IAMQC™

YOUR QUALITY CONTROL SOFTWARE

QUALITY CONTROL SOFTWARE

QC Software Peer Programme

Powerful Reports

Trending & Analysis

Data Records & Compliance

T E C H N O P A T H

Brought to you by:
TECHNOPATH Distribution Ltd, proudly partnering with you to provide the highest quality IQC products for your laboratories.

CONTENTS

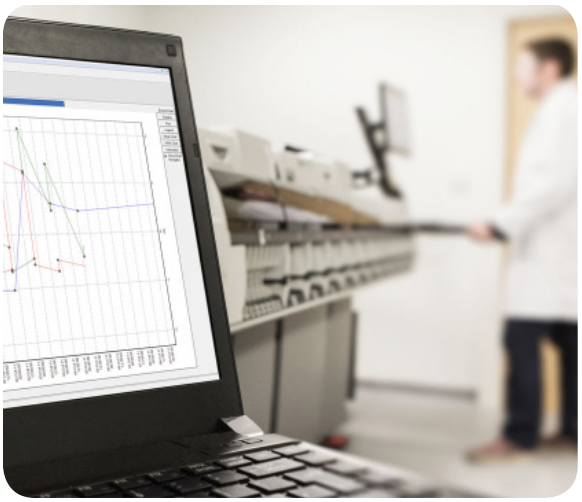
QC SOFTWARE SOLUTION

IAMQC®
YOUR QUALITY CONTROL SOFTWARE

IAMQC® Peer Software:

IAMQC® Peer is an innovative, real-time, Peer Comparison Software. TECHNOPATH's web based system facilitates laboratories testing the same lot number of quality control material to access valuable information from their colleagues through peer comparison.

The reports that are generated in IAMQC® Peer compare the accuracy and precision of analytical processes between laboratories and peer groups. This information can be extremely valuable, indicating the user's performance relative to their peer group and also providing powerful troubleshooting tools when attempting to resolve potential problems.



The Multichem® Range of Quality Controls:

Compatible for use with the TECHNOPATH Multichem® range of Quality Controls. Track your Multichem® QC results on one centralised platform.

Multichem® S Plus

Serum Chemistry & Immunology QC

Multichem® S

Serum Chemistry & Immunology QC

Multichem® P

Supplementary Immunoprotein QC

Multichem® U

Urinary Chemistry QC

Multichem® NB

Neonatal Bilirubin QC

Multichem® AE

Ammonia & Ethanol QC

Multichem® CSF

Cerebral Spinal Fluid QC

Multichem® IA Plus

Immunoassay QC

Multichem® IA

Immunoassay QC

Multichem® IA Speciality

Speciality Peptide Hormone QC

Multichem® hsTn

High Sensitive Troponin QC

Multichem® WBT

Whole Blood Immunosuppressant QC

Multichem® D-Dimer

D-Dimer QC

Multichem® A1c

Diabetes Haemoglobin A1c QC

Multichem® AMH

Anti-Müllerian Hormone QC

JOIN THE IAMQC® PEER PROGRAMME

What is the IAMQC® Peer Programme?

This web based system facilitates laboratories testing the same lot number of control material to access valuable information from their fellow colleagues through peer comparison.
The reports that are generated in IAMQC® Peer compare the accuracy and precision of analytical processes between laboratories and peer groups.

Why should my laboratory partipate?

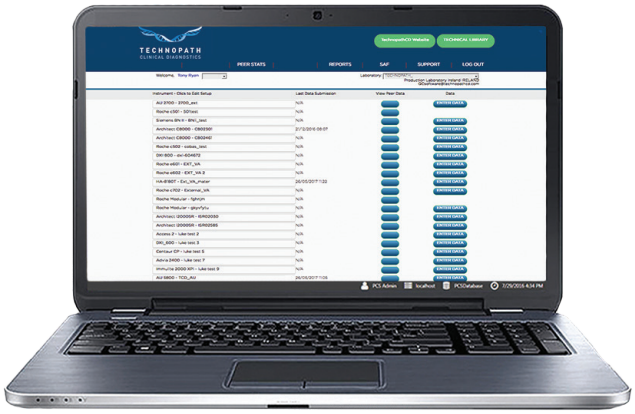
This information can be extremely valuable, indicating the user's performance relative to their peer group and also providing powerful troubleshooting tools when attempting to resolve potential problems.
The information provided by IAMQC® Peer can be used on a monthly basis to evaluate how well lab's methods are operating relative to the overall peer group.
Users can also look at this peer data in real-time interactive tables online, when they are investigating a potential problem with accuracy or precision in an individual method.

How does my laboratory participate?

To participate in IAMQC® Peer, each individual laboratory submits their individual results or summary statistics (mean, standard deviation, and number of data points) to the central database maintained by TECHNOPATH.
Laboratories data may be submitted manually on-line or, alternatively, captured by one of our many live interfacing options. Speak with a TECHNOPATH representative today to learn more.

IAMQC® REPORTS

Each one of the IAMQC® Peer comparison reports are generated in PDF format and are available on the web through the IAMQC® Peer online site. These reports can be generated by the user or automatically on a user defined schedule.
The generated reports can be emailed automatically, as well as printed. At any time, the reports are available online and can be downloaded by users using their login name and password.



