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GLOBAL PROVIDER OF QUALITY
IN DIAGNOSTIC MEDICINE



EXTERNAL
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ASSESSMENT



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QUALITY
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REFERENCE
MEASUREMENT
SERVICES

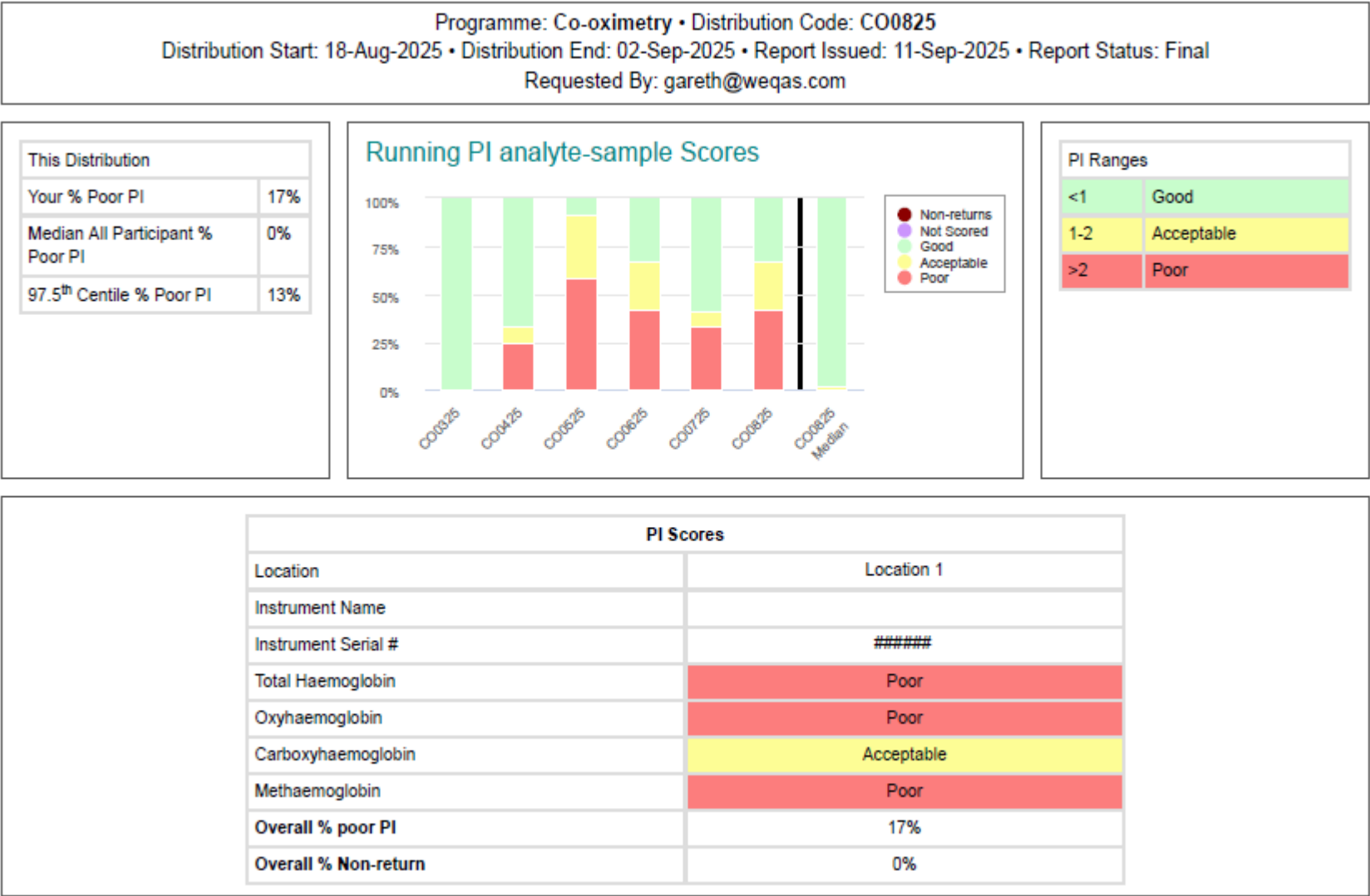


EDUCATION &
TRAINING

Case Studies

Sam Jones

Case Study 1 -

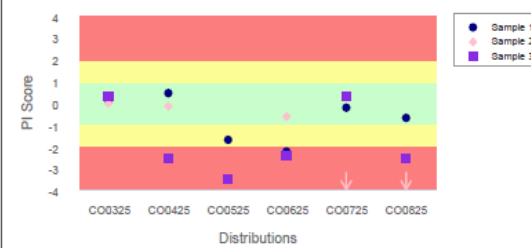


Total Haemoglobin g/L					
	Your reported result (g/L)		Method: ABL 90 FLEX	Instrument Model: ABL 90 FLEX	Overall
Sample 1	152	Mean	155.14	154.91	156.17
		SD	1.98	2.00	2.88
		Uncertainty	0.083	0.141	0.084
		n	876	314	1831
Sample 2	110	Mean	128.95	128.79	129.37
		SD	1.72	1.81	2.98
		Uncertainty	0.073	0.127	0.087
		n	876	317	1830
Sample 3	89	Mean	99.48	99.33	99.31
		SD	1.37	1.42	2.80
		Uncertainty	0.058	0.101	0.082
		n	877	312	1828

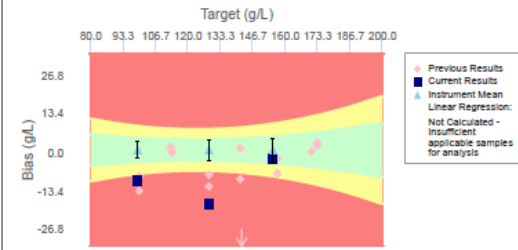
Scoring

Sample	1	2	3	Overall Performance
Target: (Method Mean)	155.14	128.95	99.48	
Weqas TAE	9.06	7.14	8.2	
PI	-0.69	-5.31	-2.56	Poor

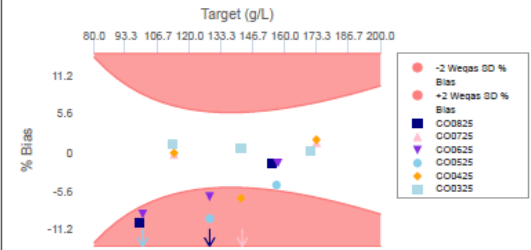
Running PI



Bias (Absolute)



Bias (Relative %)

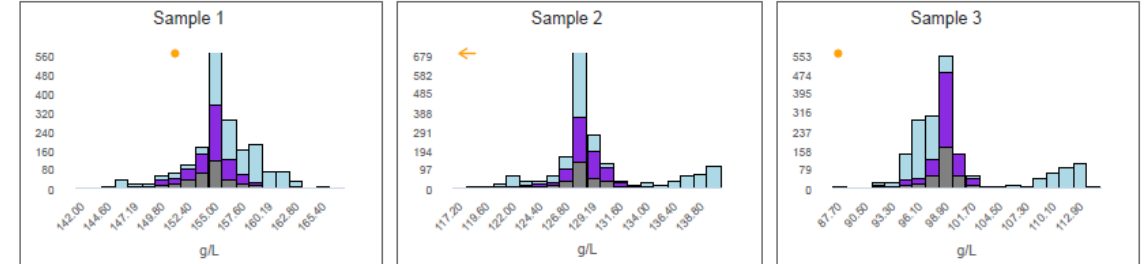


Precision

	CO0325	CO0425	CO0525	CO0625	CO0725	This distribution: CO0825
Sy.x	0.09	8.91	1.27	2.04	30.69	10.08
IS	0	192	4	10	1758	250

Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

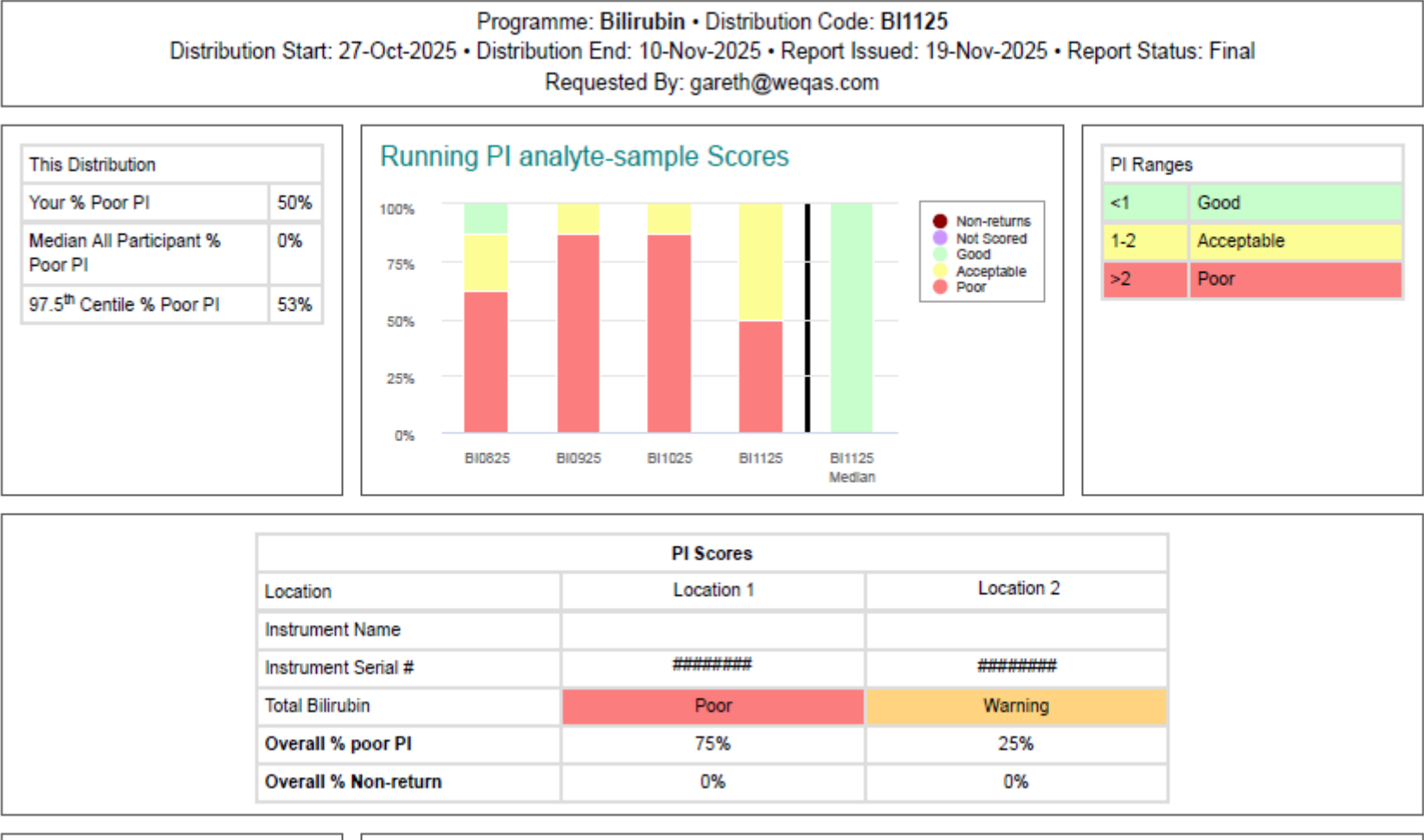


Method Summary

CO0825	Sample 1		Sample 2		Sample 3	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%
ABL 800 Series (n=25)	158.21	0.9	130.28	0.9	99.17	0.9
ABL 90 FLEX (n=876)	155.14	1.3	128.95	1.3	99.48	1.4
Avoximeter (n=5)	165.22	1.7	135.67	2.7	103.33	2.7
cobas b 221 (n=33)	151.94	1.0	122.95	1.9	93.25	1.0
Gem Premier 4000 (n=79)	147.58	1.1	122.16	1.1	96.58	1.1
Gem Premier 5000 (n=509)	156.58	0.9	128.45	0.9	97.35	1.0
Prime + (n=5)	166.00	0.0	140.00	0.0	106.00	0.0
RAPIDLab 1200 System (n=2)	156.50	2.6	135.50	0.6	107.50	0.7
Rapidpoint 500/500e (n=297)	160.40	1.1	138.75	1.3	111.90	1.3

There are no Weqas or Participant supplied comments for Total Haemoglobin for this distribution.

Case Study 2 -

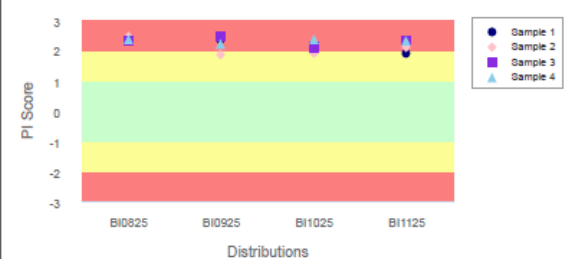


Total Bilirubin $\mu\text{mol/L}$					
	Your reported result ($\mu\text{mol/L}$)		Method: Radiometer Gas Analysers	Instrument Model: ABL 90 FLEX	Overall
Sample 1	140	Mean	125.79	125.91	121.87
		SD	4.26	4.87	9.20
		Uncertainty	0.401	1.045	0.571
		n	176	34	406
Sample 2	315	Mean	283.33	284.58	276.34
		SD	7.16	8.72	16.82
		Uncertainty	0.677	1.870	1.043
		n	175	34	406
Sample 3	204	Mean	180.33	180.69	175.23
		SD	4.70	6.01	11.34
		Uncertainty	0.443	1.289	0.705
		n	176	34	404
Sample 4	376	Mean	335.65	337.57	327.57
		SD	8.25	10.74	18.63
		Uncertainty	0.779	2.302	1.160
		n	175	34	403

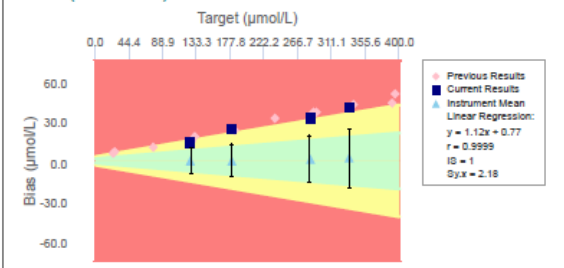
Scoring

Sample	1	2	3	4	Overall Performance
Target: (Method Mean)	125.79	283.33	180.33	335.65	
Weqas TAE	15.22	30.4	20.47	35.45	
PI	1.87	2.08	2.31	2.28	Poor

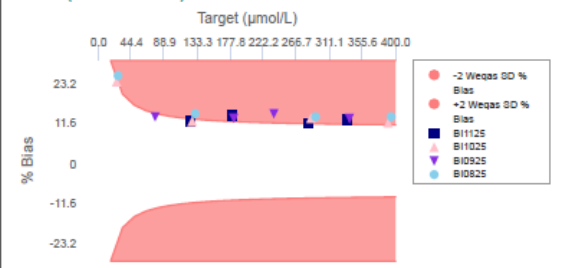
Running PI



Bias (Absolute)



Bias (Relative %)

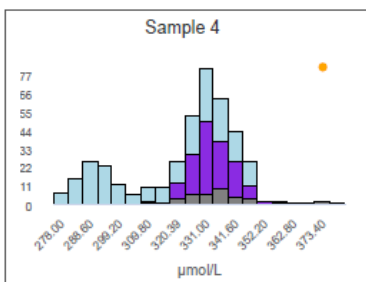
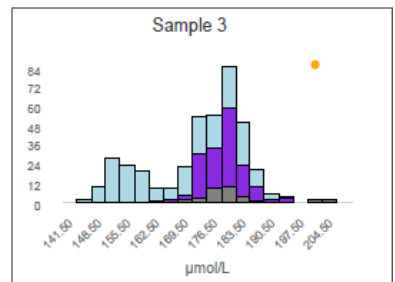
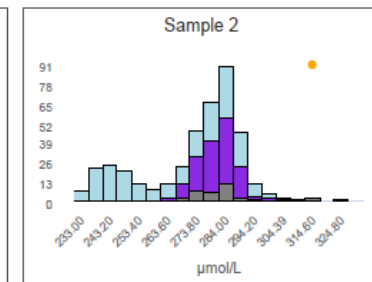
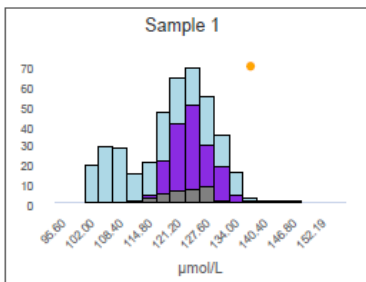


Precision

	BI0825	BI0925	BI1025	This distribution: BI1125
Syx	0.72	1.61	2.41	2.18
IS	0	1	1	1

