015
%RSD	.1966	.0704	.2310	.3297	.3340	.1854	.0874	.0860	.3047
#1	2.022	39.21	1.992	1.995	2.012	1.954	2.007	2.000	5.026
#2	2.018	39.24	1.991	1.986	2.013	1.958	2.003	1.997	5.003
#3	2.014	39.18	1.984	1.982	2.001	1.951	2.006	1.997	4.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/14/2022 22:39:17 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.047**	**1.979**	**1.983**	**2.051**	**1.986**	**2.005**	**2.023**	**1.978**
Stddev	.004	.003	.003	.002	.002	.005	.004	.001
%RSD	.2053	.1652	.1722	.1184	.0754	.2553	.1995	.0683
#1	2.051	1.982	1.987	2.050	1.987	2.008	2.026	1.979
#2	2.043	1.978	1.982	2.054	1.984	2.007	2.025	1.977
#3	2.048	1.976	1.981	2.049	1.986	1.999	2.018	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6754.1**	**68973.**	**9676.3**	**2632.7**
Stddev	9.5	168.	16.2	4.4
%RSD	.14033	.24287	.16717	.16897
#1	6746.9	68784.	9693.8	2628.0
#2	6750.6	69101.	9673.1	2633.4
#3	6764.9	69036.	9662.0	2636.8

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/14/2022 22:44:04 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0009**	**-.0001**	**.0028**	**-.0001**	**.0001**	**-.0002**	**-.0023**	**-.0000**
Stddev	.0002	.0055	.0009	.0008	.0001	.0001	.0008	.0042	.0001
%RSD	55.96	618.6	1016.	26.86	41.22	93.90	393.0	187.0	181.2
#1	.0005	.0050	-.0010	.0035	-.0001	.0000	-.0004	.0018	-.0001
#2	.0005	-.0053	.0008	.0030	-.0002	.0001	.0007	-.0067	.0000
#3	.0001	.0029	-.0001	.0020	-.0001	.0000	-.0009	-.0019	-.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0003**	**.0001**	**-.0004**	**.0021**	**.0102**	**.0007**	**-.0193**	**.0000**
Stddev	.0010	.0003	.0003	.0002	.0014	.0161	.0003	.0306	.0000
%RSD	69.87	96.84	693.9	36.22	66.01	157.7	42.99	158.4	62.63
#1	.0010	.0007	-.0003	-.0003	.0015	.0147	.0004	-.0161	.0000
#2	.0007	.0001	.0004	-.0004	.0038	.0236	.0011	.0095	.0000
#3	.0025	.0002	.0001	-.0005	.0012	-.0077	.0007	-.0514	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0061**	**-.0002**	**.0018**	**.0010**	**-.0013**	**.0008**	**.0003**	**.0006**
Stddev	.0001	.0036	.0006	.0009	.0008	.0028	.0010	.0006	.0005
%RSD	10.31	59.57	236.2	50.05	75.21	223.6	123.2	181.2	88.96
#1	.0007	-.0086	.0003	.0011	.0013	.0012	.0010	-.0002	.0005
#2	.0008	-.0078	-.0002	.0014	.0002	-.0006	.0017	.0002	.0011
#3	.0007	-.0019	-.0008	.0028	.0016	-.0043	-.0003	.0010	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/14/2022 22:44:04 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0000**	**.0004**	**-.0013**	**.0000**	**.0006**	**-.0009**	**.0003**
Stddev	.0002	.0000	.0003	.0003	.0003	.0005	.0002	.0001
%RSD	69.23	181.8	88.24	23.33	884.2	79.08	20.43	37.98
#1	.0005	.0000	.0007	-.0010	.0002	.0001	-.0011	.0003
#2	.0001	-.0000	.0004	-.0016	.0001	.0009	-.0008	.0004
#3	.0003	.0000	.0000	-.0013	-.0003	.0009	-.0008	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7570.2**	**71267.**	**9755.5**	**2698.3**
Stddev	2.8	156.	84.0	1.2
%RSD	.03647	.21943	.86152	.04541
#1	7567.6	71160.	9849.8	2698.7
#2	7573.1	71447.	9728.5	2696.9
#3	7569.9	71195.	9688.3	2699.3

Zoom In Zoom Out

Sample Name: cri Acquired: 10/14/2022 22:49:16 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0056**	**.2027**	**.0086**	**.1023**	**.1937**	**.0020**	**.0186**	**5.061**	**.0031**
Stddev	.0003	.0051	.0008	.0009	.0014	.0000	.0010	.041	.0002
%RSD	5.703	2.538	9.111	.8873	.7363	1.749	5.379	.8106	5.642
#1	.0052	.2003	.0080	.1031	.1954	.0020	.0192	5.109	.0033
#2	.0057	.2087	.0095	.1013	.1931	.0020	.0190	5.035	.0030
#3	.0058	.1993	.0083	.1025	.1928	.0019	.0174	5.040	.0031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025**	**.0469**	**.0096**	**.0095**	**.1034**	**4.863**	**.0537**	**4.976**	**.0151**
Stddev	.0019	.0005	.0004	.0004	.0002	.055	.0000	.069	.0001
%RSD	76.44	.9692	4.698	4.037	.2128	1.127	.0853	1.390	.4440
#1	.0047	.0471	.0099	.0093	.1032	4.908	.0536	5.054	.0152
#2	.0022	.0464	.0090	.0093	.1034	4.879	.0537	4.951	.0152
#3	.0008	.0473	.0098	.0100	.1037	4.802	.0537	4.922	.0151
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0207**	**4.915**	**.0095**	**.0469**	**.0028**	**.0462**	**.0051**	**.0100**	**.1931**
Stddev	.0001	.030	.0003	.0008	.0012	.0038	.0003	.0012	.0013
%RSD	.4503	.6086	3.161	1.722	40.65	8.280	6.394	12.29	.6730
#1	.0206	4.948	.0094	.0462	.0032	.0418	.0048	.0114	.1942
#2	.0206	4.904	.0098	.0478	.0038	.0485	.0054	.0094	.1917
#3	.0208	4.892	.0093	.0468	.0015	.0483	.0052	.0092	.1933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: cri Acquired: 10/14/2022 22:49:16 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0103**	**.0095**	**.0099**	**.0093**	**.0493**	**.0504**	**.0200**	**.0108**
Stddev	.0001	.0001	.0001	.0014	.0004	.0010	.0001	.0004
%RSD	1.303	1.255	.9866	14.81	.8232	1.994	.5790	4.093
#1	.0104	.0096	.0100	.0103	.0497	.0515	.0199	.0111
#2	.0102	.0097	.0100	.0098	.0490	.0501	.0198	.0110
#3	.0104	.0094	.0098	.0077	.0491	.0496	.0201	.0103
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7433.8**	**70902.**	**9691.1**	**2685.6**
Stddev	14.9	46.	118.0	5.5
%RSD	.20071	.06558	1.2174	.20610
#1	7416.6	70926.	9556.0	2679.5
#2	7443.6	70930.	9743.5	2690.3
#3	7441.1	70848.	9773.7	2687.0

Zoom In Zoom Out

Sample Name: crid Acquired: 10/14/2022 22:54:25 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0006**	**.1013**	F **.0040**	F **-.0004**	**.0040**	**.0010**	F **.0017**	**1.037**
Stddev	.0002	.0083	.0006	.0007	.0002	.0001	.0011	.005
%RSD	40.86	8.170	15.22	160.7	3.971	6.432	64.67	.4680
#1	.0003	.0929	.0047	.0002	.0039	.0010	.0006	1.042
#2	.0008	.1017	.0035	-.0003	.0040	.0009	.0028	1.038
#3	.0006	.1095	.0039	-.0012	.0042	.0011	.0017	1.032
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.0020		.0030	.0100			.0040	
Range	-30.00%		20.00%	-30.00%			-30.00%	

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0008**	**.0030**	**.0018**	F **-.0000**	**-.0019**	**1.988**	F **-.0013**
Stddev	.0001	.0015	.0002	.0007	.0001	.0007	.010	.0010
%RSD	11.74	189.3	6.663	39.23	286.8	35.34	.5020	76.82
#1	.0009	-.0019	.0029	.0020	-.0002	-.0022	1.983	-.0015
#2	.0011	.0009	.0028	.0011	.0001	-.0023	1.982	-.0003
#3	.0009	-.0014	.0032	.0025	-.0000	-.0011	2.000	-.0023
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Fail
Value					.0020			.0040
Range					-30.00%			-30.00%

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0743**	**.0031**	**.0000**	**.9657**	**.0042**	F **-.0010**	F **.0007**	F **-.0071**
Stddev	.0107	.0001	.0001	.0067	.0003	.0014	.0005	.0045
%RSD	14.47	1.816	328.3	.6972	6.016	145.6	69.96	63.17
#1	.0809	.0030	.0001	.9613	.0042	-.0026	.0003	-.0019
#2	.0801	.0031	.0000	.9735	.0040	-.0000	.0006	-.0098
#3	.0619	.0031	-.0001	.9624	.0045	-.0003	.0013	-.0094
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
Value						.0040	.0025	.0040
Range						-30.00%	-30.00%	-30.00%

Zoom In Zoom Out

Sample Name: crid Acquired: 10/14/2022 22:54:25 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0006**	F **.0033**	**-.0055**	**-.0014**	**-.0001**	**.0001**	F **.0028**	**.0021**
Stddev	.0005	.0014	.0010	.0002	.0001	.0004	.0011	.0002
%RSD	92.64	43.14	18.93	17.60	158.1	298.7	38.15	9.844
#1	.0011	.0043	-.0055	-.0017	-.0001	.0003	.0039	.0019
#2	.0004	.0017	-.0044	-.0012	.0000	-.0003	.0017	.0023
#3	.0001	.0039	-.0065	-.0013	-.0001	.0004	.0028	.0022
Check ?	Chk Fail	Chk Fail	None	None	None	None	Chk Fail	Chk Pass
Value	.0030	.0050					.0020	
Range	-30.00%	-30.00%					20.00%	

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	F **-.0012**	**.0092**	F **-.0001**
Stddev	.0004	.0001	.0001
%RSD	33.03	1.091	50.02
#1	-.0016	.0092	-.0000
#2	-.0011	.0091	-.0001
#3	-.0008	.0093	-.0001
Check ?	Chk Fail	Chk Pass	Chk Fail
Value	.0040		.0040
Range	-30.00%		-30.00%

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7699.0**	**72043.**	**9828.1**	**2737.9**
Stddev	29.2	211.	52.6	12.5
%RSD	.37916	.29244	.53519	.45647
#1	7699.7	72256.	9784.8	2733.8
#2	7727.8	71835.	9813.0	2752.0
#3	7669.4	72039.	9886.6	2728.0

Zoom In Zoom Out

Sample Name: icsa Acquired: 10/14/2022 22:59:36 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0028**	**498.0**	**-.0013**	**-.0034**	**-.0098**	**-.0003**	**.0033**	**387.8**	**.0001**
Stddev	.0001	.8	.0014	.0009	.0000	.0000	.0011	1.0	.0003
%RSD	4.386	.1601	108.6	27.16	.4367	17.50	32.98	.2481	620.7
#1	.0029	498.8	-.0027	-.0035	-.0099	-.0003	.0037	388.5	.0001
#2	.0027	497.2	.0001	-.0024	-.0098	-.0002	.0042	386.7	-.0003
#3	.0027	498.1	-.0012	-.0042	-.0098	-.0003	.0021	388.2	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1463**	**-.0008**	**-.0029**	**.0035**	**194.9**	**.1911**	**-.0014**	**486.8**	**.0028**
Stddev	.0012	.0002	.0003	.0003	.6	.0073	.0008	1.8	.0000
%RSD	.8291	28.47	9.482	8.711	.2953	3.816	56.88	.3658	.7481
#1	.1465	-.0006	-.0033	.0037	195.2	.1916	-.0016	487.5	.0028
#2	.1474	-.0008	-.0028	.0037	194.2	.1981	-.0006	484.8	.0028
#3	.1450	-.0011	-.0028	.0032	195.2	.1835	-.0022	488.1	.0028
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0016**	**-.0210**	**-.0021**	**.0215**	**.0001**	**.0054**	**.0001**	**.0011**	**-.0051**
Stddev	.0001	.0089	.0005	.0012	.0012	.0092	.0017	.0037	.0023
%RSD	8.901	42.55	23.95	5.626	1157.	169.2	1556.	348.5	45.47
#1	-.0014	-.0263	-.0017	.0216	.0015	.0088	.0020	-.0015	-.0074
#2	-.0017	-.0107	-.0019	.0202	-.0004	-.0050	-.0004	.0053	-.0028
#3	-.0016	-.0261	-.0026	.0226	-.0008	.0125	-.0012	-.0006	-.0050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: icsa Acquired: 10/14/2022 22:59:36 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0035**	**-.0013**	**-.0001**	**-.0036**	**-.0011**	**.0049**	**.0018**	**-.0060**
Stddev	.0001	.0001	.0002	.0017	.0003	.0008	.0000	.0001
%RSD	3.314	5.815	189.1	45.63	26.71	16.78	1.198	1.672
#1	-.0036	-.0014	-.0001	-.0046	-.0014	.0043	.0017	-.0061
#2	-.0035	-.0013	.0001	-.0046	-.0009	.0046	.0018	-.0060
#3	-.0034	-.0012	-.0003	-.0017	-.0010	.0059	.0018	-.0059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5765.1**	**63900.**	**9482.4**	**2407.3**
Stddev	83.0	156.	65.9	34.1
%RSD	1.4397	.24441	.69466	1.4145
#1	5814.4	64072.	9443.1	2428.8
#2	5669.3	63767.	9558.4	2368.1
#3	5811.6	63862.	9445.6	2425.1

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 10/14/2022 23:04:41 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9967**	**493.5**	**.9806**	**.4828**	**.4652**	**.4751**	**.4795**	**371.9**	**1.004**
Stddev	.0024	1.1	.0038	.0017	.0007	.0007	.0026	1.0	.001
%RSD	.2384	.2289	.3856	.3434	.1445	.1573	.5374	.2758	.0878
#1	.9986	492.6	.9793	.4829	.4649	.4745	.4766	371.1	1.003
#2	.9941	494.7	.9849	.4843	.4659	.4759	.4805	373.1	1.004
#3	.9975	493.1	.9777	.4810	.4647	.4748	.4814	371.7	1.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6378**	**.4708**	**.4645**	**.5063**	**190.1**	**.2070**	**.5084**	**486.0**	**.4898**
Stddev	.0032	.0011	.0005	.0004	.6	.0042	.0014	1.8	.0007
%RSD	.5092	.2252	.1112	.0811	.3235	2.047	.2823	.3675	.1347
#1	.6377	.4709	.4640	.5068	189.5	.2102	.5070	484.2	.4897
#2	.6345	.4697	.4643	.5060	190.7	.2022	.5099	487.8	.4892
#3	.6410	.4718	.4650	.5061	190.1	.2088	.5084	486.0	.4905
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4591**	**.0108**	**.9171**	**.4860**	**.9287**	**.4793**	**1.003**	**.9116**	**.5984**
Stddev	.0003	.0076	.0008	.0016	.0023	.0045	.004	.0008	.0035
%RSD	.0749	70.42	.0917	.3375	.2491	.9467	.3827	.0845	.5891
#1	.4587	.0195	.9179	.4873	.9312	.4784	1.006	.9111	.6007
#2	.4593	.0060	.9162	.4842	.9281	.4753	1.005	.9125	.6001
#3	.4593	.0068	.9171	.4866	.9267	.4843	.9989	.9113	.5943
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ICSAB Acquired: 10/14/2022 23:04:41 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4480**	**.4667**	**.4803**	**.8967**	**.4828**	**.4585**	**.9465**	**.4155**
Stddev	.0020	.0014	.0011	.0025	.0005	.0005	.0014	.0013
%RSD	.4483	.2986	.2383	.2803	.1122	.1109	.1530	.3102
#1	.4500	.4666	.4800	.8996	.4822	.4581	.9481	.4141
#2	.4480	.4681	.4793	.8958	.4830	.4591	.9461	.4158
#3	.4460	.4653	.4816	.8948	.4832	.4585	.9453	.4166
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5845.9**	**64085.**	**9541.5**	**2440.1**
Stddev	6.6	139.	27.7	2.9
%RSD	.11238	.21644	.29044	.11828
#1	5842.1	64182.	9573.4	2440.9
#2	5842.1	64147.	9526.5	2436.9
#3	5853.5	63926.	9524.4	2442.5

Zoom In Zoom Out

Sample Name: hstd Acquired: 10/14/2022 23:09:28 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5949**	**.1058**	**7.735**	**7.919**	**7.772**	**7.883**	**8.075**	**-.1224**	**7.658**
Stddev	.0016	.0037	.031	.019	.030	.018	.022	.0031	.019
%RSD	.2731	3.465	.3957	.2355	.3817	.2324	.2719	2.536	.2507
#1	.5968	.1092	7.716	7.900	7.802	7.904	8.056	-.1249	7.641
#2	.5940	.1063	7.719	7.921	7.772	7.873	8.069	-.1189	7.654
#3	.5940	.1019	7.770	7.937	7.743	7.871	8.099	-.1234	7.679
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5764**	**7.692**	**8.024**	**7.824**	**.0277**	**.2030**	**7.872**	**-.2903**	**7.726**
Stddev	.0029	.007	.015	.016	.0009	.0042	.022	.0158	.031
%RSD	.5058	.0860	.1876	.2021	3.188	2.048	.2857	5.446	.3970
#1	.5736	7.695	8.015	7.842	.0286	.2043	7.877	-.2855	7.703
#2	.5760	7.684	8.016	7.811	.0276	.2063	7.848	-.3080	7.715
#3	.5794	7.696	8.042	7.819	.0268	.1983	7.892	-.2775	7.761
Check ?	None	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass	None	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**7.953**	**.0828**	**7.640**	**7.712**	**7.764**	**98.14**	**7.908**	**7.862**	**24.82**
Stddev	.023	.0050	.003	.014	.011	.33	.022	.012	.10
%RSD	.2839	5.982	.0344	.1859	.1390	.3342	.2785	.1495	.3892
#1	7.932	.0871	7.641	7.708	7.777	97.84	7.889	7.848	24.72
#2	7.951	.0840	7.637	7.700	7.758	98.10	7.902	7.869	24.81
#3	7.977	.0774	7.643	7.728	7.759	98.49	7.932	7.868	24.92
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: hstd Acquired: 10/14/2022 23:09:28 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**8.138**	**7.753**	**7.820**	**8.011**	**7.911**	**8.103**	**8.110**	**7.692**
Stddev	.017	.030	.003	.012	.005	.020	.005	.008
%RSD	.2076	.3911	.0363	.1455	.0616	.2523	.0617	.1022
#1	8.121	7.782	7.821	8.022	7.914	8.082	8.107	7.701
#2	8.138	7.722	7.822	8.011	7.905	8.103	8.106	7.688
#3	8.155	7.756	7.817	7.999	7.913	8.123	8.115	7.687
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7327.9**	**71153.**	**9910.1**	**2681.0**
Stddev	6.9	177.	40.7	9.3
%RSD	.09464	.24899	.41036	.34532
#1	7335.1	71311.	9897.8	2690.7
#2	7327.2	71186.	9877.0	2679.9
#3	7321.3	70961.	9955.5	2672.3

Zoom In Zoom Out

Sample Name: hstd Acquired: 10/14/2022 23:14:36 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0175**	**292.1**	**-.0005**	**.0036**	**-.0053**	**.0003**	**.0044**	**190.1**	**.0007**
Stddev	.0003	.3	.0006	.0004	.0002	.0001	.0012	.1	.0001
%RSD	1.527	.1181	105.5	11.06	3.585	43.51	26.45	.0741	17.73
#1	.0174	292.5	-.0006	.0039	-.0051	.0005	.0057	190.2	.0008
#2	.0178	292.0	-.0010	.0037	-.0053	.0002	.0037	190.0	.0006
#3	.0172	291.9	.0001	.0032	-.0055	.0003	.0037	190.2	.0007
Check ?	None	Chk Pass	None	None	None	None	None	Chk Pass	None
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1183**	**-.0011**	**-.0019**	**.0043**	**188.7**	**193.6**	**.0041**	**292.0**	**.0032**
Stddev	.0015	.0007	.0004	.0003	.1	.2	.0005	.2	.0001
%RSD	1.299	63.47	23.17	6.299	.0730	.0903	11.67	.0790	2.258
#1	.1171	-.0014	-.0014	.0046	188.7	193.8	.0040	291.7	.0032
#2	.1200	-.0003	-.0021	.0041	188.5	193.5	.0046	292.2	.0032
#3	.1177	-.0016	-.0021	.0043	188.8	193.4	.0037	292.1	.0033
Check ?	None	None	None	None	Chk Pass	Chk Pass	None	Chk Pass	None
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**190.5**	**-.0009**	**.0177**	**.0006**	**.0349**	**-.0001**	**.0069**	**.0103**
Stddev	.0005	3.9	.0003	.0007	.0025	.0044	.0017	.0026	.0005
%RSD	33.01	2.051	39.76	3.796	451.8	12.52	2312.	38.34	4.669
#1	.0021	194.4	-.0007	.0178	.0020	.0397	-.0010	.0044	.0108
#2	.0010	186.6	-.0006	.0183	.0021	.0336	-.0011	.0096	.0104
#3	.0017	190.4	-.0013	.0170	-.0024	.0313	.0019	.0067	.0098
Check ?	None	Chk Pass	None	None	None	None	None	None	None
Value									
Range									

Zoom In Zoom Out

Sample Name: hstd Acquired: 10/14/2022 23:14:36 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.0004**	**.0011**	**-.0017**	**-.0007**	**.0056**	**.0091**	**-.0050**
Stddev	.0006	.0001	.0003	.0010	.0000	.0012	.0001	.0002
%RSD	126.9	18.41	26.89	56.71	6.589	21.12	1.376	3.090
#1	-.0003	-.0003	.0009	-.0013	-.0008	.0069	.0090	-.0051
#2	.0000	-.0005	.0015	-.0011	-.0007	.0047	.0091	-.0050
#3	-.0012	-.0003	.0010	-.0029	-.0007	.0051	.0093	-.0048
Check ?	None	None	None	None	None	None	None	None
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5915.5**	**65627.**	**9556.8**	**2469.7**
Stddev	5.8	57.	20.0	3.2
%RSD	.09825	.08755	.20906	.13024
#1	5921.6	65573.	9566.9	2472.0
#2	5910.0	65688.	9569.7	2466.0
#3	5914.9	65621.	9533.8	2471.1

Zoom In Zoom Out

Sample Name: feconf Acquired: 10/14/2022 23:19:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0184**	**-.0001**	**.0033**	**-.0001**	**-.0000**	**.0018**	**.0047**
Stddev	.0002	.0038	.0007	.0006	.0001	.0001	.0012	.0017
%RSD	27.87	20.70	595.9	19.29	149.1	233.5	67.06	36.74
#1	.0006	.0178	-.0003	.0040	.0001	.0001	.0032	.0057
#2	.0005	.0224	.0007	.0029	-.0002	-.0001	.0014	.0027
#3	.0009	.0149	-.0008	.0029	-.0001	-.0002	.0008	.0058

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0443**	**-.0003**	**-.0003**	**.0018**	**92.18**	**.0652**	**.0021**
Stddev	.0001	.0012	.0001	.0002	.0002	.55	.0130	.0008
%RSD	44.51	2.665	35.43	71.74	9.523	.5925	20.01	39.73
#1	.0003	.0453	-.0002	-.0004	.0016	92.79	.0673	.0018
#2	.0001	.0430	-.0003	-.0006	.0019	91.99	.0771	.0014
#3	.0002	.0445	-.0003	-.0001	.0020	91.75	.0512	.0030

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0279**	**.0015**	**.0008**	**.0165**	**-.0005**	**.0032**	**.0017**	**.0043**
Stddev	.0189	.0001	.0003	.0066	.0003	.0009	.0011	.0038
%RSD	67.64	3.590	30.11	39.63	58.18	26.70	63.23	88.13
#1	-.0067	.0014	.0006	.0238	-.0005	.0041	.0029	.0042
#2	-.0343	.0015	.0009	.0147	-.0008	.0024	.0015	.0081
#3	-.0428	.0014	.0011	.0111	-.0002	.0031	.0007	.0006

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**.0052**	**.0007**	**.0008**	**-.0002**	**.0003**	**-.0006**	**.0001**
Stddev	.0008	.0020	.0003	.0004	.0000	.0002	.0002	.0004
%RSD	54.24	38.28	50.44	54.59	14.45	55.15	37.35	542.9
#1	.0019	.0035	.0003	.0005	-.0002	.0003	-.0008	-.0003
#2	.0006	.0047	.0007	.0006	-.0002	.0006	-.0007	.0001
#3	.0020	.0074	.0010	.0013	-.0002	.0002	-.0003	.0004

Zoom In Zoom Out

Sample Name: feconf Acquired: 10/14/2022 23:19:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0007**	**.0024**	W **-.0023**
Stddev	.0002	.0001	.0001
%RSD	33.04	2.210	4.093
#1	.0010	.0023	-.0024
#2	.0006	.0024	-.0022
#3	.0006	.0023	-.0024

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7460.1**	**71088.**	**9829.2**	**2676.0**
Stddev	90.5	358.	51.1	35.6
%RSD	1.2129	.50301	.52002	1.3296
#1	7477.7	70730.	9776.3	2680.6
#2	7540.4	71087.	9833.0	2709.1
#3	7362.1	71445.	9878.4	2638.4

Zoom In Zoom Out

Sample Name: crconf Acquired: 10/14/2022 23:25:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0042**	**.0034**	**.0033**	**.0001**	**-.0000**	**-.0064**	**.0059**	**.0011**
Stddev	.0001	.0041	.0010	.0012	.0001	.0001	.0007	.0018	.0001
%RSD	11.51	96.78	29.84	36.86	129.4	346.1	11.00	30.40	4.534
#1	.0008	.0004	.0023	.0032	.0001	-.0001	-.0056	.0078	.0011
#2	.0008	.0085	.0034	.0045	-.0000	.0000	-.0066	.0057	.0012
#3	.0007	.0037	.0044	.0021	.0002	-.0000	-.0069	.0042	.0011

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0399**	**-.0003**	F **10.37**	**.0003**	**-.0040**	**.0082**	**.0008**	**-.0149**	**.0010**
Stddev	.0011	.0001	.07	.0001	.0006	.0109	.0006	.0039	.0001
%RSD	2.769	17.01	.6347	33.57	13.71	132.6	75.17	26.14	6.052
#1	.0408	-.0003	10.42	.0002	-.0034	.0061	.0004	-.0105	.0010
#2	.0387	-.0002	10.40	.0002	-.0045	.0199	.0005	-.0163	.0009
#3	.0402	-.0003	10.30	.0003	-.0042	-.0015	.0015	-.0179	.0011

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0069**	**.0042**	**.0009**	**.0040**	**.0011**	**.0015**	**-.0018**	**.0020**
Stddev	.0002	.0090	.0002	.0003	.0007	.0042	.0012	.0025	.0011
%RSD	18.19	130.4	5.832	38.13	17.42	380.5	81.74	139.4	57.00
#1	.0008	.0033	.0040	.0007	.0047	-.0035	.0021	-.0040	.0009
#2	.0009	-.0137	.0045	.0013	.0039	.0047	.0001	-.0022	.0019
#3	.0012	-.0102	.0043	.0007	.0033	.0022	.0023	.0009	.0032

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0000**	**.0020**	**-.0002**	**.0024**	**.0045**	**.1376**	**.0018**
Stddev	.0007	.0000	.0003	.0005	.0001	.0007	.0009	.0001
%RSD	64.92	192.2	13.89	233.5	2.859	15.83	.6184	5.684
#1	.0004	.0001	.0016	.0001	.0023	.0051	.1386	.0017
#2	.0009	-.0000	.0021	-.0007	.0024	.0046	.1372	.0018
#3	.0018	.0000	.0021	.0000	.0024	.0037	.1371	.0019

Zoom In Zoom Out

Sample Name: crconf Acquired: 10/14/2022 23:25:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7608.7**	**72320.**	**9879.5**	**2671.0**
Stddev	7.1	451.	7.8	2.7
%RSD	.09390	.62314	.07906	.09970
#1	7601.0	71952.	9875.3	2672.2
#2	7615.2	72185.	9888.5	2667.9
#3	7609.9	72822.	9874.6	2672.8

Zoom In Zoom Out

Sample Name: crid Acquired: 10/14/2022 23:30:17 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0006**	**.1107**	F **.0046**	F **.0017**	**.0039**	**.0010**	F **.0015**	**1.022**
Stddev	.0003	.0124	.0004	.0003	.0001	.0001	.0003	.004
%RSD	48.16	11.16	9.624	17.78	2.717	7.265	19.86	.3804
#1	.0003	.0969	.0041	.0013	.0041	.0010	.0011	1.024
#2	.0008	.1206	.0048	.0017	.0039	.0009	.0017	1.018
#3	.0008	.1148	.0049	.0019	.0039	.0010	.0015	1.025
Check ?	Chk Fail	Chk Pass	Chk Fail	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.0020		.0030	.0100			.0040	
Range	-30.00%		20.00%	-30.00%			-30.00%	

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0013**	**.0032**	**.0018**	F **.0003**	**-.0023**	**1.973**	F **-.0003**
Stddev	.0002	.0004	.0002	.0001	.0002	.0008	.024	.0008
%RSD	15.21	29.34	4.933	4.869	63.57	32.55	1.224	268.7
#1	.0010	.0008	.0030	.0019	.0003	-.0031	1.950	.0006
#2	.0009	.0014	.0031	.0017	.0005	-.0024	1.969	-.0008
#3	.0012	.0015	.0033	.0018	.0001	-.0016	1.998	-.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Fail
Value					.0020			.0040
Range					-30.00%			-30.00%

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0717**	**.0031**	**-.0000**	**.9639**	**.0043**	F **.0010**	F **.0008**	F **-.0060**
Stddev	.0084	.0000	.0001	.0066	.0003	.0012	.0003	.0042
%RSD	11.79	1.331	1066.	.6843	7.210	122.4	36.96	71.36
#1	.0780	.0031	-.0001	.9715	.0040	.0010	.0010	-.0047
#2	.0621	.0031	-.0001	.9606	.0042	.0023	.0008	-.0025
#3	.0749	.0030	.0001	.9595	.0046	-.0002	.0005	-.0107
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
Value						.0040	.0025	.0040
Range						-30.00%	-30.00%	-30.00%

Zoom In Zoom Out

Sample Name: crid Acquired: 10/14/2022 23:30:17 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **-.0004**	F **.0026**	**-.0042**	**-.0007**	**.0000**	**.0004**	F **.0036**	**.0022**
Stddev	.0007	.0025	.0003	.0001	.0001	.0001	.0009	.0004
%RSD	161.7	96.47	7.247	16.08	442.5	13.54	23.71	18.65
#1	-.0009	.0024	-.0043	-.0007	.0002	.0004	.0044	.0019
#2	.0003	.0051	-.0044	-.0009	.0000	.0004	.0027	.0026
#3	-.0006	.0002	-.0038	-.0007	-.0001	.0003	.0037	.0020
Check ?	Chk Fail	Chk Fail	None	None	None	None	Chk Fail	Chk Pass
Value	.0030	.0050					.0020	
Range	-30.00%	-30.00%					20.00%	

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	F **-.0003**	**.0094**	F **-.0001**
Stddev	.0001	.0003	.0002
%RSD	32.77	2.756	295.7
#1	-.0003	.0095	-.0003
#2	-.0004	.0091	-.0001
#3	-.0002	.0096	.0002
Check ?	Chk Fail	Chk Pass	Chk Fail
Value	.0040		.0040
Range	-30.00%		-30.00%

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7700.6**	**72105.**	**9876.3**	**2737.2**
Stddev	5.9	154.	61.7	2.7
%RSD	.07656	.21366	.62439	.09979
#1	7706.3	72246.	9805.4	2737.2
#2	7694.5	72128.	9917.1	2739.8
#3	7701.0	71941.	9906.5	2734.4

Zoom In Zoom Out

Sample Name: asconf Acquired: 10/14/2022 23:35:31 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0194**	**4.967**	**.0017**	**-.0002**	**.0001**	**.0001**	**.0075**	**.0011**
Stddev	.0002	.0066	.025	.0004	.0000	.0001	.0009	.0022	.0003
%RSD	47.35	34.08	.4975	24.58	25.17	46.73	1267.	28.77	28.56
#1	.0006	.0249	4.949	.0014	-.0002	.0002	-.0007	.0082	.0007
#2	.0006	.0212	4.957	.0017	-.0001	.0002	-.0002	.0051	.0012
#3	.0002	.0121	4.995	.0022	-.0002	.0001	.0011	.0093	.0013

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0511**	**-.0006**	**.0016**	**.0001**	**-.0011**	**.0050**	**.0007**	**-.0137**	**.0000**
Stddev	.0012	.0002	.0005	.0002	.0007	.0077	.0006	.0040	.0000
%RSD	2.396	33.77	34.96	351.2	66.98	153.2	85.99	29.43	72.82
#1	.0500	-.0008	.0009	.0002	-.0011	.0081	.0012	-.0179	.0001
#2	.0524	-.0006	.0018	.0002	-.0004	-.0037	.0001	-.0099	.0000
#3	.0509	-.0004	.0020	-.0002	-.0019	.0106	.0006	-.0132	.0001

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0011**	**-.0002**	**.0013**	**-.0007**	**-.0006**	**.0055**	**-.0012**	**-.0030**
Stddev	.0002	.0048	.0003	.0012	.0009	.0049	.0005	.0022	.0008
%RSD	59.74	437.3	163.2	91.77	135.5	760.0	8.521	176.0	27.36
#1	.0006	-.0041	-.0001	.0022	-.0014	-.0056	.0051	.0011	-.0028
#2	.0003	-.0036	-.0005	-.0001	.0003	-.0006	.0060	-.0032	-.0039
#3	.0001	.0045	.0001	.0017	-.0009	.0043	.0054	-.0015	-.0023

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0000**	**.0001**	**-.0011**	**.0003**	**-.0000**	**.0012**	**.0000**
Stddev	.0004	.0000	.0001	.0002	.0000	.0005	.0001	.0001
%RSD	177.1	21.11	90.09	20.58	9.652	1396.	10.00	3692.
#1	.0000	.0000	.0001	-.0012	.0003	.0006	.0011	-.0001
#2	.0006	.0000	.0000	-.0009	.0003	-.0004	.0012	.0001
#3	-.0000	.0000	.0003	-.0013	.0003	-.0003	.0014	.0000

Zoom In Zoom Out

Sample Name: asconf Acquired: 10/14/2022 23:35:31 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7648.0**	**72224.**	**9937.9**	**2728.6**
Stddev	31.2	68.	38.7	15.5
%RSD	.40741	.09359	.38921	.56955
#1	7676.0	72151.	9925.4	2739.7
#2	7653.7	72235.	9981.3	2735.3
#3	7614.4	72285.	9907.0	2710.9

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/14/2022 23:40:42 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2460**	**39.50**	**2.014**	**2.045**	**2.002**	**2.023**	**2.105**	**39.91**	**2.021**
Stddev	.0006	.08	.003	.004	.002	.007	.006	.13	.005
%RSD	.2572	.1984	.1470	.2004	.1087	.3479	.2707	.3336	.2454
#1	.2453	39.56	2.010	2.040	2.002	2.030	2.098	40.05	2.015
#2	.2462	39.54	2.016	2.048	2.004	2.023	2.109	39.88	2.025
#3	.2465	39.41	2.015	2.046	2.000	2.016	2.108	39.79	2.021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.027**	**1.996**	**2.019**	**1.948**	**40.25**	**39.20**	**1.998**	**39.66**	**2.037**
Stddev	.004	.002	.004	.002	.12	.07	.004	.11	.004
%RSD	.1893	.1116	.2037	.0912	.2891	.1912	.2159	.2869	.1777
#1	2.029	1.996	2.024	1.950	40.38	39.25	2.001	39.77	2.040
#2	2.030	1.994	2.016	1.946	40.23	39.24	2.001	39.67	2.036
#3	2.023	1.998	2.017	1.949	40.15	39.11	1.994	39.54	2.033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.042**	**39.84**	**2.025**	**2.006**	**2.045**	**1.983**	**2.027**	**2.013**	**5.035**
Stddev	.003	.07	.001	.006	.003	.009	.005	.006	.013
%RSD	.1637	.1856	.0445	.3097	.1253	.4720	.2254	.3082	.2645
#1	2.038	39.89	2.026	1.999	2.042	1.973	2.022	2.007	5.020
#2	2.042	39.88	2.025	2.009	2.047	1.991	2.031	2.019	5.044
#3	2.045	39.76	2.024	2.010	2.046	1.985	2.029	2.013	5.041
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/14/2022 23:40:42 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.067**	**2.004**	**2.020**	**2.082**	**2.008**	**2.031**	**2.046**	**2.003**
Stddev	.006	.001	.003	.004	.002	.002	.002	.002
%RSD	.3155	.0665	.1508	.1833	.1131	.1105	.1009	.0775
#1	2.063	2.003	2.023	2.079	2.011	2.030	2.046	2.004
#2	2.075	2.005	2.021	2.086	2.006	2.034	2.048	2.004
#3	2.064	2.003	2.017	2.080	2.008	2.029	2.044	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6768.6**	**69447.**	**9768.8**	**2648.2**
Stddev	4.7	69.	50.2	4.5
%RSD	.06890	.09986	.51378	.17156
#1	6770.3	69375.	9714.0	2653.4
#2	6772.2	69452.	9779.8	2645.8
#3	6763.3	69514.	9812.6	2645.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/14/2022 23:45:29 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**-.0014**	**-.0014**	**.0023**	**-.0000**	**.0001**	**-.0005**	**.0011**	**.0001**
Stddev	.0003	.0062	.0007	.0004	.0001	.0001	.0009	.0014	.0000
%RSD	82.17	455.4	53.82	16.15	160.0	99.98	177.4	129.2	46.79
#1	.0000	-.0055	-.0006	.0025	.0000	.0000	-.0006	-.0000	.0001
#2	.0005	-.0045	-.0016	.0019	-.0000	.0001	.0004	.0006	.0001
#3	.0004	.0058	-.0020	.0024	-.0001	.0001	-.0013	.0027	.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0002**	**-.0002**	**.0002**	**.0007**	**.0012**	**.0006**	**-.0365**	**.0000**
Stddev	.0019	.0001	.0002	.0002	.0009	.0101	.0011	.0129	.0000
%RSD	348.9	33.59	95.58	134.9	138.8	852.2	196.6	35.31	42.16
#1	-.0012	.0003	.0000	.0004	.0006	-.0105	.0008	-.0328	.0000
#2	.0002	.0001	-.0004	.0003	.0017	.0079	-.0006	-.0259	.0000
#3	.0026	.0002	-.0003	-.0001	-.0002	.0061	.0015	-.0508	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**-.0232**	**.0001**	**.0006**	**.0007**	**-.0004**	**.0008**	**.0002**	**.0020**
Stddev	.0002	.0036	.0002	.0013	.0005	.0040	.0007	.0010	.0015
%RSD	24.37	15.71	324.4	205.1	78.91	950.4	92.72	629.6	72.72
#1	.0008	-.0274	-.0000	-.0008	.0003	.0040	.0007	-.0010	.0011
#2	.0009	-.0216	.0003	.0009	.0013	-.0037	.0001	.0009	.0037
#3	.0006	-.0206	-.0001	.0018	.0004	-.0016	.0015	.0005	.0012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/14/2022 23:45:29 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0000**	**.0003**	**-.0010**	**.0002**	**.0003**	**-.0008**	**.0003**
Stddev	.0005	.0001	.0004	.0005	.0001	.0006	.0001	.0001
%RSD	987.2	1323.	159.2	56.17	61.49	187.7	14.09	47.68
#1	.0006	-.0000	.0004	-.0011	.0003	.0004	-.0009	.0002
#2	-.0003	.0001	.0006	-.0014	.0001	-.0003	-.0007	.0005
#3	-.0002	-.0001	-.0002	-.0004	.0002	.0009	-.0009	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7677.9**	**72359.**	**9891.6**	**2742.5**
Stddev	24.0	256.	30.0	9.9
%RSD	.31270	.35432	.30314	.36166
#1	7662.3	72466.	9868.7	2735.1
#2	7665.9	72066.	9880.4	2738.7
#3	7705.6	72544.	9925.5	2753.8

Zoom In Zoom Out

Sample Name: mp35740-mb1 Acquired: 10/14/2022 23:50:40 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0102**	**-.0010**	**.0025**	**.0004**	**.0001**	**.0008**	**.1156**	**.0002**
Stddev	.0003	.0008	.0003	.0006	.0001	.0001	.0002	.0010	.0000
%RSD	100.1	8.080	26.22	25.48	25.04	60.37	24.84	.8236	20.64
#1	-.0000	.0107	-.0012	.0020	.0006	.0001	.0006	.1148	.0002
#2	.0005	.0092	-.0007	.0022	.0004	.0001	.0008	.1153	.0002
#3	.0003	.0106	-.0011	.0032	.0003	.0002	.0009	.1166	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.0002**	**.0011**	**.0018**	**.0309**	**.0157**	**.0001**	**-.0125**	**.0003**
Stddev	.0018	.0001	.0003	.0001	.0018	.0103	.0002	.0318	.0000
%RSD	133.1	89.51	31.32	7.323	5.835	65.75	240.1	254.0	7.841
#1	.0018	.0000	.0015	.0019	.0290	.0272	.0003	.0151	.0003
#2	.0030	.0002	.0008	.0016	.0326	.0123	-.0001	-.0473	.0003
#3	-.0006	.0003	.0010	.0017	.0310	.0074	.0001	-.0054	.0003

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.0500**	**.0004**	**.0217**	**.0003**	**.0036**	**.0011**	**-.0004**	**.0095**
Stddev	.0003	.0061	.0003	.0005	.0005	.0021	.0017	.0004	.0010
%RSD	30.56	12.22	78.94	2.495	164.1	57.00	159.3	95.21	10.83
#1	.0005	.0470	.0007	.0212	-.0001	.0013	.0030	.0000	.0107
#2	.0010	.0570	.0002	.0218	.0001	.0051	-.0002	-.0005	.0093
#3	.0010	.0460	.0003	.0223	.0009	.0045	.0004	-.0006	.0086

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0226**	**.0007**	**.0008**	**-.0007**	**.0004**	**-.0001**	**.0036**	**.0005**
Stddev	.0001	.0001	.0002	.0003	.0000	.0004	.0002	.0001
%RSD	.3482	7.962	19.97	47.99	9.541	433.1	4.543	24.61
#1	.0226	.0007	.0008	-.0005	.0004	-.0004	.0035	.0003
#2	.0225	.0006	.0007	-.0011	.0004	.0003	.0037	.0005
#3	.0227	.0007	.0010	-.0005	.0004	-.0002	.0034	.0005

Zoom In Zoom Out

Sample Name: mp35740-mb1 Acquired: 10/14/2022 23:50:40 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7641.9**	**71915.**	**9909.5**	**2709.2**
Stddev	9.1	150.	71.3	3.9
%RSD	.11929	.20919	.71976	.14514
#1	7647.8	71972.	9982.8	2712.7
#2	7631.4	71744.	9840.4	2704.9
#3	7646.4	72029.	9905.4	2710.0

Zoom In Zoom Out

Sample Name: mp35740-b1 Acquired: 10/14/2022 23:55:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1849**	**18.86**	**1.487**	**1.489**	**1.459**	**1.477**	**-.0004**	**19.25**
Stddev	.0005	.02	.006	.007	.002	.004	.0004	.04
%RSD	.2638	.1203	.3986	.4549	.1375	.2654	113.5	.2101
#1	.1849	18.87	1.489	1.490	1.461	1.481	-.0000	19.29
#2	.1845	18.88	1.492	1.496	1.459	1.475	-.0008	19.24
#3	.1854	18.84	1.481	1.482	1.457	1.473	-.0002	19.21

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.500**	**.1253**	**1.448**	**1.495**	**1.422**	**19.36**	**18.76**	**.0003**
Stddev	.006	.0019	.004	.005	.004	.06	.02	.0001
%RSD	.3763	1.536	.2715	.3169	.3162	.3038	.0901	40.79
#1	1.501	.1235	1.448	1.490	1.419	19.42	18.77	.0004
#2	1.506	.1251	1.452	1.496	1.420	19.34	18.78	.0003
#3	1.494	.1274	1.444	1.500	1.427	19.31	18.74	.0002

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**18.79**	**1.505**	**1.516**	**19.14**	**1.468**	**1.493**	**1.497**	F **-.0751**
Stddev	.02	.003	.005	.04	.007	.007	.006	.0025
%RSD	.1046	.1704	.3541	.2112	.4873	.4752	.3876	3.304
#1	18.77	1.502	1.516	19.17	1.466	1.487	1.495	-.0756
#2	18.81	1.507	1.521	19.17	1.475	1.501	1.503	-.0772
#3	18.80	1.506	1.510	19.10	1.461	1.490	1.492	-.0724

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.520**	**1.490**	**.0844**	**1.568**	**1.466**	**1.489**	**1.550**	**1.470**
Stddev	.008	.008	.0018	.007	.002	.001	.007	.006
%RSD	.5092	.5288	2.168	.4787	.1269	.0697	.4230	.3862
#1	1.518	1.490	.0865	1.568	1.468	1.490	1.552	1.464
#2	1.528	1.498	.0832	1.575	1.464	1.488	1.556	1.472
#3	1.513	1.482	.0836	1.560	1.465	1.490	1.543	1.474

Zoom In Zoom Out

Sample Name: mp35740-b1 Acquired: 10/14/2022 23:55:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.210**	**1.511**	**1.480**
Stddev	.006	.007	.003
%RSD	.5398	.4502	.2185
#1	1.204	1.512	1.477
#2	1.217	1.518	1.481
#3	1.211	1.504	1.483

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7096.9**	**70499.**	**9973.3**	**2685.8**
Stddev	22.1	173.	31.2	8.5
%RSD	.31121	.24514	.31325	.31525
#1	7085.0	70698.	9937.3	2682.0
#2	7083.4	70414.	9992.0	2679.9
#3	7122.4	70385.	9990.7	2695.5

Zoom In Zoom Out

Sample Name: mp35740-s1 Acquired: 10/15/2022 0:00:34 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2516**	**50.84**	**2.056**	**1.955**	**2.299**	**1.978**	**.0449**	**33.52**	**2.056**
Stddev	.0004	.09	.003	.003	.002	.008	.0015	.12	.004
%RSD	.1662	.1851	.1332	.1523	.0872	.3942	3.444	.3547	.1804
#1	.2520	50.79	2.053	1.952	2.298	1.974	.0446	33.46	2.052
#2	.2517	50.95	2.056	1.956	2.301	1.987	.0435	33.66	2.056
#3	.2512	50.78	2.058	1.958	2.297	1.972	.0465	33.44	2.059

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3393**	**1.990**	**6.966**	**2.075**	**74.27**	**27.63**	**.0269**	**26.96**	**2.387**
Stddev	.0013	.001	.002	.001	.23	.07	.0004	.18	.001
%RSD	.3685	.0277	.0270	.0654	.3113	.2366	1.405	.6526	.0407
#1	.3406	1.990	6.968	2.074	74.15	27.60	.0273	26.80	2.386
#2	.3393	1.990	6.966	2.076	74.54	27.71	.0267	27.15	2.388
#3	.3381	1.989	6.964	2.076	74.13	27.59	.0267	26.94	2.386

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.977**	**26.69**	**2.124**	**2.926**	**2.101**	**1.488**	**1.889**	**2.039**	**3.176**
Stddev	.002	.04	.001	.001	.006	.006	.003	.005	.013
%RSD	.1157	.1395	.0681	.0391	.2940	.4057	.1768	.2285	.4182
#1	1.976	26.66	2.124	2.925	2.101	1.482	1.886	2.034	3.162
#2	1.976	26.73	2.125	2.927	2.107	1.489	1.892	2.041	3.189
#3	1.980	26.67	2.123	2.927	2.095	1.493	1.890	2.043	3.178

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.077**	**2.068**	**4.074**	**2.070**	**2.134**	**.7077**	**2.219**	**2.000**
Stddev	.001	.002	.004	.001	.003	.0015	.001	.001
%RSD	.0581	.0808	.1048	.0662	.1389	.2166	.0614	.0261
#1	2.076	2.069	4.071	2.070	2.134	.7060	2.218	1.999
#2	2.078	2.069	4.078	2.071	2.130	.7079	2.220	2.000
#3	2.076	2.066	4.071	2.068	2.136	.7090	2.218	2.000

Zoom In Zoom Out

Sample Name: mp35740-s1 Acquired: 10/15/2022 0:00:34 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6885.0**	**70399.**	**9989.5**	**2646.2**
Stddev	3.7	44.	80.3	4.6
%RSD	.05317	.06311	.80417	.17560
#1	6883.5	70377.	10053.	2650.8
#2	6882.3	70371.	9899.3	2646.2
#3	6889.2	70451.	10016.	2641.5

Zoom In Zoom Out

Sample Name: mp35740-s2 Acquired: 10/15/2022 0:05:18 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2339**	**53.49**	**1.927**	**1.815**	**2.209**	**1.841**	**.0421**	**31.75**	**1.913**
Stddev	.0010	.04	.000	.006	.003	.004	.0004	.05	.006
%RSD	.4084	.0683	.0212	.3442	.1357	.2003	.8393	.1545	.3410
#1	.2328	53.51	1.928	1.812	2.211	1.845	.0422	31.71	1.905
#2	.2344	53.45	1.927	1.812	2.205	1.840	.0424	31.80	1.915
#3	.2346	53.52	1.927	1.823	2.210	1.838	.0417	31.74	1.918

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3554**	**1.863**	**7.970**	**1.950**	**74.39**	**26.59**	**.0331**	**25.23**	**2.322**
Stddev	.0012	.003	.008	.005	.10	.03	.0004	.13	.002
%RSD	.3468	.1548	.1002	.2437	.1342	.0945	1.171	.5256	.0713
#1	.3552	1.866	7.961	1.945	74.47	26.62	.0326	25.12	2.321
#2	.3567	1.863	7.974	1.952	74.43	26.57	.0332	25.38	2.324
#3	.3543	1.860	7.975	1.954	74.28	26.58	.0334	25.19	2.322

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.844**	**24.95**	**1.981**	**3.000**	**1.962**	**1.502**	**1.724**	**1.896**	**3.015**
Stddev	.003	.02	.003	.009	.004	.003	.004	.007	.013
%RSD	.1433	.0614	.1305	.3005	.2239	.2062	.2531	.3914	.4321
#1	1.842	24.95	1.984	2.990	1.966	1.501	1.720	1.888	3.029
#2	1.844	24.94	1.980	3.005	1.963	1.498	1.723	1.900	3.013
#3	1.847	24.97	1.979	3.005	1.957	1.505	1.729	1.901	3.004

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.935**	**1.935**	**4.084**	**1.931**	**2.021**	**.6818**	**2.067**	**1.872**
Stddev	.004	.002	.003	.002	.003	.0022	.006	.002
%RSD	.2068	.1235	.0763	.1113	.1263	.3213	.3095	.1218
#1	1.939	1.935	4.081	1.929	2.019	.6797	2.072	1.870
#2	1.935	1.932	4.084	1.934	2.020	.6841	2.069	1.873
#3	1.931	1.937	4.087	1.931	2.024	.6817	2.060	1.874

Zoom In Zoom Out

Sample Name: mp35740-s2 Acquired: 10/15/2022 0:05:18 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6891.8**	**70430.**	**9982.6**	**2651.3**
Stddev	1.8	39.	73.1	4.1
%RSD	.02580	.05530	.73252	.15478
#1	6889.8	70447.	10047.	2655.2
#2	6893.0	70385.	9903.1	2651.7
#3	6892.7	70457.	9997.7	2647.0

Zoom In Zoom Out

Sample Name: jd53364-49 Acquired: 10/15/2022 0:10:04 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**23.52**	**.0500**	**.0118**	**.4095**	**.0025**	**.0188**	**8.539**	**.0015**
Stddev	.0003	.04	.0009	.0004	.0006	.0000	.0002	.064	.0001
%RSD	18.68	.1608	1.838	3.824	.1531	.7842	1.271	.7450	4.064
#1	.0019	23.48	.0490	.0116	.4092	.0025	.0187	8.543	.0015
#2	.0013	23.53	.0507	.0123	.4091	.0025	.0191	8.600	.0014
#3	.0015	23.56	.0503	.0114	.4102	.0025	.0186	8.473	.0014

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2034**	**.0274**	**5.558**	**.1374**	**50.63**	**2.401**	**.0275**	**1.893**	**.4389**
Stddev	.0025	.0001	.062	.0007	.13	.002	.0006	.038	.0047
%RSD	1.224	.3703	1.116	.5115	.2506	.0889	2.081	2.023	1.074
#1	.2006	.0274	5.487	.1368	50.51	2.403	.0274	1.871	.4337
#2	.2046	.0274	5.604	.1373	50.76	2.402	.0271	1.937	.4428
#3	.2051	.0276	5.582	.1382	50.61	2.399	.0282	1.871	.4403

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0118**	**1.313**	**.1234**	**1.153**	**.1076**	**2.927**	**.0016**	**.0081**	**1.753**
Stddev	.0002	.001	.0005	.006	.0017	.021	.0021	.0011	.015
%RSD	2.084	.0743	.3864	.5376	1.622	.7284	131.4	14.06	.8454
#1	.0120	1.312	.1229	1.153	.1063	2.911	.0039	.0068	1.751
#2	.0119	1.313	.1238	1.159	.1095	2.951	-.0003	.0090	1.769
#3	.0115	1.314	.1235	1.147	.1068	2.920	.0012	.0085	1.739

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0250**	**.1256**	**1.607**	**.0018**	**.1951**	**.0125**	**.2007**	**.0273**
Stddev	.0006	.0003	.013	.0007	.0017	.0004	.0018	.0002
%RSD	2.490	.2051	.8100	39.49	.8896	3.415	.8767	.8301
#1	.0254	.1253	1.593	.0022	.1933	.0128	.1992	.0271
#2	.0243	.1255	1.618	.0022	.1968	.0127	.2026	.0275
#3	.0252	.1258	1.610	.0010	.1951	.0120	.2004	.0272

Zoom In Zoom Out

Sample Name: jd53364-49 Acquired: 10/15/2022 0:10:04 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7371.4**	**71974.**	**10203.**	**2717.0**
Stddev	51.3	638.	90.	20.2
%RSD	.69584	.88584	.87876	.74437
#1	7407.2	72651.	10251.	2730.1
#2	7312.7	71384.	10099.	2693.7
#3	7394.4	71888.	10258.	2727.2

Zoom In Zoom Out

Sample Name: mp35740-sd1 Acquired: 10/15/2022 0:15:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0036**	**23.69**	**.0432**	**.0216**	**.4147**	**.0026**	**.0160**	**8.674**	**.0025**
Stddev	.0005	.06	.0054	.0023	.0013	.0005	.0017	.028	.0005
%RSD	14.63	.2344	12.51	10.69	.3026	17.53	10.88	.3223	20.26
#1	.0042	23.75	.0492	.0242	.4161	.0030	.0173	8.688	.0019
#2	.0037	23.64	.0388	.0207	.4144	.0021	.0168	8.693	.0027
#3	.0031	23.67	.0415	.0198	.4137	.0026	.0140	8.642	.0029

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2108**	**.0265**	**5.595**	**.1347**	**51.67**	**2.376**	**.0308**	**1.896**	**.4455**
Stddev	.0040	.0011	.011	.0024	.17	.023	.0016	.077	.0013
%RSD	1.890	4.045	.2023	1.766	.3203	.9682	5.170	4.047	.2814
#1	.2113	.0255	5.582	.1320	51.61	2.363	.0300	1.807	.4441
#2	.2067	.0265	5.603	.1359	51.85	2.403	.0298	1.940	.4462
#3	.2146	.0276	5.599	.1362	51.54	2.363	.0327	1.941	.4463

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0146**	**1.191**	**.1200**	**1.098**	**.1049**	**2.679**	**.0008**	**.0104**	**1.695**
Stddev	.0005	.021	.0011	.009	.0014	.027	.0040	.0104	.033
%RSD	3.105	1.768	.9384	.8156	1.351	1.005	495.4	100.6	1.935
#1	.0144	1.178	.1189	1.088	.1039	2.702	-.0024	.0020	1.726
#2	.0151	1.181	.1199	1.099	.1044	2.649	-.0005	.0071	1.699
#3	.0143	1.216	.1211	1.106	.1066	2.686	.0053	.0220	1.661

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0270**	**.1276**	**1.634**	**-.0024**	**.1987**	**.0395**	**.1953**	**.0275**
Stddev	.0036	.0004	.002	.0046	.0013	.0049	.0012	.0003
%RSD	13.28	.3472	.0910	193.0	.6642	12.40	.6212	.9793
#1	.0247	.1278	1.632	.0024	.1973	.0429	.1966	.0273
#2	.0252	.1279	1.635	-.0068	.1999	.0339	.1942	.0278
#3	.0311	.1271	1.634	-.0029	.1989	.0418	.1951	.0274

Zoom In Zoom Out

Sample Name: mp35740-sd1 Acquired: 10/15/2022 0:15:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7549.2**	**71926.**	**9990.9**	**2725.5**
Stddev	8.9	220.	80.2	5.6
%RSD	.11792	.30612	.80234	.20542
#1	7555.6	72120.	10028.	2730.6
#2	7552.9	71970.	9898.9	2726.4
#3	7539.0	71687.	10046.	2719.5

Zoom In Zoom Out

Sample Name: mp35740-ps1 Acquired: 10/15/2022 0:20:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2371**	**49.13**	**2.041**	**2.119**	**2.339**	**1.931**	**.0146**	**33.10**	**2.052**
Stddev	.0016	.60	.007	.013	.034	.029	.0011	.47	.010
%RSD	.6750	1.213	.3642	.6344	1.459	1.479	7.493	1.423	.4824
#1	.2389	48.55	2.044	2.128	2.301	1.898	.0134	32.62	2.059
#2	.2359	49.74	2.033	2.103	2.367	1.953	.0148	33.56	2.041
#3	.2365	49.11	2.047	2.125	2.348	1.941	.0155	33.14	2.057

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3589**	**1.962**	**7.187**	**2.050**	**76.23**	**27.33**	**.0273**	**26.38**	**2.376**
Stddev	.0012	.011	.031	.008	.69	.42	.0007	.45	.010
%RSD	.3313	.5560	.4268	.3821	.9107	1.540	2.419	1.694	.4233
#1	.3594	1.972	7.188	2.052	75.63	26.86	.0266	25.89	2.377
#2	.3575	1.951	7.156	2.041	76.99	27.67	.0278	26.77	2.366
#3	.3597	1.965	7.217	2.057	76.06	27.48	.0276	26.49	2.386

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.959**	**26.57**	**2.077**	**3.128**	**2.106**	**2.798**	**2.063**	**2.155**	**1.775**
Stddev	.012	.44	.012	.023	.009	.026	.020	.023	.032
%RSD	.5863	1.653	.5827	.7425	.4033	.9410	.9669	1.082	1.805
#1	1.964	26.08	2.085	3.136	2.113	2.821	2.064	2.153	1.808
#2	1.945	26.91	2.063	3.101	2.096	2.769	2.042	2.132	1.773
#3	1.966	26.73	2.083	3.145	2.109	2.803	2.082	2.179	1.744

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.969**	**2.076**	**3.496**	**2.096**	**2.139**	**1.861**	**2.181**	**1.940**
Stddev	.021	.032	.008	.019	.009	.011	.012	.007
%RSD	1.052	1.518	.2282	.9259	.4038	.5804	.5328	.3505
#1	1.963	2.042	3.500	2.098	2.142	1.859	2.188	1.941
#2	1.953	2.103	3.486	2.076	2.129	1.852	2.167	1.932
#3	1.992	2.084	3.500	2.115	2.146	1.873	2.186	1.945

Zoom In Zoom Out

Sample Name: mp35740-ps1 Acquired: 10/15/2022 0:20:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6972.0**	**71065.**	**10173.**	**2684.4**
Stddev	28.0	255.	118.	10.6
%RSD	.40167	.35877	1.1553	.39566
#1	6954.7	70925.	10294.	2679.9
#2	7004.3	71359.	10059.	2696.5
#3	6957.0	70910.	10167.	2676.7

Zoom In Zoom Out

Sample Name: jd53445-1 Acquired: 10/15/2022 0:24:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**223.8**	**1.127**	**.2041**	**3.324**	**.0325**	**.1844**	**27.20**	**.0013**
Stddev	.0002	1.1	.004	.0013	.015	.0001	.0015	.17	.0003
%RSD	2.616	.5098	.3283	.6413	.4622	.4607	.8189	.6331	24.84
#1	.0080	222.5	1.130	.2054	3.308	.0323	.1849	27.06	.0010
#2	.0080	224.8	1.123	.2040	3.338	.0326	.1827	27.39	.0016
#3	.0084	224.0	1.127	.2028	3.328	.0324	.1857	27.15	.0014

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7363**	**.1073**	**.5712**	**.9766**	F **404.2**	**23.30**	**.1440**	**9.094**	**.4768**
Stddev	.0022	.0006	.0016	.0034	2.7	.02	.0000	.046	.0003
%RSD	.3038	.5820	.2869	.3455	.6597	.1056	.0272	.5087	.0679
#1	.7343	.1076	.5694	.9804	401.5	23.28	.1440	9.080	.4765
#2	.7359	.1078	.5727	.9751	406.8	23.33	.1440	9.146	.4772
#3	.7387	.1066	.5714	.9742	404.3	23.30	.1440	9.057	.4767

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1531**	**5.914**	**.5109**	**6.881**	**.4225**	**27.05**	**.0116**	**.2187**	**2.086**
Stddev	.0004	.021	.0016	.013	.0008	.05	.0010	.0017	.017
%RSD	.2687	.3535	.3176	.1941	.1866	.1829	8.959	.7697	.8123
#1	.1535	5.897	.5111	6.874	.4224	27.07	.0122	.2168	2.099
#2	.1531	5.937	.5123	6.896	.4233	27.08	.0121	.2198	2.091
#3	.1527	5.907	.5091	6.872	.4217	26.99	.0104	.2196	2.067

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0614**	**3.082**	F **10.48**	**.0128**	**4.804**	**.0446**	**.5826**	**.2100**
Stddev	.0011	.013	.01	.0017	.002	.0021	.0018	.0002
%RSD	1.785	.4073	.0800	12.97	.0352	4.641	.3018	.1123
#1	.0620	3.068	10.49	.0121	4.804	.0468	.5832	.2098
#2	.0601	3.093	10.49	.0116	4.806	.0427	.5839	.2102
#3	.0620	3.085	10.48	.0147	4.802	.0443	.5806	.2098

Zoom In Zoom Out

Sample Name: jd53445-1 Acquired: 10/15/2022 0:24:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6847.5**	**72597.**	**10618.**	**2796.2**
Stddev	14.9	72.	88.	5.7
%RSD	.21793	.09963	.83214	.20248
#1	6842.8	72581.	10705.	2793.8
#2	6835.5	72534.	10528.	2792.1
#3	6864.2	72676.	10622.	2802.6

Zoom In Zoom Out

Sample Name: jd53445-2 Acquired: 10/15/2022 0:29:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0107**	**64.66**	**.1784**	**.0648**	**.4311**	**.0062**	**.0388**	**4.406**	**.0018**
Stddev	.0004	.24	.0014	.0005	.0016	.0002	.0011	.012	.0001
%RSD	3.346	.3743	.7729	.8113	.3636	2.809	2.723	.2647	6.680
#1	.0104	64.39	.1787	.0649	.4293	.0064	.0389	4.399	.0017
#2	.0106	64.73	.1797	.0642	.4323	.0061	.0398	4.399	.0020
#3	.0111	64.86	.1770	.0652	.4317	.0060	.0377	4.419	.0019

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4824**	**.0557**	**.2893**	**.5584**	F **298.6**	**9.660**	**.1453**	**29.36**	**1.211**
Stddev	.0013	.0005	.0002	.0007	1.0	.032	.0011	.03	.003
%RSD	.2734	.9535	.0551	.1304	.3353	.3286	.7247	.0929	.2267
#1	.4809	.0563	.2891	.5591	297.5	9.644	.1443	29.33	1.214
#2	.4827	.0556	.2894	.5584	299.1	9.639	.1452	29.39	1.211
#3	.4835	.0552	.2893	.5577	299.3	9.696	.1464	29.36	1.209

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0170**	**1.264**	**.1942**	**3.589**	**.4911**	**4.978**	**.0116**	**.0233**	**2.342**
Stddev	.0002	.002	.0011	.009	.0032	.004	.0007	.0020	.004
%RSD	.9594	.1620	.5712	.2593	.6450	.0787	5.807	8.440	.1546
#1	.0169	1.262	.1932	3.578	.4882	4.974	.0124	.0236	2.338
#2	.0169	1.265	.1954	3.596	.4906	4.978	.0115	.0252	2.345
#3	.0171	1.266	.1941	3.591	.4945	4.982	.0111	.0213	2.343

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0833**	**.1678**	**1.916**	**.0017**	**1.009**	**.0181**	**.4953**	**.0547**
Stddev	.0003	.0005	.005	.0013	.004	.0012	.0003	.0002
%RSD	.3614	.2862	.2568	78.26	.3658	6.415	.0562	.4340
#1	.0831	.1672	1.920	.0032	1.013	.0184	.4954	.0548
#2	.0836	.1680	1.917	.0006	1.006	.0191	.4950	.0549
#3	.0831	.1681	1.911	.0012	1.008	.0168	.4955	.0545

Zoom In Zoom Out

Sample Name: jd53445-2 Acquired: 10/15/2022 0:29:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7124.1	**70584.**	**10163.**	**2688.6**
Stddev	9.4	98.	25.	1.4
%RSD	.13199	.13843	.24256	.05173
#1	7125.0	70481.	10186.	2689.6
#2	7114.3	70595.	10167.	2687.0
#3	7133.0	70675.	10137.	2689.3

Zoom In Zoom Out

Sample Name: jd53445-3 Acquired: 10/15/2022 0:34:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0157**	**204.5**	**.4306**	**.6832**	**1.962**	**.0198**	**.1145**	**35.61**	**.0077**
Stddev	.0004	.2	.0046	.0103	.002	.0001	.0032	.03	.0004
%RSD	2.639	.0847	1.065	1.505	.1099	.5943	2.759	.0845	4.982
#1	.0159	204.5	.4358	.6951	1.962	.0197	.1117	35.61	.0082
#2	.0152	204.6	.4286	.6779	1.965	.0197	.1140	35.64	.0075
#3	.0159	204.3	.4274	.6767	1.960	.0199	.1179	35.58	.0076

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8789**	**.0909**	**.7928**	**1.172**	F **477.8**	**15.20**	**.1313**	**21.53**	**1.391**
Stddev	.0027	.0016	.0036	.001	4.2	.03	.0009	.13	.005
%RSD	.3059	1.729	.4506	.0915	.8757	.1917	.6480	.6001	.3504
#1	.8790	.0927	.7928	1.173	481.8	15.19	.1303	21.40	1.389
#2	.8761	.0901	.7892	1.173	473.4	15.23	.1317	21.65	1.386
#3	.8815	.0899	.7963	1.171	478.1	15.18	.1318	21.55	1.396

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0177**	**4.341**	**.3793**	**4.588**	**4.776**	**5.878**	**.1965**	**.0267**	**2.283**
Stddev	.0006	.005	.0052	.053	.063	.079	.0042	.0024	.028
%RSD	3.167	.1099	1.365	1.153	1.318	1.337	2.123	8.908	1.239
#1	.0181	4.345	.3853	4.648	4.849	5.969	.2013	.0251	2.316
#2	.0170	4.343	.3763	4.566	4.747	5.836	.1934	.0294	2.265
#3	.0179	4.336	.3764	4.549	4.734	5.830	.1949	.0255	2.269

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5304**	**1.108**	**6.231**	**-.0004**	**1.795**	**.0212**	**1.625**	**.1204**
Stddev	.0073	.002	.016	.0023	.005	.0002	.020	.0005
%RSD	1.381	.1404	.2542	628.4	.2731	1.173	1.240	.3800
#1	.5389	1.107	6.229	-.0030	1.794	.0212	1.648	.1203
#2	.5262	1.110	6.216	.0010	1.791	.0210	1.614	.1200
#3	.5262	1.107	6.247	.0009	1.801	.0215	1.613	.1209

Zoom In Zoom Out

Sample Name: jd53445-3 Acquired: 10/15/2022 0:34:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6838.9**	**71761.**	**10553.**	**2710.3**
Stddev	71.4	295.	18.	26.6
%RSD	1.0442	.41147	.17061	.98063
#1	6757.0	71801.	10535.	2680.0
#2	6871.9	72034.	10555.	2721.0
#3	6887.9	71448.	10571.	2729.8

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 0:39:45 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2431**	**38.78**	**1.988**	**2.020**	**1.964**	**1.979**	**2.101**	**39.24**	**1.994**
Stddev	.0002	.10	.002	.004	.002	.003	.006	.06	.004
%RSD	.0775	.2530	.0739	.1853	.0857	.1419	.2873	.1412	.2097
#1	.2429	38.86	1.988	2.016	1.966	1.982	2.095	39.29	1.990
#2	.2432	38.82	1.990	2.020	1.963	1.977	2.101	39.25	1.993
#3	.2433	38.67	1.987	2.024	1.964	1.977	2.107	39.18	1.999
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.004**	**1.974**	**1.998**	**1.922**	**39.49**	**38.65**	**1.958**	**38.86**	**2.013**
Stddev	.005	.003	.003	.004	.09	.05	.002	.15	.004
%RSD	.2702	.1724	.1665	.2210	.2187	.1167	.0918	.3948	.1963
#1	2.005	1.971	1.999	1.926	39.58	38.68	1.960	38.95	2.011
#2	2.009	1.978	2.000	1.924	39.47	38.60	1.956	38.95	2.017
#3	1.998	1.973	1.994	1.918	39.41	38.68	1.959	38.69	2.010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.021**	**39.25**	**1.996**	**1.991**	**2.013**	**1.958**	**2.021**	**2.010**	**5.006**
Stddev	.004	.01	.003	.002	.002	.010	.006	.006	.013
%RSD	.1991	.0243	.1297	.1037	.1010	.5048	.2962	.2878	.2555
#1	2.016	39.25	1.993	1.989	2.011	1.947	2.015	2.004	4.992
#2	2.021	39.23	1.996	1.991	2.015	1.960	2.027	2.016	5.014
#3	2.024	39.25	1.998	1.993	2.014	1.967	2.021	2.010	5.013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 0:39:45 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.056**	**1.971**	**1.990**	**2.066**	**1.985**	**2.014**	**2.020**	**1.980**
Stddev	.004	.003	.004	.004	.003	.006	.001	.002
%RSD	.2115	.1374	.1766	.1807	.1274	.3045	.0455	.1200
#1	2.054	1.973	1.990	2.062	1.986	2.008	2.019	1.982
#2	2.061	1.968	1.994	2.069	1.987	2.020	2.021	1.982
#3	2.053	1.972	1.987	2.067	1.983	2.015	2.021	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6770.8**	**69215.**	**9748.1**	**2647.4**
Stddev	4.5	182.	34.2	3.9
%RSD	.06632	.26311	.35085	.14548
#1	6775.8	69151.	9753.2	2650.1
#2	6769.4	69075.	9711.7	2649.2
#3	6767.1	69421.	9779.5	2643.0

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 0:44:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0011**	**-.0000**	**.0031**	**-.0001**	**.0002**	**-.0005**	**-.0008**	**.0001**
Stddev	.0003	.0078	.0007	.0007	.0001	.0000	.0011	.0011	.0000
%RSD	59.70	731.3	1757.	20.95	102.0	12.96	218.8	127.1	90.90
#1	.0006	-.0069	-.0005	.0035	-.0001	.0001	-.0017	-.0003	.0001
#2	.0002	.0087	.0008	.0035	-.0000	.0002	.0003	-.0020	.0000
#3	.0009	.0014	-.0004	.0024	-.0000	.0001	-.0001	-.0001	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**.0001**	**-.0001**	**.0003**	**.0036**	**.0112**	**.0013**	**-.0302**	**.0000**
Stddev	.0030	.0002	.0001	.0002	.0018	.0086	.0002	.0041	.0000
%RSD	591.2	417.8	158.1	50.50	48.28	76.52	17.83	13.48	209.6
#1	.0028	.0002	-.0001	.0003	.0019	.0200	.0010	-.0264	.0000
#2	-.0028	.0002	.0000	.0002	.0036	.0028	.0015	-.0296	-.0000
#3	-.0016	-.0002	-.0002	.0005	.0054	.0108	.0014	-.0345	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0015**	**-.0414**	**-.0003**	**.0028**	**-.0001**	**-.0004**	**.0005**	**-.0007**	**.0024**
Stddev	.0001	.0038	.0001	.0011	.0006	.0027	.0011	.0001	.0003
%RSD	3.328	9.130	43.41	37.78	465.6	660.5	201.4	20.05	11.59
#1	.0016	-.0378	-.0002	.0038	-.0008	.0021	-.0002	-.0008	.0025
#2	.0015	-.0453	-.0002	.0017	.0003	-.0033	.0000	-.0006	.0027
#3	.0015	-.0410	-.0004	.0029	.0001	.0000	.0017	-.0008	.0022
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 0:44:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**-.0000**	**.0012**	**-.0005**	**.0003**	**.0062**	**-.0013**	**.0002**
Stddev	.0006	.0000	.0003	.0012	.0002	.0009	.0001	.0000
%RSD	37.26	631.6	23.77	232.4	69.89	14.82	8.143	15.04
#1	.0021	.0000	.0013	-.0016	.0004	.0056	-.0014	.0002
#2	.0009	-.0000	.0008	.0008	.0004	.0058	-.0012	.0002
#3	.0017	-.0000	.0013	-.0007	.0001	.0073	-.0013	.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7614.0**	**71639.**	**9849.9**	**2717.8**
Stddev	16.9	1145.	3.8	8.1
%RSD	.22197	1.5982	.03830	.29852
#1	7617.1	71637.	9847.0	2724.7
#2	7629.2	72785.	9848.5	2719.8
#3	7595.8	70495.	9854.2	2708.8

Zoom In Zoom Out

Sample Name: jd53445-4 Acquired: 10/15/2022 0:49:45 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0104**	**94.16**	**.1616**	**.1112**	**.3926**	**.0071**	**.0448**	**17.89**	**.0044**
Stddev	.0003	.55	.0011	.0013	.0020	.0000	.0024	.08	.0001
%RSD	2.642	.5874	.6558	1.127	.5086	.1852	5.373	.4214	3.051
#1	.0105	94.37	.1619	.1113	.3930	.0071	.0435	17.95	.0044
#2	.0101	93.53	.1604	.1098	.3905	.0071	.0476	17.81	.0045
#3	.0106	94.57	.1624	.1123	.3945	.0071	.0434	17.92	.0043

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5657**	**.0493**	**.6766**	**.4135**	F **283.5**	**9.798**	**.0875**	**15.32**	**1.159**
Stddev	.0132	.0005	.0202	.0101	1.3	.058	.0009	.12	.032
%RSD	2.336	.9580	2.986	2.434	.4615	.5890	.9831	.7987	2.772
#1	.5563	.0498	.6621	.4053	284.1	9.839	.0873	15.26	1.136
#2	.5808	.0489	.6996	.4247	282.0	9.732	.0868	15.24	1.196
#3	.5600	.0492	.6679	.4105	284.4	9.824	.0884	15.46	1.146

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0151**	**1.789**	**.4572**	**3.232**	**.8549**	**4.426**	**.0167**	**.0160**	**2.497**
Stddev	.0003	.006	.0023	.011	.0019	.011	.0022	.0029	.020
%RSD	2.093	.3220	.5023	.3315	.2269	.2427	13.05	18.39	.8078
#1	.0153	1.793	.4596	3.244	.8559	4.438	.0175	.0162	2.520
#2	.0153	1.783	.4568	3.224	.8561	4.419	.0142	.0130	2.485
#3	.0148	1.792	.4551	3.227	.8527	4.420	.0183	.0188	2.485

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0903**	**.2450**	**2.161**	**.0013**	**2.014**	**.0100**	**1.320**	**.0119**
Stddev	.0010	.0015	.061	.0024	.058	.0007	.005	.0003
%RSD	1.140	.6315	2.805	181.1	2.898	6.540	.3796	2.161
#1	.0905	.2455	2.117	-.0011	1.970	.0093	1.326	.0117
#2	.0913	.2433	2.231	.0038	2.080	.0100	1.317	.0122
#3	.0893	.2463	2.136	.0013	1.990	.0106	1.317	.0119

Zoom In Zoom Out

Sample Name: jd53445-4 Acquired: 10/15/2022 0:49:45 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	7171.0	70222.	10316.	2733.0
Stddev	7.5	1697.	19.	3.2
%RSD	.10396	2.4166	.18008	.11769
#1	7163.2	71443.	10300.	2729.6
#2	7178.0	68284.	10313.	2736.0
#3	7171.7	70939.	10337.	2733.4

Zoom In Zoom Out

Sample Name: jd53445-5 Acquired: 10/15/2022 0:54:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**20.82**	**.0420**	**.0487**	**.1425**	**.0018**	**.0124**	**5.176**	**.0044**
Stddev	.0004	.10	.0004	.0009	.0003	.0000	.0012	.011	.0001
%RSD	8.444	.4945	.9402	1.929	.2404	1.280	9.500	.2190	2.593
#1	.0041	20.83	.0416	.0478	.1426	.0019	.0117	5.186	.0045
#2	.0042	20.92	.0424	.0497	.1427	.0018	.0117	5.179	.0043
#3	.0048	20.72	.0420	.0485	.1421	.0018	.0137	5.164	.0045

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1725**	**.0183**	**.0639**	**.1928**	**90.26**	**4.777**	**.0511**	**6.985**	**.2719**
Stddev	.0027	.0003	.0006	.0016	.25	.023	.0013	.040	.0016
%RSD	1.545	1.832	.9952	.8141	.2770	.4787	2.588	.5707	.6066
#1	.1694	.0184	.0636	.1926	90.39	4.796	.0511	7.009	.2723
#2	.1745	.0179	.0635	.1913	90.42	4.752	.0524	7.008	.2701
#3	.1734	.0186	.0646	.1944	89.97	4.784	.0498	6.939	.2733

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0266**	**.7681**	**.0953**	**1.094**	**.0936**	**6.999**	**.0056**	**.0099**	**1.511**
Stddev	.0001	.0021	.0006	.002	.0020	.021	.0008	.0025	.011
%RSD	.5162	.2686	.6818	.2169	2.135	.2950	14.36	24.88	.7061
#1	.0266	.7693	.0956	1.096	.0956	7.012	.0060	.0126	1.522
#2	.0267	.7657	.0957	1.095	.0936	7.010	.0046	.0080	1.508
#3	.0264	.7693	.0945	1.091	.0916	6.975	.0061	.0089	1.502

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0308**	**.1220**	**.7423**	**.0020**	**.3811**	**.0044**	**.4539**	**.0182**
Stddev	.0008	.0002	.0053	.0012	.0015	.0006	.0017	.0002
%RSD	2.610	.1364	.7182	59.46	.3838	14.52	.3640	.9128
#1	.0313	.1220	.7413	.0033	.3822	.0037	.4545	.0183
#2	.0299	.1218	.7375	.0013	.3795	.0049	.4552	.0180
#3	.0313	.1221	.7481	.0013	.3818	.0045	.4520	.0183

Zoom In Zoom Out

Sample Name: jd53445-5 Acquired: 10/15/2022 0:54:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7475.2**	**72385.**	**10242.**	**2752.6**
Stddev	12.2	246.	36.	3.6
%RSD	.16352	.33952	.35569	.12955
#1	7480.0	72386.	10245.	2754.4
#2	7461.3	72630.	10205.	2748.5
#3	7484.2	72138.	10278.	2754.9

Zoom In Zoom Out

Sample Name: jd53445-6 Acquired: 10/15/2022 0:59:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0083**	**86.00**	**.0840**	**.0517**	**.6176**	**.0036**	**.0401**	**10.27**
Stddev	.0002	.50	.0004	.0012	.0038	.0001	.0007	.07
%RSD	2.152	.5770	.5201	2.239	.6172	1.919	1.647	.6551
#1	.0084	85.43	.0839	.0521	.6133	.0036	.0393	10.19
#2	.0083	86.32	.0845	.0504	.6206	.0036	.0405	10.29
#3	.0081	86.25	.0837	.0526	.6189	.0037	.0404	10.32

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**.4331**	**.0310**	**.2662**	**.2958**	**113.9**	**7.121**	**.0705**
Stddev	.0001	.0042	.0005	.0034	.0023	.7	.053	.0009
%RSD	2.309	.9708	1.504	1.272	.7709	.5884	.7407	1.253
#1	.0034	.4293	.0315	.2646	.2933	113.1	7.060	.0702
#2	.0035	.4376	.0306	.2700	.2976	114.2	7.151	.0697
#3	.0033	.4323	.0308	.2638	.2967	114.3	7.153	.0715

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**12.78**	**.5395**	**.0140**	**1.116**	**.4299**	**3.166**	**.6641**	**6.854**
Stddev	.05	.0038	.0000	.003	.0012	.011	.0027	.012
%RSD	.3941	.6970	.2454	.2273	.2727	.3571	.4091	.1771
#1	12.73	.5364	.0140	1.119	.4313	3.175	.6672	6.868
#2	12.82	.5437	.0141	1.116	.4291	3.153	.6624	6.847
#3	12.80	.5385	.0141	1.114	.4294	3.170	.6626	6.847

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069**	**.0125**	**2.227**	**.0698**	**.2092**	**2.383**	F **-.0031**	**2.898**
Stddev	.0004	.0012	.016	.0002	.0013	.014	.0013	.020
%RSD	6.324	9.953	.7353	.3284	.6158	.5958	43.62	.6989
#1	.0064	.0121	2.245	.0698	.2078	2.367	-.0043	2.878
#2	.0071	.0115	2.222	.0696	.2101	2.395	-.0017	2.918
#3	.0072	.0139	2.213	.0701	.2098	2.387	-.0032	2.898

Zoom In Zoom Out

Sample Name: jd53445-6 Acquired: 10/15/2022 0:59:44 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0089**	**.7731**	**-.0004**
Stddev	.0011	.0008	.0001
%RSD	12.27	.1018	24.68
#1	.0088	.7737	-.0005
#2	.0078	.7735	-.0003
#3	.0100	.7722	-.0003

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7224.6**	**71910.**	**10367.**	**2756.6**
Stddev	2.4	441.	98.	3.6
%RSD	.03385	.61321	.94308	.13043
#1	7222.9	72305.	10448.	2758.2
#2	7227.4	71435.	10394.	2759.0
#3	7223.5	71991.	10258.	2752.4

Zoom In Zoom Out

Sample Name: jd53445-7 Acquired: 10/15/2022 1:04:38 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0104**	**228.7**	**.0769**	**.0372**	**.9741**	**.0062**	**.0621**	**4.895**	**.0011**
Stddev	.0001	.3	.0011	.0014	.0030	.0001	.0010	.015	.0004
%RSD	1.179	.1456	1.461	3.638	.3101	1.803	1.576	.2969	31.99
#1	.0102	228.3	.0756	.0386	.9707	.0061	.0614	4.878	.0012
#2	.0104	229.0	.0778	.0371	.9762	.0064	.0632	4.903	.0015
#3	.0104	228.7	.0773	.0359	.9755	.0062	.0616	4.903	.0008

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4175**	**.0407**	**.3092**	**.3291**	F **220.6**	**6.463**	**.0542**	**6.716**	**.6798**
Stddev	.0023	.0001	.0013	.0006	.4	.029	.0001	.038	.0023
%RSD	.5494	.3156	.4192	.1815	.1831	.4534	.2499	.5676	.3385
#1	.4175	.0407	.3077	.3291	220.1	6.446	.0541	6.737	.6787
#2	.4198	.0408	.3103	.3285	220.7	6.446	.0542	6.739	.6824
#3	.4152	.0406	.3094	.3296	220.8	6.497	.0544	6.672	.6782

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0098**	**.5166**	**.2362**	**2.168**	**.3246**	**3.231**	**.0080**	**.0133**	**2.291**
Stddev	.0005	.0057	.0010	.004	.0024	.015	.0006	.0020	.023
%RSD	5.257	1.096	.4391	.1699	.7388	.4701	7.589	15.25	1.002
#1	.0103	.5219	.2373	2.171	.3262	3.249	.0078	.0112	2.318
#2	.0097	.5107	.2359	2.164	.3258	3.223	.0087	.0152	2.276
#3	.0092	.5173	.2353	2.169	.3219	3.222	.0076	.0137	2.281

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0468**	**.1443**	**3.578**	**.0018**	**1.393**	**.0071**	**.3630**	**.0565**
Stddev	.0002	.0005	.003	.0022	.004	.0002	.0010	.0001
%RSD	.4722	.3794	.0933	120.3	.3119	3.448	.2776	.1576
#1	.0471	.1437	3.575	-.0002	1.391	.0073	.3634	.0566
#2	.0467	.1446	3.581	.0016	1.398	.0068	.3637	.0565
#3	.0467	.1446	3.577	.0042	1.390	.0072	.3618	.0564

Zoom In Zoom Out

Sample Name: jd53445-7 Acquired: 10/15/2022 1:04:38 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7029.0**	**71139.**	**10414.**	**2804.1**
Stddev	4.9	165.	10.	2.9
%RSD	.06988	.23242	.09325	.10279
#1	7034.5	71279.	10403.	2803.7
#2	7027.5	70957.	10418.	2807.1
#3	7025.0	71181.	10421.	2801.4

Zoom In Zoom Out

Sample Name: jd53445-8 Acquired: 10/15/2022 1:09:33 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0081**	**147.4**	**.0750**	**.0450**	**.5812**	**.0050**	**.0413**	**5.511**	**.0016**
Stddev	.0005	.9	.0009	.0010	.0038	.0001	.0022	.047	.0001
%RSD	6.646	.5973	1.236	2.184	.6488	1.236	5.217	.8475	8.114
#1	.0081	147.5	.0739	.0451	.5824	.0050	.0429	5.509	.0017
#2	.0076	146.5	.0756	.0460	.5769	.0050	.0421	5.465	.0017
#3	.0086	148.2	.0754	.0440	.5841	.0049	.0388	5.558	.0015

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3934**	**.0440**	**.6895**	**.3280**	**157.8**	**5.123**	**.0620**	**10.60**	**.5785**
Stddev	.0051	.0004	.0067	.0058	.7	.036	.0005	.10	.0078
%RSD	1.288	.8099	.9676	1.780	.4416	.7083	.7974	.9113	1.348
#1	.3972	.0442	.6941	.3316	158.1	5.123	.0617	10.60	.5828
#2	.3952	.0442	.6925	.3312	157.0	5.087	.0618	10.51	.5833
#3	.3876	.0436	.6818	.3213	158.3	5.159	.0626	10.70	.5695

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0151**	**.7128**	**.2088**	**1.919**	**.5150**	**2.169**	**.0090**	**.0122**	**2.194**
Stddev	.0001	.0144	.0016	.012	.0058	.013	.0008	.0005	.029
%RSD	.3734	2.018	.7439	.6255	1.133	.5765	8.544	3.699	1.314
#1	.0151	.7152	.2089	1.920	.5201	2.175	.0094	.0123	2.211
#2	.0151	.6974	.2103	1.930	.5164	2.177	.0095	.0117	2.211
#3	.0152	.7259	.2072	1.906	.5087	2.154	.0081	.0126	2.161

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0715**	**.1077**	**2.558**	**-.0004**	**.9045**	**.0072**	**.8044**	**.0213**
Stddev	.0008	.0010	.041	.0010	.0121	.0014	.0024	.0004
%RSD	1.069	.8927	1.595	230.3	1.342	19.39	.2951	1.846
#1	.0715	.1075	2.581	-.0002	.9114	.0066	.8054	.0214
#2	.0722	.1068	2.581	-.0016	.9116	.0088	.8060	.0217
#3	.0707	.1087	2.511	.0005	.8905	.0063	.8016	.0209

Zoom In Zoom Out

Sample Name: jd53445-8 Acquired: 10/15/2022 1:09:33 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7140.0**	**73214.**	**10596.**	**2835.7**
Stddev	12.1	671.	17.	5.8
%RSD	.17015	.91699	.16001	.20529
#1	7131.9	72777.	10598.	2837.0
#2	7134.1	72877.	10578.	2829.4
#3	7154.0	73987.	10611.	2840.8