Available Reports

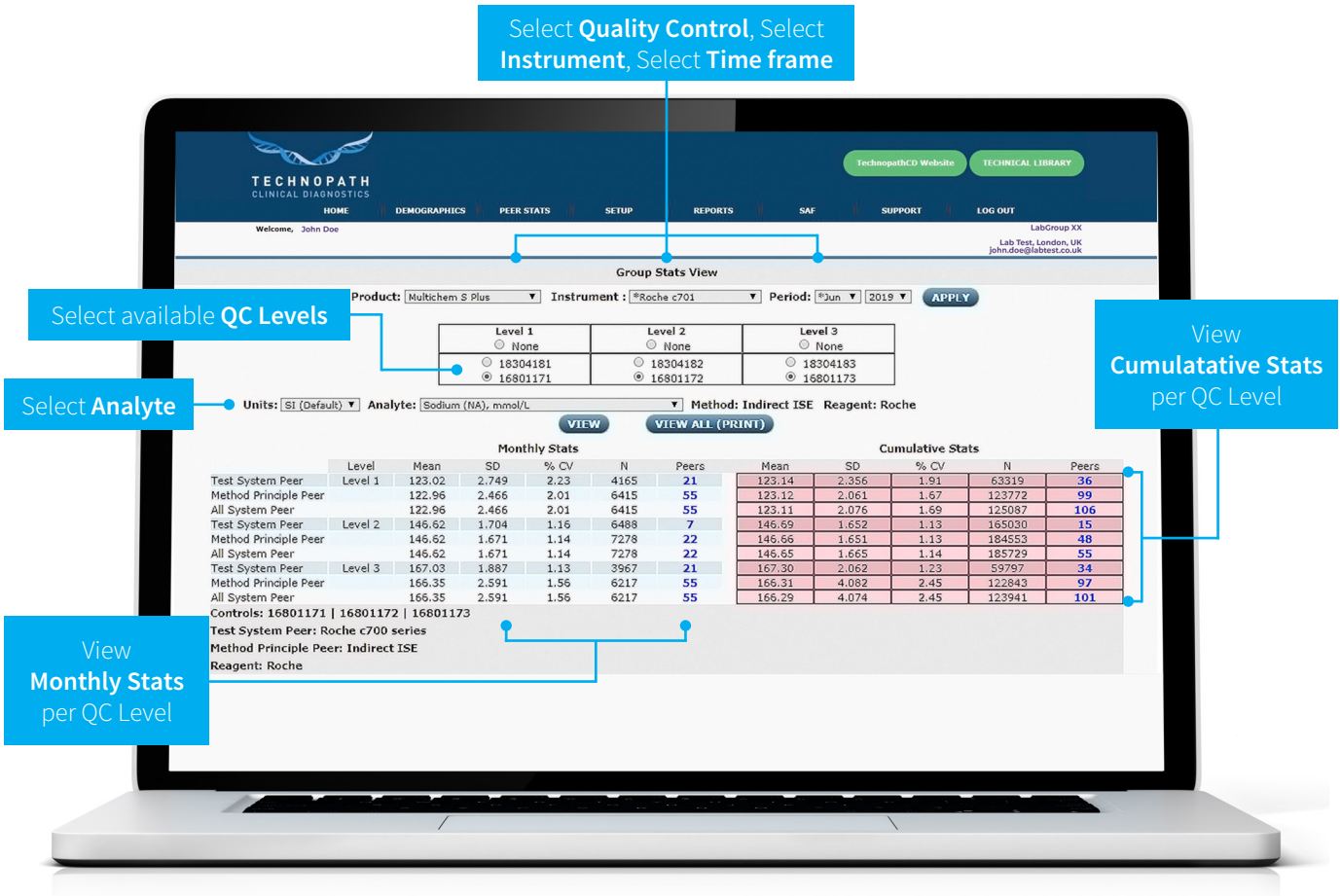
Peer Groups Stats Report
Group Coordinator Report
Levey Jennings Report
Youden Plot Report
Monthly Summary Report
Exceptions Report
Measurement of Uncertainty Report
Six Sigma Report

Generated Reports help with audit preparation and ISO 15189 requirements.

Peer Group Stats Report

Compare performance to both method and instrument group against the world peer.

