

# **Australian Oilseed Test Check Program 2006/2007**

Coordinator: Dao Ho

ABB Grain Ltd



# 15 Participants

- ABB Grain Ltd
- Agrifood Technology
- Atlantic Pacific Foods
- Cargill Oilseeds
- Cargill Processing
- Casco Agritech
- Co-operative Bulk Handling Ltd
- Department of Primary Industries
- GrainCorp (New South Wales)
- GrainCorp (Queensland)
- GrainCorp (Victoria)
- Mac Smith Milling
- NSW Agriculture
- Riverland Oilseeds
- Overseas Merchandise Inspection Co.



# Quality Parameters

- Test Weight kg/hl
- Impurities %
- Oil % - Rapid  
(Clean Seed Basis)
- Oil % - Solvent  
(Clean Seed Basis)
- Oil % - Solvent  
(Clean Seed Basis)  
AOCS Am 2-93
- Oil % - SFE  
Extraction Moisture  
% Oven
- Moisture % - Rapid
- Oleic (Percent Oil)
- Linoleic (Percent  
Oil)
- Free Fatty Acid  
(Percent of Oil)



# Outlier Determination

To determine outliers we use the formula of 'Q Test for Bad Data' to determine the outliers by standard statistical values. Below is an example of how outliers are determined for an average round of results, with the outliers highlighted in red.

Lab Code	Test Weight kg/hl	Lab Code	Impurities %	Lab Code	Oil Rapid % (Clean)	Lab Code	Oil Solvent % (Clean)
	Result		Result		Result		Result
M	62.1	I	1.2	I	42.5	L	42.3
K	66.5	H	1.4	A	42.9	B	42.9
E	66.8	F	1.5	C	43.3	F	43.4
I	67.2	G	1.5	F	43.7	K	43.8
B	67.5	A	1.88	H	43.8	C	43.8
G	67.6	E	1.9	G	44.2	I	43.8
J	68	K	1.9	D	44.2	H	43.9
F	69.7	L	2	J	44.3	E	44.4
H		M	2.2	E	44.4	J	44.7
A		D	2.2	K	44.5	G	45.1
C		J	2.3	M	45.9	A	
D		C	2.5	B		D	
L		B		L		M	
Mean	66.93	Mean	1.87	Mean	43.97	Mean	43.81
Stdev	2.18	Stdev	0.40	Stdev	0.91	Stdev	0.82
Q1	66.725	Q1	1.5	Q1	43.5	Q1	43.5
Q3	67.7	Q3	2.2	Q3	44.35	Q3	44.275
IQR	0.975	IQR	0.7	IQR	0.85	IQR	0.775
Determine	1.4625	Determine	1.05	Determine	1.275	Determine	1.1625
True Outlier Q1	65.2625	True Outlier Q1	0.45	True Outlier Q1	42.225	True Outlier Q1	42.3375
True Outlier Q3	69.1625	True Outlier Q3	3.25	True Outlier Q3	45.625	True Outlier Q3	45.4375

# Results

The monthly results from the test check program are published on the Australian Oilseeds web site alongside previous seasons of the program.

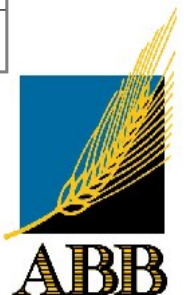
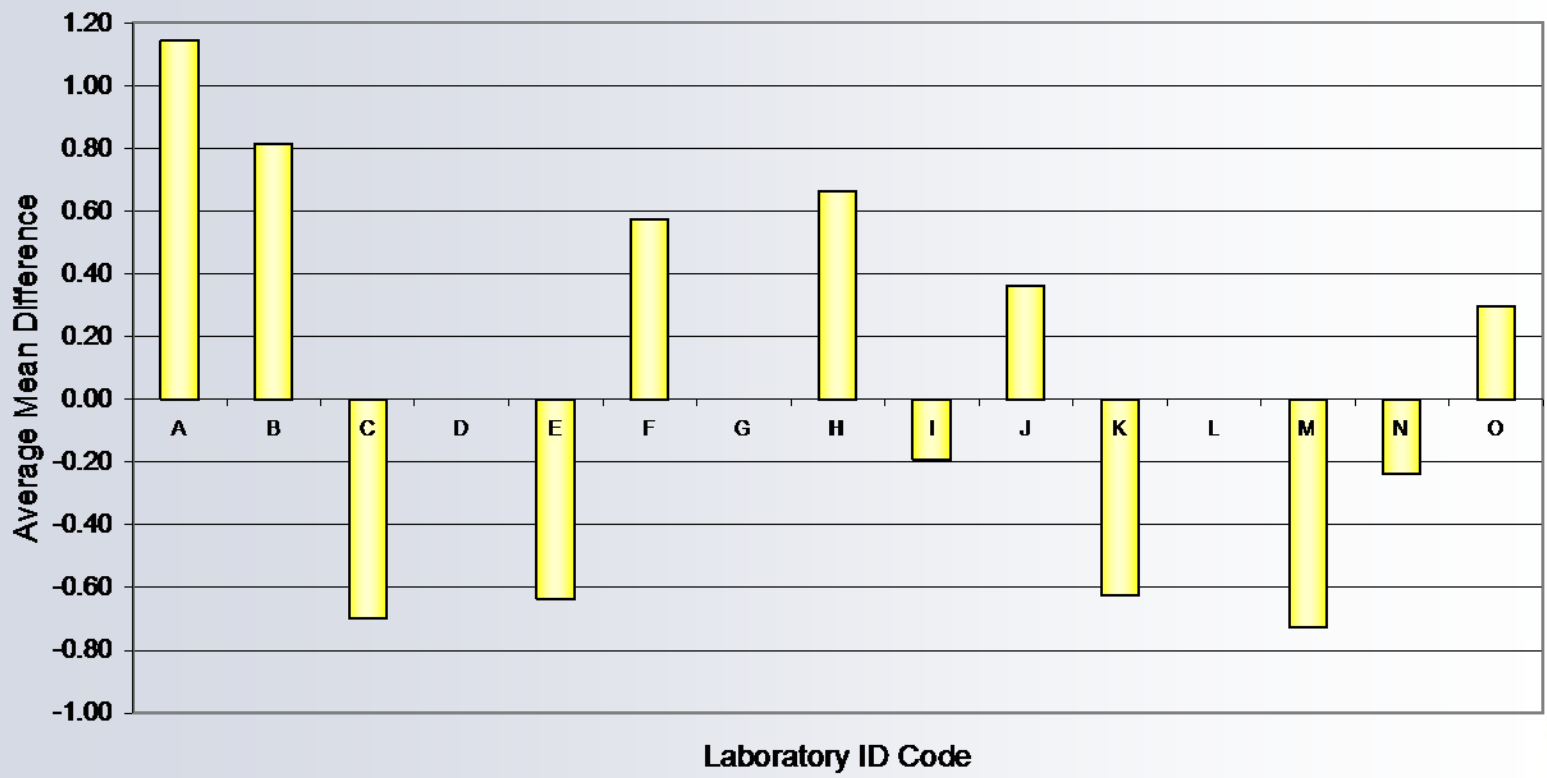
To view all results from 2001 – 2007 visit:

**[www.australianoilseeds.com](http://www.australianoilseeds.com)**



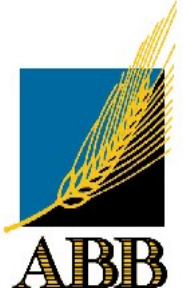
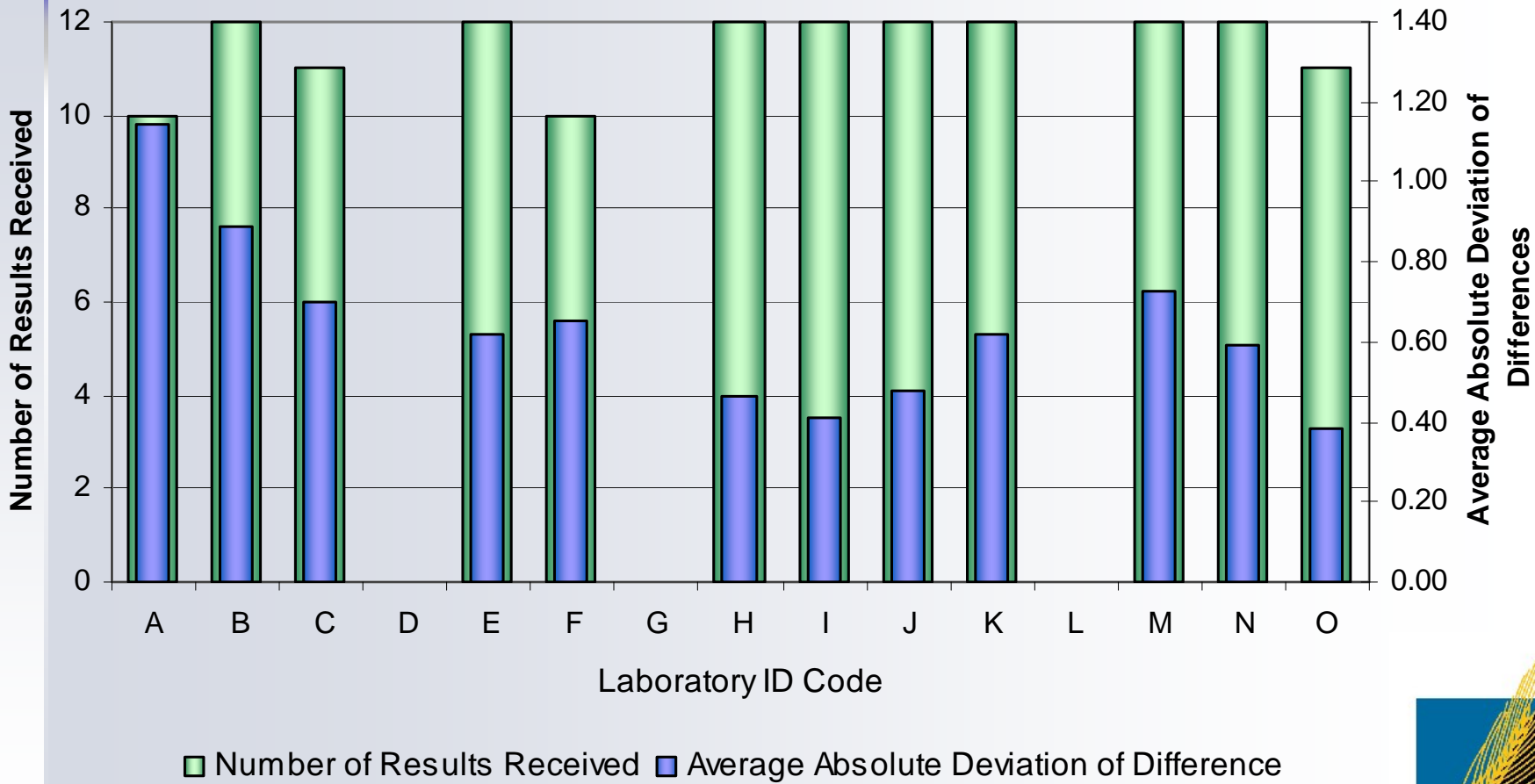
# Test Weight kg/hl

## Average of the Mean Difference

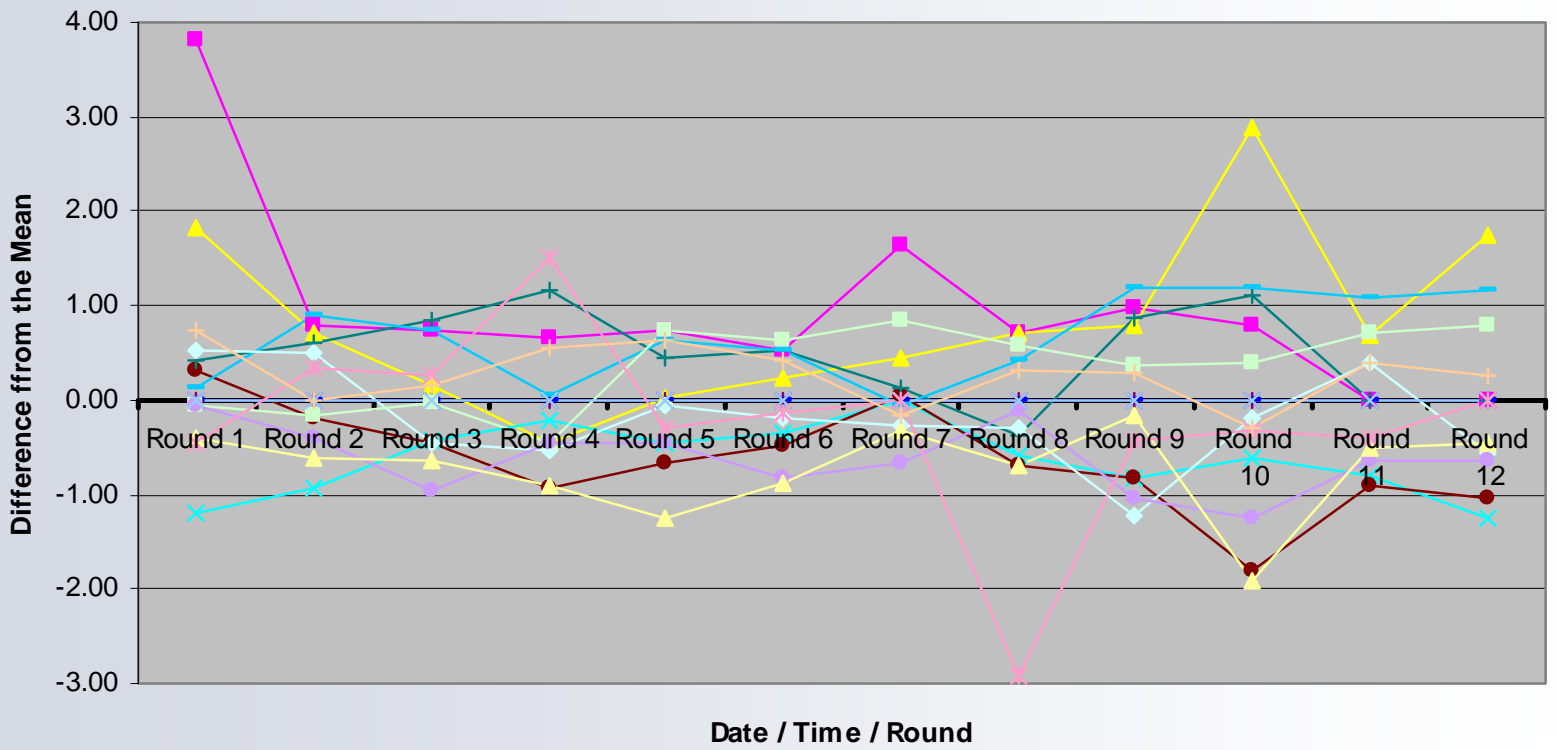


# Test Weight kg/hl

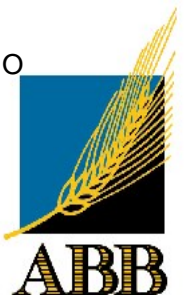
## Average Absolute Deviation of Difference and Number of Results