Zoom In Zoom Out

Sample Name: jd53449-1 Acquired: 10/15/2022 1:14:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0029**	**28.67**	**.0199**	**.0141**	**.2304**	**.0017**	**.0171**	**6.372**	**.0018**
Stddev	.0001	.05	.0006	.0005	.0007	.0001	.0008	.004	.0002
%RSD	2.964	.1576	3.098	3.333	.3235	5.559	4.517	.0649	13.77
#1	.0028	28.70	.0206	.0141	.2309	.0016	.0162	6.369	.0015
#2	.0030	28.69	.0194	.0137	.2307	.0018	.0173	6.369	.0018
#3	.0029	28.62	.0196	.0146	.2296	.0018	.0178	6.376	.0020

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2455**	**.0258**	**.1074**	**.1195**	**71.86**	**3.275**	**.0448**	**11.00**	**.6856**
Stddev	.0009	.0004	.0004	.0003	.04	.010	.0004	.01	.0019
%RSD	.3548	1.670	.3269	.2787	.0593	.3103	.9404	.0748	.2802
#1	.2445	.0259	.1071	.1192	71.91	3.264	.0453	10.99	.6847
#2	.2459	.0262	.1078	.1193	71.83	3.283	.0447	11.01	.6878
#3	.2461	.0253	.1072	.1198	71.86	3.279	.0444	11.01	.6842

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.4737**	**.0645**	**1.555**	**.1857**	**.1933**	**.0037**	**.0017**	**1.826**
Stddev	.0002	.0046	.0009	.015	.0030	.0016	.0019	.0018	.011
%RSD	12.24	.9802	1.372	.9486	1.613	.8113	52.74	101.4	.5924
#1	.0020	.4780	.0640	1.545	.1846	.1922	.0015	-.0002	1.822
#2	.0022	.4688	.0655	1.572	.1891	.1926	.0050	.0033	1.839
#3	.0017	.4744	.0640	1.548	.1835	.1951	.0046	.0021	1.818

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1727**	**.0294**	**1.207**	**.0012**	**.1017**	**.0037**	**.4157**	**.0201**
Stddev	.0020	.0001	.003	.0014	.0002	.0008	.0050	.0002
%RSD	1.179	.4639	.2160	117.7	.1727	22.34	1.201	.7792
#1	.1711	.0296	1.205	.0015	.1015	.0033	.4136	.0200
#2	.1750	.0293	1.210	-.0003	.1018	.0031	.4214	.0202
#3	.1720	.0294	1.208	.0025	.1018	.0046	.4122	.0199

Zoom In Zoom Out

Sample Name: jd53449-1 Acquired: 10/15/2022 1:14:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7363.8**	**72450.**	**10175.**	**2756.1**
Stddev	30.7	247.	57.	14.3
%RSD	.41629	.34081	.55590	.51886
#1	7375.2	72656.	10138.	2763.3
#2	7329.1	72176.	10147.	2739.6
#3	7387.2	72519.	10240.	2765.3

Zoom In Zoom Out

Sample Name: jd53449-2 Acquired: 10/15/2022 1:19:29 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065**	**59.36**	**.0466**	**.0200**	**.5187**	**.0032**	**.0321**	**10.49**	**.0042**
Stddev	.0003	.09	.0016	.0005	.0008	.0001	.0011	.02	.0002
%RSD	4.423	.1483	3.372	2.448	.1634	1.754	3.331	.1908	3.933
#1	.0062	59.32	.0452	.0204	.5193	.0032	.0321	10.48	.0040
#2	.0064	59.46	.0483	.0203	.5191	.0033	.0311	10.51	.0043
#3	.0068	59.30	.0464	.0195	.5178	.0032	.0332	10.47	.0041

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4924**	**.0458**	**.2777**	**.3723**	**117.8**	**4.961**	**.0720**	**14.04**	**1.920**
Stddev	.0016	.0004	.0015	.0012	.1	.042	.0003	.02	.007
%RSD	.3236	.7728	.5341	.3115	.0802	.8405	.4392	.1688	.3740
#1	.4925	.0455	.2783	.3714	117.7	5.003	.0723	14.05	1.925
#2	.4907	.0462	.2788	.3736	117.9	4.920	.0717	14.06	1.924
#3	.4939	.0456	.2760	.3718	117.7	4.960	.0719	14.02	1.912

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0057**	**.9445**	**.1268**	**3.166**	**1.022**	**1.333**	**.0076**	**.0071**	**2.337**
Stddev	.0002	.0035	.0007	.007	.004	.006	.0011	.0026	.015
%RSD	4.007	.3674	.5452	.2146	.3591	.4677	14.51	36.90	.6265
#1	.0059	.9423	.1260	3.158	1.018	1.326	.0066	.0097	2.353
#2	.0054	.9485	.1274	3.172	1.026	1.337	.0075	.0070	2.334
#3	.0057	.9427	.1269	3.167	1.022	1.336	.0088	.0045	2.324

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3013**	**.0547**	**2.194**	**.0015**	**.2377**	**.0076**	**.7055**	**.0156**
Stddev	.0012	.0002	.004	.0014	.0011	.0006	.0002	.0002
%RSD	.3911	.3470	.1764	89.32	.4666	7.811	.0272	1.241
#1	.3000	.0549	2.195	.0001	.2382	.0082	.7053	.0157
#2	.3022	.0545	2.197	.0017	.2384	.0073	.7055	.0158
#3	.3018	.0548	2.189	.0028	.2364	.0071	.7057	.0154

Zoom In Zoom Out

Sample Name: jd53449-2 Acquired: 10/15/2022 1:19:29 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7247.5**	**73162.**	**10377.**	**2793.7**
Stddev	11.4	233.	14.	2.4
%RSD	.15664	.31891	.13681	.08637
#1	7260.5	73122.	10363.	2794.9
#2	7242.4	72951.	10377.	2795.3
#3	7239.6	73413.	10391.	2790.9

Zoom In Zoom Out

Sample Name: jd53449-3 Acquired: 10/15/2022 1:24:26 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**25.24**	**.0297**	**.0113**	**.2441**	**.0016**	**.0168**	**9.865**	**.0034**
Stddev	.0002	.02	.0017	.0004	.0005	.0001	.0001	.010	.0001
%RSD	6.453	.0794	5.559	3.933	.2126	4.674	.7971	.0977	3.967
#1	.0033	25.23	.0316	.0113	.2444	.0016	.0167	9.868	.0035
#2	.0031	25.26	.0286	.0109	.2435	.0017	.0170	9.872	.0034
#3	.0035	25.22	.0289	.0117	.2444	.0015	.0168	9.854	.0032

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2874**	**.0229**	**.1532**	**.1560**	**79.59**	**3.176**	**.0407**	**11.00**	**.7792**
Stddev	.0013	.0001	.0008	.0005	.06	.009	.0003	.07	.0009
%RSD	.4435	.5743	.5072	.3310	.0768	.2829	.7593	.6681	.1196
#1	.2880	.0230	.1539	.1565	79.56	3.179	.0405	10.93	.7782
#2	.2860	.0227	.1523	.1554	79.66	3.184	.0410	11.08	.7801
#3	.2884	.0229	.1534	.1560	79.55	3.166	.0404	11.00	.7791

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0137**	**.4629**	**.0973**	**1.914**	**.1769**	**.2143**	**.0051**	**.0043**	**1.730**
Stddev	.0002	.0056	.0003	.004	.0015	.0026	.0010	.0010	.012
%RSD	1.625	1.220	.2888	.2030	.8421	1.230	19.50	22.97	.6673
#1	.0138	.4694	.0971	1.917	.1785	.2138	.0041	.0042	1.742
#2	.0134	.4591	.0972	1.910	.1767	.2120	.0061	.0054	1.730
#3	.0139	.4604	.0976	1.914	.1756	.2172	.0051	.0034	1.719

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1244**	**.0348**	**1.140**	**.0016**	**.0978**	**.0026**	**.9913**	**.0194**
Stddev	.0006	.0002	.003	.0005	.0004	.0014	.0028	.0002
%RSD	.4560	.4641	.2254	30.29	.3824	52.23	.2788	1.168
#1	.1243	.0346	1.141	.0021	.0983	.0038	.9885	.0196
#2	.1250	.0349	1.142	.0011	.0977	.0011	.9913	.0192
#3	.1239	.0349	1.137	.0017	.0976	.0028	.9941	.0193

Zoom In Zoom Out

Sample Name: jd53449-3 Acquired: 10/15/2022 1:24:26 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7350.0**	**72211.**	**10137.**	**2744.7**
Stddev	11.6	89.	45.	1.1
%RSD	.15736	.12288	.43986	.03975
#1	7361.8	72194.	10153.	2744.1
#2	7349.6	72306.	10086.	2745.9
#3	7338.7	72131.	10171.	2743.9

Zoom In Zoom Out

Sample Name: jd53449-4 Acquired: 10/15/2022 1:29:25 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0062**	**47.19**	**.0453**	**.0106**	**.6563**	**.0026**	**.0351**	**14.18**	**.0032**
Stddev	.0002	.06	.0004	.0003	.0006	.0000	.0010	.03	.0002
%RSD	3.748	.1168	.9221	2.804	.0927	1.186	2.980	.2000	5.179
#1	.0060	47.12	.0450	.0109	.6558	.0026	.0351	14.17	.0033
#2	.0064	47.21	.0451	.0104	.6562	.0026	.0361	14.21	.0033
#3	.0063	47.23	.0457	.0105	.6570	.0026	.0340	14.15	.0030

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7593**	**.0465**	**.1328**	**.1291**	**138.7**	**5.172**	**.0738**	**15.43**	**5.116**
Stddev	.0036	.0002	.0010	.0004	.1	.013	.0009	.04	.012
%RSD	.4807	.4623	.7683	.2917	.0974	.2458	1.168	.2537	.2351
#1	.7568	.0467	.1322	.1290	138.6	5.182	.0738	15.45	5.108
#2	.7635	.0466	.1340	.1295	138.8	5.158	.0730	15.38	5.130
#3	.7576	.0463	.1323	.1287	138.8	5.176	.0747	15.45	5.111

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0051**	**.7380**	**.0958**	**3.573**	**.1315**	**.4025**	**.0044**	**.0093**	**1.919**
Stddev	.0002	.0029	.0004	.012	.0007	.0027	.0013	.0020	.044
%RSD	4.127	.3941	.4019	.3482	.5602	.6600	30.62	21.25	2.296
#1	.0049	.7348	.0963	3.587	.1322	.3998	.0055	.0109	1.970
#2	.0053	.7405	.0956	3.569	.1307	.4051	.0029	.0100	1.897
#3	.0052	.7387	.0956	3.563	.1314	.4026	.0048	.0071	1.890

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0331**	**.0593**	**2.258**	**.0028**	**.1990**	**.0056**	**.3271**	**.0145**
Stddev	.0006	.0001	.003	.0014	.0009	.0001	.0019	.0002
%RSD	1.906	.1459	.1274	50.88	.4430	1.440	.5934	1.493
#1	.0331	.0593	2.262	.0016	.1984	.0057	.3294	.0145
#2	.0337	.0592	2.258	.0025	.2000	.0056	.3260	.0143
#3	.0324	.0593	2.256	.0044	.1987	.0055	.3260	.0147

Zoom In Zoom Out

Sample Name: jd53449-4 Acquired: 10/15/2022 1:29:25 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7193.4**	**73647.**	**10415.**	**2789.4**
Stddev	24.4	81.	39.	8.5
%RSD	.33879	.11041	.37774	.30351
#1	7165.8	73555.	10443.	2779.6
#2	7202.2	73707.	10370.	2794.2
#3	7212.1	73680.	10431.	2794.3

Zoom In Zoom Out

Sample Name: jd53449-5 Acquired: 10/15/2022 1:34:33 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0143**	**63.75**	**.1350**	**.0454**	**1.433**	**.0037**	**.0404**	**37.96**	**.0098**
Stddev	.0004	.04	.0007	.0014	.001	.0000	.0006	.12	.0002
%RSD	2.708	.0685	.4990	3.148	.0841	.6614	1.525	.3083	1.817
#1	.0138	63.71	.1357	.0440	1.432	.0037	.0397	37.85	.0098
#2	.0144	63.79	.1347	.0469	1.434	.0037	.0406	38.08	.0100
#3	.0146	63.73	.1345	.0452	1.432	.0037	.0409	37.94	.0096

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5336**	**.0479**	**.7365**	**1.375**	**116.5**	**7.478**	**.0892**	**27.30**	**2.870**
Stddev	.0011	.0007	.0016	.002	.2	.035	.0008	.05	.004
%RSD	.2021	1.515	.2139	.1348	.1747	.4631	.8469	.1865	.1250
#1	.5346	.0487	.7351	1.377	116.3	7.485	.0900	27.25	2.868
#2	.5336	.0477	.7361	1.373	116.7	7.509	.0888	27.30	2.874
#3	.5325	.0473	.7382	1.374	116.5	7.441	.0886	27.35	2.869

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052**	**1.452**	**.3141**	**6.731**	**2.014**	**2.283**	**.0273**	**.0098**	**2.433**
Stddev	.0003	.003	.0021	.028	.012	.014	.0021	.0011	.051
%RSD	4.882	.2118	.6842	.4136	.6144	.5909	7.662	11.74	2.097
#1	.0051	1.449	.3164	6.756	2.027	2.297	.0290	.0102	2.470
#2	.0055	1.454	.3137	6.735	2.012	2.282	.0279	.0085	2.454
#3	.0051	1.454	.3122	6.701	2.002	2.270	.0249	.0106	2.375

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.200**	**.1399**	**2.157**	**.0045**	**.2859**	**.0104**	**1.839**	**.0076**
Stddev	.009	.0004	.005	.0012	.0004	.0006	.007	.0002
%RSD	.7141	.2718	.2229	25.64	.1232	5.459	.3849	2.576
#1	1.209	.1394	2.160	.0037	.2857	.0103	1.846	.0078
#2	1.201	.1401	2.160	.0059	.2863	.0110	1.839	.0074
#3	1.192	.1401	2.152	.0041	.2856	.0098	1.832	.0075

Zoom In Zoom Out

Sample Name: jd53449-5 Acquired: 10/15/2022 1:34:33 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7034.5**	**71948.**	**10292.**	**2726.3**
Stddev	17.6	104.	40.	4.4
%RSD	.25067	.14472	.39061	.16031
#1	7015.1	72068.	10338.	2723.3
#2	7039.0	71881.	10270.	2724.1
#3	7049.5	71895.	10268.	2731.3

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 1:39:31 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2408**	**38.78**	**1.989**	**2.016**	**1.966**	**1.972**	**2.098**	**39.13**	**1.996**
Stddev	.0007	.10	.004	.010	.003	.004	.008	.08	.007
%RSD	.2897	.2572	.2235	.4838	.1465	.2119	.3646	.2057	.3769
#1	.2411	38.79	1.990	2.014	1.967	1.976	2.097	39.17	1.995
#2	.2401	38.88	1.993	2.026	1.969	1.974	2.107	39.19	2.004
#3	.2414	38.68	1.984	2.007	1.963	1.968	2.092	39.04	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.992**	**1.964**	**1.978**	**1.911**	**39.33**	**38.70**	**1.960**	**38.73**	**1.995**
Stddev	.004	.009	.002	.005	.08	.13	.004	.04	.002
%RSD	.2103	.4347	.0931	.2855	.1931	.3330	.1882	.1101	.0902
#1	1.988	1.961	1.980	1.907	39.38	38.70	1.959	38.71	1.997
#2	1.992	1.974	1.979	1.909	39.36	38.83	1.963	38.78	1.995
#3	1.996	1.958	1.976	1.917	39.24	38.58	1.956	38.70	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.018**	**39.25**	**1.990**	**1.986**	**2.008**	**1.961**	**2.012**	**2.002**	**5.007**
Stddev	.007	.11	.007	.006	.007	.012	.005	.005	.017
%RSD	.3467	.2741	.3756	.2920	.3357	.6287	.2729	.2424	.3393
#1	2.018	39.28	1.987	1.986	2.005	1.956	2.005	1.998	5.002
#2	2.025	39.34	1.999	1.993	2.016	1.975	2.014	2.001	5.026
#3	2.011	39.13	1.985	1.981	2.003	1.951	2.015	2.007	4.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 1:39:31 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.042**	**1.972**	**1.974**	**2.054**	**1.972**	**2.010**	**2.016**	**1.964**
Stddev	.004	.004	.000	.007	.001	.005	.011	.004
%RSD	.1931	.2142	.0063	.3553	.0314	.2658	.5347	.1881
#1	2.039	1.972	1.974	2.046	1.972	2.009	2.014	1.959
#2	2.040	1.977	1.974	2.056	1.972	2.016	2.027	1.965
#3	2.046	1.968	1.974	2.060	1.971	2.006	2.006	1.966
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6770.5**	**69596.**	**9821.4**	**2640.4**
Stddev	27.9	59.	18.5	10.9
%RSD	.41185	.08539	.18830	.41323
#1	6775.4	69533.	9801.9	2639.8
#2	6740.5	69604.	9823.4	2629.7
#3	6795.6	69651.	9838.7	2651.5

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 1:44:18 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0002**	**-.0018**	**.0021**	**-.0001**	**.0000**	**-.0000**	**-.0033**	**.0003**
Stddev	.0001	.0115	.0007	.0006	.0001	.0001	.0006	.0025	.0002
%RSD	30.90	6973.	42.23	28.42	111.7	216.9	1435.	76.34	61.49
#1	.0003	-.0130	-.0026	.0023	-.0001	.0001	-.0003	-.0013	.0001
#2	.0006	.0059	-.0011	.0026	-.0002	-.0000	.0006	-.0024	.0003
#3	.0005	.0076	-.0016	.0014	.0000	.0001	-.0005	-.0061	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0000**	**-.0000**	**-.0001**	**.0035**	**.0004**	**.0010**	**-.0212**	**.0000**
Stddev	.0001	.0005	.0005	.0003	.0011	.0019	.0014	.0142	.0000
%RSD	103.0	1465.	1015.	241.2	32.26	423.6	144.5	66.70	98.39
#1	.0000	-.0003	.0000	-.0002	.0024	.0025	-.0006	-.0114	.0001
#2	.0000	-.0003	.0004	.0002	.0034	.0000	.0020	-.0148	.0000
#3	.0002	.0005	-.0006	-.0004	.0047	-.0012	.0015	-.0374	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0471**	**-.0000**	**.0018**	**.0007**	**.0001**	**.0009**	**.0002**	**.0020**
Stddev	.0001	.0067	.0001	.0005	.0005	.0013	.0013	.0005	.0010
%RSD	11.56	14.28	297.2	29.99	72.30	1001.	156.6	270.1	49.45
#1	.0011	-.0477	-.0000	.0024	.0011	-.0008	.0003	-.0004	.0011
#2	.0009	-.0535	-.0001	.0017	.0008	.0016	-.0002	.0003	.0018
#3	.0009	-.0401	.0001	.0013	.0002	-.0004	.0024	.0007	.0031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 1:44:18 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0000**	**.0007**	**-.0008**	**.0002**	**.0026**	**-.0011**	**.0002**
Stddev	.0004	.0000	.0001	.0004	.0001	.0003	.0001	.0001
%RSD	101.7	269.1	11.75	45.99	45.11	12.89	8.959	58.11
#1	.0004	-.0000	.0007	-.0011	.0002	.0028	-.0011	.0001
#2	-.0000	.0001	.0008	-.0010	.0003	.0023	-.0012	.0004
#3	.0007	-.0000	.0006	-.0004	.0001	.0029	-.0011	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7679.6**	**72300.**	**9849.5**	**2736.2**
Stddev	7.5	386.	47.3	1.2
%RSD	.09752	.53454	.48001	.04484
#1	7682.4	71980.	9819.4	2737.0
#2	7671.1	72729.	9825.0	2734.8
#3	7685.3	72190.	9904.0	2736.9

Zoom In Zoom Out

Sample Name: jd53449-6 Acquired: 10/15/2022 1:49:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0223**	**69.47**	**.1452**	**.0243**	**1.548**	**.0039**	**.0421**	**75.38**	**.0143**
Stddev	.0001	.08	.0002	.0008	.001	.0001	.0011	.10	.0001
%RSD	.5379	.1166	.1324	3.196	.0646	1.968	2.703	.1311	.5010
#1	.0222	69.47	.1454	.0250	1.547	.0039	.0430	75.39	.0142
#2	.0223	69.39	.1450	.0235	1.549	.0038	.0408	75.27	.0144
#3	.0224	69.55	.1452	.0244	1.548	.0039	.0425	75.47	.0143

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5271**	**.0437**	**1.043**	**1.704**	**127.4**	**5.947**	**.1002**	**44.22**	**1.885**
Stddev	.0026	.0005	.001	.001	.1	.012	.0010	.19	.001
%RSD	.4845	1.136	.1380	.0713	.0430	.2080	1.021	.4238	.0368
#1	.5300	.0443	1.043	1.706	127.5	5.939	.0990	44.06	1.884
#2	.5262	.0434	1.045	1.704	127.4	5.941	.1009	44.17	1.885
#3	.5251	.0435	1.042	1.704	127.4	5.961	.1006	44.43	1.886

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0108**	**1.414**	**.3282**	**7.148**	**2.313**	**2.722**	**.0365**	**.0136**	**2.632**
Stddev	.0003	.002	.0018	.021	.003	.015	.0009	.0017	.011
%RSD	2.402	.1095	.5410	.2907	.1193	.5672	2.444	12.86	.4089
#1	.0107	1.413	.3303	7.151	2.315	2.725	.0355	.0150	2.640
#2	.0111	1.414	.3274	7.125	2.310	2.706	.0369	.0116	2.620
#3	.0106	1.416	.3270	7.166	2.314	2.736	.0371	.0142	2.635

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.691**	**.1703**	**1.914**	**.0032**	**.2715**	**.0126**	**1.640**	**.0079**
Stddev	.006	.0002	.002	.0027	.0002	.0016	.002	.0001
%RSD	.3726	.1086	.1210	82.18	.0593	12.59	.1330	1.453
#1	1.699	.1704	1.917	.0017	.2713	.0115	1.642	.0080
#2	1.687	.1704	1.912	.0017	.2716	.0144	1.639	.0078
#3	1.689	.1701	1.913	.0063	.2717	.0119	1.638	.0079

Zoom In Zoom Out

Sample Name: jd53449-6 Acquired: 10/15/2022 1:49:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6874.6**	**71253.**	**10317.**	**2713.5**
Stddev	5.5	107.	22.	3.5
%RSD	.07968	.14998	.21356	.13056
#1	6874.4	71368.	10311.	2717.3
#2	6869.2	71234.	10341.	2712.9
#3	6880.2	71157.	10298.	2710.3

Zoom In Zoom Out

Sample Name: jd53449-7 Acquired: 10/15/2022 1:54:26 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0168**	**88.96**	**.0876**	**.0729**	**1.617**	**.0048**	**.0451**	**26.39**	**.0034**
Stddev	.0002	.33	.0005	.0010	.006	.0001	.0009	.13	.0001
%RSD	.9068	.3705	.6009	1.399	.3918	2.909	1.959	.5081	3.248
#1	.0167	88.80	.0878	.0740	1.615	.0049	.0458	26.31	.0035
#2	.0168	89.33	.0870	.0722	1.624	.0048	.0441	26.54	.0033
#3	.0170	88.74	.0879	.0723	1.612	.0047	.0454	26.31	.0034

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5548**	**.0499**	**.9755**	**1.211**	**139.3**	**11.96**	**.1297**	**27.83**	**2.194**
Stddev	.0018	.0002	.0073	.001	.7	.07	.0003	.07	.012
%RSD	.3312	.4669	.7459	.1188	.4695	.6169	.2638	.2649	.5418
#1	.5550	.0501	.9785	1.212	138.8	11.90	.1297	27.75	2.197
#2	.5529	.0497	.9672	1.209	140.0	12.04	.1294	27.83	2.181
#3	.5565	.0498	.9808	1.211	139.0	11.93	.1301	27.90	2.205

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0054**	**1.138**	**.2314**	**6.975**	**2.399**	**2.105**	**.0240**	**.0117**	**2.773**
Stddev	.0001	.007	.0012	.022	.006	.010	.0017	.0021	.031
%RSD	1.042	.6123	.5359	.3138	.2496	.4548	7.187	17.79	1.103
#1	.0053	1.138	.2321	6.981	2.405	2.116	.0227	.0106	2.806
#2	.0055	1.145	.2299	6.951	2.394	2.098	.0234	.0141	2.746
#3	.0054	1.131	.2320	6.994	2.398	2.102	.0260	.0103	2.768

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.779**	**.1211**	**2.293**	**.0016**	**.3486**	**.0109**	**.7267**	**.0125**
Stddev	.009	.0005	.013	.0011	.0022	.0009	.0014	.0001
%RSD	.5324	.4483	.5514	67.08	.6251	8.675	.1953	.9902
#1	1.785	.1211	2.296	.0005	.3481	.0104	.7276	.0124
#2	1.768	.1216	2.279	.0027	.3467	.0120	.7251	.0125
#3	1.784	.1205	2.303	.0016	.3509	.0104	.7275	.0126

Zoom In Zoom Out

Sample Name: jd53449-7 Acquired: 10/15/2022 1:54:26 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6988.4**	**72096.**	**10310.**	**2754.2**
Stddev	10.4	427.	96.	8.2
%RSD	.14839	.59211	.93445	.29923
#1	6984.0	72053.	10421.	2753.0
#2	7000.2	72543.	10252.	2763.0
#3	6980.9	71693.	10255.	2746.7

Zoom In Zoom Out

Sample Name: mp35738-b1 Acquired: 10/15/2022 1:59:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2308**	**24.11**	**1.844**	**1.822**	**1.880**	**1.885**	**-.0004**	**24.55**
Stddev	.0004	.65	.002	.001	.046	.047	.0010	.66
%RSD	.1557	2.682	.1141	.0702	2.425	2.473	257.0	2.692
#1	.2312	24.86	1.845	1.821	1.932	1.939	-.0014	25.31
#2	.2305	23.73	1.846	1.821	1.852	1.859	.0006	24.15
#3	.2309	23.75	1.842	1.823	1.855	1.857	-.0004	24.18

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.872**	**.1544**	**1.811**	**1.855**	**1.797**	**24.68**	**24.07**	**-.0000**
Stddev	.002	.0015	.004	.006	.006	.62	.59	.0007
%RSD	.1005	.9832	.2351	.3062	.3588	2.508	2.447	2391.
#1	1.872	.1562	1.816	1.852	1.804	25.40	24.74	-.0007
#2	1.873	.1534	1.808	1.861	1.797	24.35	23.70	.0006
#3	1.869	.1537	1.809	1.851	1.791	24.30	23.75	.0001

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.95**	**1.876**	**1.904**	**24.60**	**1.833**	**1.855**	**1.865**	F **-.0791**
Stddev	.59	.002	.003	.61	.003	.006	.009	.0044
%RSD	2.451	.1126	.1569	2.482	.1722	.3244	.4702	5.554
#1	24.63	1.875	1.906	25.30	1.836	1.855	1.872	-.0760
#2	23.60	1.879	1.905	24.20	1.830	1.861	1.868	-.0771
#3	23.62	1.875	1.900	24.30	1.832	1.849	1.855	-.0841

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.900**	**1.835**	**.1335**	**1.960**	**1.886**	**1.866**	**1.918**	**1.844**
Stddev	.006	.011	.0011	.006	.048	.003	.006	.001
%RSD	.3145	.5872	.7980	.3226	2.539	.1810	.3263	.0448
#1	1.903	1.841	.1343	1.966	1.942	1.867	1.923	1.844
#2	1.904	1.841	.1339	1.962	1.855	1.869	1.921	1.845
#3	1.893	1.822	.1323	1.954	1.863	1.862	1.911	1.844

Zoom In Zoom Out

Sample Name: mp35738-b1 Acquired: 10/15/2022 1:59:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.446**	**1.882**	**1.856**
Stddev	.004	.007	.004
%RSD	.2783	.3921	.2269
#1	1.443	1.889	1.856
#2	1.451	1.880	1.860
#3	1.445	1.875	1.851

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6973.5**	**70098.**	**9719.3**	**2644.4**
Stddev	16.3	182.	215.4	6.2
%RSD	.23306	.25922	2.2157	.23404
#1	6955.1	70286.	9470.9	2640.9
#2	6979.5	69924.	9833.4	2640.8
#3	6985.9	70083.	9853.5	2651.6

Zoom In Zoom Out

Sample Name: mp35738-mb1 Acquired: 10/15/2022 2:04:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0125**	**-.0008**	**.0026**	**.0019**	**.0001**	**-.0001**	**.1013**	**.0001**
Stddev	.0001	.0066	.0011	.0009	.0001	.0000	.0005	.0013	.0001
%RSD	20.17	52.85	140.6	32.73	6.988	23.08	590.7	1.318	127.3
#1	.0008	.0091	-.0005	.0035	.0017	.0001	-.0004	.0998	.0002
#2	.0006	.0082	-.0020	.0026	.0020	.0001	-.0003	.1016	.0000
#3	.0008	.0201	.0001	.0017	.0020	.0002	.0005	.1024	.0001

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0000**	**.0006**	**.0047**	**.0252**	**.0041**	**-.0005**	**.0028**	**.0004**
Stddev	.0027	.0002	.0001	.0003	.0018	.0059	.0009	.0153	.0000
%RSD	11990.	1103.	16.65	5.725	7.009	141.9	205.7	545.2	5.747
#1	.0031	.0002	.0007	.0044	.0241	.0045	-.0006	-.0125	.0004
#2	-.0009	-.0001	.0007	.0048	.0273	-.0019	.0006	.0181	.0004
#3	-.0021	-.0001	.0005	.0049	.0243	.0098	-.0013	.0028	.0005

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0085**	**.0005**	**.0218**	**.0008**	**.0087**	**.0004**	**.0018**	**.0085**
Stddev	.0001	.0012	.0002	.0011	.0010	.0009	.0009	.0011	.0010
%RSD	3.753	13.60	46.26	5.023	132.5	10.18	194.8	64.31	11.81
#1	.0016	.0079	.0004	.0223	.0001	.0098	.0010	.0010	.0077
#2	.0016	.0078	.0007	.0205	.0019	.0081	-.0005	.0012	.0096
#3	.0015	.0098	.0003	.0226	.0003	.0083	.0009	.0030	.0082

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0222**	**.0006**	**.0011**	**-.0008**	**.0007**	**.0140**	**.0040**	**.0012**
Stddev	.0005	.0000	.0002	.0005	.0003	.0010	.0001	.0002
%RSD	2.253	8.219	20.77	69.19	39.03	7.039	2.716	13.43
#1	.0228	.0006	.0009	-.0003	.0007	.0148	.0041	.0013
#2	.0219	.0006	.0013	-.0007	.0004	.0143	.0039	.0010
#3	.0219	.0005	.0012	-.0014	.0009	.0129	.0039	.0013

Zoom In Zoom Out

Sample Name: mp35738-mb1 Acquired: 10/15/2022 2:04:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7667.6**	**71962.**	**9946.2**	**2708.3**
Stddev	2.8	187.	44.1	.5
%RSD	.03604	.26016	.44344	.01792
#1	7665.0	71898.	9970.8	2707.7
#2	7670.5	72173.	9895.3	2708.5
#3	7667.3	71815.	9972.5	2708.7

Zoom In Zoom Out

Sample Name: mp35738-s1 Acquired: 10/15/2022 2:09:20 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2423**	**86.05**	**1.895**	**1.836**	**2.595**	**1.847**	**.0470**	**121.8**	**1.919**
Stddev	.0019	.13	.002	.001	.003	.004	.0017	.3	.002
%RSD	.7677	.1488	.0942	.0743	.1086	.1924	3.611	.2069	.0923
#1	.2436	85.91	1.897	1.837	2.593	1.851	.0487	121.8	1.919
#2	.2430	86.08	1.895	1.835	2.595	1.848	.0453	122.1	1.917
#3	.2401	86.16	1.893	1.835	2.598	1.844	.0470	121.5	1.920

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4384**	**1.879**	**3.189**	**2.462**	**115.0**	**32.96**	**.0711**	**79.90**	**3.058**
Stddev	.0006	.004	.001	.008	.2	.13	.0006	.12	.005
%RSD	.1324	.2147	.0195	.3375	.1964	.4007	.8158	.1542	.1656
#1	.4388	1.883	3.189	2.471	115.2	32.84	.0709	79.99	3.054
#2	.4387	1.875	3.189	2.460	115.1	32.93	.0707	79.95	3.057
#3	.4377	1.878	3.188	2.455	114.8	33.10	.0718	79.76	3.064

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.838**	**25.76**	**2.023**	**3.251**	**2.538**	**2.751**	**1.446**	**1.858**	**3.472**
Stddev	.001	.09	.003	.008	.003	.013	.003	.007	.012
%RSD	.0618	.3501	.1613	.2559	.1206	.4690	.1778	.3662	.3576
#1	1.839	25.70	2.026	3.244	2.538	2.737	1.443	1.851	3.482
#2	1.837	25.72	2.022	3.260	2.535	2.755	1.448	1.865	3.458
#3	1.839	25.86	2.020	3.248	2.542	2.762	1.447	1.859	3.475

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.903**	**2.341**	**3.931**	**1.893**	**2.130**	**.8880**	F **9.307**	**1.881**
Stddev	.003	.003	.005	.002	.001	.0045	.017	.000
%RSD	.1692	.1468	.1395	.0910	.0542	.5083	.1849	.0200
#1	1.901	2.338	3.925	1.891	2.130	.8834	9.300	1.881
#2	1.907	2.342	3.932	1.895	2.129	.8925	9.326	1.881
#3	1.902	2.344	3.936	1.892	2.131	.8880	9.294	1.882

Zoom In Zoom Out

Sample Name: mp35738-s1 Acquired: 10/15/2022 2:09:20 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6538.5**	**69049.**	**9949.5**	**2600.1**
Stddev	5.3	202.	34.4	1.4
%RSD	.08164	.29208	.34556	.05511
#1	6532.9	69194.	9946.6	2599.7
#2	6543.5	69134.	9916.7	2601.7
#3	6539.1	68818.	9985.3	2598.9

Zoom In Zoom Out

Sample Name: mp35738-s2 Acquired: 10/15/2022 2:14:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2392**	**76.67**	**1.879**	**1.833**	**2.439**	**1.836**	**.0366**	**107.5**	**1.903**
Stddev	.0006	.06	.003	.006	.001	.003	.0006	.2	.001
%RSD	.2715	.0720	.1531	.3201	.0338	.1693	1.510	.1666	.0751
#1	.2390	76.61	1.876	1.828	2.439	1.833	.0371	107.3	1.904
#2	.2399	76.68	1.877	1.831	2.440	1.837	.0360	107.6	1.901
#3	.2386	76.71	1.882	1.840	2.438	1.839	.0368	107.7	1.903

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4141**	**1.862**	**2.632**	**2.381**	**100.7**	**30.79**	**.0640**	**77.69**	**2.884**
Stddev	.0009	.004	.004	.005	.2	.03	.0007	.13	.003
%RSD	.2288	.2320	.1693	.1970	.1738	.0915	1.158	.1649	.1031
#1	.4149	1.863	2.637	2.382	100.5	30.80	.0632	77.57	2.886
#2	.4144	1.866	2.628	2.384	100.7	30.80	.0647	77.67	2.880
#3	.4131	1.857	2.631	2.375	100.8	30.75	.0639	77.83	2.884

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.825**	**25.22**	**1.964**	**3.271**	**2.439**	**9.014**	**1.492**	**1.860**	**3.295**
Stddev	.002	.01	.004	.016	.010	.032	.008	.011	.012
%RSD	.0909	.0394	.1854	.4885	.4039	.3559	.5611	.5755	.3593
#1	1.823	25.22	1.965	3.278	2.438	9.026	1.492	1.864	3.292
#2	1.827	25.22	1.967	3.253	2.449	8.977	1.483	1.848	3.286
#3	1.826	25.20	1.960	3.282	2.429	9.037	1.500	1.868	3.309

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.914**	**2.348**	**3.381**	**1.903**	**1.991**	**.8589**	F **8.312**	**1.866**
Stddev	.012	.002	.003	.007	.003	.0035	.023	.001
%RSD	.6026	.0797	.0844	.3712	.1279	.4105	.2753	.0437
#1	1.921	2.349	3.378	1.907	1.994	.8613	8.311	1.867
#2	1.901	2.350	3.383	1.894	1.989	.8548	8.335	1.866
#3	1.920	2.346	3.382	1.907	1.990	.8605	8.289	1.865

Zoom In Zoom Out

Sample Name: mp35738-s2 Acquired: 10/15/2022 2:14:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6560.6**	**68726.**	**9908.7**	**2605.1**
Stddev	4.2	177.	51.1	3.2
%RSD	.06392	.25694	.51534	.12153
#1	6562.7	68668.	9963.6	2607.9
#2	6555.8	68924.	9899.8	2605.6
#3	6563.3	68585.	9862.6	2601.7

Zoom In Zoom Out

Sample Name: jd53364-5 Acquired: 10/15/2022 2:18:45 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**46.58**	**.0438**	**.0342**	**.7941**	**.0033**	**.0321**	**34.80**	**.0184**
Stddev	.0002	.01	.0011	.0002	.0015	.0000	.0012	.05	.0002
%RSD	7.591	.0161	2.575	.5042	.1930	.6590	3.587	.1406	.9605
#1	.0031	46.57	.0442	.0342	.7951	.0033	.0334	34.81	.0185
#2	.0029	46.59	.0425	.0344	.7923	.0032	.0320	34.85	.0182
#3	.0034	46.57	.0447	.0340	.7948	.0033	.0311	34.75	.0185

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2714**	**.0408**	**.8984**	**.8160**	**95.21**	**4.097**	**.0644**	**34.66**	**.8688**
Stddev	.0011	.0003	.0031	.0006	.15	.031	.0007	.15	.0017
%RSD	.4193	.8023	.3478	.0717	.1610	.7503	1.010	.4224	.2001
#1	.2720	.0410	.8979	.8162	95.16	4.123	.0643	34.68	.8691
#2	.2721	.0404	.8956	.8153	95.37	4.063	.0639	34.80	.8669
#3	.2700	.0410	.9017	.8164	95.08	4.104	.0651	34.51	.8703

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0111**	**.9445**	**.1341**	**1.399**	**.8168**	**2.829**	**.0151**	**.0105**	**1.751**
Stddev	.0001	.0054	.0009	.005	.0010	.013	.0004	.0040	.010
%RSD	.8291	.5703	.6775	.3881	.1168	.4522	2.724	38.35	.5711
#1	.0110	.9404	.1351	1.404	.8178	2.843	.0151	.0113	1.761
#2	.0111	.9425	.1336	1.393	.8168	2.818	.0155	.0141	1.750
#3	.0112	.9506	.1335	1.399	.8159	2.827	.0146	.0062	1.741

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0708**	**.2230**	**2.167**	**.0010**	**.2075**	**.0097**	**5.749**	**.0382**
Stddev	.0010	.0003	.001	.0006	.0012	.0013	.027	.0003
%RSD	1.454	.1195	.0640	59.66	.5953	13.56	.4689	.7330
#1	.0719	.2231	2.169	.0010	.2074	.0112	5.779	.0385
#2	.0698	.2227	2.166	.0016	.2064	.0087	5.741	.0381
#3	.0707	.2232	2.167	.0004	.2089	.0092	5.727	.0379

Zoom In Zoom Out

Sample Name: jd53364-5 Acquired: 10/15/2022 2:18:45 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7055.7**	**70870.**	**10022.**	**2687.7**
Stddev	14.3	165.	15.	4.4
%RSD	.20290	.23307	.15027	.16187
#1	7042.1	70920.	10026.	2683.3
#2	7054.4	71005.	10005.	2687.9
#3	7070.6	70686.	10034.	2692.0

Zoom In Zoom Out

Sample Name: mp35738-sd1 Acquired: 10/15/2022 2:23:41 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**48.55**	**.0425**	**.0416**	**.8221**	**.0033**	**.0289**	**36.77**	**.0193**
Stddev	.0007	.10	.0012	.0045	.0029	.0001	.0021	.13	.0002
%RSD	16.61	.2144	2.927	10.71	.3516	4.045	7.424	.3647	.8320
#1	.0038	48.67	.0412	.0435	.8254	.0034	.0313	36.88	.0191
#2	.0052	48.48	.0437	.0447	.8205	.0032	.0276	36.62	.0194
#3	.0042	48.51	.0426	.0365	.8203	.0034	.0277	36.81	.0194

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2851**	**.0412**	**.9467**	**.8355**	**100.1**	**4.163**	**.0650**	**35.84**	**.9105**
Stddev	.0129	.0017	.0026	.0039	.2	.093	.0025	.10	.0018
%RSD	4.527	4.131	.2729	.4721	.1618	2.223	3.786	.2761	.1966
#1	.2711	.0423	.9451	.8315	100.2	4.204	.0646	35.86	.9109
#2	.2965	.0393	.9453	.8356	100.1	4.057	.0628	35.73	.9086
#3	.2876	.0421	.9497	.8393	99.92	4.229	.0676	35.93	.9121

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0142**	**.7229**	**.1357**	**1.408**	**.8311**	**2.799**	**.0154**	**.0099**	**1.765**
Stddev	.0004	.0281	.0012	.004	.0041	.021	.0063	.0072	.015
%RSD	2.486	3.880	.8779	.2495	.4905	.7390	40.66	73.25	.8235
#1	.0145	.7024	.1363	1.412	.8266	2.786	.0216	.0094	1.770
#2	.0142	.7113	.1343	1.407	.8345	2.823	.0091	.0174	1.777
#3	.0138	.7549	.1364	1.405	.8322	2.788	.0155	.0029	1.749

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0752**	**.2329**	**2.251**	**-.0032**	**.2159**	**.0369**	**6.060**	**.0394**
Stddev	.0053	.0012	.005	.0063	.0018	.0023	.004	.0006
%RSD	7.084	.5259	.2170	195.2	.8481	6.246	.0675	1.582
#1	.0718	.2322	2.255	-.0052	.2155	.0349	6.056	.0387
#2	.0725	.2323	2.253	-.0084	.2144	.0363	6.059	.0399
#3	.0814	.2344	2.245	.0038	.2179	.0394	6.064	.0397

Zoom In Zoom Out

Sample Name: mp35738-sd1 Acquired: 10/15/2022 2:23:41 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7412.7**	**71365.**	**9905.3**	**2737.9**
Stddev	7.5	205.	40.9	3.6
%RSD	.10134	.28682	.41336	.13121
#1	7410.2	71129.	9858.1	2740.3
#2	7421.2	71498.	9927.0	2739.7
#3	7406.8	71468.	9930.9	2733.8

Zoom In Zoom Out

Sample Name: mp35738-ps1 Acquired: 10/15/2022 2:28:42 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2328**	**69.75**	**1.990**	**2.058**	**2.702**	**1.943**	**.0263**	**58.20**	**2.038**
Stddev	.0009	.13	.011	.009	.004	.004	.0006	.14	.010
%RSD	.3924	.1824	.5551	.4356	.1299	.1947	2.425	.2447	.4875
#1	.2338	69.78	1.992	2.059	2.704	1.946	.0256	58.31	2.041
#2	.2320	69.86	2.001	2.066	2.705	1.943	.0267	58.26	2.046
#3	.2326	69.62	1.979	2.048	2.698	1.939	.0267	58.04	2.027

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4122**	**1.985**	**2.814**	**2.762**	**115.2**	**29.05**	**.0618**	**58.04**	**2.792**
Stddev	.0008	.011	.002	.003	.3	.08	.0009	.29	.002
%RSD	.1921	.5644	.0618	.1117	.2491	.2602	1.474	.5072	.0772
#1	.4129	1.993	2.815	2.764	115.4	29.03	.0611	58.29	2.794
#2	.4122	1.989	2.812	2.764	115.3	29.13	.0616	58.12	2.790
#3	.4113	1.972	2.815	2.759	114.9	28.98	.0629	57.72	2.793

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.956**	**26.41**	**2.099**	**3.314**	**2.768**	**2.605**	**2.017**	**2.046**	**1.721**
Stddev	.009	.04	.009	.023	.017	.018	.022	.010	.021
%RSD	.4338	.1651	.4502	.6958	.6010	.6822	1.112	.4896	1.235
#1	1.958	26.44	2.104	3.317	2.778	2.612	2.018	2.049	1.725
#2	1.962	26.44	2.104	3.336	2.777	2.618	2.039	2.054	1.740
#3	1.946	26.36	2.088	3.290	2.749	2.585	1.994	2.035	1.698

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.002**	**2.165**	**4.003**	**2.055**	**2.143**	**1.871**	**7.377**	**1.956**
Stddev	.016	.002	.002	.016	.002	.007	.033	.000
%RSD	.8000	.1045	.0423	.7991	.0957	.3872	.4512	.0208
#1	2.007	2.167	4.004	2.065	2.141	1.869	7.398	1.957
#2	2.015	2.167	4.001	2.064	2.144	1.879	7.395	1.956
#3	1.984	2.163	4.003	2.036	2.145	1.865	7.339	1.956

Zoom In Zoom Out

Sample Name: mp35738-ps1 Acquired: 10/15/2022 2:28:42 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6753.9**	**69954.**	**10002.**	**2647.8**
Stddev	20.6	105.	34.	7.2
%RSD	.30476	.15002	.34156	.27234
#1	6742.2	70039.	9988.5	2646.9
#2	6741.8	69986.	9977.0	2641.1
#3	6777.6	69836.	10041.	2655.4

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 2:33:28 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2440**	**39.07**	**1.993**	**2.028**	**1.979**	**1.985**	**2.106**	**39.48**	**2.006**
Stddev	.0014	.20	.005	.005	.013	.011	.008	.20	.003
%RSD	.5618	.5231	.2700	.2285	.6469	.5576	.3590	.5130	.1685
#1	.2435	39.11	1.999	2.031	1.983	1.988	2.112	39.53	2.006
#2	.2455	38.84	1.989	2.022	1.965	1.973	2.097	39.26	2.003
#3	.2430	39.24	1.990	2.029	1.989	1.994	2.107	39.65	2.009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.012**	**1.977**	**2.008**	**1.930**	**39.62**	**38.98**	**1.972**	**39.04**	**2.015**
Stddev	.009	.003	.005	.005	.21	.26	.012	.20	.011
%RSD	.4252	.1300	.2540	.2560	.5204	.6776	.6300	.5030	.5330
#1	2.020	1.978	2.009	1.930	39.68	39.08	1.977	39.16	2.020
#2	2.013	1.974	2.013	1.935	39.39	38.68	1.958	38.81	2.022
#3	2.003	1.978	2.003	1.925	39.78	39.17	1.981	39.15	2.003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.030**	**39.60**	**2.001**	**1.997**	**2.017**	**1.963**	**2.014**	**2.004**	**5.028**
Stddev	.001	.24	.001	.006	.005	.010	.006	.003	.007
%RSD	.0648	.6124	.0461	.2870	.2286	.5156	.3024	.1550	.1393
#1	2.031	39.73	2.001	1.995	2.019	1.956	2.020	2.008	5.034
#2	2.029	39.32	2.000	1.993	2.012	1.959	2.008	2.002	5.020
#3	2.029	39.74	2.001	2.004	2.021	1.975	2.015	2.003	5.030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 2:33:28 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.052**	**1.986**	**1.993**	**2.056**	**1.995**	**2.037**	**2.026**	**1.987**
Stddev	.002	.013	.011	.003	.007	.004	.002	.008
%RSD	.1046	.6635	.5258	.1666	.3288	.2206	.1049	.4119
#1	2.054	1.990	1.998	2.057	1.996	2.042	2.024	1.992
#2	2.050	1.971	2.000	2.052	2.001	2.035	2.025	1.992
#3	2.051	1.996	1.981	2.058	1.988	2.034	2.028	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6754.5**	**69284.**	**9757.9**	**2638.0**
Stddev	5.2	360.	13.4	2.9
%RSD	.07635	.52030	.13689	.10842
#1	6748.8	69158.	9767.1	2634.9
#2	6759.0	69003.	9764.1	2640.5
#3	6755.6	69690.	9742.6	2638.6

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 2:38:14 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0070**	**-.0005**	**.0042**	**-.0000**	**.0001**	**.0001**	**.0001**	**.0001**
Stddev	.0002	.0044	.0012	.0005	.0001	.0000	.0002	.0039	.0001
%RSD	58.21	62.83	244.3	11.81	299.8	76.32	172.4	2785.	153.2
#1	.0001	.0030	.0003	.0047	-.0000	.0000	-.0001	-.0013	.0001
#2	.0004	.0117	.0002	.0041	-.0002	.0001	.0001	-.0029	-.0000
#3	.0005	.0062	-.0019	.0037	.0001	.0000	.0004	.0046	.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0001**	**.0001**	**.0004**	**.0022**	**.0080**	**.0009**	**-.0309**	**.0000**
Stddev	.0017	.0002	.0001	.0003	.0003	.0237	.0001	.0103	.0000
%RSD	341.4	235.2	159.5	80.72	13.79	297.7	7.853	33.43	17.84
#1	.0022	.0003	.0003	.0002	.0019	.0341	.0008	-.0335	.0000
#2	-.0011	.0001	-.0000	.0002	.0025	.0020	.0010	-.0398	.0000
#3	.0003	-.0002	.0000	.0007	.0022	-.0122	.0010	-.0196	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0022**	**-.0566**	**.0001**	**.0019**	**.0006**	**.0006**	**.0013**	**-.0001**	**.0016**
Stddev	.0002	.0071	.0002	.0002	.0016	.0042	.0010	.0015	.0007
%RSD	8.431	12.57	206.8	10.91	266.7	718.5	75.43	2629.	43.23
#1	.0023	-.0498	.0001	.0017	-.0000	-.0005	.0009	-.0001	.0023
#2	.0024	-.0640	-.0001	.0021	.0025	-.0029	.0006	-.0015	.0017
#3	.0020	-.0560	.0004	.0020	-.0006	.0052	.0024	.0015	.0009
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	.0020								
Low Limit	-.0020								

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 2:38:14 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025**	**-.0001**	**.0009**	**-.0001**	**.0005**	F **.0129**	**-.0011**	**.0002**
Stddev	.0006	.0000	.0000	.0013	.0002	.0009	.0001	.0001
%RSD	25.55	74.48	4.064	1057.	30.86	7.083	10.54	49.43
#1	.0021	-.0000	.0009	-.0012	.0007	.0134	-.0012	.0003
#2	.0022	-.0001	.0009	-.0004	.0004	.0135	-.0010	.0001
#3	.0033	-.0000	.0009	.0012	.0006	.0119	-.0012	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit						.0063		
Low Limit						-.0063		

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7620.8**	**70910.**	**9741.1**	**2719.4**
Stddev	29.3	2218.	321.3	11.7
%RSD	.38383	3.1284	3.2982	.42905
#1	7588.6	69876.	9985.6	2706.5
#2	7645.7	73456.	9860.5	2729.1
#3	7628.2	69396.	9377.2	2722.7

Zoom In Zoom Out

Sample Name: jd53384-3 Acquired: 10/15/2022 2:43:28 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**85.18**	**.1210**	**.2046**	**7.088**	**.0040**	**.0864**	F **272.6**	**.0089**
Stddev	.0001	.14	.0037	.0027	.010	.0001	.0006	.4	.0001
%RSD	1.972	.1640	3.062	1.307	.1446	1.490	.7299	.1474	.5947
#1	.0049	85.02	.1252	.2076	7.076	.0040	.0858	272.3	.0089
#2	.0048	85.25	.1194	.2026	7.093	.0041	.0863	273.0	.0089
#3	.0047	85.27	.1184	.2035	7.095	.0041	.0871	272.3	.0090

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5868**	**.0944**	**.2194**	**.5256**	F **217.7**	**7.194**	**.0865**	**59.46**	**2.931**
Stddev	.0011	.0009	.0018	.0007	.3	.021	.0009	.09	.007
%RSD	.1915	.9377	.8307	.1272	.1252	.2977	1.090	.1560	.2536
#1	.5863	.0952	.2193	.5264	217.4	7.184	.0863	59.38	2.927
#2	.5881	.0944	.2213	.5252	217.7	7.218	.0857	59.56	2.939
#3	.5860	.0935	.2177	.5253	217.9	7.179	.0876	59.44	2.925

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093**	**7.804**	**.2119**	**3.491**	**.6281**	**5.962**	**.0079**	**.0079**	**2.289**
Stddev	.0004	.021	.0031	.041	.0080	.052	.0004	.0029	.016
%RSD	3.866	.2730	1.468	1.170	1.269	.8798	5.517	36.47	.6880
#1	.0095	7.824	.2153	3.537	.6365	6.022	.0081	.0094	2.307
#2	.0096	7.806	.2114	3.477	.6272	5.930	.0083	.0096	2.283
#3	.0089	7.782	.2091	3.459	.6207	5.933	.0074	.0046	2.278

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0435**	**1.014**	**5.320**	**-.0001**	**.4847**	**.0145**	**1.070**	**.1005**
Stddev	.0014	.002	.010	.0013	.0014	.0006	.011	.0004
%RSD	3.229	.1431	.1923	1602.	.2901	4.409	1.038	.4322
#1	.0438	1.012	5.319	.0006	.4860	.0151	1.082	.1007
#2	.0447	1.015	5.331	-.0016	.4850	.0139	1.070	.1007
#3	.0420	1.015	5.311	.0008	.4832	.0143	1.059	.1000

Zoom In Zoom Out

Sample Name: jd53384-3 Acquired: 10/15/2022 2:43:28 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6447.3**	**70426.**	**10131.**	**2622.4**
Stddev	43.6	286.	28.	16.6
%RSD	.67584	.40579	.27819	.63370
#1	6405.3	70690.	10157.	2604.6
#2	6444.3	70122.	10101.	2624.8
#3	6492.3	70465.	10135.	2637.6

Zoom In Zoom Out

Sample Name: jd53384-5 Acquired: 10/15/2022 2:48:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**68.35**	**.0323**	**.2041**	**5.650**	**.0041**	**.0829**	F **286.3**	**.0058**
Stddev	.0004	.08	.0006	.0011	.004	.0001	.0021	.5	.0000
%RSD	9.429	.1178	1.806	.5180	.0627	3.431	2.526	.1801	.6722
#1	.0044	68.26	.0318	.2031	5.647	.0043	.0815	285.7	.0058
#2	.0045	68.35	.0329	.2040	5.651	.0041	.0853	286.7	.0058
#3	.0052	68.42	.0323	.2052	5.654	.0040	.0819	286.5	.0057

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4835**	**.0524**	**.1862**	**.3129**	**130.4**	**6.577**	**.0775**	**43.89**	**1.805**
Stddev	.0021	.0002	.0012	.0010	.2	.019	.0005	.05	.006
%RSD	.4401	.4652	.6190	.3153	.1504	.2875	.6957	.1219	.3340
#1	.4832	.0526	.1865	.3121	130.1	6.590	.0781	43.88	1.804
#2	.4815	.0521	.1850	.3140	130.5	6.556	.0770	43.95	1.799
#3	.4857	.0525	.1872	.3127	130.5	6.586	.0774	43.85	1.811

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**3.017**	**.1427**	**3.488**	**.4227**	**12.07**	**.0075**	**.0062**	**1.717**
Stddev	.0001	.007	.0002	.009	.0018	.05	.0011	.0011	.005
%RSD	1.719	.2309	.1198	.2572	.4366	.3832	14.41	18.03	.2691
#1	.0058	3.010	.1428	3.485	.4222	12.07	.0087	.0074	1.720
#2	.0059	3.016	.1429	3.481	.4212	12.03	.0069	.0060	1.711
#3	.0057	3.024	.1425	3.498	.4248	12.12	.0068	.0051	1.719

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0419**	**1.119**	**5.187**	**.0004**	**.3430**	**.0116**	**.9757**	**.0934**
Stddev	.0008	.001	.007	.0004	.0016	.0007	.0017	.0002
%RSD	1.920	.0453	.1314	100.5	.4786	5.728	.1744	.2413
#1	.0422	1.119	5.183	.0005	.3424	.0124	.9764	.0932
#2	.0410	1.119	5.182	-.0000	.3417	.0115	.9770	.0933
#3	.0426	1.120	5.195	.0007	.3448	.0110	.9738	.0936

Zoom In Zoom Out

Sample Name: jd53384-5 Acquired: 10/15/2022 2:48:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6476.3**	**69485.**	**10107.**	**2637.6**
Stddev	7.4	220.	61.	4.4
%RSD	.11412	.31671	.60050	.16648
#1	6468.0	69503.	10162.	2632.9
#2	6482.1	69695.	10042.	2641.6
#3	6478.7	69256.	10116.	2638.3

Zoom In Zoom Out

Sample Name: jd53386-1 Acquired: 10/15/2022 2:53:20 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**55.95**	**.0399**	**.0129**	**.5644**	**.0028**	**.0256**	**13.84**	**.0019**
Stddev	.0003	.04	.0012	.0008	.0005	.0000	.0008	.02	.0001
%RSD	7.252	.0637	2.999	5.793	.0905	1.572	3.190	.1585	5.907
#1	.0038	55.91	.0393	.0122	.5650	.0028	.0262	13.85	.0019
#2	.0034	55.97	.0413	.0130	.5643	.0028	.0259	13.85	.0018
#3	.0034	55.98	.0391	.0137	.5640	.0027	.0246	13.81	.0020

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5059**	**.0393**	**.2557**	**.2355**	**115.5**	**3.504**	**.0729**	**16.42**	**1.793**
Stddev	.0046	.0001	.0008	.0017	.1	.031	.0006	.07	.007
%RSD	.9091	.3107	.3138	.7260	.0950	.8946	.8106	.4510	.3721
#1	.5062	.0392	.2563	.2365	115.6	3.468	.0729	16.34	1.798
#2	.5104	.0395	.2561	.2364	115.6	3.519	.0723	16.41	1.797
#3	.5012	.0393	.2548	.2335	115.4	3.526	.0735	16.49	1.786

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**.4552**	**.1018**	**2.966**	**.3336**	**.5439**	**.0072**	**.0072**	**1.629**
Stddev	.0002	.0031	.0002	.005	.0006	.0019	.0007	.0003	.013
%RSD	4.358	.6715	.2261	.1554	.1901	.3557	9.662	4.372	.7791
#1	.0039	.4542	.1020	2.967	.3332	.5417	.0064	.0071	1.643
#2	.0036	.4528	.1015	2.970	.3343	.5453	.0073	.0076	1.624
#3	.0036	.4586	.1019	2.961	.3333	.5448	.0078	.0070	1.619

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3296**	**.0539**	**1.572**	**-.0006**	**.1866**	**.0066**	**.5418**	**.0247**
Stddev	.0016	.0001	.005	.0009	.0001	.0011	.0016	.0001
%RSD	.4995	.1970	.3095	153.7	.0766	16.70	.2964	.5716
#1	.3314	.0539	1.576	.0003	.1867	.0078	.5407	.0246
#2	.3293	.0538	1.574	-.0005	.1865	.0065	.5436	.0248
#3	.3281	.0540	1.567	-.0015	.1865	.0056	.5410	.0247

Zoom In Zoom Out

Sample Name: jd53386-1 Acquired: 10/15/2022 2:53:20 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7217.9**	**72936.**	**10318.**	**2792.1**
Stddev	4.5	286.	9.	5.1
%RSD	.06302	.39163	.08659	.18156
#1	7215.4	72746.	10308.	2797.0
#2	7215.0	72797.	10325.	2786.9
#3	7223.1	73264.	10321.	2792.6

Zoom In Zoom Out

Sample Name: jd53386-2 Acquired: 10/15/2022 2:58:18 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0445**	**93.12**	**.3871**	**.0371**	**3.286**	**.0047**	**.0741**	**19.00**	**.0225**
Stddev	.0003	.19	.0018	.0001	.002	.0000	.0008	.10	.0001
%RSD	.6973	.2010	.4629	.3431	.0659	.9182	1.113	.5361	.3654
#1	.0447	93.13	.3867	.0370	3.288	.0047	.0740	19.03	.0225
#2	.0447	93.30	.3856	.0372	3.286	.0048	.0749	19.08	.0224
#3	.0442	92.93	.3891	.0371	3.284	.0048	.0733	18.88	.0225

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5912**	**.0643**	**3.345**	F **8.059**	**158.1**	**8.456**	**.1099**	**21.87**	**2.386**
Stddev	.0012	.0002	.006	.006	.4	.041	.0012	.17	.003
%RSD	.1981	.2484	.1822	.0779	.2757	.4829	1.128	.7881	.1437
#1	.5923	.0644	3.345	8.054	158.0	8.461	.1090	21.73	2.383
#2	.5912	.0641	3.339	8.057	158.5	8.494	.1094	22.06	2.385
#3	.5900	.0642	3.351	8.066	157.7	8.413	.1113	21.82	2.390

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0147**	**1.817**	**.6107**	F **11.76**	**5.149**	**4.645**	**.0863**	**.0233**	**2.050**
Stddev	.0001	.007	.0005	.02	.001	.009	.0023	.0034	.009
%RSD	.4193	.3749	.0887	.1307	.0114	.1978	2.658	14.70	.4419
#1	.0146	1.824	.6104	11.75	5.150	4.646	.0837	.0271	2.059
#2	.0147	1.815	.6114	11.75	5.148	4.636	.0880	.0224	2.050
#3	.0146	1.811	.6104	11.77	5.149	4.654	.0871	.0204	2.041

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**5.040**	**.1496**	**2.553**	**.0055**	**.4056**	**.0307**	**3.903**	**.0136**
Stddev	.008	.0001	.003	.0004	.0010	.0009	.003	.0003
%RSD	.1619	.0892	.1208	6.862	.2443	2.953	.0847	2.413
#1	5.049	.1497	2.552	.0058	.4050	.0303	3.900	.0139
#2	5.033	.1495	2.550	.0057	.4051	.0317	3.905	.0133
#3	5.038	.1495	2.556	.0051	.4068	.0300	3.906	.0135

Zoom In Zoom Out

Sample Name: jd53386-2 Acquired: 10/15/2022 2:58:18 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7062.2**	**72559.**	**10284.**	**2747.9**
Stddev	4.2	62.	78.	2.0
%RSD	.05898	.08497	.75533	.07098
#1	7063.8	72507.	10329.	2746.1
#2	7065.4	72627.	10195.	2750.0
#3	7057.5	72543.	10329.	2747.5

Zoom In Zoom Out

Sample Name: jd53386-3 Acquired: 10/15/2022 3:03:15 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0090**	**47.00**	**.1569**	**.0204**	**.9427**	**.0027**	**.0252**	**40.49**	**.0105**
Stddev	.0003	.08	.0006	.0007	.0020	.0000	.0005	.05	.0001
%RSD	3.185	.1743	.3864	3.542	.2158	1.794	1.835	.1194	1.179
#1	.0093	46.97	.1565	.0198	.9404	.0027	.0247	40.53	.0103
#2	.0090	47.10	.1576	.0212	.9442	.0028	.0256	40.51	.0106
#3	.0087	46.94	.1566	.0201	.9435	.0027	.0254	40.44	.0105

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4739**	**.0454**	**.6658**	**1.450**	**133.1**	**5.810**	**.0731**	**18.29**	**2.120**
Stddev	.0008	.0006	.0010	.003	.1	.044	.0008	.10	.002
%RSD	.1677	1.387	.1431	.1757	.0638	.7562	1.161	.5236	.1056
#1	.4739	.0450	.6663	1.451	133.1	5.852	.0721	18.39	2.123
#2	.4731	.0461	.6647	1.451	133.1	5.815	.0737	18.26	2.118
#3	.4747	.0451	.6664	1.447	133.0	5.764	.0734	18.21	2.119

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0082**	**.8834**	**.4923**	**5.474**	**1.367**	**1.585**	**.0282**	**.0103**	**1.676**
Stddev	.0000	.0115	.0024	.004	.009	.013	.0005	.0011	.019
%RSD	.3195	1.303	.4951	.0801	.6421	.8415	1.765	10.64	1.147
#1	.0082	.8723	.4929	5.470	1.364	1.586	.0288	.0108	1.695
#2	.0083	.8826	.4944	5.474	1.377	1.598	.0278	.0090	1.677
#3	.0082	.8952	.4896	5.478	1.360	1.571	.0280	.0110	1.657

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9727**	**.0750**	**1.188**	**.0024**	**.1852**	**.0071**	**3.994**	**.0261**
Stddev	.0032	.0003	.000	.0015	.0004	.0013	.008	.0003
%RSD	.3326	.3838	.0371	62.27	.1967	17.59	.2097	1.032
#1	.9706	.0747	1.189	.0024	.1855	.0058	3.996	.0260
#2	.9764	.0749	1.188	.0009	.1848	.0083	4.002	.0264
#3	.9711	.0753	1.188	.0039	.1853	.0073	3.985	.0258

Zoom In Zoom Out

Sample Name: jd53386-3 Acquired: 10/15/2022 3:03:15 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7107.8**	**71921.**	**10197.**	**2738.2**
Stddev	6.5	121.	10.	1.6
%RSD	.09103	.16800	.09966	.05990
#1	7105.9	71909.	10189.	2739.0
#2	7102.5	72048.	10193.	2739.2
#3	7115.0	71807.	10209.	2736.3

Zoom In Zoom Out

Sample Name: jd53386-6 Acquired: 10/15/2022 3:08:12 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0053**	**33.12**	**.0563**	**.0156**	**.7478**	**.0029**	**.0197**	**6.540**	**.0056**
Stddev	.0001	.08	.0002	.0008	.0019	.0000	.0013	.024	.0003
%RSD	1.436	.2559	.4317	4.836	.2582	1.438	6.514	.3684	5.358
#1	.0052	33.06	.0565	.0164	.7462	.0029	.0184	6.513	.0060
#2	.0054	33.09	.0563	.0151	.7472	.0030	.0197	6.553	.0055
#3	.0053	33.22	.0561	.0151	.7500	.0029	.0209	6.556	.0054

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2996**	**.0375**	**.6066**	**1.508**	**84.26**	**3.168**	**.0461**	**11.46**	**1.222**
Stddev	.0020	.0003	.0023	.006	.08	.031	.0005	.00	.002
%RSD	.6581	.7569	.3782	.3707	.0962	.9714	.9933	.0183	.1580
#1	.2983	.0378	.6089	1.510	84.24	3.133	.0457	11.46	1.222
#2	.3019	.0373	.6066	1.512	84.35	3.190	.0466	11.46	1.223
#3	.2986	.0373	.6043	1.501	84.20	3.181	.0460	11.46	1.220

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.6092**	**.1801**	**3.077**	**1.897**	**1.256**	**.0152**	**.0084**	**1.361**
Stddev	.0001	.0022	.0004	.017	.004	.005	.0005	.0016	.015
%RSD	1.712	.3669	.2125	.5377	.2190	.3999	3.533	18.61	1.092
#1	.0044	.6067	.1805	3.085	1.901	1.259	.0158	.0102	1.350
#2	.0044	.6110	.1803	3.089	1.897	1.258	.0148	.0079	1.378
#3	.0043	.6100	.1797	3.058	1.893	1.250	.0150	.0072	1.356

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3146**	**.0528**	**1.174**	**.0015**	**.1103**	**.0109**	**.9463**	**.0199**
Stddev	.0004	.0004	.003	.0007	.0005	.0013	.0007	.0003
%RSD	.1208	.8119	.2266	48.31	.4083	12.22	.0715	1.325
#1	.3148	.0523	1.171	.0014	.1104	.0116	.9466	.0202
#2	.3148	.0530	1.176	.0023	.1108	.0117	.9455	.0198
#3	.3141	.0531	1.173	.0008	.1099	.0094	.9468	.0198

Zoom In Zoom Out

Sample Name: jd53386-6 Acquired: 10/15/2022 3:08:12 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7356.4**	**72435.**	**10214.**	**2769.5**
Stddev	3.3	121.	24.	4.1
%RSD	.04445	.16733	.23556	.14866
#1	7355.4	72297.	10212.	2770.9
#2	7360.0	72485.	10191.	2764.9
#3	7353.7	72523.	10239.	2772.7

Zoom In Zoom Out

Sample Name: jd53386-7 Acquired: 10/15/2022 3:13:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**34.84**	**.0402**	**.0177**	**.5875**	**.0023**	**.0254**	**11.45**	**.0070**
Stddev	.0004	.04	.0005	.0003	.0002	.0001	.0021	.02	.0001
%RSD	8.417	.1007	1.181	1.562	.0327	4.474	8.325	.2030	1.822
#1	.0045	34.80	.0403	.0180	.5876	.0022	.0255	11.46	.0069
#2	.0045	34.86	.0405	.0175	.5877	.0024	.0233	11.42	.0070
#3	.0052	34.86	.0396	.0176	.5873	.0023	.0275	11.46	.0072

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2712**	**.0307**	**.3076**	**.9875**	**83.22**	**4.046**	**.0500**	**9.965**	**.9085**
Stddev	.0010	.0001	.0024	.0020	.07	.015	.0006	.092	.0011
%RSD	.3768	.4229	.7656	.2007	.0784	.3768	1.264	.9241	.1211
#1	.2709	.0306	.3056	.9872	83.18	4.040	.0497	9.949	.9086
#2	.2724	.0308	.3070	.9858	83.18	4.035	.0496	9.882	.9074
#3	.2704	.0308	.3102	.9897	83.29	4.063	.0508	10.06	.9096

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**1.691**	**.2678**	**2.489**	**1.848**	**.8324**	**.0109**	**.0047**	**1.129**
Stddev	.0002	.008	.0011	.011	.007	.0028	.0008	.0017	.006
%RSD	7.430	.4840	.4244	.4307	.4023	.3325	7.527	36.74	.5619
#1	.0030	1.698	.2671	2.480	1.844	.8354	.0119	.0042	1.135
#2	.0034	1.694	.2691	2.501	1.856	.8317	.0107	.0066	1.130
#3	.0029	1.682	.2673	2.487	1.843	.8299	.0103	.0033	1.122

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2119**	**.0710**	**1.702**	**.0014**	**.0998**	**.0103**	**1.227**	**.0272**
Stddev	.0013	.0004	.002	.0010	.0002	.0011	.000	.0000
%RSD	.5956	.6150	.0962	75.23	.2097	10.45	.0304	.0831
#1	.2107	.0708	1.703	.0004	.1000	.0092	1.228	.0272
#2	.2133	.0708	1.700	.0012	.0998	.0103	1.227	.0272
#3	.2118	.0716	1.703	.0025	.0996	.0114	1.227	.0272

Zoom In Zoom Out

Sample Name: jd53386-7 Acquired: 10/15/2022 3:13:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7310.3**	**72005.**	**10097.**	**2749.2**
Stddev	1.7	138.	39.	6.6
%RSD	.02344	.19148	.38432	.24122
#1	7311.8	72123.	10093.	2753.3
#2	7308.4	72039.	10138.	2741.6
#3	7310.7	71854.	10061.	2752.8

Zoom In Zoom Out

Sample Name: jd53386-8 Acquired: 10/15/2022 3:18:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**30.82**	**.0213**	**.0097**	**.1651**	**.0018**	**.0147**	**7.052**	**.0014**
Stddev	.0003	.09	.0004	.0003	.0005	.0001	.0001	.052	.0001
%RSD	19.29	.2766	2.081	3.056	.3314	3.647	.8816	.7432	10.11
#1	.0013	30.77	.0217	.0095	.1651	.0018	.0146	7.006	.0013
#2	.0012	30.78	.0214	.0096	.1646	.0018	.0145	7.043	.0014
#3	.0017	30.92	.0209	.0100	.1657	.0017	.0148	7.109	.0016

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2718**	**.0254**	**.1073**	**.1035**	**74.88**	**2.982**	**.0488**	**12.74**	**.7510**
Stddev	.0014	.0004	.0004	.0004	.19	.026	.0004	.13	.0013
%RSD	.4982	1.398	.3739	.3750	.2601	.8572	.8037	1.041	.1752
#1	.2705	.0257	.1073	.1031	74.75	2.956	.0491	12.62	.7522
#2	.2732	.0255	.1077	.1038	74.79	3.007	.0489	12.72	.7514
#3	.2717	.0250	.1069	.1037	75.10	2.984	.0483	12.88	.7496

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.7060**	**.0540**	**2.226**	**.1459**	**.2442**	**.0025**	**.0021**	**1.170**
Stddev	.0002	.0047	.0003	.013	.0011	.0023	.0013	.0024	.021
%RSD	6.651	.6697	.6055	.6003	.7633	.9402	50.16	116.8	1.827
#1	.0027	.7033	.0543	2.241	.1466	.2419	.0013	.0018	1.193
#2	.0024	.7032	.0540	2.220	.1465	.2443	.0024	-.0002	1.150
#3	.0027	.7114	.0537	2.216	.1446	.2465	.0039	.0047	1.167

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2085**	**.0296**	**1.035**	**.0000**	**.1092**	**.0031**	**.3405**	**.0192**
Stddev	.0004	.0001	.003	.0003	.0004	.0004	.0020	.0002
%RSD	.1785	.3646	.2488	18650.	.3436	11.82	.5884	.8230
#1	.2089	.0295	1.034	-.0003	.1093	.0030	.3428	.0191
#2	.2084	.0297	1.038	.0000	.1087	.0029	.3398	.0194
#3	.2082	.0297	1.033	.0003	.1095	.0036	.3390	.0192

Zoom In Zoom Out

Sample Name: jd53386-8 Acquired: 10/15/2022 3:18:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7345.7**	**72026.**	**10138.**	**2758.0**
Stddev	17.2	129.	68.	6.2
%RSD	.23464	.17965	.67376	.22348
#1	7340.4	71973.	10190.	2754.0
#2	7331.8	71930.	10164.	2755.0
#3	7365.0	72173.	10061.	2765.1

Zoom In Zoom Out

Sample Name: jd53386-9 Acquired: 10/15/2022 3:23:09 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063**	**36.73**	**.0464**	**.0139**	**.5360**	**.0023**	**.0204**	**8.168**	**.0027**
Stddev	.0003	.05	.0011	.0010	.0006	.0000	.0005	.021	.0001
%RSD	4.721	.1389	2.403	6.990	.1035	1.125	2.346	.2598	2.876
#1	.0066	36.78	.0455	.0138	.5366	.0023	.0199	8.162	.0027
#2	.0062	36.73	.0477	.0129	.5355	.0023	.0208	8.191	.0026
#3	.0060	36.67	.0462	.0149	.5359	.0023	.0206	8.149	.0026

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2878**	**.0277**	**.3372**	**.5899**	**82.27**	**3.644**	**.0567**	**13.95**	**.6657**
Stddev	.0021	.0003	.0007	.0003	.05	.027	.0007	.07	.0010
%RSD	.7263	1.127	.2092	.0537	.0606	.7322	1.224	.5096	.1504
#1	.2886	.0274	.3375	.5899	82.23	3.620	.0575	13.90	.6646
#2	.2893	.0275	.3377	.5902	82.33	3.673	.0566	14.03	.6664
#3	.2854	.0280	.3364	.5896	82.25	3.637	.0561	13.92	.6661

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0032**	**.7735**	**.1062**	**2.905**	**.6652**	**.6316**	**.0120**	**.0059**	**1.351**
Stddev	.0000	.0058	.0009	.018	.0042	.0014	.0016	.0009	.012
%RSD	1.081	.7444	.8656	.6026	.6358	.2183	13.30	15.36	.8487
#1	.0032	.7777	.1061	2.902	.6643	.6309	.0106	.0060	1.363
#2	.0031	.7760	.1054	2.889	.6615	.6332	.0118	.0049	1.349
#3	.0032	.7670	.1072	2.924	.6698	.6307	.0137	.0067	1.340

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.008**	**.0453**	**1.238**	**.0013**	**.1217**	**.0049**	**.8747**	**.0193**
Stddev	.006	.0001	.002	.0004	.0005	.0006	.0032	.0001
%RSD	.5604	.1291	.1366	28.14	.4280	12.23	.3689	.7576
#1	1.010	.0453	1.238	.0015	.1221	.0050	.8749	.0195
#2	1.001	.0453	1.237	.0009	.1211	.0054	.8714	.0192
#3	1.012	.0452	1.240	.0014	.1219	.0042	.8778	.0193

Zoom In Zoom Out

Sample Name: jd53386-9 Acquired: 10/15/2022 3:23:09 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7284.8**	**72208.**	**10129.**	**2758.8**
Stddev	8.2	173.	43.	6.8
%RSD	.11234	.24020	.42259	.24597
#1	7288.6	72397.	10171.	2761.9
#2	7290.5	72056.	10086.	2763.4
#3	7275.4	72171.	10130.	2751.0

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 3:28:07 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2431**	**38.77**	**1.992**	**2.023**	**1.963**	**1.975**	**2.103**	**39.21**	**1.996**
Stddev	.0009	.10	.004	.006	.002	.003	.005	.07	.002
%RSD	.3773	.2706	.1792	.2786	.0934	.1642	.2498	.1864	.1066
#1	.2420	38.87	1.988	2.016	1.961	1.978	2.098	39.29	1.994
#2	.2434	38.78	1.994	2.026	1.965	1.974	2.109	39.21	1.998
#3	.2438	38.66	1.993	2.026	1.962	1.972	2.104	39.14	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.003**	**1.982**	**2.007**	**1.916**	**39.33**	**38.66**	**1.955**	**38.78**	**2.016**
Stddev	.001	.007	.004	.006	.06	.07	.001	.13	.004
%RSD	.0317	.3350	.1912	.3252	.1540	.1762	.0509	.3278	.2059
#1	2.003	1.974	2.003	1.909	39.38	38.73	1.954	38.92	2.013
#2	2.003	1.987	2.007	1.921	39.34	38.66	1.956	38.73	2.014
#3	2.002	1.984	2.011	1.917	39.26	38.59	1.955	38.67	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.021**	**39.30**	**2.000**	**1.992**	**2.024**	**1.959**	**2.020**	**2.012**	**5.018**
Stddev	.004	.07	.003	.006	.008	.014	.015	.014	.006
%RSD	.1733	.1789	.1690	.2864	.3790	.7001	.7579	.6870	.1161
#1	2.018	39.38	1.997	1.986	2.016	1.943	2.003	1.996	5.014
#2	2.025	39.26	2.004	1.996	2.030	1.964	2.028	2.016	5.025
#3	2.022	39.25	2.000	1.995	2.027	1.969	2.030	2.023	5.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 3:28:07 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.053**	**1.971**	**1.986**	**2.068**	**1.989**	**2.011**	**2.025**	**1.977**
Stddev	.014	.003	.004	.014	.006	.005	.003	.004
%RSD	.6784	.1371	.1805	.6540	.3097	.2294	.1615	.2204
#1	2.039	1.968	1.982	2.053	1.983	2.009	2.022	1.972
#2	2.053	1.974	1.986	2.076	1.989	2.007	2.024	1.977
#3	2.067	1.971	1.989	2.076	1.995	2.016	2.028	1.981
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6769.1**	**69151.**	**9788.9**	**2651.6**
Stddev	14.9	115.	69.6	3.2
%RSD	.21941	.16683	.71110	.12208
#1	6782.4	69267.	9713.6	2654.8
#2	6753.1	69151.	9802.3	2648.3
#3	6771.9	69036.	9850.8	2651.8

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 3:32:54 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0031**	**-.0004**	**.0015**	**-.0000**	**.0001**	**-.0013**	**-.0022**	**.0002**
Stddev	.0002	.0028	.0006	.0004	.0001	.0000	.0004	.0017	.0001
%RSD	336.7	91.09	136.4	30.24	527.0	21.08	30.95	77.06	36.41
#1	-.0002	-.0032	.0002	.0013	.0001	.0001	-.0008	-.0009	.0002
#2	.0001	-.0002	-.0005	.0020	-.0002	.0001	-.0014	-.0015	.0001
#3	.0003	-.0058	-.0010	.0012	-.0001	.0001	-.0016	-.0040	.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0000**	**-.0004**	**.0001**	**.0049**	**.0005**	**.0007**	**-.0206**	**.0000**
Stddev	.0030	.0001	.0001	.0002	.0009	.0262	.0011	.0105	.0000
%RSD	1185.	1060.	16.68	352.5	19.40	5508.	147.6	51.06	17.19
#1	-.0032	-.0001	-.0003	.0002	.0059	-.0051	.0014	-.0085	.0000
#2	.0019	-.0001	-.0005	-.0002	.0047	.0290	.0013	-.0274	.0000
#3	.0021	.0001	-.0004	.0002	.0040	-.0225	-.0005	-.0258	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0602**	**-.0002**	**.0026**	**.0006**	**-.0013**	**.0008**	**.0001**	**.0029**
Stddev	.0001	.0034	.0003	.0008	.0006	.0040	.0007	.0014	.0007
%RSD	17.18	5.582	133.7	31.43	100.9	313.7	84.26	2006.	24.54
#1	.0008	-.0616	.0000	.0020	-.0001	.0013	.0012	.0009	.0030
#2	.0006	-.0563	-.0001	.0035	.0008	.0008	.0012	.0009	.0021
#3	.0008	-.0626	-.0005	.0022	.0010	-.0059	.0000	-.0016	.0035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 3:32:54 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.0000**	**.0005**	**-.0005**	**.0002**	**.0029**	**-.0012**	**.0002**
Stddev	.0003	.0000	.0001	.0006	.0001	.0002	.0000	.0001
%RSD	51.83	301.2	16.66	110.0	62.73	7.910	3.910	63.07
#1	.0004	.0000	.0006	-.0009	.0001	.0031	-.0012	.0003
#2	.0008	-.0000	.0004	-.0008	.0003	.0030	-.0013	.0001
#3	.0004	.0001	.0006	.0001	.0003	.0027	-.0012	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7630.8**	**71930.**	**9869.5**	**2733.7**
Stddev	7.6	222.	39.4	3.0
%RSD	.09965	.30887	.39960	.11068
#1	7629.9	71695.	9910.2	2731.7
#2	7638.9	72136.	9831.5	2737.2
#3	7623.8	71959.	9866.9	2732.2

Zoom In Zoom Out

Sample Name: jd53387-1 Acquired: 10/15/2022 3:38:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**34.48**	**.0315**	**.0649**	**.0896**	**.0023**	**.0189**	**15.82**	**.0009**
Stddev	.0003	.82	.0009	.0016	.0020	.0001	.0010	.34	.0002
%RSD	25.81	2.382	2.756	2.454	2.213	3.633	5.099	2.169	21.33
#1	.0016	34.97	.0324	.0653	.0911	.0023	.0187	16.03	.0009
#2	.0012	34.94	.0307	.0662	.0903	.0024	.0200	16.00	.0011
#3	.0010	33.53	.0313	.0631	.0874	.0023	.0181	15.42	.0007

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2630**	**.0271**	**.1097**	**.0659**	**136.2**	**6.538**	**.0673**	**11.78**	**.7717**
Stddev	.0113	.0002	.0043	.0023	3.2	.148	.0016	.33	.0265
%RSD	4.283	.6695	3.946	3.447	2.384	2.270	2.334	2.759	3.431
#1	.2620	.0272	.1094	.0661	138.2	6.612	.0686	12.04	.7726
#2	.2748	.0269	.1141	.0681	138.0	6.635	.0677	11.89	.7978
#3	.2523	.0272	.1055	.0636	132.5	6.368	.0656	11.41	.7449

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0127**	**.7709**	**.0612**	**1.626**	**.0406**	**.9017**	**.0026**	**.0060**	**1.174**
Stddev	.0003	.0258	.0005	.018	.0015	.0131	.0013	.0021	.019
%RSD	2.057	3.344	.7765	1.113	3.581	1.450	48.14	35.12	1.609
#1	.0125	.7914	.0616	1.641	.0420	.9136	.0036	.0075	1.193
#2	.0126	.7794	.0613	1.630	.0407	.9038	.0012	.0070	1.173
#3	.0130	.7420	.0607	1.606	.0391	.8877	.0031	.0036	1.155

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0234**	**.0941**	**1.053**	**.0007**	**.1553**	**.0043**	**.2093**	**.0254**
Stddev	.0007	.0021	.036	.0020	.0059	.0007	.0027	.0008
%RSD	2.916	2.234	3.388	305.7	3.801	17.13	1.313	3.008
#1	.0231	.0956	1.056	.0008	.1552	.0051	.2120	.0252
#2	.0242	.0949	1.087	.0026	.1612	.0041	.2095	.0263
#3	.0229	.0917	1.016	-.0014	.1494	.0037	.2065	.0248

Zoom In Zoom Out

Sample Name: jd53387-1 Acquired: 10/15/2022 3:38:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7271.3**	**70425.**	**10137.**	**2730.6**
Stddev	66.7	2019.	212.	25.9
%RSD	.91746	2.8665	2.0957	.94811
#1	7219.5	70203.	9996.6	2710.8
#2	7247.8	68526.	10034.	2721.0
#3	7346.6	72545.	10382.	2759.9

Zoom In Zoom Out

Sample Name: jd53387-2 Acquired: 10/15/2022 3:43:06 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0029**	**41.74**	**.0433**	**.0528**	**.1659**	**.0030**	**.0178**	**1.799**
Stddev	.0003	.14	.0014	.0002	.0004	.0001	.0005	.003
%RSD	10.06	.3433	3.283	.4580	.2141	2.254	2.847	.1589
#1	.0026	41.81	.0417	.0527	.1656	.0029	.0173	1.802
#2	.0030	41.58	.0440	.0527	.1663	.0030	.0178	1.797
#3	.0032	41.84	.0442	.0531	.1659	.0030	.0183	1.798

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.2766**	**.0300**	**.1203**	**.0610**	**149.0**	**9.348**	**.0884**
Stddev	.0001	.0004	.0003	.0014	.0002	.5	.025	.0003
%RSD	11.62	.1428	1.036	1.155	.2714	.3194	.2712	.3754
#1	.0008	.2764	.0299	.1204	.0609	149.2	9.365	.0885
#2	.0007	.2771	.0297	.1217	.0610	148.5	9.361	.0880
#3	.0008	.2763	.0303	.1189	.0612	149.3	9.319	.0886

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**14.02**	**.8658**	**.0132**	**.7428**	**.0988**	**1.670**	**.0558**	**3.015**
Stddev	.02	.0012	.0002	.0109	.0002	.005	.0005	.011
%RSD	.1381	.1390	1.148	1.472	.2343	.3264	.9054	.3481
#1	14.02	.8668	.0131	.7439	.0987	1.672	.0555	3.014
#2	13.99	.8662	.0131	.7531	.0986	1.664	.0555	3.005
#3	14.03	.8645	.0133	.7313	.0990	1.675	.0564	3.026

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**.0068**	**1.342**	**.0250**	**.0719**	**.9888**	F **-.0027**	**2.822**
Stddev	.0017	.0009	.007	.0006	.0002	.0031	.0007	.003
%RSD	89.75	13.94	.5385	2.432	.2941	.3159	26.02	.1113
#1	.0038	.0063	1.350	.0256	.0717	.9924	-.0027	2.825
#2	.0008	.0061	1.341	.0250	.0721	.9878	-.0021	2.821
#3	.0010	.0079	1.336	.0244	.0719	.9864	-.0035	2.819

Zoom In Zoom Out

Sample Name: jd53387-2 Acquired: 10/15/2022 3:43:06 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0040**	**.2157**	**.0261**
Stddev	.0013	.0011	.0002
%RSD	31.54	.4951	.8222
#1	.0036	.2164	.0263
#2	.0030	.2145	.0260
#3	.0055	.2162	.0259

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7251.4**	**70750.**	**9987.5**	**2729.8**
Stddev	11.8	147.	45.5	6.8
%RSD	.16277	.20808	.45516	.24970
#1	7261.8	70885.	10038.	2735.3
#2	7253.8	70593.	9973.9	2731.8
#3	7238.6	70773.	9950.4	2722.2

Zoom In Zoom Out

Sample Name: jd53387-3 Acquired: 10/15/2022 3:48:03 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**25.32**	**.0167**	**.0364**	**.0566**	**.0020**	**.0099**	**1.175**	**.0005**
Stddev	.0003	.09	.0010	.0003	.0001	.0001	.0009	.003	.0002
%RSD	23.25	.3410	6.157	.8462	.2594	2.995	8.975	.2922	31.07
#1	.0011	25.41	.0157	.0367	.0567	.0020	.0096	1.178	.0007
#2	.0011	25.31	.0177	.0362	.0566	.0020	.0109	1.175	.0004
#3	.0016	25.24	.0168	.0362	.0564	.0021	.0092	1.172	.0005

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1700**	**.0226**	**.0805**	**.0365**	**86.83**	**5.471**	**.0657**	**9.698**	**.4157**
Stddev	.0006	.0002	.0006	.0001	.22	.036	.0007	.016	.0013
%RSD	.3766	.9144	.7978	.3729	.2544	.6621	1.104	.1632	.3079
#1	.1707	.0225	.0812	.0366	87.06	5.466	.0662	9.706	.4167
#2	.1694	.0228	.0803	.0363	86.81	5.437	.0659	9.680	.4160
#3	.1700	.0224	.0799	.0365	86.62	5.509	.0648	9.708	.4142

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**.3147**	**.0645**	**1.001**	**.0307**	**.7224**	**.0036**	**.0020**	**1.058**
Stddev	.0003	.0038	.0002	.005	.0012	.0084	.0008	.0014	.005
%RSD	6.949	1.223	.2519	.4969	3.826	1.156	21.23	68.06	.5157
#1	.0048	.3165	.0644	.9979	.0300	.7140	.0040	.0028	1.053
#2	.0045	.3172	.0647	1.007	.0321	.7307	.0040	.0004	1.064
#3	.0051	.3102	.0644	.9987	.0301	.7226	.0027	.0029	1.057