Syx is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

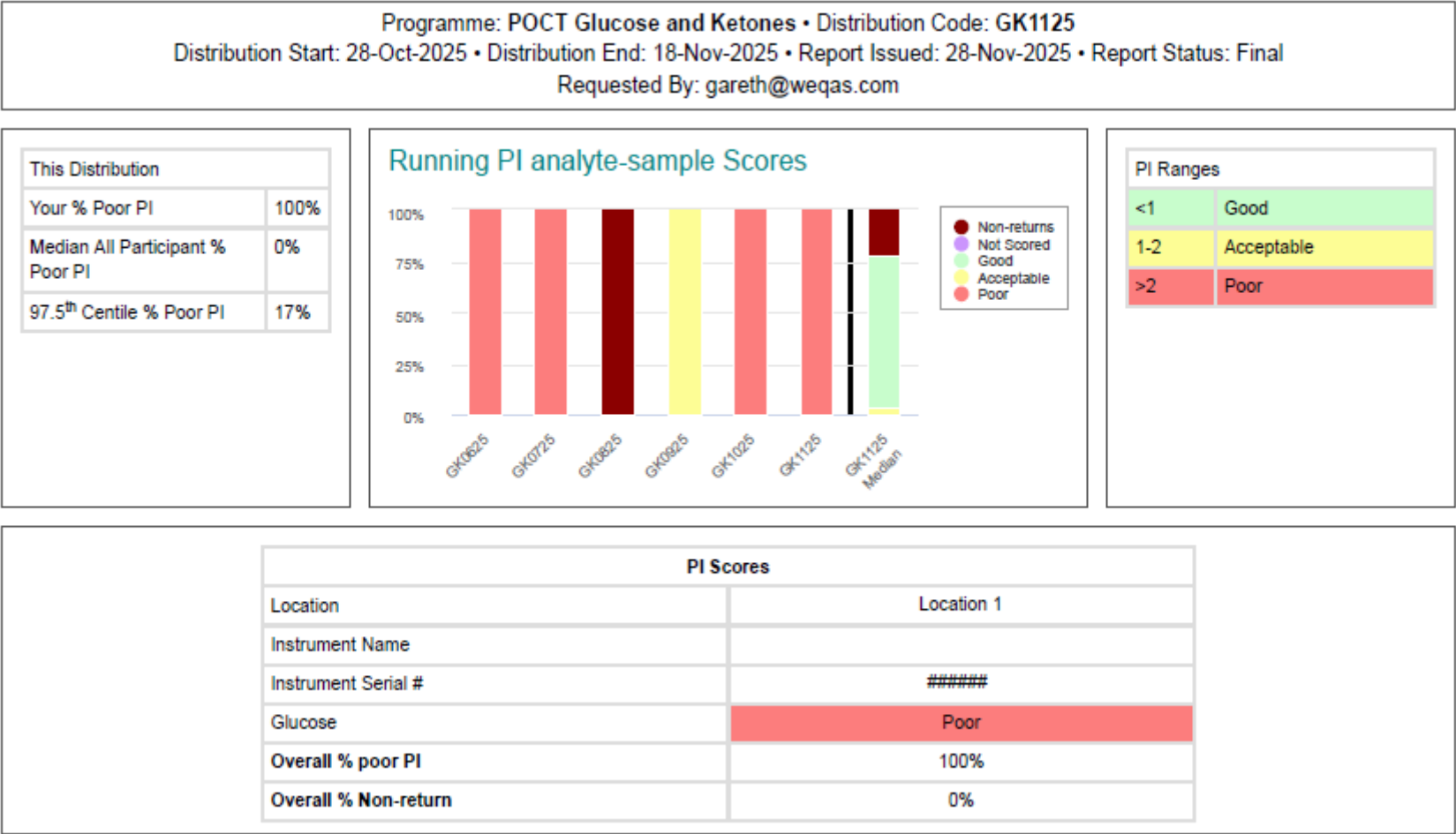


■ All Results ■ My Method ■ My Instrument ● My Result

Method Summary

BI1125	Sample 1		Sample 2		Sample 3		Sample 4	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%	Mean	CV%
Abaxis Piccolo (n=10)	110.71	1.0	249.28	1.7	158.99	2.1	293.50	1.5
Abbott Diazo (n=33)	118.11	3.2	276.02	2.8	172.87	2.5	328.24	2.4
Beckman Diazo (n=12)	120.83	3.8	273.50	3.0	175.15	3.6	323.32	3.0
Gem Premier 4000 (n=9)	127.89	5.0	284.84	2.5	183.57	1.9	338.44	3.3
Gem Premier 5000 (n=31)	125.88	2.8	282.61	1.9	179.73	2.6	334.30	1.8
Indiko Plus Diazo (n=2)	118.00	3.1	270.00	5.8	168.15	8.4	315.65	8.1
Radiometer Gas Analysers (n=176)	125.79	3.4	283.33	2.5	180.33	2.6	335.65	2.5
Roche Diazo (n=81)	108.22	3.2	246.72	2.9	155.99	3.1	293.89	2.8
Siemens Gas Analysers (n=44)	130.49	3.0	289.79	2.2	183.44	2.8	339.99	2.4
Vanadate Oxidation (n=8)	125.43	2.8	291.03	2.2	180.36	2.4	344.95	1.3

Case Study 3 -



Participant Code: WQ#### • Location: Location 1 • Analyser Name: n/a • Serial #: #####
Date Samples received: 31-Oct-2025 • Date of Analysis: 07-Nov-2025 • Operator Details: ## • Storage Conditions: Ambient Temperature (18 - 30

°C)

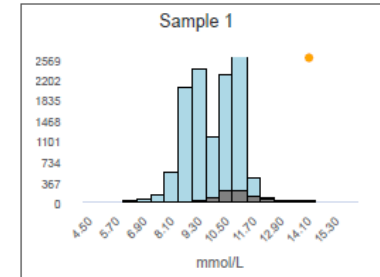
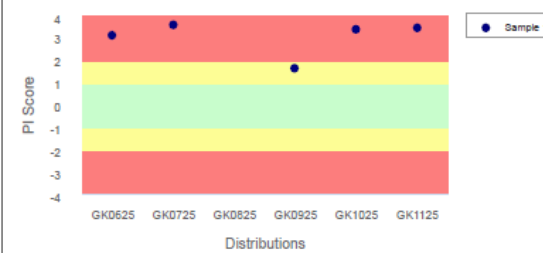
Analyte: Glucose • Method: FreeStyle Optium Neo H • Kit: FreeStyle Optium Neo H Blood Glucose Test Strips (7225701)

Glucose mmol/L					
	Your reported result (mmol/L)		Method: FreeStyle Optium Neo H	Instrument Model: FreeStyle Optium Neo H	Overall
Sample 1	14.3	Mean	11.26	11.25	10.17
		SD	0.90	0.86	1.16
		Uncertainty	0.040	0.038	0.013
		n	807	806	11827

Scoring

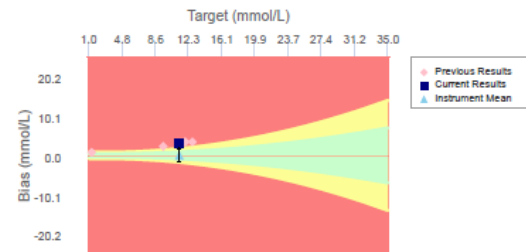
Sample	1	Overall Performance
Target: (Method Mean)	11.26	
Weqas TAE	1.74	
PI	3.49	Poor

Running PI

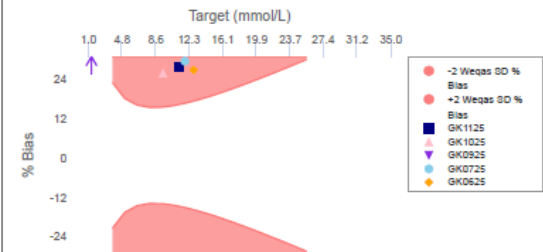


All Results My Method My Instrument My Result

Bias (Absolute)



Bias (Relative %)



Precision

	GK0625	GK0725	GK0825	GK0925	GK1025	This distribution: GK1125
Sy.x						
IS						

Sy.x is the average deviation from the best fit line and is an index of scatter.

