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Test Weight (kg/hL)

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	67.75	0.50	66.95	-0.30	68.88	1.62	66.00	-1.25	68.13	0.87										66.65	-0.60	67.10	-0.15	67.33	0.07			67.73	0.48	67.30	0.05	66.00	-1.25	0.87	67.26
Sample 2	66.75	0.96	65.53	-0.27	67.73	1.93	65.00	-0.79	67.52	1.73										64.20	-1.59	65.30	-0.49	65.44	-0.35			64.98	-0.81	66.25	0.46	65.00	-0.79	1.13	65.79
Sample 3	68.00	-0.26	67.88	-0.39	69.96	1.70	68.00	-0.26	67.02	-1.24										68.00	-0.26	69.60	1.34	68.41	0.14			68.26	0.00	68.20	-0.06	67.55	-0.71	0.84	68.26
Mean Absolute Difference		0.57		0.32		1.75		0.77		1.28											0.82		0.66		0.19				0.43		0.19		0.92		
Mean of Difference		0.40		-0.32		1.75		-0.77		0.45											-0.82		0.23		-0.05				-0.11		0.15		-0.92		

Test Weight (kg/hL) - Deviation from Mean by Lab
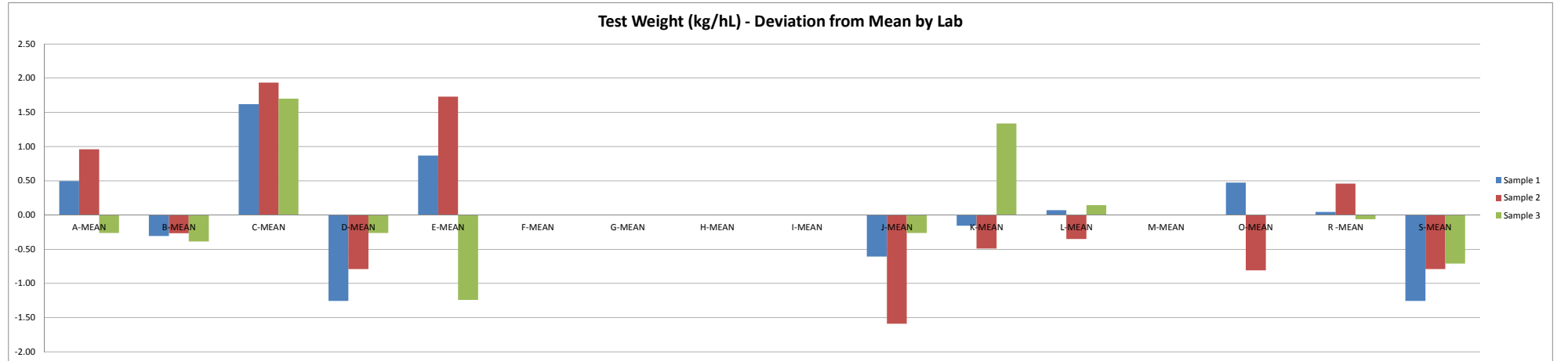
Test Weight (kg/hL) Z - score

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	0.57	-0.35	1.87	-1.45	1.01					-0.70	-0.18	0.08		0.55	0.05	-1.45
Sample 2	0.85	-0.23	1.71	-0.70	1.53					-1.41	-0.43	-0.31		-0.72	0.41	-0.70
Sample 3	-0.31	-0.46	2.02	-0.31	-1.47					-0.31	1.59	0.17		0.00	-0.07	-0.84

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Impurities (% by Weight)																																			
	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	0.77	-0.42	1.30	0.12	0.76	-0.42	1.00	-0.18	1.36	0.17									0.60	-0.58	1.12	-0.06	2.27	1.08			2.40	1.22	0.95	-0.23	0.50	-0.68	0.63	1.18
Sample 2	0.98	-0.04	0.95	-0.07	0.85	-0.18	0.95	-0.07	1.29	0.26									1.20	0.18	1.10	0.07	1.26	0.23			1.30	0.28	0.80	-0.22	0.60	-0.42	0.23	1.02
Sample 3	0.47	-0.19	0.55	-0.11	0.79	0.13	0.70	0.04	0.83	0.17									0.40	-0.26	0.53	-0.13	1.10	0.44			1.00	0.34	0.50	-0.16	0.36	-0.30	0.24	0.66
Mean Absolute Difference		0.22		0.10		0.24		0.10		0.20										0.34		0.09		0.58				0.61		0.20		0.47		
Mean of Difference		-0.22		-0.02		-0.16		-0.07		0.20										-0.22		-0.04		0.58				0.61		-0.20		-0.47		

Impurities (% by Weight) - Deviation from Mean by Lab
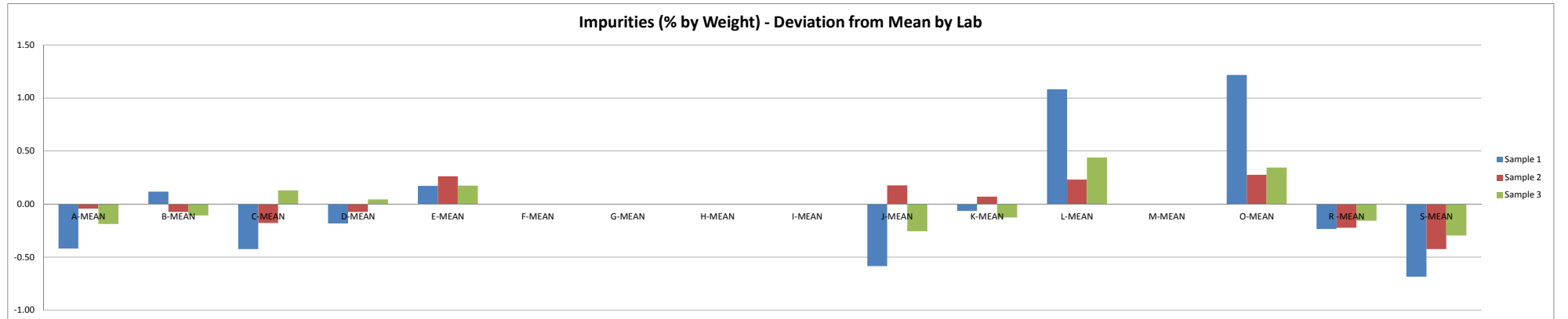
Impurities (% by Weight) Z - score																
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	-0.67	0.19	-0.67	-0.29	0.27					-0.93	-0.10	1.72		1.94	-0.37	-1.09
Sample 2	-0.19	-0.33	-0.79	-0.33	1.16					0.78	0.32	1.03		1.23	-0.99	-1.88
Sample 3	-0.76	-0.43	0.53	0.18	0.71					-1.05	-0.52	1.79		1.40	-0.64	-1.21

