Periodic Review Report

Olean Redevelopment Parcel 2
Olean, New York
BCP Site No. C905032

April 2020 0370-016-001

Prepared For: Solean West LLC

Prepared By:

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PERIODIC REVIEW REPORT

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Olean Redevelopment Parcel 2

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1.0 INTRODUCTION

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) on behalf of Solean West LLC (Solean West) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site No. C905032, located in Olean, Cattaraugus County, New York (see Figure 1), commonly referred to as the Olean Redevelopment Parcel 2 (Site).

This PRR has been prepared for the Site in accordance with NYSDEC DER-10/Technical Guidance for Site Investigation and Remediation (May 3, 2010). This PRR and the NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form (see Appendix A) has been completed for the post-remedial activities at the Site for the period March 15, 2019 to March 15, 2020.

1.1 Site Background

The Olean Redevelopment Parcel 2 Site is a portion of a larger former refinery operation that operated in the Olean area from the mid-1800s through the 1950s. Separate refineries operated on the Site and were merged in 1902 into the Vacuum Oil Company, and then in 1931 became the Socony-Vacuum Oil Company until 1954 when the refinery closed (see Figure 2). The property was divided into multiple parcels in the 1960s. Felmont Oil Company (Felmont) constructed an anhydrous ammonia plant on the northern parcels where they manufactured ammonia from natural gas. Felmont sold the ammonia to Agway for use in manufacturing fertilizer at Agway's plant located on what is now referred to as Olean Redevelopment Parcel 1. In 1983, Agway purchased the portion of the Felmont site that included the ammonia production plant. Agway dismantled and sold both the ammonia and fertilizer plants in 1984.

The properties adjoining and in the neighborhood of the Site include commercial and industrial properties including a vacant former industrial site (Olean Redevelopment Parcel 1) remediated under the BCP and undergoing redevelopment for commercial use to the south; Southern Tier Rail line to the north; a former industrial site (Olean Redevelopment Parcel 3) remediated under the BCP and redeveloped as a commercial solar farm to the east; and a Verizon Service Center to the west.

A Remedial Action Work Plan (RAWP) was prepared and submitted by Olean Gateway, LLC in March 2014 and approved by NYSDEC to address the residual soil and groundwater remediation. The remedial program was successful in achieving the remedial objectives for the Site, and the Site Management Plan (SMP) and Final Engineering Report (FER) were approved by NYSDEC in October 2014 and December 2014. The Certificate of Completion (COC) was recorded on December 24, 2015.

The Site has been redeveloped as a photovoltaic solar system consisting of nominally 300 solar arrays to in-feed the nearby National Grid commercial electrical system (grid) as described in the 2017 PRR. Figures 2 and 3 illustrate the pre- and post-remediation site conditions.

1.2 Purpose and Scope

The SMP requires, among other things, periodic inspection and certification that the institutional and engineering controls implemented at the Site remain in place and are functioning as designed. This PRR serves that purpose as well as documenting post-remedial actions taken since the COC was issued and during this reporting period, if any.

2.0 SITE OVERVIEW

The Site is located at 1470 Buffalo Road, in the City of Olean, Cattaraugus County, New York and identified as Section 94.047 Block 2 and Lot 28.1 on the Cattaraugus County Tax Map (see Figure 4). The Site is an approximately 9.1-acre area and is bounded by the Southern Tier Rail Authority railroad tracks to the north, the Olean Redevelopment Parcel 1 (NYSDEC BCP Site C905031) to the south, the Olean Redevelopment Parcel 3 (NYSDEC BCP Site C905033) to the east, and Verizon Service Center to the west. The owner of the Site at the time of issuance of the SMP was Olean Gateway LLC. Site ownership was transferred to Solean West LLC in 2016.

Remedial activities conducted between 2010 and 2015 were completed in accordance with the approved Interim Remedial Measures (IRM) Work Plan and RAWP. The remedial activities included:

Interim Remedial Measures

IRMs were previously performed in 2010 by ExxonMobil in accordance with the IRM Work Plan. The IRM Report for the Buffalo Street properties (referred to previously as BCP Site Nos. 1, 2 & 3) was prepared in March 2011 prior to the property being purchased by Olean Gateway. The previous IRM activities associated with the Olean Redevelopment Site 2 consisted of the following:

- Closure/removal of several structures/tanks:
    - One vault structure (20'x20'x8' deep) contained sediment/soil on the bottom of the vault, samples of which did not indicate the presence of significant levels of organics. The vault was closed in-place by filling with sand.
    - Two approximate 3,500-gallon and one 13,000-gallon steel underground storage tanks (USTs) were found by W&C that, when found, contained sand. A sample of the sand contained only minor detections of organics and, as such, the USTs were considered "closed in-place" by the NYSDEC.
    - Ten USTs were identified on the western portion of the Site. The USTs were believed to be process tanks associated with wax manufacturing. Liquid and solid samples from the tanks contained minor concentrations of organics. The size of the tanks ranged from approximately 700 to 2,300 gallons. The tanks were removed from the Site.

- Recovery of measurable light non-aqueous phase liquid (LNAPL) from groundwater monitoring wells via sorbent socks.

Remedial Actions

The following is a summary of the remedial actions completed by Olean Gateway at the Olean Redevelopment Parcel 2:

- Approximately 2,715 tons of arsenic-contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY.
- Approximately 143 tons of mercury-contaminated soil/fill was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY.
- Approximately 638 tons of grossly contaminated petroleum soils (GCPS) was excavated, loaded, and transported off-site by D&H Excavating for disposal at Waste Management's Chaffee Landfill, located in Chaffee, NY.
- Approximately 33,767 linear feet of subsurface metallic product piping (steel, cast iron, lead and copper) was exposed, tapped, evacuated of contents, removed, cleaned and recycled. An additional 156 linear feet of wood pipe was also exposed, tapped, evacuated of contents, removed, cleaned and disposed off-site. Piping that extended beyond the property boundary was capped and/or grouted at the apparent property line. Approximately 240 cubic yards of GCPS was excavated during piping removal activities and treated on the on-site force vented biopiles (FVBPs) and reused as backfill below the cover system.
- Approximately 25, 55-gallon drums were generated from the removal of the abandoned subsurface piping. The contents of the piping included LNAPL, residual pipe scale, and product sludge. The drums were disposed at CWM Chemical Services, LLC, located in Model City, NY. Water extracted from excavations during piping removal was pumped into holding tanks, treated with bag filters and granular activated carbon (GAC) on-site, pumped into a secondary on-site temporary holding tank, sampled, and discharged to the City of the Olean sanitary sewer with approval under an Industrial Pretreatment Program permit.
- A soil vapor extraction (SVE) system was installed and operated to address GCPS remaining in-place in the deeper soil/fill from approximately 2 to 15 fbgs. The SVE system included the installation of 13 SVE wells, associated conveyance piping, and placement of one trailer-mounted SVE blower (refer to Figure 6). Emissions from the SVE system are controlled using a biofilter contained within an approximate 20-foot by 8-foot steel roll-off box outfitted with perforated pipe. The biofilters

contain an approximate 1-foot thick gravel layer at the base of the box overlain by approximately 3 feet of wood chip and compost filter medium, which allowed the naturally occurring microbes to bioremediate the air stream and control the nuisance odors from the SVE system.

- LNAPL recovery was completed using hydrocarbon absorbent socks at monitoring well WCMW1 and a product pump at W14. LNAPL thicknesses at these two groundwater monitoring well locations varied from 0 to 6.5 feet in W14 and 0.02 to 0.6 feet in WCMW1 in 2014-2015; there was no evidence of LNAPL in WCMW4 in 2014-2015. During LNAPL monitoring events, the socks were wrung of product and reinstalled. The volume of recovered LNAPL from well W14 was approximately 48 gallons and well WCMW1 0.5 gallons. Recovered product was transferred to properly labeled and sealed 55-gallon drums at the Site for future off-site disposal. Socks with obvious staining/saturation of LNAPL were removed and replaced with new socks.
- A final cover system consisting of a demarcation layer, minimum 12 inches of clean imported soil, and vegetation was installed at the Site in April-May 2015. Prior to redevelopment, the vegetation was established across the Site.
- An Environmental Easement was executed in December 2015 between Olean Gateway and NYSDEC, and recorded with the deed in the Cattaraugus County Clerk's office to restrict land use to commercial/industrial operations; restrict the use of groundwater as a source of potable or process water without necessary water quality treatment as determined by the NYSDOH or County DOH; and prevent future exposure to any contamination remaining at the Site.

Development and implementation of the SMP for management of remaining contamination as required by the Environmental Easement., which includes plans for (1) institutional and engineering controls, (2) excavation, (3) monitoring and reporting, and, (4) operation and maintenance.

2.1 Site Redevelopment Activities

The Site was sold by Olean Gateway to Solean West in March 2016. Solean West leases the land to the Solar Company. The COC was transferred from Olean Gateway on June 21, 2016 to Solean West LLC (Solean West) and 1470B PV LLC (Solar Company). The Site was redeveloped, in accordance the NYSDEC-approved August 31, 2016 Work Plan for Redevelopment Activities, as a photovoltaic solar system consisting of nominally 300 solar arrays to in-feed the nearby National Grid commercial electrical system (grid). Redevelopment

construction began in October 2016 and was substantially complete as of the date of the 2017 PRR. Solar facility construction activities included installation of a new access road, concrete pad, aboveground equipment, power poles, fence gates and support poles, and conduits. Two power poles, four equipment support poles, four gate posts, fence posts, and a small amount of conduit (for Verizon/National Grid communications) penetrated through the cover system; all other construction activities occurred on the ground surface or above the demarcation layer. No additional redevelopment activities occurred during this reporting period.

3.0 SITE MANAGEMENT PLAN

An SMP was prepared for the Site and approved by the Department on November 2015. The SMP includes a Monitoring and Sampling Plan, an Operation & Maintenance (O&M) Plan, an Excavation Work Plan (EWP), and a copy of the Environmental Easement. A brief description of the components of the SMP is presented below.

3.1 Monitoring and Sampling Plan

The monitoring and sampling plan specifies the methods used for sampling of:

- LNAPL monitoring and collection.
- Sampling and analysis of groundwater.
- Remedial SVE system monitoring.
- Site-wide inspection.
- Evaluating Site information periodically to confirm that the remedy continues to be effective in protecting public health and the environment.

3.1.1 LNAPL Monitoring/Recovery System

LNAPL has historically been detected in two monitoring wells on the Site: WCMW1 and W14. Table 1 presents a summary of the monthly LNAPL measurements for the period of July 17, 2014 through February 27, 2020. During the March 15, 2019 to March 15, 2020 reporting period, the LNAPL thickness ranged from not detectable to 0.30 feet in well WCMW1; LNAPL was not detected in well WMCW4. Recoverable product was measured at well W14 during several of the non-detectable monthly product measurements, but any recoverable product generated by the belt skimmer went directly into an on-site storage drum for disposal. LNAPL is recovered via usage of hydrocarbon absorbent socks in well WCMW1. The adsorbent socks are installed in the well at the LNAPL/water interface. During monthly inspections, socks that had obvious staining/saturation of LNAPL are removed and replaced with new socks. As indicated on Table 1, well WCMW1 had sock change-outs in March and April 2019. An oil skimmer was installed in well W14 in September 2015 and replaced in July 2016. Approximately 11 gallons of LNAPL were recovered from well W14 this reporting period. No LNAPL was recovered from wells WCMW1 and WCMW4 during this reporting

period. Used socks and recovered oil were containerized in drums, labeled, and characterized for off-site disposal. Drums will be shipped when they are full.

3.1.2 Groundwater Sampling and Analysis

The SMP requires annual groundwater monitoring starting in 2018 (semi-annual monitoring was completed prior to 2018). Benchmark completed the annual groundwater monitoring event July 9-10, 2019. Four wells (WCMW4, W13, W17, and W28) were sampled using the procedures in the approved SMP. A groundwater sample was obtained from each well and analyzed for target compound list (TCL) volatile organic compounds (VOCs) and tentatively identified compounds (TICs) using USEPA Method 8260; semi-VOCs and TICs via USEPA Method 8270; and arsenic and lead using USEPA Method 6010. Appendix C includes field notes from the groundwater sampling event and the laboratory analytical data package. Table 2 summarizes groundwater elevations from 2012 through 2019. Tables 3 and 4 summarize the 2019 analytical results as well as historic groundwater quality data.

3.1.2.1 Results

Groundwater Elevations

The groundwater elevations (Table 2) were contoured as shown on Figure 6 using July 2019 water level data. Overall groundwater flow direction in the uppermost sand and gravel aquifer is toward the south consistent with the prior groundwater contour maps. Monitoring wells W13, W28 and W17 are upgradient wells, and wells W28, W17, and WCMW4 are downgradient wells. Monitoring wells W28, W17, and WCMW4 are downgradient of SVE System 2-SVE-1 (refer to Figure 7).

Analytical Data

Analytical results from the most recent post-COC sampling event (July 2019) is presented in Table 3 for VOCs and SVOCs and Table 4 for metals.

VOCs

Groundwater samples from wells WCMW4, W13, and W28 did not contain VOC concentrations above NYSDEC Class GA groundwater quality standards (GWQSs). Results

from well W17 indicated three VOCs slightly above GWQSs: benzene at 5.2 ug/L (compared to the GWQS of 1 ug/L), and isopropylbenzene at 9.1 ug/L and xylene at 80 ug/L (compared to GWQS of 5 ug/L). VOC-TIC concentrations were of the same order of magnitude as prior testing results without any apparent trend.

SVOCs

SVOCs were not detected in wells WMCW4 and W28. Phenanthrene was detected in wells W13 and W17 at concentrations above its GWQS; however, both were flagged with the "J" and "B" qualifiers indicating the results were estimated and the compound was found in the blank as well as the sample. SVOC-TIC concentrations were of the same order of magnitude as prior testing results without any apparent trend.

Metals

Arsenic (140 ug/L) and lead (29 ug/L) exceeded GWQSs (25 ug/L) in well WCMW4. The increased arsenic concentration over that observed in June 2018 results is attributable to the turbid nature (>1,000 NTU) of the groundwater analyzed. The well was bailed dry and only recovered enough to collect the minimum groundwater necessary for analysis.

3.1.3 SVE System and Monitoring

The SVE system (referred to as 2-SVE-1) has been in operation at Olean Redevelopment Parcel 2 since October 2014. The SVE system is comprised of two main components:

1. The collection system is a constructed of a series of vertical extraction wells and extraction well manifold piping.
2. The trailer-mounted mechanical SVE system consists of the blower, motor and ancillary equipment that generates the vacuum and moves the extracted vapor to the biofilter.

The blower is manifolded to a series of 13 wells designated 2-SVE-1 through 2-SVE-13 (refer to Figure 7). The extracted air is conveyed through 4" PVC piping installed below grade from the wells to the blower. Figure 7 shows the approximate piping network. The extracted air is treated in a biofilter prior to discharge to the atmosphere. The biofilter treatment medium consists of a mixture of compost and mulch (approx. 50% each by weight).

The natural bacteria in the biofilter use the organics in the waste stream as a source of energy. The biofilter medium needs to be maintained in a slightly wet state and periodically mixed (fluffed-up). Biofilter media requires mixing when nuisance odors become an issue or when a thick cake layer forms on top preventing proper venting. The top 4-6 inches of the biofilter media is mixed/raked periodically to keep the media broken up and loose. This was last completed in July 2019. Raking of the biofilter material is recorded on Table D-1.

3.1.3.1 Results

SVE system 2-SVE-1 has been successful in removing volatile organic vapors from the subsurface soil/fill. Appendix D presents a summary of monitoring data and a graphic chart. The estimated mass of organic petroleum hydrocarbon removed through February 27, 2020 is 6,895 pounds. The rate of removal for 2-SVE-1 has decreased from about 69 pounds per day during the initial mass removal to about 0.2 pounds per day in 2019/2020. SVE system 2-SVE-1 entrains water from the subsurface, which is believed to inhibit the effective removal of organic vapors from the soil/fill when the water table is high (e.g., late winter and spring).

Benchmark completed a system check on October 29, 2019 and February 6, 2020. Individual SVE well PID readings as well as the 2-SVE-1 system PID and vacuum readings were taken to confirm the system is running within specifications (refer to Table D-2 in Appendix D). During the April 2019 system check, PID readings from the individual wells ranged from 0 to 86.0 ppm. The individual well readings for the February 2020 were much lower ranging from 0.1 to 21.8 ppm.

The system influent PID concentration decreased from 3.8 ppm in October 2019 to 0.8 ppm in February 2020. The effluent PID concentration decreased from 0.1 ppm in October (operating at 56 inches of H_2O vacuum) to 0.0 ppm in February (operating at 62 inches of H_2O vacuum). The individual well readings in October 2019 were higher in wells 2-SVE-3 and 2-SVE-6 than readings taken during the system check performed in April 2019.

3.1.4 Discussion of Monitoring Results

The results of the LNAPL monitoring show a decrease in the amount of LNAPL present in wells WCMW1 and W14. Well WCMW4 has had no detectable amount of LNAPL since the completion of remediation in December 2015. Groundwater quality has either improved or remained the same at all monitoring wells. The groundwater quality at wells W13,

W28, and WCMW4 meets NYSDEC GWQS for organics. GWQSs for three VOCs are still exceeded at well W17 (downgradient) but results have improved compared with previous post-remediation groundwater sampling events. Monitoring wells W13, W17, and W28 met the GWQS for arsenic and lead. Monitoring well WCMW4 exceeded the GWQS for lead and arsenic. The SVE system has been effective in removing organics vapors from the vadose zone except when the water table is high, which is believed to be from the system entraining water inhibiting the effective removal of organic vapors from the soil/fill. SVE system 2-SVE-1 has shown a diminished organic removal rate.

3.2 Operation & Maintenance Plan

The O&M Plan addresses operation and maintenance for the SVE systems.

3.2.1 SVE System

3.2.1.1 Routine System Operation and Maintenance

The SVE system is designed to require little maintenance over the expected duration of use at the Olean Redevelopment Parcel 2 Site. The blower bearing housing is oil-filled and is checked once per month. If the level is below the overflow, SAE 40 weight oil is added through the top fill port of the housing. Grease fittings for the blower shaft are topped off periodically (i.e., every 2 months).

3.2.1.2 System Monitoring Devices and Alarms

Monitored system operating conditions that trigger a local (red panel light) and remote (common autodialer channel) alarm condition include low air vacuum, high air pressure, moisture separator tank high level, condensate tank high level, and heater/exhaust fan failure. Except for heater/exhaust fan failure, these alarm conditions automatically shut down the SVE system. A trailer entry (security) relay also triggers a local and remote alarm but does not cause system shutdown. Blower and condensate pump failure (e.g., due to thermal overload, power loss, or manual shut down) also triggers the autodialer. If the SVE system alarm is activated, the autodialer will contact Benchmark. Based on the alarm fault, Benchmark will respond and/or contact the appropriate repair vendor (e.g. electrician, mechanical repair service).

There was one short-term SVE system shutdowns during the 2019/2020 reporting period. As indicated on Table D-1, the system was temporarily shut down from January 20 to February 6, 2020 due to frozen piping.

3.2.2 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines the requirements for the Site to certify and attest that the institutional controls and/or engineering controls (IC/ECs) employed at the Site are unchanged from the previous certification. The annual certification primarily consists of an annual Site Inspection to complete the NYSDEC's IC/EC Certification Form. The Site inspection will verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

A Site inspection of the property was conducted on March 11, 2020 by a Benchmark licensed professional engineer who meets the requirements of a Qualified Environmental Professional (QEP). No observable indication of intrusive activities or use of groundwater were noted during the Site inspection.

Appendix A includes the completed Site Management PRR Notice – IC/ECs Certification Form. Appendix B is a photolog showing the condition of the Site at the time of the March 11, 2020 inspection.

3.3 Excavation Work Plan

An Excavation Work Plan (EWP) was included in the approved SMP for the Site. The EWP provides guidelines for the management of soil and fill material during intrusive actives. There were no intrusive activities during the time of the PRR.

As detailed in the Environmental Easements, several IC/ECs need to be maintained as a requirement of the BCA for the Site.

3.3.1 Institutional Controls

- Groundwater-Use Restriction: The use of groundwater for potable and non-potable purposes is prohibited.
- Land-Use Restriction: The controlled property may be used for commercial and/or industrial use.
- Implementation of the SMP including the O&M Plan and EWP.

3.3.2 Engineering Controls

- Vapor Mitigation: There are no buildings on the Site and, as such, no active sub-slab depressurization (ASD) systems exist.
- SVE System: The SVE system has been operated and monitored since October 2014 and continues to operate.
- LNAPL Recovery/Monitoring: LNAPL recovery and monitoring has been performed monthly via absorbent socks in well WCMW1 and an oil skimmer in well W14.
- Groundwater Monitoring: Annual sampling was completed in July 2019.
- Cover System: The cover system is intact and functioning as intended.

At the time of the Site inspection, the Site was compliant with all IC/EC requirements.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

At the time of the inspection, the Site complied with the SMP. Specifically, the Site is compliant with the ICs including land-use restrictions, groundwater-use restrictions, and the EWP component. The Site is compliant with the ECs as described below:

- Long-term groundwater monitoring indicates a gradual improvement in the post-remedial groundwater quality. NYSDEC Class GA GWQSs were only exceeded for three VOCs in Well W17 and lead/arsenic in Well WCMW4; arsenic concentrations were attributable in part to the turbidity of the sample. GWQSs were met at the other on-site wells.
- Oil skimming from Well W14 has resulted in the total recovery of approximately 183 gallons of LNAPL, including approximately 11 gallons of LNAPL this reporting period.
- The rate of removal for 2-SVE-1 has decreased from about 69 pounds per day during the initial mass removal to about 0.2 pounds per day in 2019/2020. Vapor mass removal has experienced an asymptotic reduction over the life of the system, which is an expected occurrence reflective of improvement in subsurface soil quality.

4.2 Recommendations

Groundwater samples with high turbidity will be filtered by the laboratory and analyzed for dissolved metals.

On November 18, 2019, Solean West submitted a request to NYSDEC with verification soil/fill sampling data for consideration of termination of the SVE operation since the VOC removal has leveled off as evidenced by the data submitted in this PRR. The request detailed the conditions of the SVE discontinuation referenced in the SMP: "SVE discontinuation will be based on the reduction of VOC concentrations in the untreated air samples, the soil/fill samples (pre- and post-treated), and the rate of mass removal of volatile organics by the SVE system. Once monitoring data indicates that the SVE system is no longer effective (i.e., when the mass removal of contaminants stabilizes to a diminished rate for several monitoring periods), a proposal to discontinue the SVE system will be submitted." Also submitted in the request was data showing a reduction of VOC concentrations of

untreated air and soil/fill samples. The Department replied on January 6, 2020 stating that system shutdown was not approved; however, the SVE operation could be reduced and optimized to focus on treating areas that still show impact.

After further discussions with the Department, an additional request was filed on March 16, 2020[1]. This request proposes the following revisions to the SMP for operation of SVE System 2-SVE-1 effective immediately:

- Discontinue operation of the eastern leg of the SVE system, which includes SVE wells 2-SVE-8 through 2-SVE-13.
- Continue operating SVE wells 2-SVE-2 through 2-SVE-6 and shutting off wells 2-SVE-1 and 2-SVE-7 due to consistently low wellhead PID readings and to obtain higher vacuum at the operating wells.
- Continue PID readings at SVE wellheads 2-SVE-1 through 2-SVE-13.
- Discontinue operation of the SVE system during the winter months (December through March) with startup once temperatures are consistently above 32°F.

On April 1, 2020[2] the Department issued an approval of the proposed reduction in SVE system operation, which will supersede the operational requirements of the SMP.

[1] Benchmark Environmental Engineering & Science, PLLC. March 16, 2020 Letter to NYSDEC Re: SMP Revision 1: Operation of SVE System 2-SVE-1 Olean Redevelopment Parcel 2 (Site No. C905032).

[2] New York State Department of Environmental Conservation. April 1, 2020 Letter to Mr. Paul Curran, Solean West LLC, Re: Olean Redevelopment Parcel 2 #C905032, Olean (C), Cattaraugus County, Soil Vapor Extraction (SVE) Operation.

5.0 DECLARATION/LIMITATION

Benchmark Environmental Engineering & Science, PLLC personnel conducted the annual site inspection for BCP Site No. C905032, Olean, New York, according to generally accepted practices. This report complies with the scope of work provided to Solean West LLC by Benchmark Environmental Engineering & Science, PLLC.

This report has been prepared for the exclusive use of Solean West LLC. The contents of this report are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of Solean West LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

TABLES

TABLE 1
SVE SYSTEM 2-SVE-1 LNAPL MONITORING AND COLLECTION LOG

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

Date	Inspector's Initials	WCMW1						WCMW4						W14						
		Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Accumulated Volume Collected (gallons)	Skimmer Operational?
7/17/14	SF	Y	20.27	20.29	0.02	0	N	N	NA	15.22	0	0	N	See note					--	NA
10/29/14	JJR	Y	23.19	23.52	0.33	0	Removed	N	NA	18.88	0	0	N	Y	20.86	25.66	4.8	4	4	NA
11/5/14	JJR	Y	22.93	23.55	0.62	0.4	NA	N	NA	18.72	0	0	N	Y	20.55	26.71	6.16	0	4	NA
11/13/14	JJR	Y	22.76	23.1	0.34	0	NA	N	NA	18.66	0	0	N	Y	21.41	26.43	5.02	5	9	NA
12/15/14	JJR	Y	22.04	22.31	0.27	0	NA	N	NA	17.72	0	0	N	Y	19.64	25.26	5.62	5	14	NA
1/15/15	JJR	Y	21.21	21.42	0.21	0	NA	N	NA	16.61	0	0	N	Y	18.91	24.97	6.06	See Notes	14	NA
2/27/15	BMG	Y	22.65	22.98	0.33	0.1	Y	N	NA	19.13	0	0	N	Y	20.3	25.95	5.65	5	19	NA
3/11/15	BMG	--	--	--	--	--	--	--	--	--	--	--	--	Y	20.78	23.55	2.77	4	23	NA
3/12/15	BMG	--	--	--	--	--	--	--	--	--	--	--	--	Y	20.97	24.15	3.18	3	26	NA
3/13/15	BMG	--	--	--	--	--	--	--	--	--	--	--	--	Y	20.66	23.13	2.47	3.3	29	NA
3/16/15	BMG	--	--	--	--	--	--	--	--	--	--	--	--	Y	19.67	25.2	5.53	5	34	NA
4/6/15	BMG	Y	20.32	20.34	0.02	0	Y	N	NA	14.6	0	0	N	Y	17.98	18.93	0.95	2	36	NA
7/2/15	BMG	N	NA	20.75	0	0	Y	N	NA	13.41	0	0	N	Y	18.42	22.85	4.43	3.5	40	NA
9/2/15	PWW	Y	22.92	22.95	0.03	0	N	N	NA	18.59	0	0	N	Y	20.38	27.0	6.62	5	45	NA
9/3/15	PWW	--	--	--	--	--	--	--	--	--	--	--	--	Y	20.51	25.59	5.08	3.5	48	NA
9/29/15	PWW	Y	23.19	23.26	0.07	0	Y	N	NA	18.59	0	0	N	Y	20.87	26.21	5.34	See Notes	--	NA
10/14/15	PWW	Y	22.88	22.91	0.03	0	N	N	NA	19.04	0	0	NA	Y	22.75	29.3	6.55	--	--	Y
10/28/15	ML	Y	22.74	22.75	0.01	0	Y	N	NA	18.83	0	0	NA	Y	23.61	27.62	4.01	--	--	Y
11/11/15	ML	Y	22.32	22.34	0.02	0	Y	N	NA	18.28	0	0	NA	Y	23.38	27.98	4.6	--	--	Y
11/24/15	ML	Y	22.06	22.07	0.01	0	N	N	NA	18	0	0	NA	Y	23.01	28.16	5.15	--	--	Y
12/9/15	ML	Y	21.8	22.19	0.39	0	N	N	NA	17.21	0	0	NA	Y	23.04	23.36	0.32	--	--	Y
12/22/15	ML	Y	21.76	21.82	0.06	0	N	N	NA	16.78	0	0	NA	Y	23.23	23.46	0.23	--	--	Y
1/5/16	ML	Y	20.31	20.34	0.03	0	N	N	NA	15.03	0	0	NA	Y	21.57	21.94	0.37	--	--	Y
2/2/16	ML	Y	20.94	20.96	0.02	0	N	N	NA	13.04	0	0	NA	Y	22.18	22.29	0.11	--	--	Y
3/1/16	ML	Y	20.3	20.32	0.02	0	N	N	NA	13.25	0	0	NA	Y	21.49	21.69	0.2	--	--	Y
4/12/16	BG	N	NA	23.31	NA	0	Y	N	NA	11.31	0	0	NA	Y	22.09 (Note 1)	22.3	0.21	--	--	Y
5/4/16	ML	Y	20.52	20.53	0.01	0	N	N	NA	12.66	0	0	NA	Y	21.64	21.83	0.19	--	--	Y
6/2/16	ML	Y	21.69	21.71	0.02	0	N	N	NA	16.42	0	0	NA	Y	22.68	23.29	0.61	--	--	Y
7/6/16	BMG	Y	23.1	DRY	NA	<0.1	Y	N	NA	18.77	0	0	NA	Y	24.18	28.2	4.02	--	--	Y
7/15/16	BMG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	40	Note A	Y
8/1/16	BMG	Y	24.0	24.25	0.25	<0.1	Y	N	NA	18.51	0	0	NA	Y	25.85	25.85	0	--	--	Y
8/12/16	BMG	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	45	Note B	Y
9/19/16	BMG	Y	23.93	24.03	0.1	<0.1	Y	N	NA	14.86	0	0	NA	Y	25.5	28.8	3.3	47	Note C	Y
10/27/16	BMG	N	NA	21.86	0	<0.1	N	N	NA	17.18	0	0	NA	Y	22.95	22.97	0.02	--	--	Y
11/22/16	BMG	N	NA	22.11	0	0	N	N	NA	17.74	0	0	NA	Y	NA	23.23	NA	--	--	Y
12/21/16	BMG	N	NA	21.55	0	0	N	N	NA	15.72	0	0	NA	Y	22.7	22.74	0.04	--	--	Y
1/5/17	BMG	N	NA	20.38	0	0	N	N	NA	11.57	0	0	NA	Y	21.6	21.62	0.02	--	--	Y
2/14/17	BMG	N	NA	18.9	0	0	N	N	NA	11.4	0	0	NA	Y	19.9	19.92	0.02	--	--	Y
3/28/17	BMG	N	NA	20.14	0	0	N	N	NA	14.27	0	0	NA	Y	21.1	21.15	0.05	--	--	Y
4/11/17	BMG	N	NA	19.41	0	0	N	N	NA	12.91	0	0	NA	Y	20.4	20.42	0.02	--	--	Y
5/30/17	BMG	N	NA	20.35	0	0	N	N	NA	15.49	0	0	NA	Y	21	21.31	0.31	1	48	Y
6/28/17	BMG	N	NA	21.45	0	0	N	N	NA	16.48	0	0	NA	Y	22.5	22.51	0.01	0	48	Y
7/24/17	BMG	N	NA	22.25	0	0	N	N	NA	18.86	0	0	NA	Y	23.25	23.46	0.21	1	49	Y
8/9/17	CFD	N	NA	23.06	0	0	N	N	NA	18.86	0	0	NA	Y	24.05	24.15	0.1	6	55 (Note D)	Y
9/26/17	CFD	Y	23.71	23.85	0.14	0.2	Y	N	NA	18.52	0	0	NA	Y	23.95	23.99	0.04	2	5	Y
10/26/17	CFD	Y	24.02	24.12	0.1	0.1	Y	N	NA	18.64	0	0	NA	Y	25.31	25.32	0.01	2	7	Y
11/28/17	CFD	N	NA	24.05	0	0	N	N	NA	18.32	0	0	NA	Y	23.85	23.97	0.12	2	9	Y
12/26/17	CFD	N	NA	24.01	0	0	N	N	NA	16.42	0	0	NA	Y	21.89	21.93	0.04	3	12	Y
1/25/18	CFD	N	NA	23.68	0	0	N	N	NA	15.92	0	0	NA	N	NA	20.92	Note E	5	17	Y
2/15/18	CFD	N	NA	20.43	0	0	Y	N	NA	12.68	0	0	NA	N	NA	21.33	Note E	7	24	Y
3/12/18	CFD	N	NA	19.56	0	0	N	N	NA	12.26	0	0	NA	N	NA	20.35	Note E	1	25	Y

TABLE 1
SVE SYSTEM 2-SVE-1 LNAPL MONITORING AND COLLECTION LOG

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

Date	Inspector's Initials	WCMW1						WCMW4						W14						
		Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Change Absorbent Sock? (Y / N)	Product Present? (Y / N)	Product Depth (fbTOR)	Water Level (fbTOR)	Product Level (feet)	Product Recovered (gallons)	Accumulated Volume Collected (gallons)	Skimmer Operational?
4/27/18	CFD	N	NA	19.06	0	0	N	N	NA	12.56	0	0	NA	N	NA	20.84	Note E	1	26	Y
5/24/18	CFD	Y	21.02	21.05	0.03	0.05	Y	N	NA	13.15	0	0	NA	N	NA	21.24	Note E	0.25	26.25	Y
6/28/18	CFD	N	NA	21.48	0	0	N	N	NA	14.04	0	0	NA	N	NA	21.86	Note E	0.25	26.5	Y
7/17/18	CFD	Y	22.58	22.61	0.03	0.05	Y	N	NA	16.78	0	0	NA	N	NA	23.6	Note E	0.5	27	Y
8/11/18	CFD	Y	22.12	22.14	0.02	0.2	Y	N	NA	16.84	0	0	NA	N	NA	23.45	Note E	2	29	Y
9/24/18	CFD	N	NA	21.9	0	0	N	N	NA	17	0	0	NA	N	NA	22.93	Note E	3	32	Y
10/15/18	CFD	Y	21.01	21.03	0.02	0.1	Y	N	NA	16.96	0	0	NA	N	NA	21.94	Note E	0.5	32.5	Y
11/29/18	CFD	N	NA	21.14	0	0	N	N	NA	16.62	0	0	NA	N	NA	21.53	Note E	0.5	33	Y
12/20/18	CFD	N	NA	22.16	0	0	N	N	NA	15.14	0	0	NA	N	NA	21.10	Note E	0.25	33.25	Y
1/21/19	CFD	N	NA	20.31	0	0	Y	N	NA	15.02	0	0	NA	N	NA	20.62	Note E	0.25	33.5	Y
2/13/19	CFD	Y	19.03	19.06	0.03	0.2	Y	N	NA	14.8	0	0	NA	N	NA	19.89	Note E	1.5	35	Y
3/21/19	CFD	Y	20.08	20.09	0.01	<0.1	Y	N	NA	13.72	0	0	NA	N	NA	21.00	Note E	1.0	36	Y
4/24/19	CFD	N	NA	20.67	0	0	Y	N	NA	16.64	0	0	NA	N	NA	21.60	Note E	0	36	Y
5/24/19	CFD	N	NA	20.27	0	0	N	N	NA	15.73	0	0	NA	N	NA	21.05	Note E	0.25	36.25	Y
6/21/19	CFD	N	NA	19.98	0	0	N	N	NA	15.01	0	0	NA	N	NA	20.86	Note E	0	36.25	Y
7/30/19	CFD	N	NA	20.12	0	0	N	N	NA	15.1	0	0	NA	N	NA	21.00	Note E	0.25	36.5	Y
8/23/19	CFD	N	NA	17.27	0	0	N	N	NA	15.13	0	0	NA	N	NA	20.84	Note E	2.0	38.5	Y
9/30/19	CWE	N	NA	23.51	0	0	N	N	NA	19.19	0	0	NA	N	NA	24.35	Note E	1.5	40	Y
10/31/19	CWE	N	23.15	23.45	0.30	0	N	N	NA	18.59	0	0	NA	N	24.12	25.13	Note E	5.0	45	Y
11/25/19	CWE	Y	22.45	22.71	0.26	0	N	N	NA	18.39	0	0	NA	N	NA	23.45	Note E	0	0	Y
12/30/19	CWE	Y	21.77	21.8	0.03	0	N	N	NA	14.78	0	0	NA	N	NA	22.7	Note E	0	0	Y
1/30/20	CWE	N	NA	20.45	0	0	N	N	NA	12.51	0	0	NA	N	NA	21.4	Note E	1.0	1.0	Y
2/27/20	CWE	N	NA	19.5	0	0	N	N	NA	11.15	0	0	NA	N	NA	20.15	Note E	0	1.0	Y
Total LNAPL Collected This Reporting Period						0 gal						0 gal						11 gal		
Total Volume of LNAPL collected through 2/27/2020						**1.4 gal**						**0 gal**						**183 gal**		

Date	Note or Comment
7/17/14	Well W14 had blockage in the well casing. No measurement made.
1/15/15	W14 False Reading, Bailer had ~2.2 feet of product, more viscous than past rounds, Recovered 1.75 gallons of LNAPL
9/29/15	Set-up product skimmer
10/14/15	Used Spill Buddy to recover LNAPL, skimmer not functioning properly. Sock in well WCMW1 in good condition.
4/12/16	Note 1: Well W-14 cut down 3.47'.
7/7/16	Installed new solar panel powered skimmer at well W-14. Set to run on auto for 2 hours per day.
7/15/16	Note A: Transfer 40 gallons of oil from skimmer drum to storage drum. No product/water level measurements were collected
8/12/16	Note B: Transfer 45 gallons of oil from skimmer drum to storage drum. No product/water level measurements were collected.
9/19/16	Note C: Transfer 47 gallons of oil from skimmer drum to storage drum.
8/8/17	Note D: Transfer 52 gallons of oil from skimmer drum to storage drum.
1/25/18	Note E: Product collected by the belt skimmer goes directly into a site storage drum; therefore no product detected during monthly product/water level measurement.
3/12/18	The volumes of LNAPL collected from wells WCMW-1 and WCMW-4 were not tracked until March 2018.

Shaded cells are data collected pre-remediation; all other data collected post-remediation.

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 2

GROUNDWATER MONITORING WELL WATER LEVELS
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
OLEAN, NEW YORK

Well	BCP Site No.	Purpose of Well	Top of Casing (TOC) Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)	Depth to Water (ft)	LNAPL Thickness (ft)	Liquid Elevation (ft)
				8/25/2012			7/17 & 18/2014			12/15 & 17 & 18/2014			4/14/2015			9/2/2015 & 9/3/2015			8/9/2016			12/14/2016			5/16 to 5/18/17			12/20 to 12/22/17			6/13/2018			12/19 to 12/20/18			7/9 to 7/10/19		
WCMW-15	1	GWQM	1429.28	21.95	0	1407.33	--	--	--	--	--	--	17.88	0	1411.40	21.60	0	1407.68	22.81	0	1406.47	--	--	--	18.11	0	1411.17	20.68	0	1408.60	19.75	0	1409.53	17.28	0	1412.00	18.77	0	1410.51
W3	1	GWQM	1424.64	17.81	0	1406.83	15.17	0	1409.47	16.39	0	1408.25	14.15	0	1410.49	17.66	0	1406.98	18.75	0	1405.89	--	--	--	14.66	0	1409.98	16.95	0	1407.69	16.00	0	1408.64	14.95	0	1409.69	--	--	--
W4	1	GWQM	1425.06	18.57	0	1406.49	--	--	--	--	--	--	--	--	--	See Note 1	--	--	19.40	0	1405.66	--	--	--	15.37	0	1409.69	buried			16.65	0	1408.41	15.61	0	1409.45	--	--	--
W5	1	LNAPL	1432.25	20.41	3.1	1407.23	17.72	2.53	1409.41	20.92	5.05	1408.40	--	--	--	21.11	1.41	1405.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.97	0	1411.28	--	--	--
W7A	1	LNAPL	NA	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	15.75	0	--	16.08	0	--
W9	1	LNAPL	1428.75	21.50	0.15	1407.38	--	--	--	--	--	--	--	--	--	21.20	0.23	1407.75	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.83	0	1410.92	18.16	0	1410.59
W10	1	LNAPL	1429.39	22.70	0.85	1407.43	18.88	0.01	1410.52	20.82	0.16	1408.71	--	--	--	21.80	0.20	1407.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.24	0	1411.15	18.70	0	1410.69
W11	1	GWQM	1426.61	20.14	0	1406.47	17.32	0	1409.29	18.57	0	1408.04	16.41	0	1410.20	19.98	0	1406.63	20.84	0	1405.77	--	--	--	16.68	0	1409.93	18.75	0	1407.86	17.35	0	1409.26	16.98	0	1409.63	17.13	0	1409.48
W26	1	LNAPL	1427.57	20.48	0	1407.09	--	--	--	--	--	--	--	--	--	20.98	0.73	1407.23	--	--	--	--	--	--	--	--	--	--	--	--	19.30	0.60	1408.79	17.53	0.03	1410.07	17.62	0	1409.95
W27	1	LNAPL	1429.5	23.52	1.9	1407.60	19.12	Trace	1410.38	21.12	0.6	1408.90	--	--	--	21.36	0.1	1408.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	17.81	0	1411.69	18.70	0	1410.80
W30	1	GWQM	1425.72	19.86	0	1405.86	17.20	0	1408.52	18.56	0	1407.16	16.25	0	1409.47	19.70	0	1406.02	20.65	0	1405.07	--	--	--	16.45	0	1409.27	18.76	0	1406.96	17.95	0	1407.77	16.70	0	1409.02	15.91	0	1409.81
W31	1	GWQM	1429.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	22.56	0	1406.54	--	--	--	17.80	0	1411.30	20.32	0	1408.78	19.45	0	1409.65	18.04	0	1411.06	18.50	0	1410.60
W32	1	GWQM	1429.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	18.00	0	1411.31	17.81	0	1411.50
WCMW-1	2	LNAPL	1430.89	23.90	0.61	1407.52	20.29	0.02	1410.62	22.04	0.27	1409.08	--	--	--	22.95	0.03	1407.97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	19.58	0	1411.31	20.12	0	1410.77
WCMW-4	2	GWQM	1426.95	18.72	0	1408.23	15.22	0	1411.73	17.72	0	1409.23	--	--	--	18.59	0	1408.36	18.36	0	1408.59	15.81	0	1411.14	13.87	0	1413.08	18.03	0	1408.92	16.05	0	1410.90	14.55	0	1412.40	15.90	0	1411.05
W13	2	GWQM	1431.14	23.46	0	1407.68	21.14	0	1410.00	22.22	0	1408.92	19.40	0	1411.74	23.00	0	1408.14	24.32	0	1406.82	--	--	--	19.41	0	1411.73	22.20	0	1408.94	21.25	0	1409.89	19.65	0	1411.49	20.16	0	1410.98
W14	2	LNAPL	1432.14	26.85	5.9	1406.91	--	--	--	--	--	--	--	--	--	27.00	6.62	1407.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	20.43	0	1411.71	17.72	0	1414.42
W17	2	GWQM	1424.83	17.42	0	1407.41	14.27	0	1410.56	16.01	0	1408.82	13.46	0	1411.37	17.01	0	1407.82	18.36	0	1406.47	15.74	0	1409.09	13.87	0	1410.96	16.40	0	1408.43	15.40	0	1409.43	14.14	0	1410.69	14.62	0	1410.21
W28	2	GWQM	1433.29	27.52	0	1405.77	--	--	--	--	--	--	--	--	--	25.06	0	1408.23	26.34	0	1406.95	--	--	--	21.52	0	1411.77	24.50	0	1408.79	23.30	0	1409.99	21.63	0	1411.66	22.28	0	1411.01
MW-4	3	GWQM	1431.76	23.89	0	1407.87	21.00	0	1410.76	22.34	0	1409.42	19.23	0	1412.53	23.45	0	1408.31	24.80	0	1406.96	22.20	0	1409.56	20.18	0	1411.58	22.60	0	1409.16	21.64	0	1410.12	22.60	0	1409.16	20.72	0	1411.04
MW-5	3	GWQM	1432.3	22.50	0	1409.80	--	--	--	--	--	--	18.30	0	1414.00	21.77	0	1410.53	23.48	0	1408.82	20.97	0	1411.33	17.78	0	1414.52	20.77	0	1411.53	19.05	0	1413.25	20.77	0	1411.53	18.21	0	1414.09
MWSW	3	GWQM	1430.30	24.37	0	1407.76	21.44	0	1410.69	22.52	0	1409.61	20.20	0	1411.93	24.94	0	1407.19	Damaged	--	--	21.03	0	1409.27	18.96	0	1411.34	21.44	0	1408.86	22.46	0	1407.84	21.44	0	1408.86	19.54	0	1410.76
WCMW-9	3	GWQM	1431.85	17.71	0	1414.14	14.35	0	1417.50	10.69	0	1421.16	11.94	0	1419.91	Dry	0		Dry	0	< 1412.74	11.82	0	1420.03	12.25	0	1419.60	10.99	0	1420.86	16.40	0	1415.45	--	--	--	12.12	0	1419.73
W18	3	GWQM	1434.49	25.21	0	1407.87	--	--	--	--	--	--	20.97	0	1413.52	25.72	0	1407.36	Dry	0	< 1407.87	24.41	0	1410.08	22.25	0	1412.24	24.86	0	1409.63	23.93	0	1410.56	24.86	0	1409.63	22.99	0	1411.50
W22	3	LNAPL	1433.04	23.43	0.11	1408.31	19.75	0.02	1411.91	21.97	0.09	1409.75	--	--	--	23.80	0.01	1407.85	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21.93	0	1411.11
W24	3	LNAPL	1433.09	24.52	0	1408.57	23.68	0.38	1409.74	25.34	0.23	1407.95	--	--	--	25.05	0.07	1408.10	--	--	--	--	--	--	--	--	--	--	--	--	23.00	0	1410.09	--	--	--	22.15	0.03	1410.97
W29	3	GWQM	1429.91	24.37	0	1407.57	21.41	0	1410.53	22.91	0	1409.03	20.20	0	1411.74	23.91	0	1408.03	25.08	0	1406.86	20.62	0	1409.29	18.40	0	1413.54	21.04	0	1408.87	20.05	0	1409.86	21.04	0	1408.87	19.10	0	1410.81

Notes:

Depth to water from top of well riser.

1) Wells were inaccessible due to construction activities
2) W18 well riser was increased by 1.41 feet in May 2015. Revised well top of riser elevation is 1434.49'. Historic top of riser elevation was 1433.08'.
3) W22 well riser was increased by 1.40 feet (based on TOC delta) in October 2015. Revised well top of riser elevation is 1433.04'. Historic top of riser elevation was 1431.64'.
4) W14 well riser was increased by 3.47 feet (based on TOC delta) in November 2015. Revised well top of riser elevation is 1432.14'. Historic top of riser elevation was 1428.67'.
5) MWSW well riser was decreased by 1.83 feet (based on DTB delta) in October 2016. Revised well top of riser elevation is 1430.30'. Historic top of riser elevation was 1432.13'.
6) W29 well riser was decreased by 2.03 feet (based on DTB delta) in October 2016. Revised well top of riser elevation is 1429.91'. Historic top of riser elevation was 1431.94'.
7) W5 well riser was increased by 7.32 feet (based on TOC delta) in August 2016. Revised well top of riser elevation is 1432.25'. Historic top of riser elevation was 1424.93'.

Acronyms:

NA = Not available
-- = Not measured
Shaded cells are data collected pre-remediation. All other data occurred post-remediation.

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TABLE 3

2008-2019 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
OLEAN, NEW YORK

Parameter[1]	GWQS/GV[2]	W-13										
		08/29/08	07/17/14	12/17/14	04/13/15	09/02/15	08/10/16	12/14/16	05/16/17	12/22/17	06/12/18	07/10/19
Volatile Organic Compounds (ug/L)												
1,2,4-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	**3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	**3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	**5**	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	**--**	--	--	--	--	--	--	--	--	--	ND	ND
Methylcyclohexane	**--**	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	**5**	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	**--**	--	--	--	--	--	--	--	--	--	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total xylenes	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	**--**	*NA*	*29*	*NA*	*11*	*3*	*ND*	*0.9*	*0.6*	*52*	*8*	*38*
Total VOCs	**--**	*0.5*	*29*	*ND*	*11*	*3*	*ND*	*0.9*	*0.6*	*52*	*8*	*38*
Semi-Volatile Organic Compounds (ug/L)												
Bis (2 ethylhexyl)phthalate	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**0.002**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	**--**	NA	NA	ND	NA	NA	ND	ND	ND	ND	ND	ND
Naphthalene	**10 ***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3 JB
Total TICs	**--**	NA	20	ND	ND	13	54	20	161	124	124	189
Total SVOCs	**--**	ND	20	ND	ND	13	54	20	161	124	124	190

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.

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BOLD = Analytical result exceeds individual GWQS/GV.
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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 3

2008-2019 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
OLEAN, NEW YORK

Parameter[1]	GWQS/GV[2]	W-17																			
		08/29/08	11/09/09	08/12/10	11/12/10	11/12/10	02/17/11	05/18/2011	08/17/11	11/16/11	02/22/12	07/17/14	12/17/14	04/13/15	09/02/15	08/10/16	12/14/16	05/17/17	12/22/17	06/11/18	07/10/19
Volatile Organic Compounds (ug/L)																					
1,2,4-Trimethylbenzene	**5**	**156**	**125**	**146**	**133**	**128**	**148**	**24.7**	**127**	**109**	**123**	**61.2**	**145**	**134**	**70.7**	**57.3**	**67.7**	**43.6**	**60.9**	**93.3**	ND
1,2-Dichlorobenzene	**3**	ND	2.9	**3.2**	2.8	2.7	**3.3**	2.6	**3.3**	2	**3.1**	2.63	2.68	**3.23**	2	1.91	2.23	1.4	1.95	**3.25**	ND
1,3,5-Trimethylbenzene	**5**	**53.4**	**37.6**	**45.6**	**38.4**	**36.3**	**44.2**	**5.5**	**34.1**	**29.5**	**35.9**	**18.6**	**32.6**	**35.9**	**14.7**	**14.3**	**9.2**	**7.37**	**6.9**	2.27	ND
1,4-Dichlorobenzene	**3**	ND	0.74	0.81	0.65	0.64	0.94	1.9	1.1	ND	1	1.6	ND	ND	1.01	ND	ND	ND	ND	1.11	ND
Acetone	**50**	9.7	6.4	6.3	ND	5.9	ND	ND	9	ND	28.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	44 J
Benzene	**1**	**13.6**	**10.9**	**12**	**8.5**	**7.6**	**14.7**	**2.9**	**13.7**	**7.9**	**12.2**	**4.06**	**4.8**	**5.58**	**7.1**	**7.86**	**7.37**	**3.94**	**7.31**	**12**	**5.2 J**
Chlorobenzene	**5**	3.7	2.7	3	2.4	2.2	3.4	**7**	3.6	2.3	4	**5.7**	3.68	3.57	3.19	3.21	2.78	1.95	2.33	2.57	ND
Chloroform	**7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	56.2	NA	76.4	34.8	32.2	37.4	31.3	38.2	69.6	35
Ethylbenzene	**5**	1.1	0.72	0.61	0.52	0.47	0.85	ND	0.81	ND	1.1	ND	ND	ND	ND	ND	ND	ND	1.02	1.52	ND
Isopropylbenzene	**5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**5.51**	**12.1**	**12.2**	**6.66**	**5.83**	**5.91**	4.39	**6.56**	**10.2**	**9.1 J**
m&p-Xylene	**--**	--	--	--	--	--	--	--	--	--	--	16.4	8.05	3	ND	ND	ND	ND	2.68	2.94	ND
Methylcyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	70	70	113	57.5	33.2	45.4	36.4	51.1	82.7	31
n-Butylbenzene	**5**	ND	0.62	0.72	ND	ND	ND	ND	0.48	ND	0.51	ND	ND	1.71	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**5**	**13.2**	**12.4**	**14.4**	**14.1**	**13.3**	**13.3**	2.4	**13.1**	**9**	**11**	**5.15**	**11.1**	**12.2**	**5.6**	**5.47**	**5.51**	3.8	**5.61**	**8.31**	ND
p-Isopropyltoluene	**5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	1.29	1.49	ND	ND	ND	ND	ND	ND	ND
o-Xylene	**--**	--	--	--	--	--	--	--	--	--	--	59.4	132	105	76.2	ND	68	50.5	63.7	82	ND
sec-Butylbenzene	**5**	2.1	1.3	1.6	1.6	1.4	1.7	1.4	1.6	1	1.4	1.29	1.37	1.99	ND	ND	ND	ND	ND	1.38	ND
tert-Butylbenzene	**5**	ND	0.36	ND	ND	ND	ND	0.79	ND	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**5**	**6.4**	**6.3**	**6.8**	**5.4**	**5.5**	**7**	1.2	**6.8**	5	**6.5**	3.16	4.82	2.71	1.75	1.44	1.75	ND	1.66	2.04	ND
Total xylenes	**5**	**285**	**281**	**294**	**282**	**269**	**245**	**38.4**	**183**	**156**	**162**	**75.8**	**140**	**108**	**76.2**	**61.1**	**68.0**	**50.5**	**66.4**	**84.9**	**80**
Total TICs	**--**	*NA*	*585*	*539*	*685*	*389*	*420*	*321*	*262*	*147*	*517*	*583*	*NA*	*190*	*148*	*87*	*174*	*69*	*97*	*287*	*98*
Total VOCs	**--**	*544*	*1073*	*1368*	*1457*	*1131*	*1147*	*449*	*660*	*469*	*908*	*894*	*429*	*702*	*429*	*311*	*427*	*254*	*347*	*662*	*302*
Semi-Volatile Organic Compounds (ug/L)																					
Bis (2 ethylhexyl)phthalate	**5**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	**10.3**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	**0.002**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**50**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.62	NA	NA	ND	ND	ND	ND	ND	ND
Naphthalene	**10 ***	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**50**	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.2 JB
Total TICs	**--**	NA	NA	NA	NA	NA	NA	NA	*NA*	*NA*	*NA*	*175*	*ND*	*147*	*385*	*238*	*47*	*337*	*62*	*47*	*508*
Total SVOCs	**--**	2	NA	NA	NA	NA	NA	NA	*NA*	*NA*	*NA*	*186*	*3*	*147*	*385*	*238*	*47*	*337*	*62*	*47*	*510*

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.

Definitions:

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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 3

2008-2019 GROUNDWATER ANALYTICAL SUMMARY - ORGANICS
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
OLEAN, NEW YORK

Parameter[1]	GWQS/GV[2]	W-28															WCMW-4					
		02/16/11	02/16/11	05/18/11	05/18/11	08/17/11	08/17/11	11/16/11	11/16/11	02/22/12	08/10/16	12/14/16	05/16/17	12/22/17	06/12/18	07/10/19	08/11/16	12/14/16	05/17/17	12/22/17	06/12/18	07/10/19
Volatile Organic Compounds (ug/L)																						
1,2,4-Trimethylbenzene	**5**	ND	ND	0.34	0.34	0.41	0.38	ND	ND	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	**3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	**3**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	**50**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	**1**	0.27	0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	**7**	0.81	0.82	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	**5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	**--**	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	**--**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	**5**	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	**--**	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	**5**	ND	ND	ND	ND	0.30	0.25	ND	ND	0.38	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	**5**	ND	ND	ND	ND	ND	0.31	0.28	0.26	0.43	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	**5**	0.33	0.36	0.37	ND	0.27	0.53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total xylenes	**5**	0.43	0.42	0.30	0.38	0.64	0.67	0.30	0.29	0.44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	**--**	*80*	*71*	*23*	*24*	*27*	*7*	*24*	*23*	*155*	*238*	*44*	*131*	*46*	*34*	*94*	*635*	*1*	*ND*	*ND*	*ND*	*ND*
Total VOCs	**--**	*82*	*73*	*24*	*25*	*28*	*9*	*24*	*24*	*156*	*238*	*44*	*131*	*46*	*34*	*94*	*635*	*1*	*ND*	*ND*	*ND*	*ND*
Semi-Volatile Organic Compounds (ug/L)																						
Bis (2 ethylhexyl)phthalate	**5**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.4 B	ND	ND	ND	ND	ND
Chrysene	**0.002**	**0.49**	ND	ND	ND	ND	ND	ND	ND	**0.57**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**50**	0.86	0.67	ND	ND	0.67	0.86	ND	0.61	0.63	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	**--**	ND	ND	ND	ND	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**10 ***	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**50**	1.80	1.30	ND	ND	0.78	1.90	0.66	0.52	0.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	**--**	*876*	*485*	*861*	*1000*	*516*	*480*	*480*	*449*	*413*	*392*	*74*	*469*	*33*	*ND*	*301*	*168*	*162*	*257*	*123*	*77*	*315*
Total SVOCs	**--**	*879*	*487*	*861*	*1000*	*518*	*483*	*481*	*450*	*415*	*392*	*74*	*469*	*33*	*ND*	*301*	*184*	*162*	*257*	*123*	*77*	*315*

Notes:

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TABLE 4
2008-2019 GROUNDWATER ANALYTICAL SUMMARY - METALS
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
OLEAN, NEW YORK

Parameter[1]	GWQS/GV[2]	W-13							W-17							W-28												WCMW4		
		08/29/08	08/10/16	12/14/16	05/16/17	12/22/17	06/12/18	07/10/19	08/29/08	08/10/16	12/14/16	05/17/17	12/22/17	06/11/18	07/10/19	02/16/11	02/16/11	05/18/11	08/17/11	11/16/11	02/22/12	08/10/16	12/14/16	05/16/17	12/22/17	06/12/18	07/10/19	05/17/17	06/11/18	07/10/19
Metals (ug/L)																														
Arsenic	**25**	3.6	ND	ND	ND	ND	ND	ND	5.4	ND	ND	ND	ND	ND	ND	**30.4**	13.8	20.5	**27.1**	20	**70.4**	ND	16.9	ND	ND	ND	9.8 J	22	**27.1**	**140**
Lead	**25**	<3.0	ND	ND	ND	ND	ND	ND	<3.0	7.9	17.9	ND	ND	ND	3 J	**30.4**	13.7	NA	NA	NA	NA	17.2	ND	6.3	ND	ND	5.8 J	9.6	12.7	**29**

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. NYSDEC Class "GA" Groundwater Quality Standards/Guidance Values (GWQS/GV), 6 NYCRR Part 703.

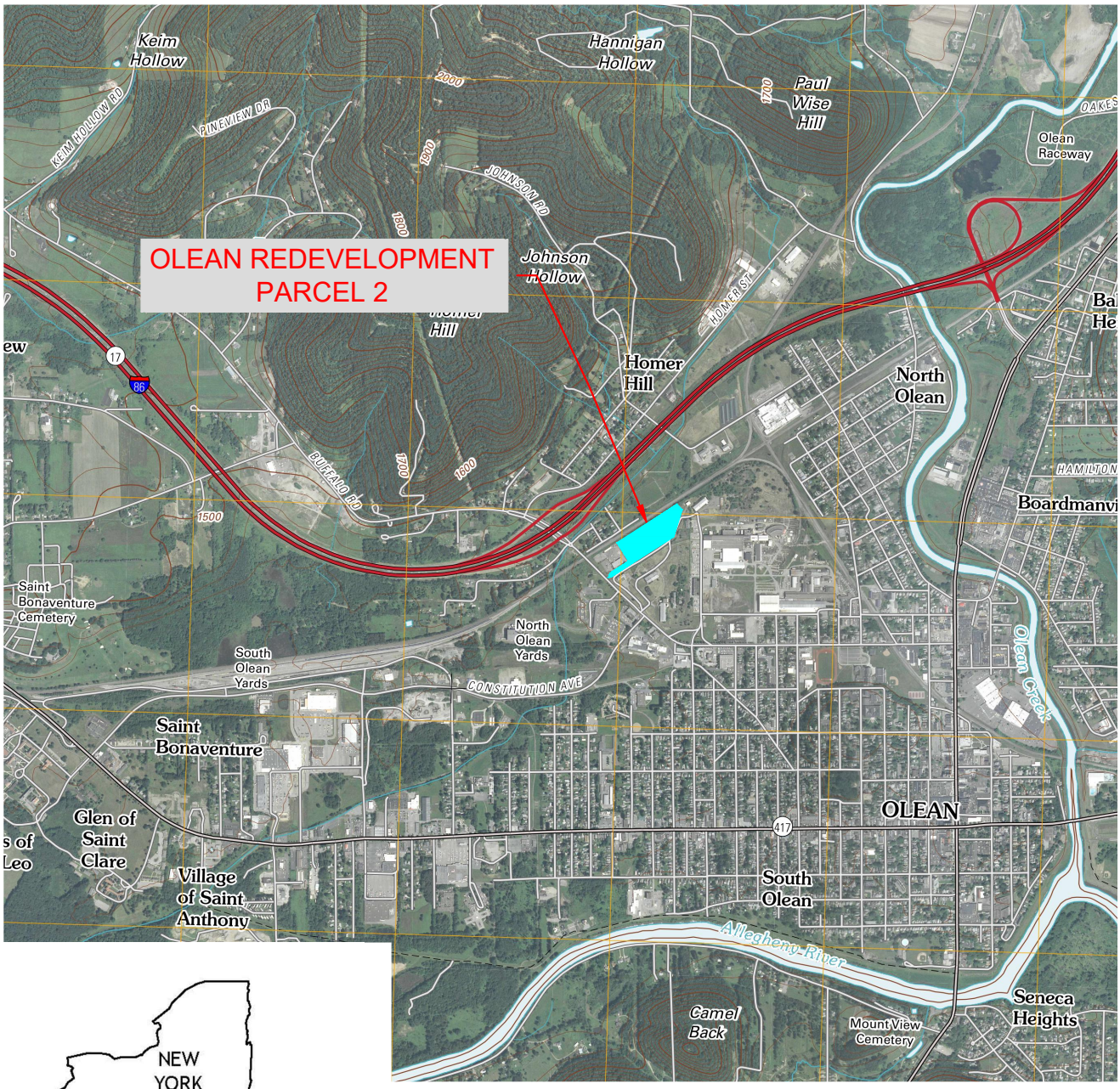
Definitions:

ND = Parameter not detected above laboratory detection limit.
NA = Not analyzed
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

BOLD = Analytical result exceeds individual GWQS/GV.
= Dates highlighted in blue indicate samples collected pre-remediation; all other samples collected post-remediation.

FIGURES

FIGURE 1



QUADRANGLE LOCATION

N

BASE MAP USGS OLEAN NY QUADRANGLE 2010

APPROXIMATE SCALE 1" = 2,500'

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0370-016-001

DATE: MARCH 2020

DRAFTED BY: RFL

SITE LOCATION AND VICINITY MAP

PERIODIC REVIEW REPORT

OLEAN REDEVELOPMENT SITE 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

PREPARED FOR

SOLEAN, LLC

DISCLAIMER:
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APPROXIMATE SCALE 1" = 300'

Property Boundary (Approximate)

Base Image Google Earth April 2007

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0370-016-001

DATE: MARCH 2020

DRAFTED BY: RFL

SITE PLAN PRE-REMEDIATION

PERIODIC REVIEW REPORT

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

PREPARED FOR

SOLEAN WEST, LLC

FIGURE 2

DISCLAIMER:
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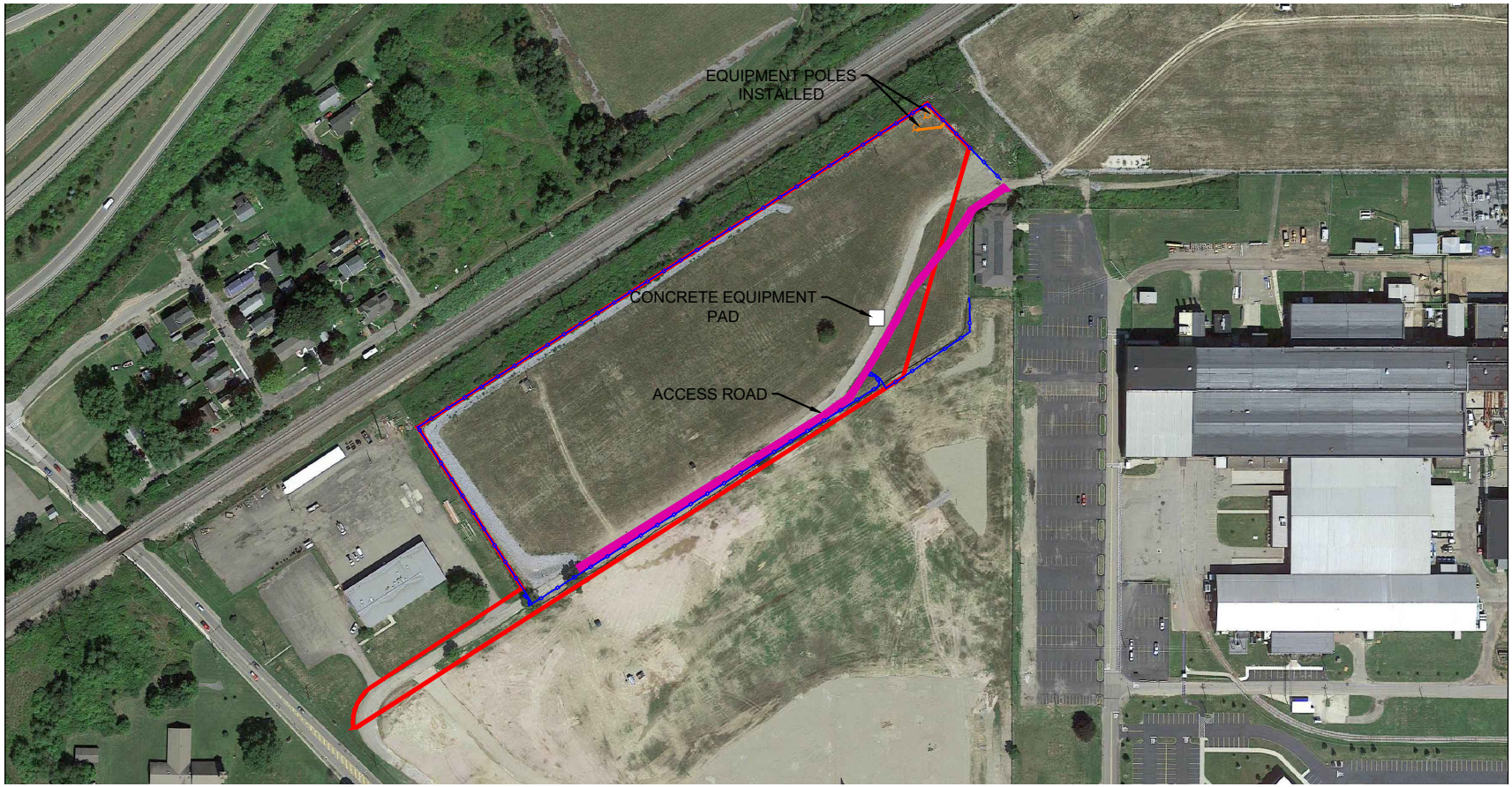

N

Approximate Scale 1" = 300'

LEGEND

Property Boundary (Approximate)

Conduit penetrations of cover system during redevelopment

Power Pole installed during redevelopment

New Fence installed during redevelopment

Base Image Google Earth August 2016

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0370-016-001

DATE: MARCH 2020

DRAFTED BY: RFL

SITE PLAN POST-REMEDIATION

PERIODIC REVIEW REPORT

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

PREPARED FOR

SOLEAN WEST LLC

FIGURE 3

DISCLAIMER:
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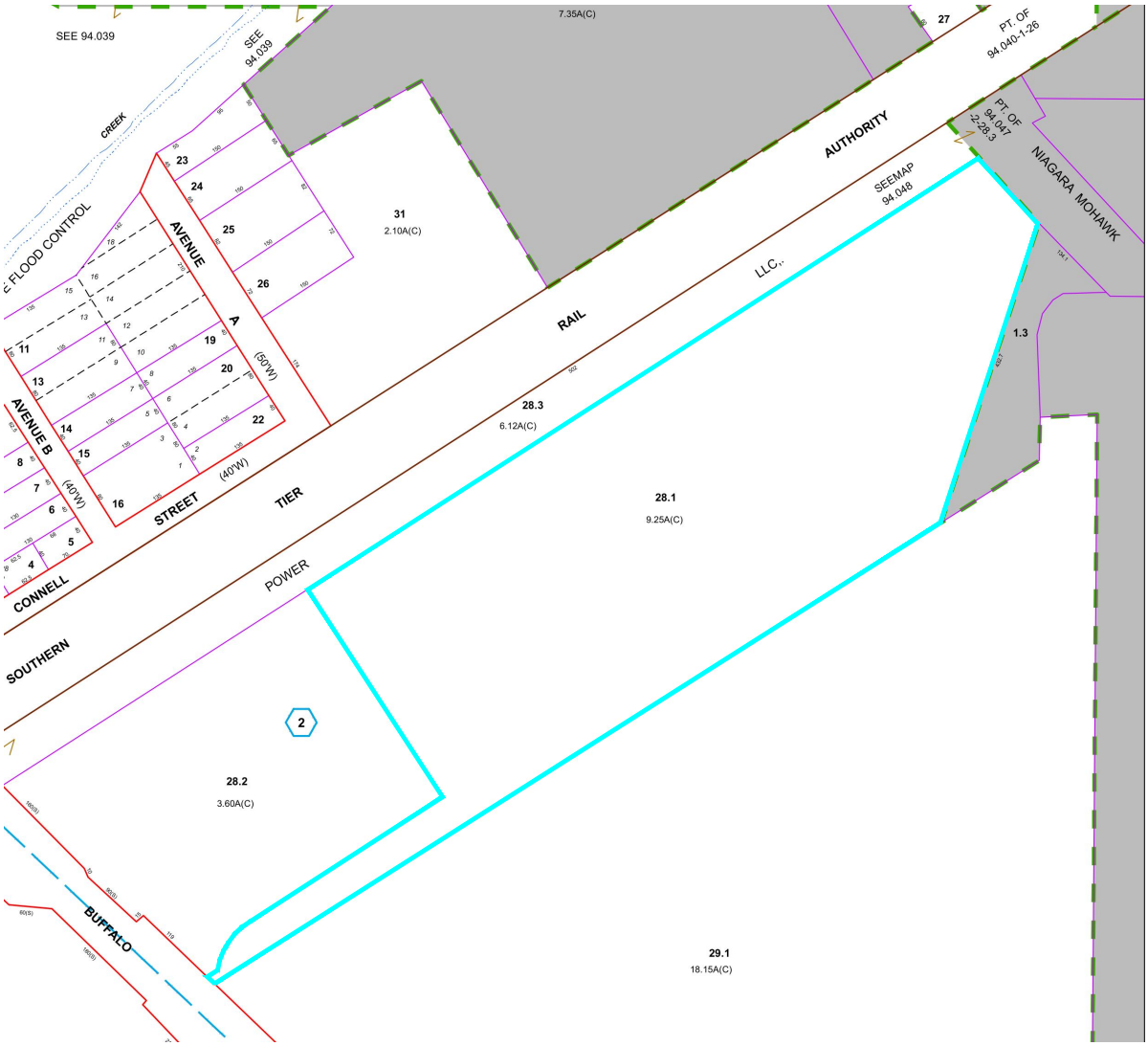
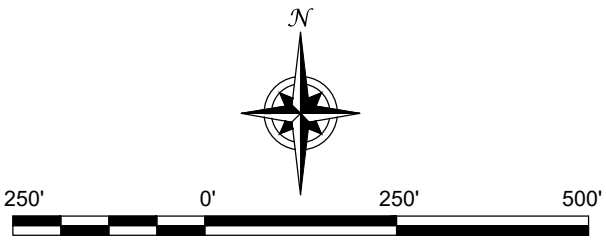
FIGURE 4





SCALE: 1 INCH = 100 FEET
SCALE IN FEET
(approximate)

LEGEND:

OLEAN REDEVELOPMENT BCP SITE 2

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0370-016-001

DATE: MARCH 2020

DRAFTED BY: CMC

SURVEY / TAX PARCEL MAP

PERIODIC REVIEW REPORT

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

PREPARED FOR

SOLEAN WEST LLC

DISCLAIMER:
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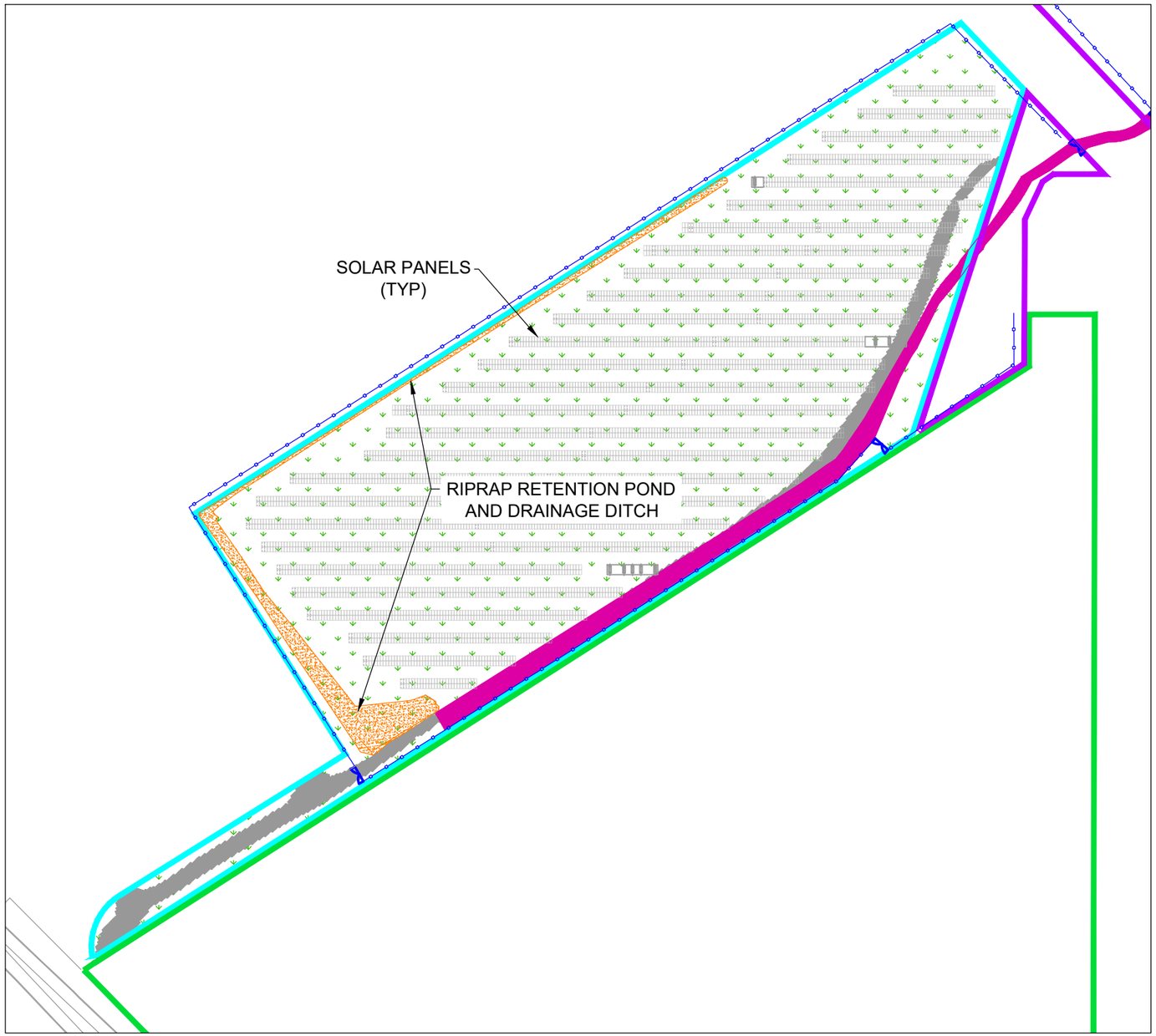


LEGEND:

- OLEAN REDEVELOPMENT BCP SITE 1
- OLEAN REDEVELOPMENT BCP SITE 2
- OLEAN REDEVELOPMENT BCP SITE 3
- APPROXIMATE LOCATION OF ACCESS ROAD (12" MIN. GRAVEL)
- FENCE
- ASPHALT ROADWAY
- VEGETATED SOIL COVER

150' 0' 150' 300'

SCALE: 1 INCH = 150 FEET
SCALE IN FEET
(approximate)

N

DATE: MARCH 2020
DRAFTED BY: CMC

SITE COVER SYSTEM MAP

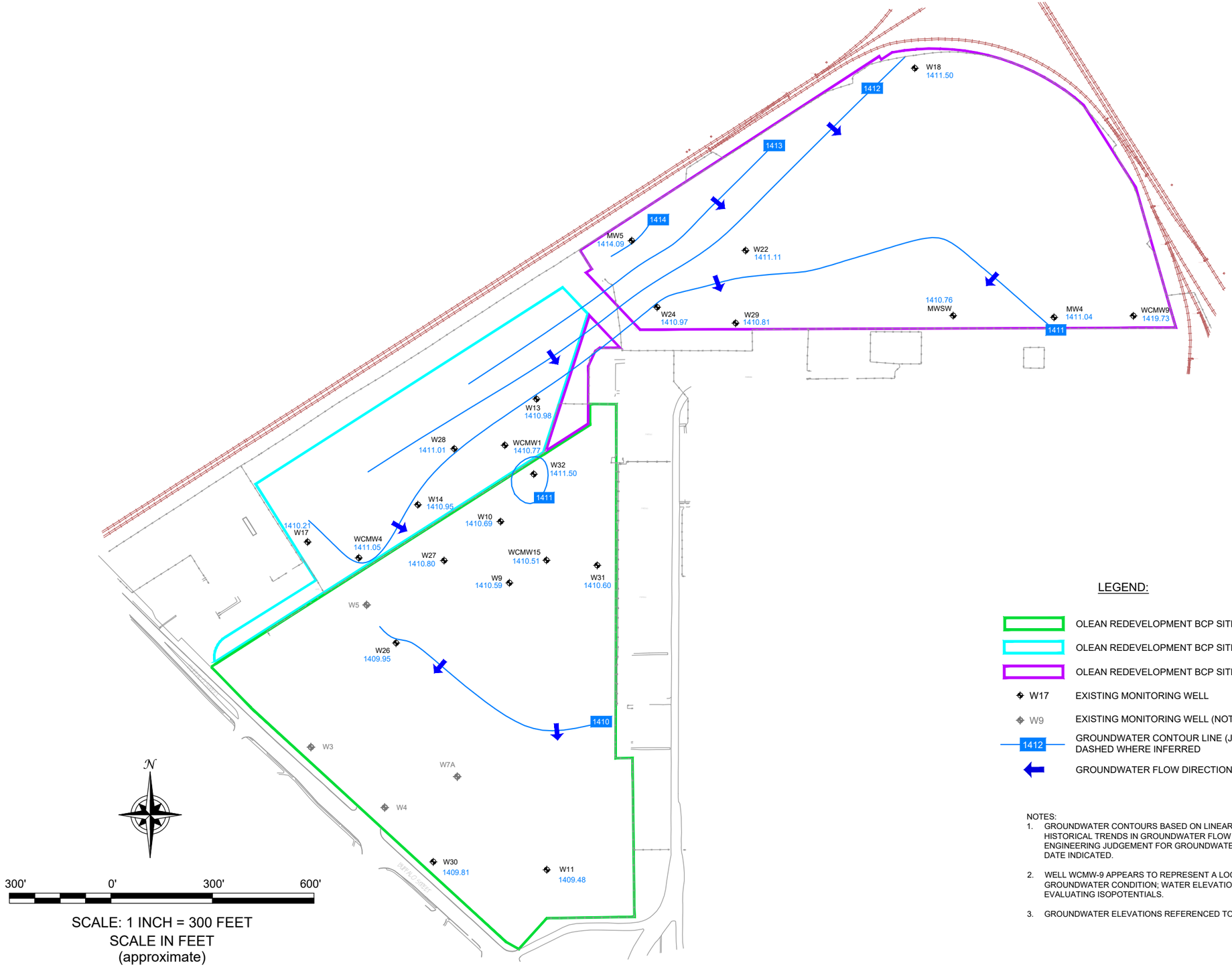
PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
BCP SITE NO. C905032
OLEAN, NEW YORK
PREPARED FOR
SOLEAN WEST LLC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0370-016-001

FIGURE 5

DISCLAIMER: PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. & TURNKEY ENVIRONMENTAL RESTORATION, LLC IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC & TURNKEY ENVIRONMENTAL RESTORATION, LLC.



LEGEND:

- OLEAN REDEVELOPMENT BCP SITE 1
- OLEAN REDEVELOPMENT BCP SITE 2
- OLEAN REDEVELOPMENT BCP SITE 3
- W17 — EXISTING MONITORING WELL
- W9 — EXISTING MONITORING WELL (NOT MEASURED)
- 1412 — GROUNDWATER CONTOUR LINE (JULY 2019); DASHED WHERE INFERRED
- GROUNDWATER FLOW DIRECTION

NOTES:

1. GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION, HISTORICAL TRENDS IN GROUNDWATER FLOW DIRECTION AND ENGINEERING JUDGEMENT FOR GROUNDWATER LEVELS MEASURED ON DATE INDICATED.
2. WELL WCMW-9 APPEARS TO REPRESENT A LOCALIZED PERCHED GROUNDWATER CONDITION; WATER ELEVATION NOT USED FOR EVALUATING ISOPOTENTIALS.
3. GROUNDWATER ELEVATIONS REFERENCED TO NAVD 88.

DATE: MARCH 2020
DRAFTED BY: CMC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

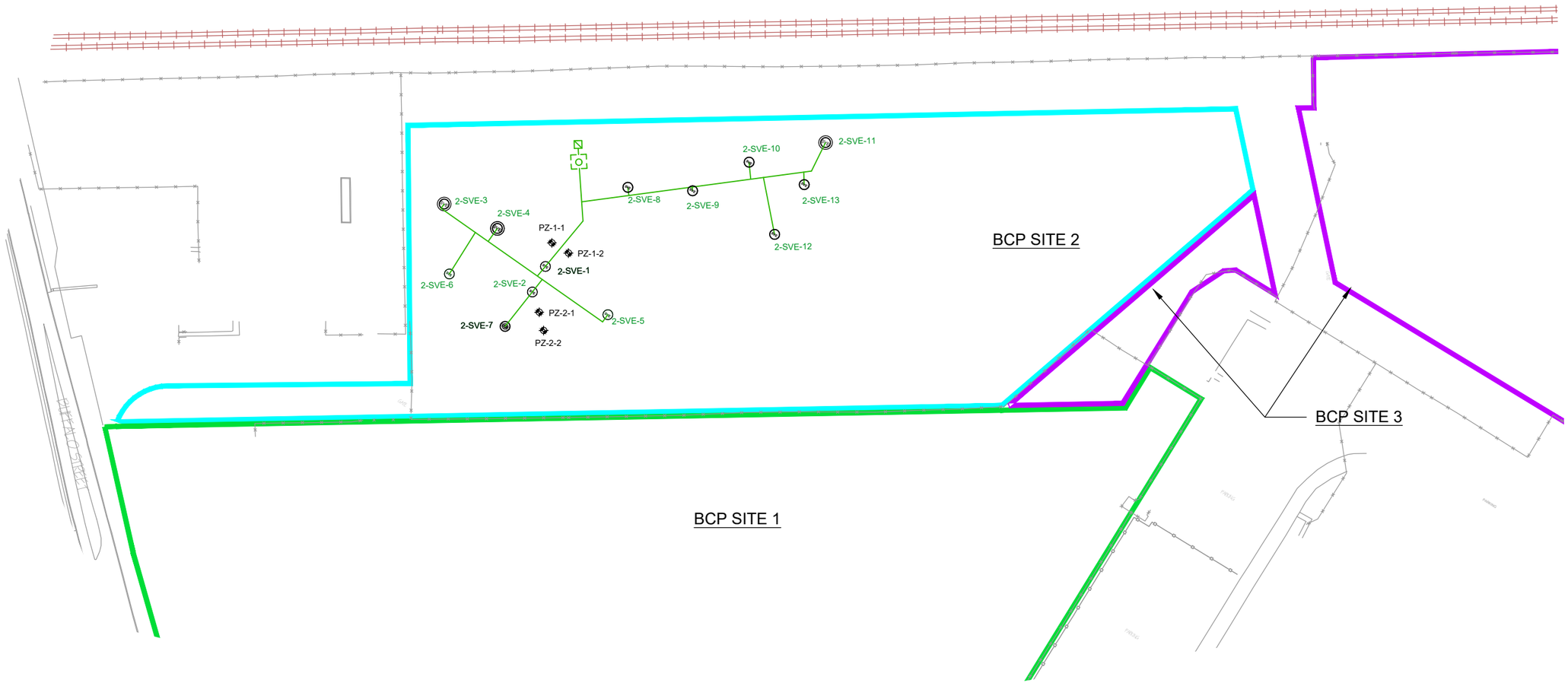
JOB NO.: 0370-016-001

GROUNDWATER ISOPOTENTIAL MAP (JULY 2019)

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK
PREPARED FOR
SOLEAN WEST LLC

FIGURE 6

DISCLAIMER:
PROPERTY OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC.



DATE: MARCH 2020
DRAFTED BY: RFL

SOIL VAPOR EXTRACTION SYSTEM MAP

PERIODIC REVIEW REPORT
OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK
PREPARED FOR
SOLEAN WEST LLC

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0370-016-001

FIGURE 7

DISCLAIMER:
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F:\CAD\Benchmark\Solean West\2018 PRR\Figure 7; SVE SYSTEM.dwg, 3/9/2020 5:44:10 PM, DWG To PDF.pc3

APPENDIX A

INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORM

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. **C905032**

Site Name Olean Redevelopment Parcel 2

Site Address: 1470 Buffalo Street Zip Code: 14760
City/Town: Olean
County: Cattaraugus
Site Acreage: 9.033

Reporting Period: March 15, 2019 to March 15, 2020

	YES	NO
1. Is the information above correct?	☑	☐
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?	☐	☑
3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	☐	☑
4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	☐	☑
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?	☐	☑

Box 2

	YES	NO
6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial	☑	☐
7. Are all ICs/ECs in place and functioning as designed?	☑	☐

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

Box 2A

	YES	NO
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?	☐	☑

If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.

9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)	☑	☐

If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.

SITE NO. C905032 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
94.047-2-28.1	Solean West LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan O&M Plan IC/EC Plan

-The property may be used for commercial and/or industrial use;
-All engineering controls (ECs) must be operated and maintained as specified in the Site Management Plan (SMP);
-All ECs must be inspected at a frequency and in a manner defined in the SMP.
-The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Cattaraugus County Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department.
-Groundwater and other environmental or public health monitoring must be performed as defined in the SMP;
-Data and information pertinent to site management must be reported at the frequency and in a manner as defined in the SMP;
-All future activities that will disturb remaining contaminated material must be conducted in accordance with the SMP;
-Monitoring to assess the performance and effectiveness of the remedy must be performed as defined in the SMP;
-Operation, maintenance, monitoring, inspection, and reporting of any mechanical or physical component of the remedy shall be performed as defined in the SMP; and
-Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
94.047-2-28.1	Vapor Mitigation Cover System Air Sparging/Soil Vapor Extraction Groundwater Treatment System

-a site cover that will allow for commercial use, that will consist either of structures such as buildings, pavement, sidewalks comprising the site development or a soil cover in areas where the upper one foot of exposed surface soil will exceed the applicable SCOs;
-removal of LNAPL from monitoring wells using the methods outlined in the SMP and RAWP;
-a soil vapor extraction (SVE) system to mitigate residual contamination in subsurface soil; and
-a vapor mitigation system for any future building(s) developed on-site.

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 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
☑	☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or 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
☑	☐

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. C905032

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 Michael Lesakowski (print name) at 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218 (print business address),

am certifying as Designated Representative of Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Mike Lesakowski Digitally signed by Mike Lesakowski Date: 2020.04.13 09:26:44 -04'00' — 4/13/2020

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification — Date

IC/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 Lori E. Riker at Benchmark Environmental Engineering & Science, PLLC 2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218,

print name — print business address

am certifying as a Professional Engineer for the Owner

(Owner or Remedial Party)

Lori E. Riker, P.E. Digitally signed by Lori E. Riker, P.E. Date: 2020.04.13 09:37:00 -04'00'

Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

4/13/2020

Date

APPENDIX B

SITE PHOTOGRAPHIC LOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: Stone access road and typical solar panel rows (looking east)

Photo 2: Stone access road and soil cover around solar panels (looking west)

Photo 3: Site soil conditions between solar panel rows (looking northeast)

Photo 4: Soil cover between solar panel rows showing slight ponding (looking west)

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: Soil erosion control silt sock and electrical conduit piping (looking east)

Photo 6: Electrical conduit piping (looking southwest)

Photo 7: Riprap retention pond area (looking northwest)

Photo 8: 2-SVE-1 treatment system trailer

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 9: Site soil cover conditions (looking west)

Photo 10: Belt skimmer (looking west)

APPENDIX C

GROUNDWATER SAMPLING FIELD FORMS AND ANALYTICAL DATA

FIELD NOTES

GROUNDWATER FIELD FORM

Project Name: Clean Redevelopment Parcel 2 Date: 7/9/19 - 7/10/19
Location: Project No.: Field Team: CCB

Well No.	WCMW4	Diameter (inches):	2"	Sample Date / Time:	7/10/19	1000
Product Depth (fbTOR):	—	Water Column (ft):	4.26	DTW when sampled:	15.90	
DTW (static) (fbTOR):	15.86	One Well Volume (gal):	0.69	Purpose: ☐ Development ☐ Sample ☐ Purge & Sample		
Total Depth (fbTOR):	20.12	Total Volume Purged (gal):	1.25	Purge Method:	bailer	

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1314	0	Initial	0	6.93	15.8	973.6	787	1.21	-47	rust flocs/cloudy, jetfuel odor
1316	1	Dry	0.75	6.87	15.6	1013	>1000	1.39	-76	"
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									

7/9/19

Sample Information:

1000	S1 15.90	1.25	6.98	16.2	969.0	621	2.06	-29	rust color, no odor
	S2								

7/10/19

not enough Volume for post

Well No.	W17	Diameter (inches):	4"	Sample Date / Time:	7/9/19	1350
Product Depth (fbTOR):	—	Water Column (ft):	12.05	DTW when sampled:		1555
DTW (static) (fbTOR):	14.55	One Well Volume (gal):	7.8	Purpose: ☐ Development ☐ Sample ☒ Purge & Sample		
Total Depth (fbTOR):	26.57	Total Volume Purged (gal):	14	Purge Method:	low flow	

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1337	0	Initial	0	7.19	19.5	592.1	23.2	0.83	-141	Slight sulfur odor/ Clear
1340	1	15.47	2.0	6.91	13.1	544.7	12.4	0.103	-121	Clear/slight odor
1343	2	15.55	4.0	6.92	13.7	872.6	23.2	0.59	-114	"
1345	3	15.55	6.0	6.85	13.2	844.7	25.7	0.49	-108	"
1347	4	15.55	8.0	6.81	14.2	939.3	41.0	—	-103	"
	5									
	6									
	7									
	8									
	9									
	10									

Sample Information:

1350	S1 15.55	11.0	6.80	12.6	969.1	19.9	—	-103	"
1355	S2 1555	14.0	6.81	13.5	1040	15.0	—	-90	"

REMARKS:

MS/MSD - W17.

DO Stopped working.

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: CCB

GROUNDWATER FIELD FORM

Project Name: Olean Redevelopment Parcel 2 Date: 7/10/19
Location: Project No.: Field Team: CB

Well No. W28			Diameter (inches): 4"			Sample Date / Time: 7/10/19 905			
Product Depth (fbTOR): —			Water Column (ft): 8.27			DTW when sampled: 23.0			
DTW (static) (fbTOR): 22.87			One Well Volume (gal): 5.4			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR): 30.57			Total Volume Purged (gal): 12.5			Purge Method: Low flow			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
850	0 Initial	0	6.53	16.0	1429	7100	1.00	-14	grey, Sulfur odor
853	1 23.0	3.5	6.85	13.5	1350	965	1.09	-75	" "
856	2 23.0	5.5	7.01	13.2	1307	442	0.80	-91	" "
859	3 23.0	7.5	7.08	12.2	1320	320	0.78	-90	" "
901	4 23.0	9.5	6.98	13.1	1320	244	0.75	-81	" "
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
905	S1 23.0	11.5	6.97	12.0	1343	199	0.75	-83	" "
910	S2 23.0	12.5	6.88	13.4	1366	85.3	0.82	-84	" Clear

Well No. WCMW1			Diameter (inches):			Sample Date / Time:			
Product Depth (fbTOR):			Water Column (ft):			DTW when sampled:			
DTW (static) (fbTOR):			One Well Volume (gal):			Purpose: ☐ Development ☐ Sample ☐ Purge & Sample			
Total Depth (fbTOR):			Total Volume Purged (gal):			Purge Method:			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0 Initial								
	1								
	2								
	3								
	4								
	5						Product		
	6								
	7								
	8								
	9								
	10								
Sample Information:									
	S1								
	S2								

REMARKS: Blind Dup w/ W28 700

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: CCB

GROUNDWATER FIELD FORM

Project Name: Olean Redevelopment Parcel 2 Date: 7/10/19
Location: Project No.: Field Team: CB

Well No.	W13	Diameter (inches):	4"	Sample Date / Time:	7/10/19 1255
Product Depth (fbTOR):	—	Water Column (ft):	12.31	DTW when sampled:	20.45
DTW (static) (fbTOR):	20.16	One Well Volume (gal):	2.0	Purpose: ☐ Development	☐ Sample ☑ Purge & Sample
Total Depth (fbTOR):	32.47	Total Volume Purged (gal):	11.5	Purge Method:	Bailer

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1232	0	Initial	0	6.97	15.5	1141	67.1	1.14	-104	Clear/no odor
1234	1	20.40	1.75	7.07	15.0	1123	21.1	0.66	-121	" "
1240	2	20.43	4.5	7.03	13.9	1057	9.39	0.93	-109	" "
1245	3	20.45	8.0	7.05	13.1	1034	4.30	0.93	-103	" "
1250	4	20.45	10.0	6.99	12.8	1024	2.39	0.96	-107	" "
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
1255	S1	20.45	11.0	6.99	12.3	1022	3.60	1.22	-100	" "
1305	S2	20.45	11.5	7.00	13.4	1014	1.97	~~0.96~~ 0.96	-104	" "

Well No.		Diameter (inches):		Sample Date / Time:	
Product Depth (fbTOR):		Water Column (ft):		DTW when sampled:	
DTW (static) (fbTOR):		One Well Volume (gal):		Purpose: ☐ Development	☐ Sample ☐ Purge & Sample
Total Depth (fbTOR):		Total Volume Purged (gal):		Purge Method:	

Time		Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
	0	Initial								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
Sample Information:										
	S1									
	S2									

REMARKS:

Note: All measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: CB

TURNKEY ENVIRONMENTAL RESTORATION LLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: Clean Redevelopment Parcel 273 Date: 7/9/19

Project No.:

Client:

Instrument Source: ☒ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units	700	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☐ 6243003 ☐ 6223973 ☐	CCB	4.00 7.00 10.01	4.01 7.04 10.00	
☒ Turbidity meter	NTU	700	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☐ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	CCB	10 NTU verification <0.4 20 100 800	9.7	
☒ Sp. Cond. meter	uS mS	700	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☐ 6243003 ☐ 6223973 ☐	CCB	7000 mS @ 25 °C	7074	
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm	700	HACH Model HQ30d	080700023281 ☐ 100500041867 ☐ 140200100319 ☐	CCB	100% Satuartion	100.1	
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: CCB **DATE:** 7/9/19

TURNKEY ENVIRONMENTAL RESTORATION, LLC

EQUIPMENT CALIBRATION LOG

PROJECT INFORMATION:

Project Name: Olean Redevelopment Parcel 2+3 Date: 7/10/19

Project No.:

Client:

Instrument Source: ☒ BM ☐ Rental

METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
☒ pH meter	units	800	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☐ 6243003 ☐ 6223973 ☐	CCB	4.00 7.00 10.01	4.02 6.99 10.03	
☒ Turbidity meter	NTU	800	Hach 2100P or 2100Q Turbidimeter	06120C020523 (P) ☐ 13120C030432 (Q) ☐ 17110C062619 (Q) ☐	CCB	10 NTU verification <0.4 20 100 800	9.8	
☒ Sp. Cond. meter	uS mS	800	Myron L Company Ultra Meter 6P	6213516 ☐ 6243084 ☐ 6212375 ☐ 6243003 ☐ 6223973 ☐	CCB	7000 mS @ 25 °C	7085	
☐ PID	ppm		MinRAE 2000			open air zero ____ ppm Iso. Gas		MIBK response factor = 1.0
☒ Dissolved Oxygen	ppm	800	HACH Model HQ30d	080700023281 ☐ 100500041867 ☐ 140200100319 ☐	CCB	100% Satuartion	100%	
☐ Particulate meter	mg/m³					zero air		
☐ Radiation Meter	uR/H					background area		

ADDITIONAL REMARKS:

PREPARED BY: CCB **DATE:** 7/10/19

ANALYTICAL DATA

eurofins | Environment Testing TestAmerica

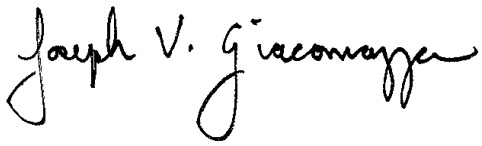
ANALYTICAL REPORT

Job Number: 480-156069-1

Job Description: Benchmark - Olean Parcel 2 GWS

For:
Benchmark Env. Eng. & Science, PLLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, NY 14218

Attention: Mr. Michael Lesakowski



Approved for release.
Joe V Giacomazza
Project Management Assistant II
7/30/2019 4:19 PM

Designee for
Brian J Fischer, Manager of Project Management
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07/30/2019

The test results in this report meet all NELAP requirements for analytes for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. All questions regarding this test report should be directed to the TestAmerica Project Manager who has signed this report. TestAmerica Buffalo NELAC Certifications: CADPH 01169CA, FLDOH E87672, ILEPA 200003, KSDOH E-10187, LADEQ 30708, MDH 036-999-337, NHELAP 2973, NJDEP NY455, NYDOH 10026, ORELAP NY200003, PADEP 68-00281, TXCEQ T-104704412-10-1

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Job Narrative
480-156069-1

Comments
No additional comments.

Receipt
The samples were received on 7/12/2019 9:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.2º C.

GC/MS VOA
Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: W13 (480-156069-1), MW17 (480-156069-2), MW17 (480-156069-2[MS]), MW17 (480-156069-2[MSD]), W28 (480-156069-3), WCMW4 (480-156069-4) and BLIND DUP (480-156069-5). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method(s) 8270D: The laboratory control sample (LCS) for preparation batch 480-481994 and analytical batch 480-482258 recovered outside control limits for the following analyte: 4-Nitrophenol. This analyte was biased high in the LCS and was not detected in the associated sample; therefore, the data has been reported. The following samples are impacted:W13 (480-156069-1), MW17 (480-156069-2), W28 (480-156069-3), WCMW4 (480-156069-4) and BLIND DUP (480-156069-5).

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: MW17 (480-156069-2), MW17 (480-156069-2[MS]), MW17 (480-156069-2[MSD]), W28 (480-156069-3), WCMW4 (480-156069-4) and BLIND DUP (480-156069-5). These results have been reported and qualified.

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-482258 recovered above the upper control limit for 4-Nitrophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: W13 (480-156069-1), MW17 (480-156069-2), W28 (480-156069-3), WCMW4 (480-156069-4) and BLIND DUP (480-156069-5).

Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-482258 recovered outside acceptance criteria, low biased, for 3-Nitroaniline, Pentachlorophenol and Carbazole. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following samples are impacted:W13 (480-156069-1), MW17 (480-156069-2), W28 (480-156069-3), WCMW4 (480-156069-4) and BLIND DUP (480-156069-5).

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: MW17 (480-156069-2), MW17 (480-156069-2[MS]), MW17 (480-156069-2[MSD]) and WCMW4 (480-156069-4). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-481994 and analytical batch 480-482258 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

GC/MS Semi VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - Olean Parcel 2 GWS

Job ID: 480-156069-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-156069-1	W13	Water	07/10/19 12:55	07/12/19 09:50	
480-156069-2	MW17	Water	07/09/19 13:50	07/12/19 09:50	
480-156069-3	W28	Water	07/10/19 09:05	07/12/19 09:50	
480-156069-4	WCMW4	Water	07/10/19 10:00	07/12/19 09:50	
480-156069-5	BLIND DUP	Water	07/10/19 07:00	07/12/19 09:50	
480-156069-6	TRIP BLANK	Water	07/10/19 00:00	07/12/19 09:50	

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

Client Sample ID: W13 — Lab Sample ID: 480-156069-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	6.4		4.0	1.8	ug/L	4		8260C	Total/NA
Phenanthrene	1.3	J B	5.0	0.44	ug/L	1		8270D	Total/NA

Client Sample ID: MW17 — Lab Sample ID: 480-156069-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	44	J	100	30	ug/L	10		8260C	Total/NA
Benzene	5.2	J	10	4.1	ug/L	10		8260C	Total/NA
Cyclohexane	35		10	1.8	ug/L	10		8260C	Total/NA
Isopropylbenzene	9.1	J	10	7.9	ug/L	10		8260C	Total/NA
Methylcyclohexane	31		10	1.6	ug/L	10		8260C	Total/NA
Methylene Chloride	10		10	4.4	ug/L	10		8260C	Total/NA
Xylenes, Total	80		20	6.6	ug/L	10		8260C	Total/NA
Phenanthrene	2.2	J B	25	2.2	ug/L	5		8270D	Total/NA
Lead	0.0030	J	0.010	0.0030	mg/L	1		6010C	Total/NA

Client Sample ID: W28 — Lab Sample ID: 480-156069-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	13		10	4.4	ug/L	10		8260C	Total/NA
Arsenic	0.0098	J	0.015	0.0056	mg/L	1		6010C	Total/NA
Lead	0.0058	J	0.010	0.0030	mg/L	1		6010C	Total/NA

Client Sample ID: WCMW4 — Lab Sample ID: 480-156069-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	13		10	4.4	ug/L	10		8260C	Total/NA
Arsenic	0.14		0.015	0.0056	mg/L	1		6010C	Total/NA
Lead	0.029		0.010	0.0030	mg/L	1		6010C	Total/NA

Client Sample ID: BLIND DUP — Lab Sample ID: 480-156069-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.6	J	10	4.1	ug/L	10		8260C	Total/NA
Cyclohexane	48		10	1.8	ug/L	10		8260C	Total/NA
Methylcyclohexane	13		10	1.6	ug/L	10		8260C	Total/NA
Methylene Chloride	8.1	J	10	4.4	ug/L	10		8260C	Total/NA
Phenanthrene	1.9	J B	5.0	0.44	ug/L	1		8270D	Total/NA
Arsenic	0.0076	J	0.015	0.0056	mg/L	1		6010C	Total/NA
Lead	0.0069	J	0.010	0.0030	mg/L	1		6010C	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-156069-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.0	J	10	3.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Client Sample ID: W13
Lab Sample ID: 480-156069-1

Date Collected: 07/10/19 12:55
Matrix: Water

Date Received: 07/12/19 09:50

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			07/15/19 16:48	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			07/15/19 16:48	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			07/15/19 16:48	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			07/15/19 16:48	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			07/15/19 16:48	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			07/15/19 16:48	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			07/15/19 16:48	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			07/15/19 16:48	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			07/15/19 16:48	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			07/15/19 16:48	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			07/15/19 16:48	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			07/15/19 16:48	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			07/15/19 16:48	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			07/15/19 16:48	4
2-Butanone (MEK)	ND		40	5.3	ug/L			07/15/19 16:48	4
2-Hexanone	ND		20	5.0	ug/L			07/15/19 16:48	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			07/15/19 16:48	4
Acetone	ND		40	12	ug/L			07/15/19 16:48	4
Benzene	ND		4.0	1.6	ug/L			07/15/19 16:48	4
Bromodichloromethane	ND		4.0	1.6	ug/L			07/15/19 16:48	4
Bromoform	ND		4.0	1.0	ug/L			07/15/19 16:48	4
Bromomethane	ND		4.0	2.8	ug/L			07/15/19 16:48	4
Carbon disulfide	ND		4.0	0.76	ug/L			07/15/19 16:48	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			07/15/19 16:48	4
Chlorobenzene	ND		4.0	3.0	ug/L			07/15/19 16:48	4
Chloroethane	ND		4.0	1.3	ug/L			07/15/19 16:48	4
Chloroform	ND		4.0	1.4	ug/L			07/15/19 16:48	4
Chloromethane	ND		4.0	1.4	ug/L			07/15/19 16:48	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			07/15/19 16:48	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			07/15/19 16:48	4
Cyclohexane	ND		4.0	0.72	ug/L			07/15/19 16:48	4
Dibromochloromethane	ND		4.0	1.3	ug/L			07/15/19 16:48	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			07/15/19 16:48	4
Ethylbenzene	ND		4.0	3.0	ug/L			07/15/19 16:48	4
Isopropylbenzene	ND		4.0	3.2	ug/L			07/15/19 16:48	4
Methyl acetate	ND		10	5.2	ug/L			07/15/19 16:48	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			07/15/19 16:48	4
Methylcyclohexane	ND		4.0	0.64	ug/L			07/15/19 16:48	4
Methylene Chloride	**6.4**		4.0	1.8	ug/L			07/15/19 16:48	4
Styrene	ND		4.0	2.9	ug/L			07/15/19 16:48	4
Tetrachloroethene	ND		4.0	1.4	ug/L			07/15/19 16:48	4
Toluene	ND		4.0	2.0	ug/L			07/15/19 16:48	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			07/15/19 16:48	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			07/15/19 16:48	4
Trichloroethene	ND		4.0	1.8	ug/L			07/15/19 16:48	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			07/15/19 16:48	4
Vinyl chloride	ND		4.0	3.6	ug/L			07/15/19 16:48	4
Xylenes, Total	ND		8.0	2.6	ug/L			07/15/19 16:48	4

Client Sample ID: W13
Date Collected: 07/10/19 12:55
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-1
Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methane, dibromofluoro-	*38*	*T J N*	*ug/L*		*4.75*	*1868-53-7*		*07/15/19 16:48*	*4*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*07/15/19 16:48*	*4*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*07/15/19 16:48*	*4*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/15/19 16:48*	*4*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 17:53	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Nitroaniline	ND		10	0.42	ug/L		07/15/19 07:45	07/16/19 17:53	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 17:53	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 17:53	1
3-Nitroaniline	ND		10	0.48	ug/L		07/15/19 07:45	07/16/19 17:53	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Methylphenol	ND		10	0.36	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Nitroaniline	ND		10	0.25	ug/L		07/15/19 07:45	07/16/19 17:53	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/15/19 07:45	07/16/19 17:53	1
Acenaphthene	ND		5.0	0.41	ug/L		07/15/19 07:45	07/16/19 17:53	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/15/19 07:45	07/16/19 17:53	1
Acetophenone	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 17:53	1
Anthracene	ND		5.0	0.28	ug/L		07/15/19 07:45	07/16/19 17:53	1
Atrazine	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 17:53	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/15/19 07:45	07/16/19 17:53	1
Biphenyl	ND		5.0	0.65	ug/L		07/15/19 07:45	07/16/19 17:53	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/15/19 07:45	07/16/19 17:53	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 17:53	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 17:53	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 17:53	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/15/19 07:45	07/16/19 17:53	1
Caprolactam	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 17:53	1

Client Sample ID: W13
Lab Sample ID: 480-156069-1

Date Collected: 07/10/19 12:55
Matrix: Water

Date Received: 07/12/19 09:50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	ND		5.0	0.30	ug/L		07/15/19 07:45	07/16/19 17:53	1
Chrysene	ND		5.0	0.33	ug/L		07/15/19 07:45	07/16/19 17:53	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/15/19 07:45	07/16/19 17:53	1
Dibenzofuran	ND		10	0.51	ug/L		07/15/19 07:45	07/16/19 17:53	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/15/19 07:45	07/16/19 17:53	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 17:53	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/15/19 07:45	07/16/19 17:53	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 17:53	1
Fluoranthene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 17:53	1
Fluorene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 17:53	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 17:53	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/15/19 07:45	07/16/19 17:53	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 17:53	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 17:53	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 17:53	1
Isophorone	ND		5.0	0.43	ug/L		07/15/19 07:45	07/16/19 17:53	1
Naphthalene	ND		5.0	0.76	ug/L		07/15/19 07:45	07/16/19 17:53	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/15/19 07:45	07/16/19 17:53	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 17:53	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 17:53	1
Pentachlorophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 17:53	1
Phenanthrene	**1.3**	**J B**	5.0	0.44	ug/L		07/15/19 07:45	07/16/19 17:53	1
Phenol	ND		5.0	0.39	ug/L		07/15/19 07:45	07/16/19 17:53	1
Pyrene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 17:53	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*2.2*	*T J*	*ug/L*		*2.49*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*2.61*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*110*	*T J*	*ug/L*		*2.76*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*2.7*	*T J*	*ug/L*		*2.83*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*35*	*T J*	*ug/L*		*4.80*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Column Bleed	*5.2*	*T J*	*ug/L*		*5.91*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*6.55*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*4.1*	*T J*	*ug/L*		*6.87*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Benzene, 1-ethyl-2,3-dimethyl-	*2.0*	*T J N*	*ug/L*		*6.90*	*933-98-2*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*1.9*	*T J*	*ug/L*		*6.99*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
1-Phenyl-1-butene	*3.2*	*T J N*	*ug/L*		*7.12*	*824-90-8*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*3.0*	*T J*	*ug/L*		*7.43*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Pregnane-3,20-dione, 11-[(trimethylsilyl)oxy]-, bis(O-methyl	*4.5*	*T J N*	*ug/L*		*7.74*	*57305-27-8*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*2.6*	*T J*	*ug/L*		*7.90*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*2.2*	*T J*	*ug/L*		*8.08*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*5.0*	*T J*	*ug/L*		*8.51*		*07/15/19 07:45*	*07/16/19 17:53*	*1*
Unknown	*1.7*	*T J*	*ug/L*		*9.19*		*07/15/19 07:45*	*07/16/19 17:53*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*41 - 120*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
2-Fluorobiphenyl	*96*		*48 - 120*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
2-Fluorophenol	*58*		*35 - 120*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
Nitrobenzene-d5	*85*		*46 - 120*	*07/15/19 07:45*	*07/16/19 17:53*	*1*

Client Sample ID: W13
Lab Sample ID: 480-156069-1
Date Collected: 07/10/19 12:55
Matrix: Water
Date Received: 07/12/19 09:50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Phenol-d5	*38*		*22 - 120*	*07/15/19 07:45*	*07/16/19 17:53*	*1*
p-Terphenyl-d14	*59*		*59 - 136*	*07/15/19 07:45*	*07/16/19 17:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 17:48	1
Lead	ND		0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 17:48	1

Client Sample ID: MW17
Date Collected: 07/09/19 13:50
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/15/19 17:11	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/15/19 17:11	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/15/19 17:11	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/15/19 17:11	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/15/19 17:11	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/15/19 17:11	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/15/19 17:11	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/15/19 17:11	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/15/19 17:11	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/15/19 17:11	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/15/19 17:11	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/15/19 17:11	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/15/19 17:11	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/15/19 17:11	10
2-Butanone (MEK)	ND		100	13	ug/L			07/15/19 17:11	10
2-Hexanone	ND		50	12	ug/L			07/15/19 17:11	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/15/19 17:11	10
Acetone	**44**	**J**	100	30	ug/L			07/15/19 17:11	10
Benzene	**5.2**	**J**	10	4.1	ug/L			07/15/19 17:11	10
Bromodichloromethane	ND		10	3.9	ug/L			07/15/19 17:11	10
Bromoform	ND		10	2.6	ug/L			07/15/19 17:11	10
Bromomethane	ND		10	6.9	ug/L			07/15/19 17:11	10
Carbon disulfide	ND		10	1.9	ug/L			07/15/19 17:11	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/15/19 17:11	10
Chlorobenzene	ND		10	7.5	ug/L			07/15/19 17:11	10
Chloroethane	ND		10	3.2	ug/L			07/15/19 17:11	10
Chloroform	ND		10	3.4	ug/L			07/15/19 17:11	10
Chloromethane	ND		10	3.5	ug/L			07/15/19 17:11	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/15/19 17:11	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/15/19 17:11	10
Cyclohexane	**35**		10	1.8	ug/L			07/15/19 17:11	10
Dibromochloromethane	ND		10	3.2	ug/L			07/15/19 17:11	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/15/19 17:11	10
Ethylbenzene	ND		10	7.4	ug/L			07/15/19 17:11	10
Isopropylbenzene	**9.1**	**J**	10	7.9	ug/L			07/15/19 17:11	10
Methyl acetate	ND		25	13	ug/L			07/15/19 17:11	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/15/19 17:11	10
Methylcyclohexane	**31**		10	1.6	ug/L			07/15/19 17:11	10
Methylene Chloride	**10**		10	4.4	ug/L			07/15/19 17:11	10
Styrene	ND		10	7.3	ug/L			07/15/19 17:11	10
Tetrachloroethene	ND		10	3.6	ug/L			07/15/19 17:11	10
Toluene	ND		10	5.1	ug/L			07/15/19 17:11	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/15/19 17:11	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/15/19 17:11	10
Trichloroethene	ND		10	4.6	ug/L			07/15/19 17:11	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/15/19 17:11	10
Vinyl chloride	ND		10	9.0	ug/L			07/15/19 17:11	10
Xylenes, Total	**80**		20	6.6	ug/L			07/15/19 17:11	10

Client Sample ID: MW17
Date Collected: 07/09/19 13:50
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-2
Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Benzene, 1,3,5-trimethyl-	98	T J N	ug/L		10.35	108-67-8		07/15/19 17:11	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		07/15/19 17:11	10
4-Bromofluorobenzene (Surr)	92		73 - 120		07/15/19 17:11	10
Toluene-d8 (Surr)	100		80 - 120		07/15/19 17:11	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	F2	25	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,4-Dichlorophenol	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,4-Dimethylphenol	ND	F1	25	2.5	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,4-Dinitrophenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,4-Dinitrotoluene	ND		25	2.2	ug/L		07/15/19 07:45	07/16/19 16:57	5
2,6-Dinitrotoluene	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Chloronaphthalene	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Chlorophenol	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Methylnaphthalene	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Methylphenol	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Nitroaniline	ND	F2	50	2.1	ug/L		07/15/19 07:45	07/16/19 16:57	5
2-Nitrophenol	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
3,3'-Dichlorobenzidine	ND	F1	25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
3-Nitroaniline	ND	F1	50	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Chloroaniline	ND	F1	25	3.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Methylphenol	ND		50	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Nitroaniline	ND	F1	50	1.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
4-Nitrophenol	ND	* F1	50	7.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Acenaphthene	ND		25	2.1	ug/L		07/15/19 07:45	07/16/19 16:57	5
Acenaphthylene	ND		25	1.9	ug/L		07/15/19 07:45	07/16/19 16:57	5
Acetophenone	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
Anthracene	ND		25	1.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
Atrazine	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzaldehyde	ND		25	1.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzo(a)anthracene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzo(a)pyrene	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzo(b)fluoranthene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Benzo(k)fluoranthene	ND		25	3.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
Biphenyl	ND		25	3.3	ug/L		07/15/19 07:45	07/16/19 16:57	5
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		07/15/19 07:45	07/16/19 16:57	5
Butyl benzyl phthalate	ND		25	5.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Caprolactam	ND	F1	25	11	ug/L		07/15/19 07:45	07/16/19 16:57	5

Client Sample ID: MW17
Date Collected: 07/09/19 13:50
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	ND		25	1.5	ug/L		07/15/19 07:45	07/16/19 16:57	5
Chrysene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		07/15/19 07:45	07/16/19 16:57	5
Dibenzofuran	ND		50	2.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Diethyl phthalate	ND	F2	25	1.1	ug/L		07/15/19 07:45	07/16/19 16:57	5
Dimethyl phthalate	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Di-n-butyl phthalate	ND		25	1.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Di-n-octyl phthalate	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
Fluoranthene	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Fluorene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Hexachlorobenzene	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Hexachlorobutadiene	ND		25	3.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Hexachloroethane	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 16:57	5
Isophorone	ND		25	2.2	ug/L		07/15/19 07:45	07/16/19 16:57	5
Naphthalene	ND		25	3.8	ug/L		07/15/19 07:45	07/16/19 16:57	5
Nitrobenzene	ND		25	1.5	ug/L		07/15/19 07:45	07/16/19 16:57	5
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 16:57	5
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 16:57	5
Pentachlorophenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 16:57	5
Phenanthrene	**2.2**	**J B**	25	2.2	ug/L		07/15/19 07:45	07/16/19 16:57	5
Phenol	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 16:57	5
Pyrene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 16:57	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*79*	*T J*	*ug/L*		*2.48*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*77*	*T J*	*ug/L*		*2.66*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*23*	*T J*	*ug/L*		*4.78*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Benzene, 1,2-dimethyl-	*49*	*T J N*	*ug/L*		*5.30*	*95-47-6*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*11*	*T J*	*ug/L*		*5.46*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*18*	*T J*	*ug/L*		*5.92*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*11*	*T J*	*ug/L*		*6.00*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Benzene, 1,2,4-trimethyl-	*21*	*T J N*	*ug/L*		*6.31*	*95-63-6*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*11*	*T J*	*ug/L*		*6.90*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*11*	*T J*	*ug/L*		*7.19*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*21*	*T J*	*ug/L*		*7.29*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*13*	*T J*	*ug/L*		*7.39*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*12*	*T J*	*ug/L*		*7.44*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*35*	*T J*	*ug/L*		*7.55*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*28*	*T J*	*ug/L*		*7.64*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*25*	*T J*	*ug/L*		*7.71*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*13*	*T J*	*ug/L*		*7.89*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*14*	*T J*	*ug/L*		*7.94*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*17*	*T J*	*ug/L*		*8.09*		*07/15/19 07:45*	*07/16/19 16:57*	*5*
Unknown	*19*	*T J*	*ug/L*		*9.29*		*07/15/19 07:45*	*07/16/19 16:57*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*98*		*41 - 120*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
2-Fluorobiphenyl	*86*		*48 - 120*	*07/15/19 07:45*	*07/16/19 16:57*	*5*

Client Sample ID: MW17
Date Collected: 07/09/19 13:50
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*57*		*35 - 120*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
Nitrobenzene-d5	*77*		*46 - 120*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
Phenol-d5	*44*		*22 - 120*	*07/15/19 07:45*	*07/16/19 16:57*	*5*
p-Terphenyl-d14	*42*	*X*	*59 - 136*	*07/15/19 07:45*	*07/16/19 16:57*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 18:03	1
Lead	**0.0030**	**J**	0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 18:03	1

Client Sample ID: W28
Date Collected: 07/10/19 09:05
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/15/19 17:34	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/15/19 17:34	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/15/19 17:34	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/15/19 17:34	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/15/19 17:34	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/15/19 17:34	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/15/19 17:34	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/15/19 17:34	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/15/19 17:34	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/15/19 17:34	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/15/19 17:34	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/15/19 17:34	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/15/19 17:34	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/15/19 17:34	10
2-Butanone (MEK)	ND		100	13	ug/L			07/15/19 17:34	10
2-Hexanone	ND		50	12	ug/L			07/15/19 17:34	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/15/19 17:34	10
Acetone	ND		100	30	ug/L			07/15/19 17:34	10
Benzene	ND		10	4.1	ug/L			07/15/19 17:34	10
Bromodichloromethane	ND		10	3.9	ug/L			07/15/19 17:34	10
Bromoform	ND		10	2.6	ug/L			07/15/19 17:34	10
Bromomethane	ND		10	6.9	ug/L			07/15/19 17:34	10
Carbon disulfide	ND		10	1.9	ug/L			07/15/19 17:34	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/15/19 17:34	10
Chlorobenzene	ND		10	7.5	ug/L			07/15/19 17:34	10
Chloroethane	ND		10	3.2	ug/L			07/15/19 17:34	10
Chloroform	ND		10	3.4	ug/L			07/15/19 17:34	10
Chloromethane	ND		10	3.5	ug/L			07/15/19 17:34	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/15/19 17:34	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/15/19 17:34	10
Cyclohexane	ND		10	1.8	ug/L			07/15/19 17:34	10
Dibromochloromethane	ND		10	3.2	ug/L			07/15/19 17:34	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/15/19 17:34	10
Ethylbenzene	ND		10	7.4	ug/L			07/15/19 17:34	10
Isopropylbenzene	ND		10	7.9	ug/L			07/15/19 17:34	10
Methyl acetate	ND		25	13	ug/L			07/15/19 17:34	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/15/19 17:34	10
Methylcyclohexane	ND		10	1.6	ug/L			07/15/19 17:34	10
Methylene Chloride	**13**		10	4.4	ug/L			07/15/19 17:34	10
Styrene	ND		10	7.3	ug/L			07/15/19 17:34	10
Tetrachloroethene	ND		10	3.6	ug/L			07/15/19 17:34	10
Toluene	ND		10	5.1	ug/L			07/15/19 17:34	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/15/19 17:34	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/15/19 17:34	10
Trichloroethene	ND		10	4.6	ug/L			07/15/19 17:34	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/15/19 17:34	10
Vinyl chloride	ND		10	9.0	ug/L			07/15/19 17:34	10
Xylenes, Total	ND		20	6.6	ug/L			07/15/19 17:34	10

Client Sample ID: W28
Date Collected: 07/10/19 09:05
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-3
Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Methane, dibromofluoro-	*94*	*T J N*	*ug/L*		*4.75*	*1868-53-7*		*07/15/19 17:34*	*10*

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*07/15/19 17:34*	*10*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*07/15/19 17:34*	*10*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/15/19 17:34*	*10*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 18:21	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Nitroaniline	ND		10	0.42	ug/L		07/15/19 07:45	07/16/19 18:21	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 18:21	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 18:21	1
3-Nitroaniline	ND		10	0.48	ug/L		07/15/19 07:45	07/16/19 18:21	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Methylphenol	ND		10	0.36	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Nitroaniline	ND		10	0.25	ug/L		07/15/19 07:45	07/16/19 18:21	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/15/19 07:45	07/16/19 18:21	1
Acenaphthene	ND		5.0	0.41	ug/L		07/15/19 07:45	07/16/19 18:21	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/15/19 07:45	07/16/19 18:21	1
Acetophenone	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 18:21	1
Anthracene	ND		5.0	0.28	ug/L		07/15/19 07:45	07/16/19 18:21	1
Atrazine	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 18:21	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/15/19 07:45	07/16/19 18:21	1
Biphenyl	ND		5.0	0.65	ug/L		07/15/19 07:45	07/16/19 18:21	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/15/19 07:45	07/16/19 18:21	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 18:21	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 18:21	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 18:21	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/15/19 07:45	07/16/19 18:21	1
Caprolactam	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 18:21	1

Client Sample ID: W28
Date Collected: 07/10/19 09:05
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	ND		5.0	0.30	ug/L		07/15/19 07:45	07/16/19 18:21	1
Chrysene	ND		5.0	0.33	ug/L		07/15/19 07:45	07/16/19 18:21	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/15/19 07:45	07/16/19 18:21	1
Dibenzofuran	ND		10	0.51	ug/L		07/15/19 07:45	07/16/19 18:21	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/15/19 07:45	07/16/19 18:21	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 18:21	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/15/19 07:45	07/16/19 18:21	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 18:21	1
Fluoranthene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 18:21	1
Fluorene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 18:21	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 18:21	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/15/19 07:45	07/16/19 18:21	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 18:21	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 18:21	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 18:21	1
Isophorone	ND		5.0	0.43	ug/L		07/15/19 07:45	07/16/19 18:21	1
Naphthalene	ND		5.0	0.76	ug/L		07/15/19 07:45	07/16/19 18:21	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/15/19 07:45	07/16/19 18:21	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 18:21	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 18:21	1
Pentachlorophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 18:21	1
Phenanthrene	ND		5.0	0.44	ug/L		07/15/19 07:45	07/16/19 18:21	1
Phenol	ND		5.0	0.39	ug/L		07/15/19 07:45	07/16/19 18:21	1
Pyrene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 18:21	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*96*	*T J*	*ug/L*		*2.77*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*31*	*T J*	*ug/L*		*4.80*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
p-Xylene	*5.4*	*T J N*	*ug/L*		*5.12*	*106-42-3*	*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*4.9*	*T J*	*ug/L*		*6.15*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*6.0*	*T J*	*ug/L*		*6.70*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*13*	*T J*	*ug/L*		*7.58*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*5.5*	*T J*	*ug/L*		*7.70*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*8.9*	*T J*	*ug/L*		*7.75*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*5.7*	*T J*	*ug/L*		*7.87*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*6.5*	*T J*	*ug/L*		*8.00*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*19*	*T J*	*ug/L*		*8.14*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*6.4*	*T J*	*ug/L*		*8.23*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*7.8*	*T J*	*ug/L*		*8.37*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*12*	*T J*	*ug/L*		*8.91*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*9.7*	*T J*	*ug/L*		*9.08*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*5.7*	*T J*	*ug/L*		*9.23*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*20*	*T J*	*ug/L*		*9.34*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*9.7*	*T J*	*ug/L*		*9.43*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*13*	*T J*	*ug/L*		*9.55*		*07/15/19 07:45*	*07/16/19 18:21*	*1*
Unknown	*15*	*T J*	*ug/L*		*9.62*		*07/15/19 07:45*	*07/16/19 18:21*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*131*	*X*	*41 - 120*	*07/15/19 07:45*	*07/16/19 18:21*	*1*
2-Fluorobiphenyl	*95*		*48 - 120*	*07/15/19 07:45*	*07/16/19 18:21*	*1*

Client Sample ID: W28
Lab Sample ID: 480-156069-3

Date Collected: 07/10/19 09:05
Matrix: Water
Date Received: 07/12/19 09:50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol	*63*		*35 - 120*	*07/15/19 07:45*	*07/16/19 18:21*	*1*
Nitrobenzene-d5	*94*		*46 - 120*	*07/15/19 07:45*	*07/16/19 18:21*	*1*
Phenol-d5	*43*		*22 - 120*	*07/15/19 07:45*	*07/16/19 18:21*	*1*
p-Terphenyl-d14	*52*	*X*	*59 - 136*	*07/15/19 07:45*	*07/16/19 18:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0098**	**J**	0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 18:22	1
Lead	**0.0058**	**J**	0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 18:22	1

Client Sample ID: WCMW4
Date Collected: 07/10/19 10:00
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/15/19 17:57	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/15/19 17:57	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/15/19 17:57	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/15/19 17:57	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/15/19 17:57	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/15/19 17:57	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/15/19 17:57	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/15/19 17:57	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/15/19 17:57	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/15/19 17:57	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/15/19 17:57	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/15/19 17:57	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/15/19 17:57	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/15/19 17:57	10
2-Butanone (MEK)	ND		100	13	ug/L			07/15/19 17:57	10
2-Hexanone	ND		50	12	ug/L			07/15/19 17:57	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/15/19 17:57	10
Acetone	ND		100	30	ug/L			07/15/19 17:57	10
Benzene	ND		10	4.1	ug/L			07/15/19 17:57	10
Bromodichloromethane	ND		10	3.9	ug/L			07/15/19 17:57	10
Bromoform	ND		10	2.6	ug/L			07/15/19 17:57	10
Bromomethane	ND		10	6.9	ug/L			07/15/19 17:57	10
Carbon disulfide	ND		10	1.9	ug/L			07/15/19 17:57	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/15/19 17:57	10
Chlorobenzene	ND		10	7.5	ug/L			07/15/19 17:57	10
Chloroethane	ND		10	3.2	ug/L			07/15/19 17:57	10
Chloroform	ND		10	3.4	ug/L			07/15/19 17:57	10
Chloromethane	ND		10	3.5	ug/L			07/15/19 17:57	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/15/19 17:57	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/15/19 17:57	10
Cyclohexane	ND		10	1.8	ug/L			07/15/19 17:57	10
Dibromochloromethane	ND		10	3.2	ug/L			07/15/19 17:57	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/15/19 17:57	10
Ethylbenzene	ND		10	7.4	ug/L			07/15/19 17:57	10
Isopropylbenzene	ND		10	7.9	ug/L			07/15/19 17:57	10
Methyl acetate	ND		25	13	ug/L			07/15/19 17:57	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/15/19 17:57	10
Methylcyclohexane	ND		10	1.6	ug/L			07/15/19 17:57	10
Methylene Chloride	**13**		10	4.4	ug/L			07/15/19 17:57	10
Styrene	ND		10	7.3	ug/L			07/15/19 17:57	10
Tetrachloroethene	ND		10	3.6	ug/L			07/15/19 17:57	10
Toluene	ND		10	5.1	ug/L			07/15/19 17:57	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/15/19 17:57	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/15/19 17:57	10
Trichloroethene	ND		10	4.6	ug/L			07/15/19 17:57	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/15/19 17:57	10
Vinyl chloride	ND		10	9.0	ug/L			07/15/19 17:57	10
Xylenes, Total	ND		20	6.6	ug/L			07/15/19 17:57	10

Client Sample ID: WCMW4
Date Collected: 07/10/19 10:00
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-4
Matrix: Water

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/15/19 17:57	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		77 - 120		07/15/19 17:57	10
4-Bromofluorobenzene (Surr)	93		73 - 120		07/15/19 17:57	10
Toluene-d8 (Surr)	100		80 - 120		07/15/19 17:57	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,4-Dichlorophenol	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,4-Dimethylphenol	ND		25	2.5	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,4-Dinitrophenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,4-Dinitrotoluene	ND		25	2.2	ug/L		07/15/19 07:45	07/16/19 18:49	5
2,6-Dinitrotoluene	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Chloronaphthalene	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Chlorophenol	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Methylnaphthalene	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Methylphenol	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Nitroaniline	ND		50	2.1	ug/L		07/15/19 07:45	07/16/19 18:49	5
2-Nitrophenol	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
3-Nitroaniline	ND		50	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Chloroaniline	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Methylphenol	ND		50	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Nitroaniline	ND		50	1.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
4-Nitrophenol	ND	*	50	7.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Acenaphthene	ND		25	2.1	ug/L		07/15/19 07:45	07/16/19 18:49	5
Acenaphthylene	ND		25	1.9	ug/L		07/15/19 07:45	07/16/19 18:49	5
Acetophenone	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
Anthracene	ND		25	1.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
Atrazine	ND		25	2.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzaldehyde	ND		25	1.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzo(a)anthracene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzo(a)pyrene	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzo(b)fluoranthene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzo(g,h,i)perylene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Benzo(k)fluoranthene	ND		25	3.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
Biphenyl	ND		25	3.3	ug/L		07/15/19 07:45	07/16/19 18:49	5
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		07/15/19 07:45	07/16/19 18:49	5
Butyl benzyl phthalate	ND		25	5.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Caprolactam	ND		25	11	ug/L		07/15/19 07:45	07/16/19 18:49	5

Client Sample ID: WCMW4
Date Collected: 07/10/19 10:00
Date Received: 07/12/19 09:50

Lab Sample ID: 480-156069-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbazole	ND		25	1.5	ug/L		07/15/19 07:45	07/16/19 18:49	5
Chrysene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		07/15/19 07:45	07/16/19 18:49	5
Dibenzofuran	ND		50	2.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Diethyl phthalate	ND		25	1.1	ug/L		07/15/19 07:45	07/16/19 18:49	5
Dimethyl phthalate	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Di-n-butyl phthalate	ND		25	1.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Di-n-octyl phthalate	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
Fluoranthene	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Fluorene	ND		25	1.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Hexachlorobenzene	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Hexachlorobutadiene	ND		25	3.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Hexachloroethane	ND		25	3.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Indeno(1,2,3-cd)pyrene	ND		25	2.4	ug/L		07/15/19 07:45	07/16/19 18:49	5
Isophorone	ND		25	2.2	ug/L		07/15/19 07:45	07/16/19 18:49	5
Naphthalene	ND		25	3.8	ug/L		07/15/19 07:45	07/16/19 18:49	5
Nitrobenzene	ND		25	1.5	ug/L		07/15/19 07:45	07/16/19 18:49	5
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		07/15/19 07:45	07/16/19 18:49	5
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		07/15/19 07:45	07/16/19 18:49	5
Pentachlorophenol	ND		50	11	ug/L		07/15/19 07:45	07/16/19 18:49	5
Phenanthrene	ND		25	2.2	ug/L		07/15/19 07:45	07/16/19 18:49	5
Phenol	ND		25	2.0	ug/L		07/15/19 07:45	07/16/19 18:49	5
Pyrene	ND		25	1.7	ug/L		07/15/19 07:45	07/16/19 18:49	5

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*120*	*T J*	*ug/L*		*2.48*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*110*	*T J*	*ug/L*		*2.67*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*34*	*T J*	*ug/L*		*4.78*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*13*	*T J*	*ug/L*		*5.91*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*12*	*T J*	*ug/L*		*6.86*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*15*	*T J*	*ug/L*		*7.74*		*07/15/19 07:45*	*07/16/19 18:49*	*5*
Unknown	*11*	*T J*	*ug/L*		*8.52*		*07/15/19 07:45*	*07/16/19 18:49*	*5*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*41 - 120*	*07/15/19 07:45*	*07/16/19 18:49*	*5*
2-Fluorobiphenyl	*86*		*48 - 120*	*07/15/19 07:45*	*07/16/19 18:49*	*5*
2-Fluorophenol	*54*		*35 - 120*	*07/15/19 07:45*	*07/16/19 18:49*	*5*
Nitrobenzene-d5	*76*		*46 - 120*	*07/15/19 07:45*	*07/16/19 18:49*	*5*
Phenol-d5	*33*		*22 - 120*	*07/15/19 07:45*	*07/16/19 18:49*	*5*
p-Terphenyl-d14	*48*	*X*	*59 - 136*	*07/15/19 07:45*	*07/16/19 18:49*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.14**		0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 18:26	1
Lead	**0.029**		0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 18:26	1

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5

Date Collected: 07/10/19 07:00
Matrix: Water

Date Received: 07/12/19 09:50

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		10	8.2	ug/L			07/15/19 18:20	10
1,1,2,2-Tetrachloroethane	ND		10	2.1	ug/L			07/15/19 18:20	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1	ug/L			07/15/19 18:20	10
1,1,2-Trichloroethane	ND		10	2.3	ug/L			07/15/19 18:20	10
1,1-Dichloroethane	ND		10	3.8	ug/L			07/15/19 18:20	10
1,1-Dichloroethene	ND		10	2.9	ug/L			07/15/19 18:20	10
1,2,4-Trichlorobenzene	ND		10	4.1	ug/L			07/15/19 18:20	10
1,2-Dibromo-3-Chloropropane	ND		10	3.9	ug/L			07/15/19 18:20	10
1,2-Dibromoethane	ND		10	7.3	ug/L			07/15/19 18:20	10
1,2-Dichlorobenzene	ND		10	7.9	ug/L			07/15/19 18:20	10
1,2-Dichloroethane	ND		10	2.1	ug/L			07/15/19 18:20	10
1,2-Dichloropropane	ND		10	7.2	ug/L			07/15/19 18:20	10
1,3-Dichlorobenzene	ND		10	7.8	ug/L			07/15/19 18:20	10
1,4-Dichlorobenzene	ND		10	8.4	ug/L			07/15/19 18:20	10
2-Butanone (MEK)	ND		100	13	ug/L			07/15/19 18:20	10
2-Hexanone	ND		50	12	ug/L			07/15/19 18:20	10
4-Methyl-2-pentanone (MIBK)	ND		50	21	ug/L			07/15/19 18:20	10
Acetone	ND		100	30	ug/L			07/15/19 18:20	10
Benzene	**6.6**	**J**	10	4.1	ug/L			07/15/19 18:20	10
Bromodichloromethane	ND		10	3.9	ug/L			07/15/19 18:20	10
Bromoform	ND		10	2.6	ug/L			07/15/19 18:20	10
Bromomethane	ND		10	6.9	ug/L			07/15/19 18:20	10
Carbon disulfide	ND		10	1.9	ug/L			07/15/19 18:20	10
Carbon tetrachloride	ND		10	2.7	ug/L			07/15/19 18:20	10
Chlorobenzene	ND		10	7.5	ug/L			07/15/19 18:20	10
Chloroethane	ND		10	3.2	ug/L			07/15/19 18:20	10
Chloroform	ND		10	3.4	ug/L			07/15/19 18:20	10
Chloromethane	ND		10	3.5	ug/L			07/15/19 18:20	10
cis-1,2-Dichloroethene	ND		10	8.1	ug/L			07/15/19 18:20	10
cis-1,3-Dichloropropene	ND		10	3.6	ug/L			07/15/19 18:20	10
Cyclohexane	**48**		10	1.8	ug/L			07/15/19 18:20	10
Dibromochloromethane	ND		10	3.2	ug/L			07/15/19 18:20	10
Dichlorodifluoromethane	ND		10	6.8	ug/L			07/15/19 18:20	10
Ethylbenzene	ND		10	7.4	ug/L			07/15/19 18:20	10
Isopropylbenzene	ND		10	7.9	ug/L			07/15/19 18:20	10
Methyl acetate	ND		25	13	ug/L			07/15/19 18:20	10
Methyl tert-butyl ether	ND		10	1.6	ug/L			07/15/19 18:20	10
Methylcyclohexane	**13**		10	1.6	ug/L			07/15/19 18:20	10
Methylene Chloride	**8.1**	**J**	10	4.4	ug/L			07/15/19 18:20	10
Styrene	ND		10	7.3	ug/L			07/15/19 18:20	10
Tetrachloroethene	ND		10	3.6	ug/L			07/15/19 18:20	10
Toluene	ND		10	5.1	ug/L			07/15/19 18:20	10
trans-1,2-Dichloroethene	ND		10	9.0	ug/L			07/15/19 18:20	10
trans-1,3-Dichloropropene	ND		10	3.7	ug/L			07/15/19 18:20	10
Trichloroethene	ND		10	4.6	ug/L			07/15/19 18:20	10
Trichlorofluoromethane	ND		10	8.8	ug/L			07/15/19 18:20	10
Vinyl chloride	ND		10	9.0	ug/L			07/15/19 18:20	10
Xylenes, Total	ND		20	6.6	ug/L			07/15/19 18:20	10

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5

Date Collected: 07/10/19 07:00
Matrix: Water
Date Received: 07/12/19 09:50

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Benzene, 1,2,3-trimethyl-	120	T J N	ug/L		10.35	526-73-8		07/15/19 18:20	10
Benzene, 1,2,4,5-tetramethyl-	26	T J N	ug/L		11.77	95-93-2		07/15/19 18:20	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		07/15/19 18:20	10
4-Bromofluorobenzene (Surr)	95		73 - 120		07/15/19 18:20	10
Toluene-d8 (Surr)	99		80 - 120		07/15/19 18:20	10

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 19:17	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Nitroaniline	ND		10	0.42	ug/L		07/15/19 07:45	07/16/19 19:17	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 19:17	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 19:17	1
3-Nitroaniline	ND		10	0.48	ug/L		07/15/19 07:45	07/16/19 19:17	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Methylphenol	ND		10	0.36	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Nitroaniline	ND		10	0.25	ug/L		07/15/19 07:45	07/16/19 19:17	1
4-Nitrophenol	ND	*	10	1.5	ug/L		07/15/19 07:45	07/16/19 19:17	1
Acenaphthene	ND		5.0	0.41	ug/L		07/15/19 07:45	07/16/19 19:17	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/15/19 07:45	07/16/19 19:17	1
Acetophenone	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 19:17	1
Anthracene	ND		5.0	0.28	ug/L		07/15/19 07:45	07/16/19 19:17	1
Atrazine	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 19:17	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/15/19 07:45	07/16/19 19:17	1
Biphenyl	ND		5.0	0.65	ug/L		07/15/19 07:45	07/16/19 19:17	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/15/19 07:45	07/16/19 19:17	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 19:17	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 19:17	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 19:17	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/15/19 07:45	07/16/19 19:17	1

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5

Date Collected: 07/10/19 07:00
Matrix: Water

Date Received: 07/12/19 09:50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 19:17	1
Carbazole	ND		5.0	0.30	ug/L		07/15/19 07:45	07/16/19 19:17	1
Chrysene	ND		5.0	0.33	ug/L		07/15/19 07:45	07/16/19 19:17	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/15/19 07:45	07/16/19 19:17	1
Dibenzofuran	ND		10	0.51	ug/L		07/15/19 07:45	07/16/19 19:17	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/15/19 07:45	07/16/19 19:17	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 19:17	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/15/19 07:45	07/16/19 19:17	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 19:17	1
Fluoranthene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 19:17	1
Fluorene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 19:17	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 19:17	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/15/19 07:45	07/16/19 19:17	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 19:17	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 19:17	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 19:17	1
Isophorone	ND		5.0	0.43	ug/L		07/15/19 07:45	07/16/19 19:17	1
Naphthalene	ND		5.0	0.76	ug/L		07/15/19 07:45	07/16/19 19:17	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/15/19 07:45	07/16/19 19:17	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 19:17	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 19:17	1
Pentachlorophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 19:17	1
Phenanthrene	**1.9**	**J B**	5.0	0.44	ug/L		07/15/19 07:45	07/16/19 19:17	1
Phenol	ND		5.0	0.39	ug/L		07/15/19 07:45	07/16/19 19:17	1
Pyrene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 19:17	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*100*	*T J*	*ug/L*		*2.76*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*33*	*T J*	*ug/L*		*4.80*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Benzene, 1,3-dimethyl-	*5.4*	*T J N*	*ug/L*		*5.12*	*108-38-3*	*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.6*	*T J*	*ug/L*		*5.74*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*5.0*	*T J*	*ug/L*		*5.91*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.4*	*T J*	*ug/L*		*6.15*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*3.4*	*T J*	*ug/L*		*6.38*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.8*	*T J*	*ug/L*		*6.42*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*6.4*	*T J*	*ug/L*		*6.70*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.0*	*T J*	*ug/L*		*6.78*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.1*	*T J*	*ug/L*		*7.10*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*4.1*	*T J*	*ug/L*		*7.70*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*7.6*	*T J*	*ug/L*		*7.75*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*3.9*	*T J*	*ug/L*		*7.88*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*7.0*	*T J*	*ug/L*		*8.00*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*5.9*	*T J*	*ug/L*		*8.03*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*19*	*T J*	*ug/L*		*8.15*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*13*	*T J*	*ug/L*		*8.91*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*19*	*T J*	*ug/L*		*9.35*		*07/15/19 07:45*	*07/16/19 19:17*	*1*
Unknown	*20*	*T J*	*ug/L*		*9.55*		*07/15/19 07:45*	*07/16/19 19:17*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*127*	*X*	*41 - 120*	*07/15/19 07:45*	*07/16/19 19:17*	*1*

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5

Date Collected: 07/10/19 07:00
Matrix: Water
Date Received: 07/12/19 09:50

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*91*		*48 - 120*	*07/15/19 07:45*	*07/16/19 19:17*	*1*
2-Fluorophenol	*60*		*35 - 120*	*07/15/19 07:45*	*07/16/19 19:17*	*1*
Nitrobenzene-d5	*93*		*46 - 120*	*07/15/19 07:45*	*07/16/19 19:17*	*1*
Phenol-d5	*40*		*22 - 120*	*07/15/19 07:45*	*07/16/19 19:17*	*1*
p-Terphenyl-d14	*57*	*X*	*59 - 136*	*07/15/19 07:45*	*07/16/19 19:17*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**0.0076**	**J**	0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 18:30	1
Lead	**0.0069**	**J**	0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 18:30	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-156069-6

Date Collected: 07/10/19 00:00
Matrix: Water

Date Received: 07/12/19 09:50

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/19 18:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/19 18:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/19 18:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/19 18:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/19 18:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/19 18:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/19 18:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/19 18:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/19 18:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/19 18:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/19 18:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/19 18:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/19 18:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/19 18:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/19 18:43	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/19 18:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/19 18:43	1
Acetone	**3.0**	**J**	10	3.0	ug/L			07/15/19 18:43	1
Benzene	ND		1.0	0.41	ug/L			07/15/19 18:43	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/19 18:43	1
Bromoform	ND		1.0	0.26	ug/L			07/15/19 18:43	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/19 18:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/19 18:43	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/19 18:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/19 18:43	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/19 18:43	1
Chloroform	ND		1.0	0.34	ug/L			07/15/19 18:43	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/19 18:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/19 18:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/19 18:43	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/19 18:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/19 18:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/19 18:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/19 18:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/19 18:43	1
Methyl acetate	ND		2.5	1.3	ug/L			07/15/19 18:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/19 18:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/19 18:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/19 18:43	1
Styrene	ND		1.0	0.73	ug/L			07/15/19 18:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/19 18:43	1
Toluene	ND		1.0	0.51	ug/L			07/15/19 18:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/19 18:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/19 18:43	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/19 18:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/19 18:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/19 18:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/19 18:43	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-156069-6

Date Collected: 07/10/19 00:00
Matrix: Water
Date Received: 07/12/19 09:50

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/15/19 18:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		07/15/19 18:43	1
4-Bromofluorobenzene (Surr)	94		73 - 120		07/15/19 18:43	1
Toluene-d8 (Surr)	99		80 - 120		07/15/19 18:43	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-156069-1	W13	105	94	98
480-156069-2	MW17	108	92	100
480-156069-2 MS	MW17	107	92	99
480-156069-2 MSD	MW17	106	91	100
480-156069-3	W28	101	93	100
480-156069-4	WCMW4	106	93	100
480-156069-5	BLIND DUP	109	95	99
480-156069-6	TRIP BLANK	103	94	99
LCS 480-482015/5	Lab Control Sample	99	92	101
MB 480-482015/7	Method Blank	102	92	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(59-136)
480-156069-1	W13	92	96	58	85	38	59
480-156069-2	MW17	98	86	57	77	44	42 X
480-156069-2 MS	MW17	98	91	61	86	53	45 X
480-156069-2 MSD	MW17	116	83	61	79	48	45 X
480-156069-3	W28	131 X	95	63	94	43	52 X
480-156069-4	WCMW4	83	86	54	76	33	48 X
480-156069-5	BLIND DUP	127 X	91	60	93	40	57 X
LCS 480-481994/2-A	Lab Control Sample	103	92	64	87	47	97
MB 480-481994/1-A	Method Blank	90	94	62	91	43	105

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-482015/7
Matrix: Water
Analysis Batch: 482015

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/15/19 11:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/15/19 11:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/15/19 11:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/15/19 11:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/15/19 11:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/15/19 11:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/15/19 11:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/15/19 11:09	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/15/19 11:09	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/15/19 11:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/15/19 11:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/15/19 11:09	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/15/19 11:09	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/15/19 11:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/15/19 11:09	1
2-Hexanone	ND		5.0	1.2	ug/L			07/15/19 11:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/15/19 11:09	1
Acetone	ND		10	3.0	ug/L			07/15/19 11:09	1
Benzene	ND		1.0	0.41	ug/L			07/15/19 11:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/15/19 11:09	1
Bromoform	ND		1.0	0.26	ug/L			07/15/19 11:09	1
Bromomethane	ND		1.0	0.69	ug/L			07/15/19 11:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/15/19 11:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/15/19 11:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/15/19 11:09	1
Chloroethane	ND		1.0	0.32	ug/L			07/15/19 11:09	1
Chloroform	ND		1.0	0.34	ug/L			07/15/19 11:09	1
Chloromethane	ND		1.0	0.35	ug/L			07/15/19 11:09	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/15/19 11:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/15/19 11:09	1
Cyclohexane	ND		1.0	0.18	ug/L			07/15/19 11:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/15/19 11:09	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/15/19 11:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/15/19 11:09	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/15/19 11:09	1
Methyl acetate	ND		2.5	1.3	ug/L			07/15/19 11:09	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/15/19 11:09	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/15/19 11:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/15/19 11:09	1
Styrene	ND		1.0	0.73	ug/L			07/15/19 11:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/15/19 11:09	1
Toluene	ND		1.0	0.51	ug/L			07/15/19 11:09	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/15/19 11:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/15/19 11:09	1
Trichloroethene	ND		1.0	0.46	ug/L			07/15/19 11:09	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/15/19 11:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/15/19 11:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/15/19 11:09	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-482015/7
Matrix: Water
Analysis Batch: 482015

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

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	None		ug/L					07/15/19 11:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		07/15/19 11:09	1
4-Bromofluorobenzene (Surr)	92		73 - 120		07/15/19 11:09	1
Toluene-d8 (Surr)	100		80 - 120		07/15/19 11:09	1

Lab Sample ID: LCS 480-482015/5
Matrix: Water
Analysis Batch: 482015

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	24.7		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.1		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.4		ug/L		109	61 - 148
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	24.2		ug/L		97	66 - 127
1,2,4-Trichlorobenzene	25.0	22.2		ug/L		89	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	24.3		ug/L		97	56 - 134
1,2-Dibromoethane	25.0	23.0		ug/L		92	77 - 120
1,2-Dichlorobenzene	25.0	24.2		ug/L		97	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	25.8		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.0		ug/L		100	80 - 120
2-Butanone (MEK)	125	145		ug/L		116	57 - 140
2-Hexanone	125	131		ug/L		104	65 - 127
4-Methyl-2-pentanone (MIBK)	125	133		ug/L		106	71 - 125
Acetone	125	156		ug/L		124	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	25.1		ug/L		100	80 - 122
Bromoform	25.0	25.6		ug/L		102	61 - 132
Bromomethane	25.0	25.0		ug/L		100	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	26.2		ug/L		105	72 - 134
Chlorobenzene	25.0	24.2		ug/L		97	80 - 120
Chloroethane	25.0	27.1		ug/L		108	69 - 136
Chloroform	25.0	22.6		ug/L		90	73 - 127
Chloromethane	25.0	28.1		ug/L		112	68 - 124
cis-1,2-Dichloroethene	25.0	23.9		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	26.1		ug/L		105	74 - 124
Cyclohexane	25.0	28.5		ug/L		114	59 - 135
Dibromochloromethane	25.0	25.0		ug/L		100	75 - 125
Dichlorodifluoromethane	25.0	27.7		ug/L		111	59 - 135
Ethylbenzene	25.0	25.2		ug/L		101	77 - 123
Isopropylbenzene	25.0	27.0		ug/L		108	77 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-482015/5
Matrix: Water
Analysis Batch: 482015

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	50.0	53.4		ug/L		107	74 - 133
Methyl tert-butyl ether	25.0	23.6		ug/L		94	77 - 120
Methylcyclohexane	25.0	26.6		ug/L		106	68 - 134
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
Styrene	25.0	24.6		ug/L		98	80 - 120
Tetrachloroethene	25.0	24.7		ug/L		99	74 - 122
Toluene	25.0	25.0		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	24.8		ug/L		99	73 - 127
trans-1,3-Dichloropropene	25.0	25.5		ug/L		102	80 - 120
Trichloroethene	25.0	25.5		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	26.5		ug/L		106	62 - 150
Vinyl chloride	25.0	27.9		ug/L		112	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 480-156069-2 MS
Matrix: Water
Analysis Batch: 482015

Client Sample ID: MW17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		250	247		ug/L		99	73 - 126
1,1,2,2-Tetrachloroethane	ND		250	253		ug/L		101	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	268		ug/L		107	61 - 148
1,1,2-Trichloroethane	ND		250	250		ug/L		100	76 - 122
1,1-Dichloroethane	ND		250	257		ug/L		103	77 - 120
1,1-Dichloroethene	ND		250	240		ug/L		96	66 - 127
1,2,4-Trichlorobenzene	ND		250	215		ug/L		86	79 - 122
1,2-Dibromo-3-Chloropropane	ND		250	237		ug/L		95	56 - 134
1,2-Dibromoethane	ND		250	236		ug/L		94	77 - 120
1,2-Dichlorobenzene	ND		250	241		ug/L		96	80 - 124
1,2-Dichloroethane	ND		250	246		ug/L		99	75 - 120
1,2-Dichloropropane	ND		250	266		ug/L		106	76 - 120
1,3-Dichlorobenzene	ND		250	255		ug/L		102	77 - 120
1,4-Dichlorobenzene	ND		250	248		ug/L		99	78 - 124
2-Butanone (MEK)	ND		1250	1480		ug/L		118	57 - 140
2-Hexanone	ND		1250	1380		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		1250	1350		ug/L		108	71 - 125
Acetone	44	J	1250	1490		ug/L		115	56 - 142
Benzene	5.2	J	250	261		ug/L		102	71 - 124
Bromodichloromethane	ND		250	248		ug/L		99	80 - 122
Bromoform	ND		250	249		ug/L		100	61 - 132
Bromomethane	ND		250	256		ug/L		103	55 - 144
Carbon disulfide	ND		250	244		ug/L		98	59 - 134
Carbon tetrachloride	ND		250	261		ug/L		104	72 - 134
Chlorobenzene	ND		250	246		ug/L		98	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-156069-2 MS
Matrix: Water
Analysis Batch: 482015

Client Sample ID: MW17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	ND		250	279		ug/L		112	69 - 136
Chloroform	ND		250	228		ug/L		91	73 - 127
Chloromethane	ND		250	287		ug/L		115	68 - 124
cis-1,2-Dichloroethene	ND		250	242		ug/L		97	74 - 124
cis-1,3-Dichloropropene	ND		250	256		ug/L		102	74 - 124
Cyclohexane	35		250	320		ug/L		114	59 - 135
Dibromochloromethane	ND		250	238		ug/L		95	75 - 125
Dichlorodifluoromethane	ND		250	297		ug/L		119	59 - 135
Ethylbenzene	ND		250	246		ug/L		98	77 - 123
Isopropylbenzene	9.1	J	250	271		ug/L		105	77 - 122
Methyl acetate	ND		500	561		ug/L		112	74 - 133
Methyl tert-butyl ether	ND		250	236		ug/L		94	77 - 120
Methylcyclohexane	31		250	290		ug/L		104	68 - 134
Methylene Chloride	10		250	254		ug/L		98	75 - 124
Styrene	ND		250	243		ug/L		97	80 - 120
Tetrachloroethene	ND		250	243		ug/L		97	74 - 122
Toluene	ND		250	244		ug/L		98	80 - 122
trans-1,2-Dichloroethene	ND		250	248		ug/L		99	73 - 127
trans-1,3-Dichloropropene	ND		250	238		ug/L		95	80 - 120
Trichloroethene	ND		250	247		ug/L		99	74 - 123
Trichlorofluoromethane	ND		250	283		ug/L		113	62 - 150
Vinyl chloride	ND		250	297		ug/L		119	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 480-156069-2 MSD
Matrix: Water
Analysis Batch: 482015

Client Sample ID: MW17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		250	234		ug/L		94	73 - 126	5	15
1,1,2,2-Tetrachloroethane	ND		250	253		ug/L		101	76 - 120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		250	254		ug/L		102	61 - 148	5	20
1,1,2-Trichloroethane	ND		250	247		ug/L		99	76 - 122	1	15
1,1-Dichloroethane	ND		250	247		ug/L		99	77 - 120	4	20
1,1-Dichloroethene	ND		250	227		ug/L		91	66 - 127	5	16
1,2,4-Trichlorobenzene	ND		250	215		ug/L		86	79 - 122	0	20
1,2-Dibromo-3-Chloropropane	ND		250	247		ug/L		99	56 - 134	4	15
1,2-Dibromoethane	ND		250	233		ug/L		93	77 - 120	1	15
1,2-Dichlorobenzene	ND		250	237		ug/L		95	80 - 124	2	20
1,2-Dichloroethane	ND		250	239		ug/L		95	75 - 120	3	20
1,2-Dichloropropane	ND		250	252		ug/L		101	76 - 120	5	20
1,3-Dichlorobenzene	ND		250	245		ug/L		98	77 - 120	4	20
1,4-Dichlorobenzene	ND		250	244		ug/L		98	78 - 124	2	20
2-Butanone (MEK)	ND		1250	1460		ug/L		117	57 - 140	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-156069-2 MSD
Matrix: Water
Analysis Batch: 482015

Client Sample ID: MW17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Hexanone	ND		1250	1370		ug/L		110	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	ND		1250	1390		ug/L		111	71 - 125	3	35
Acetone	44	J	1250	1470		ug/L		114	56 - 142	1	15
Benzene	5.2	J	250	251		ug/L		98	71 - 124	4	13
Bromodichloromethane	ND		250	242		ug/L		97	80 - 122	3	15
Bromoform	ND		250	243		ug/L		97	61 - 132	3	15
Bromomethane	ND		250	244		ug/L		98	55 - 144	5	15
Carbon disulfide	ND		250	230		ug/L		92	59 - 134	6	15
Carbon tetrachloride	ND		250	247		ug/L		99	72 - 134	6	15
Chlorobenzene	ND		250	237		ug/L		95	80 - 120	4	25
Chloroethane	ND		250	274		ug/L		110	69 - 136	2	15
Chloroform	ND		250	220		ug/L		88	73 - 127	4	20
Chloromethane	ND		250	282		ug/L		113	68 - 124	2	15
cis-1,2-Dichloroethene	ND		250	230		ug/L		92	74 - 124	5	15
cis-1,3-Dichloropropene	ND		250	246		ug/L		98	74 - 124	4	15
Cyclohexane	35		250	294		ug/L		104	59 - 135	8	20
Dibromochloromethane	ND		250	234		ug/L		93	75 - 125	2	15
Dichlorodifluoromethane	ND		250	271		ug/L		109	59 - 135	9	20
Ethylbenzene	ND		250	240		ug/L		96	77 - 123	2	15
Isopropylbenzene	9.1	J	250	261		ug/L		101	77 - 122	4	20
Methyl acetate	ND		500	554		ug/L		111	74 - 133	1	20
Methyl tert-butyl ether	ND		250	231		ug/L		92	77 - 120	2	37
Methylcyclohexane	31		250	276		ug/L		98	68 - 134	5	20
Methylene Chloride	10		250	263		ug/L		101	75 - 124	3	15
Styrene	ND		250	239		ug/L		96	80 - 120	2	20
Tetrachloroethene	ND		250	230		ug/L		92	74 - 122	5	20
Toluene	ND		250	242		ug/L		97	80 - 122	1	15
trans-1,2-Dichloroethene	ND		250	236		ug/L		94	73 - 127	5	20
trans-1,3-Dichloropropene	ND		250	240		ug/L		96	80 - 120	1	15
Trichloroethene	ND		250	241		ug/L		96	74 - 123	3	16
Trichlorofluoromethane	ND		250	267		ug/L		107	62 - 150	6	20
Vinyl chloride	ND		250	282		ug/L		113	65 - 133	5	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-481994/1-A
Matrix: Water
Analysis Batch: 482258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 14:09	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/15/19 07:45	07/16/19 14:09	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 14:09	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/15/19 07:45	07/16/19 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-481994/1-A
Matrix: Water
Analysis Batch: 482258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 14:09	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 14:09	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Nitroaniline	ND		10	0.42	ug/L		07/15/19 07:45	07/16/19 14:09	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/15/19 07:45	07/16/19 14:09	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 14:09	1
3-Nitroaniline	ND		10	0.48	ug/L		07/15/19 07:45	07/16/19 14:09	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Methylphenol	ND		10	0.36	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Nitroaniline	ND		10	0.25	ug/L		07/15/19 07:45	07/16/19 14:09	1
4-Nitrophenol	ND		10	1.5	ug/L		07/15/19 07:45	07/16/19 14:09	1
Acenaphthene	ND		5.0	0.41	ug/L		07/15/19 07:45	07/16/19 14:09	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/15/19 07:45	07/16/19 14:09	1
Acetophenone	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 14:09	1
Anthracene	ND		5.0	0.28	ug/L		07/15/19 07:45	07/16/19 14:09	1
Atrazine	ND		5.0	0.46	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 14:09	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/15/19 07:45	07/16/19 14:09	1
Biphenyl	ND		5.0	0.65	ug/L		07/15/19 07:45	07/16/19 14:09	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/15/19 07:45	07/16/19 14:09	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/15/19 07:45	07/16/19 14:09	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 14:09	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 14:09	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/15/19 07:45	07/16/19 14:09	1
Caprolactam	ND		5.0	2.2	ug/L		07/15/19 07:45	07/16/19 14:09	1
Carbazole	ND		5.0	0.30	ug/L		07/15/19 07:45	07/16/19 14:09	1
Chrysene	ND		5.0	0.33	ug/L		07/15/19 07:45	07/16/19 14:09	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/15/19 07:45	07/16/19 14:09	1
Dibenzofuran	ND		10	0.51	ug/L		07/15/19 07:45	07/16/19 14:09	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/15/19 07:45	07/16/19 14:09	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 14:09	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/15/19 07:45	07/16/19 14:09	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 14:09	1
Fluoranthene	ND		5.0	0.40	ug/L		07/15/19 07:45	07/16/19 14:09	1
Fluorene	ND		5.0	0.36	ug/L		07/15/19 07:45	07/16/19 14:09	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 14:09	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/15/19 07:45	07/16/19 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-481994/1-A
Matrix: Water
Analysis Batch: 482258

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 481994

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 14:09	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/15/19 07:45	07/16/19 14:09	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/15/19 07:45	07/16/19 14:09	1
Isophorone	ND		5.0	0.43	ug/L		07/15/19 07:45	07/16/19 14:09	1
Naphthalene	ND		5.0	0.76	ug/L		07/15/19 07:45	07/16/19 14:09	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/15/19 07:45	07/16/19 14:09	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/15/19 07:45	07/16/19 14:09	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/15/19 07:45	07/16/19 14:09	1
Pentachlorophenol	ND		10	2.2	ug/L		07/15/19 07:45	07/16/19 14:09	1
Phenanthrene	1.88	J	5.0	0.44	ug/L		07/15/19 07:45	07/16/19 14:09	1
Phenol	ND		5.0	0.39	ug/L		07/15/19 07:45	07/16/19 14:09	1
Pyrene	ND		5.0	0.34	ug/L		07/15/19 07:45	07/16/19 14:09	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*1.65*	*T J*	*ug/L*		*2.62*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*1.63*	*T J*	*ug/L*		*2.68*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*118*	*T J*	*ug/L*		*2.76*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*3.81*	*T J*	*ug/L*		*2.83*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*41.1*	*T J*	*ug/L*		*4.80*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*5.37*	*T J*	*ug/L*		*5.91*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*4.70*	*T J*	*ug/L*		*6.86*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*4.45*	*T J*	*ug/L*		*7.74*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*3.83*	*T J*	*ug/L*		*8.52*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*2.75*	*T J*	*ug/L*		*9.19*		*07/15/19 07:45*	*07/16/19 14:09*	*1*
Unknown	*1.78*	*T J*	*ug/L*		*9.78*		*07/15/19 07:45*	*07/16/19 14:09*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*41 - 120*	*07/15/19 07:45*	*07/16/19 14:09*	*1*
2-Fluorobiphenyl	*94*		*48 - 120*	*07/15/19 07:45*	*07/16/19 14:09*	*1*
2-Fluorophenol	*62*		*35 - 120*	*07/15/19 07:45*	*07/16/19 14:09*	*1*
Nitrobenzene-d5	*91*		*46 - 120*	*07/15/19 07:45*	*07/16/19 14:09*	*1*
Phenol-d5	*43*		*22 - 120*	*07/15/19 07:45*	*07/16/19 14:09*	*1*
p-Terphenyl-d14	*105*		*59 - 136*	*07/15/19 07:45*	*07/16/19 14:09*	*1*

Lab Sample ID: LCS 480-481994/2-A
Matrix: Water
Analysis Batch: 482258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 481994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2,4,5-Trichlorophenol	32.0	33.4		ug/L		104	65 - 126
2,4,6-Trichlorophenol	32.0	34.7		ug/L		108	64 - 120
2,4-Dichlorophenol	32.0	32.6		ug/L		102	63 - 120
2,4-Dimethylphenol	32.0	30.7		ug/L		96	47 - 120
2,4-Dinitrophenol	64.0	64.6		ug/L		101	31 - 137
2,4-Dinitrotoluene	32.0	30.2		ug/L		94	69 - 120
2,6-Dinitrotoluene	32.0	31.0		ug/L		97	68 - 120
2-Chloronaphthalene	32.0	27.2		ug/L		85	58 - 120
2-Chlorophenol	32.0	26.6		ug/L		83	48 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-481994/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482258
Prep Batch: 481994

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Methylnaphthalene	32.0	29.4		ug/L		92	59 - 120
2-Methylphenol	32.0	29.8		ug/L		93	39 - 120
3,3'-Dichlorobenzidine	64.0	70.8		ug/L		111	49 - 135
3-Nitroaniline	32.0	28.3		ug/L		89	51 - 120
4,6-Dinitro-2-methylphenol	64.0	67.7		ug/L		106	46 - 136
4-Bromophenyl phenyl ether	32.0	31.4		ug/L		98	65 - 120
4-Chloro-3-methylphenol	32.0	28.0		ug/L		87	61 - 123
4-Chloroaniline	32.0	26.1		ug/L		82	30 - 120
4-Methylphenol	32.0	26.1		ug/L		82	29 - 131
4-Nitroaniline	32.0	26.7		ug/L		83	65 - 120
4-Nitrophenol	64.0	78.8	*	ug/L		123	45 - 120
Acenaphthene	32.0	30.3		ug/L		95	60 - 120
Acenaphthylene	32.0	29.8		ug/L		93	63 - 120
Anthracene	32.0	30.2		ug/L		94	67 - 120
Atrazine	64.0	75.1		ug/L		117	71 - 130
Benzaldehyde	64.0	52.2		ug/L		82	10 - 140
Benzo(a)anthracene	32.0	31.5		ug/L		98	70 - 121
Benzo(a)pyrene	32.0	29.3		ug/L		92	60 - 123
Benzo(b)fluoranthene	32.0	32.0		ug/L		100	66 - 126
Benzo(g,h,i)perylene	32.0	32.1		ug/L		100	66 - 150
Benzo(k)fluoranthene	32.0	31.1		ug/L		97	65 - 124
Biphenyl	32.0	28.0		ug/L		88	59 - 120
bis (2-chloroisopropyl) ether	32.0	24.0		ug/L		75	21 - 136
Bis(2-chloroethoxy)methane	32.0	25.6		ug/L		80	50 - 128
Bis(2-chloroethyl)ether	32.0	22.1		ug/L		69	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.4		ug/L		104	63 - 139
Butyl benzyl phthalate	32.0	30.1		ug/L		94	70 - 129
Caprolactam	64.0	20.9		ug/L		33	22 - 120
Carbazole	32.0	29.4		ug/L		92	66 - 123
Chrysene	32.0	33.7		ug/L		105	69 - 120
Dibenz(a,h)anthracene	32.0	32.4		ug/L		101	65 - 135
Dibenzofuran	32.0	29.8		ug/L		93	66 - 120
Diethyl phthalate	32.0	34.3		ug/L		107	59 - 127
Dimethyl phthalate	32.0	33.2		ug/L		104	68 - 120
Di-n-butyl phthalate	32.0	32.0		ug/L		100	69 - 131
Di-n-octyl phthalate	32.0	31.0		ug/L		97	63 - 140
Fluoranthene	32.0	32.9		ug/L		103	69 - 126
Fluorene	32.0	31.5		ug/L		98	66 - 120
Hexachlorobenzene	32.0	29.8		ug/L		93	61 - 120
Hexachlorobutadiene	32.0	25.5		ug/L		80	35 - 120
Hexachlorocyclopentadiene	32.0	18.7		ug/L		58	31 - 120
Hexachloroethane	32.0	23.4		ug/L		73	43 - 120
Indeno(1,2,3-cd)pyrene	32.0	32.8		ug/L		103	69 - 146
Isophorone	32.0	29.6		ug/L		92	55 - 120
Naphthalene	32.0	28.3		ug/L		88	57 - 120
Nitrobenzene	32.0	30.5		ug/L		95	53 - 123
N-Nitrosodi-n-propylamine	32.0	26.9		ug/L		84	32 - 140
Pentachlorophenol	64.0	47.7		ug/L		74	29 - 136
Phenanthrene	32.0	32.8		ug/L		103	68 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-481994/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482258
Prep Batch: 481994

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Phenol			32.0	18.0		ug/L		56	17 - 120		
Pyrene			32.0	31.4		ug/L		98	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*103*		*41 - 120*
2-Fluorobiphenyl	*92*		*48 - 120*
2-Fluorophenol	*64*		*35 - 120*
Nitrobenzene-d5	*87*		*46 - 120*
Phenol-d5	*47*		*22 - 120*
p-Terphenyl-d14	*97*		*59 - 136*

Lab Sample ID: 480-156069-2 MS
Client Sample ID: MW17
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482258
Prep Batch: 481994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
2,4,5-Trichlorophenol	ND	F2	32.0	34.2		ug/L		107	65 - 126		
2,4,6-Trichlorophenol	ND		32.0	36.5		ug/L		114	64 - 120		
2,4-Dichlorophenol	ND		32.0	29.9		ug/L		94	48 - 132		
2,4-Dimethylphenol	ND	F1	32.0	30.8		ug/L		96	39 - 130		
2,4-Dinitrophenol	ND		64.0	67.9		ug/L		106	21 - 150		
2,4-Dinitrotoluene	ND		32.0	23.6	J	ug/L		74	54 - 138		
2,6-Dinitrotoluene	ND		32.0	32.2		ug/L		101	17 - 150		
2-Chloronaphthalene	ND		32.0	28.1		ug/L		88	52 - 124		
2-Chlorophenol	ND		32.0	26.0		ug/L		81	48 - 120		
2-Methylnaphthalene	ND		32.0	30.0		ug/L		94	34 - 140		
2-Methylphenol	ND		32.0	30.5		ug/L		95	46 - 120		
3,3'-Dichlorobenzidine	ND	F1	64.0	ND	F1	ug/L		0	10 - 150		
3-Nitroaniline	ND	F1	32.0	ND	F1	ug/L		0	32 - 150		
4,6-Dinitro-2-methylphenol	ND		64.0	79.6		ug/L		124	38 - 150		
4-Bromophenyl phenyl ether	ND		32.0	27.1		ug/L		85	63 - 126		
4-Chloro-3-methylphenol	ND		32.0	28.7		ug/L		90	64 - 127		
4-Chloroaniline	ND	F1	32.0	ND	F1	ug/L		0	16 - 124		
4-Methylphenol	ND		32.0	23.2	J	ug/L		73	36 - 120		
4-Nitroaniline	ND	F1	32.0	ND	F1	ug/L		0	32 - 150		
4-Nitrophenol	ND	* F1	64.0	87.3	F1	ug/L		136	23 - 132		
Acenaphthene	ND		32.0	31.4		ug/L		98	48 - 120		
Acenaphthylene	ND		32.0	29.7		ug/L		93	63 - 120		
Anthracene	ND		32.0	28.9		ug/L		90	65 - 122		
Atrazine	ND		64.0	49.6		ug/L		78	50 - 150		
Benzaldehyde	ND		64.0	56.1		ug/L		88	10 - 150		
Benzo(a)anthracene	ND		32.0	24.4	J	ug/L		76	43 - 124		
Benzo(a)pyrene	ND		32.0	21.5	J	ug/L		67	23 - 125		
Benzo(b)fluoranthene	ND		32.0	23.2	J	ug/L		73	27 - 127		
Benzo(g,h,i)perylene	ND		32.0	25.3		ug/L		79	16 - 147		
Benzo(k)fluoranthene	ND		32.0	24.1	J	ug/L		75	20 - 124		
Biphenyl	ND		32.0	28.7		ug/L		90	57 - 120		
bis (2-chloroisopropyl) ether	ND		32.0	24.3	J	ug/L		76	28 - 121		

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-156069-2 MS
Matrix: Water
Analysis Batch: 482258

Client Sample ID: MW17
Prep Type: Total/NA
Prep Batch: 481994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Bis(2-chloroethoxy)methane	ND		32.0	26.7		ug/L		84	44 - 128
Bis(2-chloroethyl)ether	ND		32.0	24.9	J	ug/L		78	45 - 120
Bis(2-ethylhexyl) phthalate	ND		32.0	26.6		ug/L		83	16 - 150
Butyl benzyl phthalate	ND		32.0	24.4	J	ug/L		76	51 - 140
Caprolactam	ND	F1	64.0	ND	F1	ug/L		0	10 - 120
Carbazole	ND		32.0	34.5		ug/L		108	16 - 148
Chrysene	ND		32.0	26.8		ug/L		84	44 - 122
Dibenz(a,h)anthracene	ND		32.0	24.1	J	ug/L		75	16 - 139
Dibenzofuran	ND		32.0	30.7	J	ug/L		96	60 - 120
Diethyl phthalate	ND	F2	32.0	27.0		ug/L		84	53 - 133
Dimethyl phthalate	ND		32.0	24.9	J	ug/L		78	59 - 123
Di-n-butyl phthalate	ND		32.0	26.9		ug/L		84	65 - 129
Di-n-octyl phthalate	ND		32.0	26.7		ug/L		83	16 - 150
Fluoranthene	ND		32.0	28.6		ug/L		89	63 - 129
Fluorene	ND		32.0	30.2		ug/L		95	62 - 120
Hexachlorobenzene	ND		32.0	31.1		ug/L		97	57 - 121
Hexachlorobutadiene	ND		32.0	25.3		ug/L		79	37 - 120
Hexachlorocyclopentadiene	ND		32.0	18.4	J	ug/L		58	21 - 120
Hexachloroethane	ND		32.0	29.0		ug/L		91	16 - 130
Indeno(1,2,3-cd)pyrene	ND		32.0	25.2		ug/L		79	16 - 140
Isophorone	ND		32.0	31.0		ug/L		97	48 - 133
Naphthalene	ND		32.0	27.8		ug/L		87	45 - 120
Nitrobenzene	ND		32.0	28.8		ug/L		90	45 - 123
N-Nitrosodi-n-propylamine	ND		32.0	29.8		ug/L		93	49 - 120
Pentachlorophenol	ND		64.0	81.3		ug/L		127	23 - 149
Phenanthrene	2.2	J B	32.0	34.2		ug/L		107	65 - 122
Phenol	ND		32.0	14.8	J	ug/L		46	16 - 120
Pyrene	ND		32.0	23.9	J	ug/L		75	58 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol	*98*		*41 - 120*
2-Fluorobiphenyl	*91*		*48 - 120*
2-Fluorophenol	*61*		*35 - 120*
Nitrobenzene-d5	*86*		*46 - 120*
Phenol-d5	*53*		*22 - 120*
p-Terphenyl-d14	*45*	*X*	*59 - 136*

Lab Sample ID: 480-156069-2 MSD
Matrix: Water
Analysis Batch: 482258

Client Sample ID: MW17
Prep Type: Total/NA
Prep Batch: 481994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND	F2	32.0	24.7	J F2	ug/L		77	65 - 126	32	18
2,4,6-Trichlorophenol	ND		32.0	33.1		ug/L		104	64 - 120	10	19
2,4-Dichlorophenol	ND		32.0	29.1		ug/L		91	48 - 132	3	19
2,4-Dimethylphenol	ND	F1	32.0	ND	F1	ug/L		0	39 - 130	NC	42
2,4-Dinitrophenol	ND		64.0	62.2		ug/L		97	21 - 150	9	22
2,4-Dinitrotoluene	ND		32.0	22.4	J	ug/L		70	54 - 138	5	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-156069-2 MSD
Client Sample ID: MW17
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482258
Prep Batch: 481994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2,6-Dinitrotoluene	ND		32.0	28.6		ug/L		89	17 - 150	12	15
2-Chloronaphthalene	ND		32.0	25.2		ug/L		79	52 - 124	11	21
2-Chlorophenol	ND		32.0	25.5		ug/L		80	48 - 120	2	25
2-Methylnaphthalene	ND		32.0	27.7		ug/L		86	34 - 140	8	21
2-Methylphenol	ND		32.0	26.5		ug/L		83	46 - 120	14	27
3,3'-Dichlorobenzidine	ND	F1	64.0	ND	F1	ug/L		0	10 - 150	NC	25
3-Nitroaniline	ND	F1	32.0	ND	F1	ug/L		0	32 - 150	NC	19
4,6-Dinitro-2-methylphenol	ND		64.0	88.3		ug/L		138	38 - 150	10	15
4-Bromophenyl phenyl ether	ND		32.0	27.4		ug/L		86	63 - 126	1	15
4-Chloro-3-methylphenol	ND		32.0	27.1		ug/L		85	64 - 127	6	27
4-Chloroaniline	ND	F1	32.0	ND	F1	ug/L		0	16 - 124	NC	22
4-Methylphenol	ND		32.0	24.5	J	ug/L		77	36 - 120	5	24
4-Nitroaniline	ND	F1	32.0	18.1	J	ug/L		56	32 - 150	NC	24
4-Nitrophenol	ND	* F1	64.0	79.8		ug/L		125	23 - 132	9	48
Acenaphthene	ND		32.0	28.7		ug/L		90	48 - 120	9	24
Acenaphthylene	ND		32.0	28.2		ug/L		88	63 - 120	5	18
Anthracene	ND		32.0	29.3		ug/L		91	65 - 122	1	15
Atrazine	ND		64.0	43.3		ug/L		68	50 - 150	14	20
Benzaldehyde	ND		64.0	50.2		ug/L		78	10 - 150	11	20
Benzo(a)anthracene	ND		32.0	24.0	J	ug/L		75	43 - 124	2	15
Benzo(a)pyrene	ND		32.0	22.3	J	ug/L		70	23 - 125	4	15
Benzo(b)fluoranthene	ND		32.0	23.4	J	ug/L		73	27 - 127	1	15
Benzo(g,h,i)perylene	ND		32.0	25.5		ug/L		80	16 - 147	1	15
Benzo(k)fluoranthene	ND		32.0	23.5	J	ug/L		73	20 - 124	3	22
Biphenyl	ND		32.0	26.4		ug/L		82	57 - 120	9	20
bis (2-chloroisopropyl) ether	ND		32.0	22.1	J	ug/L		69	28 - 121	10	24
Bis(2-chloroethoxy)methane	ND		32.0	24.9	J	ug/L		78	44 - 128	7	17
Bis(2-chloroethyl)ether	ND		32.0	21.2	J	ug/L		66	45 - 120	16	21
Bis(2-ethylhexyl) phthalate	ND		32.0	26.9		ug/L		84	16 - 150	1	15
Butyl benzyl phthalate	ND		32.0	23.2	J	ug/L		73	51 - 140	5	16
Caprolactam	ND	F1	64.0	ND	F1	ug/L		0	10 - 120	NC	20
Carbazole	ND		32.0	30.0		ug/L		94	16 - 148	14	20
Chrysene	ND		32.0	26.6		ug/L		83	44 - 122	0	15
Dibenz(a,h)anthracene	ND		32.0	24.0	J	ug/L		75	16 - 139	1	15
Dibenzofuran	ND		32.0	27.5	J	ug/L		86	60 - 120	11	15
Diethyl phthalate	ND	F2	32.0	23.0	J F2	ug/L		72	53 - 133	16	15
Dimethyl phthalate	ND		32.0	24.1	J	ug/L		75	59 - 123	3	15
Di-n-butyl phthalate	ND		32.0	24.6	J	ug/L		77	65 - 129	9	15
Di-n-octyl phthalate	ND		32.0	27.6		ug/L		86	16 - 150	3	16
Fluoranthene	ND		32.0	28.1		ug/L		88	63 - 129	2	15
Fluorene	ND		32.0	27.1		ug/L		85	62 - 120	11	15
Hexachlorobenzene	ND		32.0	27.4		ug/L		86	57 - 121	12	15
Hexachlorobutadiene	ND		32.0	25.1		ug/L		78	37 - 120	1	44
Hexachlorocyclopentadiene	ND		32.0	18.7	J	ug/L		58	21 - 120	1	49
Hexachloroethane	ND		32.0	29.5		ug/L		92	16 - 130	2	46
Indeno(1,2,3-cd)pyrene	ND		32.0	24.3	J	ug/L		76	16 - 140	3	15
Isophorone	ND		32.0	28.6		ug/L		89	48 - 133	8	17
Naphthalene	ND		32.0	27.3		ug/L		85	45 - 120	2	29
Nitrobenzene	ND		32.0	29.0		ug/L		91	45 - 123	1	24

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-156069-2 MSD
Client Sample ID: MW17
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482258
Prep Batch: 481994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
N-Nitrosodi-n-propylamine	ND		32.0	29.7		ug/L		93	49 - 120	0	31
Pentachlorophenol	ND		64.0	92.0		ug/L		144	23 - 149	12	37
Phenanthrene	2.2	J B	32.0	31.4		ug/L		98	65 - 122	9	15
Phenol	ND		32.0	15.4	J	ug/L		48	16 - 120	4	34
Pyrene	ND		32.0	23.4	J	ug/L		73	58 - 128	2	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol	*116*		*41 - 120*
2-Fluorobiphenyl	*83*		*48 - 120*
2-Fluorophenol	*61*		*35 - 120*
Nitrobenzene-d5	*79*		*46 - 120*
Phenol-d5	*48*		*22 - 120*
p-Terphenyl-d14	*45*	*X*	*59 - 136*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-482038/1-A
Client Sample ID: Method Blank
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482426
Prep Batch: 482038

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		07/16/19 07:57	07/16/19 17:40	1
Lead	ND		0.010	0.0030	mg/L		07/16/19 07:57	07/16/19 17:40	1

Lab Sample ID: LCS 480-482038/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482426
Prep Batch: 482038

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	0.200	0.212		mg/L		106	80 - 120
Lead	0.200	0.203		mg/L		102	80 - 120

Lab Sample ID: 480-156069-2 MS
Client Sample ID: MW17
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482426
Prep Batch: 482038

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	ND		0.200	0.205		mg/L		102	75 - 125
Lead	0.0030	J	0.200	0.196		mg/L		96	75 - 125

Lab Sample ID: 480-156069-2 MSD
Client Sample ID: MW17
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 482426
Prep Batch: 482038

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	ND		0.200	0.205		mg/L		103	75 - 125	0	20
Lead	0.0030	J	0.200	0.199		mg/L		98	75 - 125	1	20

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

GC/MS VOA

Analysis Batch: 482015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156069-1	W13	Total/NA	Water	8260C	
480-156069-2	MW17	Total/NA	Water	8260C	
480-156069-3	W28	Total/NA	Water	8260C	
480-156069-4	WCMW4	Total/NA	Water	8260C	
480-156069-5	BLIND DUP	Total/NA	Water	8260C	
480-156069-6	TRIP BLANK	Total/NA	Water	8260C	
MB 480-482015/7	Method Blank	Total/NA	Water	8260C	
LCS 480-482015/5	Lab Control Sample	Total/NA	Water	8260C	
480-156069-2 MS	MW17	Total/NA	Water	8260C	
480-156069-2 MSD	MW17	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 481994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156069-1	W13	Total/NA	Water	3510C	
480-156069-2	MW17	Total/NA	Water	3510C	
480-156069-3	W28	Total/NA	Water	3510C	
480-156069-4	WCMW4	Total/NA	Water	3510C	
480-156069-5	BLIND DUP	Total/NA	Water	3510C	
MB 480-481994/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-481994/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-156069-2 MS	MW17	Total/NA	Water	3510C	
480-156069-2 MSD	MW17	Total/NA	Water	3510C	

Analysis Batch: 482258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156069-1	W13	Total/NA	Water	8270D	481994
480-156069-2	MW17	Total/NA	Water	8270D	481994
480-156069-3	W28	Total/NA	Water	8270D	481994
480-156069-4	WCMW4	Total/NA	Water	8270D	481994
480-156069-5	BLIND DUP	Total/NA	Water	8270D	481994
MB 480-481994/1-A	Method Blank	Total/NA	Water	8270D	481994
LCS 480-481994/2-A	Lab Control Sample	Total/NA	Water	8270D	481994
480-156069-2 MS	MW17	Total/NA	Water	8270D	481994
480-156069-2 MSD	MW17	Total/NA	Water	8270D	481994

Metals

Prep Batch: 482038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156069-1	W13	Total/NA	Water	3005A	
480-156069-2	MW17	Total/NA	Water	3005A	
480-156069-3	W28	Total/NA	Water	3005A	
480-156069-4	WCMW4	Total/NA	Water	3005A	
480-156069-5	BLIND DUP	Total/NA	Water	3005A	
MB 480-482038/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-482038/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-156069-2 MS	MW17	Total/NA	Water	3005A	
480-156069-2 MSD	MW17	Total/NA	Water	3005A	

Metals

Analysis Batch: 482426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-156069-1	W13	Total/NA	Water	6010C	482038
480-156069-2	MW17	Total/NA	Water	6010C	482038
480-156069-3	W28	Total/NA	Water	6010C	482038
480-156069-4	WCMW4	Total/NA	Water	6010C	482038
480-156069-5	BLIND DUP	Total/NA	Water	6010C	482038
MB 480-482038/1-A	Method Blank	Total/NA	Water	6010C	482038
LCS 480-482038/2-A	Lab Control Sample	Total/NA	Water	6010C	482038
480-156069-2 MS	MW17	Total/NA	Water	6010C	482038
480-156069-2 MSD	MW17	Total/NA	Water	6010C	482038

Client Sample ID: W13
Lab Sample ID: 480-156069-1
Date Collected: 07/10/19 12:55
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	482015	07/15/19 16:48	AEM	TAL BUF
Total/NA	Prep	3510C			481994	07/15/19 07:45	JMP	TAL BUF
Total/NA	Analysis	8270D		1	482258	07/16/19 17:53	RJS	TAL BUF
Total/NA	Prep	3005A			482038	07/16/19 07:57	EMB	TAL BUF
Total/NA	Analysis	6010C		1	482426	07/16/19 17:48	LMH	TAL BUF

Client Sample ID: MW17
Lab Sample ID: 480-156069-2
Date Collected: 07/09/19 13:50
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	482015	07/15/19 17:11	AEM	TAL BUF
Total/NA	Prep	3510C			481994	07/15/19 07:45	JMP	TAL BUF
Total/NA	Analysis	8270D		5	482258	07/16/19 16:57	RJS	TAL BUF
Total/NA	Prep	3005A			482038	07/16/19 07:57	EMB	TAL BUF
Total/NA	Analysis	6010C		1	482426	07/16/19 18:03	LMH	TAL BUF

Client Sample ID: W28
Lab Sample ID: 480-156069-3
Date Collected: 07/10/19 09:05
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	482015	07/15/19 17:34	AEM	TAL BUF
Total/NA	Prep	3510C			481994	07/15/19 07:45	JMP	TAL BUF
Total/NA	Analysis	8270D		1	482258	07/16/19 18:21	RJS	TAL BUF
Total/NA	Prep	3005A			482038	07/16/19 07:57	EMB	TAL BUF
Total/NA	Analysis	6010C		1	482426	07/16/19 18:22	LMH	TAL BUF

Client Sample ID: WCMW4
Lab Sample ID: 480-156069-4
Date Collected: 07/10/19 10:00
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	482015	07/15/19 17:57	AEM	TAL BUF
Total/NA	Prep	3510C			481994	07/15/19 07:45	JMP	TAL BUF
Total/NA	Analysis	8270D		5	482258	07/16/19 18:49	RJS	TAL BUF
Total/NA	Prep	3005A			482038	07/16/19 07:57	EMB	TAL BUF
Total/NA	Analysis	6010C		1	482426	07/16/19 18:26	LMH	TAL BUF

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5
Date Collected: 07/10/19 07:00
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	482015	07/15/19 18:20	AEM	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5

Date Collected: 07/10/19 07:00
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			481994	07/15/19 07:45	JMP	TAL BUF
Total/NA	Analysis	8270D		1	482258	07/16/19 19:17	RJS	TAL BUF
Total/NA	Prep	3005A			482038	07/16/19 07:57	EMB	TAL BUF
Total/NA	Analysis	6010C		1	482426	07/16/19 18:30	LMH	TAL BUF

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-156069-6

Date Collected: 07/10/19 00:00
Matrix: Water
Date Received: 07/12/19 09:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	482015	07/15/19 18:43	AEM	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Job ID: 480-156069-1
Project/Site: Benchmark - Olean Parcel 2 GWS

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

Method 8260C

Volatile Organic Compounds (GC/MS) by Method 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): ZB-624 (20) ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DCA #	TOL #	BFB #
W13	480-156069-1	105	98	94
MW17	480-156069-2	108	100	92
W28	480-156069-3	101	100	93
WCMW4	480-156069-4	106	100	93
BLIND DUP	480-156069-5	109	99	95
TRIP BLANK	480-156069-6	103	99	94
	MB 480-482015/7	102	100	92
	LCS 480-482015/5	99	101	92
MW17 MS	480-156069-2 MS	107	99	92
MW17 MSD	480-156069-2 MSD	106	100	91

	QC LIMITS
DCA = 1,2-Dichloroethane-d4 (Surr)	77-120
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6963.D

Lab ID: LCS 480-482015/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	25.0	24.7	99	73-126	
1,1,2,2-Tetrachloroethane	25.0	25.1	100	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.4	109	61-148	
1,1,2-Trichloroethane	25.0	25.3	101	76-122	
1,1-Dichloroethane	25.0	25.2	101	77-120	
1,1-Dichloroethene	25.0	24.2	97	66-127	
1,2,4-Trichlorobenzene	25.0	22.2	89	79-122	
1,2-Dibromo-3-Chloropropane	25.0	24.3	97	56-134	
1,2-Dibromoethane	25.0	23.0	92	77-120	
1,2-Dichlorobenzene	25.0	24.2	97	80-124	
1,2-Dichloroethane	25.0	24.4	98	75-120	
1,2-Dichloropropane	25.0	25.8	103	76-120	
1,3-Dichlorobenzene	25.0	25.4	102	77-120	
1,4-Dichlorobenzene	25.0	25.0	100	80-120	
2-Butanone (MEK)	125	145	116	57-140	
2-Hexanone	125	131	104	65-127	
4-Methyl-2-pentanone (MIBK)	125	133	106	71-125	
Acetone	125	156	124	56-142	
Benzene	25.0	25.8	103	71-124	
Bromodichloromethane	25.0	25.1	100	80-122	
Bromoform	25.0	25.6	102	61-132	
Bromomethane	25.0	25.0	100	55-144	
Carbon disulfide	25.0	24.3	97	59-134	
Carbon tetrachloride	25.0	26.2	105	72-134	
Chlorobenzene	25.0	24.2	97	80-120	
Chloroethane	25.0	27.1	108	69-136	
Chloroform	25.0	22.6	90	73-127	
Chloromethane	25.0	28.1	112	68-124	
cis-1,2-Dichloroethene	25.0	23.9	96	74-124	
cis-1,3-Dichloropropene	25.0	26.1	105	74-124	
Cyclohexane	25.0	28.5	114	59-135	
Dibromochloromethane	25.0	25.0	100	75-125	
Dichlorodifluoromethane	25.0	27.7	111	59-135	
Ethylbenzene	25.0	25.2	101	77-123	
Isopropylbenzene	25.0	27.0	108	77-122	
Methyl acetate	50.0	53.4	107	74-133	
Methyl tert-butyl ether	25.0	23.6	94	77-120	
Methylcyclohexane	25.0	26.6	106	68-134	
Methylene Chloride	25.0	24.5	98	75-124	
Styrene	25.0	24.6	98	80-120	
Tetrachloroethene	25.0	24.7	99	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6963.D

Lab ID: LCS 480-482015/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	25.0	25.0	100	80-122	
trans-1,2-Dichloroethene	25.0	24.8	99	73-127	
trans-1,3-Dichloropropene	25.0	25.5	102	80-120	
Trichloroethene	25.0	25.5	102	74-123	
Trichlorofluoromethane	25.0	26.5	106	62-150	
Vinyl chloride	25.0	27.9	112	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6985.D

Lab ID: 480-156069-2 MS Client ID: MW17 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	250	ND	247	99	73-126	
1,1,2,2-Tetrachloroethane	250	ND	253	101	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	ND	268	107	61-148	
1,1,2-Trichloroethane	250	ND	250	100	76-122	
1,1-Dichloroethane	250	ND	257	103	77-120	
1,1-Dichloroethene	250	ND	240	96	66-127	
1,2,4-Trichlorobenzene	250	ND	215	86	79-122	
1,2-Dibromo-3-Chloropropane	250	ND	237	95	56-134	
1,2-Dibromoethane	250	ND	236	94	77-120	
1,2-Dichlorobenzene	250	ND	241	96	80-124	
1,2-Dichloroethane	250	ND	246	99	75-120	
1,2-Dichloropropane	250	ND	266	106	76-120	
1,3-Dichlorobenzene	250	ND	255	102	77-120	
1,4-Dichlorobenzene	250	ND	248	99	78-124	
2-Butanone (MEK)	1250	ND	1480	118	57-140	
2-Hexanone	1250	ND	1380	110	65-127	
4-Methyl-2-pentanone (MIBK)	1250	ND	1350	108	71-125	
Acetone	1250	44 J	1490	115	56-142	
Benzene	250	5.2 J	261	102	71-124	
Bromodichloromethane	250	ND	248	99	80-122	
Bromoform	250	ND	249	100	61-132	
Bromomethane	250	ND	256	103	55-144	
Carbon disulfide	250	ND	244	98	59-134	
Carbon tetrachloride	250	ND	261	104	72-134	
Chlorobenzene	250	ND	246	98	80-120	
Chloroethane	250	ND	279	112	69-136	
Chloroform	250	ND	228	91	73-127	
Chloromethane	250	ND	287	115	68-124	
cis-1,2-Dichloroethene	250	ND	242	97	74-124	
cis-1,3-Dichloropropene	250	ND	256	102	74-124	
Cyclohexane	250	35	320	114	59-135	
Dibromochloromethane	250	ND	238	95	75-125	
Dichlorodifluoromethane	250	ND	297	119	59-135	
Ethylbenzene	250	ND	246	98	77-123	
Isopropylbenzene	250	9.1 J	271	105	77-122	
Methyl acetate	500	ND	561	112	74-133	
Methyl tert-butyl ether	250	ND	236	94	77-120	
Methylcyclohexane	250	31	290	104	68-134	
Methylene Chloride	250	10	254	98	75-124	
Styrene	250	ND	243	97	80-120	
Tetrachloroethene	250	ND	243	97	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6985.D

Lab ID: 480-156069-2 MS Client ID: MW17 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Toluene	250	ND	244	98	80-122	
trans-1,2-Dichloroethene	250	ND	248	99	73-127	
trans-1,3-Dichloropropene	250	ND	238	95	80-120	
Trichloroethene	250	ND	247	99	74-123	
Trichlorofluoromethane	250	ND	283	113	62-150	
Vinyl chloride	250	ND	297	119	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6986.D

Lab ID: 480-156069-2 MSD Client ID: MW17 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	250	234	94	5	15	73-126	
1,1,2,2-Tetrachloroethane	250	253	101	0	15	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	250	254	102	5	20	61-148	
1,1,2-Trichloroethane	250	247	99	1	15	76-122	
1,1-Dichloroethane	250	247	99	4	20	77-120	
1,1-Dichloroethene	250	227	91	5	16	66-127	
1,2,4-Trichlorobenzene	250	215	86	0	20	79-122	
1,2-Dibromo-3-Chloropropane	250	247	99	4	15	56-134	
1,2-Dibromoethane	250	233	93	1	15	77-120	
1,2-Dichlorobenzene	250	237	95	2	20	80-124	
1,2-Dichloroethane	250	239	95	3	20	75-120	
1,2-Dichloropropane	250	252	101	5	20	76-120	
1,3-Dichlorobenzene	250	245	98	4	20	77-120	
1,4-Dichlorobenzene	250	244	98	2	20	78-124	
2-Butanone (MEK)	1250	1460	117	1	20	57-140	
2-Hexanone	1250	1370	110	0	15	65-127	
4-Methyl-2-pentanone (MIBK)	1250	1390	111	3	35	71-125	
Acetone	1250	1470	114	1	15	56-142	
Benzene	250	251	98	4	13	71-124	
Bromodichloromethane	250	242	97	3	15	80-122	
Bromoform	250	243	97	3	15	61-132	
Bromomethane	250	244	98	5	15	55-144	
Carbon disulfide	250	230	92	6	15	59-134	
Carbon tetrachloride	250	247	99	6	15	72-134	
Chlorobenzene	250	237	95	4	25	80-120	
Chloroethane	250	274	110	2	15	69-136	
Chloroform	250	220	88	4	20	73-127	
Chloromethane	250	282	113	2	15	68-124	
cis-1,2-Dichloroethene	250	230	92	5	15	74-124	
cis-1,3-Dichloropropene	250	246	98	4	15	74-124	
Cyclohexane	250	294	104	8	20	59-135	
Dibromochloromethane	250	234	93	2	15	75-125	
Dichlorodifluoromethane	250	271	109	9	20	59-135	
Ethylbenzene	250	240	96	2	15	77-123	
Isopropylbenzene	250	261	101	4	20	77-122	
Methyl acetate	500	554	111	1	20	74-133	
Methyl tert-butyl ether	250	231	92	2	37	77-120	
Methylcyclohexane	250	276	98	5	20	68-134	
Methylene Chloride	250	263	101	3	15	75-124	
Styrene	250	239	96	2	20	80-120	
Tetrachloroethene	250	230	92	5	20	74-122	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: S6986.D

Lab ID: 480-156069-2 MSD Client ID: MW17 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Toluene	250	242	97	1	15	80-122	
trans-1,2-Dichloroethene	250	236	94	5	20	73-127	
trans-1,3-Dichloropropene	250	240	96	1	15	80-120	
Trichloroethene	250	241	96	3	16	74-123	
Trichlorofluoromethane	250	267	107	6	20	62-150	
Vinyl chloride	250	282	113	5	15	65-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: S6965.D Lab Sample ID: MB 480-482015/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: HP5973S Date Analyzed: 07/15/2019 11:09

GC Column: ZB-624 (20) ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-482015/5	S6963.D	07/15/2019 10:23
W13	480-156069-1	S6979.D	07/15/2019 16:48
MW17	480-156069-2	S6980.D	07/15/2019 17:11
W28	480-156069-3	S6981.D	07/15/2019 17:34
WCMW4	480-156069-4	S6982.D	07/15/2019 17:57
BLIND DUP	480-156069-5	S6983.D	07/15/2019 18:20
TRIP BLANK	480-156069-6	S6984.D	07/15/2019 18:43
MW17 MS	480-156069-2 MS	S6985.D	07/15/2019 19:07
MW17 MSD	480-156069-2 MSD	S6986.D	07/15/2019 19:30

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: S6409.D BFB Injection Date: 06/24/2019

Instrument ID: HP5973S BFB Injection Time: 12:40

Analysis Batch No.: 479287

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	21.0	
75	30.0 - 60.0 % of mass 95	52.1	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.4	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	88.3	
175	5.0 - 9.0 % of mass 174	7.0	(7.9) 1
176	95.0 - 101.0 % of mass 174	85.5	(96.8) 1
177	5.0 - 9.0 % of mass 176	6.2	(7.2) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-479287/11	S6411.D	06/24/2019	13:55
	IC 480-479287/12	S6412.D	06/24/2019	14:18
	IC 480-479287/13	S6413.D	06/24/2019	14:42
	IC 480-479287/14	S6414.D	06/24/2019	15:05
	IC 480-479287/15	S6415.D	06/24/2019	15:27
	ICIS 480-479287/16	S6416.D	06/24/2019	15:50
	IC 480-479287/17	S6417.D	06/24/2019	16:13
	IC 480-479287/18	S6418.D	06/24/2019	16:36

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: S6960.D BFB Injection Date: 07/15/2019

Instrument ID: HP5973S BFB Injection Time: 09:10

Analysis Batch No.: 482015

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.5	
75	30.0 - 60.0 % of mass 95	53.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.0	
173	Less than 2.0 % of mass 174	0.2	(0.3) 1
174	50.0 - 120.00 % of mass 95	87.0	
175	5.0 - 9.0 % of mass 174	7.4	(8.5) 1
176	95.0 - 101.0 % of mass 174	86.3	(99.3) 1
177	5.0 - 9.0 % of mass 176	5.5	(6.4) 2

1-Value is % mass 174 2-Value is % mass 176

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-482015/3	S6961.D	07/15/2019	09:37
	LCS 480-482015/5	S6963.D	07/15/2019	10:23
	MB 480-482015/7	S6965.D	07/15/2019	11:09
W13	480-156069-1	S6979.D	07/15/2019	16:48
MW17	480-156069-2	S6980.D	07/15/2019	17:11
W28	480-156069-3	S6981.D	07/15/2019	17:34
WCMW4	480-156069-4	S6982.D	07/15/2019	17:57
BLIND DUP	480-156069-5	S6983.D	07/15/2019	18:20
TRIP BLANK	480-156069-6	S6984.D	07/15/2019	18:43
MW17 MS	480-156069-2 MS	S6985.D	07/15/2019	19:07
MW17 MSD	480-156069-2 MSD	S6986.D	07/15/2019	19:30

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: ICIS 480-479287/16 Date Analyzed: 06/24/2019 15:50

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S6416.D Heated Purge: (Y/N) N

Calibration ID: 37151

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		155641	5.33	318346	8.31	335318	10.71
UPPER LIMIT		311282	5.83	636692	8.81	670636	11.21
LOWER LIMIT		77821	4.83	159173	7.81	167659	10.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-482015/3		146354	5.32	299159	8.31	287705	10.71

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: CCVIS 480-482015/3 Date Analyzed: 07/15/2019 09:37

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm)

Lab File ID (Standard): S6961.D Heated Purge: (Y/N) N

Calibration ID: 37154

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		146354	5.32	299159	8.31	287705	10.71
UPPER LIMIT		292708	5.82	598318	8.81	575410	11.21
LOWER LIMIT		73177	4.82	149580	7.81	143853	10.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-482015/5		144593	5.33	300778	8.31	282018	10.71
MB 480-482015/7		144202	5.33	293631	8.31	295291	10.71
480-156069-1	W13	139533	5.33	287962	8.31	287940	10.71
480-156069-2	MW17	140812	5.33	289421	8.31	290964	10.71
480-156069-3	W28	138898	5.33	285744	8.31	291563	10.71
480-156069-4	WCMW4	138006	5.33	286282	8.31	286623	10.71
480-156069-5	BLIND DUP	144587	5.33	289955	8.31	296347	10.71
480-156069-6	TRIP BLANK	138173	5.33	286993	8.31	295364	10.71
480-156069-2 MS	MW17 MS	141414	5.32	301030	8.31	285607	10.71
480-156069-2 MSD	MW17 MSD	143935	5.33	300243	8.31	283893	10.71

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: S6979.D

Analysis Method: 8260C Date Collected: 07/10/2019 12:55

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 16:48

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		4.0	3.3
79-34-5	1,1,2,2-Tetrachloroethane	ND		4.0	0.84
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2
79-00-5	1,1,2-Trichloroethane	ND		4.0	0.92
75-34-3	1,1-Dichloroethane	ND		4.0	1.5
75-35-4	1,1-Dichloroethene	ND		4.0	1.2
120-82-1	1,2,4-Trichlorobenzene	ND		4.0	1.6
96-12-8	1,2-Dibromo-3-Chloropropane	ND		4.0	1.6
106-93-4	1,2-Dibromoethane	ND		4.0	2.9
95-50-1	1,2-Dichlorobenzene	ND		4.0	3.2
107-06-2	1,2-Dichloroethane	ND		4.0	0.84
78-87-5	1,2-Dichloropropane	ND		4.0	2.9
541-73-1	1,3-Dichlorobenzene	ND		4.0	3.1
106-46-7	1,4-Dichlorobenzene	ND		4.0	3.4
78-93-3	2-Butanone (MEK)	ND		40	5.3
591-78-6	2-Hexanone	ND		20	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		20	8.4
67-64-1	Acetone	ND		40	12
71-43-2	Benzene	ND		4.0	1.6
75-27-4	Bromodichloromethane	ND		4.0	1.6
75-25-2	Bromoform	ND		4.0	1.0
74-83-9	Bromomethane	ND		4.0	2.8
75-15-0	Carbon disulfide	ND		4.0	0.76
56-23-5	Carbon tetrachloride	ND		4.0	1.1
108-90-7	Chlorobenzene	ND		4.0	3.0
75-00-3	Chloroethane	ND		4.0	1.3
67-66-3	Chloroform	ND		4.0	1.4
74-87-3	Chloromethane	ND		4.0	1.4
156-59-2	cis-1,2-Dichloroethene	ND		4.0	3.2
10061-01-5	cis-1,3-Dichloropropene	ND		4.0	1.4
110-82-7	Cyclohexane	ND		4.0	0.72
124-48-1	Dibromochloromethane	ND		4.0	1.3
75-71-8	Dichlorodifluoromethane	ND		4.0	2.7
100-41-4	Ethylbenzene	ND		4.0	3.0
98-82-8	Isopropylbenzene	ND		4.0	3.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: S6979.D

Analysis Method: 8260C Date Collected: 07/10/2019 12:55

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 16:48

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		10	5.2
1634-04-4	Methyl tert-butyl ether	ND		4.0	0.64
108-87-2	Methylcyclohexane	ND		4.0	0.64
75-09-2	Methylene Chloride	6.4		4.0	1.8
100-42-5	Styrene	ND		4.0	2.9
127-18-4	Tetrachloroethene	ND		4.0	1.4
108-88-3	Toluene	ND		4.0	2.0
156-60-5	trans-1,2-Dichloroethene	ND		4.0	3.6
10061-02-6	trans-1,3-Dichloropropene	ND		4.0	1.5
79-01-6	Trichloroethene	ND		4.0	1.8
75-69-4	Trichlorofluoromethane	ND		4.0	3.5
75-01-4	Vinyl chloride	ND		4.0	3.6
1330-20-7	Xylenes, Total	ND		8.0	2.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	105		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	98		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: S6979.D

Analysis Method: 8260C Date Collected: 07/10/2019 12:55

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 16:48

Soil Aliquot Vol: Dilution Factor: 4

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 1 TIC Result Total: 38

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
1868-53-7	Methane, dibromofluoro-	4.75	38	T J N	94%

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D
Lims ID: 480-156069-E-1
Client ID: W13
Sample Type: Client
Inject. Date: 15-Jul-2019 16:48:30 ALS Bottle#: 21 Worklist Smp#: 22
Purge Vol: 5.000 mL Dil. Factor: 4.0000
Sample Info: 480-156069-e-1
Misc. Info.: 480-0082614-022
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:44:47 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:44:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	139533	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	287962	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	95	287940	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	92	120359	26.2	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	93	692403	24.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.000	88	225689	23.6	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43		2.687				ND	
26 Carbon disulfide	76		2.754				ND	
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84	3.076	3.076	0.000	89	16393	1.59	
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43		4.317				ND	
50 Chloroform	83		4.591				ND	
52 Cyclohexane	56		4.701				ND	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78		5.054				ND	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83		5.778				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92		6.897				ND	
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112	8.339	8.339	-0.006	2	4161	0.1825	a
88 Ethylbenzene	91		8.436				ND	
90 m-Xylene & p-Xylene	106		8.558				ND	
91 o-Xylene	106		8.984				ND	
92 Styrene	104		9.014				ND	
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105		9.367				ND	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	
116 1,2-Dichlorobenzene	146		11.088				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D				
Lims ID:	480-156069-E-1				
Client ID:	W13				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 16:48:30	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Sample Info:	480-156069-e-1				
Misc. Info.:	480-0082614-022				
Operator ID:	KN	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	15-Jul-2019 18:44:47	Calib Date:	24-Jun-2019 20:49:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0325				
First Level Reviewer: milligana		Date:	15-Jul-2019 18:44:48		

Tentative Identified Compound Results

RT	Area	Amount ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	1868-53-7	Methane, dibromofluoro-						
4.749	586305	9.55	153	94	50437	CHBr2F	190	

Quantitation Compounds

Compound	RT	Area	Amount ug/L
* 153 Fluorobenzene (IS)	5.327	1534449	25.0

QC Flag Legend

Processing Flags

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

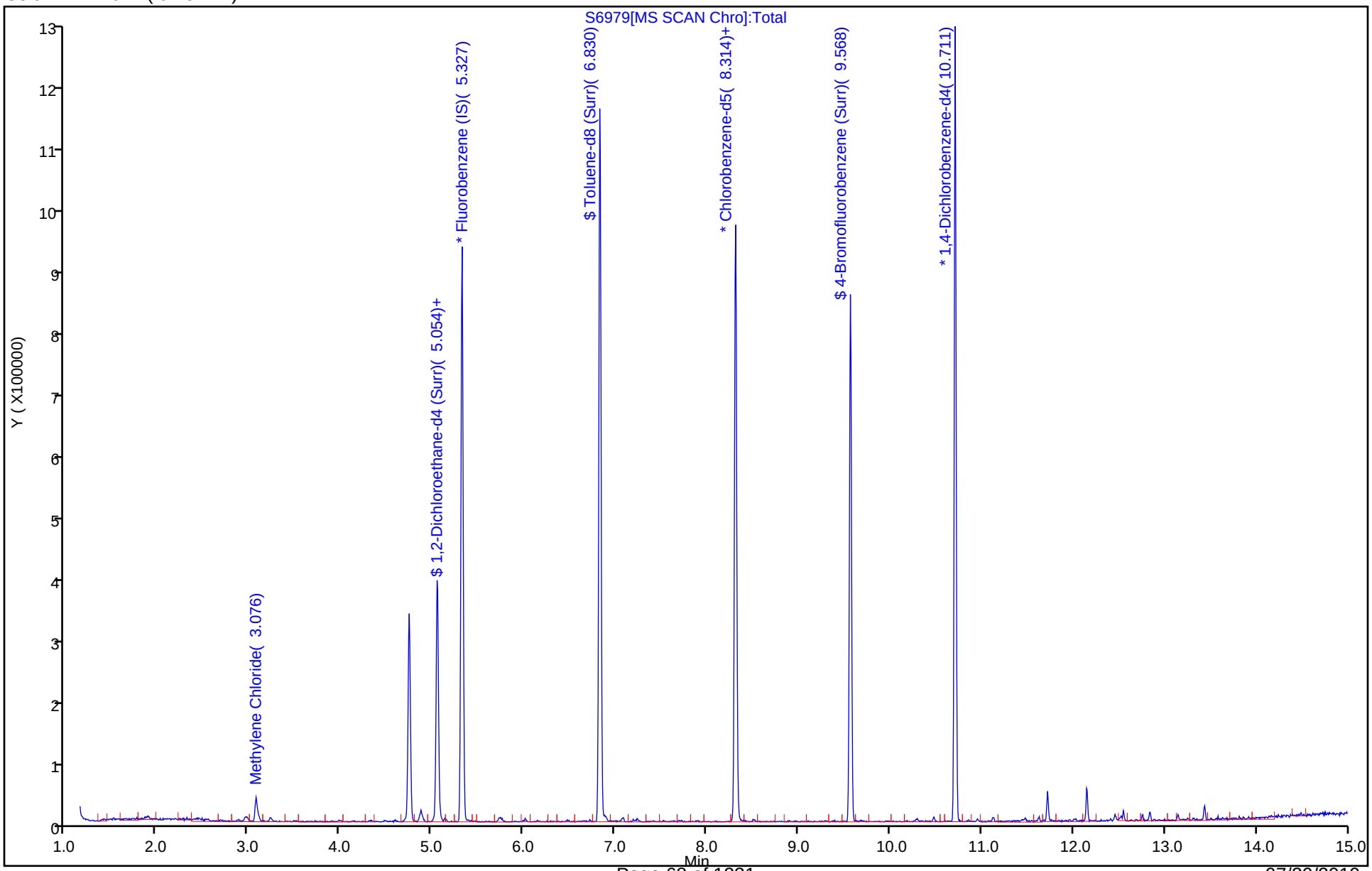
Report Date: 15-Jul-2019 18:44:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D

Injection Date:	15-Jul-2019 16:48:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-E-1	Lab Sample ID:	480-156069-1	Worklist Smp#:	22
Client ID:	W13				
Purge Vol:	5.000 mL	Dil. Factor:	4.0000	ALS Bottle#:	21
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



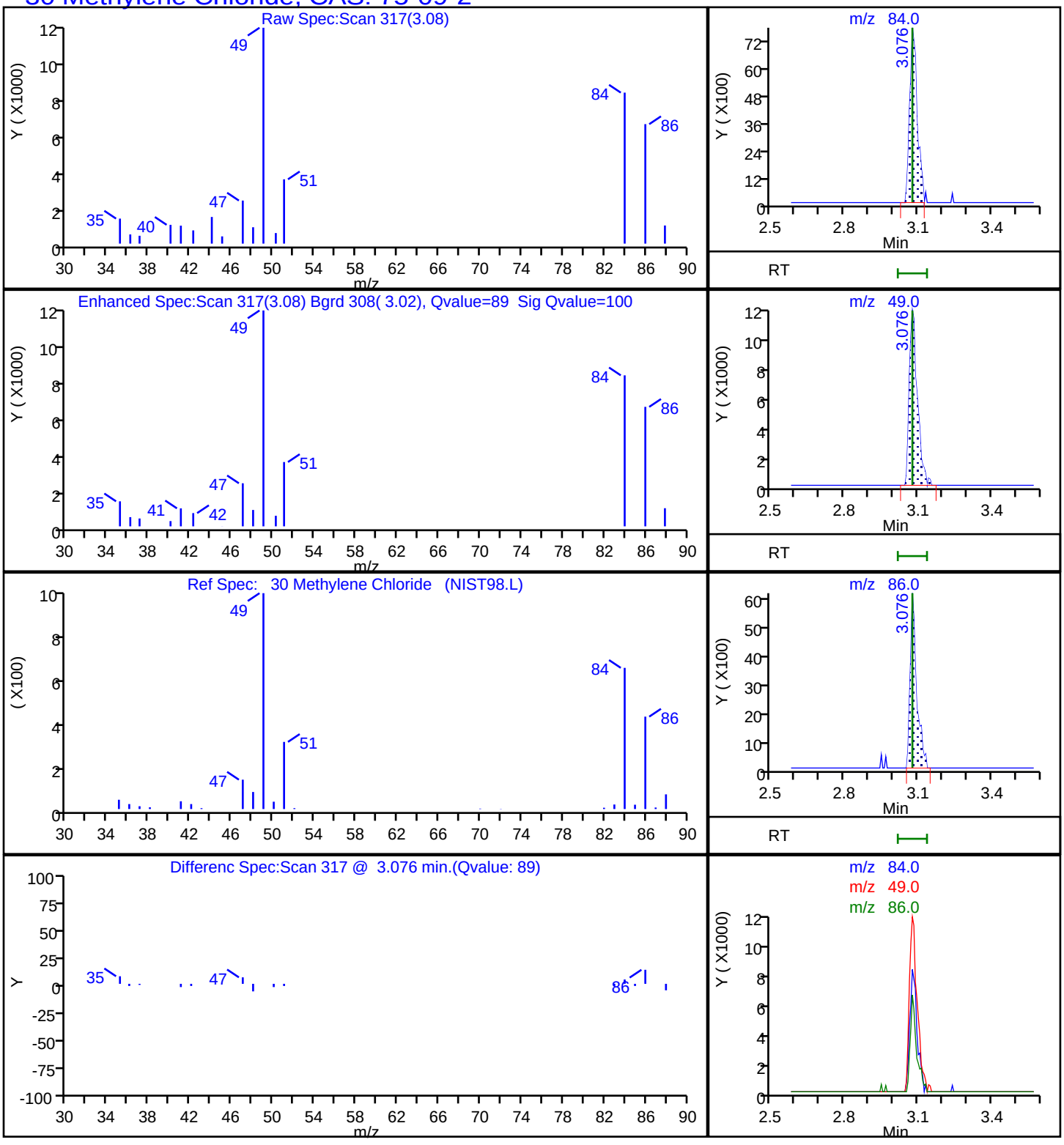
Report Date: 15-Jul-2019 18:44:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D

Injection Date:	15-Jul-2019 16:48:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-1	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	KN	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

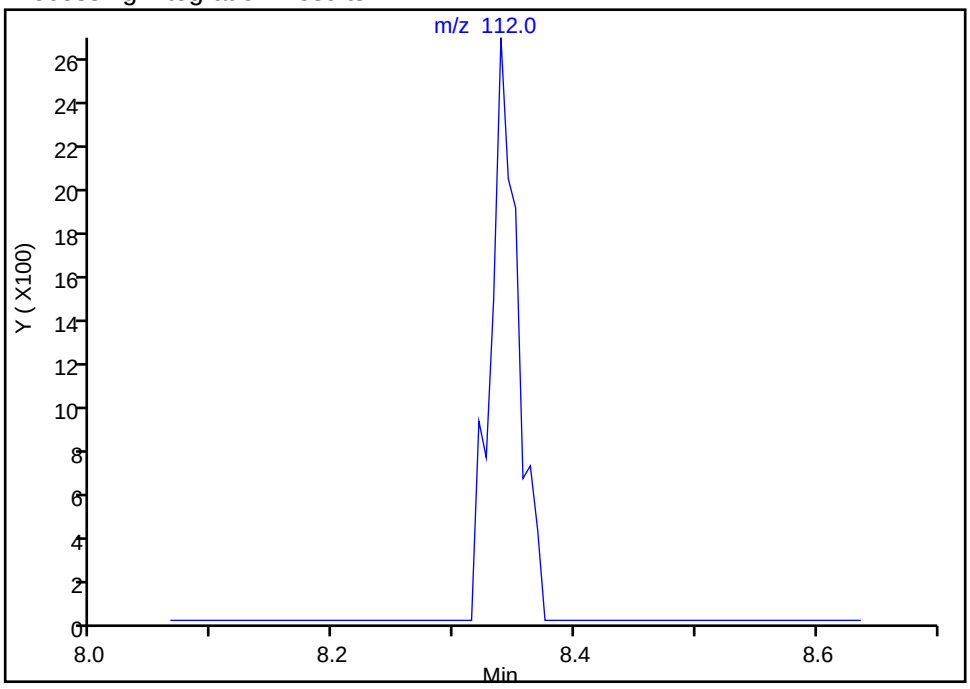
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D				
Injection Date:	15-Jul-2019 16:48:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-1	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	KN	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

87 Chlorobenzene, CAS: 108-90-7

Signal: 1

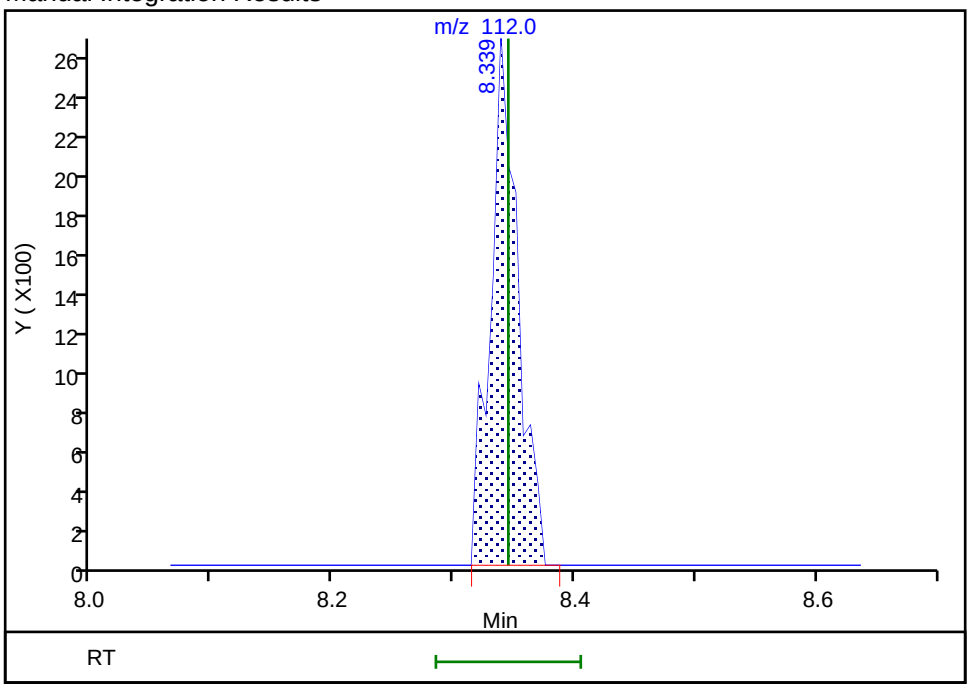
Not Detected
Expected RT: 8.34

Processing Integration Results



Manual Integration Results

RT: 8.34
Area: 4161
Amount: 0.182468
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:44:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

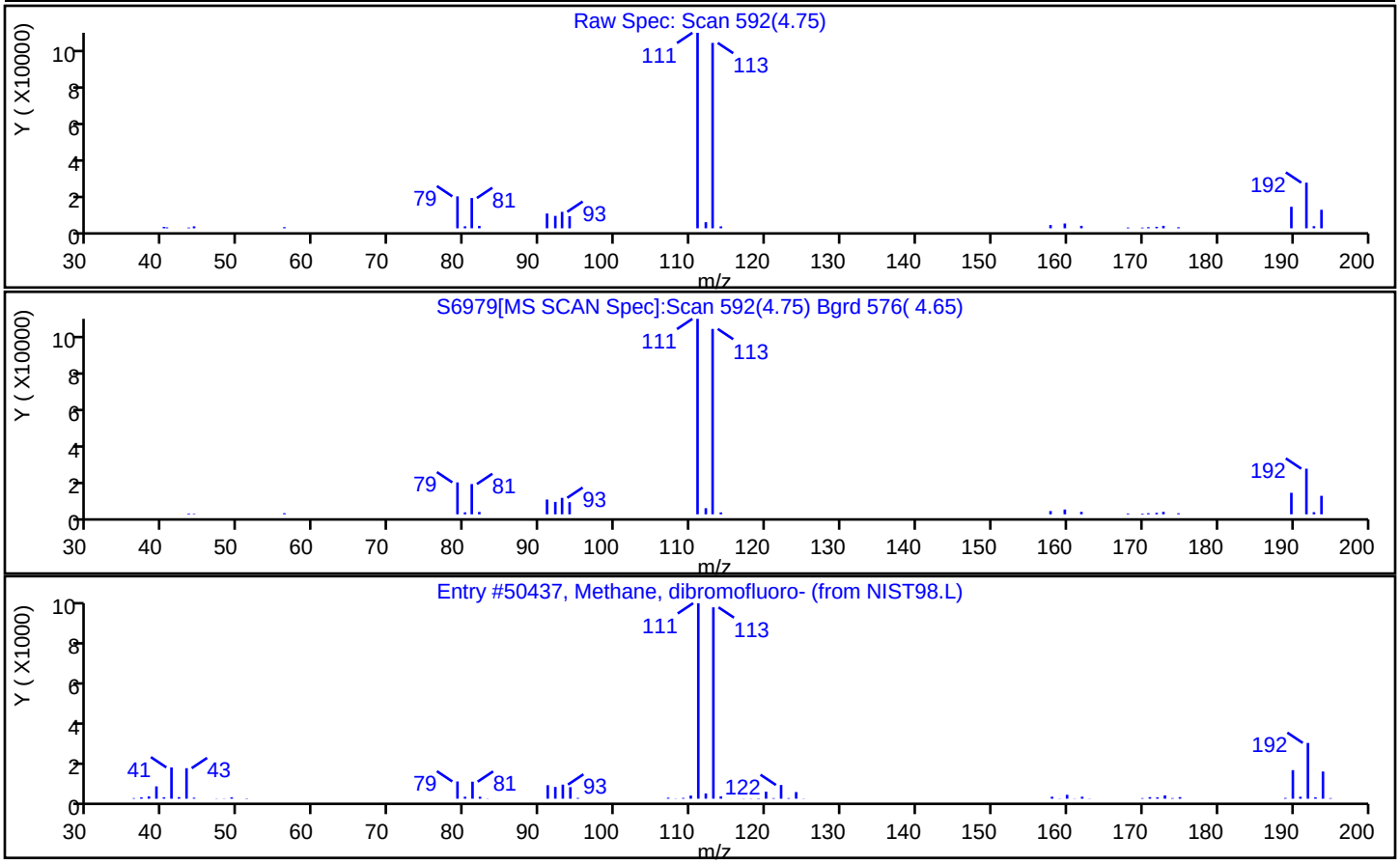
Report Date: 15-Jul-2019 18:44:48 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6979.D

Injection Date:	15-Jul-2019 16:48:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-1	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	KN	ALS Bottle#:	21	Worklist Smp#:	22
Purge Vol:	5.000 mL	Dil. Factor:	4.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:		Detector	MS SCAN		

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Methane, dibromofluoro-	1868-53-7	NIST98.L	50437	CHBr2F	190	94



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: S6980.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:11

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	44	J	100	30
71-43-2	Benzene	5.2	J	10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	35		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	9.1	J	10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: S6980.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:11

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	31		10	1.6
75-09-2	Methylene Chloride	10		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	ND		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	80		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: S6980.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:11

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 1 TIC Result Total: 98

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
108-67-8	Benzene, 1,3,5-trimethyl-	10.35	98	T J N	95%

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D
Lims ID: 480-156069-E-2
Client ID: MW17
Sample Type: Client
Inject. Date: 15-Jul-2019 17:11:30 ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-156069-e-2
Misc. Info.: 480-0082614-023
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:47:17 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:47:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	140812	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	87	289421	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	96	290964	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	94	125161	27.0	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	85	709648	24.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.574	9.567	0.006	92	220927	23.0	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43	2.687	2.687	0.000	65	13363	4.39	
26 Carbon disulfide	76		2.754				ND	
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84	3.070	3.076	-0.006	77	11815	1.01	
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43	4.330	4.330	0.013	77	5270	1.07	a
50 Chloroform	83		4.591				ND	
52 Cyclohexane	56	4.695	4.701	-0.006	88	49101	3.53	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78	5.054	5.054	0.000	22	16580	0.5194	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83	5.771	5.778	-0.007	91	43446	3.07	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92	6.891	6.897	-0.006	45	3542	0.1709	
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112	8.345	8.345	0.000	20	6427	0.2804	a
88 Ethylbenzene	91	8.430	8.436	-0.006	1	4701	0.1240	
90 m-Xylene & p-Xylene	106	8.564	8.558	0.006	44	4082	0.2694	
91 o-Xylene	106	8.984	8.983	0.000	97	118984	8.00	
92 Styrene	104		9.014				ND	U
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105	9.367	9.367	0.000	79	33155	0.9059	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	Ua
116 1,2-Dichlorobenzene	146	11.089	11.088	0.000	58	6544	0.3423	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1				0		8.27	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Lims ID:	480-156069-E-2				
Client ID:	MW17				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 17:11:30	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Sample Info:	480-156069-e-2				
Misc. Info.:	480-0082614-023				
Operator ID:	KN	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	15-Jul-2019 18:47:17	Calib Date:	24-Jun-2019 20:49:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0325				
First Level Reviewer: milligana		Date:	15-Jul-2019 18:47:19		

Tentative Identified Compound Results

RT	Area	Amount ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	108-67-8	Benzene, 1,3,5-trimethyl-						
10.352	787281	9.76	3	95	119300	C9H12	120	

Quantitation Compounds

Compound	RT	Area	Amount ug/L
* 3 1,4-Dichlorobenzene-d4	10.711	2015884	25.0

QC Flag Legend

Processing Flags

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

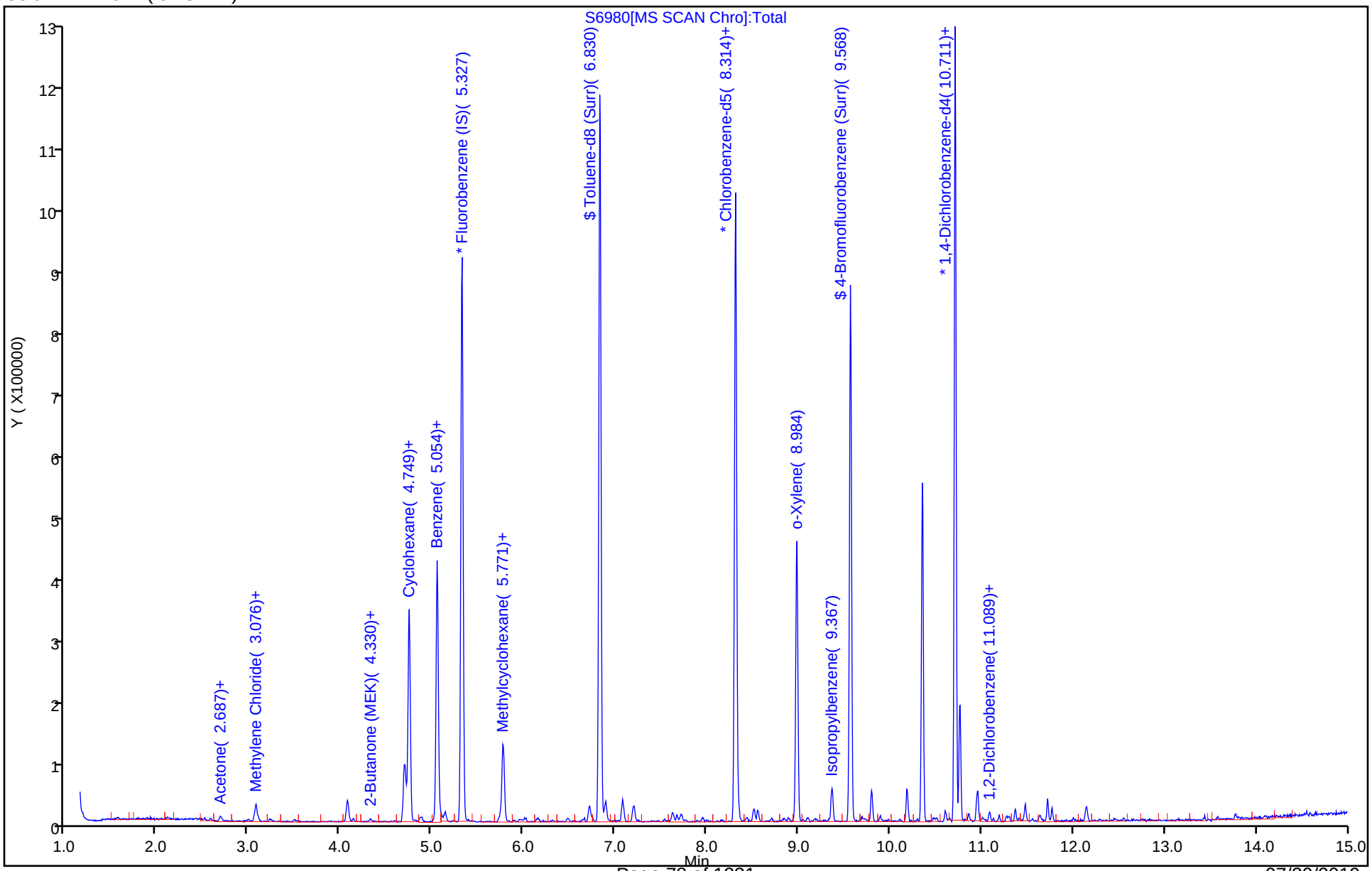
Report Date: 15-Jul-2019 18:47:20 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D

Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2	Worklist Smp#:	23
Client ID:	MW17				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	22
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

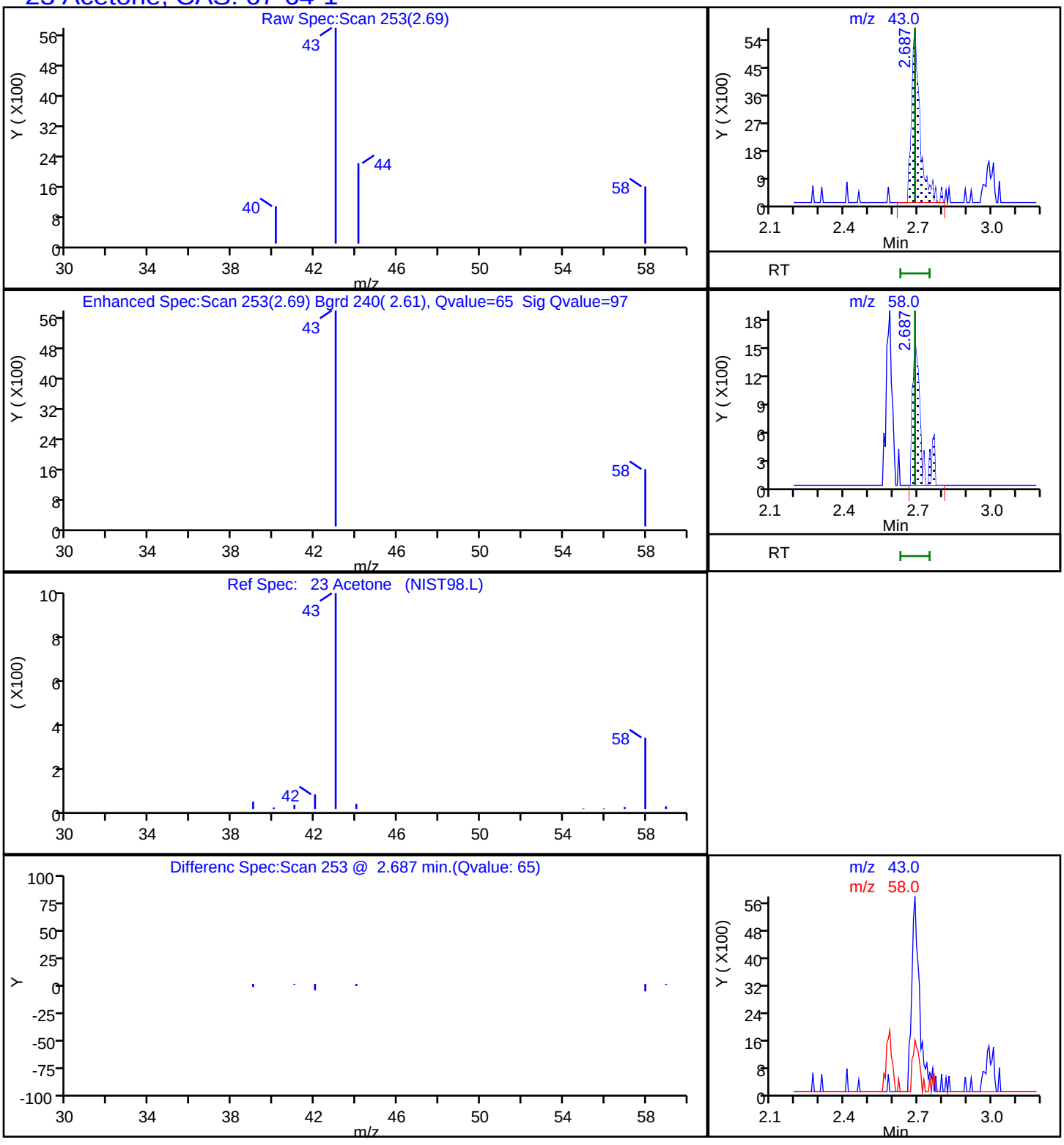
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

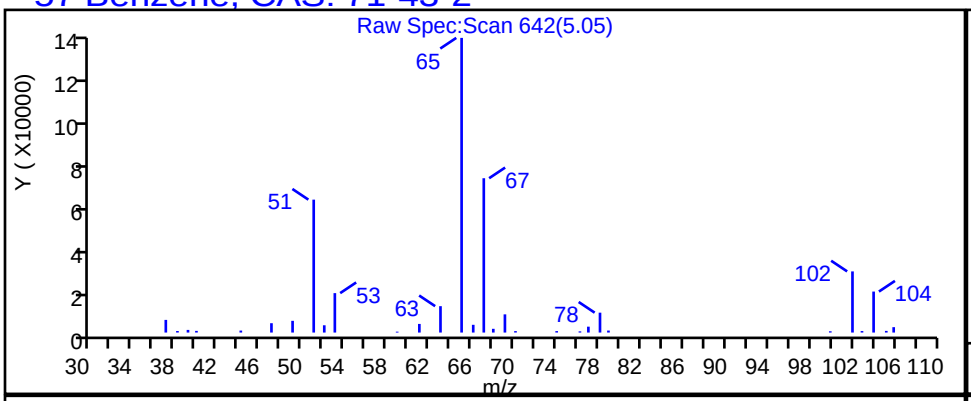
23 Acetone, CAS: 67-64-1

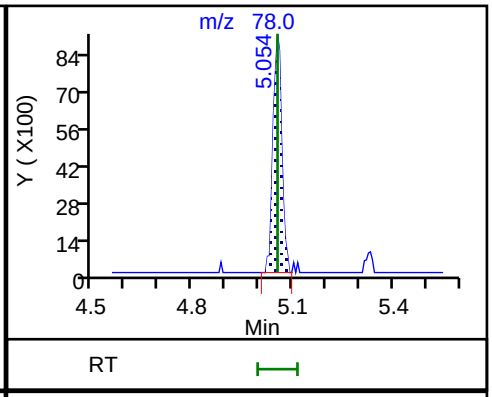


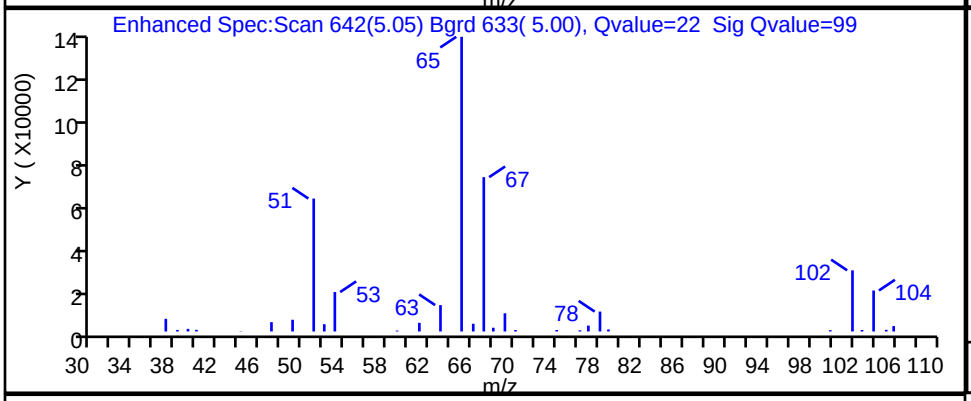
Eurofins TestAmerica, Buffalo

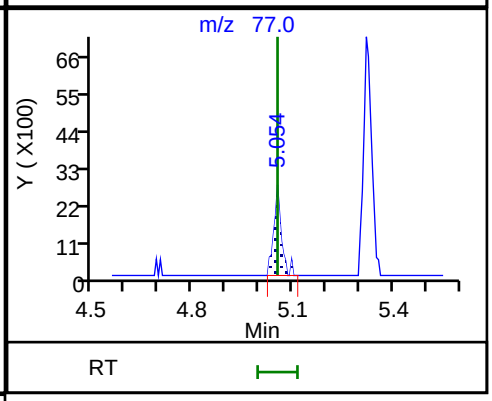
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

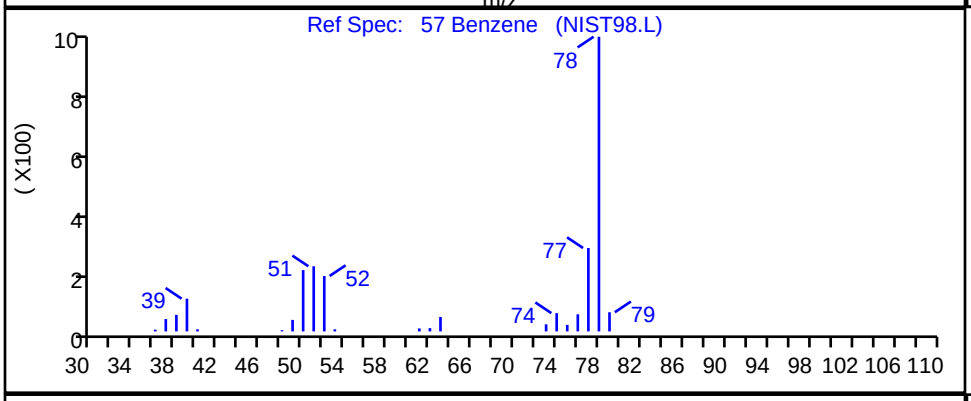
57 Benzene, CAS: 71-43-2

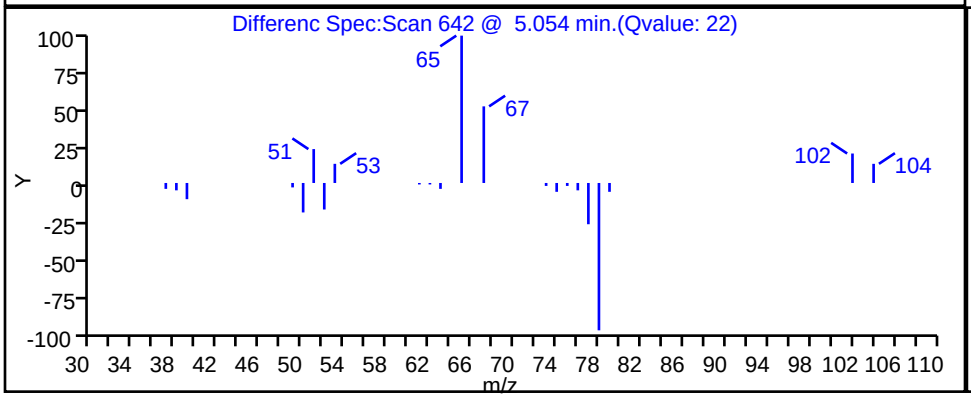


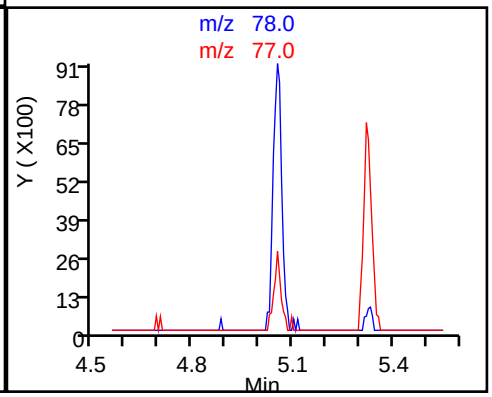








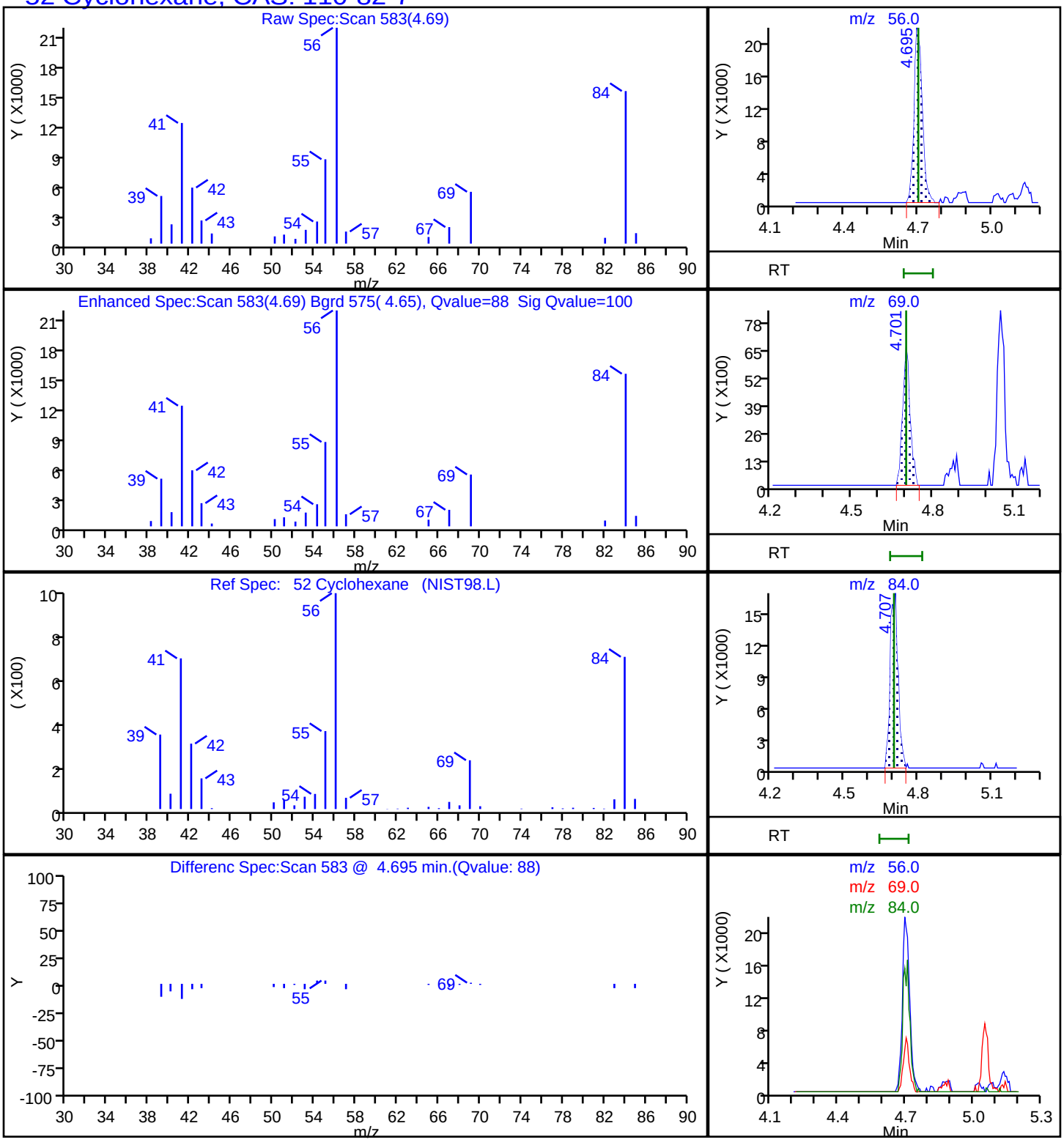




Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D		
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2
Client ID:	MW17		
Operator ID:	KN	ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

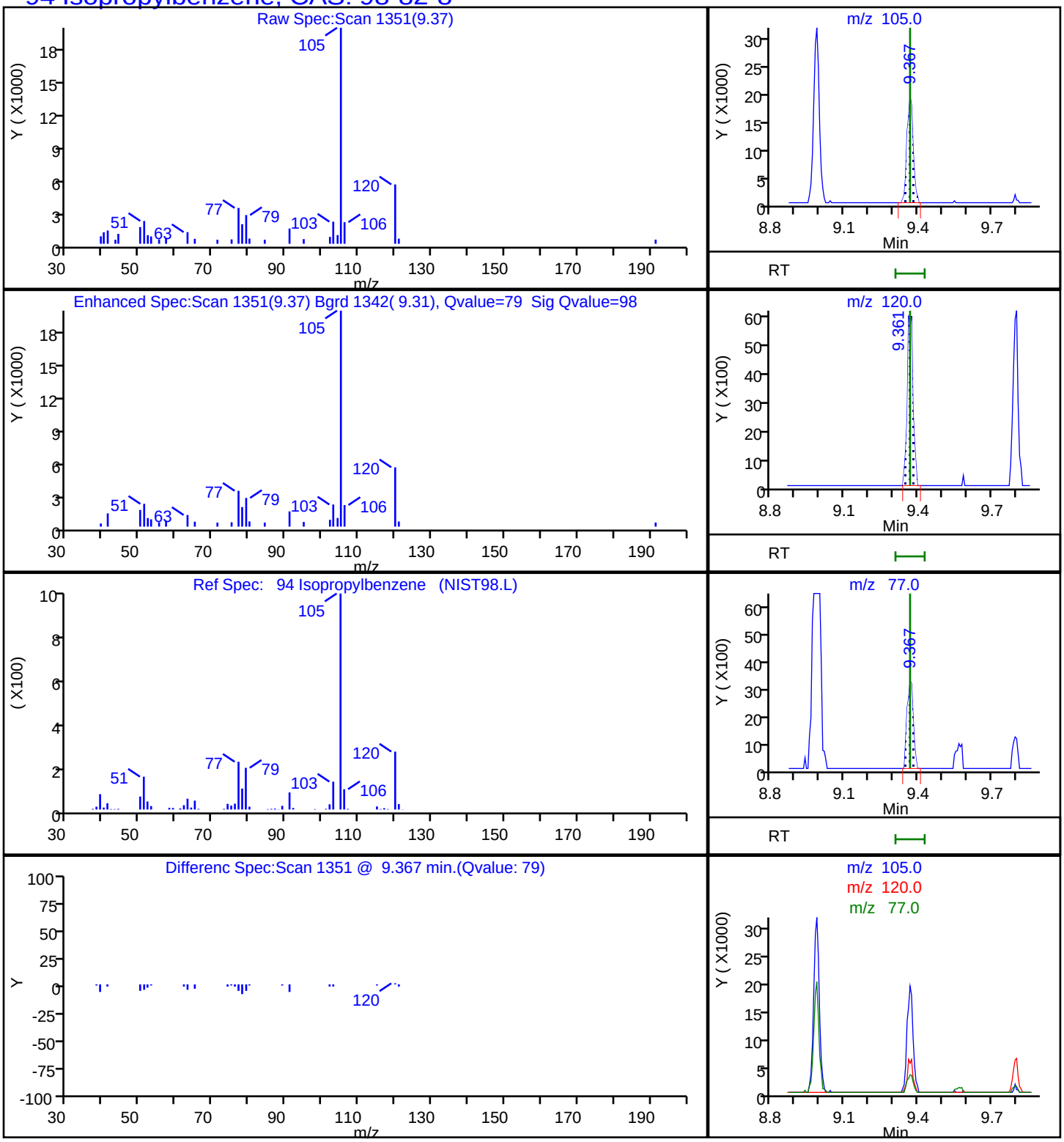
52 Cyclohexane, CAS: 110-82-7



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D		
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2
Client ID:	MW17		
Operator ID:	KN	ALS Bottle#:	22 Worklist Smp#: 23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

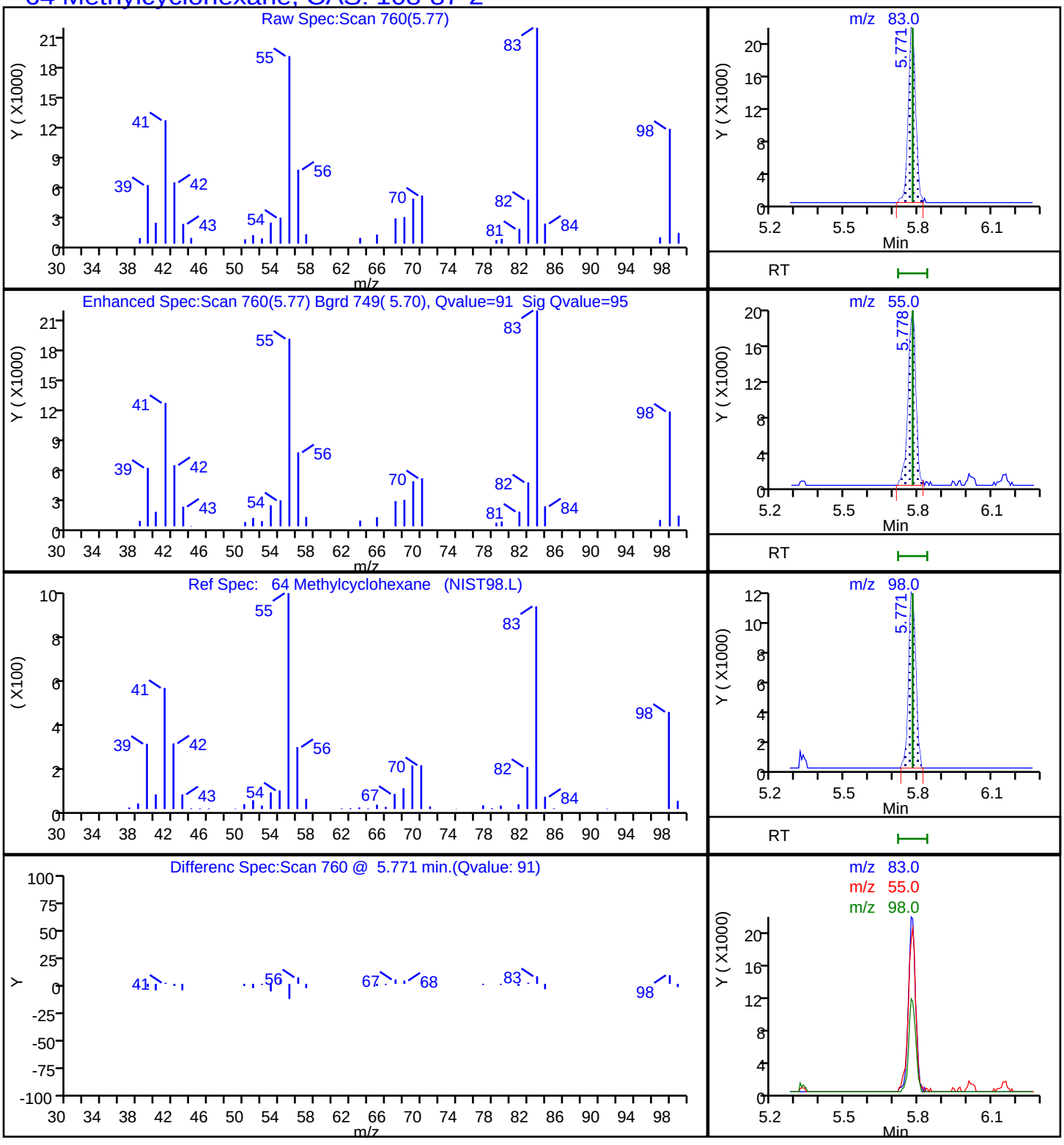
94 Isopropylbenzene, CAS: 98-82-8



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

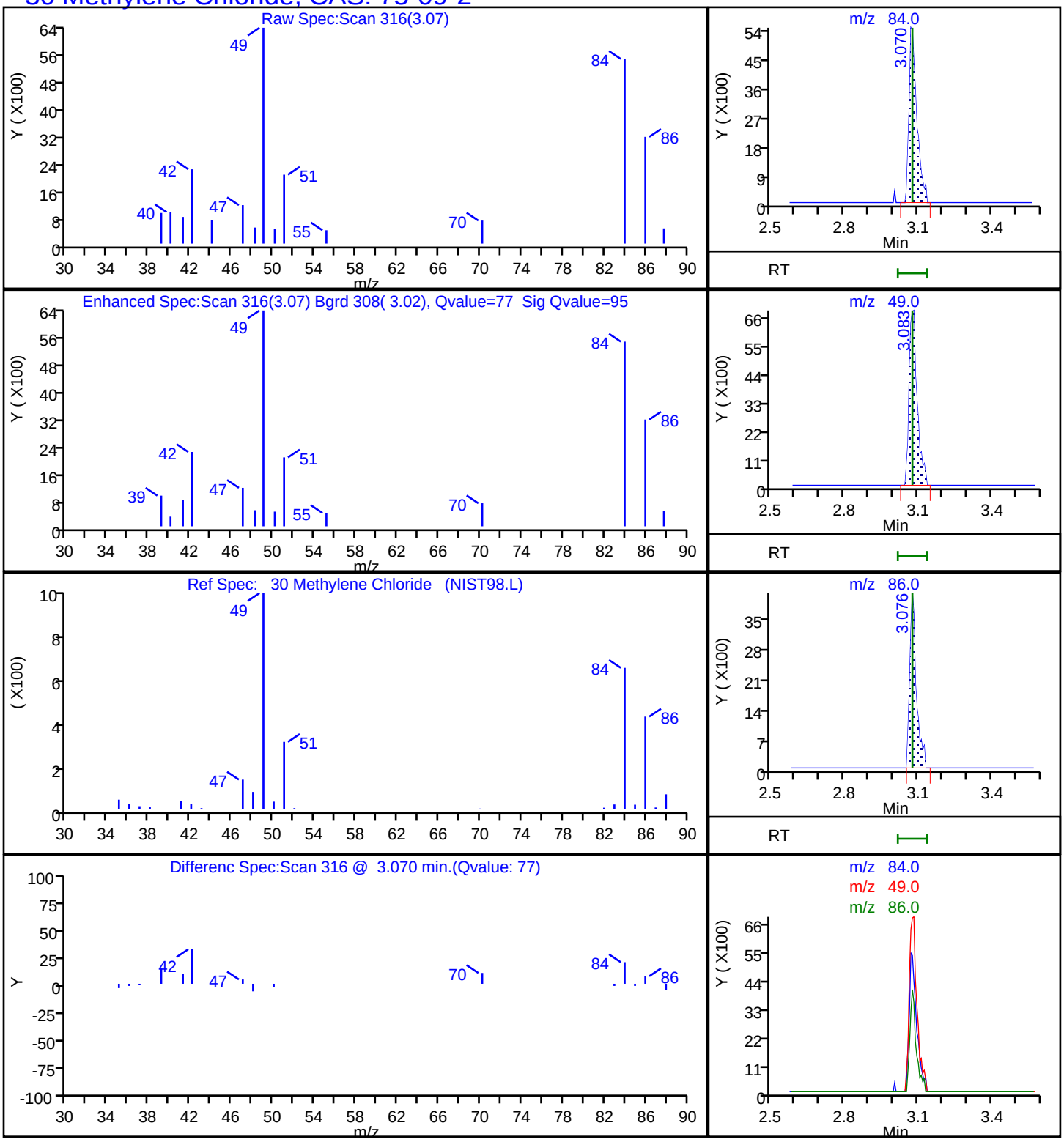
64 Methylcyclohexane, CAS: 108-87-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

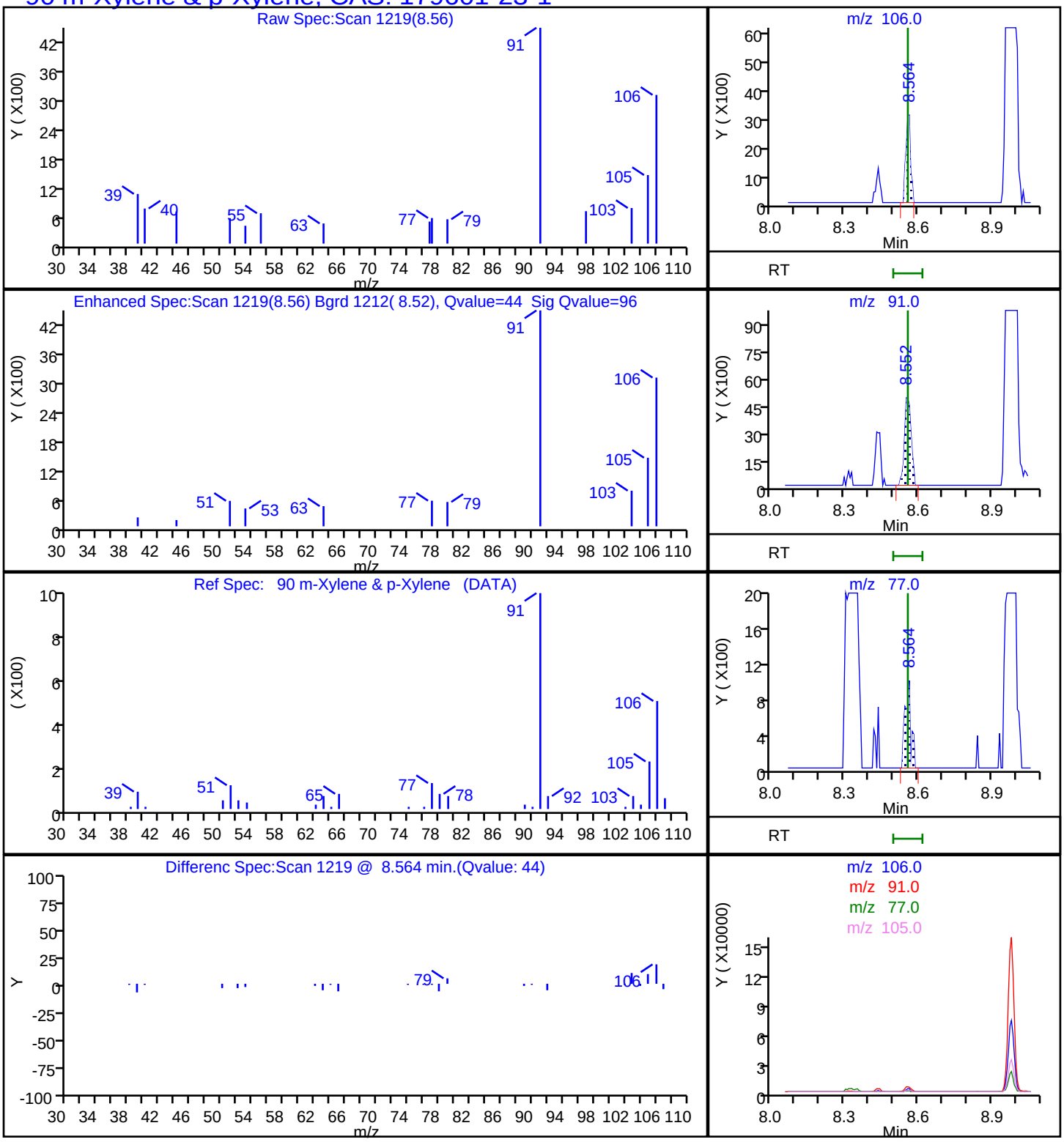
30 Methylene Chloride, CAS: 75-09-2



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

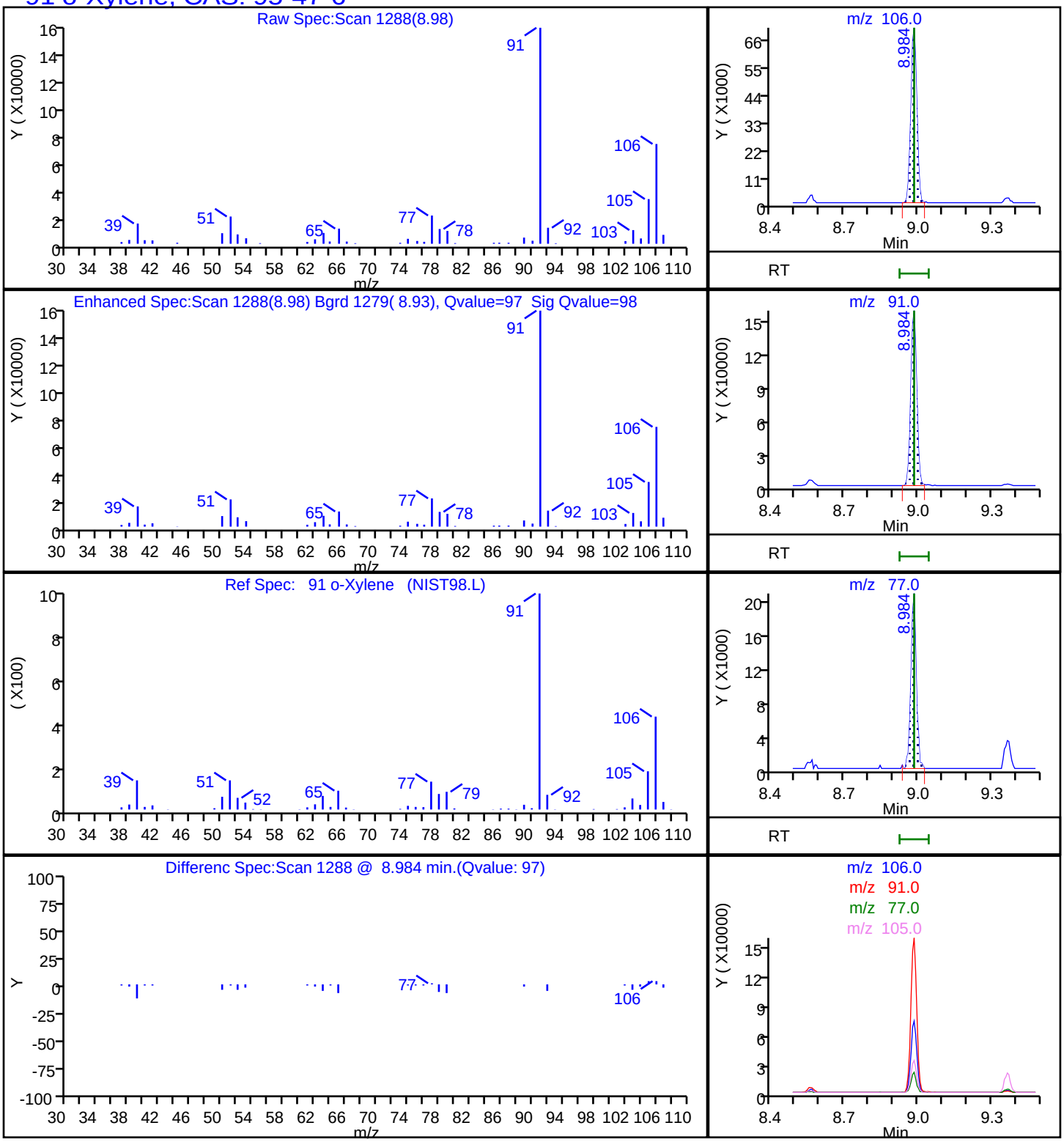
90 m-Xylene & p-Xylene, CAS: 179601-23-1



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

91 o-Xylene, CAS: 95-47-6



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

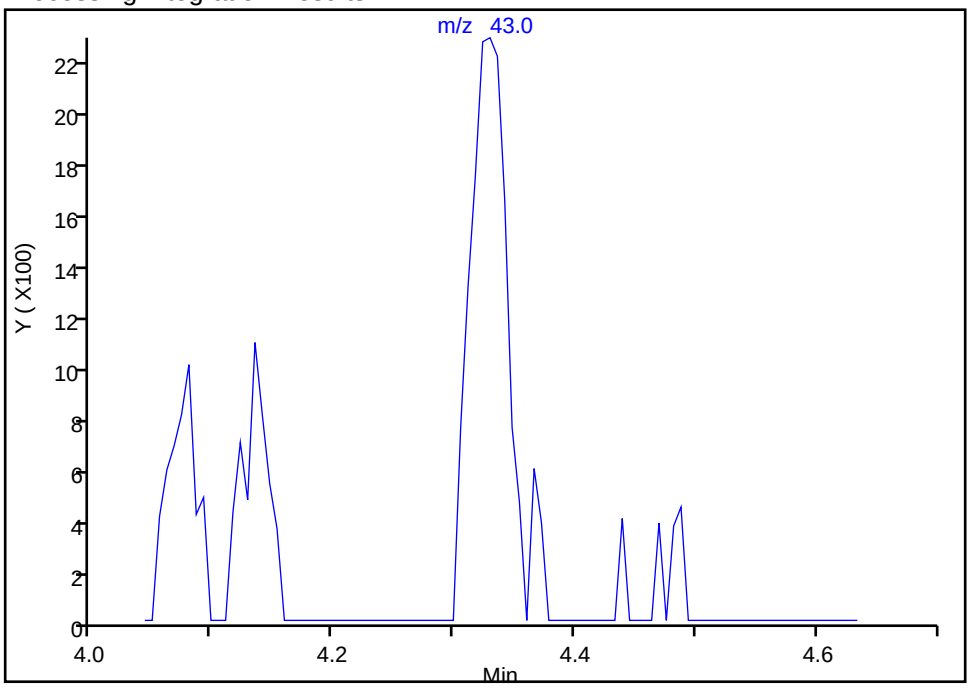
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

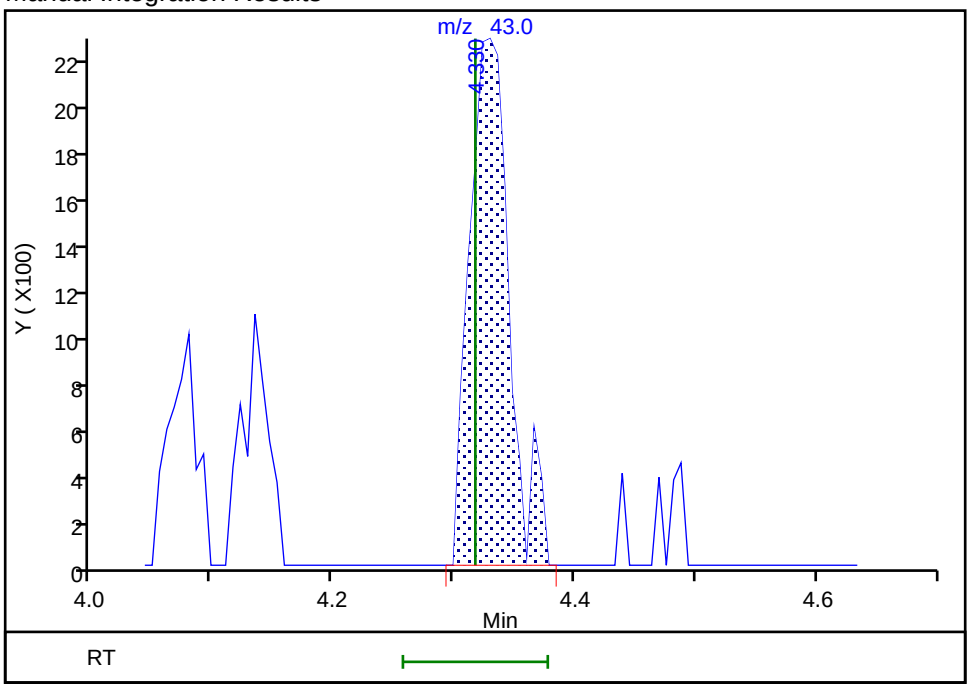
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.33
Area: 5270
Amount: 1.065118
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:46:17
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

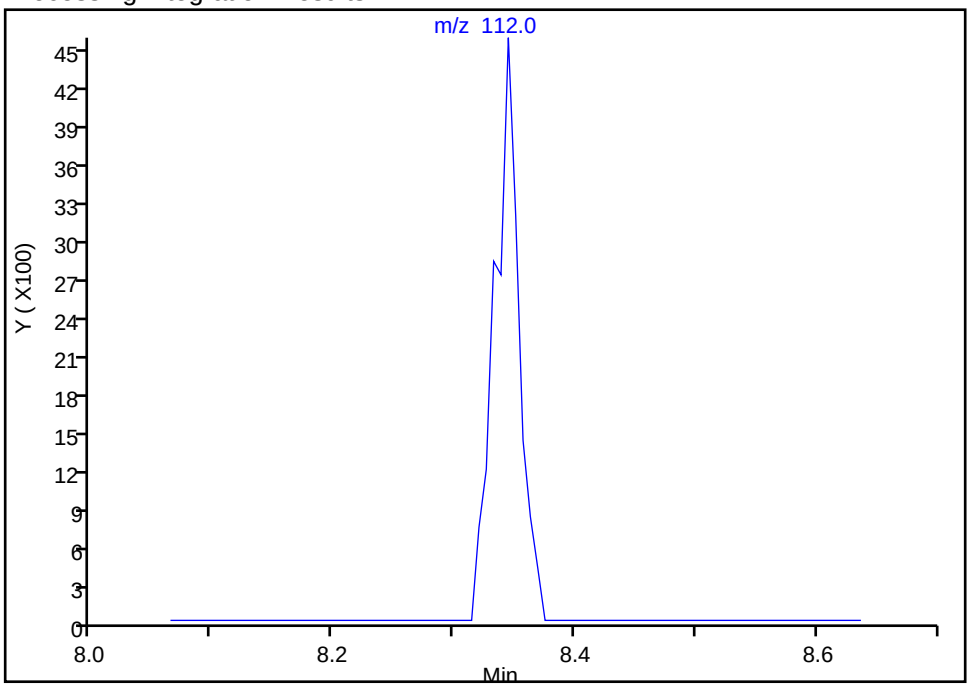
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

87 Chlorobenzene, CAS: 108-90-7

Signal: 1

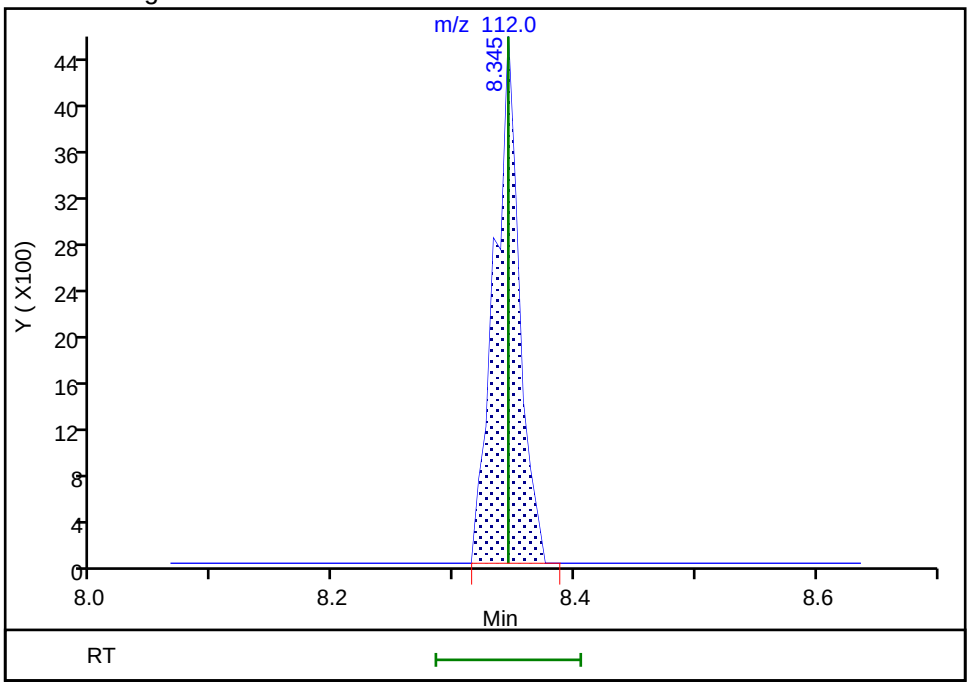
Not Detected
Expected RT: 8.34

Processing Integration Results



Manual Integration Results

RT: 8.34
Area: 6427
Amount: 0.280415
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:46:39
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

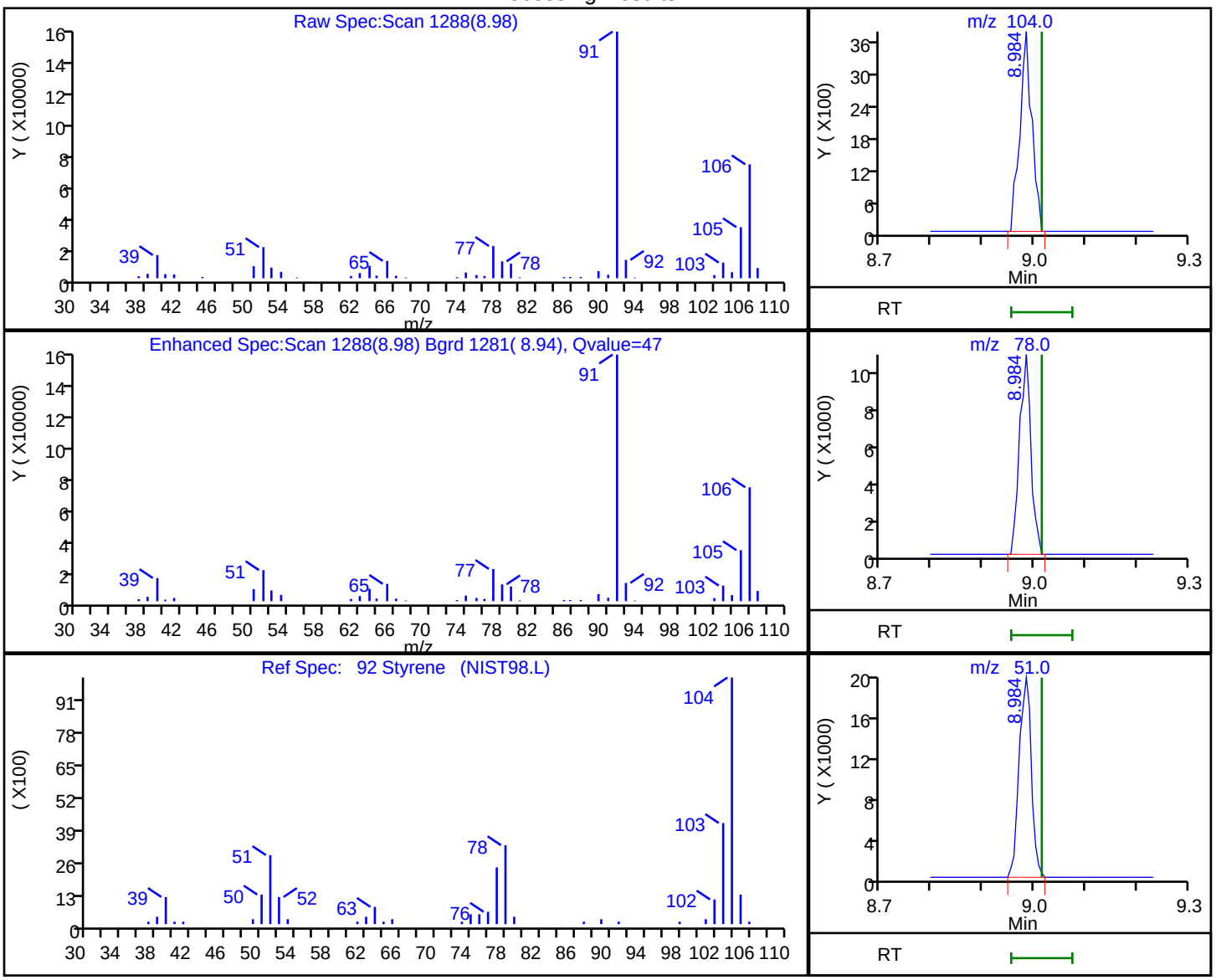
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D				
Injection Date:	15-Jul-2019 17:11:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-2	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	KN	ALS Bottle#:	22	Worklist Smp#:	23
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

92 Styrene, CAS: 100-42-5

Processing Results



RT	Mass	Response	Amount
8.98	104.00	6151	0.246074
8.98	78.00	16303	
8.98	51.00	32268	

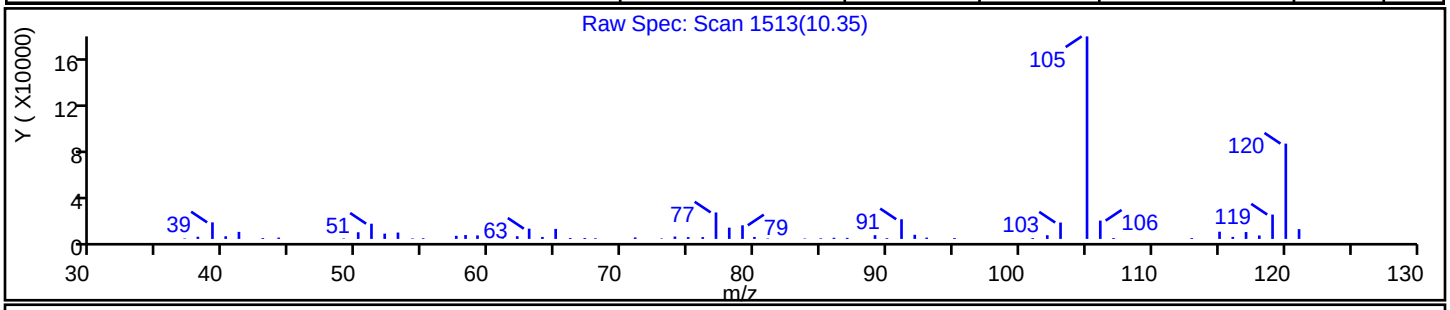
Reviewer: milligana, 15-Jul-2019 18:46:46

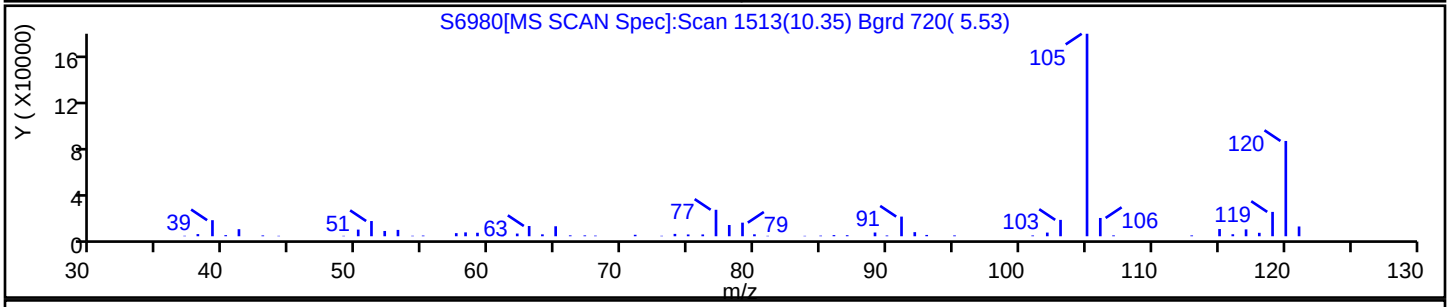
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

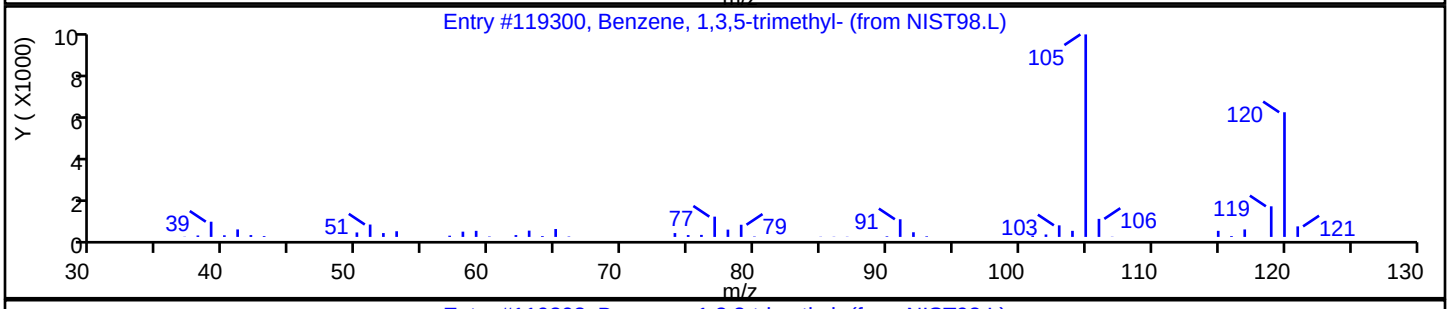
Eurofins TestAmerica, Buffalo

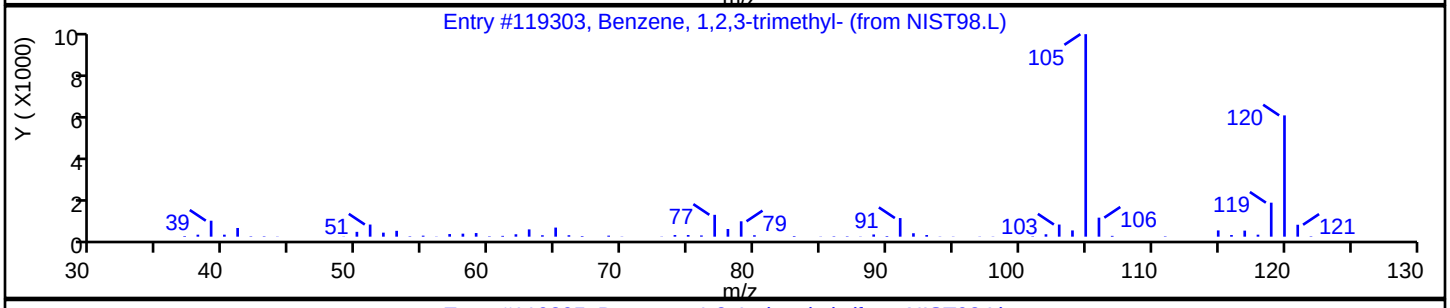
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6980.D
Injection Date: 15-Jul-2019 17:11:30 Instrument ID: HP5973S
Lims ID: 480-156069-E-2 Lab Sample ID: 480-156069-2
Client ID: MW17
Operator ID: KN ALS Bottle#: 22 Worklist Smp#: 23
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: Detector MS SCAN

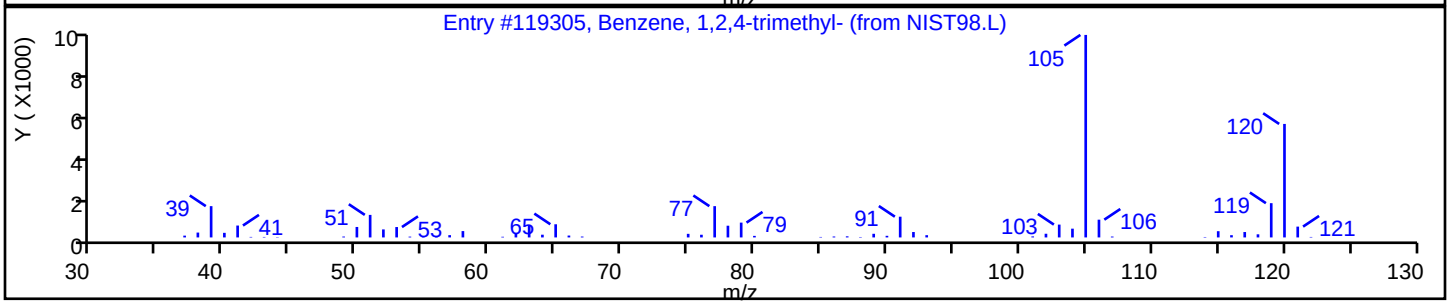
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,3,5-trimethyl-	108-67-8	NIST98.L	119300	C9H12	120	95
Benzene, 1,2,3-trimethyl-	526-73-8	NIST98.L	119303	C9H12	120	94
Benzene, 1,2,4-trimethyl-	95-63-6	NIST98.L	119305	C9H12	120	94











FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: S6981.D

Analysis Method: 8260C Date Collected: 07/10/2019 09:05

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:34

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: S6981.D

Analysis Method: 8260C Date Collected: 07/10/2019 09:05

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:34

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	13		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	ND		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	101		77-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: S6981.D

Analysis Method: 8260C Date Collected: 07/10/2019 09:05

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:34

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 1 TIC Result Total: 94

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
1868-53-7	Methane, dibromofluoro-	4.75	94	T J N	93%

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D
Lims ID: 480-156069-E-3
Client ID: W28
Sample Type: Client
Inject. Date: 15-Jul-2019 17:34:30 ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-156069-e-3
Misc. Info.: 480-0082614-024
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:48:24 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:48:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	138898	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	84	285744	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	96	291563	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	91	115727	25.3	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	94	702870	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.000	87	220075	23.2	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43	2.693	2.693	0.006	83	5952	1.98	a
26 Carbon disulfide	76		2.754				ND	U
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84	3.083	3.076	0.007	77	13793	1.28	
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43		4.317				ND	
50 Chloroform	83	4.597	4.597	0.006	25	2283	0.1521	a
52 Cyclohexane	56		4.701				ND	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78		5.054				ND	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83		5.778				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92		6.897				ND	
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112		8.345				ND	
88 Ethylbenzene	91		8.436				ND	
90 m-Xylene & p-Xylene	106		8.558				ND	
91 o-Xylene	106		8.984				ND	
92 Styrene	104		9.014				ND	
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105		9.367				ND	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	
116 1,2-Dichlorobenzene	146		11.088				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D				
Lims ID:	480-156069-E-3				
Client ID:	W28				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 17:34:30	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Sample Info:	480-156069-e-3				
Misc. Info.:	480-0082614-024				
Operator ID:	KN	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	15-Jul-2019 18:48:24	Calib Date:	24-Jun-2019 20:49:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0325				
First Level Reviewer: milligana		Date:	15-Jul-2019 18:48:25		

Tentative Identified Compound Results

RT	Area	Amount ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	1868-53-7	Methane, dibromofluoro-						
4.749	573587	9.41	153	93	50437	CHBr2F	190	

Quantitation Compounds

Compound	RT	Area	Amount ug/L
* 153 Fluorobenzene (IS)	5.327	1523686	25.0

QC Flag Legend

Processing Flags

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

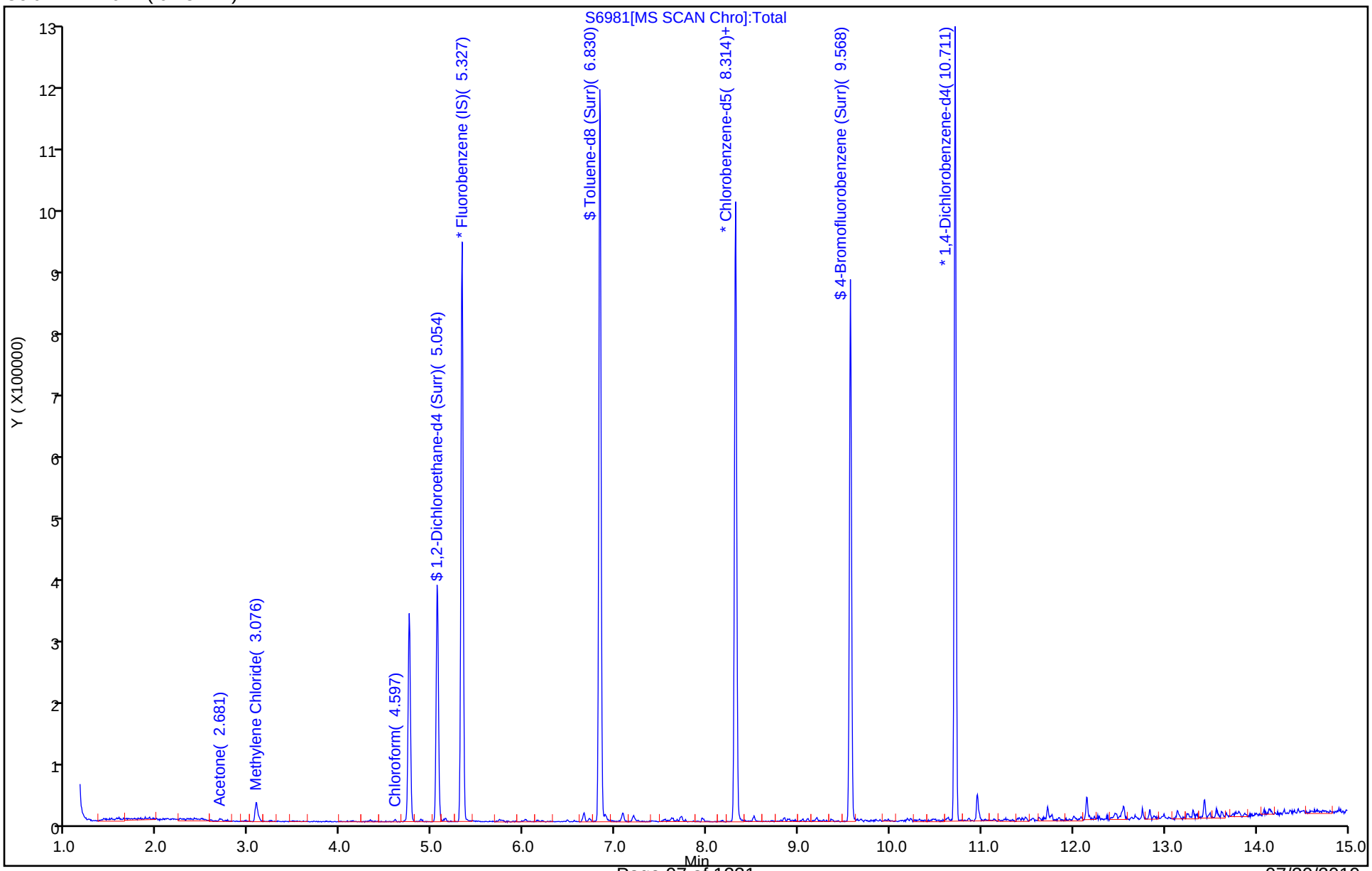
Report Date: 15-Jul-2019 18:48:26 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D

Injection Date:	15-Jul-2019 17:34:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-E-3	Lab Sample ID:	480-156069-3	Worklist Smp#:	24
Client ID:	W28				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	23
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

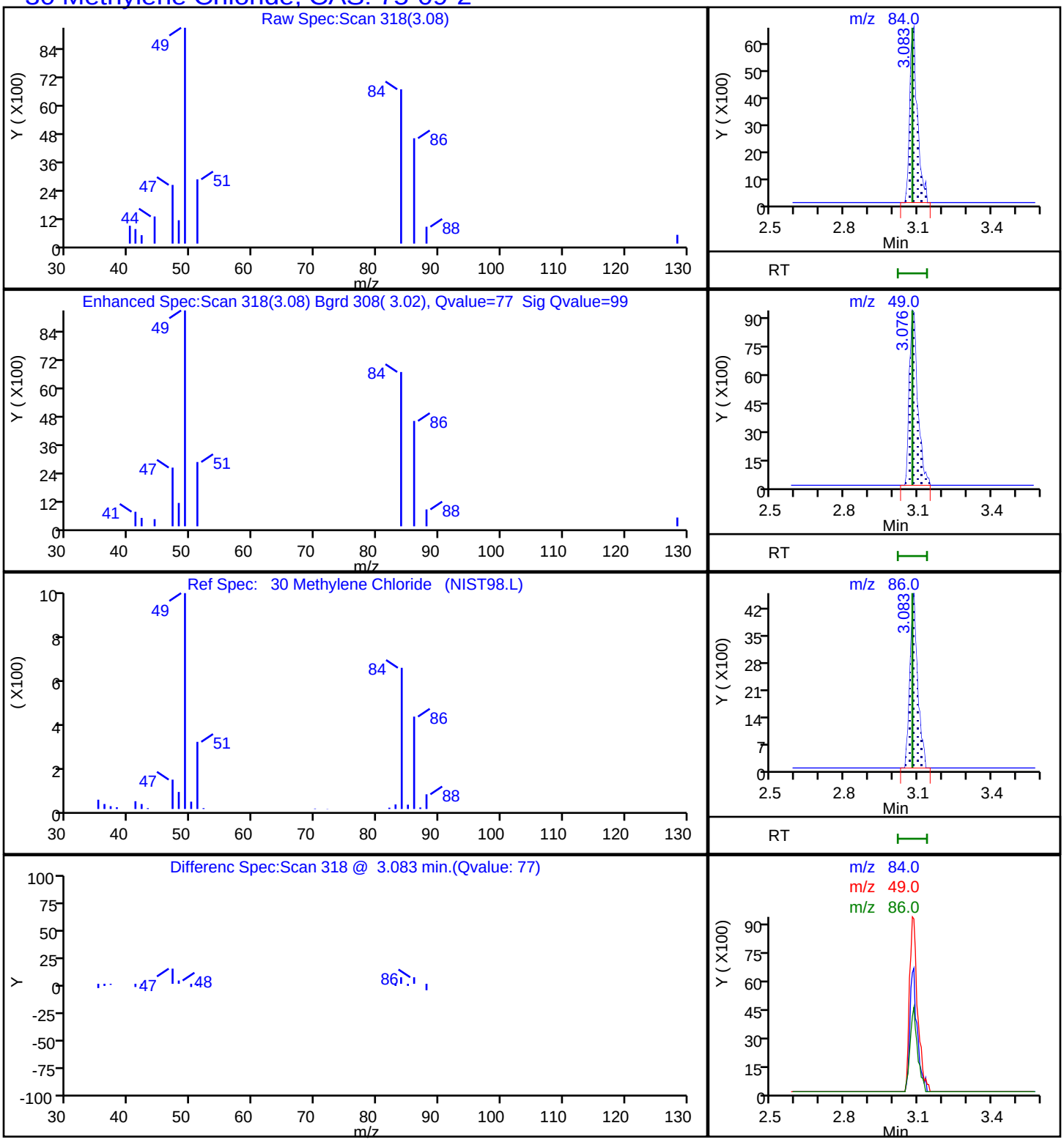
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D
Injection Date: 15-Jul-2019 17:34:30 Instrument ID: HP5973S
Lims ID: 480-156069-E-3 Lab Sample ID: 480-156069-3
Client ID: W28
Operator ID: KN ALS Bottle#: 23 Worklist Smp#: 24
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

