



A Program of ASTM International

Test Monitoring Center

<http://astmtmc.cmu.edu>

ASTM Reference Testing Semi-Annual Report HTCBT

April 2020

HTCBT Test Activity*

Test Status	Validity Code	Number of Tests
Acceptable Calibration Test	AC	247
Failed Calibration Test	OC	15
Operationally Invalid, by lab	LC	8
Acceptable Shakedown Run	NN	10
Unacceptable Shakedown Run	MN	17
Total		297

*October 1, 2019 – March 31, 2020

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HTCBT Failed Tests

Failed Parameter	Number of Tests
Severe Lead Concentration	9
Severe Copper Concentration	2
Severe Copper & Lead Concentration	2
Mild Copper Concentration	2
Total	15

HTCBT Lost Tests*

Status	Cause	#
Invalid	Heater Malfunction	2
Invalid	Airflow Control Problems	4
Invalid	Water Contamination	1
Invalid	Wrong oil used	1
Total		8

*Invalid and aborted calibration tests

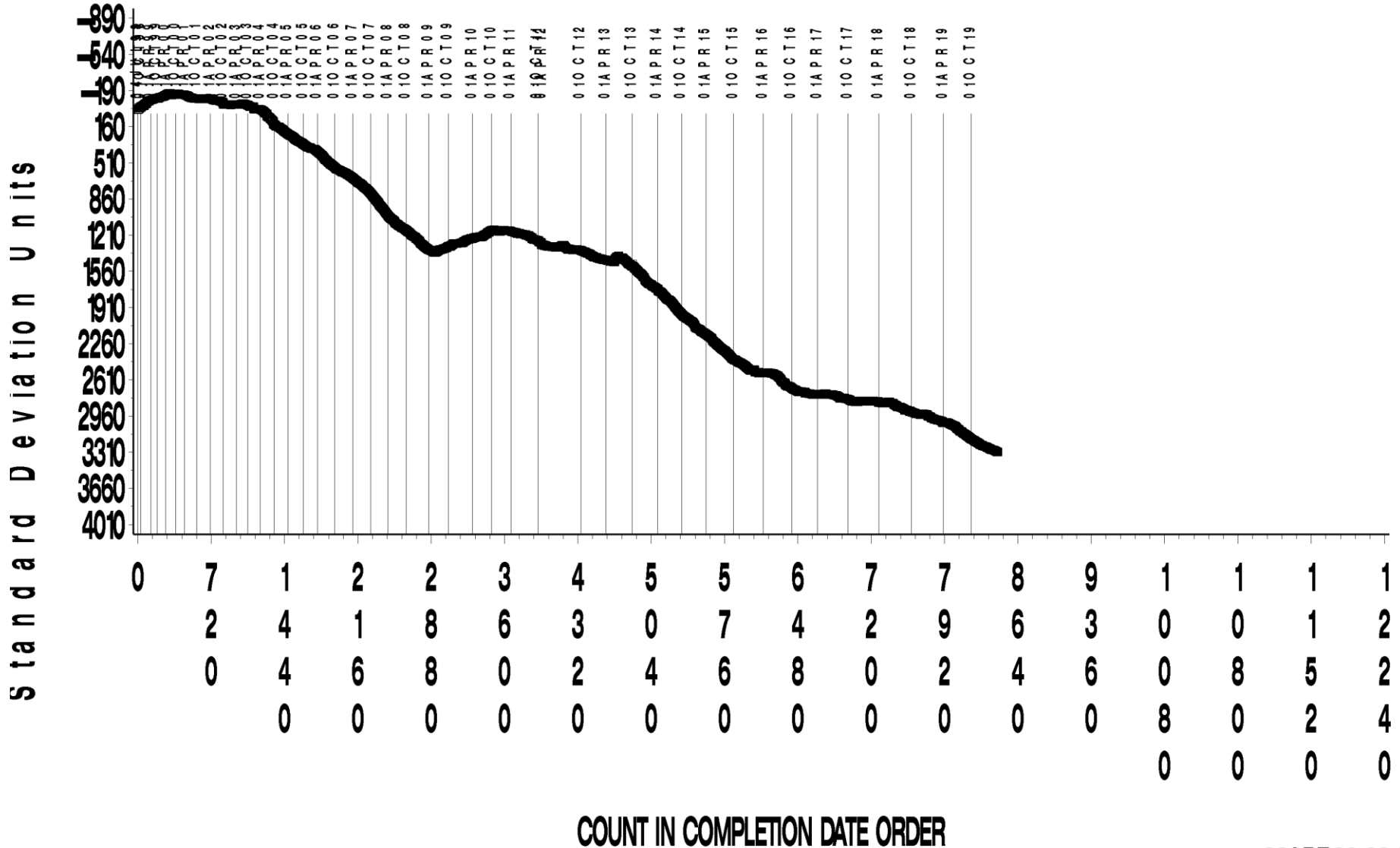
HTCBT Test Severity

- ▶ Copper concentration trending severe
- ▶ Lead concentration trending severe

COPPER CHANGE (ppm)

CUSUM Severity Analysis

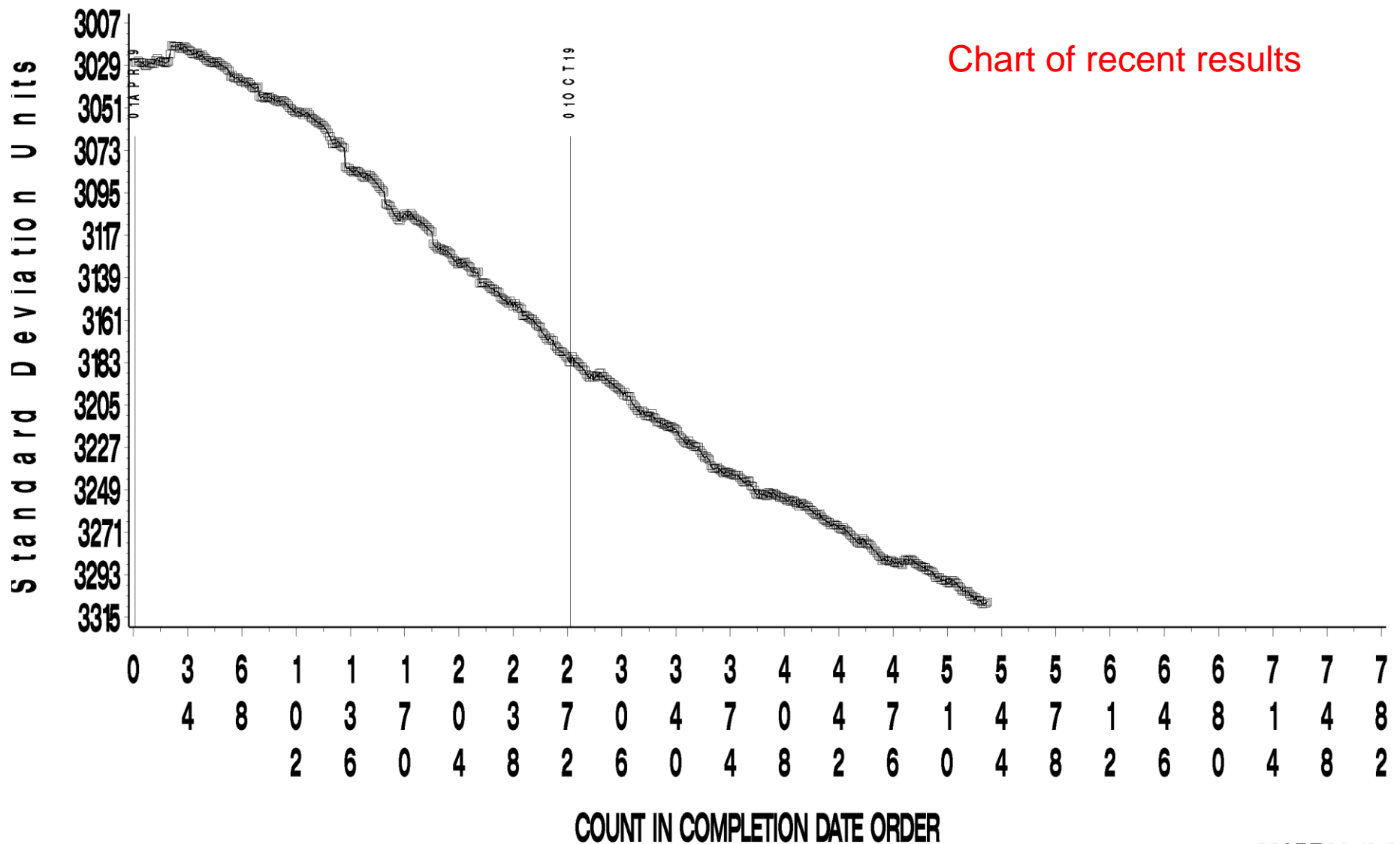
Historical Chart



COPPER CHANGE (ppm)