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Oil NIR (% by Weight)																																		
	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R-MEAN	S	S-MEAN	STDEV	MEAN
Sample 1			46.05	-0.41	46.05	-0.41	46.40	-0.06	47.55	1.09							46.96	0.50	47.05	0.59	46.15	-0.31	44.99	-1.48			46.49	0.02	46.84	0.38	46.55	0.09	0.67	46.46
Sample 2			49.80	0.03	49.90	0.13	49.00	-0.77	50.65	0.88							50.29	0.52	50.10	0.33	50.15	0.38	47.97	-1.80			49.86	0.09	49.82	0.05	49.90	0.13	0.72	49.77
Sample 3			43.55	-0.16	43.85	0.14	44.30	0.59	43.45	-0.26							43.96	0.25	44.65	0.94	43.95	0.24	41.33	-2.38			44.03	0.31	44.10	0.39	43.65	-0.06	0.86	43.71
Mean Absolute Difference				0.20		0.23		0.47		0.74								0.42		0.62		0.31		1.89				0.14		0.27		0.09		
Mean of Difference				-0.18		-0.05		-0.08		0.57								0.42		0.62		0.10		-1.89				0.14		0.27		0.05		

Oil NIR (% by Weight) - Deviation from Mean by Lab
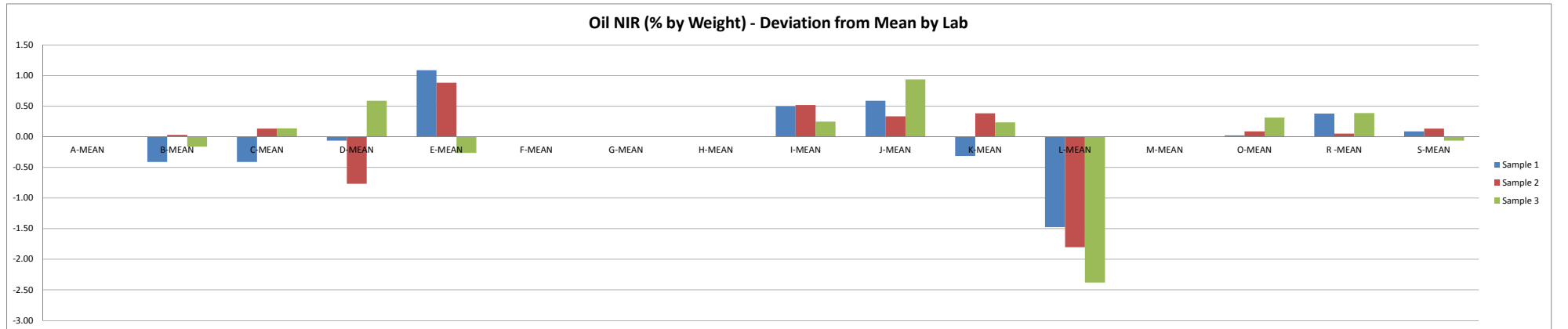
Oil NIR (% by Weight) Z - score																
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1		-0.61	-0.61	-0.09	1.61				0.74	0.87	-0.46	-2.19		0.04	0.56	0.13
Sample 2		0.05	0.19	-1.06	1.23				0.72	0.46	0.53	-2.50		0.12	0.08	0.19
Sample 3		-0.19	0.16	0.69	-0.30				0.29	1.09	0.28	-2.77		0.37	0.45	-0.07

Oil Solvent (% by Weight)

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	47.65	1.19					45.57	-0.90	45.89	-0.57	45.46	-1.01							46.75	0.29								47.62	1.16			46.30	-0.16	0.91	46.46
Sample 2	51.58	0.95					48.93	-1.70	51.13	0.50									49.95	-0.68								52.03	1.40			50.15	-0.48	1.16	50.63
Sample 3	44.22	0.17					44.35	0.30	43.94	-0.11									44.50	0.45								44.30	0.25			43.00	-1.05	0.55	44.05
Mean Absolute Difference		0.77						0.96		0.39										0.47									0.94				0.56		
Mean of Difference		0.77						-0.76		-0.06										0.02									0.94				-0.56		

Oil Solvent (% by Weight) - Deviation from Mean by Lab
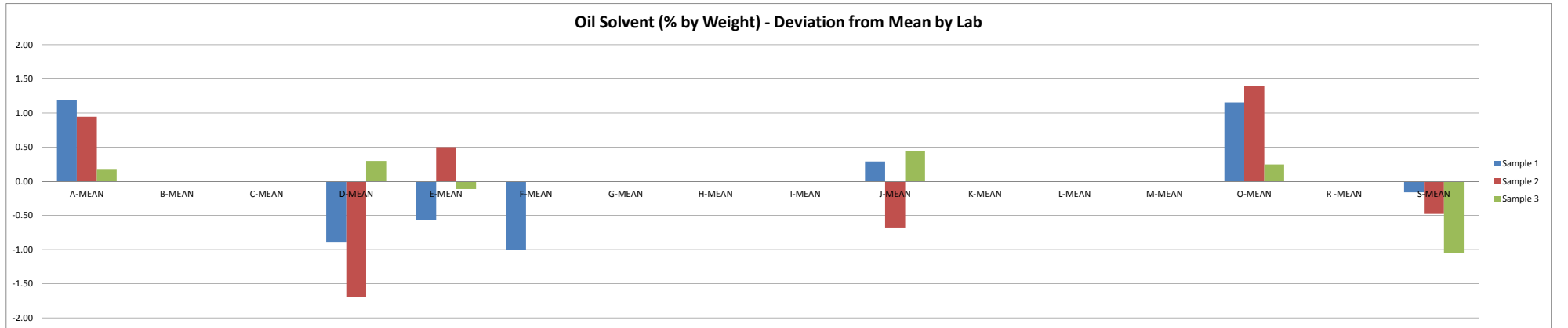
Oil Solvent (% by Weight) Z - score