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0230**	**.0449**	**.5883**	**.0011**	**.0904**	**.0027**	**.1468**	**.0162**
Stddev	.0007	.0001	.0014	.0014	.0003	.0010	.0004	.0002
%RSD	3.035	.3014	.2364	128.7	.3385	37.12	.2861	1.239
#1	.0233	.0448	.5891	.0001	.0906	.0038	.1464	.0162
#2	.0222	.0450	.5891	.0027	.0901	.0019	.1472	.0160
#3	.0235	.0447	.5867	.0005	.0906	.0024	.1469	.0164

Zoom In Zoom Out

Sample Name: jd53387-3 Acquired: 10/15/2022 3:48:03 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7352.3**	**71177.**	**9918.5**	**2743.4**
Stddev	15.9	281.	1.6	6.9
%RSD	.21690	.39501	.01604	.25182
#1	7367.4	70948.	9919.1	2750.6
#2	7335.7	71093.	9916.7	2736.8
#3	7353.9	71491.	9919.7	2742.8

Zoom In Zoom Out

Sample Name: jd53387-4 Acquired: 10/15/2022 3:53:04 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**92.64**	**.0897**	**.0639**	**.1253**	**.0042**	**.0188**	**2.519**	**.0012**
Stddev	.0003	.11	.0009	.0007	.0004	.0000	.0005	.005	.0004
%RSD	12.51	.1142	1.034	1.045	.2953	.8908	2.643	.2152	31.83
#1	.0021	92.66	.0901	.0646	.1255	.0042	.0187	2.514	.0016
#2	.0024	92.74	.0886	.0633	.1249	.0042	.0194	2.524	.0009
#3	.0019	92.53	.0903	.0638	.1255	.0042	.0184	2.519	.0010

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3871**	**.0965**	**.7211**	**.3532**	F **344.4**	**8.651**	**.1451**	**11.29**	**.9763**
Stddev	.0016	.0003	.0018	.0002	.4	.036	.0002	.09	.0004
%RSD	.4219	.3200	.2473	.0677	.1284	.4138	.1071	.7757	.0388
#1	.3857	.0968	.7231	.3530	344.5	8.618	.1450	11.22	.9759
#2	.3867	.0962	.7206	.3535	344.7	8.689	.1452	11.39	.9764
#3	.3889	.0965	.7197	.3532	343.9	8.645	.1453	11.27	.9767

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0097**	**1.103**	**.1603**	**4.804**	**.0514**	**4.364**	**.0034**	**.0129**	**1.232**
Stddev	.0002	.008	.0002	.008	.0011	.004	.0015	.0025	.001
%RSD	2.188	.7335	.1413	.1672	2.232	.0988	44.66	19.16	.1021
#1	.0095	1.107	.1604	4.813	.0521	4.361	.0031	.0101	1.234
#2	.0099	1.094	.1606	4.797	.0521	4.369	.0050	.0139	1.231
#3	.0097	1.108	.1601	4.802	.0501	4.362	.0020	.0147	1.232

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0243**	**.0682**	**.6301**	**.0005**	**.4842**	**.0056**	**.2402**	**.0283**
Stddev	.0003	.0001	.0010	.0002	.0009	.0006	.0006	.0002
%RSD	1.360	.1418	.1658	50.32	.1802	10.60	.2433	.6887
#1	.0239	.0683	.6300	.0002	.4836	.0053	.2403	.0285
#2	.0246	.0682	.6312	.0005	.4838	.0051	.2408	.0281
#3	.0244	.0681	.6292	.0006	.4852	.0062	.2396	.0284

Zoom In Zoom Out

Sample Name: jd53387-4 Acquired: 10/15/2022 3:53:04 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7162.1**	**70534.**	**10065.**	**2710.3**
Stddev	8.2	38.	65.	3.2
%RSD	.11393	.05346	.64932	.11940
#1	7152.7	70559.	10075.	2708.0
#2	7167.8	70552.	9995.5	2714.0
#3	7165.7	70491.	10125.	2708.8

Zoom In Zoom Out

Sample Name: jd53387-5 Acquired: 10/15/2022 3:58:01 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**227.3**	**.6836**	**.5467**	**5.452**	**.0215**	**.1443**	**57.75**	**.0032**
Stddev	.0003	.2	.0031	.0006	.004	.0001	.0014	.15	.0004
%RSD	5.776	.0901	.4602	.1041	.0753	.6084	.9988	.2646	13.80
#1	.0047	227.4	.6836	.5468	5.454	.0215	.1426	57.90	.0031
#2	.0048	227.4	.6867	.5461	5.455	.0217	.1449	57.74	.0037
#3	.0043	227.0	.6804	.5472	5.447	.0215	.1453	57.60	.0029

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.7096**	**.0773**	**.3630**	**.3011**	F **378.4**	**18.52**	**.1728**	**34.18**	**1.116**
Stddev	.0022	.0008	.0018	.0013	1.1	.02	.0015	.16	.004
%RSD	.3094	1.022	.5066	.4237	.2972	.1193	.8469	.4756	.3557
#1	.7120	.0778	.3626	.3003	379.5	18.51	.1727	34.28	1.117
#2	.7088	.0777	.3649	.3025	378.3	18.55	.1744	34.26	1.120
#3	.7078	.0764	.3613	.3004	377.3	18.51	.1715	33.99	1.112

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0153**	**8.442**	**.3222**	**6.462**	**.2637**	**2.292**	**.0091**	**.0185**	**1.235**
Stddev	.0001	.009	.0009	.008	.0005	.006	.0017	.0040	.004
%RSD	.7877	.1081	.2787	.1192	.1756	.2743	19.17	21.42	.3568
#1	.0152	8.445	.3230	6.469	.2633	2.298	.0099	.0230	1.239
#2	.0154	8.450	.3222	6.454	.2637	2.293	.0071	.0163	1.236
#3	.0153	8.432	.3212	6.465	.2642	2.285	.0102	.0161	1.230

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0488**	**3.361**	**7.986**	**.0040**	**1.273**	**.0143**	**.5073**	**.1867**
Stddev	.0000	.004	.022	.0009	.004	.0018	.0024	.0006
%RSD	.0377	.1118	.2760	23.41	.3239	12.37	.4717	.3093
#1	.0489	3.360	7.980	.0050	1.273	.0123	.5078	.1868
#2	.0488	3.365	8.010	.0031	1.277	.0157	.5094	.1873
#3	.0488	3.357	7.966	.0039	1.269	.0149	.5047	.1861

Zoom In Zoom Out

Sample Name: jd53387-5 Acquired: 10/15/2022 3:58:01 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6761.4**	**72574.**	**10488.**	**2790.8**
Stddev	6.2	185.	49.	6.2
%RSD	.09193	.25556	.46909	.22144
#1	6754.3	72538.	10443.	2787.6
#2	6765.7	72409.	10482.	2786.9
#3	6764.1	72774.	10540.	2797.9

Zoom In Zoom Out

Sample Name: jd53387-6 Acquired: 10/15/2022 4:02:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**71.75**	**.0874**	**.1070**	**.2150**	**.0046**	**.0341**	**3.729**	**.0007**
Stddev	.0002	.11	.0013	.0011	.0009	.0001	.0005	.010	.0003
%RSD	10.20	.1509	1.470	.9967	.4068	1.431	1.445	.2615	37.67
#1	.0024	71.80	.0865	.1066	.2158	.0046	.0336	3.718	.0006
#2	.0021	71.82	.0889	.1083	.2151	.0045	.0346	3.738	.0010
#3	.0019	71.62	.0868	.1063	.2140	.0046	.0342	3.730	.0005

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.5606**	**.0513**	**.2231**	**.1500**	F **333.4**	**16.02**	**.1959**	**34.99**	**2.052**
Stddev	.0024	.0002	.0004	.0010	.8	.04	.0005	.23	.007
%RSD	.4289	.3415	.1789	.6693	.2503	.2750	.2379	.6563	.3531
#1	.5579	.0512	.2231	.1490	333.4	16.06	.1959	34.80	2.060
#2	.5625	.0511	.2235	.1499	334.3	16.03	.1963	35.24	2.047
#3	.5613	.0515	.2227	.1510	332.6	15.97	.1954	34.91	2.048

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0222**	**1.295**	**.1369**	**3.107**	**.1045**	**1.655**	**.0064**	**.0131**	**1.268**
Stddev	.0002	.006	.0003	.013	.0005	.008	.0024	.0024	.004
%RSD	1.018	.4712	.2388	.4066	.4550	.5035	36.84	18.16	.3243
#1	.0221	1.293	.1365	3.093	.1049	1.646	.0090	.0156	1.268
#2	.0225	1.302	.1370	3.117	.1040	1.661	.0061	.0128	1.264
#3	.0221	1.291	.1371	3.111	.1046	1.660	.0043	.0109	1.273

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0307**	**.1124**	**1.651**	**.0003**	**.2862**	**.0069**	**.4273**	**.0425**
Stddev	.0010	.0001	.004	.0004	.0003	.0011	.0010	.0002
%RSD	3.128	.0954	.2285	141.5	.1190	16.30	.2295	.5014
#1	.0300	.1123	1.655	.0005	.2859	.0057	.4264	.0425
#2	.0318	.1125	1.648	.0005	.2866	.0079	.4283	.0423
#3	.0303	.1123	1.650	-.0002	.2862	.0072	.4271	.0427

Zoom In Zoom Out

Sample Name: jd53387-6 Acquired: 10/15/2022 4:02:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7102.8**	**70470.**	**9985.1**	**2685.9**
Stddev	5.1	133.	37.4	1.8
%RSD	.07150	.18910	.37415	.06617
#1	7098.4	70316.	10024.	2686.8
#2	7108.4	70547.	9949.6	2687.0
#3	7101.7	70547.	9981.8	2683.8

Zoom In Zoom Out

Sample Name: jd53387-7 Acquired: 10/15/2022 4:07:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0303**	**90.29**	**.6555**	**.0830**	**1.631**	**.0063**	**.0699**	**7.083**
Stddev	.0002	.05	.0000	.0006	.001	.0001	.0015	.015
%RSD	.7701	.0598	.0049	.7478	.0693	1.160	2.164	.2041
#1	.0301	90.30	.6555	.0832	1.629	.0063	.0703	7.098
#2	.0303	90.33	.6554	.0823	1.631	.0062	.0712	7.081
#3	.0306	90.23	.6555	.0835	1.631	.0064	.0682	7.069

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.5241**	**.0449**	**1.348**	**1.657**	F **230.0**	**19.09**	**.1600**
Stddev	.0001	.0012	.0004	.003	.005	.5	.04	.0004
%RSD	2.192	.2264	.8062	.2491	.3332	.2265	.2177	.2191
#1	.0049	.5254	.0452	1.351	1.660	230.5	19.05	.1600
#2	.0051	.5230	.0449	1.349	1.660	230.1	19.08	.1597
#3	.0049	.5241	.0445	1.344	1.650	229.5	19.13	.1604

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**25.35**	**.9095**	**.0289**	**2.495**	**.3562**	F **14.00**	**1.927**	**22.44**
Stddev	.05	.0011	.0002	.006	.0017	.04	.003	.04
%RSD	.2157	.1259	.7216	.2388	.4660	.2781	.1741	.1746
#1	25.40	.9105	.0288	2.492	.3554	14.04	1.931	22.48
#2	25.37	.9097	.0289	2.491	.3550	13.97	1.925	22.41
#3	25.29	.9083	.0292	2.502	.3581	13.98	1.925	22.42

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0233**	**.0514**	**1.424**	**.5739**	**.5143**	**3.206**	F **-.0033**	**2.204**
Stddev	.0014	.0036	.004	.0025	.0010	.005	.0001	.002
%RSD	5.805	6.966	.3052	.4288	.1975	.1474	4.016	.0873
#1	.0219	.0474	1.427	.5726	.5132	3.206	-.0034	2.205
#2	.0236	.0526	1.419	.5723	.5150	3.210	-.0033	2.205
#3	.0246	.0542	1.426	.5767	.5148	3.201	-.0032	2.201

Zoom In Zoom Out

Sample Name: jd53387-7 Acquired: 10/15/2022 4:07:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0127**	**.6983**	**.0632**
Stddev	.0003	.0008	.0002
%RSD	2.016	.1097	.3688
#1	.0129	.6991	.0635
#2	.0129	.6975	.0630
#3	.0124	.6982	.0632

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7115.0**	**71553.**	**10253.**	**2727.0**
Stddev	17.3	105.	64.	4.9
%RSD	.24331	.14606	.61943	.17882
#1	7101.0	71447.	10179.	2721.7
#2	7134.4	71556.	10291.	2731.3
#3	7109.8	71656.	10287.	2727.8

Zoom In Zoom Out

Sample Name: jd53387-8 Acquired: 10/15/2022 4:12:48 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0051**	**48.97**	**.1935**	**.0623**	**.5480**	**.0045**	**.0356**	**5.249**	**.0010**
Stddev	.0006	.03	.0010	.0007	.0003	.0000	.0012	.016	.0002
%RSD	11.08	.0626	.5313	1.063	.0600	.6652	3.234	.3076	18.05
#1	.0044	48.95	.1946	.0623	.5479	.0045	.0353	5.231	.0009
#2	.0054	48.94	.1925	.0617	.5477	.0045	.0368	5.262	.0009
#3	.0053	49.00	.1935	.0630	.5483	.0045	.0346	5.255	.0012

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3377**	**.0415**	**.3058**	**.5016**	F **218.3**	**10.09**	**.1021**	**14.79**	**.9461**
Stddev	.0019	.0004	.0015	.0005	.4	.03	.0002	.08	.0014
%RSD	.5542	.9097	.4754	.0965	.1629	.2776	.1700	.5671	.1437
#1	.3356	.0411	.3049	.5012	218.1	10.11	.1022	14.70	.9446
#2	.3390	.0416	.3050	.5021	218.0	10.06	.1021	14.87	.9465
#3	.3386	.0419	.3074	.5014	218.7	10.10	.1019	14.79	.9472

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0232**	**1.385**	**.2623**	**3.297**	**.4192**	**8.965**	**.0076**	**.0218**	**2.236**
Stddev	.0001	.010	.0003	.008	.0011	.027	.0013	.0008	.022
%RSD	.3014	.7269	.1323	.2309	.2640	.3048	16.60	3.789	.9970
#1	.0231	1.385	.2619	3.290	.4194	8.934	.0063	.0227	2.210
#2	.0231	1.375	.2625	3.296	.4180	8.984	.0078	.0218	2.250
#3	.0232	1.395	.2625	3.305	.4202	8.978	.0088	.0210	2.248

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0922**	**.2215**	**1.832**	**-.0009**	**2.287**	**.0081**	**.3957**	**.0505**
Stddev	.0005	.0003	.001	.0012	.001	.0003	.0011	.0003
%RSD	.4986	.1567	.0262	131.4	.0622	3.728	.2846	.6634
#1	.0916	.2219	1.832	-.0021	2.285	.0080	.3955	.0504
#2	.0925	.2214	1.833	.0002	2.287	.0085	.3946	.0502
#3	.0923	.2212	1.832	-.0007	2.288	.0079	.3968	.0509

Zoom In Zoom Out

Sample Name: jd53387-8 Acquired: 10/15/2022 4:12:48 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7230.2**	**71202.**	**10110.**	**2727.5**
Stddev	9.1	138.	28.	.7
%RSD	.12579	.19354	.27375	.02718
#1	7231.2	71361.	10141.	2726.6
#2	7220.6	71134.	10095.	2728.0
#3	7238.8	71111.	10092.	2727.8

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 4:17:47 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2456**	**38.78**	**1.991**	**2.028**	**1.963**	**1.976**	**2.102**	**39.28**	**1.997**
Stddev	.0021	.14	.029	.028	.005	.006	.025	.19	.027
%RSD	.8404	.3495	1.481	1.377	.2588	.2920	1.213	.4914	1.335
#1	.2458	38.63	1.973	2.010	1.959	1.971	2.087	39.06	1.984
#2	.2475	38.90	1.974	2.013	1.968	1.983	2.088	39.42	1.980
#3	.2434	38.81	2.025	2.060	1.960	1.975	2.132	39.37	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.022**	**1.996**	**2.030**	**1.934**	**39.38**	**38.73**	**1.959**	**38.77**	**2.027**
Stddev	.016	.023	.010	.019	.20	.12	.005	.30	.009
%RSD	.7722	1.164	.4843	.9665	.5181	.3177	.2352	.7677	.4280
#1	2.021	1.979	2.026	1.935	39.15	38.65	1.957	38.45	2.027
#2	2.038	1.987	2.041	1.952	39.53	38.87	1.964	39.03	2.035
#3	2.007	2.023	2.023	1.915	39.45	38.67	1.955	38.84	2.018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.025**	**39.39**	**2.013**	**2.003**	**2.037**	**1.960**	**2.024**	**2.009**	**5.020**
Stddev	.027	.12	.025	.028	.018	.027	.028	.034	.073
%RSD	1.329	.3098	1.221	1.376	.8998	1.395	1.390	1.690	1.446
#1	2.008	39.32	1.997	1.990	2.025	1.948	2.012	1.997	4.979
#2	2.010	39.54	2.001	1.984	2.027	1.941	2.004	1.983	4.976
#3	2.056	39.33	2.042	2.035	2.058	1.992	2.056	2.048	5.104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 4:17:47 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.059**	**1.972**	**1.995**	**2.084**	**2.004**	**2.016**	**2.050**	**1.992**
Stddev	.026	.005	.010	.026	.009	.029	.025	.014
%RSD	1.257	.2592	.5052	1.264	.4386	1.434	1.243	.7041
#1	2.049	1.968	1.996	2.073	2.000	1.997	2.034	1.991
#2	2.040	1.978	2.004	2.064	2.014	2.002	2.036	2.006
#3	2.088	1.970	1.984	2.114	1.997	2.049	2.079	1.978
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6746.4**	**68989.**	**9750.9**	**2648.6**
Stddev	64.6	147.	75.0	29.0
%RSD	.95770	.21276	.76947	1.0939
#1	6796.6	69041.	9832.6	2668.0
#2	6769.0	68823.	9685.0	2662.4
#3	6673.5	69102.	9735.2	2615.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 4:22:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0047**	**-.0011**	**.0017**	**-.0000**	**.0000**	**-.0012**	**-.0006**	**.0003**
Stddev	.0002	.0016	.0007	.0004	.0002	.0001	.0012	.0016	.0001
%RSD	267.1	34.53	64.32	23.09	1025.	131.1	103.3	282.4	29.13
#1	-.0002	.0064	-.0017	.0017	.0000	.0001	-.0023	-.0023	.0003
#2	.0002	.0031	-.0003	.0013	-.0002	-.0000	-.0013	-.0002	.0003
#3	-.0003	.0047	-.0013	.0021	.0001	.0001	.0001	.0008	.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.0000**	**-.0002**	**.0000**	**.0040**	**-.0111**	**.0003**	**-.0361**	**.0001**
Stddev	.0030	.0002	.0002	.0005	.0020	.0078	.0002	.0036	.0000
%RSD	224.3	336.6	137.0	3874.	49.65	70.87	60.61	10.06	18.15
#1	.0020	-.0001	-.0003	-.0004	.0058	-.0048	.0001	-.0360	.0001
#2	-.0019	.0001	-.0003	.0005	.0041	-.0086	.0004	-.0325	.0001
#3	.0039	.0001	.0001	-.0000	.0019	-.0199	.0005	-.0398	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0705**	**.0002**	**.0029**	**.0006**	**.0002**	**.0010**	**.0018**	**.0029**
Stddev	.0003	.0033	.0001	.0003	.0009	.0014	.0006	.0022	.0009
%RSD	22.70	4.692	28.31	9.089	145.6	642.8	55.26	117.1	30.35
#1	.0013	-.0735	.0003	.0032	-.0001	-.0008	.0004	.0032	.0032
#2	.0014	-.0712	.0002	.0027	.0004	-.0004	.0012	-.0006	.0037
#3	.0009	-.0670	.0002	.0028	.0017	.0018	.0015	.0030	.0019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 4:22:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**.0000**	**.0006**	**-.0010**	**.0003**	**.0019**	**-.0009**	**.0003**
Stddev	.0001	.0001	.0002	.0003	.0001	.0007	.0001	.0002
%RSD	22.01	160.2	35.22	30.64	20.89	37.31	8.286	46.90
#1	.0004	-.0000	.0008	-.0006	.0002	.0014	-.0008	.0002
#2	.0003	.0000	.0007	-.0011	.0003	.0027	-.0008	.0005
#3	.0005	.0001	.0004	-.0012	.0002	.0015	-.0009	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7625.1**	**71609.**	**9793.2**	**2737.6**
Stddev	11.9	276.	27.5	3.7
%RSD	.15650	.38489	.28042	.13335
#1	7621.0	71600.	9761.6	2736.7
#2	7638.5	71338.	9810.8	2741.7
#3	7615.7	71889.	9807.3	2734.5

Zoom In Zoom Out

Sample Name: mp35739-mb1 Acquired: 10/15/2022 4:27:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0692**	**-.0010**	**.0023**	**.0006**	**.0001**	**-.0019**	**.1359**	**.0002**
Stddev	.0004	.0008	.0016	.0004	.0002	.0001	.0002	.0019	.0001
%RSD	216.6	1.172	149.5	15.65	28.51	148.3	12.97	1.433	27.93
#1	.0003	.0690	-.0007	.0020	.0006	.0001	-.0021	.1338	.0003
#2	.0005	.0684	.0003	.0026	.0007	.0002	-.0018	.1377	.0002
#3	-.0002	.0700	-.0028	.0022	.0004	-.0001	-.0017	.1363	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0001**	**.0023**	**.0023**	**.0226**	**.0044**	**.0001**	**-.0138**	**.0004**
Stddev	.0016	.0002	.0001	.0001	.0024	.0156	.0004	.0074	.0000
%RSD	224.4	128.6	4.218	3.881	10.69	351.3	724.6	53.35	11.15
#1	-.0011	-.0003	.0024	.0022	.0217	.0225	-.0002	-.0216	.0004
#2	.0011	-.0002	.0024	.0023	.0253	-.0044	-.0002	-.0070	.0004
#3	.0020	.0001	.0022	.0023	.0207	-.0047	.0005	-.0128	.0005

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**-.0216**	**.0014**	**.0222**	**.0009**	**.0014**	**.0009**	**.0001**	**.0172**
Stddev	.0001	.0013	.0002	.0008	.0009	.0034	.0001	.0007	.0017
%RSD	4.395	5.964	11.14	3.718	105.7	245.1	11.11	515.9	9.780
#1	.0012	-.0212	.0014	.0231	.0019	.0030	.0010	-.0006	.0183
#2	.0012	-.0230	.0012	.0218	.0002	-.0025	.0008	.0003	.0180
#3	.0013	-.0205	.0015	.0217	.0005	.0036	.0009	.0008	.0153

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0220**	**.0004**	**.0012**	**-.0000**	**.0002**	**.0010**	**.0087**	**.0002**
Stddev	.0007	.0000	.0001	.0007	.0001	.0010	.0002	.0000
%RSD	3.025	9.148	9.012	4391.	67.91	99.08	1.791	10.16
#1	.0216	.0004	.0010	-.0006	.0003	.0021	.0086	.0002
#2	.0216	.0004	.0012	-.0002	.0000	.0003	.0086	.0002
#3	.0228	.0004	.0012	.0008	.0002	.0005	.0088	.0002

Zoom In Zoom Out

Sample Name: mp35739-mb1 Acquired: 10/15/2022 4:27:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7657.0**	**71835.**	**9910.8**	**2733.8**
Stddev	5.1	72.	70.6	4.6
%RSD	.06669	.10064	.71223	.16753
#1	7657.6	71752.	9991.9	2738.3
#2	7651.5	71886.	9863.6	2729.1
#3	7661.7	71867.	9876.8	2734.1

Zoom In Zoom Out

Sample Name: mp35739-b1 Acquired: 10/15/2022 4:32:57 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2339**	**24.07**	**1.853**	**1.831**	**1.856**	**1.881**	**.0006**	**24.59**
Stddev	.0003	.09	.019	.014	.005	.006	.0009	.07
%RSD	.1261	.3811	1.024	.7879	.2512	.3279	152.9	.2755
#1	.2336	24.17	1.867	1.836	1.861	1.888	.0015	24.64
#2	.2341	23.99	1.860	1.842	1.852	1.876	.0007	24.51
#3	.2341	24.05	1.831	1.815	1.855	1.879	-.0004	24.61

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.858**	**.1581**	**1.845**	**1.915**	**1.823**	**24.68**	**23.96**	**.0004**
Stddev	.015	.0013	.020	.005	.001	.07	.04	.0006
%RSD	.8204	.8245	1.064	.2675	.0482	.2874	.1646	131.2
#1	1.867	.1588	1.858	1.918	1.824	24.76	23.99	.0001
#2	1.866	.1566	1.856	1.909	1.822	24.62	23.97	.0001
#3	1.840	.1589	1.823	1.917	1.824	24.66	23.91	.0011

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.99**	**1.917**	**1.926**	**24.56**	**1.861**	**1.861**	**1.887**	F **-.0992**
Stddev	.08	.002	.018	.07	.019	.012	.016	.0017
%RSD	.3331	.0867	.9601	.2794	1.025	.6678	.8488	1.748
#1	23.99	1.917	1.938	24.64	1.874	1.863	1.897	-.1002
#2	23.91	1.915	1.935	24.54	1.869	1.873	1.895	-.1002
#3	24.07	1.918	1.905	24.51	1.839	1.848	1.868	-.0972

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.900**	**1.821**	**.1347**	**1.966**	**1.862**	**1.901**	**1.935**	**1.885**
Stddev	.015	.017	.0019	.020	.003	.001	.013	.001
%RSD	.7944	.9121	1.419	1.007	.1776	.0352	.6673	.0663
#1	1.904	1.825	.1364	1.976	1.866	1.901	1.942	1.885
#2	1.912	1.835	.1350	1.979	1.860	1.901	1.944	1.884
#3	1.883	1.803	.1326	1.944	1.861	1.902	1.920	1.886

Zoom In Zoom Out

Sample Name: mp35739-b1 Acquired: 10/15/2022 4:32:57 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.611**	**1.907**	**1.893**
Stddev	.010	.026	.002
%RSD	.6100	1.356	.1039
#1	1.607	1.928	1.894
#2	1.623	1.916	1.891
#3	1.604	1.878	1.894

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7039.5**	**70200.**	**9879.1**	**2696.1**
Stddev	69.3	113.	50.5	24.7
%RSD	.98373	.16036	.51147	.91529
#1	6993.2	70070.	9843.2	2678.4
#2	7006.1	70272.	9936.9	2685.5
#3	7119.1	70257.	9857.1	2724.3

Zoom In Zoom Out

Sample Name: mp35739-s1 Acquired: 10/15/2022 4:37:43 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2344**	**67.28**	**1.890**	**1.787**	**3.579**	**1.830**	**.0482**	**39.24**	**1.859**
Stddev	.0016	.05	.005	.001	.005	.003	.0010	.10	.002
%RSD	.6636	.0796	.2431	.0573	.1449	.1745	2.165	.2520	.1091
#1	.2332	67.23	1.887	1.788	3.575	1.827	.0471	39.20	1.860
#2	.2361	67.33	1.895	1.787	3.585	1.834	.0484	39.17	1.861
#3	.2338	67.30	1.887	1.786	3.577	1.830	.0491	39.36	1.857

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3750**	**1.885**	**2.143**	**2.214**	**95.49**	**27.76**	**.0460**	**29.41**	**2.403**
Stddev	.0022	.001	.007	.014	.15	.02	.0009	.06	.009
%RSD	.5828	.0428	.3510	.6254	.1519	.0643	2.053	.2119	.3924
#1	.3754	1.886	2.137	2.209	95.32	27.78	.0463	29.34	2.398
#2	.3769	1.886	2.152	2.229	95.58	27.76	.0468	29.46	2.414
#3	.3726	1.884	2.141	2.202	95.56	27.74	.0450	29.43	2.397

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.808**	**24.51**	**1.977**	**3.011**	**2.588**	**1.311**	**1.539**	**1.817**	**3.559**
Stddev	.002	.03	.002	.012	.004	.008	.006	.008	.022
%RSD	.1284	.1077	.1158	.3804	.1576	.6310	.4099	.4576	.6127
#1	1.807	24.48	1.978	3.020	2.591	1.311	1.543	1.825	3.549
#2	1.811	24.52	1.975	3.014	2.583	1.319	1.543	1.819	3.584
#3	1.808	24.52	1.979	2.998	2.590	1.302	1.532	1.808	3.544

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.898**	**2.090**	**3.978**	**1.904**	**2.090**	**.9352**	**2.927**	**1.797**
Stddev	.009	.002	.015	.004	.008	.0033	.006	.006
%RSD	.4771	.0845	.3658	.2109	.3673	.3543	.1918	.3607
#1	1.908	2.092	3.971	1.908	2.083	.9386	2.932	1.793
#2	1.895	2.091	3.994	1.901	2.098	.9348	2.921	1.804
#3	1.891	2.088	3.967	1.902	2.088	.9320	2.927	1.793

Zoom In Zoom Out

Sample Name: mp35739-s1 Acquired: 10/15/2022 4:37:43 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6872.0**	**70108.**	**9958.2**	**2694.9**
Stddev	6.0	124.	56.6	2.5
%RSD	.08756	.17710	.56788	.09397
#1	6869.1	70184.	9994.7	2694.6
#2	6879.0	69965.	9986.9	2692.5
#3	6868.1	70176.	9893.1	2697.5

Zoom In Zoom Out

Sample Name: mp35739-s2 Acquired: 10/15/2022 4:42:27 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2356**	**61.44**	**1.910**	**1.811**	**3.795**	**1.838**	**.0526**	**41.73**	**1.875**
Stddev	.0004	.07	.003	.006	.003	.002	.0008	.06	.002
%RSD	.1653	.1149	.1425	.3096	.0839	.1190	1.505	.1381	.1073
#1	.2353	61.51	1.909	1.807	3.797	1.839	.0521	41.71	1.873
#2	.2360	61.44	1.913	1.810	3.792	1.838	.0523	41.80	1.877
#3	.2355	61.37	1.908	1.818	3.798	1.835	.0535	41.69	1.876

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3539**	**1.879**	**2.101**	**2.191**	**88.34**	**27.60**	**.0392**	**28.52**	**2.273**
Stddev	.0029	.004	.007	.004	.10	.03	.0005	.17	.005
%RSD	.8171	.2023	.3409	.1938	.1142	.1038	1.241	.6000	.2097
#1	.3511	1.877	2.093	2.196	88.39	27.58	.0387	28.50	2.268
#2	.3568	1.877	2.103	2.188	88.40	27.58	.0396	28.71	2.273
#3	.3538	1.884	2.107	2.189	88.22	27.63	.0394	28.37	2.277

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.804**	**24.80**	**1.966**	**2.956**	**2.577**	**1.632**	**1.568**	**1.837**	**3.289**
Stddev	.003	.04	.004	.007	.006	.001	.003	.005	.007
%RSD	.1409	.1455	.1904	.2426	.2310	.0642	.1819	.2962	.2231
#1	1.802	24.78	1.962	2.962	2.570	1.632	1.568	1.843	3.288
#2	1.804	24.78	1.968	2.948	2.581	1.633	1.566	1.832	3.297
#3	1.807	24.84	1.969	2.958	2.580	1.631	1.571	1.836	3.283

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.909**	**2.108**	**4.114**	**1.913**	**2.085**	**.8164**	**2.836**	**1.808**
Stddev	.004	.002	.007	.003	.003	.0038	.006	.003
%RSD	.1833	.1050	.1651	.1608	.1630	.4612	.2105	.1361
#1	1.913	2.106	4.109	1.916	2.082	.8195	2.831	1.809
#2	1.907	2.108	4.112	1.910	2.084	.8122	2.835	1.805
#3	1.908	2.110	4.122	1.914	2.088	.8175	2.843	1.810

Zoom In Zoom Out

Sample Name: mp35739-s2 Acquired: 10/15/2022 4:42:27 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6891.8**	**70291.**	**9999.2**	**2699.0**
Stddev	10.0	242.	31.7	3.8
%RSD	.14471	.34499	.31747	.13995
#1	6903.2	70536.	9977.4	2703.3
#2	6884.7	70285.	9984.6	2696.3
#3	6887.5	70052.	10036.	2697.4

Zoom In Zoom Out

Sample Name: jd53364-27 Acquired: 10/15/2022 4:47:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**24.98**	**.0709**	**.0156**	**1.603**	**.0097**	**.0278**	**14.44**	**.0051**
Stddev	.0003	.05	.0014	.0002	.003	.0000	.0014	.03	.0000
%RSD	12.79	.2026	2.036	1.504	.1952	.2947	5.024	.1864	.3116
#1	.0021	24.98	.0718	.0156	1.601	.0097	.0262	14.44	.0051
#2	.0026	24.93	.0692	.0153	1.602	.0097	.0289	14.47	.0051
#3	.0026	25.03	.0716	.0158	1.607	.0097	.0282	14.41	.0051

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2768**	**.0307**	**.2690**	**.4161**	**70.09**	**3.031**	**.0333**	**3.995**	**.4070**
Stddev	.0007	.0003	.0008	.0008	.03	.017	.0006	.035	.0003
%RSD	.2612	1.060	.3095	.1815	.0363	.5649	1.700	.8782	.0780
#1	.2776	.0311	.2695	.4154	70.10	3.029	.0339	4.017	.4067
#2	.2763	.0305	.2681	.4169	70.12	3.049	.0332	4.013	.4073
#3	.2764	.0307	.2695	.4161	70.07	3.015	.0328	3.954	.4069

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0105**	**1.491**	**.1103**	**1.214**	**.6497**	**1.598**	**.0063**	**.0060**	**1.858**
Stddev	.0001	.001	.0004	.004	.0019	.005	.0002	.0009	.011
%RSD	.8232	.0648	.3519	.2949	.2946	.3161	3.676	15.14	.6045
#1	.0106	1.491	.1107	1.218	.6509	1.596	.0065	.0051	1.865
#2	.0105	1.490	.1099	1.210	.6475	1.594	.0063	.0060	1.845
#3	.0104	1.492	.1103	1.214	.6506	1.604	.0061	.0069	1.865

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0554**	**.2397**	**1.791**	**.0012**	**.2230**	**.0153**	**.9330**	**.0172**
Stddev	.0011	.0003	.002	.0011	.0005	.0002	.0007	.0002
%RSD	1.897	.1402	.1227	85.94	.2237	1.471	.0774	1.406
#1	.0559	.2394	1.790	.0025	.2235	.0155	.9324	.0174
#2	.0542	.2396	1.789	.0007	.2230	.0154	.9327	.0170
#3	.0560	.2401	1.793	.0006	.2225	.0151	.9338	.0170

Zoom In Zoom Out

Sample Name: jd53364-27 Acquired: 10/15/2022 4:47:10 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7367.2**	**72500.**	**10130.**	**2798.4**
Stddev	13.1	50.	42.	5.5
%RSD	.17723	.06835	.41781	.19619
#1	7381.8	72468.	10176.	2803.1
#2	7363.4	72557.	10092.	2799.7
#3	7356.5	72475.	10123.	2792.4

Zoom In Zoom Out

Sample Name: mp35739-sd1 Acquired: 10/15/2022 4:52:08 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**27.37**	**.0782**	**.0258**	**1.733**	**.0106**	**.0253**	**15.79**	**.0065**
Stddev	.0025	.38	.0054	.0031	.022	.0003	.0037	.17	.0005
%RSD	150.0	1.401	6.958	12.19	1.278	2.699	14.50	1.106	7.545
#1	-.0012	27.39	.0837	.0292	1.745	.0109	.0295	15.85	.0071
#2	.0031	27.75	.0779	.0230	1.747	.0105	.0225	15.93	.0064
#3	.0033	26.98	.0729	.0251	1.708	.0104	.0240	15.59	.0061

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3002**	**.0328**	**.2892**	**.4445**	**76.76**	**3.218**	**.0341**	**4.251**	**.4444**
Stddev	.0044	.0009	.0036	.0026	.91	.072	.0048	.048	.0014
%RSD	1.457	2.721	1.234	.5942	1.187	2.239	14.00	1.130	.3173
#1	.2989	.0325	.2852	.4458	77.40	3.181	.0396	4.266	.4438
#2	.3050	.0338	.2900	.4414	77.15	3.301	.0314	4.198	.4433
#3	.2966	.0320	.2922	.4462	75.71	3.171	.0313	4.290	.4460

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0139**	**1.302**	**.1154**	**1.299**	**.6765**	**1.663**	**.0088**	**.0097**	**2.060**
Stddev	.0011	.035	.0002	.017	.0063	.025	.0014	.0062	.036
%RSD	8.098	2.674	.1946	1.318	.9291	1.502	15.53	63.50	1.766
#1	.0144	1.300	.1156	1.295	.6816	1.652	.0092	.0027	2.091
#2	.0147	1.337	.1151	1.283	.6694	1.646	.0099	.0125	2.070
#3	.0126	1.267	.1154	1.317	.6784	1.692	.0073	.0141	2.020

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0630**	**.2611**	**1.960**	**.0001**	**.2396**	**.0424**	**1.024**	**.0174**
Stddev	.0021	.0037	.010	.0049	.0010	.0026	.006	.0004
%RSD	3.318	1.401	.5312	4551.	.4081	6.196	.6357	2.364
#1	.0606	.2621	1.951	.0039	.2400	.0413	1.026	.0169
#2	.0641	.2642	1.958	-.0054	.2385	.0406	1.017	.0175
#3	.0644	.2571	1.972	.0018	.2403	.0455	1.030	.0177

Zoom In Zoom Out

Sample Name: mp35739-sd1 Acquired: 10/15/2022 4:52:08 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7532.9**	**71537.**	**9885.2**	**2765.1**
Stddev	21.7	215.	80.3	11.9
%RSD	.28743	.30028	.81186	.43105
#1	7528.2	71771.	9812.9	2759.5
#2	7556.6	71491.	9871.1	2778.8
#3	7514.1	71349.	9971.5	2757.0

Zoom In Zoom Out

Sample Name: jd53364-41 Acquired: 10/15/2022 4:57:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**53.97**	**.0967**	**.0626**	**1.105**	**.0048**	**.0535**	**46.65**	**.0075**
Stddev	.0003	.13	.0016	.0008	.002	.0001	.0015	.12	.0001
%RSD	11.25	.2369	1.617	1.323	.2065	2.144	2.779	.2631	1.661
#1	.0031	54.10	.0956	.0627	1.107	.0047	.0530	46.77	.0073
#2	.0034	53.98	.0961	.0634	1.105	.0047	.0523	46.67	.0076
#3	.0027	53.84	.0985	.0617	1.103	.0049	.0552	46.52	.0075

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3729**	**.0453**	**.7885**	**.8161**	**177.6**	**5.041**	**.0696**	**25.35**	**1.030**
Stddev	.0010	.0002	.0019	.0025	.3	.032	.0003	.14	.002
%RSD	.2785	.4794	.2413	.3043	.1668	.6263	.4459	.5495	.1439
#1	.3725	.0450	.7907	.8173	177.8	5.068	.0698	25.32	1.032
#2	.3741	.0454	.7875	.8178	177.8	5.006	.0696	25.50	1.029
#3	.3721	.0454	.7873	.8133	177.3	5.047	.0692	25.23	1.029

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0137**	**2.753**	**.1810**	**2.240**	**.9911**	**3.065**	**.0080**	**.0095**	**1.708**
Stddev	.0002	.008	.0003	.003	.0002	.002	.0007	.0013	.005
%RSD	1.761	.2777	.1484	.1285	.0172	.0594	8.840	13.62	.2973
#1	.0140	2.757	.1812	2.243	.9912	3.063	.0074	.0083	1.709
#2	.0136	2.744	.1807	2.238	.9909	3.067	.0088	.0093	1.713
#3	.0136	2.757	.1810	2.238	.9912	3.065	.0078	.0108	1.703

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0654**	**.5357**	**3.049**	**.0015**	**.3035**	**.0106**	**1.525**	**.0324**
Stddev	.0011	.0011	.003	.0016	.0008	.0010	.005	.0002
%RSD	1.719	.2059	.1108	110.9	.2748	9.113	.3507	.5847
#1	.0645	.5364	3.052	.0018	.3029	.0100	1.527	.0322
#2	.0652	.5362	3.046	.0029	.3031	.0102	1.520	.0324
#3	.0667	.5344	3.047	-.0003	.3045	.0117	1.530	.0326

Zoom In Zoom Out

Sample Name: jd53364-41 Acquired: 10/15/2022 4:57:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7081.1**	**71347.**	**10133.**	**2732.8**
Stddev	25.4	100.	10.	9.9
%RSD	.35874	.14059	.09702	.36116
#1	7091.0	71231.	10143.	2737.7
#2	7100.0	71415.	10124.	2739.1
#3	7052.2	71394.	10131.	2721.4

Zoom In Zoom Out

Sample Name: jd53364-42 Acquired: 10/15/2022 5:02:06 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**13.10**	**.0340**	**.0089**	**.5639**	**.0039**	**.0274**	**7.316**	**.0013**
Stddev	.0003	.05	.0008	.0003	.0014	.0000	.0002	.021	.0001
%RSD	83.40	.3560	2.231	2.810	.2431	.3232	.8279	.2841	3.860
#1	.0002	13.16	.0332	.0092	.5644	.0040	.0271	7.299	.0013
#2	.0002	13.07	.0346	.0090	.5624	.0039	.0276	7.339	.0013
#3	.0008	13.08	.0343	.0087	.5650	.0039	.0275	7.310	.0013

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1403**	**.0213**	**.8706**	**.1090**	**49.45**	**1.585**	**.0144**	**.9632**	**.1652**
Stddev	.0012	.0002	.0010	.0005	.17	.017	.0012	.0108	.0003
%RSD	.8640	1.104	.1175	.4226	.3380	1.100	8.427	1.117	.1635
#1	.1390	.0215	.8711	.1085	49.45	1.565	.0137	.9709	.1651
#2	.1415	.0210	.8713	.1089	49.28	1.594	.0158	.9679	.1655
#3	.1404	.0214	.8694	.1094	49.61	1.597	.0136	.9509	.1650

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0083**	**1.320**	**.0696**	**.6877**	**.0458**	**1.208**	**.0034**	**.0040**	**1.049**
Stddev	.0002	.006	.0004	.0033	.0014	.006	.0008	.0014	.010
%RSD	2.752	.4408	.5949	.4750	3.027	.4866	23.49	36.00	.9600
#1	.0081	1.314	.0694	.6843	.0449	1.208	.0037	.0057	1.043
#2	.0081	1.326	.0701	.6907	.0451	1.202	.0025	.0031	1.060
#3	.0085	1.321	.0693	.6882	.0474	1.213	.0041	.0033	1.042

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0237**	**.1260**	**1.837**	**.0005**	**.1089**	**.0058**	**.2086**	**.0304**
Stddev	.0007	.0003	.003	.0006	.0008	.0006	.0003	.0002
%RSD	3.020	.2186	.1576	114.7	.7120	11.09	.1278	.7616
#1	.0245	.1262	1.835	.0007	.1089	.0064	.2083	.0301
#2	.0233	.1257	1.840	.0010	.1097	.0052	.2088	.0306
#3	.0233	.1261	1.836	-.0001	.1081	.0058	.2087	.0305

Zoom In Zoom Out

Sample Name: jd53364-42 Acquired: 10/15/2022 5:02:06 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7498.5**	**72267.**	**10014.**	**2779.4**
Stddev	.3	83.	33.	1.7
%RSD	.00370	.11427	.32902	.06049
#1	7498.5	72221.	10001.	2778.2
#2	7498.9	72217.	10051.	2778.6
#3	7498.3	72362.	9989.4	2781.3

Zoom In Zoom Out

Sample Name: jd53364-43 Acquired: 10/15/2022 5:07:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0070**	**64.37**	**.1124**	**.1163**	**1.677**	**.0072**	**.0776**	**35.09**	**.0070**
Stddev	.0007	.10	.0008	.0007	.004	.0000	.0015	.02	.0001
%RSD	10.22	.1533	.7177	.6203	.2463	.1374	1.874	.0511	2.026
#1	.0062	64.48	.1120	.1170	1.681	.0072	.0767	35.10	.0070
#2	.0072	64.36	.1119	.1164	1.673	.0072	.0793	35.11	.0072
#3	.0076	64.28	.1134	.1156	1.677	.0072	.0768	35.07	.0070

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3977**	**.0463**	**1.105**	**.3391**	F **209.8**	**7.548**	**.0707**	**12.43**	**.7489**
Stddev	.0019	.0004	.007	.0017	.2	.008	.0017	.02	.0027
%RSD	.4819	.9272	.6801	.5144	.1105	.1048	2.384	.1377	.3614
#1	.3995	.0459	1.114	.3404	210.0	7.555	.0691	12.45	.7511
#2	.3980	.0466	1.102	.3397	209.9	7.540	.0705	12.41	.7497
#3	.3957	.0466	1.100	.3371	209.6	7.549	.0725	12.43	.7459

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0139**	**5.906**	**.1788**	**3.091**	**.7594**	**4.625**	**.0113**	**.0190**	**1.700**
Stddev	.0004	.006	.0010	.011	.0029	.014	.0007	.0026	.006
%RSD	2.684	.0953	.5471	.3561	.3868	.2950	6.616	13.88	.3742
#1	.0143	5.903	.1793	3.096	.7604	4.639	.0107	.0220	1.705
#2	.0138	5.912	.1795	3.099	.7618	4.625	.0110	.0179	1.702
#3	.0136	5.902	.1777	3.079	.7561	4.612	.0121	.0170	1.693

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0628**	**.8824**	**4.567**	**.0029**	**.3553**	**.0086**	**.9149**	**.0669**
Stddev	.0007	.0015	.012	.0012	.0026	.0008	.0011	.0002
%RSD	1.072	.1717	.2526	40.23	.7438	8.765	.1193	.2714
#1	.0629	.8840	4.570	.0042	.3582	.0093	.9139	.0668
#2	.0634	.8810	4.577	.0020	.3545	.0087	.9160	.0667
#3	.0621	.8823	4.554	.0024	.3532	.0078	.9148	.0671

Zoom In Zoom Out

Sample Name: jd53364-43 Acquired: 10/15/2022 5:07:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7062.7**	**71273.**	**10064.**	**2725.3**
Stddev	6.8	259.	31.	.5
%RSD	.09688	.36379	.30345	.01862
#1	7068.8	71004.	10033.	2725.5
#2	7064.1	71293.	10094.	2725.6
#3	7055.3	71521.	10065.	2724.7

Zoom In Zoom Out

Sample Name: jd53364-44 Acquired: 10/15/2022 5:12:03 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**13.09**	**.0402**	**.0159**	**.4001**	**.0019**	**.0318**	**9.642**	**.0011**
Stddev	.0002	.01	.0009	.0006	.0007	.0001	.0003	.052	.0001
%RSD	8.953	.0449	2.279	3.809	.1727	3.803	.9302	.5377	11.25
#1	.0026	13.09	.0396	.0152	.3993	.0018	.0317	9.702	.0010
#2	.0022	13.10	.0413	.0162	.4006	.0019	.0316	9.610	.0013
#3	.0023	13.10	.0398	.0163	.4005	.0020	.0322	9.613	.0011

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1483**	**.0303**	**.2089**	**.1206**	**76.52**	**2.223**	**.0168**	**2.445**	**.3269**
Stddev	.0019	.0003	.0010	.0003	.12	.040	.0007	.018	.0009
%RSD	1.253	1.032	.4738	.2226	.1619	1.818	4.314	.7229	.2636
#1	.1488	.0301	.2100	.1209	76.60	2.179	.0161	2.441	.3277
#2	.1498	.0307	.2083	.1204	76.58	2.259	.0169	2.464	.3269
#3	.1462	.0301	.2083	.1206	76.37	2.231	.0175	2.429	.3260

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0095**	**2.776**	**.0854**	**1.423**	**.0607**	**4.016**	**.0043**	**.0081**	**1.062**
Stddev	.0002	.006	.0003	.003	.0003	.012	.0006	.0018	.007
%RSD	2.417	.2116	.3728	.2041	.4816	.2863	14.13	22.39	.6401
#1	.0093	2.769	.0856	1.421	.0604	4.017	.0036	.0101	1.070
#2	.0097	2.777	.0850	1.421	.0610	4.005	.0046	.0077	1.057
#3	.0095	2.780	.0856	1.426	.0607	4.028	.0047	.0065	1.060

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0269**	**.1072**	**2.074**	**.0008**	**.1153**	**.0049**	**.2412**	**.0311**
Stddev	.0006	.0001	.004	.0013	.0004	.0007	.0006	.0000
%RSD	2.396	.1224	.2010	160.0	.3446	14.64	.2287	.1301
#1	.0271	.1071	2.076	.0023	.1157	.0057	.2409	.0311
#2	.0274	.1073	2.077	-.0002	.1149	.0047	.2419	.0311
#3	.0262	.1073	2.069	.0003	.1153	.0043	.2409	.0310

Zoom In Zoom Out

Sample Name: jd53364-44 Acquired: 10/15/2022 5:12:03 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7454.1**	**71935.**	**10014.**	**2777.4**
Stddev	12.4	108.	74.	5.1
%RSD	.16677	.14968	.73789	.18423
#1	7440.0	71827.	9957.9	2771.9
#2	7459.0	72042.	9985.5	2782.1
#3	7463.4	71936.	10097.	2778.2

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 5:17:03 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2457**	**38.92**	**1.996**	**2.027**	**1.962**	**1.993**	**2.105**	**39.45**	**1.995**
Stddev	.0006	.03	.003	.002	.001	.003	.004	.01	.001
%RSD	.2413	.0773	.1638	.0754	.0504	.1691	.1889	.0249	.0494
#1	.2453	38.94	1.992	2.025	1.963	1.991	2.106	39.44	1.994
#2	.2454	38.88	1.999	2.028	1.961	1.997	2.108	39.46	1.996
#3	.2463	38.93	1.997	2.028	1.962	1.992	2.101	39.44	1.995
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.023**	**2.000**	**2.037**	**1.936**	**39.67**	**38.68**	**1.957**	**39.11**	**2.036**
Stddev	.002	.002	.002	.003	.04	.07	.005	.06	.002
%RSD	.1000	.0837	.1019	.1324	.0904	.1902	.2717	.1603	.0746
#1	2.023	2.001	2.035	1.934	39.71	38.76	1.963	39.12	2.035
#2	2.021	1.998	2.039	1.939	39.66	38.61	1.953	39.04	2.036
#3	2.025	2.001	2.039	1.935	39.64	38.68	1.956	39.17	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.022**	**39.47**	**2.015**	**2.002**	**2.040**	**1.959**	**2.015**	**1.998**	**5.015**
Stddev	.001	.06	.002	.004	.005	.009	.003	.002	.001
%RSD	.0436	.1526	.1148	.1770	.2471	.4788	.1576	.1099	.0261
#1	2.022	39.53	2.014	2.000	2.035	1.949	2.013	1.996	5.015
#2	2.023	39.41	2.015	2.006	2.041	1.967	2.019	1.999	5.017
#3	2.022	39.47	2.018	2.001	2.045	1.960	2.013	2.000	5.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 5:17:03 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.050**	**1.967**	**2.002**	**2.079**	**2.009**	**2.014**	**2.042**	**1.998**
Stddev	.001	.003	.002	.005	.004	.003	.003	.002
%RSD	.0622	.1248	.1133	.2629	.2032	.1284	.1261	.0939
#1	2.049	1.970	2.000	2.079	2.008	2.017	2.041	1.996
#2	2.050	1.965	2.002	2.074	2.013	2.014	2.040	2.000
#3	2.052	1.966	2.004	2.085	2.005	2.012	2.045	1.997
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6762.7**	**68875.**	**9616.2**	**2661.9**
Stddev	9.6	84.	41.0	5.2
%RSD	.14129	.12137	.42689	.19501
#1	6752.6	68824.	9658.8	2658.6
#2	6763.9	68971.	9576.9	2659.1
#3	6771.6	68829.	9612.9	2667.9

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 5:21:49 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**-.0014**	**-.0006**	**.0021**	**.0001**	**.0001**	**-.0007**	**-.0045**
Stddev	.0003	.0079	.0016	.0004	.0002	.0000	.0004	.0005
%RSD	300.7	569.1	275.9	18.19	123.0	36.70	59.53	10.85
#1	.0003	-.0064	-.0021	.0024	.0002	.0001	-.0007	-.0042
#2	.0003	-.0055	-.0006	.0017	-.0001	.0001	-.0003	-.0051
#3	-.0003	.0077	.0010	.0023	.0003	.0001	-.0012	-.0043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0007**	**.0000**	**.0001**	**-.0001**	**.0038**	**.0132**	**.0004**
Stddev	.0002	.0022	.0002	.0004	.0001	.0029	.0255	.0005
%RSD	81.99	326.2	589.7	297.5	91.03	75.12	193.1	118.4
#1	.0000	-.0019	-.0001	-.0002	-.0001	.0062	.0411	.0005
#2	.0003	.0021	-.0000	-.0000	-.0003	.0006	-.0089	-.0001
#3	.0002	.0018	.0002	.0006	-.0000	.0047	.0074	.0009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0233**	**.0001**	**.0009**	**-.0748**	**.0002**	**.0031**	**.0002**	**-.0010**
Stddev	.0066	.0000	.0002	.0015	.0001	.0008	.0008	.0041
%RSD	28.52	70.07	23.78	1.954	52.08	26.26	359.6	412.3
#1	-.0228	.0001	.0011	-.0732	.0001	.0028	-.0005	-.0003
#2	-.0302	.0001	.0010	-.0761	.0001	.0040	.0011	.0027
#3	-.0169	.0000	.0007	-.0751	.0003	.0025	.0001	-.0055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 5:21:49 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0012**	**.0042**	**.0003**	**.0000**	**.0006**	F **-.0019**	**.0002**
Stddev	.0010	.0001	.0024	.0007	.0000	.0001	.0007	.0002
%RSD	82.12	7.395	57.80	258.3	415.9	21.31	34.61	122.8
#1	.0015	.0011	.0069	.0007	-.0000	.0006	-.0012	.0003
#2	.0021	.0013	.0024	.0006	.0000	.0005	-.0023	.0003
#3	.0001	.0011	.0033	-.0006	.0000	.0008	-.0024	-.0001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit							.0019	
Low Limit							-.0019	

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0031**	**-.0011**	**.0003**
Stddev	.0011	.0002	.0001
%RSD	35.69	17.89	41.04
#1	.0018	-.0010	.0004
#2	.0037	-.0014	.0004
#3	.0038	-.0010	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass
High Limit			
Low Limit			

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7608.5**	**71338.**	**9682.8**	**2738.1**
Stddev	16.1	99.	54.9	3.6
%RSD	.21190	.13823	.56750	.13001
#1	7621.8	71224.	9656.6	2736.4
#2	7613.1	71402.	9745.9	2742.2
#3	7590.6	71387.	9645.8	2735.8

Zoom In Zoom Out

Sample Name: jd53364-45 Acquired: 10/15/2022 5:27:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069**	**74.31**	**.0663**	**.0401**	**.9335**	**.0044**	**.0763**	**28.52**	**.0043**
Stddev	.0003	.07	.0022	.0009	.0012	.0001	.0017	.03	.0002
%RSD	3.660	.0985	3.286	2.122	.1283	1.591	2.175	.1139	3.728
#1	.0071	74.27	.0664	.0391	.9321	.0043	.0782	28.55	.0043
#2	.0066	74.39	.0684	.0406	.9340	.0044	.0753	28.49	.0041
#3	.0071	74.26	.0640	.0406	.9343	.0043	.0754	28.51	.0044

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.476**	**.0720**	**4.547**	**.3576**	**140.1**	**18.87**	**.1149**	**30.45**	**.9908**
Stddev	.003	.0004	.003	.0013	.1	.00	.0006	.01	.0005
%RSD	.2117	.4914	.0727	.3647	.0563	.0191	.5573	.0224	.0519
#1	1.478	.0717	4.551	.3580	140.1	18.88	.1143	30.45	.9907
#2	1.473	.0718	4.546	.3562	140.1	18.87	.1155	30.45	.9903
#3	1.478	.0724	4.545	.3587	140.0	18.87	.1151	30.44	.9914

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0212**	**1.916**	**.1488**	**3.720**	**1.061**	**7.363**	**.0127**	**.0128**	**1.889**
Stddev	.0002	.005	.0004	.013	.001	.024	.0003	.0049	.005
%RSD	1.167	.2892	.2487	.3409	.1194	.3317	2.396	38.12	.2780
#1	.0211	1.920	.1490	3.707	1.062	7.335	.0124	.0182	1.887
#2	.0215	1.918	.1491	3.722	1.061	7.375	.0127	.0116	1.885
#3	.0210	1.910	.1484	3.732	1.060	7.379	.0130	.0086	1.895

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0565**	**.1535**	**5.181**	**.0005**	**.3725**	**.0064**	**.9267**	**.0393**
Stddev	.0004	.0004	.006	.0008	.0016	.0004	.0005	.0000
%RSD	.7189	.2553	.1096	177.2	.4407	5.566	.0557	.0862
#1	.0561	.1536	5.176	.0006	.3743	.0063	.9261	.0393
#2	.0565	.1531	5.182	.0012	.3722	.0068	.9271	.0393
#3	.0569	.1539	5.187	-.0004	.3711	.0061	.9268	.0393

Zoom In Zoom Out

Sample Name: jd53364-45 Acquired: 10/15/2022 5:27:02 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7017.8**	**72427.**	**10202.**	**2775.8**
Stddev	4.5	45.	16.	4.9
%RSD	.06348	.06251	.16025	.17624
#1	7022.9	72479.	10190.	2781.4
#2	7015.4	72405.	10220.	2773.7
#3	7015.0	72397.	10194.	2772.3

Zoom In Zoom Out

Sample Name: jd53364-46 Acquired: 10/15/2022 5:31:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**22.47**	**.0495**	**.0164**	**.5177**	**.0025**	**.0262**	**7.851**	**.0036**
Stddev	.0001	.04	.0017	.0008	.0005	.0000	.0016	.014	.0002
%RSD	5.568	.1975	3.373	4.805	.0929	.5743	6.289	.1799	6.611
#1	.0025	22.52	.0505	.0155	.5176	.0025	.0254	7.848	.0033
#2	.0028	22.45	.0476	.0168	.5172	.0025	.0281	7.866	.0037
#3	.0026	22.44	.0505	.0170	.5181	.0025	.0251	7.839	.0038

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1894**	**.0255**	**5.327**	**.2143**	**63.92**	**3.365**	**.0383**	**4.058**	**.2782**
Stddev	.0010	.0002	.029	.0008	.11	.017	.0005	.004	.0007
%RSD	.5125	.6507	.5412	.3698	.1789	.5087	1.341	.1117	.2399
#1	.1905	.0254	5.349	.2134	64.05	3.352	.0384	4.058	.2787
#2	.1890	.0257	5.294	.2146	63.83	3.385	.0387	4.054	.2774
#3	.1886	.0254	5.337	.2148	63.89	3.360	.0377	4.063	.2783

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0102**	**1.520**	**.0987**	**2.035**	**.2663**	**2.372**	**.0103**	**.0091**	**1.831**
Stddev	.0003	.008	.0003	.006	.0007	.009	.0009	.0023	.014
%RSD	3.185	.5478	.3414	.2834	.2494	.3645	8.529	25.57	.7609
#1	.0104	1.524	.0985	2.029	.2663	2.365	.0103	.0065	1.826
#2	.0099	1.525	.0991	2.040	.2670	2.382	.0112	.0098	1.847
#3	.0104	1.510	.0985	2.035	.2657	2.369	.0095	.0111	1.821

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0362**	**.0984**	**1.936**	**.0010**	**.1890**	**.0079**	**.5075**	**.0282**
Stddev	.0002	.0003	.004	.0013	.0009	.0008	.0016	.0003
%RSD	.4619	.3516	.2313	124.4	.4514	10.42	.3088	1.116
#1	.0363	.0988	1.932	.0013	.1891	.0071	.5079	.0280
#2	.0360	.0984	1.941	.0021	.1881	.0088	.5088	.0280
#3	.0363	.0981	1.935	-.0004	.1898	.0078	.5058	.0285

Zoom In Zoom Out

Sample Name: jd53364-46 Acquired: 10/15/2022 5:31:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7434.6**	**71618.**	**10021.**	**2764.9**
Stddev	10.9	226.	23.	3.9
%RSD	.14706	.31597	.23105	.14001
#1	7435.1	71388.	10002.	2764.9
#2	7423.4	71840.	10047.	2761.1
#3	7445.3	71627.	10015.	2768.8

Zoom In Zoom Out

Sample Name: jd53364-47 Acquired: 10/15/2022 5:36:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0019**	**23.63**	**.0577**	**.0201**	**.7132**	**.0029**	**.0450**	**9.897**	**.0041**
Stddev	.0002	.02	.0008	.0005	.0002	.0001	.0005	.015	.0003
%RSD	8.252	.0812	1.318	2.385	.0235	4.390	1.162	.1541	6.886
#1	.0017	23.65	.0580	.0196	.7132	.0031	.0455	9.914	.0042
#2	.0019	23.61	.0583	.0201	.7130	.0030	.0450	9.888	.0044
#3	.0020	23.62	.0569	.0205	.7134	.0028	.0444	9.887	.0038

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2173**	**.0321**	**5.358**	**.2421**	**72.55**	**3.652**	**.0379**	**4.474**	**.3575**
Stddev	.0025	.0001	.021	.0007	.12	.009	.0008	.038	.0005
%RSD	1.157	.3256	.3838	.2860	.1638	.2505	1.994	.8564	.1400
#1	.2169	.0321	5.334	.2427	72.69	3.662	.0378	4.456	.3569
#2	.2151	.0322	5.374	.2414	72.49	3.650	.0372	4.449	.3579
#3	.2200	.0321	5.365	.2423	72.48	3.644	.0387	4.518	.3575

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0269**	**1.370**	**.0977**	**2.226**	**.2803**	**2.681**	**.0028**	**.0129**	**1.553**
Stddev	.0002	.007	.0002	.004	.0007	.005	.0012	.0022	.004
%RSD	.6310	.5263	.1735	.1962	.2425	.2005	42.89	16.76	.2587
#1	.0270	1.372	.0977	2.221	.2809	2.681	.0027	.0139	1.553
#2	.0267	1.361	.0979	2.227	.2796	2.686	.0016	.0104	1.557
#3	.0270	1.375	.0976	2.229	.2804	2.675	.0040	.0144	1.549

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0378**	**.1210**	**3.056**	**.0009**	**.2489**	**.0086**	**.5017**	**.0342**
Stddev	.0007	.0003	.004	.0005	.0008	.0001	.0004	.0004
%RSD	1.750	.2265	.1283	53.17	.3310	.8623	.0705	1.086
#1	.0385	.1213	3.052	.0005	.2480	.0085	.5019	.0338
#2	.0375	.1211	3.060	.0014	.2492	.0086	.5018	.0342
#3	.0373	.1207	3.056	.0007	.2496	.0086	.5013	.0346

Zoom In Zoom Out

Sample Name: jd53364-47 Acquired: 10/15/2022 5:36:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7379.5**	**71545.**	**9976.9**	**2751.7**
Stddev	14.4	199.	18.1	5.4
%RSD	.19561	.27883	.18151	.19510
#1	7365.8	71724.	9965.0	2750.9
#2	7394.6	71330.	9997.8	2757.5
#3	7378.1	71581.	9968.0	2746.9

Zoom In Zoom Out

Sample Name: jd53364-48 Acquired: 10/15/2022 5:41:58 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0037**	**39.74**	**.0506**	**.0248**	**.7642**	**.0032**	**.0300**	**13.07**	**.0027**
Stddev	.0003	.08	.0013	.0003	.0019	.0001	.0008	.03	.0002
%RSD	7.597	.2054	2.521	1.366	.2469	1.963	2.669	.1918	7.719
#1	.0034	39.65	.0492	.0251	.7623	.0032	.0293	13.09	.0025
#2	.0040	39.81	.0518	.0247	.7661	.0033	.0297	13.04	.0027
#3	.0036	39.76	.0509	.0245	.7643	.0032	.0308	13.07	.0029

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2892**	**.0387**	**4.391**	**.2980**	**81.50**	**5.282**	**.0651**	**9.435**	**.6704**
Stddev	.0036	.0002	.019	.0004	.14	.026	.0009	.090	.0013
%RSD	1.257	.4636	.4351	.1449	.1657	.4979	1.385	.9594	.1910
#1	.2866	.0385	4.370	.2977	81.41	5.280	.0645	9.333	.6689
#2	.2875	.0388	4.394	.2985	81.66	5.256	.0661	9.469	.6709
#3	.2933	.0389	4.408	.2977	81.44	5.309	.0646	9.504	.6714

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0080**	**.7324**	**.1190**	**1.401**	**.4027**	**1.783**	**.0118**	**.0093**	**1.612**
Stddev	.0001	.0073	.0007	.004	.0017	.005	.0004	.0013	.013
%RSD	1.341	.9979	.5589	.2544	.4201	.2647	3.554	13.57	.7726
#1	.0080	.7240	.1196	1.397	.4038	1.780	.0114	.0079	1.599
#2	.0081	.7373	.1183	1.402	.4007	1.781	.0123	.0104	1.624
#3	.0079	.7360	.1191	1.404	.4035	1.789	.0118	.0095	1.613

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0380**	**.1350**	**1.975**	**.0012**	**.3201**	**.0066**	**.6146**	**.0278**
Stddev	.0003	.0006	.003	.0016	.0016	.0003	.0012	.0001
%RSD	.8972	.4162	.1468	138.6	.4956	4.814	.2021	.4702
#1	.0381	.1344	1.972	-.0001	.3185	.0069	.6142	.0277
#2	.0384	.1355	1.976	.0029	.3200	.0063	.6136	.0279
#3	.0377	.1351	1.977	.0006	.3217	.0067	.6160	.0279

Zoom In Zoom Out

Sample Name: jd53364-48 Acquired: 10/15/2022 5:41:58 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7301.0**	**72250.**	**10131.**	**2764.9**
Stddev	9.2	183.	7.	1.4
%RSD	.12559	.25355	.06432	.05185
#1	7310.4	72445.	10133.	2766.5
#2	7300.6	72222.	10124.	2763.8
#3	7292.1	72082.	10136.	2764.4

Zoom In Zoom Out

Sample Name: jd53364-50 Acquired: 10/15/2022 5:46:56 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0021**	**21.37**	**.0289**	**.0064**	**.4158**	**.0032**	**.0379**	**15.55**	**.0036**
Stddev	.0002	.02	.0013	.0011	.0008	.0000	.0003	.03	.0003
%RSD	11.45	.1077	4.629	17.15	.1893	1.410	.7812	.1922	7.598
#1	.0018	21.35	.0302	.0056	.4149	.0032	.0382	15.59	.0039
#2	.0023	21.38	.0275	.0059	.4160	.0031	.0378	15.55	.0034
#3	.0022	21.39	.0290	.0077	.4164	.0032	.0376	15.53	.0036

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2165**	**.0450**	**.4288**	**.1944**	**50.41**	**4.303**	**.0390**	**4.216**	**.4821**
Stddev	.0017	.0002	.0025	.0011	.04	.015	.0008	.027	.0006
%RSD	.8051	.3622	.5893	.5821	.0711	.3477	2.056	.6337	.1300
#1	.2160	.0452	.4297	.1932	50.37	4.314	.0389	4.236	.4827
#2	.2150	.0451	.4259	.1946	50.43	4.309	.0398	4.186	.4819
#3	.2184	.0449	.4307	.1955	50.42	4.286	.0382	4.227	.4815

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0113**	**1.592**	**.0991**	**.8128**	**.1134**	**3.419**	**.0053**	**.0036**	**1.350**
Stddev	.0003	.011	.0005	.0021	.0011	.015	.0004	.0007	.007
%RSD	2.795	.6728	.5239	.2588	.9619	.4261	8.159	19.40	.5204
#1	.0113	1.589	.0993	.8115	.1124	3.421	.0050	.0044	1.359
#2	.0111	1.604	.0994	.8118	.1145	3.403	.0058	.0033	1.347
#3	.0117	1.583	.0985	.8152	.1134	3.432	.0052	.0032	1.346

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0275**	**.1280**	**2.527**	**-.0001**	**.1571**	**.0032**	**.3245**	**.0383**
Stddev	.0003	.0001	.001	.0015	.0008	.0009	.0009	.0003
%RSD	1.025	.0993	.0317	1092.	.5404	26.46	.2825	.7079
#1	.0272	.1279	2.527	-.0010	.1571	.0042	.3235	.0385
#2	.0276	.1280	2.528	-.0010	.1563	.0031	.3252	.0380
#3	.0277	.1281	2.526	.0016	.1580	.0025	.3248	.0384

Zoom In Zoom Out

Sample Name: jd53364-50 Acquired: 10/15/2022 5:46:56 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7376.3**	**72321.**	**10038.**	**2780.7**
Stddev	5.6	192.	47.	6.6
%RSD	.07624	.26609	.46979	.23837
#1	7378.5	72099.	9986.9	2780.1
#2	7380.4	72428.	10048.	2787.7
#3	7369.9	72437.	10080.	2774.5

Zoom In Zoom Out

Sample Name: jd53364-51 Acquired: 10/15/2022 5:51:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**4.966**	**.0067**	**.0023**	**.1391**	**.0014**	**.0198**	**4.678**	**.0008**
Stddev	.0004	.013	.0011	.0008	.0003	.0000	.0006	.009	.0001
%RSD	86.48	.2613	16.76	35.81	.1857	1.409	3.090	.1818	12.42
#1	.0008	4.959	.0055	.0032	.1392	.0014	.0204	4.686	.0009
#2	.0007	4.959	.0078	.0024	.1388	.0014	.0192	4.669	.0007
#3	.0000	4.981	.0070	.0015	.1393	.0013	.0200	4.678	.0007

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0707**	**.0140**	**.1819**	**.0583**	**13.77**	**.7741**	**.0057**	**.5720**	**.0495**
Stddev	.0010	.0004	.0006	.0002	.01	.0113	.0008	.0131	.0002
%RSD	1.477	2.671	.3307	.3417	.0707	1.461	13.92	2.292	.3580
#1	.0718	.0141	.1818	.0584	13.76	.7825	.0064	.5659	.0494
#2	.0706	.0143	.1814	.0580	13.77	.7787	.0060	.5630	.0494
#3	.0697	.0136	.1825	.0583	13.78	.7613	.0049	.5870	.0497

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.5201**	**.0648**	**.2456**	**.0137**	**.7601**	**.0031**	**.0015**	**.8254**
Stddev	.0002	.0036	.0003	.0017	.0002	.0016	.0002	.0016	.0087
%RSD	5.789	.6913	.4184	.6865	1.399	.2123	7.332	107.7	1.055
#1	.0030	.5184	.0649	.2473	.0137	.7611	.0031	-.0003	.8353
#2	.0033	.5178	.0645	.2439	.0139	.7610	.0032	.0020	.8220
#3	.0029	.5243	.0650	.2457	.0135	.7583	.0028	.0028	.8189

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0226**	**.0474**	**1.353**	**.0000**	**.0570**	**.0016**	**.2534**	**.0231**
Stddev	.0006	.0004	.005	.0009	.0002	.0008	.0012	.0001
%RSD	2.706	.8610	.3968	2163.	.4367	51.62	.4847	.2751
#1	.0232	.0471	1.352	-.0010	.0572	.0011	.2546	.0232
#2	.0219	.0472	1.348	.0004	.0570	.0011	.2535	.0231
#3	.0226	.0479	1.359	.0008	.0567	.0026	.2521	.0231

Zoom In Zoom Out

Sample Name: jd53364-51 Acquired: 10/15/2022 5:51:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7605.1**	**72144.**	**10045.**	**2793.0**
Stddev	8.5	173.	43.	2.0
%RSD	.11154	.23917	.42902	.07178
#1	7613.6	72146.	10034.	2795.0
#2	7596.6	72316.	10009.	2791.0
#3	7604.9	71971.	10093.	2792.9

Zoom In Zoom Out

Sample Name: jd53364-52 Acquired: 10/15/2022 5:56:55 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**49.01**	**.0351**	**.0526**	**.3584**	**.0039**	**.0647**	**50.97**	**.0059**
Stddev	.0003	.05	.0007	.0007	.0003	.0000	.0021	.10	.0000
%RSD	4.929	.0938	1.994	1.426	.0839	.5802	3.283	.1953	.3350
#1	.0055	49.06	.0344	.0528	.3582	.0040	.0669	51.09	.0059
#2	.0059	48.97	.0350	.0532	.3582	.0040	.0645	50.90	.0060
#3	.0061	49.00	.0358	.0517	.3587	.0039	.0627	50.93	.0059

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.4769**	**.0556**	**.9059**	**.4018**	**119.3**	**7.645**	**.0721**	**33.71**	**1.586**
Stddev	.0026	.0003	.0019	.0011	.2	.013	.0003	.15	.003
%RSD	.5496	.4694	.2131	.2615	.1610	.1669	.4429	.4514	.1653
#1	.4788	.0555	.9040	.4024	119.5	7.642	.0718	33.84	1.583
#2	.4739	.0553	.9058	.4025	119.1	7.635	.0721	33.54	1.589
#3	.4780	.0558	.9079	.4006	119.3	7.659	.0724	33.75	1.586

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0127**	**2.665**	**.1679**	**2.513**	**.6797**	**5.658**	**.0081**	**.0095**	**1.658**
Stddev	.0002	.018	.0005	.002	.0020	.016	.0002	.0013	.005
%RSD	1.350	.6923	.2899	.0704	.2923	.2804	2.838	13.37	.2952
#1	.0127	2.670	.1679	2.513	.6774	5.644	.0079	.0105	1.652
#2	.0126	2.645	.1675	2.511	.6807	5.656	.0083	.0081	1.660
#3	.0129	2.680	.1684	2.515	.6810	5.675	.0081	.0098	1.662

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0502**	**.1413**	**3.949**	**-.0001**	**.3856**	**.0066**	**2.107**	**.0388**
Stddev	.0005	.0005	.004	.0010	.0005	.0003	.008	.0003
%RSD	.9470	.3449	.0982	745.8	.1323	4.322	.3741	.6748
#1	.0501	.1415	3.949	.0003	.3851	.0069	2.109	.0390
#2	.0507	.1408	3.952	.0005	.3855	.0066	2.113	.0387
#3	.0498	.1417	3.945	-.0012	.3861	.0064	2.098	.0385

Zoom In Zoom Out

Sample Name: jd53364-52 Acquired: 10/15/2022 5:56:55 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7037.4**	**72281.**	**10236.**	**2763.7**
Stddev	8.8	98.	17.	4.0
%RSD	.12562	.13511	.16742	.14423
#1	7036.0	72362.	10225.	2763.4
#2	7029.3	72173.	10256.	2759.9
#3	7046.8	72309.	10228.	2767.8

Zoom In Zoom Out

Sample Name: jd53364-53 Acquired: 10/15/2022 6:01:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0065**	**62.17**	**.0402**	**.0583**	**.5195**	**.0045**	**.0848**	**85.07**	**.0063**
Stddev	.0005	.21	.0017	.0008	.0017	.0000	.0014	.30	.0002
%RSD	7.813	.3418	4.183	1.339	.3205	.8991	1.682	.3576	3.336
#1	.0069	62.15	.0412	.0575	.5190	.0045	.0832	84.99	.0063
#2	.0067	62.39	.0412	.0590	.5214	.0045	.0860	85.41	.0065
#3	.0059	61.96	.0383	.0586	.5182	.0044	.0852	84.82	.0061

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.6161**	**.0703**	**1.040**	**.5016**	**130.8**	**12.98**	**.0931**	**51.85**	**1.927**
Stddev	.0048	.0003	.006	.0035	.3	.05	.0004	.27	.011
%RSD	.7752	.3557	.5641	.7002	.2591	.3750	.3776	.5291	.5671
#1	.6196	.0702	1.044	.5036	130.8	12.93	.0935	51.76	1.935
#2	.6181	.0701	1.042	.5036	131.2	13.03	.0929	52.16	1.932
#3	.6107	.0706	1.033	.4975	130.5	12.98	.0929	51.63	1.915

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0128**	**3.917**	**.1991**	**2.999**	**.6923**	**7.795**	**.0102**	**.0083**	**1.715**
Stddev	.0001	.025	.0011	.009	.0026	.023	.0015	.0025	.004
%RSD	.9096	.6321	.5723	.2981	.3819	.2913	14.49	30.07	.2376
#1	.0127	3.906	.1986	3.003	.6926	7.784	.0115	.0103	1.718
#2	.0129	3.945	.1983	2.988	.6895	7.779	.0106	.0055	1.710
#3	.0127	3.900	.2004	3.004	.6947	7.821	.0086	.0092	1.717

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0494**	**.2078**	**5.402**	**-.0007**	**.4176**	**.0063**	**2.166**	**.0494**
Stddev	.0006	.0006	.032	.0009	.0024	.0006	.009	.0005
%RSD	1.251	.3002	.5823	134.0	.5662	9.689	.4295	.9603
#1	.0500	.2077	5.425	-.0017	.4193	.0058	2.176	.0498
#2	.0495	.2085	5.414	.0000	.4186	.0062	2.165	.0496
#3	.0488	.2073	5.366	-.0004	.4149	.0070	2.157	.0489

Zoom In Zoom Out

Sample Name: jd53364-53 Acquired: 10/15/2022 6:01:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6753.6**	**72404.**	**10279.**	**2706.9**
Stddev	10.9	225.	50.	4.9
%RSD	.16126	.31028	.48473	.18226
#1	6741.9	72156.	10261.	2701.3
#2	6763.3	72461.	10241.	2708.6
#3	6755.7	72595.	10336.	2710.8

Zoom In Zoom Out

Sample Name: jd53440-1 Acquired: 10/15/2022 6:06:47 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**131.4**	**.0519**	**.0163**	**.3190**	**.0049**	**.0392**	**8.351**	**.0003**
Stddev	.0005	.2	.0019	.0004	.0008	.0001	.0010	.014	.0002
%RSD	40.38	.1460	3.616	2.717	.2426	2.286	2.587	.1641	58.36
#1	.0019	131.3	.0498	.0168	.3183	.0050	.0383	8.335	.0003
#2	.0009	131.6	.0535	.0159	.3198	.0049	.0403	8.359	.0001
#3	.0011	131.2	.0524	.0162	.3189	.0048	.0390	8.359	.0004

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.119**	**.0284**	**.2807**	**.0944**	**188.6**	**7.602**	**.0802**	**11.17**	**.6135**
Stddev	.005	.0004	.0006	.0002	.3	.014	.0008	.02	.0023
%RSD	.4686	1.525	.2195	.2617	.1393	.1878	.9971	.1793	.3816
#1	1.114	.0281	.2800	.0941	188.6	7.604	.0793	11.16	.6108
#2	1.119	.0289	.2812	.0945	188.8	7.615	.0803	11.20	.6150
#3	1.125	.0282	.2808	.0946	188.3	7.587	.0809	11.17	.6146

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0114**	**1.669**	**.0942**	**3.027**	**.0931**	**.1607**	**.0026**	**.0128**	**1.981**
Stddev	.0000	.002	.0002	.002	.0009	.0012	.0013	.0008	.011
%RSD	.2370	.1147	.1885	.0757	1.009	.7731	50.63	5.974	.5414
#1	.0115	1.667	.0943	3.026	.0938	.1620	.0021	.0136	1.994
#2	.0114	1.670	.0940	3.029	.0920	.1595	.0041	.0122	1.974
#3	.0114	1.669	.0944	3.025	.0935	.1607	.0016	.0125	1.976

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0264**	**.0702**	**2.575**	**.0013**	**.3448**	**.0049**	**.1771**	**.0780**
Stddev	.0006	.0004	.007	.0012	.0012	.0006	.0014	.0004
%RSD	2.232	.5195	.2555	90.72	.3510	11.84	.7882	.4494
#1	.0258	.0698	2.567	-.0001	.3434	.0051	.1756	.0776
#2	.0270	.0704	2.578	.0019	.3456	.0053	.1783	.0781
#3	.0264	.0703	2.579	.0020	.3454	.0042	.1775	.0783

Zoom In Zoom Out

Sample Name: jd53440-1 Acquired: 10/15/2022 6:06:47 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7085.4**	**73634.**	**10458.**	**2886.9**
Stddev	7.4	120.	18.	2.2
%RSD	.10448	.16242	.16981	.07681
#1	7093.3	73751.	10440.	2887.9
#2	7084.3	73512.	10458.	2884.3
#3	7078.7	73639.	10475.	2888.3

Zoom In Zoom Out

Sample Name: jd53440-2 Acquired: 10/15/2022 6:11:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**172.5**	**.0738**	**.0528**	**.4387**	**.0067**	**.0727**	**12.75**	**.0008**
Stddev	.0003	.6	.0019	.0008	.0013	.0000	.0026	.00	.0002
%RSD	17.57	.3309	2.597	1.494	.3034	.0676	3.521	.0113	20.93
#1	.0015	172.0	.0742	.0534	.4374	.0067	.0747	12.75	.0009
#2	.0019	172.4	.0717	.0519	.4387	.0067	.0736	12.75	.0006
#3	.0014	173.2	.0754	.0531	.4401	.0067	.0698	12.75	.0007

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.8339**	**.0535**	**.3061**	**.1131**	F **253.6**	**12.62**	**.1303**	**24.92**	**1.354**
Stddev	.0036	.0007	.0025	.0002	.7	.00	.0007	.05	.005
%RSD	.4287	1.302	.8282	.1416	.2723	.0184	.5363	.2060	.4050
#1	.8380	.0532	.3090	.1132	253.1	12.62	.1296	24.87	1.360
#2	.8320	.0530	.3049	.1129	253.4	12.63	.1309	24.97	1.352
#3	.8317	.0543	.3043	.1132	254.4	12.62	.1305	24.92	1.349

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079**	**1.091**	**.1214**	**3.101**	**.0971**	**.2918**	**.0047**	**.0141**	**1.341**
Stddev	.0003	.003	.0007	.021	.0009	.0027	.0011	.0044	.010
%RSD	3.416	.2400	.5409	.6611	.9315	.9184	23.34	30.99	.7602
#1	.0080	1.088	.1220	3.107	.0975	.2949	.0048	.0157	1.350
#2	.0076	1.094	.1207	3.079	.0960	.2903	.0036	.0174	1.330
#3	.0082	1.092	.1214	3.119	.0976	.2903	.0058	.0091	1.343

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0271**	**.1044**	**4.164**	**.0014**	**.4081**	**.0035**	**.3602**	**.1160**
Stddev	.0005	.0001	.014	.0006	.0013	.0007	.0026	.0006
%RSD	1.680	.0858	.3355	46.11	.3065	19.68	.7130	.5170
#1	.0266	.1044	4.177	.0007	.4094	.0028	.3611	.1165
#2	.0275	.1043	4.166	.0019	.4081	.0042	.3573	.1163
#3	.0274	.1044	4.149	.0017	.4069	.0035	.3622	.1153

Zoom In Zoom Out

Sample Name: jd53440-2 Acquired: 10/15/2022 6:11:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7034.8**	**71181.**	**10165.**	**2801.1**
Stddev	36.4	331.	17.	16.2
%RSD	.51734	.46438	.17080	.57825
#1	6994.5	70909.	10146.	2783.2
#2	7065.3	71085.	10180.	2814.7
#3	7044.7	71549.	10168.	2805.5

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 6:16:45 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2439**	**38.77**	**1.977**	**2.009**	**1.961**	**1.986**	**2.088**	**39.32**	**1.984**
Stddev	.0006	.19	.009	.006	.009	.009	.011	.19	.008
%RSD	.2496	.4936	.4452	.2897	.4595	.4773	.5145	.4749	.4124
#1	.2433	38.99	1.974	2.008	1.969	1.996	2.084	39.51	1.981
#2	.2445	38.61	1.971	2.005	1.951	1.977	2.080	39.14	1.977
#3	.2440	38.73	1.987	2.016	1.963	1.983	2.100	39.30	1.993
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.006**	**1.985**	**2.025**	**1.922**	**39.55**	**38.59**	**1.956**	**38.91**	**2.028**
Stddev	.006	.007	.007	.004	.18	.21	.013	.15	.005
%RSD	.2814	.3320	.3523	.2100	.4518	.5479	.6526	.3746	.2264
#1	1.999	1.985	2.022	1.918	39.74	38.81	1.965	39.06	2.023
#2	2.010	1.978	2.033	1.926	39.38	38.39	1.941	38.77	2.032
#3	2.008	1.991	2.019	1.923	39.53	38.57	1.961	38.89	2.028
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.006**	**39.37**	**2.003**	**1.989**	**2.031**	**1.942**	**2.000**	**1.984**	**4.978**
Stddev	.006	.24	.002	.006	.007	.013	.015	.017	.021
%RSD	.3193	.6151	.1156	.3163	.3582	.6825	.7534	.8633	.4292
#1	2.005	39.59	2.004	1.991	2.034	1.934	1.996	1.983	4.974
#2	2.000	39.11	2.000	1.982	2.022	1.934	1.988	1.967	4.960
#3	2.013	39.40	2.005	1.994	2.036	1.957	2.017	2.001	5.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 6:16:45 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.042**	**1.967**	**1.995**	**2.070**	**1.997**	**1.997**	**2.033**	**1.988**
Stddev	.014	.011	.004	.013	.008	.009	.004	.007
%RSD	.6643	.5712	.1895	.6376	.4077	.4284	.2050	.3468
#1	2.038	1.974	1.991	2.068	1.991	1.998	2.033	1.980
#2	2.031	1.954	1.997	2.058	2.006	1.989	2.029	1.994
#3	2.057	1.972	1.997	2.084	1.994	2.006	2.037	1.989
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6807.8**	**69181.**	**9727.0**	**2678.9**
Stddev	14.4	127.	35.6	7.3
%RSD	.21144	.18406	.36558	.27166
#1	6800.9	69220.	9688.9	2678.2
#2	6824.4	69039.	9759.2	2686.4
#3	6798.2	69284.	9732.9	2671.9

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 6:21:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.0057**	**.0001**	**.0019**	**.0000**	**.0001**	**.0005**	**-.0021**	**.0001**
Stddev	.0004	.0034	.0003	.0002	.0001	.0000	.0006	.0005	.0002
%RSD	390.6	59.47	278.1	10.16	314.5	48.06	130.8	24.04	181.1
#1	-.0004	-.0077	.0003	.0021	.0002	.0001	.0011	-.0022	.0002
#2	.0004	-.0077	-.0003	.0019	-.0000	.0001	.0006	-.0025	.0002
#3	-.0003	-.0018	.0003	.0017	-.0000	.0000	-.0002	-.0015	-.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025**	**-.0001**	**-.0001**	**-.0001**	**.0061**	**.0022**	**.0007**	**-.0209**	**.0000**
Stddev	.0012	.0000	.0004	.0002	.0022	.0187	.0006	.0055	.0000
%RSD	49.31	41.29	774.8	144.6	35.85	836.7	82.12	26.56	55.62
#1	.0039	-.0000	-.0001	-.0001	.0086	-.0192	.0011	-.0145	.0001
#2	.0019	-.0001	-.0004	.0000	.0054	.0157	.0000	-.0244	.0000
#3	.0017	-.0001	.0004	-.0004	.0044	.0101	.0009	-.0237	.0000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**-.0806**	**.0001**	**.0039**	**.0006**	**.0005**	**.0006**	**.0000**	**.0030**
Stddev	.0002	.0036	.0003	.0007	.0005	.0038	.0005	.0007	.0017
%RSD	32.93	4.469	395.9	17.47	85.01	842.4	79.18	2362.	57.55
#1	.0008	-.0786	-.0000	.0035	.0012	.0038	.0001	.0001	.0030
#2	.0004	-.0784	-.0001	.0035	.0002	-.0037	.0009	-.0007	.0013
#3	.0008	-.0847	.0004	.0047	.0004	.0013	.0010	.0008	.0047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 6:21:33 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0000**	**.0007**	**-.0003**	**.0004**	**.0019**	**-.0012**	**.0004**
Stddev	.0002	.0001	.0001	.0011	.0003	.0008	.0001	.0000
%RSD	1108.	392.9	14.77	327.3	85.11	42.39	8.559	6.602
#1	-.0001	.0000	.0007	.0007	.0000	.0028	-.0013	.0004
#2	-.0001	-.0001	.0006	-.0014	.0005	.0013	-.0011	.0004
#3	.0003	.0000	.0008	-.0003	.0006	.0015	-.0011	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7629.2**	**71532.**	**9786.4**	**2745.5**
Stddev	32.7	69.	78.3	11.7
%RSD	.42839	.09656	.79957	.42744
#1	7617.4	71476.	9786.6	2741.1
#2	7666.2	71511.	9708.1	2758.8
#3	7604.1	71609.	9864.6	2736.5