# Test Weight kg/hl Difference from the Mean vs. Time

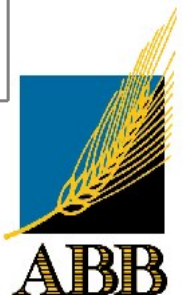
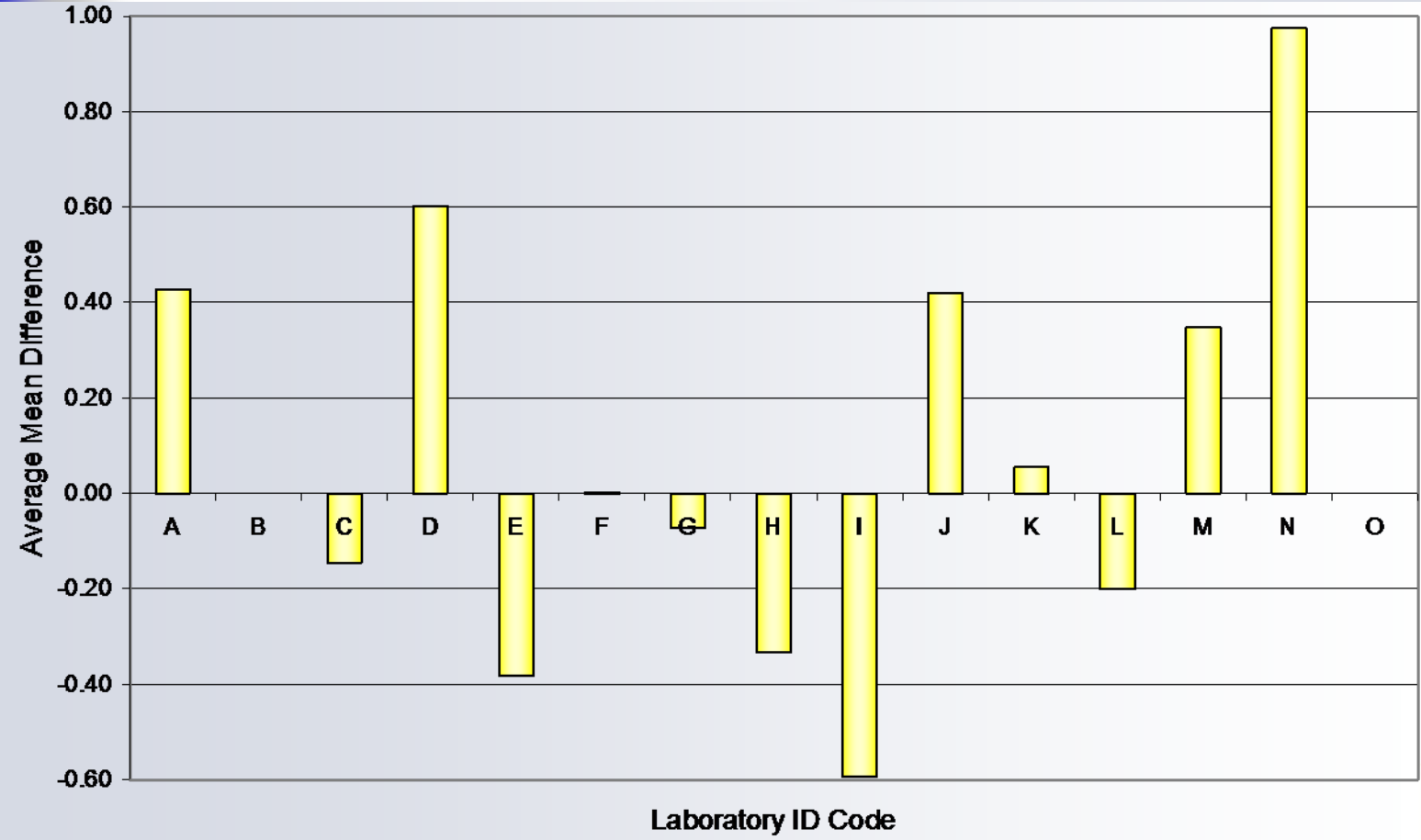


—■— A —▲— B —×— C —\*— D —●— E —+— F —■— G —■— H —■— I —■— J —●— K —×— L —▲— M —\*— N —+— O



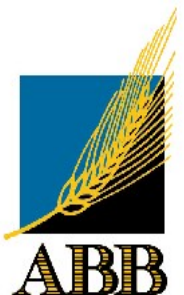
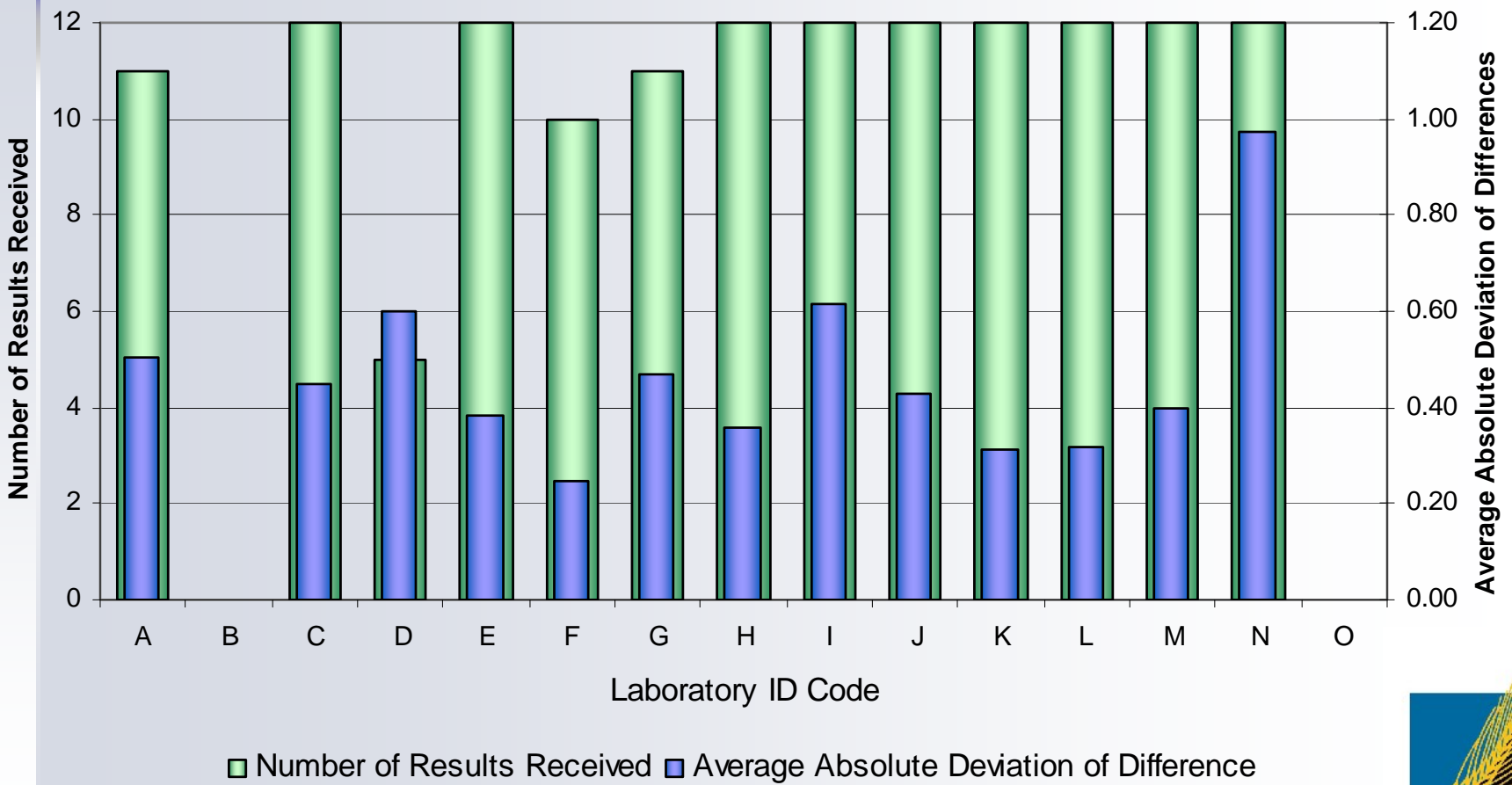


# Impurities % Average Mean Difference

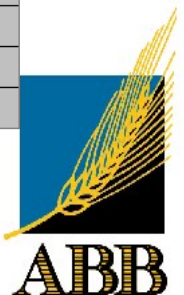
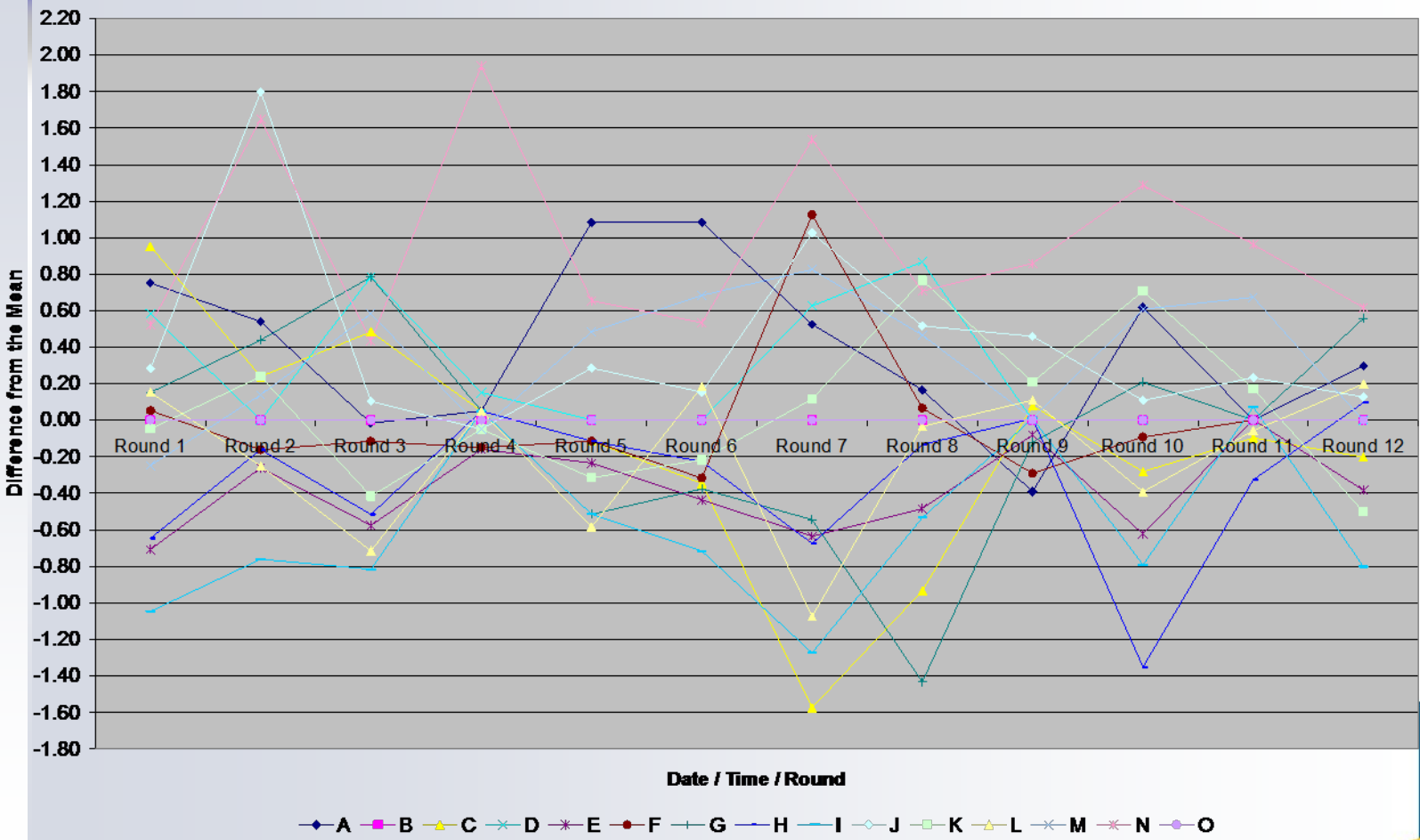


# Impurities %

## Average Absolute Deviation of Difference and Number of Results

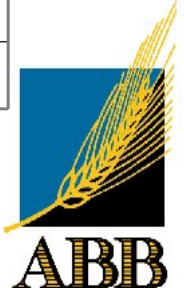
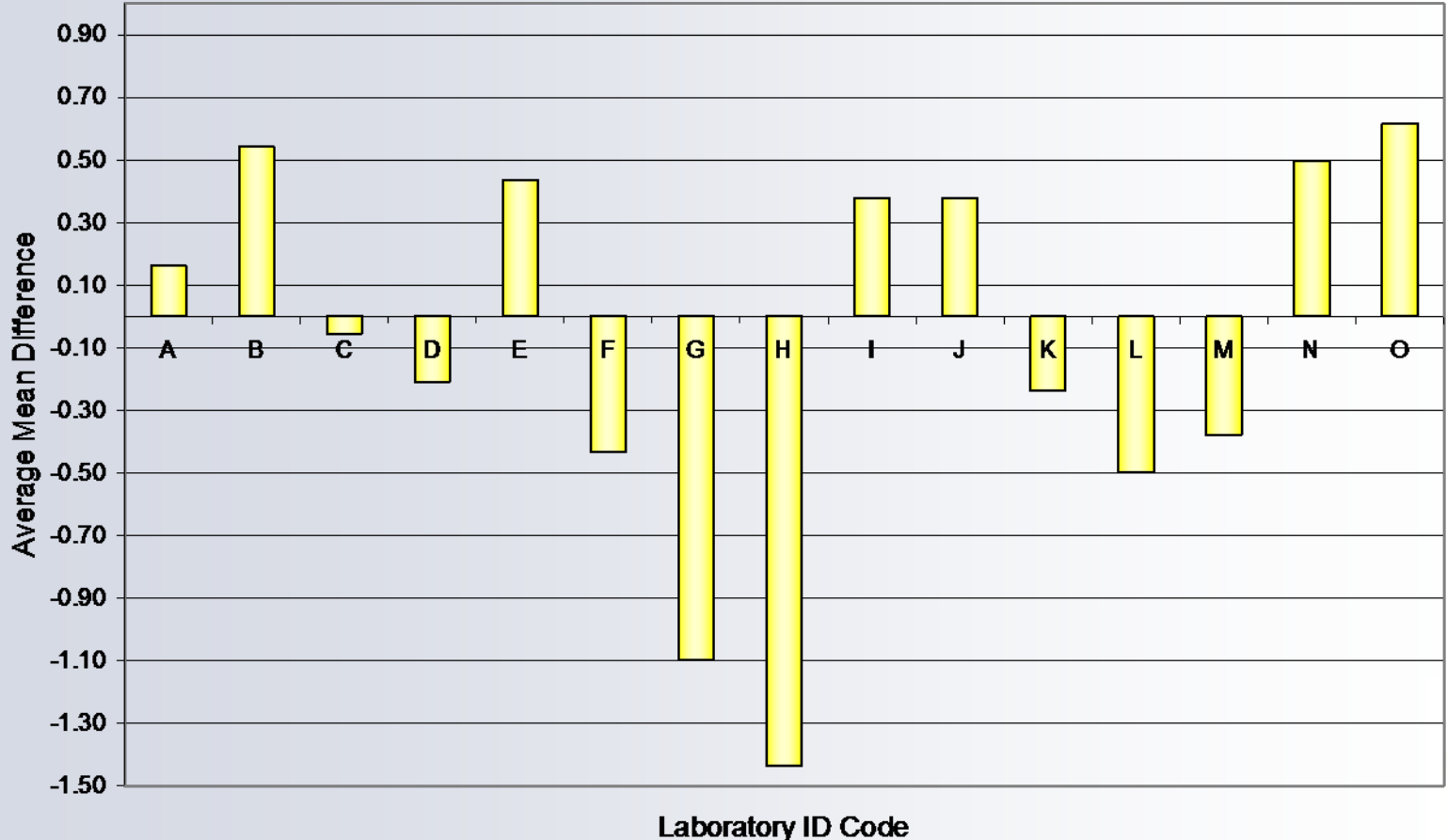