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	1.30			-0.98	-0.63	-1.10				0.32				1.27		-0.18
Sample 2	0.82			-1.47	0.43					-0.59				1.21		-0.41
Sample 3	0.31			0.54	-0.20					0.82				0.45		-1.92

Moisture Oven (% by Weight)

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	5.44	0.14	5.28	-0.02	5.01	-0.29	4.96	-0.34	5.40	0.10	5.33	0.03							5.70	0.40			5.12	-0.18			5.34	0.04	5.33	0.03	5.40	0.10	0.21	5.30
Sample 2	4.82	0.11	4.67	-0.04	4.33	-0.38	4.41	-0.30	4.85	0.14	4.65	-0.06							5.10	0.39			4.60	-0.11			4.81	0.10	4.79	0.08	4.75	0.04	0.21	4.71
Sample 3	5.54	0.18	5.41	0.05	4.71	-0.65	4.80	-0.56	5.50	0.14	5.48	0.11							5.85	0.49			5.32	-0.04			5.46	0.09	5.48	0.11	5.45	0.09	0.33	5.36
Mean Absolute Difference		0.14		0.04		0.44		0.40		0.13		0.06								0.43				0.11				0.08		0.07		0.08		
Mean of Difference		0.14		0.00		-0.44		-0.40		0.13		0.03								0.43				-0.11				0.08		0.07		0.08		

Moisture Oven (% by Weight) - Deviation from Mean by Lab
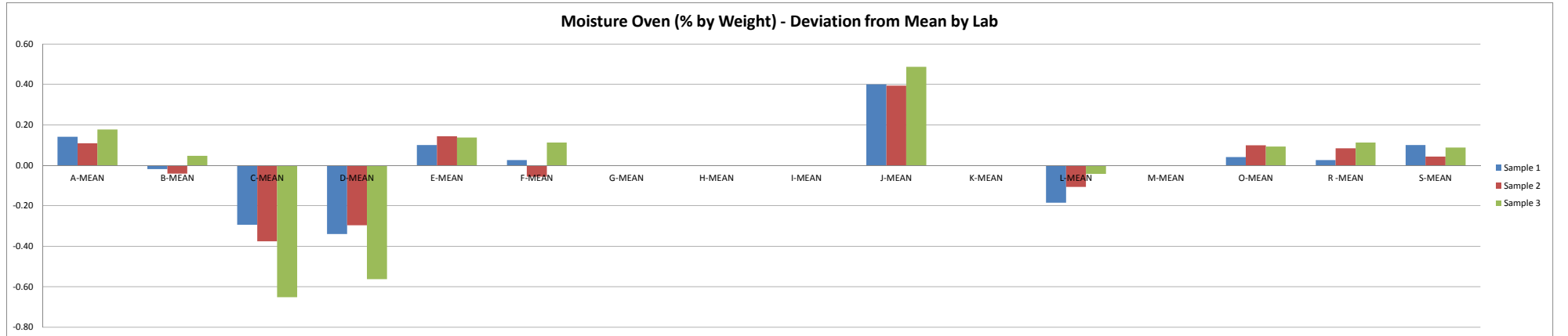
Moisture Oven (% by Weight) Z - score

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	0.67	-0.09	-1.40	-1.62	0.48	0.12				1.91		-0.88		0.20	0.12	0.48
Sample 2	0.51	-0.19	-1.77	-1.39	0.68	-0.26				1.85		-0.50		0.47	0.40	0.21
Sample 3	0.54	0.15	-1.99	-1.71	0.42	0.34				1.49		-0.13		0.28	0.34	0.27

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
																																			Moisture NIR (% by Weight)	
Sample 1			4.70	-0.33	5.05	0.02	4.90	-0.13	5.45	0.42							5.32	0.28	5.20	0.17	4.95	-0.08	5.49	0.46			4.72	-0.31	4.66	-0.38	4.90	-0.13	0.30	5.03
Sample 2			4.35	-0.25	4.55	-0.05	4.35	-0.25	4.95	0.35							4.88	0.28	4.65	0.05	4.45	-0.15	5.13	0.53			4.37	-0.23	4.31	-0.29	4.60	0.00	0.28	4.60
Sample 3			4.80	-0.30	5.05	-0.05	5.10	0.00	5.50	0.40							5.50	0.40	5.30	0.20	4.80	-0.30	5.64	0.53			4.71	-0.40	4.76	-0.34	5.00	-0.10	0.33	5.10
Mean Absolute Difference				0.29		0.04		0.13		0.39								0.32		0.14		0.18		0.51				0.31		0.34		0.08		
Mean of Difference				-0.29		-0.03		-0.13		0.39								0.32		0.14		-0.18		0.51				-0.31		-0.34		-0.08		

Moisture NIR (% by Weight) - Deviation from Mean by Lab
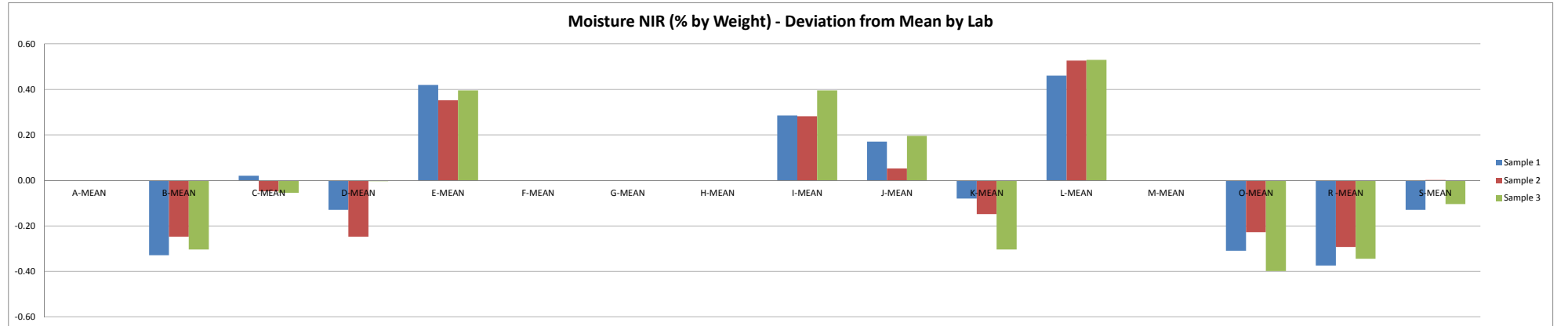
Moisture NIR (% by Weight) Z - score

