



**Water Pollution for Wastewater PT Scheme
Round 375
20 April 2026 through 04 June 2026**

M182419

m.c.m. Ecosistemi srl Localita Faggiola
Giorgio Mario Sichel
Località Faggiola
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Introduction

Thank you for participating in Round 375 of ERA's Water Pollution for Wastewater PT Scheme. This performance report has been specifically designed and prepared to assist your organization with the monitoring and improvement of your laboratory data quality.

The samples for Round 375 of ERA's Water Pollution for Wastewater PT Scheme were initially distributed on 20 April 2026, and the deadline for returning final PT results was 04 June 2026.

ERA confirms that this final (or amended final) PT report meets the requirements of ISO/IEC 17043 (A2LA certificate of accreditation number 1539.01). ERA has also verified that all data evaluations have been completed in accordance with these requirements.

The performance report is divided into sections describing the execution of the PT scheme, including outlining the objectives of the PT scheme, sample design, determination of assigned values, reporting of data, performance evaluation and additional information. Three specific sections are detailed below.

PT Round Discussion

The PT Round Discussion lists any comments pertaining to the PT round when appropriate.

Summary PT Performance Evaluation Report

The Summary PT Performance Evaluation Report provides a quick review of performance. Performance evaluations are provided in text form and as colored flags.

Group Summary

The Group Summary provides a comparison of your reported PT result to all other participants in the PT round, or to historical rounds, and includes the official Performance Evaluation for the round. Method Details are also provided for informational purposes, with results displayed for different technologies, where sufficient data is available.

ERA is continually striving to improve its proficiency testing schemes. Please contact us by phone at +1 303-431-8454 or by email at info@eraqc.com if you have any questions or feedback. Thank you again for participating in Round 375 of ERA's Water Pollution for Wastewater PT Scheme. We appreciate working with you and look forward to your continued participation in ERA PT schemes.

Sincerely,



Emily Devers
Quality Assurance Manager

PT Scheme Overview

This proficiency testing scheme is designed to evaluate laboratory performance against other participating laboratories throughout the world on the same set of environmental parameters. ERA is accredited by A2LA for the design, preparation, and operation of PT schemes that meet the requirements of ISO/IEC 17043 (A2LA Certificate of Accreditation number 1539.01). All analytes except for 1,1'-Biphenyl, 1,2-Diphenylhydrazine, 1,3-Dinitrobenzene, 2,3-Dichloroaniline, Acetophenone, Atrazine, Azobenzene, Benzaldehyde, Caprolactam, n-Decane and n-Octadecane in the Base/Neutrals, catalog # 833 are included in ERA's A2LA accreditation.

Organization and Program Coordinator

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Customer Service Available Monday thru Thursday from 6 am to 6 pm and Friday from
6 am to 5 pm United States Mountain Time (excluding U.S. holidays).
Support is also available by email at info@eraqc.com.

PT Scheme Goal

ERA's Water Pollution for Wastewater PT Scheme is designed to assist environmental laboratories to monitor and improve the quality of their analytical data. This program has been used for several decades to help laboratories meet their proficiency testing requirements.

Laboratories can establish the competency of their testing services through routine participation in PT schemes based upon independent third party evaluation of their performance. This provides both the laboratory's customers and staff with confidence in the analytical ability of the laboratory.

Laboratory Participation Criteria

ERA's Water Pollution for Wastewater PT Scheme is open to all laboratories worldwide that test environmental samples and evaluate the analytes available in the same concentration range. As an open PT scheme, ERA does not require specific methods to be used. Laboratories are encouraged to use their routine methods of analysis and treat the samples in the same manner as routinely tested samples.

PT Scheme Organization

ERA's Water Pollution for Wastewater PT Scheme operates on a monthly basis. The PT scheme currently includes a series of samples containing specified environmental contaminants. A complete listing of samples and contaminants included in the scheme is available in the scheme description and at ERA's website, www.eraqc.com. Laboratories have flexibility in the selection of PT rounds and samples they wish to receive. Please contact ERA at info@eraqc.com for PT round dates and availability.

Reporting PT Results

Participants may submit their PT results by mail, fax, email or through our website using the secure online data entry and reporting system eData (www.eraqc.com). Results may be uploaded directly from the laboratory's LIMS to the secure online reporting system using an electronic export format that meets the specifications for upload. Faxed and emailed PT results must be received by ERA no later than the closing date of the specified PT round. Mailed PT results must be postmarked by the closing date of the specified PT round. The online data entry system allows data entry until 11:59:59 pm United States Mountain Time on the closing date. All online data entry may be edited up to the closing date of the specified PT round. No special software is required to enter data online. Online data entry is confirmed through an automatic email confirmation system.

Sample Design

The purpose of proficiency testing is to evaluate the technical ability of the laboratory. This goal is achieved by using sample matrices and appropriate sample designs. ERA's Water Pollution for Wastewater PT Scheme is designed to evaluate laboratories for a broad range of analytes at concentration ranges that are environmentally significant.

ERA samples are prepared by fortifying a well characterized matrix with high purity raw materials. ERA samples are designed to evaluate the critical steps of most analytical methods. In order to ensure both homogeneity and stability of the samples for the duration of the PT round, most samples are prepared as concentrates.

ERA's Water Pollution for Wastewater PT Scheme contains a broad range of analytes divided into different sample types. These samples are designated by common terminology such as Metals or Volatiles. Samples which are designed to contain inorganic analytes contain all analytes every round, since most inorganic methods are specific to a given analyte. In contrast, most organic methods are multi-component based and cover several analytes. Therefore, in the case of many multi-component methods, false positive or false negative PT results become much more important. For this reason, many organic samples are designed to contain a random selection of analytes in every round.

Determination of Assigned Value

Assigned Value (X) may be determined by one of the following methods:

- Robust Mean: Calculated from participant results utilizing commonly accepted bi-weight techniques or from ERA's historical grand mean derived from the culmination of historical PT results.
- Robust Mean for Quantitative Microbiology: Calculated from Log-transformed participant results utilizing commonly accepted bi-weight techniques or from ERA's historical grand mean derived from the culmination of historical PT results.
- Formulation: Determined from the exact quantities used to prepare the PT sample for quantitative analyses, or from the presence or absence of the analyte in the PT sample for qualitative analyses.

Quality Control

The most important characteristics of sound proficiency testing samples are homogeneity and stability. ERA evaluates the homogeneity of every sample lot for every analyte through the analysis of multiple random samples. Homogeneity is determined using the statistical procedures of ISO 13528 or the International Harmonized Protocol for Proficiency Testing. Homogeneity testing is accomplished prior to sample distribution.

ERA verifies the stability of every lot of material after the closing date of the PT round through the analysis of multiple random samples or statistical comparison with historical data.

Homogeneity testing is performed using SRMs from a national measurement institute for all analytes where a SRM is available. In cases where a SRM is not available from a national measurement institute, which include many of the organic analytes, the calibrant used for analysis is verified against a secondary source.

Data Reporting Format

Participating laboratories should report a single PT result for each method they use to analyze the sample. Laboratories are encouraged to report their chemistry and microbiology (MPN technology) PT results to three significant figures. It is essential that they report their PT results in the units specified in the instructions on the data reporting forms and in the online data entry system, eData. Laboratories are strongly encouraged to report their method of analysis along with the final PT result. This will allow comparison of their PT result with those from other laboratories using the same or similar methods.

If the participant does not report a PT result in the field provided, it is assumed that the laboratory did not test for this analyte and a "Not Reported" performance evaluation is given. Less than (<) values can be reported but will not be given a z Score and will receive an evaluation from the rules described on page 5 of this report. Should a participant report any other text value for a PT result, it will be given a performance evaluation of "Not Evaluated".

The online data entry and reporting system, eData, is available on our website (www.eraqc.com). Participants are encouraged to take advantage of this resource to promote quick and efficient data entry.

ERA evaluates laboratory performance based upon the z Score, where z is calculated as:

$$z = (x - X) / SDPA$$

Where: x = Laboratory's reported PT result

X = Assigned Value, determined by formulation or Robust Mean (calculated from participant results utilizing commonly accepted bi-weight techniques or from ERA's historical grand mean, derived from the culmination of historical PT results).

SDPA = Standard Deviation for Proficiency Assessment based on a fixed percentage, estimated regression standard deviation or robust standard deviation, as applicable.

An absolute z Score of 2 or less is generally considered satisfactory. It is typical in proficiency testing programs to highlight PT results with an absolute z Score of 3 or more as unsatisfactory. It is also typical to indicate a warning of questionable performance if the PT result has an absolute z Score between 2 and 3. The following absolute z Score ranges are used by ERA to identify levels of performance:

	Performance Evaluation	Color Code
z Score less than or equal to 2.0	Satisfactory	Green
z Score greater than 2.0 and less than 3.0	Warning	Orange
z Score greater than or equal to 3.0	Unsatisfactory	Red

ERA also provides a "Satisfactory Range" demonstrating the approximate analytical result values that are within a performance evaluation range of z Score -2.0 to 2.0 which are generally considered to be within the Satisfactory range of PT results. PT results outside the range of z Score -2.0 to 2.0 are generally considered to signal a Warning of questionable results or are Unsatisfactory. The range of acceptable results may differ between countries or jurisdictions based on their specific Proficiency Testing requirements. Satisfactory Range for quantitative microbiology is calculated from original (non-Log) participant results for comparison to values in the reporting units and will not correspond to z Scores calculated from Log-transformed participant results used to determine performance evaluations.

For analytes where the z Score is greater than or equal to an absolute value of 3.0, it is suggested that the participant initiate corrective action within its quality management system procedures.

Final PT results for analytes added to the PT sample are evaluated as follows:

Final PT results reported with a positive value will be evaluated based on z Score.

Final PT results reported with a value of 0 (zero) will be evaluated based on z Score.

Final PT results reported as a less than (<) value will be marked as No Evaluation.

Final PT results reported as a greater than (>) value will be marked as No Evaluation.

Final PT results for analytes not added to the PT sample are evaluated as follows:

Final PT results reported with a less than (<) value will be evaluated as Satisfactory.

Final PT results reported with a value of 0 (zero) will be evaluated as Satisfactory.

Final PT results reported with a value below the PTRL will be evaluated as Satisfactory.

Final PT results reported with a value at or above the PTRL will be evaluated as Unsatisfactory.

Final PT Reports

Final PT reports will be emailed as an Adobe Acrobat pdf attachment within 10 business days of the closing date of the PT round, and posted to the online data entry and reporting system eData, available on our website (www.eraqc.com).

ERA makes extensive use of graphical data presentations to clearly illustrate the relationship between various elements. The online reporting system includes several graphical presentations designed to highlight method differences. The hardcopy reports contain data for a single PT round. The online reporting system contains all data reported in all ERA schemes.

Other Terms and Definitions

Reported PT Result is the laboratory's result from analysis of the PT sample reported to ERA.

Relative Recovery is the laboratory's reported PT result divided by the Formulation/Certified Value, expressed as a percentage.

Formulation/Certified Value is the value derived from the formulation based on weights and measures or the empirically certified value, depending on the specific analyte.

Uncertainty of Certified Value is the standard uncertainty associated with the Formulation/Certified Value, expressed as a percentage.

Assigned Value (X) is determined by Formulation or Robust Mean as defined below.

Robust Mean is calculated from participant results, or Log-transformed participant results for quantitative microbiology, utilizing commonly accepted bi-weight techniques or from ERA's historical grand mean, derived from the culmination of historical PT results.

Formulation is determined from the exact quantities used to prepare the PT sample for quantitative analyses, or from the presence or absence of the analyte in the PT sample for qualitative analyses.

Standard Deviation for Proficiency Assessment (SDPA) may be based on a fixed value, percentage of the assigned value, or robust standard deviation as calculated from participant results, or Log-transformed participant results for quantitative microbiology, utilizing commonly accepted bi-weight techniques or from ERA's historical grand standard deviation, derived from the culmination of historical PT results.

Satisfactory Range is the approximate range for analytical result values that are within a performance evaluation range of z score -2.0 to 2.0 which are generally considered to be within the Satisfactory range for PT results. Satisfactory Range for quantitative microbiology is calculated from original (non-Log) participant results for direct comparison to values in the reporting units and will not correspond to z Scores calculated from Log-transformed participant results used to determine performance evaluations.

Average Relative Recovery is the Robust Mean divided by the Formulation/Certified Value, expressed as a percentage.

Relative Standard Deviation is the SDPA divided by the Robust Mean, expressed as a percentage.