# Impurities % Difference from the Mean vs. Time



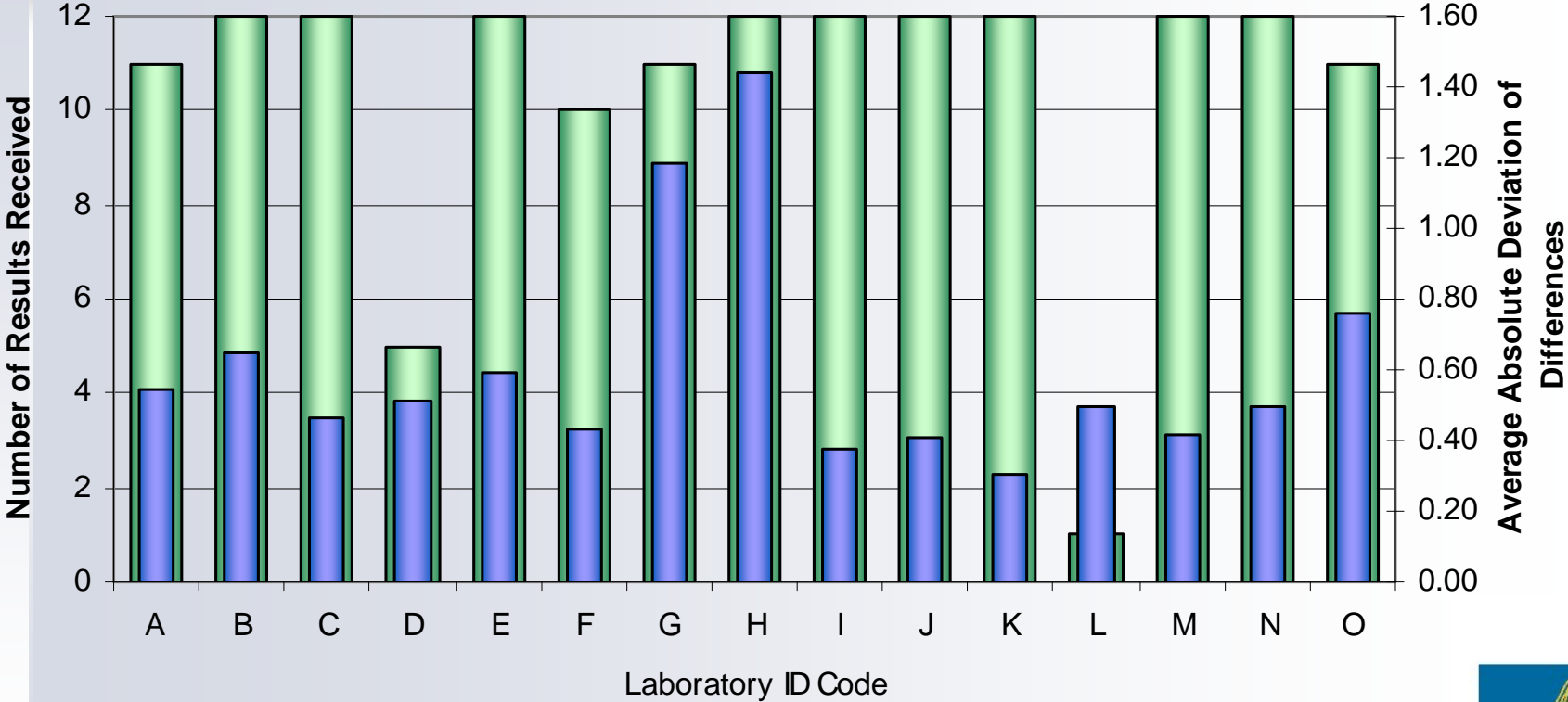
# Oil % - Rapid (Clean Seed Basis)

## Average of the Mean Difference



# Oil % - Rapid (Clean Seed Basis)

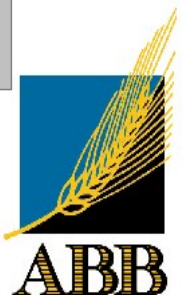
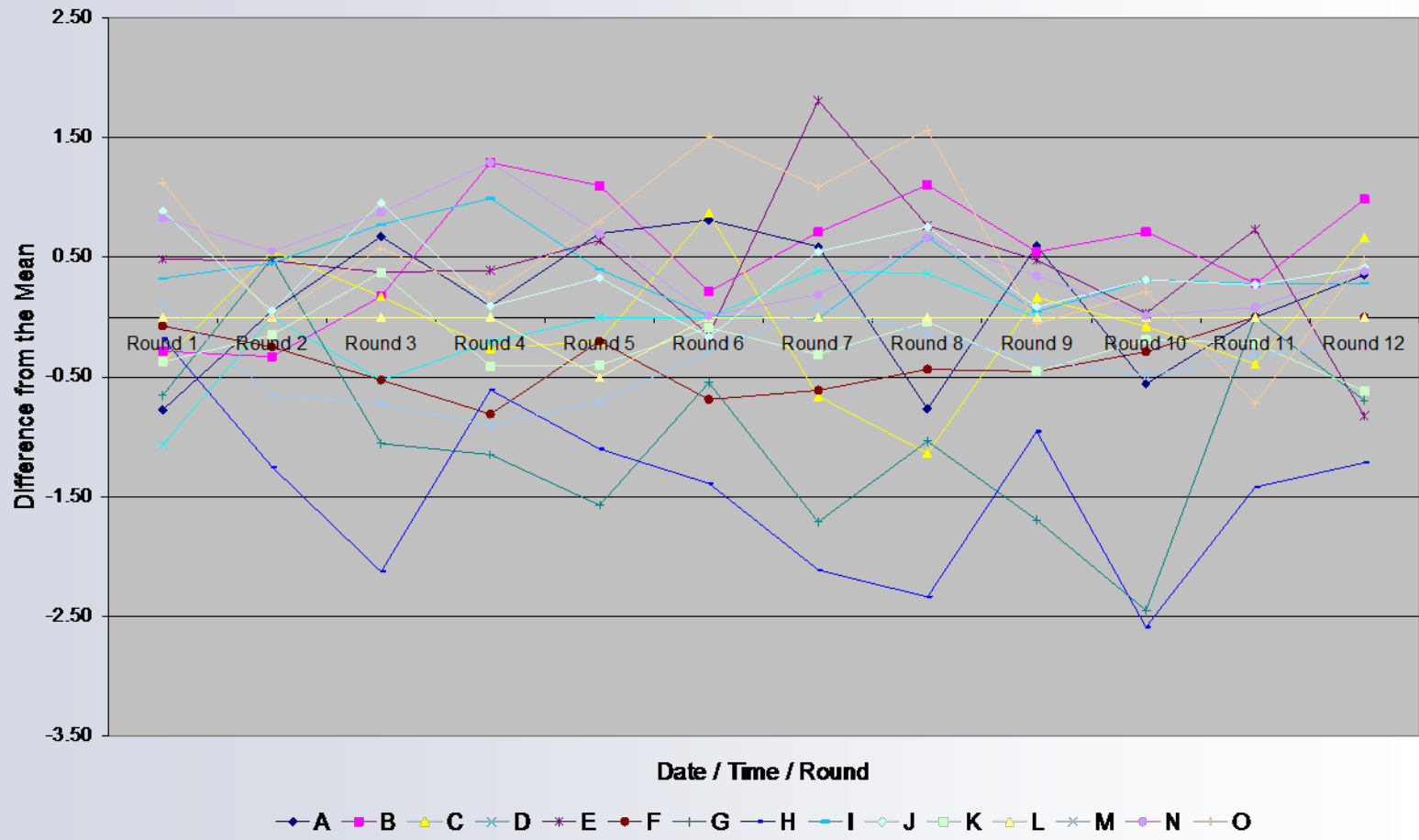
## Average Absolute Deviation of Difference and Number of Results



■ Number of Results Received ■ Average Absolute Deviation of Difference

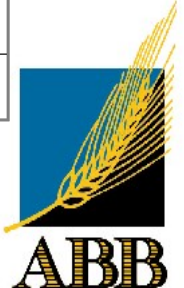
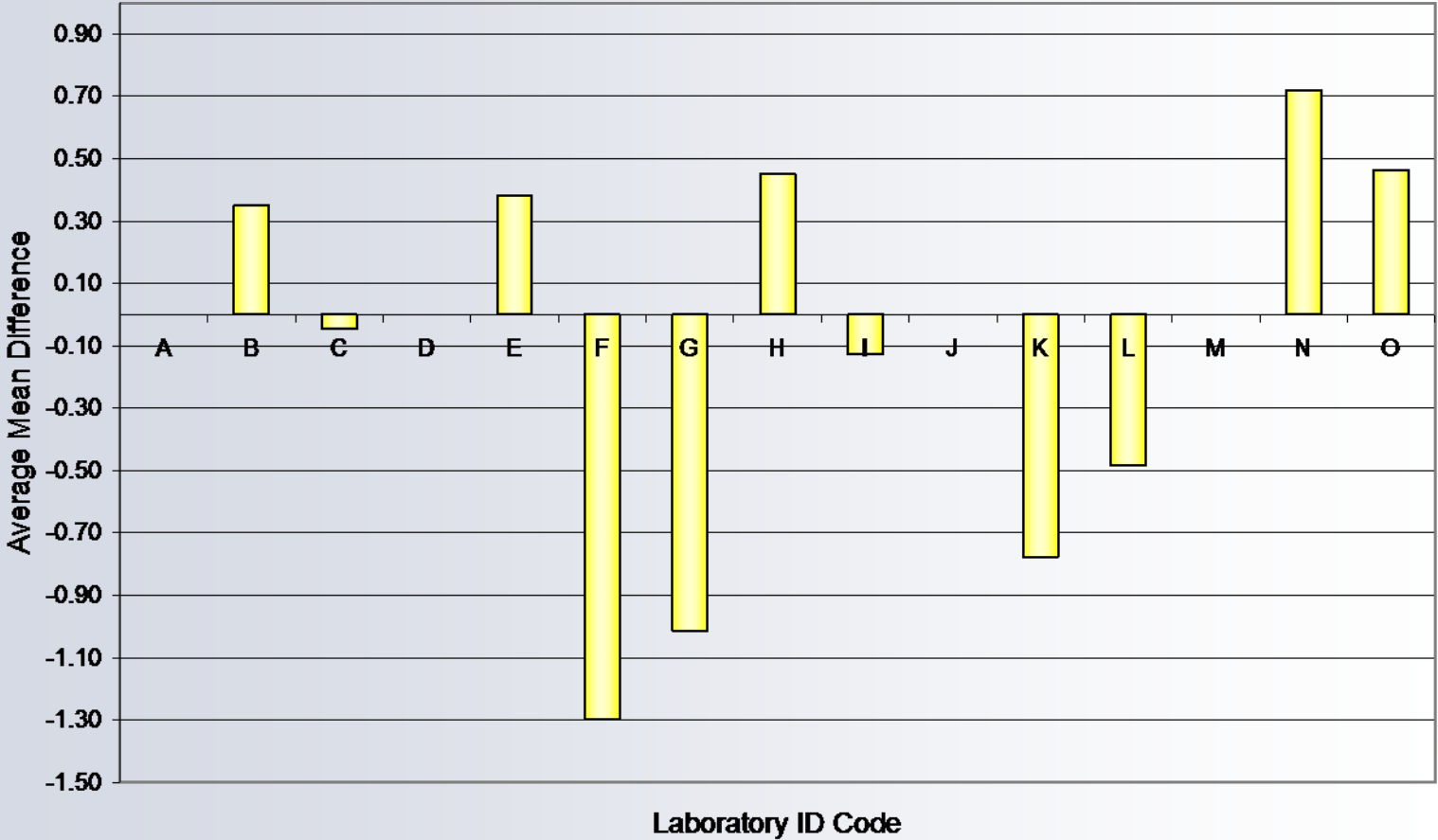


