

Proficiency Tests and Software to Facilitate

National DHIA Annual meeting, 22nd-23rd February 2022.

Marie Sørensen, Development Manager at Q-Interline



History of Q-Interline and AnalyticTrust

Q-Interline was established 1996 by Anders Larsen



Development project for AnalyticTrust initiated 2013

AnalyticTrust was founded 2014

AnalyticTrust SaaS first ed. released 2015

Development project with NDHIA 2016

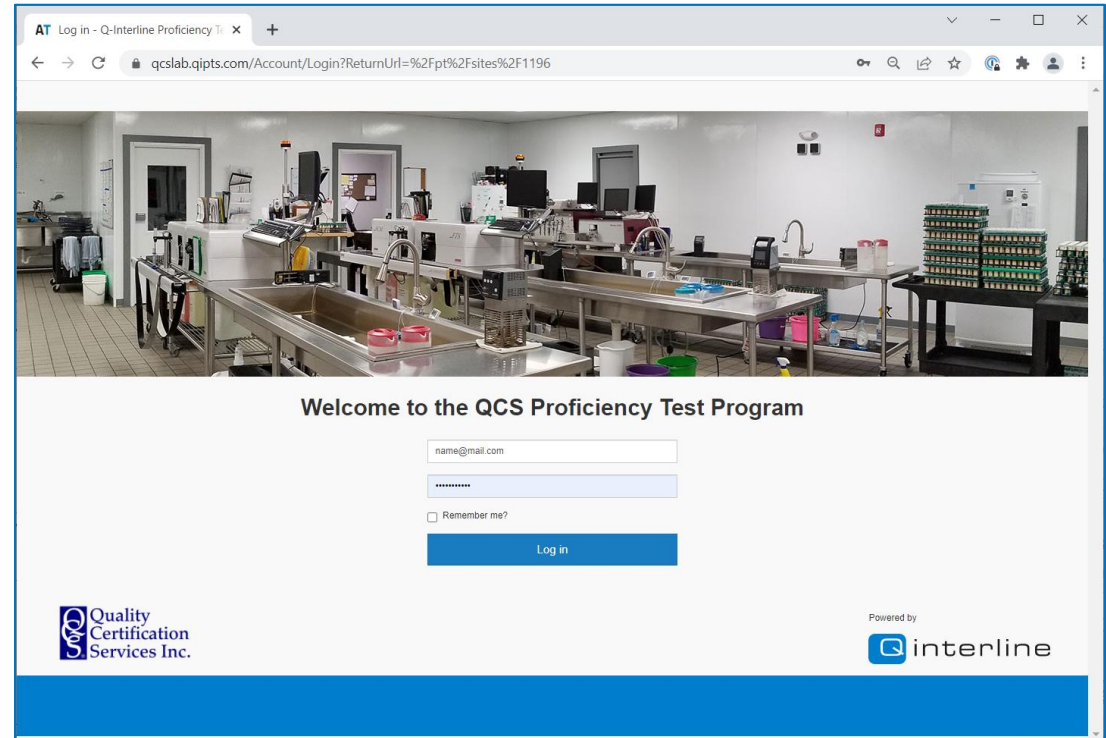
Proficiency Test SaaS first ed. released 2017

Acquisition of AnalyticTrust 2020

25 years anniversary and entry at Nasdaq First North 2021

Proficiency Test Program

- Software service, available to all users via browser, no installations
- Coop between former AnalyticTrust (now Q-Interline) and NDHIA
- Professional and accurate certification of analytical procedures and instruments
- ISO 17025:2017
- Quantitative tests e.g. samples unknown
– from summer 2017
- Qualitative tests e.g. Johne's Milk ELISA PT and Milk Pregnancy ELISA PT - from 2018



Test Participant Dashboard

Centralized Cooperative Inc. QMS Services - Manager Lab Dashboard

Open PT Sample Sets [\[View Schedule \]](#)

Target	Test	PT Sample Set	Start Date	Due	Progress	
	Pregnancy Milk ELISA PT	Trial 246 - Milk Pregnancy	2/7/2022	3/1/2022 5:59 AM	16 / 16	[Entry]
	Pregnancy Milk ELISA PT	Trial 246 - Milk Pregnancy	2/7/2022	3/1/2022 5:59 AM	16 / 16	[Entry]

Previous PT Sample Sets [\[Include archived \]](#)

Test	Target	PT Sample Set	Start Date	Due	Progress	
Samples Unknown						[View Conformance Report]
Station 2						
		291	2/7/2022	2/12/2022	96 / 96	[Data] [Report]
		290	1/10/2022	1/15/2022	96 / 96	[Data] [Report]
		289	12/13/2021	12/18/2021	96 / 96	[Data] [Report]
View All 204 Previous						
Station 3						
		291	2/7/2022	2/12/2022	120 / 120	[Data] [Report]
		290	1/10/2022	1/15/2022	120 / 120	[Data] [Report]
		289	12/13/2021	12/18/2021	120 / 120	[Data] [Report]
View All 125 Previous						
Johne's Milk ELISA PT						
		Trial 245 - Johne's	1/10/2022	2/1/2022	20 / 20	[Data] [Report]
		Trial 243 - Johne's	11/8/2021	12/1/2021	20 / 20	[Data] [Report]

Data entry - Quantitative tests

Station 3 - 278

[Import] [Back to Dashboard]

Start Date: 11/01/2021
 Due Date: 17/01/2021

Instruments: **Bentley FTS** Take Offline
 Serial number: 82027
 Properties: Milk Urea Nitrogen, Protein, Butterfat

Bentley PCM Take Offline
 Serial number: 82027
 Properties: SCC (Red), SCC (Blue)

Measurements

Sample	Butterfat	Protein	Milk Urea Nitrogen	SCC (Blue)	SCC (Red)
1	Value	Value	Value	Value	Value
2	Value	Value	Value	Value	Value
3	Value	Value	Value	Value	Value
4	Value	Value	Value	Value	Value
5	Value	Value	Value	Value	Value
6	Value	Value	Value	Value	Value
7	Value	Value	Value	Value	Value
8	Value	Value	Value	Value	Value
9	Value	Value	Value	Value	Value
10	Value	Value	Value	Value	Value
11	Value	Value	Value	Value	Value
12	Value	Value	Value	Value	Value

Import Data for PT Sample Set 278 at Station 3

[Back to Manual Edit]

Configure Source Text

Field Separator: Comma Tab Semi-colon
 Decimal Separator: Comma Period

```

0.326197675
11 0.07150445 0.560958062 0.565092492 0.458730805
0.408471814
12 0.270499416 0.626418487 0.654850013 0.121168003
0.631853278
13 0.4223930327 0.600861565 0.644077189 0.00943123
0.220848669
14 0.428840424 0.343113062 0.015715657 0.266411503
0.677518482
15 0.928146762 0.070837783 0.692896858 0.439112359
0.860220714
16 0.430086029 0.167263878 0.474884479 0.942046899
0.292360103
17 0.11219784 0.66654492 0.967363421 0.053568224
0.21250336
18 0.309927507 0.35046364 0.737706889 0.790952994
0.501962737
19 0.071884177 0.920341004 0.315851384 0.059438663
0.7201212
20 0.079634656 0.180476082 0.261682517 0.72159389
0.315203821
21 0.320700001 0.51315425 0.143756447 0.836108975
0.63202791
22 0.418190165 0.699262027 0.1348897 0.416170126
0.837119051
23 0.959085866 0.227291298 0.165724173 0.057745972
0.02760788
24 0.820684342 0.582237427 0.34688915 0.389926085
0.941184037
                    
```