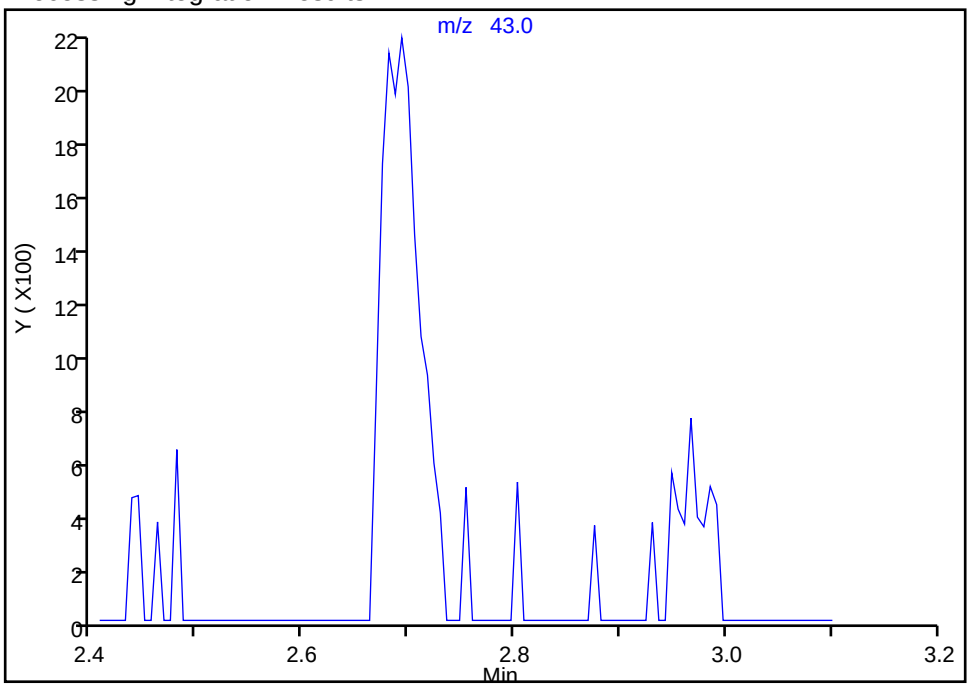
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D				
Injection Date:	15-Jul-2019 17:34:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-3	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	KN	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Signal: 1

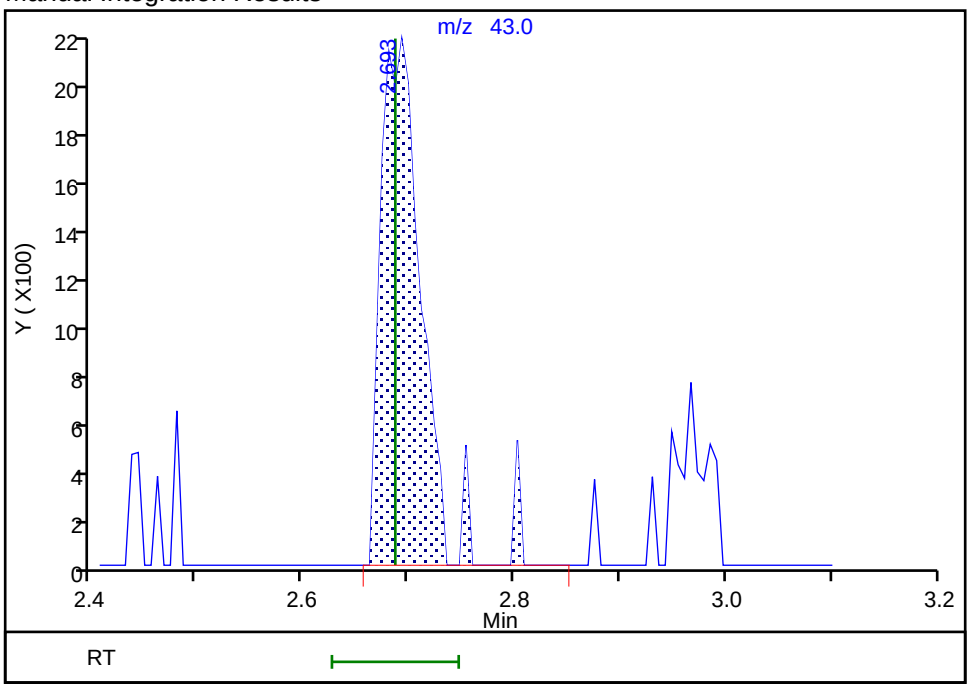
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 5952
Amount: 1.982791
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:47:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

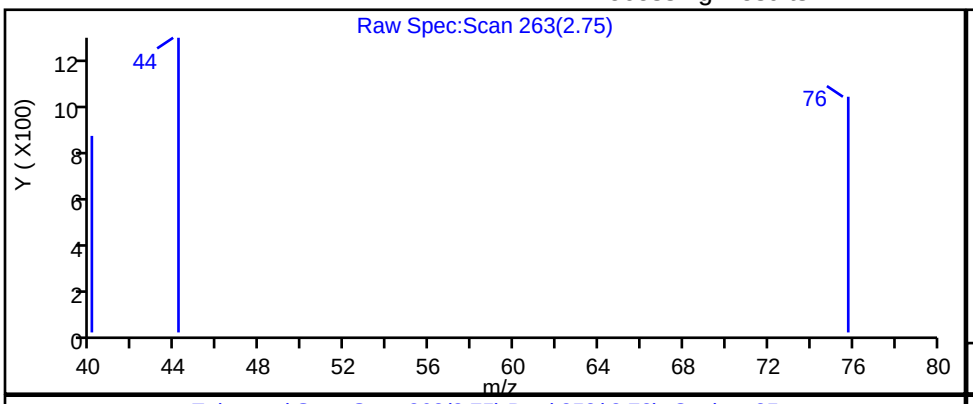
User Disabled Compound Report

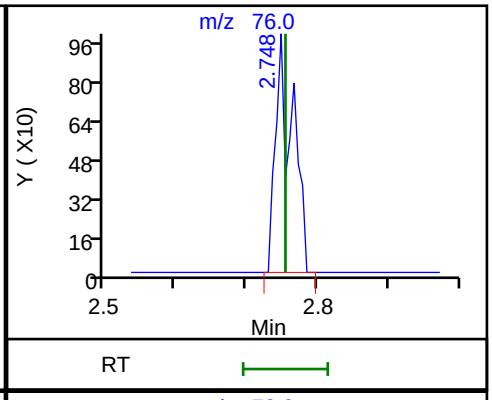
Eurofins TestAmerica, Buffalo

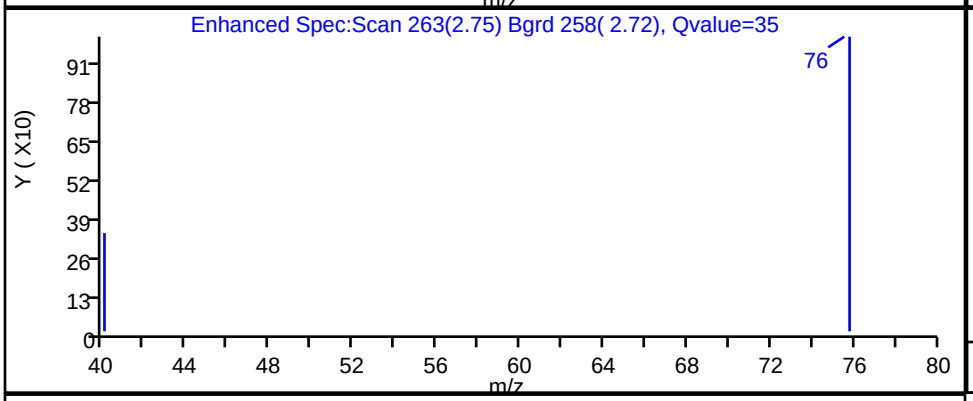
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D				
Injection Date:	15-Jul-2019 17:34:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-3	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	KN	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

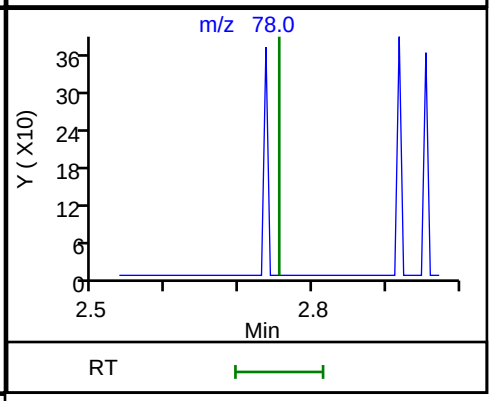
26 Carbon disulfide, CAS: 75-15-0

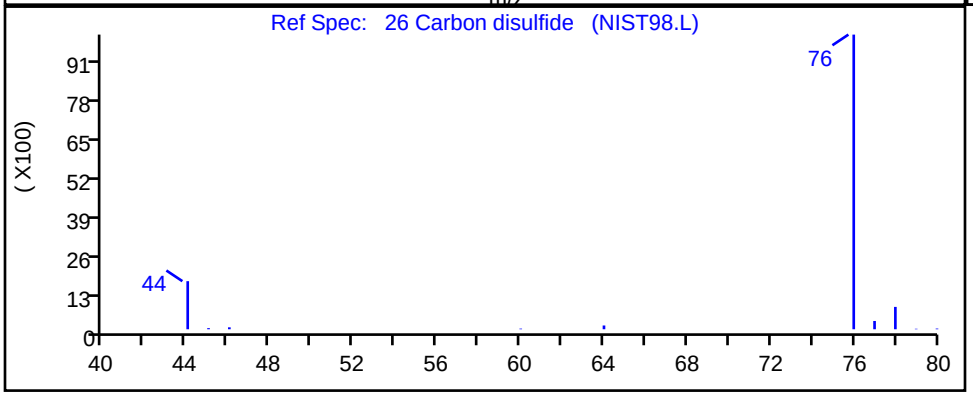
Processing Results











RT	Mass	Response	Amount
2.75	76.00	1682	0.074376
2.75	78.00	0	

Reviewer: milligana, 15-Jul-2019 18:47:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

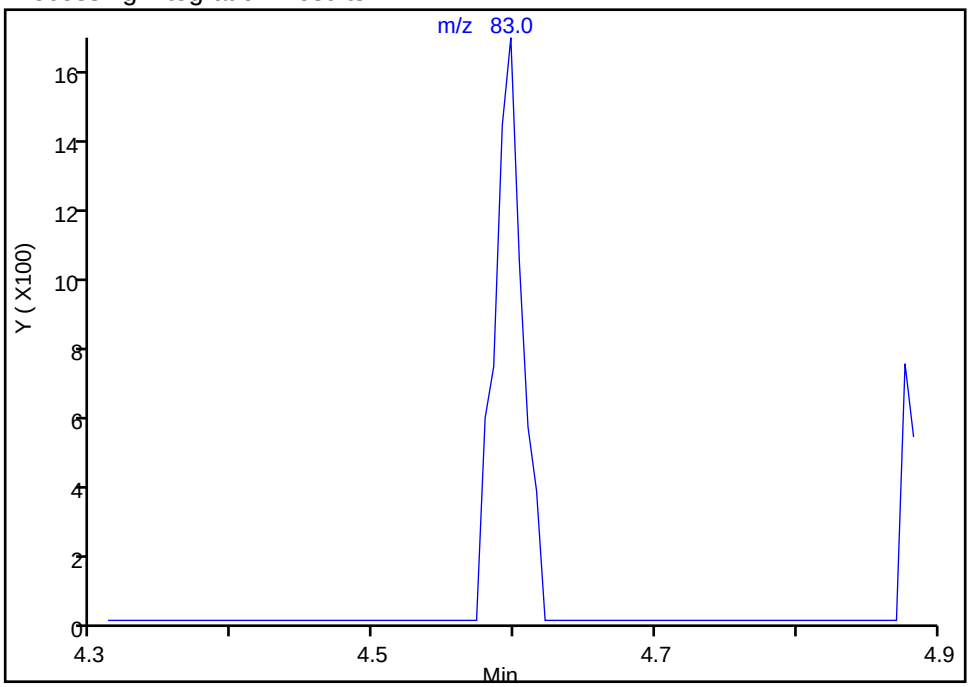
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D				
Injection Date:	15-Jul-2019 17:34:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-3	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	KN	ALS Bottle#:	23	Worklist Smp#:	24
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

Signal: 1

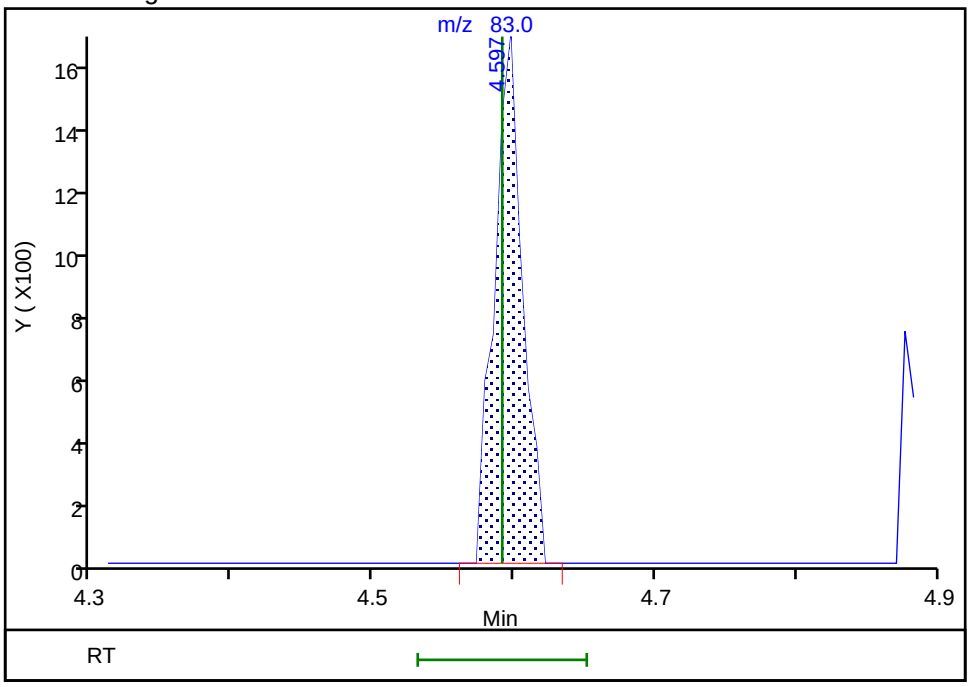
Not Detected
Expected RT: 4.59

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 2283
Amount: 0.152138
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:48:06
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Report Date: 15-Jul-2019 18:48:26 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6981.D

Injection Date: 15-Jul-2019 17:34:30 Instrument ID: HP5973S

Lims ID: 480-156069-E-3 Lab Sample ID: 480-156069-3

Client ID: W28

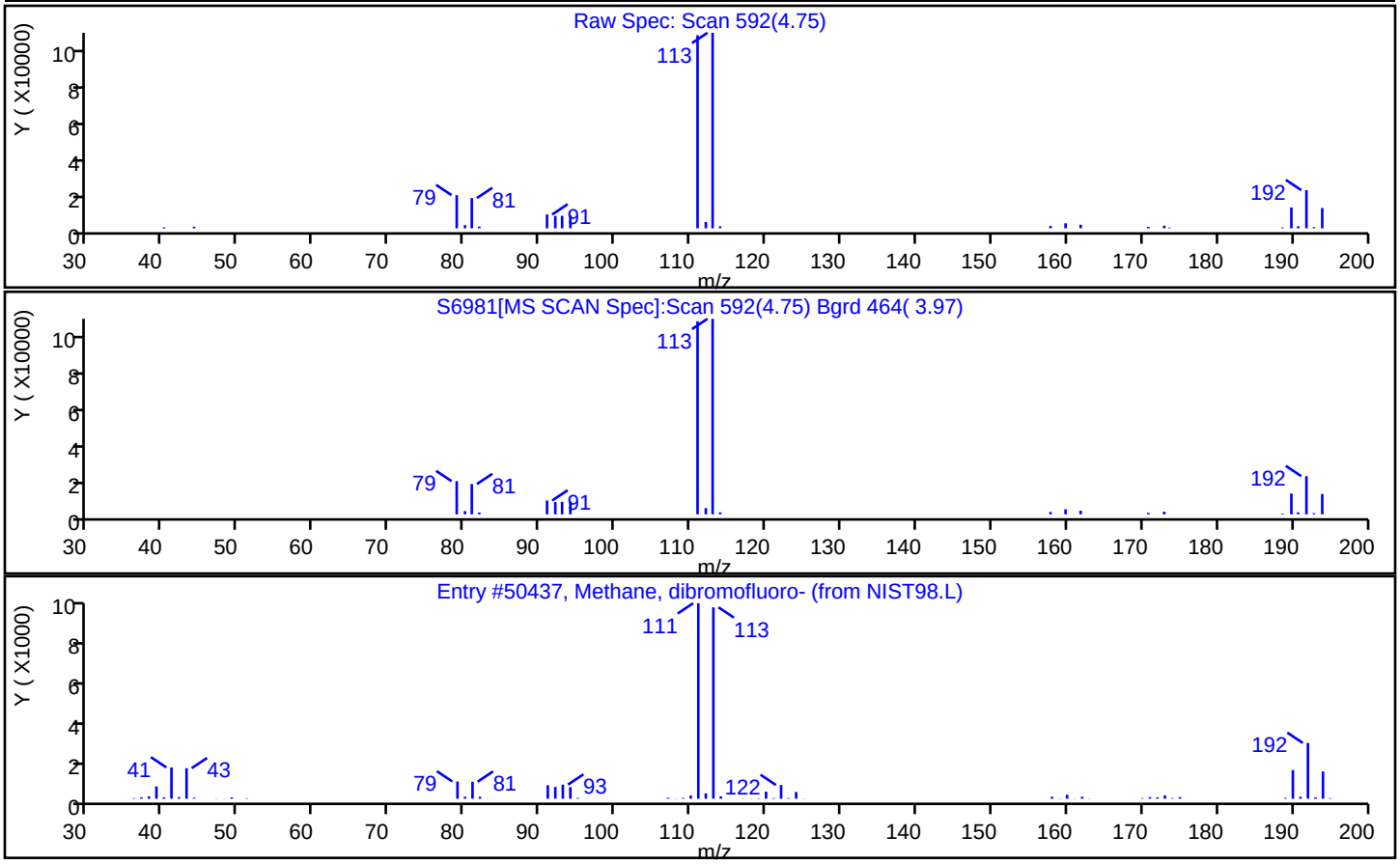
Operator ID: KN ALS Bottle#: 23 Worklist Smp#: 24

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Methane, dibromofluoro-	1868-53-7	NIST98.L	50437	CHBr2F	190	93



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: S6982.D

Analysis Method: 8260C Date Collected: 07/10/2019 10:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:57

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	ND		10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	ND		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: S6982.D

Analysis Method: 8260C Date Collected: 07/10/2019 10:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:57

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	ND		10	1.6
75-09-2	Methylene Chloride	13		10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	ND		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	93		73-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: S6982.D

Analysis Method: 8260C Date Collected: 07/10/2019 10:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 17:57

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6982.D
Lims ID: 480-156069-E-4
Client ID: WCMW4
Sample Type: Client
Inject. Date: 15-Jul-2019 17:57:30 ALS Bottle#: 24 Worklist Smp#: 25
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-156069-e-4
Misc. Info.: 480-0082614-025
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:49:02 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:49:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	138006	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	86	286282	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	94	286623	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.054	-0.001	92	120212	26.4	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	94	703150	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	-0.001	89	221656	23.3	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43	2.681	2.681	-0.006	73	3794	1.27	a
26 Carbon disulfide	76		2.754				ND	
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84	3.076	3.076	0.000	80	13898	1.30	
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43		4.317				ND	
50 Chloroform	83	4.585	4.585	-0.006	1	1785	0.1197	a
52 Cyclohexane	56		4.701				ND	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78		5.054				ND	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83		5.778				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92		6.897				ND	
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112		8.345				ND	
88 Ethylbenzene	91		8.436				ND	
90 m-Xylene & p-Xylene	106		8.558				ND	
91 o-Xylene	106		8.984				ND	
92 Styrene	104		9.014				ND	
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105		9.367				ND	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	
116 1,2-Dichlorobenzene	146		11.088				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

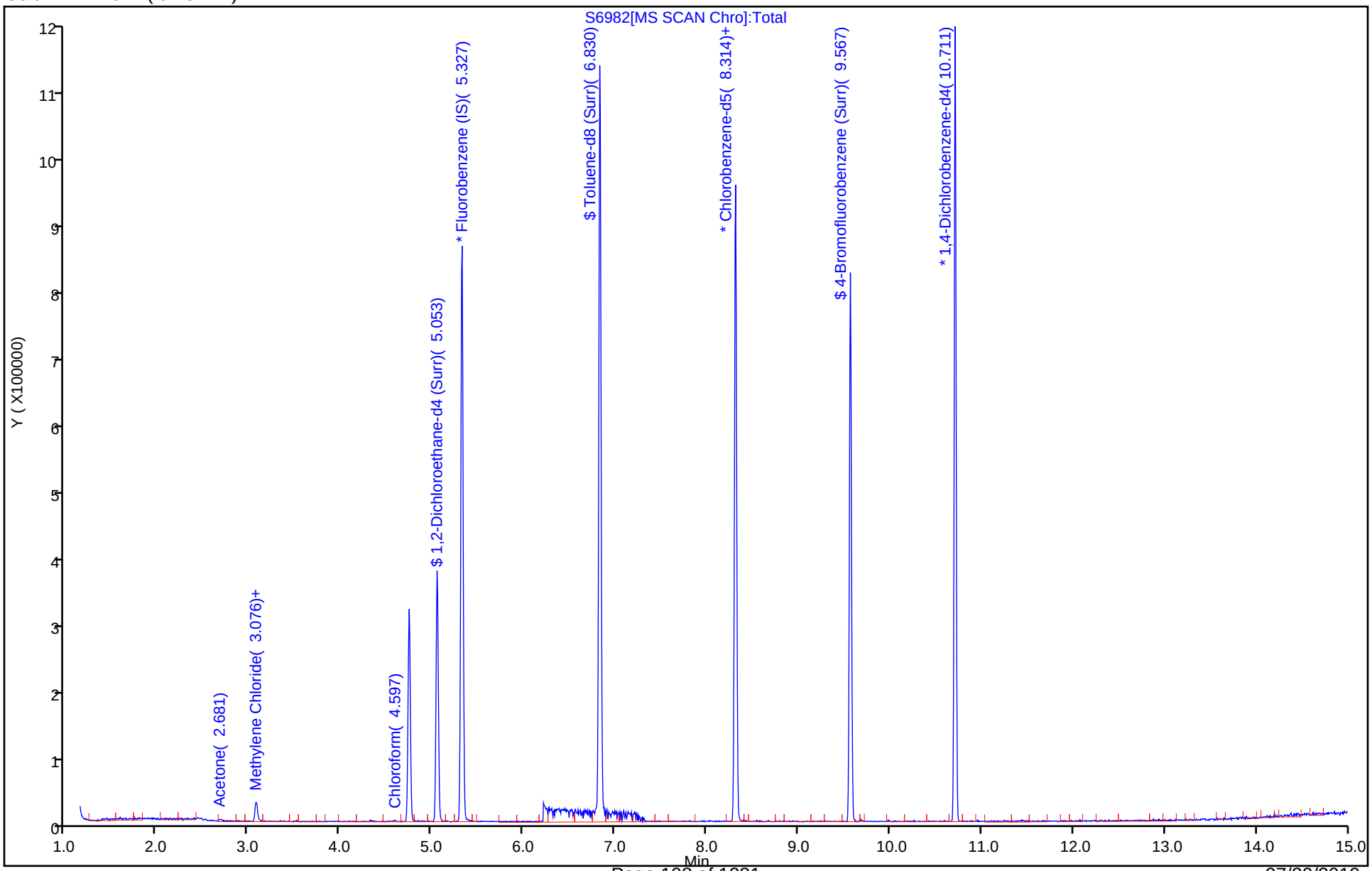
Report Date: 15-Jul-2019 18:49:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6982.D

Injection Date:	15-Jul-2019 17:57:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-E-4	Lab Sample ID:	480-156069-4	Worklist Smp#:	25
Client ID:	WCMW4				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	24
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Report Date: 15-Jul-2019 18:49:44 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6982.D

Injection Date: 15-Jul-2019 17:57:30 Instrument ID: HP5973S

Lims ID: 480-156069-E-4 Lab Sample ID: 480-156069-4

Client ID: WCMW4

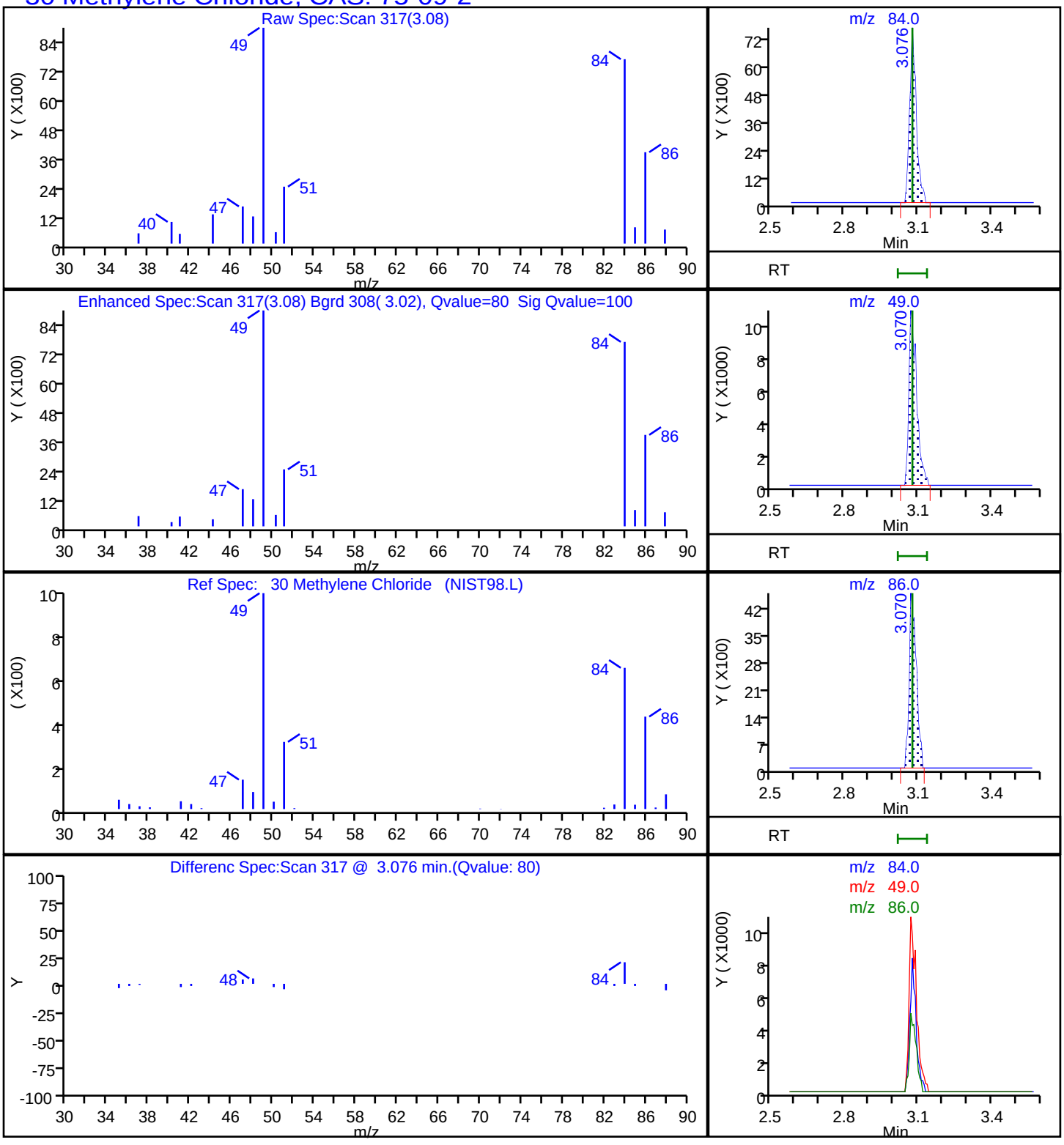
Operator ID: KN ALS Bottle#: 24 Worklist Smp#: 25

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

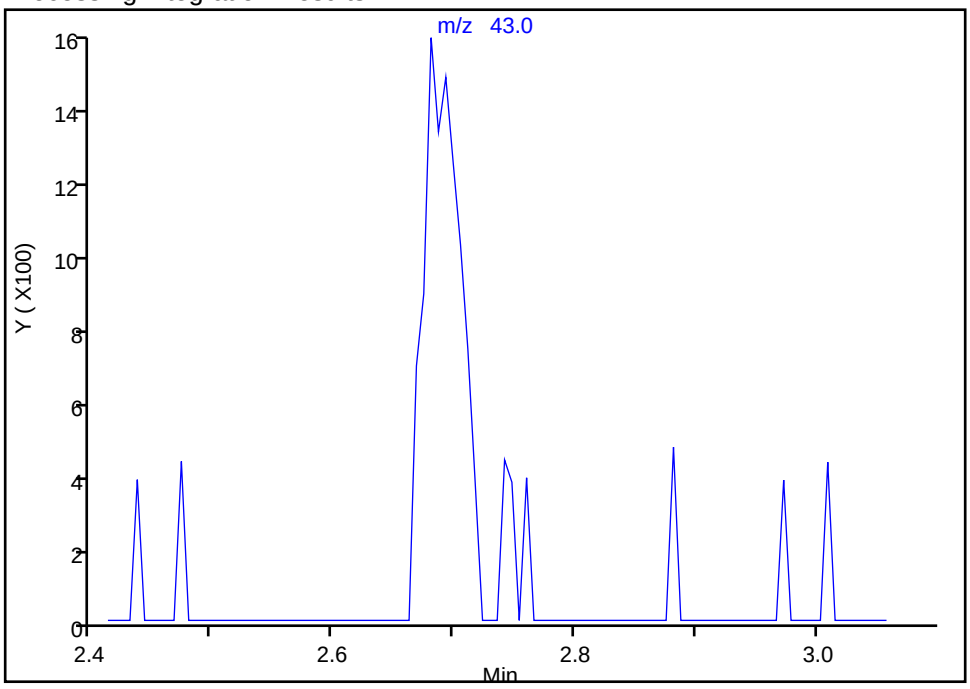
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6982.D				
Injection Date:	15-Jul-2019 17:57:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-4	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	KN	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Signal: 1

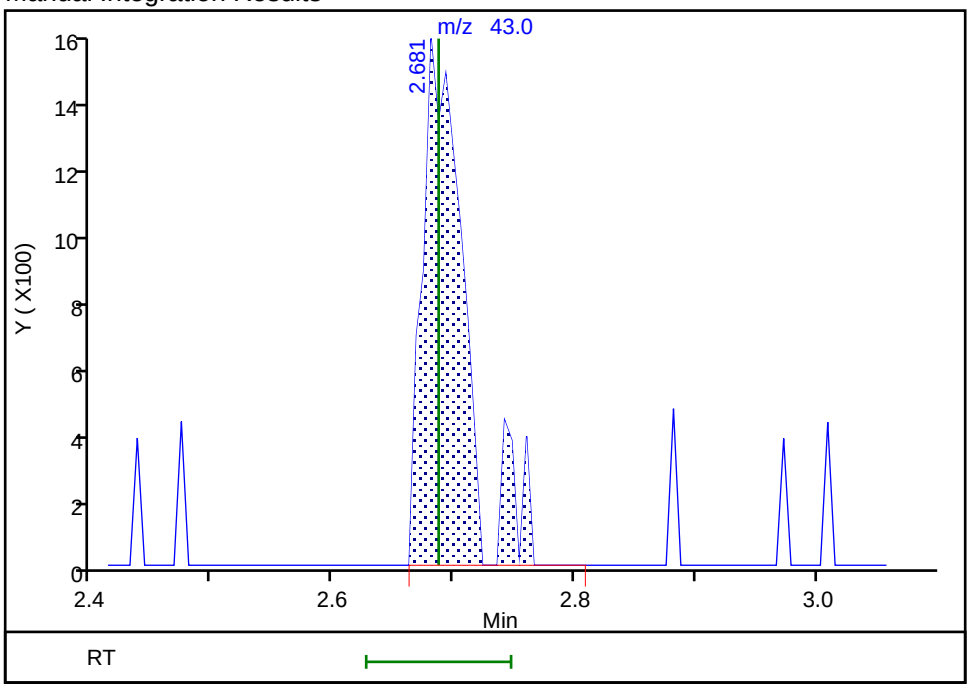
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.68
Area: 3794
Amount: 1.272065
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:48:43
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

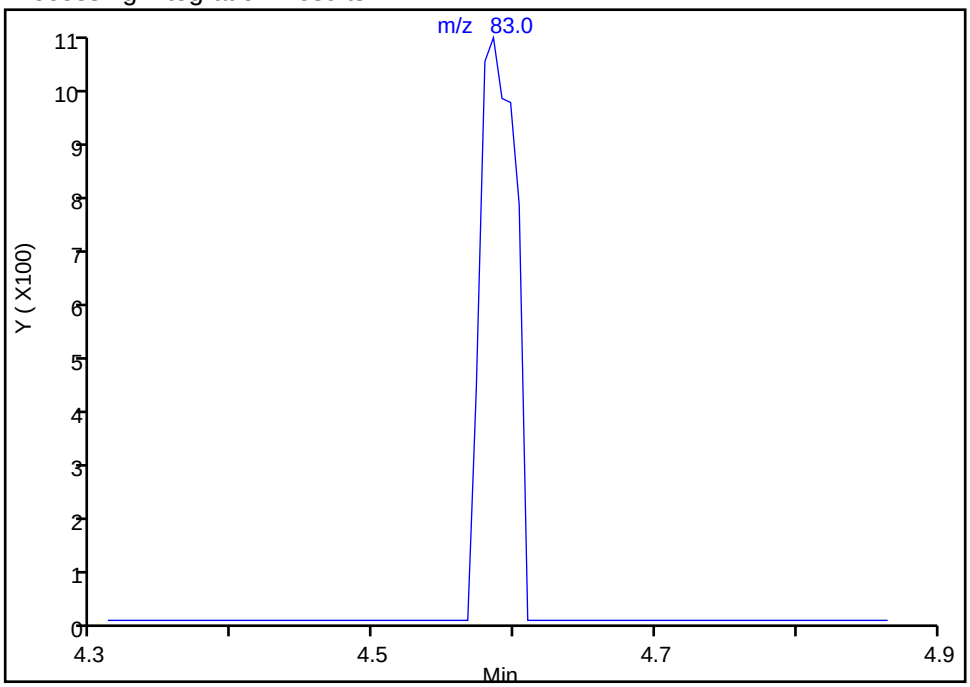
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6982.D				
Injection Date:	15-Jul-2019 17:57:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-4	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	KN	ALS Bottle#:	24	Worklist Smp#:	25
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

Signal: 1

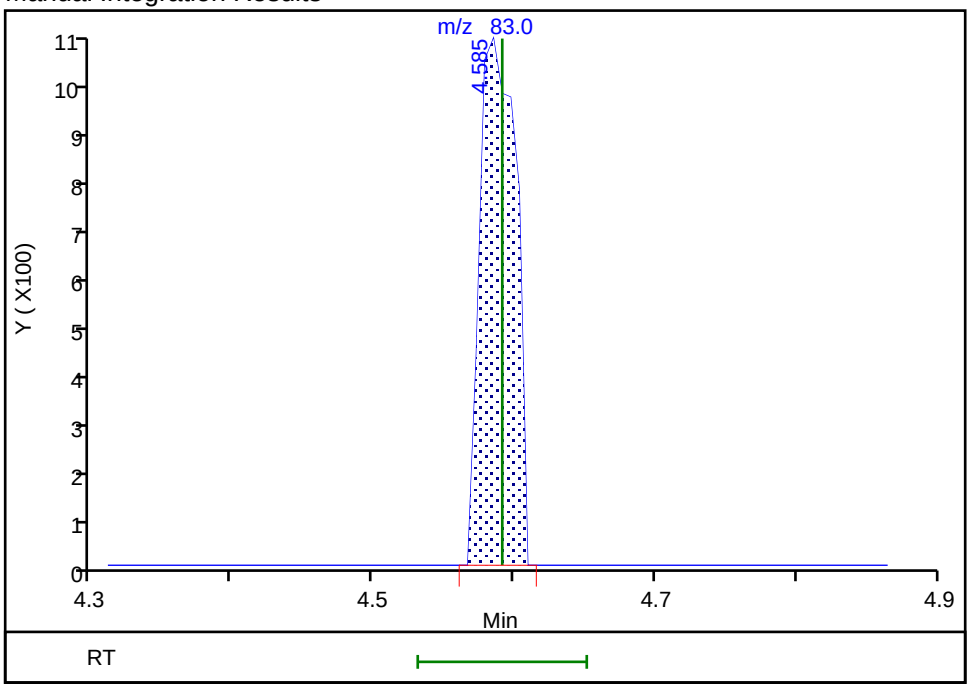
Not Detected
Expected RT: 4.59

Processing Integration Results



RT: 4.58
Area: 1785
Amount: 0.119721
Amount Units: ug/L

Manual Integration Results



Reviewer: milligana, 15-Jul-2019 18:48:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: S6983.D

Analysis Method: 8260C Date Collected: 07/10/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:20

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	ND		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		10	3.1
79-00-5	1,1,2-Trichloroethane	ND		10	2.3
75-34-3	1,1-Dichloroethane	ND		10	3.8
75-35-4	1,1-Dichloroethene	ND		10	2.9
120-82-1	1,2,4-Trichlorobenzene	ND		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	ND		10	3.9
106-93-4	1,2-Dibromoethane	ND		10	7.3
95-50-1	1,2-Dichlorobenzene	ND		10	7.9
107-06-2	1,2-Dichloroethane	ND		10	2.1
78-87-5	1,2-Dichloropropane	ND		10	7.2
541-73-1	1,3-Dichlorobenzene	ND		10	7.8
106-46-7	1,4-Dichlorobenzene	ND		10	8.4
78-93-3	2-Butanone (MEK)	ND		100	13
591-78-6	2-Hexanone	ND		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		50	21
67-64-1	Acetone	ND		100	30
71-43-2	Benzene	6.6	J	10	4.1
75-27-4	Bromodichloromethane	ND		10	3.9
75-25-2	Bromoform	ND		10	2.6
74-83-9	Bromomethane	ND		10	6.9
75-15-0	Carbon disulfide	ND		10	1.9
56-23-5	Carbon tetrachloride	ND		10	2.7
108-90-7	Chlorobenzene	ND		10	7.5
75-00-3	Chloroethane	ND		10	3.2
67-66-3	Chloroform	ND		10	3.4
74-87-3	Chloromethane	ND		10	3.5
156-59-2	cis-1,2-Dichloroethene	ND		10	8.1
10061-01-5	cis-1,3-Dichloropropene	ND		10	3.6
110-82-7	Cyclohexane	48		10	1.8
124-48-1	Dibromochloromethane	ND		10	3.2
75-71-8	Dichlorodifluoromethane	ND		10	6.8
100-41-4	Ethylbenzene	ND		10	7.4
98-82-8	Isopropylbenzene	ND		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: S6983.D

Analysis Method: 8260C Date Collected: 07/10/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:20

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		25	13
1634-04-4	Methyl tert-butyl ether	ND		10	1.6
108-87-2	Methylcyclohexane	13		10	1.6
75-09-2	Methylene Chloride	8.1	J	10	4.4
100-42-5	Styrene	ND		10	7.3
127-18-4	Tetrachloroethene	ND		10	3.6
108-88-3	Toluene	ND		10	5.1
156-60-5	trans-1,2-Dichloroethene	ND		10	9.0
10061-02-6	trans-1,3-Dichloropropene	ND		10	3.7
79-01-6	Trichloroethene	ND		10	4.6
75-69-4	Trichlorofluoromethane	ND		10	8.8
75-01-4	Vinyl chloride	ND		10	9.0
1330-20-7	Xylenes, Total	ND		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	109		77-120
460-00-4	4-Bromofluorobenzene (Surr)	95		73-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: S6983.D

Analysis Method: 8260C Date Collected: 07/10/2019 07:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:20

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 2 TIC Result Total: 146

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
526-73-8	Benzene, 1,2,3-trimethyl-	10.35	120	T J N	95%
95-93-2	Benzene, 1,2,4,5-tetramethyl-	11.77	26	T J N	90%

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D
Lims ID: 480-156069-E-5
Client ID: BLIND DUP
Sample Type: Client
Inject. Date: 15-Jul-2019 18:20:30 ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-156069-e-5
Misc. Info.: 480-0082614-026
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:50:47 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:51:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	144587	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	84	289955	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	96	296347	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.054	-0.001	97	129711	27.2	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	93	708182	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	-0.001	91	228177	23.7	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43	2.687	2.687	0.000	64	7701	2.46	a
26 Carbon disulfide	76		2.754				ND	U
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84	3.076	3.076	0.000	77	10461	0.8105	
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43		4.317				ND	
50 Chloroform	83		4.591				ND	
52 Cyclohexane	56	4.701	4.701	0.000	89	68143	4.78	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78	5.053	5.054	-0.001	42	21642	0.6603	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83	5.777	5.778	-0.001	79	18309	1.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92		6.897				ND	Ua
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112		8.345				ND	
88 Ethylbenzene	91		8.436				ND	
90 m-Xylene & p-Xylene	106		8.558				ND	
91 o-Xylene	106		8.984				ND	
92 Styrene	104		9.014				ND	
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105	9.367	9.367	0.000	73	19413	0.5208	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	
116 1,2-Dichlorobenzene	146		11.088				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D				
Lims ID:	480-156069-E-5				
Client ID:	BLIND DUP				
Sample Type:	Client				
Inject. Date:	15-Jul-2019 18:20:30	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Sample Info:	480-156069-e-5				
Misc. Info.:	480-0082614-026				
Operator ID:	KN	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	15-Jul-2019 18:50:47	Calib Date:	24-Jun-2019 20:49:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0325				
First Level Reviewer: milligana		Date:	15-Jul-2019 18:51:04		

Tentative Identified Compound Results

RT	Area	Amount ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	526-73-8	Benzene, 1,2,3-trimethyl-						
10.352	842194	11.9	3	95	119303	C9H12	120	
	95-93-2	Benzene, 1,2,4,5-tetramethyl-						
11.770	184348	2.60	3	90	120826	C10H14	134	

Quantitation Compounds

Compound	RT	Area	Amount ug/L
* 3 1,4-Dichlorobenzene-d4	10.711	1773146	25.0

QC Flag Legend

Processing Flags

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

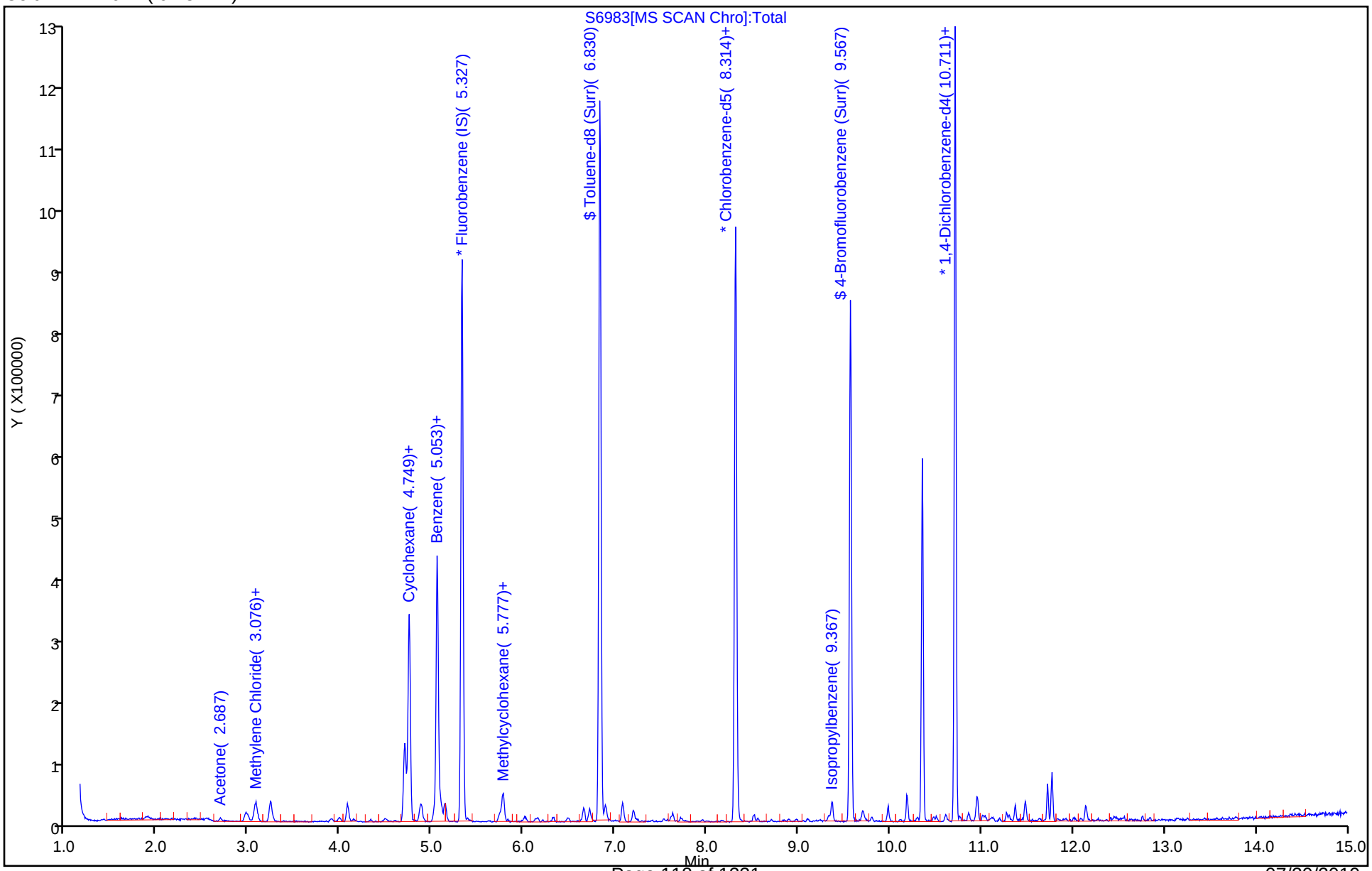
Report Date: 15-Jul-2019 18:51:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D

Injection Date:	15-Jul-2019 18:20:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-E-5	Lab Sample ID:	480-156069-5	Worklist Smp#:	26
Client ID:	BLIND DUP				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	25
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)

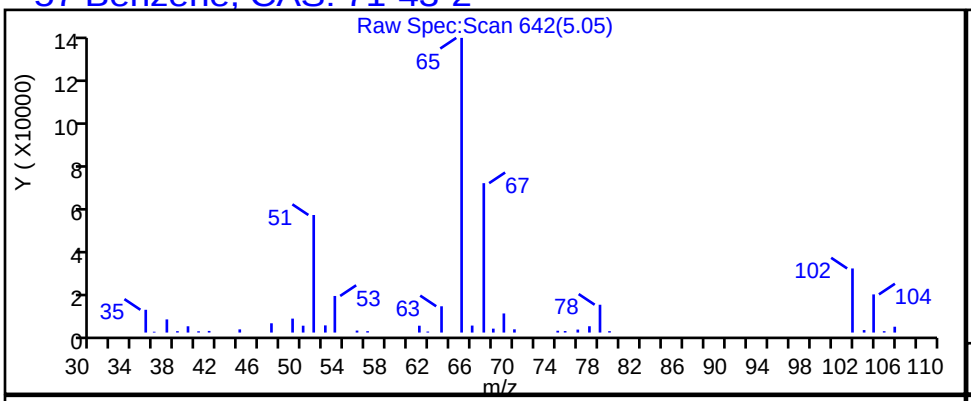


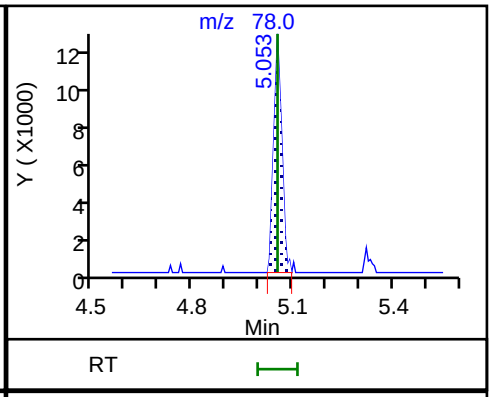
Eurofins TestAmerica, Buffalo

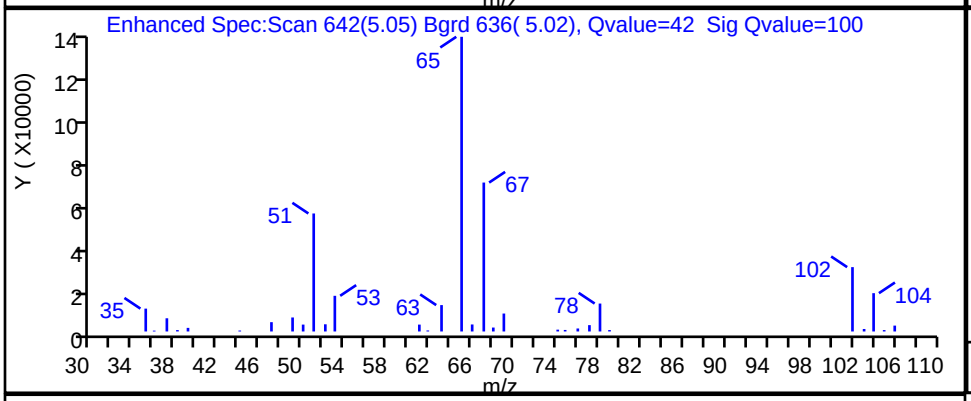
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D

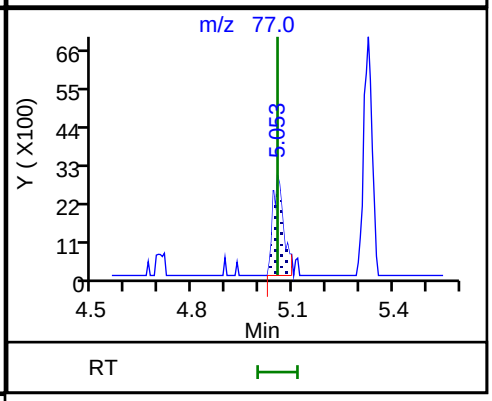
Injection Date:	15-Jul-2019 18:20:30	Instrument ID:	HP5973S
Lims ID:	480-156069-E-5	Lab Sample ID:	480-156069-5
Client ID:	BLIND DUP		
Operator ID:	KN	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

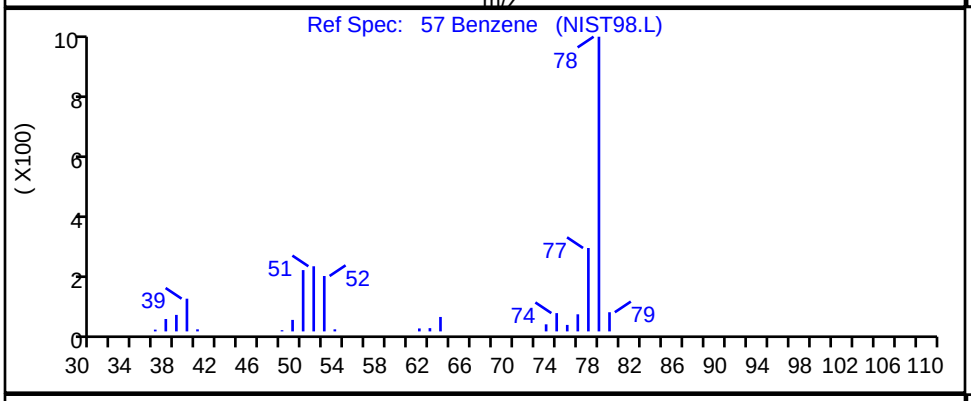
57 Benzene, CAS: 71-43-2

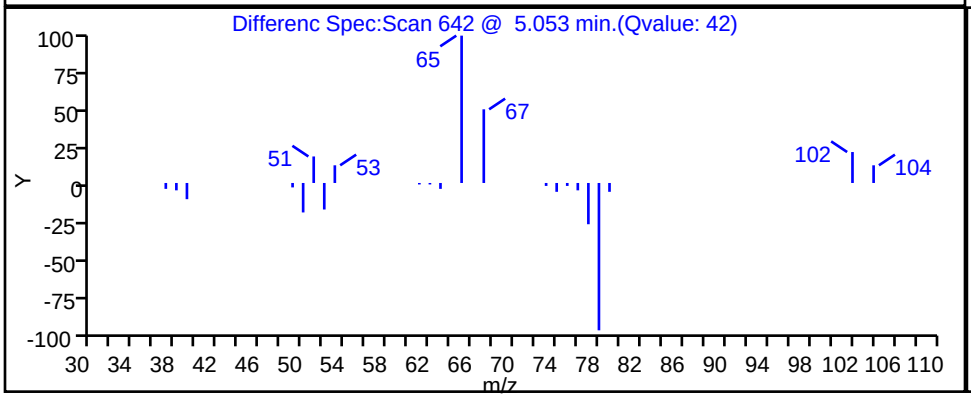


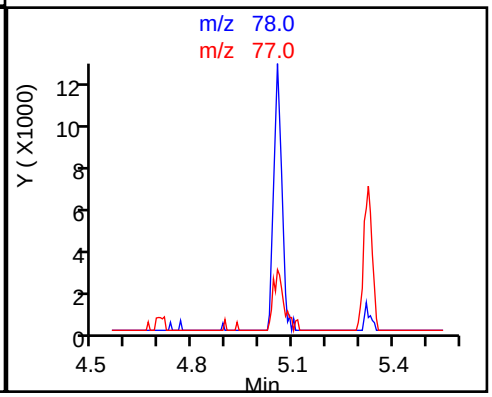








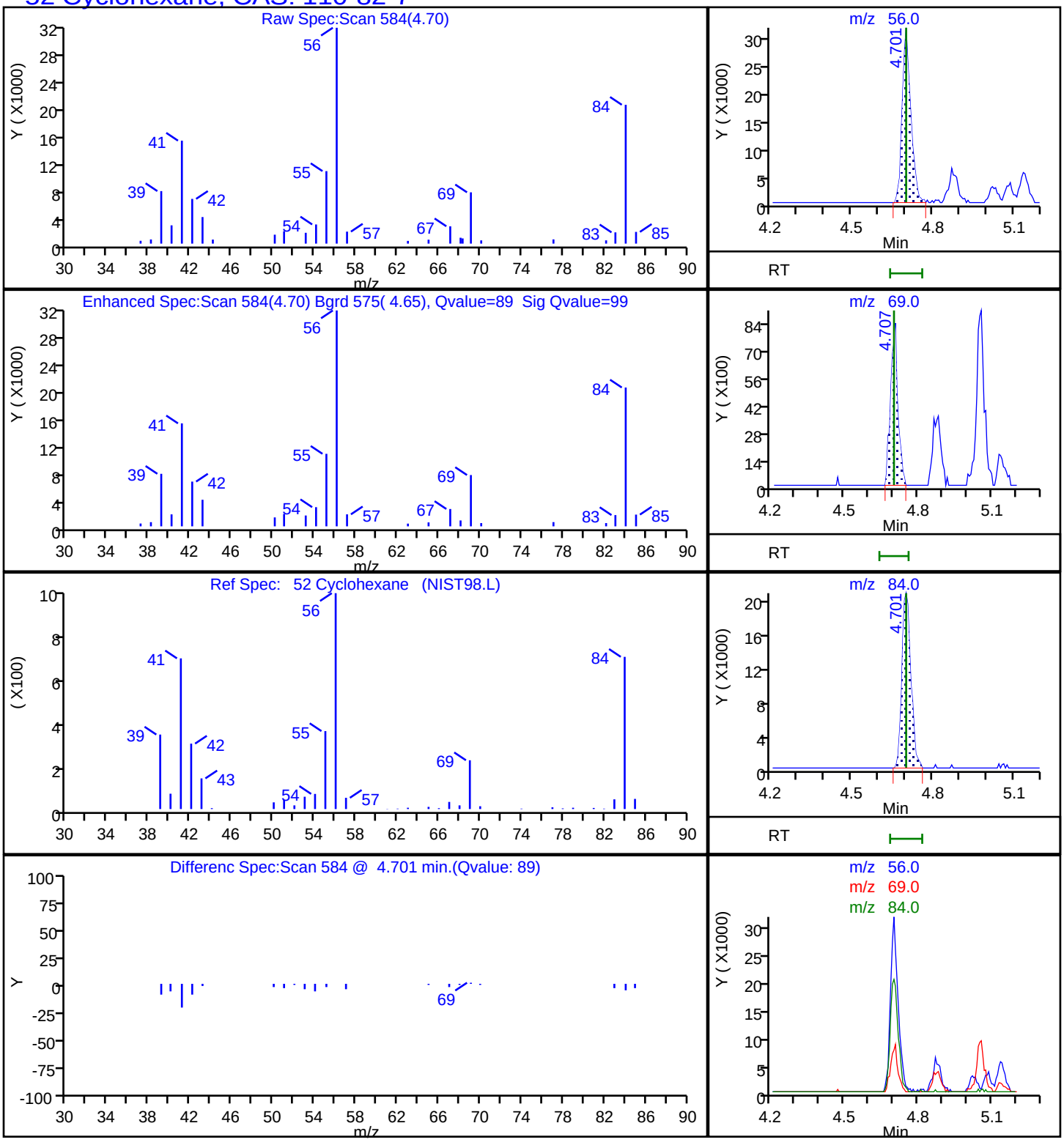




Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D		
Injection Date:	15-Jul-2019 18:20:30	Instrument ID:	HP5973S
Lims ID:	480-156069-E-5	Lab Sample ID:	480-156069-5
Client ID:	BLIND DUP		
Operator ID:	KN	ALS Bottle#:	25 Worklist Smp#: 26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000
Method:	S-8260	Limit Group:	MV - 8260C ICAL
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN

52 Cyclohexane, CAS: 110-82-7



Report Date: 15-Jul-2019 18:51:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D

Injection Date: 15-Jul-2019 18:20:30 Instrument ID: HP5973S

Lims ID: 480-156069-E-5 Lab Sample ID: 480-156069-5

Client ID: BLIND DUP

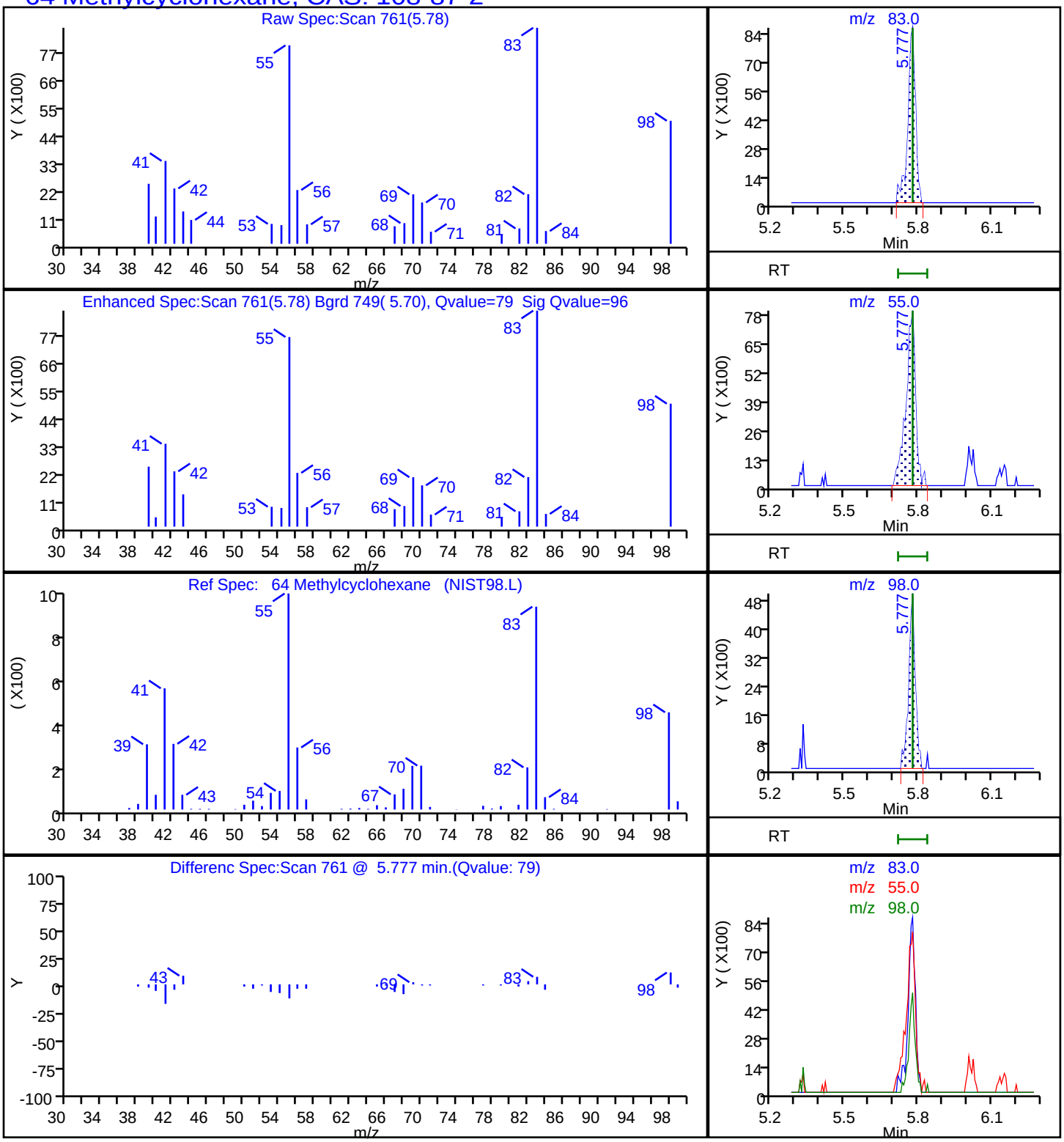
Operator ID: KN ALS Bottle#: 25 Worklist Smp#: 26

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm) Detector MS SCAN

64 Methylcyclohexane, CAS: 108-87-2



Report Date: 15-Jul-2019 18:51:04 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D

Injection Date: 15-Jul-2019 18:20:30 Instrument ID: HP5973S

Lims ID: 480-156069-E-5 Lab Sample ID: 480-156069-5

Client ID: BLIND DUP

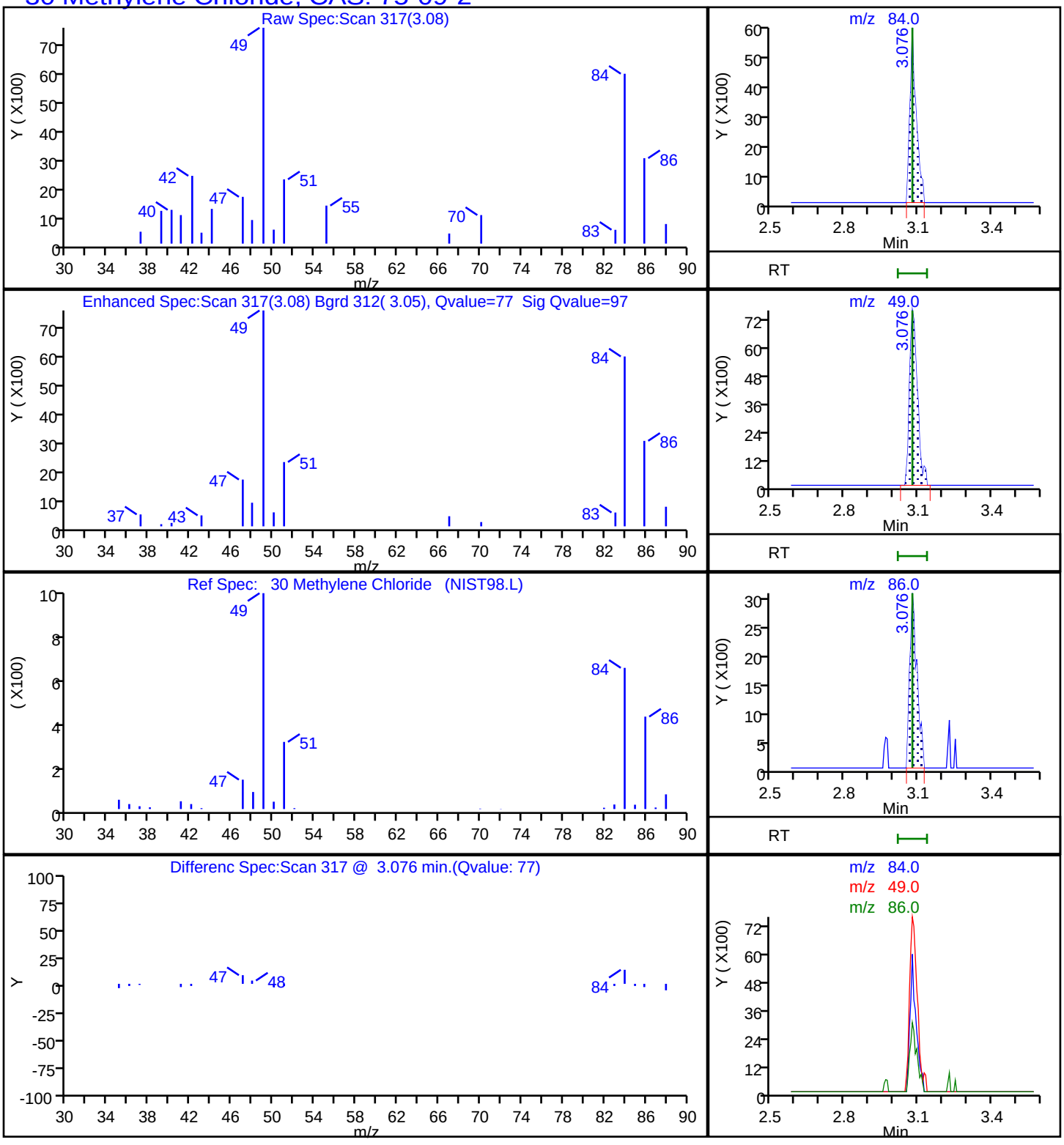
Operator ID: KN ALS Bottle#: 25 Worklist Smp#: 26

Purge Vol: 5.000 mL Dil. Factor: 10.0000

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm) Detector MS SCAN

30 Methylene Chloride, CAS: 75-09-2



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

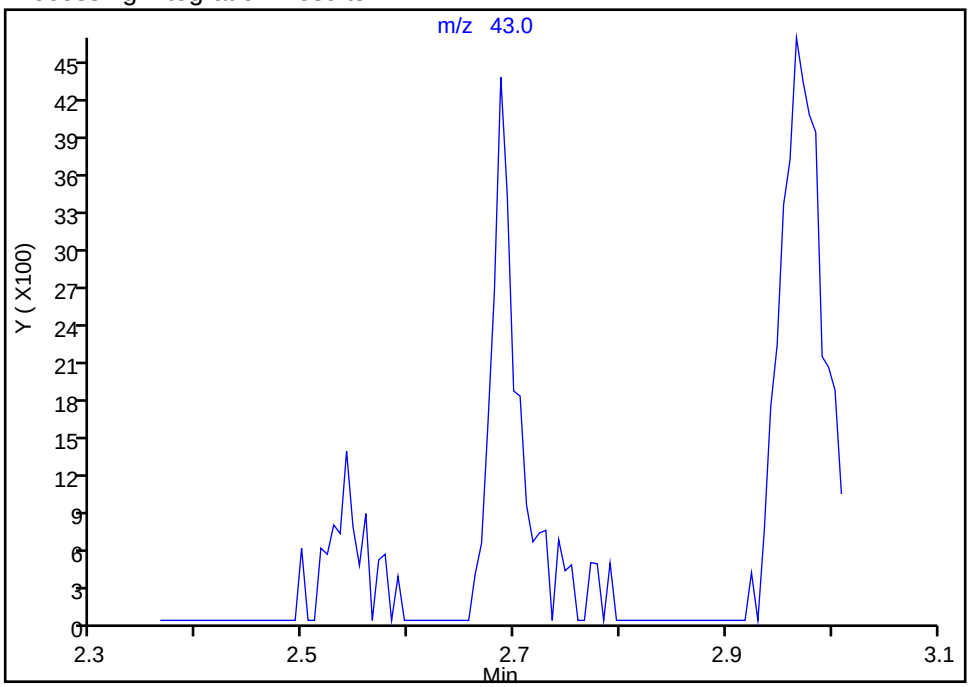
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D				
Injection Date:	15-Jul-2019 18:20:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-5	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	KN	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Signal: 1

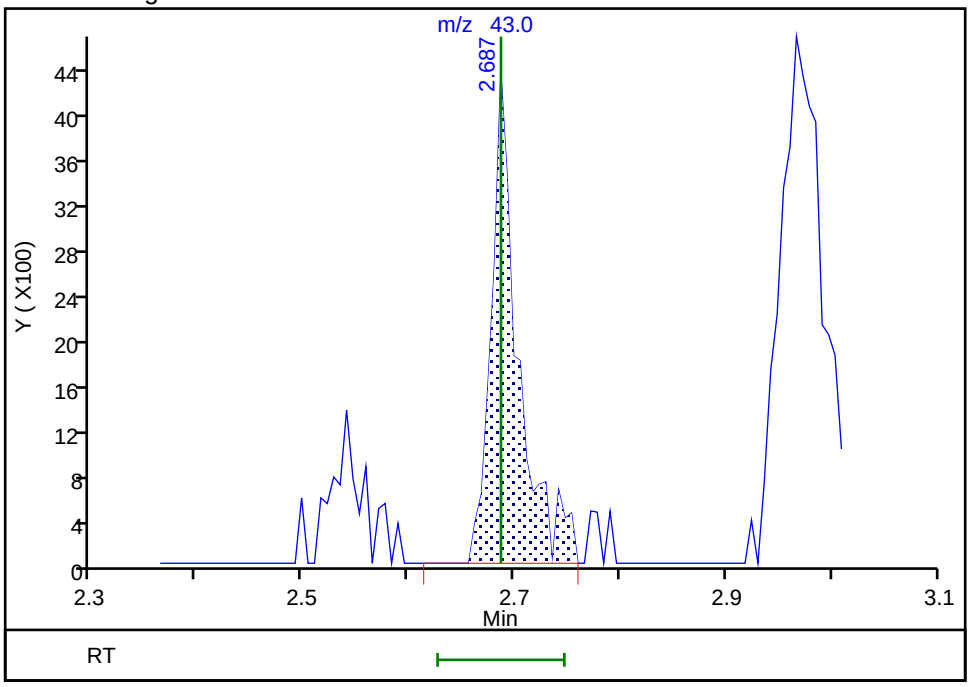
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 7701
Amount: 2.464495
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 18:50:00
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

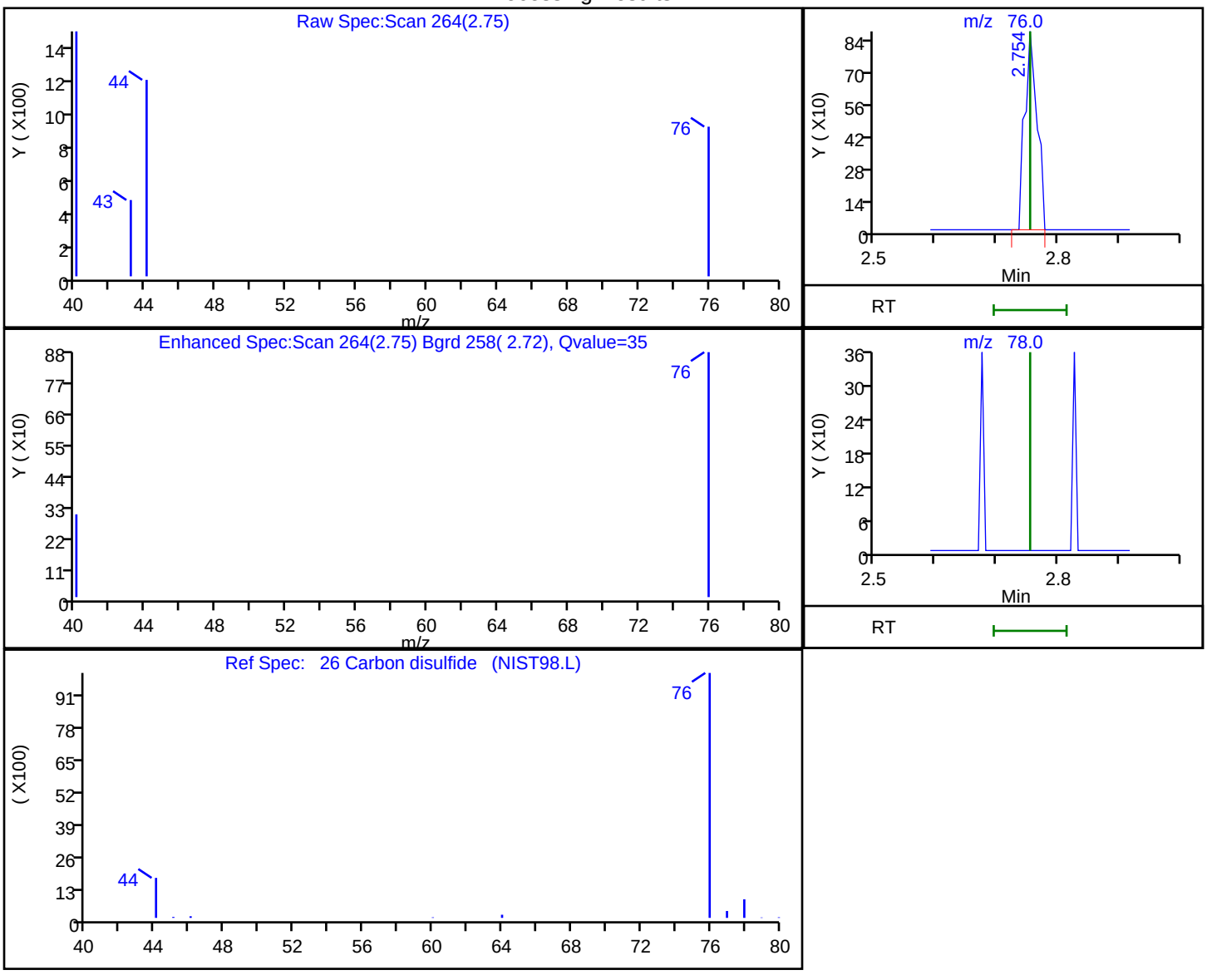
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D				
Injection Date:	15-Jul-2019 18:20:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-E-5	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	KN	ALS Bottle#:	25	Worklist Smp#:	26
Purge Vol:	5.000 mL	Dil. Factor:	10.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.75	76.00	1225	0.052037
2.75	78.00	0	

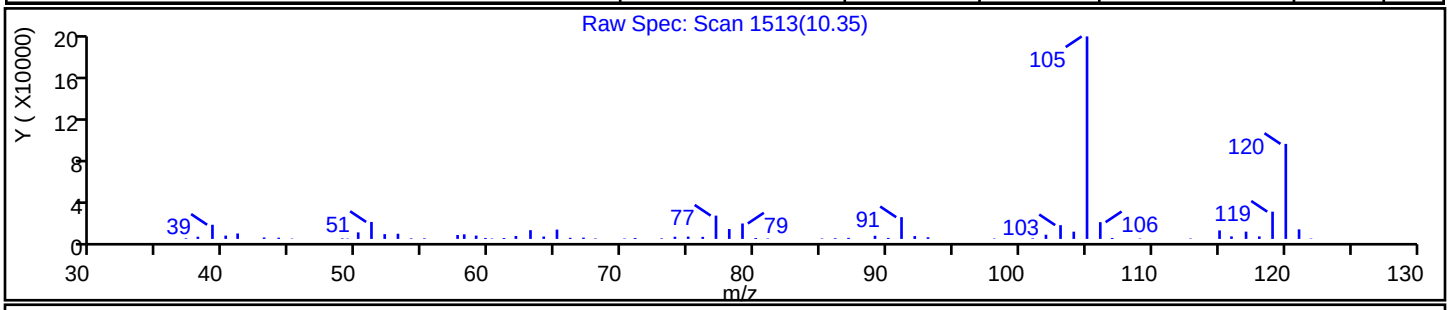
Reviewer: milligana, 15-Jul-2019 18:50:02

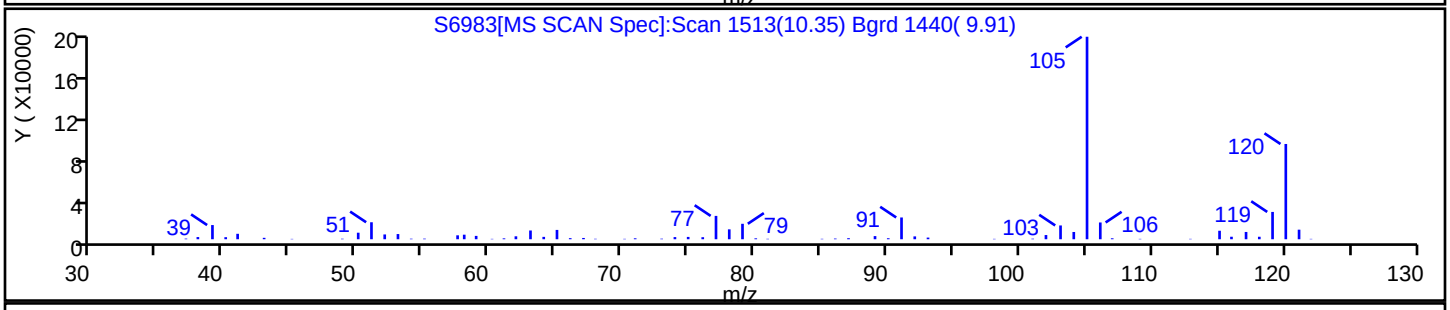
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

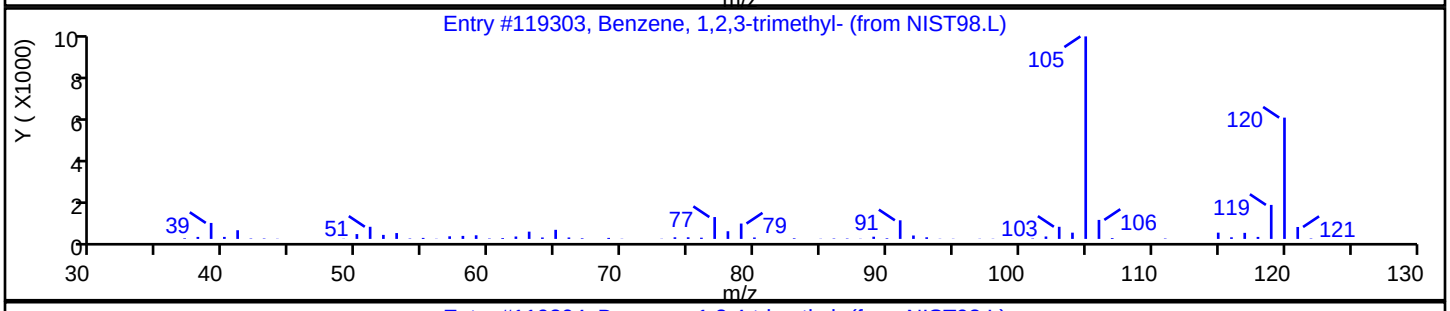
Eurofins TestAmerica, Buffalo

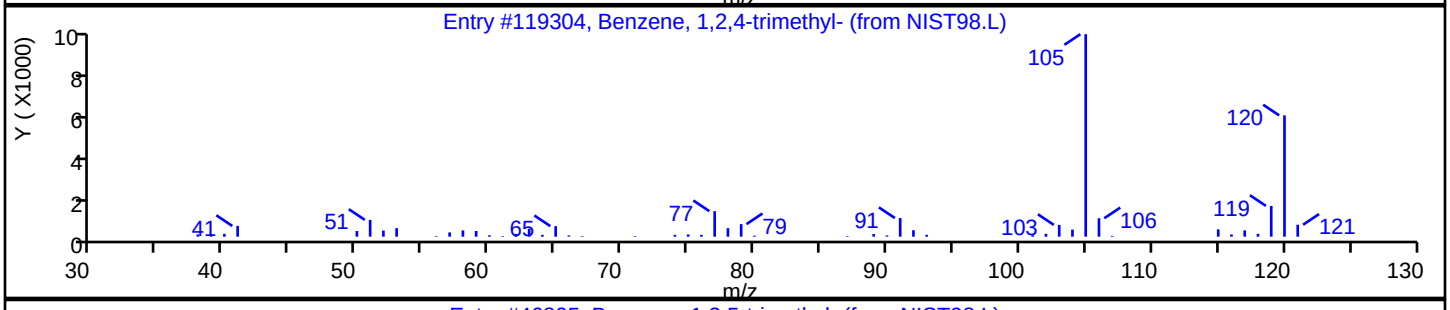
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D
Injection Date: 15-Jul-2019 18:20:30 Instrument ID: HP5973S
Lims ID: 480-156069-E-5 Lab Sample ID: 480-156069-5
Client ID: BLIND DUP
Operator ID: KN ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: Detector MS SCAN

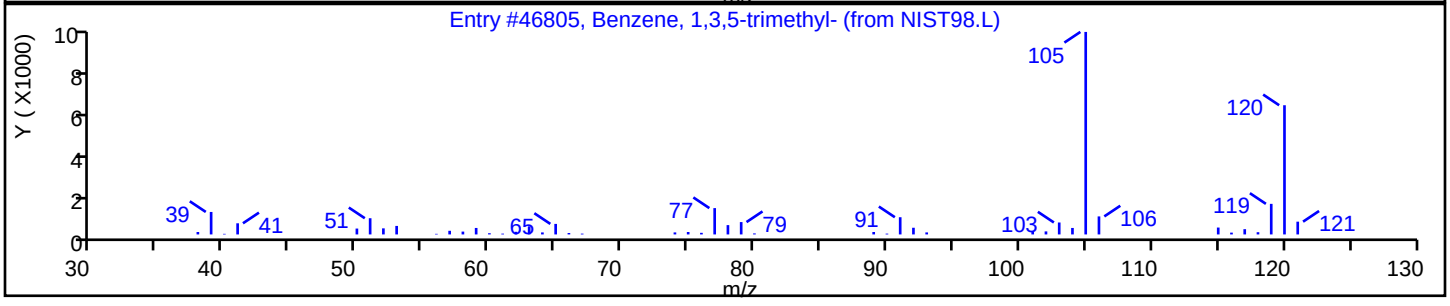
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,3-trimethyl-	526-73-8	NIST98.L	119303	C9H12	120	95
Benzene, 1,2,4-trimethyl-	95-63-6	NIST98.L	119304	C9H12	120	95
Benzene, 1,3,5-trimethyl-	108-67-8	NIST98.L	46805	C9H12	120	94







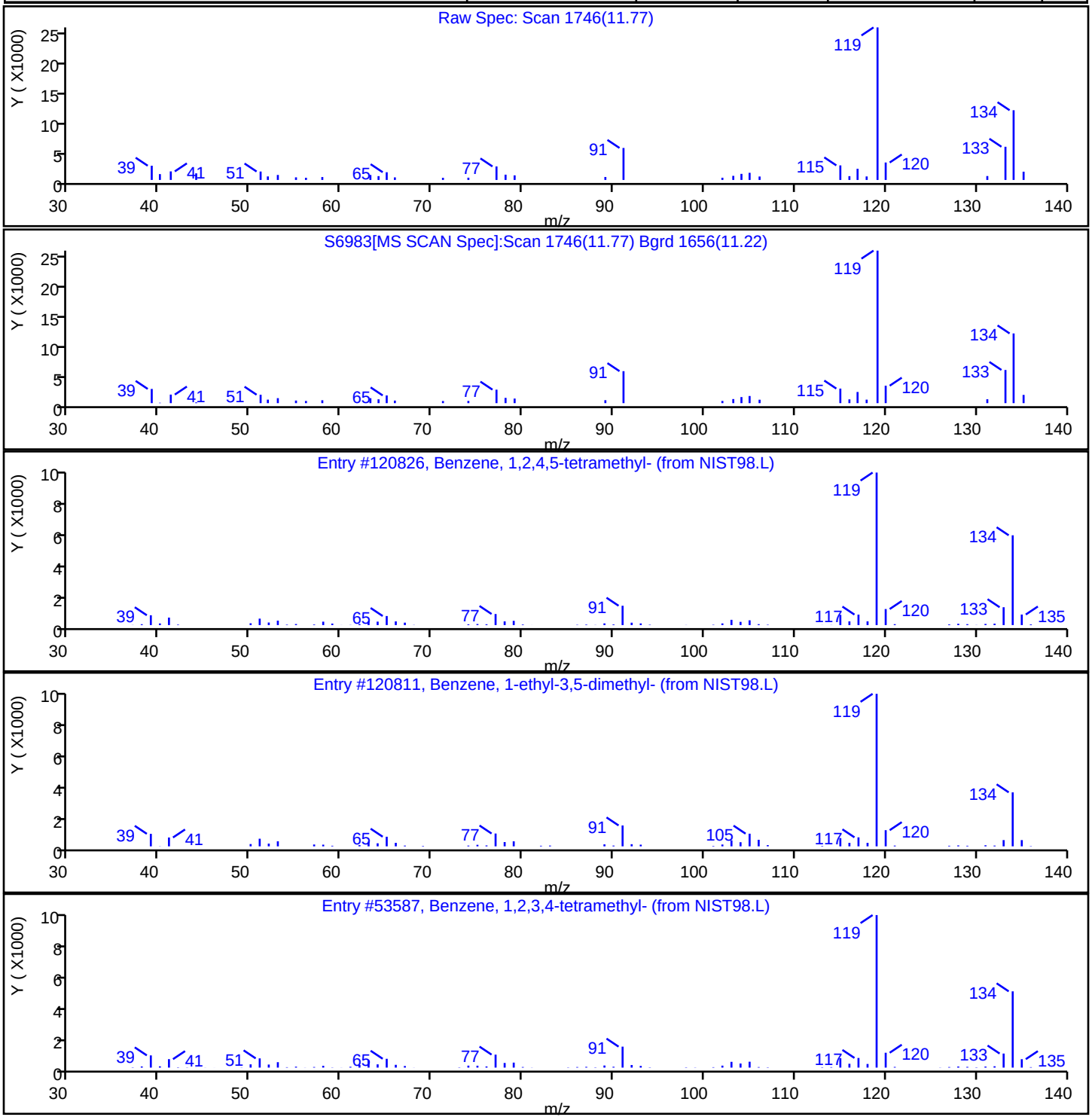




Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6983.D
Injection Date: 15-Jul-2019 18:20:30 Instrument ID: HP5973S
Lims ID: 480-156069-E-5 Lab Sample ID: 480-156069-5
Client ID: BLIND DUP
Operator ID: KN ALS Bottle#: 25 Worklist Smp#: 26
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98.L	120826	C10H14	134	90
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NIST98.L	120811	C10H14	134	90
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NIST98.L	53587	C10H14	134	90



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 480-156069-6

Matrix: Water Lab File ID: S6984.D

Analysis Method: 8260C Date Collected: 07/10/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	3.0	J	10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 480-156069-6

Matrix: Water Lab File ID: S6984.D

Analysis Method: 8260C Date Collected: 07/10/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	103		77-120
460-00-4	4-Bromofluorobenzene (Surr)	94		73-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: TRIP BLANK Lab Sample ID: 480-156069-6

Matrix: Water Lab File ID: S6984.D

Analysis Method: 8260C Date Collected: 07/10/2019 00:00

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 18:43

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6984.D
Lims ID: 480-156069-A-6
Client ID: TRIP BLANK
Sample Type: Client
Inject. Date: 15-Jul-2019 18:43:30 ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: 480-156069-a-6
Misc. Info.: 480-0082614-027
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 19:33:33 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 19:33:36

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	138173	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	286993	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	95	295364	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	93	116914	25.7	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	93	697064	24.7	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.568	0.000	88	224017	23.5	
10 Dichlorodifluoromethane	85		1.221				ND	
12 Chloromethane	50		1.391				ND	
13 Vinyl chloride	62		1.483				ND	
14 Bromomethane	94		1.762				ND	
15 Chloroethane	64		1.848				ND	
17 Trichlorofluoromethane	101		2.067				ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559				ND	
22 1,1-Dichloroethene	96		2.559				ND	
23 Acetone	43	2.687	2.687	0.000	68	8892	2.98	a
26 Carbon disulfide	76		2.754				ND	
27 Methyl acetate	43		2.979				ND	
30 Methylene Chloride	84		3.076				ND	Ua
32 Methyl tert-butyl ether	73		3.283				ND	
34 trans-1,2-Dichloroethene	96		3.302				ND	
39 1,1-Dichloroethane	63		3.721				ND	
45 cis-1,2-Dichloroethene	96		4.281				ND	
43 2-Butanone (MEK)	43		4.317				ND	
50 Chloroform	83	4.597	4.597	0.006	1	1832	0.1227	a
52 Cyclohexane	56		4.701				ND	
51 1,1,1-Trichloroethane	97		4.701				ND	
55 Carbon tetrachloride	117		4.835				ND	
57 Benzene	78		5.054				ND	
58 1,2-Dichloroethane	62		5.127				ND	
62 Trichloroethene	95		5.662				ND	
64 Methylcyclohexane	83		5.778				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63		5.905				ND	
68 Dichlorobromomethane	83		6.203				ND	
72 cis-1,3-Dichloropropene	75		6.617				ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763				ND	
74 Toluene	92		6.897				ND	
77 trans-1,3-Dichloropropene	75		7.183				ND	
79 1,1,2-Trichloroethane	83		7.371				ND	
81 Tetrachloroethene	166		7.426				ND	
80 2-Hexanone	43		7.603				ND	
83 Chlorodibromomethane	129		7.773				ND	
84 Ethylene Dibromide	107		7.870				ND	
87 Chlorobenzene	112		8.345				ND	
88 Ethylbenzene	91		8.436				ND	
90 m-Xylene & p-Xylene	106		8.558				ND	
91 o-Xylene	106		8.984				ND	
92 Styrene	104		9.014				ND	
95 Bromoform	173		9.263				ND	
94 Isopropylbenzene	105		9.367				ND	
97 1,1,2,2-Tetrachloroethane	83		9.787				ND	
111 1,3-Dichlorobenzene	146		10.644				ND	
113 1,4-Dichlorobenzene	146		10.736				ND	
116 1,2-Dichlorobenzene	146		11.088				ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825				ND	
119 1,2,4-Trichlorobenzene	180		12.494				ND	
S 124 Xylenes, Total	1		30.000				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

a - User Assigned ID

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

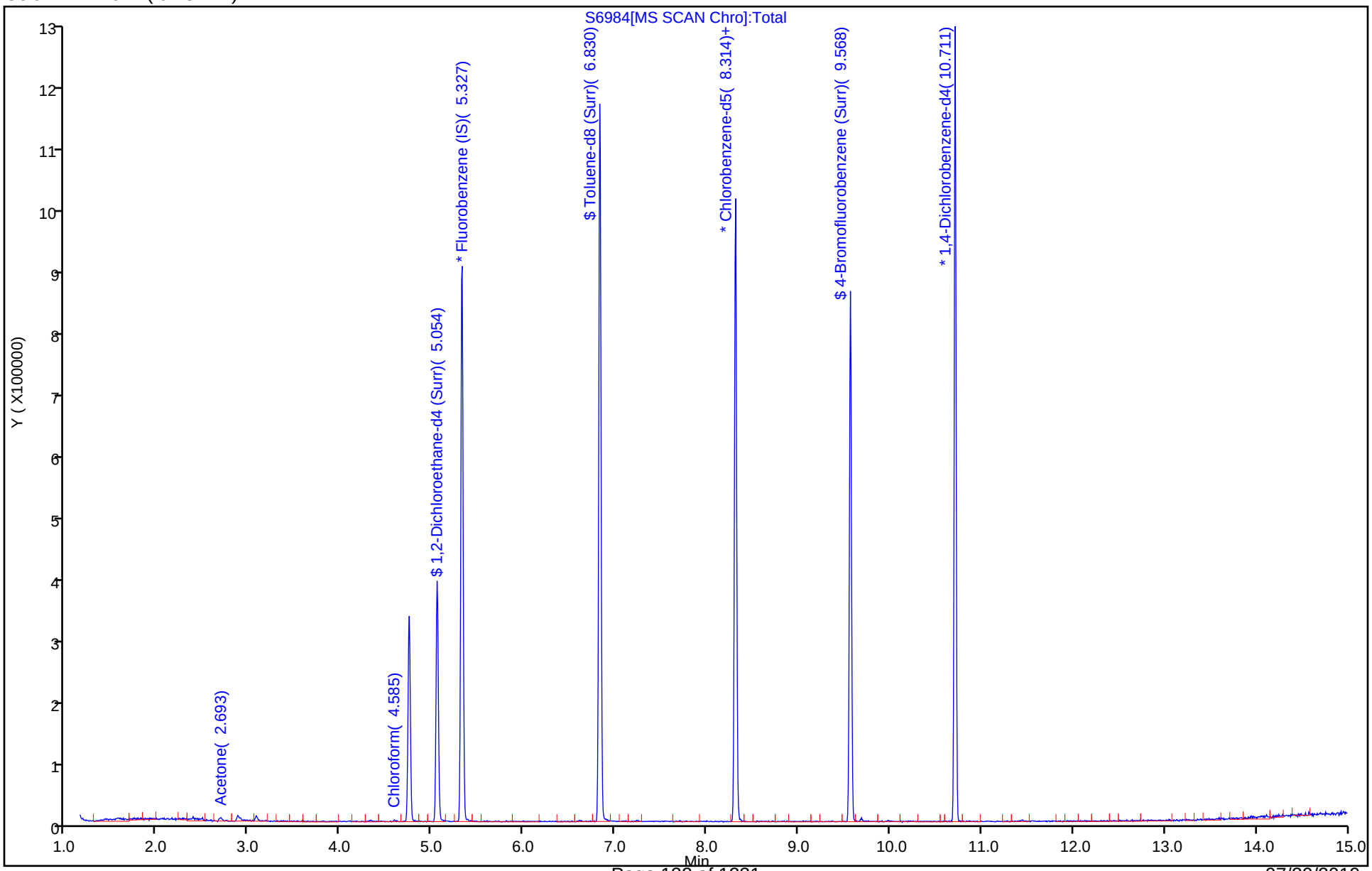
Report Date: 15-Jul-2019 19:33:36 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6984.D

Injection Date:	15-Jul-2019 18:43:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-A-6	Lab Sample ID:	480-156069-6	Worklist Smp#:	27
Client ID:	TRIP BLANK				
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	26
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

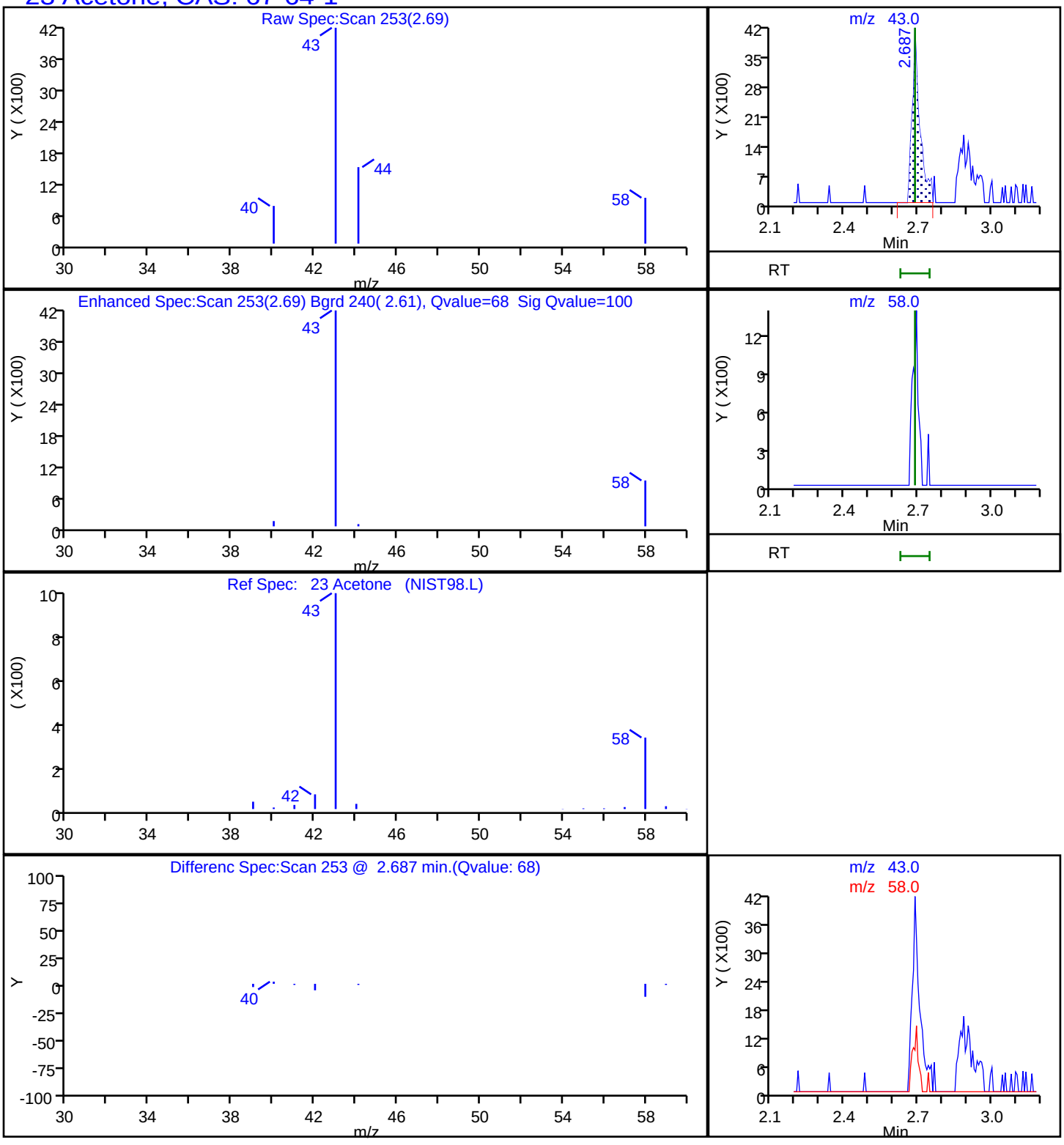
Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6984.D
Injection Date: 15-Jul-2019 18:43:30 Instrument ID: HP5973S
Lims ID: 480-156069-A-6 Lab Sample ID: 480-156069-6
Client ID: TRIP BLANK
Operator ID: KN ALS Bottle#: 26 Worklist Smp#: 27
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

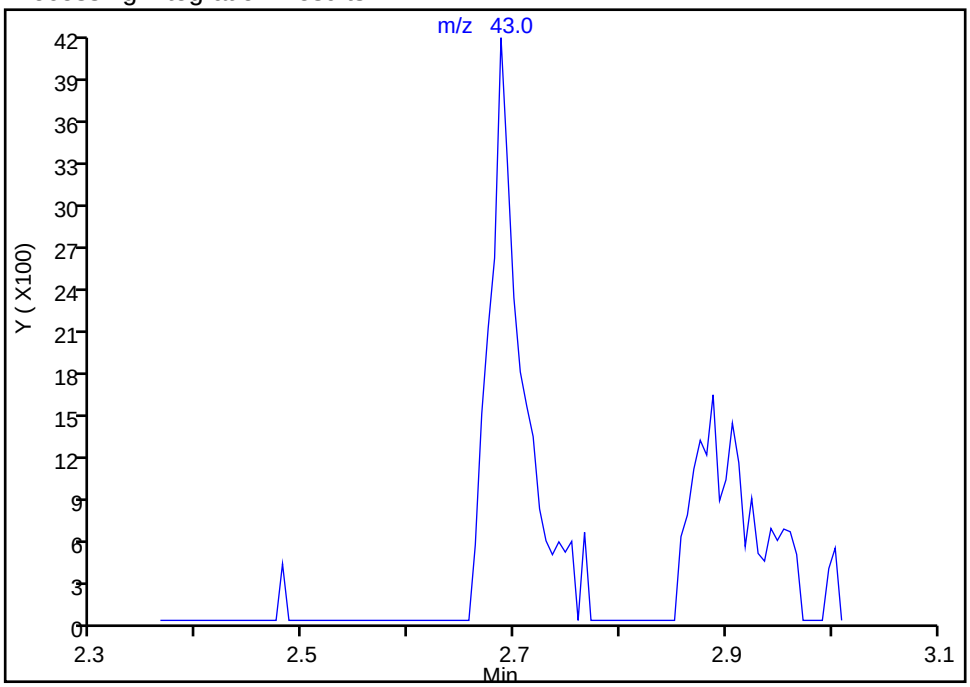
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6984.D				
Injection Date:	15-Jul-2019 18:43:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-A-6	Lab Sample ID:	480-156069-6		
Client ID:	TRIP BLANK				
Operator ID:	KN	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

23 Acetone, CAS: 67-64-1

Signal: 1

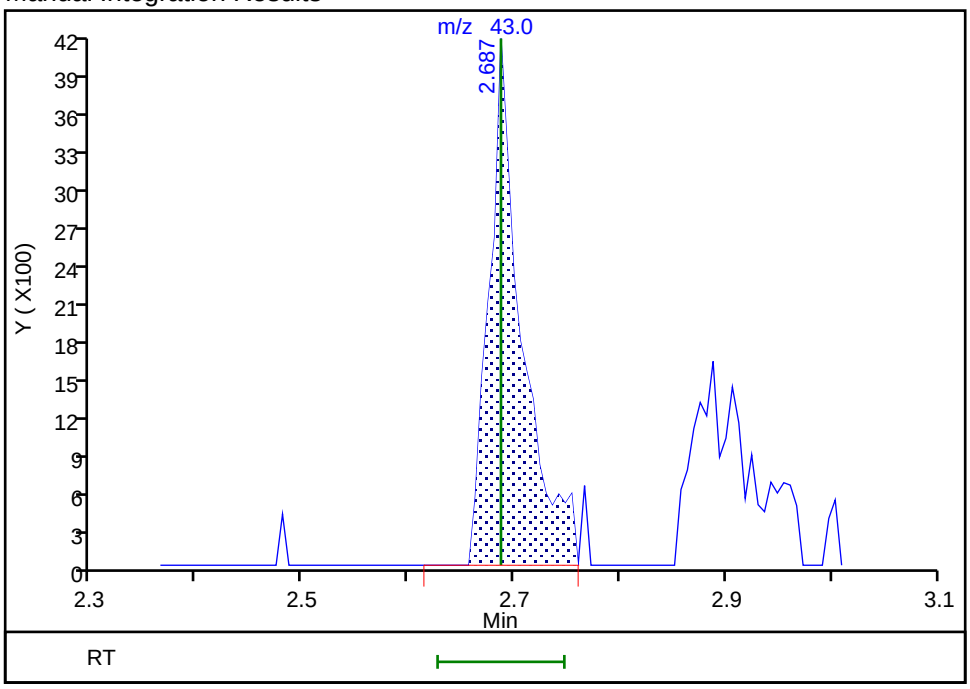
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 8892
Amount: 2.977737
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 19:32:57
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

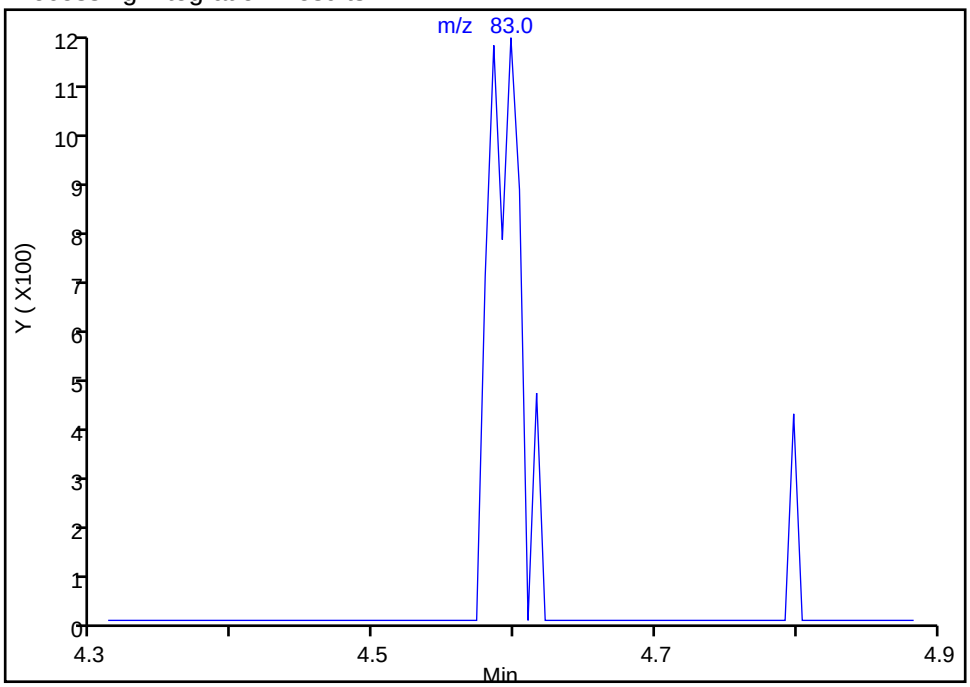
Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6984.D				
Injection Date:	15-Jul-2019 18:43:30	Instrument ID:	HP5973S		
Lims ID:	480-156069-A-6	Lab Sample ID:	480-156069-6		
Client ID:	TRIP BLANK				
Operator ID:	KN	ALS Bottle#:	26	Worklist Smp#:	27
Purge Vol:	5.000 mL	Dil. Factor:	1.0000		
Method:	S-8260	Limit Group:	MV - 8260C ICAL		
Column:	ZB-624 (0.18 mm)	Detector	MS SCAN		

50 Chloroform, CAS: 67-66-3

Signal: 1

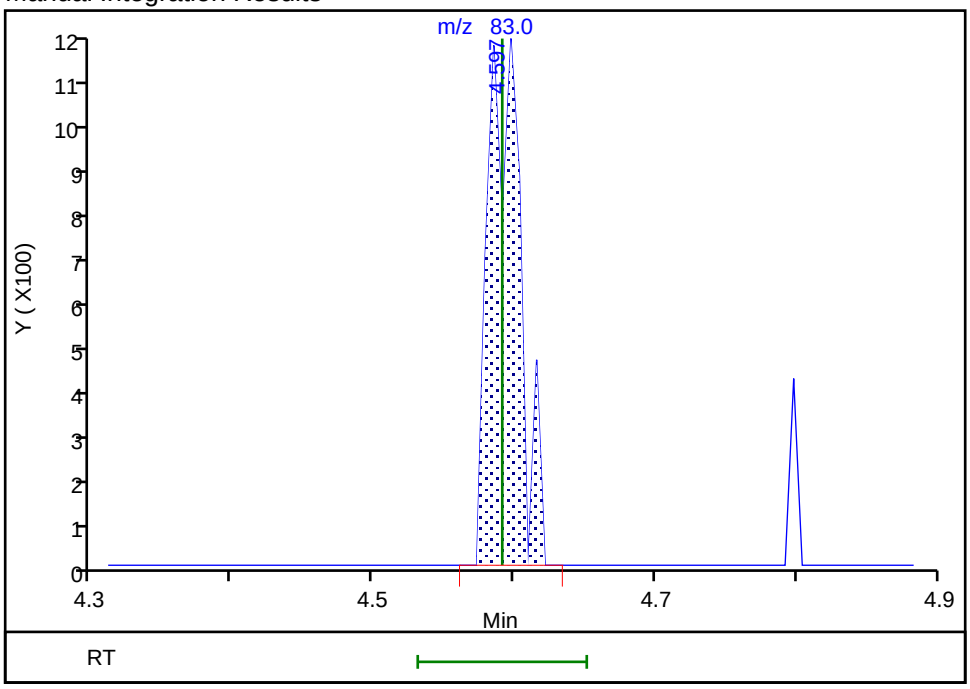
Not Detected
Expected RT: 4.59

Processing Integration Results



Manual Integration Results

RT: 4.60
Area: 1832
Amount: 0.122725
Amount Units: ug/L



Reviewer: milligana, 15-Jul-2019 19:33:12
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-479287/11	S6411.D
Level 2	IC 480-479287/12	S6412.D
Level 3	IC 480-479287/13	S6413.D
Level 4	IC 480-479287/14	S6414.D
Level 5	IC 480-479287/15	S6415.D
Level 6	ICIS 480-479287/16	S6416.D
Level 7	IC 480-479287/17	S6417.D
Level 8	IC 480-479287/18	S6418.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	+++++ 1.0428	1.1310 1.2772	1.5051 1.2463	1.3983	1.2607	Ave		1.2659			0.1000	12.2		20.0			
Chloromethane	1.3360 1.3977	1.5646 1.4792	1.7035 1.4727	1.6597	1.5071	Ave		1.5151			0.1000	8.2		20.0			
Butadiene	+++++ 1.2091	1.2345 1.4621	1.6670 1.4240	1.4923	1.3971	Ave		1.4123				11.1		20.0			
Vinyl chloride	+++++ 1.3038	1.1302 1.4793	1.6959 1.4661	1.5081	1.4185	Ave		1.4288			0.1000	12.3		20.0			
Bromomethane	1.0970 0.9345	1.0713 0.9746	1.0750 0.9919	1.0383	1.0539	Ave		1.0295			0.1000	5.5		20.0			
Chloroethane	0.7417 0.8468	0.9850 0.9125	1.1821 0.9254	1.0200	0.9699	Ave		0.9479			0.1000	13.6		20.0			
Dichlorofluoromethane	1.8559 2.0148	1.9034 2.1406	2.4637 2.1625	2.3429	2.2946	Ave		2.1473				10.0		20.0			
Trichlorofluoromethane	+++++ 1.7735	1.5857 2.0947	2.4665 2.0333	2.1127	2.0124	Ave		2.0113			0.1000	13.8		20.0			
Ethyl ether	1.3541 1.3140	1.3628 1.3338	1.4594 1.3650	1.4215	1.4318	Ave		1.3803				3.7		20.0			
Acrolein	0.3087 0.3077	0.3216 0.2815	0.2920 0.3147	0.3242	0.2902	Ave		0.3051				5.1		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0933 1.1408	0.9038 1.2553	1.4361 1.2182	1.4465	1.2249	Ave		1.2149			0.1000	14.6		20.0			
1,1-Dichloroethene	1.3104 1.1311	1.1506 1.1918	1.3690 1.2160	1.3442	1.2166	Ave		1.2412			0.1000	7.2		20.0			
Acetone	0.5284 0.5127	0.6620 0.4494	0.5768 0.5371	0.5903	0.4657	Ave		0.5403			0.1000	12.8		20.0			
Iodomethane	2.3069 2.1667	2.0532 2.2829	2.4514 2.3159	2.5584	2.4214	Ave		2.3196				6.9		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Carbon disulfide	3.9158 3.7525	3.5149 4.1301	4.4354 4.1540	4.4302	4.2303	Ave		4.0704			0.1000	7.9		20.0			
Allyl chloride	2.2609 2.1737	2.2320 2.2459	2.3735 2.3229	2.4583	2.2694	Ave		2.2921				3.9		20.0			
Methyl acetate	1.4514 1.3927	1.3606 1.3385	1.5090 1.4326	1.5110	1.3359	Ave		1.4165			0.1000	5.0		20.0			
Methylene Chloride	+++++ 1.4147	1.9383 1.4243	1.7960 1.4630	1.6835	1.5608	Lin1	0.6415	1.4401			0.1000				0.9990		0.9900
2-Methyl-2-propanol	+++++ 0.1513	0.1920 0.1389	0.1548 0.1838	0.1788	0.1425	Ave		0.1632				13.1		20.0			
Methyl tert-butyl ether	4.0761 4.0179	4.0761 4.0488	4.3193 4.1151	4.3269	4.3288	Ave		4.1636			0.1000	3.3		20.0			
trans-1,2-Dichloroethene	1.2523 1.3238	1.2326 1.4026	1.5266 1.4436	1.5516	1.4565	Ave		1.3987			0.1000	8.5		20.0			
Acrylonitrile	0.6334 0.6999	0.7329 0.6573	0.6964 0.7220	0.7585	0.6572	Ave		0.6947				6.2		20.0			
Hexane	1.8586 1.9048	1.7211 2.2308	2.4639 2.0475	2.3590	2.1942	Ave		2.0975				12.3		20.0			
1,1-Dichloroethane	2.6128 2.3434	2.1321 2.4478	2.5554 2.4820	2.6461	2.5379	Ave		2.4697			0.2000	6.7		20.0			
Vinyl acetate	2.6580 3.1920	2.4603 3.4665	2.8940 3.7175	3.2371	3.0938	Ave		3.0899				13.3		20.0			
2,2-Dichloropropane	1.2338 1.1648	1.1764 1.2375	1.3945 1.2354	1.3821	1.3756	Ave		1.2750				7.4		20.0			
cis-1,2-Dichloroethene	1.5117 1.5228	1.4782 1.5648	1.6338 1.5651	1.7188	1.6783	Ave		1.5842			0.1000	5.4		20.0			
2-Butanone (MEK)	0.8035 0.8750	0.8923 0.8500	0.8774 0.9303	0.9584	0.8407	Ave		0.8784			0.1000	5.6		20.0			
Chlorobromomethane	0.8910 0.8235	0.7735 0.8356	0.8839 0.8309	0.8936	0.8985	Ave		0.8538				5.3		20.0			
Tetrahydrofuran	0.6119 0.5947	0.6414 0.5895	0.6223 0.5978	0.6602	0.6098	Ave		0.6160				4.0		20.0			
Chloroform	+++++ 2.4489	2.9654 2.5319	2.9531 2.5568	2.8096	2.6408	Ave		2.7009			0.2000	7.7		20.0			
1,1,1-Trichloroethane	1.9628 1.9123	1.6824 2.1077	2.2293 2.1177	2.1479	2.0674	Ave		2.0284			0.1000	8.5		20.0			
Cyclohexane	2.3738 2.2950	1.8625 2.6088	2.7764 2.4294	2.7761	2.6109	Ave		2.4666			0.1000	12.2		20.0			
Carbon tetrachloride	1.4586 1.5946	1.4812 1.8132	1.7311 1.8634	1.8859	1.7079	Ave		1.6920			0.1000	9.8		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,1-Dichloropropene	1.6418 1.7833	1.5553 1.9589	2.0719 1.9401	2.0975	1.9357	Ave		1.8731				10.4		20.0			
Benzene	5.1674 5.4846	4.9091 5.7804	6.0574 5.8366	6.2543	5.8451	Ave		5.6668			0.5000	8.0		20.0			
Isobutyl alcohol	0.0532 0.0680	0.0713 0.0676	0.0579 0.0807	0.0686	0.0588	Ave		0.0658				13.3		20.0			
1,2-Dichloroethane	2.3372 2.0879	2.1751 2.1496	2.3068 2.2000	2.3175	2.1955	Ave		2.2212			0.1000	4.0		20.0			
n-Heptane	1.7235 1.9451	1.7878 2.4453	2.4486 2.2453	2.3474	2.1491	Ave		2.1365				13.5		20.0			
Trichloroethene	1.1763 1.3837	1.3518 1.4823	1.6217 1.5019	1.6225	1.4551	Ave		1.4494			0.2000	10.2		20.0			
Methylcyclohexane	2.3762 2.3491	1.8686 2.6536	2.9835 2.4796	2.7962	2.6099	Ave		2.5146			0.1000	13.4		20.0			
1,2-Dichloropropane	1.2425 1.3021	1.2946 1.4003	1.4203 1.4121	1.5400	1.3685	Ave		1.3725			0.1000	6.8		20.0			
Dibromomethane	0.9286 0.9422	0.9072 0.9250	0.9372 0.9687	1.0447	0.9852	Ave		0.9549			0.1000	4.6		20.0			
1,4-Dioxane	+++++ 0.0084	+++++ 0.0082	0.0073 0.0077	0.0085	0.0087	Ave		0.0081				6.4		20.0			
Bromodichloromethane	1.6038 1.6905	1.5079 1.8419	1.7584 1.9256	1.8640	1.8214	Ave		1.7517			0.2000	8.1		20.0			
2-Chloroethyl vinyl ether	0.9219 0.9727	0.7992 1.0861	1.0654 1.1044	1.1429	0.9942	Ave		1.0108				11.2		20.0			
cis-1,3-Dichloropropene	1.8801 2.1567	1.8208 2.3289	2.0858 2.4147	2.2033	2.2145	Ave		2.1381			0.2000	9.6		20.0			
4-Methyl-2-pentanone (MIBK)	0.7780 0.9364	0.8482 0.9369	0.8995 0.9565	0.9810	0.9773	Ave		0.9142			0.1000	7.7		20.0			
Toluene	1.8655 1.6917	1.5724 1.7906	1.9633 1.7774	1.8889	1.7723	Ave		1.7903			0.4000	6.8		20.0			
trans-1,3-Dichloropropene	0.7958 1.0122	0.8732 1.1083	0.9338 1.1155	1.0356	0.9849	Ave		0.9824			0.1000	11.3		20.0			
Ethyl methacrylate	+++++ 0.9586	0.6739 0.9995	0.8146 1.0386	0.9110	0.9405	Ave		0.9052				13.7		20.0			
1,1,2-Trichloroethane	0.5300 0.5201	0.4578 0.5436	0.5420 0.5350	0.5961	0.5253	Ave		0.5312			0.1000	7.1		20.0			
Tetrachloroethene	0.7529 0.7311	0.6745 0.8051	0.8605 0.7731	0.8847	0.7951	Ave		0.7846			0.2000	8.7		20.0			
1,3-Dichloropropane	1.0272 1.1173	1.0034 1.1589	1.1611 1.1312	1.2174	1.1189	Ave		1.1169				6.3		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Hexanone	0.5597 0.6987	0.5977 0.7129	0.6941 0.7125	0.7126	0.7386	Ave		0.6784			0.1000	9.4		20.0			
Dibromochloromethane	0.6187 0.6500	0.5639 0.7385	0.5999 0.7353	0.6567	0.6382	Ave		0.6502			0.1000	9.4		20.0			
1,2-Dibromoethane	0.6896 0.6941	0.6240 0.7297	0.6567 0.7179	0.7303	0.7013	Ave		0.6930				5.3		20.0			
Chlorobenzene	1.7896 1.9522	1.7822 2.0296	2.0799 2.0047	2.1473	2.0529	Ave		1.9798			0.5000	6.7		20.0			
Ethylbenzene	2.9289 3.2273	2.9131 3.4467	3.3818 3.3742	3.5997	3.3269	Ave		3.2748			0.1000	7.4		20.0			
1,1,1,2-Tetrachloroethane	0.5397 0.6293	0.5239 0.6924	0.6112 0.6928	0.6287	0.6521	Ave		0.6213				10.1		20.0			
m,p-Xylene	1.2679 1.2786	1.1336 1.3768	1.3610 1.3244	1.4003	1.3283	Ave		1.3089			0.1000	6.4		20.0			
o-Xylene	1.1791 1.2885	1.1063 1.3137	1.3062 1.2882	1.4601	1.3294	Ave		1.2839			0.3000	8.2		20.0			
Styrene	1.9524 2.1361	1.8655 2.2708	2.2844 2.2154	2.3261	2.2227	Ave		2.1592			0.3000	7.7		20.0			
Bromoform	0.4036 0.4362	0.3058 0.5082	0.4034 +++++	0.4214	0.4304	Ave		0.4156			0.1000	14.4		20.0			
Isopropylbenzene	2.8129 3.0904	2.5318 3.3862	3.3182 3.4851	3.4298	3.1040	Ave		3.1448			0.1000	10.6		20.0			
Bromobenzene	0.8382 0.8485	0.7224 0.8952	0.9163 0.9212	0.9131	0.8691	Ave		0.8655				7.6		20.0			
1,1,2,2-Tetrachloroethane	0.8867 0.8981	0.8388 0.9460	0.9467 0.9691	0.9239	0.8924	Ave		0.9127			0.3000	4.6		20.0			
N-Propylbenzene	3.2919 3.7199	3.0889 4.1040	3.8454 4.1488	4.1051	3.7540	Ave		3.7572				10.4		20.0			
1,2,3-Trichloropropane	+++++ 0.3170	0.2545 0.3322	0.3283 0.3362	0.3429	0.3086	Ave		0.3171				9.4		20.0			
trans-1,4-Dichloro-2-butene	0.2516 0.3348	0.3446 0.3818	0.2797 0.3845	0.3381	0.3327	Ave		0.3310				13.8		20.0			
2-Chlorotoluene	0.7140 0.7667	0.7092 0.8050	0.8495 0.8328	0.8088	0.7563	Ave		0.7803				6.7		20.0			
1,3,5-Trimethylbenzene	2.3751 2.6698	2.2404 2.8023	2.7773 2.8772	2.9043	2.7731	Ave		2.6774				9.0		20.0			
4-Chlorotoluene	0.7798 0.8134	0.6631 0.8534	0.8679 0.8878	0.8819	0.8429	Ave		0.8238				9.0		20.0			
tert-Butylbenzene	0.5424 0.5922	0.4820 0.6232	0.6347 0.6218	0.6909	0.6426	Ave		0.6037				10.7		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,2,4-Trimethylbenzene	2.3985 2.7214	2.2324 2.8306	2.8546 2.8948	3.0123	2.8270	Ave		2.7215				9.8		20.0			
sec-Butylbenzene	2.7199 3.2793	2.8126 3.5285	3.5900 3.5234	3.7521	3.4869	Ave		3.3366				11.3		20.0			
1,3-Dichlorobenzene	1.5401 1.6086	1.3917 1.6808	1.7328 1.6755	1.8101	1.7063	Ave		1.6432			0.6000	7.9		20.0			
4-Isopropyltoluene	2.6423 2.9313	2.5602 3.1006	3.0871 3.0717	3.3115	3.1316	Ave		2.9795				8.6		20.0			
1,4-Dichlorobenzene	1.6095 1.6466	1.5033 1.7016	1.7986 1.7076	1.8244	1.7362	Ave		1.6910			0.5000	6.1		20.0			
n-Butylbenzene	2.2352 2.6394	2.1922 2.7369	2.8339 2.7322	2.9013	2.7654	Ave		2.6295				10.2		20.0			
1,2-Dichlorobenzene	1.6403 1.5764	1.5409 1.5793	1.7413 1.5699	1.8001	1.6942	Ave		1.6428			0.4000	5.7		20.0			
1,2-Dibromo-3-Chloropropane	0.1383 0.1608	0.1376 0.1549	0.1571 0.1725	0.1535	0.1522	Ave		0.1534			0.0500	7.5		20.0			
1,2,4-Trichlorobenzene	1.0608 1.0092	1.0198 0.9151	1.2163 0.9428	1.2082	1.1958	Ave		1.0710			0.2000	11.3		20.0			
Hexachlorobutadiene	0.4927 0.4699	0.5243 0.4453	0.5854 0.4302	0.5984	0.5622	Ave		0.5136				12.5		20.0			
Naphthalene	2.6316 2.7008	2.6859 2.5122	3.0746 2.7964	3.2494	3.2304	Ave		2.8602				10.0		20.0			
1,2,3-Trichlorobenzene	1.1863 0.8906	1.0792 0.7859	1.1296 0.8751	1.1774	1.1046	Ave		1.0286				15.0		20.0			
Dibromofluoromethane (Surr)	1.2696 1.3144	1.2955 1.3143	1.3044 1.2736	1.3065	1.3257	Ave		1.3005				1.5		20.0			
1,2-Dichloroethane-d4 (Surr)	0.8325 0.8043	0.8377 0.8110	0.8189 0.8249	0.8356	0.8278	Ave		0.8241				1.4		20.0			
Toluene-d8 (Surr)	2.4261 2.4502	2.4762 2.5043	2.4610 2.4573	2.4571	2.4379	Ave		2.4588				1.0		20.0			
4-Bromofluorobenzene (Surr)	0.8099 0.8339	0.8542 0.8410	0.8415 0.7799	0.8428	0.8419	Ave		0.8306				2.9		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-479287/11	S6411.D
Level 2	IC 480-479287/12	S6412.D
Level 3	IC 480-479287/13	S6413.D
Level 4	IC 480-479287/14	S6414.D
Level 5	IC 480-479287/15	S6415.D
Level 6	ICIS 480-479287/16	S6416.D
Level 7	IC 480-479287/17	S6417.D
Level 8	IC 480-479287/18	S6418.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	+++++ 162300	6701 400155	18088 794180	42646	74613	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloromethane	FB	Ave	3975 217534	9270 463446	20472 938448	50617	89196	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Butadiene	FB	Ave	+++++ 188181	7314 458065	20033 907444	45512	82682	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl chloride	FB	Ave	+++++ 202921	6696 463461	20380 934287	45993	83951	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromomethane	FB	Ave	3264 145442	6347 305328	12919 632109	31665	62371	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Chloroethane	FB	Ave	2207 131801	5836 285890	14206 589690	31109	57402	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dichlorofluoromethane	FB	Ave	5522 313591	11277 670642	29607 1378067	71453	135802	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichlorofluoromethane	FB	Ave	+++++ 276032	9395 656271	29641 1295724	64433	119098	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl ether	FB	Ave	4029 204513	8074 417877	17538 869860	43352	84737	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrolein	FB	Ave	4592 239465	9527 441043	17548 1002579	49436	85862	2.50 125	5.00 250	10.0 500	25.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	3253 177558	5355 393287	17258 776282	44114	72494	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethene	FB	Ave	3899 176039	6817 373376	16452 774870	40994	72003	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acetone	FB	Ave	7861 398956	19610 704053	34660 1711221	90016	137801	2.50 125	5.00 250	10.0 500	25.0	50.0
Iodomethane	FB	Ave	6864 337229	12165 715241	29460 1475809	78027	143307	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon disulfide	FB	Ave	11651 584037	20825 1293948	53303 2647156	135110	250365	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Allyl chloride	FB	Ave	6727 338313	13224 703632	28523 1480239	74974	134308	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methyl acetate	FB	Ave	8637 433508	16123 838729	36270 1825858	92165	158131	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Methylene Chloride	FB	Lin1	+++++ 220182	11484 446245	21584 932284	51344	92371	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Methyl-2-propanol	FB	Ave	+++++ 235444	11373 435128	18603 1171245	54543	84347	+++++ 250	10.0 500	20.0 1000	50.0	100
Methyl tert-butyl ether	FB	Ave	12128 625344	24150 1268476	51907 2622366	131962	256190	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,2-Dichloroethene	FB	Ave	3726 206043	7303 439438	18346 919928	47321	86198	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Acrylonitrile	FB	Ave	18846 1089319	43425 2059166	83693 4600811	231329	388923	5.00 250	10.0 500	20.0 1000	50.0	100
Hexane	FB	Ave	5530 296467	10197 698911	29610 1304767	71944	129857	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloroethane	FB	Ave	7774 364723	12632 766890	30710 1581676	80701	150199	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Vinyl acetate	FB	Ave	15817 993623	29153 2172121	69557 4737933	197450	366200	1.00 50.0	2.00 100	4.00 200	10.0	20.0
2,2-Dichloropropane	FB	Ave	3671 181298	6970 387722	16759 787238	42152	81414	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,2-Dichloroethene	FB	Ave	4498 237010	8758 490250	19634 997325	52419	99329	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Butanone (MEK)	FB	Ave	11954 680899	26433 1331480	52719 2964082	146148	248786	2.50 125	5.00 250	10.0 500	25.0	50.0
Chlorobromomethane	FB	Ave	2651 128172	4583 261799	10622 529476	27253	53177	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrahydrofuran	FB	Ave	3641 185124	7600 369411	14958 761925	40268	72185	1.00 50.0	2.00 100	4.00 200	10.0	20.0
Chloroform	FB	Ave	+++++ 381142	17569 793239	35489 1629317	85687	156291	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1-Trichloroethane	FB	Ave	5840 297634	9968 660352	26791 1349493	65505	122355	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Cyclohexane	FB	Ave	7063 357190	11035 817337	33365 1548134	84665	154522	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Carbon tetrachloride	FB	Ave	4340 248182	8776 568091	20803 1187453	57516	101080	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1-Dichloropropene	FB	Ave	4885 277553	9215 613708	24899 1236325	63969	114558	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Benzene	FB	Ave	15375 853627	29085 1810985	72795 3719387	190741	345931	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Isobutyl alcohol	FB	Ave	3959 264603	10556 529532	17393 1285236	52323	86932	12.5 625	25.0 1250	50.0 2500	125	250
1,2-Dichloroethane	FB	Ave	6954 324970	12887 673459	27722 1401933	70678	129938	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Heptane	FB	Ave	5128 302738	10592 766104	29426 1430842	71591	127193	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Trichloroethene	FB	Ave	3500 215364	8009 464415	19489 957065	49482	86120	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Methylcyclohexane	FB	Ave	7070 365616	11071 831374	35854 1580141	85277	154463	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichloropropane	FB	Ave	3697 202655	7670 438712	17069 899856	46967	80990	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromomethane	FB	Ave	2763 146649	5375 289794	11263 617328	31861	58310	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,4-Dioxane	CBNZ d5	Ave	+++++ 53248	+++++ 104525	3674 205613	10824	21450	+++++ 500	+++++ 1000	40.0 2000	100	200
Bromodichloromethane	FB	Ave	4772 263116	8934 577073	21132 1227068	56847	107798	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chloroethyl vinyl ether	FB	Ave	2743 151392	4735 340269	12804 703763	34855	58842	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
cis-1,3-Dichloropropene	FB	Ave	5594 335664	10788 729645	25066 1538748	67197	131061	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	24288 1490485	51258 2990352	113065 6381702	312405	604932	2.50 125	5.00 250	10.0 500	25.0	50.0
Toluene	CBNZ d5	Ave	11648 538547	19003 1142953	49355 2371665	120305	219397	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	4969 322232	10553 707479	23475 1488419	65954	121917	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethyl methacrylate	CBNZ d5	Ave	+++++ 305162	8145 637980	20479 1385837	58020	116422	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2-Trichloroethane	CBNZ d5	Ave	3309 165560	5533 346978	13625 713937	37964	65031	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Tetrachloroethene	CBNZ d5	Ave	4701 232751	8152 513917	21631 1031564	56345	98422	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichloropropane	CBNZ d5	Ave	6414 355675	12127 739746	29189 1509461	77535	138506	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Hexanone	CBNZ d5	Ave	17474 1112108	36120 2275269	87241 4753768	226922	457182	2.50 125	5.00 250	10.0 500	25.0	50.0
Dibromochloromethane	CBNZ d5	Ave	3863 206933	6815 471415	15081 981204	41828	78999	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromoethane	CBNZ d5	Ave	4306 220979	7542 465789	16509 957914	46510	86814	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Chlorobenzene	CBNZ d5	Ave	11174 621468	21539 1295534	52286 2674935	136758	254129	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Ethylbenzene	CBNZ d5	Ave	18288 1027404	35206 2200065	85014 4502376	229265	411840	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3370 200339	6332 441977	15365 924407	40043	80727	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
m,p-Xylene	CBNZ d5	Ave	7917 407028	13700 878845	34213 1767262	89188	164437	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
o-Xylene	CBNZ d5	Ave	7362 410180	13370 838548	32837 1718945	92995	164573	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Styrene	CBNZ d5	Ave	12191 680007	22546 1449515	57427 2956138	148147	275157	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromoform	CBNZ d5	Ave	2520 138862	3696 324380	10141 +++++	26842	53283	0.500 25.0	1.00 50.0	2.00 +++++	5.00	10.0
Isopropylbenzene	DCBd 4	Ave	18819 1036262	34060 2153426	89529 4398964	237449	421591	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Bromobenzene	DCBd 4	Ave	5608 284506	9719 569302	24722 1162822	63211	118038	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5932 301162	11285 601624	25543 1223225	63964	121208	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
N-Propylbenzene	DCBd 4	Ave	22024 1247343	41555 2609900	103752 5236720	284201	509878	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichloropropane	DCBd 4	Ave	+++++ 106291	3424 211262	8859 424344	23737	41916	+++++ 25.0	1.00 50.0	2.00 100	5.00	10.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1683 112269	4636 242794	7547 485339	23407	45188	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
2-Chlorotoluene	DCBd 4	Ave	4777 257074	9541 511917	22920 1051204	55997	102720	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	15890 895220	30140 1782077	74935 3631731	201064	376657	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Chlorotoluene	DCBd 4	Ave	5217 272750	8921 542704	23418 1120615	61056	114483	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
tert-Butylbenzene	DCBd 4	Ave	3629 198562	6485 396285	17124 784868	47829	87286	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	16047 912526	30033 1800081	77021 3653946	208543	383978	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
sec-Butylbenzene	DCBd 4	Ave	18197 1099592	37838 2243895	96861 4447424	259759	473608	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,3-Dichlorobenzene	DCBd 4	Ave	10304 539384	18722 1068879	46754 2114820	125312	231757	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
4-Isopropyltoluene	DCBd 4	Ave	17678 982905	34442 1971761	83293 3877243	229258	425347	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 479287

SDG No.:

Instrument ID: HP5973S GC Column: ZB-624 (20) ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/24/2019 13:55 Calibration End Date: 06/24/2019 16:36 Calibration ID: 37151

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dichlorobenzene	DCBd 4	Ave	10768 552140	20224 1082105	48529 2155392	126301	235818	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
n-Butylbenzene	DCBd 4	Ave	14954 885047	29492 1740458	76462 3448657	200855	375603	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dichlorobenzene	DCBd 4	Ave	10974 528594	20730 1004352	46981 1981639	124625	230110	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	925 53929	1851 98511	4240 217788	10630	20676	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	7097 338392	13720 581955	32818 1190064	83643	162415	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Hexachlorobutadiene	DCBd 4	Ave	3296 157582	7053 283210	15795 542957	41430	76363	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Naphthalene	DCBd 4	Ave	17606 905612	36134 1597623	82955 3529694	224958	438769	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	7937 298634	14518 499786	30477 1104524	81515	150024	0.500 25.0	1.00 50.0	2.00 100	5.00	10.0
Dibromofluoromethane (Surr)	FB	Ave	188879 204582	191888 205879	195944 202895	199224	196147	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	123857 125176	124076 127040	123019 131413	127414	122475	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
Toluene-d8 (Surr)	CBNZ d5	Ave	757418 780005	748147 799272	773325 819741	782468	754481	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	252851 265460	258073 268397	264427 260169	268378	260538	25.0 25.0	25.0 25.0	25.0 25.0	25.0	25.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Lims ID: IC 0.5
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Jun-2019 13:55:30 ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 0.5
Misc. Info.: 480-0082155-011
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:57:58 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 15:57:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	148770	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	87	312199	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	95	334517	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	57	188879	25.0	24.4	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.053	0.001	90	123857	25.0	25.3	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	93	757418	25.0	24.7	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.001	89	252851	25.0	24.4	
10 Dichlorodifluoromethane	85		1.221				ND	ND	
12 Chloromethane	50	1.385	1.385	0.000	42	3975	0.5000	0.4409	
151 Butadiene	54	1.476	1.476	0.000	70	2634	0.5000	0.3134	Ma
13 Vinyl chloride	62	1.489	1.482	0.007	22	2785	0.5000	0.3275	
14 Bromomethane	94	1.756	1.756	0.000	41	3264	0.5000	0.5328	
15 Chloroethane	64	1.848	1.841	0.007	0	2207	0.5000	0.3912	M
16 Dichlorofluoromethane	67	2.060	2.060	0.000	44	5522	0.5000	0.4321	
17 Trichlorofluoromethane	101	2.073	2.066	0.007	24	3399	0.5000	0.2840	
18 Ethyl ether	59	2.340	2.346	-0.006	69	4029	0.5000	0.4905	
20 Acrolein	56	2.517	2.529	-0.012	52	4592	2.50	2.53	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	14	3253	0.5000	0.4500	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	63	3899	0.5000	0.5279	
23 Acetone	43	2.687	2.687	0.000	0	7861	2.50	2.44	M
25 Iodomethane	142	2.717	2.723	-0.006	70	6864	0.5000	0.4973	
26 Carbon disulfide	76	2.748	2.754	-0.006	76	11651	0.5000	0.4810	
28 3-Chloro-1-propene	41	2.924	2.930	-0.006	61	6727	0.5000	0.4932	
27 Methyl acetate	43	2.973	2.979	-0.006	0	8637	1.00	1.02	M
30 Methylene Chloride	84	3.076	3.076	0.000	70	7832	0.5000	0.4684	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	35	3057	5.00	3.15	
32 Methyl tert-butyl ether	73	3.289	3.289	0.000	79	12128	0.5000	0.4895	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	60	3726	0.5000	0.4477	
33 Acrylonitrile	53	3.368	3.368	0.000	94	18846	5.00	4.56	M
35 Hexane	57	3.490	3.490	0.000	80	5530	0.5000	0.4430	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.727	3.721	0.006	16	7774	0.5000	0.5290	
37 Vinyl acetate	43	3.776	3.782	-0.006	89	15817	1.00	0.8602	
44 2,2-Dichloropropane	77	4.232	4.238	-0.006	39	3671	0.5000	0.4838	
45 cis-1,2-Dichloroethene	96	4.281	4.275	0.006	0	4498	0.5000	0.4771	M
43 2-Butanone (MEK)	43	4.324	4.317	0.007	0	11954	2.50	2.29	M
48 Chlorobromomethane	128	4.518	4.512	0.006	37	2651	0.5000	0.5218	
49 Tetrahydrofuran	42	4.543	4.530	0.013	0	3641	1.00	0.99	M
50 Chloroform	83	4.591	4.591	0.000	57	10519	0.5000	0.6545	
51 1,1,1-Trichloroethane	97	4.695	4.695	0.001	43	5840	0.5000	0.4838	
52 Cyclohexane	56	4.701	4.701	0.000	62	7063	0.5000	0.4812	
55 Carbon tetrachloride	117	4.828	4.834	-0.006	44	4340	0.5000	0.4310	
54 1,1-Dichloropropene	75	4.841	4.847	-0.006	46	4885	0.5000	0.4383	
57 Benzene	78	5.054	5.053	0.001	30	15375	0.5000	0.4559	
53 Isobutyl alcohol	43	5.102	5.090	0.012	36	3959	12.5	10.1	
58 1,2-Dichloroethane	62	5.133	5.126	0.007	1	6954	0.5000	0.5261	
59 n-Heptane	43	5.224	5.230	-0.006	59	5128	0.5000	0.4033	
62 Trichloroethene	95	5.662	5.662	0.000	56	3500	0.5000	0.4058	
64 Methylcyclohexane	83	5.771	5.777	-0.006	59	7070	0.5000	0.4725	
65 1,2-Dichloropropane	63	5.917	5.905	0.012	0	3697	0.5000	0.4526	M
67 Dibromomethane	93	6.045	6.045	0.000	61	2763	0.5000	0.4863	
66 1,4-Dioxane	88		6.051				ND	ND	
68 Dichlorobromomethane	83	6.197	6.203	-0.006	34	4772	0.5000	0.4578	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	0	2743	0.5000	0.4560	M
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	44	5594	0.5000	0.4397	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	88	24288	2.50	2.13	
74 Toluene	92	6.897	6.897	0.000	69	11648	0.5000	0.5210	
77 trans-1,3-Dichloropropene	75	7.189	7.183	0.006	0	4969	0.5000	0.4050	M
75 Ethyl methacrylate	69	7.231	7.231	0.000	0	3934	0.5000	0.3480	M
79 1,1,2-Trichloroethane	83	7.371	7.377	-0.006	27	3309	0.5000	0.4988	
81 Tetrachloroethene	166	7.426	7.426	0.000	63	4701	0.5000	0.4798	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	69	6414	0.5000	0.4598	
80 2-Hexanone	43	7.603	7.602	0.001	87	17474	2.50	2.06	
83 Chlorodibromomethane	129	7.767	7.767	0.000	1	3863	0.5000	0.4758	
84 Ethylene Dibromide	107	7.876	7.870	0.006	41	4306	0.5000	0.4976	
87 Chlorobenzene	112	8.339	8.345	-0.006	32	11174	0.5000	0.4520	
88 Ethylbenzene	91	8.436	8.436	0.000	74	18288	0.5000	0.4472	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	0	3370	0.5000	0.4344	
90 m-Xylene & p-Xylene	106	8.564	8.558	0.006	59	7917	0.5000	0.4844	
91 o-Xylene	106	8.984	8.983	0.001	72	7362	0.5000	0.4592	
92 Styrene	104	9.014	9.014	0.000	63	12191	0.5000	0.4521	
95 Bromoform	173	9.269	9.263	0.006	1	2520	0.5000	0.4856	
94 Isopropylbenzene	105	9.367	9.367	0.000	58	18819	0.5000	0.4472	
101 Bromobenzene	156	9.714	9.720	-0.006	63	5608	0.5000	0.4842	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.786	0.001	28	5932	0.5000	0.4857	
99 N-Propylbenzene	91	9.799	9.799	0.000	69	22024	0.5000	0.4381	
100 1,2,3-Trichloropropane	110	9.811	9.817	-0.006	35	1615	0.5000	0.3806	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	1	1683	0.5000	0.3800	
103 2-Chlorotoluene	126	9.902	9.902	0.000	78	4777	0.5000	0.4575	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	64	15890	0.5000	0.4435	
105 4-Chlorotoluene	126	10.012	10.018	-0.006	56	5217	0.5000	0.4733	
106 tert-Butylbenzene	134	10.298	10.297	0.001	64	3629	0.5000	0.4492	
107 1,2,4-Trimethylbenzene	105	10.358	10.352	0.006	52	16047	0.5000	0.4407	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.511	10.510	0.000	56	18197	0.5000	0.4076	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	53	10304	0.5000	0.4686	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	79	17678	0.5000	0.4434	
113 1,4-Dichlorobenzene	146	10.736	10.735	0.001	0	10768	0.5000	0.4759	M
115 n-Butylbenzene	91	11.040	11.040	0.000	66	14954	0.5000	0.4250	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	66	10974	0.5000	0.4992	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.824	0.001	1	925	0.5000	0.4507	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	53	7097	0.5000	0.4952	
120 Hexachlorobutadiene	225	12.597	12.603	-0.006	23	3296	0.5000	0.4796	
121 Naphthalene	128	12.707	12.707	0.000	60	17606	0.5000	0.4600	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	52	7937	0.5000	0.5767	
S 125 1,2-Dichloroethene, Total	1				0			0.9248	
S 123 Total BTEX	1				0			2.37	
S 126 1,3-Dichloropropene, Total	1				0			0.8447	
S 124 Xylenes, Total	1				0			0.9435	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00158	Amount Added:	0.50	Units: uL	
GAS CORP mix_00347	Amount Added:	0.50	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

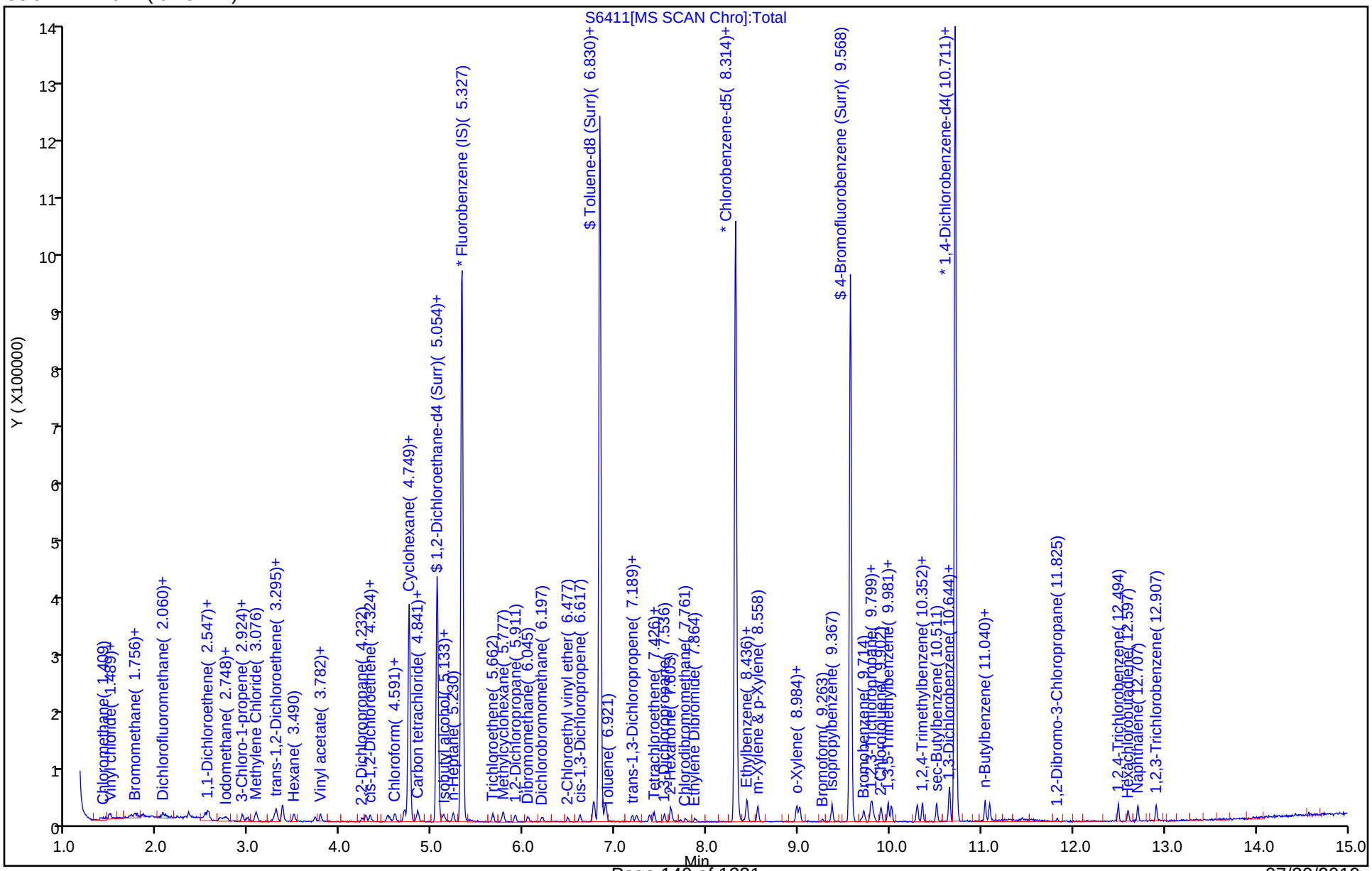
Report Date: 25-Jun-2019 12:58:00 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D

Injection Date:	24-Jun-2019 13:55:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 0.5			Worklist Smp#:	11
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

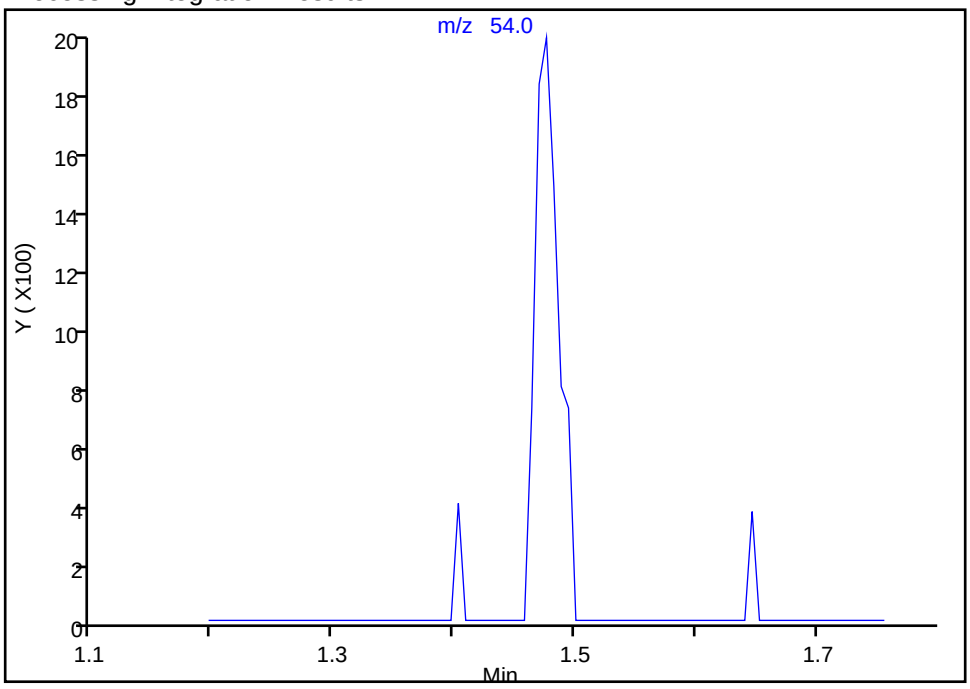
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

151 Butadiene, CAS: 106-99-0

Signal: 1

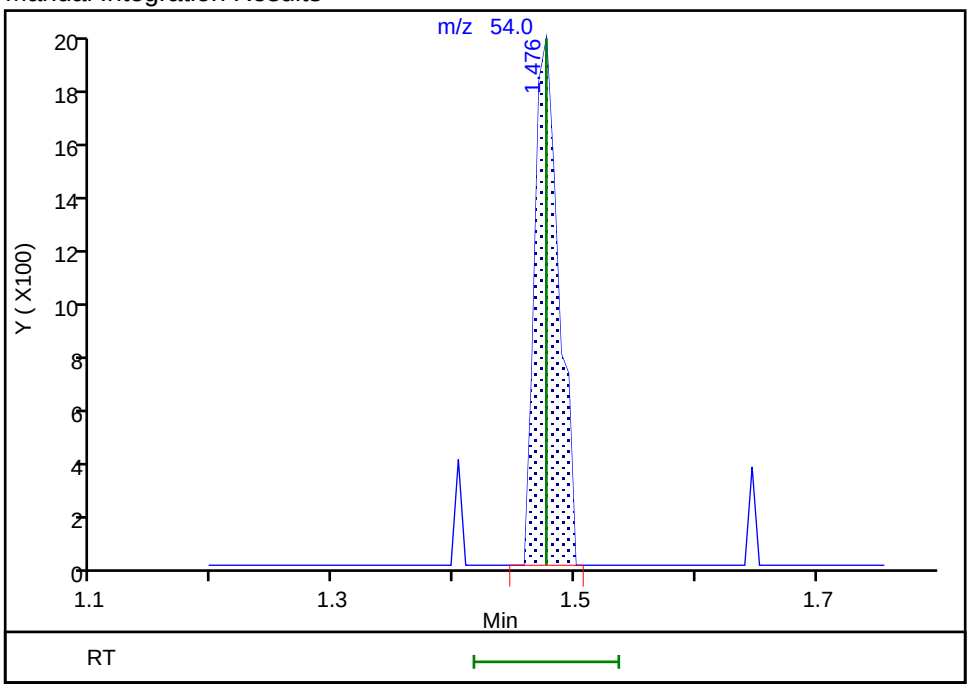
Not Detected
Expected RT: 1.48

Processing Integration Results



Manual Integration Results

RT: 1.48
Area: 2634
Amount: 0.313415
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:54:55
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

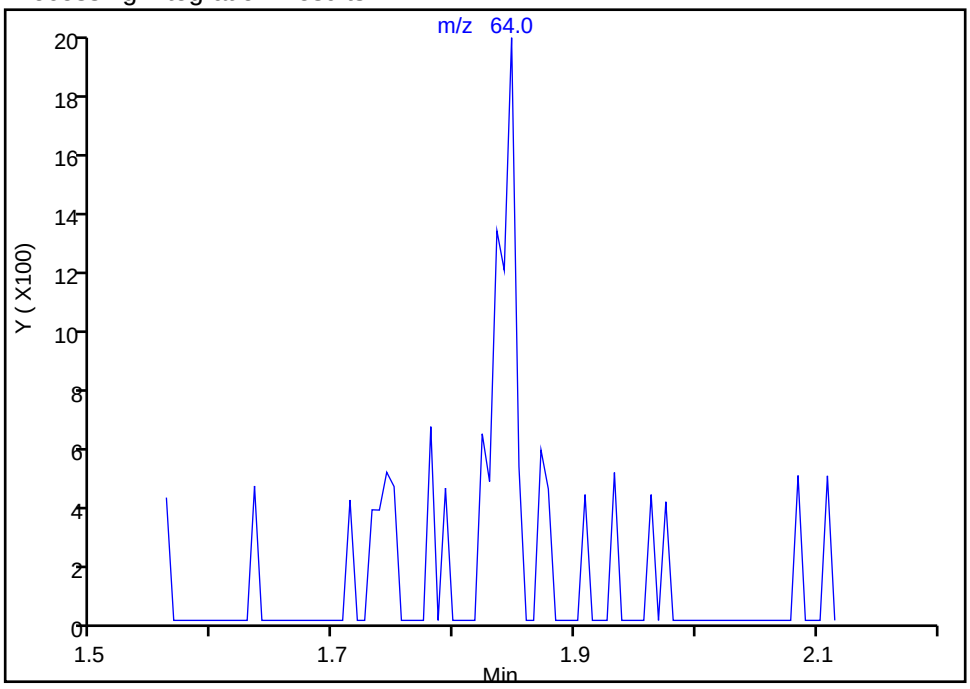
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

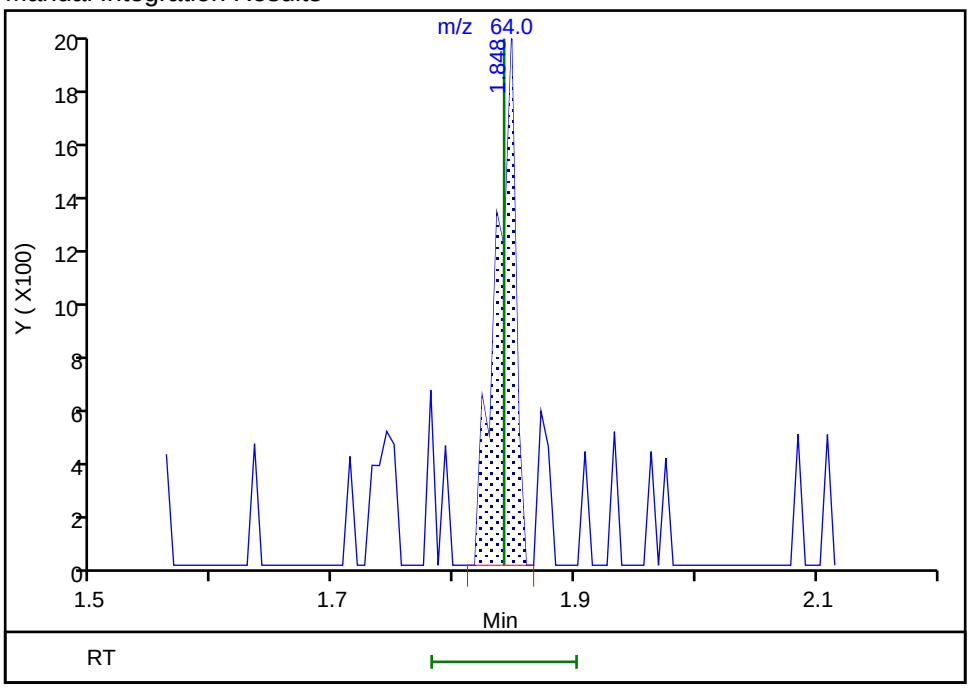
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.85
Area: 2207
Amount: 0.391242
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:06
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

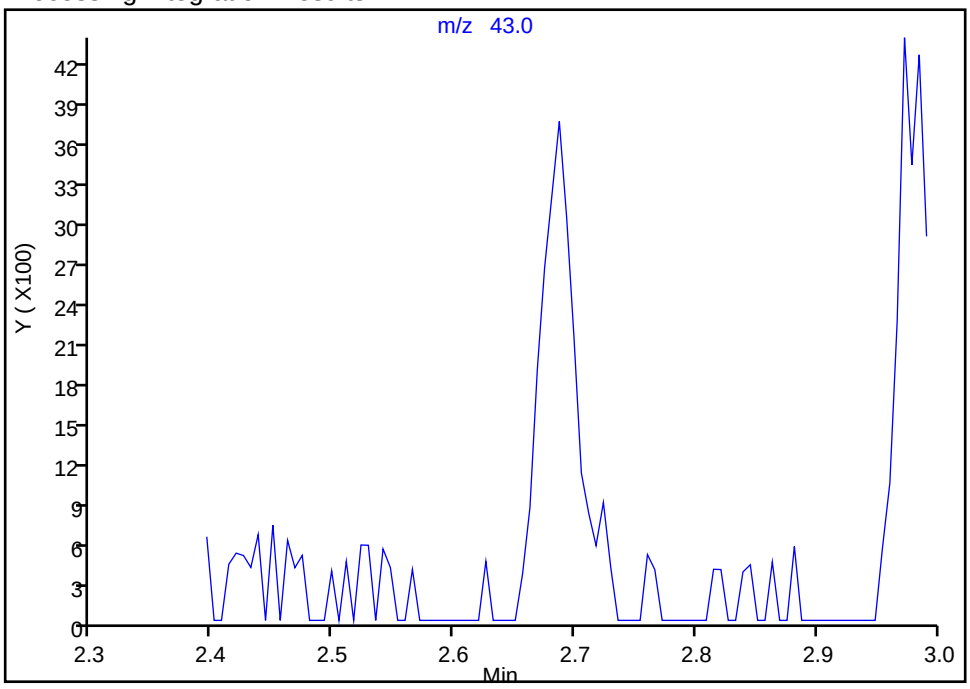
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

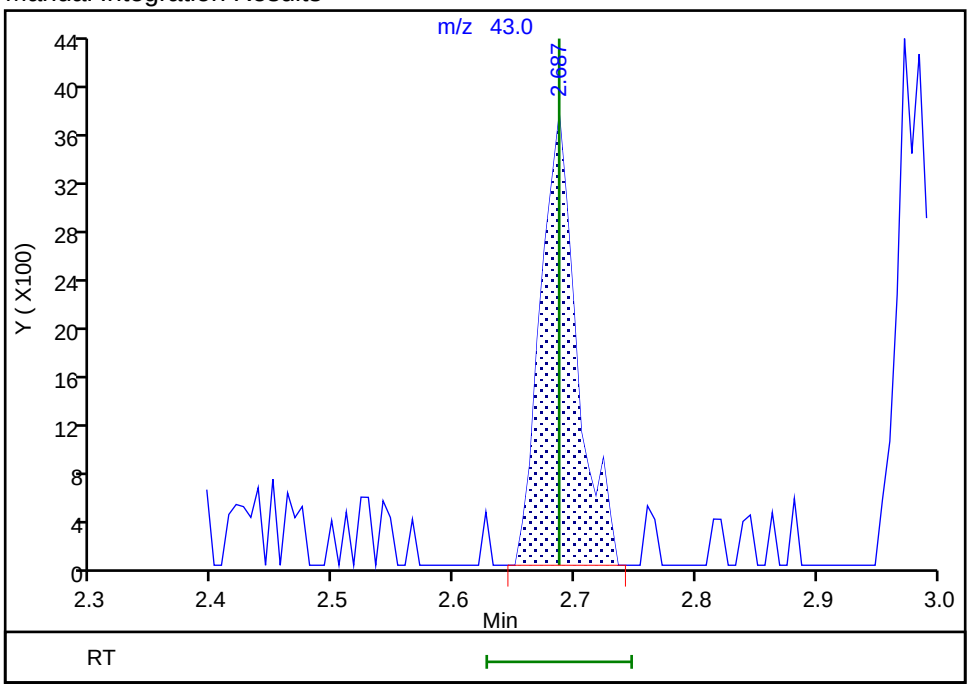
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 7861
Amount: 2.444964
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:15
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

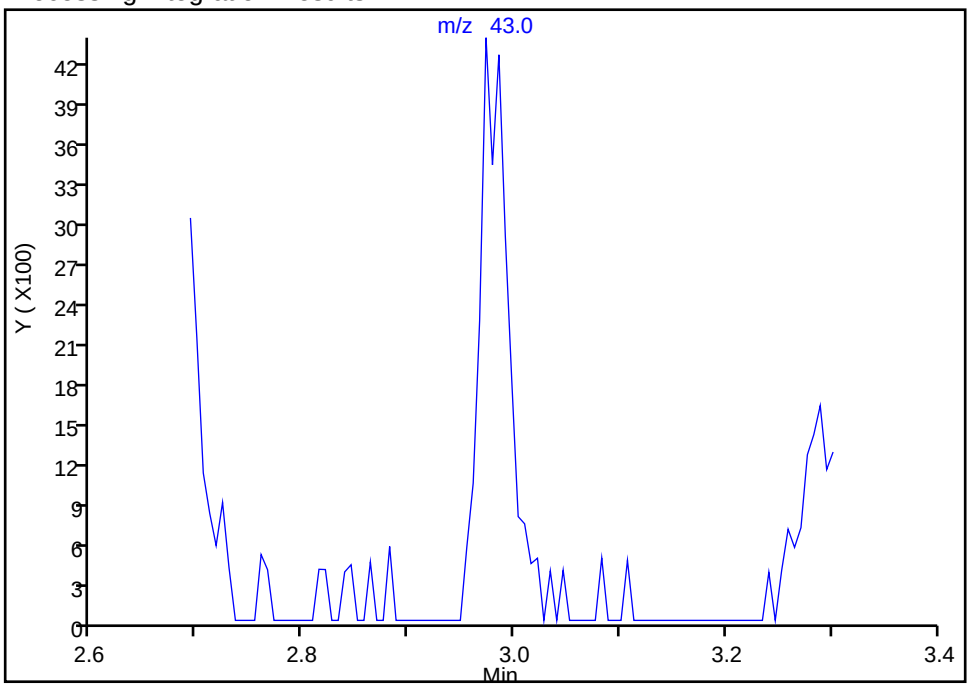
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

27 Methyl acetate, CAS: 79-20-9

Signal: 1

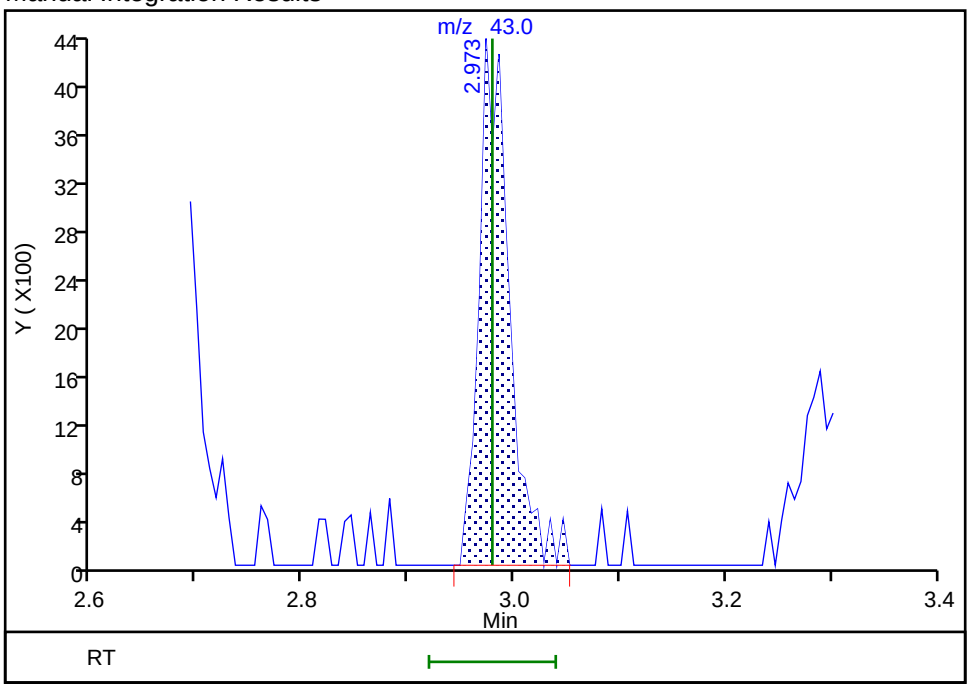
Not Detected
Expected RT: 2.98

Processing Integration Results



Manual Integration Results

RT: 2.97
Area: 8637
Amount: 1.024652
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:24
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

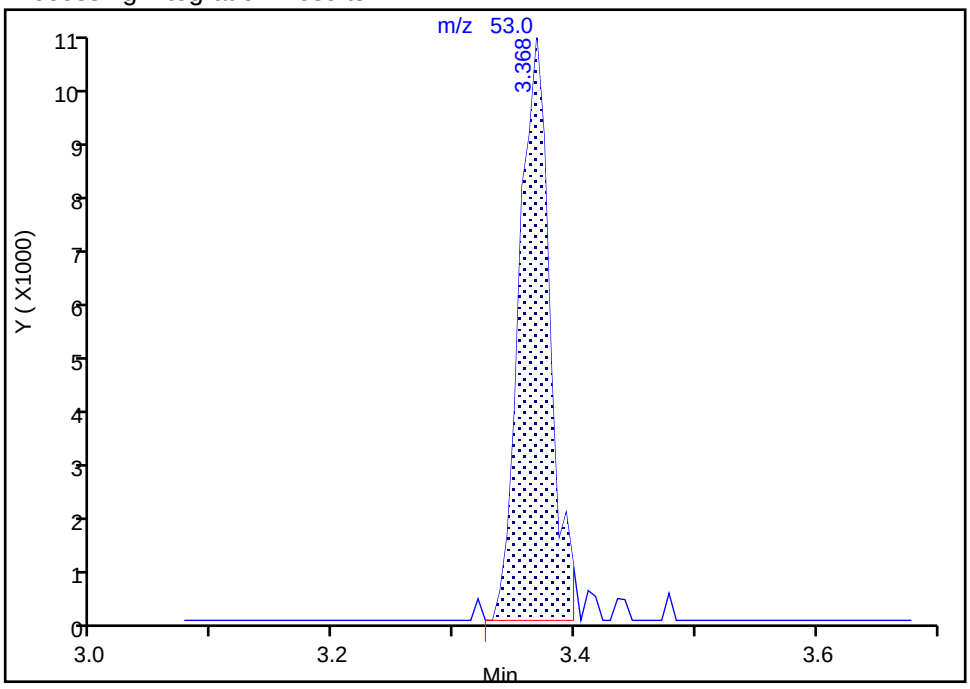
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

33 Acrylonitrile, CAS: 107-13-1

Signal: 1

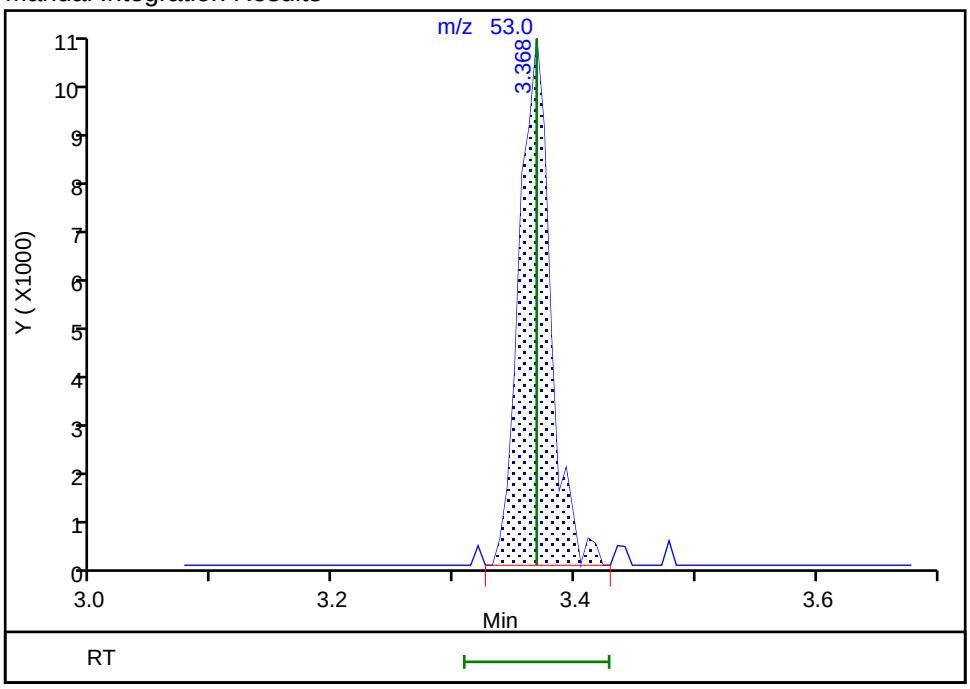
Processing Integration Results

RT: 3.37
Area: 18492
Amount: 4.482129
Amount Units: ug/L



Manual Integration Results

RT: 3.37
Area: 18846
Amount: 4.558803
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:34
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

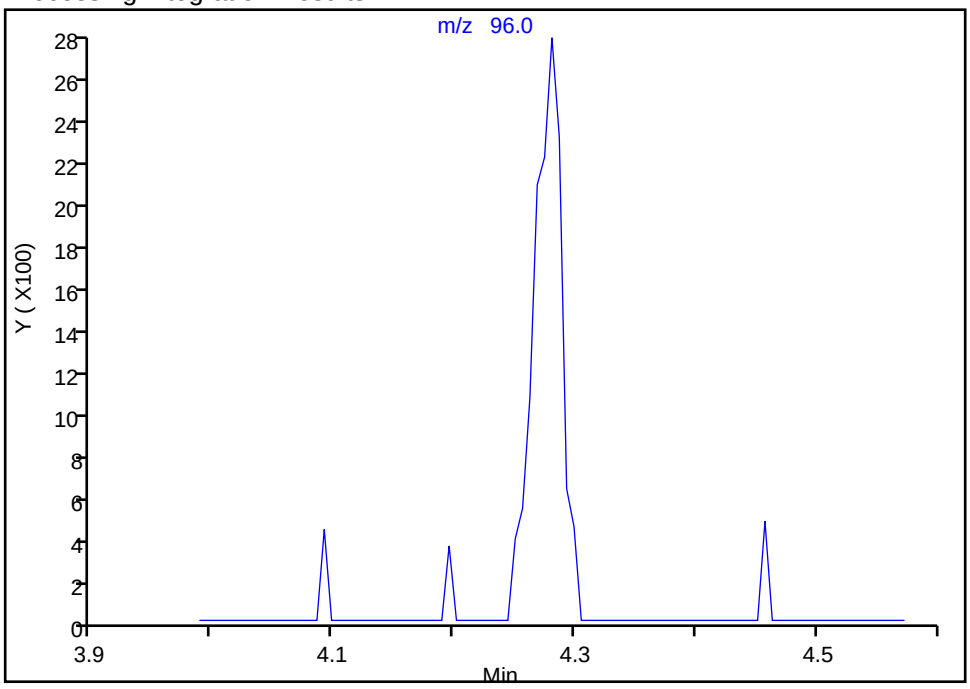
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

45 cis-1,2-Dichloroethene, CAS: 156-59-2

Signal: 1

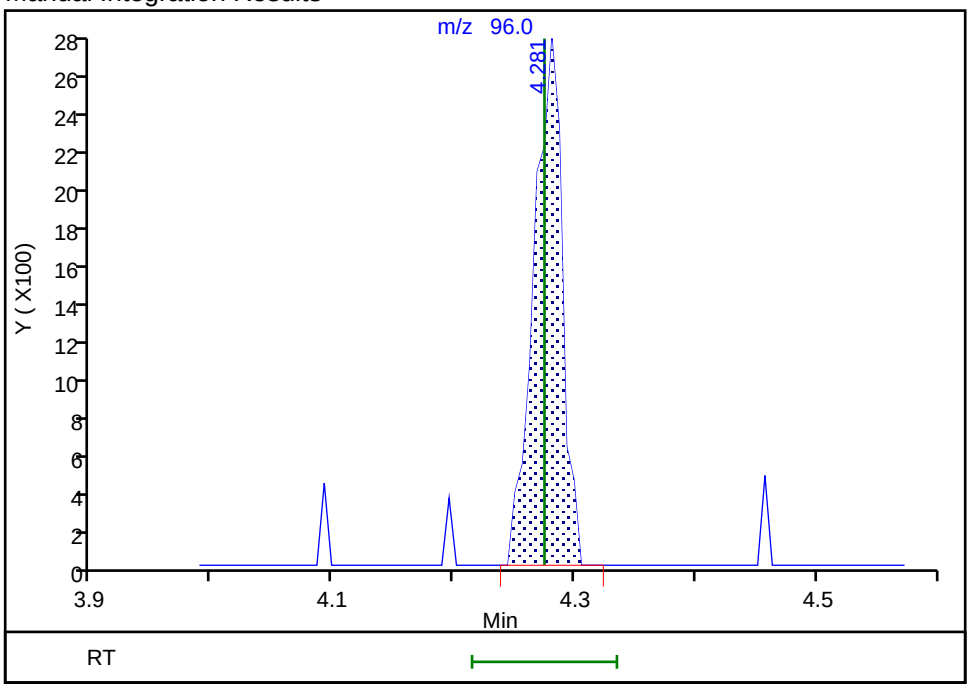
Not Detected
Expected RT: 4.27

Processing Integration Results



Manual Integration Results

RT: 4.28
Area: 4498
Amount: 0.477132
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

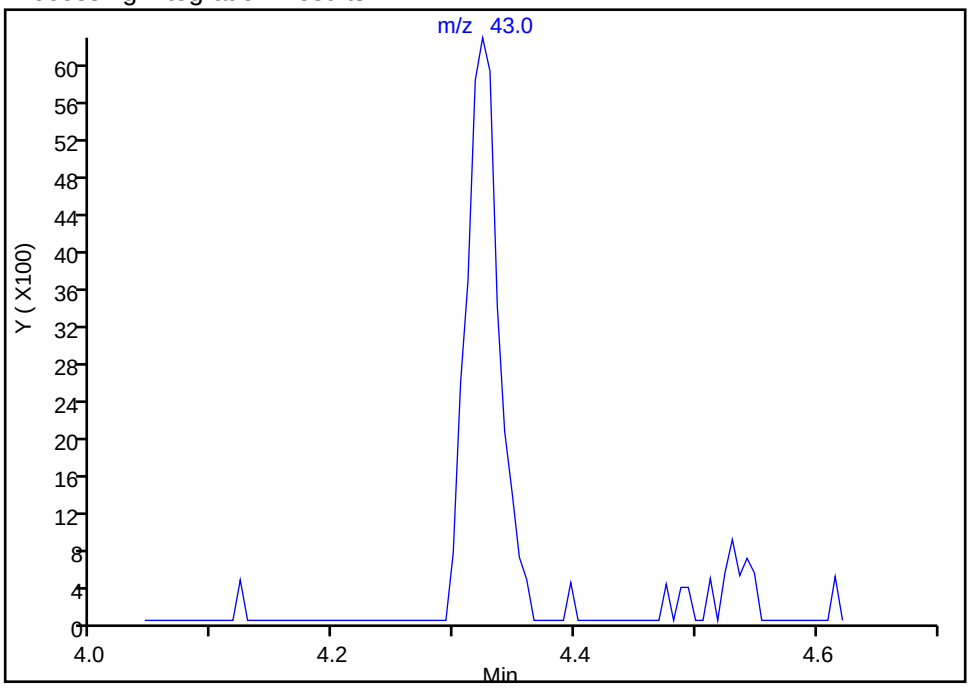
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

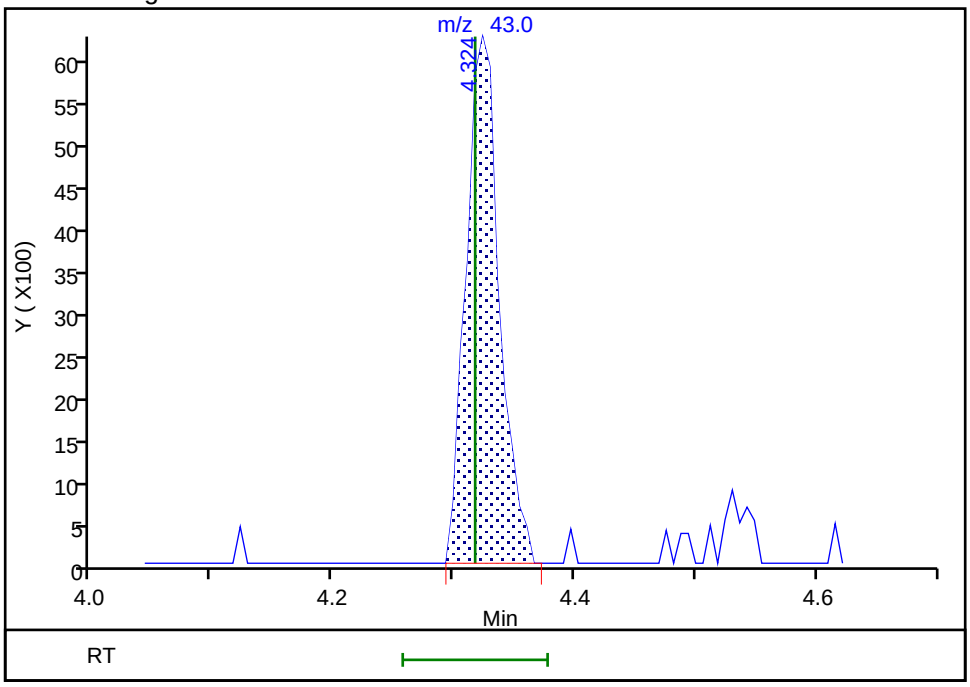
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 11954
Amount: 2.286782
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:55:47
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

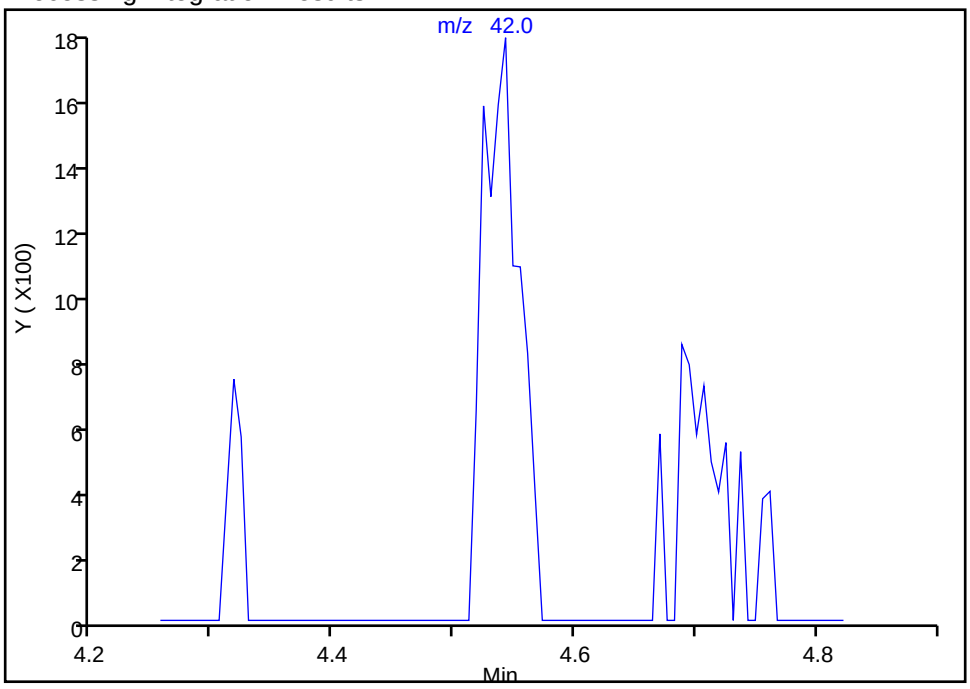
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

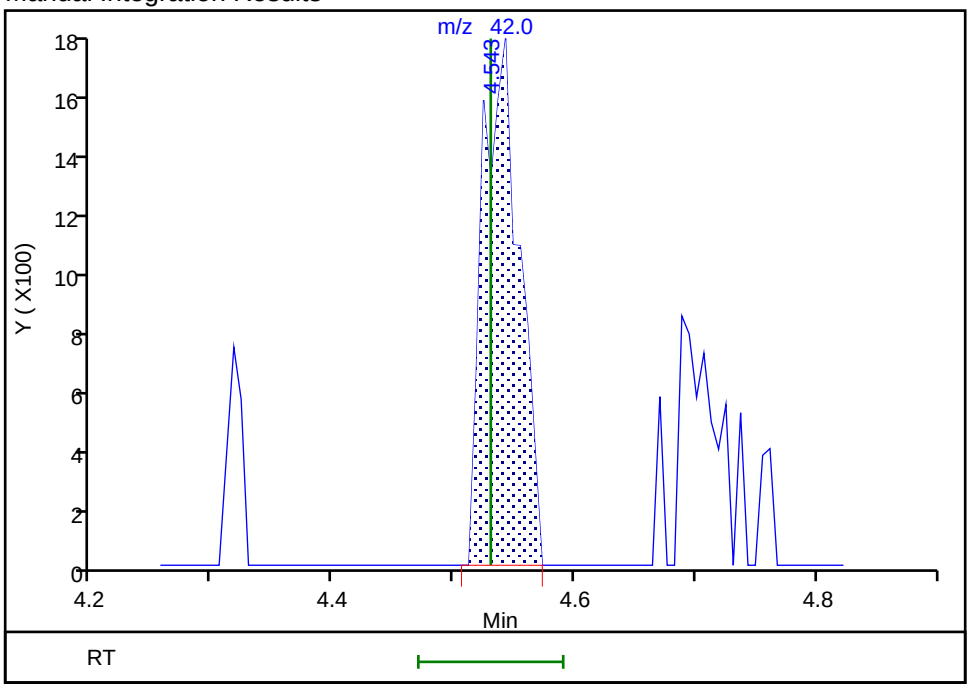
Not Detected
Expected RT: 4.53

Processing Integration Results



Manual Integration Results

RT: 4.54
Area: 3641
Amount: 0.993329
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:56:03
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

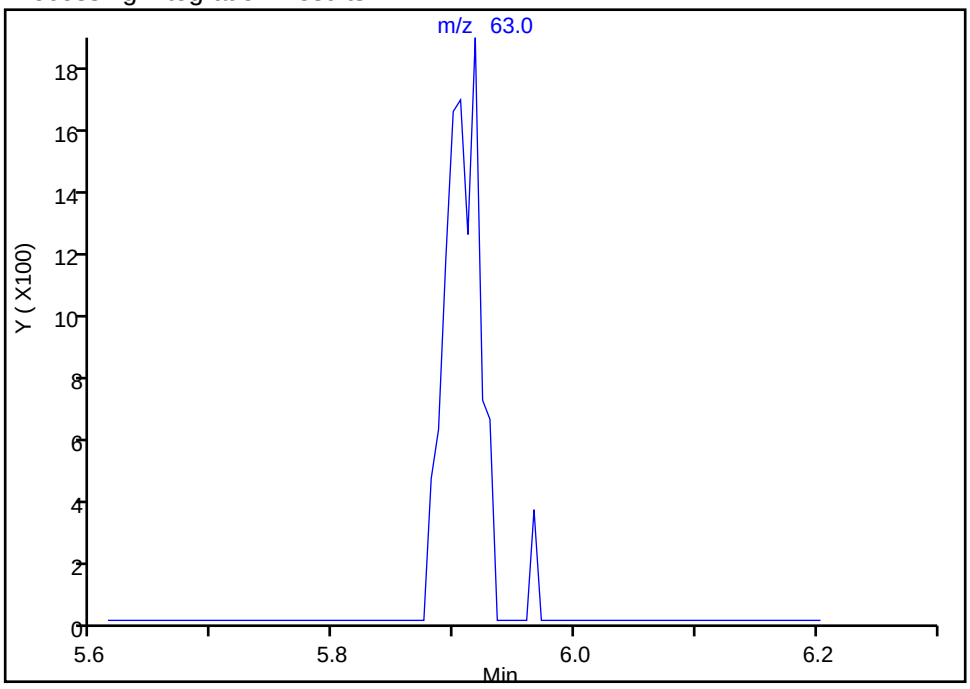
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

65 1,2-Dichloropropane, CAS: 78-87-5

Signal: 1

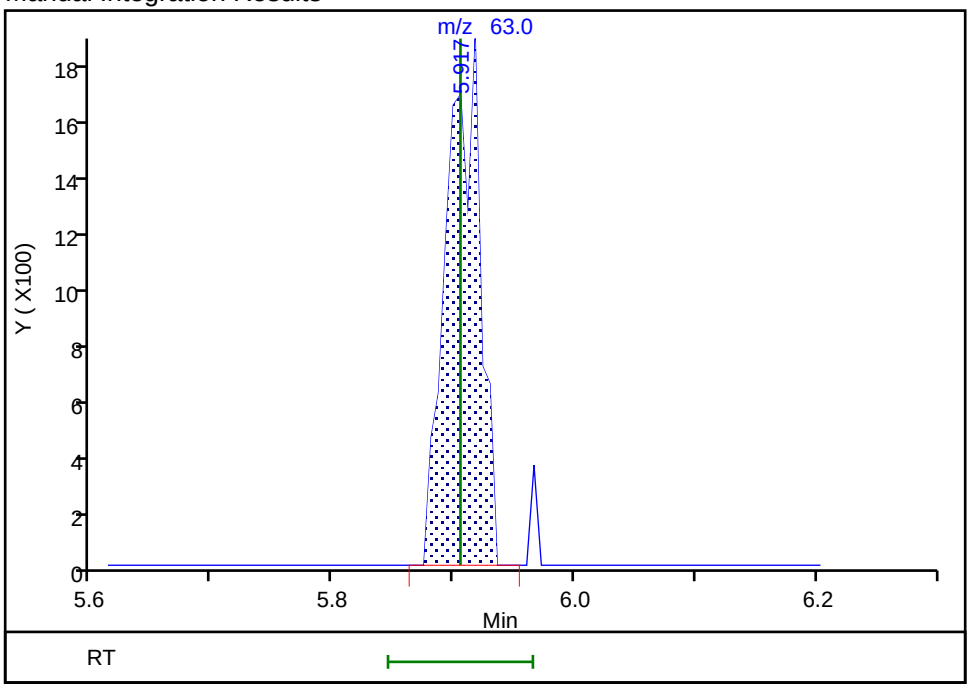
Not Detected
Expected RT: 5.91

Processing Integration Results



Manual Integration Results

RT: 5.92
Area: 3697
Amount: 0.452634
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:56:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

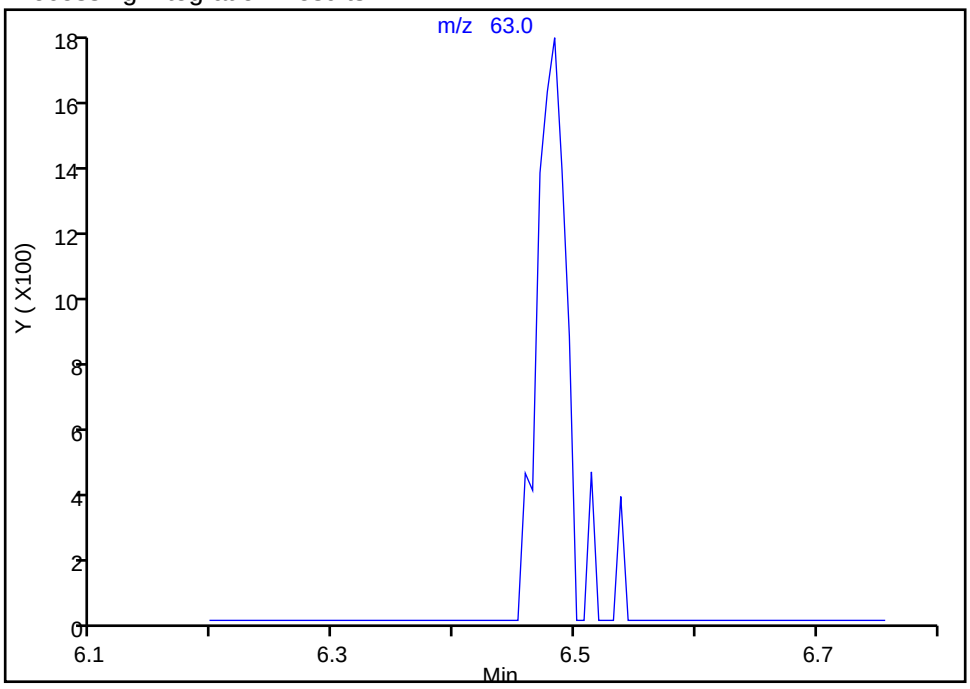
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

69 2-Chloroethyl vinyl ether, CAS: 110-75-8

Signal: 1

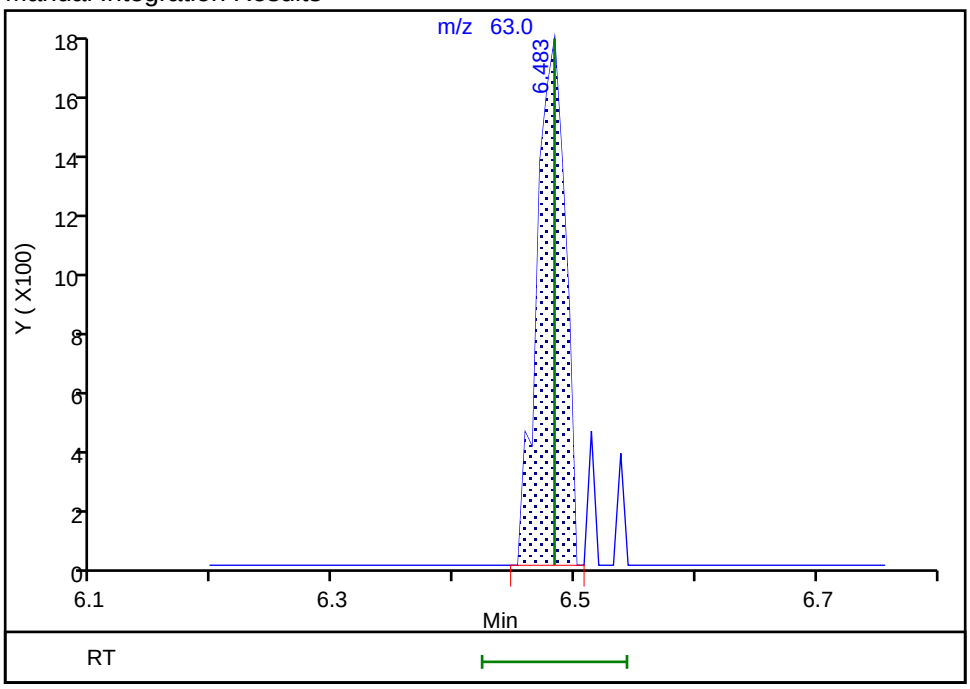
Not Detected
Expected RT: 6.48

Processing Integration Results



Manual Integration Results

RT: 6.48
Area: 2743
Amount: 0.455999
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:56:27
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

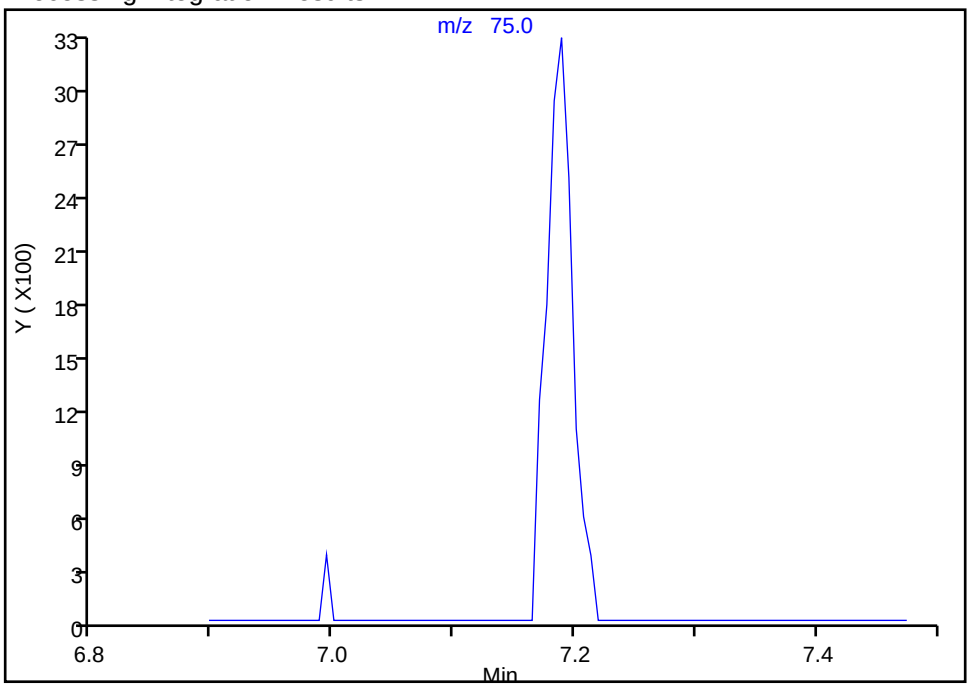
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

77 trans-1,3-Dichloropropene, CAS: 10061-02-6

Signal: 1

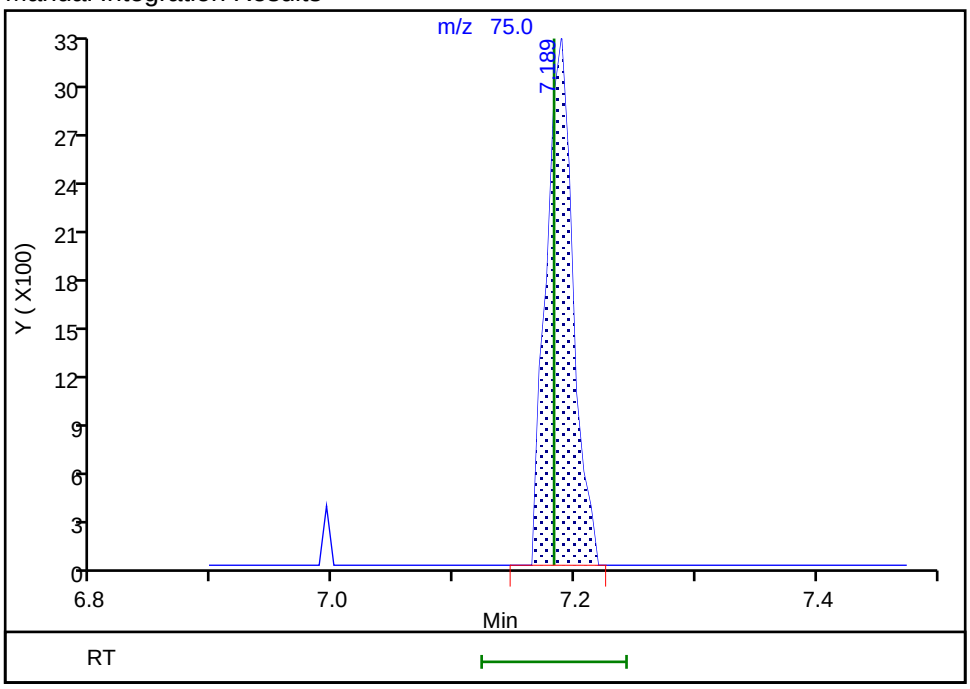
Not Detected
Expected RT: 7.18

Processing Integration Results



Manual Integration Results

RT: 7.19
Area: 4969
Amount: 0.405030
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:56:35
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

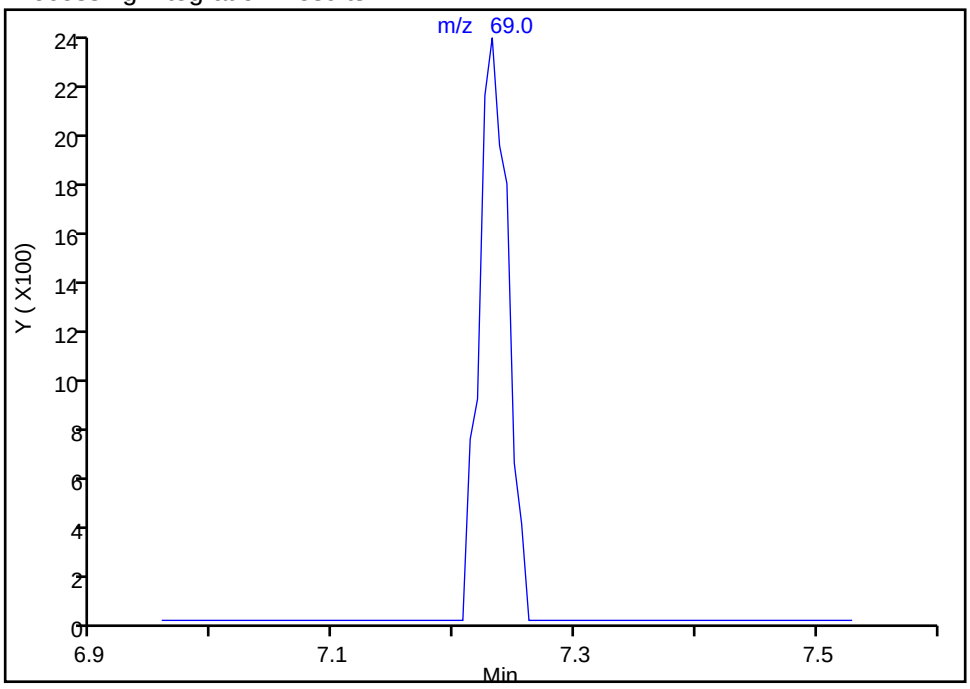
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

75 Ethyl methacrylate, CAS: 97-63-2

Signal: 1

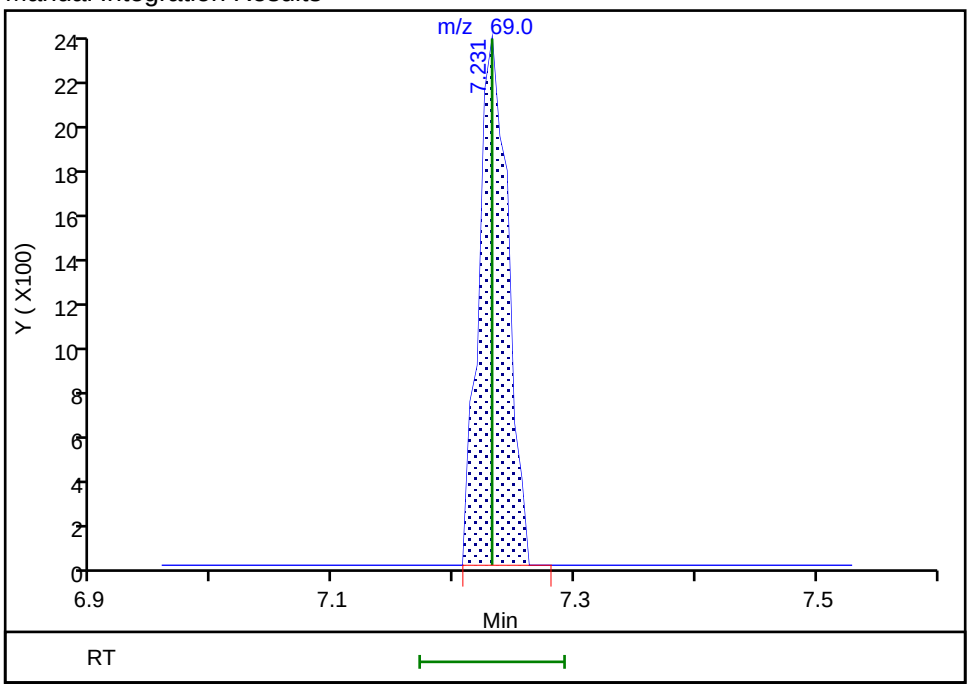
Not Detected
Expected RT: 7.23

Processing Integration Results



Manual Integration Results

RT: 7.23
Area: 3934
Amount: 0.348001
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:56:42
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

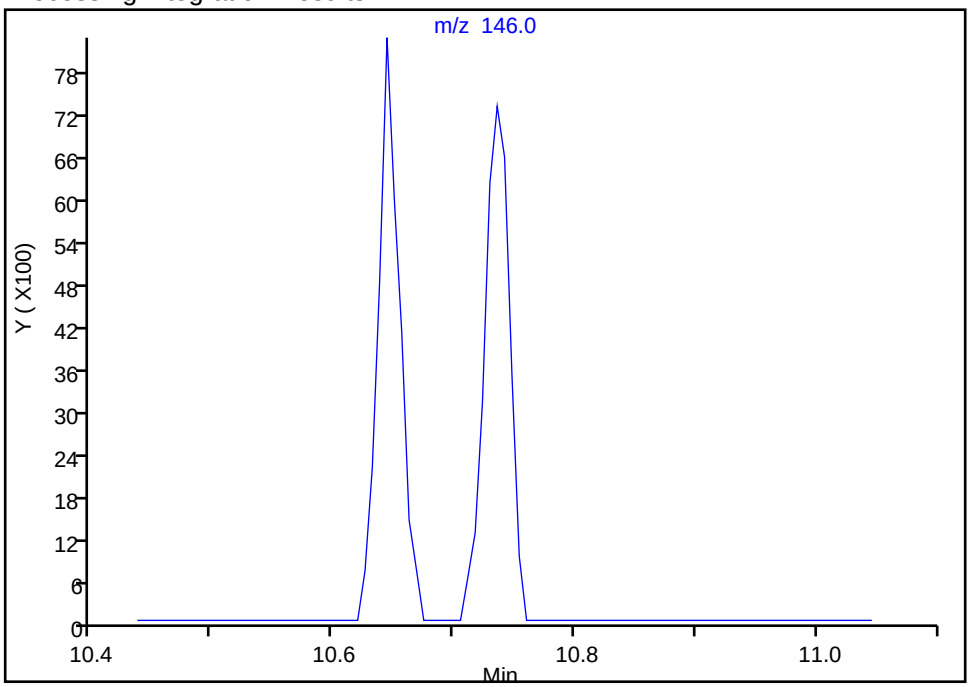
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6411.D
Injection Date: 24-Jun-2019 13:55:30 Instrument ID: HP5973S
Lims ID: IC 0.5
Client ID:
Operator ID: LH ALS Bottle#: 9 Worklist Smp#: 11
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

113 1,4-Dichlorobenzene, CAS: 106-46-7

Signal: 1

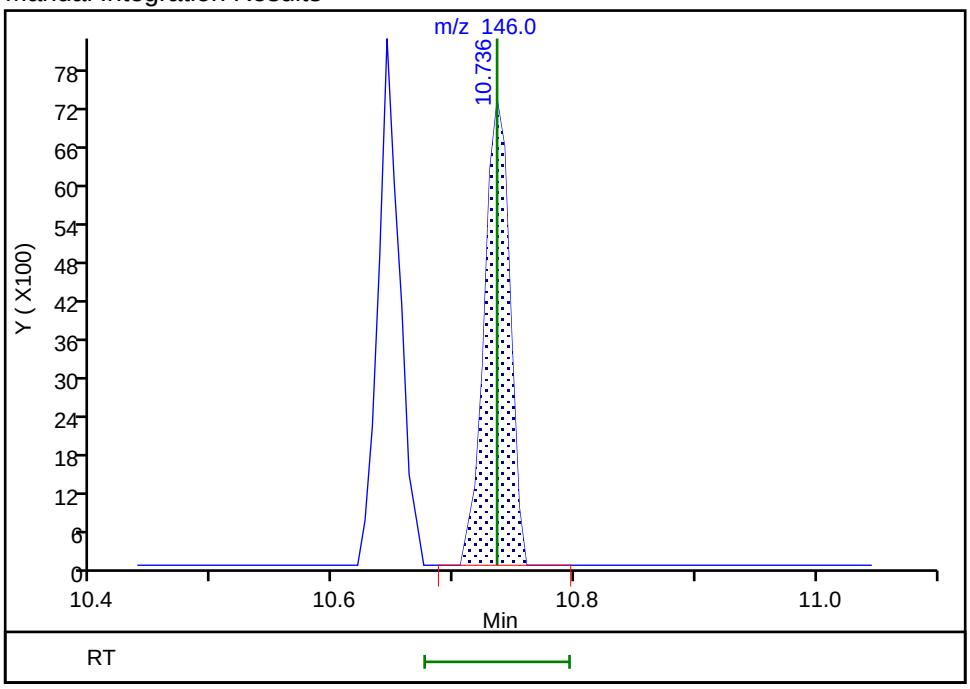
Not Detected
Expected RT: 10.74

Processing Integration Results



Manual Integration Results

RT: 10.74
Area: 10768
Amount: 0.475904
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:57:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Lims ID: IC
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Jun-2019 14:18:30 ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC
Misc. Info.: 480-0082155-012
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:05 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 15:58:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	148119	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	84	302140	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	94	336327	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	57	191888	25.0	24.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.053	0.000	92	124076	25.0	25.4	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	83	748147	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	0.000	89	258073	25.0	25.7	
10 Dichlorodifluoromethane	85	1.221	1.221	0.000	0	6701	1.00	0.8934	M
12 Chloromethane	50	1.397	1.385	0.012	56	9270	1.00	1.03	
151 Butadiene	54	1.476	1.476	0.000	92	7314	1.00	0.8741	
13 Vinyl chloride	62	1.488	1.482	0.006	25	6696	1.00	0.7910	
14 Bromomethane	94	1.756	1.756	0.000	65	6347	1.00	1.04	
15 Chloroethane	64	1.841	1.841	0.000	0	5836	1.00	1.04	M
16 Dichlorofluoromethane	67	2.066	2.060	0.006	79	11277	1.00	0.8864	
17 Trichlorofluoromethane	101	2.085	2.066	0.019	53	9395	1.00	0.7884	
18 Ethyl ether	59	2.346	2.346	0.000	77	8074	1.00	0.9873	
20 Acrolein	56	2.523	2.529	-0.006	74	9527	5.00	5.27	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	24	5355	1.00	0.7440	
22 1,1-Dichloroethene	96	2.571	2.559	0.012	60	6817	1.00	0.9270	
23 Acetone	43	2.687	2.687	0.000	0	19610	5.00	6.13	M
25 Iodomethane	142	2.729	2.723	0.006	77	12165	1.00	0.8852	
26 Carbon disulfide	76	2.760	2.754	0.006	86	20825	1.00	0.8635	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	70	13224	1.00	0.9738	
27 Methyl acetate	43	2.985	2.979	0.006	93	16123	2.00	1.92	
30 Methylene Chloride	84	3.070	3.076	-0.006	69	11484	1.00	0.9005	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	78	11373	10.0	11.8	
32 Methyl tert-butyl ether	73	3.295	3.289	0.006	82	24150	1.00	0.9790	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	78	7303	1.00	0.8813	
33 Acrylonitrile	53	3.368	3.368	0.000	95	43425	10.0	10.6	
35 Hexane	57	3.496	3.490	0.006	82	10197	1.00	0.8205	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	50	12632	1.00	0.8633	
37 Vinyl acetate	43	3.782	3.782	0.000	95	29153	2.00	1.59	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	45	6970	1.00	0.9227	
45 cis-1,2-Dichloroethene	96	4.281	4.275	0.006	46	8758	1.00	0.9331	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	0	26433	5.00	5.08	M
48 Chlorobromomethane	128	4.506	4.512	-0.006	77	4583	1.00	0.9060	
49 Tetrahydrofuran	42	4.536	4.530	0.006	74	7600	2.00	2.08	
50 Chloroform	83	4.591	4.591	0.000	87	17569	1.00	1.10	
51 1,1,1-Trichloroethane	97	4.694	4.695	0.000	71	9968	1.00	0.8294	
52 Cyclohexane	56	4.701	4.701	0.000	73	11035	1.00	0.7551	
55 Carbon tetrachloride	117	4.834	4.834	0.000	58	8776	1.00	0.8754	
54 1,1-Dichloropropene	75	4.853	4.847	0.006	72	9215	1.00	0.8304	
57 Benzene	78	5.059	5.053	0.006	35	29085	1.00	0.8663	
53 Isobutyl alcohol	43	5.096	5.090	0.006	71	10556	25.0	27.1	
58 1,2-Dichloroethane	62	5.126	5.126	0.000	63	12887	1.00	0.9793	
59 n-Heptane	43	5.236	5.230	0.006	81	10592	1.00	0.8368	
62 Trichloroethene	95	5.668	5.662	0.006	69	8009	1.00	0.9326	
64 Methylcyclohexane	83	5.777	5.777	0.000	73	11071	1.00	0.7431	
65 1,2-Dichloropropane	63	5.911	5.905	0.006	63	7670	1.00	0.9432	
67 Dibromomethane	93	6.045	6.045	0.000	74	5375	1.00	0.9501	
66 1,4-Dioxane	88	6.063	6.051	0.012	0	2885	20.0	29.4	M
68 Dichlorobromomethane	83	6.203	6.203	0.000	67	8934	1.00	0.8608	
69 2-Chloroethyl vinyl ether	63	6.477	6.483	-0.006	67	4735	1.00	0.7906	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	52	10788	1.00	0.8516	
73 4-Methyl-2-pentanone (MIBK	43	6.769	6.763	0.006	90	51258	5.00	4.64	
74 Toluene	92	6.897	6.897	0.000	69	19003	1.00	0.8783	
77 trans-1,3-Dichloropropene	75	7.189	7.183	0.006	63	10553	1.00	0.8888	
75 Ethyl methacrylate	69	7.225	7.231	-0.006	30	8145	1.00	0.7445	
79 1,1,2-Trichloroethane	83	7.365	7.377	-0.012	40	5533	1.00	0.8618	
81 Tetrachloroethene	166	7.426	7.426	0.000	83	8152	1.00	0.8597	
82 1,3-Dichloropropane	76	7.529	7.536	-0.007	73	12127	1.00	0.8984	
80 2-Hexanone	43	7.608	7.602	0.006	91	36120	5.00	4.41	
83 Chlorodibromomethane	129	7.773	7.767	0.006	41	6815	1.00	0.8673	
84 Ethylene Dibromide	107	7.870	7.870	0.000	45	7542	1.00	0.9006	
87 Chlorobenzene	112	8.339	8.345	-0.007	41	21539	1.00	0.9002	
88 Ethylbenzene	91	8.436	8.436	0.000	84	35206	1.00	0.8895	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	25	6332	1.00	0.8433	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	91	13700	1.00	0.8661	
91 o-Xylene	106	8.983	8.983	0.000	84	13370	1.00	0.8616	
92 Styrene	104	9.020	9.014	0.006	79	22546	1.00	0.8640	
95 Bromoform	173	9.263	9.263	0.000	42	3696	1.00	0.7359	
94 Isopropylbenzene	105	9.373	9.367	0.006	75	34060	1.00	0.8051	
101 Bromobenzene	156	9.713	9.720	-0.007	79	9719	1.00	0.8347	
97 1,1,2,2-Tetrachloroethane	83	9.786	9.786	0.000	50	11285	1.00	0.9191	
99 N-Propylbenzene	91	9.799	9.799	0.000	91	41555	1.00	0.8221	
100 1,2,3-Trichloropropane	110	9.811	9.817	-0.006	38	3424	1.00	0.8026	
98 trans-1,4-Dichloro-2-buten	53	9.823	9.829	-0.006	30	4636	1.00	1.04	
103 2-Chlorotoluene	126	9.902	9.902	0.000	82	9541	1.00	0.9089	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	80	30140	1.00	0.8368	
105 4-Chlorotoluene	126	10.018	10.018	0.000	77	8921	1.00	0.8050	
106 tert-Butylbenzene	134	10.304	10.297	0.007	70	6485	1.00	0.7985	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	58	30033	1.00	0.8203	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	72	37838	1.00	0.8430	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	78	18722	1.00	0.8469	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	87	34442	1.00	0.8592	
113 1,4-Dichlorobenzene	146	10.735	10.735	0.000	71	20224	1.00	0.8890	
115 n-Butylbenzene	91	11.040	11.040	0.000	83	29492	1.00	0.8337	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	82	20730	1.00	0.9380	
117 1,2-Dibromo-3-Chloropropan	75	11.818	11.824	-0.006	7	1851	1.00	0.8970	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	75	13720	1.00	0.9522	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	54	7053	1.00	1.02	
121 Naphthalene	128	12.707	12.707	0.000	87	36134	1.00	0.9391	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	70	14518	1.00	1.05	
S 125 1,2-Dichloroethene, Total	1				0			1.81	
S 123 Total BTEX	1				0			4.36	
S 126 1,3-Dichloropropene, Total	1				0			1.74	
S 124 Xylenes, Total	1				0			1.73	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00158	Amount Added:	1.00	Units: uL	
GAS CORP mix_00347	Amount Added:	1.00	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

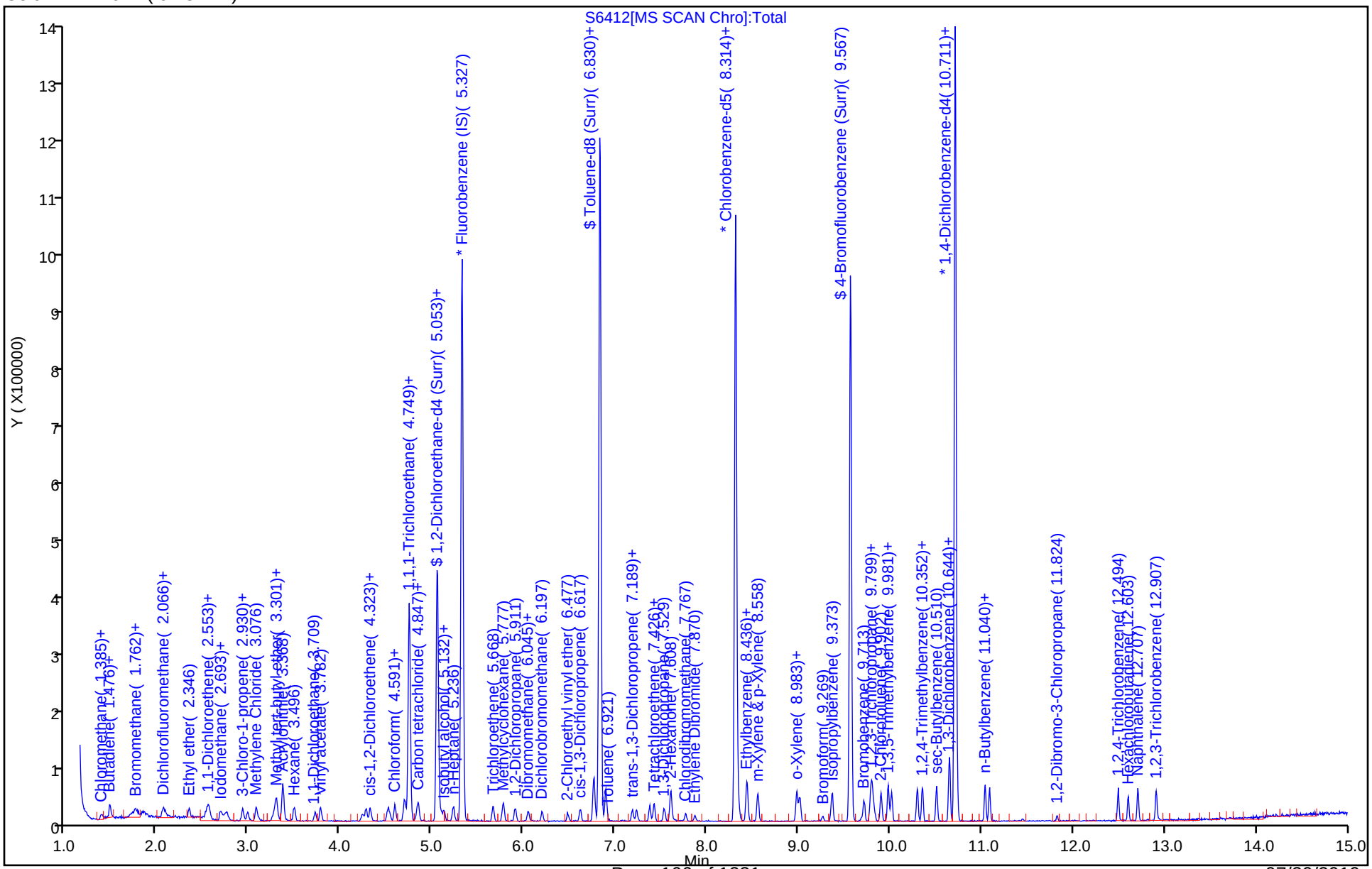
Report Date: 25-Jun-2019 12:58:07 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D

Injection Date:	24-Jun-2019 14:18:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC			Worklist Smp#:	12
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

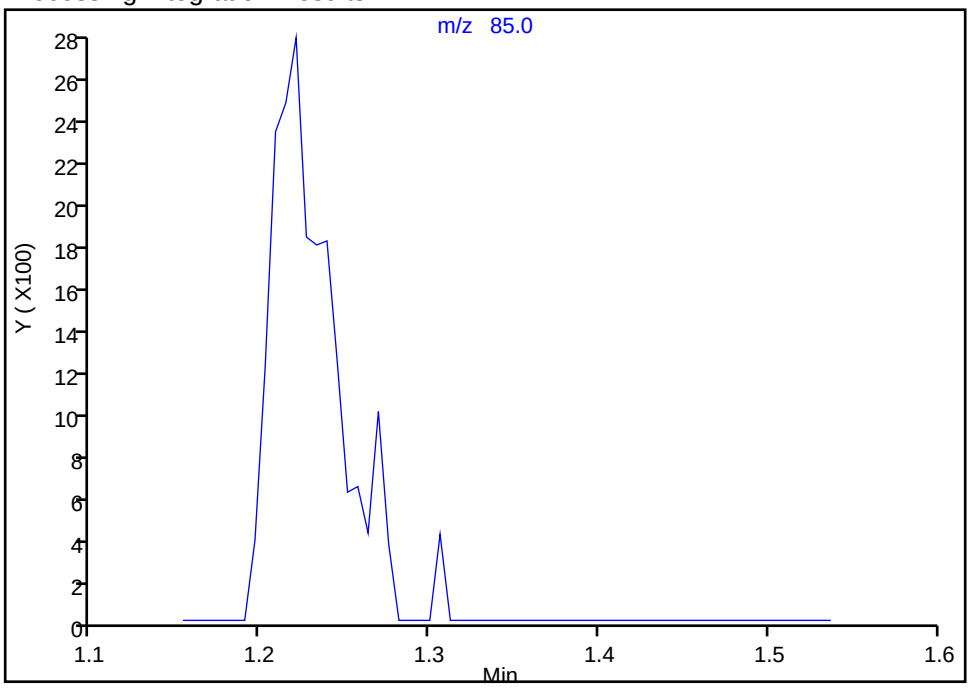
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Injection Date: 24-Jun-2019 14:18:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

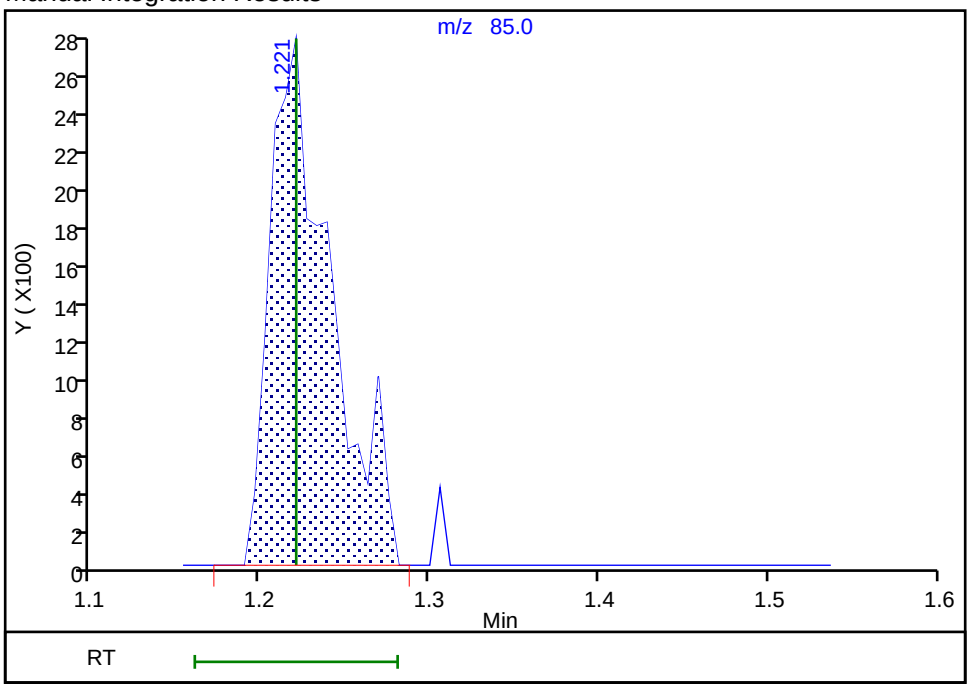
Not Detected
Expected RT: 1.22

Processing Integration Results



Manual Integration Results

RT: 1.22
Area: 6701
Amount: 0.893431
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:57:39
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

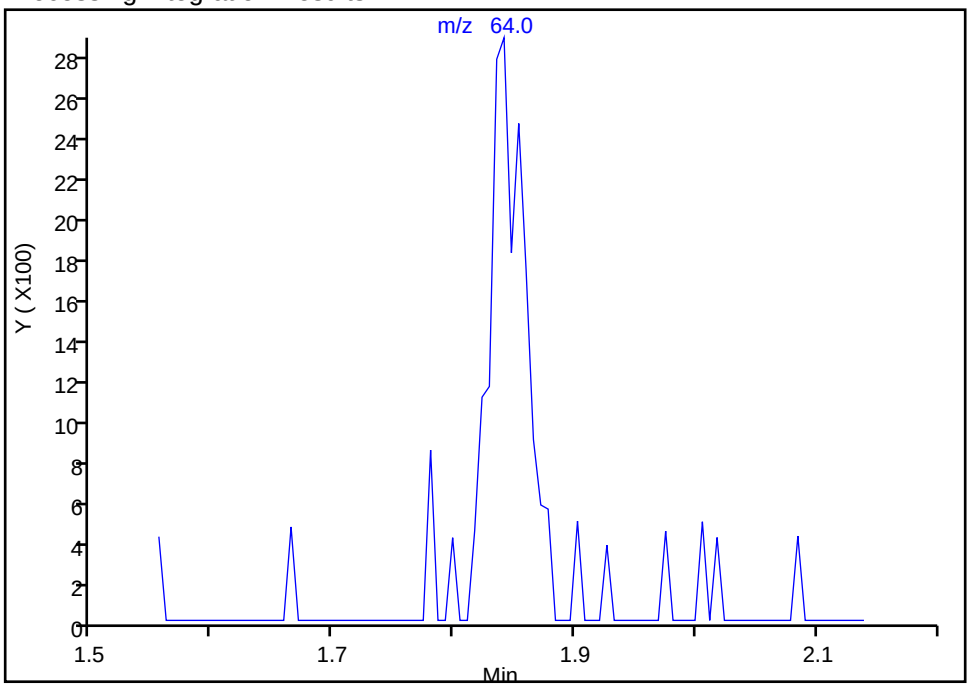
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Injection Date: 24-Jun-2019 14:18:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

15 Chloroethane, CAS: 75-00-3

Signal: 1

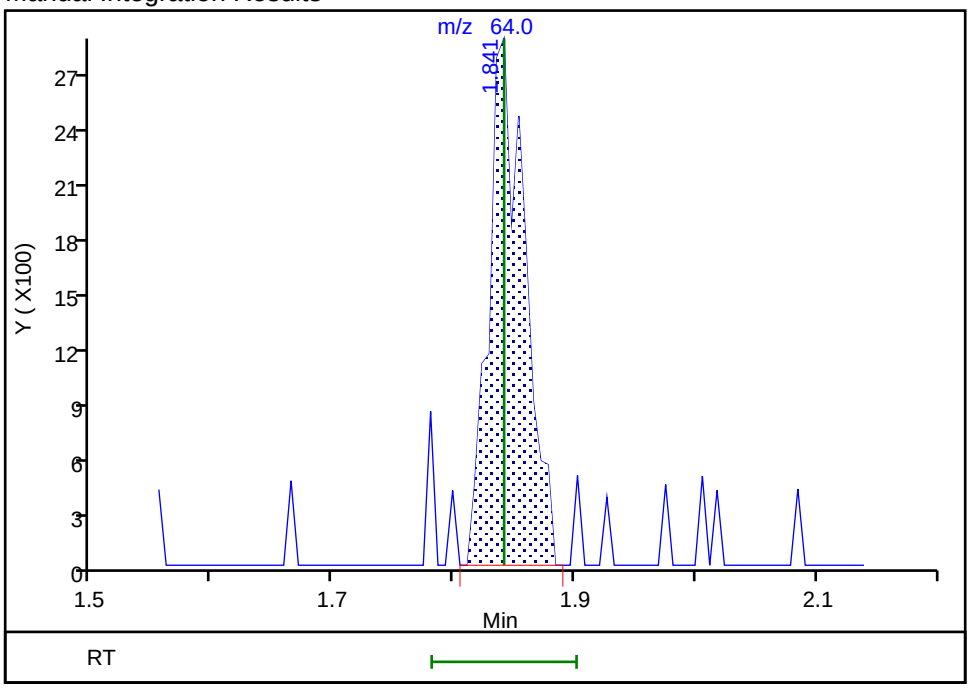
Not Detected
Expected RT: 1.84

Processing Integration Results



Manual Integration Results

RT: 1.84
Area: 5836
Amount: 1.039114
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:57:48
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

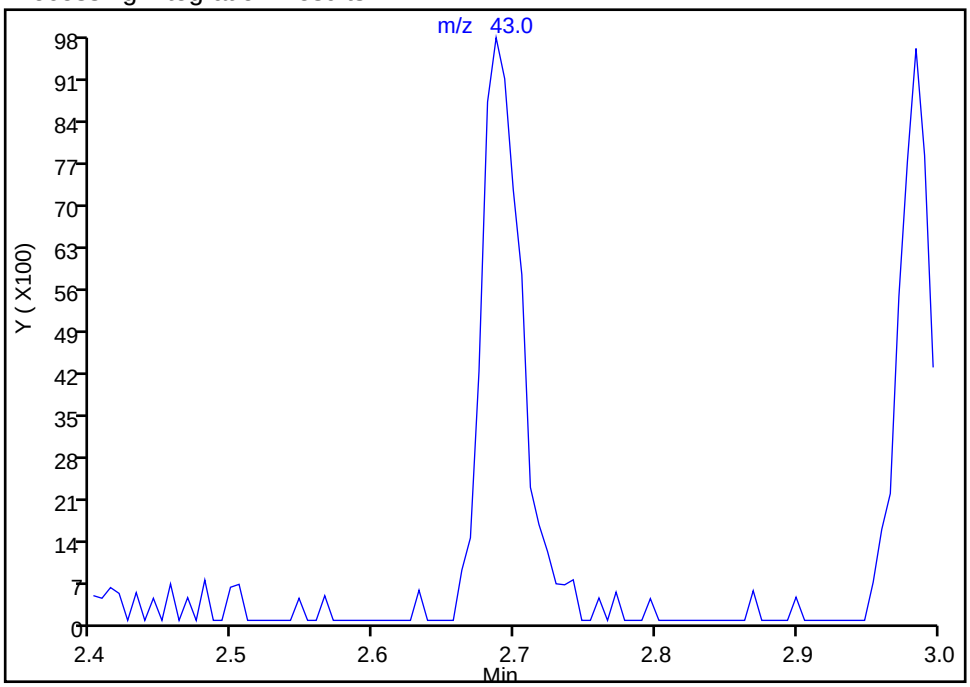
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Injection Date: 24-Jun-2019 14:18:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

23 Acetone, CAS: 67-64-1

Signal: 1

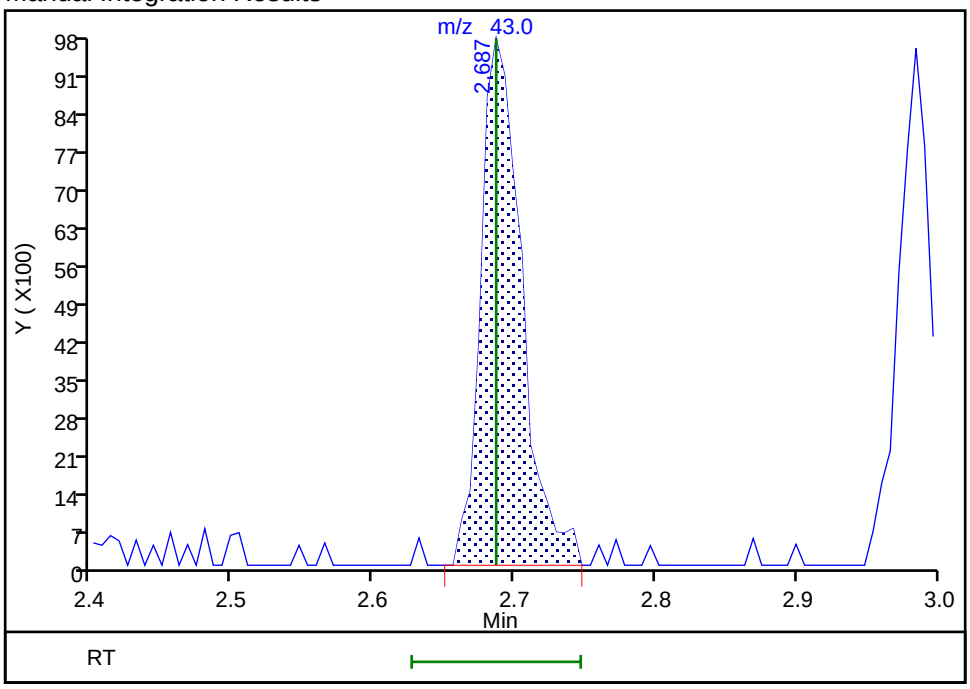
Not Detected
Expected RT: 2.69

Processing Integration Results



Manual Integration Results

RT: 2.69
Area: 19610
Amount: 6.125998
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:57:57
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

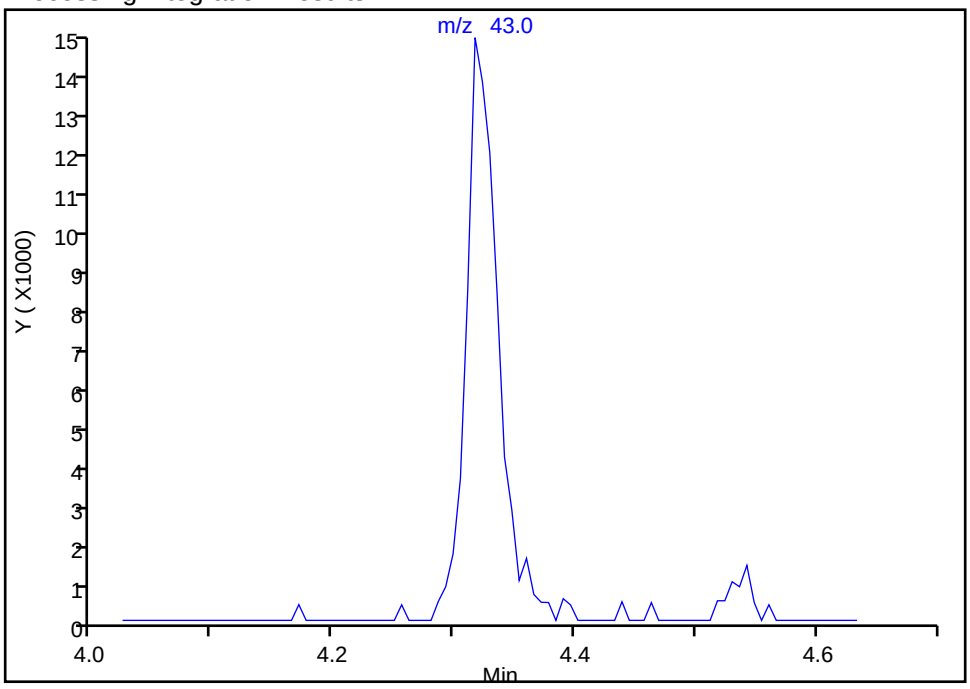
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Injection Date: 24-Jun-2019 14:18:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

43 2-Butanone (MEK), CAS: 78-93-3

Signal: 1

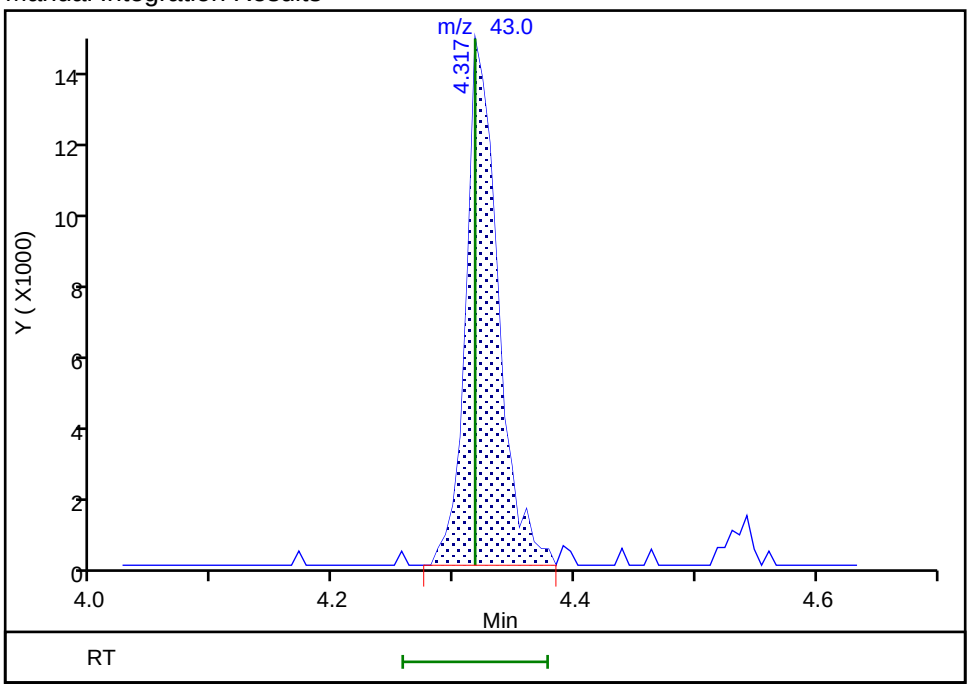
Not Detected
Expected RT: 4.32

Processing Integration Results



Manual Integration Results

RT: 4.32
Area: 26433
Amount: 5.078817
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:58:10
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

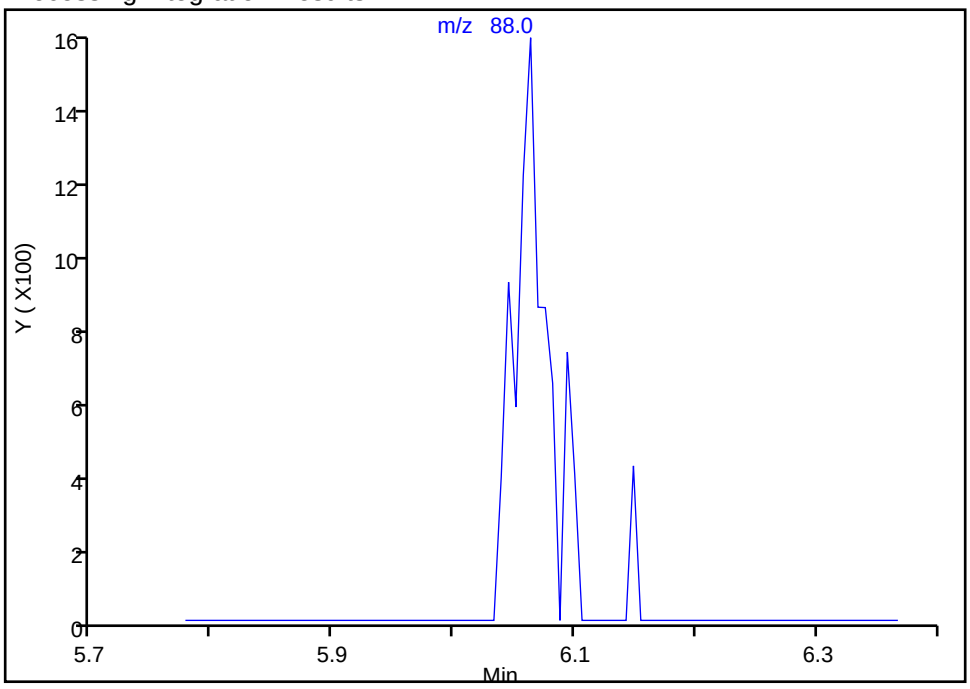
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6412.D
Injection Date: 24-Jun-2019 14:18:30 Instrument ID: HP5973S
Lims ID: IC
Client ID:
Operator ID: LH ALS Bottle#: 10 Worklist Smp#: 12
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

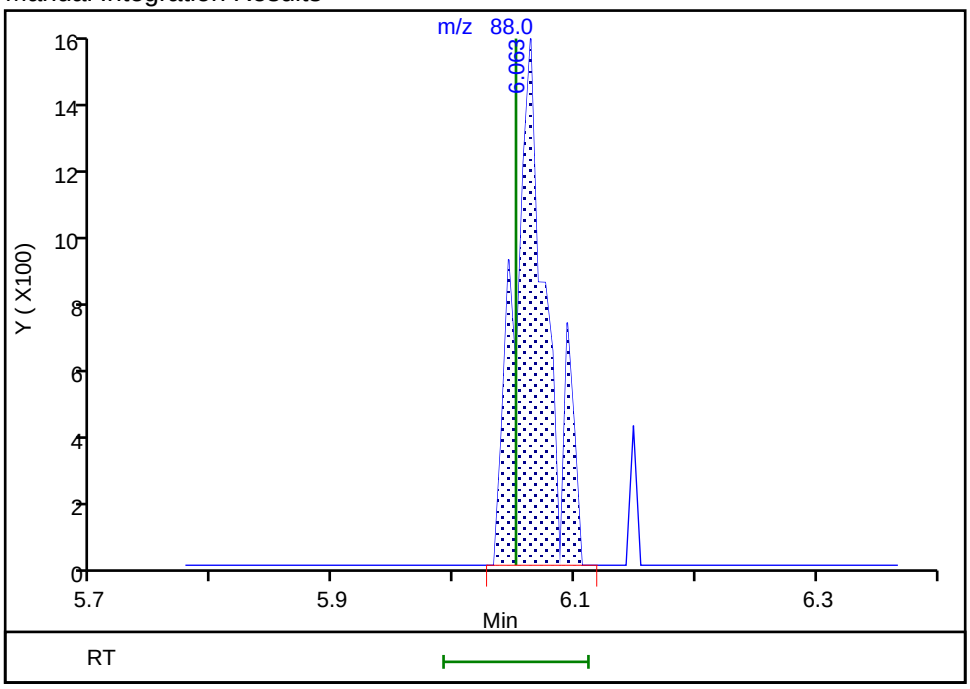
Not Detected
Expected RT: 6.05

Processing Integration Results



Manual Integration Results

RT: 6.06
Area: 2885
Amount: 29.395888
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:58:22
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6413.D
Lims ID: IC 2
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Jun-2019 14:42:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 2
Misc. Info.: 480-0082155-013
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:10 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 15:59:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	150219	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	314233	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	93	337263	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	56	195944	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.053	0.000	97	123019	25.0	24.8	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	82	773325	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	0.000	90	264427	25.0	25.3	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	0	18088	2.00	2.38	M
12 Chloromethane	50	1.379	1.385	-0.006	77	20472	2.00	2.25	
151 Butadiene	54	1.476	1.476	0.000	93	20033	2.00	2.36	
13 Vinyl chloride	62	1.482	1.482	0.000	68	20380	2.00	2.37	
14 Bromomethane	94	1.756	1.756	0.000	74	12919	2.00	2.09	
15 Chloroethane	64	1.841	1.841	0.000	76	14206	2.00	2.49	
16 Dichlorofluoromethane	67	2.054	2.060	-0.006	76	29607	2.00	2.29	
17 Trichlorofluoromethane	101	2.066	2.066	0.000	63	29641	2.00	2.45	
18 Ethyl ether	59	2.340	2.346	-0.006	94	17538	2.00	2.11	
20 Acrolein	56	2.529	2.529	0.000	87	17548	10.0	9.57	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	56	17258	2.00	2.36	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	86	16452	2.00	2.21	
23 Acetone	43	2.681	2.687	-0.006	93	34660	10.0	10.7	
25 Iodomethane	142	2.717	2.723	-0.006	97	29460	2.00	2.11	
26 Carbon disulfide	76	2.754	2.754	0.000	97	53303	2.00	2.18	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	84	28523	2.00	2.07	
27 Methyl acetate	43	2.979	2.979	0.000	94	36270	4.00	4.26	
30 Methylene Chloride	84	3.076	3.076	0.000	86	21584	2.00	2.05	
31 2-Methyl-2-propanol	59	3.253	3.259	-0.006	82	18603	20.0	19.0	M
32 Methyl tert-butyl ether	73	3.289	3.289	0.000	89	51907	2.00	2.07	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	91	18346	2.00	2.18	
33 Acrylonitrile	53	3.368	3.368	0.000	94	83693	20.0	20.0	
35 Hexane	57	3.490	3.490	0.000	90	29610	2.00	2.35	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	72	30710	2.00	2.07	
37 Vinyl acetate	43	3.776	3.782	-0.006	97	69557	4.00	3.75	
44 2,2-Dichloropropane	77	4.232	4.238	-0.006	78	16759	2.00	2.19	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	75	19634	2.00	2.06	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	92	52719	10.0	9.99	
48 Chlorobromomethane	128	4.512	4.512	0.000	85	10622	2.00	2.07	
49 Tetrahydrofuran	42	4.530	4.530	0.000	83	14958	4.00	4.04	
50 Chloroform	83	4.591	4.591	0.000	72	35489	2.00	2.19	
51 1,1,1-Trichloroethane	97	4.701	4.695	0.007	72	26791	2.00	2.20	
52 Cyclohexane	56	4.701	4.701	0.000	91	33365	2.00	2.25	
55 Carbon tetrachloride	117	4.834	4.834	0.000	66	20803	2.00	2.05	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	87	24899	2.00	2.21	
57 Benzene	78	5.053	5.053	0.000	54	72795	2.00	2.14	
53 Isobutyl alcohol	43	5.090	5.090	0.000	64	17393	50.0	44.0	
58 1,2-Dichloroethane	62	5.126	5.126	0.000	61	27722	2.00	2.08	
59 n-Heptane	43	5.230	5.230	0.000	93	29426	2.00	2.29	
62 Trichloroethene	95	5.662	5.662	0.000	87	19489	2.00	2.24	
64 Methylcyclohexane	83	5.771	5.777	-0.006	80	35854	2.00	2.37	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	80	17069	2.00	2.07	
67 Dibromomethane	93	6.045	6.045	0.000	81	11263	2.00	1.96	
66 1,4-Dioxane	88	6.051	6.051	0.000	0	3674	40.0	36.0	M
68 Dichlorobromomethane	83	6.197	6.203	-0.006	80	21132	2.00	2.01	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	71	12804	2.00	2.11	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	80	25066	2.00	1.95	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	95	113065	10.0	9.84	
74 Toluene	92	6.897	6.897	0.000	71	49355	2.00	2.19	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	87	23475	2.00	1.90	
75 Ethyl methacrylate	69	7.231	7.231	0.000	67	20479	2.00	1.80	
79 1,1,2-Trichloroethane	83	7.371	7.377	-0.006	82	13625	2.00	2.04	
81 Tetrachloroethene	166	7.426	7.426	0.000	74	21631	2.00	2.19	
82 1,3-Dichloropropane	76	7.529	7.536	-0.007	86	29189	2.00	2.08	
80 2-Hexanone	43	7.602	7.602	0.000	95	87241	10.0	10.2	
83 Chlorodibromomethane	129	7.767	7.767	0.000	62	15081	2.00	1.85	
84 Ethylene Dibromide	107	7.864	7.870	-0.006	75	16509	2.00	1.90	
87 Chlorobenzene	112	8.345	8.345	0.000	53	52286	2.00	2.10	
88 Ethylbenzene	91	8.430	8.436	-0.006	97	85014	2.00	2.07	
89 1,1,1,2-Tetrachloroethane	131	8.448	8.442	0.006	46	15365	2.00	1.97	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	97	34213	2.00	2.08	
91 o-Xylene	106	8.983	8.983	0.000	92	32837	2.00	2.03	
92 Styrene	104	9.014	9.014	0.000	90	57427	2.00	2.12	
95 Bromoform	173	9.269	9.263	0.006	73	10141	2.00	1.94	
94 Isopropylbenzene	105	9.367	9.367	0.000	91	89529	2.00	2.11	
101 Bromobenzene	156	9.720	9.720	0.000	87	24722	2.00	2.12	
97 1,1,2,2-Tetrachloroethane	83	9.780	9.786	-0.006	75	25543	2.00	2.07	
99 N-Propylbenzene	91	9.799	9.799	0.000	97	103752	2.00	2.05	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	67	8859	2.00	2.07	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	64	7547	2.00	1.69	
103 2-Chlorotoluene	126	9.902	9.902	0.000	94	22920	2.00	2.18	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	93	74935	2.00	2.07	
105 4-Chlorotoluene	126	10.018	10.018	0.000	78	23418	2.00	2.11	
106 tert-Butylbenzene	134	10.297	10.297	0.000	83	17124	2.00	2.10	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	9	77021	2.00	2.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	86	96861	2.00	2.15	
111 1,3-Dichlorobenzene	146	10.650	10.644	0.006	71	46754	2.00	2.11	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	91	83293	2.00	2.07	
113 1,4-Dichlorobenzene	146	10.735	10.735	0.000	59	48529	2.00	2.13	
115 n-Butylbenzene	91	11.040	11.040	0.000	94	76462	2.00	2.16	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	92	46981	2.00	2.12	
117 1,2-Dibromo-3-Chloropropan	75	11.824	11.824	0.000	29	4240	2.00	2.05	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	89	32818	2.00	2.27	
120 Hexachlorobutadiene	225	12.597	12.603	-0.006	83	15795	2.00	2.28	
121 Naphthalene	128	12.707	12.707	0.000	96	82955	2.00	2.15	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	91	30477	2.00	2.20	
S 125 1,2-Dichloroethene, Total	1				0			4.25	
S 123 Total BTEX	1				0			10.5	
S 126 1,3-Dichloropropene, Total	1				0			3.85	
S 124 Xylenes, Total	1				0			4.11	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00158	Amount Added:	2.00	Units: uL	
GAS CORP mix_00347	Amount Added:	2.00	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

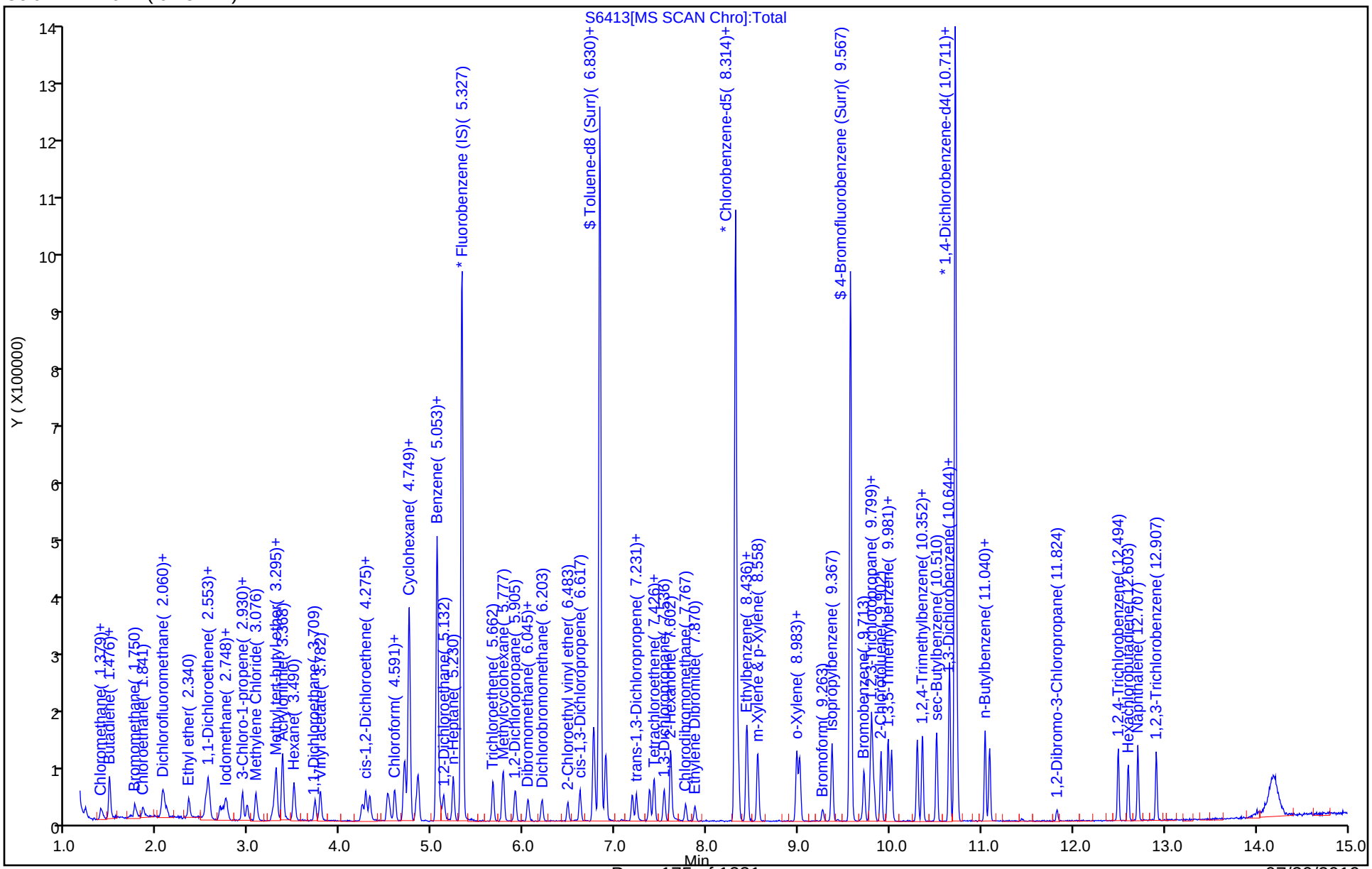
Report Date: 25-Jun-2019 12:58:13 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6413.D

Injection Date:	24-Jun-2019 14:42:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 2			Worklist Smp#:	13
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

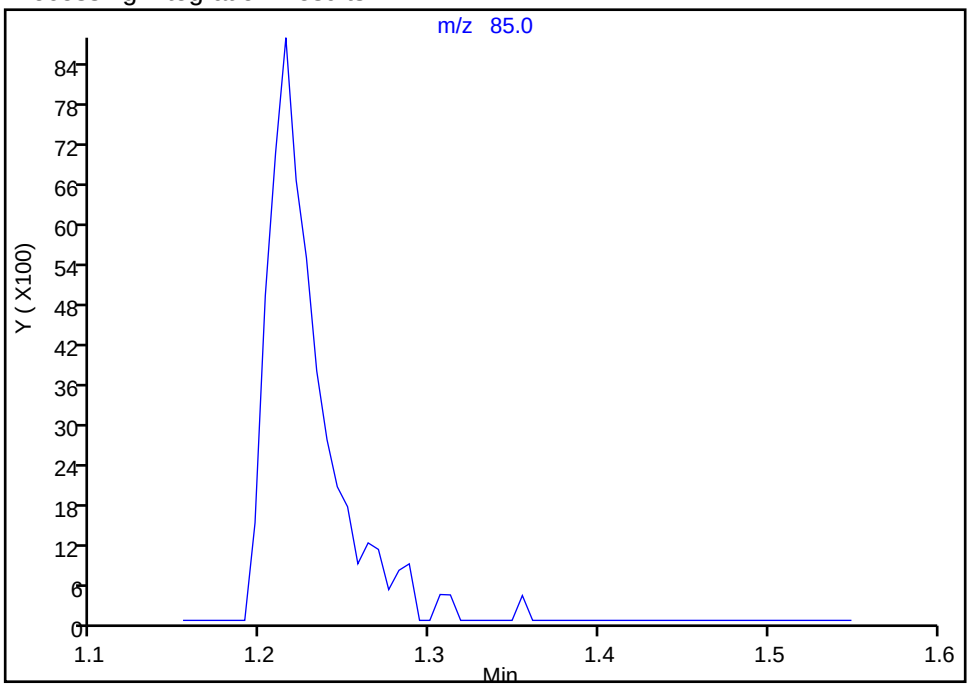
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6413.D
Injection Date: 24-Jun-2019 14:42:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

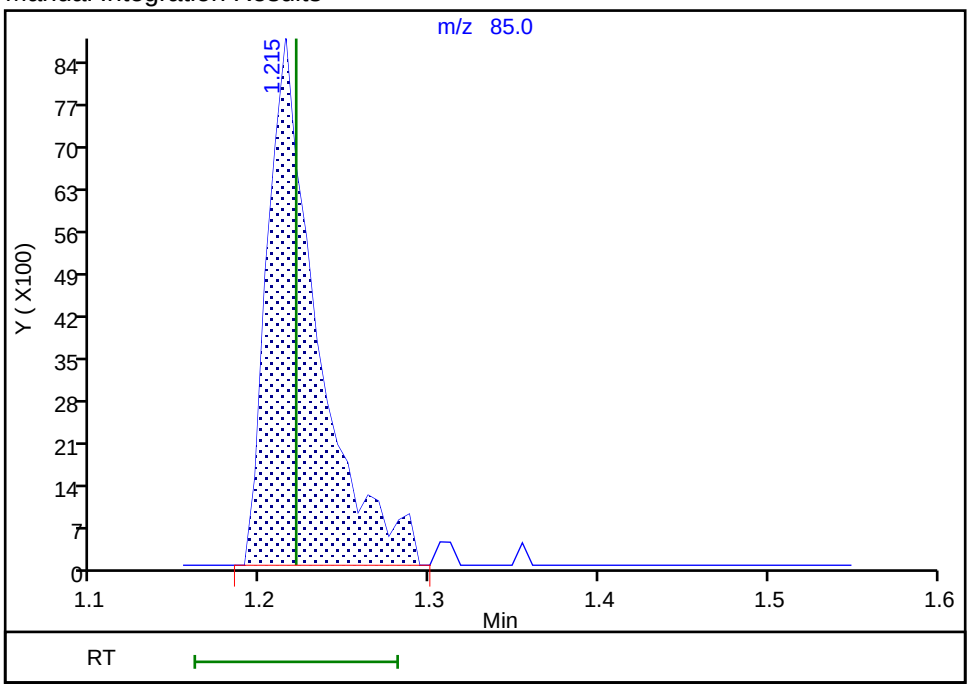
Not Detected
Expected RT: 1.22

Processing Integration Results



Manual Integration Results

RT: 1.21
Area: 18088
Amount: 2.377924
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:58:56
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

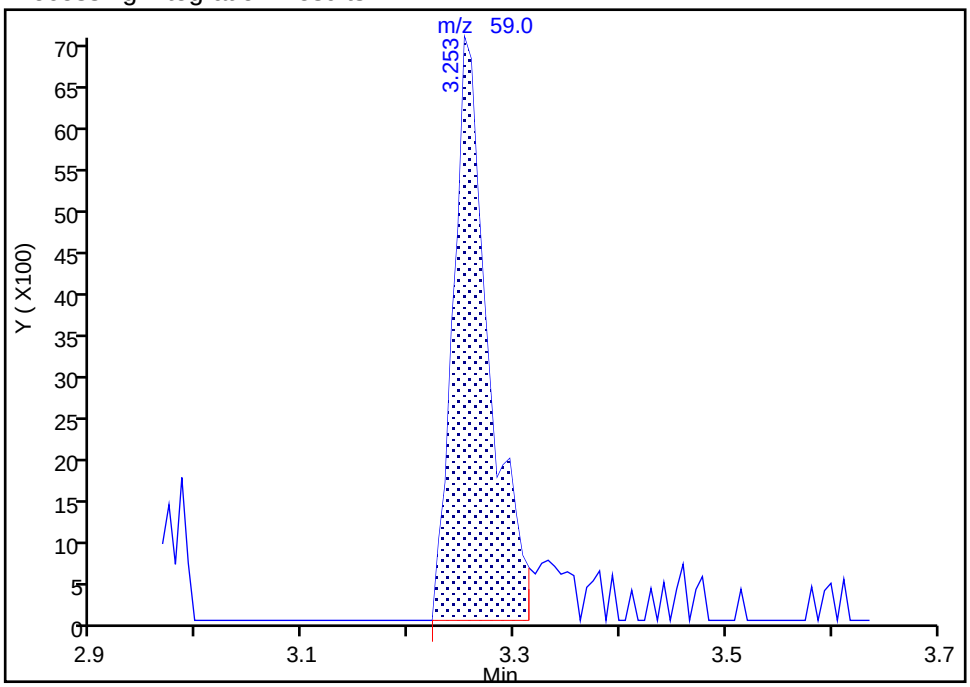
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6413.D
Injection Date: 24-Jun-2019 14:42:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

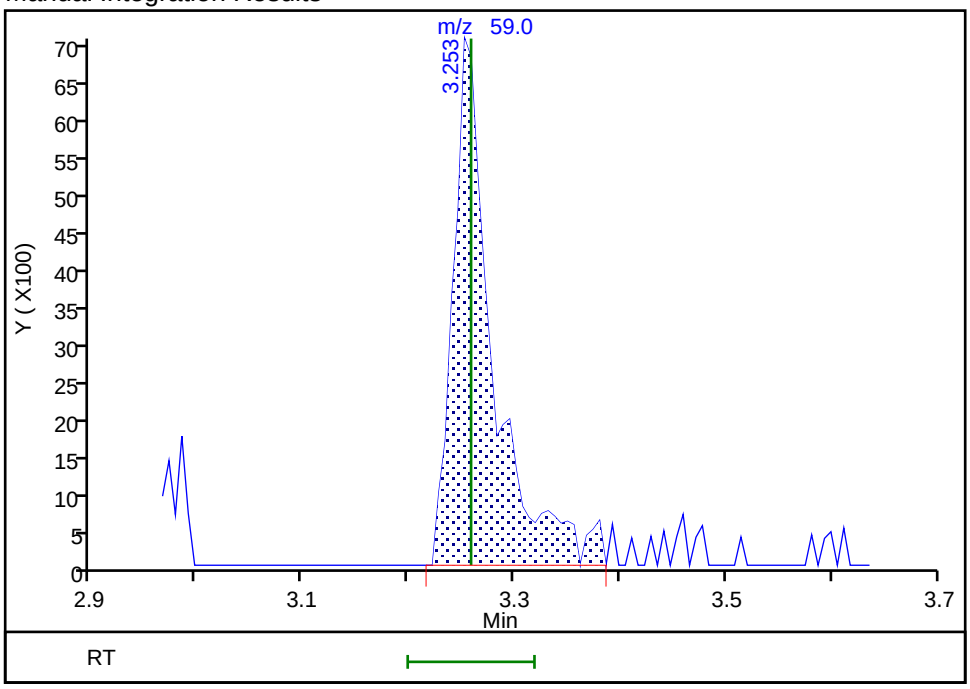
Processing Integration Results

RT: 3.25
Area: 16485
Amount: 18.660774
Amount Units: ug/L



Manual Integration Results

RT: 3.25
Area: 18603
Amount: 18.975887
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:59:17
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

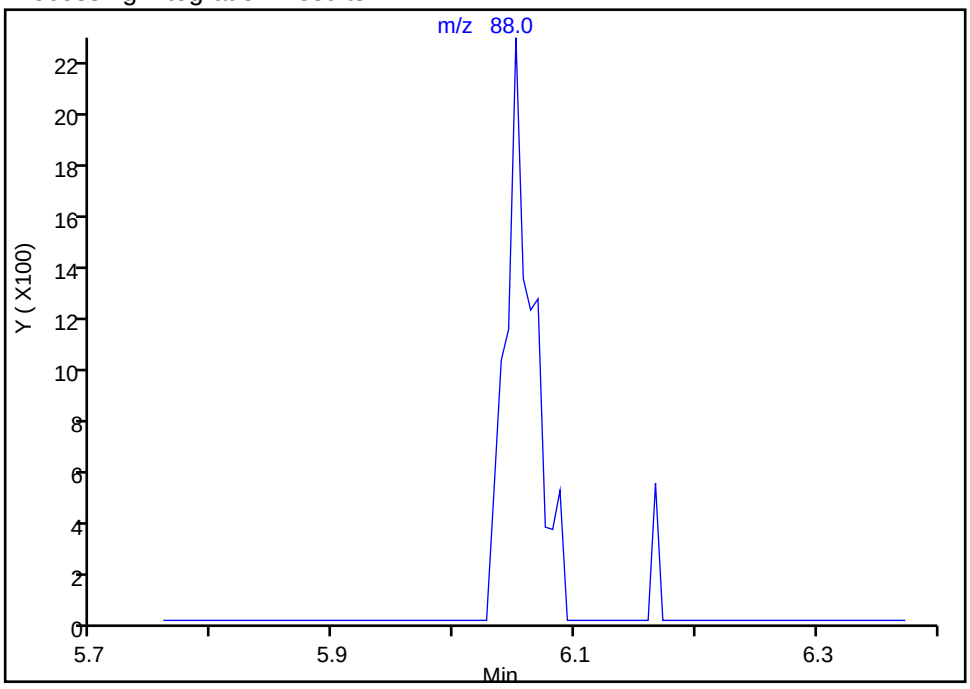
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6413.D
Injection Date: 24-Jun-2019 14:42:30 Instrument ID: HP5973S
Lims ID: IC 2
Client ID:
Operator ID: LH ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

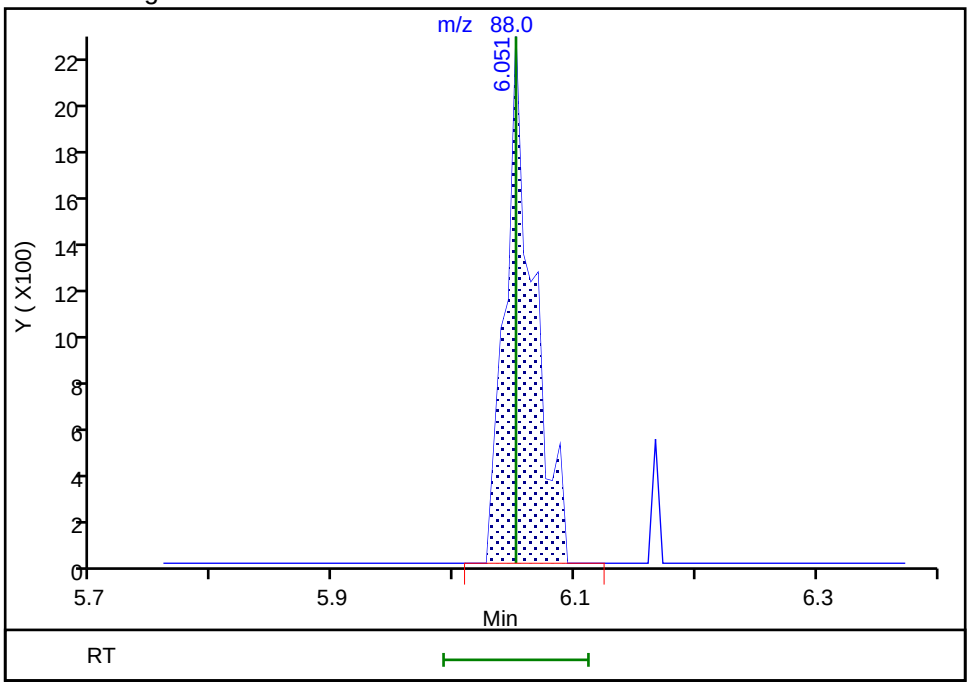
Not Detected
Expected RT: 6.05

Processing Integration Results



Manual Integration Results

RT: 6.05
Area: 3674
Amount: 35.994517
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:59:29
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6414.D
Lims ID: IC 3
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Jun-2019 15:05:30 ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 3
Misc. Info.: 480-0082155-014
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:16 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 16:00:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	152489	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	318449	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	88	346152	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	56	199224	25.0	25.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.053	0.000	91	127414	25.0	25.3	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	82	782468	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	0.000	89	268378	25.0	25.4	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	0	42646	5.00	5.52	M
12 Chloromethane	50	1.385	1.385	0.000	87	50617	5.00	5.48	
151 Butadiene	54	1.476	1.476	0.000	95	45512	5.00	5.28	
13 Vinyl chloride	62	1.482	1.482	0.000	81	45993	5.00	5.28	
14 Bromomethane	94	1.756	1.756	0.000	89	31665	5.00	5.04	
15 Chloroethane	64	1.841	1.841	0.000	96	31109	5.00	5.38	
16 Dichlorofluoromethane	67	2.060	2.060	0.000	79	71453	5.00	5.46	
17 Trichlorofluoromethane	101	2.060	2.066	-0.006	47	64433	5.00	5.25	
18 Ethyl ether	59	2.340	2.346	-0.006	87	43352	5.00	5.15	
20 Acrolein	56	2.529	2.529	0.000	90	49436	25.0	26.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	73	44114	5.00	5.95	
22 1,1-Dichloroethene	96	2.553	2.559	-0.006	95	40994	5.00	5.41	
23 Acetone	43	2.687	2.687	0.000	96	90016	25.0	27.3	
25 Iodomethane	142	2.717	2.723	-0.006	98	78027	5.00	5.51	
26 Carbon disulfide	76	2.754	2.754	0.000	99	135110	5.00	5.44	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	85	74974	5.00	5.36	
27 Methyl acetate	43	2.979	2.979	0.000	95	92165	10.0	10.7	
30 Methylene Chloride	84	3.076	3.076	0.000	93	51344	5.00	5.40	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	91	54543	50.0	54.8	
32 Methyl tert-butyl ether	73	3.289	3.289	0.000	91	131962	5.00	5.20	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	92	47321	5.00	5.55	
33 Acrylonitrile	53	3.368	3.368	0.000	98	231329	50.0	54.6	
35 Hexane	57	3.490	3.490	0.000	95	71944	5.00	5.62	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	97	80701	5.00	5.36	
37 Vinyl acetate	43	3.782	3.782	0.000	97	197450	10.0	10.5	
44 2,2-Dichloropropane	77	4.232	4.238	-0.006	84	42152	5.00	5.42	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	64	52419	5.00	5.42	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	94	146148	25.0	27.3	
48 Chlorobromomethane	128	4.512	4.512	0.000	86	27253	5.00	5.23	
49 Tetrahydrofuran	42	4.536	4.530	0.006	90	40268	10.0	10.7	
50 Chloroform	83	4.591	4.591	0.000	94	85687	5.00	5.20	
51 1,1,1-Trichloroethane	97	4.694	4.695	0.000	80	65505	5.00	5.29	
52 Cyclohexane	56	4.701	4.701	0.000	91	84665	5.00	5.63	
55 Carbon tetrachloride	117	4.828	4.834	-0.006	80	57516	5.00	5.57	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	91	63969	5.00	5.60	
57 Benzene	78	5.053	5.053	0.000	76	190741	5.00	5.52	
53 Isobutyl alcohol	43	5.090	5.090	0.000	85	52323	125.0	130.5	
58 1,2-Dichloroethane	62	5.126	5.126	0.000	70	70678	5.00	5.22	
59 n-Heptane	43	5.230	5.230	0.000	87	71591	5.00	5.49	
62 Trichloroethene	95	5.662	5.662	0.000	89	49482	5.00	5.60	
64 Methylcyclohexane	83	5.777	5.777	0.000	91	85277	5.00	5.56	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	90	46967	5.00	5.61	
67 Dibromomethane	93	6.045	6.045	0.000	88	31861	5.00	5.47	
66 1,4-Dioxane	88	6.057	6.051	0.006	40	10824	100.0	104.6	
68 Dichlorobromomethane	83	6.203	6.203	0.000	88	56847	5.00	5.32	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	91	34855	5.00	5.65	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	86	67197	5.00	5.15	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	312405	25.0	26.8	
74 Toluene	92	6.897	6.897	0.000	80	120305	5.00	5.28	
77 trans-1,3-Dichloropropene	75	7.189	7.183	0.006	90	65954	5.00	5.27	
75 Ethyl methacrylate	69	7.231	7.231	0.000	72	58020	5.00	5.03	
79 1,1,2-Trichloroethane	83	7.377	7.377	0.000	85	37964	5.00	5.61	
81 Tetrachloroethene	166	7.426	7.426	0.000	75	56345	5.00	5.64	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	92	77535	5.00	5.45	
80 2-Hexanone	43	7.602	7.602	0.000	95	226922	25.0	26.3	
83 Chlorodibromomethane	129	7.773	7.767	0.006	79	41828	5.00	5.05	
84 Ethylene Dibromide	107	7.870	7.870	0.000	97	46510	5.00	5.27	
87 Chlorobenzene	112	8.345	8.345	0.000	93	136758	5.00	5.42	
88 Ethylbenzene	91	8.436	8.436	0.000	98	229265	5.00	5.50	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	40	40043	5.00	5.06	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	98	89188	5.00	5.35	
91 o-Xylene	106	8.983	8.983	0.000	96	92995	5.00	5.69	
92 Styrene	104	9.014	9.014	0.000	93	148147	5.00	5.39	
95 Bromoform	173	9.263	9.263	0.000	89	26842	5.00	5.07	
94 Isopropylbenzene	105	9.367	9.367	0.000	95	237449	5.00	5.45	
101 Bromobenzene	156	9.713	9.720	-0.007	90	63211	5.00	5.27	
97 1,1,2,2-Tetrachloroethane	83	9.786	9.786	0.000	63	63964	5.00	5.06	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	284201	5.00	5.46	
100 1,2,3-Trichloropropane	110	9.811	9.817	-0.006	59	23737	5.00	5.41	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	80	23407	5.00	5.11	
103 2-Chlorotoluene	126	9.902	9.902	0.000	95	55997	5.00	5.18	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	93	201064	5.00	5.42	
105 4-Chlorotoluene	126	10.018	10.018	0.000	79	61056	5.00	5.35	
106 tert-Butylbenzene	134	10.297	10.297	0.000	91	47829	5.00	5.72	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	69	208543	5.00	5.53	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	93	259759	5.00	5.62	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	83	125312	5.00	5.51	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	95	229258	5.00	5.56	
113 1,4-Dichlorobenzene	146	10.735	10.735	0.000	92	126301	5.00	5.39	
115 n-Butylbenzene	91	11.040	11.040	0.000	92	200855	5.00	5.52	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	91	124625	5.00	5.48	
117 1,2-Dibromo-3-Chloropropan	75	11.831	11.824	0.007	63	10630	5.00	5.01	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	93	83643	5.00	5.64	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	91	41430	5.00	5.83	
121 Naphthalene	128	12.707	12.707	0.000	96	224958	5.00	5.68	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	92	81515	5.00	5.72	
S 125 1,2-Dichloroethene, Total	1				0			11.0	
S 123 Total BTEX	1				0			27.3	
S 126 1,3-Dichloropropene, Total	1				0			10.4	
S 124 Xylenes, Total	1				0			11.0	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00158	Amount Added:	5.00	Units: uL	
GAS CORP mix_00347	Amount Added:	5.00	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

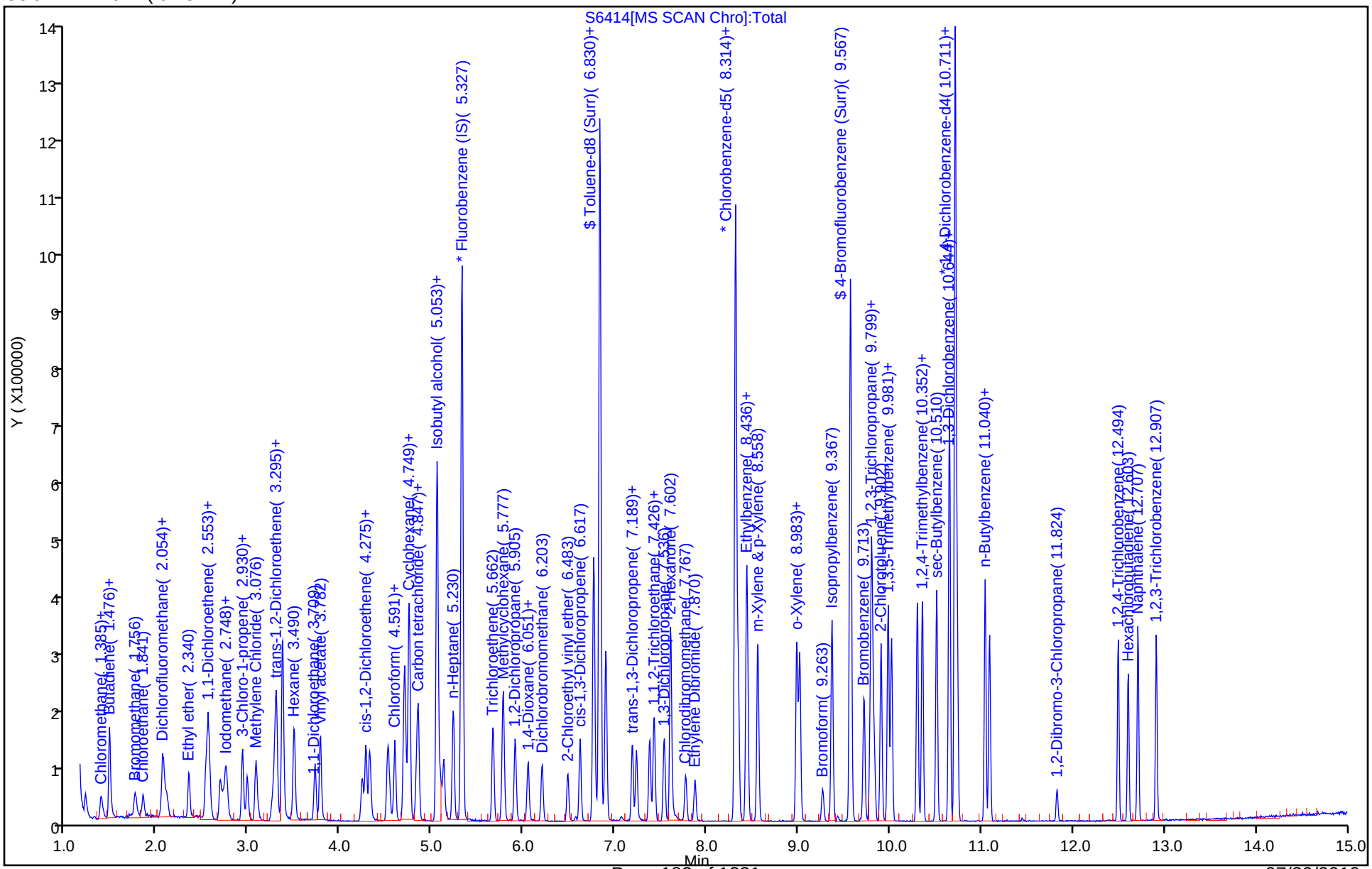
Report Date: 25-Jun-2019 12:58:18 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6414.D

Injection Date:	24-Jun-2019 15:05:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 3			Worklist Smp#:	14
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

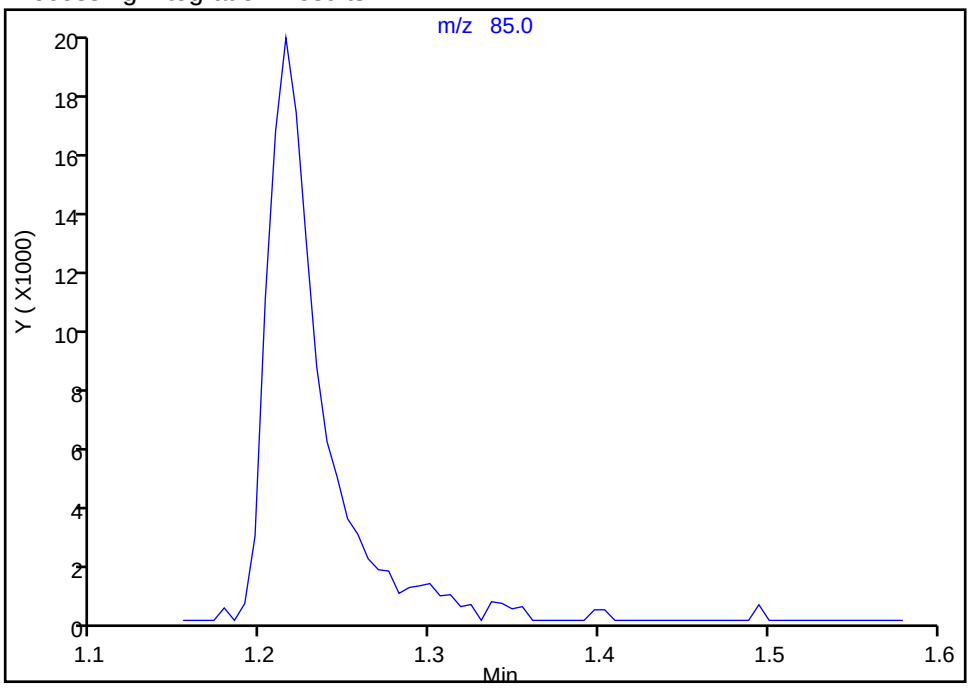
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6414.D
Injection Date: 24-Jun-2019 15:05:30 Instrument ID: HP5973S
Lims ID: IC 3
Client ID:
Operator ID: LH ALS Bottle#: 12 Worklist Smp#: 14
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

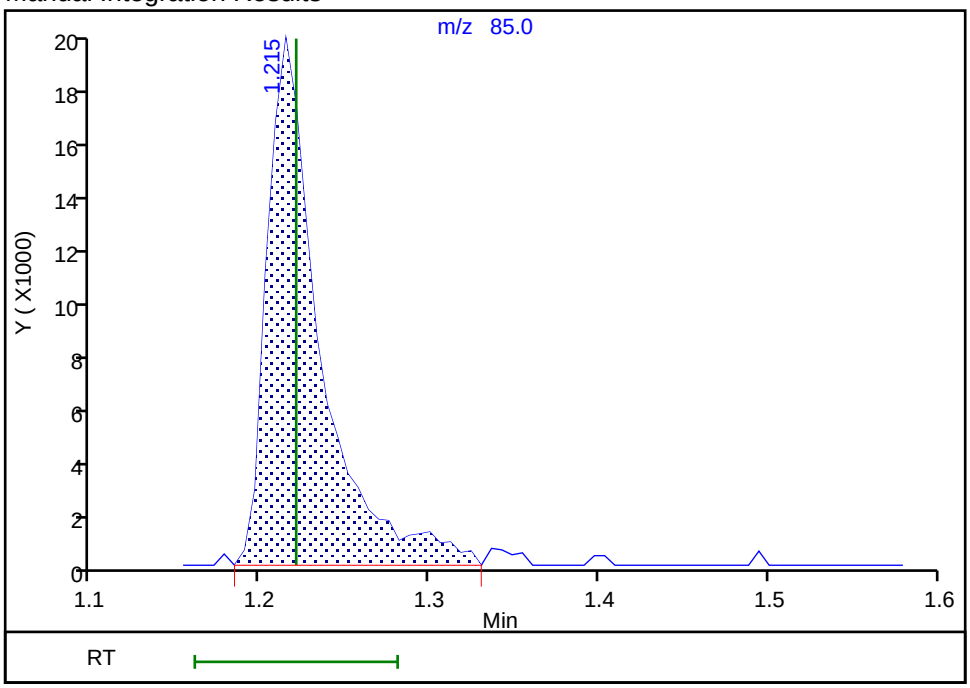
Not Detected
Expected RT: 1.22

Processing Integration Results



Manual Integration Results

RT: 1.21
Area: 42646
Amount: 5.522962
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 16:00:07
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D
Lims ID: IC 4
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Jun-2019 15:27:30 ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 4
Misc. Info.: 480-0082155-015
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:22 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 15:54:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.321	5.327	-0.006	98	147958	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	309481	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	79	339559	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	57	196147	25.0	25.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.053	0.001	84	122475	25.0	25.1	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	81	754481	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.001	88	260538	25.0	25.3	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	86	74613	10.0	9.96	Ma
12 Chloromethane	50	1.385	1.385	0.000	88	89196	10.0	9.95	
151 Butadiene	54	1.476	1.476	0.000	92	82682	10.0	9.89	
13 Vinyl chloride	62	1.482	1.482	0.000	70	83951	10.0	9.93	
14 Bromomethane	94	1.750	1.756	-0.006	92	62371	10.0	10.2	
15 Chloroethane	64	1.841	1.841	0.000	97	57402	10.0	10.2	
16 Dichlorofluoromethane	67	2.060	2.060	0.000	80	135802	10.0	10.7	
17 Trichlorofluoromethane	101	2.067	2.066	0.000	71	119098	10.0	10.0	
18 Ethyl ether	59	2.340	2.346	-0.006	89	84737	10.0	10.4	
20 Acrolein	56	2.523	2.529	-0.006	92	85862	50.0	47.6	
21 1,1,2-Trichloro-1,2,2-trif	101	2.547	2.547	0.000	69	72494	10.0	10.1	
22 1,1-Dichloroethene	96	2.553	2.559	-0.006	88	72003	10.0	9.80	
23 Acetone	43	2.687	2.687	0.000	98	137801	50.0	43.1	
25 Iodomethane	142	2.717	2.723	-0.006	98	143307	10.0	10.4	
26 Carbon disulfide	76	2.748	2.754	-0.006	99	250365	10.0	10.4	
28 3-Chloro-1-propene	41	2.924	2.930	-0.006	86	134308	10.0	9.90	
27 Methyl acetate	43	2.979	2.979	0.000	96	158131	20.0	18.9	
30 Methylene Chloride	84	3.076	3.076	0.000	93	92371	10.0	10.4	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	88	84347	100.0	87.4	M
32 Methyl tert-butyl ether	73	3.283	3.289	-0.006	92	256190	10.0	10.4	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	94	86198	10.0	10.4	
33 Acrylonitrile	53	3.368	3.368	0.000	96	388923	100.0	94.6	
35 Hexane	57	3.490	3.490	0.000	91	129857	10.0	10.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	150199	10.0	10.3	
37 Vinyl acetate	43	3.776	3.782	-0.006	98	366200	20.0	20.0	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	90	81414	10.0	10.8	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	64	99329	10.0	10.6	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	98	248786	50.0	47.9	
48 Chlorobromomethane	128	4.518	4.512	0.006	85	53177	10.0	10.5	
49 Tetrahydrofuran	42	4.530	4.530	0.000	89	72185	20.0	19.8	M
50 Chloroform	83	4.591	4.591	0.000	81	156291	10.0	9.78	
51 1,1,1-Trichloroethane	97	4.695	4.695	0.001	84	122355	10.0	10.2	
52 Cyclohexane	56	4.701	4.701	0.000	91	154522	10.0	10.6	
55 Carbon tetrachloride	117	4.828	4.834	-0.006	79	101080	10.0	10.1	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	89	114558	10.0	10.3	
57 Benzene	78	5.054	5.053	0.001	93	345931	10.0	10.3	
53 Isobutyl alcohol	43	5.090	5.090	0.000	95	86932	250.0	223.4	
58 1,2-Dichloroethane	62	5.127	5.126	0.001	76	129938	10.0	9.88	
59 n-Heptane	43	5.230	5.230	0.000	92	127193	10.0	10.1	
62 Trichloroethene	95	5.662	5.662	0.000	89	86120	10.0	10.0	
64 Methylcyclohexane	83	5.777	5.777	0.000	92	154463	10.0	10.4	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	84	80990	10.0	9.97	
67 Dibromomethane	93	6.045	6.045	0.000	87	58310	10.0	10.3	
66 1,4-Dioxane	88	6.051	6.051	0.000	19	21450	200.0	213.4	M
68 Dichlorobromomethane	83	6.197	6.203	-0.006	97	107798	10.0	10.4	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	93	58842	10.0	9.84	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	87	131061	10.0	10.4	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	604932	50.0	53.5	
74 Toluene	92	6.897	6.897	0.000	91	219397	10.0	9.90	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	97	121917	10.0	10.0	
75 Ethyl methacrylate	69	7.231	7.231	0.000	72	116422	10.0	10.4	
79 1,1,2-Trichloroethane	83	7.377	7.377	0.000	85	65031	10.0	9.89	
81 Tetrachloroethene	166	7.420	7.426	-0.006	85	98422	10.0	10.1	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	93	138506	10.0	10.0	
80 2-Hexanone	43	7.603	7.602	0.001	97	457182	50.0	54.4	
83 Chlorodibromomethane	129	7.767	7.767	0.000	90	78999	10.0	9.82	
84 Ethylene Dibromide	107	7.870	7.870	0.000	97	86814	10.0	10.1	
87 Chlorobenzene	112	8.345	8.345	0.000	94	254129	10.0	10.4	
88 Ethylbenzene	91	8.436	8.436	0.000	98	411840	10.0	10.2	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	47	80727	10.0	10.5	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	98	164437	10.0	10.1	
91 o-Xylene	106	8.984	8.983	0.001	97	164573	10.0	10.4	
92 Styrene	104	9.014	9.014	0.000	94	275157	10.0	10.3	
95 Bromoform	173	9.263	9.263	0.000	91	53283	10.0	10.4	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	421591	10.0	9.87	
101 Bromobenzene	156	9.720	9.720	0.000	91	118038	10.0	10.0	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.786	0.001	62	121208	10.0	9.78	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	509878	10.0	10.0	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	82	41916	10.0	9.73	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	81	45188	10.0	10.1	
103 2-Chlorotoluene	126	9.902	9.902	0.000	96	102720	10.0	9.69	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	95	376657	10.0	10.4	
105 4-Chlorotoluene	126	10.018	10.018	0.000	96	114483	10.0	10.2	
106 tert-Butylbenzene	134	10.298	10.297	0.001	90	87286	10.0	10.6	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	85	383978	10.0	10.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	94	473608	10.0	10.5	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	83	231757	10.0	10.4	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	96	425347	10.0	10.5	
113 1,4-Dichlorobenzene	146	10.736	10.735	0.001	91	235818	10.0	10.3	
115 n-Butylbenzene	91	11.040	11.040	0.000	94	375603	10.0	10.5	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	91	230110	10.0	10.3	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.824	0.001	67	20676	10.0	9.92	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	89	162415	10.0	11.2	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	93	76363	10.0	10.9	
121 Naphthalene	128	12.707	12.707	0.000	96	438769	10.0	11.3	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	93	150024	10.0	10.7	
S 125 1,2-Dichloroethene, Total	1				0			21.0	
S 123 Total BTEX	1				0			50.9	
S 126 1,3-Dichloropropene, Total	1				0			20.4	
S 124 Xylenes, Total	1				0			20.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

8260 CORP mix_00158	Amount Added:	5.00	Units: uL	
GAS CORP mix_00347	Amount Added:	5.00	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

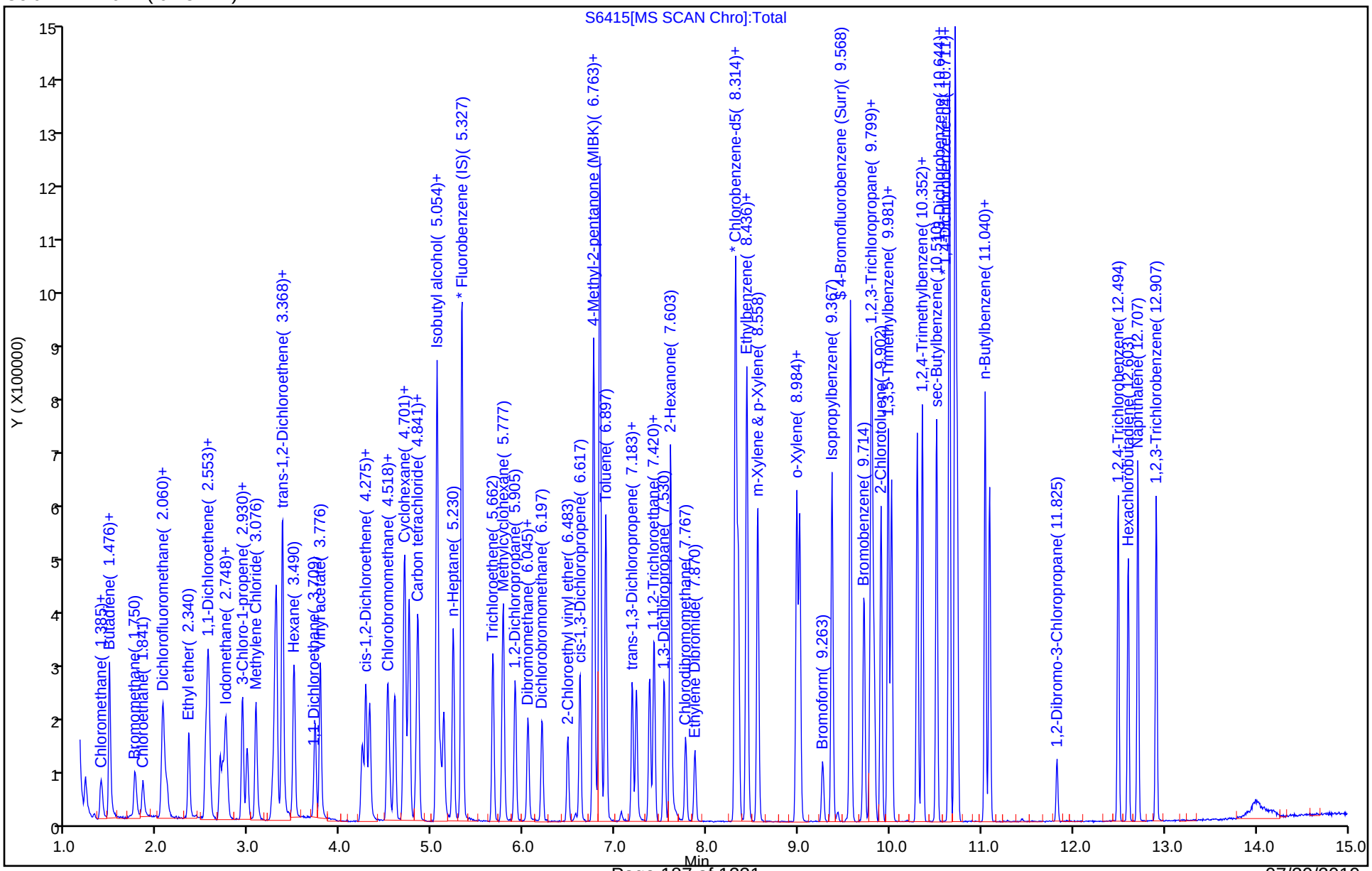
Report Date: 25-Jun-2019 12:58:24 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D

Injection Date:	24-Jun-2019 15:27:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 4			Worklist Smp#:	15
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

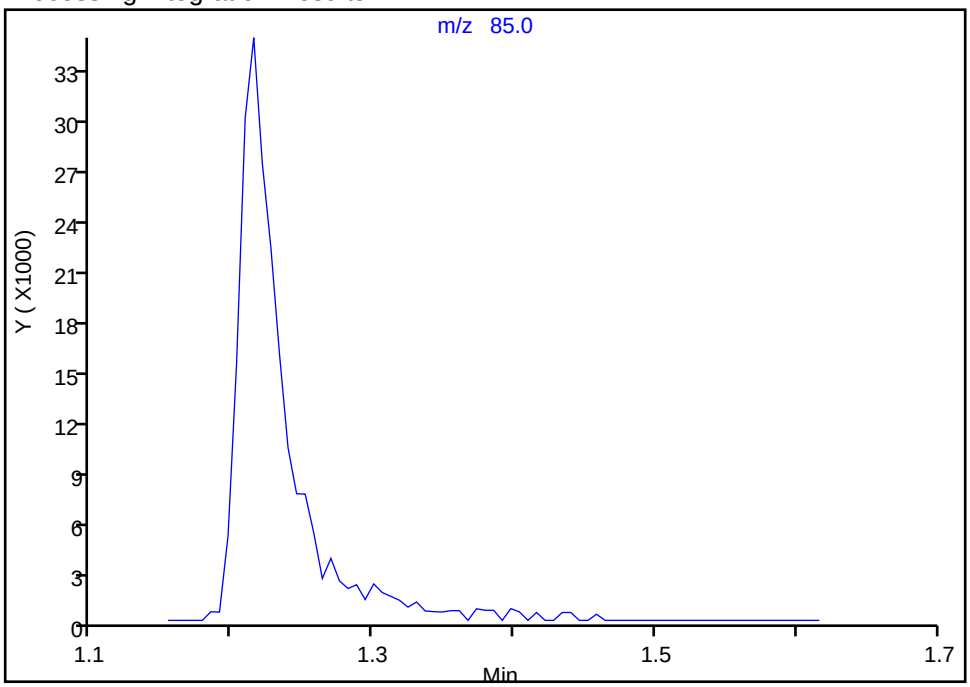
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D
Injection Date: 24-Jun-2019 15:27:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