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1		-1.11	0.07	-0.44	1.41				0.96	0.57	-0.27	1.55		-1.04	-1.26	-0.44
Sample 2		-0.90	-0.17	-0.90	1.27				1.02	0.19	-0.53	1.90		-0.82	-1.06	0.01
Sample 3		-0.91	-0.16	-0.01	1.19				1.19	0.59	-0.91	1.59		-1.20	-1.03	-0.31

Oleic Acid (% by Weight)																																		
	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	57.47	-0.63					59.20	1.10			56.92	-1.18																			58.80	0.70	1.08	58.10
Sample 2	59.65	-0.87					62.00	1.49			59.37	-1.15																			61.05	0.53	1.23	60.52
Sample 3	59.82	-1.71					63.30	1.78			60.58	-0.95																			62.40	0.88	1.60	61.53
Mean Absolute Difference		1.07						1.45				1.09																				0.70		
Mean of Difference		-1.07						1.45				-1.09																				0.70		

Oleic Acid (% by Weight) - Deviation from Mean by Lab
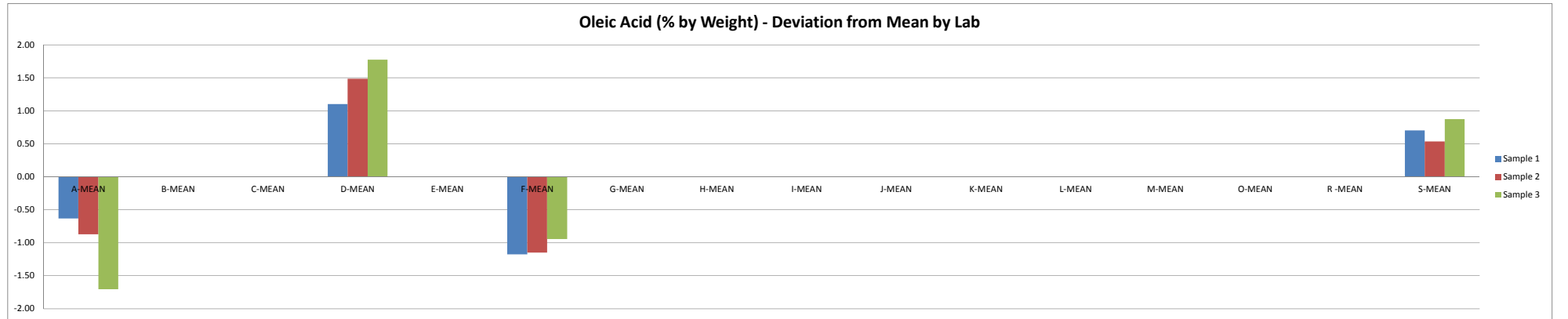
Oleic Acid (% by Weight) (% by Weight) Z - score															
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	-0.58			1.02		-1.09										0.65
Sample 2	-0.70			1.20		-0.93										0.43
Sample 3	-1.06			1.11		-0.59										0.55

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Linoleic Acid (% by Weight)																																			
Sample 1	22.89	0.27				22.30		-0.32			22.53	-0.09																					22.75	0.13	0.26	22.62
Sample 2	21.93	0.26				21.30		-0.36			21.63	-0.04																					21.80	0.14	0.27	21.66
Sample 3	22.02	0.50				20.90		-0.61			21.44	-0.07																					21.70	0.19	0.47	21.51
Mean Absolute Difference		0.35						0.43				0.07																						0.15		
Mean of Difference		0.35						-0.43				-0.07																						0.15		

Linoleic Acid (% by Weight) - Deviation from Mean by Lab
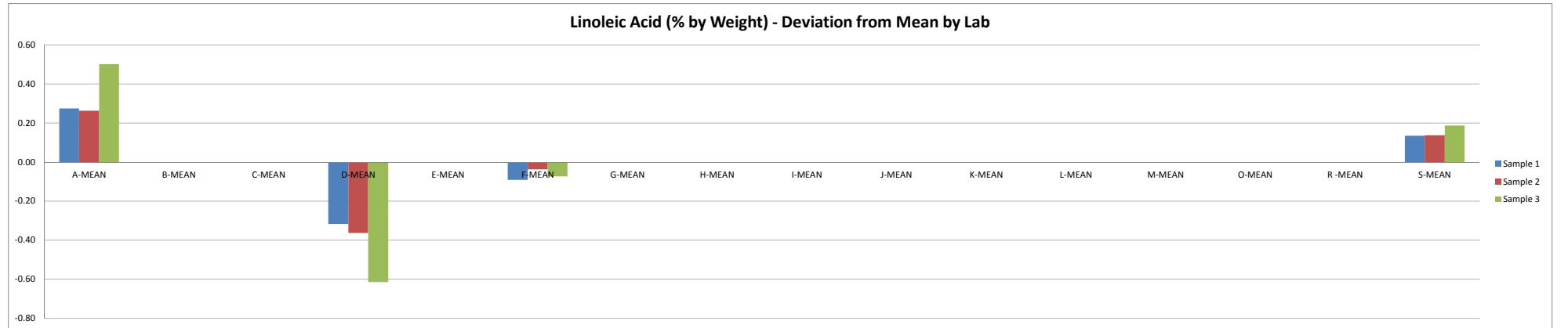
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Linoleic Acid (% by Weight) Z - score																
Sample 1	1.06			-1.22		-0.35										0.52
Sample 2	0.97			-1.34		-0.14										0.51
Sample 3	1.06			-1.30		-0.16										0.39