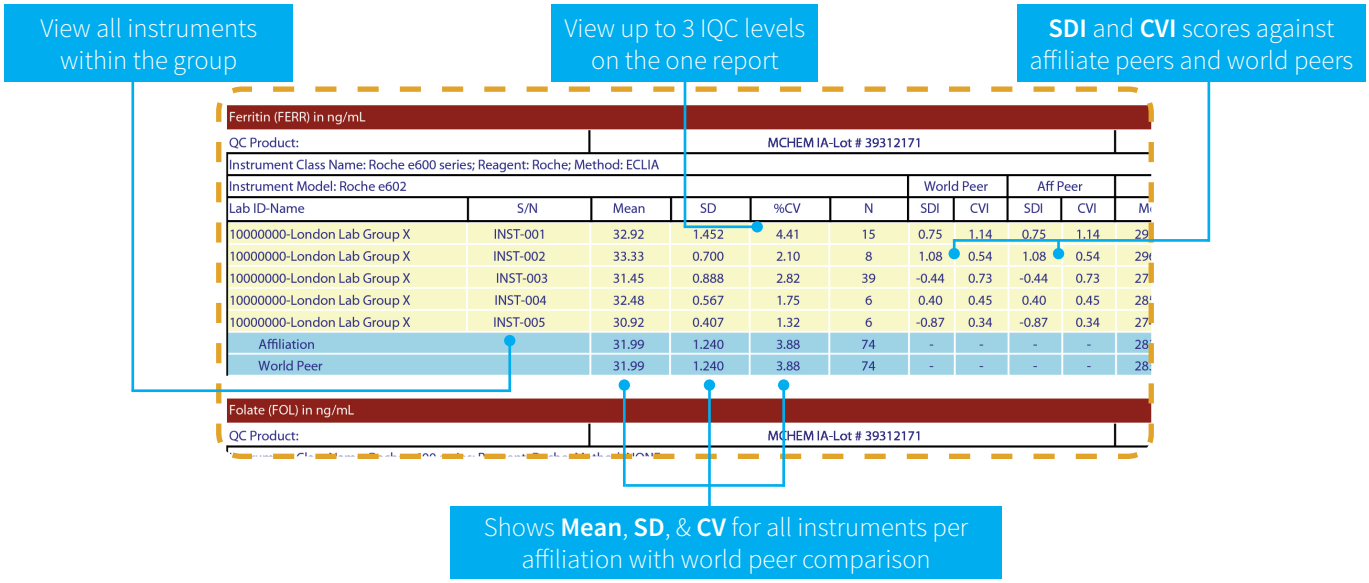
- Choose the month to view the results
- View **Mean**, **SD**, & **CV** for your instrument
- Comparisons can be made on both a monthly & cumulative base
- Gives your result an **SDI** and **CVI** score