# Oil % – Rapid Difference from the Mean vs. Time



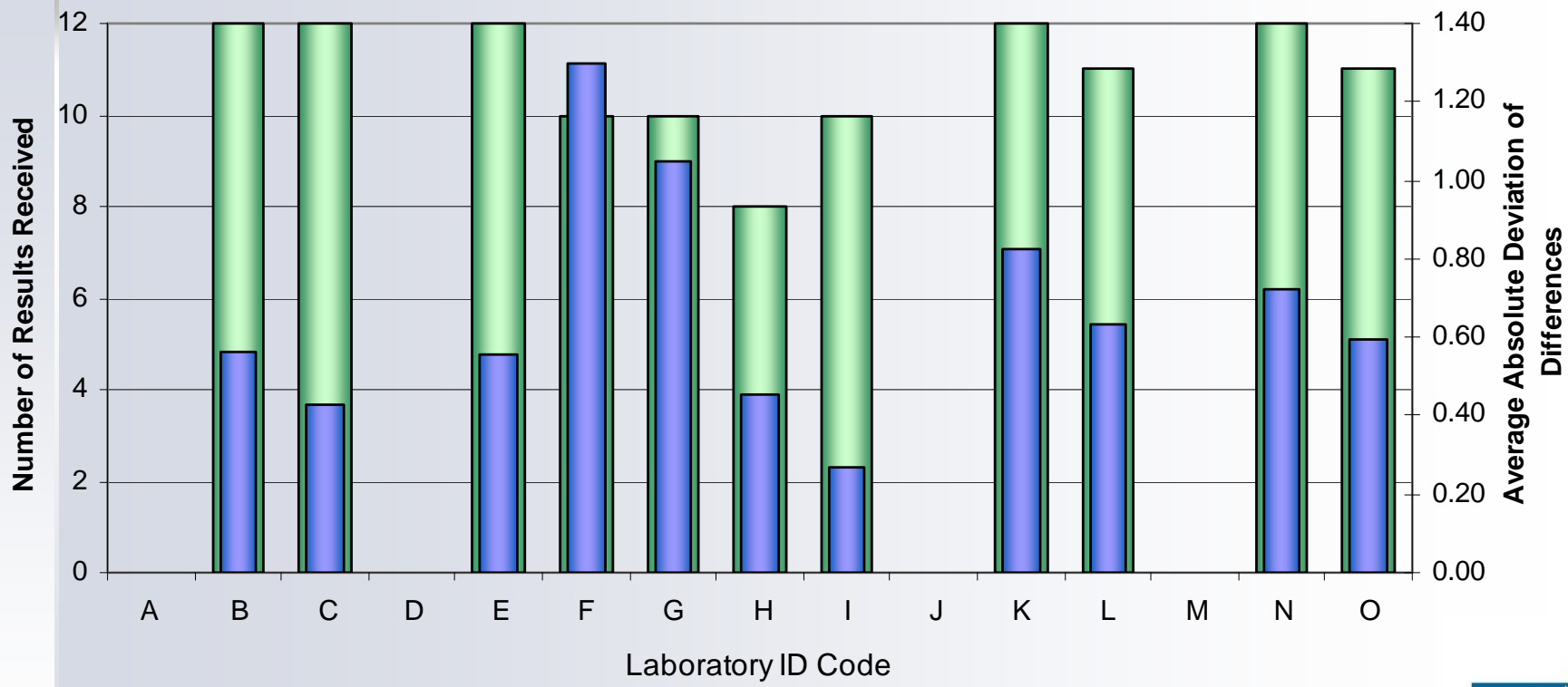
# Oil % Solvent

## Average of the Mean Difference



# Oil % Solvent

## Average Absolute Deviation of Difference and Number of Results

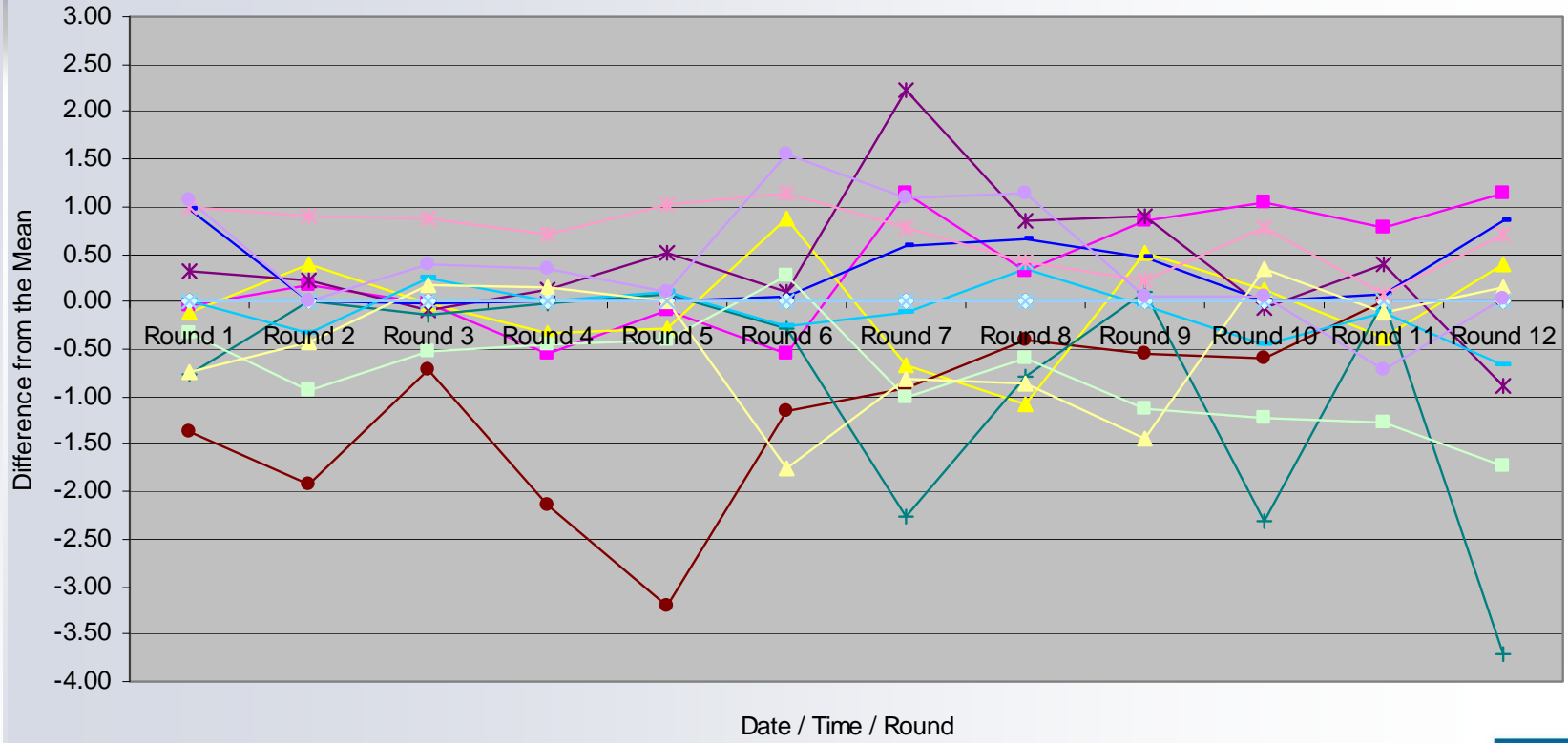


■ Number of Results Received ■ Average Absolute Deviation of Difference

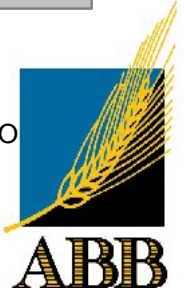




# Oil % – Solvent Difference from the Mean vs. Time

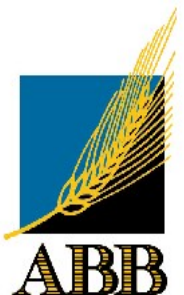
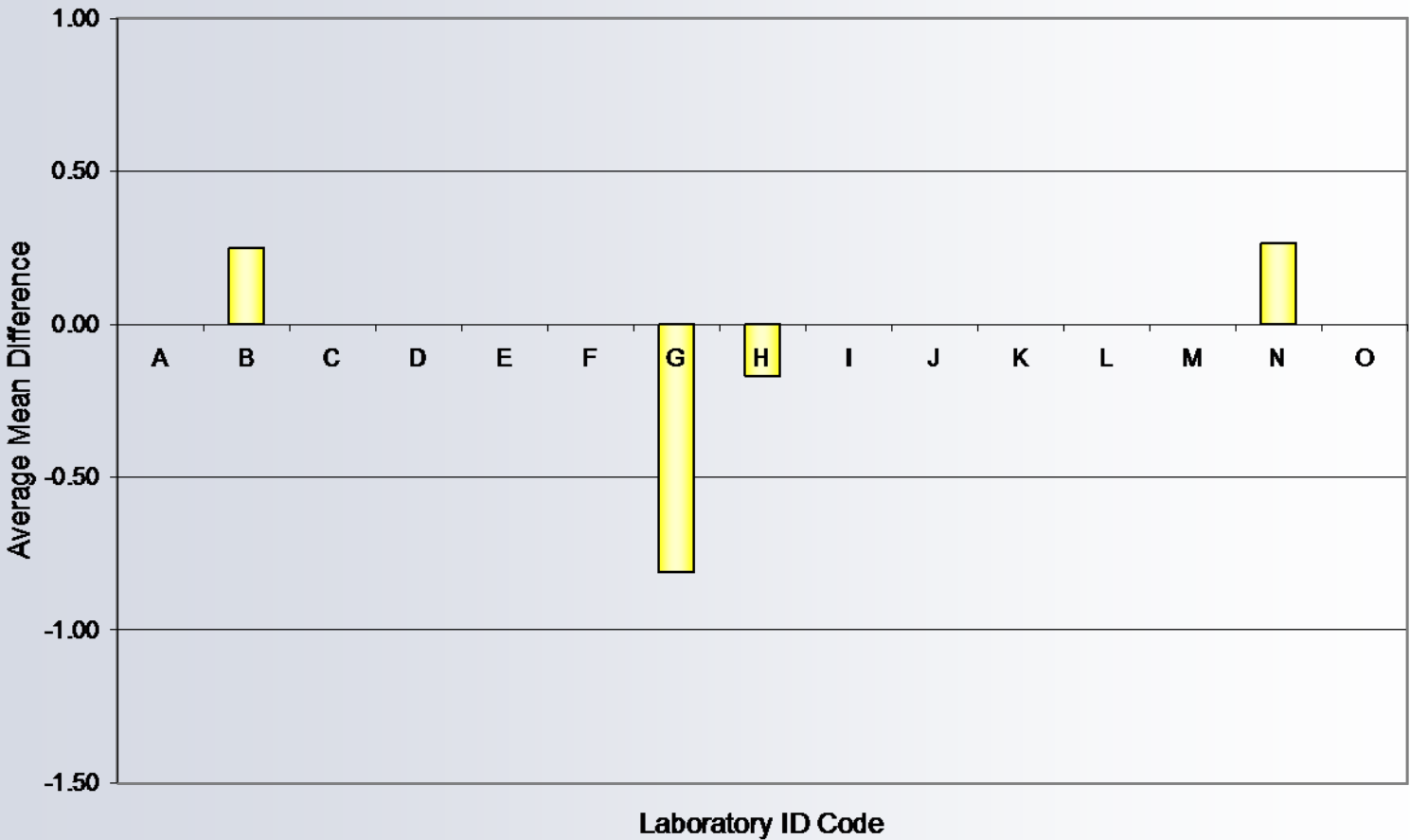


Legend: A (dark blue diamond), B (magenta square), C (yellow triangle), D (cyan asterisk), E (purple asterisk), F (dark red circle), G (teal plus), H (blue dash), I (light blue dash), J (light blue dash), K (light green square), L (yellow triangle), M (light blue asterisk), N (magenta asterisk), O (purple circle)



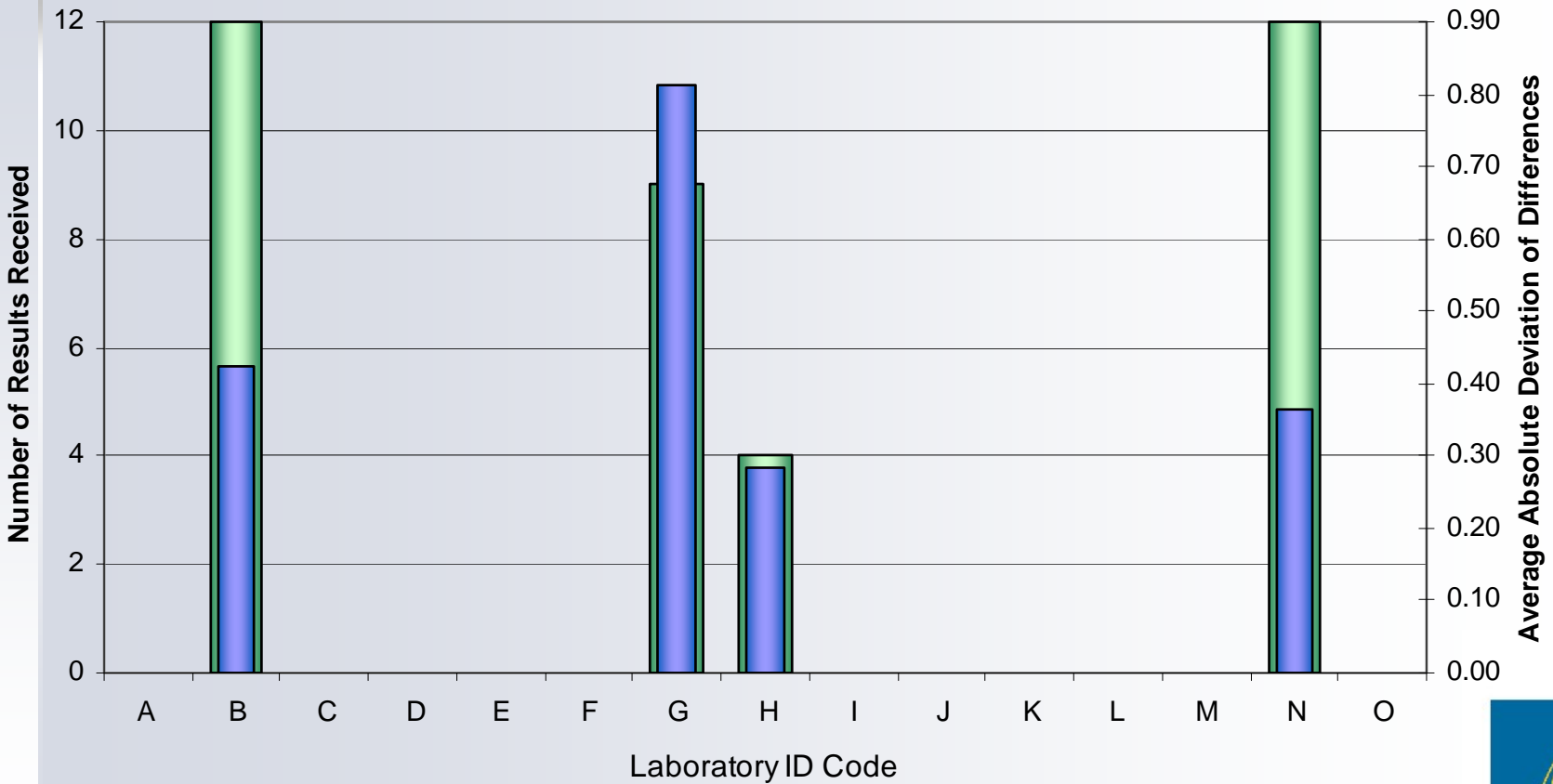
# Oil % Solvent (AOCS)

## Average of the Mean Difference

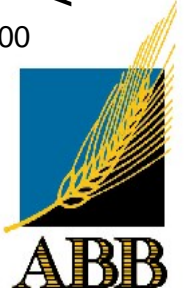


# Oil % Solvent (AOCS)

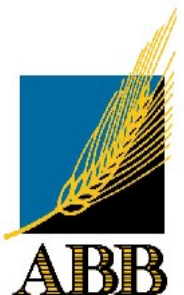
## Average Absolute Deviation of Difference and Number of Results



■ Number of Results Received ■ Average Absolute Deviation of Difference

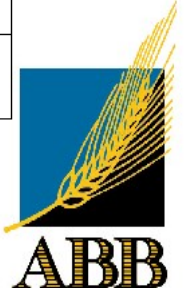
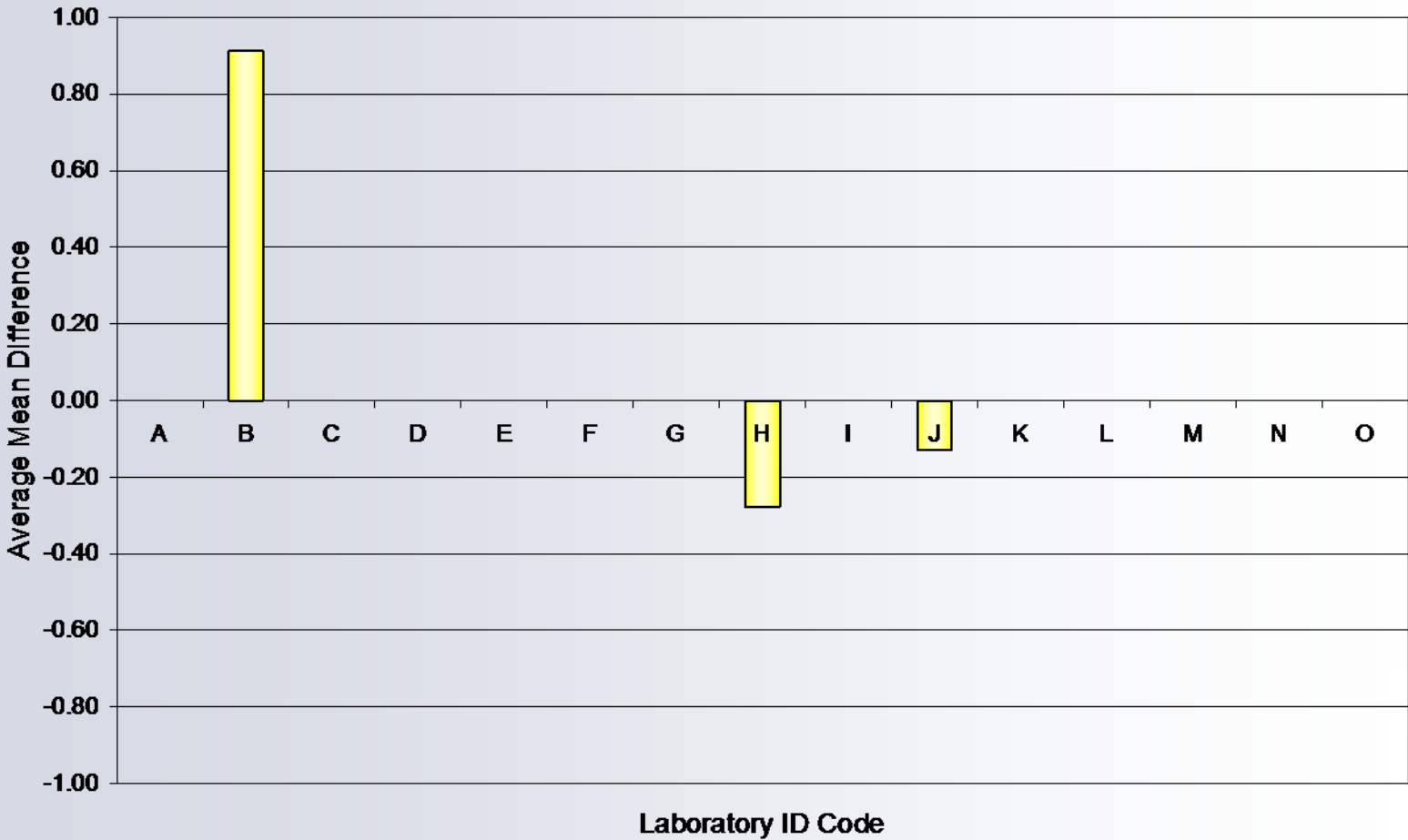


# Oil % – Solvent (AOCS) Difference from the Mean vs. Time



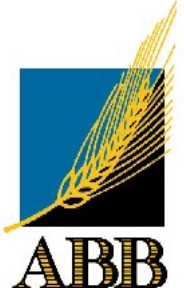
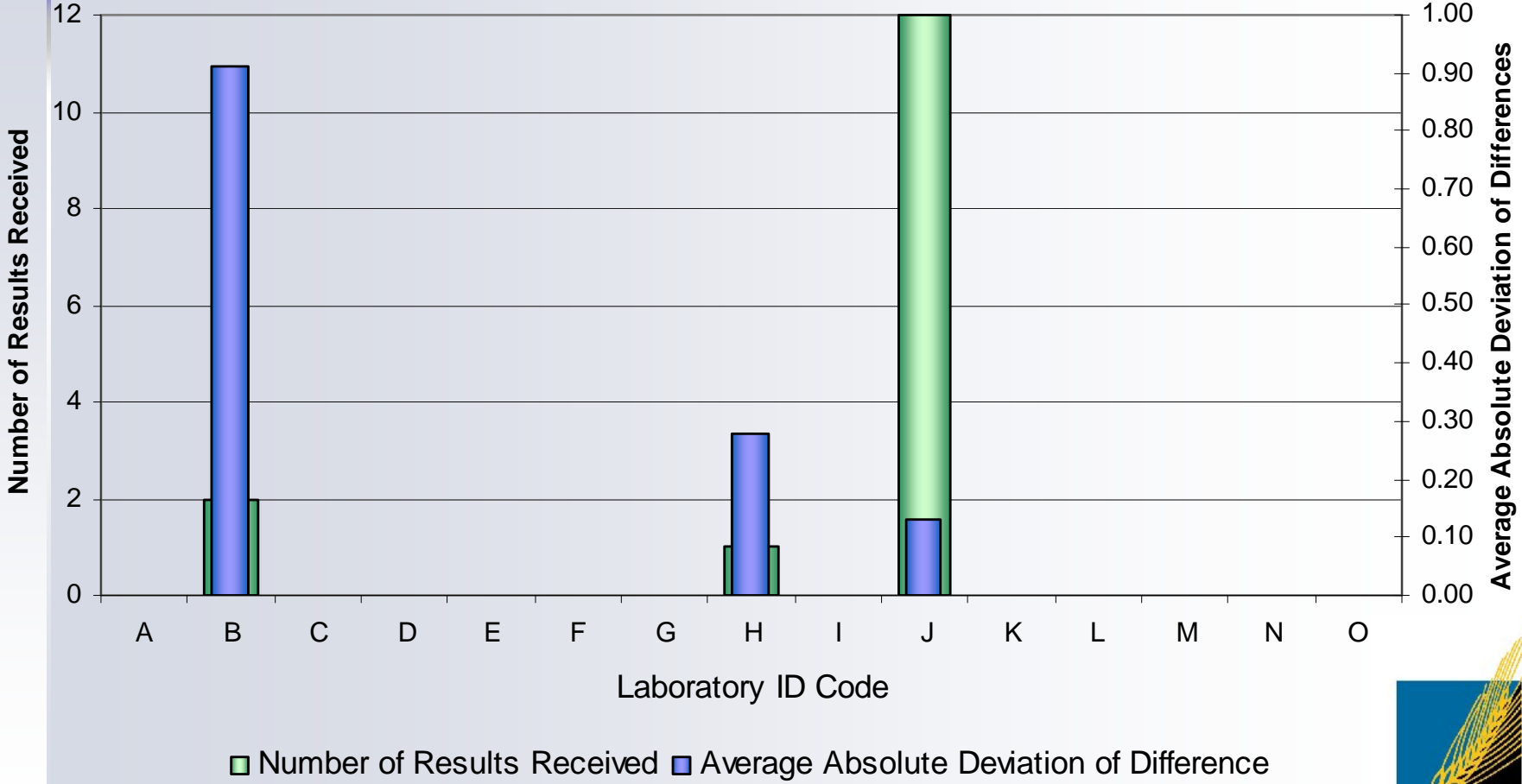
# Oil % - SFE Extraction