Map Parsed Values

	Butterfat	Protein	Milk Urea Nitrogen	SCC (Blue)	SCC (Red)
1	0.856	0.143	0.497	0.174	0.395
2	0.288	0.89	0.51	0.149	0.213
3	0.439	0.256	0.037	0.773	0.753
4	0.919	0.54	0.018	0.232	0.337
5	0.344	0.856	0.31	0.422	0.779
6	0.99	0.013	0.245	0.742	0.102
7	0.194	0.347	0.451	0.463	0.421
8	0.865	0.28	0.037	0.409	0.163
9	0.276	0.328	0.508	0.564	0.85
10	0.446	0.78	0.042	0.849	0.326
11	0.072	0.566	0.566	0.459	0.408
12	0.27	0.626	0.655	0.121	0.632
13	0.422	0.651	0.844	0.509	0.221
14	0.427	0.343	0.016	0.266	0.678
15	0.928	0.071	0.690	0.439	0.865
16	0.43	0.187	0.475	0.942	0.202
17	0.112	0.687	0.967	0.064	0.213
18	0.308	0.35	0.738	0.791	0.502
19	0.072	0.928	0.316	0.069	0.729
20	0.08	0.18	0.262	0.722	0.915
21	0.321	0.513	0.144	0.836	0.632
22	0.416	0.698	0.135	0.416	0.837
23	0.859	0.227	0.156	0.068	0.028
24	0.914	0.687	0.347	0.36	0.584

Test report - Quantitative tests

Certification Report - PT Sample Set 194

/ Station 2

[\[View Data \]](#) [\[Back to Dashboard \]](#)

Start Time 1/13/2014 1:00 AM

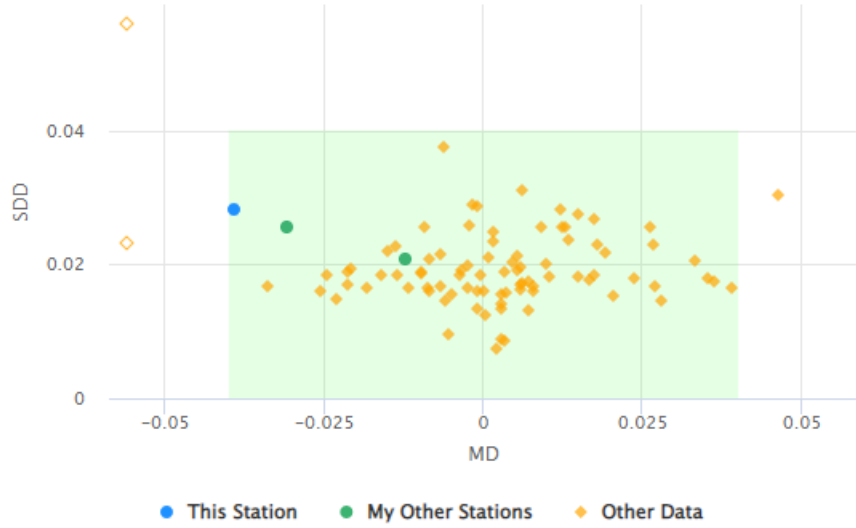
Due Time 1/18/2014 12:59 AM

Release date: 1/24/2014

Butterfat

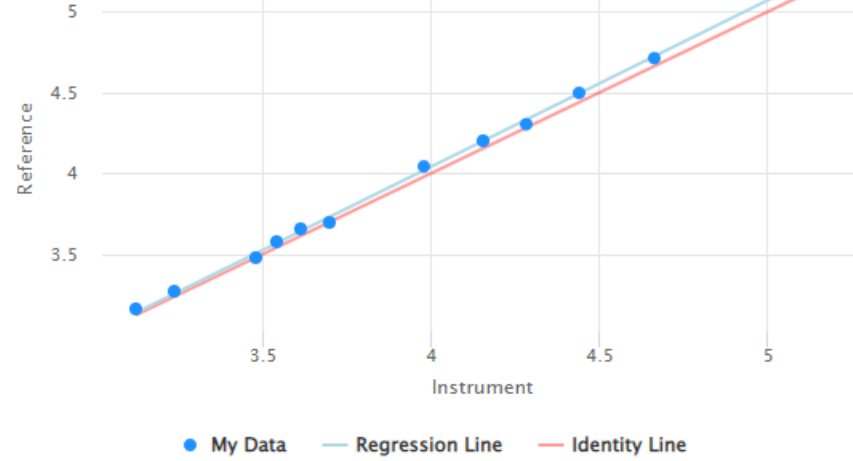
Sample Number	All Site Statistics			Site Precision Stats				Site Accuracy Stats		
	Reference Average	All Instrument Average	Difference	Result Rep 1	Result Rep 2	Range	Standard Deviation	Result Mean	Difference	Z-score
1	3.659	3.608	-0.051	3.620	3.610	0.010	0.007	3.615	-0.044	-0.114
2	3.699	3.658	-0.041	3.720	3.680	0.040	0.028	3.700	0.001	0.003
3	3.581	3.537	-0.044	3.550	3.540	0.010	0.007	3.545	-0.036	-0.095
4	4.200	4.167	-0.033	4.150	4.160	0.010	0.007	4.155	-0.045	-0.101
5	4.043	3.989	-0.054	3.970	3.990	0.020	0.014	3.980	-0.063	-0.148
6	3.480	3.460	-0.020	3.450	3.510	0.060	0.042	3.480	0.000	0.000
7	5.177	5.107	-0.070	5.040	5.110	0.070	0.049	5.075	-0.102	-0.187
8	4.303	4.251	-0.052	4.280	4.290	0.010	0.007	4.285	-0.018	-0.040
9	4.711	4.670	-0.041	4.650	4.680	0.030	0.021	4.665	-0.046	-0.092
10	3.265	3.250	-0.015	3.230	3.250	0.020	0.014	3.240	-0.025	-0.072
11	3.160	3.124	-0.036	3.130	3.120	0.010	0.007	3.125	-0.035	-0.105
12	4.497	4.440	-0.057	4.430	4.450	0.020	0.014	4.440	-0.057	-0.120
		MD	-0.043					MD	-0.039	
		SDD	0.015			Average SDD	0.023	SDD	0.028	