Zoom In Zoom Out

Sample Name: jd53440-3 Acquired: 10/15/2022 6:26:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0052**	**112.8**	**.0485**	**.0229**	**.2635**	**.0051**	**.0737**	**5.577**	**.0008**
Stddev	.0003	.6	.0012	.0001	.0013	.0000	.0008	.026	.0003
%RSD	4.940	.5349	2.481	.3964	.4755	.4295	1.052	.4616	37.85
#1	.0053	113.5	.0471	.0228	.2649	.0051	.0734	5.605	.0008
#2	.0053	112.6	.0488	.0229	.2628	.0052	.0731	5.572	.0011
#3	.0049	112.3	.0495	.0230	.2627	.0051	.0746	5.555	.0005

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9283**	**.0432**	**.2181**	**.0855**	**183.6**	**8.799**	**.0905**	**19.41**	**1.542**
Stddev	.0037	.0005	.0014	.0003	1.0	.020	.0008	.04	.001
%RSD	.3949	1.126	.6437	.3158	.5514	.2288	.8600	.1921	.0860
#1	.9242	.0431	.2165	.0854	184.8	8.822	.0902	19.45	1.540
#2	.9296	.0437	.2190	.0854	183.2	8.786	.0899	19.38	1.543
#3	.9311	.0428	.2188	.0858	182.9	8.788	.0913	19.40	1.542

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0050**	**.2984**	**.0953**	**2.181**	**.0749**	**.2036**	**.0067**	**.0106**	**1.393**
Stddev	.0001	.0014	.0009	.009	.0020	.0027	.0005	.0010	.009
%RSD	2.314	.4845	.9574	.4201	2.672	1.346	7.996	9.028	.6770
#1	.0050	.2970	.0956	2.180	.0746	.2035	.0068	.0116	1.400
#2	.0050	.2999	.0961	2.191	.0731	.2010	.0071	.0097	1.397
#3	.0048	.2984	.0943	2.173	.0771	.2065	.0061	.0104	1.383

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0289**	**.0423**	**4.554**	**.0024**	**.2942**	**.0052**	**.2407**	**.0833**
Stddev	.0005	.0002	.003	.0005	.0014	.0007	.0017	.0005
%RSD	1.590	.5650	.0694	21.22	.4877	13.92	.7245	.6136
#1	.0288	.0425	4.551	.0018	.2927	.0049	.2399	.0827
#2	.0295	.0420	4.556	.0027	.2955	.0061	.2428	.0837
#3	.0286	.0424	4.556	.0026	.2945	.0047	.2396	.0835

Zoom In Zoom Out

Sample Name: jd53440-3 Acquired: 10/15/2022 6:26:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7162.4**	**73139.**	**10352.**	**2858.5**
Stddev	10.7	263.	33.	1.5
%RSD	.14937	.36024	.32058	.05355
#1	7164.2	73431.	10316.	2859.1
#2	7150.9	73067.	10382.	2856.8
#3	7172.0	72919.	10359.	2859.7

Zoom In Zoom Out

Sample Name: jd53440-4 Acquired: 10/15/2022 6:31:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**217.2**	**.0334**	**.0231**	**.3839**	**.0069**	**.0947**	**15.84**	**.0018**
Stddev	.0004	.3	.0007	.0003	.0012	.0001	.0013	.02	.0001
%RSD	16.37	.1507	2.119	1.394	.3251	1.634	1.343	.1552	7.057
#1	.0023	217.6	.0331	.0234	.3854	.0070	.0962	15.85	.0019
#2	.0024	217.0	.0342	.0229	.3833	.0070	.0939	15.86	.0017
#3	.0031	217.1	.0329	.0229	.3831	.0068	.0941	15.82	.0017

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.246**	**.2166**	**.3261**	**.1980**	F **251.8**	**14.33**	**.0831**	**17.03**	**5.027**
Stddev	.003	.0009	.0005	.0011	.3	.05	.0007	.08	.015
%RSD	.2113	.4247	.1553	.5721	.1373	.3555	.8871	.4496	.3022
#1	1.246	.2171	.3262	.1982	252.1	14.28	.0838	17.11	5.043
#2	1.243	.2156	.3255	.1990	251.7	14.38	.0823	17.01	5.013
#3	1.248	.2172	.3265	.1968	251.4	14.32	.0833	16.96	5.025

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0058**	**.4392**	**.1789**	**2.157**	**.3411**	**.8195**	**.0052**	**.0149**	**2.066**
Stddev	.0003	.0058	.0012	.013	.0034	.0056	.0017	.0017	.018
%RSD	5.286	1.324	.6464	.6033	.9993	.6859	31.72	11.36	.8889
#1	.0060	.4394	.1799	2.161	.3417	.8136	.0071	.0135	2.088
#2	.0059	.4333	.1776	2.143	.3374	.8202	.0046	.0144	2.056
#3	.0054	.4449	.1791	2.168	.3442	.8248	.0039	.0168	2.056

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0360**	**.0801**	**5.405**	**.0044**	**.4030**	**.0060**	**.3900**	**.0905**
Stddev	.0014	.0002	.009	.0017	.0012	.0004	.0020	.0002
%RSD	4.020	.2071	.1746	38.05	.2933	5.891	.5071	.2054
#1	.0365	.0801	5.413	.0036	.4030	.0064	.3918	.0903
#2	.0371	.0803	5.395	.0032	.4017	.0057	.3879	.0905
#3	.0343	.0799	5.408	.0063	.4041	.0058	.3903	.0907

Zoom In Zoom Out

Sample Name: jd53440-4 Acquired: 10/15/2022 6:31:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6932.2**	**71252.**	**10345.**	**2805.7**
Stddev	10.4	155.	39.	2.6
%RSD	.14963	.21741	.37493	.09129
#1	6927.5	71074.	10318.	2805.8
#2	6924.9	71354.	10328.	2803.1
#3	6944.0	71329.	10389.	2808.3

Zoom In Zoom Out

Sample Name: jd53440-5 Acquired: 10/15/2022 6:36:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0069**	**172.4**	**.0663**	**.0364**	**.4741**	**.0079**	**.1044**	**9.425**	**.0014**
Stddev	.0002	.1	.0011	.0003	.0003	.0001	.0008	.038	.0002
%RSD	3.192	.0628	1.634	.8339	.0675	.9294	.7342	.4005	12.69
#1	.0067	172.4	.0663	.0365	.4737	.0079	.1035	9.469	.0012
#2	.0071	172.5	.0674	.0360	.4743	.0078	.1050	9.400	.0015
#3	.0071	172.3	.0653	.0366	.4743	.0079	.1047	9.408	.0016

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.123**	**.1092**	**.2481**	**.1070**	F **251.4**	**13.51**	**.1265**	**27.78**	**3.808**
Stddev	.002	.0008	.0005	.0007	.2	.04	.0004	.08	.008
%RSD	.1473	.6910	.2155	.6627	.0842	.2970	.3349	.2725	.1994
#1	1.125	.1096	.2476	.1068	251.6	13.49	.1270	27.73	3.808
#2	1.124	.1097	.2487	.1064	251.3	13.56	.1265	27.86	3.800
#3	1.122	.1083	.2480	.1078	251.3	13.49	.1261	27.74	3.815

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0067**	**.4760**	**.1308**	**3.120**	**.0923**	**.8594**	**.0086**	**.0150**	**1.204**
Stddev	.0002	.0046	.0004	.009	.0000	.0069	.0011	.0021	.012
%RSD	2.359	.9624	.2922	.3029	.0410	.8082	13.04	13.64	.9808
#1	.0068	.4805	.1312	3.121	.0923	.8596	.0099	.0154	1.210
#2	.0065	.4763	.1308	3.129	.0924	.8662	.0079	.0169	1.211
#3	.0067	.4713	.1304	3.110	.0923	.8523	.0081	.0128	1.190

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0317**	**.0833**	**6.133**	**.0007**	**.3965**	**.0042**	**.3352**	**.0968**
Stddev	.0011	.0003	.009	.0010	.0001	.0006	.0007	.0004
%RSD	3.399	.3661	.1519	151.8	.0187	13.58	.2087	.3955
#1	.0329	.0830	6.133	.0008	.3966	.0047	.3355	.0964
#2	.0309	.0836	6.124	-.0004	.3964	.0041	.3357	.0971
#3	.0313	.0834	6.142	.0017	.3965	.0036	.3344	.0968

Zoom In Zoom Out

Sample Name: jd53440-5 Acquired: 10/15/2022 6:36:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6978.1**	**71803.**	**10275.**	**2800.2**
Stddev	5.3	281.	26.	3.4
%RSD	.07635	.39094	.25021	.12044
#1	6975.6	71961.	10264.	2800.4
#2	6984.3	71969.	10305.	2803.5
#3	6974.5	71479.	10257.	2796.7

Zoom In Zoom Out

Sample Name: jd53440-6 Acquired: 10/15/2022 6:41:50 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0056**	**135.2**	**.0505**	**.0320**	**.2324**	**.0051**	**.0793**	**6.967**	**.0010**
Stddev	.0006	.3	.0020	.0010	.0006	.0000	.0004	.014	.0003
%RSD	9.966	.2192	4.019	3.190	.2578	.7054	.4593	.1999	27.92
#1	.0062	135.4	.0487	.0318	.2328	.0051	.0789	6.959	.0012
#2	.0051	134.9	.0527	.0311	.2317	.0051	.0796	6.959	.0011
#3	.0054	135.3	.0502	.0331	.2327	.0051	.0793	6.983	.0007

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9157**	**.0511**	**.2077**	**.0835**	**195.2**	**10.21**	**.0949**	**17.24**	**2.803**
Stddev	.0031	.0002	.0007	.0003	.3	.02	.0005	.07	.007
%RSD	.3371	.4849	.3232	.3018	.1328	.2147	.5317	.4168	.2408
#1	.9189	.0509	.2085	.0836	195.2	10.21	.0943	17.19	2.797
#2	.9128	.0510	.2072	.0836	194.9	10.18	.0953	17.20	2.801
#3	.9152	.0514	.2075	.0832	195.4	10.23	.0949	17.32	2.810

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**1.002**	**.0954**	**2.691**	**.0757**	**.4083**	**.0061**	**.0112**	**1.518**
Stddev	.0003	.001	.0009	.006	.0013	.0075	.0013	.0004	.021
%RSD	5.393	.1366	.9180	.2297	1.718	1.841	21.09	3.451	1.394
#1	.0047	1.003	.0957	2.693	.0743	.4045	.0074	.0115	1.541
#2	.0044	1.001	.0944	2.684	.0760	.4034	.0060	.0115	1.514
#3	.0049	1.002	.0961	2.696	.0768	.4169	.0048	.0108	1.499

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0298**	**.0610**	**4.877**	**.0022**	**.3443**	**.0038**	**.2340**	**.0871**
Stddev	.0006	.0001	.008	.0016	.0007	.0004	.0005	.0002
%RSD	1.863	.2245	.1639	72.25	.1999	9.984	.2156	.2546
#1	.0299	.0608	4.868	.0041	.3445	.0034	.2346	.0873
#2	.0292	.0611	4.880	.0011	.3435	.0041	.2338	.0868
#3	.0303	.0610	4.883	.0015	.3448	.0040	.2337	.0871

Zoom In Zoom Out

Sample Name: jd53440-6 Acquired: 10/15/2022 6:41:50 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7051.6**	**71044.**	**10098.**	**2777.2**
Stddev	9.1	145.	19.	6.4
%RSD	.12870	.20383	.18530	.22890
#1	7048.9	71209.	10111.	2779.9
#2	7061.7	70940.	10107.	2781.7
#3	7044.2	70983.	10077.	2769.9

Zoom In Zoom Out

Sample Name: jd53440-7 Acquired: 10/15/2022 6:46:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**30.67**	**.0510**	**.0178**	**.6235**	**.0030**	**.0425**	**20.00**	**.0012**
Stddev	.0005	.87	.0004	.0003	.0180	.0001	.0013	.58	.0001
%RSD	14.83	2.826	.8318	1.649	2.890	2.053	2.963	2.890	10.74
#1	.0036	31.67	.0510	.0177	.6443	.0030	.0417	20.67	.0013
#2	.0029	30.19	.0515	.0181	.6137	.0029	.0419	19.70	.0011
#3	.0028	30.14	.0506	.0175	.6126	.0031	.0440	19.63	.0011

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.3919**	**.0416**	**.0875**	**.2256**	**64.08**	**4.618**	**.0740**	**3.793**	**1.136**
Stddev	.0015	.0003	.0008	.0004	1.84	.116	.0022	.103	.003
%RSD	.3901	.8041	.9479	.1779	2.877	2.506	3.006	2.726	.2931
#1	.3934	.0412	.0878	.2259	66.21	4.752	.0766	3.911	1.136
#2	.3903	.0415	.0881	.2251	63.13	4.544	.0731	3.721	1.139
#3	.3921	.0419	.0866	.2257	62.92	4.560	.0724	3.747	1.132

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0217**	**2.154**	**.0860**	**2.743**	**2.425**	**.7038**	**.0074**	**.0066**	**2.001**
Stddev	.0001	.058	.0006	.003	.006	.0026	.0017	.0036	.003
%RSD	.6277	2.678	.7348	.1143	.2373	.3654	23.49	54.75	.1354
#1	.0218	2.221	.0853	2.741	2.430	.7013	.0093	.0026	2.000
#2	.0218	2.127	.0865	2.742	2.425	.7064	.0070	.0075	2.004
#3	.0216	2.116	.0861	2.747	2.419	.7037	.0059	.0097	1.999

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.123**	**.5169**	**2.741**	**.0010**	**.2334**	**.0045**	**.3035**	**.0444**
Stddev	.004	.0142	.003	.0005	.0008	.0001	.0006	.0002
%RSD	.3196	2.744	.1104	50.16	.3506	3.078	.1901	.4657
#1	1.125	.5333	2.739	.0013	.2343	.0046	.3032	.0444
#2	1.125	.5089	2.744	.0013	.2332	.0043	.3031	.0441
#3	1.119	.5086	2.739	.0004	.2327	.0044	.3042	.0445

Zoom In Zoom Out

Sample Name: jd53440-7 Acquired: 10/15/2022 6:46:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7287.4**	**71641.**	**9911.3**	**2780.3**
Stddev	4.8	330.	228.1	.5
%RSD	.06654	.46115	2.3013	.01751
#1	7287.7	71460.	9647.9	2780.2
#2	7282.5	71441.	10043.	2780.8
#3	7292.1	72023.	10043.	2779.9

Zoom In Zoom Out

Sample Name: mp35752-lb1 Acquired: 10/15/2022 6:51:48 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**.0083**	**-.0025**	**.0117**	**.0065**	**.0000**	**.0004**	**.1944**
Stddev	.0003	.0052	.0008	.0004	.0002	.0001	.0009	.0041
%RSD	659.4	62.17	33.20	3.384	2.669	273.6	241.4	2.091
#1	-.0003	.0077	-.0017	.0120	.0065	-.0001	-.0005	.1900
#2	.0002	.0138	-.0024	.0119	.0063	.0001	.0013	.1980
#3	.0002	.0035	-.0034	.0113	.0067	.0001	.0003	.1951

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0009**	**.0002**	**.0012**	**.0079**	**.0283**	**.0478**	**.0015**
Stddev	.0000	.0009	.0004	.0003	.0003	.0015	.0142	.0006
%RSD	26.98	100.1	212.5	25.58	4.274	5.219	29.80	37.34
#1	.0001	.0013	.0007	.0016	.0080	.0298	.0351	.0010
#2	.0001	-.0001	-.0001	.0010	.0082	.0268	.0450	.0021
#3	.0001	.0013	-.0000	.0012	.0075	.0284	.0632	.0014

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**.0014**	**.0007**	F **1163.**	**.0025**	**.0319**	**.0001**	**.0461**
Stddev	.0095	.0001	.0002	23.	.0003	.0008	.0015	.0009
%RSD	1062.	4.341	32.89	1.988	11.20	2.358	2577.	1.923
#1	-.0119	.0014	.0009	1184.	.0027	.0326	.0009	.0467
#2	.0042	.0014	.0006	1168.	.0025	.0311	.0009	.0466
#3	.0050	.0013	.0005	1138.	.0022	.0321	-.0016	.0451

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0032**	**.0819**	**.0012**	**.0018**	**.0007**	F **-.0029**	**.0006**
Stddev	.0013	.0006	.0007	.0007	.0000	.0002	.0012	.0001
%RSD	125.9	18.73	.8649	56.73	2.691	35.13	42.65	16.78
#1	.0025	.0030	.0811	.0007	.0018	.0004	-.0034	.0007
#2	.0001	.0028	.0825	.0010	.0018	.0008	-.0015	.0005
#3	.0004	.0039	.0822	.0020	.0019	.0009	-.0038	.0005

Zoom In Zoom Out

Sample Name: mp35752-lb1 Acquired: 10/15/2022 6:51:48 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**-.0004**	**.0227**	**.0001**
Stddev	.0003	.0000	.0001
%RSD	89.41	.0424	116.1
#1	-.0004	.0227	.0002
#2	-.0000	.0227	.0001
#3	-.0006	.0227	-.0000

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5757.8**	**63198.**	**9416.1**	**2405.8**
Stddev	18.5	40.	58.3	10.1
%RSD	.32143	.06406	.61945	.41831
#1	5767.3	63171.	9357.9	2415.1
#2	5736.5	63245.	9474.6	2395.1
#3	5769.6	63179.	9415.8	2407.1

Zoom In Zoom Out

Sample Name: mp35752-mb1 Acquired: 10/15/2022 6:57:08 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**.0070**	**-.0014**	**.0002**	**-.0000**	**.0000**	**-.0001**	**.0090**	**.0001**
Stddev	.0000	.0004	.0006	.0009	.0001	.0001	.0001	.0006	.0001
%RSD	22.44	6.191	40.84	368.6	580.0	249.0	69.42	7.121	147.6
#1	.0002	.0067	-.0007	.0013	.0000	.0001	-.0001	.0095	.0001
#2	.0002	.0070	-.0018	-.0002	.0000	.0000	-.0001	.0083	.0002
#3	.0002	.0075	-.0017	-.0003	-.0001	-.0000	-.0000	.0092	-.0000

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0024**	**-.0001**	**.0004**	**.0002**	**.0260**	**.0248**	**.0001**	**-.0143**	**.0003**
Stddev	.0023	.0002	.0002	.0003	.0013	.0067	.0003	.0044	.0001
%RSD	97.18	141.7	37.89	152.6	5.007	27.09	356.1	30.99	16.56
#1	-.0029	-.0000	.0003	.0005	.0257	.0260	.0004	-.0100	.0003
#2	-.0044	-.0000	.0003	.0001	.0249	.0176	-.0002	-.0140	.0003
#3	.0001	-.0004	.0006	-.0001	.0274	.0308	.0000	-.0189	.0004

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.1428**	**-.0003**	**.0031**	**.0008**	**-.0015**	**.0009**	**.0007**	**.0142**
Stddev	.0001	.0197	.0000	.0017	.0012	.0041	.0011	.0003	.0005
%RSD	46.25	13.81	4.487	54.61	147.3	275.4	125.5	46.19	3.212
#1	.0002	.1640	-.0003	.0018	.0021	-.0036	.0021	.0011	.0136
#2	.0004	.1396	-.0003	.0025	-.0002	-.0041	.0009	.0006	.0144
#3	.0002	.1249	-.0003	.0050	.0005	.0032	-.0002	.0004	.0144

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0000**	**.0007**	**-.0018**	**.0003**	**.0009**	**.0012**	**.0002**
Stddev	.0004	.0001	.0005	.0011	.0002	.0005	.0001	.0001
%RSD	495.4	315.9	67.58	60.32	75.50	54.45	5.865	69.49
#1	.0001	.0001	.0009	-.0027	.0002	.0010	.0013	.0001
#2	.0002	.0000	.0011	-.0019	.0006	.0014	.0012	.0001
#3	-.0005	-.0000	.0002	-.0006	.0002	.0004	.0012	.0003

Zoom In Zoom Out

Sample Name: mp35752-mb1 Acquired: 10/15/2022 6:57:08 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7594.3**	**71605.**	**9762.0**	**2724.1**
Stddev	75.0	5.	40.2	28.5
%RSD	.98820	.00629	.41144	1.0454
#1	7633.3	71600.	9715.7	2737.6
#2	7507.8	71606.	9787.4	2691.4
#3	7641.9	71609.	9782.8	2743.3

Zoom In Zoom Out

Sample Name: mp35752-b1 Acquired: 10/15/2022 7:02:19 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2368**	**24.26**	**1.927**	**1.916**	**1.864**	**1.903**	**-.0052**	**24.67**
Stddev	.0005	.04	.022	.020	.001	.002	.0011	.08
%RSD	.2260	.1827	1.126	1.058	.0720	.0992	21.74	.3152
#1	.2374	24.27	1.952	1.939	1.865	1.901	-.0064	24.76
#2	.2364	24.21	1.910	1.900	1.863	1.904	-.0048	24.61
#3	.2367	24.30	1.920	1.908	1.865	1.905	-.0043	24.66

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.908**	**.1614**	**1.896**	**1.938**	**1.840**	**24.93**	**24.01**	**.0002**
Stddev	.021	.0008	.022	.004	.001	.04	.03	.0006
%RSD	1.126	.5114	1.187	.2253	.0400	.1451	.1095	269.2
#1	1.932	.1604	1.922	1.942	1.841	24.93	24.04	-.0005
#2	1.893	.1620	1.881	1.939	1.840	24.89	23.99	.0005
#3	1.897	.1616	1.886	1.933	1.841	24.96	24.00	.0007

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.29**	**1.943**	**1.982**	**24.53**	**1.912**	**1.905**	**1.947**	F **-.1344**
Stddev	.10	.004	.026	.07	.023	.017	.016	.0019
%RSD	.4009	.2284	1.293	.2726	1.217	.8824	.8416	1.442
#1	24.38	1.949	2.012	24.55	1.939	1.923	1.964	-.1349
#2	24.19	1.941	1.964	24.46	1.896	1.890	1.931	-.1360
#3	24.31	1.940	1.971	24.58	1.901	1.902	1.945	-.1322

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.972**	**1.890**	**.0952**	**2.022**	**1.872**	**1.939**	**2.005**	**1.911**
Stddev	.019	.018	.0010	.020	.003	.002	.019	.004
%RSD	.9586	.9372	1.090	.9811	.1536	.0999	.9303	.2155
#1	1.992	1.910	.0944	2.043	1.875	1.941	2.022	1.914
#2	1.954	1.875	.0949	2.004	1.869	1.937	1.985	1.913
#3	1.971	1.887	.0964	2.019	1.871	1.939	2.007	1.907

Zoom In Zoom Out

Sample Name: mp35752-b1 Acquired: 10/15/2022 7:02:19 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.955**	**1.946**	**1.927**
Stddev	.025	.022	.003
%RSD	1.255	1.122	.1276
#1	1.983	1.971	1.929
#2	1.939	1.932	1.928
#3	1.942	1.934	1.925

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6946.8**	**69857.**	**9751.8**	**2675.6**
Stddev	68.2	68.	47.9	27.2
%RSD	.98235	.09803	.49171	1.0171
#1	6869.2	69780.	9714.5	2644.4
#2	6997.2	69877.	9805.9	2694.4
#3	6974.2	69912.	9734.9	2688.0

Zoom In Zoom Out

Sample Name: mp35752-ls1 Acquired: 10/15/2022 7:07:05 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2499**	**24.18**	**1.994**	**1.857**	**1.883**	**1.931**	**.0013**	**24.44**
Stddev	.0014	.02	.004	.002	.001	.001	.0016	.06
%RSD	.5664	.0944	.1740	.1125	.0559	.0684	129.1	.2322
#1	.2503	24.20	1.996	1.856	1.882	1.931	.0030	24.51
#2	.2511	24.15	1.996	1.860	1.883	1.929	-.0003	24.39
#3	.2484	24.18	1.990	1.856	1.884	1.931	.0011	24.44

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.974**	**.1555**	**2.001**	**1.931**	**1.861**	**24.56**	**24.22**	**.0028**
Stddev	.003	.0024	.002	.003	.005	.02	.02	.0008
%RSD	.1399	1.556	.0884	.1657	.2445	.1003	.0688	28.84
#1	1.973	.1529	2.003	1.929	1.863	24.56	24.22	.0034
#2	1.977	.1561	2.000	1.929	1.865	24.54	24.23	.0030
#3	1.972	.1576	1.999	1.934	1.856	24.59	24.20	.0019

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**23.76**	**1.920**	**1.859**	F **1130.**	**2.018**	**2.029**	**1.968**	F **-.0974**
Stddev	.07	.002	.003	21.	.001	.004	.007	.0049
%RSD	.3001	.1173	.1712	1.832	.0239	.2151	.3507	5.076
#1	23.83	1.920	1.856	1148.	2.019	2.034	1.973	-.1031
#2	23.69	1.918	1.863	1135.	2.018	2.026	1.960	-.0945
#3	23.77	1.922	1.858	1108.	2.019	2.027	1.970	-.0946

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.895**	**2.072**	**.1083**	**1.825**	**1.888**	**1.869**	**1.849**	**1.914**
Stddev	.004	.004	.0004	.007	.001	.001	.005	.002
%RSD	.2349	.1673	.4067	.3751	.0604	.0291	.2772	.0983
#1	1.899	2.074	.1083	1.832	1.889	1.869	1.847	1.913
#2	1.890	2.068	.1088	1.821	1.886	1.870	1.845	1.913
#3	1.895	2.074	.1079	1.821	1.888	1.869	1.855	1.916

Zoom In Zoom Out

Sample Name: mp35752-ls1 Acquired: 10/15/2022 7:07:05 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.852**	**2.025**	**1.893**
Stddev	.012	.005	.000
%RSD	.6563	.2457	.0198
#1	1.866	2.030	1.893
#2	1.846	2.025	1.893
#3	1.844	2.020	1.894

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**5719.9**	**64461.**	**9511.4**	**2468.3**
Stddev	4.7	79.	16.3	3.7
%RSD	.08136	.12300	.17109	.14872
#1	5714.6	64462.	9493.0	2467.8
#2	5722.9	64540.	9517.2	2464.9
#3	5722.3	64381.	9524.0	2472.2

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 7:12:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2459**	**39.17**	**1.996**	**2.028**	**1.975**	**2.003**	**2.102**	**39.78**	**1.999**
Stddev	.0010	.16	.004	.004	.008	.008	.006	.21	.003
%RSD	.4034	.4032	.2094	.1806	.3884	.3963	.2872	.5252	.1544
#1	.2469	39.04	2.001	2.023	1.972	1.998	2.099	39.60	1.998
#2	.2450	39.11	1.996	2.029	1.968	1.999	2.109	39.74	2.002
#3	.2459	39.34	1.992	2.030	1.983	2.012	2.098	40.01	1.996
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.024**	**2.002**	**2.046**	**1.933**	**39.92**	**38.92**	**1.971**	**39.50**	**2.046**
Stddev	.003	.003	.005	.007	.16	.17	.010	.22	.004
%RSD	.1650	.1417	.2400	.3589	.3982	.4400	.5153	.5630	.1925
#1	2.028	2.005	2.051	1.925	39.82	38.85	1.968	39.31	2.050
#2	2.021	2.002	2.043	1.937	39.83	38.80	1.962	39.46	2.045
#3	2.024	1.999	2.043	1.937	40.10	39.12	1.982	39.75	2.042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.026**	**39.03**	**2.019**	**2.002**	**2.046**	**1.959**	**2.020**	**2.009**	**5.004**
Stddev	.002	.15	.006	.003	.005	.012	.011	.009	.009
%RSD	.1162	.3745	.3042	.1664	.2398	.5973	.5566	.4447	.1781
#1	2.024	38.93	2.026	2.000	2.051	1.956	2.009	2.003	4.996
#2	2.028	38.96	2.015	2.006	2.046	1.972	2.032	2.020	5.014
#3	2.024	39.19	2.015	2.001	2.041	1.950	2.018	2.005	5.001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 7:12:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.060**	**1.981**	**2.011**	**2.083**	**2.017**	**2.021**	**2.057**	**2.002**
Stddev	.007	.009	.002	.007	.002	.004	.005	.003
%RSD	.3205	.4516	.1042	.3484	.1150	.1981	.2696	.1328
#1	2.060	1.979	2.011	2.078	2.019	2.024	2.063	1.999
#2	2.066	1.973	2.013	2.091	2.014	2.022	2.054	2.004
#3	2.053	1.990	2.009	2.080	2.017	2.016	2.054	2.004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6787.6**	**68940.**	**9629.1**	**2670.2**
Stddev	8.3	222.	56.1	2.3
%RSD	.12282	.32247	.58261	.08474
#1	6779.5	68706.	9693.7	2670.6
#2	6787.2	68967.	9600.4	2667.8
#3	6796.1	69148.	9593.1	2672.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 7:16:49 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0030**	**-.0001**	**.0030**	**.0002**	**.0001**	**-.0008**	**-.0019**	**.0003**
Stddev	.0001	.0094	.0003	.0001	.0001	.0001	.0001	.0033	.0001
%RSD	63.57	316.0	378.5	4.575	41.99	69.43	12.83	173.4	39.64
#1	-.0003	-.0007	-.0002	.0030	.0002	.0002	-.0008	-.0016	.0002
#2	-.0001	.0136	-.0003	.0031	.0002	.0001	-.0008	.0013	.0003
#3	-.0001	-.0040	.0003	.0028	.0001	.0000	-.0006	-.0053	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.0001**	**.0003**	**-.0001**	**.0045**	**.0191**	**.0019**	**-.0125**	**.0001**
Stddev	.0018	.0002	.0002	.0002	.0017	.0207	.0004	.0142	.0000
%RSD	255.7	199.4	79.84	122.8	37.06	108.1	22.01	114.0	38.91
#1	.0027	.0001	.0001	-.0000	.0061	.0430	.0014	.0039	.0000
#2	-.0007	.0002	.0002	-.0001	.0028	.0076	.0021	-.0211	.0001
#3	.0001	-.0001	.0006	-.0003	.0047	.0068	.0021	-.0202	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0164**	**-.0002**	**.0030**	**.0002**	**-.0032**	**.0017**	**-.0009**	**.0022**
Stddev	.0002	.0040	.0002	.0007	.0005	.0024	.0005	.0001	.0010
%RSD	19.70	24.64	107.3	23.53	209.6	74.82	29.55	5.526	48.07
#1	.0007	.0203	-.0001	.0023	-.0002	-.0043	.0012	-.0009	.0031
#2	.0010	.0123	-.0004	.0037	.0007	-.0005	.0019	-.0010	.0024
#3	.0010	.0166	-.0000	.0031	.0001	-.0048	.0021	-.0009	.0010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 7:16:49 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0006**	**-.0011**	**.0003**	**.0021**	**-.0012**	**.0004**
Stddev	.0006	.0001	.0004	.0011	.0001	.0006	.0001	.0002
%RSD	983.6	396.7	56.90	100.8	30.08	27.84	9.716	59.99
#1	.0006	.0001	.0010	-.0016	.0002	.0022	-.0011	.0002
#2	.0002	-.0000	.0003	-.0020	.0004	.0015	-.0013	.0006
#3	-.0007	.0000	.0006	.0002	.0004	.0027	-.0012	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7593.9**	**70645.**	**9616.1**	**2733.7**
Stddev	6.8	217.	31.2	5.1
%RSD	.08930	.30662	.32421	.18721
#1	7598.9	70808.	9633.6	2739.1
#2	7586.1	70399.	9580.1	2728.9
#3	7596.6	70727.	9634.5	2733.1

Zoom In Zoom Out

Sample Name: crid Acquired: 10/15/2022 7:22:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0002**	**.0949**	**.0033**	F **.0017**	**.0038**	**.0011**	F **-.0010**	**.9957**
Stddev	.0002	.0084	.0017	.0005	.0001	.0000	.0001	.0096
%RSD	131.7	8.839	53.65	30.24	3.162	4.546	6.927	.9614
#1	-.0001	.0879	.0013	.0012	.0037	.0011	-.0010	.9932
#2	.0002	.0927	.0047	.0023	.0039	.0011	-.0010	1.006
#3	.0004	.1042	.0038	.0018	.0037	.0010	-.0011	.9877
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
Value	.0020			.0100			.0040	
Range	-30.00%			-30.00%			-30.00%	

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.0011**	**.0029**	**.0019**	F **-.0003**	**.0012**	**1.938**	F **.0004**
Stddev	.0001	.0027	.0001	.0002	.0004	.0010	.043	.0005
%RSD	7.961	242.4	3.437	10.79	166.9	78.41	2.205	133.2
#1	.0009	.0004	.0029	.0018	.0002	.0002	1.948	.0006
#2	.0010	.0040	.0028	.0021	-.0006	.0021	1.975	.0009
#3	.0011	-.0011	.0029	.0017	-.0004	.0014	1.892	-.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass	Chk Fail
Value					.0020			.0040
Range					-30.00%			-30.00%

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0756**	**.0030**	**.0004**	**.9575**	**.0038**	F **.0026**	F **.0001**	F **-.0058**
Stddev	.0152	.0000	.0003	.0073	.0002	.0011	.0011	.0030
%RSD	20.05	.6039	81.78	.7580	6.430	40.70	1061.	50.90
#1	.0792	.0030	.0007	.9558	.0038	.0016	.0000	-.0084
#2	.0886	.0030	.0004	.9655	.0035	.0025	.0013	-.0064
#3	.0589	.0030	.0001	.9513	.0040	.0037	-.0010	-.0026
Check ?	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Fail
Value						.0040	.0025	.0040
Range						-30.00%	-30.00%	-30.00%

Zoom In Zoom Out

Sample Name: crid Acquired: 10/15/2022 7:22:02 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	F **.0011**	**.0051**	**.0006**	**.0002**	**-.0000**	**.0000**	**.0021**	**.0021**
Stddev	.0016	.0010	.0002	.0005	.0000	.0002	.0004	.0000
%RSD	144.7	20.32	30.48	248.7	135.3	731.4	18.08	1.469
#1	.0018	.0050	.0007	-.0001	-.0001	-.0002	.0020	.0021
#2	.0022	.0041	.0004	.0008	.0000	.0000	.0018	.0021
#3	-.0007	.0062	.0008	-.0001	-.0000	.0002	.0025	.0021
Check ?	Chk Fail	Chk Pass	None	None	None	None	Chk Pass	Chk Pass
Value	.0030							
Range	-30.00%							

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	F **.0005**	**.0093**	F **-.0000**
Stddev	.0004	.0001	.0001
%RSD	74.55	.8330	271.6
#1	.0009	.0092	-.0002
#2	.0004	.0093	-.0001
#3	.0002	.0092	.0001
Check ?	Chk Fail	Chk Pass	Chk Fail
Value	.0040		.0040
Range	-30.00%		-30.00%

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7583.0**	**71190.**	**9725.7**	**2738.3**
Stddev	22.4	289.	35.1	3.5
%RSD	.29496	.40556	.36054	.12645
#1	7587.0	71140.	9715.0	2740.2
#2	7558.9	70930.	9697.3	2734.3
#3	7603.1	71501.	9764.9	2740.4

Zoom In Zoom Out

Sample Name: mp35732-mb1 Acquired: 10/15/2022 7:27:13 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0097**	**-.0016**	**.0018**	**.0002**	**.0000**	**-.0004**	**.0173**	**.0002**
Stddev	.0004	.0066	.0014	.0002	.0002	.0000	.0008	.0014	.0002
%RSD	291.7	68.04	85.86	10.65	96.80	467.2	191.1	8.355	85.31
#1	.0006	.0110	-.0006	.0017	.0000	.0001	.0001	.0185	.0002
#2	-.0001	.0157	-.0031	.0020	.0004	-.0000	-.0014	.0178	.0000
#3	-.0001	.0026	-.0010	.0017	.0002	-.0000	-.0001	.0157	.0004

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0000**	**-.0002**	**.0003**	**-.0001**	**.0054**	**.0002**	**-.0003**	**.0027**	**.0002**
Stddev	.0016	.0000	.0001	.0005	.0009	.0175	.0009	.0117	.0000
%RSD	5752.	22.81	38.23	440.6	16.64	7172.	256.6	432.2	6.364
#1	.0011	-.0002	.0004	-.0007	.0060	-.0085	-.0013	.0103	.0003
#2	-.0018	-.0001	.0002	.0001	.0057	-.0112	-.0000	.0086	.0002
#3	.0008	-.0002	.0003	.0002	.0044	.0204	.0003	-.0108	.0002

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**-.0230**	**-.0001**	**.0036**	**-.0002**	**.0014**	**.0008**	**.0015**	**.0158**
Stddev	.0003	.0070	.0002	.0006	.0005	.0007	.0008	.0013	.0004
%RSD	48.58	30.43	295.7	15.98	252.4	46.59	98.95	91.58	2.408
#1	.0006	-.0307	-.0002	.0030	.0001	.0009	.0016	.0017	.0154
#2	.0007	-.0214	.0002	.0039	-.0007	.0021	.0009	.0027	.0161
#3	.0002	-.0170	-.0002	.0041	.0001	.0012	-.0000	.0000	.0159

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0004**	**-.0015**	**.0000**	**.0012**	**.0024**	**.0003**
Stddev	.0005	.0001	.0003	.0005	.0001	.0011	.0002	.0001
%RSD	571.8	263.6	76.26	35.52	818.3	90.67	6.697	32.92
#1	-.0001	.0001	.0002	-.0014	.0001	.0000	.0026	.0004
#2	.0007	-.0001	.0002	-.0020	.0001	.0014	.0023	.0003
#3	-.0003	.0000	.0007	-.0010	-.0001	.0022	.0024	.0002

Zoom In Zoom Out

Sample Name: mp35732-mb1 Acquired: 10/15/2022 7:27:13 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7569.7**	**71427.**	**9847.7**	**2711.6**
Stddev	68.0	150.	15.8	29.5
%RSD	.89808	.21030	.16002	1.0895
#1	7491.2	71385.	9831.9	2677.5
#2	7610.7	71303.	9847.9	2729.0
#3	7607.2	71594.	9863.4	2728.4

Zoom In Zoom Out

Sample Name: mp35732-b1 Acquired: 10/15/2022 7:32:24 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2372**	**24.72**	**1.909**	**1.903**	**1.888**	**1.919**	**-.0047**	**25.08**
Stddev	.0008	.02	.004	.004	.001	.003	.0017	.03
%RSD	.3366	.0898	.2072	.2130	.0755	.1330	35.49	.1147
#1	.2369	24.70	1.907	1.904	1.889	1.918	-.0043	25.05
#2	.2365	24.74	1.907	1.898	1.889	1.922	-.0066	25.11
#3	.2380	24.72	1.913	1.906	1.886	1.917	-.0033	25.09

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.899**	**.1639**	**1.895**	**1.956**	**1.853**	**25.31**	**24.48**	**2.069**
Stddev	.004	.0014	.002	.008	.004	.04	.02	.002
%RSD	.2308	.8257	.0912	.3908	.2413	.1777	.0842	.0992
#1	1.897	.1636	1.897	1.953	1.856	25.26	24.46	2.070
#2	1.896	.1627	1.893	1.950	1.848	25.35	24.50	2.070
#3	1.904	.1654	1.894	1.965	1.855	25.32	24.50	2.066

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**24.61**	**1.954**	**1.975**	**25.11**	**1.908**	**1.894**	**1.940**	F **-.1271**
Stddev	.09	.003	.004	.04	.002	.008	.006	.0032
%RSD	.3499	.1472	.1953	.1750	.1265	.4222	.3127	2.551
#1	24.58	1.953	1.973	25.09	1.910	1.885	1.938	-.1268
#2	24.71	1.952	1.972	25.16	1.906	1.900	1.947	-.1304
#3	24.54	1.957	1.979	25.08	1.910	1.897	1.936	-.1240

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.948**	**1.867**	**.0985**	**2.000**	**1.893**	**1.940**	**1.987**	**1.926**
Stddev	.009	.011	.0006	.007	.002	.004	.010	.004
%RSD	.4679	.5881	.5785	.3413	.0989	.2011	.5075	.1825
#1	1.938	1.858	.0981	1.996	1.892	1.944	1.980	1.925
#2	1.956	1.879	.0992	2.008	1.895	1.938	1.998	1.923
#3	1.950	1.863	.0983	1.997	1.891	1.937	1.982	1.930

Zoom In Zoom Out

Sample Name: mp35732-b1 Acquired: 10/15/2022 7:32:24 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**1.928**	**1.943**	**1.931**
Stddev	.005	.002	.001
%RSD	.2854	.1060	.0744
#1	1.930	1.943	1.932
#2	1.922	1.945	1.930
#3	1.932	1.941	1.931

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6938.6**	**69626.**	**9816.6**	**2678.2**
Stddev	7.5	179.	27.0	3.9
%RSD	.10788	.25639	.27475	.14591
#1	6930.4	69778.	9833.2	2677.9
#2	6945.0	69670.	9785.5	2682.2
#3	6940.5	69429.	9831.1	2674.4

Zoom In Zoom Out

Sample Name: mp35732-s1 Acquired: 10/15/2022 7:37:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2391**	**24.54**	**1.913**	**1.913**	**2.022**	**1.898**	**-.0039**	**36.89**	**1.893**
Stddev	.0011	.05	.003	.002	.002	.001	.0016	.11	.001
%RSD	.4408	.1922	.1530	.1213	.0772	.0240	40.74	.2978	.0451
#1	.2397	24.59	1.914	1.913	2.023	1.898	-.0035	36.84	1.893
#2	.2398	24.53	1.910	1.916	2.023	1.898	-.0026	37.01	1.893
#3	.2379	24.49	1.915	1.911	2.020	1.897	-.0057	36.81	1.892

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1870**	**1.912**	**1.929**	**1.843**	**25.04**	**28.70**	**2.075**	**33.90**	**2.174**
Stddev	.0040	.002	.003	.004	.04	.08	.003	.11	.001
%RSD	2.165	.0771	.1545	.1995	.1559	.2882	.1420	.3134	.0482
#1	.1824	1.913	1.932	1.846	25.05	28.70	2.078	33.90	2.174
#2	.1901	1.913	1.927	1.839	25.08	28.78	2.072	34.00	2.173
#3	.1884	1.910	1.927	1.845	25.00	28.62	2.075	33.79	2.175

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.948**	**101.2**	**1.940**	**1.897**	**1.917**	**2.930**	**1.923**	**1.865**	**12.41**
Stddev	.003	.2	.001	.000	.003	.009	.003	.002	.01
%RSD	.1612	.1607	.0435	.0049	.1689	.3203	.1556	.1231	.0895
#1	1.945	101.3	1.941	1.897	1.921	2.938	1.925	1.862	12.40
#2	1.948	101.4	1.940	1.897	1.916	2.933	1.926	1.867	12.42
#3	1.951	101.1	1.940	1.897	1.915	2.920	1.920	1.864	12.40

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.952**	**1.932**	**1.921**	**1.942**	**1.907**	**1.936**	**2.022**	**1.914**
Stddev	.003	.003	.003	.002	.002	.006	.002	.002
%RSD	.1535	.1421	.1499	.0964	.0912	.3366	.0857	.1145
#1	1.949	1.934	1.918	1.943	1.909	1.929	2.022	1.916
#2	1.953	1.934	1.922	1.943	1.906	1.942	2.020	1.913
#3	1.955	1.929	1.924	1.940	1.907	1.936	2.023	1.912

Zoom In Zoom Out

Sample Name: mp35732-s1 Acquired: 10/15/2022 7:37:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6675.4**	**68708.**	**9715.6**	**2633.8**
Stddev	7.6	22.	50.2	1.4
%RSD	.11398	.03180	.51665	.05175
#1	6669.8	68683.	9741.6	2633.4
#2	6684.1	68723.	9657.7	2635.3
#3	6672.4	68718.	9747.4	2632.7

Zoom In Zoom Out

Sample Name: mp35732-s2 Acquired: 10/15/2022 7:41:56 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2383**	**24.56**	**1.927**	**1.922**	**2.032**	**1.905**	**-.0064**	**37.18**	**1.901**
Stddev	.0010	.04	.001	.004	.001	.004	.0008	.07	.004
%RSD	.4033	.1714	.0679	.2013	.0591	.2051	12.74	.1873	.2332
#1	.2390	24.57	1.927	1.920	2.032	1.905	-.0057	37.16	1.896
#2	.2387	24.59	1.927	1.920	2.033	1.909	-.0062	37.25	1.903
#3	.2373	24.51	1.929	1.927	2.031	1.901	-.0073	37.12	1.904

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1877**	**1.918**	**1.926**	**1.847**	**25.08**	**28.80**	**2.060**	**34.15**	**2.183**
Stddev	.0023	.002	.001	.007	.05	.05	.004	.08	.004
%RSD	1.215	.0836	.0720	.3991	.1857	.1722	.1803	.2480	.1586
#1	.1857	1.917	1.925	1.854	25.10	28.80	2.063	34.12	2.182
#2	.1872	1.920	1.926	1.848	25.11	28.85	2.061	34.25	2.180
#3	.1901	1.919	1.928	1.840	25.03	28.75	2.056	34.09	2.187

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.964**	**102.6**	**1.946**	**1.910**	**1.930**	**3.002**	**1.949**	**1.878**	**12.64**
Stddev	.004	.1	.003	.006	.003	.005	.006	.001	.02
%RSD	.1857	.1381	.1359	.3038	.1705	.1526	.3090	.0598	.1603
#1	1.959	102.6	1.943	1.916	1.933	3.001	1.955	1.877	12.62
#2	1.966	102.6	1.948	1.909	1.926	2.999	1.944	1.878	12.64
#3	1.966	102.4	1.947	1.905	1.931	3.007	1.947	1.880	12.66

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.973**	**1.940**	**1.936**	**1.953**	**1.909**	**1.950**	**2.031**	**1.925**
Stddev	.009	.002	.002	.008	.001	.003	.005	.003
%RSD	.4537	.1070	.0812	.4231	.0398	.1286	.2673	.1297
#1	1.984	1.939	1.936	1.962	1.909	1.947	2.025	1.928
#2	1.968	1.942	1.934	1.946	1.908	1.951	2.035	1.925
#3	1.969	1.939	1.937	1.950	1.908	1.951	2.033	1.923

Zoom In Zoom Out

Sample Name: mp35732-s2 Acquired: 10/15/2022 7:41:56 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6674.7**	**68888.**	**9690.5**	**2630.2**
Stddev	8.0	146.	45.4	2.5
%RSD	.12059	.21223	.46822	.09669
#1	6679.8	69030.	9680.6	2632.8
#2	6678.9	68895.	9650.9	2629.9
#3	6665.4	68738.	9740.0	2627.8

Zoom In Zoom Out

Sample Name: jd53503-5 Acquired: 10/15/2022 7:46:40 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**.1961**	**.0001**	**.0277**	**.1602**	**.0011**	**-.0032**	**12.55**	**.0005**
Stddev	.0002	.0023	.0010	.0008	.0005	.0001	.0007	.01	.0001
%RSD	23.75	1.176	857.0	3.008	.3379	6.785	23.60	.0470	22.02
#1	.0008	.1987	-.0009	.0278	.1608	.0011	-.0028	12.55	.0006
#2	.0012	.1954	.0003	.0284	.1602	.0010	-.0040	12.55	.0005
#3	.0010	.1943	.0010	.0268	.1597	.0010	-.0026	12.54	.0004

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0266**	**.0134**	**.0003**	**.0131**	**.2660**	**4.563**	**.0367**	**9.773**	**.2604**
Stddev	.0015	.0003	.0004	.0001	.0024	.015	.0006	.024	.0004
%RSD	5.636	2.362	143.2	.4111	.9053	.3340	1.512	.2492	.1386
#1	.0282	.0131	.0006	.0132	.2635	4.580	.0371	9.756	.2609
#2	.0262	.0136	.0004	.0131	.2664	4.551	.0360	9.763	.2602
#3	.0253	.0136	-.0002	.0131	.2682	4.557	.0369	9.801	.2603

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**77.69**	**.0295**	**.0102**	**.0000**	**3.116**	**.0014**	**.0013**	**12.62**
Stddev	.0001	.14	.0002	.0006	.0006	.009	.0006	.0011	.03
%RSD	8.071	.1852	.5116	5.969	12660.	.2967	41.42	83.17	.2048
#1	.0010	77.80	.0297	.0107	-.0000	3.125	.0016	.0002	12.64
#2	.0009	77.74	.0294	.0095	-.0006	3.106	.0007	.0014	12.63
#3	.0009	77.53	.0294	.0102	.0006	3.117	.0019	.0024	12.59

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0018**	**.0608**	**-.0001**	**.0020**	**.0003**	**.0151**	**.0972**	**-.0002**
Stddev	.0006	.0002	.0003	.0014	.0002	.0002	.0004	.0002
%RSD	32.48	.2551	178.1	72.03	58.95	1.361	.3766	86.59
#1	-.0015	.0610	-.0001	.0037	.0001	.0149	.0975	-.0000
#2	-.0025	.0608	.0001	.0011	.0003	.0153	.0974	-.0002
#3	-.0015	.0607	-.0004	.0012	.0005	.0151	.0968	-.0005

Zoom In Zoom Out

Sample Name: jd53503-5 Acquired: 10/15/2022 7:46:40 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6995.6**	**69755.**	**9733.7**	**2660.8**
Stddev	1.0	69.	29.3	3.8
%RSD	.01467	.09892	.30105	.14216
#1	6994.7	69675.	9767.2	2657.2
#2	6996.7	69798.	9721.6	2660.6
#3	6995.5	69792.	9712.5	2664.8

Zoom In Zoom Out

Sample Name: mp35732-sd1 Acquired: 10/15/2022 7:51:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0005**	**.2576**	**-.0041**	**.0341**	**.1715**	**.0011**	**-.0076**	**14.17**	**.0011**
Stddev	.0005	.0421	.0031	.0029	.0011	.0002	.0019	.03	.0002
%RSD	101.4	16.36	73.82	8.593	.6471	18.32	24.58	.2447	15.91
#1	.0009	.2736	-.0055	.0356	.1721	.0010	-.0098	14.19	.0009
#2	-.0001	.2098	-.0063	.0360	.1702	.0014	-.0069	14.20	.0012
#3	.0006	.2894	-.0006	.0307	.1722	.0011	-.0062	14.13	.0012

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0353**	**.0144**	**.0006**	**.0134**	**.2841**	**4.947**	**.0379**	**10.58**	**.2830**
Stddev	.0089	.0004	.0017	.0010	.0126	.026	.0018	.14	.0006
%RSD	25.16	2.763	299.7	7.625	4.429	.5290	4.675	1.347	.2139
#1	.0375	.0142	.0009	.0124	.2984	4.970	.0394	10.42	.2835
#2	.0256	.0149	-.0013	.0145	.2791	4.951	.0360	10.69	.2823
#3	.0429	.0142	.0022	.0132	.2747	4.918	.0385	10.62	.2831

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0025**	**83.36**	**.0314**	**.0191**	**.0060**	**3.451**	**.0037**	**-.0021**	**13.64**
Stddev	.0006	.11	.0011	.0008	.0032	.012	.0043	.0025	.10
%RSD	25.96	.1342	3.556	4.228	52.23	.3367	115.7	118.9	.7047
#1	.0018	83.33	.0309	.0182	.0096	3.463	-.0011	-.0040	13.71
#2	.0031	83.49	.0327	.0197	.0046	3.440	.0051	.0007	13.69
#3	.0026	83.27	.0307	.0193	.0038	3.449	.0071	-.0029	13.53

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0037**	**.0667**	**.0002**	**-.0001**	**.0021**	**.0258**	**.1177**	**-.0007**
Stddev	.0033	.0004	.0021	.0051	.0012	.0031	.0011	.0006
%RSD	88.97	.6406	893.3	5685.	56.18	12.13	.9627	94.12
#1	-.0075	.0670	-.0008	.0052	.0011	.0222	.1182	-.0011
#2	-.0025	.0662	.0027	-.0050	.0018	.0281	.1185	.0001
#3	-.0012	.0670	-.0012	-.0004	.0034	.0270	.1164	-.0010

Zoom In Zoom Out

Sample Name: mp35732-sd1 Acquired: 10/15/2022 7:51:46 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 5.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7450.9**	**70768.**	**9696.4**	**2727.9**
Stddev	23.1	180.	40.8	12.8
%RSD	.31021	.25409	.42053	.47103
#1	7431.7	70563.	9718.8	2716.2
#2	7444.4	70843.	9649.3	2725.8
#3	7476.6	70898.	9721.0	2741.7

Zoom In Zoom Out

Sample Name: jd53129-1a Acquired: 10/15/2022 7:56:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0088**	**.0006**	**.0625**	**.1248**	**.0000**	**-.0020**	**63.16**	**.0003**
Stddev	.0002	.0050	.0009	.0009	.0002	.0000	.0009	.06	.0001
%RSD	16.19	56.17	152.6	1.446	.1473	87.20	44.52	.0921	23.74
#1	.0009	.0032	.0016	.0621	.1250	.0000	-.0025	63.09	.0003
#2	.0008	.0125	.0001	.0635	.1247	.0001	-.0010	63.17	.0002
#3	.0011	.0108	.0001	.0618	.1248	.0000	-.0025	63.21	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0178**	**.0001**	**.0013**	**.0077**	**.2324**	**6.509**	**.0022**	**14.36**	**.1409**
Stddev	.0001	.0001	.0001	.0003	.0023	.034	.0006	.12	.0004
%RSD	.7277	44.24	6.591	3.907	.9898	.5208	27.73	.8406	.2996
#1	.0179	.0001	.0012	.0078	.2313	6.485	.0029	14.27	.1414
#2	.0177	.0001	.0014	.0073	.2308	6.548	.0022	14.30	.1408
#3	.0179	.0002	.0012	.0079	.2350	6.495	.0016	14.49	.1405

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**137.5**	**.0013**	**.0701**	**.2353**	**21.22**	**.0014**	**.0023**	**6.573**
Stddev	.0001	.3	.0003	.0008	.0011	.04	.0017	.0024	.012
%RSD	11.30	.2297	20.27	1.079	.4809	.2003	128.7	100.8	.1846
#1	.0012	137.8	.0016	.0707	.2345	21.17	.0033	.0047	6.559
#2	.0010	137.5	.0011	.0692	.2366	21.23	-.0001	.0023	6.578
#3	.0012	137.2	.0011	.0704	.2348	21.25	.0009	-.0000	6.582

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0016**	**.3050**	**-.0001**	**.0007**	**.0015**	**.0096**	**.0393**	**-.0001**
Stddev	.0006	.0004	.0003	.0010	.0001	.0004	.0001	.0001
%RSD	40.70	.1474	294.4	154.1	8.534	4.343	.1768	60.97
#1	-.0010	.3052	.0002	-.0004	.0016	.0100	.0392	-.0000
#2	-.0023	.3054	-.0003	.0008	.0015	.0092	.0393	-.0001
#3	-.0014	.3045	-.0003	.0016	.0013	.0096	.0393	-.0001

Zoom In Zoom Out

Sample Name: jd53129-1a Acquired: 10/15/2022 7:56:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6679.0**	**68236.**	**9600.8**	**2586.4**
Stddev	5.5	173.	34.0	2.3
%RSD	.08197	.25327	.35453	.08709
#1	6678.7	68143.	9634.9	2589.0
#2	6684.7	68130.	9600.7	2584.8
#3	6673.7	68435.	9566.8	2585.4

Zoom In Zoom Out

Sample Name: jd53360-2 Acquired: 10/15/2022 8:01:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**35.23**	**.0142**	**.0394**	**.4820**	**.0050**	**-.0009**	**110.7**	**.0085**
Stddev	.0001	.03	.0004	.0002	.0007	.0000	.0007	.3	.0001
%RSD	1.705	.0894	2.896	.4412	.1531	.3371	79.32	.2751	1.022
#1	.0033	35.24	.0138	.0393	.4811	.0050	-.0004	110.5	.0085
#2	.0035	35.20	.0146	.0394	.4822	.0050	-.0006	110.6	.0084
#3	.0034	35.26	.0141	.0396	.4826	.0050	-.0018	111.1	.0086

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.107**	**.1411**	**.1781**	**.1851**	**36.95**	**6.059**	**.0168**	**12.35**	F **9.533**
Stddev	.002	.0006	.0006	.0009	.06	.013	.0008	.07	.034
%RSD	.1632	.4017	.3220	.4952	.1507	.2219	4.730	.5508	.3566
#1	1.106	.1409	.1785	.1859	36.89	6.045	.0177	12.28	9.504
#2	1.106	.1417	.1775	.1841	36.95	6.061	.0167	12.34	9.525
#3	1.109	.1407	.1783	.1853	37.00	6.072	.0161	12.42	9.571

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0029**	**137.7**	**.0947**	**1.675**	**.1027**	**2.615**	**.0026**	**.0052**	F **27.90**
Stddev	.0001	.3	.0001	.002	.0009	.002	.0011	.0006	.10
%RSD	2.970	.2498	.0709	.1425	.9035	.0781	42.99	12.24	.3682
#1	.0029	137.8	.0946	1.672	.1034	2.615	.0016	.0052	27.79
#2	.0029	137.3	.0947	1.676	.1016	2.613	.0023	.0046	27.92
#3	.0028	137.9	.0946	1.676	.1029	2.617	.0038	.0059	27.99

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0027**	**.5366**	**.1564**	**.0117**	**.0464**	**.0276**	**.2173**	**.0062**
Stddev	.0007	.0011	.0007	.0006	.0003	.0004	.0007	.0004
%RSD	26.61	.1957	.4347	5.202	.7232	1.410	.3159	5.666
#1	-.0033	.5354	.1572	.0113	.0464	.0273	.2177	.0064
#2	-.0029	.5370	.1559	.0124	.0460	.0275	.2176	.0064
#3	-.0019	.5374	.1561	.0115	.0467	.0281	.2165	.0058

Zoom In Zoom Out

Sample Name: jd53360-2 Acquired: 10/15/2022 8:01:59 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6455.7**	**81649.**	**11613.**	**3136.9**
Stddev	3.7	117.	78.	1.2
%RSD	.05717	.14332	.67268	.03924
#1	6456.7	81681.	11654.	3138.4
#2	6451.7	81747.	11661.	3136.1
#3	6458.9	81520.	11523.	3136.3

Zoom In Zoom Out

Sample Name: jd53360-3 Acquired: 10/15/2022 8:07:05 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0063**	**15.17**	**.0232**	**.0517**	**.6170**	**.0028**	**.0035**	F **883.2**	**.0066**
Stddev	.0002	.03	.0006	.0006	.0016	.0001	.0014	5.0	.0001
%RSD	3.919	.1920	2.480	1.085	.2580	2.921	40.56	.5615	1.999
#1	.0061	15.18	.0237	.0518	.6177	.0028	.0019	887.4	.0066
#2	.0061	15.14	.0226	.0522	.6151	.0028	.0038	884.5	.0065
#3	.0066	15.20	.0232	.0511	.6180	.0027	.0047	877.8	.0068

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.418**	**.0713**	**.0187**	**.1546**	**72.18**	**9.261**	**.0158**	**48.75**	F **16.08**
Stddev	.009	.0008	.0008	.0014	.15	.029	.0004	.10	.06
%RSD	.6215	1.053	4.349	.9360	.2121	.3187	2.485	.2135	.3945
#1	1.424	.0711	.0191	.1541	72.34	9.292	.0155	48.85	16.13
#2	1.421	.0707	.0194	.1563	72.04	9.233	.0157	48.75	16.09
#3	1.408	.0721	.0178	.1535	72.16	9.257	.0163	48.64	16.01

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**111.7**	**.0872**	**2.483**	**.0694**	**5.291**	**.0079**	**.0022**	F **32.11**
Stddev	.0002	.3	.0003	.012	.0006	.040	.0004	.0025	.02
%RSD	27.72	.2399	.3750	.4741	.8900	.7488	5.459	114.3	.0495
#1	-.0006	112.0	.0874	2.476	.0688	5.267	.0074	.0049	32.10
#2	-.0005	111.5	.0869	2.477	.0694	5.269	.0082	.0015	32.13
#3	-.0009	111.8	.0874	2.497	.0701	5.336	.0082	.0001	32.11

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0033**	**3.080**	**.1816**	**.0227**	**.0429**	**.0387**	**.1532**	**.0054**
Stddev	.0006	.005	.0030	.0013	.0007	.0011	.0012	.0000
%RSD	17.85	.1655	1.653	5.706	1.677	2.799	.7779	.5562
#1	-.0039	3.085	.1827	.0240	.0429	.0376	.1525	.0053
#2	-.0028	3.075	.1840	.0227	.0436	.0388	.1526	.0054
#3	-.0032	3.081	.1782	.0214	.0422	.0397	.1546	.0053

Zoom In Zoom Out

Sample Name: jd53360-3 Acquired: 10/15/2022 8:07:05 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5780.7	69051.	10020.	2605.3
Stddev	4.4	137.	47.	5.0
%RSD	.07580	.19769	.46762	.19035
#1	5778.6	68908.	9969.1	2610.7
#2	5785.8	69064.	10031.	2604.3
#3	5777.8	69180.	10061.	2601.0

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 8:12:24 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2456**	**39.29**	**1.996**	**2.029**	**1.979**	**2.007**	**2.101**	**39.95**	**2.004**
Stddev	.0011	.02	.004	.001	.004	.005	.003	.03	.006
%RSD	.4581	.0487	.2043	.0425	.1753	.2727	.1526	.0742	.2900
#1	.2467	39.28	2.000	2.030	1.983	2.010	2.101	39.94	2.010
#2	.2456	39.31	1.992	2.029	1.977	2.011	2.098	39.98	1.998
#3	.2445	39.28	1.994	2.028	1.978	2.001	2.104	39.92	2.005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.013**	**2.005**	**2.042**	**1.937**	**40.04**	**39.06**	**1.969**	**39.75**	**2.047**
Stddev	.008	.003	.006	.006	.07	.03	.002	.09	.003
%RSD	.3902	.1505	.3003	.2876	.1762	.0839	.0968	.2259	.1278
#1	2.020	2.008	2.039	1.943	40.10	39.03	1.970	39.69	2.045
#2	2.014	2.002	2.039	1.935	40.05	39.06	1.970	39.85	2.046
#3	2.004	2.006	2.049	1.932	39.96	39.09	1.967	39.70	2.050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.026**	**39.72**	**2.024**	**2.008**	**2.055**	**1.961**	**2.015**	**2.004**	**5.019**
Stddev	.006	.04	.003	.005	.005	.009	.006	.005	.009
%RSD	.2813	.1000	.1479	.2320	.2541	.4800	.2854	.2612	.1790
#1	2.032	39.76	2.025	2.011	2.061	1.957	2.013	2.002	5.024
#2	2.021	39.71	2.021	2.002	2.052	1.955	2.010	2.001	5.009
#3	2.026	39.68	2.027	2.009	2.052	1.972	2.021	2.010	5.025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 8:12:24 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.061**	**1.986**	**2.013**	**2.084**	**2.014**	**2.016**	**2.057**	**2.002**
Stddev	.006	.004	.001	.005	.005	.008	.009	.001
%RSD	.3130	.2127	.0539	.2621	.2395	.3803	.4594	.0678
#1	2.068	1.990	2.013	2.088	2.013	2.024	2.067	2.003
#2	2.056	1.982	2.013	2.078	2.009	2.009	2.049	2.000
#3	2.060	1.985	2.015	2.087	2.019	2.014	2.056	2.002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	6791.9	69143.	9580.0	2674.6
Stddev	10.8	120.	32.0	9.0
%RSD	.15857	.17352	.33440	.33555
#1	6781.2	69218.	9616.9	2664.8
#2	6802.7	69207.	9561.4	2682.4
#3	6791.9	69005.	9561.5	2676.7

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 8:17:10 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0054**	**-.0007**	**.0023**	**.0001**	**.0001**	**.0006**	**-.0002**	**.0002**
Stddev	.0001	.0060	.0014	.0006	.0001	.0000	.0002	.0026	.0002
%RSD	34.00	110.7	208.0	27.35	43.67	32.63	35.64	1102.	66.79
#1	.0002	-.0036	-.0022	.0027	.0002	.0001	.0004	-.0004	.0004
#2	.0001	-.0006	.0006	.0027	.0001	.0001	.0008	.0024	.0002
#3	.0002	-.0122	-.0004	.0016	.0001	.0001	.0004	-.0028	.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	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**-.0000**	**.0003**	**-.0000**	**.0059**	**-.0084**	**.0018**	**-.0165**	**.0001**
Stddev	.0005	.0002	.0002	.0002	.0027	.0193	.0003	.0051	.0000
%RSD	60.10	2383.	70.05	674.9	46.31	230.0	18.22	30.95	16.57
#1	-.0012	.0002	.0005	-.0002	.0088	.0074	.0017	-.0107	.0001
#2	-.0010	-.0000	.0004	.0002	.0054	-.0298	.0015	-.0200	.0001
#3	-.0003	-.0002	.0001	-.0000	.0034	-.0027	.0022	-.0189	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**-.0510**	**.0000**	**.0026**	**.0011**	**.0016**	**.0001**	**.0019**	**.0027**
Stddev	.0000	.0025	.0001	.0009	.0008	.0032	.0011	.0009	.0007
%RSD	4.106	4.805	413.7	34.30	74.89	208.0	1504.	48.78	25.95
#1	.0009	-.0485	-.0000	.0019	.0019	.0043	.0012	.0017	.0020
#2	.0008	-.0534	-.0001	.0024	.0003	.0023	.0000	.0030	.0034
#3	.0008	-.0511	.0001	.0037	.0011	-.0020	-.0010	.0011	.0026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 8:17:10 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0001**	**.0000**	**.0007**	**-.0007**	**.0003**	**.0026**	**-.0011**	**.0002**
Stddev	.0003	.0000	.0002	.0005	.0001	.0007	.0001	.0000
%RSD	292.4	52.92	32.13	73.40	36.79	26.83	10.46	9.094
#1	-.0002	.0000	.0006	-.0003	.0004	.0022	-.0012	.0002
#2	.0001	.0000	.0005	-.0005	.0002	.0022	-.0012	.0002
#3	.0003	.0000	.0009	-.0013	.0004	.0033	-.0010	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7669.6**	**71683.**	**9634.4**	**2757.8**
Stddev	11.6	187.	359.1	3.8
%RSD	.15124	.26120	3.7269	.13678
#1	7674.4	71881.	9225.2	2758.1
#2	7656.4	71509.	9896.7	2753.8
#3	7678.1	71659.	9781.3	2761.4

Zoom In Zoom Out

Sample Name: jd53360-4 Acquired: 10/15/2022 8:22:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**1.405**	**-.0008**	**.0067**	**.0157**	**.0001**	**-.0006**	**34.54**	**.0003**
Stddev	.0002	.011	.0008	.0003	.0003	.0000	.0005	.07	.0001
%RSD	41.12	.7948	97.75	4.360	1.622	34.64	78.28	.1984	27.00
#1	.0004	1.393	.0001	.0065	.0157	.0001	-.0001	34.61	.0003
#2	.0006	1.409	-.0011	.0065	.0155	.0001	-.0009	34.49	.0003
#3	.0002	1.414	-.0014	.0070	.0160	.0001	-.0010	34.50	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0248**	**.0010**	**.0025**	**.0054**	**2.212**	**.9973**	**.0018**	**1.512**	**.2702**
Stddev	.0013	.0001	.0001	.0003	.011	.0065	.0003	.011	.0006
%RSD	5.137	9.773	3.344	6.026	.5160	.6541	16.90	.7095	.2152
#1	.0253	.0010	.0025	.0050	2.223	1.001	.0015	1.516	.2709
#2	.0257	.0010	.0025	.0054	2.200	.9898	.0017	1.500	.2700
#3	.0233	.0012	.0024	.0057	2.214	1.001	.0021	1.521	.2698

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**13.39**	**.0020**	**.0525**	**.0013**	**.3824**	**.0003**	**-.0010**	**3.072**
Stddev	.0001	.01	.0001	.0010	.0007	.0040	.0006	.0015	.028
%RSD	10.50	.0547	4.671	1.816	55.41	1.052	211.6	149.5	.8998
#1	.0010	13.39	.0021	.0515	.0021	.3810	.0001	.0007	3.066
#2	.0012	13.38	.0019	.0526	.0007	.3793	.0009	-.0021	3.048
#3	.0011	13.39	.0021	.0534	.0012	.3869	-.0002	-.0015	3.103

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0004**	**.1292**	**.0302**	**-.0006**	**.0034**	**.0044**	**.0106**	**.0009**
Stddev	.0003	.0002	.0035	.0004	.0002	.0005	.0001	.0001
%RSD	79.40	.1540	11.56	65.67	5.558	10.71	.8677	13.94
#1	-.0006	.1291	.0341	-.0009	.0033	.0049	.0106	.0010
#2	-.0000	.1295	.0290	-.0002	.0036	.0044	.0105	.0008
#3	-.0007	.1292	.0274	-.0009	.0033	.0040	.0107	.0008

Zoom In Zoom Out

Sample Name: jd53360-4 Acquired: 10/15/2022 8:22:23 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7270.6**	**70869.**	**9839.9**	**2687.0**
Stddev	12.2	16.	45.9	6.8
%RSD	.16845	.02287	.46597	.25433
#1	7274.4	70851.	9787.4	2692.9
#2	7280.5	70872.	9860.3	2688.5
#3	7256.9	70883.	9872.0	2679.5

Zoom In Zoom Out

Sample Name: jd53388-12 Acquired: 10/15/2022 8:27:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0242**	**-.0014**	**.0175**	**.0223**	**.0000**	**-.0013**	**13.23**	**.0002**
Stddev	.0002	.0078	.0005	.0002	.0001	.0001	.0010	.04	.0000
%RSD	47.29	32.24	38.93	1.211	.3829	488.7	77.08	.3343	18.40
#1	.0002	.0236	-.0007	.0173	.0222	.0001	-.0018	13.21	.0002
#2	.0003	.0167	-.0017	.0175	.0223	.0000	-.0020	13.28	.0002
#3	.0005	.0322	-.0016	.0177	.0223	-.0001	-.0001	13.20	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0316**	**.0001**	**.0003**	**.0008**	**2.730**	**.8107**	**.0010**	**2.454**	**.4599**
Stddev	.0019	.0002	.0002	.0000	.008	.0144	.0006	.045	.0005
%RSD	6.082	151.5	65.15	5.748	.2870	1.775	57.64	1.816	.1186
#1	.0294	.0003	.0005	.0008	2.724	.7972	.0007	2.407	.4604
#2	.0329	-.0001	.0001	.0008	2.727	.8259	.0017	2.460	.4600
#3	.0326	.0001	.0004	.0009	2.739	.8089	.0007	2.496	.4593

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**12.81**	**-.0004**	**.0368**	**.0004**	**.7024**	**.0007**	**.0001**	**1.140**
Stddev	.0002	.01	.0004	.0009	.0013	.0077	.0009	.0008	.004
%RSD	20.33	.0580	107.5	2.381	320.5	1.097	133.5	584.4	.3031
#1	.0011	12.82	-.0002	.0363	.0010	.7112	.0007	.0009	1.141
#2	.0008	12.81	-.0009	.0363	-.0011	.6966	-.0002	.0001	1.142
#3	.0010	12.81	-.0001	.0378	.0014	.6995	.0016	-.0006	1.136

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**.0653**	**.0005**	**-.0009**	**.0008**	**.0033**	**.0022**	**.0002**
Stddev	.0009	.0003	.0001	.0002	.0002	.0004	.0001	.0001
%RSD	136.3	.4839	24.33	24.25	29.09	12.73	6.242	53.27
#1	-.0012	.0653	.0006	-.0007	.0010	.0030	.0021	.0002
#2	-.0011	.0650	.0004	-.0011	.0009	.0038	.0023	.0001
#3	.0004	.0656	.0004	-.0008	.0005	.0031	.0022	.0002

Zoom In Zoom Out

Sample Name: jd53388-12 Acquired: 10/15/2022 8:27:30 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7413.1**	**71393.**	**9840.2**	**2702.3**
Stddev	5.5	118.	82.6	2.7
%RSD	.07452	.16537	.83941	.10148
#1	7407.2	71313.	9848.0	2699.2
#2	7418.1	71338.	9754.0	2703.3
#3	7414.0	71528.	9918.6	2704.4

Zoom In Zoom Out

Sample Name: jd53489-1 Acquired: 10/15/2022 8:32:39 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0016**	**.0013**	**.0064**	**.1262**	**.2491**	**-.0000**	**-.0017**	**112.6**	**.0008**
Stddev	.0002	.0050	.0004	.0006	.0004	.0001	.0002	.1	.0001
%RSD	12.78	386.8	5.721	.4863	.1453	45950.	12.92	.0523	13.46
#1	.0018	-.0044	.0066	.1269	.2492	-.0001	-.0019	112.6	.0009
#2	.0016	.0034	.0060	.1258	.2487	.0000	-.0018	112.6	.0007
#3	.0014	.0049	.0067	.1260	.2494	.0001	-.0015	112.7	.0008

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1149**	**.0002**	**.0010**	**.0274**	**11.47**	**5.659**	**.0028**	**9.604**	**1.588**
Stddev	.0017	.0001	.0001	.0002	.03	.023	.0007	.015	.012
%RSD	1.468	49.20	8.636	.8603	.2279	.3987	24.71	.1529	.7770
#1	.1168	.0001	.0010	.0275	11.50	5.662	.0020	9.590	1.597
#2	.1137	.0002	.0011	.0275	11.44	5.635	.0033	9.603	1.593
#3	.1142	.0004	.0010	.0271	11.47	5.679	.0032	9.619	1.574

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**41.80**	**.0037**	**.9480**	**.0034**	**24.09**	**.0003**	**.0008**	**8.364**
Stddev	.0003	.03	.0003	.0005	.0007	.05	.0004	.0012	.023
%RSD	26.36	.0650	7.279	.0576	20.20	.2068	128.0	163.1	.2763
#1	.0012	41.81	.0039	.9482	.0030	24.12	.0002	.0018	8.365
#2	.0016	41.82	.0039	.9485	.0030	24.13	.0008	-.0006	8.387
#3	.0009	41.77	.0034	.9474	.0042	24.04	-.0000	.0011	8.341

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0026**	**.3472**	**-.0004**	**.0021**	**.0017**	**.0095**	**.0304**	**-.0005**
Stddev	.0005	.0004	.0001	.0007	.0001	.0003	.0001	.0001
%RSD	21.21	.1133	29.84	30.85	8.022	3.498	.3863	25.79
#1	-.0032	.3476	-.0005	.0021	.0015	.0096	.0305	-.0006
#2	-.0023	.3474	-.0003	.0015	.0017	.0099	.0303	-.0004
#3	-.0022	.3468	-.0003	.0028	.0018	.0092	.0305	-.0005

Zoom In Zoom Out

Sample Name: jd53489-1 Acquired: 10/15/2022 8:32:39 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6851.8**	**69530.**	**9686.4**	**2588.9**
Stddev	15.3	471.	11.8	6.6
%RSD	.22279	.67726	.12150	.25623
#1	6856.5	69243.	9683.3	2591.5
#2	6834.7	69272.	9676.4	2581.3
#3	6864.1	70073.	9699.4	2593.8

Zoom In Zoom Out

Sample Name: jd53489-2 Acquired: 10/15/2022 8:37:43 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**-.0049**	**.0097**	**.1152**	**.2668**	**.0001**	**-.0019**	**107.8**	**.0007**
Stddev	.0003	.0061	.0002	.0022	.0005	.0001	.0005	.2	.0001
%RSD	28.49	123.9	2.036	1.903	.2022	114.5	24.28	.2281	9.032
#1	.0014	.0011	.0096	.1128	.2674	.0000	-.0025	108.0	.0008
#2	.0007	-.0110	.0099	.1170	.2663	.0000	-.0016	107.5	.0006
#3	.0011	-.0047	.0097	.1159	.2668	.0001	-.0017	107.8	.0007

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1251**	**.0001**	**.0011**	**.0194**	**17.79**	**5.624**	**.0030**	**9.616**	**1.713**
Stddev	.0025	.0001	.0005	.0003	.06	.053	.0005	.009	.004
%RSD	2.000	69.63	46.55	1.437	.3092	.9487	15.73	.0934	.2168
#1	.1233	.0001	.0016	.0197	17.84	5.684	.0025	9.623	1.716
#2	.1279	.0000	.0011	.0193	17.73	5.583	.0034	9.618	1.709
#3	.1239	.0002	.0006	.0192	17.80	5.605	.0031	9.606	1.713

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**43.80**	**.0048**	**.7811**	**.0016**	**18.48**	**.0010**	**.0017**	**8.373**
Stddev	.0001	.12	.0002	.0151	.0009	.25	.0008	.0006	.107
%RSD	7.088	.2845	3.580	1.931	55.60	1.361	83.93	36.21	1.277
#1	.0012	43.92	.0046	.7637	.0019	18.19	.0006	.0024	8.250
#2	.0013	43.67	.0049	.7886	.0023	18.65	.0004	.0011	8.432
#3	.0013	43.80	.0050	.7909	.0006	18.61	.0020	.0016	8.437

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0021**	**.3313**	**-.0007**	**.0007**	**.0019**	**.0101**	**.0229**	**-.0007**
Stddev	.0007	.0006	.0003	.0005	.0004	.0003	.0004	.0001
%RSD	31.17	.1829	43.27	74.04	22.42	3.442	1.652	17.55
#1	-.0017	.3320	-.0008	.0007	.0014	.0097	.0225	-.0006
#2	-.0018	.3312	-.0008	.0011	.0021	.0102	.0231	-.0008
#3	-.0029	.3308	-.0003	.0001	.0021	.0104	.0232	-.0008

Zoom In Zoom Out

Sample Name: jd53489-2 Acquired: 10/15/2022 8:37:43 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6921.3**	**69795.**	**9734.4**	**2627.8**
Stddev	84.0	117.	29.5	30.9
%RSD	1.2143	.16819	.30331	1.1751
#1	7018.3	69749.	9700.5	2663.5
#2	6875.7	69929.	9754.0	2610.3
#3	6869.9	69708.	9748.8	2609.7

Zoom In Zoom Out

Sample Name: jd53489-3 Acquired: 10/15/2022 8:42:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**-.0030**	**.0080**	**.1162**	**.2301**	**.0000**	**-.0013**	**106.6**	**.0007**
Stddev	.0005	.0089	.0006	.0010	.0002	.0001	.0006	.1	.0001
%RSD	32.09	300.9	7.281	.8700	.1048	370.1	47.91	.1020	14.19
#1	.0010	.0069	.0073	.1168	.2304	-.0001	-.0010	106.7	.0008
#2	.0019	-.0104	.0085	.1150	.2299	.0001	-.0020	106.5	.0008
#3	.0015	-.0053	.0080	.1168	.2301	.0000	-.0009	106.7	.0006

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.1104**	**.0002**	**.0010**	**.0142**	**13.57**	**5.486**	**.0039**	**9.475**	**1.484**
Stddev	.0012	.0002	.0002	.0001	.05	.014	.0007	.048	.002
%RSD	1.045	106.8	18.99	.6248	.3537	.2526	17.39	.5070	.1280
#1	.1108	.0003	.0008	.0141	13.54	5.502	.0038	9.476	1.485
#2	.1091	-.0000	.0011	.0142	13.54	5.476	.0046	9.427	1.482
#3	.1114	.0003	.0011	.0142	13.62	5.480	.0033	9.523	1.485

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**43.16**	**.0036**	**.6347**	**.0016**	**20.13**	**.0018**	**.0027**	**8.163**
Stddev	.0002	.05	.0002	.0032	.0008	.04	.0005	.0023	.015
%RSD	18.91	.1060	5.794	.5059	51.61	.2137	29.11	86.57	.1883
#1	.0010	43.20	.0035	.6384	.0017	20.17	.0021	.0054	8.180
#2	.0013	43.11	.0038	.6329	.0007	20.12	.0021	.0014	8.158
#3	.0009	43.16	.0034	.6329	.0024	20.09	.0012	.0013	8.151

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0022**	**.3257**	**-.0004**	**.0021**	**.0015**	**.0100**	**.0296**	**-.0008**
Stddev	.0005	.0010	.0002	.0013	.0003	.0009	.0002	.0000
%RSD	24.75	.2937	44.79	60.17	19.86	9.469	.6471	5.813
#1	-.0023	.3267	-.0006	.0008	.0016	.0106	.0298	-.0008
#2	-.0027	.3249	-.0005	.0022	.0012	.0104	.0294	-.0008
#3	-.0016	.3255	-.0002	.0034	.0018	.0089	.0297	-.0008

Zoom In Zoom Out

Sample Name: jd53489-3 Acquired: 10/15/2022 8:42:49 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6861.6**	**69568.**	**9749.3**	**2590.9**
Stddev	6.9	99.	37.5	4.5
%RSD	.10038	.14217	.38413	.17492
#1	6853.9	69455.	9791.1	2585.9
#2	6863.6	69642.	9737.9	2592.0
#3	6867.2	69605.	9718.8	2594.7

Zoom In Zoom Out

Sample Name: jd53503-1 Acquired: 10/15/2022 8:47:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.4722**	**-.0005**	**.0234**	**.0591**	**.0006**	**-.0021**	**12.28**	**.0001**
Stddev	.0001	.0090	.0004	.0007	.0001	.0000	.0015	.05	.0001
%RSD	10.66	1.906	81.27	2.814	.2247	1.696	72.37	.3742	99.06
#1	.0006	.4620	-.0002	.0230	.0593	.0006	-.0037	12.30	-.0000
#2	.0008	.4791	-.0003	.0230	.0591	.0006	-.0007	12.30	.0002
#3	.0007	.4755	-.0010	.0242	.0591	.0006	-.0018	12.22	.0001

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0279**	**.0107**	**.0021**	**.0090**	**1.561**	**3.915**	**.0139**	**7.480**	**.1974**
Stddev	.0012	.0002	.0001	.0003	.004	.018	.0006	.030	.0002
%RSD	4.152	2.197	4.593	2.894	.2883	.4647	4.353	.3962	.1047
#1	.0283	.0108	.0020	.0093	1.562	3.910	.0133	7.514	.1976
#2	.0266	.0104	.0020	.0091	1.565	3.899	.0145	7.461	.1972
#3	.0288	.0108	.0022	.0088	1.556	3.935	.0139	7.465	.1974

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**39.17**	**.0182**	**.0133**	**.0021**	**9.099**	**-.0008**	**.0006**	**4.914**
Stddev	.0002	.05	.0004	.0007	.0007	.019	.0004	.0014	.010
%RSD	22.36	.1151	2.373	4.970	31.52	.2078	56.81	230.4	.2073
#1	.0011	39.19	.0187	.0137	.0017	9.112	-.0009	-.0010	4.905
#2	.0007	39.12	.0179	.0125	.0018	9.107	-.0003	.0011	4.925
#3	.0011	39.21	.0180	.0136	.0029	9.077	-.0011	.0016	4.913

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0559**	**.0032**	**-.0005**	**.0007**	**.0057**	**.0842**	**-.0001**
Stddev	.0007	.0001	.0003	.0004	.0002	.0002	.0006	.0001
%RSD	82.66	.2408	10.68	82.83	27.31	2.744	.6829	87.54
#1	-.0013	.0559	.0033	-.0001	.0006	.0057	.0846	-.0001
#2	-.0000	.0560	.0028	-.0009	.0009	.0058	.0836	-.0000
#3	-.0011	.0557	.0034	-.0005	.0006	.0055	.0844	-.0002

Zoom In Zoom Out

Sample Name: jd53503-1 Acquired: 10/15/2022 8:47:54 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7218.1**	**70909.**	**9746.5**	**2675.4**
Stddev	22.6	87.	66.6	2.4
%RSD	.31278	.12246	.68301	.09113
#1	7205.3	70838.	9669.7	2673.8
#2	7244.2	70882.	9783.8	2678.2
#3	7204.9	71006.	9786.1	2674.1

Zoom In Zoom Out

Sample Name: jd53503-2 Acquired: 10/15/2022 8:53:01 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.5335**	**.0017**	**.0441**	**.0290**	**.0002**	**-.0012**	**11.77**	**.0002**
Stddev	.0003	.0011	.0015	.0006	.0001	.0001	.0016	.07	.0001
%RSD	37.86	.2081	86.98	1.410	.2560	21.73	132.6	.5730	34.27
#1	.0010	.5323	.0033	.0448	.0289	.0003	-.0003	11.81	.0001
#2	.0005	.5337	.0003	.0437	.0290	.0002	-.0031	11.81	.0002
#3	.0006	.5345	.0017	.0439	.0290	.0003	-.0003	11.70	.0003

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0119**	**.0389**	**.0022**	**.0010**	**3.791**	**3.546**	**.0077**	**7.027**	**.0816**
Stddev	.0008	.0001	.0003	.0003	.011	.015	.0011	.081	.0004
%RSD	7.077	.3216	11.44	31.45	.2983	.4076	14.63	1.156	.4323
#1	.0110	.0391	.0025	.0012	3.802	3.550	.0089	7.031	.0818
#2	.0119	.0389	.0020	.0011	3.792	3.558	.0073	7.105	.0812
#3	.0127	.0388	.0021	.0006	3.779	3.530	.0068	6.943	.0818

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**62.96**	**.0441**	**.0070**	**.0000**	**12.28**	**-.0002**	**.0012**	**4.668**
Stddev	.0000	.15	.0003	.0007	.0002	.05	.0006	.0014	.032
%RSD	4.683	.2384	.6626	9.865	505.1	.3988	275.0	122.8	.6808
#1	.0006	63.11	.0438	.0078	.0001	12.30	.0004	-.0001	4.704
#2	.0006	62.96	.0443	.0069	-.0002	12.22	-.0003	.0009	4.644
#3	.0006	62.81	.0442	.0064	.0002	12.31	-.0008	.0027	4.656

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0012**	**.0698**	**.0041**	**-.0009**	**.0010**	**.0055**	**.0748**	**.0002**
Stddev	.0012	.0003	.0002	.0002	.0001	.0004	.0002	.0001
%RSD	101.1	.3616	4.751	23.72	7.317	7.419	.2594	52.93
#1	.0000	.0701	.0040	-.0009	.0010	.0052	.0749	.0003
#2	-.0023	.0696	.0041	-.0010	.0011	.0054	.0746	.0001
#3	-.0012	.0697	.0044	-.0006	.0010	.0060	.0750	.0001

Zoom In Zoom Out

Sample Name: jd53503-2 Acquired: 10/15/2022 8:53:01 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7115.6**	**70721.**	**9759.1**	**2662.0**
Stddev	16.2	30.	89.1	9.3
%RSD	.22738	.04239	.91299	.34775
#1	7097.0	70713.	9736.9	2653.8
#2	7126.2	70696.	9683.2	2672.0
#3	7123.6	70754.	9857.2	2660.2

Zoom In Zoom Out

Sample Name: jd53503-3 Acquired: 10/15/2022 8:58:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.3196**	**.0011**	**.0357**	**.0502**	**.0010**	**-.0012**	**6.165**	**.0002**
Stddev	.0005	.0053	.0008	.0010	.0001	.0000	.0009	.011	.0001
%RSD	49.82	1.651	73.22	2.901	.1354	3.719	74.04	.1753	51.04
#1	.0015	.3135	.0015	.0368	.0503	.0010	-.0016	6.176	.0002
#2	.0008	.3224	.0017	.0347	.0502	.0011	-.0002	6.162	.0002
#3	.0006	.3229	.0002	.0355	.0501	.0010	-.0019	6.155	.0004

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0389**	**.0220**	**.0002**	**.0012**	**19.29**	**6.175**	**.0454**	**15.11**	**.2931**
Stddev	.0010	.0001	.0002	.0002	.12	.043	.0013	.07	.0010
%RSD	2.466	.6038	102.5	12.35	.6110	.7036	2.822	.4392	.3517
#1	.0379	.0220	.0001	.0011	19.42	6.224	.0449	15.18	.2920
#2	.0391	.0221	.0000	.0013	19.26	6.144	.0469	15.10	.2940
#3	.0398	.0219	.0004	.0014	19.19	6.156	.0445	15.04	.2934

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**32.15**	**.0478**	**.0284**	**.0003**	**19.29**	**.0011**	**.0006**	**7.566**
Stddev	.0001	.14	.0003	.0009	.0003	.02	.0003	.0007	.007
%RSD	37.00	.4413	.5236	3.317	112.2	.0901	23.13	117.2	.0889
#1	.0002	32.31	.0475	.0277	.0003	19.30	.0008	-.0001	7.573
#2	.0005	32.12	.0480	.0295	.0005	19.29	.0012	.0014	7.561
#3	.0004	32.03	.0478	.0281	-.0000	19.27	.0014	.0006	7.563

