ABB Grain Ltd   ABN 59 084 962 130

08/09 AOF Test Check Program Monthly Report
Round 5
April 2009
3/04/2009 - 01/05/2009

Result Receival Dates

Lab Code	Date
M	21-Apr-05
A	08-Apr-09
J	09-Apr-09
E	14-Apr-09
K	17-Apr-09
I	21-Apr-09
L	27-Apr-09
D	29-Apr-09
H	29-Apr-09
B	01-May-09
F	01-May-09
O	04-May-09
N	05-May-09
C	**Not received**
G	**Not received**

Discussion of Results

Test Weight

Lab D submitted results significantly lower than the mean and recorded outliers for all three samples. The lab generated the highest average absolute difference of 8.24.

Impurities

Lab K produced an outlier for sample 3 with a mean difference of -0.68. Lab A submitted results lower than the mean and produced the highest average absolute difference of 0.50. Lab E was the best performer this round producing an average absolute difference of 0.03.

Oil Rapid

Lab A submitted significantly low results for all three samples this round with outliers produced for samples 2 and 3. The lab generated the highest average absolute difference of 1.59.

Oil Solvent

Lab F submitted results lower than the mean and generated an outlier for sample 2. The lab also generated the highest average absolute difference of 0.91.

Oil Solvent (AOCS Method Am 2-93)

No outliers were produced by the participating laboratories for this method.

Oil SFE

No labs submitted results for Oil SFE this round.

Moisture Oven

The result produced by lab D for sample 2 was significantly lower than the mean, recording the highest absolute average difference of 0.67. Lab K submitted the best results to achieve a low average absolute difference of 0.02.

Moisture Rapid

The results produced by lab A were significantly higher than the mean with outliers for all three samples recording the highest absolute average difference of 0.82. Lab M submitted the best results to achieve a low average absolute difference of 0.04.

Oleic Oil

Lab D submitted results significantly higher than the mean and recorded outliers for all three samples. The lab generated the highest average absolute difference of 3.41. Lab F was the best performer this round producing an average absolute difference of 0.08.

Linoleic Oil

Lab D and H submitted outliers for this method for sample 1 and 2. Both labs generated the highest absolute average differences of 1.14 and 1.01.

Free Fatty Acid

Lab E produced an outlier for sample 3 with a mean difference of 0.29 and the highest average absolute difference of 0.51. Lab F generated the second highest absolute average difference of 0.49.
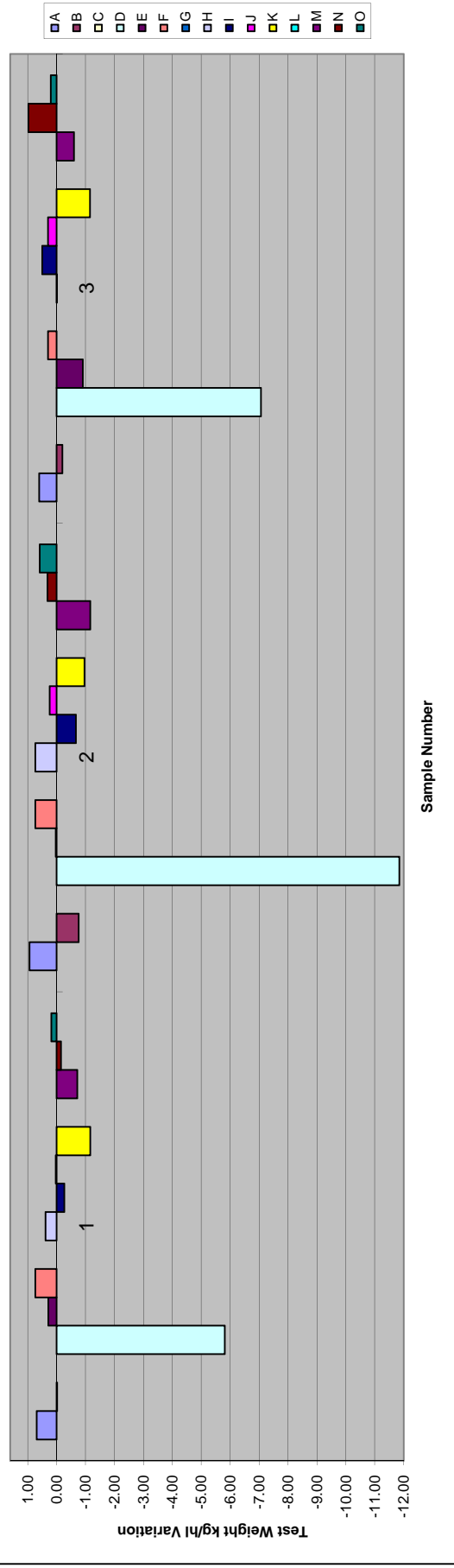
2008/2009 AOF Test Check Program
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Test Weight Average Absolute Difference

