



# EMERALD TEST

INTER-LAB COMPARISON &  
PROFICIENCY TEST  
877-567-3598  
emeraldtest.com



Digamma  
Consulting

www.digammaconsulting.com

Spring 2020 **Water Activity** Proficiency Test

“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

---

## Contents

<a href="#"><u>Summary of Statistical Data</u></a>	p. 2
<a href="#"><u>Raw Data Table</u></a>	p. 3
<a href="#"><u>Percent Recovery Data Table</u></a>	p. 4
<a href="#"><u>Z-Score Data Table</u></a>	p. 5
<a href="#"><u>Z-Score Graph</u></a>	p. 6
<a href="#"><u>Gaussian Normal Distribution Plots</u></a>	p. 7

### TERMS AND CONDITIONS OF USE

Emerald Test™ does not grant exclusive use rights with respect to this material. Emerald Test™ should be acknowledged as the source of its material. It is unlawful to falsely claim copyright or other rights in Emerald Test™ material. All rights reserved. This document or parts thereof may not be reproduced in any form, stored in any retrieval system, or transmitted in any form by any means—electronic, mechanical, photocopy, recording, or otherwise—without prior written permission of the publisher, except as provided by United States of America copyright law.



# EMERALD TEST

INTER-LAB COMPARISON &  
PROFICIENCY TEST  
877-567-3598  
emeraldtest.com



Digamma  
Consulting

www.digammaconsulting.com

Spring 2020 **Water Activity** Proficiency Test

“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

## Summary of Statistical Data

Component	Consensus Mean	Standard Deviation	Deviation %	Assigned Value	Mean Recovery %	# Accepted	% Accepted	# Not Accepted	% Not Accepted	# Outliers
Water activity	0.846	0.015	1.786	0.84	100.714	31	100	0	0	3



INTER-LAB COMPARISON &  
PROFICIENCY TEST  
877-567-3598  
emeraldtest.com



www.digammaconsulting.com

Spring 2020 **Water Activity** Proficiency Test

“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

## Raw Data Table

Analyst No.	Water Activity Aw
6653	0.85
6794	0.85
6817	0.849
6818	0.85
6831	0.8703
6856	0.8417
6866	0.8446
6891	0.8414
6918	0.8055
6922	0.85
6962	0.8728
6965	0.767
6966	0.8467
6988	0.8181
6991	0.866
6992	0.8448
7015	0.85
7021	0.78
7032	0.85
7034	0.83162
7037	0.844
7038	0.8526
7045	0.85
7055	0.848
7058	0.8116
7072	0.844
7076	0.8532
7077	0.848
7079	0.8543
7084	0.8393
7235	0.784



INTER-LAB COMPARISON &  
PROFICIENCY TEST  
877-567-3598  
emeraldtest.com



www.digammaconsulting.com

Spring 2020 **Water Activity** Proficiency Test

“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

## Percent Recovery Data Table

Analyst	Water Activity Aw
6653	101.19%
6794	101.19%
6817	101.07%
6818	101.19%
6831	103.61%
6856	100.20%
6866	100.55%
6891	100.17%
6918	95.89%
6922	101.19%
6962	103.90%
6965	91.31%
6966	100.80%
6988	97.39%
6991	103.10%
6992	100.57%
7015	101.19%
7021	92.86%
7032	101.19%
7034	99.00%
7037	100.48%
7038	101.50%
7045	101.19%
7055	100.95%
7058	96.62%
7072	100.48%
7076	101.57%
7077	100.95%
7079	101.70%
7084	99.92%
7235	93.33%



# EMERALD TEST

INTER-LAB COMPARISON &  
PROFICIENCY TEST  
877-567-3598  
emeraldtest.com



Digamma  
Consulting

www.digammaconsulting.com

Spring 2020 **Water Activity** Proficiency Test

“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

## Z-Score Data Table

Account	Water activity
Account	Water activity
6653	0.30
6794	0.30
6817	0.23
6818	0.30
6831	1.70
6856	-0.27
6866	-0.07
6891	-0.29
6918	-2.76
6922	0.30
6962	1.87
6965	Outlier
6966	0.07
6988	-1.90
6991	1.40
6992	-0.06
7015	0.30
7021	Outlier
7032	0.30
7034	-0.96
7037	-0.11
7038	0.48
7045	0.30
7055	0.16
7058	-2.34
7072	-0.11
7076	0.52
7077	0.16
7079	0.60
7084	-0.44
7235	Outlier