Linolenic Acid (% by Weight)																																		
	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	10.89	0.30					9.80	-0.79			10.91	0.32																			10.75	0.16	0.53	10.59
Sample 2	10.25	0.58					8.70	-0.96			10.01	0.34																			9.70	0.04	0.68	9.66
Sample 3	10.00	1.28					7.85	-0.87			8.63	-0.09																			8.40	-0.32	0.91	8.72
Mean Absolute Difference		0.72						0.87				0.25																				0.17		
Mean of Difference		0.72						-0.87				0.19																				-0.04		

Linolenic Acid (% by Weight) - Deaviation from Mean by Lab
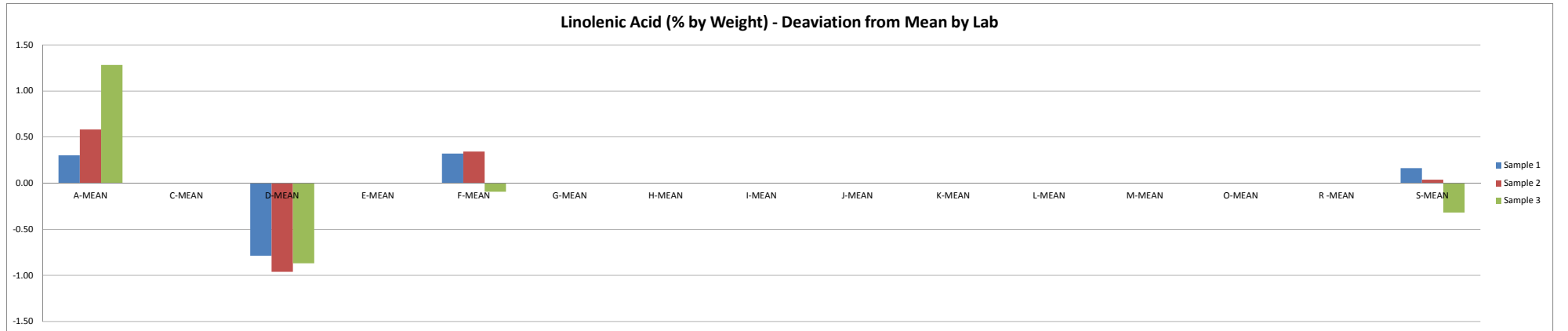
Linolenic Acid (% by Weight) Z - score																
	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	0.57			-1.49		0.61										0.31
Sample 2	0.86			-1.42		0.50										0.06
Sample 3	1.40			-0.95		-0.10										-0.35

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Free Fatty Acid (% by Weight)

	A	A-MEAN	B	B-MEAN	C	C-MEAN	D	D-MEAN	E	E-MEAN	F	F-MEAN	G	G-MEAN	H	H-MEAN	I	I-MEAN	J	J-MEAN	K	K-MEAN	L	L-MEAN	M	M-MEAN	O	O-MEAN	R	R -MEAN	S	S-MEAN	STDEV	MEAN
Sample 1	0.12	-0.07					0.34	0.16			0.21	0.03								0.20	0.02							0.14	-0.04			0.09	-0.09	0.09	0.18
Sample 2	0.10	-0.10					0.49	0.29			0.19	-0.01								0.20	0.00							0.11	-0.09			0.10	-0.10	0.15	0.20
Sample 3	0.04	-0.16					0.57	0.38			0.14	-0.06								0.19	0.00							0.11	-0.08			0.11	-0.09	0.19	0.19
Mean Absolute Difference		0.11						0.28				0.03									0.01								0.07				0.09		
Mean of Difference		-0.11						0.28				-0.01									0.01								-0.07				-0.09		

Free Fatty Acid (% by Weight) - Deaviation from Mean by Lab
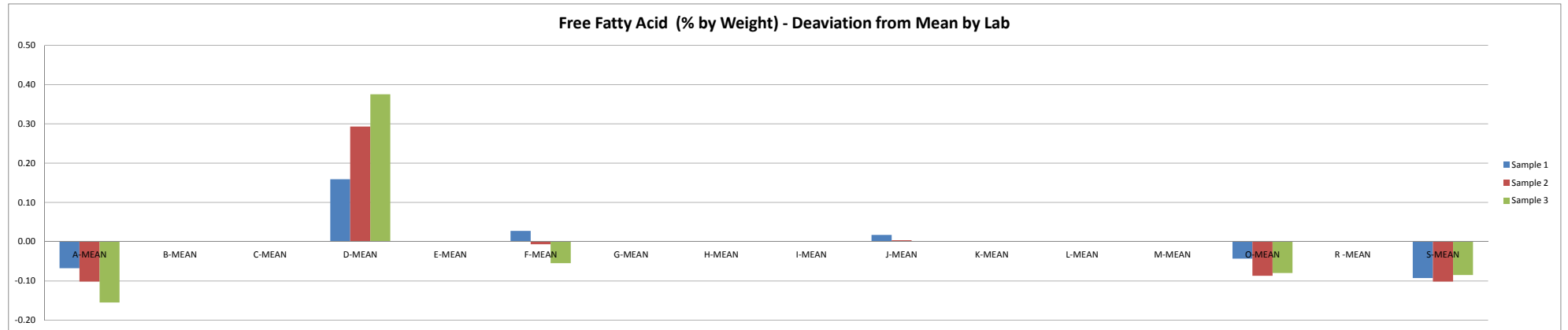
Free Fatty Acid (% by Weight) Z - score

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1	-0.75			1.75		0.30				0.19				-0.47		-1.02
Sample 2	-0.67			1.94		-0.04				0.02				-0.57		-0.67
Sample 3	-0.81			1.97		-0.29				0.00				-0.42		-0.45

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Oil % (NIR) - Oil % (Mean Reference)