Test Weight kg/hl

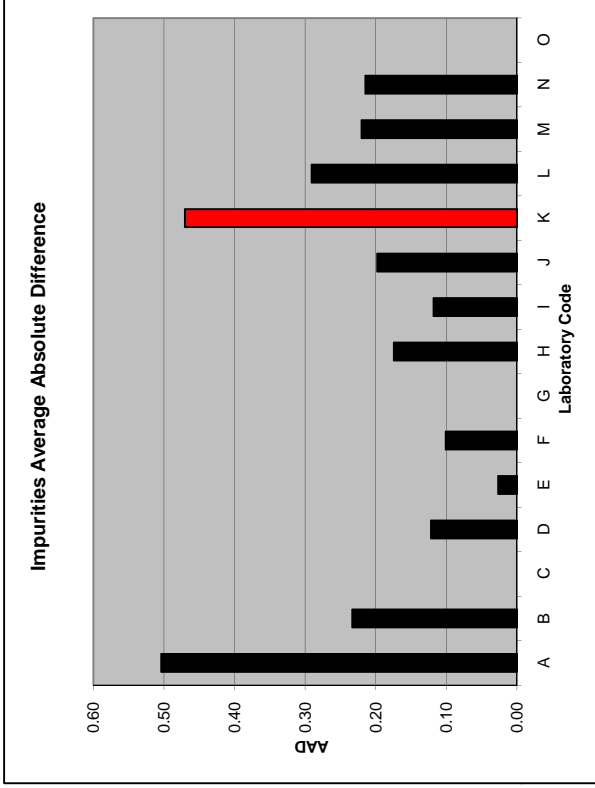| Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A	68.70	0.69	69.70	0.93	68.80	0.60	0.74	0.74
B	68.00	-0.01	68.00	-0.77	68.00	-0.20	-0.33	0.33
C								
D	62.20	-5.81	56.92	-11.85	61.14	-7.07	-8.24	8.24
E	68.30	0.29	68.80	0.03	67.30	-0.90	-0.19	0.41
F	68.75	0.74	69.50	0.73	68.50	0.30	0.59	0.59
G								
H	68.40	0.39	69.50	0.73	68.20	0.00	0.37	0.37
I	67.75	-0.26	68.10	-0.67	68.70	0.50	-0.14	0.48
J	68.05	0.03	69.01	0.24	68.50	0.29	0.19	0.19
K	66.85	-1.16	67.80	-0.97	67.05	-1.15	-1.09	1.09
L								
M	67.30	-0.71	67.60	-1.17	67.60	-0.60	-0.83	0.83
N	67.87	-0.15	69.08	0.31	69.18	0.98	0.38	0.48
O	68.20	0.19	69.35	0.58	68.40	0.20	0.32	0.32
MEAN	68.01		68.77		68.20			1.17
STDEV	0.57		0.76		0.66			
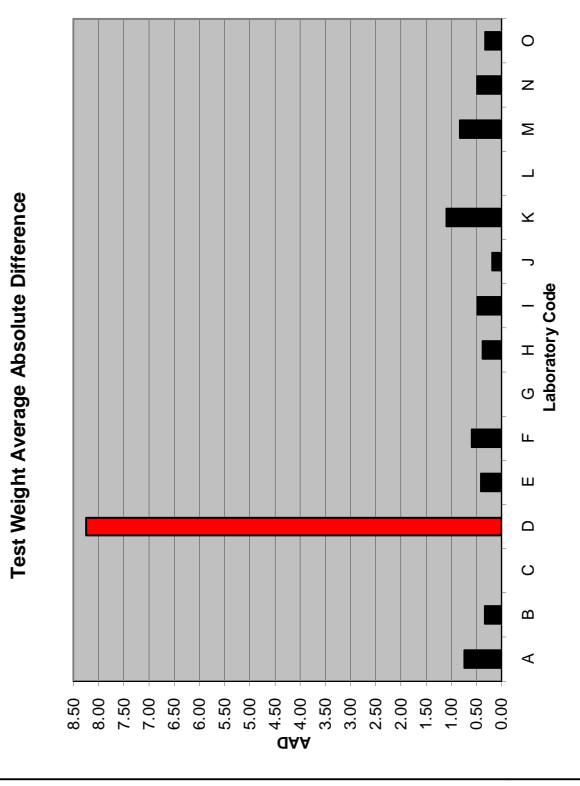
Test Weight kg/hl Deviation from the Mean

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Impurities %

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A	0.95	-0.62	0.35	-0.46	0.95	-0.43	-0.50	0.50
B	2.05	0.48	0.97	0.16	1.45	0.06	0.23	0.23
C								
D	1.42	-0.15	0.85	0.05	1.22	-0.17	-0.09	0.12
E	1.63	0.05	0.83	0.02	1.38	0.00	0.02	0.03
F	1.75	0.18	0.80	-0.01	1.50	0.12	0.10	0.10
G								
H	1.55	-0.03	0.95	0.14	1.74	0.36	0.16	0.17
I	1.75	0.18	0.85	0.04	1.25	-0.13	0.03	0.12
J	1.85	0.28	1.11	0.30	1.40	0.02	0.20	0.20
K	1.00	-0.57	0.65	-0.16	0.70	-0.68	-0.47	0.47
L	1.80	0.23	0.58	-0.23	1.80	0.42	0.14	0.29
M	1.25	-0.32	0.65	-0.16	1.20	-0.18	-0.22	0.22
N	1.87	0.30	1.10	0.29	1.33	-0.05	0.18	0.21
O								
MEAN	1.57		0.81		1.38			0.22
STDEV	0.35		0.22		0.24			