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0016**	**.0573**	**.0015**	**.0004**	**.0014**	**.0073**	**.2197**	**-.0009**
Stddev	.0013	.0002	.0003	.0014	.0003	.0002	.0003	.0001
%RSD	82.88	.3592	17.47	319.9	20.31	2.182	.1409	9.627
#1	-.0018	.0576	.0012	.0004	.0016	.0074	.2197	-.0009
#2	-.0029	.0573	.0017	-.0009	.0015	.0071	.2194	-.0008
#3	-.0002	.0572	.0014	.0018	.0011	.0073	.2200	-.0010

Zoom In Zoom Out

Sample Name: jd53503-3 Acquired: 10/15/2022 8:58:07 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7242.0**	**71226.**	**9771.0**	**2668.2**
Stddev	1.9	185.	93.4	.9
%RSD	.02663	.25930	.95550	.03218
#1	7239.9	71427.	9666.4	2667.2
#2	7243.8	71064.	9800.7	2668.8
#3	7242.3	71187.	9846.0	2668.4

Zoom In Zoom Out

Sample Name: jd53503-4 Acquired: 10/15/2022 9:03:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**.9107**	**-.0008**	**.0339**	**.0423**	**.0004**	**-.0019**	**10.73**	**.0003**
Stddev	.0003	.0056	.0002	.0005	.0003	.0000	.0008	.01	.0001
%RSD	40.83	.6169	21.85	1.359	.6109	8.326	41.42	.0725	21.31
#1	.0009	.9095	-.0008	.0344	.0421	.0005	-.0017	10.72	.0004
#2	.0008	.9058	-.0009	.0335	.0422	.0004	-.0013	10.74	.0003
#3	.0004	.9169	-.0006	.0339	.0426	.0004	-.0028	10.74	.0003

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0115**	**.0099**	**.0010**	**.0035**	**.3430**	**4.290**	**.0080**	**5.553**	**.0843**
Stddev	.0017	.0002	.0003	.0000	.0006	.013	.0002	.056	.0007
%RSD	14.87	1.669	32.15	1.347	.1639	.3014	2.018	1.002	.8360
#1	.0096	.0100	.0007	.0035	.3425	4.277	.0079	5.518	.0850
#2	.0120	.0097	.0011	.0035	.3436	4.289	.0082	5.524	.0842
#3	.0130	.0099	.0014	.0036	.3429	4.303	.0079	5.617	.0836

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0007**	**39.88**	**.0150**	**.0047**	**.0008**	**13.69**	**.0004**	**.0020**	**3.987**
Stddev	.0001	.05	.0001	.0002	.0005	.03	.0004	.0020	.010
%RSD	8.308	.1314	.9494	4.395	67.04	.2552	101.3	99.01	.2576
#1	.0008	39.90	.0151	.0049	.0003	13.72	.0008	.0005	3.988
#2	.0007	39.82	.0148	.0045	.0014	13.65	.0003	.0013	3.976
#3	.0007	39.92	.0149	.0047	.0007	13.70	.0000	.0042	3.997

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0644**	**-.0002**	**-.0001**	**.0004**	**.0039**	**.0494**	**.0001**
Stddev	.0009	.0002	.0005	.0008	.0002	.0007	.0001	.0001
%RSD	1323.	.3368	236.3	1022.	53.73	19.39	.2110	109.0
#1	.0002	.0643	.0003	.0006	.0005	.0035	.0495	.0001
#2	.0006	.0643	-.0006	.0001	.0001	.0033	.0495	.0001
#3	-.0010	.0647	-.0003	-.0009	.0005	.0047	.0493	-.0000

Zoom In Zoom Out

Sample Name: jd53503-4 Acquired: 10/15/2022 9:03:11 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7216.7**	**70577.**	**9743.1**	**2668.4**
Stddev	6.7	58.	30.1	5.9
%RSD	.09269	.08249	.30902	.22034
#1	7224.4	70548.	9757.6	2668.9
#2	7212.0	70645.	9708.5	2674.1
#3	7213.8	70540.	9763.1	2662.3

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 9:08:19 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2441**	**39.39**	**2.006**	**2.031**	**1.986**	**2.003**	**2.108**	**40.06**	**2.020**
Stddev	.0003	.09	.004	.003	.002	.004	.009	.05	.004
%RSD	.1206	.2211	.1874	.1281	.0806	.1823	.4305	.1355	.2025
#1	.2444	39.49	2.002	2.029	1.987	2.006	2.101	40.10	2.016
#2	.2438	39.33	2.010	2.034	1.984	1.999	2.118	40.00	2.024
#3	.2441	39.35	2.005	2.029	1.987	2.004	2.106	40.09	2.020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.011**	**1.990**	**2.013**	**1.932**	**40.17**	**39.29**	**1.974**	**39.71**	**2.033**
Stddev	.003	.003	.009	.001	.05	.03	.002	.13	.005
%RSD	.1699	.1278	.4540	.0378	.1175	.0638	.1039	.3294	.2706
#1	2.007	1.990	2.012	1.931	40.18	39.30	1.977	39.86	2.033
#2	2.012	1.987	2.004	1.932	40.11	39.26	1.974	39.62	2.027
#3	2.014	1.992	2.022	1.933	40.21	39.30	1.973	39.65	2.038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.040**	**39.83**	**2.023**	**2.013**	**2.040**	**1.977**	**2.022**	**2.022**	**5.044**
Stddev	.002	.06	.003	.001	.007	.005	.009	.010	.005
%RSD	.0986	.1464	.1266	.0235	.3365	.2462	.4360	.5012	.1017
#1	2.037	39.89	2.024	2.014	2.046	1.982	2.023	2.028	5.039
#2	2.040	39.81	2.021	2.013	2.033	1.976	2.030	2.028	5.049
#3	2.041	39.78	2.026	2.013	2.040	1.973	2.012	2.010	5.043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 9:08:19 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.071**	**1.990**	**2.005**	**2.078**	**2.003**	**2.033**	**2.053**	**1.992**
Stddev	.004	.002	.005	.003	.008	.004	.005	.005
%RSD	.2173	.1132	.2536	.1525	.4045	.1739	.2455	.2310
#1	2.073	1.992	2.001	2.081	2.001	2.030	2.056	1.989
#2	2.074	1.988	2.003	2.078	1.996	2.037	2.047	1.991
#3	2.066	1.992	2.011	2.075	2.012	2.033	2.054	1.998
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6805.8**	**69606.**	**9628.8**	**2662.9**
Stddev	5.2	173.	22.7	3.7
%RSD	.07630	.24850	.23569	.14081
#1	6810.5	69504.	9622.7	2665.8
#2	6806.7	69806.	9653.8	2658.7
#3	6800.3	69509.	9609.7	2664.3

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 9:13:06 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0025**	**-.0008**	**.0012**	**.0001**	F **.0002**	**-.0003**	**.0016**	**.0002**
Stddev	.0002	.0036	.0006	.0007	.0001	.0000	.0004	.0032	.0001
%RSD	46.91	141.7	74.44	60.39	172.9	19.38	142.3	201.5	22.90
#1	.0002	-.0063	-.0004	.0017	-.0001	.0002	.0002	-.0020	.0002
#2	.0005	-.0019	-.0014	.0004	.0001	.0003	-.0004	.0041	.0003
#3	.0006	.0007	-.0005	.0016	.0002	.0002	-.0007	.0027	.0002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0002			
Low Limit						-.0002			

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0012**	**.0000**	**-.0000**	**.0001**	**.0060**	**-.0142**	**.0007**	**-.0266**	**.0001**
Stddev	.0015	.0002	.0001	.0001	.0023	.0091	.0007	.0249	.0000
%RSD	117.1	659.8	514.0	182.6	39.11	64.00	102.7	93.58	10.25
#1	.0004	.0001	.0001	-.0001	.0085	-.0059	.0009	.0017	.0001
#2	.0029	-.0002	-.0000	.0001	.0039	-.0128	.0012	-.0450	.0001
#3	.0004	.0002	-.0002	.0001	.0056	-.0240	-.0001	-.0364	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**-.0614**	**.0000**	**.0002**	**-.0004**	**-.0017**	**.0004**	**.0008**	**.0012**
Stddev	.0001	.0099	.0002	.0011	.0003	.0022	.0006	.0019	.0003
%RSD	18.76	16.08	37570.	628.4	78.10	133.9	140.2	253.4	27.43
#1	.0010	-.0722	-.0002	.0012	-.0002	-.0018	.0007	.0027	.0009
#2	.0007	-.0592	.0001	-.0009	-.0002	.0006	-.0002	-.0012	.0012
#3	.0007	-.0528	.0002	.0002	-.0007	-.0038	.0008	.0008	.0016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 9:13:06 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0000**	**.0009**	**-.0007**	**.0003**	**.0012**	**-.0011**	**.0003**
Stddev	.0002	.0001	.0002	.0009	.0004	.0005	.0002	.0001
%RSD	87.22	139.8	25.50	139.1	123.2	42.34	21.47	25.92
#1	.0005	.0000	.0006	.0003	.0006	.0014	-.0013	.0002
#2	.0001	-.0000	.0011	-.0009	.0004	.0015	-.0010	.0003
#3	.0002	.0001	.0009	-.0015	-.0001	.0006	-.0009	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7651.8**	**72250.**	**9709.3**	**2728.4**
Stddev	12.0	247.	58.9	4.3
%RSD	.15702	.34203	.60700	.15770
#1	7649.5	72115.	9641.2	2723.4
#2	7641.1	72100.	9744.0	2730.4
#3	7664.8	72535.	9742.7	2731.2

Zoom In Zoom Out

Sample Name: jd53503-6 Acquired: 10/15/2022 9:18:19 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.2460**	**.0168**	**.0262**	**.0315**	**.0002**	**-.0010**	**11.55**	**.0005**
Stddev	.0004	.0029	.0012	.0003	.0000	.0000	.0008	.01	.0002
%RSD	49.43	1.172	7.370	1.036	.0782	21.12	78.70	.1138	39.05
#1	.0009	.2434	.0175	.0264	.0315	.0002	-.0019	11.54	.0004
#2	.0011	.2491	.0175	.0259	.0315	.0002	-.0003	11.54	.0007
#3	.0003	.2455	.0154	.0264	.0315	.0002	-.0009	11.56	.0003

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0300**	**.0065**	**.0008**	**.0033**	**15.06**	**4.156**	**.0094**	**6.949**	**.3202**
Stddev	.0008	.0002	.0003	.0003	.02	.028	.0008	.023	.0007
%RSD	2.691	2.353	33.96	9.995	.1564	.6711	8.790	.3341	.2327
#1	.0295	.0066	.0005	.0030	15.04	4.159	.0092	6.922	.3204
#2	.0295	.0067	.0010	.0032	15.05	4.127	.0087	6.963	.3194
#3	.0309	.0064	.0008	.0037	15.09	4.183	.0103	6.961	.3208

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**16.91**	**.0098**	**.0104**	**.0004**	**9.867**	**-.0002**	**.0006**	**4.416**
Stddev	.0002	.05	.0001	.0010	.0007	.019	.0007	.0004	.003
%RSD	25.91	.2674	.9882	9.956	172.2	.1930	346.3	60.93	.0663
#1	.0012	16.91	.0099	.0094	-.0002	9.889	-.0004	.0002	4.418
#2	.0007	16.87	.0097	.0104	.0002	9.858	-.0008	.0008	4.413
#3	.0009	16.96	.0098	.0115	.0013	9.854	.0006	.0009	4.416

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.0524**	**.0007**	**-.0000**	**.0008**	**.0052**	**.0518**	**-.0002**
Stddev	.0001	.0005	.0002	.0006	.0001	.0008	.0000	.0000
%RSD	56.55	.8724	34.27	3560.	16.44	16.48	.0855	22.94
#1	-.0001	.0521	.0008	-.0007	.0007	.0059	.0518	-.0001
#2	-.0003	.0523	.0004	.0005	.0008	.0043	.0519	-.0002
#3	-.0002	.0529	.0008	.0002	.0009	.0053	.0518	-.0002

Zoom In Zoom Out

Sample Name: jd53503-6 Acquired: 10/15/2022 9:18:19 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7328.1**	**71096.**	**9813.0**	**2672.9**
Stddev	10.0	60.	28.3	1.4
%RSD	.13697	.08422	.28816	.05126
#1	7338.9	71043.	9789.4	2671.4
#2	7319.1	71161.	9844.4	2673.8
#3	7326.3	71084.	9805.4	2673.7

Zoom In Zoom Out

Sample Name: jd53503-7 Acquired: 10/15/2022 9:23:25 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0003**	**.0265**	**-.0014**	**.0012**	**.0005**	**.0000**	**-.0007**	**.1483**	**.0003**
Stddev	.0004	.0097	.0009	.0007	.0001	.0001	.0006	.0026	.0001
%RSD	158.9	36.61	64.78	55.70	30.55	201.0	78.06	1.742	28.25
#1	-.0000	.0362	-.0024	.0007	.0004	.0001	-.0004	.1500	.0003
#2	.0007	.0169	-.0010	.0019	.0003	.0000	-.0014	.1453	.0002
#3	.0001	.0263	-.0007	.0009	.0006	-.0000	-.0004	.1496	.0003

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0023**	**-.0001**	**.0003**	**.0017**	**.0609**	**-.0023**	**.0007**	**.0194**	**.0012**
Stddev	.0005	.0003	.0001	.0002	.0028	.0032	.0007	.0159	.0000
%RSD	23.05	355.6	25.84	12.88	4.597	135.2	110.6	81.84	2.662
#1	.0027	-.0005	.0004	.0014	.0580	-.0054	.0003	.0126	.0011
#2	.0024	.0000	.0004	.0018	.0636	-.0025	.0002	.0080	.0012
#3	.0017	.0002	.0002	.0018	.0612	.0009	.0015	.0375	.0012

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.0969**	**-.0002**	**.0040**	**.0006**	**.0238**	**.0013**	**.0005**	**.0436**
Stddev	.0001	.0058	.0002	.0007	.0002	.0013	.0015	.0009	.0008
%RSD	9.059	5.992	91.48	16.54	30.50	5.293	120.9	184.9	1.914
#1	.0009	.0904	-.0001	.0033	.0008	.0242	.0003	-.0000	.0433
#2	.0008	.1015	-.0002	.0046	.0004	.0224	.0005	.0014	.0446
#3	.0010	.0987	-.0004	.0040	.0006	.0248	.0030	-.0000	.0430

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.0008**	**.0004**	**-.0007**	**.0003**	**.0011**	**.0045**	**.0000**
Stddev	.0002	.0000	.0002	.0008	.0003	.0014	.0002	.0001
%RSD	292.8	2.357	50.67	105.8	81.40	124.3	3.941	218.7
#1	-.0001	.0008	.0005	-.0015	.0006	.0005	.0043	.0002
#2	-.0003	.0008	.0005	.0000	.0002	.0027	.0047	.0000
#3	.0001	.0008	.0002	-.0007	.0002	.0002	.0046	-.0000

Zoom In Zoom Out

Sample Name: jd53503-7 Acquired: 10/15/2022 9:23:25 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7634.9**	**72585.**	**9930.4**	**2715.4**
Stddev	12.7	1047.	15.4	5.9
%RSD	.16592	1.4421	.15522	.21810
#1	7646.6	73787.	9946.1	2721.1
#2	7621.4	71872.	9929.6	2709.3
#3	7636.5	72096.	9915.3	2715.7

Zoom In Zoom Out

Sample Name: jd53503-9 Acquired: 10/15/2022 9:28:36 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.4986**	**-.0007**	**.0240**	**.0593**	**.0006**	**-.0006**	**12.16**	**.0003**
Stddev	.0003	.0079	.0003	.0004	.0002	.0001	.0011	.09	.0001
%RSD	39.39	1.589	42.89	1.494	.2871	8.641	194.0	.7466	49.30
#1	.0006	.5054	-.0007	.0242	.0594	.0007	-.0017	12.26	.0002
#2	.0008	.5004	-.0009	.0241	.0593	.0007	-.0004	12.08	.0004
#3	.0012	.4899	-.0004	.0236	.0591	.0006	.0004	12.13	.0002

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0277**	**.0103**	**.0021**	**.0038**	**1.575**	**3.932**	**.0140**	**7.465**	**.1958**
Stddev	.0014	.0002	.0003	.0005	.004	.020	.0005	.051	.0002
%RSD	4.970	1.859	12.52	12.91	.2695	.4986	3.451	.6769	.0893
#1	.0276	.0101	.0021	.0032	1.571	3.944	.0143	7.516	.1957
#2	.0292	.0104	.0024	.0040	1.573	3.910	.0134	7.462	.1959
#3	.0265	.0104	.0019	.0041	1.579	3.943	.0143	7.415	.1960

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0011**	**39.45**	**.0179**	**.0134**	**.0012**	**9.114**	**.0010**	**.0009**	**5.038**
Stddev	.0000	.18	.0001	.0007	.0009	.012	.0011	.0013	.010
%RSD	1.830	.4662	.8004	5.409	69.17	.1351	115.0	135.7	.2027
#1	.0011	39.64	.0178	.0134	.0022	9.103	.0016	.0004	5.029
#2	.0011	39.27	.0181	.0127	.0005	9.113	-.0003	.0000	5.036
#3	.0012	39.45	.0178	.0141	.0010	9.127	.0017	.0024	5.049

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.0560**	**.0038**	**-.0004**	**.0007**	**.0050**	**.0788**	**-.0000**
Stddev	.0014	.0001	.0003	.0006	.0003	.0010	.0005	.0001
%RSD	183.4	.2582	7.446	147.8	39.04	19.97	.5865	193.4
#1	-.0024	.0561	.0035	-.0010	.0008	.0055	.0791	.0000
#2	.0001	.0560	.0041	.0002	.0004	.0038	.0783	-.0000
#3	-.0000	.0558	.0037	-.0004	.0009	.0056	.0791	-.0001

Zoom In Zoom Out

Sample Name: jd53503-9 Acquired: 10/15/2022 9:28:36 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7191.0**	**70835.**	**9844.0**	**2656.7**
Stddev	12.4	84.	103.0	4.6
%RSD	.17182	.11833	1.0468	.17178
#1	7197.4	70789.	9750.7	2658.8
#2	7198.8	70931.	9954.6	2659.9
#3	7176.7	70784.	9826.7	2651.5

Zoom In Zoom Out

Sample Name: jd53507-2 Acquired: 10/15/2022 9:33:42 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0035**	**4.829**	**.0135**	**.2596**	**.6414**	**.0036**	**.0015**	**124.5**
Stddev	.0003	.012	.0006	.0016	.0006	.0000	.0011	.2
%RSD	8.241	.2392	4.207	.6288	.0865	1.054	75.17	.1222
#1	.0034	4.826	.0139	.2605	.6409	.0036	.0004	124.5
#2	.0038	4.819	.0129	.2577	.6414	.0037	.0015	124.4
#3	.0033	4.842	.0139	.2605	.6420	.0036	.0026	124.7

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0039**	**.6346**	**.3404**	**.0221**	**.0053**	**81.61**	**8.803**	**.0043**
Stddev	.0001	.0053	.0008	.0002	.0003	.09	.008	.0007
%RSD	3.551	.8315	.2255	.6852	4.846	.1044	.0934	16.91
#1	.0038	.6404	.3413	.0221	.0055	81.63	8.796	.0046
#2	.0040	.6301	.3398	.0219	.0050	81.51	8.812	.0047
#3	.0038	.6333	.3402	.0222	.0052	81.68	8.801	.0034

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**15.65**	F **8.292**	**.0006**	**120.1**	**.2385**	**.1354**	**.0143**	**3.442**
Stddev	.06	.080	.0002	.2	.0005	.0009	.0009	.006
%RSD	.4145	.9644	37.90	.1853	.2093	.6542	6.557	.1800
#1	15.69	8.384	.0006	119.9	.2391	.1363	.0153	3.445
#2	15.57	8.237	.0008	120.4	.2381	.1345	.0134	3.435
#3	15.67	8.256	.0004	120.1	.2385	.1354	.0142	3.446

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.0076**	**8.576**	**-.0022**	**.5726**	**.0106**	**.0070**	**.4084**
Stddev	.0019	.0009	.007	.0009	.0015	.0007	.0014	.0033
%RSD	79.41	12.46	.0843	41.91	.2620	6.777	19.97	.8123
#1	.0004	.0086	8.572	-.0030	.5709	.0111	.0054	.4111
#2	.0042	.0068	8.573	-.0012	.5734	.0109	.0080	.4047
#3	.0027	.0073	8.585	-.0022	.5735	.0098	.0076	.4095

Zoom In Zoom Out

Sample Name: jd53507-2 Acquired: 10/15/2022 9:33:42 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0114**	**.4217**	W **-.0014**
Stddev	.0004	.0008	.0000
%RSD	3.257	.2001	2.003
#1	.0118	.4209	-.0013
#2	.0111	.4216	-.0014
#3	.0113	.4226	-.0014

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6556.3**	**69429.**	**9885.0**	**2576.1**
Stddev	1.9	342.	29.1	.9
%RSD	.02934	.49308	.29400	.03634
#1	6554.3	69113.	9870.4	2576.8
#2	6556.5	69793.	9918.5	2576.5
#3	6558.2	69381.	9866.1	2575.1

Zoom In Zoom Out

Sample Name: jd53507-3 Acquired: 10/15/2022 9:38:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0042**	**14.21**	**.0220**	**.0359**	**.1351**	**.0011**	W **-.0159**	**186.2**
Stddev	.0003	.88	.0008	.0002	.0086	.0001	.0015	11.4
%RSD	8.236	6.197	3.713	.4337	6.356	5.532	9.262	6.125
#1	.0041	13.56	.0226	.0360	.1284	.0011	-.0174	177.4
#2	.0045	15.21	.0211	.0360	.1448	.0011	-.0158	199.1
#3	.0038	13.87	.0224	.0357	.1320	.0010	-.0145	182.1

Elem	Cd2288	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.3607**	**.0133**	F **28.36**	**.0297**	**19.35**	**7.633**	**.0070**
Stddev	.0001	.0021	.0003	.09	.0003	1.18	.467	.0013
%RSD	1.846	.5859	2.024	.3312	1.089	6.114	6.117	18.15
#1	.0031	.3584	.0130	28.40	.0298	18.43	7.241	.0055
#2	.0031	.3626	.0135	28.25	.0299	20.68	8.150	.0078
#3	.0032	.3610	.0133	28.43	.0293	18.92	7.508	.0076

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.333**	**.1396**	**.0074**	**186.1**	**.0608**	**.3121**	**.0110**	**5.233**
Stddev	.091	.0001	.0001	12.0	.0004	.0018	.0014	.005
%RSD	6.799	.0967	1.387	6.463	.6773	.5848	12.77	.1045
#1	1.247	.1398	.0076	178.6	.0605	.3123	.0123	5.229
#2	1.428	.1395	.0074	200.0	.0612	.3138	.0095	5.239
#3	1.323	.1396	.0074	179.8	.0607	.3102	.0113	5.231

Elem	Sb2068	Se1960	Si2124	Sn1899	Sr4077	Ti3349	Tl1908	V_2924
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0686**	**-.0051**	**16.07**	**-.0028**	**.6886**	**.1658**	**.0063**	**.0959**
Stddev	.0036	.0007	.02	.0002	.0434	.0016	.0013	.0003
%RSD	5.305	14.33	.1119	8.380	6.303	.9835	21.18	.2651
#1	.0648	-.0057	16.09	-.0027	.6543	.1669	.0059	.0957
#2	.0720	-.0053	16.07	-.0031	.7374	.1639	.0077	.0957
#3	.0690	-.0043	16.05	-.0027	.6740	.1666	.0051	.0962

Zoom In Zoom Out

Sample Name: jd53507-3 Acquired: 10/15/2022 9:38:52 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm
Avg	**.0288**	**.0659**	**.0088**
Stddev	.0010	.0002	.0012
%RSD	3.490	.3677	13.16
#1	.0277	.0661	.0080
#2	.0297	.0657	.0083
#3	.0290	.0661	.0102

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6349.5**	**69987.**	**9800.2**	**2493.3**
Stddev	4.7	102.	483.2	1.4
%RSD	.07443	.14569	4.9303	.05560
#1	6347.6	69902.	10164.	2493.8
#2	6346.0	70100.	9251.9	2494.3
#3	6354.9	69960.	9984.7	2491.7

Zoom In Zoom Out

Sample Name: mp35732-mb1 Acquired: 10/15/2022 9:44:00 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0004**	**-.0021**	**-.0001**	**-.0005**	**-.0001**	**.0001**	**.0006**	**.0022**	**.0000**
Stddev	.0004	.0043	.0006	.0005	.0000	.0001	.0003	.0026	.0001
%RSD	107.8	203.2	709.4	101.7	15.52	60.64	52.10	115.5	283.7
#1	-.0001	-.0026	.0000	-.0000	-.0002	.0001	.0003	.0022	-.0001
#2	.0005	.0024	-.0008	-.0004	-.0001	.0001	.0005	-.0003	.0000
#3	.0007	-.0062	.0005	-.0010	-.0001	.0000	.0009	.0048	.0001

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0006**	**-.0001**	**.0012**	**.0003**	**.0012**	**-.0201**	**.0012**	**-.0165**	**-.0000**
Stddev	.0008	.0001	.0001	.0003	.0024	.0052	.0005	.0202	.0000
%RSD	154.1	67.37	9.517	95.19	209.6	25.92	42.28	122.2	170.9
#1	-.0013	-.0002	.0012	.0002	.0039	-.0220	.0006	.0052	-.0000
#2	-.0007	-.0001	.0010	.0006	-.0009	-.0240	.0015	-.0201	-.0000
#3	.0004	-.0001	.0013	.0001	.0005	-.0142	.0014	-.0346	.0000

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0002**	**-.0524**	**.0000**	**-.0002**	**.0004**	**-.0031**	**.0002**	**.0004**	**.0011**
Stddev	.0001	.0072	.0002	.0015	.0003	.0070	.0007	.0021	.0018
%RSD	22.33	13.79	645.1	671.7	85.28	230.9	303.4	548.6	168.5
#1	.0003	-.0539	-.0001	.0015	.0006	-.0086	-.0005	.0007	.0004
#2	.0003	-.0587	.0003	-.0015	.0004	.0049	.0010	.0023	.0031
#3	.0002	-.0445	-.0001	-.0007	.0000	-.0055	.0002	-.0019	-.0003

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**-.0000**	**.0000**	**-.0001**	**.0003**	**-.0006**	**.0004**	**-.0002**
Stddev	.0006	.0001	.0003	.0012	.0001	.0006	.0001	.0001
%RSD	276.7	721.8	959.8	1512.	29.87	96.25	36.54	51.96
#1	-.0003	.0000	.0003	-.0012	.0002	-.0003	.0005	-.0001
#2	-.0008	.0000	.0001	.0012	.0003	-.0013	.0002	-.0002
#3	.0004	-.0001	-.0003	-.0002	.0004	-.0003	.0005	-.0003

Zoom In Zoom Out

Sample Name: mp35732-mb1 Acquired: 10/15/2022 9:44:00 Type: Unk
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7631.2**	**71789.**	**9789.0**	**2713.2**
Stddev	4.7	256.	48.9	2.9
%RSD	.06105	.35646	.49907	.10647
#1	7633.4	72055.	9735.1	2715.5
#2	7625.9	71545.	9801.5	2710.0
#3	7634.4	71766.	9830.3	2714.1

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 9:49:13 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.2522**	**39.12**	**2.003**	**2.030**	**1.980**	**1.988**	**2.122**	**39.58**	**2.014**
Stddev	.0133	.74	.003	.003	.035	.035	.006	.75	.003
%RSD	5.271	1.890	.1473	.1669	1.791	1.760	.2823	1.903	.1365
#1	.2673	39.59	2.001	2.030	2.003	2.007	2.129	40.02	2.011
#2	.2468	38.27	2.007	2.026	1.939	1.948	2.117	38.71	2.015
#3	.2425	39.52	2.003	2.033	1.997	2.009	2.121	40.00	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.090**	**1.977**	**2.082**	**2.008**	**39.78**	**39.10**	**1.972**	**39.19**	**2.103**
Stddev	.114	.001	.124	.111	.71	.66	.034	.67	.119
%RSD	5.471	.0659	5.932	5.512	1.796	1.689	1.723	1.702	5.664
#1	2.220	1.977	2.222	2.134	40.23	39.47	1.992	39.58	2.239
#2	2.046	1.976	2.033	1.964	38.96	38.34	1.932	38.42	2.053
#3	2.004	1.979	1.990	1.927	40.16	39.50	1.991	39.57	2.017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Elem	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.037**	**39.61**	**2.008**	**2.023**	**2.026**	**1.977**	**2.021**	**2.024**	**5.055**
Stddev	.001	.67	.002	.007	.002	.012	.008	.013	.005
%RSD	.0301	1.684	.1115	.3466	.0989	.5958	.4035	.6622	.0967
#1	2.037	39.99	2.006	2.030	2.025	1.963	2.012	2.009	5.050
#2	2.036	38.84	2.008	2.016	2.028	1.984	2.022	2.027	5.055
#3	2.037	39.99	2.010	2.021	2.024	1.982	2.029	2.035	5.060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value									
Range									

Zoom In Zoom Out

Sample Name: ccv Acquired: 10/15/2022 9:49:13 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**2.062**	**1.985**	**2.071**	**2.060**	**2.073**	**2.021**	**2.031**	**2.068**
Stddev	.011	.038	.117	.009	.116	.001	.006	.117
%RSD	.5513	1.916	5.630	.4152	5.601	.0286	.3147	5.669
#1	2.050	2.010	2.204	2.052	2.206	2.021	2.023	2.202
#2	2.064	1.941	2.021	2.058	2.025	2.022	2.035	2.019
#3	2.073	2.005	1.987	2.069	1.989	2.021	2.034	1.984
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**6806.9**	**67677.**	**9822.9**	**2652.1**
Stddev	6.9	3214.	136.8	3.6
%RSD	.10173	4.7496	1.3925	.13554
#1	6809.2	64019.	9723.0	2654.9
#2	6812.3	68966.	9978.8	2653.3
#3	6799.1	70047.	9767.0	2648.1

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 9:54:00 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3961	As1890	B_2089	Ba4554	Be3130	Bi2230	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.0048**	**-.0011**	**.0021**	**.0000**	F **.0002**	**.0005**	**-.0010**	**.0003**
Stddev	.0002	.0044	.0004	.0003	.0001	.0000	.0002	.0031	.0002
%RSD	27.93	92.98	41.03	12.23	1621.	13.58	41.06	304.8	52.78
#1	.0004	.0093	-.0013	.0018	.0000	.0001	.0003	-.0005	.0001
#2	.0007	.0045	-.0006	.0023	.0001	.0002	.0007	.0018	.0004
#3	.0008	.0004	-.0013	.0021	-.0001	.0002	.0004	-.0043	.0003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit						.0002			
Low Limit						-.0002			

Elem	Ce4040	Co2286	Cr2677	Cu3247	Fe2599	K_7664	Li6707	Mg2790	Mn2576
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.0002**	**-.0001**	**.0002**	**.0035**	**-.0161**	**.0022**	**-.0264**	**.0001**
Stddev	.0010	.0002	.0003	.0003	.0014	.0027	.0003	.0256	.0000
%RSD	52.16	110.7	504.4	152.7	40.51	16.97	15.25	96.99	23.77
#1	.0013	.0002	.0001	-.0000	.0034	-.0191	.0019	-.0550	.0001
#2	.0032	-.0000	.0001	.0001	.0021	-.0154	.0022	-.0058	.0001
#3	.0015	.0004	-.0004	.0005	.0049	-.0137	.0025	-.0184	.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	Mo2020	Na5895	Ni2316	P_1774	Pb2203	S_1820	Sb2068	Se1960	Si2124
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0010**	**-.0606**	**.0000**	**.0003**	**.0001**	**-.0020**	**.0007**	**.0023**	**.0022**
Stddev	.0001	.0045	.0004	.0002	.0003	.0029	.0011	.0006	.0003
%RSD	14.33	7.418	2014.	80.79	472.1	140.9	156.8	26.92	13.12
#1	.0009	-.0554	.0001	.0001	.0001	.0012	.0010	.0020	.0019
#2	.0010	-.0633	.0004	.0002	.0003	-.0030	-.0005	.0019	.0024
#3	.0012	-.0631	-.0004	.0006	-.0003	-.0043	.0015	.0030	.0023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit									
Low Limit									

Zoom In Zoom Out

Sample Name: ccb Acquired: 10/15/2022 9:54:00 Type: QC
Method: SGS 070219(v296) Mode: CONC Corr. Factor: 1.000000
User: admin Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	W_2079	Zn2062	Zr3391
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**-.0000**	**.0006**	**-.0007**	**.0000**	**.0020**	**-.0012**	**.0003**
Stddev	.0006	.0000	.0001	.0005	.0004	.0001	.0001	.0001
%RSD	99.43	138.5	26.48	71.81	8360.	6.694	11.91	36.89
#1	.0005	-.0000	.0007	-.0014	-.0004	.0018	-.0010	.0002
#2	.0012	-.0000	.0004	-.0004	.0002	.0021	-.0013	.0003
#3	.0000	.0000	.0006	-.0005	.0003	.0020	-.0012	.0004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Int. Std.	In2306	Y_3600	Y_3710	Y_2243
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**7624.0**	**71663.**	**9846.0**	**2709.7**
Stddev	12.5	94.	44.1	.5
%RSD	.16387	.13158	.44755	.01851
#1	7633.7	71656.	9815.4	2710.0
#2	7609.9	71761.	9896.5	2709.1
#3	7628.4	71573.	9826.1	2709.9

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}	☒	17	Mn	0.000140	0.000000	No
			Mo	-0.000064	0.000000	No
			Ti	-0.000039	0.000000	No
			Fe	-0.000046	0.000000	No
			V	-0.001411	0.000000	No
			Zn	-0.000100	0.000000	No
			Ca	-0.000005	0.000000	No
			Al	-0.000003	0.000000	No
			Mg	0.000002	0.000000	No
			Ba	-0.000089	0.000000	No
			Cr	-0.000038	0.000000	No
			Zr	0.006000	0.000000	No
			Sn	-0.000100	0.000000	No
			W	0.000000	0.000000	No
			K	-0.000080	0.000000	No
			Ce	-0.002021	0.000000	No
			Ni	0.000000	0.000000	No
Al 396.152 { 85}	☒	6	Si	0.000913	0.000000	No
			Ca	0.000078	0.000000	No
			Mo	0.043334	0.000000	No
			Zr	-0.006000	0.000000	No
			Ti	-0.000017	0.000000	No
			Ce	-0.018255	0.000000	No
As 189.042 {478}	☒	24	Al	0.000006	0.000000	No
			Fe	-0.000116	0.000000	No
			Ca	0.000001	0.000000	No
			Mn	-0.000110	0.000000	No
			Mo	0.003235	0.000000	No
			Cr	0.000791	0.000000	No
			V	0.000065	0.000000	No
			Co	-0.000252	0.000000	No
			W	-0.010000	0.000000	No
			Sn	-0.000023	0.000000	No
			Cd	-0.000194	0.000000	No
			Tl	0.000052	0.000000	No
			Be	-0.000017	0.000000	No
			Mg	-0.000003	0.000000	No
			Si	-0.000013	0.000000	No
			Zn	-0.000130	0.000000	No
			Sr	-0.000080	0.000000	No
			Zr	-0.000400	0.000000	No
			Ti	-0.000031	0.000000	No
			Cu	0.000077	0.000000	No
			K	0.000000	0.000000	No
			B	-0.000230	0.000000	No
			S	-0.000020	0.000000	No
			Ce	-0.000600	0.000000	No
B 208.959 {462}	☒	1	Mo	0.030533	0.000000	No
Ba 455.403 { 74}	☒	3	Mg	0.000021	0.000000	No
			Al	0.000002	0.000000	No
			Zr	0.000007	0.000000	No
Be 313.042 {108}	☒	10	V	0.000004	0.000000	No
			Mo	-0.000030	0.000000	No
			Ti	-0.001313	0.000000	No
			Mn	-0.000018	0.000000	No
			Ni	0.000001	0.000000	No
			Ca	0.000000	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Cu	0.000014	0.000000	No
			Zn	-0.000010	0.000000	No
			Fe	0.000001	0.000000	No
			W	0.000000	0.000000	No
Bi 223.061 {451}	☒	9	V	-0.000680	0.000000	No
			Co	-0.002200	0.000000	No
			Ca	-0.000005	0.000000	No
			Mg	-0.000002	0.000000	No
			W	0.020000	0.000000	No
			Cu	-0.001186	0.000000	No
			Fe	0.000072	0.000000	No
			Cr	0.001500	0.000000	No
			Ti	-0.037087	0.000000	No
Ca 317.933 {106}	☒	13	Fe	0.000130	0.000000	No
			W	0.003960	0.000000	No
			Tl	0.004950	0.000000	No
			Be	0.001840	0.000000	No
			Ba	0.003500	0.000000	No
			Cu	-0.001800	0.000000	No
			Cd	0.003700	0.000000	No
			Ni	0.001513	0.000000	No
			B	-0.000210	0.000000	No
			Se	0.002000	0.000000	No
			Co	0.000540	0.000000	No
			Cr	0.000640	0.000000	No
			Al	0.000026	0.000000	No
Cd 228.802 {448}	☒	13	As	0.004065	0.000000	No
			Ni	0.001100	0.000000	No
			Fe	-0.000009	0.000000	No
			V	0.000110	0.000000	No
			Ba	0.000054	0.000000	No
			Co	-0.001160	0.000000	No
			Ca	0.000000	0.000000	No
			Mn	-0.000186	0.000000	No
			Cr	-0.000093	0.000000	No
			Cu	0.000024	0.000000	No
			Al	0.000000	0.000000	No
			Mo	-0.000096	0.000000	No
			W	0.000000	0.000000	No
Ce 404.076 { 83}	☒	9	V	-0.000600	0.000000	No
			Mn	-0.060000	0.000000	No
			Zr	-0.026700	0.000000	No
			Ca	-0.000120	0.000000	No
			Ti	-0.001800	0.000000	No
			Cr	-0.003800	0.000000	No
			As	-0.010200	0.000000	No
			Mo	-0.002500	0.000000	No
			Fe	-0.000210	0.000000	No
Co 228.616 {448}	☒	9	Fe	-0.000002	0.000000	No
			Cr	0.000100	0.000000	No
			Mo	-0.001780	0.000000	No
			Ni	0.000084	0.000000	No
			Ti	0.002198	0.000000	No
			W	0.000160	0.000000	No
			Cd	-0.000188	0.000000	No
			Ca	0.000000	0.000000	No
			As	0.000150	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
Cr 267.716 {126}	☒	11	Mn	0.000318	0.000000	No
			Mo	-0.000342	0.000000	No
			Fe	-0.000007	0.000000	No
			Cd	-0.000050	0.000000	No
			Al	0.000004	0.000000	No
			Ca	0.000002	0.000000	No
			Mg	0.000001	0.000000	No
			Ti	-0.000053	0.000000	No
			Ba	0.000013	0.000000	No
			Cu	0.000100	0.000000	No
			Sr	-0.000100	0.000000	No
Cu 324.754 {104}2	☒	17	Cr	0.000000	0.000000	No
			V	-0.000208	0.000000	No
			Mo	0.000632	0.000000	No
			Ti	0.000024	0.000000	No
			Fe	-0.000128	0.000000	No
			Al	0.000003	0.000000	No
			Sn	0.000103	0.000000	No
			Co	-0.001135	0.000000	No
			Zr	0.000100	0.000000	No
			Si	-0.000002	0.000000	No
			Mn	0.000026	0.000000	No
			Se	0.000050	0.000000	No
			Ag	0.000166	0.000000	No
			Sb	0.000024	0.000000	No
			Pb	-0.000260	0.000000	No
			Be	-0.000031	0.000000	No
			W	0.000000	0.000000	No
Fe 259.940 {130}	☒	14	Co	0.000004	0.000000	No
			Si	-0.000100	0.000000	No
			Tl	-0.002590	0.000000	No
			Se	-0.000050	0.000000	No
			Cr	0.001134	0.000000	No
			Mn	-0.001433	0.000000	No
			V	-0.000064	0.000000	No
			Cu	0.000953	0.000000	No
			K	-0.000200	0.000000	No
			Zn	0.000046	0.000000	No
			Ti	-0.000631	0.000000	No
			Ca	0.000013	0.000000	No
			Ba	0.001000	0.000000	No
			Al	0.000042	0.000000	No
K 766.490 { 44}	☒	11	Fe	-0.000455	0.000000	No
			Al	-0.000083	0.000000	No
			Ca	-0.000079	0.000000	No
			Mn	0.001430	0.000000	No
			Si	-0.003000	0.000000	No
			V	-0.002000	0.000000	No
			Sn	-0.004700	0.000000	No
			Na	0.000300	0.000000	No
			Mo	-0.000850	0.000000	No
			Cu	-0.010000	0.000000	No
			Mg	-0.000066	0.000000	No
Li 670.784 { 50}	☒	1	Ca	0.000018	0.000000	No
Mg 279.079 {121}	☒	2	Mo	-0.006280	0.000000	No
			Fe	-0.000095	0.000000	No
Mn 257.610 {131}	☒	7	Fe	-0.000013	0.000000	No

Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
			Si	0.000044	0.000000	No
			Ba	0.000012	0.000000	No
			Ni	0.000028	0.000000	No
			Mo	0.000000	0.000000	No
			Cr	-0.000114	0.000000	No
			Mg	0.000004	0.000000	No
Mo 202.030 {467}	☒	5	Fe	-0.000010	0.000000	No
			Mg	-0.000001	0.000000	No
			Ca	0.000003	0.000000	No
			W	0.000000	0.000000	No
			V	-0.000230	0.000000	No
Na 589.592 { 57}	☒	5	K	0.000038	0.000000	No
			Ba	0.000900	0.000000	No
			Ca	0.000055	0.000000	No
			Al	0.000120	0.000000	No
			V	-0.005000	0.000000	No
Ni 231.604 {446}	☒	11	Fe	0.000022	0.000000	No
			Zn	-0.000021	0.000000	No
			Be	-0.000112	0.000000	No
			Co	-0.000160	0.000000	No
			Tl	0.000209	0.000000	No
			V	-0.000032	0.000000	No
			Cu	0.000100	0.000000	No
			Cr	-0.000014	0.000000	No
			Si	-0.000003	0.000000	No
			Sn	0.000079	0.000000	No
			W	0.000083	0.000000	No
P 177.495 {490}	☒	4	Mn	-0.001900	0.000000	No
			Ca	-0.000024	0.000000	No
			Fe	0.000000	0.000000	No
			Cu	-0.071000	0.000000	No
Pb 220.353 {453}	☒	23	Al	-0.000102	0.000000	No
			Fe	0.000029	0.000000	No
			Ca	-0.000012	0.000000	No
			Mn	0.000145	0.000000	No
			Zn	0.000064	0.000000	No
			Mo	-0.000773	0.000000	No
			Cu	0.000110	0.000000	No
			V	-0.000007	0.000000	No
			Co	0.000071	0.000000	No
			Ti	-0.000500	0.000000	No
			Si	0.000016	0.000000	No
			Ba	-0.000012	0.000000	No
			Sb	0.000006	0.000000	No
			Sr	-0.000100	0.000000	No
			W	0.000000	0.000000	No
			Mg	0.000010	0.000000	No
			Cd	0.000076	0.000000	No
			Zr	-0.000300	0.000000	No
			Ni	0.000202	0.000000	No
			S	0.000005	0.000000	No
			Se	0.000036	0.000000	No
			As	0.000176	0.000000	No
			Cr	0.000034	0.000000	No
S 182.034 {485}	☒	6	Ca	-0.000181	0.000000	No
			Al	-0.000396	0.000000	No
			Fe	-0.000241	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				W	0.000000	0.000000	No
				Mn	0.003000	0.000000	No
				Mo	-0.017500	0.000000	No
	Sb 206.833 {463}	☒	16	Fe	0.000005	0.000000	No
				Al	-0.000003	0.000000	No
				Ca	-0.000009	0.000000	No
				Ni	-0.000679	0.000000	No
				Cr	0.018460	0.000000	No
				V	-0.000700	0.000000	No
				Zn	-0.000400	0.000000	No
				Mo	-0.000766	0.000000	No
				Ti	0.000200	0.000000	No
				Sn	-0.020027	0.000000	No
				Mg	-0.000001	0.000000	No
				Zr	-0.000627	0.000000	No
				Sr	0.000209	0.000000	No
				W	0.000000	0.000000	No
				Si	0.000000	0.000000	No
				Ce	-0.002300	0.000000	No
	Se 196.090 {472}	☒	24	Al	0.000010	0.000000	No
				Ca	0.000006	0.000000	No
				Mn	0.000470	0.000000	No
				Mo	0.000420	0.000000	No
				Fe	-0.000180	0.000000	No
				Co	-0.000200	0.000000	No
				V	-0.000289	0.000000	No
				Sr	-0.000008	0.000000	No
				Cu	-0.000113	0.000000	No
				W	0.000000	0.000000	No
				Si	0.000037	0.000000	No
				Tl	0.000180	0.000000	No
				Be	-0.000143	0.000000	No
				Zn	-0.000250	0.000000	No
				B	-0.000141	0.000000	No
				Ti	0.000016	0.000000	No
				Cd	0.000090	0.000000	No
				Zr	-0.000280	0.000000	No
				Ba	-0.000220	0.000000	No
				Mg	-0.000002	0.000000	No
				Cr	0.000161	0.000000	No
				S	-0.000011	0.000000	No
				Ce	-0.005564	0.000000	No
				As	0.000400	0.000000	No
	Si 212.412 {459}	☒	14	Sr	0.000366	0.000000	No
				Ni	0.000106	0.000000	No
				Mo	0.025500	0.000000	No
				Ti	0.001740	0.000000	No
				Al	0.000012	0.000000	No
				Cd	0.001043	0.000000	No
				Ba	0.000170	0.000000	No
				Fe	0.000015	0.000000	No
				Sn	0.002213	0.000000	No
				Zn	0.000385	0.000000	No
				As	0.000560	0.000000	No
				Pb	0.000471	0.000000	No
				V	0.001002	0.000000	No
				W	-0.025000	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
	Sn 189.989 {478}	☒	6	Ti	-0.001411	0.000000	No
				Mo	0.000011	0.000000	No
				Fe	0.000005	0.000000	No
				Mn	0.000060	0.000000	No
				Si	0.000089	0.000000	No
				W	-0.010000	0.000000	No
	Sr 407.771 { 83}	☒	2	Fe	0.000002	0.000000	No
				Ca	0.000012	0.000000	No
	Ti 334.904 {101}	☒	4	Cr	-0.000084	0.000000	No
				Mo	0.001149	0.000000	No
				Si	0.000035	0.000000	No
				Ca	-0.000003	0.000000	No
	Tl 190.856 {477}	☒	24	Cr	0.000200	0.000000	No
				Mo	-0.001180	0.000000	No
				Al	-0.000010	0.000000	No
				Fe	-0.000066	0.000000	No
				V	-0.018815	0.000000	No
				Mn	0.000470	0.000000	No
				Si	-0.000210	0.000000	No
				Ca	-0.000008	0.000000	No
				Ti	-0.002210	0.000000	No
				Mg	0.000012	0.000000	No
				Co	0.001060	0.000000	No
				Sr	-0.000250	0.000000	No
				B	-0.000030	0.000000	No
				Ba	0.000110	0.000000	No
				Zn	0.000025	0.000000	No
				As	0.000030	0.000000	No
				Ni	-0.000049	0.000000	No
				Cu	-0.000032	0.000000	No
				W	-0.005000	0.000000	No
				Sn	-0.000080	0.000000	No
				Se	-0.000040	0.000000	No
				S	-0.000020	0.000000	No
				K	0.000000	0.000000	No
				P	0.000333	0.000000	No
	V 292.402 {115}	☒	7	Ti	0.000660	0.000000	No
				Mo	-0.014200	0.000000	No
				Fe	0.000019	0.000000	No
				Sr	0.000000	0.000000	No
				Cr	-0.002800	0.000000	No
				Mn	-0.001490	0.000000	No
				W	0.000050	0.000000	No
	W 207.911 {462}	☒	24	Al	0.000002	0.000000	No
				Si	-0.000900	0.000000	No
				Fe	-0.000007	0.000000	No
				As	-0.000200	0.000000	No
				Mg	0.000000	0.000000	No
				Mn	-0.000110	0.000000	No
				Mo	-0.000300	0.000000	No
				Ti	0.000080	0.000000	No
				Sr	-0.000850	0.000000	No
				V	-0.000140	0.000000	No
				Cd	-0.000650	0.000000	No
				Cr	-0.000390	0.000000	No
				Zn	0.012200	0.000000	No
				Sn	0.000078	0.000000	No

	Element, Wavelength and Order	Use?	# IECs	IEC	k1	k2	Calc-in-fit?
				Zr	-0.000000	0.000000	No
				B	-0.001000	0.000000	No
				Sb	-0.003000	0.000000	No
				Co	0.000041	0.000000	No
				Ni	-0.000263	0.000000	No
				Be	-0.000130	0.000000	No
				Se	-0.000080	0.000000	No
				Cu	-0.000118	0.000000	No
				Ba	-0.000090	0.000000	No
				Tl	-0.000110	0.000000	No
	Zn 206.200 {464}	☒	17	Cr	-0.000774	0.000000	No
				Mo	-0.000328	0.000000	No
				Fe	0.000003	0.000000	No
				Al	0.000002	0.000000	No
				Si	0.000006	0.000000	No
				Ba	-0.000060	0.000000	No
				Ca	0.000002	0.000000	No
				Sr	0.000017	0.000000	No
				Sn	0.000069	0.000000	No
				Cu	0.000056	0.000000	No
				As	-0.000050	0.000000	No
				Be	0.000071	0.000000	No
				Bi	-0.000400	0.000000	No
				W	0.010000	0.000000	No
				Ti	-0.000100	0.000000	No
				Mg	0.000006	0.000000	No
				Mn	-0.000110	0.000000	No
	Zr 339.198 { 99}	☒	9	Mo	0.000523	0.000000	No
				Ti	0.000190	0.000000	No
				Fe	-0.000010	0.000000	No
				Si	0.000070	0.000000	No
				Bi	0.000295	0.000000	No
				Cr	-0.000200	0.000000	No
				V	0.000200	0.000000	No
				Sn	-0.000400	0.000000	No
				W	0.020000	0.000000	No
	In 230.606 {446}*	☒	None				
	Y 360.073 { 94}*	☒	None				
	Y 371.030 { 91}*	☒	None				
	Y 224.306 {451}*	☒	None				

Element, Wavelength and Order	Date of Fit	Date of Cal.	Type of Fit	Weighting	A0	A1	A2	n (Exponent)
Ag 328.068 {103}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000221	0.122882	0.000000	1.000000
Al 396.152 { 85}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.001350	0.037706	0.000000	1.000000
As 189.042 {478}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000702	0.132458	0.000000	1.000000
B 208.959 {462}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000617	0.231150	0.000000	1.000000
Ba 455.403 { 74}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.003793	2.215960	0.000000	1.000000
Be 313.042 {108}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000102	1.635382	0.000000	1.000000
Bi 223.061 {451}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000816	0.270563	0.000000	1.000000
Ca 317.933 {106}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.004595	0.051632	0.000000	1.000000
Cd 228.802 {448}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000295	1.055773	0.000000	1.000000
Ce 404.076 { 83}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000096	0.039101	0.000000	1.000000
Co 228.616 {448}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000393	0.427878	0.000000	1.000000
Cr 267.716 {126}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000003	0.089717	0.000000	1.000000
Cu 324.754 {104}2	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.004864	0.226815	0.000000	1.000000
Fe 259.940 {130}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000231	0.044884	0.000000	1.000000
K 766.490 { 44}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.001435	0.038705	0.000000	1.000000
Li 670.784 { 50}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.002619	0.912922	0.000000	1.000000
Mg 279.079 {121}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000094	0.005441	0.000000	1.000000
Mn 257.610 {131}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000065	0.686850	0.000000	1.000000
Mo 202.030 {467}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000287	0.943480	0.000000	1.000000
Na 589.592 { 57}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.009513	0.124798	0.000000	1.000000
Ni 231.604 {446}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000337	0.318401	0.000000	1.000000
P 177.495 {490}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.009356	0.165082	0.000000	1.000000
Pb 220.353 {453}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000378	0.140290	0.000000	1.000000
S 182.034 {485}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.002169	0.045852	0.000000	1.000000
Sb 206.833 {463}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000586	0.204790	0.000000	1.000000
Se 196.090 {472}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000462	0.106286	0.000000	1.000000
Si 212.412 {459}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.004817	0.262867	0.000000	1.000000
Sn 189.989 {478}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000254	0.200833	0.000000	1.000000
Sr 407.771 { 83}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000344	3.223860	0.000000	1.000000
Ti 334.904 {101}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000023	0.122487	0.000000	1.000000
Tl 190.856 {477}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000231	0.059932	0.000000	1.000000
V 292.402 {115}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	-0.000066	0.145502	0.000000	1.000000
W 207.911 {462}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.001144	0.467591	0.000000	1.000000
Zn 206.200 {464}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.001946	0.984303	0.000000	1.000000
Zr 339.198 { 99}	10/17/2022 8:41:16	10/14/2022 22:26:07	Linear	1/Conc	0.000097	0.328668	0.000000	1.000000
In 230.606 {446}*	10/17/2022 8:41:16	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 360.073 { 94}*	10/17/2022 8:41:16	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 371.030 { 91}*	10/17/2022 8:41:16	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	0.000000	1.000000
Y 224.306 {451}*	10/17/2022 8:41:16	12/23/2009 10:44:16	Linear	1/Conc	0.000000	0.000000	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}	1.000000	0.000000	0.000438	0.001459	OK.	1.000000	0.000000	1	0
	Al 396.152 { 85}	1.000000	0.000000	0.009889	0.032962	OK.	1.000000	0.000000	1	0
	As 189.042 {478}	1.000000	0.000000	0.001261	0.004204	OK.	1.000000	0.000000	1	0
	B 208.959 {462}	1.000000	0.000000	0.000762	0.002541	OK.	1.000000	0.000000	1	0
	Ba 455.403 { 74}	1.000000	0.000000	0.000203	0.000678	OK.	1.000000	0.000000	1	0
	Be 313.042 {108}	1.000000	0.000000	0.000098	0.000326	OK.	1.000000	0.000000	1	0
	Bi 223.061 {451}	1.000000	0.000000	0.001317	0.004389	OK.	1.000000	0.000000	1	0
	Ca 317.933 {106}	1.000000	0.000000	0.003609	0.012030	OK.	1.000000	0.000000	1	0
	Cd 228.802 {448}	1.000000	0.000000	0.000207	0.000689	OK.	1.000000	0.000000	1	0
	Ce 404.076 { 83}	1.000000	0.000000	0.002548	0.008492	OK.	1.000000	0.000000	1	0
	Co 228.616 {448}	1.000000	0.000000	0.000299	0.000995	OK.	1.000000	0.000000	1	0
	Cr 267.716 {126}	1.000000	0.000000	0.000414	0.001378	OK.	1.000000	0.000000	1	0
	Cu 324.754 {104}2	1.000000	0.000000	0.000358	0.001195	OK.	1.000000	0.000000	1	0
	Fe 259.940 {130}	1.000000	0.000000	0.002496	0.008320	OK.	1.000000	0.000000	1	0
	K 766.490 { 44}	1.000000	0.000000	0.025650	0.085499	OK.	1.000000	0.000000	1	0
	Li 670.784 { 50}	1.000000	0.000000	0.001100	0.003667	OK.	1.000000	0.000000	1	0
	Mg 279.079 {121}	1.000000	0.000000	0.024405	0.081349	OK.	1.000000	0.000000	1	0
	Mn 257.610 {131}	1.000000	0.000000	0.000053	0.000177	OK.	1.000000	0.000000	1	0
	Mo 202.030 {467}	1.000000	0.000000	0.000250	0.000834	OK.	1.000000	0.000000	1	0
	Na 589.592 { 57}	1.000000	0.000000	0.007648	0.025494	OK.	1.000000	0.000000	1	0
	Ni 231.604 {446}	1.000000	0.000000	0.000344	0.001148	OK.	1.000000	0.000000	1	0
	P 177.495 {490}	1.000000	0.000000	0.001287	0.004290	OK.	1.000000	0.000000	1	0
	Pb 220.353 {453}	1.000000	0.000000	0.001165	0.003882	OK.	1.000000	0.000000	1	0
	S 182.034 {485}	1.000000	0.000000	0.004161	0.013872	OK.	1.000000	0.000000	1	0
	Sb 206.833 {463}	1.000000	0.000000	0.001330	0.004433	OK.	1.000000	0.000000	1	0
	Se 196.090 {472}	1.000000	0.000000	0.002037	0.006791	OK.	1.000000	0.000000	1	0
	Si 212.412 {459}	1.000000	0.000000	0.001002	0.003341	OK.	1.000000	0.000000	1	0
	Sn 189.989 {478}	1.000000	0.000000	0.000792	0.002638	OK.	1.000000	0.000000	1	0
	Sr 407.771 { 83}	1.000000	0.000000	0.000094	0.000313	OK.	1.000000	0.000000	1	0
	Ti 334.904 {101}	1.000000	0.000000	0.000397	0.001322	OK.	1.000000	0.000000	1	0
	Tl 190.856 {477}	1.000000	0.000000	0.001146	0.003820	OK.	1.000000	0.000000	1	0
	V 292.402 {115}	1.000000	0.000000	0.000331	0.001104	OK.	1.000000	0.000000	1	0
	W 207.911 {462}	1.000000	0.000000	0.001020	0.003401	OK.	1.000000	0.000000	1	0
	Zn 206.200 {464}	1.000000	0.000000	0.000202	0.000673	OK.	1.000000	0.000000	1	0
	Zr 339.198 { 99}	1.000000	0.000000	0.000198	0.000660	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
	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
	Y 224.306 {451}*	0.000000	0.000000	-1.000000	-1.000000	Warnin	1.000000	0.000000	1	0

SGS

Mercury Hot Block Digestion Log

Product **HG / HGTCLP**
Matrix: Aq / Liq / DW

MA Batch #: MA53162
Analyst: LM
Date: 10/14/2022
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M-82

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.

Hot Block # HG-8 Start Time: 16:00 End Time: 18:00 Tube # 1-33.
Start Temp: 91 Corrected Start Temp: 91 Correction: 0 Thermometer ID: 698872
End Temp: 90 Corrected Start Temp: 90 Correction: 0 Thermometer ID: 698872
Hot Block # Start Time: End Time: Tube #
Start Temp: Corrected Start Temp: Correction: Thermometer ID:
End Temp: Corrected Start Temp: Correction: Thermometer ID:

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
1	MP35787-MB1	N	30	30				MP35787	
2	MP35787-B1	N	30	30	2.0ml	Y	0.03		HG-22-163-287-HGA3, IN. V.
3	MP35787-S1	Y	30	30	2.0ml	Y	0.03		JD53503-5, HG-22-163-287-HGA3, IN. V.
4	MP35787-S2	Y	30	30	2.0ml	Y	0.03		JD53503-5, HG-22-163-287-HGA3, IN. V.
5	JD53503-5	Y	30	30					
6	JD53503-1	Y	30	30					
7	JD53503-2	Y	30	30					
8	JD53503-3	Y	30	30					
9	JD53503-4	Y	30	30					
10	JD53503-6	Y	30	30					
11	JD53503-7	Y	30	30					
12	JD53503-9	Y	30	30					
13	JD53129-1A	Y	10	30					LIMITED VOLUME
14	JD53507-2	Y	5	30					TURBID
15	JD53507-3	Y	30	30					
16	JD53489-1	Y	30	30					
17	JD53489-2	Y	30	30					
18	JD53489-3	Y	30	30					
19	JD53516-5	Y	30	30					
20	JD53516-6	Y	30	30					
21	JD53516-7	Y	30	30					
22	MP35788-MB1	N	30	30				MP35788	
23	MP35788-B1	N	30	30	2.0ml	Y	0.03		HG-22-163-287-HGA3, IN. V.
24	MP35788-S1	Y	30	30	2.0ml	Y	0.03		JD53535-3, HG-22-163-287-HGA3, IN. V.
25	MP35788-S2	Y	30	30	2.0ml	Y	0.03		JD53535-3, HG-22-163-287-HGA3, IN. V.
26	JD53535-3	Y	30	30					
27	JD53535-1	Y	30	30					
28	JD53535-2	Y	30	30					
29	JD53535-4	Y	30	30					
30	JD53535-5	Y	30	30					
31	JD53535-6	Y	30	30					
32	JD53535-7	Y	30	30					
33	JD53535-9	Y	30	30					
34									
35									

ANALYST: LM DATE: 10/17/22
Spike witness: DATE:
QC: REVIEWER: DATE:

DAYT-MET-0113-01-FORM-HGWATERPREP
Revision Date: 8/28/18

11.3.1 11

SGS

Mercury Hot Block Digestion Log

Product HG / EHG / HGTCLP
Matrix: Aq / Liq / DW

MA Batch #: MA53162
Analyst: LM
Date: 10/14/2022
Balance ID: B-24
Reagents: See attached sheet
Auto pipet ID M-82

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.
Hot Block # HG-8 Start Time: 16:00 End Time: 18:00 Tube # S1-CRI.

Start Temp: 91 Corrected Start Temp: 91 Correction: 0 Thermometer ID: 698872
End Temp: 90 Corrected Start Temp: 90 Correction: 0 Thermometer ID: 698872

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
S-1	Calibration Blank	N	30 ml	30 ml	0.0 ml	N			
S-2	0.2 ug/l Standard	N	30 ml	30 ml	2.0 ml	Y	0.003		HG-22-163-288-HGA4, IN. V.
S-3	0.5 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.003		HG-22-163-288-HGA4, IN. V.
S-4	1.0 ug/l Standard	N	30 ml	30 ml	1.0 ml	Y	0.030		HG-22-163-287-HGA3, IN. V.
S-5	2.5 ug/l Standard	N	30 ml	30 ml	2.5 ml	Y	0.030		HG-22-163-287-HGA3, IN. V.
S-6	5.0 ug/l Standard	N	30 ml	30 ml	5.0 ml	Y	0.030		HG-22-163-287-HGA3, IN. V.
ICV	ICV_MA53162 (Externa	N	30 ml	30 ml	3.0 ml	Y	0.03		HG-22-163-289-HGB3, AGILENT
ICB	ICB	N	30 ml	30 ml	0.0 ml	N			
CCV	CCV_MA53162	N	30 ml	30 ml	2.5 ml	Y	0.03		HG-22-163-287-HGA3, IN. V.
CCB	CCB	N	30 ml	30 ml	0.0 ml	N			
CRI	CRI	N	30 ml	30 ml	2.0 ml	Y	0.003		HG-22-163-288-HGA4, IN. V.

Form HG022-03
Revision Date: 8/24/15

DATE:
DATE:

Form HG022-03
Revision Date: 8/24/15

ANALYST: LM
QC: REVIEWER:

DATE: 10/17/22
DATE:

11.3.1 11

SGS

Reagent Information Log- Hg Waters

MA # 53162

Reagents	Exp. Date	Reagent # or
Conc. Sulfuric Acid	9/22/2024	Fisher 220502
Conc. Nitric Acid	5/4/2024	Fisher 1122040
Sodium Chloride-Hydroxylamine Hydrochloride	3/15/2023	HG-22-163 207 -HGHCL
Potassium Permanganate 5%	3/15/2023	HG-22-163 205 -HGKM1
Potassium Persulfate	3/15/2023	HG-22-163 206 -HGKS
Stannous Chloride	10/18/2022	HG-22-163 294 -HGS
STD Hg standard solution 1000 ppm	2/14/2023	Inorganic Ventures R2-HG696409
STD Hg standard solution 30 ppb	10/15/2022	HG-22-163- 287 -HGA3
STD Hg standard solution 3ppb	10/15/2022	HG-22-163- 288 -HGA4
ICV Hg standard solution 1000 ppm	4/30/2026	Agilent CT-1449
ICV Hg standard solution 30ppb	10/15/2022	HG-22-163- 289 -HGB3
Dilution Acid	4/5/2023	HG-22-163- 262 HGD2
Digestion Tubes Lot	N/A	Environmental Express 2208065
pH Paper	8/1/2024	Hydrion 222221

Form:GN087A79-03
Rev. Date: 6/6/17

SGS

Mercury Hot Block Digestion Log

Product **HG / HGTCLP**
Matrix: Aq / Liq / DW

Methods (Circle as appropriate)
EPA 245.1 **SW846 7470A**
Required corrected Temp. Range is 90-95 C.

MA Batch #: MA53162
Analyst: LM
Date: 10/17/2022
Balance ID: N/A
Reagents: See attached sheet
Auto pipet ID: M-82

Hot Block # HG-7 Start Time: 11:00 End Time: 13:00 Tube # 1-17.
Start Temp: 92 Corrected Start Temp: 91 Correction: -1 Thermometer ID: 3124942 .
End Temp: 94 Corrected Start Temp: 93 Correction: -1 Thermometer ID: 3124942 .
Hot Block #_____ Start Time:_____ End Time:_____ Tube #_____.
Start Temp:_____ Corrected Start Temp:_____ Correction:_____ Thermometer ID:_____.
End Temp:_____ Corrected Start Temp:_____ Correction:_____ Thermometer ID:_____.

Bot #	Sample ID	pH <2 Y/N	Initial Sample Vol ml	Final Samp Vol ml	Spiked Used Amount Spiked	Spiked Used Added- Y or N	Spikelot and Conc (mg/L)	MP Number	Comments/Lot # and Vendor
1	MP35794-MB1	N*	30	30				MP35794	TCLP
2	MP35794-B1	N*	30	30	2.0ml	Y	0.03		HG-22-163-291-HGA3, IN. V.
3	MP35794-S1	N*	30	30	2.0ml	Y	0.03		JD53166-7A,HG-22-163-291-HGA3, IN. V.
4	MP35794-S2	N*	30	30	2.0ml	Y	0.03		JD53166-7A,HG-22-163-291-HGA3, IN. V.
5	JD53166-7A	N*	30	30					*0.5mL of HNO3 added at 10:30 for pH<2
6	JD53166-8A	Y	30	30					
7	JD53178-1	Y	30	30					
8	JD53120-1	Y	30	30					
9	JD53120-2	Y	30	30					
10	JD53120-3	Y	30	30					
11	JD53228-1	Y	30	30					
12	JD53228-2	Y	30	30					
13	JD53228-3	Y	30	30					
14	JD53228-4	Y	30	30					
15	JD53228-5	Y	30	30					
16	JD53230-1	Y	30	30					
17	JD53255-1	Y	30	30					
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									
33									
34									
35									

ANALYST: LM DATE: 10/17/22
Spike witness:_____ DATE:_____
QC: REVIEWER:_____ DATE:_____

DAYT-MET-0113-01-FORM-HGWATERPREP
Revision Date: 8/28/18

SGS

Reagent Information Log- Hg Waters

MA # 53162

Reagents	Exp. Date	Reagent # or
Conc. Sulfuric Acid	10/17/2024	Fisher 220502
Conc. Nitric Acid	4/1/2024	Fisher 22140189
Sodium Chloride-Hydroxylamine Hydrochloride	3/15/2023	HG-22-163 207 -HGHCL
Potassium Permanganate 5%	3/15/2023	HG-22-163 205 -HGKM1
Potassium Persulfate	3/15/2023	HG-22-163 206 -HGKS
Stannous Chloride	10/18/2022	HG-22-163 294 -HGS
STD Hg standard solution 1000 ppm	2/14/2023	Inorganic Ventures R2-HG696409
STD Hg standard solution 30 ppb	10/18/2022	HG-22-163- 291 -HGA3
STD Hg standard solution 3ppb	10/18/2022	HG-22-163- 292 -HGA4
ICV Hg standard solution 1000 ppm	4/30/2026	Agilent CT-1449
ICV Hg standard solution 30ppb	10/18/2022	HG-22-163- 293 -HGB3
Dilution Acid	4/5/2023	HG-22-163- 262 HGD2
Digestion Tubes Lot	N/A	Environmental Express 2208065
pH Paper	8/1/2024	Hydrion 222221

Form:GN087A79-03
Rev. Date: 6/6/17

SGS North America Inc.

Aqueous Metals Digestion Form

Batch Information

Batch ID	Start Date	Start Time	End Date	End time	QC Samp 1	QC Samp 2
MP35732	10/14/2022	11:00	10/14/2022	16:30	JD53503-5	

Temperature

		Block ID1	Therm. ID#	Temperature	Correction	Corrected Temp
1	Start	MP-1	1124655	95	0	95
1	End	MP-1	1124655	95	0	95
2	Start					
2	End					

Methods and Equipment

	Dig. Method	Heating Method		Auto Pipette #	Digestion Tube Lot #	
	SW846 3010A	Digestion Block		M-81	2204135	

Sample ID	Bottle Number	pH<2 (Y/N)	Initial Sample Volume	Final Volume in ML	Reagent Groups Added	Spike Groups Added	Comments
MP35732-MB1	N/A	N	50	50	AB		
MP35732-B1	N/A	N	50	50	AB	ABCDE	
MP35732-S1	9	Y	50	50	AB	ABCDE	
MP35732-S2	9	Y	50	50	AB	ABCDE	
MP35732-SD1	9	Y	50	50	AB		
JD53129-1A	3	Y	50	50	AB		
JD53360-2	5	Y	50	50	AB		
JD53360-3	5	Y	50	50	AB		
JD53360-4	5	Y	5	50	AB		*DILUTION
JD53388-12	1	Y	5	50	AB		*DILUTION
JD53489-1	7	Y	50	50	AB		
JD53489-2	7	Y	50	50	AB		
JD53489-3	7	Y	50	50	AB		
JD53503-1	3	Y	50	50	AB		
JD53503-2	3	Y	50	50	AB		
JD53503-3	3	Y	50	50	AB		
JD53503-4	3	Y	50	50	AB		
JD53503-5	9	Y	50	50	AB		
JD53503-6	3	Y	50	50	AB		
JD53503-7	3	Y	50	50	AB		
JD53503-9	3	Y	50	50	AB		
JD53507-2	3	Y	50	50	AB		
JD53507-3	3	Y	50	50	AB		
MP35732-B2	N/A	N	50	50	AB	FGHIJ	^
MP35732-S3	9	Y	50	50	AB	FGHIJ	^
MP35732-S4	9	Y	50	50	AB	FGHIJ	^

Reagents Groups

Group	Description	MLs Used
A	CONC HNO3	3
B	1:1 HCL	5
C		
D		
E		
F		
G		
H		

Spike Groups

Group	Description	MLs Used
A	ACCUTEST 13A REV1	0.5
B	ACCUTEST 14A REV1	0.5
C	MINERALS 5000 PPM	0.25
D	AG 20 PPM	0.625
E	LI 1000 PPM	0.1
F	ACCUTEST 13B REV1	0.2
G	ACCUTEST 14B REV1	0.2
H	MINERALS 1000 PPM	0.2
I		

Comments: *SEE ADDITION

Analyst SARAHF **Approved by** MELVINA **Approved on** 10/17/2022

Note: Reagent traceability for batch Start Date can be seen on the reagent traceability page for this batch.
Serial Dilution samples shown for QC purposes only.
Acceptable Temperature range is 90-95 degrees C unless otherwise noted

SGS

Metals Digestion Reagents Information Log

Digestion Batch ID: MP35732 Date: 10/14/2022

Matrix: ALL

Standard/Reagent Type	Exp. Date	Standard/Reagent ID
Spiking Solution- (ACCUTEST 13A REV1)	1/28/2023	MP-21-58-65
Spiking Solution- (ACCUTEST 14A REV1)	1/28/2023	MP-21-58-62
Spiking Solution - 5000 mg/l Minerals	9/28/2023	T2-MEB720000 MFG: INO.VENT.
Spiking Solution - Sulfur 1000ppm	5/17/2024	LOT: 051721 MFG: ABSOLUTE STD.
Spiking Solution - Si 1000ppm	11/29/2022	S2-S1700841 MFG: INO.VENT.
Spiking Solution - Bi 1000ppm	12/10/2022	22125008 MFG: INO.VENT.
Spiking Solution - Se 20ppm	2/28/2023	MP-21-58-70
Spiking Solution - Li 1000ppm	11/15/2023	S2-L1701641 MFG: INO.VENT.
Spiking Solution- Ag 20 ppm	3/21/2023	MP-21-58-71
Spiking Solution - (ACCUTEST 13B REV1)	10/15/2022	MP-21-58-42
Spiking Solution - (ACCUTEST 14B REV1)	10/15/2022	MP-21-58-43
Spiking Solution - 1000ppm Minerals	2/28/2023	MP-21-58-69
Spiking Solution- P		
Nitric Acid	4/1/2024	LOT:22140189 MFG: FISHER BRAND
Nitric Acid (1:1)	4/10/2023	MP-21-60-133 1:1 HNO3
Hydrochloric Acid	9/2/2024	LOT:22G2862015 MFG: JT BAKER
Hydrochloric Acid (1:1)	4/10/2023	MP-21-60-134 1:1 HCL
Hydrogen Peroxide	8/18/2024	LOT: 221315 MFG: FISHER
Soil Lab Control/Soil LC	7/6/2024	LOT: D110-540 MFG: ERA
Teflon Chips(For Soil MB and Blank Spike)	N/A	LOT: 27407287 MFG: SAINT-GOBAIN
Digestion Tubes	N/A	LOT: 2204135 MFG: ENV. EXPRESS
pH Paper	2/15/2024	LOT: 205521 MFG: HYDRION
Filter paper Q8	N/A	LOT: 17607330 MFG: FISHER

Spike witnessed By: SS

metals digestion reagents information log 2022
1/17/18

MP35732

Additional volume preservation when pH is >2 for Metals analysis sample

Sample #	Bottle #	Sample description	Initial pH	HNO3 used for preservation (ml)	HNO3 Lot#	HNO3 Vendor	HNO3 Exp. Date	Final pH	Volume Preserved	Final Volume	Preservation Time/Date	Initial	Comment
JD53373-4	3	high ph	7	3mL	22140189	Fisher	4/1/24	2	500	500	10/12/22 12:15	SS	Whole
JD53380-6	7	high ph	7	2mL	22140189	fisher	4/1/24	2	500	500	10/12/22 12:25	SS	Whole
JD53380-5	7	high ph	7	2mL	22140189	fisher	4/1/24	2	500	500	10/12/22 12:27	SS	Whole
JD53380-5F	8	high ph	7	2mL	22140189	fisher	4/1/24	2	500	500	10/12/22 12:30	SS	Whole
JD53380-6F	8	high ph	7	2mL	22140189	fisher	4/1/24	2	500	500	10/12/22 12:30	SS	Whole
JD52739-1	2	liq	12	4	22140189	fisher	4/1/24	2	0.5	50	10/12/22 4:30	SF	
JD52739-1	2	liq	12	4	22140189	fisher	4/1/24	2	1	50	10/12/22 4:30	SF	
~~JD52739-1~~	~~2~~	~~liq~~											
~~JD52739-1~~	~~2~~	~~liq~~											
~~JD52739-1~~	~~2~~	~~liq~~											
~~JD52739-1~~	~~2~~	~~liq~~											
JD53360-2	5	high ph	4	2	1122040	Fisher	5/4/24	12	500	500	10/12/22 11:52	TW	Whole
JD53360-3	5	high ph	7	2	1122040	Fisher	5/4/24	12	500	500	10/12/22 11:55	TW	Whole
JD53388-12	1	high ph	7	.5	22140189	Fisher	4/1/24	2	5	50	10/13/22 10:45	SS	Aloquate 10/15
JD53388-12	1	high ph	7	.5	22140189	fisher	4/1/22	2	5	50	10/13 10:45	SS	Aloquate
JD53360-4	5	high ph	7	.5	22140189	fisher	4/1/22	2	5	50	10/13 11:00	SS	Aloquate
JD53360-4	5	high ph	7	.5	22140189	fisher	4/1/22	2	5	50	10/13 11:00	SS	Aloquate

Reviewed By: _____

45

AA070-02 (Additional preservation for Metals)-DAYT-MET-0077-2-02-FORM-Additional Preservation for Metals.xlsx
1/19/18

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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
HEM Oil and Grease	GP42871/GN34458	5.0	0.0	mg/l	40.03	37.4	93.4	78-114%
Solids, Total Suspended	GN34397	4.0	0.0	mg/l	100	91.6 mg/l	91.6	80-120%
Total Organic Carbon	GP42898/GN34551	1.0	0.0	mg/l	10	9.59	95.9	90-110%

Associated Samples:
Batch GN34397: JD53489-1, JD53489-2, JD53489-3
Batch GP42871: JD53489-1, JD53489-2, JD53489-3
Batch GP42898: JD53489-1, JD53489-2, JD53489-3
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
HEM Oil and Grease	GP42871/GN34458	JD53486-2	mg/l	1.6	0.0	200.0(a)	0-18%
Solids, Total Suspended	GN34397	JD53456-1	mg/l	1.5 U	0.0	0.0	0-5%

Associated Samples:
Batch GN34397: JD53489-1, JD53489-2, JD53489-3
Batch GP42871: JD53489-1, JD53489-2, JD53489-3
(*) Outside of QC limits
(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
HEM Oil and Grease	GP42871/GN34458	JD53486-1	mg/l	5.8	40.03	45.7	99.7	78-114%
Total Organic Carbon	GP42898/GN34551	JD53594-3	mg/l	2.1	10	16.0	139.0N(a)	71-132%

Associated Samples:
Batch GP42871: JD53489-1, JD53489-2, JD53489-3
Batch GP42898: JD53489-1, JD53489-2, JD53489-3
(*) 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: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Total Organic Carbon	GP42898/GN34551	JD53594-3	mg/l	2.1	10	15.9	0.6	10%

Associated Samples:
Batch GP42898: JD53489-1, JD53489-2, JD53489-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: D221018W1.TXT Date Analyzed: 10/10/22 Methods: SM5310 B-11, SM5310 B-11/14
Analyst: MH Run ID: GN34551
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
22:09	GN34551-STD1	1		STDA
22:23	GN34551-STD2	1		STDB
22:38	GN34551-STD3	1		STDC
22:54	GN34551-STD4	1		STDD
23:11	GN34551-STD5	1		STDE
23:31	GN34551-STD6	1		STDF
23:51	GN34551-STD7	1		STDG
00:13	GN34551-STD8	1		STDH
10:43	ZZZZZZ	1		
11:11	GN34551-CRI1	1		
11:29	GN34551-HSTD1	1		
11:50	GN34551-ICV1	1		
12:09	GN34551-ICB1	1		
08:26	GN34551-CCVA1	1		
08:38	GN34551-CCB1	1		
08:50	ZZZZZZ	1		
10:23	GP42877-MB2	1		
10:36	GP42877-B2	1		
11:46	JD53225-1	5		(sample used for QC only; not part of login JD53489)
11:59	GP42877-S1	5		
12:12	GP42877-MSD1	5		
12:24	GP42650-MB2	1		
12:37	GP42650-B2	1		
12:48	ZZZZZZ	1		
13:02	ZZZZZZ	1		
15:20	GN34551-CCV1	1		
15:31	GN34551-CCB2	1		
15:42	GP42878-MB2	1		
16:49	GP42878-B2	1		
17:02	JD53374-1	5		(sample used for QC only; not part of login JD53489)
17:15	GP42878-S1	5		
17:28	GP42878-MSD1	5		
17:41	ZZZZZZ	500		

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: D221018W1.TXT Date Analyzed: 10/10/22 Methods: SM5310 B-11, SM5310 B-11/14
Analyst: MH Run ID: GN34551
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:52	GP42879-MB2	1		
18:05	GP42879-B2	1		
18:29	ZZZZZZ	120		
18:42	GN34551-CCVA2	1		
18:53	GN34551-CCB3	1		
19:06	ZZZZZZ	300		
19:20	ZZZZZZ	200		
19:33	ZZZZZZ	150		
19:46	ZZZZZZ	50		
20:01	GP42898-MB1	1		
20:12	GP42898-B1	1		
20:40	JD53594-3	1		(sample used for QC only; not part of login JD53489)
20:52	GP42898-S1	1		
21:10	GP42898-MSD1	1		
21:28	ZZZZZZ	1		
21:47	GN34551-CCV2	1		
21:58	GN34551-CCB4	1		
22:11	ZZZZZZ	1		
22:24	JD53489-1	1		
22:37	JD53489-2	1		
22:50	JD53489-3	1		
23:02	ZZZZZZ	1		
23:16	ZZZZZZ	1		
23:32	ZZZZZZ	1		
23:43	ZZZZZZ	1		
23:55	GP42876-MB2	1		
00:18	GP42876-B2	1		
00:31	GN34551-CCVA3	1		
00:46	GN34551-CCB5	1		
00:57	ZZZZZZ	100		
01:09	GP42899-MB1	1		
01:24	GP42899-B1	1		
01:37	JD53556-3	1		(sample used for QC only; not part of login JD53489)

SGS Instrument Runlog
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: D221018W1.TXT Date Analyzed: 10/10/22 Methods: SM5310 B-11, SM5310 B-11/14
Analyst: MH Run ID: GN34551
Parameters: Total Organic Carbon

Time	Sample Description	Dilution Factor	PS Recov	Comments
01:50	GP42899-S1	1		
02:03	GP42899-MSD1	1		
02:16	ZZZZZZ	1		
02:34	ZZZZZZ	1		
02:45	ZZZZZZ	1		
02:58	ZZZZZZ	1		
03:10	GN34551-CCV3	1		
03:21	GN34551-CCB6	1		
03:34	ZZZZZZ	1		
03:46	ZZZZZZ	1		
04:02	ZZZZZZ	1		
04:25	GN34551-CCVA4	1		
04:37	GN34551-CCB7	1		
04:50	ZZZZZZ	1		
09:21	ZZZZZZ	5		
09:34	GN34551-CCV4	1		
09:45	GN34551-CCB8	1		
09:56	ZZZZZZ	1		

Refer to raw data for calibration curve and standards.

Instrument QC Summary
Inorganics Analyses

Login Number: JD53489
Account: AGMNYA - Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

File ID: D221018W1.TXT Date Analyzed: 10/10/22 Methods: SM5310 B-11, SM5310 B-11/14
Run ID: GN34551 Units: mg/l

Sample Number	Parameter	Result	RL	IDL/MDL	True Value	% Recov.	QC Limits
GN34551-CRI1	Total Organic Carbon	0.803	1.0	0.72	1	80.3	70-130
GN34551-HSTD1	Total Organic Carbon	49.7	1.0	0.72	50	99.4	90-110
GN34551-ICV1	Total Organic Carbon	21.6	1.0	0.72	20	108.0	90-110
GN34551-ICB1	Total Organic Carbon	0.922	1.0	0.72			
GN34551-CCVA1	Total Organic Carbon	49.2	1.0	0.72	50	98.4	
GN34551-CCB1	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCV1	Total Organic Carbon	24.5	1.0	0.72	25	98.0	90-110
GN34551-CCB2	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCVA2	Total Organic Carbon	50.2	1.0	0.72	50	100.4	
GN34551-CCB3	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCV2	Total Organic Carbon	25.3	1.0	0.72	25	101.2	90-110
GN34551-CCB4	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCVA3	Total Organic Carbon	50.9	1.0	0.72	50	101.8	
GN34551-CCB5	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCV3	Total Organic Carbon	25.8	1.0	0.72	25	103.2	90-110
GN34551-CCB6	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCVA4	Total Organic Carbon	54.4	1.0	0.72	50	108.8	
GN34551-CCB7	Total Organic Carbon	0.72 U	1.0	0.72			
GN34551-CCV4	Total Organic Carbon	25.4	1.0	0.72	25	101.6	90-110
GN34551-CCB8	Total Organic Carbon	0.72 U	1.0	0.72			

(!) Outside of QC limits

General Chemistry

Raw Data

Test: **Total Suspended Solids**
Method: **SM2540 D-11/15**

Product: **TSS**
Units: mg/l
RL: 4.0

GN Batch ID: GN34397
Analyst: AS
Date: 10/14/2022
Balance ID: B-90

SGS

QC Summary

Filtration Date: 10/14/22 | OVEN ID: INC-21 | Filtration Time: 13:31

MB ID:	GN34397-MB1	Result:	0.2	< RDL	y
Dup ID:	GN34397-D1	Samp Resu	0.4	% RPD:	0%
Dup ID:	GN34397-D2	Samp Mass	0	% RPD:	0%

Acceptable Temp. Range = 103 to 105 deg. C.

Therm ID: 5624780
Corr Factor: 0

					Date:	10/14-17/2022	10/17/2022								
					Time (Start/Finish):	15:23/10:05	10:25/11:43								
					UnCorr Temp (Start/Finish):	104/104	104/104								
					Corr Temp (Start/Finish):	104/104	104/104								
Bot #	Dish #	Sample ID	Filter Size*	Volume Filtered (ml)	Filter Tare Weight in g*	Weight after drying at 104 deg. C in g	Redry #1 Weight in g (a)	Redry ?	Redry # 2 Weight in g (a)	Redry ?	Redry # 3 Weight in g (a)	Constant Weight in g (a)	TSS in mg/l (Calculated)	Final TSS in mg/l**	Mass %RPD	Mass %RPD > 5%
	C1	GN34397-MB1	42	1000.0	**0.0903**	0.0904	0.0905	NO						0.20		
	C2	GN34397-B1	42	500.0	**0.0897**	0.1352	0.1355	NO						91.60		
	C3	GN34397-D1	42	500.0	**0.0902**	0.0904	0.0904	NO						0.40	0.00%	Y
3	C4	JD53456-1	42	500.0	**0.0898**	0.0901	0.0900	NO						0.40		
	C5	GN34397-D2	42	500.0	**0.0906**	0.0906	0.0906	NO						0.00	#DIV/0!	Y
2	C6	JD53457-1	42	500.0	**0.0913**	0.0913	0.0913	NO						0.00		
2	C7	JD53487-6	42	500.0	**0.0911**	0.0919	0.0918	NO						1.40		
9	C8	JD53489-1	42	100.0	**0.0918**	0.0953	0.0951	NO						33.00		
8	C9	JD53489-2	42	100.0	**0.0914**	0.0968	0.0966	NO						52.00		
8	C10	JD53489-3	42	70.0	**0.0895**	0.0919	0.0919	NO						34.29		
3	C11	JD53509-3	42	500.0	**0.0899**	0.0899	0.0900	NO						0.20		
3	C12	JD53574-2	42	1000.0	**0.0902**	0.0902	0.0904	NO						0.20		
2	C13	JD53487-2	42	1000.0	**0.0898**	0.0906	0.0903	NO						0.50		
2	C14	JD53487-1	42	200.0	**0.0907**	0.0933	0.0932	NO						12.50		
3	C15	JD53434-1	42	175.0	**0.0895**	0.0899	0.0899	NO						2.29		
2	C16	JD53431-1	42	350.0	**0.0889**	0.0895	0.0893	NO						1.14		
4	C17	JD53430-1	42	400.0	**0.0902**	0.0906	0.0904	NO						0.50		
2	C18	JD53428-1	42	20.0	**0.0883**	0.1394	0.1392	NO						2545.00		
1	C19	JD53409-2	42	300.0	**0.0903**	0.0931	0.0933	NO						10.00		
1	C20	JD53409-1	42	150.0	**0.0895**	0.1014	0.1010	NO						76.67		
3	C21	JD53400-1	42	200.0	**0.0900**	0.0928	0.0927	NO						13.50		
4	C22	JD53398-2	42	200.0	**0.0900**	0.0923	0.0922	NO						11.00		
3	C23	JD53394-5	42	100.0	**0.0897**	0.0929	0.0929	NO						32.00		
4	C24	JD53390-2	42	165.0	**0.0889**	0.0891	0.0892	NO						1.82		

(a) Redries when result is <DL after the initial weighing. Note: Constant weight is a change of <4% of the sample mass or 0.0005 g, whichever is
*Filters are dried and dessicated for a minimum of 12 hours ensure constant tare weight.
**Final TSS, mg/L = [(constant weight - filter tare mass, g) × 1000] ÷ (initial volume, mL ÷ 1000)
Comments:

B1 → 0.1g of Diatomaceous Earth in 1L of DI H_2O (100ppm)
Exp Date → 11/18/26

DAYT-WET-0196-11-FORM-TSS
REV DATE 06/30/22

TSS Worksheet

Acceptable Temp. Range = 103 to 105 deg. C.

** Note - Filters are dried for a minimum of 1.5 h and dessicated for a minimum of 12 h. Constant mass is determined prior to filtering.