Percent Acceptable: ERA employs multiple evaluation models designed to accommodate the regulatory and accreditation requirements across numerous jurisdictions. As such, Percent Acceptable is the percentage of participants in the PT Round with a z Score or reported value that received a Satisfactory or Warning evaluation plus those participants in the PT Round with a reported value that received Acceptable or Check for Error evaluations. While these evaluation models may not be based on equivalent scoring statistics, they do represent "Acceptable" evaluations respectively.

Proficiency Testing Reporting Limit (PTRL) is provided as guidance for laboratories to utilize a method that is sensitive enough to generate valid results at the PTRL provided for each analyte.

Participant Feedback

Participant feedback is encouraged and is reviewed periodically throughout the year and during management meetings. Participant complaints are recorded, tracked and investigated according to ERA's corrective action system and procedures.

Subcontracting/Collaboration

All activities associated with this proficiency testing scheme were performed by Waters/ERA with the exception of those noted below. The following physical samples/products were manufactured for Waters/ERA by a subcontractor:

Microbiology products with the following catalog numbers:
880, 935, 079, 077, 080, 595, 595A, 576, 576A

Notification of Program and Product Changes

As a part of ERA's continual improvement process it is sometimes necessary to make changes that potentially affect the participants of a PT scheme; for example, product size, packaging or data reporting. In order to ensure that participants are informed, a participant notification document will be included with the relevant shipment. At a minimum, the participant notification document will state the change that has occurred and any additional information that is relevant to ensure that the participant implements the change effectively, and contact information should any problems be encountered.

Exceptions to PT Scheme Operations

Exceptions are rare but may occur. Any issues are handled through our corrective action system. ERA's goal is to minimize the impact of any issue on the participants, provide clear information on the nature of the issue and the action taken to avoid the issue in the future. All affected participants are contacted immediately when an issue is detected.

Participant Confidentiality

Participants may not reveal their PT results or any aspect of a PT scheme or round to any unauthorized person or laboratory until after the closing date of the PT round. ERA ensures through both practice and policy that all employees shall be free of any commercial, financial or other pressures which may adversely affect the quality of their work. ERA also has a continuing obligation to identify and report any actual or potential conflicts of interest arising during the performance of this program. If an actual or potential organizational conflict of interest is identified, ERA will immediately make a full disclosure to the appropriate parties.

Participant reports both on paper and electronic will be released only to authorized personnel from the participant's organization or to third-parties expressly requested by the participant.

PT Round Discussion

There are no comments to report for this PT round

Summary PT Performance Evaluation Report

Demand

Lot Number P375-516

	Reported PT Result	Satisfactory Range	z Score	Reported Method	Performance Evaluation	
BOD	115 mg/L	80.3 - 162	-0.303	UNI EN ISO 5815-1:2019	Satisfactory	
CBOD		76.7 - 155			Not Reported	
COD	202 mg/L	174 - 219	0.457	ISO 15705:2002	Satisfactory	
TOC	88.6 mg/L	71.6 - 87.9	2.18	UNI EN 1484:1999	Warning	

Gasoline Range Organics (GRO) in Water

Lot Number P375-762

	Reported PT Result	Satisfactory Range	z Score	Reported Method	Performance Evaluation	
Benzene in GRO	9.49 µg/L	7.25 - 14.4	-0.744	EPA 8260D	Satisfactory	
Benzene in GRO	9.75 µg/L	7.25 - 14.4	-0.598	EPA 8260D	Satisfactory	
Benzene in GRO	9.39 µg/L	7.25 - 14.4	-0.8	EPA 8260D	Satisfactory	
Ethylbenzene in GRO	41.7 µg/L	30.7 - 51.7	0.0935	EPA 8260D	Satisfactory	
Ethylbenzene in GRO	42.2 µg/L	30.7 - 51.7	0.188	EPA 8260D	Satisfactory	
Ethylbenzene in GRO	38.6 µg/L	30.7 - 51.7	-0.496	EPA 8260D	Satisfactory	
Gasoline Range Organics (GRO)	1450 µg/L	436 - 3110	-0.485	EPA 8015C	Satisfactory	
Gasoline Range Organics (GRO)	1450 µg/L	436 - 3110	-0.485	EPA 8015C	Satisfactory	
Gasoline Range Organics (GRO)	1480 µg/L	436 - 3110	-0.44	EPA 8015C	Satisfactory	
Toluene in GRO	133 µg/L	97.2 - 175	-0.158	EPA 8260D	Satisfactory	
Toluene in GRO	135 µg/L	97.2 - 175	-0.0552	EPA 8260D	Satisfactory	
Toluene in GRO	131 µg/L	97.2 - 175	-0.261	EPA 8260D	Satisfactory	
Xylenes, total in GRO	206 µg/L	158 - 262	-0.156	EPA 8260D	Satisfactory	
Xylenes, total in GRO	214 µg/L	158 - 262	0.15	EPA 8260D	Satisfactory	
Xylenes, total in GRO	207 µg/L	158 - 262	-0.118	EPA 8260D	Satisfactory	

Laboratory M182419
Product Name Demand
Lot Number P375-516
Analyte (CAS) BOD (—)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Luca Stragliati
Analysis Date 03 Jun 2026

Group Summary

Your Reported PT Result 115
Your z Score -0.303
Your Performance Evaluation Satisfactory
Relative Recovery 94.0 %
Reported Method UNI EN ISO 5815-1:2019
Formulation/Certified Value 122 mg/L
Uncertainty of Certified Value 0.322 %
Assigned Value (X) 121
Robust Mean 121
SDPA 20.4
Satisfactory Range 80.3 - 162
Average Relative Recovery 99.1 %
Relative Standard Deviation 16.9 %
Percent Acceptable 96.8 %
Number of Data Points 249

Method Details

Galvanic Probe

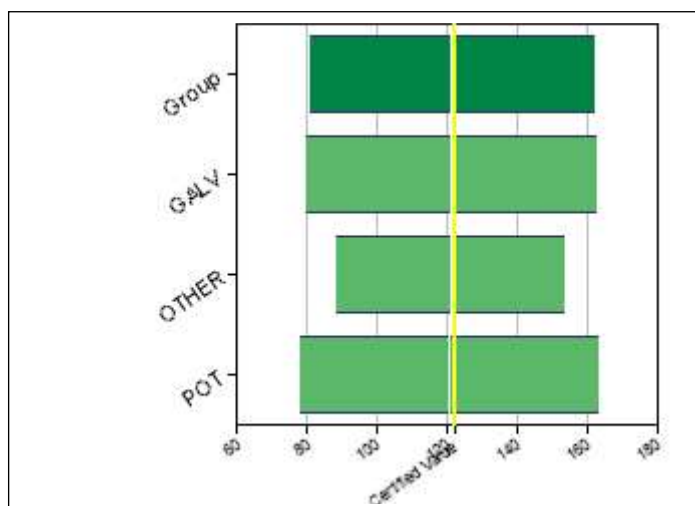
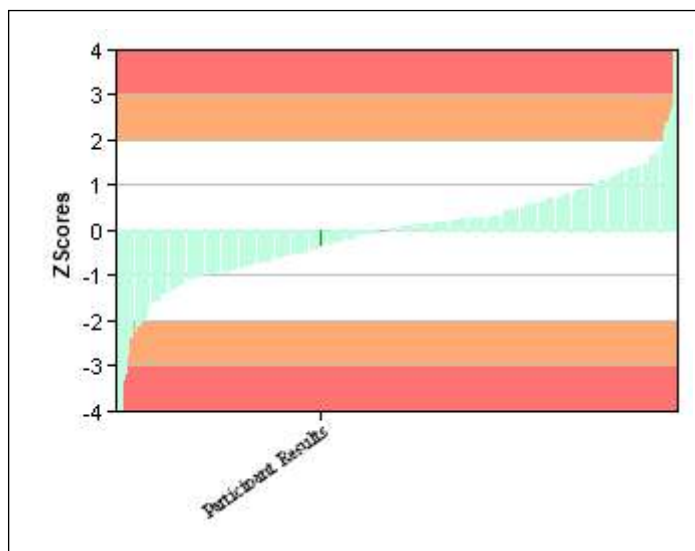
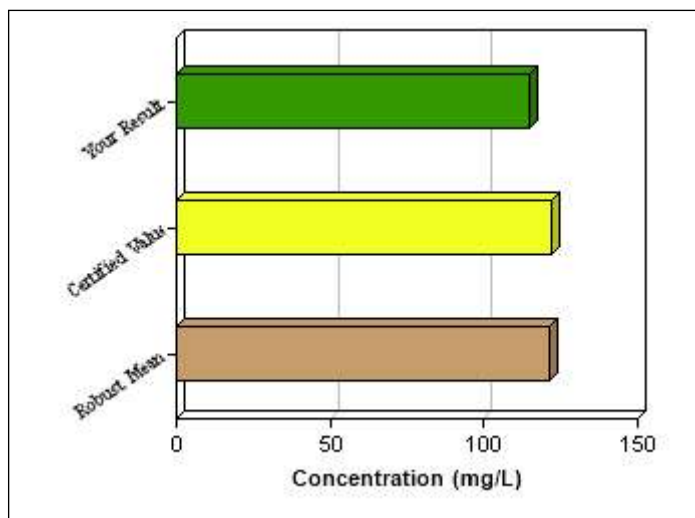
Robust Mean 121
SDPA 20.9
Data Points 178
Satisfactory Range 79.3 - 163
Average Percent Recovery 99.0%
Relative Standard Deviation 17.2%
Percent Acceptable 97.2%

Other

Robust Mean 121
SDPA 16.5
Data Points 51
Satisfactory Range 87.9 - 154
Average Percent Recovery 98.9%
Relative Standard Deviation 13.7%
Percent Acceptable 96.1%
Your Method z Score -0.358
Your Method Evaluation Satisfactory

Potentiometry

Robust Mean 121
SDPA 21.4
Data Points 14
Satisfactory Range 77.9 - 164
Average Percent Recovery 98.7%
Relative Standard Deviation 17.7%
Percent Acceptable 100%



Laboratory M182419
Product Name Demand
Lot Number P375-516
Analyte (CAS) COD (—)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Vittorio Manfredi
Analysis Date 26 May 2026

Group Summary

Your Reported PT Result 202
Your z Score 0.457
Your Performance Evaluation Satisfactory
Relative Recovery 102 %
Reported Method ISO 15705:2002
Formulation/Certified Value 199 mg/L
Uncertainty of Certified Value 0.322 %
Assigned Value (X) 197
Robust Mean 197
SDPA 11.3
Satisfactory Range 174 - 219
Average Relative Recovery 98.9 %
Relative Standard Deviation 5.75 %
Percent Acceptable 94.6 %
Number of Data Points 148