PT Sample Set Comparison

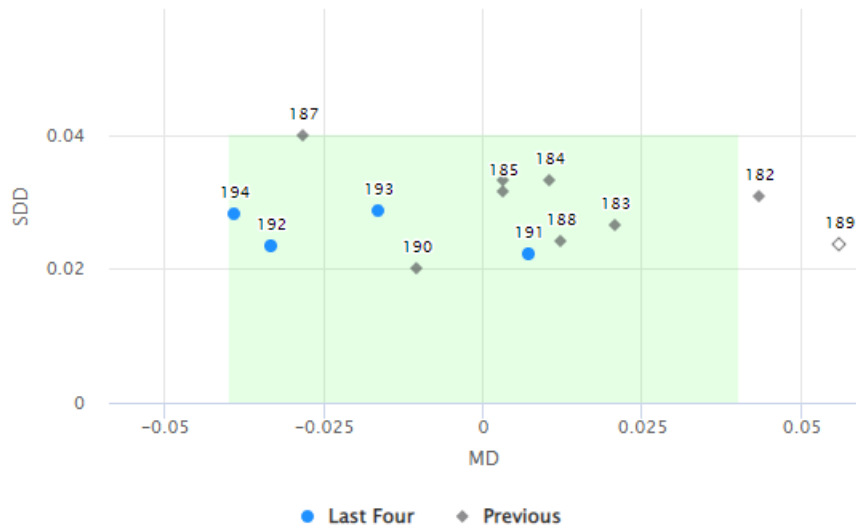


Regression

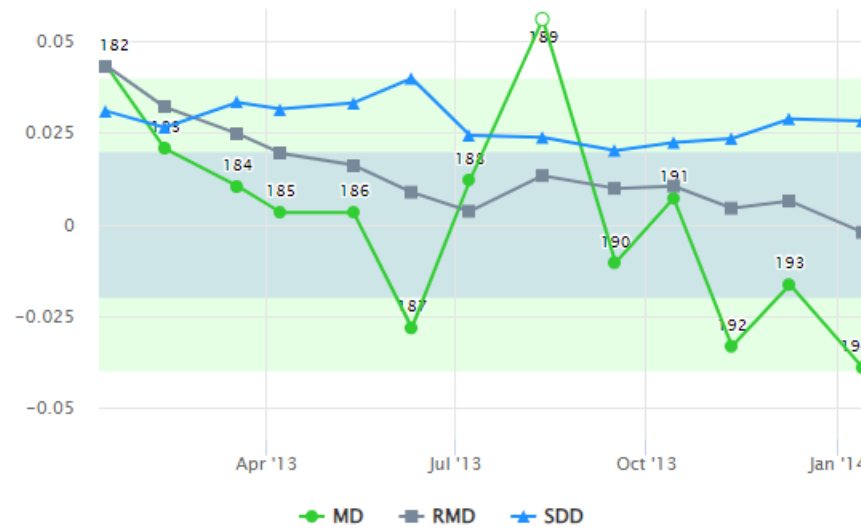
m: 1.031, b: -0.082, correlation: 0.999



Performance Last 12 Trials



Historical Performance



Conformance report

Quality Certification Services Inc. [Dropdown] Profile

Samples Unknown - Conformance Report

[Only nonconformant instruments]

Station 2

PT Sample Set	Butterfat			Protein			Milk Urea Nitrogen			SCC (Red)			SCC (Blue)		
	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD
286	-0.015	0.028	0.013	-0.015	0.010	-0.018	2.168	1.078	1.632	0.8	4.7	-0.9	2.9	4.0	-0.8
287	0.000	0.031	0.013	-0.014	0.016	-0.018	0.629	0.862	1.675	2.1	7.4	-0.1	-2.7	6.9	-1.1
288	-0.001	0.026	0.013	0.011	0.025	-0.012	0.367	0.896	1.544	-5.9	4.8	-1.5	-5.1	3.3	-1.4
289	0.004	0.018	0.011	0.003	0.019	-0.006	0.946	0.811	1.499	-14.3	10.1	-4.3	-9.0	10.1	-2.8
290	0.039	0.024	0.011	-0.003	0.014	-0.001	1.481	1.236	1.287	-5.3	4.2	-3.3	-8.2	4.1	-3.3
291	0.000	0.023	0.005	0.013	0.016	-0.001	0.111	1.040	0.950	-8.4	7.2	-5.2	-10.3	3.2	-5.4

Station 4

PT Sample Set	Butterfat			Protein			Milk Urea Nitrogen			SCC (Red)			SCC (Blue)		
	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD	MD	SDD	RMD
286	-0.014	0.023	-0.003	0.008	0.017	-0.004	1.947	0.952	0.457	-5.1	6.3	-1.7	-2.2	3.5	-1.5
287	-0.010	0.031	-0.003	-0.005	0.020	-0.004	0.683	1.268	0.413	2.6	6.2	0.2	1.9	7.1	-0.2
288	-0.012	0.029	-0.003	-0.005	0.019	-0.002	-0.233	1.056	0.516	-2.5	3.3	0.0	-4.7	3.6	-0.4
289	-0.003	0.020	-0.006	-0.007	0.022	-0.005	-0.283	0.667	0.408	-4.0	5.8	-1.0	-5.7	5.3	-1.5
290	0.026	0.028	0.001	-0.009	0.020	-0.003	0.764	0.779	0.566	-5.1	3.9	-2.4	-5.0	4.6	-2.5
291	-0.010	0.023	-0.004	0.005	0.015	-0.002	-1.143	1.083	0.289	-8.8	5.3	-3.8	-8.2	4.8	-4.0

Conformance Configuration

Cell coloring

X.XXX	Outside defined limits and part of conformance check
X.XXX	Inside defined limits and part of conformance check
X.XXX	Outside defined limits but not part of conformance check
X.XXX	Inside defined limits but not part of conformance check

For an instrument to fail one of the following must occur

	MD must not be outside limits listed below in three of the four previous trials	SDD must not be outside limits listed below in three of the four previous trials	RMD must not be outside limits listed below in five of the six previous trials
Butterfat	+/- 0.040	0.040	+/- 0.020
True Protein	+/- 0.040	0.040	+/- 0.020
Milk Urea Nitrogen	+/- 1.500	1.500	+/- 0.750
SCC	+/- 10.0	10.0	+/- 5.0

Tools for QCS - Data entry overview

Samples Unknown / 277 - Reference Progress
[Edit Reference Measurements]

Butterfat

Sample	Reference Provider Progress	Reference Value	Reference Standard Deviation	Property Progress
1	5 / 5	4.273	0.004	188 / 208
2	5 / 5	4.417	0.006	188 / 208
3	5 / 5	3.247	0.005	188 / 208
4	5 / 5	3.903	0.005	188 / 208
5	5 / 5	4.012	0.012	188 / 208
6	5 / 5	4.125	0.005	188 / 208
7	5 / 5	4.211	0.002	188 / 208
8	5 / 5	3.826	0.006	188 / 208
9	5 / 5	4.388	0.003	188 / 208
10	5 / 5	3.651	0.010	188 / 208
11	5 / 5	4.790	0.010	188 / 208
12	5 / 5	3.077	0.011	188 / 208