10 Dichlorodifluoromethane, CAS: 75-71-8

Signal: 1

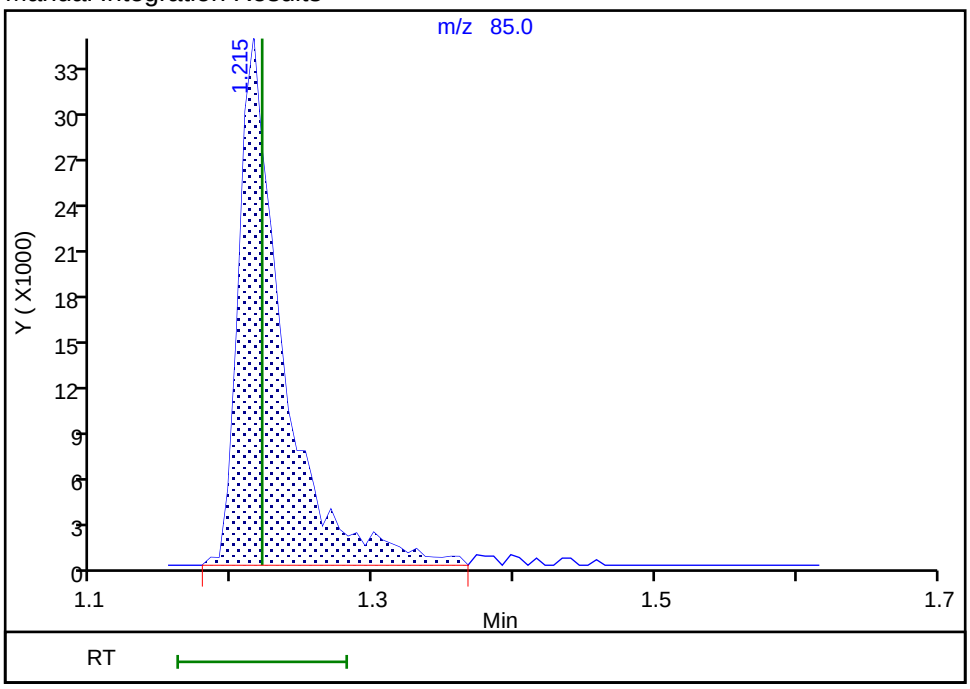
Not Detected
Expected RT: 1.22

Processing Integration Results



Manual Integration Results

RT: 1.21
Area: 74613
Amount: 9.958829
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 15:54:12
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo

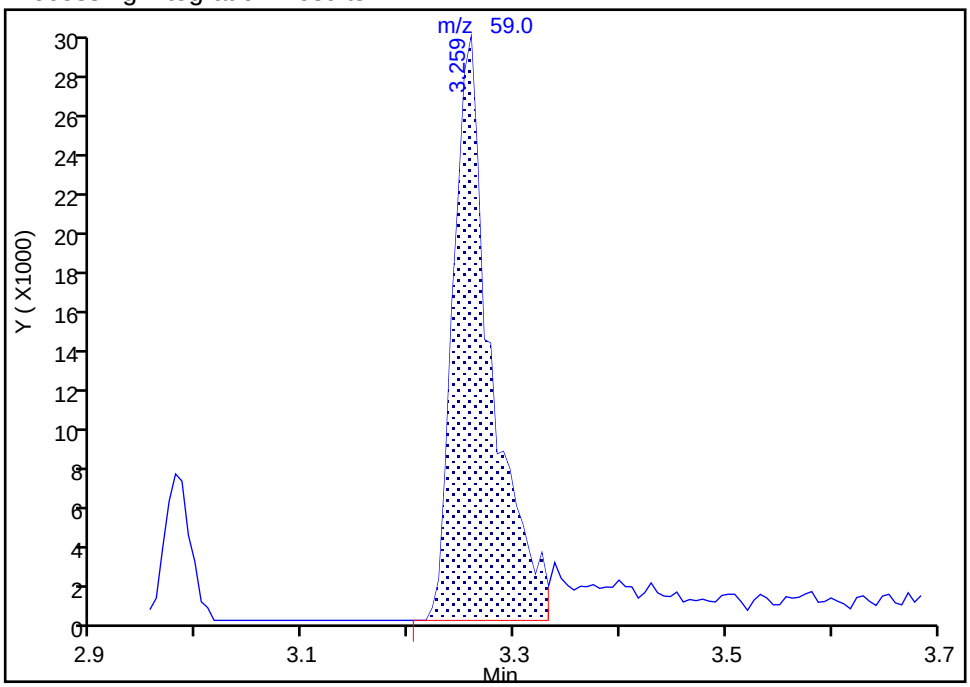
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D
Injection Date: 24-Jun-2019 15:27:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

31 2-Methyl-2-propanol, CAS: 75-65-0

Signal: 1

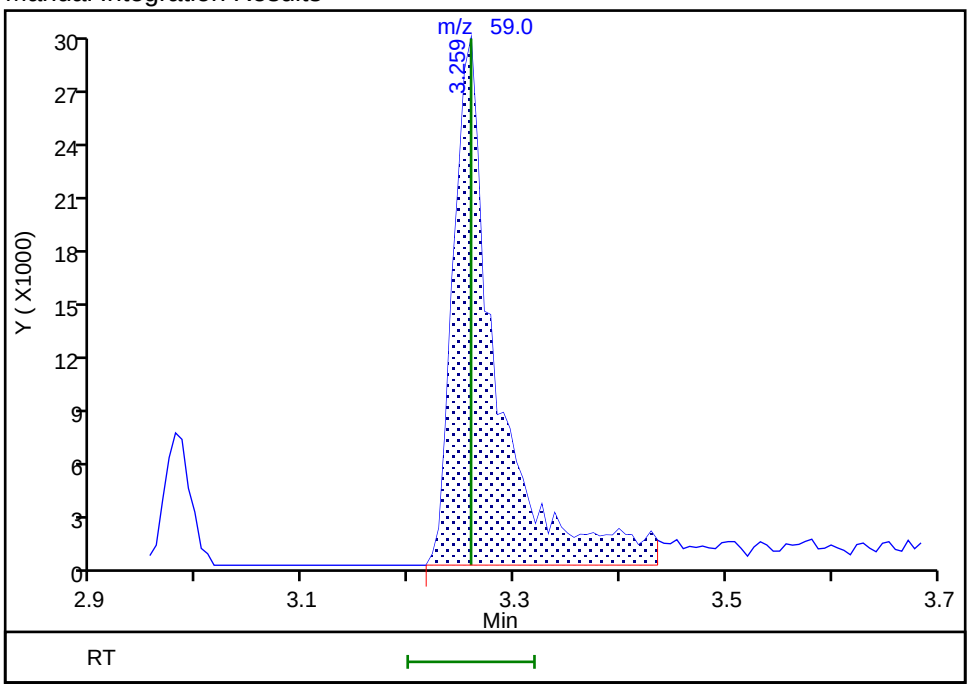
Processing Integration Results

RT: 3.26
Area: 73612
Amount: 82.620190
Amount Units: ug/L



Manual Integration Results

RT: 3.26
Area: 84347
Amount: 87.352463
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 16:02:29
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

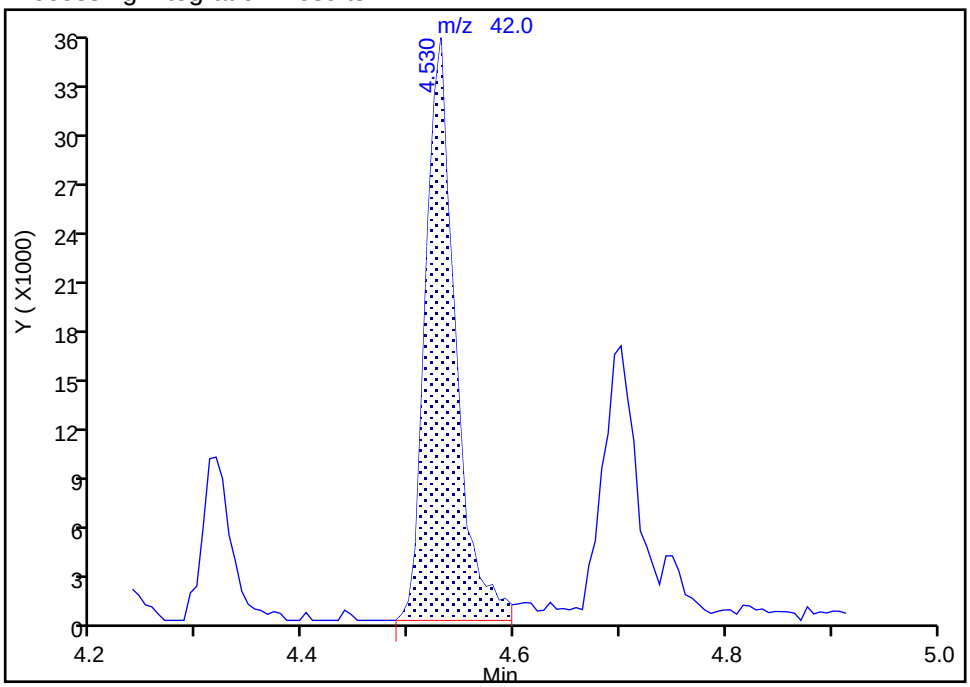
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D
Injection Date: 24-Jun-2019 15:27:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

49 Tetrahydrofuran, CAS: 109-99-9

Signal: 1

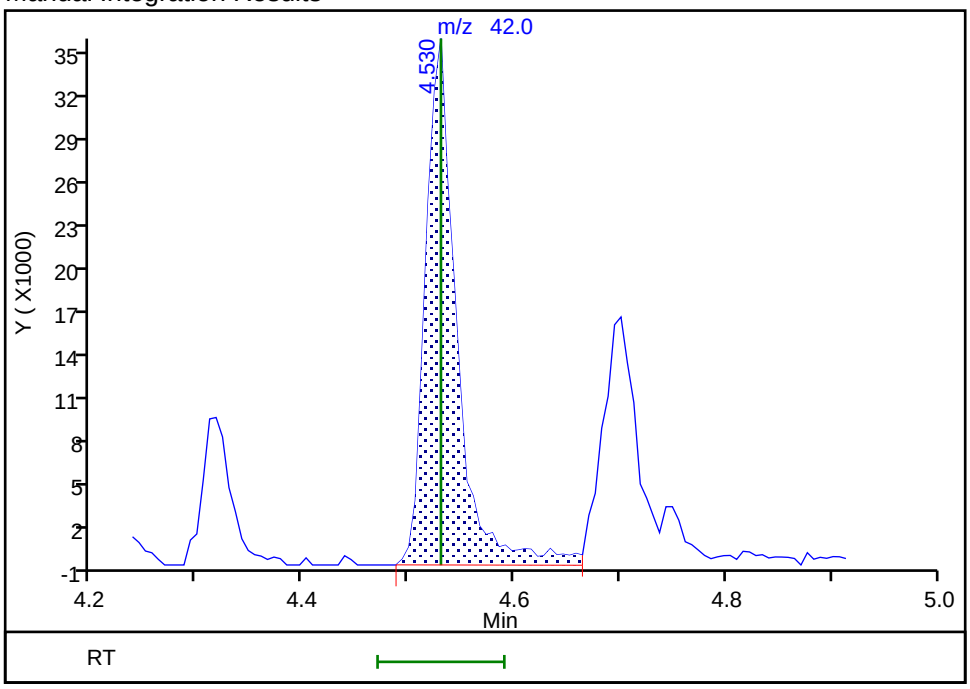
Processing Integration Results

RT: 4.53
Area: 68903
Amount: 18.670358
Amount Units: ug/L



Manual Integration Results

RT: 4.53
Area: 72185
Amount: 19.801412
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 16:02:52
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

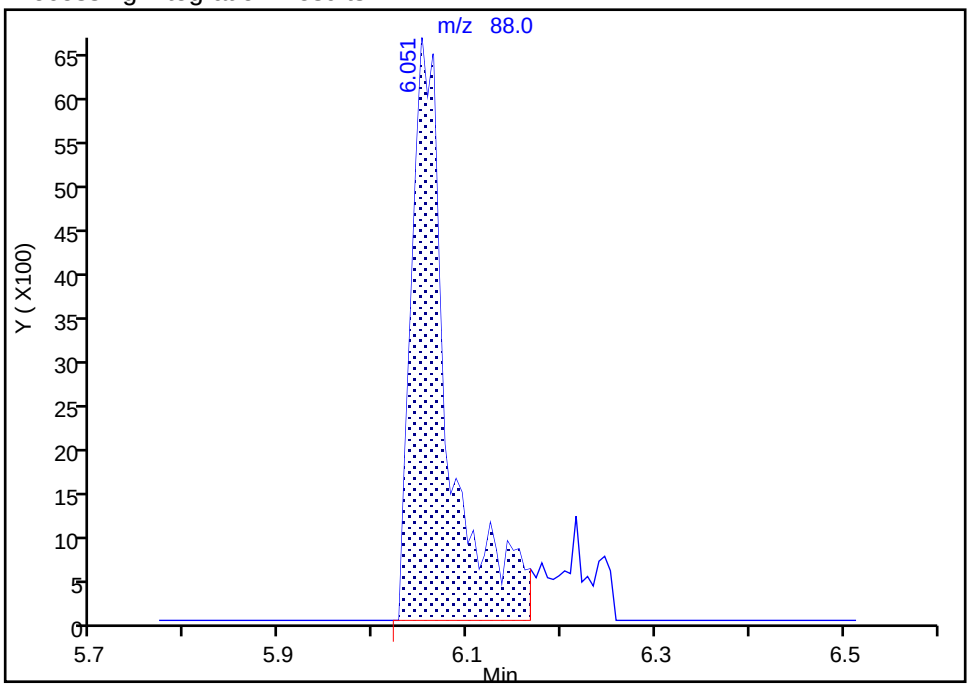
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6415.D
Injection Date: 24-Jun-2019 15:27:30 Instrument ID: HP5973S
Lims ID: IC 4
Client ID:
Operator ID: LH ALS Bottle#: 13 Worklist Smp#: 15
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

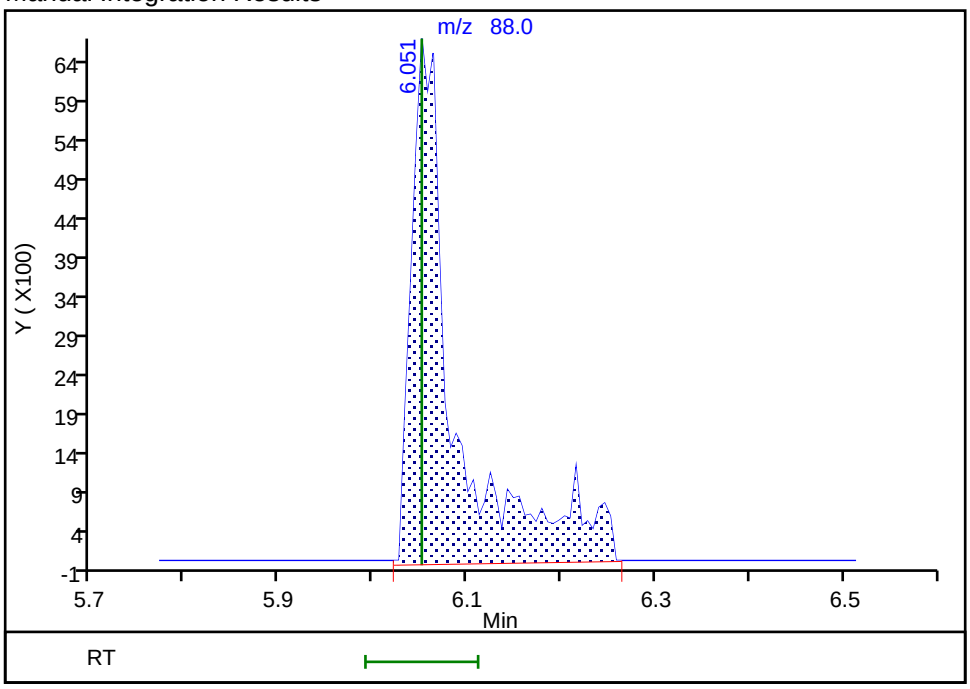
Processing Integration Results

RT: 6.05
Area: 17917
Amount: 165.5178
Amount Units: ug/L



Manual Integration Results

RT: 6.05
Area: 21450
Amount: 213.3744
Amount Units: ug/L



Reviewer: HillL, 24-Jun-2019 16:03:05
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6416.D
Lims ID: ICIS 5
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 24-Jun-2019 15:50:30 ALS Bottle#: 14 Worklist Smp#: 16
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: ICIS 5
Misc. Info.: 480-0082155-016
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:27 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 25-Jun-2019 10:43:11

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	155641	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	83	318346	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	53	335318	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	57	204582	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.053	0.000	56	125176	25.0	24.4	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	80	780005	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	0.000	88	265460	25.0	25.1	
10 Dichlorodifluoromethane	85	1.221	1.221	0.000	87	162300	25.0	20.6	
12 Chloromethane	50	1.385	1.385	0.000	99	217534	25.0	23.1	
151 Butadiene	54	1.476	1.476	0.000	94	188181	25.0	21.4	
13 Vinyl chloride	62	1.482	1.482	0.000	64	202921	25.0	22.8	
14 Bromomethane	94	1.756	1.756	0.000	92	145442	25.0	22.7	
15 Chloroethane	64	1.841	1.841	0.000	94	131801	25.0	22.3	
16 Dichlorofluoromethane	67	2.060	2.060	0.000	81	313591	25.0	23.5	
17 Trichlorofluoromethane	101	2.066	2.066	0.000	57	276032	25.0	22.0	
18 Ethyl ether	59	2.346	2.346	0.000	92	204513	25.0	23.8	
20 Acrolein	56	2.529	2.529	0.000	97	239465	125.0	126.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.547	2.547	0.000	87	177558	25.0	23.5	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	90	176039	25.0	22.8	
23 Acetone	43	2.687	2.687	0.000	99	398956	125.0	118.6	
25 Iodomethane	142	2.723	2.723	0.000	99	337229	25.0	23.4	
26 Carbon disulfide	76	2.754	2.754	0.000	99	584037	25.0	23.0	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	87	338313	25.0	23.7	
27 Methyl acetate	43	2.979	2.979	0.000	95	433508	50.0	49.2	
30 Methylene Chloride	84	3.076	3.076	0.000	96	220182	25.0	24.1	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	91	235444	250.0	231.8	
32 Methyl tert-butyl ether	73	3.289	3.289	0.000	92	625344	25.0	24.1	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	96	206043	25.0	23.7	
33 Acrylonitrile	53	3.368	3.368	0.000	99	1089319	250.0	251.9	
35 Hexane	57	3.490	3.490	0.000	93	296467	25.0	22.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	97	364723	25.0	23.7	
37 Vinyl acetate	43	3.782	3.782	0.000	97	993623	50.0	51.7	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	93	181298	25.0	22.8	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	80	237010	25.0	24.0	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	95	680899	125.0	124.5	
48 Chlorobromomethane	128	4.512	4.512	0.000	93	128172	25.0	24.1	
49 Tetrahydrofuran	42	4.530	4.530	0.000	88	185124	50.0	48.3	
50 Chloroform	83	4.591	4.591	0.000	81	381142	25.0	22.7	
51 1,1,1-Trichloroethane	97	4.695	4.695	0.000	90	297634	25.0	23.6	
52 Cyclohexane	56	4.701	4.701	0.000	91	357190	25.0	23.3	
55 Carbon tetrachloride	117	4.834	4.834	0.000	78	248182	25.0	23.6	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	91	277553	25.0	23.8	
57 Benzene	78	5.053	5.053	0.000	96	853627	25.0	24.2	
53 Isobutyl alcohol	43	5.090	5.090	0.000	93	264603	625.0	646.4	
58 1,2-Dichloroethane	62	5.126	5.126	0.000	74	324970	25.0	23.5	
59 n-Heptane	43	5.230	5.230	0.000	94	302738	25.0	22.8	
62 Trichloroethene	95	5.662	5.662	0.000	95	215364	25.0	23.9	
64 Methylcyclohexane	83	5.777	5.777	0.000	91	365616	25.0	23.4	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	88	202655	25.0	23.7	
67 Dibromomethane	93	6.045	6.045	0.000	91	146649	25.0	24.7	
66 1,4-Dioxane	88	6.051	6.051	0.000	41	53248	500.0	514.9	
68 Dichlorobromomethane	83	6.203	6.203	0.000	90	263116	25.0	24.1	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	94	151392	25.0	24.1	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	88	335664	25.0	25.2	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	1490485	125.0	128.0	
74 Toluene	92	6.897	6.897	0.000	94	538547	25.0	23.6	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	93	322232	25.0	25.8	
75 Ethyl methacrylate	69	7.231	7.231	0.000	83	305162	25.0	26.5	
79 1,1,2-Trichloroethane	83	7.377	7.377	0.000	88	165560	25.0	24.5	
81 Tetrachloroethene	166	7.426	7.426	0.000	80	232751	25.0	23.3	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	94	355675	25.0	25.0	
80 2-Hexanone	43	7.602	7.602	0.000	97	1112108	125.0	128.7	
83 Chlorodibromomethane	129	7.767	7.767	0.000	88	206933	25.0	25.0	
84 Ethylene Dibromide	107	7.870	7.870	0.000	99	220979	25.0	25.0	
87 Chlorobenzene	112	8.345	8.345	0.000	94	621468	25.0	24.7	
88 Ethylbenzene	91	8.436	8.436	0.000	98	1027404	25.0	24.6	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	42	200339	25.0	25.3	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	99	407028	25.0	24.4	
91 o-Xylene	106	8.983	8.983	0.000	97	410180	25.0	25.1	
92 Styrene	104	9.014	9.014	0.000	93	680007	25.0	24.7	
95 Bromoform	173	9.263	9.263	0.000	95	138862	25.0	26.2	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	1036262	25.0	24.6	
101 Bromobenzene	156	9.720	9.720	0.000	91	284506	25.0	24.5	
97 1,1,2,2-Tetrachloroethane	83	9.786	9.786	0.000	63	301162	25.0	24.6	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	1247343	25.0	24.8	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	82	106291	25.0	25.0	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	82	112269	25.0	25.3	
103 2-Chlorotoluene	126	9.902	9.902	0.000	96	257074	25.0	24.6	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	94	895220	25.0	24.9	
105 4-Chlorotoluene	126	10.018	10.018	0.000	97	272750	25.0	24.7	
106 tert-Butylbenzene	134	10.297	10.297	0.000	91	198562	25.0	24.5	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	49	912526	25.0	25.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	94	1099592	25.0	24.6	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	84	539384	25.0	24.5	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	96	982905	25.0	24.6	
113 1,4-Dichlorobenzene	146	10.735	10.735	0.000	94	552140	25.0	24.3	
115 n-Butylbenzene	91	11.040	11.040	0.000	94	885047	25.0	25.1	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	94	528594	25.0	24.0	
117 1,2-Dibromo-3-Chloropropan	75	11.824	11.824	0.000	78	53929	25.0	26.2	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	93	338392	25.0	23.6	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	93	157582	25.0	22.9	
121 Naphthalene	128	12.707	12.707	0.000	97	905612	25.0	23.6	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	94	298634	25.0	21.6	

Reagents:

8260 CORP mix_00158	Amount Added: 12.50	Units: uL	
GAS CORP mix_00347	Amount Added: 12.50	Units: uL	
S_8260_IS_00321	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added: 1.00	Units: uL	Run Reagent

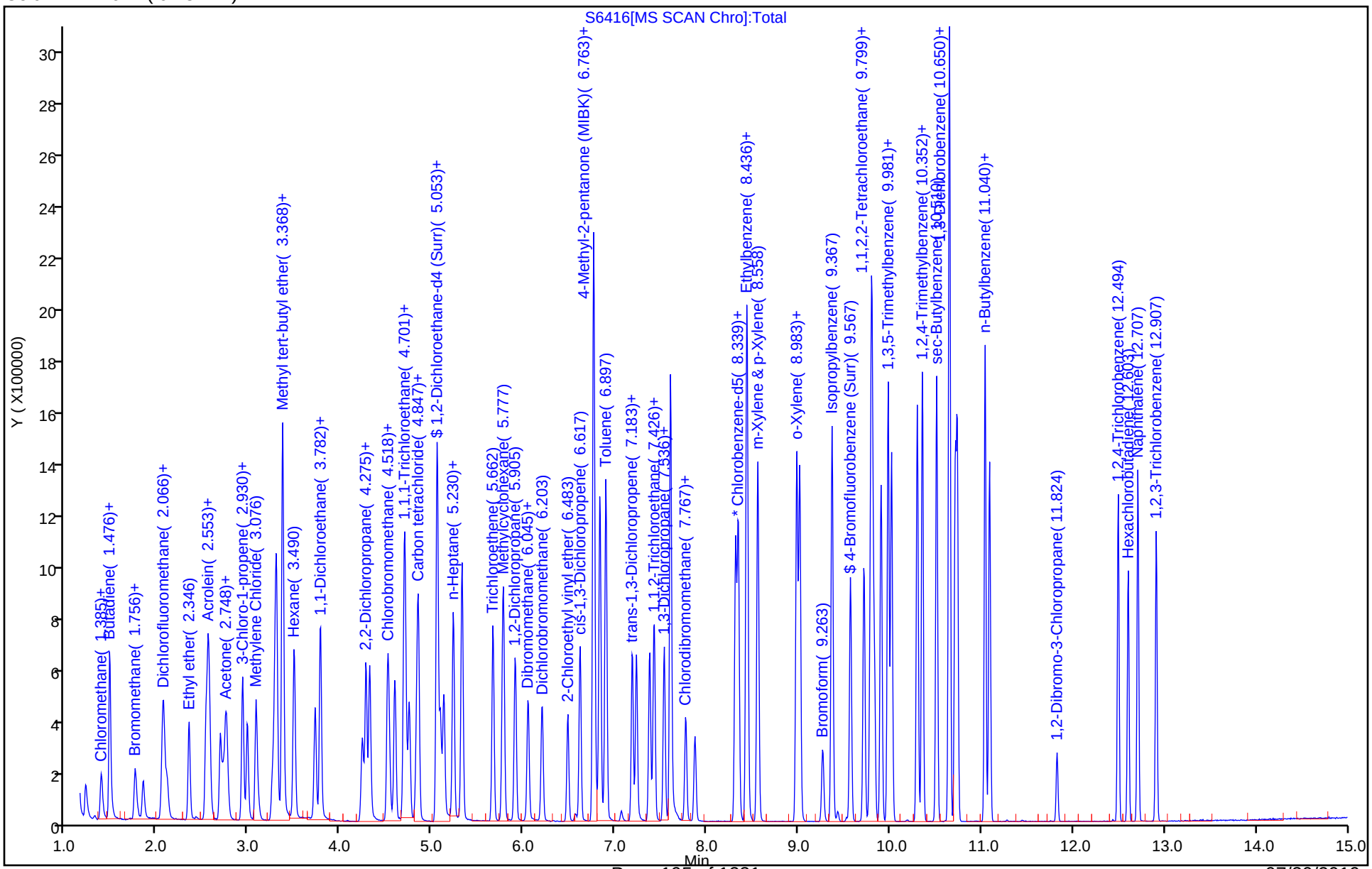
Report Date: 25-Jun-2019 12:58:29 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6416.D

Injection Date:	24-Jun-2019 15:50:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	ICIS 5			Worklist Smp#:	16
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6417.D
Lims ID: IC 6
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Jun-2019 16:13:30 ALS Bottle#: 15 Worklist Smp#: 17
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 6
Misc. Info.: 480-0082155-017
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:32 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 25-Jun-2019 10:44:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	156650	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	319159	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	41	317967	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	54	205879	25.0	25.3	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.053	0.000	40	127040	25.0	24.6	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	54	799272	25.0	25.5	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.567	0.000	88	268397	25.0	25.3	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	88	400155	50.0	50.4	
12 Chloromethane	50	1.385	1.385	0.000	89	463446	50.0	48.8	
151 Butadiene	54	1.476	1.476	0.000	90	458065	50.0	51.8	
13 Vinyl chloride	62	1.482	1.482	0.000	64	463461	50.0	51.8	
14 Bromomethane	94	1.756	1.756	0.000	92	305328	50.0	47.3	
15 Chloroethane	64	1.841	1.841	0.000	99	285890	50.0	48.1	
16 Dichlorofluoromethane	67	2.060	2.060	0.000	81	670642	50.0	49.8	
17 Trichlorofluoromethane	101	2.072	2.066	0.006	74	656271	50.0	52.1	
18 Ethyl ether	59	2.340	2.346	-0.006	92	417877	50.0	48.3	
20 Acrolein	56	2.529	2.529	0.000	96	441043	250.0	230.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	76	393287	50.0	51.7	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	88	373376	50.0	48.0	
23 Acetone	43	2.687	2.687	0.000	98	704053	250.0	208.0	
25 Iodomethane	142	2.723	2.723	0.000	99	715241	50.0	49.2	
26 Carbon disulfide	76	2.754	2.754	0.000	99	1293948	50.0	50.7	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	87	703632	50.0	49.0	
27 Methyl acetate	43	2.979	2.979	0.000	95	838729	100.0	94.5	
30 Methylene Chloride	84	3.076	3.076	0.000	91	446245	50.0	49.0	
31 2-Methyl-2-propanol	59	3.253	3.259	-0.006	94	435128	500.0	425.6	
32 Methyl tert-butyl ether	73	3.283	3.289	-0.006	92	1268476	50.0	48.6	
34 trans-1,2-Dichloroethene	96	3.301	3.301	0.000	96	439438	50.0	50.1	
33 Acrylonitrile	53	3.368	3.368	0.000	99	2059166	500.0	473.1	
35 Hexane	57	3.490	3.490	0.000	93	698911	50.0	53.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	766890	50.0	49.6	
37 Vinyl acetate	43	3.776	3.782	-0.006	98	2172121	100.0	112.2	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	91	387722	50.0	48.5	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	66	490250	50.0	49.4	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	95	1331480	250.0	241.9	
48 Chlorobromomethane	128	4.512	4.512	0.000	92	261799	50.0	48.9	
49 Tetrahydrofuran	42	4.524	4.530	-0.006	87	369411	100.0	95.7	
50 Chloroform	83	4.591	4.591	0.000	95	793239	50.0	46.9	
51 1,1,1-Trichloroethane	97	4.695	4.695	0.000	85	660352	50.0	52.0	
52 Cyclohexane	56	4.701	4.701	0.000	91	817337	50.0	52.9	
55 Carbon tetrachloride	117	4.834	4.834	0.000	80	568091	50.0	53.6	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	93	613708	50.0	52.3	
57 Benzene	78	5.053	5.053	0.000	97	1810985	50.0	51.0	
53 Isobutyl alcohol	43	5.090	5.090	0.000	92	529532	1250.0	1285.2	
58 1,2-Dichloroethane	62	5.126	5.126	0.000	73	673459	50.0	48.4	
59 n-Heptane	43	5.230	5.230	0.000	92	766104	50.0	57.2	
62 Trichloroethene	95	5.662	5.662	0.000	93	464415	50.0	51.1	
64 Methylcyclohexane	83	5.777	5.777	0.000	92	831374	50.0	52.8	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	91	438712	50.0	51.0	
67 Dibromomethane	93	6.045	6.045	0.000	86	289794	50.0	48.4	
66 1,4-Dioxane	88	6.057	6.051	0.006	40	104525	1000.0	1008.2	
68 Dichlorobromomethane	83	6.203	6.203	0.000	93	577073	50.0	52.6	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	93	340269	50.0	53.7	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	87	729645	50.0	54.5	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	2990352	250.0	256.2	
74 Toluene	92	6.897	6.897	0.000	90	1142953	50.0	50.0	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	93	707479	50.0	56.4	
75 Ethyl methacrylate	69	7.231	7.231	0.000	72	637980	50.0	55.2	
79 1,1,2-Trichloroethane	83	7.377	7.377	0.000	87	346978	50.0	51.2	
81 Tetrachloroethene	166	7.426	7.426	0.000	80	513917	50.0	51.3	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	95	739746	50.0	51.9	
80 2-Hexanone	43	7.602	7.602	0.000	97	2275269	250.0	262.7	
83 Chlorodibromomethane	129	7.767	7.767	0.000	89	471415	50.0	56.8	
84 Ethylene Dibromide	107	7.870	7.870	0.000	97	465789	50.0	52.7	
87 Chlorobenzene	112	8.345	8.345	0.000	94	1295534	50.0	51.3	
88 Ethylbenzene	91	8.436	8.436	0.000	98	2200065	50.0	52.6	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	42	441977	50.0	55.7	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	98	878845	50.0	52.6	
91 o-Xylene	106	8.983	8.983	0.000	97	838548	50.0	51.2	
92 Styrene	104	9.014	9.014	0.000	93	1449515	50.0	52.6	
95 Bromoform	173	9.263	9.263	0.000	95	324380	50.0	61.1	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	2153426	50.0	53.8	
101 Bromobenzene	156	9.720	9.720	0.000	94	569302	50.0	51.7	
97 1,1,2,2-Tetrachloroethane	83	9.786	9.786	0.000	64	601624	50.0	51.8	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	2609900	50.0	54.6	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	77	211262	50.0	52.4	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	83	242794	50.0	57.7	
103 2-Chlorotoluene	126	9.902	9.902	0.000	94	511917	50.0	51.6	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	93	1782077	50.0	52.3	
105 4-Chlorotoluene	126	10.018	10.018	0.000	97	542704	50.0	51.8	
106 tert-Butylbenzene	134	10.297	10.297	0.000	91	396285	50.0	51.6	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	77	1800081	50.0	52.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.510	10.510	0.000	94	2243895	50.0	52.9	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	84	1068879	50.0	51.1	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	96	1971761	50.0	52.0	
113 1,4-Dichlorobenzene	146	10.735	10.735	0.000	94	1082105	50.0	50.3	
115 n-Butylbenzene	91	11.040	11.040	0.000	95	1740458	50.0	52.0	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	92	1004352	50.0	48.1	
117 1,2-Dibromo-3-Chloropropan	75	11.824	11.824	0.000	81	98511	50.0	50.5	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	94	581955	50.0	42.7	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	95	283210	50.0	43.4	
121 Naphthalene	128	12.707	12.707	0.000	97	1597623	50.0	43.9	
122 1,2,3-Trichlorobenzene	180	12.907	12.907	0.000	93	499786	50.0	38.2	
S 125 1,2-Dichloroethene, Total	1				0			99.5	
S 123 Total BTEX	1				0			257.4	
S 126 1,3-Dichloropropene, Total	1				0			110.9	
S 124 Xylenes, Total	1				0			103.8	

Reagents:

8260 CORP mix_00158	Amount Added: 25.00	Units: uL		
GAS CORP mix_00347	Amount Added: 25.00	Units: uL		
S_8260_IS_00321	Amount Added: 1.00	Units: uL	Run Reagent	
S_8260_Surr_00320	Amount Added: 1.00	Units: uL	Run Reagent	

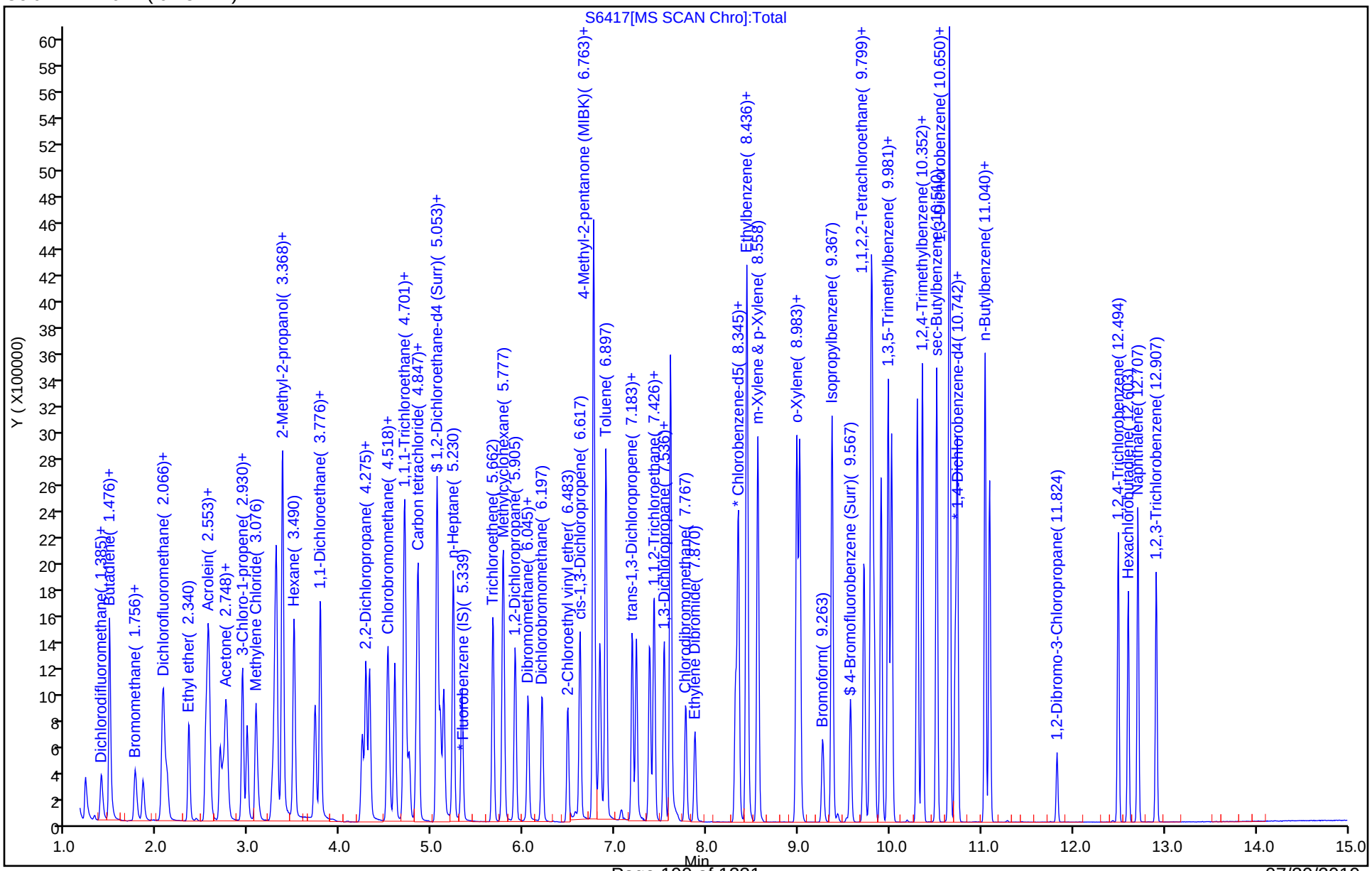
Report Date: 25-Jun-2019 12:58:34 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6417.D

Injection Date:	24-Jun-2019 16:13:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 6			Worklist Smp#:	17
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	15
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6418.D
Lims ID: IC 7
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 24-Jun-2019 16:36:30 ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: IC 7
Misc. Info.: 480-0082155-018
Operator ID: LH Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:37 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 25-Jun-2019 10:47:18

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	159312	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	333590	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	16	315559	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	56	202895	25.0	24.5	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.053	0.001	41	131413	25.0	25.0	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	18	819741	25.0	25.0	
$ 6 4-Bromofluorobenzene (Surr	174	9.574	9.567	0.007	94	260169	25.0	23.5	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	98	794180	100.0	98.4	
12 Chloromethane	50	1.385	1.385	0.000	99	938448	100.0	97.2	
151 Butadiene	54	1.477	1.476	0.000	92	907444	100.0	100.8	
13 Vinyl chloride	62	1.483	1.482	0.001	59	934287	100.0	102.6	
14 Bromomethane	94	1.756	1.756	0.000	92	632109	100.0	96.3	
15 Chloroethane	64	1.848	1.841	0.007	95	589690	100.0	97.6	
16 Dichlorofluoromethane	67	2.061	2.060	0.001	81	1378067	100.0	100.7	
17 Trichlorofluoromethane	101	2.073	2.066	0.007	81	1295724	100.0	101.1	
18 Ethyl ether	59	2.346	2.346	0.000	91	869860	100.0	98.9	
20 Acrolein	56	2.529	2.529	0.000	97	1002579	500.0	515.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.547	0.006	68	776282	100.0	100.3	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	88	774870	100.0	98.0	
23 Acetone	43	2.687	2.687	0.000	99	1711221	500.0	497.0	
25 Iodomethane	142	2.724	2.723	0.001	99	1475809	100.0	99.8	
26 Carbon disulfide	76	2.754	2.754	0.000	99	2647156	100.0	102.1	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	88	1480239	100.0	101.3	
27 Methyl acetate	43	2.979	2.979	0.000	96	1825858	200.0	202.3	
30 Methylene Chloride	84	3.076	3.076	0.000	90	932284	100.0	101.1	
31 2-Methyl-2-propanol	59	3.259	3.259	0.000	92	1171245	1000.0	1126.5	
32 Methyl tert-butyl ether	73	3.283	3.289	-0.006	92	2622366	100.0	98.8	
34 trans-1,2-Dichloroethene	96	3.302	3.301	0.001	93	919928	100.0	103.2	
33 Acrylonitrile	53	3.369	3.368	0.000	99	4600811	1000.0	1039.3	
35 Hexane	57	3.490	3.490	0.000	94	1304767	100.0	97.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	1581676	100.0	100.5	
37 Vinyl acetate	43	3.782	3.782	0.000	97	4737933	200.0	240.6	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	92	787238	100.0	96.9	
45 cis-1,2-Dichloroethene	96	4.275	4.275	0.000	67	997325	100.0	98.8	
43 2-Butanone (MEK)	43	4.318	4.317	0.001	98	2964082	500.0	529.5	
48 Chlorobromomethane	128	4.512	4.512	0.000	92	529476	100.0	97.3	
49 Tetrahydrofuran	42	4.530	4.530	0.000	86	761925	200.0	194.1	
50 Chloroform	83	4.591	4.591	0.000	81	1629317	100.0	94.7	
51 1,1,1-Trichloroethane	97	4.701	4.695	0.007	85	1349493	100.0	104.4	
52 Cyclohexane	56	4.701	4.701	0.000	91	1548134	100.0	98.5	
55 Carbon tetrachloride	117	4.835	4.834	0.001	81	1187453	100.0	110.1	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	92	1236325	100.0	103.6	
57 Benzene	78	5.054	5.053	0.001	97	3719387	100.0	103.0	
53 Isobutyl alcohol	43	5.090	5.090	0.000	93	1285236	2500.0	3067.2	
58 1,2-Dichloroethane	62	5.127	5.126	0.001	74	1401933	100.0	99.0	
59 n-Heptane	43	5.230	5.230	0.000	92	1430842	100.0	105.1	
62 Trichloroethene	95	5.668	5.662	0.006	93	957065	100.0	103.6	
64 Methylcyclohexane	83	5.778	5.777	0.001	91	1580141	100.0	98.6	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	90	899856	100.0	102.9	
67 Dibromomethane	93	6.045	6.045	0.000	90	617328	100.0	101.5	
66 1,4-Dioxane	88	6.051	6.051	0.000	37	205613	2000.0	1897.5	M
68 Dichlorobromomethane	83	6.203	6.203	0.000	96	1227068	100.0	109.9	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	93	703763	100.0	109.3	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	88	1538748	100.0	112.9	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	6381702	500.0	523.1	
74 Toluene	92	6.897	6.897	0.000	91	2371665	100.0	99.3	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	93	1488419	100.0	113.5	
75 Ethyl methacrylate	69	7.232	7.231	0.001	83	1385837	100.0	114.7	
79 1,1,2-Trichloroethane	83	7.378	7.377	0.001	87	713937	100.0	100.7	
81 Tetrachloroethene	166	7.426	7.426	0.000	86	1031564	100.0	98.5	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	94	1509461	100.0	101.3	
80 2-Hexanone	43	7.603	7.602	0.001	97	4753768	500.0	525.2	
83 Chlorodibromomethane	129	7.773	7.767	0.006	89	981204	100.0	113.1	
84 Ethylene Dibromide	107	7.870	7.870	0.000	98	957914	100.0	103.6	
87 Chlorobenzene	112	8.345	8.345	0.000	93	2674935	100.0	101.3	
88 Ethylbenzene	91	8.436	8.436	0.000	98	4502376	100.0	103.0	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	42	924407	100.0	111.5	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	99	1767262	100.0	101.2	
91 o-Xylene	106	8.984	8.983	0.001	97	1718945	100.0	100.3	
92 Styrene	104	9.014	9.014	0.000	94	2956138	100.0	102.6	
95 Bromoform	173	9.263	9.263	0.000	96	691420	100.0	124.7	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	4398964	100.0	110.8	
101 Bromobenzene	156	9.720	9.720	0.000	92	1162822	100.0	106.4	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.786	0.001	66	1223225	100.0	106.2	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	5236720	100.0	110.4	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	75	424344	100.0	106.0	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	81	485339	100.0	116.2	
103 2-Chlorotoluene	126	9.902	9.902	0.000	96	1051204	100.0	106.7	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	92	3631731	100.0	107.5	
105 4-Chlorotoluene	126	10.018	10.018	0.000	97	1120615	100.0	107.8	
106 tert-Butylbenzene	134	10.298	10.297	0.001	91	784868	100.0	103.0	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	76	3653946	100.0	106.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.511	10.510	0.001	94	4447424	100.0	105.6	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	85	2114820	100.0	102.0	
110 4-Isopropyltoluene	119	10.651	10.650	0.001	97	3877243	100.0	103.1	
113 1,4-Dichlorobenzene	146	10.736	10.735	0.001	94	2155392	100.0	101.0	
115 n-Butylbenzene	91	11.040	11.040	0.000	95	3448657	100.0	103.9	
116 1,2-Dichlorobenzene	146	11.089	11.088	0.001	93	1981639	100.0	95.6	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.824	0.001	84	217788	100.0	112.5	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	94	1190064	100.0	88.0	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	96	542957	100.0	83.8	
121 Naphthalene	128	12.707	12.707	0.000	97	3529694	100.0	97.8	
122 1,2,3-Trichlorobenzene	180	12.908	12.907	0.001	92	1104524	100.0	85.1	
S 125 1,2-Dichloroethene, Total	1				0			202.0	
S 123 Total BTEX	1				0			506.8	
S 126 1,3-Dichloropropene, Total	1				0			226.5	
S 124 Xylenes, Total	1				0			201.5	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00158	Amount Added:	50.00	Units: uL	
GAS CORP mix_00347	Amount Added:	50.00	Units: uL	
S_8260_IS_00321	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00320	Amount Added:	1.00	Units: uL	Run Reagent

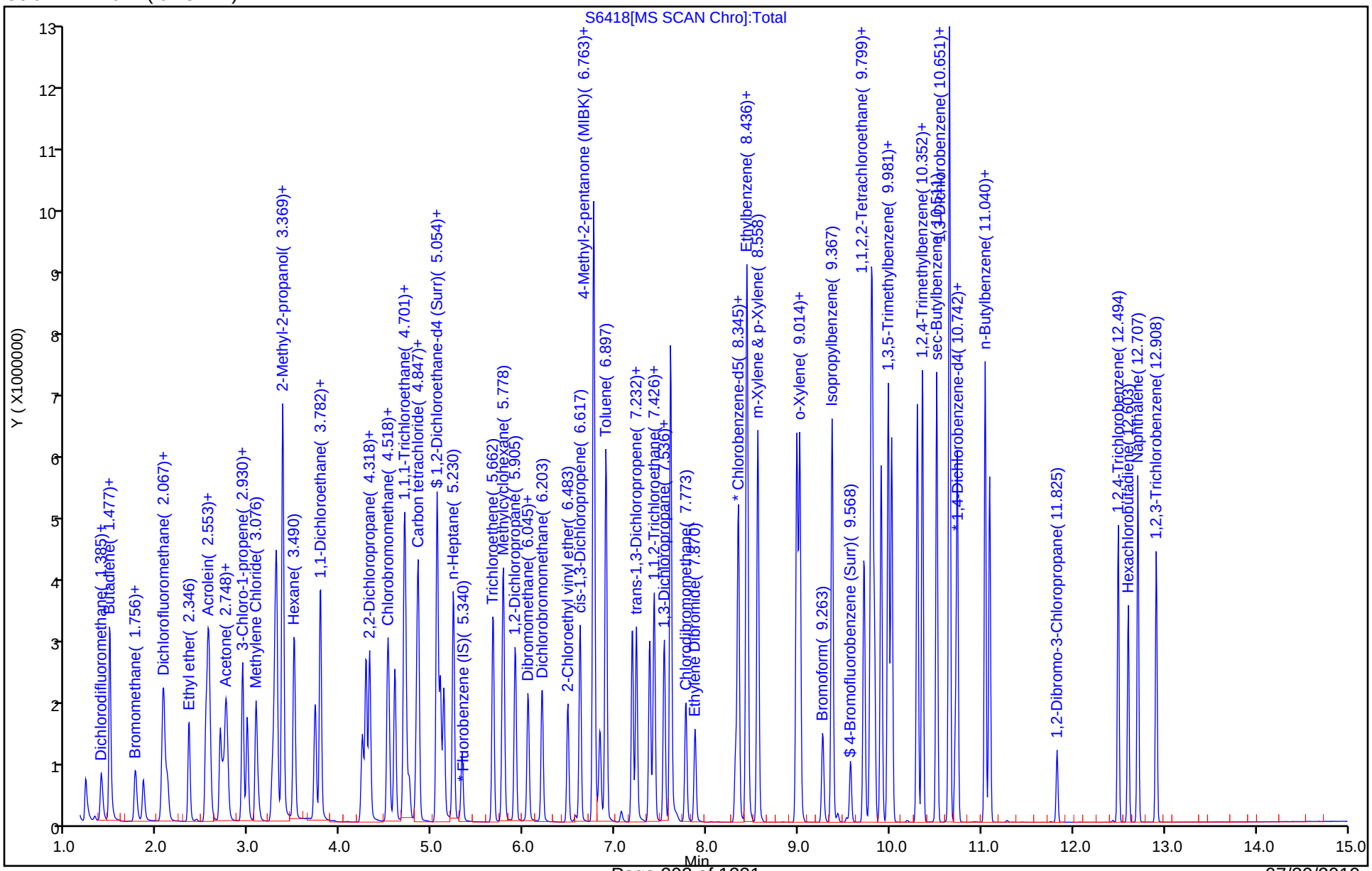
Report Date: 25-Jun-2019 12:58:39 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6418.D

Injection Date:	24-Jun-2019 16:36:30	Instrument ID:	HP5973S	Operator ID:	LH
Lims ID:	IC 7			Worklist Smp#:	18
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

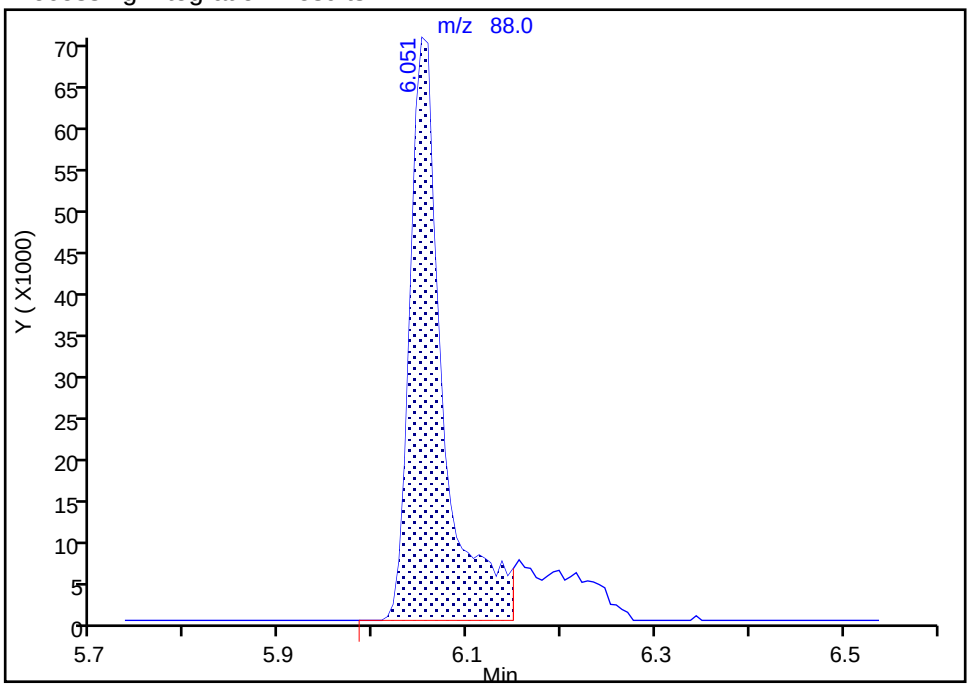
Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6418.D
Injection Date: 24-Jun-2019 16:36:30 Instrument ID: HP5973S
Lims ID: IC 7
Client ID:
Operator ID: LH ALS Bottle#: 16 Worklist Smp#: 18
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

66 1,4-Dioxane, CAS: 123-91-1

Signal: 1

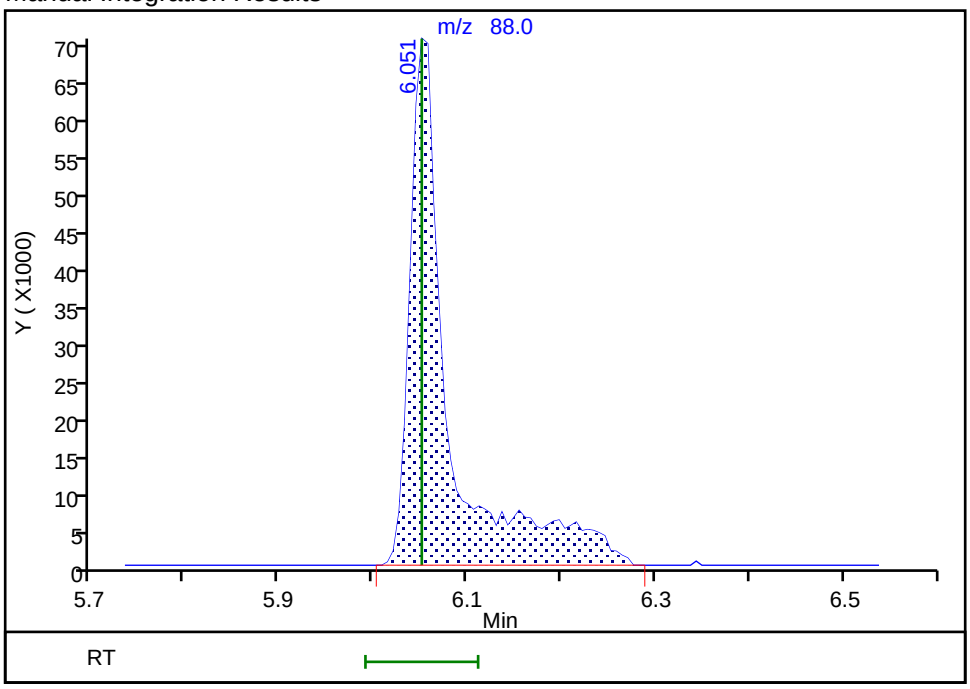
Processing Integration Results

RT: 6.05
Area: 172139
Amount: 1991.6093
Amount Units: ug/L



Manual Integration Results

RT: 6.05
Area: 205613
Amount: 1897.5207
Amount Units: ug/L



Reviewer: HillL, 25-Jun-2019 10:47:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482015/3 Calibration Date: 07/15/2019 09:37

Instrument ID: HP5973S Calib Start Date: 06/24/2019 13:55

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 06/24/2019 16:36

Lab File ID: S6961.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.266	1.358	0.1000	26.8	25.0	7.3	50.0
Chloromethane	Ave	1.515	1.645	0.1000	27.1	25.0	8.6	20.0
Butadiene	Ave	1.412	1.734		30.7	25.0	22.8*	20.0
Vinyl chloride	Ave	1.429	1.508	0.1000	26.4	25.0	5.5	20.0
Bromomethane	Ave	1.030	1.019	0.1000	24.7	25.0	-1.0	50.0
Chloroethane	Ave	0.9479	0.9919	0.1000	26.2	25.0	4.6	50.0
Dichlorofluoromethane	Ave	2.147	2.165		25.2	25.0	0.8	20.0
Trichlorofluoromethane	Ave	2.011	2.025	0.1000	25.2	25.0	0.7	20.0
Ethyl ether	Ave	1.380	1.395		25.3	25.0	1.1	20.0
Acrolein	Ave	0.3051	0.2784		114	125	-8.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.215	1.282	0.1000	26.4	25.0	5.5	20.0
1,1-Dichloroethene	Ave	1.241	1.166	0.1000	23.5	25.0	-6.1	20.0
Acetone	Ave	0.5403	0.7154	0.1000	166	125	32.4	50.0
Iodomethane	Ave	2.320	2.046		22.1	25.0	-11.8	20.0
Carbon disulfide	Ave	4.070	3.811	0.1000	23.4	25.0	-6.4	20.0
Allyl chloride	Ave	2.292	2.337		25.5	25.0	2.0	20.0
Methyl acetate	Ave	1.416	1.551	0.1000	54.8	50.0	9.5	50.0
Methylene Chloride	Lin1		1.399	0.1000	23.8	25.0	-4.6	20.0
2-Methyl-2-propanol	Ave	0.1632	0.1831		281	250	12.2	50.0
Methyl tert-butyl ether	Ave	4.164	3.946	0.1000	23.7	25.0	-5.2	20.0
trans-1,2-Dichloroethene	Ave	1.399	1.301	0.1000	23.3	25.0	-7.0	20.0
Acrylonitrile	Ave	0.6947	0.7916		285	250	14.0	20.0
Hexane	Ave	2.097	2.403		28.6	25.0	14.6	20.0
1,1-Dichloroethane	Ave	2.470	2.452	0.2000	24.8	25.0	-0.7	20.0
Vinyl acetate	Ave	3.090	3.157		51.1	50.0	2.2	20.0
2,2-Dichloropropane	Ave	1.275	1.218		23.9	25.0	-4.5	20.0
cis-1,2-Dichloroethene	Ave	1.584	1.481	0.1000	23.4	25.0	-6.5	20.0
2-Butanone (MEK)	Ave	0.8784	1.032	0.1000	147	125	17.4	20.0
Chlorobromomethane	Ave	0.8538	0.7733		22.6	25.0	-9.4	20.0
Tetrahydrofuran	Ave	0.6160	0.6727		54.6	50.0	9.2	20.0
Chloroform	Ave	2.701	2.363	0.2000	21.9	25.0	-12.5	20.0
1,1,1-Trichloroethane	Ave	2.028	1.904	0.1000	23.5	25.0	-6.1	20.0
Cyclohexane	Ave	2.467	2.642	0.1000	26.8	25.0	7.1	20.0
Carbon tetrachloride	Ave	1.692	1.703	0.1000	25.2	25.0	0.6	20.0
1,1-Dichloropropene	Ave	1.873	1.909		25.5	25.0	1.9	20.0
Benzene	Ave	5.667	5.575	0.5000	24.6	25.0	-1.6	20.0
Isobutyl alcohol	Ave	0.0658	0.0850		808	625	29.3	50.0
1,2-Dichloroethane	Ave	2.221	2.125	0.1000	23.9	25.0	-4.3	20.0
n-Heptane	Ave	2.137	2.703		31.6	25.0	26.5*	20.0
Trichloroethene	Ave	1.449	1.396	0.2000	24.1	25.0	-3.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482015/3 Calibration Date: 07/15/2019 09:37

Instrument ID: HP5973S Calib Start Date: 06/24/2019 13:55

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 06/24/2019 16:36

Lab File ID: S6961.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.515	2.511	0.1000	25.0	25.0	-0.1	20.0
1,2-Dichloropropane	Ave	1.373	1.384	0.1000	25.2	25.0	0.9	20.0
Dibromomethane	Ave	0.9549	0.9047	0.1000	23.7	25.0	-5.3	20.0
1,4-Dioxane	Ave	0.0081	0.0098		602	500	20.3	50.0
Bromodichloromethane	Ave	1.752	1.707	0.2000	24.4	25.0	-2.6	20.0
2-Chloroethyl vinyl ether	Ave	1.011	1.092		27.0	25.0	8.0	20.0
cis-1,3-Dichloropropene	Ave	2.138	2.182	0.2000	25.5	25.0	2.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9142	1.009	0.1000	138	125	10.4	20.0
Toluene	Ave	1.790	1.737	0.4000	24.3	25.0	-3.0	20.0
trans-1,3-Dichloropropene	Ave	0.9824	1.006	0.1000	25.6	25.0	2.4	20.0
Ethyl methacrylate	Ave	0.9052	0.9175		25.3	25.0	1.4	20.0
1,1,2-Trichloroethane	Ave	0.5312	0.5335	0.1000	25.1	25.0	0.4	20.0
Tetrachloroethene	Ave	0.7846	0.7655	0.2000	24.4	25.0	-2.4	20.0
1,3-Dichloropropane	Ave	1.117	1.131		25.3	25.0	1.3	20.0
2-Hexanone	Ave	0.6784	0.7380	0.1000	136	125	8.8	20.0
Dibromochloromethane	Ave	0.6502	0.6478	0.1000	24.9	25.0	-0.4	20.0
1,2-Dibromoethane	Ave	0.6930	0.6545		23.6	25.0	-5.6	20.0
Chlorobenzene	Ave	1.980	1.918	0.5000	24.2	25.0	-3.1	20.0
Ethylbenzene	Ave	3.275	3.170	0.1000	24.2	25.0	-3.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6213	0.6236		25.1	25.0	0.4	20.0
m,p-Xylene	Ave	1.309	1.249	0.1000	23.9	25.0	-4.5	20.0
o-Xylene	Ave	1.284	1.190	0.3000	23.2	25.0	-7.3	20.0
Styrene	Ave	2.159	2.063	0.3000	23.9	25.0	-4.5	20.0
Bromoform	Ave	0.4156	0.4366	0.1000	26.3	25.0	5.1	50.0
Isopropylbenzene	Ave	3.145	3.243	0.1000	25.8	25.0	3.1	20.0
Bromobenzene	Ave	0.8655	0.8623		24.9	25.0	-0.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9127	0.9211	0.3000	25.2	25.0	0.9	20.0
N-Propylbenzene	Ave	3.757	3.890		25.9	25.0	3.5	20.0
1,2,3-Trichloropropane	Ave	0.3171	0.3103		24.5	25.0	-2.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3310	0.2738		20.7	25.0	-17.3	50.0
2-Chlorotoluene	Ave	0.7803	0.7676		24.6	25.0	-1.6	20.0
1,3,5-Trimethylbenzene	Ave	2.677	2.714		25.3	25.0	1.4	20.0
4-Chlorotoluene	Ave	0.8238	0.8275		25.1	25.0	0.5	20.0
tert-Butylbenzene	Ave	0.6037	0.6052		25.1	25.0	0.2	20.0
1,2,4-Trimethylbenzene	Ave	2.721	2.718		25.0	25.0	-0.1	20.0
sec-Butylbenzene	Ave	3.337	3.369		25.2	25.0	1.0	20.0
1,3-Dichlorobenzene	Ave	1.643	1.637	0.6000	24.9	25.0	-0.4	20.0
4-Isopropyltoluene	Ave	2.980	2.964		24.9	25.0	-0.5	20.0
1,4-Dichlorobenzene	Ave	1.691	1.662	0.5000	24.6	25.0	-1.7	20.0
n-Butylbenzene	Ave	2.630	2.681		25.5	25.0	2.0	20.0
1,2-Dichlorobenzene	Ave	1.643	1.532	0.4000	23.3	25.0	-6.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482015/3 Calibration Date: 07/15/2019 09:37

Instrument ID: HP5973S Calib Start Date: 06/24/2019 13:55

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 06/24/2019 16:36

Lab File ID: S6961.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1534	0.1562	0.0500	25.5	25.0	1.8	50.0
1,2,4-Trichlorobenzene	Ave	1.071	0.9013	0.2000	21.0	25.0	-15.8	20.0
Hexachlorobutadiene	Ave	0.5136	0.4312		21.0	25.0	-16.0	20.0
Naphthalene	Ave	2.860	2.356		20.6	25.0	-17.6	20.0
1,2,3-Trichlorobenzene	Ave	1.029	0.7652		18.6	25.0	-25.6*	20.0
Dibromofluoromethane (Surr)	Ave	1.300	1.242		23.9	25.0	-4.5	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8241	0.8398		25.5	25.0	1.9	20.0
Toluene-d8 (Surr)	Ave	2.459	2.499		25.4	25.0	1.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8306	0.7743		23.3	25.0	-6.8	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6961.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 15-Jul-2019 09:37:30 ALS Bottle#: 3 Worklist Smp#: 3
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: CCVIS
Misc. Info.: 480-0082614-003
Operator ID: KN Instrument ID: HP5973S
Sublist: chrom-S-8260*sub26

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:52:50 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: nowakk Date: 15-Jul-2019 10:08:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.321	5.321	0.000	98	146354	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	86	299159	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	50	287705	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	56	181839	25.0	23.9	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	51	122903	25.0	25.5	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	80	747528	25.0	25.4	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.568	0.000	87	231628	25.0	23.3	
10 Dichlorodifluoromethane	85	1.221	1.221	0.000	86	198818	25.0	26.8	
12 Chloromethane	50	1.391	1.391	0.000	88	240696	25.0	27.1	
13 Vinyl chloride	62	1.483	1.483	0.000	52	220703	25.0	26.4	
151 Butadiene	54	1.483	1.483	0.000	92	253820	25.0	30.7	
14 Bromomethane	94	1.762	1.762	0.000	93	149145	25.0	24.7	
15 Chloroethane	64	1.848	1.848	0.000	98	145170	25.0	26.2	
16 Dichlorofluoromethane	67	2.060	2.060	0.000	81	316892	25.0	25.2	
17 Trichlorofluoromethane	101	2.067	2.067	0.000	60	296370	25.0	25.2	
18 Ethyl ether	59	2.346	2.346	0.000	93	204193	25.0	25.3	
20 Acrolein	56	2.529	2.529	0.000	96	203753	125.0	114.1	
21 1,1,2-Trichloro-1,2,2-trif	101	2.559	2.559	0.000	60	187663	25.0	26.4	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	86	170579	25.0	23.5	
23 Acetone	43	2.687	2.687	0.000	98	523523	125.0	165.5	
25 Iodomethane	142	2.717	2.717	0.000	100	299477	25.0	22.1	
26 Carbon disulfide	76	2.754	2.754	0.000	99	557707	25.0	23.4	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	88	342019	25.0	25.5	
27 Methyl acetate	43	2.979	2.979	0.000	96	454112	50.0	54.8	
30 Methylene Chloride	84	3.076	3.076	0.000	94	204739	25.0	23.8	
31 2-Methyl-2-propanol	59	3.253	3.253	0.000	93	268027	250.0	280.6	
32 Methyl tert-butyl ether	73	3.283	3.283	0.000	92	577504	25.0	23.7	
34 trans-1,2-Dichloroethene	96	3.302	3.302	0.000	91	190433	25.0	23.3	
33 Acrylonitrile	53	3.368	3.368	0.000	98	1158572	250.0	284.9	
35 Hexane	57	3.490	3.490	0.000	93	351724	25.0	28.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	358868	25.0	24.8	
37 Vinyl acetate	43	3.776	3.776	0.000	98	924066	50.0	51.1	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	93	178219	25.0	23.9	
45 cis-1,2-Dichloroethene	96	4.281	4.281	0.000	66	216821	25.0	23.4	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	99	754932	125.0	146.8	
48 Chlorobromomethane	128	4.512	4.512	0.000	93	113169	25.0	22.6	
49 Tetrahydrofuran	42	4.530	4.530	0.000	89	196898	50.0	54.6	
50 Chloroform	83	4.591	4.591	0.000	81	345772	25.0	21.9	
52 Cyclohexane	56	4.701	4.701	0.000	93	386698	25.0	26.8	
51 1,1,1-Trichloroethane	97	4.701	4.701	0.000	77	278622	25.0	23.5	
55 Carbon tetrachloride	117	4.835	4.835	0.000	79	249191	25.0	25.2	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	91	279460	25.0	25.5	
57 Benzene	78	5.054	5.054	0.000	97	815872	25.0	24.6	
53 Isobutyl alcohol	43	5.090	5.090	0.000	91	311121	625.0	808.2	
58 1,2-Dichloroethane	62	5.127	5.127	0.000	73	311062	25.0	23.9	
59 n-Heptane	43	5.230	5.230	0.000	95	395627	25.0	31.6	
62 Trichloroethene	95	5.662	5.662	0.000	93	204247	25.0	24.1	
64 Methylcyclohexane	83	5.778	5.778	0.000	94	367531	25.0	25.0	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	88	202593	25.0	25.2	
67 Dibromomethane	93	6.045	6.045	0.000	88	132407	25.0	23.7	
66 1,4-Dioxane	88	6.057	6.057	0.000	50	58467	500.0	601.7	
68 Dichlorobromomethane	83	6.203	6.203	0.000	98	249830	25.0	24.4	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	91	159820	25.0	27.0	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	86	319329	25.0	25.5	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	98	1509468	125.0	138.0	
74 Toluene	92	6.897	6.897	0.000	87	519709	25.0	24.3	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	94	301024	25.0	25.6	
75 Ethyl methacrylate	69	7.232	7.232	0.000	74	274468	25.0	25.3	
79 1,1,2-Trichloroethane	83	7.371	7.371	0.000	87	159585	25.0	25.1	
81 Tetrachloroethene	166	7.426	7.426	0.000	80	229015	25.0	24.4	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	96	338363	25.0	25.3	
80 2-Hexanone	43	7.603	7.603	0.000	97	1103897	125.0	136.0	
83 Chlorodibromomethane	129	7.773	7.773	0.000	86	193805	25.0	24.9	
84 Ethylene Dibromide	107	7.870	7.870	0.000	98	195791	25.0	23.6	
87 Chlorobenzene	112	8.345	8.345	0.000	93	573926	25.0	24.2	
88 Ethylbenzene	91	8.436	8.436	0.000	99	948461	25.0	24.2	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	42	186560	25.0	25.1	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	98	373795	25.0	23.9	
91 o-Xylene	106	8.984	8.984	0.000	98	356029	25.0	23.2	
92 Styrene	104	9.014	9.014	0.000	94	617113	25.0	23.9	
95 Bromoform	173	9.263	9.263	0.000	96	130626	25.0	26.3	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	933060	25.0	25.8	
101 Bromobenzene	156	9.720	9.720	0.000	91	248089	25.0	24.9	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.787	0.000	68	264998	25.0	25.2	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	1119274	25.0	25.9	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	77	89269	25.0	24.5	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	81	78778	25.0	20.7	
103 2-Chlorotoluene	126	9.902	9.902	0.000	94	220855	25.0	24.6	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	92	780770	25.0	25.3	
105 4-Chlorotoluene	126	10.018	10.018	0.000	97	238083	25.0	25.1	
106 tert-Butylbenzene	134	10.298	10.298	0.000	91	174127	25.0	25.1	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	77	782037	25.0	25.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
109 sec-Butylbenzene	105	10.511	10.511	0.000	94	969214	25.0	25.2	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	87	471074	25.0	24.9	
110 4-Isopropyltoluene	119	10.650	10.650	0.000	95	852897	25.0	24.9	
113 1,4-Dichlorobenzene	146	10.736	10.736	0.000	94	478290	25.0	24.6	
115 n-Butylbenzene	91	11.040	11.040	0.000	95	771347	25.0	25.5	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	92	440621	25.0	23.3	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.825	0.000	68	44943	25.0	25.5	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	94	259299	25.0	21.0	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	92	124046	25.0	21.0	
121 Naphthalene	128	12.707	12.707	0.000	97	677975	25.0	20.6	
122 1,2,3-Trichlorobenzene	180	12.914	12.914	0.000	95	220152	25.0	18.6	

Reagents:

8260 CORP mix_00160	Amount Added: 12.50	Units: uL	
GAS CORP mix_00350	Amount Added: 12.50	Units: uL	
S_8260_IS_00322	Amount Added: 1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added: 1.00	Units: uL	Run Reagent

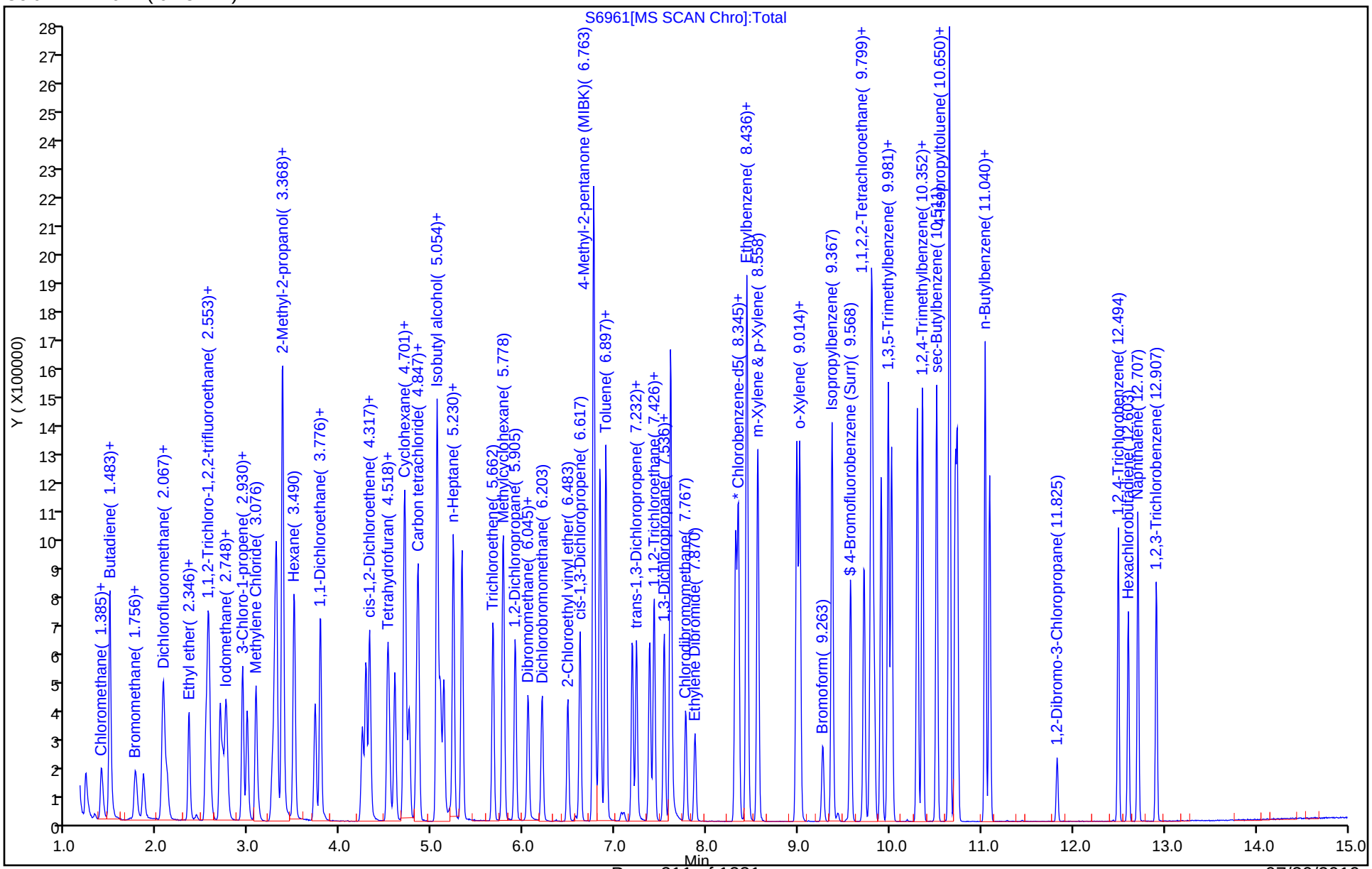
Report Date: 15-Jul-2019 18:52:51 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6961.D

Injection Date:	15-Jul-2019 09:37:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6409.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 24-Jun-2019 12:40:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Sample Info: BFB
Misc. Info.: 480-0082155-007
Operator ID: LH Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 25-Jun-2019 12:58:41 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1005

First Level Reviewer: HillL Date: 24-Jun-2019 12:50:29

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.686	3.686	0.000	0	310354	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

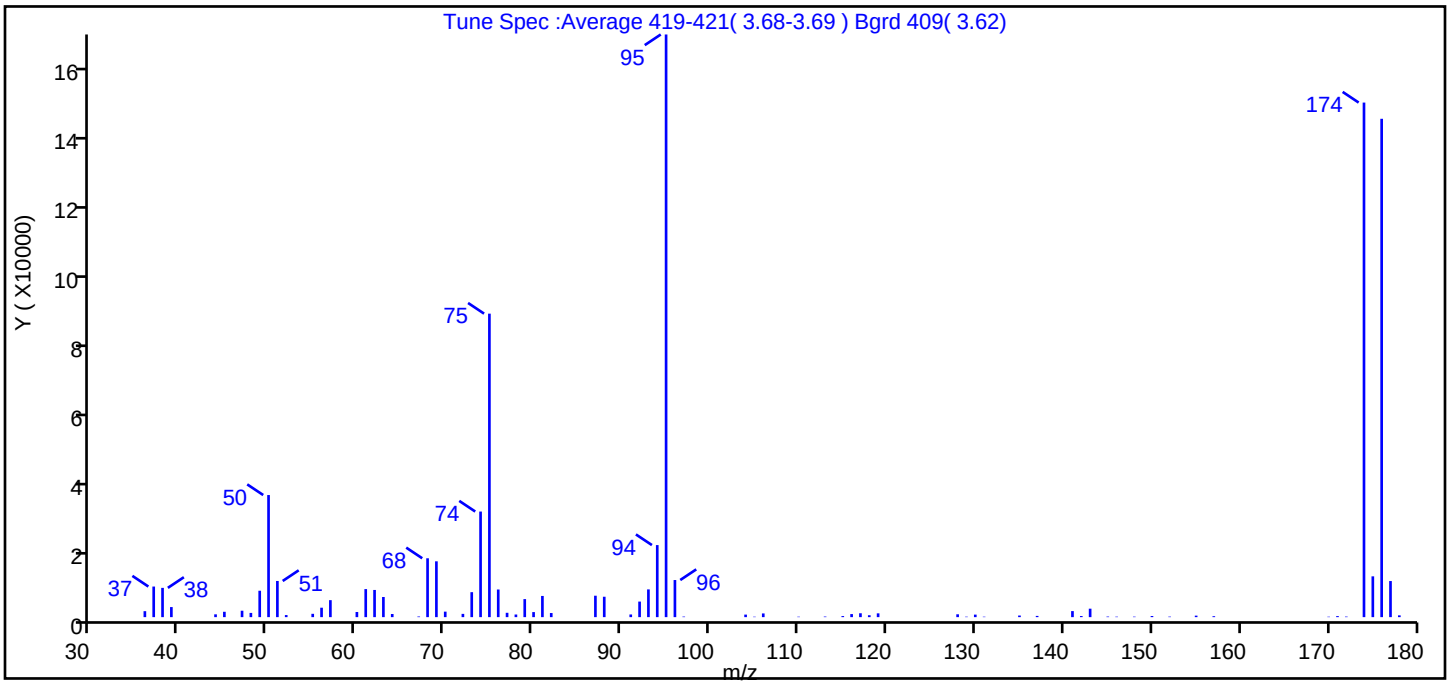
BFB_WRK_00089 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6409.D
Injection Date: 24-Jun-2019 12:40:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: LH ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.0
75	30 to 60% of m/z 95	52.1
96	5 to 9% of m/z 95	6.4
173	Less than 2% of m/z 174	0.0 (0.0)
174	50 to 120% of m/z 95	88.3
175	5 to 9% of m/z 174	7.0 (7.9)
176	Greater than 95% but less than 101% of m/z 174	85.5 (96.8)
177	5 to 9% of m/z 176	6.2 (7.2)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6409.D\S-8260.rslt\spectra.d
Injection Date: 24-Jun-2019 12:40:30
Spectrum: Tune Spec :Average 419-421(3.68-3.69) Bgrd 409(3.62)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1672	67.00	179	94.00	20184	141.00	1694
37.00	8570	68.00	16488	95.00	163200	142.00	307
38.00	8200	69.00	15638	96.00	10394	143.00	2369
39.00	2821	70.00	1541	97.00	155	145.00	162
44.00	788	72.00	916	104.00	713	146.00	133
45.00	1503	73.00	6994	105.00	121	148.00	137
47.00	1800	74.00	29576	106.00	1039	150.00	312
48.00	1184	75.00	85008	110.00	123	152.00	147
49.00	7396	76.00	7742	113.00	165	155.00	422
50.00	34200	77.00	1218	115.00	300	157.00	259
51.00	10130	78.00	740	116.00	861	170.00	120
52.00	580	79.00	5052	117.00	1089	171.00	289
55.00	932	80.00	1416	118.00	535	172.00	155
56.00	2645	81.00	5937	119.00	1063	174.00	144128
57.00	4759	82.00	1151	128.00	799	175.00	11428
60.00	1444	87.00	6001	129.00	130	176.00	139584
61.00	7855	88.00	5715	130.00	710	177.00	10110
62.00	7616	91.00	749	131.00	124	178.00	499
63.00	5644	92.00	4361	135.00	452		
64.00	879	93.00	7771	137.00	345		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6960.D				
Lims ID:	BFB				
Client ID:					
Sample Type:	BFB				
Inject. Date:	15-Jul-2019 09:10:30	ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	1.0 uL	Dil. Factor:	1.0000		
Sample Info:	BFB				
Misc. Info.:	480-0082614-002				
Operator ID:	KN	Instrument ID:	HP5973S		
Method:	\\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m				
Limit Group:	MV - 8260C ICAL				
Last Update:	15-Jul-2019 18:51:29	Calib Date:	24-Jun-2019 20:49:30		
Integrator:	RTE	ID Type:	RT Order ID		
Quant Method:	Internal Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D				
Column 1 :	ZB-624 (0.18 mm)		Det: MS SCAN		
Process Host:	CTX0325				
First Level Reviewer: nowakk		Date:	15-Jul-2019 09:21:33		

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
$ 61 BFB	95	3.662	3.662	0.000	0	232104	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

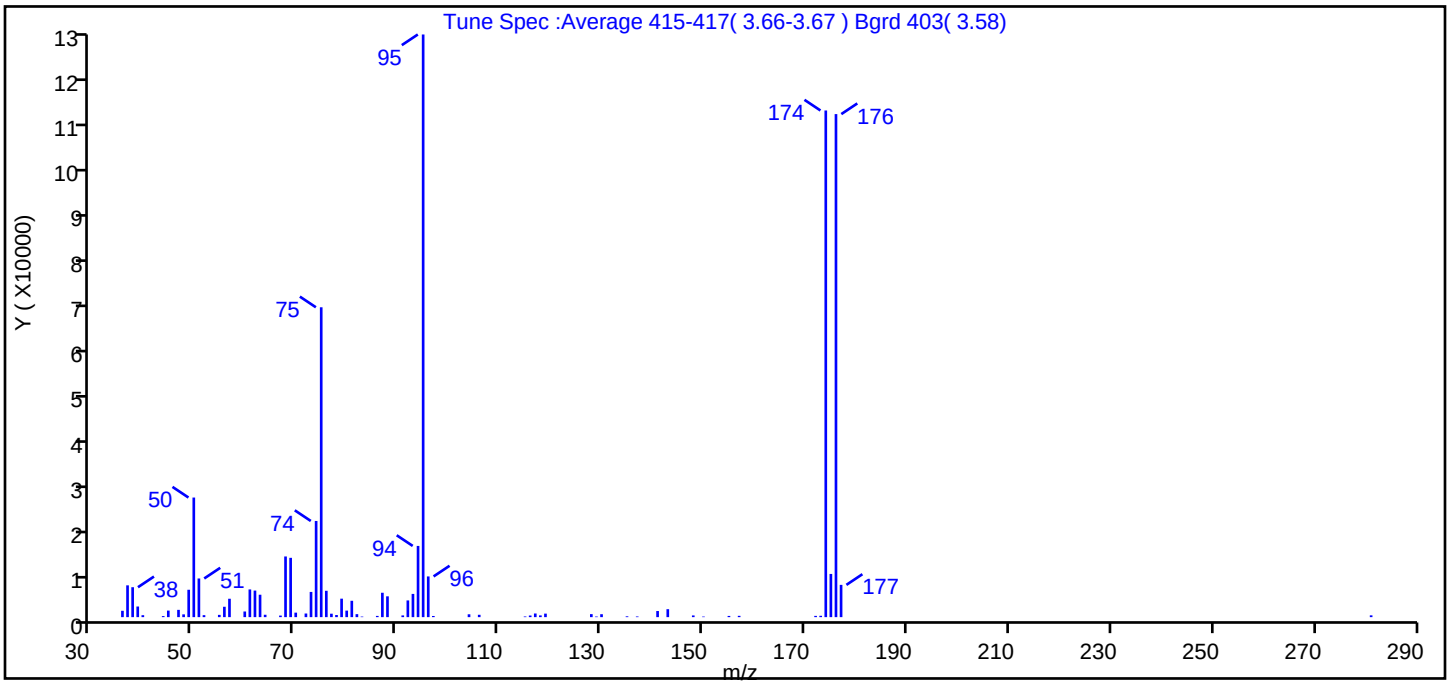
BFB_WRK_00089 Amount Added: 1.00 Units: uL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6960.D
Injection Date: 15-Jul-2019 09:10:30 Instrument ID: HP5973S
Lims ID: BFB
Client ID:
Operator ID: KN ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 1.0 uL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Tune Method: BFB Method 8260

$ 61 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.5
75	30 to 60% of m/z 95	53.2
96	5 to 9% of m/z 95	7.0
173	Less than 2% of m/z 174	0.2 (0.3)
174	50 to 120% of m/z 95	87.0
175	5 to 9% of m/z 174	7.4 (8.5)
176	Greater than 95% but less than 101% of m/z 174	86.3 (99.3)
177	5 to 9% of m/z 176	5.5 (6.4)

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6960.D\S-8260.rslt\spectra.d
Injection Date: 15-Jul-2019 09:10:30
Spectrum: Tune Spec :Average 415-417(3.66-3.67) Bgrd 403(3.58)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 72

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1323	62.00	5534	83.00	118	128.00	627
37.00	6624	63.00	4670	86.00	258	129.00	125
38.00	6233	64.00	498	87.00	5080	130.00	613
39.00	2214	67.00	325	88.00	4337	135.00	174
40.00	406	68.00	12639	91.00	359	137.00	142
44.00	219	69.00	12356	92.00	3483	141.00	1274
45.00	1364	70.00	937	93.00	4840	143.00	1657
47.00	1518	72.00	757	94.00	14833	148.00	355
48.00	580	73.00	5251	95.00	121368	150.00	119
49.00	5705	74.00	20032	96.00	8479	155.00	254
50.00	24912	75.00	64544	97.00	240	157.00	274
51.00	8053	76.00	5489	104.00	594	172.00	263
52.00	413	77.00	717	106.00	493	173.00	282
55.00	473	78.00	444	115.00	139	174.00	105536
56.00	2162	79.00	3849	116.00	336	175.00	8998
57.00	3832	80.00	1360	117.00	759	176.00	104784
60.00	1177	81.00	3406	118.00	360	177.00	6724
61.00	5771	82.00	623	119.00	733	281.00	375

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-482015/7

Matrix: Water Lab File ID: S6965.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 11:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	ND		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	ND		1.0	0.36
110-82-7	Cyclohexane	ND		1.0	0.18
124-48-1	Dibromochloromethane	ND		1.0	0.32
75-71-8	Dichlorodifluoromethane	ND		1.0	0.68
100-41-4	Ethylbenzene	ND		1.0	0.74
98-82-8	Isopropylbenzene	ND		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-482015/7

Matrix: Water Lab File ID: S6965.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 11:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	ND		2.5	1.3
1634-04-4	Methyl tert-butyl ether	ND		1.0	0.16
108-87-2	Methylcyclohexane	ND		1.0	0.16
75-09-2	Methylene Chloride	ND		1.0	0.44
100-42-5	Styrene	ND		1.0	0.73
127-18-4	Tetrachloroethene	ND		1.0	0.36
108-88-3	Toluene	ND		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	ND		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	ND		1.0	0.37
79-01-6	Trichloroethene	ND		1.0	0.46
75-69-4	Trichlorofluoromethane	ND		1.0	0.88
75-01-4	Vinyl chloride	ND		1.0	0.90
1330-20-7	Xylenes, Total	ND		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	102		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-482015/7

Matrix: Water Lab File ID: S6965.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 11:09

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6965.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 15-Jul-2019 11:09:30 ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0082614-007
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:56:16 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 18:57:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	144202	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	293631	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	95	295291	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	57	172960	25.0	23.1	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.054	-0.001	92	120995	25.0	25.5	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	84	719209	25.0	24.9	
$ 6 4-Bromofluorobenzene (Surr	174	9.567	9.568	-0.001	88	224797	25.0	23.0	
10 Dichlorodifluoromethane	85		1.221					ND	
11 Chlorodifluoromethane	51		1.239					ND	
12 Chloromethane	50		1.391					ND	
13 Vinyl chloride	62		1.483					ND	
151 Butadiene	54		1.483					ND	
14 Bromomethane	94		1.762					ND	
15 Chloroethane	64		1.848					ND	
16 Dichlorofluoromethane	67		2.060					ND	
17 Trichlorofluoromethane	101		2.067					ND	
18 Ethyl ether	59		2.346					ND	
148 Ethanol	45		2.359					ND	
19 Propene oxide	58		2.432					ND	
20 Acrolein	56		2.529					ND	
21 1,1,2-Trichloro-1,2,2-trif	101		2.559					ND	
22 1,1-Dichloroethene	96		2.559					ND	
23 Acetone	43		2.687					ND	
25 Iodomethane	142		2.717					ND	
26 Carbon disulfide	76		2.754					ND	U
24 Isopropyl alcohol	45		2.876					ND	
28 3-Chloro-1-propene	41		2.930					ND	
27 Methyl acetate	43		2.979					ND	
29 Acetonitrile	40		2.997					ND	U
30 Methylene Chloride	84		3.076					ND	
31 2-Methyl-2-propanol	59		3.253					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
32 Methyl tert-butyl ether	73		3.283					ND	
34 trans-1,2-Dichloroethene	96		3.302					ND	
33 Acrylonitrile	53		3.368					ND	
35 Hexane	57		3.490					ND	
39 1,1-Dichloroethane	63		3.721					ND	
36 Isopropyl ether	45		3.734					ND	
37 Vinyl acetate	43		3.776					ND	
40 2-Chloro-1,3-butadiene	53		3.776					ND	
38 1,1-Dimethoxyethane	75		3.813					ND	
139 Halothane	117		3.822					ND	
41 Tert-butyl ethyl ether	59		4.074					ND	
44 2,2-Dichloropropane	77		4.238					ND	
45 cis-1,2-Dichloroethene	96		4.281					ND	
43 2-Butanone (MEK)	43		4.317					ND	
42 Ethyl acetate	43		4.348					ND	
46 Propionitrile	54		4.427					ND	
48 Chlorobromomethane	128		4.512					ND	
49 Tetrahydrofuran	42		4.530					ND	
47 Methacrylonitrile	41		4.530					ND	
50 Chloroform	83		4.591					ND	
52 Cyclohexane	56		4.701					ND	
51 1,1,1-Trichloroethane	97		4.701					ND	
55 Carbon tetrachloride	117		4.835					ND	
54 1,1-Dichloropropene	75		4.847					ND	
141 2,4,4-Trimethyl-1-pentene	55		4.871					ND	
152 Isooctane	57		5.048					ND	
57 Benzene	78		5.054					ND	
53 Isobutyl alcohol	43		5.090					ND	
58 1,2-Dichloroethane	62		5.127					ND	
56 Tert-amyl methyl ether	73		5.133					ND	
147 t-Amyl alcohol	59		5.145					ND	
140 2,4,4-Trimethyl-2-pentene	97		5.153					ND	
59 n-Heptane	43		5.230					ND	
1 1,4-Difluorobenzene	114		5.437					ND	
62 Trichloroethene	95		5.662					ND	
60 n-Butanol	56		5.711					ND	
64 Methylcyclohexane	83		5.778					ND	
142 Ethyl acrylate	55		5.796					ND	
65 1,2-Dichloropropane	63		5.905					ND	
63 Methyl methacrylate	41		6.009					ND	
67 Dibromomethane	93		6.045					ND	
66 1,4-Dioxane	88		6.057					ND	
68 Dichlorobromomethane	83		6.203					ND	
70 2-Nitropropane	43		6.459					ND	
69 2-Chloroethyl vinyl ether	63		6.483					ND	
71 Epichlorohydrin	57		6.575					ND	
72 cis-1,3-Dichloropropene	75		6.617					ND	
73 4-Methyl-2-pentanone (MIBK	43		6.763					ND	
74 Toluene	92		6.897					ND	
76 2-Methylthiophene	97		7.037					ND	
77 trans-1,3-Dichloropropene	75		7.183					ND	
78 3-Methylthiophene	97		7.201					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
75 Ethyl methacrylate	69		7.232					ND	
79 1,1,2-Trichloroethane	83		7.371					ND	
81 Tetrachloroethene	166		7.426					ND	
82 1,3-Dichloropropane	76		7.536					ND	
80 2-Hexanone	43		7.603					ND	
155 n-Butyl acetate	43		7.712					ND	
83 Chlorodibromomethane	129		7.773					ND	
84 Ethylene Dibromide	107		7.870					ND	
146 1-Chlorohexane	55		8.296					ND	U
85 3-Chlorobenzotrifluoride	180		8.314					ND	
87 Chlorobenzene	112		8.345					ND	
86 4-Chlorobenzotrifluoride	180		8.381					ND	
88 Ethylbenzene	91		8.436					ND	
89 1,1,1,2-Tetrachloroethane	131		8.442					ND	
90 m-Xylene & p-Xylene	106		8.558					ND	
91 o-Xylene	106		8.984					ND	
92 Styrene	104		9.014					ND	
95 Bromoform	173		9.263					ND	
93 2-Chlorobenzotrifluoride	180		9.300					ND	
94 Isopropylbenzene	105		9.367					ND	
96 Cyclohexanone	55		9.556					ND	
101 Bromobenzene	156		9.720					ND	
97 1,1,2,2-Tetrachloroethane	83		9.787					ND	
99 N-Propylbenzene	91		9.799					ND	
100 1,2,3-Trichloropropane	110		9.817					ND	
98 trans-1,4-Dichloro-2-buten	53		9.829					ND	
103 2-Chlorotoluene	126		9.902					ND	
104 3-Chlorotoluene	126		9.969					ND	
102 1,3,5-Trimethylbenzene	105		9.981					ND	
105 4-Chlorotoluene	126		10.018					ND	
106 tert-Butylbenzene	134		10.298					ND	
107 1,2,4-Trimethylbenzene	105		10.352					ND	
108 Pentachloroethane	167		10.359					ND	
109 sec-Butylbenzene	105		10.511					ND	
111 1,3-Dichlorobenzene	146		10.644					ND	
110 4-Isopropyltoluene	119		10.650					ND	
114 Dicyclopentadiene	66		10.711					ND	
113 1,4-Dichlorobenzene	146		10.736					ND	
112 1,2,3-Trimethylbenzene	105		10.766					ND	
150 Benzyl chloride	126		10.888					ND	
115 n-Butylbenzene	91		11.040					ND	
116 1,2-Dichlorobenzene	146		11.088					ND	
117 1,2-Dibromo-3-Chloropropan	75		11.825					ND	
118 1,3,5-Trichlorobenzene	180		11.952					ND	
119 1,2,4-Trichlorobenzene	180		12.494					ND	
120 Hexachlorobutadiene	225		12.603					ND	
121 Naphthalene	128		12.707					ND	
122 1,2,3-Trichlorobenzene	180		12.914					ND	
149 2-Methylnaphthalene	142		13.619					ND	U
144 1-Bromopropane TIC	1		0.000					ND	
134 Pentachloroethane TIC	1		0.000					ND	
136 Nitrobenzene	77		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
137 Methyl acrylate	1		0.000					ND	
145 Ethylene oxide TIC	1		0.000					ND	
143 Propene oxide TIC	1		0.000					ND	
138 cis-1,4-Dichloro-2-butene	88		0.000					ND	
135 Hexachloroethane	117		0.000					ND	
S 125 1,2-Dichloroethene, Total	1		30.000					ND	
S 123 Total BTEX	1		30.000					ND	
S 126 1,3-Dichloropropene, Total	1		30.000					ND	
S 124 Xylenes, Total	1		30.000					ND	
S 157 Trihalomethanes, Total	1		0.000					ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

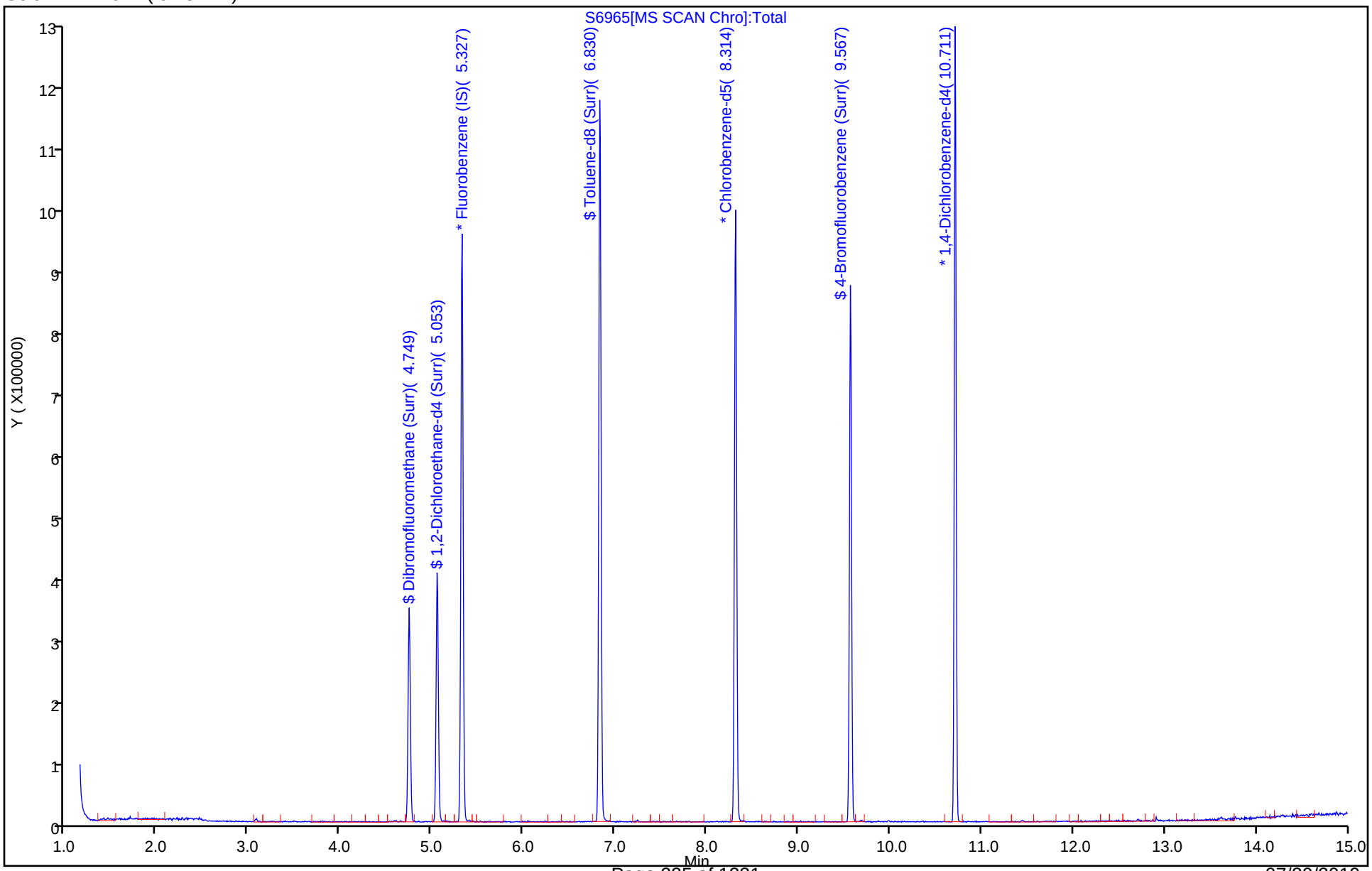
Report Date: 15-Jul-2019 18:57:47 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6965.D

Injection Date:	15-Jul-2019 11:09:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	MB			Worklist Smp#:	7
Client ID:					
Purge Vol:	5.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



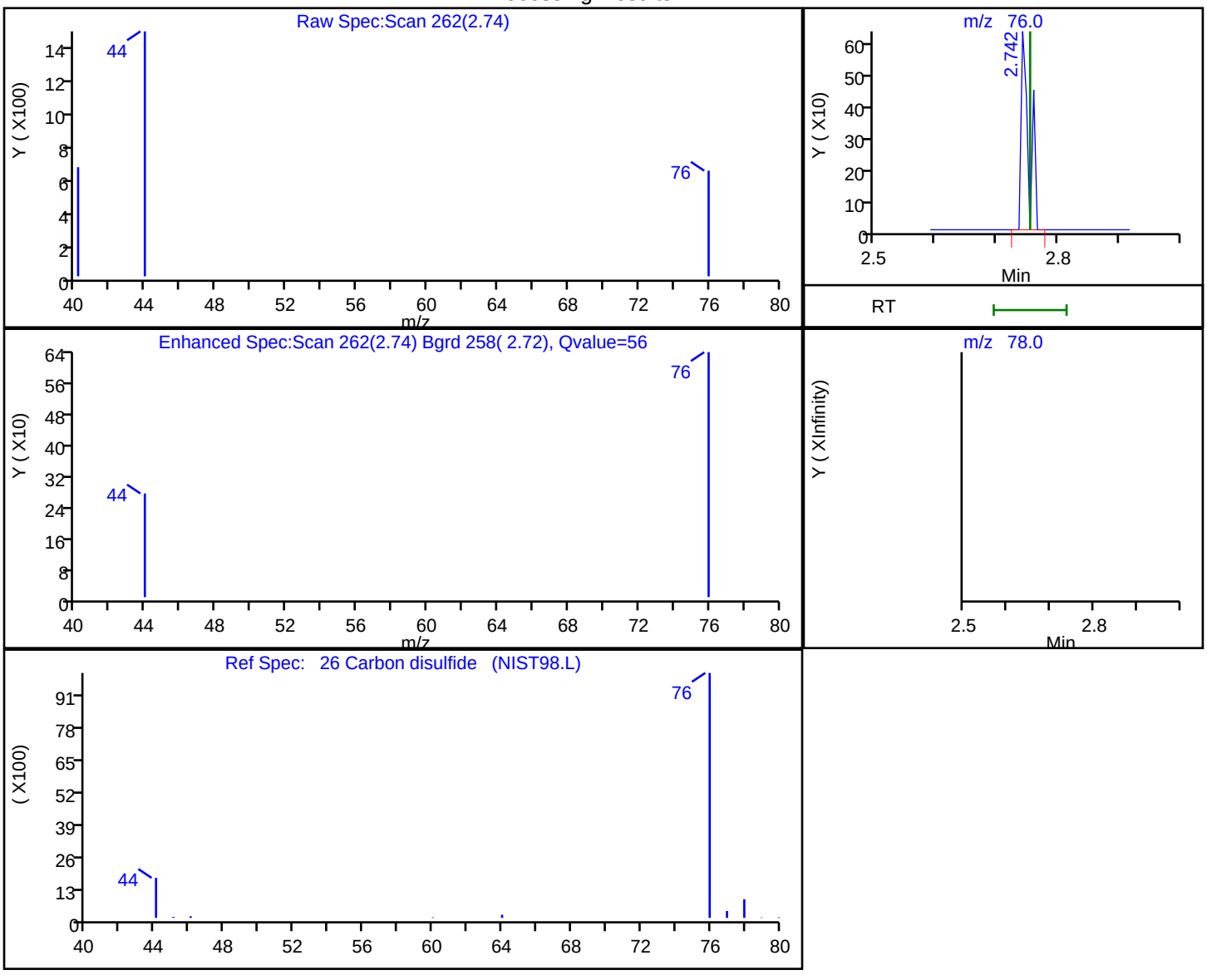
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6965.D
Injection Date: 15-Jul-2019 11:09:30 Instrument ID: HP5973S
Lims ID: MB
Client ID:
Operator ID: KN ALS Bottle#: 7 Worklist Smp#: 7
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Method: S-8260 Limit Group: MV - 8260C ICAL
Column: ZB-624 (0.18 mm) Detector MS SCAN

26 Carbon disulfide, CAS: 75-15-0

Processing Results



RT	Mass	Response	Amount
2.74	76.00	553	0.023554
2.75	78.00	0	

Reviewer: nowakk, 15-Jul-2019 11:32:21
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-482015/5

Matrix: Water Lab File ID: S6963.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 10:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	24.7		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	25.1		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	27.4		1.0	0.31
79-00-5	1,1,2-Trichloroethane	25.3		1.0	0.23
75-34-3	1,1-Dichloroethane	25.2		1.0	0.38
75-35-4	1,1-Dichloroethene	24.2		1.0	0.29
120-82-1	1,2,4-Trichlorobenzene	22.2		1.0	0.41
96-12-8	1,2-Dibromo-3-Chloropropane	24.3		1.0	0.39
106-93-4	1,2-Dibromoethane	23.0		1.0	0.73
95-50-1	1,2-Dichlorobenzene	24.2		1.0	0.79
107-06-2	1,2-Dichloroethane	24.4		1.0	0.21
78-87-5	1,2-Dichloropropane	25.8		1.0	0.72
541-73-1	1,3-Dichlorobenzene	25.4		1.0	0.78
106-46-7	1,4-Dichlorobenzene	25.0		1.0	0.84
78-93-3	2-Butanone (MEK)	145		10	1.3
591-78-6	2-Hexanone	131		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	133		5.0	2.1
67-64-1	Acetone	156		10	3.0
71-43-2	Benzene	25.8		1.0	0.41
75-27-4	Bromodichloromethane	25.1		1.0	0.39
75-25-2	Bromoform	25.6		1.0	0.26
74-83-9	Bromomethane	25.0		1.0	0.69
75-15-0	Carbon disulfide	24.3		1.0	0.19
56-23-5	Carbon tetrachloride	26.2		1.0	0.27
108-90-7	Chlorobenzene	24.2		1.0	0.75
75-00-3	Chloroethane	27.1		1.0	0.32
67-66-3	Chloroform	22.6		1.0	0.34
74-87-3	Chloromethane	28.1		1.0	0.35
156-59-2	cis-1,2-Dichloroethene	23.9		1.0	0.81
10061-01-5	cis-1,3-Dichloropropene	26.1		1.0	0.36
110-82-7	Cyclohexane	28.5		1.0	0.18
124-48-1	Dibromochloromethane	25.0		1.0	0.32
75-71-8	Dichlorodifluoromethane	27.7		1.0	0.68
100-41-4	Ethylbenzene	25.2		1.0	0.74
98-82-8	Isopropylbenzene	27.0		1.0	0.79

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-482015/5

Matrix: Water Lab File ID: S6963.D

Analysis Method: 8260C Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 10:23

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	53.4		2.5	1.3
1634-04-4	Methyl tert-butyl ether	23.6		1.0	0.16
108-87-2	Methylcyclohexane	26.6		1.0	0.16
75-09-2	Methylene Chloride	24.5		1.0	0.44
100-42-5	Styrene	24.6		1.0	0.73
127-18-4	Tetrachloroethene	24.7		1.0	0.36
108-88-3	Toluene	25.0		1.0	0.51
156-60-5	trans-1,2-Dichloroethene	24.8		1.0	0.90
10061-02-6	trans-1,3-Dichloropropene	25.5		1.0	0.37
79-01-6	Trichloroethene	25.5		1.0	0.46
75-69-4	Trichlorofluoromethane	26.5		1.0	0.88
75-01-4	Vinyl chloride	27.9		1.0	0.90
1330-20-7	Xylenes, Total	48.4		2.0	0.66

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	101		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6963.D
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 15-Jul-2019 10:23:30 ALS Bottle#: 5 Worklist Smp#: 5
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: LCS
Misc. Info.: 480-0082614-005
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 18:56:16 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: nowakk Date: 15-Jul-2019 10:42:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	99	144593	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	300778	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	49	282018	25.0	25.0	
$ 154 Dibromofluoromethane (Surr	113	4.749	4.749	0.000	55	177558	25.0	23.6	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	47	118291	25.0	24.8	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	69	746279	25.0	25.2	
$ 6 4-Bromofluorobenzene (Surr	174	9.574	9.568	0.006	93	231022	25.0	23.1	
10 Dichlorodifluoromethane	85	1.221	1.221	0.000	86	202899	25.0	27.7	
12 Chloromethane	50	1.391	1.391	0.000	89	246423	25.0	28.1	
13 Vinyl chloride	62	1.483	1.483	0.000	49	230744	25.0	27.9	
151 Butadiene	54	1.483	1.483	0.000	92	274322	25.0	33.6	
14 Bromomethane	94	1.762	1.762	0.000	90	148943	25.0	25.0	
15 Chloroethane	64	1.848	1.848	0.000	95	148322	25.0	27.1	
16 Dichlorofluoromethane	67	2.067	2.060	0.007	81	332543	25.0	26.8	
17 Trichlorofluoromethane	101	2.073	2.067	0.006	63	308400	25.0	26.5	
18 Ethyl ether	59	2.346	2.346	0.000	95	198209	25.0	24.8	
20 Acrolein	56	2.529	2.529	0.000	98	181785	125.0	103.0	
21 1,1,2-Trichloro-1,2,2-trif	101	2.559	2.559	0.000	64	192322	25.0	27.4	
22 1,1-Dichloroethene	96	2.565	2.559	0.006	88	173527	25.0	24.2	
23 Acetone	43	2.687	2.687	0.000	98	485938	125.0	155.5	
25 Iodomethane	142	2.718	2.717	0.001	99	307521	25.0	22.9	
26 Carbon disulfide	76	2.754	2.754	0.000	99	571984	25.0	24.3	
28 3-Chloro-1-propene	41	2.930	2.930	0.000	88	344404	25.0	26.0	
27 Methyl acetate	43	2.979	2.979	0.000	96	437536	50.0	53.4	
30 Methylene Chloride	84	3.076	3.076	0.000	94	208049	25.0	24.5	
31 2-Methyl-2-propanol	59	3.259	3.253	0.006	91	278124	250.0	294.7	
32 Methyl tert-butyl ether	73	3.289	3.283	0.006	93	568555	25.0	23.6	
34 trans-1,2-Dichloroethene	96	3.302	3.302	0.000	90	200643	25.0	24.8	
33 Acrylonitrile	53	3.368	3.368	0.000	98	1106846	250.0	275.5	
35 Hexane	57	3.490	3.490	0.000	94	363949	25.0	30.0	
39 1,1-Dichloroethane	63	3.721	3.721	0.000	97	359841	25.0	25.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
37 Vinyl acetate	43	3.782	3.776	0.006	98	931204	50.0	52.1	
44 2,2-Dichloropropane	77	4.238	4.238	0.000	92	188874	25.0	25.6	
45 cis-1,2-Dichloroethene	96	4.275	4.281	-0.006	71	218909	25.0	23.9	
43 2-Butanone (MEK)	43	4.318	4.317	0.001	94	734863	125.0	144.6	
48 Chlorobromomethane	128	4.512	4.512	0.000	94	114111	25.0	23.1	
49 Tetrahydrofuran	42	4.530	4.530	0.000	87	190046	50.0	53.3	
50 Chloroform	83	4.591	4.591	0.000	81	353267	25.0	22.6	
52 Cyclohexane	56	4.701	4.701	0.000	89	406644	25.0	28.5	
51 1,1,1-Trichloroethane	97	4.701	4.701	0.000	77	289260	25.0	24.7	
55 Carbon tetrachloride	117	4.835	4.835	0.000	82	255940	25.0	26.2	
54 1,1-Dichloropropene	75	4.847	4.847	0.000	91	291695	25.0	26.9	
57 Benzene	78	5.054	5.054	0.000	96	844018	25.0	25.8	
53 Isobutyl alcohol	43	5.090	5.090	0.000	95	302761	625.0	796.1	
58 1,2-Dichloroethane	62	5.127	5.127	0.000	73	313455	25.0	24.4	
59 n-Heptane	43	5.230	5.230	0.000	95	413403	25.0	33.5	
62 Trichloroethene	95	5.662	5.662	0.000	97	213792	25.0	25.5	
64 Methylcyclohexane	83	5.778	5.778	0.000	94	386817	25.0	26.6	
65 1,2-Dichloropropane	63	5.905	5.905	0.000	89	204834	25.0	25.8	
67 Dibromomethane	93	6.045	6.045	0.000	88	131858	25.0	23.9	
66 1,4-Dioxane	88	6.051	6.051	-0.006	40	53646	500.0	549.1	M
68 Dichlorobromomethane	83	6.203	6.203	0.000	93	254197	25.0	25.1	
69 2-Chloroethyl vinyl ether	63	6.483	6.483	0.000	92	160186	25.0	27.4	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	86	323371	25.0	26.1	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	99	1462896	125.0	133.0	
74 Toluene	92	6.897	6.897	0.000	88	538333	25.0	25.0	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	98	301476	25.0	25.5	
75 Ethyl methacrylate	69	7.232	7.232	0.000	75	279655	25.0	25.7	
79 1,1,2-Trichloroethane	83	7.378	7.371	0.007	85	161525	25.0	25.3	
81 Tetrachloroethene	166	7.426	7.426	0.000	79	233541	25.0	24.7	
82 1,3-Dichloropropane	76	7.536	7.536	0.000	96	341118	25.0	25.4	
80 2-Hexanone	43	7.603	7.603	0.000	97	1065509	125.0	130.6	
83 Chlorodibromomethane	129	7.767	7.773	-0.006	88	195560	25.0	25.0	
84 Ethylene Dibromide	107	7.870	7.870	0.000	99	191605	25.0	23.0	
87 Chlorobenzene	112	8.345	8.345	0.000	92	576959	25.0	24.2	
88 Ethylbenzene	91	8.436	8.436	0.000	99	993629	25.0	25.2	
89 1,1,1,2-Tetrachloroethane	131	8.442	8.442	0.000	41	188176	25.0	25.2	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	98	390460	25.0	24.8	
91 o-Xylene	106	8.984	8.984	0.000	98	364158	25.0	23.6	
92 Styrene	104	9.014	9.014	0.000	93	638840	25.0	24.6	
95 Bromoform	173	9.270	9.263	0.007	96	127785	25.0	25.6	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	957105	25.0	27.0	
101 Bromobenzene	156	9.720	9.720	0.000	92	255090	25.0	26.1	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.787	0.000	65	258098	25.0	25.1	
99 N-Propylbenzene	91	9.799	9.799	0.000	98	1155072	25.0	27.3	
100 1,2,3-Trichloropropane	110	9.817	9.817	0.000	76	87756	25.0	24.5	
98 trans-1,4-Dichloro-2-buten	53	9.829	9.829	0.000	77	65482	25.0	17.5	
103 2-Chlorotoluene	126	9.902	9.902	0.000	95	227431	25.0	25.8	
102 1,3,5-Trimethylbenzene	105	9.981	9.981	0.000	92	799263	25.0	26.5	
105 4-Chlorotoluene	126	10.018	10.018	0.000	97	241579	25.0	26.0	
106 tert-Butylbenzene	134	10.298	10.298	0.000	87	173065	25.0	25.4	
107 1,2,4-Trimethylbenzene	105	10.352	10.352	0.000	77	808698	25.0	26.3	
109 sec-Butylbenzene	105	10.511	10.511	0.000	94	1001990	25.0	26.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	84	470803	25.0	25.4	
110 4-Isopropyltoluene	119	10.651	10.650	0.001	96	891238	25.0	26.5	
113 1,4-Dichlorobenzene	146	10.736	10.736	0.000	94	477013	25.0	25.0	
115 n-Butylbenzene	91	11.040	11.040	0.000	95	789812	25.0	26.6	
116 1,2-Dichlorobenzene	146	11.089	11.088	0.001	92	448936	25.0	24.2	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.825	0.000	72	41992	25.0	24.3	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	91	268082	25.0	22.2	
120 Hexachlorobutadiene	225	12.603	12.603	0.000	95	123588	25.0	21.3	
121 Naphthalene	128	12.707	12.707	0.000	97	687897	25.0	21.3	
122 1,2,3-Trichlorobenzene	180	12.908	12.914	-0.006	94	225613	25.0	19.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

8260 CORP mix_00160	Amount Added:	12.50	Units: uL	
GAS CORP mix_00350	Amount Added:	12.50	Units: uL	
S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

Report Date: 15-Jul-2019 18:56:17 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6963.D

Injection Date: 15-Jul-2019 10:23:30 Instrument ID: HP5973S Operator ID: KN

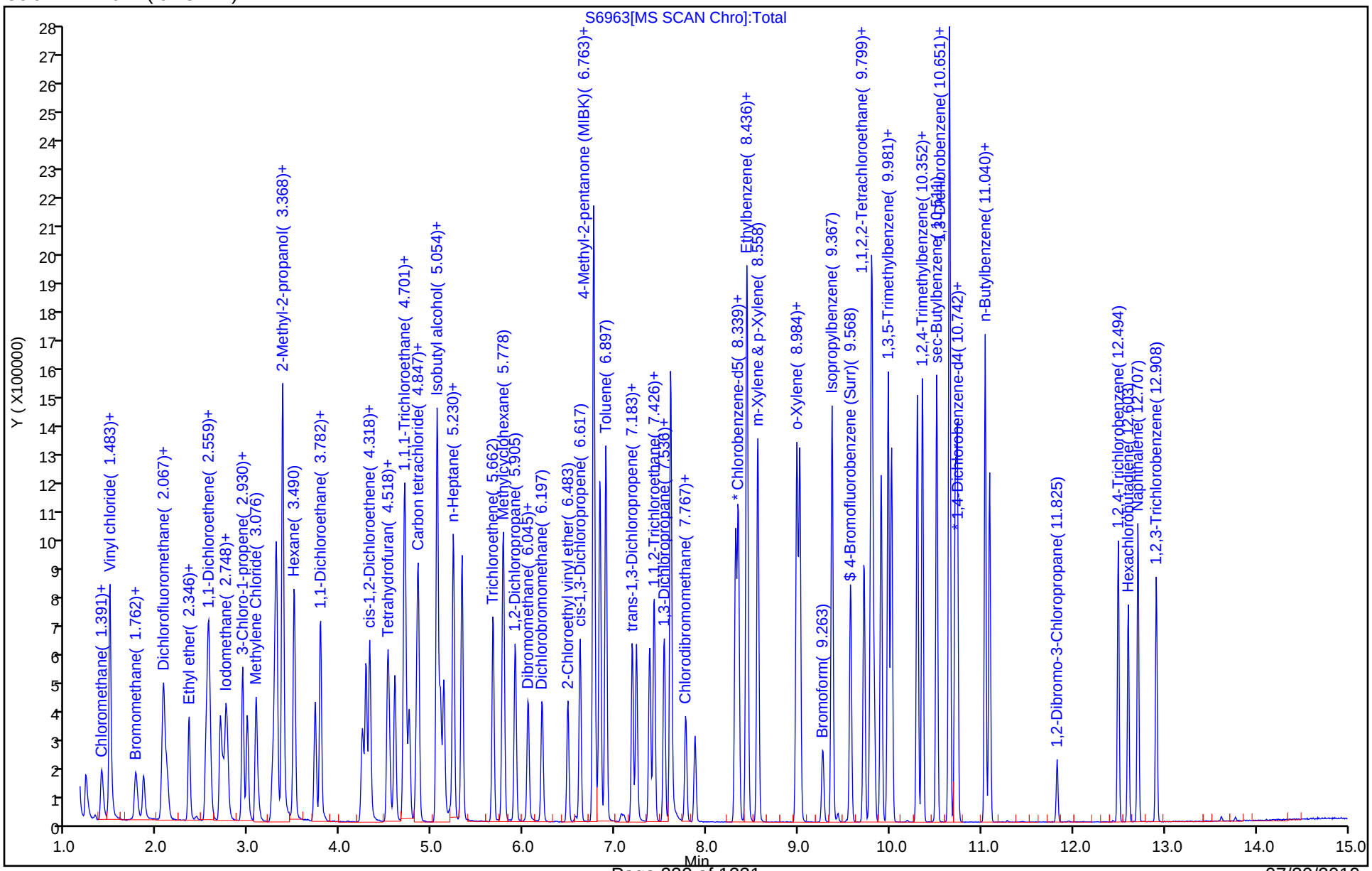
Lims ID: LCS Worklist Smp#: 5

Client ID:

Purge Vol: 5.000 mL Dil. Factor: 1.0000 ALS Bottle#: 5

Method: S-8260 Limit Group: MV - 8260C ICAL

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MS Lab Sample ID: 480-156069-2 MS

Matrix: Water Lab File ID: S6985.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 19:07

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	247		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	253		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	268		10	3.1
79-00-5	1,1,2-Trichloroethane	250		10	2.3
75-34-3	1,1-Dichloroethane	257		10	3.8
75-35-4	1,1-Dichloroethene	240		10	2.9
120-82-1	1,2,4-Trichlorobenzene	215		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	237		10	3.9
106-93-4	1,2-Dibromoethane	236		10	7.3
95-50-1	1,2-Dichlorobenzene	241		10	7.9
107-06-2	1,2-Dichloroethane	246		10	2.1
78-87-5	1,2-Dichloropropane	266		10	7.2
541-73-1	1,3-Dichlorobenzene	255		10	7.8
106-46-7	1,4-Dichlorobenzene	248		10	8.4
78-93-3	2-Butanone (MEK)	1480		100	13
591-78-6	2-Hexanone	1380		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	1350		50	21
67-64-1	Acetone	1490		100	30
71-43-2	Benzene	261		10	4.1
75-27-4	Bromodichloromethane	248		10	3.9
75-25-2	Bromoform	249		10	2.6
74-83-9	Bromomethane	256		10	6.9
75-15-0	Carbon disulfide	244		10	1.9
56-23-5	Carbon tetrachloride	261		10	2.7
108-90-7	Chlorobenzene	246		10	7.5
75-00-3	Chloroethane	279		10	3.2
67-66-3	Chloroform	228		10	3.4
74-87-3	Chloromethane	287		10	3.5
156-59-2	cis-1,2-Dichloroethene	242		10	8.1
10061-01-5	cis-1,3-Dichloropropene	256		10	3.6
110-82-7	Cyclohexane	320		10	1.8
124-48-1	Dibromochloromethane	238		10	3.2
75-71-8	Dichlorodifluoromethane	297		10	6.8
100-41-4	Ethylbenzene	246		10	7.4
98-82-8	Isopropylbenzene	271		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MS Lab Sample ID: 480-156069-2 MS

Matrix: Water Lab File ID: S6985.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 19:07

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	561		25	13
1634-04-4	Methyl tert-butyl ether	236		10	1.6
108-87-2	Methylcyclohexane	290		10	1.6
75-09-2	Methylene Chloride	254		10	4.4
100-42-5	Styrene	243		10	7.3
127-18-4	Tetrachloroethene	243		10	3.6
108-88-3	Toluene	244		10	5.1
156-60-5	trans-1,2-Dichloroethene	248		10	9.0
10061-02-6	trans-1,3-Dichloropropene	238		10	3.7
79-01-6	Trichloroethene	247		10	4.6
75-69-4	Trichlorofluoromethane	283		10	8.8
75-01-4	Vinyl chloride	297		10	9.0
1330-20-7	Xylenes, Total	516		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		77-120
460-00-4	4-Bromofluorobenzene (Surr)	92		73-120
2037-26-5	Toluene-d8 (Surr)	99		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6985.D
Lims ID: 480-156069-D-2 MS
Client ID: MW17
Sample Type: MS
Inject. Date: 15-Jul-2019 19:07:30 ALS Bottle#: 27 Worklist Smp#: 28
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 480-156069-d-2 ms
Misc. Info.: 480-0082614-028
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 23:26:00 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0314

First Level Reviewer: phoonnays Date: 16-Jul-2019 12:44:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.321	5.327	-0.006	98	141414	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	301030	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	55	285607	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.054	5.054	0.000	50	124905	25.0	26.8	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	71	735224	25.0	24.8	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.000	88	229105	25.0	22.9	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	86	212479	25.0	29.7	
12 Chloromethane	50	1.391	1.391	0.000	100	246329	25.0	28.7	
13 Vinyl chloride	62	1.483	1.483	0.000	70	240086	25.0	29.7	
14 Bromomethane	94	1.762	1.762	0.000	92	149314	25.0	25.6	
15 Chloroethane	64	1.848	1.848	0.000	94	149630	25.0	27.9	
17 Trichlorofluoromethane	101	2.067	2.067	0.000	60	322139	25.0	28.3	
21 1,1,2-Trichloro-1,2,2-trif	101	2.547	2.559	-0.012	75	184232	25.0	26.8	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	95	168161	25.0	24.0	
23 Acetone	43	2.687	2.687	0.000	99	454447	125.0	148.7	
26 Carbon disulfide	76	2.754	2.754	0.000	98	562626	25.0	24.4	
27 Methyl acetate	43	2.979	2.979	0.000	96	449161	50.0	56.1	
30 Methylene Chloride	84	3.076	3.076	0.000	94	210764	25.0	25.4	
32 Methyl tert-butyl ether	73	3.283	3.283	0.000	93	555768	25.0	23.6	
34 trans-1,2-Dichloroethene	96	3.302	3.302	0.000	92	196359	25.0	24.8	
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	359592	25.0	25.7	
45 cis-1,2-Dichloroethene	96	4.275	4.281	-0.006	70	217025	25.0	24.2	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	98	733331	125.0	147.6	
50 Chloroform	83	4.591	4.591	0.000	81	348483	25.0	22.8	
52 Cyclohexane	56	4.701	4.701	0.000	92	446190	25.0	32.0	
51 1,1,1-Trichloroethane	97	4.701	4.701	0.000	75	283796	25.0	24.7	
55 Carbon tetrachloride	117	4.829	4.835	-0.007	96	249945	25.0	26.1	
57 Benzene	78	5.054	5.054	0.000	97	836070	25.0	26.1	
58 1,2-Dichloroethane	62	5.127	5.127	0.000	74	309444	25.0	24.6	
62 Trichloroethene	95	5.662	5.662	0.000	90	202728	25.0	24.7	
64 Methylcyclohexane	83	5.778	5.778	0.000	92	412578	25.0	29.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63	5.905	5.905	0.000	88	206695	25.0	26.6	
68 Dichlorobromomethane	83	6.197	6.203	-0.006	90	245679	25.0	24.8	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	87	309566	25.0	25.6	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	98	1487926	125.0	135.2	
74 Toluene	92	6.897	6.897	0.000	94	526479	25.0	24.4	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	98	281775	25.0	23.8	
79 1,1,2-Trichloroethane	83	7.378	7.371	0.007	87	159649	25.0	25.0	
81 Tetrachloroethene	166	7.426	7.426	0.000	80	229373	25.0	24.3	
80 2-Hexanone	43	7.603	7.602	0.000	98	1123131	125.0	137.5	
83 Chlorodibromomethane	129	7.767	7.773	-0.006	87	186010	25.0	23.8	
84 Ethylene Dibromide	107	7.870	7.870	0.000	98	196623	25.0	23.6	
87 Chlorobenzene	112	8.345	8.345	0.000	92	586853	25.0	24.6	
88 Ethylbenzene	91	8.436	8.436	0.000	99	969711	25.0	24.6	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	99	380241		24.1	
91 o-Xylene	106	8.984	8.983	0.000	98	424446		27.5	
92 Styrene	104	9.014	9.014	0.000	93	631864	25.0	24.3	
95 Bromoform	173	9.263	9.263	0.000	95	124675	25.0	24.9	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	973237	25.0	27.1	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.786	0.000	61	263384	25.0	25.3	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	84	478363	25.0	25.5	
113 1,4-Dichlorobenzene	146	10.736	10.735	0.000	94	479955	25.0	24.8	
116 1,2-Dichlorobenzene	146	11.089	11.088	0.000	92	452536	25.0	24.1	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.824	0.000	76	41499	25.0	23.7	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	93	262499	25.0	21.5	
S 124 Xylenes, Total	1				0			51.6	

Reagents:

8260 CORP mix_00160	Amount Added:	12.50	Units: uL	
GAS CORP mix_00350	Amount Added:	12.50	Units: uL	
S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

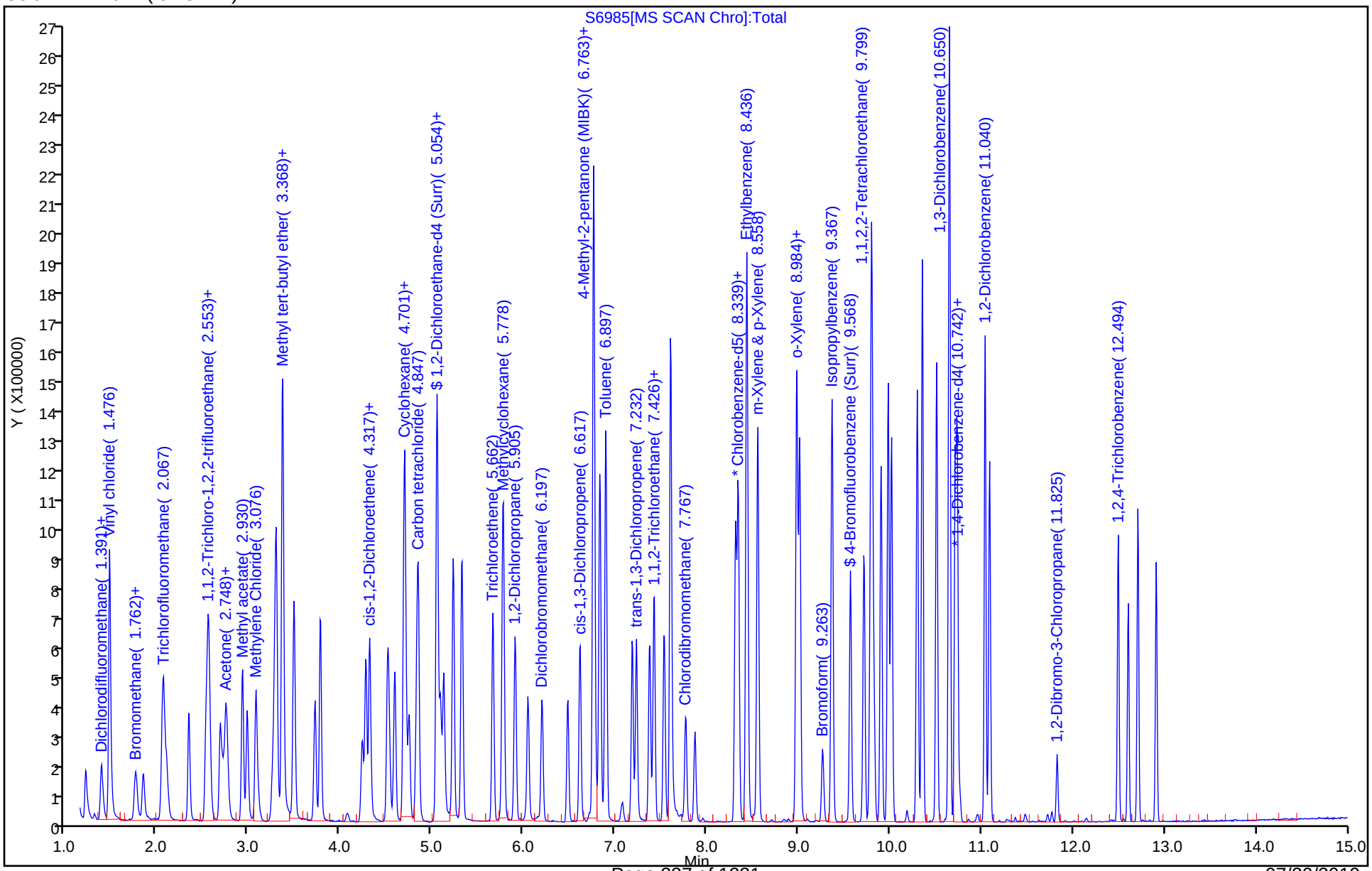
Report Date: 16-Jul-2019 12:44:26 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6985.D

Injection Date:	15-Jul-2019 19:07:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-D-2 MS			Worklist Smp#:	28
Client ID:	MW17				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	27
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MSD Lab Sample ID: 480-156069-2 MSD

Matrix: Water Lab File ID: S6986.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 19:30

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	234		10	8.2
79-34-5	1,1,2,2-Tetrachloroethane	253		10	2.1
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	254		10	3.1
79-00-5	1,1,2-Trichloroethane	247		10	2.3
75-34-3	1,1-Dichloroethane	247		10	3.8
75-35-4	1,1-Dichloroethene	227		10	2.9
120-82-1	1,2,4-Trichlorobenzene	215		10	4.1
96-12-8	1,2-Dibromo-3-Chloropropane	247		10	3.9
106-93-4	1,2-Dibromoethane	233		10	7.3
95-50-1	1,2-Dichlorobenzene	237		10	7.9
107-06-2	1,2-Dichloroethane	239		10	2.1
78-87-5	1,2-Dichloropropane	252		10	7.2
541-73-1	1,3-Dichlorobenzene	245		10	7.8
106-46-7	1,4-Dichlorobenzene	244		10	8.4
78-93-3	2-Butanone (MEK)	1460		100	13
591-78-6	2-Hexanone	1370		50	12
108-10-1	4-Methyl-2-pentanone (MIBK)	1390		50	21
67-64-1	Acetone	1470		100	30
71-43-2	Benzene	251		10	4.1
75-27-4	Bromodichloromethane	242		10	3.9
75-25-2	Bromoform	243		10	2.6
74-83-9	Bromomethane	244		10	6.9
75-15-0	Carbon disulfide	230		10	1.9
56-23-5	Carbon tetrachloride	247		10	2.7
108-90-7	Chlorobenzene	237		10	7.5
75-00-3	Chloroethane	274		10	3.2
67-66-3	Chloroform	220		10	3.4
74-87-3	Chloromethane	282		10	3.5
156-59-2	cis-1,2-Dichloroethene	230		10	8.1
10061-01-5	cis-1,3-Dichloropropene	246		10	3.6
110-82-7	Cyclohexane	294		10	1.8
124-48-1	Dibromochloromethane	234		10	3.2
75-71-8	Dichlorodifluoromethane	271		10	6.8
100-41-4	Ethylbenzene	240		10	7.4
98-82-8	Isopropylbenzene	261		10	7.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MSD Lab Sample ID: 480-156069-2 MSD

Matrix: Water Lab File ID: S6986.D

Analysis Method: 8260C Date Collected: 07/09/2019 13:50

Sample wt/vol: 5(mL) Date Analyzed: 07/15/2019 19:30

Soil Aliquot Vol: Dilution Factor: 10

Soil Extract Vol.: GC Column: ZB-624 (20) ID: 0.18(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 482015 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	554		25	13
1634-04-4	Methyl tert-butyl ether	231		10	1.6
108-87-2	Methylcyclohexane	276		10	1.6
75-09-2	Methylene Chloride	263		10	4.4
100-42-5	Styrene	239		10	7.3
127-18-4	Tetrachloroethene	230		10	3.6
108-88-3	Toluene	242		10	5.1
156-60-5	trans-1,2-Dichloroethene	236		10	9.0
10061-02-6	trans-1,3-Dichloropropene	240		10	3.7
79-01-6	Trichloroethene	241		10	4.6
75-69-4	Trichlorofluoromethane	267		10	8.8
75-01-4	Vinyl chloride	282		10	9.0
1330-20-7	Xylenes, Total	505		20	6.6

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	106		77-120
460-00-4	4-Bromofluorobenzene (Surr)	91		73-120
2037-26-5	Toluene-d8 (Surr)	100		80-120

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6986.D
Lims ID: 480-156069-D-2 MSD
Client ID: MW17
Sample Type: MSD
Inject. Date: 15-Jul-2019 19:30:30 ALS Bottle#: 28 Worklist Smp#: 29
Purge Vol: 5.000 mL Dil. Factor: 10.0000
Sample Info: 0-156069-d-2 msd
Misc. Info.: 480-0082614-029
Operator ID: KN Instrument ID: HP5973S

Method: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 15-Jul-2019 23:26:00 Calib Date: 24-Jun-2019 20:49:30
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973S\20190624-82155.b\S6429.D

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX0325

First Level Reviewer: milligana Date: 15-Jul-2019 20:09:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
* 153 Fluorobenzene (IS)	70	5.327	5.327	0.000	98	143935	25.0	25.0	
* 2 Chlorobenzene-d5	82	8.314	8.314	0.000	85	300243	25.0	25.0	
* 3 1,4-Dichlorobenzene-d4	152	10.711	10.711	0.000	54	283893	25.0	25.0	
$ 4 1,2-Dichloroethane-d4 (Sur	67	5.053	5.054	-0.001	51	125782	25.0	26.5	
$ 5 Toluene-d8 (Surr)	98	6.830	6.830	0.000	69	739784	25.0	25.1	
$ 6 4-Bromofluorobenzene (Surr	174	9.568	9.567	0.000	87	226153	25.0	22.7	
10 Dichlorodifluoromethane	85	1.215	1.221	-0.006	86	197873	25.0	27.1	
12 Chloromethane	50	1.391	1.391	0.000	99	245667	25.0	28.2	
13 Vinyl chloride	62	1.482	1.483	-0.001	49	231754	25.0	28.2	
14 Bromomethane	94	1.762	1.762	0.000	91	144533	25.0	24.4	
15 Chloroethane	64	1.847	1.848	-0.001	94	149789	25.0	27.4	
17 Trichlorofluoromethane	101	2.079	2.067	0.012	77	309285	25.0	26.7	
21 1,1,2-Trichloro-1,2,2-trif	101	2.553	2.559	-0.006	65	177763	25.0	25.4	
22 1,1-Dichloroethene	96	2.559	2.559	0.000	86	162097	25.0	22.7	
23 Acetone	43	2.687	2.687	0.000	98	457567	125.0	147.1	
26 Carbon disulfide	76	2.754	2.754	0.000	99	539013	25.0	23.0	
27 Methyl acetate	43	2.979	2.979	0.000	96	451486	50.0	55.4	
30 Methylene Chloride	84	3.076	3.076	0.000	93	221617	25.0	26.3	
32 Methyl tert-butyl ether	73	3.283	3.283	0.000	93	552736	25.0	23.1	
34 trans-1,2-Dichloroethene	96	3.301	3.302	-0.001	91	190026	25.0	23.6	
39 1,1-Dichloroethane	63	3.721	3.721	0.000	85	351849	25.0	24.7	
45 cis-1,2-Dichloroethene	96	4.275	4.281	-0.006	71	210018	25.0	23.0	
43 2-Butanone (MEK)	43	4.317	4.317	0.000	98	739617	125.0	146.2	
50 Chloroform	83	4.591	4.591	0.000	81	341758	25.0	22.0	
52 Cyclohexane	56	4.701	4.701	0.000	92	417782	25.0	29.4	
51 1,1,1-Trichloroethane	97	4.695	4.701	-0.006	76	273409	25.0	23.4	
55 Carbon tetrachloride	117	4.828	4.835	-0.007	82	240309	25.0	24.7	
57 Benzene	78	5.053	5.054	-0.001	96	817646	25.0	25.1	
58 1,2-Dichloroethane	62	5.126	5.127	-0.001	79	305186	25.0	23.9	
62 Trichloroethene	95	5.662	5.662	0.000	93	200959	25.0	24.1	
64 Methylcyclohexane	83	5.777	5.778	-0.001	94	398856	25.0	27.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
65 1,2-Dichloropropane	63	5.905	5.905	0.000	90	199408	25.0	25.2	
68 Dichlorobromomethane	83	6.197	6.203	-0.006	91	243686	25.0	24.2	
72 cis-1,3-Dichloropropene	75	6.617	6.617	0.000	87	302566	25.0	24.6	
73 4-Methyl-2-pentanone (MIBK	43	6.763	6.763	0.000	97	1525678	125.0	139.0	
74 Toluene	92	6.897	6.897	0.000	87	520835	25.0	24.2	
77 trans-1,3-Dichloropropene	75	7.183	7.183	0.000	94	283701	25.0	24.0	
79 1,1,2-Trichloroethane	83	7.377	7.371	0.006	88	157398	25.0	24.7	
81 Tetrachloroethene	166	7.426	7.426	0.000	79	216823	25.0	23.0	
80 2-Hexanone	43	7.603	7.602	-0.001	97	1116483	125.0	137.0	
83 Chlorodibromomethane	129	7.767	7.773	-0.006	88	182474	25.0	23.4	
84 Ethylene Dibromide	107	7.870	7.870	0.000	98	193573	25.0	23.3	
87 Chlorobenzene	112	8.345	8.345	0.000	92	564393	25.0	23.7	
88 Ethylbenzene	91	8.436	8.436	0.000	99	945375	25.0	24.0	
90 m-Xylene & p-Xylene	106	8.558	8.558	0.000	100	374431		23.8	
91 o-Xylene	106	8.983	8.983	-0.001	98	412429		26.7	
92 Styrene	104	9.014	9.014	0.000	93	620780	25.0	23.9	
95 Bromoform	173	9.263	9.263	0.000	94	121163	25.0	24.3	
94 Isopropylbenzene	105	9.367	9.367	0.000	96	933635	25.0	26.1	
97 1,1,2,2-Tetrachloroethane	83	9.787	9.786	-0.001	62	262147	25.0	25.3	
111 1,3-Dichlorobenzene	146	10.644	10.644	0.000	80	457636	25.0	24.5	
113 1,4-Dichlorobenzene	146	10.736	10.735	0.000	94	469410	25.0	24.4	
116 1,2-Dichlorobenzene	146	11.088	11.088	0.000	92	442296	25.0	23.7	
117 1,2-Dibromo-3-Chloropropan	75	11.825	11.824	-0.001	77	42974	25.0	24.7	
119 1,2,4-Trichlorobenzene	180	12.494	12.494	0.000	92	261786	25.0	21.5	
S 124 Xylenes, Total	1				0			50.6	

Reagents:

8260 CORP mix_00160	Amount Added:	12.50	Units: uL	
GAS CORP mix_00350	Amount Added:	12.50	Units: uL	
S_8260_IS_00322	Amount Added:	1.00	Units: uL	Run Reagent
S_8260_Surr_00322	Amount Added:	1.00	Units: uL	Run Reagent

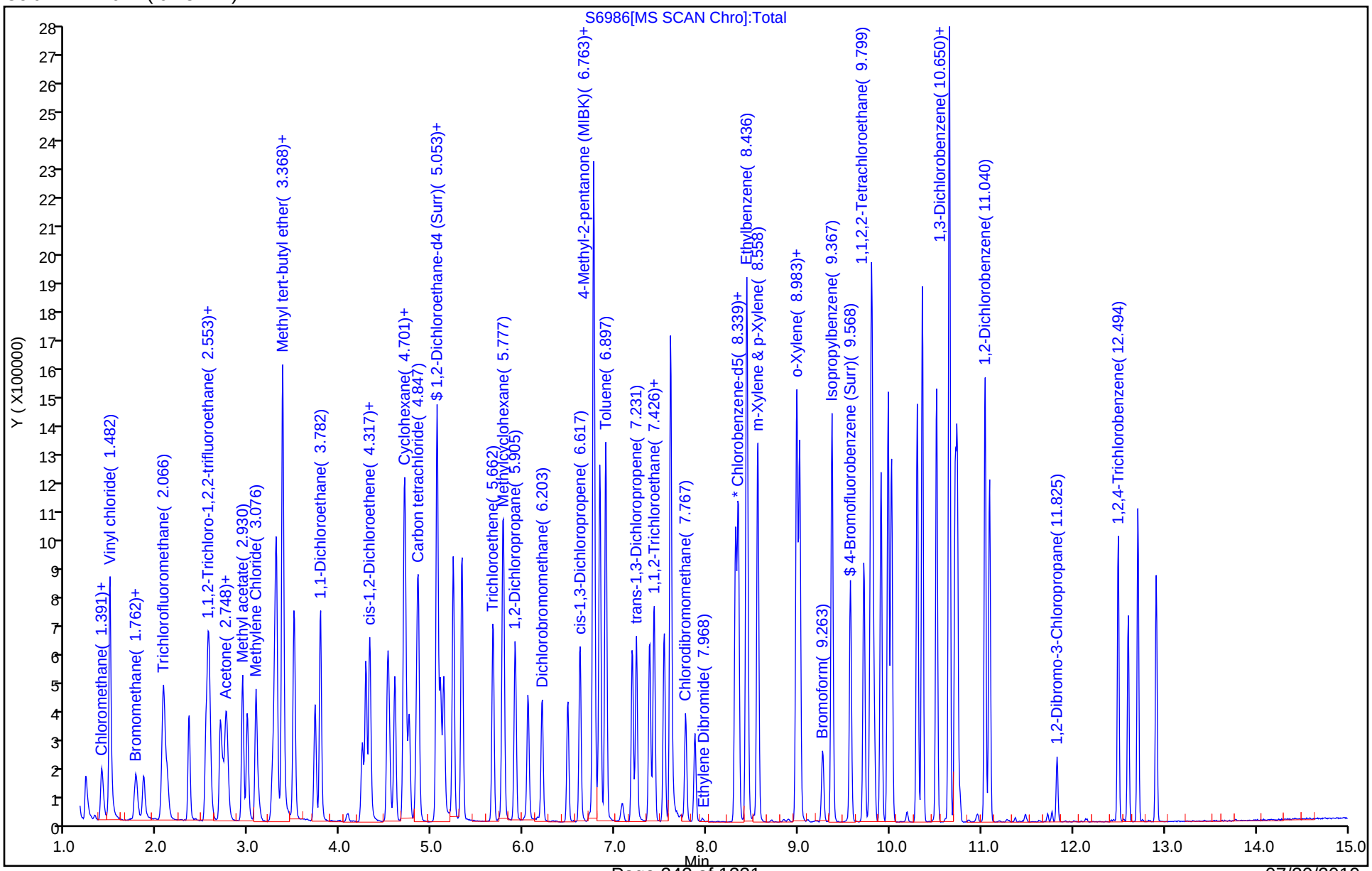
Report Date: 15-Jul-2019 23:26:08 Chrom Revision: 2.3 20-Jun-2019 20:50:56

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973S\20190715-82614.b\S6986.D

Injection Date:	15-Jul-2019 19:30:30	Instrument ID:	HP5973S	Operator ID:	KN
Lims ID:	480-156069-D-2 MSD			Worklist Smp#:	29
Client ID:	MW17				
Purge Vol:	5.000 mL	Dil. Factor:	10.0000	ALS Bottle#:	28
Method:	S-8260	Limit Group:	MV - 8260C ICAL		

Column: ZB-624 (0.18 mm)



GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: HP5973S Start Date: 06/24/2019 12:40

Analysis Batch Number: 479287 End Date: 06/24/2019 22:21

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-479287/7		06/24/2019 12:40	1	S6409.D	ZB-624 (20) 0.18(mm)
IC 480-479287/11		06/24/2019 13:55	1	S6411.D	ZB-624 (20) 0.18(mm)
IC 480-479287/12		06/24/2019 14:18	1	S6412.D	ZB-624 (20) 0.18(mm)
IC 480-479287/13		06/24/2019 14:42	1	S6413.D	ZB-624 (20) 0.18(mm)
IC 480-479287/14		06/24/2019 15:05	1	S6414.D	ZB-624 (20) 0.18(mm)
IC 480-479287/15		06/24/2019 15:27	1	S6415.D	ZB-624 (20) 0.18(mm)
ICIS 480-479287/16		06/24/2019 15:50	1	S6416.D	ZB-624 (20) 0.18(mm)
IC 480-479287/17		06/24/2019 16:13	1	S6417.D	ZB-624 (20) 0.18(mm)
IC 480-479287/18		06/24/2019 16:36	1	S6418.D	ZB-624 (20) 0.18(mm)
MDLV 480-479287/20		06/24/2019 17:22	1		ZB-624 (20) 0.18(mm)
IC 480-479287/23		06/24/2019 18:31	1		ZB-624 (20) 0.18(mm)
IC 480-479287/24		06/24/2019 18:54	1		ZB-624 (20) 0.18(mm)
IC 480-479287/25		06/24/2019 19:17	1		ZB-624 (20) 0.18(mm)
IC 480-479287/26		06/24/2019 19:40	1		ZB-624 (20) 0.18(mm)
IC 480-479287/27		06/24/2019 20:03	1		ZB-624 (20) 0.18(mm)
IC 480-479287/28		06/24/2019 20:26	1		ZB-624 (20) 0.18(mm)
IC 480-479287/29		06/24/2019 20:49	1		ZB-624 (20) 0.18(mm)
MDLV 480-479287/31		06/24/2019 21:35	1		ZB-624 (20) 0.18(mm)
ICV 480-479287/32		06/24/2019 21:58	1		ZB-624 (20) 0.18(mm)
ICV 480-479287/33		06/24/2019 22:21	1		ZB-624 (20) 0.18(mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: HP5973S Start Date: 07/15/2019 09:10

Analysis Batch Number: 482015 End Date: 07/15/2019 19:30

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 480-482015/2		07/15/2019 09:10	1	S6960.D	ZB-624 (20) 0.18(mm)
CCVIS 480-482015/3		07/15/2019 09:37	1	S6961.D	ZB-624 (20) 0.18(mm)
CCV 480-482015/4		07/15/2019 10:00	1		ZB-624 (20) 0.18(mm)
LCS 480-482015/5		07/15/2019 10:23	1	S6963.D	ZB-624 (20) 0.18(mm)
MB 480-482015/7		07/15/2019 11:09	1	S6965.D	ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 11:49	100		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 12:12	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 12:35	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 12:58	2		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 13:21	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 13:44	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 14:07	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 14:30	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 14:53	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 15:16	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 15:39	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 16:02	1		ZB-624 (20) 0.18(mm)
ZZZZZ		07/15/2019 16:25	1		ZB-624 (20) 0.18(mm)
480-156069-1		07/15/2019 16:48	4	S6979.D	ZB-624 (20) 0.18(mm)
480-156069-2		07/15/2019 17:11	10	S6980.D	ZB-624 (20) 0.18(mm)
480-156069-3		07/15/2019 17:34	10	S6981.D	ZB-624 (20) 0.18(mm)
480-156069-4		07/15/2019 17:57	10	S6982.D	ZB-624 (20) 0.18(mm)
480-156069-5		07/15/2019 18:20	10	S6983.D	ZB-624 (20) 0.18(mm)
480-156069-6		07/15/2019 18:43	1	S6984.D	ZB-624 (20) 0.18(mm)
480-156069-2 MS		07/15/2019 19:07	10	S6985.D	ZB-624 (20) 0.18(mm)
480-156069-2 MSD		07/15/2019 19:30	10	S6986.D	ZB-624 (20) 0.18(mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 482015 Batch Start Date: 07/15/19 09:10 Batch Analyst: Milligan, Amanda E

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	8260 CORP mix 00160	BFB_WRK 00089	GAS CORP mix 00350
BFB 480-482015/2		8260C		1 uL	1 uL			1 uL	
CCVIS 480-482015/3		8260C		5 mL	5 mL		12.5 uL		12.5 uL
LCS 480-482015/5		8260C		5 mL	5 mL		12.5 uL		12.5 uL
MB 480-482015/7		8260C		5 mL	5 mL				
480-156069-E-1	W13	8260C	T	5 mL	5 mL	<2 SU			
480-156069-E-2	MW17	8260C	T	5 mL	5 mL	<2 SU			
480-156069-E-3	W28	8260C	T	5 mL	5 mL	<2 SU			
480-156069-E-4	WCMW4	8260C	T	5 mL	5 mL	<2 SU			
480-156069-E-5	BLIND DUP	8260C	T	5 mL	5 mL	<2 SU			
480-156069-A-6	TRIP BLANK	8260C	T	5 mL	5 mL	<2 SU			
480-156069-D-2 MS	MW17	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL
480-156069-D-2 MSD	MW17	8260C	T	5 mL	5 mL	<2 SU	12.5 uL		12.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	S_8260_IS 00322	S_8260_Surr 00322	AnalysisComment			
BFB 480-482015/2		8260C							
CCVIS 480-482015/3		8260C		1 uL	1 uL				
LCS 480-482015/5		8260C		1 uL	1 uL				
MB 480-482015/7		8260C		1 uL	1 uL				
480-156069-E-1	W13	8260C	T	1 uL	1 uL	Foam			
480-156069-E-2	MW17	8260C	T	1 uL	1 uL	Foam			
480-156069-E-3	W28	8260C	T	1 uL	1 uL	Foam			
480-156069-E-4	WCMW4	8260C	T	1 uL	1 uL	Foam			
480-156069-E-5	BLIND DUP	8260C	T	1 uL	1 uL	Foam			
480-156069-A-6	TRIP BLANK	8260C	T	1 uL	1 uL				
480-156069-D-2 MS	MW17	8260C	T	1 uL	1 uL				

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 482015 Batch Start Date: 07/15/19 09:10 Batch Analyst: Milligan, Amanda E

Batch Method: 8260C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	S_8260_IS 00322	S_8260_Surr 00322	AnalysisComment			
480-156069-D-2 MSD	MW17	8260C	T	1 uL	1 uL	Client QC			

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
W13	480-156069-1	58	38	85	96	92	59
MW17	480-156069-2	57	44	77	86	98	42 X
W28	480-156069-3	63	43	94	95	131 X	52 X
WCMW4	480-156069-4	54	33	76	86	83	48 X
BLIND DUP	480-156069-5	60	40	93	91	127 X	57 X
	MB 480-481994/1-A	62	43	91	94	90	105
	LCS 480-481994/2-A	64	47	87	92	103	97
MW17 MS	480-156069-2 MS	61	53	86	91	98	45 X
MW17 MSD	480-156069-2 MSD	61	48	79	83	116	45 X

	QC LIMITS
2FP = 2-Fluorophenol	35-120
PHL = Phenol-d5	22-120
NBZ = Nitrobenzene-d5	46-120
FBP = 2-Fluorobiphenyl	48-120
TBP = 2,4,6-Tribromophenol	41-120
TPHd14 = p-Terphenyl-d14	59-136

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025822.D

Lab ID: LCS 480-481994/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	33.4	104	65-126	
2,4,6-Trichlorophenol	32.0	34.7	108	64-120	
2,4-Dichlorophenol	32.0	32.6	102	63-120	
2,4-Dimethylphenol	32.0	30.7	96	47-120	
2,4-Dinitrophenol	64.0	64.6	101	31-137	
2,4-Dinitrotoluene	32.0	30.2	94	69-120	
2,6-Dinitrotoluene	32.0	31.0	97	68-120	
2-Chloronaphthalene	32.0	27.2	85	58-120	
2-Chlorophenol	32.0	26.6	83	48-120	
2-Methylnaphthalene	32.0	29.4	92	59-120	
2-Methylphenol	32.0	29.8	93	39-120	
3,3'-Dichlorobenzidine	64.0	70.8	111	49-135	
3-Nitroaniline	32.0	28.3	89	51-120	
4,6-Dinitro-2-methylphenol	64.0	67.7	106	46-136	
4-Bromophenyl phenyl ether	32.0	31.4	98	65-120	
4-Chloro-3-methylphenol	32.0	28.0	87	61-123	
4-Chloroaniline	32.0	26.1	82	30-120	
4-Methylphenol	32.0	26.1	82	29-131	
4-Nitroaniline	32.0	26.7	83	65-120	
4-Nitrophenol	64.0	78.8	123	45-120	*
Acenaphthene	32.0	30.3	95	60-120	
Acenaphthylene	32.0	29.8	93	63-120	
Anthracene	32.0	30.2	94	67-120	
Atrazine	64.0	75.1	117	71-130	
Benzaldehyde	64.0	52.2	82	10-140	
Benzo(a)anthracene	32.0	31.5	98	70-121	
Benzo(a)pyrene	32.0	29.3	92	60-123	
Benzo(b)fluoranthene	32.0	32.0	100	66-126	
Benzo(g,h,i)perylene	32.0	32.1	100	66-150	
Benzo(k)fluoranthene	32.0	31.1	97	65-124	
Biphenyl	32.0	28.0	88	59-120	
bis (2-chloroisopropyl) ether	32.0	24.0	75	21-136	
Bis(2-chloroethoxy)methane	32.0	25.6	80	50-128	
Bis(2-chloroethyl)ether	32.0	22.1	69	44-120	
Bis(2-ethylhexyl) phthalate	32.0	33.4	104	63-139	
Butyl benzyl phthalate	32.0	30.1	94	70-129	
Caprolactam	64.0	20.9	33	22-120	
Carbazole	32.0	29.4	92	66-123	
Chrysene	32.0	33.7	105	69-120	
Dibenz(a,h)anthracene	32.0	32.4	101	65-135	
Dibenzofuran	32.0	29.8	93	66-120	
Diethyl phthalate	32.0	34.3	107	59-127	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025822.D

Lab ID: LCS 480-481994/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Dimethyl phthalate	32.0	33.2	104	68-120	
Di-n-butyl phthalate	32.0	32.0	100	69-131	
Di-n-octyl phthalate	32.0	31.0	97	63-140	
Fluoranthene	32.0	32.9	103	69-126	
Fluorene	32.0	31.5	98	66-120	
Hexachlorobenzene	32.0	29.8	93	61-120	
Hexachlorobutadiene	32.0	25.5	80	35-120	
Hexachlorocyclopentadiene	32.0	18.7	58	31-120	
Hexachloroethane	32.0	23.4	73	43-120	
Indeno(1,2,3-cd)pyrene	32.0	32.8	103	69-146	
Isophorone	32.0	29.6	92	55-120	
Naphthalene	32.0	28.3	88	57-120	
Nitrobenzene	32.0	30.5	95	53-123	
N-Nitrosodi-n-propylamine	32.0	26.9	84	32-140	
Pentachlorophenol	64.0	47.7	74	29-136	
Phenanthrene	32.0	32.8	103	68-120	
Phenol	32.0	18.0	56	17-120	
Pyrene	32.0	31.4	98	70-125	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025823.D

Lab ID: 480-156069-2 MS Client ID: MW17 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	ND	34.2	107	65-126	
2,4,6-Trichlorophenol	32.0	ND	36.5	114	64-120	
2,4-Dichlorophenol	32.0	ND	29.9	94	48-132	
2,4-Dimethylphenol	32.0	ND	30.8	96	39-130	
2,4-Dinitrophenol	64.0	ND	67.9	106	21-150	
2,4-Dinitrotoluene	32.0	ND	23.6 J	74	54-138	
2,6-Dinitrotoluene	32.0	ND	32.2	101	17-150	
2-Chloronaphthalene	32.0	ND	28.1	88	52-124	
2-Chlorophenol	32.0	ND	26.0	81	48-120	
2-Methylnaphthalene	32.0	ND	30.0	94	34-140	
2-Methylphenol	32.0	ND	30.5	95	46-120	
3,3'-Dichlorobenzidine	64.0	ND	ND	0	10-150	F1
3-Nitroaniline	32.0	ND	ND	0	32-150	F1
4,6-Dinitro-2-methylphenol	64.0	ND	79.6	124	38-150	
4-Bromophenyl phenyl ether	32.0	ND	27.1	85	63-126	
4-Chloro-3-methylphenol	32.0	ND	28.7	90	64-127	
4-Chloroaniline	32.0	ND	ND	0	16-124	F1
4-Methylphenol	32.0	ND	23.2 J	73	36-120	
4-Nitroaniline	32.0	ND	ND	0	32-150	F1
4-Nitrophenol	64.0	ND	87.3	136	23-132	F1
Acenaphthene	32.0	ND	31.4	98	48-120	
Acenaphthylene	32.0	ND	29.7	93	63-120	
Anthracene	32.0	ND	28.9	90	65-122	
Atrazine	64.0	ND	49.6	78	50-150	
Benzaldehyde	64.0	ND	56.1	88	10-150	
Benzo(a)anthracene	32.0	ND	24.4 J	76	43-124	
Benzo(a)pyrene	32.0	ND	21.5 J	67	23-125	
Benzo(b)fluoranthene	32.0	ND	23.2 J	73	27-127	
Benzo(g,h,i)perylene	32.0	ND	25.3	79	16-147	
Benzo(k)fluoranthene	32.0	ND	24.1 J	75	20-124	
Biphenyl	32.0	ND	28.7	90	57-120	
bis (2-chloroisopropyl) ether	32.0	ND	24.3 J	76	28-121	
Bis(2-chloroethoxy)methane	32.0	ND	26.7	84	44-128	
Bis(2-chloroethyl)ether	32.0	ND	24.9 J	78	45-120	
Bis(2-ethylhexyl) phthalate	32.0	ND	26.6	83	16-150	
Butyl benzyl phthalate	32.0	ND	24.4 J	76	51-140	
Caprolactam	64.0	ND	ND	0	10-120	F1
Carbazole	32.0	ND	34.5	108	16-148	
Chrysene	32.0	ND	26.8	84	44-122	
Dibenz(a,h)anthracene	32.0	ND	24.1 J	75	16-139	
Dibenzofuran	32.0	ND	30.7 J	96	60-120	
Diethyl phthalate	32.0	ND	27.0	84	53-133	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025823.D

Lab ID: 480-156069-2 MS Client ID: MW17 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Dimethyl phthalate	32.0	ND	24.9 J	78	59-123	
Di-n-butyl phthalate	32.0	ND	26.9	84	65-129	
Di-n-octyl phthalate	32.0	ND	26.7	83	16-150	
Fluoranthene	32.0	ND	28.6	89	63-129	
Fluorene	32.0	ND	30.2	95	62-120	
Hexachlorobenzene	32.0	ND	31.1	97	57-121	
Hexachlorobutadiene	32.0	ND	25.3	79	37-120	
Hexachlorocyclopentadiene	32.0	ND	18.4 J	58	21-120	
Hexachloroethane	32.0	ND	29.0	91	16-130	
Indeno(1,2,3-cd)pyrene	32.0	ND	25.2	79	16-140	
Isophorone	32.0	ND	31.0	97	48-133	
Naphthalene	32.0	ND	27.8	87	45-120	
Nitrobenzene	32.0	ND	28.8	90	45-123	
N-Nitrosodi-n-propylamine	32.0	ND	29.8	93	49-120	
Pentachlorophenol	64.0	ND	81.3	127	23-149	
Phenanthrene	32.0	2.2 J	34.2	107	65-122	
Phenol	32.0	ND	14.8 J	46	16-120	
Pyrene	32.0	ND	23.9 J	75	58-128	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025824.D

Lab ID: 480-156069-2 MSD Client ID: MW17 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	24.7 J	77	32	18	65-126	F2
2,4,6-Trichlorophenol	32.0	33.1	104	10	19	64-120	
2,4-Dichlorophenol	32.0	29.1	91	3	19	48-132	
2,4-Dimethylphenol	32.0	ND	0	NC	42	39-130	F1
2,4-Dinitrophenol	64.0	62.2	97	9	22	21-150	
2,4-Dinitrotoluene	32.0	22.4 J	70	5	20	54-138	
2,6-Dinitrotoluene	32.0	28.6	89	12	15	17-150	
2-Chloronaphthalene	32.0	25.2	79	11	21	52-124	
2-Chlorophenol	32.0	25.5	80	2	25	48-120	
2-Methylnaphthalene	32.0	27.7	86	8	21	34-140	
2-Methylphenol	32.0	26.5	83	14	27	46-120	
3,3'-Dichlorobenzidine	64.0	ND	0	NC	25	10-150	F1
3-Nitroaniline	32.0	ND	0	NC	19	32-150	F1
4,6-Dinitro-2-methylphenol	64.0	88.3	138	10	15	38-150	
4-Bromophenyl phenyl ether	32.0	27.4	86	1	15	63-126	
4-Chloro-3-methylphenol	32.0	27.1	85	6	27	64-127	
4-Chloroaniline	32.0	ND	0	NC	22	16-124	F1
4-Methylphenol	32.0	24.5 J	77	5	24	36-120	
4-Nitroaniline	32.0	18.1 J	56	NC	24	32-150	
4-Nitrophenol	64.0	79.8	125	9	48	23-132	
Acenaphthene	32.0	28.7	90	9	24	48-120	
Acenaphthylene	32.0	28.2	88	5	18	63-120	
Anthracene	32.0	29.3	91	1	15	65-122	
Atrazine	64.0	43.3	68	14	20	50-150	
Benzaldehyde	64.0	50.2	78	11	20	10-150	
Benzo(a)anthracene	32.0	24.0 J	75	2	15	43-124	
Benzo(a)pyrene	32.0	22.3 J	70	4	15	23-125	
Benzo(b)fluoranthene	32.0	23.4 J	73	1	15	27-127	
Benzo(g,h,i)perylene	32.0	25.5	80	1	15	16-147	
Benzo(k)fluoranthene	32.0	23.5 J	73	3	22	20-124	
Biphenyl	32.0	26.4	82	9	20	57-120	
bis (2-chloroisopropyl) ether	32.0	22.1 J	69	10	24	28-121	
Bis(2-chloroethoxy)methane	32.0	24.9 J	78	7	17	44-128	
Bis(2-chloroethyl)ether	32.0	21.2 J	66	16	21	45-120	
Bis(2-ethylhexyl) phthalate	32.0	26.9	84	1	15	16-150	
Butyl benzyl phthalate	32.0	23.2 J	73	5	16	51-140	
Caprolactam	64.0	ND	0	NC	20	10-120	F1
Carbazole	32.0	30.0	94	14	20	16-148	
Chrysene	32.0	26.6	83	0	15	44-122	
Dibenz(a,h)anthracene	32.0	24.0 J	75	1	15	16-139	
Dibenzofuran	32.0	27.5 J	86	11	15	60-120	
Diethyl phthalate	32.0	23.0 J	72	16	15	53-133	F2

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y025824.D

Lab ID: 480-156069-2 MSD Client ID: MW17 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Dimethyl phthalate	32.0	24.1 J	75	3	15	59-123	
Di-n-butyl phthalate	32.0	24.6 J	77	9	15	65-129	
Di-n-octyl phthalate	32.0	27.6	86	3	16	16-150	
Fluoranthene	32.0	28.1	88	2	15	63-129	
Fluorene	32.0	27.1	85	11	15	62-120	
Hexachlorobenzene	32.0	27.4	86	12	15	57-121	
Hexachlorobutadiene	32.0	25.1	78	1	44	37-120	
Hexachlorocyclopentadiene	32.0	18.7 J	58	1	49	21-120	
Hexachloroethane	32.0	29.5	92	2	46	16-130	
Indeno(1,2,3-cd)pyrene	32.0	24.3 J	76	3	15	16-140	
Isophorone	32.0	28.6	89	8	17	48-133	
Naphthalene	32.0	27.3	85	2	29	45-120	
Nitrobenzene	32.0	29.0	91	1	24	45-123	
N-Nitrosodi-n-propylamine	32.0	29.7	93	0	31	49-120	
Pentachlorophenol	64.0	92.0	144	12	37	23-149	
Phenanthrene	32.0	31.4	98	9	15	65-122	
Phenol	32.0	15.4 J	48	4	34	16-120	
Pyrene	32.0	23.4 J	73	2	19	58-128	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: Y025821.D Lab Sample ID: MB 480-481994/1-A

Matrix: Water Date Extracted: 07/15/2019 07:45

Instrument ID: HP5973Y Date Analyzed: 07/16/2019 14:09

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 480-481994/2-A	Y025822.D	07/16/2019 14:37
MW17 MS	480-156069-2 MS	Y025823.D	07/16/2019 15:05
MW17 MSD	480-156069-2 MSD	Y025824.D	07/16/2019 15:33
MW17	480-156069-2	Y025827.D	07/16/2019 16:57
W13	480-156069-1	Y025829.D	07/16/2019 17:53
W28	480-156069-3	Y025830.D	07/16/2019 18:21
WCMW4	480-156069-4	Y025831.D	07/16/2019 18:49
BLIND DUP	480-156069-5	Y025832.D	07/16/2019 19:17

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: Y024941.D DFTPP Injection Date: 06/04/2019

Instrument ID: HP5973Y DFTPP Injection Time: 16:15

Analysis Batch No.: 476154

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	35.3	
68	Less than 2% of mass 69	0.0	(0.0) 1
69	Mass 69 Relative abundance	43.8	
70	Less than 2% of mass 69	0.2	(0.5) 1
127	10-80% of Base Peak	48.4	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	7.0	
275	10-60% of Base Peak	27.0	
365	Greater than 1% of mass 198	4.0	
441	present but less than 24% of mass 442	14.7	(16.7) 2
442	Greater than 50% of mass 198	88.2	
443	15-24% of mass 442	16.5	(18.7) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 480-476154/3	Y024942.D	06/04/2019	16:43
	IC 480-476154/4	Y024943.D	06/04/2019	17:11
	IC 480-476154/5	Y024944.D	06/04/2019	17:38
	IC 480-476154/6	Y024945.D	06/04/2019	18:06
	ICIS 480-476154/7	Y024946.D	06/04/2019	18:34
	IC 480-476154/8	Y024947.D	06/04/2019	19:02
	IC 480-476154/9	Y024948.D	06/04/2019	19:30
	IC 480-476154/10	Y024949.D	06/04/2019	19:58

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab File ID: Y025818.D DFTPP Injection Date: 07/16/2019

Instrument ID: HP5973Y DFTPP Injection Time: 12:46

Analysis Batch No.: 482258

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	10-80% of Base Peak	60.6	
68	Less than 2% of mass 69	0.6	(1.0) 1
69	Mass 69 Relative abundance	57.8	
70	Less than 2% of mass 69	0.4	(0.6) 1
127	10-80% of Base Peak	54.3	
197	Less than 2% of mass 198	0.0	
198	Base peak	100.0	
199	5-9% of mass 198	7.1	
275	10-60% of Base Peak	29.0	
365	Greater than 1% of mass 198	5.8	
441	present but less than 24% of mass 442	15.1	(17.2) 2
442	Greater than 50% of mass 198	87.8	
443	15-24% of mass 442	17.4	(19.9) 2

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

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

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 480-482258/3	Y025819.D	07/16/2019	13:14
	MB 480-481994/1-A	Y025821.D	07/16/2019	14:09
	LCS 480-481994/2-A	Y025822.D	07/16/2019	14:37
MW17 MS	480-156069-2 MS	Y025823.D	07/16/2019	15:05
MW17 MSD	480-156069-2 MSD	Y025824.D	07/16/2019	15:33
MW17	480-156069-2	Y025827.D	07/16/2019	16:57
W13	480-156069-1	Y025829.D	07/16/2019	17:53
W28	480-156069-3	Y025830.D	07/16/2019	18:21
WCMW4	480-156069-4	Y025831.D	07/16/2019	18:49
BLIND DUP	480-156069-5	Y025832.D	07/16/2019	19:17

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: ICIS 480-476154/7 Date Analyzed: 06/04/2019 18:34

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): Y024946.D Heated Purge: (Y/N) N

Calibration ID: 37071

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		337477	6.45	1254314	7.55	712139	9.03
UPPER LIMIT		674954	6.95	2508628	8.05	1424278	9.53
LOWER LIMIT		168739	5.95	627157	7.05	356070	8.53
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-482258/3		213393	6.26	787893	7.35	480982	8.83

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: ICIS 480-476154/7 Date Analyzed: 06/04/2019 18:34

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): Y024946.D Heated Purge: (Y/N) N

Calibration ID: 37071

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1334753	10.29	1258571	12.98	1310530	15.17
UPPER LIMIT		2669506	10.79	2517142	13.48	2621060	15.67
LOWER LIMIT		667377	9.79	629286	12.48	655265	14.67
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCVIS 480-482258/3		980392	10.08	983655	12.65	1012366	14.75

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: CCVIS 480-482258/3 Date Analyzed: 07/16/2019 13:14

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): Y025819.D Heated Purge: (Y/N) N

Calibration ID: 37079

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		213393	6.26	787893	7.35	480982	8.83
UPPER LIMIT		426786	6.76	1575786	7.85	961964	9.33
LOWER LIMIT		106697	5.76	393947	6.85	240491	8.33
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-481994/1-A		214620	6.26	759097	7.35	474895	8.83
LCS 480-481994/2-A		206002	6.26	735914	7.35	465466	8.83
480-156069-2 MS	MW17 MS	206179	6.26	758371	7.35	466592	8.83
480-156069-2 MSD	MW17 MSD	208430	6.26	771560	7.35	485722	8.83
480-156069-2	MW17	208322	6.26	753050	7.35	470661	8.83
480-156069-1	W13	199196	6.26	707223	7.35	427337	8.83
480-156069-3	W28	197207	6.26	730591	7.35	495102	8.83
480-156069-4	WCMW4	209165	6.26	734531	7.35	441360	8.83
480-156069-5	BLIND DUP	196774	6.26	689784	7.35	500982	8.84

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Sample No.: CCVIS 480-482258/3 Date Analyzed: 07/16/2019 13:14

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm)

Lab File ID (Standard): Y025819.D Heated Purge: (Y/N) N

Calibration ID: 37079

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		980392	10.08	983655	12.65	1012366	14.75
UPPER LIMIT		1960784	10.58	1967310	13.15	2024732	15.25
LOWER LIMIT		490196	9.58	491828	12.15	506183	14.25
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 480-481994/1-A		926583	10.07	894740	12.64	904623	14.75
LCS 480-481994/2-A		906511	10.08	922328	12.65	928194	14.75
480-156069-2 MS	MW17 MS	744486	10.08	875469	12.66	999156	14.76
480-156069-2 MSD	MW17 MSD	760654	10.08	869375	12.66	1014970	14.76
480-156069-2	MW17	738444	10.08	870493	12.66	1007635	14.76
480-156069-1	W13	834043	10.08	824431	12.66	895052	14.76
480-156069-3	W28	709066	10.09	877046	12.67	1035062	14.77
480-156069-4	WCMW4	798801	10.08	822905	12.65	908560	14.76
480-156069-5	BLIND DUP	748471	10.09	895073	12.67	1008753	14.77

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: Y025829.D

Analysis Method: 8270D Date Collected: 07/10/2019 12:55

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 17:53

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND	*	10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: Y025829.D

Analysis Method: 8270D Date Collected: 07/10/2019 12:55

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 17:53

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	1.3	J B	5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: Y025829.D

Analysis Method: 8270D Date Collected: 07/10/2019 12:55

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 17:53

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	92		41-120
321-60-8	2-Fluorobiphenyl	96		48-120
367-12-4	2-Fluorophenol	58		35-120
4165-60-0	Nitrobenzene-d5	85		46-120
4165-62-2	Phenol-d5	38		22-120
1718-51-0	p-Terphenyl-d14	59		59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Matrix: Water Lab File ID: Y025829.D

Analysis Method: 8270D Date Collected: 07/10/2019 12:55

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 17:53

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 17 TIC Result Total: 188.9

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.49	2.2	T J	
	Unknown	2.61	1.9	T J	
	Unknown	2.76	110	T J	
	Unknown	2.83	2.7	T J	
	Unknown	4.80	35	T J	
	Column Bleed	5.91	5.2	T J	
	Unknown	6.55	1.7	T J	
	Unknown	6.87	4.1	T J	
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-	6.90	2.0	T J N	95%
	Unknown	6.99	1.9	T J	
824-90-8	1-Phenyl-1-butene	7.12	3.2	T J N	90%
	Unknown	7.43	3.0	T J	
57305-27-8	Pregnane-3,20-dione, 11-[(trimethylsilyl)oxy]-, bis(O-methyl	7.74	4.5	T J N	93%
	Unknown	7.90	2.6	T J	
	Unknown	8.08	2.2	T J	
	Unknown	8.51	5.0	T J	
	Unknown	9.19	1.7	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D
Lims ID: 480-156069-A-1-A
Client ID: W13
Sample Type: Client
Inject. Date: 16-Jul-2019 17:53:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-013
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:05:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.256	6.256	0.000	96	199196	4.00	
* 2 Naphthalene-d8	136	7.346	7.345	0.001	99	707223	4.00	
* 3 Acenaphthene-d10	164	8.825	8.830	-0.005	94	427337	4.00	
* 4 Phenanthrene-d10	188	10.081	10.080	0.001	96	834043	4.00	
* 5 Chrysene-d12	240	12.655	12.649	0.006	98	824431	4.00	
* 6 Perylene-d12	264	14.759	14.748	0.011	99	895052	4.00	
$ 7 2-Fluorophenol	112	5.135	5.112	0.028	88	307583	4.63	
$ 8 Phenol-d5	99	5.957	5.972	0.016	90	250383	3.05	
$ 9 Nitrobenzene-d5	82	6.732	6.732	0.001	97	540410	6.82	
$ 10 2-Fluorobiphenyl	172	8.238	8.238	0.001	98	1197988	7.67	
$ 11 2,4,6-Tribromophenol	330	9.493	9.493	0.001	88	180326	7.38	
$ 12 p-Terphenyl-d14	244	11.427	11.431	0.001	98	902401	4.70	
35 Benzaldehyde	77		5.876				ND	
37 Phenol	94		5.951				ND	
39 Bis(2-chloroethyl)ether	93		6.015				ND	U
40 2-Chlorophenol	128		6.085				ND	
48 2-Methylphenol	108		6.464				ND	
49 2,2'-oxybis[1-chloropropan	45		6.475				ND	
53 N-Nitrosodi-n-propylamine	70		6.587				ND	
57 4-Methylphenol	108		6.592				ND	
52 Acetophenone	105		6.597				ND	
58 Hexachloroethane	117		6.699				ND	
59 Nitrobenzene	77		6.747				ND	
62 Isophorone	82		6.945				ND	U
64 2-Nitrophenol	139		7.019				ND	U
66 2,4-Dimethylphenol	107		7.041				ND	
69 Bis(2-chloroethoxy)methane	93		7.105				ND	
72 2,4-Dichlorophenol	162		7.228				ND	
74 Naphthalene	128		7.367				ND	
76 4-Chloroaniline	127		7.399				ND	
79 Hexachlorobutadiene	225		7.463				ND	
84 Caprolactam	113		7.698				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
85 4-Chloro-3-methylphenol	107		7.805				ND	
87 2-Methylnaphthalene	142		7.943				ND	
90 Hexachlorocyclopentadiene	237		8.077				ND	
93 2,4,6-Trichlorophenol	196		8.178				ND	
94 2,4,5-Trichlorophenol	196		8.221				ND	
96 1,1'-Biphenyl	154		8.328				ND	
97 2-Chloronaphthalene	162		8.360				ND	
100 2-Nitroaniline	65		8.435				ND	
105 Dimethyl phthalate	163		8.563				ND	
107 2,6-Dinitrotoluene	165		8.622				ND	
108 Acenaphthylene	152		8.713				ND	
109 3-Nitroaniline	138		8.777				ND	
110 Acenaphthene	153		8.857				ND	
111 2,4-Dinitrophenol	184		8.862				ND	
112 4-Nitrophenol	109		8.916				ND	
114 2,4-Dinitrotoluene	165		8.964				ND	
115 Dibenzofuran	168		8.996				ND	
120 Diethyl phthalate	149		9.140				ND	
123 4-Chlorophenyl phenyl ethe	204		9.263				ND	U
124 Fluorene	166		9.284				ND	U
126 4-Nitroaniline	138		9.295				ND	
127 4,6-Dinitro-2-methylphenol	198		9.316				ND	
130 N-Nitrosodiphenylamine	169		9.359				ND	
139 4-Bromophenyl phenyl ether	248		9.679				ND	
140 Hexachlorobenzene	284		9.759				ND	
143 Atrazine	200		9.786				ND	
145 Pentachlorophenol	266		9.920				ND	
151 Phenanthrene	178	10.102	10.102	0.001	94	76954	0.3332	
152 Anthracene	178		10.144				ND	
153 Carbazole	167		10.267				ND	
157 Di-n-butyl phthalate	149		10.502				ND	U
164 Fluoranthene	202	11.111	11.106	0.006	89	20461	0.0796	
167 Pyrene	202		11.324				ND	
174 Butyl benzyl phthalate	149		11.890				ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553				ND	
179 3,3'-Dichlorobenzidine	252		12.574				ND	
180 Benzo[a]anthracene	228		12.633				ND	
182 Chrysene	228		12.686				ND	
184 Di-n-octyl phthalate	149		13.450				ND	
186 Benzo[b]fluoranthene	252		14.160				ND	
187 Benzo[k]fluoranthene	252		14.198				ND	
189 Benzo[a]pyrene	252		14.663				ND	
193 Indeno[1,2,3-cd]pyrene	276		16.436				ND	
194 Dibenz(a,h)anthracene	278		16.446				ND	
195 Benzo[g,h,i]perylene	276		16.900				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D
Lims ID: 480-156069-A-1-A
Client ID: W13
Sample Type: Client
Inject. Date: 16-Jul-2019 17:53:30 ALS Bottle#: 13 Worklist Smp#: 13
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-013
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Tic RT Window: 1.500 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\chromna\Buffalo\Database\NIST98.L
Min. Match: 85

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:05:27

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
2.486	212717	0.5409	1					
	Unknown							
2.614	185801	0.4725	1					
	Unknown							
2.758	11287792	28.7	1					
	Unknown							
2.827	268758	0.6834	1					
	Unknown							
4.804	3401895	8.65	1					
	Column Bleed							
5.909	506933	1.29	1	0	0		0	
	Unknown							
6.545	166225	0.4227	1					
	Unknown							
6.865	554960	1.02	2					
933-98-2	Benzene, 1-ethyl-2,3-dimethyl-							
6.903	278287	0.5100	2	95	120728	C10H14	134	
	Unknown							
6.994	259084	0.4748	2					
824-90-8	1-Phenyl-1-butene							
7.122	441082	0.8084	2	90	120545	C10H12	132	
	Unknown							
7.431	404590	0.7415	2					

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	57305-27-8	Pregnane-3,20-dione, 11-[(trimethylsilyl)oxy]-, bis(O-methyloxime), (5.beta.,11.beta.)-						
7.741	615955	1.13	2	93	26368	C26H46N2O3Si	462	
	Unknown							
7.896	351120	0.6435	2					
	Unknown							
8.083	300368	0.5505	2					
	Unknown							
8.510	714421	1.26	3					
	Unknown							
9.194	239045	0.4202	3					

Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.256	1573002	4.00
* 2 Naphthalene-d8	7.346	2182582	4.00
* 3 Acenaphthene-d10	8.825	2275735	4.00

QC Flag Legend

Processing Flags

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

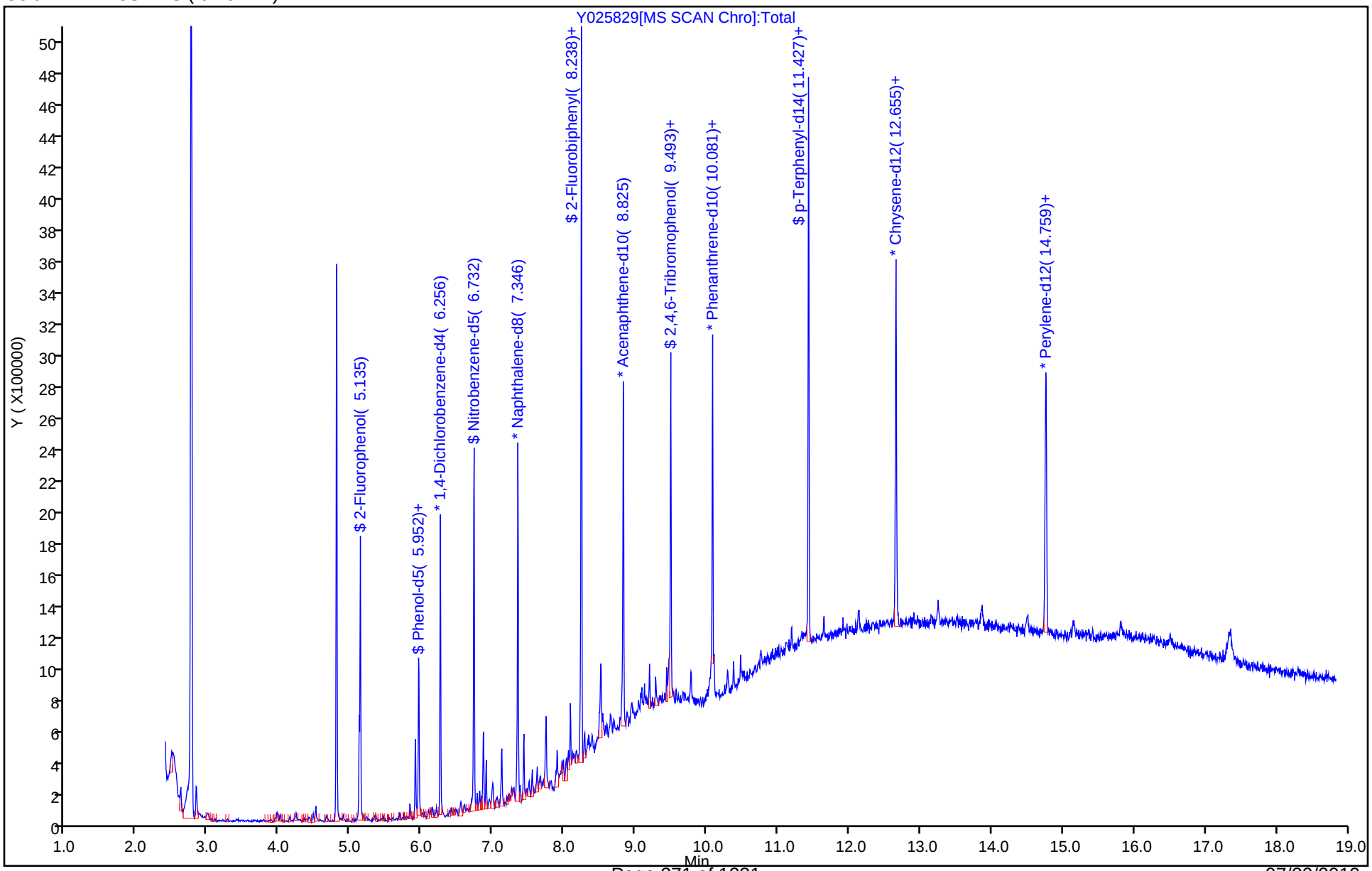
Report Date: 17-Jul-2019 09:33:28 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D

Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1	Worklist Smp#:	13
Client ID:	W13				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	13
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

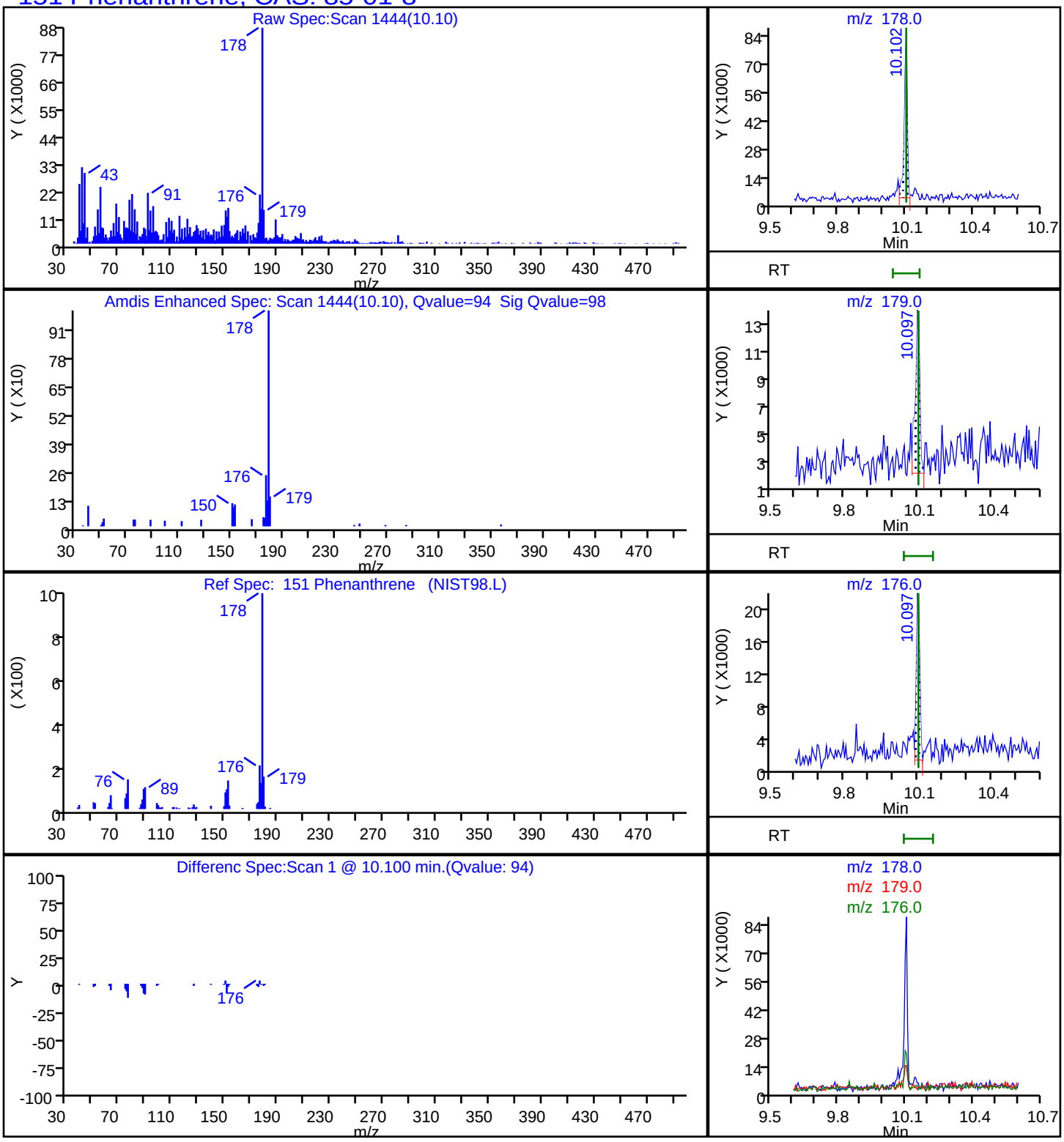
Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

151 Phenanthrene, CAS: 85-01-8



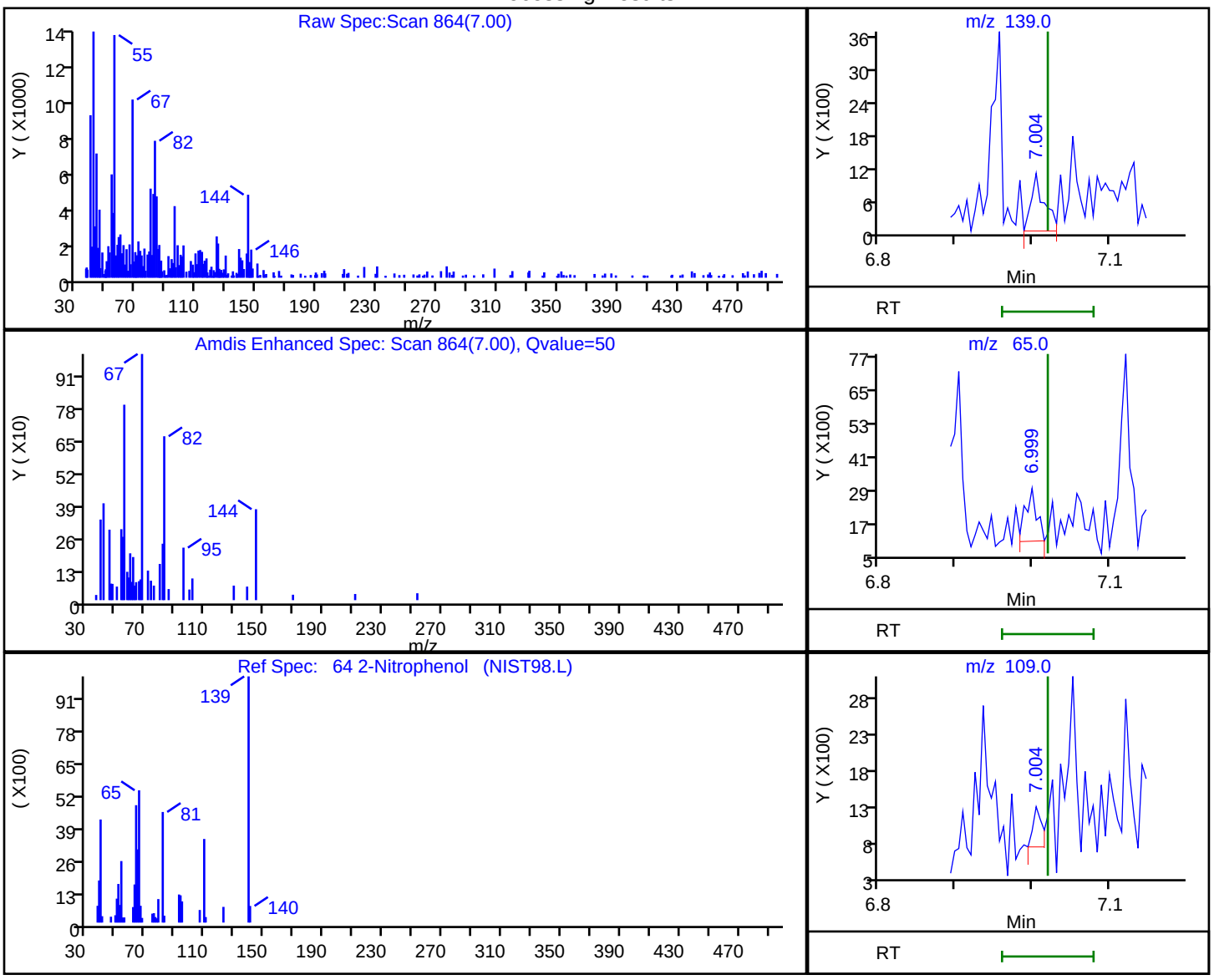
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

64 2-Nitrophenol, CAS: 88-75-5

Processing Results



RT	Mass	Response	Amount
7.00	139.00	1267	0.037603
7.00	65.00	1961	
7.00	109.00	445	

Reviewer: schickr, 17-Jul-2019 09:04:59

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

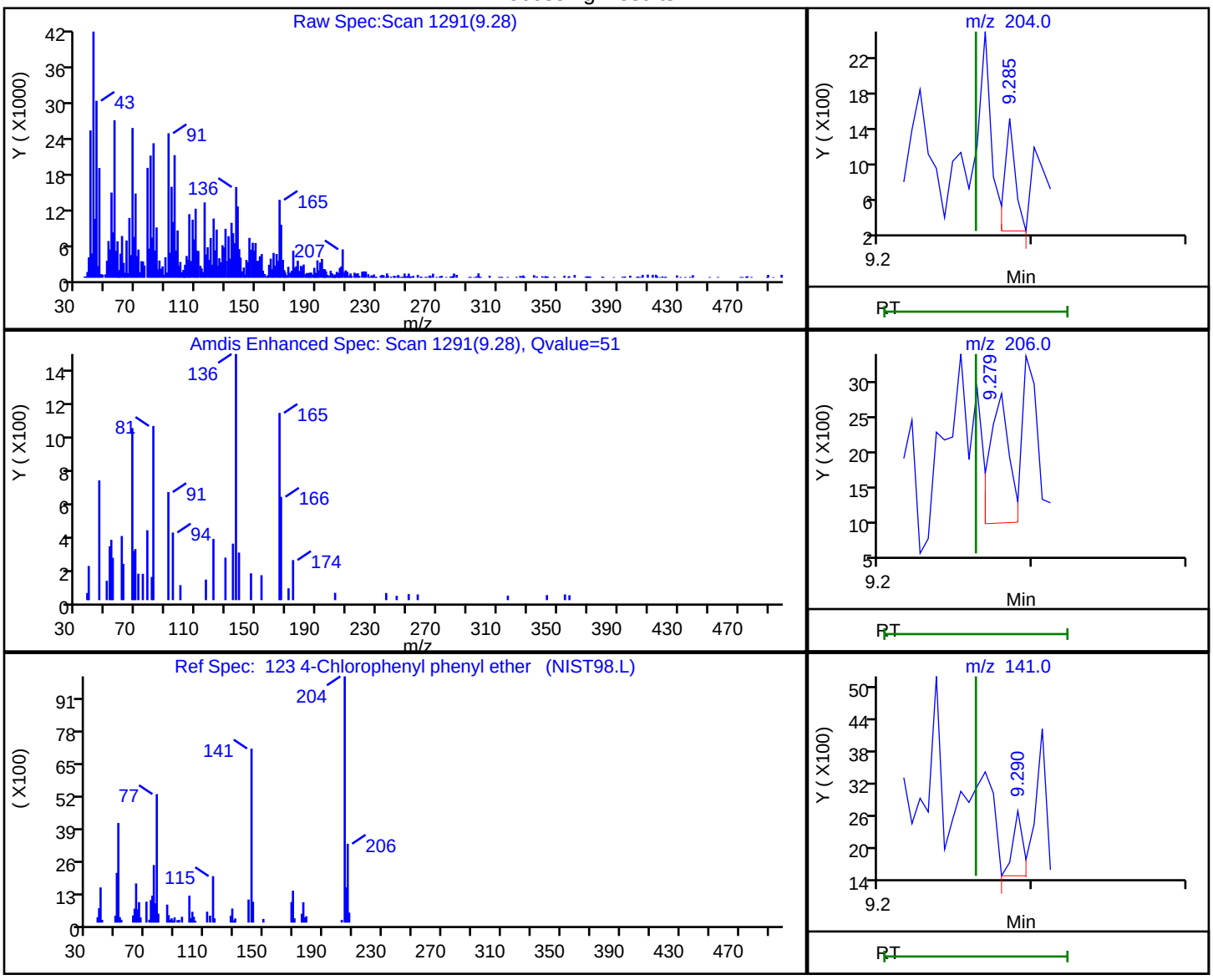
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

123 4-Chlorophenyl phenyl ether, CAS: 7005-72-3

Processing Results



RT	Mass	Response	Amount
9.28	204.00	583	0.007570
9.28	206.00	1642	
9.29	141.00	564	

Reviewer: schickr, 17-Jul-2019 09:05:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

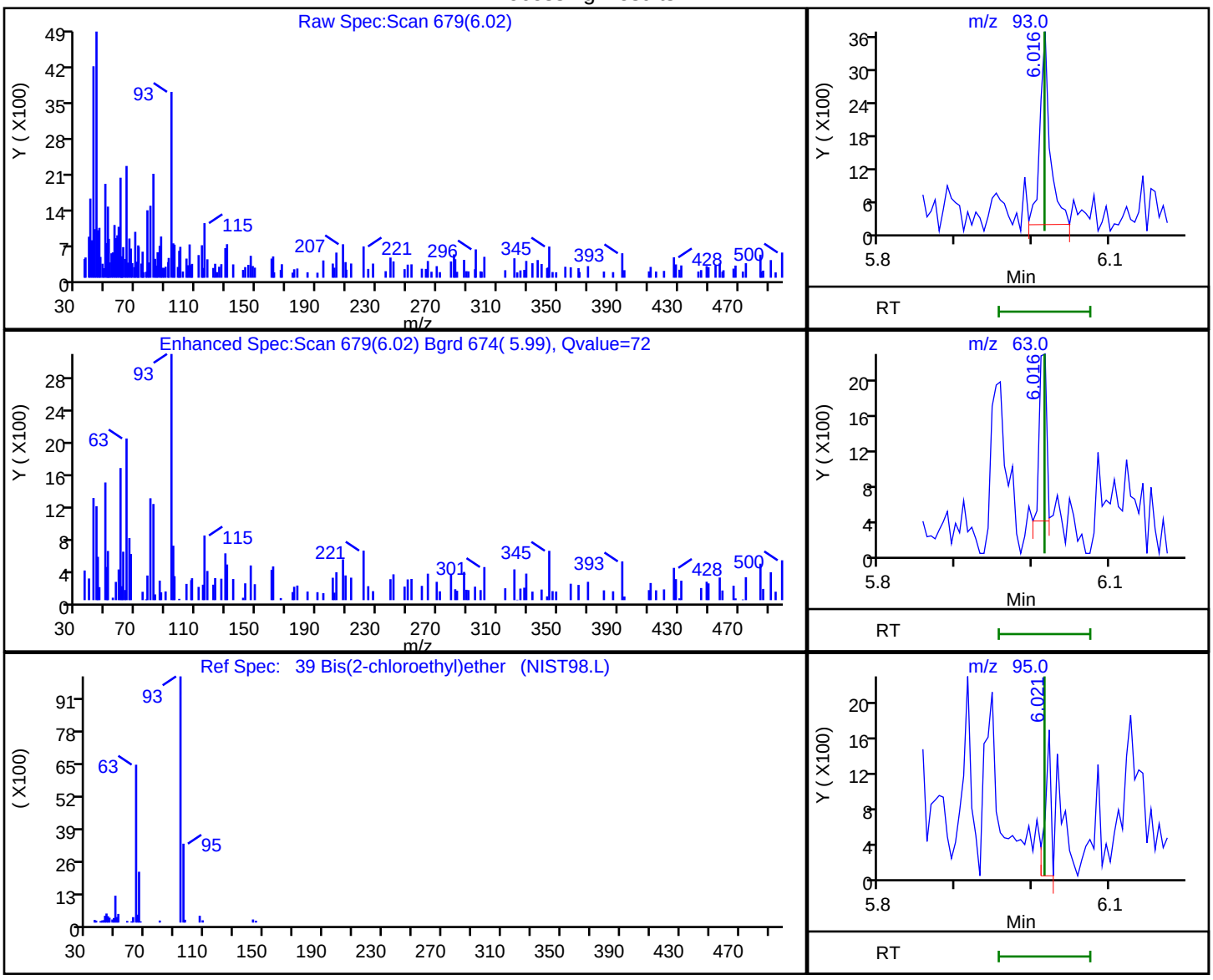
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

39 Bis(2-chloroethyl)ether, CAS: 111-44-4

Processing Results



RT	Mass	Response	Amount
6.02	93.00	3226	0.044564
6.02	63.00	1232	
6.02	95.00	849	

Reviewer: schickr, 17-Jul-2019 09:04:55

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

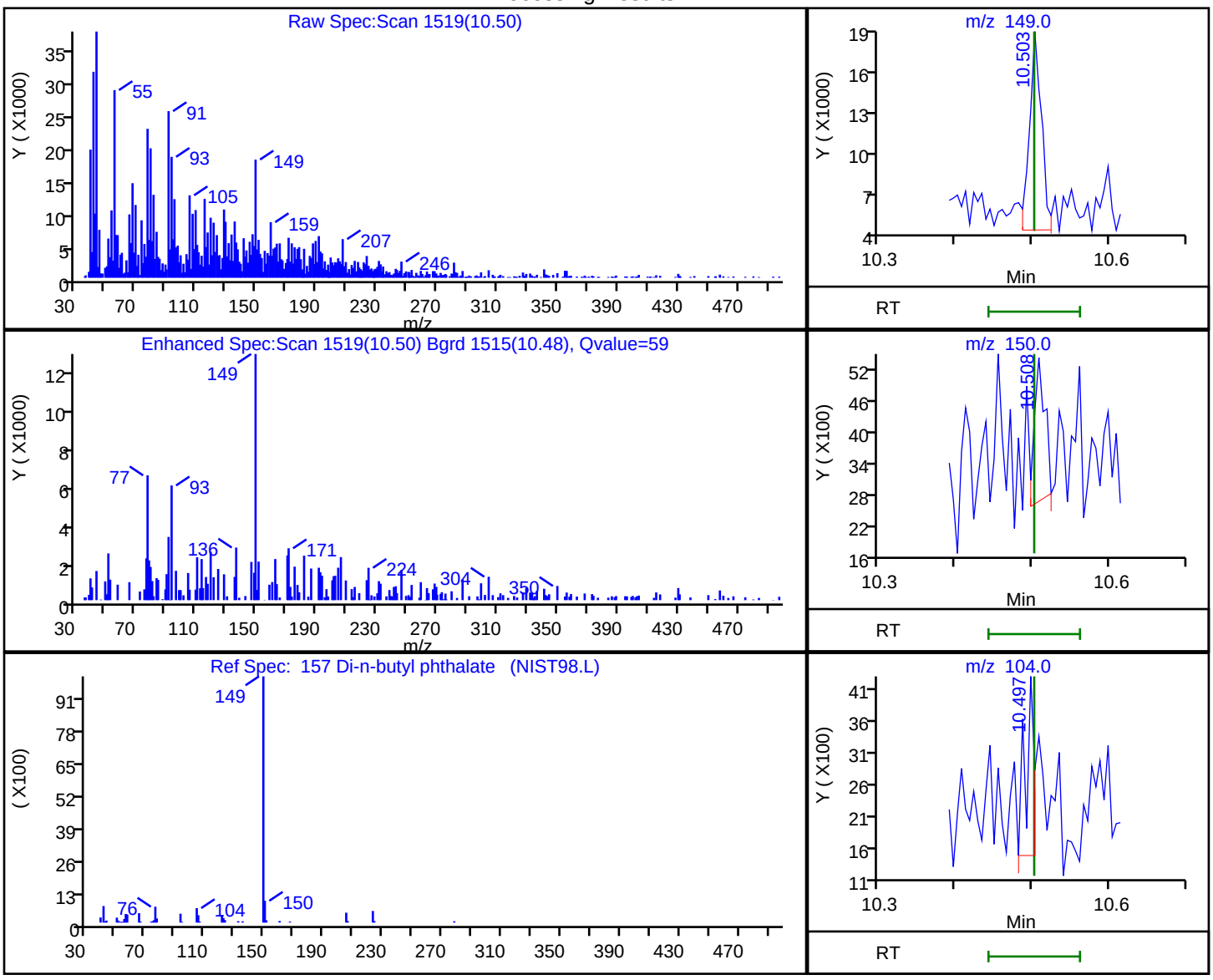
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

157 Di-n-butyl phthalate, CAS: 84-74-2

Processing Results



RT	Mass	Response	Amount
10.50	149.00	15242	0.058142
10.51	150.00	2656	
10.50	104.00	2133	

Reviewer: schickr, 17-Jul-2019 09:05:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

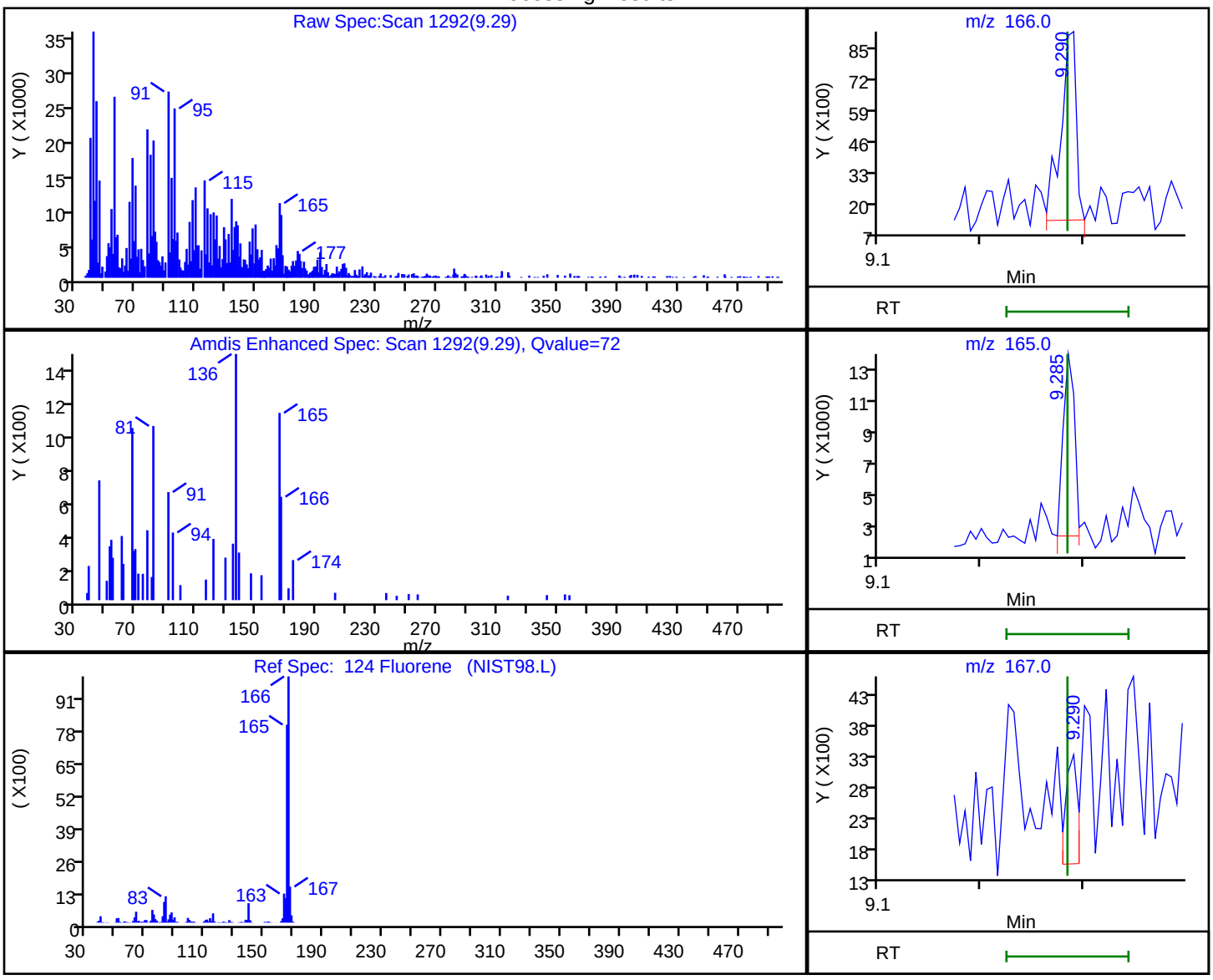
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

124 Fluorene, CAS: 86-73-7

Processing Results



RT	Mass	Response	Amount
9.29	166.00	8249	0.056005
9.28	165.00	7938	
9.29	167.00	1463	

Reviewer: schickr, 17-Jul-2019 09:05:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

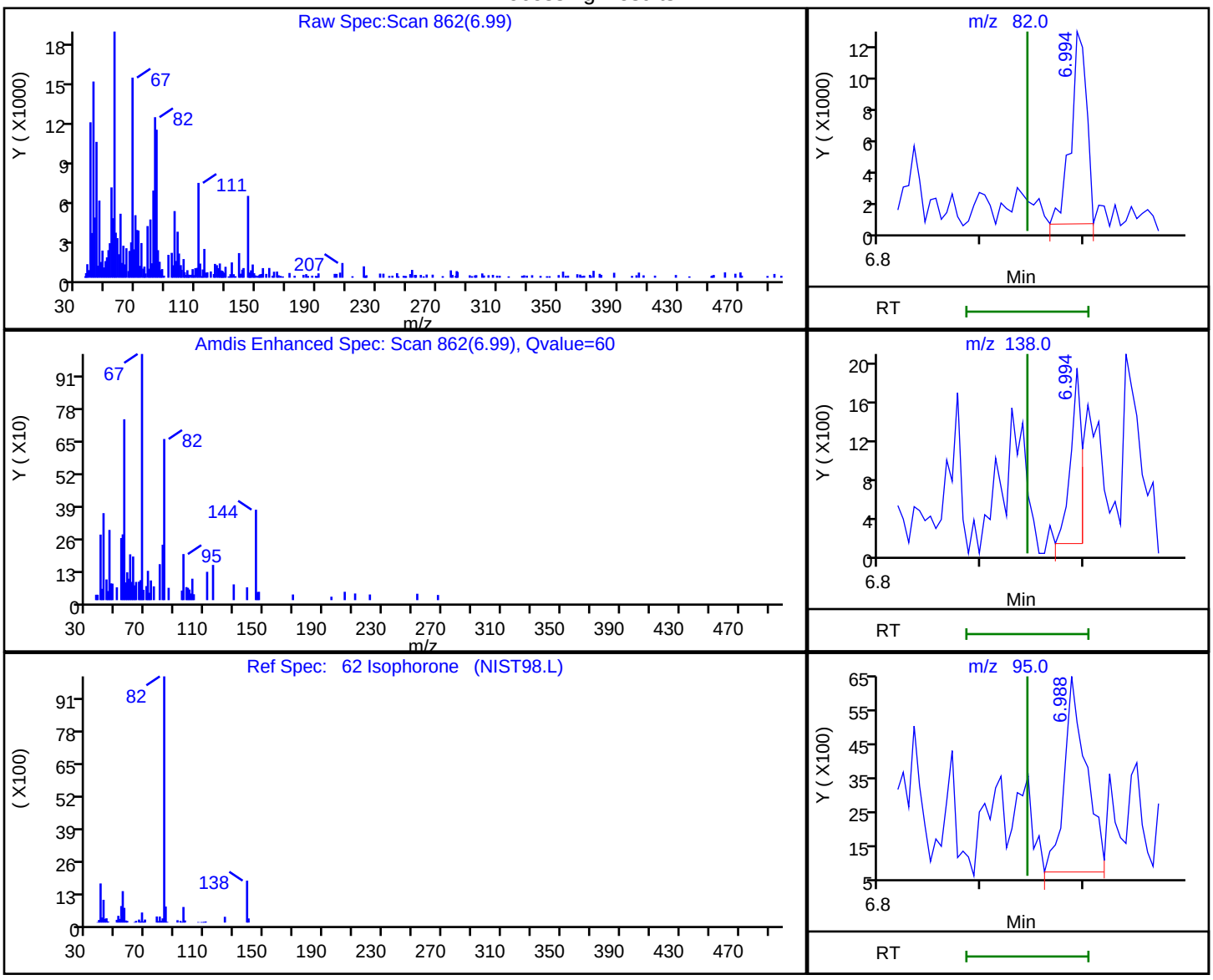
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

62 Isophorone, CAS: 78-59-1

Processing Results



RT	Mass	Response	Amount
6.99	82.00	11910	0.096529
6.99	138.00	1359	
6.99	95.00	8571	

Reviewer: schickr, 17-Jul-2019 09:04:58

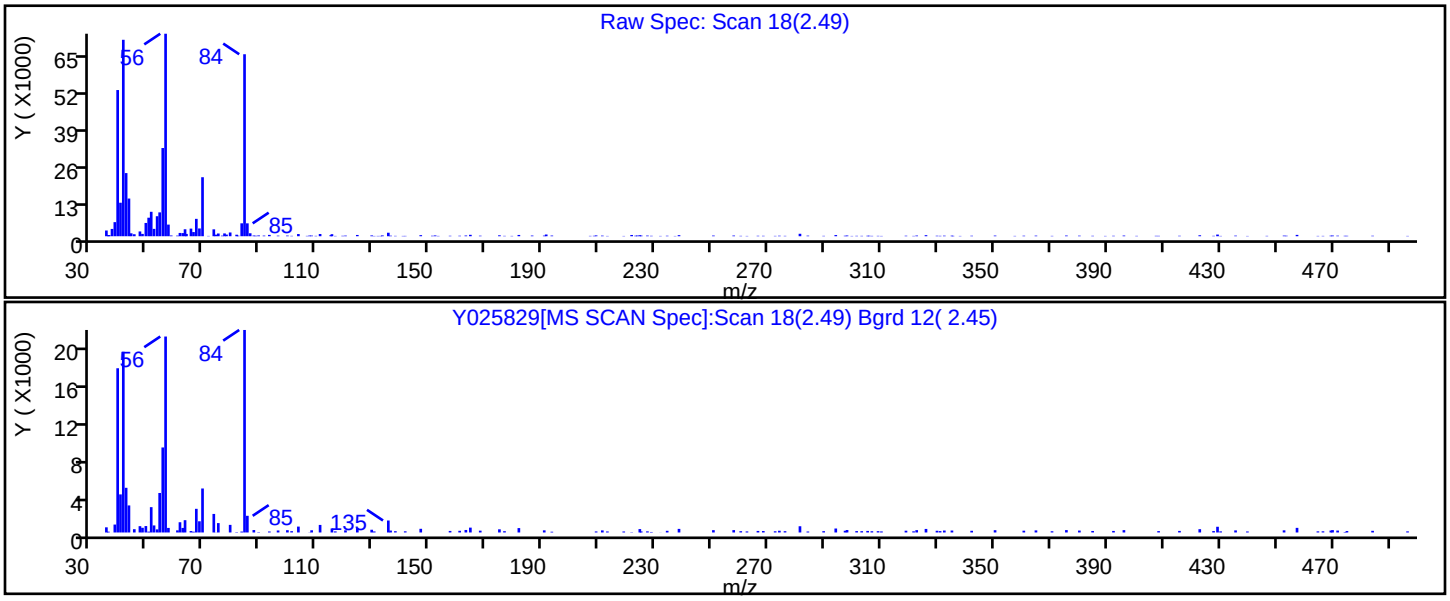
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 17-Jul-2019 09:33:29 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Report Date: 17-Jul-2019 09:33:29 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
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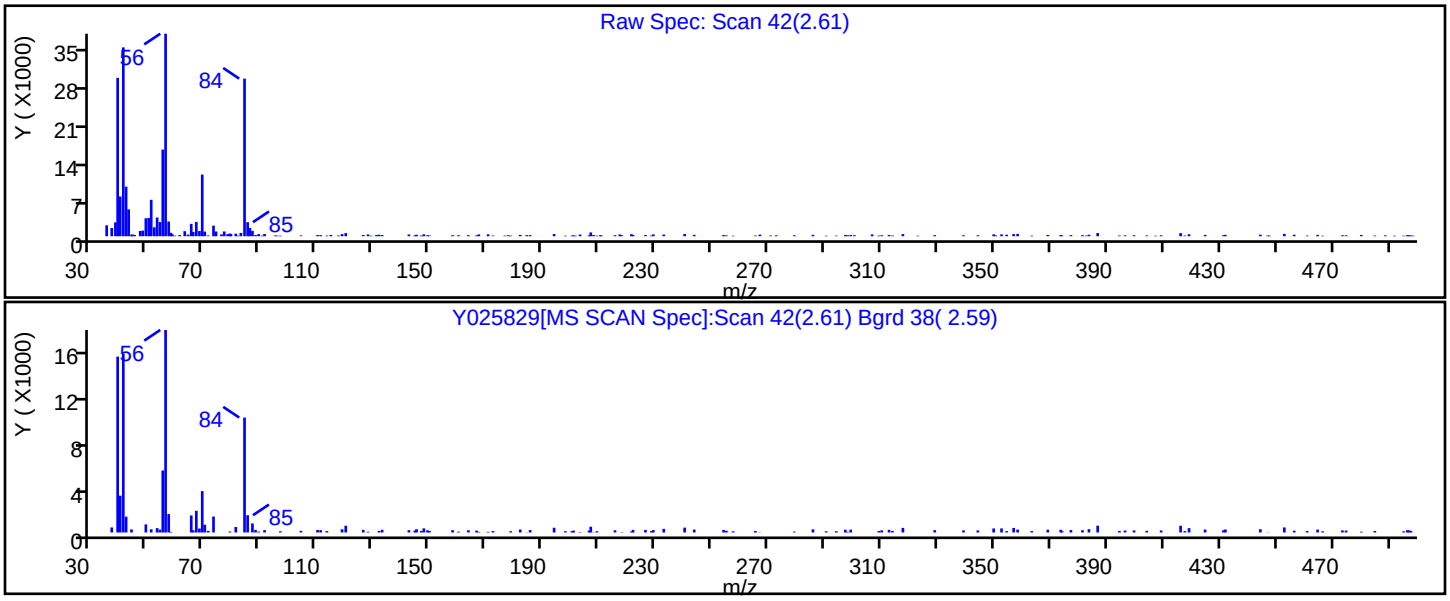
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Report Date: 17-Jul-2019 09:33:29 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

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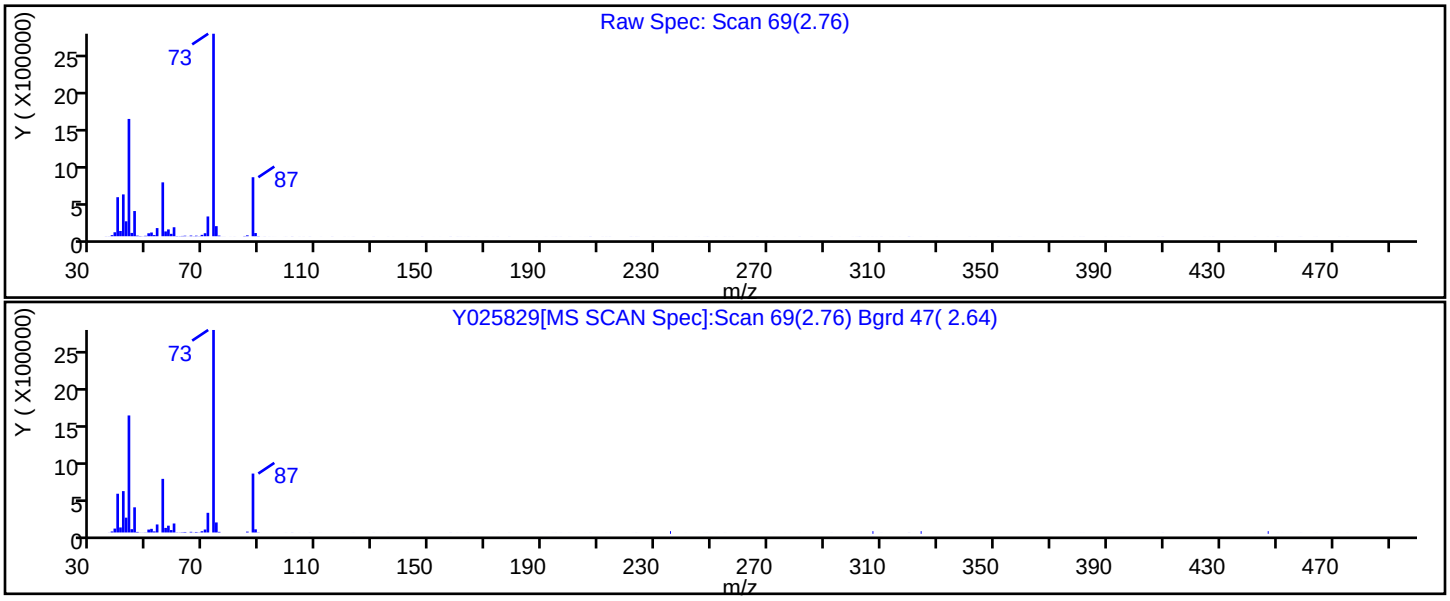
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Report Date: 17-Jul-2019 09:33:29 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D

Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
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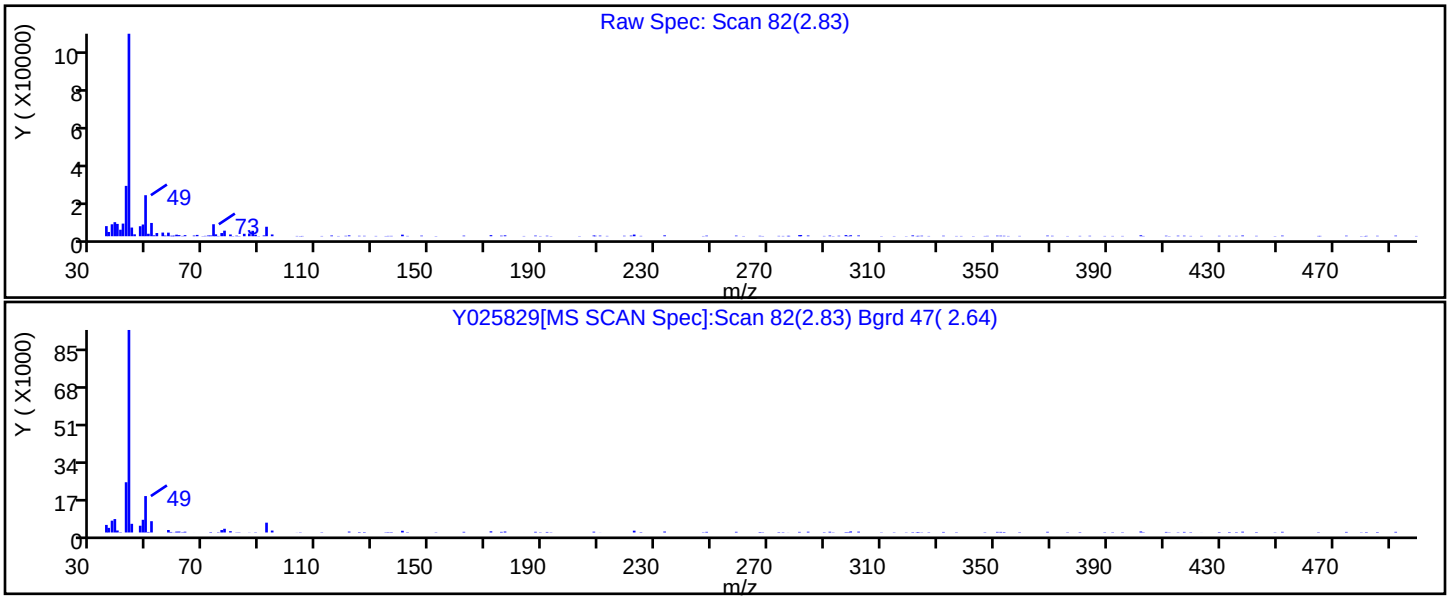
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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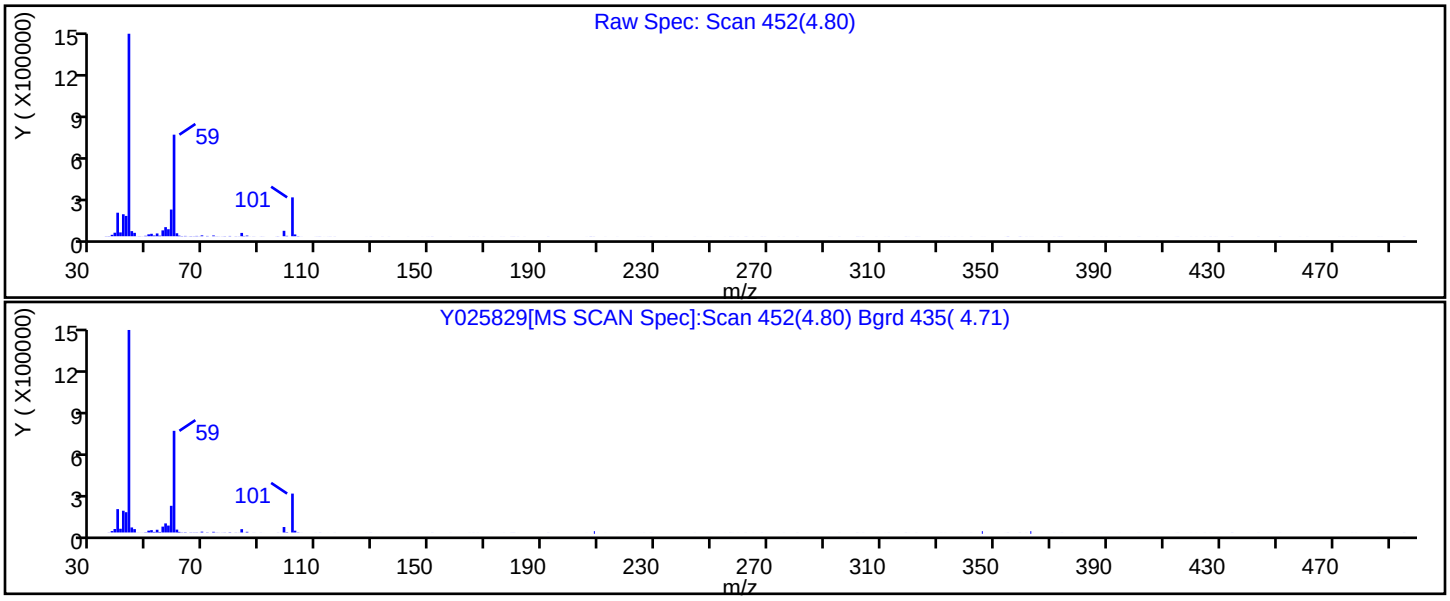
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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Eurofins TestAmerica, Buffalo

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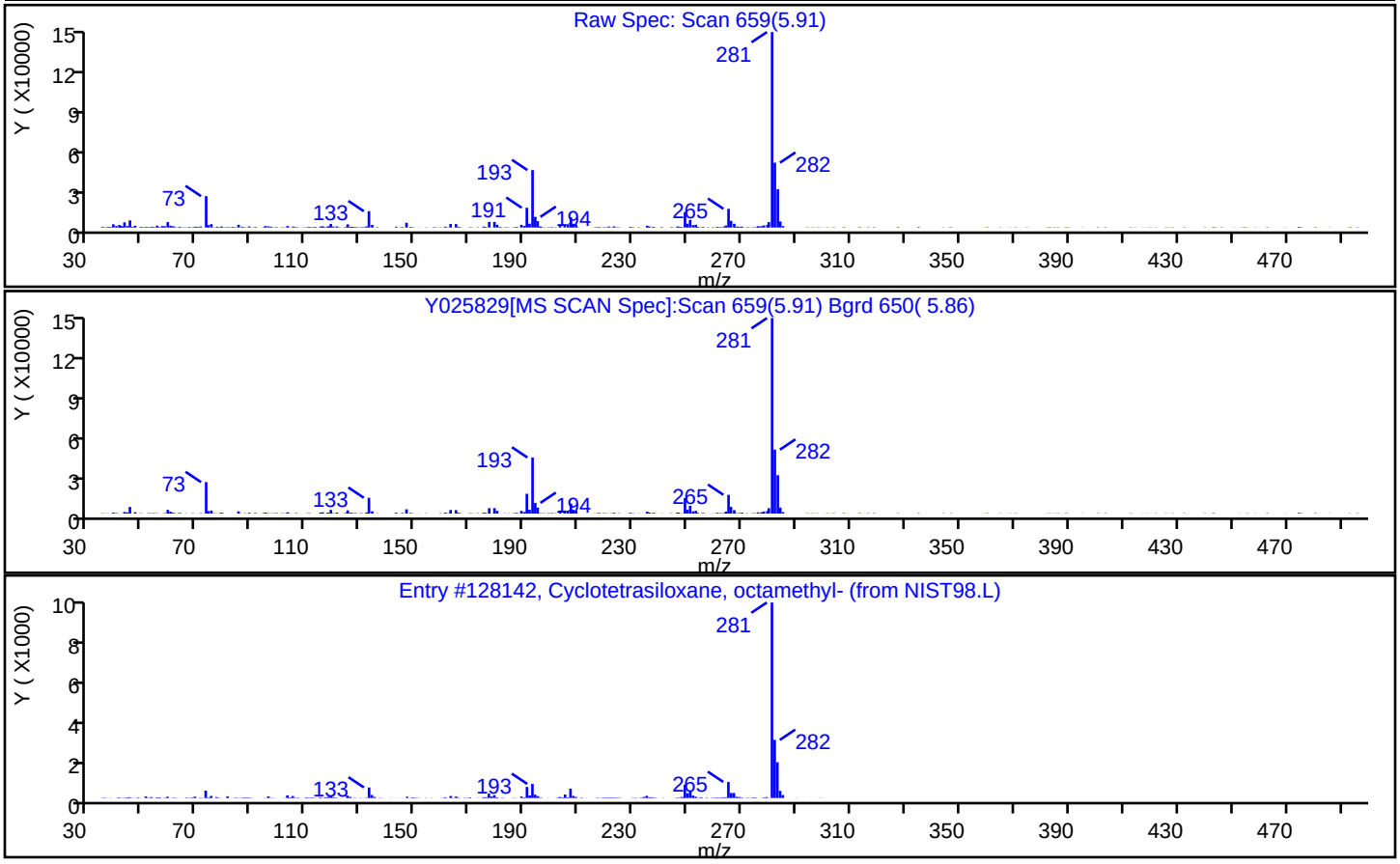
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Column Bleed						
Cyclotetrasiloxane, octamethyl-	556-67-2	NIST98.L	128142	C8H24O4Si4	296	86



Report Date: 17-Jul-2019 09:33:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

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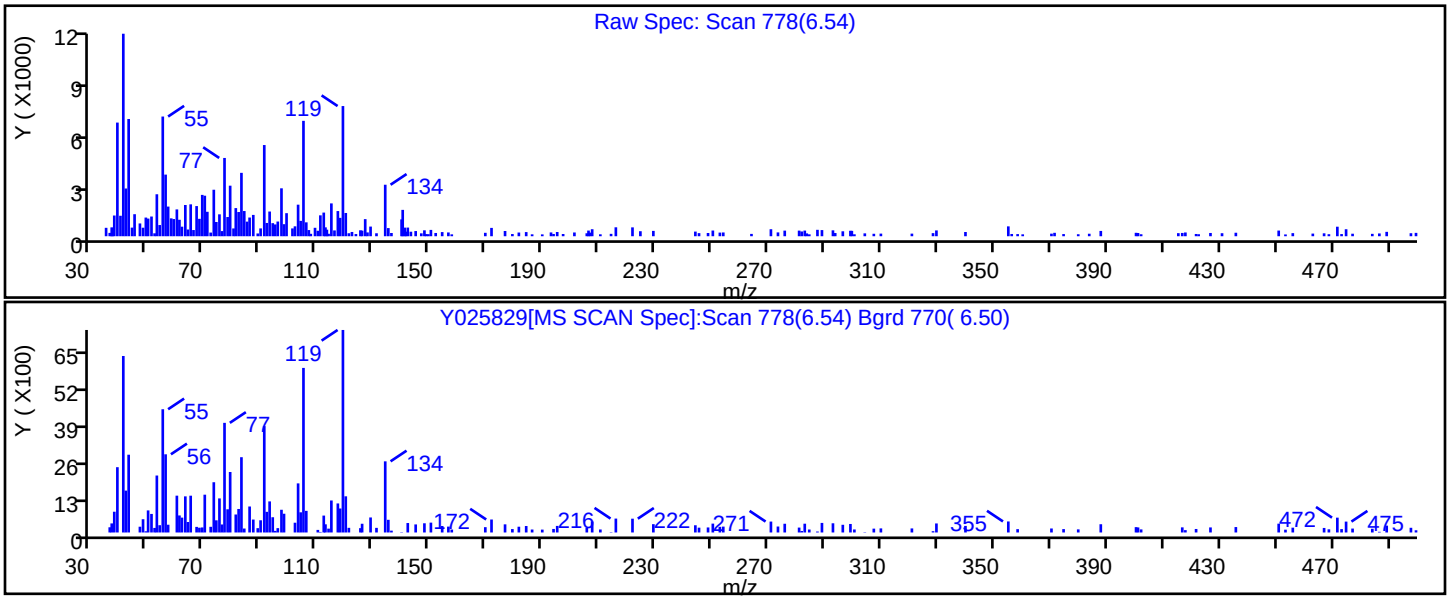
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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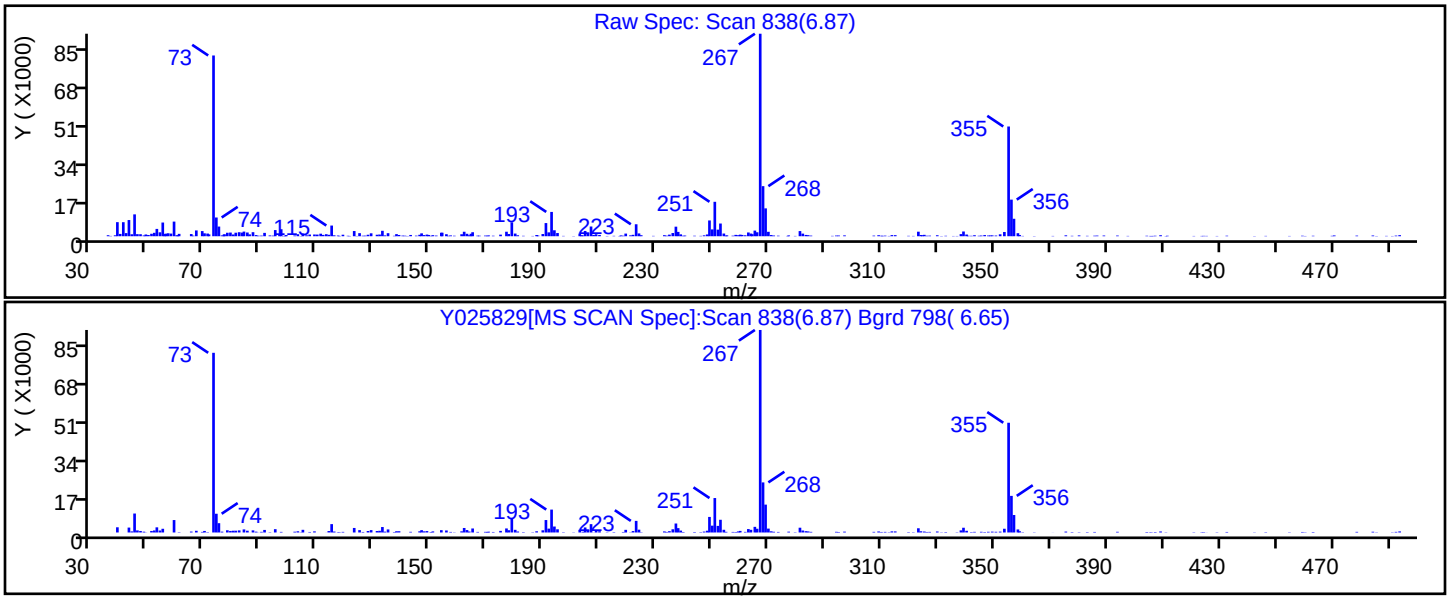
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D				
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D

Injection Date: 16-Jul-2019 17:53:30 Instrument ID: HP5973Y

Lims ID: 480-156069-A-1-A Lab Sample ID: 480-156069-1

Client ID: W13

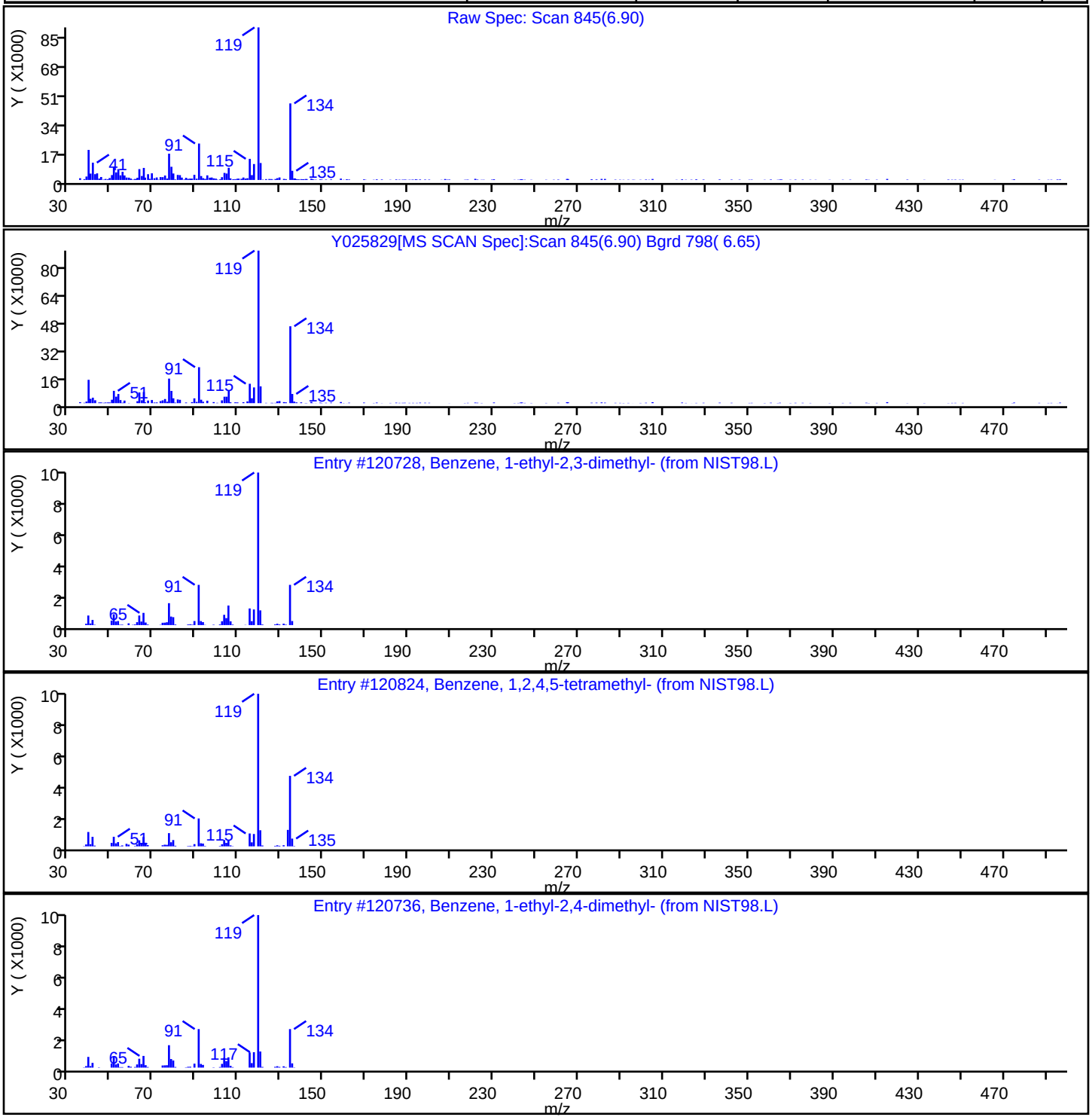
Operator ID: BS ALS Bottle#: 13 Worklist Smp#: 13

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1-ethyl-2,3-dimethyl-	933-98-2	NIST98.L	120728	C10H14	134	95
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NIST98.L	120824	C10H14	134	94
Benzene, 1-ethyl-2,4-dimethyl-	874-41-9	NIST98.L	120736	C10H14	134	93



Report Date: 17-Jul-2019 09:33:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

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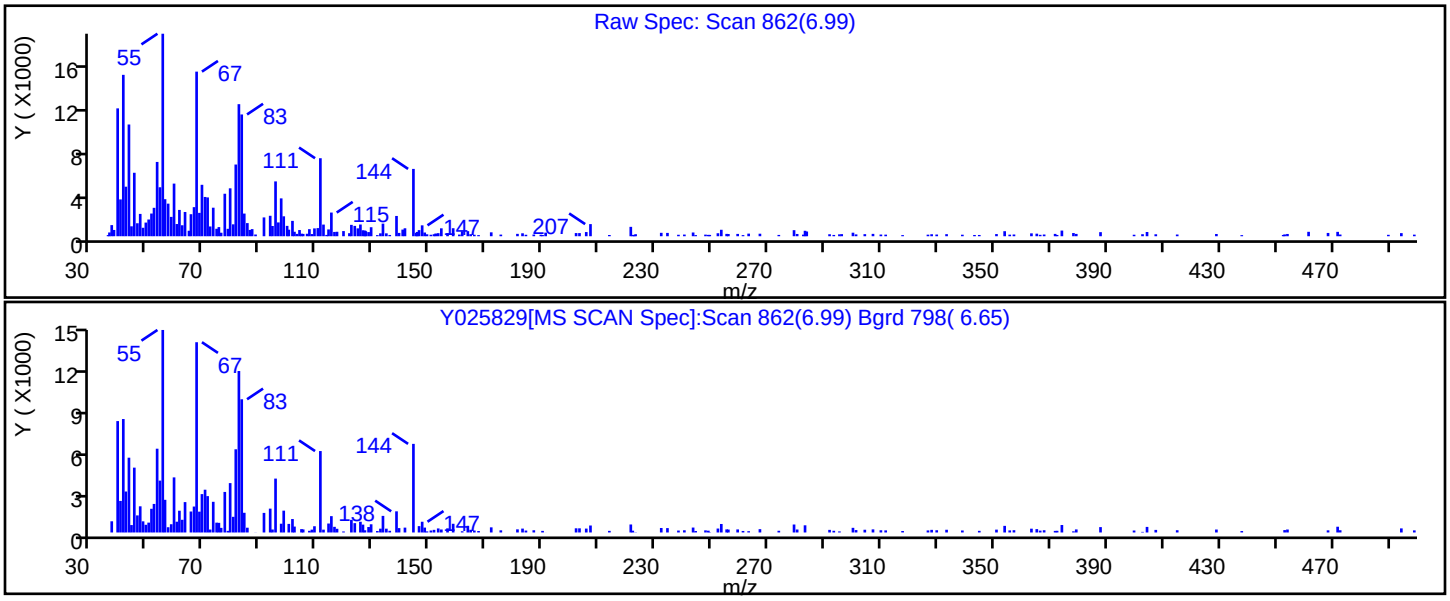
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025829.D

Injection Date: 16-Jul-2019 17:53:30 Instrument ID: HP5973Y

Lims ID: 480-156069-A-1-A Lab Sample ID: 480-156069-1

Client ID: W13

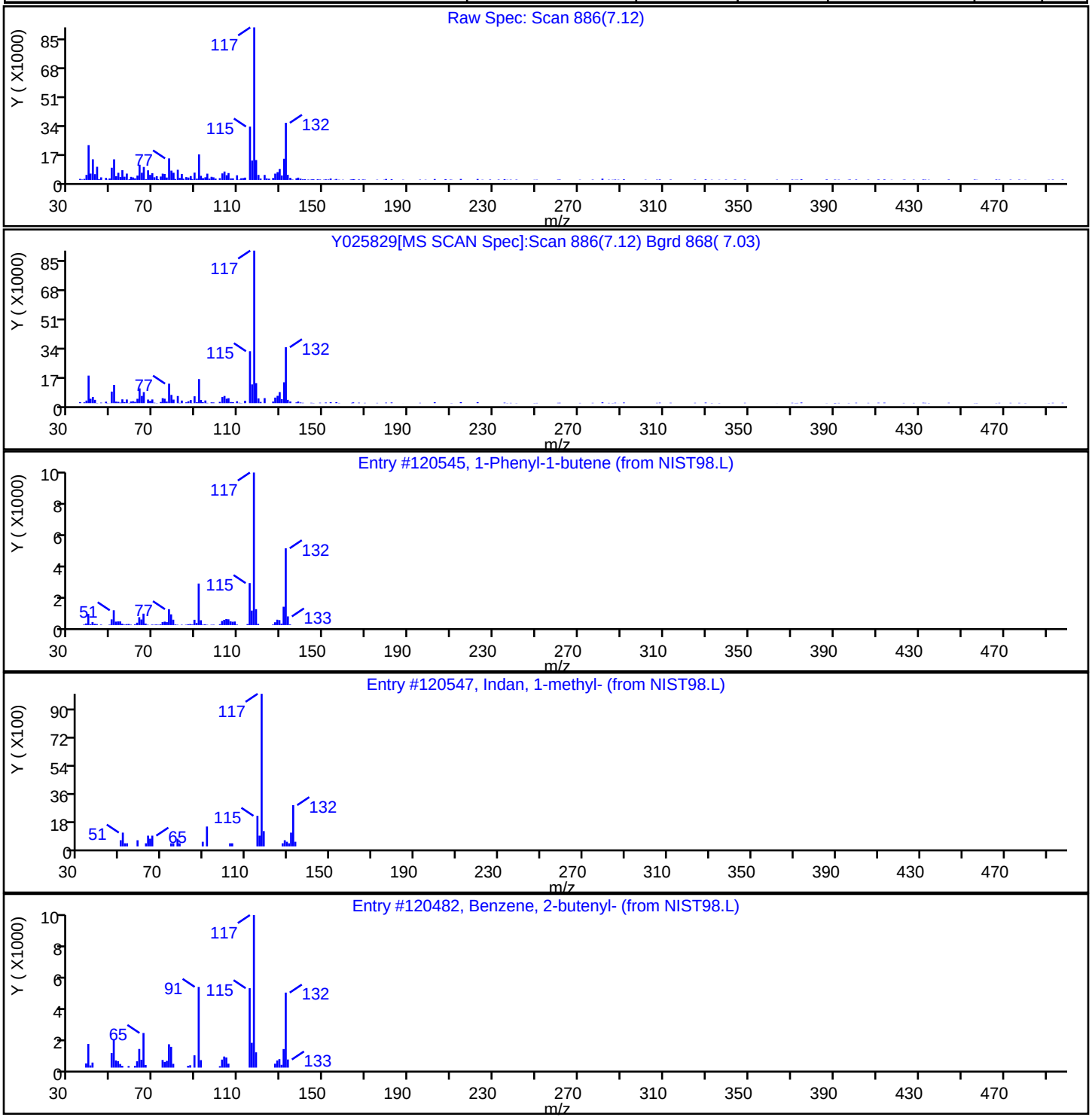
Operator ID: BS ALS Bottle#: 13 Worklist Smp#: 13

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
1-Phenyl-1-butene	824-90-8	NIST98.L	120545	C10H12	132	90
Indan, 1-methyl-	767-58-8	NIST98.L	120547	C10H12	132	90
Benzene, 2-butenyl-	1560-06-1	NIST98.L	120482	C10H12	132	87



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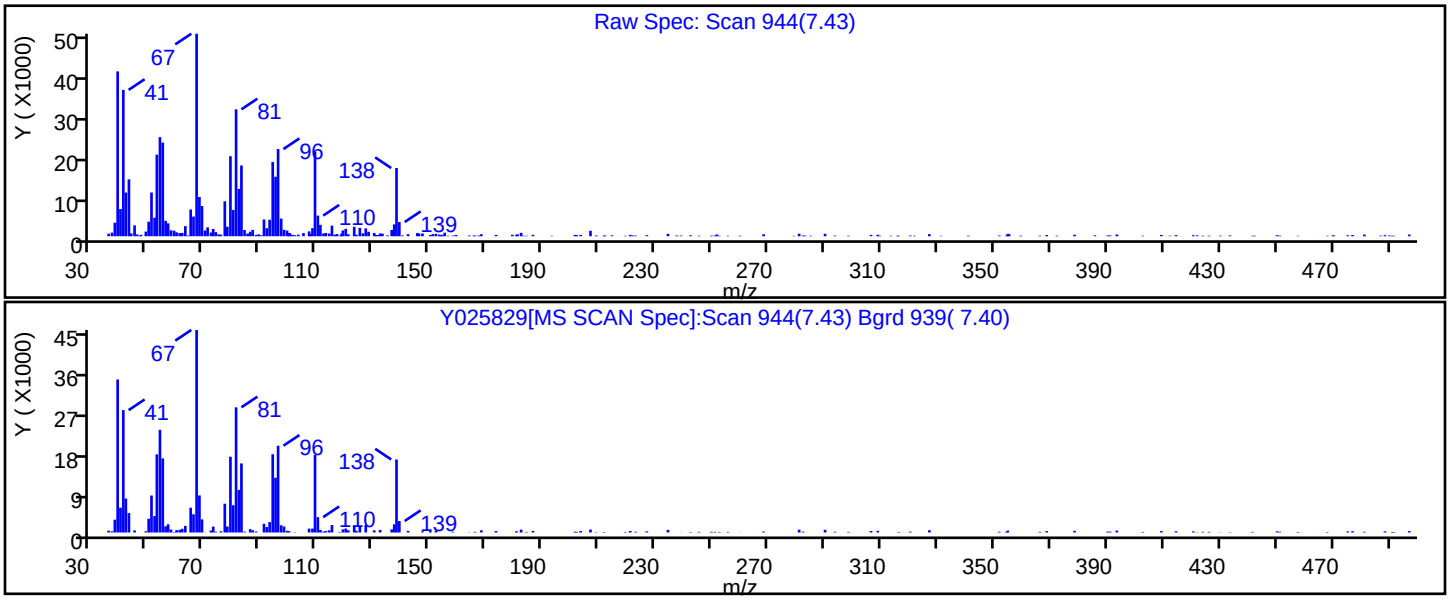
Injection Date:	16-Jul-2019 17:53:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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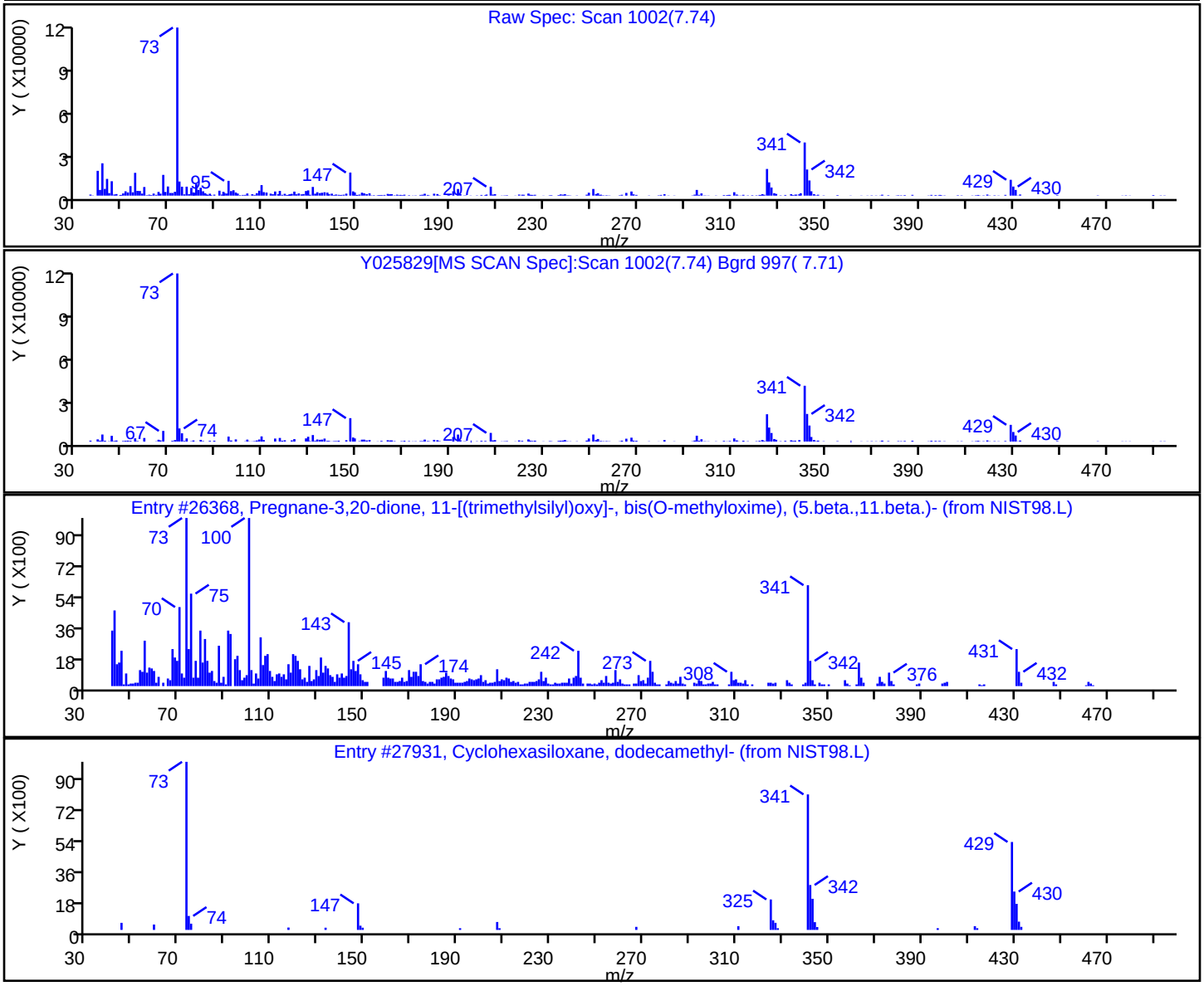
Lims ID:	480-156069-A-1-A	Lab Sample ID:	480-156069-1		
Client ID:	W13				
Operator ID:	BS	ALS Bottle#:	13	Worklist Smp#:	13
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Pregnane-3,20-dione, 11-[(trimethylsilyl)oxy]-,	57305-27-8	NIST98.L	26368	C26H46N2O3Si	462	93
Cyclohexasiloxane, dodecamethyl-	540-97-6	NIST98.L	27931	C12H36O6Si6	444	91



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Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

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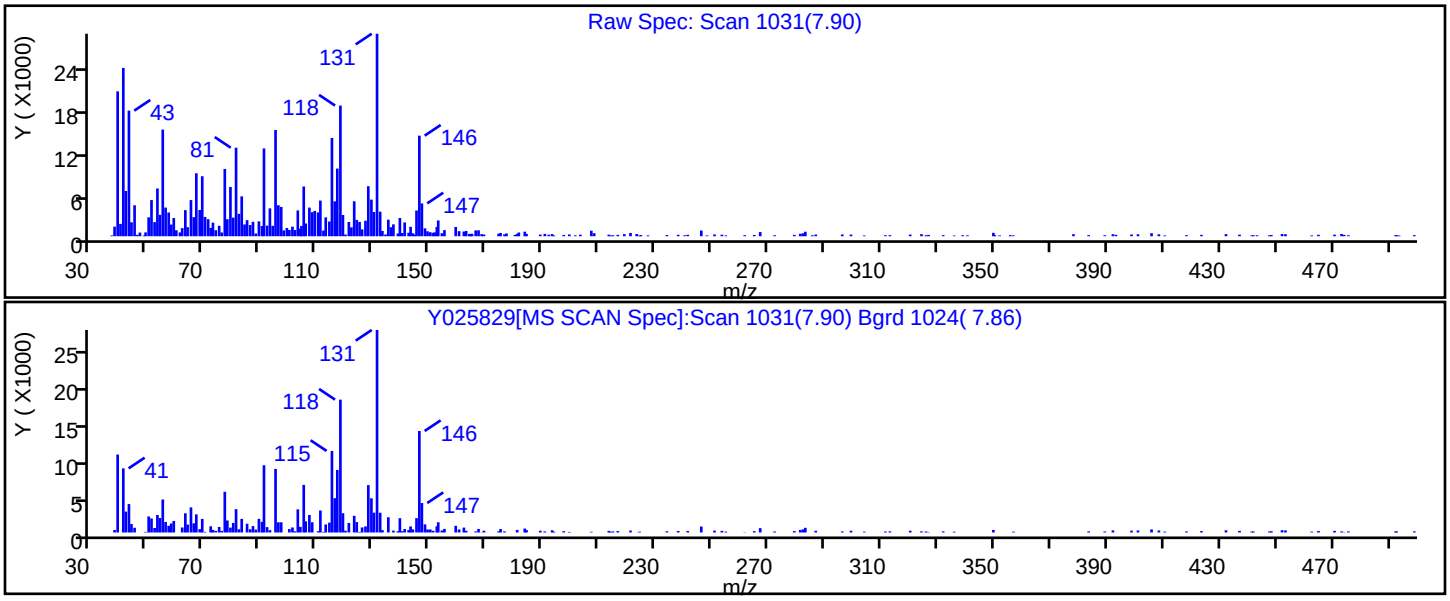

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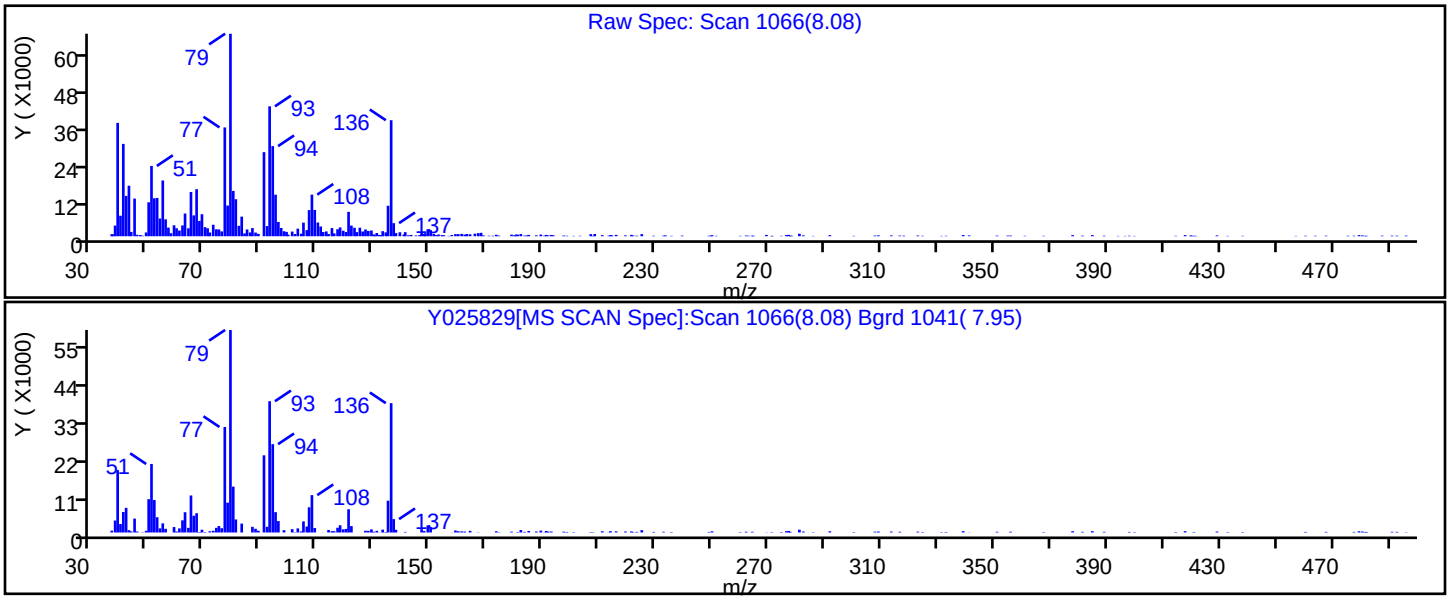

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Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

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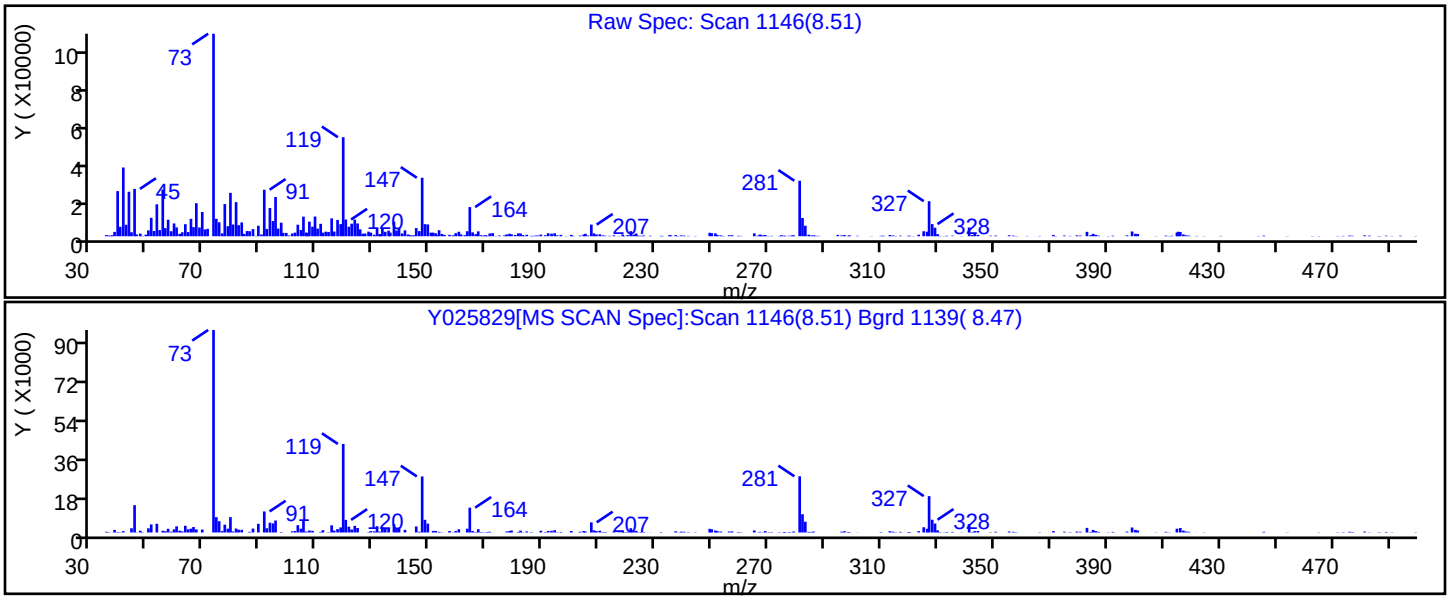

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Client ID:	W13				
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Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

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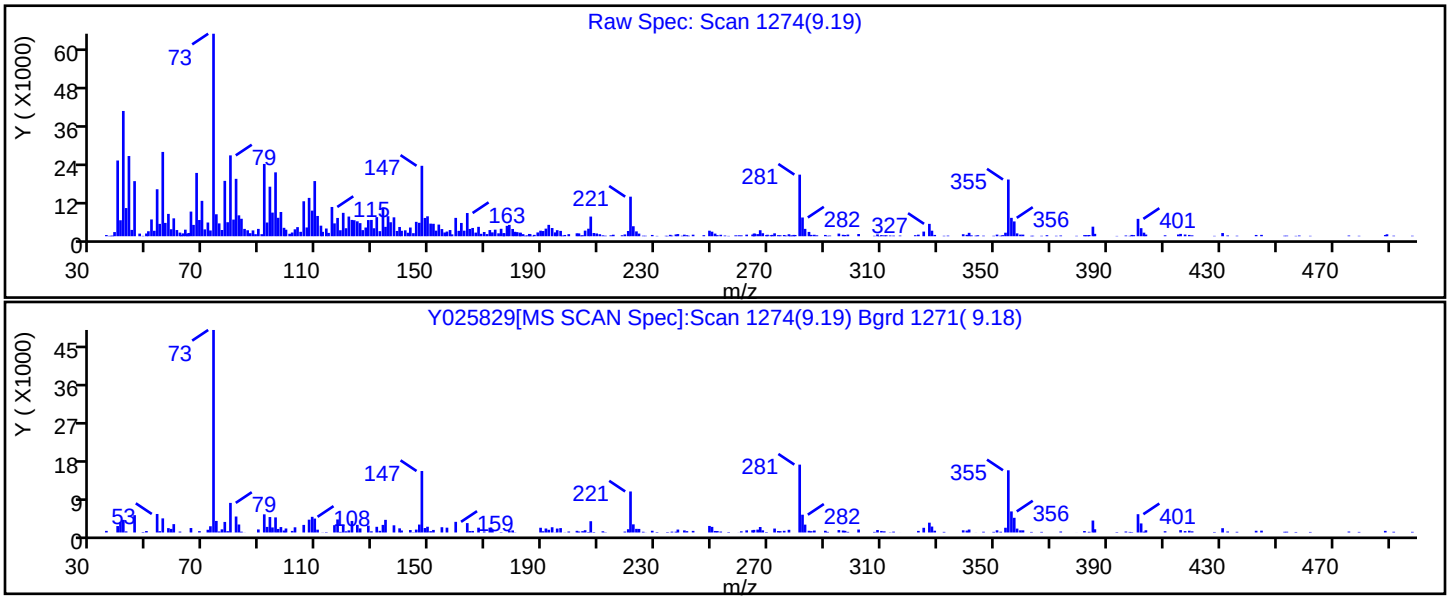


FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: Y025827.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 16:57

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND	F2	25	2.4
88-06-2	2,4,6-Trichlorophenol	ND		25	3.1
120-83-2	2,4-Dichlorophenol	ND		25	2.6
105-67-9	2,4-Dimethylphenol	ND	F1	25	2.5
51-28-5	2,4-Dinitrophenol	ND		50	11
121-14-2	2,4-Dinitrotoluene	ND		25	2.2
606-20-2	2,6-Dinitrotoluene	ND		25	2.0
91-58-7	2-Chloronaphthalene	ND		25	2.3
95-57-8	2-Chlorophenol	ND		25	2.7
91-57-6	2-Methylnaphthalene	ND		25	3.0
95-48-7	2-Methylphenol	ND		25	2.0
88-74-4	2-Nitroaniline	ND	F2	50	2.1
88-75-5	2-Nitrophenol	ND		25	2.4
91-94-1	3,3'-Dichlorobenzidine	ND	F1	25	2.0
99-09-2	3-Nitroaniline	ND	F1	50	2.4
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	11
101-55-3	4-Bromophenyl phenyl ether	ND		25	2.3
59-50-7	4-Chloro-3-methylphenol	ND		25	2.3
106-47-8	4-Chloroaniline	ND	F1	25	3.0
7005-72-3	4-Chlorophenyl phenyl ether	ND		25	1.8
106-44-5	4-Methylphenol	ND		50	1.8
100-01-6	4-Nitroaniline	ND	F1	50	1.3
100-02-7	4-Nitrophenol	ND	* F1	50	7.6
83-32-9	Acenaphthene	ND		25	2.1
208-96-8	Acenaphthylene	ND		25	1.9
98-86-2	Acetophenone	ND		25	2.7
120-12-7	Anthracene	ND		25	1.4
1912-24-9	Atrazine	ND		25	2.3
100-52-7	Benzaldehyde	ND		25	1.3
56-55-3	Benzo(a)anthracene	ND		25	1.8
50-32-8	Benzo(a)pyrene	ND		25	2.4
205-99-2	Benzo(b)fluoranthene	ND		25	1.7
191-24-2	Benzo(g,h,i)perylene	ND		25	1.8
207-08-9	Benzo(k)fluoranthene	ND		25	3.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: Y025827.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 16:57

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		25	3.3
108-60-1	bis (2-chloroisopropyl) ether	ND		25	2.6
111-91-1	Bis(2-chloroethoxy)methane	ND		25	1.8
111-44-4	Bis(2-chloroethyl)ether	ND		25	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		25	11
85-68-7	Butyl benzyl phthalate	ND		25	5.0
105-60-2	Caprolactam	ND	F1	25	11
86-74-8	Carbazole	ND		25	1.5
218-01-9	Chrysene	ND		25	1.7
53-70-3	Dibenz(a,h)anthracene	ND		25	2.1
132-64-9	Dibenzofuran	ND		50	2.6
84-66-2	Diethyl phthalate	ND	F2	25	1.1
131-11-3	Dimethyl phthalate	ND		25	1.8
84-74-2	Di-n-butyl phthalate	ND		25	1.6
117-84-0	Di-n-octyl phthalate	ND		25	2.4
206-44-0	Fluoranthene	ND		25	2.0
86-73-7	Fluorene	ND		25	1.8
118-74-1	Hexachlorobenzene	ND		25	2.6
87-68-3	Hexachlorobutadiene	ND		25	3.4
77-47-4	Hexachlorocyclopentadiene	ND		25	3.0
67-72-1	Hexachloroethane	ND		25	3.0
193-39-5	Indeno(1,2,3-cd)pyrene	ND		25	2.4
78-59-1	Isophorone	ND		25	2.2
91-20-3	Naphthalene	ND		25	3.8
98-95-3	Nitrobenzene	ND		25	1.5
621-64-7	N-Nitrosodi-n-propylamine	ND		25	2.7
86-30-6	N-Nitrosodiphenylamine	ND		25	2.6
87-86-5	Pentachlorophenol	ND		50	11
85-01-8	Phenanthrene	2.2	J B	25	2.2
108-95-2	Phenol	ND		25	2.0
129-00-0	Pyrene	ND		25	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: Y025827.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 16:57

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	98		41-120
321-60-8	2-Fluorobiphenyl	86		48-120
367-12-4	2-Fluorophenol	57		35-120
4165-60-0	Nitrobenzene-d5	77		46-120
4165-62-2	Phenol-d5	44		22-120
1718-51-0	p-Terphenyl-d14	42	X	59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Matrix: Water Lab File ID: Y025827.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 16:57

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 20 TIC Result Total: 508

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.48	79	T J	
	Unknown	2.66	77	T J	
	Unknown	4.78	23	T J	
95-47-6	Benzene, 1,2-dimethyl-	5.30	49	T J N	95%
	Unknown	5.46	11	T J	
	Unknown	5.92	18	T J	
	Unknown	6.00	11	T J	
95-63-6	Benzene, 1,2,4-trimethyl-	6.31	21	T J N	91%
	Unknown	6.90	11	T J	
	Unknown	7.19	11	T J	
	Unknown	7.29	21	T J	
	Unknown	7.39	13	T J	
	Unknown	7.44	12	T J	
	Unknown	7.55	35	T J	
	Unknown	7.64	28	T J	
	Unknown	7.71	25	T J	
	Unknown	7.89	13	T J	
	Unknown	7.94	14	T J	
	Unknown	8.09	17	T J	
	Unknown	9.29	19	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D
Lims ID: 480-156069-A-2-A
Client ID: MW17
Sample Type: Client
Inject. Date: 16-Jul-2019 16:57:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 2.0 ul Dil. Factor: 5.0000
Sample Info: 480-0082649-011
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:06:37

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.258	6.256	0.002	94	208322	4.00	
* 2 Naphthalene-d8	136	7.348	7.345	0.003	99	753050	4.00	
* 3 Acenaphthene-d10	164	8.827	8.830	-0.003	95	470661	4.00	
* 4 Phenanthrene-d10	188	10.082	10.080	0.002	96	738444	4.00	
* 5 Chrysene-d12	240	12.657	12.649	0.008	98	870493	4.00	
* 6 Perylene-d12	264	14.761	14.748	0.013	99	1007635	4.00	
$ 7 2-Fluorophenol	112	5.120	5.112	0.013	87	63659	0.9170	
$ 8 Phenol-d5	99	5.954	5.972	0.013	47	60487	0.7051	a
$ 9 Nitrobenzene-d5	82	6.728	6.732	-0.003	95	104120	1.23	
$ 10 2-Fluorobiphenyl	172	8.240	8.238	0.003	98	237748	1.38	
$ 11 2,4,6-Tribromophenol	330	9.495	9.493	0.003	83	32628	1.56	
$ 12 p-Terphenyl-d14	244	11.428	11.431	0.002	98	134594	0.6645	
237 Lidocaine	1		0.195				ND	
202 o-Anisidine	1		0.195				ND	
13 1,4-Dioxane	88		3.099				ND	
14 N-Nitrosodimethylamine	42		3.574				ND	
15 Pyridine	52		3.612				ND	
19 2-Picoline	93		4.509				ND	
20 N-Nitrosomethylethylamine	88		4.626				ND	
18 1-Methylcyclopentanol	71		4.655				ND	
22 Methyl methanesulfonate	80		4.925				ND	
24 Acrylamide	71		4.947				ND	
21 2-Chlorobenzotrifluoride	180		5.205				ND	
23 4-Chlorobenzotrifluoride	180		5.275				ND	
28 N-Nitrosodiethylamine	102		5.305				ND	
25 n,n'-Dimethylacetamide	87		5.339				ND	
196 CBF-400	214		5.530				ND	
26 4-Chloropyridine	78	5.564	5.563	0.006	0	237	NC	
30 Ethyl methanesulfonate	79		5.572				ND	
27 3-Chloropyridine	78		5.607				ND	
29 3-Chlorobenzotrifluoride	180		5.675				ND	
35 Benzaldehyde	77		5.876				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
37 Phenol	94		5.951				ND	
31 2-Chloropyridine	78		5.965				ND	
36 Aniline	93		5.973				ND	
38 Pentachloroethane	167		6.015				ND	
39 Bis(2-chloroethyl)ether	93		6.015				ND	
257 CBF-500	161		6.057				ND	
40 2-Chlorophenol	128		6.085				ND	
41 n-Decane	57		6.095				ND	
32 2-Chlorotoluene	91	6.108	6.125	-0.011	52	48487		NC
33 3-Chlorotoluene	91	6.108	6.146	-0.032	57	48487		NC
34 4-Chlorotoluene	91		6.172				ND	
43 1,3-Dichlorobenzene	146		6.208				ND	
44 1,4-Dichlorobenzene	146		6.272				ND	
45 Benzyl alcohol	108		6.379				ND	
46 1,2-Dichlorobenzene	146	6.408	6.411	0.003	51	11212	0.1356	
42 p-Fluoroaniline	111		6.413				ND	
48 2-Methylphenol	108		6.464				ND	
49 2,2'-oxybis[1-chloropropan	45		6.475				ND	
47 Indene	115	6.482	6.491	-0.003	17	1186	0.009494	
50 N-Nitrosopyrrolidine	100		6.570				ND	
53 N-Nitrosodi-n-propylamine	70	6.632	6.593	0.045	56	786	0.0153	
57 4-Methylphenol	108		6.592				ND	
52 Acetophenone	105		6.597				ND	
54 N-Nitrosomorpholine	56		6.603				ND	
56 2-Toluidine	106		6.629				ND	
55 4-Methylbenzenamine	106		6.632				ND	
58 Hexachloroethane	117		6.699				ND	
59 Nitrobenzene	77		6.747				ND	
61 N-Nitrosopiperidine	114		6.870				ND	
51 N-Methylaniline	106		6.893				ND	
62 Isophorone	82		6.945				ND	
63 2-Chloroaniline	127		6.989				ND	
64 2-Nitrophenol	139	7.048	7.020	0.029	51	288	0.008027	
66 2,4-Dimethylphenol	107		7.041				ND	
68 o,o',o''-Triethylphosphoro	198		7.078				ND	
67 Tetraethyl lead	237		7.080				ND	
69 Bis(2-chloroethoxy)methane	93		7.105				ND	
60 2,6-Dichloropyridine	112		7.108				ND	
70 Benzoic acid	105		7.142				ND	
71 alpha,alpha-Dimethyl phene	58		7.201				ND	
72 2,4-Dichlorophenol	162		7.228				ND	
282 2,4-Dichlorotoluene	125	7.219	7.235	-0.015	1	589		NC
73 1,2,4-Trichlorobenzene	180		7.292				ND	
65 Benzeneacetonitrile	117		7.321				ND	
287 1,3,5-Trichlorobenzene	180		7.321				ND	
75 Alpha-Terpineol	59		7.353				ND	
74 Naphthalene	128		7.367				ND	
76 4-Chloroaniline	127		7.399				ND	
77 2,6-Dichlorophenol	162		7.415				ND	
78 Hexachloropropene	213		7.441				ND	
79 Hexachlorobutadiene	225		7.463				ND	
286 4-Chlorophenol	128	7.577	7.599	-0.022	54	507		NC

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
81 Quinoline	129		7.644				ND	
82 N-Nitrosodi-n-butylamine	84		7.660				ND	
83 p-Phenylene diamine	108		7.692				ND	
84 Caprolactam	113		7.698				ND	
85 4-Chloro-3-methylphenol	107		7.805				ND	
80 Benzeneacetic acid (TIC)	91		7.850				ND	
86 Safrole, Total	162	7.818	7.853	-0.034	51	752	0.0148	
87 2-Methylnaphthalene	142		7.943				ND	
88 Phthalic anhydride	104		7.983				ND	
89 1-Methylnaphthalene	142	8.031	8.030	0.002	40	8013	0.0634	
90 Hexachlorocyclopentadiene	237		8.077				ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.088				ND	
275 Isosafrole Peak 1	162		8.098				ND	
93 2,4,6-Trichlorophenol	196		8.178				ND	
284 2,3-Dichlorobenzenamine	161	8.175	8.181	-0.006	47	649	NC	
281 2,4,5-Trichlorotoluene	159	8.218	8.216	0.003	1	131	NC	
94 2,4,5-Trichlorophenol	196		8.221				ND	
198 NVF-400	82	8.256	8.274	-0.018	0	10343	0.0549	
277 Isosafrole Peak 2	162	8.245	8.286	-0.040	54	532	0.0185	
95 Isosafrole	162	8.245	8.286	-0.040	54	532	0.0220	
96 1,1'-Biphenyl	154		8.328				ND	
97 2-Chloronaphthalene	162		8.360				ND	
99 1-Chloronaphthalene	162	8.400	8.382	0.019	1	921	0.006800	
258 CU-600	58	8.421	8.435	-0.013	0	950	0.005046	
100 2-Nitroaniline	65		8.435				ND	
102 1,4-Naphthoquinone	158		8.499				ND	
103 Dicyclohexylamine	138		8.501				ND	
104 1,4-Dinitrobenzene	168		8.536				ND	
105 Dimethyl phthalate	163		8.563				ND	
106 1,3-Dinitrobenzene	168		8.606				ND	
107 2,6-Dinitrotoluene	165		8.622				ND	
285 1,2,3,4 -Tetrachlorobenzen	216	8.629	8.631	0.006	1	294	NC	
108 Acenaphthylene	152		8.713				ND	
109 3-Nitroaniline	138		8.777				ND	
110 Acenaphthene	153		8.857				ND	
111 2,4-Dinitrophenol	184		8.862				ND	
112 4-Nitrophenol	109		8.916				ND	
114 2,4-Dinitrotoluene	165		8.964				ND	
113 Pentachlorobenzene	250		8.969				ND	
115 Dibenzofuran	168		8.996				ND	
116 1-Naphthylamine	143	9.030	9.060	-0.029	50	427	0.0959	
117 2,3,5,6-Tetrachlorophenol	232	9.062	9.073	-0.003	48	137	0.0827	
118 2,3,4,6-Tetrachlorophenol	232		9.102				ND	
119 2-Naphthylamine	143		9.124				ND	
121 Hexadecane	57	9.169	9.140	0.029	1	4333	0.0453	
120 Diethyl phthalate	149		9.140				ND	
122 Thionazin	97		9.214				ND	
123 4-Chlorophenyl phenyl ethe	204		9.263				ND	
125 N-Nitro-o-toluidine	152		9.284				ND	
124 Fluorene	166		9.284				ND	
126 4-Nitroaniline	138		9.295				ND	
128 Tributyl phosphate	99		9.297				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
127 4,6-Dinitro-2-methylphenol	198		9.316				ND	
130 N-Nitrosodiphenylamine	169		9.359				ND	
129 Diphenylamine	169		9.359				ND	
132 Azobenzene	77		9.396				ND	
131 1,2-Diphenylhydrazine	77	9.436	9.397	0.040	40	8099	0.0580	
134 Sulfotepp	322	9.441	9.461	-0.019	55	192	0.008032	
135 1,3,5-Trinitrobenzene	213		9.578				ND	
278 Diallate Peak 1	86		9.588				ND	
136 Diallate	86		9.588				ND	
137 Phorate	75		9.599				ND	
138 Phenacetin	108		9.599				ND	
280 Diallate Peak 2	86		9.668				ND	
139 4-Bromophenyl phenyl ether	248		9.679				ND	
141 Dimethoate	87		9.748				ND	
140 Hexachlorobenzene	284		9.759				ND	
142 Simazine	201		9.761				ND	
143 Atrazine	200		9.786				ND	
144 4-Aminobiphenyl	169		9.898				ND	
148 n-Octadecane	57		9.904				ND	
145 Pentachlorophenol	266		9.920				ND	
147 Pronamide	173		9.925				ND	
146 Pentachloronitrobenzene	237		9.930				ND	
149 Disulfoton	88	10.018	10.032	-0.013	52	1125	0.0175	
150 Dinoseb	211		10.042				ND	
151 Phenanthrene	178	10.098	10.102	-0.003	91	22043	0.1078	
152 Anthracene	178		10.144				ND	
98 n,n'-Dimethylaniline	120	10.269	10.251	0.019	1	1575	NC	
153 Carbazole	167		10.267				ND	
154 Alachlor	160		10.354				ND	
155 Methyl parathion	109		10.357				ND	
157 Di-n-butyl phthalate	149		10.502				ND	
158 Ethyl Parathion	97		10.672				ND	
159 4-Nitroquinoline-1-oxide	190		10.737				ND	
160 Anthraquinone	180		10.766				ND	
161 Methapyrilene	58		10.769				ND	
288 2-Methylanthracene	192	10.867	10.869	0.003	1	3296	NC	
163 Octachlorostyrene	308	10.915	10.894	0.022	1	543	NC	
162 Isodrin	193		10.977				ND	
164 Fluoranthene	202		11.105				ND	
165 1-Hydroxyanthraquinone	224	11.193	11.140	0.054	52	1461	0.1169	
166 Benzidine	184		11.201				ND	
167 Pyrene	202		11.324				ND	
276 Aramite Peak 1	185		11.367				ND	
279 Aramite Peak 2	185	11.433	11.442	-0.009	51	2067	0.0790	
168 Aramite, Total	185		11.442				ND	
170 p-Dimethylamino azobenzene	120		11.559				ND	
169 1,4-Dihydroxyanthraquinone	240		11.583				ND	
171 Chlorobenzilate	251		11.591				ND	
172 Famphur	218		11.850				ND	
175 9-Octadecenamide	59		11.887				ND	
174 Butyl benzyl phthalate	149		11.890				ND	
173 3,3'-Dimethylbenzidine	212		11.912				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
176 Kepone	272		12.015				ND	
177 2-Acetylaminofluorene	181		12.211				ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553				ND	
178 4,4'-Methylene bis(2-chlor	231		12.563				ND	
179 3,3'-Dichlorobenzidine	252		12.574				ND	
180 Benzo[a]anthracene	228		12.633				ND	
182 Chrysene	228		12.686				ND	
183 6-Methylchrysene	242	13.303	13.301	0.008	0	1334	0.007164	
184 Di-n-octyl phthalate	149		13.450				ND	
185 7,12-Dimethylbenz(a)anthra	256		14.139				ND	
186 Benzo[b]fluoranthene	252		14.160				ND	
187 Benzo[k]fluoranthene	252		14.198				ND	
189 Benzo[a]pyrene	252		14.663				ND	
192 Hexachlorophene	196		14.836				ND	
283 Benzo[e]pyrene	252	15.151	15.149	0.014	3	1532	NC	
190 3-Methylcholanthrene	268		15.196				ND	
191 Dibenz[a,h]acridine	279	16.048	16.052	0.008	1	2322	0.009705	
193 Indeno[1,2,3-cd]pyrene	276		16.436				ND	
194 Dibenz(a,h)anthracene	278		16.446				ND	
195 Benzo[g,h,i]perylene	276		16.900				ND	
199 CAG-800	149		19.675				ND	
256 CN-500	112		19.994				ND	
197 Dibenzo[a,e]pyrene	302		21.867				ND	
294 3'-Bromoacetophenone TIC	1		0.000				ND	
302 1-Bromo-2-chloroethane TIC	1		0.000				ND	
297 Fluorobenzene TIC	1		0.000				ND	
290 1,3-Dibromobenzene TIC	1		0.000				ND	
291 1,4-Dibromobenzene TIC	1		0.000				ND	
293 3-Nitro-4-Chlorobenzotrifl	1		0.000				ND	
298 2-Bromopyridine TIC	1		0.000				ND	
299 1-Bromo-3-fluorobenzene TI	1		0.000				ND	
301 3-Amino-4-Chlorobenzotrifl	1		0.000				ND	
292 Ethylene Dibromide TIC	1		0.000				ND	
296 1,2-dichloro-4-(trifluorom	1		0.000				ND	
300 1-Bromo-4-ethylbenzene TIC	1		0.000				ND	
295 4-Bromofluorobenzene TIC	1		0.000				ND	
230 2,3-Dichlorophenol	1		0.195				ND	
216 5-Methyl-o-Anisidine TIC	1		0.195				ND	
244 Pendimethalin	1		0.195				ND	
233 4-Chlorobenzotrifluoride T	1		0.195				ND	
247 Benefin (TIC)	1		0.195				ND	
206 2,4-Toluene diamine	1		0.195				ND	
210 Dibenzo[a,h]pyrene	1		0.195				ND	
214 1,2,3-Trimethylbenzene	105		0.195				ND	
219 Photomirex TIC	1		0.195				ND	
240 Prometryn (TIC)	1		0.195				ND	
209 2,4-Dichlorotoluene TIC	1		0.195				ND	
222 2-Chlorobenzotrifluoride T	1		0.195				ND	
215 trans Azobenzene (TIC)	1		0.195				ND	
204 2,6-Dichlorotoluene TIC	1		0.195				ND	
213 4,4'-Methylene bis(2-chlor	1		0.195				ND	
241 5-Methyl-o-Anisidine	1		0.195				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
238 Phenylacetic Acid	1		0.195				ND	
224 1-Bromopropane	1		0.195				ND	
225 Dibenz(a,i)pyrene	1		0.195				ND	
201 7H-Dibenzo[c,g]carbazole	1		0.195				ND	
211 Pendimethalin (TIC)	1		0.195				ND	
227 Dibenz[a,j]acridine	279		0.195				ND	
205 Phenylmercaptan	110		0.195				ND	
220 Tetramethyl lead TIC	1		0.195				ND	
229 o-Anisidine TIC	1		0.195				ND	
218 3-Chlorobenzotrifluoride T	1		0.195				ND	
212 Hexamethyldisiloxane TIC	1		0.195				ND	
254 4,4'-DDD	235		11.703				ND	
S 261 Total Cresols	1		0.195				ND	
S 264 EPH Adjustment 1	1		0.195				ND	
S 262 3 & 4 Methylphenol	108		0.195				ND	
S 259 Chlorobenzotrifluoride N.O	1		0.195				ND	
S 260 Chlorotoluene N.O.S	1		0.195				ND	
S 263 3-Methylphenol	1		0.195				ND	
T 226 Tris(2,3-dibromopropyl)pho	201		0.195				ND	
T 243 2,4-Xylidine TIC	121		0.195				ND	
T 242 1,3-phenylenediamine TIC	108		0.195				ND	
T 274 2-Aminopyridine TIC	99	5.954	5.563	0.396	40	60487	1.16	
T 231 1-Methylnaphthalene (TIC)	142	8.501	8.506	-0.004	1	2440	0.0130	
T 156 2,3,7,8-TCDD	322	12.737	12.737	0.001	1	259	0.002201	
T 289 2,3,7,8-TCDD TIC	322		0.000				ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Lims ID:	480-156069-A-2-A				
Client ID:	MW17				
Sample Type:	Client				
Inject. Date:	16-Jul-2019 16:57:30	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Sample Info:	480-0082649-011				
Operator ID:	BS	Instrument ID:	HP5973Y		
Method:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m				
Limit Group:	MB - 8270D ICAL				
Last Update:	17-Jul-2019 09:32:21	Calib Date:	05-Jun-2019 03:24:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	RXI-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1004				
First Level Reviewer: schickr		Date:	17-Jul-2019 09:06:37		

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
2.482	2430397	3.96	1					
	Unknown							
2.663	2375374	3.87	1					
	Unknown							
4.784	713659	1.16	1					
95-47-6	Benzene, 1,2-dimethyl-							
5.302	1498147	2.44	1	95	37719	C8H10	106	
	Unknown							
5.457	341256	0.5559	1					
	Unknown							
5.916	559449	0.9114	1					
	Unknown							
5.996	347226	0.5656	1					
95-63-6	Benzene, 1,2,4-trimethyl-							
6.306	641997	1.05	1	91	46773	C9H12	120	
	Unknown							
6.904	364448	0.5639	2					
	Unknown							
7.193	346565	0.5363	2					
	Unknown							
7.289	683585	1.06	2					
	Unknown							
7.390	428348	0.6628	2					

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
7.444	379153	0.5867	2					
		Unknown						
7.551	1134990	1.76	2					
		Unknown						
7.641	892044	1.38	2					
		Unknown						
7.711	792199	1.23	2					
		Unknown						
7.892	406825	0.6295	2					
		Unknown						
7.935	457704	0.7082	2					
		Unknown						
8.085	540624	0.8365	2					
		Unknown						
9.286	649663	0.9646	3					

Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.258	2455452	4.00
* 2 Naphthalene-d8	7.348	2585020	4.00
* 3 Acenaphthene-d10	8.827	2693903	4.00

QC Flag Legend

Processing Flags

NC - Not Calibrated

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

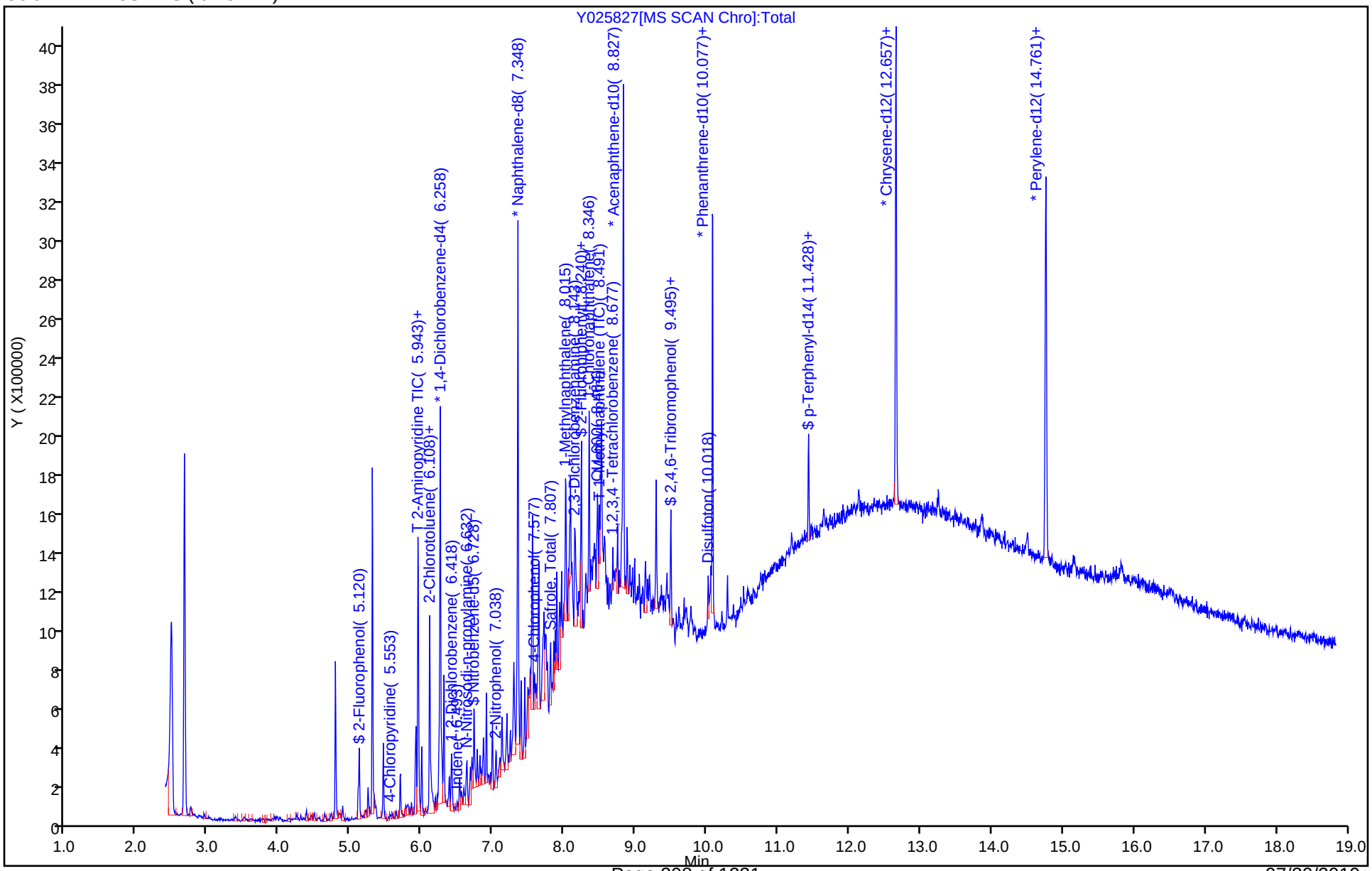
Report Date: 17-Jul-2019 09:33:13 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D

Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2	Worklist Smp#:	11
Client ID:	MW17				
Injection Vol:	2.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	11
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

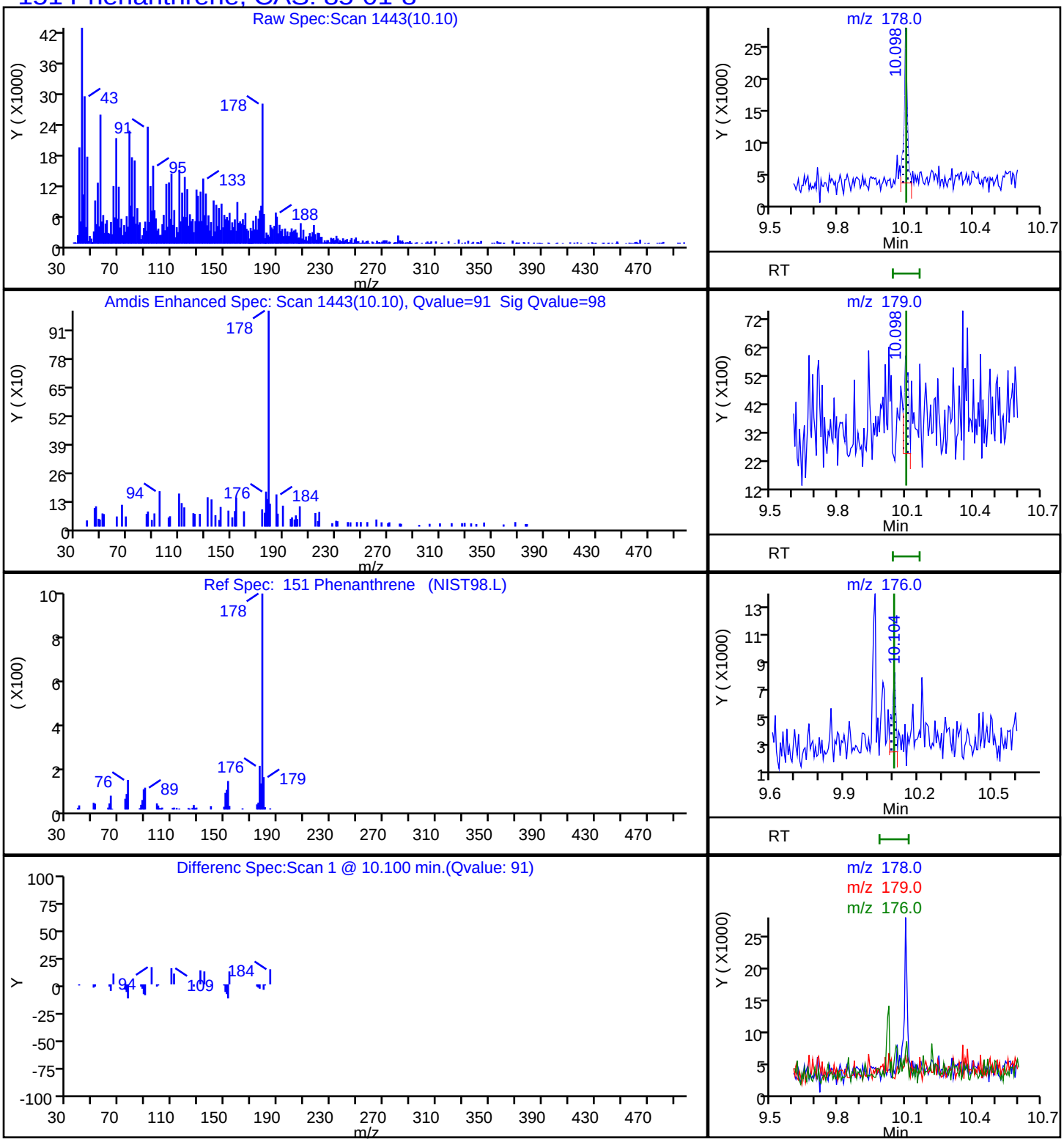
Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

151 Phenanthrene, CAS: 85-01-8



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

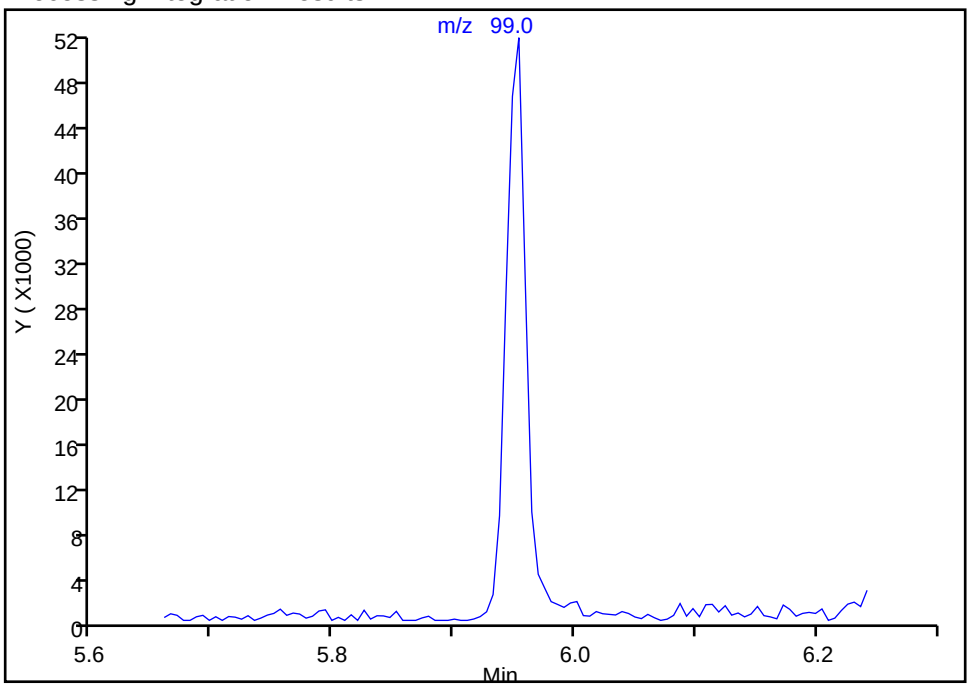
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

$ 8 Phenol-d5, CAS: 4165-62-2

Signal: 1

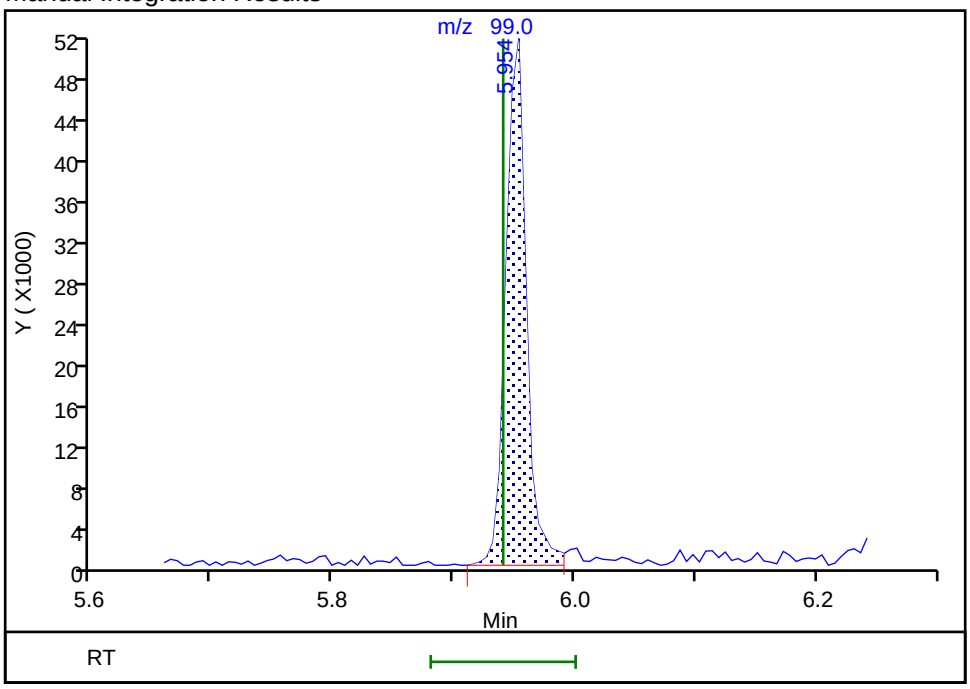
Not Detected
Expected RT: 5.94

Processing Integration Results



Manual Integration Results

RT: 5.95
Area: 60487
Amount: 0.705076
Amount Units: ng/uL



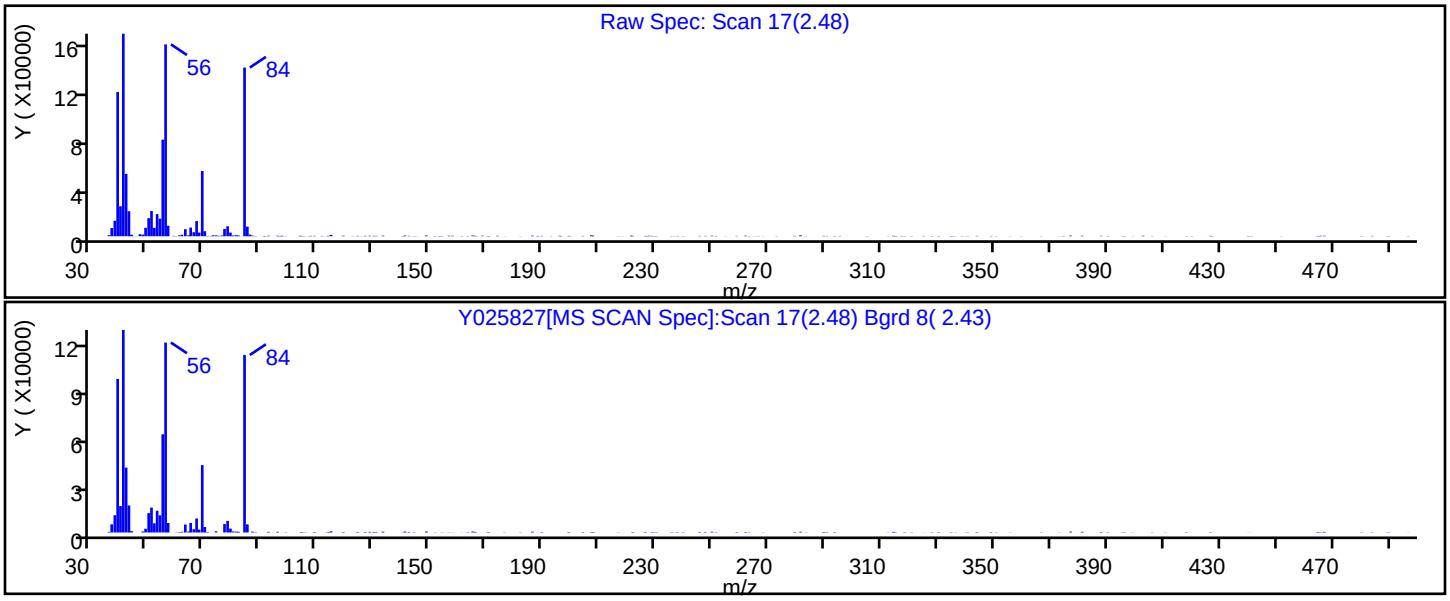
Reviewer: schickr, 17-Jul-2019 09:06:31
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

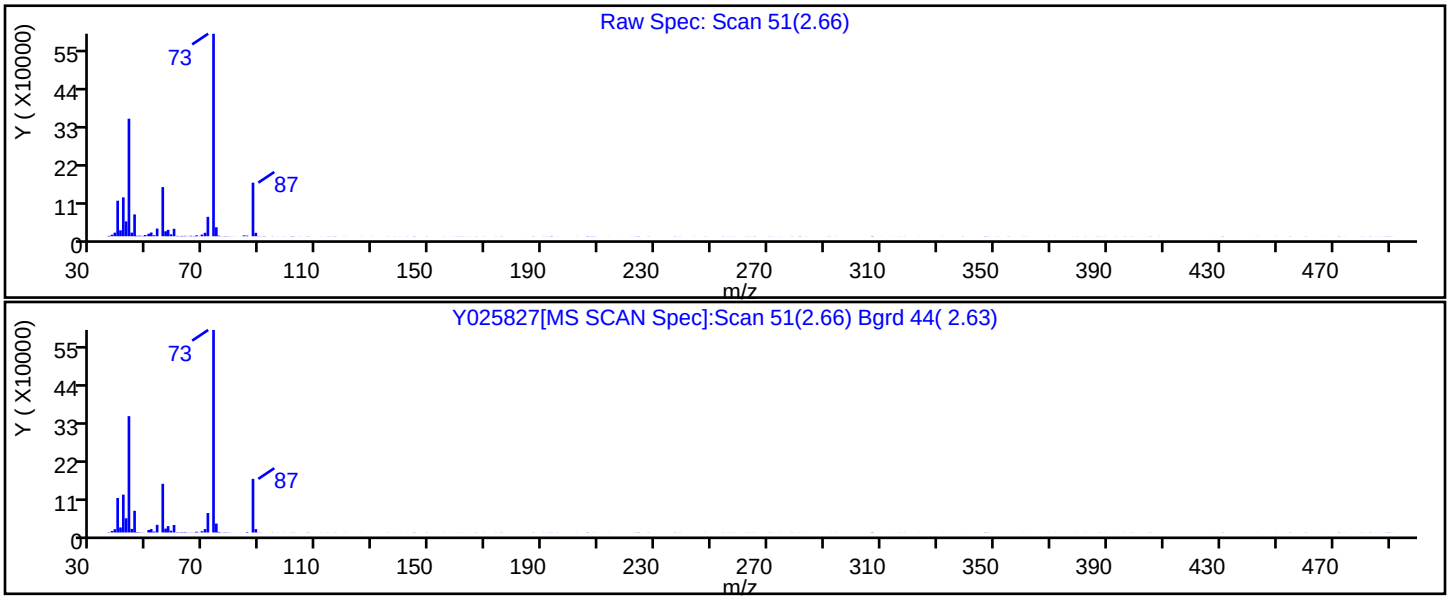


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



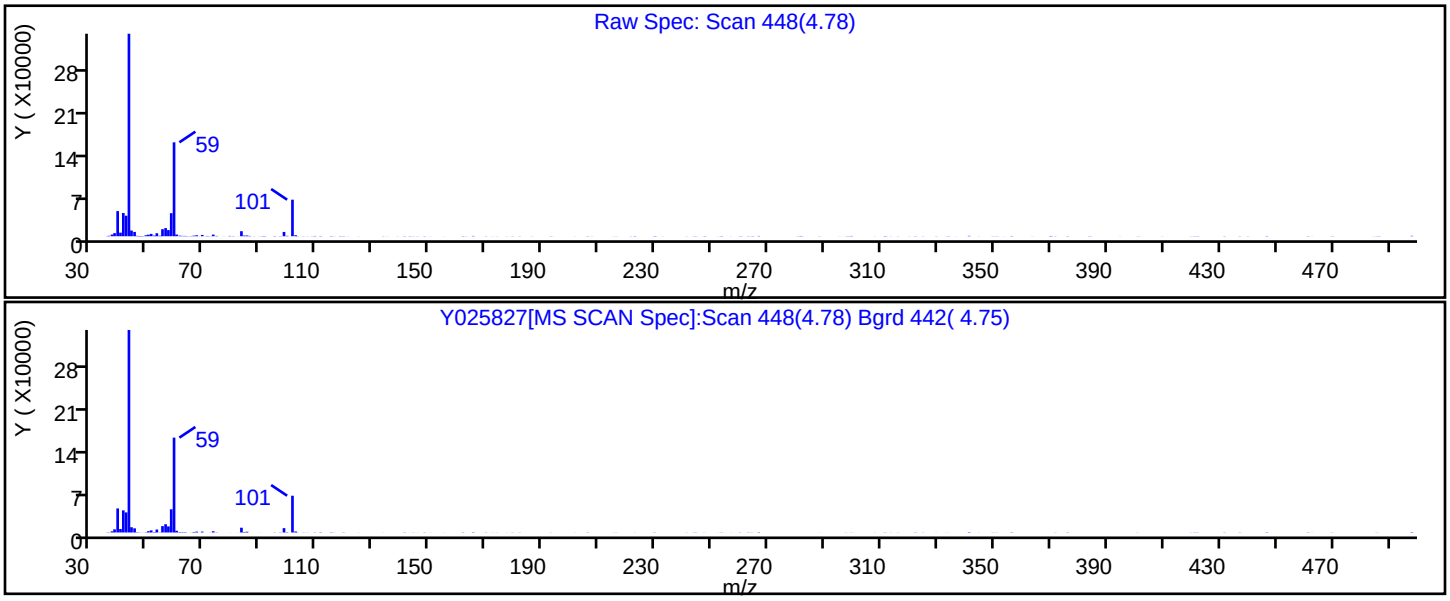
Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D

Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D

Injection Date: 16-Jul-2019 16:57:30 Instrument ID: HP5973Y

Lims ID: 480-156069-A-2-A Lab Sample ID: 480-156069-2

Client ID: MW17

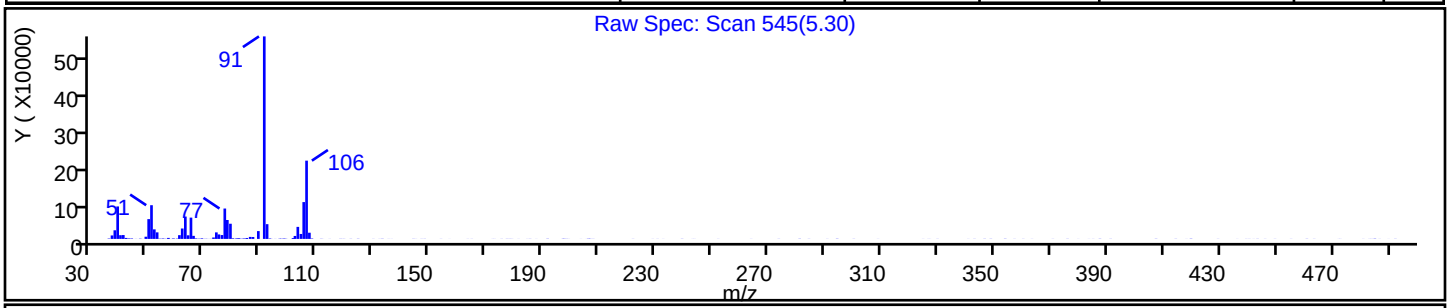
Operator ID: BS ALS Bottle#: 11 Worklist Smp#: 11

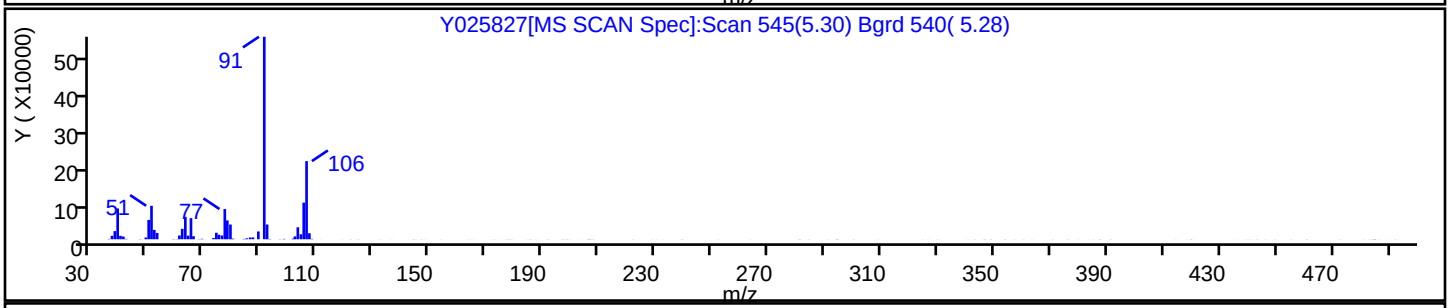
Injection Vol: 2.0 ul Dil. Factor: 5.0000

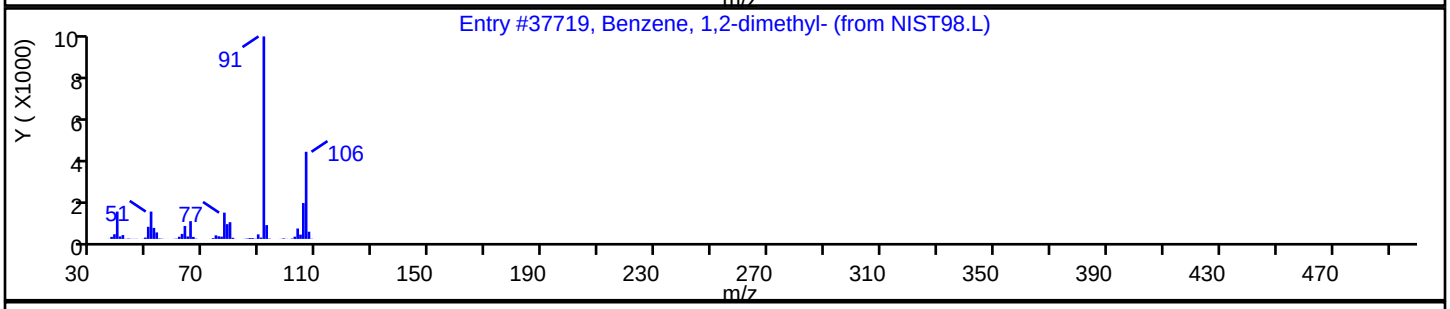
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

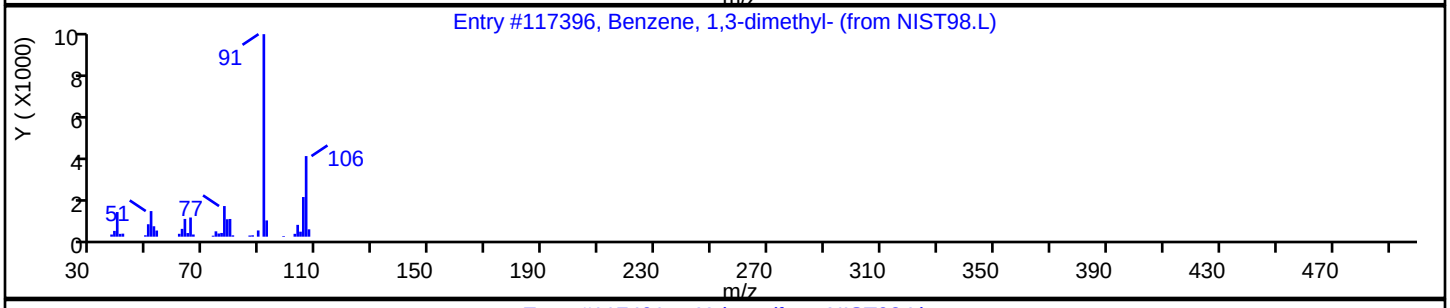
Column: Detector MS SCAN

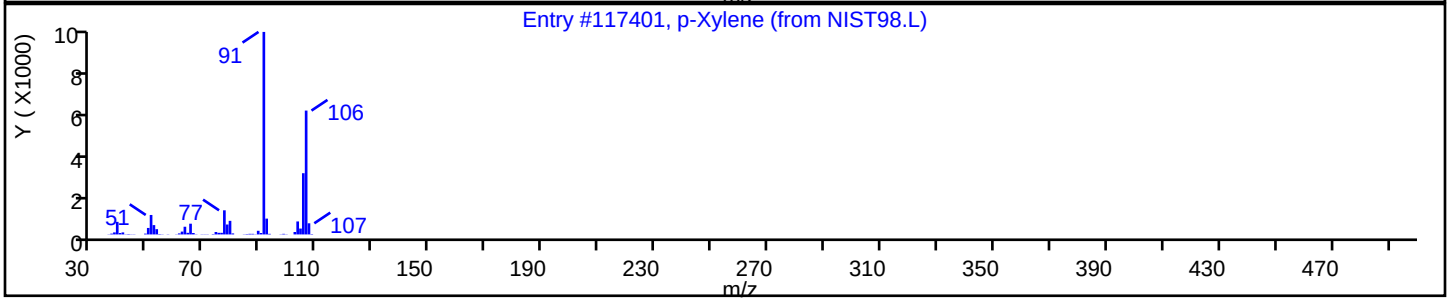
Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2-dimethyl-	95-47-6	NIST98.L	37719	C8H10	106	95
Benzene, 1,3-dimethyl-	108-38-3	NIST98.L	117396	C8H10	106	94
p-Xylene	106-42-3	NIST98.L	117401	C8H10	106	94









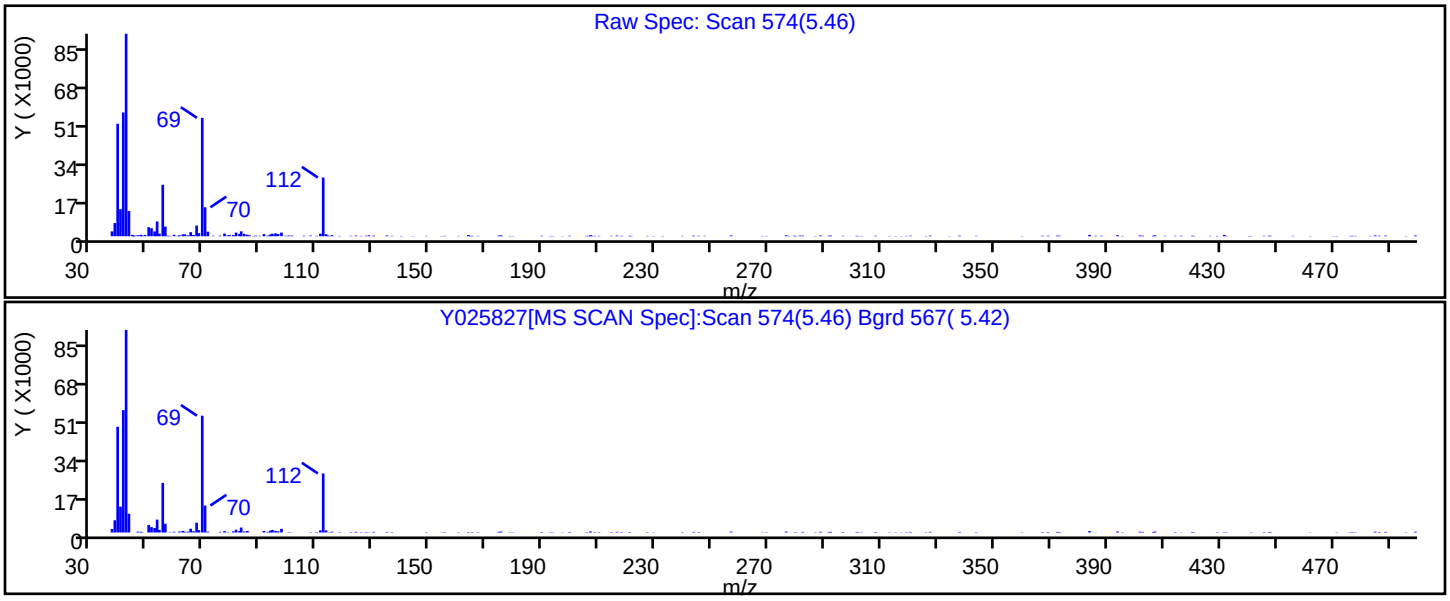


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

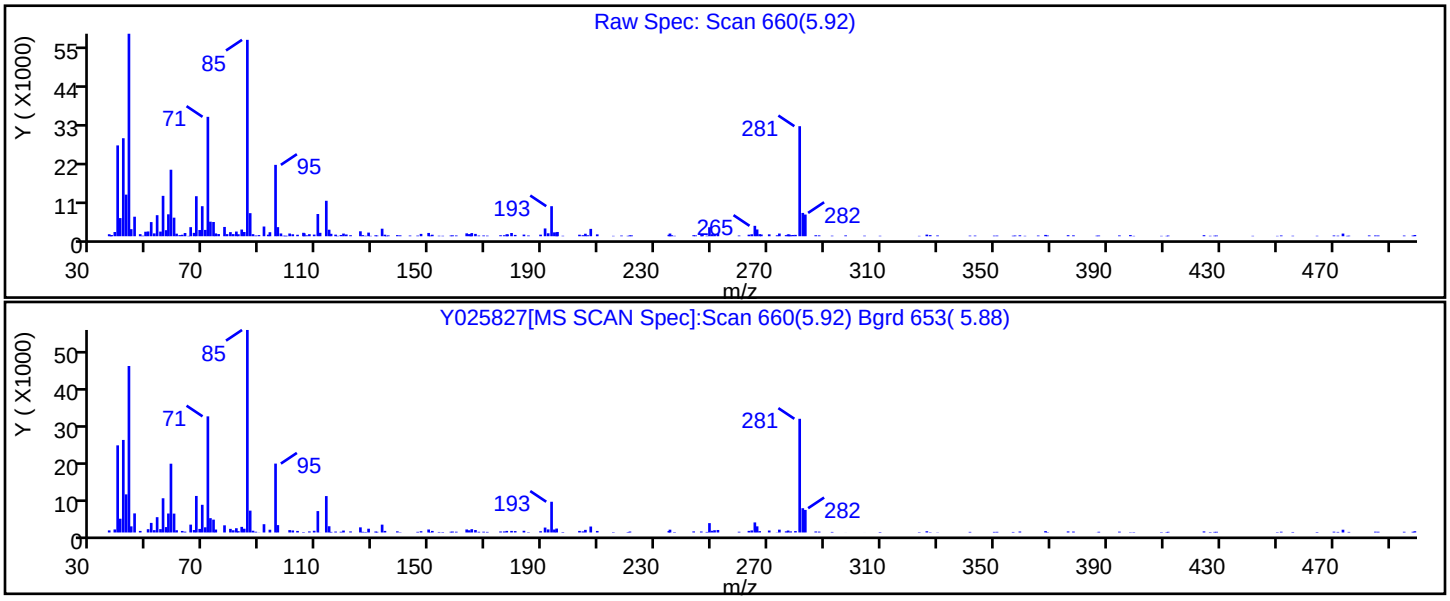


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

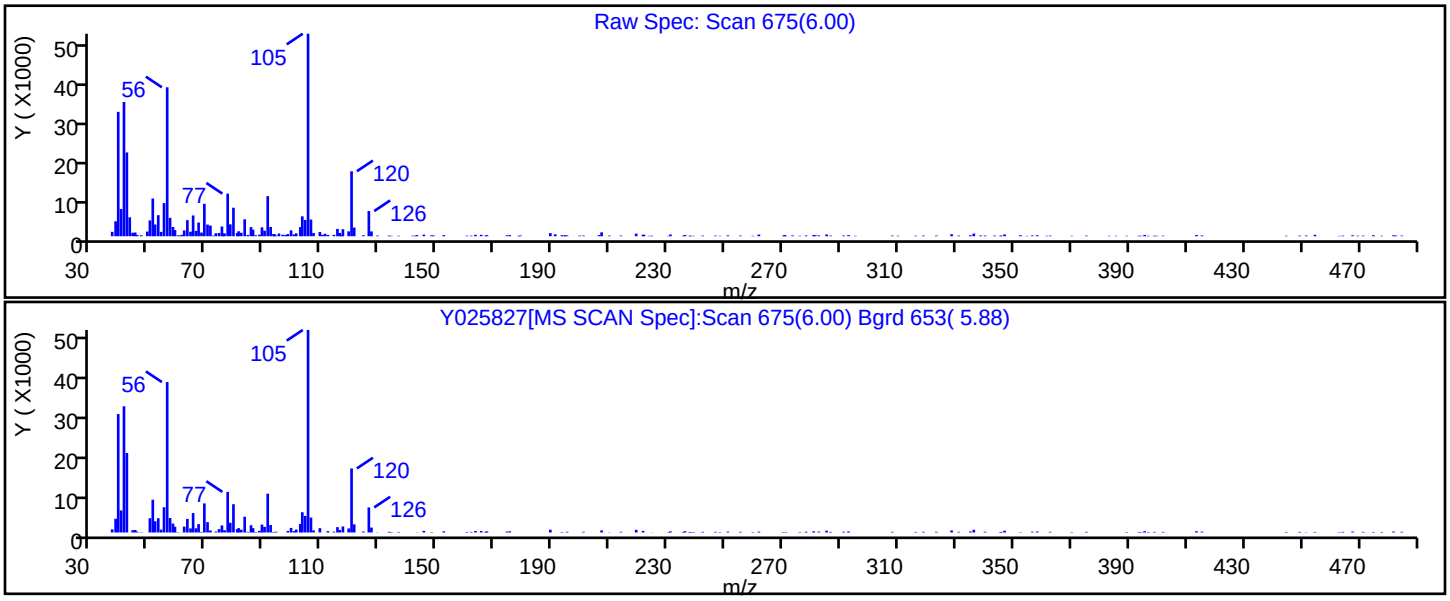


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D

Injection Date: 16-Jul-2019 16:57:30 Instrument ID: HP5973Y

Lims ID: 480-156069-A-2-A Lab Sample ID: 480-156069-2

Client ID: MW17

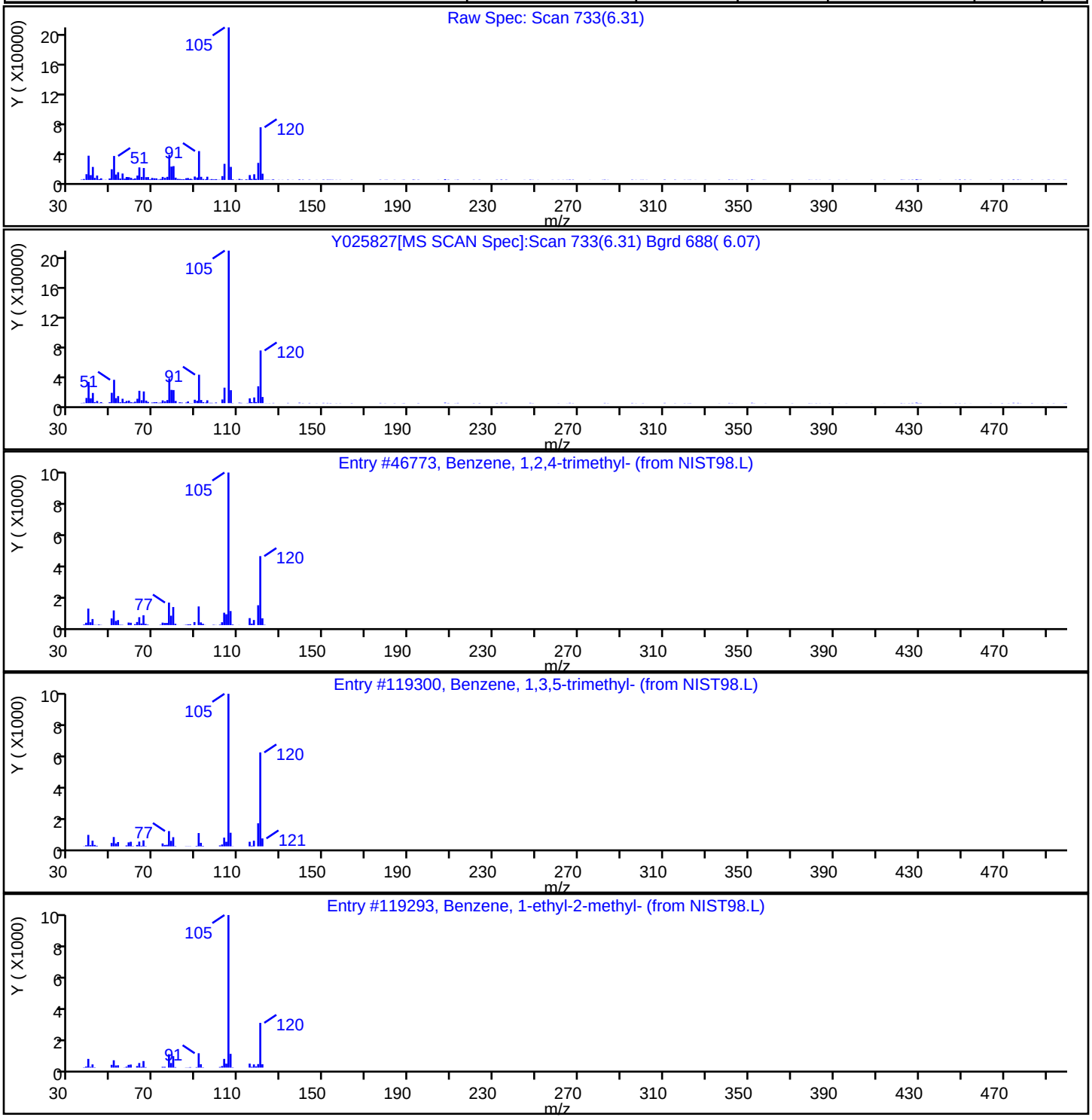
Operator ID: BS ALS Bottle#: 11 Worklist Smp#: 11

Injection Vol: 2.0 ul Dil. Factor: 5.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,2,4-trimethyl-	95-63-6	NIST98.L	46773	C9H12	120	91
Benzene, 1,3,5-trimethyl-	108-67-8	NIST98.L	119300	C9H12	120	91
Benzene, 1-ethyl-2-methyl-	611-14-3	NIST98.L	119293	C9H12	120	90

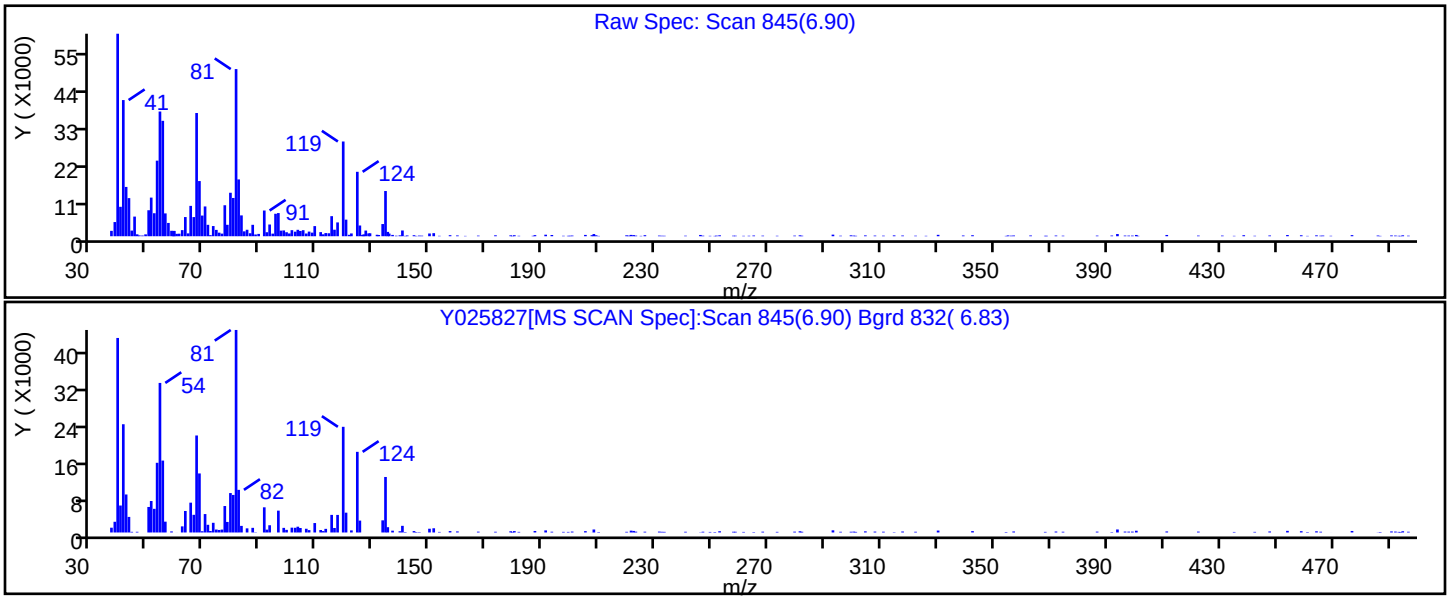


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

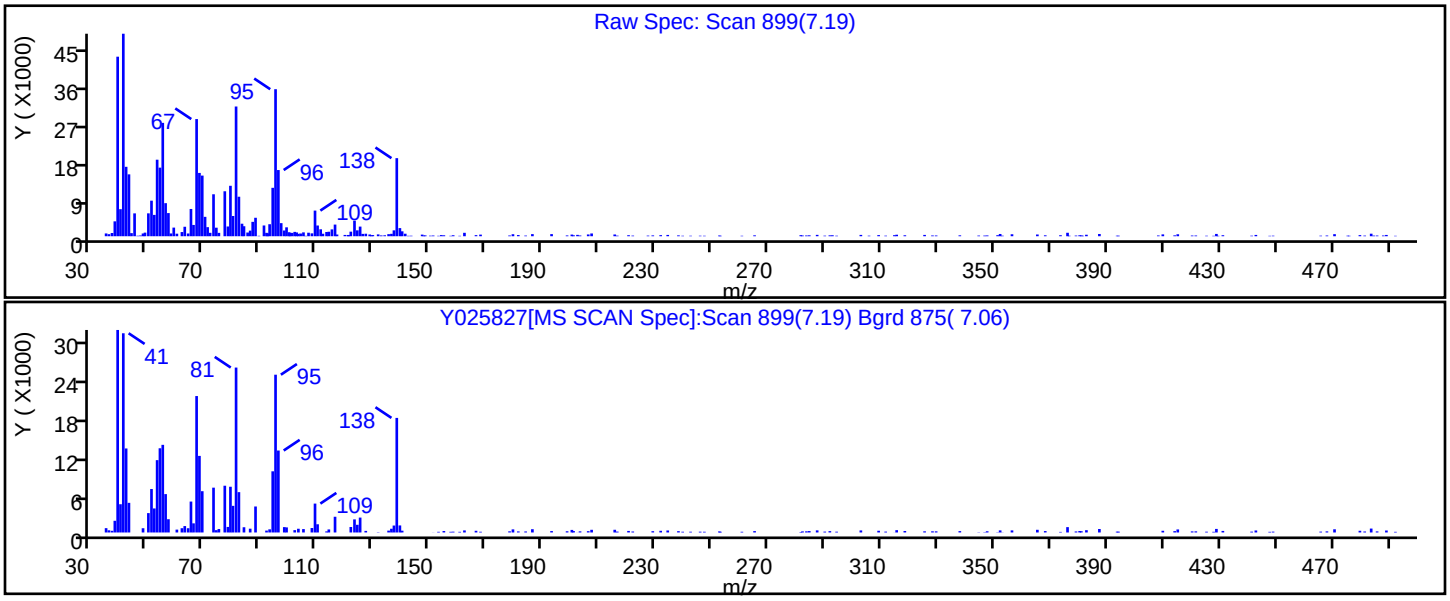


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

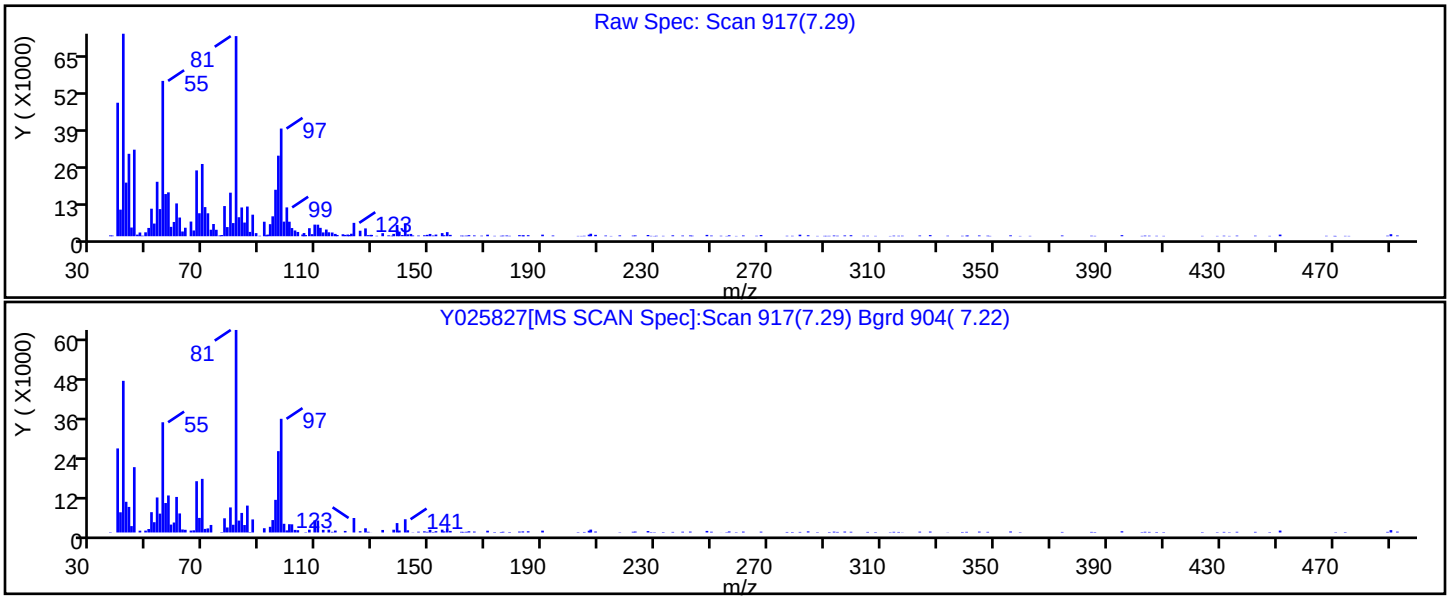


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

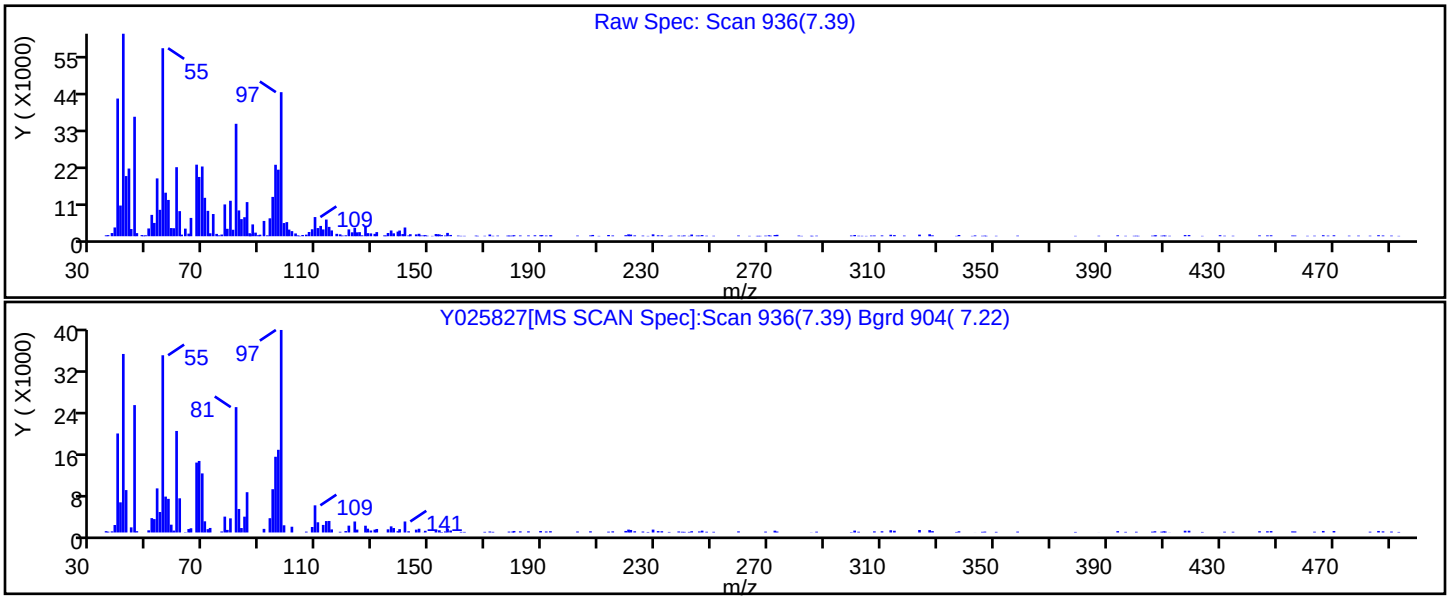


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

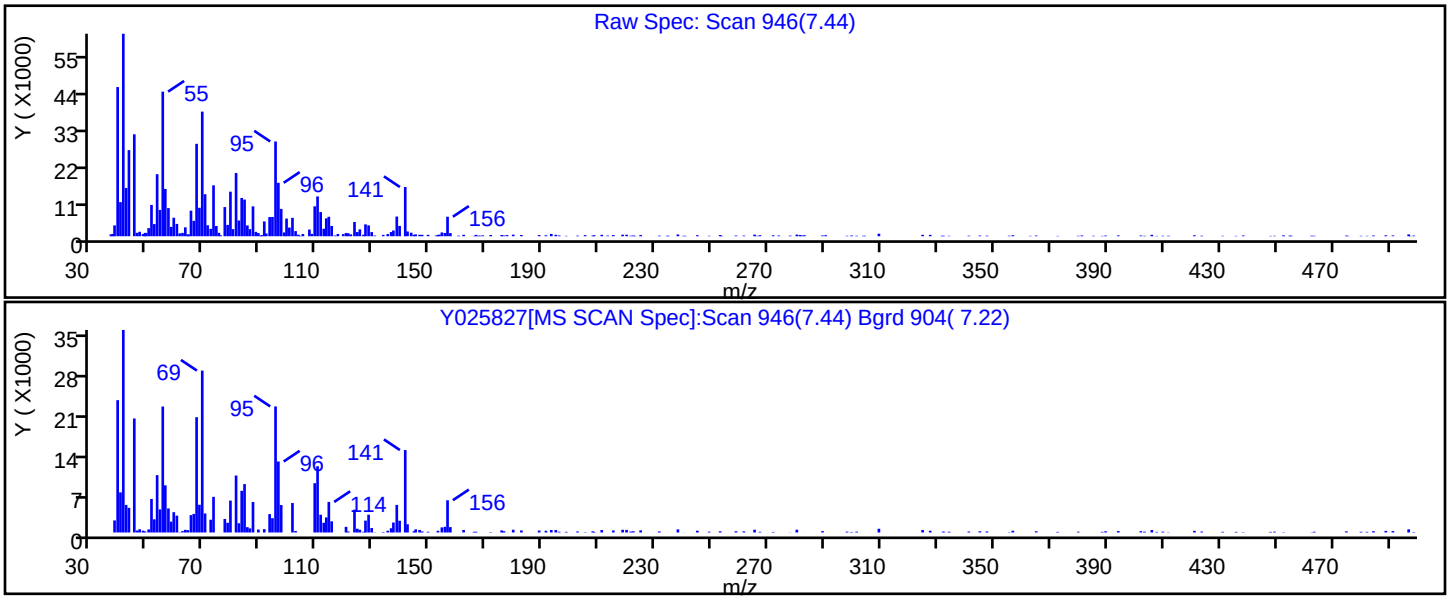


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

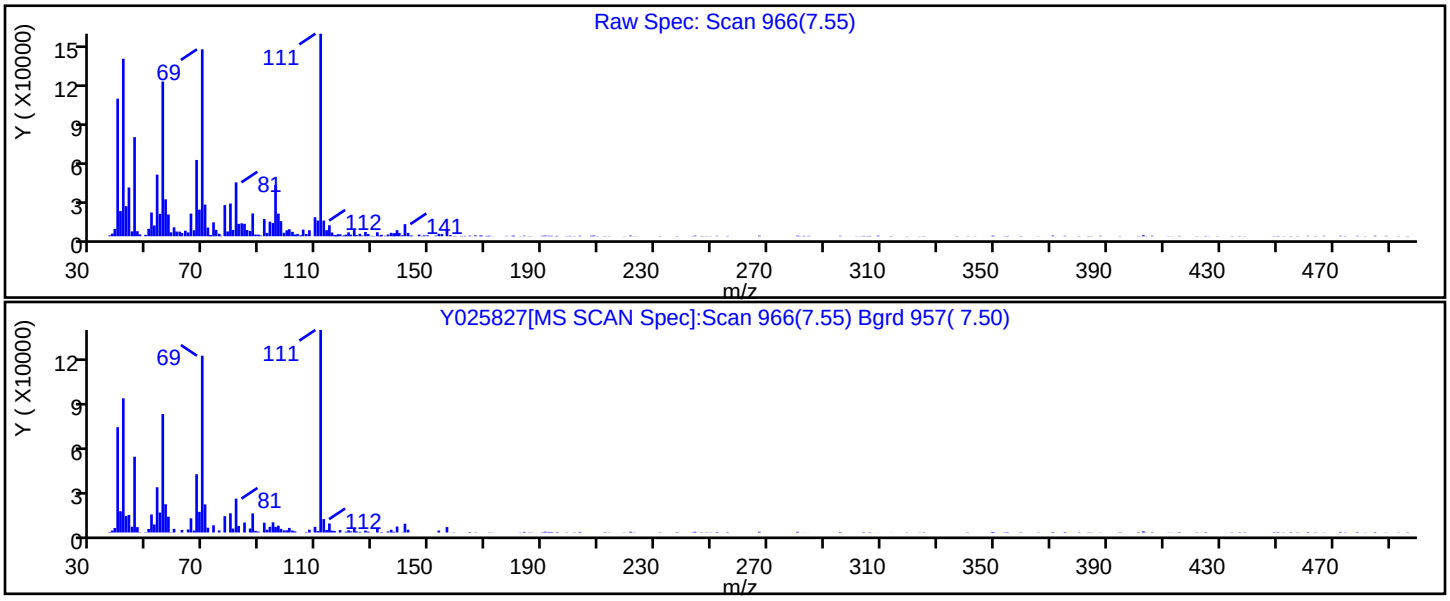


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

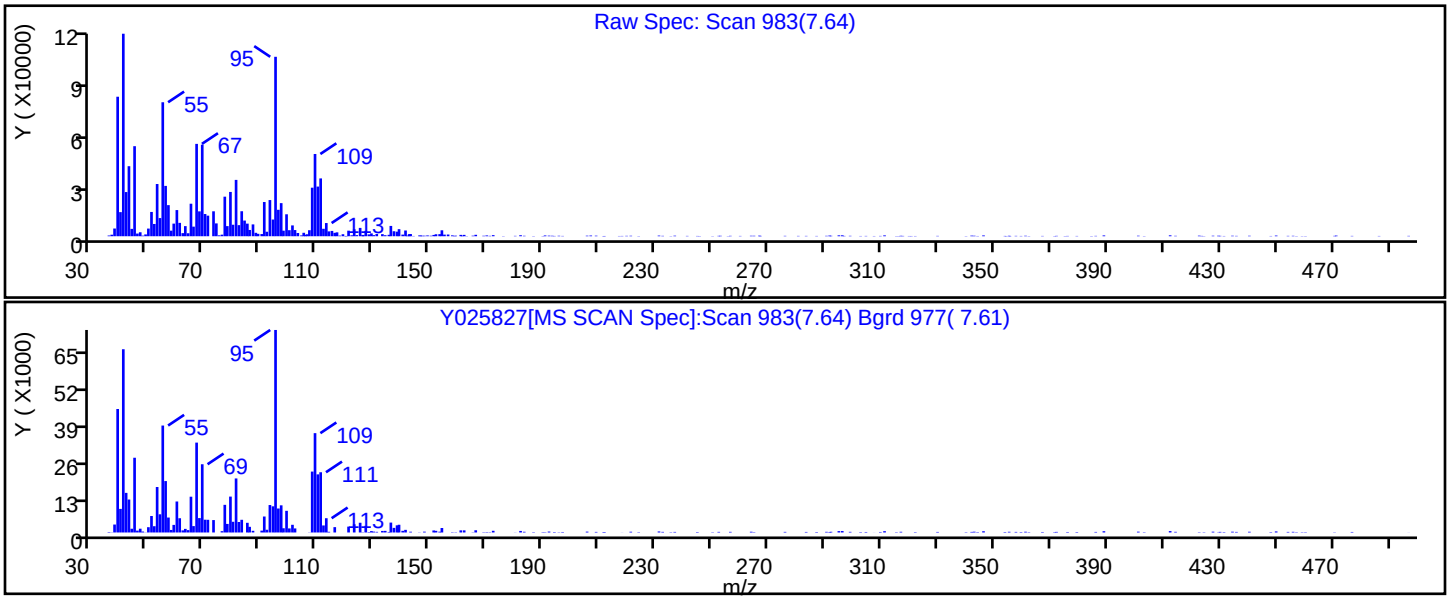


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

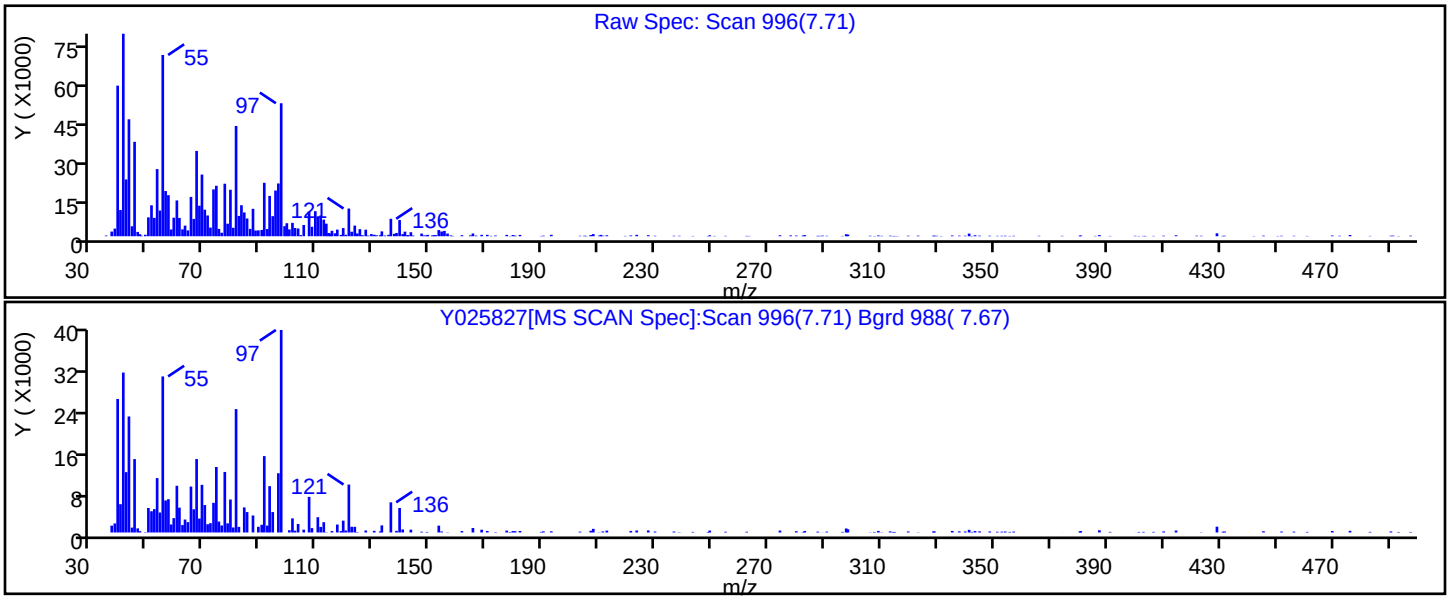


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

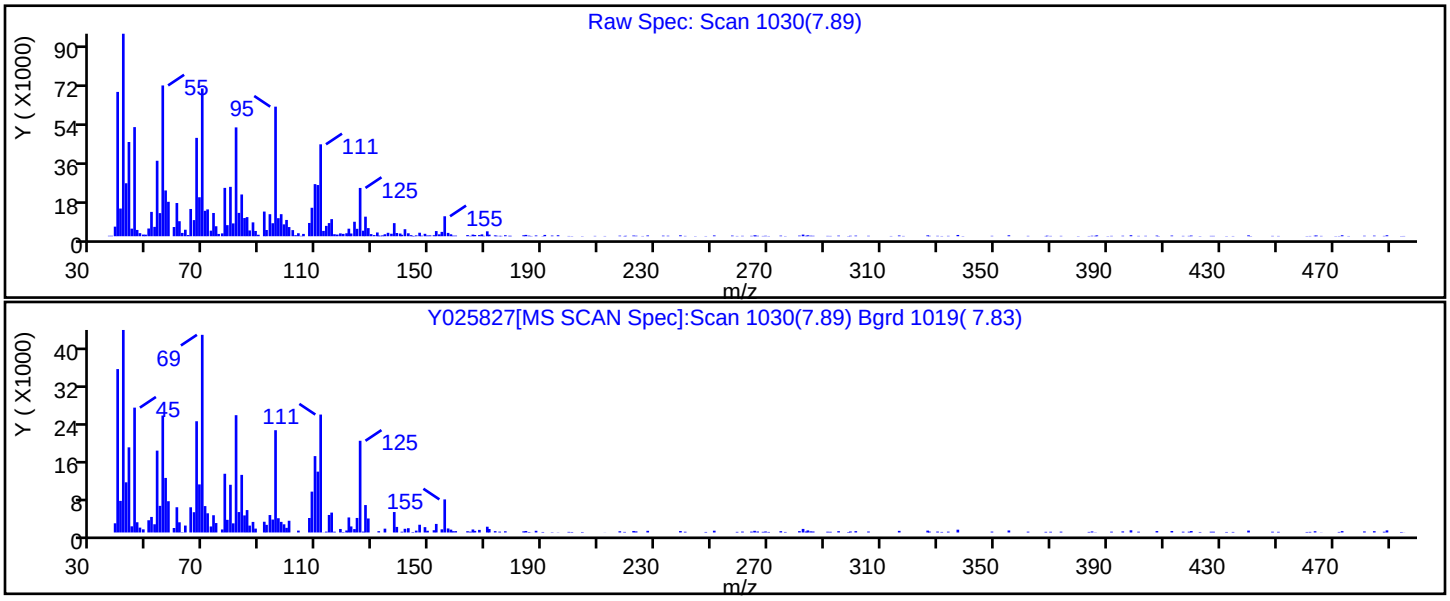


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

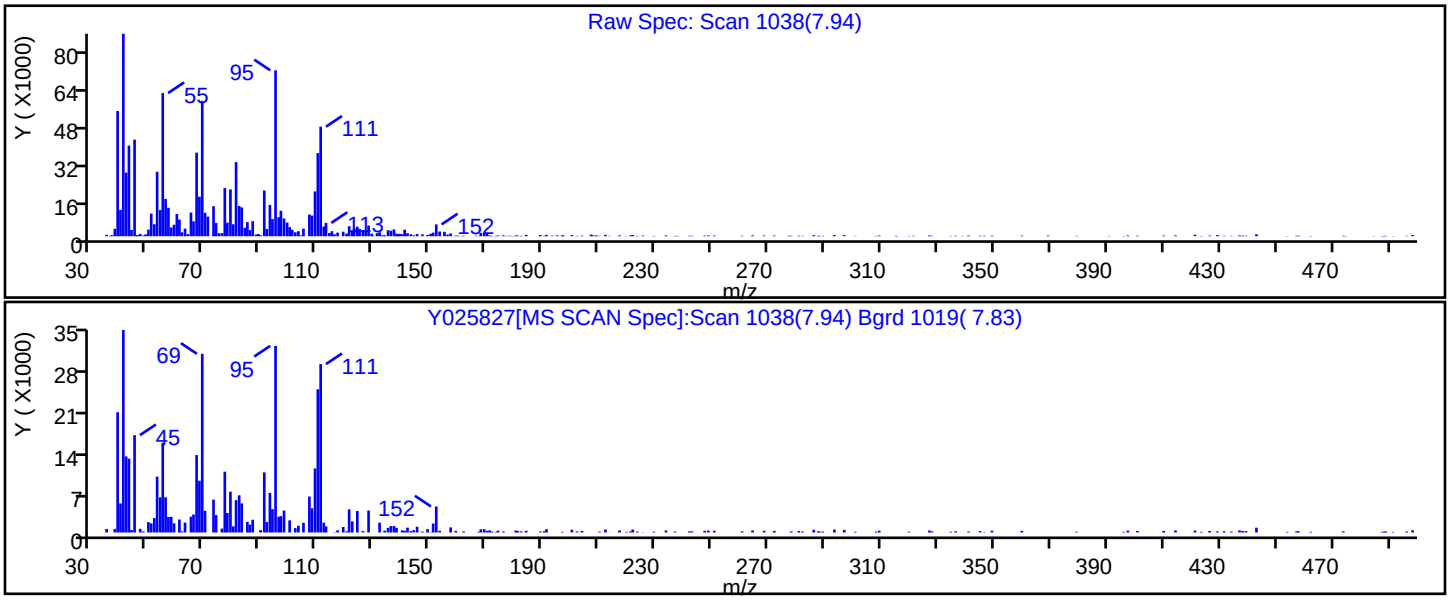


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

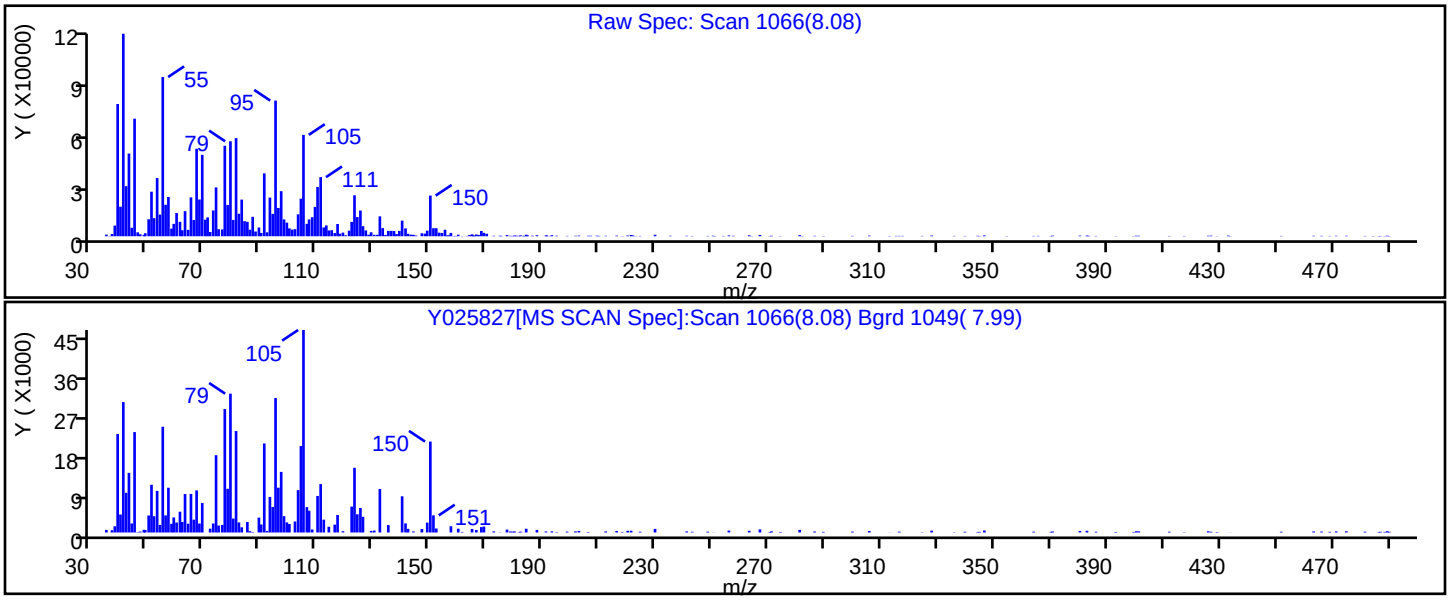


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

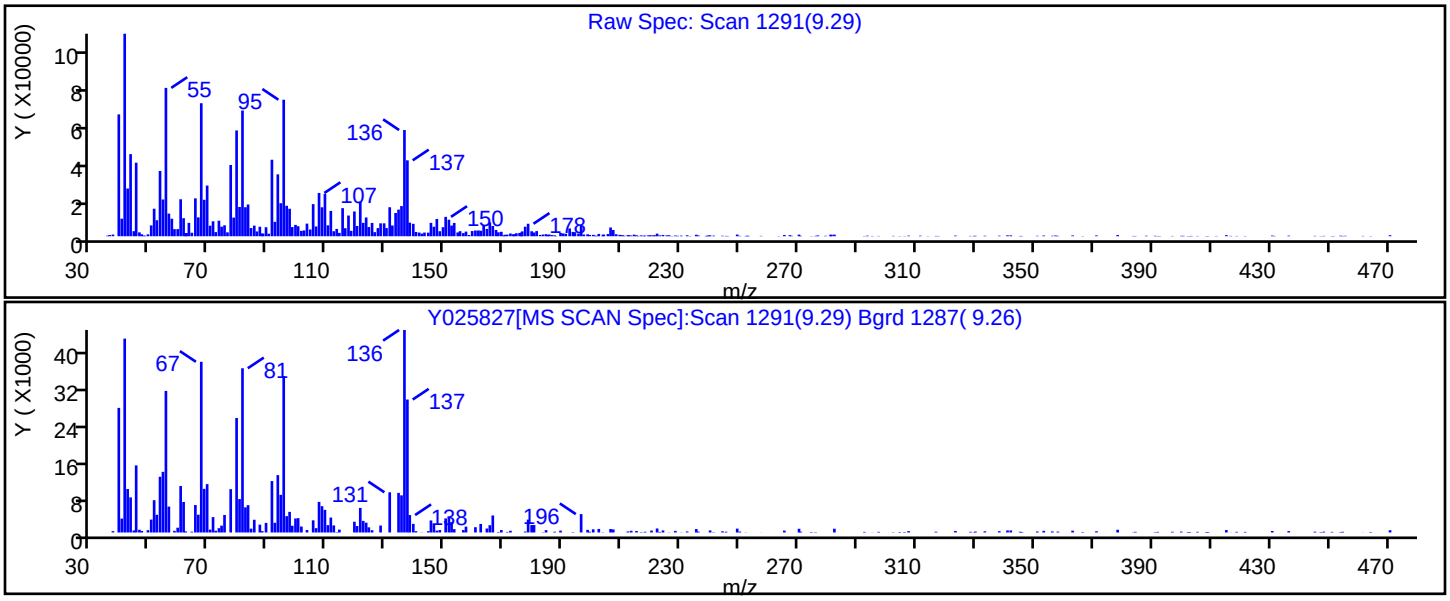


Report Date: 17-Jul-2019 09:33:16 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025827.D				
Injection Date:	16-Jul-2019 16:57:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-2-A	Lab Sample ID:	480-156069-2		
Client ID:	MW17				
Operator ID:	BS	ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: Y025830.D

Analysis Method: 8270D Date Collected: 07/10/2019 09:05

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:21

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND	*	10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: Y025830.D

Analysis Method: 8270D Date Collected: 07/10/2019 09:05

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:21

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: Y025830.D

Analysis Method: 8270D Date Collected: 07/10/2019 09:05

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:21

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	131	X	41-120
321-60-8	2-Fluorobiphenyl	95		48-120
367-12-4	2-Fluorophenol	63		35-120
4165-60-0	Nitrobenzene-d5	94		46-120
4165-62-2	Phenol-d5	43		22-120
1718-51-0	p-Terphenyl-d14	52	X	59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Matrix: Water Lab File ID: Y025830.D

Analysis Method: 8270D Date Collected: 07/10/2019 09:05

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:21

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 20 TIC Result Total: 301.2

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.77	96	T J	
	Unknown	4.80	31	T J	
106-42-3	p-Xylene	5.12	5.4	T J N	95%
	Unknown	6.15	4.9	T J	
	Unknown	6.70	6.0	T J	
	Unknown	7.58	13	T J	
	Unknown	7.70	5.5	T J	
	Unknown	7.75	8.9	T J	
	Unknown	7.87	5.7	T J	
	Unknown	8.00	6.5	T J	
	Unknown	8.14	19	T J	
	Unknown	8.23	6.4	T J	
	Unknown	8.37	7.8	T J	
	Unknown	8.91	12	T J	
	Unknown	9.08	9.7	T J	
	Unknown	9.23	5.7	T J	
	Unknown	9.34	20	T J	
	Unknown	9.43	9.7	T J	
	Unknown	9.55	13	T J	
	Unknown	9.62	15	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D
Lims ID: 480-156069-A-3-A
Client ID: W28
Sample Type: Client
Inject. Date: 16-Jul-2019 18:21:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-014
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:07:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.261	6.256	0.005	95	197207	4.00	
* 2 Naphthalene-d8	136	7.350	7.345	0.005	98	730591	4.00	
* 3 Acenaphthene-d10	164	8.830	8.830	0.000	94	495102	4.00	
* 4 Phenanthrene-d10	188	10.085	10.080	0.005	96	709066	4.00	
* 5 Chrysene-d12	240	12.670	12.649	0.021	98	877046	4.00	
* 6 Perylene-d12	264	14.774	14.748	0.026	99	1035062	4.00	
$ 7 2-Fluorophenol	112	5.139	5.112	0.032	88	330161	5.02	
$ 8 Phenol-d5	99	5.962	5.972	0.021	86	278271	3.43	
$ 9 Nitrobenzene-d5	82	6.731	6.732	0.000	96	618200	7.55	
$ 10 2-Fluorobiphenyl	172	8.242	8.238	0.005	98	1373560	7.59	
$ 11 2,4,6-Tribromophenol	330	9.503	9.493	0.011	83	219139	10.5	
$ 12 p-Terphenyl-d14	244	11.436	11.431	0.010	98	853512	4.18	
35 Benzaldehyde	77		5.876				ND	
37 Phenol	94		5.951				ND	
39 Bis(2-chloroethyl)ether	93		6.015				ND	
40 2-Chlorophenol	128		6.085				ND	
48 2-Methylphenol	108		6.464				ND	
49 2,2'-oxybis[1-chloropropan	45		6.475				ND	
53 N-Nitrosodi-n-propylamine	70		6.587				ND	U
57 4-Methylphenol	108		6.592				ND	
52 Acetophenone	105		6.597				ND	U
58 Hexachloroethane	117		6.699				ND	
59 Nitrobenzene	77		6.747				ND	
62 Isophorone	82		6.945				ND	
64 2-Nitrophenol	139		7.019				ND	U
66 2,4-Dimethylphenol	107		7.041				ND	
69 Bis(2-chloroethoxy)methane	93		7.105				ND	
72 2,4-Dichlorophenol	162		7.228				ND	
74 Naphthalene	128		7.367				ND	
76 4-Chloroaniline	127		7.399				ND	
79 Hexachlorobutadiene	225		7.463				ND	
84 Caprolactam	113		7.698				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
85 4-Chloro-3-methylphenol	107		7.805				ND	
87 2-Methylnaphthalene	142		7.943				ND	
90 Hexachlorocyclopentadiene	237		8.077				ND	
93 2,4,6-Trichlorophenol	196		8.178				ND	
94 2,4,5-Trichlorophenol	196		8.221				ND	
96 1,1'-Biphenyl	154		8.328				ND	
97 2-Chloronaphthalene	162		8.360				ND	
100 2-Nitroaniline	65		8.435				ND	
105 Dimethyl phthalate	163		8.563				ND	
107 2,6-Dinitrotoluene	165		8.622				ND	U
108 Acenaphthylene	152		8.713				ND	
109 3-Nitroaniline	138		8.777				ND	
110 Acenaphthene	153		8.857				ND	
111 2,4-Dinitrophenol	184		8.862				ND	
112 4-Nitrophenol	109		8.916				ND	U
114 2,4-Dinitrotoluene	165		8.964				ND	
115 Dibenzofuran	168		8.996				ND	U
120 Diethyl phthalate	149		9.140				ND	U
123 4-Chlorophenyl phenyl ethe	204		9.263				ND	
124 Fluorene	166		9.284				ND	
126 4-Nitroaniline	138		9.295				ND	
127 4,6-Dinitro-2-methylphenol	198		9.316				ND	U
130 N-Nitrosodiphenylamine	169		9.359				ND	
139 4-Bromophenyl phenyl ether	248		9.679				ND	
140 Hexachlorobenzene	284		9.759				ND	U
143 Atrazine	200		9.786				ND	U
145 Pentachlorophenol	266		9.920				ND	U
151 Phenanthrene	178		10.101				ND	U
152 Anthracene	178		10.144				ND	U
153 Carbazole	167		10.267				ND	
157 Di-n-butyl phthalate	149		10.502				ND	
164 Fluoranthene	202		11.105				ND	U
167 Pyrene	202		11.324				ND	U
174 Butyl benzyl phthalate	149		11.890				ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553				ND	
179 3,3'-Dichlorobenzidine	252		12.574				ND	
180 Benzo[a]anthracene	228		12.633				ND	
182 Chrysene	228		12.686				ND	
184 Di-n-octyl phthalate	149		13.450				ND	
186 Benzo[b]fluoranthene	252		14.160				ND	
187 Benzo[k]fluoranthene	252		14.198				ND	
189 Benzo[a]pyrene	252		14.663				ND	
193 Indeno[1,2,3-cd]pyrene	276		16.436				ND	
194 Dibenz(a,h)anthracene	278		16.446				ND	
195 Benzo[g,h,i]perylene	276		16.900				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D
Lims ID: 480-156069-A-3-A
Client ID: W28
Sample Type: Client
Inject. Date: 16-Jul-2019 18:21:30 ALS Bottle#: 14 Worklist Smp#: 14
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-014
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Tic RT Window: 1.500 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\chromna\Buffalo\Database\NIST98.L
Min. Match: 85

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:07:04

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
2.768	12263963	23.9	1					
	Unknown							
4.803	3906024	7.63	1					
106-42-3	p-Xylene							
5.118	689063	1.35	1	95	117401	C8H10	106	
	Unknown							
6.154	623536	1.22	1					
	Unknown							
6.704	765674	1.50	1					
	Unknown							
7.580	3929208	3.25	2					
	Unknown							
7.697	1670984	1.38	2					
	Unknown							
7.746	2693220	2.23	2					
	Unknown							
7.874	1721354	1.42	2					
	Unknown							
7.997	1977862	1.64	2					
	Unknown							
8.141	4534714	4.70	3					
	Unknown							
8.226	1541797	1.60	3					

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
8.370	1876664	1.95	3					
	Unknown							
8.905	2791102	2.90	3					
	Unknown							
9.081	2344453	2.43	3					
	Unknown							
9.225	1365399	1.42	3					
	Unknown							
9.343	4752099	4.93	3					
	Unknown							
9.428	2327019	2.41	3					
	Unknown							
9.551	1630619	3.24	4					
	Unknown							
9.620	1943913	3.87	4					

Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.255	2048461	4.00
* 2 Naphthalene-d8	7.350	4831889	4.00
* 3 Acenaphthene-d10	8.830	3856233	4.00
* 4 Phenanthrene-d10	10.085	2011145	4.00

QC Flag Legend

Processing Flags

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

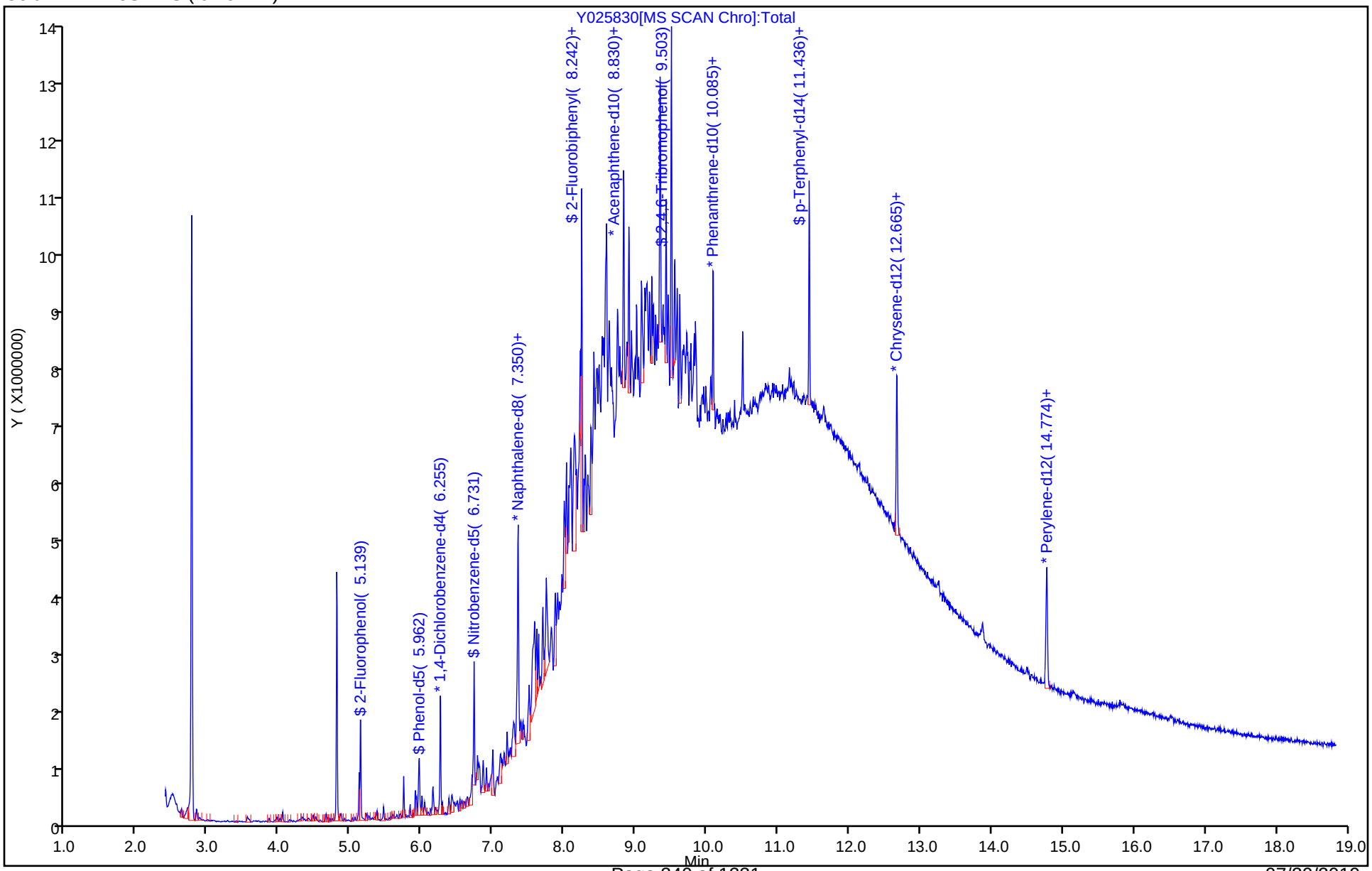
Report Date: 17-Jul-2019 09:33:35 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3	Worklist Smp#:	14
Client ID:	W28				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	14
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



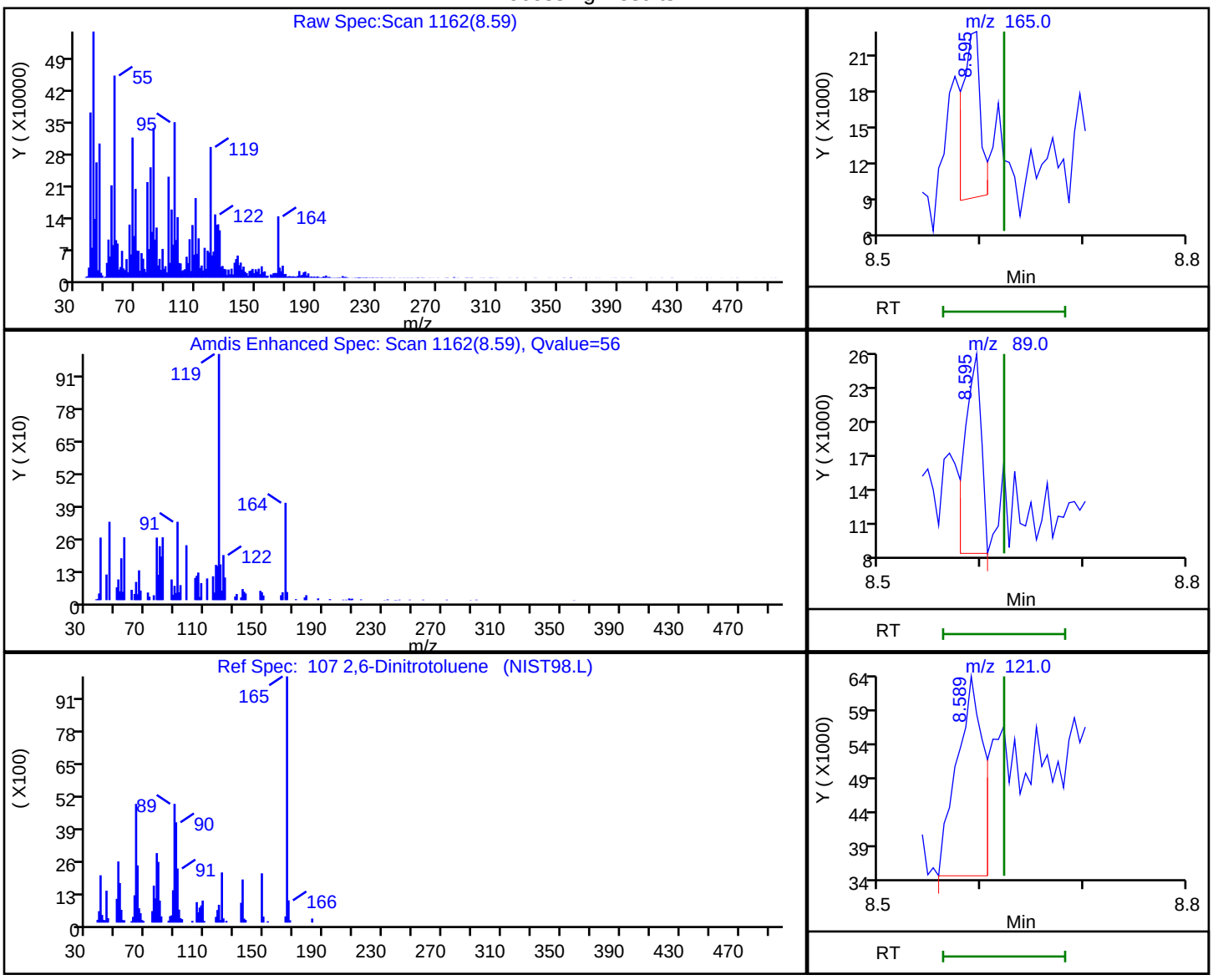
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

107 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
8.59	165.00	16229	0.416105
8.59	89.00	18589	
8.59	121.00	50997	

Reviewer: schickr, 17-Jul-2019 09:07:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

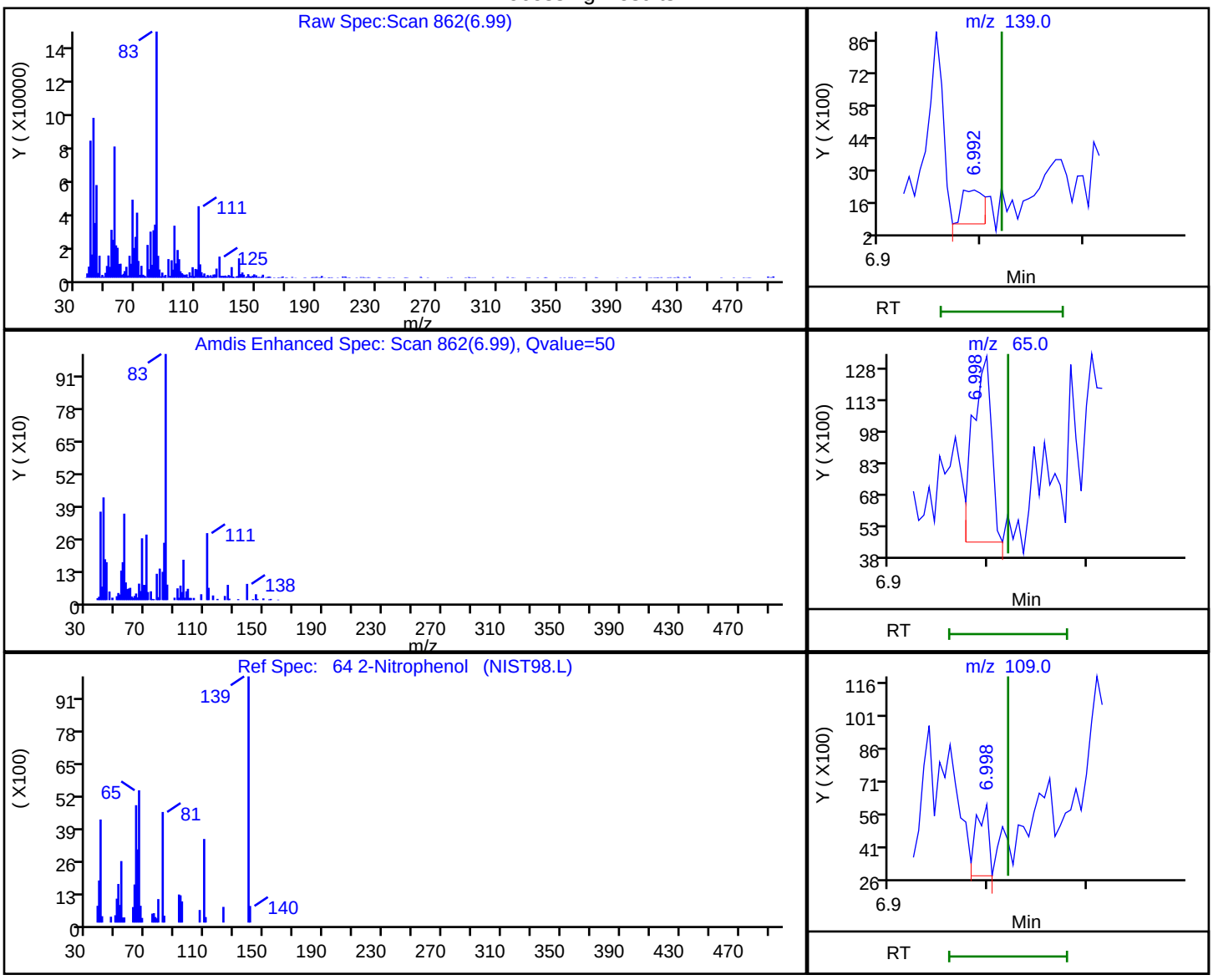
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

64 2-Nitrophenol, CAS: 88-75-5

Processing Results



RT	Mass	Response	Amount
6.99	139.00	2217	0.063694
7.00	65.00	11707	
7.00	109.00	2874	

Reviewer: schickr, 17-Jul-2019 09:07:20

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

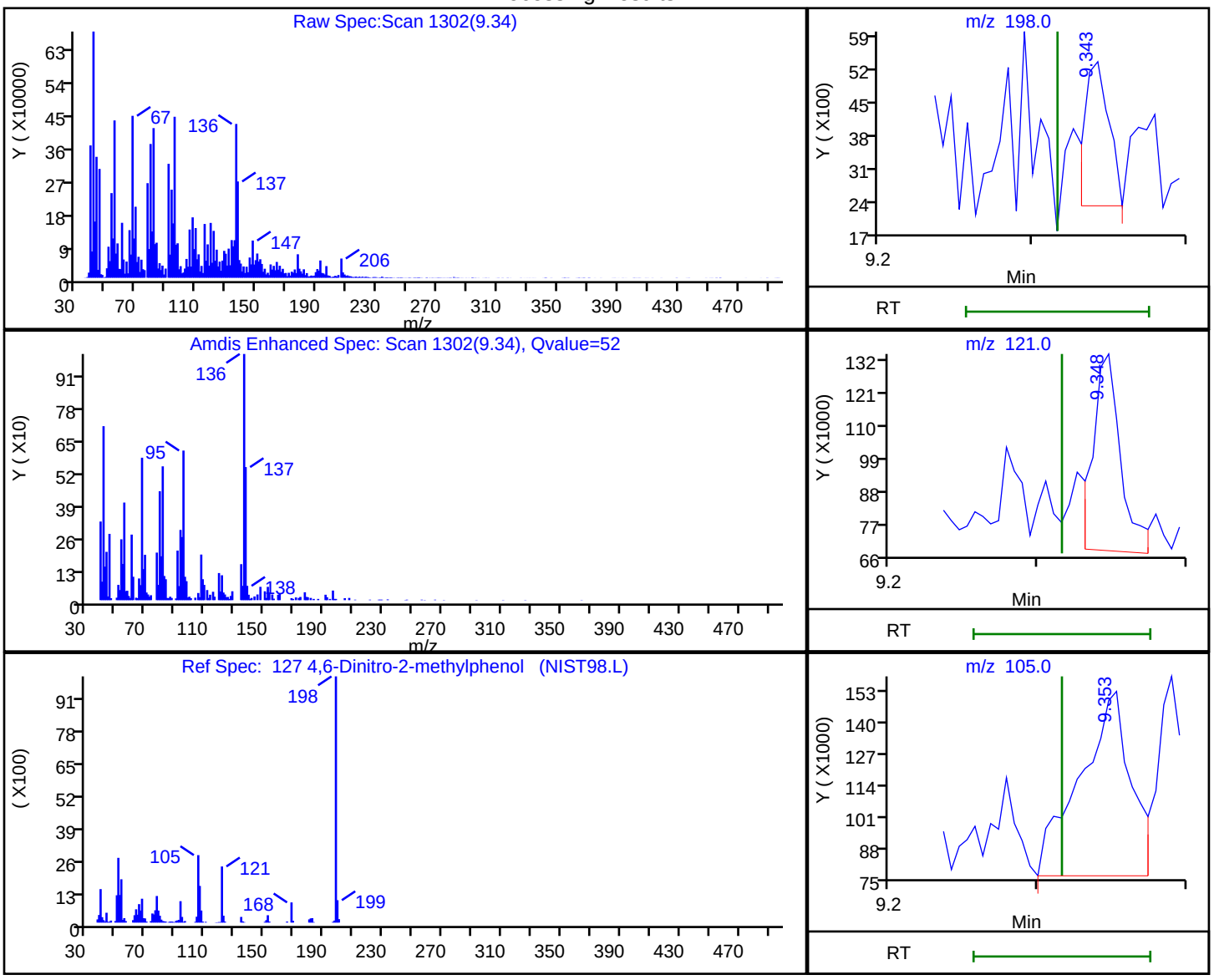
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

127 4,6-Dinitro-2-methylphenol, CAS: 534-52-1

Processing Results



RT	Mass	Response	Amount
9.34	198.00	3381	0.954614
9.35	121.00	86785	
9.35	105.00	184031	

Reviewer: schickr, 17-Jul-2019 09:07:57

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

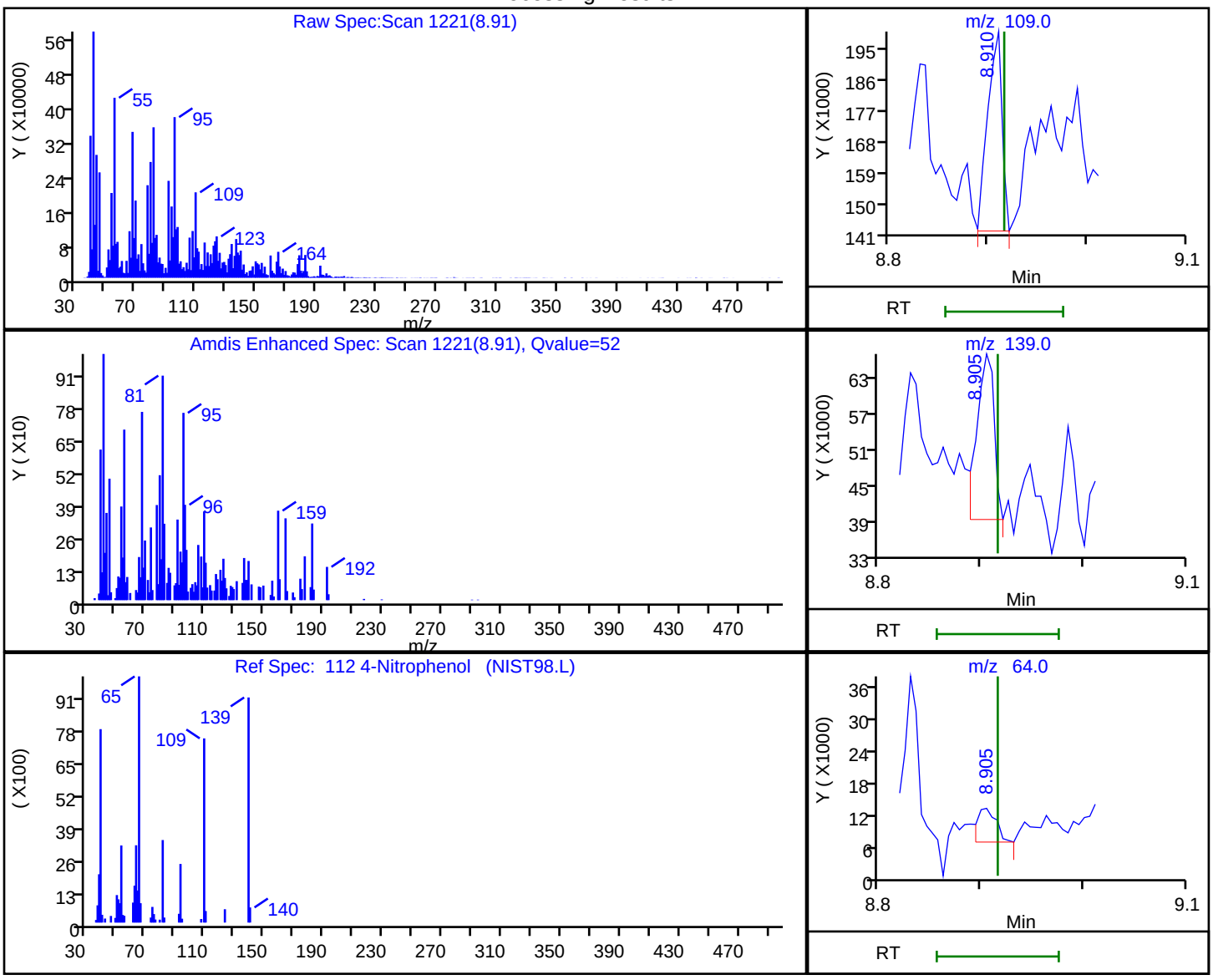
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

112 4-Nitrophenol, CAS: 100-02-7

Processing Results



RT	Mass	Response	Amount
8.91	109.00	58459	2.901476
8.90	139.00	31532	
8.90	64.00	8279	

Reviewer: schickr, 17-Jul-2019 09:23:32

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

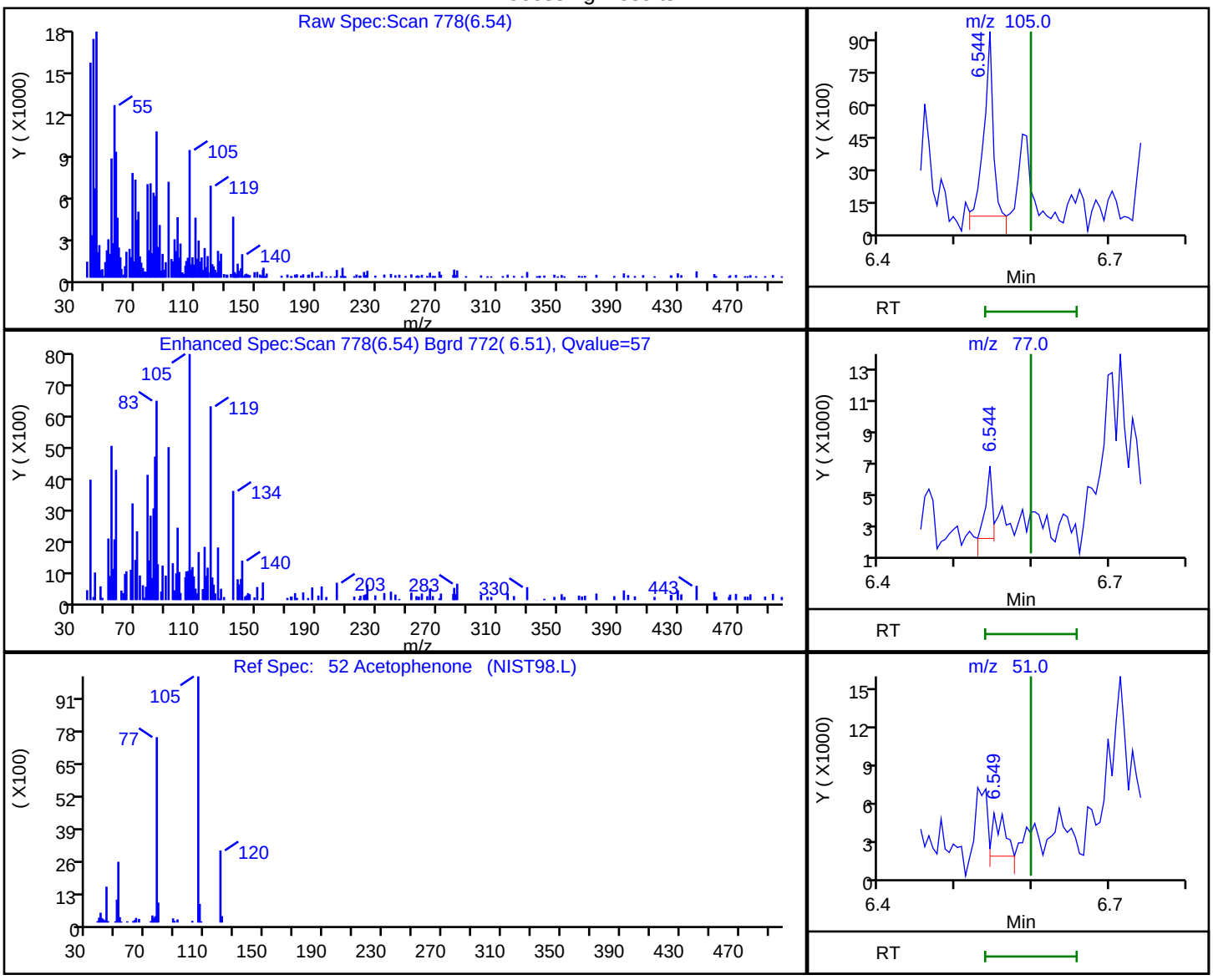
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

52 Acetophenone, CAS: 98-86-2

Processing Results



RT	Mass	Response	Amount
6.54	105.00	6962	0.074119
6.54	77.00	2475	
6.55	51.00	3535	

Reviewer: schickr, 17-Jul-2019 09:07:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

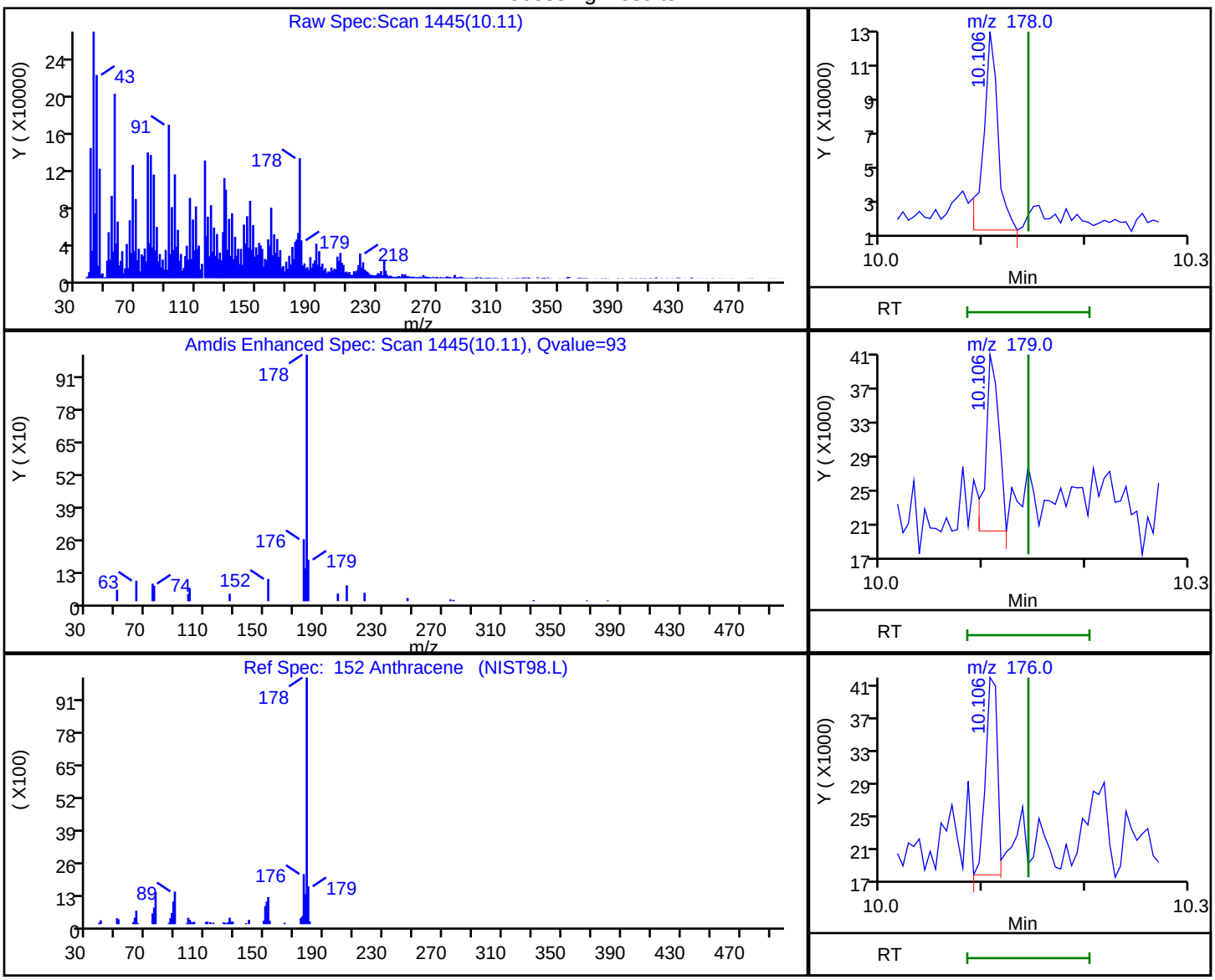
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

152 Anthracene, CAS: 120-12-7

Processing Results



RT	Mass	Response	Amount
10.11	178.00	104588	0.528829
10.11	179.00	17745	
10.11	176.00	18638	

Reviewer: schickr, 17-Jul-2019 09:08:08

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

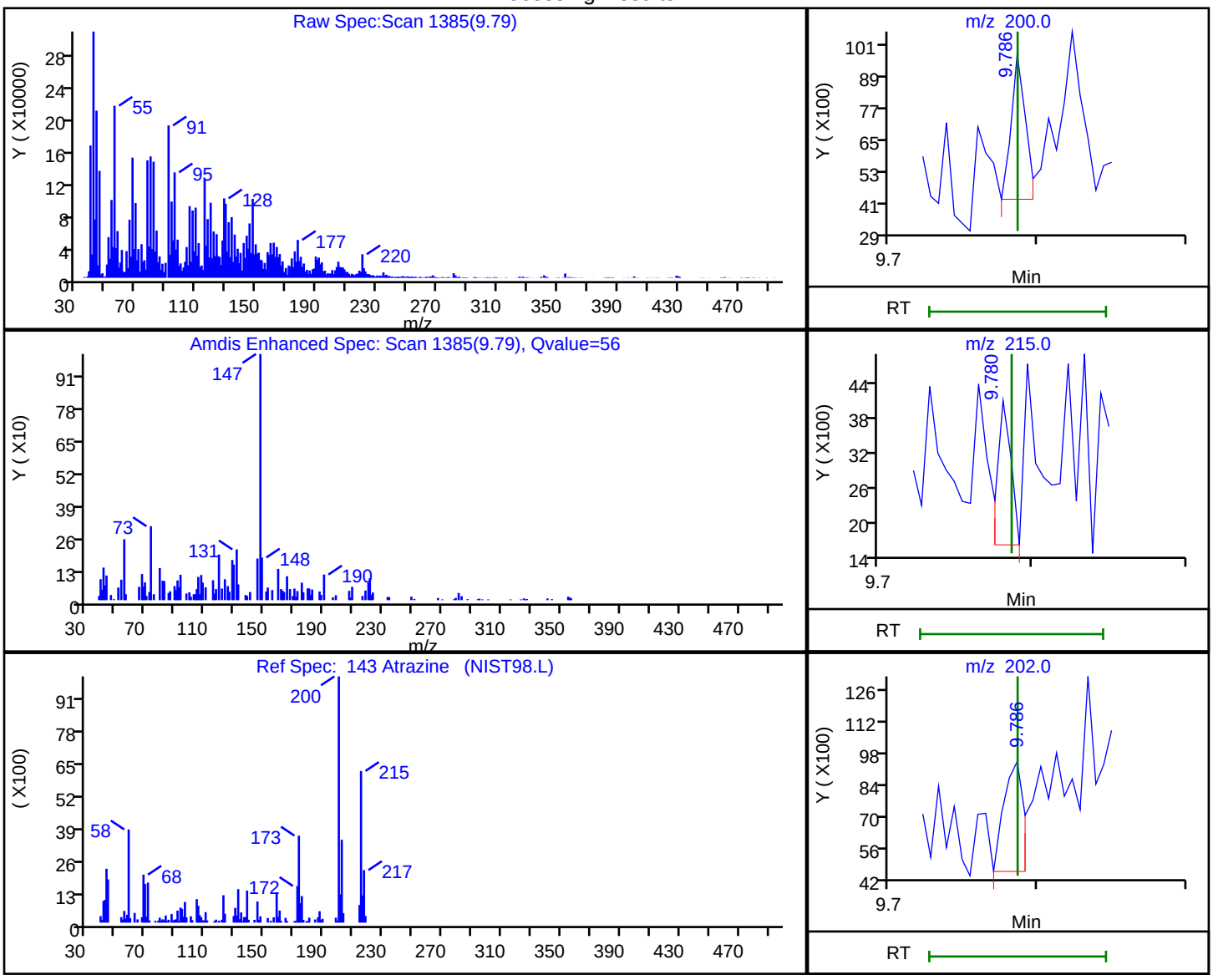
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

143 Atrazine, CAS: 1912-24-9

Processing Results



RT	Mass	Response	Amount
9.79	200.00	3710	0.074896
9.78	215.00	1512	
9.79	202.00	4561	

Reviewer: schickr, 17-Jul-2019 09:08:00

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

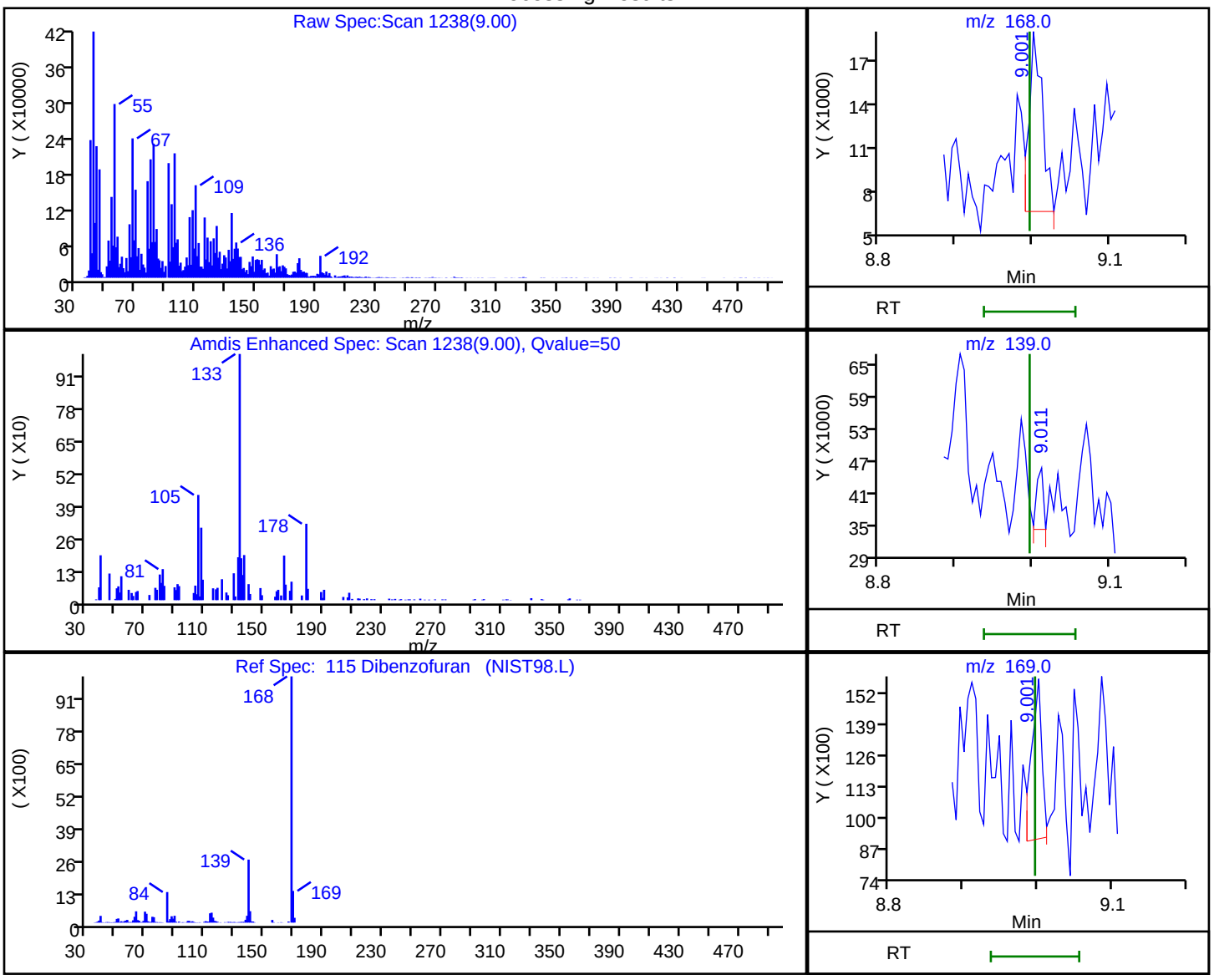
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

115 Dibenzofuran, CAS: 132-64-9

Processing Results



RT	Mass	Response	Amount
9.00	168.00	14115	0.064904
9.01	139.00	6663	
9.00	169.00	6587	

Reviewer: schickr, 17-Jul-2019 09:23:36

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

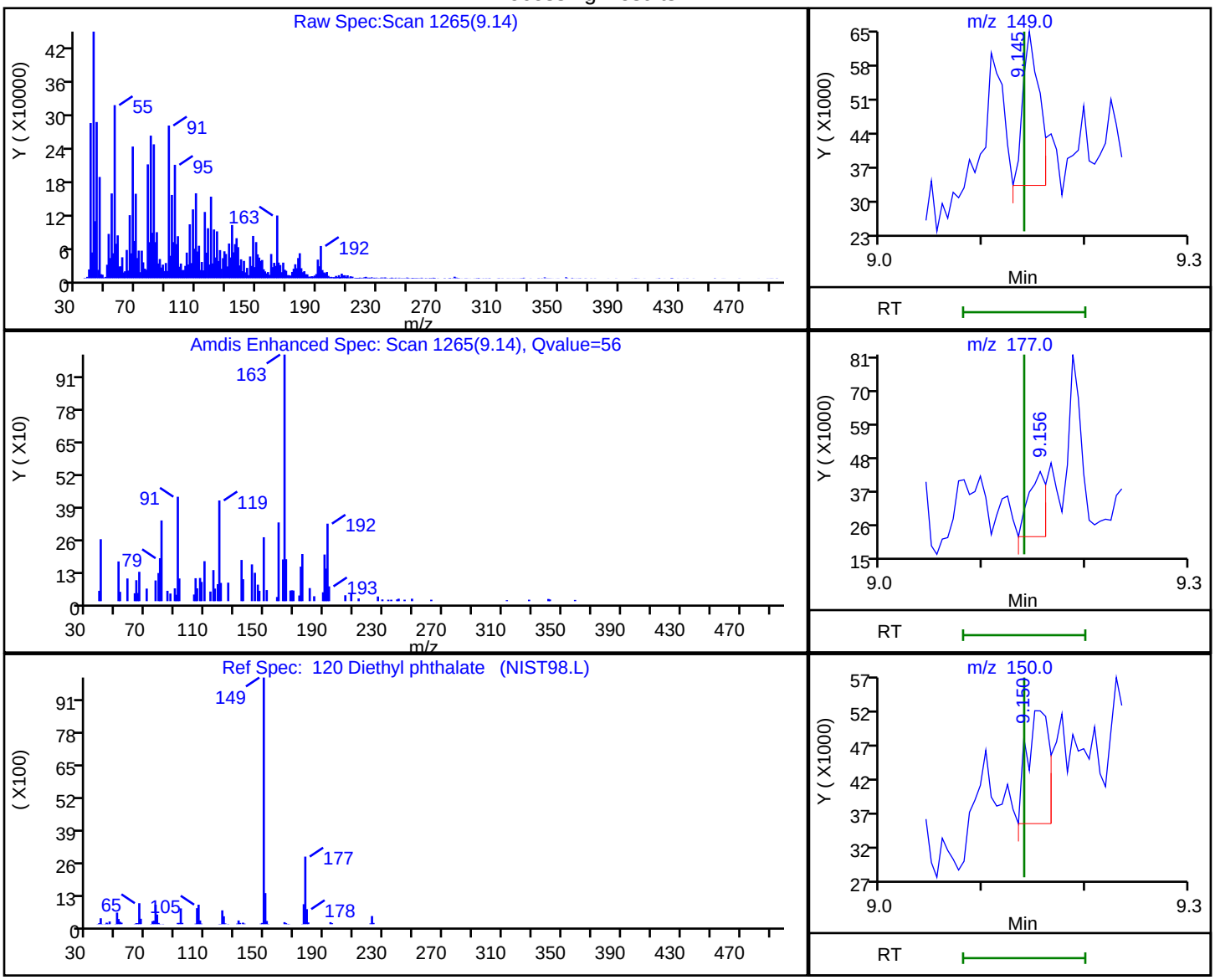
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

120 Diethyl phthalate, CAS: 84-66-2

Processing Results



RT	Mass	Response	Amount
9.14	149.00	36042	0.206661
9.16	177.00	25643	
9.15	150.00	24966	

Reviewer: schickr, 17-Jul-2019 09:23:34

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

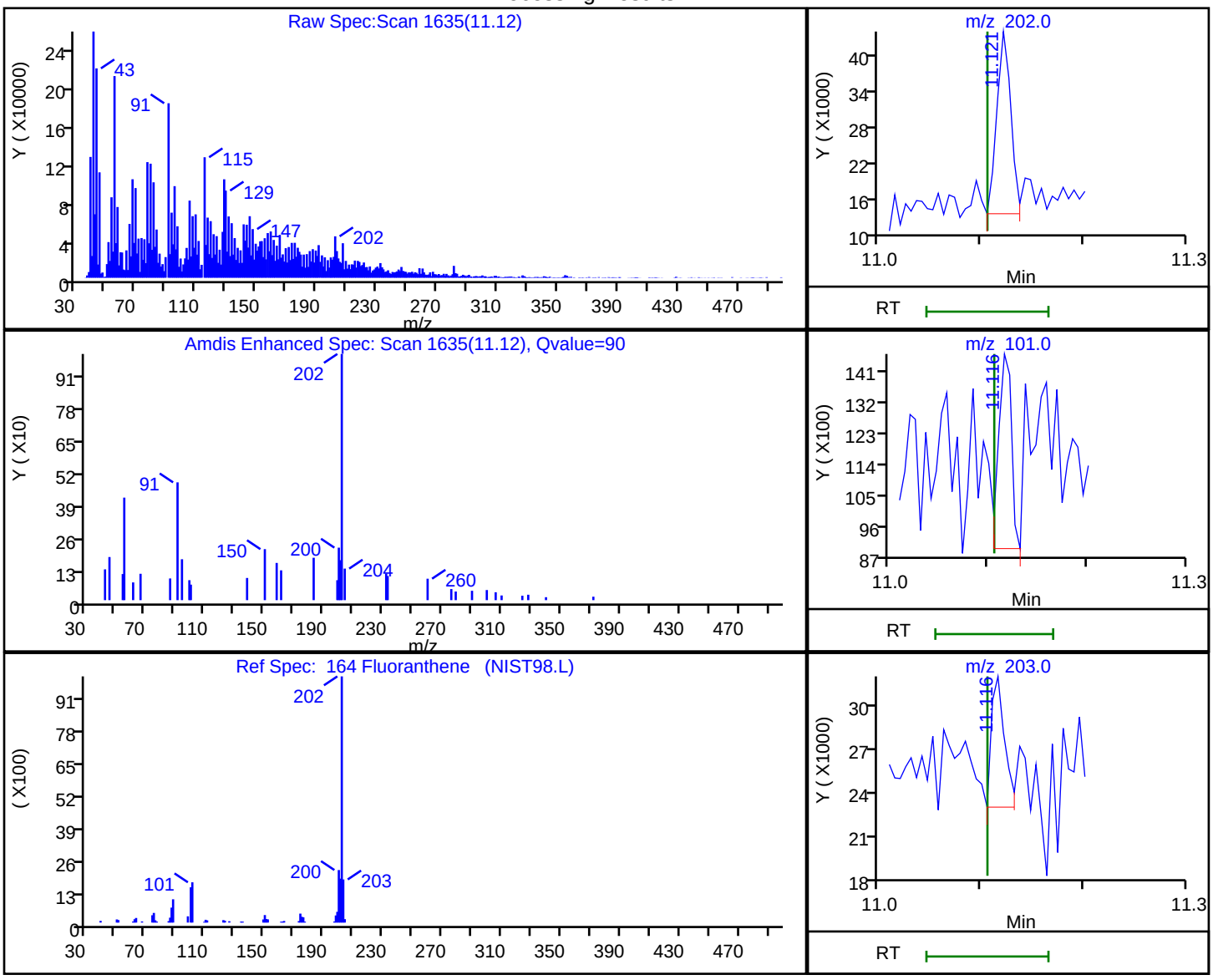
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

164 Fluoranthene, CAS: 206-44-0

Processing Results



RT	Mass	Response	Amount
11.12	202.00	28694	0.131267
11.12	101.00	5106	
11.12	203.00	7864	

Reviewer: schickr, 17-Jul-2019 09:08:10

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

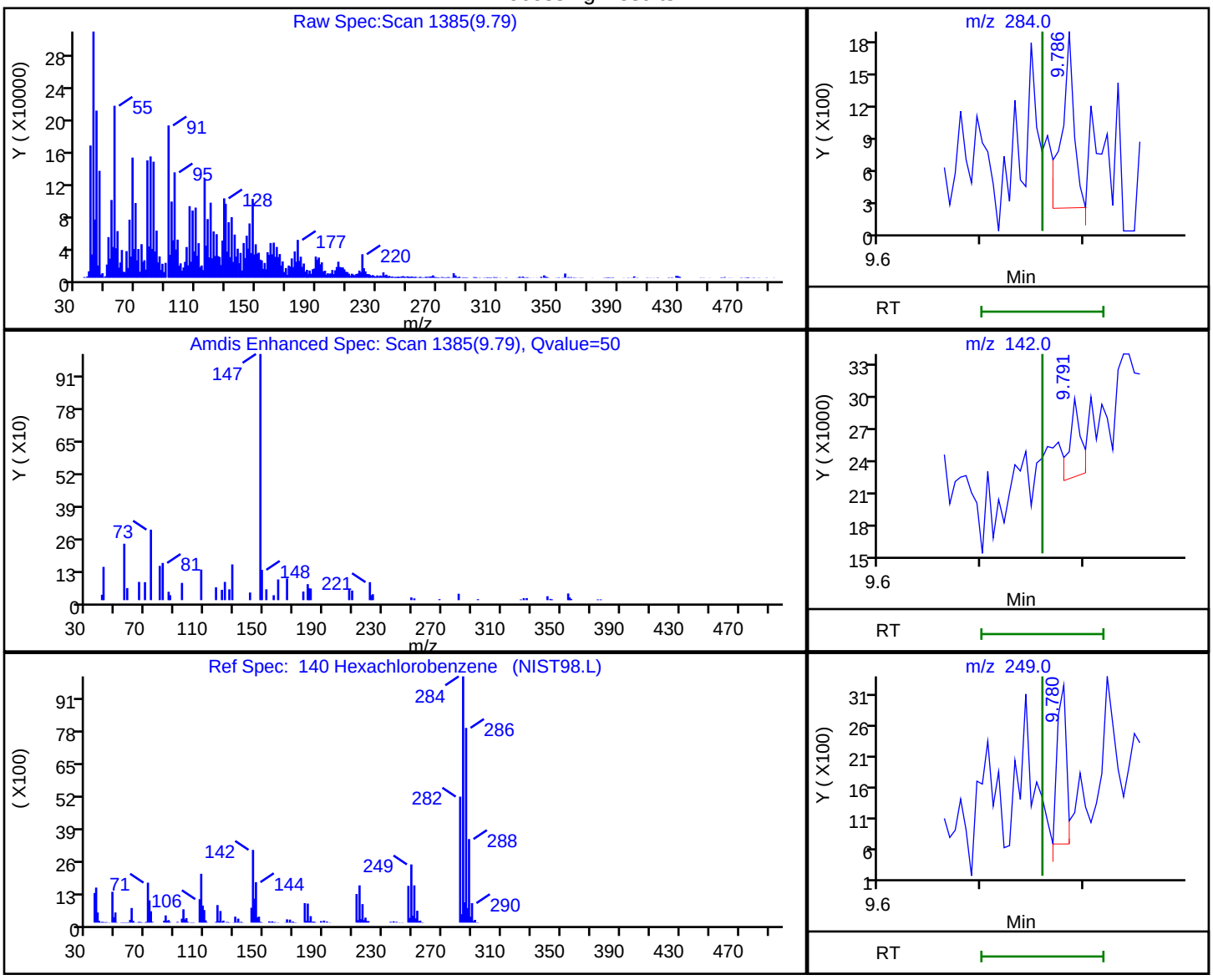
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

140 Hexachlorobenzene, CAS: 118-74-1

Processing Results



RT	Mass	Response	Amount
9.79	284.00	1334	0.027667
9.79	142.00	5720	
9.78	249.00	1565	

Reviewer: schickr, 17-Jul-2019 09:07:58

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

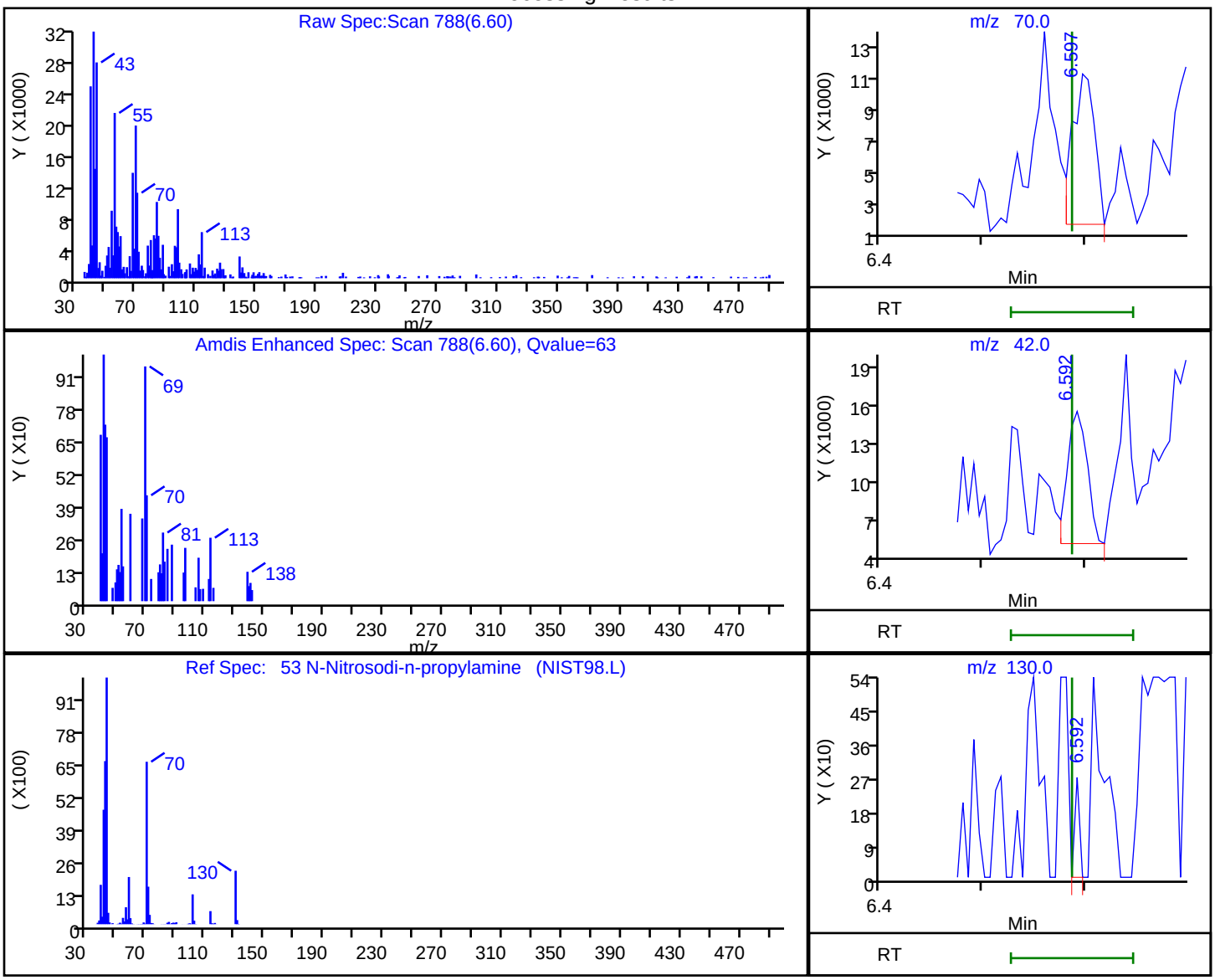
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

53 N-Nitrosodi-n-propylamine, CAS: 621-64-7

Processing Results



RT	Mass	Response	Amount
6.60	70.00	13442	0.276562
6.59	42.00	13299	
6.59	130.00	85	

Reviewer: schickr, 17-Jul-2019 09:07:16

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

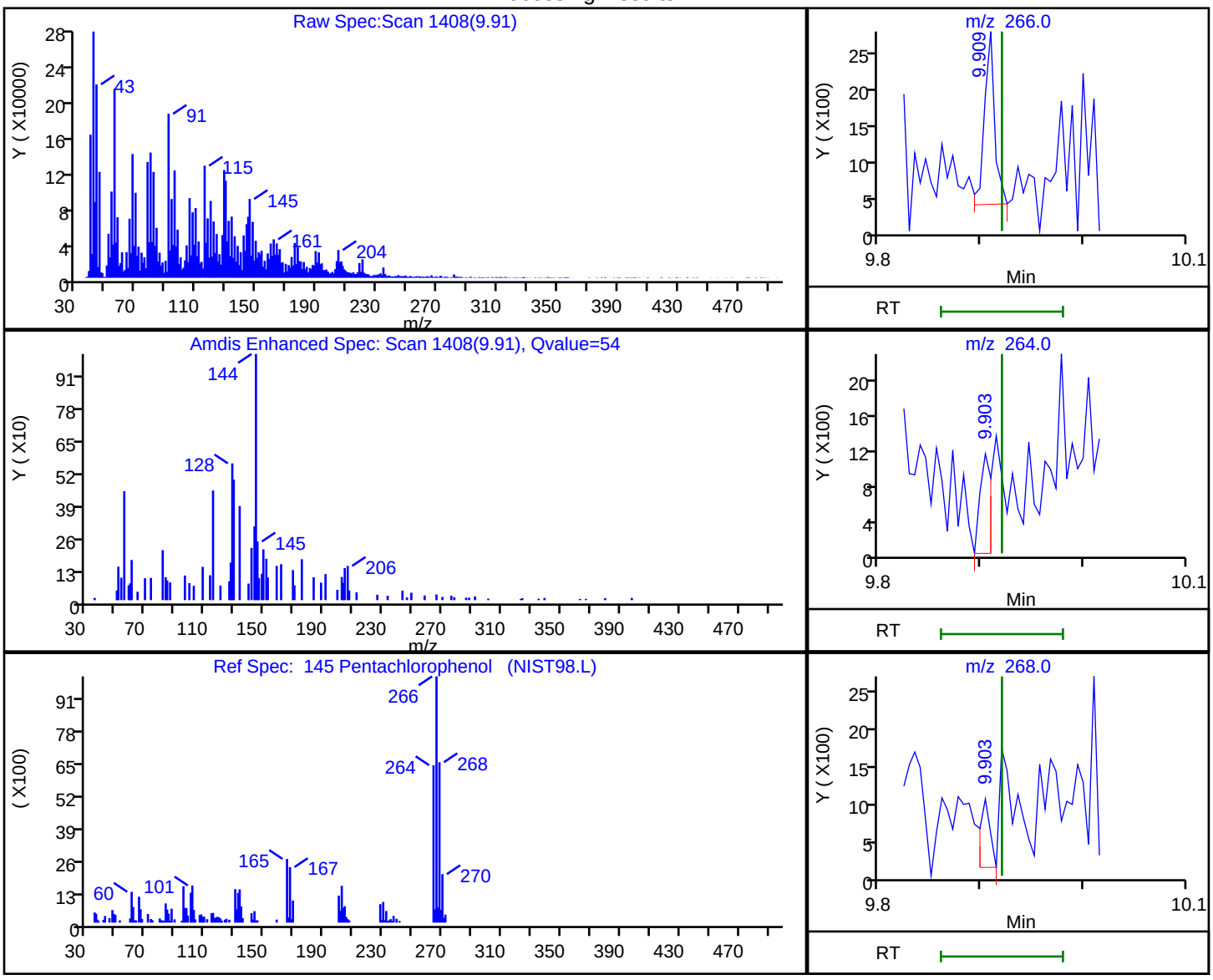
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

145 Pentachlorophenol, CAS: 87-86-5

Processing Results



RT	Mass	Response	Amount
9.91	266.00	1636	1.046721
9.90	264.00	871	
9.90	268.00	595	

Reviewer: schickr, 17-Jul-2019 09:08:01

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

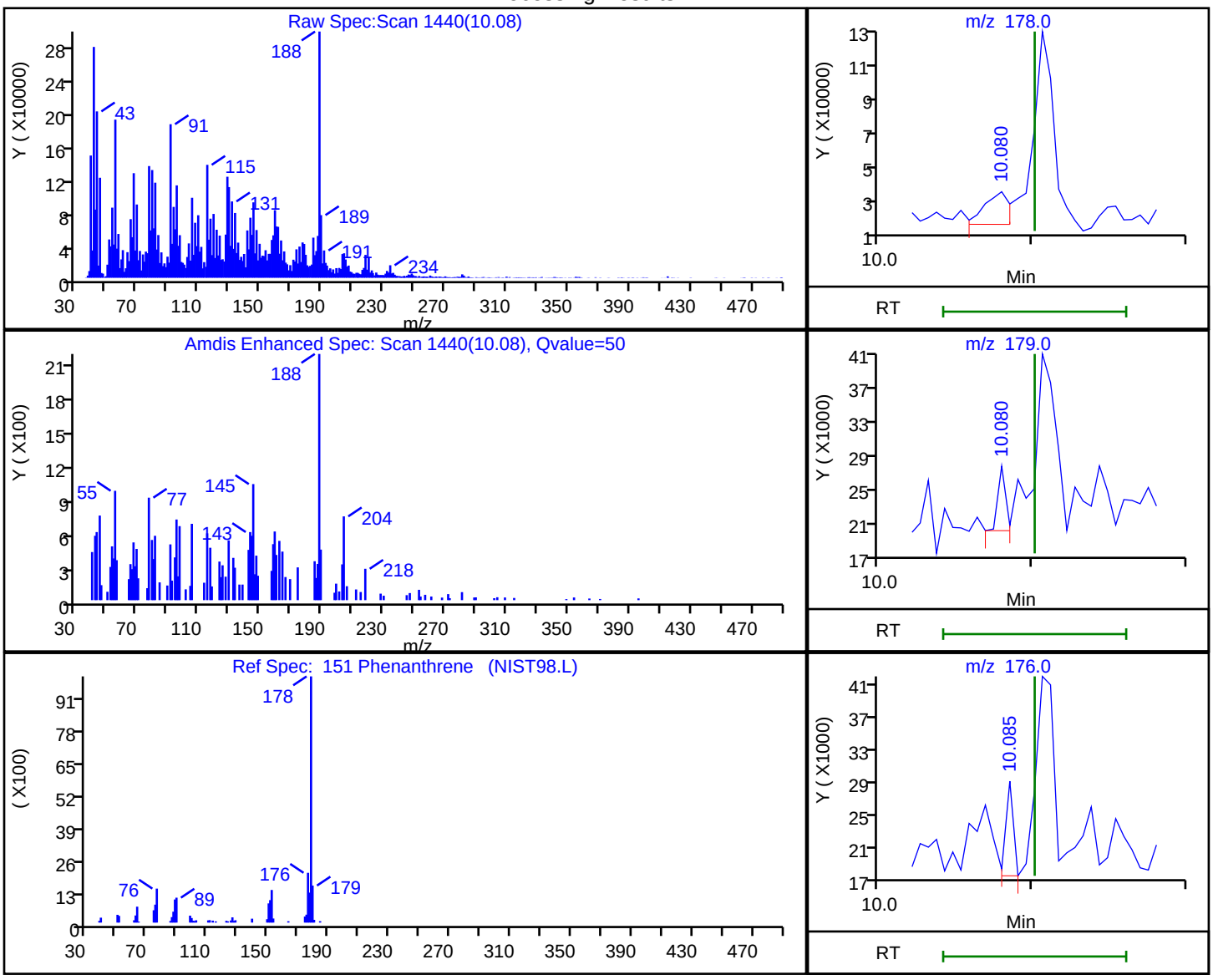
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

151 Phenanthrene, CAS: 85-01-8

Processing Results



RT	Mass	Response	Amount
10.08	178.00	19897	0.101339
10.08	179.00	2642	
10.08	176.00	3773	

Reviewer: schickr, 17-Jul-2019 09:08:04

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

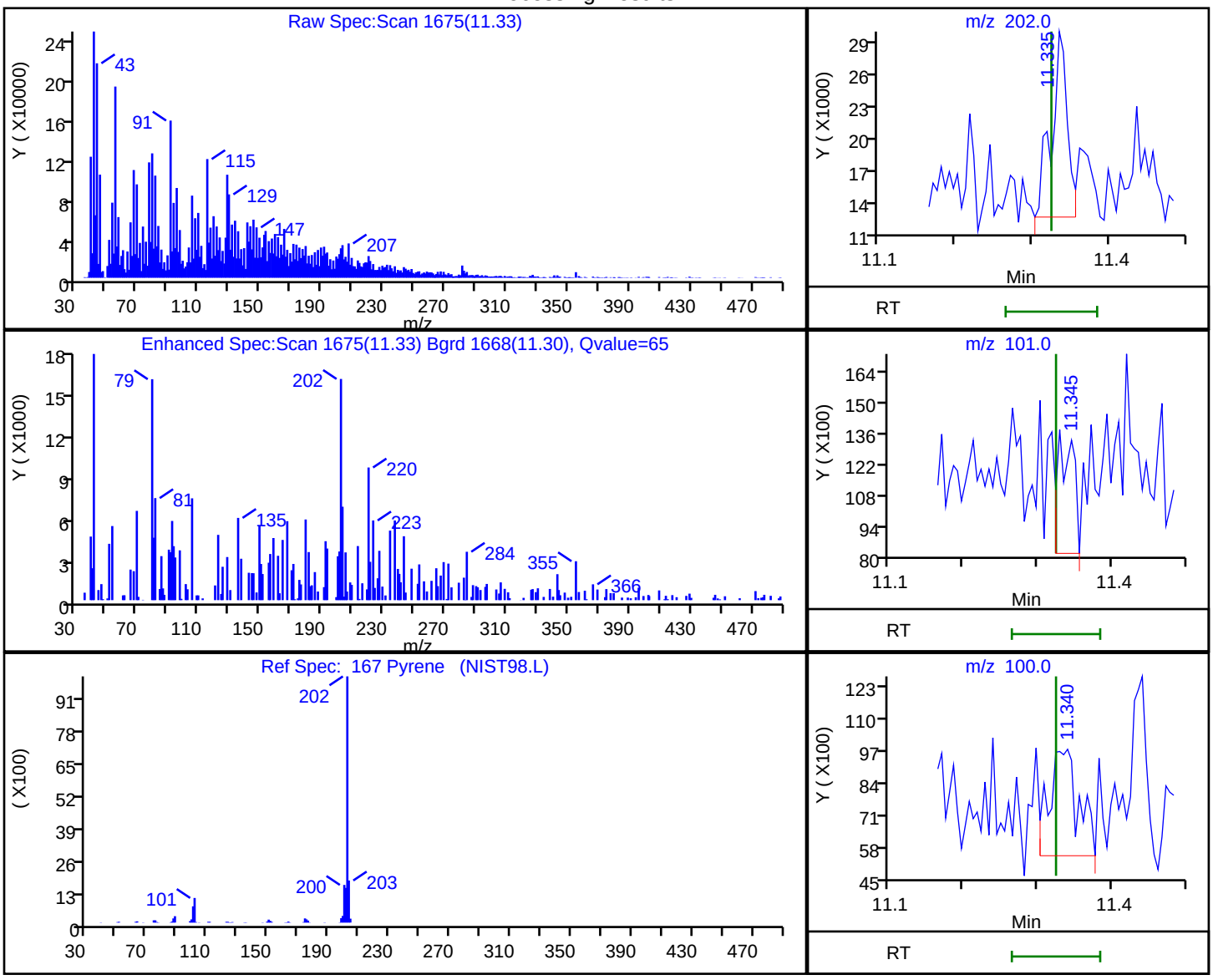
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

167 Pyrene, CAS: 129-00-0

Processing Results



RT	Mass	Response	Amount
11.33	202.00	24141	0.084064
11.35	101.00	8156	
11.34	100.00	11909	

Reviewer: schickr, 17-Jul-2019 09:08:11

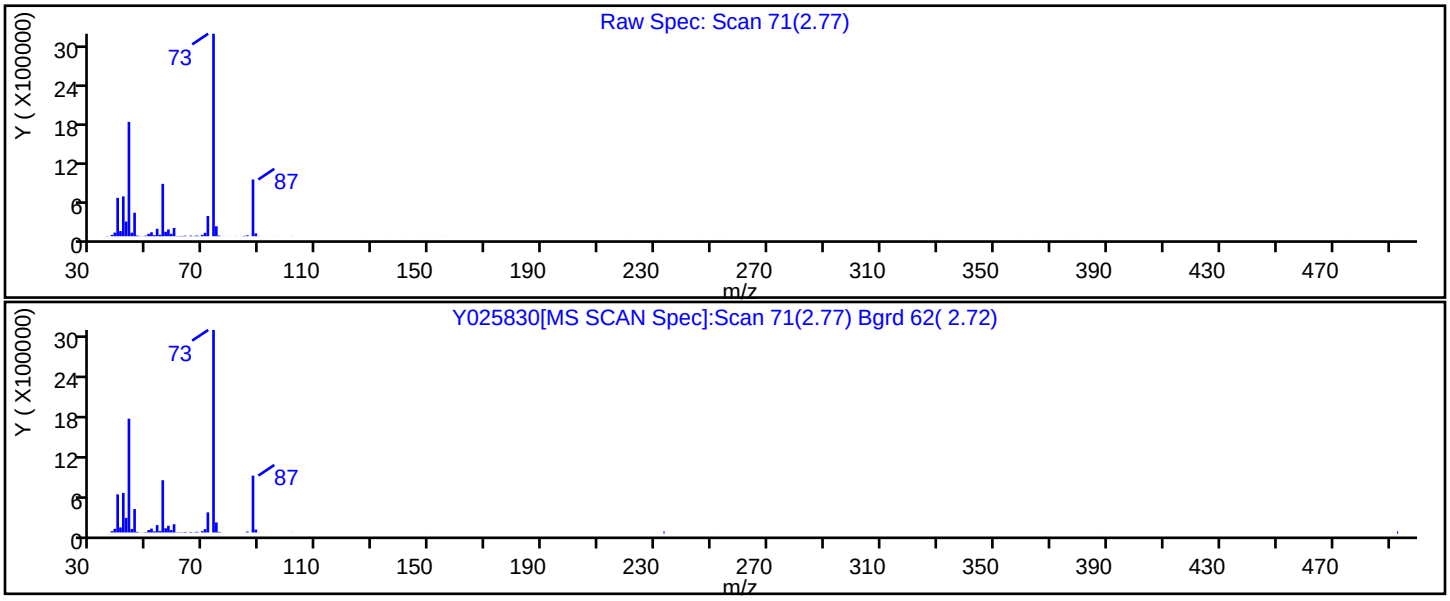
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



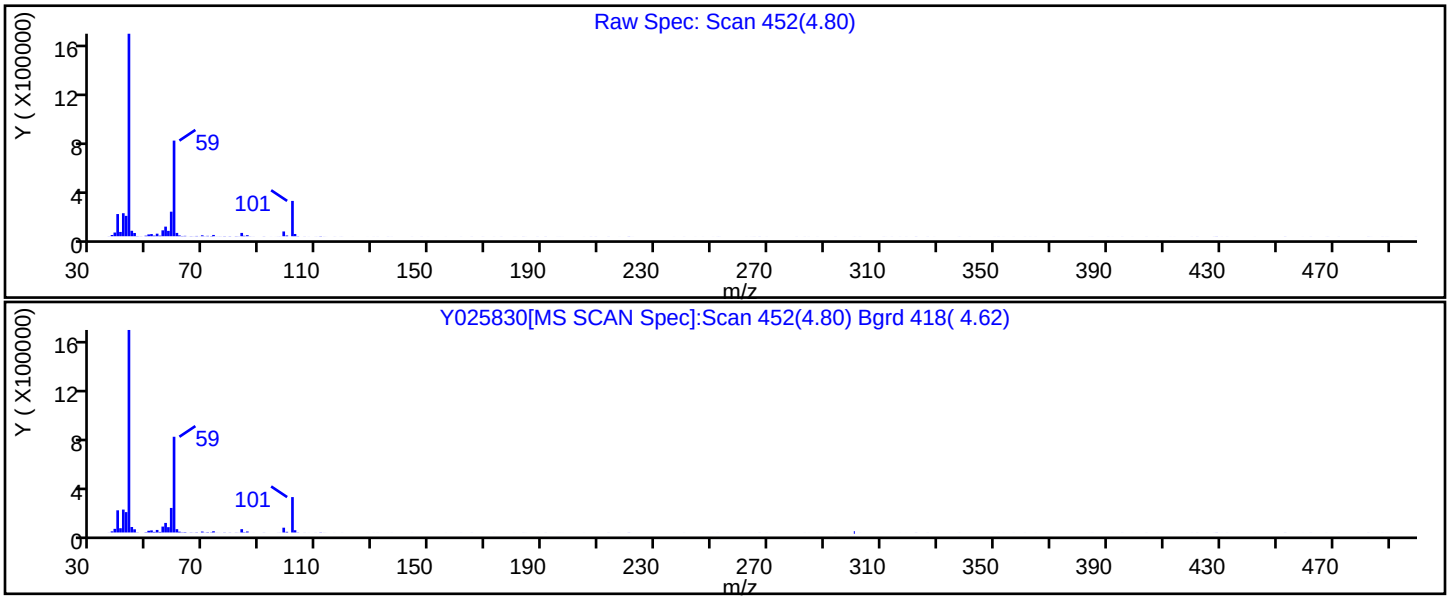
Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date: 16-Jul-2019 18:21:30 Instrument ID: HP5973Y

Lims ID: 480-156069-A-3-A Lab Sample ID: 480-156069-3

Client ID: W28

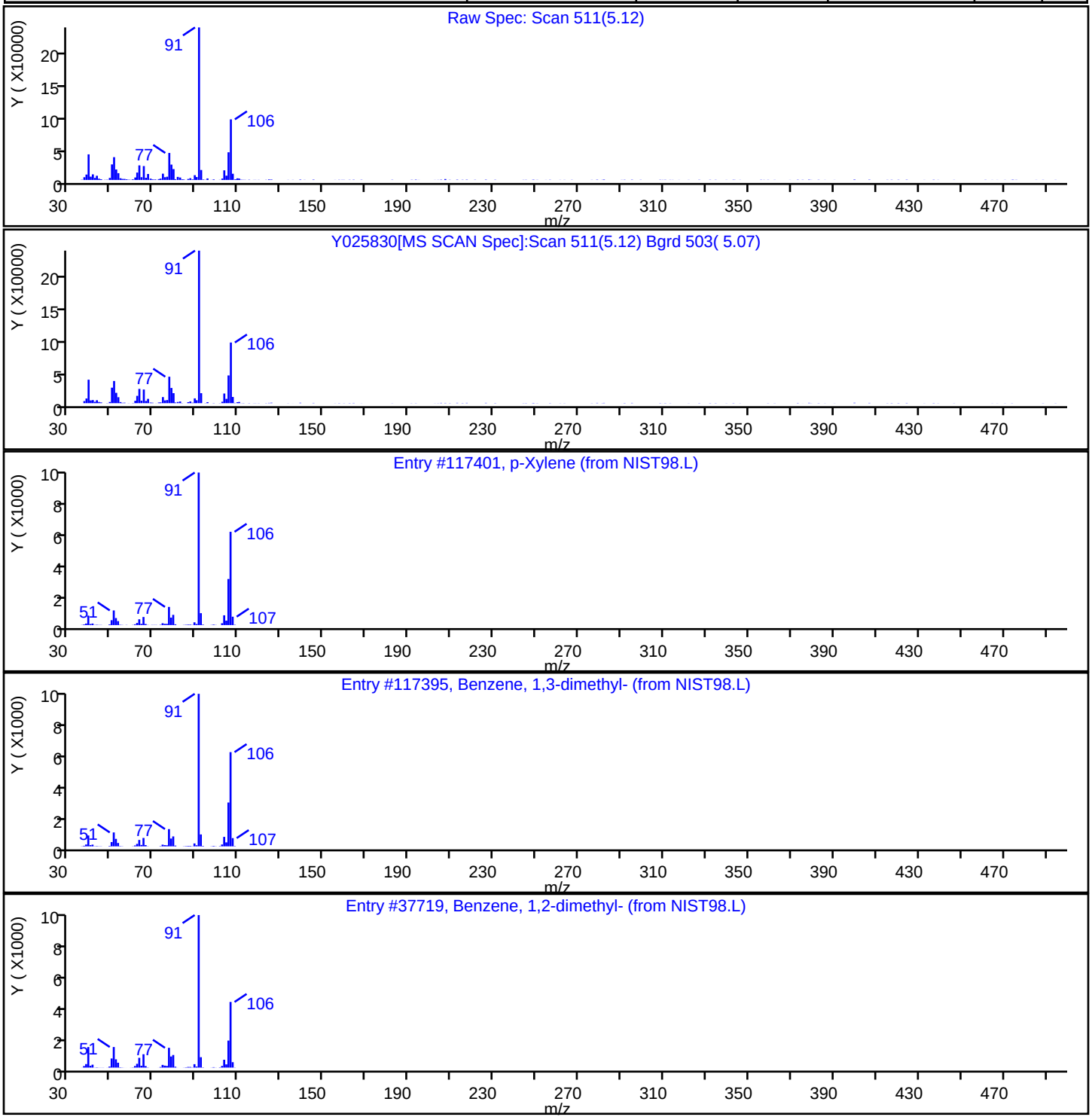
Operator ID: BS ALS Bottle#: 14 Worklist Smp#: 14

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
p-Xylene	106-42-3	NIST98.L	117401	C8H10	106	95
Benzene, 1,3-dimethyl-	108-38-3	NIST98.L	117395	C8H10	106	95
Benzene, 1,2-dimethyl-	95-47-6	NIST98.L	37719	C8H10	106	93

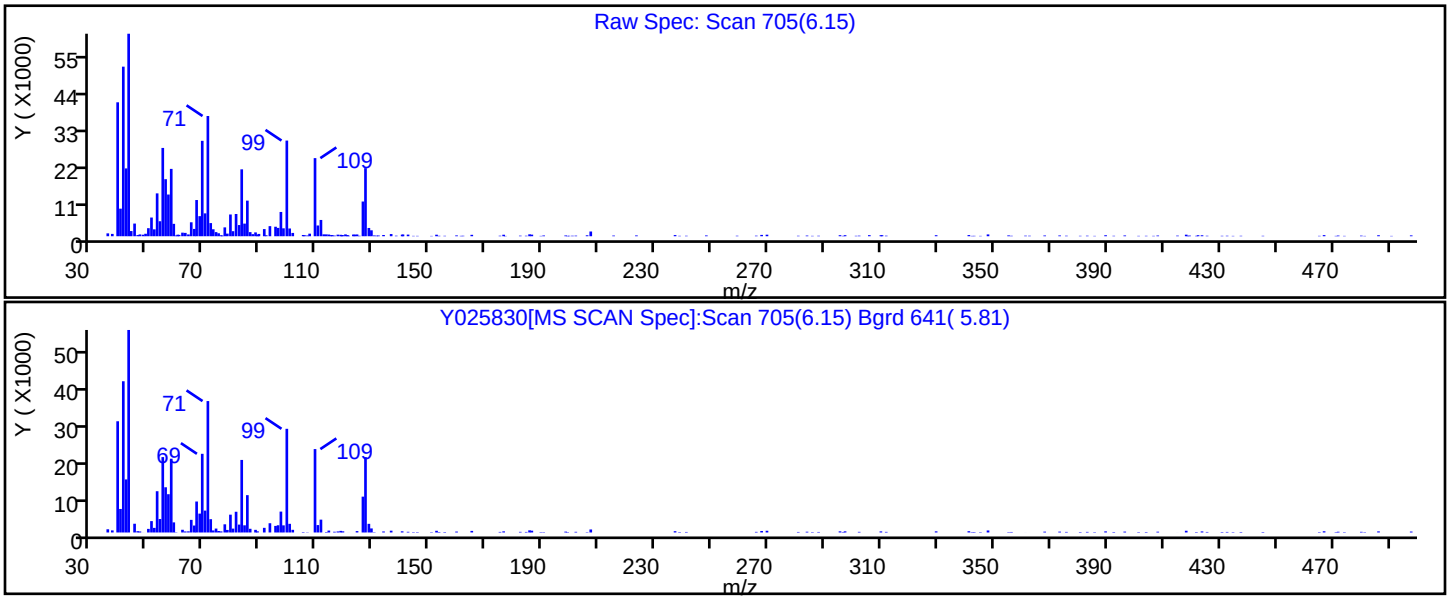


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

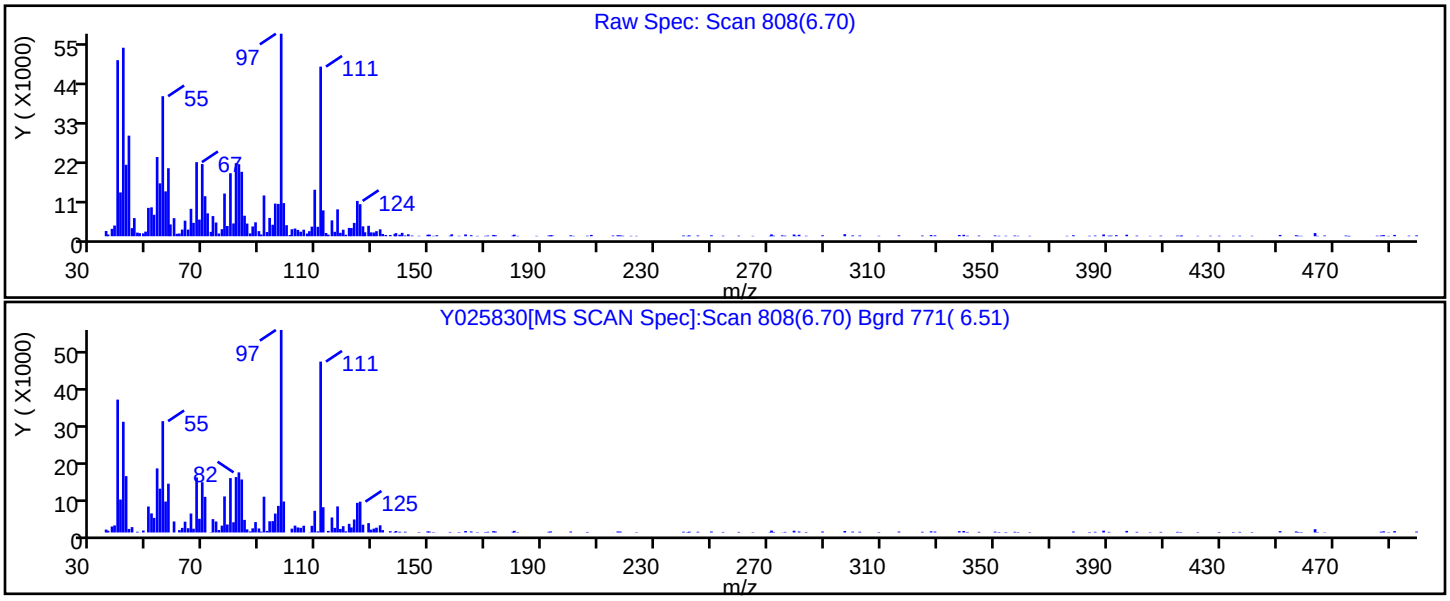


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

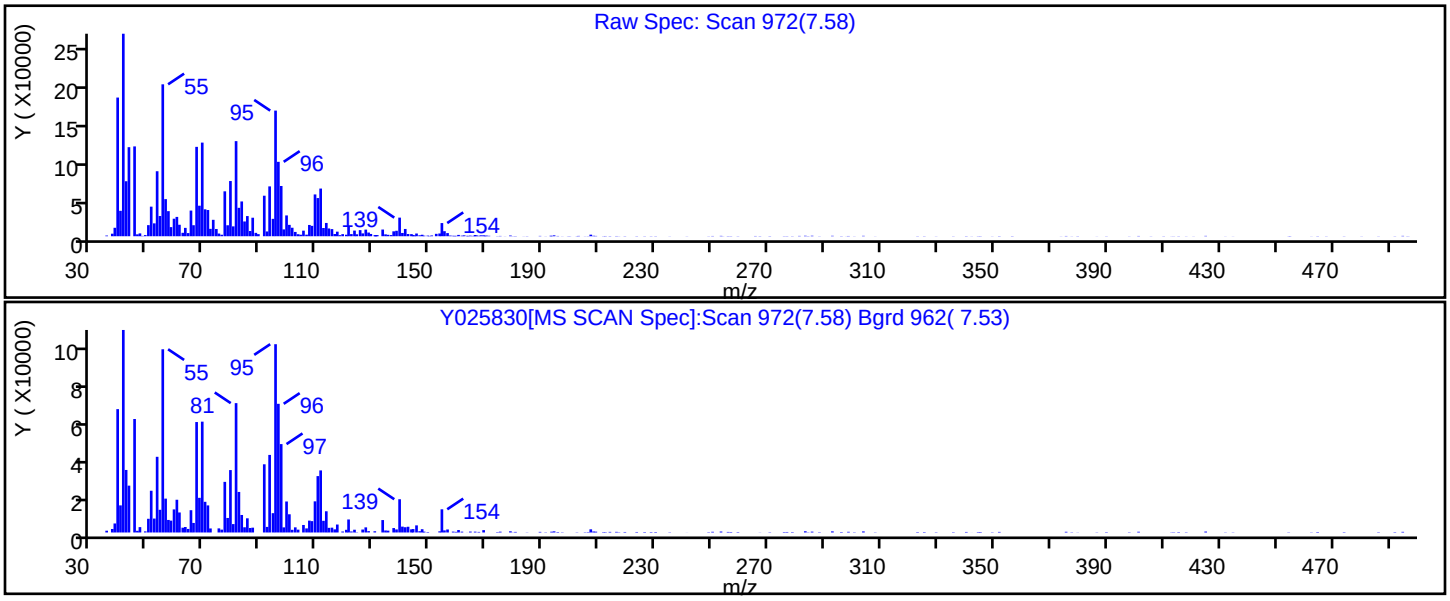


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

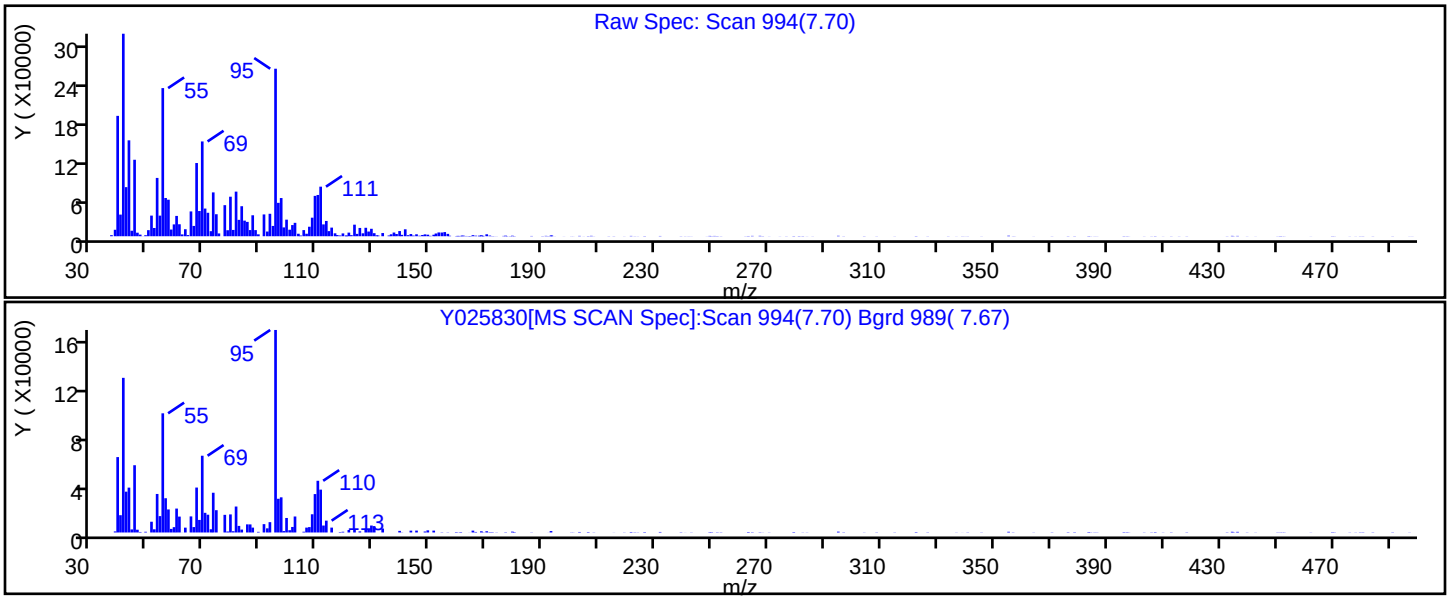


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

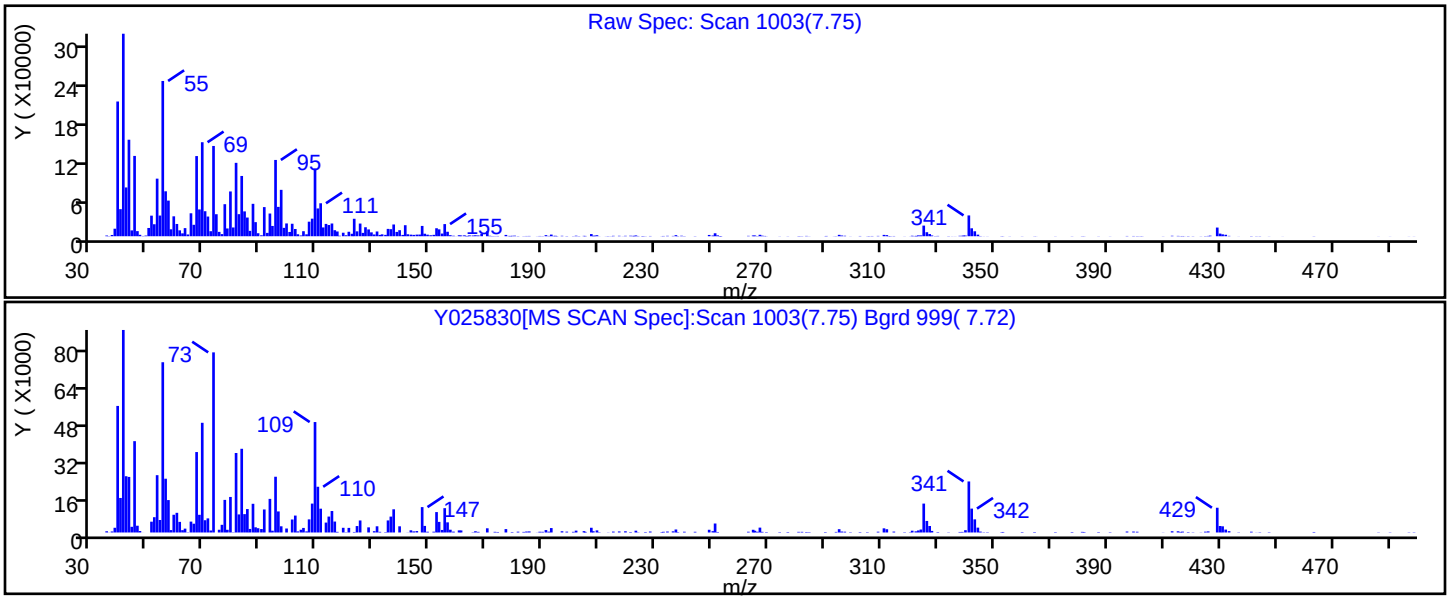


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

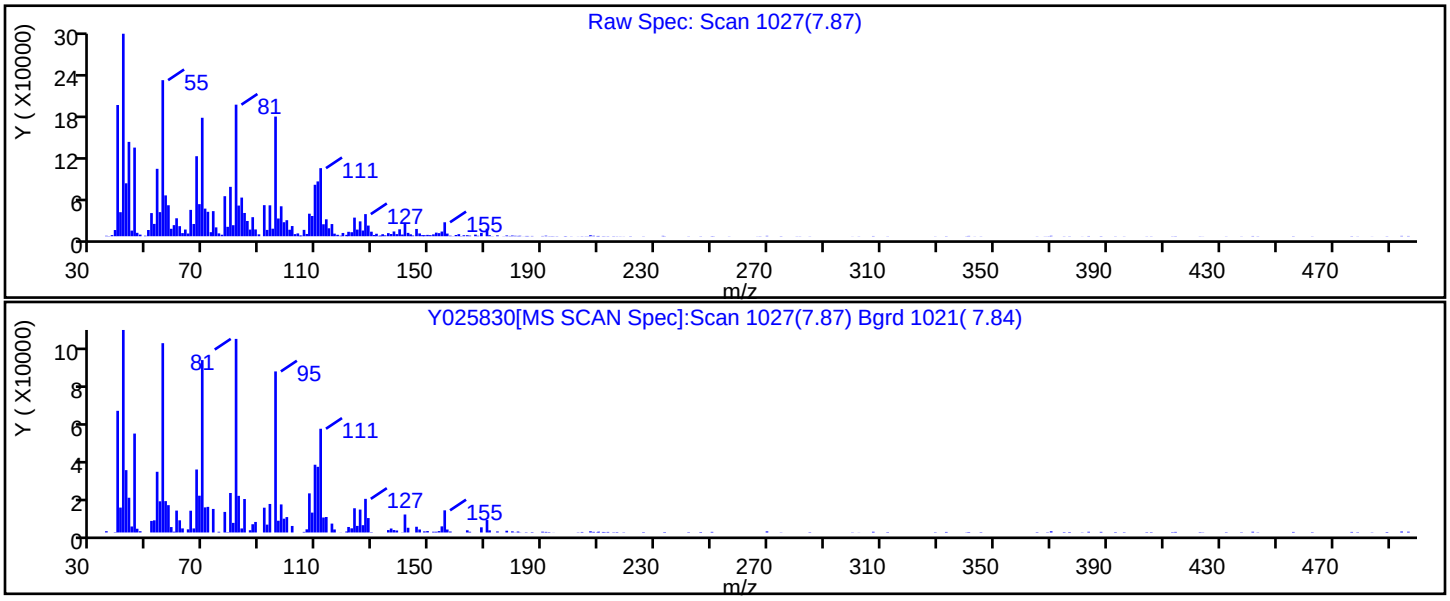


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

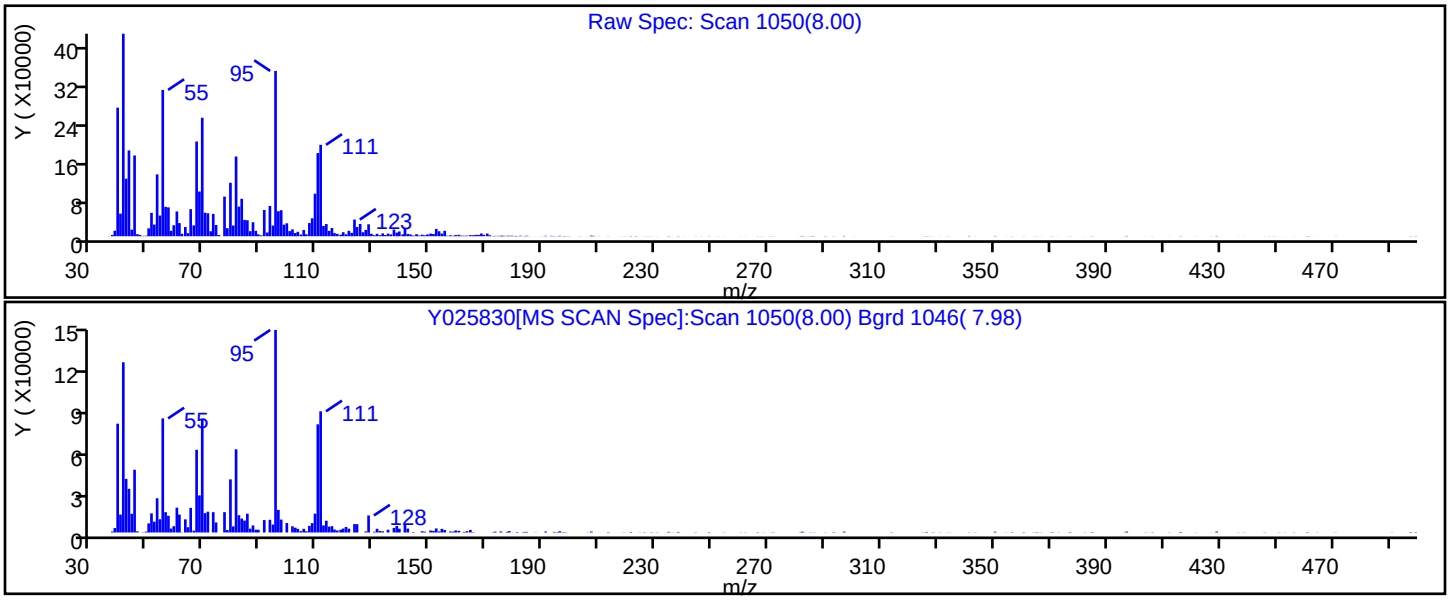
No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

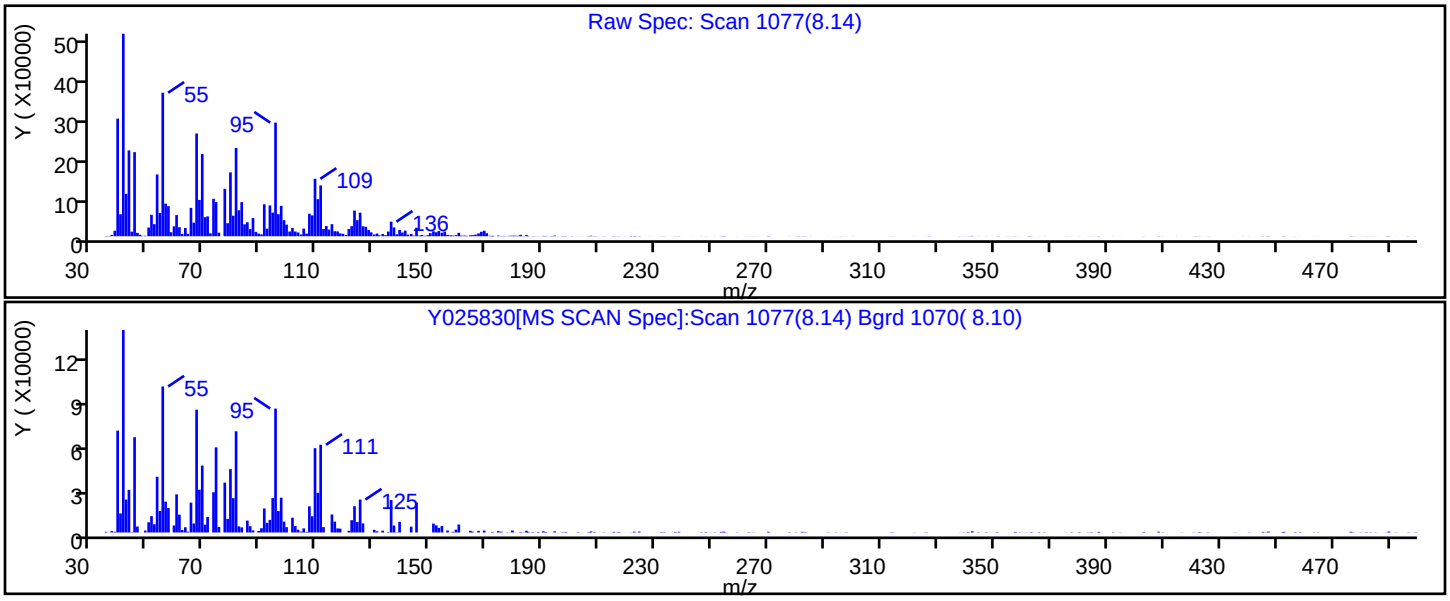


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



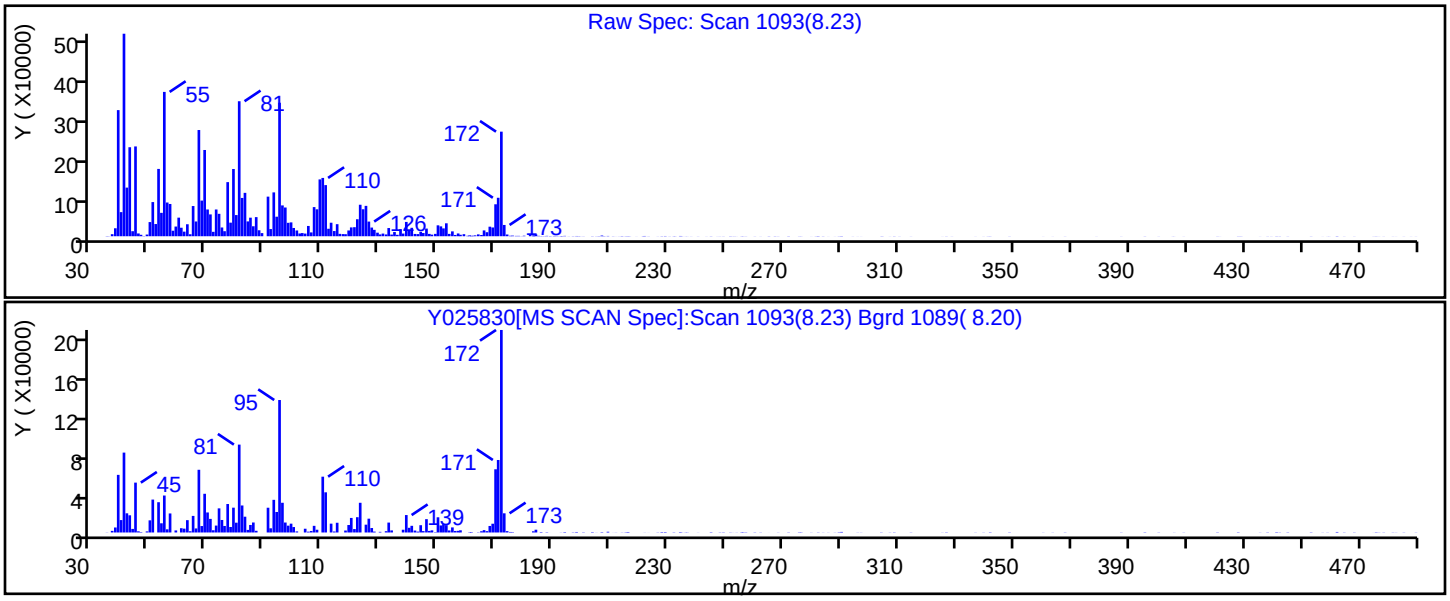
Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

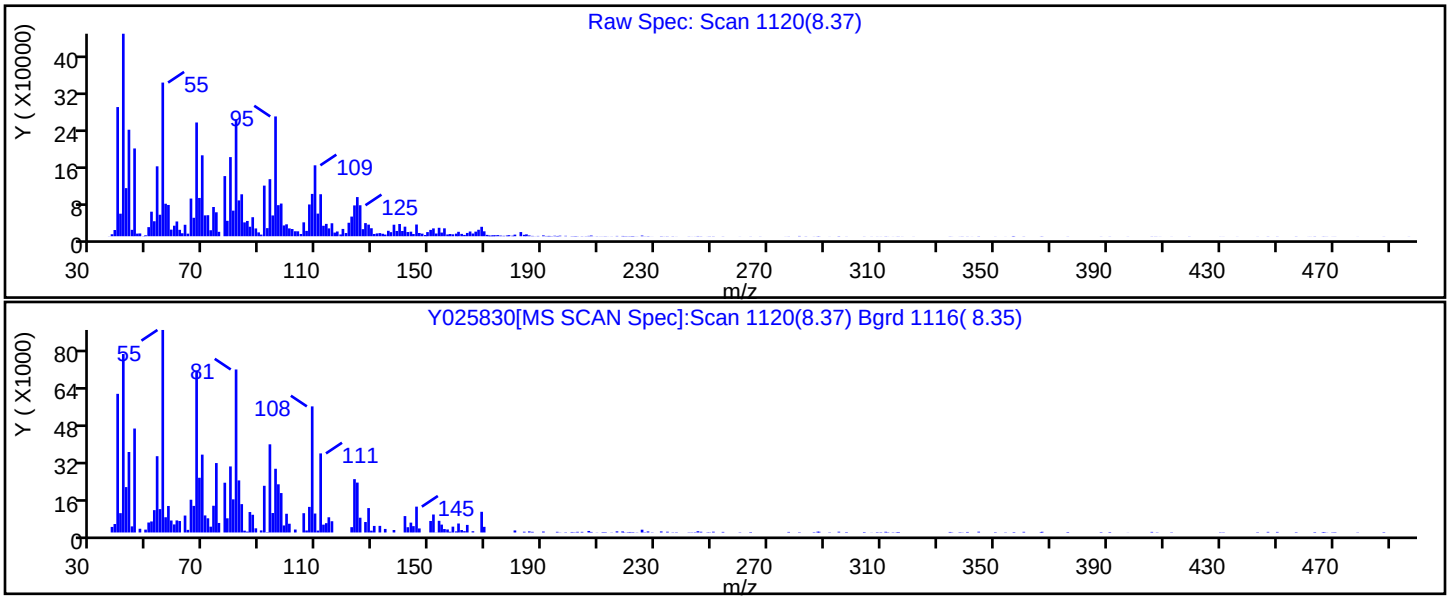


Report Date: 17-Jul-2019 09:33:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

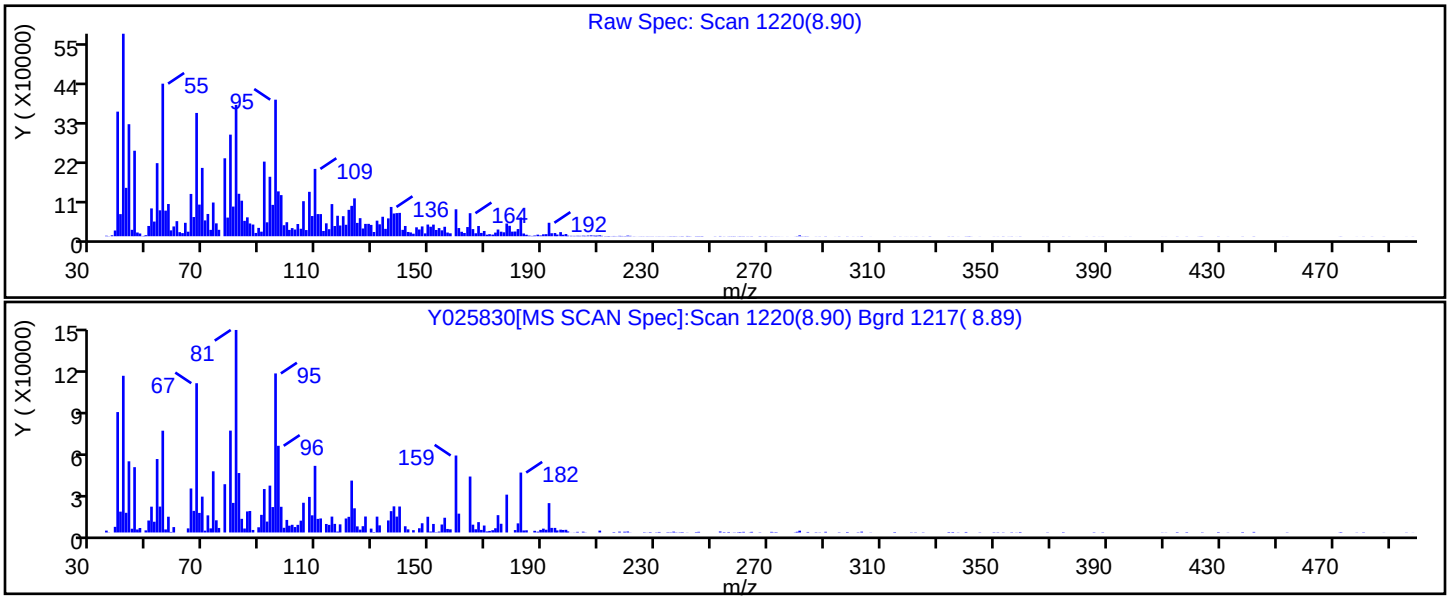


Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

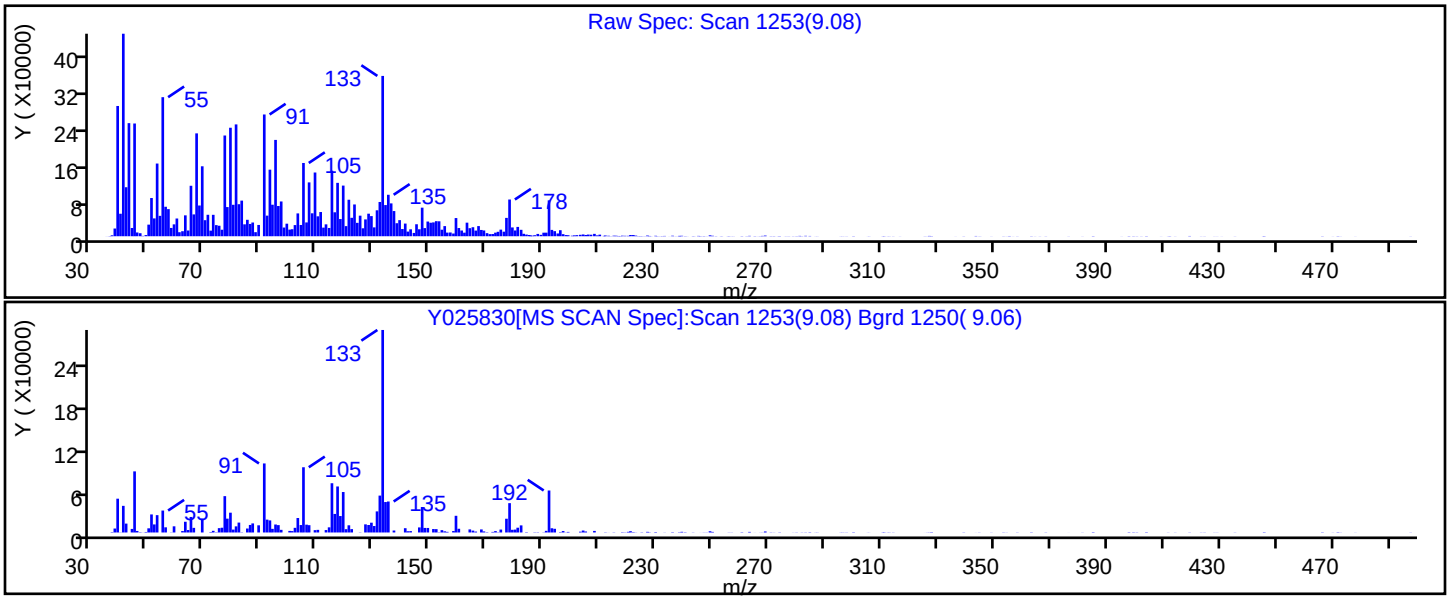


Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



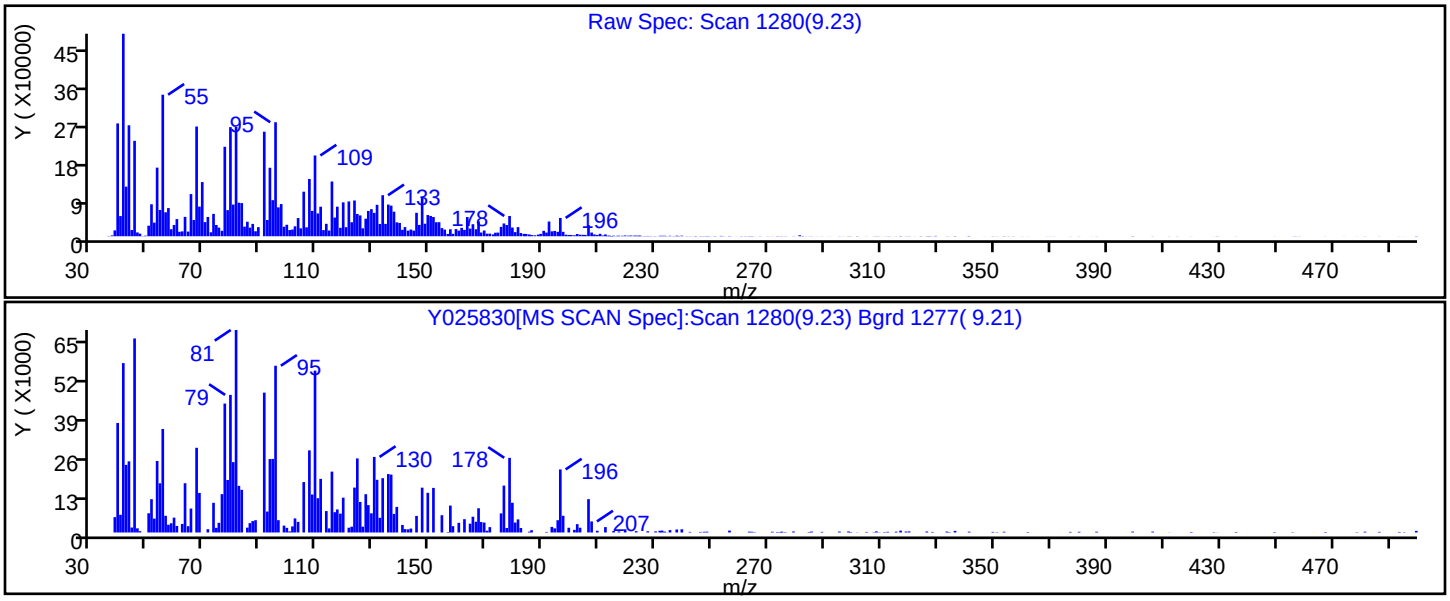
Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



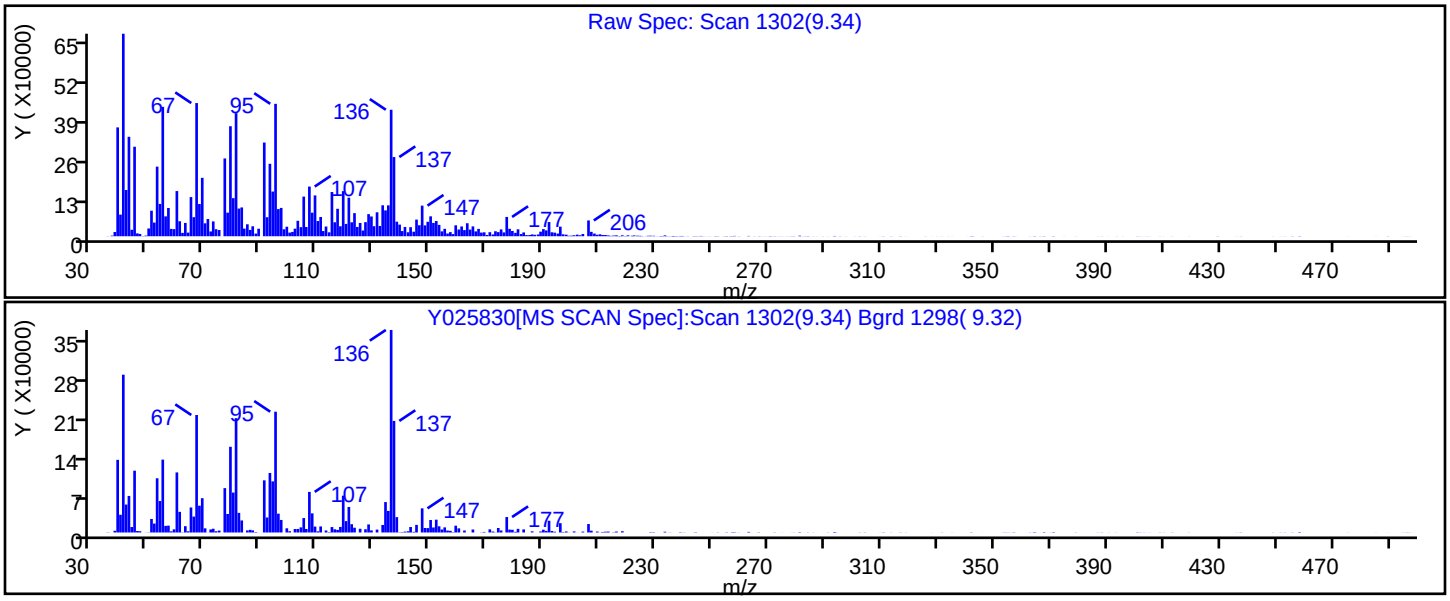
Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D

Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

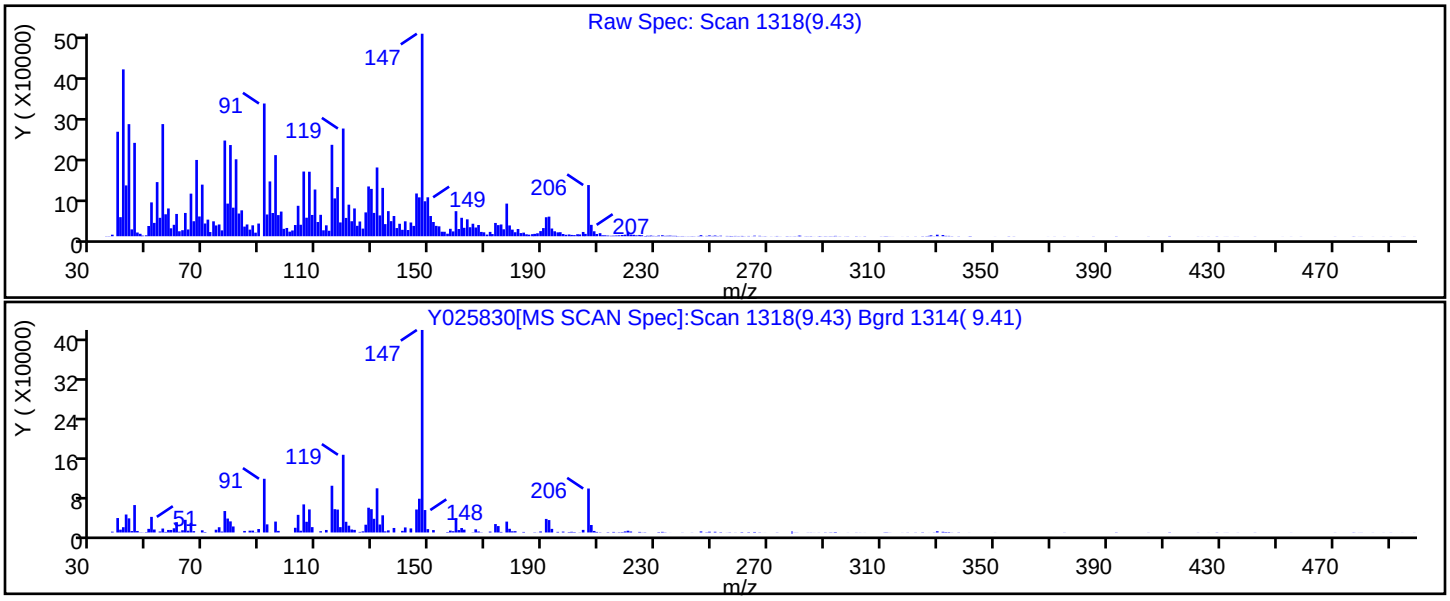


Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

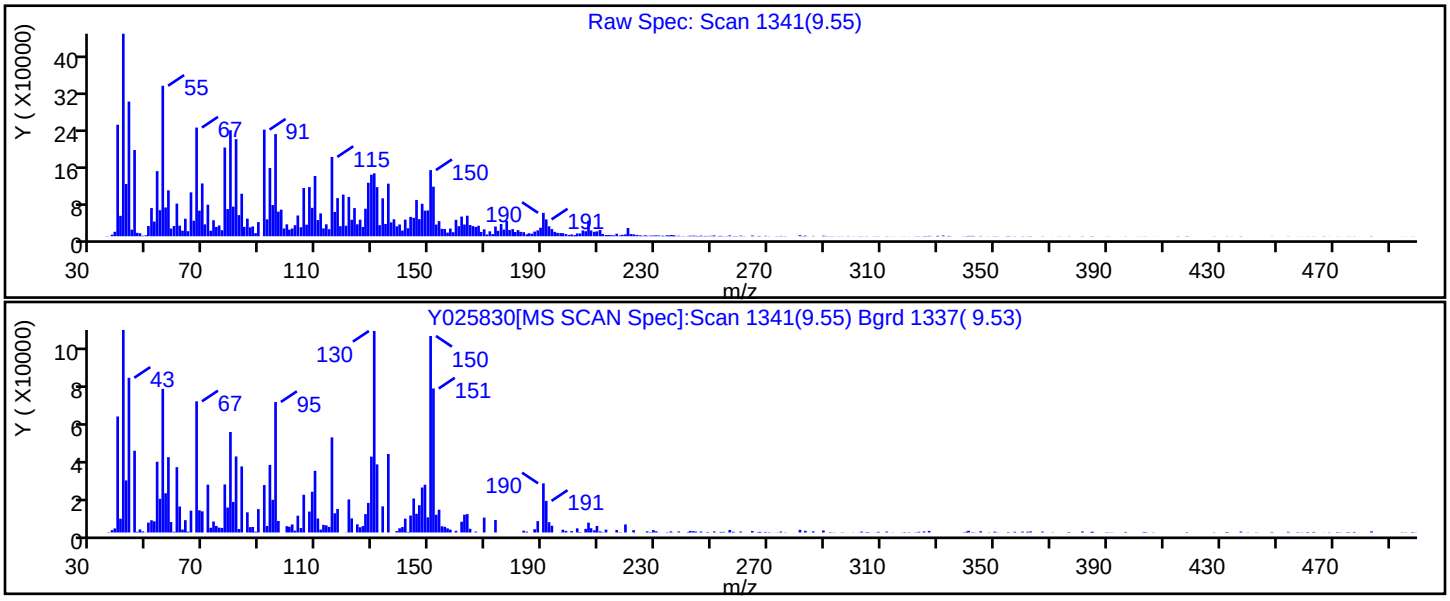


Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

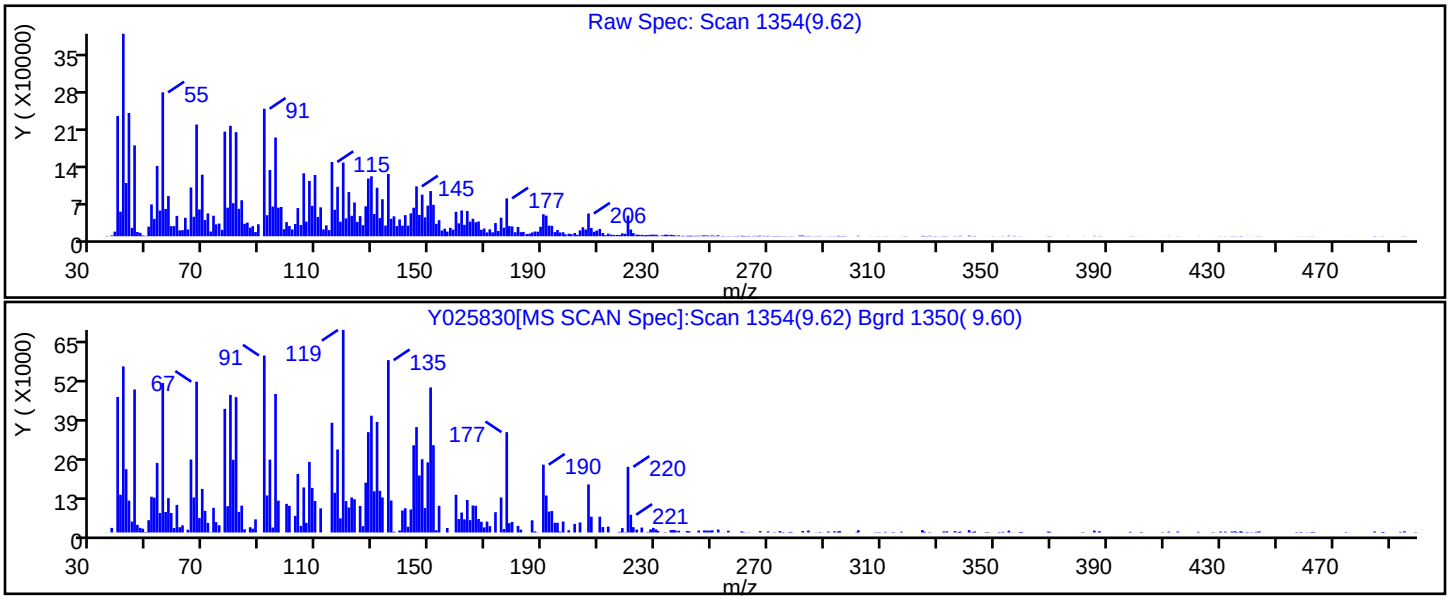


Report Date: 17-Jul-2019 09:33:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025830.D				
Injection Date:	16-Jul-2019 18:21:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-A-3-A	Lab Sample ID:	480-156069-3		
Client ID:	W28				
Operator ID:	BS	ALS Bottle#:	14	Worklist Smp#:	14
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 | Lab Sample ID: 480-156069-4

Matrix: Water | Lab File ID: Y025831.D

Analysis Method: 8270D | Date Collected: 07/10/2019 10:00

Extract. Method: 3510C | Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2019 18:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 482258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		25	2.4
88-06-2	2,4,6-Trichlorophenol	ND		25	3.1
120-83-2	2,4-Dichlorophenol	ND		25	2.6
105-67-9	2,4-Dimethylphenol	ND		25	2.5
51-28-5	2,4-Dinitrophenol	ND		50	11
121-14-2	2,4-Dinitrotoluene	ND		25	2.2
606-20-2	2,6-Dinitrotoluene	ND		25	2.0
91-58-7	2-Chloronaphthalene	ND		25	2.3
95-57-8	2-Chlorophenol	ND		25	2.7
91-57-6	2-Methylnaphthalene	ND		25	3.0
95-48-7	2-Methylphenol	ND		25	2.0
88-74-4	2-Nitroaniline	ND		50	2.1
88-75-5	2-Nitrophenol	ND		25	2.4
91-94-1	3,3'-Dichlorobenzidine	ND		25	2.0
99-09-2	3-Nitroaniline	ND		50	2.4
534-52-1	4,6-Dinitro-2-methylphenol	ND		50	11
101-55-3	4-Bromophenyl phenyl ether	ND		25	2.3
59-50-7	4-Chloro-3-methylphenol	ND		25	2.3
106-47-8	4-Chloroaniline	ND		25	3.0
7005-72-3	4-Chlorophenyl phenyl ether	ND		25	1.8
106-44-5	4-Methylphenol	ND		50	1.8
100-01-6	4-Nitroaniline	ND		50	1.3
100-02-7	4-Nitrophenol	ND	*	50	7.6
83-32-9	Acenaphthene	ND		25	2.1
208-96-8	Acenaphthylene	ND		25	1.9
98-86-2	Acetophenone	ND		25	2.7
120-12-7	Anthracene	ND		25	1.4
1912-24-9	Atrazine	ND		25	2.3
100-52-7	Benzaldehyde	ND		25	1.3
56-55-3	Benzo(a)anthracene	ND		25	1.8
50-32-8	Benzo(a)pyrene	ND		25	2.4
205-99-2	Benzo(b)fluoranthene	ND		25	1.7
191-24-2	Benzo(g,h,i)perylene	ND		25	1.8
207-08-9	Benzo(k)fluoranthene	ND		25	3.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: Y025831.D

Analysis Method: 8270D Date Collected: 07/10/2019 10:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:49

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		25	3.3
108-60-1	bis (2-chloroisopropyl) ether	ND		25	2.6
111-91-1	Bis(2-chloroethoxy)methane	ND		25	1.8
111-44-4	Bis(2-chloroethyl)ether	ND		25	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		25	11
85-68-7	Butyl benzyl phthalate	ND		25	5.0
105-60-2	Caprolactam	ND		25	11
86-74-8	Carbazole	ND		25	1.5
218-01-9	Chrysene	ND		25	1.7
53-70-3	Dibenz(a,h)anthracene	ND		25	2.1
132-64-9	Dibenzofuran	ND		50	2.6
84-66-2	Diethyl phthalate	ND		25	1.1
131-11-3	Dimethyl phthalate	ND		25	1.8
84-74-2	Di-n-butyl phthalate	ND		25	1.6
117-84-0	Di-n-octyl phthalate	ND		25	2.4
206-44-0	Fluoranthene	ND		25	2.0
86-73-7	Fluorene	ND		25	1.8
118-74-1	Hexachlorobenzene	ND		25	2.6
87-68-3	Hexachlorobutadiene	ND		25	3.4
77-47-4	Hexachlorocyclopentadiene	ND		25	3.0
67-72-1	Hexachloroethane	ND		25	3.0
193-39-5	Indeno(1,2,3-cd)pyrene	ND		25	2.4
78-59-1	Isophorone	ND		25	2.2
91-20-3	Naphthalene	ND		25	3.8
98-95-3	Nitrobenzene	ND		25	1.5
621-64-7	N-Nitrosodi-n-propylamine	ND		25	2.7
86-30-6	N-Nitrosodiphenylamine	ND		25	2.6
87-86-5	Pentachlorophenol	ND		50	11
85-01-8	Phenanthrene	ND		25	2.2
108-95-2	Phenol	ND		25	2.0
129-00-0	Pyrene	ND		25	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: Y025831.D

Analysis Method: 8270D Date Collected: 07/10/2019 10:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:49

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	83		41-120
321-60-8	2-Fluorobiphenyl	86		48-120
367-12-4	2-Fluorophenol	54		35-120
4165-60-0	Nitrobenzene-d5	76		46-120
4165-62-2	Phenol-d5	33		22-120
1718-51-0	p-Terphenyl-d14	48	X	59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Matrix: Water Lab File ID: Y025831.D

Analysis Method: 8270D Date Collected: 07/10/2019 10:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 18:49

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 7 TIC Result Total: 315

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.48	120	T J	
	Unknown	2.67	110	T J	
	Unknown	4.78	34	T J	
	Unknown	5.91	13	T J	
	Unknown	6.86	12	T J	
	Unknown	7.74	15	T J	
	Unknown	8.52	11	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D
Lims ID: 480-156069-B-4-A
Client ID: WCMW4
Sample Type: Client
Inject. Date: 16-Jul-2019 18:49:30 ALS Bottle#: 15 Worklist Smp#: 15
Injection Vol: 2.0 ul Dil. Factor: 5.0000
Sample Info: 480-0082649-015
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:08:51

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.258	6.256	0.002	95	209165	4.00	
* 2 Naphthalene-d8	136	7.348	7.345	0.003	98	734531	4.00	
* 3 Acenaphthene-d10	164	8.827	8.830	-0.003	95	441360	4.00	
* 4 Phenanthrene-d10	188	10.082	10.080	0.002	97	798801	4.00	
* 5 Chrysene-d12	240	12.651	12.649	0.002	98	822905	4.00	
* 6 Perylene-d12	264	14.756	14.748	0.008	99	908560	4.00	
$ 7 2-Fluorophenol	112	5.126	5.112	0.019	89	60163	0.8632	
$ 8 Phenol-d5	99	5.954	5.972	0.013	82	45711	0.5307	
$ 9 Nitrobenzene-d5	82	6.733	6.732	0.002	96	99612	1.21	
$ 10 2-Fluorobiphenyl	172	8.240	8.238	0.003	98	222971	1.38	
$ 11 2,4,6-Tribromophenol	330	9.495	9.493	0.003	89	29590	1.32	
$ 12 p-Terphenyl-d14	244	11.428	11.431	0.002	98	146425	0.7648	
35 Benzaldehyde	77		5.876				ND	
37 Phenol	94		5.951				ND	
39 Bis(2-chloroethyl)ether	93		6.015				ND	
40 2-Chlorophenol	128		6.085				ND	
48 2-Methylphenol	108		6.464				ND	
49 2,2'-oxybis[1-chloropropan	45		6.475				ND	
53 N-Nitrosodi-n-propylamine	70		6.587				ND	
57 4-Methylphenol	108		6.592				ND	
52 Acetophenone	105		6.597				ND	
58 Hexachloroethane	117		6.699				ND	
59 Nitrobenzene	77		6.747				ND	
62 Isophorone	82		6.945				ND	
64 2-Nitrophenol	139		7.019				ND	
66 2,4-Dimethylphenol	107		7.041				ND	
69 Bis(2-chloroethoxy)methane	93		7.105				ND	
72 2,4-Dichlorophenol	162		7.228				ND	
74 Naphthalene	128		7.367				ND	
76 4-Chloroaniline	127		7.399				ND	
79 Hexachlorobutadiene	225		7.463				ND	
84 Caprolactam	113		7.698				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
85 4-Chloro-3-methylphenol	107		7.805				ND	
87 2-Methylnaphthalene	142		7.943				ND	
90 Hexachlorocyclopentadiene	237		8.077				ND	
93 2,4,6-Trichlorophenol	196		8.178				ND	
94 2,4,5-Trichlorophenol	196		8.221				ND	
96 1,1'-Biphenyl	154		8.328				ND	
97 2-Chloronaphthalene	162		8.360				ND	
100 2-Nitroaniline	65		8.435				ND	
105 Dimethyl phthalate	163		8.563				ND	
107 2,6-Dinitrotoluene	165		8.622				ND	
108 Acenaphthylene	152		8.713				ND	
109 3-Nitroaniline	138		8.777				ND	
110 Acenaphthene	153		8.857				ND	
111 2,4-Dinitrophenol	184		8.862				ND	
112 4-Nitrophenol	109		8.916				ND	
114 2,4-Dinitrotoluene	165		8.964				ND	
115 Dibenzofuran	168		8.996				ND	
120 Diethyl phthalate	149		9.140				ND	
123 4-Chlorophenyl phenyl ethe	204		9.263				ND	
124 Fluorene	166		9.284				ND	
126 4-Nitroaniline	138		9.295				ND	
127 4,6-Dinitro-2-methylphenol	198		9.316				ND	
130 N-Nitrosodiphenylamine	169		9.359				ND	
139 4-Bromophenyl phenyl ether	248		9.679				ND	
140 Hexachlorobenzene	284		9.759				ND	
143 Atrazine	200		9.786				ND	
145 Pentachlorophenol	266		9.920				ND	
151 Phenanthrene	178		10.101				ND	
152 Anthracene	178		10.144				ND	
153 Carbazole	167		10.267				ND	
157 Di-n-butyl phthalate	149		10.502				ND	
164 Fluoranthene	202		11.105				ND	U
167 Pyrene	202		11.324				ND	
174 Butyl benzyl phthalate	149		11.890				ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553				ND	
179 3,3'-Dichlorobenzidine	252		12.574				ND	
180 Benzo[a]anthracene	228		12.633				ND	
182 Chrysene	228		12.686				ND	
184 Di-n-octyl phthalate	149		13.450				ND	
186 Benzo[b]fluoranthene	252		14.160				ND	
187 Benzo[k]fluoranthene	252		14.198				ND	
189 Benzo[a]pyrene	252		14.663				ND	
193 Indeno[1,2,3-cd]pyrene	276		16.436				ND	
194 Dibenz(a,h)anthracene	278		16.446				ND	
195 Benzo[g,h,i]perylene	276		16.900				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D				
Lims ID:	480-156069-B-4-A				
Client ID:	WCMW4				
Sample Type:	Client				
Inject. Date:	16-Jul-2019 18:49:30	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Sample Info:	480-0082649-015				
Operator ID:	BS	Instrument ID:	HP5973Y		
Method:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m				
Limit Group:	MB - 8270D ICAL				
Last Update:	17-Jul-2019 09:32:21	Calib Date:	05-Jun-2019 03:24:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	RXI-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1004				
First Level Reviewer: schickr		Date:	17-Jul-2019 09:08:51		

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
		Unknown						
2.482	2368552	5.79	1					
		Unknown						
2.669	2337455	5.71	1					
		Unknown						
4.784	704332	1.72	1					
		Unknown						
5.906	256264	0.6264	1					
		Unknown						
6.862	276589	0.6157	2					
		Unknown						
7.743	342656	0.7628	2					
		Unknown						
8.517	287121	0.5440	3					

Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.258	1636521	4.00
* 2 Naphthalene-d8	7.348	1796863	4.00
* 3 Acenaphthene-d10	8.827	2111218	4.00

QC Flag Legend

Processing Flags

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

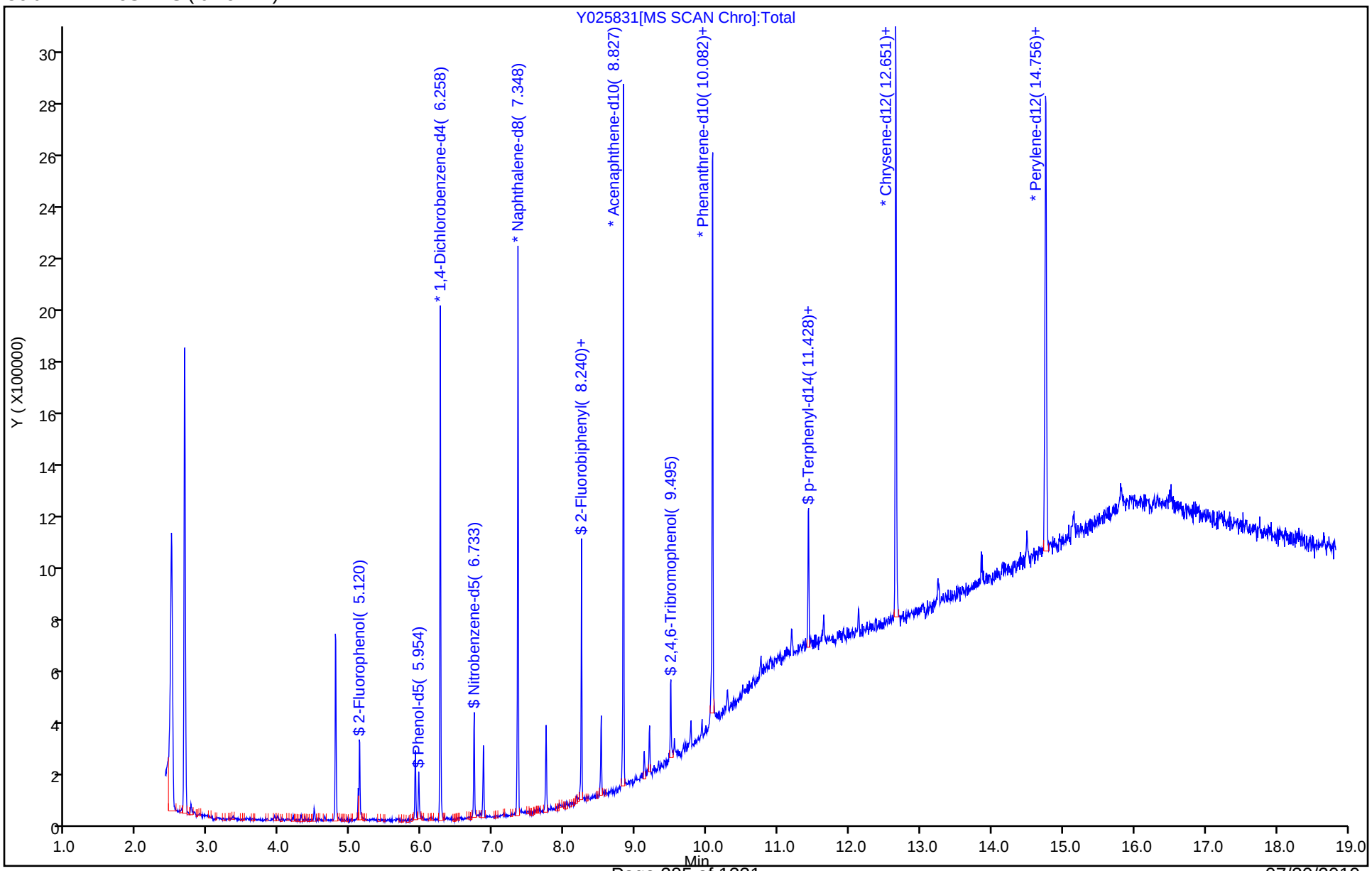
Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D

Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4	Worklist Smp#:	15
Client ID:	WCMW4				
Injection Vol:	2.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	15
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



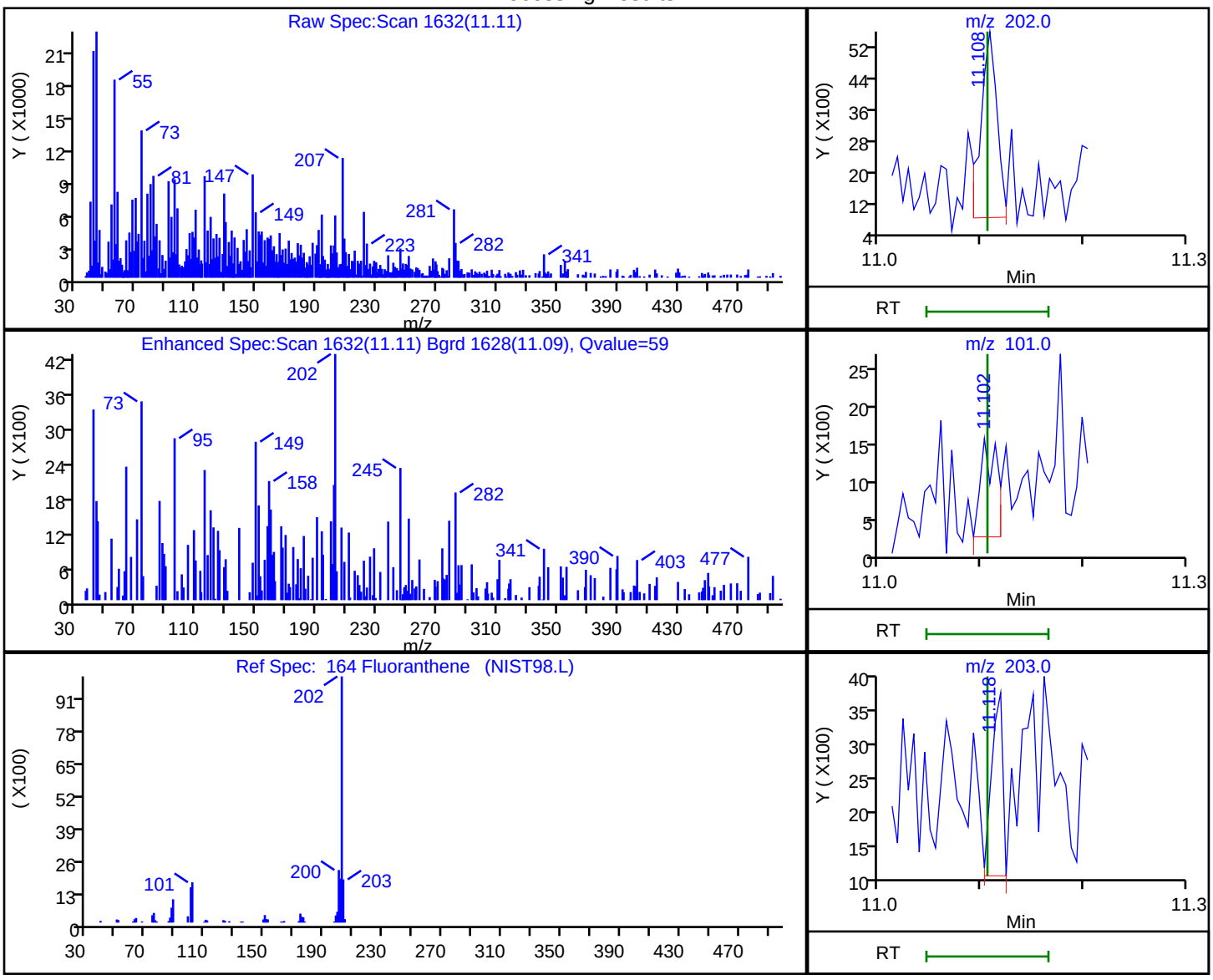
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D				
Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

164 Fluoranthene, CAS: 206-44-0

Processing Results



RT	Mass	Response	Amount
11.11	202.00	5329	0.021640
11.10	101.00	1466	
11.12	203.00	1991	

Reviewer: schickr, 17-Jul-2019 09:08:47

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

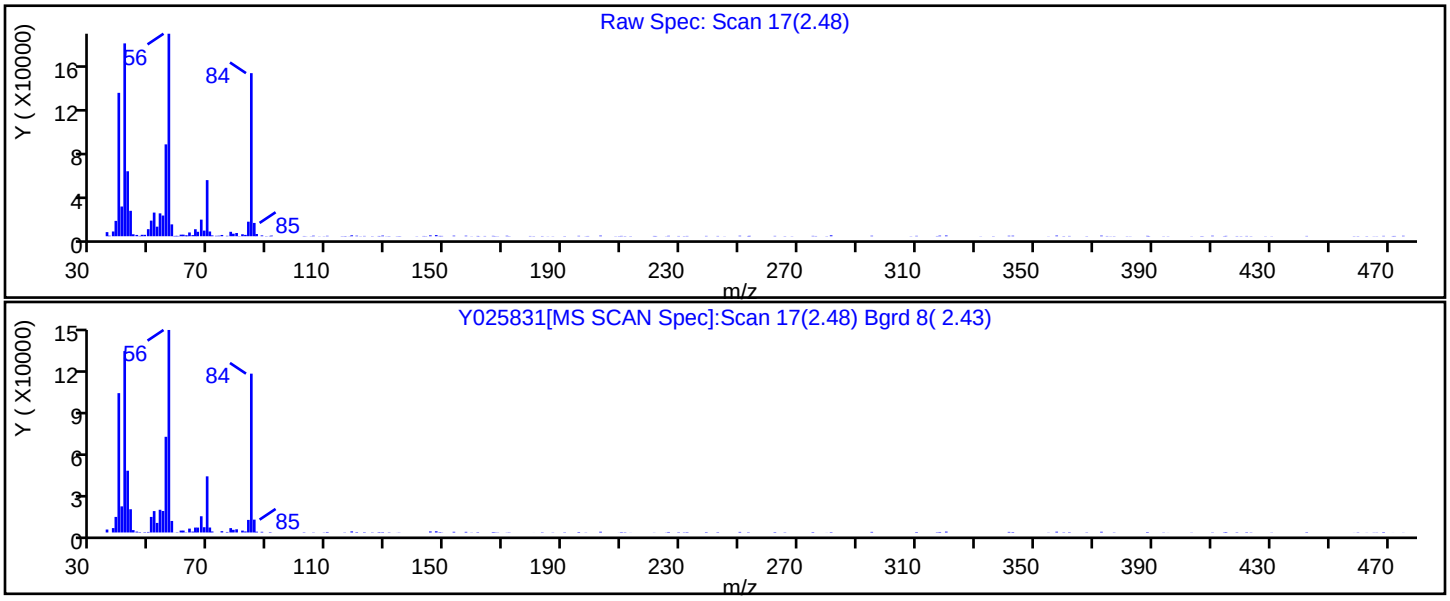
Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D

Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



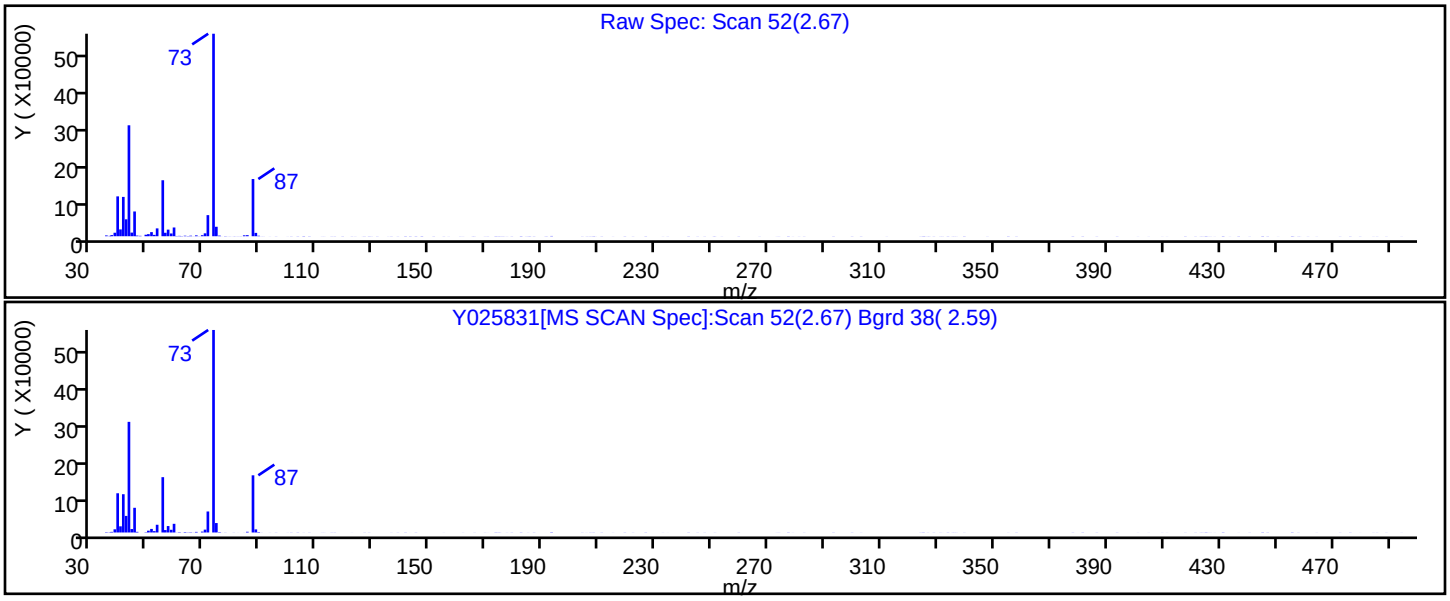
Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D

Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



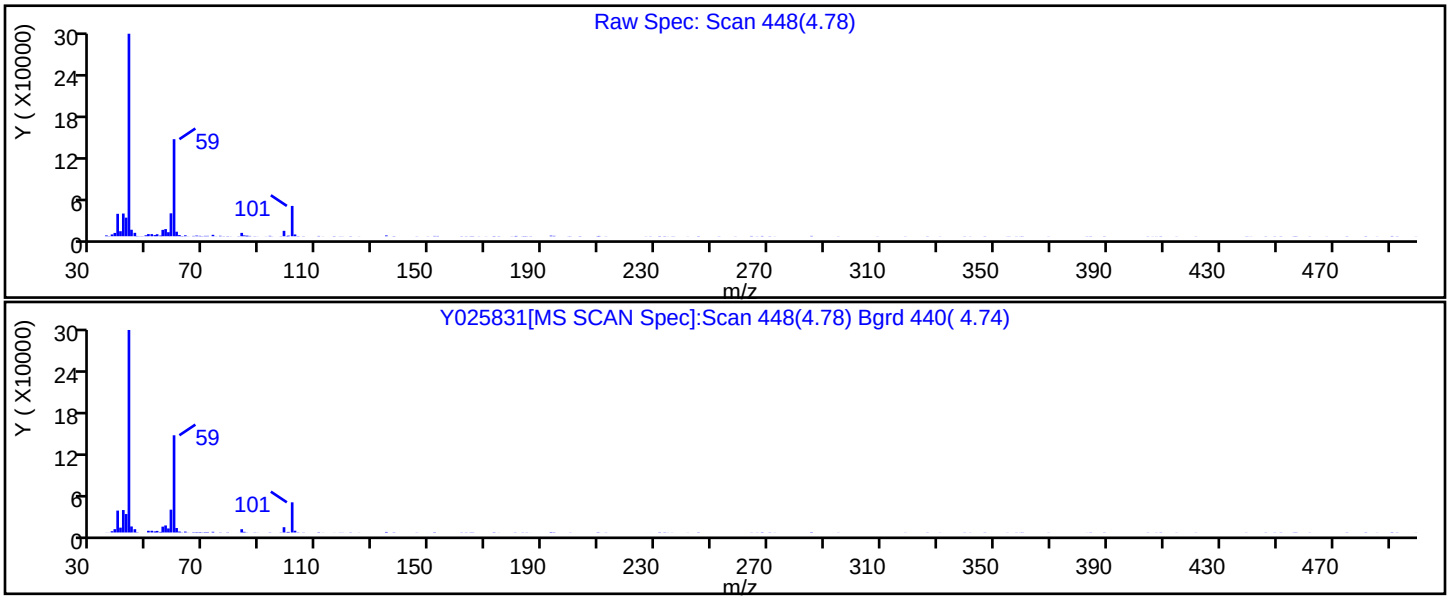
Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D

Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

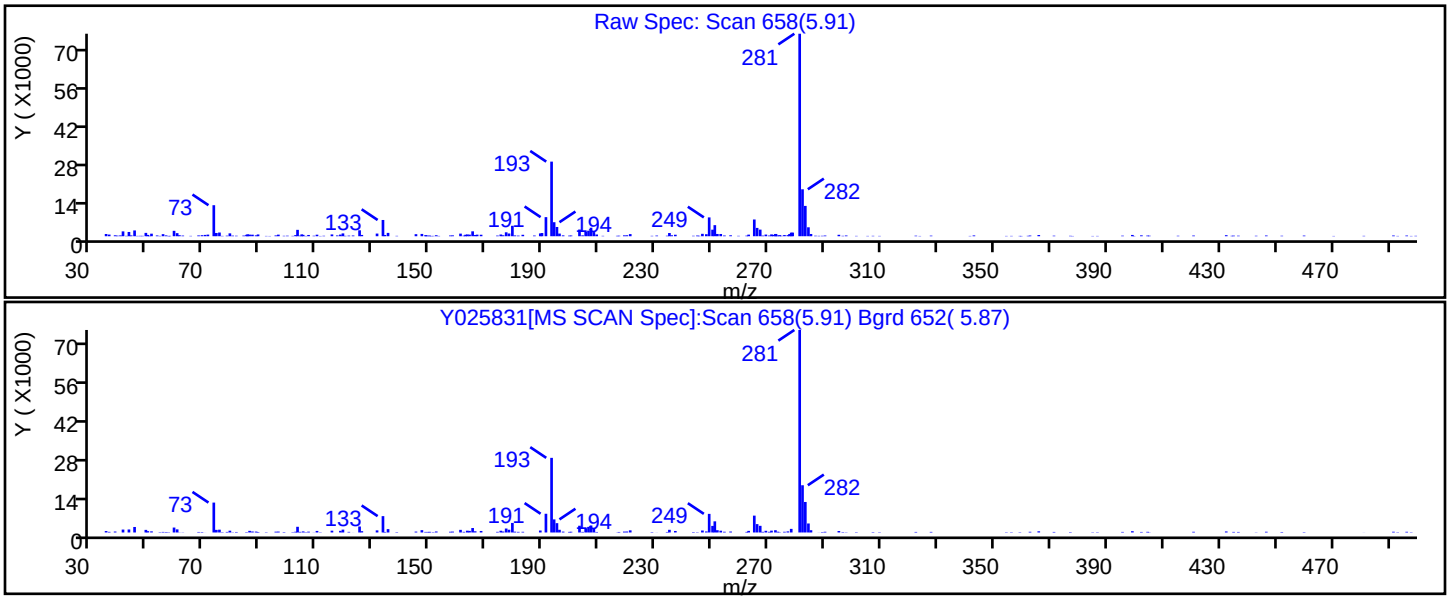


Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D				
Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



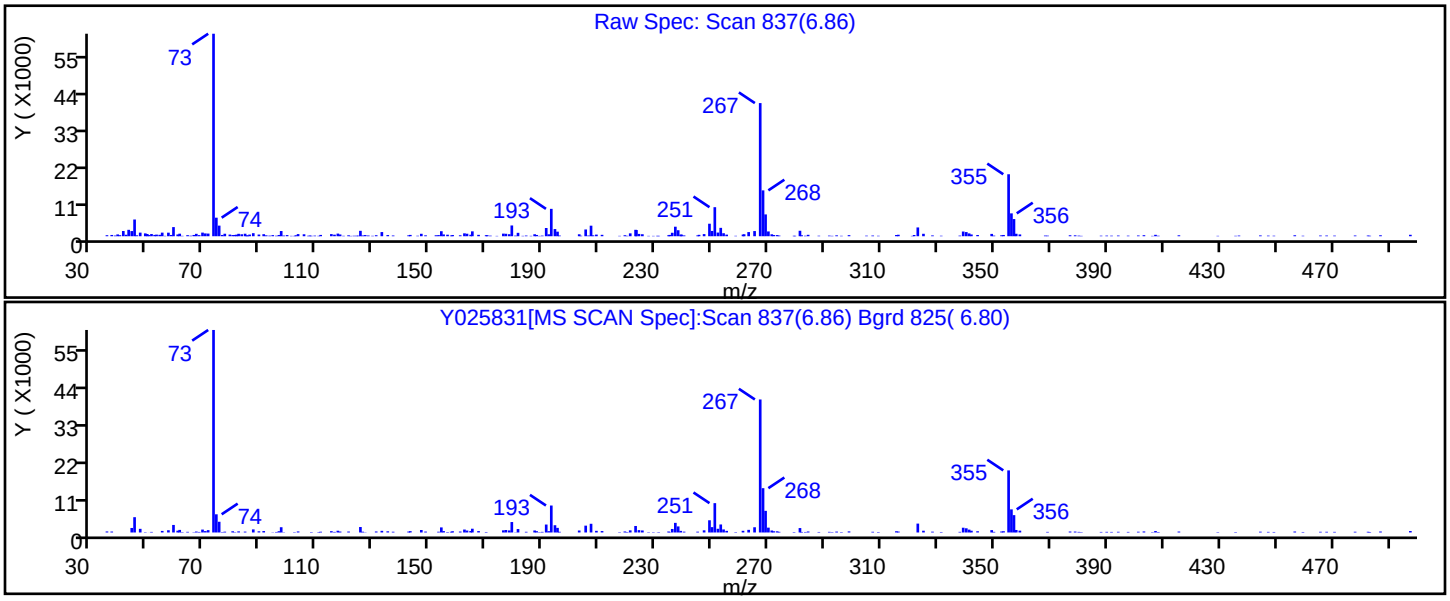
Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D

Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

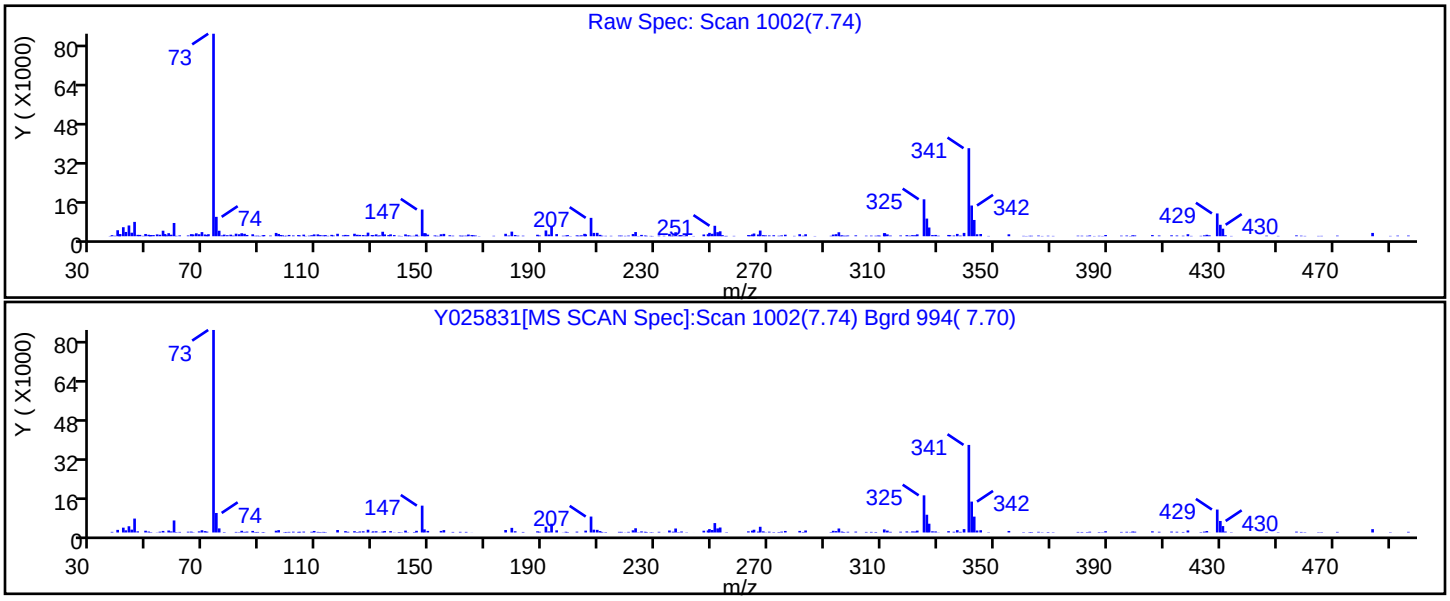


Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D				
Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

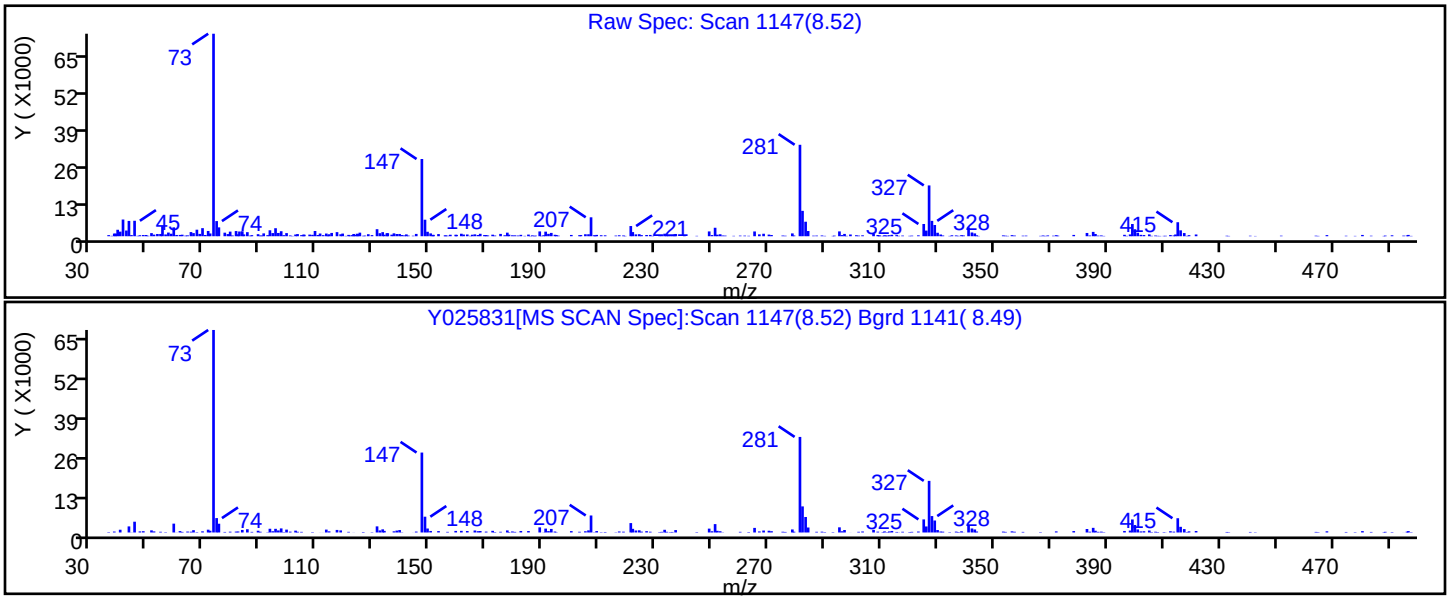


Report Date: 17-Jul-2019 09:33:40 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025831.D				
Injection Date:	16-Jul-2019 18:49:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-4-A	Lab Sample ID:	480-156069-4		
Client ID:	WCMW4				
Operator ID:	BS	ALS Bottle#:	15	Worklist Smp#:	15
Injection Vol:	2.0 ul	Dil. Factor:	5.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: Y025832.D

Analysis Method: 8270D Date Collected: 07/10/2019 07:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 19:17

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND	*	10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP | Lab Sample ID: 480-156069-5

Matrix: Water | Lab File ID: Y025832.D

Analysis Method: 8270D | Date Collected: 07/10/2019 07:00

Extract. Method: 3510C | Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2019 19:17

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

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 482258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	1.9	J B	5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: Y025832.D

Analysis Method: 8270D Date Collected: 07/10/2019 07:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 19:17

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	127	X	41-120
321-60-8	2-Fluorobiphenyl	91		48-120
367-12-4	2-Fluorophenol	60		35-120
4165-60-0	Nitrobenzene-d5	93		46-120
4165-62-2	Phenol-d5	40		22-120
1718-51-0	p-Terphenyl-d14	57	X	59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: BLIND DUP Lab Sample ID: 480-156069-5

Matrix: Water Lab File ID: Y025832.D

Analysis Method: 8270D Date Collected: 07/10/2019 07:00

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 19:17

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 20 TIC Result Total: 274.6

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.76	100	T J	
	Unknown	4.80	33	T J	
108-38-3	Benzene, 1,3-dimethyl-	5.12	5.4	T J N	96%
	Unknown	5.74	4.6	T J	
	Unknown	5.91	5.0	T J	
	Unknown	6.15	4.4	T J	
	Unknown	6.38	3.4	T J	
	Unknown	6.42	4.8	T J	
	Unknown	6.70	6.4	T J	
	Unknown	6.78	4.0	T J	
	Unknown	7.10	4.1	T J	
	Unknown	7.70	4.1	T J	
	Unknown	7.75	7.6	T J	
	Unknown	7.88	3.9	T J	
	Unknown	8.00	7.0	T J	
	Unknown	8.03	5.9	T J	
	Unknown	8.15	19	T J	
	Unknown	8.91	13	T J	
	Unknown	9.35	19	T J	
	Unknown	9.55	20	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D
Lims ID: 480-156069-B-5-A
Client ID: BLIND DUP
Sample Type: Client
Inject. Date: 16-Jul-2019 19:17:30 ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-016
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:09:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.260	6.256	0.004	96	196774	4.00	
* 2 Naphthalene-d8	136	7.350	7.345	0.005	98	689784	4.00	
* 3 Acenaphthene-d10	164	8.835	8.830	0.005	95	500982	4.00	
* 4 Phenanthrene-d10	188	10.090	10.080	0.010	96	748471	4.00	
* 5 Chrysene-d12	240	12.670	12.649	0.021	98	895073	4.00	
* 6 Perylene-d12	264	14.774	14.748	0.026	99	1008753	4.00	
$ 7 2-Fluorophenol	112	5.133	5.112	0.026	88	315075	4.81	
$ 8 Phenol-d5	99	5.961	5.972	0.020	86	259822	3.21	
$ 9 Nitrobenzene-d5	82	6.730	6.732	-0.001	97	576971	7.46	
$ 10 2-Fluorobiphenyl	172	8.242	8.238	0.005	98	1335116	7.29	
$ 11 2,4,6-Tribromophenol	330	9.508	9.493	0.016	87	222579	10.1	
$ 12 p-Terphenyl-d14	244	11.441	11.431	0.015	98	946511	4.55	
35 Benzaldehyde	77		5.876				ND	
37 Phenol	94		5.951				ND	
39 Bis(2-chloroethyl)ether	93		6.015				ND	
40 2-Chlorophenol	128		6.085				ND	
48 2-Methylphenol	108		6.464				ND	
49 2,2'-oxybis[1-chloropropan	45		6.475				ND	
53 N-Nitrosodi-n-propylamine	70		6.587				ND	
57 4-Methylphenol	108		6.592				ND	
52 Acetophenone	105		6.597				ND	
58 Hexachloroethane	117		6.699				ND	
59 Nitrobenzene	77		6.747				ND	
62 Isophorone	82		6.945				ND	
64 2-Nitrophenol	139		7.019				ND	U
66 2,4-Dimethylphenol	107		7.041				ND	
69 Bis(2-chloroethoxy)methane	93		7.105				ND	
72 2,4-Dichlorophenol	162		7.228				ND	
74 Naphthalene	128		7.367				ND	
76 4-Chloroaniline	127		7.399				ND	
79 Hexachlorobutadiene	225		7.463				ND	
84 Caprolactam	113		7.698				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/uL	Flags
85 4-Chloro-3-methylphenol	107		7.805				ND	
87 2-Methylnaphthalene	142		7.943				ND	
90 Hexachlorocyclopentadiene	237		8.077				ND	
93 2,4,6-Trichlorophenol	196		8.178				ND	U
94 2,4,5-Trichlorophenol	196		8.221				ND	
96 1,1'-Biphenyl	154		8.328				ND	U
97 2-Chloronaphthalene	162		8.360				ND	
100 2-Nitroaniline	65		8.435				ND	
105 Dimethyl phthalate	163		8.563				ND	
107 2,6-Dinitrotoluene	165		8.622				ND	U
108 Acenaphthylene	152		8.713				ND	
109 3-Nitroaniline	138		8.777				ND	
110 Acenaphthene	153		8.857				ND	
111 2,4-Dinitrophenol	184		8.862				ND	
112 4-Nitrophenol	109		8.916				ND	
114 2,4-Dinitrotoluene	165		8.964				ND	
115 Dibenzofuran	168		8.996				ND	
120 Diethyl phthalate	149		9.140				ND	U
123 4-Chlorophenyl phenyl ethe	204		9.263				ND	U
124 Fluorene	166		9.284				ND	
126 4-Nitroaniline	138		9.295				ND	
127 4,6-Dinitro-2-methylphenol	198		9.316				ND	U
130 N-Nitrosodiphenylamine	169		9.359				ND	
139 4-Bromophenyl phenyl ether	248		9.679				ND	
140 Hexachlorobenzene	284		9.759				ND	
143 Atrazine	200		9.786				ND	U
145 Pentachlorophenol	266		9.920				ND	
151 Phenanthrene	178	10.111	10.102	0.010	93	99992	0.4825	
152 Anthracene	178		10.144				ND	
153 Carbazole	167		10.267				ND	
157 Di-n-butyl phthalate	149		10.502				ND	
164 Fluoranthene	202		11.105				ND	U
167 Pyrene	202		11.324				ND	
174 Butyl benzyl phthalate	149		11.890				ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553				ND	U
179 3,3'-Dichlorobenzidine	252		12.574				ND	
180 Benzo[a]anthracene	228		12.633				ND	
182 Chrysene	228		12.686				ND	
184 Di-n-octyl phthalate	149		13.450				ND	
186 Benzo[b]fluoranthene	252		14.160				ND	
187 Benzo[k]fluoranthene	252		14.198				ND	
189 Benzo[a]pyrene	252		14.663				ND	
193 Indeno[1,2,3-cd]pyrene	276		16.436				ND	
194 Dibenz(a,h)anthracene	278		16.446				ND	
195 Benzo[g,h,i]perylene	276		16.900				ND	

QC Flag Legend

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Lims ID:	480-156069-B-5-A				
Client ID:	BLIND DUP				
Sample Type:	Client				
Inject. Date:	16-Jul-2019 19:17:30	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Sample Info:	480-0082649-016				
Operator ID:	BS	Instrument ID:	HP5973Y		
Method:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m				
Limit Group:	MB - 8270D ICAL				
Last Update:	17-Jul-2019 09:32:21	Calib Date:	05-Jun-2019 03:24:30		
Tic RT Window:	1.500 -0.000	Response:	area		
Quant By:	Nearest ISTD	Quant LOD:	10.00000		
MS Library:	\\chromna\Buffalo\Database\NIST98.L				
Min. Match:	85				
Column 1 :	RXI-5Sil MS (0.25 mm)		Det: MS SCAN		
Process Host:	CTX1004				
First Level Reviewer: schickr		Date:	17-Jul-2019 09:09:41		

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
2.757	11981335	26.2	1					
	Unknown							
4.802	3787220	8.29	1					
108-38-3	Benzene, 1,3-dimethyl-							
5.117	611091	1.34	1	96	117396	C8H10	106	
	Unknown							
5.742	526628	1.15	1					
	Unknown							
5.908	573022	1.25	1					
	Unknown							
6.154	498558	1.09	1					
	Unknown							
6.378	383032	0.8388	1					
	Unknown							
6.421	543529	1.19	1					
	Unknown							
6.704	735597	1.61	1					
	Unknown							
6.784	460557	1.01	1					
	Unknown							
7.104	1226419	1.01	2					
	Unknown							
7.697	1240822	1.03	2					

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
7.745	2312711	1.91	2					
	Unknown							
7.879	1190350	0.9841	2					
	Unknown							
8.002	2117561	1.75	2					
	Unknown							
8.034	1784612	1.48	2					
	Unknown							
8.146	4471745	4.70	3					
	Unknown							
8.910	3191029	3.35	3					
	Unknown							
9.348	4545561	4.77	3					
	Unknown							
9.550	2152590	4.89	4					

Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.255	1826589	4.00
* 2 Naphthalene-d8	7.350	4838166	4.00
* 3 Acenaphthene-d10	8.835	3807850	4.00
* 4 Phenanthrene-d10	10.090	1761361	4.00

QC Flag Legend

Processing Flags

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

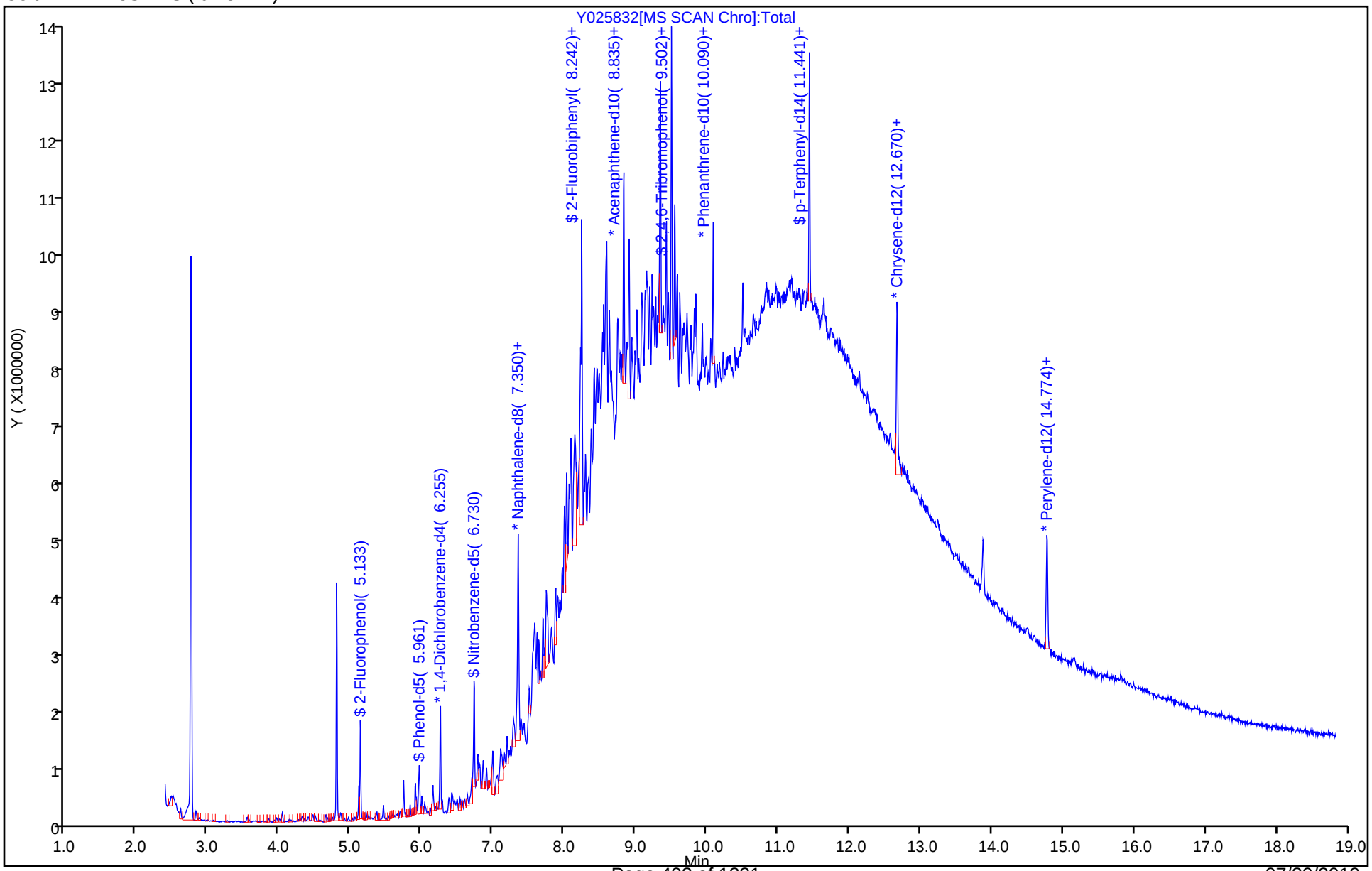
Report Date: 17-Jul-2019 09:33:43 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D

Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5	Worklist Smp#:	16
Client ID:	BLIND DUP				
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	16
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

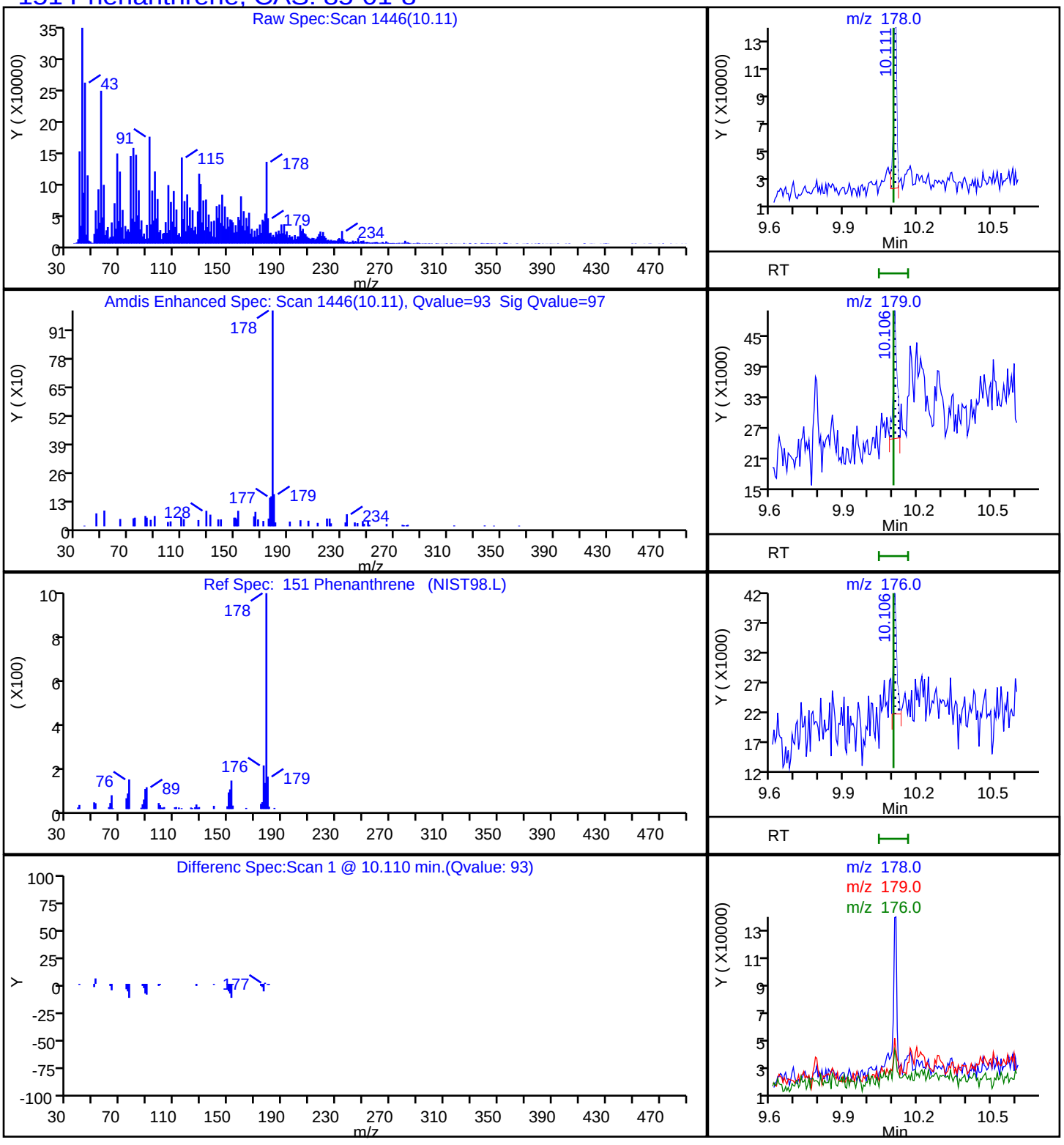
Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

151 Phenanthrene, CAS: 85-01-8



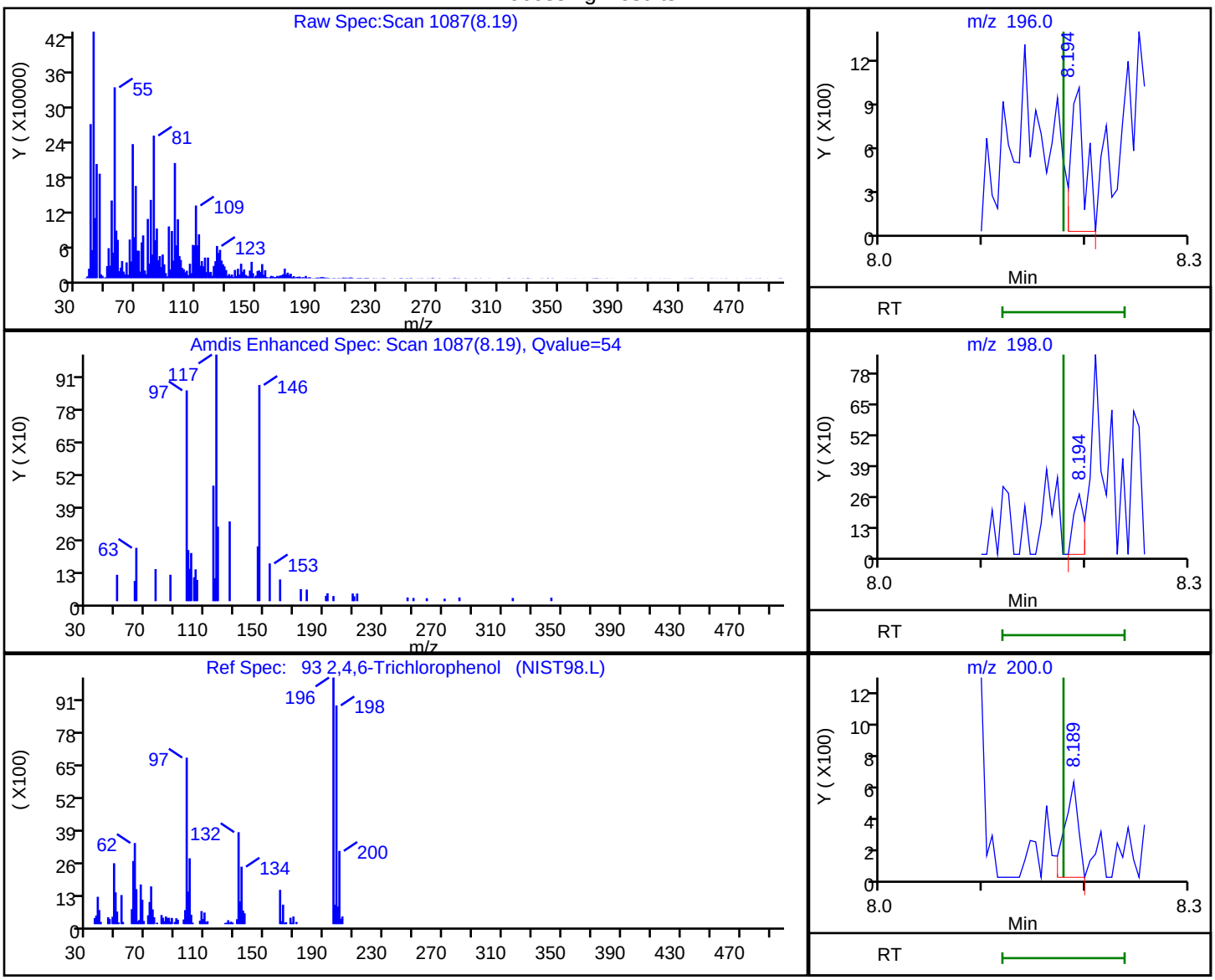
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

93 2,4,6-Trichlorophenol, CAS: 88-06-2

Processing Results



RT	Mass	Response	Amount
8.19	196.00	912	0.018376
8.19	198.00	183	
8.19	200.00	557	

Reviewer: schickr, 17-Jul-2019 09:09:12

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

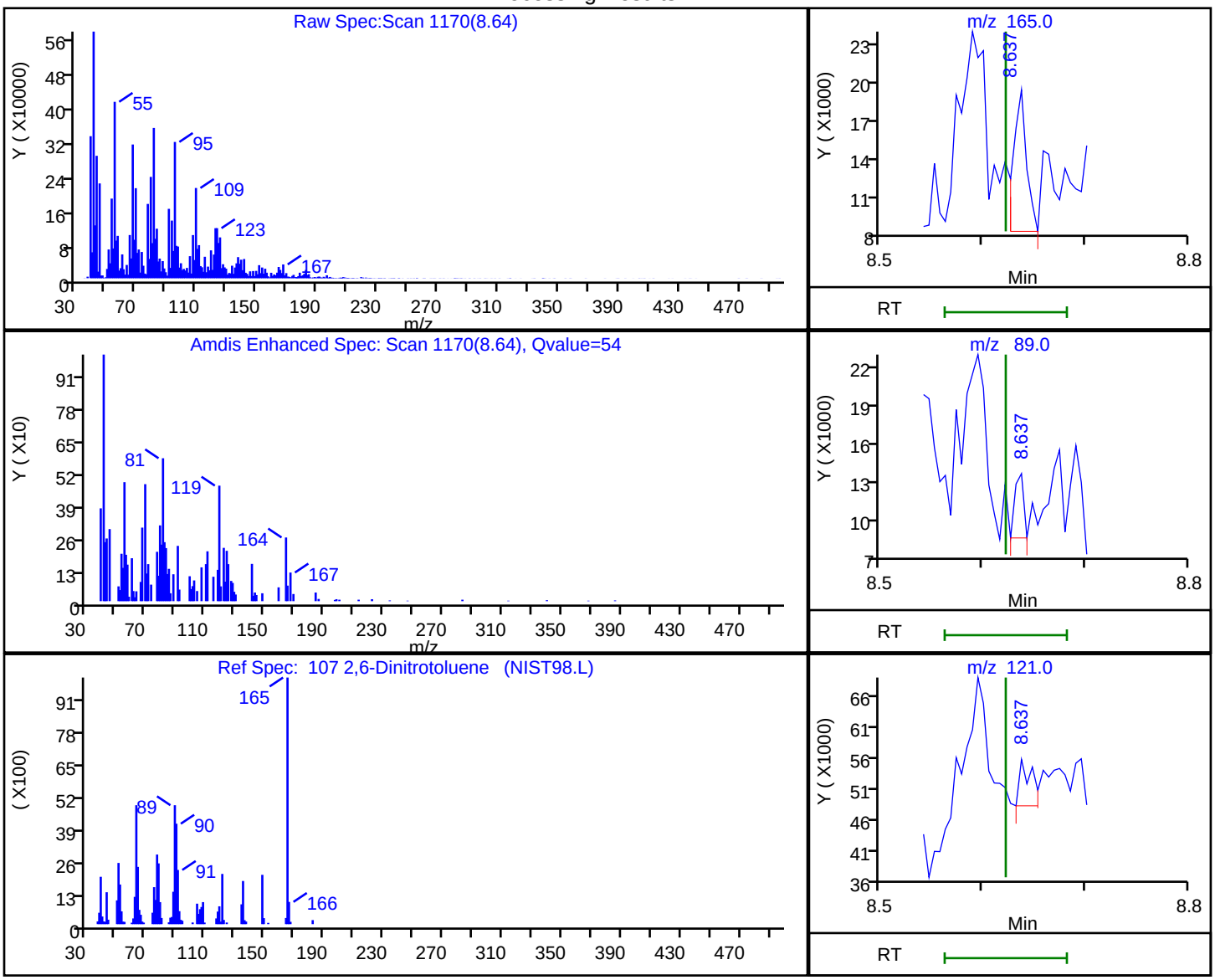
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

107 2,6-Dinitrotoluene, CAS: 606-20-2

Processing Results



RT	Mass	Response	Amount
8.64	165.00	9445	0.239324
8.64	89.00	2816	
8.64	121.00	6336	

Reviewer: schickr, 17-Jul-2019 09:09:18

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

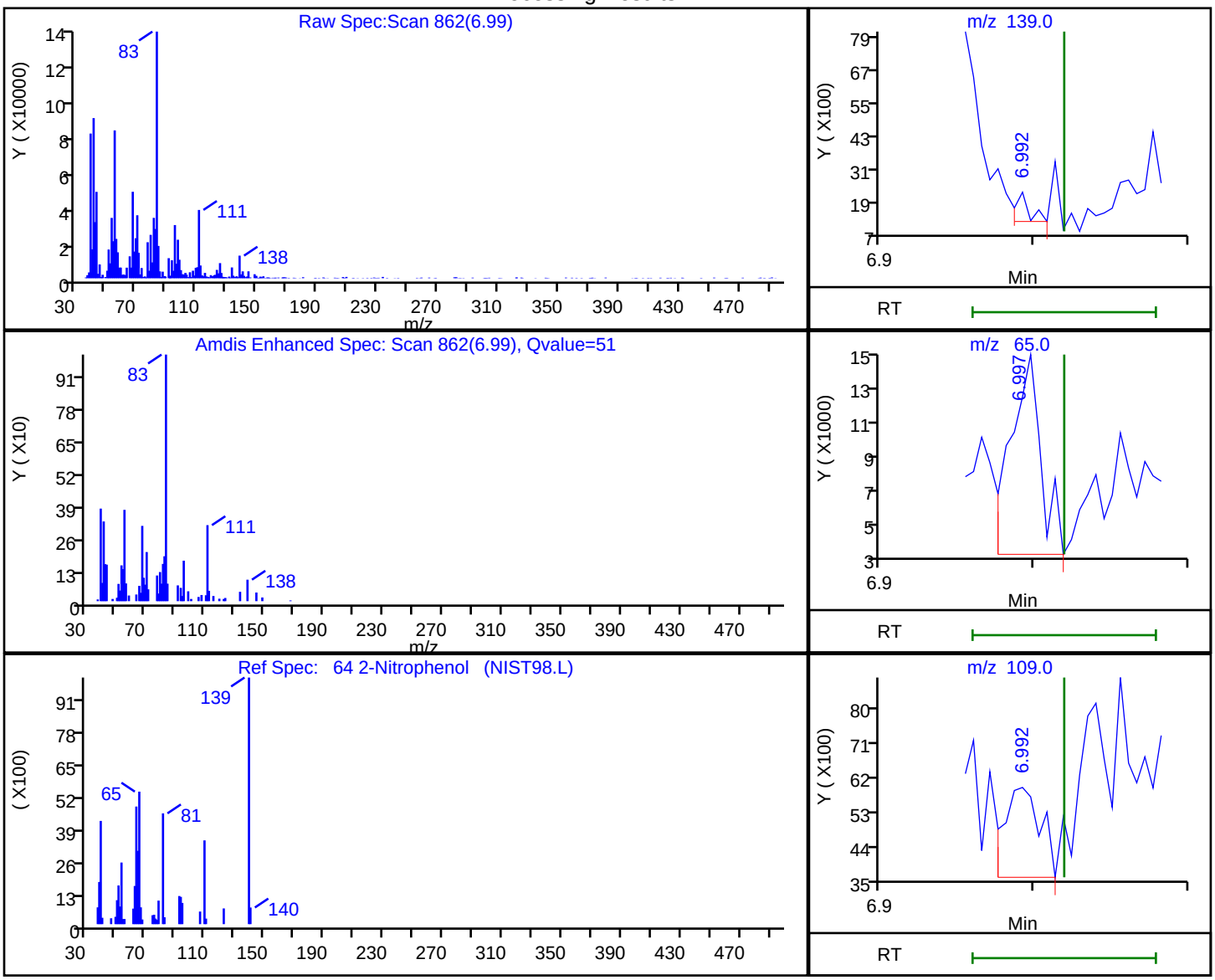
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

64 2-Nitrophenol, CAS: 88-75-5

Processing Results



RT	Mass	Response	Amount
6.99	139.00	652	0.019840
7.00	65.00	15836	
6.99	109.00	3917	

Reviewer: schickr, 17-Jul-2019 09:09:09

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

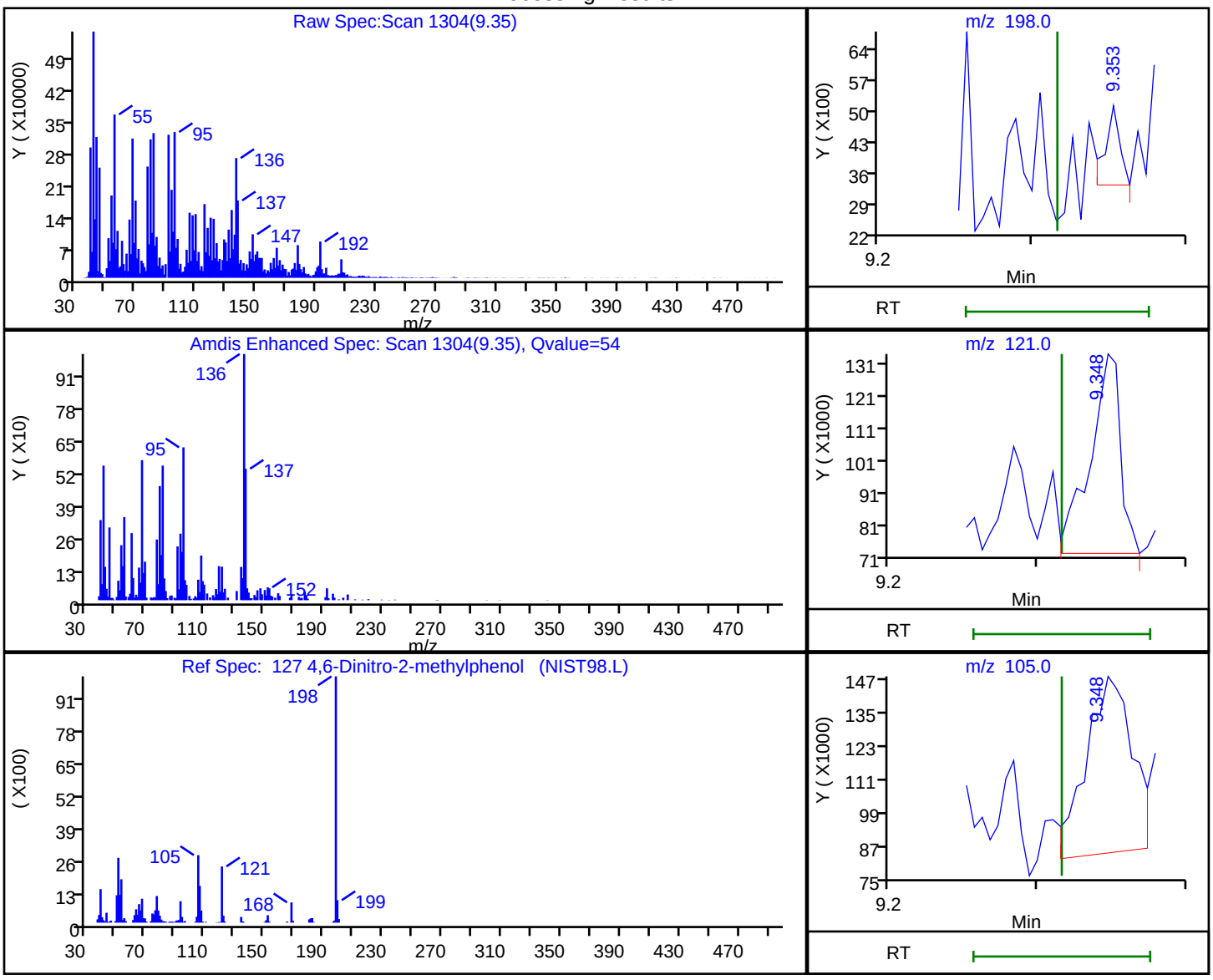
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

127 4,6-Dinitro-2-methylphenol, CAS: 534-52-1

Processing Results



RT	Mass	Response	Amount
9.35	198.00	1213	0.855983
9.35	121.00	87655	
9.35	105.00	143093	

Reviewer: schickr, 17-Jul-2019 09:09:28

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

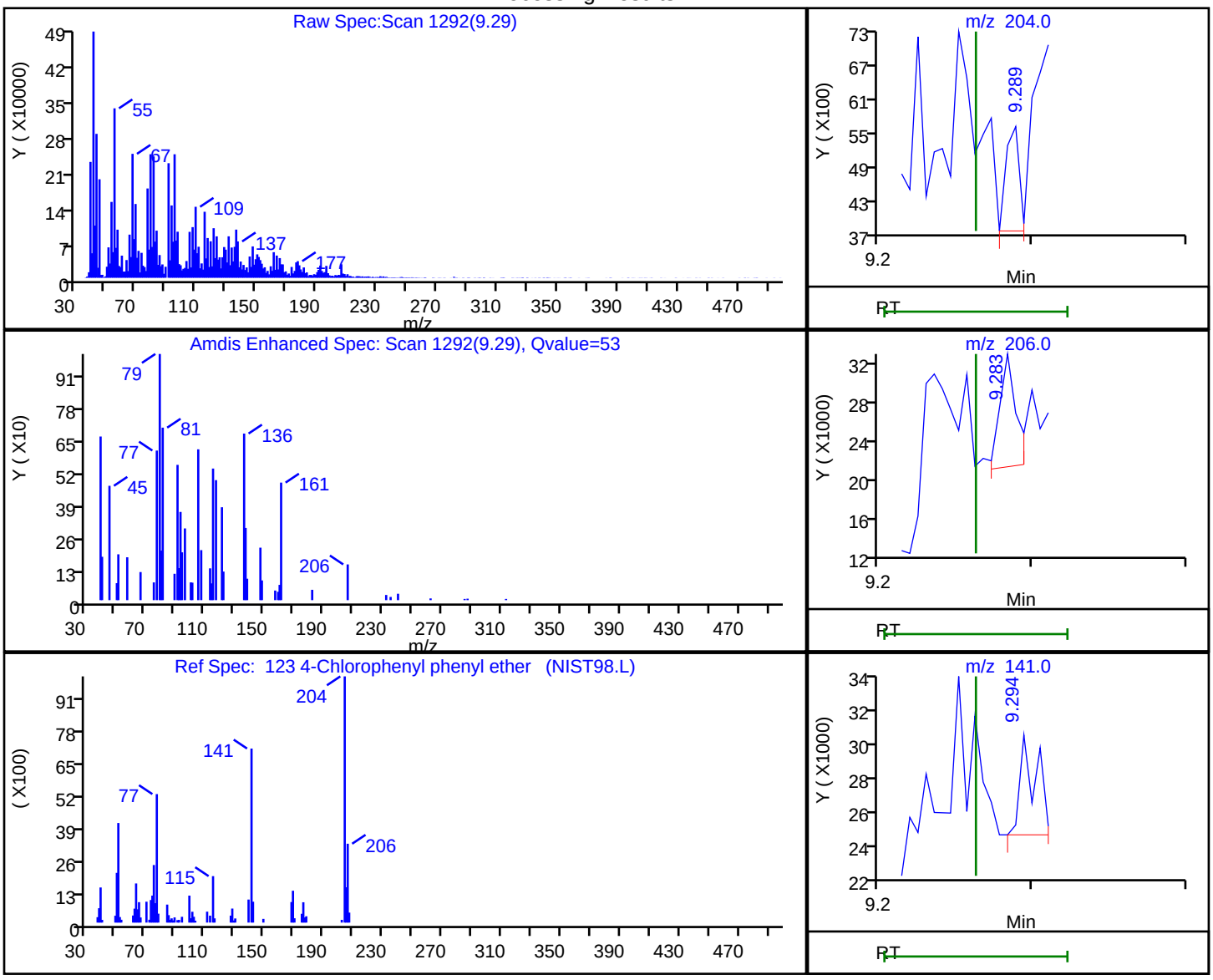
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

123 4-Chlorophenyl phenyl ether, CAS: 7005-72-3

Processing Results



RT	Mass	Response	Amount
9.29	204.00	1106	0.012250
9.28	206.00	8408	
9.29	141.00	4109	

Reviewer: schickr, 17-Jul-2019 09:09:24

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

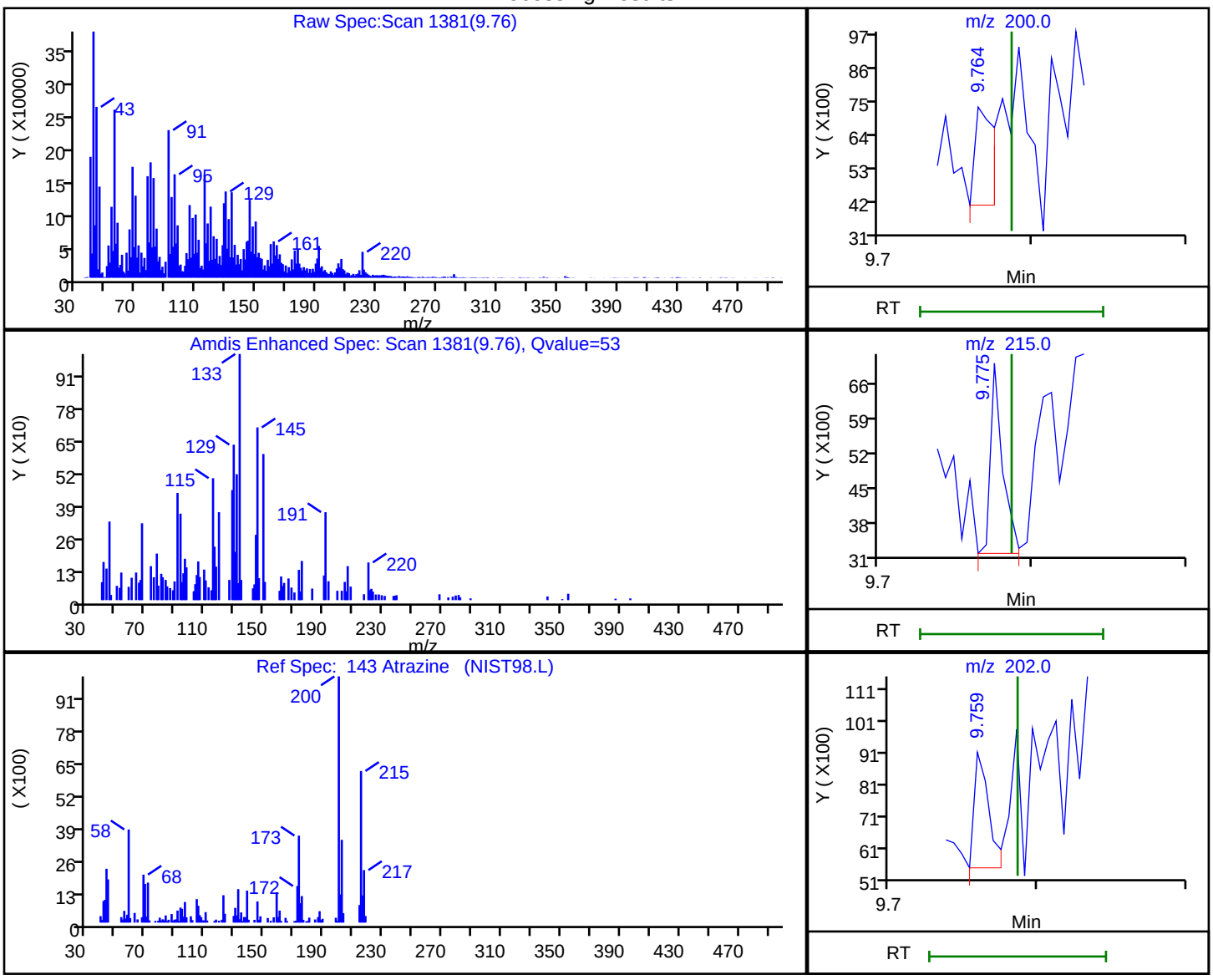
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

143 Atrazine, CAS: 1912-24-9

Processing Results



RT	Mass	Response	Amount
9.76	200.00	2751	0.054884
9.77	215.00	2112	
9.76	202.00	2489	

Reviewer: schickr, 17-Jul-2019 09:09:31

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

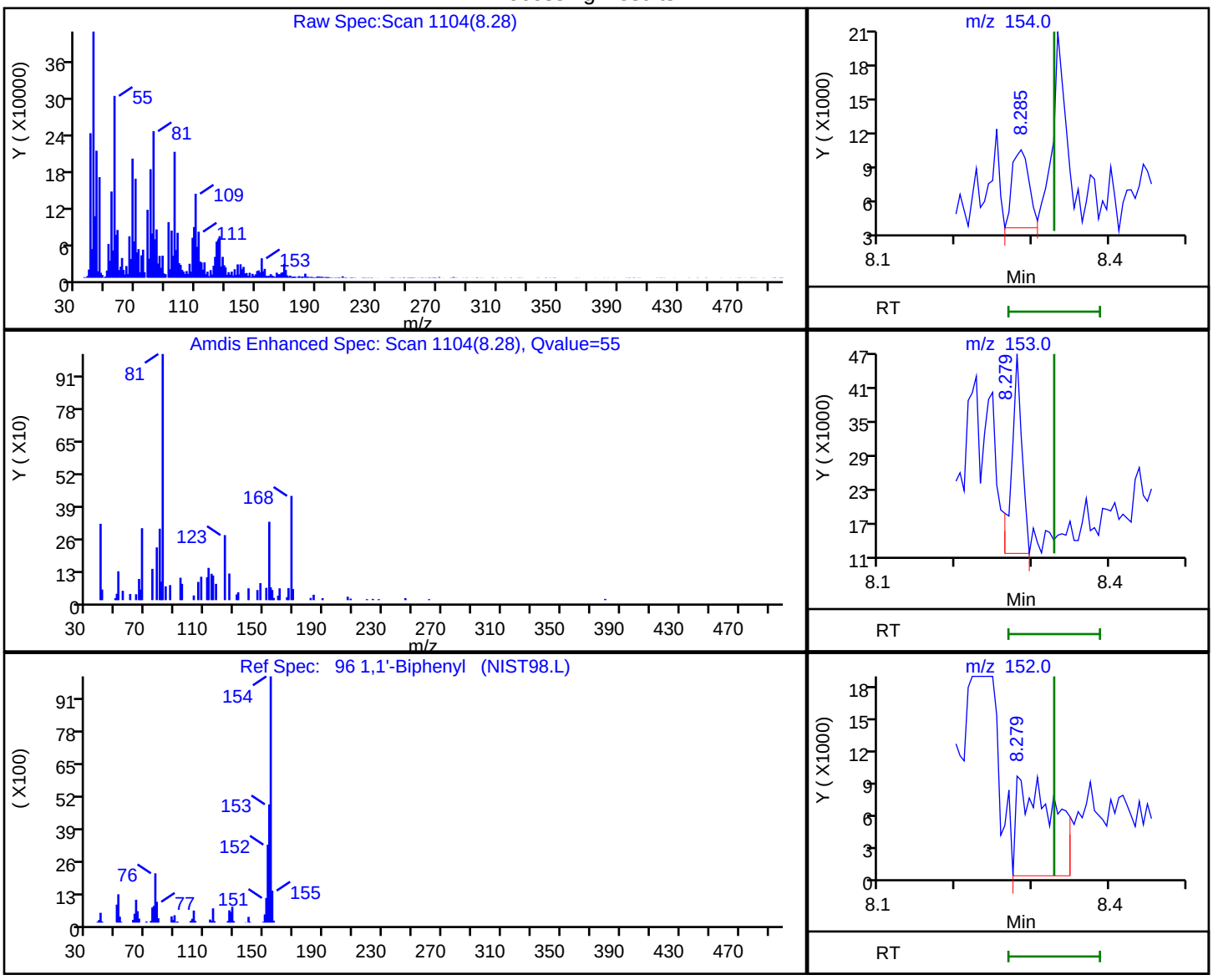
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

96 1,1'-Biphenyl, CAS: 92-52-4

Processing Results



RT	Mass	Response	Amount
8.28	154.00	10105	0.052735
8.28	153.00	31582	
8.28	152.00	30719	

Reviewer: schickr, 17-Jul-2019 09:09:14

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

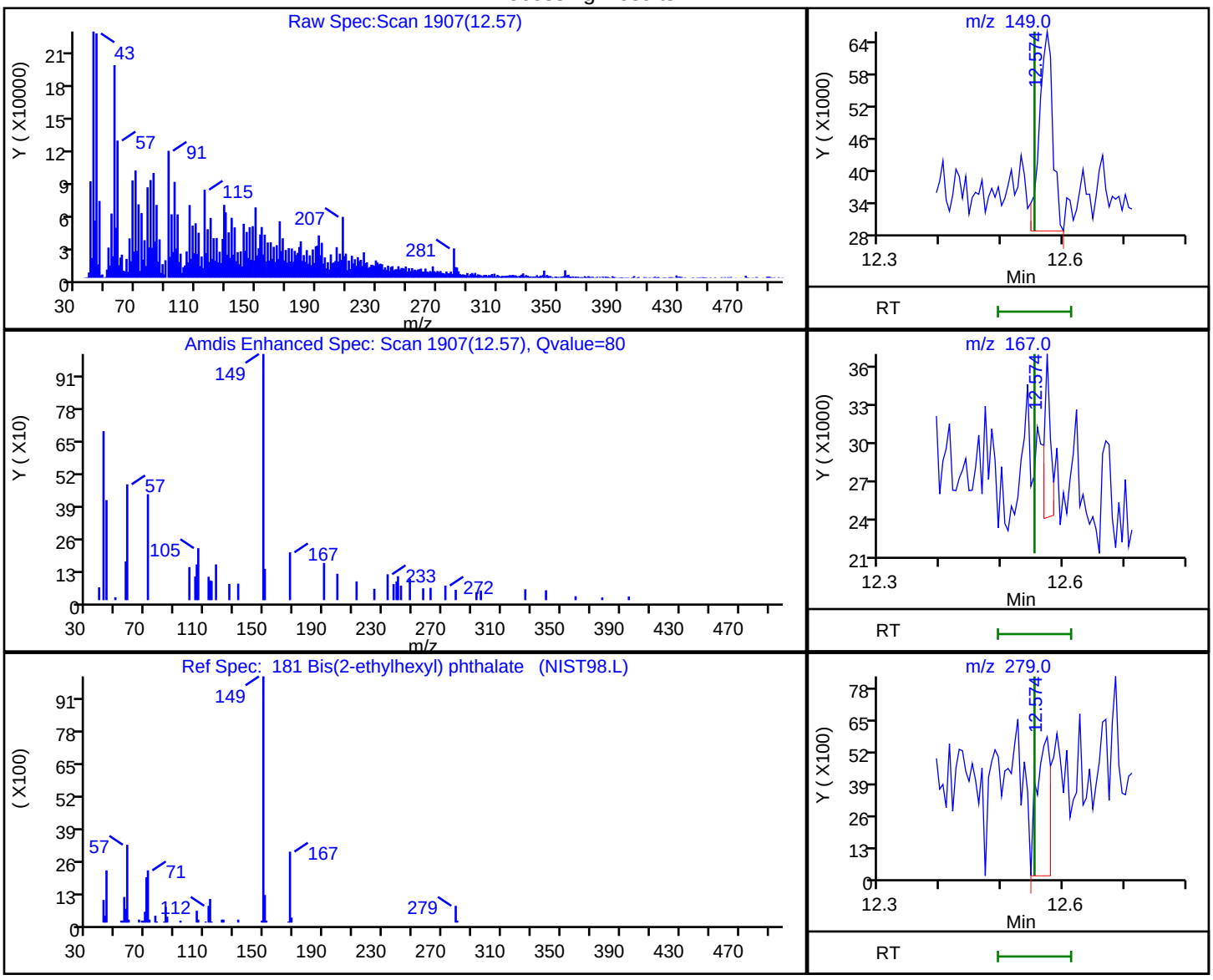
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

181 Bis(2-ethylhexyl) phthalate, CAS: 117-81-7

Processing Results



RT	Mass	Response	Amount
12.57	149.00	56480	0.308396
12.57	167.00	8201	
12.57	279.00	8847	

Reviewer: schickr, 17-Jul-2019 09:09:37

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

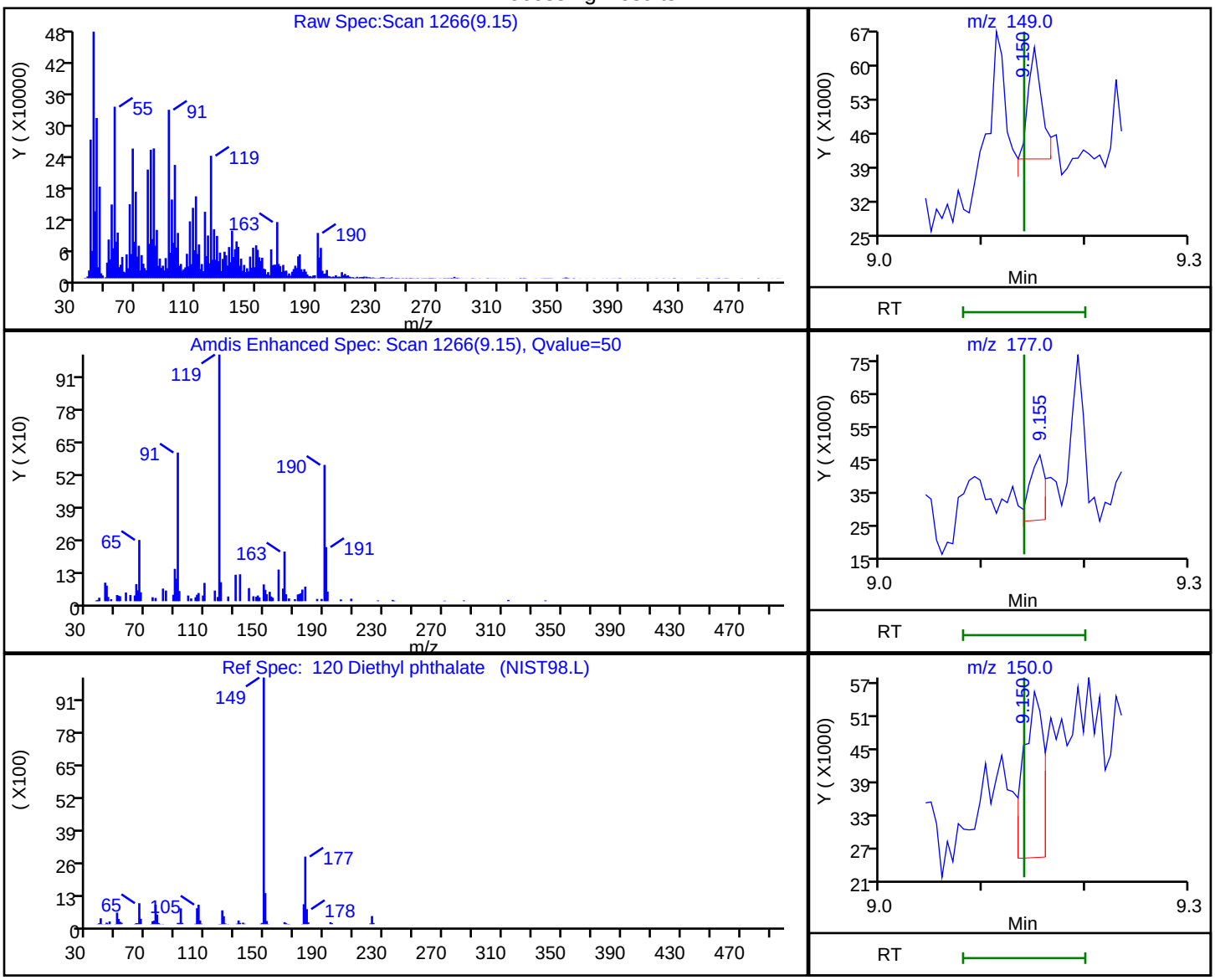
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

120 Diethyl phthalate, CAS: 84-66-2

Processing Results



RT	Mass	Response	Amount
9.15	149.00	21509	0.121883
9.16	177.00	20358	
9.15	150.00	40158	