Method Details

Ultraviolet or Visible Mo

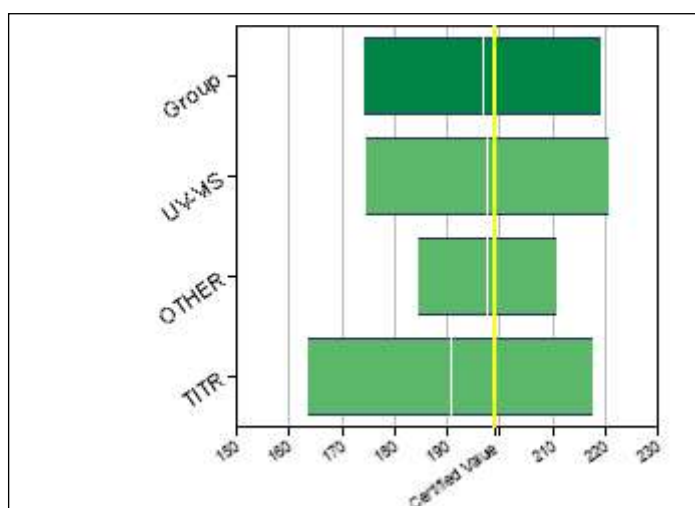
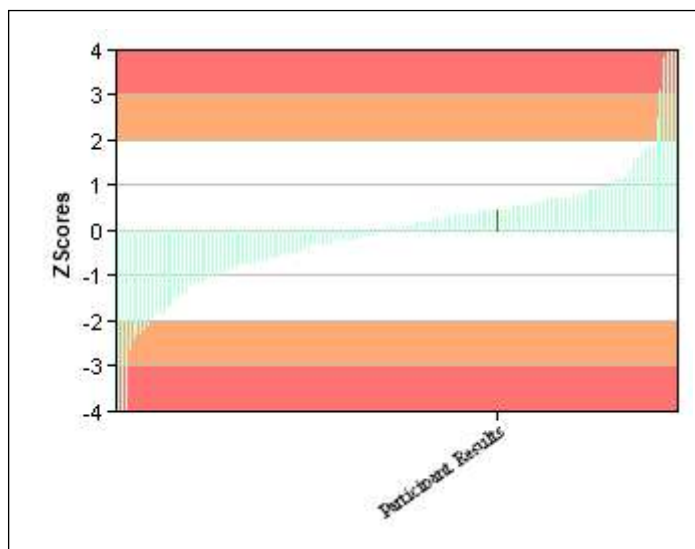
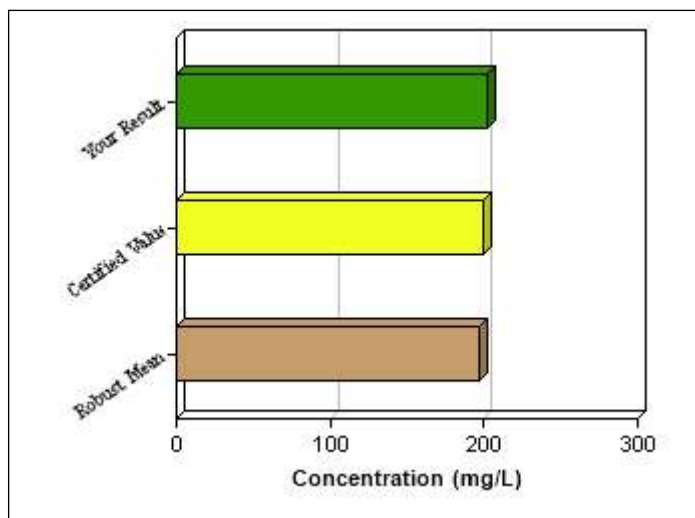
Robust Mean 198
SDPA 11.7
Data Points 95
Satisfactory Range 174 - 221
Average Percent Recovery 99.3%
Relative Standard Deviation 5.90%
Percent Acceptable 94.7%

Other

Robust Mean 198
SDPA 6.62
Data Points 32
Satisfactory Range 184 - 211
Average Percent Recovery 99.3%
Relative Standard Deviation 3.35%
Percent Acceptable 93.8%
Your Method z Score 0.649
Your Method Evaluation Satisfactory

Titrimetry -Visual Indica

Robust Mean 191
SDPA 13.6
Data Points 19
Satisfactory Range 163 - 218
Average Percent Recovery 95.8%
Relative Standard Deviation 7.14%
Percent Acceptable 100%



Laboratory M182419
 Product Name Demand
 Lot Number P375-516
 Analyte (CAS) TOC (—)

PT Scheme Water Pollution for Wastewater
 PT Round Number 375
 Analyst Luca Stragliati
 Analysis Date 27 May 2026

Group Summary

Your Reported PT Result 88.6
Your z Score 2.18
Your Performance Evaluation **Warning**
Relative Recovery 112 %
Reported Method UNI EN 1484:1999
 Formulation/Certified Value 78.8 mg/L
 Uncertainty of Certified Value 0.322 %
 Assigned Value (X) 79.7
 Robust Mean 79.7
 SDPA 4.07
 Satisfactory Range 71.6 - 87.9
 Average Relative Recovery 101 %
 Relative Standard Deviation 5.11 %
 Percent Acceptable 99.0 %
 Number of Data Points 105

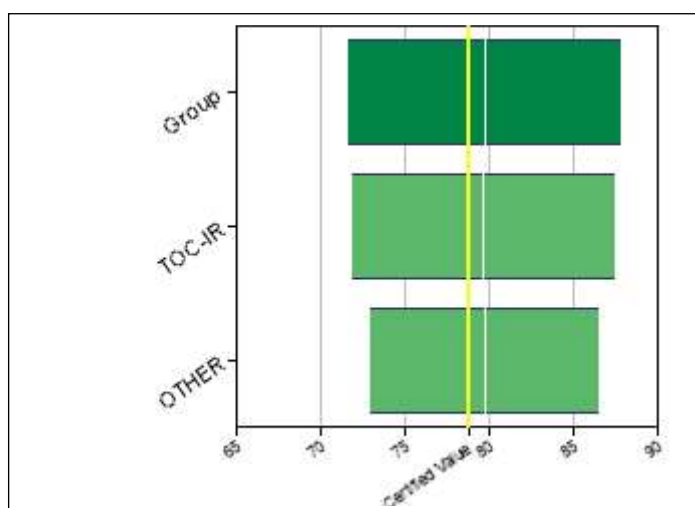
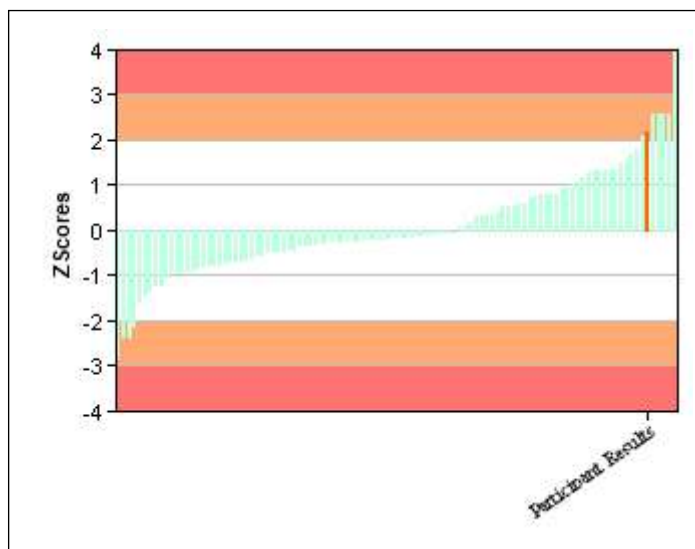
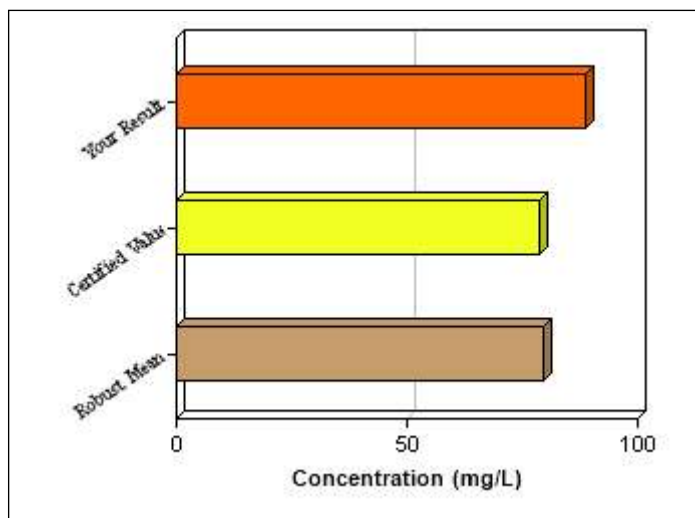
Method Details

Total Organic Carbon-Nond

Robust Mean 79.6
 SDPA 3.94
 Data Points 79
 Satisfactory Range 71.7 - 87.5
 Average Percent Recovery 101%
 Relative Standard Deviation 4.94%
 Percent Acceptable 100%

Other

Robust Mean 79.7
 SDPA 3.41
 Data Points 21
 Satisfactory Range 72.9 - 86.5
 Average Percent Recovery 101%
 Relative Standard Deviation 4.27%
 Percent Acceptable 90.5%
Your Method z Score 2.61
Your Method Evaluation **Warning**



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Benzene in GRO (71-43-2)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Stefano Mizzi
Analysis Date 03 Jun 2026

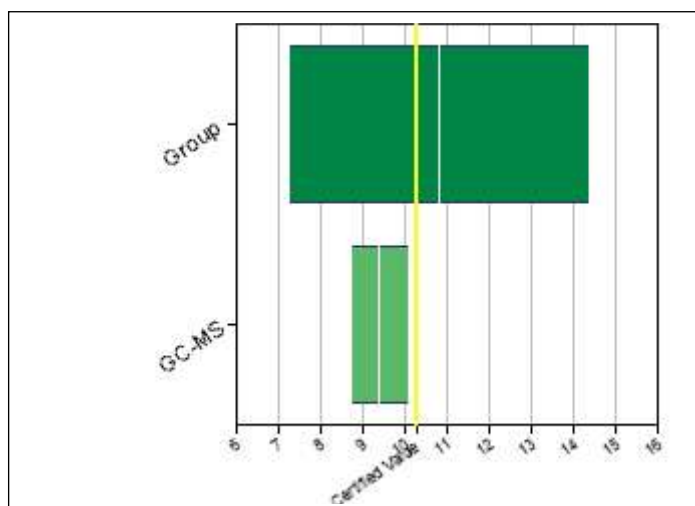
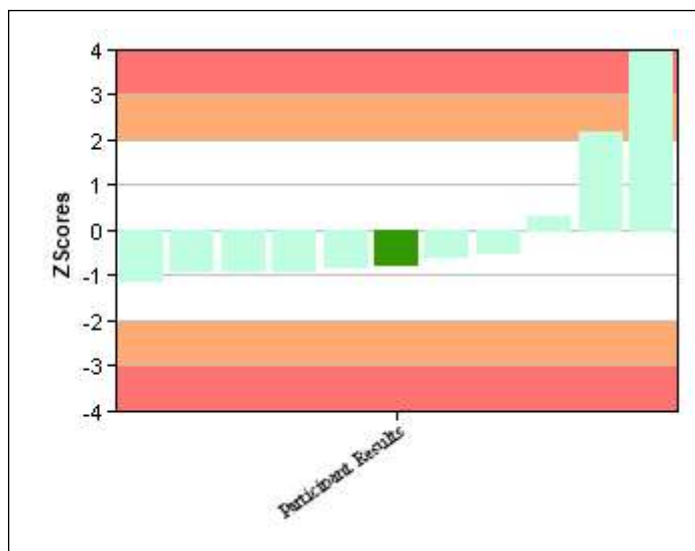
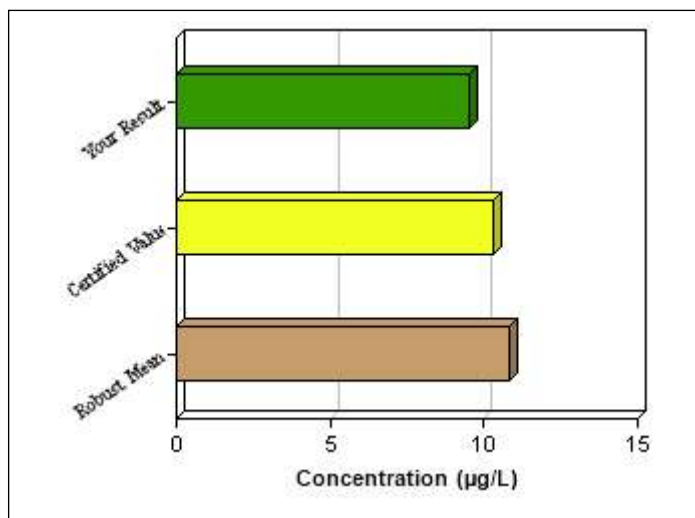
Group Summary

Your Reported PT Result 9.49
Your z Score -0.744
Your Performance Evaluation Satisfactory
Relative Recovery 92.1 %
Reported Method EPA 8260D
Formulation/Certified Value 10.3 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 10.8
Robust Mean 10.8
SDPA 1.78
Satisfactory Range 7.25 - 14.4
Average Relative Recovery 105 %
Relative Standard Deviation 16.5 %
Percent Acceptable 90.9 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 9.39
SDPA 0.344
Data Points 10
Satisfactory Range 8.70 - 10.1
Average Percent Recovery 91.1%
Relative Standard Deviation 3.66%
Percent Acceptable 80.0%
Your Method z Score 0.298
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Benzene in GRO (71-43-2)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Rodica Biza
Analysis Date 03 Jun 2026