## Average of the Mean Difference

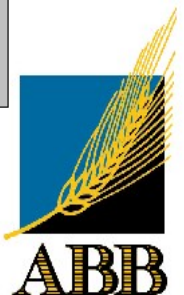
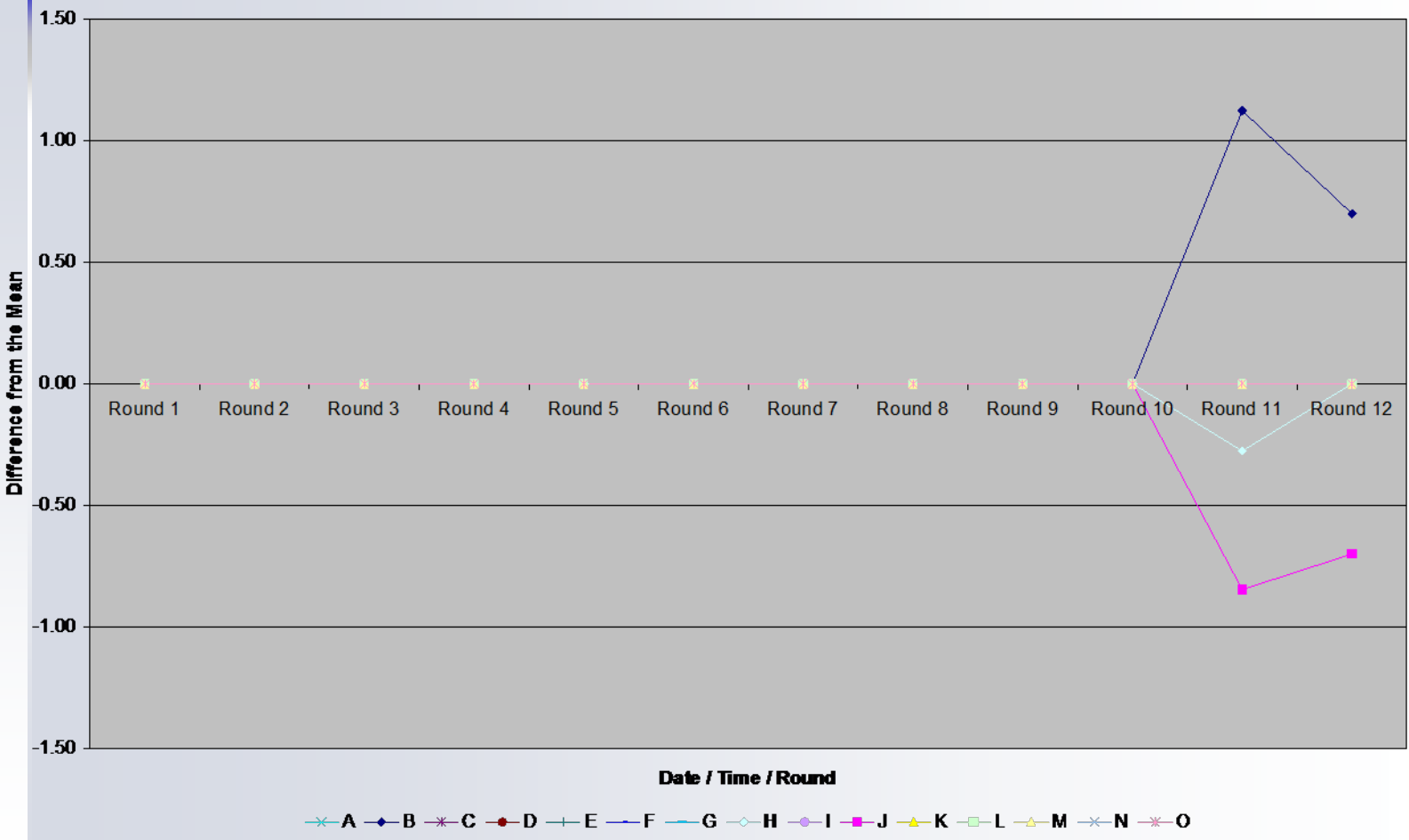


# Oil % – SFE Extraction

## Average Absolute Deviation of Difference and Number of Results

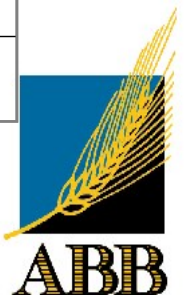
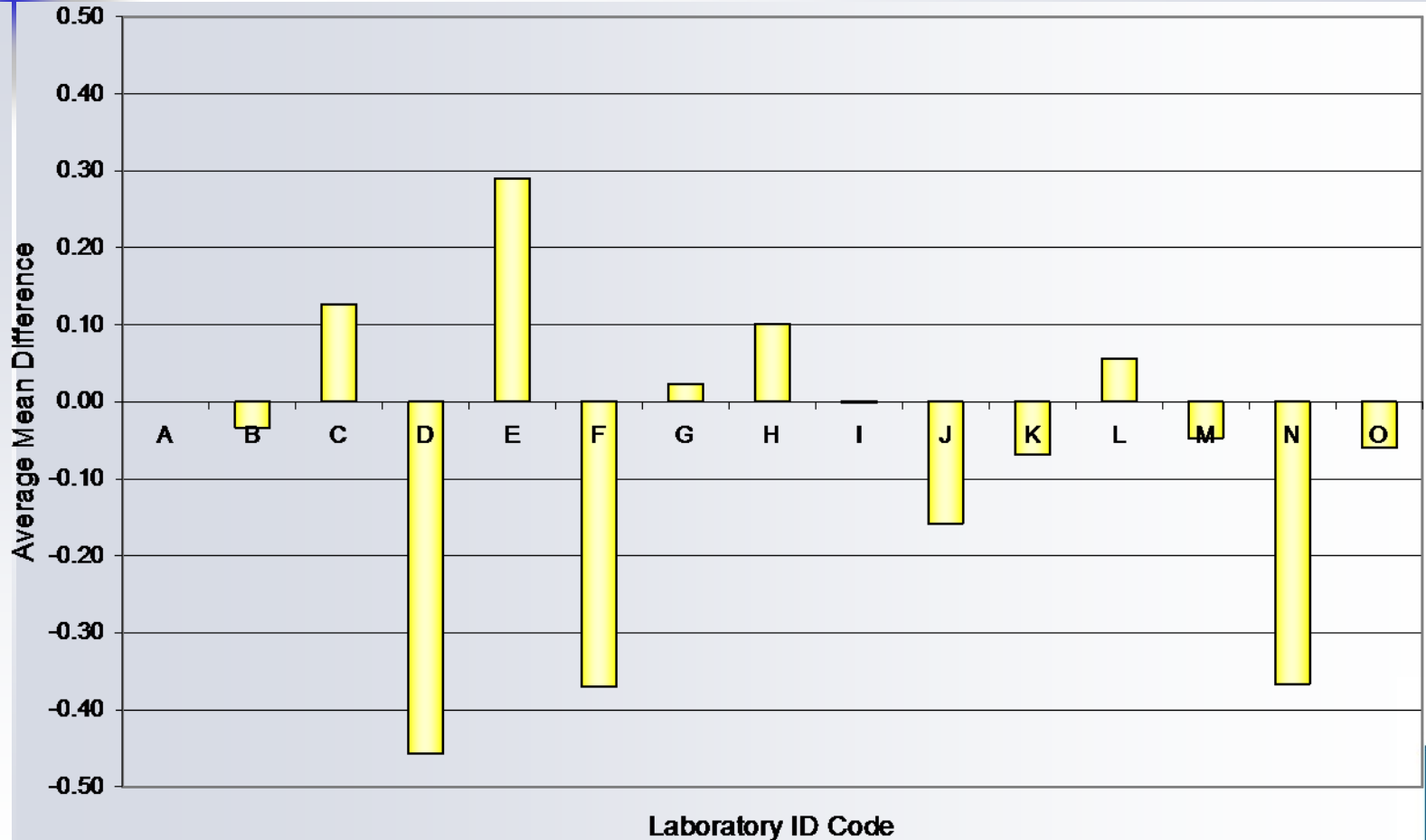


# Oil % – SFE Extraction Difference from the Mean vs. Time



# Moisture % - Oven

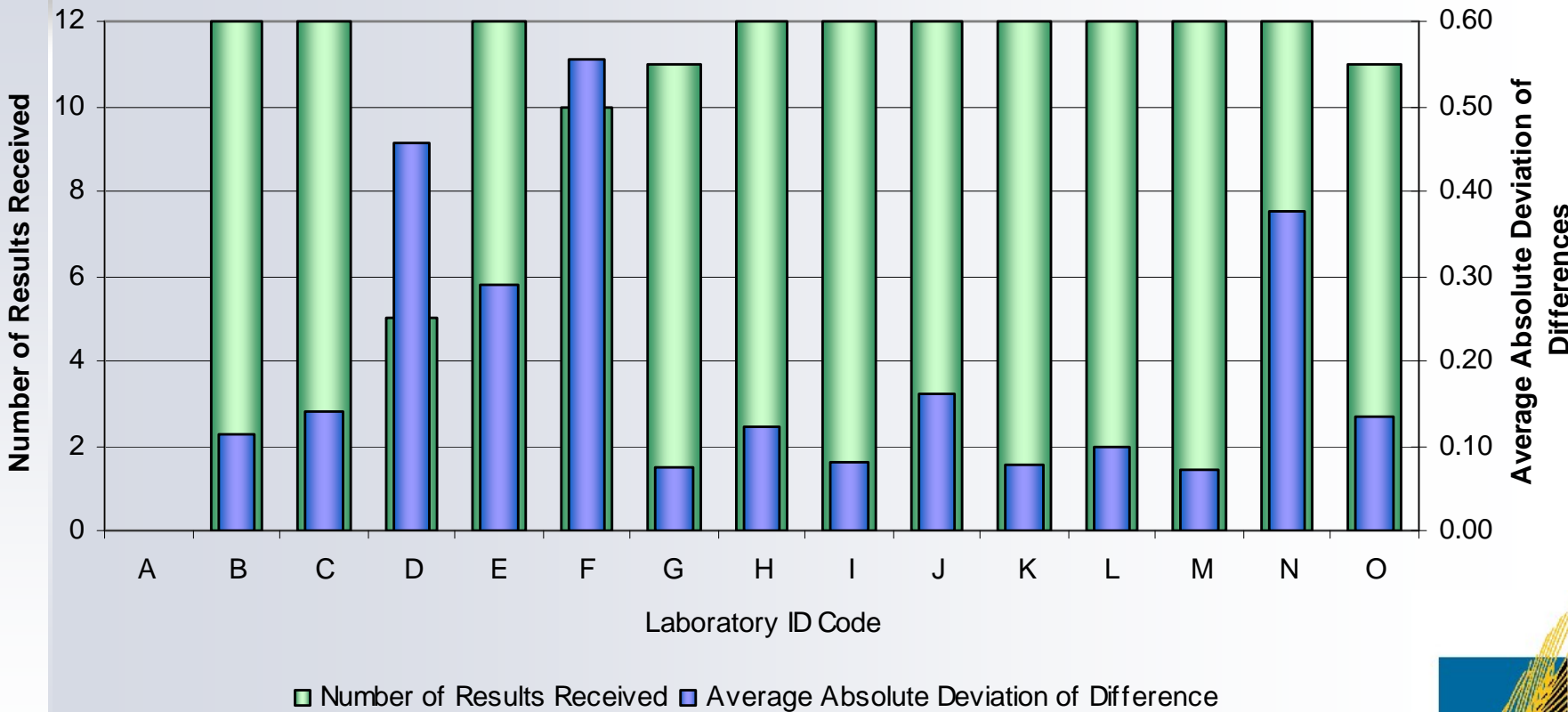
## Average of the Mean Difference



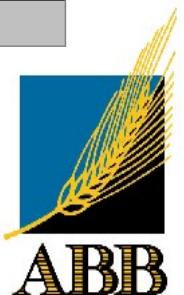
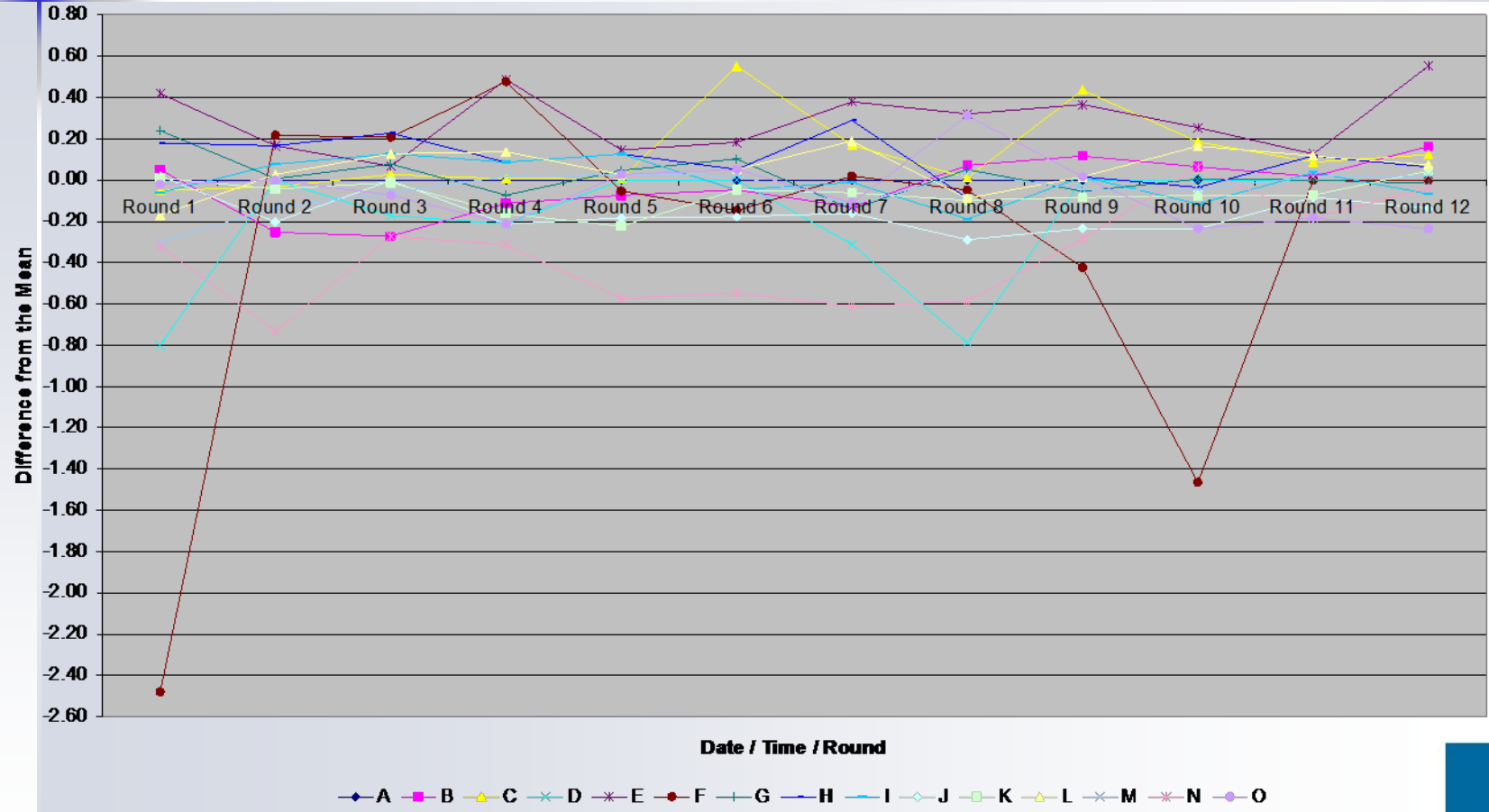