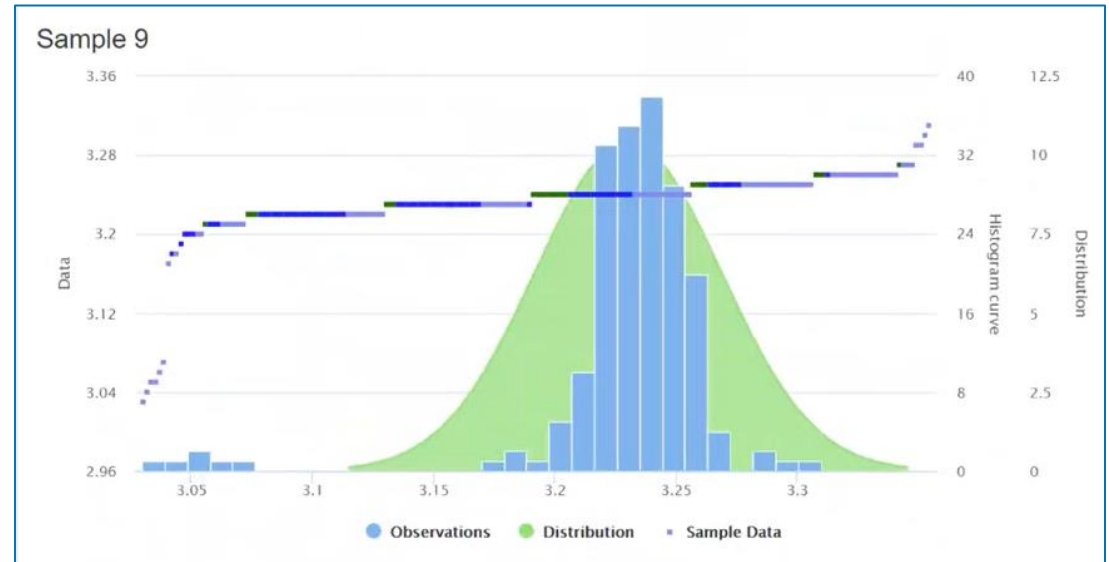
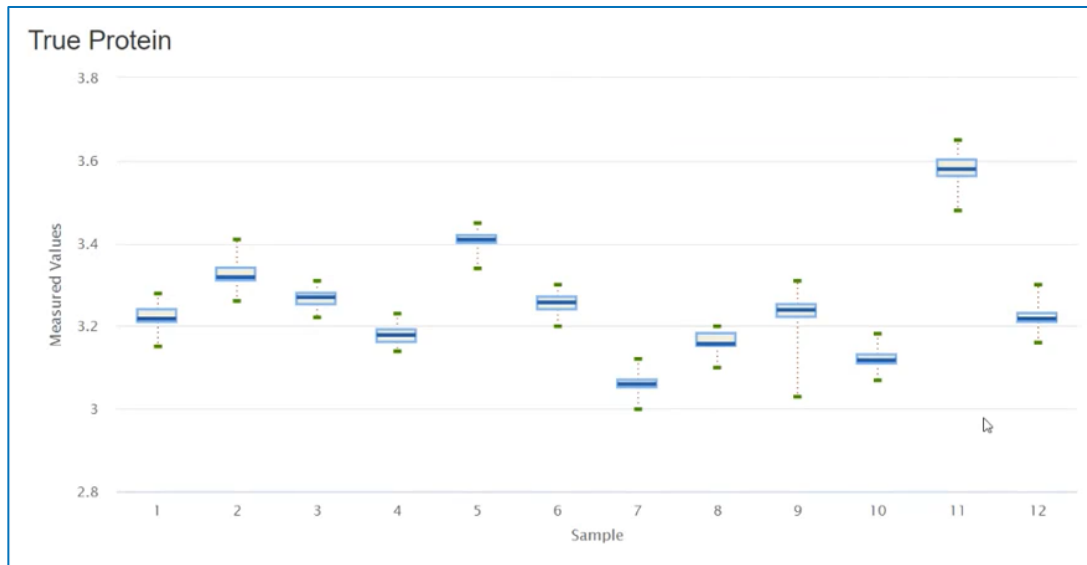
True Protein

Sample	Reference Provider Progress	Reference Value	Reference Standard Deviation	Property Progress
1	5 / 5	3.235	0.007	188 / 208
2	5 / 5	3.320	-	188 / 208

Samples Unknown / 277 - Progress
[Add Stations]

Site	Stations	Progress
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	5 / 5 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	4 / 4 [Edit] [Report]
...	...	5 / 5 [Edit] [Report]

Tools for QCS - Sample evaluation



Statistics		
Number of results	188	188
Minimum	3.03	3.03
2.5% Percentile	3.0604	3.067
Median	3.24	3.24
97.5% Percentile	3.27	3.27
Maximum	3.31	3.31
Mean	3.23	3.23
Standard Deviation	0.038	0.0384
Reference Value		3.24
Reference std. dev.		0.01414