Reviewer: schickr, 17-Jul-2019 09:09:23

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

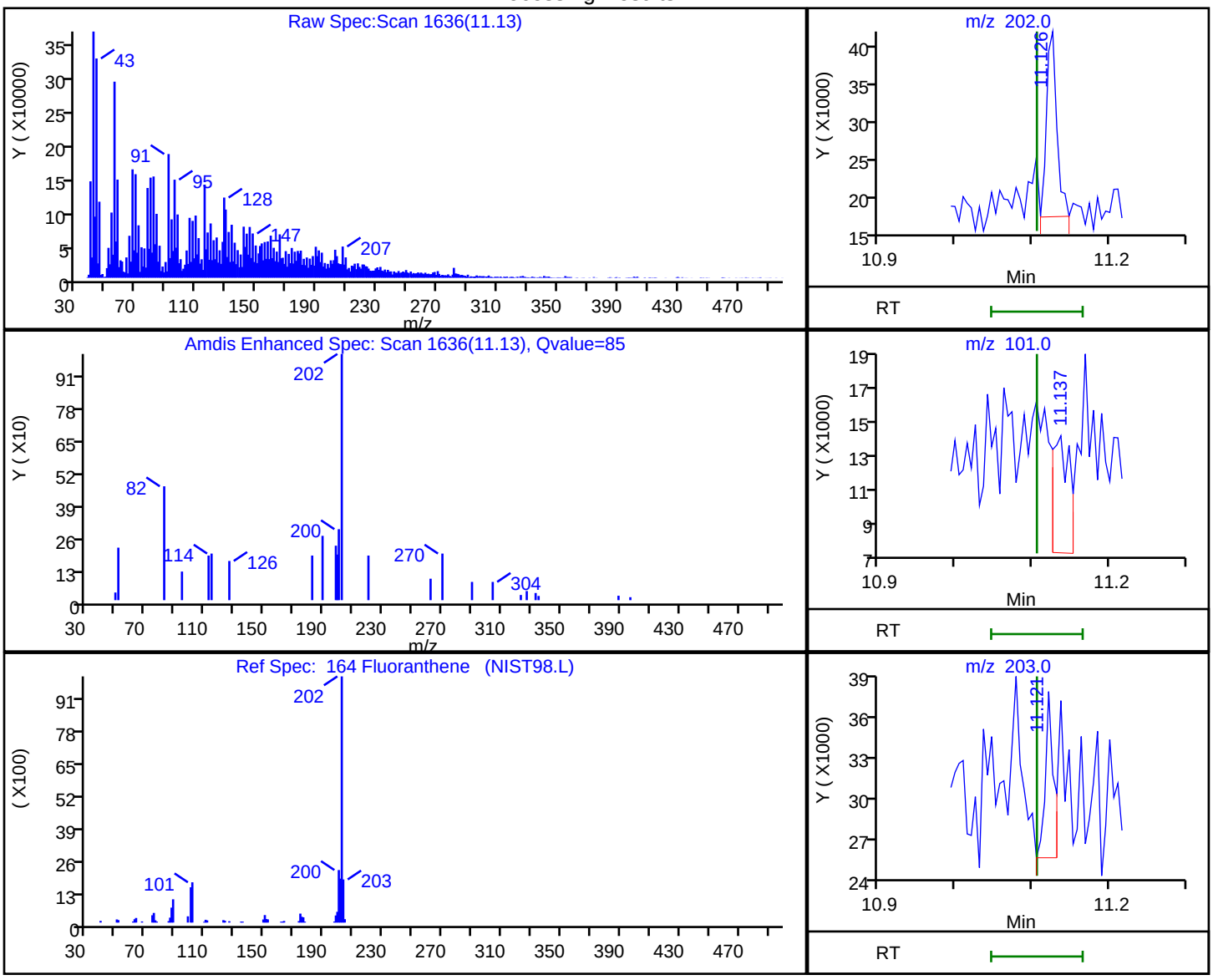
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

164 Fluoranthene, CAS: 206-44-0

Processing Results



RT	Mass	Response	Amount
11.13	202.00	22542	0.097694
11.14	101.00	10418	
11.12	203.00	8682	

Reviewer: schickr, 17-Jul-2019 09:09:34

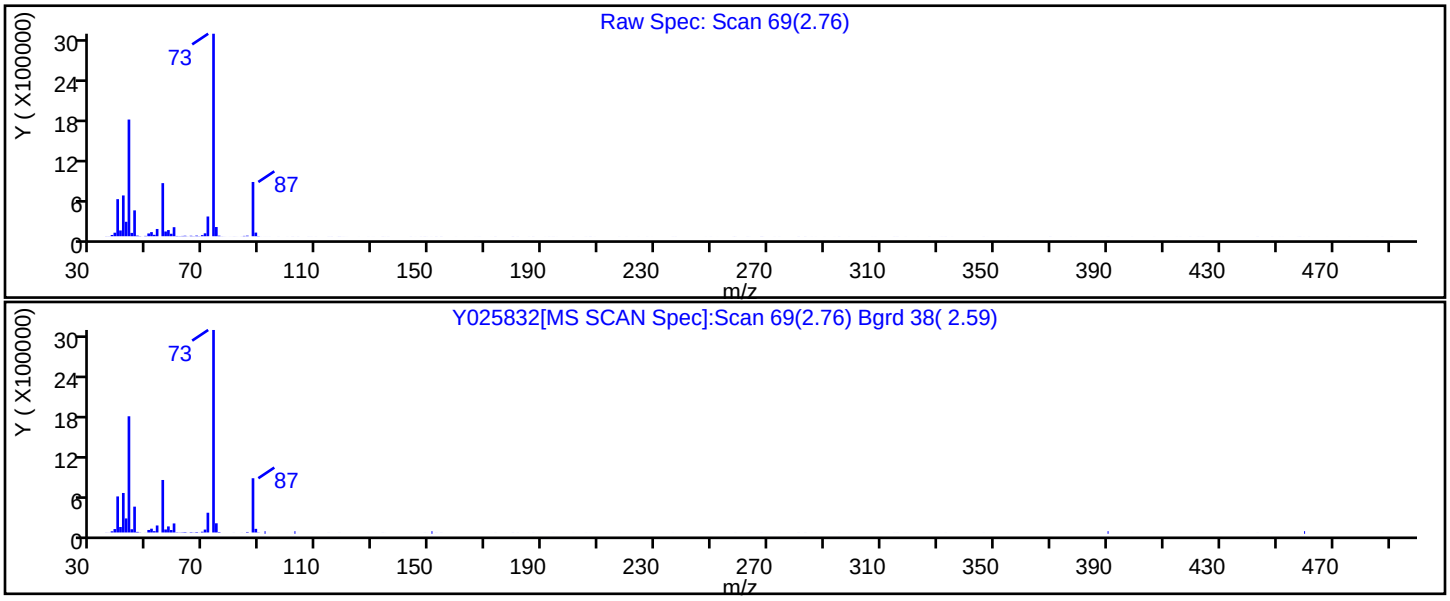
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



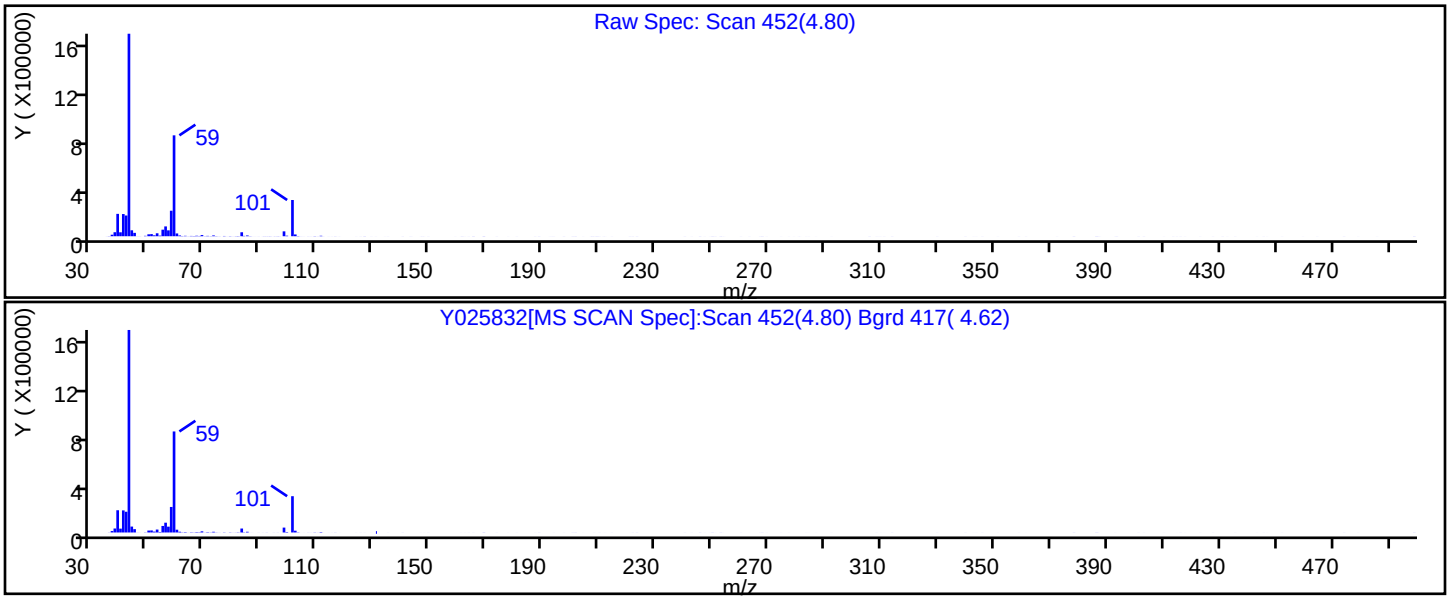
Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D

Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

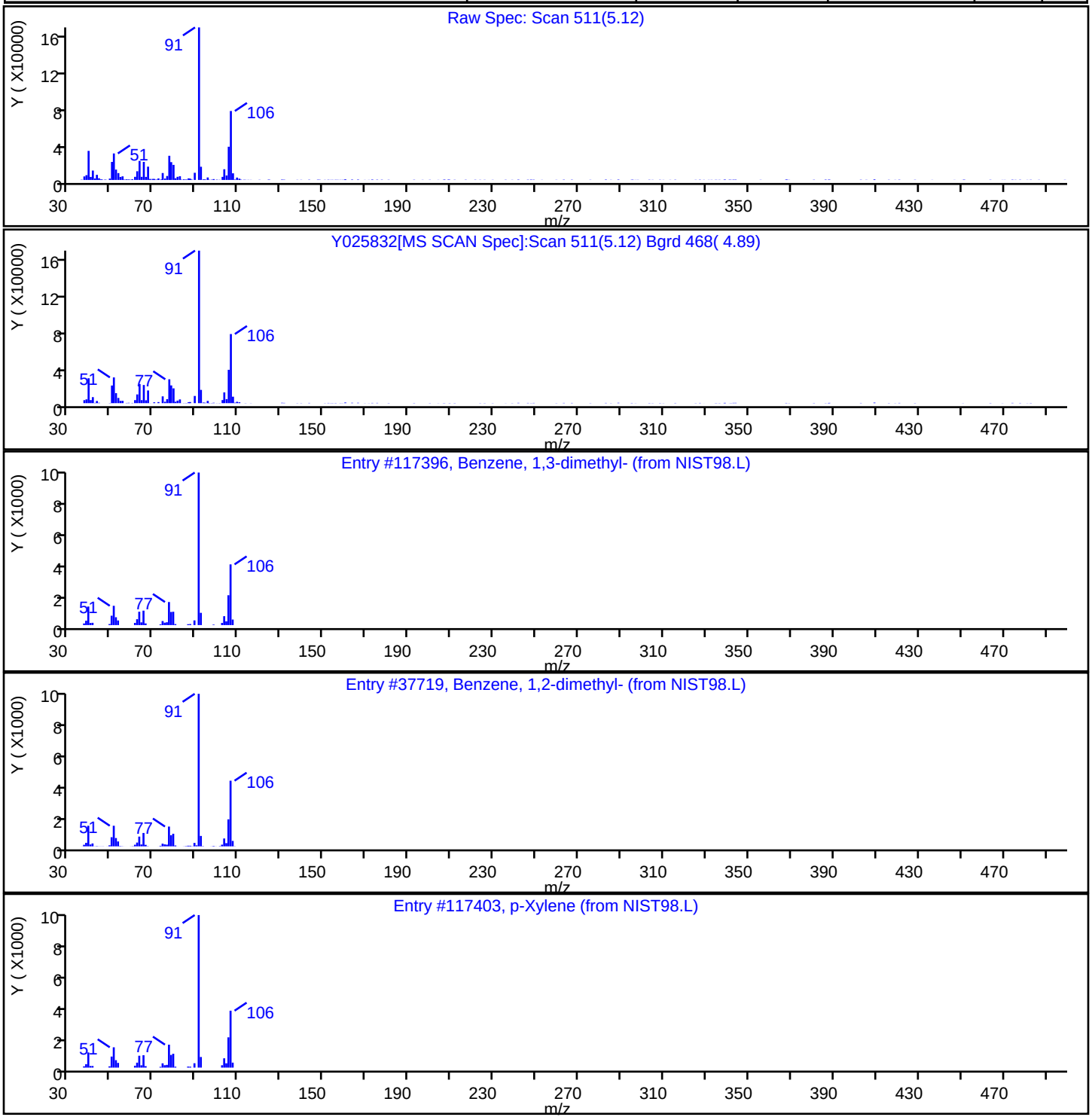
No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D
Injection Date: 16-Jul-2019 19:17:30 Instrument ID: HP5973Y
Lims ID: 480-156069-B-5-A Lab Sample ID: 480-156069-5
Client ID: BLIND DUP
Operator ID: BS ALS Bottle#: 16 Worklist Smp#: 16
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: Detector MS SCAN

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Benzene, 1,3-dimethyl-	108-38-3	NIST98.L	117396	C8H10	106	96
Benzene, 1,2-dimethyl-	95-47-6	NIST98.L	37719	C8H10	106	95
p-Xylene	106-42-3	NIST98.L	117403	C8H10	106	95

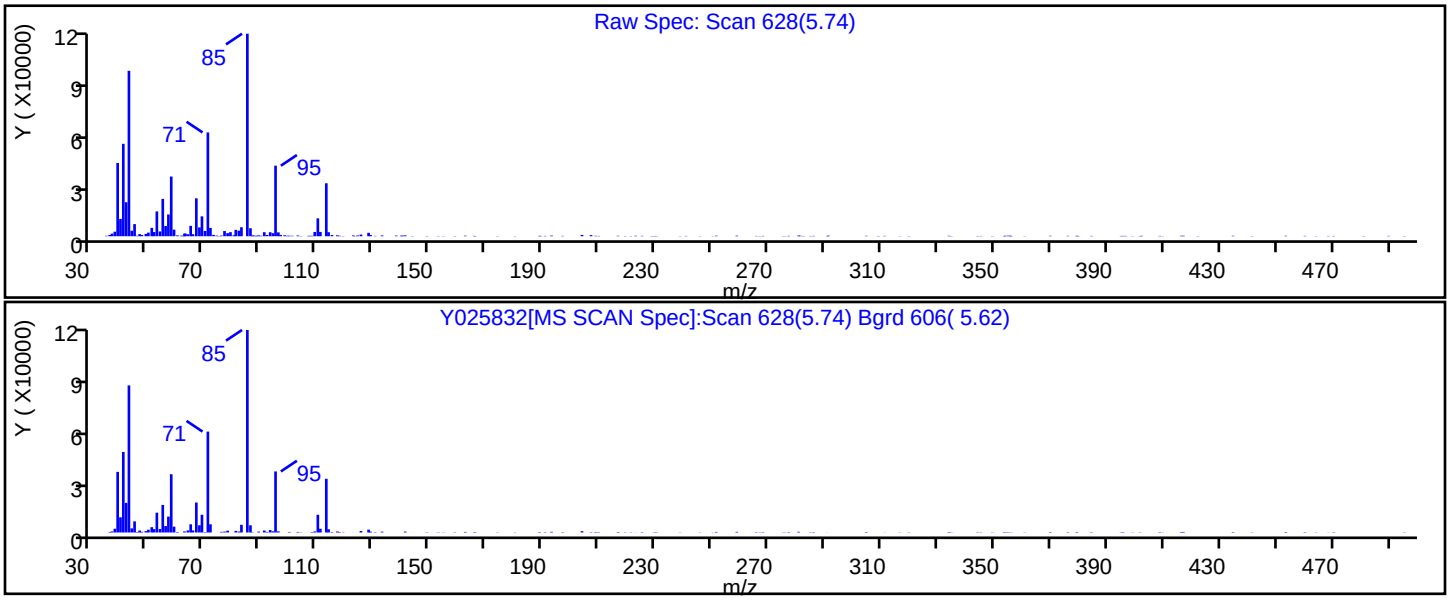


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



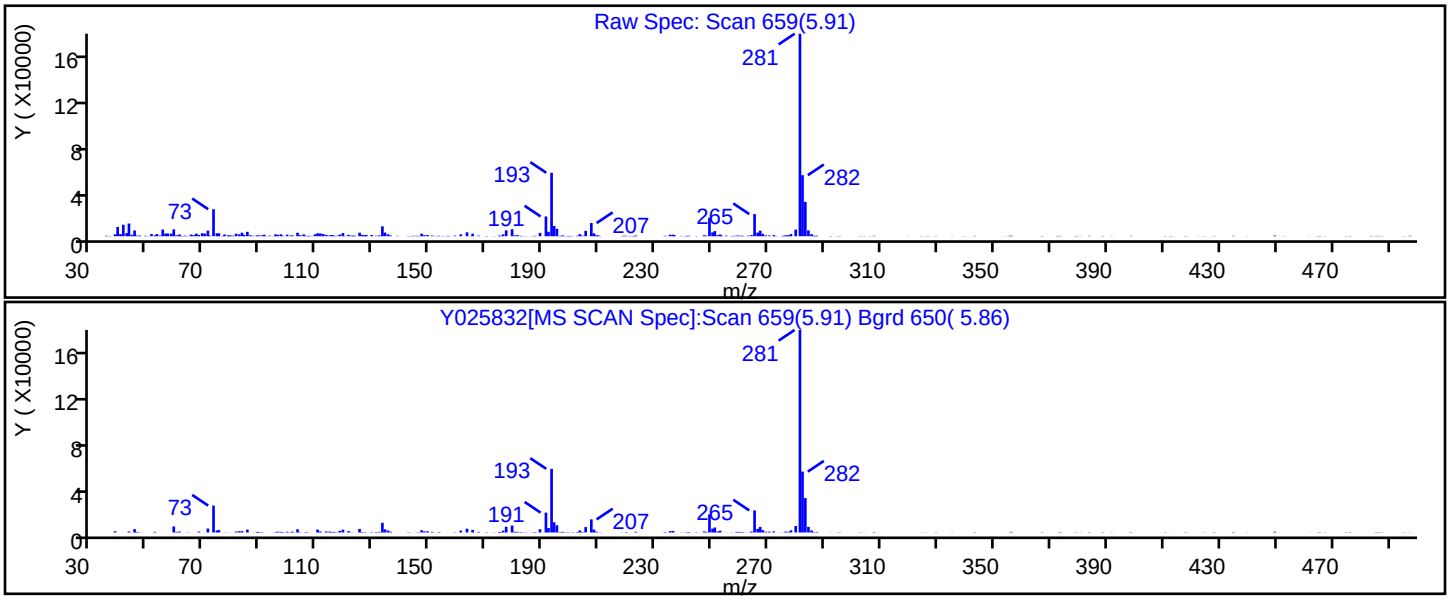
Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D

Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

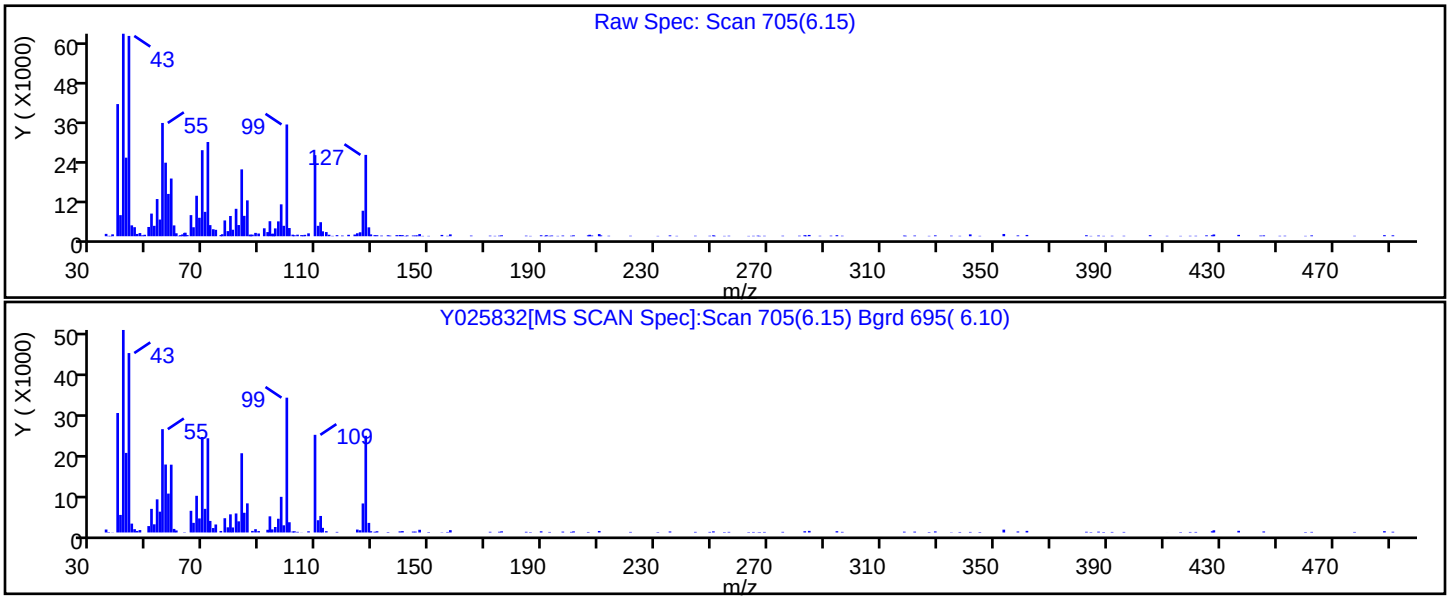


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

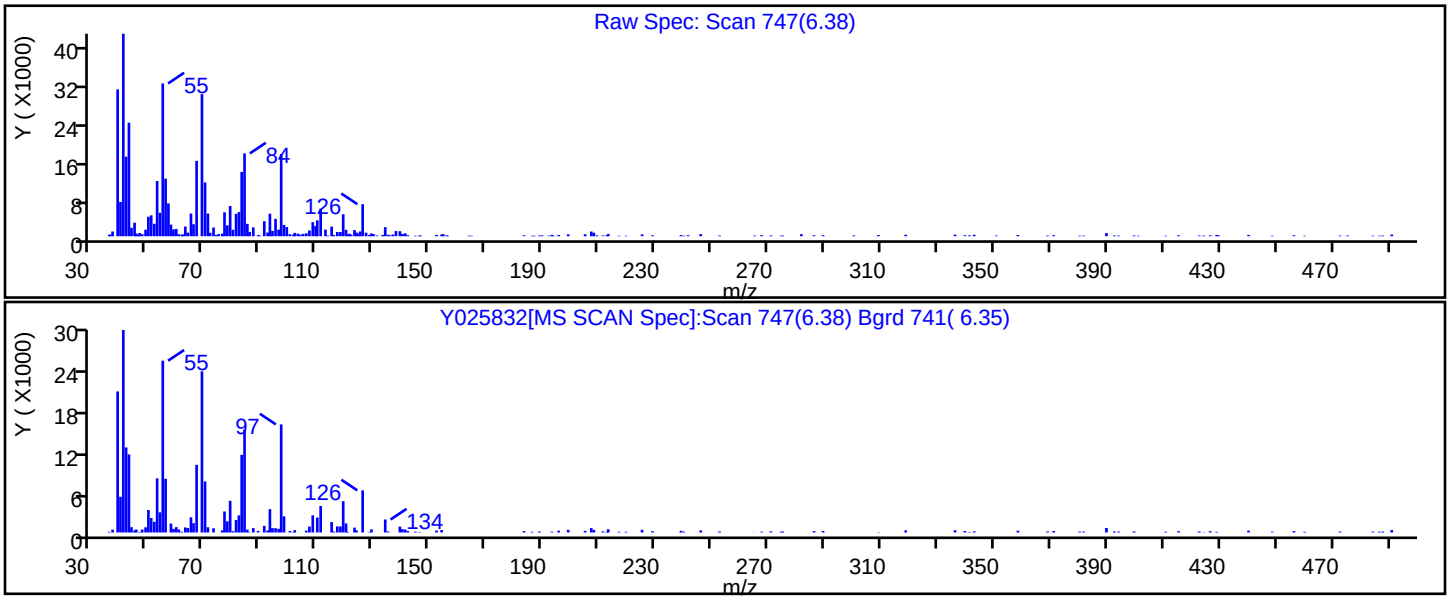


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



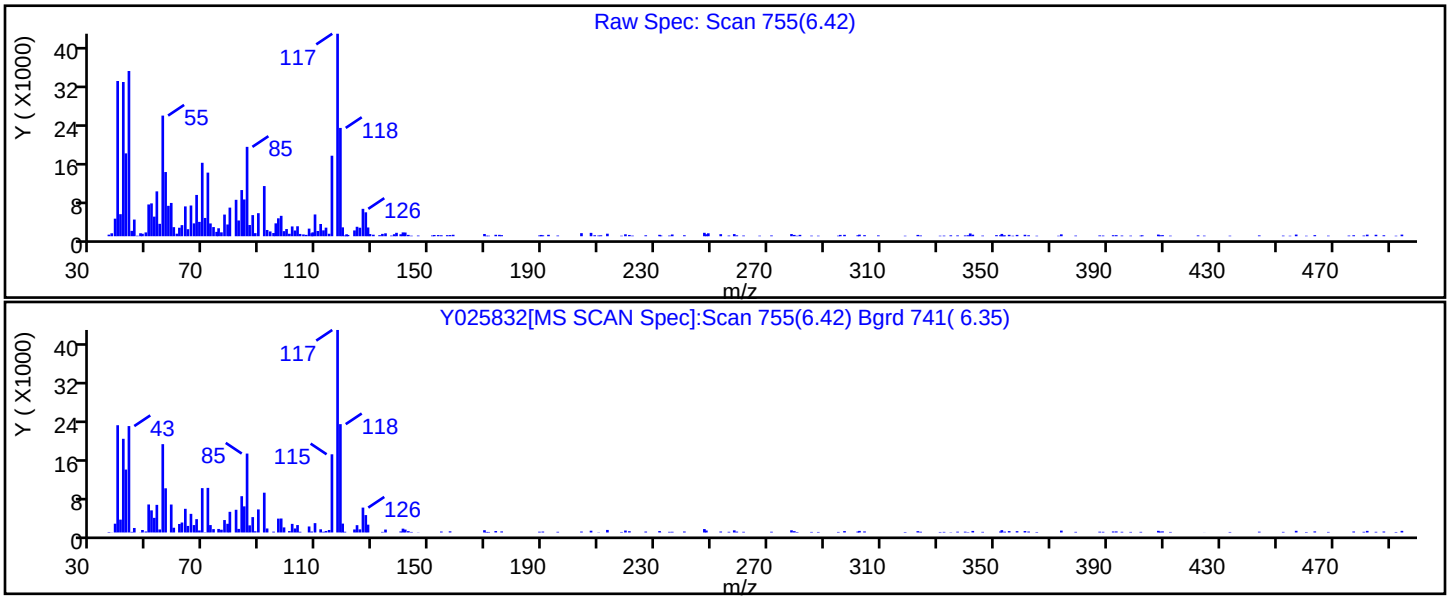
Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D

Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

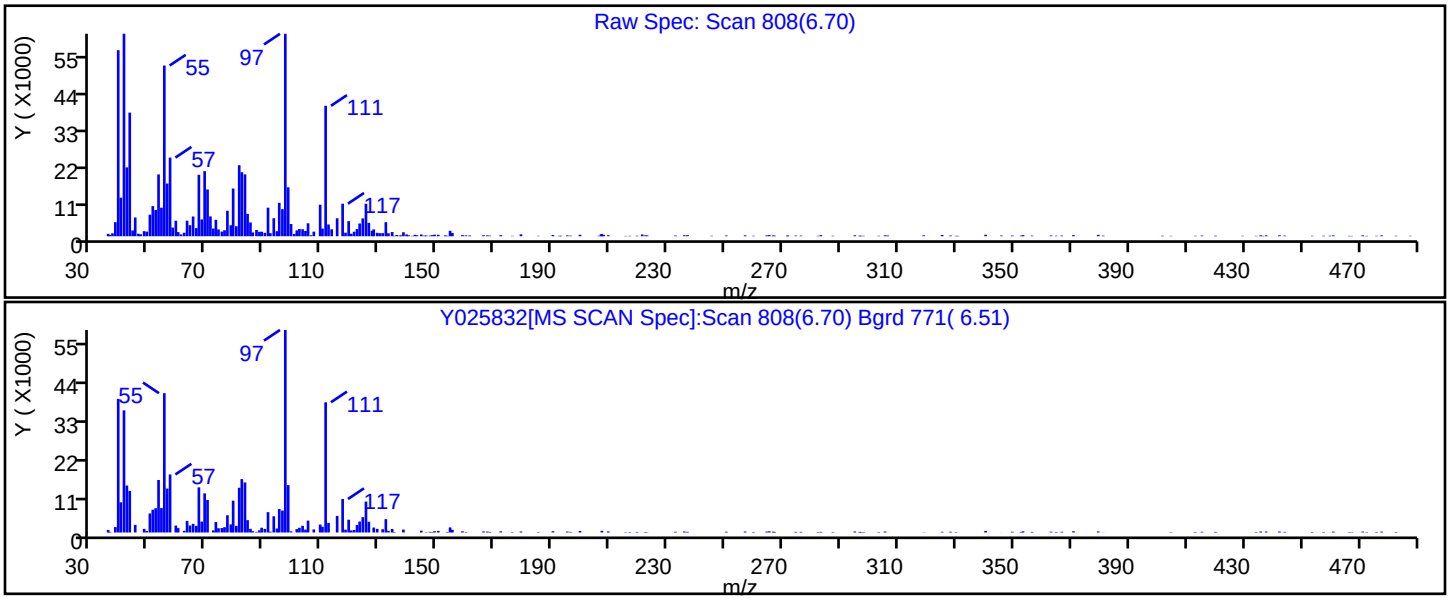


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

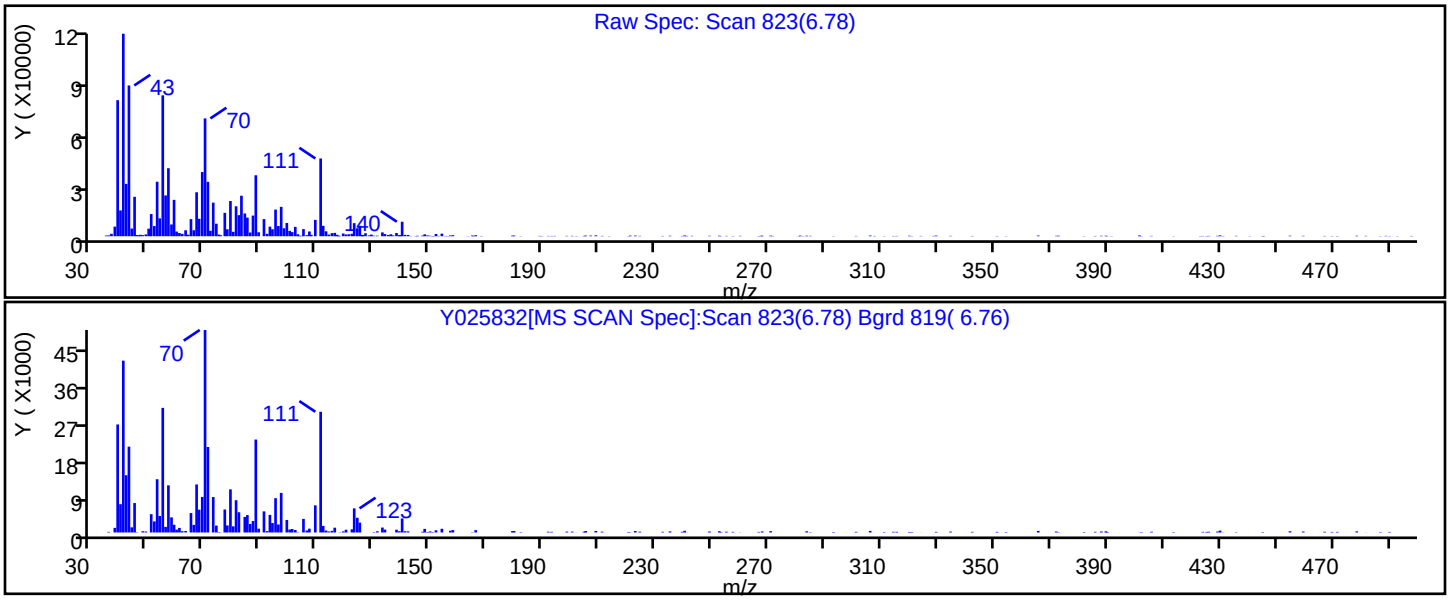


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

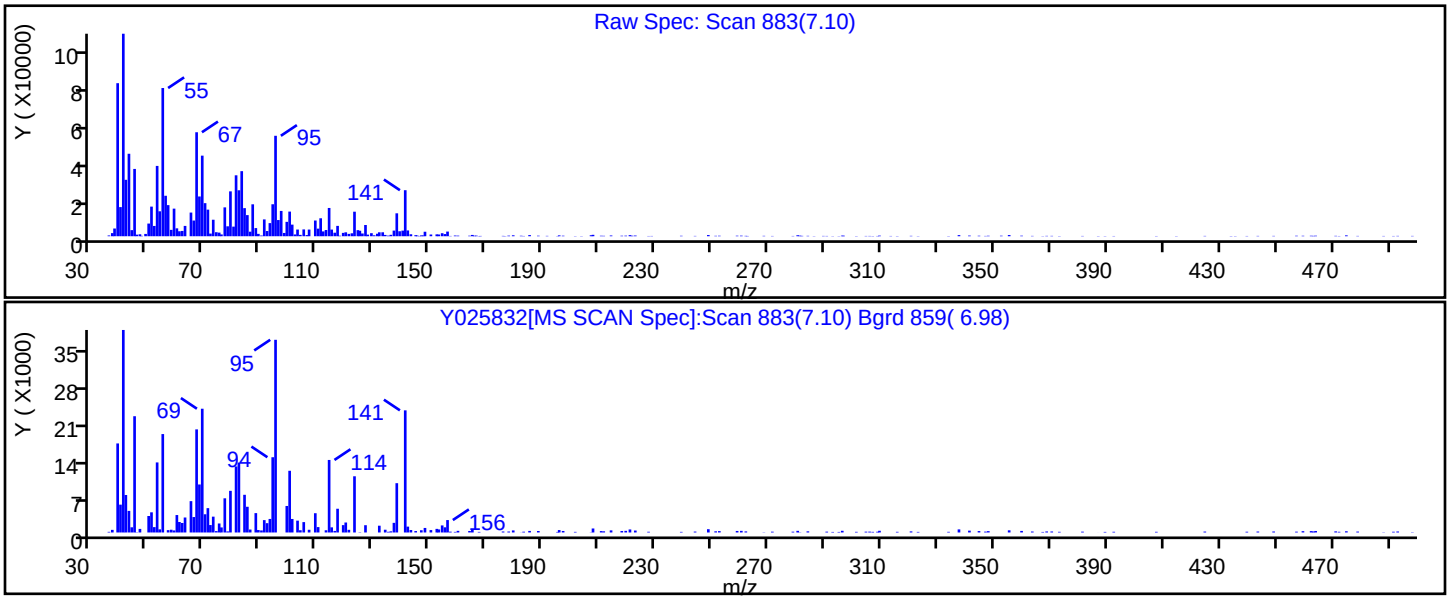


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

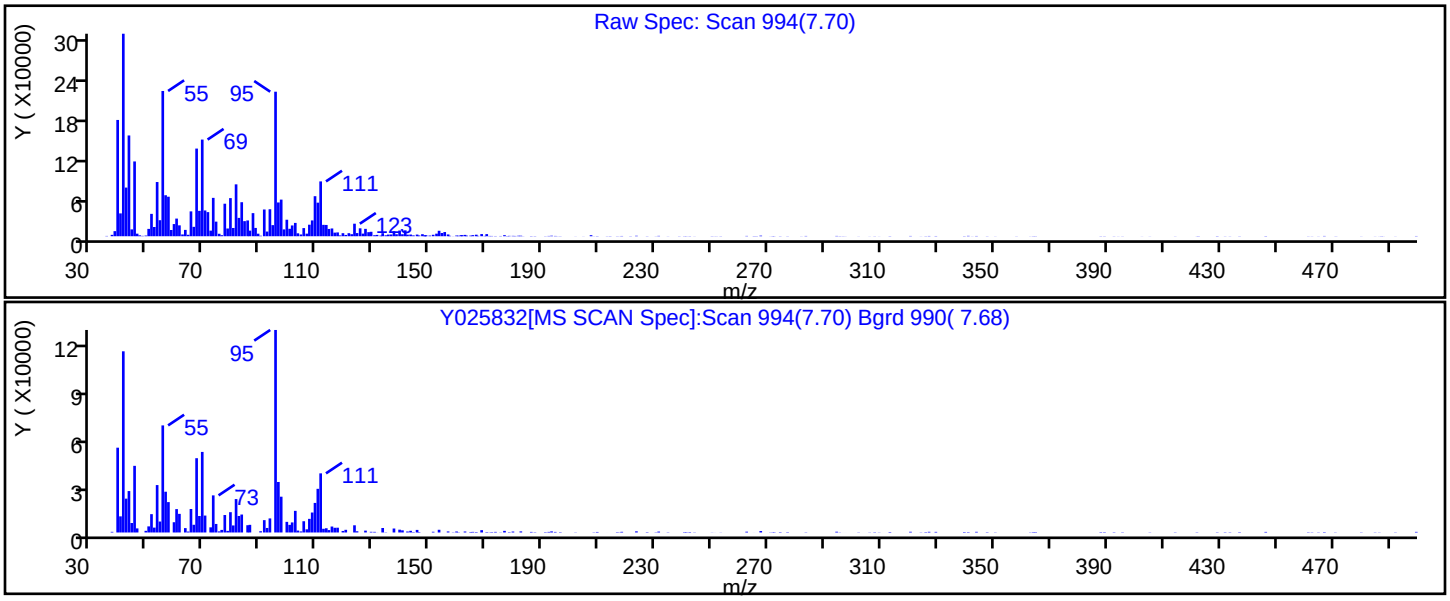


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

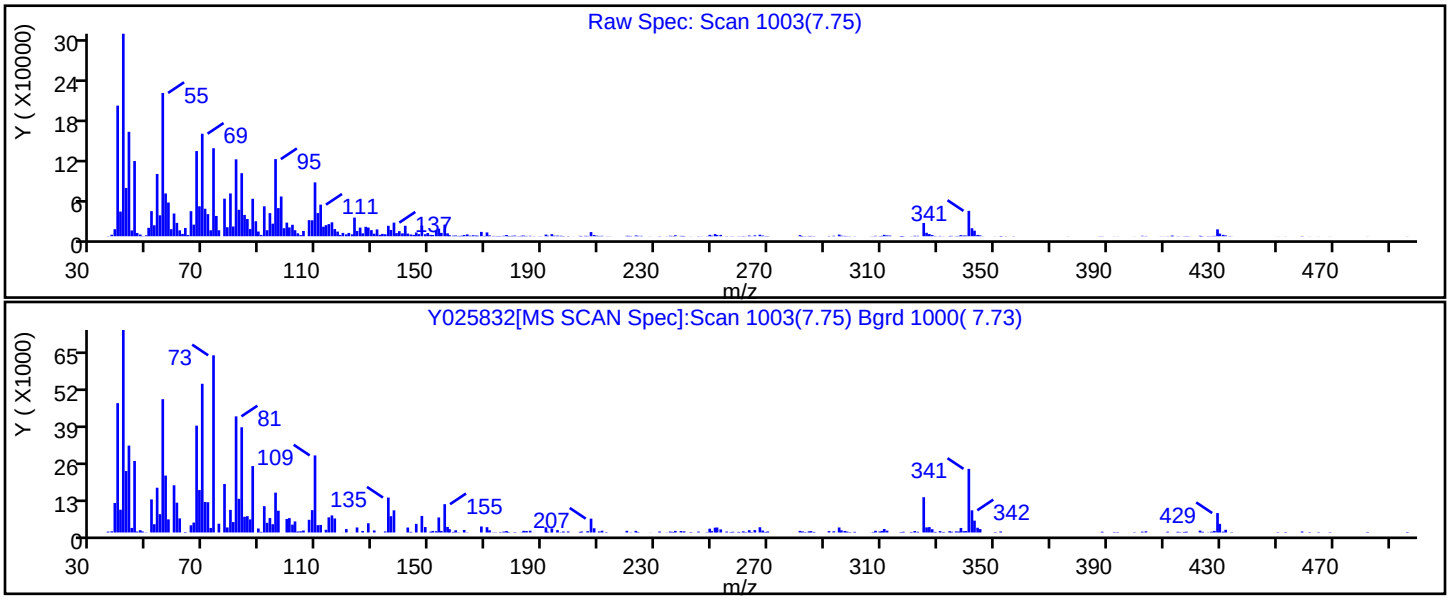


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

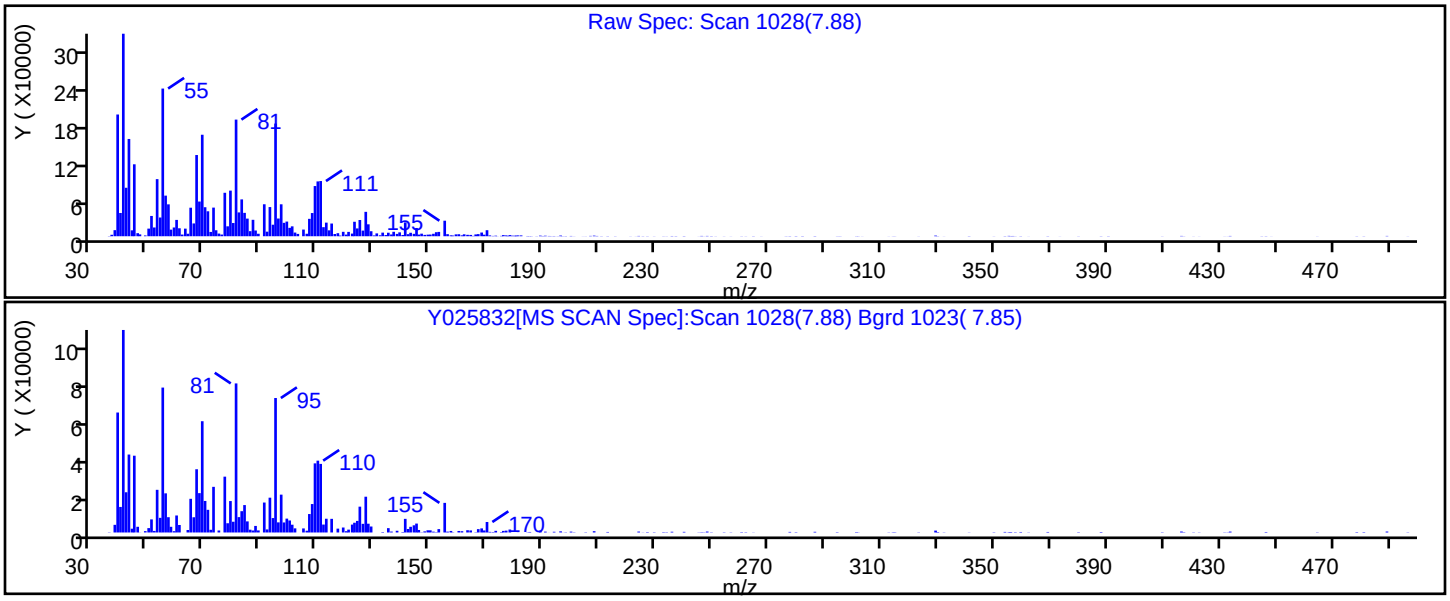


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

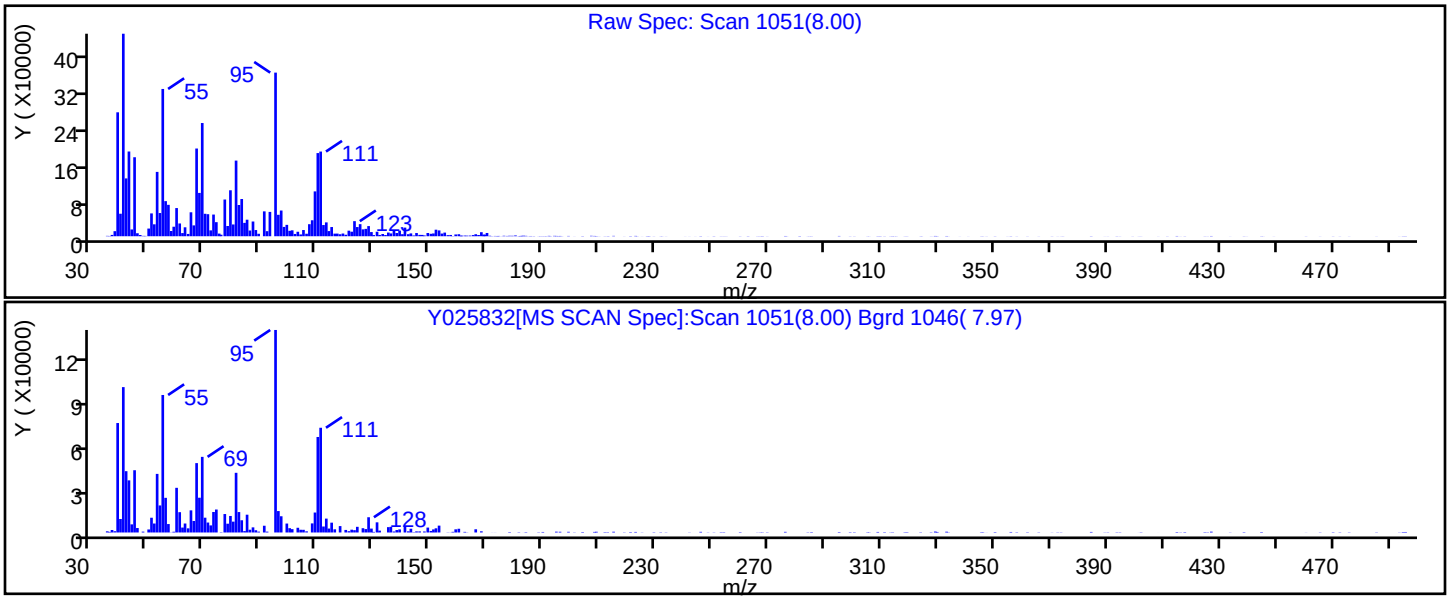


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

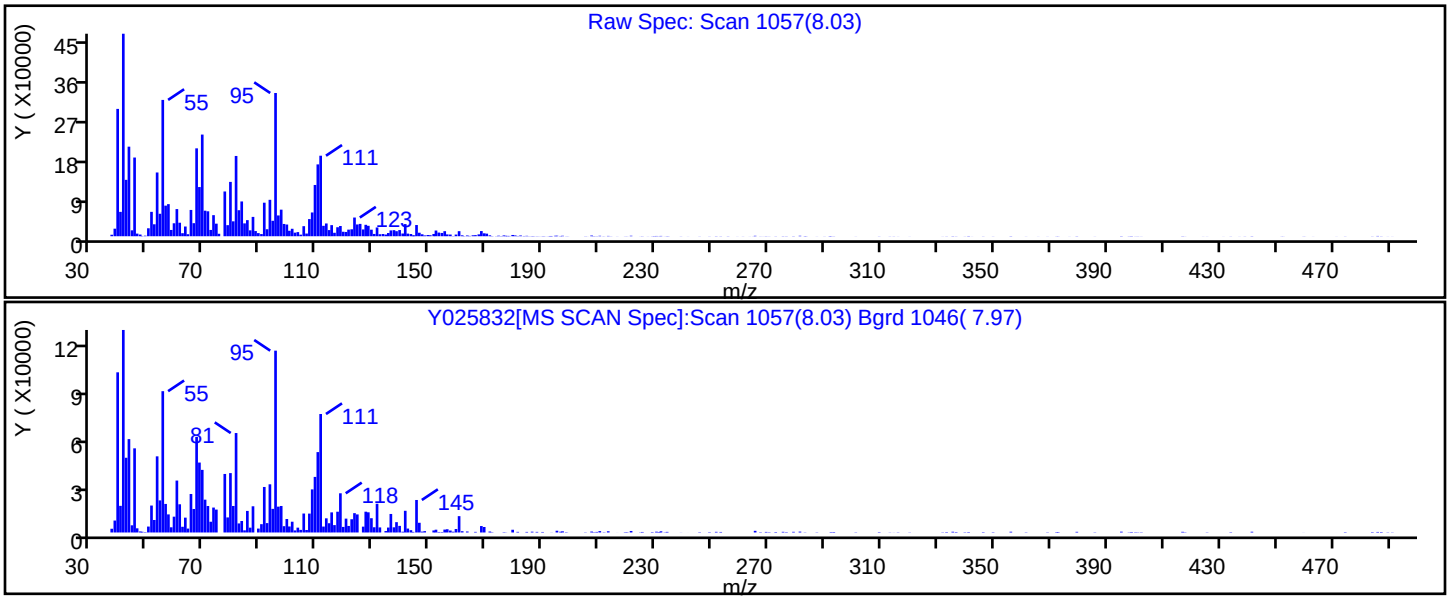


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

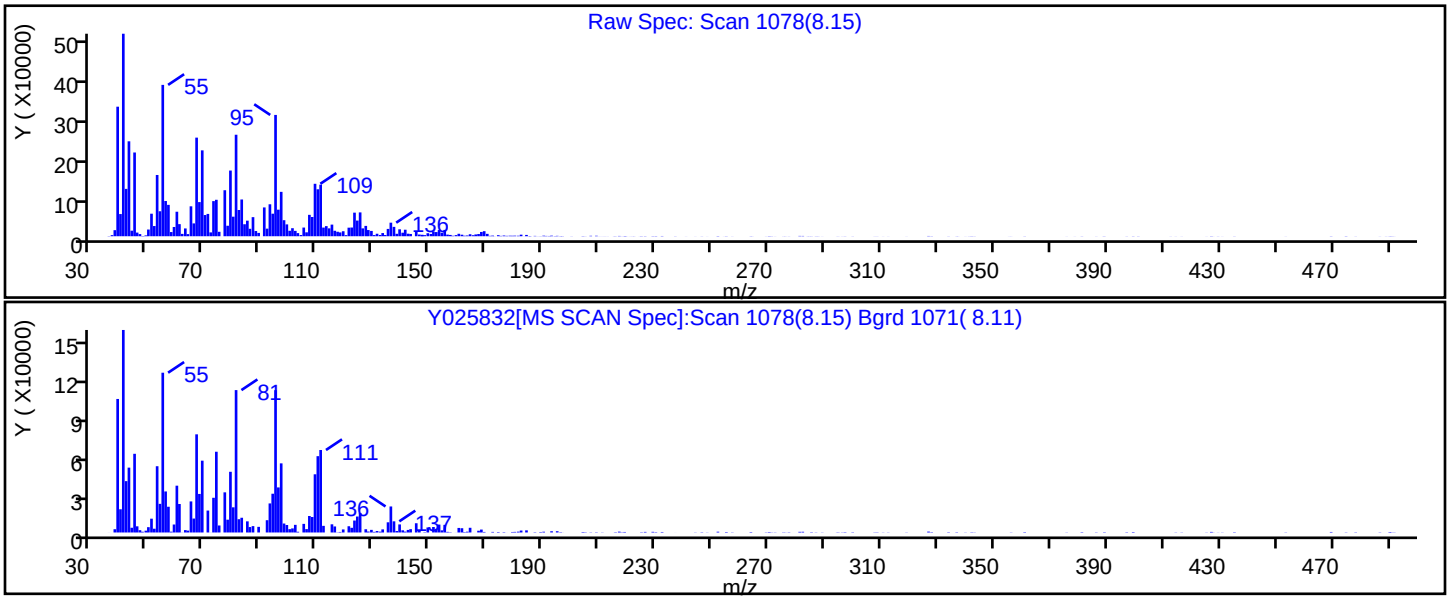
No Library Matches Found above the Threshold: 85



Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



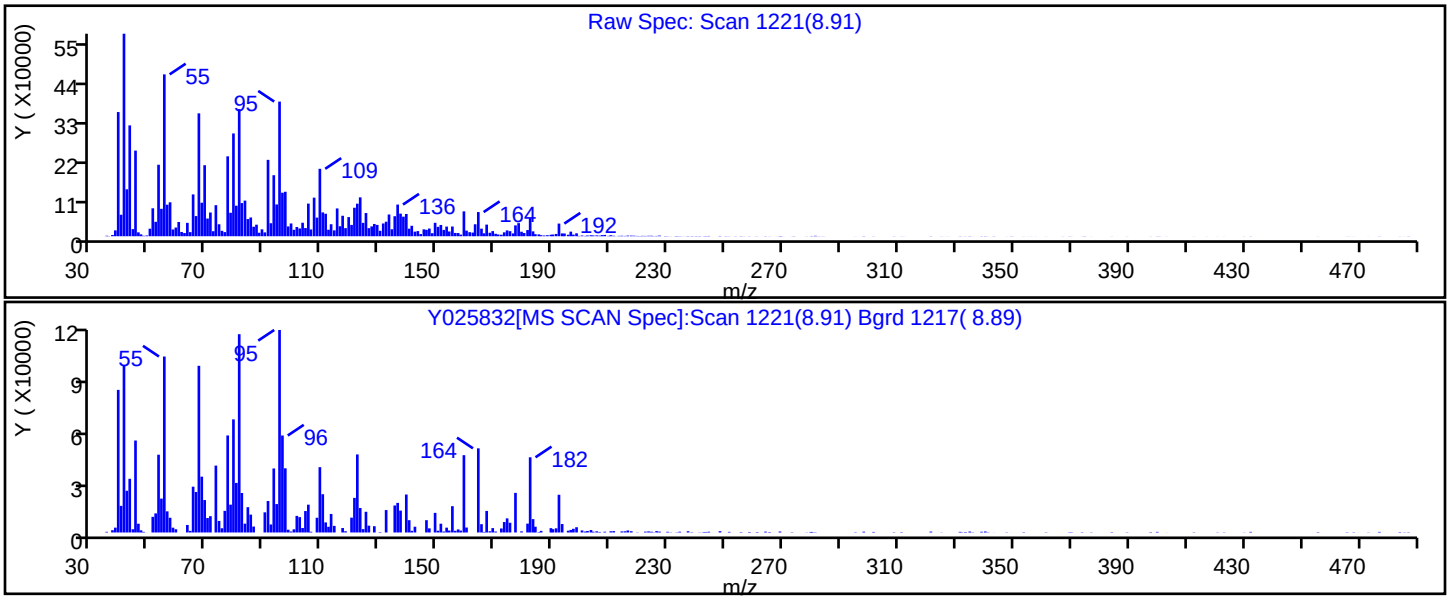
Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D

Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

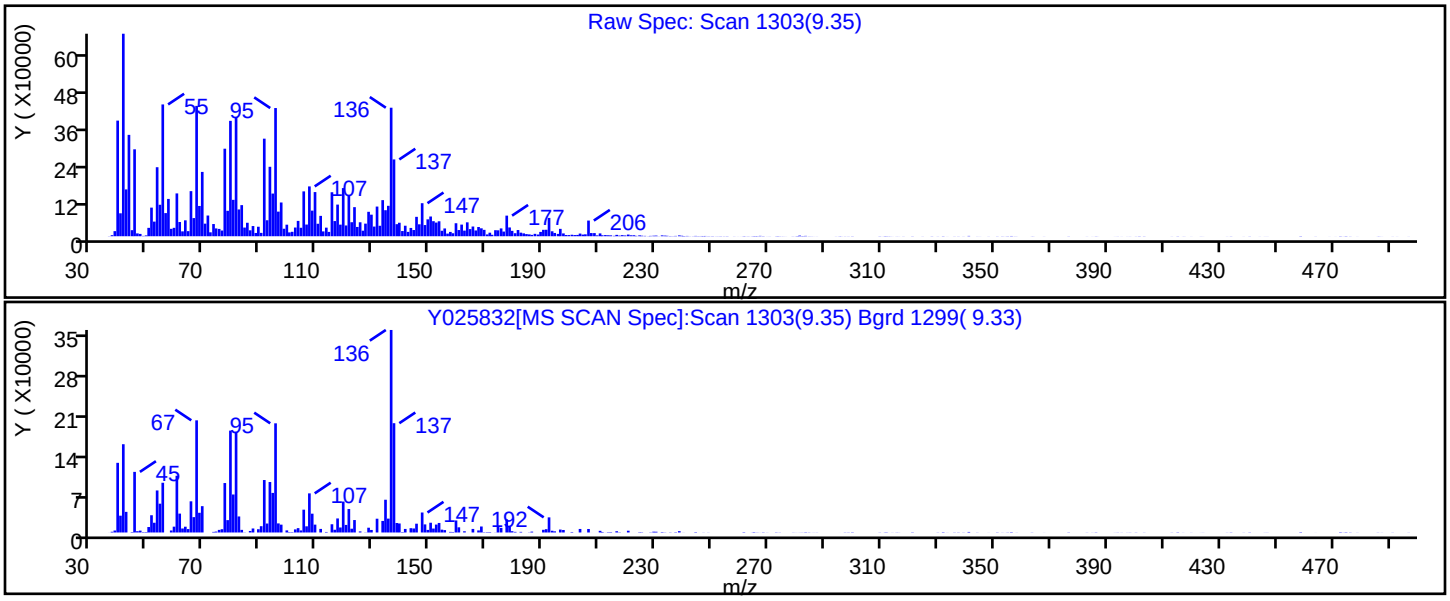


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85

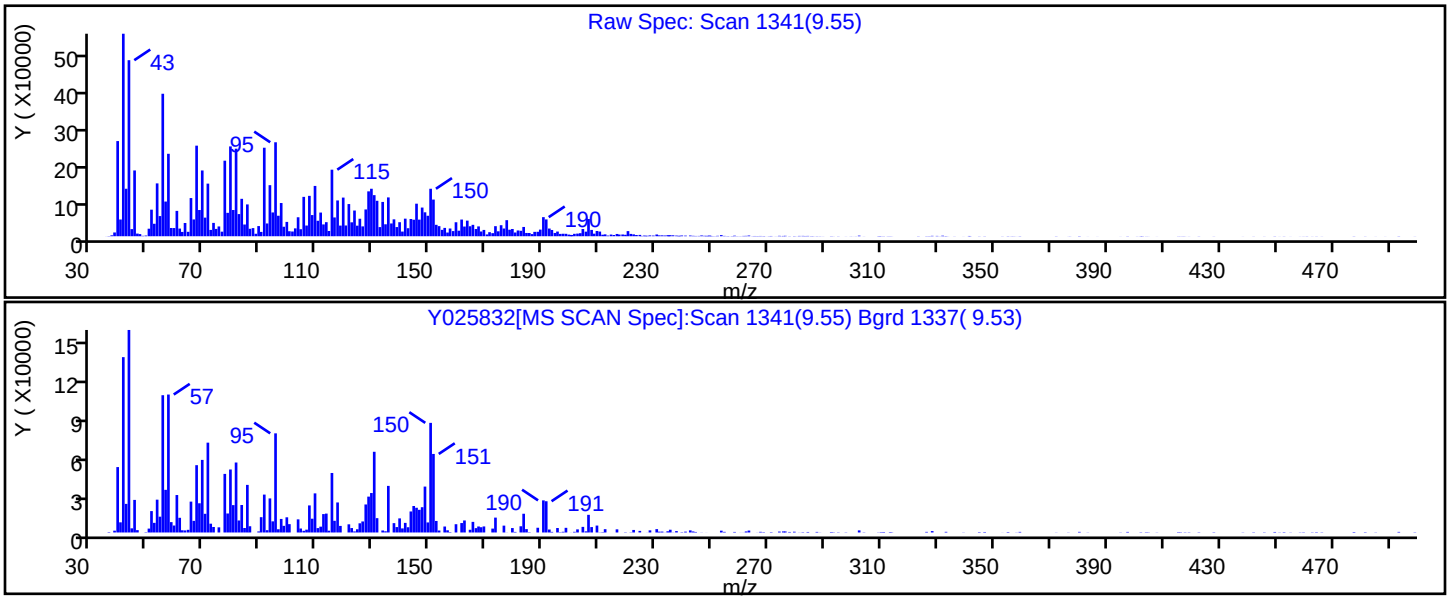


Report Date: 17-Jul-2019 09:33:44 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025832.D				
Injection Date:	16-Jul-2019 19:17:30	Instrument ID:	HP5973Y		
Lims ID:	480-156069-B-5-A	Lab Sample ID:	480-156069-5		
Client ID:	BLIND DUP				
Operator ID:	BS	ALS Bottle#:	16	Worklist Smp#:	16
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-476154/3	Y024942.D
Level 2	IC 480-476154/4	Y024943.D
Level 3	IC 480-476154/5	Y024944.D
Level 4	IC 480-476154/6	Y024945.D
Level 5	ICIS 480-476154/7	Y024946.D
Level 6	IC 480-476154/8	Y024947.D
Level 7	IC 480-476154/9	Y024948.D
Level 8	IC 480-476154/10	Y024949.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
1,4-Dioxane	0.5420	0.5940 0.5424	0.5464 0.5206	0.5870	0.5291	Ave		0.5516			0.0100	5.1		20.0			
N-Nitrosodimethylamine	0.7194	0.7118 0.7071	0.7207 0.6807	0.7476	0.7100	Ave		0.7139			0.0100	2.8		20.0			
Pyridine	0.8388	0.7246 0.8447	0.7837 0.8238	0.8404	0.7736	Ave		0.8042			0.0100	5.6		20.0			
Benzaldehyde	1.0905	1.1665 1.0407	1.2187 0.9232	1.2905	1.1062	Ave		1.1195			0.0100	10.8		20.0			
Phenol	1.6851	1.4963 1.6865	1.6596 1.6512	1.7540	1.6272	Ave		1.6514			0.8000	4.8		20.0			
Aniline	1.8047	1.7533 1.9260	1.7598 1.8406	1.7575	1.6142	Ave		1.7794			0.0100	5.4		20.0			
Bis(2-chloroethyl)ether	1.4934	1.3269 1.4527	1.3709 1.4202	1.6257	1.4856	Ave		1.4536			0.7000	6.7		20.0			
2-Chlorophenol	1.4432	1.3260 1.4628	1.4331 1.4240	1.4999	1.3651	Ave		1.4220			0.8000	4.1		20.0			
n-Decane	1.4444	1.4560 1.4599	1.4995 1.3843	1.5483	1.4398	Ave		1.4617			0.0100	3.5		20.0			
1,3-Dichlorobenzene	1.6187	1.6530 1.6425	1.6637 1.5776	1.7254	1.5809	Ave		1.6374			0.0100	3.1		20.0			
1,4-Dichlorobenzene	1.6553	1.5398 1.6668	1.6405 1.6156	1.7197	1.6107	Ave		1.6355			0.0100	3.4		20.0			
Benzyl alcohol	0.8330	0.5044 0.8480	0.6935 0.8499	0.8494	0.7697	Lin2	-0.086	0.8378			0.0100	5.2			0.9970		0.9900
1,2-Dichlorobenzene	1.5907	1.5456 1.6068	1.6081 1.5367	1.6712	1.5554	Ave		1.5878			0.0100	3.0		20.0			
2-Methylphenol	1.2564	0.9541 1.2317	1.2148 1.2308	1.3141	1.2003	Ave		1.2003			0.7000	9.6		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
bis (2-chloroisopropyl) ether	1.8412	1.8916 1.7898	1.9171 1.7139	2.0353	1.8152	Ave		1.8577			0.0100	5.5		20.0			
Indene	2.4254	2.5296 2.2913	2.5597 1.9366	2.6438	2.4047	Ave		2.3987			0.0100	9.8		20.0			
4-Methylphenol	1.2973	1.1325 1.3206	1.1851 1.2665	1.2997	1.2234	Ave		1.2465			0.6000	5.5		20.0			
N-Nitrosodi-n-propylamine	1.0072	0.9072 1.0136	0.9816 0.9863	1.0486	0.9565	Ave		0.9858			0.5000	4.6		20.0			
Acetophenone	1.9357	1.8113 1.9567	1.8957 1.8663	1.9995	1.8714	Ave		1.9052			0.0100	3.3		20.0			
Hexachloroethane	0.6989	0.6783 0.7166	0.7005 0.6892	0.7256	0.6810	Ave		0.6986			0.3000	2.5		20.0			
Nitrobenzene	0.4064	0.3631 0.4016	0.3957 0.3898	0.4181	0.3929	Ave		0.3954			0.2000	4.3		20.0			
Isophorone	0.7223	0.6395 0.7099	0.6996 0.6945	0.7254	0.6937	Ave		0.6978			0.4000	4.1		20.0			
2-Nitrophenol	0.1997	0.1693 0.1996	0.1826 0.1999	0.1916	0.1913	Ave		0.1906			0.1000	5.9		20.0			
2,4-Dimethylphenol	0.3885	0.3412 0.3896	0.3797 0.3825	0.3960	0.3737	Ave		0.3787			0.2000	4.8		20.0			
Bis(2-chloroethoxy)methane	0.4336	0.4069 0.4322	0.4219 0.4146	0.4470	0.4101	Ave		0.4238			0.3000	3.4		20.0			
Benzoic acid	0.2377	+++++ 0.2482	0.1137 0.2504	0.1878	0.2017	Lin2	-0.709	0.2544			0.0100	3.8			0.9980		0.9900
2,4-Dichlorophenol	0.3214	0.2435 0.3203	0.2898 0.3142	0.3282	0.3060	Ave		0.3033			0.2000	9.6		20.0			
1,2,4-Trichlorobenzene	0.3869	0.3689 0.3872	0.3978 0.3783	0.3981	0.3754	Ave		0.3847			0.0100	2.9		20.0			
Naphthalene	0.9628 1.0752	1.0077 1.0767	1.0824 1.0220	1.1373	1.0371	Ave		1.0501			0.7000	5.1		20.0			
4-Chloroaniline	0.3496	0.2831 0.3514	0.3464 0.3385	0.3271	0.3115	Ave		0.3297			0.0100	7.6		20.0			
2,6-Dichlorophenol	0.3161	0.2569 0.3165	0.2912 0.3115	0.3112	0.2965	Ave		0.3000			0.0100	7.1		20.0			
Hexachlorobutadiene	0.2503	0.2435 0.2483	0.2456 0.2483	0.2536	0.2400	Ave		0.2471			0.0100	1.8		20.0			
Caprolactam	0.1065	0.0735 0.1048	0.0956 0.1025	0.1055	0.0996	Lin2	-0.016	0.1051			0.0100	2.9			0.9990		0.9900
4-Chloro-3-methylphenol	0.3204	0.2369 0.3184	0.2986 0.3123	0.3183	0.3003	Lin2	-0.020	0.3180			0.2000	2.5			0.9990		0.9900

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2-Methylnaphthalene	0.6273 0.7431	0.7123 0.7346	0.7266 0.7219	0.7728	0.7096	Ave		0.7185			0.4000	5.8		20.0			
1-Methylnaphthalene	0.5776 0.6951	0.6449 0.6960	0.6857 0.6749	0.7264	0.6667	Ave		0.6709			0.0100	6.6		20.0			
Hexachlorocyclopentadiene	 0.4551	0.3636 0.4648	0.4076 0.4546	0.4522	0.4466	Ave		0.4349			0.0500	8.4		20.0			
1,2,4,5-Tetrachlorobenzene	 0.7041	0.6541 0.7107	0.6844 0.7053	0.7171	0.6901	Ave		0.6951			0.0100	3.1		20.0			
2,4,6-Trichlorophenol	 0.4188	0.3263 0.4224	0.3653 0.4322	0.3974	0.4114	Ave		0.3963			0.2000	9.5		20.0			
2,4,5-Trichlorophenol	 0.4247	0.3594 0.4565	0.3775 0.4589	0.4333	0.4094	Ave		0.4171			0.2000	9.1		20.0			
Biphenyl	 1.5530	1.4687 1.5500	1.5296 1.5109	1.5820	1.5153	Ave		1.5299			0.0100	2.4		20.0			
2-Chloronaphthalene	 1.2180	1.2005 1.2205	1.2113 1.1938	1.2610	1.1864	Ave		1.2131			0.8000	2.0		20.0			
2-Nitroaniline	 0.3478	0.2337 0.3484	0.2988 0.3461	0.3409	0.3334	Lin2	-0.029	0.3463			0.0100	2.9			0.9990		0.9900
Dimethyl phthalate	 1.3704	1.2697 1.2675	1.3145 1.3460	1.4067	1.3493	Ave		1.3320			0.0100	3.9		20.0			
1,3-Dinitrobenzene	 0.1282	0.0663 0.1293	0.1040 0.1137	0.1148	0.1172	Lin2	-0.014	0.1229			0.0100	5.2			0.9970		0.9900
2,6-Dinitrotoluene	 0.3357	0.2585 0.3401	0.3026 0.3280	0.3229	0.3179	Ave		0.3151			0.2000	8.8		20.0			
Acenaphthylene	1.4028 1.8263	1.7039 1.8193	1.7802 1.7391	1.8826	1.7881	Ave		1.7428			0.9000	8.5		20.0			
3-Nitroaniline	 0.2942	0.2096 0.2965	0.2545 0.2824	0.2247	0.2328	Ave		0.2564			0.0100	13.8		20.0			
2,4-Dinitrophenol	 0.1644	+++++ 0.1830	0.0832 0.1914	0.1126	0.1393	Lin2	-0.219	0.1826			0.0100	8.4			0.9910		0.9900
Acenaphthene	1.0761 1.2705	1.2690 1.2863	1.2451 1.2574	1.3164	1.2414	Ave		1.2453			0.9000	5.8		20.0			
4-Nitrophenol	 0.1976	0.0523 0.1974	0.1399 0.1944	0.1495	0.1666	Lin2	-0.070	0.1869			0.0100	8.3			0.9930		0.9900
2,4-Dinitrotoluene	 0.4480	0.2481 0.4525	0.3513 0.4044	0.4125	0.4230	Lin2	-0.048	0.4326			0.2000	5.5			0.9970		0.9900
Dibenzofuran	 1.7819	1.7203 1.7695	1.7276 1.7140	1.8453	1.7406	Ave		1.7570			0.8000	2.6		20.0			
2,3,4,6-Tetrachlorophenol	 0.3490	0.2346 0.3579	0.2896 0.3723	0.3269	0.3302	Lin2	-0.031	0.3493			0.0100	5.5			0.9970		0.9900

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Hexadecane	0.8290	0.7821 0.8321	0.7814 0.8073	0.8613	0.7955	Ave		0.8126			0.0100	3.6		20.0			
Diethyl phthalate	1.4471	1.3559 1.4334	1.3740 1.3889	1.4757	1.3882	Ave		1.4090			0.0100	3.1		20.0			
4-Chlorophenyl phenyl ether	0.7266	0.6903 0.7322	0.6966 0.7256	0.7605	0.7143	Ave		0.7209			0.4000	3.3		20.0			
Fluorene	1.1754 1.4463	1.3286 1.4341	1.3761 1.4040	1.4670	1.3980	Ave		1.3787			0.9000	6.7		20.0			
4-Nitroaniline	0.3316	0.2464 0.3442	0.3016 0.3308	0.2960	0.2832	Lin2	-0.020	0.3217			0.0100	6.6			0.9960		0.9900
4,6-Dinitro-2-methylphenol	0.1197	+++++ 0.1263	0.0775 0.1277	0.1019	0.1089	Lin2	-0.103	0.1277			0.0100	3.0			0.9990		0.9900
Diphenylamine	0.6356	0.5835 0.6401	0.6093 0.6255	0.6589	0.6084	Ave		0.6231			0.0100	4.0		20.0			
N-Nitrosodiphenylamine	0.5434	0.4989 0.5473	0.5210 0.5348	0.5634	0.5202	Ave		0.5327			0.0100	4.0		20.0			
1,2-Diphenylhydrazine	0.7762	0.7041 0.7705	0.7598 0.7272	0.8114	0.7498	Ave		0.7570			0.0100	4.6		20.0			
trans-Azobenzene	0.7762	0.7041 0.7705	0.7598 0.7272	0.8142	0.7493	Ave		0.7573			0.0100	4.7		20.0			
4-Bromophenyl phenyl ether	0.2440	0.2328 0.2478	0.2327 0.2438	0.2460	0.2273	Ave		0.2392			0.1000	3.4		20.0			
Hexachlorobenzene	0.2728	0.2674 0.2825	0.2632 0.2763	0.2790	0.2628	Ave		0.2720			0.1000	2.9		20.0			
Atrazine	0.4314	0.3778 0.3951	0.3946 0.3521	0.4297	0.4208	Ave		0.4002			0.0100	7.3		20.0			
n-Octadecane	0.4543	0.4258 0.4599	0.4479 0.4388	0.4780	0.4349	Ave		0.4485			0.0100	3.9		20.0			
Pentachlorophenol	0.1272	+++++ 0.1393	0.0753 0.1395	0.0968	0.1083	Lin2	-0.134	0.1370			0.0500	6.6			0.9940		0.9900
Phenanthrene	0.9701 1.1358	1.1143 1.1329	1.1264 1.0917	1.1766	1.1130	Ave		1.1076			0.7000	5.5		20.0			
Anthracene	1.0292 1.1618	1.0832 1.1475	1.1193 1.0971	1.1888	1.0986	Ave		1.1157			0.7000	4.5		20.0			
Carbazole	0.8334	0.9080 0.9337	0.9532 0.9182	0.9381	0.8173	Ave		0.9003			0.0100	5.9		20.0			
Di-n-butyl phthalate	1.2858	1.2106 1.2536	1.2755 1.1988	1.3097	1.2668	Ave		1.2573			0.0100	3.2		20.0			
Fluoranthene	1.0643 1.2702	1.1815 1.2840	1.2808 1.2084	1.3241	1.2519	Ave		1.2331			0.6000	6.6		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzidine	0.1930	0.3890 0.2942	0.3036 0.3445	0.2521	0.1474	Ave		0.2748			0.0100	30.6	*	20.0			
Pyrene	1.1025 1.3804	1.2635 1.3575	1.3337 1.2873	1.3985	1.3546	Ave		1.3097			0.6000	7.3		20.0			
Butyl benzyl phthalate	0.6144	0.4841 0.6117	0.5514 0.5807	0.5935	0.5986	Ave		0.5763			0.0100	8.0		20.0			
Bis(2-ethylhexyl) phthalate	0.8742	0.6929 0.8662	0.7696 0.8284	0.8525	0.8453	Ave		0.8184			0.0100	8.0		20.0			
3,3'-Dichlorobenzidine	0.3411	0.3872 0.3964	0.4009 0.4023	0.3844	0.3210	Ave		0.3762			0.0100	8.5		20.0			
Benzo(a)anthracene	1.1200 1.3331	1.2311 1.3151	1.2853 1.2728	1.3598	1.2869	Ave		1.2755			0.8000	5.8		20.0			
Chrysene	0.9332 1.2008	1.1430 1.1737	1.1690 1.1292	1.2252	1.1680	Ave		1.1428			0.7000	7.9		20.0			
Di-n-octyl phthalate	1.4598	0.9989 1.4561	1.2316 1.3978	1.4068	1.4030	Lin2	-0.113	1.4334			0.0100	3.5			0.9990		0.9900
Benzo(b)fluoranthene	0.9294 1.2656	1.0221 1.2852	1.1403 1.2838	1.2839	1.2134	Lin2	-0.045	1.2570			0.7000	4.0			0.9980		0.9900
Benzo(k)fluoranthene	0.9538 1.1995	1.2034 1.2701	1.1789 1.2140	1.2642	1.1637	Lin2	-0.030	1.2328			0.7000	4.6			0.9980		0.9900
Benzo(a)pyrene	0.8374 1.1986	0.9734 1.2293	1.1163 1.2021	1.1971	1.1550	Lin2	-0.047	1.1967			0.7000	2.5			0.9990		0.9900
Indeno(1,2,3-cd)pyrene	1.0529 1.4334	1.1939 1.4858	1.3492 1.4606	1.4258	1.3610	Lin2	-0.051	1.4339			0.5000	3.0			0.9990		0.9900
Dibenz(a,h)anthracene	0.8464 1.2182	1.0628 1.2539	1.0894 1.2416	1.1891	1.1440	Lin2	-0.045	1.2087			0.4000	3.9			0.9980		0.9900
Benzo(g,h,i)perylene	0.8771 1.1867	0.9664 1.2135	1.1153 1.2151	1.1991	1.1234	Lin2	-0.042	1.1858			0.5000	3.5			0.9990		0.9900
2-Fluorophenol	1.3705	1.2301 1.3895	1.3325 1.3468	1.3259	1.3351	Ave		1.3329			0.0100	3.8		20.0			
Phenol-d5	1.6662	1.5631 1.6991	1.6229 1.6335	1.7273	1.6183	Ave		1.6472			0.0100	3.3		20.0			
Nitrobenzene-d5	0.4639	0.4203 0.4577	0.4383 0.4480	0.4674	0.4428	Ave		0.4483			0.0100	3.7		20.0			
2-Fluorobiphenyl	1.4806	1.4114 1.4791	1.4545 1.4614	1.5072	1.4410	Ave		1.4622			0.0100	2.1		20.0			
2,4,6-Tribromophenol	0.1190	0.0882 0.1231	0.1006 0.1230	0.1130	0.1119	Lin2	-0.008	0.1183			0.0100	5.0			0.9970		0.9900
p-Terphenyl-d14	0.9637	0.8438 0.9811	0.8918 0.9407	0.9614	0.9321	Ave		0.9307			0.0100	5.1		20.0			

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

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 480-476154/3	Y024942.D
Level 2	IC 480-476154/4	Y024943.D
Level 3	IC 480-476154/5	Y024944.D
Level 4	IC 480-476154/6	Y024945.D
Level 5	ICIS 480-476154/7	Y024946.D
Level 6	IC 480-476154/8	Y024947.D
Level 7	IC 480-476154/9	Y024948.D
Level 8	IC 480-476154/10	Y024949.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,4-Dioxane	DCBd 4	Ave	339936	11613 515247	42553 696971	88961	178558	8.00	0.250 12.0	1.00 16.0	2.00	4.00
N-Nitrosodimethylamine	DCBd 4	Ave	451247	13916 671787	56126 911380	113312	239624	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Pyridine	DCBd 4	Ave	1052252	28333 1605009	122063 2205878	254739	522143	16.0	0.500 24.0	2.00 32.0	4.00	8.00
Benzaldehyde	DCBd 4	Ave	1367974	45613 1977310	189812 2471863	391162	746665	16.0	0.500 24.0	2.00 32.0	4.00	8.00
Phenol	DCBd 4	Ave	1056949	29255 1602217	129237 2210655	265830	549154	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Aniline	DCBd 4	Ave	1131939	34278 1829745	137039 2464239	266374	544747	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Bis(2-chloroethyl)ether	DCBd 4	Ave	936729	25943 1380082	106761 1901411	246388	501348	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Chlorophenol	DCBd 4	Ave	905249	25924 1389663	111599 1906501	227322	460675	8.00	0.250 12.0	1.00 16.0	2.00	4.00
n-Decane	DCBd 4	Ave	905948	28466 1386932	116769 1853255	234657	485893	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,3-Dichlorobenzene	DCBd 4	Ave	1015311	32317 1560407	129561 2112107	261499	533503	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,4-Dichlorobenzene	DCBd 4	Ave	1038244	30104 1583489	127755 2163029	260631	543559	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzyl alcohol	DCBd 4	Lin2	522471	9862 805568	54002 1137866	128741	259772	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,2-Dichlorobenzene	DCBd 4	Ave	997757	30219 1526453	125232 2057407	253292	524900	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Methylphenol	DCBd 4	Ave	788036	18653 1170099	94604 1647838	199169	405087	8.00	0.250 12.0	1.00 16.0	2.00	4.00
bis (2-chloroisopropyl) ether	DCBd 4	Ave	1154858	36983 1700286	149295 2294602	308469	612580	8.00	0.250 12.0	1.00 16.0	2.00	4.00

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Indene	DCBd 4	Ave	7606314	247282 10883796	996658 12963455	2003441	4057647	40.0	1.25 60.0	5.00 80.0	10.0	20.0
4-Methylphenol	DCBd 4	Ave	813687	22142 1254607	92289 1695562	196986	412878	8.00	0.250 12.0	1.00 16.0	2.00	4.00
N-Nitrosodi-n-propylamine	DCBd 4	Ave	631725	17736 962948	76438 1320481	158930	322787	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Acetophenone	DCBd 4	Ave	1214168	35412 1858858	147623 2498573	303041	631546	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Hexachloroethane	DCBd 4	Ave	438372	13262 680743	54549 922642	109968	229817	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Nitrobenzene	NPT	Ave	948932	26883 1444442	114936 1950824	238502	492778	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Isophorone	NPT	Ave	1686683	47343 2553434	203206 3475936	413842	870062	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Nitrophenol	NPT	Ave	466434	12532 717829	53044 1000420	109321	239896	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,4-Dimethylphenol	NPT	Ave	907200	25258 1401397	110296 1914048	225900	468796	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Bis(2-chloroethoxy)methane	NPT	Ave	1012602	30125 1554454	122553 2075150	255005	514332	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzoic acid	NPT	Lin2	2775241	+++++ 4463835	165091 6265509	535646	1264676	40.0	+++++ 60.0	5.00 80.0	10.0	20.0
2,4-Dichlorophenol	NPT	Ave	750609	18024 1151994	84165 1572398	187254	383774	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,2,4-Trichlorobenzene	NPT	Ave	903527	27314 1392707	115542 1893477	227103	470838	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Naphthalene	NPT	Ave	35872 2510717	74604 3872625	314392 5114886	648785	1300822	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
4-Chloroaniline	NPT	Ave	816481	20958 1263760	100615 1694030	186605	390688	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,6-Dichlorophenol	NPT	Ave	738137	19021 1138183	84589 1559141	177523	371896	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Hexachlorobutadiene	NPT	Ave	584536	18028 893109	71350 1242706	144677	301017	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Caprolactam	NPT	Lin2	497565	10881 754142	55531 1025760	120392	249764	16.0	0.500 24.0	2.00 32.0	4.00	8.00
4-Chloro-3-methylphenol	NPT	Lin2	748266	17541 1145036	86738 1562996	181610	376665	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Methylnaphthalene	NPT	Ave	23370 1735363	52737 2642178	211052 3612613	440853	890049	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
1-Methylnaphthalene	NPT	Ave	21521 1623304	47742 2503248	199177 3377390	414407	836254	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Hexachlorocyclopentadiene	ANT	Ave	626017	15251 969881	68581 1312651	150738	318029	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,2,4,5-Tetrachlorobenzene	ANT	Ave	968486	27432 1483220	115157 2036611	239064	491425	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,4,6-Trichlorophenol	ANT	Ave	576076	13686 881445	61468 1248152	132473	292950	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,4,5-Trichlorophenol	ANT	Ave	584157	15074 952633	63518 1325215	144442	291524	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Biphenyl	ANT	Ave	2136183	61597 3234745	257383 4362927	527373	1079120	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Chloronaphthalene	ANT	Ave	1675386	50351 2547047	203809 3447164	420364	844849	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Nitroaniline	ANT	Lin2	478460	9800 727158	50284 999457	113629	237392	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Dimethyl phthalate	ANT	Ave	1885097	53250 2645094	221181 3886725	468944	960880	8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,3-Dinitrobenzene	NPT	Lin2	299469	4909 465207	30210 569140	65479	147058	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,6-Dinitrotoluene	ANT	Ave	461770	10840 709675	50917 947271	107648	226411	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Acenaphthylene	ANT	Ave	29604 2512205	71460 3796655	299541 5021928	627594	1273377	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
3-Nitroaniline	ANT	Ave	404690	8792 618799	42824 815503	74892	165812	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,4-Dinitrophenol	ANT	Lin2	452328	+++++ 763598	27996 1105083	75078	198466	16.0	+++++ 24.0	2.00 32.0	4.00	8.00
Acenaphthene	ANT	Ave	22710 1747566	53222 2684352	209500 3630799	438848	884018	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
4-Nitrophenol	ANT	Lin2	543691	4386 823736	47085 1122503	99659	237275	16.0	0.500 24.0	2.00 32.0	4.00	8.00
2,4-Dinitrotoluene	ANT	Lin2	616227	10407 944377	59105 1167685	137498	301270	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Dibenzofuran	ANT	Ave	2451081	72149 3692682	290696 4949380	615136	1239541	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,3,4,6-Tetrachlorophenol	ANT	Lin2	480006	9838 746806	48728 1075065	108960	235152	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Hexadecane	ANT	Ave	1140303	32802 1736421	131474 2331164	287110	566475	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Diethyl phthalate	ANT	Ave	1990503	56866 2991328	231190 4010512	491926	988604	8.00	0.250 12.0	1.00 16.0	2.00	4.00
4-Chlorophenyl phenyl ether	ANT	Ave	999514	28953 1527943	117220 2095295	253520	508684	8.00	0.250 12.0	1.00 16.0	2.00	4.00

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Fluorene	ANT	Ave	24805 1989441	55721 2992836	231549 4054207	489050	995560	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
4-Nitroaniline	ANT	Lin2	 456065	10336 718239	50755 955132	98690	201694	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
4,6-Dinitro-2-methylphenol	PHN	Lin2	 612619	+++++ 968835	46553 1366650	123723	290791	 16.0	+++++ 24.0	2.00 32.0	4.00	8.00
Diphenylamine	PHN	Ave	 1390873	37359 2098910	156457 2860758	342072	694306	 6.84	0.214 10.3	0.855 13.7	1.71	3.42
N-Nitrosodiphenylamine	PHN	Ave	 1390873	37359 2098910	156457 2860758	342072	694306	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
1,2-Diphenylhydrazine	PHN	Ave	 1986752	52725 2954844	228194 3890048	492654	1000755	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
trans-Azobenzene	PHN	Ave	 1986752	52725 2954844	228194 3890048	494376	1000167	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
4-Bromophenyl phenyl ether	PHN	Ave	 624413	17430 950299	69872 1304016	149371	303440	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Hexachlorobenzene	PHN	Ave	 698338	20024 1083308	79042 1477938	169408	350730	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Atrazine	ANT	Ave	 1186832	31694 1648952	132799 2033169	286462	599287	 16.0	0.500 24.0	2.00 32.0	4.00	8.00
n-Octadecane	PHN	Ave	 1162724	31881 1763887	134527 2347129	290226	580491	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Pentachlorophenol	PHN	Lin2	 651365	+++++ 1068445	45256 1492385	117501	289212	 16.0	+++++ 24.0	2.00 32.0	4.00	8.00
Phenanthrene	PHN	Ave	36555 2907076	83436 4344964	338289 5839788	714397	1485605	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Anthracene	PHN	Ave	38783 2973601	81109 4400787	336140 5868353	721827	1466385	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Carbazole	PHN	Ave	 2133073	67987 3581021	286254 4911540	569577	1090839	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Di-n-butyl phthalate	PHN	Ave	 3290934	90648 4807588	383061 6412447	795251	1690923	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Fluoranthene	PHN	Ave	40106 3251000	88469 4924174	384668 6463669	803946	1670920	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzidine	CRY	Ave	 941184	56286 2142668	179544 3532962	292512	370903	 16.0	0.500 24.0	2.00 32.0	4.00	8.00
Pyrene	CRY	Ave	40906 3365070	91412 4943171	394361 6600118	811316	1704892	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Butyl benzyl phthalate	CRY	Ave	 1497685	35025 2227504	163034 2977332	344307	753375	 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Bis(2-ethylhexyl) phthalate	CRY	Ave	 2131131	50130 3154143	227564 4247292	494586	1063902	 8.00	0.250 12.0	1.00 16.0	2.00	4.00

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

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1 Analy Batch No.: 476154

SDG No.:

Instrument ID: HP5973Y GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/04/2019 16:43 Calibration End Date: 06/04/2019 19:58 Calibration ID: 37071

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/UL)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
3,3'-Dichlorobenzidine	CRY	Ave	1662948	56022 2886827	237102 4125577	445992	808033	16.0	0.500 24.0	2.00 32.0	4.00	8.00
Benzo(a)anthracene	CRY	Ave	41553 3249988	89068 4788936	380075 6526016	788838	1619687	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Chrysene	CRY	Ave	34625 2927289	82691 4274000	345667 5789525	710798	1469950	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Di-n-octyl phthalate	CRY	Lin2	3558826	72268 5302147	364182 7167133	816110	1765731	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzo(b)fluoranthene	PRY	Lin2	35420 3154980	77327 4671347	344458 6559152	770074	1590177	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzo(k)fluoranthene	PRY	Lin2	36350 2990118	91042 4616363	356119 6202152	758280	1525070	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzo(a)pyrene	PRY	Lin2	31915 2987847	73641 4468268	337215 6141711	718046	1513697	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Indeno(1,2,3-cd)pyrene	PRY	Lin2	40127 3573288	90326 5400581	407569 7462122	855179	1783585	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Dibenz(a,h)anthracene	PRY	Lin2	32255 3036839	80405 4557588	329088 6343449	713238	1499302	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
Benzo(g,h,i)perylene	PRY	Lin2	33425 2958304	73112 4410642	336885 6208086	719213	1472281	0.125 8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Fluorophenol	DCBd 4	Ave	859620	24049 1320069	103768 1803113	200950	450561	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Phenol-d5	DCBd 4	Ave	1045113	30561 1614184	126381 2186990	261788	546142	8.00	0.250 12.0	1.00 16.0	2.00	4.00
Nitrobenzene-d5	NPT	Ave	1083363	31119 1646311	127309 2241985	266622	555410	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2-Fluorobiphenyl	ANT	Ave	2036679	59193 3086631	244735 4220042	502432	1026203	8.00	0.250 12.0	1.00 16.0	2.00	4.00
2,4,6-Tribromophenol	PHN	Lin2	304615	6606 472218	30216 657873	68618	149416	8.00	0.250 12.0	1.00 16.0	2.00	4.00
p-Terphenyl-d14	CRY	Ave	2349394	61045 3572497	263712 4823205	557756	1173156	8.00	0.250 12.0	1.00 16.0	2.00	4.00

Curve Type Legend:

Ave = Average ISTD
Lin2 = Linear 1/conc^2 ISTD

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024942.D
Lims ID: IC L1 .125
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 04-Jun-2019 16:43:30 ALS Bottle#: 4 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-003
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:08 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:07:08

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.453	6.454	-0.001	97	318371	4.00	4.00	
* 2 Naphthalene-d8	136	7.548	7.544	0.004	100	1192240	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.034	-0.001	94	675320	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.289	0.005	97	1205867	4.00	4.00	
* 5 Chrysene-d12	240	12.975	12.976	-0.001	99	1187281	4.00	4.00	
* 6 Perylene-d12	264	15.170	15.171	-0.001	98	1219517	4.00	4.00	
74 Naphthalene	128	7.564	7.565	-0.001	95	35872	0.1250	0.1146	
87 2-Methylnaphthalene	142	8.147	8.147	-0.001	93	23370	0.1250	0.1091	
89 1-Methylnaphthalene	142	8.232	8.232	0.000	91	21521	0.1250	0.1076	
108 Acenaphthylene	152	8.916	8.916	0.000	97	29604	0.1250	0.1006	
110 Acenaphthene	153	9.060	9.060	0.000	96	22710	0.1250	0.1080	
124 Fluorene	166	9.492	9.493	-0.001	96	24805	0.1250	0.1066	
151 Phenanthrene	178	10.310	10.315	-0.005	96	36555	0.1250	0.1095	
152 Anthracene	178	10.358	10.358	0.000	95	38783	0.1250	0.1153	
164 Fluoranthene	202	11.346	11.346	0.000	98	40106	0.1250	0.1079	
167 Pyrene	202	11.575	11.576	-0.001	96	40906	0.1250	0.1052	
180 Benzo[a]anthracene	228	12.959	12.959	0.000	96	41553	0.1250	0.1098	
182 Chrysene	228	13.012	13.013	-0.001	95	34625	0.1250	0.1021	
186 Benzo[b]fluoranthene	252	14.556	14.562	-0.006	95	35420	0.1250	0.1283	
187 Benzo[k]fluoranthene	252	14.599	14.599	0.000	99	36350	0.1250	0.1207	
189 Benzo[a]pyrene	252	15.079	15.085	-0.006	78	31915	0.1250	0.1271	
193 Indeno[1,2,3-cd]pyrene	276	16.965	16.965	0.000	95	40127	0.1250	0.1270	
194 Dibenz(a,h)anthracene	278	16.981	16.981	0.000	68	32255	0.1250	0.1244	
195 Benzo[g,h,i]perylene	276	17.483	17.489	-0.006	97	33425	0.1250	0.1279	

Reagents:

MB_L1LVI_WRK_00376 Amount Added: 1.00 Units: mL
MB_LLIS_WRK_00170 Amount Added: 20.00 Units: uL Run Reagent

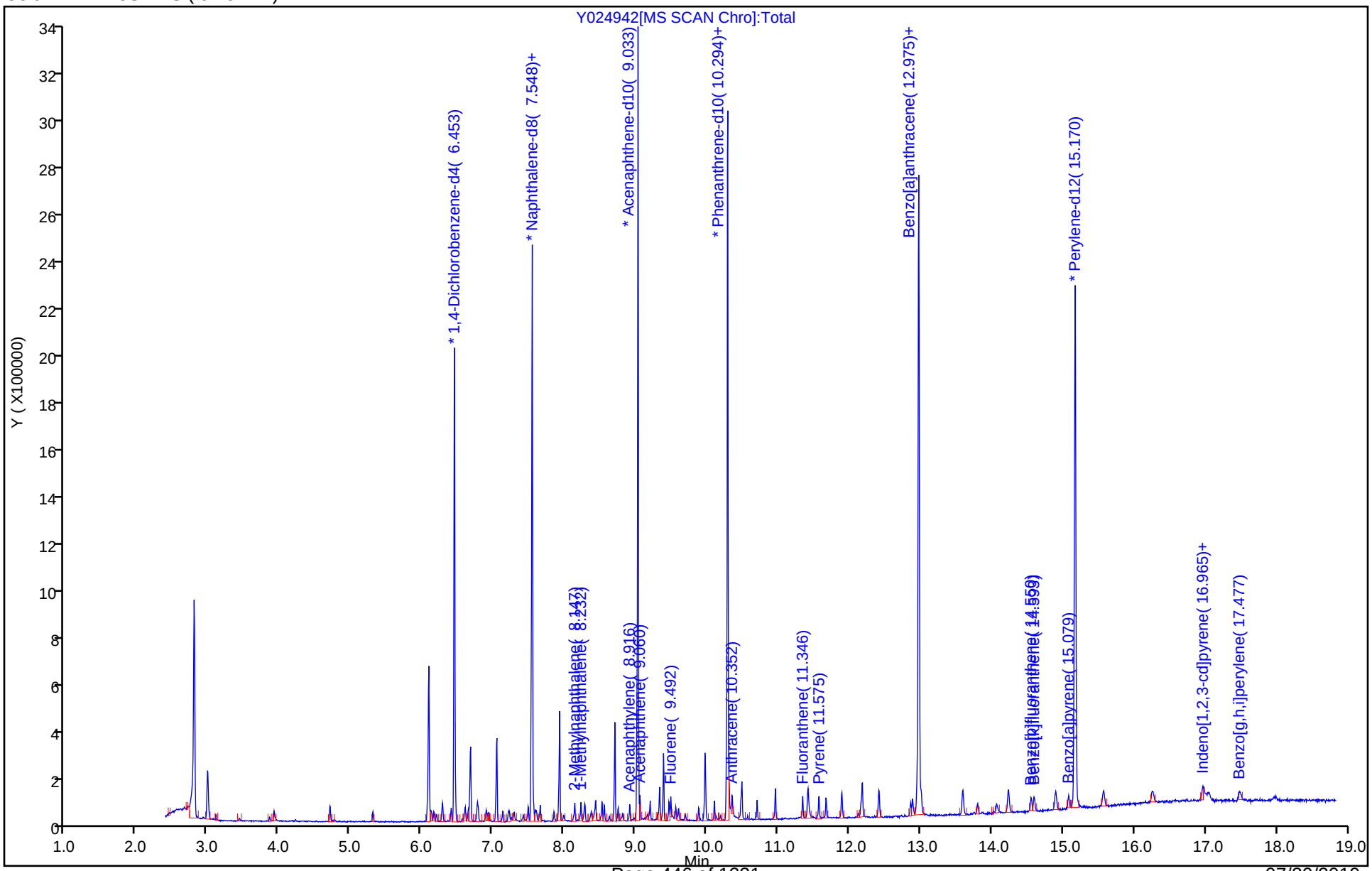
Report Date: 06-Jun-2019 13:20:09 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024942.D

Injection Date:	04-Jun-2019 16:43:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 .125			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024943.D
Lims ID: IC L1 .25
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 04-Jun-2019 17:11:30 ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-004
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:13 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:08:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.453	6.454	-0.001	97	312816	4.00	4.00	
* 2 Naphthalene-d8	136	7.548	7.544	0.004	100	1184562	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.034	-0.001	95	671041	4.00	4.00	
* 4 Phenanthrene-d10	188	10.293	10.289	0.004	97	1198068	4.00	4.00	
* 5 Chrysene-d12	240	12.974	12.976	-0.002	99	1157574	4.00	4.00	
* 6 Perylene-d12	264	15.175	15.171	0.004	98	1210497	4.00	4.00	
$ 7 2-Fluorophenol	112	5.310	5.306	0.004	92	24049	0.2500	0.2307	
$ 8 Phenol-d5	99	6.122	6.123	-0.001	95	30561	0.2500	0.2372	
$ 9 Nitrobenzene-d5	82	6.923	6.924	-0.001	91	31119	0.2500	0.2344	
$ 10 2-Fluorobiphenyl	172	8.440	8.441	-0.001	98	59193	0.2500	0.2413	
$ 11 2,4,6-Tribromophenol	330	9.700	9.701	-0.001	92	6606	0.2500	0.2554	
$ 12 p-Terphenyl-d14	244	11.677	11.672	0.005	99	61045	0.2500	0.2267	
13 1,4-Dioxane	88	3.441	3.425	0.016	96	11613	0.2500	0.2692	
14 N-Nitrosodimethylamine	42	3.857	3.847	0.010	90	13916	0.2500	0.2492	
15 Pyridine	52	3.911	3.890	0.021	96	28333	0.5000	0.4505	
35 Benzaldehyde	77	6.074	6.080	-0.006	93	45613	0.5000	0.5210	
37 Phenol	94	6.133	6.133	0.000	98	29255	0.2500	0.2265	
36 Aniline	93	6.170	6.171	-0.001	97	34278	0.2500	0.2463	
39 Bis(2-chloroethyl)ether	93	6.207	6.203	0.004	90	25943	0.2500	0.2282	
40 2-Chlorophenol	128	6.282	6.283	-0.001	96	25924	0.2500	0.2331	
41 n-Decane	57	6.293	6.288	0.005	92	28466	0.2500	0.2490	
43 1,3-Dichlorobenzene	146	6.410	6.411	-0.001	96	32317	0.2500	0.2524	
44 1,4-Dichlorobenzene	146	6.469	6.470	-0.001	93	30104	0.2500	0.2354	
45 Benzyl alcohol	108	6.570	6.566	0.004	90	9862	0.2500	0.2530	
46 1,2-Dichlorobenzene	146	6.608	6.609	-0.001	95	30219	0.2500	0.2434	
48 2-Methylphenol	108	6.651	6.651	0.000	94	18653	0.2500	0.1987	
49 2,2'-oxybis[1-chloropropan	45	6.667	6.668	-0.001	92	36983	0.2500	0.2546	
47 Indene	115	6.683	6.684	-0.001	88	247282	1.25	1.32	
57 4-Methylphenol	108	6.773	6.774	-0.001	95	22142	0.2500	0.2272	
53 N-Nitrosodi-n-propylamine	70	6.779	6.780	-0.001	89	17736	0.2500	0.2300	
52 Acetophenone	105	6.789	6.790	-0.001	97	35412	0.2500	0.2377	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.902	6.903	-0.001	94	13262	0.2500	0.2428	
59 Nitrobenzene	77	6.939	6.940	-0.001	88	26883	0.2500	0.2296	
62 Isophorone	82	7.137	7.138	-0.001	99	47343	0.2500	0.2291	
64 2-Nitrophenol	139	7.211	7.212	-0.001	97	12532	0.2500	0.2221	
66 2,4-Dimethylphenol	107	7.227	7.223	0.004	98	25258	0.2500	0.2252	
69 Bis(2-chloroethoxy)methane	93	7.297	7.298	-0.001	98	30125	0.2500	0.2401	
70 Benzoic acid	105	7.265	7.324	-0.059	84	31869	1.25	3.21	M
72 2,4-Dichlorophenol	162	7.420	7.421	-0.001	93	18024	0.2500	0.2006	
73 1,2,4-Trichlorobenzene	180	7.494	7.495	-0.001	94	27314	0.2500	0.2398	
74 Naphthalene	128	7.564	7.565	-0.001	96	74604	0.2500	0.2399	
76 4-Chloroaniline	127	7.591	7.597	-0.006	95	20958	0.2500	0.2147	
77 2,6-Dichlorophenol	162	7.607	7.608	-0.001	96	19021	0.2500	0.2141	
79 Hexachlorobutadiene	225	7.660	7.661	-0.001	93	18028	0.2500	0.2464	
84 Caprolactam	113	7.858	7.885	-0.027	79	10881	0.5000	0.5001	a
85 4-Chloro-3-methylphenol	107	7.986	7.987	-0.001	97	17541	0.2500	0.2494	
87 2-Methylnaphthalene	142	8.146	8.147	-0.001	92	52737	0.2500	0.2478	
89 1-Methylnaphthalene	142	8.232	8.232	0.000	91	47742	0.2500	0.2403	
90 Hexachlorocyclopentadiene	237	8.280	8.281	-0.001	94	15251	0.2500	0.2090	
91 1,2,4,5-Tetrachlorobenzene	216	8.290	8.291	-0.001	97	27432	0.2500	0.2352	
93 2,4,6-Trichlorophenol	196	8.376	8.377	-0.001	91	13686	0.2500	0.2059	
94 2,4,5-Trichlorophenol	196	8.419	8.414	0.004	93	15074	0.2500	0.2154	
96 1,1'-Biphenyl	154	8.531	8.532	-0.001	95	61597	0.2500	0.2400	
97 2-Chloronaphthalene	162	8.563	8.564	-0.001	95	50351	0.2500	0.2474	
100 2-Nitroaniline	65	8.627	8.633	-0.006	82	9800	0.2500	0.2526	
105 Dimethyl phthalate	163	8.755	8.756	-0.001	98	53250	0.2500	0.2383	
106 1,3-Dinitrobenzene	168	8.798	8.799	-0.001	83	4909	0.2500	0.2523	
107 2,6-Dinitrotoluene	165	8.814	8.820	-0.006	93	10840	0.2500	0.2051	
108 Acenaphthylene	152	8.915	8.916	-0.001	98	71460	0.2500	0.2444	
109 3-Nitroaniline	138	8.974	8.975	-0.001	90	8792	0.2500	0.2044	
110 Acenaphthene	153	9.059	9.060	-0.001	94	53222	0.2500	0.2548	
111 2,4-Dinitrophenol	184	9.070	9.060	0.010	55	2837	0.5000	1.29	
112 4-Nitrophenol	109	9.118	9.098	0.020	93	4386	0.5000	0.5142	
114 2,4-Dinitrotoluene	165	9.161	9.162	-0.001	89	10407	0.2500	0.2540	
115 Dibenzofuran	168	9.204	9.205	-0.001	96	72149	0.2500	0.2448	
118 2,3,4,6-Tetrachlorophenol	232	9.305	9.306	-0.001	73	9838	0.2500	0.2558	
121 Hexadecane	57	9.332	9.338	-0.006	95	32802	0.2500	0.2406	
120 Diethyl phthalate	149	9.337	9.343	-0.006	97	56866	0.2500	0.2406	
123 4-Chlorophenyl phenyl ethe	204	9.465	9.466	-0.001	92	28953	0.2500	0.2394	
124 Fluorene	166	9.492	9.493	-0.001	93	55721	0.2500	0.2409	
126 4-Nitroaniline	138	9.497	9.498	-0.001	50	10336	0.2500	0.2524	
127 4,6-Dinitro-2-methylphenol	198	9.513	9.514	-0.001	87	8419	0.5000	1.03	
129 Diphenylamine	169	9.561	9.562	-0.001	93	37359	0.2138	0.2002	
130 N-Nitrosodiphenylamine	169	9.561	9.562	-0.001	62	37359	0.2500	0.2341	
132 Azobenzene	77	9.604	9.605	-0.001	98	52725	0.2500	0.2324	
131 1,2-Diphenylhydrazine	77	9.604	9.605	-0.001	41	52725	0.2500	0.2325	
139 4-Bromophenyl phenyl ether	248	9.882	9.883	-0.001	64	17430	0.2500	0.2433	
140 Hexachlorobenzene	284	9.967	9.974	-0.007	95	20024	0.2500	0.2458	
143 Atrazine	200	9.983	9.990	-0.007	93	31694	0.5000	0.4721	
148 n-Octadecane	57	10.106	10.107	-0.001	94	31881	0.2500	0.2373	
145 Pentachlorophenol	266	10.128	10.129	-0.001	90	5217	0.5000	1.11	
151 Phenanthrene	178	10.309	10.315	-0.006	96	83436	0.2500	0.2515	
152 Anthracene	178	10.357	10.358	-0.001	97	81109	0.2500	0.2427	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.475	10.481	-0.006	95	67987	0.2500	0.2521	
157 Di-n-butyl phthalate	149	10.704	10.705	-0.001	100	90648	0.2500	0.2407	
164 Fluoranthene	202	11.345	11.346	-0.001	98	88469	0.2500	0.2395	
166 Benzidine	184	11.436	11.437	-0.001	98	56286	0.5000	0.7077	
167 Pyrene	202	11.575	11.576	-0.001	98	91412	0.2500	0.2412	
174 Butyl benzyl phthalate	149	12.163	12.163	0.000	96	35025	0.2500	0.2100	
181 Bis(2-ethylhexyl) phthalat	149	12.862	12.863	-0.001	96	50130	0.2500	0.2117	
179 3,3'-Dichlorobenzidine	252	12.889	12.890	-0.001	73	56022	0.5000	0.5146	
180 Benzo[a]anthracene	228	12.958	12.959	-0.001	99	89068	0.2500	0.2413	
182 Chrysene	228	13.012	13.013	-0.001	97	82691	0.2500	0.2500	
184 Di-n-octyl phthalate	149	13.802	13.803	-0.001	99	72268	0.2500	0.2530	
186 Benzo[b]fluoranthene	252	14.555	14.562	-0.007	97	77327	0.2500	0.2392	
187 Benzo[k]fluoranthene	252	14.593	14.599	-0.006	99	91042	0.2500	0.2680	
189 Benzo[a]pyrene	252	15.079	15.085	-0.006	78	73641	0.2500	0.2429	
193 Indeno[1,2,3-cd]pyrene	276	16.964	16.965	-0.001	93	90326	0.2500	0.2434	
194 Dibenz(a,h)anthracene	278	16.980	16.981	-0.001	74	80405	0.2500	0.2566	
195 Benzo[g,h,i]perylene	276	17.477	17.489	-0.012	98	73112	0.2500	0.2392	a
S 261 Total Cresols	1				0			0.4259	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00377	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

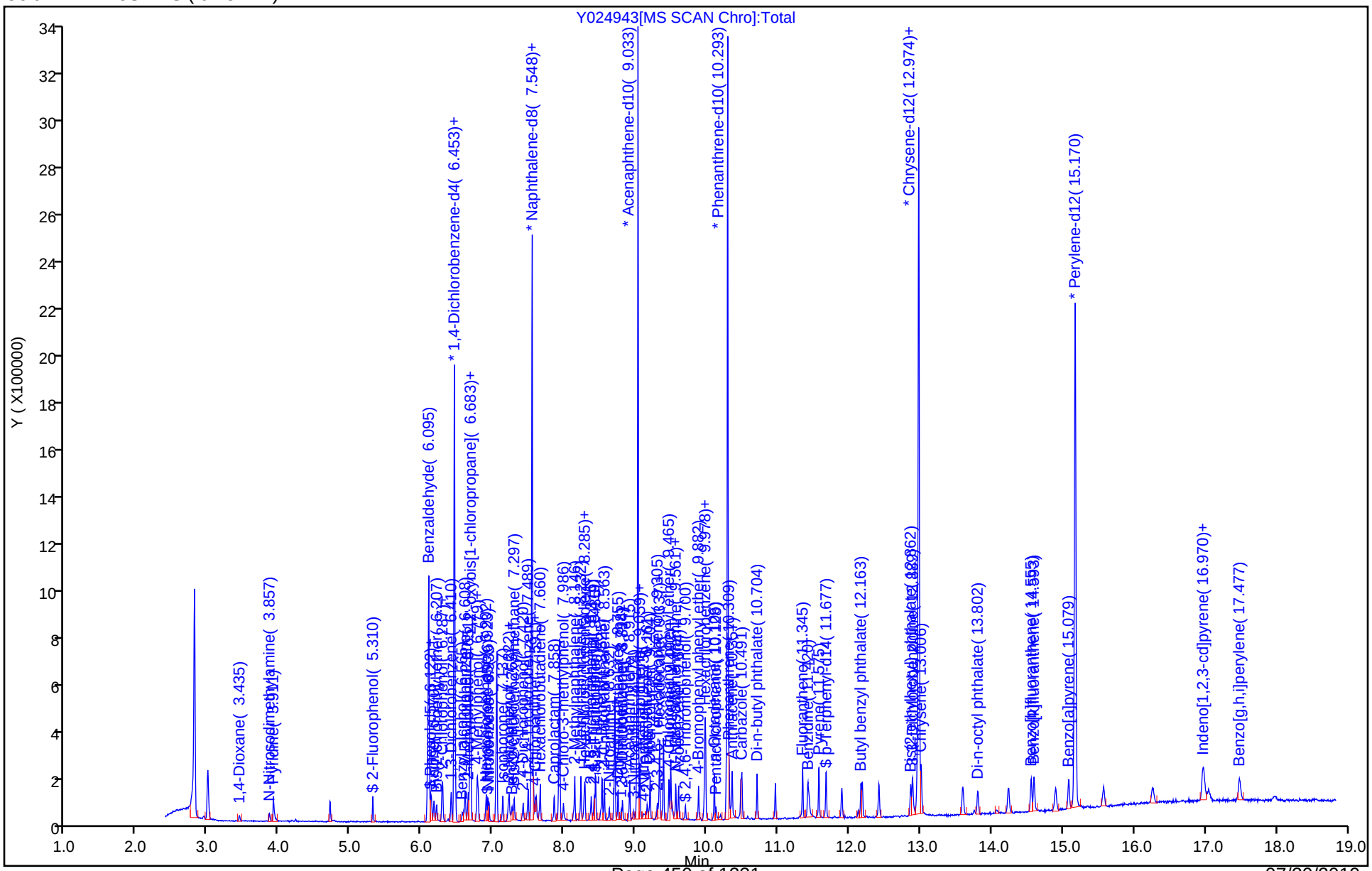
Report Date: 06-Jun-2019 13:20:14 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024943.D

Injection Date:	04-Jun-2019 17:11:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 .25			Worklist Smp#:	4
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

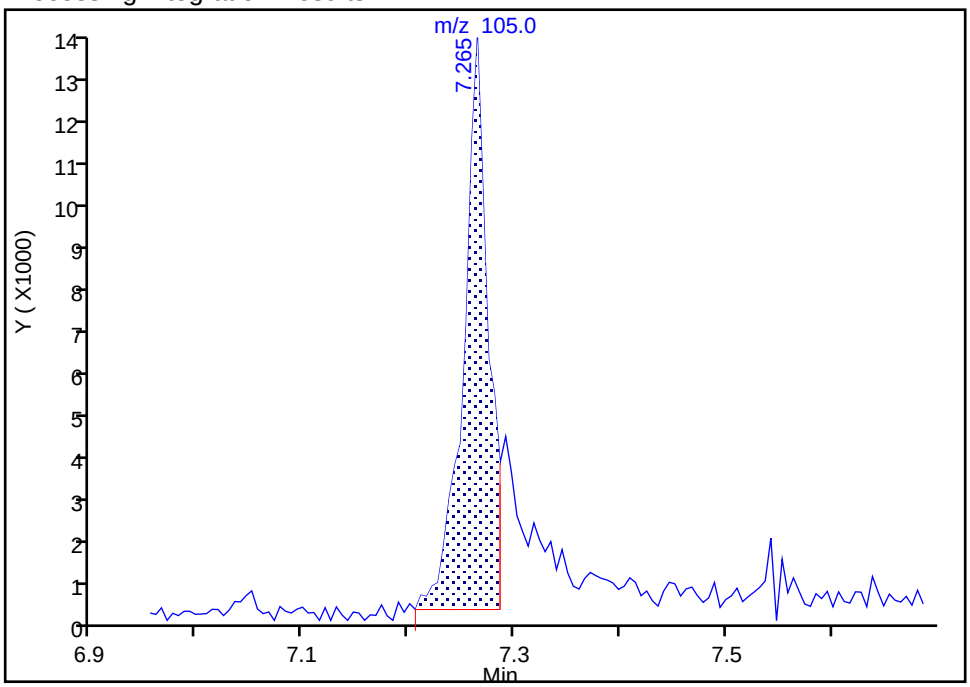
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024943.D				
Injection Date:	04-Jun-2019 17:11:30	Instrument ID:	HP5973Y		
Lims ID:	IC L1 .25				
Client ID:					
Operator ID:	bs	ALS Bottle#:	5	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

70 Benzoic acid, CAS: 65-85-0

Signal: 1

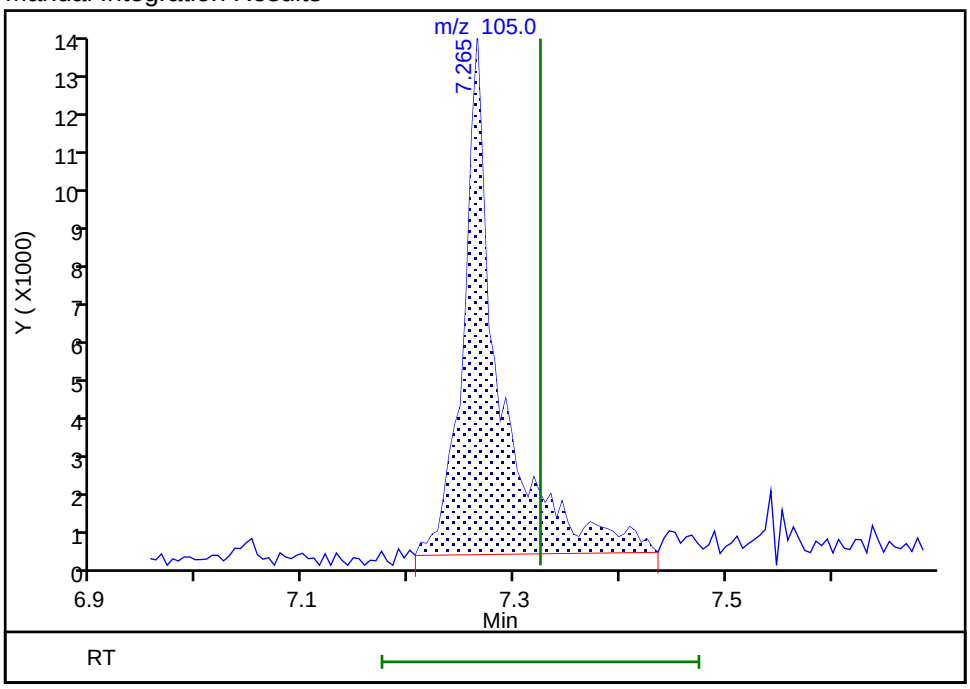
Processing Integration Results

RT: 7.26
Area: 22209
Amount: 0.498553
Amount Units: ng/uL



Manual Integration Results

RT: 7.26
Area: 31869
Amount: 3.212291
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:07:39

Audit Action: Manually Integrated Audit Reason: Incomplete Integration

Eurofins TestAmerica, Buffalo

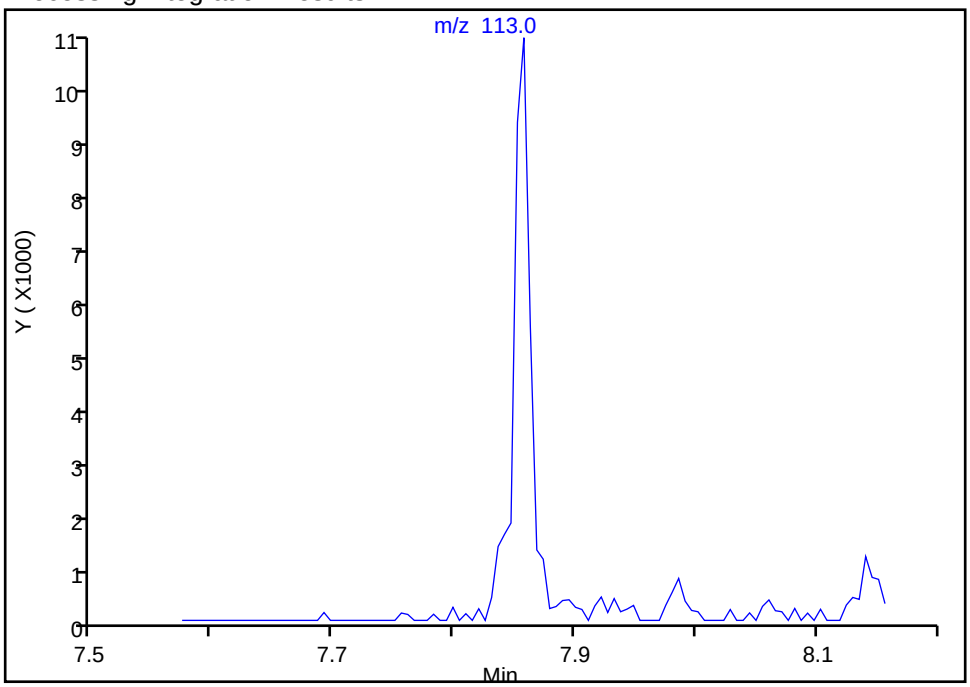
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024943.D
Injection Date: 04-Jun-2019 17:11:30 Instrument ID: HP5973Y
Lims ID: IC L1 .25
Client ID:
Operator ID: bs ALS Bottle#: 5 Worklist Smp#: 4
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

84 Caprolactam, CAS: 105-60-2

Signal: 1

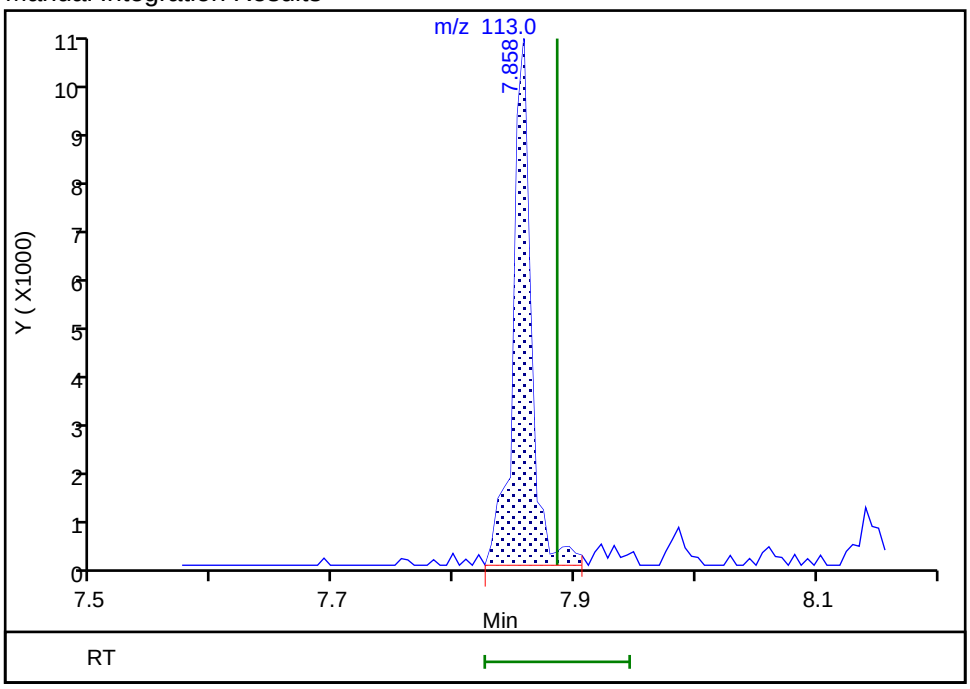
Not Detected
Expected RT: 7.89

Processing Integration Results



Manual Integration Results

RT: 7.86
Area: 10881
Amount: 0.500095
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:07:44
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

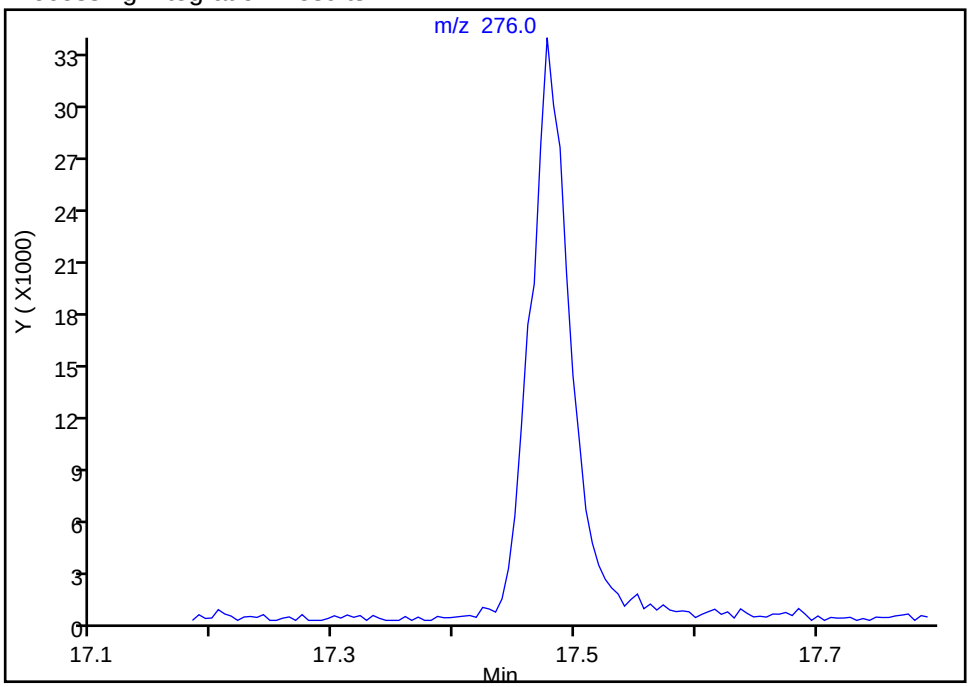
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024943.D				
Injection Date:	04-Jun-2019 17:11:30	Instrument ID:	HP5973Y		
Lims ID:	IC L1 .25				
Client ID:					
Operator ID:	bs	ALS Bottle#:	5	Worklist Smp#:	4
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

195 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

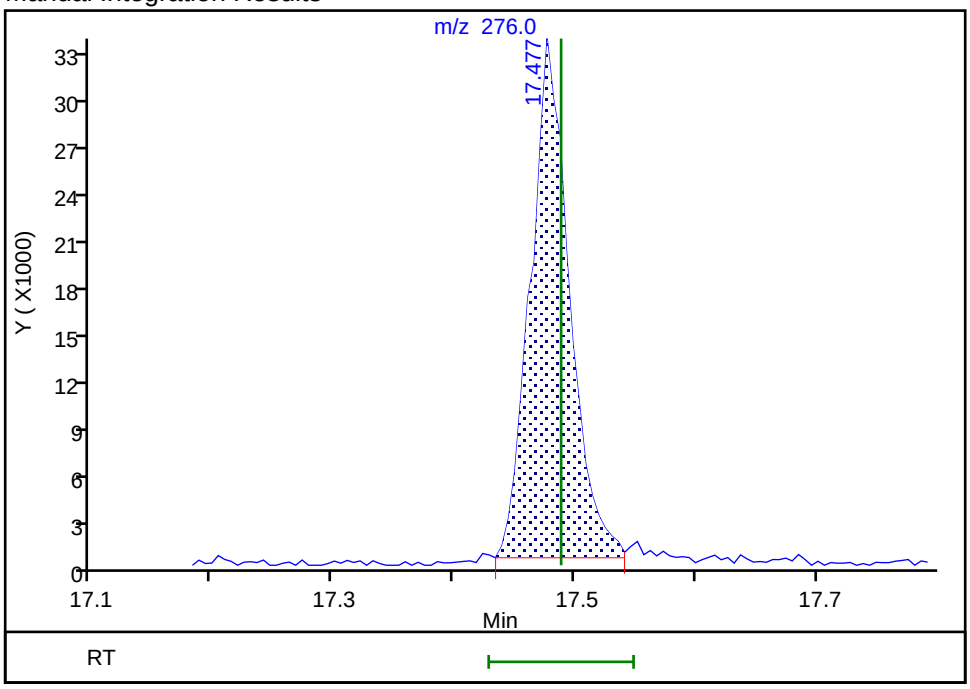
Not Detected
Expected RT: 17.49

Processing Integration Results



Manual Integration Results

RT: 17.48
Area: 73112
Amount: 0.239224
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:07:59
Audit Action: Assigned Compound ID Audit Reason: Incomplete Integration

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024944.D
Lims ID: IC L1 1.0
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 04-Jun-2019 17:38:30 ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-005
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:22 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:09:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.455	6.454	0.001	97	311496	4.00	4.00	
* 2 Naphthalene-d8	136	7.545	7.544	0.001	100	1161854	4.00	4.00	
* 3 Acenaphthene-d10	164	9.035	9.034	0.001	95	673053	4.00	4.00	
* 4 Phenanthrene-d10	188	10.290	10.289	0.001	97	1201290	4.00	4.00	
* 5 Chrysene-d12	240	12.977	12.976	0.001	99	1182792	4.00	4.00	
* 6 Perylene-d12	264	15.172	15.171	0.001	98	1208285	4.00	4.00	
$ 7 2-Fluorophenol	112	5.307	5.306	0.001	93	103768	1.00	1.00	
$ 8 Phenol-d5	99	6.119	6.123	-0.004	97	126381	1.00	0.9852	
$ 9 Nitrobenzene-d5	82	6.925	6.924	0.001	89	127309	1.00	0.9776	
$ 10 2-Fluorobiphenyl	172	8.437	8.441	-0.004	99	244735	1.00	0.99	
$ 11 2,4,6-Tribromophenol	330	9.698	9.701	-0.003	92	30216	1.00	0.9195	
$ 12 p-Terphenyl-d14	244	11.674	11.672	0.002	100	263712	1.00	0.9583	
13 1,4-Dioxane	88	3.432	3.425	0.007	96	42553	1.00	0.99	
14 N-Nitrosodimethylamine	42	3.849	3.847	0.002	90	56126	1.00	1.01	
15 Pyridine	52	3.897	3.890	0.007	96	122063	2.00	1.95	
35 Benzaldehyde	77	6.076	6.080	-0.004	94	189812	2.00	2.18	
37 Phenol	94	6.130	6.133	-0.003	99	129237	1.00	1.00	
36 Aniline	93	6.167	6.171	-0.004	97	137039	1.00	0.9889	
39 Bis(2-chloroethyl)ether	93	6.204	6.203	0.001	94	106761	1.00	0.9431	
40 2-Chlorophenol	128	6.279	6.283	-0.004	97	111599	1.00	1.01	
41 n-Decane	57	6.290	6.288	0.002	90	116769	1.00	1.03	
43 1,3-Dichlorobenzene	146	6.413	6.411	0.002	98	129561	1.00	1.02	
44 1,4-Dichlorobenzene	146	6.472	6.470	0.002	93	127755	1.00	1.00	
45 Benzyl alcohol	108	6.562	6.566	-0.004	90	54002	1.00	0.9301	
46 1,2-Dichlorobenzene	146	6.605	6.609	-0.004	97	125232	1.00	1.01	
48 2-Methylphenol	108	6.648	6.651	-0.003	94	94604	1.00	1.01	
49 2,2'-oxybis[1-chloropropan	45	6.664	6.668	-0.004	92	149295	1.00	1.03	
47 Indene	115	6.685	6.684	0.001	88	996658	5.00	5.34	
57 4-Methylphenol	108	6.776	6.774	0.002	92	92289	1.00	0.9508	
53 N-Nitrosodi-n-propylamine	70	6.776	6.780	-0.004	88	76438	1.00	1.00	
52 Acetophenone	105	6.787	6.790	-0.003	95	147623	1.00	0.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.904	6.903	0.001	90	54549	1.00	1.00	
59 Nitrobenzene	77	6.942	6.940	0.002	88	114936	1.00	1.00	
62 Isophorone	82	7.134	7.138	-0.004	100	203206	1.00	1.00	
64 2-Nitrophenol	139	7.214	7.212	0.002	94	53044	1.00	0.9583	
66 2,4-Dimethylphenol	107	7.225	7.223	0.002	98	110296	1.00	1.00	
69 Bis(2-chloroethoxy)methane	93	7.294	7.298	-0.004	98	122553	1.00	1.00	
70 Benzoic acid	105	7.278	7.324	-0.046	88	165091	5.00	5.02	
72 2,4-Dichlorophenol	162	7.422	7.421	0.001	94	84165	1.00	0.9553	
73 1,2,4-Trichlorobenzene	180	7.492	7.495	-0.003	93	115542	1.00	1.03	
74 Naphthalene	128	7.566	7.565	0.001	97	314392	1.00	1.03	a
76 4-Chloroaniline	127	7.593	7.597	-0.004	96	100615	1.00	1.05	
77 2,6-Dichlorophenol	162	7.609	7.608	0.001	97	84589	1.00	0.9708	
79 Hexachlorobutadiene	225	7.663	7.661	0.002	95	71350	1.00	0.99	
84 Caprolactam	113	7.866	7.885	-0.019	78	55531	2.00	1.97	
85 4-Chloro-3-methylphenol	107	7.983	7.987	-0.004	96	86738	1.00	1.00	
87 2-Methylnaphthalene	142	8.143	8.147	-0.004	92	211052	1.00	1.01	
89 1-Methylnaphthalene	142	8.234	8.232	0.002	92	199177	1.00	1.02	
90 Hexachlorocyclopentadiene	237	8.282	8.281	0.001	94	68581	1.00	0.9371	
91 1,2,4,5-Tetrachlorobenzene	216	8.287	8.291	-0.004	97	115157	1.00	0.9846	
93 2,4,6-Trichlorophenol	196	8.378	8.377	0.001	91	61468	1.00	0.9219	
94 2,4,5-Trichlorophenol	196	8.416	8.414	0.002	92	63518	1.00	0.9051	
96 1,1'-Biphenyl	154	8.528	8.532	-0.004	95	257383	1.00	1.00	
97 2-Chloronaphthalene	162	8.560	8.564	-0.004	95	203809	1.00	1.00	
100 2-Nitroaniline	65	8.629	8.633	-0.004	86	50284	1.00	0.9469	
105 Dimethyl phthalate	163	8.752	8.756	-0.004	99	221181	1.00	0.9868	
106 1,3-Dinitrobenzene	168	8.795	8.799	-0.004	88	30210	1.00	0.9634	
107 2,6-Dinitrotoluene	165	8.816	8.820	-0.004	94	50917	1.00	0.9603	
108 Acenaphthylene	152	8.918	8.916	0.002	98	299541	1.00	1.02	
109 3-Nitroaniline	138	8.971	8.975	-0.004	93	42824	1.00	0.99	
111 2,4-Dinitrophenol	184	9.057	9.060	-0.003	58	27996	2.00	2.11	
110 Acenaphthene	153	9.062	9.060	0.002	94	209500	1.00	1.00	
112 4-Nitrophenol	109	9.105	9.098	0.007	94	47085	2.00	1.87	
114 2,4-Dinitrotoluene	165	9.163	9.162	0.001	94	59105	1.00	0.9227	
115 Dibenzofuran	168	9.206	9.205	0.001	96	290696	1.00	0.9833	
118 2,3,4,6-Tetrachlorophenol	232	9.302	9.306	-0.004	71	48728	1.00	0.9169	
121 Hexadecane	57	9.334	9.338	-0.004	95	131474	1.00	0.9615	
120 Diethyl phthalate	149	9.340	9.343	-0.003	98	231190	1.00	0.9751	
123 4-Chlorophenyl phenyl ethe	204	9.468	9.466	0.002	90	117220	1.00	0.9664	
124 Fluorene	166	9.495	9.493	0.002	93	231549	1.00	1.00	
126 4-Nitroaniline	138	9.489	9.498	-0.009	81	50755	1.00	1.00	
127 4,6-Dinitro-2-methylphenol	198	9.511	9.514	-0.003	89	46553	2.00	2.02	
129 Diphenylamine	169	9.564	9.562	0.002	93	156457	0.8550	0.8361	
130 N-Nitrosodiphenylamine	169	9.564	9.562	0.002	64	156457	1.00	0.9780	
132 Azobenzene	77	9.601	9.605	-0.004	99	228194	1.00	1.00	
131 1,2-Diphenylhydrazine	77	9.601	9.605	-0.004	41	228194	1.00	1.00	
139 4-Bromophenyl phenyl ether	248	9.884	9.883	0.001	65	69872	1.00	0.9727	
140 Hexachlorobenzene	284	9.970	9.974	-0.004	94	79042	1.00	0.9676	
143 Atrazine	200	9.986	9.990	-0.004	93	132799	2.00	1.97	
148 n-Octadecane	57	10.103	10.107	-0.004	95	134527	1.00	1.00	
145 Pentachlorophenol	266	10.125	10.129	-0.004	93	45256	2.00	2.08	
151 Phenanthrene	178	10.312	10.315	-0.003	97	338289	1.00	1.02	
152 Anthracene	178	10.354	10.358	-0.004	97	336140	1.00	1.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.477	10.481	-0.004	96	286254	1.00	1.06	
157 Di-n-butyl phthalate	149	10.707	10.705	0.002	100	383061	1.00	1.01	
164 Fluoranthene	202	11.343	11.346	-0.003	98	384668	1.00	1.04	
166 Benzidine	184	11.433	11.437	-0.004	99	179544	2.00	2.21	
167 Pyrene	202	11.572	11.576	-0.004	97	394361	1.00	1.02	
174 Butyl benzyl phthalate	149	12.165	12.163	0.002	97	163034	1.00	0.9567	
181 Bis(2-ethylhexyl) phthalat	149	12.865	12.863	0.002	95	227564	1.00	0.9403	
179 3,3'-Dichlorobenzidine	252	12.886	12.890	-0.004	73	237102	2.00	2.13	
180 Benzo[a]anthracene	228	12.961	12.959	0.002	97	380075	1.00	1.01	
182 Chrysene	228	13.009	13.013	-0.004	96	345667	1.00	1.02	
184 Di-n-octyl phthalate	149	13.805	13.803	0.002	99	364182	1.00	0.9380	
186 Benzo[b]fluoranthene	252	14.553	14.562	-0.009	97	344458	1.00	0.9430	
187 Benzo[k]fluoranthene	252	14.595	14.599	-0.004	98	356119	1.00	0.9803	
189 Benzo[a]pyrene	252	15.081	15.085	-0.004	78	337215	1.00	0.9724	
193 Indeno[1,2,3-cd]pyrene	276	16.961	16.965	-0.004	98	407569	1.00	0.9762	
194 Dibenz(a,h)anthracene	278	16.977	16.981	-0.004	91	329088	1.00	0.9382	
195 Benzo[g,h,i]perylene	276	17.479	17.489	-0.010	97	336885	1.00	0.9760	
S 261 Total Cresols	1				0			1.96	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00378	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

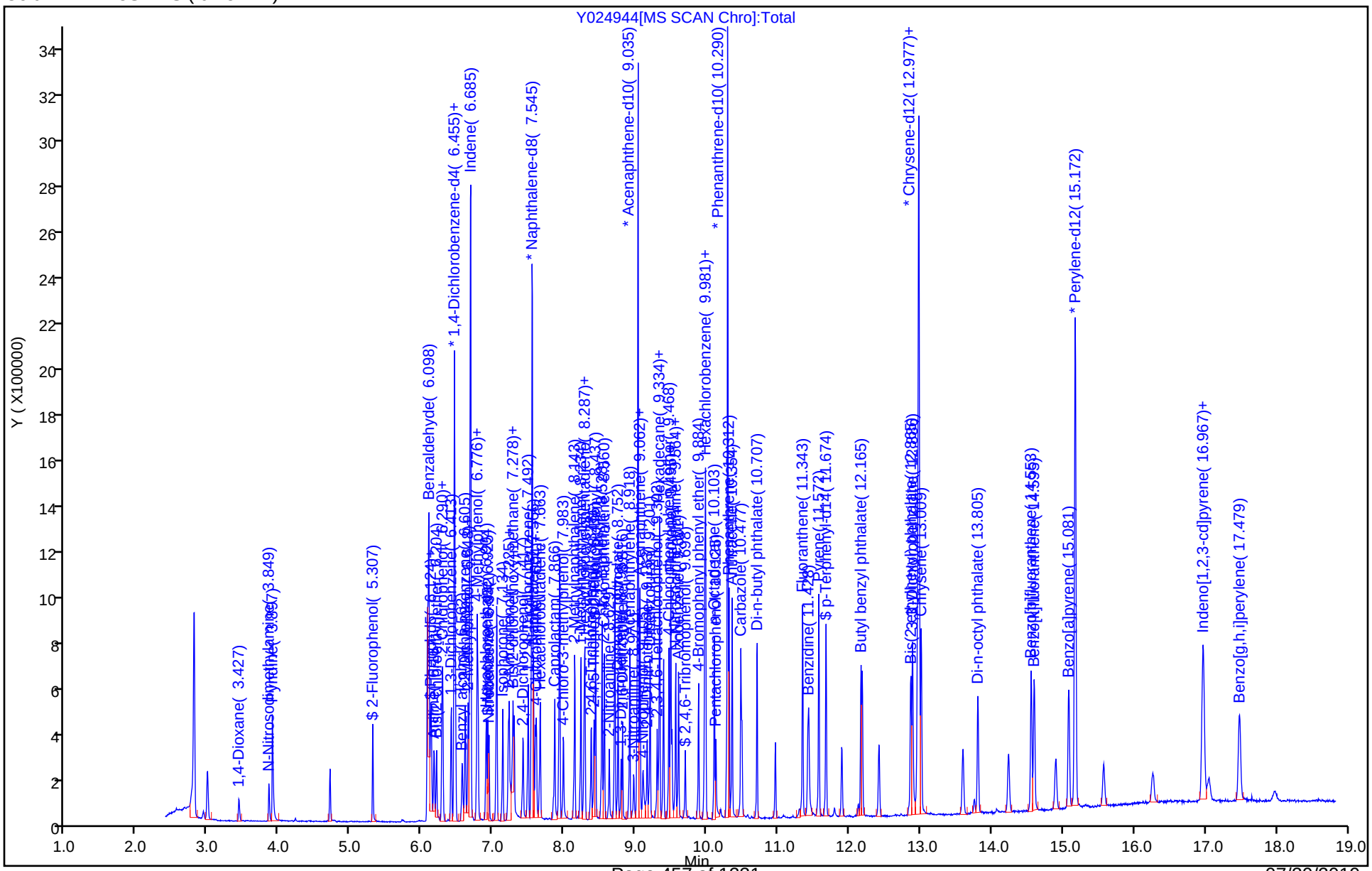
Report Date: 06-Jun-2019 13:20:23 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024944.D

Injection Date:	04-Jun-2019 17:38:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 1.0			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo

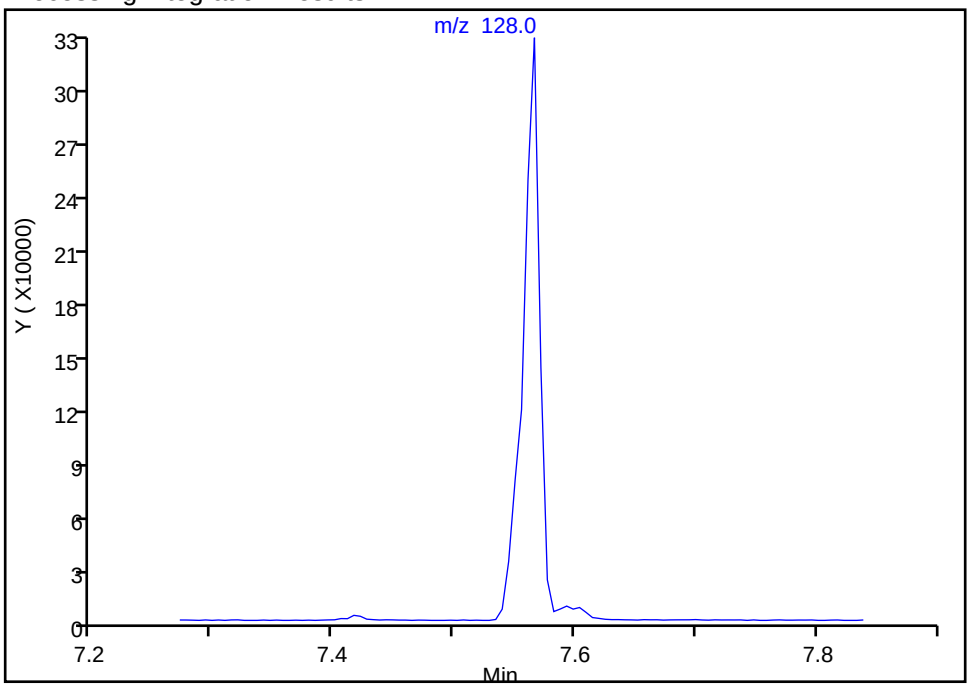
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024944.D
Injection Date: 04-Jun-2019 17:38:30 Instrument ID: HP5973Y
Lims ID: IC L1 1.0
Client ID:
Operator ID: bs ALS Bottle#: 6 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

74 Naphthalene, CAS: 91-20-3

Signal: 1

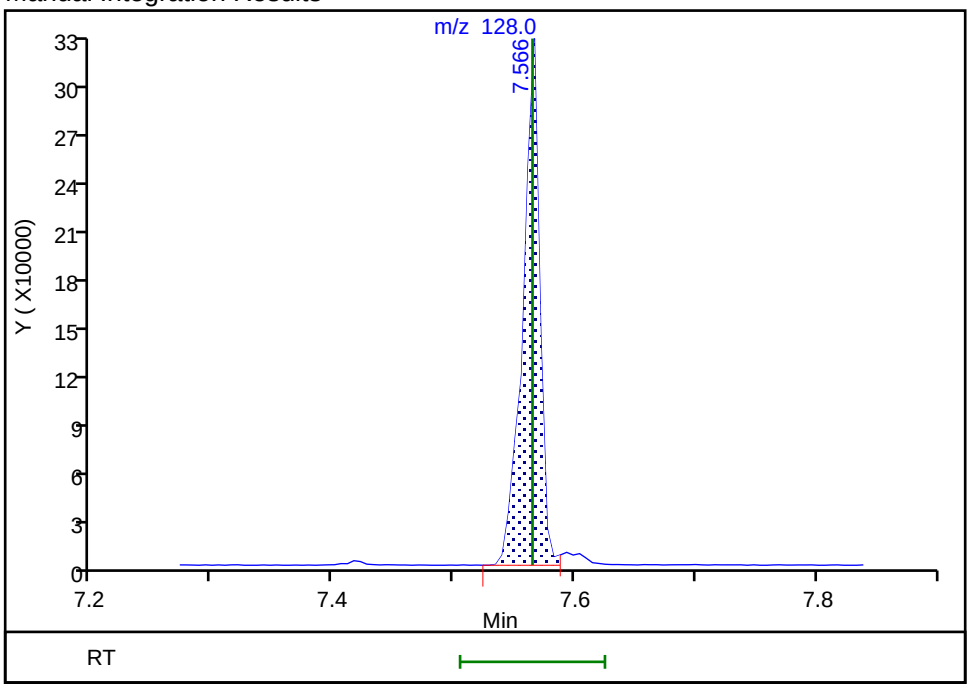
Not Detected
Expected RT: 7.56

Processing Integration Results



Manual Integration Results

RT: 7.57
Area: 314392
Amount: 1.030701
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:08:50
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024945.D
Lims ID: IC L1 2.0
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 04-Jun-2019 18:06:30 ALS Bottle#: 7 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-006
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:31 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:09:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.453	6.454	-0.001	97	303120	4.00	4.00	
* 2 Naphthalene-d8	136	7.548	7.544	0.004	100	1140967	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.034	-0.001	94	666723	4.00	4.00	
* 4 Phenanthrene-d10	188	10.293	10.289	0.004	97	1214360	4.00	4.00	
* 5 Chrysene-d12	240	12.975	12.976	-0.001	99	1160266	4.00	4.00	
* 6 Perylene-d12	264	15.175	15.171	0.004	98	1199594	4.00	4.00	
$ 7 2-Fluorophenol	112	5.310	5.306	0.004	94	200950	2.00	1.99	
$ 8 Phenol-d5	99	6.122	6.123	-0.001	96	261788	2.00	2.10	
$ 9 Nitrobenzene-d5	82	6.923	6.924	-0.001	90	266622	2.00	2.08	
$ 10 2-Fluorobiphenyl	172	8.440	8.441	-0.001	99	502432	2.00	2.06	
$ 11 2,4,6-Tribromophenol	330	9.700	9.701	-0.001	94	68618	2.00	1.98	
$ 12 p-Terphenyl-d14	244	11.671	11.672	-0.001	99	557756	2.00	2.07	
13 1,4-Dioxane	88	3.430	3.425	0.005	96	88961	2.00	2.13	
14 N-Nitrosodimethylamine	42	3.852	3.847	0.005	92	113312	2.00	2.09	
15 Pyridine	52	3.895	3.890	0.005	96	254739	4.00	4.18	
35 Benzaldehyde	77	6.079	6.080	-0.001	96	391162	4.00	4.61	
37 Phenol	94	6.133	6.133	0.000	99	265830	2.00	2.12	
36 Aniline	93	6.170	6.171	-0.001	97	266374	2.00	1.98	
39 Bis(2-chloroethyl)ether	93	6.207	6.203	0.004	94	246388	2.00	2.24	
40 2-Chlorophenol	128	6.282	6.283	-0.001	96	227322	2.00	2.11	
41 n-Decane	57	6.293	6.288	0.005	90	234657	2.00	2.12	
43 1,3-Dichlorobenzene	146	6.410	6.411	-0.001	98	261499	2.00	2.11	
44 1,4-Dichlorobenzene	146	6.469	6.470	-0.001	95	260631	2.00	2.10	
45 Benzyl alcohol	108	6.565	6.566	-0.001	91	128741	2.00	2.13	
46 1,2-Dichlorobenzene	146	6.608	6.609	-0.001	97	253292	2.00	2.11	
48 2-Methylphenol	108	6.651	6.651	0.000	94	199169	2.00	2.19	
49 2,2'-oxybis[1-chloropropan	45	6.667	6.668	-0.001	92	308469	2.00	2.19	
47 Indene	115	6.683	6.684	-0.001	89	2003441	10.0	11.0	
57 4-Methylphenol	108	6.774	6.774	0.000	96	196986	2.00	2.09	
53 N-Nitrosodi-n-propylamine	70	6.779	6.780	-0.001	87	158930	2.00	2.13	
52 Acetophenone	105	6.790	6.790	0.000	97	303041	2.00	2.10	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.902	6.903	-0.001	94	109968	2.00	2.08	
59 Nitrobenzene	77	6.939	6.940	-0.001	89	238502	2.00	2.11	
62 Isophorone	82	7.137	7.138	-0.001	99	413842	2.00	2.08	
64 2-Nitrophenol	139	7.212	7.212	0.000	97	109321	2.00	2.01	
66 2,4-Dimethylphenol	107	7.228	7.223	0.005	97	225900	2.00	2.09	
69 Bis(2-chloroethoxy)methane	93	7.297	7.298	-0.001	98	255005	2.00	2.11	
70 Benzoic acid	105	7.297	7.324	-0.027	75	535646	10.0	10.2	
72 2,4-Dichlorophenol	162	7.420	7.421	-0.001	93	187254	2.00	2.16	
73 1,2,4-Trichlorobenzene	180	7.495	7.495	0.000	94	227103	2.00	2.07	
74 Naphthalene	128	7.564	7.565	-0.001	98	648785	2.00	2.17	
76 4-Chloroaniline	127	7.596	7.597	-0.001	97	186605	2.00	1.98	
77 2,6-Dichlorophenol	162	7.607	7.608	-0.001	96	177523	2.00	2.07	
79 Hexachlorobutadiene	225	7.660	7.661	-0.001	95	144677	2.00	2.05	
84 Caprolactam	113	7.874	7.885	-0.011	78	120392	4.00	4.17	
85 4-Chloro-3-methylphenol	107	7.986	7.987	-0.001	96	181610	2.00	2.07	
87 2-Methylnaphthalene	142	8.146	8.147	-0.001	93	440853	2.00	2.15	
89 1-Methylnaphthalene	142	8.232	8.232	0.000	93	414407	2.00	2.17	
90 Hexachlorocyclopentadiene	237	8.280	8.281	-0.001	95	150738	2.00	2.08	
91 1,2,4,5-Tetrachlorobenzene	216	8.290	8.291	-0.001	97	239064	2.00	2.06	
93 2,4,6-Trichlorophenol	196	8.376	8.377	-0.001	92	132473	2.00	2.01	
94 2,4,5-Trichlorophenol	196	8.413	8.414	-0.001	93	144442	2.00	2.08	
96 1,1'-Biphenyl	154	8.531	8.532	-0.001	95	527373	2.00	2.07	
97 2-Chloronaphthalene	162	8.563	8.564	-0.001	96	420364	2.00	2.08	
100 2-Nitroaniline	65	8.627	8.633	-0.006	83	113629	2.00	2.05	
105 Dimethyl phthalate	163	8.755	8.756	-0.001	98	468944	2.00	2.11	
106 1,3-Dinitrobenzene	168	8.798	8.799	-0.001	88	65479	2.00	1.98	
107 2,6-Dinitrotoluene	165	8.819	8.820	-0.001	95	107648	2.00	2.05	
108 Acenaphthylene	152	8.915	8.916	-0.001	98	627594	2.00	2.16	
109 3-Nitroaniline	138	8.974	8.975	-0.001	92	74892	2.00	1.75	
110 Acenaphthene	153	9.060	9.060	0.000	93	438848	2.00	2.11	
111 2,4-Dinitrophenol	184	9.060	9.060	0.000	84	75078	4.00	3.67	
112 4-Nitrophenol	109	9.097	9.098	-0.001	95	99659	4.00	3.57	
114 2,4-Dinitrotoluene	165	9.161	9.162	-0.001	95	137498	2.00	2.02	
115 Dibenzofuran	168	9.204	9.205	-0.001	96	615136	2.00	2.10	
118 2,3,4,6-Tetrachlorophenol	232	9.305	9.306	-0.001	71	108960	2.00	1.96	
121 Hexadecane	57	9.337	9.338	-0.001	94	287110	2.00	2.12	
120 Diethyl phthalate	149	9.337	9.343	-0.006	98	491926	2.00	2.09	
123 4-Chlorophenyl phenyl ethe	204	9.465	9.466	-0.001	93	253520	2.00	2.11	
124 Fluorene	166	9.492	9.493	-0.001	94	489050	2.00	2.13	
126 4-Nitroaniline	138	9.492	9.498	-0.006	50	98690	2.00	1.90	
127 4,6-Dinitro-2-methylphenol	198	9.514	9.514	0.000	90	123723	4.00	4.00	
129 Diphenylamine	169	9.562	9.562	0.000	94	342072	1.71	1.81	
130 N-Nitrosodiphenylamine	169	9.562	9.562	0.000	63	342072	2.00	2.12	
132 Azobenzene	77	9.604	9.605	-0.001	99	494376	2.00	2.15	
131 1,2-Diphenylhydrazine	77	9.604	9.605	-0.001	41	492654	2.00	2.14	
139 4-Bromophenyl phenyl ether	248	9.887	9.883	0.004	66	149371	2.00	2.06	
140 Hexachlorobenzene	284	9.973	9.974	-0.001	94	169408	2.00	2.05	
143 Atrazine	200	9.984	9.990	-0.006	93	286462	4.00	4.29	
148 n-Octadecane	57	10.106	10.107	-0.001	95	290226	2.00	2.13	
145 Pentachlorophenol	266	10.128	10.129	-0.001	93	117501	4.00	3.80	
151 Phenanthrene	178	10.315	10.315	0.000	97	714397	2.00	2.12	
152 Anthracene	178	10.357	10.358	-0.001	97	721827	2.00	2.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.480	10.481	-0.001	96	569577	2.00	2.08	
157 Di-n-butyl phthalate	149	10.705	10.705	0.000	100	795251	2.00	2.08	
164 Fluoranthene	202	11.346	11.346	0.000	98	803946	2.00	2.15	
166 Benzidine	184	11.431	11.437	-0.006	99	292512	4.00	3.67	
167 Pyrene	202	11.575	11.576	-0.001	97	811316	2.00	2.14	
174 Butyl benzyl phthalate	149	12.163	12.163	0.000	97	344307	2.00	2.06	
181 Bis(2-ethylhexyl) phthalat	149	12.862	12.863	-0.001	96	494586	2.00	2.08	
179 3,3'-Dichlorobenzidine	252	12.889	12.890	-0.001	73	445992	4.00	4.09	
180 Benzo[a]anthracene	228	12.959	12.959	0.000	98	788838	2.00	2.13	
182 Chrysene	228	13.012	13.013	-0.001	96	710798	2.00	2.14	
184 Di-n-octyl phthalate	149	13.802	13.803	-0.001	99	816110	2.00	2.04	
186 Benzo[b]fluoranthene	252	14.556	14.562	-0.006	97	770074	2.00	2.08	
187 Benzo[k]fluoranthene	252	14.598	14.599	-0.001	99	758280	2.00	2.07	
189 Benzo[a]pyrene	252	15.084	15.085	-0.001	77	718046	2.00	2.04	
193 Indeno[1,2,3-cd]pyrene	276	16.964	16.965	-0.001	98	855179	2.00	2.02	
194 Dibenz(a,h)anthracene	278	16.975	16.981	-0.006	90	713238	2.00	2.00	
195 Benzo[g,h,i]perylene	276	17.482	17.489	-0.007	98	719213	2.00	2.06	
S 261 Total Cresols	1				0			4.28	

Reagents:

MB_L1LVI_WRK_00379	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

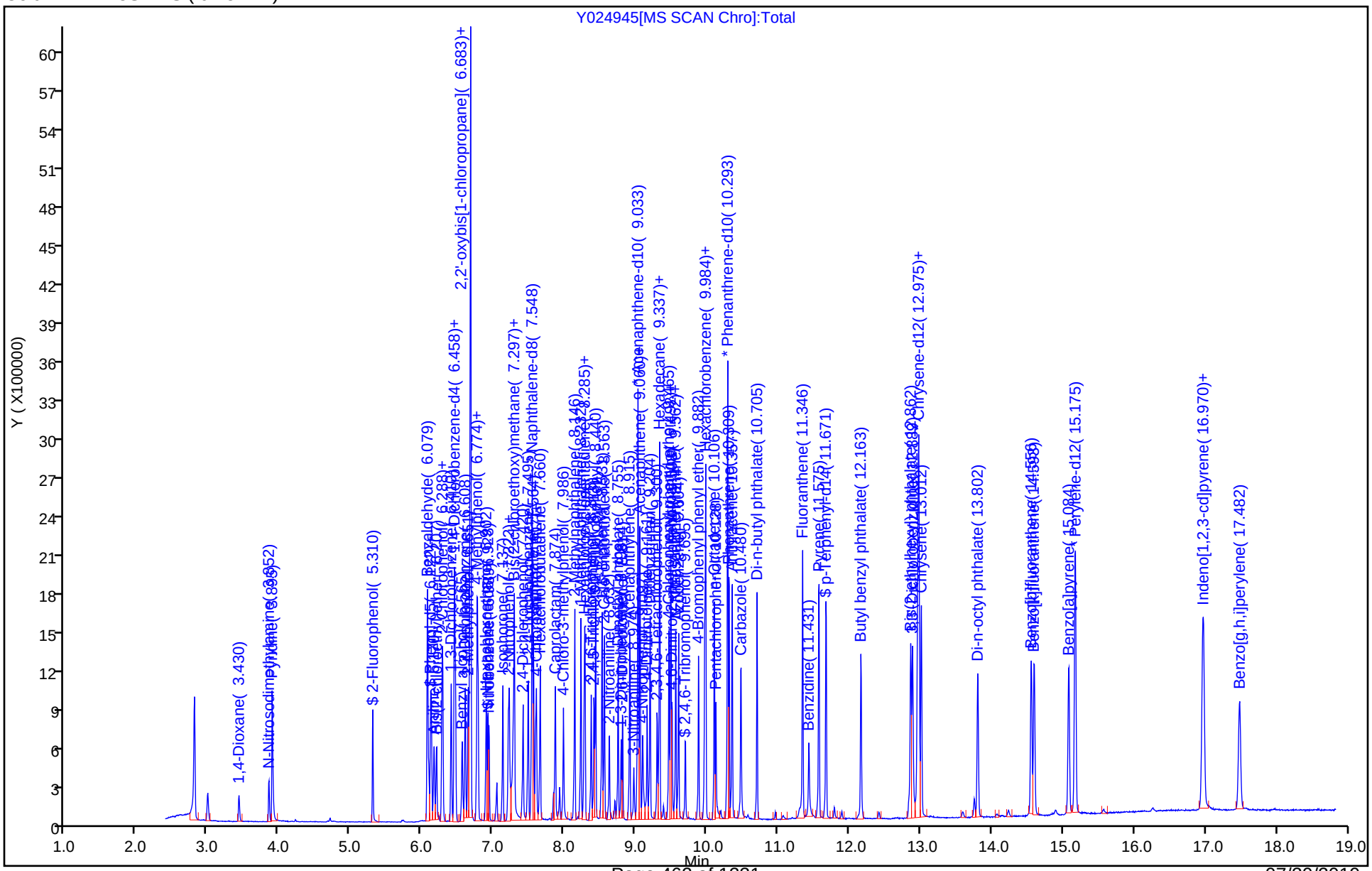
Report Date: 06-Jun-2019 13:20:32 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024945.D

Injection Date:	04-Jun-2019 18:06:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 2.0			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024946.D
Lims ID: ICIS L1 4.0
Client ID:
Sample Type: ICIS Calib Level: 5
Inject. Date: 04-Jun-2019 18:34:30 ALS Bottle#: 8 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-007
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:39 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:10:06

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.454	6.454	0.000	96	337477	4.00	4.00	
* 2 Naphthalene-d8	136	7.549	7.549	0.000	100	1254314	4.00	4.00	
* 3 Acenaphthene-d10	164	9.034	9.034	0.000	95	712139	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.294	0.000	97	1334753	4.00	4.00	
* 5 Chrysene-d12	240	12.975	12.975	0.000	99	1258571	4.00	4.00	
* 6 Perylene-d12	264	15.171	15.171	0.000	98	1310530	4.00	4.00	
$ 7 2-Fluorophenol	112	5.306	5.306	0.000	93	450561	4.00	4.01	
$ 8 Phenol-d5	99	6.123	6.123	0.000	96	546142	4.00	3.93	
$ 9 Nitrobenzene-d5	82	6.924	6.924	0.000	90	555410	4.00	3.95	
$ 10 2-Fluorobiphenyl	172	8.441	8.441	0.000	99	1026203	4.00	3.94	
$ 11 2,4,6-Tribromophenol	330	9.701	9.701	0.000	93	149416	4.00	3.85	
$ 12 p-Terphenyl-d14	244	11.672	11.672	0.000	100	1173156	4.00	4.01	
13 1,4-Dioxane	88	3.425	3.425	0.000	97	178558	4.00	3.84	
14 N-Nitrosodimethylamine	42	3.847	3.847	0.000	90	239624	4.00	3.98	
15 Pyridine	52	3.890	3.890	0.000	96	522143	8.00	7.70	
35 Benzaldehyde	77	6.080	6.080	0.000	96	746665	8.00	7.91	
37 Phenol	94	6.133	6.133	0.000	99	549154	4.00	3.94	
36 Aniline	93	6.171	6.171	0.000	97	544747	4.00	3.63	
39 Bis(2-chloroethyl)ether	93	6.203	6.203	0.000	93	501348	4.00	4.09	
40 2-Chlorophenol	128	6.283	6.283	0.000	97	460675	4.00	3.84	
41 n-Decane	57	6.288	6.288	0.000	90	485893	4.00	3.94	
43 1,3-Dichlorobenzene	146	6.411	6.411	0.000	97	533503	4.00	3.86	
44 1,4-Dichlorobenzene	146	6.470	6.470	0.000	93	543559	4.00	3.94	
45 Benzyl alcohol	108	6.566	6.566	0.000	91	259772	4.00	3.78	
46 1,2-Dichlorobenzene	146	6.609	6.609	0.000	97	524900	4.00	3.92	
48 2-Methylphenol	108	6.651	6.651	0.000	95	405087	4.00	4.00	
49 2,2'-oxybis[1-chloropropan	45	6.668	6.668	0.000	92	612580	4.00	3.91	
47 Indene	115	6.684	6.684	0.000	88	4057647	20.0	20.0	
57 4-Methylphenol	108	6.774	6.774	0.000	98	412878	4.00	3.93	
53 N-Nitrosodi-n-propylamine	70	6.780	6.780	0.000	88	322787	4.00	3.88	
52 Acetophenone	105	6.790	6.790	0.000	96	631546	4.00	3.93	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.903	6.903	0.000	92	229817	4.00	3.90	
59 Nitrobenzene	77	6.940	6.940	0.000	87	492778	4.00	3.97	
62 Isophorone	82	7.138	7.138	0.000	99	870062	4.00	3.98	
64 2-Nitrophenol	139	7.212	7.212	0.000	95	239896	4.00	4.01	
66 2,4-Dimethylphenol	107	7.223	7.223	0.000	97	468796	4.00	3.95	
69 Bis(2-chloroethoxy)methane	93	7.298	7.298	0.000	98	514332	4.00	3.87	
70 Benzoic acid	105	7.324	7.324	0.000	88	1264676	20.0	18.6	
72 2,4-Dichlorophenol	162	7.421	7.421	0.000	93	383774	4.00	4.03	
73 1,2,4-Trichlorobenzene	180	7.495	7.495	0.000	94	470838	4.00	3.90	
74 Naphthalene	128	7.565	7.565	0.000	98	1300822	4.00	3.95	
76 4-Chloroaniline	127	7.597	7.597	0.000	97	390688	4.00	3.78	
77 2,6-Dichlorophenol	162	7.608	7.608	0.000	97	371896	4.00	3.95	
79 Hexachlorobutadiene	225	7.661	7.661	0.000	95	301017	4.00	3.88	
84 Caprolactam	113	7.885	7.885	0.000	79	249764	8.00	7.73	
85 4-Chloro-3-methylphenol	107	7.987	7.987	0.000	95	376665	4.00	3.84	
87 2-Methylnaphthalene	142	8.147	8.147	0.000	92	890049	4.00	3.95	
89 1-Methylnaphthalene	142	8.232	8.232	0.000	92	836254	4.00	3.97	
90 Hexachlorocyclopentadiene	237	8.281	8.281	0.000	94	318029	4.00	4.11	
91 1,2,4,5-Tetrachlorobenzene	216	8.291	8.291	0.000	97	491425	4.00	3.97	
93 2,4,6-Trichlorophenol	196	8.377	8.377	0.000	92	292950	4.00	4.15	
94 2,4,5-Trichlorophenol	196	8.414	8.414	0.000	93	291524	4.00	3.93	
96 1,1'-Biphenyl	154	8.532	8.532	0.000	95	1079120	4.00	3.96	
97 2-Chloronaphthalene	162	8.564	8.564	0.000	96	844849	4.00	3.91	
100 2-Nitroaniline	65	8.633	8.633	0.000	84	237392	4.00	3.93	
105 Dimethyl phthalate	163	8.756	8.756	0.000	99	960880	4.00	4.05	
106 1,3-Dinitrobenzene	168	8.799	8.799	0.000	87	147058	4.00	3.93	
107 2,6-Dinitrotoluene	165	8.820	8.820	0.000	96	226411	4.00	4.04	
108 Acenaphthylene	152	8.916	8.916	0.000	98	1273377	4.00	4.10	
109 3-Nitroaniline	138	8.975	8.975	0.000	94	165812	4.00	3.63	
111 2,4-Dinitrophenol	184	9.060	9.060	0.000	83	198466	8.00	7.31	
110 Acenaphthene	153	9.060	9.060	0.000	94	884018	4.00	3.99	
112 4-Nitrophenol	109	9.098	9.098	0.000	94	237275	8.00	7.51	
114 2,4-Dinitrotoluene	165	9.162	9.162	0.000	95	301270	4.00	4.02	
115 Dibenzofuran	168	9.205	9.205	0.000	97	1239541	4.00	3.96	
118 2,3,4,6-Tetrachlorophenol	232	9.306	9.306	0.000	71	235152	4.00	3.87	
121 Hexadecane	57	9.338	9.338	0.000	95	566475	4.00	3.92	
120 Diethyl phthalate	149	9.343	9.343	0.000	98	988604	4.00	3.94	
123 4-Chlorophenyl phenyl ethe	204	9.466	9.466	0.000	93	508684	4.00	3.96	
124 Fluorene	166	9.493	9.493	0.000	94	995560	4.00	4.06	
126 4-Nitroaniline	138	9.498	9.498	0.000	47	201694	4.00	3.58	a
127 4,6-Dinitro-2-methylphenol	198	9.514	9.514	0.000	88	290791	8.00	7.63	
129 Diphenylamine	169	9.562	9.562	0.000	93	694306	3.42	3.34	
130 N-Nitrosodiphenylamine	169	9.562	9.562	0.000	63	694306	4.00	3.91	
132 Azobenzene	77	9.605	9.605	0.000	99	1000167	4.00	3.96	
131 1,2-Diphenylhydrazine	77	9.605	9.605	0.000	41	1000755	4.00	3.96	
139 4-Bromophenyl phenyl ether	248	9.883	9.883	0.000	65	303440	4.00	3.80	
140 Hexachlorobenzene	284	9.974	9.974	0.000	94	350730	4.00	3.86	
143 Atrazine	200	9.990	9.990	0.000	93	599287	8.00	8.41	
148 n-Octadecane	57	10.107	10.107	0.000	94	580491	4.00	3.88	
145 Pentachlorophenol	266	10.129	10.129	0.000	93	289212	8.00	7.31	
151 Phenanthrene	178	10.315	10.315	0.000	97	1485605	4.00	4.02	
152 Anthracene	178	10.358	10.358	0.000	97	1466385	4.00	3.94	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.481	10.481	0.000	96	1090839	4.00	3.63	
157 Di-n-butyl phthalate	149	10.705	10.705	0.000	100	1690923	4.00	4.03	
164 Fluoranthene	202	11.346	11.346	0.000	98	1670920	4.00	4.06	
166 Benzidine	184	11.437	11.437	0.000	99	370903	8.00	4.29	
167 Pyrene	202	11.576	11.576	0.000	97	1704892	4.00	4.14	
174 Butyl benzyl phthalate	149	12.163	12.163	0.000	97	753375	4.00	4.15	
181 Bis(2-ethylhexyl) phthalat	149	12.863	12.863	0.000	95	1063902	4.00	4.13	
179 3,3'-Dichlorobenzidine	252	12.890	12.890	0.000	73	808033	8.00	6.83	
180 Benzo[a]anthracene	228	12.959	12.959	0.000	98	1619687	4.00	4.04	
182 Chrysene	228	13.013	13.013	0.000	97	1469950	4.00	4.09	
184 Di-n-octyl phthalate	149	13.803	13.803	0.000	99	1765731	4.00	3.99	
186 Benzo[b]fluoranthene	252	14.562	14.562	0.000	97	1590177	4.00	3.90	
187 Benzo[k]fluoranthene	252	14.599	14.599	0.000	98	1525070	4.00	3.80	
189 Benzo[a]pyrene	252	15.085	15.085	0.000	77	1513697	4.00	3.90	
193 Indeno[1,2,3-cd]pyrene	276	16.965	16.965	0.000	96	1783585	4.00	3.83	
194 Dibenz(a,h)anthracene	278	16.981	16.981	0.000	91	1499302	4.00	3.82	
195 Benzo[g,h,i]perylene	276	17.489	17.489	0.000	97	1472281	4.00	3.82	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00380	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

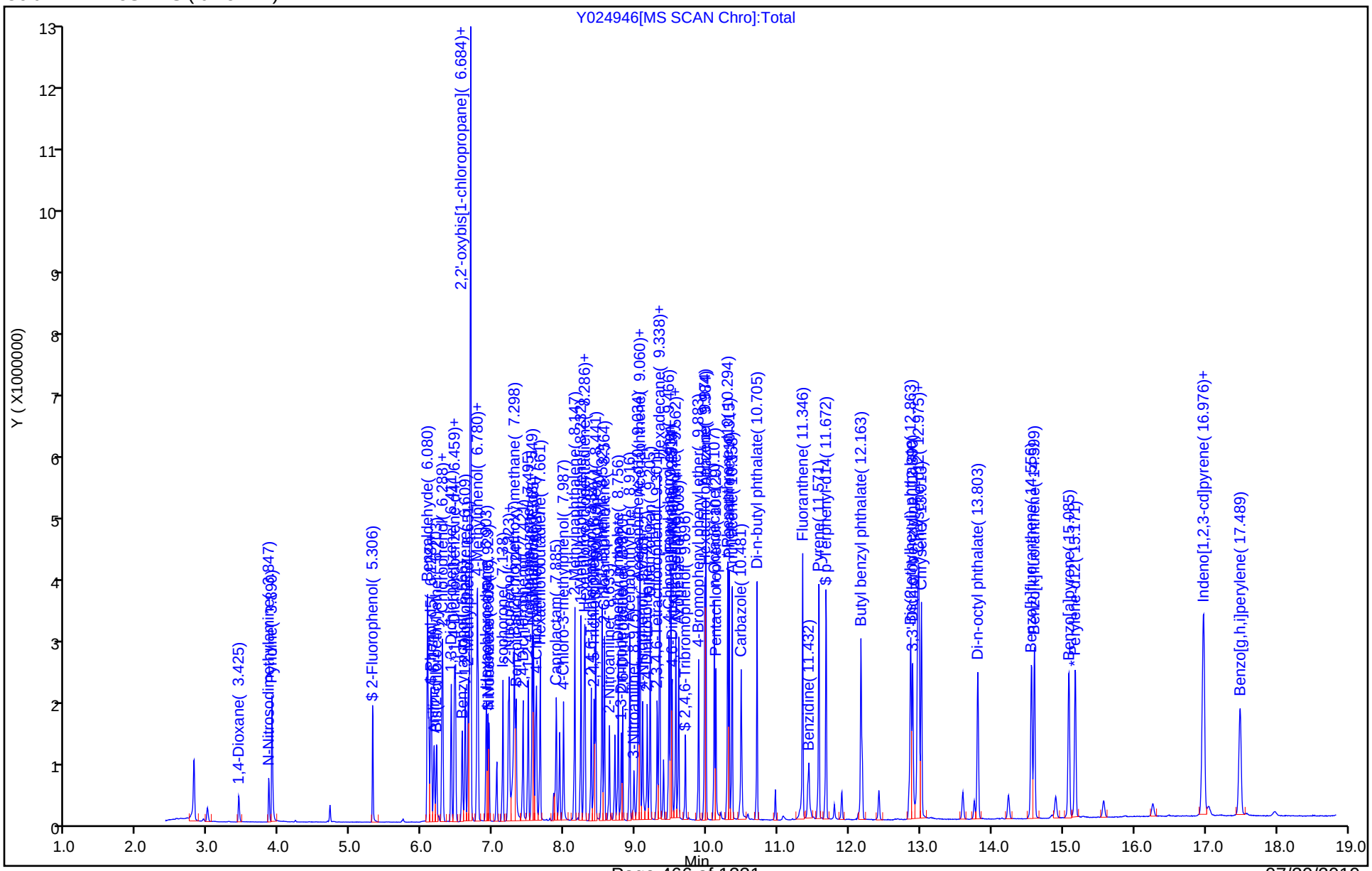
Report Date: 06-Jun-2019 13:20:40 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024946.D

Injection Date:	04-Jun-2019 18:34:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	ICIS L1 4.0			Worklist Smp#:	7
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

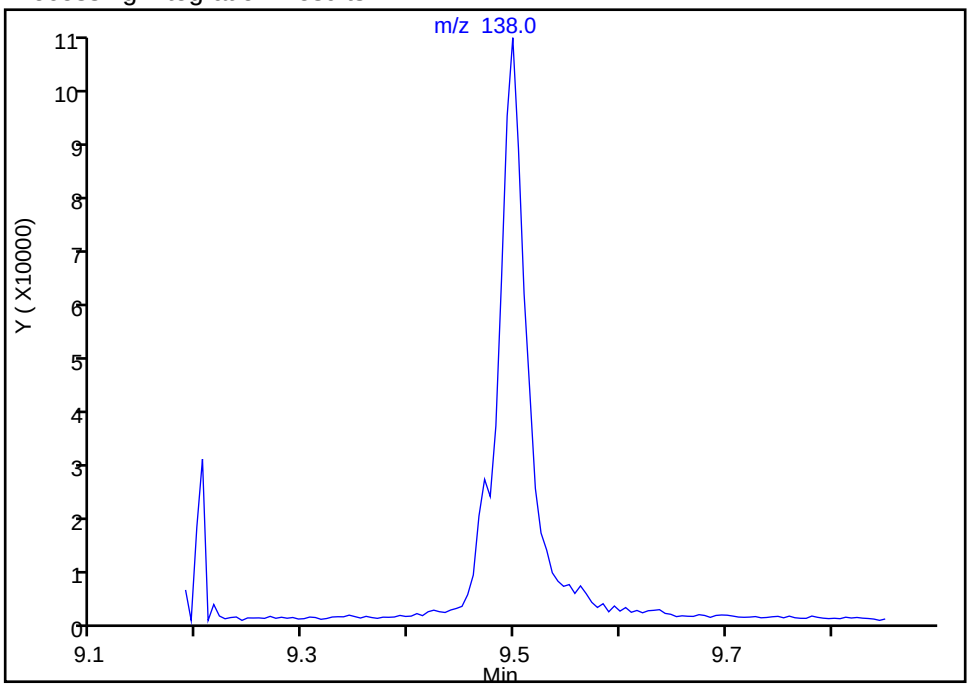
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024946.D				
Injection Date:	04-Jun-2019 18:34:30	Instrument ID:	HP5973Y		
Lims ID:	ICIS L1 4.0				
Client ID:					
Operator ID:	bs	ALS Bottle#:	8	Worklist Smp#:	7
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

126 4-Nitroaniline, CAS: 100-01-6

Signal: 1

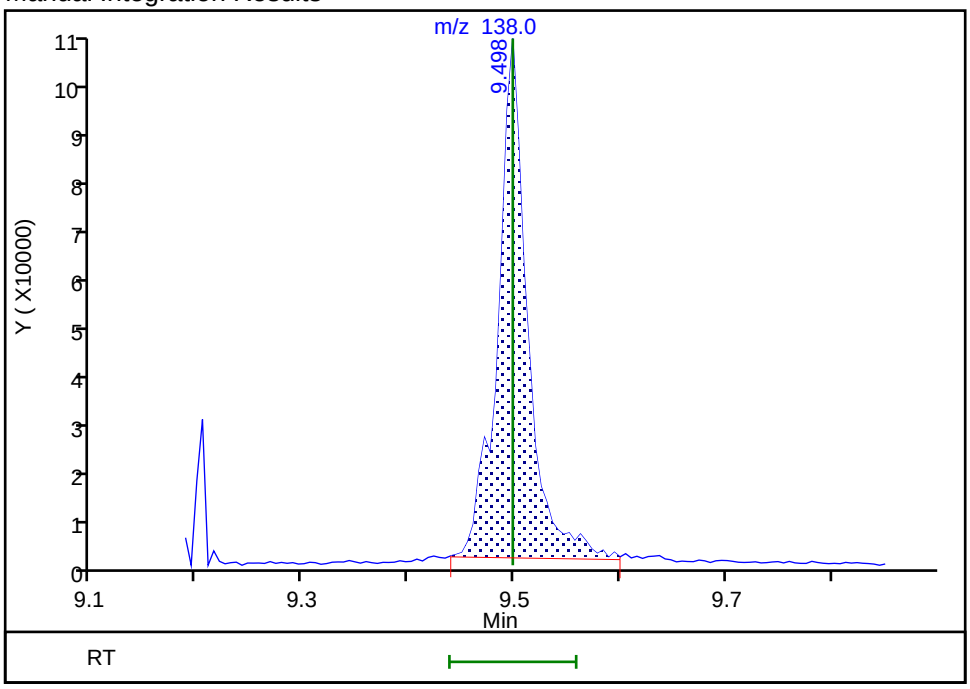
Not Detected
Expected RT: 9.50

Processing Integration Results



Manual Integration Results

RT: 9.50
Area: 201694
Amount: 3.582588
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:09:58
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024947.D
Lims ID: IC L1 8.0
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 04-Jun-2019 19:02:30 ALS Bottle#: 9 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-008
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:47 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:10:39

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.453	6.454	-0.001	96	313617	4.00	4.00	
* 2 Naphthalene-d8	136	7.548	7.549	-0.001	100	1167608	4.00	4.00	
* 3 Acenaphthene-d10	164	9.033	9.034	-0.001	94	687771	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.294	0.000	97	1279738	4.00	4.00	
* 5 Chrysene-d12	240	12.980	12.975	0.005	99	1218915	4.00	4.00	
* 6 Perylene-d12	264	15.175	15.171	0.005	95	1246402	4.00	4.00	
$ 7 2-Fluorophenol	112	5.310	5.306	0.004	92	859620	8.00	8.23	
$ 8 Phenol-d5	99	6.122	6.123	-0.001	95	1045113	8.00	8.09	
$ 9 Nitrobenzene-d5	82	6.929	6.924	0.005	89	1083363	8.00	8.28	
$ 10 2-Fluorobiphenyl	172	8.440	8.441	-0.001	99	2036679	8.00	8.10	
$ 11 2,4,6-Tribromophenol	330	9.701	9.701	0.000	92	304615	8.00	8.12	
$ 12 p-Terphenyl-d14	244	11.677	11.672	0.005	100	2349394	8.00	8.28	
13 1,4-Dioxane	88	3.425	3.425	0.000	96	339936	8.00	7.86	
14 N-Nitrosodimethylamine	42	3.852	3.847	0.005	90	451247	8.00	8.06	
15 Pyridine	52	3.890	3.890	0.000	96	1052252	16.0	16.7	
35 Benzaldehyde	77	6.080	6.080	0.000	94	1367974	16.0	15.6	
37 Phenol	94	6.133	6.133	0.000	99	1056949	8.00	8.16	
36 Aniline	93	6.170	6.171	-0.001	97	1131939	8.00	8.11	
39 Bis(2-chloroethyl)ether	93	6.208	6.203	0.005	94	936729	8.00	8.22	
40 2-Chlorophenol	128	6.283	6.283	0.000	97	905249	8.00	8.12	
41 n-Decane	57	6.293	6.288	0.005	90	905948	8.00	7.90	
43 1,3-Dichlorobenzene	146	6.411	6.411	0.000	98	1015311	8.00	7.91	
44 1,4-Dichlorobenzene	146	6.469	6.470	-0.001	93	1038244	8.00	8.10	
45 Benzyl alcohol	108	6.566	6.566	0.000	92	522471	8.00	8.06	
46 1,2-Dichlorobenzene	146	6.608	6.609	-0.001	97	997757	8.00	8.01	
48 2-Methylphenol	108	6.651	6.651	0.000	97	788036	8.00	8.37	
49 2,2'-oxybis[1-chloropropan	45	6.667	6.668	-0.001	93	1154858	8.00	7.93	
47 Indene	115	6.688	6.684	0.004	89	7606314	40.0	40.4	
57 4-Methylphenol	108	6.779	6.774	0.005	95	813687	8.00	8.33	
53 N-Nitrosodi-n-propylamine	70	6.779	6.780	-0.001	90	631725	8.00	8.17	
52 Acetophenone	105	6.790	6.790	0.000	96	1214168	8.00	8.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.902	6.903	-0.001	94	438372	8.00	8.00	
59 Nitrobenzene	77	6.945	6.940	0.005	87	948932	8.00	8.22	
62 Isophorone	82	7.137	7.138	-0.001	100	1686683	8.00	8.28	
64 2-Nitrophenol	139	7.217	7.212	0.005	95	466434	8.00	8.38	
66 2,4-Dimethylphenol	107	7.228	7.223	0.005	97	907200	8.00	8.21	
69 Bis(2-chloroethoxy)methane	93	7.297	7.298	-0.001	98	1012602	8.00	8.19	
70 Benzoic acid	105	7.356	7.324	0.032	89	2775241	40.0	40.2	
72 2,4-Dichlorophenol	162	7.420	7.421	-0.001	94	750609	8.00	8.48	
73 1,2,4-Trichlorobenzene	180	7.495	7.495	0.000	94	903527	8.00	8.05	
74 Naphthalene	128	7.564	7.565	-0.001	98	2510717	8.00	8.19	
76 4-Chloroaniline	127	7.596	7.597	-0.001	95	816481	8.00	8.49	
77 2,6-Dichlorophenol	162	7.607	7.608	-0.001	96	738137	8.00	8.43	
79 Hexachlorobutadiene	225	7.661	7.661	0.000	95	584536	8.00	8.10	
84 Caprolactam	113	7.906	7.885	0.021	84	497565	16.0	16.4	
85 4-Chloro-3-methylphenol	107	7.992	7.987	0.005	96	748266	8.00	8.12	
87 2-Methylnaphthalene	142	8.147	8.147	0.000	92	1735363	8.00	8.27	
89 1-Methylnaphthalene	142	8.232	8.232	0.000	95	1623304	8.00	8.29	
90 Hexachlorocyclopentadiene	237	8.280	8.281	-0.001	93	626017	8.00	8.37	
91 1,2,4,5-Tetrachlorobenzene	216	8.291	8.291	0.000	97	968486	8.00	8.10	
93 2,4,6-Trichlorophenol	196	8.376	8.377	-0.001	92	576076	8.00	8.46	
94 2,4,5-Trichlorophenol	196	8.419	8.414	0.005	95	584157	8.00	8.15	
96 1,1'-Biphenyl	154	8.531	8.532	-0.001	95	2136183	8.00	8.12	
97 2-Chloronaphthalene	162	8.563	8.564	-0.001	96	1675386	8.00	8.03	
100 2-Nitroaniline	65	8.633	8.633	0.000	85	478460	8.00	8.12	
105 Dimethyl phthalate	163	8.761	8.756	0.005	99	1885097	8.00	8.23	
106 1,3-Dinitrobenzene	168	8.798	8.799	-0.001	84	299469	8.00	8.46	
107 2,6-Dinitrotoluene	165	8.820	8.820	0.000	94	461770	8.00	8.52	
108 Acenaphthylene	152	8.921	8.916	0.005	98	2512205	8.00	8.38	
109 3-Nitroaniline	138	8.980	8.975	0.005	95	404690	8.00	9.18	
110 Acenaphthene	153	9.065	9.060	0.005	95	1747566	8.00	8.16	
111 2,4-Dinitrophenol	184	9.060	9.060	0.000	85	452328	16.0	15.6	
112 4-Nitrophenol	109	9.103	9.098	0.005	94	543691	16.0	17.3	
114 2,4-Dinitrotoluene	165	9.167	9.162	0.005	95	616227	8.00	8.40	
115 Dibenzofuran	168	9.204	9.205	-0.001	96	2451081	8.00	8.11	
118 2,3,4,6-Tetrachlorophenol	232	9.306	9.306	0.000	71	480006	8.00	8.08	
121 Hexadecane	57	9.338	9.338	0.000	95	1140303	8.00	8.16	
120 Diethyl phthalate	149	9.343	9.343	0.000	98	1990503	8.00	8.22	
123 4-Chlorophenyl phenyl ethe	204	9.471	9.466	0.005	90	999514	8.00	8.06	
124 Fluorene	166	9.498	9.493	0.005	93	1989441	8.00	8.39	
126 4-Nitroaniline	138	9.498	9.498	0.000	60	456065	8.00	8.31	
127 4,6-Dinitro-2-methylphenol	198	9.519	9.514	0.005	89	612619	16.0	15.8	
129 Diphenylamine	169	9.567	9.562	0.005	93	1390873	6.84	6.98	
130 N-Nitrosodiphenylamine	169	9.567	9.562	0.005	63	1390873	8.00	8.16	
132 Azobenzene	77	9.605	9.605	0.000	99	1986752	8.00	8.20	
131 1,2-Diphenylhydrazine	77	9.605	9.605	0.000	41	1986752	8.00	8.20	
139 4-Bromophenyl phenyl ether	248	9.888	9.883	0.005	64	624413	8.00	8.16	
140 Hexachlorobenzene	284	9.973	9.974	-0.001	95	698338	8.00	8.02	
143 Atrazine	200	9.989	9.990	-0.001	93	1186832	16.0	17.2	
148 n-Octadecane	57	10.107	10.107	0.000	95	1162724	8.00	8.10	
145 Pentachlorophenol	266	10.128	10.129	-0.001	92	651365	16.0	15.8	
151 Phenanthrene	178	10.315	10.315	0.000	98	2907076	8.00	8.20	
152 Anthracene	178	10.358	10.358	0.000	97	2973601	8.00	8.33	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.481	10.481	0.000	96	2133073	8.00	7.41	
157 Di-n-butyl phthalate	149	10.705	10.705	0.000	100	3290934	8.00	8.18	
164 Fluoranthene	202	11.346	11.346	0.000	98	3251000	8.00	8.24	
166 Benzidine	184	11.437	11.437	0.000	99	941184	16.0	11.2	
167 Pyrene	202	11.576	11.576	0.000	97	3365070	8.00	8.43	
174 Butyl benzyl phthalate	149	12.168	12.163	0.005	97	1497685	8.00	8.53	
181 Bis(2-ethylhexyl) phthalat	149	12.863	12.863	0.000	95	2131131	8.00	8.54	
179 3,3'-Dichlorobenzidine	252	12.895	12.890	0.005	73	1662948	16.0	14.5	
180 Benzo[a]anthracene	228	12.964	12.959	0.005	98	3249988	8.00	8.36	
182 Chrysene	228	13.018	13.013	0.005	97	2927289	8.00	8.41	
184 Di-n-octyl phthalate	149	13.808	13.803	0.005	99	3558826	8.00	8.23	
186 Benzo[b]fluoranthene	252	14.561	14.562	-0.001	97	3154980	8.00	8.09	
187 Benzo[k]fluoranthene	252	14.604	14.599	0.005	98	2990118	8.00	7.81	
189 Benzo[a]pyrene	252	15.090	15.085	0.005	77	2987847	8.00	8.05	
193 Indeno[1,2,3-cd]pyrene	276	16.981	16.965	0.016	96	3573288	8.00	8.03	
194 Dibenz(a,h)anthracene	278	16.991	16.981	0.010	91	3036839	8.00	8.10	
195 Benzo[g,h,i]perylene	276	17.499	17.489	0.010	98	2958304	8.00	8.04	
S 261 Total Cresols	1				0			16.7	

Reagents:

MB_L1LVI_WRK_00381	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

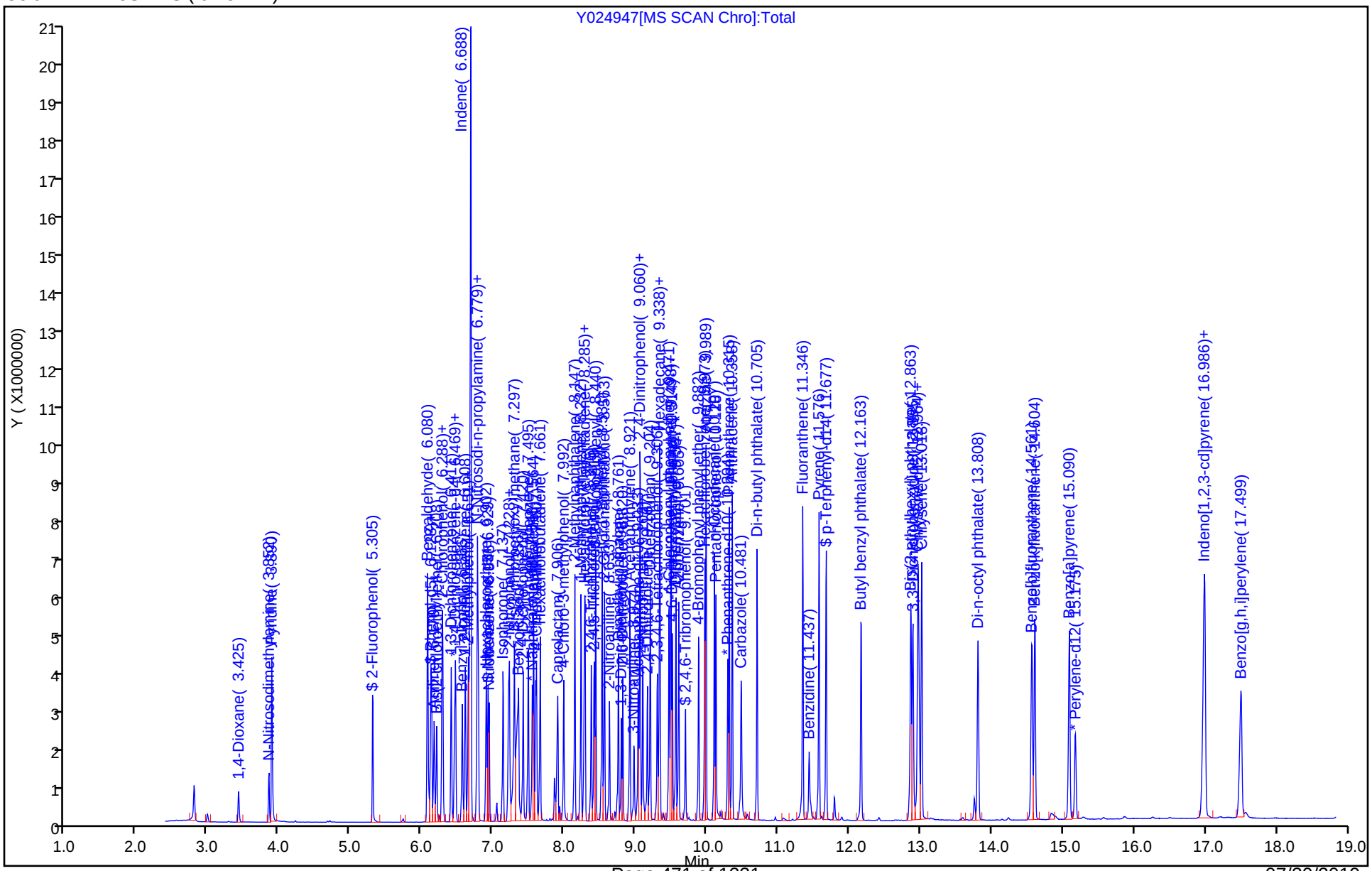
Report Date: 06-Jun-2019 13:20:49 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024947.D

Injection Date:	04-Jun-2019 19:02:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 8.0			Worklist Smp#:	8
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024948.D
Lims ID: IC L1 12.0
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 04-Jun-2019 19:30:30 ALS Bottle#: 10 Worklist Smp#: 9
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-009
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:20:55 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:11:10

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.458	6.454	0.004	96	316668	4.00	4.00	a
* 2 Naphthalene-d8	136	7.548	7.549	-0.001	99	1198891	4.00	4.00	
* 3 Acenaphthene-d10	164	9.038	9.034	0.004	95	695623	4.00	4.00	
* 4 Phenanthrene-d10	188	10.293	10.294	-0.001	97	1278375	4.00	4.00	
* 5 Chrysene-d12	240	12.985	12.975	0.010	100	1213808	4.00	4.00	
* 6 Perylene-d12	264	15.175	15.171	0.005	98	1211566	4.00	4.00	
$ 7 2-Fluorophenol	112	5.310	5.306	0.004	92	1320069	12.0	12.5	
$ 8 Phenol-d5	99	6.127	6.123	0.004	95	1614184	12.0	12.4	
$ 9 Nitrobenzene-d5	82	6.928	6.924	0.004	90	1646311	12.0	12.3	
$ 10 2-Fluorobiphenyl	172	8.439	8.441	-0.002	99	3086631	12.0	12.1	
$ 11 2,4,6-Tribromophenol	330	9.705	9.701	0.004	93	472218	12.0	12.6	
$ 12 p-Terphenyl-d14	244	11.676	11.672	0.004	100	3572497	12.0	12.6	
13 1,4-Dioxane	88	3.430	3.425	0.005	96	515247	12.0	11.8	
14 N-Nitrosodimethylamine	42	3.857	3.847	0.010	91	671787	12.0	11.9	
15 Pyridine	52	3.894	3.890	0.004	95	1605009	24.0	25.2	
35 Benzaldehyde	77	6.079	6.080	-0.001	95	1977310	24.0	22.3	
37 Phenol	94	6.137	6.133	0.004	99	1602217	12.0	12.3	
36 Aniline	93	6.175	6.171	0.004	97	1829745	12.0	13.0	
39 Bis(2-chloroethyl)ether	93	6.207	6.203	0.004	94	1380082	12.0	12.0	
40 2-Chlorophenol	128	6.282	6.283	-0.001	96	1389663	12.0	12.3	
41 n-Decane	57	6.292	6.288	0.004	91	1386932	12.0	12.0	
43 1,3-Dichlorobenzene	146	6.415	6.411	0.004	98	1560407	12.0	12.0	
44 1,4-Dichlorobenzene	146	6.474	6.470	0.004	93	1583489	12.0	12.2	
45 Benzyl alcohol	108	6.570	6.566	0.004	91	805568	12.0	12.2	
46 1,2-Dichlorobenzene	146	6.607	6.609	-0.002	96	1526453	12.0	12.1	
48 2-Methylphenol	108	6.656	6.651	0.005	97	1170099	12.0	12.3	
49 2,2'-oxybis[1-chloropropan	45	6.672	6.668	0.004	92	1700286	12.0	11.6	
47 Indene	115	6.688	6.684	0.004	90	10883796	60.0	57.3	e
57 4-Methylphenol	108	6.778	6.774	0.004	95	1254607	12.0	12.7	
53 N-Nitrosodi-n-propylamine	70	6.784	6.780	0.004	91	962948	12.0	12.3	
52 Acetophenone	105	6.794	6.790	0.004	96	1858858	12.0	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.901	6.903	-0.002	92	680743	12.0	12.3	
59 Nitrobenzene	77	6.944	6.940	0.004	87	1444442	12.0	12.2	
62 Isophorone	82	7.142	7.138	0.004	99	2553434	12.0	12.2	
64 2-Nitrophenol	139	7.216	7.212	0.004	96	717829	12.0	12.6	
66 2,4-Dimethylphenol	107	7.227	7.223	0.004	97	1401397	12.0	12.3	
69 Bis(2-chloroethoxy)methane	93	7.302	7.298	0.004	99	1554454	12.0	12.2	
70 Benzoic acid	105	7.382	7.324	0.058	88	4463835	60.0	61.3	
72 2,4-Dichlorophenol	162	7.425	7.421	0.004	94	1151994	12.0	12.7	
73 1,2,4-Trichlorobenzene	180	7.494	7.495	-0.001	94	1392707	12.0	12.1	
74 Naphthalene	128	7.569	7.565	0.004	98	3872625	12.0	12.3	
76 4-Chloroaniline	127	7.596	7.597	-0.001	96	1263760	12.0	12.8	
77 2,6-Dichlorophenol	162	7.612	7.608	0.004	97	1138183	12.0	12.7	
79 Hexachlorobutadiene	225	7.660	7.661	-0.001	95	893109	12.0	12.1	
84 Caprolactam	113	7.921	7.885	0.036	79	754142	24.0	24.1	
85 4-Chloro-3-methylphenol	107	7.996	7.987	0.009	96	1145036	12.0	12.1	
87 2-Methylnaphthalene	142	8.146	8.147	-0.001	92	2642178	12.0	12.3	
89 1-Methylnaphthalene	142	8.237	8.232	0.004	93	2503248	12.0	12.4	
90 Hexachlorocyclopentadiene	237	8.285	8.281	0.004	95	969881	12.0	12.8	
91 1,2,4,5-Tetrachlorobenzene	216	8.290	8.291	-0.001	97	1483220	12.0	12.3	
93 2,4,6-Trichlorophenol	196	8.381	8.377	0.004	91	881445	12.0	12.8	
94 2,4,5-Trichlorophenol	196	8.418	8.414	0.004	94	952633	12.0	13.1	
96 1,1'-Biphenyl	154	8.530	8.532	-0.002	96	3234745	12.0	12.2	
97 2-Chloronaphthalene	162	8.562	8.564	-0.002	96	2547047	12.0	12.1	
100 2-Nitroaniline	65	8.637	8.633	0.004	85	727158	12.0	12.2	
105 Dimethyl phthalate	163	8.760	8.756	0.004	99	2645094	12.0	11.4	
106 1,3-Dinitrobenzene	168	8.803	8.799	0.004	86	465207	12.0	12.7	
107 2,6-Dinitrotoluene	165	8.824	8.820	0.004	95	709675	12.0	13.0	
108 Acenaphthylene	152	8.920	8.916	0.004	98	3796655	12.0	12.5	
109 3-Nitroaniline	138	8.979	8.975	0.004	95	618799	12.0	13.9	
111 2,4-Dinitrophenol	184	9.064	9.060	0.004	68	763598	24.0	25.2	
110 Acenaphthene	153	9.064	9.060	0.004	90	2684352	12.0	12.4	
112 4-Nitrophenol	109	9.107	9.098	0.009	94	823736	24.0	25.7	
114 2,4-Dinitrotoluene	165	9.171	9.162	0.009	95	944377	12.0	12.7	
115 Dibenzofuran	168	9.209	9.205	0.004	96	3692682	12.0	12.1	
118 2,3,4,6-Tetrachlorophenol	232	9.305	9.306	-0.001	72	746806	12.0	12.4	
121 Hexadecane	57	9.337	9.338	-0.001	96	1736421	12.0	12.3	
120 Diethyl phthalate	149	9.347	9.343	0.004	98	2991328	12.0	12.2	
123 4-Chlorophenyl phenyl ethe	204	9.470	9.466	0.004	91	1527943	12.0	12.2	
124 Fluorene	166	9.497	9.493	0.004	94	2992836	12.0	12.5	
126 4-Nitroaniline	138	9.497	9.498	-0.001	85	718239	12.0	12.9	
127 4,6-Dinitro-2-methylphenol	198	9.518	9.514	0.004	89	968835	24.0	24.6	
129 Diphenylamine	169	9.566	9.562	0.004	93	2098910	10.3	10.5	
130 N-Nitrosodiphenylamine	169	9.566	9.562	0.004	63	2098910	12.0	12.3	
132 Azobenzene	77	9.609	9.605	0.004	99	2954844	12.0	12.2	
131 1,2-Diphenylhydrazine	77	9.609	9.605	0.004	41	2954844	12.0	12.2	
139 4-Bromophenyl phenyl ether	248	9.887	9.883	0.004	64	950299	12.0	12.4	
140 Hexachlorobenzene	284	9.972	9.974	-0.002	95	1083308	12.0	12.5	
143 Atrazine	200	9.994	9.990	0.004	94	1648952	24.0	23.7	
148 n-Octadecane	57	10.106	10.107	-0.001	95	1763887	12.0	12.3	
145 Pentachlorophenol	266	10.133	10.129	0.004	93	1068445	24.0	25.4	
151 Phenanthrene	178	10.314	10.315	-0.001	98	4344964	12.0	12.3	
152 Anthracene	178	10.362	10.358	0.004	98	4400787	12.0	12.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.480	10.481	-0.001	96	3581021	12.0	12.4	
157 Di-n-butyl phthalate	149	10.709	10.705	0.004	100	4807588	12.0	12.0	
164 Fluoranthene	202	11.350	11.346	0.004	98	4924174	12.0	12.5	
166 Benzidine	184	11.436	11.437	-0.001	99	2142668	24.0	25.7	
167 Pyrene	202	11.580	11.576	0.004	96	4943171	12.0	12.4	
174 Butyl benzyl phthalate	149	12.168	12.163	0.005	97	2227504	12.0	12.7	
181 Bis(2-ethylhexyl) phthalat	149	12.867	12.863	0.004	96	3154143	12.0	12.7	
179 3,3'-Dichlorobenzidine	252	12.894	12.890	0.004	73	2886827	24.0	25.3	
180 Benzo[a]anthracene	228	12.969	12.959	0.010	99	4788936	12.0	12.4	
182 Chrysene	228	13.022	13.013	0.009	96	4274000	12.0	12.3	
184 Di-n-octyl phthalate	149	13.813	13.803	0.010	99	5302147	12.0	12.3	
186 Benzo[b]fluoranthene	252	14.571	14.562	0.009	97	4671347	12.0	12.3	
187 Benzo[k]fluoranthene	252	14.614	14.599	0.015	98	4616363	12.0	12.4	
189 Benzo[a]pyrene	252	15.094	15.085	0.009	77	4468268	12.0	12.4	
193 Indeno[1,2,3-cd]pyrene	276	16.991	16.965	0.025	96	5400581	12.0	12.5	
194 Dibenz(a,h)anthracene	278	17.001	16.981	0.020	91	4557588	12.0	12.5	
195 Benzo[g,h,i]perylene	276	17.514	17.489	0.025	98	4410642	12.0	12.3	
S 261 Total Cresols	1				0			25.0	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Review Flags

a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00382	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added: 20.00	Units: uL	Run Reagent

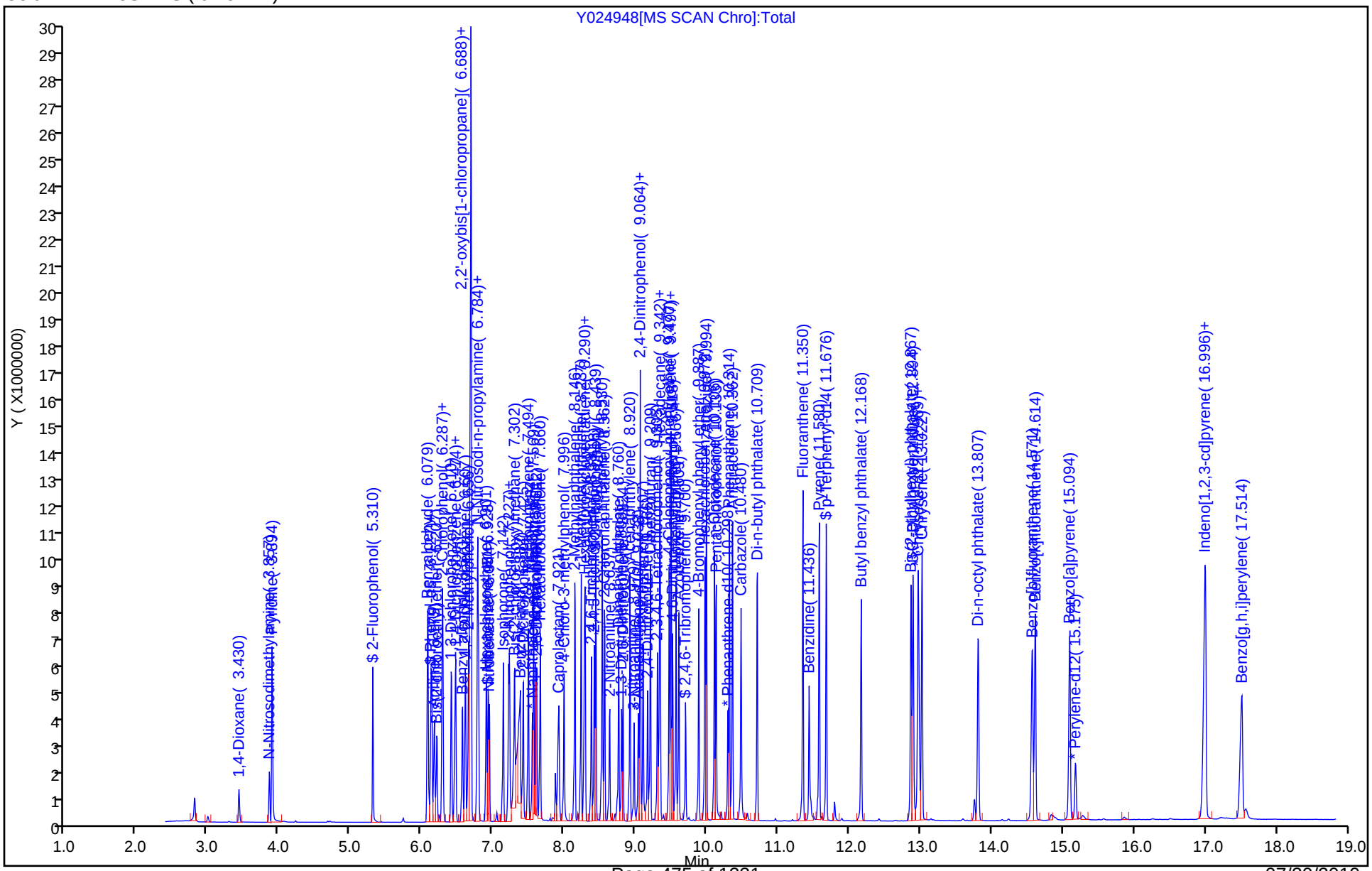
Report Date: 06-Jun-2019 13:20:56 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024948.D

Injection Date:	04-Jun-2019 19:30:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 12.0			Worklist Smp#:	9
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

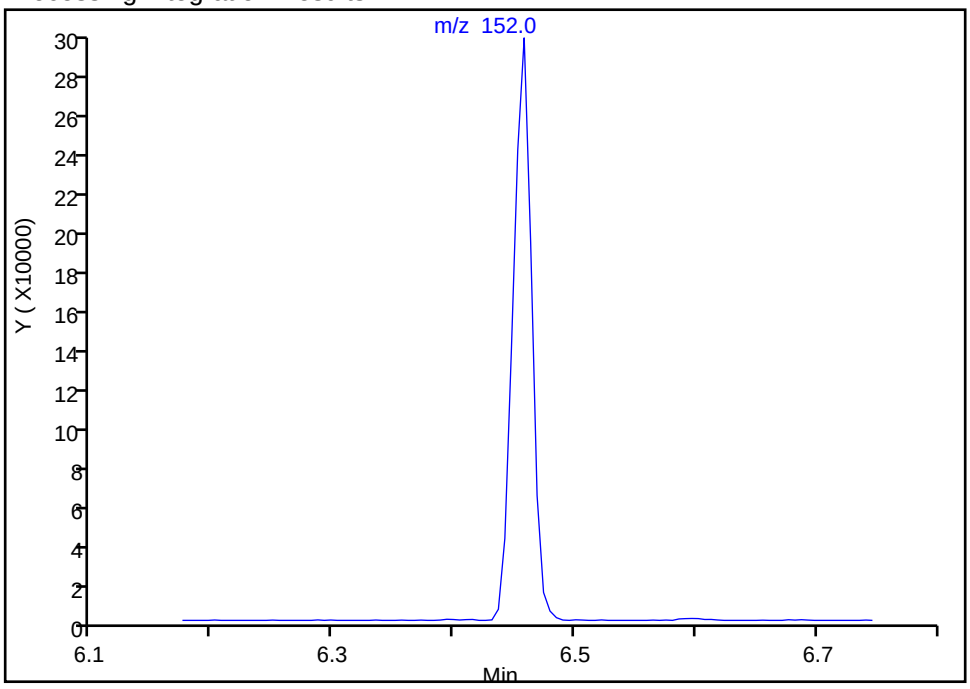
Data File:	\\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024948.D				
Injection Date:	04-Jun-2019 19:30:30	Instrument ID:	HP5973Y		
Lims ID:	IC L1 12.0				
Client ID:					
Operator ID:	bs	ALS Bottle#:	10	Worklist Smp#:	9
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:	RXI-5Sil MS (0.25 mm)	Detector	MS SCAN		

* 1 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

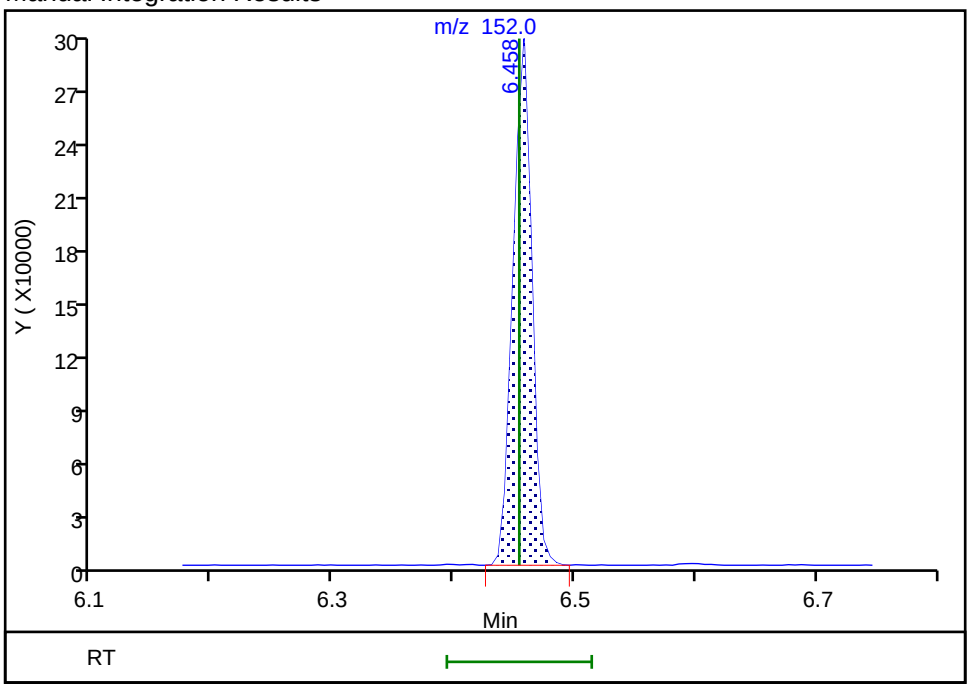
Not Detected
Expected RT: 6.45

Processing Integration Results



Manual Integration Results

RT: 6.46
Area: 316668
Amount: 4.000000
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:10:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024949.D
Lims ID: IC L1 16.0
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 04-Jun-2019 19:58:30 ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0081676-010
Operator ID: bs Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:21:03 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 05-Jun-2019 17:11:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.459	6.454	0.005	96	334701	4.00	4.00	a
* 2 Naphthalene-d8	136	7.549	7.549	0.000	99	1251157	4.00	4.00	
* 3 Acenaphthene-d10	164	9.039	9.034	0.005	95	721899	4.00	4.00	
* 4 Phenanthrene-d10	188	10.294	10.294	0.000	97	1337269	4.00	4.00	
* 5 Chrysene-d12	240	12.986	12.975	0.011	100	1281814	4.00	4.00	
* 6 Perylene-d12	264	15.181	15.171	0.011	98	1277265	4.00	4.00	
$ 7 2-Fluorophenol	112	5.311	5.306	0.005	92	1803113	16.0	16.2	
$ 8 Phenol-d5	99	6.128	6.123	0.005	95	2186990	16.0	15.9	
$ 9 Nitrobenzene-d5	82	6.929	6.924	0.005	89	2241985	16.0	16.0	
$ 10 2-Fluorobiphenyl	172	8.441	8.441	0.000	99	4220042	16.0	16.0	
$ 11 2,4,6-Tribromophenol	330	9.707	9.701	0.006	93	657873	16.0	16.7	
$ 12 p-Terphenyl-d14	244	11.678	11.672	0.006	100	4823205	16.0	16.2	
13 1,4-Dioxane	88	3.426	3.425	0.001	95	696971	16.0	15.1	
14 N-Nitrosodimethylamine	42	3.858	3.847	0.011	91	911380	16.0	15.3	
15 Pyridine	52	3.896	3.890	0.006	95	2205878	32.0	32.8	
35 Benzaldehyde	77	6.080	6.080	0.000	95	2471863	32.0	26.4	
37 Phenol	94	6.144	6.133	0.011	99	2210655	16.0	16.0	
36 Aniline	93	6.176	6.171	0.005	96	2464239	16.0	16.6	
39 Bis(2-chloroethyl)ether	93	6.214	6.203	0.011	94	1901411	16.0	15.6	
40 2-Chlorophenol	128	6.283	6.283	0.000	97	1906501	16.0	16.0	
41 n-Decane	57	6.294	6.288	0.006	91	1853255	16.0	15.2	
43 1,3-Dichlorobenzene	146	6.411	6.411	0.000	97	2112107	16.0	15.4	
44 1,4-Dichlorobenzene	146	6.475	6.470	0.005	94	2163029	16.0	15.8	
45 Benzyl alcohol	108	6.572	6.566	0.006	91	1137866	16.0	16.3	
46 1,2-Dichlorobenzene	146	6.609	6.609	0.000	97	2057407	16.0	15.5	
48 2-Methylphenol	108	6.657	6.651	0.006	92	1647838	16.0	16.4	
49 2,2'-oxybis[1-chloropropan	45	6.673	6.668	0.005	93	2294602	16.0	14.8	
47 Indene	115	6.689	6.684	0.005	90	12963455	80.0	64.6	e
57 4-Methylphenol	108	6.785	6.774	0.011	96	1695562	16.0	16.3	
53 N-Nitrosodi-n-propylamine	70	6.791	6.780	0.011	88	1320481	16.0	16.0	
52 Acetophenone	105	6.796	6.790	0.006	95	2498573	16.0	15.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.903	6.903	0.000	92	922642	16.0	15.8	
59 Nitrobenzene	77	6.951	6.940	0.011	87	1950824	16.0	15.8	
62 Isophorone	82	7.143	7.138	0.005	99	3475936	16.0	15.9	
64 2-Nitrophenol	139	7.218	7.212	0.006	96	1000420	16.0	16.8	
66 2,4-Dimethylphenol	107	7.229	7.223	0.006	97	1914048	16.0	16.2	
69 Bis(2-chloroethoxy)methane	93	7.303	7.298	0.005	99	2075150	16.0	15.7	
70 Benzoic acid	105	7.399	7.324	0.075	87	6265509	80.0	81.5	Ma
72 2,4-Dichlorophenol	162	7.426	7.421	0.005	94	1572398	16.0	16.6	
73 1,2,4-Trichlorobenzene	180	7.496	7.495	0.001	94	1893477	16.0	15.7	
74 Naphthalene	128	7.570	7.565	0.005	98	5114886	16.0	15.6	
76 4-Chloroaniline	127	7.597	7.597	0.000	97	1694030	16.0	16.4	
77 2,6-Dichlorophenol	162	7.613	7.608	0.005	97	1559141	16.0	16.6	
79 Hexachlorobutadiene	225	7.661	7.661	0.000	95	1242706	16.0	16.1	
84 Caprolactam	113	7.934	7.885	0.049	79	1025760	32.0	31.4	
85 4-Chloro-3-methylphenol	107	7.998	7.987	0.011	96	1562996	16.0	15.8	
87 2-Methylnaphthalene	142	8.147	8.147	0.000	92	3612613	16.0	16.1	
89 1-Methylnaphthalene	142	8.238	8.232	0.006	93	3377390	16.0	16.1	
90 Hexachlorocyclopentadiene	237	8.286	8.281	0.005	95	1312651	16.0	16.7	
91 1,2,4,5-Tetrachlorobenzene	216	8.291	8.291	0.000	97	2036611	16.0	16.2	
93 2,4,6-Trichlorophenol	196	8.382	8.377	0.005	92	1248152	16.0	17.5	
94 2,4,5-Trichlorophenol	196	8.425	8.414	0.011	94	1325215	16.0	17.6	
96 1,1'-Biphenyl	154	8.532	8.532	0.000	96	4362927	16.0	15.8	
97 2-Chloronaphthalene	162	8.569	8.564	0.005	96	3447164	16.0	15.7	
100 2-Nitroaniline	65	8.639	8.633	0.006	85	999457	16.0	16.1	
105 Dimethyl phthalate	163	8.767	8.756	0.011	99	3886725	16.0	16.2	
106 1,3-Dinitrobenzene	168	8.809	8.799	0.010	85	569140	16.0	14.9	
107 2,6-Dinitrotoluene	165	8.826	8.820	0.006	94	947271	16.0	16.7	
108 Acenaphthylene	152	8.922	8.916	0.006	98	5021928	16.0	16.0	
109 3-Nitroaniline	138	8.980	8.975	0.005	95	815503	16.0	17.6	
110 Acenaphthene	153	9.066	9.060	0.006	91	3630799	16.0	16.2	
111 2,4-Dinitrophenol	184	9.066	9.060	0.006	68	1105083	32.0	34.7	
112 4-Nitrophenol	109	9.109	9.098	0.011	93	1122503	32.0	33.7	
114 2,4-Dinitrotoluene	165	9.173	9.162	0.011	95	1167685	16.0	15.1	
115 Dibenzofuran	168	9.210	9.205	0.005	96	4949380	16.0	15.6	
118 2,3,4,6-Tetrachlorophenol	232	9.306	9.306	0.000	71	1075065	16.0	17.1	
121 Hexadecane	57	9.338	9.338	0.000	96	2331164	16.0	15.9	
120 Diethyl phthalate	149	9.349	9.343	0.006	98	4010512	16.0	15.8	
123 4-Chlorophenyl phenyl ethe	204	9.472	9.466	0.006	91	2095295	16.0	16.1	
124 Fluorene	166	9.498	9.493	0.005	94	4054207	16.0	16.3	
126 4-Nitroaniline	138	9.504	9.498	0.006	86	955132	16.0	16.5	
127 4,6-Dinitro-2-methylphenol	198	9.525	9.514	0.011	90	1366650	32.0	32.8	
129 Diphenylamine	169	9.573	9.562	0.011	93	2860758	13.7	13.7	
130 N-Nitrosodiphenylamine	169	9.573	9.562	0.011	63	2860758	16.0	16.1	
132 Azobenzene	77	9.611	9.605	0.006	99	3890048	16.0	15.4	
131 1,2-Diphenylhydrazine	77	9.611	9.605	0.006	41	3890048	16.0	15.4	
139 4-Bromophenyl phenyl ether	248	9.888	9.883	0.005	64	1304016	16.0	16.3	
140 Hexachlorobenzene	284	9.974	9.974	0.000	96	1477938	16.0	16.3	
143 Atrazine	200	10.001	9.990	0.011	95	2033169	32.0	28.1	
148 n-Octadecane	57	10.107	10.107	0.000	95	2347129	16.0	15.7	
145 Pentachlorophenol	266	10.134	10.129	0.005	93	1492385	32.0	33.6	
151 Phenanthrene	178	10.321	10.315	0.006	98	5839788	16.0	15.8	
152 Anthracene	178	10.364	10.358	0.006	98	5868353	16.0	15.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.481	10.481	0.000	96	4911540	16.0	16.3	
157 Di-n-butyl phthalate	149	10.711	10.705	0.006	100	6412447	16.0	15.3	
164 Fluoranthene	202	11.352	11.346	0.006	98	6463669	16.0	15.7	
166 Benzidine	184	11.437	11.437	0.000	99	3532962	32.0	40.1	
167 Pyrene	202	11.582	11.576	0.006	96	6600118	16.0	15.7	
174 Butyl benzyl phthalate	149	12.169	12.163	0.006	97	2977332	16.0	16.1	
181 Bis(2-ethylhexyl) phthalat	149	12.869	12.863	0.006	96	4247292	16.0	16.2	
179 3,3'-Dichlorobenzidine	252	12.901	12.890	0.011	73	4125577	32.0	34.2	
180 Benzo[a]anthracene	228	12.970	12.959	0.011	99	6526016	16.0	16.0	
182 Chrysene	228	13.024	13.013	0.011	96	5789525	16.0	15.8	
184 Di-n-octyl phthalate	149	13.814	13.803	0.011	99	7167133	16.0	15.7	
186 Benzo[b]fluoranthene	252	14.573	14.562	0.010	97	6559152	16.0	16.4	
187 Benzo[k]fluoranthene	252	14.615	14.599	0.016	98	6202152	16.0	15.8	
189 Benzo[a]pyrene	252	15.101	15.085	0.016	77	6141711	16.0	16.1	
193 Indeno[1,2,3-cd]pyrene	276	16.997	16.965	0.032	96	7462122	16.0	16.3	
194 Dibenz(a,h)anthracene	278	17.013	16.981	0.032	92	6343449	16.0	16.5	
195 Benzo[g,h,i]perylene	276	17.521	17.489	0.032	98	6208086	16.0	16.4	
S 261 Total Cresols	1				0			32.7	

QC Flag Legend

Processing Flags
e - Potential Peak Saturated
Review Flags
M - Manually Integrated
a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00383	Amount Added:	1.00	Units: mL	
MB_LLIS_WRK_00170	Amount Added:	20.00	Units: uL	Run Reagent

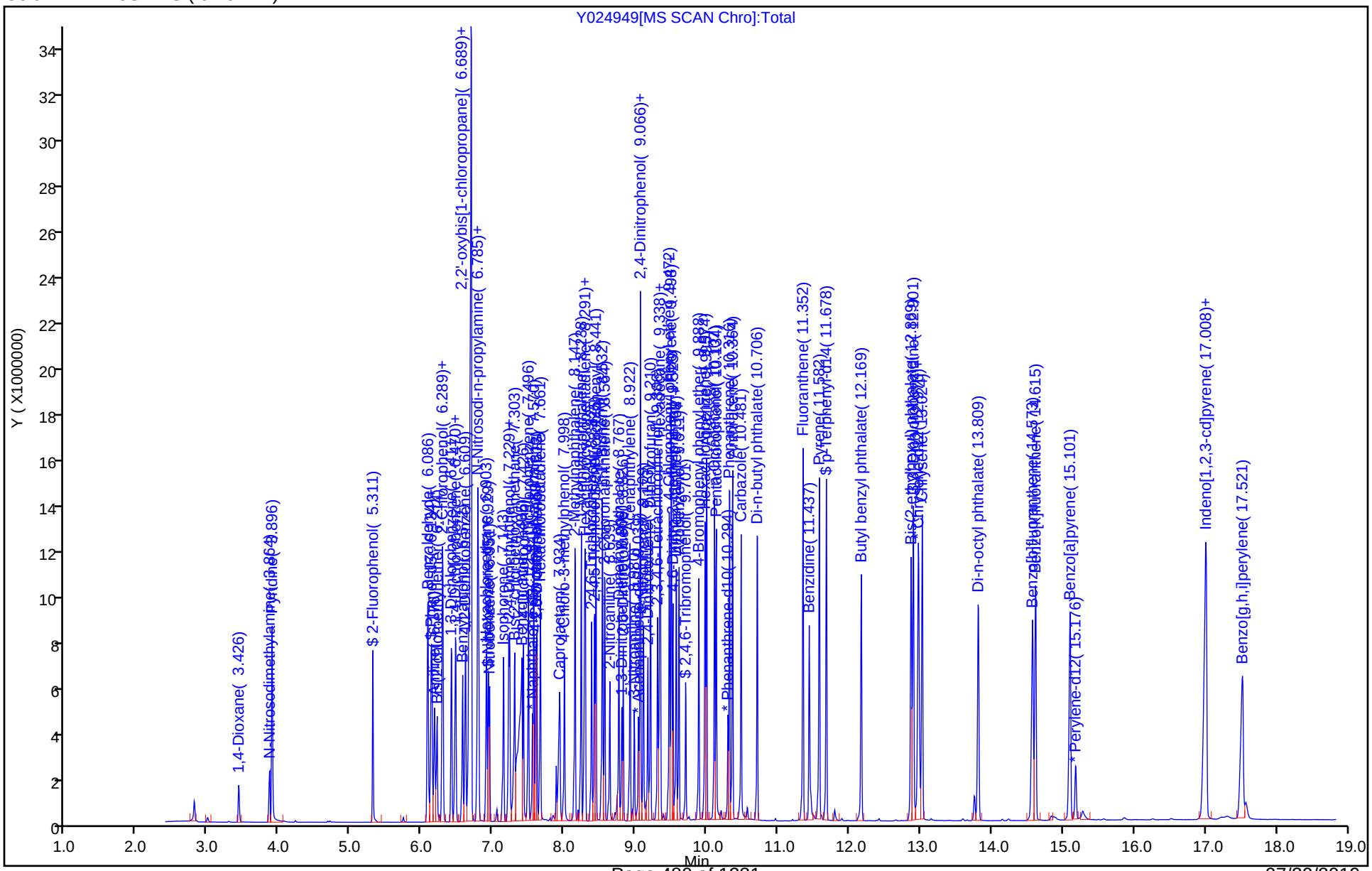
Report Date: 06-Jun-2019 13:21:04 Chrom Revision: 2.3 03-May-2019 15:52:00

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024949.D

Injection Date:	04-Jun-2019 19:58:30	Instrument ID:	HP5973Y	Operator ID:	bs
Lims ID:	IC L1 16.0			Worklist Smp#:	10
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Eurofins TestAmerica, Buffalo

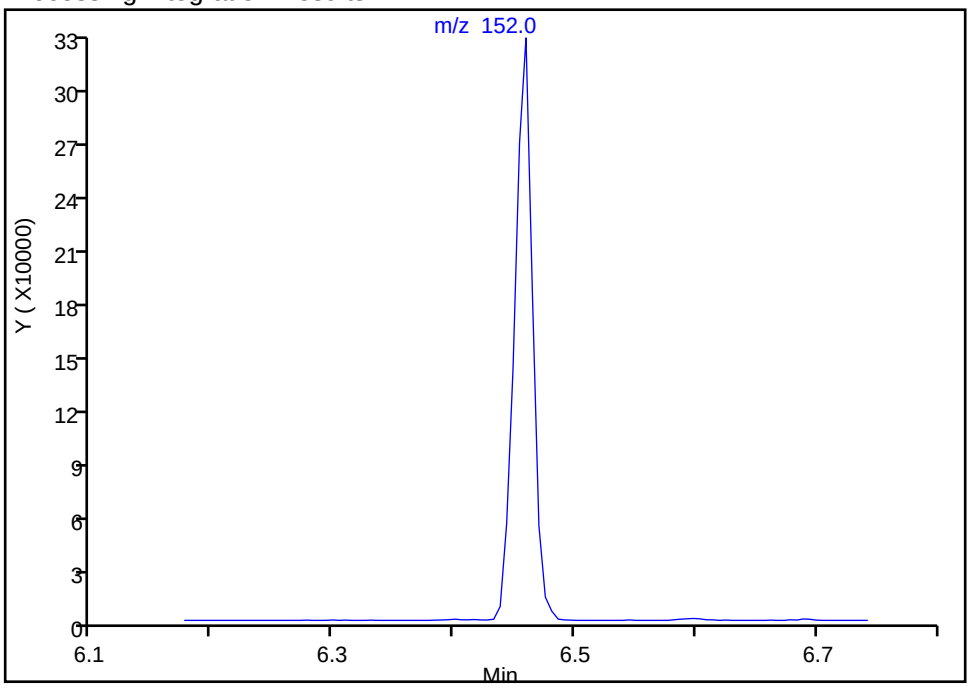
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024949.D
Injection Date: 04-Jun-2019 19:58:30 Instrument ID: HP5973Y
Lims ID: IC L1 16.0
Client ID:
Operator ID: bs ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

* 1 1,4-Dichlorobenzene-d4, CAS: 3855-82-1

Signal: 1

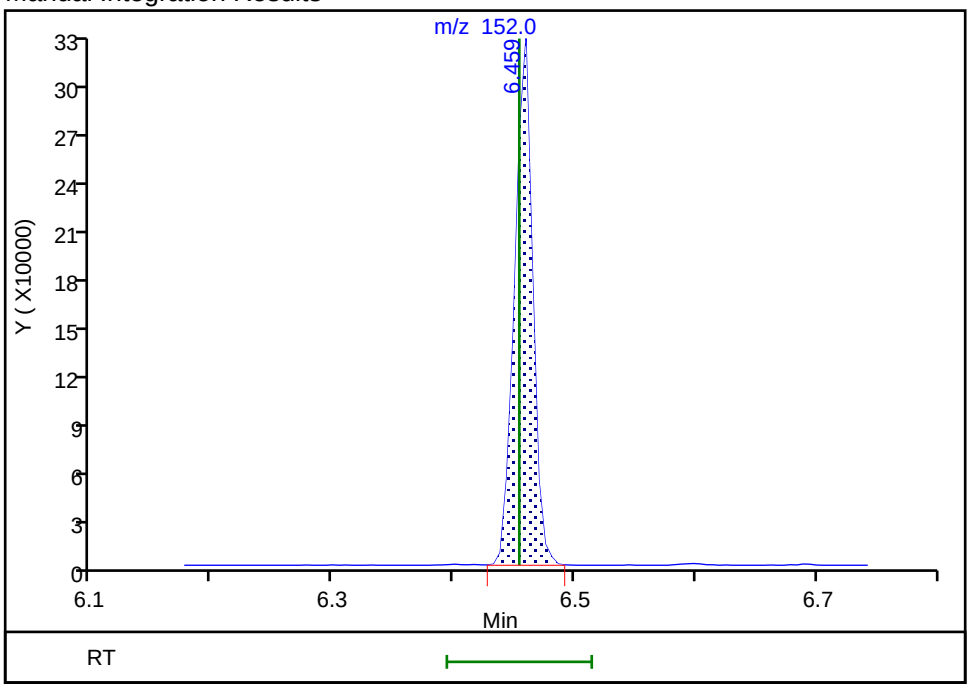
Not Detected
Expected RT: 6.45

Processing Integration Results



Manual Integration Results

RT: 6.46
Area: 334701
Amount: 4.000000
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:11:24
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

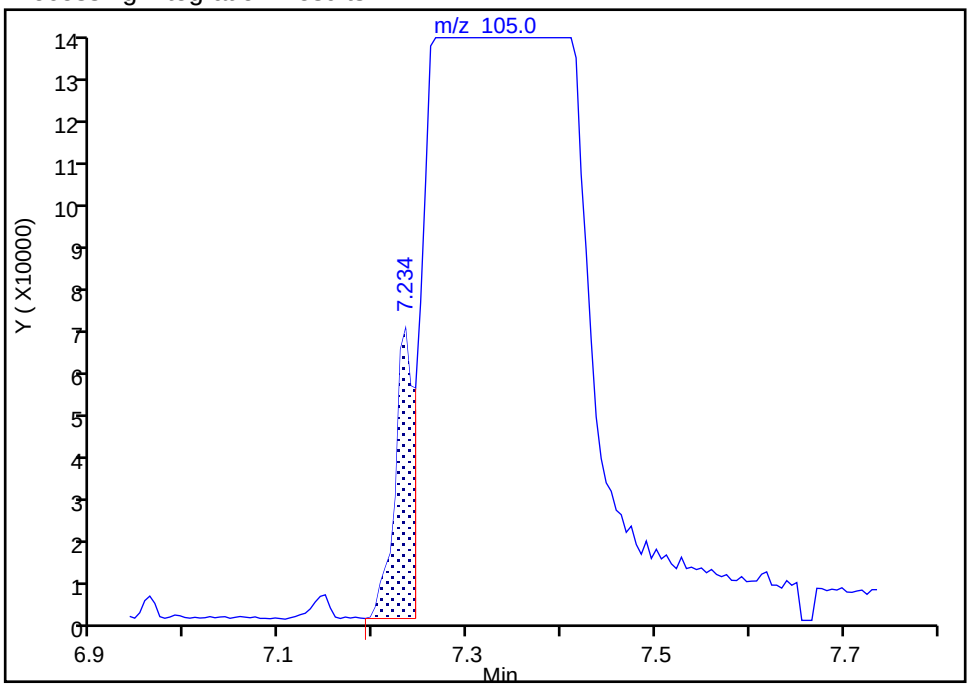
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024949.D
Injection Date: 04-Jun-2019 19:58:30 Instrument ID: HP5973Y
Lims ID: IC L1 16.0
Client ID:
Operator ID: bs ALS Bottle#: 11 Worklist Smp#: 10
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

70 Benzoic acid, CAS: 65-85-0

Signal: 1

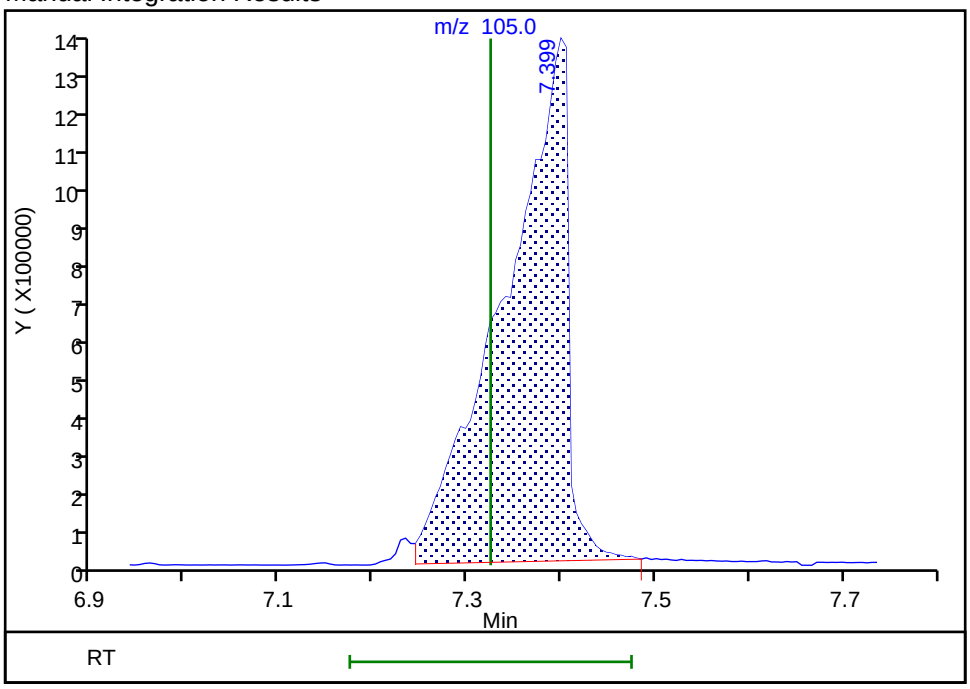
Processing Integration Results

RT: 7.23
Area: 99091
Amount: 2.055088
Amount Units: ng/uL



Manual Integration Results

RT: 7.40
Area: 6265509
Amount: 81.540832
Amount Units: ng/uL



Reviewer: schickr, 05-Jun-2019 17:11:44
Audit Action: Split an Integrated Peak Audit Reason: Incomplete Integration

FORM VI
RESOLUTION CHECK SUMMARY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID (1): CCVIS 480-482258/3 Instrument ID (1): HP5973Y

GC Column (1): RXI-5Sil MS ID: 0.25(mm) Date Analyzed (1): 07/16/2019 13:14

ANALYTE	RT	RESOLUTION (%)
Benzo(b)fluoranthene	14.16	22.20

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482258/3 Calibration Date: 07/16/2019 13:14

Instrument ID: HP5973Y Calib Start Date: 06/04/2019 16:43

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 06/04/2019 19:58

Lab File ID: Y025819.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5516	0.4602	0.0100	3340	4000	-16.6	20.0
N-Nitrosodimethylamine	Ave	0.7139	1.129	0.0100	6320	4000	58.1*	50.0
Pyridine	Ave	0.8042	0.6831	0.0100	6800	8000	-15.1	50.0
Benzaldehyde	Ave	1.119	1.081	0.0100	7730	8000	-3.4	50.0
Phenol	Ave	1.651	1.532	0.8000	3710	4000	-7.2	20.0
Aniline	Ave	1.779	1.458	0.0100	3280	4000	-18.0	20.0
Bis(2-chloroethyl)ether	Ave	1.454	1.197	0.7000	3290	4000	-17.7	20.0
2-Chlorophenol	Ave	1.422	1.350	0.8000	3800	4000	-5.1	20.0
n-Decane	Ave	1.462	1.191	0.0100	3260	4000	-18.5	20.0
1,3-Dichlorobenzene	Ave	1.637	1.598	0.0100	3900	4000	-2.4	20.0
1,4-Dichlorobenzene	Ave	1.635	1.589	0.0100	3890	4000	-2.8	20.0
Benzyl alcohol	Lin2		0.6021	0.0100	2980	4000	-25.6*	20.0
1,2-Dichlorobenzene	Ave	1.588	1.591	0.0100	4010	4000	0.2	20.0
2-Methylphenol	Ave	1.200	1.263	0.7000	4210	4000	5.2	20.0
bis (2-chloroisopropyl) ether	Ave	1.858	1.526	0.0100	3290	4000	-17.9	20.0
Indene	Ave	2.399	2.765	0.0100	23100	20000	15.3	20.0
N-Nitrosodi-n-propylamine	Ave	0.9858	0.8841	0.5000	3590	4000	-10.3	20.0
4-Methylphenol	Ave	1.246	1.155	0.6000	3710	4000	-7.3	20.0
Acetophenone	Ave	1.905	1.852	0.0100	3890	4000	-2.8	20.0
Hexachloroethane	Ave	0.6986	0.7531	0.3000	4310	4000	7.8	20.0
Nitrobenzene	Ave	0.3954	0.4048	0.2000	4100	4000	2.4	20.0
Isophorone	Ave	0.6978	0.6634	0.4000	3800	4000	-4.9	20.0
2-Nitrophenol	Ave	0.1906	0.1943	0.1000	4080	4000	1.9	20.0
2,4-Dimethylphenol	Ave	0.3787	0.3710	0.2000	3920	4000	-2.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.4238	0.3579	0.3000	3380	4000	-15.5	20.0
Benzoic acid	Lin2		0.2071	0.0100	19100	20000	-4.6	50.0
2,4-Dichlorophenol	Ave	0.3033	0.3014	0.2000	3970	4000	-0.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3847	0.4233	0.0100	4400	4000	10.0	20.0
Naphthalene	Ave	1.050	1.045	0.7000	3980	4000	-0.5	20.0
4-Chloroaniline	Ave	0.3297	0.2818	0.0100	3420	4000	-14.5	20.0
2,6-Dichlorophenol	Ave	0.3000	0.3185	0.0100	4250	4000	6.2	20.0
Hexachlorobutadiene	Ave	0.2471	0.2901	0.0100	4700	4000	17.4	20.0
Caprolactam	Lin2		0.0813	0.0100	6340	8000	-20.7	50.0
4-Chloro-3-methylphenol	Lin2		0.2941	0.2000	3760	4000	-6.0	20.0
2-Methylnaphthalene	Ave	0.7185	0.7664	0.4000	4270	4000	6.7	20.0
1-Methylnaphthalene	Ave	0.6709	0.7078	0.0100	4220	4000	5.5	20.0
Hexachlorocyclopentadiene	Ave	0.4349	0.4832	0.0500	4440	4000	11.1	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.6951	0.7434	0.0100	4280	4000	6.9	20.0
2,4,6-Trichlorophenol	Ave	0.3963	0.4348	0.2000	4390	4000	9.7	20.0
2,4,5-Trichlorophenol	Ave	0.4171	0.4193	0.2000	4020	4000	0.5	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482258/3 Calibration Date: 07/16/2019 13:14

Instrument ID: HP5973Y Calib Start Date: 06/04/2019 16:43

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 06/04/2019 19:58

Lab File ID: Y025819.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.530	1.549	0.0100	4050	4000	1.2	20.0
2-Chloronaphthalene	Ave	1.213	1.216	0.8000	4010	4000	0.2	20.0
2-Nitroaniline	Lin2		0.3442	0.0100	4060	4000	1.5	20.0
Dimethyl phthalate	Ave	1.332	1.437	0.0100	4320	4000	7.9	20.0
1,3-Dinitrobenzene	Lin2		0.1270	0.0100	4250	4000	6.3	20.0
2,6-Dinitrotoluene	Ave	0.3151	0.3215	0.2000	4080	4000	2.0	20.0
Acenaphthylene	Ave	1.743	1.803	0.9000	4140	4000	3.4	20.0
3-Nitroaniline	Ave	0.2564	0.1583	0.0100	2470	4000	-38.3*	20.0
Acenaphthene	Ave	1.245	1.282	0.9000	4120	4000	2.9	20.0
2,4-Dinitrophenol	Lin2		0.1346	0.0100	7100	8000	-11.3	20.0
4-Nitrophenol	Lin2		0.2626	0.0100	11600	8000	45.2*	20.0
2,4-Dinitrotoluene	Lin2		0.3955	0.2000	3770	4000	-5.8	20.0
Dibenzofuran	Ave	1.757	1.789	0.8000	4070	4000	1.8	20.0
2,3,4,6-Tetrachlorophenol	Lin2		0.3530	0.0100	4130	4000	3.2	20.0
Diethyl phthalate	Ave	1.409	1.521	0.0100	4320	4000	8.0	20.0
Hexadecane	Ave	0.8126	0.6620	0.0100	3260	4000	-18.5	20.0
4-Chlorophenyl phenyl ether	Ave	0.7209	0.7910	0.4000	4390	4000	9.7	20.0
Fluorene	Ave	1.379	1.452	0.9000	4210	4000	5.3	20.0
4-Nitroaniline	Lin2		0.2675	0.0100	3390	4000	-15.3	20.0
4,6-Dinitro-2-methylphenol	Lin2		0.1082	0.0100	7590	8000	-5.2	20.0
Diphenylamine	Ave	0.6231	0.5676	0.0100	3120	3420	-8.9	20.0
N-Nitrosodiphenylamine	Ave	0.5327	0.4853	0.0100	3640	4000	-8.9	20.0
1,2-Diphenylhydrazine	Ave	0.7570	0.7820	0.0100	4130	4000	3.3	20.0
trans-Azobenzene	Ave	0.7573	0.7820	0.0100	4130	4000	3.3	20.0
4-Bromophenyl phenyl ether	Ave	0.2392	0.2385	0.1000	3990	4000	-0.3	20.0
Hexachlorobenzene	Ave	0.2720	0.2596	0.1000	3820	4000	-4.5	20.0
Atrazine	Ave	0.4002	0.4456	0.0100	8910	8000	11.4	20.0
n-Octadecane	Ave	0.4485	0.3552	0.0100	3170	4000	-20.8*	20.0
Pentachlorophenol	Lin2		0.0618	0.0500	4590	8000	-42.7*	20.0
Phenanthrene	Ave	1.108	1.052	0.7000	3800	4000	-5.0	20.0
Anthracene	Ave	1.116	1.090	0.7000	3910	4000	-2.3	20.0
Carbazole	Ave	0.9003	0.6293	0.0100	2800	4000	-30.1*	20.0
Di-n-butyl phthalate	Ave	1.257	1.245	0.0100	3960	4000	-1.0	20.0
Fluoranthene	Ave	1.233	1.270	0.6000	4120	4000	3.0	20.0
Benzidine	Ave	0.2748	0.1167	0.0100	3400	8000	-57.5*	50.0
Pyrene	Ave	1.310	1.305	0.6000	3990	4000	-0.4	20.0
Butyl benzyl phthalate	Ave	0.5763	0.5690	0.0100	3950	4000	-1.3	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8184	0.8812	0.0100	4310	4000	7.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3762	0.2982	0.0100	6340	8000	-20.7	50.0
Benzo(a)anthracene	Ave	1.276	1.295	0.8000	4060	4000	1.5	20.0
Chrysene	Ave	1.143	1.209	0.7000	4230	4000	5.8	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: CCVIS 480-482258/3 Calibration Date: 07/16/2019 13:14

Instrument ID: HP5973Y Calib Start Date: 06/04/2019 16:43

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 06/04/2019 19:58

Lab File ID: Y025819.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Di-n-octyl phthalate	Lin2		1.400	0.0100	3990	4000	-0.4	20.0
Benzo(b)fluoranthene	Lin2		1.216	0.7000	3910	4000	-2.3	20.0
Benzo(k)fluoranthene	Lin2		1.281	0.7000	4180	4000	4.5	20.0
Benzo(a)pyrene	Lin2		1.202	0.7000	4060	4000	1.5	20.0
Indeno(1,2,3-cd)pyrene	Lin2		1.483	0.5000	4170	4000	4.3	20.0
Dibenz(a,h)anthracene	Lin2		1.190	0.4000	3970	4000	-0.6	20.0
Benzo(g,h,i)perylene	Lin2		1.180	0.5000	4020	4000	0.4	20.0
2-Fluorophenol	Ave	1.333	1.251	0.0100	3750	4000	-6.2	20.0
Phenol-d5	Ave	1.647	1.480	0.0100	3590	4000	-10.1	20.0
Nitrobenzene-d5	Ave	0.4483	0.4342	0.0100	3870	4000	-3.1	20.0
2-Fluorobiphenyl	Ave	1.462	1.551	0.0100	4240	4000	6.1	20.0
2,4,6-Tribromophenol	Lin2		0.1187	0.0100	4080	4000	2.1	20.0
p-Terphenyl-d14	Ave	0.9307	0.9599	0.0100	4130	4000	3.1	20.0

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025819.D
Lims ID: CCVIS
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Jul-2019 13:14:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-003
Operator ID: BS Instrument ID: HP5973Y
Sublist: chrom-Y-LVI-8270*sub36

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:34:34 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 16-Jul-2019 13:57:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.256	6.256	0.000	95	213393	4.00	4.00	
* 2 Naphthalene-d8	136	7.345	7.345	0.000	98	787893	4.00	4.00	
* 3 Acenaphthene-d10	164	8.830	8.830	0.000	96	480982	4.00	4.00	
* 4 Phenanthrene-d10	188	10.080	10.080	0.000	96	980392	4.00	4.00	
* 5 Chrysene-d12	240	12.649	12.649	0.000	98	983655	4.00	4.00	
* 6 Perylene-d12	264	14.748	14.748	0.000	99	1012366	4.00	4.00	
$ 7 2-Fluorophenol	112	5.107	5.107	0.000	89	266932	4.00	3.75	
$ 8 Phenol-d5	99	5.941	5.941	0.000	89	315850	4.00	3.59	
$ 9 Nitrobenzene-d5	82	6.731	6.731	0.000	96	342133	4.00	3.87	
$ 10 2-Fluorobiphenyl	172	8.237	8.237	0.000	98	746051	4.00	4.24	
$ 11 2,4,6-Tribromophenol	330	9.492	9.492	0.000	91	116387	4.00	4.08	
$ 12 p-Terphenyl-d14	244	11.426	11.426	0.000	99	944254	4.00	4.13	
13 1,4-Dioxane	88	3.099	3.099	0.000	90	98209	4.00	3.34	
14 N-Nitrosodimethylamine	42	3.574	3.574	0.000	68	240819	4.00	6.32	
15 Pyridine	52	3.612	3.612	0.000	85	291555	8.00	6.80	
35 Benzaldehyde	77	5.876	5.876	0.000	87	461471	8.00	7.73	
37 Phenol	94	5.951	5.951	0.000	96	327005	4.00	3.71	
36 Aniline	93	5.973	5.973	0.000	98	311231	4.00	3.28	a
39 Bis(2-chloroethyl)ether	93	6.015	6.015	0.000	88	255416	4.00	3.29	
40 2-Chlorophenol	128	6.085	6.085	0.000	90	288113	4.00	3.80	
41 n-Decane	57	6.095	6.095	0.000	87	254131	4.00	3.26	
43 1,3-Dichlorobenzene	146	6.208	6.208	0.000	91	340930	4.00	3.90	
44 1,4-Dichlorobenzene	146	6.272	6.272	0.000	88	339156	4.00	3.89	
45 Benzyl alcohol	108	6.379	6.379	0.000	85	128485	4.00	2.98	
46 1,2-Dichlorobenzene	146	6.405	6.405	0.000	92	339590	4.00	4.01	
48 2-Methylphenol	108	6.464	6.464	0.000	94	269519	4.00	4.21	
49 2,2'-oxybis[1-chloropropan	45	6.475	6.475	0.000	76	325577	4.00	3.29	
47 Indene	115	6.485	6.485	0.000	87	2949873	20.0	23.1	
53 N-Nitrosodi-n-propylamine	70	6.587	6.587	0.000	90	188655	4.00	3.59	
57 4-Methylphenol	108	6.592	6.592	0.000	54	246508	4.00	3.71	
52 Acetophenone	105	6.597	6.597	0.000	79	395211	4.00	3.89	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
58 Hexachloroethane	117	6.699	6.699	0.000	80	160698	4.00	4.31	
59 Nitrobenzene	77	6.747	6.747	0.000	93	318935	4.00	4.10	
62 Isophorone	82	6.945	6.945	0.000	94	522687	4.00	3.80	
64 2-Nitrophenol	139	7.019	7.019	0.000	81	153065	4.00	4.08	
66 2,4-Dimethylphenol	107	7.041	7.041	0.000	97	292280	4.00	3.92	
69 Bis(2-chloroethoxy)methane	93	7.105	7.105	0.000	92	282020	4.00	3.38	
70 Benzoic acid	105	7.142	7.142	0.000	93	815726	20.0	19.1	
72 2,4-Dichlorophenol	162	7.228	7.228	0.000	93	237430	4.00	3.97	
73 1,2,4-Trichlorobenzene	180	7.292	7.292	0.000	91	333531	4.00	4.40	
74 Naphthalene	128	7.367	7.367	0.000	98	823378	4.00	3.98	
76 4-Chloroaniline	127	7.399	7.399	0.000	94	222052	4.00	3.42	
77 2,6-Dichlorophenol	162	7.415	7.415	0.000	88	250937	4.00	4.25	
79 Hexachlorobutadiene	225	7.463	7.463	0.000	94	228548	4.00	4.70	
84 Caprolactam	113	7.698	7.698	0.000	67	128124	8.00	6.34	
85 4-Chloro-3-methylphenol	107	7.805	7.805	0.000	91	231700	4.00	3.76	
87 2-Methylnaphthalene	142	7.943	7.943	0.000	89	603854	4.00	4.27	
89 1-Methylnaphthalene	142	8.029	8.029	0.000	89	557653	4.00	4.22	
90 Hexachlorocyclopentadiene	237	8.077	8.077	0.000	96	232419	4.00	4.44	
91 1,2,4,5-Tetrachlorobenzene	216	8.088	8.088	0.000	98	357536	4.00	4.28	
93 2,4,6-Trichlorophenol	196	8.178	8.178	0.000	93	209124	4.00	4.39	
94 2,4,5-Trichlorophenol	196	8.221	8.221	0.000	90	201688	4.00	4.02	
96 1,1'-Biphenyl	154	8.328	8.328	0.000	97	744966	4.00	4.05	
97 2-Chloronaphthalene	162	8.360	8.360	0.000	97	584645	4.00	4.01	
100 2-Nitroaniline	65	8.435	8.435	0.000	76	165566	4.00	4.06	
105 Dimethyl phthalate	163	8.563	8.563	0.000	96	691353	4.00	4.32	
106 1,3-Dinitrobenzene	168	8.606	8.606	0.000	80	100093	4.00	4.25	
107 2,6-Dinitrotoluene	165	8.622	8.622	0.000	86	154626	4.00	4.08	
108 Acenaphthylene	152	8.713	8.713	0.000	97	867058	4.00	4.14	
109 3-Nitroaniline	138	8.777	8.777	0.000	88	76148	4.00	2.47	
110 Acenaphthene	153	8.857	8.857	0.000	92	616530	4.00	4.12	
111 2,4-Dinitrophenol	184	8.862	8.862	0.000	80	129449	8.00	7.10	
112 4-Nitrophenol	109	8.916	8.916	0.000	87	252581	8.00	11.6	
114 2,4-Dinitrotoluene	165	8.964	8.964	0.000	85	190227	4.00	3.77	
115 Dibenzofuran	168	8.996	8.996	0.000	95	860422	4.00	4.07	
118 2,3,4,6-Tetrachlorophenol	232	9.102	9.102	0.000	75	169785	4.00	4.13	
121 Hexadecane	57	9.140	9.140	0.000	84	318390	4.00	3.26	
120 Diethyl phthalate	149	9.140	9.140	0.000	96	731613	4.00	4.32	
123 4-Chlorophenyl phenyl ethe	204	9.263	9.263	0.000	94	380447	4.00	4.39	
124 Fluorene	166	9.284	9.284	0.000	92	698233	4.00	4.21	
126 4-Nitroaniline	138	9.295	9.295	0.000	66	128673	4.00	3.39	
127 4,6-Dinitro-2-methylphenol	198	9.316	9.316	0.000	85	212201	8.00	7.59	
130 N-Nitrosodiphenylamine	169	9.359	9.359	0.000	74	475817	4.00	3.64	
129 Diphenylamine	169	9.359	9.359	0.000	90	475817	3.42	3.12	
132 Azobenzene	77	9.396	9.396	0.000	93	766680	4.00	4.13	
131 1,2-Diphenylhydrazine	77	9.396	9.396	0.000	40	766680	4.00	4.13	
139 4-Bromophenyl phenyl ether	248	9.679	9.679	0.000	80	233857	4.00	3.99	
140 Hexachlorobenzene	284	9.759	9.759	0.000	93	254536	4.00	3.82	
143 Atrazine	200	9.786	9.786	0.000	91	428690	8.00	8.91	
148 n-Octadecane	57	9.904	9.904	0.000	83	348270	4.00	3.17	
145 Pentachlorophenol	266	9.920	9.920	0.000	88	121166	8.00	4.59	
151 Phenanthrene	178	10.101	10.101	0.000	97	1031595	4.00	3.80	
152 Anthracene	178	10.144	10.144	0.000	97	1068775	4.00	3.91	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
153 Carbazole	167	10.267	10.267	0.000	97	616947	4.00	2.80	
157 Di-n-butyl phthalate	149	10.502	10.502	0.000	99	1220264	4.00	3.96	
164 Fluoranthene	202	11.105	11.105	0.000	97	1244927	4.00	4.12	
166 Benzidine	184	11.201	11.201	0.000	98	229554	8.00	3.40	
167 Pyrene	202	11.324	11.324	0.000	97	1283779	4.00	3.99	
174 Butyl benzyl phthalate	149	11.890	11.890	0.000	96	559655	4.00	3.95	
181 Bis(2-ethylhexyl) phthalat	149	12.553	12.553	0.000	94	866780	4.00	4.31	
179 3,3'-Dichlorobenzidine	252	12.574	12.574	0.000	74	586580	8.00	6.34	
180 Benzo[a]anthracene	228	12.633	12.633	0.000	96	1273761	4.00	4.06	
182 Chrysene	228	12.686	12.686	0.000	95	1189486	4.00	4.23	
184 Di-n-octyl phthalate	149	13.450	13.450	0.000	99	1377192	4.00	3.99	
186 Benzo[b]fluoranthene	252	14.160	14.160	0.000	94	1231277	4.00	3.91	
187 Benzo[k]fluoranthene	252	14.198	14.198	0.000	97	1296710	4.00	4.18	
189 Benzo[a]pyrene	252	14.663	14.663	0.000	75	1217244	4.00	4.06	
193 Indeno[1,2,3-cd]pyrene	276	16.436	16.436	0.000	97	1500868	4.00	4.17	
194 Dibenz(a,h)anthracene	278	16.446	16.446	0.000	87	1204484	4.00	3.97	
195 Benzo[g,h,i]perylene	276	16.900	16.900	0.000	96	1195014	4.00	4.02	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_L1LVI_WRK_00384	Amount Added: 1.00	Units: mL	
MB_LLIS_WRK_00173	Amount Added: 20.00	Units: uL	Run Reagent

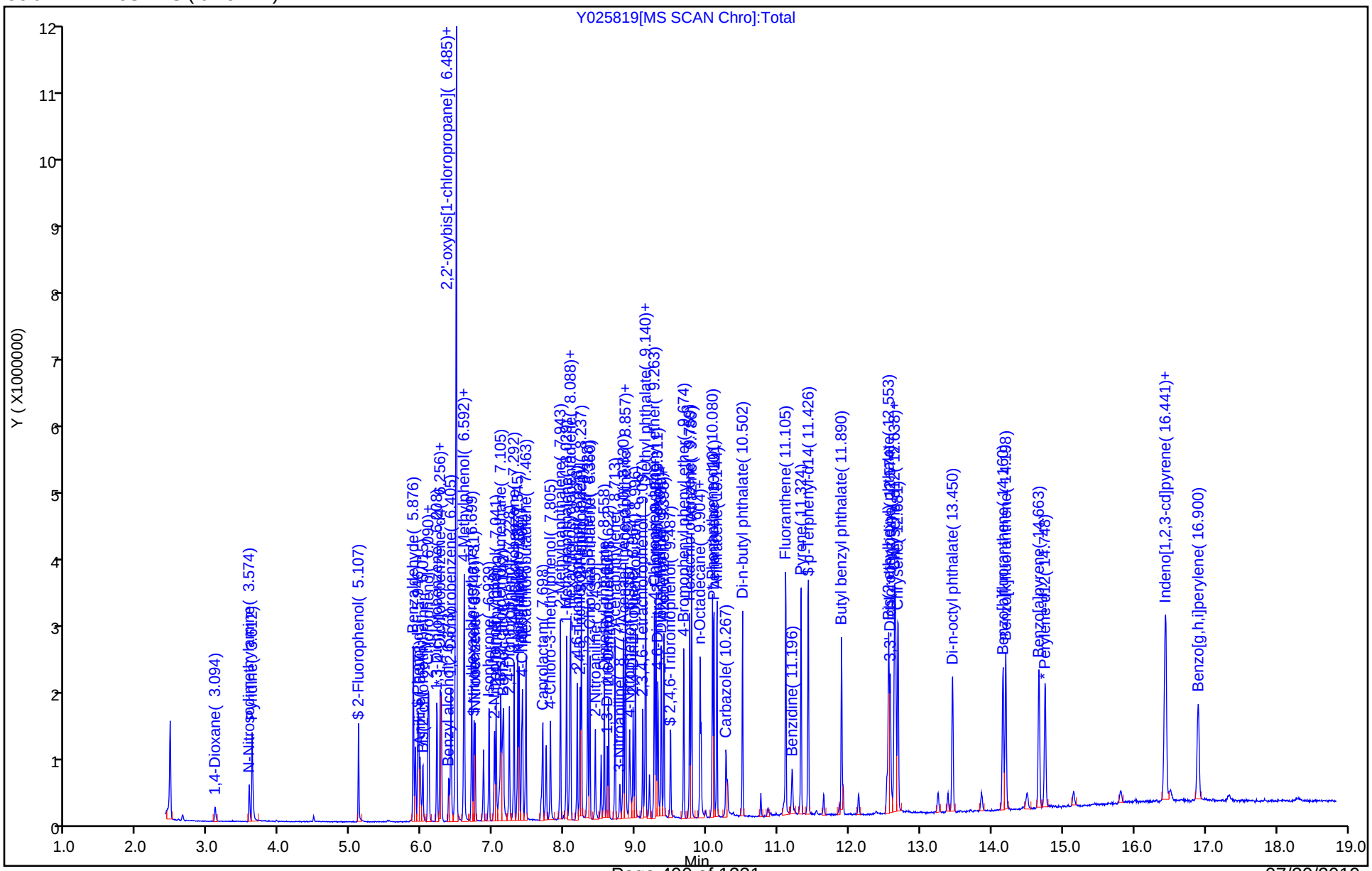
Report Date: 17-Jul-2019 09:34:35 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025819.D

Injection Date:	16-Jul-2019 13:14:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	CCVIS			Worklist Smp#:	3
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Buffalo

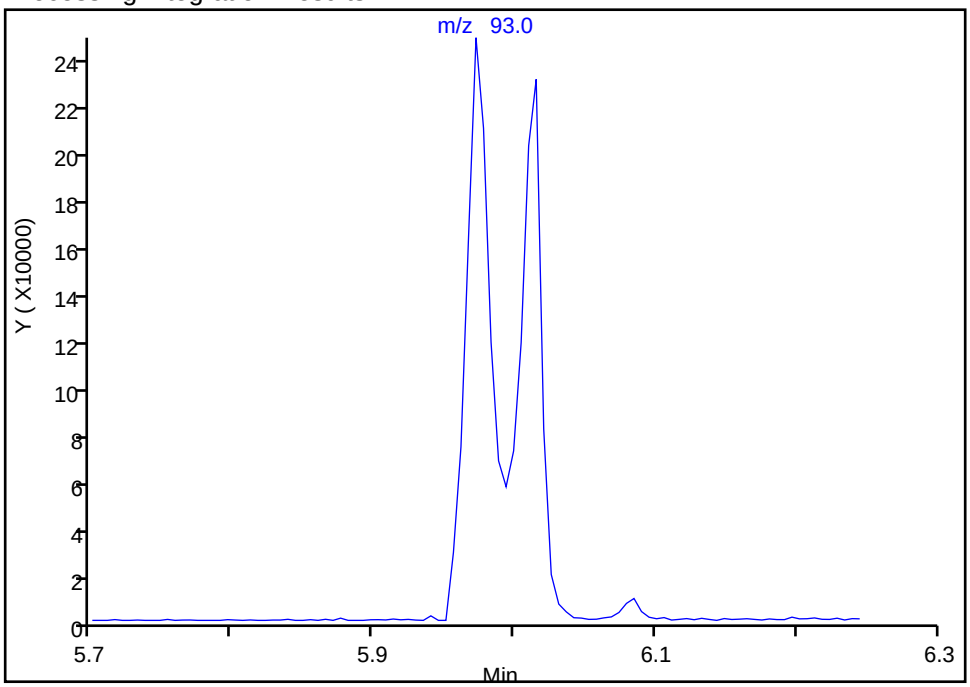
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025819.D
Injection Date: 16-Jul-2019 13:14:30 Instrument ID: HP5973Y
Lims ID: CCVIS
Client ID:
Operator ID: BS ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

36 Aniline, CAS: 62-53-3

Signal: 1

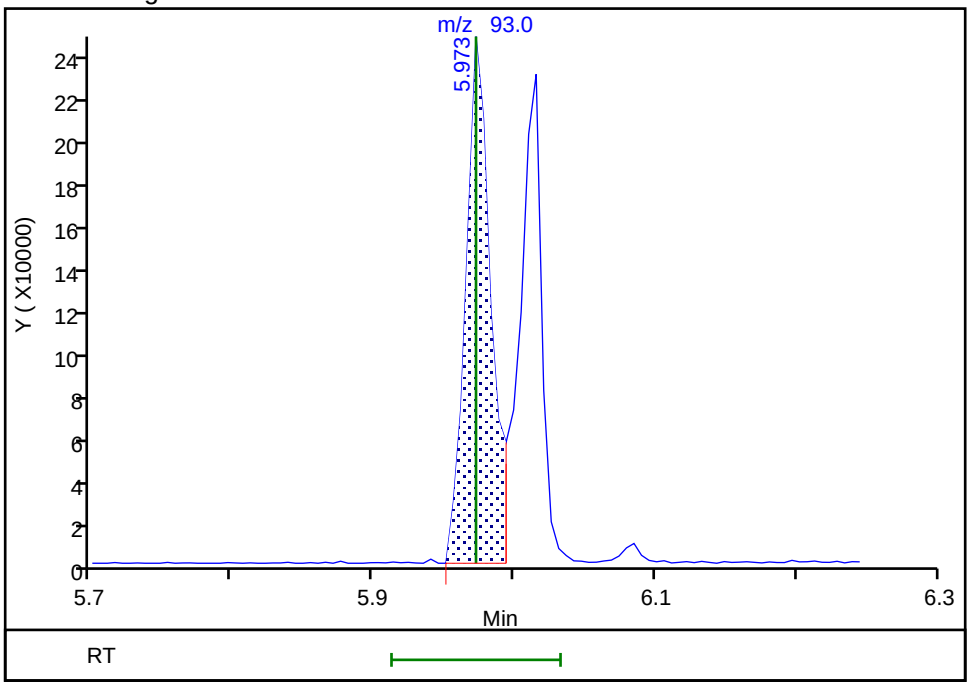
Not Detected
Expected RT: 5.97

Processing Integration Results



Manual Integration Results

RT: 5.97
Area: 311231
Amount: 3.278538
Amount Units: ng/uL



Reviewer: schickr, 16-Jul-2019 13:56:55
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 04-Jun-2019 16:15:30 ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: dftpp
Operator ID: bs Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 06-Jun-2019 13:22:23 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1009

First Level Reviewer: schickr Date: 06-Jun-2019 13:22:19

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
250 Pentachlorophenol_T	266	10.127	10.127	0.000	93	355706	NR	NR	
251 DFTPP									
252 Benzidine_T	184	11.436	11.436	0.000	99	1152874	NR	NR	
253 4,4'-DDE	246	11.612	11.612	0.000	83	2358		NR	
254 4,4'-DDD	235	11.970	11.970	0.000	97	11656		NR	
255 4,4'-DDT	235	12.322	12.322	0.000	99	1410458	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

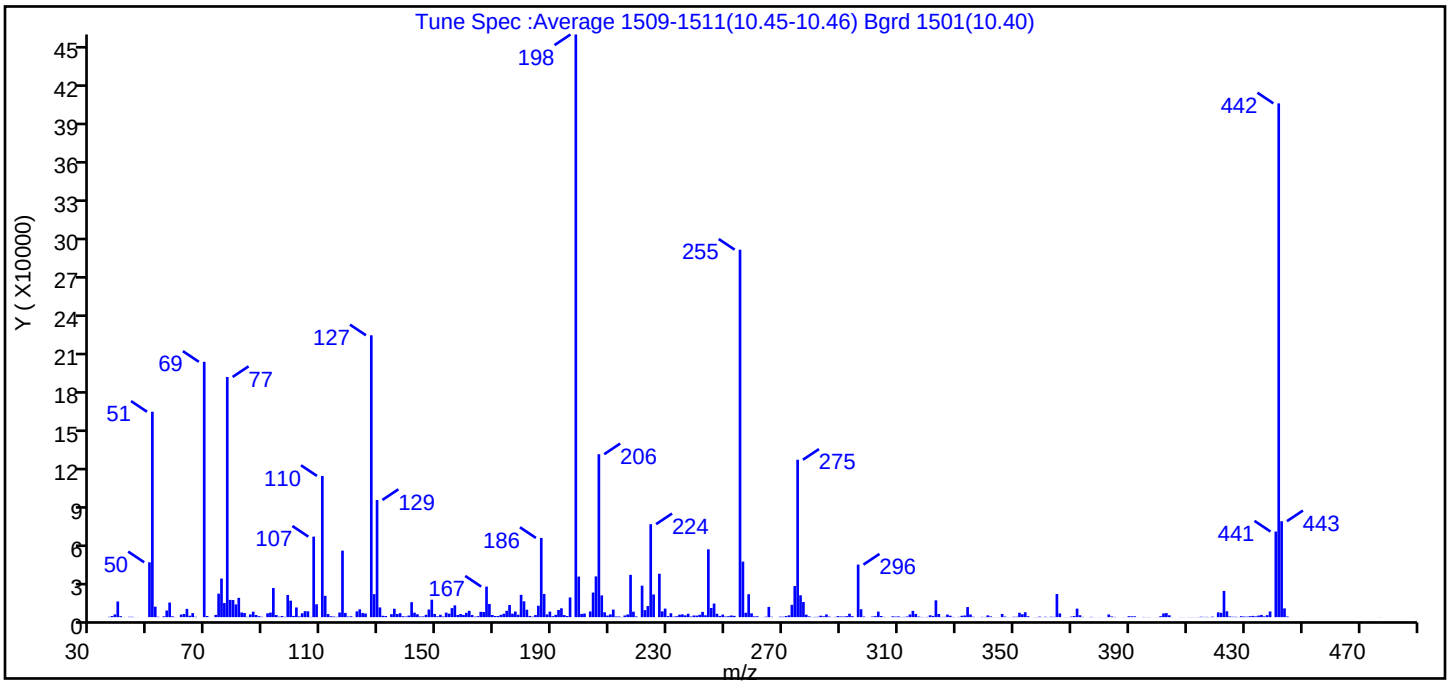
MB_DFTPP_WRK_00355 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D
Injection Date: 04-Jun-2019 16:15:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: bs ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

251 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (113.4)
51	10-80% of the base peak	35.3
68	<2% of mass 69	0.0 (0.0)
69	Present	43.8
70	<2% of mass 69	0.2 (0.5)
127	10-80% of the base peak	48.4
197	<2% of mass 198	0.0
199	5-9% of mass 198	7.0
275	10-60% of the base peak	27.0
365	>1% of mass 198	4.0
441	present but <24% of mass 442	14.7 (16.7)
442	base peak, or >50% of 198	88.2
443	15-24% of mass 442	16.5 (18.7)

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 04-Jun-2019 16:15:30
Spectrum: Tune Spec :Average 1509-1511(10.45-10.46) Bgrd 1501(10.40)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 381

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	261	145.00	556	245.00	7126	346.00	2476
37.00	858	146.00	1795	246.00	10535	347.00	450
38.00	2089	147.00	5948	247.00	2634	348.00	109
39.00	12176	148.00	13541	248.00	922	349.00	47
40.00	766	149.00	2505	249.00	1973	350.00	307
41.00	71	150.00	652	250.00	494	351.00	305
43.00	273	151.00	1799	251.00	746	352.00	3407
44.00	272	152.00	494	252.00	1321	353.00	2262
45.00	39	153.00	3493	253.00	986	354.00	3800
46.00	47	154.00	2711	255.00	285440	355.00	703
50.00	42632	155.00	7002	256.00	43152	357.00	78
51.00	159552	156.00	9190	257.00	3392	358.00	112
52.00	8134	157.00	1704	258.00	17824	359.00	423
53.00	303	158.00	2445	259.00	2986	360.00	59
55.00	669	159.00	1743	260.00	629	361.00	287
56.00	5139	160.00	3366	261.00	667	362.00	66
57.00	11356	161.00	4949	262.00	41	363.00	341
58.00	646	162.00	1614	263.00	64	364.00	242
59.00	92	163.00	390	264.00	347	365.00	17952
61.00	2020	164.00	751	265.00	7937	366.00	2891
62.00	2472	165.00	4154	266.00	299	367.00	44
63.00	6426	166.00	4005	269.00	395	368.00	91
64.00	1077	167.00	23728	270.00	334	369.00	57
65.00	3110	168.00	10214	271.00	851	370.00	436
66.00	298	169.00	1648	272.00	1417	371.00	821
69.00	198336	170.00	899	273.00	9554	372.00	6635
70.00	919	171.00	917	274.00	24136	373.00	1503
71.00	51	172.00	1792	275.00	122272	374.00	233
73.00	1711	173.00	2641	276.00	16984	376.00	66
74.00	18216	174.00	4918	277.00	11760	377.00	216
75.00	29976	175.00	9470	278.00	1917	378.00	51
76.00	10949	176.00	2697	279.00	597	379.00	36
77.00	186560	177.00	4361	280.00	109	380.00	73

Report Date: 06-Jun-2019 13:22:23 Chrom Revision: 2.3 03-May-2019 15:52:00
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 04-Jun-2019 16:15:30
Spectrum: Tune Spec :Average 1509-1511(10.45-10.46) Bgrd 1501(10.40)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 381

m/z	Y	m/z	Y	m/z	Y	m/z	Y
78.00	13411	178.00	1868	281.00	205	382.00	70
79.00	13325	179.00	17328	282.00	272	383.00	2073
80.00	9882	180.00	12315	283.00	1114	384.00	539
81.00	14968	181.00	5764	284.00	687	385.00	227
82.00	3641	182.00	979	285.00	2127	386.00	59
83.00	3229	183.00	422	286.00	431	388.00	70
84.00	258	184.00	1634	287.00	41	389.00	38
85.00	2135	185.00	8876	288.00	208	390.00	760
86.00	4249	186.00	61528	289.00	825	391.00	663
87.00	1655	187.00	18016	290.00	508	392.00	643
88.00	772	188.00	2119	291.00	484	393.00	47
89.00	306	189.00	4302	292.00	778	395.00	167
91.00	2983	190.00	753	293.00	2647	396.00	100
92.00	3526	191.00	1814	294.00	737	397.00	108
93.00	22664	192.00	5574	296.00	40824	399.00	43
94.00	1640	193.00	6873	297.00	6144	400.00	66
95.00	383	194.00	1598	298.00	465	401.00	717
96.00	849	195.00	874	299.00	38	402.00	2877
97.00	239	196.00	15295	300.00	50	403.00	3124
98.00	17200	198.00	452608	301.00	484	404.00	1471
99.00	12793	199.00	31496	302.00	765	405.00	93
100.00	968	200.00	2511	303.00	4298	408.00	96
101.00	7534	201.00	2784	304.00	897	409.00	60
102.00	565	203.00	4411	305.00	203	410.00	33
103.00	2998	204.00	19080	306.00	51	411.00	85
104.00	4654	205.00	31656	307.00	41	412.00	104
105.00	4528	206.00	126568	308.00	642	413.00	50
106.00	156	207.00	16896	309.00	451	414.00	97
107.00	62528	208.00	3774	310.00	618	415.00	328
108.00	9990	209.00	1240	311.00	161	416.00	194
110.00	109680	210.00	2127	312.00	207	417.00	220
111.00	16552	211.00	5882	313.00	511	418.00	111
112.00	2437	212.00	531	314.00	2090	419.00	408
113.00	707	213.00	510	315.00	4884	421.00	3717

Report Date: 06-Jun-2019 13:22:23 Chrom Revision: 2.3 03-May-2019 15:52:00
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 04-Jun-2019 16:15:30
Spectrum: Tune Spec :Average 1509-1511(10.45-10.46) Bgrd 1501(10.40)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 381

m/z	Y	m/z	Y	m/z	Y	m/z	Y
114.00	497	214.00	127	316.00	2489	422.00	3377
115.00	239	215.00	1289	317.00	474	423.00	20384
116.00	3593	216.00	2078	318.00	182	424.00	4552
117.00	51648	217.00	32832	319.00	105	425.00	545
118.00	3267	218.00	4239	320.00	215	426.00	292
119.00	457	219.00	523	321.00	1468	427.00	301
120.00	669	221.00	24448	322.00	984	428.00	129
121.00	53	222.00	5451	323.00	13084	429.00	750
122.00	4521	223.00	8623	324.00	2442	430.00	497
123.00	6058	224.00	72208	325.00	199	431.00	395
124.00	3151	225.00	17632	326.00	242	432.00	747
125.00	2835	227.00	33688	327.00	2017	433.00	977
127.00	218944	228.00	4491	328.00	1114	434.00	628
128.00	17880	229.00	6640	329.00	185	435.00	1222
129.00	91024	230.00	815	330.00	72	436.00	1745
130.00	7551	231.00	3047	331.00	219	437.00	606
131.00	1073	232.00	418	332.00	1091	438.00	1576
132.00	895	233.00	741	333.00	1287	439.00	4410
134.00	2306	234.00	1912	334.00	7820	441.00	66488
135.00	6517	235.00	2148	335.00	2089	442.00	399104
136.00	2431	236.00	1361	336.00	301	443.00	74528
137.00	3098	237.00	2609	338.00	64	444.00	6793
138.00	707	238.00	503	339.00	222	445.00	496
139.00	494	239.00	1304	340.00	143	446.00	43
140.00	1219	240.00	1186	341.00	1397	477.00	68
141.00	11626	241.00	1837	342.00	581	489.00	34
142.00	3462	242.00	4085	343.00	100		
143.00	2245	243.00	1445	344.00	37		
144.00	524	244.00	52680	345.00	86		

Breakdown Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D
Injection Date: 04-Jun-2019 16:15:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: bs ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

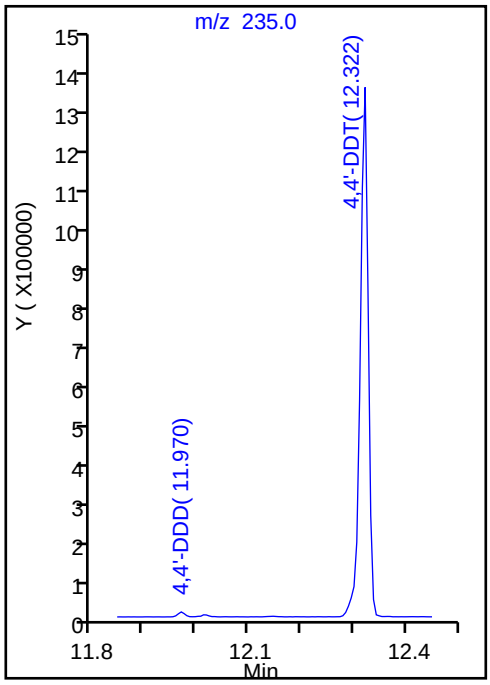
255 4,4'-DDT, Detector: MS SCAN

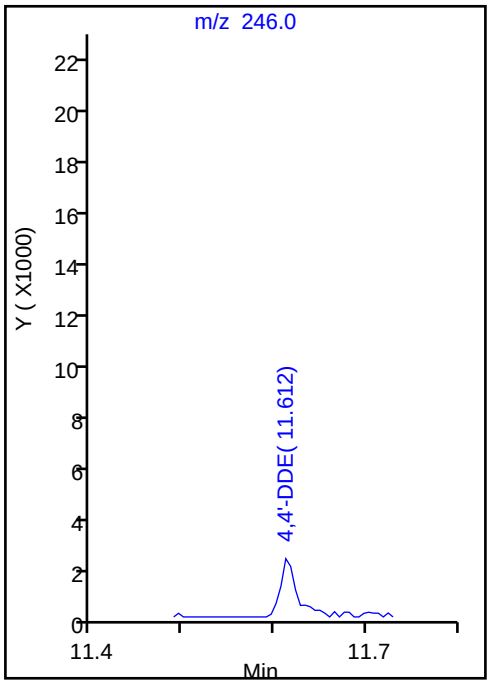
SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

255 4,4'-DDT, Area = 1410458
254 4,4'-DDD, Area = 11656
253 4,4'-DDE, Area = 2358

%Breakdown: 0.98%, <= 20.00%
Passed





Peak Tailing Report

Eurofins TestAmerica, Buffalo

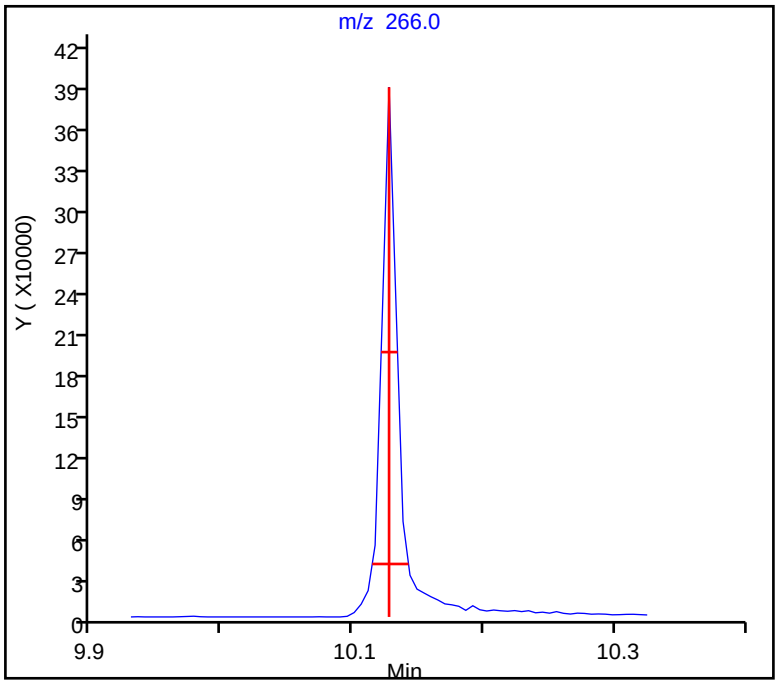
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D
Injection Date: 04-Jun-2019 16:15:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: bs ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

250 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.015 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



Peak Tailing Report

Eurofins TestAmerica, Buffalo

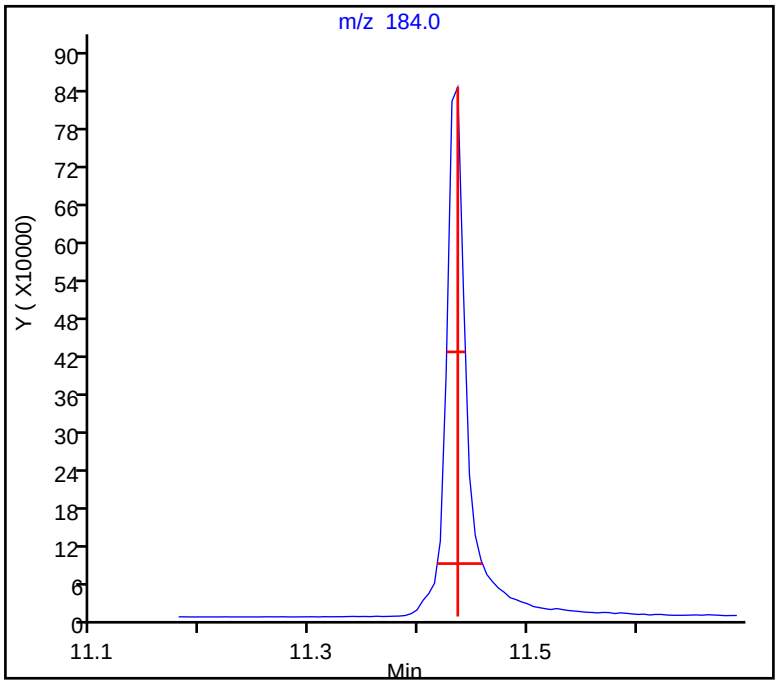
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024941.D
Injection Date: 04-Jun-2019 16:15:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: bs ALS Bottle#: 3 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

252 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.023 (min.)
Front Width = 0.019 (min.)