Impurities Average Absolute Difference

AAD / Laboratory Code

Impurities % Deviation from the Mean Result
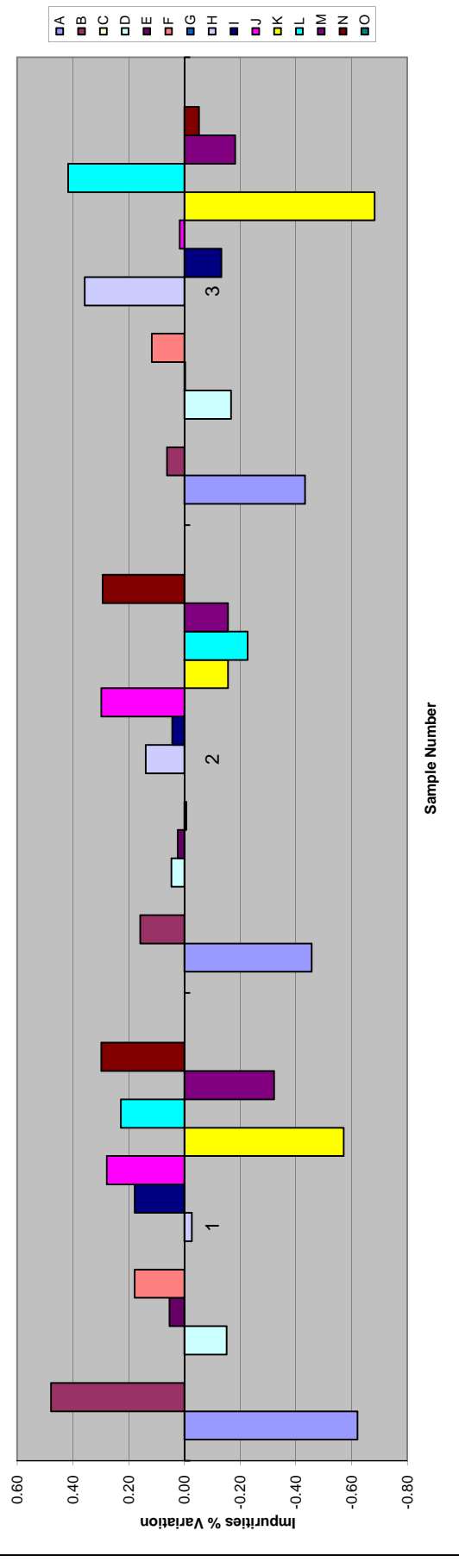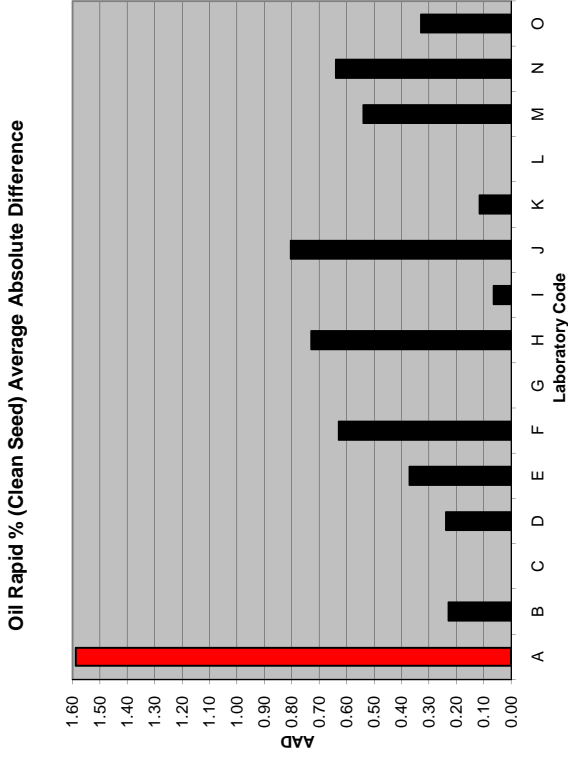
Impurities % Variation / Sample Number

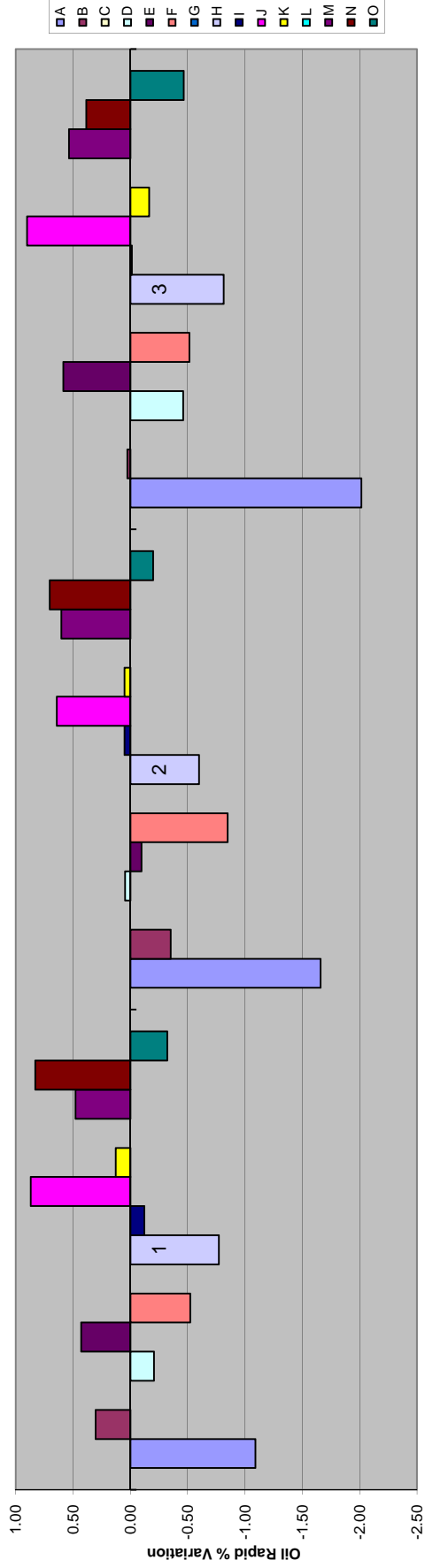Oil Rapid % (Clean Seed) Deviation from the Mean

2008/2009 AOF Test Check Program
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Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A	38.08	-1.09	40.39	-1.66	36.60	-2.01	-1.59	1.59
B	39.48	0.30	41.70	-0.35	38.64	0.03	-0.01	0.23
C								
D	38.97	-0.21	42.10	0.05	38.16	-0.46	-0.21	0.24
E	39.60	0.43	41.95	-0.10	39.20	0.59	0.31	0.37
F	38.65	-0.52	41.20	-0.85	38.10	-0.51	-0.63	0.63
G								
H	38.40	-0.77	41.45	-0.60	37.80	-0.81	-0.73	0.73
I	39.05	-0.12	42.10	0.05	38.60	-0.01	-0.03	0.06
J	40.04	0.87	42.69	0.64	39.52	0.90	0.80	0.80
K	39.30	0.13	42.10	0.05	38.45	-0.16	0.01	0.11
L								
M	39.65	0.48	42.65	0.60	39.15	0.54	0.54	0.54
N	40.00	0.83	42.75	0.70	39.00	0.39	0.64	0.64
O	38.85	-0.32	41.85	-0.20	38.15	-0.46	-0.33	0.33
MEAN	39.17		42.05		38.61			0.52
STDEV	0.62		0.50		0.55			