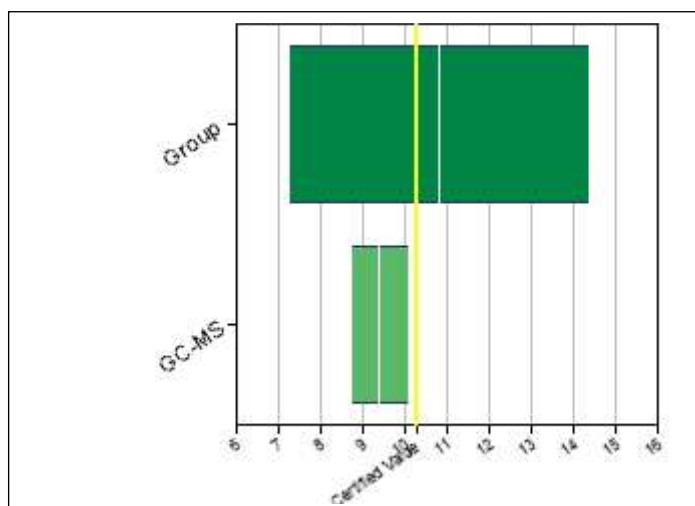
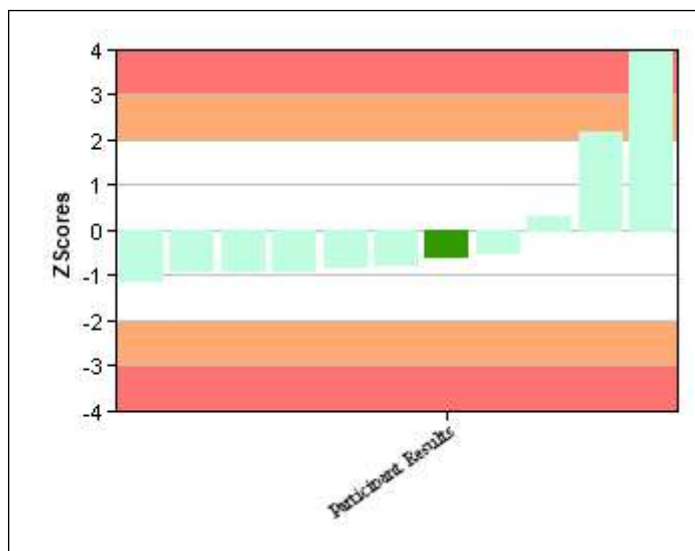
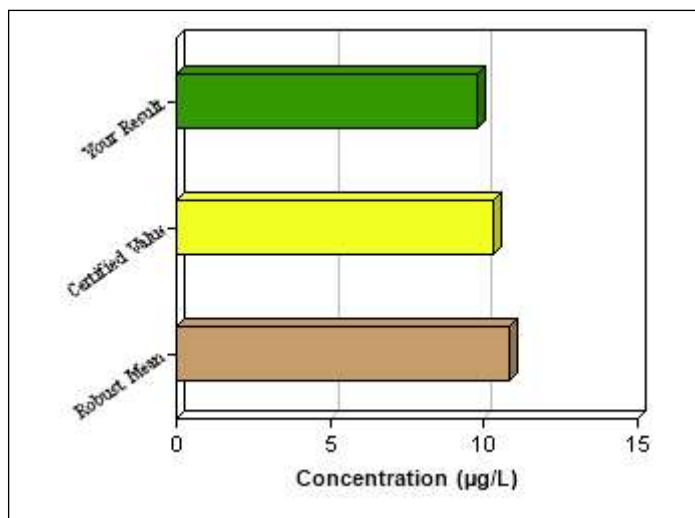
Group Summary

Your Reported PT Result 9.75
Your z Score -0.598
Your Performance Evaluation Satisfactory
Relative Recovery 94.7 %
Reported Method EPA 8260D
Formulation/Certified Value 10.3 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 10.8
Robust Mean 10.8
SDPA 1.78
Satisfactory Range 7.25 - 14.4
Average Relative Recovery 105 %
Relative Standard Deviation 16.5 %
Percent Acceptable 90.9 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 9.39
SDPA 0.344
Data Points 10
Satisfactory Range 8.70 - 10.1
Average Percent Recovery 91.1%
Relative Standard Deviation 3.66%
Percent Acceptable 80.0%
Your Method z Score 1.05
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Benzene in GRO (71-43-2)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Davide Leotta
Analysis Date 03 Jun 2026

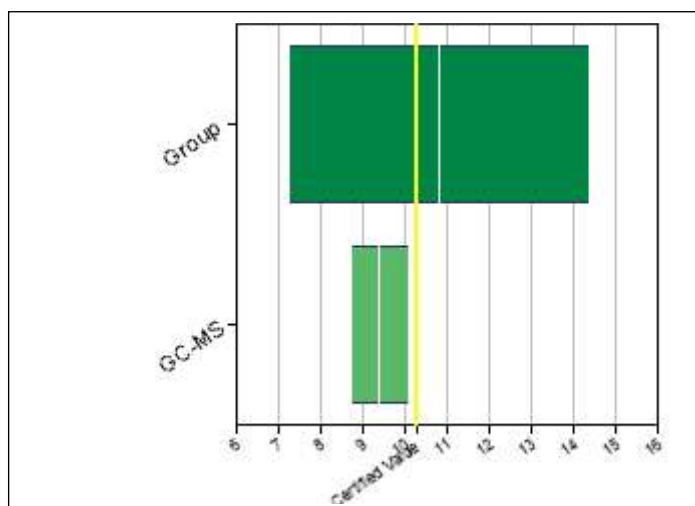
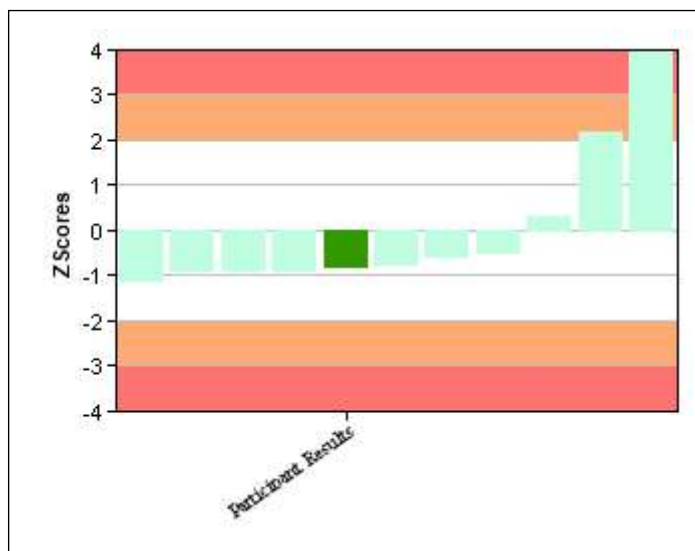
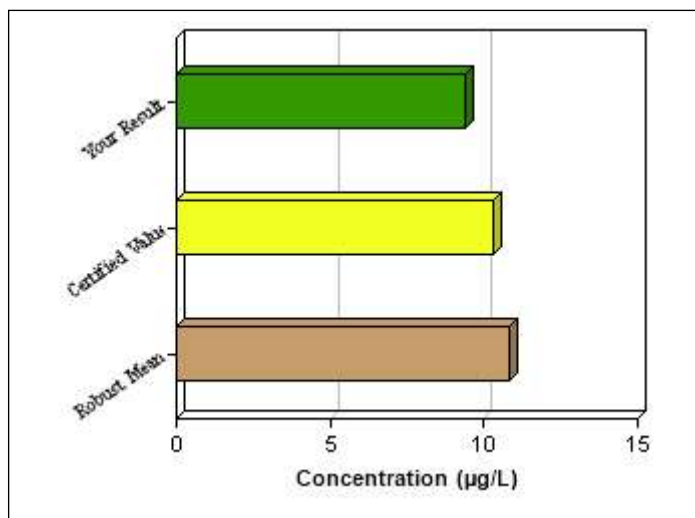
Group Summary

Your Reported PT Result 9.39
Your z Score -0.8
Your Performance Evaluation Satisfactory
Relative Recovery 91.2 %
Reported Method EPA 8260D
Formulation/Certified Value 10.3 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 10.8
Robust Mean 10.8
SDPA 1.78
Satisfactory Range 7.25 - 14.4
Average Relative Recovery 105 %
Relative Standard Deviation 16.5 %
Percent Acceptable 90.9 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 9.39
SDPA 0.344
Data Points 10
Satisfactory Range 8.70 - 10.1
Average Percent Recovery 91.1%
Relative Standard Deviation 3.66%
Percent Acceptable 80.0%
Your Method z Score 0.00727
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Ethylbenzene in GRO (100-41-4)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Stefano Mizzi
Analysis Date 03 Jun 2026

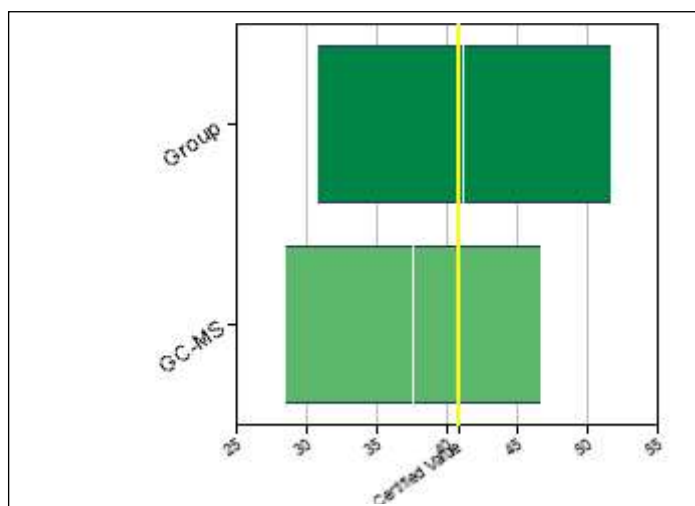
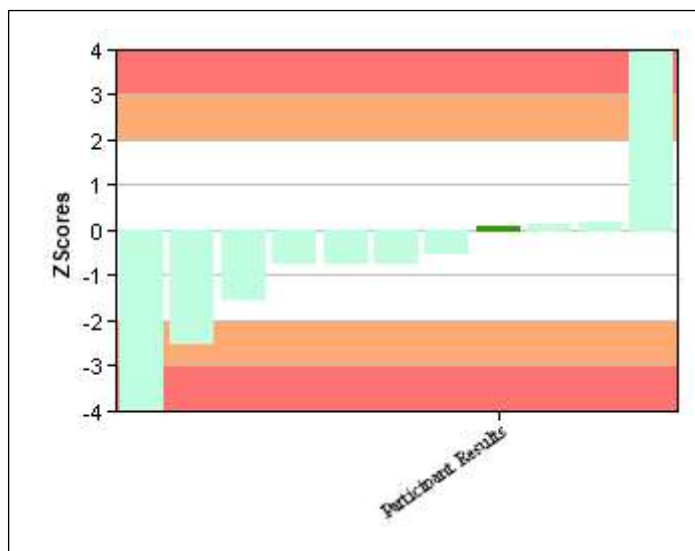
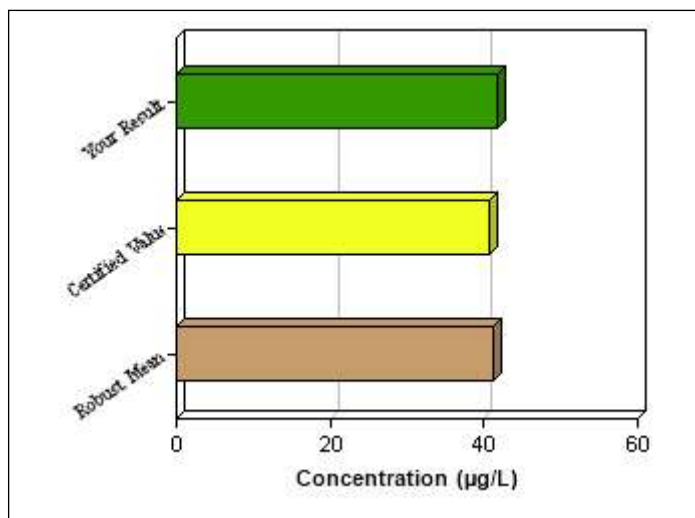
Group Summary

Your Reported PT Result 41.7
Your z Score 0.0935
Your Performance Evaluation Satisfactory
Relative Recovery 102 %
Reported Method EPA 8260D
Formulation/Certified Value 40.8 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 41.2
Robust Mean 41.2
SDPA 5.26
Satisfactory Range 30.7 - 51.7
Average Relative Recovery 101 %
Relative Standard Deviation 12.8 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 37.6
SDPA 4.57
Data Points 10
Satisfactory Range 28.4 - 46.7
Average Percent Recovery 92.1%
Relative Standard Deviation 12.2%
Percent Acceptable 90.0%
Your Method z Score 0.904
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Ethylbenzene in GRO (100-41-4)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Rodica Biza
Analysis Date 03 Jun 2026