# Moisture % - Oven

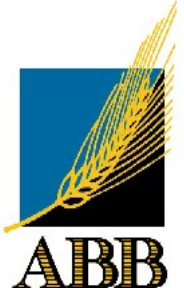
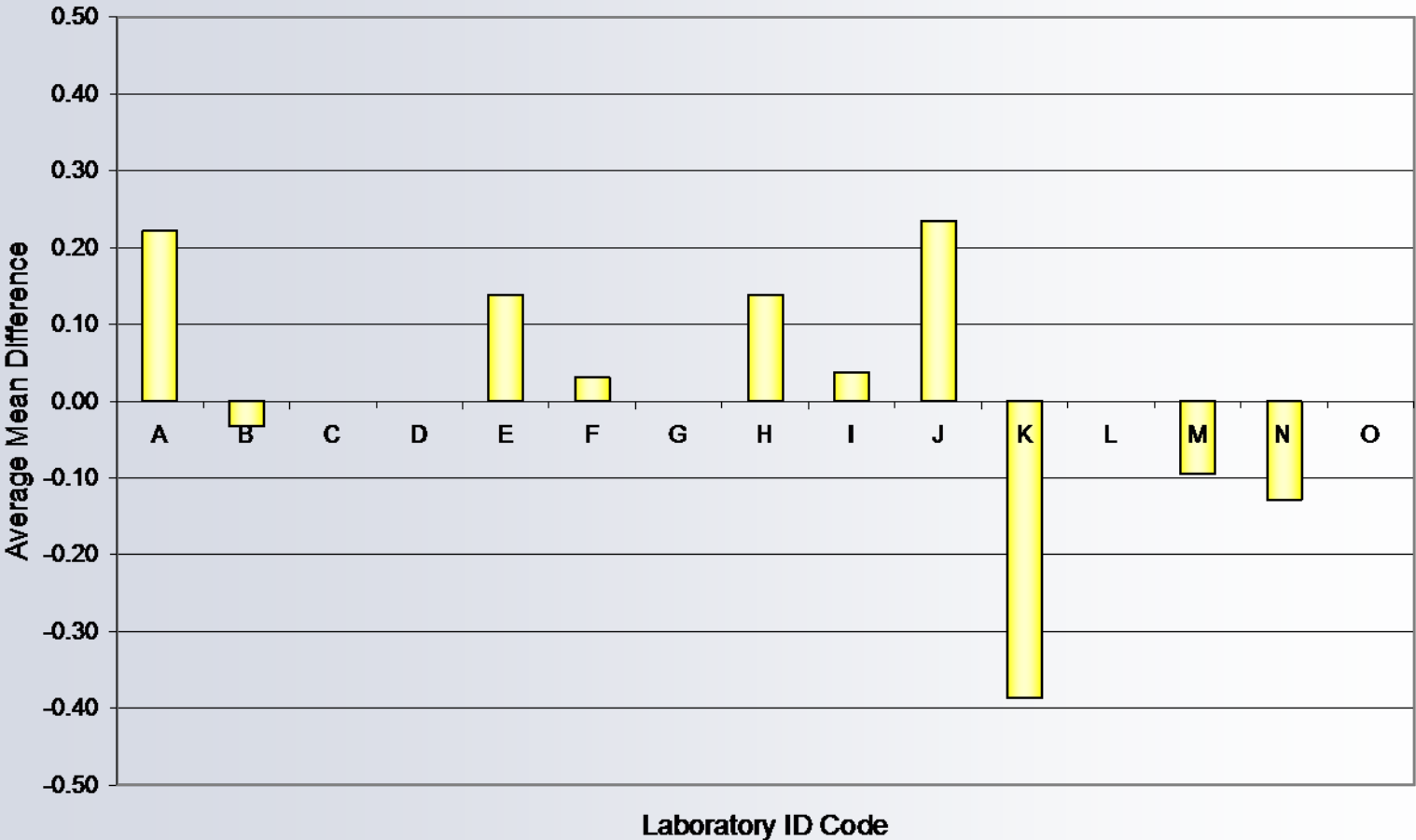
## Average Absolute Deviation of Difference and Number of Results



# Moisture % – Oven Difference from the Mean vs. Time

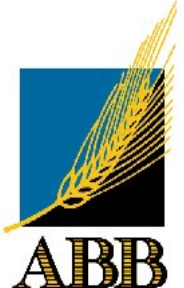
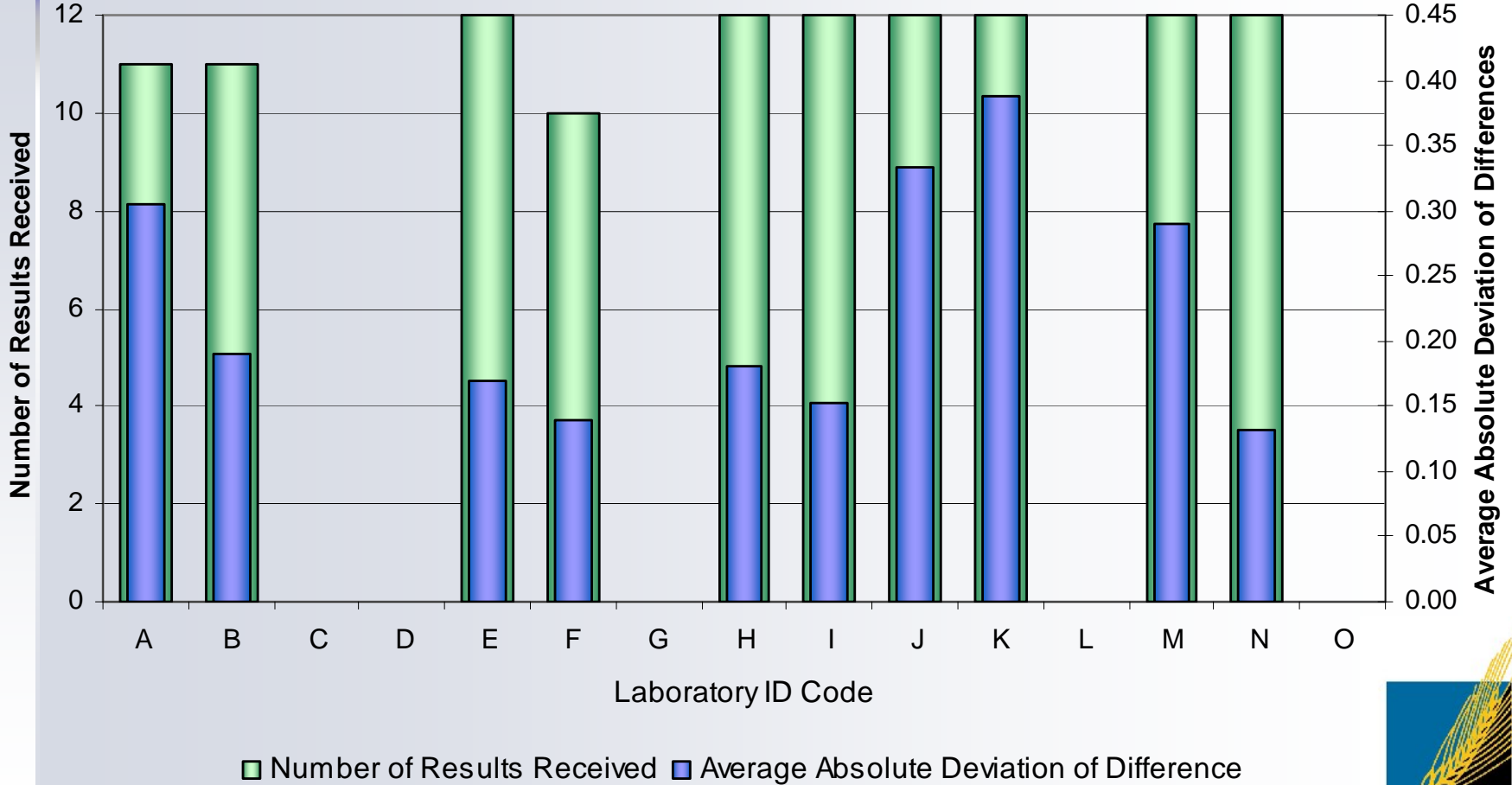


# Moisture % - Rapid Average of the Mean Difference

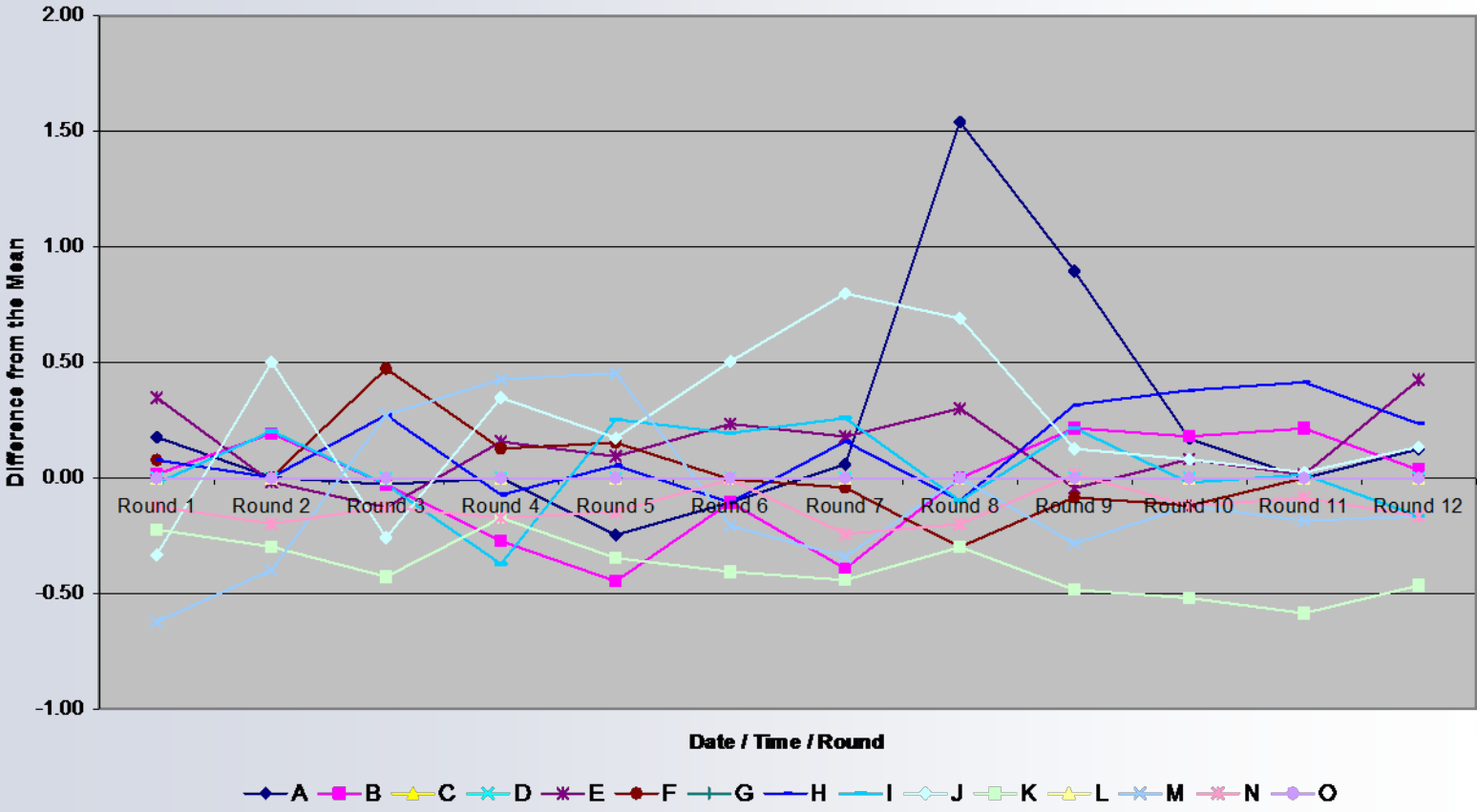


# Moisture % - Rapid

## Average Absolute Deviation of Difference and Number of Results

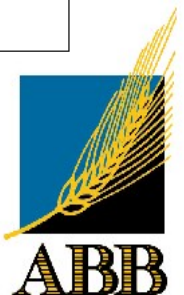
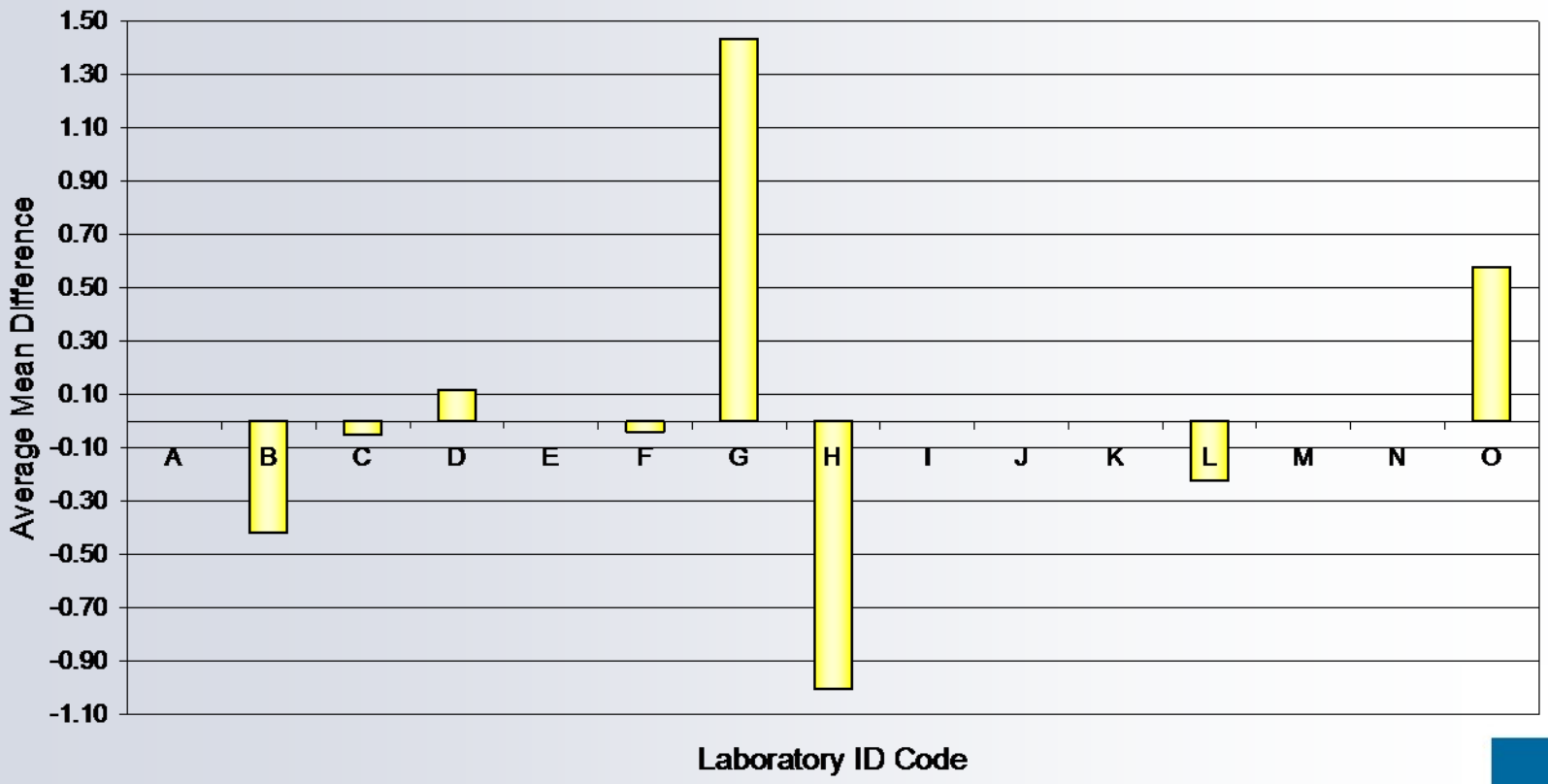