CUSUM Severity Analysis

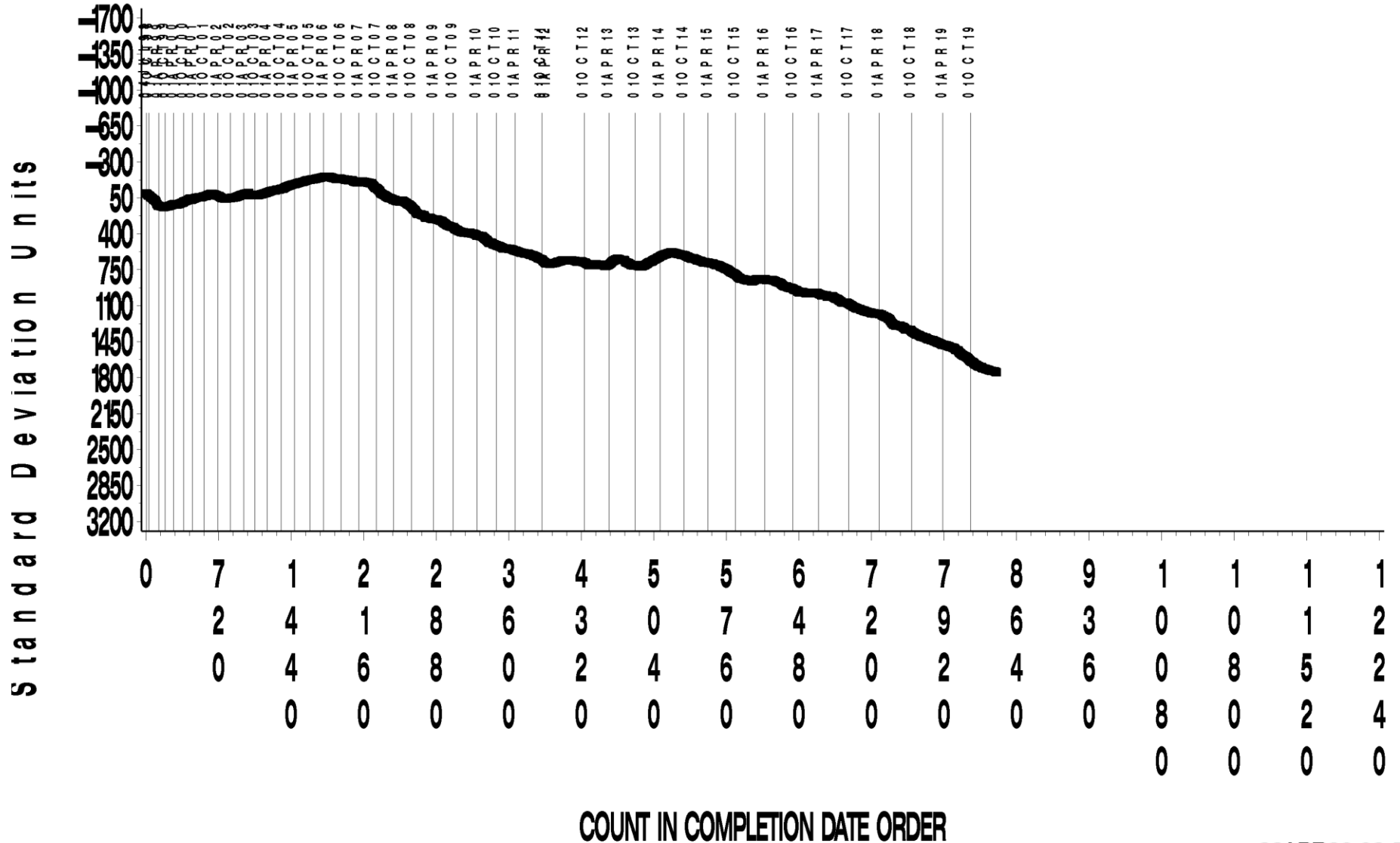
Chart of recent results



LEAD CHANGE (ppm)