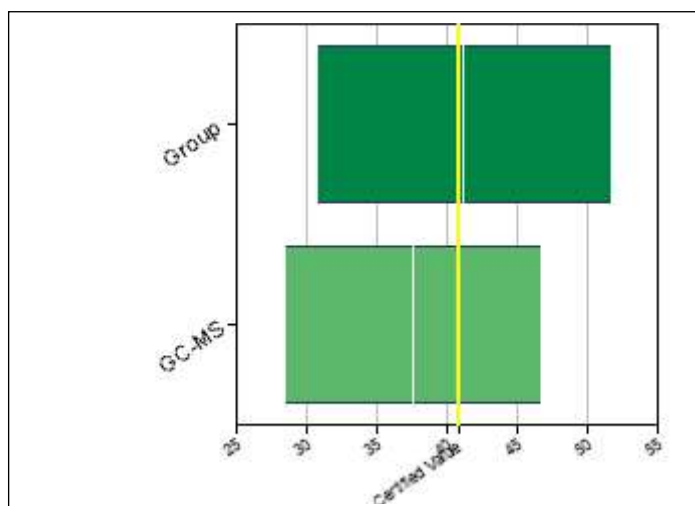
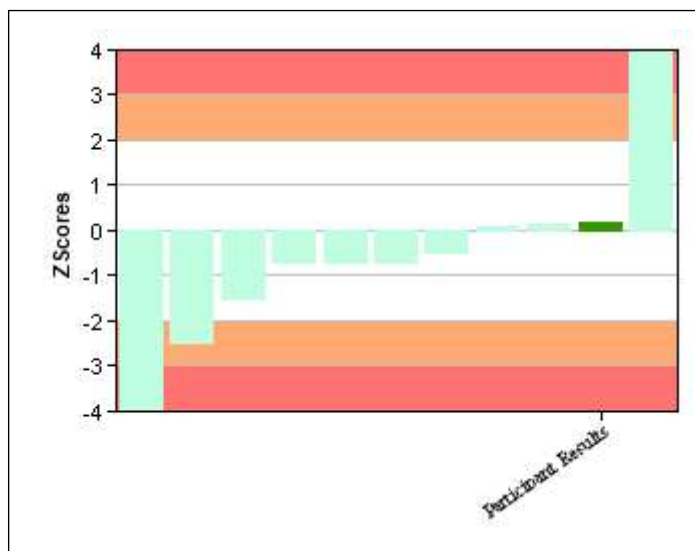
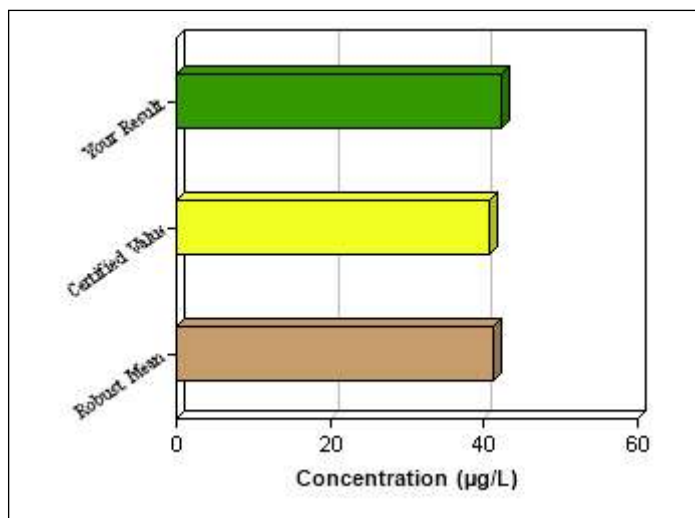
Group Summary

Your Reported PT Result 42.2
Your z Score 0.188
Your Performance Evaluation Satisfactory
Relative Recovery 103 %
Reported Method EPA 8260D
Formulation/Certified Value 40.8 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 41.2
Robust Mean 41.2
SDPA 5.26
Satisfactory Range 30.7 - 51.7
Average Relative Recovery 101 %
Relative Standard Deviation 12.8 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 37.6
SDPA 4.57
Data Points 10
Satisfactory Range 28.4 - 46.7
Average Percent Recovery 92.1%
Relative Standard Deviation 12.2%
Percent Acceptable 90.0%
Your Method z Score 1.01
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Ethylbenzene in GRO (100-41-4)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Davide Leotta
Analysis Date 03 Jun 2026

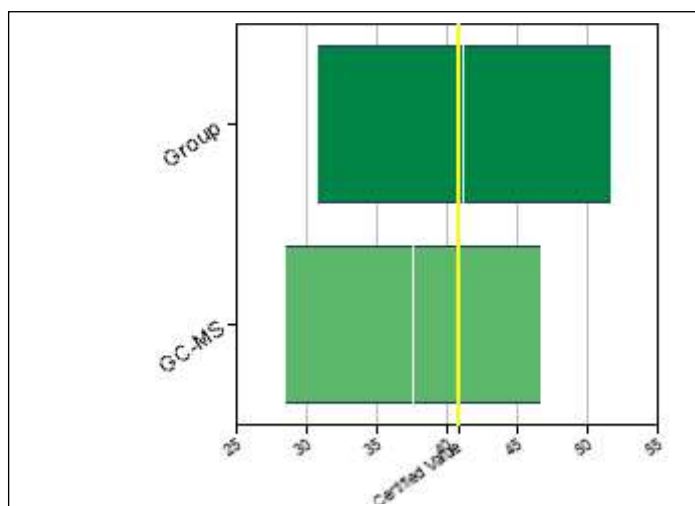
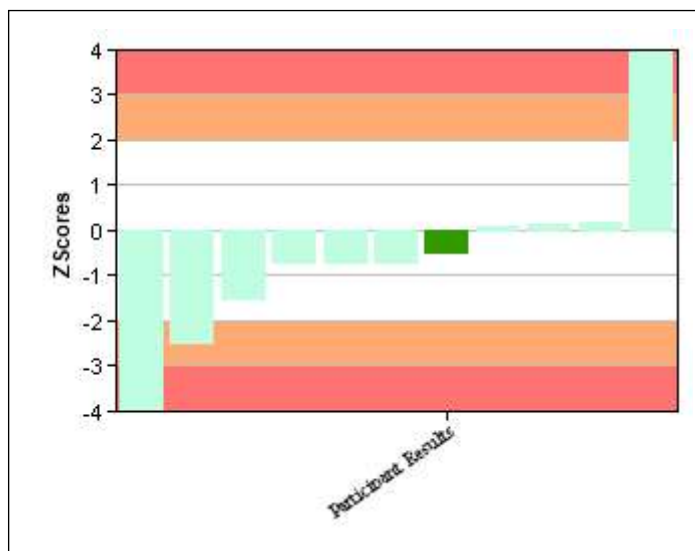
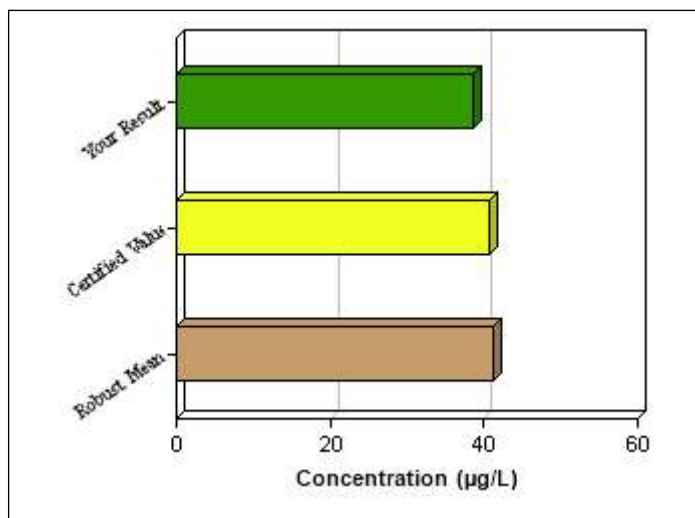
Group Summary

Your Reported PT Result 38.6
Your z Score -0.496
Your Performance Evaluation Satisfactory
Relative Recovery 94.6 %
Reported Method EPA 8260D
Formulation/Certified Value 40.8 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 41.2
Robust Mean 41.2
SDPA 5.26
Satisfactory Range 30.7 - 51.7
Average Relative Recovery 101 %
Relative Standard Deviation 12.8 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 37.6
SDPA 4.57
Data Points 10
Satisfactory Range 28.4 - 46.7
Average Percent Recovery 92.1%
Relative Standard Deviation 12.2%
Percent Acceptable 90.0%
Your Method z Score 0.226
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Gasoline Range Organics (GRO) (67-64-1)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Stefano Mizzi
Analysis Date 03 Jun 2026

Group Summary

Your Reported PT Result 1450
Your z Score -0.485
Your Performance Evaluation Satisfactory
Relative Recovery 91.2 %
Reported Method EPA 8015C
Formulation/Certified Value 1590 µg/L
Uncertainty of Certified Value 0.427 %
Assigned Value (X) 1770
Robust Mean 1770
SDPA 670
Satisfactory Range 436 - 3110
Average Relative Recovery 112 %
Relative Standard Deviation 37.7 %
Percent Acceptable 100 %
Number of Data Points 43

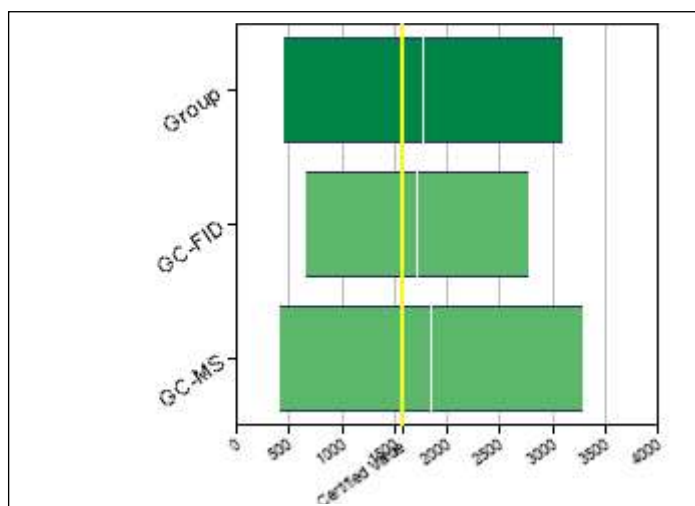
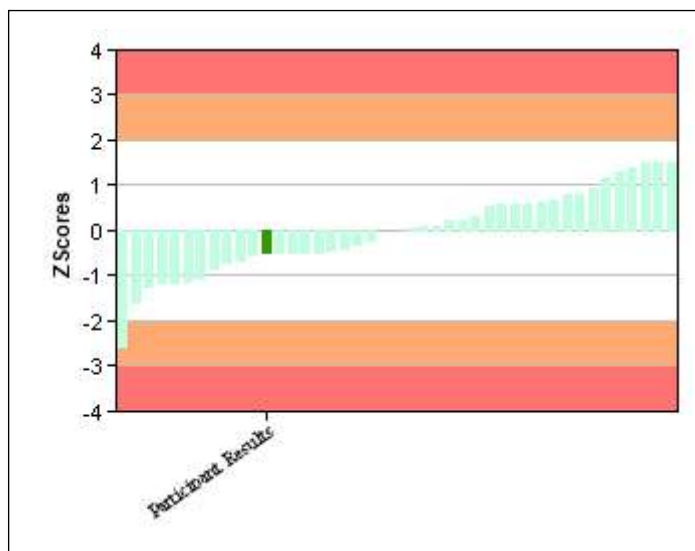
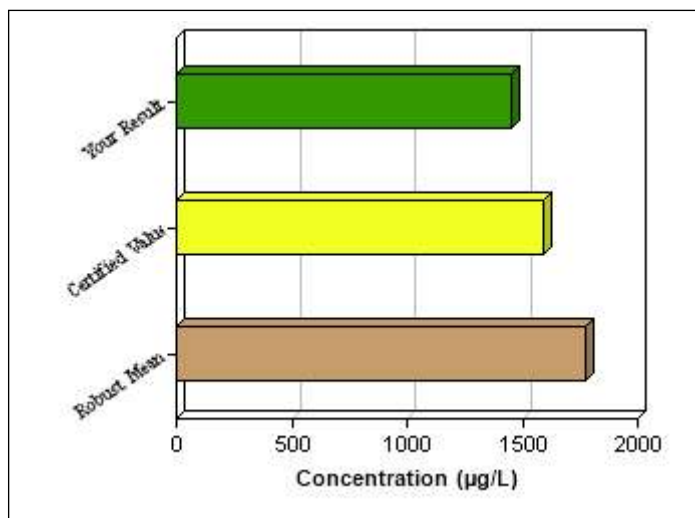
Method Details