Oil Rapid % (Clean Seed) Average Absolute Difference

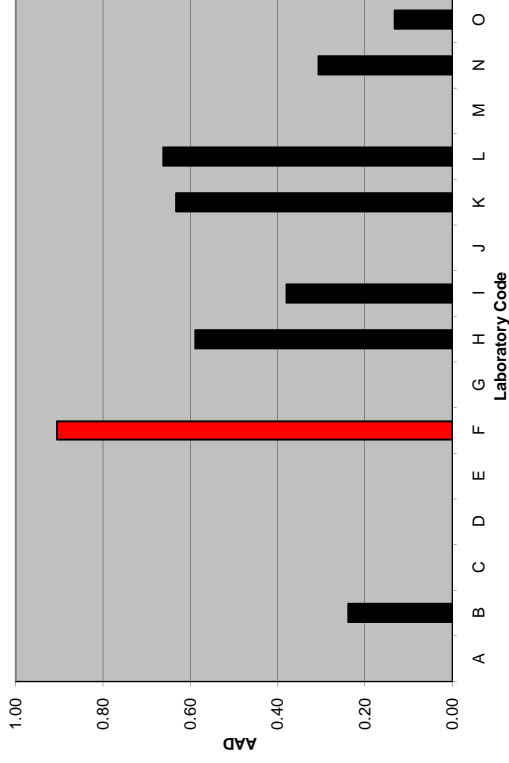Oil Rapid % (Clean Seed) Deviation from the Mean Result

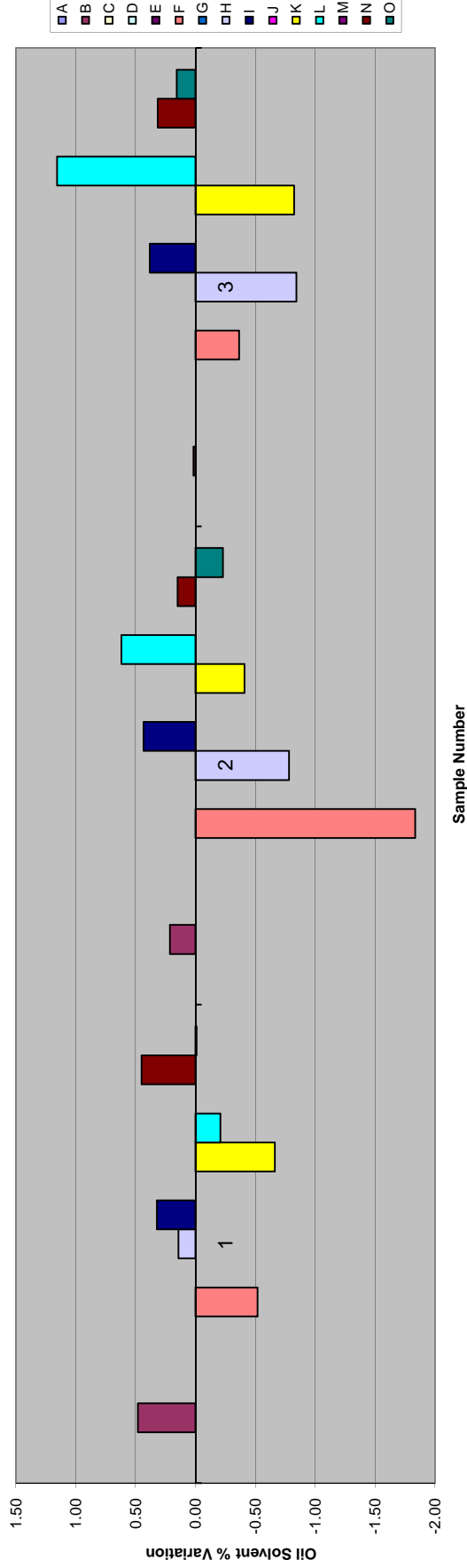Oil Solvent % (Clean Seed) Deviation from the Mean

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B	39.64	0.48	42.35	0.22	38.46	0.02	0.24	0.24
C								
D								
E								
F	38.64	-0.52	40.30	-1.83	38.08	-0.36	-0.91	0.91
G								
H	39.30	0.14	41.35	-0.78	37.60	-0.84	-0.49	0.59
I	39.48	0.32	42.57	0.44	38.83	0.38	0.38	0.38
J								
K	38.50	-0.66	41.72	-0.41	37.62	-0.82	-0.63	0.63
L	38.95	-0.21	42.75	0.62	39.60	1.16	0.52	0.66
M								
N	39.61	0.45	42.28	0.15	38.76	0.32	0.31	0.31
O	39.15	-0.01	41.90	-0.23	38.60	0.16	-0.03	0.13
MEAN	39.16		42.13		38.44			0.48
STDEV	0.43		0.50		0.67			

Oil Rapid % (Clean Seed) Average Absolute Difference

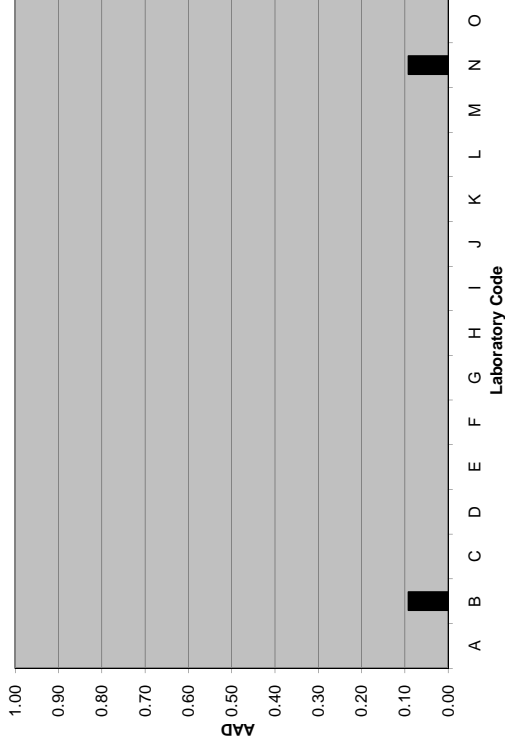Oil Solvent % (Clean Seed) Deviation from the Mean Result