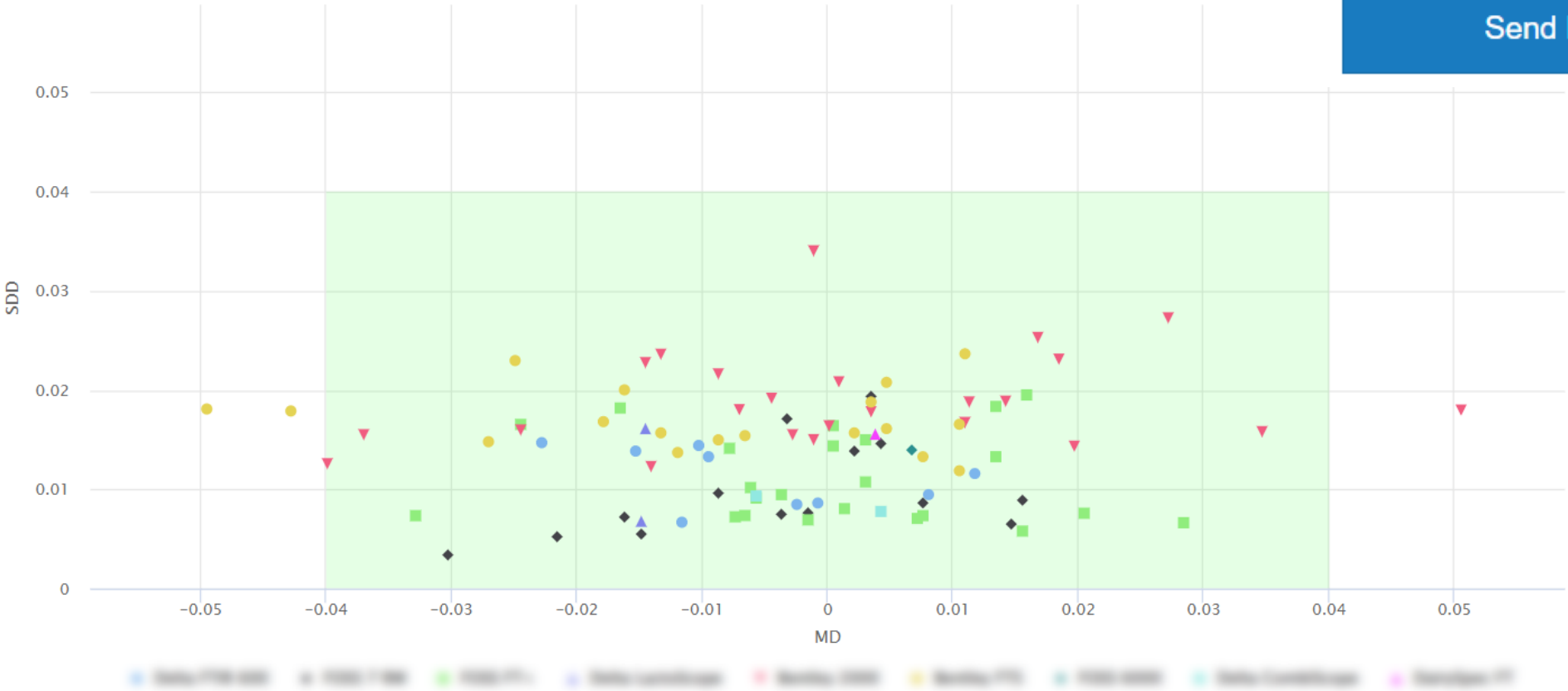
Tools for QCS - Overview report

True Protein

PT Sample Set Comparison - 276 / True Protein

Update Statistics

Send Release Mail



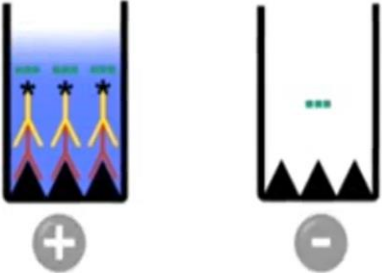
Data entry - Qualitative test

Options (Milk Pregnancy ELISA PT)

- Pregnant (Positive)
- Recheck (Suspect)
- Open (Negative)
- Sample Issue (Sample Issue)
- Tech Issue (Tech Issue)

Control Sample	IDEXX PAG	
	Negative 1	<input type="text" value="0.087"/>
	Negative 2	<input type="text" value="0.131"/>
	Positive 1	<input type="text" value="1.068"/>
	Positive 2	<input type="text" value="1.099"/>

Sample	IDEXX PAG	
1	<input type="text" value="1.14"/>	Pregnant <input type="button" value="v"/>
2	<input type="text" value="0.105"/>	Recheck <input type="button" value="v"/>
3	<input type="text" value="0.101"/>	Recheck <input type="button" value="v"/>
4	<input type="text" value="0.137"/>	Recheck <input type="button" value="v"/>
5	<input type="text" value="-0.001"/>	Open <input type="button" value="v"/>
6	<input type="text" value="0.58"/>	Pregnant <input type="button" value="v"/>
7	<input type="text" value="0.028"/>	Open <input type="button" value="v"/>
8	<input type="text" value="0.105"/>	Recheck <input type="button" value="v"/>
9	<input type="text" value="0.104"/>	Recheck <input type="button" value="v"/>
10	<input type="text" value="1.613"/>	Pregnant <input type="button" value="v"/>
11	<input type="text" value="0.051"/>	Open <input type="button" value="v"/>
12	<input type="text" value="0.105"/>	Recheck <input type="button" value="v"/>



Certification report - Qualitative test

Pregnancy Milk ELISA PT Certification Report - Trial 244 - Milk Pregnancy

Start Time	12/13/2021 6:00 AM
Due Time	1/1/2022 5:59 AM

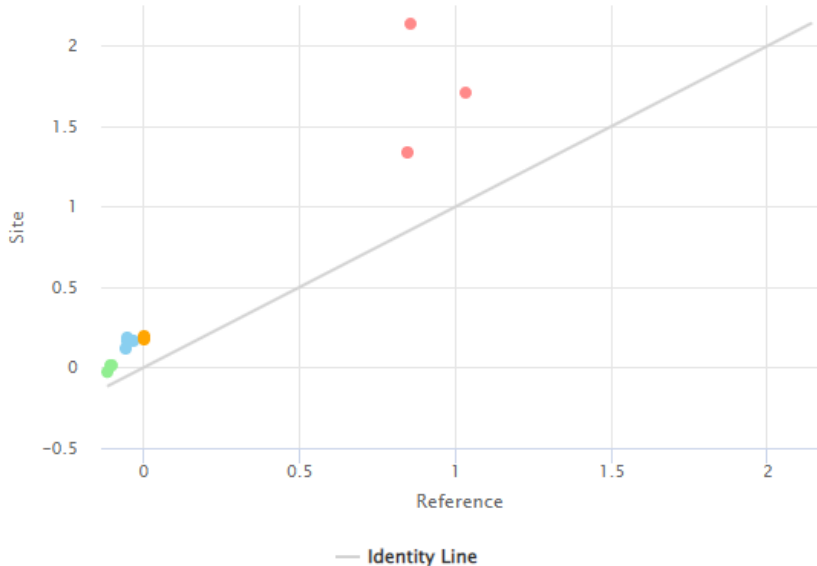
IDEXX PAG - Conformance

	Positive	Suspect	Negative
Correct	100.0%	33.3%	100.0%
False	-	-	44.4%

Current PT Sample Set Results

Sample	Reference	Site	Difference	Result	Conclusion
1	0.085	-0.002	0.087	- -	Correct Negative
2	1.408	0.949	0.459	+ +	Correct Positive
3	0.189	0.045	0.144	? -	False Negative
4	0.265	0.104	0.161	? ?	Correct Suspect
5	0.084	-0.004	0.088	- -	Correct Negative
6	0.259	0.049	0.210	? -	False Negative
7	2.209	0.956	1.253	+ +	Correct Positive
8	0.235	0.068	0.167	? -	False Negative
9	0.237	0.049	0.188	? -	False Negative
10	0.044	-0.014	0.058	- -	Correct Negative
11	0.247	0.103	0.144	? ?	Correct Suspect
12	1.781	1.131	0.650	+ +	Correct Positive

Regression Analysis



For QCS - Conformance Overview

Pregnancy Milk ELISA PT / Trial 244 - Milk Pregnancy - Overview

[Edit]

[Back to PT Sample Sets]

Start Date	12/13/2021 6:00 AM
Due Date	1/1/2022 5:59 AM
Reference Due Date	1/1/2022 5:59 AM
Release Date	2/1/2022 5:59 AM

Update Statistics

Send Release Mail

IDEXX PAG

[Download Excel Report]

Reference	1	2	3	4	5	6	7	8	9	10	11	12	+	?	-	(+)	(?)	(-)	B	Overall
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	33.3%	100.0%	-	-	44.4%	-	66.7%
	-	+	(-)	?	-	(-)	+	(-)	(-)	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	(-)	?	-	?	+	?	?	-	?	+	100.0%	83.3%	100.0%	-	-	11.1%	-	91.7%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	(-)	(-)	-	(-)	+	(-)	(-)	-	?	+	100.0%	16.7%	100.0%	-	-	55.6%	-	58.3%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	(-)	(-)	-	(-)	+	(-)	(-)	-	?	+	100.0%	66.7%	100.0%	-	-	22.2%	-	83.3%
	-	+	?	?	-	?	+	?	?	-	?	(?)	66.7%	100.0%	100.0%	-	16.7%	-	-	91.7%
	-	+	?	?	-	(-)	+	?	?	-	?	+	100.0%	83.3%	100.0%	-	-	11.1%	-	91.7%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	(+)	(-)	(+)	(-)	-	(-)	(-)	(+)	(-)	-	(-)	(?)	-	-	66.7%	33.3%	16.7%	66.7%	-	16.7%
	-	+	(-)	?	-	?	+	?	?	-	?	+	100.0%	83.3%	100.0%	-	-	11.1%	-	91.7%
	-	+	(-)	?	-	?	+	?	?	-	?	+	100.0%	83.3%	100.0%	-	-	11.1%	-	91.7%
	-	+	?	?	-	?	+	?	?	-	?	+	100.0%	100.0%	100.0%	-	-	-	-	100.0%
	-	+	(-)	?	-	?	+	(-)	(-)	-	?	+	100.0%	50.0%	100.0%	-	-	33.3%	-	75.0%
	-	+	(-)	?	-	(-)	+	(-)	?	-	?	+	100.0%	50.0%	100.0%	-	-	33.3%	-	75.0%
	-	+	(-)	(-)	-	(-)	+	(-)	(-)	-	(-)	+	100.0%	-	100.0%	-	-	66.7%	-	50.0%