Gas Chromatography - Flam

Robust Mean 1720
SDPA 534
Data Points 22
Satisfactory Range 653 - 2790
Average Percent Recovery 108%
Relative Standard Deviation 31.0%
Percent Acceptable 100%
Your Method z Score -0.506
Your Method Evaluation Satisfactory

Gas Chromatography - Mass

Robust Mean 1850
SDPA 724
Data Points 16
Satisfactory Range 406 - 3300
Average Percent Recovery 117%
Relative Standard Deviation 39.0%
Percent Acceptable 100%



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Gasoline Range Organics (GRO) (67-64-1)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Rodica Biza
Analysis Date 03 Jun 2026

Group Summary

Your Reported PT Result 1450
Your z Score -0.485
Your Performance Evaluation Satisfactory
Relative Recovery 91.2 %
Reported Method EPA 8015C
Formulation/Certified Value 1590 µg/L
Uncertainty of Certified Value 0.427 %
Assigned Value (X) 1770
Robust Mean 1770
SDPA 670
Satisfactory Range 436 - 3110
Average Relative Recovery 112 %
Relative Standard Deviation 37.7 %
Percent Acceptable 100 %
Number of Data Points 43

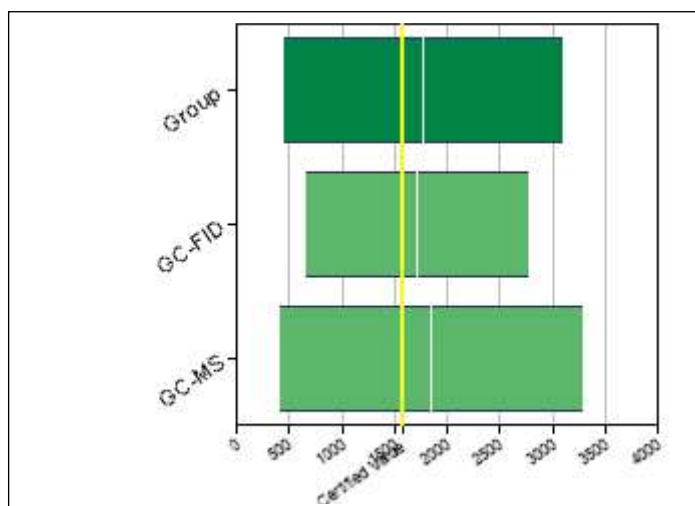
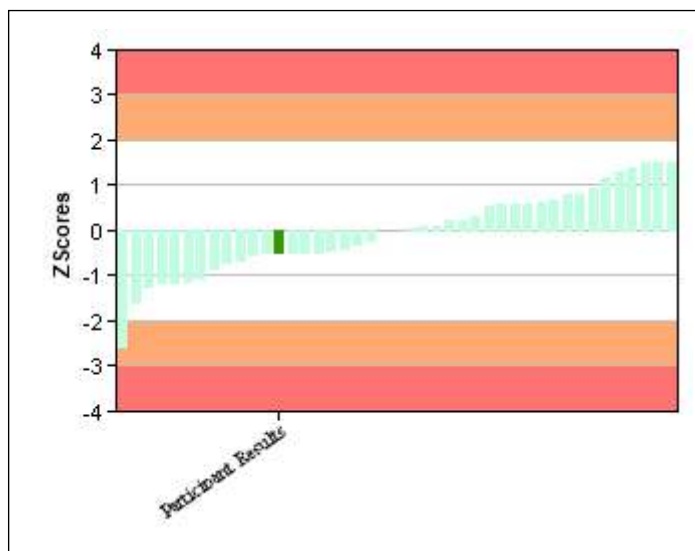
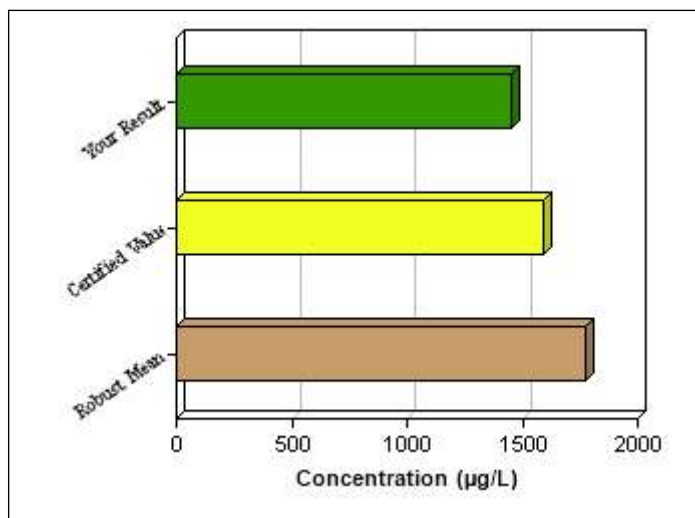
Method Details

Gas Chromatography - Flam

Robust Mean 1720
SDPA 534
Data Points 22
Satisfactory Range 653 - 2790
Average Percent Recovery 108%
Relative Standard Deviation 31.0%
Percent Acceptable 100%
Your Method z Score -0.506
Your Method Evaluation Satisfactory

Gas Chromatography - Mass

Robust Mean 1850
SDPA 724
Data Points 16
Satisfactory Range 406 - 3300
Average Percent Recovery 117%
Relative Standard Deviation 39.0%
Percent Acceptable 100%



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Gasoline Range Organics (GRO) (67-64-1)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Davide Leotta
Analysis Date 03 Jun 2026

Group Summary

Your Reported PT Result 1480
Your z Score -0.44
Your Performance Evaluation Satisfactory
Relative Recovery 93.1 %
Reported Method EPA 8015C
Formulation/Certified Value 1590 µg/L
Uncertainty of Certified Value 0.427 %
Assigned Value (X) 1770
Robust Mean 1770
SDPA 670
Satisfactory Range 436 - 3110
Average Relative Recovery 112 %
Relative Standard Deviation 37.7 %
Percent Acceptable 100 %
Number of Data Points 43

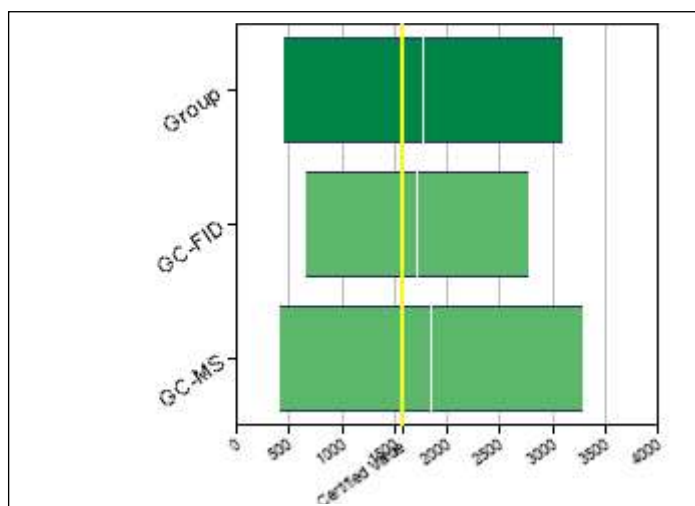
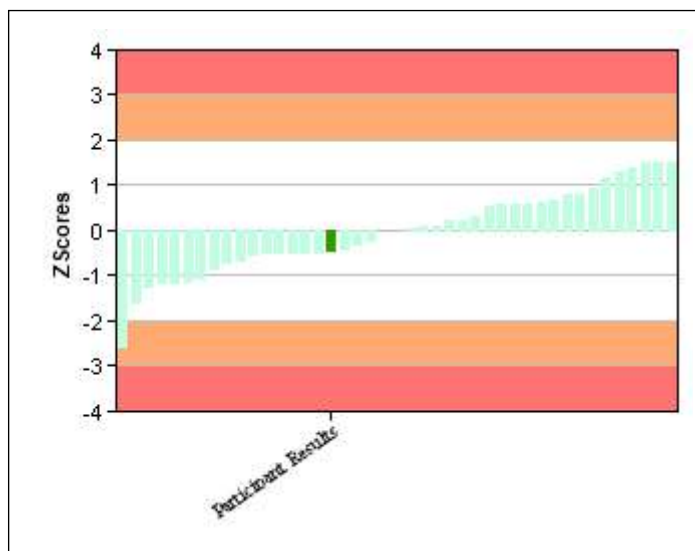
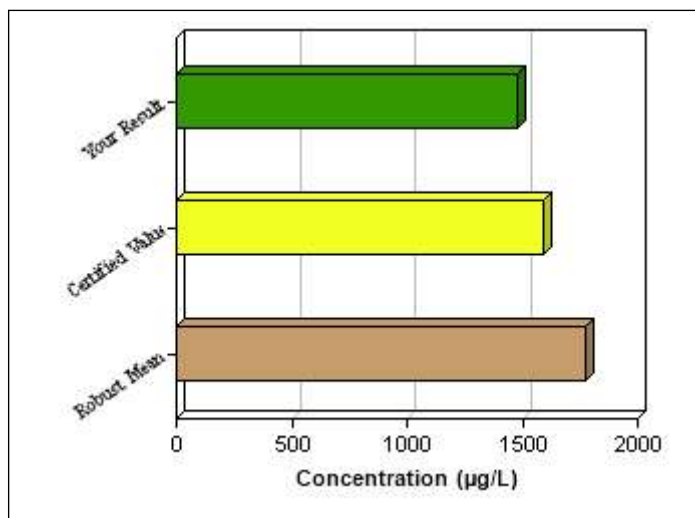
Method Details

Gas Chromatography - Flam

Robust Mean 1720
SDPA 534
Data Points 22
Satisfactory Range 653 - 2790
Average Percent Recovery 108%
Relative Standard Deviation 31.0%
Percent Acceptable 100%
Your Method z Score -0.450
Your Method Evaluation Satisfactory

Gas Chromatography - Mass

Robust Mean 1850
SDPA 724
Data Points 16
Satisfactory Range 406 - 3300
Average Percent Recovery 117%
Relative Standard Deviation 39.0%
Percent Acceptable 100%



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Toluene in GRO (108-88-3)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Stefano Mizzi
Analysis Date 03 Jun 2026