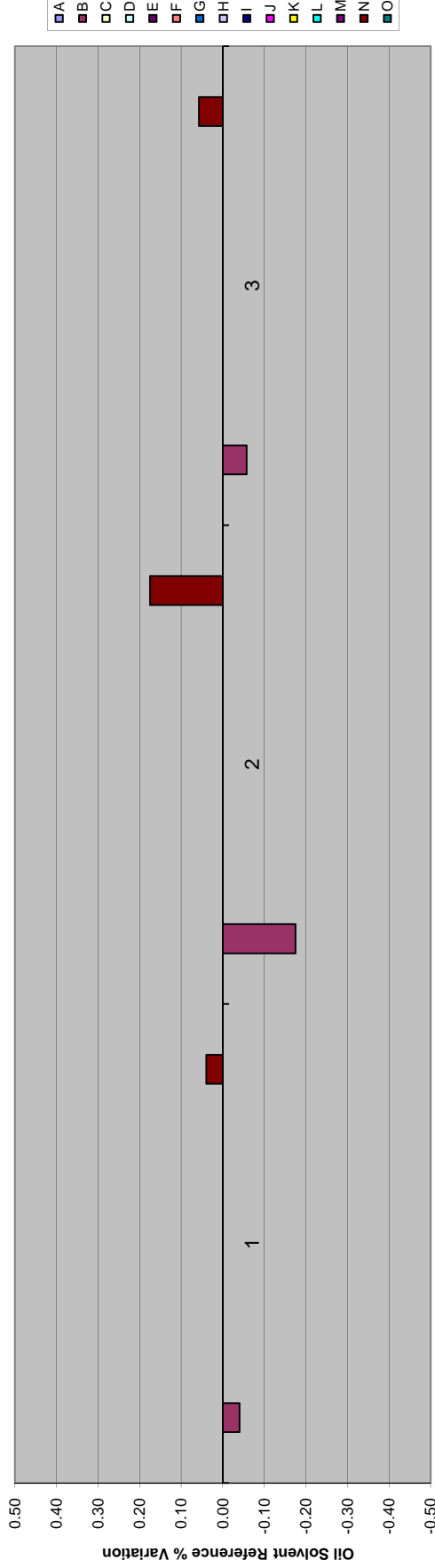Oil Solvent Reference % (Clean Seed) Deviation from the Mean

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Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B	39.58	-0.04	41.98	-0.18	38.54	-0.06	-0.09	0.09
C								
D								
E								
F								
G								
H								
I								
J								
K								
L								
M								
N	39.66	0.04	42.33	0.18	38.66	0.06	0.09	0.09
O								
MEAN	39.62		42.15		38.60			0.09
STDEV	0.06		0.25		0.08			

Oil Solvent Reference % (Clean Seed) Average Absolute Difference

AAD (y-axis: 0.00–1.00); Laboratory Code (x-axis: A B C D E F G H I J K L M N O)

Oil Solvent Reference % (Clean Seed) Deviation from the Mean Result

Oil Solvent Reference % Variation (y-axis: 0.50 to -0.50); Sample Number (x-axis: 1, 2, 3)

Legend: A B C D E F G H I J K L M N O

Oil SFE% Deviation from the Mean

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B								
C								
D								
E								
F								
G								
H								
I								
J								
K								
L								
M								
N								#DIV/0!
O								
MEAN	#DIV/0!		#DIV/0!		#DIV/0!			
STDEV	#DIV/0!		#DIV/0!		#DIV/0!			