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1		-0.41	-0.41	-0.06	1.09				0.50	0.59	-0.31	-1.48		0.02	0.38	0.09
Sample 2		-0.83	-0.73	-1.63	0.02				-0.34	-0.53	-0.48	-2.66		-0.77	-0.81	-0.73
Sample 3		-0.50	-0.20	0.25	-0.60				-0.09	0.60	-0.10	-2.72		-0.03	0.05	-0.40
Average		-0.58	-0.45	-0.48	0.17				0.02	0.22	-0.30	-2.29		-0.26	-0.13	-0.35

Moisture % (NIR) - Moisture % (Mean Reference)

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Sample 1		-0.60	-0.25	-0.40	0.15				0.02	-0.10	-0.35	0.19		-0.58	-0.64	-0.40
Sample 2		-0.36	-0.16	-0.36	0.24				0.17	-0.06	-0.26	0.42		-0.34	-0.40	-0.11
Sample 3		-0.56	-0.31	-0.26	0.14				0.14	-0.06	-0.56	0.27		-0.66	-0.60	-0.36
Average		-0.51	-0.24	-0.34	0.18				0.11	-0.07	-0.39	0.29		-0.52	-0.55	-0.29

Collective 2018 Oil		

Mean Difference (Oil NIR % - Oil Reference %)

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Round 1			-0.64	-0.72	0.36		-0.25	-0.59	-2.42	-0.67	-0.39	-2.18	0.06	-0.59	-0.32	-0.61
Round 2		-0.58	-0.45	-0.48	0.17				0.02	0.22	-0.30	-2.29		-0.26	-0.13	-0.35
Round 3																
Round 4																
Round 5																
Round 6																

Mean Difference (Oil NIR % Oil Solvent %)
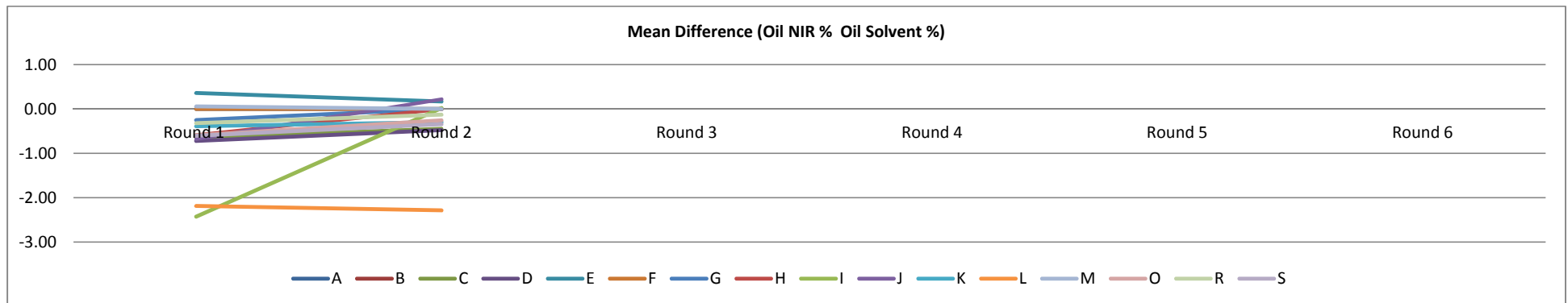
Collective 2018 Moisture

Mean Difference (Moisutre NIR % - Moisture Reference %)

	A	B	C	D	E	F	G	H	I	J	K	L	M	O	R	S
Round 1			-0.51	-0.38	0.14		-0.43	-0.43	0.11	0.21	-0.51	0.10	-0.99	-0.44	-0.56	-0.29
Round 2		-0.51	-0.24	-0.34	0.18				0.11	-0.07	-0.39	0.29		-0.52	-0.55	-0.29
Round 3																
Round 4																
Round 5																
Round 6																

Mean Difference (Moisutre NIR % - Moisture Oven %)

Appendix 1:

$$z = (x - X) / \hat{\sigma} \qquad\qquad ..(19)$$

where $\hat{\sigma}$ is the standard deviation for proficiency assessment.

NOTE   ISO Guide 43 uses the symbol s for the standard deviation in the definition of the z-score. This is appropriate when this quantity is derived as the standard deviation of a number of results, but not in other cases (for example, when it is calculated from the results of a precision experiment, or by reference to a generalised linear model).

Interpretation of z-scores. When a participant reports a result that gives rise to a z-score above 3,0 or below -3,0 then the result shall be considered to give an "action signal". Likewise, a z-score above 2,0 or below -2,0 shall be considered to give a "warning signal". A single "action signal", or "warning signals" in two successive rounds, shall be taken as evidence that an anomaly has occurred that requires investigation.

Reference : ISO 13528 statistical methods for use in proficiency testing by interlaboratory comparisons

AOF Test Check Program 2018 - Round 2.xlsx

Appendix 2: Raw Data

Reporting Date	19/03/2018		Lab	A							
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL		67.75	67.75	67.75	66.75	66.75	66.75	68.00	68.00	68.00
Impurities	% by weight	AOF4-1.3	0.75	0.78	0.77	1.03	0.93	0.98	0.48	0.46	0.47
Oil NIR (Clean Seed)	% by weight	NIR									
Oil Solvent (Clean Seed)	% by weight	FOSFA	47.64	47.65	47.65	51.57	51.58	51.58	44.22	44.22	44.22
Oil SFE Extraction	% by weight	Fast Fat									
Moisture Oven	% by weight		5.46	5.42	5.44	4.84	4.79	4.82	5.54	5.54	5.54
Moisture NIR	% by weight	NIR									
Oleic Acid	% by weight	Methanolic KOH	57.46	57.47	57.47	59.66	59.63	59.65	59.78	59.86	59.82
Linoleic Acid	% by weight	Methanolic KOH	22.90	22.88	22.89	21.89	21.96	21.93	22.06	21.97	22.02
Linolenic Acid	% by weight	Methanolic KOH	10.90	10.88	10.89	10.26	10.23	10.25	9.97	10.03	10.00
Free Fatty Acid	% by weight	AOCS Ac5-41	0.11	0.12	0.12	0.09	0.10	0.10	0.03	0.04	0.04