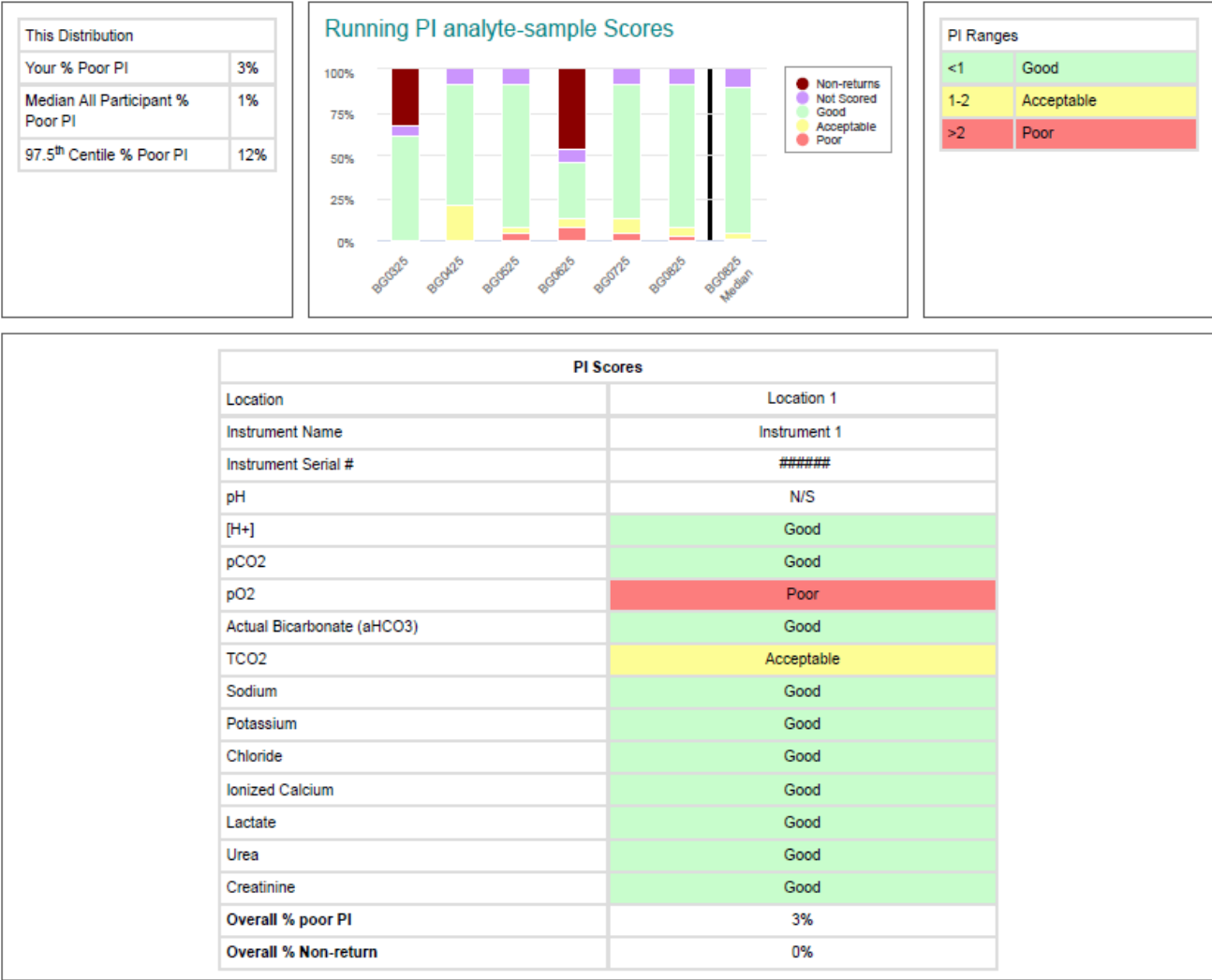
IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

Method Summary

GK1125	Sample 1	
Method Name	Mean	CV%
ACCU-CHEK Guide (n=9)	9.48	1.2
CareSens (n=129)	10.11	6.6
cobas pulse (n=139)	9.34	1.8
FreeStyle Optium Neo (n=9)	11.39	9.3
FreeStyle Optium Neo H (n=807)	11.26	8.0
Freestyle Precision Pro (n=1625)	10.92	4.4
Inform II / Performa (n=3469)	11.12	3.1
Nova StatStrip Connectivity (n=3233)	9.22	5.2
Nova StatStrip Xpress (n=2342)	9.29	6.4
Procheck Advance (n=53)	7.95	9.0

There are no Weqas or Participant supplied comments for Glucose for this distribution.

Case Study 4 -

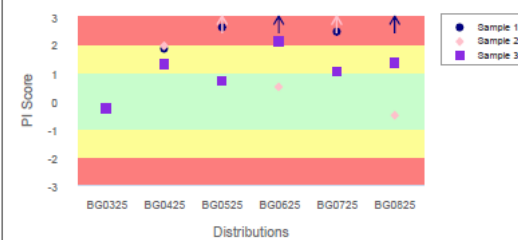


pO2 kPa					
	Your reported result (kPa)		Method: i-STAT	Instrument Model: i-STAT	Overall
Sample 1	15.1	Mean	8.37	8.29	4.97
		SD	0.98	0.95	2.52
		Uncertainty	0.064	0.087	0.063
		n	368	185	2502
Sample 2	20.7	Mean	21.29	21.05	21.29
		SD	0.94	0.97	0.94
		Uncertainty	0.061	0.089	0.024
		n	374	187	2510
Sample 3	18.5	Mean	17.23	16.95	16.35
		SD	0.81	0.71	0.77
		Uncertainty	0.053	0.065	0.019
		n	368	182	2498

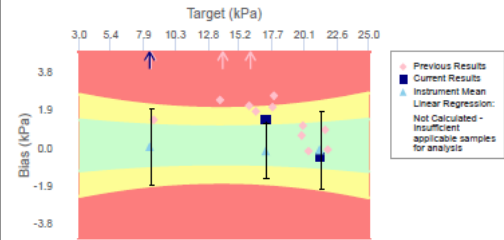
Scoring

Sample	1	2	3	Overall Performance
Target: (Method Mean)	8.37	21.29	17.23	
Weqas TAE	2.02	2.2	1.92	
PI	6.65	-0.54	1.33	Poor

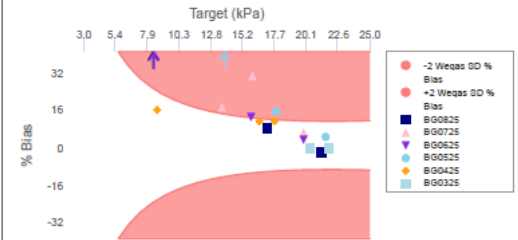
Running PI



Bias (Absolute)



Bias (Relative %)

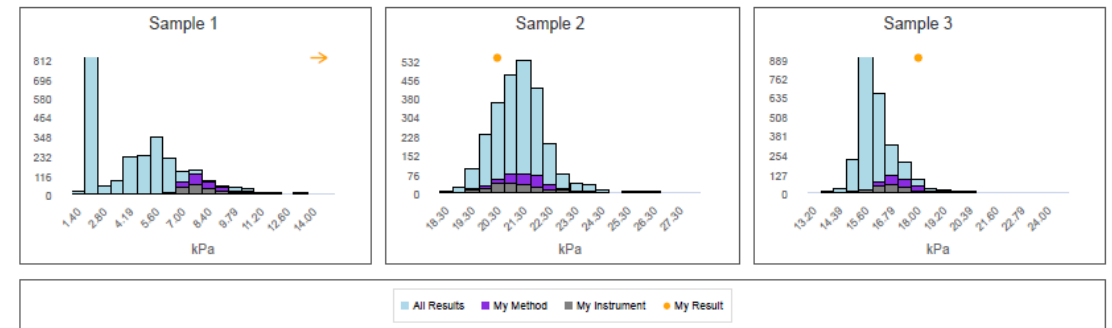


Precision

	BG0325	BG0425	BG0525	BG0625	BG0725	This distribution: BG0825
Sy.x		0.04	0.92	1.59	2.4	0.35
IS		0	1477	5490	1992	39

Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

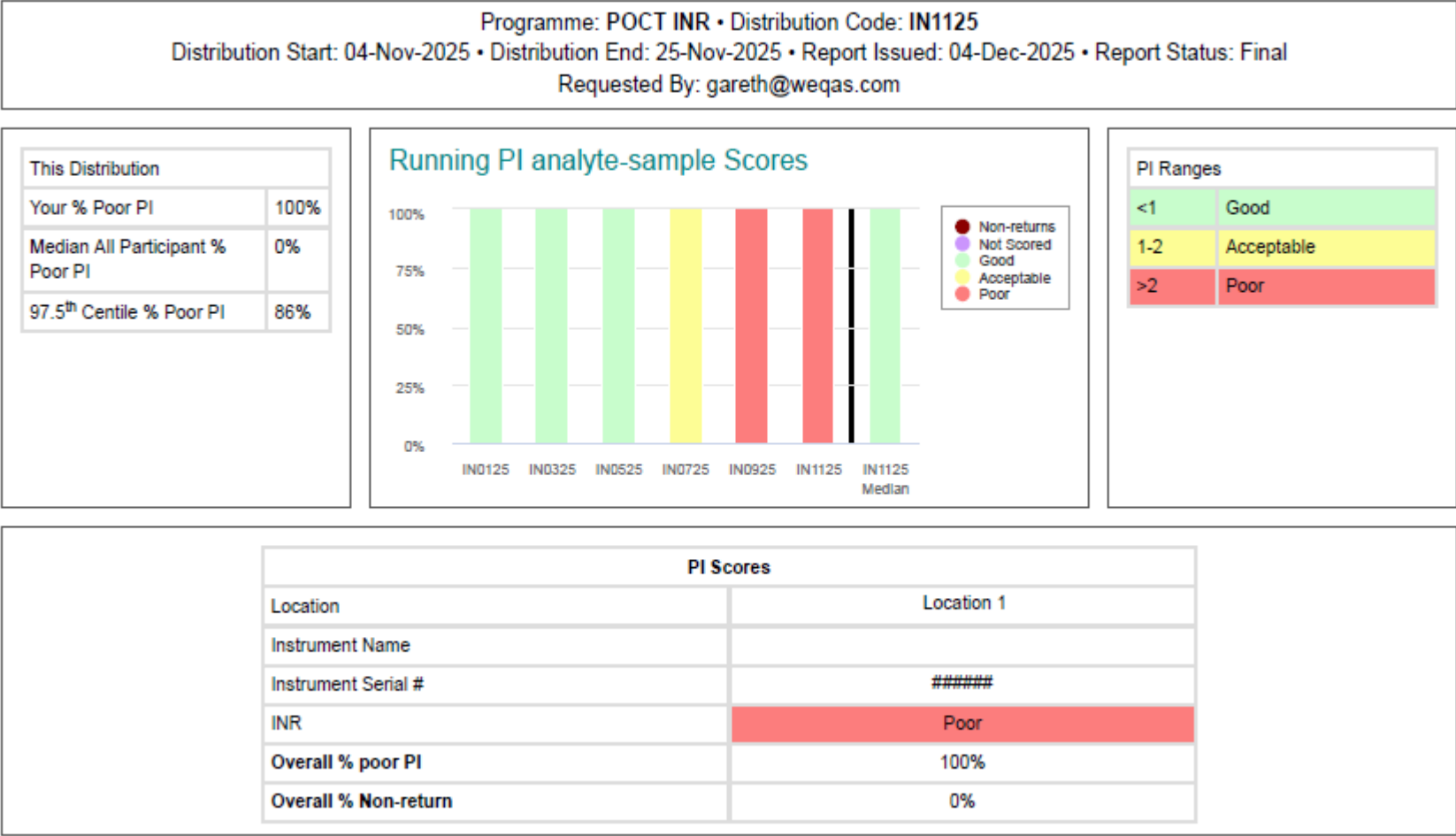


Method Summary

BG0825	Sample 1		Sample 2		Sample 3	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%
ABL 800 Series (n=27)	6.21	5.5	21.65	3.5	17.04	3.7
ABL 90 FLEX (n=942)	2.44	7.2	21.69	2.8	16.03	2.8
cobas b 123 (n=22)	4.32	8.8	21.57	3.5	16.15	3.1
cobas b 221 (n=36)	10.39	5.9	21.85	3.0	17.90	3.0
epoc (n=172)	6.57	19.7	22.55	4.4	17.75	4.8
Gem Premier 4000 (n=80)	6.44	8.8	21.50	3.8	16.59	3.2
Gem Premier 5000 (n=523)	5.02	14.7	20.47	3.4	15.92	3.7
i-STAT (n=368)	8.37	11.7	21.29	4.4	17.23	4.7
Prime + (n=10)	3.42	5.5	22.37	0.7	16.85	1.7
Rapidpoint 500/500e (n=311)	6.17	6.1	20.66	3.0	16.26	2.3

There are no Weqas or Participant supplied comments for pO2 for this distribution.

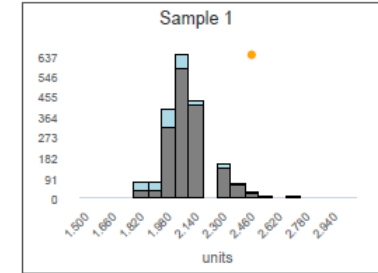
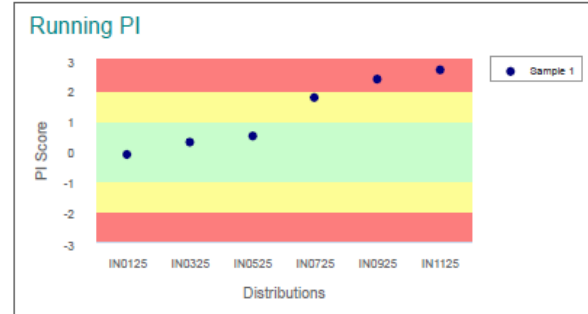
Case Study 5 -



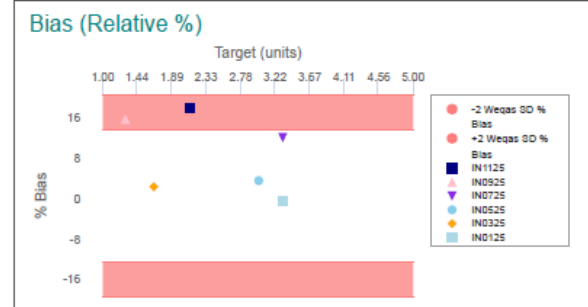
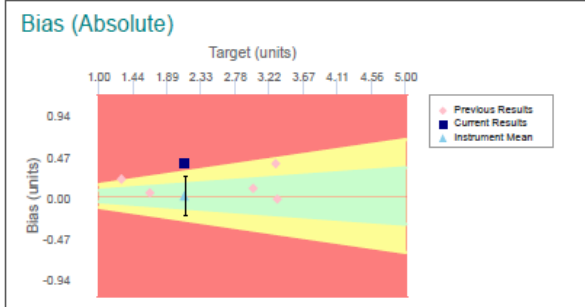
INR units					
	Your reported result (units)		Method: CoaguChek Pro II	Instrument Model: CoaguChek Pro II	Overall
Sample 1	2.5	Mean	2.132	2.132	2.124
		SD	0.112	0.112	0.117
		Uncertainty	0.0035	0.0035	0.0035
		n	1570	1567	1791

Scoring

Sample	1	Overall Performance
Target: (Method Mean)	2.132	
Weqas TAE	0.277	
PI	2.65	Poor



All Results My Method My Instrument My Result



Precision

	IN0125	IN0325	IN0525	IN0725	IN0925	This distribution: IN1125
Sy.x						
IS						

Sy.x is the average deviation from the best fit line and is an index of scatter.

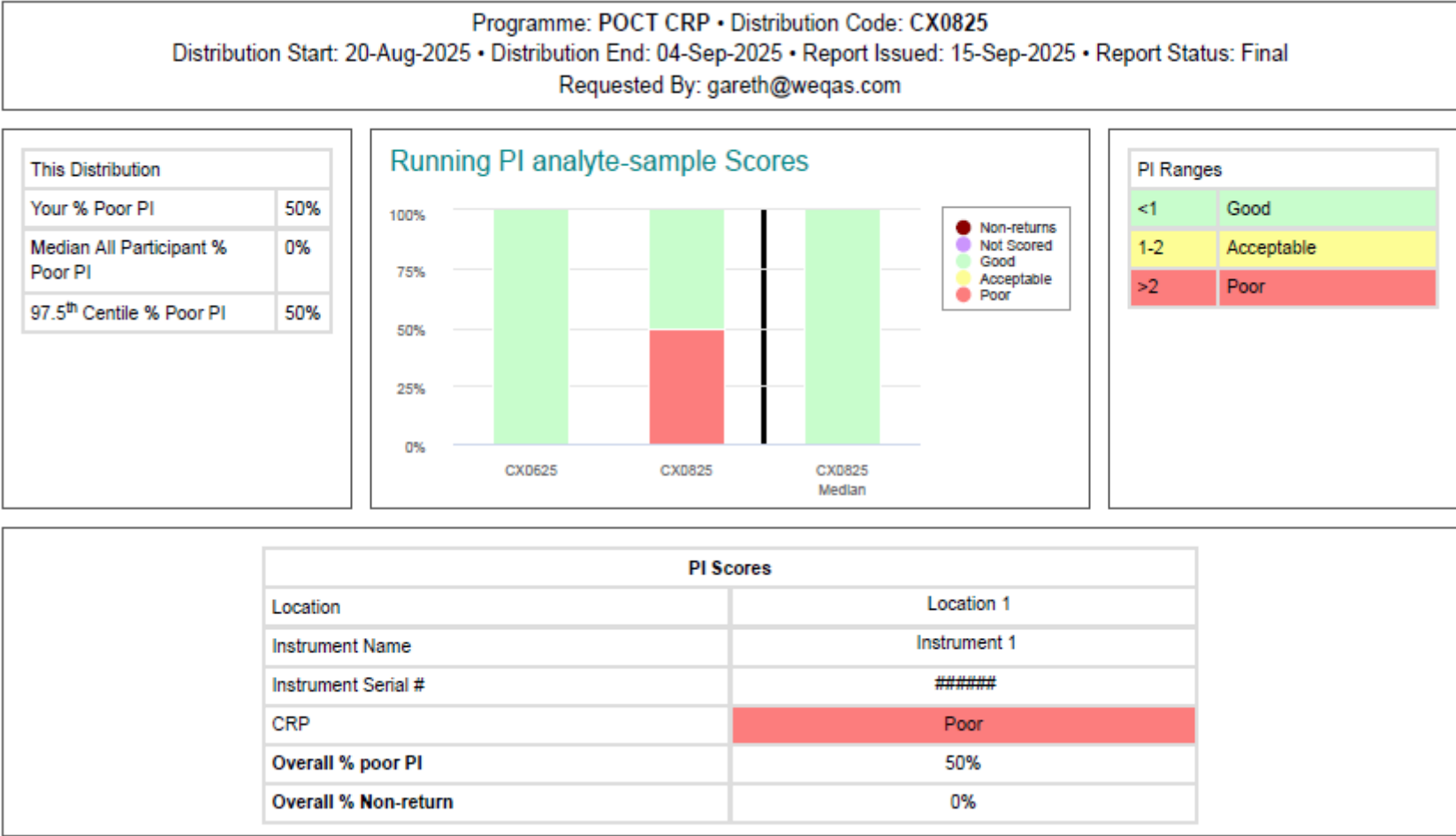
IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