Oil SFE % Average Absolute Difference
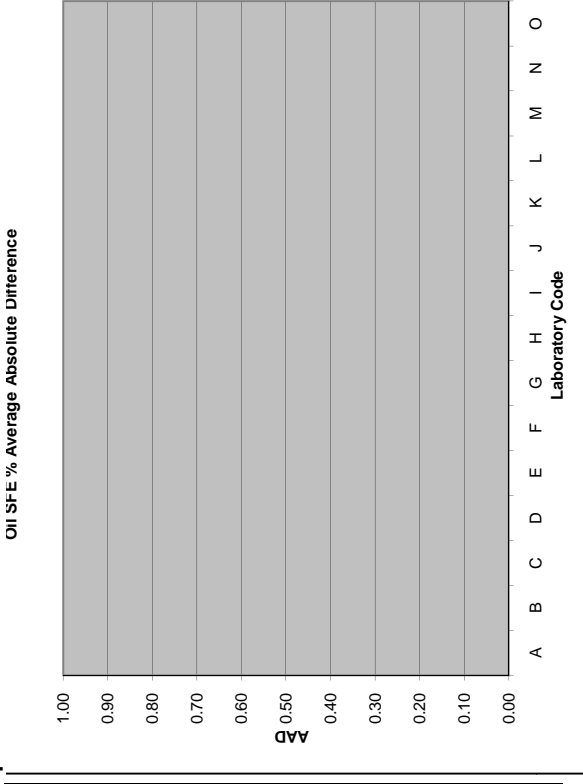
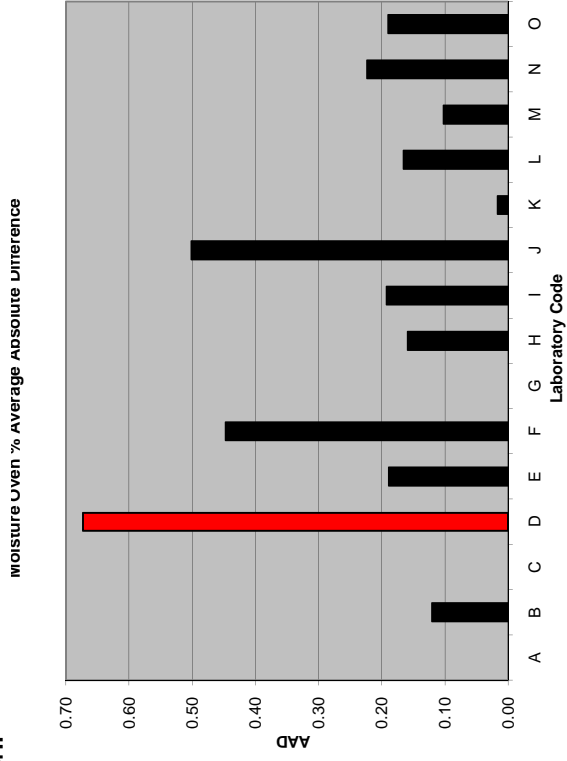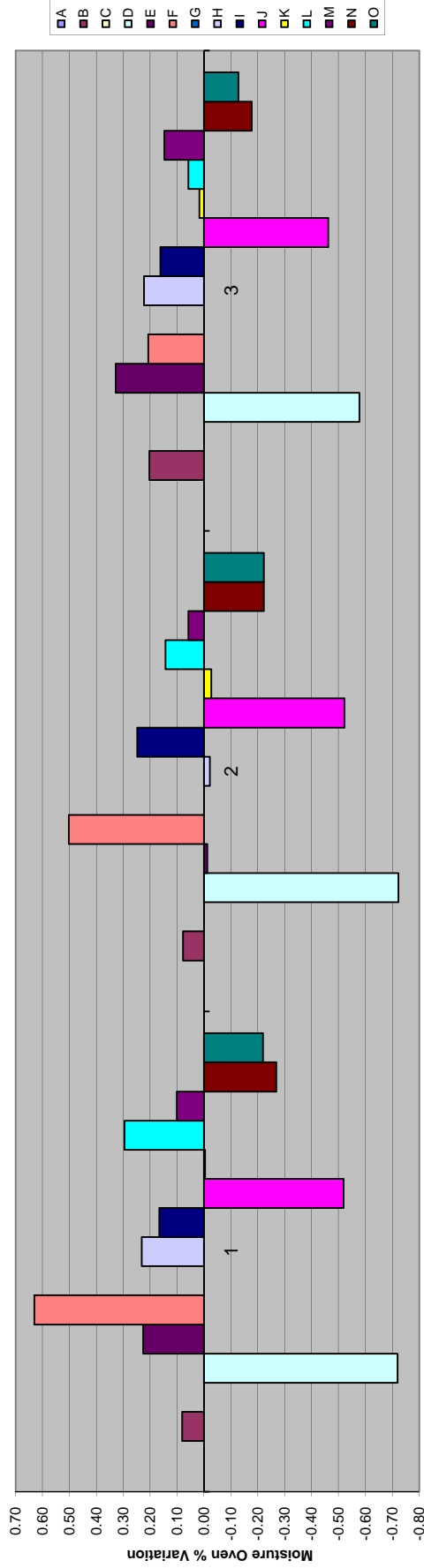**Oil SFE % Deviation from the Mean Result**

Moisture Oven % Deviation from the Mean

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B	6.20	0.08	6.30	0.08	6.43	0.20	0.12	0.12
C								
D	5.40	-0.72	5.50	-0.72	5.65	-0.58	-0.67	0.67
E	6.35	0.23	6.21	-0.01	6.56	0.33	0.18	0.19
F	6.75	0.63	6.73	0.50	6.44	0.21	0.45	0.45
G								
H	6.35	0.23	6.20	-0.02	6.45	0.22	0.14	0.16
I	6.29	0.17	6.47	0.25	6.39	0.16	0.19	0.19
J	5.60	-0.52	5.70	-0.52	5.77	-0.46	-0.50	0.50
K	6.12	0.00	6.20	-0.03	6.25	0.02	0.00	0.02
L	6.42	0.30	6.37	0.14	6.29	0.06	0.17	0.17
M	6.22	0.10	6.28	0.06	6.38	0.15	0.10	0.10
N	5.85	-0.27	6.00	-0.22	6.05	-0.18	-0.22	0.22
O	5.90	-0.22	6.00	-0.22	6.10	-0.13	-0.19	0.19
MEAN	6.12		6.22		6.23			0.25
STDEV	0.37		0.27		0.28			