# Moisture % – Rapid Difference from the Mean vs Time



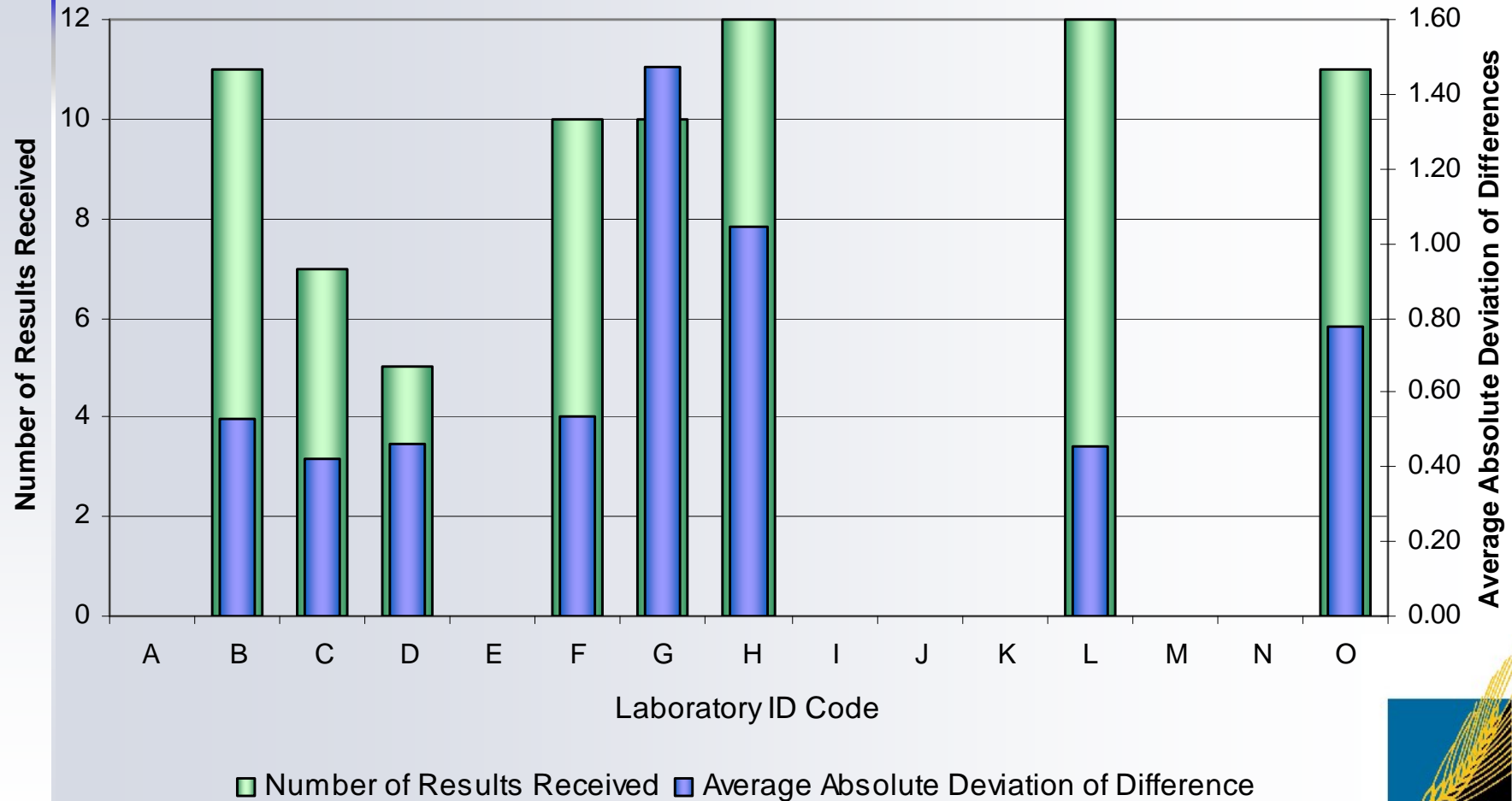
# Oleic % Oil

## Average of the Mean Difference

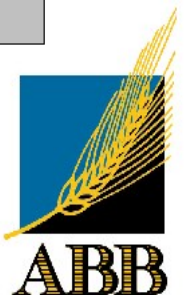
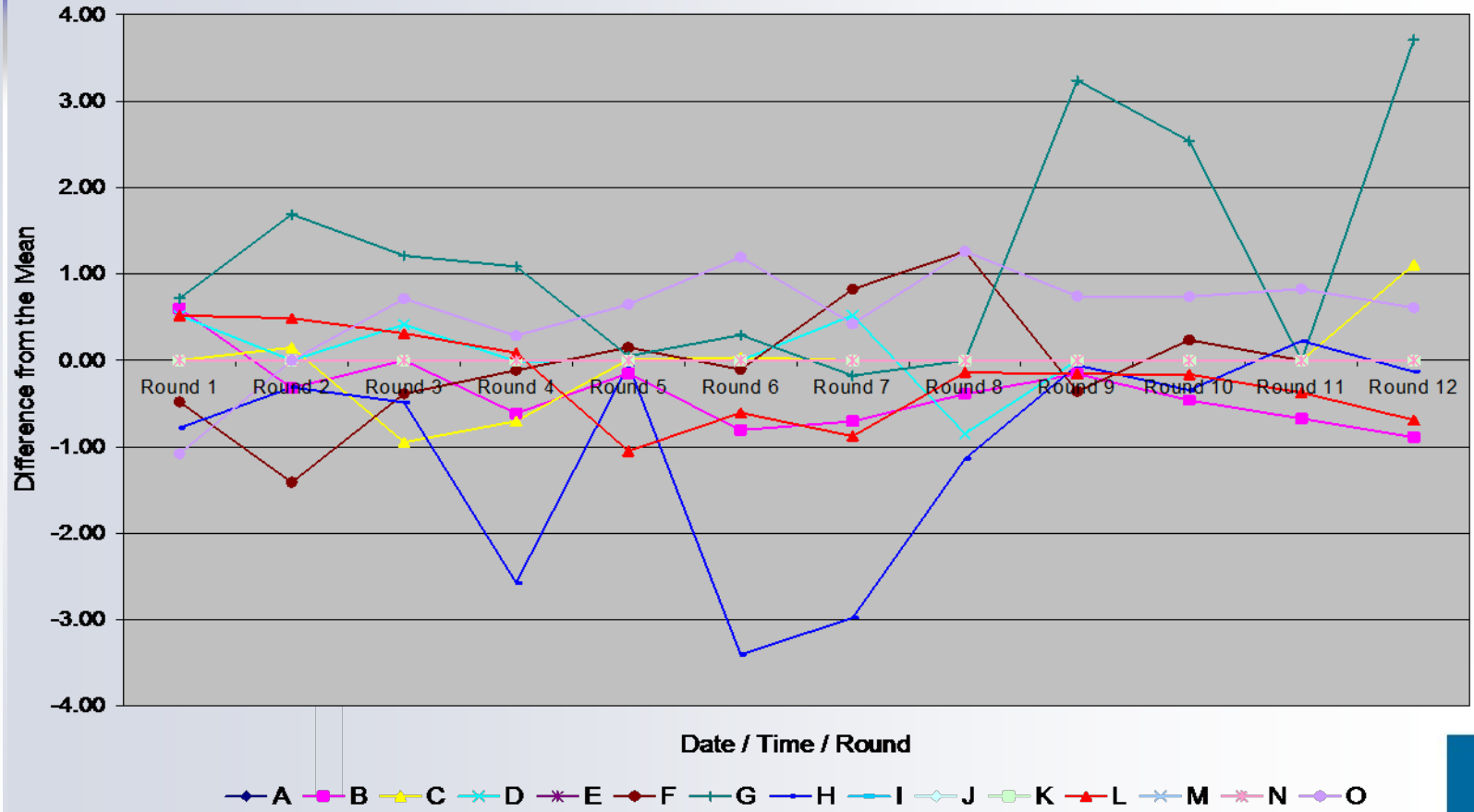


# Oleic % Oil

## Average Absolute Deviation of Difference and Number of Results



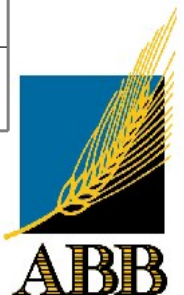
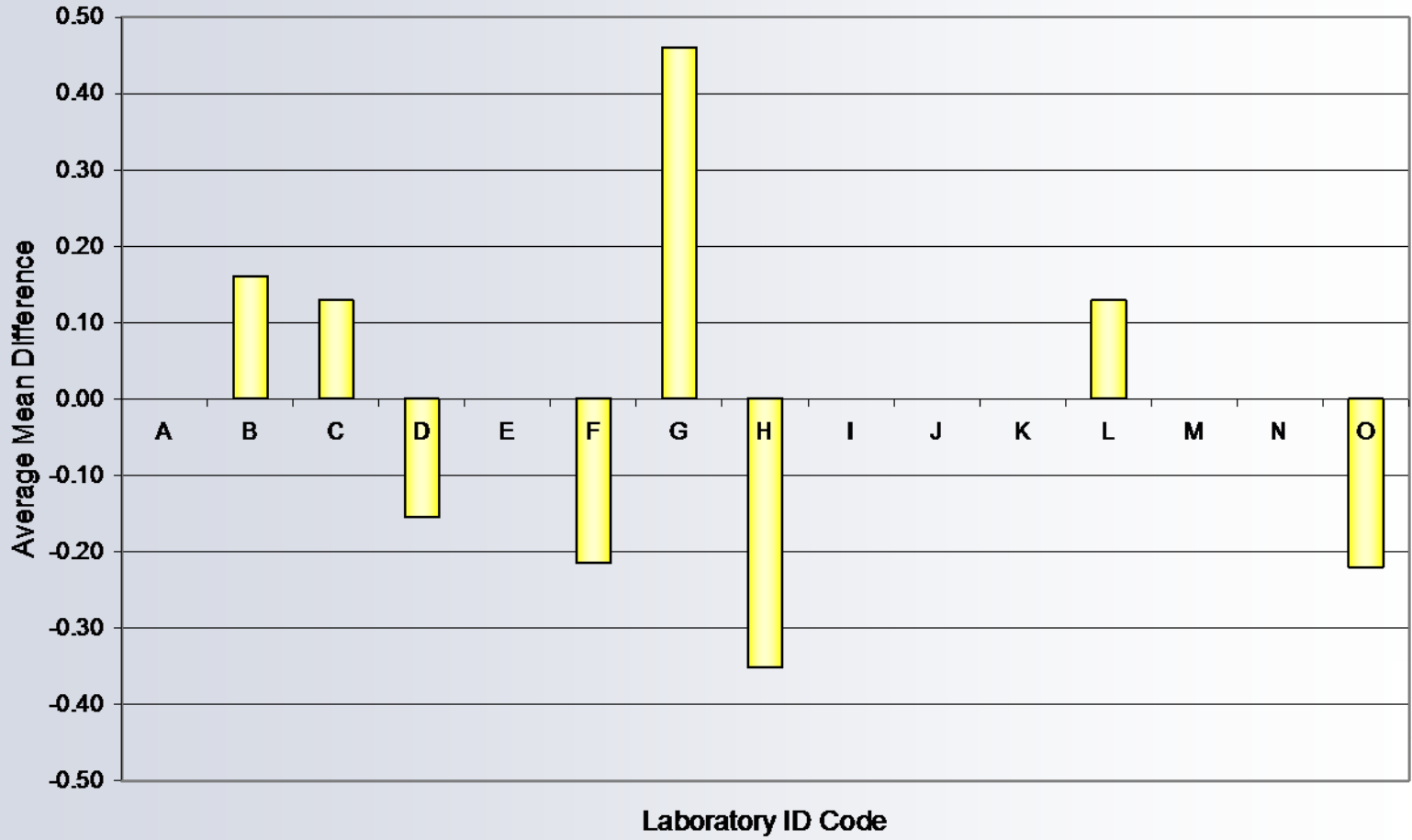
# Oleic % Oil Difference from the Mean vs. Time