Method Summary

IN1125	Sample 1	
Method Name	Mean	CV%
Abbott I-Stat (n=2)	2.300	20.9
CoaguChek INRange (n=4)	2.200	14.0
CoaguChek Pro II (n=1570)	2.132	5.3
CoaguChek XS (n=21)	2.003	4.3
CoaguChek XS Plus (n=170)	2.043	5.8
CoaguChek XS Plus / XS Pro (n=2)	2.100	0.0
CoaguChek XS Pro (n=22)	2.136	7.1

There are no Weqas or Participant supplied comments for INR for this distribution.

Case Study 6 -

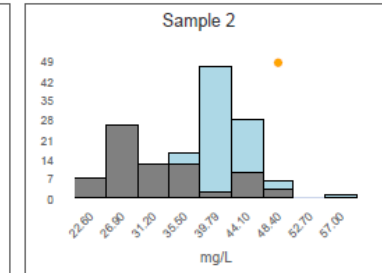
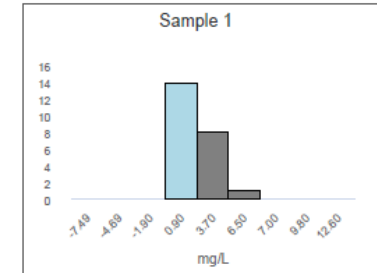
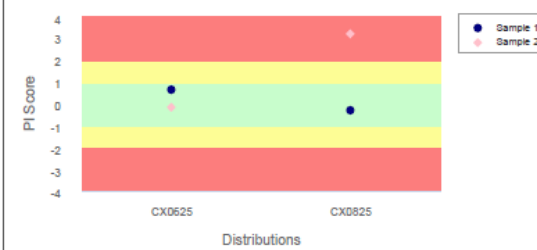


CRP mg/L					
	Your reported result (mg/L)		Method: LumiraDx	Instrument Model: LumiraDx	Overall
Sample 1	<5	Mean	5.17	5.17	2.84
		SD	0.19	0.19	2.32
		Uncertainty	0.078	0.078	0.605
		n	9	9	23
Sample 2	50.7	Mean	33.88	33.88	39.08
		SD	7.11	7.11	7.86
		Uncertainty	1.054	1.054	0.822
		n	71	71	143

Scoring

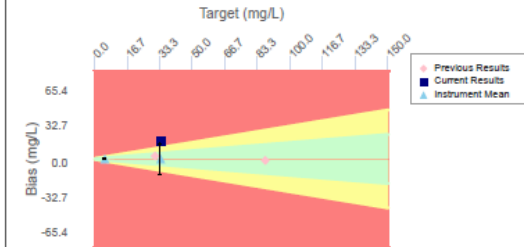
Sample	1	2	Overall Performance
Target: (Method Mean)	5.17	33.88	
Weqas TAE	1.95	10.56	
PI	-0.27	3.19	Poor

Running PI

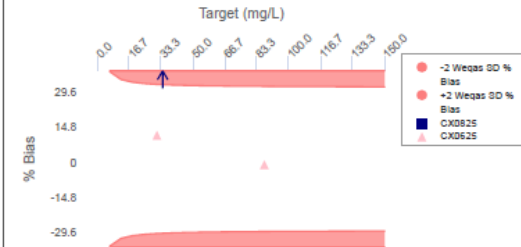


■ All Results ■ My Method ■ My Instrument ● My Result

Bias (Absolute)



Bias (Relative %)



Precision

	CX0625	This distribution: CX0825
Sy.x		
IS		

Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

Method Summary

CX0825		Sample 1		Sample 2	
Method Name		Mean	CV%	Mean	CV%
Afinion (n=)		n/a	n/a	43.41	4.0
AQT90 Flex (n=)		n/a	n/a	45.11	4.3
cobas b101 (n=)		n/a	n/a	43.70	7.2
LabPad (n=1)		2.50	0.0	n/a	n/a
LumiraDx (n=9)		5.17	3.6	33.88	21.0
Microsemi (n=8)		1.08	16.7	44.04	8.1
Piccolo Xpress (n=1)		2.00	0.0	42.84	3.4
QuikRead go (n=4)		1.10	8.4	41.59	14.7

There are no Weqas or Participant supplied comments for CRP for this distribution.

Case Study 7 -

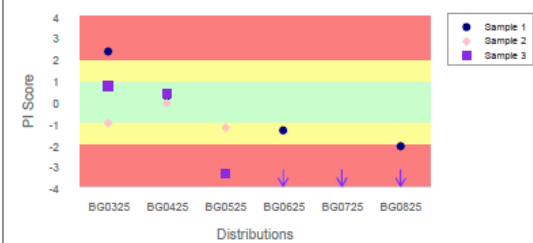


Sodium mmol/L					
	Your reported result (mmol/L)		Method: Rapidpoint 500/500e	Instrument Model: RAPIDPoint 500e	Overall
Sample 1	112.1	Mean	115.3	115.3	116.8
		SD	0.4	0.4	1.5
		Uncertainty	0.03	0.03	0.04
		n	291	209	2230
Sample 2	148.1	Mean	157.5	157.6	158.9
		SD	1.5	1.2	4.2
		Uncertainty	0.11	0.10	0.11
		n	290	209	2225
Sample 3	131.7	Mean	140.4	140.4	142.6
		SD	1.0	1.0	3.0
		Uncertainty	0.07	0.09	0.08
		n	290	209	2216

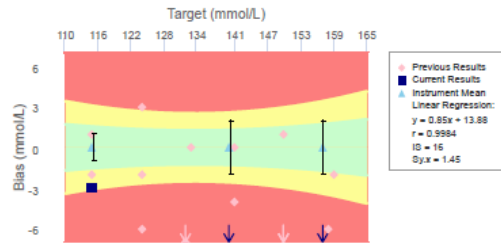
Scoring

Sample	1	2	3	Overall Performance
Target: (Method Mean)	115.3	157.5	140.4	
Weqas TAE	3	3.4	2.6	
PI	-2.1	-5.45	-6.72	Poor

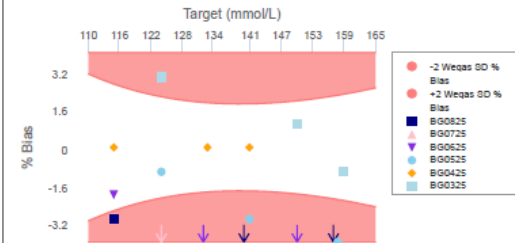
Running PI



Bias (Absolute)



Bias (Relative %)

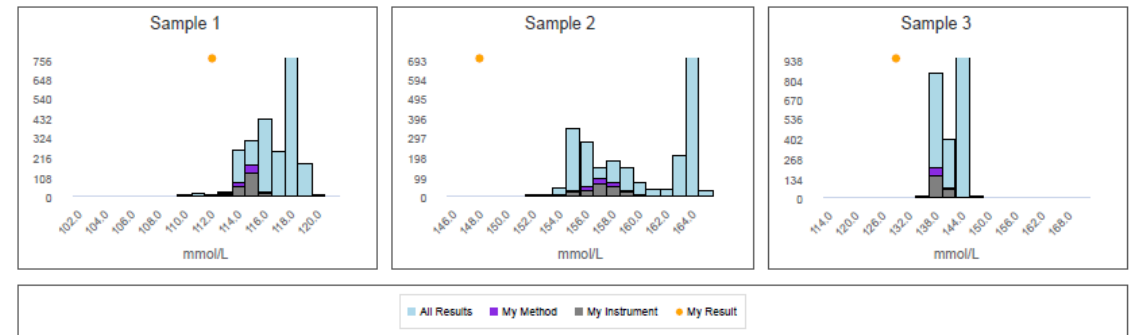


Precision

	BG0325	BG0425	BG0525	BG0625	BG0725	This distribution: BG0825
Sy.x	1.3	0.14	0.51	1.37	0.82	1.45
IS	17	0	3	23	12	16

Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

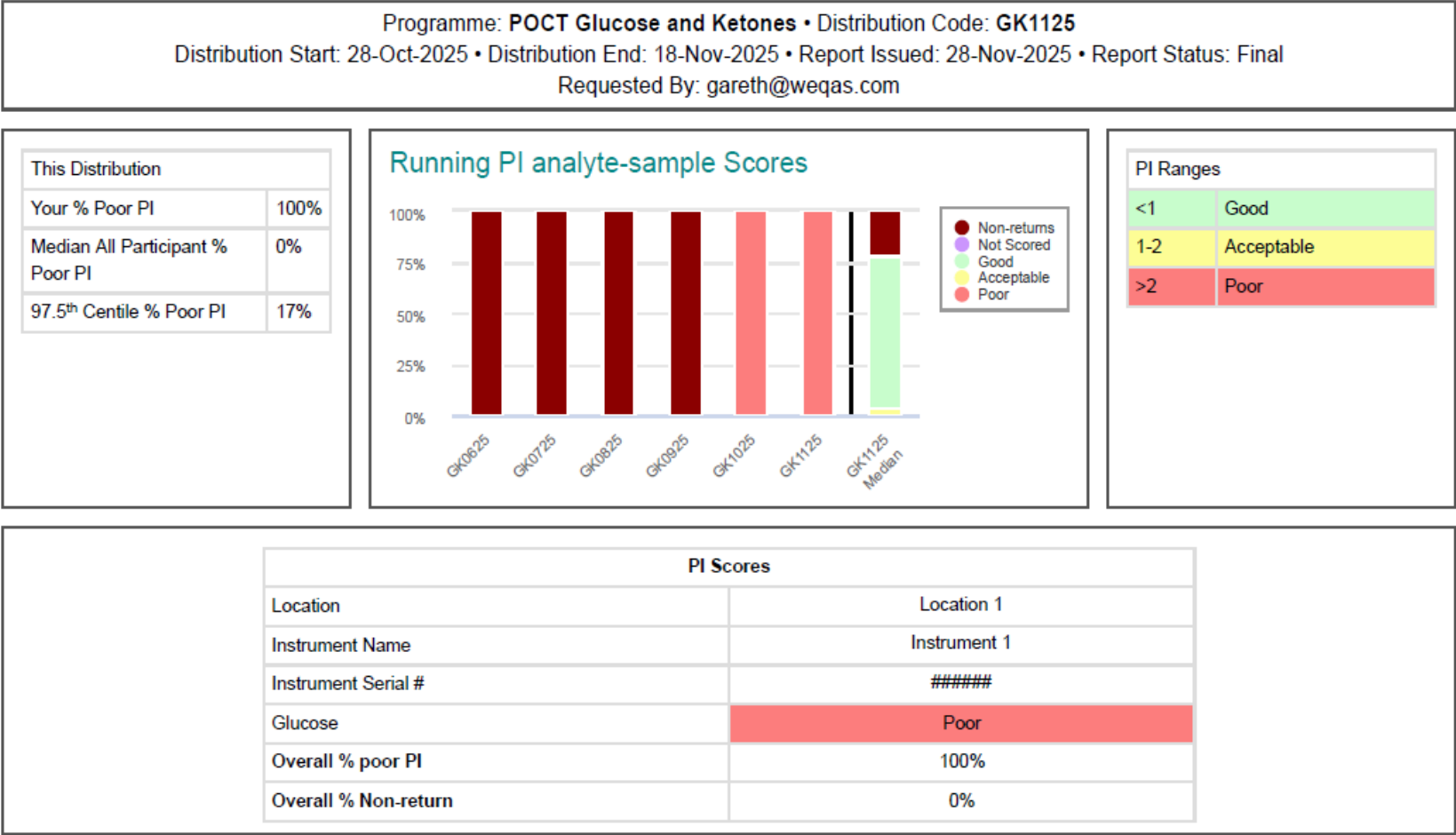


Method Summary

BG0825	Sample 1		Sample 2		Sample 3	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%
ABL 800 Series (n=25)	118.2	0.8	159.8	0.7	143.0	0.8
ABL 90 FLEX (n=931)	118.2	0.4	163.8	0.3	145.5	0.4
cobas b 123 (n=22)	111.5	0.4	157.7	0.2	140.0	0.0
cobas b 221 (n=36)	116.2	0.9	156.6	0.3	140.2	0.5
epoc (n=122)	115.9	1.2	160.3	0.9	142.0	1.0
Gem Premier 4000 (n=75)	115.9	0.6	154.7	0.5	139.6	0.4
Gem Premier 5000 (n=497)	116.3	0.5	155.4	0.4	139.8	0.4
i-STAT (n=210)	114.2	0.5	158.6	0.5	141.1	0.4
Prime + (n=11)	116.7	0.3	165.5	0.2	144.2	0.5
Rapidpoint 500/500e (n=291)	115.3	0.3	157.5	0.9	140.4	0.7

There are no Weqas or Participant supplied comments for Sodium for this distribution.

Case Study 8 -

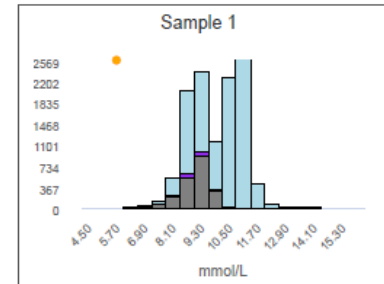
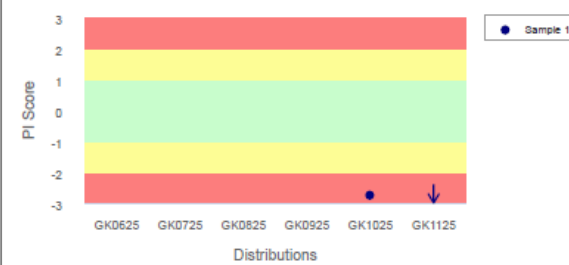


Glucose mmol/L					
	Your reported result (mmol/L)		Method: Nova StatStrip Xpress	Instrument Model: StatStrip Xpress2 Glucose/Ketone	Overall
Sample 1	6	Mean	9.29	9.33	10.17
		SD	0.60	0.57	1.16
		Uncertainty	0.015	0.015	0.013
		n	2342	2136	11827

Scoring

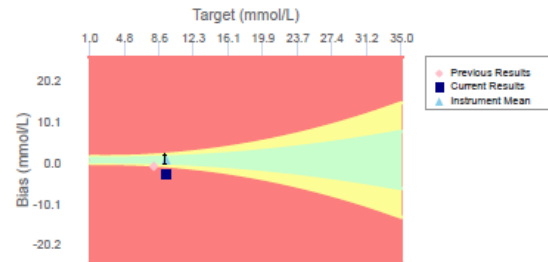
Sample	1	Overall Performance
Target: (Method Mean)	9.29	
Weqas TAE	1.36	
PI	-4.84	Poor

Running PI

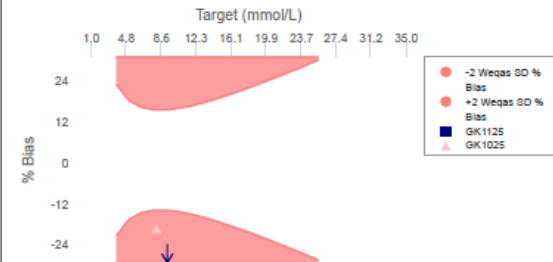


■ All Results ■ My Method ■ My Instrument ● My Result

Bias (Absolute)



Bias (Relative %)



Precision

	GK0625	GK0725	GK0825	GK0925	GK1025	This distribution: GK1125
Sy.x						
IS						

Sy.x is the average deviation from the best fit line and is an index of scatter.