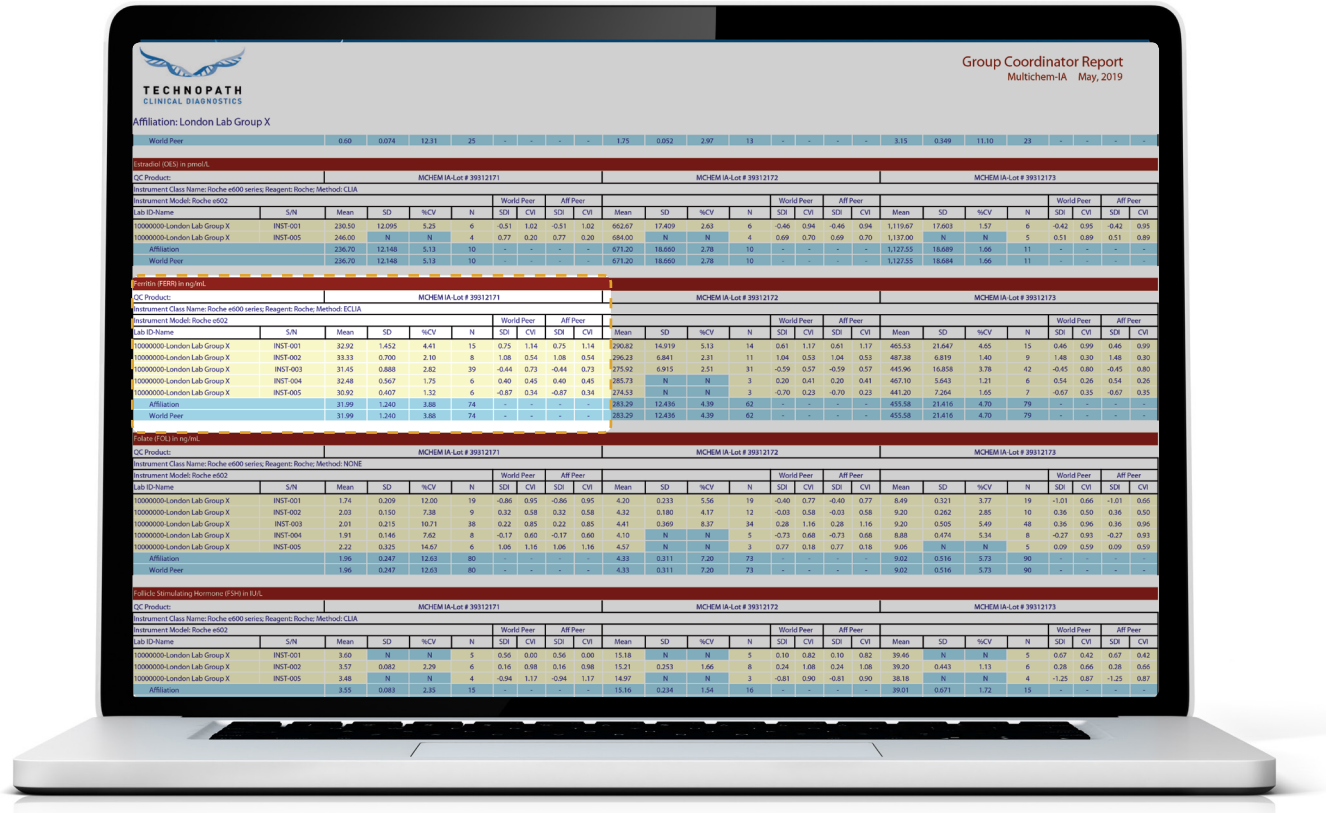


Group Coordinator Report

Provides a test by test listing of statistics for the laboratory and its peer groups for up to 3 levels of control material. A peer group is a group of laboratories using the same control material and the same analytical method. The Group Coordinator Report documents all of the relevant data points submitted to IAMQC® and automatically provides a statistical analysis in table format.
This report provides a centralised review of all instruments, from the moment the customer begins to report data and thus facilitates users meeting accreditation requirements, with respect to the storage, retrieval and statistical analysis of quality control data.

Note: When SDI and CVI goes above 1.5, these performance issues are highlighted for ease of review.

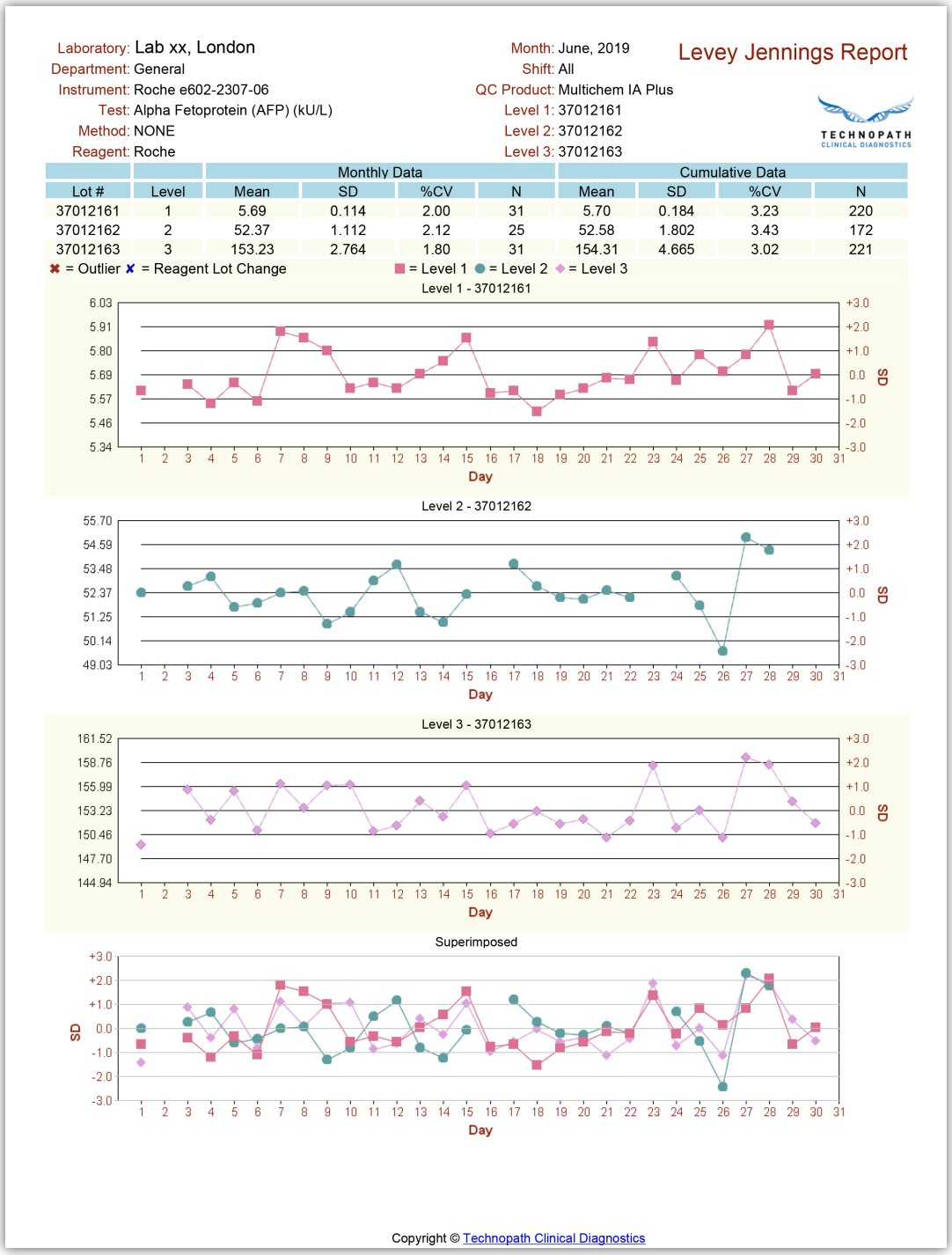




Levey Jennings Report

The Levey Jennings Report displays individual daily QC means for the selected month for a specific analyte. The report can be generated for two or three levels of QC material.
This report also provides a super-imposed version of all QC levels at the bottom of each sheet, highlighting any level specific bias. The top of the graph displays a summary of both monthly and cumulative data, including all of the relevant statistics for the laboratory.