For QCS - Conformance Overview

Pregnancy Milk ELISA PT - Administrative Conformance Report

[\[Back to PT Sample Set List \]](#)

IDEXX PAG

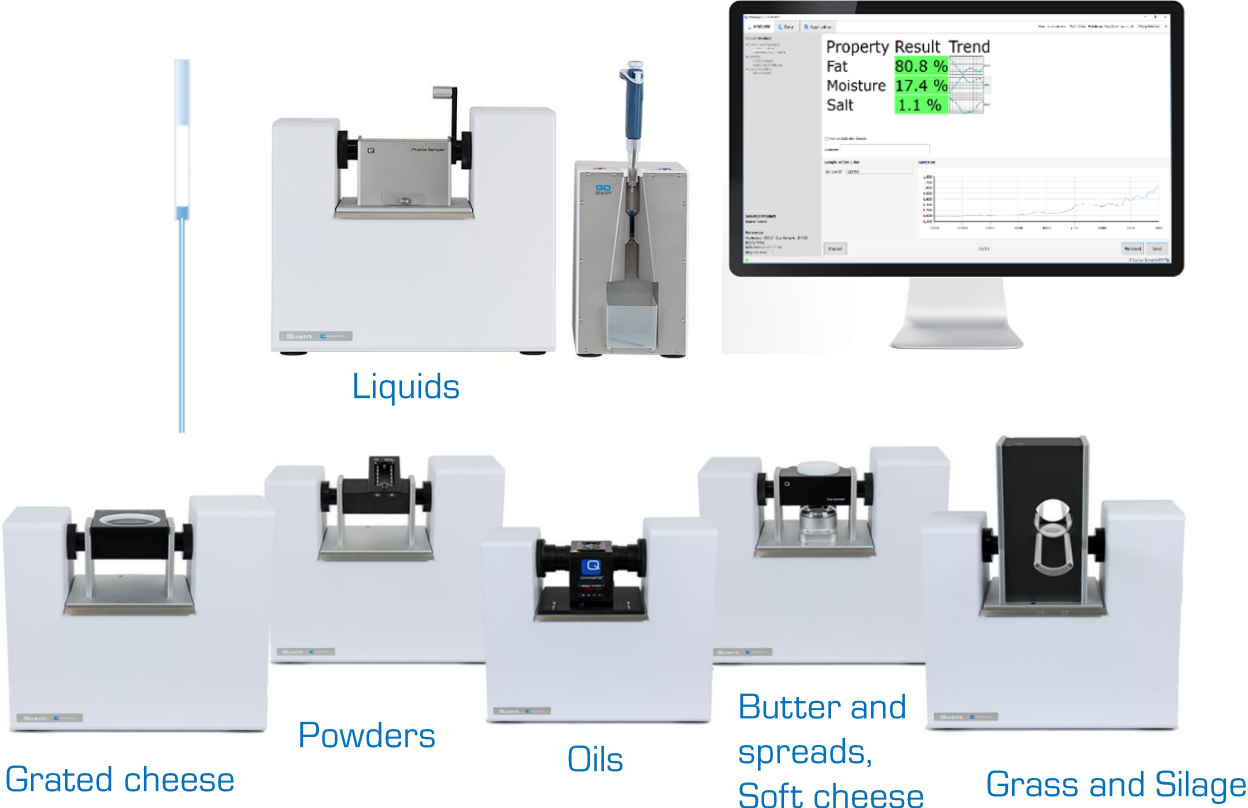
	Trial 246 - Milk Pregnancy	Trial 244 - Milk Pregnancy	Trial 242 - Milk Pregnancy	Trial 240 - Milk Pregnancy	Trial 238 - Milk Pregnancy	Trial 236 - Milk Pregnancy	Trial 234 - Milk Pregnancy	Last 3 Months	Last 6 Months	Last 12 Months
	-	-	-	-	100.0%	58.3%	91.7%	-	-	83.3%
	-	-	91.7%	-	-	-	-	-	91.7%	91.7%
	-	75.0%	100.0%	100.0%	100.0%	91.7%	75.0%	75.0%	91.7%	90.3%
	-	75.0%	83.3%	91.7%	-	100.0%	75.0%	75.0%	83.3%	85.0%
	-	50.0%	50.0%	83.3%	100.0%	58.3%	75.0%	50.0%	61.1%	69.4%
	-	91.7%	83.3%	91.7%	100.0%	100.0%	83.3%	91.7%	88.9%	91.7%
	-	16.7%	91.7%	91.7%	100.0%	83.3%	91.7%	16.7%	66.7%	79.2%
	-	-	-	-	-	-	-	-	-	-
	-	100.0%	91.7%	91.7%	100.0%	91.7%	100.0%	100.0%	94.4%	95.8%
	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	100.0%	100.0%	-	-	-	100.0%
	-	100.0%	91.7%	91.7%	100.0%	91.7%	100.0%	100.0%	94.4%	95.8%

Q-Interline Analytical Instruments

LABORATORY SYSTEMS: AT-LINE

PRODUCTION SYSTEMS: IN-LINE

DairyQuant GO



InSight Pro



AnalyticTrust – Quality Management

- Software service for Quality Management of Analytical Instruments
- Local and Global QA plans to schedule and administrate tests on specific or multiple instruments
- Performance validation QA plans based on single sample or sample sets schedules
- Pilot sample QA plan for daily control and testing stability over time