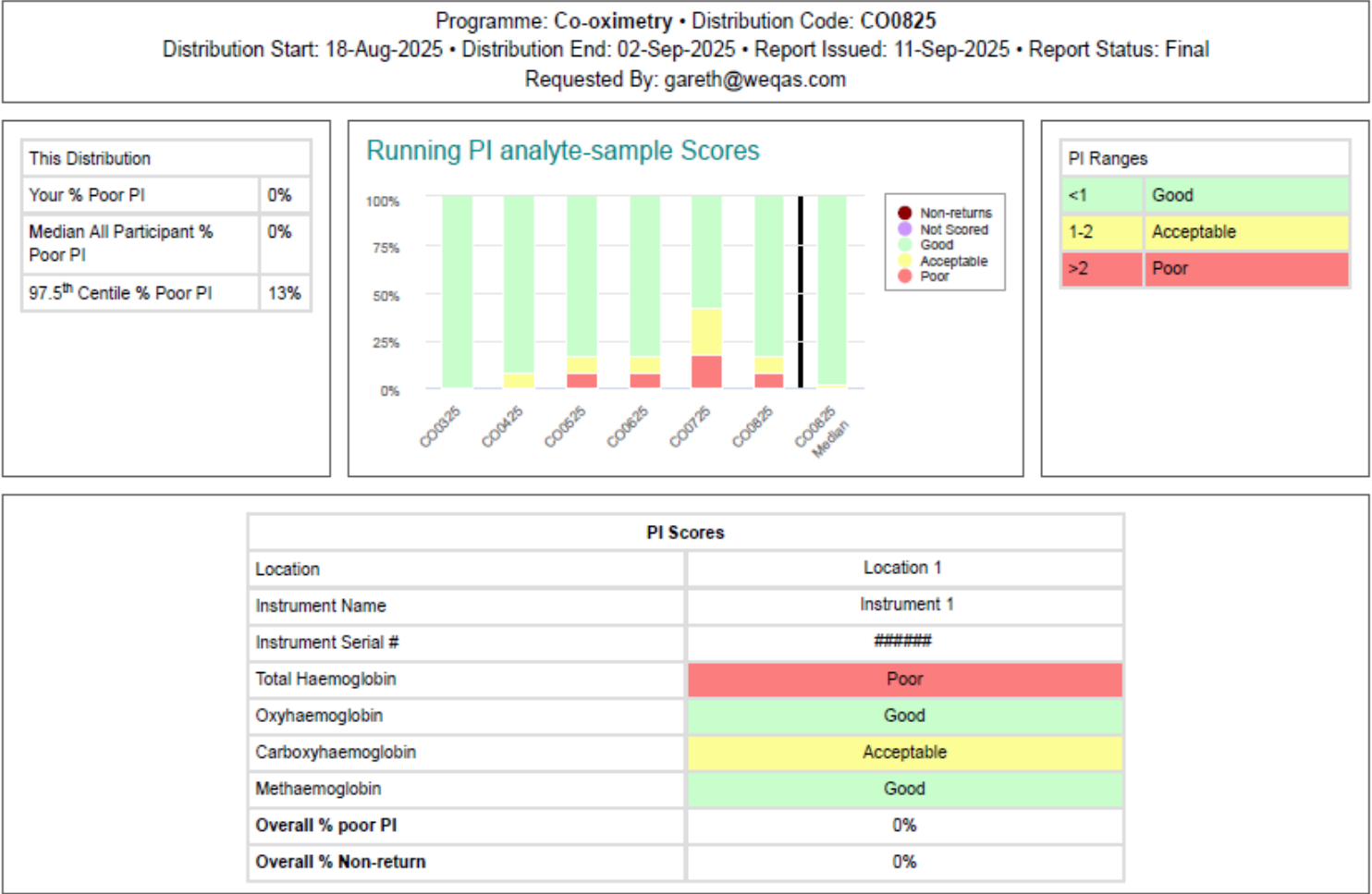
IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)

Method Summary

GK1125	Sample 1	
Method Name	Mean	CV%
ACCU-CHEK Guide (n=9)	9.48	1.2
CareSens (n=129)	10.11	6.6
cobas pulse (n=139)	9.34	1.8
FreeStyle Optium Neo (n=9)	11.39	9.3
FreeStyle Optium Neo H (n=807)	11.26	8.0
Freestyle Precision Pro (n=1625)	10.92	4.4
Inform II / Performa (n=3469)	11.12	3.1
Nova StatStrip Connectivity (n=3233)	9.22	5.2
Nova StatStrip Xpress (n=2342)	9.29	6.4
Procheck Advance (n=53)	7.95	9.0

There are no Weqas or Participant supplied comments for Glucose for this distribution.

Case Study 9 -

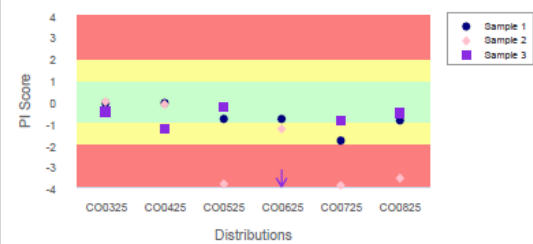


Total Haemoglobin g/L					
	Your reported result (g/L)		Method: ABL 90 FLEX	Instrument Model: ABL 90 FLEX PLUS	Overall
Sample 1	151	Mean	155.14	155.28	156.17
		SD	1.98	1.93	2.88
		Uncertainty	0.083	0.102	0.084
		n	876	562	1831
Sample 2	116	Mean	128.95	129.02	129.37
		SD	1.72	1.68	2.98
		Uncertainty	0.073	0.089	0.087
		n	876	559	1830
Sample 3	97	Mean	99.48	99.53	99.31
		SD	1.37	1.37	2.80
		Uncertainty	0.058	0.072	0.082
		n	877	565	1828

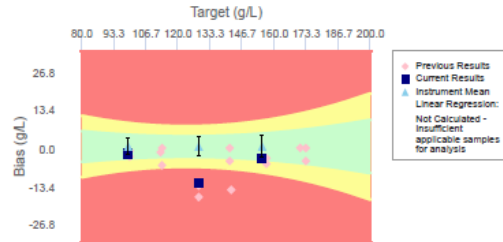
Scoring

Sample	1	2	3	Overall Performance
Target: (Method Mean)	155.14	128.95	99.48	
Weqas TAE	9.06	7.14	8.2	
PI	-0.91	-3.63	-0.6	Poor

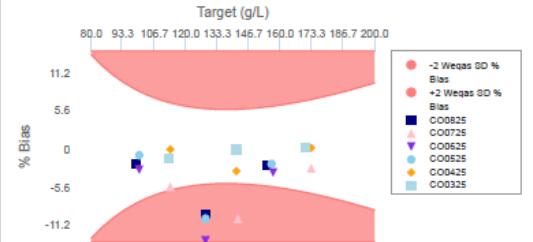
Running PI



Bias (Absolute)



Bias (Relative %)

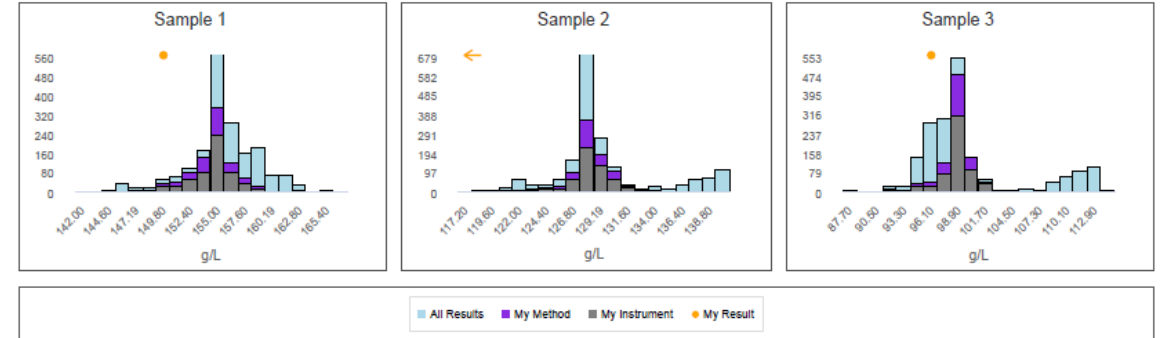


Precision

	CO0325	CO0425	CO0525	CO0625	CO0725	This distribution: CO0825
Sy.x	0.52	3.67	9.02	10.62	7.44	7.82
IS	1	37	268	365	144	206

Sy.x is the average deviation from the best fit line and is an index of scatter.

IS Score	Interpretation
0 to 10	Good
11 to 150	Acceptable to Warning level
> 150	Unacceptable (incl. Curvilinear Data)



Method Summary

CO0825	Sample 1		Sample 2		Sample 3	
Method Name	Mean	CV%	Mean	CV%	Mean	CV%
ABL 800 Series (n=25)	158.21	0.9	130.28	0.9	99.17	0.9
ABL 90 FLEX (n=876)	155.14	1.3	128.95	1.3	99.48	1.4
Avoximeter (n=5)	165.22	1.7	135.67	2.7	103.33	2.7
cobas b 221 (n=33)	151.94	1.0	122.95	1.9	93.25	1.0
Gem Premier 4000 (n=79)	147.58	1.1	122.16	1.1	96.58	1.1
Gem Premier 5000 (n=509)	156.58	0.9	128.45	0.9	97.35	1.0
Prime + (n=5)	166.00	0.0	140.00	0.0	106.00	0.0
RAPIDLab 1200 System (n=2)	156.50	2.6	135.50	0.6	107.50	0.7
Rapidpoint 500/500e (n=297)	160.40	1.1	138.75	1.3	111.90	1.3

There are no Weqas or Participant supplied comments for Total Haemoglobin for this distribution.