Date:		10/10-11/2022	10/14/2022				
Time (Start/Finish):		17:27/10:07	11:42/13:21				
Uncorr Temp Deg C (Start/Finish):		104/104	104/104				
Corr Temp Deg C (Start/Finish):		104/104	104/104				
Dish #	**Filter size**	**Initial weight after drying** (mg)**	**Redry 1 Constant Weight in g (a)**	**Redry ?**	**Redry 2 Constant Weight in g (a)**	**Redry ?**	**Redry 3 Constant Weight in g (a)**
C1	42.00000	0.0904	**0.0903**	NO		*FALSE*	
C2	42.00000	0.0899	**0.0897**	NO		*FALSE*	
C3	42.00000	0.0899	**0.0902**	NO		*FALSE*	
C4	42.00000	0.0898	**0.0898**	NO		*FALSE*	
C5	42.00000	0.0907	**0.0906**	NO		*FALSE*	
C6	42.00000	0.0914	**0.0913**	NO		*FALSE*	
C7	42.00000	0.0911	**0.0911**	NO		*FALSE*	
C8	42.00000	0.0918	**0.0918**	NO		*FALSE*	
C9	42.00000	0.0915	**0.0914**	NO		*FALSE*	
C10	42.00000	0.0896	**0.0895**	NO		*FALSE*	
C11	42.00000	0.0900	**0.0899**	NO		*FALSE*	
C12	42.00000	0.0903	**0.0902**	NO		*FALSE*	
C13	42.00000	**0.0898**	**0.0898**	NO		*FALSE*	
C14	42.00000	0.0908	**0.0907**	NO		*FALSE*	
C15	42.00000	**0.0896**	**0.0895**	NO		*FALSE*	
C16	42.00000	**0.0891**	**0.0889**	NO		*FALSE*	
C17	42.00000	**0.0902**	**0.0902**	NO		*FALSE*	
C18	42.00000	**0.0885**	**0.0883**	NO		*FALSE*	
C19	42.00000	**0.0904**	**0.0903**	NO		*FALSE*	
C20	42.00000	**0.0898**	**0.0895**	NO		*FALSE*	
C21	42.00000	**0.0903**	**0.0900**	NO		*FALSE*	
C22	42.00000	**0.0901**	**0.0900**	NO		*FALSE*	
C23	42.00000	**0.0898**	**0.0897**	NO		*FALSE*	
C24	42.00000	0.0890	**0.0889**	NO		*FALSE*	

Constant Weight	
0.0903	X
0.0897	
0.0902	
0.0898	
0.0906	
0.0913	
0.0911	
0.0918	
0.0914	
0.0895	
0.0899	
0.0902	
0.0898	
0.0907	
0.0895	
0.0889	
0.0902	
0.0883	
0.0903	
0.0895	
0.0900	
0.0900	
0.0897	
0.0889	

0.0900

JJY

SGS

GN34397
TSS SAMPLE DESCRIPTION SHEET

SGS Sample ID	BOTTLE #	FILTER LOT: 115519	Filter size used	Non-standard volumes. Comment with reason as shown below.	Limited Volume
JD53456-1-QC	3	Clear NP	42	500	✓
JD53457-1-QC	2	↓	42	500	✓
JD53487-6	2	Clear FP	42	500A	
JD53489-1	9	Clear More Orange Particles	42	100A	
JD53489-2	8	Light Orange Turbid	42	100A	
JD53489-3	8	↓	42	70A	
JD53509-3	3	Clear NP	42	500A	
JD53574-2	3	↓	42	1000	
JD53487-2	2	↓	42	1000	
JD53487-1	2	Clear MP	42	200A	
JD53434-1	3	Clear NP	42	175A	
JD53431-1	2	↓	42	350A	
JD53430-1	4	↓	42	400A	
JD53428-1	2	Gray Turbid MP	42	20A	
JD53409-2	1	Clear NP	42	300A	
JD53409-1	1	Hazy Colorless	42	150A	
JD53400-1	3	Clear FP	42	200A	
JD53398-2	4	Clear NP	42	200A	
JD53394-5	3	Orange Turbid	42	100A	
JD53390-2	4	Clear FP	42	165A	

Reason [A]: Sample contains heavy particulates and it can be assessed by appearance that it will clog the filter at higher volumes Reason [B]: Initial analysis of the sample at a higher volume produced clogging. Rerunning at reduced volume.

TEST: HEM Oil and Grease		OG1664		GN Group:	GN34458
Method: EPA 1664A		Reporting Date:	10/16/2022	GP Group:	GP42871
Date Extracted:	10/16/2022	Final Date Weighed:	10/16/2022	Analyst:	IH
Balance # Used:	B-55	(Refer to balance log for balance calibration)		Units:	mg/L

QC Summary		Units:	mg/l						
Dup Sample ID:	JD53486-2	Samp Res:	<4.81	Dup Result:	<4.81	% RPD:	0%		
MS Sample ID:	JD53486-1	Samp Res:	5.769	Spike:	40.03	MS Res:	45.673	% Rec.	99.69%
Method Blank Date:	10/16/2022	Result:	<5	RL:	5			<RL:	YES
Blank Spike Date:	10/16/2022	Result:	37.4	Spk Amt.	40.03			% Rec.	93.43%
External:	NA	Control Limit:	NA	Result:	NA			% Rec.	NA

Speed Vap Temperature During Evaporation: 40 deg. C

Speed: Vap III
Vap ID:

(c) refer to Determination of Constant weights page for balance check weight results.

Flask #	Sample ID	Sample pH	Sample Volume (ml)	Total Weight (g)	Tare Weight (g)	Sample Weight (g)	Calc Result	Final Result	RL	Analysis Time
	0.002 g check (c)	na	na	0.0021	0.0021	na	na	na	na	13:15
	1.000 g check (c)	na	na	1.0000	1.0001	na	na	na	na	13:15
	5.000 g check (c)	na	na	4.9995	4.9993	na	na	na	na	13:15
	100 g check (c)	na	na	99.9947	99.9948	na	na	na	na	13:15
MB	GP42871-MB1	<2	1000	2.2697	2.2694	0.0003	0.300	<5	5.00	13:15
BSP	GP42871-B1	<2	1000	2.3284	2.2910	0.0374	37.400	37.400	5.00	16:37
MS	GP42871-S1	<2	1040	2.3294	2.2819	0.0475	45.673	45.673	4.81	16:37
DUP	GP42871-D1	<2	1040	2.2660	2.2654	0.0006	0.577	<4.81	4.81	16:37
1	JD53486-1	<2	1040	2.2845	2.2785	0.0060	5.769	5.769	4.81	16:37
2	JD53486-2	<2	1040	2.2704	2.2687	0.0017	1.635	<4.81	4.81	16:37
3	JD53088-1	<2	900	2.2708	2.2705	0.0003	0.333	<5.56	5.56	16:37
4	JD53640-1	<2	500	2.2498	2.2489	0.0009	1.800	<10	10.00	16:37
5	JD53476-1	<2	990	2.2791	2.2714	0.0077	7.778	7.778	5.05	16:37
6	JD53476-3	<2	1040	2.2748	2.2673	0.0075	7.212	7.212	4.81	16:37
7	JD53489-1	<2	1010	2.2745	2.2738	0.0007	0.693	<4.95	4.95	16:37
8	JD53489-2	<2	1020	2.2687	2.2684	0.0003	0.294	<4.9	4.90	16:37
9	JD53489-3	<2	990	2.2635	2.2628	0.0007	0.707	<5.05	5.05	16:37
10	JD53512-1	<2	990	2.2770	2.2768	0.0002	0.202	<5.05	5.05	16:37
	0.002 g check (c)	na	na	0.0023	0.0021	na	na	na	na	
	1.000g check(b)	na	na	1.0000	0.9999	na	na	na	na	

SGS

DETERMINATION OF CONSTANT WEIGHT

Test: HEM Oil and Grease
Method: EPA 1664A
Test Code: OG1664 10A

GN Group: GN34458
GP Group: GP42871
Analyst: IH
Units: mg/l

Balance ID#: B-55
Thermometer ID#: 73133
Thermometer correction factc 0

Definition of Constant Weight: Weight loss is less than 0.5 mg (0.0005 g).

Date:		10/16/2022	10/16/2022					
Start Time, End Time, Temp (Corrected, Uncorrected)	NA	14:58-15:28	16:05-16:35(70'C)					Note: Samples must be dried at 70 +/- 2 deg. For a minimum of 30 minutes for each drying cycle.
Sample ID	Flask #	Initial Weight (g)	Second Weight (g)	Re-Weigh ?	Third Weight (g)	Re-Weigh ?	Fourth Weight (g)	Description
0.002 g check (c)		0.0021	0.0021	N				
1.000 g check (c)		1.0000	1.0000	N				
5.000 g check (c)		4.9995	4.9995					
100 g check (c)		99.9947	99.9947	N				
GP42871-MB1	MB	2.2697	2.2697	N				
GP42871-B1	BSP	2.3283	2.3284	N				5ml spike
GP42871-S1	MS	2.3292	2.3294	N				5ml spike
GP42871-D1	DUP	2.2660	2.2660	N				
JD53486-1	1	2.2845	2.2845	N				
JD53486-2	2	2.2702	2.2704	N				
JD53088-1	3	2.2708	2.2708	N				
JD53640-1	4	2.2498	2.2498	N				
JD53476-1	5	2.2791	2.2791	N				
JD53476-3	6	2.2747	2.2748	N				
JD53489-1	7	2.2743	2.2745	N				
JD53489-2	8	2.2687	2.2687	N				
JD53489-3	9	2.2634	2.2635	N				
JD53512-1	10	2.2769	2.2770	N				
0.002 g check (c)		0.0023	0.0023	N				
1.000g check(b)		1.0000	1.0000	N				
5 (100%)				N				

Form: GN185-3

SGS

	Accutest Sample ID	Bottle #	Volume (mL)	Appearance (clarity, color, etc.)	Odor
MS	JD53486-1	1	1040	SLIGHTLY CLOUDY	CHEM
DUP	JD53486-2	1	1040	CLEAR	CHEM
1	JD53486-1	2	1040	SLIGHTLY CLOUDY	CHEM
2	JD53486-2	2	1040	CLEAR	CHEM
3	JD53088-1	2	900	CLEAR	CHEM
4	JD53640-1	2	500	CLOUDY	CHEM
5	JD53476-1	1	990	CLOUDY	CHEM
6	JD53476-3	2	1040	CLEAR	CHEM
7	JD53489-1	2	1010	SLIGHTLY CLOUDY	CHEM
8	JD53489-2	2	1020	SLIGHTLY CLOUDY	CHEM
9	JD53489-3	2	990	SLIGHTLY CLOUDY	CHEM
10	JD53512-1	1	990	CLEAR	CHEM
				hem spike ICV(EXTERNAL)	
				HEM SPIKE	
				GNE6-65981-OG1664	
				EXP: 10/14/2022	
				HEM: 8.006 mg/ml HEX: 4.004 mg/ml	

Form: GN-110

SGS

Reagent Information Log - OG1664 Water by EPA 1664A

1

Reagent	Expiration Date	Reagent # or Manufacturer/Lot
Hexane	9/17/2027	FISHER Lot #223504
HEM Spike	3/31/2024	BIOTAGE lot # 1207864
Methanol	7/28/2027	J.T.BAKER batch# 22A0762005
1:1 HCL	8/20/2027	GNE1-64114-PHC/OG16
Sodium Sulfate		
Filter 47mm	NA	LABORATORYSALES&SER.#206334
Pre-Filter 47mm	NA	LABORATORYSALES&SER.#193992
Filter 90/100mm	NA	LABORATORYSALES&SER.#200276
Pre-Filter 90/100mm	NA	LABORATORYSALES&SER.#206211
pH paper	8/1/2024	HYDRON LOT#222221
HEM Spike (ICV)	3/31/2024	

B1/S1= 5.0ml of 8.0 mg/mL HEM SPIKE
HEX= 4.00 mg/L

Form: GN-087 1344
Rev. Date: 11/4/08

13.2
13

LABORATORY REVIEW SIGNATURE FORM
(To be stored with the raw data)

File ID: D221018W1.TXT Date Analyzed: 10/10/22 Methods: SM5310 B-11, SM5310 B-11/14
Analyst: MH Run ID: GN34551

The following analyst(s) have reviewd this run and attest that, to the best of their knowledge, this documentation is complete and correct:

Analyst: MB Date 10/19/22

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

Analyst: _____ Date _____

The following supervisor or their designee has reviewed this run and attests that, to the best of their knowledge, this documentation is complete and correct:

Supervisor (or designee): _____ Date 10/19/22

C:\TOC-L\Data\d221018w1.toc.tlx

	Sample Name	Sample ID	Origin	Manual Diluti	Result	Comment
1	WASHCONF		TOCAQSW846.m	1.000	NPOC:0.7470mg/L	
2	CRI		TOCAQSW846.m	1.000	NPOC:0.8025mg/L	
3	HSTD		TOCAQSW846.m	1.000	NPOC:49.69mg/L	
4	ICV		TOCAQSW846.m	1.000	NPOC:21.55mg/L	
5	ICB		TOCAQSW846.m	1.000	NPOC:0.9215mg/L	
6	CCVA		TOCAQ.met	1.000	NPOC:49.16mg/L	
7	CCB		TOCAQ.met	1.000	NPOC:0.05737mg/L	
8	SPARGERCHK		TOCAQ.met	1.000	NPOC:0.00627mg/L	
9	GP42877-MB2	[toc](rerun)	TOCAQ.met	1.000	NPOC:0.000mg/L	
10	GP42877-B2		TOCAQ.met	1.000	NPOC:10.19mg/L	
11	JD53225-1		TOCAQ.met	5.000	NPOC:83.11mg/L	
12	GP42877-S1	JD53225-1	TOCAQ.met	5.000	NPOC:154.7mg/L	
13	GP42877-MSD1	JD53225-1	TOCAQ.met	5.000	NPOC:157.8mg/L	
14	GP42650-MB2	[toc](rerun)	TOCAQ.met	1.000	NPOC:0.000mg/L	
15	GP42650-B2		TOCAQ.met	1.000	NPOC:9.087mg/L	
16	JD52825-3		TOCAQ.met	1.000	NPOC:0.2161mg/L	
17	JD52825-4		TOCAQ.met	1.000	NPOC:0.1260mg/L	
18	CCV		TOCAQ.met	1.000	NPOC:24.54mg/L	
19	CCB		TOCAQ.met	1.000	NPOC:0.000mg/L	
20	GP42878-MB2	[toc](rerun)	TOCAQ.met	1.000	NPOC:0.000mg/L	
21	GP42878-B2		TOCAQ.met	1.000	NPOC:10.08mg/L	
22	JD53374-1		TOCAQ.met	5.000	NPOC:46.19mg/L	
23	GP42878-S1	JD53374-1	TOCAQ.met	5.000	NPOC:118.9mg/L	
24	GP42878-MSD1	JD53374-1	TOCAQ.met	5.000	NPOC:127.7mg/L	
25	JD53022-1		TOCAQ.met	500.0	NPOC:10393mg/L	
26	GP42879-MB2	[doc](rerun)	TOCAQ.met	1.000	NPOC:0.000mg/L	
27	GP42879-B2		TOCAQ.met	1.000	NPOC:10.34mg/L	
28	JD53337-6F		TOCAQ.met	120.0	NPOC:2789mg/L	
29	CCVA		TOCAQ.met	1.000	NPOC:50.22mg/L	
30	CCB		TOCAQ.met	1.000	NPOC:0.000mg/L	
31	JD53337-8F		TOCAQ.met	300.0	NPOC:11303mg/L	
32	JD53337-9F		TOCAQ.met	200.0	NPOC:6250mg/L	
33	JD53337-10F		TOCAQ.met	150.0	NPOC:3272mg/L	
34	JD53337-11F		TOCAQ.met	50.00	NPOC:587.2mg/L	
35	GP42898-MB1	[toc]	TOCAQ.met	1.000	NPOC:0.000mg/L	
36	GP42898-B1		TOCAQ.met	1.000	NPOC:9.594mg/L	
37	JD53594-3		TOCAQ.met	1.000	NPOC:2.054mg/L	
38	GP42898-S1	JD53594-3	TOCAQ.met	1.000	NPOC:15.99mg/L	
39	GP42898-MSD1	JD53594-3	TOCAQ.met	1.000	NPOC:15.86mg/L	
40	JD53429-4		TOCAQ.met	1.000	NPOC:10.40mg/L	
41	CCV		TOCAQ.met	1.000	NPOC:25.25mg/L	
42	CCB		TOCAQ.met	1.000	NPOC:0.000mg/L	
43	JD53429-5		TOCAQ.met	1.000	NPOC:7.907mg/L	
44	JD53489-1		TOCAQ.met	1.000	NPOC:19.86mg/L	
45	JD53489-2		TOCAQ.met	1.000	NPOC:27.69mg/L	
46	JD53489-3		TOCAQ.met	1.000	NPOC:24.30mg/L	
47	JD53569-1		TOCAQ.met	1.000	NPOC:1.121mg/L	
48	JD53569-2		TOCAQ.met	1.000	NPOC:1.150mg/L	
49	JD53599-5		TOCAQ.met	1.000	NPOC:10.28mg/L	
50	JD53538-1	field blank	TOCAQ.met	1.000	NPOC:0.08931mg/L	
51	GP42876-MB2	[doc](rerun)	TOCAQ.met	1.000	NPOC:0.000mg/L	

d221018w1.toc GN34551 MB 10/19/22

C:\TOC-L\Data\d221018w1.toc.tlx

	Sample Name	Sample ID	Origin	Manual Diluti	Result	Comment
52	GP42876-B2		TOCAQ.met	1.000	NPOC:9.922mg/L	
53	CCVA		TOCAQ.met	1.000	NPOC:50.93mg/L	
54	CCB		TOCAQ.met	1.000	NPOC:0.01710mg/L	
55	JD53337-5F		TOCAQ.met	100.0	NPOC:2167mg/L	
56	GP42899-MB1	[toc]	TOCAQ.met	1.000	NPOC:0.2409mg/L	
57	GP42899-B1		TOCAQ.met	1.000	NPOC:10.62mg/L	
58	JD53556-3		TOCAQ.met	1.000	NPOC:7.610mg/L	
59	GP42899-S1	JD53556-3	TOCAQ.met	1.000	NPOC:20.52mg/L	
60	GP42899-MSD1	JD53556-3	TOCAQ.met	1.000	NPOC:20.50mg/L	
61	JD53539-1	(2)	TOCAQ.met	1.000	NPOC:106.0mg/L	overrange, see rerun
62	JD53556-4		TOCAQ.met	1.000	NPOC:3.063mg/L	
63	JD53556-5		TOCAQ.met	1.000	NPOC:3.549mg/L	
64	JD53557-1		TOCAQ.met	1.000	NPOC:2.990mg/L	
65	CCV		TOCAQ.met	1.000	NPOC:25.84mg/L	
66	CCB		TOCAQ.met	1.000	NPOC:0.000mg/L	
67	JD53556-7		TOCAQ.met	1.000	NPOC:2.637mg/L	
68	JD53567-1		TOCAQ.met	1.000	NPOC:25.58mg/L	
69	JD53551-1		TOCAQ.met	1.000	NPOC:0.4781mg/L	
70	CCVA		TOCAQ.met	1.000	NPOC:54.37mg/L	
71	CCB		TOCAQ.met	1.000	NPOC:0.04029mg/L	
72	SPARGERCHK		TOCAQ.met	1.000	NPOC:0.1907mg/L	
73	JD53539-1		TOCAQ.met	5.000	NPOC:87.85mg/L	rerun
74	CCV		TOCAQ.met	1.000	NPOC:25.37mg/L	
75	CCB		TOCAQ.met	1.000	NPOC:0.000mg/L	
76	SPARGERCHK		TOCAQ.met	1.000	NPOC:0.000mg/L	

d221018w1.toc GN34551 MB 10/19/22

13.3 13

SGS

GN Batch ID: GN34551
Date: 10-18-22

Test: **Total Organic Carbon**
Product: ~~TOC~~ or DOC
Method: **SM5310 B, C, or D-11, SW846 9060M**

d221018w1.toc

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
1	WASHCONF	<2			
2	CRI				
3	HSTD				
4	ICV				
5	ICB				
6	CCV				
9	CCVA				
10	CCB				
11	SPARGERCHK				
12	GP42877-MB2			-	[toc](rerun)
13	GP42877-B2			-	
14	JD53225-1		1:5	6	
15	GP42877-S1		1:5	6	JD53225-1
16	GP42877-MSD1		1:5	6	JD53225-1
17	GP42650-MB2			-	[toc](rerun)
18	GP42650-B2			-	
19	JD52825-3			8	
20	JD52825-4			8	
21	CCV				
22	CCB				
23	GP42878-MB2			-	[toc](rerun)
24	GP42878-B2			-	
25	JD53374-1		1:5	3	
26	GP42878-S1		1:5	4	JD53374-1
27	GP42878-MSD1		1:5	4	JD53374-1
28	JD53022-1		1:500	1	
29	GP42879-MB2			-	[doc](rerun)

Analyst: MB Date: 10/19/22 QCReviewer: _____ Date: _____

Comments: BSP: 500ul of 1000ppm KHP up to 50mL with DI H20 TV= 10 mg/L
MS/MSD: 200ul of 1000ppm KHP up to 20mL with sample TV=10 mg/L
ICV: 5mL of 100 ppm Sucrose up to 25mL with DI H20 TV=20 mg/L

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN 34551
Date: 10-18-22

Test: **Total Organic Carbon**
Product: **TOC or DOC**
Method: **SM5310 B, C, or D-11, SW846 9060M**

Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
30	GP42879-B2	<2		-	
31	JD53337-6F		1:120	1	
32	CCVA				
33	CCB				
34	JD53337-8F		1:300	1	
35	JD53337-9F		1:200	1	
36	JD53337-10F		1:150	1	
37	JD53337-11F		1:50	1	
38	GP42898-MB1			-	[toc]
39	GP42898-B1			-	
40	JD53594-3			11	
41	GP42898-S1			12	JD53594-3
42	GP42898-MSD1			12	JD53594-3
43	JD53429-4			9	
44	CCV				
45	CCB				
46	JD53429-5			9	
47	JD53489-1			10	
48	JD53489-2			10	
49	JD53489-3			10	
50	JD53569-1			3	TOCEP
51	JD53569-2			1	TOCEP
52	JD53599-5			9	
53	JD53538-1			8	Field Blank
54	GP42876-MB2			-	[doc](rerun)
55	GP42876-B2			-	
56	CCVA				

Analyst: MB Date: 10/19/22 QCReviewer: _____ Date: _____
Comments: _____

Form: GN054-04
Rev. Date: 2/27/18

SGS

GN Batch ID: GN34551
Date: 10-18-22

Test: **Total Organic Carbon**
Product: **TOC or DOC**
Method: **SM5310 B, C, or D-11, SW846 9060M**
Note: Refer to raw data and LIMS for information not shown below.

Autosampler Position #	Sample ID	pH	Diluton Factor	Bottle #	Comments
57	CCB	<2			
58	JD53337-5F		1:100	1	
59	GP42899-MB1			-	[toc]
60	GP42899-B1			-	
61	JD53556-3			40	
62	GP42899-S1			41	JD53556-3
63	GP42899-MSD1			41	JD53556-3
64	JD53539-1			8	
65	JD53556-4			15	
66	JD53556-5			15	
67	JD53557-1			15	
68	CCV				
69	CCB				
70	JD53556-7			15	
71	JD53567-1			3	
72	JD53551-1			8	
1	CCVA				
2	CCB				
3	SPARGERCHK				

Analyst: MB Date: 10/19/22 QCReviewer: _____ Date: 10/19/22
Comments:

Form: GN054-04
Rev. Date: 2/27/18

13.3
13

SGS

Analyst MB Product TOC/DOC Autopipette # 53

Date 10-18-22 Batch ID GN34551 Class A Vol. Flask

Sample Dilution Prep Log

Sample ID	Dilution	Initial Volume	Final Volume	Comments
JD53225-1	1:5	4mL	20mL	Rerun (GP42877)
JD53374-1	↓	↓	↓	Rerun (GP42878)
JD53022-1	1:500	0.1mL	50mL	↓
JD53337-6F	1:120	0.25mL	30mL	Rerun (GP42879)
-8F	1:300	0.1mL	30mL	
-9F	1:200	0.1mL	20mL	
-10F	1:150	0.2mL	30mL	
-11F	1:50	0.4mL	20mL	
-5F	1:100	0.2mL	20mL	Rerun (GP42876)
JD53539-1	1:5	4mL	20mL	Rerun (GP42899)

QC Reviewer: _____ Date: _____

Form: GN165-01
Rev. Date: 2/25/03

SGS

GENERAL CHEMISTRY STANDARD PREPARATION LOG FOR TOC

Product: TOC

GN or GP Number: GN34551

Intermediate Standard Description	Stock used to prepare standard	Stock concentration in (mg/l)	Stock volume or weight used with units	Balance/ Autopipet ID (*)	Diluent (a)	Final Volume	Final Conc. of Intermediate (mg/l)	Expiration Date	Analyst	Date
GNE10-71931-TOC	**Fisher lot:** 178879	KHP	2.125g	B-39	DI H20	1000 ml	1000 ppm	1/13/2023	MB	10/14/2022
GNE10-71936-TOC	*GNE10-71931-TOC*	1000ppm	20 mL	Class A pipet	DI H20	200 ml	100 ppm	11/18/2022	MB	10/14/2022
GNE10-71934-TOC	**Fisher lot:** 210554	Sucrose	0.0474g	B-39	DI H20	200 ml	100 ppm	11/18/2022	MB	10/14/2022
Standard Description	**Intermediate or Stock used to prepare standard**	**Intermediate or Stock concentration (mg/L)**	**Intermediate or Stock volume used in ml**	**Balance/ Autopipet ID (*)**	**Diluent**	**Final Volume**	**Final Conc. of Standard (mg/l)**	**Expiration Date**	**Analyst**	**Date**
KHP STDS										
GNE10-71937-TOC	*GNE10-71936-TOC*	100 ppm	1.0	Class A pipet	DI H20	100 ml	1.0	11/18/2022	MB	10/14/2022
GNE10-71938-TOC	*GNE10-71936-TOC*	100 ppm	2.0	Class A pipet	DI H20	100 ml	2.0	11/18/2022	MB	10/14/2022
GNE10-71939-TOC	*GNE10-71936-TOC*	100 ppm	5.0	Class A pipet	DI H20	100 ml	5.0	11/18/2022	MB	10/14/2022
GNE10-71940-TOC	*GNE10-71936-TOC*	100 ppm	10.0	Class A pipet	DI H20	100 ml	10.0	11/18/2022	MB	10/14/2022
GNE10-71941-TOC	*GNE10-71936-TOC*	100 ppm	20.0	Class A pipet	DI H20	100 ml	20.0	11/18/2022	MB	10/14/2022
GNE10-71942-TOC	*GNE10-71936-TOC*	100 ppm	30.0	Class A pipet	DI H20	100 ml	30.0	11/18/2022	MB	10/14/2022
GNE10-71943-TOC	*GNE10-71936-TOC*	100 ppm	50.0	Class A pipet	DI H20	100 ml	50.0	11/18/2022	MB	10/14/2022
KHP STDS										
GNE10-71932-TOC	**Acros lot:** A0383564	KHP	0.2125g	B-39	DI H20	1000 ml	100 ppm	11/18/2022	MB	10/14/2022
GNE10-71944-TOC	*GNE10-71932-TOC*	100 ppm	50 mL	Class A pipet	DI H20	200 ml	25 ppm	11/18/2022	MB	10/14/2022
GNE10-71945-TOC	*GNE10-71932-TOC*	100 ppm	100 mL	Class A pipet	DI H20	200 ml	50 ppm	11/18/2022	MB	10/14/2022

(a) Diluent reagent reference number_____ Expiration Date_____

**Volume will change with standardization concentration.

All strikeouts must be initialed, dated, and reason applied if not transcription error.

Form: GN199-02
Rev. Date: 3/2/18

SGS

Reagent Information Log - TOC/DOC - Water

GN34551

Reagent	Reagent # or Manufacturer/Lot	Exp. Date
Potassium Hydrogen Phthlate (KHP), Stock Solution 1000 mg/L	GNE10-71931-TOC	1/13/2023
Carbonate/Bicarbonate Stock Solution	GNE10-71933-TOC	1/13/2023
Sparger Check Solution	GNE10-71935-TOC	11/18/2022
CCV Solution	GNE10-71944-TOC	11/18/2022
CCVA Solution (50 ppm)	GNE10-71945-TOC	11/18/2022
CRI Check	GNE10-71937-TOC	11/18/2022
HCl	VWR CHEMICALS LOT: 2022041418	4/10/2024
pH Hydron paper	FISHER LOT: 222221	8/1/2024
Sucrose stock solution	GNE10-71934-TOC	11/18/2022

All standards and stocks were made as described in the SOP for this method (circle one): (Y) or N
If no (N), see attached page for standards prep.

Form: GN087A67-04
Rev. Date: 4/6/18

13.3 13

TOC-Control L Report

d221007w1.toc.tlx

Instr.Information

Instrument Options	TOC/AS1/Sparge Kit/
Catalyst	Regular Sensitivity

Cal. Curve

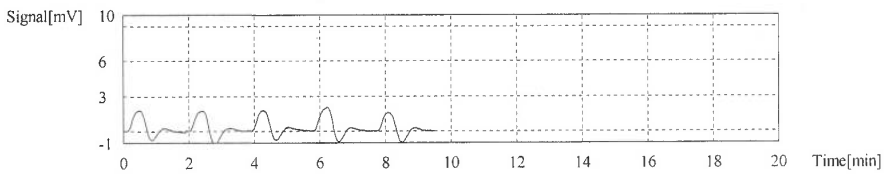
Sample Name:	Untitled
Sample ID:	Untitled
Cal. Curve:	d221007w1.2022_10_07_22_05_04.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.605	100uL	1.000	*******		10/7/2022 10:09:41 PM
2	2.544	100uL	1.000	*******		10/7/2022 10:11:57 PM
3	3.287	100uL	1.000	*******		10/7/2022 10:14:12 PM
4	3.836	100uL	1.000	*******		10/7/2022 10:16:29 PM
5	2.134	100uL	1.000	*******	E	10/7/2022 10:18:44 PM

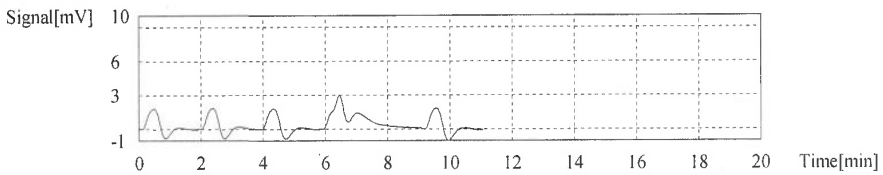
Acid Add.	0.000%
Sp. Time	600.0sec
Mean Area	3.318



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	2.982	100uL	1.000	*******		10/7/2022 10:23:07 PM
2	3.019	100uL	1.000	*******		10/7/2022 10:25:25 PM
3	2.978	100uL	1.000	*******		10/7/2022 10:27:44 PM
4	13.53	100uL	1.000	*******	E	10/7/2022 10:31:21 PM
5	2.535	100uL	1.000	*******		10/7/2022 10:33:40 PM

Acid Add.	0.000%
Sp. Time	600.0sec
Mean Area	2.879



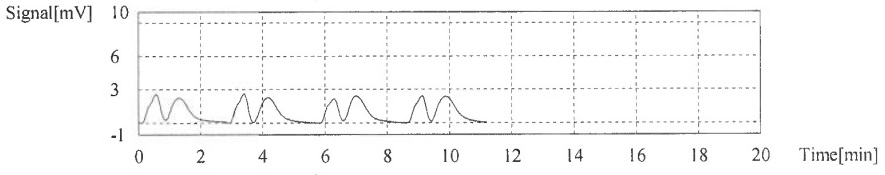
Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	14.64	100uL	1.000	*******		10/7/2022 10:38:58 PM
2	15.12	100uL	1.000	*******		10/7/2022 10:42:14 PM
3	14.26	100uL	1.000	*******		10/7/2022 10:45:24 PM
4	15.08	100uL	1.000	*******		10/7/2022 10:48:23 PM

TOC-Control L Report

d221007w1.toc.tlx

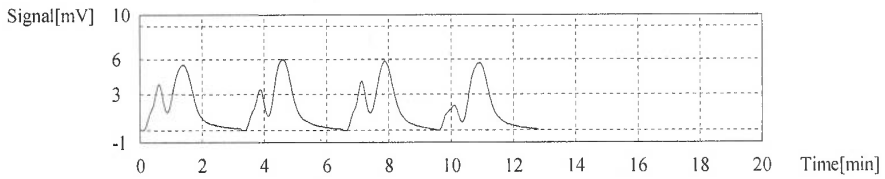
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 14.78



Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	34.13	100uL	1.000	*******		10/7/2022 10:54:21 PM
2	33.68	100uL	1.000	*******		10/7/2022 10:57:58 PM
3	33.66	100uL	1.000	*******		10/7/2022 11:01:17 PM
4	31.28	100uL	1.000	*******		10/7/2022 11:04:57 PM

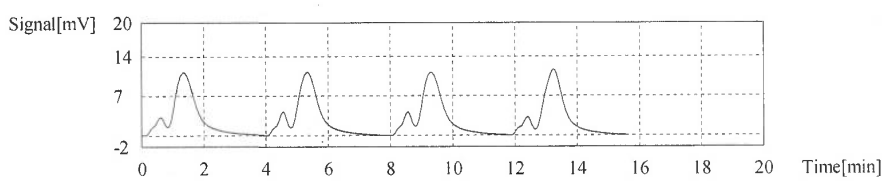
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 33.19



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	60.98	100uL	1.000	*******		10/7/2022 11:11:35 PM
2	61.45	100uL	1.000	*******		10/7/2022 11:15:57 PM
3	61.36	100uL	1.000	*******		10/7/2022 11:20:07 PM
4	60.04	100uL	1.000	*******		10/7/2022 11:24:22 PM

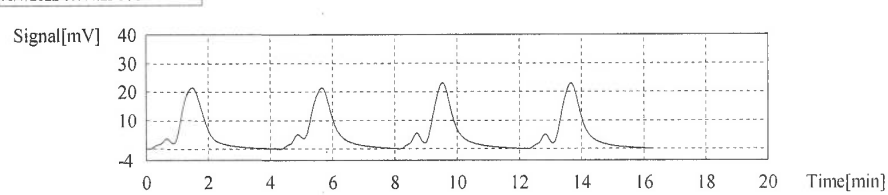
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 60.96



Conc: 20.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	115.1	100uL	1.000	*******		10/7/2022 11:31:18 PM
2	115.6	100uL	1.000	*******		10/7/2022 11:35:30 PM
3	116.5	100uL	1.000	*******		10/7/2022 11:39:58 PM
4	116.9	100uL	1.000	*******		10/7/2022 11:44:23 PM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 116.0



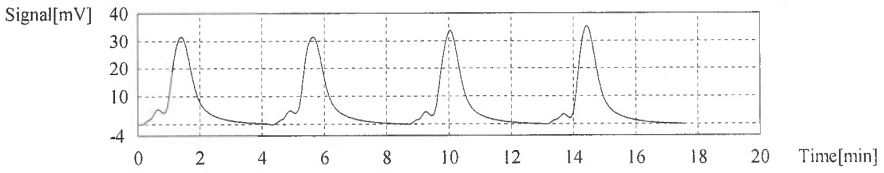
Conc: 30.00mg/L

TOC-Control L Report

d221007w1.toc.tlx

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	169.2	100uL	1.000	*******		10/7/2022 11:51:20 PM
2	168.8	100uL	1.000	*******		10/7/2022 11:56:03 PM
3	169.6	100uL	1.000	*******		10/8/2022 12:00:50 AM
4	170.2	100uL	1.000	*******		10/8/2022 12:05:40 AM

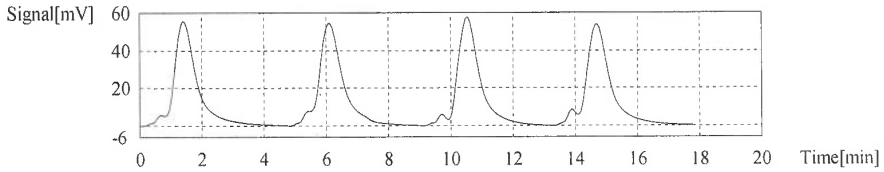
Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 169.5



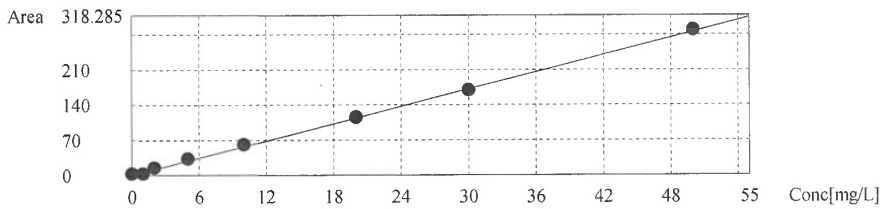
Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	285.2	100uL	1.000	*******		10/8/2022 12:13:07 AM
2	290.8	100uL	1.000	*******		10/8/2022 12:17:46 AM
3	290.7	100uL	1.000	*******		10/8/2022 12:22:19 AM
4	290.7	100uL	1.000	*******		10/8/2022 12:27:16 AM

Acid Add. 0.000%
Sp. Time 600.0sec
Mean Area 289.4



Slope: 5.710
Intercept 0.000
r^2 0.9992
r 0.9996
Zero Shift Yes



TOC-Control L Report

d221018w1.toc.tlx

Instr.Information

Instrument Options: TOC/ASI/Sparge Kit/
Catalyst: Regular Sensitivity

Sample

Sample Name: WASHCONF
Sample ID:
Origin: TOCAQSW846.met
Status: Completed
Chk. Result

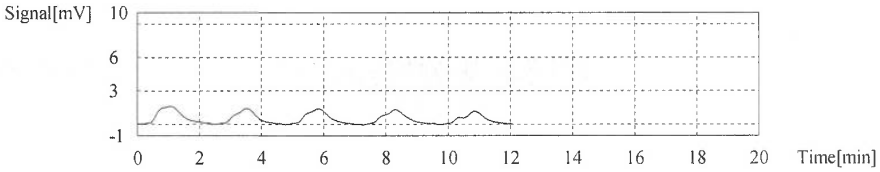
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7470mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.078	0.9725mg/L	100uL	1.000	E	d30828w1.2013_08_28_18_20_48.cal	10/10/2022 10:40:29 AM
2	6.630	0.7554mg/L	100uL	1.000		d30828w1.2013_08_28_18_20_48.cal	10/10/2022 10:43:01 AM
3	7.306	0.8567mg/L	100uL	1.000		d30828w1.2013_08_28_18_20_48.cal	10/10/2022 10:45:37 AM
4	6.616	0.7533mg/L	100uL	1.000		d30828w1.2013_08_28_18_20_48.cal	10/10/2022 10:48:17 AM
5	5.742	0.6223mg/L	100uL	1.000		d30828w1.2013_08_28_18_20_48.cal	10/10/2022 10:50:55 AM

Mean Conc. 0.7470mg/L
CV Conc 12.86%



Sample

Sample Name: CRI
Sample ID:
Origin: TOCAQSW846.met
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.8025mg/L

1. Det

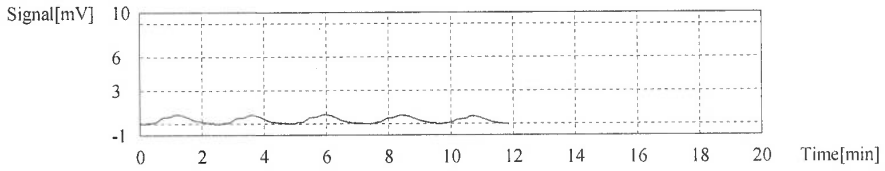
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	4.799	0.8404mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:11:06 AM
2	4.518	0.7912mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:13:41 AM
3	4.727	0.8278mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:16:20 AM
4	4.287	0.7507mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:18:47 AM
5	3.829	0.6705mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:21:18 AM

TOC-Control L Report

d221018w1.toc.tlx

Mean Conc. 0.8025mg/L
CV Conc 5.03%



Sample

Sample Name: HSTD
Sample ID:
Origin: TOCAQSW846.met
Status Completed
Chk. Result

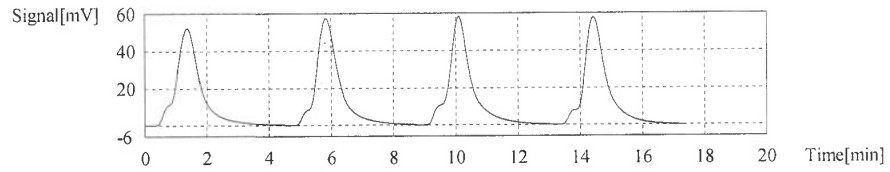
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 49.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	275.7	48.28mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:29:17 AM
2	287.6	50.36mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:33:47 AM
3	286.7	50.21mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:38:22 AM
4	284.9	49.89mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:42:54 AM

Mean Conc. 49.69mg/L
CV Conc 1.93%



Sample

Sample Name: ICV
Sample ID:
Origin: TOCAQSW846.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 21.55mg/L

1. Det

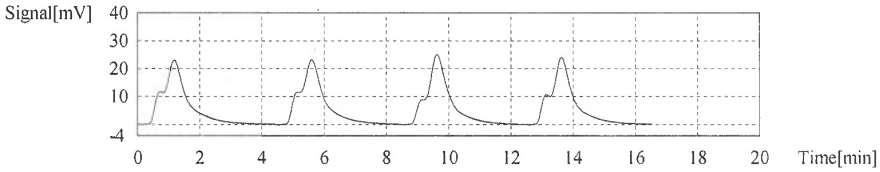
Anal.: NPOC

TOC-Control L Report

d221018w1.toc.tlx

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.9	21.70mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:50:51 AM
2	122.9	21.52mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:55:04 AM
3	124.1	21.73mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 11:59:21 AM
4	121.3	21.24mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 12:03:38 PM

Mean Conc. 21.55mg/L
CV Conc 1.04%



Sample

Sample Name: ICB
Sample ID:
Origin: TOCAQSW846.met
Status Completed
Chk. Result

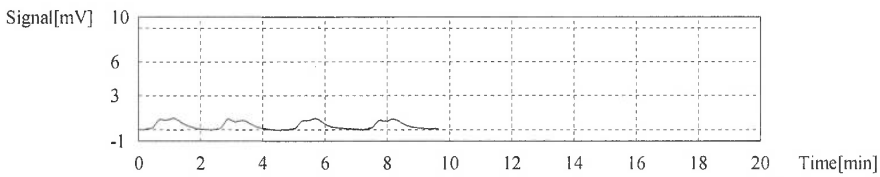
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.9215mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	5.568	0.9751mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 12:09:24 PM
2	5.213	0.9129mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 12:11:58 PM
3	5.159	0.9034mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 12:14:42 PM
4	5.108	0.8945mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/10/2022 12:17:27 PM

Mean Conc. 0.9215mg/L
CV Conc 3.96%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:49.16mg/L

TOC-Control L Report

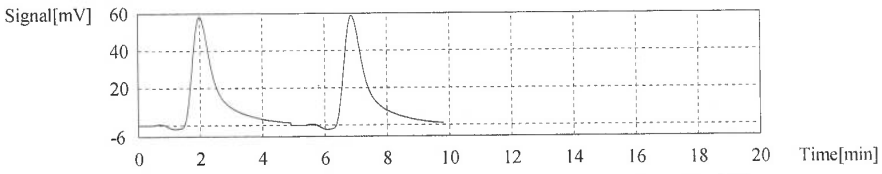
d221018w1.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	279.3	48.91mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:26:11 AM
2	282.1	49.40mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:31:58 AM

Mean Conc. 49.16mg/L
CV Conc 0.71%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

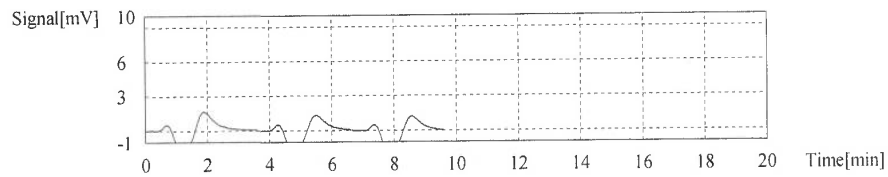
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.05737mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9828	0.1721mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 8:38:28 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 8:41:48 AM
3	0.000	0.000mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 8:44:54 AM

Mean Conc. 0.05737mg/L
CV Conc 173.21%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.00627mg/L

TOC-Control L Report

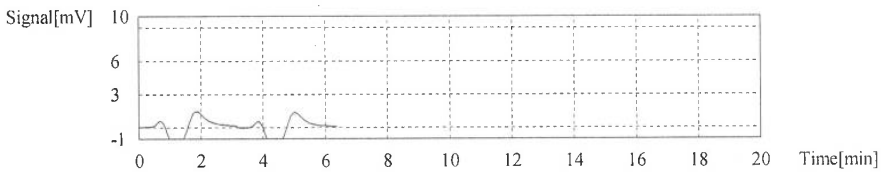
d221018w1.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.07160	0.01254mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:50:53 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:54:22 AM

Mean Conc. 0.00627mg/L
CV Conc 141.42%



Sample

Sample Name: GP42877-MB2
Sample ID: [toc](rerun)
Origin: TOCAQ.met
Status Completed
Chk. Result

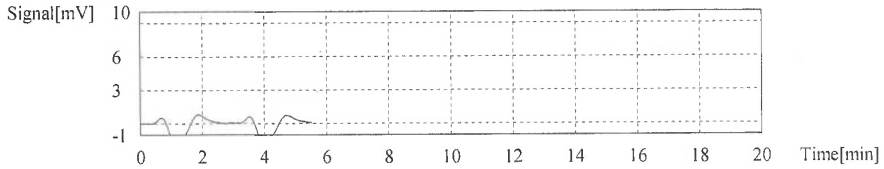
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:23:28 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:26:21 AM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42877-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.19mg/L

TOC-Control L Report

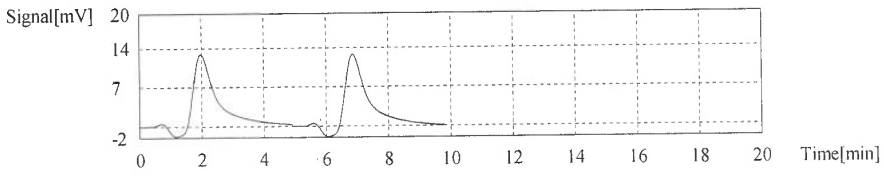
d221018wl.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.67	10.27mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 10:36:42 AM
2	57.73	10.11mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 10:41:51 AM

Mean Conc. 10.19mg/L
CV Conc 1.14%



Sample

Sample Name: JD53225-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

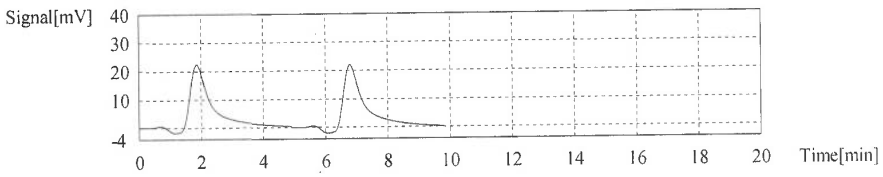
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:83.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	95.96	84.02mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:46:44 AM
2	93.88	82.20mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:51:55 AM

Mean Conc. 83.11mg/L
CV Conc 1.55%



Sample

Sample Name: GP42877-S1
Sample ID: JD53225-1
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:154.7mg/L

TOC-Control L Report

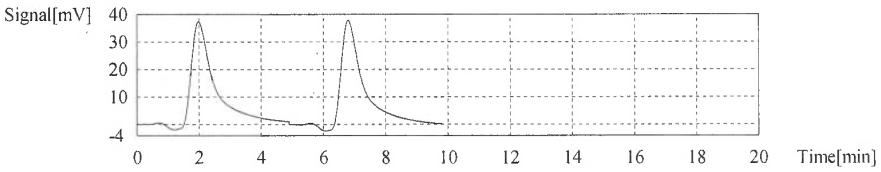
d221018w1.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	177.8	155.7mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:59:44 AM
2	175.5	153.7mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:05:06 PM

Mean Conc. 154.7mg/L
CV Conc 0.92%



Sample

Sample Name: GP42877-MSD1
Sample ID: JD53225-1
Origin: TOCAQ.met
Status Completed
Chk. Result

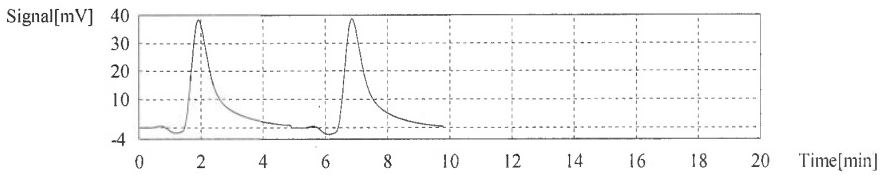
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:157.8mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	179.2	156.9mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:12:55 PM
2	181.2	158.7mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:18:13 PM

Mean Conc. 157.8mg/L
CV Conc 0.78%



Sample

Sample Name: GP42650-MB2
Sample ID: [toc](rerun)
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

TOC-Control L Report

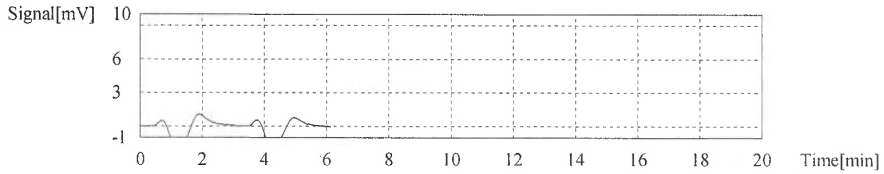
d221018w1.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:24:12 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:27:27 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42650-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

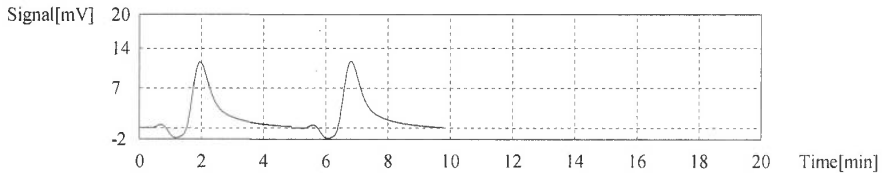
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.087mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	51.67	9.048mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/18/2022 12:37:12 PM
2	52.11	9.126mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:42:21 PM

Mean Conc. 9.087mg/L
CV Conc 0.60%



Sample

Sample Name: JD52825-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2161mg/L

TOC-Control L Report

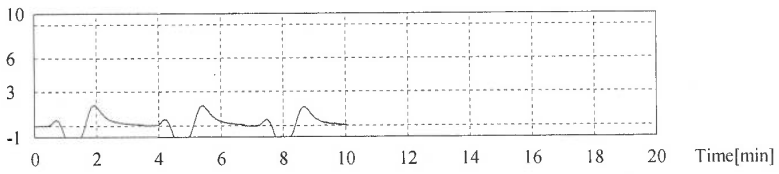
d221018w1.toc.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.114	0.1951mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:48:46 PM
2	1.354	0.2371mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:52:17 PM
3	0.6016	0.1054mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 12:55:44 PM

Mean Conc. 0.2161mg/L
CV Conc 13.75%



Sample

Sample Name: JD52825-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

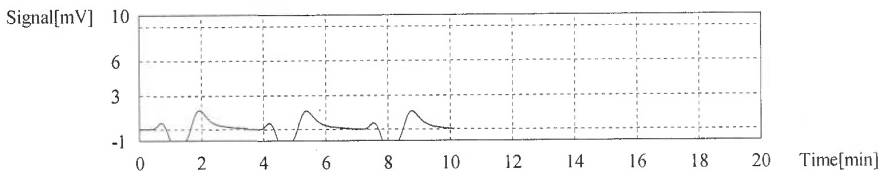
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1260mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6431	0.1126mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 1:02:03 PM
2	1.117	0.1956mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 1:05:35 PM
3	0.7962	0.1394mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 1:09:03 PM

Mean Conc. 0.1260mg/L
CV Conc 15.04%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

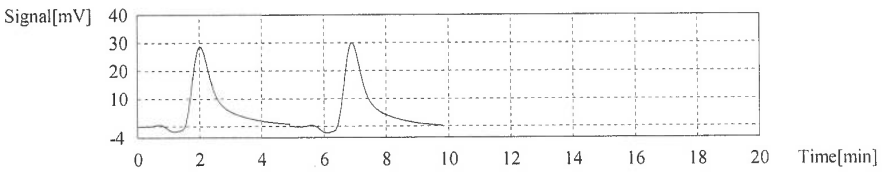
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	139.7	24.46mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:20:48 PM
2	140.6	24.62mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:25:59 PM

Mean Conc. 24.54mg/L
CV Conc 0.45%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

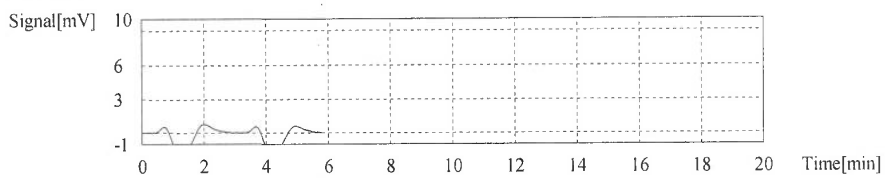
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:31:51 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:34:51 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42878-MB2
Sample ID: [toc](rerun)
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

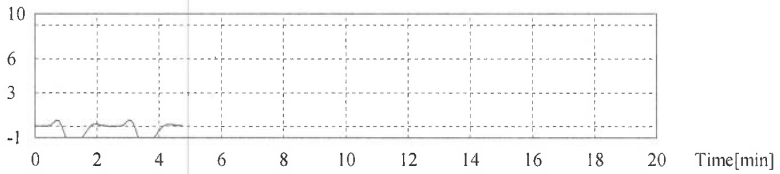
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:42:23 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 3:44:59 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42878-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

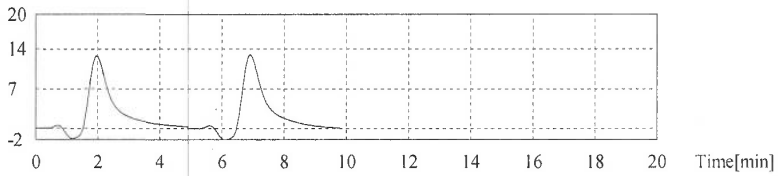
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 10.08mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	57.27	10.03mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 4:49:18 PM
2	57.87	10.13mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 4:54:27 PM

Mean Conc. 10.08mg/L
CV Conc 0.74%



Sample

Sample Name: JD53374-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

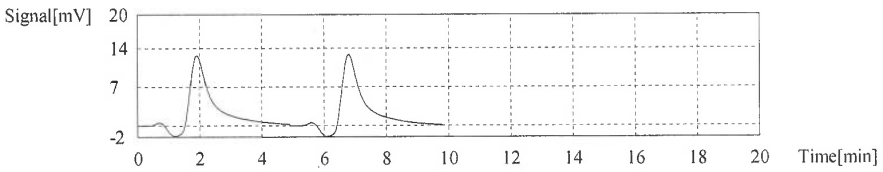
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:46.19mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	52.94	46.35mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:02:16 PM
2	52.56	46.02mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:07:25 PM

Mean Conc. 46.19mg/L
CV Conc 0.51%



Sample

Sample Name: GP42878-S1
Sample ID: JD53374-1
Origin: TOCAQ.met
Status Completed
Chk. Result

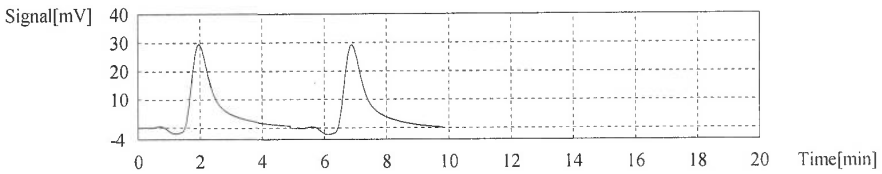
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:118.9mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	137.5	120.4mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:15:14 PM
2	134.0	117.3mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:20:31 PM

Mean Conc. 118.9mg/L
CV Conc 1.82%



Sample

Sample Name: GP42878-MSD1
Sample ID: JD53374-1
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

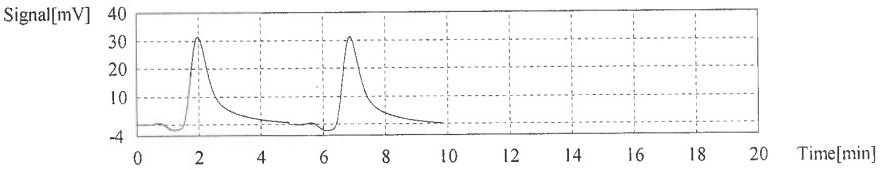
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC:127.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	147.0	128.7mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:28:20 PM
2	144.6	126.6mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:33:30 PM

Mean Conc. 127.7mg/L
CV Conc 1.16%



Sample

Sample Name: JD53022-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

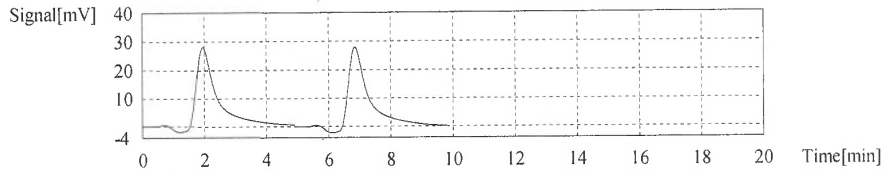
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	500.0	NPOC:10393mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	120.3	10534mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:41:19 PM
2	117.1	10253mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:46:28 PM

Mean Conc. 10393mg/L
CV Conc 1.91%



Sample

Sample Name: GP42879-MB2
Sample ID: [doc](rerun)
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

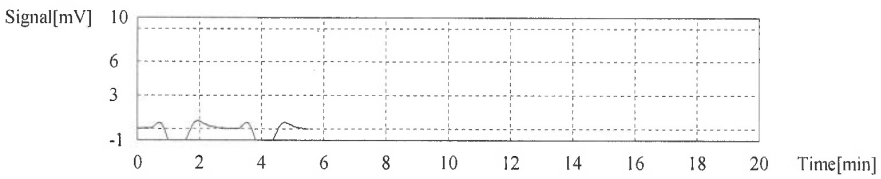
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:52:12 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 5:55:04 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42879-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

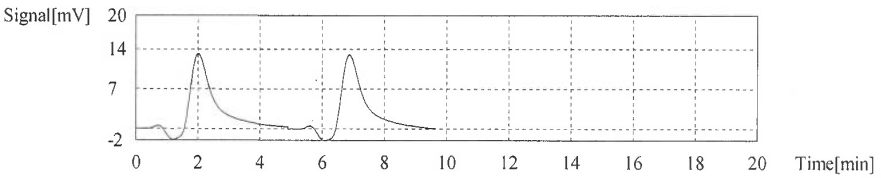
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.34mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	59.79	10.47mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:05:26 PM
2	58.26	10.20mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:10:28 PM

Mean Conc. 10.34mg/L
CV Conc 1.83%



Sample

Sample Name: JD53337-6F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

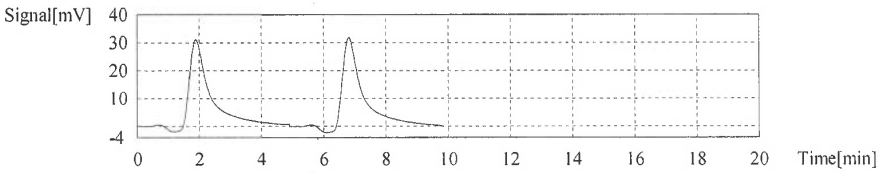
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	120.0	NPOC:2789mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	132.2	2778mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:29:43 PM
2	133.2	2799mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:34:54 PM

Mean Conc. 2789mg/L
CV Conc 0.53%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

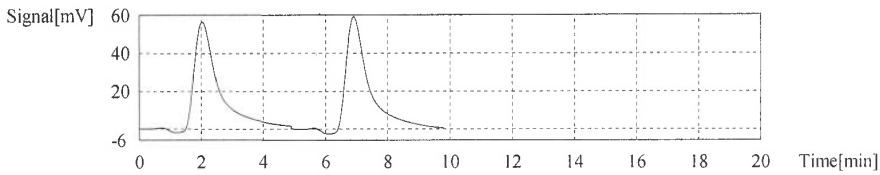
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:50.22mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	286.7	50.21mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:42:44 PM
2	286.8	50.22mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:47:58 PM

Mean Conc. 50.22mg/L
CV Conc 0.02%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

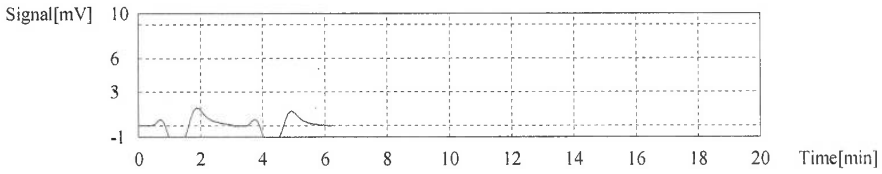
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:53:56 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 6:57:17 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: JD53337-8F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

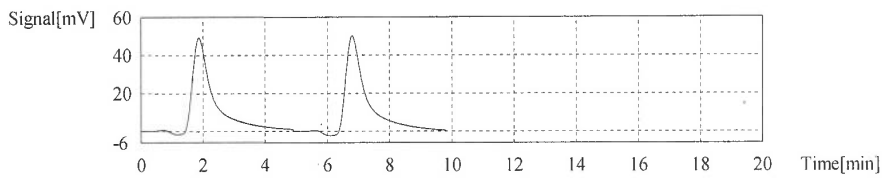
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	300.0	NPOC:11303mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	214.0	11243mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:06:58 PM
2	216.3	11364mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:12:24 PM

Mean Conc. 11303mg/L
CV Conc 0.76%



Sample

Sample Name: JD53337-9F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

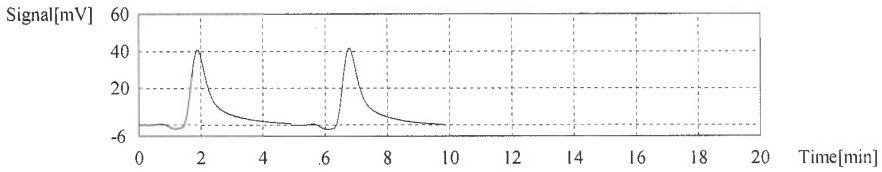
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	200.0	NPOC:6250mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	176.9	6196mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:20:14 PM
2	180.0	6304mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:25:27 PM

Mean Conc. 6250mg/L
CV Conc 1.23%



Sample

Sample Name: JD53337-10F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

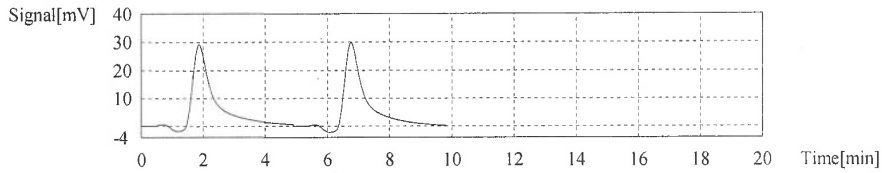
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	150.0	NPOC:3272mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	124.1	3260mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:33:17 PM
2	125.0	3284mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:38:27 PM

Mean Conc. 3272mg/L
CV Conc 0.51%



Sample

Sample Name: JD53337-11F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

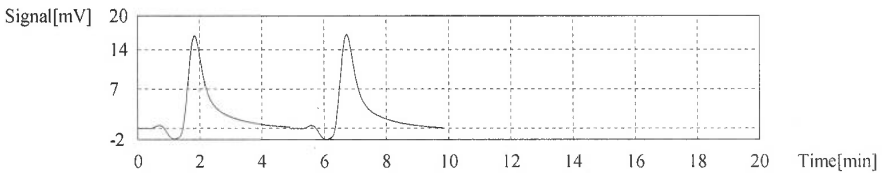
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	50.00	NPOC:587.2mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	67.20	588.4mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:46:17 PM
2	66.93	586.0mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:51:28 PM

Mean Conc. 587.2mg/L
CV Conc 0.28%



Sample

Sample Name: GP42898-MB1
Sample ID: [toc]
Origin: TOCAQ.met
Status Completed
Chk. Result

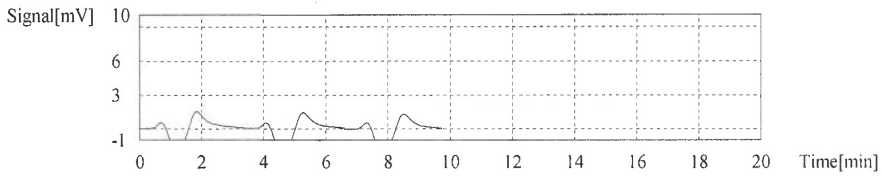
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7614	0.1333mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 7:57:46 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:01:15 PM
3	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:04:37 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42898-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

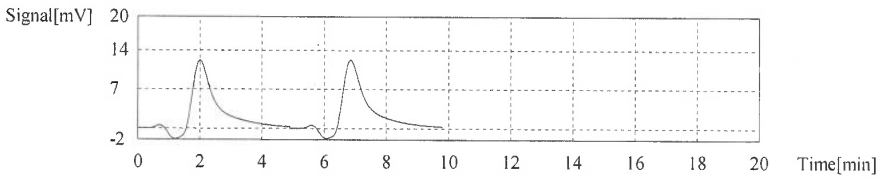
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.594mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	53.85	9.430mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:12:22 PM
2	55.72	9.758mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:22:39 PM

Mean Conc. 9.594mg/L
CV Conc 2.41%



Sample

Sample Name: JD53594-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

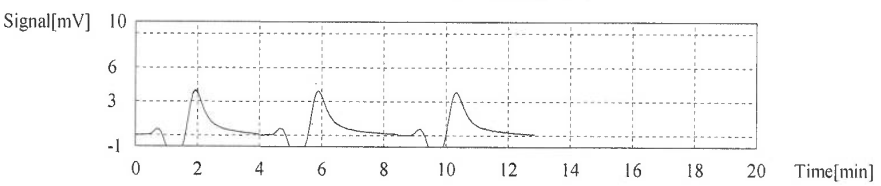
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.054mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.36	1.814mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:29:34 PM
2	11.83	2.072mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:40:20 PM
3	11.63	2.037mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:44:58 PM

Mean Conc. 2.054mg/L
CV Conc 1.21%



Sample

Sample Name: GP42898-S1
Sample ID: JD53594-3
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

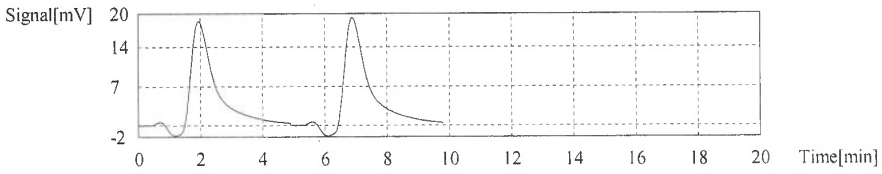
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.99mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.33	15.82mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 8:52:43 PM
2	92.32	16.17mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:03:00 PM

Mean Conc. 15.99mg/L
CV Conc 1.54%



Sample

Sample Name: GP42898-MSD1
Sample ID: JD53594-3
Origin: TOCAQ.met
Status Completed
Chk. Result

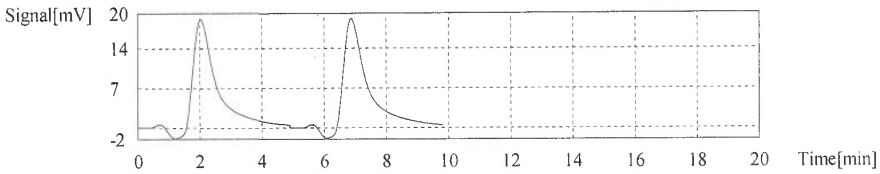
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.11	15.61mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:10:51 PM
2	92.06	16.12mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:21:07 PM

Mean Conc. 15.86mg/L
CV Conc 2.30%



Sample

Sample Name: JD53429-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

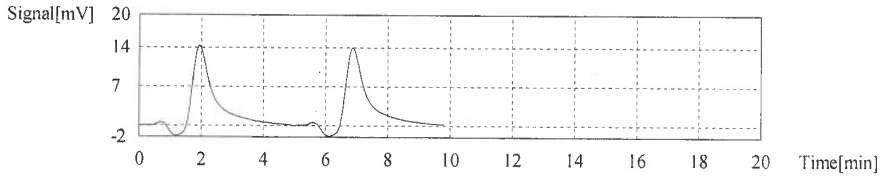
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.03	10.69mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:28:56 PM
2	57.74	10.11mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:39:12 PM

Mean Conc. 10.40mg/L
CV Conc 3.92%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

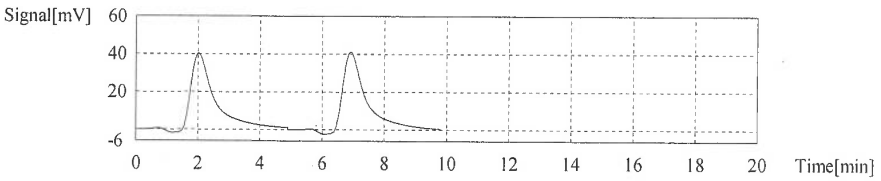
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.25mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	199.7	25.17mg/L	100uL	1.000		d70727w1.2017_07_28_00_34_53.cal	10/18/2022 9:47:03 PM
2	200.9	25.33mg/L	100uL	1.000		d70727w1.2017_07_28_00_34_53.cal	10/18/2022 9:52:21 PM

Mean Conc. 25.25mg/L
CV Conc 0.45%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

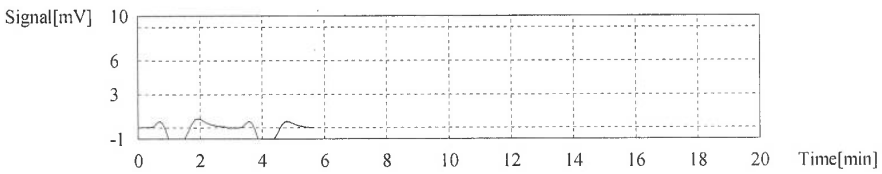
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 9:58:09 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:01:02 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: JD53429-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

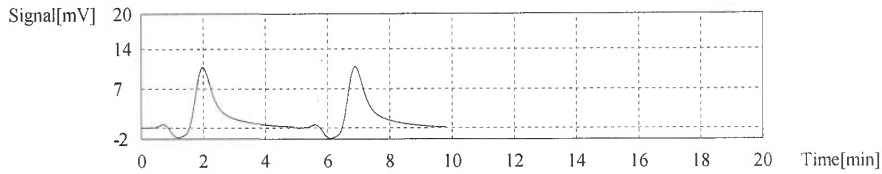
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.907mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	45.87	8.033mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:11:21 PM
2	44.43	7.781mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:16:31 PM

Mean Conc. 7.907mg/L
CV Conc 2.26%



Sample

Sample Name: JD53489-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

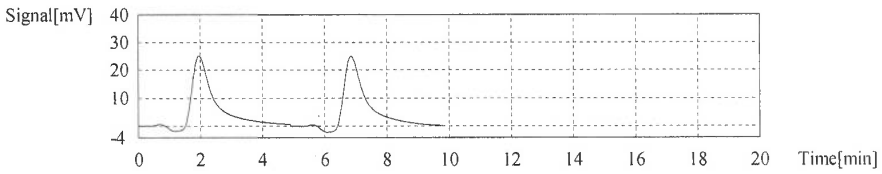
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.86mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	113.3	19.84mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:24:21 PM
2	113.5	19.88mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:29:29 PM

Mean Conc. 19.86mg/L
CV Conc 0.12%



Sample

Sample Name: JD53489-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

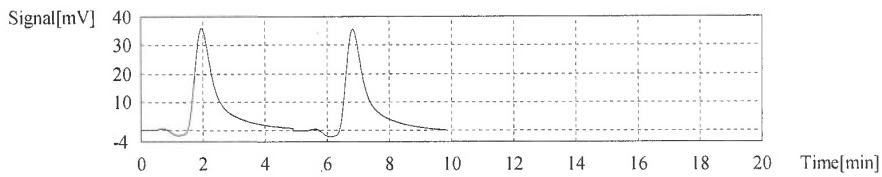
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:27.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	159.5	27.93mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:37:20 PM
2	156.7	27.44mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:42:29 PM

Mean Conc. 27.69mg/L
CV Conc 1.25%



Sample

Sample Name: JD53489-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

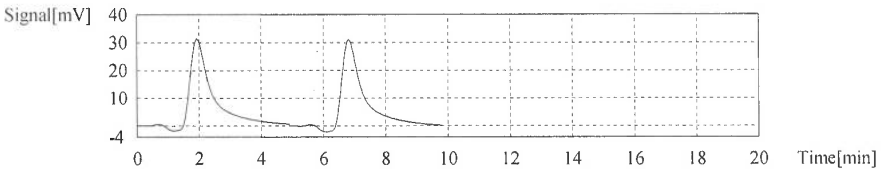
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.30mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	140.8	24.66mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:50:19 PM
2	136.7	23.94mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 10:55:35 PM

Mean Conc. 24.30mg/L
CV Conc 2.09%



Sample

Sample Name: JD53569-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

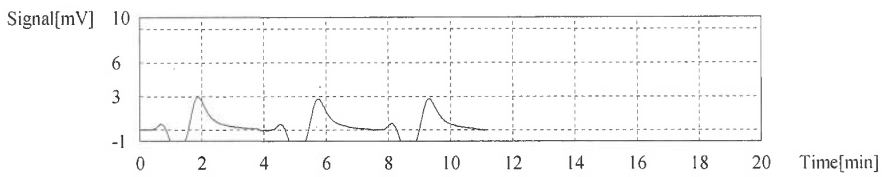
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.121mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.468	1.133mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:02:21 PM
2	5.090	0.8914mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:06:12 PM
3	6.332	1.109mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:10:10 PM

Mean Conc. 1.121mg/L
CV Conc 1.50%



Sample

Sample Name: JD53569-2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

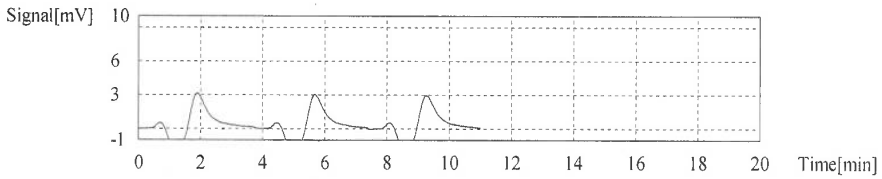
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.150mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.599	1.156mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:16:47 PM
2	5.717	1.001mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:20:39 PM
3	6.535	1.144mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:24:30 PM

Mean Conc. 1.150mg/L
CV Conc 0.69%



Sample

Sample Name: JD53599-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

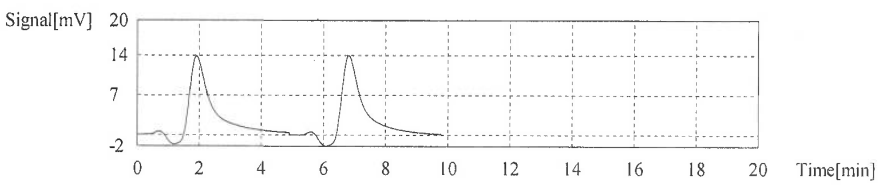
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.28mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.79	10.30mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:32:15 PM
2	58.64	10.27mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:37:25 PM

Mean Conc. 10.28mg/L
CV Conc 0.18%



Sample

Sample Name: JD53538-1
Sample ID: field blank
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

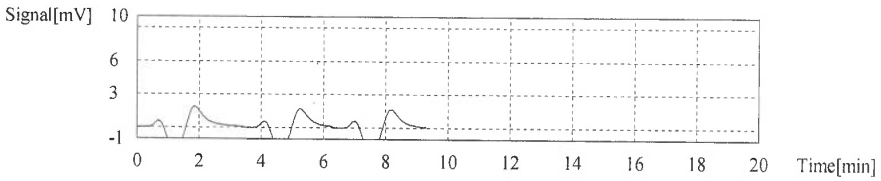
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.08931mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.490	0.2609mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:43:45 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:46:54 PM
3	0.03990	0.00699mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:50:11 PM

Mean Conc. 0.08931mg/L
CV Conc 166.48%



Sample

Sample Name: GP42876-MB2
Sample ID: [doc](rerun)
Origin: TOCAQ.met
Status Completed
Chk. Result

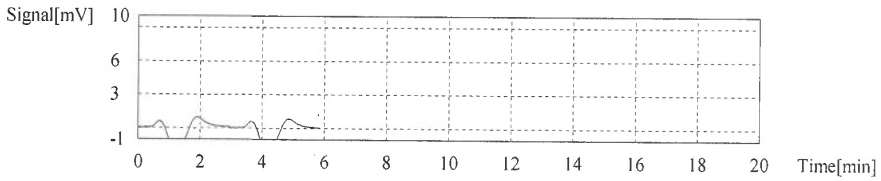
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:55:59 PM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/18/2022 11:59:08 PM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: GP42876-B2
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

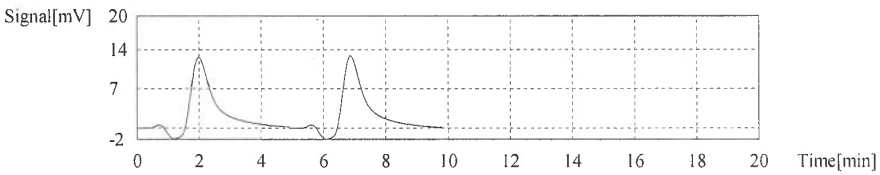
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 9.922mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.76	9.940mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:18:21 AM
2	56.56	9.905mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:23:30 AM

Mean Conc. 9.922mg/L
CV Conc 0.25%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

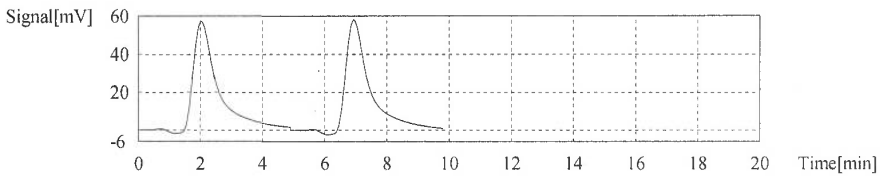
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 50.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	291.3	51.01mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:31:21 AM
2	290.3	50.84mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:37:07 AM

Mean Conc. 50.93mg/L
CV Conc 0.24%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

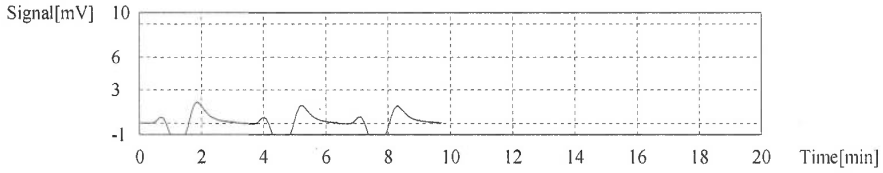
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01710mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.437	0.2516mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:43:21 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:46:37 AM
3	0.1953	0.03420mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:50:13 AM

Mean Conc. 0.01710mg/L
CV Conc 141.42%



Sample

Sample Name: JD53337-5F
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

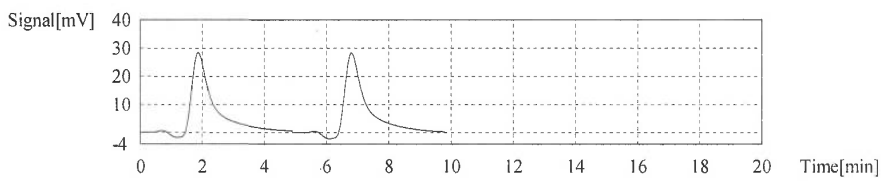
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	100.0	NPOC:2167mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	123.9	2170mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 12:57:59 AM
2	123.6	2164mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:03:08 AM

Mean Conc. 2167mg/L
CV Conc 0.17%



Sample

Sample Name: GP42899-MB1
Sample ID: [toc]
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

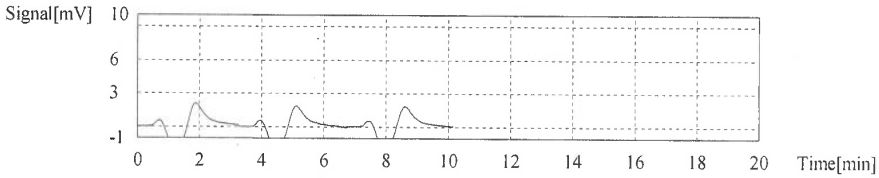
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2409mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.106	0.1937mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:09:20 AM
2	2.366	0.4143mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:13:05 AM
3	1.645	0.2881mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:16:45 AM

Mean Conc. 0.2409mg/L
CV Conc 27.71%



Sample

Sample Name: GP42899-B1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

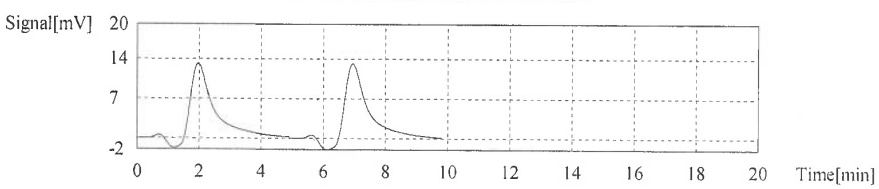
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.62mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	61.86	10.83mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:24:31 AM
2	59.43	10.41mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:29:40 AM

Mean Conc. 10.62mg/L
CV Conc 2.83%



Sample

Sample Name: JD53556-3
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

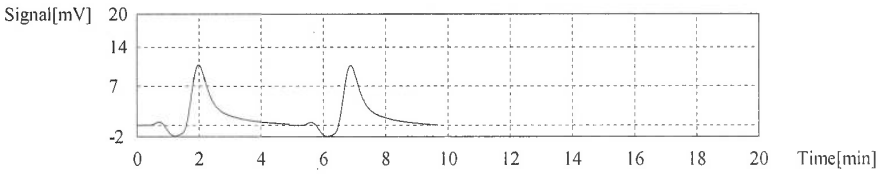
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 7.610mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	43.52	7.621mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:37:31 AM
2	43.39	7.598mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:42:32 AM

Mean Conc. 7.610mg/L
CV Conc 0.21%



Sample

Sample Name: GP42899-S1
Sample ID: JD53556-3
Origin: TOCAQ.met
Status Completed
Chk. Result

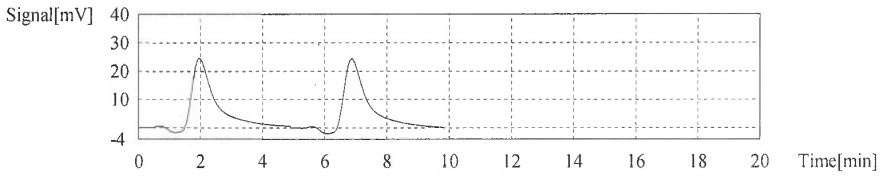
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC 20.52mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	116.9	20.47mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:50:23 AM
2	117.4	20.56mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 1:55:39 AM

Mean Conc. 20.52mg/L
CV Conc 0.30%



Sample

Sample Name: GP42899-MSD1
Sample ID: JD53556-3
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

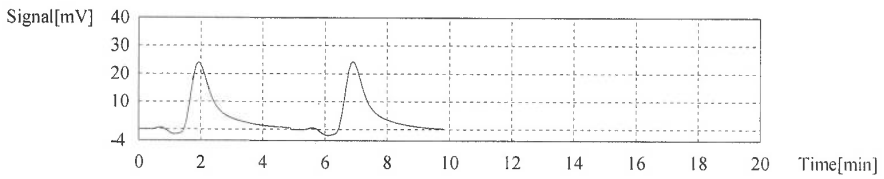
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:20.50mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	118.0	20.66mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 2:03:30 AM
2	116.1	20.33mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 2:08:41 AM

Mean Conc. 20.50mg/L
CV Conc 1.15%



Sample

Sample Name: JD53539-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

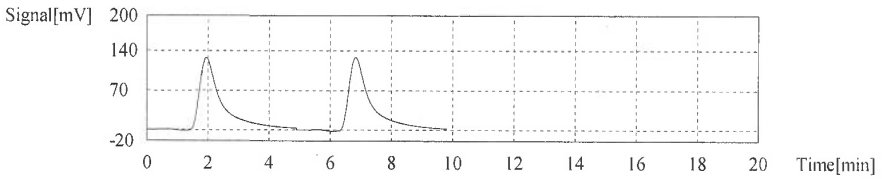
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:106.0mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	604.1	105.8mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 2:16:32 AM
2	606.4	106.2mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 2:23:00 AM

Mean Conc. 106.0mg/L
CV Conc 0.27%



Sample

Sample Name: JD53556-4
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

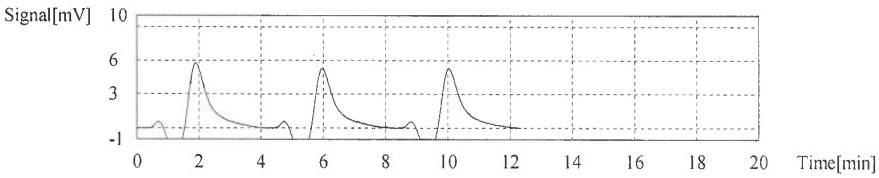
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.063mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	19.84	3.474mg/L	100uL	1.000	E	d221007w1 2022_10_07_22_05_04.cal	10/19/2022 2:29:59 AM
2	17.11	2.996mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/19/2022 2:34:15 AM
3	17.87	3.129mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/19/2022 2:38:39 AM

Mean Conc. 3.063mg/L
CV Conc 3.07%



Sample

Sample Name: JD53556-5
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

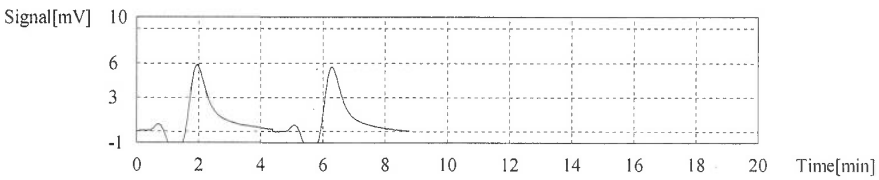
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:3.549mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.17	3.532mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/19/2022 2:45:54 AM
2	20.36	3.565mg/L	100uL	1.000		d221007w1 2022_10_07_22_05_04.cal	10/19/2022 2:50:34 AM

Mean Conc. 3.549mg/L
CV Conc 0.66%



Sample

Sample Name: JD53557-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

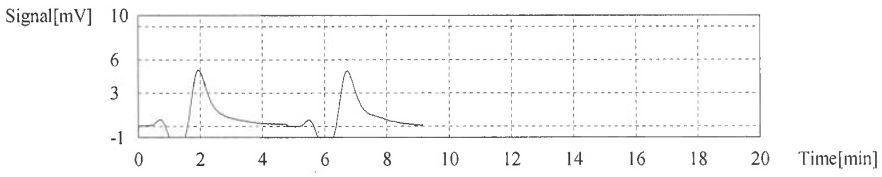
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.990mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.82	2.946mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 2:58:18 AM
2	17.33	3.035mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:02:55 AM

Mean Conc. 2.990mg/L
CV Conc 2.11%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

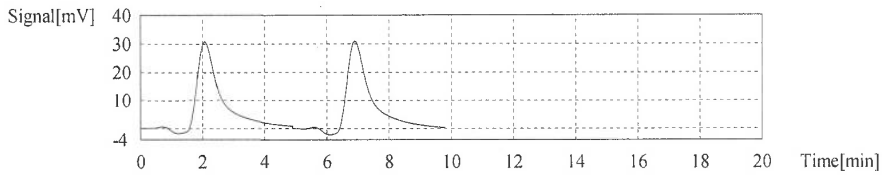
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.84mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	145.9	25.55mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:10:46 AM
2	149.2	26.13mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:16:02 AM

Mean Conc. 25.84mg/L
CV Conc 1.58%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

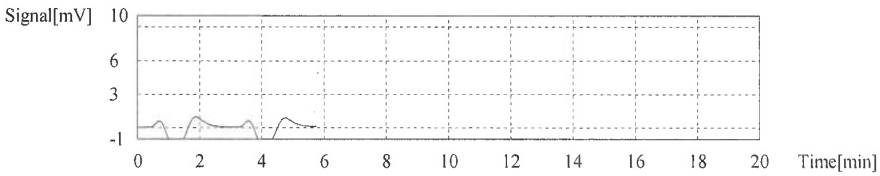
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:21:51 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:24:55 AM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: JD53556-7
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