Instrument Dashboard

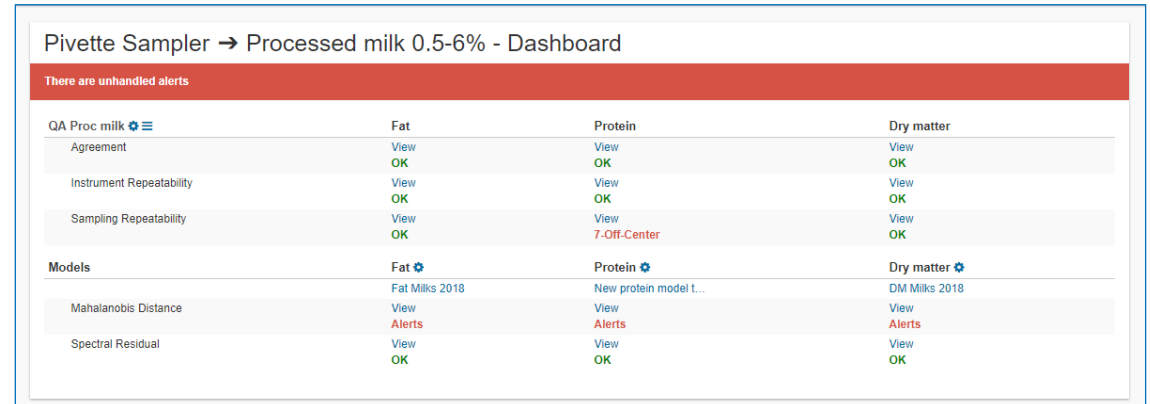
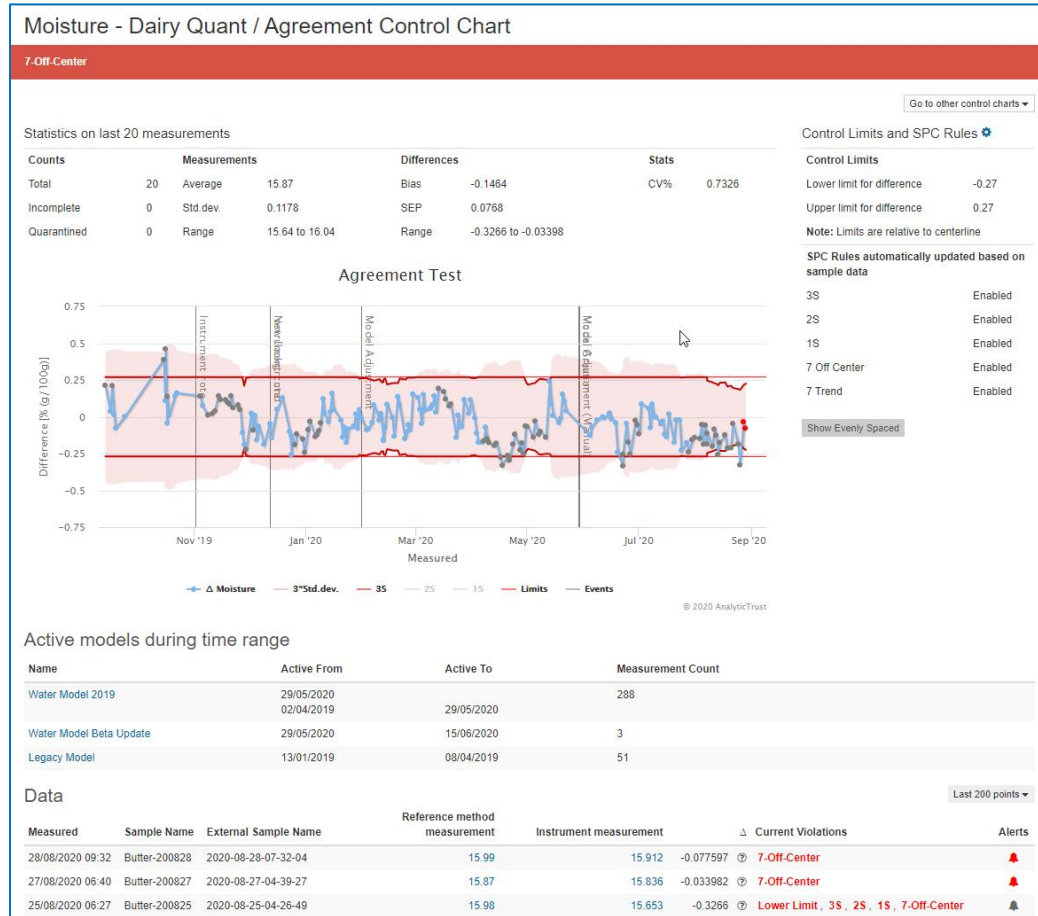
There are unhandled alerts

Products	Remaining Tasks	Instrument Tasks	Reference Tasks	Templates
Line 1				
Butters				
Butter salted	Unhandled Alerts			
Butter unsalted	OK			
Sweetened				
Sweet butter	OK			
Hardware Performance				
Default				
Loss Of Intensity	OK			
Modulation Efficiency	OK			
Non Linearity	OK			
Noise	OK			

Product	Measurements	Identification	QA Plan	Due Date	Status
Line 1 → Butter unsalted	Instrument Measurement	P-20-09-08	Daily Pilot	14/09/2020	Awaiting input
Line 1 → Butter salted	Instrument Measurement ✓ Reference Method	Butter-20-09-08	Agreement	21/09/2020	Awaiting input
Line 1 → Butter salted	Instrument Measurement ✓ Reference Method ✓	Butter-20-09-08.2	Agreement	21/09/2020	Done
Line 1 → Sweet butter	Instrument Measurement ✓ Reference Method ✓	Sweet butter-20-09-08	Agreement	21/09/2020	Done

- ✓ Analyser
- ✓ Laboratory
- ✓ Sampling
- ✓ Precision
- ✓ Agreement

AnalyticTrust - Quality Management



- Instant data analysis
- Alert system ensures action upon performance deviations
- Event system ensures transparency for better interpretation of data
- Safe track of historical data for audits

[Adjustment History] [Jump to other model](#)

Current & Possible Adjustments

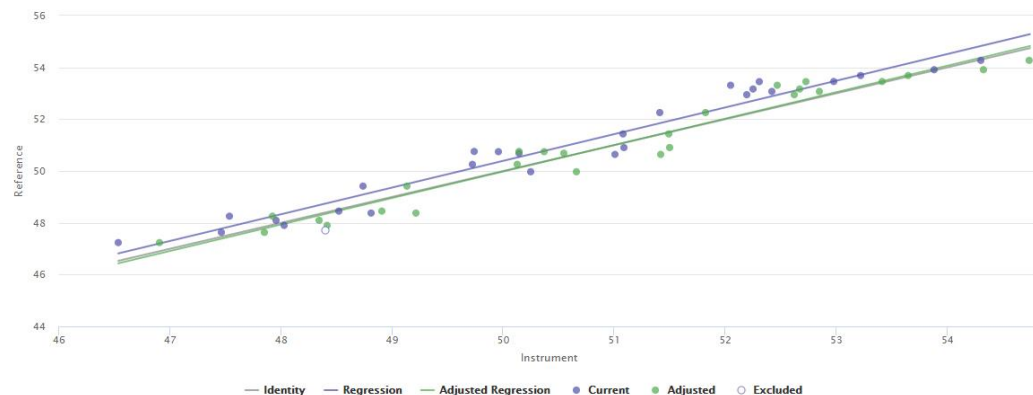
[Show Expert Mode]

	Current	Slope & Bias	Slope Keep Bias	Slope Correct Bias	Slope Reset Bias	Bias Keep Slope	Bias Reset Slope
Instrument Bias	0.00000	-1.12332	0.00000	0.00000	0.00000	0.40809	0.40809
Instrument Slope	1.00000	1.03031	1.00808	1.00808	1.00812	1.00000	1.00000
R ² / R ² _{adj}	0.95497	0.95857	0.95677	0.95677	0.95677	0.95677	0.95677
SEP/SEC	0.48292	0.47855	0.48091	0.48091	0.48090	0.48292	0.48292
Bias on Current	-0.40809	0.00000	0.00000	0.00000	0.00193	0.00000	0.00000
Average Change		0.40809	0.40809	0.40809	0.41002	0.40809	0.40809
Recommendation	Do not keep	Not significant	Significant	Significant	Most Significant	Significant	Significant
Reference Data Range	47.23500 to 54.27000						
N	27, excluded 1 (3%)						