Moisture Oven % Average Absolute Difference

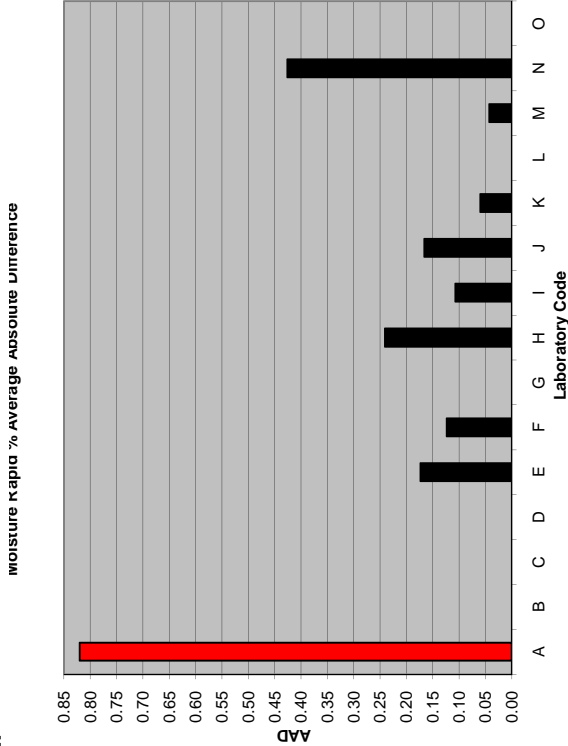Moisture Oven % Deviation from the Mean Result
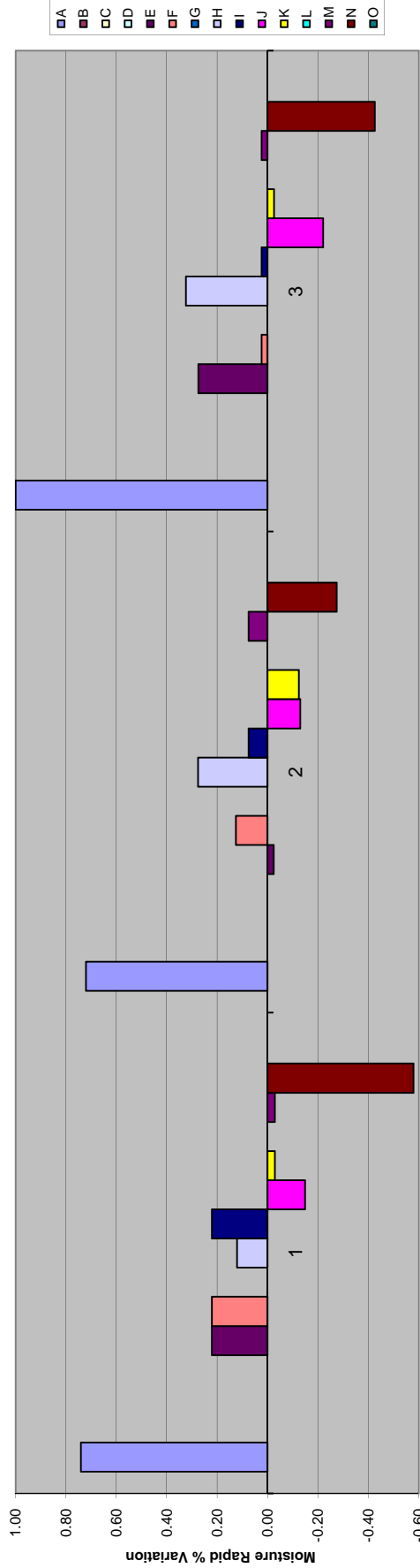
Moisture Rapid % Deviation from the Mean

Moisture Rapid % Average Absolute Difference

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1 Result	Sample 1 S1-Mean	Sample 2 Result	Sample 2 S2-Mean	Sample 3 Result	Sample 3 S3-Mean	Mean of Differences	Average Absolute Difference
A	6.97	0.74	6.85	0.72	7.33	1.00	0.82	0.82
B								
C								
D								
E	6.45	0.22	6.10	-0.02	6.60	0.27	0.16	0.17
F	6.45	0.22	6.25	0.13	6.35	0.02	0.12	0.12
G								
H	6.35	0.12	6.40	0.28	6.65	0.32	0.24	0.24
I	6.45	0.22	6.20	0.08	6.35	0.02	0.11	0.11
J	6.08	-0.15	6.00	-0.13	6.11	-0.22	-0.17	0.17
K	6.20	-0.03	6.00	-0.12	6.30	-0.03	-0.06	0.06
L								
M	6.20	-0.03	6.20	0.08	6.35	0.02	0.02	0.04
N	5.65	-0.58	5.85	-0.27	5.90	-0.43	-0.43	0.43
O								
MEAN	6.23		6.12		6.33			0.24
STDEV	0.27		0.17		0.24			

Moisture Rapid % Average Absolute Difference

AAD vs Laboratory Code bar chart (Labs A–O)

Moisture Rapid % Deviation from the Mean Result

Moisture Rapid % Variation vs Sample Number (Samples 1, 2, 3), legend A–O

Oleic % Oil Deviation from the Mean

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Lab	Sample 1 Result	S1-Mean	Sample 2 Result	S2-Mean	Sample 3 Result	S3-Mean	Mean of Differences	Average Absolute Difference
A								
B	59.64	-0.32	62.10	-0.32	59.67	-0.86	-0.50	0.50
C								
D	64.03	4.07	65.43	3.01	63.69	3.16	3.41	3.41
E								
F	59.85	-0.11	62.35	-0.07	60.60	0.07	-0.03	0.08
G								
H	59.15	-0.81	62.70	0.28	61.35	0.82	0.10	0.64
I								
J								
K								
L	60.36	0.40	61.89	-0.53	59.63	-0.90	-0.34	0.61
M								
N								
O	60.80	0.84	63.05	0.63	61.40	0.87	0.78	0.78
MEAN	59.96		62.42		60.53			1.00
STDEV	0.64		0.47		0.87			