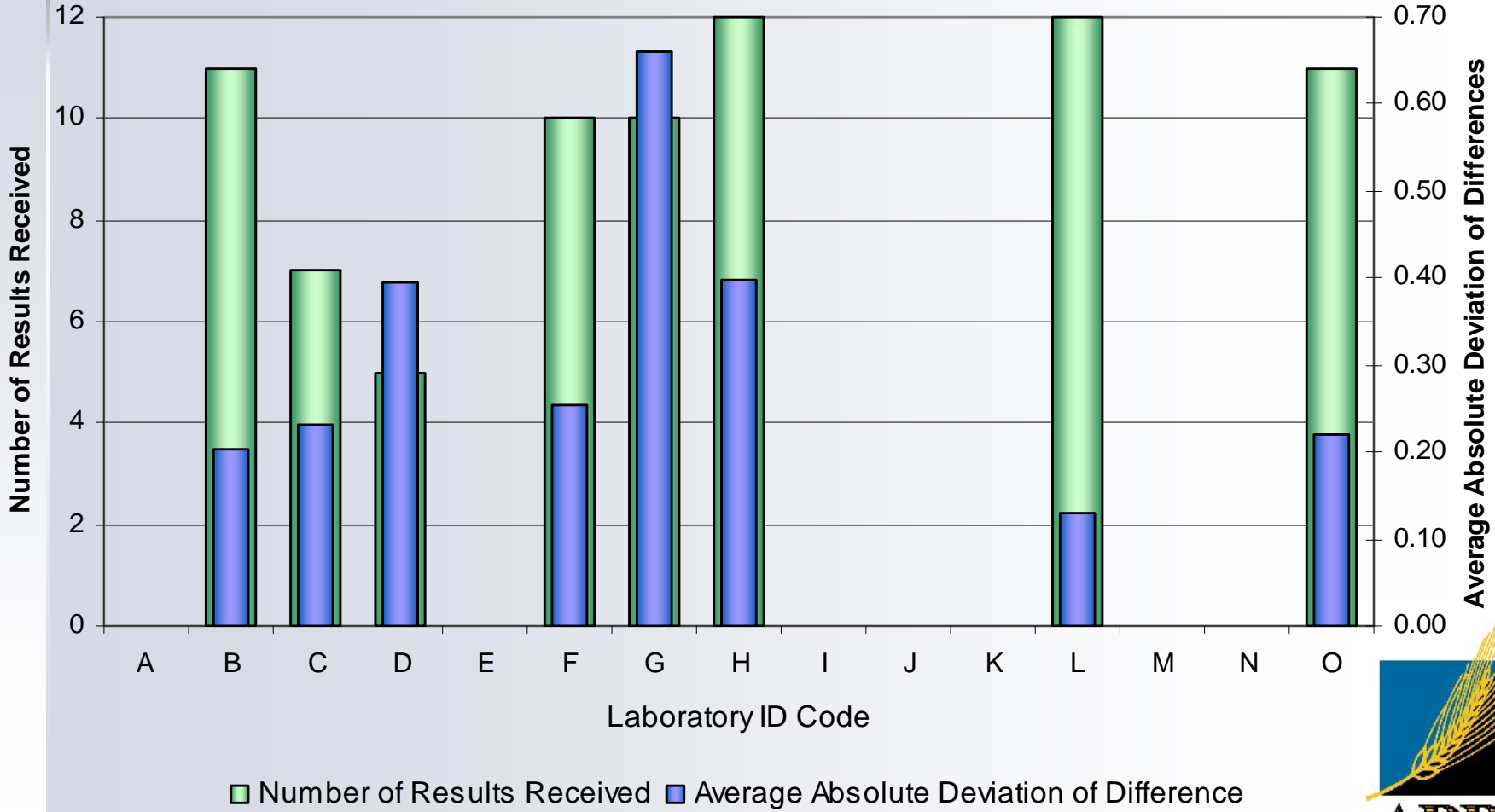
# Linoleic % Oil

## Average of the Mean Difference

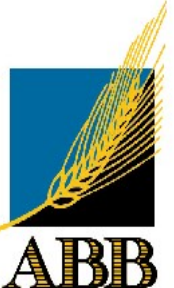
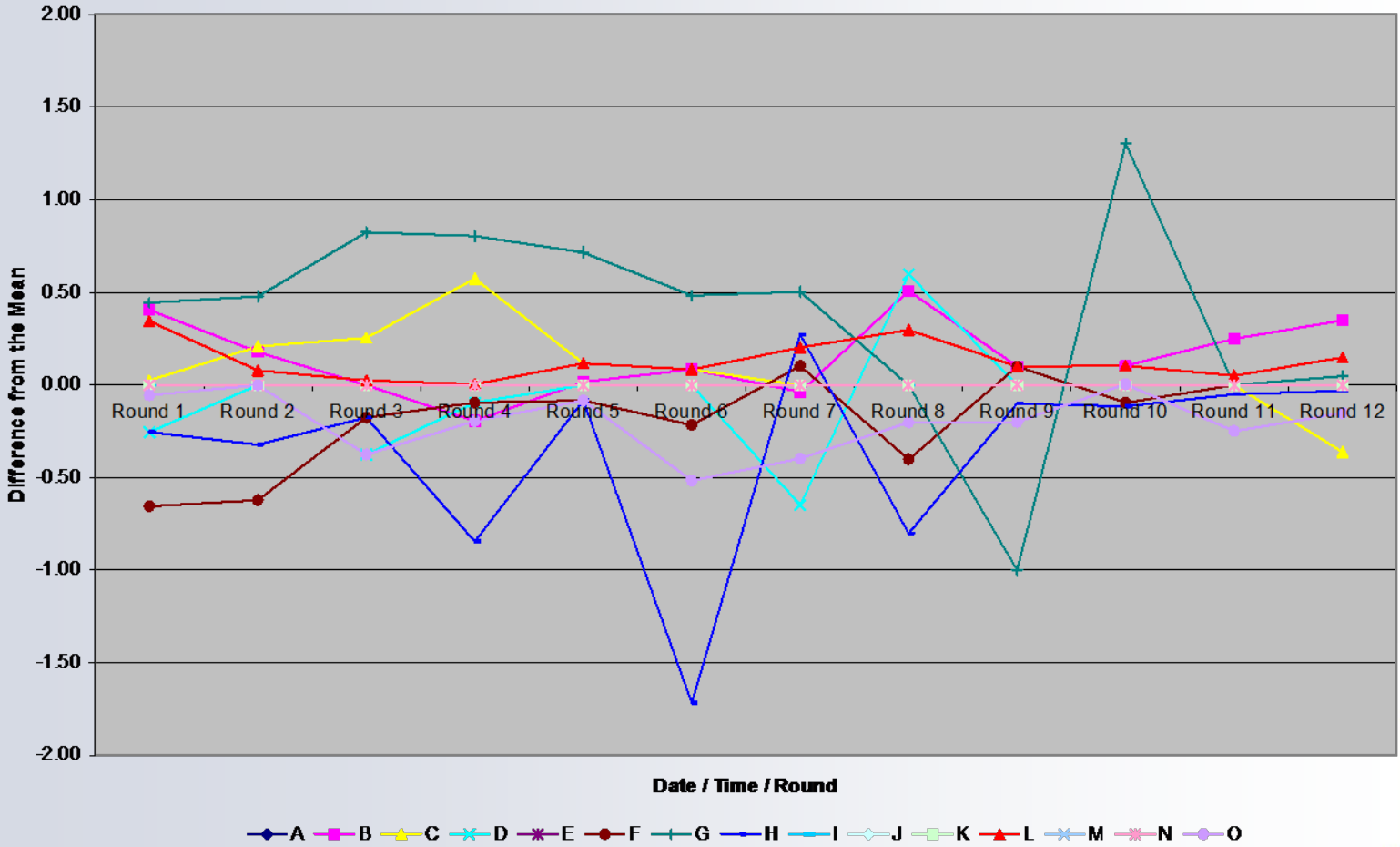


# Linoleic % Oil

## Average Absolute Deviation of Difference and Number of Results

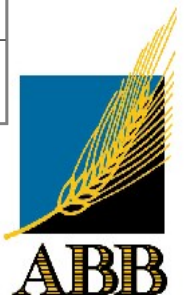
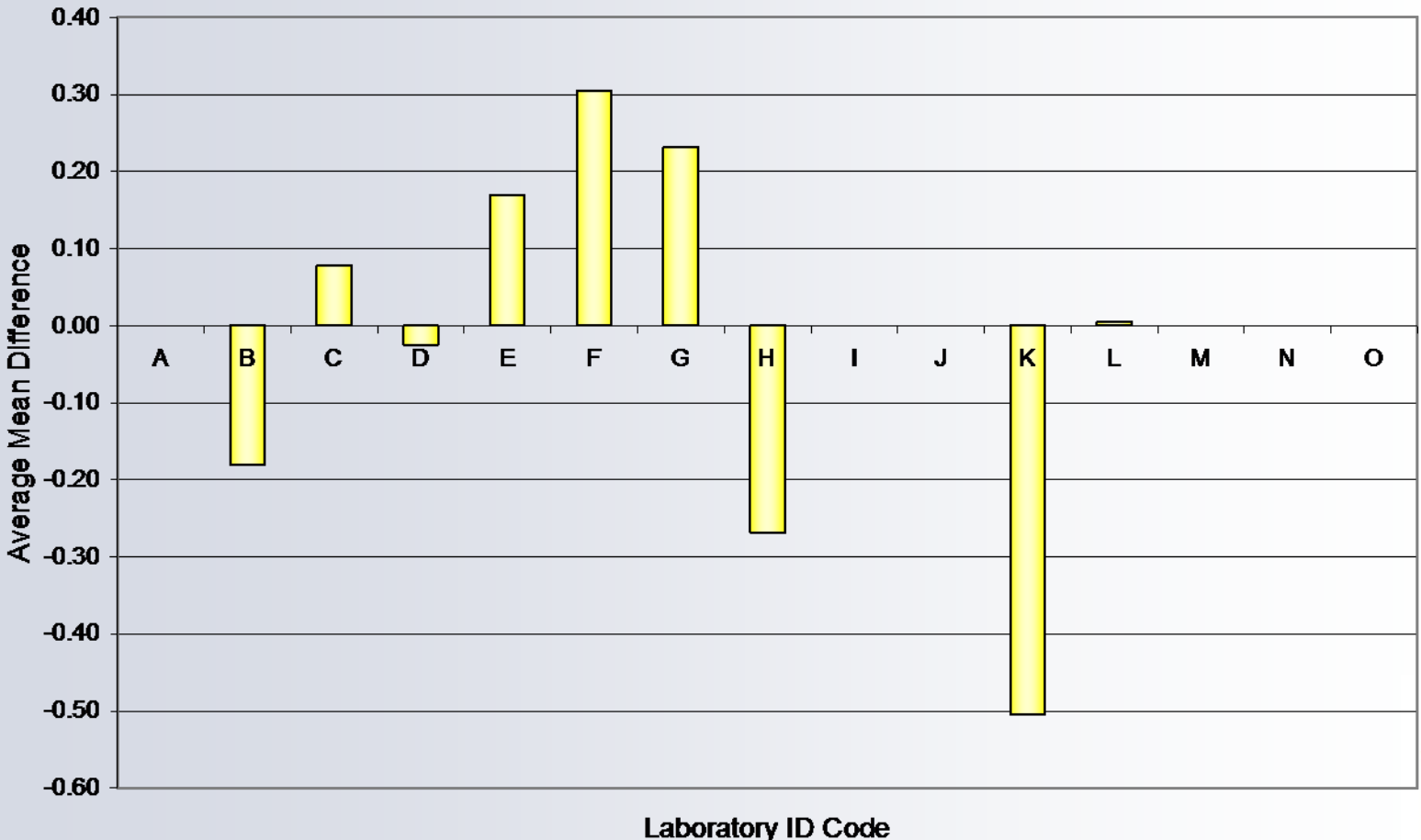


# Linoleic % Oil Difference from the Mean vs. Time



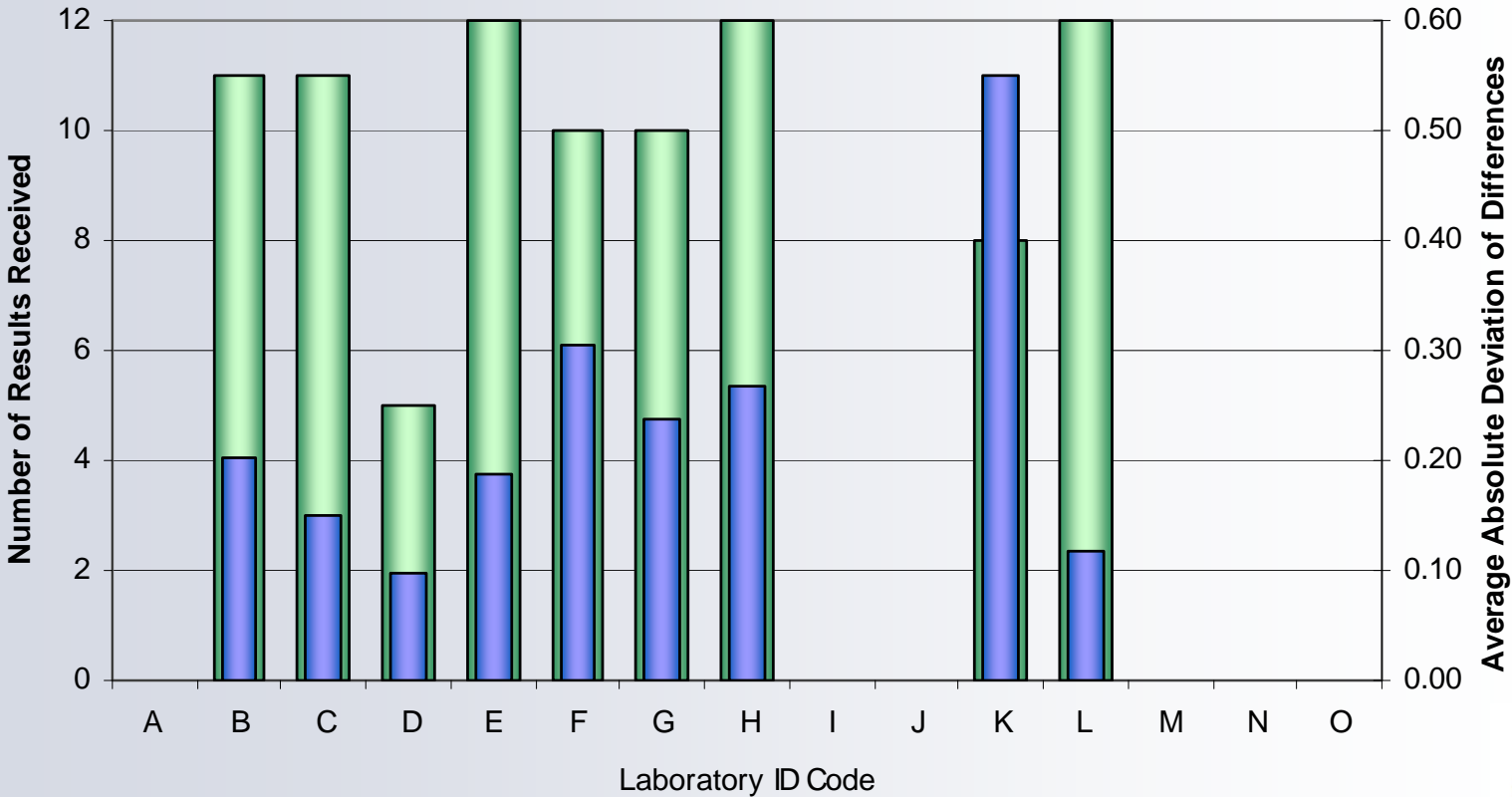
# Free Fatty Acid % Oil

## Average of the Mean Difference

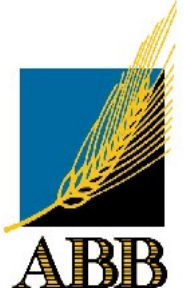


# Free Fatty Acid % Oil

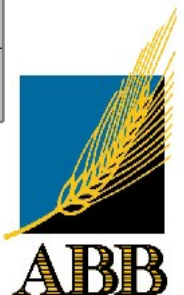
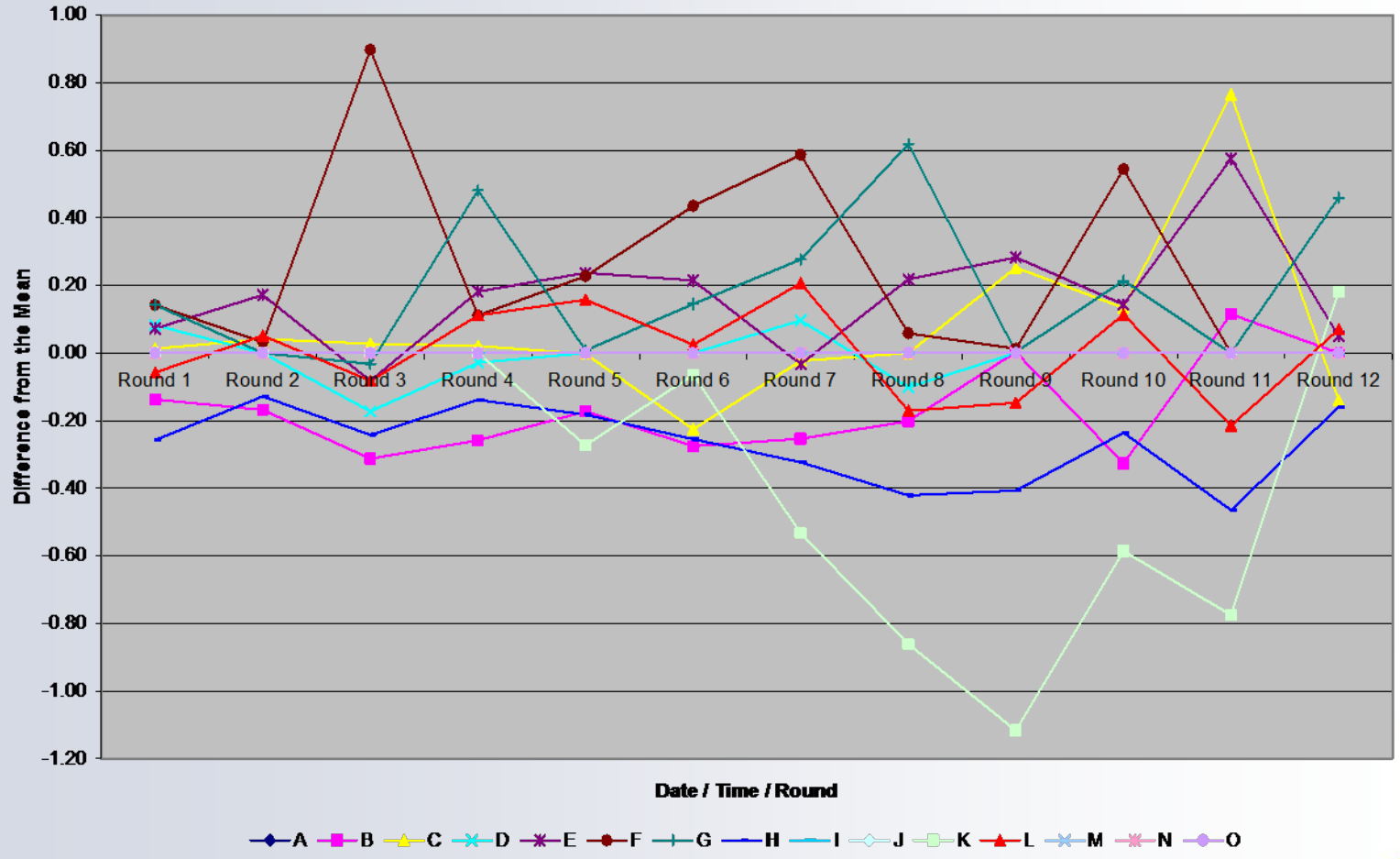
## Average Absolute Deviation of Difference and Number of Samples



■ Number of Results Received ■ Average Absolute Deviation of Difference



# Free Fatty Acid % Oil Difference from the Mean vs. Time



# Missing Results

Participation decreased this season with 12 missing submissions for the season compared to 4 for 2005/2006.

Round Number	Participant
1	-
2	D, O
3	-
4	-
5	D
6	D
7	-
8	-
9	D
10	D
11	A, D, F, G
12	D, F



# Plans for 2007/2008

- CereTech Pty Ltd to continue as coordinators of the test check program.
- Round 1 commenced 12/12/2007
- Sample size has increased from 500g to 1kg with results to be reported in duplicate
- Dao Ho will be collating the results for 2007/2008. If e-mailing your results, please send them to:  
**dao.ho@abb.com.au**





# Suggestions? Opinions? Feedback?

I am after any feedback, positive or negative, regarding the program.

If you have any suggestions on how the program could be run better or if you no longer want to participate, please contact me. I look forward to hearing from you all!

Dao Ho  
Ph 08 8304 5030  
Dao.ho@abb.com.au



# **Thank you for your participation in the 2006/2007 AOF Test Check Program**