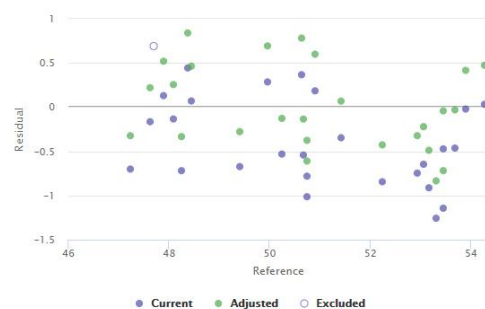
Make Automated Adjustment

Make Manual Adjustment

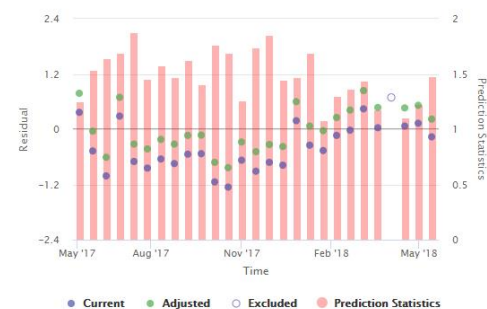
Instrument vs. Reference



Residual vs. reference



Residual vs. time



Measurements

[Download Measurements With Spectra]

Time	Test	Sample	Reference	Instrument	Mahalanobis Distance	Bias	Slope	Current	Current Diff	Adjusted	Adjusted Diff	Excluded	Quarantine
15/05/2018 08:52:00	Yellow Cheese	30-18-05-13	47.63000	47.46450	1.48268	0.00000	1.00000	47.46450	-0.16550	47.84968	0.21968	<input type="checkbox"/>	<input type="checkbox"/>
30/04/2018 10:57:00	Yellow Cheese	30-18-04-29	47.90000	48.02968	1.22836	0.00000	1.00000	48.02968	0.12968	48.41945	0.51945	<input type="checkbox"/>	<input type="checkbox"/>
17/04/2018 07:50:00	Yellow Cheese	30-18-04-15	48.45000	48.51921	1.10203	0.00000	1.00000	48.51921	0.06921	48.91296	0.46296	<input type="checkbox"/>	<input type="checkbox"/>
12/04/2018 07:36:00	Yellow Cheese	30-18-04-01	47.71000	48.40003	1.24644	0.00000	1.00000	48.40003	0.69003			<input checked="" type="checkbox"/>	<input type="checkbox"/>

Reference & Instrument Measurements

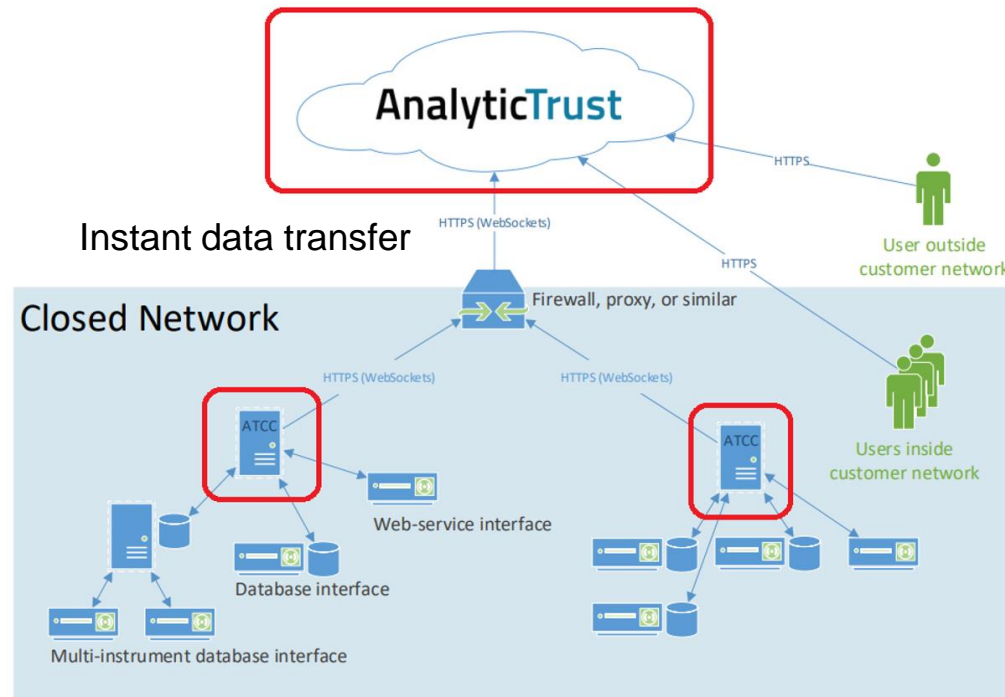
Measurement Time	Reference method measurement	Instrument measurement	Instrument repeatability measurement	Sampling repeatability measurement
<input type="radio"/> Measured At Due: 9/16/2020	9/10/2020 4:44 PM	9/10/2020 4:44 PM	9/10/2020 4:44 PM	9/10/2020 4:45 PM
Measurement Comments	<input type="text" value="Comment"/>	<input type="text" value="nice sample"/>	<input type="text" value="Comment"/>	<input type="text" value="Comment"/>
Fat % (g/100g)*	<input type="text" value="Value"/>	0.2995	0.3034	0.3003
Protein % (g/100g)	<input type="text" value="Value"/>	3.563	3.549	3.56
Dry matter % (g/100g)	<input type="text" value="Value"/>	9.547	9.542	9.546

Additional details for each measurement (e.g., Sample ID, Operator, Bias, Slope) are provided for the instrument, repeatability, and sampling measurements.

Buttons: Save All Measurements, Show All

- Guided model adjustment with recommendations based on statistical analysis
- Interactive tool for outlier evaluation
- Option for adjustments applied automatically for connected instruments
- Documentation of all model adjustments for audits

AnalyticTrust - Quality Management



- Portal mode or connected mode with instrument cloud drivers
- All Q-Interline systems can link directly to AnalyticTrust
- Easy and safe monitoring – Automatic hardware and calibration model surveillance

Highlights

- The AnalyticTrust software provides a quality management tool for keeping track of a company's analytical instruments, across sites, instrument types and manufacturers. The system ensures activities are documented and guides to keep the instruments analytical performance at their best.
- Proficiency Test is important to ensure that analytical data can be trusted and does not contain significant differences between dairies and laboratories.
- The Proficiency Test software provides easy access for dairies and laboratories to test validity of analytical instruments and procedures in compliance with standards as ISO 17025:2017.
- The Proficiency Test solution is highly scalable and flexible for QCS as Test provider. It's a cost efficient as manual processes can be guided or automated. Data can easily be shared anonymously for comparison and optimisation. Maintenance is seamless for the users.
- The Proficiency Test platform is dynamic and can be continuous improved with further e.g. reports, status views and guidance to users.
- Q-Interline is open as partner for further development of QCS proficiency test software solutions



Value through insight

SINCE 1998



Søren Wiborg
Sales Director
North America



Marie Sørensen
Development Manager

Thank you



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