Oleic Oil % Average Absolute Difference

Laboratory Code

Oleic % Oil Deviation from the Mean Result

Sample Number

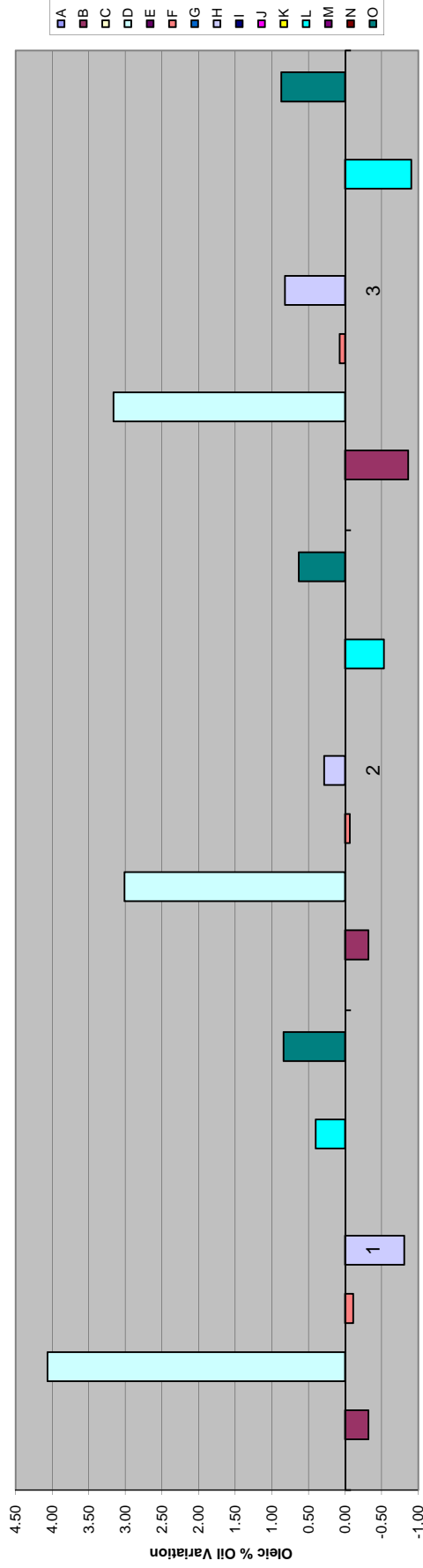**Linoleic % Oil Deviation from the Mean**

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B	20.63	0.35	19.10	0.09	20.42	0.39	0.27	0.27
C								
D	18.93	-1.35	17.85	-1.16	19.12	-0.91	-1.14	1.14
E								
F	20.05	-0.23	18.80	-0.20	19.80	-0.23	-0.22	0.22
G								
H	21.95	1.67	19.90	0.90	20.50	0.47	1.01	1.01
I								
J								
K								
L	20.14	-0.14	19.23	0.22	20.60	0.57	0.22	0.31
M								
N								
O	20.30	0.02	18.90	-0.11	19.75	-0.28	-0.12	0.14
MEAN	20.28		19.01		20.03			0.52
STDEV	0.25		0.19		0.58			

Linoleic Oil % Average Absolute Difference
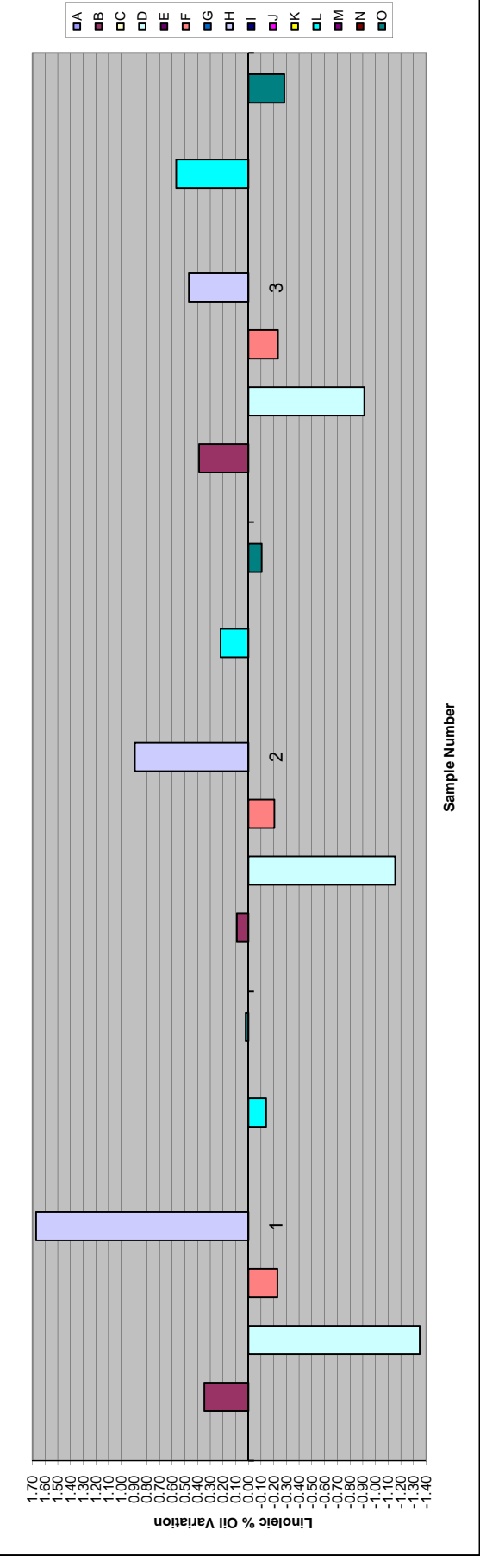
Laboratory Code

Linoleic % Oil Deviation from the Mean Result

Sample Number

Free Fatty Acid % Oil Deviation from the Mean

2008/2009 AOF Test Check Program
Round 5 Summary - April

Lab	Sample 1		Sample 2		Sample 3		Mean of Differences	Average Absolute Difference
	Result	S1-Mean	Result	S2-Mean	Result	S3-Mean		
A								
B	0.74	0.01	0.20	-0.12	0.61	0.02	-0.03	0.26
C								
D	0.72	-0.01	0.34	0.02	0.57	-0.02	0.00	0.30
E	1.02	0.29	0.42	0.10	0.88	0.29	0.23	0.51
F	0.80	0.07	0.53	0.21	0.75	0.16	0.15	0.49
G								
H	0.53	-0.20	0.17	-0.15	0.43	-0.16	-0.17	0.14
I								
J								
K	0.80	0.07	0.25	-0.07	0.58	-0.01	0.00	0.27
L	0.50	-0.23	0.31	-0.01	0.60	0.01	-0.08	0.27
M								
N								
O								
MEAN	0.73		0.32		0.59			0.32
STDEV	0.18		0.13		0.10			

Free Fatty Acid % Average Absolute Difference

Free Fatty Acid % Oil Deviation from the Mean Result