Reporting Date	26/03/2018		Lab	B							
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL	balance	66.87	67.03	66.95	65.00	66.05	65.53	67.79	67.96	67.88
Impurities	% by weight	balance	1.00	1.60	1.30	1.00	0.90	0.95	0.50	0.60	0.55
Oil NIR (Clean Seed)	% by weight	nir	46.20	45.90	46.05	49.80	49.80	49.80	43.50	43.60	43.55
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight	oven	5.29	5.27	5.28	4.64	4.69	4.67	5.39	5.43	5.41
Moisture NIR	% by weight	nir	4.70	4.70	4.70	4.40	4.30	4.35	4.80	4.80	4.80
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	27/03/2018		Lab	C							
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL		68.97	68.78	68.88	67.84	67.61	67.73	70.21	69.71	69.96
Impurities			0.72	0.80	0.76	0.88	0.81	0.85	0.85	0.72	0.79
Oil NIR (Clean Seed)	% by weight	Infratec 1241	45.90	46.20	46.05	50.10	49.70	49.90	43.90	43.80	43.85
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight		5.12	4.89	5.01	4.35	4.31	4.33	4.54	4.88	4.71
Moisture NIR	% by weight	Infratec 1241	5.0	5.1	5.1	4.5	4.6	4.6	5.1	5.0	5.1
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	29/03/2018		Lab	D							
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL		66.0	66.0	66.0	65.0	65.0	65.0	68.0	68.0	68.0
Impurities	% by weight		0.9	1.1	1.0	0.9	1.0	1.0	0.7	0.7	0.7
Oil NIR (Clean Seed)	% by weight		46.4	46.4	46.4	49.1	48.9	49.0	44.2	44.4	44.3
Oil Solvent (Clean Seed)	% by weight		44.45	46.68	45.6	49.79	48.07	48.9	44.24	44.46	44.4
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight		4.93	4.99	5.0	4.40	4.42	4.4	4.83	4.77	4.8
Moisture NIR	% by weight		4.9	4.9	4.9	4.3	4.4	4.4	5.1	5.1	5.1
Oleic Acid	% by weight		59.30	59.10	59.2	62.00	62.00	62.0	63.20	63.40	63.3
Linoleic Acid	% by weight		22.20	22.40	22.3	21.30	21.30	21.3	20.90	20.90	20.9
Linolenic Acid	% by weight		9.7	9.9	9.8	8.7	8.7	8.7	7.9	7.8	7.9
Free Fatty Acid	% by weight		0.39	0.30	0.3	0.46	0.52	0.5	0.53	0.60	0.6

Reporting Date	21/03/2018		Lab	E								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL		67.78	68.47	68.13	68.60	66.44	67.52	64.67	69.37	67.02
Impurities	% by weight		1.46	1.25	1.36	1.25	1.32	1.29	0.80	0.86	0.83
Oil NIR (Clean Seed)	% by weight	Infratec 1241	47.70	47.40	47.55	51.00	50.30	50.65	43.80	43.10	43.45
Oil Solvent (Clean Seed)	% by weight	ISO 659	45.98	45.80	45.89	51.14	51.12	51.13	44.21	43.67	43.94
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight		5.4	5.4	5.4	4.9	4.8	4.9	5.5	5.5	5.5
Moisture NIR	% by weight		5.5	5.4	5.5	5.0	4.9	5.0	5.5	5.5	5.5
Oleic Acid	% by weight	Infratec 1241									
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	13/03/2018		Lab	F								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL										
Impurities	% by weight										
Oil NIR (Clean Seed)	% by weight										
Oil Solvent (Clean Seed)	% by weight	AOF 4-1.24a	45.46	45.45	45.46						
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight	AOF 4-1.5	5.33	5.32	5.33	4.64	4.66	4.65	5.47	5.48	5.48
Moisture NIR	% by weight										
Oleic Acid	% by weight	AOF 4-1.21	56.95	56.89	56.92	59.31	59.42	59.37	60.53	60.63	60.58
Linoleic Acid	% by weight	AOF 4-1.21	22.52	22.53	22.53	21.64	21.61	21.63	21.50	21.38	21.44
Linolenic Acid	% by weight	AOF 4-1.21	10.91	10.91	10.91	10.01	10.00	10.01	8.61	8.64	8.63
Free Fatty Acid	% by weight	AOF 4-2.19	0.20	0.22	0.21	0.20	0.18	0.19	0.13	0.14	0.14

			Lab	G								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL										
Impurities	% by weight										
Oil NIR (Clean Seed)	% by weight	NIR									
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight										
Moisture NIR	% by weight	NIR									
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

			Lab	H								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL										
Impurities	% by weight										
Oil NIR (Clean Seed)	% by weight										
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight										
Moisture NIR	% by weight										
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	15/03/2018		Lab	I								
				Sample 1			**Sample 2**			**Sample 3**		
Parameter	**Unit**	**Method**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**
Test Weight	kg/hL										
Impurities	% by weight										
Oil NIR (Clean Seed)	% by weight		46.94	46.98	46.96	50.37	50.20	50.29	44.07	43.85	43.96
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight										
Moisture NIR	% by weight		5.30	5.33	5.32	4.89	4.87	4.88	5.52	5.48	5.50
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	27/03/2018		Lab	J								
				Sample 1			**Sample 2**			**Sample 3**		
Parameter	**Unit**	**Method**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**
Test Weight	kg/hL	Chondrometer	66.8	66.5	66.7	64.2	64.2	64.2	68.0	68.0	68.0
Impurities	% by weight	AOF Quality Standard	0.6	0.6	0.6	1.2	1.2	1.2	0.4	0.4	0.4
Oil NIR (Clean Seed)	% by weight	NIR	46.9	47.2	47.1	50.1	50.1	50.1	44.6	44.7	44.7
Oil Solvent (Clean Seed)	% by weight	AOCS AM 2-93	46.7	46.8	46.8	50.0	49.9	50.0	44.5	44.5	44.5
Oil SFE Extraction	% by weight	N/A									
Moisture Oven	% by weight	AOAC 925.10	5.7	5.7	5.7	5.1	5.1	5.1	5.8	5.9	5.9
Moisture NIR	% by weight	NIR	5.2	5.2	5.2	4.7	4.6	4.7	5.4	5.2	5.3
Oleic Acid	% by weight	N/A									
Linoleic Acid	% by weight	N/A									
Linolenic Acid	% by weight	N/A									
Free Fatty Acid	% by weight	AOCS Ca 5a-40	0.20	0.20	0.20	0.20	0.20	0.20	0.18	0.20	0.19