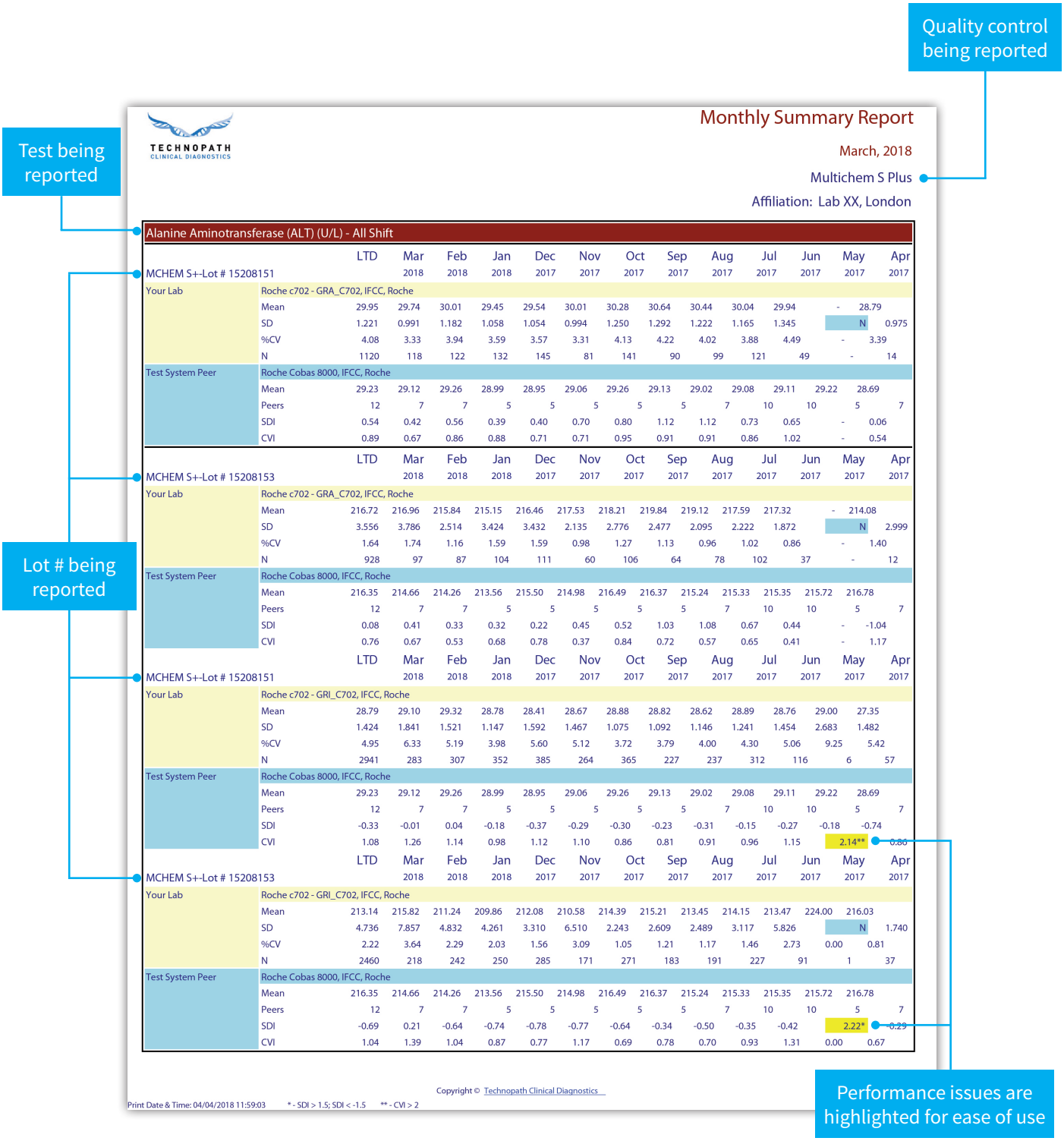
- Select month to view QC results
- Monthly **Mean**, **SD**, & **CV** given for all levels
- Results shown as a daily mean
- Levey Jenning for up to 3 levels of results
- Bottom chart superimposes multiple levels on the same chart, showing any level specific bias



Monthly Summary Report

For each test, and control level, this report displays summary statistics for the last twelve individual months and Lot-to-Date period for the laboratory and its peer groups. This data is useful for long-term intra-laboratory and inter-laboratory comparisons.

This report provides the customer with an indication of the 'usual' method accuracy and precision, allowing them to view any unexpected trending or increases in imprecision. The report also displays the customer's monthly SDI and CVI, indicating any shifts from the peer group. The 'monthly summary' report facilitates the user investigating changes in performance over time.



Measurement of Uncertainty Report

IAMQC® Peer has added new features that will add significant value for the end user. Customers can now generate a Measurement of Uncertainty report in MS Excel format from their online IAMQC® Peer account. Measurement of Uncertainty has become an important consideration in many laboratories and is referred to by many of the accreditation bodies as a requirement during audits (ISO 15189 Section 5.6.2).