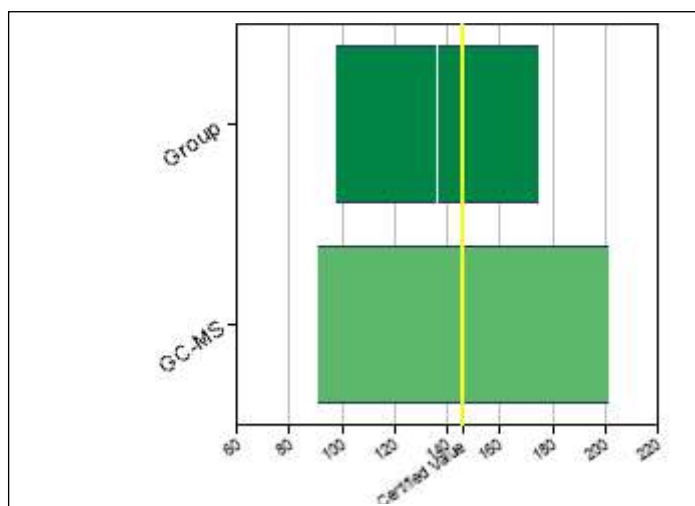
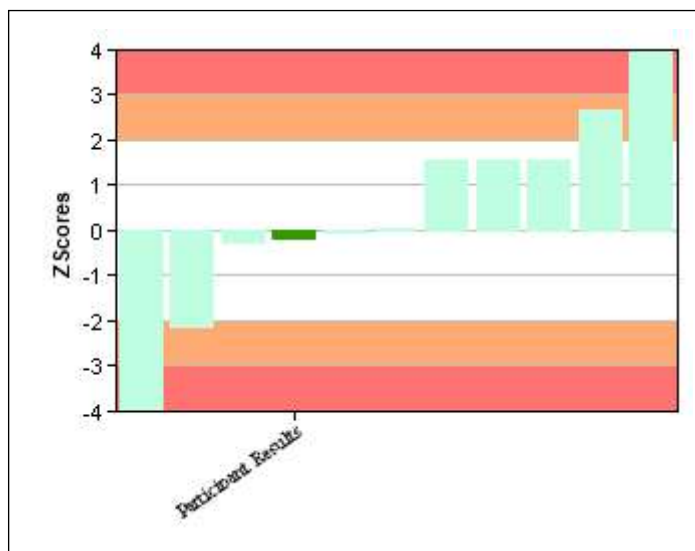
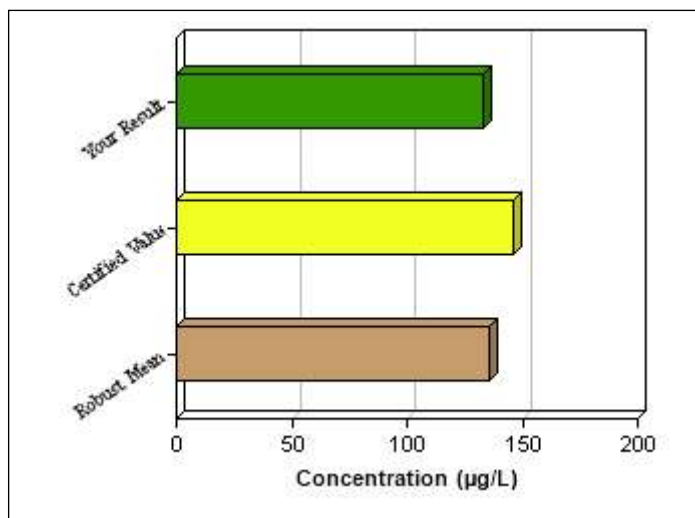
Group Summary

Your Reported PT Result 133
Your z Score -0.158
Your Performance Evaluation Satisfactory
Relative Recovery 91.1 %
Reported Method EPA 8260D
Formulation/Certified Value 146 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 136
Robust Mean 136
SDPA 19.4
Satisfactory Range 97.2 - 175
Average Relative Recovery 93.2 %
Relative Standard Deviation 14.3 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 146
SDPA 27.8
Data Points 10
Satisfactory Range 90.7 - 202
Average Percent Recovery 100%
Relative Standard Deviation 19.0%
Percent Acceptable 90.0%
Your Method z Score -0.477
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Toluene in GRO (108-88-3)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Rodica Biza
Analysis Date 03 Jun 2026

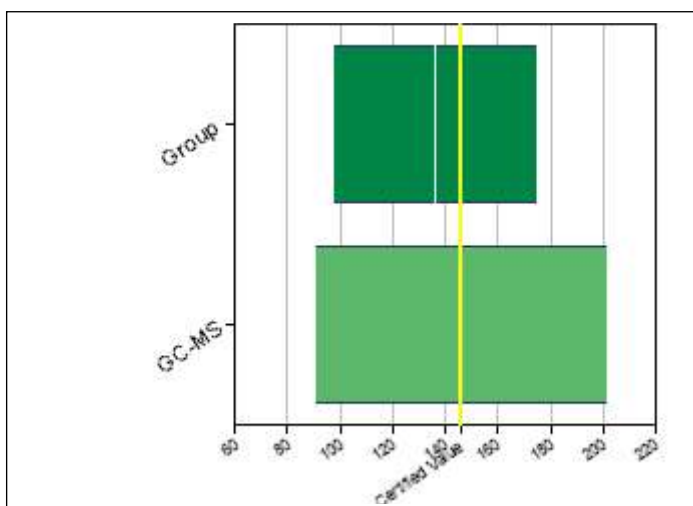
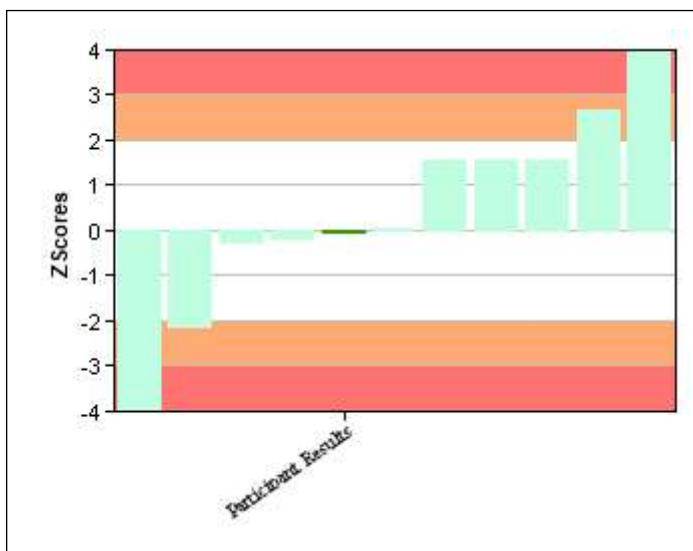
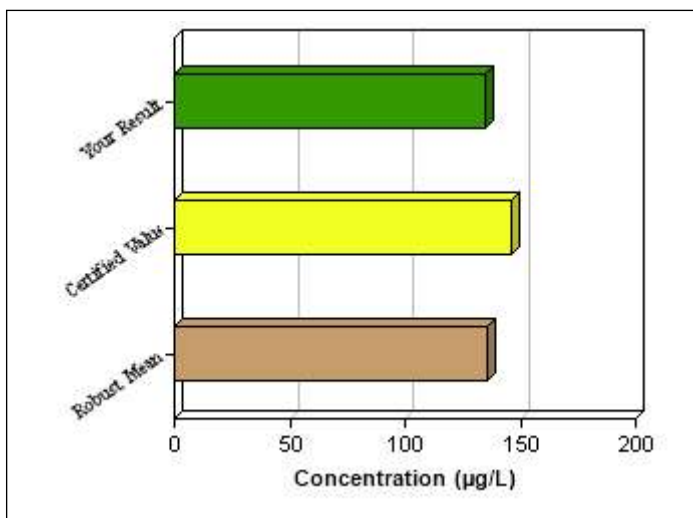
Group Summary

Your Reported PT Result 135
Your z Score -0.0552
Your Performance Evaluation Satisfactory
Relative Recovery 92.5 %
Reported Method EPA 8260D
Formulation/Certified Value 146 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 136
Robust Mean 136
SDPA 19.4
Satisfactory Range 97.2 - 175
Average Relative Recovery 93.2 %
Relative Standard Deviation 14.3 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 146
SDPA 27.8
Data Points 10
Satisfactory Range 90.7 - 202
Average Percent Recovery 100%
Relative Standard Deviation 19.0%
Percent Acceptable 90.0%
Your Method z Score -0.405
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Toluene in GRO (108-88-3)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Davide Leotta
Analysis Date 03 Jun 2026

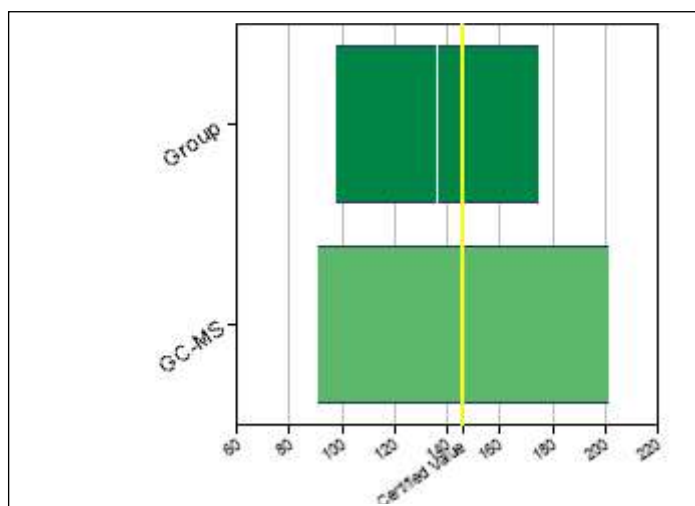
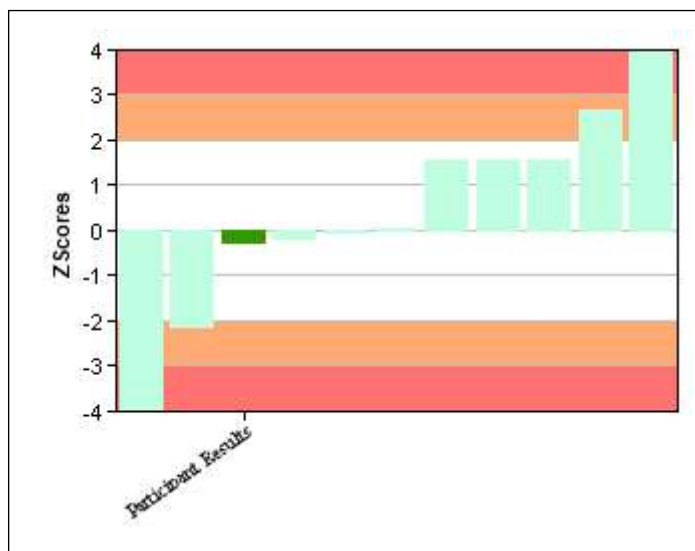
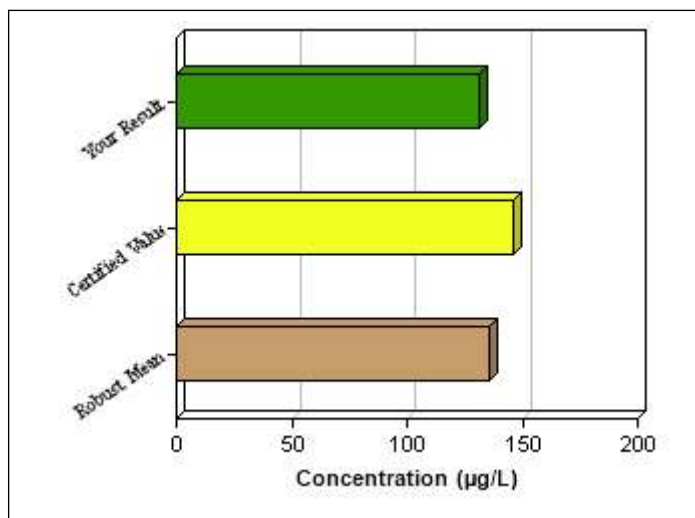
Group Summary

Your Reported PT Result 131
Your z Score -0.261
Your Performance Evaluation Satisfactory
Relative Recovery 89.7 %
Reported Method EPA 8260D
Formulation/Certified Value 146 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 136
Robust Mean 136
SDPA 19.4
Satisfactory Range 97.2 - 175
Average Relative Recovery 93.2 %
Relative Standard Deviation 14.3 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 146
SDPA 27.8
Data Points 10
Satisfactory Range 90.7 - 202
Average Percent Recovery 100%
Relative Standard Deviation 19.0%
Percent Acceptable 90.0%
Your Method z Score -0.549
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Xylenes, total in GRO (1330-20-7)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Stefano Mizzi
Analysis Date 03 Jun 2026