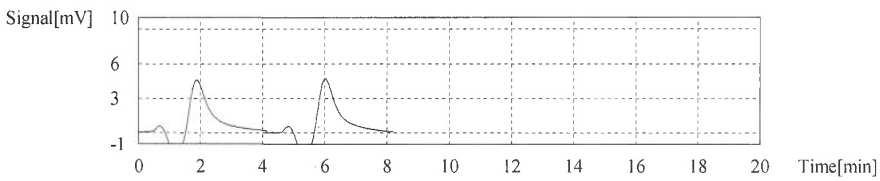
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.637mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	14.53	2.545mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:34:18 AM
2	15.59	2.730mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:38:38 AM

Mean Conc. 2.637mg/L
CV Conc 4.98%



Sample

Sample Name: JD53567-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

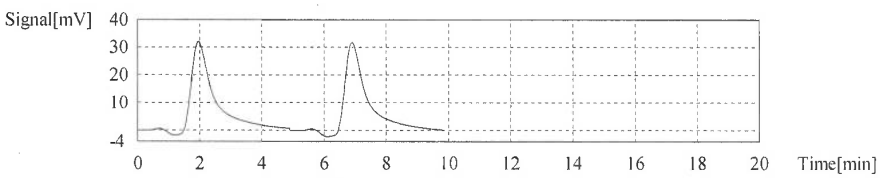
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.58mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	149.0	26.09mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:46:29 AM
2	143.1	25.06mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:51:43 AM

Mean Conc. 25.58mg/L
CV Conc 2.86%



Sample

Sample Name: JD53551-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

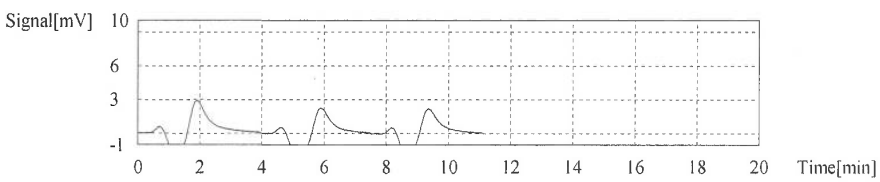
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4781mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.267	1.097mg/L	100uL	1.000	E	d221007w1.2022_10_07_22_05_04.cal	10/19/2022 3:58:34 AM
2	1.956	0.3425mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:02:24 AM
3	3.504	0.6136mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:06:13 AM

Mean Conc. 0.4781mg/L
CV Conc 40.10%



Sample

Sample Name: CCVA
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

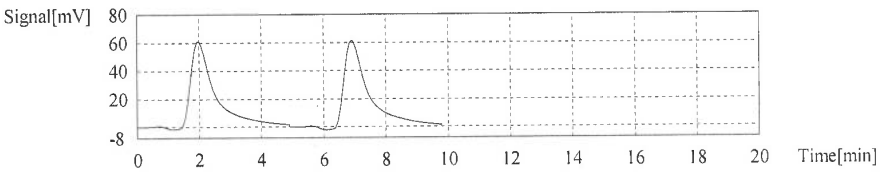
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:54.37mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	309.3	54.16mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:25:03 AM
2	311.6	54.57mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:31:10 AM

Mean Conc. 54.37mg/L
CV Conc 0.52%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

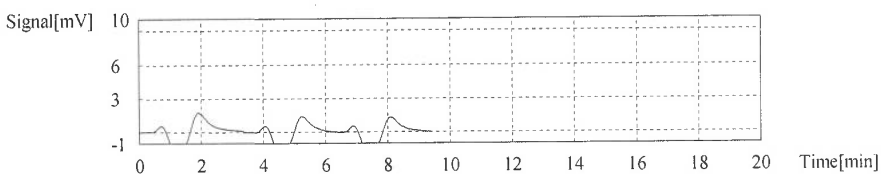
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.04029mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6902	0.1209mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:37:26 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:40:30 AM
3	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:43:55 AM

Mean Conc. 0.04029mg/L
CV Conc 173.21%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

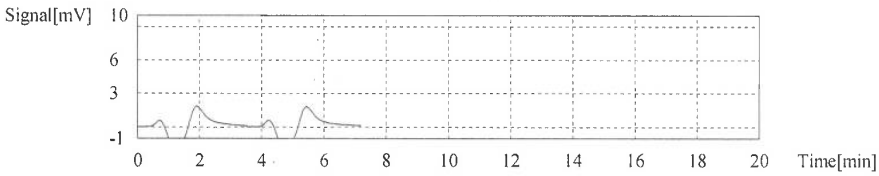
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC,0.1907mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.086	0.1902mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:50:16 AM
2	1.092	0.1912mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 4:54:11 AM

Mean Conc. 0.1907mg/L
CV Conc 0.39%



Sample

Sample Name: JD53539-1
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

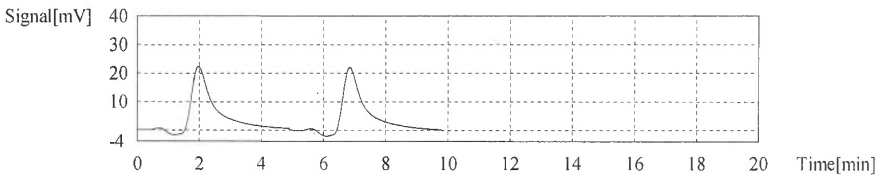
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	5.000	NPOC,87.85mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	102.1	89.40mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:21:12 AM
2	98.56	86.30mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:26:22 AM

Mean Conc. 87.85mg/L
CV Conc 2.49%



Sample

Sample Name: CCV
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

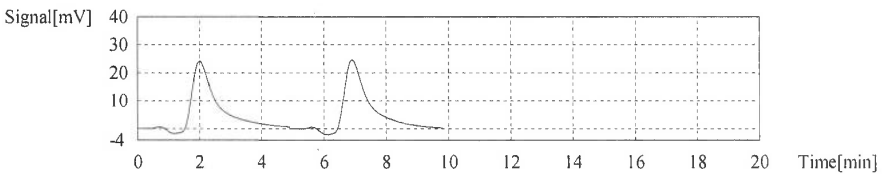
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.37mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	119.4	25.05mg/L	100uL	1.000		d71127w1.2017_11_27_09_11_39.cal	10/19/2022 9:34:11 AM
2	122.4	25.68mg/L	100uL	1.000		d71127w1.2017_11_27_09_11_39.cal	10/19/2022 9:39:29 AM

Mean Conc. 25.37mg/L
CV Conc 1.76%



Sample

Sample Name: CCB
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

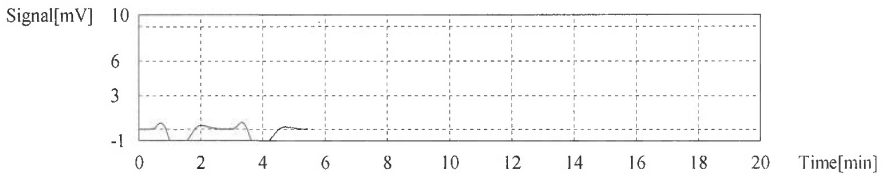
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:45:01 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:48:02 AM

Mean Conc. 0.000mg/L
CV Conc 0.00%



Sample

Sample Name: SPARGERCHK
Sample ID:
Origin: TOCAQ.met
Status Completed
Chk. Result

TOC-Control L Report

d221018w1.toc.tlx

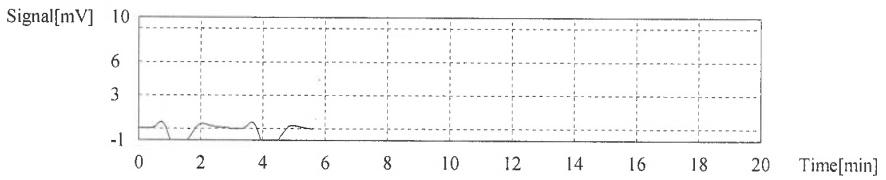
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.000mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:56:29 AM
2	0.000	0.000mg/L	100uL	1.000		d221007w1.2022_10_07_22_05_04.cal	10/19/2022 9:59:21 AM

Mean Conc. 0.000mg/L
CV Conc 0.00%



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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30115866

SGS Job Number: JD59837

Sampling Date: 02/06/23



Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; marie.meidhof@sgs.com;
ATTN: Todd Carignan

Total number of pages in report: **16**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4

Table of Contents

Section 1: Sample Summary **3**
Section 2: Summary of Hits **4**
Section 3: Sample Results **5**
3.1: JD59837-1: INFLUENT-001 6
3.2: JD59837-2: TRIP BLANK 10
Section 4: Misc. Forms **12**
4.1: Chain of Custody 13
4.2: Sample Tracking Chronicle 15
4.3: Internal Chain of Custody 16

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD59837

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD59837-1	02/06/23	11:00	AJS	02/07/23	AQ	Ground Water	INFLUENT-001
JD59837-2	02/06/23	11:00		02/07/23	AQ	Trip Blank Water	TRIP BLANK

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Summary of Hits

Job Number: JD59837
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 02/06/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD59837-1	**INFLUENT-001**					
cis-1,2-Dichloroethene		36.2	1.0	0.51	ug/l	EPA 624.1
1,2-Dichloroethene (total)		36.2	1.0	0.46	ug/l	EPA 624.1
Trichloroethene		4.8	1.0	0.43	ug/l	EPA 624.1
Vinyl chloride		24.6	1.0	0.79	ug/l	EPA 624.1
TPH-DRO (C10-C28)		1.38	0.093	0.059	mg/l	SW846 8015D
JD59837-2	**TRIP BLANK**					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	INFLUENT-001		
Lab Sample ID:	JD59837-1	**Date Sampled:**	02/06/23
Matrix:	AQ - Ground Water	**Date Received:**	02/07/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D208415.D	1	02/08/23 20:25	ED	n/a	n/a	V2D9070
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	36.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	36.2	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD59837-1	**Date Sampled:**	02/06/23
Matrix:	AQ - Ground Water	**Date Received:**	02/07/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	4.8	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	24.6	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	102%		80-128%
2037-26-5	Toluene-D8 (SUR)	109%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	97%		79-117%
1868-53-7	Dibromofluoromethane (S)	94%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD59837-1	**Date Sampled:**	02/06/23
Matrix:	AQ - Ground Water	**Date Received:**	02/07/23
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	XX2497177.D	1	02/14/23 04:57	RK	02/13/23 09:40	OP44593A	GXX8075
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	57%		10-156%
877-09-8	Tetrachloro-m-xylene	41%		10-156%
2051-24-3	Decachlorobiphenyl	10%		10-143%
2051-24-3	Decachlorobiphenyl	33%		10-143%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD59837-1	**Date Sampled:**	02/06/23
Matrix:	AQ - Ground Water	**Date Received:**	02/07/23
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z89203.D	1	02/11/23 03:12	RK	02/09/23 09:30	OP44606	G2Z3448
Run #2							

	Initial Volume	Final Volume
Run #1	270 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.38	0.093	0.059	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	55%		10-112%
438-22-2	5a-Androstane	33%		10-98%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD59837-2	**Date Sampled:**	02/06/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/07/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2D208410.D	1	02/08/23 17:57	ED	n/a	n/a	V2D9070
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD59837-2	**Date Sampled:**	02/06/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	02/07/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	101%		80-128%
2037-26-5	Toluene-D8 (SUR)	104%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	101%		79-117%
1868-53-7	Dibromofluoromethane (S)	94%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

FED-EX Tracking # 5894 7370 6506
Bottle Order Control # MM-012423-33
SGS Quote #
SGS Job # JD 59837

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City State Zip: Clifton Park, NY
Project Contact E-mail: Todd Corignan
Phone #: 646-248-4208
Sampler(s) Name(s): A. Svensson
Phone #

Project Information

Project Name: IR DC Rollforms
Street: 583 Allen St
City State: Jamestown, NY
Project #: 30115866
Client Purchase Order #
Project Manager: Todd Corignan

Billing Information (if different from Report to)
Company Name
Street Address
City State Zip
Attention:

Requested Analysis

VOCs USEPA 624.1
TPH DRO USEPA 8015B
PCBs USEPA 608

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	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Preserved: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)			LAB USE ONLY
1	INFLUENT-001		2/6/23	1100	AJS	G	N	GW	7	7								3	2	2	E84
2	Trip Blank		1/27/23	0700	—	G	N	TB	2	2								2	0	0	V34
	Temp Blank		—	—	—	G	N	TB	1					1				0	0	0	

Initial Assessment 3A EC
Label Verification

Ref: MM-012423-33
Dep:
Date: 27Jan23
Wgt: 15.00 LBS
DV: 0.00

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

Svcs: PRIORITY OVERNIGHT
TRCK: 5894 7370 6506

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- 10 Business Days
- 5 Business Days
- 3 Business Days*
- 2 Business Days*
- 1 Business Day*
- Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- NJ Reduced (Level 3)
- Full Tier I (Level 4)
- Commercial "C"
- NJ DKQP
- NYASP Category A
- NYASP Category B
- MA MCP Criteria
- CT RCP Criteria
- State Forms
- EDD Format
- DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

February 2023 - Q1
(1) - cooler
Field pH: 8.0

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

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

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1		2/6/23 1730	FX	FX	2/7/23 9:50	JP
2						
3						
4						
5						

Custody Seal # — Intact / Not intact / Absent
Therm ID: — On Ice ✓ — Cooler Temp. °C: 2.0
See Sample Receipt Summary

SGS Sample Receipt Summary

Job Number: JD59837 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, JAMESTOWN, NY, OR

Date / Time Received: 2/7/2023 9:50:00 AM **Delivery Method:** FEDEX **Airbill #'s:** 5894 7370 6506

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.0);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

JD59837: Chain of Custody
Page 2 of 2

Internal Sample Tracking Chronicle

Arcadis

Job No: JD59837

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD59837-1	Collected: 06-FEB-23 11:00 By: AJS		Received: 07-FEB-23 By: JP			
INFLUENT-001						
JD59837-1	EPA 624.1	08-FEB-23 20:25	ED			V624TCL
JD59837-1	SW846 8015D	11-FEB-23 03:12	RK	09-FEB-23	ED	B8015DRO
JD59837-1	EPA 608.3	14-FEB-23 04:57	RK	13-FEB-23	KB	P608PCBLL
JD59837-2	Collected: 06-FEB-23 11:00 By:		Received: 07-FEB-23 By: JP			
TRIP BLANK						
JD59837-2	EPA 624.1	08-FEB-23 17:57	ED			V624TCL

SGS Internal Chain of Custody

Job Number: JD59837
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 02/07/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD59837-1.1	Christian King	Secured Storage	02/07/23 22:30	Return to Storage
JD59837-1.1	Christian King	Secured Staging Area	02/09/23 20:42	Return to Storage
Stage				
JD59837-1.1	Secured Staging Area	Doaa Salem	02/10/23 08:02	Retrieve from Storage
JD59837-1.2	Christian King	Secured Storage	02/07/23 22:30	Return to Storage
JD59837-1.2	Secured Storage	Dave Hunkele	02/11/23 08:44	Retrieve from Storage
JD59837-1.2	Dave Hunkele	Secured Staging Area	02/11/23 08:45	Return to Storage
JD59837-1.2	Secured Staging Area	Samanth Mally	02/13/23 07:37	Retrieve from Storage
JD59837-1.2.1	Samanth Mally	Organics Prep	02/13/23 07:38	Extract from JD59837-1.2
JD59837-1.2.1	Organics Prep	Kevin Brefo	02/13/23 17:44	Extract from JD59837-1.2
JD59837-1.2.1	Kevin Brefo	Extract Storage	02/13/23 17:44	Return to Storage
JD59837-1.2.1	Extract Storage	Rebecca Krug	02/13/23 20:51	Retrieve from Storage
JD59837-1.2.1	Rebecca Krug	GCXX	02/13/23 20:51	Load on Instrument
JD59837-1.3	Christian King	Secured Storage	02/07/23 22:30	Return to Storage
JD59837-1.4	Christian King	Secured Storage	02/07/23 22:30	Return to Storage
JD59837-1.4	Christian King	Secured Staging Area	02/08/23 18:18	Return to Storage
Stage				
JD59837-1.4	Secured Staging Area	Samanth Mally	02/09/23 06:30	Retrieve from Storage
JD59837-1.4	Samanth Mally	Doaa Salem	02/09/23 08:24	Custody Transfer
JD59837-1.4.1	Doaa Salem	Organics Prep	02/09/23 08:37	Extract from JD59837-1.4
JD59837-1.4.1	Organics Prep	Ellen Dondeo	02/10/23 21:03	Extract from JD59837-1.4
JD59837-1.4.1	Ellen Dondeo	Extract Storage	02/10/23 21:03	Return to Storage
JD59837-1.4.1	Extract Storage	Rebecca Krug	02/10/23 23:06	Retrieve from Storage
JD59837-1.4.1	Rebecca Krug	GC2Z	02/10/23 23:06	Load on Instrument
JD59837-1.6	Secured Storage	Edward Durner	02/08/23 14:08	Retrieve from Storage
JD59837-1.6	Edward Durner	GCMS2D	02/08/23 14:08	Load on Instrument
JD59837-1.6	GCMS2D	Edward Durner	02/09/23 09:32	Unload from Instrument
JD59837-1.6	Edward Durner	Secured Storage	02/09/23 09:33	Return to Storage
JD59837-2.1	Secured Storage	Edward Durner	02/08/23 14:08	Retrieve from Storage
JD59837-2.1	Edward Durner	GCMS2D	02/08/23 14:08	Load on Instrument
JD59837-2.1	GCMS2D	Edward Durner	02/09/23 09:32	Unload from Instrument
JD59837-2.1	Edward Durner	Secured Storage	02/09/23 09:33	Return to Storage

Sample Summary

Arcadis

Job No: JD67727

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JD67727-1	06/15/23	10:15	AS	06/16/23	AQ	Influent	INFLUENT-001
JD67727-2	06/15/23	10:15	AS	06/16/23	AQ	Trip Blank Water	TRIP BLANK

This report contains results reported as ND = Not detected. The following applies:
Organics ND = Not detected above the MDL

Report of Analysis

Client Sample ID: INFLUENT-001
Lab Sample ID: JD67727-1
Matrix: AQ - Influent
Method: EPA 624.1
Project: DC Rollforms, 583 Allen Street, Jamestown, NY

Date Sampled: 06/15/23
Date Received: 06/16/23
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L356836.D	1	06/20/23 01:03	ED	n/a	n/a	VL10844
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	4.1	5.0	3.0	ug/l	J
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	69.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	69.8	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD67727-1	**Date Sampled:**	06/15/23
Matrix:	AQ - Influent	**Date Received:**	06/16/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.64	1.0	0.43	ug/l	J
75-01-4	Vinyl chloride	26.1	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	99%		80-128%
2037-26-5	Toluene-D8 (SUR)	103%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	103%		79-117%
1868-53-7	Dibromofluoromethane (S)	112%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD67727-1	**Date Sampled:**	06/15/23
Matrix:	AQ - Influent	**Date Received:**	06/16/23
Method:	EPA 608.3 EPA 608	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	RK22407.D	1	06/22/23 23:17	CP	06/19/23 14:37	OP47337A	GRK580
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016 [a]	ND	0.050	0.034	ug/l	
11104-28-2	Aroclor 1221	ND	0.050	0.029	ug/l	
11141-16-5	Aroclor 1232	ND	0.050	0.020	ug/l	
53469-21-9	Aroclor 1242	ND	0.050	0.027	ug/l	
12672-29-6	Aroclor 1248	ND	0.050	0.025	ug/l	
11097-69-1	Aroclor 1254	ND	0.050	0.034	ug/l	
11096-82-5	Aroclor 1260 [a]	ND	0.050	0.027	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		10-156%
877-09-8	Tetrachloro-m-xylene	46%		10-156%
2051-24-3	Decachlorobiphenyl	57%		10-143%
2051-24-3	Decachlorobiphenyl	64%		10-143%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	INFLUENT-001		
Lab Sample ID:	JD67727-1	**Date Sampled:**	06/15/23
Matrix:	AQ - Influent	**Date Received:**	06/16/23
Method:	SW846 8015D SW846 3510C	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AY1492.D	1	06/23/23 19:27	TP	06/22/23 11:00	OP47304	GAY67
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.21	0.083	0.053	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	58%		10-112%
438-22-2	5a-Androstane	60%		10-98%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD67727-2	**Date Sampled:**	06/15/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/16/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L356835.D	1	06/20/23 00:40	ED	n/a	n/a	VL10844
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	5.0	3.0	ug/l	
71-43-2	Benzene	ND	1.0	0.34	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.35	ug/l	
75-25-2	Bromoform	ND	1.0	0.60	ug/l	
74-83-9	Bromomethane	ND	1.0	0.87	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon disulfide	ND	1.0	0.52	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.33	ug/l	
75-00-3	Chloroethane	ND	1.0	0.54	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.78	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.43	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.42	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.39	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.45	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.46	ug/l	
540-59-0	1,2-Dichloroethene (total)	ND	1.0	0.46	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.42	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.37	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.30	ug/l	
591-78-6	2-Hexanone	ND	5.0	1.8	ug/l	
108-10-1	4-Methyl-2-pentanone(MIBK)	ND	5.0	1.5	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.41	ug/l	
100-42-5	Styrene	ND	2.0	0.34	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.32	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.41	ug/l	
108-88-3	Toluene	ND	1.0	0.36	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.43	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.41	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD67727-2	**Date Sampled:**	06/15/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/16/23
Method:	EPA 624.1	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA TCL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.43	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.79	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	103%		80-128%
2037-26-5	Toluene-D8 (SUR)	104%		82-113%
460-00-4	4-Bromofluorobenzene (SUR)	105%		79-117%
1868-53-7	Dibromofluoromethane (S)	111%		84-121%

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

GW
TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

FED-EX Tracking #
Bottle Order Control # KR-041023-126
SGS Quote #
SGS Job # JD67727

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City State Zip: Clifton Park, NY
Project Contact E-mail: Todd Corrigan
Phone #: 646-248-4208
Sampler(s) Name(s) Phone #: A. Svensson 716-409-4063

Project Information

Project Name: IR DC ROLLFORMS
Street: 583 Allen St.
City State: Jamestown, NY
Project #: 30174313
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)
Company Name:
Street Address:
City State Zip:
Attention:

VOCs USEPA 624.1
TPH DRO USEPA 8015B
PCBs USEPA 608

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	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	MeOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	INFLUENT-001	1	6/15/23	1015	AS	G	N	GW	7	3				4				3 2 2	F89
2	TRIP BLANK		4/11/23	0800	—	G	N	TB	2	2				0				2 0 0	V92

Ref: KR-041023-126 Date: 11Apr23
Dep: Wgt: 9.85 LBS
DV: 0.00

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

Fed: PRIORITY OVERNIGHT TRK#: 5804 7472 7294

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- [ ] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [x] Other Standard

Initial Assessment 2B
Label Verification

All data available via SGS Engage

* Approval needed for 1-3 BD TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria ____
- [ ] CT RCP Criteria ____
- [ ] State Forms
- [ ] EDD Format ____

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

June 2023 - Q2
(1) cooler
Field pH: 7.9
• 2x3x40mL DRO

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

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

Relinquished by:	Date / Time:	Received By:
1	6/15/23 1830	1 Fedex
2		2 Fedex
3		3
4		4
5		5

Custody Seal # ☐ Intact ☐ Not Intact ☐ Absent

Therm ID: See Sample Receipt Summary

Cooler Temp. °C: 2.1 IR40

EHSA-QAC-0023-05 Rev.Date:8/5/22

SGS Sample Receipt Summary

Job Number: JD67727 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, JAMESTOWN, NY, ORD

Date / Time Received: 6/16/2023 10:00:00 AM **Delivery Method:** FED EX **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.1);

Cooler Temps (Corrected) °C: Cooler 1: (1.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun 40		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

August 29, 2022

Todd Carignan
Arcadis
855 Route 146
Suite 210
Clifton Park, NY 12065

RE: Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Dear Todd Carignan:

Enclosed are the analytical results for sample(s) received by the laboratory on August 18, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Carolynne Trout

Carolynne Trout for
Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Jasmine Mullins, Arcadis

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
A2LA Certification #: 2926.01*
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563*
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10621921001	**Influent-001**	Air	08/15/22 12:00	08/18/22 09:02

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Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10621921001	**Influent-001**	TO-15	HMH	11	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Sample: Influent-001 **Lab ID: 10621921001** Collected: 08/15/22 12:00 Received: 08/18/22 09:02 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis							
Carbon tetrachloride	ND	ug/m3	2.3	1.77		08/22/22 21:02	56-23-5	
Chloroform	ND	ug/m3	0.88	1.77		08/22/22 21:02	67-66-3	
1,1-Dichloroethane	ND	ug/m3	1.5	1.77		08/22/22 21:02	75-34-3	
1,1-Dichloroethene	ND	ug/m3	1.4	1.77		08/22/22 21:02	75-35-4	
cis-1,2-Dichloroethene	**113**	ug/m3	1.4	1.77		08/22/22 21:02	156-59-2	
trans-1,2-Dichloroethene	**6.0**	ug/m3	1.4	1.77		08/22/22 21:02	156-60-5	
Methylene Chloride	ND	ug/m3	6.2	1.77		08/22/22 21:02	75-09-2	
Tetrachloroethene	**4.9**	ug/m3	1.2	1.77		08/22/22 21:02	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	2.0	1.77		08/22/22 21:02	71-55-6	
Trichloroethene	**761**	ug/m3	9.7	17.7		08/23/22 20:42	79-01-6	
Vinyl chloride	**140**	ug/m3	0.92	1.77		08/22/22 21:02	75-01-4	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

QC Batch: 836097
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10621921001

METHOD BLANK: 4427164 Matrix: Air
Associated Lab Samples: 10621921001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	08/22/22 14:24	
1,1-Dichloroethane	ug/m3	ND	0.82	08/22/22 14:24	
1,1-Dichloroethene	ug/m3	ND	0.81	08/22/22 14:24	
Carbon tetrachloride	ug/m3	ND	1.3	08/22/22 14:24	
Chloroform	ug/m3	ND	0.50	08/22/22 14:24	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	08/22/22 14:24	
Methylene Chloride	ug/m3	ND	3.5	08/22/22 14:24	
Tetrachloroethene	ug/m3	ND	0.69	08/22/22 14:24	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	08/22/22 14:24	
Trichloroethene	ug/m3	ND	0.55	08/22/22 14:24	
Vinyl chloride	ug/m3	ND	0.52	08/22/22 14:24	

LABORATORY CONTROL SAMPLE: 4427165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	58	54.6	94	70-130	
1,1-Dichloroethane	ug/m3	42.5	40.2	95	70-130	
1,1-Dichloroethene	ug/m3	41.9	37.6	90	70-130	
Carbon tetrachloride	ug/m3	66.7	69.2	104	70-132	
Chloroform	ug/m3	52.1	50.9	98	70-130	
cis-1,2-Dichloroethene	ug/m3	42.1	42.0	100	70-136	
Methylene Chloride	ug/m3	36.8	30.3	82	65-132	
Tetrachloroethene	ug/m3	72	75.4	105	70-134	
trans-1,2-Dichloroethene	ug/m3	42.3	37.8	89	70-134	
Trichloroethene	ug/m3	57.2	56.2	98	70-134	
Vinyl chloride	ug/m3	27.2	21.5	79	70-132	

SAMPLE DUPLICATE: 4427911

Parameter	Units	10621754003 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3		ND		25	
1,1-Dichloroethane	ug/m3		ND		25	
1,1-Dichloroethene	ug/m3		ND		25	
Carbon tetrachloride	ug/m3		ND		25	
Chloroform	ug/m3		.56J		25	
cis-1,2-Dichloroethene	ug/m3		ND		25	
Methylene Chloride	ug/m3		ND		25	

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REPORT OF LABORATORY ANALYSIS

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

SAMPLE DUPLICATE: 4427911

Parameter	Units	10621754003 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/m3		92.6	1	25	
trans-1,2-Dichloroethene	ug/m3		ND		25	
Trichloroethene	ug/m3		.34J		25	
Vinyl chloride	ug/m3		ND		25	

SAMPLE DUPLICATE: 4427912

Parameter	Units	10621754004 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3		ND		25	
1,1-Dichloroethane	ug/m3		ND		25	
1,1-Dichloroethene	ug/m3		ND		25	
Carbon tetrachloride	ug/m3		ND		25	
Chloroform	ug/m3		ND		25	
cis-1,2-Dichloroethene	ug/m3		277	0	25	
Methylene Chloride	ug/m3		ND		25	
Tetrachloroethene	ug/m3		18.1	2	25	
trans-1,2-Dichloroethene	ug/m3		3.7	9	25	
Trichloroethene	ug/m3		.68J		25	
Vinyl chloride	ug/m3		13.7	12	25	

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(612)607-1700

QUALIFIERS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10621921

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10621921001	**Influent-001**	TO-15	836097		

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

56659

Page: 1 of 1

Section A Required Client Information:

Company: ARCADIS
Address: 855 Route 146, Suite 210
Clifton Park, NY
Email To: todd.carignan@arcadis.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Todd Carignan
Copy To:
Purchase Order No.:
Project Name: IR DC Rollforms
Project Number: 30115866.01

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 44233

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units: ug/m³ mg/m³ PPBV PPMV Other

Report Level II. III. IV. Other

Section D Required Client Information

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Influent-001		0.6	8/15/22	1200	—	—	-27	-1	3808								X			001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Ref: 1051159/MR2 Date: 10Aug22
Dep: AIR Wgt: 3.45 LBS
DV: 0.00
Svcs: ** 2DAY **
TRCK: 5743 6822 5444

SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
TOTAL: 0.00

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Adam Svensson/ARCADIS	8/16/22	1400	Matt [illegible]/Pace	8/18/22	9:02

SAMPLE CONDITIONS

—	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N	Y/N
	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY)

WO#: 10621921

10621921

echnical Phone: 612.607.6386

Pace ANALYTICAL SERVICES	**DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air** **Effective Date: 02/25/2022**

Air Sample Condition Upon Receipt **Client Name:** Arcadis **Project #:** **WO#: 10621921**

PM: MR2 Due Date: 08/29/22

CLIENT: Arcadis-NY

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 5743 6822 5444 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other: _____

Date & Initials of Person Examining Contents: 8-18-22 MJ

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: (Air Can) | Airbag				11. Individually Certified Cans? Y | N (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☐ Yes	☐ No		13. 1 gauge returned.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☐ 10AIR17 ☐ 10AIR47 ☒ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
Influent	3808	—	-1.5	+10					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: Matt Ray **Date:** 08/18/22

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

December 13, 2022

Todd Carignan
Arcadis
855 Route 146
Suite 210
Clifton Park, NY 12065

RE: Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Dear Todd Carignan:

Enclosed are the analytical results for sample(s) received by the laboratory on December 02, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Jasmine Mullins, Arcadis
Rachael Thomas, Arcadis

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Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
A2LA Certification #: 2926.01*
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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SAMPLE SUMMARY

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10635641001	**Influent-001**	Air	11/30/22 15:30	12/02/22 09:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10635641001	**Influent-001**	TO-15	MJL	11	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Sample: Influent-001 **Lab ID: 10635641001** Collected: 11/30/22 15:30 Received: 12/02/22 09:30 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis							
Carbon tetrachloride	ND	ug/m3	66.8	52.2		12/12/22 22:47	56-23-5	
Chloroform	ND	ug/m3	25.9	52.2		12/12/22 22:47	67-66-3	
1,1-Dichloroethane	ND	ug/m3	43.0	52.2		12/12/22 22:47	75-34-3	
1,1-Dichloroethene	ND	ug/m3	42.1	52.2		12/12/22 22:47	75-35-4	
cis-1,2-Dichloroethene	**427**	ug/m3	42.1	52.2		12/12/22 22:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	42.1	52.2		12/12/22 22:47	156-60-5	
Methylene Chloride	ND	ug/m3	184	52.2		12/12/22 22:47	75-09-2	
Tetrachloroethene	ND	ug/m3	36.0	52.2		12/12/22 22:47	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	57.9	52.2		12/12/22 22:47	71-55-6	
Trichloroethene	**149**	ug/m3	28.5	52.2		12/12/22 22:47	79-01-6	
Vinyl chloride	**1470**	ug/m3	13.6	52.2		12/12/22 22:47	75-01-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

QC Batch: 858073
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10635641001

METHOD BLANK: 4535045 Matrix: Air
Associated Lab Samples: 10635641001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	1.1	12/12/22 17:19	
1,1-Dichloroethane	ug/m3	ND	0.82	12/12/22 17:19	
1,1-Dichloroethene	ug/m3	ND	0.81	12/12/22 17:19	
Carbon tetrachloride	ug/m3	ND	1.3	12/12/22 17:19	
Chloroform	ug/m3	ND	0.50	12/12/22 17:19	
cis-1,2-Dichloroethene	ug/m3	ND	0.81	12/12/22 17:19	
Methylene Chloride	ug/m3	ND	3.5	12/12/22 17:19	
Tetrachloroethene	ug/m3	ND	0.69	12/12/22 17:19	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	12/12/22 17:19	
Trichloroethene	ug/m3	ND	0.55	12/12/22 17:19	
Vinyl chloride	ug/m3	ND	0.26	12/12/22 17:19	

LABORATORY CONTROL SAMPLE: 4535046

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	58	60.4	104	70-130	
1,1-Dichloroethane	ug/m3	42.5	46.8	110	70-130	
1,1-Dichloroethene	ug/m3	41.9	40.2	96	70-130	
Carbon tetrachloride	ug/m3	66.7	67.3	101	70-132	
Chloroform	ug/m3	52.1	55.5	107	70-130	
cis-1,2-Dichloroethene	ug/m3	42.1	43.6	104	70-136	
Methylene Chloride	ug/m3	36.8	37.4	102	65-132	
Tetrachloroethene	ug/m3	72	77.5	108	70-134	
trans-1,2-Dichloroethene	ug/m3	42.3	44.3	105	70-134	
Trichloroethene	ug/m3	57.2	60.8	106	70-134	
Vinyl chloride	ug/m3	27.2	27.2	100	70-132	

SAMPLE DUPLICATE: 4535597

Parameter	Units	10635893001 Result	Dup Result	RPD	Max RPD	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethane	ug/m3	ND	ND		25	
1,1-Dichloroethene	ug/m3	ND	ND		25	
Carbon tetrachloride	ug/m3	ND	.74J		25	
Chloroform	ug/m3	0.85	1.1	21	25	
cis-1,2-Dichloroethene	ug/m3	ND	ND		25	
Methylene Chloride	ug/m3	ND	1.5J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

SAMPLE DUPLICATE: 4535597

Parameter	Units	10635893001 Result	Dup Result	RPD	Max RPD	Qualifiers
Tetrachloroethene	ug/m3	ND	ND		25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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TNI - The NELAC Institute.

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Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 30115866.01 IR DC Rollforms
Pace Project No.: 10635641

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10635641001	**Influent-001**	TO-15	858073		

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

53642

Page: 1 of 1

Section A Required Client Information:

Company: ARCADIS
Address: 855 Route 146, Suite 210
Clifton Park, NY
Email To: todd.carignan@arcadis.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Todd Carignan
Copy To:
Purchase Order No.:
Project Name: IRDC Rollforms
Project Number: 30115866.01

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 44233

Program
☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act
☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units
ug/m³ mg/m³
PPBV PPMV
Other

Report Level II. III. IV. Other

Method:

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	Influent-001		1.0	11/30/22	1530	—	—	-20	-1	1138								X			001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

WO#: 10635641

10635641

Ref: 1051896/MR1
Dep: AIR
Date: 07Nov22
Wgt: 4.00 LBS
DV:
Svcs: ** 2DAY **
TRCK: 6101 8739 8970

SHIPPING:	0.00
SPECIAL:	0.00
HANDLING:	0.00
0.00 TOTAL:	0.00

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Adam Svensson/Arcadis	11/30/22	1800	HEE	12.2.22	930

SAMPLE CONDITIONS

	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
—		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY)

ORIGINAL

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414 Air Technical Phone: 612.607.6386

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air
	Effective Date: 02/25/2022

Air Sample Condition Upon Receipt **Client Name:** ARCADIS **Project #:** WO#: 10635641

PM: MR2 Due Date: 12/13/22

CLIENT: Arcadis-NY

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 6101 9739 8970 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☒ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 12.2.22 CM

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: Air Can | Airbag				11. Individually Certified Cans? Y | (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12. STAND ALONE GAUGE
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946III)**	☒ Yes	☐ No		13.

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☒ 10AIR17 ☐ 10AIR47 ☐ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
INF.	1136	—	-1	+6					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Matt Ray **Date:** 12/05/22

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

February 17, 2023

Todd Carignan
Arcadis
855 Route 146
Suite 210
Clifton Park, NY 12065

RE: Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Dear Todd Carignan:

Enclosed are the analytical results for sample(s) received by the laboratory on February 08, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Minneapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Matt Ray
matt.ray@pacelabs.com
(612)607-1700
Project Manager

Enclosures

cc: Rachael Thomas, Arcadis

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Pace Analytical Services, LLC - Minneapolis MN

1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
A2LA Certification #: 2926.01*
Alabama Certification #: 40770
Alaska Contaminated Sites Certification #: 17-009*
Alaska DW Certification #: MN00064
Arizona Certification #: AZ0014*
Arkansas DW Certification #: MN00064
Arkansas WW Certification #: 88-0680
California Certification #: 2929
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
GMP+ Certification #: GMP050884
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 1240*
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081*
New Jersey Certification #: MN002
New York Certification #: 11647*
North Carolina DW Certification #: 27700
North Carolina WW Certification #: 530
North Dakota Certification (A2LA) #: R-036
North Dakota Certification (MN) #: R-036
Ohio DW Certification #: 41244
Ohio VAP Certification (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
Oklahoma Certification #: 9507*
Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001*
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192*
Utah Certification #: MN00064*
Vermont Certification #: VT-027053137
Virginia Certification #: 460163*
Washington Certification #: C486*
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE SUMMARY

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10642189001	**INFLUENT-001**	Air	02/06/23 11:30	02/08/23 11:32

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

SAMPLE ANALYTE COUNT

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10642189001	**INFLUENT-001**	TO-15	SW	11	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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Minneapolis, MN 55414
(612)607-1700

ANALYTICAL RESULTS

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Sample: INFLUENT-001 **Lab ID: 10642189001** Collected: 02/06/23 11:30 Received: 02/08/23 11:32 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15 Pace Analytical Services - Minneapolis							
Carbon tetrachloride	ND	ug/m3	2.3	1.77		02/16/23 21:11	56-23-5	
Chloroform	ND	ug/m3	0.88	1.77		02/16/23 21:11	67-66-3	
1,1-Dichloroethane	ND	ug/m3	1.5	1.77		02/16/23 21:11	75-34-3	
1,1-Dichloroethene	ND	ug/m3	1.4	1.77		02/16/23 21:11	75-35-4	
cis-1,2-Dichloroethene	**48.8**	ug/m3	1.4	1.77		02/16/23 21:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.4	1.77		02/16/23 21:11	156-60-5	
Methylene Chloride	ND	ug/m3	6.2	1.77		02/16/23 21:11	75-09-2	
Tetrachloroethene	**2.3**	ug/m3	1.2	1.77		02/16/23 21:11	127-18-4	
1,1,1-Trichloroethane	ND	ug/m3	2.0	1.77		02/16/23 21:11	71-55-6	
Trichloroethene	**419**	ug/m3	9.7	17.7		02/17/23 13:12	79-01-6	
Vinyl chloride	**22.4**	ug/m3	0.46	1.77		02/16/23 21:11	75-01-4	

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

QC Batch: 867741
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Laboratory: Pace Analytical Services - Minneapolis

Associated Lab Samples: 10642189001

METHOD BLANK: 4578374 Matrix: Air
Associated Lab Samples: 10642189001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/m3	ND	0.56	02/16/23 13:38	
1,1-Dichloroethane	ug/m3	ND	0.41	02/16/23 13:38	
1,1-Dichloroethene	ug/m3	ND	0.40	02/16/23 13:38	
Carbon tetrachloride	ug/m3	ND	0.64	02/16/23 13:38	
Chloroform	ug/m3	ND	0.25	02/16/23 13:38	
cis-1,2-Dichloroethene	ug/m3	ND	0.40	02/16/23 13:38	
Methylene Chloride	ug/m3	ND	1.8	02/16/23 13:38	
Tetrachloroethene	ug/m3	ND	0.34	02/16/23 13:38	
trans-1,2-Dichloroethene	ug/m3	ND	0.40	02/16/23 13:38	
Trichloroethene	ug/m3	ND	0.27	02/16/23 13:38	
Vinyl chloride	ug/m3	ND	0.13	02/16/23 13:38	

LABORATORY CONTROL SAMPLE: 4578375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/m3	58	51.9	89	70-133	
1,1-Dichloroethane	ug/m3	42.5	38.8	91	70-133	
1,1-Dichloroethene	ug/m3	41.9	40.9	97	69-134	
Carbon tetrachloride	ug/m3	66.7	54.8	82	70-135	
Chloroform	ug/m3	52.1	45.4	87	70-133	
cis-1,2-Dichloroethene	ug/m3	42.1	41.3	98	70-133	
Methylene Chloride	ug/m3	36.8	31.4	85	70-134	
Tetrachloroethene	ug/m3	72	64.7	90	70-139	
trans-1,2-Dichloroethene	ug/m3	42.3	39.8	94	70-132	
Trichloroethene	ug/m3	57.2	52.4	91	70-132	
Vinyl chloride	ug/m3	27.2	26.6	98	64-136	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALIFIERS

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 30115866 IR DC Rollforms
Pace Project No.: 10642189

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10642189001	**INFLUENT-001**	TO-15	867741		

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

57080

Page: 1 of 1

Section A Required Client Information:

Company: ARCADIS
Address: 855 Route 146, Suite 210
Clifton Park, NY
Email To: Todd.carignan@arcadis.com
Phone: Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Todd Carignan
Copy To:
Purchase Order No.:
Project Name: IRDC Rollforms
Project Number: 30115866

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager/Sales Rep.
Pace Profile #: 44233

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: NY

Reporting Units: ug/m³ ___ mg/m³ ___ PPBV ___ PPMV ___ Other ___

Report Level: II.___ III.___ IV.___ Other___

'Section D Required Client Information

AIR SAMPLE ID
Sample IDs MUST BE UNIQUE

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	AIR SAMPLE ID	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE - END/GRAB DATE	COLLECTED COMPOSITE - END/GRAB TIME	Canister Pressure (Initial Field - in Hg)	Canister Pressure (Final Field - in Hg)	Summa Can Number	Flow Control Number	Method: PM10	3C - Fixed Gas (%)	TO-3 BTEX	TO-3M (Methane)	TO-14	TO-15 Full List VOCs	TO-15 Short List BTEX	TO-15 Short List Chlorinated	TO-15 Short List (other)	Pace Lab ID
1	INFLUENT-001		0.1	2/6/23	1130	—	—	-17	-1	1128								X			001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Ref: 1052756/MR1 Date: 31Jan23
Dep: AIR Wgt: 4.00 LBS
DV: 0.00
Svcs: ** 2DAY ** Master 6101 8741 2923
TRCK: 6101 8741 2934

SHIPPING:	0.00
SPECIAL:	0.00
HANDLING:	0.00
TOTAL:	0.00

Comments :

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature] / ARCADIS	2/6/23	1730	[signature] / Pace	2-8-23	11:32

SAMPLE CONDITIONS

	Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
—	2	Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N
		Y/N	Y/N	Y/N

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:
SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY)

WO# : 10642189

10642189

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-MIN4-0113 v01_Sample Condition Upon Receipt (SCUR) - Air
	Effective Date: 02/25/2022

Air Sample Condition Upon Receipt **Client Name:** Arcadis **Project #:** WO#: 10642189

PM: MR2 Due Date: 02/17/23

CLIENT: Arcadis-NY

Courier: ☒ FedEx ☐ UPS ☐ USPS ☐ Client ☐ Pace ☐ SpeeDee ☐ Commercial

Tracking Number: 6101 8741 2934 ☐ See Exception

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No

Seals Intact? ☐ Yes ☐ No

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Tin Can ☐ Other:

Date & Initials of Person Examining Contents: 2-8-23 MI

				Comments:
Chain of Custody Present?	☒ Yes	☐ No		1.
Chain of Custody Filled Out?	☒ Yes	☐ No		2.
Chain of Custody Relinquished?	☒ Yes	☐ No		3.
Sampler Name and/or Signature on COC?	☐ Yes	☒ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No		5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No		6.
Rush Turn Around Time Requested?	☐ Yes	☒ No		7.
Sufficient Volume?	☒ Yes	☐ No		8.
Correct Containers Used? **(Tedlar bags not acceptable container for TO-15 or APH)** -Pace Containers Used?	☒ Yes ☒ Yes	☐ No ☐ No		9.
Containers Intact? **(visual inspection/no leaks when pressurized)**	☒ Yes	☐ No		10.
Media: (Air Can) | Airbag				11. Individually Certified Cans? Y / (N) (list which samples)
Is sufficient information available to reconcile samples to the COC?	☒ Yes	☐ No		12.
Do cans need to be pressurized? **(DO NOT PRESSURIZE 3C or ASTM 1946!!!)**	☒ Yes	☐ No		13. 1 gauge attached

Gauge #: ☐ 10AIR26 ☐ 10AIR34 ☐ 10AIR35 ☐ 10AIR17 ☐ 10AIR47 ☒ 10AIR48

Canisters					Canisters				
Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure	Sample Number	Can ID	Flow Controller	Initial Pressure	Final Pressure
001	1128	-	-1.5	+10					

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: Date/Time:

Comments/Resolution:

Project Manager Review: Matt Ray **Date:** 2/8/23

Note: *Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e., out of hold, incorrect preservative, out of temp, incorrect containers).*

Qualtrax ID: 52723

ANALYTICAL REPORT

June 26, 2023

ARCADIS US - Clifton Park, NY

Sample Delivery Group:	L1626852
Samples Received:	06/16/2023
Project Number:	30174313
Description:	Trane - Jamestown, NY
Site:	DC ROLLFORMS
Report To:	Todd Carignan 855 New York 146 Clifton Park, NY 12065

Entire Report Reviewed By:

Chris McCord
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.



TABLE OF CONTENTS

Cp: Cover Page 1

Tc: Table of Contents 2

Ss: Sample Summary 3

Cn: Case Narrative 4

Sr: Sample Results 5

INFLUENT-001 L1626852-01 5

Qc: Quality Control Summary 6

Volatile Organic Compounds (MS) by Method TO-15 6

Gl: Glossary of Terms 8

Al: Accreditations & Locations 9

Sc: Sample Chain of Custody 10

SAMPLE SUMMARY

INFLUENT-001 L1626852-01 Air

Collected by: Adam Svensson
Collected date/time: 06/15/23 09:15
Received date/time: 06/16/23 09:15

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2080264	1	06/19/23 12:38	06/19/23 12:38	GH	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2082663	10	06/22/23 15:04	06/22/23 15:04	AA	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.



Chris McCord
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2080264
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2080264
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2080264
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2080264
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	19.4	76.9		1	WG2080264
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	0.233	0.923		1	WG2080264
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2080264
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.10	7.47		1	WG2080264
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2080264
Trichloroethylene	79-01-6	131	2.00	10.7	142	761		10	WG2082663
Vinyl chloride	75-01-4	62.50	0.200	0.511	5.35	13.7		1	WG2080264
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.9*				WG2080264
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.6*				WG2082663

Method Blank (MB)

(MB) R3939696-3 06/19/23 09:34

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Carbon tetrachloride	U		0.0732	0.200
Chloroform	U		0.0717	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
Methylene Chloride	U		0.0979	0.200
Tetrachloroethylene	U		0.0814	0.200
1,1,1-Trichloroethane	U		0.0736	0.200
Vinyl chloride	U		0.0949	0.200
(S) 1,4-Bromofluorobenzene	*94.1*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3939696-1 06/19/23 08:36 • (LCSD) R3939696-2 06/19/23 09:06

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	3.75	3.84	3.83	102	102	70.0-130			0.261	25
Chloroform	3.75	3.91	3.83	104	102	70.0-130			2.07	25
1,1-Dichloroethane	3.75	3.87	3.84	103	102	70.0-130			0.778	25
1,1-Dichloroethene	3.75	3.77	3.76	101	100	70.0-130			0.266	25
cis-1,2-Dichloroethene	3.75	3.82	3.74	102	99.7	70.0-130			2.12	25
trans-1,2-Dichloroethene	3.75	3.76	3.79	100	101	70.0-130			0.795	25
Methylene Chloride	3.75	3.78	3.84	101	102	70.0-130			1.57	25
Tetrachloroethylene	3.75	4.03	4.03	107	107	70.0-130			0.000	25
1,1,1-Trichloroethane	3.75	3.90	3.81	104	102	70.0-130			2.33	25
Vinyl chloride	3.75	3.76	3.79	100	101	70.0-130			0.795	25
(S) 1,4-Bromofluorobenzene				*98.0*	*97.8*	*60.0-140*				

Method Blank (MB)

(MB) R3940802-3 06/22/23 10:12

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Trichloroethylene	U		0.0680	0.200
(S) 1,4-Bromofluorobenzene	*97.9*			*60.0-140*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3940802-1 06/22/23 08:51 • (LCSD) R3940802-2 06/22/23 09:32

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethylene	3.75	4.63	4.62	123	123	70.0-130			0.216	25
(S) 1,4-Bromofluorobenzene				*98.6*	*99.0*	*60.0-140*				

GLOSSARY OF TERMS

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

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
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.
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
	The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.

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	LAO000356
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.

Company Name/Address:
ARCADIS US - Clifton Park, NY

855 New York 146
Clifton Park, NY 12065

Billing Information:
Accounts Payable
630 Plaza Dr., Ste. 600
Highlands Ranch, CO 80129

Report To:
Todd Carignan

Email To:
todd.carignan@arcadis.com

Project Description: **Trane - Jamestown, NY**

City/State Collected: Jamestown, NY

Please Circle: PT MT CT (ET)

Phone:
518-250-7360

Client Project #
30174313

Lab Project #
ARCADCPNY-TRANEJAMES

Collected by (print):
Adam Svensson

Site/Facility ID #
DC ROLLFORMS

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)
___ Same Day ___ Three Day
___ Next Day ___ Five Day
___ Two Day

Date Results Needed
Standard TAT

Sample ID	Can #	Flow Cont. #	Collection Date	Collection Time	Canister Pressure/Vacuum Initial	Canister Pressure/Vacuum Final
INFLUENT-001	3088	9599	6/15/23	0915	-28.5	-4.0

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		

Invo: ARCADCPNY-TRANE Date : 08Jun23 Shipping : 0.00
Customer : P998900 Weight : 10 LBS Special : 0.00
Phone : (615)758-5858 COD : Handling : 0.00
Sat Del : N DV : 0.00 Total : 0.00

Svcs: PRIORITY OVERNIGHT
TRCK: 6040 5547 7640

Analysis
TO-15 Summa: X

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE
MT JULIET, TN
12065 Lebanon Road Mt Juliet, TN 37122
Phone: 615-758-5858 Alt: 800-767-5859
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1621852
1056

Acctnum: ARCADCPNY
Template: T230183
Prelogin: P998900
PM: 526 - Chris McCord
PB: CSL 06/08/23

Shipped Via: FedEx Ground

Rem./Contaminant	Sample # (lab only)
	01

Remarks: 0.7 ppm

Relinquished by : (Signature) Date: 6/15/23 Time: 1830
Relinquished by : (Signature) Date: Time:
Relinquished by : (Signature) Date: Time:

Samples returned via: __ UPS __ FedEx __ Courier _____
Tracking #

Received by: (Signature) Date: Time:
Received by: (Signature) Date: Time:
Received for lab by: (Signature) Date: 6/16/23 Time: 0915

Hold #
Condition: (lab use only)
COC Seal Intact: ___ Y ___ N ___ NA
NCF:

Appendix D

Groundwater Sampling Logs

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-8S | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 60°F, Sunny

Measuring Pt. Description: TIC | Screen Setting (ft-bmp): — | Casing Diameter (in.): 4" | Well Material: PVC X, SS

Total Depth (ft-bmp): 12.46' | Static Water Level (ft-bmp): 8.00' | Water Column in Well (ft.): 4.46' | Gallons in Well: 2.90 x3 = 8.70

MP Elevation: — | Pump Intake (ft-bmp): ~11' | Volumes Purged: 2.4 | Gallons Purged: 7.0

Sample Method: low flow/grab | Pump On/Off: 1125/1255, 1305/1310 | Sample Time: Label 1305, Start 1305, End 1310 | Purge Method: Peri, Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No.: NA | Sampled By: MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1250	85	300	10.60	7.0	7.08	0.751	35	2.03	15.72	-91	Clear	None
Dry @	1255	—	—	—	—	—	—	—	—	—	—	—

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Recharge too slow to maintain WL, dry @ 1255, sampled @ 1305 after allowing to recharge

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID MW-8S | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 60°F, sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 4" | Well Material: PVC X, SS ___

Total Depth (ft-bmp) 12.46' | Static Water Level (ft-bmp) 8.00' | Water Column in Well (ft.) 4.46 | Gallons in Well 2.90 x3 = 8.70

MP Elevation — | Pump Intake (ft-bmp) ~11' | Volumes Purged 2.4 | Gallons Purged 7.0

Sample Method low flow/grab | Pump On/Off 1125/1255, 1305/1310 | Sample Time Label 1305, Start 1305, End 1310 | Purge Method Peri, Centrifugal ___, Submersible ___, Disp. Bailer ___, Other ___

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1130	5	300	8.23	0.4	7.15	0.621	1.7	4.38	15.46	61	Clear	None
1135	10	300	8.59	0.8	7.13	0.652	0.0	3.60	15.50	48		
1140	15	300	8.54	1.2	7.13	0.663	0.0	3.22	15.51	43		
1145	20	300	8.71	1.6	7.13	0.685	0.0	2.86	15.54	28		
1150	25	300	8.97	2.0	7.11	0.715	0.0	2.17	15.56	16		
1155	30	300	9.09	2.4	7.10	0.727	0.0	1.95	15.57	-19		
1200	35	300	9.27	2.8	7.10	0.740	0.0	1.83	15.61	-37		
1205	40	300	9.37	3.2	7.10	0.742	0.0	1.72	15.63	-40		
1210	45	300	9.56	3.6	7.10	0.745	0.0	1.63	15.61	-48		
1215	50	300	9.78	4.0	7.10	0.789	0.4	1.63	15.64	-72		
1220	55	300	9.86	4.4	7.09	0.798	0.0	1.22	15.62	-80		
1225	60	300	10.00	4.8	7.09	0.796	0.0	1.03	15.61	-82		
1230	65	300	10.18	5.2	7.08	0.781	0.0	0.80	15.62	-82		
1235	70	300	10.27	5.6	7.09	0.767	0.0	0.72	15.64	-83		
1240	75	300	10.40	6.0	7.09	0.739	0.0	0.57	15.64	-82		
1245	80	300	10.53	6.4	7.09	0.736	0.1	0.52	15.66	-86		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40mL VOA	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Recharge too slow to maintain WL, dry @ 1255, sampled @ 1305 after allowing to recharge

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-9 | Date 10/11/22

Project Name/Location Trane - DC Rollforms | Weather 70°F, Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) – | Casing Diameter (in.) 4" | Well Material: PVC X, SS

Total Depth (ft-bmp) 12.35' | Static Water Level (ft-bmp) 7.49' | Water Column in Well (ft.) 4.86 | Gallons in Well 3.16 x3 = 9.48

MP Elevation – | Pump Intake (ft-bmp) ~10' | Volumes Purged 1.02 | Gallons Purged 3.22

Sample Method low flow/grab | Pump On/Off 12:30/1345 | Sample Time Label 13:40, Start 13:40, End 13:45 | Purge Method Peri; Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No. NA | Sampled By MS

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
12:35	5	300	7.82	0.33	6.90	0.411	32.0	10.42	17.02	-8	clear	none
12:40	10	200	8.27	0.66	6.91	0.411	25.1	10.39	17.06	-7		
12:45	15	150	8.40	0.72	6.94	0.417	18.7	10.22	17.07	-9		
12:50	20	150	8.46	0.88	6.96	0.432	10.5	9.91	17.12	-22		
12:55	25	150	8.54	1.02	6.98	0.439	6.1	9.56	17.28	-33		
13:00	30	150	8.60	1.18	6.99	0.441	4.3	9.37	17.29	-36		
13:05	35	150	8.70	1.34	7.00	0.440	3.6	9.21	16.95	-39		
13:10	40	400	8.90	1.82	6.99	0.441	2.6	9.12	16.93	-40		
13:15	45	400	9.20	2.26	7.00	0.444	0.0	8.77	17.16	-43		
13:20	50	150	9.22	2.42	7.01	0.446	1.0	8.51	17.29	-43		
13:25	55	150	9.35	2.58	7.02	0.448	0.0	8.29	17.35	-42		
13:30	60	150	9.45	2.74	7.02	0.449	0.0	8.08	17.42	-42		
13:35	65	150	9.55	2.90	7.03	0.449	0.0	7.75	17.41	-36		
13:40	70	150	9.65	3.06	7.03	0.450	0.0	7.72	17.46	-31		

Constituents Sampled	Container	Number	Preservative
8260 C VOC	40 mL VOA	3	HCl

Well Information

Well Location: W of Atl Metal Press + Fab bldg | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Instructed to Sample after Stabilization @ 13:35 by TC

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID MW-101R | Date 10/11/22

Project Name/Location Trane - DC Rollforms | Weather 50° F, Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 4" | Well Material: PVC X, SS ___

Total Depth (ft-bmp) 13.47' | Static Water Level (ft-bmp) 8.85 | Water Column in Well (ft.) 4.62 | Gallons in Well 3.00 x3 = 9.00

MP Elevation — | Pump Intake (ft-bmp) ~11' | Volumes Purged 0.83 | Gallons Purged 2.50

Sample Method low flow/grab | Pump On/Off 1440/1530, 1550/1555 | Sample Time Label 1550, Start 1550, End 1555 | Purge Method Peri, Centrifugal ___, Submersible ___, Disp. Bailer ___, Other ___

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1445	5	400	9.71	0.44	7.00	0.563	0.0	9.98	17.33	51	clear	
1450	10	300	10.05	0.77	6.97	0.563	0.0	9.25	17.51	54		
1455	15	300	10.35	1.03	6.93	0.562	0.0	9.03	17.58	57		
1500	20	200	10.65	1.25	6.89	0.563	0.0	8.83	17.66	60		
1505	25	150	11.00	1.50	6.86	0.564	0.1	8.66	17.76	63		
1510	30	150	11.37	1.66	6.83	0.567	0.3	8.53	17.72	69		
1515	35	150	11.62	1.86	6.82	0.568	0.2	8.39	17.76	74		
1520	40	150	11.87	2.10	6.82	0.569	0.5	8.42	17.39	77		
1525	45	150	12.11	2.30	6.81	0.567	0.0	8.27	17.38	82		
Dry @ 1530												
1550		150	11.70	2.50	6.85	0.555	0.7	8.27	18.24	78		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Adjacent to VEP-12 + River | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: N/A

NOTES: Dry @ 1530, Sampled @ 1550 after allowing to recharge. Recharge rate too slow to maintain WL

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-12 | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 70° F, Sunny

Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	4"	Well Material: PVC / SS	X /
Total Depth (ft-bmp)	12.45'	Static Water Level (ft-bmp)	7.14'	Water Column in Well (ft.)	5.31'	Gallons in Well	3.45 x3 = 10.35
MP Elevation	—	Pump Intake (ft-bmp)	~11	Volumes Purged	1.74	Gallons Purged	6.0
Sample Method	low flow/grab	Pump On/Off	11:15/1235, 1250/1300	Sample Time	Label 1250, Start 1250, End 1300	Purge Method	Peri; Centrifugal; Submersible; Disp. Bailer; Other
Replicate/Code No.	NA	Sampled By	MJ				

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1120	5	300	7.39	0.4	7.84	0.800	0.0	4.37	15.66	189	clear	None
1125	10	300	7.45	0.8	7.87	0.794	0.0	4.33	15.07	188		
1130	15	300	7.78	1.2	7.96	0.790	0.0	3.84	15.18	181		
1135	20	300	8.00	1.6	7.96	0.813	0.0	2.96	15.25	177		
1140	25	300	8.22	2.0	7.95	0.824	0.0	2.57	15.30	174		
1145	30	300	8.39	2.4	7.93	0.834	0.0	2.28	15.33	171		
1150	35	300	8.55	2.8	7.92	0.839	0.0	2.12	15.35	169		
1155	40	300	8.85	3.2	7.89	0.853	0.0	2.24	15.37	165		
1200	45	300	8.91	3.6	7.84	0.848	0.0	2.32	15.67	164		
1205	50	300	9.11	4.0	782	0.915	0.0	1.90	15.54	165		
1210	55	300	9.46	4.4	7.80	0.927	0.0	1.53	15.46	161		
1215	60	300	9.70	4.8	7.79	0.931	0.0	1.33	15.45	152		
1220	65	300	9.85	5.2	7.78	0.935	0.0	1.30	15.42	145		
1225	70	300	10.4	5.6	7.76	0.970	0.0	1.46	15.37	118		
1230	75	300	10.5	6.0	7.74	0.985	0.0	1.42	15.49	77		
Dry @ 1235												

Constituents Sampled	Container	Number	Preservative
8260C VOC	40mL VOA	3	HCl

Well Information

Well Location:	Grass	Well Locked at Arrival:	Y
Condition of Well:	Good	Well Locked at Departure:	Y
Well Completion:	Flush Mount / (Stick Up)	Key Number To Well:	NA

NOTES: Recharge extremely slow, too slow to maintain WL. Sampled 1st water @ 1250

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

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Water Sampling Log

ARCADIS for natural and built assets

Project No. 30115866 | Well ID MW-13 | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 60°F Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS ___

Total Depth (ft-bmp) 11.71' | Static Water Level (ft-bmp) 7.87' | Water Column in Well (ft.) 3.84 | Gallons in Well 0.61 x3=1.83

MP Elevation — | Pump Intake (ft-bmp) ~10' | Volumes Purged 3.28 | Gallons Purged 2.0

Sample Method low flow/grab | Pump On/Off 1340/1415 | Sample Time Label 1410, Start 1410, End 1415 | Purge Method Peri, Centrifugal ___, Submersible ___, Disp. Bailer ___, Other ___

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1345	5	350	9.78	0.5	6.94	1.34	12.1	4.93	15.65	-73	Yellowish	none
1350	10	200	10.4	0.8	6.94	1.37	18.4	3.50	15.58	-90		
1355	15	200	10.25	1.1	6.94	1.38	17.3	2.06	15.21	-106		
1400	20	200	10.32	1.4	6.91	1.44	16.2	1.46	15.20	-111		
1405	25	200	10.50	1.7	6.91	1.40	15.1	1.32	15.20	-115		
1410	30	200	10.58	2.0	6.91	1.52	13.0	1.20	15.18	-126		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Recharge too slow to maintain WL

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-14 | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 60°F, sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS

Total Depth (ft-bmp) 11.85 | Static Water Level (ft-bmp) 6.78 | Water Column in Well (ft.) 5.07 | Gallons in Well 0.81 x3 = 2.43

MP Elevation — | Pump Intake (ft-bmp) 2'6" | Volumes Purged 3.33 | Gallons Purged 2.7

Sample Method low flow/grab | Pump On/Off 1430/1520 | Sample Time Label 1515, Start 1515, End 1520 | Purge Method Peri, Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) ((mL/min))	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1435	5	200	7.14	0.3	6.97	1.13	5.0	0.61	15.58	-151	Clear	none
1440	10	200	7.14	0.6	6.95	1.13	4.6	0.41	15.89	-155		
1445	15	200	7.14	0.9	6.94	1.12	4.3	0.34	15.97	-159		
1450	20	200	7.14	1.2	6.95	1.12	7.6	0.29	15.91	-159		
1455	25	200	7.14	1.5	6.94	1.12	5.3	0.25	15.81	-159		
1500	30	200	7.14	1.8	6.94	1.12	5.0	0.22	15.73	-160		
1505	35	200	7.14	2.1	6.93	1.13	4.3	0.22	15.73	-161		
1510	40	200	7.14	2.4	6.93	1.13	4.4	0.22	15.78	-162		
1515	45	200	7.14	2.7	6.93	1.13	4.5	0.21	15.75	-162		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Recharge rate too slow to maintain WL

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Water Sampling Log

ARCADIS

Page 1 of 1

Project No. 30115866 | Well ID ESI-1 | Date 10/11/22

Project Name/Location Trane - DC Rollforms | Weather 50°F, Sunny

Measuring Pt. Description: TIC | Screen Setting (ft-bmp): — | Casing Diameter (in.): 2" | Well Material: PVC X, SS

Total Depth (ft-bmp): 16.71 | Static Water Level (ft-bmp): 7.41 | Water Column in Well (ft.): 9.30 | Gallons in Well: 1.49 x3=4.46

MP Elevation: — | Pump Intake (ft-bmp): ~13' | Volumes Purged: 3.09 | Gallons Purged: 4.60

Sample Method: low flow/grab | Pump On/Off: ~~1630~~ 1635/1745 | Sample Time: Label 1740, Start 1740, End 1745 | Purge Method: Peri, Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No.: ESI-DUP | Sampled By: MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1640	5	300	7.53	0.35	6.97	0.669	9.4	10.65	16.07	109	clear	
1645	10	300	7.50	0.70	6.93	0.665	5.0	10.18	16.12	111		
1650	15	300	7.50	1.05	6.89	0.671	3.6	10.01	15.95	113		
1655	20	300	7.52	1.40	6.88	0.672	0.1	9.81	15.96	114		
1700	25	300	7.52	1.75	6.86	0.674	0.0	9.65	15.80	115		
1705	30	300	7.52	2.10	6.85	0.675	0.0	9.42	15.75	116		
1710	35	300	7.52	2.45	6.85	0.675	0.0	9.28	15.71	117		
1715	40	300	7.52	2.80	6.84	0.674	0.0	9.04	15.74	118		
1720	45	300	7.52	3.15	6.84	0.675	0.0	8.91	15.68	118		
1725	50	300	7.52	3.50	6.84	0.675	0.0	8.69	15.69	119		
1730	55	300	7.52	3.85	6.83	0.676	0.0	8.44	15.67	120		
1735	60	300	7.52	4.20	6.82	0.675	0.0	8.18	15.72	121		
1740	65	300	7.52	4.55	6.82	0.676	0.0	8.12	15.65	121		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	6	HCl

Well Information

Well Location: Between VEP-8 + River | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Collected duplicate

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID ESI-2 | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 50°F, cloudy

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS —

Total Depth (ft-bmp) 15.00' | Static Water Level (ft-bmp) 8.54' | Water Column in Well (ft.) 6.46 | Gallons in Well 1.03 x3 = 3.09

MP Elevation — | Pump Intake (ft-bmp) ~13' | Volumes Purged 3.40 | Gallons Purged 3.5

Sample Method low flow/grab | Pump On/Off 0945/1025 | Sample Time Label 1020, Start 1020, End 1025 | Purge Method Peri; Centrifugal —, Submersible —, Disp. Bailer —, Other —

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
0950	5	350	8.60	0.5	7.01	0.432	43.5	0.41	15.28	-12	clear	
0955	10	350	8.60	1	7.11	0.898	27.7	0.43	15.48	-10		
1000	15	350	8.60	1.5	7.10	0.903	9.3	0.32	15.55	-17		
1005	20	350	8.60	2.0	7.09	0.784	1.0	0.29	15.62	-23		
1010	25	350	8.60	2.5	7.08	0.790	0.0	0.26	15.65	-29		
1015	30	350	8.60	3.0	7.08	0.788	0.0	0.25	15.69	-33		
1020	35	350	8.60	3.5	7.08	0.786	0.0	0.25	15.72	-32		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Between VEP-6 + River | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design for natural and built assets

Page 1 of 1

Project No.	30115866	Well ID	ESI-4R	Date	10/13/22
Project Name/Location	Trane - DC Rollforms			Weather	50°F light rain
Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	2"
				Well Material: PVC	X
				SS	
Total Depth (ft-bmp)	12.20'	Static Water Level (ft-bmp)	11.30'	Water Column in Well (ft.)	0.90'
				Gallons in Well	0.14 x3= 0.42
MP Elevation	—	Pump Intake (ft-bmp)	~12.1'	Volumes Purged	3.57
				Gallons Purged	0.5
Sample Method	low flow/grab	Pump On/Off	1100/1200	Sample Time Label	1115
				Start	1115
				End	1200
				Purge Method	Peri.
				Centrifugal	
				Submersible	
Replicate/Code No.	ESI-4R MS/MSD	Sampled By	MJ	Disp. Bailer	
				Other	

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
10/10/22			11.84									
10/11/22			11.90									
10/12/22			11.43									
10/13/22												
1105	5	150	11.59	0.1	6.91	0.832	26.2	2.14	14.06	-48	Clear	none
1110	10	150	11.81	0.3	6.94	0.805	9.9	4.86	14.35	-41		
1115	15	150	11.95	0.5	6.96	0.798	8.6	2.66	14.04	-26		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40mL VOA	3	HCl
USEPA 537/Modified PFAS	250 mL HDPE	6	None

Well Information

Well Location:	Adjacent to MW-45 & VEP-14	Well Locked at Arrival:	Y
Condition of Well:	Good	Well Locked at Departure:	Y
Well Completion:	Flush Mount / (Stick Up)	Key Number To Well:	NA

NOTES: Well went dry during sampling. FD-1 collected @ 1130, EB-1 collected @ 1140 while waiting for recharge. MS/MSD only collected for PFAS, not VOC due to low volume. System was turned off 10/12/22 evening to maximize recharge for sampling 10/13/22.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID ESI-6 | Date 10/11/22

Project Name/Location Trane - DC Rollforms | Weather 50°F, Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS

Total Depth (ft-bmp) 19.60' | Static Water Level (ft-bmp) 7.87 | Water Column in Well (ft.) 11.73 | Gallons in Well 1.88 x 3 = 5.63

MP Elevation — | Pump Intake (ft-bmp) ~18' | Volumes Purged 3.24 | Gallons Purged 6.10

Sample Method low flow/grab | Pump On/Off 10:20/1135 | Sample Time Label 1130, Start 1130, End 1135 | Purge Method Peri, Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
10:20	0	300	7.87	0	6.84	1.27	0.0	12.01	14.42	-96	clear	none
10:25	5	300	7.90	[illegible]	6.85	1.32	0.0	12.10	14.59	-111		
10:30	10	300	7.91	0.66	6.85	1.34	0.0	11.94	14.66	-120		
10:35	15	300	7.90	0.99	6.85	1.35	0.0	11.76	14.68	-122		
10:40	20	400	7.90	1.43	6.84	1.36	0.0	11.56	14.68	-124		
10:45	25	400	7.90	1.87	6.84	1.36	0.0	11.26	14.71	-125		
10:50	30	400	7.90	2.31	6.84	1.37	0.0	10.90	14.75	-125		
10:55	35	400	7.90	2.75	6.88	1.38	0.0	10.48	14.77	-126		
11:00	40	400	7.90	3.19	6.87	1.38	0.7	10.05	1481	-127		
11:05	45	400	7.90	3.63	6.86	1.38	2.6	9.45	14.82	-127		
11:10	50	400	7.90	4.07	6.87	1.38	1.8	9.52	14.92	-128		
11:15	55	400	7.90	4.51	6.86	1.38	3.0	9.34	14.92	-127		
11:20	60	400	7.90	4.95	6.85	1.39	1.5	9.01	14.93	-127		
11:25	65	400	7.90	5.39	6.92	1.39	1.8	8.84	14.93	-127		
11:30	70	400	7.91	5.83	6.86	1.38	1.9	8.54	14.95	-127		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: Yes

Condition of Well: Good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: N/A

NOTES: Slowed flow to 150 mL/min to sample
Potential bubble in flow cell

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID ESI-7 | Date 10/13/22

Project Name/Location Trane - DC Rollforms | Weather 50°F, cloudy

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS

Total Depth (ft-bmp) 17.33 | Static Water Level (ft-bmp) 8.74 | Water Column in Well (ft.) 8.59 | Gallons in Well 1.37 x3 = 4.11

MP Elevation — | Pump Intake (ft-bmp) 216' | Volumes Purged 3.2 | Gallons Purged 4.4

Sample Method low flow/grab | Pump On/Off 1250/1350 | Sample Time Label 1345, Start 1345, End 1350 | Purge Method Peri, Centrifugal, Submersible, Disp. Bailer, Other

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) mS/cm	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1255	5	300	8.79	0.4	6.98	1.26	28.9	1.11	14.24	18	clear	none
1300	10	300	8.79	0.8	6.94	1.20	28.0	1.06	14.45	11		
1305	15	300	8.79	1.2	6.96	1.02	4.4	2.79	14.60	15		
1310	20	300	8.79	1.6	6.96	1.01	0.0	2.70	14.65	19		
1315	25	300	8.79	2.0	6.96	1.01	0.0	2.53	14.68	21		
1320	30	300	8.79	2.4	6.96	1.01	0.0	2.47	14.76	23		
1325	35	300	8.79	2.8	6.96	1.01	0.0	2.42	14.72	24		
1330	40	300	8.79	3.2	6.95	1.01	0.0	2.31	14.76	25		
1335	45	300	8.79	3.6	6.95	1.01	0.0	2.38	14.80	26		
1340	50	300	8.79	4.0	6.95	1.01	0.0	2.32	14.85	27		
1345	55	300	8.79	4.4	6.95	1.01	0.0	2.29	14.80	27		

Constituents Sampled	Container	Number	Preservative
8260 C VOC	40 mL VOA	3	HCl

Well Information

Well Location: Near river bank | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID OW-5 | Date 10/13/22

Project Name/Location Trane - DC Rollforms | Weather 50°F, rainy

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS ___

Total Depth (ft-bmp) 13.18' | Static Water Level (ft-bmp) 9.23 | Water Column in Well (ft.) 3.95' | Gallons in Well 0.63 x3 = 1.89

MP Elevation — | Pump Intake (ft-bmp) ~11' | Volumes Purged 3.4 | Gallons Purged 2.15

Sample Method low flow/grab | Pump On/Off 0920/0930, 0940/1020 | Sample Time Label 1015, Start 1015, End 1020 | Purge Method Peri, Centrifugal ___, Submersible ___, Disp. Bailer ___, Other ___

Replicate/Code No. OW-5 MS/MSD | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
0925	5	250	9.51	0.35	7.06	2.00	81.4	0.76	14.56	~74	Clear	none
0930	10	200	9.61	0.65	6.97	2.02	71.5	0.65	14.53	-78		
Stopped to clean flow cell, turb seems too high												
Pump on 0940											Slightly	
0945	15	200	9.65	0.95	7.02	2.04	58.2	0.40	14.34	-83	cloudy	none
0950	20	150	9.72	1.15	6.97	2.02	56.9	0.35	14.37	-80		
0955	25	150	9.74	1.35	6.96	2.01	65.8	0.34	14.33	-82		
1000	30	150	9.75	1.55	6.94	1.99	64.1	0.28	14.29	-83		
1005	35	150	9.78	1.75	6.94	1.98	62.9	0.24	14.24	-85		
1010	40	150	9.79	1.95	6.94	1.97	57.8	0.22	14.17	-86		
1015	45	150	9.79	2.15	6.94	1.96	53.0	0.21	14.11	-86		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40 mL VOA	9	HCl

Well Information

Well Location: Adjacent to TW-15 | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES: Recharge rate too slow to maintain WL

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consult for natural and built assets

Project No. 30115866 | Well ID OW-G | Date 10/12/22

Project Name/Location Trane - DC Rollforms | Weather 60°F Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) – | Casing Diameter (in.) 2" | Well Material: PVC X, SS ___

Total Depth (ft-bmp) 13.06' | Static Water Level (ft-bmp) 8.90' | Water Column in Well (ft.) 4.16' | Gallons in Well 0.66 x3= 1.98

MP Elevation – | Pump Intake (ft-bmp) ~12' | Volumes Purged 3.18 | Gallons Purged 2.1

Sample Method low flow/grab | Pump On/Off 1535/1615 | Sample Time Label 1610, Start 1610, End 1615 | Purge Method Peri, Centrifugal ___, Submersible ___, Disp. Bailer ___, Other ___

Replicate/Code No. NA | Sampled By MJ

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH 6.98	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
1540	5	200	9.09	0.3	~~6.98~~	1.08	2.7	1.75	15.85	-88	Clear	None
1545	10	200	9.18	0.6	6.94	1.08	0.0	1.37	15.55	-71		
1550	15	200	9.23	0.9	6.90	1.09	0.0	0.96	15.56	-61		
1555	20	200	9.26	1.2	6.89	1.09	0.0	0.74	15.57	-57		
1600	25	200	9.28	1.5	6.87	1.09	0.0	0.55	15.58	-52		
1605	30	200	9.31	1.8	6.87	1.09	0.0	0.43	15.57	-49		
1610	35	200	9.35	2.1	6.86	1.09	0.0	0.30	15.58	-48		

Constituents Sampled	Container	Number	Preservative
8260C VOC	40mL VOA	3	HCl

Well Information

Well Location: Adjacent to IW-14 | Well Locked at Arrival: Y

Condition of Well: Good | Well Locked at Departure: Y

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: NA

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-8S | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather

Measuring Pt. Description | Screen Setting (ft-bmp) | Casing Diameter (in.) | Well Material: PVC / SS

Total Depth (ft-bmp) | Static Water Level (ft-bmp) | Water Column in Well (ft) | Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | Volumes Purged | Gallons Purged

Sample Method | Pump On/Off | Sample Time Label / Start / End | Purge Method: Centrifugal / Submersible / Disp. Bailer / Other

Replicate/Code No. | Sampled By

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (umhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
1155	80	200	10.96	4.0	6.83	0.669	3.89	0.77	12.2	3.5	clear	none
1200	85	200	11.08	4.25	6.81	0.666	6.96	0.85	12.3	0.1	↓	↓
1201	DRY											

Constituents Sampled	Container	Number	Preservative

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: Flush Mount / Stick Up | Key Number To Well:

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

See Page 1

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-8S | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather 70°F, Sun

Measuring Pt. Description: TIC | Screen Setting (ft-bmp): — | Casing Diameter (in.): 4" | Well Material: PVC X, SS —

Total Depth (ft-bmp): 12.37' | Static Water Level (ft-bmp): 8.85 | Water Column in Well (ft.): 3.52 | Gallons in Well: 2.29

MP Elevation: — | Pump Intake (ft-bmp): ~11 | Volumes Purged: 1.85 | Gallons Purged: 4.25

Sample Method: Low-Flow | Pump On/Off: 1035/1201 | Sample Time: Label 1230, Start 1231, End 1233 | Purge Method: Centrifugal —, Submersible —, Disp. Bailer —, Other Peri Pump

Replicate/Code No.: — | Sampled By: BKW

Time	Minutes Elapsed	Rate (ppm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (umhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
*1035	Pump	On	8.85									
1040	5	200	9.05	0.25	6.86	0.601	6.14	3.54	12.6	75.0	clear	none
1045	10	200	9.81	0.5	6.85	0.600	3.59	1.32	12.1	73.1		
1050	15	200	9.31	0.75	6.85	0.615	2.75	0.85	12.4	53.4		
1055	20	200	9.43	1.0	6.85	0.627	2.68	0.77	12.5	25.4		
1100	25	200	9.56	1.25	6.85	0.632	2.62	0.75	12.4	15.5		
1105	30	200	9.67	1.5	6.86	0.629	3.19	0.75	12.2	12.0		
1110	35	200	9.80	1.75	6.85	0.634	2.79	0.73	12.1	9.9		
1115	40	200	9.93	2.0	6.86	0.640	3.02	0.73	12.1	3.8		
1120	45	200	10.08	2.25	6.86	0.647	2.97	0.74	12.2	-2.3		
1125	50	200	10.20	2.5	6.86	0.651	2.80	0.75	12.2	-4.4		
1130	55	200	10.35	2.75	6.85	0.657	2.45	0.74	12.2	-3.8		
1135	60	200	10.43	3.0	6.85	0.659	2.96	0.73	12.1	-1.6		
1140	65	200	10.55	~~3.5~~ 3.25	6.85	0.660	2.81	0.76	12.2	1.2		
1145	70	200	10.69	~~3.75~~ 3.5	6.84	0.663	2.63	0.75	12.2	3.8		
1150	75	200	10.82	3.75	6.84	0.665	3.92	0.76	12.2	5.8	↓	↓

Constituents Sampled	Container	Number	Preservative
8260 C VOCs	40mL VOA	3	HCl

Well Information

Well Location: grass | Well Locked at Arrival: Yes

Condition of Well: good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level. DRY at 1201, sampled at 1230 after allowing to recharge.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-9 | Date 5/31/23

Project Name/Location Trane - DC Rollforms | Weather 68°F sunny

Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	4
Total Depth (ft-bmp)	12.45	Static Water Level (ft-bmp)	7.60	Water Column in Well (ft.)	4.85
MP Elevation	—	Pump Intake (ft-bmp)	≈12.00	Volumes Purged	3
Sample Method	low flow	Pump On/Off	1325/1530	Sample Time Label / Start / End	1525 / 1525 / 1530
Replicate/Code No.	—	Sampled By	AJS		

Well Material: PVC X, SS —

Gallons in Well: 3.2

Gallons Purged: 9.6

Purge Method: peri pump; Centrifugal —; Submersible —; Disp. Bailer —; Other —

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(µmhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance Color	Appearance Odor
1330	5	300	7.96	0.4	6.87	0.320	46.7	0.55	14.5	-21.2	clear	none
1335	10	300	8.11	0.7	6.86	0.319	28.6	0.42	14.5	-10.4		
1340	15	300	8.25	1.1	6.86	0.321	18.2	0.33	14.7	-2.7		
1345	20	300	8.35	1.5	6.87	0.319	11.2	0.32	14.6	4.8		
1350	25	300	8.46	2.0	6.86	0.325	8.01	0.34	14.9	2.4		
1355	30	300	8.58	2.4	6.85	0.328	5.27	0.34	14.9	-6.4		
1400	35	300	8.72	2.8	6.85	0.329	3.37	0.34	14.8	-11.5		
1405	40	300	8.87	3.3	6.85	0.329	3.76	0.37	14.7	-10.4		
1410	45	300	8.92	3.7	6.85	0.328	2.77	0.42	14.6	-8.2		
1415	50	300	9.06	4.2	6.83	0.329	3.19	0.45	14.8	-5.7		
1420	55	300	9.21	4.6	6.82	0.330	2.17	0.45	14.9	-0.3		
1425	60	300	9.37	5.0	6.82	0.329	2.53	0.47	15.0	3.3		
1430	65	300	9.54	5.4	6.81	0.326	4.15	0.48	14.6	9.1		
1435	70	300	9.69	5.9	6.80	0.326	1.84	0.46	14.7	14.9		
1440	75	300	9.84	6.4	6.78	0.328	2.62	0.49	14.8	15.9		
1445	80	300	10.06	6.8	6.80	0.326	3.28	0.47	14.8	19.7		

Constituents Sampled	Container	Number	Preservative
VOCs	40 mL VOAs	3	HCl

Well Information

Well Location: behind Allmetal building

Condition of Well: good

Well Completion: Flush Mount / (Stick Up)

Well Locked at Arrival: Yes

Well Locked at Departure: yes

Key Number To Well: master

NOTES: Recovery rate too slow to maintain water level.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID MW-9 | Date 5/31/23

Project Name/Location Trane - DC Rollforms | Weather

Measuring Pt. Description | Screen Setting (ft-bmp) | Casing Diameter (in.) | Well Material: PVC ___ SS ___

Total Depth (ft-bmp) | Static Water Level (ft-bmp) | Water Column in Well (ft) see pg 1 | Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | Volumes Purged | Gallons Purged

Sample Method | Pump On/Off | Sample Time Label ___ Start ___ End ___ | Purge Method Centrifugal ___ Submersible ___ Disp. Bailer ___ Other ___

Replicate/Code No. | Sampled By

Time	Minutes Elapsed	Rate ~~(ppm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(umhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance	
											Color	Odor
1450	85	300	10.28	7.2	6.79	0.323	3.20	0.44	14.6	21.2	clear	none
1455	90	300	10.55	7.6	6.82	0.322	2.14	0.37	14.5	22.3		
1500	95	300	10.83	8.0	6.83	0.321	2.71	0.39	14.4	25.3		
1505	100	300	11.08	8.4	6.88	0.320	2.61	0.44	14.5	29.1		
1510	105	300	11.32	8.8	6.92	0.320	2.91	0.31	14.7	32.3		
1515	110	300	11.57	9.2	6.96	0.318	3.74	0.36	14.6	35.8		
1520	115	300	11.82	9.6	6.94	0.318	3.26	0.39	14.7	37.9		
1525	SAMPLE											

Constituents Sampled	Container	Number	Preservative

Well Information

Well Location: see pg 1 | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: Flush Mount / Stick Up | Key Number To Well:

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID MW-10R | Date 6-1-23

Project Name/Location Trane - DC Rollforms | Weather 60°F, Sun

Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	4"
Total Depth (ft-bmp)	13.38'	Static Water Level (ft-bmp)	12.24'	Water Column in Well (ft.)	1.14'
MP Elevation	—	Pump Intake (ft-bmp)	~13'	Volumes Purged	~~0.75~~ 1
Sample Method	Low-Flow	Pump On/Off	0735/0750	Sample Time	Label 0805, Start 0805, End 0808
Replicate/Code No.	—	Sampled By	BKW		

Well Material: PVC X, SS —

Gallons in Well 0.74

Gallons Purged 0.75

Purge Method: Centrifugal, Submersible, Disp. Bailer, Other Peri Pump

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (umhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
0735	Pump on		12.24'	—								
0740	5	200	12.75'	0.25	7.38	0.553	8.99	4.06	10.7	45.3	clear	none
0745	10	200	12.99'	0.5	7.32	0.552	9.79	3.88	10.6	67.2	↓	↓
0750	DRY	—	—	0.75	—	—	—	—	—	—	↓	↓

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40mL VOA	3	HCL

Well Information

Well Location: grass along creek

Condition of Well: good

Well Completion: Flush Mount / (Stick Up)

Well Locked at Arrival: Yes

Well Locked at Departure: Yes

Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level. Well dry at 0750, sampled at 0805 after allowing to recharge

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy

Project No. 30115866 | Well ID MW-12 | Date 5-30-23

Project Name/Location Trane - DC Rollforms | Weather 78°F, Sun

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 4 | Well Material: PVC X, SS —

Total Depth (ft-bmp) 13.38' | Static Water Level (ft-bmp) 8.01' | Water Column in Well (ft.) 5.37' | Gallons in Well 3.49

MP Elevation — | Pump Intake (ft-bmp) 11' | Volumes Purged 1.72 | Gallons Purged 6.0

Sample Method Low-Flow | Pump On/Off 1410/1537 | Sample Time Label 1600, Start 1600, End 1603 | Purge Method: Centrifugal —, Submersible —, Disp. Bailer —, Other Peri Pump

Replicate/Code No. — | Sampled By BKW 1600/1603

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
1410	Pump	on	8.01									
1415	5	300	8.18		4.68	0.751	16.9	0.99	14.1	-12.1	slightly orange	none
1420	10	150	8.30		4.74	0.754	19.4	0.92	14.7	-17.3	↓	↓
1425	15	150	8.45	0.5	4.90	0.755	23.0	0.86	14.5	-25.1		
1430	20	150	8.52		4.97	0.762	18.4	0.83	14.4	-20.5		
1435	25	200	8.61	1.0	5.00	0.765	14.0	0.84	13.7	-11.7		
1440	30	250	8.81		5.00	0.764	10.29	0.84	13.4	1.5		
1445	35	300	9.05	1.5	4.96	(0.761)	7.43	0.82	13.3	14.7	↓	
1450	40	300	9.18		4.91	0.756	7.81	0.80	13.0	16.6	clear	
1455	45	300	9.40	~~2.35~~ 2.0	4.69	0.748	8.74	0.74	12.7	6.4	↓	
1500	50	300	9.55	2.5	4.84	0.749	8.00	0.72	12.8	8.8		
1505	55	360	9.80	3.0	4.22	0.756	13.5	0.72	12.2	-5.2		
1510	60	350	9.99	3.5	5.63	0.763	13.3	5.38	12.2	-13.3	↓	↓
~~1515~~	DRY - lowered tubing to 12'											
1515	65	350	10.15	3.75	4.49	0.802	25.2	0.85	11.8	-27.0	clear	none
1520	70	350	10.38	4.25	4.27	0.798	18.6	0.77	11.9	-32.0	↓	↓

Constituents Sampled	Container	Number	Preservative
8260C VOCs	40mL VOA	3	HCL

Well Information

Well Location: grass | Well Locked at Arrival: Yes

Condition of Well: good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: Recharge too slow to maintain water level. Well dry at 1540, sampled at 1600 after allowing to recharge.

pH not calibrated.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID MW-12 | Date

Project Name/Location Trane - DC Rollforms | Weather

Measuring Pt. Description | Screen Setting (ft-bmp) | Casing Diameter (in.) | Well Material: PVC / SS

Total Depth (ft-bmp) | Static Water Level (ft-bmp) | Water Column in Well (ft.) | Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | Volumes Purged | Gallons Purged

Sample Method | Pump On/Off | Sample Time: Label / Start / End | Purge Method: Centrifugal / Submersible / Disp. Bailer / Other

Replicate/Code No. | Sampled By | see Page 1

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
1525	75	350	10.60	5.0	4.55	0.810	23.7	1.44	11.9	-53.2	clear	none
1530	80	350	10.85	5.5	4.37	0.818	38.6	0.96	11.5	-59.9	↓	↓
1535	85	350	11.13	6.0	4.16	0.787	17.7	0.72	11.5	-62.5	↓	↓
1540	DRY											

Constituents Sampled	Container	Number	Preservative

Well Information

Well Location: | Well Locked at Arrival:

Condition of Well: | Well Locked at Departure:

Well Completion: Flush Mount / Stick Up | Key Number To Well:

NOTES:

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

see Page 1

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-13 | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather ~65°F, Sun

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS —

Total Depth (ft-bmp) 11.73' | Static Water Level (ft-bmp) 8.25' | Water Column in Well (ft.) 3.48' | Gallons in Well 0.57

MP Elevation — | Pump Intake (ft-bmp) ~10' | Volumes Purged ~~0.75~~ 1.32 | Gallons Purged 0.75

Sample Method Low-Flow | Pump On/Off 0955/1012 | Sample Time Label 1018, Start 1016, End 1018 | Purge Method: Centrifugal —, Submersible —, Disp. Bailer —, Other Peri Pump

Replicate/Code No. — | Sampled By BKW

Time	Minutes Elapsed	Rate (gpm) mL/min	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) mS/cm	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance Color	Appearance Odor
0955	Pump On		8.25	—							orange	none
1000	5	200	10.20	0.25	6.74	0.887	82.5	1.03	11.6	-78.8	slightly orange	↓
1005	10	200	10.58	0.5	6.69	1.006	21.1	1.13	11.4	-91.1	↓	↓
1010	15	200	10.84	0.75	6.67	1.094	21.7	1.33	11.3	-94.6	↓	↓
1015	20											
~~1020~~	~~25~~											
1025	30											
1011	DRY											

Constituents Sampled	Container	Number	Preservative
8260C VOCs	40mL VOA	3	HCL

Well Information

Well Location: grass | Well Locked at Arrival: Yes

Condition of Well: good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: Recharge too slow to maintain water level. Dry at 1011, sampled at 1018 after allowing to recharge.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID MW-14 | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather ~62°F, Sun

Measuring Pt. Description: TIC | Screen Setting (ft-bmp): — | Casing Diameter (in.): 2" | Well Material: PVC X, SS —

Total Depth (ft-bmp): 11.87' | Static Water Level (ft-bmp): 7.60' | Water Column in Well (ft.): 4.27' | Gallons in Well: 0.696

MP Elevation: — | Pump Intake (ft-bmp): ~10' | Volumes Purged: 2.6 | Gallons Purged: 1.8

Sample Method: Low | Pump On/Off: 0815/0853 | Sample Time: Label 0900, Start 0900, End 0905 | Purge Method: Centrifugal ___, Submersible ___, Disp. Bailer ___, Other Peri Pump

Replicate/Code No.: — | Sampled By: BKW

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
0815	Pump On		7.60									
0820	5	200	8.25	0.25	4.15	1.056	8.26	1.03	12.2	-119.3	clear	none
0825	10	200	8.81	0.5	4.03	1.121	3.01	0.81	11.9	-125.6	↓	↓
0830	15	200	9.05	0.75	3.90	1.122	2.46	0.80	11.8	-124.3		
0835	20	200	9.48	1.0	4.02	1.086	6.10	1.31	11.3	-122.7		
0840	25	200	9.62	1.25	3.99	1.079	4.04	0.84	11.1	-123.8		
0845	30	200	9.90	1.5	3.97	1.088	1.54	0.70	11.3	-126.1		
0850	35	200	10.17	1.75	4.02	1.079	1.35	0.68	11.1	-127.8		
0853	DRY											

Constituents Sampled	Container	Number	Preservative
8260C VOCs	40mL VOA	3	HCl

Well Information

Well Location: grass | Well Locked at Arrival: Yes

Condition of Well: good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level, Well dry at 0853, sampled at 0900 after allowing to recharge.

pH not calibrated.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID ESI-1 | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather 85°F, Sun

Measuring Pt Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in)	2"	Well Material: PVC	X
						SS	—
Total Depth (ft-bmp)	16.68'	Static Water Level (ft-bmp)	12.25'	Water Column in Well (ft.)	4.43'	Gallons in Well	0.72
MP Elevation	—	Pump Intake (ft-bmp)	~15'	Volumes Purged	~1	Gallons Purged	0.75
Sample Method	Low-Flow	Pump On/Off	1440/1456	Sample Time	Label 1510 Start 1510 End 1516	Purge Method	
						Centrifugal	
						Submersible	
						Disp. Bailer	
Replicate/Code No.	ESI-DUP	Sampled By	BKW			Other	Peri Pump

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
1440	Pump	On	12.25									
1445	5	200	13.84	0.25	6.63	0.642	5.85	4.40	12.5	107.7	Clear	none
1450	10	200	14.93	0.5	6.64	0.642	7.44	4.53	12.5	114.8	↓	↓
1455	15	200	15.62	0.75	6.65	0.643	22.0	4.57	13.2	118.0	↓	↓
1456	DRY											

Constituents Sampled	Container	Number	Preservative
8260C VOCs	40mL VOA	6	HCL

Well Information

Well Location: grass along creek | Well Locked at Arrival: Yes

Condition of Well: good | Well Locked at Departure: Yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level. Dry at 1456, sampled at 1510 after allowing to recharge.