> *"The laboratory shall determine measurement uncertainty for each measurement procedure, in the examination phases used to report measured quantity values on patients' samples. The laboratory shall define the performance requirements for the measurement uncertainty of each measurement procedure and regularly reviewestimates of measurement uncertainty."*
> **ISO 15189 Section 5.6.2**

Measuring Uncertainty

To measure uncertainty **(u)** the clinical pathology laboratory must first calculate the standard error of mean (SEM) of the intra assay precision **(A)** and the SD of the inter assay precision **(B)**.

Once calculated, both A and B now need to be squared, add together and then a final calculation of the square root (see below).

$$u = \sqrt{A^2 + B^2}$$

The K Factor

Once clinical pathology laboratories have determined the uncertainty they may then want to re-scale the result. The standard uncertainty may be thought of as equivalent to 'one standard deviation', but we may wish to have an overall uncertainty stated at another level of confidence, e.g. 95 percent. This re-scaling can be done using a coverage factor, k.

Multiplying the standard uncertainty, u , by a coverage factor gives a result which is called the expanded uncertainty, usually shown by the symbol U.

A particular value of coverage factor gives a particular confidence level for the expanded uncertainty. Most commonly, we scale the overall uncertainty by using the coverage factor k = 2, to give a level of confidence of approximately 95 percent. (k = 2 is correct if the combined standard uncertainty is normally distributed).

Some other coverage factors (for a normal distribution) are:

- k = 1 for a confidence level of approximately 68 percent
- k = 2.58 for a confidence level of 99 percent
- k = 3 for a confidence level of 99.7 percent

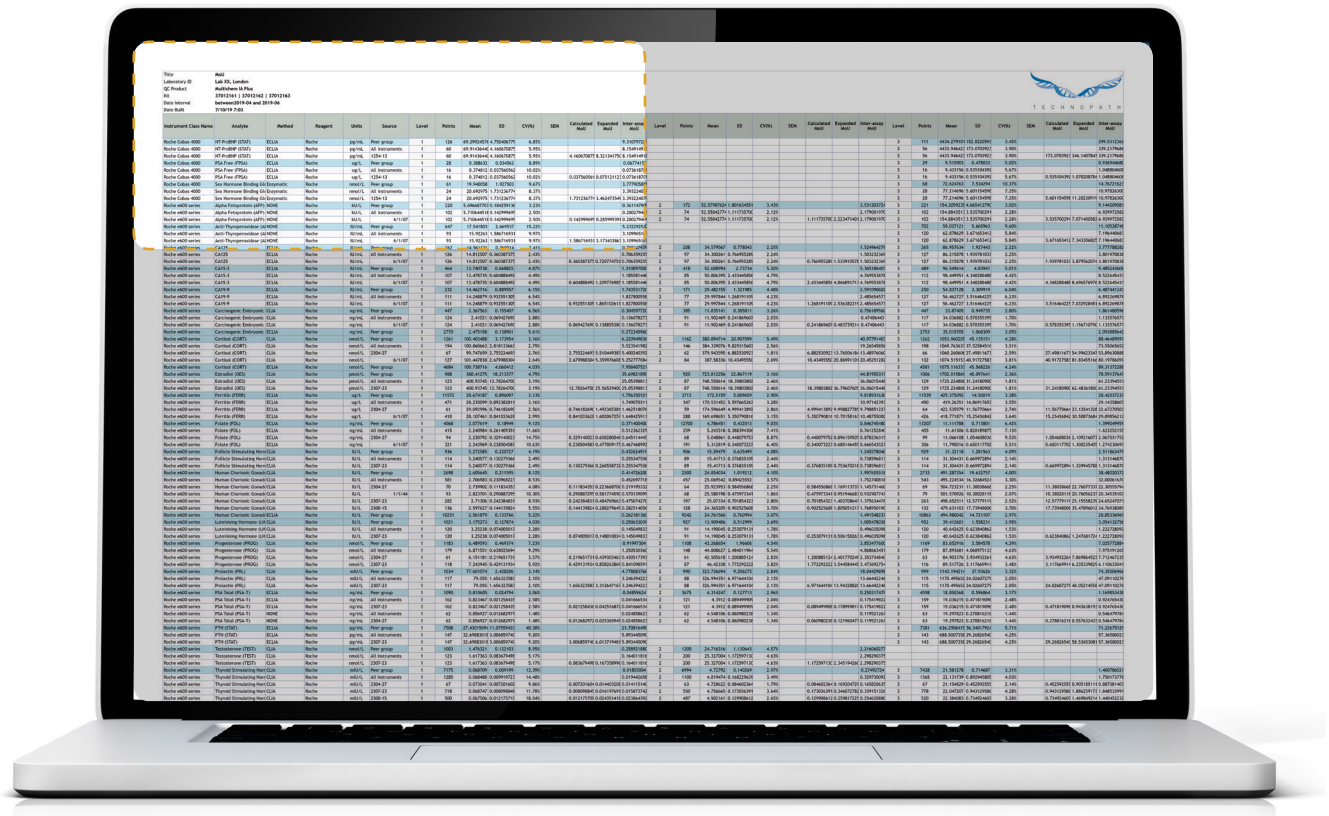
Example Measurement of Uncertainty Report

Your Measurement of Uncertainty report is generated in MS Excel format and available online to download from your IAMQC® Peer account.