Tailing Factor = 1.2, Max. Tailing < 2.00
Passed



Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D
Lims ID: DFTPP
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Jul-2019 12:46:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: DFTPP
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:34:29 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 16-Jul-2019 13:09:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
250 Pentachlorophenol_T	266	9.919	9.919	0.000	89	153627	NR	NR	
251 DFTPP									
252 Benzidine_T	184	11.201	11.201	0.000	98	1110220	NR	NR	
253 4,4'-DDE	246		11.521					ND	
254 4,4'-DDD	235	11.703	11.703	0.000	63	7394		NR	
255 4,4'-DDT	235	12.034	12.034	0.000	96	1234631	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

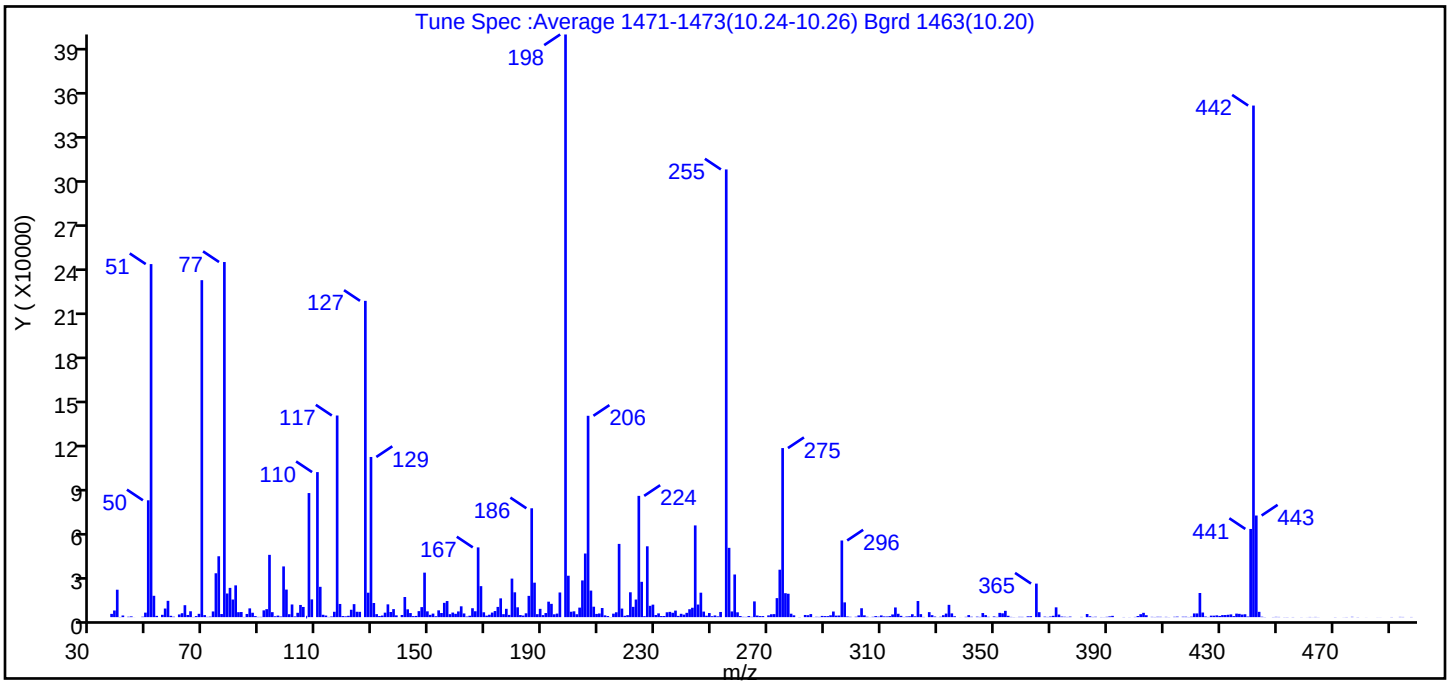
MB_DFTPP_WRK_00357 Amount Added: 1.00 Units: mL

MS Tune Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D
Injection Date: 16-Jul-2019 12:46:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: BS ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Tune Method: DFTPP Method 8270D, BP 198

251 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	base peak, or >90% of 442	100.0 (113.9)
51	10-80% of the base peak	60.6
68	<2% of mass 69	0.6 (1.0)
69	Present	57.8
70	<2% of mass 69	0.4 (0.6)
127	10-80% of the base peak	54.3
197	<2% of mass 198	0.0
199	5-9% of mass 198	7.1
275	10-60% of the base peak	29.0
365	>1% of mass 198	5.8
441	present but <24% of mass 442	15.1 (17.2)
442	base peak, or >50% of 198	87.8
443	15-24% of mass 442	17.4 (19.9)

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 16-Jul-2019 12:46:30
Spectrum: Tune Spec :Average 1471-1473(10.24-10.26) Bgrd 1463(10.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	2236	146.00	4117	248.00	974	358.00	35
38.00	4546	147.00	6867	249.00	2811	359.00	217
39.00	18768	148.00	30456	250.00	640	360.00	194
40.00	107	149.00	3980	251.00	1161	361.00	20
41.00	1131	150.00	1568	252.00	542	362.00	540
43.00	291	151.00	2427	253.00	3541	363.00	616
44.00	509	152.00	607	255.00	306368	365.00	22960
45.00	30	153.00	4642	256.00	47424	366.00	3385
48.00	309	154.00	2825	257.00	3905	368.00	353
49.00	3079	155.00	9787	258.00	29184	369.00	150
50.00	79960	156.00	11018	259.00	3306	370.00	448
51.00	241600	157.00	2055	260.00	741	371.00	922
52.00	14609	158.00	3128	261.00	212	372.00	6706
53.00	881	159.00	2271	262.00	167	373.00	1775
55.00	1589	160.00	3917	263.00	741	374.00	407
56.00	5893	161.00	7416	264.00	209	375.00	280
57.00	11167	162.00	2529	265.00	10768	376.00	158
58.00	909	163.00	416	266.00	1084	377.00	380
59.00	299	164.00	972	267.00	738	381.00	165
61.00	1837	165.00	6105	268.00	729	383.00	2138
62.00	2691	166.00	4037	269.00	25	384.00	580
63.00	8174	167.00	47736	270.00	1214	385.00	159
64.00	1489	168.00	21208	271.00	1985	386.00	279
65.00	4015	169.00	3328	272.00	2073	388.00	109
66.00	118	170.00	1034	273.00	13015	389.00	69
67.00	716	171.00	1660	274.00	32456	390.00	219
68.00	2272	172.00	3123	275.00	115696	391.00	532
69.00	230592	173.00	4173	276.00	16384	392.00	890
70.00	1401	174.00	7006	277.00	16025	396.00	107
71.00	207	175.00	12859	278.00	2351	398.00	68
72.00	367	176.00	2036	279.00	1237	400.00	157
73.00	3899	177.00	5698	281.00	95	401.00	767
74.00	30032	178.00	1539	283.00	1478	402.00	2031

Report Date: 17-Jul-2019 09:34:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 16-Jul-2019 12:46:30
Spectrum: Tune Spec :Average 1471-1473(10.24-10.26) Bgrd 1463(10.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
75.00	41664	179.00	26376	284.00	1308	403.00	2951
76.00	2130	180.00	16992	285.00	2097	404.00	1321
77.00	243008	181.00	6739	286.00	64	406.00	203
78.00	16186	182.00	1443	287.00	264	407.00	122
79.00	20024	183.00	1089	288.00	181	408.00	259
80.00	12053	184.00	2636	289.00	847	409.00	235
81.00	21744	185.00	14555	290.00	720	410.00	32
82.00	3396	186.00	74496	291.00	690	411.00	202
83.00	3506	187.00	23592	292.00	1255	412.00	78
84.00	136	188.00	2036	293.00	3847	414.00	252
85.00	2178	189.00	5683	294.00	1030	415.00	365
86.00	6004	190.00	1394	295.00	1097	417.00	292
87.00	3015	191.00	2804	296.00	52456	418.00	298
88.00	706	192.00	10589	297.00	10099	419.00	113
89.00	176	193.00	9096	298.00	466	420.00	322
90.00	188	194.00	1950	299.00	227	421.00	2532
91.00	4644	195.00	2417	301.00	281	422.00	2545
92.00	5466	196.00	16880	302.00	1177	423.00	16520
93.00	42632	198.00	398720	303.00	6101	424.00	3165
94.00	3407	199.00	28344	304.00	1228	425.00	424
95.00	600	200.00	3696	305.00	283	426.00	129
96.00	1057	201.00	3992	306.00	49	427.00	1018
97.00	440	202.00	1999	307.00	240	428.00	1011
98.00	34712	203.00	6515	308.00	718	429.00	1224
99.00	18856	204.00	25128	309.00	351	430.00	840
100.00	2015	205.00	43544	310.00	1173	431.00	1405
101.00	8675	206.00	137792	311.00	495	432.00	1436
102.00	501	207.00	18168	312.00	454	433.00	1621
103.00	2976	208.00	7139	313.00	711	434.00	1886
104.00	8341	209.00	2208	314.00	1839	435.00	707
105.00	6976	210.00	2510	315.00	6626	436.00	2417
106.00	1	211.00	6242	316.00	2292	437.00	2255
107.00	84912	212.00	1212	317.00	898	438.00	1780
108.00	12152	213.00	751	318.00	134	439.00	1978

Report Date: 17-Jul-2019 09:34:30 Chrom Revision: 2.3 15-Jul-2019 06:58:08
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D\Y-LVI-8270.rslt\spectra.d
Injection Date: 16-Jul-2019 12:46:30
Spectrum: Tune Spec :Average 1471-1473(10.24-10.26) Bgrd 1463(10.20)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 401

m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	99248	214.00	99	319.00	447	440.00	412
111.00	20752	215.00	2383	320.00	611	441.00	60352
112.00	1625	216.00	3325	321.00	1992	442.00	350080
113.00	1088	217.00	50120	322.00	572	443.00	69544
114.00	160	218.00	5860	323.00	11033	444.00	3634
115.00	454	219.00	928	324.00	2051	445.00	305
116.00	3673	220.00	1358	325.00	145	446.00	92
117.00	137984	221.00	17016	327.00	3426	449.00	105
118.00	9022	222.00	7046	328.00	1350	450.00	204
119.00	728	223.00	12046	329.00	414	451.00	150
120.00	534	224.00	82992	330.00	39	453.00	79
121.00	929	225.00	24176	331.00	278	454.00	93
122.00	5056	226.00	658	332.00	1319	456.00	104
123.00	8899	227.00	48480	333.00	2440	459.00	67
124.00	3689	228.00	7745	334.00	8428	461.00	37
125.00	3637	229.00	8552	335.00	2581	462.00	134
127.00	216448	230.00	1431	336.00	607	463.00	48
128.00	16720	231.00	2576	338.00	34	464.00	148
129.00	109608	232.00	771	340.00	211	465.00	57
130.00	9681	233.00	771	341.00	1394	471.00	91
131.00	2051	234.00	3322	342.00	289	474.00	47
132.00	752	235.00	3611	344.00	351	475.00	106
133.00	1080	236.00	2988	345.00	167	477.00	223
134.00	3064	237.00	4481	346.00	2806	479.00	94
135.00	8757	238.00	871	347.00	1379	482.00	37
136.00	3521	239.00	2291	348.00	234	486.00	40
137.00	5491	240.00	1717	350.00	494	487.00	35
138.00	1232	241.00	2944	351.00	182	491.00	104
140.00	1471	242.00	5415	352.00	2914	494.00	170
141.00	13772	243.00	6422	353.00	2634	495.00	137
142.00	5363	244.00	62768	354.00	4315	498.00	119
143.00	2803	245.00	8624	355.00	925		
144.00	684	246.00	16736	356.00	167		
145.00	842	247.00	3800	357.00	92		

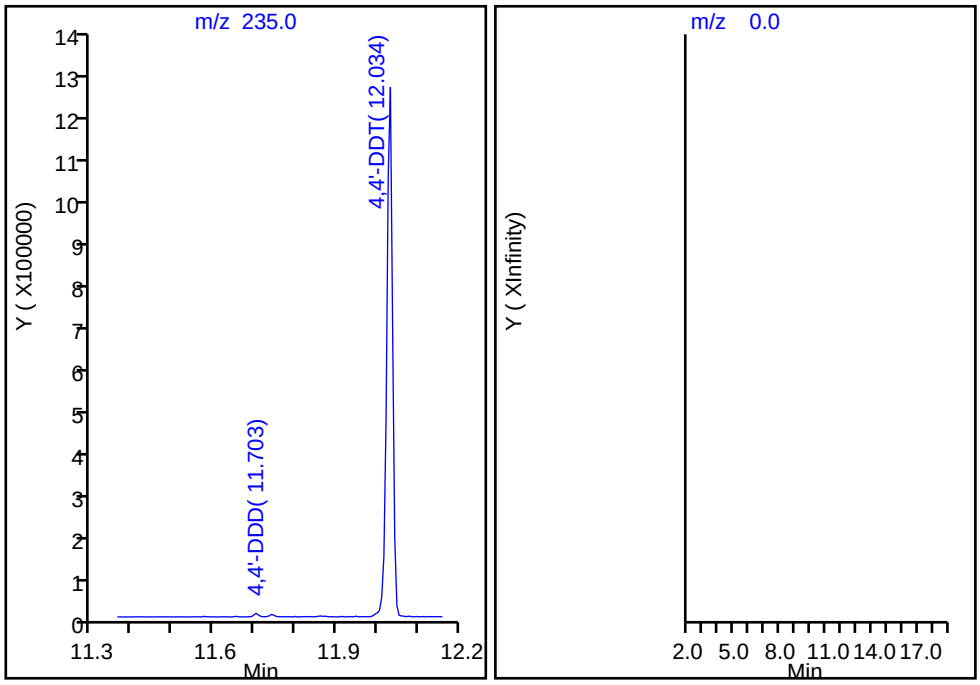
m/z	Y	m/z	Y	m/z	Y	m/z	Y
110.00	99248	214.00	99	319.00	447	440.00	412
111.00	20752	215.00	2383	320.00	611	441.00	60352
112.00	1625	216.00	3325	321.00	1992	442.00	350080
113.00	1088	217.00	50120	322.00	572	443.00	69544
114.00	160	218.00	5860	323.00	11033	444.00	3634
115.00	454	219.00	928	324.00	2051	445.00	305
116.00	3673	220.00	1358	325.00	145	446.00	92
117.00	137984	221.00	17016	327.00	3426	449.00	105
118.00	9022	222.00	7046	328.00	1350	450.00	204
119.00	728	223.00	12046	329.00	414	451.00	150
120.00	534	224.00	82992	330.00	39	453.00	79
121.00	929	225.00	24176	331.00	278	454.00	93
122.00	5056	226.00	658	332.00	1319	456.00	104
123.00	8899	227.00	48480	333.00	2440	459.00	67
124.00	3689	228.00	7745	334.00	8428	461.00	37
125.00	3637	229.00	8552	335.00	2581	462.00	134
127.00	216448	230.00	1431	336.00	607	463.00	48
128.00	16720	231.00	2576	338.00	34	464.00	148
129.00	109608	232.00	771	340.00	211	465.00	57
130.00	9681	233.00	771	341.00	1394	471.00	91
131.00	2051	234.00	3322	342.00	289	474.00	47
132.00	752	235.00	3611	344.00	351	475.00	106
133.00	1080	236.00	2988	345.00	167	477.00	223
134.00	3064	237.00	4481	346.00	2806	479.00	94
135.00	8757	238.00	871	347.00	1379	482.00	37
136.00	3521	239.00	2291	348.00	234	486.00	40
137.00	5491	240.00	1717	350.00	494	487.00	35
138.00	1232	241.00	2944	351.00	182	491.00	104
140.00	1471	242.00	5415	352.00	2914	494.00	170
141.00	13772	243.00	6422	353.00	2634	495.00	137
142.00	5363	244.00	62768	354.00	4315	498.00	119
143.00	2803	245.00	8624	355.00	925		
144.00	684	246.00	16736	356.00	167		
145.00	842	247.00	3800	357.00	92		

Breakdown Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D
Injection Date: 16-Jul-2019 12:46:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: BS ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

255 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

255 4,4'-DDT, Area = 1234631
254 4,4'-DDD, Area = 7394
253 4,4'-DDE, Area = 0

%Breakdown: 0.60%, <= 20.00%
Passed

Peak Tailing Report

Eurofins TestAmerica, Buffalo

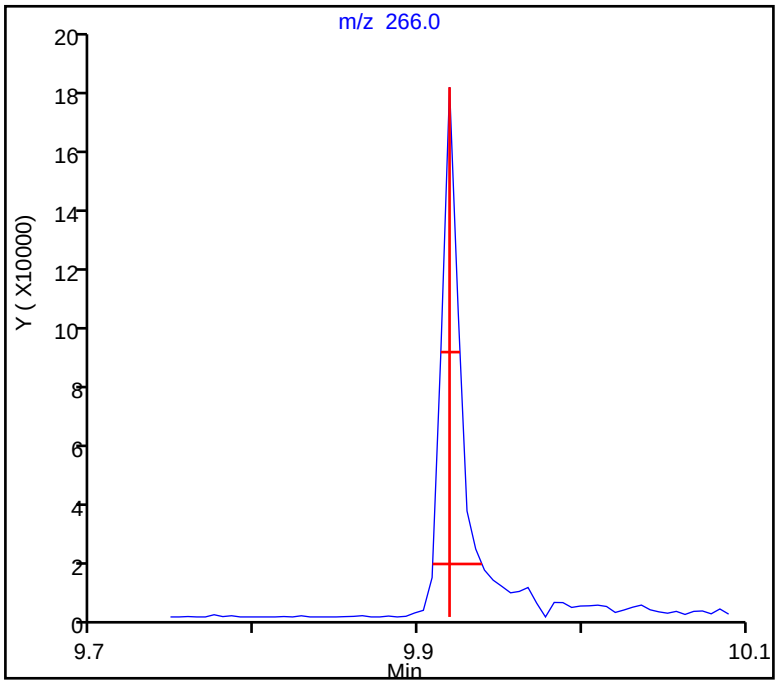
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D
Injection Date: 16-Jul-2019 12:46:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: BS ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

250 Pentachlorophenol_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.020 (min.)
Front Width = 0.010 (min.)

Tailing Factor = 2.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

Eurofins TestAmerica, Buffalo

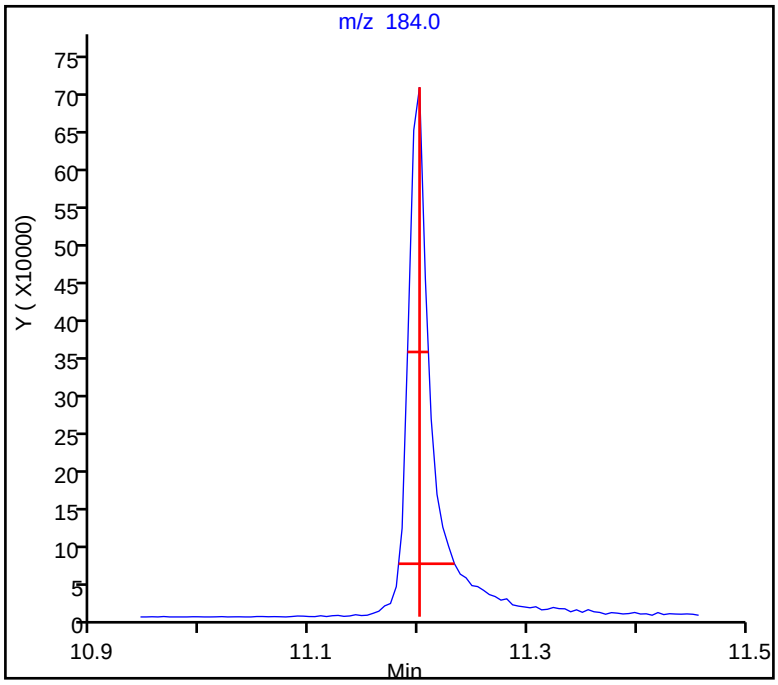
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025818.D
Injection Date: 16-Jul-2019 12:46:30 Instrument ID: HP5973Y
Lims ID: DFTPP
Client ID:
Operator ID: BS ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

252 Benzidine_T, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.032 (min.)
Front Width = 0.019 (min.)

Tailing Factor = 1.7, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-481994/1-A

Matrix: Water Lab File ID: Y025821.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:09

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND		10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo(a)anthracene	ND		5.0	0.36
50-32-8	Benzo(a)pyrene	ND		5.0	0.47
205-99-2	Benzo(b)fluoranthene	ND		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	ND		5.0	0.35
207-08-9	Benzo(k)fluoranthene	ND		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-481994/1-A

Matrix: Water Lab File ID: Y025821.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:09

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	ND		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	1.88	J	5.0	0.44
108-95-2	Phenol	ND		5.0	0.39
129-00-0	Pyrene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-481994/1-A

Matrix: Water Lab File ID: Y025821.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:09

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	90		41-120
321-60-8	2-Fluorobiphenyl	94		48-120
367-12-4	2-Fluorophenol	62		35-120
4165-60-0	Nitrobenzene-d5	91		46-120
4165-62-2	Phenol-d5	43		22-120
1718-51-0	p-Terphenyl-d14	105		59-136

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-481994/1-A

Matrix: Water Lab File ID: Y025821.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:09

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

Number TICs Found: 11 TIC Result Total: 189.07

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	2.62	1.65	T J	
	Unknown	2.68	1.63	T J	
	Unknown	2.76	118	T J	
	Unknown	2.83	3.81	T J	
	Unknown	4.80	41.1	T J	
	Unknown	5.91	5.37	T J	
	Unknown	6.86	4.70	T J	
	Unknown	7.74	4.45	T J	
	Unknown	8.52	3.83	T J	
	Unknown	9.19	2.75	T J	
	Unknown	9.78	1.78	T J	

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D
Lims ID: MB 480-481994/1-A
Client ID:
Sample Type: MB
Inject. Date: 16-Jul-2019 14:09:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-005
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 08:58:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.256	6.256	0.000	95	214620	4.00	4.00	
* 2 Naphthalene-d8	136	7.345	7.345	0.000	99	759097	4.00	4.00	
* 3 Acenaphthene-d10	164	8.825	8.830	-0.005	94	474895	4.00	4.00	
* 4 Phenanthrene-d10	188	10.074	10.080	-0.006	96	926583	4.00	4.00	
* 5 Chrysene-d12	240	12.643	12.649	-0.006	98	894740	4.00	4.00	
* 6 Perylene-d12	264	14.748	14.748	0.000	99	904623	4.00	4.00	
$ 7 2-Fluorophenol	112	5.129	5.112	0.022	88	352346	8.00	4.93	
$ 8 Phenol-d5	99	5.946	5.972	0.005	87	307281	8.00	3.48	
$ 9 Nitrobenzene-d5	82	6.726	6.732	-0.005	98	618641	8.00	7.27	
$ 10 2-Fluorobiphenyl	172	8.237	8.238	0.000	98	1302886	8.00	7.51	
$ 11 2,4,6-Tribromophenol	330	9.492	9.493	0.000	93	195595	8.00	7.21	
$ 12 p-Terphenyl-d14	244	11.426	11.431	0.000	98	1744404	8.00	8.38	
237 Lidocaine	1		0.195					ND	
202 o-Anisidine	1		0.195					ND	
13 1,4-Dioxane	88		3.099					ND	
14 N-Nitrosodimethylamine	42		3.574					ND	
15 Pyridine	52		3.612					ND	
19 2-Picoline	93		4.509					ND	
20 N-Nitrosomethylethylamine	88		4.626					ND	
18 1-Methylcyclopentanol	71		4.655					ND	
22 Methyl methanesulfonate	80		4.925					ND	
24 Acrylamide	71		4.947					ND	
21 2-Chlorobenzotrifluoride	180		5.205					ND	
23 4-Chlorobenzotrifluoride	180		5.275					ND	
28 N-Nitrosodiethylamine	102		5.305					ND	
25 n,n'-Dimethylacetamide	87		5.339					ND	
196 CBF-400	214	5.567	5.535	0.037	0	41		0.000764	
26 4-Chloropyridine	78	5.540	5.563	-0.018	0	159		NC	
30 Ethyl methanesulfonate	79		5.572					ND	
27 3-Chloropyridine	78		5.607					ND	
29 3-Chlorobenzotrifluoride	180		5.675					ND	
35 Benzaldehyde	77		5.876					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
37 Phenol	94		5.951					ND	
31 2-Chloropyridine	78		5.965					ND	
36 Aniline	93		5.973					ND	
38 Pentachloroethane	167		6.015					ND	
39 Bis(2-chloroethyl)ether	93		6.015					ND	
257 CBF-500	161	6.079	6.058	0.022	0	78		0.001454	
40 2-Chlorophenol	128		6.085					ND	
41 n-Decane	57	6.095	6.101	0.000	81	4815		0.0614	
32 2-Chlorotoluene	91		6.119					ND	
33 3-Chlorotoluene	91		6.140					ND	
34 4-Chlorotoluene	91		6.172					ND	
43 1,3-Dichlorobenzene	146		6.208					ND	
44 1,4-Dichlorobenzene	146		6.272					ND	
45 Benzyl alcohol	108		6.379					ND	
46 1,2-Dichlorobenzene	146		6.405					ND	
42 p-Fluoroaniline	111		6.413					ND	
48 2-Methylphenol	108		6.464					ND	
49 2,2'-oxybis[1-chloropropan	45		6.475					ND	
47 Indene	115	6.485	6.491	0.000	80	4687		0.0364	
50 N-Nitrosopyrrolidine	100		6.570					ND	
53 N-Nitrosodi-n-propylamine	70		6.587					ND	
57 4-Methylphenol	108		6.592					ND	
52 Acetophenone	105	6.592	6.604	-0.005	67	2369		0.0232	
54 N-Nitrosomorpholine	56		6.603					ND	
56 2-Toluidine	106		6.629					ND	
55 4-Methylbenzenamine	106		6.632					ND	
58 Hexachloroethane	117		6.699					ND	
59 Nitrobenzene	77		6.747					ND	
61 N-Nitrosopiperidine	114		6.870					ND	
51 N-Methylaniline	106		6.893					ND	
62 Isophorone	82		6.945					ND	
63 2-Chloroaniline	127		6.989					ND	
64 2-Nitrophenol	139		7.019					ND	
66 2,4-Dimethylphenol	107		7.041					ND	
68 o,o',o''-Triethylphosphoro	198		7.078					ND	
67 Tetraethyl lead	237		7.080					ND	
69 Bis(2-chloroethoxy)methane	93		7.105					ND	
60 2,6-Dichloropyridine	112		7.108					ND	
70 Benzoic acid	105		7.142					ND	
71 alpha,alpha-Dimethyl phene	58		7.201					ND	
72 2,4-Dichlorophenol	162		7.228					ND	
282 2,4-Dichlorotoluene	125	7.233	7.235	-0.001	1	278		NC	
73 1,2,4-Trichlorobenzene	180		7.292					ND	
65 Benzeneacetonitrile	117		7.321					ND	
287 1,3,5-Trichlorobenzene	180	7.297	7.328	-0.024	1	887		NC	
75 Alpha-Terpineol	59		7.353					ND	
74 Naphthalene	128		7.367					ND	
76 4-Chloroaniline	127		7.399					ND	
77 2,6-Dichlorophenol	162		7.415					ND	
78 Hexachloropropene	213		7.441					ND	
79 Hexachlorobutadiene	225		7.463					ND	
286 4-Chlorophenol	128		7.599					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
81 Quinoline	129		7.644					ND	
82 N-Nitrosodi-n-butylamine	84		7.660					ND	
83 p-Phenylene diamine	108		7.692					ND	
84 Caprolactam	113		7.698					ND	
85 4-Chloro-3-methylphenol	107		7.805					ND	
80 Benzeneacetic acid (TIC)	91		7.850					ND	
86 Safrole, Total	162		7.852					ND	
87 2-Methylnaphthalene	142		7.943					ND	
88 Phthalic anhydride	104		7.983					ND	
89 1-Methylnaphthalene	142		8.029					ND	U
90 Hexachlorocyclopentadiene	237		8.077					ND	
91 1,2,4,5-Tetrachlorobenzene	216		8.088					ND	
275 Isosafrole Peak 1	162		8.098					ND	
93 2,4,6-Trichlorophenol	196		8.178					ND	
284 2,3-Dichlorobenzenamine	161	8.237	8.181	0.056	50	808		NC	
281 2,4,5-Trichlorotoluene	159	8.237	8.216	0.022	19	433		NC	
94 2,4,5-Trichlorophenol	196		8.221					ND	
198 NVF-400	82	8.280	8.274	0.006	0	252		0.001328	
277 Isosafrole Peak 2	162		8.285					ND	
95 Isosafrole	162		8.285					ND	
96 1,1'-Biphenyl	154		8.328					ND	
97 2-Chloronaphthalene	162		8.360					ND	
99 1-Chloronaphthalene	162		8.381					ND	U
258 CU-600	58	8.424	8.435	-0.010	0	208		0.001096	
100 2-Nitroaniline	65		8.435					ND	
102 1,4-Naphthoquinone	158		8.499					ND	
103 Dicyclohexylamine	138		8.501					ND	
104 1,4-Dinitrobenzene	168		8.536					ND	
105 Dimethyl phthalate	163		8.563					ND	
106 1,3-Dinitrobenzene	168		8.606					ND	
107 2,6-Dinitrotoluene	165		8.622					ND	
285 1,2,3,4 -Tetrachlorobenzen	216	8.664	8.631	0.041	1	158		NC	
108 Acenaphthylene	152		8.713					ND	
109 3-Nitroaniline	138		8.777					ND	
110 Acenaphthene	153		8.857					ND	
111 2,4-Dinitrophenol	184		8.862					ND	
112 4-Nitrophenol	109		8.916					ND	
114 2,4-Dinitrotoluene	165		8.964					ND	U
113 Pentachlorobenzene	250		8.969					ND	
115 Dibenzofuran	168	8.996	8.996	0.000	91	9413		0.0451	
116 1-Naphthylamine	143		9.059					ND	
117 2,3,5,6-Tetrachlorophenol	232		9.065					ND	U
118 2,3,4,6-Tetrachlorophenol	232		9.102					ND	
119 2-Naphthylamine	143		9.124					ND	
121 Hexadecane	57		9.140					ND	U
120 Diethyl phthalate	149		9.140					ND	U
122 Thionazin	97		9.214					ND	
123 4-Chlorophenyl phenyl ethe	204		9.263					ND	
125 N-Nitro-o-toluidine	152		9.284					ND	
124 Fluorene	166	9.284	9.285	0.000	97	14312		0.0874	
126 4-Nitroaniline	138		9.295					ND	
128 Tributyl phosphate	99		9.297					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
127 4,6-Dinitro-2-methylphenol	198		9.316					ND	
130 N-Nitrosodiphenylamine	169		9.359					ND	
129 Diphenylamine	169		9.359					ND	
132 Azobenzene	77		9.396					ND	
131 1,2-Diphenylhydrazine	77		9.396					ND	U
134 Sulfotepp	322		9.460					ND	U
135 1,3,5-Trinitrobenzene	213		9.578					ND	
278 Diallate Peak 1	86		9.588					ND	
136 Diallate	86		9.588					ND	
137 Phorate	75		9.599					ND	
138 Phenacetin	108		9.599					ND	
280 Diallate Peak 2	86		9.668					ND	
139 4-Bromophenyl phenyl ether	248		9.679					ND	
141 Dimethoate	87		9.748					ND	
140 Hexachlorobenzene	284		9.759					ND	
142 Simazine	201		9.761					ND	
143 Atrazine	200		9.786					ND	
144 4-Aminobiphenyl	169		9.898					ND	
148 n-Octadecane	57		9.904					ND	
145 Pentachlorophenol	266		9.920					ND	
147 Pronamide	173		9.925					ND	
146 Pentachloronitrobenzene	237		9.930					ND	
149 Disulfoton	88		10.031					ND	
150 Dinoseb	211		10.042					ND	
151 Phenanthrene	178	10.096	10.102	-0.005	97	120681		0.4704	
152 Anthracene	178		10.144					ND	U
98 n,n'-Dimethylaniline	120	10.240	10.251	-0.010	1	320		NC	
153 Carbazole	167		10.267					ND	
154 Alachlor	160		10.354					ND	
155 Methyl parathion	109		10.357					ND	U
157 Di-n-butyl phthalate	149	10.502	10.502	0.000	96	13510		0.0464	
158 Ethyl Parathion	97		10.672					ND	
159 4-Nitroquinoline-1-oxide	190		10.737					ND	
160 Anthraquinone	180		10.766					ND	
161 Methapyrilene	58		10.769					ND	
288 2-Methylanthracene	192	10.833	10.869	-0.031	3	802		NC	
163 Octachlorostyrene	308	10.854	10.894	-0.039	1	83		NC	
162 Isodrin	193		10.977					ND	
164 Fluoranthene	202	11.105	11.106	0.000	95	26585		0.0931	
165 1-Hydroxyanthraquinone	224		11.139					ND	U
166 Benzidine	184		11.201					ND	
167 Pyrene	202	11.324	11.330	0.000	95	10368		0.0354	
276 Aramite Peak 1	185		11.367					ND	
279 Aramite Peak 2	185		11.442					ND	U
168 Aramite, Total	185		11.442					ND	
170 p-Dimethylamino azobenzene	120		11.559					ND	
169 1,4-Dihydroxyanthraquinone	240		11.583					ND	
171 Chlorobenzilate	251		11.591					ND	
172 Famphur	218		11.850					ND	
175 9-Octadecenamide	59		11.887					ND	
174 Butyl benzyl phthalate	149		11.890					ND	
173 3,3'-Dimethylbenzidine	212		11.912					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
176 Kepone	272		12.015					ND	
177 2-Acetylaminofluorene	181		12.211					ND	
181 Bis(2-ethylhexyl) phthalat	149		12.553					ND	
178 4,4'-Methylene bis(2-chlor	231		12.563					ND	
179 3,3'-Dichlorobenzidine	252		12.574					ND	
180 Benzo[a]anthracene	228		12.633					ND	
182 Chrysene	228		12.686					ND	
183 6-Methylchrysene	242		13.295					ND	U
184 Di-n-octyl phthalate	149		13.450					ND	
185 7,12-Dimethylbenz(a)anthra	256		14.139					ND	
186 Benzo[b]fluoranthene	252		14.160					ND	
187 Benzo[k]fluoranthene	252		14.198					ND	
189 Benzo[a]pyrene	252		14.663					ND	
192 Hexachlorophene	196		14.836					ND	
283 Benzo[e]pyrene	252	15.148	15.149	0.011	46	345		NC	
190 3-Methylcholanthrene	268		15.196					ND	U
191 Dibenz[a,h]acridine	279		16.040					ND	U
193 Indeno[1,2,3-cd]pyrene	276		16.436					ND	
194 Dibenz(a,h)anthracene	278		16.446					ND	
195 Benzo[g,h,i]perylene	276		16.900					ND	
199 CAG-800	149		19.675					ND	
256 CN-500	112		19.994					ND	
197 Dibenzo[a,e]pyrene	302		21.867					ND	
294 3'-Bromoacetophenone TIC	1		0.000					ND	
302 1-Bromo-2-chloroethane TIC	1		0.000					ND	
297 Fluorobenzene TIC	1		0.000					ND	
290 1,3-Dibromobenzene TIC	1		0.000					ND	
291 1,4-Dibromobenzene TIC	1		0.000					ND	
293 3-Nitro-4-Chlorobenzotrifl	1		0.000					ND	
298 2-Bromopyridine TIC	1		0.000					ND	
299 1-Bromo-3-fluorobenzene TI	1		0.000					ND	
301 3-Amino-4-Chlorobenzotrifl	1		0.000					ND	
292 Ethylene Dibromide TIC	1		0.000					ND	
296 1,2-dichloro-4-(trifluorom	1		0.000					ND	
300 1-Bromo-4-ethylbenzene TIC	1		0.000					ND	
295 4-Bromofluorobenzene TIC	1		0.000					ND	
230 2,3-Dichlorophenol	1		0.195					ND	
216 5-Methyl-o-Anisidine TIC	1		0.195					ND	
244 Pendimethalin	1		0.195					ND	
233 4-Chlorobenzotrifluoride T	1		0.195					ND	
247 Benefin (TIC)	1		0.195					ND	
206 2,4-Toluene diamine	1		0.195					ND	
210 Dibenzo[a,h]pyrene	1		0.195					ND	
214 1,2,3-Trimethylbenzene	105		0.195					ND	
219 Photomirex TIC	1		0.195					ND	
240 Prometryn (TIC)	1		0.195					ND	
209 2,4-Dichlorotoluene TIC	1		0.195					ND	
222 2-Chlorobenzotrifluoride T	1		0.195					ND	
215 trans Azobenzene (TIC)	1		0.195					ND	
204 2,6-Dichlorotoluene TIC	1		0.195					ND	
213 4,4'-Methylene bis(2-chlor	1		0.195					ND	
241 5-Methyl-o-Anisidine	1		0.195					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
238 Phenylacetic Acid	1		0.195					ND	
224 1-Bromopropane	1		0.195					ND	
225 Dibenz(a,i)pyrene	1		0.195					ND	
201 7H-Dibenzo[c,g]carbazole	1		0.195					ND	
211 Pendimethalin (TIC)	1		0.195					ND	
227 Dibenz[a,j]acridine	279		0.195					ND	
205 Phenylmercaptan	110		0.195					ND	
220 Tetramethyl lead TIC	1		0.195					ND	
229 o-Anisidine TIC	1		0.195					ND	
218 3-Chlorobenzotrifluoride T	1		0.195					ND	
212 Hexamethyldisiloxane TIC	1		0.195					ND	
254 4,4'-DDD	235	11.645	11.703	-0.058	53	135			NR
S 261 Total Cresols	1		0.195					ND	
S 264 EPH Adjustment 1	1		0.195					ND	
S 262 3 & 4 Methylphenol	108		0.195					ND	
S 259 Chlorobenzotrifluoride N.O	1		0.195					ND	
S 260 Chlorotoluene N.O.S	1		0.195					ND	
S 263 3-Methylphenol	1		0.195					ND	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

NC - Not Calibrated

Review Flags

U - Marked Undetected

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

Eurofins TestAmerica, Buffalo
Tentatively Identified Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D
Lims ID: MB 480-481994/1-A
Client ID:
Sample Type: MB
Inject. Date: 16-Jul-2019 14:09:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-005
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Tic RT Window: 1.500 -0.000 Response: area
Quant By: Nearest ISTD Quant LOD: 10.00000
MS Library: \\chromna\Buffalo\Database\NIST98.L
Min. Match: 85

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 08:58:45

Tentative Identified Compound Results

RT	Area	Amount ng/uL	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight	Flags
	Unknown							
2.618	174718	0.4120	1					
	Unknown							
2.682	172979	0.4079	1					
	Unknown							
2.762	12483241	29.4	1					
	Unknown							
2.832	403719	0.9519	1					
	Unknown							
4.797	4359702	10.3	1					
	Unknown							
5.908	569671	1.34	1					
	Unknown							
6.864	554129	1.18	2					
	Unknown							
7.740	524398	1.11	2					
	Unknown							
8.515	559765	0.9587	3					
	Unknown							
9.193	402078	0.6886	3					
	Unknown							
9.775	279918	0.4445	4					

Report Date: 17-Jul-2019 09:32:34 Chrom Revision: 2.3 15-Jul-2019 06:58:08
Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D
Quantitation Compounds

Compound	RT	Area	Amount ng/uL
* 1 1,4-Dichlorobenzene-d4	6.256	1696407	4.00
* 2 Naphthalene-d8	7.345	1885428	4.00
* 3 Acenaphthene-d10	8.825	2335480	4.00
* 4 Phenanthrene-d10	10.074	2519061	4.00

QC Flag Legend

Processing Flags
NR - Missing Quant Standard
NC - Not Calibrated

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

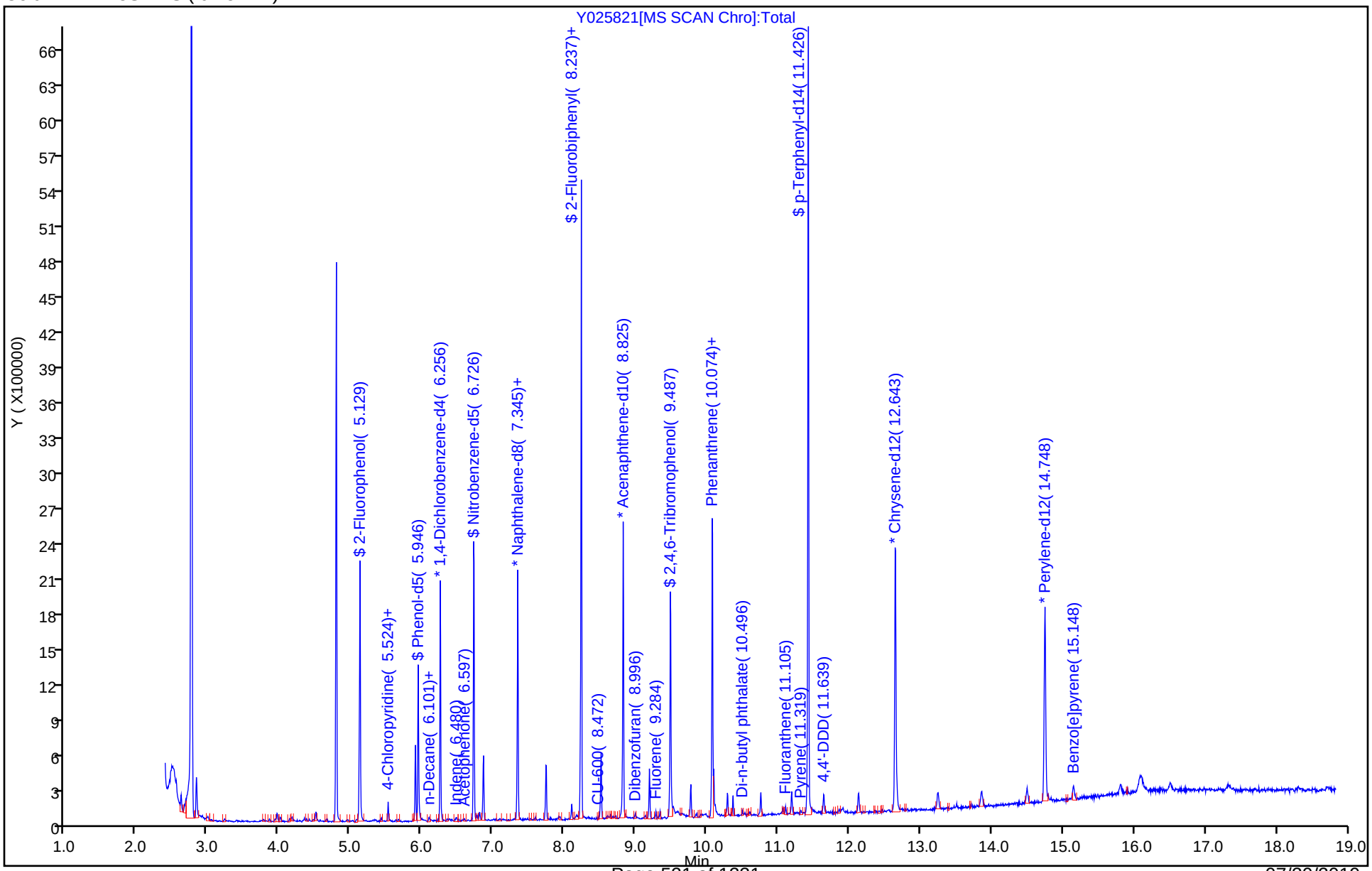
Report Date: 17-Jul-2019 09:32:34 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	MB 480-481994/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



Report Date: 17-Jul-2019 09:32:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date: 16-Jul-2019 14:09:30 Instrument ID: HP5973Y

Lims ID: MB 480-481994/1-A

Client ID:

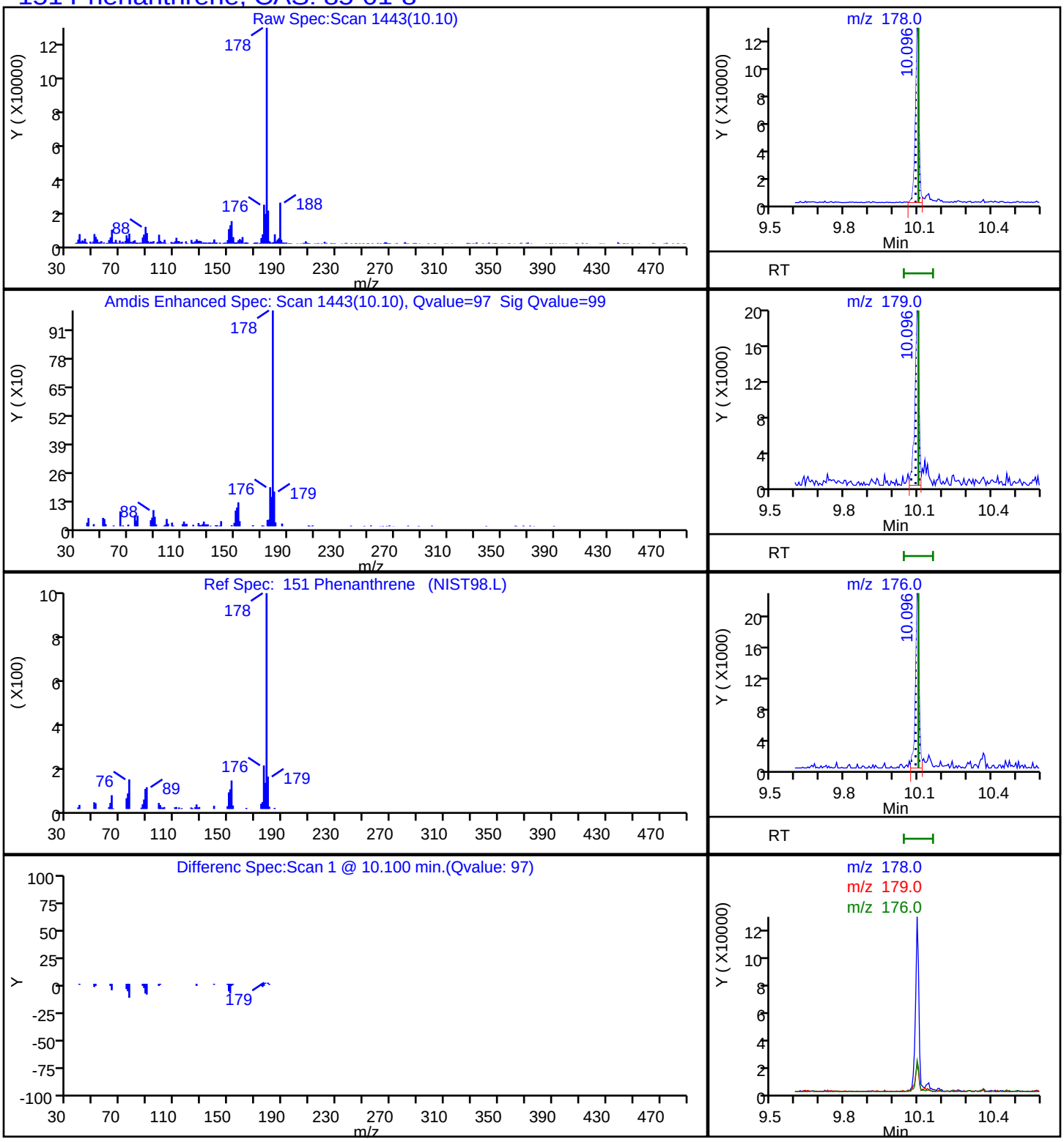
Operator ID: BS ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

151 Phenanthrene, CAS: 85-01-8



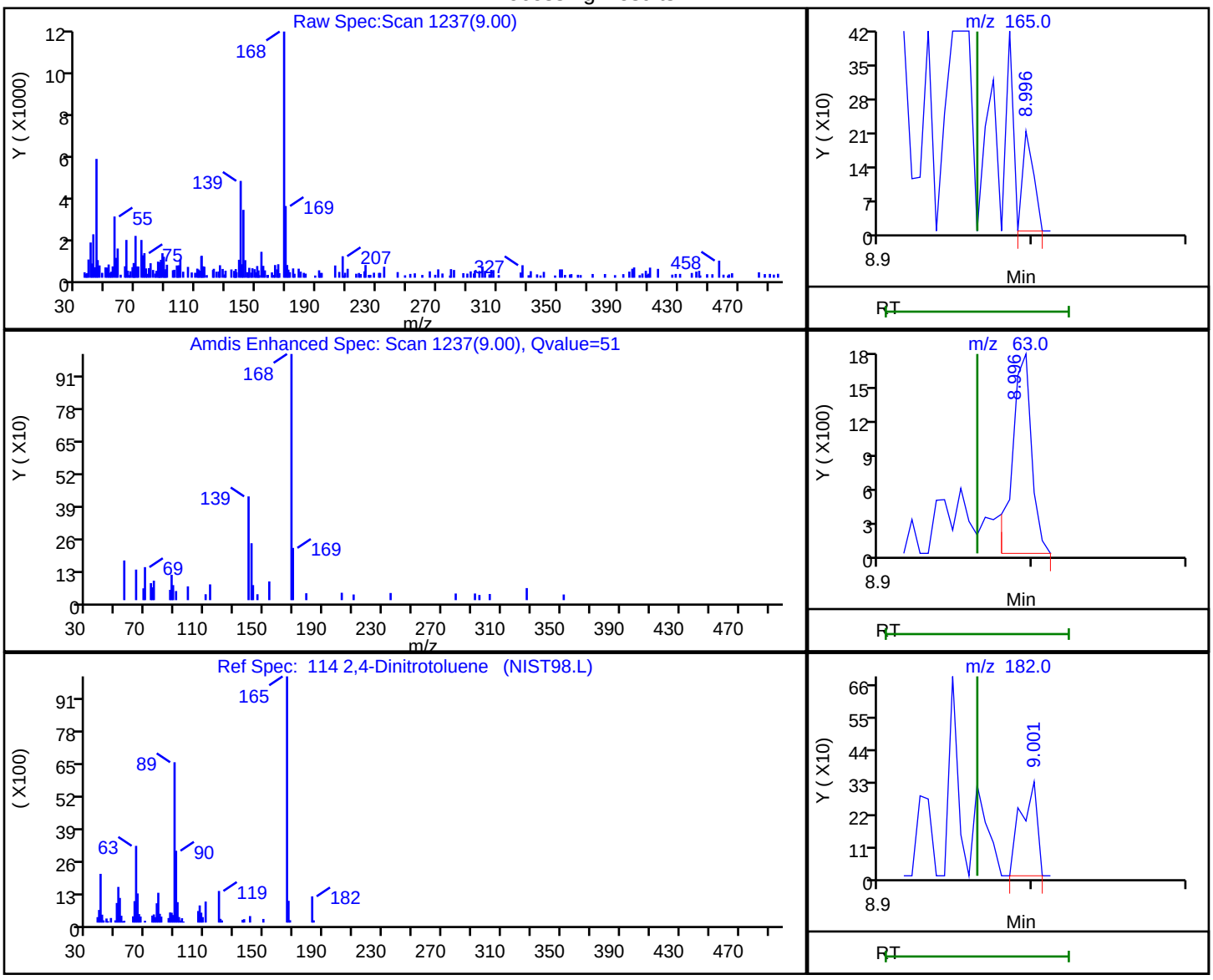
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D
Injection Date: 16-Jul-2019 14:09:30 Instrument ID: HP5973Y
Lims ID: MB 480-481994/1-A
Client ID:
Operator ID: BS ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

114 2,4-Dinitrotoluene, CAS: 121-14-2

Processing Results



RT	Mass	Response	Amount
9.00	165.00	103	0.112608
9.00	63.00	1517	
9.00	182.00	238	

Reviewer: schickr, 17-Jul-2019 08:57:54
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

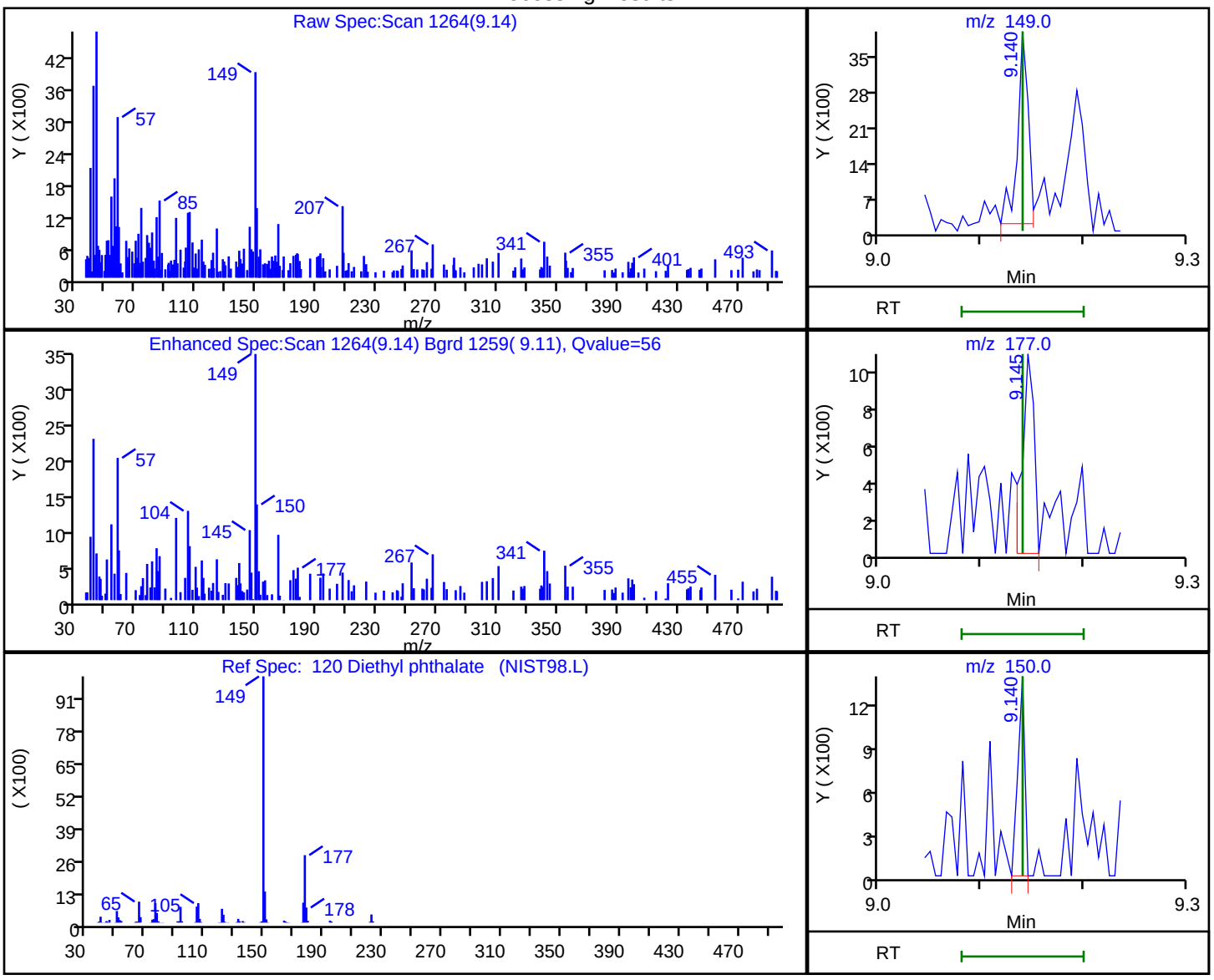
User Disabled Compound Report

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D
Injection Date: 16-Jul-2019 14:09:30 Instrument ID: HP5973Y
Lims ID: MB 480-481994/1-A
Client ID:
Operator ID: BS ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL
Column: RXI-5Sil MS (0.25 mm) Detector MS SCAN

120 Diethyl phthalate, CAS: 84-66-2

Processing Results



RT	Mass	Response	Amount
9.14	149.00	2781	0.016625
9.15	177.00	871	
9.14	150.00	624	

Reviewer: schickr, 17-Jul-2019 08:58:01
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

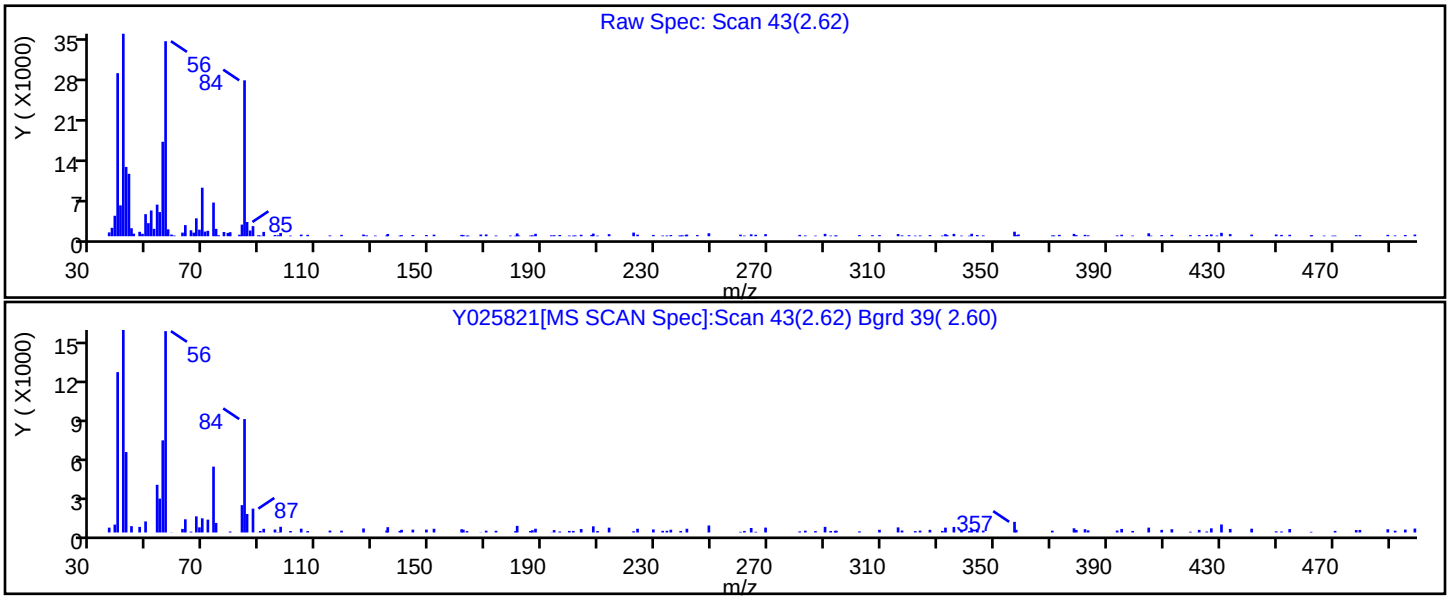
Report Date: 17-Jul-2019 09:32:36 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



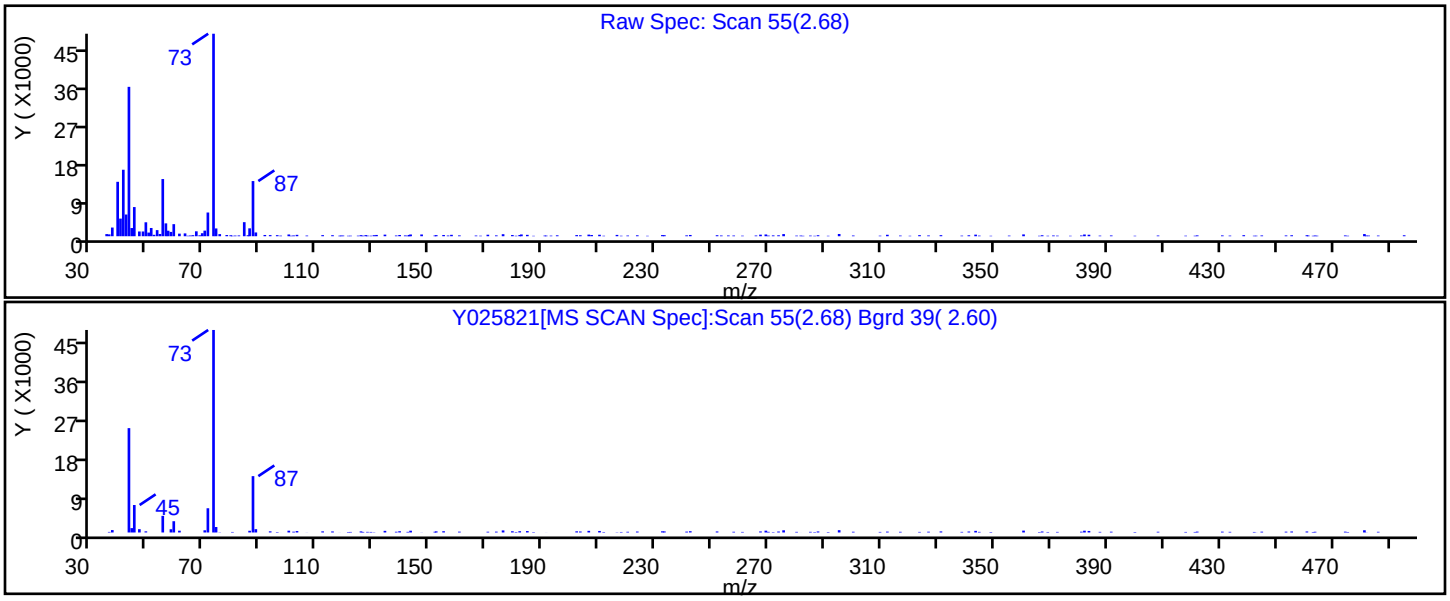
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



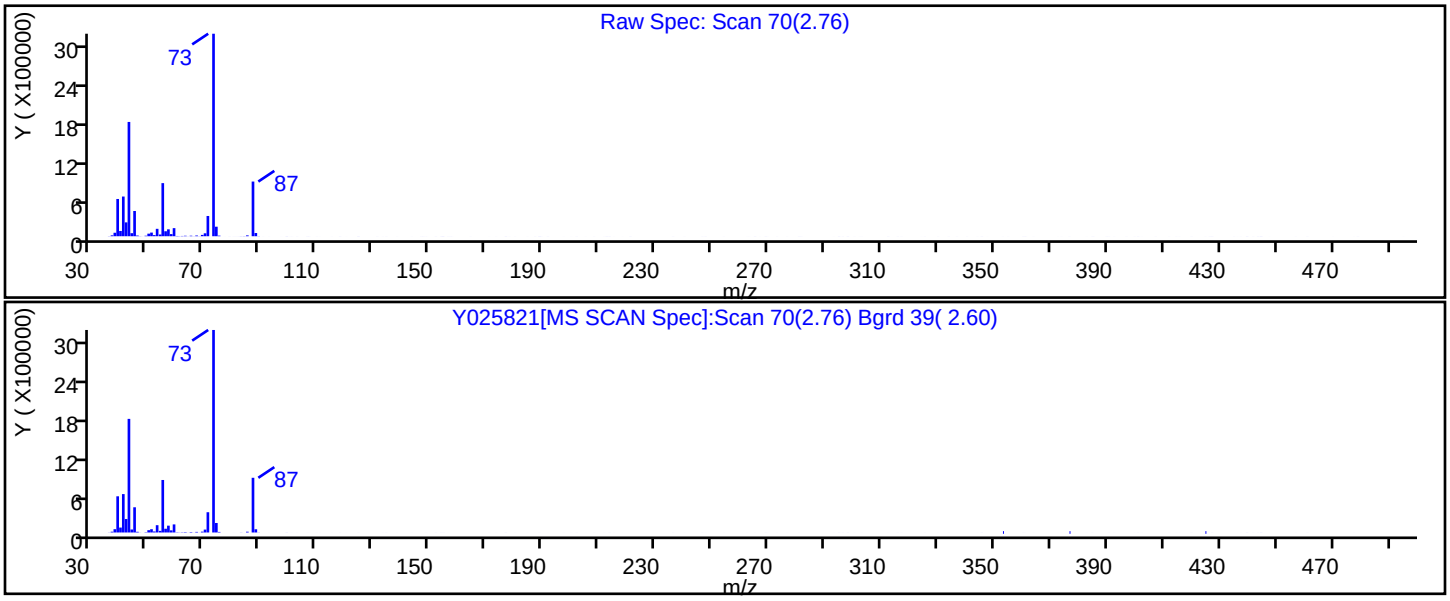
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



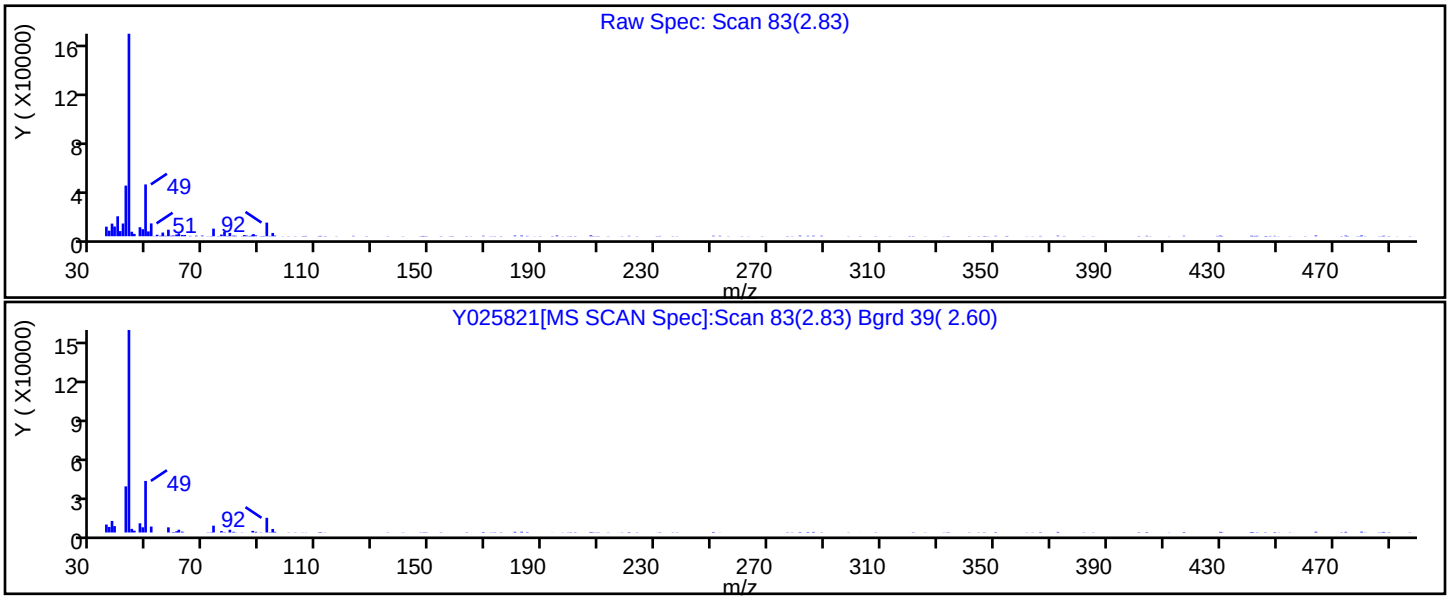
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



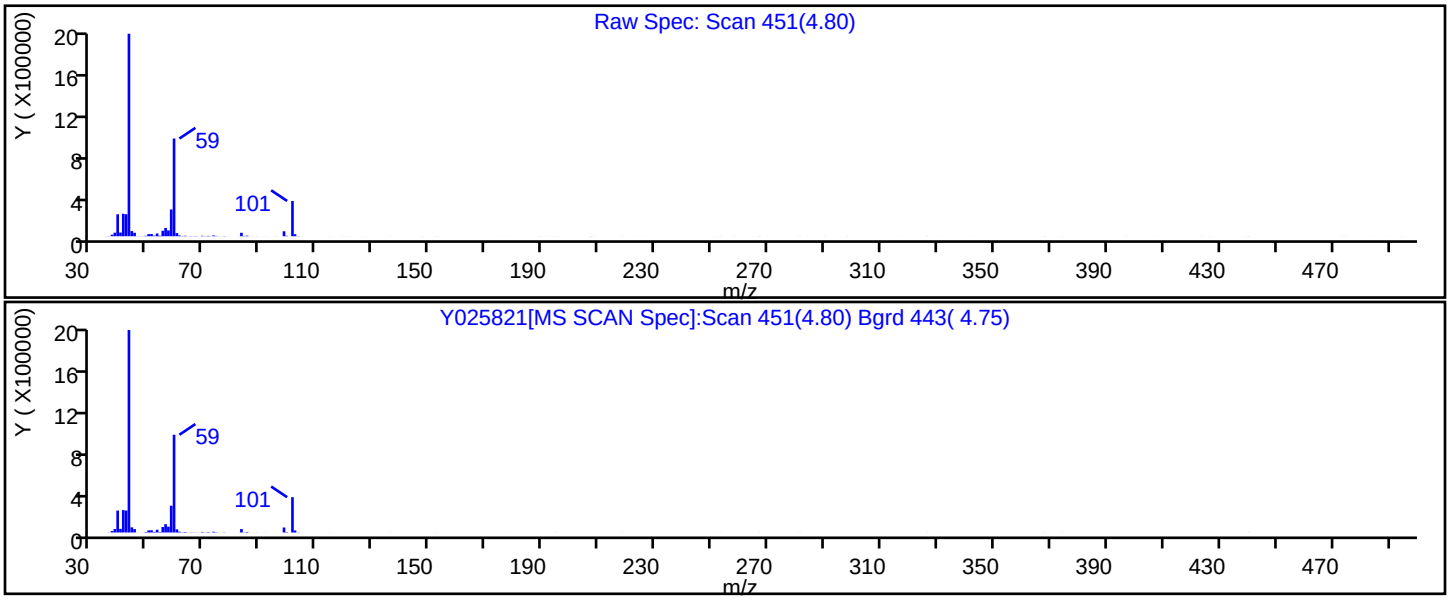
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date: 16-Jul-2019 14:09:30 Instrument ID: HP5973Y

Lims ID: MB 480-481994/1-A

Client ID:

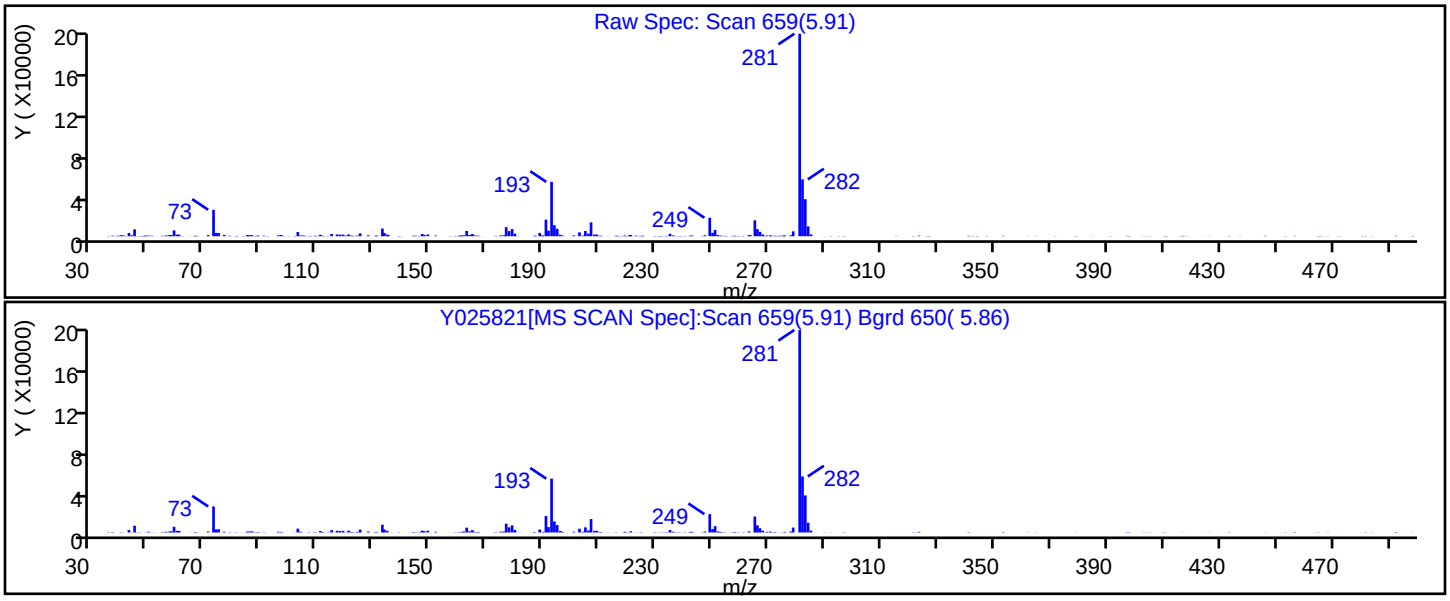
Operator ID: BS ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

No Library Matches Found above the Threshold: 85



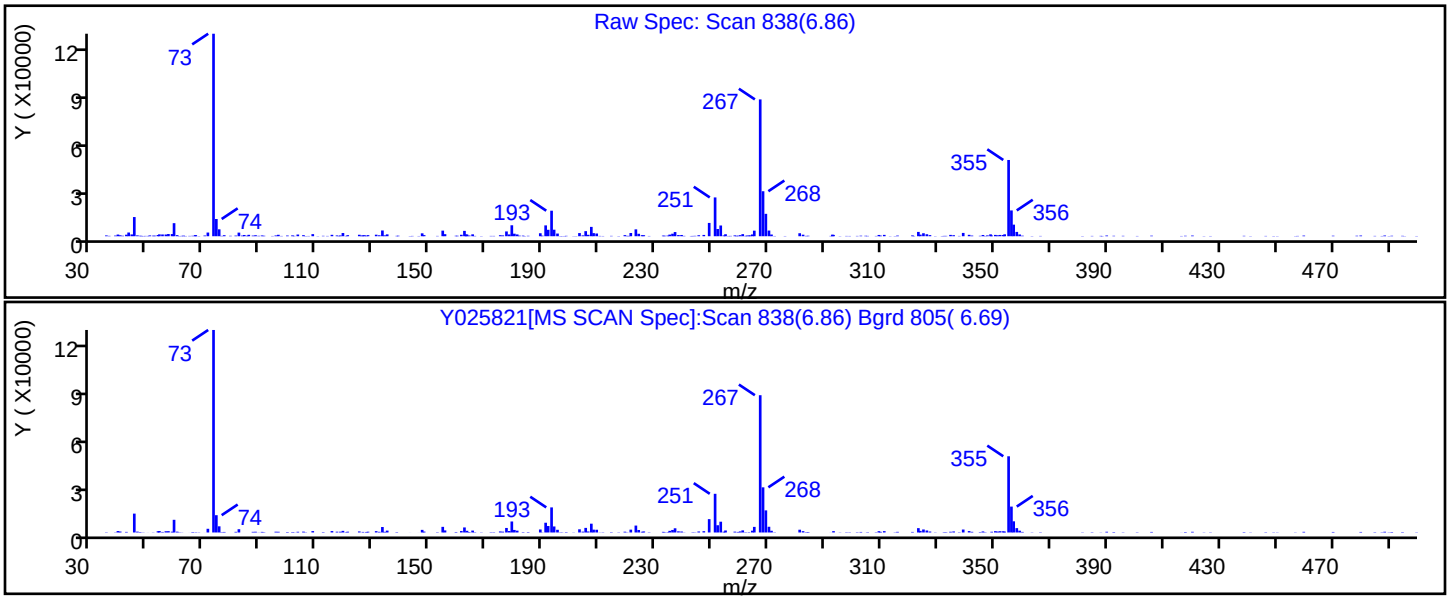
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date: 16-Jul-2019 14:09:30 Instrument ID: HP5973Y

Lims ID: MB 480-481994/1-A

Client ID:

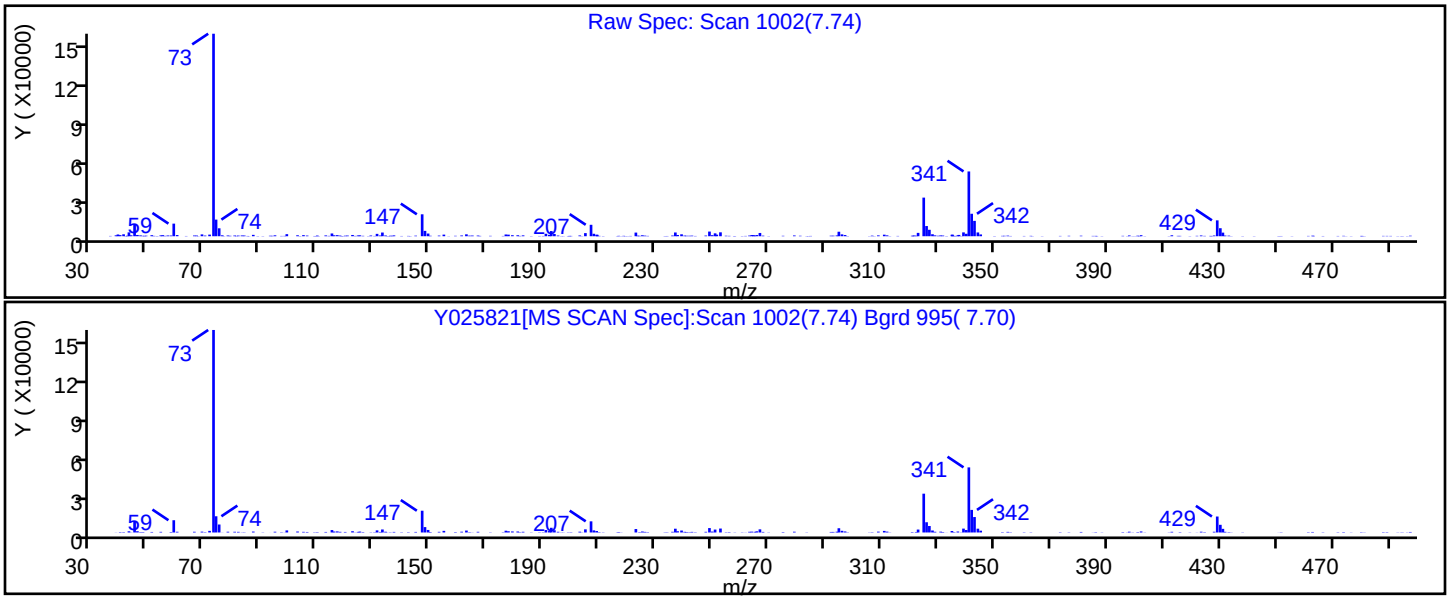
Operator ID: BS ALS Bottle#: 5 Worklist Smp#: 5

Injection Vol: 2.0 ul Dil. Factor: 1.0000

Method: Y-LVI-8270 Limit Group: MB - 8270D ICAL

Column: Detector MS SCAN

No Library Matches Found above the Threshold: 85



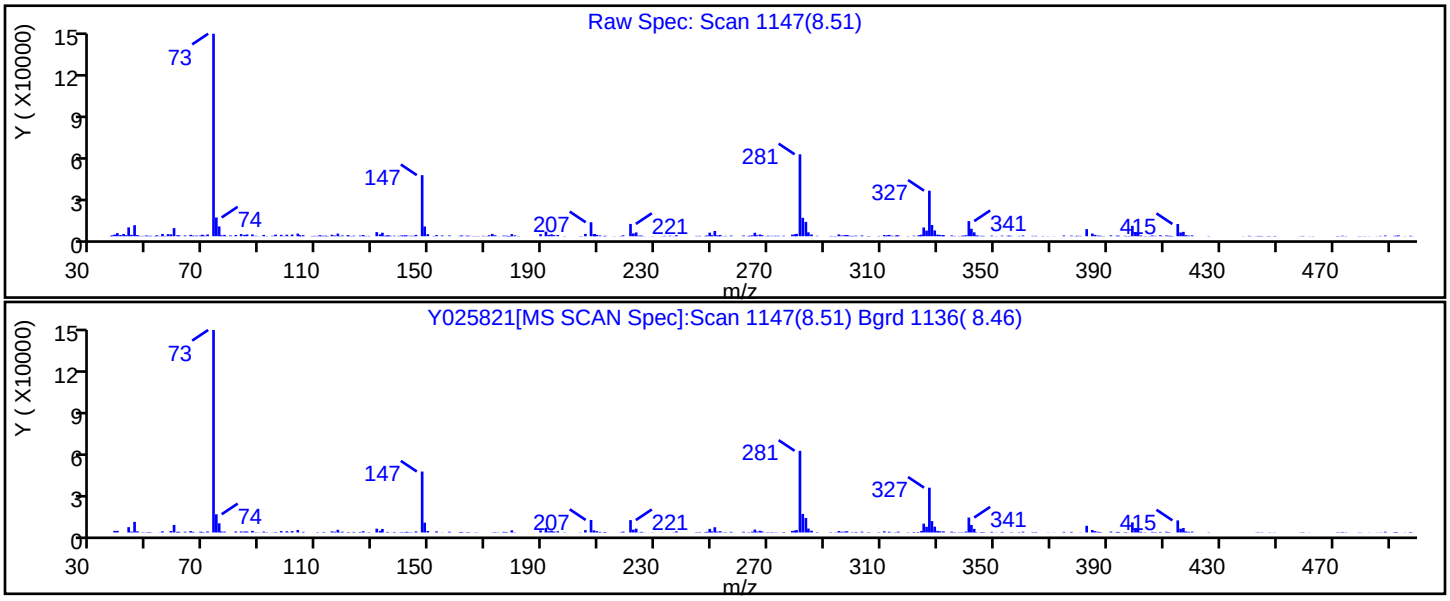
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



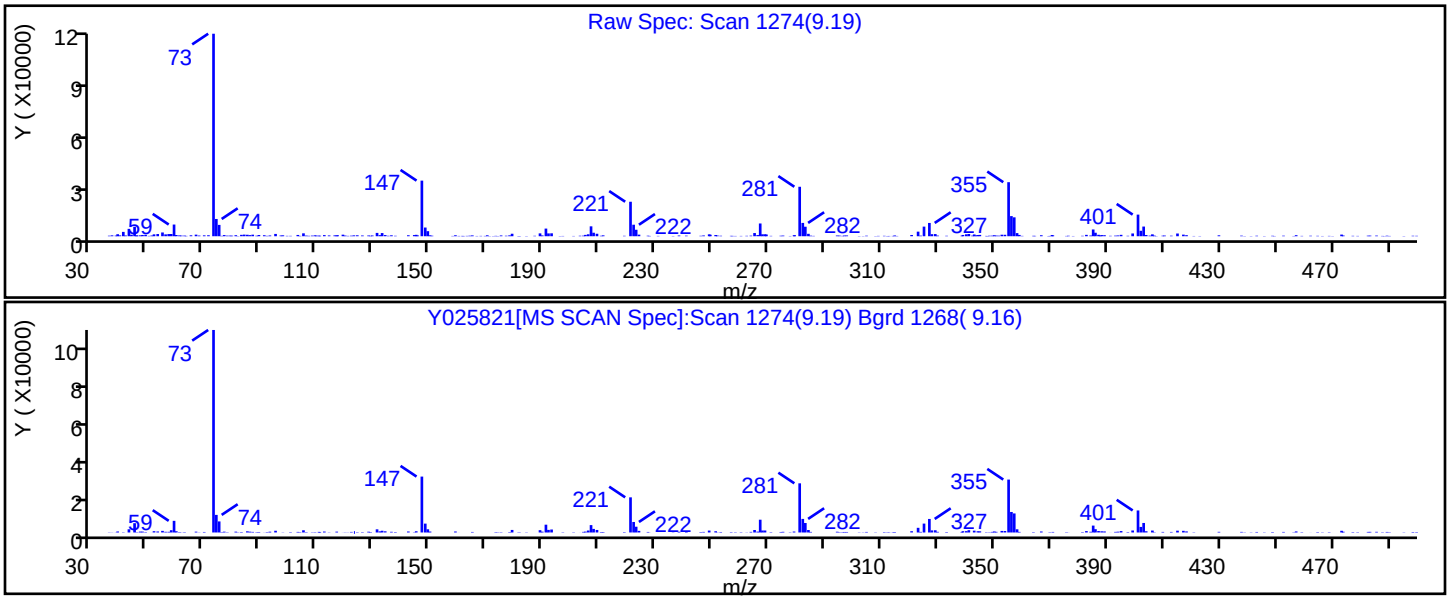
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



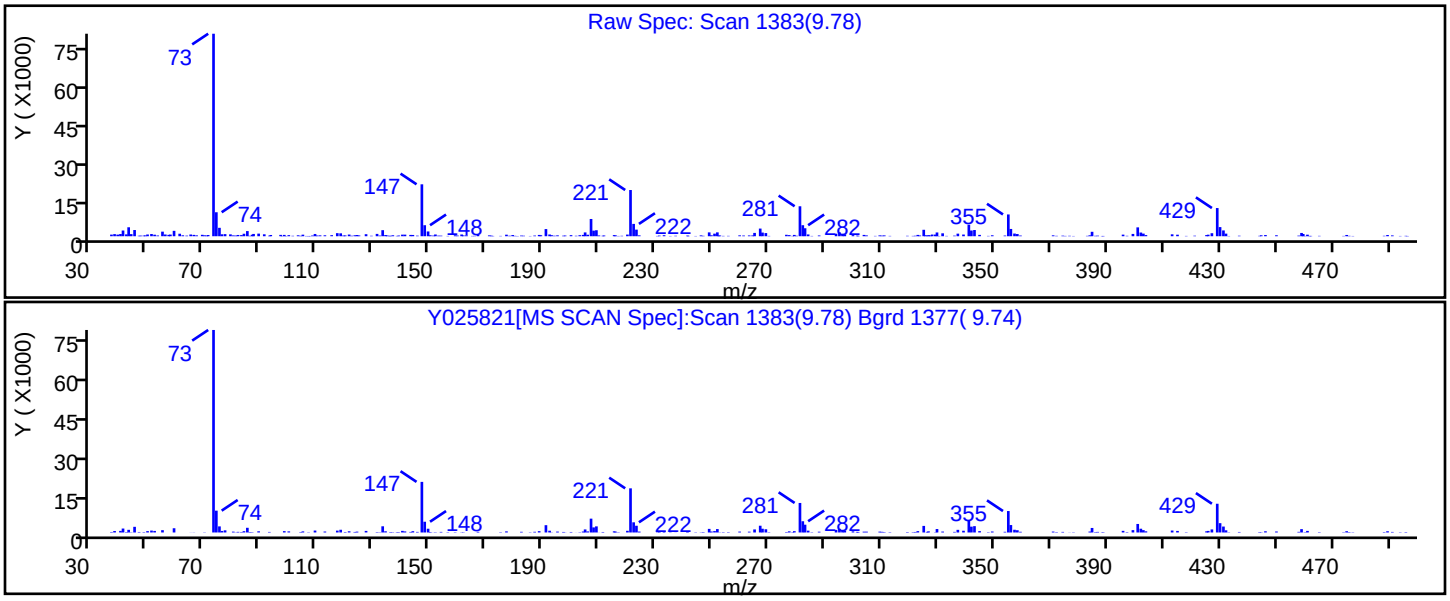
Report Date: 17-Jul-2019 09:32:37 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025821.D

Injection Date:	16-Jul-2019 14:09:30	Instrument ID:	HP5973Y		
Lims ID:	MB 480-481994/1-A				
Client ID:					
Operator ID:	BS	ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	2.0 ul	Dil. Factor:	1.0000		
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		
Column:		Detector	MS SCAN		

No Library Matches Found above the Threshold: 85



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-156069-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 480-481994/2-A

Matrix: Water | Lab File ID: Y025822.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2019 14:37

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

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 482258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	33.4		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	34.7		5.0	0.61
120-83-2	2,4-Dichlorophenol	32.6		5.0	0.51
105-67-9	2,4-Dimethylphenol	30.7		5.0	0.50
51-28-5	2,4-Dinitrophenol	64.6		10	2.2
121-14-2	2,4-Dinitrotoluene	30.2		5.0	0.45
606-20-2	2,6-Dinitrotoluene	31.0		5.0	0.40
91-58-7	2-Chloronaphthalene	27.2		5.0	0.46
95-57-8	2-Chlorophenol	26.6		5.0	0.53
91-57-6	2-Methylnaphthalene	29.4		5.0	0.60
95-48-7	2-Methylphenol	29.8		5.0	0.40
88-74-4	2-Nitroaniline	31.8		10	0.42
88-75-5	2-Nitrophenol	30.4		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	70.8		5.0	0.40
99-09-2	3-Nitroaniline	28.3		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	67.7		10	2.2
101-55-3	4-Bromophenyl phenyl ether	31.4		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	28.0		5.0	0.45
106-47-8	4-Chloroaniline	26.1		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	31.2		5.0	0.35
106-44-5	4-Methylphenol	26.1		10	0.36
100-01-6	4-Nitroaniline	26.7		10	0.25
100-02-7	4-Nitrophenol	78.8		10	1.5
83-32-9	Acenaphthene	30.3		5.0	0.41
208-96-8	Acenaphthylene	29.8		5.0	0.38
98-86-2	Acetophenone	28.4		5.0	0.54
120-12-7	Anthracene	30.2		5.0	0.28
1912-24-9	Atrazine	75.1		5.0	0.46
100-52-7	Benzaldehyde	52.2		5.0	0.27
56-55-3	Benzo(a)anthracene	31.5		5.0	0.36
50-32-8	Benzo(a)pyrene	29.3		5.0	0.47
205-99-2	Benzo(b)fluoranthene	32.0		5.0	0.34
191-24-2	Benzo(g,h,i)perylene	32.1		5.0	0.35
207-08-9	Benzo(k)fluoranthene	31.1		5.0	0.73

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-481994/2-A

Matrix: Water Lab File ID: Y025822.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:37

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	28.0		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	24.0		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	25.6		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	22.1		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	33.4		5.0	2.2
85-68-7	Butyl benzyl phthalate	30.1		5.0	1.0
105-60-2	Caprolactam	20.9		5.0	2.2
86-74-8	Carbazole	29.4		5.0	0.30
218-01-9	Chrysene	33.7		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	32.4		5.0	0.42
132-64-9	Dibenzofuran	29.8		10	0.51
84-66-2	Diethyl phthalate	34.3		5.0	0.22
131-11-3	Dimethyl phthalate	33.2		5.0	0.36
84-74-2	Di-n-butyl phthalate	32.0		5.0	0.31
117-84-0	Di-n-octyl phthalate	31.0		5.0	0.47
206-44-0	Fluoranthene	32.9		5.0	0.40
86-73-7	Fluorene	31.5		5.0	0.36
118-74-1	Hexachlorobenzene	29.8		5.0	0.51
87-68-3	Hexachlorobutadiene	25.5		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	18.7		5.0	0.59
67-72-1	Hexachloroethane	23.4		5.0	0.59
193-39-5	Indeno(1,2,3-cd)pyrene	32.8		5.0	0.47
78-59-1	Isophorone	29.6		5.0	0.43
91-20-3	Naphthalene	28.3		5.0	0.76
98-95-3	Nitrobenzene	30.5		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	26.9		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	30.3		5.0	0.51
87-86-5	Pentachlorophenol	47.7		10	2.2
85-01-8	Phenanthrene	32.8		5.0	0.44
108-95-2	Phenol	18.0		5.0	0.39
129-00-0	Pyrene	31.4		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 480-481994/2-A

Matrix: Water Lab File ID: Y025822.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 14:37

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

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	103		41-120
321-60-8	2-Fluorobiphenyl	92		48-120
367-12-4	2-Fluorophenol	64		35-120
4165-60-0	Nitrobenzene-d5	87		46-120
4165-62-2	Phenol-d5	47		22-120
1718-51-0	p-Terphenyl-d14	97		59-136

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025822.D
Lims ID: LCS 480-481994/2-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jul-2019 14:37:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 2.0 ul Dil. Factor: 1.0000
Sample Info: 480-0082649-006
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

First Level Reviewer: schickr Date: 17-Jul-2019 09:04:44

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.255	6.256	-0.001	94	206002	4.00	4.00	
* 2 Naphthalene-d8	136	7.345	7.345	0.000	99	735914	4.00	4.00	
* 3 Acenaphthene-d10	164	8.829	8.830	-0.001	95	465466	4.00	4.00	
* 4 Phenanthrene-d10	188	10.079	10.080	-0.001	96	906511	4.00	4.00	
* 5 Chrysene-d12	240	12.654	12.649	0.005	98	922328	4.00	4.00	
* 6 Perylene-d12	264	14.753	14.748	0.005	99	928194	4.00	4.00	
$ 7 2-Fluorophenol	112	5.139	5.112	0.032	88	350275	8.00	5.10	
$ 8 Phenol-d5	99	5.951	5.972	0.010	87	319647	8.00	3.77	
$ 9 Nitrobenzene-d5	82	6.730	6.732	-0.001	96	576902	8.00	6.99	
$ 10 2-Fluorobiphenyl	172	8.237	8.238	-0.001	98	1256645	8.00	7.39	
$ 11 2,4,6-Tribromophenol	330	9.492	9.493	0.000	90	219075	8.00	8.24	
$ 12 p-Terphenyl-d14	244	11.425	11.431	-0.001	98	1665624	8.00	7.76	
13 1,4-Dioxane	88	3.232	3.232	0.133	91	113749	8.00	4.00	a
14 N-Nitrosodimethylamine	42	3.654	3.654	0.080	69	331690	8.00	9.02	a
15 Pyridine	52	3.707	3.707	0.095	85	296159	16.0	7.15	a
35 Benzaldehyde	77	5.881	5.882	0.005	87	752597	16.0	13.1	
37 Phenol	94	5.961	5.957	0.010	98	383458	8.00	4.51	
36 Aniline	93	5.977	5.978	0.004	96	437883	8.00	4.78	
39 Bis(2-chloroethyl)ether	93	6.015	6.021	0.000	87	413224	8.00	5.52	
40 2-Chlorophenol	128	6.089	6.090	0.004	91	486578	8.00	6.64	
41 n-Decane	57	6.100	6.101	0.005	87	289890	8.00	3.85	
43 1,3-Dichlorobenzene	146	6.212	6.213	0.004	92	486964	8.00	5.77	
44 1,4-Dichlorobenzene	146	6.271	6.278	-0.001	89	495895	8.00	5.89	
45 Benzyl alcohol	108	6.378	6.384	0.000	83	229894	8.00	5.43	
46 1,2-Dichlorobenzene	146	6.410	6.411	0.005	91	494622	8.00	6.05	
48 2-Methylphenol	108	6.469	6.470	0.005	93	461232	8.00	7.46	
49 2,2'-oxybis[1-chloropropan	45	6.474	6.481	-0.001	76	575136	8.00	6.01	
47 Indene	115	6.485	6.491	0.000	88	7667166	64.0	62.1	
53 N-Nitrosodi-n-propylamine	70	6.586	6.593	-0.001	91	341367	8.00	6.72	
57 4-Methylphenol	108	6.597	6.598	0.005	56	419532	8.00	6.54	
52 Acetophenone	105	6.597	6.604	0.000	78	697680	8.00	7.11	
58 Hexachloroethane	117	6.698	6.705	-0.001	77	210127	8.00	5.84	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
59 Nitrobenzene	77	6.746	6.748	-0.001	93	554580	8.00	7.62	
62 Isophorone	82	6.944	6.945	-0.001	94	948952	8.00	7.39	
64 2-Nitrophenol	139	7.019	7.020	0.000	85	266433	8.00	7.60	
66 2,4-Dimethylphenol	107	7.040	7.041	-0.001	96	534639	8.00	7.67	
69 Bis(2-chloroethoxy)methane	93	7.104	7.105	-0.001	94	498054	8.00	6.39	
70 Benzoic acid	105	7.163	7.143	0.021	93	1348669	64.0	31.6	
72 2,4-Dichlorophenol	162	7.227	7.228	-0.001	93	454177	8.00	8.14	
73 1,2,4-Trichlorobenzene	180	7.291	7.292	-0.001	91	469876	8.00	6.64	
74 Naphthalene	128	7.366	7.367	-0.001	98	1366049	8.00	7.07	
76 4-Chloroaniline	127	7.403	7.399	0.004	94	396306	8.00	6.53	
77 2,6-Dichlorophenol	162	7.414	7.415	-0.001	90	450120	8.00	8.16	
79 Hexachlorobutadiene	225	7.462	7.463	-0.001	95	290213	8.00	6.38	
84 Caprolactam	113	7.697	7.704	-0.001	68	98246	16.0	5.23	
85 4-Chloro-3-methylphenol	107	7.804	7.805	-0.001	88	405644	8.00	7.00	
87 2-Methylnaphthalene	142	7.943	7.944	0.000	89	972401	8.00	7.36	
89 1-Methylnaphthalene	142	8.028	8.030	-0.001	89	905625	8.00	7.34	
90 Hexachlorocyclopentadiene	237	8.076	8.077	-0.001	96	236184	8.00	4.67	
91 1,2,4,5-Tetrachlorobenzene	216	8.087	8.088	-0.001	98	544565	8.00	6.73	
93 2,4,6-Trichlorophenol	196	8.178	8.179	0.000	94	399841	8.00	8.67	
94 2,4,5-Trichlorophenol	196	8.220	8.222	-0.001	91	405100	8.00	8.35	
96 1,1'-Biphenyl	154	8.327	8.329	-0.001	97	1247495	8.00	7.01	
97 2-Chloronaphthalene	162	8.359	8.361	-0.001	97	958362	8.00	6.79	
100 2-Nitroaniline	65	8.434	8.435	-0.001	74	317012	8.00	7.95	
105 Dimethyl phthalate	163	8.562	8.564	-0.001	96	1285059	8.00	8.29	
106 1,3-Dinitrobenzene	168	8.605	8.606	-0.001	77	179795	8.00	8.07	
107 2,6-Dinitrotoluene	165	8.621	8.622	-0.001	87	283825	8.00	7.74	
108 Acenaphthylene	152	8.712	8.713	-0.001	97	1509638	8.00	7.44	
109 3-Nitroaniline	138	8.776	8.777	-0.001	87	211386	8.00	7.08	
110 Acenaphthene	153	8.856	8.857	-0.001	93	1099100	8.00	7.58	
111 2,4-Dinitrophenol	184	8.861	8.863	-0.001	79	317617	16.0	16.1	
112 4-Nitrophenol	109	8.915	8.916	-0.001	85	420046	16.0	19.7	
114 2,4-Dinitrotoluene	165	8.968	8.964	0.004	87	374248	8.00	7.55	
115 Dibenzofuran	168	9.000	8.996	0.004	95	1521987	8.00	7.44	
118 2,3,4,6-Tetrachlorophenol	232	9.102	9.103	0.000	75	338401	8.00	8.41	
121 Hexadecane	57	9.139	9.140	-0.001	86	555219	8.00	5.87	
120 Diethyl phthalate	149	9.144	9.140	0.004	96	1407590	8.00	8.58	
123 4-Chlorophenyl phenyl ethe	204	9.262	9.263	-0.001	94	654783	8.00	7.81	
124 Fluorene	166	9.289	9.285	0.005	92	1261708	8.00	7.86	
126 4-Nitroaniline	138	9.294	9.295	-0.001	78	247298	8.00	6.67	
127 4,6-Dinitro-2-methylphenol	198	9.315	9.317	-0.001	79	466188	16.0	16.9	
130 N-Nitrosodiphenylamine	169	9.363	9.359	0.004	67	914956	8.00	7.58	
129 Diphenylamine	169	9.363	9.359	0.004	91	914956	6.84	6.48	
132 Azobenzene	77	9.401	9.397	0.005	93	1392390	8.00	8.11	
131 1,2-Diphenylhydrazine	77	9.401	9.397	0.005	40	1392390	8.00	8.12	
139 4-Bromophenyl phenyl ether	248	9.679	9.680	0.000	71	425568	8.00	7.85	
140 Hexachlorobenzene	284	9.759	9.760	0.000	92	459078	8.00	7.45	
143 Atrazine	200	9.791	9.787	0.005	91	874208	16.0	18.8	
148 n-Octadecane	57	9.903	9.904	-0.001	83	627255	8.00	6.17	
145 Pentachlorophenol	266	9.919	9.920	-0.001	88	339510	16.0	11.9	
151 Phenanthrene	178	10.101	10.102	0.000	97	2058868	8.00	8.20	
152 Anthracene	178	10.143	10.145	-0.001	97	1909842	8.00	7.55	
153 Carbazole	167	10.266	10.267	-0.001	97	1498953	8.00	7.35	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
157 Di-n-butyl phthalate	149	10.501	10.502	-0.001	99	2281486	8.00	8.01	
164 Fluoranthene	202	11.110	11.106	0.005	97	2297003	8.00	8.22	
166 Benzidine	184	11.201	11.197	0.000	98	191169	16.0	3.02	
167 Pyrene	202	11.324	11.330	0.000	97	2373978	8.00	7.86	
174 Butyl benzyl phthalate	149	11.895	11.896	0.005	97	1000719	8.00	7.53	
181 Bis(2-ethylhexyl) phthalat	149	12.557	12.559	0.004	94	1573553	8.00	8.34	
179 3,3'-Dichlorobenzidine	252	12.573	12.580	-0.001	74	1534410	16.0	17.7	
180 Benzo[a]anthracene	228	12.638	12.639	0.005	97	2314037	8.00	7.87	
182 Chrysene	228	12.686	12.692	0.000	95	2222167	8.00	8.43	
184 Di-n-octyl phthalate	149	13.449	13.456	-0.001	99	2537029	8.00	7.75	
186 Benzo[b]fluoranthene	252	14.160	14.171	0.000	95	2322327	8.00	8.00	
187 Benzo[k]fluoranthene	252	14.202	14.209	0.004	96	2219811	8.00	7.78	
189 Benzo[a]pyrene	252	14.667	14.674	0.005	75	2022833	8.00	7.32	
193 Indeno[1,2,3-cd]pyrene	276	16.440	16.448	0.004	96	2719564	8.00	8.21	
194 Dibenz(a,h)anthracene	278	16.451	16.459	0.005	88	2259020	8.00	8.09	
195 Benzo[g,h,i]perylene	276	16.910	16.913	0.010	97	2195184	8.00	8.01	
S 263 3-Methylphenol	1				0		8.00	6.54	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

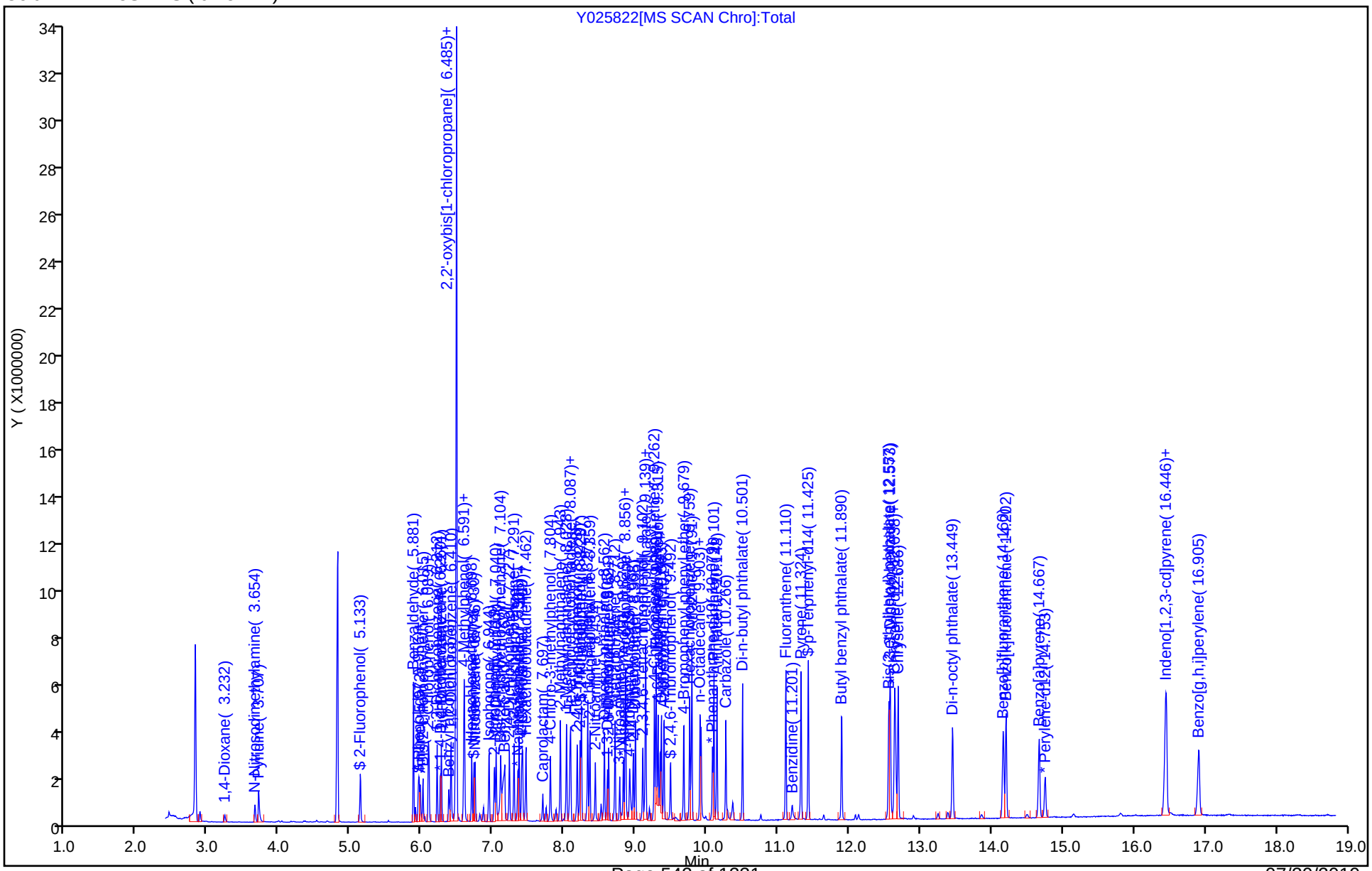
Report Date: 17-Jul-2019 09:32:42 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025822.D

Injection Date:	16-Jul-2019 14:37:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	LCS 480-481994/2-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	2.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MS Lab Sample ID: 480-156069-2 MS

Matrix: Water Lab File ID: Y025823.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 15:05

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	34.2		25	2.4
88-06-2	2,4,6-Trichlorophenol	36.5		25	3.1
120-83-2	2,4-Dichlorophenol	29.9		25	2.6
105-67-9	2,4-Dimethylphenol	30.8		25	2.5
51-28-5	2,4-Dinitrophenol	67.9		50	11
121-14-2	2,4-Dinitrotoluene	23.6	J	25	2.2
606-20-2	2,6-Dinitrotoluene	32.2		25	2.0
91-58-7	2-Chloronaphthalene	28.1		25	2.3
95-57-8	2-Chlorophenol	26.0		25	2.7
91-57-6	2-Methylnaphthalene	30.0		25	3.0
95-48-7	2-Methylphenol	30.5		25	2.0
88-74-4	2-Nitroaniline	23.6	J	50	2.1
88-75-5	2-Nitrophenol	30.8		25	2.4
91-94-1	3,3'-Dichlorobenzidine	ND		25	2.0
99-09-2	3-Nitroaniline	ND		50	2.4
534-52-1	4,6-Dinitro-2-methylphenol	79.6		50	11
101-55-3	4-Bromophenyl phenyl ether	27.1		25	2.3
59-50-7	4-Chloro-3-methylphenol	28.7		25	2.3
106-47-8	4-Chloroaniline	ND		25	3.0
7005-72-3	4-Chlorophenyl phenyl ether	27.6		25	1.8
106-44-5	4-Methylphenol	23.2	J	50	1.8
100-01-6	4-Nitroaniline	ND		50	1.3
100-02-7	4-Nitrophenol	87.3		50	7.6
83-32-9	Acenaphthene	31.4		25	2.1
208-96-8	Acenaphthylene	29.7		25	1.9
98-86-2	Acetophenone	30.2		25	2.7
120-12-7	Anthracene	28.9		25	1.4
1912-24-9	Atrazine	49.6		25	2.3
100-52-7	Benzaldehyde	56.1		25	1.3
56-55-3	Benzo(a)anthracene	24.4	J	25	1.8
50-32-8	Benzo(a)pyrene	21.5	J	25	2.4
205-99-2	Benzo(b)fluoranthene	23.2	J	25	1.7
191-24-2	Benzo(g,h,i)perylene	25.3		25	1.8
207-08-9	Benzo(k)fluoranthene	24.1	J	25	3.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo | Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MS | Lab Sample ID: 480-156069-2 MS

Matrix: Water | Lab File ID: Y025823.D

Analysis Method: 8270D | Date Collected: 07/09/2019 13:50

Extract. Method: 3510C | Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) | Date Analyzed: 07/16/2019 15:05

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 482258 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	28.7		25	3.3
108-60-1	bis (2-chloroisopropyl) ether	24.3	J	25	2.6
111-91-1	Bis(2-chloroethoxy)methane	26.7		25	1.8
111-44-4	Bis(2-chloroethyl)ether	24.9	J	25	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	26.6		25	11
85-68-7	Butyl benzyl phthalate	24.4	J	25	5.0
105-60-2	Caprolactam	ND		25	11
86-74-8	Carbazole	34.5		25	1.5
218-01-9	Chrysene	26.8		25	1.7
53-70-3	Dibenz(a,h)anthracene	24.1	J	25	2.1
132-64-9	Dibenzofuran	30.7	J	50	2.6
84-66-2	Diethyl phthalate	27.0		25	1.1
131-11-3	Dimethyl phthalate	24.9	J	25	1.8
84-74-2	Di-n-butyl phthalate	26.9		25	1.6
117-84-0	Di-n-octyl phthalate	26.7		25	2.4
206-44-0	Fluoranthene	28.6		25	2.0
86-73-7	Fluorene	30.2		25	1.8
118-74-1	Hexachlorobenzene	31.1		25	2.6
87-68-3	Hexachlorobutadiene	25.3		25	3.4
77-47-4	Hexachlorocyclopentadiene	18.4	J	25	3.0
67-72-1	Hexachloroethane	29.0		25	3.0
193-39-5	Indeno(1,2,3-cd)pyrene	25.2		25	2.4
78-59-1	Isophorone	31.0		25	2.2
91-20-3	Naphthalene	27.8		25	3.8
98-95-3	Nitrobenzene	28.8		25	1.5
621-64-7	N-Nitrosodi-n-propylamine	29.8		25	2.7
86-30-6	N-Nitrosodiphenylamine	28.6		25	2.6
87-86-5	Pentachlorophenol	81.3		50	11
85-01-8	Phenanthrene	34.2		25	2.2
108-95-2	Phenol	14.8	J	25	2.0
129-00-0	Pyrene	23.9	J	25	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MS Lab Sample ID: 480-156069-2 MS

Matrix: Water Lab File ID: Y025823.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 15:05

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	98		41-120
321-60-8	2-Fluorobiphenyl	91		48-120
367-12-4	2-Fluorophenol	61		35-120
4165-60-0	Nitrobenzene-d5	86		46-120
4165-62-2	Phenol-d5	53		22-120
1718-51-0	p-Terphenyl-d14	45	X	59-136

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025823.D
Lims ID: 480-156069-B-2-A MS
Client ID: MW17
Sample Type: MS
Inject. Date: 16-Jul-2019 15:05:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 2.0 ul Dil. Factor: 5.0000
Sample Info: 480-0082649-007
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.257	6.256	0.001	95	206179	0.8000	4.00	
* 2 Naphthalene-d8	136	7.346	7.345	0.001	98	758371	0.8000	4.00	
* 3 Acenaphthene-d10	164	8.826	8.830	-0.004	96	466592	0.8000	4.00	
* 4 Phenanthrene-d10	188	10.081	10.080	0.001	96	744486	0.8000	4.00	
* 5 Chrysene-d12	240	12.655	12.649	0.006	98	875469	0.8000	4.00	
* 6 Perylene-d12	264	14.760	14.748	0.012	99	999156	0.8000	4.00	
$ 7 2-Fluorophenol	112	5.119	5.112	0.012	86	67476	1.60	0.9821	
$ 8 Phenol-d5	99	5.947	5.972	0.006	51	72082	1.60	0.8490	
$ 9 Nitrobenzene-d5	82	6.727	6.732	-0.004	95	116883	1.60	1.38	
$ 10 2-Fluorobiphenyl	172	8.238	8.238	0.001	98	249295	1.60	1.46	
$ 11 2,4,6-Tribromophenol	330	9.493	9.493	0.001	84	33093	1.60	1.57	
$ 12 p-Terphenyl-d14	244	11.427	11.431	0.001	98	147581	1.60	0.7245	
237 Lidocaine	1		0.195					ND	
202 o-Anisidine	1		0.195					ND	
13 1,4-Dioxane	88	3.127	3.232	0.028	86	24536	1.60	0.8629	
14 N-Nitrosodimethylamine	42	3.597	3.654	0.023	68	65500	1.60	1.78	
15 Pyridine	52	3.656	3.707	0.044	88	50421	3.20	1.22	
19 2-Picoline	93		4.509					ND	
20 N-Nitrosomethylethylamine	88		4.626					ND	
18 1-Methylcyclopentanol	71		4.655					ND	
22 Methyl methanesulfonate	80		4.925					ND	
24 Acrylamide	71		4.947					ND	
21 2-Chlorobenzotrifluoride	180		5.205					ND	
23 4-Chlorobenzotrifluoride	180		5.275					ND	
28 N-Nitrosodiethylamine	102		5.305					ND	
25 n,n'-Dimethylacetamide	87		5.339					ND	
196 CBF-400	214	5.477	5.535	-0.053	0	92		0.001785	
26 4-Chloropyridine	78	5.552	5.563	-0.006	0	546		NC	
30 Ethyl methanesulfonate	79		5.572					ND	
27 3-Chloropyridine	78		5.607					ND	
29 3-Chlorobenzotrifluoride	180		5.675					ND	
35 Benzaldehyde	77	5.878	5.882	0.002	85	161720	3.20	2.80	
37 Phenol	94	5.958	5.957	0.007	85	62785	1.60	0.7376	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
31 2-Chloropyridine	78		5.965					ND	
36 Aniline	93		5.973				ND	ND	
38 Pentachloroethane	167		6.015					ND	
39 Bis(2-chloroethyl)ether	93	6.011	6.021	-0.004	92	93172	1.60	1.24	
257 CBF-500	161	6.043	6.058	-0.014	0	58		0.001125	
40 2-Chlorophenol	128	6.086	6.090	0.001	90	95344	1.60	1.30	
41 n-Decane	57	6.097	6.101	0.002	93	48721	1.60	0.6466	
32 2-Chlorotoluene	91		6.119					ND	
33 3-Chlorotoluene	91		6.140					ND	
34 4-Chlorotoluene	91		6.172					ND	
43 1,3-Dichlorobenzene	146	6.209	6.213	0.001	90	106812	1.60	1.27	
44 1,4-Dichlorobenzene	146	6.273	6.278	0.001	91	110504	1.60	1.31	
45 Benzyl alcohol	108		6.379				ND	ND	
46 1,2-Dichlorobenzene	146	6.406	6.411	0.001	90	118286	1.60	1.45	
42 p-Fluoroaniline	111		6.413					ND	
48 2-Methylphenol	108	6.470	6.470	0.006	92	94470	1.60	1.53	
49 2,2'-oxybis[1-chloropropan	45	6.470	6.481	-0.005	79	116485	1.60	1.22	
47 Indene	115	6.481	6.491	-0.004	87	1433212	12.8	11.6	
50 N-Nitrosopyrrolidine	100		6.570					ND	
53 N-Nitrosodi-n-propylamine	70	6.588	6.593	0.001	91	75715	1.60	1.49	
57 4-Methylphenol	108	6.599	6.598	0.007	90	74573	1.60	1.16	
52 Acetophenone	105	6.593	6.604	-0.004	89	148308	1.60	1.51	
54 N-Nitrosomorpholine	56		6.603					ND	
56 2-Toluidine	106	6.593	6.635	-0.036	54	13564		0.1356	
55 4-Methylbenzenamine	106		6.632					ND	
58 Hexachloroethane	117	6.700	6.705	0.001	86	52167	1.60	1.45	
59 Nitrobenzene	77	6.748	6.748	0.001	93	108092	1.60	1.44	
61 N-Nitrosopiperidine	114		6.870					ND	
51 N-Methylaniline	106		6.893					ND	
62 Isophorone	82	6.940	6.945	-0.005	94	204795	1.60	1.55	
63 2-Chloroaniline	127		6.989					ND	
64 2-Nitrophenol	139	7.015	7.020	-0.004	88	55629	1.60	1.54	
66 2,4-Dimethylphenol	107	7.042	7.041	0.001	93	110615	1.60	1.54	
68 o,o',o''-Triethylphosphoro	198		7.078					ND	
67 Tetraethyl lead	237		7.080					ND	
69 Bis(2-chloroethoxy)methane	93	7.106	7.105	0.001	90	107391	1.60	1.34	
60 2,6-Dichloropyridine	112		7.108					ND	
70 Benzoic acid	105	7.170	7.143	0.028	94	355763	12.8	10.2	
71 alpha,alpha-Dimethyl phene	58		7.201					ND	
72 2,4-Dichlorophenol	162	7.229	7.228	0.001	91	86071	1.60	1.50	
282 2,4-Dichlorotoluene	125	7.229	7.235	-0.005	32	2693		NC	
73 1,2,4-Trichlorobenzene	180	7.293	7.292	0.001	91	104170	1.60	1.43	
65 Benzeneacetonitrile	117		7.321					ND	
287 1,3,5-Trichlorobenzene	180		7.321					ND	
75 Alpha-Terpineol	59		7.353					ND	
74 Naphthalene	128	7.362	7.367	-0.005	98	276265	1.60	1.39	
76 4-Chloroaniline	127		7.399				ND	ND	
77 2,6-Dichlorophenol	162	7.410	7.415	-0.005	90	92478	1.60	1.63	
78 Hexachloropropene	213		7.441					ND	
79 Hexachlorobutadiene	225	7.464	7.463	0.001	92	59366	1.60	1.27	
286 4-Chlorophenol	128		7.599					ND	
81 Quinoline	129		7.644					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
82 N-Nitrosodi-n-butylamine	84		7.660					ND	
83 p-Phenylene diamine	108		7.692					ND	
84 Caprolactam	113		7.698				ND	ND	
85 4-Chloro-3-methylphenol	107	7.806	7.805	0.001	83	82797	1.60	1.44	
80 Benzeneacetic acid (TIC)	91		7.850					ND	
86 Safrole, Total	162		7.852					ND	
87 2-Methylnaphthalene	142	7.945	7.944	0.002	88	204368	1.60	1.50	
88 Phthalic anhydride	104		7.983					ND	
89 1-Methylnaphthalene	142	8.030	8.030	0.001	91	210480	1.60	1.65	
90 Hexachlorocyclopentadiene	237	8.078	8.077	0.001	89	46678	1.60	0.9201	
91 1,2,4,5-Tetrachlorobenzene	216	8.089	8.088	0.001	93	111592	1.60	1.38	
275 Isosafrole Peak 1	162	8.089	8.099	-0.009	54	1126		0.0199	
93 2,4,6-Trichlorophenol	196	8.180	8.179	0.002	92	84292	1.60	1.82	
284 2,3-Dichlorobenzenamine	161	8.196	8.181	0.015	47	1155		NC	
281 2,4,5-Trichlorotoluene	159	8.254	8.216	0.039	50	1358		NC	
94 2,4,5-Trichlorophenol	196	8.222	8.222	0.001	89	83201	1.60	1.71	
198 NVF-400	82	8.265	8.274	-0.009	0	6136		0.0324	
277 Isosafrole Peak 2	162	8.228	8.286	-0.057	52	2036		0.0704	
95 Isosafrole	162	8.228	8.286	-0.057	52	2036		0.0838	
96 1,1'-Biphenyl	154	8.329	8.329	0.001	96	256109	1.60	1.44	
97 2-Chloronaphthalene	162	8.356	8.361	-0.004	97	198606	1.60	1.40	
99 1-Chloronaphthalene	162	8.431	8.382	0.050	42	1568		0.0117	
258 CU-600	58	8.431	8.435	-0.003	0	1833		0.009668	
100 2-Nitroaniline	65	8.436	8.435	0.001	77	44219	1.60	1.18	
102 1,4-Naphthoquinone	158		8.499					ND	
103 Dicyclohexylamine	138		8.501					ND	
104 1,4-Dinitrobenzene	168		8.536					ND	
105 Dimethyl phthalate	163	8.559	8.564	-0.004	96	193776	1.60	1.25	
106 1,3-Dinitrobenzene	168	8.607	8.606	0.001	75	30327	1.60	1.42	
107 2,6-Dinitrotoluene	165	8.623	8.622	0.001	84	59216	1.60	1.61	
285 1,2,3,4 -Tetrachlorobenzen	216	8.596	8.631	-0.027	47	142		NC	
108 Acenaphthylene	152	8.708	8.713	-0.005	97	302166	1.60	1.49	
109 3-Nitroaniline	138		8.777				ND	ND	
110 Acenaphthene	153	8.858	8.857	0.001	93	228037	1.60	1.57	
111 2,4-Dinitrophenol	184	8.863	8.863	0.001	83	46756	3.20	3.40	
112 4-Nitrophenol	109	8.927	8.916	0.011	86	86963	3.20	4.36	
114 2,4-Dinitrotoluene	165	8.965	8.964	0.001	89	54014	1.60	1.18	
113 Pentachlorobenzene	250		8.969					ND	
115 Dibenzofuran	168	8.997	8.996	0.001	94	314455	1.60	1.53	
116 1-Naphthylamine	143		9.059					ND	
117 2,3,5,6-Tetrachlorophenol	232		9.065					ND	
118 2,3,4,6-Tetrachlorophenol	232	9.104	9.103	0.002	72	63180	1.60	1.64	
119 2-Naphthylamine	143		9.124					ND	
121 Hexadecane	57	9.136	9.140	-0.004	85	99892	1.60	1.05	
120 Diethyl phthalate	149	9.141	9.140	0.001	96	221900	1.60	1.35	
122 Thionazin	97		9.214					ND	
123 4-Chlorophenyl phenyl ethe	204	9.264	9.263	0.001	93	115907	1.60	1.38	
125 N-Nitro-o-toluidine	152		9.284					ND	
124 Fluorene	166	9.285	9.285	0.001	89	243173	1.60	1.51	
126 4-Nitroaniline	138		9.295				ND	ND	
128 Tributyl phosphate	99		9.297					ND	
127 4,6-Dinitro-2-methylphenol	198	9.312	9.317	-0.004	80	75375	3.20	3.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
130 N-Nitrosodiphenylamine	169	9.360	9.359	0.001	70	141578	1.60	1.43	
129 Diphenylamine	169	9.360	9.359	0.001	89	141578	1.37	1.22	
132 Azobenzene	77	9.397	9.397	0.001	94	230964	1.60	1.64	
131 1,2-Diphenylhydrazine	77	9.397	9.397	0.001	41	230964	1.60	1.64	
134 Sulfotepp	322	9.493	9.461	0.033	51	388		0.0164	
135 1,3,5-Trinitrobenzene	213	9.611	9.578	0.033	55	1442		0.2950	
278 Diallate Peak 1	86		9.588					ND	
136 Diallate	86		9.588					ND	
137 Phorate	75		9.599					ND	
138 Phenacetin	108		9.599					ND	
280 Diallate Peak 2	86		9.668					ND	
139 4-Bromophenyl phenyl ether	248	9.675	9.680	-0.004	73	60254	1.60	1.35	
141 Dimethoate	87		9.748					ND	
140 Hexachlorobenzene	284	9.761	9.760	0.002	91	78634	1.60	1.55	
142 Simazine	201	9.766	9.755	0.005	50	1675		0.1776	
143 Atrazine	200	9.809	9.787	0.023	91	115850	3.20	2.48	
144 4-Aminobiphenyl	169	9.921	9.898	0.023	65	13087		0.1157	
148 n-Octadecane	57	9.905	9.904	0.001	81	69754	1.60	0.8356	
145 Pentachlorophenol	266	9.921	9.920	0.001	88	78684	3.20	4.06	
147 Pronamide	173	9.915	9.925	-0.010	55	1476		0.0234	
146 Pentachloronitrobenzene	237		9.930					ND	
149 Disulfoton	88	10.060	10.032	0.029	54	3405		0.0525	
150 Dinoseb	211	10.017	10.043	-0.025	52	1223		0.4345	
151 Phenanthrene	178	10.102	10.102	0.001	97	352086	1.60	1.71	
152 Anthracene	178	10.145	10.145	0.001	96	300421	1.60	1.45	
98 n,n'-Dimethylaniline	120	10.236	10.251	-0.014	1	776		NC	
153 Carbazole	167	10.268	10.267	0.001	97	289145	1.60	1.73	
154 Alachlor	160		10.354					ND	
155 Methyl parathion	109		10.357					ND	
157 Di-n-butyl phthalate	149	10.503	10.502	0.001	99	315228	1.60	1.35	
158 Ethyl Parathion	97		10.672					ND	
159 4-Nitroquinoline-1-oxide	190		10.737					ND	
160 Anthraquinone	180		10.766					ND	
161 Methapyrilene	58		10.769					ND	
288 2-Methylanthracene	192	10.888	10.869	0.024	1	1823		NC	
163 Octachlorostyrene	308	10.909	10.894	0.016	1	385		NC	
162 Isodrin	193		10.977					ND	
164 Fluoranthene	202	11.112	11.106	0.007	97	328017	1.60	1.43	
165 1-Hydroxyanthraquinone	224		11.139					ND	
166 Benzidine	184		11.201				ND	ND	
167 Pyrene	202	11.325	11.330	0.001	96	342460	1.60	1.19	
276 Aramite Peak 1	185		11.367					ND	
279 Aramite Peak 2	185		11.442					ND	
168 Aramite, Total	185		11.442					ND	
170 p-Dimethylamino azobenzene	120		11.559					ND	
169 1,4-Dihydroxyanthraquinone	240		11.583					ND	
171 Chlorobenzilate	251		11.591					ND	
172 Famphur	218		11.850					ND	
175 9-Octadecenamide	59		11.887					ND	
174 Butyl benzyl phthalate	149	11.897	11.896	0.007	95	153934	1.60	1.22	
173 3,3'-Dimethylbenzidine	212	11.897	11.912	-0.015	50	2424		0.0298	
176 Kepone	272		12.015					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
177 2-Acetylaminofluorene	181		12.211					ND	
181 Bis(2-ethylhexyl) phthalat	149	12.559	12.559	0.006	94	238675	1.60	1.33	
178 4,4'-Methylene bis(2-chlor	231	12.565	12.569	0.002	55	2198		0.0457	
179 3,3'-Dichlorobenzidine	252		12.574				ND	ND	
180 Benzo[a]anthracene	228	12.639	12.639	0.006	97	340496	1.60	1.22	
182 Chrysene	228	12.687	12.692	0.001	95	334648	1.60	1.34	
183 6-Methylchrysene	242	13.264	13.301	-0.031	51	2008		0.0107	
184 Di-n-octyl phthalate	149	13.457	13.456	0.007	98	394212	1.60	1.34	
185 7,12-Dimethylbenz(a)anthra	256	14.194	14.145	0.055	51	1305		0.0145	
186 Benzo[b]fluoranthene	252	14.162	14.171	0.002	94	353272	1.60	1.16	
187 Benzo[k]fluoranthene	252	14.204	14.209	0.006	97	363822	1.60	1.21	
189 Benzo[a]pyrene	252	14.669	14.674	0.007	75	309198	1.60	1.07	
192 Hexachlorophene	196		14.836					ND	
283 Benzo[e]pyrene	252	15.160	15.149	0.023	1	717		NC	
190 3-Methylcholanthrene	268		15.196					ND	
191 Dibenz[a,h]acridine	279	16.063	16.052	0.023	1	2007		0.008459	
193 Indeno[1,2,3-cd]pyrene	276	16.442	16.448	0.006	95	438139	1.60	1.26	
194 Dibenz(a,h)anthracene	278	16.448	16.459	0.002	76	353139	1.60	1.21	
195 Benzo[g,h,i]perylene	276	16.907	16.913	0.007	96	364431	1.60	1.27	
199 CAG-800	149		19.675					ND	
256 CN-500	112		19.994					ND	
197 Dibenzo[a,e]pyrene	302		21.867					ND	
294 3'-Bromoacetophenone TIC	1		0.000					ND	
302 1-Bromo-2-chloroethane TIC	1		0.000					ND	
297 Fluorobenzene TIC	1		0.000					ND	
290 1,3-Dibromobenzene TIC	1		0.000					ND	
291 1,4-Dibromobenzene TIC	1		0.000					ND	
293 3-Nitro-4-Chlorobenzotrifl	1		0.000					ND	
298 2-Bromopyridine TIC	1		0.000					ND	
299 1-Bromo-3-fluorobenzene TI	1		0.000					ND	
301 3-Amino-4-Chlorobenzotrifl	1		0.000					ND	
292 Ethylene Dibromide TIC	1		0.000					ND	
296 1,2-dichloro-4-(trifluorom	1		0.000					ND	
300 1-Bromo-4-ethylbenzene TIC	1		0.000					ND	
295 4-Bromofluorobenzene TIC	1		0.000					ND	
230 2,3-Dichlorophenol	1		0.195					ND	
216 5-Methyl-o-Anisidine TIC	1		0.195					ND	
244 Pendimethalin	1		0.195					ND	
233 4-Chlorobenzotrifluoride T	1		0.195					ND	
247 Benefin (TIC)	1		0.195					ND	
206 2,4-Toluene diamine	1		0.195					ND	
210 Dibenzo[a,h]pyrene	1		0.195					ND	
214 1,2,3-Trimethylbenzene	105		0.195					ND	
219 Photomirex TIC	1		0.195					ND	
240 Prometryn (TIC)	1		0.195					ND	
209 2,4-Dichlorotoluene TIC	1		0.195					ND	
222 2-Chlorobenzotrifluoride T	1		0.195					ND	
215 trans Azobenzene (TIC)	1		0.195					ND	
204 2,6-Dichlorotoluene TIC	1		0.195					ND	
213 4,4'-Methylene bis(2-chlor	1		0.195					ND	
241 5-Methyl-o-Anisidine	1		0.195					ND	
238 Phenylacetic Acid	1		0.195					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
224 1-Bromopropane	1		0.195					ND	
225 Dibenz(a,i)pyrene	1		0.195					ND	
201 7H-Dibenzo[c,g]carbazole	1		0.195					ND	
211 Pendimethalin (TIC)	1		0.195					ND	
227 Dibenz[a,j]acridine	279		0.195					ND	
205 Phenylmercaptan	110		0.195					ND	
220 Tetramethyl lead TIC	1		0.195					ND	
229 o-Anisidine TIC	1		0.195					ND	
218 3-Chlorobenzotrifluoride T	1		0.195					ND	
212 Hexamethyldisiloxane TIC	1		0.195					ND	
250 Pentachlorophenol_T	266	9.921	9.919	0.002	88	78684			NR
252 Benzidine_T	184	11.192	11.201	-0.009	51	956			NR
253 4,4'-DDE	246		11.521					ND	
254 4,4'-DDD	235		11.703					ND	
255 4,4'-DDT	235		12.034					ND	
S 261 Total Cresols	1				0				2.69
S 264 EPH Adjustment 1	1		0.195					ND	
S 262 3 & 4 Methylphenol	108				0				1.16
S 259 Chlorobenzotrifluoride N.O	1		0.195					ND	
S 260 Chlorotoluene N.O.S	1		0.195					ND	
S 263 3-Methylphenol	1				0		1.60		1.16

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

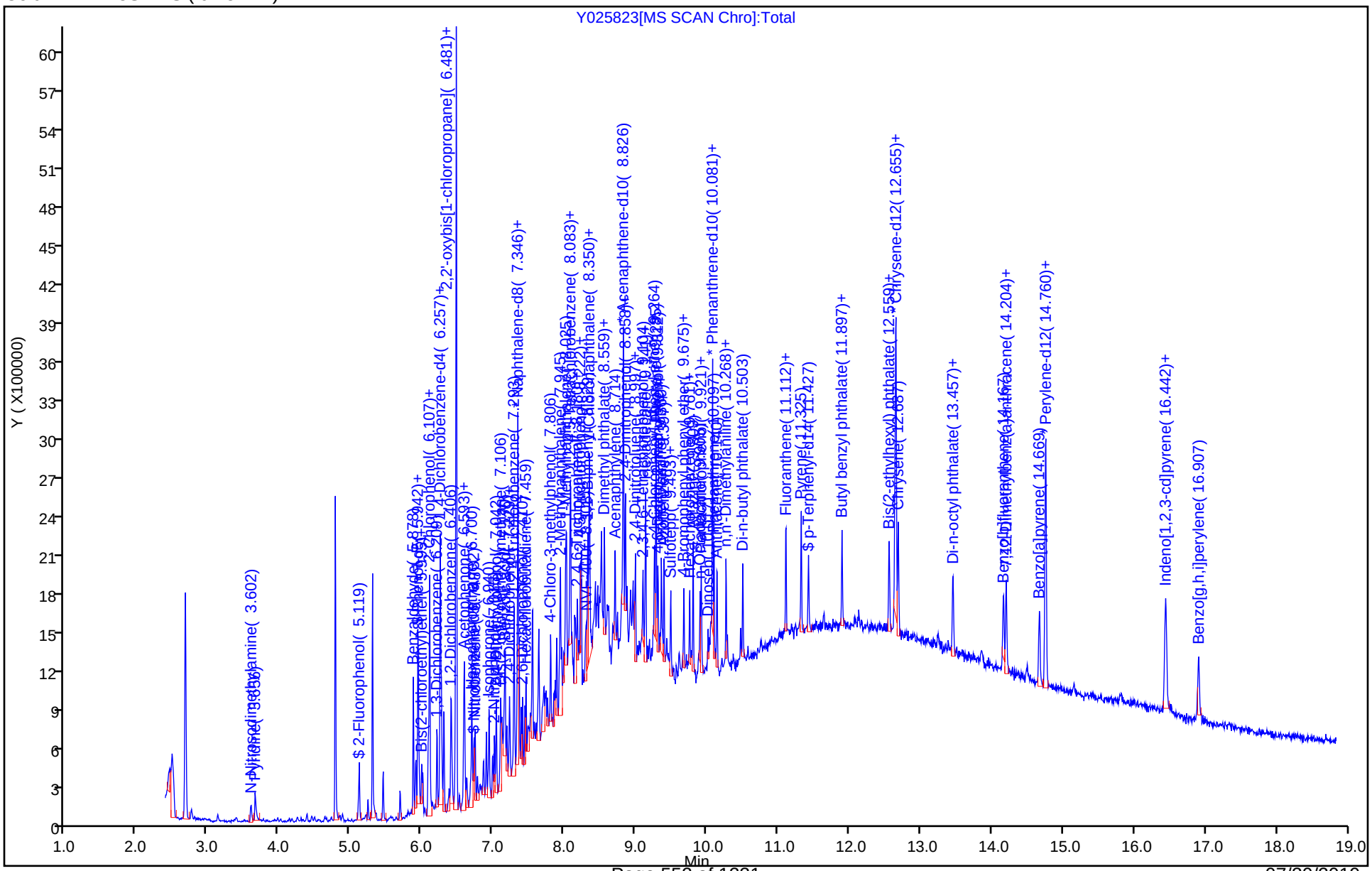
Report Date: 17-Jul-2019 09:32:48 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025823.D

Injection Date:	16-Jul-2019 15:05:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-B-2-A MS			Worklist Smp#:	7
Client ID:	MW17				
Injection Vol:	2.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	7
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MSD Lab Sample ID: 480-156069-2 MSD

Matrix: Water Lab File ID: Y025824.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 15:33

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	24.7	J	25	2.4
88-06-2	2,4,6-Trichlorophenol	33.1		25	3.1
120-83-2	2,4-Dichlorophenol	29.1		25	2.6
105-67-9	2,4-Dimethylphenol	ND		25	2.5
51-28-5	2,4-Dinitrophenol	62.2		50	11
121-14-2	2,4-Dinitrotoluene	22.4	J	25	2.2
606-20-2	2,6-Dinitrotoluene	28.6		25	2.0
91-58-7	2-Chloronaphthalene	25.2		25	2.3
95-57-8	2-Chlorophenol	25.5		25	2.7
91-57-6	2-Methylnaphthalene	27.7		25	3.0
95-48-7	2-Methylphenol	26.5		25	2.0
88-74-4	2-Nitroaniline	17.2	J	50	2.1
88-75-5	2-Nitrophenol	28.5		25	2.4
91-94-1	3,3'-Dichlorobenzidine	ND		25	2.0
99-09-2	3-Nitroaniline	ND		50	2.4
534-52-1	4,6-Dinitro-2-methylphenol	88.3		50	11
101-55-3	4-Bromophenyl phenyl ether	27.4		25	2.3
59-50-7	4-Chloro-3-methylphenol	27.1		25	2.3
106-47-8	4-Chloroaniline	ND		25	3.0
7005-72-3	4-Chlorophenyl phenyl ether	24.3	J	25	1.8
106-44-5	4-Methylphenol	24.5	J	50	1.8
100-01-6	4-Nitroaniline	18.1	J	50	1.3
100-02-7	4-Nitrophenol	79.8		50	7.6
83-32-9	Acenaphthene	28.7		25	2.1
208-96-8	Acenaphthylene	28.2		25	1.9
98-86-2	Acetophenone	28.5		25	2.7
120-12-7	Anthracene	29.3		25	1.4
1912-24-9	Atrazine	43.3		25	2.3
100-52-7	Benzaldehyde	50.2		25	1.3
56-55-3	Benzo(a)anthracene	24.0	J	25	1.8
50-32-8	Benzo(a)pyrene	22.3	J	25	2.4
205-99-2	Benzo(b)fluoranthene	23.4	J	25	1.7
191-24-2	Benzo(g,h,i)perylene	25.5		25	1.8
207-08-9	Benzo(k)fluoranthene	23.5	J	25	3.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MSD Lab Sample ID: 480-156069-2 MSD

Matrix: Water Lab File ID: Y025824.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 15:33

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
92-52-4	Biphenyl	26.4		25	3.3
108-60-1	bis (2-chloroisopropyl) ether	22.1	J	25	2.6
111-91-1	Bis(2-chloroethoxy)methane	24.9	J	25	1.8
111-44-4	Bis(2-chloroethyl)ether	21.2	J	25	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	26.9		25	11
85-68-7	Butyl benzyl phthalate	23.2	J	25	5.0
105-60-2	Caprolactam	ND		25	11
86-74-8	Carbazole	30.0		25	1.5
218-01-9	Chrysene	26.6		25	1.7
53-70-3	Dibenz(a,h)anthracene	24.0	J	25	2.1
132-64-9	Dibenzofuran	27.5	J	50	2.6
84-66-2	Diethyl phthalate	23.0	J	25	1.1
131-11-3	Dimethyl phthalate	24.1	J	25	1.8
84-74-2	Di-n-butyl phthalate	24.6	J	25	1.6
117-84-0	Di-n-octyl phthalate	27.6		25	2.4
206-44-0	Fluoranthene	28.1		25	2.0
86-73-7	Fluorene	27.1		25	1.8
118-74-1	Hexachlorobenzene	27.4		25	2.6
87-68-3	Hexachlorobutadiene	25.1		25	3.4
77-47-4	Hexachlorocyclopentadiene	18.7	J	25	3.0
67-72-1	Hexachloroethane	29.5		25	3.0
193-39-5	Indeno(1,2,3-cd)pyrene	24.3	J	25	2.4
78-59-1	Isophorone	28.6		25	2.2
91-20-3	Naphthalene	27.3		25	3.8
98-95-3	Nitrobenzene	29.0		25	1.5
621-64-7	N-Nitrosodi-n-propylamine	29.7		25	2.7
86-30-6	N-Nitrosodiphenylamine	27.9		25	2.6
87-86-5	Pentachlorophenol	92.0		50	11
85-01-8	Phenanthrene	31.4		25	2.2
108-95-2	Phenol	15.4	J	25	2.0
129-00-0	Pyrene	23.4	J	25	1.7

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Client Sample ID: MW17 MSD Lab Sample ID: 480-156069-2 MSD

Matrix: Water Lab File ID: Y025824.D

Analysis Method: 8270D Date Collected: 07/09/2019 13:50

Extract. Method: 3510C Date Extracted: 07/15/2019 07:45

Sample wt/vol: 250(mL) Date Analyzed: 07/16/2019 15:33

Con. Extract Vol.: 1(mL) Dilution Factor: 5

Injection Volume: 2(uL) Level: (low/med) Low

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

Analysis Batch No.: 482258 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol	116		41-120
321-60-8	2-Fluorobiphenyl	83		48-120
367-12-4	2-Fluorophenol	61		35-120
4165-60-0	Nitrobenzene-d5	79		46-120
4165-62-2	Phenol-d5	48		22-120
1718-51-0	p-Terphenyl-d14	45	X	59-136

Eurofins TestAmerica, Buffalo
Target Compound Quantitation Report

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025824.D
Lims ID: 480-156069-B-2-B MSD
Client ID: MW17
Sample Type: MSD
Inject. Date: 16-Jul-2019 15:33:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 2.0 ul Dil. Factor: 5.0000
Sample Info: 480-0082649-008
Operator ID: BS Instrument ID: HP5973Y

Method: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y-LVI-8270.m
Limit Group: MB - 8270D ICAL
Last Update: 17-Jul-2019 09:32:21 Calib Date: 05-Jun-2019 03:24:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Buffalo\ChromData\HP5973Y\20190604-81676.b\Y024965.D

Column 1 : RXI-5Sil MS (0.25 mm) Det: MS SCAN
Process Host: CTX1004

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.258	6.256	0.002	95	208430	0.8000	4.00	
* 2 Naphthalene-d8	136	7.348	7.345	0.003	98	771560	0.8000	4.00	
* 3 Acenaphthene-d10	164	8.827	8.830	-0.003	95	485722	0.8000	4.00	
* 4 Phenanthrene-d10	188	10.082	10.080	0.002	96	760654	0.8000	4.00	
* 5 Chrysene-d12	240	12.657	12.649	0.008	98	869375	0.8000	4.00	
* 6 Perylene-d12	264	14.761	14.748	0.013	98	1014970	0.8000	4.00	
$ 7 2-Fluorophenol	112	5.120	5.112	0.013	87	68185	1.60	0.9817	
$ 8 Phenol-d5	99	5.953	5.972	0.012	66	66089	1.60	0.7700	
$ 9 Nitrobenzene-d5	82	6.728	6.732	-0.003	95	109212	1.60	1.26	
$ 10 2-Fluorobiphenyl	172	8.239	8.238	0.002	98	236186	1.60	1.33	
$ 11 2,4,6-Tribromophenol	330	9.495	9.493	0.003	83	40206	1.60	1.86	
$ 12 p-Terphenyl-d14	244	11.428	11.431	0.002	98	145110	1.60	0.7174	
237 Lidocaine	1		0.195					ND	
202 o-Anisidine	1		0.195					ND	
13 1,4-Dioxane	88	3.133	3.232	0.034	87	21804	1.60	0.7586	
14 N-Nitrosodimethylamine	42	3.598	3.654	0.024	68	63486	1.60	1.71	
15 Pyridine	52	3.662	3.707	0.050	86	70122	3.20	1.67	
19 2-Picoline	93		4.509					ND	
20 N-Nitrosomethylethylamine	88		4.626					ND	
18 1-Methylcyclopentanol	71		4.655					ND	
22 Methyl methanesulfonate	80		4.925					ND	
24 Acrylamide	71	4.955	4.951	0.008	16	1105		0.0429	
21 2-Chlorobenzotrifluoride	180		5.205					ND	
23 4-Chlorobenzotrifluoride	180		5.275					ND	
28 N-Nitrosodiethylamine	102		5.305					ND	
25 n,n'-Dimethylacetamide	87		5.339					ND	
196 CBF-400	214		5.530					ND	
26 4-Chloropyridine	78	5.569	5.563	0.011	0	1203		NC	
30 Ethyl methanesulfonate	79		5.572					ND	
27 3-Chloropyridine	78		5.607					ND	
29 3-Chlorobenzotrifluoride	180		5.675					ND	
35 Benzaldehyde	77	5.879	5.882	0.003	86	146437	3.20	2.51	
37 Phenol	94	5.959	5.957	0.008	87	66080	1.60	0.7679	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
31 2-Chloropyridine	78		5.965					ND	
36 Aniline	93	5.980	5.978	0.007	91	35658	1.60	0.3846	
38 Pentachloroethane	167		6.015					ND	
39 Bis(2-chloroethyl)ether	93	6.012	6.021	-0.003	95	80214	1.60	1.06	
257 CBF-500	161		6.057					ND	
40 2-Chlorophenol	128	6.087	6.090	0.002	89	94638	1.60	1.28	
41 n-Decane	57	6.098	6.101	0.003	88	52891	1.60	0.6944	
32 2-Chlorotoluene	91		6.119					ND	
33 3-Chlorotoluene	91		6.140					ND	
34 4-Chlorotoluene	91		6.172					ND	
43 1,3-Dichlorobenzene	146	6.210	6.213	0.002	91	103771	1.60	1.22	
44 1,4-Dichlorobenzene	146	6.274	6.278	0.002	92	111968	1.60	1.31	
45 Benzyl alcohol	108	6.402	6.384	0.024	55	55676	1.60	1.38	
46 1,2-Dichlorobenzene	146	6.407	6.411	0.002	90	115667	1.60	1.40	
42 p-Fluoroaniline	111		6.413					ND	
48 2-Methylphenol	108	6.472	6.470	0.008	88	82860	1.60	1.32	
49 2,2'-oxybis[1-chloropropan	45	6.472	6.481	-0.003	71	106913	1.60	1.10	
47 Indene	115	6.482	6.491	-0.003	89	1400291	12.8	11.2	
50 N-Nitrosopyrrolidine	100		6.570					ND	
53 N-Nitrosodi-n-propylamine	70	6.584	6.593	-0.003	94	76276	1.60	1.48	
57 4-Methylphenol	108	6.600	6.598	0.008	93	79511	1.60	1.22	
52 Acetophenone	105	6.594	6.604	-0.003	84	141522	1.60	1.43	
54 N-Nitrosomorpholine	56		6.603					ND	
56 2-Toluidine	106	6.594	6.635	-0.035	57	15616		0.1544	
55 4-Methylbenzenamine	106		6.632					ND	
58 Hexachloroethane	117	6.701	6.705	0.002	88	53690	1.60	1.47	
59 Nitrobenzene	77	6.744	6.748	-0.003	92	110685	1.60	1.45	
61 N-Nitrosopiperidine	114		6.870					ND	
51 N-Methylaniline	106		6.893					ND	
62 Isophorone	82	6.942	6.945	-0.003	93	192275	1.60	1.43	
63 2-Chloroaniline	127		6.989					ND	
64 2-Nitrophenol	139	7.016	7.020	-0.003	86	52353	1.60	1.42	
66 2,4-Dimethylphenol	107		7.041				ND	ND	
68 o,o',o''-Triethylphosphoro	198		7.078					ND	
67 Tetraethyl lead	237		7.080					ND	
69 Bis(2-chloroethoxy)methane	93	7.107	7.105	0.002	96	101719	1.60	1.24	
60 2,6-Dichloropyridine	112		7.108					ND	
70 Benzoic acid	105	7.166	7.143	0.024	92	357456	12.8	10.1	
71 alpha,alpha-Dimethyl phene	58		7.201					ND	
72 2,4-Dichlorophenol	162	7.230	7.228	0.002	93	85252	1.60	1.46	
282 2,4-Dichlorotoluene	125	7.230	7.235	-0.004	34	766		NC	
73 1,2,4-Trichlorobenzene	180	7.294	7.292	0.002	90	103255	1.60	1.39	
65 Benzeneacetonitrile	117		7.321					ND	
287 1,3,5-Trichlorobenzene	180		7.321					ND	
75 Alpha-Terpineol	59		7.353					ND	
74 Naphthalene	128	7.364	7.367	-0.003	98	276400	1.60	1.36	
76 4-Chloroaniline	127		7.399				ND	ND	
77 2,6-Dichlorophenol	162	7.412	7.415	-0.003	90	90283	1.60	1.56	
78 Hexachloropropene	213	7.460	7.442	0.019	51	300		0.005452	
79 Hexachlorobutadiene	225	7.460	7.463	-0.003	93	59828	1.60	1.26	
286 4-Chlorophenol	128	7.609	7.599	0.010	50	923		NC	
81 Quinoline	129		7.644					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
82 N-Nitrosodi-n-butylamine	84	7.604	7.661	-0.056	51	18297		0.4207	
83 p-Phenylene diamine	108		7.692					ND	
84 Caprolactam	113		7.698				ND	ND	
85 4-Chloro-3-methylphenol	107	7.807	7.805	0.002	79	79326	1.60	1.36	
80 Benzeneacetic acid (TIC)	91		7.850					ND	
86 Safrole, Total	162		7.852					ND	
87 2-Methylnaphthalene	142	7.946	7.944	0.003	87	191630	1.60	1.38	
88 Phthalic anhydride	104		7.983					ND	
89 1-Methylnaphthalene	142	8.031	8.030	0.002	89	193118	1.60	1.49	
90 Hexachlorocyclopentadiene	237	8.079	8.077	0.002	91	49295	1.60	0.9334	
91 1,2,4,5-Tetrachlorobenzene	216	8.090	8.088	0.002	94	118569	1.60	1.40	
275 Isosafrole Peak 1	162	8.095	8.099	-0.003	56	1106		0.0192	
93 2,4,6-Trichlorophenol	196	8.181	8.179	0.003	91	79749	1.60	1.66	
284 2,3-Dichlorobenzenamine	161	8.175	8.181	-0.006	1	269		NC	
281 2,4,5-Trichlorotoluene	159	8.213	8.216	-0.002	1	596		NC	
94 2,4,5-Trichlorophenol	196	8.223	8.222	0.002	90	62520	1.60	1.23	
198 NVF-400	82	8.250	8.274	-0.024	0	2640		0.0137	
277 Isosafrole Peak 2	162	8.239	8.286	-0.046	54	1193		0.0405	
95 Isosafrole	162	8.239	8.286	-0.046	54	1193		0.0482	
96 1,1'-Biphenyl	154	8.325	8.329	-0.003	96	244788	1.60	1.32	
97 2-Chloronaphthalene	162	8.357	8.361	-0.003	96	185574	1.60	1.26	
99 1-Chloronaphthalene	162	8.426	8.382	0.045	13	1778		0.0127	
258 CU-600	58	8.432	8.435	-0.002	0	1713		0.008881	
100 2-Nitroaniline	65	8.437	8.435	0.002	77	32622	1.60	0.8597	
102 1,4-Naphthoquinone	158		8.499					ND	
103 Dicyclohexylamine	138		8.501					ND	
104 1,4-Dinitrobenzene	168		8.536					ND	
105 Dimethyl phthalate	163	8.560	8.564	-0.003	95	195262	1.60	1.21	
106 1,3-Dinitrobenzene	168	8.608	8.606	0.002	76	25785	1.60	1.20	
107 2,6-Dinitrotoluene	165	8.624	8.622	0.002	88	54705	1.60	1.43	
285 1,2,3,4 -Tetrachlorobenzen	216	8.619	8.631	-0.004	1	115		NC	
108 Acenaphthylene	152	8.709	8.713	-0.004	97	298003	1.60	1.41	
109 3-Nitroaniline	138		8.777				ND	ND	
110 Acenaphthene	153	8.854	8.857	-0.003	91	217307	1.60	1.44	
111 2,4-Dinitrophenol	184	8.864	8.863	0.002	83	42268	3.20	3.11	
112 4-Nitrophenol	109	8.928	8.916	0.012	80	82096	3.20	3.99	
114 2,4-Dinitrotoluene	165	8.966	8.964	0.002	86	53124	1.60	1.12	
113 Pentachlorobenzene	250		8.969					ND	
115 Dibenzofuran	168	8.998	8.996	0.002	94	293183	1.60	1.37	
116 1-Naphthylamine	143	9.051	9.060	-0.008	53	974		0.1006	
117 2,3,5,6-Tetrachlorophenol	232		9.065					ND	
118 2,3,4,6-Tetrachlorophenol	232	9.105	9.103	0.003	75	67440	1.60	1.68	
119 2-Naphthylamine	143		9.124					ND	
121 Hexadecane	57	9.137	9.140	-0.003	84	85321	1.60	0.8646	
120 Diethyl phthalate	149	9.142	9.140	0.002	95	196929	1.60	1.15	
122 Thionazin	97		9.214					ND	
123 4-Chlorophenyl phenyl ethe	204	9.265	9.263	0.002	93	106549	1.60	1.22	
125 N-Nitro-o-toluidine	152		9.284					ND	
124 Fluorene	166	9.286	9.285	0.002	91	227175	1.60	1.36	
126 4-Nitroaniline	138	9.297	9.295	0.002	60	32878	1.60	0.9026	
128 Tributyl phosphate	99		9.297					ND	
127 4,6-Dinitro-2-methylphenol	198	9.313	9.317	-0.003	79	87576	3.20	4.41	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
130 N-Nitrosodiphenylamine	169	9.361	9.359	0.002	67	141220	1.60	1.39	
129 Diphenylamine	169	9.361	9.359	0.002	91	141220	1.37	1.19	
132 Azobenzene	77	9.398	9.397	0.002	93	221404	1.60	1.54	
131 1,2-Diphenylhydrazine	77	9.398	9.397	0.002	41	221404	1.60	1.54	
134 Sulfotepp	322		9.460					ND	
135 1,3,5-Trinitrobenzene	213		9.578					ND	
278 Diallate Peak 1	86		9.588					ND	
136 Diallate	86		9.588					ND	
137 Phorate	75		9.599					ND	
138 Phenacetin	108		9.599					ND	
280 Diallate Peak 2	86		9.668					ND	
139 4-Bromophenyl phenyl ether	248	9.676	9.680	-0.003	72	62362	1.60	1.37	
141 Dimethoate	87		9.748					ND	
140 Hexachlorobenzene	284	9.762	9.760	0.003	94	70917	1.60	1.37	
142 Simazine	201	9.783	9.755	0.022	50	4175		0.3646	
143 Atrazine	200	9.810	9.787	0.024	89	105151	3.20	2.16	
144 4-Aminobiphenyl	169	9.922	9.898	0.024	63	8713		0.0754	
148 n-Octadecane	57	9.906	9.904	0.002	78	79347	1.60	0.9303	
145 Pentachlorophenol	266	9.922	9.920	0.002	89	94270	3.20	4.60	
147 Pronamide	173	9.917	9.925	-0.008	57	3492		0.0542	
146 Pentachloronitrobenzene	237		9.930					ND	
149 Disulfoton	88	10.023	10.032	-0.008	54	3916		0.0591	
150 Dinoseb	211	10.018	10.043	-0.024	56	1289		0.4357	
151 Phenanthrene	178	10.098	10.102	-0.003	97	330184	1.60	1.57	
152 Anthracene	178	10.141	10.145	-0.003	97	310319	1.60	1.46	
98 n,n'-Dimethylaniline	120	10.248	10.251	-0.002	1	3490		NC	
153 Carbazole	167	10.269	10.267	0.002	98	257138	1.60	1.50	
154 Alachlor	160		10.354					ND	
155 Methyl parathion	109		10.357					ND	
157 Di-n-butyl phthalate	149	10.504	10.502	0.002	99	294273	1.60	1.23	
158 Ethyl Parathion	97		10.672					ND	
159 4-Nitroquinoline-1-oxide	190		10.737					ND	
160 Anthraquinone	180		10.766					ND	
161 Methapyrilene	58		10.769					ND	
288 2-Methylanthracene	192	10.883	10.869	0.019	1	1311		NC	
163 Octachlorostyrene	308	10.899	10.894	0.006	1	203		NC	
162 Isodrin	193		10.977					ND	
164 Fluoranthene	202	11.113	11.106	0.008	97	329093	1.60	1.40	
165 1-Hydroxyanthraquinone	224		11.139					ND	
166 Benzidine	184		11.201				ND	ND	
167 Pyrene	202	11.327	11.330	0.003	97	332681	1.60	1.17	
276 Aramite Peak 1	185		11.367					ND	
279 Aramite Peak 2	185		11.442					ND	
168 Aramite, Total	185		11.442					ND	
170 p-Dimethylamino azobenzene	120		11.559					ND	
169 1,4-Dihydroxyanthraquinone	240		11.583					ND	
171 Chlorobenzilate	251		11.591					ND	
172 Famphur	218		11.850					ND	
175 9-Octadecenamide	59		11.887					ND	
174 Butyl benzyl phthalate	149	11.898	11.896	0.008	97	145560	1.60	1.16	
173 3,3'-Dimethylbenzidine	212		11.912					ND	
176 Kepone	272		12.015					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
177 2-Acetylaminofluorene	181		12.211					ND	
181 Bis(2-ethylhexyl) phthalat	149	12.560	12.559	0.007	94	239465	1.60	1.35	
178 4,4'-Methylene bis(2-chlor	231		12.563					ND	
179 3,3'-Dichlorobenzidine	252		12.574				ND	ND	
180 Benzo[a]anthracene	228	12.641	12.639	0.007	96	332334	1.60	1.20	
182 Chrysene	228	12.689	12.692	0.003	94	330674	1.60	1.33	
183 6-Methylchrysene	242	13.287	13.301	-0.008	20	1868		0.0100	
184 Di-n-octyl phthalate	149	13.458	13.456	0.008	99	404856	1.60	1.38	
185 7,12-Dimethylbenz(a)anthra	256		14.139					ND	
186 Benzo[b]fluoranthene	252	14.163	14.171	0.003	94	361976	1.60	1.17	
187 Benzo[k]fluoranthene	252	14.205	14.209	0.007	97	359669	1.60	1.17	
189 Benzo[a]pyrene	252	14.670	14.674	0.008	74	327029	1.60	1.12	
192 Hexachlorophene	196		14.836					ND	
283 Benzo[e]pyrene	252	15.167	15.149	0.030	2	587		NC	
190 3-Methylcholanthrene	268		15.196					ND	
191 Dibenz[a,h]acridine	279	16.043	16.052	0.003	1	4215		0.0175	
193 Indeno[1,2,3-cd]pyrene	276	16.438	16.448	0.002	96	429711	1.60	1.22	
194 Dibenz(a,h)anthracene	278	16.454	16.459	0.008	87	356849	1.60	1.20	
195 Benzo[g,h,i]perylene	276	16.903	16.913	0.003	95	373215	1.60	1.28	
199 CAG-800	149		19.675					ND	
256 CN-500	112		19.994					ND	
197 Dibenzo[a,e]pyrene	302		21.867					ND	
294 3'-Bromoacetophenone TIC	1		0.000					ND	
302 1-Bromo-2-chloroethane TIC	1		0.000					ND	
297 Fluorobenzene TIC	1		0.000					ND	
290 1,3-Dibromobenzene TIC	1		0.000					ND	
291 1,4-Dibromobenzene TIC	1		0.000					ND	
293 3-Nitro-4-Chlorobenzotrifl	1		0.000					ND	
298 2-Bromopyridine TIC	1		0.000					ND	
299 1-Bromo-3-fluorobenzene TI	1		0.000					ND	
301 3-Amino-4-Chlorobenzotrifl	1		0.000					ND	
292 Ethylene Dibromide TIC	1		0.000					ND	
296 1,2-dichloro-4-(trifluorom	1		0.000					ND	
300 1-Bromo-4-ethylbenzene TIC	1		0.000					ND	
295 4-Bromofluorobenzene TIC	1		0.000					ND	
230 2,3-Dichlorophenol	1		0.195					ND	
216 5-Methyl-o-Anisidine TIC	1		0.195					ND	
244 Pendimethalin	1		0.195					ND	
233 4-Chlorobenzotrifluoride T	1		0.195					ND	
247 Benefin (TIC)	1		0.195					ND	
206 2,4-Toluene diamine	1		0.195					ND	
210 Dibenzo[a,h]pyrene	1		0.195					ND	
214 1,2,3-Trimethylbenzene	105		0.195					ND	
219 Photomirex TIC	1		0.195					ND	
240 Prometryn (TIC)	1		0.195					ND	
209 2,4-Dichlorotoluene TIC	1		0.195					ND	
222 2-Chlorobenzotrifluoride T	1		0.195					ND	
215 trans Azobenzene (TIC)	1		0.195					ND	
204 2,6-Dichlorotoluene TIC	1		0.195					ND	
213 4,4'-Methylene bis(2-chlor	1		0.195					ND	
241 5-Methyl-o-Anisidine	1		0.195					ND	
238 Phenylacetic Acid	1		0.195					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/uL	OnCol Amt ng/uL	Flags
224 1-Bromopropane	1		0.195					ND	
225 Dibenz(a,i)pyrene	1		0.195					ND	
201 7H-Dibenzo[c,g]carbazole	1		0.195					ND	
211 Pendimethalin (TIC)	1		0.195					ND	
227 Dibenz[a,j]acridine	279		0.195					ND	
205 Phenylmercaptan	110		0.195					ND	
220 Tetramethyl lead TIC	1		0.195					ND	
229 o-Anisidine TIC	1		0.195					ND	
218 3-Chlorobenzotrifluoride T	1		0.195					ND	
212 Hexamethyldisiloxane TIC	1		0.195					ND	
250 Pentachlorophenol_T	266	9.922	9.919	0.003	89	94270			NR
252 Benzidine_T	184		11.201					ND	
253 4,4'-DDE	246		11.521					ND	
254 4,4'-DDD	235		11.703					ND	
255 4,4'-DDT	235		12.034					ND	
S 261 Total Cresols	1				0			2.55	
S 264 EPH Adjustment 1	1		0.195					ND	
S 262 3 & 4 Methylphenol	108				0			1.22	
S 259 Chlorobenzotrifluoride N.O	1		0.195					ND	
S 260 Chlorotoluene N.O.S	1		0.195					ND	
S 263 3-Methylphenol	1				0		1.60	1.22	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard
NC - Not Calibrated
ND - Not Detected or Marked ND

Reagents:

MB_LLIS_WRK_00173 Amount Added: 20.00 Units: uL Run Reagent

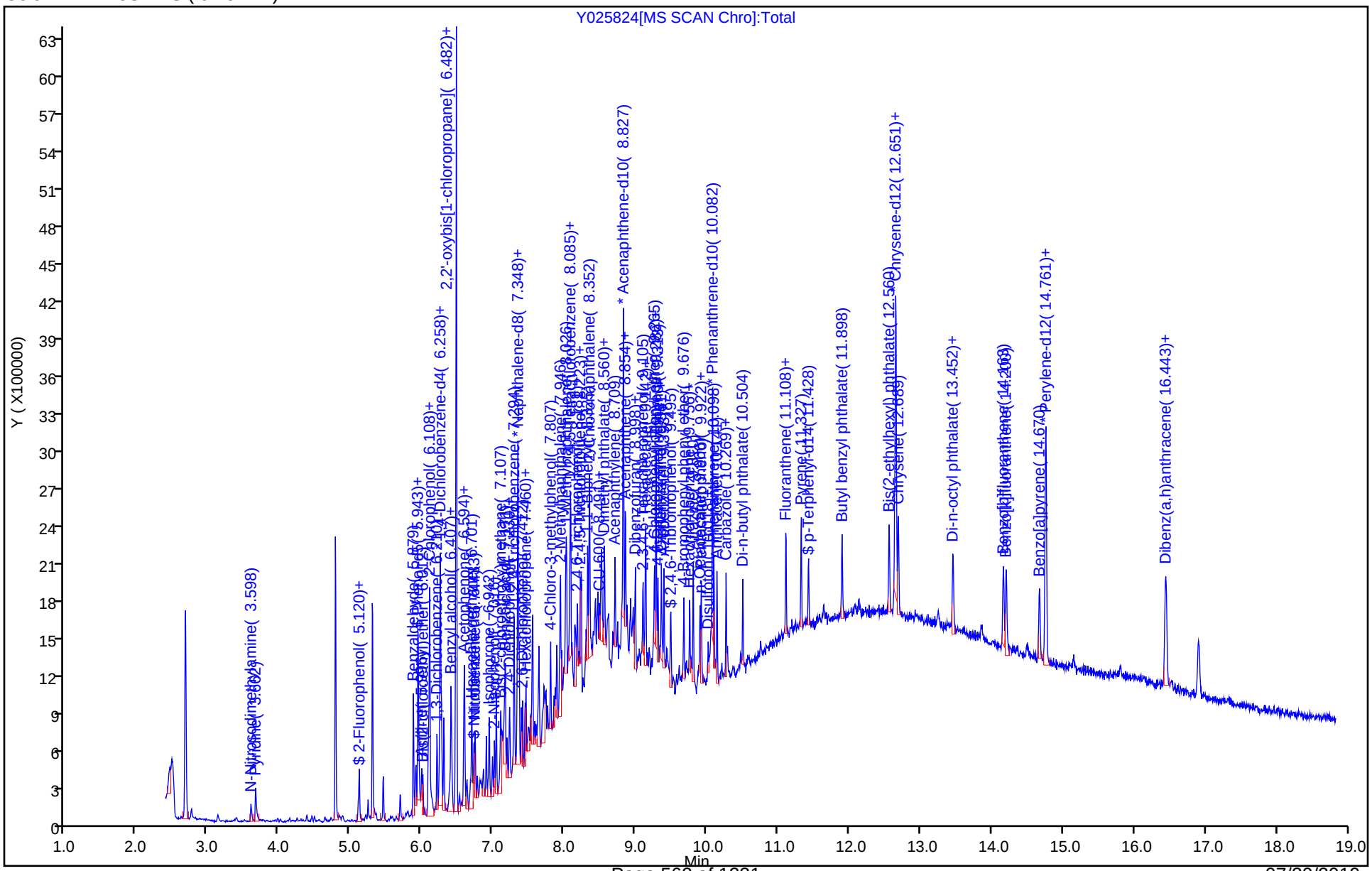
Report Date: 17-Jul-2019 09:32:53 Chrom Revision: 2.3 15-Jul-2019 06:58:08

Eurofins TestAmerica, Buffalo

Data File: \\chromna\Buffalo\ChromData\HP5973Y\20190716-82649.b\Y025824.D

Injection Date:	16-Jul-2019 15:33:30	Instrument ID:	HP5973Y	Operator ID:	BS
Lims ID:	480-156069-B-2-B MSD			Worklist Smp#:	8
Client ID:	MW17				
Injection Vol:	2.0 ul	Dil. Factor:	5.0000	ALS Bottle#:	8
Method:	Y-LVI-8270	Limit Group:	MB - 8270D ICAL		

Column: RXI-5Sil MS (0.25 mm)



GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: HP5973Y Start Date: 06/04/2019 16:15

Analysis Batch Number: 476154 End Date: 06/05/2019 03:24

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-476154/2		06/04/2019 16:15	1	Y024941.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/3		06/04/2019 16:43	1	Y024942.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/4		06/04/2019 17:11	1	Y024943.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/5		06/04/2019 17:38	1	Y024944.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/6		06/04/2019 18:06	1	Y024945.D	RXI-5Sil MS 0.25(mm)
ICIS 480-476154/7		06/04/2019 18:34	1	Y024946.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/8		06/04/2019 19:02	1	Y024947.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/9		06/04/2019 19:30	1	Y024948.D	RXI-5Sil MS 0.25(mm)
IC 480-476154/10		06/04/2019 19:58	1	Y024949.D	RXI-5Sil MS 0.25(mm)
ICV 480-476154/11		06/04/2019 20:26	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/12		06/04/2019 20:54	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/13		06/04/2019 21:21	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/14		06/04/2019 21:49	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/15		06/04/2019 22:17	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/16		06/04/2019 22:45	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/17		06/04/2019 23:13	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/18		06/04/2019 23:41	1		RXI-5Sil MS 0.25(mm)
ICV 480-476154/19		06/05/2019 00:09	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/20		06/05/2019 00:37	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/21		06/05/2019 01:05	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/22		06/05/2019 01:32	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/23		06/05/2019 02:00	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/24		06/05/2019 02:28	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/25		06/05/2019 02:56	1		RXI-5Sil MS 0.25(mm)
IC 480-476154/26		06/05/2019 03:24	1		RXI-5Sil MS 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: HP5973Y Start Date: 07/16/2019 12:46

Analysis Batch Number: 482258 End Date: 07/16/2019 23:28

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 480-482258/2		07/16/2019 12:46	1	Y025818.D	RXI-5Sil MS 0.25(mm)
CCVIS 480-482258/3		07/16/2019 13:14	1	Y025819.D	RXI-5Sil MS 0.25(mm)
MB 480-481994/1-A		07/16/2019 14:09	1	Y025821.D	RXI-5Sil MS 0.25(mm)
LCS 480-481994/2-A		07/16/2019 14:37	1	Y025822.D	RXI-5Sil MS 0.25(mm)
480-156069-2 MS		07/16/2019 15:05	5	Y025823.D	RXI-5Sil MS 0.25(mm)
480-156069-2 MSD		07/16/2019 15:33	5	Y025824.D	RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 16:01	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 16:29	5		RXI-5Sil MS 0.25(mm)
480-156069-2		07/16/2019 16:57	5	Y025827.D	RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 17:25	5		RXI-5Sil MS 0.25(mm)
480-156069-1		07/16/2019 17:53	1	Y025829.D	RXI-5Sil MS 0.25(mm)
480-156069-3		07/16/2019 18:21	1	Y025830.D	RXI-5Sil MS 0.25(mm)
480-156069-4		07/16/2019 18:49	5	Y025831.D	RXI-5Sil MS 0.25(mm)
480-156069-5		07/16/2019 19:17	1	Y025832.D	RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 19:45	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 20:13	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 20:41	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 21:09	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 21:36	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 22:04	5		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 22:32	20		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 23:00	1		RXI-5Sil MS 0.25(mm)
ZZZZZ		07/16/2019 23:28	1		RXI-5Sil MS 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 481994 Batch Start Date: 07/15/19 07:45 Batch Analyst: Pollock, Jacob M

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	SecondAdjustpH	O_8270LL LCS 00095
MB 480-481994/1		3510C, 8270D		250 mL	1 mL	7 SU	<2 SU	>11 SU	
LCS 480-481994/2		3510C, 8270D		250 mL	1 mL	7 SU	<2 SU	>11 SU	1 mL
480-156069-B-2 MS	MW17	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	1 mL
480-156069-B-2 MSD	MW17	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	1 mL
480-156069-A-2	MW17	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	
480-156069-A-1	W13	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	
480-156069-A-3	W28	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	
480-156069-B-4	WCMW4	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	
480-156069-B-5	BLIND DUP	3510C, 8270D	T	250 mL	1 mL	7 SU	<2 SU	>11 SU	

Lab Sample ID	Client Sample ID	Method Chain	Basis	O_8270LLsurr 00068					
MB 480-481994/1		3510C, 8270D		1 mL					
LCS 480-481994/2		3510C, 8270D		1 mL					
480-156069-B-2 MS	MW17	3510C, 8270D	T	1 mL					
480-156069-B-2 MSD	MW17	3510C, 8270D	T	1 mL					
480-156069-A-2	MW17	3510C, 8270D	T	1 mL					
480-156069-A-1	W13	3510C, 8270D	T	1 mL					
480-156069-A-3	W28	3510C, 8270D	T	1 mL					
480-156069-B-4	WCMW4	3510C, 8270D	T	1 mL					
480-156069-B-5	BLIND DUP	3510C, 8270D	T	1 mL					

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 481994 Batch Start Date: 07/15/19 07:45 Batch Analyst: Pollock, Jacob M

Batch Method: 3510C Batch End Date:

Batch Notes	
Acid Used for pH Adjustment ID	5304000
Base Used to Adjust pH ID	5084288
Analyst ID - Concentration	JP
Analyst ID - Extraction	JP
Method/Fraction	3510C_LVI/8270D
Na2SO4 ID	5393118
Prep Solvent ID	5391690
Prep Solvent Volume Used	120 mL
Analyst ID - Spike Analyst	JP
Analyst ID - Spike Witness Analyst	JP
Sufficient Volume for Batch QC	Yes
Vial Lot Number	00259742

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS

COVER PAGE
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

Project: Benchmark - Olean Parcel 2 GWS

Client Sample ID	Lab Sample ID
W13	480-156069-1
MW17	480-156069-2
W28	480-156069-3
WCMW4	480-156069-4
BLIND DUP	480-156069-5

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: W13 Lab Sample ID: 480-156069-1

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG ID.:

Matrix: Water Date Sampled: 07/10/2019 12:55

Reporting Basis: WET Date Received: 07/12/2019 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: MW17 Lab Sample ID: 480-156069-2

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG ID.:

Matrix: Water Date Sampled: 07/09/2019 13:50

Reporting Basis: WET Date Received: 07/12/2019 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7439-92-1	Lead	0.0030	0.010	0.0030	mg/L	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: W28 Lab Sample ID: 480-156069-3

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG ID.:

Matrix: Water Date Sampled: 07/10/2019 09:05

Reporting Basis: WET Date Received: 07/12/2019 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.0098	0.015	0.0056	mg/L	J		1	6010C
7439-92-1	Lead	0.0058	0.010	0.0030	mg/L	J		1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: WCMW4 Lab Sample ID: 480-156069-4

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG ID.:

Matrix: Water Date Sampled: 07/10/2019 10:00

Reporting Basis: WET Date Received: 07/12/2019 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.14	0.015	0.0056	mg/L			1	6010C
7439-92-1	Lead	0.029	0.010	0.0030	mg/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: BLIND DUP
Lab Sample ID: 480-156069-5
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-156069-1
SDG ID.:
Matrix: Water
Date Sampled: 07/10/2019 07:00
Reporting Basis: WET
Date Received: 07/12/2019 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-38-2	Arsenic	0.0076	0.015	0.0056	mg/L	J		1	6010C
7439-92-1	Lead	0.0069	0.010	0.0030	mg/L	J		1	6010C

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

ICV Source: MEI_MSS_ICV_00015 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00025

Analyte	ICV 480-482426/8 07/16/2019 11:49				CCV 480-482426/20 07/16/2019 17:06				CCV 480-482426/26 07/16/2019 17:52			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.719		0.750	96	0.995		1.00	100	0.994		1.00	99
Lead	0.714		0.750	95	0.983		1.00	98	0.985		1.00	98

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

ICV Source: MEI_MSS_ICV_00015 Concentration Units: mg/L

CCV Source: MEI_MSS_STD2_00025

Analyte	CCV 480-482426/38 07/16/2019 18:38											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	1.00		1.00	100								
Lead	0.985		1.00	99								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

ICV Source: MEI_10_CCVL_00262 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00262

Analyte	ICVL 480-482426/10 07/16/2019 11:57				CCVL 480-482426/22 07/16/2019 17:14				CCVL 480-482426/28 07/16/2019 17:59			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.0152		0.0150	101	0.0141	J	0.0150	94	0.0128	J	0.0150	85
Lead	0.0108		0.0100	108	0.00959	J	0.0100	96	0.0106		0.0100	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

ICV Source: MEI_10_CCVL_00262 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00262

Analyte	CCVL 480-482426/40 07/16/2019 18:45											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	0.0136	J	0.0150	91								
Lead	0.00950	J	0.0100	95								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-482426/9 07/16/2019 11:53		CCB 480-482426/21 07/16/2019 17:10		CCB 480-482426/27 07/16/2019 17:55		CCB 480-482426/39 07/16/2019 18:41	
		Found	C	Found	C	Found	C	Found	C
Arsenic	0.015	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-482038/1-A

Instrument Code: ICAP1 Batch No.: 482426

CAS No.	Analyte	Concentration	C	Q	Method
7440-38-2	Arsenic	ND			6010C
7439-92-1	Lead	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: ICSA 480-482426/11 Instrument ID: ICAP1

Lab File ID: I1071619A-5.asc ICS Source: MEI_MSS_ICSA_00004

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**0.0007**	
Lead		**0.0008**	
Aluminum	*500*	*509*	*102*
Antimony		*-0.0047*	
Barium		*0.0016*	
Beryllium		*0.0000*	
Boron		*0.0040*	
Cadmium		*0.0005*	
Calcium	*500*	*477*	*95*
Chromium		*0.0028*	
Cobalt		*-0.0006*	
Copper		*-0.0048*	
Iron	*200*	*190*	*95*
Lithium		*0.0059*	
Magnesium	*500*	*492*	*98*
Manganese		*0.0008*	
Molybdenum		*-0.0024*	
Nickel		*-0.0039*	
Potassium		*0.0027*	
Selenium		*-0.0108*	
Silicon		*0.0193*	
Silver		*0.0005*	
Sodium		*0.185*	
Strontium		*-0.0089*	
Sulfur		*-0.0980*	
Thallium		*-0.0068*	
Tin		*0.0013*	
Titanium		*0.0005*	
Vanadium		*-0.0010*	
Zinc		*-0.0023*	

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

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Lab Sample ID: ICSAB 480-482426/12 Instrument ID: ICAP1

Lab File ID: I1071619A-5.asc ICS Source: MEI_MSS_ICSAB_00007

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**0.500**	**0.511**	**102**
Lead	**0.500**	**0.503**	**101**
Aluminum	*500*	*514*	*103*
Antimony	*0.500*	*0.525*	*105*
Barium	*0.501*	*0.525*	*105*
Beryllium	*0.250*	*0.254*	*102*
Boron	*5.00*	*5.06*	*101*
Cadmium	*0.500*	*0.534*	*107*
Calcium	*500*	*481*	*96*
Chromium	*0.500*	*0.496*	*99*
Cobalt	*0.500*	*0.505*	*101*
Copper	*0.500*	*0.541*	*108*
Iron	*200*	*191*	*96*
Lithium		*0.0058*	
Magnesium	*500*	*495*	*99*
Manganese	*0.501*	*0.494*	*99*
Molybdenum	*0.500*	*0.509*	*102*
Nickel	*0.501*	*0.492*	*98*
Potassium	*5.00*	*5.25*	*105*
Selenium	*0.500*	*0.486*	*97*
Silicon	*5.00*	*5.02*	*100*
Silver	*0.500*	*0.555*	*111*
Sodium	*5.00*	*5.46*	*109*
Strontium	*0.500*	*0.495*	*99*
Sulfur		*-0.108*	
Thallium	*0.500*	*0.483*	*97*
Tin	*0.500*	*0.508*	*102*
Titanium	*0.500*	*0.507*	*101*
Vanadium	*0.500*	*0.499*	*100*
Zinc	*0.501*	*0.454*	*91*

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

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MW17 MS
Lab ID: 480-156069-2 MS
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-156069-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR C		Sample Result (SR) C		Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	0.205		ND		0.200	102	75-125		6010C
Lead	0.196		0.0030	J	0.200	96	75-125		6010C

SSR = Spiked Sample Result

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

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: MW17 MSD
Lab ID: 480-156069-2 MSD
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-156069-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Arsenic	0.205		0.200	103	75-125	0	20		6010C
Lead	0.199		0.200	98	75-125	1	20		6010C

SDR = Sample Duplicate Result

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

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: MW17 PDS
Lab ID: 480-156069-2 PDS
Lab Name: Eurofins TestAmerica, Buffalo
Job No.: 480-156069-1
SDG No.:
Matrix: Water
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Arsenic	0.209		ND		0.200	104	80-120		6010C
Lead	0.201		0.0030	J	0.200	99	80-120		6010C

SSR = Spiked Sample Result

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

FORM VB - IN

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 480-482038/2-A

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

Sample Matrix: Water LCS Source: MED_01_W1_00058

Analyte	Water(mg/L)							
	True	Found	C	%R	Limits		Q	Method
Arsenic	0.200	0.212		106	80	120		6010C
Lead	0.200	0.203		102	80	120		6010C

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

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-156069-2

SDG No:

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-156069-1

Matrix: Water Concentration Units: mg/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Arsenic	ND		ND		NC		6010C
Lead	0.0030	J	ND		NC		6010C

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

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG Number:

Matrix: Water Instrument ID: ICAP1

Method: 6010C MDL Date: 07/17/2013 11:47

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Arsenic	189.042	0.015	0.00555
Lead	220.353	0.01	0.003

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG Number:

Matrix: Water Instrument ID: ICAP1

Method: 6010C XMDL Date: 07/17/2013 11:47

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Arsenic	189.042	0.015	0.00555
Lead	220.353	0.01	0.003

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/16/2019

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	308.215														
Antimony	206.833										0.011204		-0.000091		
Arsenic	189.042										-0.013070				
Barium	455.403														
Beryllium	313.042														
Boron	208.959														
Cadmium	228.802			0.001560									0.000001		
Calcium	317.933														
Chromium	267.716												-0.00001		
Cobalt	228.616														
Copper	327.396							0.000012							
Iron	259.940														
Lead	220.353		-0.000041									0.000307	0.000029		
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610		0.0000025										0.0000023		
Molybdenum	202.030														
Nickel	231.604												0.000028		
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068												-0.000009		
Sodium	589.592														
Strontium	407.771							0.0000357							
Sulfur	182.034														
Thallium	190.856														
Tin	189.989														
Titanium	334.904														
Vanadium	292.402												0.000016		
Zinc	206.200										-0.001694				

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/16/2019

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042													-0.00656	
Boron	208.959			0.028306											
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716		0.000093												
Cobalt	228.616			-0.001186										0.001957	
Copper	327.396														
Iron	259.940														
Lead	220.353			-0.001446											
Lithium	670.784														
Magnesium	279.079		-0.003930												
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090		000338												
Silicon	288.158														
Silver	328.068		0.000090												
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856														
Tin	189.989														
Titanium	334.904														
Vanadium	292.402			-0.013712										0.000519	
Zinc	206.200														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/16/2019

Analyte	Wave Length	V	Zn												
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042	0.000298													
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616														
Copper	327.396														
Iron	259.940														
Lead	220.353														
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856	0.002141													
Tin	189.989														
Titanium	334.904														
Vanadium	292.402														
Zinc	206.200														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/17/2019

Analyte	Wave Length	Ag	Al	As	B	Ba	Be	Ca	Cd	Co	Cr	Cu	Fe	K	Li
Aluminum	308.215														
Antimony	206.833										0.011204		-0.000091		
Arsenic	189.042										-0.013070				
Barium	455.403														
Beryllium	313.042														
Boron	208.959														
Cadmium	228.802			0.001560									0.000001		
Calcium	317.933														
Chromium	267.716												-0.00001		
Cobalt	228.616														
Copper	327.396							0.000012							
Iron	259.940														
Lead	220.353		-0.000041									0.000307	0.000029		
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610		0.0000025										0.0000023		
Molybdenum	202.030														
Nickel	231.604												0.000028		
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068												-0.000009		
Sodium	589.592														
Strontium	407.771							0.0000357							
Sulfur	182.034														
Thallium	190.856									0.002444					
Tin	189.989														
Titanium	334.904														
Vanadium	292.402												0.000016		
Zinc	206.200										-0.001694				

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/17/2019

Analyte	Wave Length	Mg	Mn	Mo	Na	Ni	Pb	S	Sb	Se	Si	Sn	Sr	Ti	Tl
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042													-0.00656	
Boron	208.959			0.028306											
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716		0.000093												
Cobalt	228.616			-0.001186										0.001957	
Copper	327.396														
Iron	259.940														
Lead	220.353			-0.001446											
Lithium	670.784														
Magnesium	279.079		-0.003930												
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090		0.000338												
Silicon	288.158														
Silver	328.068		0.000090												
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856		0.000597												
Tin	189.989														
Titanium	334.904		0.000146												
Vanadium	292.402			-0.013712										0.000519	
Zinc	206.200														

X-IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job Number: 480-156069-1

SDG No.:

ICP-AES Instrument ID: ICAP1 Date: 05/17/2019

Analyte	Wave Length	V	Zn												
Aluminum	308.215														
Antimony	206.833														
Arsenic	189.042														
Barium	455.403														
Beryllium	313.042	0.000298													
Boron	208.959														
Cadmium	228.802														
Calcium	317.933														
Chromium	267.716														
Cobalt	228.616														
Copper	327.396														
Iron	259.940														
Lead	220.353														
Lithium	670.784														
Magnesium	279.079														
Manganese	257.610														
Molybdenum	202.030														
Nickel	231.604														
Potassium	766.490														
Selenium	196.090														
Silicon	288.158														
Silver	328.068														
Sodium	589.592														
Strontium	407.771														
Sulfur	182.034														
Thallium	190.856	0.002141													
Tin	189.989														
Titanium	334.904														
Vanadium	292.402														
Zinc	206.200														

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No: 480-156069-1

SDG No.:

Instrument ID: ICAP1 Date: 02/16/2017 09:07

Analyte	Integ. Time (Sec.)	Concentration (mg/L)	Method
Arsenic	15	5	6010C
Lead	15	120	6010C

12-IN
PREPARATION LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 480-482038/1-A	07/16/2019 07:57	482038		50	50
LCS 480-482038/2-A	07/16/2019 07:57	482038		50	50
480-156069-1	07/16/2019 07:57	482038		50	50
480-156069-2	07/16/2019 07:57	482038		50	50
480-156069-2 MS	07/16/2019 07:57	482038		50	50
480-156069-2 MSD	07/16/2019 07:57	482038		50	50
480-156069-3	07/16/2019 07:57	482038		50	50
480-156069-4	07/16/2019 07:57	482038		50	50
480-156069-5	07/16/2019 07:57	482038		50	50

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: ICAP1 Method: 6010C

Start Date: 07/16/2019 11:13 End Date: 07/16/2019 20:18

Lab Sample ID	D/F	Type	Time	Analytes																			
				As	Pb																		
ICIS 480-482426/1	1		11:13	X	X																		
IC 480-482426/2			11:17	X	X																		
IC 480-482426/3			11:21	X	X																		
IC 480-482426/4			11:25	X	X																		
ICV 480-482426/5			11:29																				
ICB 480-482426/6			11:33																				
ICVL 480-482426/7			11:37																				
ICV 480-482426/8	1		11:49	X	X																		
ICB 480-482426/9	1		11:53	X	X																		
ICVL 480-482426/10	1		11:57	X	X																		
ICSA 480-482426/11	1		12:01	X	X																		
ICSAB 480-482426/12	1		12:05	X	X																		
ZZZZZZ			12:09																				
ZZZZZZ			12:13																				
ZZZZZZ			12:17																				
ZZZZZZ			12:21																				
ZZZZZZ			12:24																				
CCV 480-482426/18			12:28																				
CCB 480-482426/19			12:32																				
CCV 480-482426/20	1		17:06	X	X																		
CCB 480-482426/21	1		17:10	X	X																		
CCVL 480-482426/22	1		17:14	X	X																		
MB 480-482038/1-A	1	T	17:40	X	X																		
LCS 480-482038/2-A	1	T	17:44	X	X																		
480-156069-1	1	T	17:48	X	X																		
CCV 480-482426/26	1		17:52	X	X																		
CCB 480-482426/27	1		17:55	X	X																		
CCVL 480-482426/28	1		17:59	X	X																		
480-156069-2	1	T	18:03	X	X																		
480-156069-2 SD	5	T	18:07	X	X																		
480-156069-2 PDS	1	T	18:10	X	X																		
480-156069-2 MS	1	T	18:14	X	X																		
480-156069-2 MSD	1	T	18:18	X	X																		
480-156069-3	1	T	18:22	X	X																		
480-156069-4	1	T	18:26	X	X																		
480-156069-5	1	T	18:30	X	X																		
ZZZZZZ			18:33																				
CCV 480-482426/38	1		18:38	X	X																		
CCB 480-482426/39	1		18:41	X	X																		
CCVL 480-482426/40	1		18:45	X	X																		
ZZZZZZ			18:49																				
ZZZZZZ			18:53																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Instrument ID: ICAP1 Method: 6010C

Start Date: 07/16/2019 11:13 End Date: 07/16/2019 20:18

Lab Sample ID	D / F	Type	Time	Analytes																			
				As	Pb																		
ZZZZZZ			18:57																				
ZZZZZZ			19:02																				
ZZZZZZ			19:06																				
ZZZZZZ			19:10																				
ZZZZZZ			19:13																				
ZZZZZZ			19:17																				
ZZZZZZ			19:21																				
CCV 480-482426/50			19:25																				
CCB 480-482426/51			19:28																				
CCVL 480-482426/52			19:32																				
ZZZZZZ			19:36																				
ZZZZZZ			19:40																				
ZZZZZZ			19:44																				
CCV 480-482426/56			20:11																				
CCB 480-482426/57			20:14																				
CCVL 480-482426/58			20:18																				

Prep Types

T = Total/NA

15-IN
ICP INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY
METALS

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

ICP Instrument ID: ICAP1 Start Date: 07/16/2019 End Date: 07/16/2019

Lab Sample ID	Time	Internal Standards %RI For:									
		Element In 230.606	Q	Element Y 224.306	Q	Element Y 360.073	Q	Element Y 377.433	Q	Element	Q
ICIS 480-482426/1	11:13										
ICV 480-482426/8	11:49	94		96		94		97			
ICB 480-482426/9	11:53	100		100		101		100			
ICVL 480-482426/10	11:57	101		100		100		100			
ICSA 480-482426/11	12:01	80		86		85		93			
ICSAB 480-482426/12	12:05	79		86		85		93			
CCV 480-482426/20	17:06	93		95		94		98			
CCB 480-482426/21	17:10	99		98		100		100			
CCVL 480-482426/22	17:14	99		99		99		100			
MB 480-482038/1-A	17:40	98		97		99		101			
LCS 480-482038/2-A	17:44	97		96		97		101			
480-156069-1	17:48	92		92		93		98			
CCV 480-482426/26	17:52	93		96		94		98			
CCB 480-482426/27	17:55	99		98		99		99			
CCVL 480-482426/28	17:59	100		99		99		100			
480-156069-2	18:03	93		92		93		99			
480-156069-2 SD	18:07	98		97		97		100			
480-156069-2 PDS	18:10	91		92		93		99			
480-156069-2 MS	18:14	91		92		93		99			
480-156069-2 MSD	18:18	91		91		93		99			
480-156069-3	18:22	91		91		92		98			
480-156069-4	18:26	92		93		93		99			
480-156069-5	18:30	90		91		92		98			
CCV 480-482426/38	18:38	93		96		94		97			
CCB 480-482426/39	18:41	99		98		98		98			
CCVL 480-482426/40	18:45	100		99		98		99			

Run File: 01071619A

Instrument: ICAP1

Analyst: jak

Data Review: 7/17/19

Spikes Ids:5314881(W1), 5314880 5224664(Sn), 5258441(Ag), 5258400(Si), 5282890(S), 4685895(TCLP)
Pipette Ids: 5/2/19-(1-11)
Internal Standard: 5397733

Seq#	Run File ID	Sample ID	Date / Time	Sample Type
1	I1071619A	ICIS-5392763	07/16/19 11:13 AM	Standard
2	I1071619A	IC-5395711	07/16/19 11:17 AM	Standard
3	I1071619A	IC-5385806	07/16/19 11:21 AM	Standard
4	I1071619A	IC-5377549	07/16/19 11:25 AM	Standard
5	I1071619A	ICV-5374275	07/16/19 11:29 AM	QC
6	I1071619A	ICB-5392763	07/16/19 11:33 AM	QC
7	I1071619A	ICVL-5395711	07/16/19 11:37 AM	QC
8	I1071619A	CCVL-5395711	07/16/19 12:44 PM	QC
9	I1071619A	LB 480-481794/1-C	07/16/19 12:48 PM	Unknown
10	I1071619A	MB 480-481816/2-A	07/16/19 12:52 PM	Unknown
11	I1071619A	LCS 480-481816/3-A	07/16/19 12:56 PM	Unknown
12	I1071619A	LCSD 480-481816/4-A	07/16/19 01:00 PM	Unknown
13	I1071619A	480-155996-C-1-C	07/16/19 01:03 PM	Unknown
14	I1071619A	480-155996-C-1-Csd@5	07/16/19 01:07 PM	Unknown
15	I1071619A	480-155996-C-1-Cpds	07/16/19 01:11 PM	Unknown
16	I1071619A	MB 480-482031/1-A	07/16/19 01:55 PM	Unknown
17	I1071619A	LCSSRM 480-482031/2-	07/16/19 01:58 PM	Unknown
18	I1071619A	CCV-5385806	07/16/19 02:02 PM	QC
19	I1071619A	CCB-5392763	07/16/19 02:06 PM	QC
20	I1071619A	CCVL-5395711	07/16/19 02:10 PM	QC
21	I1071619A	240-115578-B-1-A	07/16/19 02:14 PM	Unknown
22	I1071619A	240-115578-B-1-Asd@5	07/16/19 02:18 PM	Unknown
23	I1071619A	240-115578-B-1-Apds	07/16/19 02:21 PM	Unknown
24	I1071619A	240-115578-B-1-B MS	07/16/19 02:25 PM	Unknown
25	I1071619A	240-115578-B-1-C MSD	07/16/19 02:29 PM	Unknown
26	I1071619A	240-115578-B-2-A	07/16/19 02:33 PM	Unknown
27	I1071619A	240-115578-B-3-A	07/16/19 02:37 PM	Unknown
28	I1071619A	240-115578-B-4-A	07/16/19 02:41 PM	Unknown
29	I1071619A	240-115578-B-5-A	07/16/19 02:45 PM	Unknown
30	I1071619A	CCV-5385806	07/16/19 02:49 PM	QC
31	I1071619A	CCB-5392763	07/16/19 02:52 PM	QC
32	I1071619A	CCVL-5395711	07/16/19 02:56 PM	QC
33	I1071619A	240-115578-B-6-A	07/16/19 03:00 PM	Unknown
34	I1071619A	240-115578-B-7-A	07/16/19 03:04 PM	Unknown
35	I1071619A	240-115578-B-8-A	07/16/19 03:08 PM	Unknown
36	I1071619A	240-115578-B-9-A	07/16/19 03:12 PM	Unknown
37	I1071619A	240-115578-B-10-A	07/16/19 03:16 PM	Unknown
38	I1071619A	240-115578-B-11-A	07/16/19 03:20 PM	Unknown
39	I1071619A	480-156115-B-22-A	07/16/19 03:24 PM	Unknown
40	I1071619A	MB 480-481896/1-A	07/16/19 03:27 PM	Unknown
41	I1071619A	LCS 480-481896/2-A	07/16/19 03:31 PM	Unknown
42	I1071619A	CCV-5385806	07/16/19 03:35 PM	QC

43	I1071619A	CCB-5392763	07/16/19 03:39 PM QC
44	I1071619A	CCVL-5395711	07/16/19 03:43 PM QC
45	I1071619A	480-156031-C-1-A	07/16/19 03:46 PM Unknown
46	I1071619A	480-156031-C-2-A	07/16/19 03:50 PM Unknown
47	I1071619A	480-156031-C-3-A	07/16/19 03:54 PM Unknown
48	I1071619A	480-156031-C-4-A	07/16/19 03:58 PM Unknown
49	I1071619A	480-156031-C-5-A	07/16/19 04:02 PM Unknown
50	I1071619A	480-156031-C-6-A	07/16/19 04:06 PM Unknown
51	I1071619A	480-156036-B-1-A	07/16/19 04:09 PM Unknown
52	I1071619A	480-156036-B-1-Asd@5	07/16/19 04:13 PM Unknown
53	I1071619A	480-156036-B-1-Apds	07/16/19 04:17 PM Unknown
54	I1071619A	CCV-5385806	07/16/19 04:21 PM QC
55	I1071619A	CCB-5392763	07/16/19 04:24 PM QC
56	I1071619A	CCVL-5395711	07/16/19 04:28 PM QC
57	I1071619A	480-156036-B-1-B MS	07/16/19 04:32 PM Unknown
58	I1071619A	480-156036-B-1-C MSD	07/16/19 04:36 PM Unknown
59	I1071619A	480-156036-B-2-A	07/16/19 04:40 PM Unknown
60	I1071619A	480-156036-B-3-A	07/16/19 04:43 PM Unknown
61	I1071619A	480-156036-B-4-A	07/16/19 04:47 PM Unknown
62	I1071619A	480-156036-B-5-A	07/16/19 04:51 PM Unknown
63	I1071619A	480-156036-B-6-A	07/16/19 04:55 PM Unknown
64	I1071619A	480-156038-E-2-A	07/16/19 04:58 PM Unknown
65	I1071619A	480-156038-E-3-A	07/16/19 05:02 PM Unknown
66	I1071619A	CCV-5385806	07/16/19 05:06 PM QC
67	I1071619A	CCB-5392763	07/16/19 05:10 PM QC
68	I1071619A	CCVL-5395711	07/16/19 05:14 PM QC
69	I1071619A	MB 480-482187/1-A	07/16/19 05:18 PM Unknown
70	I1071619A	LCS 480-482187/2-A	07/16/19 05:22 PM Unknown
71	I1071619A	LCSD 480-482187/3-A	07/16/19 05:25 PM Unknown
72	I1071619A	480-154477-E-8-D	07/16/19 05:29 PM Unknown
73	I1071619A	480-154477-E-8-Dsd@5	07/16/19 05:33 PM Unknown
74	I1071619A	480-154477-E-8-Dpds	07/16/19 05:37 PM Unknown
75	I1071619A	MB 480-482038/1-A	07/16/19 05:40 PM Unknown
76	I1071619A	LCS 480-482038/2-A	07/16/19 05:44 PM Unknown
77	I1071619A	480-156069-C-1-A	07/16/19 05:48 PM Unknown
78	I1071619A	CCV-5385806	07/16/19 05:52 PM QC
79	I1071619A	CCB-5392763	07/16/19 05:55 PM QC
80	I1071619A	CCVL-5395711	07/16/19 05:59 PM QC
81	I1071619A	480-156069-C-2-A	07/16/19 06:03 PM Unknown
82	I1071619A	480-156069-C-2-Asd@5	07/16/19 06:07 PM Unknown
83	I1071619A	480-156069-C-2-Apds	07/16/19 06:10 PM Unknown
84	I1071619A	480-156069-C-2-B MS	07/16/19 06:14 PM Unknown
85	I1071619A	480-156069-C-2-C MSD	07/16/19 06:18 PM Unknown
86	I1071619A	480-156069-C-3-A	07/16/19 06:22 PM Unknown
87	I1071619A	480-156069-C-4-A	07/16/19 06:26 PM Unknown
88	I1071619A	480-156069-C-5-A	07/16/19 06:30 PM Unknown
89	I1071619A	480-156079-A-1-A	07/16/19 06:33 PM Unknown
90	I1071619A	CCV-5385806	07/16/19 06:38 PM QC
91	I1071619A	CCB-5392763	07/16/19 06:41 PM QC
92	I1071619A	CCVL-5395711	07/16/19 06:45 PM QC
93	I1071619A	480-156079-A-2-A	07/16/19 06:49 PM Unknown
94	I1071619A	480-156079-A-3-A	07/16/19 06:53 PM Unknown

95	I1071619A	480-156079-A-4-A	07/16/19 06:57 PM Unknown
96	I1071619A	480-156079-A-5-A	07/16/19 07:02 PM Unknown
97	I1071619A	480-156099-C-2-A	07/16/19 07:06 PM Unknown
98	I1071619A	480-156099-C-3-A	07/16/19 07:10 PM Unknown
99	I1071619A	480-156099-C-4-A	07/16/19 07:13 PM Unknown
100	I1071619A	480-156099-C-5-A	07/16/19 07:17 PM Unknown
101	I1071619A	480-156054-D-1-A	07/16/19 07:21 PM Unknown
102	I1071619A	CCV-5385806	07/16/19 07:25 PM QC
103	I1071619A	CCB-5392763	07/16/19 07:28 PM QC
104	I1071619A	CCVL-5395711	07/16/19 07:32 PM QC
105	I1071619A	480-156054-D-2-A	07/16/19 07:36 PM Unknown
106	I1071619A	480-156094-A-1-A	07/16/19 07:40 PM Unknown
107	I1071619A	480-156098-D-1-A@50	07/16/19 07:44 PM Unknown
108	I1071619A	MB 480-482035/1-A	07/16/19 07:48 PM Unknown
109	I1071619A	LCS 480-482035/2-A	07/16/19 07:51 PM Unknown
110	I1071619A	480-156095-K-1-D	07/16/19 07:55 PM Unknown
111	I1071619A	480-156095-K-1-Dsd@5	07/16/19 07:59 PM Unknown
112	I1071619A	480-156095-K-1-Dpds	07/16/19 08:03 PM Unknown
113	I1071619A	480-156095-K-1-E MS	07/16/19 08:07 PM Unknown
114	I1071619A	CCV-5385806	07/16/19 08:11 PM QC
115	I1071619A	CCB-5392763	07/16/19 08:14 PM QC
116	I1071619A	CCVL-5395711	07/16/19 08:18 PM QC
117	I1071619A	480-156095-K-1-F MSD	07/16/19 08:22 PM Unknown
118	I1071619A	480-156095-G-2-B	07/16/19 08:26 PM Unknown
119	I1071619A	480-156087-C-1-B	07/16/19 08:30 PM Unknown
120	I1071619A	480-156087-C-2-B	07/16/19 08:34 PM Unknown
121	I1071619A	480-156087-D-3-B	07/16/19 08:38 PM Unknown
122	I1071619A	480-156076-C-1-D	07/16/19 08:42 PM Unknown
123	I1071619A	480-156076-C-1-E MS	07/16/19 08:46 PM Unknown
124	I1071619A	480-156076-C-1-F MSD	07/16/19 08:49 PM Unknown
125	I1071619A	480-156088-D-1-B	07/16/19 08:53 PM Unknown
126	I1071619A	CCV-5385806	07/16/19 08:57 PM QC
127	I1071619A	CCB-5392763	07/16/19 09:01 PM QC
128	I1071619A	CCVL-5395711	07/16/19 09:05 PM QC
129	I1071619A	480-156091-B-1-B	07/16/19 09:08 PM Unknown
130	I1071619A	480-156081-B-1-B	07/16/19 09:12 PM Unknown
131	I1071619A	480-156086-L-1-B	07/16/19 09:16 PM Unknown
132	I1071619A	480-156061-C-1-B	07/16/19 09:20 PM Unknown
133	I1071619A	480-156058-M-1-A	07/16/19 09:24 PM Unknown
134	I1071619A	blank	07/16/19 09:28 PM Unknown
135	I1071619A	MB 480-481887/1-A	07/16/19 09:32 PM Unknown
136	I1071619A	LCS 480-481887/2-A	07/16/19 09:36 PM Unknown
137	I1071619A	480-156033-H-1-A	07/16/19 09:40 PM Unknown
138	I1071619A	CCV-5385806	07/16/19 09:43 PM QC
139	I1071619A	CCB-5392763	07/16/19 09:47 PM QC
140	I1071619A	CCVL-5395711	07/16/19 09:51 PM QC
141	I1071619A	480-156033-H-1-Asd@5	07/16/19 09:55 PM Unknown
142	I1071619A	480-156033-H-1-Apds	07/16/19 09:59 PM Unknown
143	I1071619A	480-156033-H-1-B MS	07/16/19 10:02 PM Unknown
144	I1071619A	480-156033-H-1-C MSD	07/16/19 10:06 PM Unknown
145	I1071619A	480-156004-B-1-A	07/16/19 10:10 PM Unknown
146	I1071619A	480-156010-D-1-A	07/16/19 10:13 PM Unknown

147	I1071619A	480-156010-D-1-B MS	07/16/19 10:17 PM Unknown
148	I1071619A	480-156010-D-1-C MSD	07/16/19 10:21 PM Unknown
149	I1071619A	480-156025-A-1-A	07/16/19 10:24 PM Unknown
150	I1071619A	CCV-5385806	07/16/19 10:28 PM QC
151	I1071619A	CCB-5392763	07/16/19 10:32 PM QC
152	I1071619A	CCVL-5395711	07/16/19 10:36 PM QC
153	I1071619A	480-156026-B-2-A	07/16/19 10:40 PM Unknown
154	I1071619A	480-155976-B-1-A	07/16/19 10:44 PM Unknown
155	I1071619A	480-155979-F-1-B	07/16/19 10:48 PM Unknown
156	I1071619A	480-156032-E-1-A	07/16/19 10:52 PM Unknown
157	I1071619A	480-156014-E-1-A	07/16/19 10:56 PM Unknown
158	I1071619A	480-156014-E-2-A	07/16/19 10:59 PM Unknown
159	I1071619A	480-156032-E-2-A	07/16/19 11:03 PM Unknown
160	I1071619A	480-156032-D-3-A	07/16/19 11:07 PM Unknown
161	I1071619A	blank	07/16/19 11:11 PM Unknown
162	I1071619A	CCV-5385806	07/16/19 11:15 PM QC
163	I1071619A	CCB-5392763	07/16/19 11:19 PM QC
164	I1071619A	CCVL-5395711	07/16/19 11:22 PM QC
165	I1071619A	480-155979-F-2-B	07/16/19 11:26 PM Unknown
166	I1071619A	480-156023-A-1-A@2	07/16/19 11:30 PM Unknown
167	I1071619A	480-156023-A-2-A	07/16/19 11:34 PM Unknown
168	I1071619A	480-156015-B-1-A	07/16/19 11:38 PM Unknown
169	I1071619A	480-155980-D-1-C	07/16/19 11:42 PM Unknown
170	I1071619A	480-156022-E-1-A	07/16/19 11:46 PM Unknown
171	I1071619A	blank	07/16/19 11:50 PM Unknown
172	I1071619A	blank	07/16/19 11:54 PM Unknown
173	I1071619A	blank	07/16/19 11:58 PM Unknown
174	I1071619A	CCV-5385806	07/17/19 12:02 AM QC
175	I1071619A	CCB-5392763	07/17/19 12:06 AM QC
176	I1071619A	CCVL-5395711	07/17/19 12:09 AM QC
177	I1071619A	MB 480-482043/1-A	07/17/19 12:13 AM Unknown
178	I1071619A	LCS 480-482043/2-A	07/17/19 12:17 AM Unknown
179	I1071619A	480-156102-C-1-A	07/17/19 12:21 AM Unknown
180	I1071619A	480-156102-C-2-A	07/17/19 12:25 AM Unknown
181	I1071619A	480-156102-C-3-A	07/17/19 12:29 AM Unknown
182	I1071619A	480-156102-C-3-Asd@5	07/17/19 12:33 AM Unknown
183	I1071619A	480-156102-C-3-Apds	07/17/19 12:36 AM Unknown
184	I1071619A	480-156102-C-3-B MS	07/17/19 12:40 AM Unknown
185	I1071619A	480-156102-C-3-C MSD	07/17/19 12:44 AM Unknown
186	I1071619A	CCV-5385806	07/17/19 12:48 AM QC
187	I1071619A	CCB-5392763	07/17/19 12:51 AM QC
188	I1071619A	CCVL-5395711	07/17/19 12:55 AM QC
189	I1071619A	480-156102-C-4-A	07/17/19 12:59 AM Unknown
190	I1071619A	480-156102-C-5-A	07/17/19 01:03 AM Unknown
191	I1071619A	480-156102-C-6-A	07/17/19 01:07 AM Unknown
192	I1071619A	480-156102-C-7-A	07/17/19 01:11 AM Unknown
193	I1071619A	480-156102-C-8-A	07/17/19 01:15 AM Unknown
194	I1071619A	155845-2 tot	07/17/19 01:19 AM Unknown
195	I1071619A	155912-1 tot	07/17/19 01:22 AM Unknown
196	I1071619A	155918-2 tot	07/17/19 01:26 AM Unknown
197	I1071619A	155918-5 tot	07/17/19 01:30 AM Unknown
198	I1071619A	CCV-5385806	07/17/19 01:34 AM QC

199	I1071619A	CCB-5392763	07/17/19 01:38 AM QC
200	I1071619A	CCVL-5395711	07/17/19 01:42 AM QC
201	I1071619A	155919-3 tot	07/17/19 01:45 AM Unknown
202	I1071619A	155919-6 tot	07/17/19 01:49 AM Unknown
203	I1071619A	155931-11 sol	07/17/19 01:53 AM Unknown
204	I1071619A	155931-13 sol	07/17/19 01:57 AM Unknown
205	I1071619A	155931-18 sol	07/17/19 02:01 AM Unknown
206	I1071619A	155931-19 sol	07/17/19 02:04 AM Unknown
207	I1071619A	155931-2 sol	07/17/19 02:08 AM Unknown
208	I1071619A	CCVL-5395711	07/17/19 02:12 AM QC
209	I1071619A	CCV-5385806	07/17/19 02:16 AM QC
210	I1071619A	CCB-5392763	07/17/19 02:20 AM QC
211	I1071619A	ICV-5374275	07/16/19 11:49 AM QC
212	I1071619A	ICB-5392763	07/16/19 11:53 AM QC
213	I1071619A	ICVL-5395711	07/16/19 11:57 AM QC
214	I1071619A	ICSA-5361020	07/16/19 12:01 PM QC
215	I1071619A	ICSAB-5379501	07/16/19 12:05 PM QC
216	I1071619A	ICEX1	07/16/19 12:09 PM Unknown
217	I1071619A	ICEX2	07/16/19 12:13 PM Unknown
218	I1071619A	ICEX3	07/16/19 12:17 PM Unknown
219	I1071619A	ICEX4	07/16/19 12:21 PM Unknown
220	I1071619A	ICEX5	07/16/19 12:24 PM Unknown
221	I1071619A	CCV-5385806	07/16/19 12:28 PM QC
222	I1071619A	CCB-5392763	07/16/19 12:32 PM QC

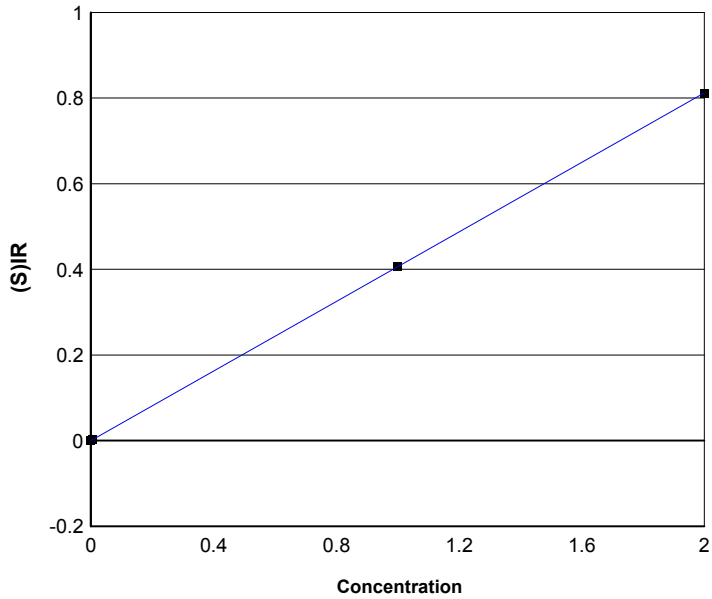
I1071619A

Author: jak

Published: 7/17/2019 8:35:06AM

Instrument Name: iCAP1 Serial Number: 20094603

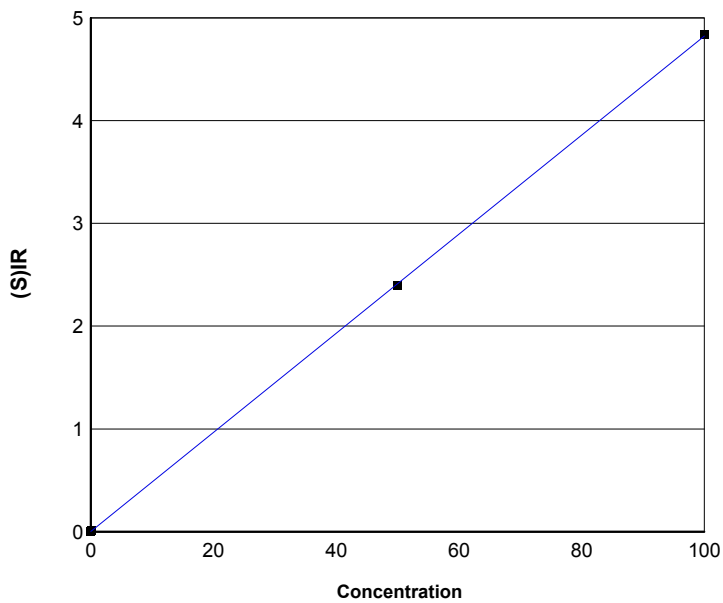
Method Name: ICAP1 New Stds (90)



Element Name:	Ag
Element Wavelength:	Ag 328.068 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.00012606
A1 (Gain):	0.40625
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

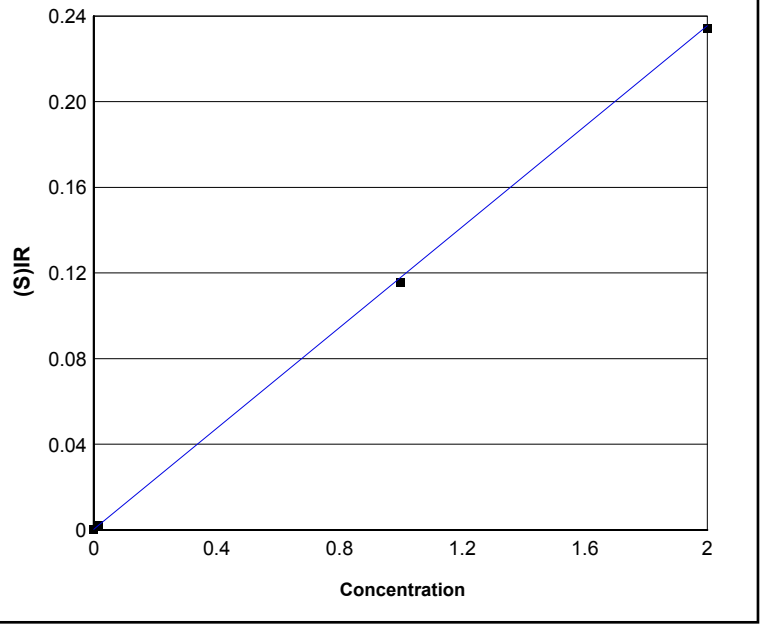
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000001708	0.0000001708	0.00000	-0.00012599	0.0000038541	1
IC-5395711	0.0060000	0.0058184	-0.00018164	-3.0273	0.0022376	0.0000026248	1
IC-5385806	1.0000	1.0034	0.0034216	0.34216	0.40737	0.00057818	1
IC-5377549	2.0000	1.9968	-0.0032399	-0.16200	0.81077	0.0040225	1



Element Name:	Al
Element Wavelength:	Al 308.215 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.0019403
A1 (Gain):	0.048221
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

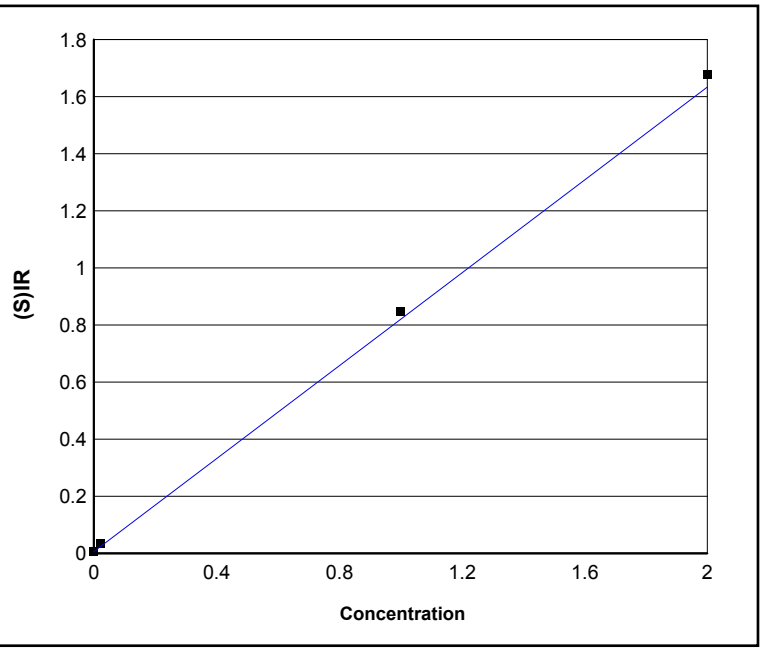
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000059693	-0.0000059693	0.00000	0.0019400	0.00024031	1
IC-5395711	0.20000	0.20652	0.0065190	3.2595	0.011899	0.00027697	1
IC-5385806	50.000	49.732	-0.26836	-0.53672	2.4000	0.0047833	1
IC-5377549	100.00	100.26	0.26184	0.26184	4.8366	0.0040034	1



Element Name:	As
Element Wavelength:	As 189.042 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	0.00031329
A1 (Gain):	0.11759
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

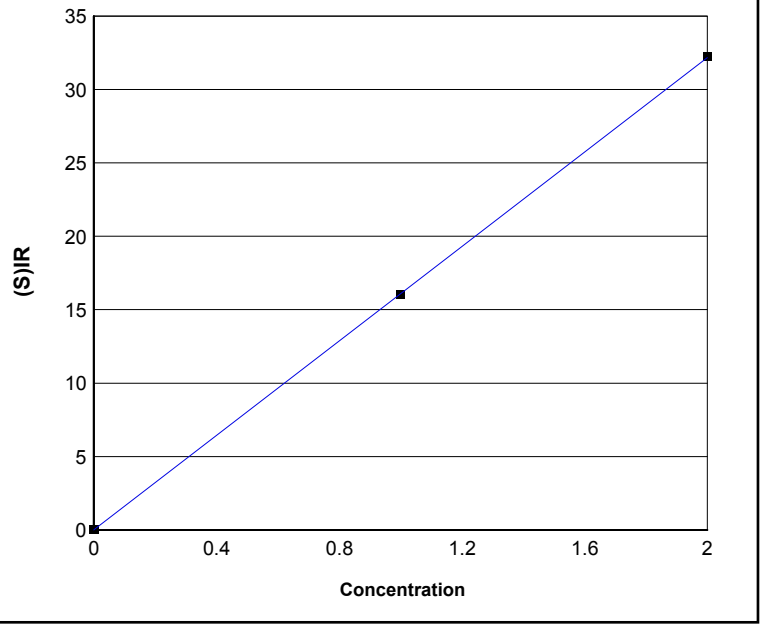
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000669	-0.0000000669	0.00000	0.00031328	0.00039411	1
IC-5395711	0.015000	0.015152	0.00015172	1.0115	0.0020902	0.000046404	1
IC-5385806	1.0000	0.98885	-0.011154	-1.1154	0.11540	0.000084318	1
IC-5377549	2.0000	2.0110	0.011001	0.55006	0.23440	0.00053158	1



Element Name:	B
Element Wavelength:	B 208.959 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99769
A0 (Offset):	0.0056492
A1 (Gain):	0.81410
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

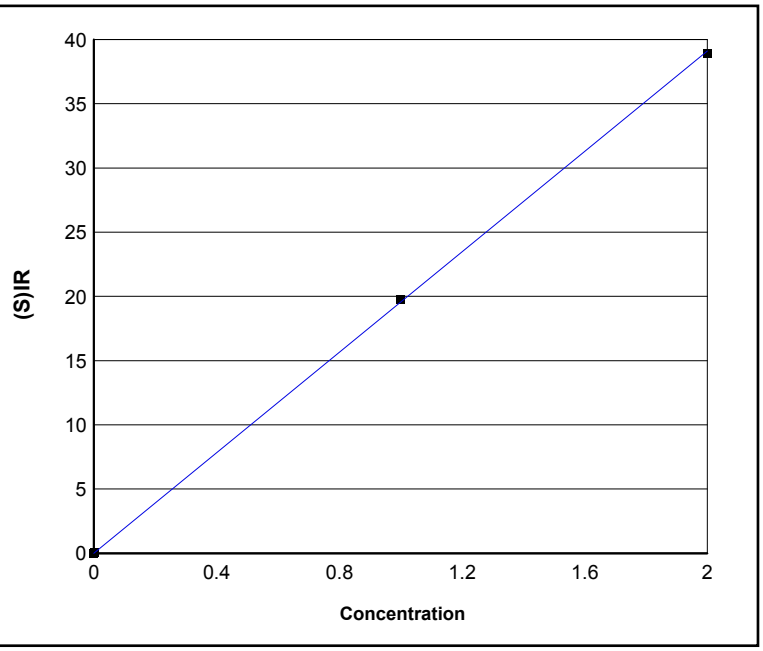
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	-0.000017062	-0.000017062	0.00000	0.0056353	0.00019877	1
IC-5395711	0.020000	0.037246	0.017246	86.231	0.036252	0.00047615	1
IC-5385806	1.0000	0.99856	-0.0014425	-0.14425	0.84666	0.00067989	1
IC-5377549	2.0000	1.9845	-0.015516	-0.77580	1.6774	0.0016660	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0050717
A1 (Gain):	16.087
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

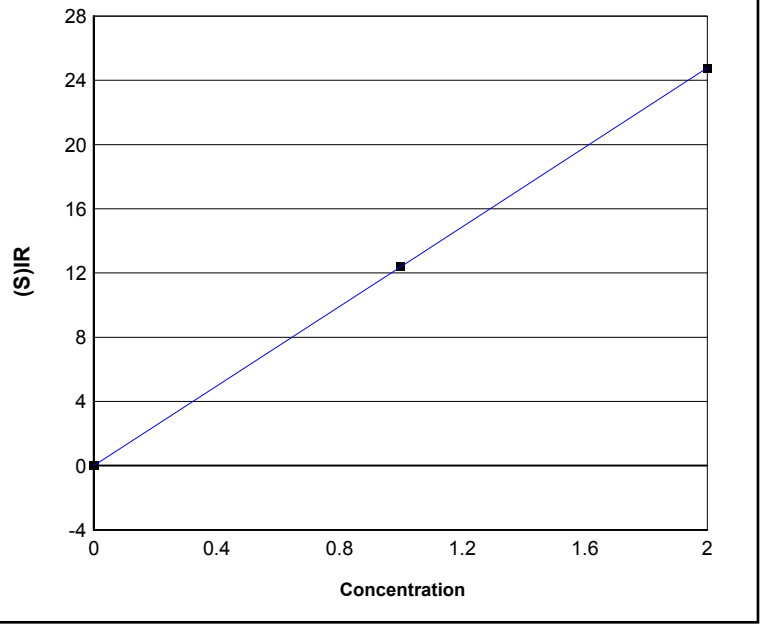
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000001215	-0.0000001215	0.00000	0.0050697	0.00029256	1
IC-5395711	0.0020000	0.0021245	0.00012450	6.2249	0.039248	0.0021166	1
IC-5385806	1.0000	0.99708	-0.0029158	-0.29158	16.045	0.023643	1
IC-5377549	2.0000	2.0028	0.0027913	0.13957	32.224	0.015363	1



Element Name:	Ba
Element Wavelength:	Ba 455.403 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.0025245
A1 (Gain):	19.555
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

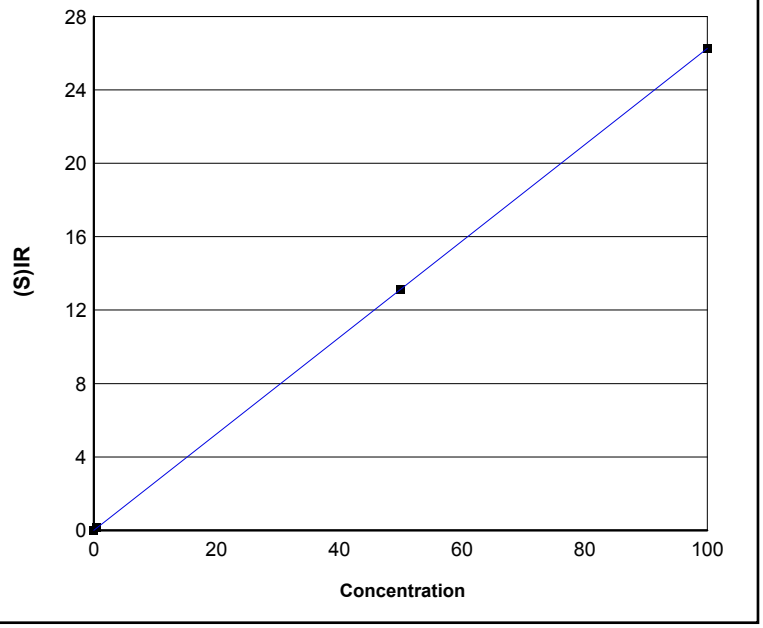
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000964	-0.0000000964	0.00000	0.0025226	0.00013836	1
IC-5395711	0.0020000	0.0020872	0.000087238	4.3619	0.043341	0.000055615	1
IC-5385806	1.0000	1.0092	0.0092455	0.92455	19.739	0.040734	1
IC-5377549	2.0000	1.9907	-0.0093328	-0.46664	38.931	0.094117	1



Element Name:	Be
Element Wavelength:	Be 313.042 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.00048627
A1 (Gain):	12.390
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

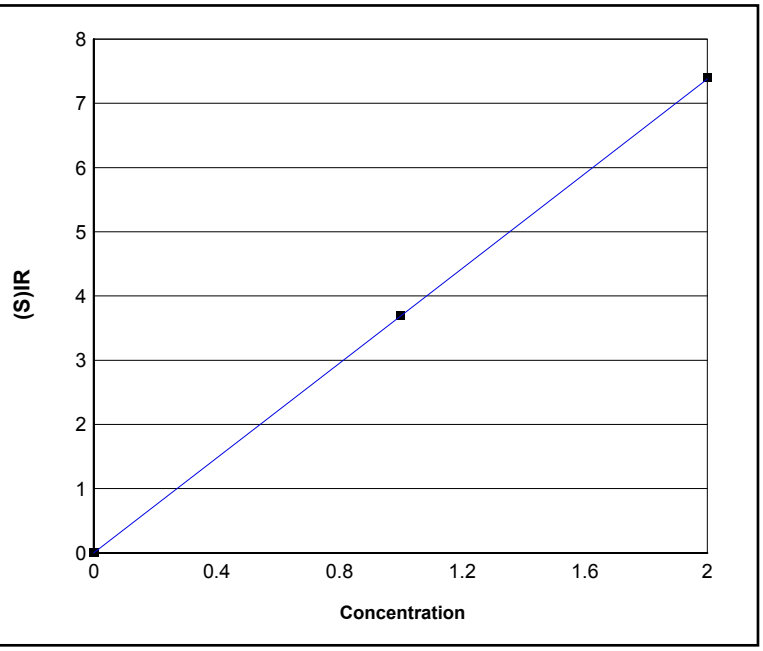
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000889	-0.0000000889	0.00000	-0.00048737	0.000012247	1
IC-5395711	0.0020000	0.0020849	0.000084879	4.2440	0.025328	0.00047732	1
IC-5385806	1.0000	1.0041	0.0041091	0.41091	12.437	0.017810	1
IC-5377549	2.0000	1.9958	-0.0041940	-0.20970	24.721	0.013691	1



Element Name:	Ca
Element Wavelength:	Ca 317.933 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.0041224
A1 (Gain):	0.26257
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

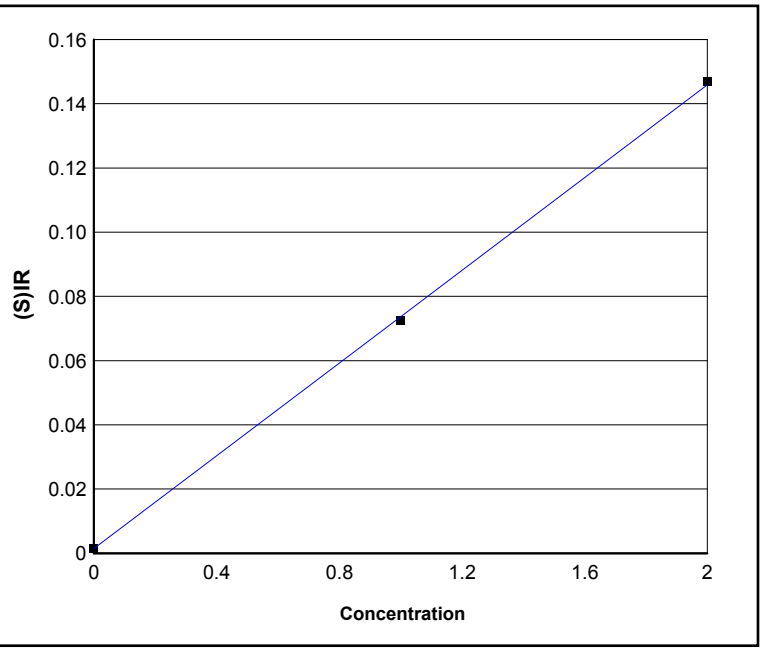
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000053357	-0.0000053357	0.00000	0.0041210	0.00029306	1
IC-5395711	0.50000	0.50528	0.0052799	1.0560	0.13679	0.000016918	1
IC-5385806	50.000	50.016	0.016426	0.032852	13.137	0.021369	1
IC-5377549	100.00	99.978	-0.021706	-0.021706	26.255	0.041486	1



Element Name:	Cd
Element Wavelength:	Cd 228.802 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00083054
A1 (Gain):	3.6895
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

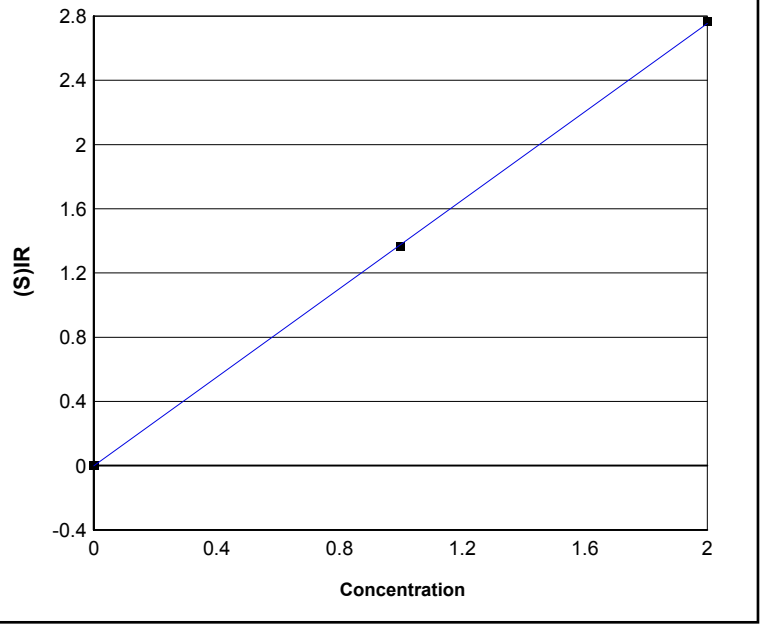
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000423	0.0000000423	0.00000	0.00083069	0.0000099749	1
IC-5395711	0.0020000	0.0019587	-0.000041271	-2.0635	0.0081416	0.00022503	1
IC-5385806	1.0000	0.99897	-0.0010297	-0.10297	3.6923	0.0013522	1
IC-5377549	2.0000	2.0011	0.0010714	0.053570	7.3954	0.017072	1



Element Name:	Ce
Element Wavelength:	Ce 404.076 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.9999
A0 (Offset):	0.001488
A1 (Gain):	0.07221
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

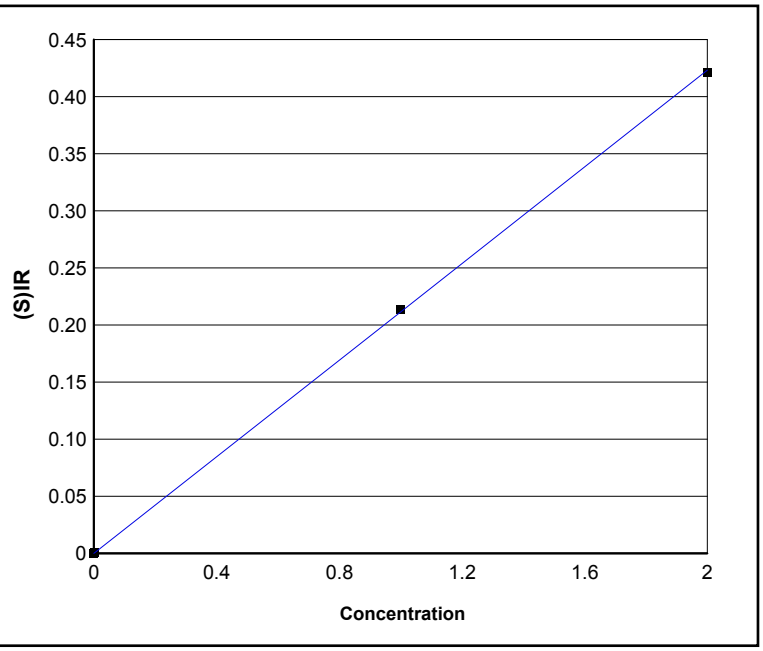
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	0.000007093	0.000007093	0.0000	0.001489	0.0005966	1
IC-5385806	1.000	0.9858	-0.01419	-1.419	0.07267	0.0003355	1
IC-5377549	2.000	2.014	0.01419	0.7093	0.1469	0.001408	1



Element Name:	Co
Element Wavelength:	Co 228.616 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.00071736
A1 (Gain):	1.3774
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

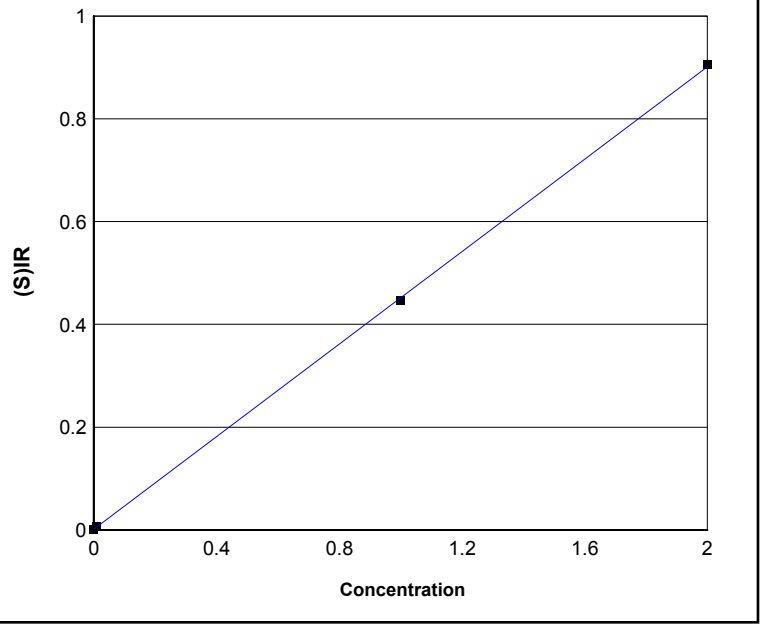
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000695	0.0000000695	0.00000	-0.00071727	0.000035957	1
IC-5395711	0.0040000	0.0039472	-0.000052846	-1.3212	0.0047191	0.00027090	1
IC-5385806	1.0000	0.99164	-0.0083561	-0.83561	1.3662	0.0024047	1
IC-5377549	2.0000	2.0084	0.0084089	0.42045	2.7678	0.0040951	1



Element Name:	Cr
Element Wavelength:	Cr 267.716 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.000023806
A1 (Gain):	0.21152
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

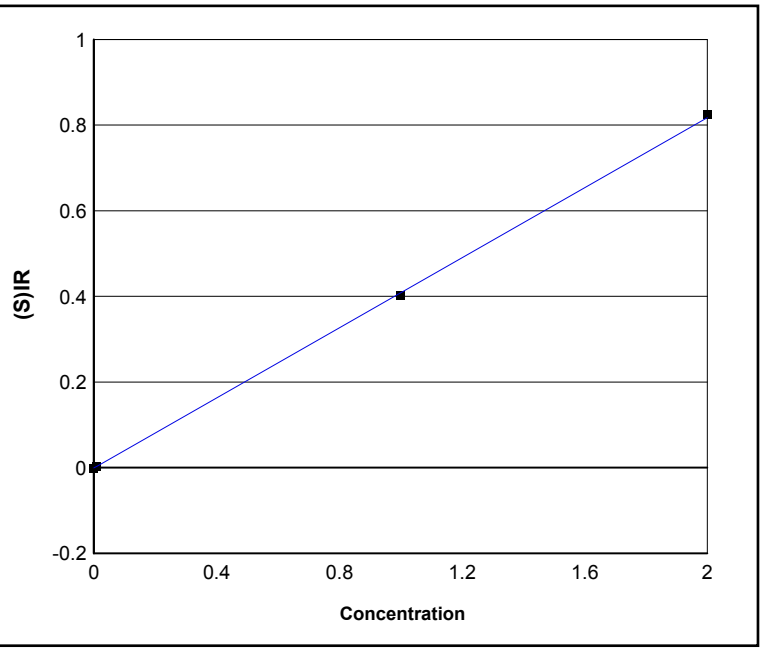
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000000259	-0.0000000259	0.00000	0.000023801	0.0000046994	1
IC-5395711	0.0040000	0.0040087	0.0000087255	0.21814	0.00087173	0.000043674	1
IC-5385806	1.0000	1.0086	0.0085756	0.85756	0.21336	0.00059855	1
IC-5377549	2.0000	1.9914	-0.0085843	-0.42922	0.42125	0.0024336	1



Element Name:	Cu
Element Wavelength:	Cu 324.754 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	0.0017174
A1 (Gain):	0.44981
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

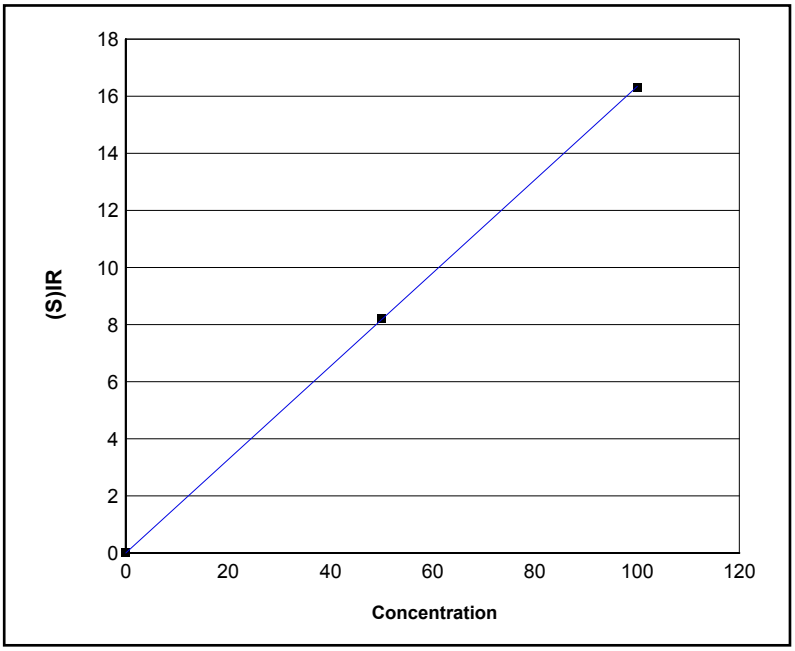
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000007175	0.0000007175	0.00000	0.0017177	0.000062812	1
IC-5395711	0.010000	0.0093255	-0.00067446	-6.7446	0.0059121	0.000042910	1
IC-5385806	1.0000	0.99071	-0.0092904	-0.92904	0.44734	0.0013255	1
IC-5377549	2.0000	2.0100	0.0099648	0.49824	0.90581	0.0025508	1



Element Name:	Cu
Element Wavelength:	Cu 327.396 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99995
A0 (Offset):	-0.00063516
A1 (Gain):	0.40904
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

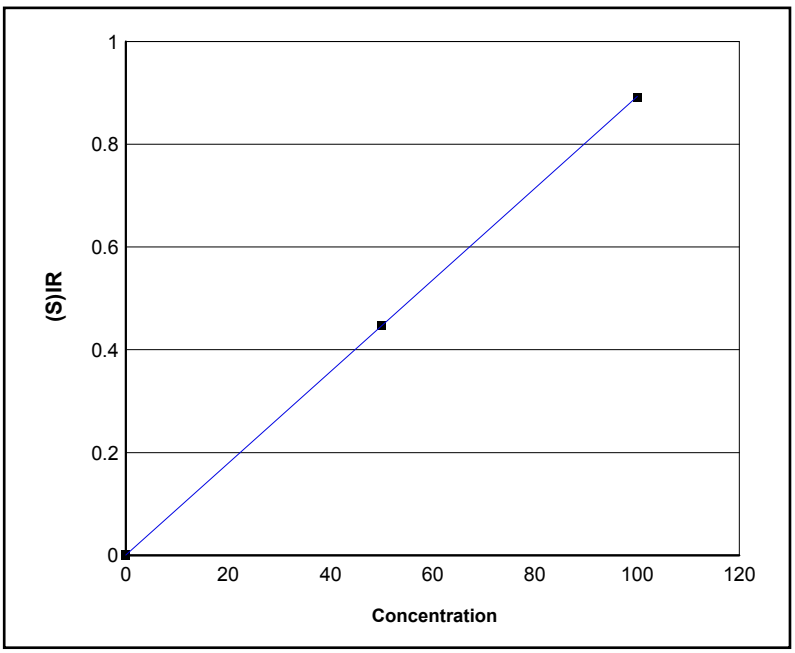
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000007118	0.0000007118	0.00000	-0.00063486	0.0000029614	1
IC-5395711	0.010000	0.0093520	-0.00064799	-6.4799	0.0031926	0.0000042574	1
IC-5385806	1.0000	0.98659	-0.013407	-1.3407	0.40316	0.000044450	1
IC-5377549	2.0000	2.0141	0.014055	0.70275	0.82368	0.0024706	1



Element Name:	Fe
Element Wavelength:	Fe 259.940 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00066512
A1 (Gain):	0.16336
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

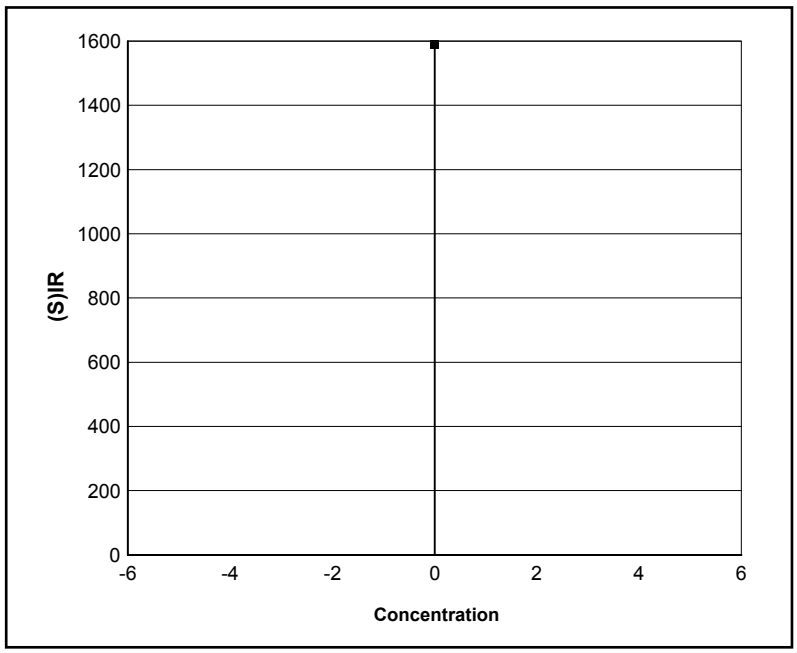
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000004536	-0.0000004536	0.00000	0.00066505	0.000064050	1
IC-5395711	0.050000	0.050341	0.00034088	0.68177	0.0088887	0.00025526	1
IC-5385806	50.025	50.251	0.22583	0.45144	8.2095	0.0072469	1
IC-5377549	100.05	99.824	-0.22617	-0.22606	16.308	0.011685	1



Element Name:	Fe
Element Wavelength:	Fe 271.441 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00051880
A1 (Gain):	0.0089211
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

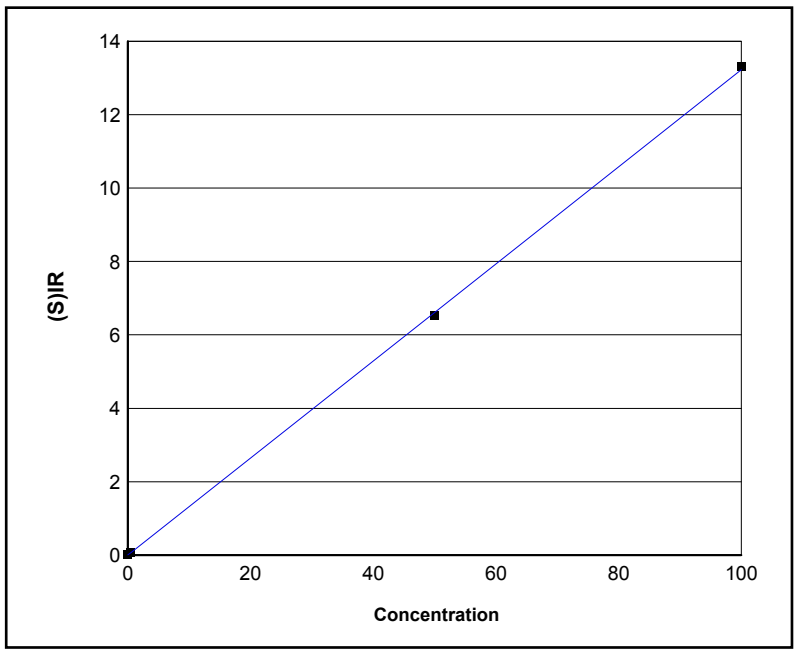
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.000013675	0.000013675	0.00000	0.00051892	0.00039303	1
IC-5395711	0.050000	0.036249	-0.013751	-27.502	0.00084218	0.00056319	1
IC-5385806	50.025	50.164	0.13866	0.27718	0.44803	0.0032855	1
IC-5377549	100.05	99.925	-0.12491	-0.12485	0.89196	0.0041857	1



Element Name:	In
Element Wavelength:	In 230.606 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:17:51AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

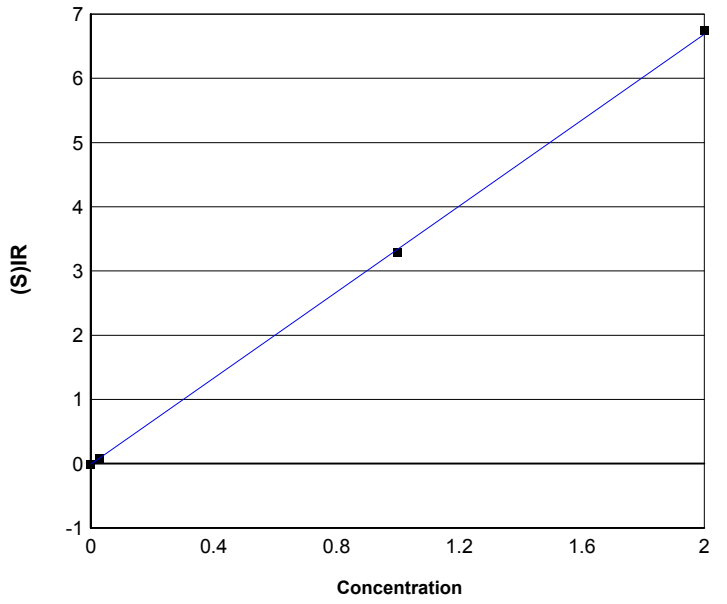
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000			0.0000	1,590	2.408	1



Element Name:	K
Element Wavelength:	K 766.490 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.0038119
A1 (Gain):	0.13221
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		**QC Normalize**	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

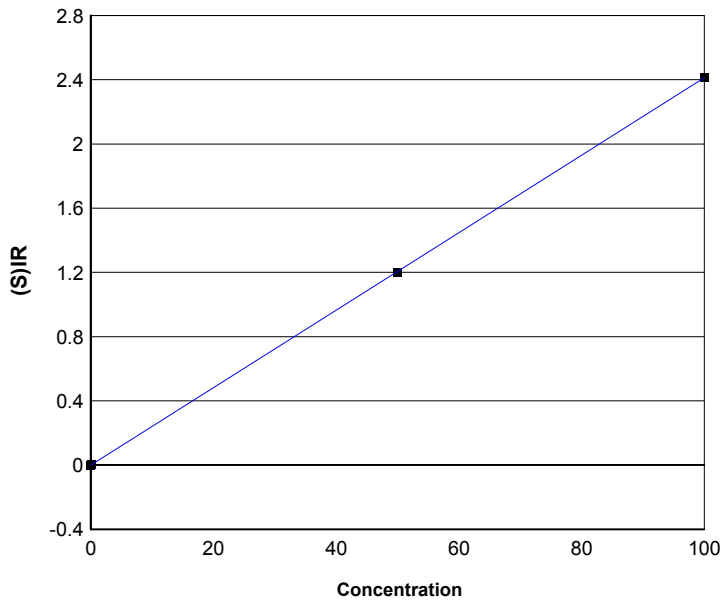
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.000026504	0.000026504	0.00000	0.0038154	0.000090747	1
IC-5395711	0.50000	0.47706	-0.022945	-4.5889	0.066883	0.00040044	1
IC-5385806	50.000	49.265	-0.73487	-1.4697	6.5171	0.0039152	1
IC-5377549	100.00	100.76	0.75782	0.75782	13.325	0.00069714	1



Element Name:	Li
Element Wavelength:	Li 670.784 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99993
A0 (Offset):	-0.0082229
A1 (Gain):	3.3464
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

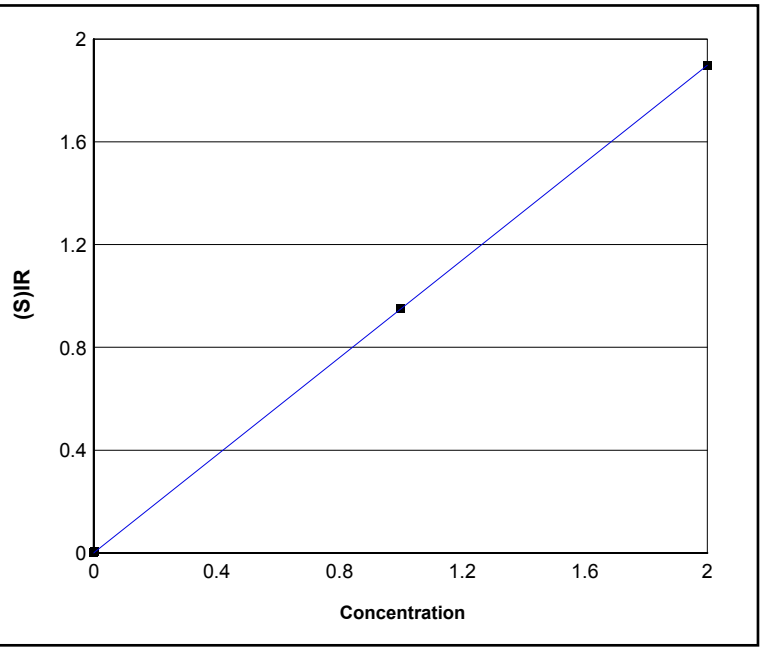
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000018375	0.0000018375	0.00000	-0.0082167	0.0025563	1
IC-5395711	0.030000	0.028361	-0.0016393	-5.4644	0.086684	0.0032612	1
IC-5385806	1.0000	0.98515	-0.014848	-1.4848	3.2885	0.0042094	1
IC-5377549	2.0000	2.0165	0.016487	0.82435	6.7398	0.0048524	1



Element Name:	Mg
Element Wavelength:	Mg 279.079 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	-0.000028933
A1 (Gain):	0.024124
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

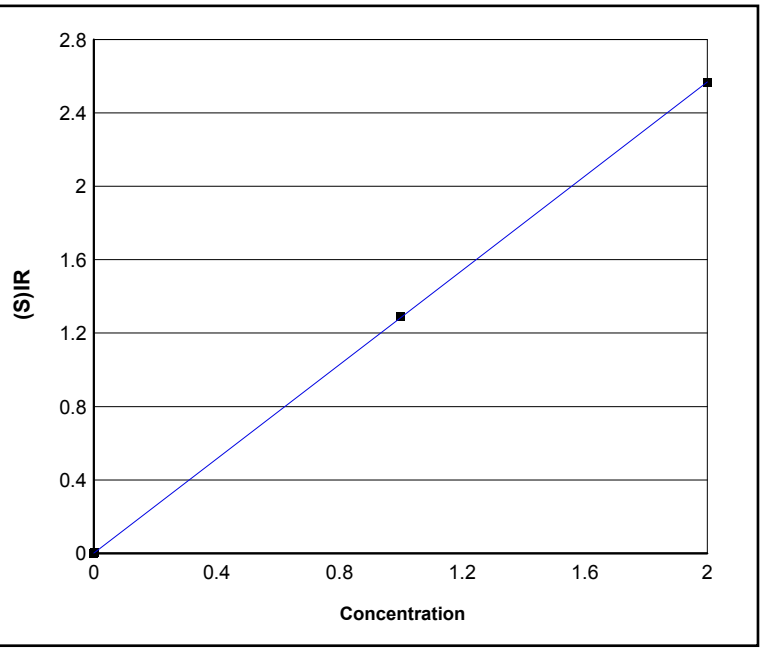
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000010361	-0.0000010361	0.00000	-0.000028958	0.000012713	1
IC-5395711	0.20000	0.20134	0.0013356	0.66778	0.0048277	0.000062119	1
IC-5385806	50.000	49.852	-0.14842	-0.29683	1.2025	0.0015786	1
IC-5377549	100.00	100.15	0.14708	0.14708	2.4157	0.0025542	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00026678
A1 (Gain):	0.94918
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

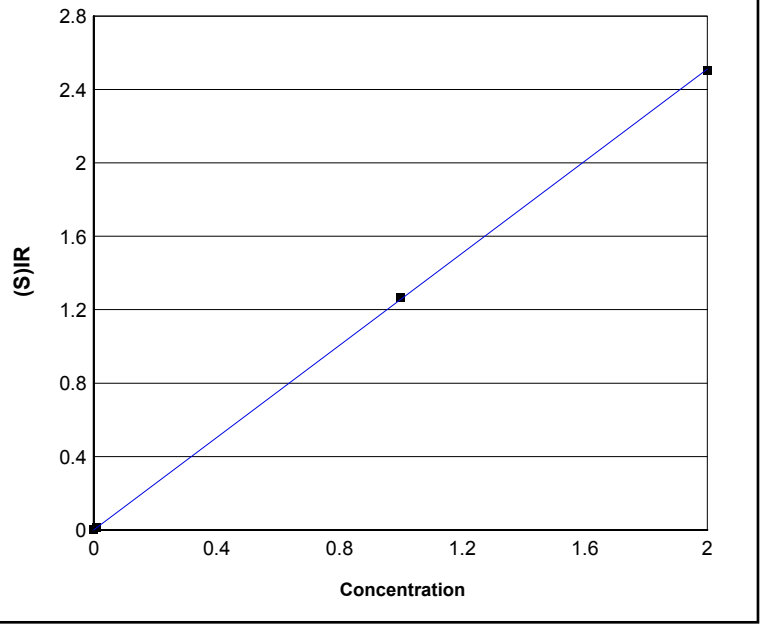
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000006325	-0.0000006325	0.00000	0.00026618	0.00017967	1
IC-5395711	0.0030000	0.0036294	0.00062939	20.980	0.0037123	0.00028113	1
IC-5385806	1.0000	1.0027	0.0027085	0.27085	0.95225	0.0027256	1
IC-5377549	2.0000	1.9967	-0.0033379	-0.16689	1.8959	0.0029595	1



Element Name:	Mn
Element Wavelength:	Mn 257.610 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.00072851
A1 (Gain):	1.2840
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

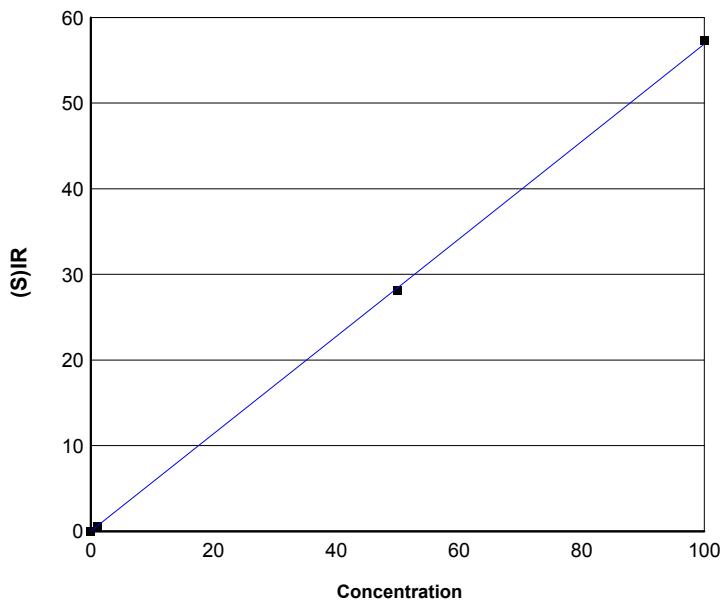
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000001311	0.0000001311	0.00000	0.00072868	0.000045155	1
IC-5395711	0.0030000	0.0028624	-0.00013761	-4.5869	0.0044045	0.000023942	1
IC-5385806	1.0000	1.0042	0.0042044	0.42044	1.2904	0.0012330	1
IC-5377549	2.0000	1.9959	-0.0040668	-0.20334	2.5641	0.013899	1



Element Name:	Mo
Element Wavelength:	Mo 202.030 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00051519
A1 (Gain):	1.2553
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

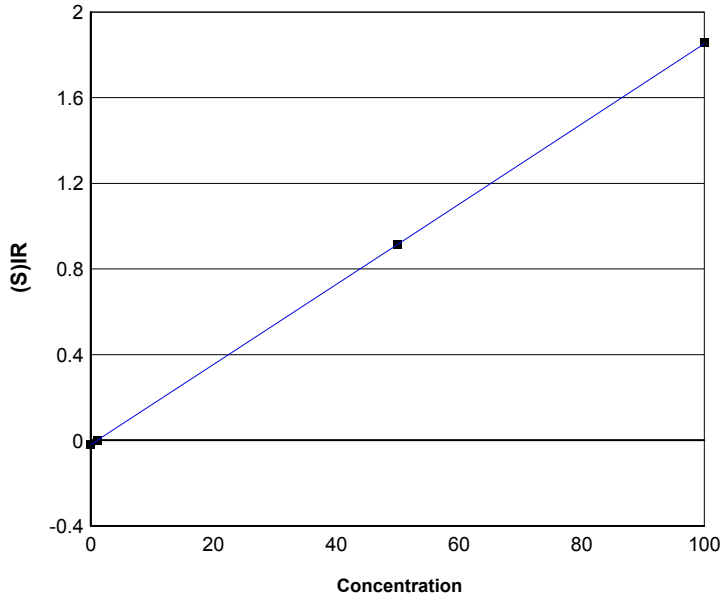
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000002954	0.0000002954	0.00000	0.00051556	0.000028142	1
IC-5395711	0.010000	0.0096650	-0.00033496	-3.3496	0.012648	0.00013475	1
IC-5385806	1.0000	1.0076	0.0075845	0.75845	1.2654	0.00082156	1
IC-5377549	2.0000	1.9928	-0.0072496	-0.36248	2.5021	0.000053731	1



Element Name:	Na
Element Wavelength:	Na 589.592 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99994
A0 (Offset):	0.0050856
A1 (Gain):	0.56914
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

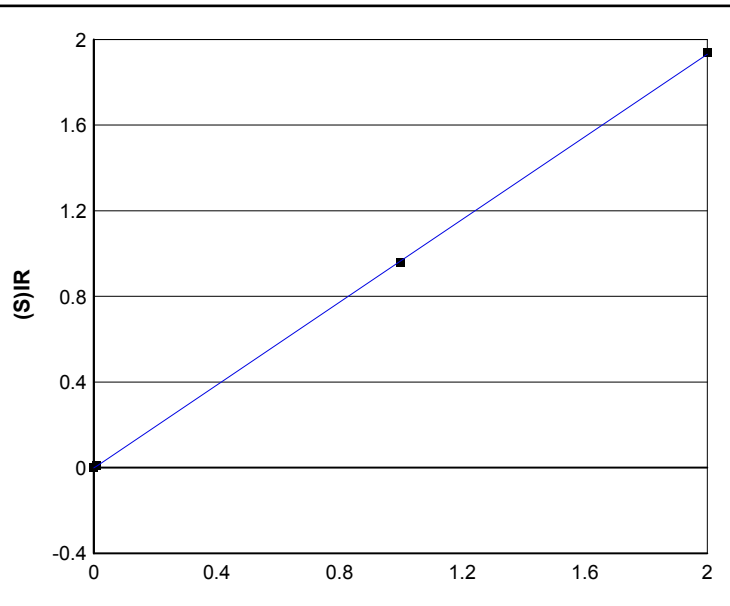
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.000063776	0.000063776	0.00000	0.0051219	0.000049519	1
IC-5395711	1.0000	0.94215	-0.057854	-5.7854	0.54130	0.0014713	1
IC-5385806	50.000	49.350	-0.65003	-1.3001	28.092	0.014858	1
IC-5377549	100.00	100.71	0.70789	0.70789	57.322	0.013788	1



Element Name:	Na
Element Wavelength:	Na 818.326 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99997
A0 (Offset):	-0.020359
A1 (Gain):	0.018726
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

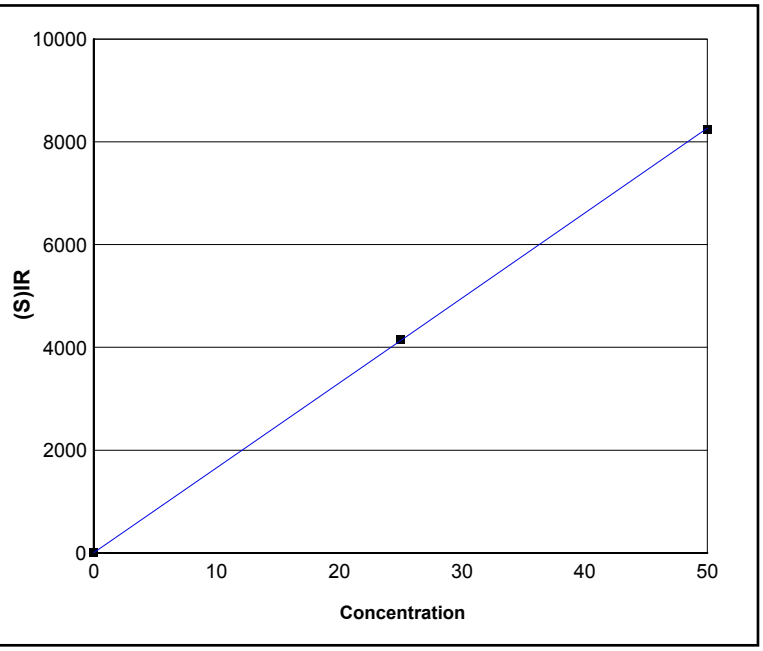
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.000096598	0.000096598	0.00000	-0.020357	0.0015275	1
IC-5395711	1.0000	0.90412	-0.095881	-9.5881	-0.0034290	0.0012660	1
IC-5385806	50.000	49.832	-0.16750	-0.33500	0.91278	0.0036119	1
IC-5377549	100.00	100.26	0.26338	0.26338	1.8571	0.00064328	1



Element Name:	Ni
Element Wavelength:	Ni 231.604 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.0010154
A1 (Gain):	0.96643
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

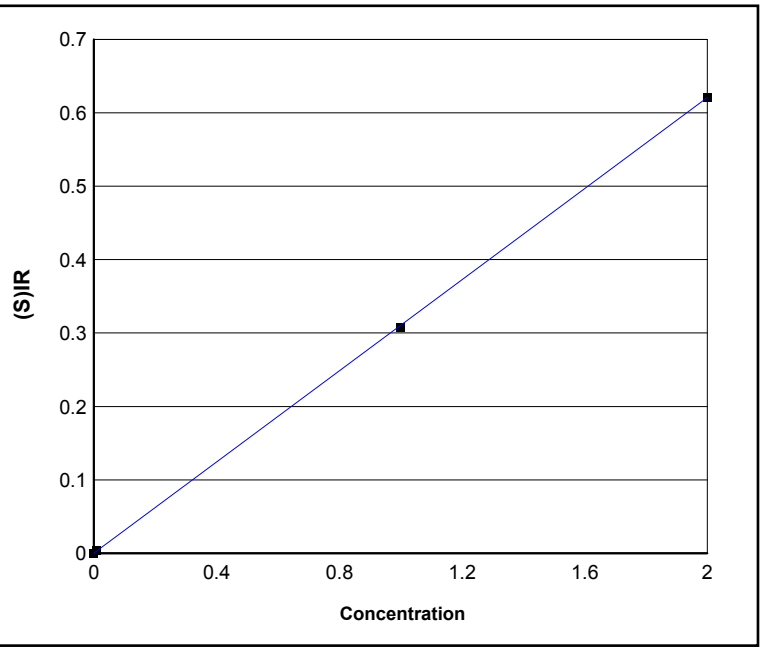
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000002907	-0.0000002907	0.00000	-0.0010157	0.000029519	1
IC-5395711	0.010000	0.010326	0.00032578	3.2578	0.0089650	0.00044412	1
IC-5385806	1.0000	0.99331	-0.0066926	-0.66926	0.96030	0.0014266	1
IC-5377549	2.0000	2.0064	0.0063672	0.31836	1.9407	0.0075564	1



Element Name:	P
Element Wavelength:	P 213.618 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	3.422
A1 (Gain):	165.2
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

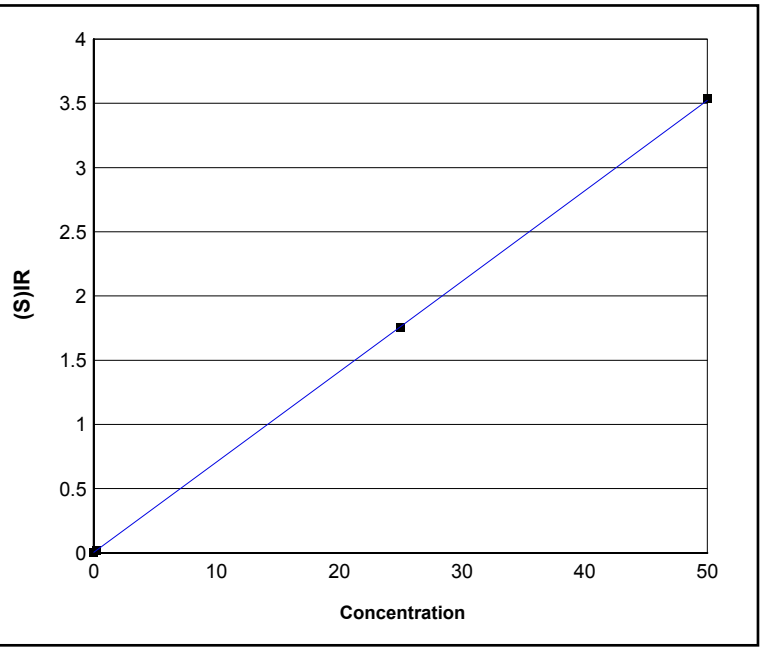
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	-0.00006174	-0.00006174	0.0000	3.411	0.09231	1
IC-5385806	25.00	25.12	0.1235	0.4939	4,155	1.202	1
IC-5377549	50.00	49.88	-0.1235	-0.2470	8,245	9.773	1



Element Name:	Pb
Element Wavelength:	Pb 220.353 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00014657
A1 (Gain):	0.31027
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

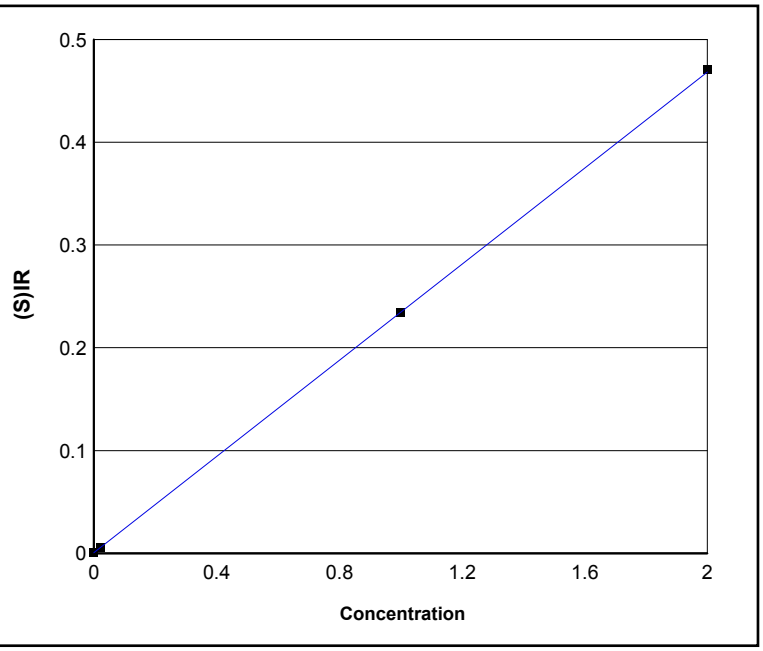
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000002860	0.0000002860	0.00000	0.00014665	0.000017397	1
IC-5395711	0.010000	0.0097538	-0.00024615	-2.4615	0.0031670	0.00070558	1
IC-5385806	1.0000	0.99178	-0.0082247	-0.82247	0.30706	0.00071191	1
IC-5377549	2.0000	2.0085	0.0084710	0.42355	0.62170	0.0012645	1



Element Name:	S
Element Wavelength:	S 182.034 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.9999
A0 (Offset):	0.004313
A1 (Gain):	0.07036
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

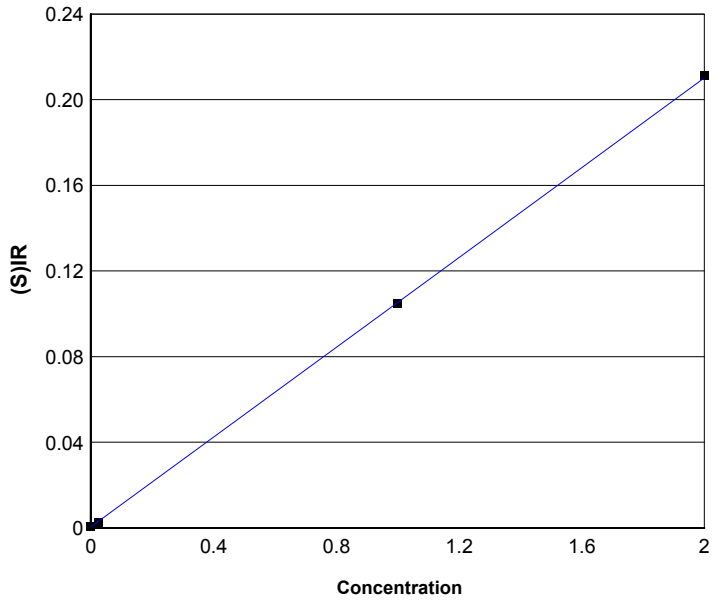
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	0.00003689	0.00003689	0.0000	0.004316	0.0004938	1
IC-5395711	0.2000	0.1636	-0.03640	-18.20	0.01582	0.0001974	1
IC-5385806	25.00	24.84	-0.1579	-0.6317	1.752	0.002370	1
IC-5377549	50.00	50.19	0.1943	0.3887	3.536	0.00008397	1



Element Name:	Sb
Element Wavelength:	Sb 206.833 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.00066668
A1 (Gain):	0.23385
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

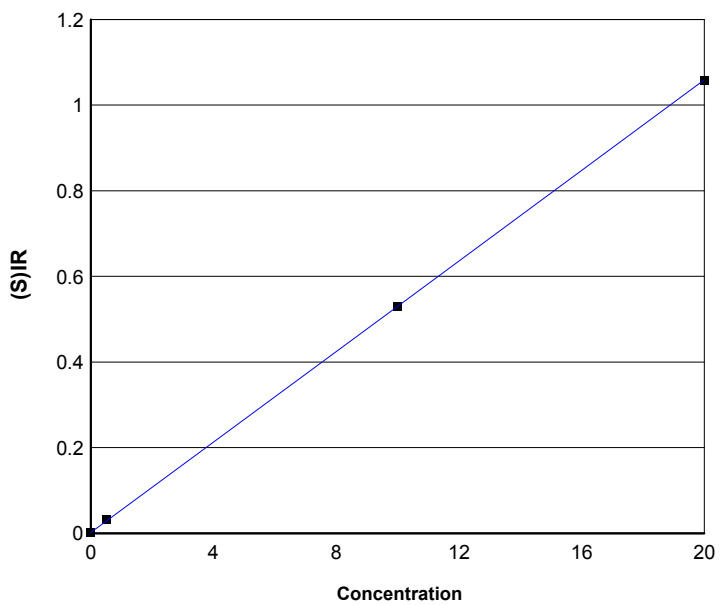
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000014942	-0.0000014942	0.00000	0.00066633	0.00039908	1
IC-5395711	0.020000	0.021554	0.0015535	7.7677	0.0057103	0.00052820	1
IC-5385806	1.0000	0.99561	-0.0043867	-0.43867	0.23433	0.00065229	1
IC-5377549	2.0000	2.0028	0.0028376	0.14188	0.47071	0.00042223	1



Element Name:	Se
Element Wavelength:	Se 196.090 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99987
A0 (Offset):	0.00046857
A1 (Gain):	0.10487
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

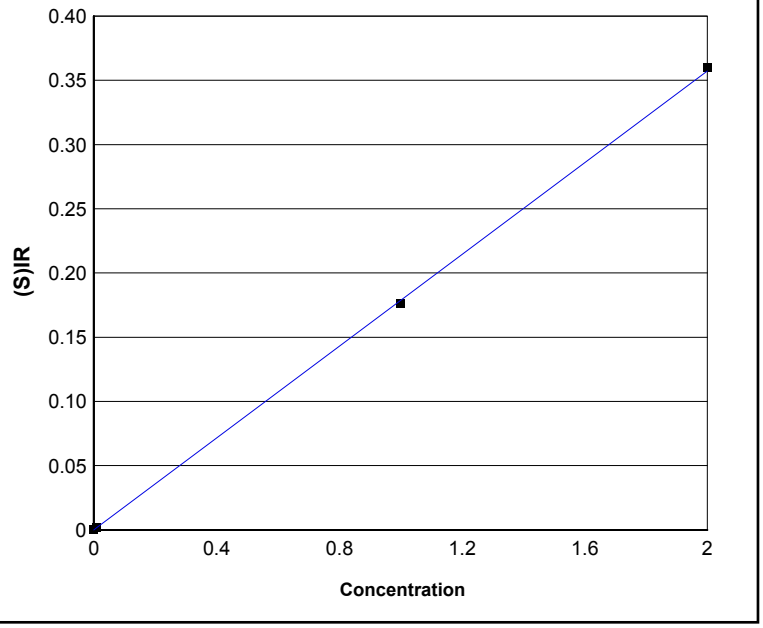
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000041854	0.0000041854	0.00000	0.00046901	0.00011513	1
IC-5395711	0.025000	0.020824	-0.0041765	-16.706	0.0026524	0.00027120	1
IC-5385806	1.0000	0.99511	-0.0048888	-0.48888	0.10486	0.00041124	1
IC-5377549	2.0000	2.0091	0.0090640	0.45320	0.21123	0.00098088	1



Element Name:	Si
Element Wavelength:	Si 288.158 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99990
A0 (Offset):	0.0020617
A1 (Gain):	0.052839
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

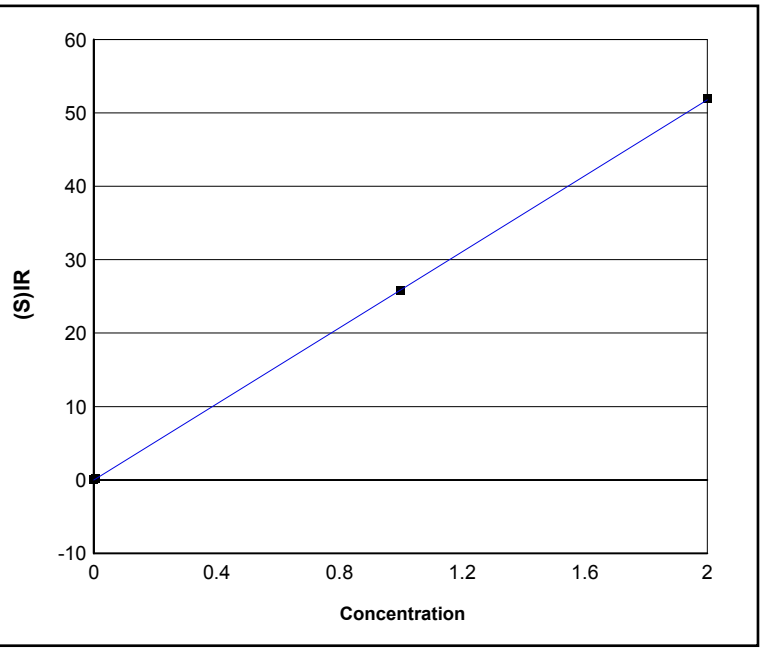
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	-0.000051731	-0.000051731	0.00000	0.0020590	0.00068489	1
IC-5395711	0.50000	0.55351	0.053513	10.703	0.031309	0.00022892	1
IC-5385806	10.000	9.9822	-0.017759	-0.17759	0.52952	0.0040222	1
IC-5377549	20.000	19.964	-0.035754	-0.17877	1.0570	0.0011532	1



Element Name:	Sn
Element Wavelength:	Sn 189.989 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99991
A0 (Offset):	0.000083813
A1 (Gain):	0.17854
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

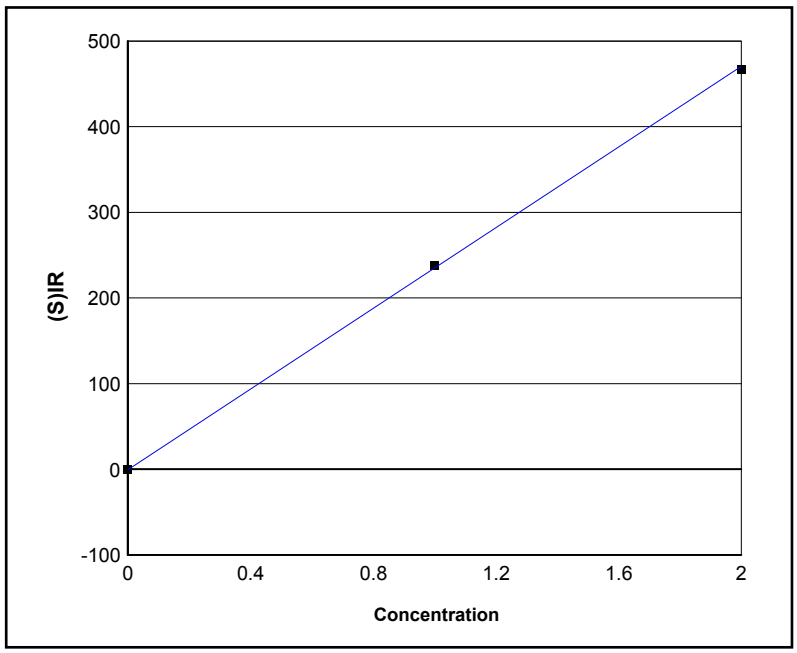
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000016359	0.0000016359	0.00000	0.000084105	0.00011244	1
IC-5395711	0.010000	0.0084210	-0.0015790	-15.790	0.0015873	0.00017396	1
IC-5385806	1.0000	0.98703	-0.012965	-1.2965	0.17631	0.000022519	1
IC-5377549	2.0000	2.0145	0.014544	0.72720	0.35976	0.000071355	1



Element Name:	Sr
Element Wavelength:	Sr 407.771 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	-0.0027130
A1 (Gain):	25.899
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

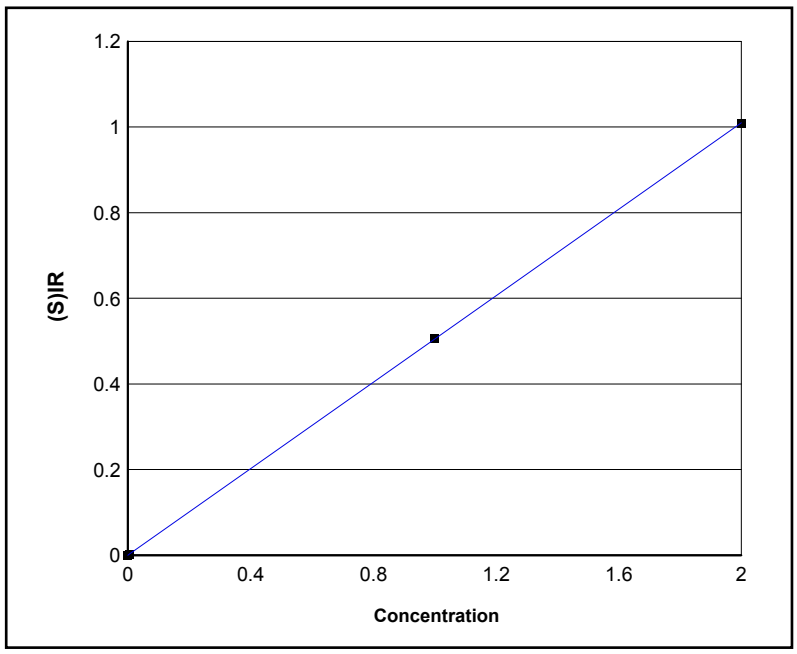
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000002615	0.0000002615	0.00000	-0.0027062	0.00020256	1
IC-5395711	0.0050000	0.0047502	-0.00024978	-4.9955	0.12078	0.0018952	1
IC-5385806	1.0000	0.99506	-0.0049401	-0.49401	25.815	0.015897	1
IC-5377549	2.0000	2.0052	0.0051903	0.25952	52.023	0.025719	1



Element Name:	Th
Element Wavelength:	Th 283.730 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	-0.4802
A1 (Gain):	235.5
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

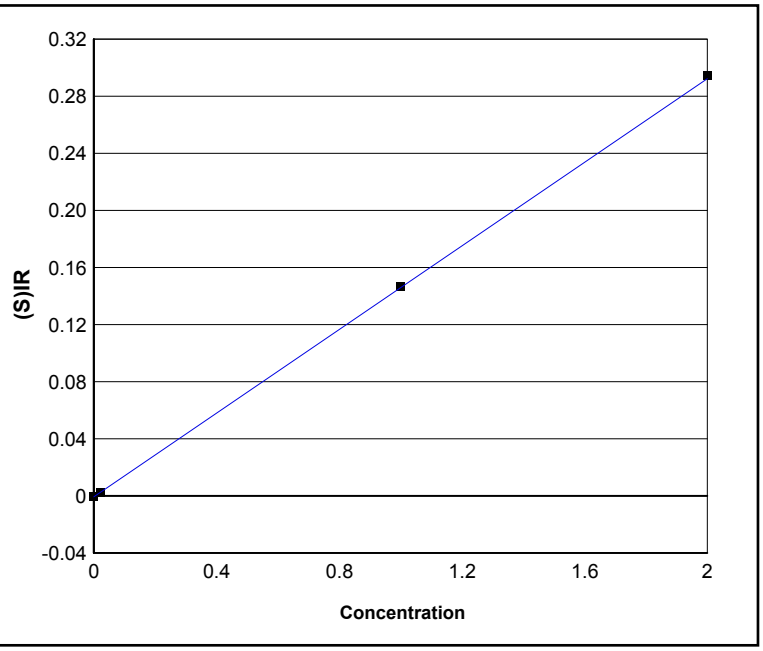
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	-0.000006659	-0.000006659	0.0000	-0.4818	0.05143	1
IC-5385806	1.000	1.013	0.01332	1.332	238.1	1.266	1
IC-5377549	2.000	1.987	-0.01332	-0.6659	467.4	0.005780	1



Element Name:	Ti
Element Wavelength:	Ti 334.904 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.00000
A0 (Offset):	0.00011614
A1 (Gain):	0.50479
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

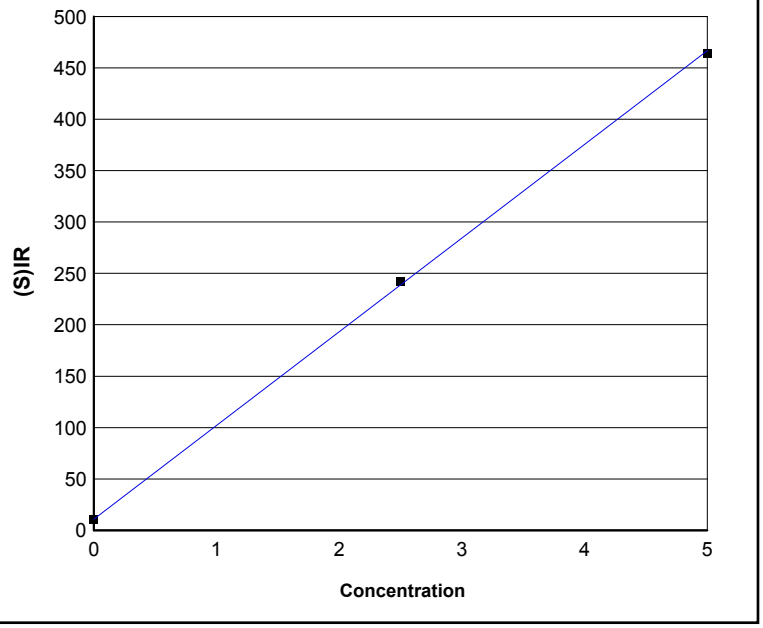
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000001606	0.0000001606	0.00000	0.00011622	0.00012628	1
IC-5395711	0.0050000	0.0048358	-0.00016415	-3.2830	0.0025572	0.000022498	1
IC-5385806	1.0000	1.0012	0.0012381	0.12381	0.50554	0.00068476	1
IC-5377549	2.0000	1.9989	-0.0010740	-0.053698	1.0092	0.0013111	1



Element Name:	Tl
Element Wavelength:	Tl 190.856 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	-0.00072356
A1 (Gain):	0.14653
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

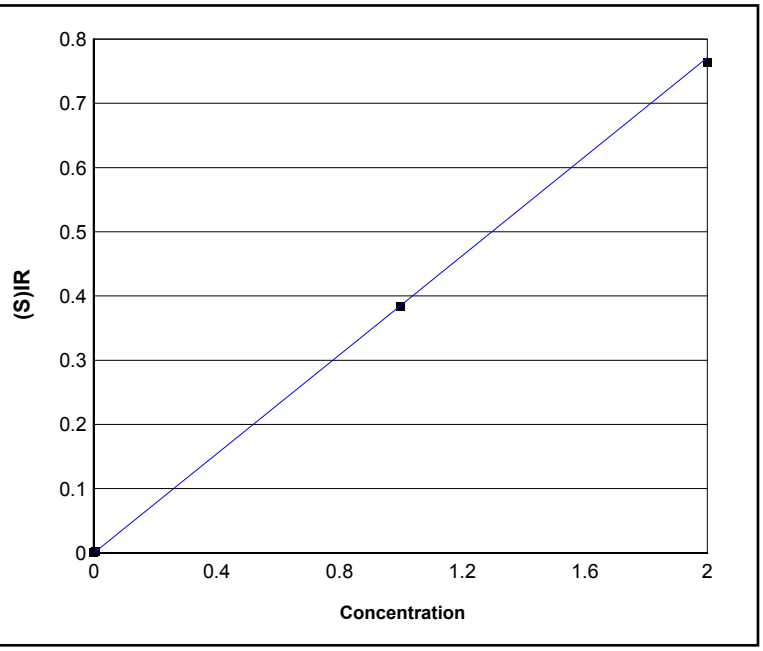
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000014809	0.0000014809	0.00000	-0.00072334	0.00016551	1
IC-5395711	0.020000	0.018510	-0.0014897	-7.4487	0.0019919	0.000015082	1
IC-5385806	1.0000	0.99940	-0.00059944	-0.059944	0.14645	0.00013316	1
IC-5377549	2.0000	2.0021	0.0020834	0.10417	0.29410	0.00022105	1



Element Name:	U
Element Wavelength:	U 409.014 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	10.93
A1 (Gain):	91.17
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

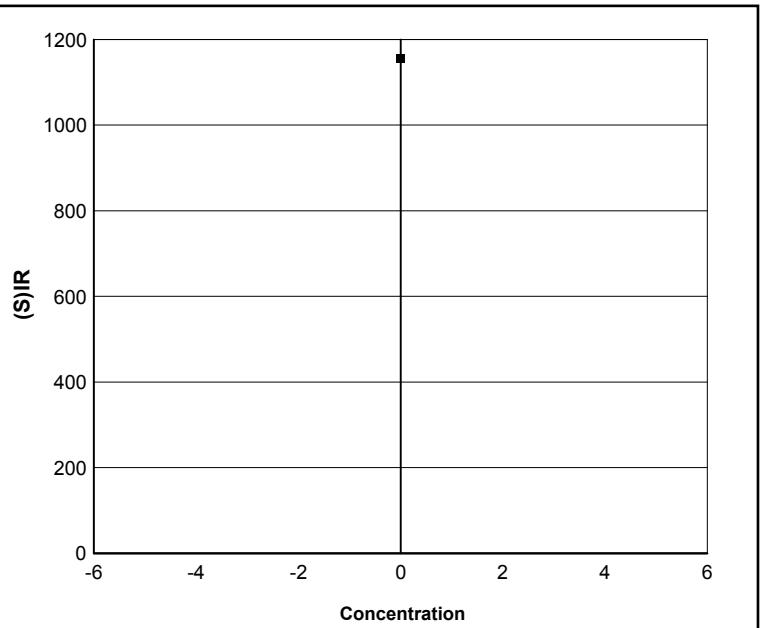
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	-0.00001686	-0.00001686	0.0000	10.93	0.8003	1
IC-5385806	2.500	2.534	0.03373	1.349	241.9	2.093	1
IC-5377549	5.000	4.966	-0.03373	-0.6746	463.7	2.781	1



Element Name:	V
Element Wavelength:	V 292.402 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99999
A0 (Offset):	0.000072647
A1 (Gain):	0.38543
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

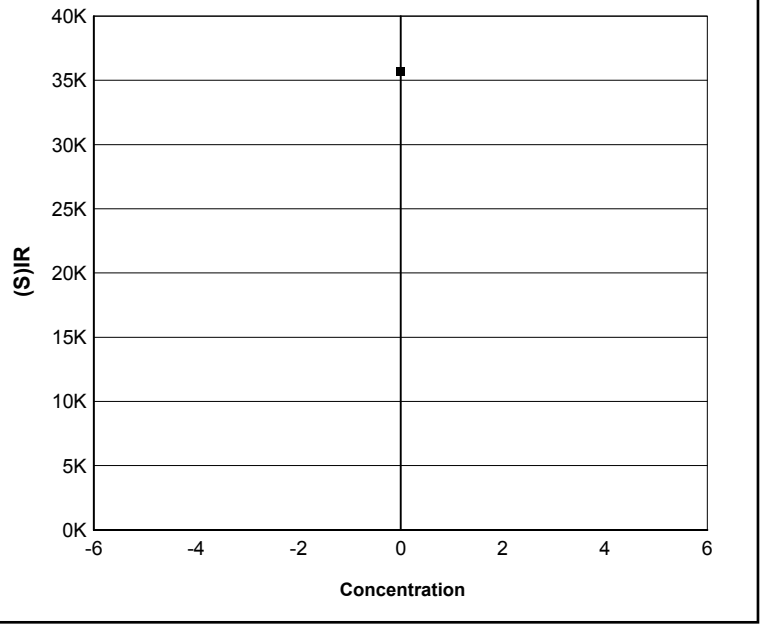
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000002998	0.0000002998	0.00000	0.000072763	0.000079130	1
IC-5395711	0.0050000	0.0046921	-0.00030789	-6.1577	0.0018428	0.000013850	1
IC-5385806	1.0000	1.0029	0.0029350	0.29350	0.38313	0.00059698	1
IC-5377549	2.0000	1.9974	-0.0026305	-0.13152	0.76291	0.0017420	1



Element Name:	Y
Element Wavelength:	Y 224.306 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:17:51AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

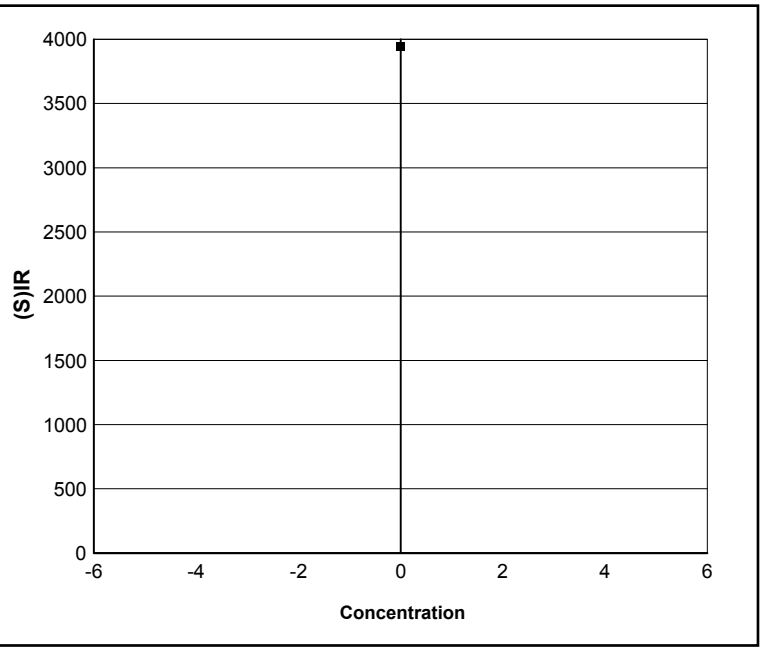
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000			0.0000	1,156	0.2576	1



Element Name:	Y
Element Wavelength:	Y 360.073 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:17:51AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

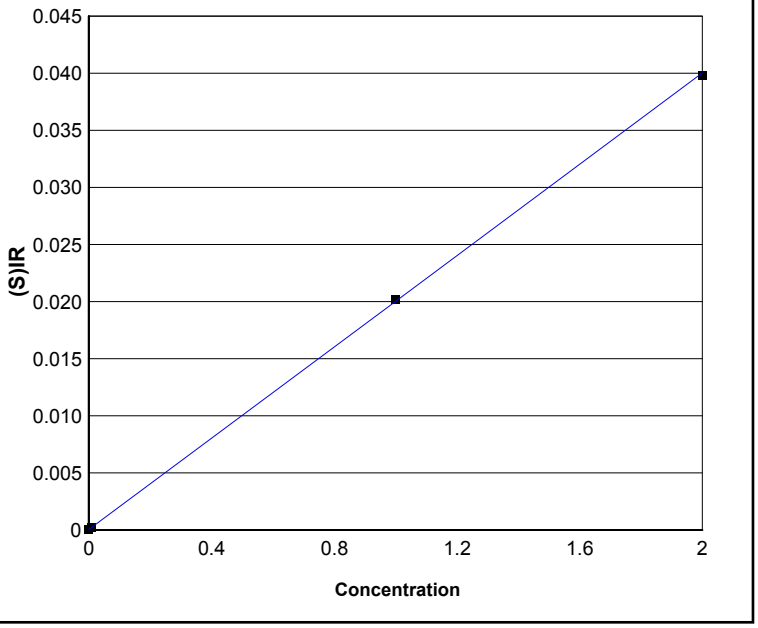
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000			0.0000	35,680	39.96	1



Element Name:	Y
Element Wavelength:	Y 377.433 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:17:51AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.0000
A0 (Offset):	0.0000
A1 (Gain):	0.0000
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		**QC Normalize**	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

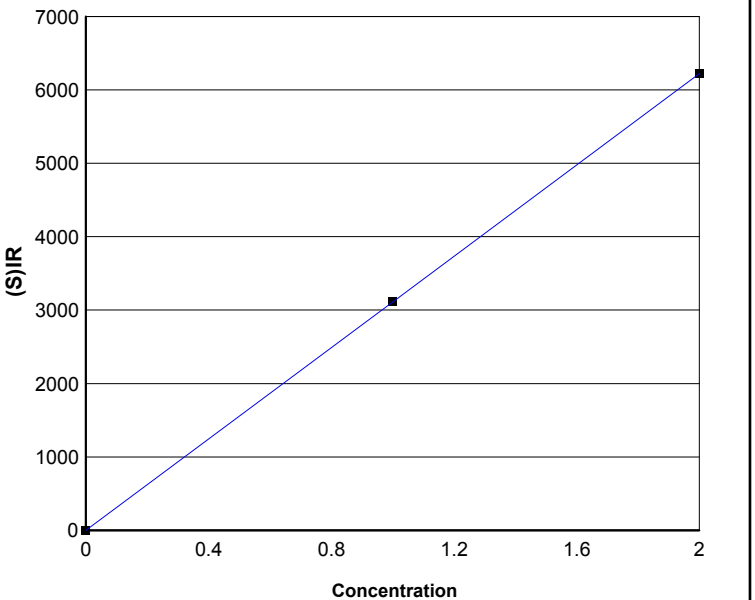
Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000			0.0000	3,947	8.043	1



Element Name:	Zn
Element Wavelength:	Zn 206.200 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	0.99998
A0 (Offset):	0.000042154
A1 (Gain):	0.019991
A2 (Curvature):	0.00000
n (Exponent):	1.0000

Reslope		QC Normalize	
Slope:	1.0000	**Slope factor:**	1.0000
Y Int:	0.00000	**Offset:**	0.00000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.00000	0.0000005125	0.0000005125	0.00000	0.000042164	0.0000019660	1
IC-5395711	0.010000	0.0094399	-0.00056008	-5.6008	0.00023072	0.000022286	1
IC-5385806	1.0000	1.0089	0.0089481	0.89481	0.020176	0.000026791	1
IC-5377549	2.0000	1.9916	-0.0083875	-0.41937	0.039784	0.00026611	1



Element Name:	Zr
Element Wavelength:	Zr 343.823 nm
Concentration Units:	ppm
Date of Calibration:	7/16/2019 11:29:21AM
Date of Fit:	7/16/2019 12:39:40PM
Type of Fit:	Linear
Correlation:	1.0000
A0 (Offset):	1.276
A1 (Gain):	3,109
A2 (Curvature):	0.0000
n (Exponent):	1.000

Reslope		QC Normalize	
Slope:	1.000	**Slope factor:**	1.000
Y Int:	0.0000	**Offset:**	0.0000

Standard Name	Stated	Found	Diff	% Diff	(S)IR	Stddev	Emphasis
ICIS-5392763	0.0000	0.0000004415	-0.0000004415	0.0000	1.275	3.005	1
IC-5385806	1.000	1.001	0.0008830	0.08830	3,113	6.141	1
IC-5377549	2.000	1.999	-0.0008830	-0.04415	6,217	12.95	1

Sample Name: ICIS-5392763 Acquired: 7/16/2019 11:13:43 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Ba4554-2	Be3130
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00013**	**.00194**	**.00031**	**.00564**	**.00507**	**.00252**	**-.00049**
Stddev	.00000	.00024	.00039	.00020	.00029	.00014	.00001
%RSD	3.0590	12.387	125.80	3.5272	5.7708	5.4848	2.5129
#1	-.00012	.00177	.00059	.00549	.00486	.00262	-.00048
#2	-.00013	.00211	.00003	.00578	.00528	.00242	-.00050

Elem	Ca3179	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00412**	**.00083**	**.0015**	**-.00072**	**.00002**	**-.00063**	**.00067**
Stddev	.00029	.00001	.0006	.00004	.00000	.00000	.00006
%RSD	7.1113	1.2008	40.07	5.0130	19.745	.46646	9.6309
#1	.00433	.00084	.0019	-.00074	.00003	-.00064	.00071
#2	.00391	.00082	.0011	-.00069	.00002	-.00063	.00062

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576-2	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00052**	**.00382**	**-.00822**	**-.00003**	**.00027**	**.00073**	**.00052**
Stddev	.00039	.00009	.00256	.00001	.00018	.00005	.00003
%RSD	75.739	2.3785	31.111	43.901	67.501	6.1969	5.4585
#1	.00024	.00375	-.01002	-.00004	.00039	.00076	.00050
#2	.00080	.00388	-.00641	-.00002	.00014	.00070	.00054

Elem	Na5895	Na8183	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00512**	**-.02036**	**-.00102**	**3.411**	**.00015**	**.0043**	**.00067**
Stddev	.00005	.00153	.00003	.092	.00002	.0005	.00040
%RSD	.96682	7.5036	2.9063	2.706	11.863	11.44	59.893
#1	.00516	-.01928	-.00104	3.346	.00016	.0047	.00095
#2	.00509	-.02144	-.00099	3.477	.00013	.0040	.00038

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00047**	**.00206**	**.00008**	**-.00271**	**-.4818**	**.00012**	**-.00072**
Stddev	.00012	.00068	.00011	.00020	.0514	.00013	.00017
%RSD	24.549	33.263	133.69	7.4849	10.67	108.66	22.881
#1	.00055	.00254	.00016	-.00285	-.5182	.00003	-.00061
#2	.00039	.00157	.00000	-.00256	-.4455	.00021	-.00084

Sample Name: ICIS-5392763 Acquired: 7/16/2019 11:13:43 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	U_4090	V_2924	Zn2062	Zr3438
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**10.93**	**.00007**	**.00004**	**1.275**
Stddev	.80	.00008	.00000	3.005
%RSD	7.326	108.75	4.6627	235.7
#1	11.49	.00002	.00004	3.400
#2	10.36	.00013	.00004	-.8500
Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1589.6**	**1155.7**	**35681.**	**3947.5**
Stddev	2.4	.3	40.	8.0
%RSD	.15151	.02229	.11200	.20376
#1	1591.3	1155.5	35652.	3941.8
#2	1587.9	1155.8	35709.	3953.2

Sample Name: IC-5395711 Acquired: 7/16/2019 11:17:54 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Ba4554-2	Be3130
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00224**	**.01190**	**.00209**	**.03625**	**.03925**	**.04334**	**.02533**
Stddev	.00000	.00028	.00005	.00048	.00212	.00006	.00048
%RSD	.11730	2.3278	2.2200	1.3134	5.3928	.12832	1.8845
#1	.00224	.01170	.00206	.03592	.03775	.04330	.02499
#2	.00224	.01209	.00212	.03659	.04074	.04338	.02567

Elem	Ca3179	Cd2288	Co2286	Cr2677	Cu3273	Fe2599	Fe2714
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.13679**	**.00814**	**.00472**	**.00087**	**.00319**	**.00889**	**.00084**
Stddev	.00002	.00023	.00027	.00004	.00000	.00026	.00056
%RSD	.01237	2.7640	5.7406	5.0100	.13335	2.8718	66.872
#1	.13678	.00798	.00453	.00090	.00319	.00907	.00044
#2	.13681	.00830	.00491	.00084	.00320	.00871	.00124

Elem	K_7664	Li6707	Mg2790	Mn2576-2	Mn2576	Mo2020	Na5895
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.06688**	**.08668**	**.00483**	**.00371**	**.00440**	**.01265**	**.54130**
Stddev	.00040	.00326	.00006	.00028	.00002	.00013	.00147
%RSD	.59871	3.7622	1.2867	7.5729	.54357	1.0654	.27182
#1	.06660	.08899	.00487	.00351	.00439	.01255	.54234
#2	.06717	.08438	.00478	.00391	.00442	.01274	.54026

Elem	Na8183	Ni2316	Pb2203	S_1820	Sb2068	Se1960	Si2881
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**-.00343**	**.00897**	**.00317**	**.0158**	**.00571**	**.00265**	**.03131**
Stddev	.00127	.00044	.00071	.0002	.00053	.00027	.00023
%RSD	36.921	4.9539	22.279	1.247	9.2500	10.225	.73115
#1	-.00432	.00865	.00267	.0157	.00534	.00284	.03147
#2	-.00253	.00928	.00367	.0160	.00608	.00246	.03115

Elem	Sn1899	Sr4077	Ti3349	Tl1908	V_2924	Zn2062
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.00159**	**.12078**	**.00256**	**.00199**	**.00184**	**.00023**
Stddev	.00017	.00190	.00002	.00002	.00001	.00002
%RSD	10.959	1.5691	.87976	.75718	.75156	9.6590
#1	.00146	.12212	.00254	.00198	.00185	.00025
#2	.00171	.11944	.00257	.00200	.00183	.00021

Sample Name: IC-5395711 Acquired: 7/16/2019 11:17:54 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1586.6	1149.2	35659.	3946.1
Stddev	1.5	.2	123.	5.9
%RSD	.09491	.01729	.34507	.15024
#1	1587.7	1149.0	35746.	3941.9
#2	1585.6	1149.3	35572.	3950.3

Sample Name: IC-5385806 Acquired: 7/16/2019 11:21:59 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Ba4554-2	Be3130
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.40737	2.4000	.11540	.84666	16.045	19.739	12.437
Stddev	.00058	.0048	.00008	.00068	.024	.041	.018
%RSD	.14193	.19930	.07307	.08030	.14736	.20637	.14320
#1	.40696	2.4034	.11546	.84714	16.062	19.710	12.450
#2	.40778	2.3966	.11534	.84618	16.028	19.767	12.425

Elem	Ca3179	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	13.137	3.6923	.0727	1.3662	.21336	.40316	8.2095
Stddev	.021	.0014	.0003	.0024	.00060	.00004	.0073
%RSD	.16267	.03662	.4617	.17601	.28054	.01103	.08827
#1	13.152	3.6933	.0729	1.3645	.21293	.40313	8.2147
#2	13.122	3.6914	.0724	1.3679	.21378	.40319	8.2044

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576-2	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.44803	6.5171	3.2885	1.2025	.95225	1.2904	1.2654
Stddev	.00329	.0039	.0042	.0016	.00273	.0012	.0008
%RSD	.73332	.06008	.12800	.13128	.28623	.09555	.06493
#1	.45036	6.5199	3.2915	1.2014	.95417	1.2895	1.2660
#2	.44571	6.5144	3.2855	1.2036	.95032	1.2913	1.2648

Elem	Na5895	Na8183	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	28.092	.91278	.96030	4155.	.30706	1.752	.23433
Stddev	.015	.00361	.00143	1.	.00071	.002	.00065
%RSD	.05289	.39570	.14856	.0289	.23185	.1353	.27836
#1	28.103	.91534	.95929	4155.	.30655	1.754	.23479
#2	28.082	.91023	.96130	4154.	.30756	1.750	.23387

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.10486	.52952	.17631	25.815	238.1	.50554	.14645
Stddev	.00041	.00402	.00002	.016	1.3	.00068	.00013
%RSD	.39218	.75961	.01277	.06158	.5316	.13545	.09092
#1	.10515	.52667	.17632	25.826	239.0	.50505	.14654
#2	.10457	.53236	.17629	25.804	237.2	.50602	.14635

Sample Name: IC-5385806 Acquired: 7/16/2019 11:21:59 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	U_4090	V_2924	Zn2062	Zr3438
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**241.9**	**.38313**	**.02018**	**3113.**
Stddev	2.1	.00060	.00003	6.
%RSD	.8651	.15582	.13279	.1972
#1	243.4	.38271	.02016	3118.
#2	240.4	.38355	.02019	3109.