Duplicate collected here.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID ESI-2 | Date 5-31-23

Project Name/Location Trane - DC Rollforms | Weather 85°F, sun

Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in)	2"
Total Depth (ft-bmp)	14.98'	Static Water Level (ft-bmp)	11.42'	Water Column in Well (ft)	3.56
MP Elevation	—	Pump Intake (ft-bmp)	~~13~~ ~14'	Volumes Purged	3.44
Sample Method	Low-Flow	Pump On/Off	1325/1408	Sample Time	Label 1410, Start 1406, End 1408
Replicate/Code No.	—	Sampled By	BKW		

Well Material: PVC X, SS —

Gallons in Well 0.58

Gallons Purged 2.0

Purge Method: Centrifugal —, Submersible —, Disp. Bailer —, Other Peri Pump

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (umhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance: Color	Appearance: Odor
1325	Pump	On	11.42	—	—	—	—	—	—	—	—	—
1330	5	200	11.85	0.25	6.79	0.812	11.1	0.79	12.8	161.4	clear	none
1335	10	200	11.80	0.5	6.75	0.776	4.75	0.89	13.3	-39.1		
1340	15	200	11.80	0.75	6.72	0.762	2.83	0.78	12.8	-26.4		
1345	20	200	11.80	1.0	6.71	0.759	1.98	0.72	13.0	-22.7		
1350	25	200	11.80	1.25	6.70	0.757	1.40	0.68	12.8	-20.1		
1355	30	200	11.82	1.5	6.70	0.760	1.98	0.68	12.9	-19.6		
1400	35	200	11.82	1.75	6.70	0.761	1.42	0.65	12.6	-19.3		
1405	40	200	11.85	2.0	6.70	0.762	1.11	0.65	12.2	-18.7		
1410	SAMPLED										↓	↓

Constituents Sampled	Container	Number	Preservative
8260C VOCs	40mL VOA	3	HCL

Well Information

Well Location: grass along creek

Condition of Well: good

Well Completion: Flush Mount / Stick Up

Well Locked at Arrival: Yes

Well Locked at Departure: Yes

Key Number To Well: master

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Page 1 of 1

Project No.	30115866	Well ID	ESI-4R	Date	6-1-23
Project Name/Location	Trane - DC Rollforms			Weather	75°F, sun
Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	2"
Well Material: PVC	X	SS	—		
Total Depth (ft-bmp)	12.15	Static Water Level (ft-bmp)	DRY	Water Column in Well (ft.)	—
Gallons in Well	0				
MP Elevation	—	Pump Intake (ft-bmp)	—	Volumes Purged	—
Gallons Purged	—				
Sample Method	—	Pump On/Off	—	Sample Time	Label —
Start —					
End —					
Purge Method	—				
Centnfugal					
Submersible					
Disp. Bailer					
Other					
Replicate/Code No.	—	Sampled By	—		

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. (µmhos) (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) (°F)	Redox (mV)	Appearance	
											Color	Odor
DRY - NOT SAMPLED												

Constituents Sampled	Container	Number	Preservative

Well Information

Well Location:	Grass near MW-4S	Well Locked at Arrival:	Yes
Condition of Well:	good	Well Locked at Departure:	Yes
Well Completion:	Flush Mount / (Stick Up)	Key Number To Well:	master

NOTES: Well dry on 5/30/23. On 5/31/23 took VEPs 11, 12, 13, 14 offline to try to draw water into ESI-4R. On 6/1/23, still Dry. No sample collected.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS Design & Consultancy for natural and built assets

Project No. 30115866 | Well ID ESI-6 | Date 5/30/23

Project Name/Location Trane - DC Rollforms | Weather 89°F Sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2" | Well Material: PVC X, SS —

Total Depth (ft-bmp) 19.61 | Static Water Level (ft-bmp) 8.85 | Water Column in Well (ft.) 10.76 | Gallons in Well 1.8

MP Elevation — | Pump Intake (ft-bmp) ~17.5 | Volumes Purged 3 | Gallons Purged 5.4

Sample Method low flow | Pump On/Off 1400 / 1555 | Sample Time Label 1550, Start 1550, End 1555 | Purge Method peri pump; Centrifugal —, Submersible —, Disp. Bailer —, Other —

Replicate/Code No. — | Sampled By AJS

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(umhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance	
											Color	Odor
1405	5	~~(200~~ 200	8.85	0.1	7.39	0.995	9.15	1.31	15.8	-148.1	clear	none
1410	10	200	8.83	0.3	7.43	0.902	2.88	0.48	12.6	-161.6		
1415	15	200	8.83	0.6	7.44	0.897	1.25	0.41	12.3	-164.4		
1420	20	200	8.83	0.9	7.45	0.898	1.77	0.35	12.1	-168.3		
1425	25	200	8.84	1.2	7.45	0.903	1.10	0.33	12.3	-170.5		
1430	30	200	8.84	1.5	7.45	0.899	1.07	0.31	12.0	-172.0		
1435	35	200	8.84	1.8	7.45	0.911	1.58	0.30	12.2	-173.6		
1440	40	200	8.84	2.0	7.45	0.901	1.77	0.29	11.9	-174.2		
1445	45	200	8.84	2.3	7.45	0.902	2.28	0.29	12.0	-174.3		
1450	50	200	8.84	2.6	7.45	0.904	2.48	0.28	11.9	-175.0		
1455	55	200	8.84	2.8	7.46	0.904	1.49	0.28	12.0	-175.3		
1500	60	200	8.84	3.1	7.46	0.899	2.30	0.28	11.9	-175.4		
1505	65	200	8.84	3.3	7.46	0.898	1.77	0.27	11.7	-175.3		
1510	70	200	8.84	3.5	7.46	0.904	1.49	0.26	11.9	-175.6		
1515	75	200	8.84	3.8	7.46	0.900	1.37	0.26	11.7	-175.4		
1520	80	200	8.84	4.1	7.46	0.895	1.43	0.26	11.7	-175.6	↓	↓

Constituents Sampled	Container	Number	Preservative
VOCs 8260C	40 mL VOAs	3	HCl

Well Information

Well Location: Grass | Well Locked at Arrival: yes

Condition of Well: Good | Well Locked at Departure: yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES:

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 Well ID ESI-6 Date 5/30/23

Project Name/Location Trane - DC Rollforms Weather

Measuring Pt. Description | Screen Setting (ft-bmp) | Casing Diameter (in.) | Well Material: PVC / SS

Total Depth (ft-bmp) | Static Water Level (ft-bmp) | Water Column in Well (ft.) | Gallons in Well

MP Elevation | Pump Intake (ft-bmp) | ~~Volume~~ Purged | Gallons Purged

Sample Method | Pump On/Off | Sample Time (See pg 1) Label / Start / End | Purge Method: Centrifugal / Submersible / Disp. Bailer / Other

Replicate/Code No. | Sampled By

Time	Minutes Elapsed	Rate (gpm) (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(µmhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance	
											Color	Odor
1525	85	200	8.84	4.3	7.45	0.902	1.15	0.26	11.9	-175.7	clear	none
1530	90	200	8.84	4.6	7.45	0.908	0.92	0.26	12.0	-175.9		
1535	95	200	8.84	5.0	7.45	0.903	0.92	0.26	11.9	-175.7		
1540	100	200	8.84	5.2	7.45	0.904	1.04	0.26	12.0	-175.7		
1545	105	200	8.84	5.2	7.45	0.906	1.10	0.26	12.0	-175.6		
1550	SAMPLE											

Constituents Sampled	Container	Number	Preservative

Well Information

Well Location: (See pg 2) Well Locked at Arrival:

Condition of Well: Well Locked at Departure:

Well Completion: Flush Mount / Stick Up Key Number To Well:

NOTES:

Well Casing Volumes

Gallons/Foot: 1" = 0.04; 1.25" = 0.06; 1.5" = 0.09; 2" = 0.16; 2.5" = 0.26; 3" = 0.37; 3.5" = 0.50; 4" = 0.65; 6" = 1.47

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID ESI-7 | Date 5/31/23

Project Name/Location Trane - DC Rollforms | Weather 68°F Sunny

Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	—	Casing Diameter (in.)	2	Well Material: PVC / SS	X / —
Total Depth (ft-bmp)	17.35	Static Water Level (ft-bmp)	10.89	Water Column in Well (ft)	6.46	Gallons in Well	1.1
MP Elevation	—	Pump Intake (ft-bmp)	~16.5	Volumes Purged	2.3	Gallons Purged	2.5
Sample Method	low flow	Pump On/Off	1120/1210	Sample Time Label / Start / End	1220 / 1220 / 1225	Purge Method	peri pump
Replicate/Code No.	—	Sampled By	AJS			Centrifugal / Submersible / Disp. Bailer / Other	

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(µmhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance Color	Appearance Odor
1125	5	200	11.73	0.1	7.19	0.870	5.77	1.35	13.3	-89.8	clear	none
1130	10	200	12.57	0.3	7.15	0.804	6.34	0.59	12.9	-81.5		
1135	15	200	13.35	0.6	7.12	0.765	9.07	0.41	12.9	-72.6		
1140	20	200	13.85	0.8	7.12	0.756	5.96	0.56	12.8	-84.3		
1145	25	200	14.51	1.0	7.12	0.744	5.12	0.43	12.6	-75.2		
1150	30	200	15.06	1.3	7.15	0.745	4.87	0.47	12.5	-91.5		
1155	35	200	15.42	1.6	7.16	0.757	4.95	0.44	12.3	-94.9		
1200	40	200	15.78	1.9	7.18	0.799	2.29	0.45	12.2	-96.1		
1205	45	200	16.32	2.2	7.21	0.844	1.24	0.39	12.4	-106.4	↓	↓
1210	50	200	WELL DRY									
Allowed well to recharge												
1220	SAMPLE											

Constituents Sampled	Container	Number	Preservative
VOCs	40 mL VOAs	3	HCl

Well Information

Well Location: grass

Condition of Well: good

Well Completion: Flush Mount / (Stick Up)

Well Locked at Arrival: YES

Well Locked at Departure: Yes

Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Project No. 30115866 | Well ID OW-5 | Date 5/31/23

Project Name/Location Trane - DC Rollforms | Weather 68°F, sunny

Measuring Pt. Description TIC | Screen Setting (ft-bmp) — | Casing Diameter (in.) 2 | Well Material: PVC X, SS —

Total Depth (ft-bmp) 13.10 | Static Water Level (ft-bmp) 11.56 | Water Column in Well (ft.) 1.54 | Gallons in Well 0.25

MP Elevation — | Pump Intake (ft-bmp) ~12.50 | Volumes Purged 8.4 | Gallons Purged 2.1

Sample Method low flow | Pump On/Off 0920/1015 | Sample Time Label 1010, Start 1010, End 1015 | Purge Method peri pump; Centrifugal —, Submersible —, Disp. Bailer —, Other —

Replicate/Code No. — | Sampled By AJS

Time	Minutes Elapsed	Rate ~~(gpm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(umhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(°F)~~	Redox (mV)	Appearance	
											Color	Odor
0925	5	200	11.76	0.1	6.79	1.007	45.3	1.43	15.4	35.3	clear	None
0930	10	200	12.03	0.3	6.75	0.966	19.0	0.71	12.2	36.8		
0935	15	200	12.20	0.5	6.75	0.973	12.1	0.52	12.0	44.5		
0940	20	200	12.33	0.8	6.75	0.987	10.41	0.46	12.1	44.5		
0945	25	200	12.41	1.0	6.75	0.990	7.85	0.42	11.9	41.1		
0950	30	200	12.54	1.2	6.75	1.002	4.54	0.41	12.0	33.9		
0955	35	200	12.65	1.5	6.74	1.012	4.80	0.38	12.1	24.3		
1000	40	200	12.76	1.7	6.74	1.010	4.03	0.39	12.0	18.4		
1005	45	200	12.84	1.9	6.74	1.006	4.12	0.36	12.0	15.7	↓	↓
1010	SAMPLE											

Constituents Sampled	Container	Number	Preservative
VOCs	40 mL VOAs	9	HCl

Well Information

Well Location: grass | Well Locked at Arrival: yes

Condition of Well: good | Well Locked at Departure: yes

Well Completion: Flush Mount / (Stick Up) | Key Number To Well: master

NOTES: MS/MSD collected here

Recharge rate too slow to maintain water level.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Water Sampling Log

ARCADIS

Page 1 of 1

Project No.	30115866	Well ID	OW-6	Date	5/31/23
Project Name/Location	Trane - DC Rollforms			Weather	68°F Sunny
Measuring Pt. Description	TIC	Screen Setting (ft-bmp)	~	Casing Diameter (in.)	2
Total Depth (ft-bmp)	12.91	Static Water Level (ft-bmp)	11.51	Water Column in Well (ft.)	1.40
MP Elevation	—	Pump Intake (ft-bmp)	≈ 12.70	Volumes Purged	3
Sample Method	low flow	Pump On/Off	1030/1050	Sample Time	Label 1100, Start 1100, End 1105
Replicate/Code No.	—	Sampled By	AJS		

Well Material: PVC X, SS —

Gallons In Well: 0.2

Gallons Purged: 0.6

Purge Method: peri pump
Centrifugal —
Submersible —
Disp. Bailer —
Other —

Time	Minutes Elapsed	Rate ~~(spm)~~ (mL/min)	Depth to Water (ft) TOC	Gallons Purged	pH	Cond. ~~(µmhos)~~ (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/L)	Temp. (°C) ~~(F)~~	Redox (mV)	Appearance	
											Color	Odor
1035	5	200	11.74	0.1	7.03	1.250	12.4	1.91	16.4	-98.5	clear	none
1040	10	200	12.10	0.3	7.00	1.204	9.15	0.92	13.1	-90.9	↓	↓
1045	15	200	12.45	0.5	7.01	1.198	4.02	0.57	12.7	-105.5		
1050	20	200	12.70	0.6	WELL DRY		NM	NM	NM	NM	↓	↓
Allowed well to recharge												
1100	SAMPLE											

Constituents Sampled	Container	Number	Preservative
VOCs	40 mL VOAs	3	HCl

Well Information

Well Location: grass
Condition of Well: good
Well Completion: Flush Mount / (Stick Up)

Well Locked at Arrival: yes
Well Locked at Departure: yes
Key Number To Well: master

NOTES: Recharge rate too slow to maintain water level.

Well Casing Volumes

Gallons/Foot					
	1" = 0.04	1.5" = 0.09	2.5" = 0.26	3.5" = 0.50	6" = 1.47
	1.25" = 0.06	2" = 0.16	3" = 0.37	4" = 0.65	

Appendix E

Recovery and Monitoring Well DTW/DTP and Inspection Log

Recovery and Monitoring Well DTW/DTP and Inspection Log
DC Rollforms, Jamestown, New York

Date: 10/10/2022
Time: 0900
Technician: MJ

Well ID	DTW	DTP	Bolted/ Locked yes/no	Gripper Plug yes/no	Notes
Recovery Wells (Active)					
VEP-1	8.70	NP	Y	Y	DTB: 11.50
VEP-2	10.09	NP	Y	Y	DTB: 11.00
VEP-3	9.68	NP	Y	Y	DTB: 11.85
VEP-4	4.54	NP	Y	Y	Inactive
VEP-5	4.90	NP	Y	Y	Inactive
VEP-6	8.60	NP	Y	Y	DTB: 14.55
VEP-7	10.50	NP	Y	Y	DTB: 13.55
VEP-8	10.56	NP	Y	Y	DTB: 12.90
VEP-9	11.25	NP	Y	Y	DTB: 12.10
VEP-10	10.64	NP	Y	Y	DTB: 12.50
VEP-11	11.65	NP	Y	Y	DTB: 13.80
VEP-12	10.90	NP	Y	Y	DTB: 12.38 Slight odor, no product detected or on probe
VEP-13	10.72	NP	Y	Y	DTB: 13.90
VEP-14	10.38	NP	Y	Y	DTB: 14.24
Monitoring Wells					
RW-1	4.29	NP	N	Y	Partially overgrown w/ grass
RW-2	4.66	NP	N	Y	
RW-3	4.53	NP	Y	Y	
ESI-1	7.32	NP	Y	Y	
ESI-2	7.09	NP	Y	Y	
ESI-3	6.55	6.45	Y	Y	
~~ESI-4~~	NA	NA	NA	NA	Abandoned
ESI-4R	11.84	NP	Y	Y	DTB: 12.20 Gauged w/ teflon free probe
ESI-5	4.69	NP	Y	Y	No visible label, sock appears clean, slight odor
ESI-6	7.74	NP	Y	Y	
ESI-7	6.92	NP	Y	Y	
IW-1	7.30	NP	Y	Y	Wasp nest → Sprayed w/ insecticide
IW-2	7.09	NP	Y	Y	
IW-3	6.90	NP	Y	Y	
IW-4	6.70	NP	Y	Y	
IW-5	6.60	NP	Y	Y	
IW-6	5.25	NP	Y	Y	
IW-7	4.91	NP	Y	Y	
IW-8	6.00	NP	Y	Y	
IW-9	4.61	NP	Y	Y	
IW-10	4.73	NP	Y	Y	
IW-11	4.75	NP	Y	Y	
IW-12	4.69	NP	Y	Y	
IW-13	4.70	NP	Y	Y	
IW-14	4.50	NP	Y	Y	
IW-15	4.73	NP	Y	Y	
MW-4S	11.73	NP	Y	Y	

Recovery and Monitoring Well DTW/DTP and Inspection Log
DC Rollforms, Jamestown, New York

Date: 10/10/2022
Time: 0900
Technician: MJ

Well ID	DTW	DTP	Bolted/ Locked yes/no	Gripper Plug yes/no	Notes
MW-7D	7.88	NP	Y	Y	
MW-8S	7.30	NP	Y	Y	
MW-8D	6.37	NP	Y	Y	
MW-9	7.47	NP	Y	Y	Slight odor, no product detected or on probe
~~MW-10~~	NA	NA	NA	NA	Replaced w/ 10R, May be incorrectly labeled "VEP-12"
MW-10R	8.16	NP	Y	Y	Stickup
MW-12	6.52	NP	Y	Y	
MW-13	5.95	NP	Y	Y	
MW-14	6.26	NP	Y	Y	
VEPOW-1	8.14	NP	Y	Y	
VEPOW-2	8.88	NP	Y	Y	
OW-3	4.19	NP	N	Y	Partially overgrown w/ grass
OW-4	7.36	NP	Y	Y	
OW-5	7.52	NP	Y	Y	Slight odor, no product detected or on probe
OW-6	7.51	NP	Y	Y	
OW-7	6.97	NP	Y	Y	
PW-1	8.44	NP	Y	Y	

Definitions: DTW - depth to water
DTP - depth to product

Recovery and Monitoring Well DTW/DTP and Inspection Log
DC Rollforms, Jamestown, New York

Date: 2/6/23
Time: 1330
Technician: AJS

Well ID	DTW	DTP	Bolted/ Locked yes/no	Gripper Plug yes/no	Notes
Recovery Wells (Active)					
VEP-1	9.03	ND	Y	Y	
VEP-2	10.11	ND	Y	Y	
VEP-3	9.63	ND	Y	Y	
~~VEP-4~~					
~~VEP-5~~					
VEP-6	8.37	ND	Y	Y	
VEP-7	10.96	ND	Y	Y	
VEP-8	10.54	ND	Y	Y	
VEP-9	3.13	ND	Y	Y	
VEP-10	10.58	ND	Y	Y	
VEP-11	11.62	ND	Y	Y	
VEP-12	11.02	ND	Y	Y	
VEP-13	8.72	ND	Y	Y	
VEP-14	7.43	ND	Y	Y	
Monitoring Wells					
RW-1	3.62	ND	Y	Y	
RW-2	3.93	ND	Y	Y	
RW-3	3.86	ND	Y	Y	
ESI-1	6.93	ND	Y	Y	
ESI-2	6.18	ND	Y	Y	
ESI-3	5.98	ND	Y	Y	
ESI-4R	10.89	ND	Y	Y	
ESI-5	3.93	ND	Y	Y	
ESI-6	6.45	ND	Y	Y	
ESI-7	6.31	ND	Y	Y	
IW-1	6.58	ND	Y	Y	
IW-2	6.51	ND	Y	Y	
IW-3	6.51	ND	Y	Y	
IW-4	6.59	ND	Y	Y	
IW-5	5.97	ND	Y	Y	
MW-4S	11.16	ND	Y	Y	
MW-7D	7.02	ND	Y	Y	
MW-8S	6.77	ND	Y	Y	
MW-8D	5.96	ND	Y	Y	
MW-9	7.06	ND	Y	Y	
MW-10R	7.77	ND	Y	Y	
MW-12	5.97	ND	Y	Y	
MW-13	6.13	ND	Y	Y	
MW-14	5.84	ND	Y	Y	
OW-1	7.85	ND	Y	Y	
OW-2	8.53	ND	Y	Y	
OW-3	3.56	ND	Y	Y	
OW-4	6.88	ND	Y	Y	
OW-5	6.67	ND	Y	Y	
OW-6	6.92	ND	Y	Y	
OW-7	6.70	ND	Y	Y	
PW-1	8.18	ND	Y	Y	
old mw-10	6.94	ND	Y	Y	

Definitions: DTW - depth to water
DTP - depth to product

Appendix F

Groundwater Laboratory Analytical Reports

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30115866.01

SGS Job Number: JD53550

Sampling Dates: 10/11/22 - 10/12/22



Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; jasmine.mullins@arcadis.com;
ATTN: Todd Carignan

Total number of pages in report: **38**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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Sections: 1 2 3 4

Table of Contents

Section 1: Sample Summary **3**
Section 2: Summary of Hits **4**
Section 3: Sample Results **6**
3.1: JD53550-1: ESI-6 7
3.2: JD53550-2: MW-9 9
3.3: JD53550-3: MW-10R 11
3.4: JD53550-4: ESI-1 13
3.5: JD53550-5: ESI-DUP 15
3.6: JD53550-6: MW-12 17
3.7: JD53550-7: MW-8S 19
3.8: JD53550-8: ESI-2 21
3.9: JD53550-9: MW-13 23
3.10: JD53550-10: MW-14 25
3.11: JD53550-11: OW-6 27
3.12: JD53550-12: TB 29
Section 4: Misc. Forms **31**
4.1: Chain of Custody 32
4.2: Sample Tracking Chronicle 35
4.3: Internal Chain of Custody 37

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD53550

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD53550-1	10/11/22	11:30	MJ	10/13/22	AQ	Ground Water	ESI-6
JD53550-2	10/11/22	13:40	MJ	10/13/22	AQ	Ground Water	MW-9
JD53550-3	10/11/22	15:50	MJ	10/13/22	AQ	Ground Water	MW-10R
JD53550-4	10/11/22	17:40	MJ	10/13/22	AQ	Ground Water	ESI-1
JD53550-5	10/11/22	00:00	MJ	10/13/22	AQ	Ground Water	ESI-DUP
JD53550-6	10/12/22	12:50	MJ	10/13/22	AQ	Ground Water	MW-12
JD53550-7	10/12/22	13:05	MJ	10/13/22	AQ	Ground Water	MW-8S
JD53550-8	10/12/22	10:20	MJ	10/13/22	AQ	Ground Water	ESI-2
JD53550-9	10/12/22	14:10	MJ	10/13/22	AQ	Ground Water	MW-13
JD53550-10	10/12/22	15:15	MJ	10/13/22	AQ	Ground Water	MW-14
JD53550-11	10/12/22	16:10	MJ	10/13/22	AQ	Ground Water	OW-6
JD53550-12	10/12/22	16:10		10/13/22	AQ	Trip Blank Water	TB

Summary of Hits

Job Number: JD53550
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 10/11/22 thru 10/12/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD53550-1	**ESI-6**					
cis-1,2-Dichloroethene [a]		0.59 J	1.0	0.51	ug/l	SW846 8260D
JD53550-2	**MW-9**					
cis-1,2-Dichloroethene [a]		0.90 J	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		0.75 J	1.0	0.53	ug/l	SW846 8260D
JD53550-3	**MW-10R**					
cis-1,2-Dichloroethene [a]		2.2	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		3.1	1.0	0.53	ug/l	SW846 8260D
JD53550-4	**ESI-1**					
No hits reported in this sample.						
JD53550-5	**ESI-DUP**					
No hits reported in this sample.						
JD53550-6	**MW-12**					
cis-1,2-Dichloroethene [a]		94.1	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		1.8	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]		64.5	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [a]		5.3	1.0	0.52	ug/l	SW846 8260D
JD53550-7	**MW-8S**					
1,1-Dichloroethene [a]		12.0	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene [a]		5290	100	51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		42.8	1.0	0.54	ug/l	SW846 8260D
Toluene [a]		0.62 J	1.0	0.49	ug/l	SW846 8260D
Trichloroethene [a]		41.9	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [b]		471	10	5.2	ug/l	SW846 8260D
JD53550-8	**ESI-2**					
cis-1,2-Dichloroethene [a]		0.70 J	1.0	0.51	ug/l	SW846 8260D
JD53550-9	**MW-13**					
cis-1,2-Dichloroethene [a]		184	1.0	0.51	ug/l	SW846 8260D

Summary of Hits

Job Number: JD53550
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 10/11/22 thru 10/12/22

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
trans-1,2-Dichloroethene [a]	1.5	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]	83.1	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [a]	25.1	1.0	0.52	ug/l	SW846 8260D
JD53550-10 MW-14					
cis-1,2-Dichloroethene [a]	2190	100	51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [c]	7.6 J	10	5.4	ug/l	SW846 8260D
Trichloroethene [c]	103	10	5.3	ug/l	SW846 8260D
Vinyl chloride [c]	435	10	5.2	ug/l	SW846 8260D
JD53550-11 OW-6					
cis-1,2-Dichloroethene [a]	10.6	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]	0.60 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]	14.1	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [d]	0.53 J	1.0	0.52	ug/l	SW846 8260D
JD53550-12 TB					
Chloroform [a]	10.5	1.0	0.50	ug/l	SW846 8260D

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Diluted due to high concentration of target compound.
(c) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Dilution required due to high concentration of target compound.
(d) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	ESI-6		
Lab Sample ID:	JD53550-1	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182950.D	1	10/18/22 02:54	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.59	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-6		
Lab Sample ID:	JD53550-1	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	98%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-9		
Lab Sample ID:	JD53550-2	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182951.D	1	10/18/22 03:18	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.90	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-9		
Lab Sample ID:	JD53550-2	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.75	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-10R		
Lab Sample ID:	JD53550-3	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182952.D	1	10/18/22 03:41	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	2.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-10R		
Lab Sample ID:	JD53550-3	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	3.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	101%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-1		
Lab Sample ID:	JD53550-4	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182953.D	1	10/18/22 04:05	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-1		
Lab Sample ID:	JD53550-4	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	98%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-DUP		
Lab Sample ID:	JD53550-5	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182954.D	1	10/18/22 04:28	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-DUP		
Lab Sample ID:	JD53550-5	**Date Sampled:**	10/11/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-12		
Lab Sample ID:	JD53550-6	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2K00319.D	1	10/18/22 14:07	TS	n/a	n/a	V2K13
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	94.1	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.8	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-12		
Lab Sample ID:	JD53550-6	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	64.5	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	5.3	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	99%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-8S		
Lab Sample ID:	JD53550-7	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182960.D	1	10/18/22 06:49	ED	n/a	n/a	V3D7695
Run #2 [b]	2K00315.D	10	10/18/22 13:02	TS	n/a	n/a	V2K13
Run #3 [a]	1K00312.D	100	10/18/22 12:13	TS	n/a	n/a	V1K13

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml
Run #3	5.0 ml

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [c]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [c]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [c]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	12.0	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	5290 [d]	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	42.8	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	0.62	1.0	0.49	ug/l	J

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-8S		
Lab Sample ID:	JD53550-7	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	
79-01-6	Trichloroethene	41.9	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	471 [e]	10	5.2	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	99%	100%	100%	80-120%
17060-07-0	1,2-Dichloroethane-D4	96%	101%	97%	80-120%
2037-26-5	Toluene-D8	99%	101%	99%	80-120%
460-00-4	4-Bromofluorobenzene	99%	103%	98%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Diluted due to high concentration of target compound.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Result is from Run# 3
(e) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-2		
Lab Sample ID:	JD53550-8	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182956.D	1	10/18/22 05:15	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.70	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-2		
Lab Sample ID:	JD53550-8	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		80-120%
2037-26-5	Toluene-D8	98%		80-120%
460-00-4	4-Bromofluorobenzene	99%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-13		
Lab Sample ID:	JD53550-9	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2K00331.D	1	10/18/22 17:24	TS	n/a	n/a	V2K13
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	184	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	1.5	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-13		
Lab Sample ID:	JD53550-9	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	83.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	25.1	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		80-120%
17060-07-0	1,2-Dichloroethane-D4	97%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	101%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-14		
Lab Sample ID:	JD53550-10	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2K00317.D	10	10/18/22 13:35	TS	n/a	n/a	V2K13
Run #2 [b]	1K00314.D	100	10/18/22 12:46	TS	n/a	n/a	V1K13

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	100	37	ug/l	
107-13-1	Acrylonitrile	ND	100	10	ug/l	
71-43-2	Benzene	ND	5.0	4.3	ug/l	
75-27-4	Bromodichloromethane	ND	10	4.5	ug/l	
75-25-2	Bromoform	ND	10	6.3	ug/l	
74-83-9	Bromomethane	ND	20	16	ug/l	
56-23-5	Carbon tetrachloride	ND	10	5.5	ug/l	
108-90-7	Chlorobenzene	ND	10	5.6	ug/l	
75-00-3	Chloroethane	ND	10	7.3	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	100	35	ug/l	
67-66-3	Chloroform	ND	10	5.0	ug/l	
74-87-3	Chloromethane	ND	10	7.6	ug/l	
124-48-1	Dibromochloromethane	ND	10	5.6	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	10	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	10	5.1	ug/l	
75-71-8	Dichlorodifluoromethane	ND	20	5.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	5.7	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	6.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	10	5.9	ug/l	
156-59-2	cis-1,2-Dichloroethene	2190 [c]	100	51	ug/l	
156-60-5	trans-1,2-Dichloroethene	7.6	10	5.4	ug/l	J
78-87-5	1,2-Dichloropropane	ND	10	5.1	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	4.7	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	4.3	ug/l	
100-41-4	Ethylbenzene	ND	10	6.0	ug/l	
75-09-2	Methylene chloride	ND	20	10	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	6.5	ug/l	
127-18-4	Tetrachloroethene	ND	10	5.6	ug/l	
108-88-3	Toluene	ND	10	4.9	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	5.4	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	5.3	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-14		
Lab Sample ID:	JD53550-10	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	103	10	5.3	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	4.0	ug/l	
75-01-4	Vinyl chloride	435	10	5.2	ug/l	
1330-20-7	Xylene (total)	ND	10	5.9	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	99%	96%	80-120%
2037-26-5	Toluene-D8	101%	102%	80-120%
460-00-4	4-Bromofluorobenzene	99%	99%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Dilution required due to high concentration of target compound.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-6		
Lab Sample ID:	JD53550-11	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182958.D	1	10/18/22 06:02	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	10.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.60	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-6		
Lab Sample ID:	JD53550-11	**Date Sampled:**	10/12/22
Matrix:	AQ - Ground Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	14.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [c]	0.53	1.0	0.52	ug/l	J
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	96%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	96%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TB		
Lab Sample ID:	JD53550-12	**Date Sampled:**	10/12/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182943.D	1	10/18/22 00:09	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	10.5	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TB		
Lab Sample ID:	JD53550-12	**Date Sampled:**	10/12/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/13/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		80-120%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS

GW

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

JD53550

Page 1 of 1

EHSA-QAC-0023-04-FORM-Standard COC

FedEx Tracking # 580973615775

Bottle Order Control #

SGS Quote #

SGS Job #

Client / Reporting Information

Company Name: Arcadis
Street Address: 855 Route 146, Suite 210
City / State / Zip: Clifton Park, NY
Project Contact / E-mail: Todd Carignan
Phone #: 518-488-9403
Sampler(s) Name(s) / Phone #: Matt Juliana

Project Information

Project Name: DC Rollforms
Street: 583 Allen St
City / State: Jamestown, NY
Project #: 30115866.01
Client Purchase Order #
Project Manager: Todd Carignan

Billing Information (if different from Report to)

Company Name
Street Address
City / State / Zip
Attention:

Requested Analysis

US EPA 8260C VOC

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	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)
1	ESI-6		10/11/22	1130	MJ	G	N	GW	3	X								X
2	MW-9		10/11/22	1340	MJ	G	N	GW	3	X								X
3	MW-16R		10/11/22	1556	MJ	G	N	GW	3	X								X
4	ESI-1		10/11/22	1740	MJ	G	N	GW	3	X								X
5	ESI-DUP		10/11/22		MJ	G	N	GW	3	X								X
6	MW-12		10/12/22	1250	MJ	G	N	GW	3	X								X
7	MW-8S		10/12/22	1305	MJ	G	N	GW	3	X								X
8	ESI-2		10/12/22	1020	MJ	G	N	GW	3	X								X
9	MW-13		10/12/22	1410	MJ	G	N	GW	3	X								X
10	MW-14		10/12/22	1515	MJ	G	N	GW	3	X								X
11	OW-6		10/12/22	1610	MJ	G	N	GW	3	X								X
12	TB		10-6-22	7:00														X

LAB USE ONLY: VTTb

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [X] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days* NB4B
- [ ] 1 Business Day*
- [ ] Other

All data available via Lablink

* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [X] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [X] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Semi-Annual GW Sampling
1 cooler

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

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

	Relinquished by:	Date / Time:	Received By:
1	Matt Juliana	10/12/22 1700	FedEx
2	FedEx	10/13 1000	
3			
4			
5			

Custody Seal # — [ ] Intact [ ] Not Intact [ ] Absent

Therm ID: — On Ice [X] — See Sample Receipt Summary [ ] — Cooler Temp. °C: 2.7

JD53550: Chain of Custody
Page 1 of 3

SGS Sample Receipt Summary

Job Number: JD53550 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, 583 ALLEN STREET, JAME

Date / Time Received: 10/13/2022 10:00:00 AM **Delivery Method:** FEDEX **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (2.7);

Cooler Temps (Corrected) °C: Cooler 1: (2.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments 1.) -12 Received 2 TB in cooler not on COC, added to the end of the COC no analysis marked.

Responded to by: Marie Meidhof

Response Date: 10/13/2022

Please login the TB for the same VOC analysis as the GW samples.

JD53550: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Arcadis

Job No: JD53550

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD53550-1	Collected: 11-OCT-22 11:30 By: MJ		Received: 13-OCT-22		By: KG	
ESI-6						
JD53550-1	SW846 8260D	18-OCT-22 02:54	ED			V8260PPL
JD53550-2	Collected: 11-OCT-22 13:40 By: MJ		Received: 13-OCT-22		By: KG	
MW-9						
JD53550-2	SW846 8260D	18-OCT-22 03:18	ED			V8260PPL
JD53550-3	Collected: 11-OCT-22 15:50 By: MJ		Received: 13-OCT-22		By: KG	
MW-10R						
JD53550-3	SW846 8260D	18-OCT-22 03:41	ED			V8260PPL
JD53550-4	Collected: 11-OCT-22 17:40 By: MJ		Received: 13-OCT-22		By: KG	
ESI-1						
JD53550-4	SW846 8260D	18-OCT-22 04:05	ED			V8260PPL
JD53550-5	Collected: 11-OCT-22 00:00 By: MJ		Received: 13-OCT-22		By: KG	
ESI-DUP						
JD53550-5	SW846 8260D	18-OCT-22 04:28	ED			V8260PPL
JD53550-6	Collected: 12-OCT-22 12:50 By: MJ		Received: 13-OCT-22		By: KG	
MW-12						
JD53550-6	SW846 8260D	18-OCT-22 14:07	TS			V8260PPL
JD53550-7	Collected: 12-OCT-22 13:05 By: MJ		Received: 13-OCT-22		By: KG	
MW-8S						
JD53550-7	SW846 8260D	18-OCT-22 06:49	ED			V8260PPL
JD53550-7	SW846 8260D	18-OCT-22 12:13	TS			V8260PPL
JD53550-7	SW846 8260D	18-OCT-22 13:02	TS			V8260PPL
JD53550-8	Collected: 12-OCT-22 10:20 By: MJ		Received: 13-OCT-22		By: KG	
ESI-2						

Internal Sample Tracking Chronicle

Arcadis

Job No: JD53550

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD53550-8	SW846 8260D	18-OCT-22 05:15	ED			V8260PPL
JD53550-9 MW-13	Collected: 12-OCT-22 14:10 By: MJ		Received: 13-OCT-22 By: KG			
JD53550-9	SW846 8260D	18-OCT-22 17:24	TS			V8260PPL
JD53550-10 MW-14	Collected: 12-OCT-22 15:15 By: MJ		Received: 13-OCT-22 By: KG			
JD53550-10	SW846 8260D	18-OCT-22 12:46	TS			V8260PPL
JD53550-10	SW846 8260D	18-OCT-22 13:35	TS			V8260PPL
JD53550-11 OW-6	Collected: 12-OCT-22 16:10 By: MJ		Received: 13-OCT-22 By: KG			
JD53550-11	SW846 8260D	18-OCT-22 06:02	ED			V8260PPL
JD53550-12 TB	Collected: 12-OCT-22 16:10 By:		Received: 13-OCT-22 By: KG			
JD53550-12	SW846 8260D	18-OCT-22 00:09	ED			V8260PPL

SGS Internal Chain of Custody

Job Number: JD53550
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/13/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53550-1.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-1.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-1.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-1.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-2.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-2.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-2.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-2.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-3.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-3.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-3.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-3.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-4.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-4.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-4.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-4.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-5.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-5.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-5.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-5.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-6.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-6.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-6.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-6.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-6.2	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53550-6.2	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53550-6.2	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53550-6.2	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53550-7.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-7.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-7.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-7.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-7.2	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53550-7.2	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53550-7.2	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53550-7.2	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage

SGS Internal Chain of Custody

Job Number: JD53550
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/13/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53550-8.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-8.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-8.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-8.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-9.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-9.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-9.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-9.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-9.2	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53550-9.2	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53550-9.2	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53550-9.2	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53550-10.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-10.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-10.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-10.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-10.2	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53550-10.2	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53550-10.2	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53550-10.2	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53550-11.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-11.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-11.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-11.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53550-12.1	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53550-12.1	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53550-12.1	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53550-12.1	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30115866.01

SGS Job Number: JD53615

Sampling Date: 10/13/22



Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; jasmine.mullins@arcadis.com;
ATTN: Todd Carignan

Total number of pages in report: **19**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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Test results relate only to samples analyzed.

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EHS.US.CustomerCare@sgs.com

Sections: 1 2 3 4

Table of Contents

Section 1: Sample Summary **3**
Section 2: Summary of Hits **4**
Section 3: Sample Results **5**
3.1: JD53615-1: OW-5 6
3.2: JD53615-2: ESI-4R 8
3.3: JD53615-3: ESI-7 10
3.4: JD53615-4: TB 12
Section 4: Misc. Forms **14**
4.1: Chain of Custody 15
4.2: Sample Tracking Chronicle 18
4.3: Internal Chain of Custody 19

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD53615

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD53615-1	10/13/22	10:15	MJ	10/14/22	AQ	Ground Water	OW-5
JD53615-1D	10/13/22	10:15	MJ	10/14/22	AQ	Water Dup/MSD	OW-5 MSD
JD53615-1S	10/13/22	10:15	MJ	10/14/22	AQ	Water Matrix Spike	OW-5 MS
JD53615-2	10/13/22	11:15	MJ	10/14/22	AQ	Ground Water	ESI-4R
JD53615-3	10/13/22	13:45	MJ	10/14/22	AQ	Ground Water	ESI-7
JD53615-4	10/13/22	13:45	MJ	10/14/22	AQ	Trip Blank Water	TB

Summary of Hits

Job Number: JD53615
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 10/13/22

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD53615-1	**OW-5**					
cis-1,2-Dichloroethene [a]		17.2	1.0	0.51	ug/l	SW846 8260D
Vinyl chloride [a]		19.7	1.0	0.52	ug/l	SW846 8260D
JD53615-2	**ESI-4R**					
cis-1,2-Dichloroethene [a]		89.8	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		0.82 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]		8.3	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [a]		3.9	1.0	0.52	ug/l	SW846 8260D
JD53615-3	**ESI-7**					
cis-1,2-Dichloroethene [a]		1.6	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		10.3	1.0	0.53	ug/l	SW846 8260D
JD53615-4	**TB**					
Chloroform [a]		10.2	1.0	0.50	ug/l	SW846 8260D

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	OW-5		
Lab Sample ID:	JD53615-1	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	1K00332.D	1	10/18/22 17:41	TS	n/a	n/a	V1K13
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile [b]	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	17.2	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene [b]	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-5		
Lab Sample ID:	JD53615-1	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	19.7	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		80-120%
2037-26-5	Toluene-D8	101%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-4R		
Lab Sample ID:	JD53615-2	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2K00333.D	1	10/18/22 17:57	TS	n/a	n/a	V2K13
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	89.8	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.82	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-4R		
Lab Sample ID:	JD53615-2	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	8.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	3.9	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	94%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	98%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-7		
Lab Sample ID:	JD53615-3	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182946.D	1	10/18/22 01:20	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	1.6	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-7		
Lab Sample ID:	JD53615-3	**Date Sampled:**	10/13/22
Matrix:	AQ - Ground Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	10.3	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	95%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	100%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TB		
Lab Sample ID:	JD53615-4	**Date Sampled:**	10/13/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3D182942.D	1	10/17/22 23:45	ED	n/a	n/a	V3D7695
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane [b]	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane [b]	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	10.2	1.0	0.50	ug/l	
74-87-3	Chloromethane [b]	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TB		
Lab Sample ID:	JD53615-4	**Date Sampled:**	10/13/22
Matrix:	AQ - Trip Blank Water	**Date Received:**	10/14/22
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride [b]	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%		80-120%
17060-07-0	1,2-Dichloroethane-D4	94%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	99%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com/ehsusa

EHSA-QAC-0023-04-FORM-Standard COC

GW

JD53615

Page 1 of 1

FED-EX Tracking # 5899 7366 0246 | Bottle Order Control # MM-10522-62
SGS Quote # | SGS Job #

Client / Reporting Information

Company Name: Arcadis
Street Address: 855 Route 146, Suite 210
City: Clifton Park State: NY Zip:
Project Contact: Todd Carignan E-mail:
Phone #: 518-488-9403
Sampler(s) Name(s): Matt Juliana Phone #:

Project Information

Project Name: DC Rollforms
Street: 583 Allen St
City: Jamestown State: NY
Project #: 30115866.01
Client Purchase Order #:
Project Manager: Todd Carignan
Attention:

Billing Information (if different from Report to)

Company Name:
Street Address:
City State Zip:

Requested Analysis

USEPA 8260C VOC

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	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	OW-5		10/13/22	1015	MJ	G	N	GW	3	X								X	V784
2	OW-5 MS		10/13/22	1015	MJ	G	N	GW	3	X								X	
3	OW-5 MSD		10/13/22	1015	MJ	G	N	GW	3	X								X	
4	ESI-4R		10/13/22	1115	MJ	G	N	GW	3	X								X	
5	ESI-7		10/13/22	1345	MJ	G	N	GW	3	X								X	
	TB		10/14/22																

Turn Around Time (Business Days)

Approved By (SGS PM): / Date:

- [X] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

Initial Approval: NB2B
Label Verification:

All data available via Lablink
* Approval needed for 1-3 Business Day TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [X] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [X] EDD Format
- [ ] DOD-QSM5

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Semi Annual GW Sampling
1 Cooler

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

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

	Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1	Matt Juliana	10/13/22 1430	FedEx	FedEx 10/14 1000		
2						
3						
4						
5						

Custody Seal # | [ ] Intact [ ] Not intact [ ] Absent
Therm ID: | On Ice: [X] | See Sample Receipt Summary | Cooler Temp. °C: 3.4 cp

SGS Sample Receipt Summary

Job Number: JD53615 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, 583 ALLEN STREET, JAME

Date / Time Received: 10/14/2022 10:00:00 AM **Delivery Method:** FEDEX **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.4);

Cooler Temps (Corrected) °C: Cooler 1: (3.4);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments: 1.) -4 Recived TB in cooler, not on COC. Added to the end of COC, no analysis on COC. Please Confirm.

Responded to by: Marie Meidhof

Response Date: 10/14/2022

Please login the trip blank for VOC analysis, same as the other samples on the COC.

JD53615: Chain of Custody
Page 3 of 3

Internal Sample Tracking Chronicle

Arcadis

Job No: JD53615

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30115866.01

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD53615-1	Collected: 13-OCT-22 10:15 By: MJ		Received: 14-OCT-22 By: KG			
OW-5						
JD53615-1	SW846 8260D	18-OCT-22 17:41	TS			V8260PPL
JD53615-2	Collected: 13-OCT-22 11:15 By: MJ		Received: 14-OCT-22 By: KG			
ESI-4R						
JD53615-2	SW846 8260D	18-OCT-22 17:57	TS			V8260PPL
JD53615-3	Collected: 13-OCT-22 13:45 By: MJ		Received: 14-OCT-22 By: KG			
ESI-7						
JD53615-3	SW846 8260D	18-OCT-22 01:20	ED			V8260PPL
JD53615-4	Collected: 13-OCT-22 13:45 By: MJ		Received: 14-OCT-22 By: KG			
TB						
JD53615-4	SW846 8260D	17-OCT-22 23:45	ED			V8260PPL

SGS Internal Chain of Custody

Job Number: JD53615
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 10/14/22

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD53615-1.2	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53615-1.2	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53615-1.2	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53615-1.2	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53615-1.3	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-1.3	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-1.3	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-1.3	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53615-1.4	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-1.4	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-1.4	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-1.4	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53615-1.7	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-1.7	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-1.7	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-1.7	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53615-2.1	Secured Storage	Taylor Sauter	10/18/22 16:51	Retrieve from Storage
JD53615-2.1	Taylor Sauter	GCMS1K	10/18/22 16:51	Load on Instrument
JD53615-2.1	GCMS1K	Taylor Sauter	10/19/22 11:31	Unload from Instrument
JD53615-2.1	Taylor Sauter	Secured Storage	10/19/22 11:31	Return to Storage
JD53615-2.2	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-2.2	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-2.2	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-2.2	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53615-3.2	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-3.2	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-3.2	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-3.2	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage
JD53615-4.2	Secured Storage	Edward Durner	10/17/22 13:56	Retrieve from Storage
JD53615-4.2	Edward Durner	GCMS3D	10/17/22 13:56	Load on Instrument
JD53615-4.2	GCMS3D	Edward Durner	10/18/22 09:04	Unload from Instrument
JD53615-4.2	Edward Durner	Secured Storage	10/18/22 09:04	Return to Storage

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

e-Hardcopy 2.0
Automated Report

Technical Report for

Arcadis

DC Rollforms, 583 Allen Street, Jamestown, NY

30174313

SGS Job Number: JD66839

Sampling Dates: 05/30/23 - 06/01/23



Report to:

Arcadis U.S., Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065
Todd.Carignan@arcadis.com; Ben.Girard@Arcadis.com;
Kenneth.Varley@Arcadis.com; marie.meidhof@sgs.com;
ATTN: Todd Carignan

Total number of pages in report: **49**

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.

David Chastain
General Manager

Client Service contact: Marie Meidhof 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC, OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA(68-00408), RI, SC, TX, UT, VA, WV

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Sections: 1 2 3 4

Table of Contents

Section 1: Sample Summary **3**
Section 2: Summary of Hits **5**
Section 3: Sample Results **7**
3.1: JD66839-1: ESI-6 8
3.2: JD66839-2: MW-12 10
3.3: JD66839-3: ESI-7 12
3.4: JD66839-4: OW-5 14
3.5: JD66839-5: OW-6 16
3.6: JD66839-6: MW-9 18
3.7: JD66839-7: ESI-1 20
3.8: JD66839-8: ESI-DUP 22
3.9: JD66839-9: ESI-2 24
3.10: JD66839-10: MW-8S 26
3.11: JD66839-11: MW-13 28
3.12: JD66839-12: MW-14 30
3.13: JD66839-13: MW-10R 32
3.14: JD66839-14: TRIP BLANK 34
3.15: JD66839-15: TRIP BLANK 36
Section 4: Misc. Forms **38**
4.1: Chain of Custody 39
4.2: Sample Tracking Chronicle 42
4.3: Internal Chain of Custody 45

SGS North America Inc.

Sample Summary

Arcadis

Job No: JD66839

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
JD66839-1	05/30/23	15:50	AJS	06/02/23	AQ	Ground Water	ESI-6
JD66839-2	05/30/23	16:00	BKW	06/02/23	AQ	Ground Water	MW-12
JD66839-3	05/31/23	12:20	AJS	06/02/23	AQ	Ground Water	ESI-7
JD66839-4	05/31/23	10:10	AJS	06/02/23	AQ	Ground Water	OW-5
JD66839-4D	05/31/23	10:10	AJS	06/02/23	AQ	Water Dup/MSD	OW-5
JD66839-4S	05/31/23	10:10	AJS	06/02/23	AQ	Water Matrix Spike	OW-5
JD66839-5	05/31/23	11:00	AJS	06/02/23	AQ	Ground Water	OW-6
JD66839-6	05/31/23	15:25	AJS	06/02/23	AQ	Ground Water	MW-9
JD66839-7	05/31/23	15:10	BKW	06/02/23	AQ	Ground Water	ESI-1
JD66839-8	05/31/23	00:00	BKW	06/02/23	AQ	Ground Water	ESI-DUP
JD66839-9	05/31/23	14:10	BKW	06/02/23	AQ	Ground Water	ESI-2
JD66839-10	05/31/23	12:30	BKW	06/02/23	AQ	Ground Water	MW-8S

Sample Summary
(continued)

Arcadis

Job No: JD66839

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
JD66839-11	05/31/23	10:18	BKW	06/02/23	AQ	Ground Water	MW-13
JD66839-12	05/31/23	09:00	BKW	06/02/23	AQ	Ground Water	MW-14
JD66839-13	06/01/23	08:05	BKW	06/02/23	AQ	Ground Water	MW-10R
JD66839-14	06/01/23	08:05		06/02/23	AQ	Trip Blank Water	TRIP BLANK
JD66839-15	06/01/23	08:05		06/02/23	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: JD66839
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 05/30/23 thru 06/01/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JD66839-1	**ESI-6**					
No hits reported in this sample.						
JD66839-2	**MW-12**					
1,1-Dichloroethene [a]		2.3	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene [b]		682	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		8.2	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]		42.2	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [a]		55.0	1.0	0.52	ug/l	SW846 8260D
JD66839-3	**ESI-7**					
Vinyl chloride [b]		0.89 J	1.0	0.52	ug/l	SW846 8260D
JD66839-4	**OW-5**					
cis-1,2-Dichloroethene [a]		188	1.0	0.51	ug/l	SW846 8260D
Vinyl chloride [b]		370	10	5.2	ug/l	SW846 8260D
JD66839-5	**OW-6**					
cis-1,2-Dichloroethene [a]		72.4	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		1.4	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [b]		403	10	5.2	ug/l	SW846 8260D
JD66839-6	**MW-9**					
cis-1,2-Dichloroethene [a]		0.73 J	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		0.72 J	1.0	0.53	ug/l	SW846 8260D
JD66839-7	**ESI-1**					
No hits reported in this sample.						
JD66839-8	**ESI-DUP**					
No hits reported in this sample.						
JD66839-9	**ESI-2**					
cis-1,2-Dichloroethene [a]		6.7	1.0	0.51	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		0.56 J	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]		2.1	1.0	0.53	ug/l	SW846 8260D

Summary of Hits

Job Number: JD66839
Account: Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Collected: 05/30/23 thru 06/01/23

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Vinyl chloride [a]		1.6	1.0	0.52	ug/l	SW846 8260D
JD66839-10	**MW-8S**					
cis-1,2-Dichloroethene [c]		3570	25	13	ug/l	SW846 8260D
trans-1,2-Dichloroethene [c]		19.1 J	25	13	ug/l	SW846 8260D
Trichloroethene [c]		18.8 J	25	13	ug/l	SW846 8260D
Vinyl chloride [c]		546	25	13	ug/l	SW846 8260D
JD66839-11	**MW-13**					
1,1-Dichloroethene [a]		2.4	1.0	0.59	ug/l	SW846 8260D
cis-1,2-Dichloroethene [b]		792	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene [a]		4.4	1.0	0.54	ug/l	SW846 8260D
Trichloroethene [a]		0.89 J	1.0	0.53	ug/l	SW846 8260D
Vinyl chloride [a]		162	1.0	0.52	ug/l	SW846 8260D
JD66839-12	**MW-14**					
cis-1,2-Dichloroethene [a]		1150	20	10	ug/l	SW846 8260D
trans-1,2-Dichloroethene [c]		3.1 J	4.0	2.1	ug/l	SW846 8260D
Vinyl chloride [a]		721	20	10	ug/l	SW846 8260D
JD66839-13	**MW-10R**					
cis-1,2-Dichloroethene [a]		18.3	1.0	0.51	ug/l	SW846 8260D
Trichloroethene [a]		2.5	1.0	0.53	ug/l	SW846 8260D
JD66839-14	**TRIP BLANK**					
No hits reported in this sample.						
JD66839-15	**TRIP BLANK**					
No hits reported in this sample.						

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Dilution required due to high concentration of target compound.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	ESI-6		
Lab Sample ID:	JD66839-1	**Date Sampled:**	05/30/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128508.D	1	06/06/23 05:47	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-6		
Lab Sample ID:	JD66839-1	**Date Sampled:**	05/30/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-12		
Lab Sample ID:	JD66839-2	**Date Sampled:**	05/30/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128509.D	1	06/06/23 06:15	LD	n/a	n/a	V4D5700
Run #2 [b]	2U57124.D	20	06/06/23 13:25	KD	n/a	n/a	V2U2222

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [c]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	2.3	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	682 [d]	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	8.2	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-12		
Lab Sample ID:	JD66839-2	**Date Sampled:**	05/30/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	42.2	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	55.0	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	89%	112%	80-120%
2037-26-5	Toluene-D8	96%	100%	80-120%
460-00-4	4-Bromofluorobenzene	95%	108%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-7		
Lab Sample ID:	JD66839-3	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2U57132.D	1	06/06/23 16:46	KD	n/a	n/a	V2U2222
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile [b]	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform [c]	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene [c]	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene [c]	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-7		
Lab Sample ID:	JD66839-3	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	0.89	1.0	0.52	ug/l	J
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	114%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	107%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-5		
Lab Sample ID:	JD66839-4	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128499.D	1	06/06/23 01:33	LD	n/a	n/a	V4D5700
Run #2 [b]	2U57125.D	10	06/06/23 13:50	KD	n/a	n/a	V2U2222

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [c]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	188	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-5		
Lab Sample ID:	JD66839-4	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	370 [d]	10	5.2	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%	103%	80-120%
17060-07-0	1,2-Dichloroethane-D4	91%	113%	80-120%
2037-26-5	Toluene-D8	96%	100%	80-120%
460-00-4	4-Bromofluorobenzene	96%	106%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-6		
Lab Sample ID:	JD66839-5	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128511.D	1	06/06/23 07:11	LD	n/a	n/a	V4D5700
Run #2 [b]	2U57123.D	10	06/06/23 13:00	KD	n/a	n/a	V2U2222

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [c]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	72.4	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	OW-6		
Lab Sample ID:	JD66839-5	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	1.4	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	403 [d]	10	5.2	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	91%	112%	80-120%
2037-26-5	Toluene-D8	95%	100%	80-120%
460-00-4	4-Bromofluorobenzene	94%	105%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-9		
Lab Sample ID:	JD66839-6	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128512.D	1	06/06/23 07:39	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	0.73	1.0	0.51	ug/l	J
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-9		
Lab Sample ID:	JD66839-6	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.72	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-1		
Lab Sample ID:	JD66839-7	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128513.D	1	06/06/23 08:07	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-1		
Lab Sample ID:	JD66839-7	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-DUP		
Lab Sample ID:	JD66839-8	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128514.D	1	06/06/23 08:36	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-DUP		
Lab Sample ID:	JD66839-8	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	95%		80-120%
17060-07-0	1,2-Dichloroethane-D4	91%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-2		
Lab Sample ID:	JD66839-9	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128515.D	1	06/06/23 09:04	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	6.7	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	0.56	1.0	0.54	ug/l	J
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	ESI-2		
Lab Sample ID:	JD66839-9	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	2.1	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	1.6	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-8S		
Lab Sample ID:	JD66839-10	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128501.D	25	06/06/23 02:29	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	250	92	ug/l	
107-13-1	Acrylonitrile	ND	250	26	ug/l	
71-43-2	Benzene	ND	13	11	ug/l	
75-27-4	Bromodichloromethane	ND	25	11	ug/l	
75-25-2	Bromoform	ND	25	16	ug/l	
74-83-9	Bromomethane	ND	50	41	ug/l	
56-23-5	Carbon tetrachloride	ND	25	14	ug/l	
108-90-7	Chlorobenzene	ND	25	14	ug/l	
75-00-3	Chloroethane	ND	25	18	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	250	88	ug/l	
67-66-3	Chloroform	ND	25	13	ug/l	
74-87-3	Chloromethane	ND	25	19	ug/l	
124-48-1	Dibromochloromethane	ND	25	14	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	25	13	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	25	14	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	25	13	ug/l	
75-71-8	Dichlorodifluoromethane	ND	50	14	ug/l	
75-34-3	1,1-Dichloroethane	ND	25	14	ug/l	
107-06-2	1,2-Dichloroethane	ND	25	15	ug/l	
75-35-4	1,1-Dichloroethene	ND	25	15	ug/l	
156-59-2	cis-1,2-Dichloroethene	3570	25	13	ug/l	
156-60-5	trans-1,2-Dichloroethene	19.1	25	13	ug/l	J
78-87-5	1,2-Dichloropropane	ND	25	13	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	25	12	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	25	11	ug/l	
100-41-4	Ethylbenzene	ND	25	15	ug/l	
75-09-2	Methylene chloride	ND	50	25	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	25	16	ug/l	
127-18-4	Tetrachloroethene	ND	25	14	ug/l	
108-88-3	Toluene	ND	25	12	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	25	13	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	25	13	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-8S		
Lab Sample ID:	JD66839-10	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	18.8	25	13	ug/l	J
75-69-4	Trichlorofluoromethane	ND	50	10	ug/l	
75-01-4	Vinyl chloride	546	25	13	ug/l	
1330-20-7	Xylene (total)	ND	25	15	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		80-120%
17060-07-0	1,2-Dichloroethane-D4	93%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Dilution required due to high concentration of target compound.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-13		
Lab Sample ID:	JD66839-11	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128516.D	1	06/06/23 09:32	LD	n/a	n/a	V4D5700
Run #2 [b]	2U57130.D	20	06/06/23 15:55	KD	n/a	n/a	V2U2222

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [c]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	2.4	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	792 [d]	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	4.4	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-13		
Lab Sample ID:	JD66839-11	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.89	1.0	0.53	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	162	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%	102%	80-120%
17060-07-0	1,2-Dichloroethane-D4	90%	113%	80-120%
2037-26-5	Toluene-D8	95%	99%	80-120%
460-00-4	4-Bromofluorobenzene	95%	108%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-14		
Lab Sample ID:	JD66839-12	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2V97970.D	4	06/06/23 17:08	KD	n/a	n/a	V2V3941
Run #2 [b]	4D128500.D	20	06/06/23 02:01	LD	n/a	n/a	V4D5700

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

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	40	15	ug/l	
107-13-1	Acrylonitrile	ND	40	4.1	ug/l	
71-43-2	Benzene	ND	2.0	1.7	ug/l	
75-27-4	Bromodichloromethane	ND	4.0	1.8	ug/l	
75-25-2	Bromoform [c]	ND	4.0	2.5	ug/l	
74-83-9	Bromomethane [d]	ND	8.0	6.6	ug/l	
56-23-5	Carbon tetrachloride	ND	4.0	2.2	ug/l	
108-90-7	Chlorobenzene	ND	4.0	2.2	ug/l	
75-00-3	Chloroethane [d]	ND	4.0	2.9	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	40	14	ug/l	
67-66-3	Chloroform	ND	4.0	2.0	ug/l	
74-87-3	Chloromethane	ND	4.0	3.0	ug/l	
124-48-1	Dibromochloromethane	ND	4.0	2.2	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	4.0	2.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	4.0	2.2	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	4.0	2.0	ug/l	
75-71-8	Dichlorodifluoromethane	ND	8.0	2.2	ug/l	
75-34-3	1,1-Dichloroethane [e]	ND	4.0	2.3	ug/l	
107-06-2	1,2-Dichloroethane	ND	4.0	2.4	ug/l	
75-35-4	1,1-Dichloroethene	ND	4.0	2.4	ug/l	
156-59-2	cis-1,2-Dichloroethene	1150 [f]	20	10	ug/l	
156-60-5	trans-1,2-Dichloroethene	3.1	4.0	2.1	ug/l	J
78-87-5	1,2-Dichloropropane	ND	4.0	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	4.0	1.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	4.0	1.7	ug/l	
100-41-4	Ethylbenzene	ND	4.0	2.4	ug/l	
75-09-2	Methylene chloride	ND	8.0	4.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	4.0	2.6	ug/l	
127-18-4	Tetrachloroethene	ND	4.0	2.2	ug/l	
108-88-3	Toluene	ND	4.0	2.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	4.0	2.1	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	4.0	2.1	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-14		
Lab Sample ID:	JD66839-12	**Date Sampled:**	05/31/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	4.0	2.1	ug/l	
75-69-4	Trichlorofluoromethane	ND	8.0	1.6	ug/l	
75-01-4	Vinyl chloride	721 [f]	20	10	ug/l	
1330-20-7	Xylene (total)	ND	4.0	2.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	98%	80-120%
17060-07-0	1,2-Dichloroethane-D4	111%	93%	80-120%
2037-26-5	Toluene-D8	102%	95%	80-120%
460-00-4	4-Bromofluorobenzene	102%	95%	82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes. Dilution required due to high concentration of target compound.
(b) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(c) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.
(d) Associated CCV outside of control limits high, sample was ND. This compound in blank spike is outside in house QC limits bias high.
(e) This compound in blank spike is outside in house QC limits bias high.
(f) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
RL = Reporting 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:	MW-10R		
Lab Sample ID:	JD66839-13	**Date Sampled:**	06/01/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	2U57121.D	1	06/06/23 12:09	KD	n/a	n/a	V2U2222
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile [b]	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform [c]	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene [c]	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	18.3	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene [c]	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	MW-10R		
Lab Sample ID:	JD66839-13	**Date Sampled:**	06/01/23
Matrix:	AQ - Ground Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	2.5	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	112%		80-120%
2037-26-5	Toluene-D8	100%		80-120%
460-00-4	4-Bromofluorobenzene	105%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits high, sample was ND.
(c) This compound in blank spike is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD66839-14	**Date Sampled:**	06/01/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128497.D	1	06/06/23 00:36	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD66839-14	**Date Sampled:**	06/01/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	97%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD66839-15	**Date Sampled:**	06/01/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	4D128498.D	1	06/06/23 01:05	LD	n/a	n/a	V4D5700
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein [b]	ND	10	3.7	ug/l	
107-13-1	Acrylonitrile	ND	10	1.0	ug/l	
71-43-2	Benzene	ND	0.50	0.43	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.45	ug/l	
75-25-2	Bromoform	ND	1.0	0.63	ug/l	
74-83-9	Bromomethane	ND	2.0	1.6	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.55	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.56	ug/l	
75-00-3	Chloroethane	ND	1.0	0.73	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	10	3.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.50	ug/l	
74-87-3	Chloromethane	ND	1.0	0.76	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.56	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.53	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.51	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.56	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.57	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.60	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.59	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.51	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.51	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.47	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.43	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.60	ug/l	
75-09-2	Methylene chloride	ND	2.0	1.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.65	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	0.56	ug/l	
108-88-3	Toluene	ND	1.0	0.49	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.54	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.53	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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:	TRIP BLANK		
Lab Sample ID:	JD66839-15	**Date Sampled:**	06/01/23
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/02/23
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	DC Rollforms, 583 Allen Street, Jamestown, NY		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.53	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.40	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.52	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.59	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	92%		80-120%
2037-26-5	Toluene-D8	96%		80-120%
460-00-4	4-Bromofluorobenzene	95%		82-114%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) Associated CCV outside of control limits low. A sensitivity check was analyzed to demonstrate system suitability to detect affected analyte. Sample was ND.

ND = Not detected MDL = Method Detection Limit
RL = Reporting 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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Sample Tracking Chronicle
- Internal Chain of Custody

SGS

GW TB

CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

Page 1 of 2

FED-EX Tracking #:
Bottle Order Control #: MM-052423-52
SGS Quote #:
SGS Job #: JD66839

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City / State / Zip: Clifton Park, NY
Project Contact / E-mail: Todd Corrigan
Phone #: 518-488-9401
Sampler(s) Name(s) / Phone #: A. Svensson, B. Kudla-Wilkens

Project Information

Project Name: IR DC Rollforms
Street: 583 Allen St
City / State: Jamestown, NY
Project #: 30174313
Client Purchase Order #:
Project Manager: Michelle Jenkins

Billing Information (if different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

USEPA 8260C VOCs

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	Grab (G) / Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
1	ESI-6		5/30/23	1550	AJS	G	N	GW	3	X								X	
2	MW-12		5/30/23	1600	BKW	G	N	GW	3	X								X	
3	ESI-7		5/31/23	1220	AJS	G	N	GW	3	X								X	
4	DW-5		5/31/23	1010	AJS	G	N	GW	9	X								X	
5	DW-6		5/31/23	1100	AJS	G	N	GW	3	X								X	
6	MW-4		5/31/23	1525	AJS	G	N	GW	3	X								X	
7	ESI-1		5/31/23	1510	BKW	G	N	GW	3	X								X	
8	ESI-DUP		5/31/23	—	BKW	G	N	GW	3	X								X	
9	ESI-2		5/31/23	1410	BKW	G	N	GW	3	X								X	
10	MW-8S		5/31/23	1230	BKW	G	N	GW	3	X								X	
11	MW-13		5/31/23	1018	BKW	G	N	GW	3	X								X	
12	MW-14		5/31/23	0900	BKW	G	N	GW	3	X								X	

Initial Assessment JB-JW
Label Verification

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- [X] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via SGS Engage

* Approval needed for 1-3 BD TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [X] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [X] EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Semi-annual GWS
1-cooler
MS/MSD taken at OW-5

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

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

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 ANA	6/1/23 1000	1 Fedex	2 Fedex	6/1/23 10:15	2
3		3	4		4
5		5	Custody Seal #	Intact / Not Intact / Absent	Therm ID: / On Ice / Cooler Temp. °C: 3.5° IR#0

See Sample Receipt Summary

EHSA-QAC-0023-05 Rev.Date:8/5/22

JD66839: Chain of Custody
Page 1 of 3

CHAIN OF CUSTODY

Page 2 of 2

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200
www.sgs.com/ehsusa

FED-EX Tracking #: | Bottle Order Control #:
SGS Quote #: | SGS Job #: JD66839

Client / Reporting Information

Company Name: ARCADIS
Street Address: 855 Route 146, Suite 210
City / State / Zip: Clifton Park, NY
Project Contact / E-mail: Todd Carignan
Phone #: 518-488-9403
Sampler(s) Name(s) / Phone #: A. Svensson, B. Kudla-Williams

Project Information

Project Name: IR DC Rollforms
Street: 583 Allen St
City / State: Jamestown, NY
Project #: 30174313
Client Purchase Order #:
Project Manager: Michelle Jenkins

Billing Information (If different from Report to)

Company Name:
Street Address:
City / State / Zip:
Attention:

USEPA 8260C VOCs

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
SED - Sediment
OI - Oil
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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	Time	Sampled by	Grab (G) Comp (C)	Source Chlorinated (Y/N)	Matrix	# of bottles	HCl	NaOH	HNO_3	H_2SO_4	NONE	DI Water	MEOH	ENCORE	pH Check (Lab Use Only)	LAB USE ONLY
13	MW-10R		6/1/23	0805	BKW	G	N	GW	3	X								X	
14	TRIPBLANK		5/25/23	0800	—	G	N	TB	2	X								X	
15	TRIP BLANK		5/25/23	0800	—	G	N	TB	2	X								X	

Ref: MM-052423-52
Dep:
Date: 25May23
Wgt: 9.85 LBS
DV:
VOA: PRIORITY OVERNIGHT
TRK#: 5004 7972 0107

0.00 TOTAL:
SHIPPING: 0.00
SPECIAL: 0.00
HANDLING: 0.00
0.00

Turn Around Time (Business Days)

Approved By (SGS PM) / Date:

- [X] 10 Business Days
- [ ] 5 Business Days
- [ ] 3 Business Days*
- [ ] 2 Business Days*
- [ ] 1 Business Day*
- [ ] Other

All data available via SGS Engage

* Approval needed for 1-3 BD TAT

Deliverable

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] NJ Reduced (Level 3)
- [ ] Full Tier I (Level 4)
- [ ] Commercial "C"
- [ ] NJ DKQP
- [X] NYASP Category A
- [ ] NYASP Category B
- [ ] MA MCP Criteria
- [ ] CT RCP Criteria
- [ ] State Forms
- [X] EDD Format

Commercial "A" = Results only; Commercial "B" = Results + QC Summary
Commercial "C" = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Semi-annual GWs
1-cooler

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

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

Relinquished by:	Date / Time:	Received By:	Relinquished By:	Date / Time:	Received By:
1 MM AAM	6/1/23 1000	1 Fedex	2 Fedex	6/2/23 0814	2
3		3	4		4
5		5	Custody Seal #	Intact / Not intact / Absent	Therm ID: / On Ice / Cooler Temp. °C / See Sample Receipt Summary

SGS Sample Receipt Summary

Job Number: JD66839 **Client:** ARCADIS U.S., INC. **Project:** DC ROLLFORMS, 583 ALLEN STREET, JA

Date / Time Received: 6/2/2023 10:15:00 AM **Delivery Method:** FEDEX **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (3.5);

Cooler Temps (Corrected) °C: Cooler 1: (3.3);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 231619 pH 12+: 203117A Other: (Specify)

Comments

SM089-03
Rev. Date 12/7/17

Internal Sample Tracking Chronicle

Arcadis

Job No: JD66839

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD66839-1	Collected: 30-MAY-23 15:50 By: AJS		Received: 02-JUN-23 By: EN			
ESI-6						
JD66839-1	SW846 8260D	06-JUN-23 05:47	LD			V8260PPL
JD66839-2	Collected: 30-MAY-23 16:00 By: BKW		Received: 02-JUN-23 By: EN			
MW-12						
JD66839-2	SW846 8260D	06-JUN-23 06:15	LD			V8260PPL
JD66839-2	SW846 8260D	06-JUN-23 13:25	KD			V8260PPL
JD66839-3	Collected: 31-MAY-23 12:20 By: AJS		Received: 02-JUN-23 By: EN			
ESI-7						
JD66839-3	SW846 8260D	06-JUN-23 16:46	KD			V8260PPL
JD66839-4	Collected: 31-MAY-23 10:10 By: AJS		Received: 02-JUN-23 By: EN			
OW-5						
JD66839-4	SW846 8260D	06-JUN-23 01:33	LD			V8260PPL
JD66839-4	SW846 8260D	06-JUN-23 13:50	KD			V8260PPL
JD66839-5	Collected: 31-MAY-23 11:00 By: AJS		Received: 02-JUN-23 By: EN			
OW-6						
JD66839-5	SW846 8260D	06-JUN-23 07:11	LD			V8260PPL
JD66839-5	SW846 8260D	06-JUN-23 13:00	KD			V8260PPL
JD66839-6	Collected: 31-MAY-23 15:25 By: AJS		Received: 02-JUN-23 By: EN			
MW-9						
JD66839-6	SW846 8260D	06-JUN-23 07:39	LD			V8260PPL
JD66839-7	Collected: 31-MAY-23 15:10 By: BKW		Received: 02-JUN-23 By: EN			
ESI-1						
JD66839-7	SW846 8260D	06-JUN-23 08:07	LD			V8260PPL

Internal Sample Tracking Chronicle

Arcadis

Job No: JD66839

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD66839-8 ESI-DUP	Collected: 31-MAY-23 00:00 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-8	SW846 8260D	06-JUN-23 08:36	LD			V8260PPL
JD66839-9 ESI-2	Collected: 31-MAY-23 14:10 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-9	SW846 8260D	06-JUN-23 09:04	LD			V8260PPL
JD66839-10 MW-8S	Collected: 31-MAY-23 12:30 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-10	SW846 8260D	06-JUN-23 02:29	LD			V8260PPL
JD66839-11 MW-13	Collected: 31-MAY-23 10:18 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-11	SW846 8260D	06-JUN-23 09:32	LD			V8260PPL
JD66839-11	SW846 8260D	06-JUN-23 15:55	KD			V8260PPL
JD66839-12 MW-14	Collected: 31-MAY-23 09:00 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-12	SW846 8260D	06-JUN-23 02:01	LD			V8260PPL
JD66839-12	SW846 8260D	06-JUN-23 17:08	KD			V8260PPL
JD66839-13 MW-10R	Collected: 01-JUN-23 08:05 By: BKW		Received: 02-JUN-23 By: EN			
JD66839-13	SW846 8260D	06-JUN-23 12:09	KD			V8260PPL
JD66839-14 TRIP BLANK	Collected: 01-JUN-23 08:05 By:		Received: 02-JUN-23 By: EN			
JD66839-14	SW846 8260D	06-JUN-23 00:36	LD			V8260PPL

Internal Sample Tracking Chronicle

Arcadis

Job No: JD66839

DC Rollforms, 583 Allen Street, Jamestown, NY
Project No: 30174313

Sample Number	Method	Analyzed	By	Prepped	By	Test Codes
JD66839-15 Collected: 01-JUN-23 08:05 By: TRIP BLANK			Received: 02-JUN-23 By: EN			
JD66839-15	SW846 8260D	06-JUN-23 01:05	LD			V8260PPL

SGS Internal Chain of Custody

Job Number: JD66839
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 06/02/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD66839-1.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-1.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-1.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-1.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-1.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-1.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-1.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-2.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-2.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-2.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-2.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-2.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-2.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-2.2	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-2.2	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-2.2	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-2.2	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage
JD66839-2.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-3.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-3.1	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-3.1	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-3.1	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-3.1	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage
JD66839-3.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-3.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-3.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-3.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-3.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-3.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-4.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-4.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument

SGS Internal Chain of Custody

Job Number: JD66839
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 06/02/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD66839-4.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-4.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.4	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.5	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.6	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.6	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-4.6	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-4.6	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-4.6	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-4.7	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.7	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-4.7	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-4.7	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-4.7	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-4.8	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-4.8	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-4.8	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-4.8	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-4.8	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage
JD66839-4.9	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-5.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-5.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-5.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-5.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-5.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-5.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-5.2	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-5.2	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-5.2	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-5.2	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage
JD66839-5.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-6.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage

SGS Internal Chain of Custody

Job Number: JD66839
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 06/02/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD66839-6.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-6.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-6.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-6.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-6.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-6.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-7.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-7.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-7.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-7.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-7.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-7.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-7.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-8.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-8.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-8.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-8.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-8.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-8.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-8.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-9.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-9.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-9.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-9.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-9.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-9.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-9.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-10.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-10.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-10.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-10.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-10.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument

SGS Internal Chain of Custody

Job Number: JD66839
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 06/02/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD66839-10.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-10.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-11.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-11.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-11.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-11.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-11.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-11.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-11.2	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-11.2	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-11.2	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-11.2	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage
JD66839-11.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-12.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-12.1	Secured Storage	Kinjal Desai	06/06/23 14:06	Retrieve from Storage
JD66839-12.1	Kinjal Desai	GCMS2V	06/06/23 14:06	Load on Instrument
JD66839-12.1	GCMS2V	Kinjal Desai	06/07/23 15:36	Unload from Instrument
JD66839-12.1	Kinjal Desai	Secured Storage	06/07/23 15:36	Return to Storage
JD66839-12.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-12.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-12.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-12.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-12.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-12.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-13.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-13.1	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-13.1	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-13.1	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-13.1	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-13.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-13.2	Secured Storage	Kinjal Desai	06/06/23 15:19	Retrieve from Storage
JD66839-13.2	Kinjal Desai	GCMS2U	06/06/23 15:19	Load on Instrument
JD66839-13.2	GCMS2U	Kinjal Desai	06/07/23 15:16	Unload from Instrument
JD66839-13.2	Kinjal Desai	Secured Storage	06/07/23 15:16	Return to Storage

SGS Internal Chain of Custody

Job Number: JD66839
Account: AGMNYA Arcadis
Project: DC Rollforms, 583 Allen Street, Jamestown, NY
Received: 06/02/23

Sample.Bottle Number	Transfer FROM	Transfer TO	Date/Time	Reason
JD66839-13.3	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-14.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-14.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-14.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-14.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-14.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-14.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage
JD66839-15.1	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-15.2	Joe Waddington	Secured Storage	06/02/23 22:05	Return to Storage
JD66839-15.2	Secured Storage	Louie Devletter	06/05/23 17:49	Retrieve from Storage
JD66839-15.2	Louie Devletter	GCMS4D	06/05/23 17:49	Load on Instrument
JD66839-15.2	GCMS4D	Louie Devletter	06/06/23 09:21	Unload from Instrument
JD66839-15.2	Louie Devletter	Secured Storage	06/06/23 09:21	Return to Storage

Appendix G

Site Photographs

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 1

Date:
June 22, 2022

Description:
View of riverbank.



Photo: 2

Date:
June 22, 2022

Description:
View of riverbank

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252

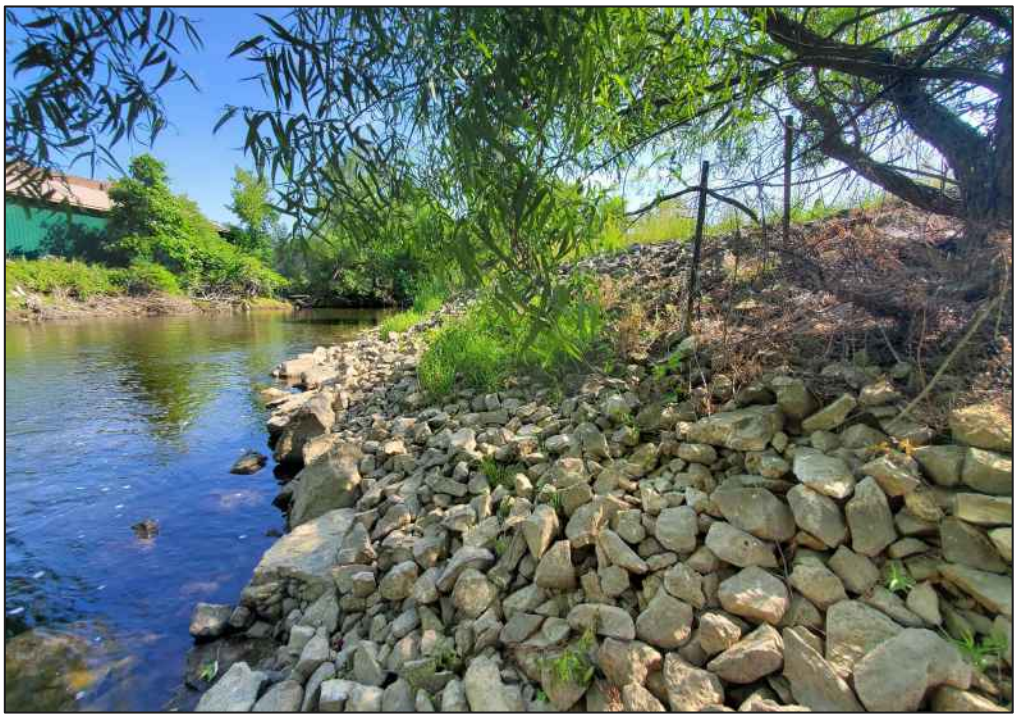


Photo: 3

Date:
June 22, 2022

Description:
View of riverbank.



Photo: 4

Date:
June 22, 2022

Description:
View of riverbank

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 5

Date:
July 19, 2022

Description:
View of land surrounding treatment building.



Photo: 6

Date:
July 19, 2022

Description:
View of land surrounding treatment building.

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 7

Date:
September 22, 2022

Description:
View of system valves.



Photo: 8

Date:
October 14, 2022

Description:
Monitoring wells MW-10R and VEP-12.

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 9

Date:
October 14, 2022

Description:
Low flow groundwater sampling.



Photo: 10

Date:
December 5, 2022

Description:
View of riverbank.

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 11

Date:
December 5, 2022

Description:
View of riverbank.



Photo: 12

Date:
December 5, 2022

Description:
View of riverbank and monitoring wells.

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 13

Date:
February 6, 2023

Description:
View of riverbank.



Photo: 14

Date:
February 6, 2023

Description:
View of riverbank.

Appendix G - Site Photographs

DC Rollforms Site
NYSDEC Site 907019
30054252



Photo: 15

Date:
February 6, 2023

Description:
View of riverbank.



Photo: 16

Date:
February 6, 2023

Description:
View of riverbank.

Appendix H

Institutional and Engineering Controls Certification Forms

Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form

Site Details **Box 1**

Site No. 907019

Site Name D.C. (Dow Craft) Rollforms

Site Address: 583 Allen Street Zip Code: 14701
City/Town: Jamestown
County: Chautauqua
Site Acreage: 2.380

Reporting Period: June 15, 2022 to June 15, 2023

	YES	NO
1. Is the information above correct?	X	☐
If NO, include handwritten above or on a separate sheet.		
2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	☐	X
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	X
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	X	☐
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.		
5. Is the site currently undergoing development?	☐	X

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	X	☐
7. Are all ICs in place and functioning as designed?	X	☐

IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____
Signature of Owner, Remedial Party or Designated Representative Date

SITE NO. 907019 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
387.08-3-18.1	AllMetal Press and Fabrication, Inc.	Site Management Plan Landuse Restriction Ground Water Use Restriction Soil Management Plan

Deed Restrictions (7/19/2005) Recorded - 11/29/2005:
1. Property use: Commercial or Industrial
2. Prohibition of use of groundwater.

Site Management Plan:Soils Management Plan and Inspections of Cover System, Rip Rap, Plantings, and Erosion.

Groundwater Collection and Treatment System Operation, Maintenance, and Monitoring.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
387.08-3-18.1	Groundwater Containment Subsurface Barriers Groundwater Treatment System Cover System ~~Air Sparging/~~Soil Vapor Extraction

Box 5

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

YES	NO
X	☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

   (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES	NO
X	☐

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

_____ _____

Signature of Owner, Remedial Party or Designated Representative Date

IC CERTIFICATIONS
SITE NO. 907019

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Todd Carignan (print name) at 855 Route 146 Suite 210, Clifton Park NY 12065 (print business address),

am certifying as Remedial Party (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

T. Carignan — Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

7/1/2023 — Date

EC CERTIFICATIONS

Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Moh Mohiuddin (print name) at 50 Millstone Rd, Bldg 200, Suite 220, East Windsor NY 08520 (print business address),

am certifying as a Professional Engineer for the Remedial Party, Arcadis (Owner or Remedial Party)

STATE OF NEW YORK
MOH MOHIUDDIN
LICENSED PROFESSIONAL ENGINEER
074521
(Required for PE)

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

07/01/2023
Date

Arcadis of New York, Inc.
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New York 12065
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