Spring 2020 **Water Activity** Proficiency Test  
"Water activity (Humidity)" [#55231]

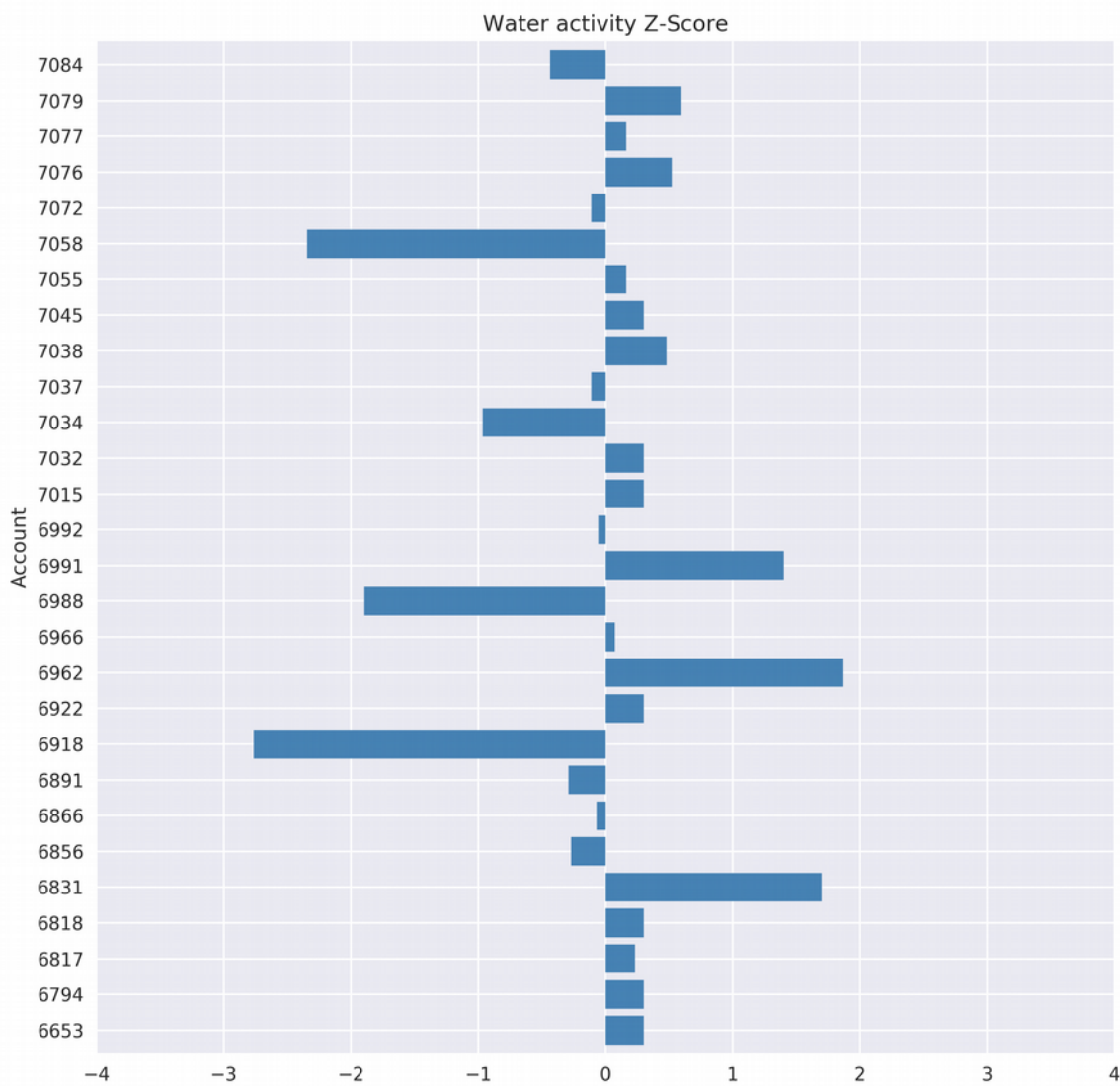
31 participating laboratories

1 analytes of interest

Matrix: Solvent Standard

Acceptance Criteria:  $\pm 20\%$  Recovery

## Z-Score Graph





Spring 2020 **Water Activity** Proficiency Test  
“Water activity (Humidity)” [#55231]

31 participating laboratories

1 analytes of interest

**Matrix:** Solvent Standard

**Acceptance Criteria:**  $\pm 20\%$  Recovery

## Gaussian Normal Distribution Plots