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1478.4**	**1113.3**	**33852.**	**3889.0**
Stddev	1.9	.3	50.	1.1
%RSD	.12619	.03007	.14663	.02935
#1	1479.8	1113.6	33887.	3889.8
#2	1477.1	1113.1	33817.	3888.2

Sample Name: IC-5377549 Acquired: 7/16/2019 11:25:43 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Ba4554-2	Be3130
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.81077**	**4.8366**	**.23440**	**1.6774**	**32.224**	**38.931**	**24.721**
Stddev	.00402	.0040	.00053	.0017	.015	.094	.014
%RSD	.49613	.08277	.22678	.09932	.04768	.24176	.05538
#1	.81362	4.8338	.23402	1.6762	32.213	38.997	24.711
#2	.80793	4.8395	.23477	1.6786	32.235	38.864	24.731

Elem	Ca3179	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**26.255**	**7.3954**	**.1469**	**2.7678**	**.42125**	**.82368**	**16.308**
Stddev	.041	.0171	.0014	.0041	.00243	.00247	.012
%RSD	.15801	.23084	.9580	.14795	.57770	.29995	.07165
#1	26.226	7.3833	.1479	2.7707	.42297	.82193	16.299
#2	26.285	7.4075	.1459	2.7649	.41953	.82542	16.316

Elem	Fe2714	K_7664	Li6707	Mg2790	Mn2576-2	Mn2576	Mo2020
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.89196**	**13.325**	**6.7398**	**2.4157**	**1.8959**	**2.5641**	**2.5021**
Stddev	.00419	.001	.0049	.0026	.0030	.0139	.0001
%RSD	.46927	.00523	.07200	.10573	.15610	.54208	.00215
#1	.89492	13.324	6.7432	2.4175	1.8980	2.5739	2.5020
#2	.88900	13.325	6.7364	2.4139	1.8938	2.5542	2.5021

Elem	Na5895	Na8183	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**57.322**	**1.8571**	**1.9407**	**8245.**	**.62170**	**3.536**	**.47071**
Stddev	.014	.0006	.0076	10.	.00126	.000	.00042
%RSD	.02405	.03464	.38936	.1185	.20340	.0024	.08970
#1	57.332	1.8567	1.9460	8251.	.62081	3.536	.47041
#2	57.312	1.8576	1.9354	8238.	.62259	3.536	.47101

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**.21123**	**1.0570**	**.35976**	**52.023**	**467.4**	**1.0092**	**.29410**
Stddev	.00098	.0012	.00007	.026	.0	.0013	.00022
%RSD	.46437	.10910	.01983	.04944	.0012	.12992	.07516
#1	.21192	1.0578	.35981	52.005	467.4	1.0082	.29426
#2	.21053	1.0561	.35971	52.041	467.3	1.0101	.29394

Sample Name: IC-5377549 Acquired: 7/16/2019 11:25:43 Type: Cal
Method: ICAP1 New Stds (v90) Mode: IR Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	U_4090	V_2924	Zn2062	Zr3438
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**463.7**	**.76291**	**.03978**	**6217.**
Stddev	2.8	.00174	.00027	13.
%RSD	.5997	.22833	.66888	.2083
#1	461.7	.76414	.03997	6227.
#2	465.7	.76168	.03960	6208.

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1410.7**	**1098.9**	**33012.**	**3844.2**
Stddev	.1	1.1	44.	5.2
%RSD	.00490	.10335	.13407	.13419
#1	1410.7	1099.7	32981.	3847.8
#2	1410.8	1098.1	33044.	3840.5

Sample Name: ICV-5374275 Acquired: 7/16/2019 11:29:28 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.72364**	**36.088**	**.72353**	**.73900**	**.73491**	**.75686**	**36.242**
Stddev	.00448	.051	.00193	.00094	.00005	.00109	.127
%RSD	.61857	.14087	.26652	.12702	.00675	.14466	.34908
#1	.72048	36.052	.72490	.73966	.73495	.75608	36.153
#2	.72681	36.124	.72217	.73834	.73488	.75763	36.332
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.73444**	**-.0143**	**.72619**	**.74468**	**.72311**	**36.439**	**35.904**
Stddev	.00164	.0095	.00060	.00363	.00218	.135	.040
%RSD	.22382	66.59	.08204	.48723	.30113	.37132	.11097
#1	.73560	-.0076	.72661	.74211	.72157	36.343	35.876
#2	.73328	-.0211	.72577	.74724	.72465	36.534	35.932
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.72513**	**35.839**	**.74376**	**.76854**	**35.639**	**.73154**	**17.77**
Stddev	.00230	.041	.00467	.00103	.025	.00034	.00
%RSD	.31757	.11456	.62750	.13384	.07004	.04623	.0107
#1	.72676	35.810	.74046	.76926	35.622	.73178	17.77
#2	.72350	35.868	.74706	.76781	35.657	.73130	17.77
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: ICV-5374275 Acquired: 7/16/2019 11:29:28 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.71829**	**18.11**	**.77750**	W **.71094**	**7.3381**	**.71411**	**.73385**
Stddev	.00154	.02	.00388	.00403	.0495	.00369	.00101
%RSD	.21421	.1355	.49885	.56698	.67488	.51688	.13751
#1	.71938	18.09	.78024	.70809	7.3031	.71672	.73314
#2	.71721	18.13	.77475	.71379	7.3731	.71150	.73456
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value				.75000			
Range				-5.0000%			

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0602**	**.74621**	**.72723**	**2.298**	**.74394**	**.73871**	**.0027**
Stddev	.0028	.00296	.00008	.046	.00180	.00893	.0001
%RSD	4.622	.39722	.01143	2.007	.24152	1.2088	1.911
#1	.0621	.74412	.72729	2.266	.74267	.73239	.0027
#2	.0582	.74831	.72717	2.331	.74521	.74502	.0027
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1479.5**	**1098.4**	**33765.**	**3880.6**
Stddev	4.0	2.3	98.	2.4
%RSD	.27198	.20561	.28927	.06292
#1	1476.7	1096.8	33834.	3882.3
#2	1482.4	1100.0	33696.	3878.9

Sample Name: ICB-5392763 Acquired: 7/16/2019 11:33:15 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00012	.01304	-.00275	.01588	.00004	.00000	-.00169	.00012
Stddev	.00018	.02425	.00276	.00018	.00000	.00004	.00006	.00002
%RSD	144.81	185.91	100.11	1.1040	5.6847	9544.0	3.7371	14.289
#1	-.00000	.03019	-.00470	.01576	.00004	-.00003	-.00165	.00014
#2	.00025	-.00410	-.00080	.01601	.00004	.00003	-.00174	.00011
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0083	.00001	.00005	.00045	-.00183	.00665	.00045	-.00134
Stddev	.0166	.00015	.00005	.00017	.00021	.01508	.00043	.00076
%RSD	198.6	1461.7	98.429	38.072	11.571	226.84	95.008	56.286
#1	-.0201	-.00009	.00009	.00033	-.00198	-.00402	.00075	-.00188
#2	.0034	.00012	.00002	.00057	-.00168	.01731	.00015	-.00081
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.00021	.00030	.00448	.00030	.0011	-.00040	-.0286	-.00004
Stddev	.00000	.00020	.00109	.00025	.0044	.00023	.0007	.00061
%RSD	.73269	66.788	24.342	83.433	386.8	57.608	2.298	1360.2
#1	-.00022	.00016	.00371	.00047	-.0020	-.00056	-.0290	-.00047
#2	-.00021	.00044	.00525	.00012	.0043	-.00024	-.0281	.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB-5392763 Acquired: 7/16/2019 11:33:15 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00295	.06479	-.00084	-.00003	-.0061	.00020	.00066	-.0055
Stddev	.00169	.00563	.00006	.00003	.0044	.00019	.00081	.0023
%RSD	57.267	8.6950	7.6320	123.00	72.87	91.872	121.92	41.20
#1	.00414	.06081	-.00080	-.00000	-.0030	.00007	.00123	-.0071
#2	.00176	.06878	-.00089	-.00005	-.0093	.00034	.00009	-.0039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	-.00051	-.00083	-.0004
Stddev	.00032	.00005	.0005
%RSD	61.968	5.5938	130.1
#1	-.00073	-.00080	-.0000
#2	-.00029	-.00086	-.0008
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1586.1	1151.9	35680.	3956.1
Stddev	2.9	.5	37.	12.8
%RSD	.18077	.04453	.10474	.32429
#1	1584.1	1151.5	35707.	3947.0
#2	1588.1	1152.3	35654.	3965.2

Sample Name: ICVL-5395711 Acquired: 7/16/2019 11:37:10 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00616**	**.20312**	**.01178**	F **.03754**	**.00210**	**.00203**	**.50100**
Stddev	.00017	.00416	.00034	.00022	.00001	.00008	.00583
%RSD	2.8247	2.0480	2.9060	.57535	.50012	4.0076	1.1643
#1	.00628	.20606	.01203	.03769	.00211	.00209	.50513
#2	.00603	.20018	.01154	.03738	.00209	.00198	.49688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	**-.0085**	**.00373**	**.00391**	**.00953**	**.04861**	**.48426**
Stddev	.00000	.0033	.00020	.00036	.00046	.00233	.00760
%RSD	.23580	39.37	5.4769	9.2585	4.8215	4.7986	1.5696
#1	.00190	-.0108	.00387	.00416	.00920	.05026	.48963
#2	.00190	-.0061	.00358	.00365	.00985	.04696	.47888
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02855**	**.20455**	**.00291**	**.00996**	**.95103**	**.01024**	**-.0229**
Stddev	.00114	.00224	.00003	.00025	.00134	.00036	.0006
%RSD	4.0050	1.0954	.91567	2.5584	.14074	3.5554	2.729
#1	.02774	.20614	.00293	.00978	.95008	.00999	-.0224
#2	.02935	.20297	.00289	.01014	.95198	.01050	-.0233
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: ICVL-5395711 Acquired: 7/16/2019 11:37:10 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00986**	**.1662**	**.02180**	**.02634**	**.56672**	**.00871**	**.00478**
Stddev	.00041	.0080	.00110	.00015	.00263	.00032	.00009
%RSD	4.1539	4.801	5.0404	.58387	.46415	3.7049	1.8427
#1	.00957	.1606	.02257	.02623	.56486	.00893	.00484
#2	.01015	.1718	.02102	.02645	.56858	.00848	.00472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0018**	**.00470**	**.01867**	**-.0357**	**.00424**	**.00964**	**-.0014**
Stddev	.0013	.00009	.00032	.0527	.00011	.00089	.0001
%RSD	70.59	1.9148	1.7224	147.8	2.5927	9.2258	11.01
#1	.0009	.00477	.01845	.0016	.00417	.00901	-.0015
#2	.0027	.00464	.01890	-.0730	.00432	.01027	-.0013
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1592.4**	**1152.0**	**35597.**	**3919.4**
Stddev	.1	.4	10.	21.5
%RSD	.00782	.03280	.02901	.54936
#1	1592.3	1151.7	35605.	3904.2
#2	1592.5	1152.3	35590.	3934.6

Sample Name: ICV-5374275 Acquired: 7/16/2019 11:49:33 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.73527**	**36.464**	**.71873**	**.73527**	**.74198**	**.75497**	**36.335**
Stddev	.00370	.059	.00505	.00003	.00097	.00026	.018
%RSD	.50329	.16236	.70305	.00464	.13016	.03378	.04846
#1	.73265	36.506	.71515	.73525	.74266	.75479	36.348
#2	.73788	36.422	.72230	.73530	.74129	.75515	36.323
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.73369**	**-.0227**	**.72728**	**.75205**	**.71879**	**37.020**	**35.811**
Stddev	.00106	.0073	.00047	.00295	.00008	.003	.049
%RSD	.14450	32.31	.06515	.39162	.01124	.00843	.13809
#1	.73444	-.0175	.72762	.74997	.71884	37.023	35.776
#2	.73294	-.0279	.72695	.75413	.71873	37.018	35.846
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.73756**	**35.784**	**.75241**	**.76362**	**35.899**	**.72901**	**17.83**
Stddev	.00407	.017	.00340	.00028	.050	.00149	.01
%RSD	.55131	.04867	.45234	.03687	.14051	.20406	.0707
#1	.74043	35.772	.75000	.76382	35.934	.72795	17.82
#2	.73468	35.796	.75481	.76342	35.863	.73006	17.84
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: ICV-5374275 Acquired: 7/16/2019 11:49:33 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.71382**	**18.01**	**.77545**	W **.70440**	**7.4538**	**.71265**	**.73661**
Stddev	.00109	.02	.00482	.00519	.0033	.00038	.00023
%RSD	.15314	.1127	.62189	.73650	.04469	.05337	.03160
#1	.71304	18.03	.77886	.70073	7.4561	.71238	.73645
#2	.71459	18.00	.77204	.70806	7.4514	.71292	.73678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value				.75000			
Range				-5.0000%			

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0579**	**.74486**	**.72626**	**2.285**	**.74469**	**.74327**	**.0009**
Stddev	.0037	.00157	.00215	.051	.00120	.00092	.0007
%RSD	6.325	.21061	.29590	2.254	.16093	.12329	83.13
#1	.0605	.74375	.72778	2.249	.74384	.74391	.0004
#2	.0553	.74596	.72474	2.322	.74554	.74262	.0014
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1487.6**	**1105.9**	**33609.**	**3842.4**
Stddev	2.5	1.8	31.	20.6
%RSD	.16507	.16676	.09270	.53619
#1	1485.9	1104.6	33631.	3827.9
#2	1489.3	1107.2	33587.	3857.0

Sample Name: ICB-5392763 Acquired: 7/16/2019 11:53:18 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00030**	**-.00520**	**.01707**	**.00002**	**-.00001**	**.00058**	**.00002**
Stddev	.00001	.00315	.00343	.00002	.00000	.00002	.00388	.00003
%RSD	5.7147	1055.5	65.945	.09690	10.288	302.90	670.34	155.90
#1	.00023	.00252	-.00763	.01706	.00002	.00001	.00332	.00004
#2	.00021	-.00193	-.00278	.01708	.00001	-.00002	-.00216	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0048**	**.00009**	**.00018**	**.00025**	**.00077**	**.01249**	**.00068**	**.00037**
Stddev	.0096	.00026	.00044	.00000	.00094	.00146	.00086	.00241
%RSD	199.4	276.78	236.64	.35820	122.04	11.683	127.23	645.99
#1	.0020	.00028	-.00012	.00024	.00011	.01146	.00129	.00208
#2	-.0116	-.00009	.00049	.00025	.00143	.01352	.00007	-.00133
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00020**	**.00006**	**.00216**	**-.00005**	**-.0006**	**-.00104**	**-.0274**	**.00022**
Stddev	.00006	.00014	.00230	.00019	.0004	.00171	.0005	.00430
%RSD	27.537	222.68	106.42	412.89	69.28	164.43	1.813	1956.3
#1	-.00024	-.00004	.00053	.00009	-.0003	.00017	-.0270	.00326
#2	-.00016	.00016	.00379	-.00018	-.0008	-.00225	-.0277	-.00282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICB-5392763 Acquired: 7/16/2019 11:53:18 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00287	.07122	-.00105	-.00001	.0019	-.00005	-.00078	.0056
Stddev	.00331	.00648	.00036	.00004	.0044	.00013	.00020	.0147
%RSD	115.22	9.1015	34.711	689.70	228.9	288.46	25.270	264.1
#1	.00521	.06664	-.00079	.00002	-.0012	-.00014	-.00064	-.0048
#2	.00053	.07580	-.00130	-.00003	.0050	.00005	-.00091	.0160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	-.00054	-.00055	-.0013
Stddev	.00004	.00012	.0006
%RSD	6.6748	22.314	46.48
#1	-.00052	-.00063	-.0009
#2	-.00057	-.00046	-.0018
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1593.4	1158.9	35900.	3951.8
Stddev	2.5	.8	120.	7.2
%RSD	.15978	.07136	.33504	.18170
#1	1591.6	1158.3	35985.	3956.9
#2	1595.2	1159.5	35815.	3946.7

Sample Name: ICVL-5395711 Acquired: 7/16/2019 11:57:13 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00588**	**.20442**	**.01516**	F **.03666**	**.00211**	**.00201**	**.50427**
Stddev	.00045	.01676	.00177	.00025	.00001	.00002	.00022
%RSD	7.6416	8.1983	11.700	.68392	.62797	1.1601	.04292
#1	.00556	.21627	.01641	.03683	.00210	.00200	.50442
#2	.00620	.19257	.01390	.03648	.00212	.00203	.50412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00207**	**-.0070**	**.00380**	**.00419**	**.00949**	**.05104**	**.49973**
Stddev	.00010	.0310	.00012	.00020	.00007	.00155	.02577
%RSD	4.7533	445.8	3.0660	4.6762	.77649	3.0404	5.1569
#1	.00200	.0150	.00372	.00433	.00943	.04994	.51795
#2	.00214	-.0289	.00388	.00405	.00954	.05213	.48151
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02884**	**.19873**	**.00286**	**.01001**	**.94043**	**.01033**	**-.0226**
Stddev	.00031	.00360	.00006	.00014	.00334	.00007	.0025
%RSD	1.0697	1.8125	2.0435	1.3772	.35483	.65885	11.05
#1	.02906	.19618	.00290	.00992	.93807	.01028	-.0209
#2	.02862	.20128	.00281	.01011	.94279	.01038	-.0244
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: ICVL-5395711 Acquired: 7/16/2019 11:57:13 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01080**	**.1636**	**.02202**	**.02008**	**.54610**	**.00891**	**.00474**
Stddev	.00189	.0020	.00201	.00101	.00566	.00108	.00004
%RSD	17.510	1.215	9.1368	5.0182	1.0356	12.097	.74621
#1	.00946	.1650	.02345	.02080	.54210	.00967	.00471
#2	.01214	.1622	.02060	.01937	.55010	.00814	.00476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**.00477**	**.02025**	**.0015**	**.00452**	**.01018**	**-.0007**
Stddev	.0032	.00038	.00026	.0054	.00002	.00050	.0012
%RSD	2867.	7.9784	1.2998	356.3	.48173	4.9346	157.8
#1	-.0024	.00450	.02007	-.0023	.00450	.01054	-.0016
#2	.0022	.00504	.02044	.0053	.00453	.00983	.0001
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1599.4**	**1156.6**	**35815.**	**3954.9**
Stddev	.7	.2	15.	25.0
%RSD	.04435	.02087	.04230	.63110
#1	1598.9	1156.4	35825.	3972.5
#2	1599.9	1156.8	35804.	3937.2

Sample Name: ICSA-5361020 Acquired: 7/16/2019 12:01:08 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**509.10**	**.00066**	**.00404**	**.00156**	**-.00001**	**476.60**	**.00053**
Stddev	.00027	.18	.00012	.00036	.00001	.00000	1.68	.00005
%RSD	58.074	.03554	18.624	8.8368	.80863	26.966	.35230	9.5822
#1	.00066	509.23	.00075	.00429	.00157	-.00001	475.41	.00050
#2	.00027	508.97	.00058	.00378	.00155	-.00001	477.79	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0082**	**-.00063**	**.00276**	**-.00478**	**189.56**	**.00273**	**.00594**	**491.64**
Stddev	.0038	.00047	.00004	.00035	.19	.03625	.00076	2.05
%RSD	46.70	74.568	1.4746	7.3811	.10081	1330.1	12.777	.41725
#1	.0055	-.00096	.00273	-.00453	189.69	-.02291	.00648	490.19
#2	.0110	-.00030	.00279	-.00503	189.42	.02836	.00541	493.09
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**-.00243**	**.18538**	**-.00394**	**-.3893**	**.00082**	**-.0980**	**-.00474**
Stddev	.00020	.00056	.00206	.00067	.0077	.00065	.0058	.00401
%RSD	26.166	23.098	1.1132	17.076	1.987	79.466	5.925	84.718
#1	.00092	-.00283	.18392	-.00346	-.3838	.00128	-.1021	-.00757
#2	.00063	-.00203	.18684	-.00441	-.3947	.00036	-.0939	-.00190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: ICSA-5361020 Acquired: 7/16/2019 12:01:08 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.01083**	**.01926**	**.00127**	**-.00890**	**.1007**	**.00047**	**-.00681**	**.1146**
Stddev	.00054	.01016	.00138	.00017	.0175	.00026	.00091	.0084
%RSD	4.9517	52.774	108.40	1.8714	17.38	55.221	13.314	7.308
#1	-.01045	.01207	.00225	-.00878	.0883	.00029	-.00745	.1087
#2	-.01121	.02645	.00030	-.00901	.1131	.00065	-.00617	.1205
Check ?	Chk Pass	None	Chk Pass	None	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**-.00102**	**-.00231**	**.0060**
Stddev	.00014	.00358	.0004
%RSD	13.750	155.17	6.987
#1	-.00112	.00022	.0057
#2	-.00092	-.00484	.0063
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1265.7**	**995.14**	**30343.**	**3680.8**
Stddev	1.6	.89	66.	1.3
%RSD	.12403	.08921	.21853	.03438
#1	1264.6	994.52	30390.	3681.7
#2	1266.8	995.77	30296.	3679.9

Sample Name: ICSAB-5379501 Acquired: 7/16/2019 12:05:11 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.55456**	**514.00**	**.51096**	**5.0615**	**.52502**	**.25386**	**480.91**	**.53392**
Stddev	.00180	.67	.00251	.0121	.00115	.00069	2.64	.00099
%RSD	.32520	.13029	.49145	.23876	.21891	.26987	.54996	.18581
#1	.55328	514.47	.51273	5.0700	.52421	.25338	479.04	.53463
#2	.55583	513.53	.50918	5.0529	.52583	.25435	482.78	.53322
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0022**	**.50452**	**.49587**	**.54050**	**191.10**	**5.2491**	**.00582**	**495.00**
Stddev	.0016	.00080	.00202	.00138	.35	.0043	.00008	1.04
%RSD	75.50	.15802	.40817	.25622	.18136	.08109	1.3159	.20971
#1	-.0033	.50396	.49443	.53952	190.85	5.2461	.00576	494.27
#2	-.0010	.50509	.49730	.54147	191.34	5.2521	.00587	495.74
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	None	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.49418**	**.50944**	**5.4627**	**.49183**	**3.653**	**.50340**	**-.1082**	**.52465**
Stddev	.00280	.00140	.0067	.00035	.010	.00030	.0046	.00140
%RSD	.56689	.27559	.12224	.07170	.2842	.06046	4.273	.26620
#1	.49220	.51044	5.4675	.49158	3.645	.50319	-.1050	.52366
#2	.49616	.50845	5.4580	.49208	3.660	.50362	-.1115	.52564
Check ?	Chk Pass	None	None	Chk Pass	None	Chk Pass	None	Chk Pass
Value								
Range								

Sample Name: ICSAB-5379501 Acquired: 7/16/2019 12:05:11 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.48583**	**5.0214**	**.50769**	**.49469**	**.1055**	**.50727**	**.48347**	**.0284**
Stddev	.00833	.0221	.00012	.00057	.0008	.00022	.00852	.0656
%RSD	1.7141	.44016	.02290	.11459	.7600	.04344	1.7630	231.3
#1	.49172	5.0057	.50777	.49509	.1061	.50712	.47744	.0748
#2	.47994	5.0370	.50761	.49429	.1049	.50743	.48949	-.0180
Check ?	Chk Pass	Chk Pass	None	None	None	None	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**.49902**	**.45420**	**.0071**
Stddev	.00075	.00077	.0005
%RSD	.15126	.16909	6.737
#1	.49848	.45366	.0075
#2	.49955	.45475	.0068
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1263.4**	**993.88**	**30266.**	**3678.3**
Stddev	1.4	3.45	49.	9.0
%RSD	.11446	.34763	.16310	.24575
#1	1262.4	991.43	30301.	3684.7
#2	1264.4	996.32	30231.	3671.9

Sample Name: ICEX1 Acquired: 7/16/2019 12:09:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**-.00819**	**4.9904**	**.00141**	**.00016**
Stddev	.00015	.00884	.0145	.00038	.00001
%RSD	32.725	107.92	.28967	27.032	6.1656
#1	.00036	-.00194	5.0006	.00168	.00017
#2	.00057	-.01444	4.9802	.00114	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00102**	**.01178**	**.00168**	**-.0080**	**.00006**
Stddev	.00001	.00230	.00017	.0159	.00004
%RSD	1.0393	19.517	9.9007	198.8	65.395
#1	-.00102	.01015	.00156	.0032	.00008
#2	-.00103	.01340	.00180	-.0192	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**23.461**	**.00228**	**.01480**	**-.00006**
Stddev	.00001	.059	.00186	.01315	.00057
%RSD	12.920	.25041	81.584	88.883	1007.0
#1	.00007	23.420	.00359	.00550	-.00046
#2	.00008	23.503	.00096	.02409	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 7/16/2019 12:09:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00467**	F **.00849**	**-.00080**	**.00145**	**.00046**
Stddev	.00094	.00008	.00000	.00615	.00010
%RSD	20.193	.99562	.42820	424.56	22.318
#1	.00533	.00855	-.00080	-.00290	.00053
#2	.00400	.00843	-.00081	.00580	.00039
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.00300			
Low Limit		-.00300			

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.00311**	**-.0091**	**-.00055**	**.00639**
Stddev	-----	.00041	.0009	.00019	.00155
%RSD	-----	13.102	9.720	34.926	24.242
#1	^ -----	.00340	-.0085	-.00069	.00529
#2	^ -----	.00283	-.0097	-.00042	.00748
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00686**	**-.00041**	**.00001**	**.0027**	**-.00146**
Stddev	.00096	.00002	.00001	.0054	.00015
%RSD	14.003	5.3583	44.940	195.7	10.353
#1	.00618	-.00043	.00002	.0065	-.00135
#2	.00754	-.00040	.00001	-.0010	-.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX1 Acquired: 7/16/2019 12:09:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00662**	**-.2062**	**5.0181**	**.00415**	**-.0017**
Stddev	.00019	.0073	.0014	.00076	.0002
%RSD	2.8399	3.536	.02844	18.337	10.29
#1	-.00648	-.2113	5.0191	.00362	-.0016
#2	-.00675	-.2010	5.0171	.00469	-.0018
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1617.8**	**1180.2**	**36106.**	**4023.0**
Stddev	.4	.6	94.	15.7
%RSD	.02619	.05074	.26038	.39040
#1	1618.1	1179.8	36173.	4034.1
#2	1617.5	1180.7	36040.	4011.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.78%	102.13%	101.19%	101.91%
Range				

Sample Name: ICEX2 Acquired: 7/16/2019 12:13:13 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00106**	**.01378**	**-.00107**	**.00754**	**.00006**
Stddev	.00030	.01133	.00101	.00023	.00000
%RSD	27.940	82.198	94.306	3.0493	2.4355
#1	-.00127	.02180	-.00179	.00770	.00006
#2	-.00085	.00577	-.00036	.00738	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00187**	**.00394**	**-.00000**	**-.0190**	**-.00032**
Stddev	.00001	.00098	.00010	.0114	.00015
%RSD	.46244	24.772	5697.2	60.00	48.434
#1	-.00186	.00325	-.00007	-.0271	-.00021
#2	-.00187	.00464	.00007	-.0110	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**-.00186**	**-.00290**	**.01130**	**10.001**
Stddev	.00018	.00043	.00100	.00537	.020
%RSD	40.635	23.184	34.482	47.505	.19574
#1	.00056	-.00216	-.00360	.00750	9.9872
#2	.00031	-.00155	-.00219	.01509	10.015
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 7/16/2019 12:13:13 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.04538**	**-.00020**	**-.00040**	**.00310**	**.00410**
Stddev	.00085	.00004	.00029	.00669	.00011
%RSD	1.8698	18.674	72.621	216.00	2.6292
#1	-.04598	-.00023	-.00019	-.00163	.00402
#2	-.04478	-.00017	-.00061	.00782	.00418
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0056**	**.00428**	**-.0372**	**.00125**	**.00285**
Stddev	.0030	.00018	.0056	.00041	.00219
%RSD	53.32	4.2564	14.99	32.914	76.876
#1	-.0077	.00415	-.0332	.00096	.00440
#2	-.0035	.00441	-.0411	.00154	.00130
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.155**	**-.00009**	**.00015**	**.0034**	**19.934**
Stddev	.304	.00053	.00003	.0007	.083
%RSD	.61846	621.96	22.773	20.36	.41404
#1	48.940	.00029	.00018	.0029	19.875
#2	49.370	-.00046	.00013	.0038	19.992
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX2 Acquired: 7/16/2019 12:13:13 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.081**	**-.0088**	**-.00103**	**-.00013**	**.0018**
Stddev	.005	.0024	.00001	.00125	.0018
%RSD	.02295	26.87	1.0294	949.87	98.07
#1	20.077	-.0071	-.00102	.00075	.0006
#2	20.084	-.0105	-.00104	-.00102	.0031
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1549.7**	**1136.0**	**34835.**	**3904.0**
Stddev	.1	.9	18.	1.7
%RSD	.00911	.08198	.05117	.04248
#1	1549.6	1135.3	34823.	3905.2
#2	1549.8	1136.6	34848.	3902.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.491%	98.297%	97.631%	98.900%
Range				

Sample Name: ICEX3 Acquired: 7/16/2019 12:17:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00346**	**.03757**	**.00062**	**.00030**	**-.00001**
Stddev	.00000	.00012	.00006	.00032	.00000
%RSD	.13652	.32483	9.8027	108.93	19.281
#1	-.00347	.03766	.00066	.00007	-.00001
#2	-.00346	.03749	.00058	.00053	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.01239**	**.00026**	**-.0595**	**.00026**
Stddev	.00002	.00147	.00000	.0125	.00005
%RSD	1306.9	11.902	.26858	21.07	20.575
#1	.00002	.01135	.00027	-.0683	.00022
#2	-.00001	.01343	.00026	-.0506	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00106**	**.00104**	**.00885**	**.03602**	**.00042**
Stddev	.00018	.00008	.00121	.00425	.00074
%RSD	16.741	7.2629	13.680	11.790	174.32
#1	.00118	.00099	.00799	.03302	.00095
#2	.00093	.00110	.00970	.03902	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 7/16/2019 12:17:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01734**	**52.226**	**-.00265**	**.00825**	**.00088**
Stddev	.00163	.118	.00000	.00198	.00032
%RSD	9.4193	.22597	.05684	24.028	36.764
#1	-.01619	52.309	-.00266	.00685	.00065
#2	-.01850	52.142	-.00265	.00965	.00110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0030**	**.00484**	**99.62**	**-.00190**	**-.00830**
Stddev	.0017	.00094	.35	.00050	.00143
%RSD	56.08	19.371	.3523	26.507	17.275
#1	-.0018	.00550	99.37	-.00225	-.00729
#2	-.0041	.00418	99.87	-.00154	-.00932
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03090**	**-.00112**	**.00002**	**-.0018**	**.00138**
Stddev	.00807	.00134	.00003	.0009	.00001
%RSD	26.127	120.11	147.20	49.80	.45397
#1	.03661	-.00207	.00004	-.0012	.00137
#2	.02519	-.00017	-.00000	-.0024	.00138
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX3 Acquired: 7/16/2019 12:17:09 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00001	-.1368	-.00030	.00429	-.0032
Stddev	.00060	.0153	.00017	.00083	.0013
%RSD	5695.0	11.19	55.395	19.339	40.69
#1	.00043	-.1476	-.00042	.00488	-.0023
#2	-.00041	-.1260	-.00018	.00371	-.0041
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1606.8	1159.4	35656.	3993.6
Stddev	.7	1.2	25.	3.7
%RSD	.04184	.10595	.06943	.09350
#1	1607.3	1160.2	35638.	3996.2
#2	1606.4	1158.5	35673.	3990.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.09%	100.32%	99.930%	101.17%
Range				

Sample Name: ICEX4 Acquired: 7/16/2019 12:21:04 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**-.04945**	**.00106**	**-.00094**	**.00002**
Stddev	.00005	.00747	.00287	.00022	.00000
%RSD	36.505	15.108	271.54	23.577	.35165
#1	-.00018	-.05474	-.00097	-.00078	.00002
#2	-.00011	-.04417	.00309	-.00109	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.01232**	**-.00096**	**.0076**	**19.522**
Stddev	.00007	.00280	.00005	.0078	.010
%RSD	487.75	22.759	5.0495	101.8	.05241
#1	.00006	.01430	-.00093	.0131	19.529
#2	-.00003	.01033	-.00100	.0021	19.514
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.226**	**.00983**	**.00047**	**.01547**	**-.00009**
Stddev	.012	.00010	.00111	.00846	.00035
%RSD	.11714	1.0246	234.90	54.700	384.57
#1	10.234	.00990	.00125	.00949	.00016
#2	10.217	.00975	-.00031	.02145	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 7/16/2019 12:21:04 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00239**	**.00004**	**-.00030**	**-.00187**	**10.146**
Stddev	.00096	.00011	.00026	.00086	.006
%RSD	40.383	268.24	84.792	46.171	.05807
#1	-.00171	-.00004	-.00012	-.00248	10.150
#2	-.00307	.00012	-.00048	-.00126	10.142
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0243**	**-.00540**	**-.0586**	**.00014**	**-.00047**
Stddev	.0007	.00276	.0033	.00045	.00026
%RSD	2.709	50.995	5.607	322.04	56.147
#1	-.0239	-.00345	-.0563	-.00018	-.00028
#2	-.0248	-.00735	-.0609	.00046	-.00066
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.05409**	**-.00037**	**.00003**	**-.0005**	**.00004**
Stddev	.00687	.00029	.00002	.0009	.00028
%RSD	12.694	77.193	65.084	178.6	732.41
#1	-.05895	-.00057	.00002	.0001	-.00016
#2	-.04924	-.00017	.00005	-.0011	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX4 Acquired: 7/16/2019 12:21:04 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00358**	**.0134**	**.00036**	**-.00150**	**-.0023**
Stddev	.00147	.0249	.00011	.00042	.0015
%RSD	41.073	185.6	30.984	27.893	67.32
#1	.00254	-.0042	.00028	-.00179	-.0012
#2	.00463	.0310	.00044	-.00120	-.0034
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1562.1**	**1120.8**	**35229.**	**3907.5**
Stddev	2.2	.3	87.	.0
%RSD	.14187	.02748	.24804	.00058
#1	1560.5	1120.6	35168.	3907.5
#2	1563.6	1121.0	35291.	3907.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.271%	96.984%	98.735%	98.988%
Range				

Sample Name: ICEX5 Acquired: 7/16/2019 12:24:54 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.04046**	**-.00176**	**-.01589**	**-.00005**
Stddev	.00071	.00888	.00051	.00000	.00002
%RSD	141.60	21.950	29.072	.02080	35.841
#1	-.00000	.03418	-.00140	-.01589	-.00004
#2	.00100	.04674	-.00212	-.01590	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.02200**	**.00035**	**-.0038**	**-.00160**
Stddev	.00003	.00128	.00006	.0111	.00003
%RSD	46.810	5.8383	17.522	292.3	2.0090
#1	-.00008	.02290	.00039	.0040	-.00162
#2	-.00004	.02109	.00030	-.0116	-.00157
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**-.00054**	**-.00271**	**.01062**	**.00041**
Stddev	.00004	.00008	.00215	.01955	.00002
%RSD	15.554	14.638	79.477	184.12	5.4017
#1	.00029	-.00060	-.00423	.02445	.00039
#2	.00023	-.00049	-.00119	-.00321	.00042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 7/16/2019 12:24:54 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.05202**	**-.00013**	**5.1678**	**.01139**	**-.00007**
Stddev	.00764	.00007	.0133	.00108	.00001
%RSD	14.694	54.501	.25710	9.4941	18.738
#1	-.05743	-.00018	5.1584	.01063	-.00008
#2	-.04662	-.00008	5.1772	.01215	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0158**	**-.00026**	**-.0438**	**.00244**	**.00327**
Stddev	.0042	.00032	.0035	.00260	.00168
%RSD	26.84	125.41	7.897	106.49	51.299
#1	-.0188	-.00049	-.0463	.00428	.00208
#2	-.0128	-.00003	-.0414	.00060	.00445
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00101**	**-.00053**	**-.00001**	**-.0005**	**.00069**
Stddev	.00201	.00039	.00002	.0003	.00009
%RSD	199.69	74.235	245.08	55.80	13.023
#1	.00242	-.00080	.00001	-.0007	.00076
#2	-.00041	-.00025	-.00002	-.0003	.00063
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: ICEX5 Acquired: 7/16/2019 12:24:54 Type: Unk
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00180**	**-.0338**	**.00053**	**-.00084**	**-.0005**
Stddev	.00042	.0117	.00005	.00043	.0001
%RSD	23.608	34.63	9.3750	51.525	23.55
#1	-.00150	-.0421	.00050	-.00115	-.0006
#2	-.00210	-.0255	.00057	-.00053	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1562.8**	**1129.0**	**35540.**	**3911.0**
Stddev	.9	.3	64.	18.9
%RSD	.05992	.02858	.17926	.48393
#1	1562.2	1129.3	35585.	3897.6
#2	1563.5	1128.8	35495.	3924.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.317%	97.695%	99.605%	99.075%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 12:28:45 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99133**	**49.168**	**.97281**	**.98080**	**.98441**	**.99109**	**49.250**	**.98559**
Stddev	.00101	.373	.00202	.00054	.00555	.00342	.122	.00034
%RSD	.10178	.75816	.20769	.05532	.56405	.34554	.24832	.03466
#1	.99205	49.432	.97138	.98119	.98834	.99351	49.337	.98583
#2	.99062	48.904	.97424	.98042	.98048	.98866	49.164	.98535
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9944**	**.97918**	**.99626**	**.97776**	**50.325**	**48.593**	**.97967**	**49.246**
Stddev	.0133	.00200	.00263	.00251	.496	.054	.01094	.100
%RSD	1.338	.20375	.26372	.25712	.98544	.11024	1.1169	.20391
#1	1.004	.97777	.99812	.97953	50.676	48.555	.98741	49.317
#2	.9850	.98059	.99440	.97598	49.975	48.631	.97194	49.175
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99308**	**.99688**	**48.912**	**.98277**	**24.96**	**.98375**	**24.44**	**.98291**
Stddev	.00313	.00219	.262	.00006	.01	.00594	.05	.00343
%RSD	.31503	.21974	.53580	.00564	.0511	.60404	.2101	.34873
#1	.99529	.99843	49.098	.98273	24.96	.97954	24.40	.98533
#2	.99087	.99533	48.727	.98281	24.95	.98795	24.47	.98048
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 12:28:45 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98102	10.018	.97897	.98426	1.001	.99239	.98451	2.530
Stddev	.00215	.146	.00145	.00517	.016	.00314	.00281	.032
%RSD	.21925	1.4608	.14800	.52486	1.633	.31654	.28548	1.252
#1	.97950	10.122	.97999	.98791	.9896	.99461	.98252	2.508
#2	.98255	9.9150	.97794	.98060	1.013	.99017	.98650	2.553
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	.99392	1.0061	1.001
Stddev	.00248	.0030	.003
%RSD	.24942	.29708	.2878
#1	.99567	1.0082	1.003
#2	.99217	1.0040	.9986
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1487.3	1122.8	33991.	3892.2
Stddev	1.6	.1	45.	18.4
%RSD	.10660	.01176	.13213	.47263
#1	1488.4	1122.7	33959.	3879.2
#2	1486.2	1122.9	34023.	3905.2

Sample Name: CCB-5392763 Acquired: 7/16/2019 12:32:26 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**.01201**	**-.00192**	**.01782**	**.00002**	**.00003**	**.00023**	**.00004**
Stddev	.00004	.00414	.00185	.00000	.00000	.00000	.00192	.00012
%RSD	34.743	34.455	96.342	.01921	11.305	16.313	818.03	283.02
#1	.00009	.01493	-.00061	.01782	.00002	.00003	.00159	.00012
#2	.00015	.00908	-.00323	.01782	.00003	.00002	-.00112	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0056**	**-.00016**	**.00036**	**.00035**	**.00128**	**-.00524**	**.00036**	**-.00173**
Stddev	.0009	.00012	.00024	.00013	.00051	.00668	.00060	.00062
%RSD	15.76	71.113	65.567	37.526	39.612	127.37	166.29	35.793
#1	-.0062	-.00025	.00053	.00026	.00164	-.00052	.00079	-.00129
#2	-.0050	-.00008	.00020	.00045	.00092	-.00996	-.00006	-.00216
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**.00075**	**.00035**	**.00036**	**.0022**	**-.00021**	**-.0247**	**.00060**
Stddev	.00004	.00013	.00237	.00017	.0018	.00021	.0008	.00203
%RSD	18.856	17.487	670.62	47.167	81.41	98.118	3.111	339.19
#1	-.00016	.00065	.00203	.00024	.0009	-.00036	-.0242	-.00084
#2	-.00021	.00084	-.00132	.00049	.0035	-.00007	-.0253	.00204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 12:32:26 Type: QC
Method: ICAP1 New Stds (v91) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00134	.07012	-.00102	.00001	.0076	-.00032	.00098	-.0132
Stddev	.00379	.00499	.00031	.00001	.0007	.00007	.00187	.0405
%RSD	283.59	7.1186	29.968	146.86	9.149	22.512	192.03	306.2
#1	.00402	.06659	-.00080	.00001	.0081	-.00037	-.00035	-.0419
#2	-.00134	.07365	-.00123	-.00000	.0071	-.00026	.00230	.0154
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	.00000	-.00168	.0000
Stddev	.00012	.00100	.0002
%RSD	2814.8	59.301	1825.
#1	.00009	-.00098	-.0001
#2	-.00008	-.00239	.0001
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1580.1	1146.9	35641.	3976.2
Stddev	1.2	.7	58.	12.5
%RSD	.07559	.05803	.16267	.31388
#1	1579.3	1146.5	35682.	3967.4
#2	1581.0	1147.4	35600.	3985.1

Sample Name: CCVL-5395711 Acquired: 7/16/2019 12:44:42 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00563**	**.20322**	**.01554**	F **.03711**	**.00209**	**.00202**	**.50639**
Stddev	.00025	.00571	.00087	.00010	.00000	.00000	.00237
%RSD	4.4012	2.8095	5.6058	.27914	.05181	.16444	.46793
#1	.00580	.19918	.01492	.03718	.00210	.00202	.50471
#2	.00545	.20725	.01616	.03703	.00209	.00202	.50806
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00204**	**-.0029**	**.00388**	**.00450**	**.00915**	**.04695**	**.47044**
Stddev	.00007	.0005	.00019	.00038	.00029	.00291	.00233
%RSD	3.4424	15.80	4.8542	8.4906	3.1886	6.1955	.49620
#1	.00209	-.0026	.00402	.00423	.00894	.04489	.46879
#2	.00199	-.0032	.00375	.00477	.00935	.04900	.47209
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02896**	**.19950**	**.00281**	**.00994**	**.92550**	**.01019**	**-.0242**
Stddev	.00032	.00006	.00002	.00029	.00051	.00030	.0012
%RSD	1.1030	.02987	.87518	2.9495	.05552	2.9436	4.792
#1	.02874	.19954	.00280	.01015	.92586	.00998	-.0250
#2	.02919	.19946	.00283	.00974	.92514	.01040	-.0234
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 12:44:42 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01012**	**.1685**	**.01922**	**.02705**	**.55296**	**.00960**	**.00475**
Stddev	.00007	.0065	.00137	.00504	.01417	.00051	.00007
%RSD	.65466	3.848	7.1398	18.631	2.5625	5.2820	1.4251
#1	.01007	.1731	.01825	.03061	.54294	.00995	.00470
#2	.01016	.1639	.02019	.02349	.56298	.00924	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0077**	**.00462**	**.01792**	**.0049**	**.00444**	**.00998**	**-.0006**
Stddev	.0063	.00024	.00138	.0323	.00033	.00037	.0001
%RSD	80.69	5.1159	7.6797	653.2	7.3697	3.6762	21.96
#1	-.0033	.00479	.01889	-.0179	.00467	.00972	-.0005
#2	-.0122	.00445	.01694	.0278	.00421	.01024	-.0007
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1591.7**	**1154.0**	**35807.**	**3974.8**
Stddev	2.8	.5	162.	10.3
%RSD	.17288	.04526	.45296	.25807
#1	1589.8	1153.6	35922.	3982.1
#2	1593.6	1154.3	35692.	3967.6

Sample Name: LB 480-481794/1-C Acquired: 7/16/2019 12:48:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.08769**	**-.00038**	**.22942**	**.00038**
Stddev	.00023	.00266	.00145	.00199	.00000
%RSD	99.770	3.0279	380.49	.86957	1.0596
#1	-.00007	.08956	.00064	.22801	.00039
#2	-.00039	.08581	-.00141	.23083	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.31854**	**.00008**	**-.0190**	**-.00012**
Stddev	.00002	.00152	.00021	.0152	.00010
%RSD	54.302	.47662	268.85	79.68	87.209
#1	.00002	.31961	-.00007	-.0298	-.00005
#2	.00006	.31747	.00023	-.0083	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00676**	F **.01023**	**.03459**	**.03676**	**.00030**
Stddev	.00004	.00072	.00182	.02347	.00010
%RSD	.53222	6.9959	5.2485	63.858	31.842
#1	.00678	.01074	.03331	.05336	.00037
#2	.00673	.00973	.03588	.02016	.00023
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		.01000			
Low Limit		-.01000			

Sample Name: LB 480-481794/1-C Acquired: 7/16/2019 12:48:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02793**	**.00091**	**.00048**	**.40521**	**.00415**
Stddev	.00120	.00004	.00004	.00014	.00020
%RSD	4.2952	3.9956	8.0465	.03488	4.8633
#1	.02708	.00093	.00045	.40511	.00401
#2	.02878	.00088	.00050	.40531	.00429
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0245**	**-.00073**	**-.0226**	**.00044**	**.00042**
Stddev	.0019	.00061	.0034	.00042	.00427
%RSD	7.820	83.212	15.15	95.131	1027.1
#1	-.0259	-.00030	-.0250	.00074	-.00260
#2	-.0232	-.00116	-.0202	.00015	.00343
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **9.0494**	**-.00076**	**.00138**	**.0045**	**-.00008**
Stddev	.0895	.00097	.00002	.0003	.00016
%RSD	.98859	126.34	1.6700	6.053	194.47
#1	9.1127	-.00145	.00139	.0047	.00003
#2	8.9862	-.00008	.00136	.0043	-.00019
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: LB 480-481794/1-C Acquired: 7/16/2019 12:48:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00154**	**-.0395**	**-.00048**	**.01348**	**-.0010**
Stddev	.00108	.0053	.00018	.00016	.0004
%RSD	70.053	13.39	38.478	1.1767	38.58
#1	-.00078	-.0357	-.00061	.01359	-.0012
#2	-.00230	-.0432	-.00035	.01337	-.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.3**	**1144.3**	**35842.**	**4001.3**
Stddev	2.6	.4	31.	8.0
%RSD	.16104	.03404	.08697	.20034
#1	1588.1	1144.6	35820.	3995.6
#2	1584.5	1144.0	35864.	4007.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.795%	99.017%	100.45%	101.36%
Range				

Sample Name: MB 480-481816/2-A Acquired: 7/16/2019 12:52:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.08542**	**-.00291**	**.03414**	**.00013**
Stddev	.00013	.00870	.00081	.00006	.00001
%RSD	56.002	10.185	27.969	.17198	10.570
#1	.00031	.09157	-.00349	.03409	.00012
#2	.00014	.07927	-.00234	.03418	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.23579**	**.00011**	**-.0082**	**-.00017**
Stddev	.00003	.00252	.00002	.0137	.00019
%RSD	139.23	1.0677	23.032	168.6	114.65
#1	-.00004	.23757	.00012	.0016	-.00003
#2	-.00000	.23401	.00009	-.0179	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**.00041**	**.01496**	**.02247**	**.00040**
Stddev	.00020	.00040	.00106	.00528	.00052
%RSD	46.128	96.283	7.0738	23.480	130.37
#1	.00058	.00070	.01421	.02620	.00077
#2	.00030	.00013	.01570	.01874	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-481816/2-A Acquired: 7/16/2019 12:52:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00752**	**.00093**	**-.00019**	**.02764**	**.00089**
Stddev	.00266	.00003	.00005	.00044	.00001
%RSD	35.337	3.4616	25.343	1.6067	.71307
#1	.00940	.00091	-.00023	.02732	.00088
#2	.00564	.00095	-.00016	.02795	.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0013**	**.00009**	**-.0236**	**-.00063**	**-.00248**
Stddev	.0004	.00139	.0030	.00066	.00399
%RSD	29.58	1506.0	12.82	105.71	161.14
#1	.0015	.00107	-.0214	-.00016	.00035
#2	.0010	-.00089	-.0257	-.00110	-.00530
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.13340**	**-.00108**	**.00141**	**.0028**	**-.00003**
Stddev	.00882	.00005	.00001	.0053	.00041
%RSD	6.6134	4.6818	.60459	187.9	1208.8
#1	.12716	-.00104	.00140	-.0009	-.00032
#2	.13964	-.00112	.00141	.0066	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-481816/2-A Acquired: 7/16/2019 12:52:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00085**	**-.0334**	**-.00012**	**.00297**	**-.0003**
Stddev	.00060	.0752	.00016	.00020	.0001
%RSD	70.513	225.3	133.45	6.7293	23.32
#1	.00043	-.0866	-.00001	.00311	-.0004
#2	.00128	.0198	-.00023	.00283	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1584.0**	**1149.2**	**35854.**	**3989.8**
Stddev	.3	.3	15.	17.1
%RSD	.01596	.02760	.04302	.42849
#1	1584.2	1149.0	35865.	4001.9
#2	1583.8	1149.4	35843.	3977.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.650%	99.439%	100.49%	101.07%
Range				

Sample Name: LCS 480-481816/3-A Acquired: 7/16/2019 12:56:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99413**	**.08320**	**1.0023**	**.22279**	**1.0048**
Stddev	.00232	.00512	.0002	.00003	.0031
%RSD	.23328	6.1500	.02288	.01216	.31278
#1	.99577	.07958	1.0021	.22281	1.0070
#2	.99249	.08682	1.0025	.22277	1.0026
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0391**	**.28047**	**.99278**	**-.0065**	**.98338**
Stddev	.0015	.00482	.00165	.0005	.00039
%RSD	.14759	1.7189	.16667	6.960	.04001
#1	1.0402	.27706	.99395	-.0068	.98310
#2	1.0381	.28388	.99161	-.0062	.98366
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0299**	**.97647**	**.00434**	**.03173**	**.00089**
Stddev	.0011	.00335	.00084	.00010	.00054
%RSD	.10855	.34278	19.301	.30591	60.150
#1	1.0306	.97410	.00493	.03180	.00051
#2	1.0291	.97883	.00375	.03166	.00127
Check ?	Chk Pass	Chk Pass	None	None	None
High Limit					
Low Limit					

Sample Name: LCS 480-481816/3-A Acquired: 7/16/2019 12:56:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01879**	**1.0155**	**1.0467**	**.38994**	**1.0257**
Stddev	.00217	.0017	.0027	.00223	.0016
%RSD	11.535	.16913	.26288	.57184	.15743
#1	.01726	1.0167	1.0486	.38837	1.0245
#2	.02032	1.0143	1.0447	.39152	1.0268
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-2.408**	**.96681**	F **-.0288**	**1.0818**	**.96081**
Stddev	.004	.00315	.0004	.0022	.00259
%RSD	.1726	.32596	1.222	.20677	.26990
#1	-2.411	.96458	-.0286	1.0834	.96264
#2	-2.405	.96904	-.0291	1.0802	.95897
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			1.200		
Low Limit			.8000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.3850**	**.00035**	**.99170**	**-.0011**	**-.00006**
Stddev	.0409	.00003	.00275	.0027	.00002
%RSD	.43602	8.7231	.27754	249.5	30.870
#1	9.4139	.00033	.99365	-.0030	-.00005
#2	9.3560	.00037	.98976	.0008	-.00007
Check ?	None	None	None	None	None
High Limit					
Low Limit					

Sample Name: LCS 480-481816/3-A Acquired: 7/16/2019 12:56:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.97415**	**-.0725**	**.99192**	**1.0431**	**-.0008**
Stddev	.00205	.0293	.00100	.0061	.0004
%RSD	.21069	40.44	.10054	.58853	56.52
#1	.97560	-.0518	.99121	1.0387	-.0005
#2	.97270	-.0932	.99263	1.0474	-.0011
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1584.9**	**1138.3**	**35592.**	**3977.3**
Stddev	1.9	1.4	33.	7.4
%RSD	.11919	.12028	.09199	.18639
#1	1586.3	1137.3	35616.	3972.0
#2	1583.6	1139.3	35569.	3982.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.710%	98.497%	99.753%	100.75%
Range				

Sample Name: LCSD 480-481816/4-A Acquired: 7/16/2019 13:00:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.96766**	**.11030**	**.97068**	**.22374**	**.97866**
Stddev	.00039	.00336	.00166	.00076	.00201
%RSD	.04048	3.0495	.17113	.34070	.20517
#1	.96738	.11268	.96951	.22320	.98008
#2	.96794	.10792	.97185	.22428	.97724
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0093**	**.32717**	**.96386**	**.0014**	**.95379**
Stddev	.0007	.00471	.00058	.0010	.00031
%RSD	.07235	1.4381	.06055	70.79	.03226
#1	1.0088	.33050	.96345	.0007	.95401
#2	1.0098	.32385	.96427	.0021	.95358
Check ?	Chk Pass	None	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.99822**	**.94547**	**.00317**	**.04325**	**.00007**
Stddev	.00385	.00252	.00071	.01146	.00039
%RSD	.38540	.26685	22.275	26.488	516.08
#1	.99550	.94725	.00366	.05135	-.00020
#2	1.0009	.94369	.00267	.03515	.00035
Check ?	Chk Pass	Chk Pass	None	None	None
High Limit					
Low Limit					

Sample Name: LCSD 480-481816/4-A Acquired: 7/16/2019 13:00:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01786**	**.99077**	**1.0158**	**.39309**	**.99708**
Stddev	.00054	.00079	.0000	.00075	.00132
%RSD	3.0142	.07938	.00257	.19131	.13240
#1	.01824	.99022	1.0158	.39256	.99801
#2	.01748	.99133	1.0158	.39362	.99615
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-2.332**	**.94141**	F **-.0273**	**1.0491**	**.93481**
Stddev	.002	.00223	.0001	.0008	.00410
%RSD	.0665	.23722	.4182	.08118	.43853
#1	-2.334	.94299	-.0274	1.0485	.93770
#2	-2.331	.93984	-.0272	1.0497	.93191
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			1.200		
Low Limit			.8000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.2507**	**-.00060**	**.96374**	**.0050**	**-.00025**
Stddev	.0725	.00038	.00174	.0069	.00054
%RSD	.78404	62.928	.18024	138.3	221.72
#1	9.3020	-.00033	.96497	.0001	-.00063
#2	9.1995	-.00086	.96251	.0099	.00014
Check ?	None	None	None	None	None
High Limit					
Low Limit					

Sample Name: LCSD 480-481816/4-A Acquired: 7/16/2019 13:00:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.94635**	**-.0513**	**.96349**	**1.0199**	**-.0007**
Stddev	.00083	.0240	.00036	.0002	.0003
%RSD	.08796	46.83	.03723	.02207	37.55
#1	.94694	-.0343	.96374	1.0201	-.0009
#2	.94576	-.0683	.96323	1.0198	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1582.2**	**1137.8**	**35583.**	**3970.7**
Stddev	.5	1.8	50.	29.2
%RSD	.02934	.15494	.14119	.73419
#1	1581.9	1139.1	35618.	3950.1
#2	1582.6	1136.6	35547.	3991.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.539%	98.455%	99.725%	100.59%
Range				

Sample Name: 480-155996-C-1-C Acquired: 7/16/2019 13:03:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.17936**	F **76.951**	**16.825**	**.04053**
Stddev	.00076	.00030	.111	.047	.00012
%RSD	413.05	.16710	.14434	.27794	.29529
#1	.00035	.17915	77.030	16.858	.04044
#2	-.00072	.17957	76.873	16.792	.04061
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			4.5000		
Low Limit			-.01500		

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**320.27**	**.04914**	**.0003**	**.31083**
Stddev	.00007	1.94	.00161	.0071	.00007
%RSD	254.79	.60619	3.2837	2509.	.02176
#1	.00002	321.64	.05028	.0053	.31087
#2	-.00008	318.90	.04800	-.0047	.31078
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46052**	**.12541**	**3.1839**	F **1082.3**	**1.4624**
Stddev	.00080	.00034	.0102	7.5	.0014
%RSD	.17344	.27068	.31977	.69349	.09636
#1	.46108	.12565	3.1767	1077.0	1.4634
#2	.45995	.12517	3.1911	1087.6	1.4614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-155996-C-1-C Acquired: 7/16/2019 13:03:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**59.444**	**.04078**	**3.8681**	F **12567.**	**3.3968**
Stddev	.068	.00017	.0052	45.	.0071
%RSD	.11364	.40721	.13449	.35970	.20887
#1	59.396	.04067	3.8718	12599.	3.3917
#2	59.492	.04090	3.8644	12535.	3.4018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.806**	**.00066**	F **2685.**	**.28054**	**.11799**
Stddev	.012	.00002	3.	.00276	.00649
%RSD	.2514	3.2468	.1128	.98270	5.5005
#1	4.814	.00064	2687.	.28249	.12258
#2	4.797	.00067	2683.	.27859	.11340
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.515**	**1.2100**	**1.4571**	**.0076**	**.02012**
Stddev	.000	.0009	.0019	.0097	.00039
%RSD	.00183	.07612	.13257	127.4	1.9540
#1	16.515	1.2107	1.4585	.0144	.01984
#2	16.516	1.2094	1.4558	.0008	.02040
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155996-C-1-C Acquired: 7/16/2019 13:03:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00248**	**-.0354**	**.22390**	**.08690**	**.1200**
Stddev	.00368	.0523	.00100	.00150	.0001
%RSD	148.40	147.8	.44604	1.7242	.1150
#1	-.00508	-.0724	.22319	.08584	.1201
#2	.00012	.0016	.22460	.08796	.1200
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**895.57**	**838.68**	**23035.**	**3279.1**
Stddev	.17	2.37	49.	2.2
%RSD	.01946	.28253	.21086	.06648
#1	895.45	837.01	23069.	3277.6
#2	895.69	840.36	23000.	3280.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	56.341%	72.572%	64.558%	83.069%
Range				

Sample Name: 480-155996-C-1-Csd@5 Acquired: 7/16/2019 13:07:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.06032**	F **14.104**	**3.4668**	**.00847**
Stddev	.00036	.00398	.039	.0063	.00001
%RSD	65.232	6.5947	.27454	.18066	.10884
#1	-.00030	.05750	14.077	3.4624	.00846
#2	-.00082	.06313	14.132	3.4713	.00848
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			4.5000		
Low Limit			-.01500		

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**66.271**	**.00445**	**.0023**	**.06164**
Stddev	.00002	.199	.00028	.0024	.00045
%RSD	70.368	.29969	6.3671	106.6	.72259
#1	-.00004	66.411	.00465	.0040	.06195
#2	-.00001	66.130	.00425	.0006	.06133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09713**	**.02121**	**.66187**	**208.36**	**.26709**
Stddev	.00029	.00031	.00067	.64	.00044
%RSD	.29828	1.4608	.10184	.30928	.16558
#1	.09733	.02143	.66235	208.82	.26740
#2	.09692	.02099	.66140	207.91	.26678
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155996-C-1-Csd@5 Acquired: 7/16/2019 13:07:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.631**	**.00848**	**.83370**	F **2414.5**	**.69873**
Stddev	.023	.00010	.00036	6.1	.00137
%RSD	.16526	1.1370	.04316	.25414	.19584
#1	13.647	.00855	.83396	2418.8	.69970
#2	13.615	.00841	.83345	2410.2	.69776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.010**	**.00103**	F **861.3**	**.05166**	**.00940**
Stddev	.002	.00043	1.6	.00036	.00025
%RSD	.1936	41.981	.1858	.70251	2.7088
#1	1.011	.00133	860.2	.05192	.00958
#2	1.009	.00072	862.4	.05141	.00922
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.0643**	**.23722**	**.29298**	**.0074**	**.00380**
Stddev	.0310	.00053	.00051	.0040	.00011
%RSD	1.0115	.22414	.17287	53.73	2.9857
#1	3.0424	.23685	.29334	.0046	.00388
#2	3.0863	.23760	.29262	.0102	.00372
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155996-C-1-Csd@5 Acquired: 7/16/2019 13:07:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00169**	**-.0560**	**.04554**	**.01538**	**.0224**
Stddev	.00053	.0150	.00037	.00055	.0002
%RSD	31.319	26.72	.80930	3.5535	.9453
#1	.00132	-.0454	.04528	.01577	.0226
#2	.00207	-.0666	.04580	.01499	.0223
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1197.1**	**996.20**	**28870.**	**3688.1**
Stddev	1.8	3.14	65.	1.8
%RSD	.14782	.31542	.22633	.04785
#1	1198.3	998.42	28916.	3689.4
#2	1195.8	993.98	28824.	3686.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.309%	86.202%	80.912%	93.430%
Range				

Sample Name: 480-155996-C-1-Cpds Acquired: 7/16/2019 13:11:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.5404**	**.18998**	F **77.741**	**16.738**	**1.0217**
Stddev	.0009	.00261	.087	.003	.0019
%RSD	.05941	1.3728	.11156	.01522	.18249
#1	1.5398	.19182	77.679	16.736	1.0231
#2	1.5411	.18814	77.802	16.739	1.0204
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			4.5000		
Low Limit			-.01500		

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.94074**	**319.14**	**1.3080**	**.0062**	**1.3436**
Stddev	.00067	.66	.0006	.0036	.0005
%RSD	.07071	.20694	.04615	58.13	.03896
#1	.94121	318.67	1.3085	.0088	1.3440
#2	.94027	319.61	1.3076	.0037	1.3433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.4072**	**1.3593**	**3.1472**	F **1072.3**	**1.4518**
Stddev	.0026	.0027	.0171	2.2	.0016
%RSD	.18756	.19917	.54330	.20889	.11287
#1	1.4091	1.3574	3.1351	1070.7	1.4529
#2	1.4054	1.3613	3.1593	1073.9	1.4506
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-155996-C-1-Cpds Acquired: 7/16/2019 13:11:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**59.261**	**.98874**	F **4.7991**	F **12447.**	**4.4171**
Stddev	.093	.00058	.0030	36.	.0022
%RSD	.15621	.05894	.06167	.28644	.04981
#1	59.327	.98832	4.7970	12472.	4.4156
#2	59.196	.98915	4.8012	12422.	4.4187
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Fail	Chk Pass
High Limit			4.5000	900.00	
Low Limit			-.01000	-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.428**	**1.0223**	F **2681.**	**1.5151**	**1.6148**
Stddev	.004	.0031	8.	.0063	.0061
%RSD	.1269	.30736	.3118	.41684	.37669
#1	3.425	1.0245	2675.	1.5195	1.6191
#2	3.431	1.0201	2687.	1.5106	1.6105
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.330**	**1.2050**	**1.4476**	**.0077**	**.01974**
Stddev	.053	.0036	.0021	.0086	.00001
%RSD	.32679	.29982	.14282	111.4	.06452
#1	16.293	1.2025	1.4461	.0016	.01975
#2	16.368	1.2076	1.4491	.0138	.01973
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155996-C-1-Cpds Acquired: 7/16/2019 13:11:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.91895**	**-.0923**	**1.2248**	**1.0784**	**.1191**
Stddev	.00387	.0085	.0034	.0032	.0022
%RSD	.42081	9.180	.27662	.29763	1.838
#1	.92169	-.0863	1.2224	1.0807	.1206
#2	.91622	-.0983	1.2272	1.0762	.1176
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**894.02**	**837.88**	**22976.**	**3279.7**
Stddev	.49	.17	43.	8.8
%RSD	.05464	.02030	.18856	.26789
#1	893.67	837.76	23006.	3285.9
#2	894.37	838.00	22945.	3273.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	56.243%	72.502%	64.393%	83.083%
Range				

Sample Name: MB 480-482031/1-A Acquired: 7/16/2019 13:55:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.03399**	**-.00044**	F **.24586**	**.00039**
Stddev	.00013	.00234	.00027	.00042	.00002
%RSD	898.06	6.8937	62.107	.17042	5.6346
#1	-.00008	.03233	-.00025	.24557	.00040
#2	.00011	.03564	-.00063	.24616	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.06720**	**.00007**	**-.0202**	**-.00006**
Stddev	.00006	.00219	.00012	.0111	.00005
%RSD	10129.	3.2563	175.23	55.17	83.255
#1	.00004	.06875	.00015	-.0123	-.00002
#2	-.00004	.06565	-.00002	-.0281	-.00009
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00343**	**.00044**	F **.08280**	**.05253**	**.00129**
Stddev	.00038	.00014	.00032	.01713	.00044
%RSD	11.222	31.995	.39188	32.603	33.782
#1	.00315	.00034	.08257	.06465	.00098
#2	.00370	.00054	.08303	.04042	.00160
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.05000		
Low Limit			-.04000		

Sample Name: MB 480-482031/1-A Acquired: 7/16/2019 13:55:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00928**	**.00179**	F **.00886**	**.08740**	**.00040**
Stddev	.00116	.00006	.00026	.00017	.00029
%RSD	12.516	3.5671	2.8901	.18922	72.908
#1	.01010	.00174	.00867	.08751	.00019
#2	.00846	.00183	.00904	.08728	.00060
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			.00500		
Low Limit			-.00500		

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0289**	**-.00043**	**.0178**	**.00072**	**.00049**
Stddev	.0005	.00007	.0003	.00168	.00294
%RSD	1.877	16.966	1.657	233.22	601.27
#1	.0292	-.00048	.0176	.00190	.00257
#2	.0285	-.00038	.0180	-.00047	-.00159
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **1.4223**	F **.02739**	**.00016**	**.0029**	**.00050**
Stddev	.0133	.00059	.00002	.0021	.00035
%RSD	.93306	2.1682	14.179	73.44	71.124
#1	1.4316	.02781	.00017	.0044	.00025
#2	1.4129	.02697	.00014	.0014	.00075
Check ?	Chk Fail	Chk Fail	Chk Pass	None	Chk Pass
High Limit	.50000	.01000			
Low Limit	-.50000	-.01000			

Sample Name: MB 480-482031/1-A Acquired: 7/16/2019 13:55:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.0196**	**-.00057**	**.00375**	**-.0015**
Stddev	.00098	.0203	.00017	.00046	.0009
%RSD	5307.1	103.9	30.113	12.169	56.39
#1	.00068	.0052	-.00045	.00407	-.0009
#2	-.00071	.0339	-.00069	.00343	-.0021
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1561.8**	**1127.0**	**35224.**	**3940.8**
Stddev	.2	.2	28.	2.3
%RSD	.00991	.01931	.07913	.05742
#1	1561.9	1126.9	35204.	3942.4
#2	1561.6	1127.2	35244.	3939.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.251%	97.521%	98.720%	99.831%
Range				

Sample Name: LCSSRM 480-482031/2- Acquired: 7/16/2019 13:58:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.59104**	**88.971**	**1.7257**	**1.5476**	**2.4147**
Stddev	.00130	.056	.0058	.0017	.0048
%RSD	.22072	.06273	.33420	.11055	.19754
#1	.59012	89.010	1.7216	1.5488	2.4181
#2	.59197	88.931	1.7298	1.5464	2.4113
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.83798**	**40.767**	**1.2000**	**1.205**	**1.6979**
Stddev	.00019	.114	.0021	.002	.0013
%RSD	.02285	.28014	.17095	.1743	.07575
#1	.83785	40.687	1.2014	1.204	1.6970
#2	.83812	40.848	1.1985	1.207	1.6988
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.4407**	**.92361**	**134.46**	**22.177**	**.06591**
Stddev	.0048	.00133	.23	.004	.00059
%RSD	.33082	.14422	.17077	.01846	.89291
#1	1.4373	.92455	134.29	22.180	.06550
#2	1.4441	.92267	134.62	22.174	.06633
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Sample Name: LCSSRM 480-482031/2- Acquired: 7/16/2019 13:58:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.847**	**2.9415**	**.93752**	**1.9018**	**.88581**
Stddev	.033	.0153	.00228	.0036	.00333
%RSD	.15876	.52052	.24336	.18808	.37617
#1	20.870	2.9307	.93590	1.9044	.88345
#2	20.823	2.9524	.93913	1.8993	.88816
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.663**	**.73885**	**.7212**	**.64657**	**.41543**
Stddev	.010	.00170	.0012	.00584	.00216
%RSD	.2647	.23031	.1675	.90363	.52089
#1	3.656	.74005	.7220	.65070	.41696
#2	3.670	.73765	.7203	.64244	.41390
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.6977**	**.72489**	**.79171**	**.2759**	**4.7385**
Stddev	.0859	.00289	.00072	.0042	.0063
%RSD	1.1160	.39925	.09137	1.507	.13400
#1	7.6369	.72284	.79222	.2788	4.7341
#2	7.7584	.72693	.79119	.2729	4.7430
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCSSRM 480-482031/2- Acquired: 7/16/2019 13:58:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.56601	.0735	.54718	2.2413	.0669
Stddev	.00339	.0235	.00209	.0076	.0004
%RSD	.59928	31.94	.38196	.34101	.5610
#1	.56361	.0569	.54570	2.2358	.0666
#2	.56841	.0900	.54866	2.2467	.0671
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1477.5	1250.6	38937.	4469.7
Stddev	1.0	1.7	16.	5.2
%RSD	.06961	.13285	.03986	.11526
#1	1476.8	1249.4	38948.	4473.4
#2	1478.2	1251.8	38926.	4466.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.950%	108.21%	109.13%	113.23%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 14:02:39 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99521**	**48.858**	**.98322**	**.98178**	**.98176**	**.98946**	**49.210**	**.98483**
Stddev	.00519	.020	.00533	.00084	.00182	.00138	.075	.00017
%RSD	.52121	.04177	.54193	.08604	.18514	.13957	.15244	.01746
#1	.99154	48.843	.97945	.98238	.98048	.98848	49.263	.98471
#2	.99888	48.872	.98699	.98118	.98305	.99043	49.157	.98495
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9951**	**.97946**	**.99622**	**.98263**	**49.657**	**48.645**	**.97792**	**49.210**
Stddev	.0033	.00114	.00147	.00223	.323	.091	.00330	.088
%RSD	.3328	.11684	.14796	.22657	.65043	.18700	.33782	.17863
#1	.9927	.97865	.99518	.98106	49.429	48.581	.97558	49.148
#2	.9974	.98027	.99726	.98420	49.886	48.709	.98025	49.272
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0035**	**.99735**	**48.933**	**.98444**	**24.89**	**.97871**	**24.50**	**.97975**
Stddev	.0032	.00045	.127	.00216	.03	.00320	.02	.00434
%RSD	.31720	.04473	.26032	.21992	.1316	.32670	.0761	.44304
#1	1.0013	.99704	48.843	.98291	24.87	.98097	24.49	.97668
#2	1.0058	.99767	49.023	.98597	24.91	.97645	24.51	.98282
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 14:02:39 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98001	9.9552	.97611	.98295	.9974	.99680	.98397	2.469
Stddev	.00045	.0162	.00060	.00201	.0231	.00008	.00027	.047
%RSD	.04553	.16236	.06101	.20492	2.317	.00837	.02748	1.886
#1	.97970	9.9438	.97653	.98152	.9811	.99686	.98416	2.436
#2	.98033	9.9666	.97569	.98437	1.014	.99674	.98378	2.502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	.99739	1.0039	.9969
Stddev	.00031	.0003	.0044
%RSD	.03095	.02646	.4421
#1	.99760	1.0040	.9937
#2	.99717	1.0037	1.0000
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1487.7	1120.8	33932.	3907.0
Stddev	1.3	.7	138.	10.9
%RSD	.08876	.06324	.40544	.27867
#1	1488.7	1120.3	34029.	3899.3
#2	1486.8	1121.3	33834.	3914.7

Sample Name: CCB-5392763 Acquired: 7/16/2019 14:06:19 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00492**	**.00303**	**.01992**	**.00004**	**.00005**	**-.00086**	**-.00004**
Stddev	.00012	.00270	.00092	.00025	.00001	.00006	.00176	.00003
%RSD	38.646	54.884	30.263	1.2638	36.614	116.61	205.90	72.868
#1	-.00022	.00683	.00368	.02009	.00003	.00010	-.00210	-.00006
#2	-.00039	.00301	.00238	.01974	.00005	.00001	.00039	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0001**	**-.00004**	**.00019**	**.00028**	**-.00076**	**.01734**	**.00093**	**-.00087**
Stddev	.0130	.00001	.00006	.00011	.00315	.00449	.00031	.00070
%RSD	11830.	13.996	33.013	38.091	416.54	25.879	32.808	80.848
#1	-.0093	-.00005	.00015	.00021	-.00298	.02052	.00072	-.00136
#2	.0091	-.00004	.00024	.00036	.00147	.01417	.00115	-.00037
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00060**	**.04020**	**.00029**	**.0029**	**-.00023**	**-.0094**	**-.00085**
Stddev	.00002	.00022	.00227	.00021	.0017	.00030	.0030	.00181
%RSD	7.7328	36.403	5.6395	72.716	58.83	130.07	31.79	212.54
#1	-.00023	.00045	.03859	.00014	.0041	-.00002	-.0115	.00043
#2	-.00025	.00076	.04180	.00044	.0017	-.00044	-.0073	-.00214
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 14:06:19 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00214**	**.07516**	**.00013**	**-.00004**	**.0032**	**.00002**	**-.00006**	**.0029**
Stddev	.00162	.00522	.00006	.00000	.0015	.00010	.00114	.0325
%RSD	75.790	6.9435	44.734	7.9568	47.24	482.24	1918.1	1110.
#1	.00328	.07147	.00018	-.00004	.0043	-.00005	-.00087	.0259
#2	.00099	.07885	.00009	-.00003	.0022	.00009	.00075	-.0200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**-.00022**	**-.00083**	**.0005**
Stddev	.00008	.00103	.0009
%RSD	36.321	124.57	179.2
#1	-.00028	-.00156	-.0001
#2	-.00016	-.00010	.0011
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1581.1**	**1146.5**	**35516.**	**3928.9**
Stddev	.1	.9	23.	11.4
%RSD	.00470	.07555	.06464	.29004
#1	1581.1	1147.1	35500.	3937.0
#2	1581.0	1145.9	35533.	3920.9

Sample Name: CCVL-5395711 Acquired: 7/16/2019 14:10:11 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00564**	**.19556**	**.01313**	F **.03857**	**.00211**	**.00201**	**.50112**
Stddev	.00017	.01334	.00130	.00025	.00000	.00005	.00231
%RSD	2.9615	6.8198	9.8876	.64228	.18959	2.6781	.46178
#1	.00552	.18613	.01222	.03875	.00211	.00205	.50276
#2	.00575	.20499	.01405	.03840	.00211	.00197	.49949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00202**	**-.0062**	**.00382**	**.00457**	**.00959**	**.05115**	**.50280**
Stddev	.00007	.0005	.00005	.00007	.00011	.00340	.00224
%RSD	3.3598	8.417	1.3603	1.5410	1.1025	6.6434	.44633
#1	.00197	-.0065	.00378	.00452	.00967	.04875	.50439
#2	.00207	-.0058	.00385	.00462	.00952	.05356	.50122
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02898**	**.19957**	**.00297**	**.00979**	**.97977**	**.01074**	**-.0238**
Stddev	.00020	.00148	.00007	.00004	.00696	.00005	.0024
%RSD	.68473	.74192	2.5097	.40585	.71081	.45511	10.17
#1	.02884	.19853	.00292	.00976	.98470	.01078	-.0255
#2	.02912	.20062	.00303	.00982	.97485	.01071	-.0221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 14:10:11 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00966**	**.1817**	**.02179**	**.02360**	**.55476**	**.00918**	**.00479**
Stddev	.00033	.0016	.00113	.00131	.01617	.00015	.00002
%RSD	3.4074	.8542	5.1783	5.5680	2.9140	1.5873	.49214
#1	.00989	.1828	.02259	.02267	.54333	.00908	.00480
#2	.00942	.1806	.02099	.02453	.56619	.00928	.00477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0017**	**.00491**	**.01835**	**.0082**	**.00436**	**.01126**	**-.0005**
Stddev	.0053	.00040	.00049	.0340	.00007	.00052	.0008
%RSD	315.0	8.0975	2.6623	412.7	1.5640	4.6225	168.4
#1	.0054	.00519	.01869	-.0158	.00431	.01089	-.0010
#2	-.0021	.00463	.01800	.0323	.00441	.01162	.0001
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1592.7**	**1153.1**	**35555.**	**3951.7**
Stddev	4.9	2.7	93.	.2
%RSD	.30520	.23568	.26205	.00488
#1	1589.3	1151.2	35489.	3951.8
#2	1596.1	1155.0	35621.	3951.5

Sample Name: 240-115578-B-1-A Acquired: 7/16/2019 14:14:03 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00044**	**79.450**	**.08076**	**.44959**	**.55872**
Stddev	.00034	.348	.00124	.00054	.00369
%RSD	77.447	.43772	1.5360	.12039	.66072
#1	.00068	79.696	.07989	.44920	.55611
#2	.00020	79.204	.08164	.44997	.56133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00338**	**862.19**	**.00186**	**.2950**	**.04635**
Stddev	.00002	2.42	.00011	.0050	.00035
%RSD	.65196	.28032	5.8211	1.691	.75290
#1	.00336	860.48	.00194	.2985	.04660
#2	.00339	863.90	.00179	.2914	.04611
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09910**	**.10698**	**112.52**	**30.571**	**.14186**
Stddev	.00082	.00010	.44	.047	.00106
%RSD	.83020	.09355	.39157	.15332	.74997
#1	.09852	.10705	112.83	30.604	.14261
#2	.09969	.10691	112.20	30.538	.14111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-A Acquired: 7/16/2019 14:14:03 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **482.92**	**3.8550**	**.00401**	**3.6670**	**.11272**
Stddev	4.51	.0130	.00023	.0095	.00015
%RSD	.93467	.33683	5.7548	.25934	.13234
#1	479.72	3.8458	.00418	3.6738	.11283
#2	486.11	3.8642	.00385	3.6603	.11262
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.854**	**.27281**	**23.78**	**.00028**	**-.00116**
Stddev	.005	.00007	.03	.00151	.00454
%RSD	.1851	.02396	.1346	543.23	390.47
#1	2.857	.27286	23.76	.00135	-.00437
#2	2.850	.27276	23.80	-.00079	.00205
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.773**	**.03632**	**2.9297**	**.0860**	**1.0167**
Stddev	.134	.00029	.0046	.0030	.0054
%RSD	1.1388	.80878	.15564	3.471	.53293
#1	11.868	.03612	2.9329	.0881	1.0206
#2	11.678	.03653	2.9264	.0839	1.0129
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-A Acquired: 7/16/2019 14:14:03 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00077**	**.0121**	**.14332**	**.42310**	**.0583**
Stddev	.00141	.0745	.00005	.00576	.0000
%RSD	183.02	614.9	.03456	1.3615	.0779
#1	-.00177	-.0406	.14328	.41903	.0583
#2	.00023	.0648	.14335	.42718	.0583
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1220.8**	**1067.1**	**33079.**	**4041.3**
Stddev	.8	1.3	120.	13.4
%RSD	.06394	.11857	.36404	.33136
#1	1221.4	1066.2	33164.	4031.8
#2	1220.3	1068.0	32994.	4050.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.803%	92.334%	92.709%	102.38%
Range				

Sample Name: 240-115578-B-1-Asd@5 Acquired: 7/16/2019 14:18:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00041**	**18.436**	**.01211**	**.28745**	**.13899**
Stddev	.00018	.012	.00671	.00069	.00006
%RSD	44.535	.06289	55.411	.23920	.04318
#1	-.00028	18.428	.00737	.28793	.13895
#2	-.00053	18.444	.01686	.28696	.13904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00078**	**210.44**	**.00065**	**.0528**	**.00927**
Stddev	.00003	.44	.00001	.0044	.00012
%RSD	4.0988	.20773	1.5611	8.333	1.2421
#1	.00081	210.13	.00065	.0497	.00919
#2	.00076	210.75	.00064	.0559	.00935
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02462**	**.02256**	**26.156**	**6.6716**	**.03071**
Stddev	.00011	.00013	.007	.0179	.00066
%RSD	.45825	.56282	.02845	.26795	2.1618
#1	.02470	.02247	26.151	6.6589	.03118
#2	.02454	.02265	26.161	6.6842	.03024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-Asd@5 Acquired: 7/16/2019 14:18:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**112.65**	**.88711**	**.00050**	**.94983**	**.02344**
Stddev	.03	.00056	.00002	.00106	.00021
%RSD	.03091	.06337	3.8630	.11122	.88029
#1	112.67	.88751	.00048	.95057	.02359
#2	112.62	.88671	.00051	.94908	.02329
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.6240**	**.05522**	**5.087**	**-.00223**	**-.00506**
Stddev	.0077	.00057	.009	.00120	.00446
%RSD	1.242	1.0316	.1723	54.065	88.058
#1	.6294	.05562	5.093	-.00308	-.00821
#2	.6185	.05481	5.081	-.00138	-.00191
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.5617**	**.00625**	**.67576**	**.0243**	**.25579**
Stddev	.0316	.00033	.00090	.0026	.00933
%RSD	.88572	5.2424	.13330	10.53	3.6490
#1	3.5394	.00602	.67639	.0261	.26239
#2	3.5840	.00648	.67512	.0225	.24919
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-Asd@5 Acquired: 7/16/2019 14:18:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00063**	**-.0186**	**.03216**	**.10406**	**.0109**
Stddev	.00306	.0445	.00010	.00110	.0009
%RSD	484.27	239.7	.30110	1.0556	7.956
#1	-.00153	-.0500	.03223	.10483	.0115
#2	.00279	.0129	.03209	.10328	.0102
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1436.1**	**1095.1**	**33848.**	**3938.2**
Stddev	2.0	1.0	60.	4.5
%RSD	.13653	.08761	.17746	.11429
#1	1437.5	1095.8	33891.	3941.4
#2	1434.7	1094.5	33806.	3935.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.344%	94.763%	94.864%	99.766%
Range				

Sample Name: 240-115578-B-1-Apds Acquired: 7/16/2019 14:21:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.10032**	**95.532**	**.46038**	**.79782**	**.89226**
Stddev	.00014	.121	.00338	.00017	.00142
%RSD	.14433	.12667	.73514	.02186	.15886
#1	.10042	95.447	.45799	.79794	.89126
#2	.10022	95.618	.46278	.79770	.89327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37340**	**855.41**	**.39178**	**.2733**	**.44332**
Stddev	.00032	.68	.00058	.0002	.00154
%RSD	.08636	.07893	.14751	.0839	.34835
#1	.37318	855.89	.39219	.2731	.44223
#2	.37363	854.94	.39137	.2734	.44441
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.44207**	**.49247**	**125.46**	**48.745**	**.53501**
Stddev	.00029	.00057	.09	.001	.00229
%RSD	.06492	.11566	.06935	.00160	.42887
#1	.44228	.49287	125.52	48.745	.53339
#2	.44187	.49207	125.39	48.746	.53663
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-Apds Acquired: 7/16/2019 14:21:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **478.17**	**4.0463**	**.38059**	**22.534**	**.51379**
Stddev	1.73	.0065	.00030	.001	.00043
%RSD	.36102	.15991	.07887	.00570	.08336
#1	476.95	4.0418	.38038	22.535	.51349
#2	479.39	4.0509	.38080	22.533	.51410
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.025**	**.66746**	**22.85**	**.41674**	**.36780**
Stddev	.007	.00061	.03	.00154	.00714
%RSD	.3238	.09159	.1326	.37011	1.9425
#1	2.020	.66703	22.83	.41564	.36275
#2	2.029	.66790	22.87	.41783	.37285
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.473**	**.47570**	**3.1546**	**.0906**	**1.3587**
Stddev	.018	.00254	.0212	.0055	.0059
%RSD	.14070	.53410	.67313	6.080	.43458
#1	12.486	.47749	3.1396	.0945	1.3628
#2	12.461	.47390	3.1696	.0867	1.3545
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-Apds Acquired: 7/16/2019 14:21:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.39218**	**-.0091**	**.49839**	**.73641**	**.0631**
Stddev	.00082	.0245	.00034	.00148	.0014
%RSD	.21035	267.5	.06835	.20077	2.170
#1	.39277	-.0264	.49863	.73746	.0621
#2	.39160	.0081	.49815	.73537	.0640
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1216.8**	**1063.7**	**32929.**	**4019.1**
Stddev	.2	.6	59.	1.8
%RSD	.01966	.05520	.17984	.04499
#1	1216.7	1063.3	32971.	4020.4
#2	1217.0	1064.1	32887.	4017.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	76.551%	92.045%	92.288%	101.82%
Range				

Sample Name: 240-115578-B-1-B MS Acquired: 7/16/2019 14:25:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09544**	**120.86**	**.42194**	**.96630**	**.73263**
Stddev	.00033	.44	.00054	.00357	.00277
%RSD	.35066	.36125	.12814	.36919	.37818
#1	.09568	121.17	.42232	.96378	.73459
#2	.09520	120.55	.42156	.96883	.73067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36581**	F **1166.3**	**.39017**	**.1949**	**.40056**
Stddev	.00066	2.5	.00027	.0113	.00007
%RSD	.18174	.21162	.06914	5.797	.01638
#1	.36628	1168.1	.38998	.1869	.40052
#2	.36534	1164.6	.39036	.2029	.40061
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.42630**	**.44276**	**84.085**	**65.674**	**.55069**
Stddev	.00151	.00057	1.120	.240	.00177
%RSD	.35331	.12963	1.3323	.36543	.32179
#1	.42523	.44236	84.877	65.844	.55195
#2	.42736	.44317	83.292	65.504	.54944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-B MS Acquired: 7/16/2019 14:25:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **716.34**	**4.2434**	**.36789**	**23.048**	**.44338**
Stddev	2.52	.0205	.00047	.135	.00060
%RSD	.35134	.48323	.12770	.58532	.13611
#1	714.56	4.2290	.36756	23.144	.44381
#2	718.12	4.2579	.36822	22.953	.44295
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.7188**	**.54536**	**35.88**	**.33029**	**.35984**
Stddev	.0097	.00349	.03	.00658	.00261
%RSD	1.353	.64003	.0812	1.9921	.72470
#1	.7120	.54289	35.86	.32564	.36168
#2	.7257	.54783	35.90	.33495	.35799
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.355**	**.41807**	**1.3460**	**.0586**	**1.1771**
Stddev	.248	.00057	.0056	.0008	.0120
%RSD	1.7247	.13713	.41378	1.369	1.0162
#1	14.530	.41847	1.3499	.0580	1.1687
#2	14.180	.41766	1.3420	.0591	1.1856
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-B MS Acquired: 7/16/2019 14:25:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36607**	**-.0237**	**.47594**	**.58383**	**.0797**
Stddev	.00325	.0135	.00279	.00406	.0015
%RSD	.88806	57.04	.58626	.69495	1.903
#1	.36837	-.0141	.47397	.58670	.0807
#2	.36377	-.0332	.47791	.58097	.0786
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1163.8**	**999.60**	**31096.**	**3811.9**
Stddev	2.6	.85	35.	14.3
%RSD	.22559	.08513	.11241	.37575
#1	1161.9	1000.2	31120.	3801.7
#2	1165.7	999.00	31071.	3822.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.215%	86.496%	87.150%	96.565%
Range				

Sample Name: 240-115578-B-1-C MSD Acquired: 7/16/2019 14:29:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09235**	**151.39**	**.44279**	**.94949**	**1.1333**
Stddev	.00050	.48	.00526	.00328	.0036
%RSD	.54000	.31767	1.1877	.34525	.31545
#1	.09200	151.05	.43907	.94717	1.1308
#2	.09271	151.73	.44650	.95181	1.1358
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.35129**	F **969.51**	**.39438**	**.3044**	**.42369**
Stddev	.00210	4.28	.00008	.0089	.00075
%RSD	.59691	.44159	.02088	2.917	.17633
#1	.34980	966.48	.39444	.3107	.42316
#2	.35277	972.54	.39432	.2981	.42422
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.45825**	**.46499**	**129.03**	**73.288**	**.54820**
Stddev	.00301	.00006	1.53	.109	.00390
%RSD	.65648	.01278	1.1828	.14836	.71145
#1	.45613	.46495	127.95	73.211	.54544
#2	.46038	.46504	130.11	73.365	.55096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-C MSD Acquired: 7/16/2019 14:29:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **559.88**	**4.7786**	**.35136**	**22.504**	**.48769**
Stddev	2.17	.0465	.00061	.115	.00061
%RSD	.38760	.97217	.17246	.50883	.12581
#1	561.42	4.7458	.35094	22.423	.48812
#2	558.35	4.8115	.35179	22.585	.48726
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.104**	**.69345**	**44.03**	**.28521**	**.33281**
Stddev	.002	.00376	.15	.00161	.00858
%RSD	.1020	.54208	.3394	.56314	2.5778
#1	2.102	.69610	43.92	.28407	.32674
#2	2.105	.69079	44.13	.28635	.33888
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.914**	**.41729**	**5.5756**	**.1033**	**1.8642**
Stddev	.133	.00065	.0469	.0064	.0076
%RSD	1.1135	.15658	.84065	6.156	.40783
#1	11.820	.41683	5.5425	.1078	1.8588
#2	12.007	.41775	5.6087	.0988	1.8696
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-1-C MSD Acquired: 7/16/2019 14:29:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.37075**	**-.0435**	**.53520**	**.77571**	**.1263**
Stddev	.00335	.0053	.00257	.00756	.0006
%RSD	.90419	12.29	.48026	.97442	.5086
#1	.37312	-.0473	.53338	.77037	.1258
#2	.36838	-.0397	.53702	.78106	.1267
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1184.8**	**1062.3**	**32829.**	**4056.7**
Stddev	1.0	2.3	107.	18.6
%RSD	.08722	.21607	.32661	.45894
#1	1185.5	1063.9	32905.	4069.9
#2	1184.0	1060.7	32754.	4043.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.534%	91.923%	92.009%	102.77%
Range				

Sample Name: 240-115578-B-2-A Acquired: 7/16/2019 14:33:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**33.066**	**.02867**	**.44334**	**.09166**
Stddev	.00028	.179	.00208	.00124	.00028
%RSD	192.49	.54196	7.2495	.28054	.30056
#1	.00034	33.193	.03014	.44246	.09186
#2	-.00005	32.939	.02720	.44422	.09147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00151**	F **1512.6**	**.00107**	**.1027**	**.02048**
Stddev	.00001	2.5	.00020	.0019	.00003
%RSD	.72711	.16614	18.622	1.890	.12438
#1	.00152	1510.8	.00121	.1013	.02049
#2	.00150	1514.4	.00093	.1041	.02046
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03701**	**.02770**	**45.855**	**17.690**	**.08983**
Stddev	.00044	.00024	.271	.042	.00054
%RSD	1.1947	.85647	.59075	.23578	.60491
#1	.03733	.02753	46.047	17.719	.09021
#2	.03670	.02787	45.664	17.660	.08944
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-2-A Acquired: 7/16/2019 14:33:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **937.46**	**4.8594**	**.00116**	**2.9867**	**.05620**
Stddev	5.64	.0066	.00021	.0114	.00037
%RSD	.60216	.13628	17.766	.38260	.65065
#1	933.47	4.8641	.00101	2.9948	.05594
#2	941.46	4.8547	.00130	2.9786	.05646
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.7059**	**.14827**	**15.09**	**-.00057**	**-.00864**
Stddev	.0016	.00322	.05	.00232	.00420
%RSD	.2321	2.1691	.3196	405.32	48.605
#1	.7070	.14599	15.06	.00107	-.01161
#2	.7047	.15054	15.13	-.00221	-.00567
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.875**	**.03507**	**.66120**	**.0188**	**.21546**
Stddev	.066	.00038	.00277	.0149	.00353
%RSD	.55661	1.0870	.41853	79.57	1.6376
#1	11.921	.03534	.66316	.0082	.21795
#2	11.828	.03480	.65924	.0294	.21296
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-2-A Acquired: 7/16/2019 14:33:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00046**	**.0175**	**.04641**	**.19515**	**.0205**
Stddev	.00268	.0234	.00005	.00370	.0006
%RSD	586.81	133.3	.10232	1.8941	3.147
#1	-.00236	.0010	.04638	.19777	.0200
#2	.00144	.0341	.04645	.19254	.0209
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1135.0**	**956.42**	**29557.**	**3683.1**
Stddev	1.5	1.97	32.	13.0
%RSD	.12941	.20575	.10844	.35273
#1	1136.0	957.81	29534.	3673.9
#2	1134.0	955.03	29579.	3692.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.404%	82.759%	82.837%	93.302%
Range				

Sample Name: 240-115578-B-3-A Acquired: 7/16/2019 14:37:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00068**	**166.22**	**.03502**	**.33697**	**1.3371**
Stddev	.00013	.06	.00307	.00056	.0009
%RSD	19.320	.03755	8.7635	.16644	.06858
#1	-.00058	166.17	.03285	.33737	1.3377
#2	-.00077	166.26	.03719	.33657	1.3364
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00695**	**31.008**	**.00186**	**.6556**	**.11186**
Stddev	.00003	.022	.00004	.0137	.00078
%RSD	.46812	.07127	2.0528	2.096	.69806
#1	.00697	31.023	.00184	.6459	.11241
#2	.00692	30.992	.00189	.6653	.11130
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.22926**	**.11476**	**222.24**	**37.136**	**.23255**
Stddev	.00096	.00016	.77	.013	.00084
%RSD	.41671	.13849	.34822	.03603	.36107
#1	.22993	.11488	222.78	37.126	.23195
#2	.22858	.11465	221.69	37.145	.23314
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-3-A Acquired: 7/16/2019 14:37:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**48.731**	**7.2173**	**.00156**	**3.6409**	**.26058**
Stddev	.134	.0173	.00004	.0052	.00054
%RSD	.27426	.24018	2.4738	.14238	.20697
#1	48.825	7.2050	.00153	3.6446	.26096
#2	48.636	7.2296	.00159	3.6373	.26020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.512**	**.10585**	**.4364**	**-.00061**	**-.00513**
Stddev	.010	.00216	.0012	.00265	.00853
%RSD	.1348	2.0413	.2709	431.83	166.35
#1	7.504	.10432	.4356	-.00249	.00090
#2	7.519	.10737	.4372	.00126	-.01116
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.8974**	**.03650**	**.26165**	**.2001**	**2.9045**
Stddev	.1217	.00138	.00047	.0060	.0059
%RSD	1.7638	3.7737	.17926	2.977	.20133
#1	6.9834	.03747	.26198	.2043	2.9086
#2	6.8113	.03553	.26131	.1959	2.9003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-3-A Acquired: 7/16/2019 14:37:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00885**	**-.1238**	**.33923**	**.45524**	**.1272**
Stddev	.00124	.0576	.00001	.00138	.0010
%RSD	14.007	46.49	.00244	.30287	.7504
#1	-.00973	-.0831	.33924	.45622	.1279
#2	-.00797	-.1645	.33923	.45427	.1265
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1441.2**	**1348.2**	**41473.**	**4816.4**
Stddev	1.0	.4	132.	13.3
%RSD	.07222	.02811	.31867	.27609
#1	1440.4	1348.4	41379.	4807.0
#2	1441.9	1347.9	41566.	4825.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.664%	116.66%	116.23%	122.01%
Range				

Sample Name: 240-115578-B-4-A Acquired: 7/16/2019 14:41:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00148**	**92.919**	**.02929**	**.31362**	**.55681**
Stddev	.00001	.206	.00423	.00075	.00093
%RSD	.56760	.22188	14.428	.24053	.16687
#1	-.00149	92.773	.03228	.31308	.55615
#2	-.00148	93.065	.02631	.31415	.55747
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00391**	**285.39**	**.00087**	**.4824**	**.07144**
Stddev	.00001	.08	.00021	.0107	.00027
%RSD	.27682	.02823	23.753	2.213	.37267
#1	.00392	285.44	.00072	.4749	.07163
#2	.00391	285.33	.00101	.4900	.07126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12844**	**.13763**	**143.04**	**25.892**	**.12915**
Stddev	.00010	.00124	1.06	.008	.00003
%RSD	.07536	.90438	.74375	.03261	.02589
#1	.12851	.13675	143.79	25.898	.12912
#2	.12837	.13851	142.28	25.886	.12917
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-4-A Acquired: 7/16/2019 14:41:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**47.842**	**4.3702**	**.00157**	**2.3013**	**.14411**
Stddev	.057	.0278	.00007	.0090	.00009
%RSD	.11915	.63563	4.1947	.39065	.06312
#1	47.801	4.3506	.00152	2.3077	.14417
#2	47.882	4.3899	.00161	2.2950	.14404
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.877**	**.04394**	**.3439**	**-.00181**	**-.00092**
Stddev	.005	.00208	.0039	.00152	.00358
%RSD	.0868	4.7338	1.142	84.069	389.42
#1	5.873	.04541	.3411	-.00073	.00161
#2	5.881	.04247	.3467	-.00288	-.00345
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.8716**	**.03544**	**.52522**	**.1381**	**2.2643**
Stddev	.0727	.00108	.00153	.0022	.0063
%RSD	.92355	3.0344	.29186	1.617	.27776
#1	7.8202	.03620	.52630	.1396	2.2599
#2	7.9230	.03468	.52414	.1365	2.2688
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-4-A Acquired: 7/16/2019 14:41:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00526**	**-.0271**	**.20406**	**.26162**	**.1257**
Stddev	.00083	.0032	.00063	.00079	.0000
%RSD	15.859	11.92	.30646	.30376	.0025
#1	-.00467	-.0248	.20362	.26105	.1257
#2	-.00585	-.0294	.20450	.26218	.1256
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1383.5**	**1233.6**	**38183.**	**4491.9**
Stddev	.1	1.3	33.	6.8
%RSD	.00521	.10907	.08537	.15134
#1	1383.5	1232.7	38206.	4487.1
#2	1383.6	1234.6	38160.	4496.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.037%	106.75%	107.01%	113.79%
Range				

Sample Name: 240-115578-B-5-A Acquired: 7/16/2019 14:45:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00107**	**60.463**	**.02558**	**.28836**	**.34494**
Stddev	.00006	.005	.00119	.00069	.00024
%RSD	5.7874	.00853	4.6385	.23946	.06945
#1	-.00103	60.467	.02641	.28787	.34511
#2	-.00112	60.460	.02474	.28885	.34477
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00251**	**233.88**	**.00090**	**.3991**	**.05207**
Stddev	.00002	.41	.00002	.0047	.00034
%RSD	.76857	.17605	1.7591	1.181	.64722
#1	.00253	233.59	.00089	.3957	.05183
#2	.00250	234.17	.00091	.4024	.05230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.07787**	**.20640**	**108.93**	**15.613**	**.08972**
Stddev	.00001	.00059	.28	.037	.00029
%RSD	.01335	.28615	.26056	.23393	.32230
#1	.07788	.20682	109.13	15.639	.08992
#2	.07786	.20598	108.73	15.587	.08951
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-5-A Acquired: 7/16/2019 14:45:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**39.861**	**4.5062**	**.00161**	**1.3139**	**.10316**
Stddev	.026	.0223	.00014	.0010	.00043
%RSD	.06603	.49422	8.8207	.07586	.42022
#1	39.880	4.5219	.00171	1.3132	.10346
#2	39.842	4.4904	.00151	1.3146	.10285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.034**	**.02717**	**.2540**	**-.00139**	**-.00859**
Stddev	.020	.00219	.0001	.00154	.00238
%RSD	.3870	8.0702	.0200	110.92	27.725
#1	5.047	.02562	.2540	-.00247	-.00690
#2	5.020	.02872	.2539	-.00030	-.01027
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.2956**	**.03357**	**.33521**	**.0967**	**1.3333**
Stddev	.0224	.00065	.00020	.0051	.0069
%RSD	.30708	1.9389	.05967	5.270	.51358
#1	7.3114	.03311	.33535	.0931	1.3381
#2	7.2798	.03403	.33507	.1003	1.3284
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-5-A Acquired: 7/16/2019 14:45:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00333**	**-.0575**	**.13738**	**.17547**	**.0874**
Stddev	.00080	.0547	.00064	.00041	.0013
%RSD	24.063	95.19	.46619	.23288	1.487
#1	-.00390	-.0188	.13783	.17576	.0865
#2	-.00276	-.0962	.13693	.17518	.0883
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1414.2**	**1219.5**	**37707.**	**4416.3**
Stddev	.6	.1	116.	4.0
%RSD	.03912	.01024	.30820	.09151
#1	1414.6	1219.4	37624.	4419.2
#2	1413.8	1219.6	37789.	4413.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.968%	105.52%	105.68%	111.88%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 14:49:17 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0153**	**49.356**	**.98474**	**.97998**	**.99013**	**.99161**	**49.476**	**.98363**
Stddev	.0030	.213	.00463	.00095	.00407	.00405	.084	.00019
%RSD	.29759	.43080	.47068	.09660	.41149	.40857	.16877	.01946
#1	1.0131	49.206	.98146	.97931	.98725	.98874	49.417	.98377
#2	1.0174	49.507	.98801	.98064	.99301	.99447	49.535	.98350
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.026**	**.98404**	**1.0112**	**.97587**	**50.775**	**48.617**	**.99622**	**49.193**
Stddev	.013	.00066	.0036	.00018	.342	.262	.00382	.227
%RSD	1.263	.06713	.35468	.01850	.67268	.53852	.38372	.46077
#1	1.016	.98451	1.0086	.97574	50.534	48.432	.99352	49.033
#2	1.035	.98358	1.0137	.97600	51.017	48.803	.99892	49.353
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0216**	**.99361**	**49.299**	**.98509**	**25.11**	**.97985**	**24.43**	**.98123**
Stddev	.0003	.00151	.245	.00156	.04	.00161	.02	.00336
%RSD	.02661	.15177	.49603	.15789	.1494	.16398	.0685	.34211
#1	1.0218	.99468	49.126	.98619	25.14	.98098	24.42	.98361
#2	1.0214	.99255	49.472	.98399	25.09	.97871	24.44	.97886
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 14:49:17 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97445	10.168	.97553	.98918	.9896	.99732	.97884	2.526
Stddev	.00821	.078	.00270	.00533	.0082	.00074	.00473	.072
%RSD	.84231	.76360	.27726	.53895	.8292	.07371	.48311	2.839
#1	.98025	10.113	.97745	.98542	.9838	.99680	.98218	2.476
#2	.96864	10.223	.97362	.99295	.9954	.99784	.97549	2.577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	1.0025	1.0231	1.008
Stddev	.0009	.0041	.003
%RSD	.08969	.40006	.3004
#1	1.0032	1.0260	1.006
#2	1.0019	1.0202	1.010
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1496.2	1129.5	33787.	3872.8
Stddev	1.2	2.0	78.	3.2
%RSD	.08290	.17598	.23138	.08150
#1	1497.1	1130.9	33842.	3875.1
#2	1495.3	1128.1	33731.	3870.6

Sample Name: CCB-5392763 Acquired: 7/16/2019 14:52:58 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**-.00046**	**-.00262**	**.01934**	**.00005**	**.00006**	**-.00052**	**-.00001**
Stddev	.00019	.00818	.00014	.00078	.00000	.00002	.00072	.00008
%RSD	137.26	1790.5	5.4850	4.0284	8.8237	27.806	138.04	1381.5
#1	.00000	-.00624	-.00272	.01989	.00004	.00007	-.00103	-.00006
#2	.00027	.00533	-.00251	.01879	.00005	.00005	-.00001	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0067**	**.00007**	**.00047**	**.00023**	**-.00001**	**.02159**	**.00029**	**.00045**
Stddev	.0115	.00016	.00022	.00002	.00038	.00868	.00063	.00374
%RSD	171.0	244.07	46.009	9.2909	2653.0	40.214	214.75	826.12
#1	-.0148	-.00005	.00062	.00021	-.00028	.02773	.00074	.00310
#2	.0014	.00018	.00032	.00024	.00025	.01545	-.00015	-.00219
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00029**	**.00027**	**.03347**	**.00034**	**-.0008**	**-.00036**	**-.0228**	**.00223**
Stddev	.00000	.00007	.00016	.00008	.0010	.00128	.0049	.00154
%RSD	1.1370	25.126	.47680	22.826	116.2	361.54	21.56	68.964
#1	-.00029	.00032	.03358	.00029	-.0002	-.00126	-.0193	.00332
#2	-.00030	.00023	.03336	.00040	-.0015	.00055	-.0263	.00114
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 14:52:58 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00076	.07313	.00054	.00000	.0002	-.00012	.00092	.0037
Stddev	.00082	.00569	.00029	.00001	.0125	.00020	.00117	.0351
%RSD	108.24	7.7758	54.522	430.00	7052.	158.76	127.54	955.1
#1	.00018	.07715	.00033	-.00001	-.0086	.00002	.00009	.0285
#2	.00134	.06911	.00075	.00001	.0090	-.00026	.00174	-.0211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	-.00035	-.00089	-.0000
Stddev	.00024	.00092	.0009
%RSD	68.923	103.85	5759.
#1	-.00052	-.00154	-.0006
#2	-.00018	-.00024	.0006
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1589.9	1156.5	35628.	3960.3
Stddev	.5	1.4	126.	4.5
%RSD	.03217	.12111	.35352	.11403
#1	1590.2	1157.5	35717.	3957.1
#2	1589.5	1155.5	35539.	3963.5

Sample Name: CCVL-5395711 Acquired: 7/16/2019 14:56:49 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00615**	**.20199**	**.01394**	F **.03826**	**.00212**	**.00199**	**.50228**
Stddev	.00023	.01018	.00633	.00031	.00002	.00002	.00083
%RSD	3.6689	5.0399	45.399	.82021	.78291	.78285	.16558
#1	.00599	.19479	.00946	.03804	.00211	.00200	.50287
#2	.00631	.20919	.01841	.03848	.00213	.00198	.50169
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00210**	**-.0082**	**.00393**	**.00394**	**.00958**	**.05392**	**.48462**
Stddev	.00010	.0069	.00002	.00011	.00031	.00054	.02042
%RSD	4.7330	84.54	.42164	2.6753	3.2385	1.0041	4.2144
#1	.00203	-.0033	.00394	.00401	.00980	.05430	.49906
#2	.00218	-.0131	.00392	.00386	.00936	.05354	.47018
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02952**	**.19902**	**.00293**	**.00987**	**.96506**	**.01036**	**-.0247**
Stddev	.00072	.00582	.00002	.00007	.00664	.00011	.0017
%RSD	2.4295	2.9253	.80968	.69491	.68826	1.0939	6.721
#1	.02901	.19490	.00291	.00992	.96037	.01028	-.0236
#2	.03003	.20314	.00294	.00982	.96976	.01044	-.0259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 14:56:49 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00986**	**.1694**	**.01983**	**.02415**	**.55810**	**.00897**	**.00478**
Stddev	.00052	.0014	.00180	.00186	.01306	.00088	.00003
%RSD	5.3072	.8031	9.0910	7.6981	2.3399	9.7867	.66892
#1	.00949	.1685	.02110	.02546	.54887	.00959	.00476
#2	.01023	.1704	.01855	.02283	.56734	.00835	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0007**	**.00469**	**.02088**	**-.0020**	**.00442**	**.01102**	**.0005**
Stddev	.0079	.00018	.00109	.0349	.00008	.00070	.0014
%RSD	1179.	3.8711	5.2046	1781.	1.6974	6.3663	282.3
#1	.0049	.00482	.02011	.0227	.00448	.01151	-.0005
#2	-.0063	.00456	.02165	-.0267	.00437	.01052	.0015
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1597.0**	**1159.6**	**35651.**	**3982.2**
Stddev	2.0	.1	37.	11.3
%RSD	.12292	.00628	.10262	.28475
#1	1595.6	1159.6	35677.	3990.2
#2	1598.4	1159.5	35625.	3974.2

Sample Name: 240-115578-B-6-A Acquired: 7/16/2019 15:00:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00092**	**47.145**	**.04143**	**.37371**	**.26575**
Stddev	.00028	.146	.00137	.00001	.00003
%RSD	30.008	.31023	3.3090	.00365	.01009
#1	-.00073	47.249	.04046	.37372	.26573
#2	-.00112	47.042	.04240	.37370	.26577
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	F **1103.1**	**.00103**	**.2210**	**.02397**
Stddev	.00002	3.1	.00013	.0107	.00022
%RSD	.83307	.27771	12.945	4.854	.92943
#1	.00188	1105.3	.00112	.2286	.02412
#2	.00191	1101.0	.00093	.2134	.02381
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.06083**	**.08000**	**73.378**	**16.889**	**.09238**
Stddev	.00102	.00045	.023	.071	.00010
%RSD	1.6788	.55797	.03070	.42260	.10802
#1	.06010	.07969	73.362	16.939	.09231
#2	.06155	.08032	73.394	16.839	.09245
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-6-A Acquired: 7/16/2019 15:00:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **654.60**	**4.3990**	**.00112**	**2.5808**	**.05236**
Stddev	.92	.0121	.00026	.0160	.00004
%RSD	.14024	.27404	23.537	.61944	.07758
#1	653.95	4.3904	.00093	2.5921	.05233
#2	655.25	4.4075	.00130	2.5695	.05239
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.290**	**.13062**	**12.92**	**.00018**	**-.00948**
Stddev	.003	.00068	.01	.00093	.00702
%RSD	.1271	.52233	.0598	520.06	74.093
#1	2.287	.13110	12.92	.00084	-.00451
#2	2.292	.13014	12.93	-.00048	-.01444
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8895**	**.03369**	**.56332**	**.0499**	**.92202**
Stddev	.0547	.00266	.00288	.0066	.01239
%RSD	.55307	7.8834	.51137	13.26	1.3434
#1	9.9282	.03182	.56535	.0545	.91326
#2	9.8508	.03557	.56128	.0452	.93078
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-6-A Acquired: 7/16/2019 15:00:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00198**	**-.0141**	**.09427**	**.21698**	**.0555**
Stddev	.00266	.0176	.00007	.00114	.0004
%RSD	134.30	125.2	.07849	.52313	.6355
#1	-.00010	-.0016	.09421	.21618	.0553
#2	-.00386	-.0265	.09432	.21778	.0558
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1186.9**	**1031.2**	**32047.**	**3946.2**
Stddev	1.4	2.4	70.	12.1
%RSD	.12098	.23245	.21689	.30728
#1	1187.9	1032.9	32096.	3937.6
#2	1185.9	1029.5	31998.	3954.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	74.670%	89.229%	89.817%	99.969%
Range				

Sample Name: 240-115578-B-7-A Acquired: 7/16/2019 15:04:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**64.761**	**.03116**	**.30223**	**.34413**
Stddev	.00025	.180	.00190	.00011	.00070
%RSD	28.074	.27746	6.0926	.03569	.20290
#1	-.00070	64.888	.03250	.30231	.34462
#2	-.00105	64.634	.02981	.30216	.34363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00273**	**285.63**	**.00078**	**.3872**	**.04967**
Stddev	.00005	.41	.00010	.0010	.00002
%RSD	1.8001	.14487	12.990	.2597	.03772
#1	.00276	285.93	.00085	.3879	.04968
#2	.00269	285.34	.00071	.3865	.04965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08900**	**.11720**	**113.00**	**18.375**	**.09634**
Stddev	.00038	.00039	.20	.020	.00078
%RSD	.42394	.33212	.17545	.10760	.81459
#1	.08873	.11692	112.86	18.389	.09689
#2	.08927	.11747	113.14	18.361	.09578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-7-A Acquired: 7/16/2019 15:04:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**84.991**	**4.9007**	**.00268**	**1.4552**	**.10580**
Stddev	.103	.0344	.00021	.0047	.00007
%RSD	.12126	.70275	7.7627	.32396	.06192
#1	85.064	4.9251	.00253	1.4518	.10584
#2	84.918	4.8764	.00282	1.4585	.10575
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.755**	**.03280**	**.3192**	**.00015**	**-.00399**
Stddev	.011	.00002	.0065	.00011	.00021
%RSD	.2333	.06326	2.049	72.135	5.3540
#1	4.747	.03282	.3146	.00007	-.00414
#2	4.763	.03279	.3239	.00022	-.00384
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.7745**	**.03101**	**.37740**	**.1081**	**1.3954**
Stddev	.0483	.00005	.00094	.0031	.0075
%RSD	.62066	.15473	.25025	2.912	.53501
#1	7.7404	.03097	.37807	.1103	1.4007
#2	7.8086	.03104	.37673	.1059	1.3901
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-7-A Acquired: 7/16/2019 15:04:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00143**	**-.0288**	**.15605**	**.19524**	**.0772**
Stddev	.00077	.0270	.00009	.00003	.0014
%RSD	54.074	93.94	.06029	.01285	1.840
#1	-.00088	-.0097	.15598	.19523	.0762
#2	-.00197	-.0479	.15612	.19526	.0782
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1381.7**	**1187.5**	**36916.**	**4341.4**
Stddev	.3	1.4	134.	9.8
%RSD	.01863	.11719	.36306	.22687
#1	1381.5	1186.5	36821.	4334.5
#2	1381.9	1188.5	37011.	4348.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.923%	102.75%	103.46%	109.98%
Range				

Sample Name: 240-115578-B-8-A Acquired: 7/16/2019 15:08:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00048**	**21.978**	**.02073**	**.38165**	**.09413**
Stddev	.00055	.002	.00624	.00030	.00001
%RSD	113.46	.00978	30.121	.07900	.01531
#1	-.00087	21.976	.02514	.38187	.09414
#2	-.00010	21.979	.01631	.38144	.09412
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00108**	F **1503.2**	**.00478**	**.1282**	**.00922**
Stddev	.00001	4.0	.00009	.0321	.00012
%RSD	1.1321	.26864	1.9569	25.02	1.3314
#1	.00109	1500.4	.00485	.1056	.00913
#2	.00107	1506.1	.00472	.1509	.00931
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03176**	**.02447**	**40.867**	**11.881**	**.07034**
Stddev	.00043	.00024	.357	.034	.00045
%RSD	1.3386	.97909	.87265	.28416	.64001
#1	.03146	.02464	41.120	11.905	.07066
#2	.03206	.02430	40.615	11.857	.07002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-8-A Acquired: 7/16/2019 15:08:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **936.99**	**5.2182**	**.00045**	**2.2044**	**.02215**
Stddev	1.63	.0071	.00016	.0029	.00031
%RSD	.17437	.13682	35.274	.13103	1.3783
#1	938.15	5.2131	.00056	2.2065	.02193
#2	935.84	5.2232	.00034	2.2024	.02236
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.6657**	**.13905**	**12.61**	**-.00548**	**-.00619**
Stddev	.0049	.00113	.04	.00410	.00252
%RSD	.7333	.81139	.3205	74.831	40.705
#1	.6691	.13825	12.64	-.00837	-.00441
#2	.6622	.13985	12.58	-.00258	-.00797
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.133**	**.03418**	**.55039**	**.0295**	**.16664**
Stddev	.005	.00030	.00249	.0136	.00472
%RSD	.04861	.87966	.45298	46.26	2.8309
#1	11.129	.03440	.55215	.0391	.16330
#2	11.136	.03397	.54862	.0198	.16997
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-8-A Acquired: 7/16/2019 15:08:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00326**	**.0191**	**.03567**	**.96319**	**.0313**
Stddev	.00233	.0186	.00025	.00099	.0013
%RSD	71.624	97.29	.69684	.10293	4.293
#1	-.00491	.0323	.03549	.96249	.0322
#2	-.00161	.0060	.03585	.96389	.0303
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1131.8**	**965.01**	**29791.**	**3719.6**
Stddev	1.0	4.86	43.	8.7
%RSD	.08977	.50389	.14393	.23471
#1	1131.1	961.58	29760.	3713.5
#2	1132.5	968.45	29821.	3725.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.202%	83.503%	83.493%	94.228%
Range				

Sample Name: 240-115578-B-9-A Acquired: 7/16/2019 15:12:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00012**	**69.189**	**.08145**	**.36077**	**.36142**
Stddev	.00013	.029	.00253	.00039	.00048
%RSD	113.53	.04232	3.1006	.10704	.13390
#1	.00021	69.209	.07967	.36104	.36108
#2	.00002	69.168	.08324	.36049	.36177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00251**	**786.69**	**.00276**	**.2917**	**.03626**
Stddev	.00002	2.07	.00020	.0021	.00023
%RSD	.72811	.26321	7.0587	.7283	.63858
#1	.00250	785.22	.00263	.2932	.03610
#2	.00253	788.15	.00290	.2902	.03643
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08526**	**.36094**	**90.465**	**17.894**	**.11236**
Stddev	.00101	.00168	.225	.040	.00016
%RSD	1.1789	.46541	.24908	.22251	.14480
#1	.08455	.35975	90.306	17.866	.11248
#2	.08597	.36213	90.624	17.923	.11225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-9-A Acquired: 7/16/2019 15:12:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **458.63**	**3.9422**	**.00139**	**3.2896**	**.08076**
Stddev	.93	.0189	.00018	.0077	.00089
%RSD	.20221	.47891	13.171	.23546	1.0985
#1	457.98	3.9288	.00126	3.2951	.08139
#2	459.29	3.9555	.00152	3.2841	.08013
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	450.00				
Low Limit	-.20000				

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.602**	**.26943**	**17.34**	**.00001**	**-.00173**
Stddev	.003	.00007	.01	.00232	.00134
%RSD	.1033	.02779	.0369	21560.	77.283
#1	2.601	.26948	17.34	-.00163	-.00079
#2	2.604	.26937	17.33	.00165	-.00268
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.2962**	**.03536**	**.41130**	**.0834**	**.96642**
Stddev	.0235	.00043	.00032	.0006	.00100
%RSD	.32269	1.2129	.07668	.7616	.10352
#1	7.3129	.03506	.41108	.0829	.96571
#2	7.2796	.03567	.41152	.0838	.96713
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-9-A Acquired: 7/16/2019 15:12:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00208**	**-.0257**	**.11200**	**.50460**	**.0709**
Stddev	.00061	.0016	.00100	.00179	.0000
%RSD	29.140	6.414	.89110	.35437	.0225
#1	-.00251	-.0245	.11129	.50333	.0709
#2	-.00165	-.0268	.11270	.50586	.0709
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1232.4**	**1073.8**	**33497.**	**4071.9**
Stddev	.7	.5	81.	7.5
%RSD	.05857	.04594	.24217	.18534
#1	1231.9	1073.5	33554.	4066.6
#2	1232.9	1074.2	33439.	4077.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	77.531%	92.918%	93.879%	103.15%
Range				

Sample Name: 240-115578-B-10-A Acquired: 7/16/2019 15:16:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**67.285**	**.08933**	**.34690**	**.39365**
Stddev	.00043	.008	.00038	.00035	.00049
%RSD	55.606	.01162	.42454	.10099	.12422
#1	-.00047	67.280	.08960	.34665	.39330
#2	-.00108	67.291	.08906	.34715	.39400
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00270**	**532.17**	**.00224**	**.2973**	**.03718**
Stddev	.00002	.31	.00005	.0055	.00001
%RSD	.76379	.05817	2.2396	1.863	.02348
#1	.00272	531.95	.00221	.2933	.03719
#2	.00269	532.39	.00228	.3012	.03718
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08875**	**.11850**	**93.331**	**17.761**	**.12160**
Stddev	.00015	.00028	.178	.016	.00057
%RSD	.16994	.23747	.19074	.08766	.46948
#1	.08865	.11869	93.205	17.772	.12200
#2	.08886	.11830	93.457	17.750	.12120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-10-A Acquired: 7/16/2019 15:16:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**259.83**	**3.2186**	**.00152**	**2.0741**	**.09476**
Stddev	1.53	.0026	.00005	.0006	.00041
%RSD	.58842	.07999	3.3308	.02818	.43190
#1	260.91	3.2168	.00156	2.0745	.09447
#2	258.75	3.2204	.00148	2.0737	.09505
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.602**	**.31183**	**2.463**	**-.00259**	**-.00692**
Stddev	.010	.00030	.005	.00244	.00325
%RSD	.2809	.09595	.1897	94.253	46.894
#1	3.595	.31204	2.459	-.00086	-.00922
#2	3.609	.31162	2.466	-.00432	-.00463
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.4801**	**.03653**	**.42202**	**.0759**	**1.4929**
Stddev	.0124	.00319	.00059	.0001	.0010
%RSD	.14576	8.7394	.13877	.0718	.06888
#1	8.4888	.03427	.42243	.0758	1.4936
#2	8.4714	.03879	.42160	.0759	1.4921
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-10-A Acquired: 7/16/2019 15:16:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00239**	**-.0068**	**.14046**	**.51792**	**.0541**
Stddev	.00139	.0075	.00011	.00484	.0007
%RSD	57.979	109.9	.07536	.93510	1.309
#1	-.00141	-.0121	.14038	.51450	.0546
#2	-.00337	-.0015	.14053	.52135	.0536
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1295.3**	**1105.5**	**34338.**	**4127.8**
Stddev	.5	1.2	18.	2.4
%RSD	.03535	.10752	.05296	.05935
#1	1295.7	1104.7	34351.	4129.6
#2	1295.0	1106.4	34326.	4126.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	81.491%	95.663%	96.238%	104.57%
Range				

Sample Name: 240-115578-B-11-A Acquired: 7/16/2019 15:20:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00070**	**70.966**	**.09261**	**.33750**	**.43108**
Stddev	.00010	.170	.00503	.00077	.00070
%RSD	13.788	.23917	5.4312	.22695	.16144
#1	-.00077	70.846	.08905	.33696	.43059
#2	-.00063	71.086	.09616	.33804	.43157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00286**	**494.53**	**.00225**	**.3106**	**.03725**
Stddev	.00003	1.63	.00019	.0057	.00026
%RSD	.99459	.32992	8.2170	1.828	.69328
#1	.00284	493.38	.00212	.3146	.03707
#2	.00288	495.69	.00238	.3066	.03744
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09228**	**.11527**	**95.736**	**17.635**	**.12560**
Stddev	.00031	.00036	.161	.030	.00030
%RSD	.33394	.31353	.16843	.16883	.24147
#1	.09206	.11502	95.850	17.656	.12539
#2	.09249	.11553	95.622	17.614	.12582
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-11-A Acquired: 7/16/2019 15:20:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**233.01**	**3.3294**	**.00189**	**2.0687**	**.09442**
Stddev	.77	.0152	.00007	.0048	.00041
%RSD	.33094	.45712	3.9042	.23118	.43816
#1	232.47	3.3187	.00184	2.0720	.09413
#2	233.56	3.3402	.00194	2.0653	.09471
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.910**	**.35078**	**4.799**	**-.00246**	**-.00809**
Stddev	.003	.00065	.010	.00369	.00058
%RSD	.0793	.18538	.2124	149.68	7.1108
#1	3.907	.35032	4.791	-.00507	-.00850
#2	3.912	.35124	4.806	.00014	-.00768
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.6210**	**.03415**	**.41312**	**.0674**	**1.6633**
Stddev	.0366	.00008	.00046	.0033	.0097
%RSD	.48048	.22716	.11104	4.962	.58528
#1	7.6469	.03410	.41279	.0698	1.6564
#2	7.5951	.03421	.41344	.0650	1.6702
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 240-115578-B-11-A Acquired: 7/16/2019 15:20:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00420**	**-.0234**	**.14891**	**.52673**	**.0503**
Stddev	.00205	.0474	.00022	.00672	.0006
%RSD	48.852	202.5	.14505	1.2759	1.189
#1	-.00565	.0101	.14906	.52198	.0507
#2	-.00275	-.0569	.14876	.53148	.0499
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1304.3**	**1115.2**	**34827.**	**4170.7**
Stddev	.2	.0	90.	7.7
%RSD	.01232	.00101	.25879	.18529
#1	1304.2	1115.2	34890.	4165.2
#2	1304.4	1115.1	34763.	4176.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	82.056%	96.495%	97.606%	105.65%
Range				

Sample Name: 480-156115-B-22-A Acquired: 7/16/2019 15:24:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**115.39**	**.09573**	**.29695**	**1.5732**
Stddev	.00045	.06	.00044	.00017	.0002
%RSD	167.04	.05589	.45873	.05782	.01475
#1	.00005	115.34	.09604	.29707	1.5734
#2	-.00058	115.43	.09542	.29683	1.5731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00495**	**18.285**	**.01285**	**.4677**	**.08068**
Stddev	.00004	.001	.00010	.0128	.00001
%RSD	.85258	.00484	.79285	2.742	.00970
#1	.00498	18.284	.01277	.4586	.08069
#2	.00492	18.286	.01292	.4767	.08068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12702**	**.15940**	**175.90**	**15.827**	**.21241**
Stddev	.00028	.00024	.14	.011	.00017
%RSD	.22114	.14827	.07725	.06677	.07860
#1	.12722	.15956	175.99	15.835	.21253
#2	.12682	.15923	175.80	15.820	.21229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156115-B-22-A Acquired: 7/16/2019 15:24:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.270**	**3.8655**	**.00036**	**.49901**	**.18262**
Stddev	.026	.0027	.00008	.00354	.00045
%RSD	.09398	.07109	21.525	.70991	.24583
#1	27.289	3.8675	.00042	.50152	.18231
#2	27.252	3.8636	.00031	.49651	.18294
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.252**	**1.3222**	**.9716**	**.01169**	**-.00296**
Stddev	.003	.0020	.0045	.00026	.00420
%RSD	.0642	.15355	.4658	2.1902	141.78
#1	5.250	1.3208	.9684	.01187	-.00593
#2	5.255	1.3236	.9748	.01151	.00001
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.9938**	**.03890**	**.09971**	**.1552**	**.66741**
Stddev	.1040	.00018	.00020	.0055	.00003
%RSD	1.1562	.45779	.20080	3.524	.00444
#1	9.0673	.03877	.09985	.1514	.66739
#2	8.9203	.03902	.09957	.1591	.66743
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156115-B-22-A Acquired: 7/16/2019 15:24:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00648**	**-.0442**	**.17401**	**.96359**	**.0455**
Stddev	.00285	.0417	.00110	.00348	.0007
%RSD	43.935	94.34	.63135	.36087	1.604
#1	-.00849	-.0737	.17479	.96605	.0450
#2	-.00447	-.0147	.17323	.96113	.0460
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1481.8**	**1217.2**	**37807.**	**4351.3**
Stddev	.7	4.7	23.	1.5
%RSD	.04717	.38826	.06106	.03482
#1	1481.3	1213.8	37790.	4350.2
#2	1482.3	1220.5	37823.	4352.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.219%	105.32%	105.96%	110.23%
Range				

Sample Name: MB 480-481896/1-A Acquired: 7/16/2019 15:27:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.08124**	**.00198**	F **.21385**	**.00017**
Stddev	.00004	.01016	.00006	.00039	.00001
%RSD	39.254	12.501	3.2045	.18270	3.5024
#1	.00007	.07406	.00194	.21412	.00017
#2	.00012	.08843	.00203	.21357	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**.17719**	**.00004**	**-.0031**	**-.00001**
Stddev	.00007	.00422	.00014	.0076	.00003
%RSD	162.13	2.3807	326.64	246.4	237.56
#1	-.00001	.17421	.00014	.0023	.00001
#2	.00009	.18018	-.00006	-.0085	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00042**	**.00349**	**.03460**	**.00044**
Stddev	.00009	.00014	.00136	.00242	.00015
%RSD	29.218	33.144	39.048	6.9942	34.240
#1	.00036	.00052	.00446	.03289	.00033
#2	.00024	.00032	.00253	.03631	.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-481896/1-A Acquired: 7/16/2019 15:27:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00560**	**.00119**	**-.00040**	**.03933**	**.00053**
Stddev	.00180	.00002	.00027	.00495	.00028
%RSD	32.171	1.6858	67.361	12.585	53.371
#1	.00688	.00118	-.00021	.04283	.00073
#2	.00433	.00121	-.00059	.03583	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.00097**	**-.0258**	**-.00138**	**.00265**
Stddev	.0017	.00125	.0029	.00242	.00551
%RSD	51.67	128.84	11.08	175.56	208.15
#1	.0021	.00185	-.0237	-.00309	-.00125
#2	.0046	.00009	-.0278	.00033	.00654
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **1.0207**	**.00010**	**.00101**	**.0042**	**.00019**
Stddev	.0101	.00061	.00000	.0075	.00017
%RSD	.98862	589.40	.36390	177.6	90.221
#1	1.0135	-.00033	.00101	.0096	.00007
#2	1.0278	.00053	.00102	-.0011	.00032
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-481896/1-A Acquired: 7/16/2019 15:27:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00129**	**-.0456**	**-.00054**	**-.00005**	**-.0005**
Stddev	.00142	.0040	.00025	.00061	.0001
%RSD	110.19	8.739	45.836	1307.6	20.27
#1	.00028	-.0484	-.00036	.00038	-.0004
#2	.00229	-.0428	-.00071	-.00048	-.0006
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1601.1**	**1160.7**	**36292.**	**4044.1**
Stddev	3.0	.6	41.	14.4
%RSD	.18445	.04942	.11247	.35578
#1	1603.2	1161.1	36321.	4054.2
#2	1599.0	1160.3	36263.	4033.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.73%	100.43%	101.71%	102.45%
Range				

Sample Name: LCS 480-481896/2-A Acquired: 7/16/2019 15:31:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04804**	**9.3305**	**.19155**	F **.38981**	**.19767**
Stddev	.00060	.0156	.00290	.00022	.00046
%RSD	1.2416	.16754	1.5119	.05706	.23309
#1	.04762	9.3415	.19360	.38997	.19734
#2	.04846	9.3194	.18950	.38965	.19800
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19510**	**9.5322**	**.19397**	**-.0277**	**.18491**
Stddev	.00011	.0058	.00024	.0158	.00010
%RSD	.05740	.06078	.12495	57.14	.05448
#1	.19502	9.5281	.19415	-.0165	.18484
#2	.19517	9.5363	.19380	-.0389	.18499
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19463**	**.18679**	**9.6727**	**9.2175**	**.18772**
Stddev	.00076	.00023	.0480	.0033	.00210
%RSD	.39013	.12513	.49614	.03531	1.1200
#1	.19409	.18696	9.7067	9.2198	.18921
#2	.19517	.18663	9.6388	9.2152	.18623
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-481896/2-A Acquired: 7/16/2019 15:31:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6056**	**.19560**	**.19744**	**9.1387**	**.19342**
Stddev	.0083	.00063	.00044	.0376	.00063
%RSD	.08672	.32085	.22149	.41102	.32732
#1	9.5997	.19515	.19775	9.1652	.19297
#2	9.6114	.19604	.19713	9.1121	.19387
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4751**	**.18766**	**9.602**	**.21067**	**.18256**
Stddev	.0004	.00169	.006	.00025	.00625
%RSD	.0760	.90108	.0636	.11867	3.4228
#1	-.4753	.18885	9.606	.21049	.18698
#2	-.4748	.18646	9.597	.21084	.17814
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.054**	**.18226**	**.18638**	**.0040**	**.19244**
Stddev	.081	.00128	.00044	.0075	.00029
%RSD	.80657	.70019	.23430	187.7	.14979
#1	10.111	.18136	.18669	.0093	.19264
#2	9.9964	.18316	.18607	-.0013	.19223
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-481896/2-A Acquired: 7/16/2019 15:31:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18875**	**-.0170**	**.18968**	**.19790**	**.0041**
Stddev	.00005	.0319	.00004	.00141	.0004
%RSD	.02563	187.8	.02233	.71027	9.114
#1	.18872	-.0395	.18971	.19691	.0043
#2	.18878	.0056	.18965	.19890	.0038
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1573.6**	**1136.6**	**35082.**	**4006.4**
Stddev	2.4	.1	163.	9.6
%RSD	.15057	.00869	.46517	.23845
#1	1575.3	1136.6	35197.	4013.1
#2	1572.0	1136.5	34966.	3999.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.998%	98.348%	98.321%	101.49%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 15:35:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0052**	**49.356**	**.98107**	**.98601**	**.99226**	**.98829**	**49.172**	**.98790**
Stddev	.0034	.041	.00093	.00086	.00176	.00159	.217	.00123
%RSD	.33648	.08208	.09446	.08689	.17749	.16088	.44203	.12429
#1	1.0076	49.385	.98172	.98662	.99351	.98941	49.325	.98704
#2	1.0028	49.328	.98041	.98540	.99101	.98716	49.018	.98877
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9778**	**.98254**	**1.0013**	**.97667**	**49.746**	**48.609**	**.99237**	**49.327**
Stddev	.0231	.00088	.0004	.00122	.129	.067	.00137	.029
%RSD	2.359	.08916	.03890	.12507	.26004	.13734	.13790	.05905
#1	.9614	.98192	1.0016	.97754	49.655	48.656	.99334	49.348
#2	.9941	.98316	1.0011	.97581	49.837	48.562	.99140	49.307
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99830**	**.99460**	**49.130**	**.98125**	**25.01**	**.97836**	**24.54**	**.98570**
Stddev	.00043	.00032	.032	.00235	.00	.00044	.02	.00013
%RSD	.04305	.03229	.06438	.23921	.0193	.04452	.0982	.01314
#1	.99861	.99482	49.153	.97959	25.01	.97867	24.55	.98579
#2	.99800	.99437	49.108	.98291	25.02	.97805	24.52	.98560
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 15:35:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.97510	10.031	.97634	.98520	.9885	.98942	.98409	2.549
Stddev	.00290	.055	.00255	.00075	.0011	.00162	.00079	.017
%RSD	.29751	.55267	.26123	.07585	.1163	.16384	.08073	.6585
#1	.97715	10.070	.97454	.98573	.9877	.98827	.98465	2.538
#2	.97305	9.9920	.97814	.98467	.9893	.99057	.98353	2.561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	.99058	.99955	1.002
Stddev	.00261	.00720	.003
%RSD	.26347	.71983	.2848
#1	.99242	.99446	1.000
#2	.98873	1.0046	1.004
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1486.4	1120.7	33841.	3896.3
Stddev	1.3	.1	115.	4.7
%RSD	.08552	.00529	.34050	.12038
#1	1487.3	1120.8	33759.	3893.0
#2	1485.5	1120.7	33922.	3899.6

Sample Name: CCB-5392763 Acquired: 7/16/2019 15:39:08 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00677**	**-.00027**	**.01861**	**.00004**	**-.00000**	**.00381**	**-.00006**
Stddev	.00027	.01526	.00146	.00025	.00001	.00000	.00065	.00004
%RSD	195.70	225.43	547.50	1.3171	16.487	363.14	16.993	73.606
#1	-.00033	.01756	-.00130	.01844	.00004	.00000	.00427	-.00009
#2	.00005	-.00402	.00077	.01878	.00003	-.00000	.00335	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0152**	**-.00001**	**.00006**	**.00006**	**.00064**	**.01640**	**-.00006**	**.00242**
Stddev	.0090	.00001	.00054	.00027	.00088	.00509	.00014	.00264
%RSD	59.09	140.51	870.89	429.77	136.64	31.041	248.35	109.22
#1	-.0215	-.00002	.00045	-.00013	.00002	.02000	.00004	.00429
#2	-.0088	-.00000	-.00032	.00025	.00126	.01280	-.00015	.00055
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00045**	**.03884**	**.00033**	**.0004**	**-.00130**	**-.0223**	**-.00020**
Stddev	.00001	.00017	.00203	.00022	.0019	.00040	.0038	.00174
%RSD	3.1984	38.287	5.2393	67.647	508.1	30.628	17.03	891.66
#1	-.00025	.00033	.04028	.00049	-.0010	-.00158	-.0250	-.00143
#2	-.00024	.00057	.03740	.00017	.0017	-.00102	-.0196	.00104
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 15:39:08 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.07402**	**-.00039**	**-.00002**	**.0046**	**-.00017**	**.00171**	**-.0293**
Stddev	.00433	.01729	.00098	.00001	.0073	.00014	.00104	.0187
%RSD	2074.3	23.364	248.96	31.879	158.9	85.740	61.172	63.75
#1	.00286	.06179	.00030	-.00002	-.0006	-.00007	.00097	-.0425
#2	-.00327	.08625	-.00109	-.00003	.0097	-.00027	.00244	-.0161
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**-.00056**	**-.00236**	**-.0017**
Stddev	.00027	.00028	.0001
%RSD	48.769	11.829	6.014
#1	-.00075	-.00256	-.0016
#2	-.00036	-.00216	-.0017
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.6**	**1150.1**	**35724.**	**3962.3**
Stddev	1.3	1.4	42.	1.2
%RSD	.08304	.12280	.11759	.03095
#1	1587.5	1151.1	35754.	3963.2
#2	1585.6	1149.1	35694.	3961.4

Sample Name: CCVL-5395711 Acquired: 7/16/2019 15:43:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00593**	**.20190**	**.01055**	F **.03749**	**.00212**	**.00203**	**.50073**
Stddev	.00013	.01355	.00196	.00058	.00002	.00004	.00047
%RSD	2.2336	6.7088	18.588	1.5397	.82898	1.9184	.09424
#1	.00584	.21148	.01193	.03790	.00211	.00206	.50040
#2	.00603	.19232	.00916	.03708	.00213	.00200	.50107
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00197**	**-.0125**	**.00379**	**.00422**	**.00937**	**.05101**	**.49118**
Stddev	.00009	.0204	.00012	.00009	.00011	.00119	.00733
%RSD	4.6771	162.8	3.0887	2.1903	1.2075	2.3326	1.4922
#1	.00190	-.0270	.00387	.00415	.00945	.05016	.49637
#2	.00203	.0019	.00370	.00428	.00929	.05185	.48600
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02855**	**.20123**	**.00283**	**.00991**	**.97789**	**.01023**	**-.0231**
Stddev	.00048	.00217	.00003	.00011	.00622	.00005	.0006
%RSD	1.6823	1.0808	1.1797	1.0909	.63569	.53511	2.599
#1	.02821	.19969	.00281	.00983	.97350	.01019	-.0235
#2	.02889	.20276	.00286	.00998	.98229	.01026	-.0226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 15:43:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00972	.1656	.02112	.02679	.55681	.00828	.00474
Stddev	.00024	.0025	.00130	.00149	.00446	.00083	.00002
%RSD	2.4731	1.522	6.1759	5.5564	.80180	10.030	.39923
#1	.00989	.1674	.02019	.02784	.55997	.00769	.00475
#2	.00955	.1638	.02204	.02574	.55366	.00887	.00472
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0059	.00482	.02006	-.0065	.00466	.01123	-.0005
Stddev	.0134	.00007	.00145	.0153	.00006	.00012	.0006
%RSD	227.9	1.5275	7.2054	236.0	1.2640	1.0464	132.3
#1	.0154	.00477	.02109	.0043	.00462	.01114	-.0000
#2	-.0036	.00487	.01904	-.0173	.00470	.01131	-.0009
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1589.9	1149.4	35688.	3959.5
Stddev	.1	.5	21.	4.9
%RSD	.00943	.04219	.05781	.12249
#1	1590.0	1149.8	35674.	3956.1
#2	1589.8	1149.1	35703.	3962.9

Sample Name: 480-156031-C-1-A Acquired: 7/16/2019 15:46:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.02418**	**-.00206**	**.22541**	**.06789**
Stddev	.00033	.00245	.00377	.00136	.00012
%RSD	135.04	10.152	183.08	.60323	.17905
#1	-.00001	.02245	-.00473	.22445	.06781
#2	-.00048	.02592	.00061	.22637	.06798
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**129.16**	**.00011**	**-.0191**	**.00094**
Stddev	.00004	.41	.00011	.0012	.00001
%RSD	663.54	.31735	99.521	6.432	.70018
#1	.00002	129.45	.00003	-.0182	.00095
#2	-.00004	128.87	.00018	-.0200	.00094
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.01016**	**.00472**	**11.339**	**.00096**
Stddev	.00036	.00021	.00159	.021	.00063
%RSD	85.155	2.0619	33.706	.18555	65.067
#1	.00017	.01030	.00360	11.354	.00052
#2	.00067	.01001	.00585	11.324	.00140
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-1-A Acquired: 7/16/2019 15:46:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.7886**	**.11509**	**.00398**	**17.117**	**.00185**
Stddev	.0144	.00018	.00013	.042	.00008
%RSD	.24837	.15326	3.3386	.24776	4.5400
#1	5.7785	.11496	.00389	17.087	.00179
#2	5.7988	.11521	.00407	17.147	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0133**	**.00146**	**10.35**	**-.00204**	**-.00178**
Stddev	.0004	.00066	.01	.00184	.00139
%RSD	2.991	45.390	.1204	90.352	78.429
#1	-.0130	.00099	10.35	-.00334	-.00079
#2	-.0136	.00193	10.36	-.00074	-.00276
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.4592**	**-.00051**	**.15763**	**.0010**	**-.00024**
Stddev	.0155	.00035	.00024	.0044	.00028
%RSD	.34663	68.479	.15393	445.6	116.70
#1	4.4483	-.00026	.15746	.0041	-.00044
#2	4.4701	-.00076	.15781	-.0021	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-1-A Acquired: 7/16/2019 15:46:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00401**	**.0303**	**-.00015**	**.00278**	**-.0006**
Stddev	.00080	.0188	.00014	.00070	.0002
%RSD	19.869	62.11	92.780	25.164	35.43
#1	.00458	.0170	-.00025	.00327	-.0005
#2	.00345	.0436	-.00005	.00228	-.0008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1528.1**	**1116.9**	**34280.**	**3940.3**
Stddev	2.2	2.9	80.	2.4
%RSD	.14191	.25782	.23390	.06060
#1	1529.6	1119.0	34337.	3938.6
#2	1526.6	1114.9	34223.	3942.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.133%	96.648%	96.074%	99.819%
Range				

Sample Name: 480-156031-C-2-A Acquired: 7/16/2019 15:50:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00022**	**.02546**	**.04714**	**.34823**	**.40404**
Stddev	.00038	.01423	.00026	.00044	.00107
%RSD	174.71	55.898	.54345	.12745	.26406
#1	-.00049	.01540	.04732	.34855	.40328
#2	.00005	.03553	.04695	.34792	.40479
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**270.06**	**.00005**	**-.0271**	**.01165**
Stddev	.00002	.01	.00023	.0066	.00031
%RSD	130.50	.00247	468.65	24.24	2.6660
#1	.00000	270.07	-.00012	-.0224	.01143
#2	.00002	270.06	.00022	-.0317	.01187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	**-.00146**	**66.297**	**19.412**	**.00396**
Stddev	.00023	.00055	.051	.009	.00003
%RSD	12.281	37.293	.07659	.04398	.77471
#1	.00173	-.00108	66.262	19.418	.00398
#2	.00206	-.00185	66.333	19.406	.00394
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-2-A Acquired: 7/16/2019 15:50:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**32.875**	**1.3638**	**.00623**	**44.159**	**.00981**
Stddev	.037	.0014	.00014	.012	.00029
%RSD	.11333	.09918	2.1824	.02669	2.9674
#1	32.849	1.3629	.00633	44.168	.00960
#2	32.901	1.3648	.00613	44.151	.01001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.1387**	**.00333**	**9.510**	**-.00246**	**-.00398**
Stddev	.0021	.00050	.008	.00166	.00079
%RSD	1.488	15.042	.0882	67.626	19.785
#1	-.1402	.00298	9.504	-.00128	-.00453
#2	-.1373	.00368	9.516	-.00363	-.00342
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.0582**	**.00102**	**.60592**	**.0410**	**.00026**
Stddev	.1697	.00058	.00059	.0059	.00006
%RSD	1.8730	56.923	.09761	14.45	22.896
#1	9.1782	.00143	.60550	.0452	.00022
#2	8.9382	.00061	.60634	.0368	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-2-A Acquired: 7/16/2019 15:50:40 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.1113**	**.00115**	**.00498**	**.0009**
Stddev	.00021	.0129	.00019	.00080	.0008
%RSD	49.127	11.61	16.727	16.029	95.04
#1	-.00028	.1204	.00128	.00442	.0015
#2	-.00058	.1022	.00101	.00555	.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1431.7**	**1063.2**	**32887.**	**3904.4**
Stddev	2.2	1.2	98.	9.9
%RSD	.15380	.11687	.29787	.25376
#1	1433.2	1064.1	32956.	3911.4
#2	1430.1	1062.3	32817.	3897.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.068%	92.001%	92.169%	98.909%
Range				

Sample Name: 480-156031-C-3-A Acquired: 7/16/2019 15:54:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.00634**	**.01759**	**.24800**	**.04891**
Stddev	.00016	.01147	.00285	.00051	.00015
%RSD	39.344	180.78	16.179	.20587	.31378
#1	.00053	.01445	.01960	.24836	.04901
#2	.00030	-.00177	.01558	.24764	.04880
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**243.54**	**.00024**	**-.0055**	**.04389**
Stddev	.00003	2.16	.00014	.0073	.00033
%RSD	527.97	.88831	57.554	133.3	.75929
#1	-.00002	245.07	.00014	-.0107	.04413
#2	.00003	242.01	.00033	-.0003	.04366
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**-.00056**	**98.228**	**10.037**	**.01228**
Stddev	.00051	.00007	.931	.034	.00113
%RSD	58.336	11.625	.94795	.33801	9.2003
#1	-.00051	-.00061	98.886	10.061	.01308
#2	-.00123	-.00052	97.569	10.013	.01148
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-3-A Acquired: 7/16/2019 15:54:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**45.195**	**2.6880**	**.00238**	**58.458**	**.00902**
Stddev	.073	.0110	.00008	.236	.00061
%RSD	.16079	.40917	3.2051	.40438	6.7982
#1	45.246	2.6957	.00233	58.625	.00945
#2	45.144	2.6802	.00243	58.291	.00859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.2033**	**.00575**	**3.385**	**-.00045**	**-.00464**
Stddev	.0004	.00062	.020	.00291	.00180
%RSD	.2208	10.854	.5922	643.31	38.696
#1	-.2030	.00619	3.371	-.00251	-.00592
#2	-.2036	.00531	3.400	.00161	-.00337
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.159**	**-.00026**	**.71978**	**.0607**	**.00025**
Stddev	.537	.00060	.00334	.0031	.00018
%RSD	2.8013	233.89	.46443	5.157	72.907
#1	19.539	-.00068	.72215	.0629	.00012
#2	18.780	.00017	.71742	.0585	.00038
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-3-A Acquired: 7/16/2019 15:54:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**.0480**	**.00003**	**.01373**	**.0026**
Stddev	.00419	.0594	.00003	.00283	.0004
%RSD	1631.1	123.8	108.86	20.584	13.67
#1	-.00322	.0899	.00005	.01173	.0028
#2	.00271	.0060	.00001	.01573	.0023
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1428.5**	**1067.7**	**32998.**	**3886.0**
Stddev	2.3	.1	40.	20.9
%RSD	.15900	.01056	.12180	.53676
#1	1430.1	1067.6	32970.	3871.2
#2	1426.8	1067.8	33026.	3900.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.865%	92.388%	92.482%	98.442%
Range				

Sample Name: 480-156031-C-4-A Acquired: 7/16/2019 15:58:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.01555**	**.04731**	**.47559**	**.21642**
Stddev	.00001	.00725	.00304	.00107	.00017
%RSD	23.547	46.607	6.4279	.22530	.07795
#1	-.00007	.02068	.04946	.47635	.21654
#2	-.00005	.01043	.04516	.47484	.21630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**300.93**	**.00020**	**.0071**	**.06666**
Stddev	.00001	1.45	.00007	.0065	.00027
%RSD	65.405	.48105	35.947	91.44	.40616
#1	.00003	301.95	.00025	.0025	.06647
#2	.00001	299.91	.00015	.0117	.06686
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00096**	**-.00130**	**26.251**	**14.779**	**.01189**
Stddev	.00067	.00008	.007	.009	.00045
%RSD	70.222	5.9945	.02834	.06356	3.7624
#1	.00143	-.00124	26.246	14.786	.01157
#2	.00048	-.00135	26.256	14.773	.01220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-4-A Acquired: 7/16/2019 15:58:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**49.739**	**3.5634**	**.00269**	**114.97**	**.01406**
Stddev	.065	.0018	.00007	.09	.00030
%RSD	.13087	.05007	2.6014	.07494	2.1034
#1	49.785	3.5647	.00274	114.91	.01427
#2	49.693	3.5622	.00264	115.03	.01386
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0212**	**.00341**	**3.087**	**-.00378**	**-.00802**
Stddev	.0009	.00163	.014	.00077	.00245
%RSD	4.472	47.915	.4680	20.277	30.508
#1	-.0205	.00225	3.076	-.00433	-.00974
#2	-.0219	.00456	3.097	-.00324	-.00629
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.921**	**.00067**	**1.8803**	**.0283**	**.00150**
Stddev	.079	.00039	.0019	.0041	.00009
%RSD	.66625	57.839	.10200	14.34	5.7063
#1	11.977	.00039	1.8790	.0254	.00144
#2	11.865	.00094	1.8817	.0312	.00156
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-4-A Acquired: 7/16/2019 15:58:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00339**	**.0558**	**.00207**	**.00641**	**.0020**
Stddev	.00007	.1063	.00021	.00123	.0008
%RSD	2.0004	190.4	10.322	19.263	41.60
#1	.00343	-.0193	.00192	.00728	.0026
#2	.00334	.1310	.00222	.00554	.0014
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1401.9**	**1057.5**	**32962.**	**3915.1**
Stddev	2.6	1.7	69.	1.3
%RSD	.18820	.16341	.20851	.03214
#1	1403.8	1058.7	32913.	3914.2
#2	1400.0	1056.3	33010.	3915.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.194%	91.504%	92.380%	99.179%
Range				

Sample Name: 480-156031-C-5-A Acquired: 7/16/2019 16:02:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.08343**	**-.00013**	**.24955**	**.10282**
Stddev	.00019	.00134	.00511	.00146	.00020
%RSD	89.291	1.6005	3805.5	.58608	.19814
#1	-.00008	.08249	.00348	.24851	.10296
#2	-.00035	.08438	-.00375	.25058	.10268
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**139.62**	**.00014**	**-.0204**	**.00193**
Stddev	.00001	.04	.00007	.0093	.00012
%RSD	10.187	.02931	52.809	45.33	6.2567
#1	.00007	139.59	.00009	-.0269	.00184
#2	.00006	139.65	.00019	-.0139	.00201
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02512**	**.00054**	**54.685**	**11.702**	**.00237**
Stddev	.00033	.00031	.760	.084	.00049
%RSD	1.3327	57.558	1.3903	.71834	20.685
#1	.02536	.00076	54.148	11.642	.00202
#2	.02488	.00032	55.223	11.761	.00271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-5-A Acquired: 7/16/2019 16:02:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.7969**	**.99035**	**-.00075**	**5.3831**	**.00095**
Stddev	.0199	.00484	.00023	.0425	.00007
%RSD	.22564	.48878	31.383	.78867	7.6245
#1	8.7829	.99377	-.00091	5.3531	.00090
#2	8.8110	.98693	-.00058	5.4131	.00100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.1075**	**.00240**	**1.678**	**-.00274**	**-.00908**
Stddev	.0028	.00015	.005	.00456	.00319
%RSD	2.625	6.3998	.2841	166.45	35.127
#1	-.1055	.00251	1.674	.00048	-.01133
#2	-.1095	.00229	1.681	-.00596	-.00682
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.3990**	**.00001**	**.18895**	**.0382**	**.00092**
Stddev	.0264	.00062	.00159	.0027	.00025
%RSD	.60014	9202.6	.84213	7.060	26.953
#1	4.3803	-.00043	.18782	.0363	.00110
#2	4.4176	.00045	.19007	.0401	.00075
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-5-A Acquired: 7/16/2019 16:02:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00010**	**.0065**	**.00154**	**.00774**	**.0013**
Stddev	.00029	.0348	.00038	.00002	.0007
%RSD	283.73	536.6	24.723	.23495	55.26
#1	.00030	.0311	.00181	.00775	.0008
#2	-.00010	-.0181	.00127	.00773	.0018
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1505.0**	**1096.1**	**34221.**	**3982.2**
Stddev	3.9	2.9	15.	21.8
%RSD	.25644	.26579	.04343	.54749
#1	1507.7	1098.1	34210.	3997.6
#2	1502.2	1094.0	34231.	3966.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.678%	94.845%	95.908%	100.88%
Range				

Sample Name: 480-156031-C-6-A Acquired: 7/16/2019 16:06:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.04274**	**.00300**	**.20368**	**.02335**
Stddev	.00018	.00503	.00077	.00095	.00005
%RSD	124.58	11.779	25.799	.46515	.21054
#1	-.00028	.04630	.00245	.20301	.02331
#2	-.00002	.03918	.00355	.20435	.02338
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**13.542**	**-.00005**	**.0071**	**.00075**
Stddev	.00001	.011	.00017	.0141	.00015
%RSD	43.649	.08049	316.45	198.2	20.405
#1	.00003	13.549	.00007	.0171	.00064
#2	.00001	13.534	-.00017	-.0029	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00540**	**.00120**	**.12135**	**3.7992**	**.00132**
Stddev	.00028	.00024	.00188	.0264	.00089
%RSD	5.2481	19.544	1.5480	.69541	67.323
#1	.00520	.00104	.12002	3.8178	.00195
#2	.00560	.00137	.12268	3.7805	.00069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-6-A Acquired: 7/16/2019 16:06:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.1508**	**.07141**	**-.00037**	**69.714**	**.00109**
Stddev	.0025	.00034	.00001	.373	.00029
%RSD	.11689	.47313	1.8405	.53474	27.010
#1	2.1490	.07117	-.00037	69.450	.00088
#2	2.1526	.07164	-.00038	69.978	.00129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0002**	**.00099**	**8.495**	**.00058**	**-.00167**
Stddev	.0002	.00076	.020	.00020	.00165
%RSD	105.3	76.494	.2397	35.350	98.725
#1	-.0004	.00046	8.481	.00043	-.00050
#2	-.0001	.00153	8.510	.00072	-.00283
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.4869**	**-.00120**	**.08142**	**.0032**	**.00015**
Stddev	.0529	.00088	.00032	.0109	.00001
%RSD	.81482	73.398	.39245	345.0	4.9163
#1	6.5243	-.00058	.08120	.0109	.00016
#2	6.4496	-.00182	.08165	-.0045	.00015
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156031-C-6-A Acquired: 7/16/2019 16:06:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00246**	**-.0349**	**-.00018**	**.00573**	**-.0016**
Stddev	.00058	.0186	.00037	.00181	.0001
%RSD	23.555	53.27	204.73	31.500	9.040
#1	.00288	-.0217	.00008	.00446	-.0017
#2	.00205	-.0480	-.00044	.00701	-.0015
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1554.4**	**1128.1**	**34694.**	**3988.6**
Stddev	.2	.7	134.	13.7
%RSD	.01299	.06048	.38717	.34382
#1	1554.2	1128.6	34789.	3998.3
#2	1554.5	1127.6	34599.	3978.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.787%	97.612%	97.234%	101.04%
Range				

Sample Name: 480-156036-B-1-A Acquired: 7/16/2019 16:09:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.01197**	**.00064**	**.19198**	**.00017**
Stddev	.00048	.00375	.00010	.00117	.00001
%RSD	377.64	31.314	15.150	.60863	5.6818
#1	-.00046	.01462	.00071	.19116	.00016
#2	.00021	.00932	.00057	.19281	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.08407**	**-.00013**	**.0056**	**.00007**
Stddev	.00000	.00149	.00009	.0096	.00008
%RSD	10.115	1.7775	66.092	170.7	112.35
#1	-.00002	.08512	-.00020	-.0012	.00001
#2	-.00002	.08301	-.00007	.0124	.00012
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00028**	**.00485**	**.00391**	**.00039**
Stddev	.00040	.00018	.00011	.00548	.00070
%RSD	198.65	62.191	2.3561	140.18	181.37
#1	-.00008	.00016	.00493	.00003	-.00011
#2	.00048	.00041	.00477	.00779	.00089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-A Acquired: 7/16/2019 16:09:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02432**	**.00103**	**-.00039**	**.05649**	**.00020**
Stddev	.00003	.00001	.00048	.00145	.00024
%RSD	.13779	.82316	121.56	2.5673	120.19
#1	.02434	.00103	-.00006	.05546	.00003
#2	.02429	.00102	-.00073	.05751	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0023**	**-.00041**	**-.0064**	**.00081**	**.00305**
Stddev	.0028	.00065	.0039	.00115	.00557
%RSD	121.1	158.67	61.75	142.80	182.57
#1	-.0042	-.00086	-.0092	.00162	-.00089
#2	-.0003	.00005	-.0036	-.00001	.00699
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.92782**	**-.00080**	**.00132**	**.0055**	**.00011**
Stddev	.02208	.00064	.00002	.0054	.00026
%RSD	2.3795	79.355	1.7510	99.14	232.07
#1	.94343	-.00125	.00134	.0093	.00029
#2	.91221	-.00035	.00131	.0016	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-A Acquired: 7/16/2019 16:09:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.0263**	**-.00017**	**-.00074**	**-.0012**
Stddev	.00008	.0087	.00010	.00018	.0005
%RSD	27.117	33.20	55.934	24.061	36.69
#1	-.00024	.0325	-.00024	-.00061	-.0009
#2	-.00036	.0202	-.00011	-.00086	-.0016
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1591.9**	**1149.5**	**35736.**	**4047.1**
Stddev	1.4	1.4	33.	3.3
%RSD	.08921	.12215	.09277	.08267
#1	1590.9	1150.4	35759.	4044.7
#2	1592.9	1148.5	35713.	4049.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	100.15%	99.462%	100.15%	102.52%
Range				

Sample Name: 480-156036-B-1-Asd@5 Acquired: 7/16/2019 16:13:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.00118**	**-.00179**	**.03851**	**.00005**
Stddev	.00033	.00025	.00078	.00025	.00000
%RSD	108.34	21.271	43.667	.64541	5.3716
#1	-.00007	.00100	-.00234	.03868	.00005
#2	-.00054	.00135	-.00123	.03833	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.02173**	**-.00014**	**-.0032**	**.00007**
Stddev	.00001	.00349	.00005	.0169	.00021
%RSD	103.67	16.086	34.591	531.0	324.36
#1	.00002	.02420	-.00018	-.0151	.00022
#2	.00000	.01925	-.00011	.0088	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**.00025**	**-.00224**	**.00843**	**.00047**
Stddev	.00024	.00003	.00043	.01686	.00024
%RSD	144.03	10.495	19.357	199.99	50.559
#1	-.00000	.00023	-.00255	.02036	.00064
#2	.00034	.00026	-.00193	-.00349	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-Asd@5 Acquired: 7/16/2019 16:13:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00723**	**.00028**	**-.00030**	**.03651**	**.00071**
Stddev	.00145	.00002	.00009	.00482	.00029
%RSD	20.067	7.1209	28.628	13.214	40.812
#1	.00620	.00026	-.00036	.03993	.00051
#2	.00825	.00029	-.00024	.03310	.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0009**	**-.00004**	**-.0260**	**.00121**	**.00695**
Stddev	.0001	.00063	.0047	.00199	.00133
%RSD	15.65	1656.8	18.17	163.94	19.219
#1	-.0010	-.00048	-.0227	.00262	.00600
#2	-.0008	.00040	-.0294	-.00019	.00789
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18514**	**-.00032**	**.00029**	**.0023**	**-.00020**
Stddev	.00259	.00039	.00004	.0021	.00011
%RSD	1.4009	122.57	12.336	91.22	55.080
#1	.18330	-.00059	.00027	.0008	-.00012
#2	.18697	-.00004	.00032	.0038	-.00028
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-Asd@5 Acquired: 7/16/2019 16:13:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00147**	**-.0167**	**-.00057**	**.00051**	**-.0007**
Stddev	.00049	.0222	.00006	.00161	.0003
%RSD	32.969	133.0	10.034	316.84	50.51
#1	.00113	-.0323	-.00053	-.00063	-.0009
#2	.00182	-.0010	-.00061	.00165	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1580.0**	**1146.3**	**35662.**	**4012.8**
Stddev	3.4	1.7	95.	4.9
%RSD	.21378	.15209	.26607	.12307
#1	1582.4	1147.5	35595.	4016.3
#2	1577.6	1145.1	35729.	4009.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.400%	99.191%	99.948%	101.65%
Range				

Sample Name: 480-156036-B-1-Apds Acquired: 7/16/2019 16:17:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05117**	**9.6553**	**.20263**	**.38541**	**.20433**
Stddev	.00017	.0157	.00054	.00178	.00028
%RSD	.33746	.16245	.26597	.46284	.13647
#1	.05129	9.6664	.20301	.38415	.20453
#2	.05104	9.6442	.20225	.38667	.20413
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20312**	**10.023**	**.20515**	**-.0208**	**.19579**
Stddev	.00039	.001	.00056	.0005	.00014
%RSD	.19243	.01354	.27344	2.541	.06907
#1	.20340	10.024	.20475	-.0212	.19570
#2	.20285	10.022	.20555	-.0204	.19589
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20437**	**.19682**	**10.158**	**9.5664**	**.19440**
Stddev	.00017	.00037	.065	.0301	.00002
%RSD	.08407	.18877	.64217	.31446	.00896
#1	.20425	.19708	10.204	9.5451	.19442
#2	.20449	.19656	10.112	9.5877	.19439
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-Apds Acquired: 7/16/2019 16:17:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.222**	**.20311**	**.20848**	**9.4747**	**.20433**
Stddev	.000	.00010	.00002	.0214	.00043
%RSD	.00238	.05132	.01109	.22539	.21077
#1	10.222	.20319	.20849	9.4898	.20402
#2	10.221	.20304	.20846	9.4596	.20463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.5107**	**.19753**	**10.28**	**.22149**	**.19920**
Stddev	.0017	.00001	.01	.00147	.00259
%RSD	.3251	.00440	.1413	.66420	1.3021
#1	-.5119	.19754	10.27	.22045	.19737
#2	-.5096	.19752	10.29	.22253	.20104
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.766**	**.21333**	**.19383**	**.0145**	**.20128**
Stddev	.038	.00009	.00047	.0011	.00065
%RSD	.35511	.04323	.24336	7.750	.32424
#1	10.793	.21326	.19416	.0153	.20082
#2	10.739	.21339	.19349	.0137	.20175
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-Apds Acquired: 7/16/2019 16:17:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19938**	**-.0681**	**.19958**	**.20771**	**.0025**
Stddev	.00077	.0198	.00027	.00149	.0000
%RSD	.38545	29.08	.13581	.71627	1.084
#1	.19992	-.0821	.19977	.20665	.0025
#2	.19883	-.0541	.19938	.20876	.0025
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1572.9**	**1135.4**	**35190.**	**4034.5**
Stddev	3.4	4.8	46.	6.2
%RSD	.21764	.42197	.12999	.15410
#1	1575.3	1138.8	35222.	4030.1
#2	1570.4	1132.0	35157.	4038.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.949%	98.245%	98.624%	102.20%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 16:21:16 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99685**	**49.193**	**.98934**	**.99165**	**.98954**	**.99003**	**49.219**	**.99175**
Stddev	.00188	.048	.00706	.00159	.00051	.00017	.030	.00202
%RSD	.18879	.09743	.71326	.16028	.05136	.01704	.06006	.20404
#1	.99818	49.159	.99433	.99053	.98990	.98991	49.198	.99032
#2	.99552	49.227	.98435	.99278	.98918	.99015	49.240	.99318
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.9975**	**.98413**	**1.0003**	**.98027**	**49.776**	**48.756**	**.98641**	**49.377**
Stddev	.0126	.00042	.0005	.00275	.024	.035	.00309	.063
%RSD	1.267	.04247	.05191	.28080	.04826	.07200	.31276	.12667
#1	.9885	.98384	.99993	.98222	49.759	48.781	.98859	49.422
#2	1.006	.98443	1.0007	.97832	49.793	48.731	.98422	49.333
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99749**	**.99886**	**49.023**	**.98588**	**24.86**	**.98397**	**24.73**	**.99196**
Stddev	.00285	.00066	.052	.00043	.01	.00028	.07	.00015
%RSD	.28585	.06616	.10653	.04351	.0476	.02851	.2817	.01545
#1	.99951	.99933	49.060	.98558	24.85	.98377	24.68	.99207
#2	.99548	.99839	48.986	.98619	24.87	.98417	24.78	.99185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 16:21:16 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.99580	10.048	.97818	.98572	.9796	.99310	.98758	2.516
Stddev	.00069	.008	.00485	.00068	.0035	.00086	.00843	.002
%RSD	.06934	.07916	.49619	.06849	.3588	.08617	.85363	.0732
#1	.99532	10.053	.97475	.98525	.9771	.99249	.98162	2.515
#2	.99629	10.042	.98161	.98620	.9821	.99370	.99354	2.517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	.99549	1.0061	.9922
Stddev	.00130	.0036	.0019
%RSD	.13093	.35395	.1893
#1	.99642	1.0036	.9909
#2	.99457	1.0086	.9936
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1471.2	1105.8	33667.	3881.3
Stddev	.5	.1	130.	1.0
%RSD	.03593	.00915	.38654	.02507
#1	1471.6	1105.7	33574.	3882.0
#2	1470.8	1105.8	33759.	3880.6

Sample Name: CCB-5392763 Acquired: 7/16/2019 16:24:56 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.00730**	**-.00119**	**.01847**	**.00003**	**.00002**	**.00082**	**.00004**
Stddev	.00015	.00076	.00242	.00023	.00001	.00003	.00340	.00010
%RSD	132.02	10.459	203.60	1.2409	22.350	170.80	415.94	273.18
#1	.00022	.00676	.00052	.01863	.00002	-.00000	.00322	.00011
#2	.00001	.00784	-.00290	.01831	.00003	.00004	-.00158	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0032**	**-.00011**	**.00005**	**.00026**	**.00012**	**.02400**	**.00006**	**-.00042**
Stddev	.0063	.00007	.00028	.00000	.00157	.01312	.00118	.00095
%RSD	198.8	64.119	511.74	.12804	1279.5	54.680	1844.6	225.79
#1	-.0077	-.00006	.00025	.00026	-.00099	.01472	.00090	-.00109
#2	.0013	-.00016	-.00014	.00027	.00123	.03328	-.00077	.00025
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**.00033**	**.02880**	**.00051**	**.0041**	**.00064**	**-.0248**	**-.00095**
Stddev	.00006	.00035	.00051	.00014	.0026	.00006	.0017	.00030
%RSD	20.811	106.35	1.7651	27.028	62.37	8.6861	6.759	31.403
#1	-.00023	.00008	.02916	.00041	.0060	.00060	-.0260	-.00116
#2	-.00031	.00058	.02844	.00061	.0023	.00068	-.0236	-.00074
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 16:24:56 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00363	.08415	.00017	-.00002	.0075	.00010	.00106	-.0328
Stddev	.00134	.00270	.00042	.00001	.0043	.00029	.00086	.0013
%RSD	37.003	3.2094	255.05	84.833	57.45	303.25	81.388	3.980
#1	.00458	.08224	-.00013	-.00001	.0106	.00030	.00167	-.0319
#2	.00268	.08606	.00046	-.00003	.0045	-.00011	.00045	-.0337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	-.00056	-.00150	-.0003
Stddev	.00018	.00040	.0010
%RSD	32.074	26.321	306.3
#1	-.00069	-.00122	-.0011
#2	-.00043	-.00178	.0004
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1575.3	1142.4	35719.	3975.8
Stddev	.3	.4	20.	6.3
%RSD	.02049	.03879	.05725	.15756
#1	1575.1	1142.7	35734.	3971.4
#2	1575.6	1142.1	35705.	3980.2

Sample Name: CCVL-5395711 Acquired: 7/16/2019 16:28:47 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00580**	**.20974**	**.01236**	F **.03734**	**.00210**	**.00202**	**.49477**
Stddev	.00031	.00291	.00000	.00027	.00001	.00003	.00121
%RSD	5.4071	1.3886	.01224	.71871	.37082	1.4222	.24381
#1	.00558	.20768	.01236	.03715	.00210	.00204	.49562
#2	.00603	.21180	.01236	.03753	.00209	.00200	.49391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00202**	**.0032**	**.00396**	**.00421**	**.00951**	**.05115**	**.51284**
Stddev	.00006	.0072	.00008	.00005	.00021	.00204	.01058
%RSD	2.7610	224.1	1.9061	1.0726	2.2514	3.9816	2.0622
#1	.00199	-.0019	.00402	.00424	.00936	.04971	.50537
#2	.00206	.0084	.00391	.00417	.00966	.05259	.52032
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02872**	**.20120**	**.00288**	**.00998**	**.97144**	**.01045**	**-.0218**
Stddev	.00033	.00029	.00005	.00018	.00628	.00054	.0015
%RSD	1.1641	.14560	1.5803	1.7833	.64622	5.1485	6.686
#1	.02896	.20141	.00291	.00986	.96701	.01083	-.0228
#2	.02849	.20099	.00285	.01011	.97588	.01007	-.0207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 16:28:47 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00971**	**.1704**	**.02058**	**.02482**	**.55853**	**.00787**	**.00476**
Stddev	.00030	.0046	.00095	.00493	.00482	.00069	.00002
%RSD	3.0865	2.679	4.6179	19.864	.86373	8.7270	.40479
#1	.00950	.1672	.01990	.02830	.56194	.00835	.00478
#2	.00992	.1736	.02125	.02133	.55512	.00738	.00475
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0021**	**.00474**	**.02041**	**.0303**	**.00429**	**.00980**	**.0002**
Stddev	.0038	.00010	.00120	.0135	.00003	.00168	.0009
%RSD	182.9	2.0193	5.8690	44.72	.78527	17.171	392.9
#1	-.0048	.00481	.01956	.0398	.00431	.00861	.0009
#2	.0006	.00467	.02125	.0207	.00426	.01099	-.0004
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1584.6**	**1145.3**	**35602.**	**3965.4**
Stddev	3.0	1.5	53.	6.6
%RSD	.18808	.13313	.14895	.16632
#1	1586.7	1146.4	35640.	3960.7
#2	1582.5	1144.2	35565.	3970.1

Sample Name: 480-156036-B-1-B MS Acquired: 7/16/2019 16:32:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05061**	**9.7568**	**.20494**	**.38982**	**.20924**
Stddev	.00015	.0081	.00114	.00150	.00041
%RSD	.30282	.08285	.55789	.38599	.19516
#1	.05051	9.7625	.20413	.38876	.20953
#2	.05072	9.7511	.20575	.39089	.20895
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20671**	**10.127**	**.20602**	**-.0051**	**.19698**
Stddev	.00087	.064	.00015	.0092	.00004
%RSD	.42020	.62808	.07108	181.7	.02031
#1	.20732	10.172	.20612	.0014	.19701
#2	.20610	10.082	.20592	-.0116	.19695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20446**	**.19967**	**10.089**	**9.8176**	**.19664**
Stddev	.00055	.00025	.032	.0282	.00026
%RSD	.26880	.12285	.31776	.28740	.13371
#1	.20407	.19984	10.111	9.7977	.19682
#2	.20485	.19950	10.066	9.8376	.19645
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-B MS Acquired: 7/16/2019 16:32:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.236**	**.20473**	**.21112**	**9.6593**	**.20662**
Stddev	.058	.00021	.00029	.0093	.00018
%RSD	.57137	.10303	.13759	.09660	.08946
#1	10.195	.20487	.21092	9.6659	.20649
#2	10.278	.20458	.21133	9.6527	.20675
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.5002**	**.19878**	**10.27**	**.22538**	**.20098**
Stddev	.0021	.00083	.00	.00162	.00072
%RSD	.4100	.41758	.0197	.71871	.35947
#1	-.5017	.19819	10.27	.22652	.20047
#2	-.4988	.19937	10.27	.22423	.20149
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.220**	**.19088**	**.19876**	**.0009**	**.20506**
Stddev	.003	.00153	.00067	.0034	.00030
%RSD	.02950	.80089	.33668	394.3	.14692
#1	10.222	.18980	.19924	-.0015	.20527
#2	10.218	.19196	.19829	.0033	.20484
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-B MS Acquired: 7/16/2019 16:32:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20326**	**.0394**	**.20149**	**.20858**	**.0016**
Stddev	.00302	.0132	.00047	.00310	.0001
%RSD	1.4849	33.44	.23423	1.4855	7.920
#1	.20539	.0301	.20182	.21077	.0015
#2	.20112	.0487	.20116	.20639	.0016
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1561.4**	**1124.8**	**35140.**	**4037.5**
Stddev	1.9	2.2	101.	10.1
%RSD	.12322	.19983	.28643	.25071
#1	1562.8	1126.4	35069.	4030.4
#2	1560.0	1123.2	35211.	4044.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.228%	97.330%	98.485%	102.28%
Range				

Sample Name: 480-156036-B-1-C MSD Acquired: 7/16/2019 16:36:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04951**	**9.6078**	**.20462**	**.38149**	**.20450**
Stddev	.00033	.0088	.00039	.00136	.00064
%RSD	.66853	.09161	.18908	.35535	.31419
#1	.04975	9.6016	.20435	.38245	.20496
#2	.04928	9.6141	.20490	.38053	.20405
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20236**	**9.7963**	**.20041**	**-.0054**	**.19156**
Stddev	.00025	.0011	.00025	.0127	.00011
%RSD	.12537	.01093	.12609	237.3	.05875
#1	.20254	9.7970	.20023	.0036	.19148
#2	.20218	9.7955	.20059	-.0144	.19164
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20196**	**.19479**	**10.111**	**9.6175**	**.19456**
Stddev	.00038	.00033	.013	.0075	.00022
%RSD	.18978	.16895	.12766	.07828	.11462
#1	.20223	.19502	10.102	9.6228	.19472
#2	.20168	.19456	10.120	9.6121	.19440
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-C MSD Acquired: 7/16/2019 16:36:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.9096**	**.20232**	**.20641**	**9.5372**	**.20194**
Stddev	.0108	.00168	.00002	.0134	.00012
%RSD	.10894	.82940	.01085	.14096	.05759
#1	9.9172	.20350	.20640	9.5467	.20202
#2	9.9019	.20113	.20643	9.5277	.20186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4854**	**.19392**	**10.03**	**.21868**	**.19664**
Stddev	.0007	.00019	.01	.00601	.00661
%RSD	.1459	.09925	.1013	2.7484	3.3614
#1	-.4859	.19378	10.02	.22293	.20132
#2	-.4849	.19406	10.04	.21443	.19197
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.243**	**.18645**	**.19548**	**.0091**	**.20087**
Stddev	.017	.00043	.00066	.0115	.00071
%RSD	.16846	.22817	.33932	125.9	.35161
#1	10.255	.18675	.19595	.0010	.20136
#2	10.231	.18615	.19501	.0172	.20037
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-1-C MSD Acquired: 7/16/2019 16:36:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19762**	**-.0623**	**.19669**	**.20477**	**-.0002**
Stddev	.00045	.0402	.00069	.00245	.0003
%RSD	.22788	64.41	.35074	1.1969	157.1
#1	.19730	-.0340	.19718	.20651	.0000
#2	.19794	-.0907	.19620	.20304	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1556.2**	**1121.3**	**34993.**	**3995.1**
Stddev	.1	1.0	109.	17.6
%RSD	.00927	.08590	.31042	.44101
#1	1556.1	1121.9	34916.	4007.6
#2	1556.3	1120.6	35070.	3982.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.900%	97.023%	98.073%	101.21%
Range				

Sample Name: 480-156036-B-2-A Acquired: 7/16/2019 16:40:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.01979**	**-.00259**	**.21421**	**.03541**
Stddev	.00006	.01043	.00267	.00022	.00001
%RSD	17.711	52.703	102.90	.10090	.02593
#1	-.00029	.01242	-.00071	.21436	.03541
#2	-.00038	.02717	-.00448	.21406	.03542
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**103.12**	**.00004**	**-.0163**	**-.00013**
Stddev	.00002	.05	.00007	.0011	.00016
%RSD	2695.3	.05165	189.14	6.525	121.71
#1	-.00002	103.16	-.00001	-.0155	-.00024
#2	.00002	103.08	.00009	-.0170	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.00046**	**.00222**	**2.0198**	**.00406**
Stddev	.00063	.00005	.00137	.0248	.00047
%RSD	95.097	11.086	61.778	1.2259	11.493
#1	.00111	.00043	.00125	2.0023	.00439
#2	.00022	.00050	.00319	2.0373	.00373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-2-A Acquired: 7/16/2019 16:40:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**42.514**	**.00166**	**.00006**	**2.2111**	**.00044**
Stddev	.157	.00005	.00002	.0085	.00015
%RSD	.36827	3.1730	30.871	.38477	34.563
#1	42.403	.00163	.00005	2.2051	.00055
#2	42.625	.00170	.00007	2.2171	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0000**	**.00094**	**22.04**	**-.00110**	**-.00277**
Stddev	.0033	.00010	.02	.00134	.00103
%RSD	10570.	10.324	.0775	121.90	36.955
#1	-.0023	.00087	22.06	-.00015	-.00350
#2	.0023	.00101	22.03	-.00205	-.00205
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.1315**	**-.00039**	**.08557**	**.0049**	**-.00010**
Stddev	.0283	.00046	.00029	.0106	.00039
%RSD	.39660	118.30	.33451	218.3	384.62
#1	7.1515	-.00072	.08537	.0124	-.00038
#2	7.1115	-.00006	.08578	-.0026	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-2-A Acquired: 7/16/2019 16:40:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00146**	**.0215**	**-.00022**	**.00030**	**-.0014**
Stddev	.00173	.0132	.00046	.00014	.0007
%RSD	118.53	61.66	206.61	46.846	47.97
#1	.00024	.0308	.00010	.00040	-.0019
#2	.00268	.0121	-.00055	.00020	-.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1516.7**	**1102.2**	**34234.**	**3961.0**
Stddev	1.1	1.7	77.	8.0
%RSD	.07526	.15653	.22588	.20110
#1	1515.9	1101.0	34289.	3966.6
#2	1517.5	1103.4	34180.	3955.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.419%	95.375%	95.947%	100.34%
Range				

Sample Name: 480-156036-B-3-A Acquired: 7/16/2019 16:43:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.01847**	**.00057**	**.21589**	**.06583**
Stddev	.00008	.01044	.00338	.00014	.00014
%RSD	114.79	56.518	591.65	.06518	.21314
#1	-.00001	.01109	-.00182	.21579	.06592
#2	-.00013	.02585	.00296	.21599	.06573
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**123.18**	**.00008**	**.0049**	**-.00032**
Stddev	.00003	.62	.00007	.0139	.00000
%RSD	121.14	.49959	88.063	284.8	.46813
#1	-.00005	122.75	.00013	.0147	-.00032
#2	-.00000	123.62	.00003	-.0049	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00033**	**.00054**	**.01735**	**1.7448**	**.00832**
Stddev	.00031	.00020	.00104	.0129	.00006
%RSD	93.384	37.439	6.0078	.74132	.71540
#1	.00054	.00040	.01662	1.7540	.00836
#2	.00011	.00068	.01809	1.7357	.00828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-3-A Acquired: 7/16/2019 16:43:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**43.914**	**.04317**	**.00051**	**3.4089**	**.00148**
Stddev	.212	.00020	.00013	.0006	.00039
%RSD	.48249	.46728	24.818	.01824	26.354
#1	44.064	.04303	.00060	3.4084	.00175
#2	43.765	.04332	.00042	3.4093	.00120
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0095**	**.00177**	**22.07**	**.00002**	**-.00377**
Stddev	.0036	.00128	.03	.00006	.00210
%RSD	37.82	72.682	.1472	318.14	55.841
#1	.0120	.00267	22.04	.00006	-.00228
#2	.0070	.00086	22.09	-.00002	-.00525
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.6321**	**-.00018**	**.11893**	**.0007**	**-.00017**
Stddev	.0037	.00142	.00009	.0090	.00004
%RSD	.04778	795.35	.07507	1318.	20.966
#1	7.6296	.00083	.11886	-.0057	-.00019
#2	7.6347	-.00119	.11899	.0071	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-3-A Acquired: 7/16/2019 16:43:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**.0080**	**-.00001**	**.00028**	**-.0005**
Stddev	.00006	.0066	.00032	.00049	.0001
%RSD	3.1244	82.21	3143.1	173.65	28.36
#1	.00207	.0033	-.00024	.00062	-.0006
#2	.00198	.0127	.00022	-.00006	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1497.2**	**1089.9**	**34082.**	**3929.4**
Stddev	.4	.8	28.	25.3
%RSD	.02586	.07159	.08244	.64450
#1	1497.5	1090.5	34102.	3947.3
#2	1496.9	1089.3	34062.	3911.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.190%	94.309%	95.519%	99.543%
Range				

Sample Name: 480-156036-B-4-A Acquired: 7/16/2019 16:47:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00064**	**.01747**	**.00023**	**.22178**	**.04086**
Stddev	.00027	.00340	.00204	.00064	.00008
%RSD	42.225	19.454	886.40	.28845	.18849
#1	-.00083	.01987	-.00121	.22223	.04080
#2	-.00045	.01507	.00167	.22133	.04091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**99.936**	**.00010**	**-.0155**	**.00099**
Stddev	.00001	.766	.00005	.0186	.00033
%RSD	120.30	.76641	49.008	119.7	33.291
#1	-.00000	100.48	.00014	-.0287	.00122
#2	-.00002	99.395	.00007	-.0024	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00029**	**-.00001**	**3.0824**	**1.6397**	**.00433**
Stddev	.00029	.00015	.0265	.0057	.00014
%RSD	101.80	1085.8	.86088	.34638	3.2366
#1	.00008	-.00012	3.1012	1.6437	.00423
#2	.00049	.00009	3.0637	1.6357	.00443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-4-A Acquired: 7/16/2019 16:47:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**43.799**	**.26775**	**.00039**	**6.1826**	**.00184**
Stddev	.037	.00142	.00034	.0214	.00037
%RSD	.08496	.52866	88.495	.34637	20.245
#1	43.826	.26675	.00063	6.1978	.00158
#2	43.773	.26875	.00015	6.1675	.00210
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0071**	**.00287**	**8.680**	**-.00196**	**-.00563**
Stddev	.0007	.00077	.020	.00047	.00637
%RSD	9.688	26.862	.2284	24.158	113.16
#1	-.0066	.00232	8.666	-.00162	-.01014
#2	-.0075	.00341	8.694	-.00229	-.00113
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.4725**	**-.00018**	**.09309**	**.0030**	**.00012**
Stddev	.0950	.00119	.00004	.0082	.00008
%RSD	1.2717	657.97	.03901	275.1	64.278
#1	7.5397	.00066	.09307	.0088	.00007
#2	7.4053	-.00102	.09312	-.0028	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-4-A Acquired: 7/16/2019 16:47:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00287**	**-.0176**	**-.00043**	**.00007**	**-.0001**
Stddev	.00204	.0365	.00012	.00168	.0001
%RSD	70.959	207.2	27.559	2417.3	91.90
#1	.00143	.0082	-.00035	.00126	-.0002
#2	.00432	-.0435	-.00052	-.00112	-.0000
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1511.4**	**1100.3**	**34026.**	**3946.0**
Stddev	.1	.8	133.	19.5
%RSD	.00908	.07328	.39190	.49374
#1	1511.5	1100.9	34120.	3932.2
#2	1511.3	1099.8	33932.	3959.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.085%	95.212%	95.363%	99.963%
Range				

Sample Name: 480-156036-B-5-A Acquired: 7/16/2019 16:51:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.04135**	**-.00660**	**.21512**	**.07100**
Stddev	.00012	.00560	.00260	.00013	.00004
%RSD	206.87	13.553	39.413	.05997	.05310
#1	-.00003	.04532	-.00844	.21503	.07097
#2	.00015	.03739	-.00476	.21522	.07102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**103.25**	**.00003**	**-.0303**	**-.00025**
Stddev	.00002	.73	.00007	.0066	.00001
%RSD	219.68	.70442	214.83	21.95	5.6822
#1	.00000	103.77	-.00002	-.0256	-.00026
#2	-.00002	102.74	.00008	-.0350	-.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00149**	**.00102**	**.05825**	**1.3421**	**.00189**
Stddev	.00003	.00012	.00274	.0190	.00011
%RSD	2.2878	12.062	4.7043	1.4163	5.9506
#1	.00146	.00093	.06019	1.3287	.00181
#2	.00151	.00110	.05631	1.3556	.00197
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-5-A Acquired: 7/16/2019 16:51:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**45.571**	**.00506**	**.00178**	**4.2728**	**.00063**
Stddev	.009	.00007	.00019	.0002	.00022
%RSD	.01935	1.2902	10.767	.00369	35.317
#1	45.577	.00510	.00164	4.2727	.00079
#2	45.564	.00501	.00191	4.2729	.00047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0473**	**-.00012**	**4.561**	**-.00281**	**-.00353**
Stddev	.0041	.00130	.016	.00075	.00059
%RSD	8.696	1049.4	.3434	26.685	16.654
#1	.0444	.00080	4.572	-.00228	-.00312
#2	.0502	-.00105	4.550	-.00334	-.00395
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.2933**	**.00055**	**.07751**	**.0020**	**.00097**
Stddev	.0471	.00155	.00001	.0018	.00003
%RSD	.64626	280.36	.01852	90.28	3.3586
#1	7.3266	.00165	.07750	.0007	.00094
#2	7.2600	-.00054	.07752	.0033	.00099
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-5-A Acquired: 7/16/2019 16:51:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00319**	**-.0072**	**.00020**	**-.00256**	**-.0012**
Stddev	.00071	.0326	.00027	.00067	.0002
%RSD	22.273	449.8	135.12	25.994	14.20
#1	.00269	-.0303	.00001	-.00304	-.0011
#2	.00369	.0158	.00040	-.00209	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1506.8**	**1096.8**	**34149.**	**3960.1**
Stddev	3.1	2.4	29.	11.4
%RSD	.20687	.21780	.08497	.28664
#1	1509.0	1098.4	34169.	3952.0
#2	1504.6	1095.1	34128.	3968.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	94.795%	94.903%	95.707%	100.32%
Range				

Sample Name: 480-156036-B-6-A Acquired: 7/16/2019 16:55:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**.01265**	**-.00277**	**.21682**	**.03550**
Stddev	.00018	.00269	.00369	.00011	.00010
%RSD	69.114	21.258	133.23	.05014	.27769
#1	-.00039	.01075	-.00016	.21690	.03543
#2	-.00013	.01456	-.00538	.21675	.03557
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**84.129**	**.00014**	**-.0079**	**-.00016**
Stddev	.00005	.464	.00014	.0076	.00023
%RSD	205.84	.55111	103.70	96.53	138.12
#1	-.00001	84.457	.00024	-.0132	-.00000
#2	.00006	83.801	.00004	-.0025	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00073**	**.00220**	**1.4682**	**.00525**
Stddev	.00005	.00014	.00269	.0073	.00023
%RSD	5.6023	18.911	122.26	.49404	4.3580
#1	.00079	.00064	.00410	1.4630	.00542
#2	.00086	.00083	.00030	1.4733	.00509
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-6-A Acquired: 7/16/2019 16:55:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**44.860**	**.00149**	**.00151**	**3.1208**	**.00072**
Stddev	.058	.00011	.00008	.0095	.00038
%RSD	.12833	7.3889	4.9869	.30415	52.838
#1	44.819	.00157	.00156	3.1275	.00098
#2	44.900	.00141	.00145	3.1141	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0063**	**.00106**	**8.785**	**-.00053**	**-.00172**
Stddev	.0035	.00149	.002	.00063	.00095
%RSD	56.00	140.88	.0179	118.71	55.140
#1	.0038	.00000	8.786	-.00098	-.00105
#2	.0088	.00211	8.784	-.00009	-.00239
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.7437**	**.00025**	**.15253**	**-.0059**	**-.00022**
Stddev	.0471	.00052	.00055	.0096	.00011
%RSD	.69830	206.14	.35868	163.3	49.672
#1	6.7770	.00061	.15292	.0009	-.00030
#2	6.7104	-.00011	.15214	-.0126	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156036-B-6-A Acquired: 7/16/2019 16:55:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00184**	**.0329**	**-.00039**	**-.00018**	**-.0016**
Stddev	.00168	.0328	.00011	.00075	.0007
%RSD	90.969	99.78	28.494	413.21	42.65
#1	.00303	.0561	-.00047	.00035	-.0021
#2	.00066	.0097	-.00031	-.00071	-.0011
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1516.1**	**1101.9**	**34408.**	**3975.5**
Stddev	1.9	3.0	146.	22.2
%RSD	.12848	.26789	.42546	.55850
#1	1517.5	1103.9	34511.	3959.8
#2	1514.8	1099.8	34304.	3991.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.382%	95.344%	96.433%	100.71%
Range				

Sample Name: 480-156038-E-2-A Acquired: 7/16/2019 16:58:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00063**	**.02717**	**.00890**	**.36263**	**.02377**
Stddev	.00037	.01263	.00288	.00006	.00001
%RSD	58.950	46.462	32.407	.01779	.04146
#1	-.00037	.01825	.00686	.36258	.02377
#2	-.00089	.03610	.01094	.36267	.02378
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**236.77**	**.00010**	**.0030**	**.00064**
Stddev	.00003	.12	.00002	.0101	.00007
%RSD	79.549	.05032	23.055	339.8	10.696
#1	-.00006	236.69	.00012	-.0042	.00069
#2	-.00002	236.86	.00009	.0101	.00059
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**-.00130**	**2.1844**	**4.0781**	**.06263**
Stddev	.00024	.00046	.0118	.0069	.00034
%RSD	39.182	35.012	.53914	.17044	.54762
#1	.00077	-.00163	2.1761	4.0732	.06287
#2	.00043	-.00098	2.1928	4.0830	.06239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156038-E-2-A Acquired: 7/16/2019 16:58:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**157.84**	**.07068**	**.00399**	**21.618**	**.00085**
Stddev	.11	.00025	.00027	.051	.00022
%RSD	.07127	.35038	6.6458	.23653	25.449
#1	157.92	.07051	.00380	21.582	.00100
#2	157.76	.07086	.00418	21.654	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.00060**	F **260.8**	**-.00081**	**-.00387**
Stddev	.0002	.00016	.2	.00088	.01057
%RSD	12.09	27.508	.0785	109.18	272.92
#1	.0021	.00072	260.7	-.00018	-.01135
#2	.0018	.00048	261.0	-.00144	.00360
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.8401**	**-.00048**	**.89797**	**.0033**	**-.00017**
Stddev	.0950	.00070	.00051	.0056	.00020
%RSD	1.0745	146.72	.05693	168.5	122.44
#1	8.9072	.00002	.89761	-.0006	-.00031
#2	8.7729	-.00098	.89833	.0073	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156038-E-2-A Acquired: 7/16/2019 16:58:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00159**	**.0290**	**-.00091**	**-.00219**	**-.0017**
Stddev	.00037	.0517	.00020	.00068	.0001
%RSD	23.038	178.0	21.523	30.868	4.096
#1	.00133	-.0075	-.00105	-.00266	-.0016
#2	.00185	.0656	-.00077	-.00171	-.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1417.0**	**1050.5**	**32689.**	**3870.8**
Stddev	2.3	.5	21.	21.8
%RSD	.16575	.05076	.06326	.56198
#1	1418.7	1050.9	32703.	3886.1
#2	1415.3	1050.1	32674.	3855.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.144%	90.900%	91.615%	98.057%
Range				

Sample Name: 480-156038-E-3-A Acquired: 7/16/2019 17:02:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00050**	**.01595**	**-.00244**	**.31865**	**.01187**
Stddev	.00005	.00254	.00068	.00083	.00001
%RSD	10.232	15.933	27.846	.26024	.08791
#1	-.00047	.01774	-.00292	.31924	.01186
#2	-.00054	.01415	-.00196	.31807	.01187
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**280.12**	**.00011**	**-.0004**	**.00088**
Stddev	.00005	.11	.00001	.0038	.00013
%RSD	84.299	.03921	7.2228	884.5	14.961
#1	-.00010	280.20	.00010	-.0031	.00097
#2	-.00003	280.04	.00011	.0023	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00089**	**-.00111**	**1.8600**	**4.4791**	**.10691**
Stddev	.00031	.00006	.0048	.0107	.00060
%RSD	34.537	5.0869	.25936	.23995	.56538
#1	.00111	-.00115	1.8566	4.4715	.10648
#2	.00067	-.00107	1.8634	4.4867	.10734
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156038-E-3-A Acquired: 7/16/2019 17:02:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**342.52**	**.10531**	**.00380**	**61.686**	**.00202**
Stddev	.68	.00051	.00003	.030	.00027
%RSD	.19772	.48862	.78547	.04784	13.294
#1	343.00	.10567	.00378	61.665	.00183
#2	342.04	.10495	.00382	61.707	.00221
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0006**	**.00082**	F **568.4**	**.00004**	**-.00533**
Stddev	.0015	.00056	1.7	.00166	.00718
%RSD	266.9	68.451	.3040	4044.6	134.76
#1	.0016	.00121	569.7	.00121	-.01040
#2	-.0005	.00042	567.2	-.00113	-.00025
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.064**	**.00162**	**.80214**	**.0006**	**-.00039**
Stddev	.067	.00020	.00176	.0079	.00026
%RSD	.66353	12.492	.21985	1327.	66.610
#1	10.111	.00147	.80089	-.0050	-.00057
#2	10.017	.00176	.80338	.0062	-.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156038-E-3-A Acquired: 7/16/2019 17:02:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00341**	**.0634**	**-.00136**	**-.00225**	**-.0005**
Stddev	.00130	.0484	.00029	.00065	.0011
%RSD	38.204	76.43	20.985	29.009	216.4
#1	.00249	.0976	-.00116	-.00179	-.0013
#2	.00434	.0291	-.00156	-.00271	.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1366.3**	**1021.9**	**31933.**	**3812.5**
Stddev	.9	.1	56.	14.1
%RSD	.06418	.01356	.17603	.36878
#1	1366.9	1021.8	31894.	3822.5
#2	1365.7	1022.0	31973.	3802.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.954%	88.425%	89.497%	96.582%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 17:06:51 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99358**	**48.690**	**.99532**	**.98723**	**.97858**	**.99394**	**48.622**	**.98560**
Stddev	.00103	.081	.00175	.00012	.00187	.00005	.049	.00075
%RSD	.10395	.16583	.17557	.01262	.19120	.00536	.10077	.07626
#1	.99431	48.747	.99409	.98732	.97990	.99398	48.587	.98506
#2	.99285	48.633	.99656	.98714	.97726	.99391	48.657	.98613
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.010**	**.97806**	**.99348**	**.99416**	**50.047**	**48.990**	**.97787**	**49.075**
Stddev	.006	.00102	.00609	.00144	.314	.185	.00190	.155
%RSD	.6166	.10381	.61299	.14532	.62698	.37841	.19438	.31585
#1	1.014	.97734	.99779	.99518	50.269	49.121	.97921	49.184
#2	1.005	.97878	.98917	.99314	49.825	48.859	.97652	48.965
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0137**	**1.0037**	**49.261**	**.99044**	**24.73**	**.98348**	**24.76**	**.98366**
Stddev	.0008	.0010	.200	.00206	.02	.00012	.06	.00365
%RSD	.07909	.09968	.40545	.20791	.0778	.01268	.2583	.37066
#1	1.0143	1.0044	49.402	.99189	24.75	.98339	24.72	.98108
#2	1.0131	1.0030	49.119	.98898	24.72	.98356	24.81	.98624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 17:06:51 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0029**	**9.9880**	**.97489**	**.99065**	**1.009**	**1.0076**	**.98214**	**2.488**
Stddev	.0084	.0039	.00221	.00380	.001	.0009	.00239	.014
%RSD	.83912	.03850	.22691	.38379	.1281	.09376	.24375	.5505
#1	1.0088	9.9907	.97332	.99334	1.008	1.0069	.98045	2.498
#2	.99690	9.9852	.97645	.98797	1.010	1.0083	.98384	2.478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0092**	**1.0097**	**1.003**
Stddev	.0003	.0027	.005
%RSD	.02832	.27109	.5454
#1	1.0094	1.0078	1.007
#2	1.0090	1.0116	.9994
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1470.4**	**1102.8**	**33561.**	**3887.4**
Stddev	1.3	1.5	7.	5.2
%RSD	.09040	.13875	.02121	.13275
#1	1471.3	1103.8	33556.	3883.7
#2	1469.4	1101.7	33566.	3891.0

Sample Name: CCB-5392763 Acquired: 7/16/2019 17:10:31 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**.00082**	**-.00128**	**.01810**	**.00002**	**-.00001**	**-.00091**	**.00012**
Stddev	.00020	.00769	.00068	.00053	.00000	.00002	.00265	.00011
%RSD	82.960	932.71	52.786	2.9467	14.837	174.05	292.05	93.498
#1	.00038	.00627	-.00080	.01772	.00002	.00000	.00097	.00004
#2	.00010	-.00462	-.00176	.01848	.00002	-.00002	-.00278	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0143**	**.00003**	**.00050**	**.00003**	**-.00079**	**.02726**	**.00038**	**.00140**
Stddev	.0059	.00026	.00009	.00051	.00267	.01375	.00025	.00324
%RSD	41.21	958.25	17.883	1593.3	338.89	50.452	66.769	231.18
#1	-.0185	.00021	.00044	.00039	.00110	.03698	.00020	.00369
#2	-.0102	-.00016	.00057	-.00033	-.00268	.01753	.00056	-.00089
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.00050**	**.03937**	**.00004**	**.0037**	**-.00058**	**-.0135**	**.00187**
Stddev	.00000	.00003	.00177	.00001	.0012	.00122	.0017	.00165
%RSD	.33031	5.2751	4.5032	12.914	31.81	212.24	12.68	88.403
#1	-.00028	.00048	.03812	.00004	.0045	-.00144	-.0123	.00303
#2	-.00028	.00052	.04062	.00005	.0029	.00029	-.0148	.00070
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/16/2019 17:10:31 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00069	.09189	-.00026	.00002	.0047	-.00045	.00014	-.0126
Stddev	.00154	.00523	.00060	.00001	.0004	.00003	.00069	.0191
%RSD	225.12	5.6932	228.21	85.683	7.852	7.3584	503.44	152.2
#1	-.00041	.09559	-.00069	.00003	.0044	-.00047	.00062	.0010
#2	.00178	.08819	.00016	.00001	.0050	-.00043	-.00035	-.0261
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	-.00019	.00048	.0000
Stddev	.00005	.00085	.0000
%RSD	27.353	174.87	129.1
#1	-.00015	.00108	.0001
#2	-.00022	-.00011	.0000
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1570.5	1136.1	35547.	3957.8
Stddev	.3	.1	20.	10.0
%RSD	.01889	.00551	.05659	.25264
#1	1570.7	1136.1	35562.	3964.9
#2	1570.3	1136.2	35533.	3950.7

Sample Name: CCVL-5395711 Acquired: 7/16/2019 17:14:23 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00576**	**.20944**	**.01411**	F **.03658**	**.00210**	**.00205**	**.50335**
Stddev	.00020	.00706	.00080	.00057	.00001	.00002	.00395
%RSD	3.3947	3.3730	5.6562	1.5653	.69648	1.1198	.78478
#1	.00590	.21443	.01467	.03698	.00209	.00203	.50614
#2	.00562	.20444	.01354	.03617	.00211	.00206	.50056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00184**	**-.0191**	**.00393**	**.00414**	**.00981**	**.05219**	**.48961**
Stddev	.00008	.0057	.00008	.00012	.00006	.00116	.00230
%RSD	4.3916	29.74	1.9286	2.9368	.56261	2.2179	.47003
#1	.00190	-.0151	.00399	.00423	.00977	.05138	.48798
#2	.00178	-.0232	.00388	.00405	.00985	.05301	.49124
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02837**	**.19633**	**.00294**	**.01004**	**.97481**	**.01024**	**-.0222**
Stddev	.00021	.00094	.00003	.00002	.00024	.00019	.0005
%RSD	.75650	.47729	1.1750	.23989	.02468	1.8654	2.415
#1	.02852	.19699	.00291	.01002	.97464	.01038	-.0225
#2	.02822	.19567	.00296	.01006	.97498	.01011	-.0218
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 17:14:23 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00959	.1748	.02266	.02468	.56061	.00887	.00480
Stddev	.00208	.0008	.00094	.00149	.00624	.00052	.00001
%RSD	21.662	.4656	4.1580	6.0564	1.1135	5.8218	.11589
#1	.00812	.1754	.02199	.02574	.56503	.00850	.00481
#2	.01106	.1743	.02332	.02363	.55620	.00923	.00480
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0015	.00472	.02104	.0226	.00449	.01002	-.0005
Stddev	.0047	.00016	.00063	.0030	.00003	.00148	.0007
%RSD	307.5	3.4713	3.0026	13.42	.64511	14.735	134.5
#1	-.0018	.00483	.02059	.0247	.00447	.01107	-.0010
#2	.0048	.00460	.02149	.0204	.00451	.00898	-.0000
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1579.6	1139.7	35395.	3957.4
Stddev	.6	1.1	73.	7.1
%RSD	.03853	.09464	.20627	.17819
#1	1579.2	1138.9	35343.	3952.4
#2	1580.0	1140.4	35446.	3962.4

Sample Name: MB 480-482187/1-A Acquired: 7/16/2019 17:18:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	**.01174**	**-.00290**	F **3.6244**	**.00001**
Stddev	.00005	.00533	.00034	.0062	.00000
%RSD	19.689	45.385	11.725	.17134	7.6694
#1	-.00030	.01551	-.00266	3.6200	.00001
#2	-.00023	.00797	-.00314	3.6288	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.01065**	**-.00002**	**.0049**	**-.00037**
Stddev	.00007	.00489	.00001	.0075	.00018
%RSD	532.93	45.892	41.007	153.4	47.075
#1	.00006	.00720	-.00003	-.0004	-.00050
#2	-.00004	.01411	-.00001	.0102	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.00028**	**-.00135**	**.02282**	**-.00034**
Stddev	.00013	.00017	.00016	.00012	.00074
%RSD	65.817	61.702	12.088	.51677	218.54
#1	.00011	.00016	-.00146	.02274	-.00086
#2	.00030	.00040	-.00123	.02290	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-482187/1-A Acquired: 7/16/2019 17:18:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00072**	**.00056**	**-.00018**	**.03352**	**.00035**
Stddev	.00203	.00006	.00003	.00607	.00012
%RSD	282.20	9.8483	15.604	18.117	35.549
#1	-.00216	.00052	-.00016	.03782	.00044
#2	.00072	.00060	-.00019	.02923	.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0020**	**.00146**	**-.0165**	**.00021**	**.00210**
Stddev	.0009	.00096	.0015	.00046	.00014
%RSD	44.48	65.638	9.263	221.32	6.4967
#1	.0026	.00213	-.0154	.00053	.00220
#2	.0014	.00078	-.0176	-.00012	.00200
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **9.0787**	**-.00075**	**.00003**	**.0016**	**-.00003**
Stddev	.0348	.00027	.00003	.0089	.00023
%RSD	.38328	35.426	84.068	542.9	692.73
#1	9.0541	-.00056	.00005	.0079	.00013
#2	9.1033	-.00094	.00001	-.0046	-.00020
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-482187/1-A Acquired: 7/16/2019 17:18:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00142**	**.0225**	**-.00041**	**.00114**	**-.0005**
Stddev	.00154	.0489	.00005	.00038	.0001
%RSD	108.16	217.1	13.107	33.308	14.52
#1	.00250	.0571	-.00045	.00140	-.0004
#2	.00033	-.0121	-.00037	.00087	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1567.2**	**1126.4**	**35442.**	**3988.8**
Stddev	.8	1.0	93.	.2
%RSD	.05239	.08514	.26330	.00411
#1	1567.7	1127.1	35508.	3988.9
#2	1566.6	1125.8	35376.	3988.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.590%	97.470%	99.332%	101.05%
Range				

Sample Name: LCS 480-482187/2-A Acquired: 7/16/2019 17:22:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04893**	**9.3660**	**.19570**	F **3.7840**	**.20041**
Stddev	.00064	.0002	.00278	.0007	.00002
%RSD	1.3129	.00260	1.4191	.01887	.00770
#1	.04938	9.3658	.19766	3.7845	.20042
#2	.04847	9.3661	.19373	3.7835	.20040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20084**	**9.5108**	**.19557**	**-.0192**	**.18763**
Stddev	.00084	.0256	.00002	.0124	.00084
%RSD	.42058	.26862	.01191	64.50	.44644
#1	.20025	9.4927	.19556	-.0104	.18822
#2	.20144	9.5288	.19559	-.0279	.18704
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21052**	**.19429**	**9.9807**	**9.4795**	**.19051**
Stddev	.00026	.00004	.0539	.0556	.00113
%RSD	.12508	.02050	.53958	.58630	.59283
#1	.21033	.19426	9.9426	9.4402	.18972
#2	.21070	.19432	10.019	9.5188	.19131
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-482187/2-A Acquired: 7/16/2019 17:22:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6201**	**.20131**	**.20311**	**9.3427**	**.19976**
Stddev	.0513	.00048	.00047	.0338	.00039
%RSD	.53285	.23993	.23289	.36185	.19547
#1	9.5839	.20165	.20344	9.3188	.20004
#2	9.6564	.20097	.20278	9.3666	.19949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4696**	**.18975**	**9.771**	**.21540**	**.19466**
Stddev	.0000	.00045	.064	.00089	.00092
%RSD	.0091	.23623	.6582	.41230	.47517
#1	-.4696	.19007	9.816	.21603	.19531
#2	-.4696	.18943	9.725	.21477	.19400
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **18.271**	**.18305**	**.19146**	**.0104**	**.19941**
Stddev	.006	.00070	.00117	.0025	.00088
%RSD	.03548	.38457	.61135	23.65	.44283
#1	18.266	.18354	.19063	.0121	.19878
#2	18.275	.18255	.19228	.0086	.20003
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	11.500				
Low Limit	8.5000				

Sample Name: LCS 480-482187/2-A Acquired: 7/16/2019 17:22:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19242**	**-.0329**	**.19770**	**.20122**	**.0022**
Stddev	.00131	.0053	.00061	.00040	.0001
%RSD	.68008	16.23	.30861	.19798	3.297
#1	.19334	-.0367	.19813	.20094	.0021
#2	.19149	-.0292	.19727	.20151	.0022
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1551.4**	**1116.4**	**34597.**	**3960.6**
Stddev	1.3	1.3	30.	7.0
%RSD	.08177	.11688	.08700	.17583
#1	1550.5	1115.4	34619.	3965.5
#2	1552.3	1117.3	34576.	3955.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.602%	96.600%	96.964%	100.33%
Range				

Sample Name: LCSD 480-482187/3-A Acquired: 7/16/2019 17:25:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05013**	**9.6096**	**.19984**	F **3.7947**	**.20543**
Stddev	.00046	.0225	.00119	.0034	.00032
%RSD	.91928	.23392	.59437	.08826	.15354
#1	.05045	9.5937	.19900	3.7971	.20566
#2	.04980	9.6255	.20068	3.7923	.20521
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20584**	**9.7485**	**.19967**	**.0058**	**.19166**
Stddev	.00038	.0294	.00030	.0001	.00002
%RSD	.18458	.30186	.14836	1.253	.00968
#1	.20611	9.7277	.19988	.0059	.19165
#2	.20557	9.7693	.19946	.0058	.19168
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19898**	**.19771**	**10.122**	**9.7029**	**.19405**
Stddev	.00078	.00073	.007	.0368	.00113
%RSD	.39040	.36941	.07022	.37913	.58257
#1	.19843	.19719	10.117	9.7290	.19485
#2	.19953	.19822	10.127	9.6769	.19325
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCSD 480-482187/3-A Acquired: 7/16/2019 17:25:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8243**	**.20284**	**.20796**	**9.5399**	**.20174**
Stddev	.0288	.00085	.00000	.0440	.00079
%RSD	.29346	.41894	.00215	.46080	.39159
#1	9.8039	.20344	.20796	9.5709	.20119
#2	9.8447	.20224	.20796	9.5088	.20230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4736**	**.19393**	**10.01**	**.21779**	**.19723**
Stddev	.0018	.00304	.01	.00027	.00637
%RSD	.3883	1.5691	.1417	.12523	3.2272
#1	-.4749	.19178	10.00	.21760	.20173
#2	-.4723	.19608	10.02	.21798	.19273
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **18.477**	**.18726**	**.19622**	**.0074**	**.20345**
Stddev	.120	.00244	.00085	.0123	.00120
%RSD	.64875	1.3028	.43401	166.0	.59152
#1	18.562	.18554	.19682	.0162	.20430
#2	18.392	.18899	.19561	-.0013	.20260
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	11.500				
Low Limit	8.5000				

Sample Name: LCSD 480-482187/3-A Acquired: 7/16/2019 17:25:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19585**	**-.0663**	**.20109**	**.20498**	**.0012**
Stddev	.00124	.0459	.00024	.00002	.0004
%RSD	.63187	69.27	.11842	.00788	36.94
#1	.19498	-.0988	.20126	.20499	.0009
#2	.19673	-.0338	.20092	.20497	.0015
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1552.0**	**1115.1**	**34666.**	**3956.8**
Stddev	1.7	1.2	38.	7.5
%RSD	.11234	.11067	.10989	.18959
#1	1550.8	1114.2	34639.	3962.1
#2	1553.3	1116.0	34693.	3951.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.639%	96.490%	97.155%	100.24%
Range				

Sample Name: 480-154477-E-8-D Acquired: 7/16/2019 17:29:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.02085**	**.00145**	**2.3821**	**.04656**
Stddev	.00012	.01384	.00015	.0013	.00005
%RSD	130.60	66.364	10.276	.05629	.11444
#1	-.00018	.03063	.00155	2.3812	.04652
#2	-.00001	.01106	.00134	2.3831	.04659
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**7.4767**	**.00005**	**-.0011**	**.00134**
Stddev	.00007	.0107	.00011	.0095	.00002
%RSD	20.610	.14378	234.76	860.5	1.2211
#1	.00029	7.4843	-.00003	-.0078	.00135
#2	.00039	7.4691	.00013	.0056	.00133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00049**	**.10057**	**1.1071**	**.00537**
Stddev	.00012	.00059	.00297	.0020	.00021
%RSD	40.189	119.10	2.9579	.18342	4.0011
#1	.00022	.00008	.09847	1.1057	.00522
#2	.00039	.00091	.10267	1.1085	.00552
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-D Acquired: 7/16/2019 17:29:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.48305**	**.03393**	**-.00016**	**37.896**	**.00293**
Stddev	.00609	.00008	.00025	.135	.00011
%RSD	1.2603	.22487	156.36	.35747	3.8954
#1	.48736	.03398	-.00034	37.800	.00285
#2	.47875	.03387	.00002	37.992	.00301
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0010**	**.00176**	**.1276**	**-.00055**	**-.00080**
Stddev	.0004	.00108	.0042	.00269	.00123
%RSD	37.60	61.693	3.318	492.30	155.09
#1	-.0007	.00099	.1246	.00136	.00008
#2	-.0012	.00252	.1306	-.00245	-.00167
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.179**	**-.00065**	**.04854**	**.0057**	**.00027**
Stddev	.091	.00047	.00033	.0156	.00024
%RSD	.53177	72.614	.68324	275.7	87.063
#1	17.115	-.00032	.04830	.0167	.00011
#2	17.244	-.00098	.04877	-.0054	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-D Acquired: 7/16/2019 17:29:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00095**	**-.0689**	**-.00030**	**.23984**	**-.0010**
Stddev	.00176	.0727	.00018	.00125	.0003
%RSD	185.19	105.5	60.133	.52076	25.87
#1	.00220	-.1202	-.00043	.23896	-.0012
#2	-.00029	-.0175	-.00017	.24072	-.0008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1548.9**	**1112.7**	**34374.**	**3946.2**
Stddev	.7	.3	77.	4.4
%RSD	.04539	.03034	.22309	.11113
#1	1549.4	1112.9	34428.	3949.3
#2	1548.4	1112.4	34320.	3943.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.439%	96.279%	96.337%	99.968%
Range				

Sample Name: 480-154477-E-8-Dsd@5 Acquired: 7/16/2019 17:33:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.02673**	**-.00173**	**.46961**	**.00927**
Stddev	.00001	.02140	.00165	.00018	.00002
%RSD	4.3886	80.053	94.938	.03903	.21734
#1	-.00029	.01160	-.00057	.46948	.00926
#2	-.00031	.04186	-.00290	.46974	.00929
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**1.4958**	**.00009**	**-.0292**	**.00018**
Stddev	.00002	.0101	.00014	.0116	.00002
%RSD	111.69	.67225	157.20	39.91	12.151
#1	.00004	1.5029	-.00001	-.0209	.00020
#2	.00000	1.4887	.00019	-.0374	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00046**	**-.00006**	**.02069**	**.24001**	**.00123**
Stddev	.00001	.00025	.00253	.01119	.00021
%RSD	2.8816	422.02	12.216	4.6605	17.487
#1	.00047	-.00023	.01890	.24792	.00138
#2	.00045	.00012	.02247	.23210	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-Dsd@5 Acquired: 7/16/2019 17:33:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09727**	**.00679**	**-.00050**	**7.4842**	**.00045**
Stddev	.00160	.00002	.00005	.0243	.00019
%RSD	1.6416	.27523	10.356	.32399	42.820
#1	.09614	.00680	-.00054	7.4670	.00059
#2	.09840	.00678	-.00046	7.5013	.00031
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0018**	**.00092**	**-.0007**	**.00062**	**.00351**
Stddev	.0014	.00084	.0045	.00018	.00225
%RSD	77.13	90.698	615.2	29.043	64.027
#1	-.0027	.00033	-.0039	.00049	.00192
#2	-.0008	.00151	.0025	.00075	.00510
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.4190**	**-.00060**	**.00963**	**.0080**	**.00012**
Stddev	.0450	.00009	.00007	.0043	.00003
%RSD	1.3170	14.250	.75964	54.41	22.585
#1	3.3872	-.00066	.00958	.0110	.00010
#2	3.4508	-.00054	.00968	.0049	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-Dsd@5 Acquired: 7/16/2019 17:33:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00125**	**.0345**	**-.00035**	**.04660**	**-.0004**
Stddev	.00004	.0543	.00009	.00092	.0001
%RSD	3.3976	157.2	24.359	1.9845	20.94
#1	.00122	.0729	-.00029	.04725	-.0004
#2	.00128	-.0039	-.00041	.04594	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1588.2**	**1139.5**	**35393.**	**3975.0**
Stddev	1.5	.1	135.	5.0
%RSD	.09236	.00831	.38041	.12671
#1	1587.1	1139.6	35488.	3971.4
#2	1589.2	1139.5	35297.	3978.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.913%	98.603%	99.193%	100.70%
Range				

Sample Name: 480-154477-E-8-Dpds Acquired: 7/16/2019 17:37:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04954**	**9.5851**	**.20476**	**2.5192**	**.24891**
Stddev	.00020	.0254	.00111	.0023	.00011
%RSD	.39752	.26512	.54305	.09163	.04504
#1	.04968	9.5671	.20555	2.5176	.24898
#2	.04940	9.6031	.20398	2.5209	.24883
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20982**	**17.012**	**.20436**	**-.0160**	**.19699**
Stddev	.00011	.021	.00029	.0041	.00086
%RSD	.05289	.12348	.14392	25.44	.43546
#1	.20974	17.026	.20456	-.0189	.19760
#2	.20989	16.997	.20415	-.0131	.19638
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20149**	**.20296**	**10.450**	**10.783**	**.20136**
Stddev	.00092	.00041	.012	.008	.00126
%RSD	.45583	.20172	.11199	.07576	.62552
#1	.20214	.20267	10.441	10.789	.20047
#2	.20084	.20325	10.458	10.777	.20225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-Dpds Acquired: 7/16/2019 17:37:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.366**	**.24116**	**.21132**	**46.583**	**.20935**
Stddev	.008	.00069	.00115	.007	.00002
%RSD	.07382	.28775	.54185	.01468	.01019
#1	10.361	.24165	.21213	46.578	.20933
#2	10.372	.24067	.21051	46.587	.20936
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4786**	**.20085**	**10.24**	**.22035**	**.20401**
Stddev	.0001	.00112	.02	.00246	.00238
%RSD	.0234	.55586	.2104	1.1167	1.1690
#1	-.4786	.20006	10.25	.21861	.20569
#2	-.4787	.20164	10.22	.22209	.20232
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.466**	**.20777**	**.24215**	**.0105**	**.20856**
Stddev	.035	.00196	.00027	.0048	.00035
%RSD	.13412	.94497	.11186	45.72	.16561
#1	26.441	.20638	.24196	.0071	.20880
#2	26.491	.20916	.24234	.0139	.20831
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-154477-E-8-Dpds Acquired: 7/16/2019 17:37:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20072**	**-.0184**	**.20706**	**.43753**	**.0002**
Stddev	.00146	.0477	.00025	.00106	.0001
%RSD	.72711	259.3	.12059	.24219	51.16
#1	.20176	.0153	.20689	.43827	.0003
#2	.19969	-.0521	.20724	.43678	.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1523.3**	**1106.1**	**34121.**	**3934.1**
Stddev	.6	.2	13.	3.8
%RSD	.03893	.01357	.03922	.09727
#1	1523.8	1106.2	34111.	3931.4
#2	1522.9	1106.0	34130.	3936.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.835%	95.713%	95.628%	99.663%
Range				

Sample Name: MB 480-482038/1-A Acquired: 7/16/2019 17:40:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.00892**	**.00118**	F **2.1711**	**.00007**
Stddev	.00013	.00801	.00043	.0023	.00000
%RSD	38.789	89.874	36.267	.10645	4.8585
#1	-.00024	.01458	.00088	2.1695	.00006
#2	-.00043	.00325	.00148	2.1727	.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.04065**	**.00001**	**-.0189**	**-.00013**
Stddev	.00000	.00348	.00005	.0006	.00001
%RSD	.43455	8.5686	1019.3	3.098	4.5422
#1	-.00002	.03819	.00004	-.0185	-.00013
#2	-.00002	.04312	-.00003	-.0194	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00056**	**.00113**	**.03241**	**.02999**	**.00072**
Stddev	.00008	.00007	.00124	.00647	.00023
%RSD	14.410	5.8941	3.8227	21.572	31.999
#1	.00050	.00108	.03329	.02541	.00088
#2	.00062	.00118	.03154	.03456	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-482038/1-A Acquired: 7/16/2019 17:40:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.00104**	**.00000**	**.04834**	**.00021**
Stddev	.00034	.00003	.00044	.00071	.00003
%RSD	456.64	2.6866	18247.	1.4591	16.241
#1	.00031	.00102	-.00031	.04785	.00024
#2	-.00016	.00106	.00031	.04884	.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.00015**	**-.0139**	**.00048**	**.00250**
Stddev	.0009	.00074	.0028	.00048	.00041
%RSD	120.8	478.82	19.90	100.03	16.307
#1	.0014	.00067	-.0159	.00083	.00221
#2	.0001	-.00037	-.0119	.00014	.00279
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **7.0946**	**-.00079**	**.00011**	**.0022**	**-.00021**
Stddev	.0546	.00074	.00005	.0012	.00012
%RSD	.76922	94.289	49.248	55.99	57.120
#1	7.1332	-.00131	.00015	.0031	-.00029
#2	7.0560	-.00026	.00007	.0013	-.00012
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-482038/1-A Acquired: 7/16/2019 17:40:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**-.0078**	**-.00052**	**.00330**	**-.0011**
Stddev	.00020	.0270	.00019	.00166	.0016
%RSD	57.049	347.6	36.266	50.329	143.7
#1	.00021	.0113	-.00039	.00448	.0000
#2	.00050	-.0269	-.00066	.00213	-.0022
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1565.3**	**1124.8**	**35323.**	**3972.3**
Stddev	.8	.6	41.	10.3
%RSD	.05407	.05337	.11469	.26017
#1	1564.7	1124.3	35352.	3965.0
#2	1565.9	1125.2	35294.	3979.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.474%	97.327%	98.998%	100.63%
Range				

Sample Name: LCS 480-482038/2-A Acquired: 7/16/2019 17:44:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05169**	**10.076**	**.21169**	F **2.2000**	**.21635**
Stddev	.00020	.034	.00203	.0020	.00020
%RSD	.39470	.33833	.96095	.09207	.09455
#1	.05154	10.052	.21313	2.1986	.21620
#2	.05183	10.100	.21025	2.2015	.21649
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21623**	**10.279**	**.21052**	**-.0177**	**.20136**
Stddev	.00045	.028	.00019	.0161	.00076
%RSD	.20751	.27551	.08920	91.24	.37745
#1	.21591	10.259	.21039	-.0063	.20082
#2	.21655	10.299	.21065	-.0291	.20190
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21068**	**.21108**	**10.553**	**10.258**	**.20345**
Stddev	.00005	.00058	.022	.055	.00020
%RSD	.02305	.27677	.20392	.53558	.10067
#1	.21072	.21067	10.537	10.219	.20330
#2	.21065	.21150	10.568	10.297	.20359
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-482038/2-A Acquired: 7/16/2019 17:44:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.325**	**.21575**	**.21978**	**10.083**	**.21298**
Stddev	.018	.00201	.00020	.002	.00035
%RSD	.17131	.93242	.09038	.01657	.16229
#1	10.338	.21433	.21964	10.082	.21323
#2	10.313	.21718	.21992	10.084	.21274
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4982**	**.20343**	**10.50**	F **.23087**	**.20975**
Stddev	.0007	.00147	.04	.00005	.00272
%RSD	.1478	.72316	.4174	.02015	1.2985
#1	-.4977	.20447	10.47	.23091	.21168
#2	-.4987	.20239	10.53	.23084	.20783
Check ?	None	Chk Pass	None	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **16.395**	**.19710**	**.20629**	**.0100**	**.21539**
Stddev	.043	.00062	.00041	.0023	.00004
%RSD	.26052	.31345	.19732	23.09	.01804
#1	16.365	.19667	.20601	.0116	.21536
#2	16.426	.19754	.20658	.0084	.21541
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	11.500				
Low Limit	8.5000				

Sample Name: LCS 480-482038/2-A Acquired: 7/16/2019 17:44:35 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20797**	**-.0430**	**.21280**	**.21937**	**-.0005**
Stddev	.00044	.0228	.00078	.00051	.0010
%RSD	.21387	52.93	.36863	.23028	196.3
#1	.20765	-.0592	.21224	.21973	-.0012
#2	.20828	-.0269	.21335	.21901	.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1547.0**	**1109.9**	**34625.**	**3977.1**
Stddev	1.2	1.4	109.	9.4
%RSD	.07518	.12416	.31605	.23686
#1	1547.8	1110.8	34703.	3983.7
#2	1546.2	1108.9	34548.	3970.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.323%	96.038%	97.042%	100.75%
Range				

Sample Name: 480-156069-C-1-A Acquired: 7/16/2019 17:48:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00066**	**.01980**	**-.00057**	**2.2239**	**.41092**
Stddev	.00000	.00283	.00512	.0013	.00073
%RSD	.61070	14.268	891.04	.05922	.17794
#1	-.00065	.02180	.00304	2.2230	.41040
#2	-.00066	.01780	-.00419	2.2249	.41143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**192.31**	**.00025**	**-.0245**	**-.00039**
Stddev	.00001	.79	.00008	.0048	.00048
%RSD	33.732	.40975	32.538	19.75	122.76
#1	-.00003	191.76	.00031	-.0279	-.00073
#2	-.00005	192.87	.00019	-.0211	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**-.00090**	**7.9499**	**5.1207**	**.02409**
Stddev	.00010	.00004	.0282	.0236	.00049
%RSD	85.844	4.6705	.35504	.46038	2.0432
#1	.00018	-.00087	7.9300	5.1040	.02374
#2	.00004	-.00093	7.9699	5.1374	.02444
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-1-A Acquired: 7/16/2019 17:48:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.055**	**1.1072**	**.00007**	**4.9450**	**-.00051**
Stddev	.038	.0087	.00011	.0316	.00026
%RSD	.18217	.78595	161.54	.63874	50.547
#1	21.028	1.1010	.00015	4.9227	-.00070
#2	21.082	1.1133	-.00001	4.9674	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0191**	**.00274**	**5.314**	**-.00102**	**-.00122**
Stddev	.0023	.00069	.024	.00091	.00128
%RSD	12.18	25.172	.4509	88.568	105.46
#1	.0175	.00322	5.297	-.00038	-.00212
#2	.0208	.00225	5.331	-.00167	-.00031
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.955**	**-.00079**	**.54718**	**.0061**	**-.00009**
Stddev	.057	.00096	.00236	.0022	.00036
%RSD	.47405	121.06	.43217	36.14	397.01
#1	11.915	-.00011	.54551	.0076	-.00034
#2	11.995	-.00147	.54885	.0045	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-1-A Acquired: 7/16/2019 17:48:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00012**	**.0246**	**-.00041**	**-.00011**	**-.0012**
Stddev	.00079	.0344	.00040	.00097	.0011
%RSD	647.91	139.8	98.785	899.84	85.92
#1	.00043	.0489	-.00012	-.00080	-.0020
#2	-.00068	.0003	-.00069	.00058	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1470.3**	**1067.6**	**33121.**	**3875.8**
Stddev	2.9	.8	113.	11.1
%RSD	.19392	.07277	.34226	.28632
#1	1468.2	1067.0	33201.	3883.7
#2	1472.3	1068.1	33041.	3868.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.495%	92.379%	92.827%	98.186%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 17:52:01 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0060**	**48.582**	**.99417**	**.98473**	**.97422**	**1.0027**	**48.930**	**.98372**
Stddev	.0017	.011	.00136	.00052	.00037	.0012	.125	.00054
%RSD	.16399	.02271	.13646	.05296	.03754	.11673	.25449	.05502
#1	1.0071	48.590	.99513	.98510	.97396	1.0036	48.842	.98410
#2	1.0048	48.574	.99321	.98436	.97447	1.0019	49.018	.98334
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.022**	**.97881**	**.99676**	**1.0027**	**50.753**	**49.232**	**.97186**	**48.982**
Stddev	.017	.00031	.00038	.0012	.464	.078	.00099	.019
%RSD	1.704	.03193	.03836	.11561	.91408	.15827	.10166	.03920
#1	1.010	.97859	.99649	1.0019	50.424	49.287	.97116	48.968
#2	1.034	.97903	.99703	1.0036	51.081	49.177	.97256	48.995
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0350**	**1.0090**	**49.266**	**.99891**	**24.79**	**.98489**	**24.83**	**.97682**
Stddev	.0024	.0014	.020	.00077	.01	.00263	.03	.00763
%RSD	.22670	.13647	.04003	.07753	.0237	.26737	.1113	.78103
#1	1.0367	1.0100	49.252	.99836	24.79	.98675	24.85	.97143
#2	1.0333	1.0080	49.280	.99946	24.80	.98303	24.81	.98222
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 17:52:01 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0130**	**9.9988**	**.97742**	**.99416**	**.9880**	**1.0204**	**.99233**	**2.442**
Stddev	.0046	.0486	.00073	.00066	.0161	.0018	.00166	.005
%RSD	.45488	.48573	.07498	.06675	1.627	.17114	.16717	.2057
#1	1.0097	9.9644	.97793	.99369	.9994	1.0216	.99350	2.445
#2	1.0163	10.033	.97690	.99463	.9767	1.0191	.99116	2.438
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0228**	**1.0236**	**1.013**
Stddev	.0001	.0047	.001
%RSD	.01423	.45730	.1126
#1	1.0229	1.0203	1.012
#2	1.0227	1.0269	1.013
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1482.0**	**1112.5**	**33559.**	**3880.1**
Stddev	1.7	2.2	90.	15.2
%RSD	.11638	.20199	.26725	.39180
#1	1480.8	1110.9	33623.	3890.9
#2	1483.3	1114.1	33496.	3869.4

Sample Name: CCB-5392763 Acquired: 7/16/2019 17:55:42 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00035**	**-.00024**	**-.00039**	F **.02066**	**.00004**	**.00000**	**.00034**
Stddev	.00011	.00820	.00097	.00018	.00000	.00001	.00192
%RSD	32.712	3395.3	250.00	.85169	2.6212	840.14	568.52
#1	-.00043	-.00604	-.00107	.02079	.00004	.00001	.00170
#2	-.00027	.00556	.00030	.02054	.00005	-.00001	-.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**-.0052**	**-.00010**	**.00039**	**-.00010**	**-.00150**	**.02445**
Stddev	.00002	.0103	.00002	.00010	.00014	.00055	.00290
%RSD	9.4132	197.8	19.988	24.657	140.96	36.363	11.863
#1	-.00020	-.0125	-.00008	.00045	-.00020	-.00111	.02240
#2	-.00017	.0021	-.00011	.00032	-.00000	-.00189	.02650
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00019**	**-.00173**	**-.00019**	**.00053**	**.03325**	**.00003**	**.0053**
Stddev	.00056	.00299	.00006	.00006	.00118	.00022	.0002
%RSD	293.20	173.16	32.168	10.407	3.5608	736.04	2.840
#1	-.00059	.00039	-.00014	.00049	.03241	.00019	.0052
#2	.00021	-.00385	-.00023	.00057	.03408	-.00013	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 17:55:42 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**-.0221**	**.00163**	**.00328**	**.07746**	**-.00029**	**-.00002**
Stddev	.00050	.0019	.00023	.00052	.00066	.00036	.00002
%RSD	298.36	8.554	14.191	15.750	.85226	125.08	89.484
#1	.00019	-.0234	.00147	.00291	.07699	-.00054	-.00001
#2	-.00052	-.0208	.00179	.00364	.07792	-.00003	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0079**	**-.00013**	**.00030**	**.0082**	**-.00063**	**-.00132**	**-.0006**
Stddev	.0065	.00034	.00088	.0428	.00023	.00067	.0004
%RSD	82.51	266.84	297.01	519.7	36.286	50.594	59.53
#1	.0033	-.00036	-.00033	.0385	-.00047	-.00085	-.0004
#2	.0125	.00011	.00092	-.0220	-.00079	-.00179	-.0009
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1576.2**	**1137.6**	**35255.**	**3927.3**
Stddev	.8	.8	22.	8.5
%RSD	.05286	.07035	.06103	.21569
#1	1575.6	1137.0	35270.	3933.3
#2	1576.8	1138.1	35240.	3921.3

Sample Name: CCVL-5395711 Acquired: 7/16/2019 17:59:33 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00589**	**.20624**	**.01282**	F **.03904**	**.00210**	**.00201**	**.49457**
Stddev	.00014	.01725	.00183	.00036	.00003	.00007	.00272
%RSD	2.3767	8.3646	14.250	.91898	1.3345	3.5577	.54915
#1	.00579	.19404	.01153	.03929	.00212	.00196	.49265
#2	.00599	.21844	.01411	.03878	.00208	.00206	.49649
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00190**	**-.0172**	**.00368**	F **.00654**	**.00997**	**.06428**	**.49266**
Stddev	.00004	.0053	.00003	.00018	.00007	.00109	.01018
%RSD	2.0102	30.57	.71482	2.7387	.68608	1.6997	2.0666
#1	.00187	-.0210	.00366	.00666	.00992	.06506	.49986
#2	.00193	-.0135	.00369	.00641	.01002	.06351	.48546
Check ?	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.00400			
Range				50.000%			

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02830**	**.19788**	**.00323**	**.01008**	**.97184**	**.01004**	**-.0207**
Stddev	.00076	.00137	.00005	.00021	.00862	.00033	.0006
%RSD	2.6813	.69300	1.5652	2.0664	.88696	3.2922	2.818
#1	.02884	.19885	.00319	.01023	.97793	.00980	-.0202
#2	.02777	.19691	.00326	.00994	.96574	.01027	-.0211
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 17:59:33 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01064**	**.1697**	**.02274**	**.02742**	**.53887**	**.00913**	**.00477**
Stddev	.00060	.0050	.00040	.00035	.01505	.00139	.00003
%RSD	5.6324	2.947	1.7388	1.2854	2.7932	15.197	.67442
#1	.01021	.1732	.02246	.02717	.52823	.00815	.00474
#2	.01106	.1661	.02302	.02767	.54951	.01011	.00479
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.00470**	**.01959**	**-.0190**	**.00455**	**.01016**	**-.0002**
Stddev	.0051	.00002	.00088	.0644	.00010	.00110	.0004
%RSD	162.7	.36428	4.4682	339.4	2.2620	10.842	268.7
#1	-.0005	.00471	.01897	.0266	.00447	.01094	-.0004
#2	.0067	.00468	.02021	-.0646	.00462	.00938	.0001
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.2**	**1142.9**	**35279.**	**3949.3**
Stddev	.3	1.7	42.	6.5
%RSD	.02060	.15278	.12028	.16533
#1	1586.4	1141.6	35309.	3953.9
#2	1586.0	1144.1	35249.	3944.7

Sample Name: 480-156069-C-2-A Acquired: 7/16/2019 18:03:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00030**	**.06792**	**.00216**	**2.2381**	**.25182**
Stddev	.00023	.01166	.00114	.0023	.00066
%RSD	77.353	17.166	52.592	.10373	.26057
#1	-.00014	.07616	.00296	2.2397	.25136
#2	-.00047	.05967	.00136	2.2364	.25229
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**194.00**	**.00027**	**-.0203**	**-.00029**
Stddev	.00004	.18	.00001	.0006	.00006
%RSD	291.30	.09116	3.1588	3.195	18.924
#1	.00002	193.88	.00026	-.0198	-.00025
#2	-.00004	194.13	.00027	-.0207	-.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**.00027**	**6.5300**	**3.6079**	**.00760**
Stddev	.00026	.00007	.0283	.0261	.00159
%RSD	44.619	26.125	.43288	.72381	20.909
#1	.00040	.00022	6.5100	3.5895	.00647
#2	.00076	.00032	6.5500	3.6264	.00872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-A Acquired: 7/16/2019 18:03:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.075**	**1.6489**	**.00021**	**3.5170**	**-.00010**
Stddev	.017	.0008	.00001	.0001	.00018
%RSD	.08974	.04908	3.5255	.00258	172.68
#1	19.062	1.6495	.00020	3.5170	.00002
#2	19.087	1.6484	.00021	3.5169	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5343**	**.00301**	**2.678**	**-.00204**	**-.00282**
Stddev	.0012	.00097	.003	.00026	.00691
%RSD	.2202	32.168	.0974	12.636	245.32
#1	.5335	.00233	2.680	-.00223	.00207
#2	.5351	.00370	2.676	-.00186	-.00770
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.353**	**-.00021**	**.94001**	**.0064**	**.00013**
Stddev	.060	.00051	.00084	.0018	.00033
%RSD	.41745	241.58	.08937	27.85	253.10
#1	14.311	-.00057	.94060	.0077	-.00010
#2	14.395	.00015	.93941	.0052	.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-A Acquired: 7/16/2019 18:03:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**.0126**	**.00096**	**.00142**	**.0014**
Stddev	.00228	.0080	.00024	.00182	.0007
%RSD	1221.9	63.40	24.870	128.84	53.79
#1	.00180	.0182	.00113	.00013	.0019
#2	-.00142	.0069	.00079	.00271	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1473.9**	**1066.1**	**33347.**	**3925.8**
Stddev	.8	2.4	5.	11.9
%RSD	.05120	.22791	.01569	.30323
#1	1473.4	1064.4	33343.	3934.2
#2	1474.4	1067.8	33350.	3917.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.724%	92.251%	93.459%	99.450%
Range				

Sample Name: 480-156069-C-2-Asd@5 Acquired: 7/16/2019 18:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.01832**	**-.00426**	**.43114**	**.04981**
Stddev	.00013	.00468	.00422	.00058	.00007
%RSD	58.764	25.551	98.931	.13547	.13541
#1	-.00032	.02163	-.00724	.43155	.04986
#2	-.00013	.01501	-.00128	.43072	.04976
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**38.708**	**.00005**	**-.0216**	**-.00032**
Stddev	.00004	.081	.00002	.0055	.00003
%RSD	243.21	.20859	39.559	25.21	9.0384
#1	.00001	38.765	.00004	-.0178	-.00034
#2	-.00005	38.651	.00007	-.0255	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00182**	**.00009**	**1.3404**	**.71142**	**.00076**
Stddev	.00029	.00005	.0141	.00069	.00045
%RSD	16.198	50.056	1.0489	.09751	59.615
#1	.00203	.00012	1.3504	.71093	.00044
#2	.00161	.00006	1.3305	.71192	.00108
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-Asd@5 Acquired: 7/16/2019 18:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.7613**	**.33706**	**-.00025**	**.70009**	**.00062**
Stddev	.0014	.00048	.00002	.00144	.00020
%RSD	.03675	.14311	9.1095	.20556	33.122
#1	3.7623	.33740	-.00026	.70111	.00047
#2	3.7603	.33672	-.00023	.69908	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1093**	**.00220**	**.4827**	**-.00054**	**-.00027**
Stddev	.0001	.00187	.0031	.00079	.00051
%RSD	.0840	84.831	.6418	146.81	192.27
#1	.1093	.00352	.4849	.00002	.00010
#2	.1094	.00088	.4805	-.00110	-.00063
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.8604**	**.00012**	**.18702**	**.0062**	**-.00028**
Stddev	.0410	.00048	.00082	.0031	.00041
%RSD	1.4317	401.81	.43844	49.59	146.58
#1	2.8894	-.00022	.18760	.0083	.00001
#2	2.8314	.00046	.18644	.0040	-.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-Asd@5 Acquired: 7/16/2019 18:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00014	-.0134	-.00011	.00116	-.0014
Stddev	.00168	.0495	.00041	.00021	.0007
%RSD	1235.1	369.1	375.98	17.999	51.46
#1	-.00105	.0216	-.00040	.00101	-.0009
#2	.00132	-.0484	.00018	.00131	-.0020
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1561.8	1118.2	34777.	3937.1
Stddev	.6	1.6	35.	18.3
%RSD	.04001	.13960	.09939	.46518
#1	1562.2	1117.1	34753.	3924.2
#2	1561.3	1119.3	34802.	3950.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.250%	96.755%	97.468%	99.739%
Range				

Sample Name: 480-156069-C-2-Apds Acquired: 7/16/2019 18:10:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05024**	**9.7529**	**.20883**	**2.3790**	**.44423**
Stddev	.00038	.0386	.00286	.0068	.00000
%RSD	.75937	.39606	1.3686	.28755	.00089
#1	.04997	9.7802	.20681	2.3839	.44423
#2	.05051	9.7256	.21085	2.3742	.44423
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20605**	**196.44**	**.20393**	**-.0123**	**.19178**
Stddev	.00040	.69	.00057	.0071	.00023
%RSD	.19529	.35213	.27933	57.29	.11786
#1	.20634	195.95	.20433	-.0073	.19194
#2	.20577	196.93	.20352	-.0173	.19162
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19276**	**.20734**	**16.377**	**13.530**	**.21078**
Stddev	.00013	.00017	.027	.034	.00058
%RSD	.06574	.08180	.16204	.25223	.27608
#1	.19267	.20722	16.395	13.554	.21119
#2	.19285	.20746	16.358	13.506	.21037
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-Apds Acquired: 7/16/2019 18:10:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.194**	**1.7978**	**.21035**	**13.367**	**.20288**
Stddev	.080	.0077	.00051	.037	.00071
%RSD	.28442	.42674	.24449	.27774	.34927
#1	28.138	1.7924	.20999	13.393	.20339
#2	28.251	1.8032	.21072	13.341	.20238
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0721**	**.20127**	**13.33**	**.22017**	**.20226**
Stddev	.0028	.00037	.00	.00287	.00372
%RSD	3.924	.18151	.0103	1.3041	1.8413
#1	.0741	.20153	13.33	.22220	.19963
#2	.0701	.20101	13.33	.21814	.20490
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**23.691**	**.21261**	**1.1125**	**.0128**	**.20532**
Stddev	.033	.00097	.0054	.0003	.00002
%RSD	.14138	.45623	.48213	2.306	.00934
#1	23.667	.21330	1.1163	.0131	.20531
#2	23.714	.21192	1.1087	.0126	.20534
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-Apds Acquired: 7/16/2019 18:10:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19947**	**-.0267**	**.20447**	**.19720**	**.0041**
Stddev	.00007	.0210	.00038	.00269	.0003
%RSD	.03418	78.65	.18374	1.3644	8.470
#1	.19942	-.0118	.20421	.19530	.0038
#2	.19952	-.0415	.20474	.19910	.0043
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1453.8**	**1060.2**	**33140.**	**3914.7**
Stddev	1.7	2.8	128.	2.4
%RSD	.11967	.26655	.38713	.06101
#1	1452.6	1058.3	33230.	3913.0
#2	1455.0	1062.2	33049.	3916.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.460%	91.744%	92.879%	99.169%
Range				

Sample Name: 480-156069-C-2-B MS Acquired: 7/16/2019 18:14:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04918**	**9.5366**	**.20453**	**2.2640**	**.44909**
Stddev	.00020	.0090	.00315	.0046	.00009
%RSD	.39714	.09439	1.5409	.20125	.02017
#1	.04904	9.5430	.20230	2.2608	.44916
#2	.04931	9.5303	.20676	2.2673	.44903
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20104**	**201.42**	**.19887**	**-.0141**	**.18726**
Stddev	.00057	.62	.00043	.0130	.00074
%RSD	.28309	.30629	.21637	92.66	.39428
#1	.20144	201.85	.19857	-.0233	.18778
#2	.20063	200.98	.19917	-.0048	.18674
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18962**	**.20233**	**15.852**	**13.457**	**.20557**
Stddev	.00001	.00060	.027	.060	.00047
%RSD	.00473	.29540	.16721	.44669	.23087
#1	.18961	.20190	15.871	13.499	.20591
#2	.18962	.20275	15.834	13.414	.20523
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-B MS Acquired: 7/16/2019 18:14:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.538**	**1.8297**	**.20639**	**13.243**	**.19773**
Stddev	.032	.0033	.00045	.010	.00023
%RSD	.11124	.17967	.21918	.07860	.11720
#1	28.561	1.8321	.20607	13.250	.19790
#2	28.516	1.8274	.20671	13.235	.19757
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0616**	**.19589**	**12.82**	**.21774**	**.20254**
Stddev	.0020	.00078	.03	.00293	.00073
%RSD	3.210	.40047	.2359	1.3470	.36108
#1	.0602	.19644	12.80	.21567	.20305
#2	.0630	.19533	12.85	.21981	.20202
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**23.138**	**.18672**	**1.1309**	**.0151**	**.20123**
Stddev	.050	.00041	.0010	.0051	.00060
%RSD	.21795	.21844	.08892	33.79	.29852
#1	23.174	.18701	1.1316	.0115	.20166
#2	23.102	.18643	1.1302	.0187	.20081
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-B MS Acquired: 7/16/2019 18:14:45 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19471**	**.0084**	**.19914**	**.19450**	**.0020**
Stddev	.00108	.0006	.00013	.00287	.0003
%RSD	.55325	7.063	.06423	1.4739	15.06
#1	.19395	.0088	.19905	.19653	.0018
#2	.19547	.0080	.19923	.19247	.0023
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1453.9**	**1059.2**	**33122.**	**3922.3**
Stddev	.1	1.8	4.	5.0
%RSD	.00403	.17461	.01317	.12732
#1	1453.8	1060.5	33125.	3918.8
#2	1453.9	1057.9	33119.	3925.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.463%	91.652%	92.828%	99.364%
Range				

Sample Name: 480-156069-C-2-C MSD Acquired: 7/16/2019 18:18:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04854**	**9.5472**	**.20538**	**2.3022**	**.44840**
Stddev	.00083	.0052	.00487	.0026	.00002
%RSD	1.7020	.05394	2.3719	.11379	.00513
#1	.04796	9.5508	.20194	2.3003	.44841
#2	.04913	9.5436	.20883	2.3040	.44838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20177**	**201.84**	**.19890**	**-.0238**	**.18783**
Stddev	.00087	.04	.00044	.0013	.00051
%RSD	.42951	.02184	.21942	5.334	.26921
#1	.20116	201.81	.19859	-.0229	.18747
#2	.20238	201.87	.19921	-.0247	.18819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18914**	**.20204**	**16.178**	**13.484**	**.20676**
Stddev	.00083	.00081	.052	.018	.00073
%RSD	.43762	.40166	.32107	.13208	.35321
#1	.18856	.20261	16.141	13.472	.20728
#2	.18973	.20147	16.215	13.497	.20625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-C MSD Acquired: 7/16/2019 18:18:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**28.532**	**1.8472**	**.20573**	**13.269**	**.19864**
Stddev	.045	.0002	.00056	.023	.00002
%RSD	.15827	.00866	.27135	.17444	.01138
#1	28.564	1.8471	.20612	13.253	.19862
#2	28.501	1.8473	.20533	13.286	.19865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0822**	**.19884**	**13.01**	**.21497**	**.20371**
Stddev	.0040	.00022	.04	.00050	.00036
%RSD	4.808	.11035	.3447	.23453	.17877
#1	.0794	.19900	12.98	.21462	.20345
#2	.0850	.19869	13.04	.21533	.20396
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**23.344**	**.18642**	**1.1361**	**.0138**	**.20074**
Stddev	.012	.00054	.0033	.0038	.00013
%RSD	.05080	.28788	.29087	27.63	.06547
#1	23.335	.18680	1.1337	.0165	.20083
#2	23.352	.18604	1.1384	.0111	.20065
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-2-C MSD Acquired: 7/16/2019 18:18:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19940**	**.0498**	**.19913**	**.19368**	**.0023**
Stddev	.00185	.0120	.00029	.00022	.0002
%RSD	.92995	24.19	.14647	.11259	6.876
#1	.19809	.0413	.19934	.19383	.0021
#2	.20071	.0583	.19892	.19352	.0024
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1444.8**	**1055.8**	**33024.**	**3899.7**
Stddev	2.5	1.5	4.	4.4
%RSD	.17200	.13773	.01086	.11162
#1	1446.6	1056.8	33027.	3902.8
#2	1443.1	1054.8	33022.	3896.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.895%	91.358%	92.555%	98.791%
Range				

Sample Name: 480-156069-C-3-A Acquired: 7/16/2019 18:22:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00076**	**1.8676**	**.00982**	**2.3035**	**1.0402**
Stddev	.00024	.0004	.00343	.0029	.0015
%RSD	31.362	.02040	34.924	.12734	.14199
#1	-.00059	1.8673	.00740	2.3056	1.0413
#2	-.00093	1.8678	.01225	2.3015	1.0392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**268.13**	**.00012**	**-.0079**	**.00045**
Stddev	.00003	.59	.00006	.0329	.00001
%RSD	46.591	.21987	47.750	415.2	1.5100
#1	.00005	268.55	.00016	.0153	.00045
#2	.00010	267.71	.00008	-.0312	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00984**	**.00287**	**11.791**	**3.5033**	**.00955**
Stddev	.00060	.00008	.035	.0054	.00099
%RSD	6.0485	2.9547	.30043	.15469	10.384
#1	.00942	.00293	11.816	3.5071	.01025
#2	.01026	.00281	11.766	3.4995	.00884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-3-A Acquired: 7/16/2019 18:22:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**32.806**	**.89301**	**.00088**	**3.3226**	**.00551**
Stddev	.034	.00101	.00000	.0023	.00026
%RSD	.10433	.11337	.09730	.06937	4.6703
#1	32.830	.89373	.00088	3.3242	.00533
#2	32.782	.89230	.00088	3.3210	.00570
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1763**	**.00575**	**33.47**	**-.00208**	**-.00124**
Stddev	.0008	.00065	.04	.00022	.00033
%RSD	.4508	11.298	.1330	10.551	26.818
#1	.1769	.00621	33.44	-.00193	-.00148
#2	.1758	.00529	33.50	-.00224	-.00101
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.036**	**.00034**	**.41306**	**.0013**	**.03737**
Stddev	.070	.00049	.00003	.0146	.00189
%RSD	.43837	146.67	.00610	1095.	5.0569
#1	16.086	-.00001	.41307	-.0090	.03603
#2	15.986	.00069	.41304	.0117	.03870
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-3-A Acquired: 7/16/2019 18:22:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00064**	**.0363**	**.00400**	**.01193**	**.0033**
Stddev	.00146	.0473	.00014	.00122	.0009
%RSD	229.44	130.4	3.5832	10.192	27.50
#1	.00167	.0697	.00411	.01107	.0040
#2	-.00040	.0028	.00390	.01279	.0027
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1441.5**	**1054.0**	**32907.**	**3870.3**
Stddev	1.0	.3	34.	8.2
%RSD	.07157	.02943	.10322	.21295
#1	1442.3	1054.2	32883.	3864.5
#2	1440.8	1053.8	32931.	3876.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.688%	91.201%	92.227%	98.046%
Range				

Sample Name: 480-156069-C-4-A Acquired: 7/16/2019 18:26:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00023**	**.33085**	**.13872**	**2.2181**	**.32580**
Stddev	.00034	.01535	.00145	.0027	.00065
%RSD	147.26	4.6403	1.0471	.12196	.20043
#1	-.00047	.34170	.13975	2.2200	.32627
#2	.00001	.31999	.13769	2.2162	.32534
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**199.51**	**.00056**	**.0074**	**-.00046**
Stddev	.00003	.51	.00001	.0119	.00016
%RSD	15.148	.25323	2.0411	160.0	34.155
#1	.00019	199.15	.00056	-.0010	-.00057
#2	.00015	199.86	.00055	.0158	-.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00565**	**.01719**	**104.00**	**2.9674**	**.01178**
Stddev	.00018	.00005	.42	.0211	.00057
%RSD	3.1075	.30758	.40333	.71201	4.8739
#1	.00577	.01723	103.70	2.9524	.01219
#2	.00553	.01715	104.29	2.9823	.01138
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-4-A Acquired: 7/16/2019 18:26:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.000**	**.49698**	**.00519**	**4.4998**	**.00339**
Stddev	.037	.00284	.00040	.0125	.00002
%RSD	.17387	.57047	7.6412	.27869	.49349
#1	20.975	.49899	.00491	4.4909	.00338
#2	21.026	.49498	.00548	4.5086	.00340
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.060**	**.02940**	**8.693**	**.00396**	**-.00150**
Stddev	.001	.00028	.015	.00185	.00237
%RSD	.0163	.95751	.1741	46.757	158.06
#1	7.061	.02920	8.682	.00527	.00018
#2	7.060	.02960	8.704	.00265	-.00318
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.778**	**.00060**	**.94847**	**.0569**	**.01218**
Stddev	.035	.00178	.00200	.0025	.00017
%RSD	.16879	295.28	.21074	4.385	1.3745
#1	20.753	.00186	.94706	.0551	.01206
#2	20.803	-.00065	.94988	.0587	.01230
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-4-A Acquired: 7/16/2019 18:26:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00263**	**.0222**	**.03375**	**.05672**	**.0059**
Stddev	.00185	.0003	.00022	.00040	.0011
%RSD	70.342	1.427	.65847	.71300	19.25
#1	-.00132	.0220	.03391	.05643	.0068
#2	-.00394	.0225	.03360	.05700	.0051
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1460.4**	**1071.0**	**33284.**	**3900.7**
Stddev	.7	1.6	158.	20.1
%RSD	.04627	.15251	.47349	.51464
#1	1460.8	1069.8	33172.	3914.9
#2	1459.9	1072.1	33395.	3886.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.872%	92.670%	93.282%	98.816%
Range				

Sample Name: 480-156069-C-5-A Acquired: 7/16/2019 18:30:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**1.9401**	**.00761**	**2.2234**	**1.1127**
Stddev	.00044	.0123	.00097	.0001	.0044
%RSD	173.02	.63446	12.796	.00269	.39531
#1	-.00057	1.9314	.00692	2.2234	1.1096
#2	.00006	1.9488	.00830	2.2233	1.1158
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**280.33**	**.00022**	**-.0043**	**.00044**
Stddev	.00005	2.19	.00003	.0158	.00001
%RSD	56.641	.78231	12.536	371.1	1.5184
#1	.00012	278.77	.00024	-.0154	.00044
#2	.00005	281.88	.00020	.0069	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01455**	**.00290**	**12.649**	**3.6084**	**.00941**
Stddev	.00015	.00005	.087	.0050	.00012
%RSD	1.0498	1.7839	.68837	.13886	1.2873
#1	.01465	.00293	12.587	3.6048	.00950
#2	.01444	.00286	12.710	3.6119	.00933
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-5-A Acquired: 7/16/2019 18:30:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**34.503**	**.94310**	**.00157**	**3.4790**	**.00879**
Stddev	.027	.00033	.00044	.0083	.00044
%RSD	.07943	.03539	27.747	.23890	5.0431
#1	34.483	.94286	.00188	3.4731	.00848
#2	34.522	.94334	.00126	3.4849	.00911
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1923**	**.00686**	**34.34**	**-.00207**	**-.00306**
Stddev	.0009	.00142	.03	.00001	.00013
%RSD	.4685	20.660	.0994	.64151	4.2613
#1	.1917	.00586	34.32	-.00208	-.00316
#2	.1930	.00786	34.37	-.00206	-.00297
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.091**	**.00126**	**.43473**	**.0084**	**.04431**
Stddev	.201	.00027	.00005	.0002	.00212
%RSD	1.2495	20.999	.01072	2.584	4.7870
#1	15.949	.00108	.43476	.0083	.04581
#2	16.233	.00145	.43470	.0086	.04281
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156069-C-5-A Acquired: 7/16/2019 18:30:00 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00109**	**.0586**	**.00414**	**.01358**	**.0051**
Stddev	.00075	.0334	.00004	.00032	.0000
%RSD	68.610	56.95	.87517	2.3735	.8635
#1	.00161	.0823	.00411	.01335	.0052
#2	.00056	.0350	.00416	.01381	.0051
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1436.5**	**1051.4**	**32681.**	**3855.0**
Stddev	.4	1.6	42.	13.2
%RSD	.02928	.14915	.12839	.34268
#1	1436.8	1052.6	32711.	3864.4
#2	1436.2	1050.3	32651.	3845.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.371%	90.982%	91.593%	97.659%
Range				

Sample Name: 480-156079-A-1-A Acquired: 7/16/2019 18:33:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00188**	**.05183**	**.00323**	**2.4819**	**3.1590**
Stddev	.00033	.00400	.00085	.0022	.0141
%RSD	17.482	7.7124	26.220	.09078	.44619
#1	-.00211	.04900	.00383	2.4803	3.1490
#2	-.00165	.05465	.00263	2.4834	3.1690
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**690.07**	**-.00026**	**-.0314**	**-.00091**
Stddev	.00005	2.63	.00015	.0026	.00021
%RSD	127.27	.38060	58.398	8.194	23.012
#1	-.00008	688.21	-.00015	-.0296	-.00105
#2	-.00000	691.93	-.00037	-.0332	-.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01021**	**-.00398**	**.32390**	**29.624**	**.08006**
Stddev	.00057	.00017	.00659	.124	.00010
%RSD	5.5492	4.3668	2.0356	.41795	.12832
#1	.00981	-.00410	.32856	29.537	.07998
#2	.01061	-.00386	.31924	29.712	.08013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-1-A Acquired: 7/16/2019 18:33:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**256.08**	**6.2968**	**-.00037**	F **2032.6**	**.01595**
Stddev	.02	.0312	.00054	7.2	.00042
%RSD	.00587	.49498	144.79	.35212	2.6598
#1	256.09	6.3189	.00001	2027.5	.01565
#2	256.07	6.2748	-.00075	2037.6	.01625
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1443**	**.00282**	**41.91**	**-.00300**	**-.01324**
Stddev	.0035	.00096	.11	.00083	.00381
%RSD	2.420	33.918	.2523	27.812	28.818
#1	.1468	.00349	41.84	-.00241	-.01054
#2	.1419	.00214	41.99	-.00359	-.01593
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**14.961**	**.00166**	F **9.2140**	**.0070**	**-.00023**
Stddev	.112	.00053	.0992	.0004	.00011
%RSD	.74860	31.758	1.0761	5.195	49.990
#1	14.882	.00204	9.1439	.0072	-.00031
#2	15.040	.00129	9.2841	.0067	-.00015
Check ?	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
High Limit			9.0000		
Low Limit			-.00500		

Sample Name: 480-156079-A-1-A Acquired: 7/16/2019 18:33:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00218**	**.0317**	**.00048**	**.00043**	**-.0004**
Stddev	.00431	.0153	.00003	.00108	.0011
%RSD	197.19	48.27	6.9552	251.21	263.1
#1	.00523	.0209	.00050	.00119	.0004
#2	-.00086	.0425	.00045	-.00033	-.0012
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1126.3**	**929.99**	**27767.**	**3541.8**
Stddev	.9	.04	63.	6.9
%RSD	.08195	.00391	.22526	.19614
#1	1125.7	929.97	27722.	3546.7
#2	1127.0	930.02	27811.	3536.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	70.858%	80.473%	77.820%	89.724%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 18:38:06 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99585**	**48.416**	**1.0040**	**.98081**	**.97018**	**1.0067**	**48.618**	**.98026**
Stddev	.00257	.016	.0051	.00085	.00062	.0006	.092	.00077
%RSD	.25833	.03349	.50990	.08651	.06441	.06490	.18822	.07814
#1	.99403	48.404	1.0004	.98141	.97062	1.0062	48.682	.97972
#2	.99767	48.427	1.0077	.98021	.96974	1.0072	48.553	.98080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.036**	**.97540**	**.98502**	**1.0168**	**51.931**	**49.627**	**.97681**	**48.741**
Stddev	.025	.00068	.00333	.0014	.298	.067	.00128	.044
%RSD	2.461	.06990	.33843	.14258	.57477	.13595	.13101	.09077
#1	1.054	.97588	.98266	1.0178	52.142	49.579	.97772	48.772
#2	1.018	.97491	.98738	1.0158	51.720	49.675	.97591	48.710
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0485**	**1.0152**	**49.902**	**1.0026**	**24.62**	**.98504**	**25.05**	**.97076**
Stddev	.0068	.0003	.053	.0020	.00	.00352	.04	.00065
%RSD	.64784	.02603	.10602	.20241	.0180	.35709	.1588	.06747
#1	1.0437	1.0150	49.940	1.0012	24.62	.98255	25.02	.97122
#2	1.0533	1.0154	49.865	1.0041	24.63	.98753	25.08	.97029
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 18:38:06 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0165**	**10.001**	**.97375**	**1.0022**	**.9875**	**1.0365**	**.99667**	**2.456**
Stddev	.0037	.058	.00142	.0010	.0038	.0003	.00094	.013
%RSD	.36364	.57511	.14593	.10133	.3875	.02815	.09440	.5204
#1	1.0191	9.9601	.97475	1.0030	.9902	1.0367	.99601	2.465
#2	1.0139	10.041	.97274	1.0015	.9848	1.0363	.99734	2.447
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0383**	**1.0324**	**1.022**
Stddev	.0015	.0040	.001
%RSD	.14596	.38289	.0837
#1	1.0372	1.0296	1.022
#2	1.0394	1.0352	1.021
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1477.8**	**1106.0**	**33366.**	**3837.6**
Stddev	.7	1.4	43.	13.5
%RSD	.04523	.12798	.12985	.35122
#1	1478.2	1107.0	33397.	3828.0
#2	1477.3	1105.0	33335.	3847.1

Sample Name: CCB-5392763 Acquired: 7/16/2019 18:41:46 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**-.00712**	**-.00314**	F **.02106**	**.00003**	**-.00002**	**-.00443**
Stddev	.00008	.01021	.00042	.00011	.00000	.00001	.00296
%RSD	56.658	143.47	13.462	.53969	10.624	54.148	66.866
#1	-.00019	.00010	-.00344	.02098	.00003	-.00001	-.00234
#2	-.00008	-.01434	-.00284	.02114	.00003	-.00002	-.00652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**-.0075**	**-.00017**	**.00039**	**-.00006**	**-.00021**	**.05573**
Stddev	.00002	.0150	.00002	.00015	.00010	.00112	.00487
%RSD	412.34	199.1	12.527	37.403	168.98	546.05	8.7455
#1	-.00001	.0031	-.00019	.00050	-.00013	-.00100	.05917
#2	.00002	-.0181	-.00016	.00029	.00001	.00059	.05228
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**-.00020**	**-.00023**	**.00039**	**.08393**	**.00038**	**.0037**
Stddev	.00027	.00046	.00003	.00021	.00508	.00058	.0013
%RSD	1464.8	226.81	11.368	54.024	6.0488	150.52	36.65
#1	.00017	-.00053	-.00024	.00024	.08752	-.00002	.0027
#2	-.00021	.00012	-.00021	.00053	.08034	.00079	.0046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 18:41:46 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.00084	-.0201	-.00020	.00218	.07962	-.00043	-.00003
Stddev	.00160	.0033	.00023	.00304	.00151	.00087	.00007
%RSD	191.37	16.34	116.12	139.01	1.9002	201.13	226.97
#1	-.00030	-.0178	-.00036	.00004	.08069	.00018	-.00007
#2	.00197	-.0224	-.00004	.00433	.07855	-.00104	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0025	-.00016	.00044	-.0081	-.00031	-.00121	-.0003
Stddev	.0080	.00014	.00052	.0147	.00022	.00018	.0002
%RSD	324.0	86.941	118.42	181.6	70.523	15.226	70.41
#1	-.0082	-.00027	.00007	-.0185	-.00016	-.00134	-.0004
#2	.0032	-.00006	.00081	.0023	-.00047	-.00108	-.0001
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1571.8	1135.2	35100.	3879.8
Stddev	.3	1.0	138.	5.2
%RSD	.01664	.08508	.39314	.13474
#1	1571.6	1134.5	35198.	3883.5
#2	1572.0	1135.9	35003.	3876.2

Sample Name: CCVL-5395711 Acquired: 7/16/2019 18:45:38 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00630**	**.19250**	**.01364**	F **.03933**	**.00212**	**.00204**	**.48859**
Stddev	.00008	.00809	.00398	.00038	.00001	.00006	.00490
%RSD	1.2542	4.2024	29.187	.96968	.36812	2.8558	1.0019
#1	.00624	.19822	.01646	.03906	.00211	.00200	.49205
#2	.00635	.18678	.01083	.03960	.00212	.00208	.48513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**-.0093**	**.00377**	**.00491**	**.00990**	**.05492**	**.50951**
Stddev	.00003	.0113	.00000	.00023	.00008	.00166	.02106
%RSD	1.6354	121.3	.04829	4.7488	.77021	3.0176	4.1341
#1	.00206	-.0013	.00377	.00475	.00985	.05609	.52441
#2	.00201	-.0173	.00377	.00508	.00995	.05375	.49462
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02860**	**.19805**	**.00318**	**.01009**	**1.0250**	**.01075**	**-.0222**
Stddev	.00014	.00387	.00002	.00002	.0000	.00012	.0002
%RSD	.47938	1.9522	.66142	.19248	.00430	1.0814	.8851
#1	.02850	.20078	.00316	.01008	1.0250	.01067	-.0223
#2	.02870	.19532	.00319	.01010	1.0249	.01083	-.0220
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 18:45:38 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00950**	**.1700**	**.02176**	**.03047**	**.55495**	**.00858**	**.00487**
Stddev	.00005	.0019	.00013	.00582	.01088	.00125	.00000
%RSD	.52770	1.090	.59727	19.097	1.9614	14.591	.05889
#1	.00953	.1687	.02167	.02636	.56265	.00770	.00487
#2	.00946	.1713	.02185	.03459	.54725	.00947	.00487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0009**	**.00495**	**.01982**	**-.0113**	**.00453**	**.01103**	**-.0005**
Stddev	.0044	.00025	.00086	.0483	.00003	.00067	.0004
%RSD	481.4	5.0692	4.3335	426.4	.56278	6.1128	78.48
#1	-.0022	.00477	.02042	.0228	.00451	.01151	-.0002
#2	.0040	.00513	.01921	-.0455	.00454	.01056	-.0008
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.1**	**1142.4**	**34972.**	**3907.1**
Stddev	.6	1.2	18.	14.4
%RSD	.03582	.10128	.05102	.36788
#1	1586.6	1143.2	34984.	3897.0
#2	1585.7	1141.6	34959.	3917.3

Sample Name: 480-156079-A-2-A Acquired: 7/16/2019 18:49:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00108**	**.08560**	**.00433**	**6.5832**	**.66321**
Stddev	.00001	.01433	.00333	.0132	.00200
%RSD	.84439	16.745	76.812	.20073	.30096
#1	-.00109	.07547	.00198	6.5926	.66462
#2	-.00108	.09574	.00669	6.5739	.66179
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**416.05**	**-.00006**	**-.0426**	**.00055**
Stddev	.00002	2.78	.00015	.0005	.00054
%RSD	62.564	.66877	237.87	1.175	98.662
#1	.00002	418.02	.00004	-.0430	.00093
#2	.00004	414.08	-.00017	-.0423	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.42405**	**-.00241**	**.43931**	**253.55**	**.16848**
Stddev	.00282	.00009	.00005	.31	.00117
%RSD	.66548	3.8242	.01043	.12357	.69674
#1	.42206	-.00235	.43928	253.78	.16765
#2	.42605	-.00248	.43935	253.33	.16931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-2-A Acquired: 7/16/2019 18:49:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **578.94**	**1.2656**	**.00061**	F **5112.8**	**.01210**
Stddev	1.10	.0004	.00043	37.9	.00025
%RSD	.18972	.03588	71.245	.74155	2.0536
#1	578.16	1.2659	.00030	5086.0	.01228
#2	579.71	1.2653	.00091	5139.6	.01193
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	450.00			900.00	
Low Limit	-.20000			-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.9288**	**-.00061**	**76.49**	**-.00346**	**-.00847**
Stddev	.0008	.00092	.07	.00063	.00132
%RSD	.0872	152.07	.0981	18.327	15.569
#1	.9293	.00005	76.54	-.00391	-.00940
#2	.9282	-.00126	76.43	-.00301	-.00753
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.804**	**-.00003**	**6.7862**	**-.0085**	**.03821**
Stddev	.035	.00019	.0201	.0029	.00018
%RSD	.17013	669.81	.29632	33.63	.47284
#1	20.779	.00011	6.8005	-.0065	.03833
#2	20.829	-.00017	6.7720	-.0106	.03808
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-2-A Acquired: 7/16/2019 18:49:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00087**	**-.0133**	**.01651**	**-.00257**	**.0154**
Stddev	.00263	.0018	.00042	.00049	.0003
%RSD	303.52	13.24	2.5575	19.151	2.042
#1	.00273	-.0120	.01681	-.00292	.0156
#2	-.00099	-.0145	.01621	-.00222	.0151
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1013.6**	**881.13**	**25343.**	**3357.6**
Stddev	.0	.97	45.	11.8
%RSD	.00168	.11009	.17580	.35232
#1	1013.7	880.44	25311.	3349.2
#2	1013.6	881.81	25374.	3365.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	63.769%	76.244%	71.027%	85.056%
Range				

Sample Name: 480-156079-A-3-A Acquired: 7/16/2019 18:53:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00013**	**.04778**	**.01300**	**2.5133**	**.89605**
Stddev	.00039	.01363	.00117	.0007	.00178
%RSD	296.77	28.532	9.0094	.02744	.19920
#1	.00014	.03814	.01383	2.5138	.89478
#2	-.00041	.05742	.01217	2.5128	.89731
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**532.69**	**-.00005**	**-.0123**	**-.00034**
Stddev	.00006	1.05	.00013	.0144	.00013
%RSD	127.41	.19716	239.23	117.0	38.101
#1	-.00008	533.44	-.00014	-.0021	-.00025
#2	-.00000	531.95	.00004	-.0225	-.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00256**	**-.00221**	**1.4434**	**62.044**	**.04898**
Stddev	.00063	.00018	.0099	.391	.00034
%RSD	24.551	8.0986	.68382	.62941	.68504
#1	.00301	-.00209	1.4504	61.768	.04875
#2	.00212	-.00234	1.4364	62.320	.04922
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-3-A Acquired: 7/16/2019 18:53:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**213.19**	**.50400**	**.00863**	F **2152.0**	**.00525**
Stddev	.09	.00083	.00013	6.0	.00126
%RSD	.04143	.16473	1.5330	.27725	24.078
#1	213.26	.50341	.00873	2147.8	.00436
#2	213.13	.50459	.00854	2156.2	.00615
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0230**	**.00142**	**42.28**	**-.00204**	**-.01030**
Stddev	.0016	.00274	.00	.00537	.00199
%RSD	6.864	193.47	.0107	263.56	19.306
#1	.0219	-.00052	42.28	.00176	-.00890
#2	.0241	.00335	42.29	-.00583	-.01171
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.184**	**-.00005**	**3.6284**	**.0100**	**-.00070**
Stddev	.017	.00208	.0200	.0036	.00014
%RSD	.14994	4105.3	.55218	35.75	19.474
#1	11.196	-.00152	3.6426	.0074	-.00060
#2	11.172	.00142	3.6142	.0125	-.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-3-A Acquired: 7/16/2019 18:53:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00443**	**.0591**	**.00004**	**.00317**	**.0007**
Stddev	.00155	.0214	.00032	.00024	.0006
%RSD	35.024	36.23	745.21	7.4608	90.59
#1	.00552	.0743	-.00018	.00300	.0011
#2	.00333	.0440	.00027	.00334	.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1139.0**	**941.63**	**27495.**	**3526.3**
Stddev	.1	2.16	21.	13.1
%RSD	.01110	.22967	.07788	.37124
#1	1138.9	940.10	27510.	3517.1
#2	1139.1	943.16	27480.	3535.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.653%	81.480%	77.059%	89.331%
Range				

Sample Name: 480-156079-A-4-A Acquired: 7/16/2019 18:57:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00146**	**.02515**	**.00355**	**2.6406**	**.09569**
Stddev	.00032	.01333	.00136	.0093	.00010
%RSD	22.057	53.005	38.208	.35133	.09938
#1	-.00169	.03458	.00259	2.6472	.09563
#2	-.00123	.01572	.00451	2.6340	.09576
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**332.76**	**.00011**	**-.0171**	**.00085**
Stddev	.00004	.44	.00030	.0132	.00002
%RSD	113.31	.13366	272.26	77.20	2.8807
#1	.00001	332.45	-.00010	-.0265	.00083
#2	.00007	333.08	.00033	-.0078	.00086
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**.00852**	**2.9275**	**43.318**	**.09224**
Stddev	.00026	.00028	.0061	.174	.00092
%RSD	49.405	3.2962	.20866	.40256	.99943
#1	.00070	.00832	2.9318	43.441	.09289
#2	.00034	.00872	2.9232	43.194	.09159
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-4-A Acquired: 7/16/2019 18:57:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**331.73**	**2.1408**	**.00238**	F **2924.4**	**.00316**
Stddev	.26	.0035	.00021	5.1	.00055
%RSD	.07942	.16526	8.7251	.17514	17.391
#1	331.54	2.1383	.00253	2928.0	.00355
#2	331.92	2.1433	.00223	2920.8	.00277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0218**	**.01497**	F **98.10**	**-.00113**	**-.01821**
Stddev	.0037	.00015	.05	.00197	.00923
%RSD	17.02	.99183	.0497	174.37	50.668
#1	.0192	.01507	98.13	.00026	-.02473
#2	.0245	.01486	98.06	-.00252	-.01168
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**15.328**	**.00011**	**5.5032**	**.0031**	**.00019**
Stddev	.029	.00408	.0135	.0100	.00030
%RSD	.18854	3574.5	.24463	324.6	153.21
#1	15.349	-.00277	5.4937	.0101	.00040
#2	15.308	.00300	5.5127	-.0040	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-4-A Acquired: 7/16/2019 18:57:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00448**	**.0336**	**-.00102**	**.86059**	**.0002**
Stddev	.00068	.0257	.00025	.00481	.0009
%RSD	15.231	76.41	24.501	.55941	416.0
#1	.00400	.0154	-.00119	.85718	-.0004
#2	.00497	.0517	-.00084	.86399	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1111.7**	**932.99**	**27026.**	**3481.5**
Stddev	1.8	.97	53.	.3
%RSD	.16291	.10389	.19655	.00780
#1	1110.4	932.30	27064.	3481.7
#2	1113.0	933.68	26989.	3481.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	69.938%	80.732%	75.745%	88.195%
Range				

Sample Name: 480-156079-A-5-A Acquired: 7/16/2019 19:02:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00124**	**.04159**	**.00429**	**2.1867**	**.06943**
Stddev	.00042	.00585	.00785	.0002	.00004
%RSD	34.362	14.060	182.84	.00896	.06402
#1	-.00094	.04573	-.00126	2.1868	.06946
#2	-.00154	.03746	.00984	2.1865	.06940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	F **1319.7**	**.00001**	**-.0267**	**-.00008**
Stddev	.00004	4.5	.00027	.0170	.00012
%RSD	73.402	.33728	1948.8	63.63	156.99
#1	-.00007	1316.6	.00020	-.0147	.00001
#2	-.00002	1322.9	-.00018	-.0387	-.00016
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00150**	**-.00745**	**8.6592**	**66.084**	**.24346**
Stddev	.00069	.00016	.0070	.012	.00063
%RSD	46.108	2.1615	.08076	.01857	.25806
#1	.00198	-.00756	8.6542	66.093	.24391
#2	.00101	-.00734	8.6641	66.076	.24302
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156079-A-5-A Acquired: 7/16/2019 19:02:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **1014.6**	**5.2626**	**.00099**	F **4609.5**	**-.00143**
Stddev	2.7	.0024	.00015	1.6	.00107
%RSD	.26246	.04558	15.106	.03441	74.565
#1	1016.5	5.2643	.00088	4608.3	-.00218
#2	1012.7	5.2609	.00109	4610.6	-.00068
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit	450.00			900.00	
Low Limit	-.20000			-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0114**	**-.00024**	F **275.2**	**.00192**	**-.01755**
Stddev	.0038	.00253	.3	.00009	.00351
%RSD	33.11	1050.0	.1218	4.7440	19.970
#1	.0140	-.00203	275.4	.00198	-.01507
#2	.0087	.00155	274.9	.00185	-.02003
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.536**	**.00352**	F **21.077**	**.0021**	**-.00246**
Stddev	.005	.00219	.079	.0108	.00052
%RSD	.03943	62.057	.37481	522.4	21.144
#1	13.532	.00507	21.021	-.0055	-.00282
#2	13.540	.00198	21.133	.0097	-.00209
Check ?	Chk Pass	Chk Pass	Chk Fail	None	Chk Pass
High Limit			9.0000		
Low Limit			-.00500		

Sample Name: 480-156079-A-5-A Acquired: 7/16/2019 19:02:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00303	.0595	-.00168	-.00031	-.0008
Stddev	.00162	.0413	.00050	.00048	.0007
%RSD	53.549	69.46	29.379	152.75	91.22
#1	.00188	.0303	-.00133	.00003	-.0003
#2	.00418	.0887	-.00203	-.00065	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	965.60	834.19	24440.	3261.5
Stddev	.31	1.10	30.	8.9
%RSD	.03255	.13146	.12421	.27145
#1	965.38	833.42	24419.	3267.7
#2	965.82	834.97	24462.	3255.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	60.746%	72.183%	68.498%	82.622%
Range				

Sample Name: 480-156099-C-2-A Acquired: 7/16/2019 19:06:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**1.1982**	**.03934**	**1.8138**	**.25249**
Stddev	.00035	.0032	.00326	.0002	.00066
%RSD	101.27	.26634	8.2941	.00930	.26054
#1	.00059	1.2005	.03703	1.8137	.25202
#2	.00010	1.1960	.04164	1.8139	.25295
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**79.608**	**.00048**	**.2180**	**.02320**
Stddev	.00000	.052	.00003	.0099	.00002
%RSD	.92938	.06529	6.8573	4.531	.07679
#1	.00035	79.644	.00051	.2110	.02319
#2	.00035	79.571	.00046	.2249	.02321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	**-.00000**	**274.89**	**6.6883**	**.00241**
Stddev	.00082	.00003	2.59	.0064	.00070
%RSD	97.455	632.70	.94170	.09606	29.309
#1	-.00026	-.00002	276.72	6.6837	.00290
#2	-.00142	.00001	273.06	6.6928	.00191
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-2-A Acquired: 7/16/2019 19:06:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.6091**	**2.8134**	**-.00094**	**154.58**	**.00071**
Stddev	.0155	.0118	.00027	.68	.00019
%RSD	.27638	.41866	29.164	.44183	26.329
#1	5.5981	2.8051	-.00075	155.06	.00058
#2	5.6200	2.8217	-.00114	154.10	.00084
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.2940**	**.01939**	**2.898**	**-.00146**	**-.00360**
Stddev	.0033	.00099	.010	.00081	.00233
%RSD	1.115	5.0795	.3406	55.230	64.679
#1	-.2916	.01870	2.891	-.00204	-.00196
#2	-.2963	.02009	2.905	-.00089	-.00525
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.969**	**.00189**	**.20673**	**.1711**	**.04380**
Stddev	.088	.00135	.00023	.0079	.00012
%RSD	.48960	71.223	.11178	4.594	.26854
#1	18.031	.00284	.20657	.1766	.04388
#2	17.907	.00094	.20689	.1655	.04371
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-2-A Acquired: 7/16/2019 19:06:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00706**	**.0339**	**.01366**	**.01513**	**.0094**
Stddev	.00255	.0284	.00007	.00007	.0011
%RSD	36.106	83.92	.52406	.48781	11.56
#1	-.00526	.0138	.01371	.01518	.0101
#2	-.00887	.0540	.01361	.01508	.0086
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1447.1**	**1132.5**	**34262.**	**4015.7**
Stddev	1.7	4.0	78.	14.8
%RSD	.11475	.35473	.22657	.36913
#1	1448.3	1135.4	34317.	4005.3
#2	1445.9	1129.7	34207.	4026.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.037%	97.999%	96.025%	101.73%
Range				

Sample Name: 480-156099-C-3-A Acquired: 7/16/2019 19:10:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**.11020**	**.00043**	**1.9902**	**.01395**
Stddev	.00002	.00926	.00250	.0042	.00005
%RSD	8.6424	8.4013	583.88	.20846	.33090
#1	-.00028	.10365	.00219	1.9872	.01399
#2	-.00025	.11674	-.00134	1.9931	.01392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**5.0854**	**.00009**	**-.0020**	**.00011**
Stddev	.00006	.0243	.00003	.0113	.00013
%RSD	240.88	.47777	38.394	575.6	115.39
#1	.00002	5.0682	.00006	-.0099	.00020
#2	-.00006	5.1025	.00011	.0060	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00721**	**.00235**	**1.2789**	**1.2589**	**.00116**
Stddev	.00011	.00030	.0018	.0177	.00044
%RSD	1.5201	12.849	.13910	1.4087	37.961
#1	.00729	.00213	1.2802	1.2715	.00085
#2	.00713	.00256	1.2777	1.2464	.00147
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-3-A Acquired: 7/16/2019 19:10:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.98617**	**.08270**	**.00079**	**21.443**	**.00521**
Stddev	.00076	.00006	.00010	.027	.00010
%RSD	.07694	.07022	12.194	.12817	2.0047
#1	.98563	.08274	.00072	21.423	.00528
#2	.98670	.08266	.00086	21.462	.00514
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0272**	**.00260**	**1.594**	**.00168**	**.00320**
Stddev	.0010	.00016	.002	.00276	.00308
%RSD	3.504	6.2530	.1207	164.39	96.286
#1	.0279	.00271	1.595	-.00027	.00538
#2	.0266	.00248	1.593	.00362	.00102
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.8504**	**-.00074**	**.04197**	**.0005**	**.00224**
Stddev	.0180	.00098	.00010	.0005	.00025
%RSD	.22963	132.97	.23167	103.7	11.254
#1	7.8376	-.00004	.04191	.0001	.00242
#2	7.8631	-.00143	.04204	.0009	.00206
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-3-A Acquired: 7/16/2019 19:10:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**-.0376**	**.00033**	**.00500**	**-.0008**
Stddev	.00052	.0263	.00005	.00013	.0001
%RSD	13004.	69.94	14.304	2.6360	13.06
#1	-.00038	-.0562	.00036	.00509	-.0009
#2	.00037	-.0190	.00029	.00490	-.0008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1559.5**	**1114.6**	**34591.**	**3949.7**
Stddev	.3	2.3	62.	8.1
%RSD	.01805	.20595	.17830	.20472
#1	1559.3	1116.3	34547.	3955.4
#2	1559.7	1113.0	34634.	3944.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.107%	96.450%	96.945%	100.06%
Range				

Sample Name: 480-156099-C-4-A Acquired: 7/16/2019 19:13:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.09843**	**.00342**	**2.0176**	**.01206**
Stddev	.00008	.01001	.00126	.0027	.00001
%RSD	46.707	10.170	36.853	.13378	.05193
#1	-.00011	.10551	.00431	2.0195	.01206
#2	-.00023	.09135	.00253	2.0157	.01206
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**6.5970**	**-.00005**	**-.0141**	**.00006**
Stddev	.00002	.0113	.00008	.0087	.00005
%RSD	96.083	.17081	159.72	61.79	80.090
#1	-.00003	6.6050	.00001	-.0080	.00009
#2	-.00001	6.5891	-.00011	-.0203	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00091**	**.00122**	**.98107**	**1.2149**	**.00096**
Stddev	.00005	.00003	.00153	.0073	.00075
%RSD	5.3451	2.8439	.15561	.60063	77.390
#1	.00094	.00120	.97999	1.2201	.00044
#2	.00087	.00125	.98215	1.2098	.00149
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-4-A Acquired: 7/16/2019 19:13:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0259**	**.05868**	**-.00010**	**21.038**	**.00050**
Stddev	.0040	.00011	.00003	.009	.00023
%RSD	.38924	.18279	28.758	.04274	46.079
#1	1.0287	.05861	-.00011	21.031	.00034
#2	1.0231	.05876	-.00008	21.044	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0214**	**.00107**	**2.673**	**.00164**	**-.00194**
Stddev	.0023	.00053	.005	.00194	.00148
%RSD	10.59	49.986	.1708	117.89	76.331
#1	.0230	.00145	2.676	.00301	-.00089
#2	.0198	.00069	2.670	.00027	-.00298
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.8944**	**-.00186**	**.04233**	**.0045**	**.00146**
Stddev	.0073	.00060	.00009	.0099	.00025
%RSD	.09197	32.280	.21560	218.2	17.162
#1	7.8893	-.00228	.04227	-.0025	.00164
#2	7.8996	-.00143	.04240	.0115	.00128
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-4-A Acquired: 7/16/2019 19:13:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00125**	**-.0369**	**-.00018**	**.00489**	**-.0000**
Stddev	.00084	.0041	.00001	.00019	.0010
%RSD	67.189	11.16	7.4820	3.8097	24220.
#1	-.00065	-.0340	-.00019	.00476	-.0007
#2	-.00184	-.0398	-.00017	.00503	.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1566.4**	**1114.7**	**34467.**	**3944.0**
Stddev	1.2	1.4	25.	9.7
%RSD	.07429	.12758	.07172	.24532
#1	1565.6	1113.7	34484.	3950.9
#2	1567.2	1115.7	34449.	3937.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.542%	96.459%	96.598%	99.913%
Range				

Sample Name: 480-156099-C-5-A Acquired: 7/16/2019 19:17:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**.10040**	**-.00148**	**2.0521**	**.01289**
Stddev	.00012	.00618	.00071	.0017	.00005
%RSD	18591.	6.1589	47.899	.08281	.41596
#1	-.00009	.09603	-.00098	2.0509	.01293
#2	.00009	.10478	-.00198	2.0533	.01285
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**6.8859**	**.00007**	**-.0188**	**.00019**
Stddev	.00010	.0005	.00003	.0236	.00003
%RSD	418.86	.00766	40.728	125.5	14.235
#1	.00009	6.8863	.00005	-.0355	.00021
#2	-.00005	6.8856	.00010	-.0021	.00018
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00397**	**.00109**	**1.0544**	**1.2955**	**.00114**
Stddev	.00035	.00003	.0052	.0289	.00005
%RSD	8.7080	2.8639	.48939	2.2333	4.0227
#1	.00372	.00111	1.0507	1.3160	.00117
#2	.00421	.00107	1.0580	1.2751	.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-5-A Acquired: 7/16/2019 19:17:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.0663**	**.06464**	**.00047**	**22.186**	**.00287**
Stddev	.0026	.00005	.00017	.053	.00039
%RSD	.24020	.07971	36.860	.23680	13.675
#1	1.0681	.06460	.00034	22.148	.00315
#2	1.0645	.06468	.00059	22.223	.00259
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0258**	**.00188**	**2.754**	**.00146**	**.00179**
Stddev	.0011	.00028	.011	.00283	.00409
%RSD	4.128	14.645	.4037	194.49	228.27
#1	.0251	.00169	2.762	-.00055	.00468
#2	.0266	.00208	2.746	.00346	-.00110
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.1526**	**.00000**	**.04458**	**-.0005**	**.00172**
Stddev	.0430	.00017	.00002	.0026	.00030
%RSD	.52722	3435.3	.04818	568.0	17.489
#1	8.1223	.00013	.04457	.0014	.00193
#2	8.1830	-.00012	.04460	-.0023	.00150
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156099-C-5-A Acquired: 7/16/2019 19:17:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00118**	**.0174**	**.00014**	**.00318**	**-.0009**
Stddev	.00278	.0167	.00031	.00046	.0010
%RSD	235.41	95.98	227.09	14.510	108.5
#1	-.00314	.0292	.00036	.00351	-.0016
#2	.00078	.0056	-.00008	.00286	-.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1559.4**	**1114.2**	**34363.**	**3931.5**
Stddev	.1	.4	8.	1.9
%RSD	.00530	.03517	.02353	.04898
#1	1559.5	1114.5	34357.	3932.9
#2	1559.4	1113.9	34369.	3930.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.104%	96.411%	96.307%	99.596%
Range				

Sample Name: 480-156054-D-1-A Acquired: 7/16/2019 19:21:33 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.04322**	**.00057**	**2.2669**	**.29385**
Stddev	.00002	.00903	.00091	.0017	.00046
%RSD	5.6797	20.890	158.32	.07552	.15735
#1	-.00033	.04960	-.00007	2.2657	.29418
#2	-.00031	.03683	.00122	2.2681	.29352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**74.217**	**.00028**	**-.0113**	**-.00047**
Stddev	.00003	.144	.00018	.0051	.00025
%RSD	145.55	.19463	66.683	45.10	52.426
#1	.00005	74.115	.00015	-.0148	-.00030
#2	-.00000	74.320	.00041	-.0077	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00218**	**.00140**	**3.9760**	**6.9020**	**.02132**
Stddev	.00060	.00005	.0223	.0234	.00120
%RSD	27.363	3.5424	.56171	.33957	5.6368
#1	.00260	.00137	3.9602	6.8854	.02217
#2	.00176	.00144	3.9918	6.9186	.02047
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156054-D-1-A Acquired: 7/16/2019 19:21:33 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.754**	**.64337**	**.00100**	**57.280**	**.00206**
Stddev	.031	.00373	.00018	.148	.00034
%RSD	.15680	.57925	17.900	.25920	16.522
#1	19.776	.64600	.00112	57.175	.00182
#2	19.733	.64073	.00087	57.385	.00230
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**4.062**	**.00338**	**.1495**	**-.00170**	**-.00692**
Stddev	.015	.00012	.0011	.00581	.00480
%RSD	.3678	3.6382	.7102	340.65	69.383
#1	4.073	.00330	.1487	.00240	-.00353
#2	4.052	.00347	.1502	-.00581	-.01032
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.579**	**.00100**	**1.0635**	**.0070**	**.00081**
Stddev	.110	.00035	.0023	.0017	.00003
%RSD	.55956	34.536	.21627	24.70	3.2560
#1	19.501	.00076	1.0619	.0082	.00083
#2	19.656	.00125	1.0652	.0058	.00079
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156054-D-1-A Acquired: 7/16/2019 19:21:33 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00069**	**.0086**	**-.00002**	**.00852**	**-.0002**
Stddev	.00136	.0982	.00022	.00080	.0003
%RSD	198.65	1142.	1221.2	9.3402	180.6
#1	-.00028	-.0608	.00014	.00909	.0001
#2	.00165	.0780	-.00017	.00796	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1492.0**	**1084.2**	**33484.**	**3897.4**
Stddev	1.7	2.1	125.	11.0
%RSD	.11372	.19694	.37473	.28236
#1	1493.2	1085.7	33395.	3905.2
#2	1490.8	1082.7	33573.	3889.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.862%	93.817%	93.844%	98.733%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 19:25:18 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99673**	**48.404**	**1.0124**	**.98635**	**.96834**	**1.0119**	**48.784**	**.98468**
Stddev	.00307	.001	.0052	.00028	.00047	.0010	.069	.00052
%RSD	.30753	.00123	.51107	.02824	.04842	.09450	.14060	.05241
#1	.99890	48.404	1.0088	.98654	.96800	1.0126	48.832	.98431
#2	.99457	48.404	1.0161	.98615	.96867	1.0112	48.735	.98504
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.028**	**.97874**	**.98685**	**1.0239**	**51.638**	**49.757**	**.97055**	**48.861**
Stddev	.007	.00035	.00302	.0005	.195	.029	.00125	.127
%RSD	.6596	.03529	.30624	.05299	.37786	.05750	.12911	.25985
#1	1.033	.97899	.98899	1.0243	51.776	49.737	.97143	48.951
#2	1.023	.97850	.98472	1.0235	51.500	49.778	.96966	48.772
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0562**	**1.0234**	**49.764**	**1.0104**	**24.75**	**.99071**	**25.16**	**.97465**
Stddev	.0014	.0002	.073	.0006	.01	.00261	.06	.00153
%RSD	.13476	.01750	.14607	.05396	.0352	.26332	.2353	.15713
#1	1.0552	1.0233	49.816	1.0100	24.76	.98886	25.20	.97574
#2	1.0572	1.0236	49.713	1.0108	24.75	.99255	25.11	.97357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 19:25:18 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0379**	**9.9471**	**.97582**	**1.0040**	**.9998**	**1.0460**	**.99906**	**2.440**
Stddev	.0009	.0335	.00196	.0003	.0075	.0001	.00563	.047
%RSD	.08736	.33657	.20099	.02697	.7537	.01276	.56370	1.937
#1	1.0373	9.9707	.97721	1.0042	.9945	1.0459	1.0030	2.406
#2	1.0385	9.9234	.97443	1.0038	1.005	1.0460	.99508	2.473
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0461**	**1.0372**	**1.026**
Stddev	.0019	.0031	.000
%RSD	.17962	.29576	.0379
#1	1.0448	1.0351	1.026
#2	1.0474	1.0394	1.026
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1480.3**	**1104.5**	**33475.**	**3864.0**
Stddev	.4	.1	64.	15.8
%RSD	.02897	.01307	.19230	.40860
#1	1480.0	1104.4	33521.	3852.8
#2	1480.6	1104.6	33430.	3875.2

Sample Name: CCB-5392763 Acquired: 7/16/2019 19:28:59 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00031**	**.01094**	**-.00247**	F **.02141**	**.00003**	**-.00001**	**-.00195**
Stddev	.00019	.00865	.00351	.00008	.00001	.00001	.00158
%RSD	63.273	79.077	142.06	.36565	27.066	84.093	81.191
#1	-.00044	.00482	-.00495	.02147	.00003	-.00001	-.00083
#2	-.00017	.01705	.00001	.02136	.00004	-.00000	-.00307
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**-.0254**	**-.00026**	**-.00022**	**-.00008**	**.00159**	**.03787**
Stddev	.00001	.0022	.00001	.00041	.00028	.00118	.00774
%RSD	99.163	8.510	3.2109	186.96	368.07	73.941	20.436
#1	-.00002	-.0238	-.00025	-.00051	-.00028	.00076	.03240
#2	-.00000	-.0269	-.00026	.00007	.00012	.00242	.04334
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00024**	**-.00027**	**-.00029**	**.00034**	**.09315**	**.00023**	**.0042**
Stddev	.00073	.00037	.00003	.00018	.00208	.00008	.0016
%RSD	302.13	134.52	8.8265	53.260	2.2339	36.387	39.00
#1	.00076	-.00001	-.00031	.00021	.09463	.00017	.0030
#2	-.00027	-.00053	-.00027	.00047	.09168	.00028	.0054
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 19:28:59 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**-.0187**	**-.00128**	**.00074**	**.08013**	**-.00010**	**-.00002**
Stddev	.00055	.0001	.00060	.00260	.00566	.00021	.00000
%RSD	904.68	.4365	46.660	351.17	7.0665	201.06	22.410
#1	.00045	-.0186	-.00170	.00258	.08413	.00004	-.00003
#2	-.00033	-.0187	-.00086	-.00110	.07612	-.00025	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0071**	**.00009**	**.00103**	**.0241**	**-.00050**	**-.00051**	**.0002**
Stddev	.0031	.00000	.00085	.0112	.00019	.00051	.0007
%RSD	43.98	2.5589	82.548	46.54	39.123	99.972	332.4
#1	.0049	.00009	.00164	.0320	-.00036	-.00087	.0007
#2	.0093	.00009	.00043	.0162	-.00063	-.00015	-.0003
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1567.6**	**1131.6**	**35150.**	**3920.7**
Stddev	3.7	.5	42.	11.4
%RSD	.23430	.04609	.11882	.28959
#1	1565.0	1131.2	35179.	3928.8
#2	1570.2	1131.9	35120.	3912.7

Sample Name: CCVL-5395711 Acquired: 7/16/2019 19:32:50 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00602**	**.19672**	**.01666**	F **.04003**	**.00209**	**.00208**	**.48968**
Stddev	.00007	.01375	.00145	.00019	.00001	.00005	.00469
%RSD	1.1135	6.9907	8.7014	.47993	.54687	2.3450	.95691
#1	.00607	.20644	.01769	.03990	.00210	.00211	.49299
#2	.00598	.18699	.01564	.04017	.00209	.00205	.48637
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00179**	**-.0193**	**.00355**	F **.01405**	**.01015**	F **.12190**	**.50658**
Stddev	.00016	.0188	.00013	.00027	.00022	.00029	.01629
%RSD	9.0588	97.64	3.6531	1.9455	2.1976	.23428	3.2162
#1	.00167	-.0326	.00364	.01424	.01030	.12210	.49506
#2	.00190	-.0060	.00345	.01386	.00999	.12170	.51810
Check ?	Chk Pass	None	Chk Pass	Chk Fail	Chk Pass	Chk Fail	Chk Pass
Value				.00400		.05000	
Range				50.000%		50.000%	