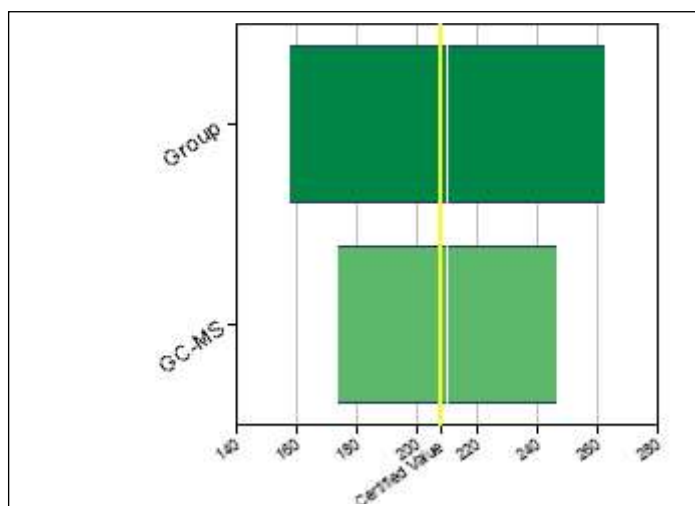
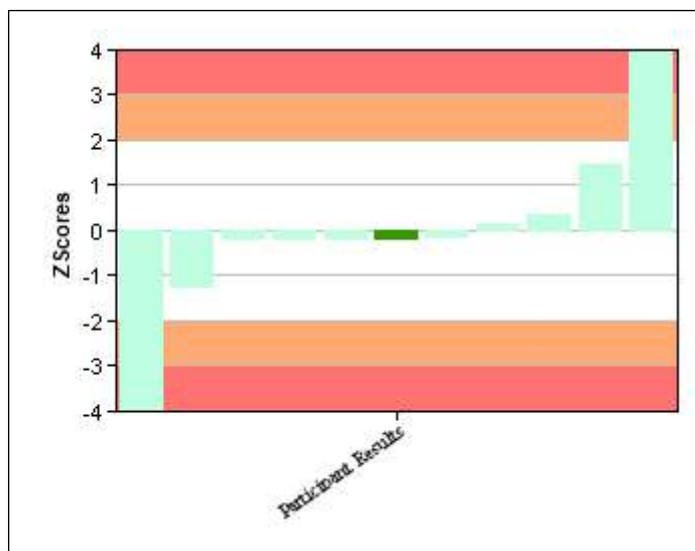
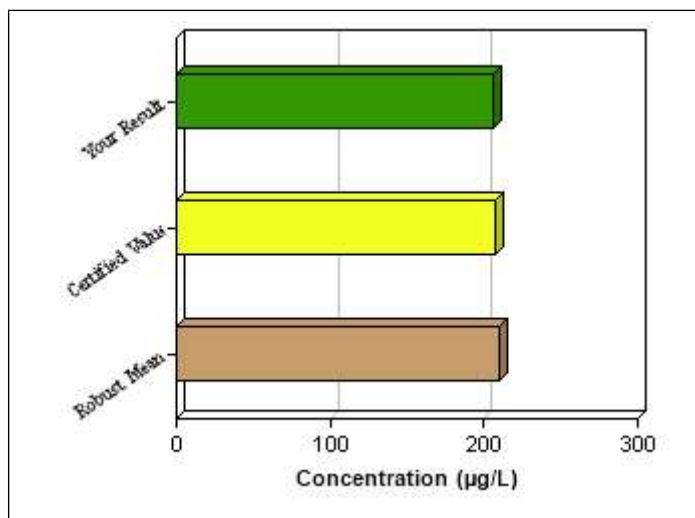
Group Summary

Your Reported PT Result 206
Your z Score -0.156
Your Performance Evaluation Satisfactory
Relative Recovery 99.0 %
Reported Method EPA 8260D
Formulation/Certified Value 208 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 210
Robust Mean 210
SDPA 26.2
Satisfactory Range 158 - 262
Average Relative Recovery 101 %
Relative Standard Deviation 12.5 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 210
SDPA 18.3
Data Points 10
Satisfactory Range 173 - 247
Average Percent Recovery 101%
Relative Standard Deviation 8.72%
Percent Acceptable 90.0%
Your Method z Score -0.220
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Xylenes, total in GRO (1330-20-7)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Rodica Biza
Analysis Date 03 Jun 2026

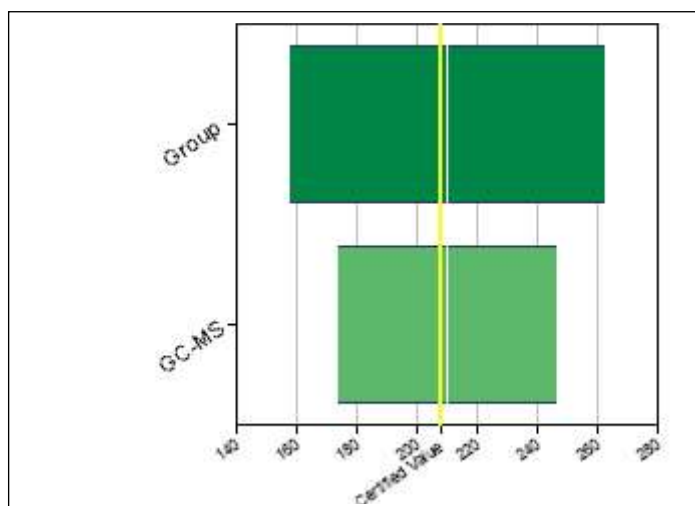
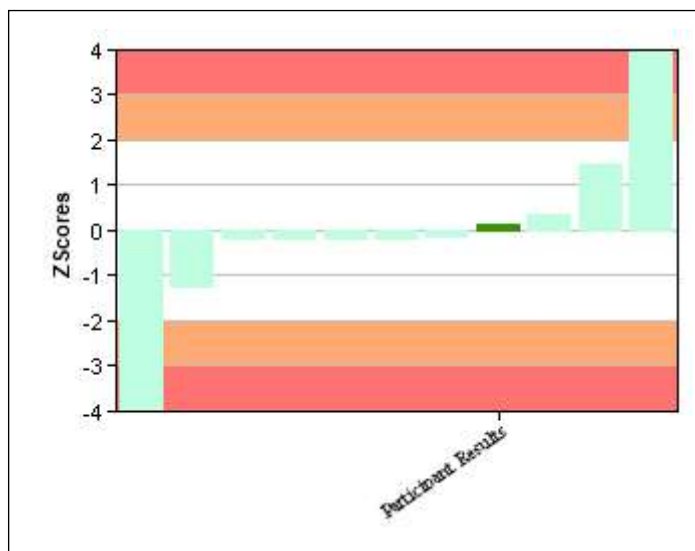
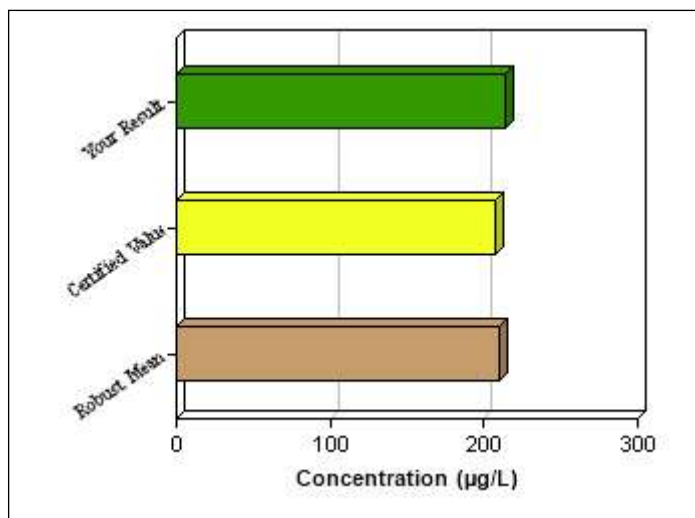
Group Summary

Your Reported PT Result 214
Your z Score 0.15
Your Performance Evaluation Satisfactory
Relative Recovery 103 %
Reported Method EPA 8260D
Formulation/Certified Value 208 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 210
Robust Mean 210
SDPA 26.2
Satisfactory Range 158 - 262
Average Relative Recovery 101 %
Relative Standard Deviation 12.5 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 210
SDPA 18.3
Data Points 10
Satisfactory Range 173 - 247
Average Percent Recovery 101%
Relative Standard Deviation 8.72%
Percent Acceptable 90.0%
Your Method z Score 0.217
Your Method Evaluation Satisfactory



Laboratory M182419
Product Name Gasoline Range Organics (GRO) in Water
Lot Number P375-762
Analyte (CAS) Xylenes, total in GRO (1330-20-7)

PT Scheme Water Pollution for Wastewater
PT Round Number 375
Analyst Davide Leotta
Analysis Date 03 Jun 2026

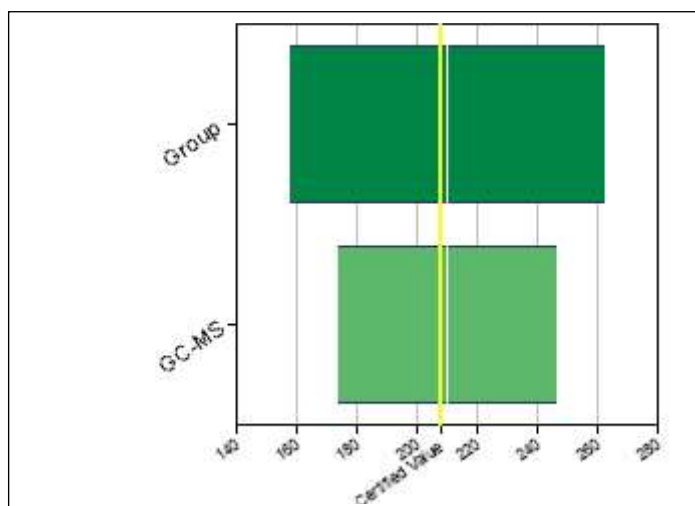
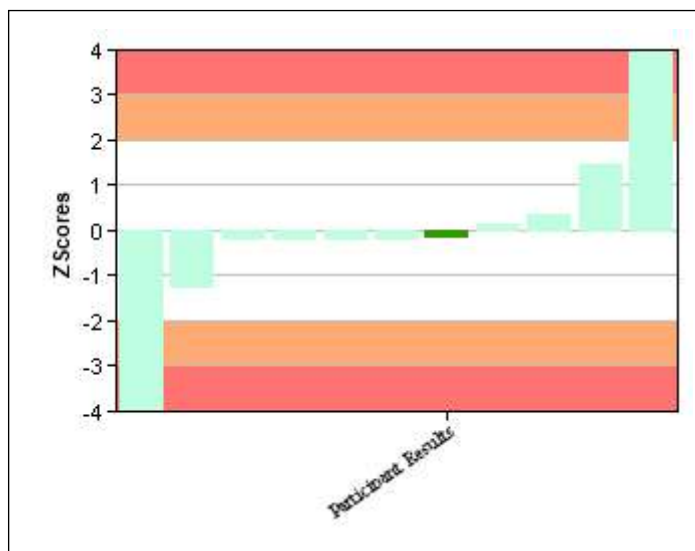
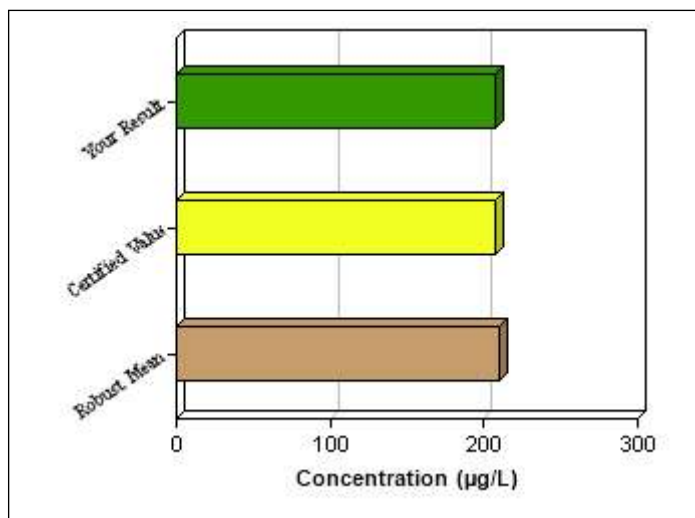
Group Summary

Your Reported PT Result 207
Your z Score -0.118
Your Performance Evaluation Satisfactory
Relative Recovery 99.5 %
Reported Method EPA 8260D
Formulation/Certified Value 208 µg/L
Uncertainty of Certified Value 0.000 %
Assigned Value (X) 210
Robust Mean 210
SDPA 26.2
Satisfactory Range 158 - 262
Average Relative Recovery 101 %
Relative Standard Deviation 12.5 %
Percent Acceptable 81.8 %
Number of Data Points 11

Method Details

Gas Chromatography - Mass

Robust Mean 210
SDPA 18.3
Data Points 10
Satisfactory Range 173 - 247
Average Percent Recovery 101%
Relative Standard Deviation 8.72%
Percent Acceptable 90.0%
Your Method z Score -0.165
Your Method Evaluation Satisfactory



Laboratory of Excellence

m.c.m. Ecosistemi srl Localita Faggiola

*This laboratory has been recognized by ERA as a
Laboratory of Excellence for achieving 100% acceptable data in the*

April 2026 WP ERA Proficiency Testing Round 375

*which included 947 participating laboratories. This achievement is a demonstration of
the superior quality of this laboratory in evaluation of the analyte(s) listed below.*

BOD

TOC

Ethylbenzene in GRO

Toluene in GRO

COD

Benzene in GRO

Gasoline Range Organics (GRO)

Xylenes, total in GRO



A Waters Company

Emily Devers, Quality Assurance Manager





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