Calculated MOU, Expanded MOU, Interassay MOU

Title	MoU
Laboratory ID	Lab XX, London
QC Product	Multichem IA Plus
Kit	37012161 | 37012162 | 37012163
Date Interval	between2019-04 and 2019-06
Date Built	7/10/19 7:03

Instrument Class Name	Analyte	Method	Reagent	Units	Source	Level	Points	Mean	SD	CV(%)	SEM	Calculated MoU	Expanded MoU	Inter-assay MoU
Roche Cobas 4000	NT-ProBNP (STAT)	ECLIA	Roche	pg/mL	Peer group	1	126	69.29924576	4.750406779	6.85%				9.310797282
Roche Cobas 4000	NT-ProBNP (STAT)	ECLIA	Roche	pg/mL	All instruments	1	60	69.91436446	4.160670875	5.95%				8.154914912
Roche Cobas 4000	NT-ProBNP (STAT)	ECLIA	Roche	pg/mL	1254-13	1	60	69.91436446	4.160670875	5.95%		4.160670875	8.321341750	8.154914912
Roche Cobas 4000	PSA Free (FPSA)	ECLIA	Roche	ug/L	Peer group	1	28	0.388632	0.034562	8.89%				0.06774152
Roche Cobas 4000	PSA Free (FPSA)	ECLIA	Roche	ug/L	All instruments	1	16	0.374812	0.037560562	10.02%				0.073618701
Roche Cobas 4000	PSA Free (FPSA)	ECLIA	Roche	ug/L	1254-13	1	16	0.374812	0.037560562	10.02%		0.037560561	0.075121123	0.073618701
Roche Cobas 4000	Sex Hormone Binding Gl	Enzymatic	Roche	nmol/L	Peer group	1	61	19.940058	1.927503	9.67%				3.777905881
Roche Cobas 4000	Sex Hormone Binding Gl	Enzymatic	Roche	nmol/L	All instruments	1	24	20.692975	1.731236774	8.37%				3.393224075
Roche Cobas 4000	Sex Hormone Binding Gl	Enzymatic	Roche	nmol/L	1254-13	1	24	20.692975	1.731236774	8.37%		1.731236774	3.462473549	3.393224075
Roche e600 series	Alpha Fetoprotein (AFP)	NONE	Roche	kU/L	Peer group	1	220	5.696687707	0.184259136	3.23%				0.361147906
Roche e600 series	Alpha Fetoprotein (AFP)	NONE	Roche	kU/L	All instruments	1	102	5.710644518	0.142999695	2.50%				0.280279404
Roche e600 series	Alpha Fetoprotein (AFP)	NONE	Roche	kU/L	6/1/07	1	102	5.710644518	0.142999695	2.50%		0.142999695	0.285999391	0.280279404