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02812**	**.19851**	W **.00420**	**.00962**	**1.0279**	**.01095**	**-.0200**
Stddev	.00057	.00446	.00002	.00011	.0003	.00013	.0017
%RSD	2.0285	2.2471	.43511	1.1439	.02792	1.1892	8.460
#1	.02772	.19535	.00422	.00954	1.0277	.01086	-.0212
#2	.02853	.20166	.00419	.00969	1.0281	.01104	-.0188
Check ?	Chk Pass	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass	None
Value			.00300				
Range			30.000%				

Sample Name: CCVL-5395711 Acquired: 7/16/2019 19:32:50 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01079**	**.1718**	**.02164**	**.02936**	**.54216**	**.00938**	**.00487**
Stddev	.00120	.0002	.00043	.00415	.01592	.00083	.00006
%RSD	11.147	.1073	1.9882	14.140	2.9372	8.8714	1.2238
#1	.00994	.1716	.02194	.03230	.53090	.00879	.00483
#2	.01164	.1719	.02133	.02643	.55342	.00996	.00491
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0026**	**.00505**	**.01851**	**-.0177**	**.00440**	**.01107**	**.0002**
Stddev	.0034	.00011	.00091	.0397	.00019	.00262	.0002
%RSD	133.2	2.1367	4.8921	224.4	4.3428	23.670	116.4
#1	.0001	.00513	.01915	-.0458	.00454	.01292	.0000
#2	.0050	.00498	.01787	.0104	.00427	.00922	.0003
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1582.9**	**1137.5**	**35148.**	**3941.1**
Stddev	.3	.7	9.	1.4
%RSD	.01626	.06259	.02533	.03486
#1	1583.1	1138.0	35154.	3942.0
#2	1582.8	1137.0	35141.	3940.1

Sample Name: 480-156054-D-2-A Acquired: 7/16/2019 19:36:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**.04380**	**.01552**	**2.2099**	**.12997**
Stddev	.00012	.00355	.00080	.0032	.00008
%RSD	159.13	8.1007	5.1623	.14362	.05831
#1	-.00001	.04631	.01609	2.2121	.12991
#2	.00017	.04130	.01496	2.2077	.13002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**27.412**	**.00028**	**-.0114**	**-.00045**
Stddev	.00004	.062	.00001	.0170	.00001
%RSD	538.05	.22742	4.3612	148.6	1.7549
#1	-.00002	27.368	.00027	.0006	-.00045
#2	.00004	27.456	.00028	-.0235	-.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00132**	**.00031**	**1.4445**	**5.4502**	**.19667**
Stddev	.00012	.00019	.0078	.0143	.00086
%RSD	9.0466	61.526	.54049	.26222	.43514
#1	.00124	.00044	1.4390	5.4401	.19607
#2	.00141	.00017	1.4500	5.4603	.19728
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156054-D-2-A Acquired: 7/16/2019 19:36:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.3545**	**.20968**	**.02904**	**780.52**	**.00348**
Stddev	.0149	.00178	.00034	.88	.00020
%RSD	.15935	.84814	1.1766	.11304	5.8803
#1	9.3651	.20842	.02880	781.15	.00362
#2	9.3440	.21094	.02928	779.90	.00333
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0962**	**.00231**	**34.29**	**-.00047**	**-.01211**
Stddev	.0015	.00042	.03	.00053	.00096
%RSD	1.575	18.131	.0930	114.71	7.8977
#1	.0951	.00261	34.27	-.00084	-.01279
#2	.0973	.00202	34.31	-.00009	-.01143
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.796**	**.00040**	**.23786**	**.0021**	**.00033**
Stddev	.037	.00093	.00024	.0083	.00004
%RSD	.17625	235.42	.09968	387.4	11.660
#1	20.770	.00105	.23769	.0080	.00035
#2	20.822	-.00026	.23803	-.0037	.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156054-D-2-A Acquired: 7/16/2019 19:36:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00204	.0004	-.00036	-.00093	.0013
Stddev	.00205	.0049	.00058	.00051	.0005
%RSD	100.37	1359.	157.91	54.502	40.03
#1	.00349	.0038	.00004	-.00129	.0009
#2	.00059	-.0031	-.00077	-.00057	.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1357.9	1055.0	30866.	3766.4
Stddev	.2	1.9	92.	.3
%RSD	.01473	.17617	.29905	.00910
#1	1357.7	1053.7	30931.	3766.1
#2	1358.0	1056.3	30801.	3766.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.424%	91.292%	86.507%	95.412%
Range				

Sample Name: 480-156094-A-1-A Acquired: 7/16/2019 19:40:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00739**	**1.3680**	**.00768**	**2.5794**	**.59098**
Stddev	.00003	.0083	.00586	.0045	.00009
%RSD	.44735	.60880	76.271	.17611	.01500
#1	.00737	1.3739	.00354	2.5826	.59105
#2	.00742	1.3621	.01182	2.5762	.59092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00242**	**6.2792**	**.83306**	**-.0144**	**.02243**
Stddev	.00003	.0044	.00149	.0020	.00001
%RSD	1.4066	.07054	.17869	14.17	.03946
#1	.00239	6.2823	.83412	-.0159	.02242
#2	.00244	6.2761	.83201	-.0130	.02243
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.23760**	**.55254**	**27.760**	**13.987**	**.00817**
Stddev	.00109	.00082	.328	.058	.00067
%RSD	.45994	.14814	1.1818	.41341	8.1772
#1	.23838	.55196	27.992	14.028	.00770
#2	.23683	.55312	27.528	13.946	.00865
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156094-A-1-A Acquired: 7/16/2019 19:40:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.5620**	**.22285**	**.01860**	**32.270**	**.14865**
Stddev	.0050	.00094	.00010	.192	.00038
%RSD	.19437	.42247	.56007	.59591	.25845
#1	2.5585	.22218	.01853	32.406	.14838
#2	2.5655	.22352	.01868	32.134	.14892
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.288**	**.09208**	**6.165**	**.01073**	**.00473**
Stddev	.001	.00057	.033	.00023	.00543
%RSD	.0382	.61522	.5417	2.1508	114.90
#1	2.289	.09248	6.189	.01090	.00857
#2	2.287	.09168	6.142	.01057	.00089
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.388**	**.00292**	**.19045**	**.0190**	**.02190**
Stddev	.122	.00025	.00109	.0078	.00088
%RSD	1.1716	8.4088	.57136	40.92	4.0249
#1	10.474	.00309	.19122	.0135	.02127
#2	10.302	.00274	.18968	.0245	.02252
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156094-A-1-A Acquired: 7/16/2019 19:40:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00355**	**.0350**	**.00307**	**.43865**	**.0048**
Stddev	.00108	.0123	.00030	.00050	.0001
%RSD	30.289	35.18	9.7169	.11438	2.575
#1	-.00279	.0437	.00328	.43901	.0047
#2	-.00431	.0263	.00286	.43830	.0049
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1551.8**	**1120.3**	**34057.**	**3843.1**
Stddev	5.1	5.0	8.	25.3
%RSD	.32652	.44971	.02315	.65807
#1	1548.2	1116.7	34051.	3825.2
#2	1555.3	1123.9	34062.	3861.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.622%	96.940%	95.449%	97.356%
Range				

Sample Name: 480-156098-D-1-A@50 Acquired: 7/16/2019 19:44:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00155**	**.56724**	**.29011**	**.12538**	**.00298**
Stddev	.00030	.00127	.00035	.00131	.00001
%RSD	19.231	.22406	.12050	1.0473	.19373
#1	.00176	.56814	.28987	.12631	.00299
#2	.00134	.56634	.29036	.12445	.00298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.80011**	**.00413**	**-.0153**	**.00487**
Stddev	.00003	.00024	.00010	.0004	.00002
%RSD	23.721	.03010	2.3634	2.716	.44222
#1	.00012	.79994	.00420	-.0150	.00486
#2	.00017	.80028	.00406	-.0156	.00489
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **19.384**	**6.0699**	**7.4027**	**.30302**	**.00332**
Stddev	.051	.0069	.0242	.01387	.00083
%RSD	.26165	.11282	.32634	4.5785	25.007
#1	19.348	6.0747	7.3856	.31283	.00390
#2	19.419	6.0650	7.4198	.29321	.00273
Check ?	Chk Fail	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit	9.0000				
Low Limit	-.00400				

Sample Name: 480-156098-D-1-A@50 Acquired: 7/16/2019 19:44:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18374**	**.05817**	**.18036**	**4.9772**	**4.9984**
Stddev	.00103	.00004	.00044	.0084	.0049
%RSD	.56321	.06649	.24470	.16910	.09856
#1	.18301	.05815	.18005	4.9713	5.0019
#2	.18447	.05820	.18068	4.9832	4.9949
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	^ *****	**.04173**	**7.654**	**.00268**	**.01468**
Stddev	-----	.00007	.013	.00013	.00206
%RSD	-----	.16856	.1673	4.9699	14.026
#1	^ -----	.04168	7.663	.00277	.01322
#2	^ -----	.04178	7.645	.00259	.01613
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.30857**	**.06261**	**.02162**	**.0043**	F **5.0640**
Stddev	.00465	.00023	.00008	.0004	.0054
%RSD	1.5068	.37459	.36406	9.841	.10595
#1	.30529	.06244	.02168	.0040	5.0678
#2	.31186	.06277	.02156	.0046	5.0602
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Fail
High Limit					4.5000
Low Limit					-.00500

Sample Name: 480-156098-D-1-A@50 Acquired: 7/16/2019 19:44:23 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00508	-.1255	.13291	.39824	.3257
Stddev	.00096	.0446	.00016	.00311	.0002
%RSD	18.938	35.57	.11838	.77994	.0698
#1	.00440	-.1570	.13280	.40043	.3259
#2	.00576	-.0939	.13302	.39604	.3256
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1543.7	1093.1	34165.	3854.8
Stddev	5.2	2.2	47.	5.4
%RSD	.33748	.19769	.13849	.14042
#1	1540.0	1091.6	34132.	3858.6
#2	1547.4	1094.7	34199.	3850.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.115%	94.589%	95.753%	97.651%
Range				

Sample Name: MB 480-482035/1-A Acquired: 7/16/2019 19:48:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**.00705**	**-.00203**	F **1.8444**	**.00007**
Stddev	.00026	.00412	.00105	.0023	.00002
%RSD	136.83	58.511	51.849	.12345	27.890
#1	.00038	.00997	-.00129	1.8428	.00009
#2	.00001	.00413	-.00278	1.8461	.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.06370**	**.00013**	**-.0038**	**.00001**
Stddev	.00002	.00161	.00008	.0054	.00021
%RSD	26.062	2.5338	63.781	142.5	3335.8
#1	-.00005	.06484	.00007	.0000	-.00014
#2	-.00008	.06256	.00019	-.0076	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00341**	**.00072**	**.01561**	**.02274**	**.00058**
Stddev	.00015	.00003	.00411	.00836	.00114
%RSD	4.2571	3.7967	26.333	36.759	195.58
#1	.00352	.00074	.01851	.02865	-.00022
#2	.00331	.00070	.01270	.01683	.00139
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-482035/1-A Acquired: 7/16/2019 19:48:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00365**	**.00146**	**.00004**	**.09976**	**.00212**
Stddev	.00072	.00006	.00003	.00028	.00006
%RSD	19.609	4.0200	73.066	.28397	2.7412
#1	.00415	.00141	.00002	.09956	.00216
#2	.00314	.00150	.00006	.09996	.00208
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.00169**	**-.0050**	**.00124**	**.00011**
Stddev	.0012	.00022	.0001	.00075	.00094
%RSD	39.09	12.951	1.240	60.507	858.99
#1	.0039	.00154	-.0050	.00176	.00077
#2	.0022	.00185	-.0051	.00071	-.00056
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **6.1132**	**-.00037**	**.00020**	**.0005**	**.00034**
Stddev	.0081	.00020	.00001	.0051	.00021
%RSD	.13249	53.079	2.8173	1025.	61.154
#1	6.1190	-.00023	.00021	.0041	.00019
#2	6.1075	-.00051	.00020	-.0031	.00048
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-482035/1-A Acquired: 7/16/2019 19:48:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00072**	**.0221**	**-.00048**	**.00573**	**-.0002**
Stddev	.00165	.0072	.00010	.00160	.0022
%RSD	231.22	32.75	20.800	27.858	1183.
#1	.00189	.0272	-.00041	.00686	-.0017
#2	-.00045	.0170	-.00055	.00460	.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1585.2**	**1141.3**	**35186.**	**3913.7**
Stddev	2.4	1.2	39.	14.4
%RSD	.15207	.10703	.11105	.36731
#1	1586.9	1142.2	35214.	3903.5
#2	1583.5	1140.4	35159.	3923.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.725%	98.757%	98.614%	99.144%
Range				

Sample Name: LCS 480-482035/2-A Acquired: 7/16/2019 19:51:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04917**	**9.2913**	**.19409**	F **1.9812**	**.19897**
Stddev	.00024	.0428	.00447	.0036	.00018
%RSD	.49384	.46072	2.3019	.18320	.09029
#1	.04934	9.2610	.19725	1.9786	.19884
#2	.04900	9.3216	.19093	1.9838	.19910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20081**	**9.4523**	**.19285**	**-.0011**	**.18552**
Stddev	.00102	.0352	.00034	.0011	.00002
%RSD	.50931	.37232	.17552	93.63	.00919
#1	.20009	9.4274	.19261	-.0004	.18551
#2	.20153	9.4772	.19309	-.0019	.18553
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19686**	**.19494**	**10.227**	**9.4344**	**.19212**
Stddev	.00052	.00027	.110	.0192	.00087
%RSD	.26601	.14060	1.0780	.20372	.45403
#1	.19649	.19475	10.149	9.4208	.19150
#2	.19723	.19514	10.305	9.4480	.19273
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-482035/2-A Acquired: 7/16/2019 19:51:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.4151**	**.20629**	**.20159**	**9.4610**	**.19842**
Stddev	.0014	.00063	.00014	.0526	.00048
%RSD	.01526	.30642	.07098	.55611	.24187
#1	9.4141	.20584	.20169	9.4238	.19808
#2	9.4162	.20673	.20149	9.4982	.19876
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4618**	**.18814**	**9.662**	**.21015**	**.19786**
Stddev	.0023	.00118	.033	.00096	.00004
%RSD	.5061	.62782	.3364	.45484	.01941
#1	-.4602	.18897	9.639	.20948	.19788
#2	-.4635	.18730	9.685	.21083	.19783
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **15.336**	**.18041**	**.19273**	**.0078**	**.20031**
Stddev	.140	.00142	.00111	.0036	.00074
%RSD	.91526	.78524	.57787	45.67	.37035
#1	15.237	.18141	.19194	.0103	.19978
#2	15.436	.17941	.19351	.0053	.20083
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	11.500				
Low Limit	8.5000				

Sample Name: LCS 480-482035/2-A Acquired: 7/16/2019 19:51:59 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.18591	-.0146	.19914	.20797	.0039
Stddev	.00160	.1036	.00056	.00002	.0004
%RSD	.86115	708.5	.28370	.00863	11.45
#1	.18704	-.0879	.19874	.20796	.0042
#2	.18477	.0586	.19954	.20799	.0035
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1561.1	1122.7	34537.	3925.7
Stddev	.1	.3	7.	18.2
%RSD	.00716	.03073	.01988	.46317
#1	1561.1	1122.5	34542.	3938.5
#2	1561.0	1123.0	34532.	3912.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.208%	97.151%	96.794%	99.448%
Range				

Sample Name: 480-156095-K-1-D Acquired: 7/16/2019 19:55:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00067**	**.04918**	**-.00021**	**2.1536**	**.31773**
Stddev	.00024	.00489	.00049	.0029	.00001
%RSD	36.090	9.9330	237.12	.13362	.00393
#1	-.00050	.04573	.00014	2.1516	.31774
#2	-.00084	.05264	-.00055	2.1556	.31772
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**104.48**	**.00009**	**-.0113**	**.00002**
Stddev	.00004	.58	.00001	.0152	.00014
%RSD	105.76	.55985	12.545	134.5	655.71
#1	-.00001	104.89	.00009	-.0221	.00012
#2	-.00006	104.06	.00008	-.0006	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00701**	**.00058**	**1.9894**	**18.914**	**.03557**
Stddev	.00058	.00023	.0095	.002	.00001
%RSD	8.2614	40.718	.47915	.01061	.04050
#1	.00742	.00074	1.9961	18.912	.03556
#2	.00660	.00041	1.9826	18.915	.03558
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-D Acquired: 7/16/2019 19:55:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.537**	**.88988**	**.00621**	**64.996**	**.00769**
Stddev	.005	.00095	.00019	.190	.00005
%RSD	.04263	.10639	3.1321	.29289	.70191
#1	12.541	.88921	.00635	65.130	.00766
#2	12.534	.89055	.00607	64.861	.00773
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1527**	**.00384**	**16.04**	**-.00024**	**-.00419**
Stddev	.0013	.00164	.02	.00146	.00182
%RSD	.8295	42.640	.1521	609.37	43.368
#1	.1518	.00500	16.02	-.00127	-.00290
#2	.1536	.00269	16.05	.00079	-.00547
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.1357**	**-.00106**	**8.0481**	**.0011**	**.00091**
Stddev	.0400	.00078	.0011	.0013	.00017
%RSD	.43738	73.126	.01374	119.5	18.969
#1	9.1075	-.00161	8.0488	.0002	.00079
#2	9.1640	-.00051	8.0473	.0021	.00103
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-D Acquired: 7/16/2019 19:55:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00048**	**-.0108**	**.00049**	**.01933**	**-.0003**
Stddev	.00031	.0468	.00043	.00042	.0001
%RSD	63.846	432.2	88.042	2.1610	42.80
#1	.00026	-.0439	.00079	.01903	-.0003
#2	.00070	.0223	.00018	.01963	-.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1483.7**	**1083.5**	**33218.**	**3890.6**
Stddev	.1	1.3	65.	14.8
%RSD	.00984	.11792	.19678	.38036
#1	1483.8	1084.4	33264.	3880.2
#2	1483.6	1082.6	33171.	3901.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.342%	93.758%	93.097%	98.561%
Range				

Sample Name: 480-156095-K-1-Dsd@5 Acquired: 7/16/2019 19:59:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**.02149**	**-.00077**	**.41698**	**.06323**
Stddev	.00016	.00092	.00060	.00096	.00003
%RSD	63.313	4.2601	77.207	.22927	.05073
#1	-.00014	.02084	-.00120	.41766	.06325
#2	-.00036	.02214	-.00035	.41630	.06321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**20.826**	**.00017**	**-.0086**	**.00003**
Stddev	.00008	.037	.00009	.0048	.00009
%RSD	197.97	.17712	55.190	55.73	340.81
#1	-.00009	20.852	.00010	-.0052	.00009
#2	.00002	20.800	.00024	-.0120	-.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00211**	**.00019**	**.40099**	**3.6921**	**.00650**
Stddev	.00018	.00026	.00088	.0168	.00082
%RSD	8.5109	133.26	.22058	.45579	12.648
#1	.00198	.00001	.40036	3.6802	.00708
#2	.00224	.00037	.40161	3.7040	.00591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-Dsd@5 Acquired: 7/16/2019 19:59:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.4942**	**.18176**	**.00119**	**12.886**	**.00200**
Stddev	.0111	.00058	.00034	.017	.00024
%RSD	.44416	.31792	29.006	.13046	12.091
#1	2.5020	.18135	.00095	12.874	.00217
#2	2.4863	.18216	.00143	12.898	.00183
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0325**	**.00024**	**3.073**	**.00190**	**.00122**
Stddev	.0023	.00103	.004	.00067	.00024
%RSD	7.041	432.98	.1185	35.125	19.374
#1	.0341	-.00049	3.070	.00237	.00105
#2	.0309	.00096	3.075	.00143	.00138
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.8013**	**-.00056**	**1.6340**	**.0042**	**-.00019**
Stddev	.0032	.00071	.0016	.0011	.00011
%RSD	.17828	126.03	.09798	25.98	57.109
#1	1.7990	-.00006	1.6329	.0034	-.00011
#2	1.8036	-.00107	1.6352	.0050	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-Dsd@5 Acquired: 7/16/2019 19:59:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00218**	**.0410**	**-.00019**	**.00184**	**-.0007**
Stddev	.00169	.0146	.00013	.00033	.0011
%RSD	77.463	35.60	68.587	17.779	169.7
#1	.00338	.0307	-.00010	.00161	.0001
#2	.00099	.0513	-.00029	.00208	-.0015
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1571.4**	**1128.5**	**34543.**	**3919.6**
Stddev	2.3	.6	8.	5.8
%RSD	.14499	.05467	.02307	.14883
#1	1573.0	1128.1	34537.	3923.7
#2	1569.7	1128.9	34548.	3915.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.855%	97.648%	96.811%	99.293%
Range				

Sample Name: 480-156095-K-1-Dpds Acquired: 7/16/2019 20:03:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.04994	9.8491	.19521	2.2861	.50784
Stddev	.00020	.1029	.00120	.0030	.00125
%RSD	.40210	1.0445	.61711	.13193	.24562
#1	.05008	9.9218	.19606	2.2840	.50695
#2	.04980	9.7764	.19436	2.2882	.50872
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.19913	110.38	.19405	-.0141	.18602
Stddev	.00053	.19	.00005	.0050	.00058
%RSD	.26412	.17621	.02690	35.62	.31280
#1	.19876	110.52	.19408	-.0105	.18643
#2	.19951	110.24	.19401	-.0176	.18561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.21255	.19500	11.854	28.219	.23917
Stddev	.00139	.00030	.007	.042	.00152
%RSD	.65313	.15596	.06254	.14919	.63539
#1	.21353	.19478	11.860	28.249	.24024
#2	.21157	.19521	11.849	28.189	.23809
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-Dpds Acquired: 7/16/2019 20:03:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.490**	**1.0561**	**.20671**	**73.051**	**.20248**
Stddev	.025	.0012	.00019	.234	.00024
%RSD	.11788	.11618	.09196	.32057	.11994
#1	21.507	1.0553	.20684	73.217	.20231
#2	21.472	1.0570	.20658	72.886	.20265
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.2856**	**.19353**	**26.21**	**.21407**	**.18828**
Stddev	.0040	.00283	.03	.00017	.00458
%RSD	1.400	1.4619	.1225	.07864	2.4317
#1	-.2884	.19153	26.18	.21395	.18504
#2	-.2828	.19553	26.23	.21419	.19151
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.119**	**.21340**	**7.9903**	**.0094**	**.19731**
Stddev	.083	.00132	.0041	.0055	.00008
%RSD	.43296	.61858	.05186	58.19	.03897
#1	19.178	.21247	7.9874	.0055	.19736
#2	19.061	.21434	7.9933	.0133	.19726
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-Dpds Acquired: 7/16/2019 20:03:19 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19267**	**.0158**	**.19645**	**.21711**	**.0008**
Stddev	.00059	.0271	.00050	.00170	.0012
%RSD	.30509	170.7	.25679	.78350	145.8
#1	.19309	.0350	.19681	.21831	-.0000
#2	.19225	-.0033	.19609	.21591	.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1466.9**	**1081.6**	**33070.**	**3860.2**
Stddev	3.4	2.5	14.	9.6
%RSD	.23236	.23493	.04227	.24843
#1	1469.3	1083.4	33060.	3853.5
#2	1464.5	1079.8	33080.	3867.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.285%	93.589%	92.684%	97.790%
Range				

Sample Name: 480-156095-K-1-E MS Acquired: 7/16/2019 20:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04930**	**9.4780**	**.19946**	**2.2039**	**.51278**
Stddev	.00033	.0494	.00557	.0006	.00083
%RSD	.67473	.52143	2.7913	.02525	.16155
#1	.04907	9.4430	.20340	2.2035	.51220
#2	.04954	9.5129	.19552	2.2043	.51337
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19994**	**114.72**	**.19464**	**-.0150**	**.18658**
Stddev	.00011	.03	.00028	.0371	.00009
%RSD	.05550	.02586	.14274	247.0	.04641
#1	.19986	114.74	.19484	.0112	.18664
#2	.20001	114.70	.19445	-.0413	.18652
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18998**	**.19611**	**11.719**	**28.732**	**.23203**
Stddev	.00136	.00091	.102	.090	.00216
%RSD	.71417	.46202	.86915	.31476	.92950
#1	.18902	.19547	11.647	28.668	.23051
#2	.19094	.19675	11.791	28.796	.23356
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-E MS Acquired: 7/16/2019 20:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**22.106**	**1.0859**	**.20685**	**75.516**	**.20035**
Stddev	.006	.0081	.00048	.104	.00086
%RSD	.02917	.74288	.22990	.13764	.42861
#1	22.101	1.0802	.20719	75.443	.19975
#2	22.110	1.0916	.20652	75.590	.20096
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.2795**	**.19507**	**26.33**	**.21353**	**.18942**
Stddev	.0003	.00021	.00	.00027	.00066
%RSD	.0913	.10901	.0046	.12777	.34857
#1	-.2797	.19492	26.33	.21333	.18896
#2	-.2793	.19522	26.33	.21372	.18989
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.205**	**.18481**	**8.2572**	**.0068**	**.19765**
Stddev	.098	.00123	.0483	.0013	.00025
%RSD	.54022	.66300	.58484	19.57	.12629
#1	18.135	.18567	8.2231	.0059	.19748
#2	18.274	.18394	8.2914	.0078	.19783
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-E MS Acquired: 7/16/2019 20:07:11 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19314**	**.0059**	**.19492**	**.21813**	**.0009**
Stddev	.00116	.0382	.00050	.00248	.0008
%RSD	.60301	648.8	.25413	1.1353	85.21
#1	.19396	-.0211	.19457	.21638	.0015
#2	.19231	.0329	.19527	.21988	.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1461.1**	**1078.5**	**32957.**	**3867.5**
Stddev	2.8	.2	103.	13.9
%RSD	.19004	.01944	.31288	.35918
#1	1463.0	1078.6	33030.	3877.4
#2	1459.1	1078.3	32884.	3857.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.917%	93.320%	92.366%	97.975%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 20:11:02 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0076**	**49.059**	**1.0028**	**.98931**	**.98373**	**1.0080**	**49.361**	**.98965**
Stddev	.0008	.196	.0015	.00211	.00370	.0027	.089	.00164
%RSD	.08261	.39965	.14801	.21338	.37640	.26459	.18016	.16600
#1	1.0082	49.198	1.0017	.99080	.98635	1.0099	49.424	.99081
#2	1.0070	48.921	1.0038	.98782	.98111	1.0061	49.298	.98849
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.020**	**.98740**	**1.0035**	**1.0038**	**51.121**	**49.456**	**.98514**	**49.351**
Stddev	.009	.00229	.0007	.0025	.250	.122	.00385	.119
%RSD	.9200	.23150	.07041	.24549	.48942	.24752	.39102	.24106
#1	1.027	.98901	1.0040	1.0055	51.298	49.543	.98786	49.435
#2	1.014	.98578	1.0030	1.0020	50.944	49.369	.98241	49.267
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0414**	**1.0142**	**49.675**	**1.0023**	**25.04**	**.98725**	**25.07**	**.98678**
Stddev	.0024	.0012	.188	.0004	.04	.00263	.05	.00845
%RSD	.22957	.12180	.37941	.04156	.1549	.26628	.2112	.85603
#1	1.0431	1.0151	49.808	1.0026	25.06	.98539	25.04	.99275
#2	1.0397	1.0134	49.542	1.0020	25.01	.98911	25.11	.98081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 20:11:02 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0095**	**10.115**	**.98319**	**1.0011**	**.9894**	**1.0248**	**1.0010**	**2.528**
Stddev	.0033	.038	.00109	.0037	.0072	.0027	.0022	.023
%RSD	.32953	.37784	.11065	.36815	.7300	.26816	.21954	.9158
#1	1.0119	10.142	.98396	1.0037	.9945	1.0268	.99943	2.544
#2	1.0072	10.088	.98242	.99848	.9842	1.0229	1.0025	2.512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0285**	**1.0334**	**1.019**
Stddev	.0024	.0013	.003
%RSD	.22903	.12597	.2764
#1	1.0302	1.0343	1.021
#2	1.0268	1.0325	1.017
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1486.7**	**1116.8**	**33709.**	**3875.0**
Stddev	1.3	1.1	83.	2.2
%RSD	.08843	.09478	.24597	.05588
#1	1485.7	1116.1	33651.	3876.6
#2	1487.6	1117.6	33768.	3873.5

Sample Name: CCB-5392763 Acquired: 7/16/2019 20:14:43 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00023**	**.00509**	**.00011**	F **.02182**	**.00004**	**.00003**	**-.00190**
Stddev	.00032	.00787	.00605	.00046	.00000	.00002	.00217
%RSD	136.34	154.41	5704.5	2.1042	13.231	77.071	114.53
#1	.00046	.01066	.00438	.02215	.00003	.00004	-.00036
#2	.00001	-.00047	-.00417	.02150	.00004	.00001	-.00343
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**-.0175**	**.00006**	**-.00012**	**.00015**	**-.00015**	**.04672**
Stddev	.00000	.0068	.00016	.00041	.00007	.00311	.02033
%RSD	17.248	39.23	249.15	339.91	48.021	2094.7	43.515
#1	-.00001	-.0223	.00018	-.00041	.00019	.00205	.03235
#2	-.00000	-.0126	-.00005	.00017	.00010	-.00235	.06110
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00051**	**.00177**	**-.00028**	**.00036**	**.06456**	**.00039**	**.0044**
Stddev	.00028	.00037	.00004	.00030	.00204	.00023	.0017
%RSD	55.816	20.948	13.419	82.706	3.1587	59.200	39.63
#1	-.00071	.00151	-.00026	.00015	.06312	.00023	.0032
#2	-.00031	.00203	-.00031	.00057	.06600	.00056	.0057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 20:14:43 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**-.0241**	**.00140**	**.00293**	**.07624**	**-.00038**	**-.00000**
Stddev	.00001	.0051	.00025	.00039	.01482	.00085	.00000
%RSD	10.413	20.94	18.059	13.239	19.435	220.70	23.063
#1	-.00008	-.0206	.00122	.00320	.08672	.00021	-.00000
#2	-.00007	-.0277	.00158	.00266	.06576	-.00098	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093**	**-.00020**	**.00023**	**-.0030**	**-.00015**	**.00037**	**-.0005**
Stddev	.0113	.00011	.00036	.0039	.00010	.00023	.0002
%RSD	122.4	54.327	155.53	132.3	66.778	62.425	40.23
#1	.0012	-.00012	-.00002	-.0057	-.00022	.00053	-.0004
#2	.0173	-.00027	.00048	-.0002	-.00008	.00021	-.0007
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1584.5**	**1147.4**	**35276.**	**3901.0**
Stddev	2.0	5.5	103.	.5
%RSD	.12565	.47627	.29285	.01265
#1	1583.1	1143.6	35203.	3900.7
#2	1585.9	1151.3	35349.	3901.4

Sample Name: CCVL-5395711 Acquired: 7/16/2019 20:18:34 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00534**	**.19934**	**.01376**	F **.03975**	**.00211**	**.00208**	**.49531**
Stddev	.00064	.01059	.00104	.00006	.00002	.00006	.00239
%RSD	11.942	5.3115	7.5810	.15303	1.0363	2.8258	.48225
#1	.00488	.19186	.01449	.03979	.00210	.00212	.49700
#2	.00579	.20683	.01302	.03971	.00213	.00204	.49362
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00209**	**-.0050**	**.00373**	**.00444**	**.00962**	**.05149**	**.50483**
Stddev	.00017	.0035	.00003	.00002	.00002	.00034	.00186
%RSD	8.1064	69.81	.69425	.37510	.20559	.66624	.36776
#1	.00221	-.0074	.00375	.00443	.00963	.05125	.50352
#2	.00197	-.0025	.00371	.00446	.00961	.05173	.50614
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02886**	**.20197**	**.00299**	**.01010**	**1.0192**	**.01022**	**-.0211**
Stddev	.00049	.00455	.00003	.00016	.0031	.00007	.0010
%RSD	1.6849	2.2523	.96703	1.5469	.30408	.68757	4.747
#1	.02852	.19876	.00301	.00999	1.0170	.01017	-.0218
#2	.02921	.20519	.00297	.01021	1.0214	.01026	-.0204
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 20:18:34 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01024**	**.1703**	**.02229**	**.02649**	**.56524**	**.00824**	**.00483**
Stddev	.00181	.0004	.00025	.00451	.00049	.00112	.00004
%RSD	17.713	.2085	1.1073	17.013	.08670	13.538	.77736
#1	.00896	.1700	.02212	.02330	.56559	.00903	.00481
#2	.01153	.1705	.02246	.02967	.56490	.00745	.00486
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0046**	**.00469**	**.01951**	**-.0457**	**.00438**	**.01125**	**.0003**
Stddev	.0004	.00008	.00221	.0380	.00037	.00113	.0002
%RSD	9.442	1.6091	11.350	83.14	8.3586	10.052	52.58
#1	.0049	.00464	.02108	-.0188	.00464	.01205	.0002
#2	.0043	.00475	.01795	-.0726	.00413	.01045	.0004
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1594.3**	**1148.7**	**35210.**	**3922.2**
Stddev	.0	2.7	34.	6.9
%RSD	.00011	.23243	.09549	.17709
#1	1594.3	1146.9	35234.	3917.3
#2	1594.3	1150.6	35186.	3927.1

Sample Name: 480-156095-K-1-F MSD Acquired: 7/16/2019 20:22:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04899**	**9.4457**	**.19656**	**2.2546**	**.50063**
Stddev	.00007	.0054	.00056	.0008	.00129
%RSD	.14636	.05685	.28313	.03373	.25734
#1	.04893	9.4419	.19695	2.2552	.50154
#2	.04904	9.4495	.19616	2.2541	.49972
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19819**	**110.30**	**.19339**	**-.0048**	**.18526**
Stddev	.00027	.50	.00042	.0047	.00032
%RSD	.13470	.45191	.21475	98.59	.17453
#1	.19838	110.65	.19309	-.0081	.18549
#2	.19800	109.95	.19368	-.0014	.18503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19465**	**.19252**	**11.802**	**27.871**	**.23358**
Stddev	.00032	.00123	.048	.009	.00113
%RSD	.16683	.63784	.40653	.03395	.48234
#1	.19442	.19339	11.836	27.878	.23438
#2	.19488	.19165	11.768	27.865	.23278
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-F MSD Acquired: 7/16/2019 20:22:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.476**	**1.0538**	**.20565**	**73.185**	**.20057**
Stddev	.068	.0029	.00000	.069	.00106
%RSD	.31798	.27432	.00088	.09369	.52790
#1	21.524	1.0558	.20565	73.137	.20131
#2	21.428	1.0517	.20565	73.234	.19982
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.2865**	**.19269**	**25.76**	**.21237**	**.19177**
Stddev	.0007	.00232	.02	.00269	.00819
%RSD	.2464	1.2048	.0634	1.2681	4.2706
#1	-.2860	.19105	25.75	.21427	.19756
#2	-.2870	.19433	25.77	.21046	.18598
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.583**	**.18376**	**8.0564**	**.0109**	**.19545**
Stddev	.046	.00012	.0270	.0189	.00038
%RSD	.24964	.06413	.33491	173.6	.19467
#1	18.616	.18367	8.0755	.0243	.19572
#2	18.550	.18384	8.0373	-.0025	.19518
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-K-1-F MSD Acquired: 7/16/2019 20:22:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18999**	**-.0279**	**.19354**	**.21315**	**.0028**
Stddev	.00047	.0360	.00101	.00069	.0007
%RSD	.24986	128.9	.52392	.32374	23.72
#1	.19033	-.0025	.19426	.21364	.0023
#2	.18966	-.0534	.19282	.21266	.0033
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1461.2**	**1075.5**	**33026.**	**3844.6**
Stddev	3.7	1.4	128.	13.1
%RSD	.25129	.13284	.38733	.34159
#1	1463.8	1076.5	32935.	3835.3
#2	1458.6	1074.5	33116.	3853.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.924%	93.064%	92.559%	97.394%
Range				

Sample Name: 480-156095-G-2-B Acquired: 7/16/2019 20:26:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00074**	**.02350**	**.00018**	**1.8346**	**.04442**
Stddev	.00005	.00596	.00260	.0039	.00001
%RSD	6.5780	25.359	1416.5	.21488	.02566
#1	-.00071	.01929	.00202	1.8374	.04441
#2	-.00078	.02772	-.00165	1.8318	.04443
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**436.33**	**.00013**	**-.0074**	**.00010**
Stddev	.00006	.18	.00007	.0016	.00026
%RSD	79.566	.04187	51.304	21.11	254.13
#1	-.00013	436.21	.00008	-.0085	.00028
#2	-.00004	436.46	.00017	-.0063	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00154**	**.00481**	**.36068**	**6.2793**	**.03866**
Stddev	.00020	.00008	.00525	.0425	.00062
%RSD	13.112	1.6619	1.4555	.67696	1.6037
#1	.00168	.00487	.36439	6.3093	.03823
#2	.00140	.00475	.35697	6.2492	.03910
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-G-2-B Acquired: 7/16/2019 20:26:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**45.860**	**.13193**	**.00140**	**234.45**	**.00119**
Stddev	.048	.00043	.00044	.31	.00024
%RSD	.10365	.32463	31.266	.13206	20.265
#1	45.894	.13162	.00170	234.67	.00102
#2	45.827	.13223	.00109	234.23	.00136
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0054**	**.00161**	F **344.9**	**.00034**	**-.00540**
Stddev	.0017	.00088	.3	.00225	.00750
%RSD	30.77	54.475	.0939	661.17	138.73
#1	-.0065	.00223	344.7	-.00125	-.00010
#2	-.0042	.00099	345.1	.00193	-.01070
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.0859**	**-.00122**	**8.7394**	**-.0074**	**-.00086**
Stddev	.0158	.00024	.0239	.0077	.00009
%RSD	.19577	20.069	.27293	104.4	11.001
#1	8.0747	-.00139	8.7562	-.0019	-.00093
#2	8.0971	-.00105	8.7225	-.0128	-.00080
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156095-G-2-B Acquired: 7/16/2019 20:26:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00403**	**.0830**	**-.00025**	**.02950**	**.0000**
Stddev	.00073	.0172	.00021	.00118	.0004
%RSD	18.043	20.79	82.707	3.9948	6662.
#1	.00351	.0952	-.00039	.02866	.0003
#2	.00454	.0708	-.00010	.03033	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1345.7**	**1021.2**	**30926.**	**3734.7**
Stddev	.3	1.7	25.	8.1
%RSD	.02339	.16760	.08111	.21578
#1	1346.0	1020.0	30908.	3729.0
#2	1345.5	1022.4	30944.	3740.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.660%	88.362%	86.674%	94.611%
Range				

Sample Name: 480-156087-C-1-B Acquired: 7/16/2019 20:30:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**16.009**	**.00603**	**3.5919**	**1.8536**
Stddev	.00018	.101	.00180	.0090	.0161
%RSD	33.681	.63176	29.917	.25005	.86721
#1	-.00040	16.080	.00731	3.5856	1.8649
#2	-.00065	15.937	.00476	3.5983	1.8422
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00058**	**367.98**	**.00062**	**.0395**	**.00746**
Stddev	.00002	2.05	.00008	.0030	.00042
%RSD	4.3099	.55756	13.089	7.533	5.6689
#1	.00060	369.43	.00068	.0416	.00716
#2	.00056	366.52	.00056	.0374	.00776
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02373**	**.07417**	**44.158**	**105.81**	**.10649**
Stddev	.00079	.00025	.901	.53	.00193
%RSD	3.3498	.33114	2.0400	.50310	1.8167
#1	.02317	.07400	44.795	106.18	.10786
#2	.02429	.07435	43.521	105.43	.10512
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-C-1-B Acquired: 7/16/2019 20:30:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**84.056**	**1.7008**	**.00403**	**151.03**	**.02503**
Stddev	.055	.0005	.00018	.73	.00000
%RSD	.06579	.02936	4.4566	.48513	.01093
#1	84.095	1.7011	.00391	151.55	.02503
#2	84.017	1.7004	.00416	150.51	.02502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.8962**	**.02764**	**7.407**	**-.00052**	**-.00315**
Stddev	.0008	.00047	.022	.00034	.00434
%RSD	.0916	1.6969	.2987	64.744	137.94
#1	.8968	.02731	7.391	-.00028	-.00008
#2	.8956	.02798	7.423	-.00076	-.00621
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**41.854**	**.00263**	**3.9103**	**.0297**	**.66299**
Stddev	.831	.00026	.0415	.0057	.00172
%RSD	1.9856	9.9477	1.0625	19.16	.25980
#1	42.442	.00245	3.9397	.0257	.66421
#2	41.267	.00282	3.8809	.0338	.66177
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-C-1-B Acquired: 7/16/2019 20:30:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00076**	**.0325**	**.02739**	**.11487**	**.0095**
Stddev	.00106	.0345	.00021	.00218	.0015
%RSD	139.92	106.1	.76162	1.8952	16.10
#1	-.00151	.0081	.02724	.11333	.0106
#2	-.00001	.0568	.02754	.11641	.0084
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1342.5**	**1043.5**	**31729.**	**3776.2**
Stddev	.9	.9	8.	27.1
%RSD	.06934	.08614	.02392	.71761
#1	1343.2	1044.1	31724.	3757.0
#2	1341.9	1042.8	31735.	3795.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	84.460%	90.293%	88.926%	95.661%
Range				

Sample Name: 480-156087-C-2-B Acquired: 7/16/2019 20:34:28 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00038**	**.11130**	**-.00283**	**3.6150**	**.23886**
Stddev	.00105	.00152	.00129	.0040	.00068
%RSD	278.78	1.3624	45.717	.11112	.28410
#1	-.00112	.11023	-.00192	3.6179	.23934
#2	.00037	.11237	-.00375	3.6122	.23838
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**59.383**	**.00009**	**-.0059**	**.00049**
Stddev	.00002	.450	.00003	.0062	.00008
%RSD	276.49	.75809	33.146	105.0	16.229
#1	-.00002	59.701	.00007	-.0102	.00043
#2	.00001	59.065	.00012	-.0015	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00541**	**.01183**	**.03335**	**92.451**	**.07908**
Stddev	.00057	.00018	.00324	.053	.00071
%RSD	10.590	1.4798	9.7099	.05723	.90108
#1	.00500	.01195	.03564	92.489	.07857
#2	.00581	.01170	.03106	92.414	.07958
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-C-2-B Acquired: 7/16/2019 20:34:28 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**68.410**	**.00825**	**.00054**	**140.10**	**.00859**
Stddev	.053	.00020	.00005	.07	.00007
%RSD	.07716	2.4492	8.4139	.05210	.80111
#1	68.448	.00840	.00051	140.16	.00855
#2	68.373	.00811	.00057	140.05	.00864
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1967**	**.00132**	**5.651**	**-.00014**	**-.00486**
Stddev	.0009	.00099	.011	.00010	.00025
%RSD	.4793	74.518	.1940	74.586	5.1664
#1	.1960	.00202	5.643	-.00006	-.00504
#2	.1973	.00063	5.659	-.00021	-.00468
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8554**	**-.00044**	**.99109**	**.0006**	**-.00008**
Stddev	.0721	.00053	.00168	.0015	.00046
%RSD	.73106	118.80	.16931	247.6	603.74
#1	9.9064	-.00082	.99228	.0016	.00025
#2	9.8045	-.00007	.98991	-.0004	-.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-C-2-B Acquired: 7/16/2019 20:34:28 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**.0140**	**-.00046**	**.01110**	**-.0003**
Stddev	.00058	.0464	.00017	.00024	.0003
%RSD	114.66	331.5	35.835	2.1435	102.6
#1	.00092	-.0188	-.00058	.01093	-.0001
#2	.00010	.0468	-.00035	.01126	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1433.8**	**1072.3**	**32731.**	**3858.4**
Stddev	.9	.7	50.	17.0
%RSD	.06611	.06867	.15360	.44165
#1	1433.1	1072.8	32696.	3846.4
#2	1434.5	1071.8	32767.	3870.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.201%	92.787%	91.734%	97.745%
Range				

Sample Name: 480-156087-D-3-B Acquired: 7/16/2019 20:38:20 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00042**	**.12637**	**-.00098**	**3.5049**	**.24299**
Stddev	.00048	.00289	.00222	.0036	.00008
%RSD	114.63	2.2863	226.79	.10377	.03371
#1	-.00008	.12842	-.00254	3.5023	.24294
#2	-.00076	.12433	.00059	3.5074	.24305
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**63.002**	**.00005**	**.0139**	**.00062**
Stddev	.00001	.126	.00000	.0121	.00009
%RSD	26.060	.20015	3.4769	87.01	14.487
#1	.00007	63.091	.00005	.0054	.00069
#2	.00005	62.912	.00005	.0225	.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00235**	**.00094**	**.02491**	**93.427**	**.08021**
Stddev	.00022	.00024	.00041	.100	.00060
%RSD	9.5268	25.965	1.6498	.10687	.74933
#1	.00251	.00111	.02462	93.498	.07979
#2	.00219	.00077	.02520	93.357	.08064
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-D-3-B Acquired: 7/16/2019 20:38:20 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**66.773**	**.00677**	**.00041**	**142.13**	**.00684**
Stddev	.033	.00003	.00058	.34	.00045
%RSD	.05014	.43504	142.56	.24139	6.5359
#1	66.749	.00675	.00082	142.38	.00652
#2	66.796	.00679	-.00000	141.89	.00715
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.2284**	**.00101**	**5.611**	**-.00170**	**-.00012**
Stddev	.0023	.00223	.000	.00135	.00168
%RSD	.9858	221.22	.0073	79.745	1383.3
#1	.2300	-.00057	5.611	-.00265	.00107
#2	.2268	.00258	5.610	-.00074	-.00131
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8715**	**-.00093**	**1.0429**	**-.0003**	**.00016**
Stddev	.0789	.00130	.0009	.0017	.00063
%RSD	.79952	139.39	.08638	511.1	406.21
#1	9.8157	-.00001	1.0423	.0009	.00060
#2	9.9273	-.00184	1.0436	-.0015	-.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156087-D-3-B Acquired: 7/16/2019 20:38:20 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00216**	**-.0073**	**-.00047**	**.00998**	**-.0009**
Stddev	.00191	.0018	.00007	.00124	.0007
%RSD	88.362	24.42	14.981	12.454	72.78
#1	.00351	-.0086	-.00052	.00910	-.0014
#2	.00081	-.0061	-.00042	.01086	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1436.5**	**1073.7**	**32484.**	**3821.9**
Stddev	.8	1.2	50.	2.0
%RSD	.05245	.11032	.15317	.05259
#1	1437.1	1074.6	32519.	3823.4
#2	1436.0	1072.9	32449.	3820.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.374%	92.911%	91.041%	96.820%
Range				

Sample Name: 480-156076-C-1-D Acquired: 7/16/2019 20:42:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.32470**	**.00220**	**1.7504**	**.62745**
Stddev	.00031	.01182	.00159	.0048	.00033
%RSD	78.898	3.6413	72.065	.27269	.05289
#1	-.00017	.31634	.00108	1.7471	.62722
#2	-.00061	.33306	.00332	1.7538	.62768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**30.002**	**-.00010**	**-.0056**	**.00000**
Stddev	.00002	.116	.00007	.0007	.00007
%RSD	110.30	.38668	68.259	12.58	9952.6
#1	.00000	30.084	-.00014	-.0061	.00005
#2	.00003	29.920	-.00005	-.0051	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00104**	**.00015**	**.70494**	**1.2560**	**.01376**
Stddev	.00027	.00040	.00696	.0296	.00046
%RSD	25.845	268.25	.98687	2.3543	3.3457
#1	.00123	.00043	.70986	1.2351	.01409
#2	.00085	-.00013	.70002	1.2769	.01344
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-D Acquired: 7/16/2019 20:42:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.8965**	**.09984**	**-.00001**	**22.917**	**.00043**
Stddev	.0131	.00025	.00001	.116	.00031
%RSD	.18957	.24722	63.884	.50758	73.149
#1	6.8872	.09966	-.00002	23.000	.00065
#2	6.9057	.10001	-.00001	22.835	.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0949**	**.00084**	**.7386**	**.00112**	**-.00246**
Stddev	.0019	.00004	.0006	.00066	.00173
%RSD	2.012	4.6977	.0751	59.102	70.266
#1	.0963	.00087	.7390	.00065	-.00368
#2	.0936	.00081	.7382	.00159	-.00124
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5847**	**.00109**	**.15850**	**.0082**	**.00426**
Stddev	.0220	.00032	.00042	.0028	.00015
%RSD	.22935	29.854	.26361	34.30	3.5911
#1	9.6003	.00086	.15880	.0062	.00415
#2	9.5692	.00132	.15821	.0102	.00437
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-D Acquired: 7/16/2019 20:42:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00104**	**-.0103**	**.00020**	**.00004**	**-.0008**
Stddev	.00293	.0341	.00017	.00018	.0007
%RSD	281.59	330.9	85.543	452.40	84.69
#1	-.00103	-.0344	.00008	.00016	-.0003
#2	.00311	.0138	.00032	-.00009	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1547.6**	**1111.0**	**34166.**	**3935.3**
Stddev	.0	1.9	45.	8.7
%RSD	.00015	.16684	.13312	.21998
#1	1547.6	1112.3	34198.	3929.2
#2	1547.6	1109.7	34134.	3941.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.362%	96.136%	95.755%	99.692%
Range				

Sample Name: 480-156076-C-1-E MS Acquired: 7/16/2019 20:46:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04889**	**9.6924**	**.20112**	**1.9105**	**.77428**
Stddev	.00001	.0400	.00219	.0018	.00185
%RSD	.01671	.41294	1.0906	.09432	.23936
#1	.04888	9.7207	.20267	1.9118	.77559
#2	.04889	9.6641	.19957	1.9092	.77297
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19887**	**38.372**	**.19307**	**-.0145**	**.18454**
Stddev	.00036	.093	.00026	.0133	.00044
%RSD	.18226	.24246	.13393	91.39	.23901
#1	.19912	38.438	.19289	-.0051	.18423
#2	.19861	38.307	.19326	-.0239	.18485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19246**	**.19248**	**10.457**	**10.581**	**.20524**
Stddev	.00004	.00021	.020	.014	.00186
%RSD	.02273	.10949	.19529	.12822	.90807
#1	.19243	.19233	10.472	10.591	.20655
#2	.19249	.19263	10.443	10.572	.20392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-E MS Acquired: 7/16/2019 20:46:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.154**	**.29173**	**.20149**	**31.378**	**.19413**
Stddev	.005	.00019	.00003	.102	.00071
%RSD	.03144	.06490	.01291	.32478	.36503
#1	16.151	.29160	.20147	31.450	.19363
#2	16.158	.29187	.20151	31.306	.19463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.3604**	**.18714**	**10.50**	**.21107**	**.19016**
Stddev	.0029	.00053	.03	.00296	.00134
%RSD	.8031	.28055	.2392	1.4045	.70233
#1	-.3625	.18751	10.52	.21317	.18922
#2	-.3584	.18677	10.49	.20897	.19110
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.778**	**.18178**	**.34271**	**.0086**	**.20239**
Stddev	.059	.00058	.00134	.0040	.00100
%RSD	.31278	.31805	.39169	46.91	.49223
#1	18.819	.18137	.34365	.0114	.20169
#2	18.736	.18219	.34176	.0057	.20310
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-E MS Acquired: 7/16/2019 20:46:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.18786**	**.0093**	**.19579**	**.19798**	**.0001**
Stddev	.00339	.0324	.00002	.00142	.0005
%RSD	1.8030	349.8	.01232	.71689	733.9
#1	.19025	-.0137	.19581	.19697	.0004
#2	.18546	.0322	.19578	.19898	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1524.3**	**1101.9**	**33813.**	**3916.6**
Stddev	.6	.1	17.	5.8
%RSD	.03633	.00544	.05172	.14796
#1	1523.9	1101.9	33801.	3912.5
#2	1524.7	1102.0	33825.	3920.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.895%	95.349%	94.766%	99.217%
Range				

Sample Name: 480-156076-C-1-F MSD Acquired: 7/16/2019 20:49:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05036**	**10.001**	**.20521**	**1.8471**	**.80653**
Stddev	.00018	.040	.00267	.0053	.00517
%RSD	.35903	.40060	1.3035	.28737	.64067
#1	.05023	10.030	.20711	1.8433	.81018
#2	.05049	9.9730	.20332	1.8509	.80287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20547**	**39.696**	**.19938**	**-.0004**	**.18999**
Stddev	.00098	.237	.00010	.0137	.00002
%RSD	.47785	.59717	.04936	3379.	.01045
#1	.20616	39.864	.19931	-.0101	.18997
#2	.20477	39.529	.19945	.0093	.19000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20135**	**.20012**	**10.845**	**10.876**	**.21249**
Stddev	.00017	.00023	.080	.098	.00070
%RSD	.08663	.11436	.73693	.89757	.32745
#1	.20122	.20028	10.902	10.945	.21298
#2	.20147	.19995	10.789	10.807	.21200
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-F MSD Acquired: 7/16/2019 20:49:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.625**	**.30278**	**.20876**	**32.558**	**.20052**
Stddev	.022	.00024	.00078	.203	.00007
%RSD	.13285	.07763	.37171	.62199	.03637
#1	16.609	.30261	.20821	32.701	.20047
#2	16.640	.30294	.20931	32.415	.20057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.3666**	**.19428**	**10.84**	**.21812**	**.19902**
Stddev	.0037	.00078	.02	.00328	.00681
%RSD	1.001	.39893	.2238	1.5042	3.4217
#1	-.3692	.19373	10.82	.21580	.19421
#2	-.3640	.19483	10.86	.22044	.20384
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.046**	**.18832**	**.35466**	**.0152**	**.20955**
Stddev	.132	.00002	.00198	.0145	.00177
%RSD	.69382	.01062	.55866	95.39	.84339
#1	19.140	.18834	.35606	.0254	.21080
#2	18.953	.18831	.35326	.0049	.20830
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156076-C-1-F MSD Acquired: 7/16/2019 20:49:53 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19700**	**.0249**	**.20090**	**.20663**	**.0008**
Stddev	.00066	.0056	.00034	.00006	.0007
%RSD	.33595	22.57	.17105	.02996	92.78
#1	.19653	.0209	.20066	.20658	.0003
#2	.19747	.0288	.20114	.20667	.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1518.2**	**1096.5**	**33754.**	**3905.4**
Stddev	.4	2.1	7.	29.6
%RSD	.02357	.19157	.02098	.75676
#1	1517.9	1098.0	33759.	3884.5
#2	1518.4	1095.0	33749.	3926.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.509%	94.881%	94.601%	98.935%
Range				

Sample Name: 480-156088-D-1-B Acquired: 7/16/2019 20:53:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00288**	**.12650**	**-.00231**	**1.6997**	**.01964**
Stddev	.00013	.00371	.00039	.0025	.00001
%RSD	4.4793	2.9323	16.768	.14615	.05593
#1	.00297	.12388	-.00204	1.7015	.01963
#2	.00279	.12912	-.00258	1.6980	.01965
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**3.5472**	**.01016**	**-.0101**	**.00045**
Stddev	.00005	.0111	.00025	.0091	.00017
%RSD	141.81	.31308	2.4220	89.72	36.515
#1	.00007	3.5393	.00999	-.0037	.00057
#2	-.00000	3.5550	.01034	-.0165	.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01990**	**.04913**	**.46601**	**.64689**	**.00191**
Stddev	.00003	.00026	.00251	.00297	.00049
%RSD	.13115	.53584	.53890	.45836	25.857
#1	.01992	.04894	.46779	.64899	.00156
#2	.01988	.04932	.46423	.64479	.00226
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156088-D-1-B Acquired: 7/16/2019 20:53:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.76621**	**.00326**	**.00216**	**9.0945**	**.00782**
Stddev	.00609	.00005	.00006	.0079	.00015
%RSD	.79540	1.5102	2.9204	.08733	1.8543
#1	.76190	.00322	.00221	9.1001	.00772
#2	.77052	.00329	.00212	9.0889	.00792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.582**	**.01417**	**2.867**	**.00313**	**.00436**
Stddev	.015	.00081	.005	.00000	.00440
%RSD	.9369	5.6902	.1873	.01355	100.98
#1	1.592	.01474	2.871	.00313	.00747
#2	1.571	.01360	2.864	.00313	.00125
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.2800**	**-.00020**	**.02522**	**.0010**	**.00861**
Stddev	.0008	.00020	.00012	.0099	.00014
%RSD	.01153	101.29	.48446	983.7	1.6003
#1	7.2794	-.00035	.02531	-.0060	.00851
#2	7.2806	-.00006	.02514	.0080	.00871
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156088-D-1-B Acquired: 7/16/2019 20:53:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**-.0263**	**.00018**	**.11828**	**-.0007**
Stddev	.00007	.0219	.00001	.00261	.0001
%RSD	49.596	83.21	6.0075	2.2107	17.62
#1	-.00019	-.0417	.00017	.12012	-.0008
#2	-.00009	-.0108	.00018	.11643	-.0006
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1560.6**	**1119.7**	**34481.**	**3885.5**
Stddev	2.6	2.1	87.	15.3
%RSD	.16751	.18690	.25244	.39473
#1	1558.8	1118.2	34542.	3896.4
#2	1562.5	1121.1	34419.	3874.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.181%	96.884%	96.637%	98.431%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 20:57:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0108**	**48.963**	**1.0023**	**.99260**	**.98170**	**1.0057**	**49.209**	**.99080**
Stddev	.0004	.165	.0034	.00056	.00138	.0006	.047	.00042
%RSD	.04396	.33692	.33450	.05666	.14018	.05916	.09630	.04248
#1	1.0111	48.846	1.0047	.99221	.98073	1.0061	49.175	.99110
#2	1.0104	49.079	.99992	.99300	.98268	1.0053	49.242	.99050
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.016**	**.98401**	**1.0007**	**1.0091**	**51.051**	**49.353**	**.98112**	**49.467**
Stddev	.012	.00284	.0025	.0009	.062	.015	.00000	.146
%RSD	1.200	.28907	.25062	.08878	.12116	.03130	.00025	.29441
#1	1.007	.98602	1.0025	1.0097	51.095	49.364	.98112	49.570
#2	1.025	.98200	.99893	1.0084	51.007	49.342	.98112	49.364
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0375**	**1.0181**	**49.608**	**.99989**	**24.99**	**.98880**	**25.10**	**.98913**
Stddev	.0003	.0016	.051	.00148	.08	.00061	.01	.00580
%RSD	.03259	.15868	.10284	.14760	.3351	.06161	.0518	.58663
#1	1.0377	1.0192	49.644	1.0009	25.05	.98923	25.10	.99323
#2	1.0373	1.0169	49.572	.99885	24.93	.98837	25.09	.98503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 20:57:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0091**	**10.036**	**.97757**	**.99923**	**1.011**	**1.0259**	**.99685**	**2.485**
Stddev	.0025	.007	.00185	.00075	.007	.0006	.00496	.024
%RSD	.24364	.07133	.18923	.07482	.7192	.05541	.49798	.9541
#1	1.0108	10.041	.97888	.99975	1.006	1.0263	1.0004	2.469
#2	1.0073	10.030	.97626	.99870	1.016	1.0255	.99334	2.502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0299**	**1.0272**	**1.024**
Stddev	.0001	.0028	.004
%RSD	.00477	.26846	.4374
#1	1.0300	1.0291	1.027
#2	1.0299	1.0252	1.020
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1488.7**	**1113.2**	**33669.**	**3903.5**
Stddev	2.8	2.7	3.	5.4
%RSD	.18726	.24261	.01001	.13712
#1	1490.7	1115.1	33671.	3907.2
#2	1486.7	1111.3	33666.	3899.7

Sample Name: CCB-5392763 Acquired: 7/16/2019 21:01:08 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**.00638**	**-.00025**	F **.02221**	**.00005**	**-.00001**	**-.00132**
Stddev	.00015	.01072	.00008	.00036	.00000	.00003	.00165
%RSD	74.399	168.03	33.556	1.6220	7.3156	347.23	125.14
#1	-.00032	-.00120	-.00030	.02246	.00005	.00001	-.00015
#2	-.00010	.01396	-.00019	.02195	.00005	-.00003	-.00248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**-.0068**	**-.00025**	**.00032**	**.00008**	**.00046**	**.04581**
Stddev	.00005	.0246	.00018	.00008	.00005	.00045	.00107
%RSD	185.46	361.1	69.657	26.077	65.250	98.689	2.3425
#1	-.00006	-.0242	-.00038	.00026	.00004	.00078	.04505
#2	.00001	.0106	-.00013	.00038	.00012	.00014	.04657
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00017**	**-.00313**	**-.00025**	**.00045**	**.06084**	**.00021**	**.0042**
Stddev	.00085	.00020	.00000	.00012	.00592	.00013	.0011
%RSD	516.58	6.3377	.17171	26.487	9.7257	60.929	25.94
#1	.00077	-.00327	-.00025	.00037	.06502	.00030	.0050
#2	-.00044	-.00299	-.00025	.00054	.05665	.00012	.0035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 21:01:08 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**-.0228**	**.00082**	**.00082**	**.07171**	**-.00117**	**-.00000**
Stddev	.00062	.0016	.00022	.00176	.00822	.00081	.00001
%RSD	403.21	6.964	26.348	215.14	11.466	69.557	1574.1
#1	.00028	-.0239	.00097	.00206	.07753	-.00174	-.00001
#2	-.00059	-.0216	.00067	-.00043	.06590	-.00059	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0008**	**.00009**	**.00001**	**-.0201**	**-.00054**	**-.00291**	**-.0011**
Stddev	.0065	.00002	.00101	.0177	.00011	.00006	.0001
%RSD	804.6	23.330	8788.1	88.18	19.687	2.1389	11.91
#1	-.0038	.00007	.00072	-.0326	-.00061	-.00296	-.0012
#2	.0054	.00010	-.00070	-.0076	-.00046	-.00287	-.0010
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1575.7**	**1140.7**	**35167.**	**3917.3**
Stddev	1.6	1.3	5.	11.1
%RSD	.09996	.11389	.01548	.28352
#1	1576.8	1139.8	35163.	3909.4
#2	1574.6	1141.6	35171.	3925.1

Sample Name: CCVL-5395711 Acquired: 7/16/2019 21:05:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00589**	**.19815**	**.01242**	F **.04075**	**.00214**	**.00207**	**.49888**
Stddev	.00009	.01579	.00167	.00015	.00002	.00001	.00486
%RSD	1.5239	7.9692	13.486	.37399	.75884	.35051	.97515
#1	.00583	.20932	.01123	.04086	.00215	.00206	.49544
#2	.00596	.18699	.01360	.04064	.00213	.00207	.50232
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00193**	**-.0008**	**.00360**	W **.00550**	**.00956**	**.06027**	**.47791**
Stddev	.00001	.0007	.00010	.00011	.00008	.00177	.03460
%RSD	.45933	93.96	2.7529	1.9813	.82721	2.9355	7.2408
#1	.00193	-.0003	.00367	.00558	.00951	.06152	.50237
#2	.00192	-.0013	.00353	.00542	.00962	.05902	.45344
Check ?	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value				.00400			
Range				30.000%			

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02896**	**.19783**	**.00325**	**.01006**	**1.0094**	**.01051**	**-.0199**
Stddev	.00024	.00559	.00004	.00011	.0023	.00005	.0005
%RSD	.82384	2.8242	1.1330	1.0908	.22751	.50008	2.487
#1	.02879	.19388	.00327	.00998	1.0078	.01055	-.0195
#2	.02913	.20178	.00322	.01014	1.0110	.01047	-.0202
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 21:05:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00885**	**.1715**	**.02236**	**.02325**	**.57962**	**.00832**	**.00484**
Stddev	.00125	.0041	.00052	.00168	.00012	.00072	.00003
%RSD	14.146	2.417	2.3234	7.2056	.01995	8.6974	.61662
#1	.00973	.1686	.02272	.02206	.57970	.00883	.00486
#2	.00796	.1744	.02199	.02443	.57953	.00781	.00482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0017**	**.00485**	**.01716**	**.0019**	**.00450**	**.01101**	**.0005**
Stddev	.0008	.00010	.00059	.0088	.00040	.00150	.0018
%RSD	44.82	2.0398	3.4595	471.3	8.9230	13.661	362.7
#1	-.0012	.00492	.01758	.0081	.00422	.00995	-.0008
#2	-.0022	.00478	.01674	-.0044	.00478	.01207	.0017
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1585.7**	**1142.2**	**35091.**	**3919.8**
Stddev	.9	.9	87.	13.6
%RSD	.05765	.08033	.24817	.34705
#1	1586.3	1142.9	35029.	3910.2
#2	1585.0	1141.6	35152.	3929.5

Sample Name: 480-156091-B-1-B Acquired: 7/16/2019 21:08:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**.60651**	**.00142**	**2.1740**	**.07004**
Stddev	.00023	.00259	.00014	.0021	.00003
%RSD	148.34	.42767	9.6715	.09693	.03837
#1	-.00031	.60467	.00132	2.1755	.07002
#2	.00001	.60834	.00151	2.1725	.07005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**23.021**	**.00041**	**-.0082**	**-.00019**
Stddev	.00004	.048	.00017	.0034	.00019
%RSD	87.076	.20730	42.269	41.94	97.328
#1	.00002	22.987	.00053	-.0058	-.00033
#2	.00007	23.054	.00029	-.0106	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00267**	**.60672**	**4.3713**	**80.221**	**.00367**
Stddev	.00060	.00181	.0293	.229	.00036
%RSD	22.449	.29849	.67069	.28528	9.7031
#1	.00309	.60544	4.3506	80.059	.00342
#2	.00224	.60800	4.3920	80.383	.00392
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156091-B-1-B Acquired: 7/16/2019 21:08:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.0138**	**.07339**	**.01350**	**399.39**	**.00537**
Stddev	.0120	.00003	.00038	.83	.00033
%RSD	.59414	.03412	2.8490	.20745	6.2007
#1	2.0222	.07341	.01378	398.80	.00514
#2	2.0053	.07337	.01323	399.97	.00561
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.21**	**.00692**	**19.70**	**.00028**	**-.00591**
Stddev	.03	.00074	.02	.00103	.00427
%RSD	.2796	10.738	.0944	372.45	72.201
#1	11.19	.00639	19.71	.00100	-.00893
#2	11.23	.00745	19.69	-.00045	-.00289
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**22.913**	**.00732**	**.07487**	**.0060**	**.01177**
Stddev	.111	.00032	.00020	.0101	.00078
%RSD	.48328	4.4169	.26095	168.4	6.6160
#1	22.835	.00755	.07474	.0131	.01232
#2	22.991	.00709	.07501	-.0011	.01122
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156091-B-1-B Acquired: 7/16/2019 21:08:52 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00213**	**.0116**	**.00049**	**.07945**	**.0009**
Stddev	.00225	.0009	.00047	.00034	.0009
%RSD	105.69	7.436	97.342	.42545	96.95
#1	.00372	.0110	.00015	.07969	.0015
#2	.00054	.0122	.00082	.07921	.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1409.8**	**1069.4**	**32186.**	**3882.9**
Stddev	.9	3.6	36.	5.2
%RSD	.06338	.33989	.11122	.13377
#1	1409.2	1066.8	32211.	3886.5
#2	1410.5	1071.9	32161.	3879.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.693%	92.534%	90.206%	98.364%
Range				

Sample Name: 480-156081-B-1-B Acquired: 7/16/2019 21:12:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00041**	**.81435**	**.34107**	**10.866**	**.18330**
Stddev	.00007	.00622	.00186	.008	.00044
%RSD	18.426	.76374	.54488	.07029	.24025
#1	-.00035	.80996	.34239	10.872	.18299
#2	-.00046	.81875	.33976	10.861	.18361
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00019**	**31.797**	**.00037**	**-.0019**	**.03225**
Stddev	.00003	.140	.00008	.0147	.00015
%RSD	13.926	.43873	22.545	787.1	.47848
#1	.00021	31.896	.00043	-.0123	.03214
#2	.00017	31.699	.00031	.0085	.03236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36653**	**1.0516**	**3.5286**	**447.19**	**.16906**
Stddev	.00036	.0019	.0277	.57	.00066
%RSD	.09851	.17741	.78382	.12771	.39258
#1	.36628	1.0503	3.5482	446.78	.16953
#2	.36679	1.0530	3.5091	447.59	.16859
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156081-B-1-B Acquired: 7/16/2019 21:12:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**35.099**	**.18477**	**.01490**	F **1348.8**	**.16740**
Stddev	.086	.00047	.00059	.7	.00020
%RSD	.24485	.25479	3.9533	.05306	.12162
#1	35.039	.18444	.01532	1349.3	.16755
#2	35.160	.18510	.01449	1348.3	.16726
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.067**	**.02042**	**50.16**	**.02925**	**.00072**
Stddev	.016	.00005	.09	.00025	.00444
%RSD	.2278	.24973	.1795	.84661	620.02
#1	7.078	.02039	50.22	.02908	-.00242
#2	7.056	.02046	50.10	.02943	.00386
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**22.675**	**.07927**	**.35449**	**.0006**	**.23119**
Stddev	.091	.00004	.00083	.0005	.00030
%RSD	.39955	.04614	.23416	85.62	.13147
#1	22.739	.07925	.35508	.0003	.23098
#2	22.611	.07930	.35391	.0010	.23141
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156081-B-1-B Acquired: 7/16/2019 21:12:42 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00319**	**-.0218**	**.07058**	**.55960**	**.0440**
Stddev	.00477	.0160	.00021	.00084	.0014
%RSD	149.56	73.37	.29311	.15090	3.292
#1	-.00657	-.0105	.07043	.56020	.0450
#2	.00018	-.0332	.07073	.55901	.0430
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1249.0**	**1013.9**	**29688.**	**3710.6**
Stddev	.4	.1	46.	14.3
%RSD	.03112	.01114	.15534	.38645
#1	1248.7	1013.8	29720.	3700.5
#2	1249.2	1013.9	29655.	3720.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.572%	87.730%	83.204%	94.000%
Range				

Sample Name: 480-156086-L-1-B Acquired: 7/16/2019 21:16:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00063**	**.73600**	**.15150**	F **22.528**	**.64398**
Stddev	.00032	.02902	.00506	.022	.00041
%RSD	51.265	3.9427	3.3371	.09930	.06415
#1	-.00040	.75652	.14793	22.513	.64427
#2	-.00086	.71548	.15508	22.544	.64368
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				18.000	
Low Limit				-.02000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00038**	F **995.14**	**.00027**	**.0249**	**.01281**
Stddev	.00004	.60	.00016	.0212	.00050
%RSD	9.4608	.05990	60.064	85.33	3.9260
#1	.00041	995.56	.00016	.0099	.01245
#2	.00036	994.72	.00039	.0398	.01317
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.14448**	**-.00543**	**207.61**	F **762.99**	**.34045**
Stddev	.00041	.00032	.68	1.17	.00141
%RSD	.28708	5.8913	.32792	.15391	.41315
#1	.14478	-.00521	207.12	762.16	.33946
#2	.14419	-.00566	208.09	763.82	.34145
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-156086-L-1-B Acquired: 7/16/2019 21:16:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**207.29**	**8.7520**	**.00302**	F **2172.9**	**.06756**
Stddev	.17	.0403	.00013	3.8	.00050
%RSD	.08323	.46005	4.3168	.17676	.74634
#1	207.41	8.7805	.00293	2170.2	.06791
#2	207.17	8.7235	.00311	2175.7	.06720
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.328**	**.02149**	F **131.5**	**.00807**	**-.00051**
Stddev	.007	.00090	.2	.00287	.00547
%RSD	.5103	4.1960	.1838	35.594	1074.3
#1	1.333	.02085	131.3	.01011	-.00438
#2	1.323	.02213	131.7	.00604	.00336
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**38.001**	**.03291**	**5.8592**	**.1070**	**.07123**
Stddev	.326	.00212	.0073	.0052	.00002
%RSD	.85839	6.4555	.12448	4.839	.02730
#1	37.770	.03441	5.8644	.1106	.07125
#2	38.232	.03140	5.8540	.1033	.07122
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156086-L-1-B Acquired: 7/16/2019 21:16:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01839**	**.0549**	**.02093**	**.99729**	**.0223**
Stddev	.00435	.0818	.00022	.00230	.0002
%RSD	23.679	149.0	1.0631	.23056	.7074
#1	-.01531	.1128	.02077	.99566	.0224
#2	-.02147	-.0029	.02109	.99891	.0221
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1092.5**	**882.96**	**26666.**	**3512.6**
Stddev	1.8	3.25	39.	7.9
%RSD	.16204	.36849	.14712	.22511
#1	1093.8	885.26	26639.	3518.2
#2	1091.3	880.66	26694.	3507.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	68.733%	76.403%	74.736%	88.984%
Range				

Sample Name: 480-156061-C-1-B Acquired: 7/16/2019 21:20:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**1.1718**	**.07243**	**11.715**	**.12605**
Stddev	.00001	.0152	.00065	.002	.00002
%RSD	2.8032	1.3005	.89568	.01313	.01749
#1	-.00053	1.1826	.07197	11.716	.12607
#2	-.00051	1.1611	.07289	11.714	.12604
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**390.55**	**.00010**	**.0050**	**.00990**
Stddev	.00007	1.29	.00002	.0041	.00051
%RSD	465.87	.33002	18.329	81.62	5.1023
#1	.00004	389.64	.00012	.0079	.00955
#2	-.00007	391.46	.00009	.0021	.01026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21228**	**-.00211**	**78.238**	**495.03**	**.14055**
Stddev	.00048	.00011	.468	4.31	.00089
%RSD	.22825	5.1177	.59818	.87142	.63334
#1	.21194	-.00204	78.569	498.08	.14118
#2	.21262	-.00219	77.908	491.98	.13992
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156061-C-1-B Acquired: 7/16/2019 21:20:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**138.73**	**3.2033**	**.00090**	F **1241.4**	**.04128**
Stddev	.08	.0099	.00011	4.3	.00039
%RSD	.05445	.30807	11.697	.34960	.95536
#1	138.79	3.2103	.00083	1244.4	.04155
#2	138.68	3.1963	.00098	1238.3	.04100
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.522**	**.00956**	**28.63**	**.00106**	**.00536**
Stddev	.001	.00199	.01	.00313	.00131
%RSD	.0666	20.775	.0177	294.97	24.496
#1	1.523	.01096	28.63	.00327	.00444
#2	1.522	.00815	28.62	-.00115	.00629
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**30.276**	**.01534**	**2.6804**	**.0529**	**.01955**
Stddev	.137	.00041	.0223	.0116	.00025
%RSD	.45327	2.6520	.83303	22.02	1.2767
#1	30.373	.01505	2.6962	.0446	.01973
#2	30.179	.01563	2.6646	.0611	.01938
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156061-C-1-B Acquired: 7/16/2019 21:20:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00725**	**.0060**	**.01986**	**.05696**	**.0165**
Stddev	.00175	.0159	.00009	.00107	.0008
%RSD	24.118	267.5	.45949	1.8739	4.976
#1	-.00602	-.0053	.01992	.05620	.0171
#2	-.00849	.0172	.01979	.05771	.0159
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1197.3**	**950.19**	**28564.**	**3660.0**
Stddev	.3	.82	.	.5
%RSD	.02724	.08679	.00105	.01496
#1	1197.6	950.77	28564.	3659.7
#2	1197.1	949.61	28564.	3660.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.324%	82.220%	80.054%	92.719%
Range				

Sample Name: 480-156058-M-1-A Acquired: 7/16/2019 21:24:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**.01430**	**.00198**	**1.7583**	**.00624**
Stddev	.00031	.01095	.00043	.0014	.00002
%RSD	428.62	76.587	21.878	.07705	.25167
#1	.00030	.02204	.00228	1.7593	.00625
#2	-.00015	.00656	.00167	1.7574	.00622
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**10.678**	**.00015**	**-.0050**	**-.00030**
Stddev	.00008	.015	.00012	.0042	.00000
%RSD	13543.	.14196	80.548	83.98	.35076
#1	.00006	10.688	.00023	-.0020	-.00030
#2	-.00006	10.667	.00006	-.0079	-.00030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00082**	**.00628**	**.05892**	**3.4781**	**.00240**
Stddev	.00019	.00019	.00263	.0074	.00022
%RSD	23.453	2.9931	4.4694	.21174	9.1100
#1	.00068	.00642	.05705	3.4833	.00255
#2	.00095	.00615	.06078	3.4729	.00224
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156058-M-1-A Acquired: 7/16/2019 21:24:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.376**	**.00329**	**-.00016**	**93.163**	**.00224**
Stddev	.011	.00004	.00003	.299	.00017
%RSD	.10667	1.1234	16.639	.32059	7.5634
#1	10.368	.00331	-.00018	93.374	.00212
#2	10.384	.00326	-.00014	92.951	.00236
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.3475**	**.00183**	**8.154**	**.00208**	**.00024**
Stddev	.0035	.00071	.015	.00129	.00828
%RSD	1.002	38.597	.1815	62.077	3410.0
#1	.3451	.00233	8.144	.00300	-.00561
#2	.3500	.00133	8.165	.00117	.00610
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.1230**	**.00041**	**.09736**	**.0021**	**-.00012**
Stddev	.0338	.00010	.00028	.0074	.00021
%RSD	.47481	24.698	.28479	352.7	173.41
#1	7.0991	.00034	.09755	-.0031	.00003
#2	7.1469	.00049	.09716	.0074	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156058-M-1-A Acquired: 7/16/2019 21:24:51 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00035**	**.0283**	**.00044**	**.11744**	**-.0005**
Stddev	.00097	.0101	.00036	.00043	.0007
%RSD	273.72	35.49	82.227	.36819	158.2
#1	-.00033	.0212	.00018	.11713	-.0010
#2	.00104	.0355	.00069	.11775	.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1522.0**	**1101.4**	**33595.**	**3899.2**
Stddev	2.4	.6	63.	9.2
%RSD	.15502	.05081	.18751	.23675
#1	1523.7	1101.8	33551.	3892.6
#2	1520.4	1101.0	33640.	3905.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.753%	95.303%	94.155%	98.777%
Range				

Sample Name: blank Acquired: 7/16/2019 21:28:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**.00578**	**.00142**	**.03492**	**-.00002**
Stddev	.00033	.00487	.00219	.00130	.00000
%RSD	187.80	84.168	154.15	3.7312	25.459
#1	-.00006	.00234	-.00013	.03584	-.00002
#2	.00041	.00922	.00297	.03400	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.00098**	**-.00014**	**-.0204**	**.00005**
Stddev	.00006	.00040	.00008	.0028	.00026
%RSD	119.45	40.280	57.032	13.53	504.85
#1	-.00001	.00070	-.00009	-.0185	-.00013
#2	-.00010	.00127	-.00020	-.0224	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00021**	**-.00024**	**.00057**	**.18857**	**-.00011**
Stddev	.00029	.00027	.00094	.02241	.00063
%RSD	137.00	112.39	165.99	11.884	576.62
#1	.00001	-.00042	.00123	.20442	.00034
#2	.00041	-.00005	-.00010	.17273	-.00056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 21:28:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00241**	**-.00028**	**-.00049**	**.18075**	**.00053**
Stddev	.00070	.00001	.00007	.00016	.00019
%RSD	29.268	1.9430	13.799	.08670	36.088
#1	.00291	-.00028	-.00054	.18086	.00040
#2	.00191	-.00028	-.00044	.18064	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.00020**	**-.0190**	**.00090**	**-.00251**
Stddev	.0016	.00023	.0026	.00311	.00163
%RSD	113.1	113.51	13.73	347.55	64.862
#1	.0026	.00036	-.0172	-.00131	-.00367
#2	.0003	.00004	-.0208	.00310	-.00136
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20913**	**-.00163**	**.00002**	**.0074**	**-.00001**
Stddev	.00432	.00018	.00001	.0016	.00010
%RSD	2.0679	11.257	64.920	22.08	1196.1
#1	.20607	-.00150	.00002	.0062	.00006
#2	.21219	-.00176	.00001	.0085	-.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 21:28:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00057**	**-.0246**	**-.00043**	**.00027**	**-.0013**
Stddev	.00245	.0772	.00024	.00056	.0006
%RSD	433.64	314.2	54.362	208.54	43.61
#1	.00117	-.0792	-.00027	-.00013	-.0017
#2	-.00230	.0300	-.00060	.00066	-.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1581.8**	**1140.7**	**35649.**	**4022.1**
Stddev	.6	.9	50.	22.6
%RSD	.03853	.08301	.14125	.56286
#1	1582.2	1140.1	35684.	4038.1
#2	1581.4	1141.4	35613.	4006.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.513%	98.709%	99.910%	101.89%
Range				

Sample Name: MB 480-481887/1-A Acquired: 7/16/2019 21:32:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00018**	**.06362**	**-.00190**	F **.09603**	**.00016**
Stddev	.00027	.00530	.00470	.00145	.00000
%RSD	152.81	8.3317	247.00	1.5078	2.1261
#1	.00001	.06737	-.00523	.09706	.00016
#2	-.00037	.05988	.00142	.09501	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.12374**	**.00001**	**-.0117**	**-.00008**
Stddev	.00003	.00177	.00015	.0207	.00009
%RSD	62.035	1.4287	1011.6	176.8	115.30
#1	-.00007	.12249	.00012	.0029	-.00014
#2	-.00003	.12499	-.00009	-.0263	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00060**	**.00084**	**.01342**	**.14228**	**-.00038**
Stddev	.00003	.00020	.00016	.02900	.00033
%RSD	4.3831	24.059	1.1814	20.385	87.092
#1	.00062	.00098	.01331	.12177	-.00061
#2	.00059	.00069	.01353	.16279	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-481887/1-A Acquired: 7/16/2019 21:32:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00453**	**.00036**	**-.00045**	**.16270**	**.00034**
Stddev	.00031	.00000	.00020	.00170	.00012
%RSD	6.9069	1.1730	45.061	1.0466	35.365
#1	.00431	.00037	-.00031	.16149	.00042
#2	.00475	.00036	-.00059	.16390	.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0047**	**-.00082**	**-.0136**	**.00109**	**.00319**
Stddev	.0024	.00000	.0024	.00197	.00225
%RSD	50.22	.52416	17.83	180.25	70.403
#1	.0064	-.00081	-.0119	.00249	.00160
#2	.0030	-.00082	-.0153	-.00030	.00478
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **.53067**	**-.00038**	**.00070**	**.0075**	**-.00008**
Stddev	.00375	.00068	.00001	.0051	.00005
%RSD	.70576	181.06	.85244	68.14	57.841
#1	.53332	-.00086	.00070	.0039	-.00005
#2	.52802	.00011	.00069	.0111	-.00012
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-481887/1-A Acquired: 7/16/2019 21:32:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00057**	**.0197**	**-.00027**	**.00079**	**-.0002**
Stddev	.00064	.0693	.00012	.00129	.0002
%RSD	112.15	351.2	43.696	163.64	92.80
#1	.00102	-.0293	-.00018	.00170	-.0004
#2	.00012	.0687	-.00035	-.00012	-.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1569.2**	**1125.1**	**35180.**	**3981.2**
Stddev	.5	.8	25.	1.0
%RSD	.03356	.07163	.07092	.02608
#1	1568.8	1124.5	35197.	3980.4
#2	1569.6	1125.6	35162.	3981.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.719%	97.352%	98.596%	100.85%
Range				

Sample Name: LCS 480-481887/2-A Acquired: 7/16/2019 21:36:22 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04805**	**9.4747**	**.20162**	F **.28800**	**.20283**
Stddev	.00002	.0267	.00005	.00042	.00020
%RSD	.04524	.28144	.02449	.14532	.09662
#1	.04804	9.4559	.20159	.28770	.20269
#2	.04807	9.4936	.20166	.28829	.20296
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20425**	**9.6948**	**.19808**	**-.0189**	**.19036**
Stddev	.00027	.0256	.00016	.0239	.00045
%RSD	.13454	.26412	.07941	126.2	.23734
#1	.20444	9.7129	.19797	-.0020	.19004
#2	.20405	9.6767	.19819	-.0358	.19068
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19583**	**.20002**	**10.153**	**9.7172**	**.19171**
Stddev	.00004	.00062	.049	.0258	.00028
%RSD	.01974	.31032	.48150	.26517	.14351
#1	.19586	.20046	10.118	9.7354	.19151
#2	.19581	.19959	10.187	9.6990	.19190
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-481887/2-A Acquired: 7/16/2019 21:36:22 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.7449**	**.20547**	**.20840**	**9.5989**	**.20370**
Stddev	.0119	.00119	.00114	.0188	.00030
%RSD	.12234	.57731	.54726	.19625	.14527
#1	9.7365	.20631	.20921	9.6122	.20349
#2	9.7533	.20463	.20760	9.5856	.20391
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4632**	**.19432**	**10.03**	**.21506**	**.20024**
Stddev	.0021	.00156	.04	.00182	.00293
%RSD	.4545	.80181	.3823	.84442	1.4619
#1	-.4617	.19322	10.05	.21377	.19817
#2	-.4647	.19543	9.999	.21634	.20231
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.077**	**.18619**	**.19534**	**.0046**	**.20577**
Stddev	.041	.00016	.00026	.0032	.00050
%RSD	.40854	.08500	.13523	70.38	.24370
#1	10.048	.18607	.19553	.0023	.20613
#2	10.106	.18630	.19515	.0069	.20542
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-481887/2-A Acquired: 7/16/2019 21:36:22 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19975**	**-.0665**	**.20098**	**.20523**	**-.0002**
Stddev	.00091	.0125	.00028	.00052	.0013
%RSD	.45393	18.83	.14023	.25216	539.4
#1	.20039	-.0577	.20118	.20559	-.0012
#2	.19910	-.0754	.20078	.20486	.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1557.0**	**1115.5**	**34556.**	**3958.9**
Stddev	.6	.9	62.	12.5
%RSD	.04011	.08198	.18044	.31585
#1	1556.6	1114.9	34512.	3950.1
#2	1557.4	1116.2	34601.	3967.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.951%	96.527%	96.849%	100.29%
Range				

Sample Name: 480-156033-H-1-A Acquired: 7/16/2019 21:40:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00052**	**.07204**	**.00116**	**1.3139**	**.10777**
Stddev	.00030	.00578	.00148	.0015	.00007
%RSD	58.284	8.0208	127.95	.11681	.06672
#1	-.00073	.06796	.00011	1.3149	.10782
#2	-.00030	.07613	.00221	1.3128	.10771
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**143.68**	**.00018**	**-.0010**	**.00316**
Stddev	.00005	.29	.00002	.0019	.00002
%RSD	501.20	.20183	9.1948	185.1	.68129
#1	.00002	143.89	.00019	.0003	.00314
#2	-.00004	143.48	.00017	-.0023	.00317
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00066**	**.00053**	**4.1927**	**6.9912**	**.00839**
Stddev	.00011	.00002	.0000	.0175	.00029
%RSD	16.990	4.5727	.00100	.24999	3.4741
#1	.00058	.00051	4.1927	6.9788	.00860
#2	.00074	.00055	4.1927	7.0035	.00819
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-A Acquired: 7/16/2019 21:40:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**42.709**	**2.2877**	**.00004**	**40.004**	**.01636**
Stddev	.109	.0054	.00011	.047	.00000
%RSD	.25589	.23765	276.70	.11856	.00533
#1	42.786	2.2915	-.00004	39.971	.01636
#2	42.631	2.2839	.00012	40.038	.01636
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0033**	**.00204**	**50.88**	**.00052**	**-.00478**
Stddev	.0027	.00021	.03	.00049	.00071
%RSD	82.02	10.506	.0575	94.848	14.805
#1	.0053	.00219	50.85	.00017	-.00528
#2	.0014	.00189	50.90	.00087	-.00428
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.7740**	**.00083**	**.79572**	**.0051**	**.00024**
Stddev	.0120	.00080	.00090	.0072	.00007
%RSD	.17732	96.969	.11347	142.7	29.132
#1	6.7655	.00026	.79509	.0102	.00019
#2	6.7825	.00140	.79636	-.0000	.00029
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-A Acquired: 7/16/2019 21:40:04 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00198**	**.0210**	**-.00035**	**.07403**	**-.0009**
Stddev	.00031	.0523	.00056	.00207	.0010
%RSD	15.923	249.4	160.41	2.8009	118.5
#1	.00220	-.0160	.00005	.07549	-.0016
#2	.00175	.0580	-.00074	.07256	-.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1463.1**	**1069.1**	**32985.**	**3862.5**
Stddev	.8	.7	95.	5.5
%RSD	.05253	.06314	.28854	.14259
#1	1463.6	1068.6	32918.	3858.6
#2	1462.6	1069.6	33052.	3866.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	92.044%	92.508%	92.445%	97.849%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 21:43:49 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0121**	**48.833**	**1.0111**	**.99399**	**.97838**	**1.0128**	**48.590**	**.98807**
Stddev	.0014	.217	.0016	.00122	.00046	.0014	.132	.00007
%RSD	.13821	.44365	.15849	.12228	.04692	.14293	.27177	.00709
#1	1.0111	48.680	1.0122	.99313	.97805	1.0118	48.497	.98812
#2	1.0131	48.986	1.0100	.99485	.97870	1.0138	48.683	.98802
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.029**	**.98392**	**.99893**	**1.0261**	**52.214**	**49.860**	**.99197**	**48.952**
Stddev	.023	.00052	.00050	.0004	.085	.076	.00127	.010
%RSD	2.235	.05242	.04984	.04326	.16247	.15209	.12795	.02087
#1	1.045	.98355	.99929	1.0264	52.274	49.806	.99287	48.959
#2	1.013	.98428	.99858	1.0258	52.154	49.913	.99107	48.945
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0652**	**1.0238**	**50.402**	**1.0103**	**24.91**	**.99226**	**25.20**	**.98092**
Stddev	.0048	.0022	.052	.0004	.04	.00270	.02	.00100
%RSD	.44946	.21504	.10228	.04157	.1661	.27175	.0678	.10227
#1	1.0686	1.0254	50.438	1.0106	24.94	.99416	25.19	.98021
#2	1.0618	1.0223	50.365	1.0100	24.88	.99035	25.21	.98163
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 21:43:49 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0251	10.192	.98153	1.0141	.9952	1.0420	1.0063	2.461
Stddev	.0083	.005	.00189	.0005	.0064	.0005	.0008	.060
%RSD	.81431	.05058	.19232	.04915	.6388	.04479	.07724	2.427
#1	1.0310	10.196	.98286	1.0145	.9907	1.0417	1.0068	2.419
#2	1.0192	10.189	.98019	1.0138	.9997	1.0423	1.0057	2.503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	1.0469	1.0307	1.045
Stddev	.0029	.0039	.000
%RSD	.27759	.37453	.0185
#1	1.0490	1.0280	1.045
#2	1.0449	1.0334	1.044
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1482.7	1110.3	33337.	3855.3
Stddev	3.4	.8	97.	6.4
%RSD	.23087	.07166	.29105	.16666
#1	1485.1	1110.8	33268.	3859.9
#2	1480.3	1109.7	33405.	3850.8

Sample Name: CCB-5392763 Acquired: 7/16/2019 21:47:30 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**-.00543**	**-.00079**	F **.02503**	**.00003**	**.00000**	**-.00152**
Stddev	.00025	.01355	.00672	.00017	.00000	.00001	.00317
%RSD	1424.4	249.67	849.55	.66035	9.1939	652.12	207.98
#1	.00019	.00416	-.00554	.02491	.00003	.00001	-.00376
#2	-.00016	-.01501	.00396	.02514	.00003	-.00001	.00072
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**-.0066**	**.00011**	**.00026**	**.00023**	**.00005**	**.08053**
Stddev	.00006	.0033	.00026	.00021	.00005	.00076	.00370
%RSD	120.88	49.84	234.45	80.343	23.925	1471.1	4.5897
#1	-.00010	-.0043	.00029	.00011	.00019	-.00049	.08314
#2	-.00001	-.0089	-.00007	.00041	.00026	.00059	.07792
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00087**	**-.00021**	**.00038**	**.08394**	**.00043**	**.0051**
Stddev	.00097	.00157	.00001	.00023	.00223	.00001	.0024
%RSD	447.70	181.58	2.5015	59.961	2.6591	2.2238	47.55
#1	-.00047	.00198	-.00022	.00022	.08552	.00043	.0069
#2	.00090	-.00025	-.00021	.00054	.08237	.00042	.0034
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 21:47:30 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00091**	**-.0186**	**.00118**	**-.00044**	**.08871**	**-.00010**	**-.00002**
Stddev	.00007	.0027	.00093	.00637	.01460	.00017	.00006
%RSD	7.5746	14.71	78.907	1457.2	16.453	172.15	294.21
#1	-.00096	-.0167	.00184	-.00494	.07839	-.00022	.00002
#2	-.00086	-.0205	.00052	.00407	.09903	.00002	-.00006
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0082**	**-.00020**	**.00011**	**.0438**	**-.00019**	**-.00228**	**-.0001**
Stddev	.0005	.00010	.00068	.0137	.00009	.00138	.0003
%RSD	6.328	48.132	601.53	31.34	48.539	60.364	238.2
#1	.0086	-.00027	-.00037	.0341	-.00012	-.00131	.0001
#2	.0078	-.00013	.00059	.0535	-.00025	-.00325	-.0004
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1574.5**	**1134.5**	**35199.**	**3933.5**
Stddev	1.4	1.2	57.	7.3
%RSD	.08687	.10391	.16132	.18659
#1	1575.5	1133.7	35159.	3928.3
#2	1573.5	1135.4	35239.	3938.6

Sample Name: CCVL-5395711 Acquired: 7/16/2019 21:51:21 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00561**	**.20099**	**.01265**	F **.04310**	**.00210**	**.00207**	**.49350**
Stddev	.00020	.01230	.00130	.00012	.00000	.00004	.00314
%RSD	3.5400	6.1196	10.251	.27861	.00054	2.1208	.63684
#1	.00575	.20969	.01173	.04302	.00210	.00210	.49573
#2	.00547	.19230	.01357	.04319	.00210	.00204	.49128
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00196**	**-.0083**	**.00373**	W **.00555**	**.00968**	**.05845**	**.55462**
Stddev	.00002	.0190	.00041	.00014	.00014	.00227	.00172
%RSD	.88390	229.7	10.938	2.4433	1.4747	3.8839	.31001
#1	.00197	.0052	.00402	.00564	.00958	.05684	.55340
#2	.00194	-.0217	.00344	.00545	.00978	.06006	.55583
Check ?	Chk Pass	None	Chk Pass	Chk Warn	Chk Pass	Chk Pass	Chk Pass
Value				.00400			
Range				30.000%			

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02771**	**.19804**	**.00315**	**.01012**	**1.0251**	**.01065**	**-.0205**
Stddev	.00075	.00134	.00001	.00007	.0049	.00014	.0029
%RSD	2.7204	.67566	.22912	.72021	.48016	1.2783	14.30
#1	.02825	.19899	.00315	.01018	1.0286	.01075	-.0226
#2	.02718	.19709	.00314	.01007	1.0217	.01056	-.0184
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 21:51:21 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00890**	**.1732**	**.02116**	**.02546**	**.57379**	**.00930**	**.00485**
Stddev	.00009	.0041	.00034	.00001	.00817	.00010	.00004
%RSD	1.0460	2.372	1.6126	.02820	1.4234	1.0663	.85217
#1	.00896	.1761	.02140	.02545	.56802	.00923	.00488
#2	.00883	.1703	.02092	.02546	.57957	.00937	.00482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0031**	**.00492**	**.02035**	**.0002**	**.00451**	**.01084**	**.0002**
Stddev	.0042	.00034	.00146	.0375	.00019	.00159	.0006
%RSD	134.7	6.8334	7.1571	20530.	4.1171	14.702	372.5
#1	.0001	.00516	.01932	-.0263	.00464	.00971	-.0003
#2	.0060	.00468	.02138	.0267	.00437	.01197	.0006
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.2**	**1141.3**	**35599.**	**3950.7**
Stddev	.2	.6	57.	1.9
%RSD	.01501	.05498	.15899	.04914
#1	1586.3	1140.9	35639.	3949.3
#2	1586.0	1141.8	35559.	3952.0

Sample Name: 480-156033-H-1-Asd@5 Acquired: 7/16/2019 21:55:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.03081**	**.00207**	**.25437**	**.02147**
Stddev	.00019	.01145	.00178	.00012	.00005
%RSD	47.549	37.157	85.676	.04609	.23828
#1	-.00053	.03891	.00333	.25445	.02151
#2	-.00026	.02272	.00082	.25429	.02144
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**28.523**	**.00001**	**-.0094**	**.00074**
Stddev	.00004	.095	.00003	.0038	.00008
%RSD	82.192	.33456	372.11	40.69	11.341
#1	-.00002	28.591	.00003	-.0121	.00080
#2	-.00008	28.456	-.00002	-.0067	.00068
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.00019**	**.85045**	**1.3831**	**.00149**
Stddev	.00035	.00028	.00295	.0053	.00064
%RSD	581.05	146.85	.34647	.38356	42.874
#1	-.00031	-.00001	.84837	1.3869	.00104
#2	.00019	.00039	.85254	1.3794	.00195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-Asd@5 Acquired: 7/16/2019 21:55:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.3548**	**.45924**	**-.00029**	**7.7795**	**.00338**
Stddev	.0088	.00216	.00011	.0135	.00043
%RSD	.10487	.47001	38.582	.17301	12.594
#1	8.3486	.46076	-.00021	7.7700	.00308
#2	8.3610	.45771	-.00037	7.7890	.00368
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0022**	**.00002**	**9.673**	**.00092**	**.00212**
Stddev	.0004	.00066	.036	.00341	.00123
%RSD	17.93	3731.2	.3741	372.18	58.062
#1	.0025	-.00045	9.698	-.00149	.00298
#2	.0020	.00048	9.647	.00333	.00125
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.3412**	**-.00125**	**.15790**	**.0106**	**.00003**
Stddev	.0179	.00032	.00049	.0069	.00019
%RSD	1.3310	25.738	.30750	64.73	607.11
#1	1.3286	-.00102	.15756	.0154	.00016
#2	1.3539	-.00148	.15825	.0057	-.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-Asd@5 Acquired: 7/16/2019 21:55:13 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00180**	**-.0013**	**-.00042**	**.01409**	**-.0016**
Stddev	.00006	.0457	.00045	.00043	.0010
%RSD	3.3657	3480.	106.47	3.0192	60.30
#1	.00176	-.0336	-.00010	.01379	-.0023
#2	.00185	.0310	-.00074	.01439	-.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1567.4**	**1123.6**	**34758.**	**3943.5**
Stddev	1.6	.8	22.	2.0
%RSD	.09997	.07045	.06373	.04965
#1	1568.5	1123.1	34742.	3944.9
#2	1566.3	1124.2	34773.	3942.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.608%	97.230%	97.413%	99.900%
Range				

Sample Name: 480-156033-H-1-Apds Acquired: 7/16/2019 21:59:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04969**	**9.7426**	**.20919**	**1.4685**	**.30720**
Stddev	.00114	.0014	.00510	.0003	.00002
%RSD	2.2907	.01381	2.4382	.01798	.00791
#1	.04889	9.7417	.21280	1.4683	.30718
#2	.05050	9.7436	.20558	1.4686	.30721
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20664**	**148.94**	**.20348**	**-.0124**	**.19622**
Stddev	.00034	.08	.00016	.0109	.00018
%RSD	.16328	.05308	.07982	87.79	.09362
#1	.20688	148.99	.20336	-.0200	.19609
#2	.20640	148.88	.20359	-.0047	.19635
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19304**	**.20548**	**14.067**	**16.839**	**.20979**
Stddev	.00073	.00081	.035	.039	.00107
%RSD	.37624	.39227	.24796	.23156	.51048
#1	.19356	.20491	14.092	16.867	.21055
#2	.19253	.20605	14.043	16.812	.20904
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-Apds Acquired: 7/16/2019 21:59:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**50.859**	**2.3795**	**.21079**	**48.505**	**.22048**
Stddev	.115	.0035	.00094	.111	.00033
%RSD	.22581	.14666	.44717	.22945	.14876
#1	50.941	2.3771	.21145	48.584	.22071
#2	50.778	2.3820	.21012	48.427	.22025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4416**	**.20189**	**59.74**	**.21770**	**.20141**
Stddev	.0022	.00108	.07	.00441	.00394
%RSD	.4966	.53706	.1243	2.0241	1.9583
#1	-.4401	.20265	59.69	.22082	.20420
#2	-.4432	.20112	59.80	.21459	.19862
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.199**	**.21574**	**.96371**	**.0065**	**.20680**
Stddev	.012	.00002	.00270	.0061	.00102
%RSD	.07676	.00919	.27991	94.65	.49127
#1	16.191	.21573	.96562	.0108	.20752
#2	16.208	.21575	.96181	.0021	.20608
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-Apds Acquired: 7/16/2019 21:59:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20486**	**-.0265**	**.20312**	**.26874**	**.0020**
Stddev	.00151	.0220	.00043	.00192	.0002
%RSD	.73859	82.97	.21113	.71326	11.48
#1	.20379	-.0110	.20342	.27010	.0018
#2	.20593	-.0421	.20281	.26739	.0021
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1447.3**	**1068.1**	**33102.**	**3869.4**
Stddev	.5	.2	28.	4.4
%RSD	.03339	.02209	.08594	.11387
#1	1447.6	1067.9	33123.	3872.5
#2	1447.0	1068.2	33082.	3866.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.050%	92.420%	92.774%	98.023%
Range				

Sample Name: 480-156033-H-1-B MS Acquired: 7/16/2019 22:02:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04972**	**9.6380**	**.20952**	**1.5164**	**.30965**
Stddev	.00023	.0123	.00387	.0019	.00038
%RSD	.45601	.12786	1.8486	.12677	.12395
#1	.04988	9.6467	.21226	1.5151	.30992
#2	.04956	9.6293	.20678	1.5178	.30938
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20333**	**152.62**	**.20203**	**.0001**	**.19446**
Stddev	.00027	.08	.00003	.0219	.00115
%RSD	.13247	.05097	.01417	30390.	.58973
#1	.20352	152.68	.20205	.0156	.19365
#2	.20314	152.57	.20201	-.0154	.19527
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19156**	**.20338**	**14.116**	**16.891**	**.20890**
Stddev	.00133	.00012	.054	.069	.00043
%RSD	.69611	.06088	.38114	.40994	.20606
#1	.19062	.20346	14.154	16.842	.20921
#2	.19250	.20329	14.078	16.940	.20860
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-B MS Acquired: 7/16/2019 22:02:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**52.378**	**2.4519**	**.20801**	**49.866**	**.21835**
Stddev	.122	.0029	.00051	.002	.00102
%RSD	.23264	.11646	.24693	.00460	.46904
#1	52.464	2.4498	.20765	49.868	.21907
#2	52.291	2.4539	.20838	49.865	.21762
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4332**	**.19933**	**61.43**	**.21940**	**.20669**
Stddev	.0047	.00097	.03	.00101	.00097
%RSD	1.080	.48830	.0478	.46223	.47131
#1	-.4299	.20002	61.45	.22012	.20600
#2	-.4366	.19864	61.41	.21868	.20738
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.237**	**.19312**	**.98885**	**.0119**	**.20489**
Stddev	.044	.00140	.00036	.0001	.00016
%RSD	.27122	.72385	.03620	1.066	.07928
#1	16.268	.19213	.98911	.0120	.20500
#2	16.206	.19411	.98860	.0118	.20477
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-B MS Acquired: 7/16/2019 22:02:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20319**	**-.0112**	**.19999**	**.27215**	**-.0011**
Stddev	.00127	.0264	.00004	.00054	.0009
%RSD	.62391	235.3	.01764	.19789	83.21
#1	.20229	-.0298	.19997	.27177	-.0004
#2	.20409	.0074	.20002	.27253	-.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1440.5**	**1062.6**	**32998.**	**3877.3**
Stddev	2.4	.4	50.	6.5
%RSD	.16916	.03864	.15232	.16851
#1	1442.2	1062.3	32963.	3872.7
#2	1438.8	1062.9	33034.	3881.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.622%	91.945%	92.482%	98.223%
Range				

Sample Name: 480-156033-H-1-C MSD Acquired: 7/16/2019 22:06:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04897**	**9.6102**	**.20851**	**1.5539**	**.31191**
Stddev	.00018	.0233	.00508	.0003	.00036
%RSD	.37493	.24285	2.4385	.01893	.11462
#1	.04910	9.6267	.20491	1.5537	.31165
#2	.04884	9.5937	.21210	1.5541	.31216
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20486**	**156.88**	**.20215**	**-.0053**	**.19437**
Stddev	.00097	.48	.00025	.0013	.00013
%RSD	.47291	.30406	.12425	24.82	.06676
#1	.20417	156.54	.20233	-.0044	.19446
#2	.20554	157.21	.20198	-.0062	.19428
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19202**	**.20387**	**14.144**	**17.161**	**.20806**
Stddev	.00077	.00071	.067	.022	.00002
%RSD	.40262	.35035	.47443	.12723	.01033
#1	.19257	.20438	14.096	17.145	.20805
#2	.19148	.20337	14.191	17.176	.20808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-C MSD Acquired: 7/16/2019 22:06:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**53.800**	**2.5064**	**.20890**	**50.947**	**.21846**
Stddev	.029	.0089	.00041	.163	.00047
%RSD	.05330	.35583	.19560	.31915	.21342
#1	53.779	2.5127	.20918	50.832	.21879
#2	53.820	2.5001	.20861	51.062	.21814
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4374**	**.20072**	**62.71**	**.21724**	**.20013**
Stddev	.0026	.00009	.08	.00229	.00016
%RSD	.5998	.04473	.1278	1.0522	.07809
#1	-.4356	.20066	62.76	.21562	.20002
#2	-.4393	.20079	62.65	.21886	.20024
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.345**	**.19278**	**1.0112**	**.0147**	**.20445**
Stddev	.015	.00159	.0033	.0019	.00028
%RSD	.09439	.82648	.32404	12.68	.13601
#1	16.334	.19165	1.0089	.0134	.20464
#2	16.356	.19391	1.0135	.0160	.20425
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156033-H-1-C MSD Acquired: 7/16/2019 22:06:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20273**	**.0008**	**.19986**	**.27614**	**.0001**
Stddev	.00153	.0604	.00036	.00031	.0007
%RSD	.75441	7377.	.18206	.11193	569.1
#1	.20381	.0435	.19960	.27636	.0006
#2	.20164	-.0419	.20012	.27592	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1438.5**	**1063.7**	**32986.**	**3878.6**
Stddev	.3	.1	8.	19.6
%RSD	.02397	.00548	.02308	.50530
#1	1438.7	1063.7	32980.	3892.5
#2	1438.2	1063.6	32991.	3864.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.496%	92.039%	92.447%	98.256%
Range				

Sample Name: 480-156004-B-1-A Acquired: 7/16/2019 22:10:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.13588**	**-.00289**	**.07611**	**.01186**
Stddev	.00008	.01042	.00139	.00005	.00001
%RSD	17.185	7.6658	47.898	.06643	.05796
#1	-.00050	.14325	-.00191	.07615	.01185
#2	-.00039	.12852	-.00387	.07608	.01186
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**69.167**	**.00028**	**-.0044**	**.01015**
Stddev	.00006	.566	.00002	.0003	.00018
%RSD	18.335	.81850	8.1378	6.241	1.7930
#1	.00027	69.567	.00026	-.0042	.01028
#2	.00034	68.766	.00029	-.0045	.01002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**.00085**	**.02968**	**1.6621**	**.06578**
Stddev	.00040	.00022	.00357	.0151	.00027
%RSD	154.14	25.284	12.041	.90917	.40524
#1	.00054	.00070	.03221	1.6728	.06559
#2	-.00002	.00101	.02715	1.6515	.06597
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156004-B-1-A Acquired: 7/16/2019 22:10:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.446**	**2.7972**	**-.00001**	**7.6105**	**.05233**
Stddev	.022	.0041	.00005	.0188	.00042
%RSD	.05947	.14775	542.20	.24686	.80848
#1	37.431	2.8001	-.00004	7.5973	.05203
#2	37.462	2.7943	.00002	7.6238	.05263
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0048**	**.00015**	F **110.2**	**.00123**	**-.00233**
Stddev	.0030	.00027	.0	.00074	.00051
%RSD	62.54	182.00	.0242	60.452	22.006
#1	.0027	-.00004	110.1	.00070	-.00197
#2	.0069	.00034	110.2	.00175	-.00270
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.1075**	**-.00006**	**.15736**	**.0008**	**-.00001**
Stddev	.0080	.00085	.00027	.0096	.00021
%RSD	.15631	1460.5	.17180	1251.	3543.5
#1	5.1131	.00054	.15717	.0075	-.00015
#2	5.1018	-.00066	.15755	-.0060	.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156004-B-1-A Acquired: 7/16/2019 22:10:01 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00224**	**-.0009**	**-.00028**	**.06133**	**-.0007**
Stddev	.00200	.0209	.00012	.00103	.0015
%RSD	89.110	2206.	42.828	1.6799	206.7
#1	.00366	-.0158	-.00020	.06206	.0003
#2	.00083	.0139	-.00037	.06060	-.0017
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1521.7**	**1096.2**	**33959.**	**3916.5**
Stddev	1.9	.6	5.	13.6
%RSD	.12315	.05813	.01410	.34616
#1	1523.0	1096.6	33963.	3906.9
#2	1520.3	1095.7	33956.	3926.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.729%	94.854%	95.176%	99.216%
Range				

Sample Name: 480-156010-D-1-A Acquired: 7/16/2019 22:13:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**.14290**	**.00102**	**.07702**	**.02119**
Stddev	.00015	.01191	.00130	.00125	.00004
%RSD	153.01	8.3321	127.81	1.6198	.18380
#1	-.00020	.15132	.00010	.07614	.02117
#2	.00001	.13448	.00194	.07791	.02122
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00007**	**16.051**	**-.00009**	**-.0038**	**-.00000**
Stddev	.00006	.025	.00001	.0096	.00007
%RSD	87.549	.15837	8.7833	250.3	16533.
#1	.00012	16.033	-.00010	-.0106	-.00005
#2	.00003	16.069	-.00009	.0029	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**.00087**	**.16727**	**.83381**	**.00207**
Stddev	.00023	.00020	.00040	.01079	.00012
%RSD	86.064	22.799	.24063	1.2938	5.7354
#1	.00044	.00073	.16699	.82619	.00216
#2	.00011	.00100	.16756	.84144	.00199
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-A Acquired: 7/16/2019 22:13:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.4479**	**.21330**	**.00125**	**1.8358**	**.00099**
Stddev	.0106	.00055	.00015	.0112	.00004
%RSD	.73187	.25727	11.882	.60769	4.0686
#1	1.4554	.21369	.00136	1.8437	.00096
#2	1.4404	.21292	.00115	1.8280	.00102
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.324**	**-.00006**	**3.297**	**.00016**	**.00203**
Stddev	.007	.00076	.004	.00107	.00209
%RSD	.3089	1220.7	.1271	681.79	102.97
#1	2.329	-.00060	3.300	-.00060	.00351
#2	2.319	.00047	3.294	.00091	.00055
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.43937**	**-.00083**	**.10916**	**.0077**	**.00002**
Stddev	.00169	.00111	.00043	.0004	.00004
%RSD	.38520	133.98	.39844	4.768	157.67
#1	.44057	-.00004	.10947	.0074	.00005
#2	.43817	-.00161	.10885	.0080	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-A Acquired: 7/16/2019 22:13:49 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00075	.0167	-.00012	-.00087	-.0012
Stddev	.00034	.0199	.00016	.00079	.0001
%RSD	44.868	119.3	135.13	90.933	5.753
#1	.00099	.0307	-.00023	-.00143	-.0012
#2	.00052	.0026	-.00001	-.00031	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1573.4	1122.9	34828.	3966.1
Stddev	.6	.7	50.	7.1
%RSD	.03640	.06143	.14222	.17795
#1	1573.0	1122.4	34793.	3961.1
#2	1573.8	1123.4	34863.	3971.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.985%	97.166%	97.609%	100.47%
Range				

Sample Name: 480-156010-D-1-B MS Acquired: 7/16/2019 22:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04937**	**9.4861**	**.20782**	**.26958**	**.22299**
Stddev	.00018	.0210	.00234	.00010	.00013
%RSD	.36909	.22147	1.1278	.03628	.05933
#1	.04925	9.5010	.20617	.26951	.22308
#2	.04950	9.4713	.20948	.26964	.22290
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20365**	**25.681**	**.19700**	**-.0158**	**.18883**
Stddev	.00020	.029	.00088	.0064	.00042
%RSD	.09750	.11315	.44680	40.19	.22286
#1	.20379	25.702	.19638	-.0203	.18853
#2	.20351	25.661	.19762	-.0113	.18912
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19505**	**.19988**	**10.390**	**10.460**	**.19410**
Stddev	.00076	.00016	.030	.018	.00018
%RSD	.38943	.07901	.29231	.17376	.09189
#1	.19559	.19977	10.412	10.472	.19422
#2	.19452	.19999	10.369	10.447	.19397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-B MS Acquired: 7/16/2019 22:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.138**	**.42414**	**.20926**	**11.403**	**.20217**
Stddev	.006	.00101	.00046	.002	.00061
%RSD	.05211	.23797	.21942	.02104	.30227
#1	11.134	.42343	.20958	11.405	.20260
#2	11.142	.42485	.20893	11.401	.20174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.936**	**.19313**	**13.49**	**.21355**	**.19529**
Stddev	.004	.00024	.03	.00041	.00065
%RSD	.1897	.12596	.2482	.19021	.33057
#1	1.939	.19296	13.47	.21326	.19484
#2	1.934	.19330	13.51	.21384	.19575
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.8943**	**.18391**	**.30464**	**.0102**	**.20529**
Stddev	.0387	.00121	.00009	.0055	.00011
%RSD	.39100	.65879	.02925	54.51	.05520
#1	9.9216	.18476	.30471	.0141	.20521
#2	9.8669	.18305	.30458	.0062	.20537
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-B MS Acquired: 7/16/2019 22:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19605**	**-.0267**	**.20229**	**.20439**	**-.0004**
Stddev	.00107	.1490	.00105	.00320	.0012
%RSD	.54479	558.4	.51848	1.5670	317.8
#1	.19681	.0787	.20155	.20212	-.0012
#2	.19530	-.1321	.20303	.20665	.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1541.4**	**1105.1**	**34144.**	**3929.0**
Stddev	.9	.3	59.	5.8
%RSD	.05542	.03095	.17352	.14760
#1	1542.0	1104.8	34186.	3924.9
#2	1540.8	1105.3	34102.	3933.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.972%	95.620%	95.694%	99.533%
Range				

Sample Name: 480-156010-D-1-C MSD Acquired: 7/16/2019 22:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04835**	**9.4178**	**.20563**	**.26181**	**.21984**
Stddev	.00004	.0705	.00102	.00032	.00036
%RSD	.07350	.74823	.49509	.12099	.16214
#1	.04833	9.4677	.20491	.26204	.21958
#2	.04838	9.3680	.20635	.26159	.22009
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20305**	**24.435**	**.19604**	**-.0244**	**.18780**
Stddev	.00038	.004	.00032	.0139	.00017
%RSD	.18646	.01628	.16461	57.00	.09220
#1	.20332	24.438	.19627	-.0146	.18792
#2	.20279	24.432	.19581	-.0342	.18768
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19354**	**.19934**	**10.225**	**10.374**	**.19305**
Stddev	.00009	.00195	.043	.024	.00293
%RSD	.04667	.97785	.42244	.22817	1.5189
#1	.19347	.19796	10.255	10.390	.19512
#2	.19360	.20072	10.194	10.357	.19098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-C MSD Acquired: 7/16/2019 22:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.022**	**.39971**	**.20688**	**11.154**	**.20057**
Stddev	.013	.00160	.00008	.055	.00001
%RSD	.11851	.39942	.03805	.49671	.00380
#1	11.013	.40084	.20683	11.193	.20058
#2	11.031	.39858	.20694	11.115	.20057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.755**	**.19019**	**13.09**	**.21146**	**.19607**
Stddev	.003	.00206	.02	.00116	.00309
%RSD	.1455	1.0823	.1235	.54631	1.5776
#1	1.753	.18874	13.10	.21228	.19825
#2	1.757	.19165	13.08	.21064	.19388
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5966**	**.18430**	**.29348**	**.0060**	**.20372**
Stddev	.0580	.00234	.00087	.0070	.00105
%RSD	.60436	1.2709	.29498	116.5	.51470
#1	9.6376	.18595	.29410	.0109	.20298
#2	9.5556	.18264	.29287	.0011	.20447
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156010-D-1-C MSD Acquired: 7/16/2019 22:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19487**	**-.0079**	**.20177**	**.20225**	**-.0006**
Stddev	.00289	.0201	.00052	.00222	.0003
%RSD	1.4844	255.6	.25547	1.0955	58.07
#1	.19692	-.0221	.20213	.20382	-.0008
#2	.19282	.0064	.20141	.20068	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1546.2**	**1110.0**	**34327.**	**3935.3**
Stddev	1.3	.2	28.	7.3
%RSD	.08713	.02035	.08188	.18652
#1	1547.1	1110.1	34346.	3940.5
#2	1545.2	1109.8	34307.	3930.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.270%	96.046%	96.205%	99.693%
Range				

Sample Name: 480-156025-A-1-A Acquired: 7/16/2019 22:24:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00009**	**1.9279**	**.00390**	**4.7927**	**.00092**
Stddev	.00016	.0082	.00196	.0058	.00002
%RSD	179.36	.42574	50.170	.12066	1.7010
#1	.00002	1.9221	.00529	4.7968	.00093
#2	-.00021	1.9337	.00252	4.7886	.00091
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**1.3169**	**.00023**	**-.0266**	**.00069**
Stddev	.00000	.0021	.00006	.0366	.00006
%RSD	.16785	.15678	26.383	137.8	9.3358
#1	.00025	1.3184	.00019	-.0007	.00074
#2	.00025	1.3154	.00028	-.0524	.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.02233**	**.01615**	**.01119**	**1.5342**	**.00729**
Stddev	.00028	.00007	.00084	.0134	.00065
%RSD	1.2613	.43092	7.5492	.87289	8.9534
#1	.02253	.01620	.01178	1.5247	.00683
#2	.02214	.01610	.01059	1.5437	.00775
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156025-A-1-A Acquired: 7/16/2019 22:24:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.45376**	**.00160**	**.56406**	**302.06**	**.00474**
Stddev	.00287	.00008	.00170	.06	.00020
%RSD	.63190	4.7457	.30125	.01997	4.1514
#1	.45173	.00165	.56527	302.10	.00460
#2	.45579	.00154	.56286	302.01	.00488
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0152**	**-.00696**	F **110.0**	**.00410**	**.02439**
Stddev	.0040	.00073	.3	.00131	.00088
%RSD	26.22	10.432	.2411	32.007	3.6037
#1	.0180	-.00645	110.2	.00317	.02501
#2	.0124	-.00747	109.9	.00502	.02377
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.53433**	**.00020**	**.00635**	**.0032**	**.00068**
Stddev	.00462	.00041	.00009	.0030	.00011
%RSD	.86503	203.37	1.3511	95.18	15.351
#1	.53760	-.00009	.00641	.0053	.00061
#2	.53106	.00049	.00629	.0010	.00076
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156025-A-1-A Acquired: 7/16/2019 22:24:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**.0345**	**.00022**	**.07841**	**-.0002**
Stddev	.00030	.0271	.00011	.00219	.0015
%RSD	417.87	78.38	52.669	2.7914	926.0
#1	-.00028	.0154	.00014	.07996	-.0012
#2	.00014	.0537	.00030	.07686	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1455.2**	**1110.3**	**33046.**	**3931.0**
Stddev	.2	1.1	42.	10.9
%RSD	.01245	.09565	.12622	.27813
#1	1455.3	1109.5	33017.	3923.3
#2	1455.0	1111.0	33076.	3938.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	91.546%	96.071%	92.617%	99.584%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 22:28:51 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0030**	**48.640**	**1.0105**	**.99101**	**.97323**	**1.0119**	**48.655**	**.98790**
Stddev	.0016	.047	.0091	.00155	.00098	.0007	.049	.00006
%RSD	.16155	.09618	.90331	.15651	.10022	.06703	.10119	.00628
#1	1.0041	48.607	1.0040	.98991	.97254	1.0123	48.620	.98786
#2	1.0018	48.673	1.0169	.99211	.97392	1.0114	48.690	.98795
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.021**	**.98008**	**.98953**	**1.0256**	**51.728**	**49.894**	**.97944**	**49.019**
Stddev	.003	.00171	.00325	.0008	.131	.102	.00103	.075
%RSD	.2497	.17451	.32878	.07743	.25251	.20515	.10527	.15401
#1	1.022	.97888	.99183	1.0250	51.636	49.822	.97871	48.965
#2	1.019	.98129	.98723	1.0261	51.821	49.967	.98017	49.072
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0551**	**1.0243**	**50.026**	**1.0090**	**24.81**	**.99293**	**25.25**	**.98342**
Stddev	.0059	.0012	.045	.0011	.02	.00322	.06	.00233
%RSD	.56188	.11627	.09080	.11242	.0693	.32404	.2477	.23736
#1	1.0593	1.0234	49.993	1.0082	24.82	.99521	25.20	.98177
#2	1.0509	1.0251	50.058	1.0098	24.80	.99066	25.29	.98507
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 22:28:51 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0334	9.9611	.98175	1.0089	.9952	1.0409	1.0074	2.506
Stddev	.0008	.0408	.00322	.0018	.0141	.0043	.0003	.021
%RSD	.07653	.40969	.32843	.18019	1.420	.41216	.03138	.8226
#1	1.0329	9.9322	.97947	1.0076	.9852	1.0439	1.0071	2.521
#2	1.0340	9.9900	.98403	1.0102	1.005	1.0379	1.0076	2.492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	1.0443	1.0334	1.036
Stddev	.0023	.0040	.001
%RSD	.22105	.38437	.0886
#1	1.0460	1.0362	1.037
#2	1.0427	1.0306	1.035
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1480.7	1105.3	33453.	3874.9
Stddev	2.6	2.0	56.	5.2
%RSD	.17353	.17755	.16723	.13462
#1	1482.5	1106.7	33413.	3878.6
#2	1478.9	1103.9	33492.	3871.2

Sample Name: CCB-5392763 Acquired: 7/16/2019 22:32:32 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00990**	**-.00047**	F **.02193**	**.00004**	**.00003**	**.00102**
Stddev	.00011	.00515	.00043	.00034	.00001	.00001	.00174
%RSD	170.35	52.029	91.074	1.5458	32.386	23.409	170.33
#1	-.00001	.00626	-.00017	.02169	.00003	.00002	-.00021
#2	.00014	.01354	-.00078	.02217	.00005	.00003	.00225
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**-.0017**	**-.00021**	**-.00007**	**-.00013**	**.00035**	**.04295**
Stddev	.00003	.0108	.00032	.00025	.00018	.00033	.00895
%RSD	451.45	620.5	155.54	381.47	137.81	93.943	20.828
#1	.00002	-.0094	-.00044	.00011	-.00000	.00058	.03663
#2	-.00003	.0059	.00002	-.00024	-.00026	.00012	.04928
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**-.00046**	**-.00028**	**.00048**	**.05961**	**.00009**	**.0065**
Stddev	.00001	.00042	.00003	.00007	.00420	.00007	.0023
%RSD	14.520	92.552	10.067	15.107	7.0380	77.056	35.99
#1	-.00005	-.00075	-.00030	.00043	.05664	.00004	.0048
#2	-.00006	-.00016	-.00026	.00053	.06257	.00015	.0081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 22:32:32 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00123**	**-.0203**	**.00188**	**.00085**	**.07073**	**-.00004**	**-.00001**
Stddev	.00070	.0084	.00070	.00258	.00154	.00044	.00001
%RSD	56.624	41.49	37.168	302.10	2.1841	1107.8	51.999
#1	-.00074	-.0262	.00238	.00268	.07182	-.00035	-.00001
#2	-.00172	-.0143	.00139	-.00097	.06964	.00027	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0049**	**-.00009**	**-.00126**	**-.0007**	**-.00021**	**-.00072**	**-.0013**
Stddev	.0025	.00018	.00045	.0067	.00015	.00003	.0006
%RSD	49.79	192.92	35.870	1002.	73.334	3.6239	48.86
#1	.0067	.00003	-.00094	-.0054	-.00010	-.00070	-.0017
#2	.0032	-.00022	-.00158	.0040	-.00032	-.00074	-.0008
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1574.0**	**1132.8**	**35282.**	**3946.7**
Stddev	.5	1.7	47.	1.1
%RSD	.03093	.14701	.13337	.02899
#1	1573.7	1131.7	35315.	3947.5
#2	1574.4	1134.0	35248.	3945.9

Sample Name: CCVL-5395711 Acquired: 7/16/2019 22:36:24 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00587**	**.19732**	**.01219**	F **.03976**	**.00210**	**.00211**	**.48650**
Stddev	.00010	.01868	.00207	.00047	.00001	.00003	.00383
%RSD	1.7580	9.4662	16.950	1.1875	.69098	1.3917	.78767
#1	.00594	.18411	.01073	.04009	.00211	.00213	.48921
#2	.00580	.21053	.01365	.03942	.00209	.00209	.48379
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00201**	**-.0025**	**.00382**	**.00474**	**.00966**	**.05959**	**.53040**
Stddev	.00008	.0022	.00026	.00030	.00001	.00058	.00820
%RSD	4.1595	89.08	6.7864	6.2336	.11146	.98072	1.5455
#1	.00207	-.0009	.00364	.00495	.00965	.05918	.52461
#2	.00195	-.0040	.00401	.00453	.00966	.06000	.53620
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02888**	**.19716**	**.00313**	**.01011**	**1.0066**	**.01051**	**-.0186**
Stddev	.00011	.00064	.00004	.00008	.0003	.00000	.0015
%RSD	.36950	.32363	1.4091	.82628	.03262	.03520	8.080
#1	.02880	.19671	.00310	.01017	1.0068	.01051	-.0196
#2	.02896	.19761	.00316	.01005	1.0063	.01051	-.0175
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 22:36:24 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01005**	**.1757**	**.02159**	**.02658**	**.54130**	**.00895**	**.00488**
Stddev	.00178	.0013	.00090	.00052	.00621	.00078	.00003
%RSD	17.686	.7619	4.1732	1.9387	1.1468	8.7558	.70162
#1	.01131	.1748	.02222	.02622	.54569	.00950	.00490
#2	.00880	.1767	.02095	.02695	.53691	.00839	.00485
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.00506**	**.02083**	**.0024**	**.00447**	**.01089**	**-.0006**
Stddev	.0006	.00060	.00121	.0219	.00002	.00094	.0004
%RSD	13.16	11.866	5.8313	921.3	.54657	8.6383	68.95
#1	.0040	.00548	.01997	.0179	.00445	.01155	-.0009
#2	.0048	.00463	.02169	-.0131	.00448	.01022	-.0003
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1586.1**	**1138.7**	**35286.**	**3964.2**
Stddev	1.2	1.5	92.	12.6
%RSD	.07474	.13416	.26175	.31767
#1	1586.9	1139.8	35221.	3973.1
#2	1585.3	1137.6	35351.	3955.2

Sample Name: 480-156026-B-2-A Acquired: 7/16/2019 22:40:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00280**	**.24645**	**.00720**	**.33969**	**4.5879**
Stddev	.00046	.00584	.00648	.00089	.0020
%RSD	16.427	2.3700	89.968	.26139	.04280
#1	-.00312	.25058	.00262	.34032	4.5865
#2	-.00247	.24232	.01178	.33907	4.5893
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00027**	F **3537.5**	**.00042**	**.0440**	**.00076**
Stddev	.00001	12.0	.00025	.0063	.00029
%RSD	2.2539	.33796	58.229	14.32	38.551
#1	-.00026	3529.1	.00060	.0396	.00097
#2	-.00027	3546.0	.00025	.0485	.00055
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		900.00			
Low Limit		-.50000			

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00041**	**.15103**	**6.9861**	F **2985.3**	**.96964**
Stddev	.00071	.00053	.0114	56.8	.00245
%RSD	172.64	.35002	.16378	1.9036	.25293
#1	-.00009	.15065	6.9942	3025.5	.96791
#2	.00091	.15140	6.9780	2945.1	.97137
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-156026-B-2-A Acquired: 7/16/2019 22:40:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.66820**	**.30478**	**.14208**	F **4918.6**	**.05915**
Stddev	.00920	.00042	.00060	31.7	.00124
%RSD	1.3767	.13650	.42132	.64431	2.0959
#1	.66170	.30449	.14250	4941.1	.06003
#2	.67471	.30507	.14166	4896.2	.05828
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.1017**	**.09836**	F **278.8**	**.00833**	**-.00040**
Stddev	.0024	.00070	.9	.00141	.01032
%RSD	2.322	.71199	.3106	16.953	2605.9
#1	-.1000	.09787	279.4	.00733	.00690
#2	-.1034	.09886	278.2	.00933	-.00770
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.0571**	**.00571**	F **33.685**	**.0068**	F **-.00529**
Stddev	.0181	.00034	.012	.0094	.00003
%RSD	.88197	6.0317	.03430	137.9	.59918
#1	2.0443	.00596	33.677	.0002	-.00526
#2	2.0700	.00547	33.693	.0134	-.00531
Check ?	Chk Pass	Chk Pass	Chk Fail	None	Chk Fail
High Limit			9.0000		4.5000
Low Limit			-.00500		-.00500

Sample Name: 480-156026-B-2-A Acquired: 7/16/2019 22:40:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00361**	**.1026**	**.00141**	**.09761**	**-.0003**
Stddev	.00445	.0162	.00103	.00089	.0001
%RSD	123.39	15.82	73.184	.91674	41.60
#1	.00046	.1141	.00068	.09698	-.0002
#2	.00676	.0911	.00215	.09825	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**884.22**	**804.68**	**23473.**	**3234.8**
Stddev	1.33	.59	17.	6.8
%RSD	.15028	.07298	.07073	.21126
#1	883.28	804.26	23485.	3230.0
#2	885.15	805.10	23461.	3239.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	55.626%	69.629%	65.787%	81.946%
Range				

Sample Name: 480-155976-B-1-A Acquired: 7/16/2019 22:44:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.19248**	**.00009**	**1.1578**	**.01696**
Stddev	.00009	.00319	.00266	.0016	.00004
%RSD	425.78	1.6592	2834.3	.13659	.25809
#1	-.00009	.19474	-.00179	1.1567	.01693
#2	.00004	.19022	.00197	1.1589	.01699
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**9.5448**	**.00011**	**-.0040**	**.00102**
Stddev	.00003	.0376	.00013	.0138	.00014
%RSD	55.895	.39436	120.42	347.4	14.168
#1	-.00006	9.5182	.00002	.0058	.00112
#2	-.00003	9.5714	.00020	-.0137	.00092
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08599**	**.14735**	**1.8438**	**35.338**	**.00315**
Stddev	.00026	.00024	.0171	.088	.00028
%RSD	.30548	.16432	.92842	.24772	9.0548
#1	.08617	.14718	1.8317	35.276	.00294
#2	.08580	.14752	1.8559	35.399	.00335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155976-B-1-A Acquired: 7/16/2019 22:44:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.8416**	**.04827**	**.00338**	**63.282**	**.10879**
Stddev	.0075	.00021	.00014	.371	.00019
%RSD	.40694	.44054	4.0521	.58656	.17789
#1	1.8469	.04811	.00348	63.019	.10893
#2	1.8363	.04842	.00328	63.544	.10866
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**7.831**	**.00284**	**7.234**	**.00013**	**-.00288**
Stddev	.007	.00082	.048	.00145	.00025
%RSD	.0909	28.835	.6666	1088.9	8.5792
#1	7.836	.00226	7.268	.00116	-.00270
#2	7.826	.00342	7.200	-.00089	-.00305
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.6872**	**.00176**	**.04477**	**.0008**	**.00927**
Stddev	.0029	.00073	.00018	.0072	.00012
%RSD	.17168	41.592	.40127	864.4	1.2913
#1	1.6851	.00228	.04464	-.0042	.00936
#2	1.6892	.00124	.04490	.0059	.00919
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155976-B-1-A Acquired: 7/16/2019 22:44:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00002	-.0059	.00067	.04597	-.0012
Stddev	.00143	.0499	.00002	.00071	.0007
%RSD	6962.2	847.3	3.5846	1.5480	57.40
#1	.00103	.0294	.00065	.04547	-.0007
#2	-.00099	-.0411	.00068	.04647	-.0016
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1514.4	1093.0	33884.	3965.8
Stddev	1.8	.1	22.	22.4
%RSD	.11591	.01094	.06435	.56410
#1	1515.6	1092.9	33868.	3981.6
#2	1513.2	1093.1	33899.	3950.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.272%	94.578%	94.964%	100.46%
Range				

Sample Name: 480-155979-F-1-B Acquired: 7/16/2019 22:48:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00093**	**.03726**	**.06537**	**9.8270**	**.57950**
Stddev	.00054	.00214	.00007	.0011	.00209
%RSD	58.445	5.7442	.11379	.01151	.36071
#1	-.00055	.03877	.06532	9.8262	.57802
#2	-.00131	.03574	.06543	9.8278	.58098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**122.58**	**-.00006**	**-.0127**	**.01520**
Stddev	.00007	.02	.00003	.0005	.00000
%RSD	926.91	.01314	54.814	4.213	.01944
#1	-.00005	122.59	-.00004	-.0123	.01520
#2	.00004	122.57	-.00008	-.0131	.01520
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.03736**	**-.00044**	**7.8977**	**336.64**	**.24638**
Stddev	.00046	.00052	.0215	.78	.00020
%RSD	1.2307	119.68	.27203	.23193	.07943
#1	.03703	-.00080	7.8825	337.19	.24652
#2	.03768	-.00007	7.9129	336.09	.24624
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155979-F-1-B Acquired: 7/16/2019 22:48:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**94.818**	**.26857**	**.00434**	**890.98**	**.09682**
Stddev	.131	.00165	.00025	.87	.00040
%RSD	.13776	.61549	5.6461	.09787	.41436
#1	94.910	.26741	.00417	891.59	.09710
#2	94.725	.26974	.00451	890.36	.09653
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.278**	**.00339**	**14.16**	**.00269**	**-.01051**
Stddev	.002	.00176	.02	.00028	.00098
%RSD	.1288	51.857	.1068	10.590	9.3233
#1	1.276	.00215	14.15	.00249	-.00982
#2	1.279	.00463	14.17	.00289	-.01120
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**20.281**	**.00648**	**1.0337**	**.0065**	**.03518**
Stddev	.037	.00027	.0008	.0110	.00019
%RSD	.18077	4.1739	.08158	169.6	.54641
#1	20.255	.00667	1.0343	-.0013	.03532
#2	20.307	.00629	1.0331	.0143	.03504
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155979-F-1-B Acquired: 7/16/2019 22:48:18 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00260**	**-.0338**	**.01604**	**-.00039**	**.0310**
Stddev	.00032	.0309	.00074	.00024	.0004
%RSD	12.256	91.42	4.5865	60.808	1.135
#1	.00238	-.0557	.01657	-.00056	.0313
#2	.00283	-.0120	.01552	-.00022	.0308
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1268.3**	**999.45**	**29844.**	**3752.4**
Stddev	.3	1.07	21.	.4
%RSD	.02259	.10749	.07105	.01194
#1	1268.1	1000.2	29859.	3752.0
#2	1268.5	998.69	29829.	3752.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.788%	86.483%	83.641%	95.058%
Range				

Sample Name: 480-156032-E-1-A Acquired: 7/16/2019 22:52:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00044**	**.11246**	**.05808**	**10.889**	**.34950**
Stddev	.00044	.00012	.00058	.002	.00052
%RSD	100.76	.10634	.99562	.01543	.14834
#1	-.00076	.11238	.05848	10.890	.34914
#2	-.00013	.11255	.05767	10.888	.34987
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00004**	**137.33**	**-.00005**	**-.0095**	**.02307**
Stddev	.00002	.58	.00021	.0011	.00009
%RSD	38.125	.42486	456.74	11.79	.38636
#1	.00003	137.74	-.00019	-.0087	.02313
#2	.00006	136.92	.00010	-.0103	.02300
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09030**	**.00233**	**13.228**	**383.98**	**.08406**
Stddev	.00063	.00046	.090	3.02	.00050
%RSD	.70205	19.519	.67882	.78763	.59862
#1	.08985	.00265	13.291	386.12	.08441
#2	.09075	.00201	13.164	381.85	.08370
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-E-1-A Acquired: 7/16/2019 22:52:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**66.099**	**.53715**	**.00449**	F **1158.9**	**.15784**
Stddev	.024	.00030	.00028	8.6	.00017
%RSD	.03668	.05529	6.2802	.73857	.10681
#1	66.082	.53694	.00429	1164.9	.15772
#2	66.116	.53736	.00469	1152.8	.15796
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.789**	**.00644**	**19.84**	**.00561**	**-.00901**
Stddev	.007	.00092	.00	.00383	.00089
%RSD	.1747	14.355	.0083	68.330	9.9277
#1	3.785	.00579	19.84	.00832	-.00964
#2	3.794	.00709	19.84	.00290	-.00837
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.940**	**.02008**	**1.1366**	**.0059**	**.07098**
Stddev	.085	.00106	.0079	.0115	.00008
%RSD	.50146	5.2589	.69351	196.4	.10696
#1	17.000	.02082	1.1421	-.0023	.07103
#2	16.880	.01933	1.1310	.0140	.07093
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-E-1-A Acquired: 7/16/2019 22:52:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00220**	**-.0027**	**.03853**	**.01396**	**.0149**
Stddev	.00028	.0797	.00035	.00002	.0004
%RSD	12.485	2958.	.91280	.12156	2.457
#1	.00240	-.0590	.03829	.01395	.0146
#2	.00201	.0537	.03878	.01397	.0151
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1246.3**	**993.28**	**29619.**	**3754.7**
Stddev	.3	.34	66.	19.3
%RSD	.02339	.03423	.22328	.51340
#1	1246.5	993.52	29666.	3741.1
#2	1246.1	993.04	29572.	3768.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.404%	85.949%	83.012%	95.117%
Range				

Sample Name: 480-156014-E-1-A Acquired: 7/16/2019 22:56:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**2.6590**	**.00704**	**.38814**	**.27684**
Stddev	.00050	.0002	.00268	.00354	.00034
%RSD	2473.2	.00803	38.095	.91255	.12371
#1	.00037	2.6589	.00894	.39065	.27659
#2	-.00033	2.6592	.00514	.38564	.27708
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00008**	**53.051**	**.00112**	**.0046**	**.00352**
Stddev	.00001	.233	.00001	.0321	.00015
%RSD	9.7630	.43935	.45542	694.1	4.2330
#1	.00008	52.886	.00113	-.0181	.00342
#2	.00007	53.215	.00112	.0273	.00363
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01452**	**3.7168**	**18.187**	**302.16**	**.01178**
Stddev	.00007	.0126	.025	.21	.00006
%RSD	.47008	.33889	.13911	.06954	.54460
#1	.01448	3.7079	18.169	302.31	.01173
#2	.01457	3.7257	18.204	302.01	.01182
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156014-E-1-A Acquired: 7/16/2019 22:56:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**45.736**	**1.8754**	**.01492**	**345.07**	**.02570**
Stddev	.050	.0098	.00022	.13	.00001
%RSD	.10889	.51991	1.4560	.03873	.04756
#1	45.771	1.8685	.01507	345.17	.02569
#2	45.701	1.8823	.01476	344.98	.02571
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**147.5**	**.01587**	**53.96**	**.00007**	**.00222**
Stddev	.1	.00048	.05	.00009	.00558
%RSD	.0941	3.0484	.0885	121.26	251.57
#1	147.4	.01553	54.00	.00013	.00616
#2	147.6	.01621	53.93	.00001	-.00173
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.991**	**.00800**	**.18445**	**.0122**	**.04454**
Stddev	.004	.00180	.00012	.0062	.00014
%RSD	.02026	22.451	.06510	51.31	.32466
#1	17.993	.00927	.18453	.0166	.04444
#2	17.988	.00673	.18436	.0077	.04464
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156014-E-1-A Acquired: 7/16/2019 22:56:05 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00575**	**-.0350**	**.00570**	**.97890**	**.0015**
Stddev	.00159	.0384	.00010	.00023	.0003
%RSD	27.721	109.8	1.6823	.02358	19.54
#1	-.00688	-.0078	.00577	.97907	.0018
#2	-.00463	-.0621	.00563	.97874	.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1368.4**	**1037.4**	**31712.**	**3881.9**
Stddev	.5	2.3	90.	11.0
%RSD	.03764	.22286	.28511	.28461
#1	1368.0	1035.8	31776.	3889.7
#2	1368.8	1039.1	31648.	3874.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.087%	89.770%	88.876%	98.340%
Range				

Sample Name: 480-156014-E-2-A Acquired: 7/16/2019 22:59:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**2.2498**	**.00357**	**.19728**	**.11296**
Stddev	.00015	.0148	.00175	.00032	.00011
%RSD	35.736	.65907	48.833	.16345	.10035
#1	-.00032	2.2393	.00234	.19751	.11288
#2	-.00054	2.2602	.00481	.19705	.11304
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00013**	**52.949**	**.00050**	**-.0199**	**.00219**
Stddev	.00003	.071	.00022	.0072	.00011
%RSD	26.888	.13324	44.552	36.02	5.1261
#1	.00015	52.999	.00034	-.0148	.00211
#2	.00010	52.899	.00065	-.0249	.00227
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00760**	**.28266**	**6.8228**	**272.50**	**.01063**
Stddev	.00051	.00066	.0390	.45	.00048
%RSD	6.7590	.23446	.57174	.16368	4.5569
#1	.00796	.28219	6.8504	272.19	.01029
#2	.00723	.28313	6.7952	272.82	.01098
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156014-E-2-A Acquired: 7/16/2019 22:59:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**38.353**	**2.2656**	**.00363**	**313.57**	**.01197**
Stddev	.026	.0068	.00030	.49	.00027
%RSD	.06818	.30020	8.2992	.15524	2.2438
#1	38.334	2.2608	.00384	313.91	.01216
#2	38.371	2.2704	.00342	313.22	.01178
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**132.5**	**.00657**	**30.33**	**.00069**	**-.00505**
Stddev	.2	.00092	.04	.00203	.00378
%RSD	.1254	13.994	.1268	295.39	74.769
#1	132.4	.00722	30.36	-.00075	-.00238
#2	132.6	.00592	30.30	.00212	-.00772
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.332**	**-.00057**	**.12499**	**.0073**	**.02763**
Stddev	.220	.00072	.00003	.0067	.00028
%RSD	1.1362	124.75	.02025	91.76	1.0172
#1	19.488	-.00007	.12500	.0026	.02782
#2	19.177	-.00108	.12497	.0121	.02743
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156014-E-2-A Acquired: 7/16/2019 22:59:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**-.0043**	**.00406**	**.15810**	**-.0005**
Stddev	.00241	.0871	.00018	.00026	.0007
%RSD	3787.3	2049.	4.3334	.16428	131.8
#1	-.00177	-.0659	.00418	.15828	-.0010
#2	.00164	.0574	.00393	.15791	-.0000
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1375.1**	**1042.7**	**31717.**	**3862.0**
Stddev	2.3	.4	71.	6.6
%RSD	.16572	.03630	.22317	.17008
#1	1373.5	1042.4	31767.	3857.4
#2	1376.7	1043.0	31667.	3866.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.507%	90.226%	88.891%	97.836%
Range				

Sample Name: 480-156032-E-2-A Acquired: 7/16/2019 23:03:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00070**	**.09326**	**.05970**	**10.960**	**.31265**
Stddev	.00021	.01163	.00363	.030	.00007
%RSD	30.475	12.471	6.0795	.27808	.02299
#1	-.00055	.08503	.05713	10.982	.31270
#2	-.00086	.10148	.06226	10.939	.31260
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**151.92**	**.00011**	**-.0211**	**.02357**
Stddev	.00000	.59	.00000	.0053	.00022
%RSD	3.2699	.38940	4.5242	24.89	.93760
#1	-.00002	151.50	.00011	-.0248	.02342
#2	-.00002	152.34	.00010	-.0174	.02373
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.08562**	**.00174**	**11.563**	**388.30**	**.08440**
Stddev	.00004	.00015	.020	.56	.00088
%RSD	.05042	8.4410	.16889	.14304	1.0390
#1	.08565	.00185	11.549	387.90	.08378
#2	.08559	.00164	11.577	388.69	.08502
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-E-2-A Acquired: 7/16/2019 23:03:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**67.281**	**.53980**	**.00443**	F **1160.7**	**.15966**
Stddev	.073	.00076	.00020	5.3	.00012
%RSD	.10812	.14149	4.4720	.45356	.07601
#1	67.332	.53926	.00457	1157.0	.15957
#2	67.230	.54034	.00429	1164.4	.15975
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.787**	**.00555**	**20.41**	**.00687**	**-.01115**
Stddev	.007	.00332	.06	.00081	.00175
%RSD	.1854	59.892	.2808	11.767	15.707
#1	3.782	.00320	20.45	.00630	-.00991
#2	3.792	.00789	20.37	.00744	-.01239
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.658**	**.01680**	**1.1890**	**.0030**	**.05384**
Stddev	.103	.00114	.0011	.0098	.00007
%RSD	.61583	6.8125	.09212	327.3	.13045
#1	16.585	.01599	1.1882	.0099	.05389
#2	16.730	.01761	1.1898	-.0039	.05379
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-E-2-A Acquired: 7/16/2019 23:03:46 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00409**	**-.0021**	**.03517**	**.01289**	**.0154**
Stddev	.00144	.0287	.00014	.00043	.0016
%RSD	35.196	1395.	.40020	3.3449	10.38
#1	.00511	-.0224	.03508	.01259	.0143
#2	.00307	.0183	.03527	.01320	.0165
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1246.6**	**996.32**	**29659.**	**3761.4**
Stddev	6.2	5.88	49.	13.1
%RSD	.49853	.58996	.16385	.34859
#1	1242.2	992.17	29693.	3770.7
#2	1251.0	1000.5	29624.	3752.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.424%	86.212%	83.123%	95.286%
Range				

Sample Name: 480-156032-D-3-A Acquired: 7/16/2019 23:07:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00078**	**.10891**	**.07807**	**10.784**	**.32048**
Stddev	.00059	.01151	.00175	.023	.00035
%RSD	75.128	10.569	2.2398	.21030	.10894
#1	-.00037	.10077	.07931	10.800	.32023
#2	-.00120	.11705	.07683	10.768	.32073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**145.67**	**-.00008**	**-.0149**	**.02340**
Stddev	.00009	.25	.00019	.0032	.00007
%RSD	273.79	.17020	218.65	21.24	.31146
#1	.00009	145.84	-.00022	-.0127	.02345
#2	-.00003	145.49	.00005	-.0171	.02335
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.09155**	**.00896**	**11.438**	**388.65**	**.08276**
Stddev	.00082	.00082	.058	1.41	.00151
%RSD	.89552	9.1365	.51100	.36370	1.8221
#1	.09097	.00838	11.479	389.64	.08383
#2	.09213	.00953	11.396	387.65	.08170
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-D-3-A Acquired: 7/16/2019 23:07:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**65.855**	**.53215**	**.00421**	F **1156.4**	**.15816**
Stddev	.024	.00107	.00030	4.1	.00065
%RSD	.03669	.20153	7.1949	.35197	.40870
#1	65.872	.53139	.00442	1159.3	.15770
#2	65.837	.53290	.00399	1153.5	.15862
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.476**	**.00383**	**19.88**	**.00898**	**-.00890**
Stddev	.004	.00101	.06	.00202	.00129
%RSD	.1048	26.412	.3014	22.526	14.454
#1	3.474	.00454	19.92	.00755	-.00981
#2	3.479	.00311	19.83	.01041	-.00799
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**16.146**	**.02047**	**1.1184**	**.0109**	**.06980**
Stddev	.071	.00051	.0048	.0041	.00067
%RSD	.44256	2.4741	.43285	37.37	.95783
#1	16.196	.02011	1.1218	.0137	.06933
#2	16.095	.02082	1.1149	.0080	.07027
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156032-D-3-A Acquired: 7/16/2019 23:07:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00303**	**-.0121**	**.05275**	**.05349**	**.0241**
Stddev	.00454	.0052	.00018	.00124	.0000
%RSD	149.87	43.33	.33687	2.3135	.1756
#1	.00624	-.0158	.05263	.05261	.0241
#2	-.00018	-.0084	.05288	.05436	.0241
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1243.7**	**991.27**	**29631.**	**3761.7**
Stddev	.7	2.22	79.	14.3
%RSD	.05347	.22352	.26501	.38083
#1	1243.3	989.70	29686.	3751.5
#2	1244.2	992.84	29575.	3771.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	78.244%	85.775%	83.044%	95.293%
Range				

Sample Name: blank Acquired: 7/16/2019 23:11:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00014**	**.00078**	**-.00230**	**.03295**	**-.00001**
Stddev	.00036	.00288	.00004	.00133	.00000
%RSD	258.97	370.60	1.8155	4.0221	21.325
#1	-.00012	.00282	-.00233	.03388	-.00001
#2	.00040	-.00126	-.00227	.03201	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**-.00417**	**-.00008**	**.0000**	**.00004**
Stddev	.00000	.00180	.00003	.0015	.00009
%RSD	39.004	43.230	44.569	23150.	196.68
#1	-.00000	-.00290	-.00005	-.0011	-.00002
#2	-.00001	-.00545	-.00010	.0011	.00010
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00052**	**-.00009**	**.00087**	**.45442**	**-.00037**
Stddev	.00008	.00001	.00154	.01055	.00015
%RSD	14.961	9.2551	176.29	2.3212	41.002
#1	.00058	-.00009	.00196	.46188	-.00047
#2	.00047	-.00010	-.00022	.44696	-.00026
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:11:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00138**	**-.00023**	**-.00023**	**.37182**	**.00037**
Stddev	.00028	.00008	.00011	.01392	.00019
%RSD	20.109	34.191	48.971	3.7450	52.157
#1	.00158	-.00017	-.00031	.38166	.00051
#2	.00119	-.00028	-.00015	.36197	.00024
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0062**	**.00046**	**-.0215**	**.00148**	**.00170**
Stddev	.0016	.00080	.0029	.00137	.00060
%RSD	26.04	173.19	13.37	92.737	35.094
#1	.0051	.00102	-.0195	.00245	.00128
#2	.0073	-.00010	-.0235	.00051	.00213
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.13899**	**-.00096**	**.00003**	**.0040**	**-.00008**
Stddev	.00582	.00077	.00002	.0031	.00016
%RSD	4.1882	79.990	49.402	77.55	205.63
#1	.14310	-.00042	.00002	.0018	.00004
#2	.13487	-.00150	.00004	.0061	-.00019
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:11:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00119**	**-.0015**	**-.00047**	**-.00074**	**-.0008**
Stddev	.00099	.0325	.00014	.00094	.0003
%RSD	83.161	2151.	29.826	126.23	40.09
#1	.00188	.0215	-.00037	-.00141	-.0006
#2	.00049	-.0245	-.00057	-.00008	-.0011
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1584.5**	**1140.3**	**35376.**	**3962.4**
Stddev	.1	1.2	32.	8.9
%RSD	.00539	.10636	.08961	.22497
#1	1584.6	1141.2	35399.	3956.1
#2	1584.4	1139.4	35354.	3968.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.682%	98.671%	99.147%	100.38%
Range				

Sample Name: CCV-5385806 Acquired: 7/16/2019 23:15:19 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99396**	**48.067**	**1.0212**	**.99356**	**.96655**	**1.0139**	**48.396**	**.98444**
Stddev	.00193	.195	.0009	.00107	.00342	.0029	.041	.00078
%RSD	.19457	.40554	.08482	.10812	.35387	.28646	.08440	.07921
#1	.99260	47.930	1.0206	.99280	.96413	1.0119	48.367	.98389
#2	.99533	48.205	1.0218	.99432	.96897	1.0160	48.425	.98500
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.038**	**.97801**	**.98262**	**1.0369**	**51.644**	**50.181**	**.96992**	**48.699**
Stddev	.011	.00098	.00199	.0052	.067	.120	.00239	.001
%RSD	1.024	.10005	.20257	.50516	.12998	.24009	.24600	.00177
#1	1.046	.97732	.98121	1.0406	51.691	50.096	.96823	48.700
#2	1.031	.97871	.98403	1.0332	51.596	50.266	.97161	48.699
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0632**	**1.0271**	**49.992**	**1.0137**	**24.69**	**.99218**	**25.45**	**.97547**
Stddev	.0009	.0012	.155	.0011	.02	.00031	.06	.00455
%RSD	.08237	.11326	.31030	.10486	.0616	.03150	.2192	.46606
#1	1.0638	1.0280	49.882	1.0145	24.68	.99240	25.49	.97225
#2	1.0626	1.0263	50.101	1.0130	24.70	.99195	25.41	.97868
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/16/2019 23:15:19 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0424**	**9.9986**	**.97944**	**1.0092**	**.9875**	**1.0516**	**1.0056**	**2.517**
Stddev	.0177	.0020	.00429	.0029	.0008	.0014	.0018	.000
%RSD	1.7011	.01960	.43840	.28723	.0792	.13363	.18287	.0100
#1	1.0549	9.9972	.98247	1.0071	.9880	1.0526	1.0069	2.517
#2	1.0298	10.0000	.97640	1.0112	.9869	1.0506	1.0043	2.517
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0530**	**1.0382**	**1.032**
Stddev	.0029	.0050	.001
%RSD	.27513	.48622	.0783
#1	1.0550	1.0418	1.031
#2	1.0509	1.0346	1.033
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1475.3**	**1100.2**	**33413.**	**3872.9**
Stddev	.7	.1	44.	6.2
%RSD	.04988	.00740	.13133	.15952
#1	1474.8	1100.1	33382.	3877.3
#2	1475.8	1100.3	33444.	3868.6

Sample Name: CCB-5392763 Acquired: 7/16/2019 23:19:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00005**	**.01297**	**-.00364**	F **.02637**	**.00003**	**-.00004**	**-.00113**
Stddev	.00053	.00394	.00500	.00026	.00001	.00003	.00232
%RSD	972.21	30.369	137.53	.97002	30.464	58.398	205.38
#1	.00032	.01018	-.00010	.02619	.00002	-.00003	.00051
#2	-.00043	.01575	-.00717	.02656	.00003	-.00006	-.00277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**-.0095**	**-.00017**	**.00028**	**.00007**	**.00003**	**.15212**
Stddev	.00016	.0106	.00011	.00019	.00003	.00184	.00778
%RSD	783.00	111.1	64.851	66.094	38.037	6913.6	5.1139
#1	.00009	-.0020	-.00009	.00015	.00005	-.00127	.15762
#2	-.00014	-.0170	-.00024	.00041	.00009	.00133	.14662
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**-.00190**	**-.00031**	**.00067**	**.15563**	**.00039**	**.0071**
Stddev	.00067	.00309	.00004	.00003	.00163	.00012	.0016
%RSD	141.50	162.75	12.620	4.1048	1.0496	31.113	23.12
#1	-.00094	-.00409	-.00034	.00069	.15678	.00048	.0083
#2	.00000	.00029	-.00028	.00065	.15447	.00031	.0060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/16/2019 23:19:00 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00015**	**-.0206**	**.00071**	**.00347**	**.09554**	**-.00064**	**.00002**
Stddev	.00029	.0005	.00045	.00354	.02060	.00027	.00005
%RSD	188.84	2.467	62.905	102.07	21.564	42.488	192.93
#1	-.00036	-.0209	.00039	.00598	.11011	-.00083	.00006
#2	.00005	-.0202	.00102	.00097	.08097	-.00045	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0127**	**-.00012**	**-.00002**	**-.0316**	**-.00037**	**-.00260**	**-.0002**
Stddev	.0014	.00003	.00055	.0250	.00025	.00019	.0008
%RSD	11.07	24.609	2422.5	79.11	67.112	7.1141	471.8
#1	.0137	-.00014	-.00042	-.0492	-.00019	-.00247	.0004
#2	.0117	-.00010	.00037	-.0139	-.00054	-.00273	-.0007
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1569.2**	**1129.2**	**35196.**	**3953.7**
Stddev	1.1	1.3	166.	20.6
%RSD	.06884	.11389	.47251	.52044
#1	1569.9	1128.3	35313.	3939.2
#2	1568.4	1130.1	35078.	3968.3

Sample Name: CCVL-5395711 Acquired: 7/16/2019 23:22:52 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00574**	**.20148**	**.01371**	F **.04296**	**.00209**	**.00205**	**.49233**
Stddev	.00023	.00319	.00100	.00051	.00001	.00000	.00133
%RSD	3.9894	1.5816	7.3105	1.1760	.41072	.05941	.27062
#1	.00590	.19922	.01300	.04331	.00208	.00206	.49139
#2	.00558	.20373	.01441	.04260	.00210	.00205	.49327
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00189**	**-.0027**	**.00372**	**.00420**	**.00942**	**.05208**	**.60568**
Stddev	.00004	.0138	.00003	.00000	.00030	.00170	.02464
%RSD	2.3447	504.0	.78032	.00023	3.1350	3.2584	4.0679
#1	.00186	.0070	.00369	.00420	.00963	.05088	.62310
#2	.00193	-.0125	.00374	.00420	.00921	.05328	.58826
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02886**	**.19761**	**.00304**	**.01008**	**1.0994**	**.01052**	**-.0171**
Stddev	.00006	.00307	.00003	.00005	.0035	.00009	.0003
%RSD	.21513	1.5510	.85096	.49150	.32170	.85590	1.834
#1	.02882	.19978	.00306	.01005	1.0969	.01045	-.0169
#2	.02891	.19545	.00302	.01012	1.1019	.01058	-.0174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/16/2019 23:22:52 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.01017**	**.1775**	**.02221**	**.02652**	**.56182**	**.00993**	**.00491**
Stddev	.00213	.0030	.00076	.00840	.00454	.00053	.00002
%RSD	20.905	1.711	3.4394	31.678	.80882	5.3391	.30677
#1	.00867	.1797	.02275	.02058	.55861	.00955	.00492
#2	.01168	.1754	.02167	.03247	.56504	.01030	.00490
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0030**	**.00482**	**.02093**	**-.0307**	**.00450**	**.01082**	**-.0003**
Stddev	.0003	.00037	.00127	.0236	.00002	.00019	.0013
%RSD	11.54	7.6871	6.0897	77.05	.34604	1.7564	500.0
#1	.0027	.00456	.02002	-.0140	.00451	.01096	.0007
#2	.0032	.00508	.02183	-.0474	.00449	.01069	-.0012
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1591.4**	**1142.8**	**35076.**	**3922.2**
Stddev	1.3	.9	103.	1.0
%RSD	.08078	.07778	.29264	.02450
#1	1592.4	1143.4	35148.	3921.5
#2	1590.5	1142.2	35003.	3922.9

Sample Name: 480-155979-F-2-B Acquired: 7/16/2019 23:26:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.38076**	**.19326**	F **33.476**	**.70964**
Stddev	.00020	.00397	.00049	.004	.00038
%RSD	46.318	1.0427	.25571	.01192	.05353
#1	.00028	.37795	.19361	33.473	.70937
#2	.00056	.38357	.19291	33.479	.70991
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				18.000	
Low Limit				-.02000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**57.109**	**.00003**	**-.0205**	**.06704**
Stddev	.00011	.099	.00015	.0056	.00019
%RSD	350.39	.17411	608.40	27.24	.28630
#1	.00005	57.179	-.00008	-.0244	.06718
#2	-.00011	57.039	.00013	-.0165	.06691
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.46419**	**.03212**	**5.7801**	F **1223.9**	**1.3376**
Stddev	.00273	.00063	.0419	7.8	.0028
%RSD	.58803	1.9682	.72565	.63337	.20924
#1	.46612	.03167	5.8098	1218.4	1.3357
#2	.46226	.03257	5.7505	1229.4	1.3396
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-155979-F-2-B Acquired: 7/16/2019 23:26:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**106.87**	**.12231**	**.03690**	F **2780.4**	**.81899**
Stddev	.07	.00026	.00029	1.4	.00041
%RSD	.06130	.21072	.77873	.05107	.04985
#1	106.92	.12249	.03711	2779.4	.81870
#2	106.83	.12212	.03670	2781.4	.81928
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.93**	**.02839**	**46.98**	**.02327**	**-.00907**
Stddev	.02	.00117	.06	.00057	.00179
%RSD	.0951	4.1261	.1170	2.4632	19.787
#1	17.94	.02756	46.94	.02286	-.01034
#2	17.92	.02922	47.02	.02367	-.00780
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**32.100**	**.16464**	**1.1489**	**-.0016**	**.41211**
Stddev	.075	.00157	.0003	.0063	.00062
%RSD	.23453	.95638	.02816	384.5	.15104
#1	32.153	.16575	1.1487	.0028	.41167
#2	32.047	.16352	1.1491	-.0061	.41256
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155979-F-2-B Acquired: 7/16/2019 23:26:43 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00226**	**-.0980**	**.09063**	**.18107**	**.2558**
Stddev	.00071	.0392	.00046	.00017	.0026
%RSD	31.271	40.06	.51125	.09577	1.012
#1	-.00276	-.0702	.09030	.18119	.2540
#2	-.00176	-.1257	.09096	.18095	.2577
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1132.9**	**961.80**	**27432.**	**3552.7**
Stddev	.7	.05	14.	2.1
%RSD	.06077	.00551	.05059	.05924
#1	1133.4	961.83	27442.	3551.2
#2	1132.5	961.76	27422.	3554.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.274%	83.224%	76.882%	90.000%
Range				

Sample Name: 480-156023-A-1-A@2 Acquired: 7/16/2019 23:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00071**	**.77097**	**.14077**	**15.689**	**.46435**
Stddev	.00066	.00178	.00496	.011	.00054
%RSD	93.825	.23063	3.5220	.07085	.11721
#1	-.00024	.76971	.14427	15.696	.46474
#2	-.00118	.77222	.13726	15.681	.46397
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00034**	**852.27**	**.00041**	**.0333**	**.01289**
Stddev	.00005	.65	.00011	.0072	.00016
%RSD	14.639	.07588	26.460	21.56	1.2527
#1	.00031	851.81	.00033	.0282	.01300
#2	.00038	852.73	.00049	.0384	.01277
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12582**	**-.00527**	**250.89**	F **590.93**	**.23561**
Stddev	.00045	.00033	.16	.68	.00068
%RSD	.36095	6.2897	.06190	.11528	.28816
#1	.12550	-.00504	251.00	590.45	.23609
#2	.12614	-.00550	250.78	591.41	.23513
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-156023-A-1-A@2 Acquired: 7/16/2019 23:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**186.56**	**9.5188**	**.00200**	F **1628.8**	**.05296**
Stddev	.01	.0026	.00045	3.5	.00016
%RSD	.00469	.02728	22.744	.21285	.31141
#1	186.57	9.5206	.00167	1631.3	.05284
#2	186.55	9.5169	.00232	1626.4	.05308
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.9086**	**.02543**	F **116.5**	**.00716**	**-.00575**
Stddev	.0113	.00154	.0	.00198	.00761
%RSD	1.243	6.0596	.0078	27.585	132.34
#1	.9166	.02652	116.5	.00577	-.01113
#2	.9006	.02434	116.5	.00856	-.00037
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.363**	**.03006**	**4.8196**	**.1340**	**.05281**
Stddev	.042	.00024	.0027	.0102	.00045
%RSD	.15209	.79087	.05577	7.631	.85291
#1	27.333	.03023	4.8215	.1412	.05312
#2	27.392	.02989	4.8177	.1267	.05249
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156023-A-1-A@2 Acquired: 7/16/2019 23:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.01695**	**.0877**	**.01713**	**1.6989**	**.0164**
Stddev	.00210	.0521	.00107	.0035	.0005
%RSD	12.403	59.38	6.2492	.20736	2.783
#1	-.01844	.1245	.01637	1.6964	.0167
#2	-.01547	.0509	.01789	1.7014	.0161
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1143.9**	**915.05**	**27375.**	**3594.8**
Stddev	3.7	4.12	30.	14.9
%RSD	.32302	.45025	.10945	.41571
#1	1146.5	917.96	27354.	3605.3
#2	1141.3	912.13	27396.	3584.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	71.964%	79.179%	76.723%	91.065%
Range				

Sample Name: 480-156023-A-2-A Acquired: 7/16/2019 23:34:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00083**	**.49157**	**.20654**	F **27.966**	**.38961**
Stddev	.00061	.00311	.00365	.040	.00029
%RSD	73.238	.63332	1.7652	.14200	.07456
#1	-.00040	.49378	.20396	27.938	.38981
#2	-.00126	.48937	.20912	27.994	.38940
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				18.000	
Low Limit				-.02000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00027**	**80.783**	**-.00012**	**.0092**	**.03724**
Stddev	.00003	.039	.00011	.0177	.00025
%RSD	10.859	.04886	95.458	191.2	.67949
#1	.00030	80.811	-.00004	-.0033	.03742
#2	.00025	80.755	-.00019	.0217	.03707
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.38253**	**.00277**	**16.852**	F **1256.0**	**.34049**
Stddev	.00144	.00007	.031	7.0	.00173
%RSD	.37518	2.3649	.18549	.55512	.50830
#1	.38151	.00272	16.830	1260.9	.34171
#2	.38354	.00281	16.874	1251.1	.33927
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-156023-A-2-A Acquired: 7/16/2019 23:34:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**229.89**	**.37119**	**.01146**	F **4000.4**	**.18377**
Stddev	.54	.00127	.00014	5.5	.00003
%RSD	.23614	.34302	1.2618	.13693	.01482
#1	229.50	.37029	.01136	4004.2	.18379
#2	230.27	.37209	.01156	3996.5	.18375
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.441**	**.00957**	**66.37**	**.00785**	**-.00277**
Stddev	.001	.00127	.17	.00208	.00622
%RSD	.0140	13.285	.2518	26.536	224.57
#1	6.440	.00867	66.49	.00932	.00163
#2	6.442	.01047	66.25	.00638	-.00717
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.795**	**.05860**	**1.2608**	**.0176**	**.26233**
Stddev	.018	.00149	.0026	.0005	.00107
%RSD	.04881	2.5502	.20471	3.065	.40605
#1	37.782	.05966	1.2627	.0172	.26158
#2	37.808	.05755	1.2590	.0180	.26308
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156023-A-2-A Acquired: 7/16/2019 23:34:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00109**	**-.0093**	**.11052**	**.25676**	**.0815**
Stddev	.00051	.0096	.00041	.00459	.0009
%RSD	46.767	103.3	.37202	1.7863	1.092
#1	-.00145	-.0161	.11023	.25352	.0821
#2	-.00073	-.0025	.11081	.26000	.0809
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1082.9**	**931.37**	**26091.**	**3481.0**
Stddev	.0	.09	48.	5.1
%RSD	.00390	.00985	.18268	.14664
#1	1082.9	931.44	26125.	3484.6
#2	1082.9	931.31	26058.	3477.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	68.126%	80.592%	73.125%	88.184%
Range				

Sample Name: 480-156015-B-1-A Acquired: 7/16/2019 23:38:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00047**	**1.0758**	**.27286**	**10.357**	**.23071**
Stddev	.00004	.0243	.00024	.024	.00055
%RSD	9.0259	2.2580	.08893	.23005	.23847
#1	-.00044	1.0929	.27269	10.340	.23032
#2	-.00050	1.0586	.27303	10.374	.23110
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**75.888**	**.00002**	**.0068**	**.03559**
Stddev	.00001	.006	.00010	.0141	.00038
%RSD	3.7554	.00801	642.24	207.8	1.0771
#1	.00020	75.884	-.00005	-.0032	.03586
#2	.00019	75.893	.00009	.0167	.03532
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.26547**	**.00829**	**4.3703**	F **566.24**	**.10132**
Stddev	.00087	.00028	.0199	6.08	.00048
%RSD	.32956	3.3792	.45431	1.0743	.46941
#1	.26485	.00809	4.3563	561.93	.10098
#2	.26608	.00849	4.3843	570.54	.10165
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-156015-B-1-A Acquired: 7/16/2019 23:38:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**74.598**	**.40371**	**.01232**	F **1866.0**	**.17331**
Stddev	.187	.00015	.00027	.5	.00031
%RSD	.25034	.03746	2.1776	.02448	.17778
#1	74.466	.40360	.01251	1865.6	.17309
#2	74.730	.40381	.01213	1866.3	.17352
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.898**	**.00753**	**41.81**	**.03020**	**-.00339**
Stddev	.043	.00021	.05	.00080	.00265
%RSD	.4790	2.7406	.1204	2.6347	78.170
#1	8.928	.00739	41.77	.03077	-.00151
#2	8.868	.00768	41.85	.02964	-.00526
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**24.388**	**.06007**	**.67864**	**-.0013**	**.25086**
Stddev	.081	.00103	.00219	.0018	.00130
%RSD	.33268	1.7159	.32294	135.2	.51800
#1	24.331	.06079	.67709	-.0026	.24994
#2	24.446	.05934	.68019	-.0001	.25178
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156015-B-1-A Acquired: 7/16/2019 23:38:50 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00192**	**-.0255**	**.08010**	**.12689**	**.0777**
Stddev	.00224	.0356	.00003	.00308	.0011
%RSD	116.79	139.9	.03904	2.4241	1.391
#1	-.00350	-.0507	.08008	.12471	.0784
#2	-.00033	-.0003	.08012	.12906	.0769
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1203.8**	**995.13**	**28621.**	**3659.0**
Stddev	3.9	5.89	10.	12.8
%RSD	.32518	.59237	.03367	.35116
#1	1206.6	999.30	28628.	3668.1
#2	1201.1	990.96	28614.	3649.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	75.734%	86.109%	80.213%	92.693%
Range				

Sample Name: 480-155980-D-1-C Acquired: 7/16/2019 23:42:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00034**	**.74947**	**.06847**	**16.438**	**.59430**
Stddev	.00032	.02123	.00050	.003	.00139
%RSD	94.182	2.8324	.72488	.01750	.23411
#1	-.00011	.76449	.06883	16.436	.59331
#2	-.00057	.73446	.06812	16.440	.59528
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**146.25**	**.00014**	**-.0128**	**.03769**
Stddev	.00004	.31	.00003	.0010	.00032
%RSD	150.25	.21337	21.536	7.835	.84062
#1	-.00005	146.47	.00012	-.0135	.03747
#2	.00000	146.03	.00016	-.0121	.03792
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.31282**	**.01320**	**4.2352**	F **622.86**	**.09585**
Stddev	.00179	.00030	.0429	6.30	.00039
%RSD	.57363	2.2538	1.0126	1.0121	.40328
#1	.31155	.01341	4.2655	627.31	.09557
#2	.31409	.01299	4.2049	618.40	.09612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				540.00	
Low Limit				-.50000	

Sample Name: 480-155980-D-1-C Acquired: 7/16/2019 23:42:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**131.81**	**1.6876**	**.00863**	F **2136.5**	**.21973**
Stddev	.00	.0010	.00007	12.4	.00074
%RSD	.00055	.06180	.79155	.58018	.33805
#1	131.81	1.6869	.00858	2145.2	.21920
#2	131.81	1.6883	.00868	2127.7	.22025
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.06**	**.00972**	**61.22**	**.01131**	**-.00781**
Stddev	.02	.00302	.14	.00444	.00275
%RSD	.1438	31.110	.2271	39.224	35.263
#1	12.07	.01186	61.12	.00817	-.00586
#2	12.05	.00758	61.32	.01445	-.00975
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**27.880**	**.04111**	**.94029**	**.0053**	**.68105**
Stddev	.122	.00237	.00459	.0061	.00057
%RSD	.43873	5.7742	.48789	113.5	.08423
#1	27.967	.03943	.94353	.0011	.68064
#2	27.794	.04278	.93704	.0096	.68145
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-155980-D-1-C Acquired: 7/16/2019 23:42:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00009**	**-.0906**	**.15286**	**.32438**	**.1199**
Stddev	.00031	.0362	.00004	.00002	.0007
%RSD	327.22	39.99	.02692	.00563	.6197
#1	-.00012	-.1162	.15283	.32437	.1204
#2	.00031	-.0650	.15289	.32439	.1194
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1167.4**	**972.15**	**28064.**	**3585.7**
Stddev	1.2	2.19	6.	17.2
%RSD	.09884	.22494	.02240	.47866
#1	1168.2	973.69	28069.	3573.6
#2	1166.6	970.60	28060.	3597.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	73.441%	84.120%	78.654%	90.835%
Range				

Sample Name: 480-156022-E-1-A Acquired: 7/16/2019 23:46:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00084**	**.04660**	**.00239**	**.82228**	**1.7326**
Stddev	.00028	.00648	.00102	.00301	.0032
%RSD	33.032	13.899	42.897	.36611	.18639
#1	-.00104	.04202	.00311	.82441	1.7349
#2	-.00065	.05118	.00166	.82015	1.7303
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**210.00**	**.00002**	**-.0026**	**.00186**
Stddev	.00005	2.27	.00021	.0079	.00008
%RSD	446.68	1.0829	1285.6	308.9	4.5045
#1	-.00005	211.60	-.00013	.0030	.00192
#2	.00002	208.39	.00017	-.0082	.00180
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00517**	**-.00082**	**3.3390**	**48.698**	**.04492**
Stddev	.00013	.00063	.0057	.007	.00078
%RSD	2.5549	76.996	.17178	.01484	1.7257
#1	.00508	-.00126	3.3350	48.703	.04547
#2	.00526	-.00037	3.3431	48.692	.04437
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156022-E-1-A Acquired: 7/16/2019 23:46:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**96.484**	**.67880**	**.00023**	**240.46**	**.03247**
Stddev	.022	.00023	.00048	.33	.00003
%RSD	.02324	.03321	204.72	.13562	.07892
#1	96.468	.67896	.00057	240.69	.03245
#2	96.499	.67864	-.00010	240.23	.03248
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1694**	**.00128**	**24.68**	**.00123**	**-.00320**
Stddev	.0010	.00121	.02	.00049	.00310
%RSD	.5825	94.237	.0851	40.056	96.951
#1	.1687	.00214	24.66	.00158	-.00101
#2	.1701	.00043	24.69	.00088	-.00540
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.1521**	**.00136**	**2.1461**	**.0041**	**.00170**
Stddev	.0471	.00242	.0031	.0059	.00014
%RSD	.51412	177.77	.14462	143.5	8.1799
#1	9.1854	.00308	2.1483	.0083	.00160
#2	9.1189	-.00035	2.1439	-.0001	.00180
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156022-E-1-A Acquired: 7/16/2019 23:46:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**.0187**	**.00094**	**.00364**	**.0059**
Stddev	.00053	.0343	.00029	.00154	.0002
%RSD	1647.4	183.0	30.553	42.349	3.682
#1	-.00034	-.0055	.00114	.00255	.0057
#2	.00041	.0430	.00074	.00472	.0060
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1367.9**	**1033.9**	**31574.**	**3807.4**
Stddev	1.5	.6	21.	8.3
%RSD	.11077	.05500	.06757	.21757
#1	1366.9	1033.5	31558.	3801.6
#2	1369.0	1034.3	31589.	3813.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	86.057%	89.466%	88.489%	96.452%
Range				

Sample Name: blank Acquired: 7/16/2019 23:50:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**.01510**	**.00010**	**.04165**	**-.00000**
Stddev	.00018	.00462	.00037	.00004	.00001
%RSD	71.645	30.603	363.29	.09964	163.33
#1	.00037	.01836	.00037	.04168	-.00001
#2	.00012	.01183	-.00016	.04162	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.00102**	**.00004**	**-.0224**	**-.00020**
Stddev	.00001	.00141	.00012	.0010	.00031
%RSD	26.829	138.72	291.09	4.650	155.31
#1	-.00002	.00201	.00012	-.0216	-.00042
#2	-.00003	.00002	-.00004	-.0231	.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00205**	**-.00007**	**.01266**	**.39138**	**-.00038**
Stddev	.00020	.00013	.00172	.00123	.00001
%RSD	9.5756	168.66	13.595	.31401	3.7900
#1	.00191	-.00016	.01388	.39225	-.00037
#2	.00219	.00001	.01145	.39051	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:50:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00197**	**-.00006**	**-.00051**	**.33777**	**.00041**
Stddev	.00144	.00003	.00000	.00461	.00056
%RSD	73.071	41.712	.57218	1.3661	136.97
#1	.00095	-.00004	-.00051	.34104	.00001
#2	.00299	-.00008	-.00050	.33451	.00080
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0030**	**-.00029**	**-.0174**	**-.00113**	**.00335**
Stddev	.0016	.00088	.0018	.00228	.00214
%RSD	55.28	302.23	10.60	202.44	63.979
#1	.0041	.00033	-.0187	.00049	.00486
#2	.0018	-.00091	-.0161	-.00274	.00183
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.15712**	**-.00075**	**.00007**	**.0086**	**-.00026**
Stddev	.00000	.00040	.00001	.0069	.00004
%RSD	.00076	52.762	13.690	80.72	16.515
#1	.15713	-.00103	.00007	.0135	-.00029
#2	.15712	-.00047	.00006	.0037	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:50:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00131**	**.0243**	**-.00044**	**-.00115**	**-.0015**
Stddev	.00030	.0435	.00023	.00048	.0008
%RSD	22.599	179.2	51.478	41.601	50.01
#1	-.00151	-.0065	-.00028	-.00149	-.0010
#2	-.00110	.0550	-.00061	-.00081	-.0021
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1581.2**	**1139.4**	**35201.**	**3950.2**
Stddev	.9	1.9	.	7.5
%RSD	.05776	.16532	.00018	.18938
#1	1580.6	1140.8	35201.	3955.5
#2	1581.9	1138.1	35201.	3944.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.476%	98.596%	98.656%	100.07%
Range				

Sample Name: blank Acquired: 7/16/2019 23:54:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**.01209**	**-.00303**	**.03687**	**-.00000**
Stddev	.00008	.00227	.00023	.00106	.00000
%RSD	129.35	18.749	7.6575	2.8872	192.28
#1	-.00011	.01049	-.00320	.03762	.00000
#2	-.00001	.01369	-.00287	.03612	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**-.00186**	**-.00010**	**-.0216**	**-.00008**
Stddev	.00001	.00302	.00005	.0001	.00010
%RSD	144.44	162.39	52.390	.6395	125.80
#1	-.00002	-.00400	-.00006	-.0215	-.00015
#2	.00000	.00028	-.00014	-.0217	-.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.00005**	**-.00283**	**.24448**	**.00010**
Stddev	.00003	.00023	.00109	.01128	.00164
%RSD	8.5453	507.17	38.574	4.6123	1566.0
#1	.00028	-.00012	-.00206	.25246	-.00105
#2	.00031	.00021	-.00361	.23651	.00126
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:54:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00088**	**-.00026**	**-.00040**	**.25177**	**.00033**
Stddev	.00080	.00004	.00005	.00359	.00001
%RSD	90.383	15.351	13.426	1.4257	2.4479
#1	.00144	-.00029	-.00044	.24923	.00034
#2	.00032	-.00024	-.00036	.25430	.00033
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0024**	**.00036**	**-.0191**	**-.00024**	**.00296**
Stddev	.0002	.00160	.0040	.00121	.00691
%RSD	8.671	449.93	20.78	502.49	233.33
#1	.0026	.00149	-.0219	.00061	-.00192
#2	.0023	-.00078	-.0163	-.00110	.00785
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.12335**	**-.00060**	**.00001**	**.0089**	**-.00011**
Stddev	.00925	.00025	.00006	.0020	.00011
%RSD	7.4977	41.406	404.23	22.72	105.82
#1	.11681	-.00078	.00006	.0103	-.00019
#2	.12989	-.00043	-.00003	.0075	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:54:39 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00003**	**-.0128**	**-.00044**	**-.00105**	**-.0008**
Stddev	.00239	.0251	.00033	.00026	.0017
%RSD	8446.1	195.4	74.579	25.216	223.7
#1	-.00166	.0049	-.00021	-.00124	-.0020
#2	.00172	-.0306	-.00067	-.00086	.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1583.6**	**1139.8**	**35368.**	**3948.0**
Stddev	.2	.1	27.	11.8
%RSD	.01468	.01281	.07497	.29919
#1	1583.8	1139.9	35349.	3956.3
#2	1583.4	1139.7	35387.	3939.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.626%	98.624%	99.124%	100.01%
Range				

Sample Name: blank Acquired: 7/16/2019 23:58:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**-.00021**	**-.00292**	**.03420**	**-.00001**
Stddev	.00058	.00563	.00175	.00014	.00000
%RSD	236.64	2646.8	59.981	.42282	28.214
#1	.00017	.00377	-.00168	.03430	-.00001
#2	-.00066	-.00419	-.00415	.03410	-.00002
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**.00219**	**-.00004**	**-.0146**	**-.00007**
Stddev	.00001	.00269	.00000	.0120	.00010
%RSD	22.291	122.75	9.5989	81.96	148.16
#1	-.00003	.00029	-.00004	-.0061	-.00014
#2	-.00002	.00409	-.00004	-.0231	.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00006**	**.00005**	**-.00134**	**.22276**	**.00052**
Stddev	.00053	.00029	.00039	.01723	.00012
%RSD	956.96	531.79	29.115	7.7364	23.289
#1	.00043	-.00015	-.00107	.23494	.00061
#2	-.00032	.00026	-.00162	.21057	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:58:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00154**	**-.00029**	**-.00022**	**.21453**	**.00030**
Stddev	.00132	.00001	.00019	.00406	.00021
%RSD	85.642	4.4554	84.808	1.8917	71.657
#1	-.00248	-.00030	-.00035	.21166	.00015
#2	-.00061	-.00028	-.00009	.21740	.00045
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0034**	**-.00067**	**-.0198**	**-.00018**	**-.00155**
Stddev	.0024	.00105	.0010	.00004	.00139
%RSD	71.06	156.94	5.262	23.467	89.250
#1	.0017	-.00142	-.0190	-.00021	-.00253
#2	.0051	.00007	-.0205	-.00015	-.00057
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.11268**	**-.00004**	**.00002**	**.0086**	**.00003**
Stddev	.00320	.00002	.00001	.0063	.00052
%RSD	2.8389	39.823	55.243	73.70	1739.8
#1	.11494	-.00003	.00002	.0041	.00040
#2	.11042	-.00005	.00001	.0131	-.00034
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: blank Acquired: 7/16/2019 23:58:31 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**.0191**	**-.00071**	**-.00146**	**-.0008**
Stddev	.00008	.0069	.00013	.00003	.0001
%RSD	27.108	36.27	18.026	2.0902	9.166
#1	.00024	.0142	-.00080	-.00144	-.0008
#2	.00035	.0239	-.00062	-.00148	-.0007
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1589.5**	**1145.0**	**35527.**	**3982.4**
Stddev	3.0	1.1	22.	15.2
%RSD	.18620	.09706	.06083	.38091
#1	1591.6	1144.2	35512.	3971.6
#2	1587.4	1145.8	35542.	3993.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.996%	99.080%	99.570%	100.88%
Range				

Sample Name: CCV-5385806 Acquired: 7/17/2019 0:02:23 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0014**	**48.151**	**1.0219**	**.99310**	**.96805**	**1.0128**	**48.459**	**.98282**
Stddev	.0022	.261	.0100	.00127	.00198	.0064	.287	.00028
%RSD	.21425	.54203	.98071	.12749	.20501	.63548	.59164	.02810
#1	1.0029	48.335	1.0290	.99399	.96945	1.0174	48.662	.98301
#2	.99989	47.966	1.0149	.99220	.96664	1.0083	48.256	.98262
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.045**	**.97994**	**.98397**	**1.0360**	**51.697**	**50.049**	**.97275**	**48.666**
Stddev	.012	.00092	.00118	.0010	.491	.240	.00146	.014
%RSD	1.167	.09347	.11964	.10115	.94909	.47983	.15026	.02862
#1	1.053	.97929	.98313	1.0368	52.044	50.219	.97379	48.676
#2	1.036	.98059	.98480	1.0353	51.350	49.880	.97172	48.656
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0681**	**1.0303**	**50.104**	**1.0130**	**24.77**	**.99478**	**25.34**	**.97297**
Stddev	.0003	.0001	.192	.0030	.02	.00154	.01	.00151
%RSD	.02334	.00536	.38404	.29490	.0960	.15509	.0357	.15489
#1	1.0680	1.0303	50.240	1.0109	24.75	.99369	25.33	.97190
#2	1.0683	1.0304	49.968	1.0152	24.79	.99587	25.34	.97403
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/17/2019 0:02:23 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0465**	**10.160**	**.97722**	**1.0108**	**.9972**	**1.0510**	**1.0059**	**2.501**
Stddev	.0057	.103	.00412	.0038	.0198	.0003	.0013	.032
%RSD	.54058	1.0168	.42188	.37665	1.985	.02856	.13067	1.285
#1	1.0425	10.233	.98013	1.0134	.9832	1.0508	1.0069	2.523
#2	1.0505	10.087	.97430	1.0081	1.011	1.0512	1.0050	2.478
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0552**	**1.0361**	**1.031**
Stddev	.0007	.0029	.003
%RSD	.06218	.28166	.2420
#1	1.0556	1.0341	1.033
#2	1.0547	1.0382	1.029
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1482.7**	**1105.1**	**33353.**	**3866.7**
Stddev	.5	1.7	10.	27.3
%RSD	.03647	.15053	.03093	.70578
#1	1482.4	1104.0	33360.	3847.4
#2	1483.1	1106.3	33345.	3886.0

Sample Name: CCB-5392763 Acquired: 7/17/2019 0:06:04 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00025**	**-.00206**	**.00045**	F **.03038**	**.00003**	**-.00001**	**-.00050**
Stddev	.00075	.00799	.00014	.00035	.00000	.00005	.00050
%RSD	302.41	388.08	31.445	1.1508	17.291	789.11	101.16
#1	-.00078	.00359	.00035	.03063	.00002	-.00004	-.00085
#2	.00028	-.00771	.00055	.03013	.00003	.00003	-.00014
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**-.0069**	**-.00013**	**.00021**	**-.00013**	**-.00017**	**.12848**
Stddev	.00003	.0007	.00007	.00043	.00010	.00038	.01174
%RSD	253.58	10.58	49.097	205.96	79.574	225.00	9.1368
#1	.00001	-.0064	-.00018	.00051	-.00020	-.00044	.13678
#2	-.00004	-.0074	-.00009	-.00009	-.00006	.00010	.12018
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00067**	**.00340**	**-.00021**	**.00060**	**.13435**	**.00038**	**.0055**
Stddev	.00042	.00154	.00003	.00014	.00334	.00005	.0001
%RSD	61.718	45.309	15.094	23.750	2.4880	12.719	2.594
#1	.00038	.00449	-.00019	.00050	.13671	.00041	.0054
#2	.00097	.00231	-.00023	.00070	.13199	.00035	.0056
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/17/2019 0:06:04 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00018**	**-.0145**	**.00123**	**.00446**	**.13621**	**.00056**	**-.00004**
Stddev	.00030	.0061	.00011	.00218	.00523	.00017	.00003
%RSD	170.00	41.76	8.9835	48.921	3.8391	31.146	82.877
#1	-.00004	-.0102	.00131	.00292	.13251	.00044	-.00002
#2	.00039	-.0188	.00115	.00600	.13991	.00068	-.00007
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0070**	**.00013**	**-.00050**	**-.0159**	**-.00028**	**-.00012**	**-.0005**
Stddev	.0065	.00014	.00004	.0331	.00022	.00030	.0005
%RSD	92.87	113.77	8.1421	208.0	76.819	239.30	112.9
#1	.0115	.00023	-.00053	-.0393	-.00044	-.00033	-.0009
#2	.0024	.00002	-.00047	.0075	-.00013	.00009	-.0001
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1576.5**	**1132.3**	**35077.**	**3961.6**
Stddev	4.5	1.4	65.	.2
%RSD	.28322	.12163	.18669	.00381
#1	1573.3	1131.4	35123.	3961.5
#2	1579.6	1133.3	35031.	3961.7

Sample Name: CCVL-5395711 Acquired: 7/17/2019 0:09:56 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00581**	**.21352**	**.01397**	F **.04711**	**.00208**	**.00205**	**.49452**
Stddev	.00014	.00189	.00014	.00020	.00000	.00010	.00197
%RSD	2.4806	.88683	.99664	.41804	.21789	4.9636	.39737
#1	.00592	.21218	.01407	.04725	.00208	.00198	.49313
#2	.00571	.21486	.01387	.04698	.00208	.00213	.49591
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00186**	**-.0076**	**.00357**	**.00414**	**.00965**	**.05130**	**.61701**
Stddev	.00002	.0019	.00018	.00043	.00006	.00220	.00780
%RSD	.84009	24.49	5.1015	10.387	.60315	4.2942	1.2634
#1	.00187	-.0063	.00344	.00444	.00969	.04975	.61150
#2	.00185	-.0090	.00369	.00383	.00961	.05286	.62252
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02786**	**.19660**	**.00305**	**.01027**	**1.0732**	**.01077**	**-.0211**
Stddev	.00037	.00226	.00003	.00034	.0040	.00018	.0025
%RSD	1.3336	1.1495	.89773	3.3190	.37714	1.6900	12.06
#1	.02812	.19500	.00307	.01051	1.0761	.01090	-.0229
#2	.02759	.19820	.00304	.01003	1.0704	.01064	-.0193
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/17/2019 0:09:56 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00930**	**.1699**	**.02003**	**.02454**	**.59091**	**.00901**	**.00482**
Stddev	.00062	.0042	.00081	.00138	.00132	.00014	.00008
%RSD	6.6732	2.458	4.0211	5.6180	.22389	1.5733	1.6461
#1	.00886	.1669	.01946	.02357	.59184	.00911	.00487
#2	.00974	.1729	.02060	.02552	.58997	.00891	.00476
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0044**	**.00493**	**.02024**	**.0187**	**.00457**	**.01099**	**-.0008**
Stddev	.0061	.00009	.00072	.0672	.00036	.00057	.0001
%RSD	137.3	1.9112	3.5537	359.9	7.8364	5.1488	16.64
#1	.0088	.00499	.01973	.0662	.00431	.01059	-.0009
#2	.0001	.00486	.02075	-.0289	.00482	.01139	-.0007
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1590.8**	**1141.8**	**35339.**	**3937.8**
Stddev	2.4	.6	21.	19.2
%RSD	.15261	.05110	.05943	.48786
#1	1589.1	1141.3	35354.	3924.2
#2	1592.5	1142.2	35324.	3951.4

Sample Name: MB 480-482043/1-A Acquired: 7/17/2019 0:13:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00028**	**.01808**	**.00117**	F **2.2954**	**.00013**
Stddev	.00000	.00435	.00190	.0018	.00000
%RSD	.56729	24.064	161.63	.07815	2.6027
#1	-.00028	.02116	.00252	2.2967	.00013
#2	-.00028	.01500	-.00017	2.2941	.00013
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.02000	
Low Limit				-.00800	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.07290**	**-.00015**	**-.0194**	**-.00013**
Stddev	.00002	.00089	.00009	.0061	.00024
%RSD	149.41	1.2148	59.816	31.27	189.93
#1	-.00003	.07353	-.00009	-.0236	-.00030
#2	.00000	.07228	-.00021	-.0151	.00004
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00049**	**.00470**	**.01977**	**.11293**	**.00014**
Stddev	.00028	.00031	.00003	.00203	.00037
%RSD	57.204	6.6380	.16179	1.7999	273.97
#1	.00068	.00448	.01979	.11149	-.00013
#2	.00029	.00492	.01975	.11436	.00040
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: MB 480-482043/1-A Acquired: 7/17/2019 0:13:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00182**	**.00105**	**-.00040**	**.14422**	**.00040**
Stddev	.00388	.00001	.00014	.00267	.00006
%RSD	213.12	1.0062	35.443	1.8512	14.912
#1	.00456	.00106	-.00050	.14611	.00036
#2	-.00092	.00104	-.00030	.14233	.00044
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0054**	**.00050**	**-.0126**	**.00216**	**.00212**
Stddev	.0002	.00092	.0008	.00183	.00050
%RSD	2.849	182.29	6.694	84.606	23.385
#1	-.0053	.00115	-.0120	.00087	.00177
#2	-.0055	-.00015	-.0132	.00345	.00247
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **7.3926**	**-.00084**	**.00017**	**.0022**	**-.00006**
Stddev	.0005	.00013	.00000	.0003	.00000
%RSD	.00672	15.254	.05713	14.37	3.6598
#1	7.3929	-.00093	.00017	.0020	-.00006
#2	7.3922	-.00075	.00017	.0024	-.00006
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	.50000				
Low Limit	-.50000				

Sample Name: MB 480-482043/1-A Acquired: 7/17/2019 0:13:47 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00098**	**-.0306**	**-.00011**	F **.01249**	**-.0015**
Stddev	.00036	.0201	.00014	.00135	.0006
%RSD	37.208	65.66	135.73	10.818	39.58
#1	-.00072	-.0164	-.00021	.01154	-.0011
#2	-.00123	-.0448	-.00000	.01345	-.0019
Check ?	Chk Pass	None	Chk Pass	Chk Fail	None
High Limit				.01000	
Low Limit				-.00300	

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1582.4**	**1131.5**	**35124.**	**3979.8**
Stddev	1.2	1.1	143.	12.8
%RSD	.07668	.09530	.40835	.32204
#1	1581.6	1130.7	35023.	3988.8
#2	1583.3	1132.2	35225.	3970.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.551%	97.905%	98.440%	100.82%
Range				

Sample Name: LCS 480-482043/2-A Acquired: 7/17/2019 0:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05041**	**9.4380**	**.20321**	F **2.4440**	**.20430**
Stddev	.00033	.0305	.00125	.0019	.00039
%RSD	.65009	.32319	.61524	.07626	.18864
#1	.05018	9.4596	.20233	2.4453	.20402
#2	.05064	9.4165	.20410	2.4427	.20457
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				.23000	
Low Limit				.17000	

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20681**	**9.5667**	**.19772**	**.0148**	**.18947**
Stddev	.00074	.0238	.00023	.0032	.00033
%RSD	.35664	.24898	.11431	21.84	.17306
#1	.20733	9.5835	.19788	.0171	.18970
#2	.20628	9.5498	.19756	.0125	.18924
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19813**	**.20358**	**10.411**	**9.8778**	**.19650**
Stddev	.00021	.00040	.059	.0231	.00054
%RSD	.10472	.19801	.56321	.23342	.27556
#1	.19798	.20329	10.453	9.8941	.19688
#2	.19828	.20386	10.370	9.8615	.19612
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: LCS 480-482043/2-A Acquired: 7/17/2019 0:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6494**	**.21446**	**.21041**	**9.8267**	**.20379**
Stddev	.0354	.00030	.00132	.0275	.00116
%RSD	.36658	.13861	.62673	.28027	.56687
#1	9.6244	.21425	.21134	9.8462	.20461
#2	9.6745	.21467	.20948	9.8072	.20298
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4600**	**.19274**	**10.10**	**.21480**	**.20200**
Stddev	.0010	.00087	.02	.00023	.00010
%RSD	.2070	.45216	.1687	.10488	.04731
#1	-.4594	.19212	10.11	.21496	.20193
#2	-.4607	.19335	10.08	.21464	.20207
Check ?	None	Chk Pass	None	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **16.949**	**.18645**	**.19960**	**.0063**	**.20949**
Stddev	.080	.00053	.00071	.0015	.00037
%RSD	.47373	.28591	.35446	24.54	.17896
#1	17.006	.18683	.20010	.0052	.20923
#2	16.892	.18607	.19910	.0073	.20976
Check ?	Chk Fail	Chk Pass	Chk Pass	None	Chk Pass
High Limit	11.500				
Low Limit	8.5000				

Sample Name: LCS 480-482043/2-A Acquired: 7/17/2019 0:17:37 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19883**	**-.0513**	**.20657**	**.21293**	**.0024**
Stddev	.00016	.0357	.00000	.00089	.0003
%RSD	.07796	69.49	.00023	.41867	11.43
#1	.19894	-.0261	.20657	.21230	.0025
#2	.19872	-.0765	.20657	.21356	.0022
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1557.2**	**1111.6**	**34228.**	**3919.6**
Stddev	2.1	2.7	87.	1.3
%RSD	.13331	.24730	.25470	.03423
#1	1555.7	1109.6	34290.	3920.6
#2	1558.6	1113.5	34167.	3918.7
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.963%	96.185%	95.930%	99.295%
Range				

Sample Name: 480-156102-C-1-A Acquired: 7/17/2019 0:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00059**	**9.1293**	**.91106**	**1.3789**	**2.9045**
Stddev	.00016	.0175	.00732	.0031	.0020
%RSD	27.782	.19168	.80336	.22703	.07013
#1	-.00071	9.1170	.91624	1.3767	2.9031
#2	-.00048	9.1417	.90589	1.3811	2.9060
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00252**	**150.19**	**.00605**	**.4638**	**.08799**
Stddev	.00004	.27	.00029	.0157	.00033
%RSD	1.5430	.18036	4.8121	3.376	.37022
#1	.00254	150.38	.00585	.4527	.08776
#2	.00249	150.00	.00626	.4748	.08822
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01346**	**.21194**	F **776.86**	**3.3588**	**.00801**
Stddev	.00018	.00029	5.53	.0050	.00038
%RSD	1.3032	.13874	.71237	.14726	4.7718
#1	.01358	.21173	772.95	3.3623	.00828
#2	.01334	.21214	780.78	3.3553	.00774
Check ?	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			540.00		
Low Limit			-.05000		

Sample Name: 480-156102-C-1-A Acquired: 7/17/2019 0:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576-2	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}2	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.5709**	F **48.106**	**.07359**	**1.7688**	**.10198**
Stddev	.0035	.432	.00005	.0009	.00001
%RSD	.03696	.89767	.06538	.05179	.00902
#1	9.5684	47.801	.07356	1.7694	.10197
#2	9.5734	48.411	.07363	1.7681	.10198
Check ?	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit		45.000			
Low Limit		-.00300			

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**78.06**	**.20108**	**19.13**	**.01901**	**.03164**
Stddev	.13	.00089	.00	.00074	.00313
%RSD	.1625	.44223	.0185	3.9160	9.9030
#1	78.15	.20045	19.13	.01954	.03386
#2	77.97	.20171	19.13	.01849	.02943
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**43.097**	**.01204**	**.67863**	**.6016**	**.07744**
Stddev	.332	.00123	.00060	.0028	.00194
%RSD	.77068	10.203	.08807	.4612	2.5020
#1	42.863	.01117	.67821	.5997	.07881
#2	43.332	.01291	.67905	.6036	.07607
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-1-A Acquired: 7/17/2019 0:21:17 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	F **-.02524**	**.1934**	**.03327**	**.28771**	**.0367**
Stddev	.00261	.0321	.00028	.00279	.0007
%RSD	10.321	16.58	.83150	.96936	1.781
#1	-.02340	.2161	.03347	.28968	.0372
#2	-.02709	.1708	.03308	.28574	.0363
Check ?	Chk Fail	None	Chk Pass	Chk Pass	None
High Limit	18.000				
Low Limit	-.02000				

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1392.5**	**1456.2**	**46190.**	**5426.8**
Stddev	1.3	3.5	73.	13.2
%RSD	.09324	.24079	.15893	.24316
#1	1393.5	1458.7	46138.	5436.1
#2	1391.6	1453.8	46242.	5417.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	87.605%	126.01%	129.45%	137.48%
Range				

Sample Name: 480-156102-C-2-A Acquired: 7/17/2019 0:25:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00077**	**.02800**	**.00688**	**2.2348**	**.23801**
Stddev	.00010	.00764	.00405	.0072	.00019
%RSD	12.526	27.273	58.895	.32071	.07942
#1	-.00070	.03340	.00401	2.2297	.23814
#2	-.00084	.02260	.00974	2.2398	.23787
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**388.33**	**.00019**	**-.0124**	**.00093**
Stddev	.00005	.34	.00007	.0014	.00023
%RSD	67.156	.08858	34.438	11.47	24.549
#1	-.00010	388.57	.00014	-.0114	.00110
#2	-.00004	388.08	.00024	-.0134	.00077
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00050**	**.00089**	**5.6980**	**7.9992**	**.01235**
Stddev	.00023	.00048	.0456	.0496	.00063
%RSD	45.888	53.100	.80068	.61979	5.1361
#1	.00067	.00123	5.7303	8.0342	.01190
#2	.00034	.00056	5.6658	7.9641	.01280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-2-A Acquired: 7/17/2019 0:25:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**38.418**	**4.9199**	**.00008**	**35.046**	**.00463**
Stddev	.028	.0057	.00020	.150	.00028
%RSD	.07300	.11529	258.78	.42913	6.0182
#1	38.438	4.9159	-.00006	35.153	.00443
#2	38.398	4.9239	.00022	34.940	.00483
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0332**	**.00243**	F **232.7**	**-.00144**	**-.00253**
Stddev	.0019	.00070	.7	.00018	.00058
%RSD	5.622	28.725	.3074	12.679	22.826
#1	.0318	.00194	232.2	-.00131	-.00294
#2	.0345	.00292	233.2	-.00157	-.00212
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**12.930**	**-.00037**	**.47601**	**.0009**	**-.00040**
Stddev	.082	.00025	.00135	.0097	.00035
%RSD	.63444	67.991	.28400	1115.	85.568
#1	12.988	-.00054	.47697	-.0060	-.00016
#2	12.872	-.00019	.47505	.0077	-.00065
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-2-A Acquired: 7/17/2019 0:25:24 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00125**	**.0674**	**.00028**	**-.00029**	**.0003**
Stddev	.00184	.0931	.00009	.00092	.0008
%RSD	146.43	138.1	30.406	320.84	218.5
#1	-.00004	.1333	.00034	-.00094	.0009
#2	.00255	.0016	.00022	.00036	-.0002
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1410.0**	**1038.3**	**32085.**	**3847.5**
Stddev	.6	2.5	18.	18.0
%RSD	.04452	.24130	.05763	.46781
#1	1409.6	1040.1	32098.	3834.8
#2	1410.5	1036.6	32072.	3860.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.705%	89.847%	89.922%	97.468%
Range				

Sample Name: 480-156102-C-3-A Acquired: 7/17/2019 0:29:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00055**	**.02505**	**-.00283**	**2.4043**	**.02886**
Stddev	.00008	.00143	.00048	.0021	.00004
%RSD	13.647	5.7280	16.822	.08843	.14575
#1	-.00050	.02607	-.00250	2.4028	.02889
#2	-.00061	.02404	-.00317	2.4058	.02884
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**331.68**	**.00023**	**-.0033**	**.00018**
Stddev	.00002	.34	.00026	.0019	.00007
%RSD	148.79	.10127	112.85	58.97	38.201
#1	.00003	331.44	.00041	-.0019	.00013
#2	-.00000	331.92	.00005	-.0047	.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00092**	**.00126**	**.07947**	**2.6069**	**.00806**
Stddev	.00043	.00041	.00229	.0263	.00002
%RSD	46.798	32.770	2.8829	1.0099	.30451
#1	.00062	.00155	.08109	2.6255	.00804
#2	.00123	.00097	.07785	2.5883	.00808
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-A Acquired: 7/17/2019 0:29:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.510**	**2.8447**	**.00050**	**6.1809**	**.00283**
Stddev	.066	.0026	.00015	.0055	.00012
%RSD	.24862	.09176	30.155	.08839	4.3416
#1	26.557	2.8428	.00060	6.1771	.00275
#2	26.464	2.8465	.00039	6.1848	.00292
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0141**	**.00131**	F **256.7**	**-.00216**	**-.00280**
Stddev	.0029	.00026	.1	.00133	.00300
%RSD	20.88	19.555	.0293	61.878	106.86
#1	.0120	.00149	256.8	-.00121	-.00068
#2	.0162	.00113	256.7	-.00310	-.00492
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**9.6184**	**.00042**	**.25168**	**.0016**	**.00016**
Stddev	.0075	.00055	.00010	.0058	.00002
%RSD	.07836	130.59	.03801	353.7	9.8624
#1	9.6237	.00003	.25161	-.0025	.00015
#2	9.6131	.00080	.25175	.0058	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-A Acquired: 7/17/2019 0:29:15 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00020**	**.0105**	**-.00010**	**.00383**	**-.0005**
Stddev	.00005	.0100	.00016	.00071	.0009
%RSD	23.589	94.73	164.10	18.614	166.7
#1	.00016	.0176	.00002	.00332	-.0011
#2	.00023	.0035	-.00021	.00433	.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1443.1**	**1050.7**	**32560.**	**3853.1**
Stddev	1.3	2.5	15.	8.4
%RSD	.09168	.23632	.04589	.21928
#1	1444.1	1052.5	32571.	3859.1
#2	1442.2	1048.9	32550.	3847.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.788%	90.918%	91.255%	97.609%
Range				

Sample Name: 480-156102-C-3-Asd@5 Acquired: 7/17/2019 0:33:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00068**	**.01679**	**-.00018**	**.46827**	**.00580**
Stddev	.00027	.00413	.00221	.00153	.00003
%RSD	40.120	24.606	1193.0	.32708	.45025
#1	-.00087	.01387	-.00174	.46719	.00578
#2	-.00048	.01971	.00137	.46936	.00582
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**67.542**	**.00016**	**-.0235**	**-.00003**
Stddev	.00002	.335	.00017	.0159	.00024
%RSD	23.773	.49612	104.97	67.49	706.15
#1	-.00008	67.779	.00028	-.0123	.00014
#2	-.00012	67.305	.00004	-.0347	-.00021
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00084**	**.00023**	**.01881**	**.55002**	**.00167**
Stddev	.00026	.00017	.00062	.01811	.00112
%RSD	30.252	74.238	3.2755	3.2921	67.044
#1	.00102	.00011	.01838	.56282	.00088
#2	.00066	.00034	.01925	.53722	.00246
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-Asd@5 Acquired: 7/17/2019 0:33:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.2682**	**.58423**	**-.00031**	**1.2406**	**.00050**
Stddev	.0236	.00046	.00038	.0014	.00005
%RSD	.44877	.07949	122.27	.11038	9.9390
#1	5.2515	.58391	-.00004	1.2416	.00053
#2	5.2849	.58456	-.00058	1.2396	.00046
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0041**	**-.00042**	**49.22**	**.00102**	**-.00052**
Stddev	.0018	.00225	.09	.00379	.00043
%RSD	42.96	533.08	.1918	372.66	83.375
#1	.0053	-.00201	49.16	.00370	-.00021
#2	.0028	.00117	49.29	-.00166	-.00082
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**1.9127**	**-.00077**	**.05049**	**.0034**	**.00005**
Stddev	.0045	.00057	.00001	.0049	.00005
%RSD	.23454	73.945	.01201	144.0	90.020
#1	1.9159	-.00118	.05048	.0068	.00002
#2	1.9096	-.00037	.05049	-.0001	.00008
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-Asd@5 Acquired: 7/17/2019 0:33:08 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00099**	**-.0246**	**-.00015**	**.00087**	**-.0000**
Stddev	.00085	.0552	.00019	.00067	.0007
%RSD	85.172	224.0	121.60	77.457	1697.
#1	.00159	.0144	-.00029	.00134	-.0006
#2	.00040	-.0636	-.00002	.00039	.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1569.8**	**1121.6**	**34442.**	**3919.1**
Stddev	.0	.1	22.	18.3
%RSD	.00302	.01112	.06259	.46769
#1	1569.7	1121.5	34458.	3906.2
#2	1569.8	1121.7	34427.	3932.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	98.754%	97.053%	96.529%	99.282%
Range				

Sample Name: 480-156102-C-3-Apds Acquired: 7/17/2019 0:36:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05113**	**9.7027**	**.21418**	**2.5238**	**.23110**
Stddev	.00056	.0515	.00450	.0013	.00047
%RSD	1.0857	.53061	2.1002	.05149	.20549
#1	.05073	9.7391	.21736	2.5229	.23076
#2	.05152	9.6663	.21100	2.5247	.23143
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20556**	**329.19**	**.20372**	**-.0161**	**.19151**
Stddev	.00053	.20	.00003	.0086	.00029
%RSD	.25550	.06113	.01596	53.23	.15283
#1	.20519	329.33	.20370	-.0100	.19131
#2	.20593	329.05	.20375	-.0222	.19172
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19216**	**.21114**	**10.157**	**12.782**	**.21287**
Stddev	.00014	.00000	.026	.003	.00132
%RSD	.07124	.00131	.25618	.02380	.62071
#1	.19207	.21114	10.139	12.780	.21194
#2	.19226	.21115	10.175	12.785	.21381
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-Apds Acquired: 7/17/2019 0:36:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**35.306**	**2.9459**	**.21118**	**16.102**	**.20610**
Stddev	.046	.0020	.00068	.006	.00024
%RSD	.13066	.06869	.32066	.03728	.11843
#1	35.274	2.9473	.21071	16.097	.20593
#2	35.339	2.9445	.21166	16.106	.20627
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4099**	**.20045**	F **257.8**	**.21849**	**.21043**
Stddev	.0017	.00005	.1	.00259	.00842
%RSD	.4083	.02493	.0432	1.1836	4.0015
#1	-.4087	.20041	257.9	.22032	.21638
#2	-.4110	.20048	257.7	.21666	.20447
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.189**	**.21244**	**.44219**	**.0107**	**.20792**
Stddev	.097	.00058	.00054	.0023	.00100
%RSD	.50649	.27316	.12133	21.12	.48228
#1	19.120	.21285	.44181	.0123	.20721
#2	19.258	.21203	.44257	.0091	.20863
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-Apds Acquired: 7/17/2019 0:36:55 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20086**	**.0477**	**.20626**	**.20200**	**.0005**
Stddev	.00075	.0041	.00019	.00443	.0002
%RSD	.37196	8.561	.09170	2.1913	33.46
#1	.20034	.0506	.20639	.19887	.0006
#2	.20139	.0448	.20612	.20513	.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1430.3**	**1052.9**	**32480.**	**3851.8**
Stddev	.8	.1	86.	4.2
%RSD	.05321	.00713	.26330	.10900
#1	1430.9	1052.8	32541.	3854.8
#2	1429.8	1052.9	32420.	3848.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.983%	91.107%	91.031%	97.577%
Range				

Sample Name: 480-156102-C-3-B MS Acquired: 7/17/2019 0:40:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.05298**	**10.042**	**.21727**	**2.3122**	**.24113**
Stddev	.00025	.094	.00099	.0018	.00023
%RSD	.46369	.93987	.45365	.07717	.09716
#1	.05315	9.9757	.21657	2.3135	.24096
#2	.05280	10.109	.21797	2.3110	.24129
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.21221**	**351.50**	**.20948**	**-.0113**	**.19741**
Stddev	.00000	1.52	.00028	.0020	.00012
%RSD	.00120	.43202	.13467	17.78	.06141
#1	.21221	350.43	.20928	-.0099	.19749
#2	.21221	352.58	.20968	-.0128	.19732
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19854**	**.21808**	**10.539**	**13.364**	**.22065**
Stddev	.00102	.00003	.044	.010	.00154
%RSD	.51623	.01404	.41375	.07395	.69583
#1	.19926	.21810	10.509	13.357	.21956
#2	.19782	.21806	10.570	13.371	.22174
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-B MS Acquired: 7/17/2019 0:40:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**37.205**	**3.1610**	**.21800**	**16.976**	**.21202**
Stddev	.016	.0034	.00085	.061	.00025
%RSD	.04300	.10690	.39023	.35718	.11563
#1	37.216	3.1586	.21860	16.934	.21220
#2	37.194	3.1634	.21740	17.019	.21185
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.4153**	**.20596**	F **273.9**	**.22697**	**.21739**
Stddev	.0037	.00266	.0	.00155	.00964
%RSD	.8876	1.2894	.0087	.68108	4.4326
#1	-.4127	.20784	273.9	.22806	.22421
#2	-.4179	.20409	274.0	.22588	.21058
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**18.842**	**.19539**	**.46761**	**.0033**	**.21494**
Stddev	.008	.00230	.00157	.0052	.00116
%RSD	.04460	1.1769	.33614	157.1	.53797
#1	18.836	.19701	.46650	.0070	.21576
#2	18.848	.19376	.46872	-.0004	.21412
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-B MS Acquired: 7/17/2019 0:40:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20469**	**.0170**	**.21087**	**.20825**	**.0001**
Stddev	.00002	.0055	.00046	.00016	.0012
%RSD	.00995	32.67	.21809	.07447	979.2
#1	.20470	.0131	.21119	.20814	-.0007
#2	.20467	.0209	.21054	.20836	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1417.4**	**1042.9**	**32165.**	**3820.9**
Stddev	2.5	.6	53.	4.4
%RSD	.17605	.05645	.16435	.11563
#1	1415.6	1042.5	32203.	3824.0
#2	1419.2	1043.3	32128.	3817.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.170%	90.241%	90.148%	96.794%
Range				

Sample Name: 480-156102-C-3-C MSD Acquired: 7/17/2019 0:44:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04893**	**9.4354**	**.20653**	**2.2688**	**.22615**
Stddev	.00045	.0157	.00192	.0019	.00042
%RSD	.91687	.16604	.93065	.08279	.18570
#1	.04924	9.4465	.20789	2.2674	.22645
#2	.04861	9.4243	.20517	2.2701	.22586
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.20045**	**323.79**	**.19887**	**-.0181**	**.18616**
Stddev	.00016	1.84	.00019	.0059	.00003
%RSD	.07742	.56779	.09325	32.80	.01866
#1	.20034	322.49	.19874	-.0223	.18619
#2	.20056	325.09	.19900	-.0139	.18614
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19556**	**.20676**	**9.9359**	**12.435**	**.20518**
Stddev	.00073	.00064	.0193	.045	.00091
%RSD	.37472	.30783	.19444	.36491	.44257
#1	.19608	.20721	9.9222	12.467	.20582
#2	.19504	.20631	9.9495	12.403	.20454
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-C MSD Acquired: 7/17/2019 0:44:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**34.616**	**2.8750**	**.20639**	**15.637**	**.20116**
Stddev	.067	.0110	.00011	.011	.00057
%RSD	.19312	.38083	.05174	.06824	.28223
#1	34.664	2.8828	.20631	15.644	.20076
#2	34.569	2.8673	.20646	15.629	.20157
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.3961**	**.19512**	F **253.6**	**.21213**	**.20401**
Stddev	.0053	.00130	.1	.00014	.00296
%RSD	1.335	.66674	.0501	.06428	1.4499
#1	-.3999	.19604	253.7	.21223	.20192
#2	-.3924	.19420	253.5	.21204	.20610
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.580**	**.18689**	**.43043**	**.0113**	**.20238**
Stddev	.024	.00177	.00057	.0059	.00075
%RSD	.13434	.94972	.13207	52.19	.37014
#1	17.563	.18814	.43083	.0154	.20291
#2	17.597	.18563	.43003	.0071	.20185
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-3-C MSD Acquired: 7/17/2019 0:44:27 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.19638**	**-.0219**	**.19991**	**.19823**	**.0003**
Stddev	.00128	.0047	.00056	.00007	.0008
%RSD	.65349	21.62	.28143	.03723	298.4
#1	.19547	-.0185	.20031	.19818	-.0003
#2	.19729	-.0252	.19951	.19829	.0008
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1424.4**	**1045.9**	**32481.**	**3837.9**
Stddev	.2	2.3	126.	.9
%RSD	.01312	.22130	.38685	.02315
#1	1424.5	1047.5	32392.	3837.2
#2	1424.3	1044.2	32570.	3838.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	89.611%	90.500%	91.033%	97.224%
Range				

Sample Name: CCV-5385806 Acquired: 7/17/2019 0:48:13 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.99607**	**47.803**	**1.0092**	**.98172**	**.96017**	**1.0098**	**48.349**	**.98083**
Stddev	.00029	.128	.0012	.00135	.00282	.0006	.012	.00127
%RSD	.02896	.26718	.11808	.13783	.29327	.06242	.02548	.12996
#1	.99628	47.893	1.0100	.98077	.96216	1.0102	48.341	.97992
#2	.99587	47.713	1.0083	.98268	.95817	1.0093	48.358	.98173
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.010**	**.97497**	**.98584**	**1.0252**	**51.426**	**49.597**	**.96548**	**48.794**
Stddev	.001	.00044	.00005	.0017	.042	.109	.00452	.021
%RSD	.0679	.04529	.00486	.16753	.08096	.21948	.46863	.04224
#1	1.011	.97529	.98587	1.0264	51.396	49.674	.96868	48.779
#2	1.010	.97466	.98581	1.0240	51.455	49.520	.96228	48.808
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0607**	**1.0208**	**49.675**	**1.0096**	**24.74**	**.99230**	**25.11**	**.96784**
Stddev	.0008	.0006	.191	.0019	.03	.00406	.09	.00158
%RSD	.07050	.06096	.38394	.18306	.1161	.40891	.3745	.16294
#1	1.0601	1.0213	49.810	1.0109	24.72	.98943	25.04	.96895
#2	1.0612	1.0204	49.541	1.0083	24.76	.99517	25.17	.96672
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/17/2019 0:48:13 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0416**	**9.8788**	**.97851**	**1.0044**	**.9884**	**1.0464**	**.99898**	**2.471**
Stddev	.0027	.0107	.00044	.0026	.0046	.0006	.00587	.054
%RSD	.25621	.10879	.04487	.26108	.4658	.05972	.58763	2.182
#1	1.0397	9.8864	.97820	1.0062	.9917	1.0469	.99483	2.509
#2	1.0435	9.8712	.97882	1.0025	.9851	1.0460	1.0031	2.433
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0513**	**1.0434**	**1.032**
Stddev	.0025	.0020	.003
%RSD	.23512	.19358	.3042
#1	1.0530	1.0448	1.035
#2	1.0495	1.0419	1.030
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1488.4**	**1112.0**	**33549.**	**3874.4**
Stddev	.2	.1	32.	3.0
%RSD	.01074	.00836	.09536	.07721
#1	1488.5	1112.1	33571.	3872.3
#2	1488.3	1112.0	33526.	3876.5

Sample Name: CCB-5392763 Acquired: 7/17/2019 0:51:53 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00773**	**-.00162**	F **.02443**	**.00005**	**-.00001**	**-.00480**
Stddev	.00034	.00912	.00102	.00005	.00001	.00010	.00010
%RSD	197.51	117.99	62.575	.19828	22.726	1267.5	2.0296
#1	.00007	.01417	-.00234	.02446	.00004	.00006	-.00473
#2	-.00041	.00128	-.00090	.02439	.00006	-.00007	-.00487
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00011**	**.0046**	**-.00022**	**-.00013**	**.00001**	**-.00149**	**.07415**
Stddev	.00013	.0062	.00015	.00030	.00039	.00124	.00553
%RSD	117.71	133.4	67.026	236.30	3953.7	83.419	7.4585
#1	.00002	.0003	-.00033	-.00034	-.00027	-.00237	.07024
#2	.00020	.0090	-.00012	.00009	.00029	-.00061	.07806
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00111**	**-.00023**	**.00037**	**.05102**	**.00009**	**.0067**
Stddev	.00067	.00004	.00001	.00004	.00049	.00011	.0009
%RSD	157.75	3.7154	4.0843	11.949	.95268	119.66	12.91
#1	-.00005	.00114	-.00024	.00040	.05068	.00001	.0061
#2	.00089	.00108	-.00022	.00033	.05136	.00017	.0073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/17/2019 0:51:53 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00026**	**-.0161**	**.00001**	**.00049**	**.07746**	**-.00028**	**.00002**
Stddev	.00132	.0014	.00133	.00140	.00080	.00089	.00005
%RSD	500.12	8.884	15782.	285.09	1.0294	317.31	354.58
#1	-.00067	-.0171	.00095	-.00050	.07690	.00035	-.00002
#2	.00120	-.0151	-.00093	.00148	.07803	-.00091	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0076**	**-.00005**	**.00101**	**.0151**	**-.00032**	**-.00071**	**-.0001**
Stddev	.0023	.00026	.00087	.0472	.00022	.00092	.0008
%RSD	30.60	501.76	85.458	312.8	68.706	128.66	1215.
#1	.0060	-.00024	.00163	.0485	-.00047	-.00136	-.0006
#2	.0093	.00013	.00040	-.0183	-.00016	-.00006	.0005
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1585.1**	**1142.4**	**35519.**	**3966.8**
Stddev	1.3	1.7	6.	18.8
%RSD	.07964	.15275	.01580	.47392
#1	1586.0	1143.6	35523.	3953.5
#2	1584.2	1141.1	35516.	3980.1

Sample Name: CCVL-5395711 Acquired: 7/17/2019 0:55:45 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00559**	**.19185**	**.01197**	F **.04209**	**.00209**	**.00203**	**.49265**
Stddev	.00016	.00607	.00097	.00008	.00002	.00005	.00277
%RSD	2.8208	3.1655	8.0971	.17981	.94052	2.2798	.56148
#1	.00548	.19614	.01128	.04204	.00210	.00207	.49460
#2	.00570	.18756	.01265	.04214	.00207	.00200	.49069
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00191**	**-.0047**	**.00372**	**.00404**	**.00948**	**.05038**	**.51437**
Stddev	.00000	.0049	.00003	.00034	.00038	.00006	.00396
%RSD	.00693	103.4	.87951	8.3808	4.0538	.11260	.77058
#1	.00191	-.0081	.00370	.00427	.00920	.05034	.51717
#2	.00191	-.0013	.00375	.00380	.00975	.05042	.51156
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02840**	**.20122**	**.00297**	**.00993**	**.99434**	**.01047**	**-.0180**
Stddev	.00002	.00290	.00012	.00034	.00405	.00028	.0011
%RSD	.05375	1.4405	3.9775	3.3981	.40733	2.7090	6.205
#1	.02839	.20327	.00306	.00969	.99148	.01067	-.0172
#2	.02841	.19917	.00289	.01017	.99720	.01027	-.0188
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/17/2019 0:55:45 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00932**	**.1772**	**.02298**	**.02750**	**.54201**	**.00887**	**.00486**
Stddev	.00057	.0034	.00019	.00703	.00608	.00004	.00003
%RSD	6.1431	1.899	.82669	25.555	1.1225	.41108	.59089
#1	.00972	.1796	.02312	.02253	.54632	.00889	.00488
#2	.00892	.1748	.02285	.03247	.53771	.00884	.00484
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.0093**	**.00507**	**.01873**	**-.0136**	**.00428**	**.01153**	**-.0002**
Stddev	.0014	.00021	.00042	.0024	.00012	.00036	.0008
%RSD	15.59	4.1179	2.2383	17.85	2.8196	3.1111	479.9
#1	.0083	.00522	.01902	-.0153	.00420	.01179	.0004
#2	.0103	.00492	.01843	-.0119	.00437	.01128	-.0007
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1590.4**	**1141.2**	**35315.**	**3951.4**
Stddev	1.4	1.4	51.	11.8
%RSD	.08894	.12472	.14300	.29815
#1	1589.4	1140.2	35280.	3943.1
#2	1591.4	1142.2	35351.	3959.8

Sample Name: 480-156102-C-4-A Acquired: 7/17/2019 0:59:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00080**	**.18364**	**-.00222**	**2.1155**	**.02274**
Stddev	.00028	.01830	.00212	.0002	.00005
%RSD	34.990	9.9649	95.501	.00948	.20985
#1	-.00060	.19658	-.00072	2.1154	.02278
#2	-.00099	.17070	-.00372	2.1157	.02271
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00008**	**556.15**	**.00059**	**.0011**	**.00064**
Stddev	.00006	1.11	.00000	.0105	.00004
%RSD	77.307	.19974	.57707	923.6	6.3239
#1	-.00004	556.94	.00059	.0086	.00061
#2	-.00012	555.36	.00058	-.0063	.00067
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00543**	**.00729**	**.85064**	**4.6278**	**.01062**
Stddev	.00041	.00019	.00507	.0022	.00018
%RSD	7.5671	2.6401	.59621	.04768	1.6909
#1	.00572	.00715	.84706	4.6294	.01074
#2	.00514	.00743	.85423	4.6263	.01049
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-4-A Acquired: 7/17/2019 0:59:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**103.15**	**6.1558**	**.00067**	**9.7269**	**.00513**
Stddev	.11	.0203	.00019	.0134	.00043
%RSD	.10204	.32971	28.180	.13747	8.3201
#1	103.22	6.1702	.00080	9.7364	.00483
#2	103.08	6.1415	.00054	9.7175	.00543
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0380**	**.00274**	F **548.8**	**-.00108**	**-.00983**
Stddev	.0010	.00049	.2	.00147	.00257
%RSD	2.666	17.800	.0375	135.42	26.099
#1	.0373	.00308	548.6	-.00005	-.01165
#2	.0387	.00239	548.9	-.00212	-.00802
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**8.6756**	**-.00158**	**.52706**	**-.0067**	**.00248**
Stddev	.0310	.00147	.00092	.0059	.00000
%RSD	.35757	92.874	.17545	87.14	.13210
#1	8.6976	-.00262	.52641	-.0026	.00248
#2	8.6537	-.00054	.52772	-.0109	.00247
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-4-A Acquired: 7/17/2019 0:59:36 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	.00233	.0167	-.00011	.01900	-.0016
Stddev	.00131	.0086	.00002	.00125	.0002
%RSD	56.108	51.39	17.113	6.5551	11.96
#1	.00326	.0106	-.00010	.01812	-.0015
#2	.00141	.0228	-.00013	.01988	-.0018
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1367.0	1009.4	31508.	3800.8
Stddev	.2	1.3	20.	3.8
%RSD	.01804	.12680	.06214	.09949
#1	1367.2	1010.3	31494.	3803.5
#2	1366.8	1008.5	31522.	3798.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	85.997%	87.343%	88.305%	96.285%
Range				

Sample Name: 480-156102-C-5-A Acquired: 7/17/2019 1:03:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.04091**	**.00866**	**2.3678**	**.43692**
Stddev	.00004	.00372	.00268	.0012	.00004
%RSD	8.2826	9.0920	30.962	.04909	.00978
#1	-.00040	.04354	.01055	2.3686	.43689
#2	-.00045	.03828	.00676	2.3670	.43695
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00000**	**282.32**	**.00023**	**-.0113**	**-.00017**
Stddev	.00003	.18	.00007	.0126	.00013
%RSD	975.33	.06336	29.112	111.4	77.026
#1	.00003	282.19	.00019	-.0201	-.00008
#2	-.00002	282.44	.00028	-.0024	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00070**	**-.00003**	**6.9577**	**8.2819**	**.00487**
Stddev	.00068	.00010	.0097	.0207	.00046
%RSD	96.320	290.02	.13978	.24992	9.3472
#1	.00118	-.00010	6.9646	8.2673	.00455
#2	.00022	.00004	6.9508	8.2966	.00519
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-5-A Acquired: 7/17/2019 1:03:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**36.181**	**3.4285**	**-.00005**	**11.573**	**.00090**
Stddev	.020	.0049	.00049	.012	.00037
%RSD	.05543	.14387	983.05	.10648	41.593
#1	36.167	3.4250	-.00039	11.582	.00064
#2	36.195	3.4320	.00029	11.565	.00117
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1752**	**.00448**	**15.63**	**.00080**	**-.00286**
Stddev	.0021	.00105	.04	.00526	.00190
%RSD	1.203	23.492	.2500	655.76	66.652
#1	.1737	.00374	15.66	.00452	-.00420
#2	.1767	.00523	15.60	-.00292	-.00151
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.919**	**-.00102**	**.93540**	**.0033**	**.00049**
Stddev	.015	.00067	.00080	.0098	.00018
%RSD	.12643	66.008	.08601	293.1	37.020
#1	11.929	-.00149	.93597	-.0036	.00061
#2	11.908	-.00054	.93483	.0102	.00036
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-5-A Acquired: 7/17/2019 1:03:34 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00272**	**-.0072**	**.00179**	**.00708**	**.0036**
Stddev	.00170	.0814	.00034	.00005	.0011
%RSD	62.496	1128.	18.778	.75575	29.86
#1	.00152	-.0647	.00203	.00704	.0044
#2	.00393	.0503	.00155	.00712	.0028
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1436.6**	**1045.5**	**32650.**	**3875.4**
Stddev	1.3	.6	31.	2.5
%RSD	.08810	.05569	.09566	.06477
#1	1437.5	1045.1	32628.	3877.2
#2	1435.7	1045.9	32672.	3873.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.380%	90.470%	91.506%	98.174%
Range				

Sample Name: 480-156102-C-6-A Acquired: 7/17/2019 1:07:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00043**	**.14078**	**.00322**	**2.1828**	**.03352**
Stddev	.00042	.00432	.00367	.0019	.00001
%RSD	98.328	3.0699	114.06	.08786	.02591
#1	-.00013	.13772	.00581	2.1815	.03352
#2	-.00073	.14383	.00062	2.1842	.03353
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00006**	**341.33**	**.00006**	**-.0024**	**-.00018**
Stddev	.00005	1.06	.00011	.0080	.00020
%RSD	93.496	.30991	189.05	335.0	108.16
#1	-.00010	342.08	-.00002	.0033	-.00004
#2	-.00002	340.59	.00013	-.0080	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00200**	**.00229**	**.28148**	**3.8849**	**.00931**
Stddev	.00051	.00016	.00323	.0130	.00025
%RSD	25.666	6.9753	1.1482	.33499	2.6727
#1	.00164	.00217	.28377	3.8941	.00913
#2	.00237	.00240	.27920	3.8757	.00948
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-6-A Acquired: 7/17/2019 1:07:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**21.031**	**.32313**	**.00030**	**3.3103**	**.00182**
Stddev	.001	.00006	.00041	.0082	.00034
%RSD	.00500	.01976	135.25	.24803	18.890
#1	21.031	.32317	.00059	3.3161	.00158
#2	21.030	.32308	.00001	3.3045	.00207
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0207**	**.00144**	F **187.4**	**-.00282**	**-.00335**
Stddev	.0028	.00044	.2	.00084	.00251
%RSD	13.31	30.671	.1330	29.815	74.970
#1	.0188	.00113	187.6	-.00222	-.00157
#2	.0227	.00176	187.3	-.00341	-.00512
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.814**	**-.00102**	**.39460**	**.0019**	**.00234**
Stddev	.038	.00148	.00023	.0016	.00063
%RSD	.35093	144.47	.05877	83.42	26.845
#1	10.787	.00002	.39476	.0030	.00189
#2	10.841	-.00207	.39443	.0008	.00278
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-6-A Acquired: 7/17/2019 1:07:32 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00047**	**-.0054**	**.00000**	**.00838**	**-.0001**
Stddev	.00069	.0372	.00011	.00019	.0006
%RSD	148.37	681.8	4627.0	2.2645	555.3
#1	-.00002	.0208	-.00008	.00852	-.0005
#2	.00096	-.0317	.00008	.00825	.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1445.1**	**1052.6**	**32563.**	**3841.3**
Stddev	1.1	.4	26.	1.8
%RSD	.07374	.03838	.08098	.04685
#1	1445.8	1052.9	32582.	3840.1
#2	1444.3	1052.3	32545.	3842.6
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	90.911%	91.079%	91.264%	97.312%
Range				

Sample Name: 480-156102-C-7-A Acquired: 7/17/2019 1:11:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00119**	**4.7251**	**.02412**	**2.3270**	**.44445**
Stddev	.00004	.0083	.00316	.0012	.00125
%RSD	3.0184	.17482	13.104	.04978	.28059
#1	-.00122	4.7309	.02189	2.3278	.44534
#2	-.00117	4.7193	.02636	2.3261	.44357
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**171.65**	**.00034**	**.0048**	**.00232**
Stddev	.00002	.18	.00011	.0063	.00014
%RSD	10.590	.10615	31.389	132.9	5.8533
#1	.00018	171.52	.00041	.0093	.00222
#2	.00015	171.78	.00026	.0003	.00242
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01129**	**.05137**	**16.878**	**6.5285**	**.01310**
Stddev	.00032	.00092	.076	.0096	.00020
%RSD	2.8329	1.7947	.45280	.14677	1.5198
#1	.01107	.05202	16.824	6.5217	.01296
#2	.01152	.05072	16.932	6.5353	.01324
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-7-A Acquired: 7/17/2019 1:11:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.678**	**3.6193**	**.00904**	**6.8593**	**.00720**
Stddev	.013	.0074	.00063	.0215	.00033
%RSD	.07105	.20496	7.0052	.31312	4.5160
#1	17.669	3.6140	.00859	6.8441	.00697
#2	17.687	3.6245	.00948	6.8745	.00743
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.9160**	**.06054**	**21.11**	**.00297**	**-.00044**
Stddev	.0032	.00105	.01	.00210	.00461
%RSD	.3452	1.7415	.0301	70.658	1045.4
#1	.9183	.05979	21.11	.00445	-.00370
#2	.9138	.06128	21.10	.00148	.00282
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**19.706**	**.00192**	**.67228**	**.0122**	**.08400**
Stddev	.082	.00011	.00137	.0083	.00111
%RSD	.41521	5.5601	.20314	67.82	1.3244
#1	19.649	.00199	.67132	.0064	.08321
#2	19.764	.00184	.67325	.0181	.08478
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-7-A Acquired: 7/17/2019 1:11:25 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00025**	**-.0434**	**.01207**	**.16613**	**.0025**
Stddev	.00188	.0171	.00012	.00002	.0004
%RSD	756.92	39.40	.96805	.01077	14.58
#1	.00158	-.0555	.01215	.16612	.0027
#2	-.00108	-.0313	.01199	.16615	.0022
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1482.9**	**1072.3**	**33349.**	**3904.0**
Stddev	2.2	2.0	13.	1.0
%RSD	.14947	.18963	.03774	.02487
#1	1484.5	1073.8	33358.	3904.7
#2	1481.3	1070.9	33340.	3903.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.289%	92.788%	93.464%	98.899%
Range				

Sample Name: 480-156102-C-8-A Acquired: 7/17/2019 1:15:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00087**	**.03293**	**.00469**	**2.2383**	**.24393**
Stddev	.00080	.00575	.00364	.0029	.00008
%RSD	91.395	17.468	77.568	.12971	.03075
#1	-.00143	.03699	.00212	2.2404	.24399
#2	-.00031	.02886	.00727	2.2363	.24388
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**401.47**	**.00016**	**.0060**	**.00105**
Stddev	.00001	1.18	.00002	.0015	.00000
%RSD	32.039	.29353	12.506	24.74	.34268
#1	-.00001	402.30	.00017	.0049	.00105
#2	-.00002	400.64	.00014	.0070	.00105
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00112**	**.00120**	**6.0650**	**8.4580**	**.01245**
Stddev	.00018	.00032	.0175	.0072	.00069
%RSD	16.182	26.909	.28864	.08559	5.5736
#1	.00099	.00097	6.0774	8.4631	.01196
#2	.00125	.00143	6.0526	8.4529	.01295
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-8-A Acquired: 7/17/2019 1:15:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**39.698**	**5.1225**	**-.00014**	**37.319**	**.00506**
Stddev	.068	.0060	.00007	.049	.00005
%RSD	.17215	.11679	45.919	.13077	.98458
#1	39.650	5.1268	-.00010	37.353	.00510
#2	39.747	5.1183	-.00019	37.284	.00503
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0233**	**.00234**	F **242.8**	**-.00057**	**-.00999**
Stddev	.0011	.00089	.0	.00000	.00817
%RSD	4.685	38.078	.0141	.74257	81.808
#1	.0241	.00297	242.8	-.00057	-.01576
#2	.0225	.00171	242.8	-.00058	-.00421
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**13.413**	**-.00047**	**.50108**	**.0039**	**.00028**
Stddev	.007	.00020	.00070	.0068	.00021
%RSD	.05231	42.688	.13926	173.9	73.807
#1	13.418	-.00033	.50157	-.0009	.00013
#2	13.408	-.00062	.50059	.0088	.00043
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 480-156102-C-8-A Acquired: 7/17/2019 1:15:16 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00051**	**.0177**	**.00024**	**-.00034**	**.0008**
Stddev	.00237	.0169	.00039	.00177	.0001
%RSD	468.78	95.47	167.38	514.06	9.886
#1	-.00117	.0297	-.00004	-.00159	.0007
#2	.00218	.0058	.00051	.00091	.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1405.6**	**1034.1**	**31856.**	**3801.4**
Stddev	1.3	1.6	11.	1.9
%RSD	.09424	.15217	.03529	.05098
#1	1404.6	1033.0	31864.	3800.0
#2	1406.5	1035.2	31848.	3802.8
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	88.424%	89.482%	89.280%	96.300%
Range				

Sample Name: 155845-2 tot Acquired: 7/17/2019 1:19:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00032**	**.26030**	**.00002**	**.01845**	**.07553**
Stddev	.00028	.00018	.00069	.00064	.00005
%RSD	88.378	.07090	4366.3	3.4752	.06510
#1	-.00012	.26043	.00050	.01890	.07550
#2	-.00051	.26017	-.00047	.01800	.07556
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**2.6851**	**-.00014**	**.0157**	**.00081**
Stddev	.00005	.0080	.00009	.0134	.00020
%RSD	21.668	.29666	67.451	85.61	24.669
#1	.00018	2.6908	-.00007	.0062	.00067
#2	.00025	2.6795	-.00020	.0252	.00095
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00043**	**.00030**	**.55615**	**4.3465**	**.00058**
Stddev	.00015	.00043	.00610	.0095	.00036
%RSD	35.448	145.69	1.0971	.21972	61.733
#1	.00054	.00060	.56047	4.3397	.00083
#2	.00033	-.00001	.55184	4.3532	.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155845-2 tot Acquired: 7/17/2019 1:19:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.36351**	**.07876**	**-.00035**	**2.0494**	**.00289**
Stddev	.00338	.00010	.00007	.0064	.00044
%RSD	.92947	.12096	19.222	.31166	15.297
#1	.36590	.07883	-.00040	2.0539	.00258
#2	.36112	.07869	-.00030	2.0449	.00321
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0014**	**.00076**	**4.705**	**-.00148**	**.00120**
Stddev	.0023	.00034	.007	.00103	.00197
%RSD	159.4	44.486	.1599	69.782	163.98
#1	.0031	.00100	4.700	-.00221	.00260
#2	-.0002	.00052	4.710	-.00075	-.00019
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.6509**	**.00052**	**.05286**	**.0088**	**-.00004**
Stddev	.0057	.00084	.00000	.0046	.00050
%RSD	.15572	161.85	.00378	52.32	1135.2
#1	3.6549	.00112	.05286	.0121	.00031
#2	3.6469	-.00008	.05285	.0056	-.00039
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155845-2 tot Acquired: 7/17/2019 1:19:07 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00205**	**.0113**	**-.00028**	**.00095**	**-.0016**
Stddev	.00032	.0169	.00029	.00065	.0021
%RSD	15.465	149.4	104.88	68.785	132.8
#1	.00228	.0232	-.00048	.00049	-.0030
#2	.00183	-.0006	-.00007	.00141	-.0001
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1665.4**	**1200.7**	**36332.**	**4067.5**
Stddev	7.5	5.6	30.	4.4
%RSD	.45083	.46806	.08256	.10762
#1	1670.7	1204.7	36353.	4070.6
#2	1660.1	1196.7	36311.	4064.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	104.77%	103.90%	101.82%	103.04%
Range				

Sample Name: 155912-1 tot Acquired: 7/17/2019 1:22:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00093**	**.02255**	**.00403**	**1.3758**	**.13508**
Stddev	.00098	.00186	.00116	.0019	.00015
%RSD	104.77	8.2541	28.669	.13744	.10793
#1	-.00024	.02387	.00485	1.3744	.13518
#2	-.00163	.02124	.00321	1.3771	.13497
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**218.85**	**.00014**	**.0140**	**.00427**
Stddev	.00004	.09	.00017	.0179	.00024
%RSD	68.522	.04146	122.63	128.0	5.5041
#1	-.00010	218.91	.00026	.0266	.00444
#2	-.00003	218.78	.00002	.0013	.00411
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00351**	**.01231**	**1.9184**	**96.406**	**.03307**
Stddev	.00033	.00016	.0471	.024	.00028
%RSD	9.5308	1.3032	2.4526	.02466	.85960
#1	.00375	.01242	1.9517	96.423	.03328
#2	.00327	.01219	1.8852	96.389	.03287
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155912-1 tot Acquired: 7/17/2019 1:22:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**162.75**	**2.9593**	**.00123**	F **1216.1**	**.06682**
Stddev	.19	.0161	.00000	.2	.00043
%RSD	.11517	.54371	.11000	.01729	.64641
#1	162.88	2.9479	.00123	1216.0	.06651
#2	162.61	2.9707	.00123	1216.3	.06712
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass
High Limit				900.00	
Low Limit				-1.0000	

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.1392**	**.00022**	F **103.1**	**-.00055**	**-.01595**
Stddev	.0006	.00037	.1	.00069	.00308
%RSD	.4626	164.81	.0821	125.47	19.317
#1	.1388	.00048	103.2	-.00006	-.01377
#2	.1397	-.00004	103.0	-.00104	-.01813
Check ?	None	Chk Pass	Chk Fail	Chk Pass	Chk Pass
High Limit			90.00		
Low Limit			-.2000		

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**10.469**	**.00322**	**1.3571**	**.0046**	**.00062**
Stddev	.040	.00182	.0014	.0110	.00020
%RSD	.37848	56.477	.09980	240.5	32.180
#1	10.440	.00193	1.3562	.0123	.00076
#2	10.497	.00450	1.3581	-.0032	.00048
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155912-1 tot Acquired: 7/17/2019 1:22:56 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00527**	**.0063**	**.00063**	**.08096**	**.0020**
Stddev	.00252	.1122	.00054	.00046	.0011
%RSD	47.831	1790.	85.224	.57206	57.24
#1	.00349	.0856	.00025	.08129	.0028
#2	.00705	-.0731	.00101	.08063	.0012
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1263.0**	**1015.4**	**30284.**	**3779.2**
Stddev	5.3	5.1	15.	4.5
%RSD	.41591	.50449	.05019	.11966
#1	1266.7	1019.1	30273.	3782.4
#2	1259.3	1011.8	30294.	3776.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	79.457%	87.866%	84.874%	95.737%
Range				

Sample Name: 155918-2 tot Acquired: 7/17/2019 1:26:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00010**	**.06880**	**-.00024**	**.00761**	**.00463**
Stddev	.00008	.01971	.00072	.00014	.00001
%RSD	78.889	28.646	304.65	1.7980	.14849
#1	-.00005	.05486	-.00074	.00771	.00462
#2	-.00016	.08273	.00027	.00752	.00463
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**1.9968**	**.00016**	**-.0068**	**.00040**
Stddev	.00002	.0067	.00005	.0061	.00007
%RSD	39.147	.33716	34.173	89.41	18.195
#1	.00007	1.9921	.00020	-.0025	.00045
#2	.00004	2.0016	.00012	-.0112	.00035
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00002**	**-.00012**	**.11257**	**.60032**	**-.00053**
Stddev	.00044	.00011	.00045	.01259	.00000
%RSD	2017.6	92.265	.40415	2.0968	.28928
#1	.00034	-.00004	.11289	.59142	-.00053
#2	-.00029	-.00019	.11225	.60922	-.00053
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155918-2 tot Acquired: 7/17/2019 1:26:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.32073**	**.00717**	**-.00063**	**2.1897**	**.00185**
Stddev	.00446	.00001	.00027	.0092	.00036
%RSD	1.3910	.16627	42.891	.41821	19.273
#1	.31758	.00717	-.00044	2.1832	.00210
#2	.32389	.00718	-.00082	2.1962	.00160
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0094**	**.00186**	**1.472**	**-.00283**	**.00118**
Stddev	.0000	.00023	.010	.00075	.00495
%RSD	.4036	12.612	.6992	26.620	418.09
#1	.0094	.00170	1.479	-.00230	.00469
#2	.0094	.00203	1.465	-.00336	-.00232
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.5820**	**-.00099**	**.01600**	**-.0013**	**.00267**
Stddev	.0112	.00038	.00002	.0084	.00036
%RSD	.20083	38.962	.11740	637.3	13.351
#1	5.5899	-.00071	.01598	.0046	.00242
#2	5.5741	-.00126	.01601	-.0073	.00292
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155918-2 tot Acquired: 7/17/2019 1:26:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00193**	**.0056**	**-.00021**	**-.00009**	**-.0007**
Stddev	.00062	.0077	.00003	.00022	.0006
%RSD	31.922	136.2	12.267	234.99	82.38
#1	.00149	.0002	-.00022	-.00024	-.0003
#2	.00236	.0110	-.00019	.00006	-.0011
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1630.8**	**1169.3**	**35725.**	**4047.5**
Stddev	2.6	1.8	141.	12.0
%RSD	.15993	.15276	.39558	.29759
#1	1632.7	1170.6	35825.	4056.0
#2	1629.0	1168.1	35625.	4039.0
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.60%	101.18%	100.13%	102.53%
Range				

Sample Name: 155918-5 tot Acquired: 7/17/2019 1:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00081**	**.08693**	**.29380**	**.02435**	**.10214**
Stddev	.00042	.01388	.00100	.00018	.00002
%RSD	51.920	15.968	.34035	.75147	.01481
#1	.00111	.07712	.29309	.02448	.10213
#2	.00052	.09675	.29450	.02422	.10215
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**15.748**	**.00031**	**.0337**	**.02923**
Stddev	.00007	.138	.00007	.0029	.00012
%RSD	337.85	.87390	21.448	8.533	.40389
#1	-.00007	15.845	.00036	.0357	.02932
#2	.00003	15.650	.00026	.0317	.02915
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2714	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	271.441 {124}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00243**	**.02334**	**215.85**	**4.8679**	**.00024**
Stddev	.00070	.00016	.44	.0047	.00006
%RSD	28.916	.69327	.20615	.09687	25.647
#1	-.00194	.02323	215.54	4.8645	.00029
#2	-.00293	.02346	216.17	4.8712	.00020
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155918-5 tot Acquired: 7/17/2019 1:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**2.7758**	**2.7751**	**-.00213**	**8.0862**	**.00241**
Stddev	.0018	.0054	.00015	.0126	.00046
%RSD	.06399	.19600	7.0460	.15613	19.038
#1	2.7745	2.7713	-.00223	8.0773	.00273
#2	2.7770	2.7790	-.00202	8.0951	.00209
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.5709**	**.01160**	**.5566**	**-.00271**	**.00267**
Stddev	.0027	.00200	.0019	.00242	.00270
%RSD	.4674	17.223	.3327	89.396	100.94
#1	.5728	.01301	.5579	-.00100	.00458
#2	.5690	.01019	.5553	-.00442	.00076
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**11.897**	**.00204**	**.20207**	**.1251**	**.00161**
Stddev	.036	.00020	.00065	.0054	.00002
%RSD	.30023	9.5726	.32391	4.346	1.3028
#1	11.872	.00218	.20160	.1290	.00159
#2	11.923	.00190	.20253	.1213	.00162
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155918-5 tot Acquired: 7/17/2019 1:30:44 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00453**	**.0387**	**.00199**	**.00747**	**.0058**
Stddev	.00249	.0440	.00000	.00122	.0003
%RSD	54.956	113.5	.03413	16.380	5.299
#1	-.00277	.0077	.00199	.00833	.0055
#2	-.00629	.0698	.00199	.00660	.0060
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1578.7**	**1137.9**	**34838.**	**3989.9**
Stddev	1.8	1.1	150.	2.2
%RSD	.11436	.09727	.43013	.05401
#1	1579.9	1138.7	34944.	3991.4
#2	1577.4	1137.1	34732.	3988.3
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	99.314%	98.462%	97.639%	101.07%
Range				

Sample Name: CCV-5385806 Acquired: 7/17/2019 1:34:31 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.97980**	**47.115**	**1.0192**	**.97916**	**.94947**	**1.0061**	**47.645**	**.97891**
Stddev	.00057	.036	.0003	.00092	.00165	.0007	.028	.00209
%RSD	.05831	.07740	.02696	.09377	.17358	.07002	.05883	.21347
#1	.97940	47.089	1.0191	.97851	.95064	1.0066	47.625	.97743
#2	.98020	47.140	1.0194	.97981	.94831	1.0056	47.665	.98039
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.024**	**.97042**	**.96842**	**1.0367**	**50.726**	**49.793**	**.95067**	**48.321**
Stddev	.004	.00049	.00158	.0008	.141	.121	.00077	.083
%RSD	.4412	.05008	.16364	.07646	.27701	.24245	.08060	.17122
#1	1.027	.97008	.96954	1.0362	50.627	49.879	.95013	48.380
#2	1.020	.97077	.96729	1.0373	50.826	49.708	.95121	48.263
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0614**	**1.0250**	**49.495**	**1.0124**	**24.42**	**.99059**	**25.30**	**.96618**
Stddev	.0015	.0025	.048	.0002	.00	.00305	.07	.00486
%RSD	.14139	.24398	.09631	.02265	.0151	.30815	.2955	.50250
#1	1.0603	1.0233	49.529	1.0125	24.42	.98843	25.25	.96275
#2	1.0624	1.0268	49.461	1.0122	24.42	.99274	25.35	.96962
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/17/2019 1:34:31 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**1.0493**	**9.5933**	**.97479**	**1.0017**	**.9977**	**1.0538**	**1.0033**	**2.506**
Stddev	.0042	.0211	.00271	.0015	.0084	.0002	.0038	.058
%RSD	.39740	.21979	.27844	.15137	.8452	.02067	.38013	2.300
#1	1.0464	9.6082	.97671	1.0028	.9917	1.0539	1.0006	2.547
#2	1.0522	9.5783	.97288	1.0006	1.004	1.0536	1.0060	2.465
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**1.0577**	**1.0342**	**1.025**
Stddev	.0008	.0061	.005
%RSD	.07424	.58685	.5109
#1	1.0582	1.0385	1.021
#2	1.0571	1.0299	1.028
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1470.1**	**1096.0**	**33357.**	**3877.0**
Stddev	1.9	1.8	37.	1.8
%RSD	.12971	.16058	.11208	.04539
#1	1471.4	1097.2	33331.	3875.8
#2	1468.7	1094.7	33384.	3878.3

Sample Name: CCB-5392763 Acquired: 7/17/2019 1:38:11 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00014**	**.00919**	**-.00081**	F **.02116**	**.00003**	**.00005**	**-.00338**
Stddev	.00013	.01836	.00096	.00053	.00001	.00007	.00023
%RSD	86.372	199.66	117.94	2.4977	25.566	140.19	6.7596
#1	-.00006	-.00379	-.00013	.02154	.00004	.00010	-.00354
#2	-.00023	.02217	-.00149	.02079	.00003	.00000	-.00322
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
High Limit				.02000			
Low Limit				-.02000			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00002**	**.0004**	**-.00008**	**.00003**	**.00002**	**.02861**	**.06245**
Stddev	.00000	.0026	.00004	.00032	.00033	.00681	.01116
%RSD	.36417	712.0	56.136	922.89	2025.5	23.812	17.867
#1	-.00002	-.0015	-.00011	-.00019	-.00021	.02380	.07035
#2	-.00002	.0022	-.00005	.00026	.00025	.03343	.05456
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00026**	**-.00067**	**-.00022**	**.00049**	**.06640**	**.00020**	**.0086**
Stddev	.00015	.00142	.00012	.00027	.00089	.00004	.0004
%RSD	57.418	212.93	55.183	54.249	1.3361	21.399	4.749
#1	-.00037	.00034	-.00030	.00030	.06578	.00023	.0083
#2	-.00016	-.00167	-.00013	.00068	.06703	.00017	.0089
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Sample Name: CCB-5392763 Acquired: 7/17/2019 1:38:11 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00053**	**-.0137**	**.00063**	**.00578**	**.08417**	**.00048**	**-.00003**
Stddev	.00024	.0016	.00217	.00097	.00640	.00125	.00008
%RSD	45.739	11.50	342.04	16.808	7.6051	260.96	284.80
#1	-.00036	-.0149	.00217	.00510	.07964	.00137	-.00009
#2	-.00070	-.0126	-.00090	.00647	.08869	-.00041	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit							
Low Limit							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0005**	**-.00002**	**-.00011**	**.0170**	**-.00041**	**-.00059**	**-.0004**
Stddev	.0127	.00001	.00011	.0103	.00000	.00100	.0003
%RSD	2755.	37.610	99.125	60.40	.48526	170.19	80.28
#1	-.0094	-.00002	-.00019	.0242	-.00041	.00012	-.0002
#2	.0085	-.00001	-.00003	.0097	-.00040	-.00130	-.0006
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit							
Low Limit							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1572.1**	**1129.3**	**35060.**	**3917.7**
Stddev	.3	.8	51.	11.0
%RSD	.02049	.07043	.14520	.28029
#1	1572.4	1128.7	35096.	3910.0
#2	1571.9	1129.8	35024.	3925.5

Sample Name: CCVL-5395711 Acquired: 7/17/2019 1:42:03 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00562**	**.18795**	**.01185**	F **.03946**	**.00209**	**.00204**	**.48655**
Stddev	.00039	.01938	.00104	.00007	.00001	.00000	.00047
%RSD	6.9674	10.311	8.7431	.17853	.33263	.13353	.09565
#1	.00589	.20165	.01112	.03941	.00208	.00204	.48622
#2	.00534	.17425	.01259	.03951	.00209	.00203	.48688
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00192**	**-.0070**	**.00365**	**.00389**	**.00955**	**.06341**	**.52711**
Stddev	.00004	.0107	.00003	.00030	.00037	.00020	.00550
%RSD	1.8390	151.9	.93728	7.8277	3.8634	.32239	1.0428
#1	.00194	.0005	.00363	.00367	.00929	.06327	.52323
#2	.00189	-.0146	.00367	.00410	.00981	.06356	.53100
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02823**	**.19565**	**.00312**	**.00980**	**.99862**	**.01072**	**-.0177**
Stddev	.00032	.00373	.00008	.00021	.00106	.00017	.0018
%RSD	1.1481	1.9062	2.6382	2.1630	.10609	1.6025	10.31
#1	.02846	.19829	.00317	.00995	.99787	.01060	-.0164
#2	.02801	.19301	.00306	.00965	.99937	.01084	-.0189
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/17/2019 1:42:03 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00897**	**.1819**	**.02020**	**.02520**	**.52681**	**.00920**	**.00485**
Stddev	.00224	.0005	.00026	.00068	.00120	.00153	.00004
%RSD	24.941	.2841	1.2850	2.6879	.22830	16.690	.77470
#1	.01055	.1822	.02038	.02472	.52767	.01028	.00487
#2	.00738	.1815	.02002	.02568	.52596	.00811	.00482
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0093**	**.00511**	**.01969**	**.0035**	**.00445**	**.01203**	**.0002**
Stddev	.0001	.00024	.00254	.0379	.00012	.00071	.0011
%RSD	.5840	4.6737	12.901	1069.	2.5915	5.8883	483.2
#1	-.0094	.00494	.02148	.0304	.00436	.01153	.0010
#2	-.0093	.00528	.01789	-.0233	.00453	.01254	-.0005
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1587.3**	**1137.2**	**35033.**	**3925.5**
Stddev	.6	1.4	67.	8.7
%RSD	.04017	.12439	.19022	.22124
#1	1587.7	1138.2	34986.	3931.6
#2	1586.8	1136.2	35080.	3919.3

Sample Name: 155919-3 tot Acquired: 7/17/2019 1:45:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00039**	**.02858**	**.00331**	**.39041**	**.17188**
Stddev	.00021	.02339	.00418	.00176	.00011
%RSD	52.416	81.844	126.27	.44959	.06197
#1	-.00025	.04512	.00627	.38917	.17180
#2	-.00054	.01204	.00035	.39165	.17195
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00003**	**187.88**	**-.00011**	**-.0103**	**.00229**
Stddev	.00005	.43	.00005	.0208	.00013
%RSD	137.35	.22762	44.644	202.1	5.6041
#1	-.00000	187.57	-.00008	.0044	.00220
#2	-.00007	188.18	-.00015	-.0250	.00239
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00073**	**-.00090**	**22.244**	**5.1359**	**.00443**
Stddev	.00009	.00013	.033	.0123	.00013
%RSD	12.434	14.169	.14866	.23895	2.9608
#1	.00066	-.00099	22.267	5.1446	.00434
#2	.00079	-.00081	22.220	5.1272	.00453
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155919-3 tot Acquired: 7/17/2019 1:45:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na8183	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	818.326 { 41}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**26.737**	**1.5746**	**-.00058**	**108.56**	**.00613**
Stddev	.001	.0039	.00047	.38	.00069
%RSD	.00251	.24564	80.961	.35215	11.279
#1	26.737	1.5773	-.00025	108.29	.00564
#2	26.736	1.5719	-.00091	108.83	.00662
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0600**	**.00250**	**.7313**	**-.00489**	**-.00923**
Stddev	.0014	.00207	.0037	.00100	.00277
%RSD	2.378	83.075	.5003	20.540	30.041
#1	.0610	.00103	.7339	-.00418	-.00727
#2	.0590	.00396	.7287	-.00560	-.01120
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.8316**	**.00117**	**.65150**	**.0128**	**-.00009**
Stddev	.0029	.00008	.00141	.0061	.00043
%RSD	.04169	7.0429	.21663	47.94	497.72
#1	6.8336	.00111	.65250	.0085	-.00039
#2	6.8296	.00123	.65050	.0171	.00022
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155919-3 tot Acquired: 7/17/2019 1:45:54 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00323**	**.0065**	**-.00017**	**.01905**	**-.0007**
Stddev	.00090	.0372	.00011	.00055	.0002
%RSD	27.748	569.0	66.782	2.8898	32.13
#1	.00260	-.0197	-.00025	.01866	-.0006
#2	.00386	.0328	-.00009	.01944	-.0009
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1485.6**	**1102.1**	**33731.**	**3950.3**
Stddev	9.3	9.0	26.	13.4
%RSD	.62485	.81233	.07825	.33809
#1	1492.2	1108.5	33750.	3959.7
#2	1479.1	1095.8	33713.	3940.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	93.461%	95.368%	94.537%	100.07%
Range				

Sample Name: 155919-6 tot Acquired: 7/17/2019 1:49:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00021**	**-.00011**	**-.00105**	**.02612**	**.01134**
Stddev	.00011	.01122	.00072	.00039	.00002
%RSD	51.990	10166.	68.602	1.5011	.14186
#1	-.00013	.00783	-.00156	.02640	.01136
#2	-.00028	-.00805	-.00054	.02585	.01133
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00001**	**157.48**	**-.00016**	**-.0001**	**-.00007**
Stddev	.00004	.52	.00010	.0037	.00002
%RSD	601.02	.33301	65.677	3838.	30.820
#1	-.00004	157.85	-.00023	.0026	-.00009
#2	.00002	157.11	-.00008	-.0027	-.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00030**	**-.00100**	**.01333**	**1.5336**	**.00323**
Stddev	.00007	.00023	.00041	.0099	.00052
%RSD	22.631	22.944	3.0558	.64523	16.192
#1	.00034	-.00084	.01361	1.5266	.00360
#2	.00025	-.00116	.01304	1.5406	.00286
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155919-6 tot Acquired: 7/17/2019 1:49:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**17.945**	**.05729**	**-.00046**	**15.875**	**.00047**
Stddev	.009	.00027	.00008	.014	.00011
%RSD	.04845	.46572	16.985	.08553	23.670
#1	17.939	.05748	-.00051	15.865	.00040
#2	17.951	.05710	-.00040	15.884	.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0008**	**.00070**	**11.11**	**-.00401**	**-.00433**
Stddev	.0000	.00141	.07	.00012	.00495
%RSD	2.047	202.99	.6024	3.0931	114.21
#1	-.0008	.00170	11.06	-.00409	-.00083
#2	-.0008	-.00030	11.16	-.00392	-.00783
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**3.9563**	**-.00053**	**.58576**	**-.0003**	**-.00057**
Stddev	.0178	.00004	.00116	.0029	.00027
%RSD	.45053	8.2656	.19732	1049.	48.339
#1	3.9437	-.00056	.58495	.0018	-.00076
#2	3.9689	-.00049	.58658	-.0023	-.00037
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155919-6 tot Acquired: 7/17/2019 1:49:41 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00392**	**.0610**	**-.00037**	**.01915**	**-.0005**
Stddev	.00016	.0155	.00010	.00022	.0003
%RSD	4.0135	25.49	26.377	1.1344	64.81
#1	.00403	.0720	-.00030	.01899	-.0007
#2	.00381	.0500	-.00043	.01930	-.0003
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1530.1**	**1112.1**	**33909.**	**3932.5**
Stddev	5.8	6.6	27.	15.6
%RSD	.37754	.59535	.07855	.39646
#1	1534.2	1116.8	33927.	3943.6
#2	1526.0	1107.5	33890.	3921.5
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.261%	96.235%	95.033%	99.622%
Range				

Sample Name: 155931-11 sol Acquired: 7/17/2019 1:53:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00005**	**.01875**	**-.00060**	**.00075**	**.00004**
Stddev	.00037	.01013	.00127	.00046	.00001
%RSD	755.47	54.052	211.38	60.660	14.192
#1	-.00021	.02591	-.00150	.00043	.00004
#2	.00031	.01158	.00030	.00107	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**.03322**	**-.00024**	**-.0074**	**.00019**
Stddev	.00003	.00207	.00002	.0069	.00026
%RSD	3467.0	6.2265	6.8265	93.26	135.50
#1	-.00003	.03468	-.00023	-.0123	.00038
#2	.00002	.03176	-.00025	-.0025	.00001
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00016**	**.00007**	**.00055**	**.06508**	**.00045**
Stddev	.00011	.00039	.00201	.00071	.00017
%RSD	68.778	533.10	361.55	1.0901	37.962
#1	.00024	-.00020	-.00086	.06558	.00033
#2	.00008	.00035	.00197	.06458	.00057
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-11 sol Acquired: 7/17/2019 1:53:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00936**	**-.00018**	**-.00060**	**.08471**	**.00071**
Stddev	.00423	.00003	.00015	.00751	.00003
%RSD	45.117	14.610	24.481	8.8610	4.1240
#1	.00638	-.00020	-.00050	.09002	.00069
#2	.01235	-.00016	-.00071	.07940	.00073
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0068**	**-.00032**	**-.0223**	**-.00147**	**-.00367**
Stddev	.0008	.00002	.0014	.00158	.00247
%RSD	12.34	5.9489	6.282	107.44	67.263
#1	-.0074	-.00033	-.0233	-.00035	-.00193
#2	-.0062	-.00031	-.0213	-.00259	-.00542
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01622**	**-.00080**	**.00008**	**.0024**	**.00003**
Stddev	.00760	.00020	.00003	.0056	.00008
%RSD	46.863	24.637	37.797	228.1	289.53
#1	.02160	-.00094	.00010	-.0015	.00008
#2	.01085	-.00066	.00006	.0064	-.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-11 sol Acquired: 7/17/2019 1:53:29 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00376**	**.0116**	**-.00029**	**-.00136**	**-.0005**
Stddev	.00088	.0137	.00018	.00010	.0011
%RSD	23.302	118.2	63.018	7.6570	242.2
#1	.00438	.0213	-.00016	-.00129	.0003
#2	.00314	.0019	-.00042	-.00144	-.0013
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1617.8**	**1165.5**	**35868.**	**4003.7**
Stddev	6.6	7.2	134.	5.0
%RSD	.41104	.61918	.37460	.12391
#1	1622.5	1170.6	35963.	4007.2
#2	1613.1	1160.4	35773.	4000.2
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	101.77%	100.85%	100.52%	101.42%
Range				

Sample Name: 155931-13 sol Acquired: 7/17/2019 1:57:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.02294**	**-.00323**	**.01828**	**.05188**
Stddev	.00047	.00936	.00086	.00035	.00021
%RSD	128.23	40.789	26.560	1.9043	.39865
#1	-.00070	.01633	-.00384	.01853	.05173
#2	-.00003	.02956	-.00262	.01804	.05203
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00000**	**123.56**	**-.00018**	**-.0024**	**-.00026**
Stddev	.00001	.39	.00024	.0289	.00008
%RSD	183.67	.31803	131.05	1216.	29.787
#1	-.00001	123.84	-.00001	-.0228	-.00021
#2	.00000	123.28	-.00035	.0181	-.00032
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.04828**	**.00085**	**.31655**	**1.1040**	**.00609**
Stddev	.00053	.00023	.00387	.0134	.00044
%RSD	1.1066	26.622	1.2220	1.2118	7.2533
#1	.04790	.00069	.31928	1.0945	.00640
#2	.04865	.00101	.31381	1.1134	.00578
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-13 sol Acquired: 7/17/2019 1:57:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**29.532**	**.00201**	**.00069**	**21.585**	**.02601**
Stddev	.059	.00008	.00011	.076	.00041
%RSD	.20064	4.0255	16.146	.35130	1.5754
#1	29.490	.00195	.00061	21.531	.02572
#2	29.574	.00206	.00077	21.638	.02630
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0035**	**.00258**	**21.77**	**-.00344**	**-.00247**
Stddev	.0033	.00206	.08	.00035	.00427
%RSD	94.38	79.774	.3831	10.135	172.66
#1	-.0059	.00403	21.71	-.00319	.00055
#2	-.0012	.00112	21.83	-.00368	-.00549
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.5371**	**-.00121**	**.14834**	**.0053**	**-.00012**
Stddev	.0186	.00022	.00044	.0012	.00015
%RSD	.28450	18.130	.29847	22.70	130.70
#1	6.5502	-.00106	.14802	.0062	-.00001
#2	6.5239	-.00137	.14865	.0045	-.00023
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-13 sol Acquired: 7/17/2019 1:57:21 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00272**	**.0454**	**-.00025**	**-.00220**	**-.0007**
Stddev	.00093	.0101	.00022	.00157	.0005
%RSD	34.124	22.31	88.928	71.028	64.65
#1	.00338	.0382	-.00041	-.00110	-.0004
#2	.00206	.0526	-.00009	-.00331	-.0011
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1549.7**	**1122.5**	**33744.**	**3904.1**
Stddev	2.9	4.4	141.	19.8
%RSD	.18863	.39482	.41797	.50665
#1	1551.8	1125.7	33844.	3918.1
#2	1547.7	1119.4	33644.	3890.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	97.494%	97.133%	94.572%	98.902%
Range				

Sample Name: 155931-18 sol Acquired: 7/17/2019 2:01:09 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00017**	**.00722**	**-.00386**	**.02768**	**.12691**
Stddev	.00004	.00879	.00169	.00001	.00019
%RSD	20.674	121.75	43.839	.04723	.14639
#1	-.00020	.00100	-.00266	.02769	.12677
#2	-.00015	.01344	-.00505	.02767	.12704
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00004**	**116.71**	**-.00012**	**-.0104**	**-.00027**
Stddev	.00005	.17	.00023	.0074	.00001
%RSD	119.87	.14529	190.60	71.67	1.9902
#1	-.00007	116.59	-.00028	-.0051	-.00028
#2	-.00001	116.83	.00004	-.0156	-.00027
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00031**	**-.00078**	**.63964**	**2.6410**	**.00931**
Stddev	.00016	.00028	.00446	.0281	.00000
%RSD	50.667	35.641	.69786	1.0628	.02890
#1	.00020	-.00098	.64280	2.6212	.00932
#2	.00043	-.00059	.63649	2.6609	.00931
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-18 sol Acquired: 7/17/2019 2:01:09 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**34.801**	**.18270**	**.00268**	**45.799**	**.00094**
Stddev	.010	.00081	.00008	.160	.00031
%RSD	.02971	.44089	2.9007	.34868	33.461
#1	34.794	.18213	.00273	45.686	.00071
#2	34.809	.18327	.00262	45.912	.00116
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0037**	**.00095**	**39.95**	**-.00131**	**-.00377**
Stddev	.0039	.00035	.12	.00173	.00029
%RSD	104.4	36.230	.2946	131.76	7.7820
#1	-.0065	.00071	39.86	-.00253	-.00398
#2	-.0010	.00120	40.03	-.00009	-.00357
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**6.1672**	**-.00116**	**.21483**	**.0046**	**-.00040**
Stddev	.0388	.00061	.00046	.0070	.00019
%RSD	.62971	52.419	.21320	152.3	48.189
#1	6.1397	-.00073	.21451	.0095	-.00026
#2	6.1947	-.00160	.21516	-.0004	-.00054
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-18 sol Acquired: 7/17/2019 2:01:09 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00383**	**.0352**	**-.00047**	**-.00328**	**-.0007**
Stddev	.00340	.0639	.00005	.00155	.0005
%RSD	88.841	181.7	9.6045	47.271	71.99
#1	.00142	.0804	-.00050	-.00438	-.0011
#2	.00624	-.0100	-.00044	-.00218	-.0004
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1528.1**	**1110.7**	**33752.**	**3917.1**
Stddev	7.3	4.2	41.	14.2
%RSD	.47687	.37441	.12247	.36159
#1	1533.3	1113.6	33782.	3927.2
#2	1523.0	1107.7	33723.	3907.1
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	96.135%	96.106%	94.596%	99.232%
Range				

Sample Name: 155931-19 sol Acquired: 7/17/2019 2:04:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00956**	**.00131**	**.00029**	**.00004**
Stddev	.00002	.01210	.00135	.00030	.00001
%RSD	7.7820	126.61	103.42	102.72	21.762
#1	-.00026	.01811	.00226	.00050	.00003
#2	-.00023	.00100	.00035	.00008	.00005
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00001**	**.03284**	**-.00027**	**-.0239**	**.00005**
Stddev	.00003	.00301	.00009	.0064	.00015
%RSD	421.38	9.1736	34.426	26.72	309.81
#1	-.00001	.03497	-.00033	-.0194	-.00006
#2	.00003	.03071	-.00020	-.0284	.00016
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00042**	**.00011**	**.00093**	**.05275**	**-.00020**
Stddev	.00020	.00051	.00183	.00371	.00050
%RSD	47.303	446.16	197.29	7.0287	247.62
#1	.00056	-.00025	-.00037	.05013	.00015
#2	.00028	.00047	.00223	.05537	-.00055
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-19 sol Acquired: 7/17/2019 2:04:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.01040**	**-.00026**	**-.00059**	**.08140**	**.00073**
Stddev	.00081	.00008	.00005	.00375	.00011
%RSD	7.7803	29.312	8.9664	4.6110	15.447
#1	.01097	-.00020	-.00063	.08405	.00065
#2	.00983	-.00031	-.00056	.07874	.00081
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.0039**	**-.00013**	**-.0268**	**-.00077**	**-.00023**
Stddev	.0007	.00012	.0009	.00181	.00099
%RSD	18.76	88.782	3.517	235.82	430.84
#1	-.0044	-.00021	-.0261	.00051	.00047
#2	-.0034	-.00005	-.0274	-.00204	-.00093
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00652**	**-.00096**	**.00011**	**.0041**	**-.00015**
Stddev	.02094	.00026	.00000	.0016	.00045
%RSD	320.96	26.945	3.2275	37.55	303.13
#1	-.00828	-.00078	.00012	.0052	-.00047
#2	.02133	-.00114	.00011	.0030	.00017
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-19 sol Acquired: 7/17/2019 2:04:57 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00192**	**.0268**	**-.00024**	**-.00052**	**-.0009**
Stddev	.00033	.0050	.00025	.00131	.0005
%RSD	17.232	18.66	103.43	252.45	59.29
#1	.00215	.0233	-.00007	.00041	-.0012
#2	.00168	.0304	-.00042	-.00145	-.0005
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1624.4**	**1168.7**	**36001.**	**4041.4**
Stddev	7.3	8.2	29.	9.9
%RSD	.44857	.70490	.08177	.24602
#1	1629.6	1174.5	36022.	4048.5
#2	1619.3	1162.9	35980.	4034.4
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	102.19%	101.13%	100.90%	102.38%
Range				

Sample Name: 155931-2 sol Acquired: 7/17/2019 2:08:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2
Line	328.068 {103}	308.215 {109}	189.042 {478}	208.959 {461}	455.403 { 74}2
IS Ref	(Y_3600)	(Y_3774)	(Y_2243)	(Y_2243)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00056**	**.01280**	**.00082**	**.12827**	**.07119**
Stddev	.00006	.01217	.00136	.00084	.00005
%RSD	10.114	95.049	164.80	.65134	.07648
#1	-.00052	.02140	.00178	.12886	.07122
#2	-.00060	.00420	-.00014	.12768	.07115
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Be3130	Ca3179	Cd2288	**Ce4040	Co2286
Line	313.042 {108}	317.933 {106}	228.802 {447}	404.076 { 83}	228.616 {447}
IS Ref	(Y_3774)	(Y_3774)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00007**	**152.60**	**-.00017**	**-.0179**	**-.00003**
Stddev	.00008	.61	.00010	.0037	.00007
%RSD	126.57	.39784	60.502	20.64	289.86
#1	-.00001	153.03	-.00009	-.0153	-.00008
#2	-.00012	152.18	-.00024	-.0205	.00003
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Cr2677	Cu3273	Fe2599	K_7664	Li6707
Line	267.716 {126}	327.396 {103}	259.940 {130}	766.490 { 44}	670.784 { 50}
IS Ref	(Y_3600)	(Y_3600)	(Y_3774)	(Y_3774)	(Y_3774)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**-.00037**	**.00004**	**.00622**	**4.1384**	**.00979**
Stddev	.00023	.00003	.00388	.0063	.00090
%RSD	61.198	77.890	62.441	.15260	9.1419
#1	-.00021	.00006	.00896	4.1340	.00916
#2	-.00053	.00002	.00347	4.1429	.01042
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-2 sol Acquired: 7/17/2019 2:08:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Mg2790	Mn2576	Mo2020	Na5895	Ni2316
Line	279.079 {121}2	257.610 {131}3	202.030 {467}	589.592 { 57}	231.604 {446}
IS Ref	(Y_3600)	(Y_3600)	(Y_2243)	(Y_3774)	(In2306)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**35.017**	**.13815**	**.00298**	**52.642**	**.00262**
Stddev	.034	.00021	.00062	.007	.00025
%RSD	.09798	.15321	20.692	.01374	9.5436
#1	35.041	.13800	.00342	52.647	.00245
#2	34.993	.13830	.00255	52.637	.00280
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	P_2136	Pb2203	S_1820	Sb2068	Se1960
Line	213.618 {458}	220.353 {453}	182.034 {485}	206.833 {463}	196.090 {472}
IS Ref	(none)	(In2306)	(Y_2243)	(Y_2243)	(Y_2243)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.0077**	**.00039**	**62.83**	**-.00148**	**-.00545**
Stddev	.0002	.00109	.16	.00417	.00063
%RSD	2.722	281.91	.2497	281.54	11.566
#1	.0075	-.00038	62.72	.00147	-.00589
#2	.0078	.00116	62.94	-.00443	-.00500
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit					
Low Limit					

Elem	Si2881	Sn1899	Sr4077	Th2837	Ti3349
Line	288.158 {117}2	189.989 {477}	407.771 { 83}	283.730 {119}	334.904 {101}
IS Ref	(Y_3774)	(In2306)	(Y_3774)	(none)	(Y_3600)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**5.8118**	**.00033**	**1.3095**	**.0058**	**-.00014**
Stddev	.0731	.00155	.0014	.0082	.00015
%RSD	1.2585	476.86	.10465	141.0	108.02
#1	5.8635	-.00077	1.3104	.0116	-.00003
#2	5.7600	.00142	1.3085	.0000	-.00025
Check ?	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass
High Limit					
Low Limit					

Sample Name: 155931-2 sol Acquired: 7/17/2019 2:08:48 Type: Unk
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Line	190.856 {477}	409.014 { 82}	292.402 {115}	206.200 {163}	343.823 { 98}
IS Ref	(In2306)	(none)	(Y_3600)	(Y_3600)	(none)
Units	ppm	ppm	ppm	ppm	ppm
Avg	**.00551**	**-.0059**	**-.00050**	**.00177**	**-.0018**
Stddev	.00141	.0256	.00007	.00084	.0006
%RSD	25.574	435.6	13.894	47.447	32.37
#1	.00651	.0122	-.00055	.00118	-.0023
#2	.00451	-.0240	-.00046	.00237	-.0014
Check ?	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit					
Low Limit					

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Line	230.606 {446}	224.306 {450}	360.073 { 94}	377.433 { 89}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1510.2**	**1104.5**	**33633.**	**3924.9**
Stddev	4.7	5.7	18.	5.6
%RSD	.31185	.51330	.05290	.14249
#1	1513.5	1108.5	33620.	3921.0
#2	1506.8	1100.5	33646.	3928.9
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value	95.004%	95.572%	94.261%	99.429%
Range				

Sample Name: CCVL-5395711 Acquired: 7/17/2019 2:12:35 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00578**	**.18427**	**.01430**	F **.03856**	**.00209**	**.00201**	**.48314**
Stddev	.00012	.00438	.00103	.00051	.00001	.00002	.00046
%RSD	2.0089	2.3761	7.1675	1.3131	.56768	.77768	.09444
#1	.00570	.18736	.01358	.03891	.00208	.00202	.48282
#2	.00586	.18117	.01503	.03820	.00210	.00200	.48346
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Fail	Chk Pass	Chk Pass	Chk Pass
Value				.02000			
Range				50.000%			

Elem	Cd2288	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00195**	**-.0092**	**.00365**	**.00419**	**.00964**	**.05653**	**.53444**
Stddev	.00008	.0001	.00013	.00002	.00020	.00251	.00062
%RSD	3.8988	.6273	3.5527	.41874	2.1091	4.4355	.11537
#1	.00190	-.0092	.00374	.00420	.00978	.05831	.53401
#2	.00201	-.0093	.00355	.00418	.00949	.05476	.53488
Check ?	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Li6707	Mg2790	Mn2576	Mo2020	Na5895	Ni2316	P_2136
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.02897**	**.19297**	**.00311**	**.00998**	**1.0090**	**.01057**	**-.0172**
Stddev	.00048	.00413	.00002	.00007	.0021	.00038	.0007
%RSD	1.6650	2.1377	.56517	.66566	.20965	3.6284	3.954
#1	.02863	.19005	.00313	.01003	1.0105	.01029	-.0168
#2	.02931	.19588	.00310	.00994	1.0075	.01084	-.0177
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None
Value							
Range							

Sample Name: CCVL-5395711 Acquired: 7/17/2019 2:12:35 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Pb2203	S_1820	Sb2068	Se1960	Si2881	Sn1899	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00998**	**.1808**	**.02028**	**.02901**	**.52706**	**.00858**	**.00497**
Stddev	.00003	.0036	.00122	.00285	.00952	.00002	.00007
%RSD	.27436	1.972	6.0250	9.8101	1.8056	.23460	1.4111
#1	.00996	.1834	.02114	.02700	.52033	.00859	.00502
#2	.01000	.1783	.01942	.03102	.53379	.00856	.00492
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value							
Range							

Elem	Th2837	Ti3349	Tl1908	U_4090	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0028**	**.00520**	**.01993**	**-.0740**	**.00448**	**.01182**	**-.0009**
Stddev	.0041	.00027	.00157	.0060	.00001	.00051	.0004
%RSD	144.0	5.1651	7.8927	8.056	.19004	4.3169	44.09
#1	.0001	.00501	.01882	-.0782	.00449	.01146	-.0006
#2	-.0057	.00539	.02104	-.0697	.00447	.01218	-.0012
Check ?	None	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value							
Range							

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1566.3**	**1115.3**	**34670.**	**3899.0**
Stddev	3.5	3.5	36.	4.2
%RSD	.22242	.31251	.10283	.10749
#1	1563.8	1112.8	34695.	3896.1
#2	1568.7	1117.8	34645.	3902.0

Sample Name: CCV-5385806 Acquired: 7/17/2019 2:16:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.98495	47.143	1.0259	.97402	.94980	1.0091	47.486	.97526
Stddev	.00377	.059	.0002	.00114	.00011	.0019	.026	.00034
%RSD	.38259	.12409	.01550	.11734	.01138	.18300	.05384	.03534
#1	.98229	47.101	1.0260	.97321	.94987	1.0078	47.468	.97550
#2	.98762	47.184	1.0258	.97483	.94972	1.0104	47.504	.97501
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2714	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.027	.96744	.96891	1.0494	51.193	50.157	.95715	48.223
Stddev	.014	.00042	.00162	.0007	.168	.121	.00010	.020
%RSD	1.399	.04300	.16700	.06786	.32809	.24054	.01059	.04062
#1	1.017	.96773	.96776	1.0489	51.074	50.072	.95708	48.237
#2	1.037	.96714	.97005	1.0499	51.312	50.242	.95722	48.209
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0764	1.0299	49.868	1.0152	24.33	.98932	25.35	.96014
Stddev	.0030	.0006	.038	.0014	.00	.00157	.01	.00062
%RSD	.27983	.05935	.07599	.13512	.0128	.15825	.0479	.06454
#1	1.0742	1.0295	49.841	1.0142	24.32	.98821	25.34	.96058
#2	1.0785	1.0304	49.895	1.0162	24.33	.99042	25.36	.95970
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
Value								
Range								

Sample Name: CCV-5385806 Acquired: 7/17/2019 2:16:27 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0538	9.5823	.96907	1.0084	.9881	1.0652	1.0020	2.456
Stddev	.0017	.0043	.00138	.0013	.0046	.0011	.0009	.031
%RSD	.16514	.04477	.14256	.13094	.4667	.10634	.08793	1.280
#1	1.0525	9.5853	.96809	1.0074	.9913	1.0644	1.0026	2.478
#2	1.0550	9.5792	.97005	1.0093	.9848	1.0660	1.0014	2.434
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
Value								
Range								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	1.0680	1.0388	1.034
Stddev	.0015	.0006	.003
%RSD	.14424	.05405	.2390
#1	1.0690	1.0384	1.032
#2	1.0669	1.0392	1.036
Check ?	Chk Pass	Chk Pass	None
Value			
Range			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1473.6	1093.8	33085.	3863.5
Stddev	1.7	.5	34.	.6
%RSD	.11510	.04757	.10310	.01660
#1	1474.8	1094.2	33109.	3864.0
#2	1472.4	1093.4	33061.	3863.1

Sample Name: CCB-5392763 Acquired: 7/17/2019 2:20:07 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Ag3280	Al3082	As1890	B_2089	Ba4554-2	Be3130	Ca3179	Cd2288
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00022**	**.00664**	**.00142**	**.01951**	**.00005**	**-.00001**	**-.00389**	**.00001**
Stddev	.00002	.00199	.00027	.00044	.00001	.00001	.00010	.00002
%RSD	7.6792	30.038	19.092	2.2594	16.170	152.19	2.5880	185.26
#1	.00021	.00805	.00123	.01982	.00004	.00000	-.00382	.00002
#2	.00024	.00523	.00162	.01919	.00005	-.00001	-.00397	-.00000
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	**Ce4040	Co2286	Cr2677	Cu3273	Fe2599	K_7664	Li6707	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.0105**	**-.00037**	**.00053**	**-.00047**	**.00533**	**.03605**	**-.00048**	**.00089**
Stddev	.0080	.00012	.00021	.00005	.00390	.00990	.00029	.00021
%RSD	76.61	34.035	40.246	11.483	73.301	27.466	60.900	23.399
#1	-.0048	-.00045	.00068	-.00051	.00257	.04306	-.00027	.00075
#2	-.0161	-.00028	.00038	-.00043	.00809	.02905	-.00068	.00104
Check ?	None	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Elem	Mn2576	Mo2020	Na5895	Ni2316	P_2136	Pb2203	S_1820	Sb2068
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**-.00024**	**.00061**	**.04617**	**.00025**	**.0078**	**.00086**	**-.0184**	**.00077**
Stddev	.00002	.00011	.00101	.00028	.0029	.00023	.0029	.00048
%RSD	8.1239	18.268	2.1965	114.50	36.71	27.112	15.53	62.434
#1	-.00025	.00053	.04545	.00045	.0058	.00102	-.0204	.00043
#2	-.00022	.00069	.04688	.00005	.0098	.00069	-.0164	.00111
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	Chk Pass
High Limit								
Low Limit								

Sample Name: CCB-5392763 Acquired: 7/17/2019 2:20:07 Type: QC
Method: ICAP1 New Stds (v90) Mode: CONC Corr. Factor: 1.000000
User: emb Custom ID1: Custom ID2: Custom ID3:
Comment:

Elem	Se1960	Si2881	Sn1899	Sr4077	Th2837	Ti3349	Tl1908	U_4090
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	**.00203**	**.06432**	**.00033**	**-.00001**	**.0060**	**-.00012**	**-.00110**	**.0117**
Stddev	.00120	.00531	.00061	.00001	.0024	.00007	.00195	.0208
%RSD	58.821	8.2556	187.55	81.808	39.52	53.824	177.45	178.1
#1	.00119	.06807	-.00011	-.00000	.0044	-.00017	-.00248	.0264
#2	.00288	.06056	.00076	-.00002	.0077	-.00008	.00028	-.0030
Check ?	Chk Pass	Chk Pass	Chk Pass	Chk Pass	None	Chk Pass	Chk Pass	None
High Limit								
Low Limit								

Elem	V_2924	Zn2062	Zr3438
Units	ppm	ppm	ppm
Avg	**-.00067**	**-.00186**	**-.0015**
Stddev	.00004	.00014	.0005
%RSD	6.2275	7.3250	34.62
#1	-.00070	-.00195	-.0011
#2	-.00064	-.00176	-.0018
Check ?	Chk Pass	Chk Pass	None
High Limit			
Low Limit			

Int. Std.	In2306	Y_2243	Y_3600	Y_3774
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	**1568.2**	**1120.6**	**34862.**	**3910.7**
Stddev	1.5	1.4	150.	12.7
%RSD	.09397	.12354	.43110	.32559
#1	1569.2	1119.7	34968.	3919.7
#2	1567.1	1121.6	34756.	3901.7

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 482038 Batch Start Date: 07/16/19 07:57 Batch Analyst: Bauer, Elizabeth M

Batch Method: 3005A Batch End Date: 07/16/19 12:02

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MED_01_Si 00130	MED_01_W1 00058	MED_02_W2 00056	MED_03_Ag 00144
MB 480-482038/1		3005A, 6010C		50 mL	50 mL				
LCS 480-482038/2		3005A, 6010C		50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-156069-C-1	W13	3005A, 6010C	T	50 mL	50 mL				
480-156069-C-2	MW17	3005A, 6010C	T	50 mL	50 mL				
480-156069-C-2 MS	MW17	3005A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-156069-C-2 MSD	MW17	3005A, 6010C	T	50 mL	50 mL	0.25 mL	0.25 mL	0.25 mL	0.25 mL
480-156069-C-3	W28	3005A, 6010C	T	50 mL	50 mL				
480-156069-C-4	WCMW4	3005A, 6010C	T	50 mL	50 mL				
480-156069-C-5	BLIND DUP	3005A, 6010C	T	50 mL	50 mL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	MED_04_Sn 00132	MED_05_S 00089				
MB 480-482038/1		3005A, 6010C							
LCS 480-482038/2		3005A, 6010C		0.25 mL	0.25 mL				
480-156069-C-1	W13	3005A, 6010C	T						
480-156069-C-2	MW17	3005A, 6010C	T						
480-156069-C-2 MS	MW17	3005A, 6010C	T	0.25 mL	0.25 mL				
480-156069-C-2 MSD	MW17	3005A, 6010C	T	0.25 mL	0.25 mL				
480-156069-C-3	W28	3005A, 6010C	T						
480-156069-C-4	WCMW4	3005A, 6010C	T						
480-156069-C-5	BLIND DUP	3005A, 6010C	T						

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

METALS BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-156069-1

SDG No.:

Batch Number: 482038 Batch Start Date: 07/16/19 07:57 Batch Analyst: Bauer, Elizabeth M

Batch Method: 3005A Batch End Date: 07/16/19 12:02

Batch Notes	
Batch Comment	90219753 (push filters)
Temperature - Corrected - End	95.9 Degrees C
Temperature - Corrected - Start	96.4 Degrees C
Digestion End Time	07/16/2019 12:02
Digestion Start Time	07/16/2019 07:57
Digestion Unit ID	B
Hydrochloric Acid ID	5386738
Nitric Acid ID	5385201
Pipette/Syringe/Dispenser ID	MDL-1
Thermometer ID	170435816
Digestion Tube/Cup ID	1902243
Temperature - Uncorrected - End	95.0 Degrees C
Temperature - Uncorrected - Start	95.5 Degrees C

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler: CAROLINE BUKOWSKI	Lab PM: Fischer, Brian J	Carrier Tracking No(s):	COC No: 480-132560-29886.1
Client Contact: Ms. Lori Riker	Phone: 716-856-0599	E-Mail: brian.fischer@testamericainc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days): Standard			
State, Zip: NY, 14218				
Phone: 716-856-0599(Tel)	PO #: T0370-016-001			
Email: lriker@benchmarkturnkey.com	WO #:			
Project Name: Benchmark - Olean Parcel 2 GWS	Project #: 48020511			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

480-156069 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - (MOD) TCL SVOA - OLM04.2 w/ TICs	6010C - (MOD) As/Pb only	8260C - (MOD) TCL list OLM04.2 w/ TICs	Total Numb	Special Instructions/Note:
			Preservation Code:				N	D	A		
W13	7/10/19	1255	G	Water			X	X	X		
MW17	7/9/19	1350	G	Water			X	X	X		
W28	7/10/19	905	G	Water			X	X	X		
WCMW4	7/10/19	1000	G	Water			X	X	X		
W14				Water							
WCMW1				Water							
BLIND DUP	7/10/19	700	G	Water			X	X	X		
MS	7/9/19	1350	G	Water			X	X	X		
MSD	7/9/19	1350	G	Water			X	X	X		
TRIP BLANK											

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		7/12/19	BMTK		7/12/19 05:10	BMTK
2		7/12/19 05:50	BMTK			
3					7-12-19 950	BMTK

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		2.2 #1

Ver: 01/16/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-156069-1

Login Number: 156069
List Number: 1
Creator: Harper, Marcus D

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BMTK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX D

SVE PERIODIC INSPECTION LOGS

TABLE D-1
SUMMARY OF SVE SYSTEM 2-SVE-1 VOC MASS REMOVAL

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

Date	Elapsed Time (days)	SVE Operation Time (days)	Influent (Untreated) PID Reading	Effluent (Post-Biofilter) PID Reading (ppm)	Corrected Influent Concentration[1]	Vacuum (in of H_2O)	Air Velocity (ft/min)	Pipe Diameter (in)	Air Flow Rate		Volume of Air Processed Since Previous Reading (CF)	Rate of VOC Removal (lb/day)	VOCs Removed Since Last Monitoring Period (lb)	Total VOC Removal to Date (lb)	Notes
									(ACFM)	(SCFM)					
26-Mar-19	1613	1339.28	0.2	0	1	48.0	6000	4	524	488	22488487	0.0	1.7	7,343	Bio-filter raked 3/8/19 & 3/22/19
24-Apr-19	1642	1368.28	0.4	0.1	1	42.0	6000	4	524	488	20380192	0.0	1.0	7,344	Bio-filter raked 3/8/19 & 3/22/19
24-May-19	1672	1398.28	0.5	0	1	40.0	6000	4	524	488	21082957	0.1	1.5	6,874	Bio-filter raked 5/3/19, 5/17/19 & 5/31/19
17-Jun-19	1696	1422.28	1	0	2	38.0	6000	4	524	488	16866365	0.1	1.9	6,876	Bio-filter raked 6/14/19 & 6/28/19
25-Jul-19	1734	1460.28	1.3	0	3	40.0	6000	4	524	488	43571444	0.1	6.0	6,880	Bio-filter raked 7/12/19 & 7/26/19
27-Aug-19	1767	1493.28	1.6	0	4	34.2	6000	4	524	488	87845653	0.2	13.5	6,886	
4-Sep-19	1775	1501.28	1.3	0	3	68.3	6000	4	524	488	93467775	0.1	12.2	6,885	
9-Sep-19	1780	1506.28	7.7	0.1	19	54.6	6000	4	524	488	96981601	0.8	60.2	6,933	
12-Sep-19	1783	1509.28	8.5	0.1	21	57.4	6000	4	524	488	78006940	0.9	53.8	6,928	
31-Oct-19	1832	1558.28	1.3	0	3	57.4	6000	4	524	488	95576071	0.1	16.8	6,893	
25-Nov-19	1857	1583.28	2.9	0	0	61.5	6000	4	524	488	17569131	0.0	1.8	6,895	
19-Dec-19	1881	1607.28	1.1	0	0	61.5	6000	4	524	488	16866365	0.0	0.0	6,895	
27-Jan-20	1920	1646.28	0.6	0	0	79.2	6000	4	524	488	27407844	0.0	0.0	6,895	
27-Feb-20	1951	1677.28	0.4	0	0	61.5	6000	4	524	488	21785722	0.0	0.0	6,895	

Notes:

1. The estimated mass of contamination recovered is based on ratio of the sum of the gasoline and diesel range organics (GRO and DRO) as measured by a vapor sample collected with a summa canister to the contemporaneous PID reading. The ratio is 2.46 milligram per cubic meter for each 1 part per million on the PID.

TABLE D-2
SUMMARY OF SVE SYSTEM 2-1

OLEAN REDEVELOPMENT PARCEL 2
NYSDEC BCP SITE NO. C905032
OLEAN, NEW YORK

Date	Well	PID	System PID (ppm)	Notes
10/29/19	2-SVE-1	off	Influent: 3.8 Effluent: 0.1	SVE System 2-1 Vacuum: 56 inches H_2O
	2-SVE-2	14.2		
	2-SVE-3	86.0		
	2-SVE-4	0.2		
	2-SVE-5	3.6		
	2-SVE-6	64.6		
	2-SVE-7	2.2		
	2-SVE-8	off		
	2-SVE-9	4.0		
	2-SVE-10	2.3		
	2-SVE-11	off		
	2-SVE-12	3.8		
	2-SVE-13	off		
2/6/20	2-SVE-1	off	Influent: 0.8 Effluent: 0.0	SVE System 2-1 Vacuum: 62 inches H_2O
	2-SVE-2	0.1		
	2-SVE-3	19.6		
	2-SVE-4	1.7		
	2-SVE-5	13.6		
	2-SVE-6	0.1		
	2-SVE-7	0.2		
	2-SVE-8	off		
	2-SVE-9	0.6		
	2-SVE-10	21.8		
	2-SVE-11	off		
	2-SVE-12	1.1		
	2-SVE-13	off		