Reporting Date	16/03/2018		Lab	K								
				Sample 1			**Sample 2**			**Sample 3**		
Parameter	**Unit**	**Method**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**
Test Weight	kg/hL		66.6	67.6	67.1	65.6	65.0	65.3	69.8	69.4	69.6
Impurities	% by weight	AOF 2a-86	1.32	0.92	1.12	1.08	1.11	1.10	0.60	0.46	0.5
Oil NIR (Clean Seed)	% by weight	NIR	46.3	46.0	46.2	50.2	50.1	50.2	43.8	44.1	44.0
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight										
Moisture NIR	% by weight	NIR	5.0	4.9	5.0	4.5	4.4	4.5	4.8	4.8	4.8
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	19/03/2018		Lab	L								
				Sample 1			**Sample 2**			**Sample 3**		
Parameter	**Unit**	**Method**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**	**Result A**	**Result B**	**Average**
Test Weight	kg/hL	Chondrometer	67.35	67.30	67.33	65.52	65.36	65.44	68.37	68.44	68.41
Impurities	% by weight	AOF 4 – 1.3	2.24	2.29	2.27	1.24	1.27	1.26	1.02	1.17	1.10
Oil NIR (Clean Seed)	% by weight	Near-Infra Red (NIR)	44.87	45.10	44.99	47.85	48.08	47.97	41.39	41.27	41.33
Oil Solvent (Clean Seed)	% by weight	N/A									
Oil SFE Extraction	% by weight	N/A									
Moisture Oven	% by weight	AOF 4 - 1.5	5.11	5.12	5.12	4.63	4.57	4.60	5.39	5.25	5.32
Moisture NIR	% by weight	Near-Infra Red (NIR)	5.51	5.47	5.49	5.12	5.13	5.13	5.65	5.62	5.64
Oleic Acid	% by weight	N/A									
Linoleic Acid	% by weight	N/A									
Linolenic Acid	% by weight	N/A									
Free Fatty Acid	% by weight	N/A									

			Lab	M								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL										
Impurities	% by weight										
Oil NIR (Clean Seed)	% by weight										
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight										
Moisture NIR	% by weight										
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	29.03.2018		Lab	O								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL		67.76	67.70	67.73	64.98	64.98	64.98	68.28	68.24	68.26
Impurities	% by weight	AOF 4-1.2	2.40	2.40	2.40	1.30	1.30	1.30	1.00	1.00	1.00
Oil NIR (Clean Seed)	% by weight	NIR	46.50	46.47	46.49	49.86	49.85	49.86	44.04	44.01	44.03
Oil Solvent (Clean Seed)	% by weight	AOF 4-1.5 FOSFA	47.46	47.77	47.62	52.04	52.02	52.03	44.80	43.80	44.30
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight	AOF-1.5	5.36	5.32	5.34	4.81	4.80	4.81	5.47	5.44	5.46
Moisture NIR	% by weight	NIR	4.73	4.71	4.72	4.38	4.36	4.37	4.69	4.72	4.71
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight	AOF 4-2.19	0.10	0.18	0.14	0.11	0.11	0.11	0.14	0.08	0.11

Reporting Date	29.03.2018		Lab	R								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL	½ litre measure & electronic balance	67.20	67.40	67.30	66.60	65.90	66.25	68.30	68.10	68.20
Impurities	% by weight	Hand sieve (3.0/1.0mm), aspirate & hand pick	1.10	0.80	0.95	0.80	0.80	0.80	0.60	0.40	0.50
Oil NIR (Clean Seed)	% by weight	Infratec 1241 Serial No: 91724323	47.03	46.65	46.84	49.94	49.70	49.82	44.12	44.08	44.10
Oil Solvent (Clean Seed)	% by weight										
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight	10g @ 130 oC for 1hr in duplicate (AOF method)	5.34	5.31	5.33	4.80	4.78	4.79	5.47	5.48	5.48
Moisture NIR	% by weight	Infratec 1241 Serial No: 91724323	4.59	4.72	4.66	4.27	4.34	4.31	4.72	4.80	4.76
Oleic Acid	% by weight										
Linoleic Acid	% by weight										
Linolenic Acid	% by weight										
Free Fatty Acid	% by weight										

Reporting Date	29/03/2018		Lab	S								
				Sample 1			Sample 2			Sample 3		
Parameter	Unit	Method	Result A	Result B	Average	Result A	Result B	Average	Result A	Result B	Average
Test Weight	kg/hL	TP 16	66.10	65.90	66.00	65.30	64.70	65.00	67.40	67.70	67.55
Impurities	% by weight	TP 52	0.46	0.54	0.50	0.59	0.61	0.60	0.37	0.35	0.36
Oil NIR (Clean Seed)	% by weight	TP 54	47.00	46.10	46.55	50.00	49.80	49.90	43.70	43.60	43.65
Oil Solvent (Clean Seed)	% by weight	TP 53	46.00	46.60	46.30	50.00	50.30	50.15	43.10	42.90	43.00
Oil SFE Extraction	% by weight										
Moisture Oven	% by weight	TP 22	5.40	5.40	5.40	4.80	4.70	4.75	5.50	5.40	5.45
Moisture NIR	% by weight	TP 54	4.90	4.90	4.90	4.60	4.60	4.60	5.00	5.00	5.00
Oleic Acid	% by weight	TP 47	58.70	58.90	58.80	61.10	61.00	61.05	62.40	62.40	62.40
Linoleic Acid	% by weight	TP 47	22.80	22.70	22.75	21.80	21.80	21.80	21.70	21.70	21.70
Linolenic Acid	% by weight	TP 47	10.80	10.70	10.75	9.70	9.70	9.70	8.40	8.40	8.40
Free Fatty Acid	% by weight	TP 46	0.08	0.10	0.09	0.10	0.09	0.10	0.10	0.11	0.11