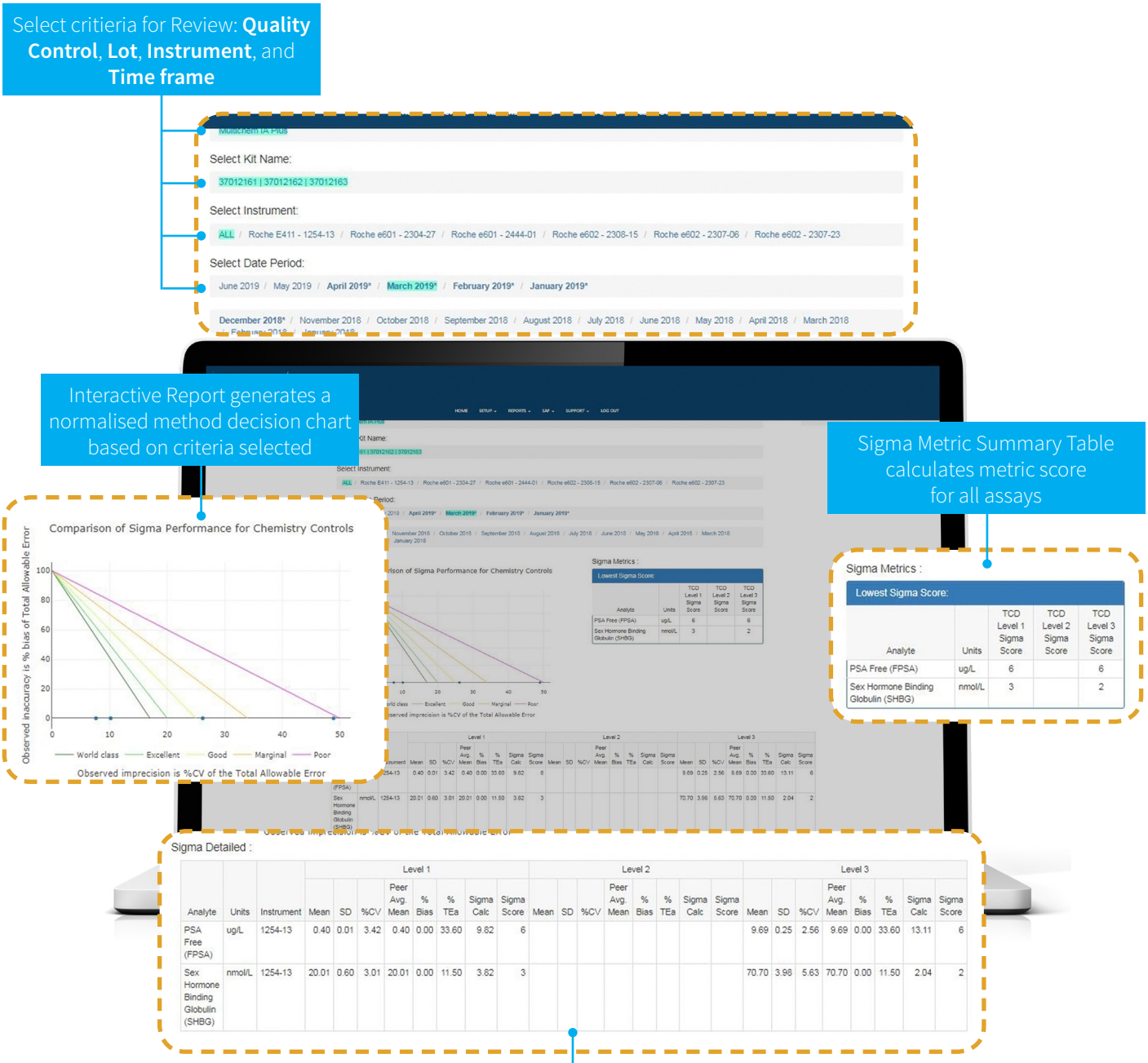
Six Sigma Report

IAMQC® Peer now offers end-users the opportunity to automatically calculate and review their sigma metric performance. The system will automatically calculate imprecision and bias and once the end-user has defined their acceptability criteria (i.e Total Allowable Error), the software will automatically calculate a sigma score for every assay that is tested in the laboratory using the following calculation:

Sigma-metric = (TEa – Bias) / CV

[all parameters expressed as %]

The new interactive report includes a normalised method decision chart displaying all assays, a Sigma Metric summary table outlining the calculated sigma score for each assay and a detailed summary table displaying further information on the statistics used for the calculation.



FEATURES

COMPLIANCE

- Report Generation & Storage.
- Audit Preparation.
- Facilitates meeting **ISO 15189** requirements.
- Increase confidence in your laboratory performance.

INFORMATICS

- Designed to work alongside the laboratory middleware, providing additional features.
- IQC performance can be compared to the world peer group, giving increased confidence in IQC results.
- Web based system, meaning IQC data is available anywhere, anytime.

USER-FRIENDLY

- Easy to read tables and reports.
- Submit data automatically via the laboratories middleware.
- Perfect for the modern day hub & spoke laboratory.

TRENDING & ANALYSIS

- Compare IQC performance across multiple instruments within a laboratory or across a group of laboratories.
- Compare with world peer group.

DATA RECORDS

- Centralised data management – review IQC performance of multiple instruments in one location.
- Defined reporting for record keeping & Real-Time Investigation.

Increase confidence in your laboratory's performance.

BENEFITS

BENCH TECHNOLOGISTS:

- Spend less time on false positive QC flags
- Concentrate on tests, which require their attention
- Spend less time trouble-shooting
- Know how to react when the mean shifts
- Assess the acceptability of new reagent lots and calibrations
- Solve QC problems
- Gain understanding and confidence in the QC process

LAB MANAGERS:

- Choose QC rules to maximise true rejects and minimise false rejects
- Quickly see the tests that require their attention
- Skim graphics to quickly review current or historical data by lab, department, instrument or test
- Monitor performance in groups of laboratories
- Review problem tests and QA activities in local and remote labs

LAB OR HOSPITAL ADMINISTRATORS:

- Save money
- Improve quality
- Improve service
- Review Administrative Summary Reports to ensure quality performance

SERVICE EXCELLENCE

TECHNOPATH only partner with market-leading manufacturers of innovative products. Combined with these high quality product lines, TECHNOPATH provide unrivalled technical support.
Our specialised teams are highly trained, providing the best possible standard of customer service and technical support along with a sophisticated supply chain management system.

Our customers take precedence and are at the forefront of everything we do.

TECHNOPATH Distribution Ltd offer the following Service Excellence:

DELIVERY

- Next day delivery policy via DHL Special Courier.
- Specialising in ambient, refridgerated and frozen product deliveries.

SEQUESTER

- 18 months single Lot # reservation.
- Reduces frequency of mean establishment.
- Dedicated Sequester Manager available 5 days a week to monitor run rates and sequester volumes.

FREEZER PROGRAMME

- Available on request.
- -30°c freezer provided for dedicated QC storage.

SUPPORT

- We have a full UK based team including a dedicated Territory Manager in the North of the UK that is available 5 days a week to provide training and any local support required.
- Our head office customer service and technical support staff in Co. Tipperary, Ireland are also available 5 days a week via the telephone or email.

CONTACT US

For further information on any of the clinical diagnostics product offerings from TECHNOPATH please contact us on the below details or check out our website: www.techno-path.com

TECHNOPATH

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