CUSUM Severity Analysis

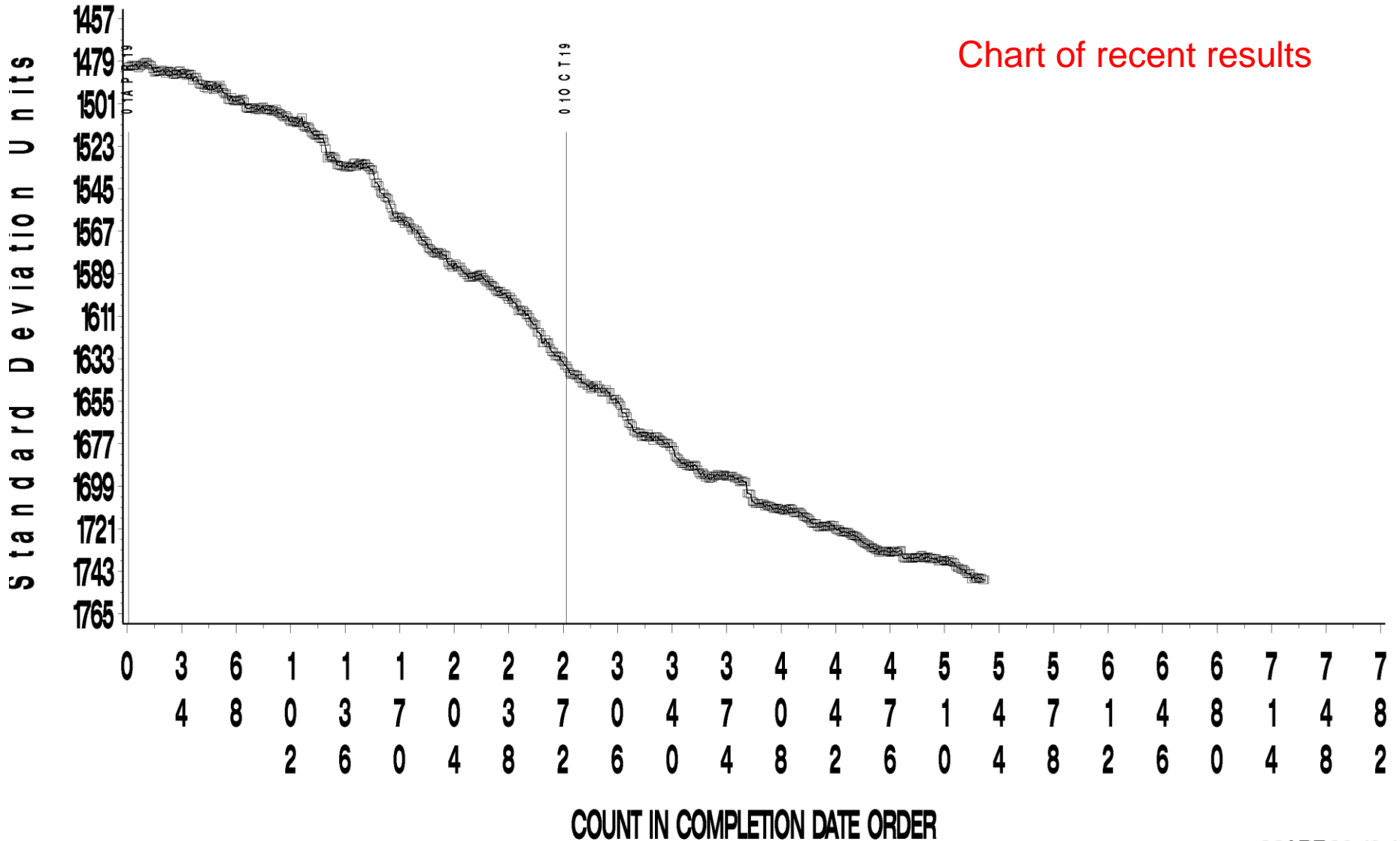
Historical Chart



LEAD CHANGE (ppm)

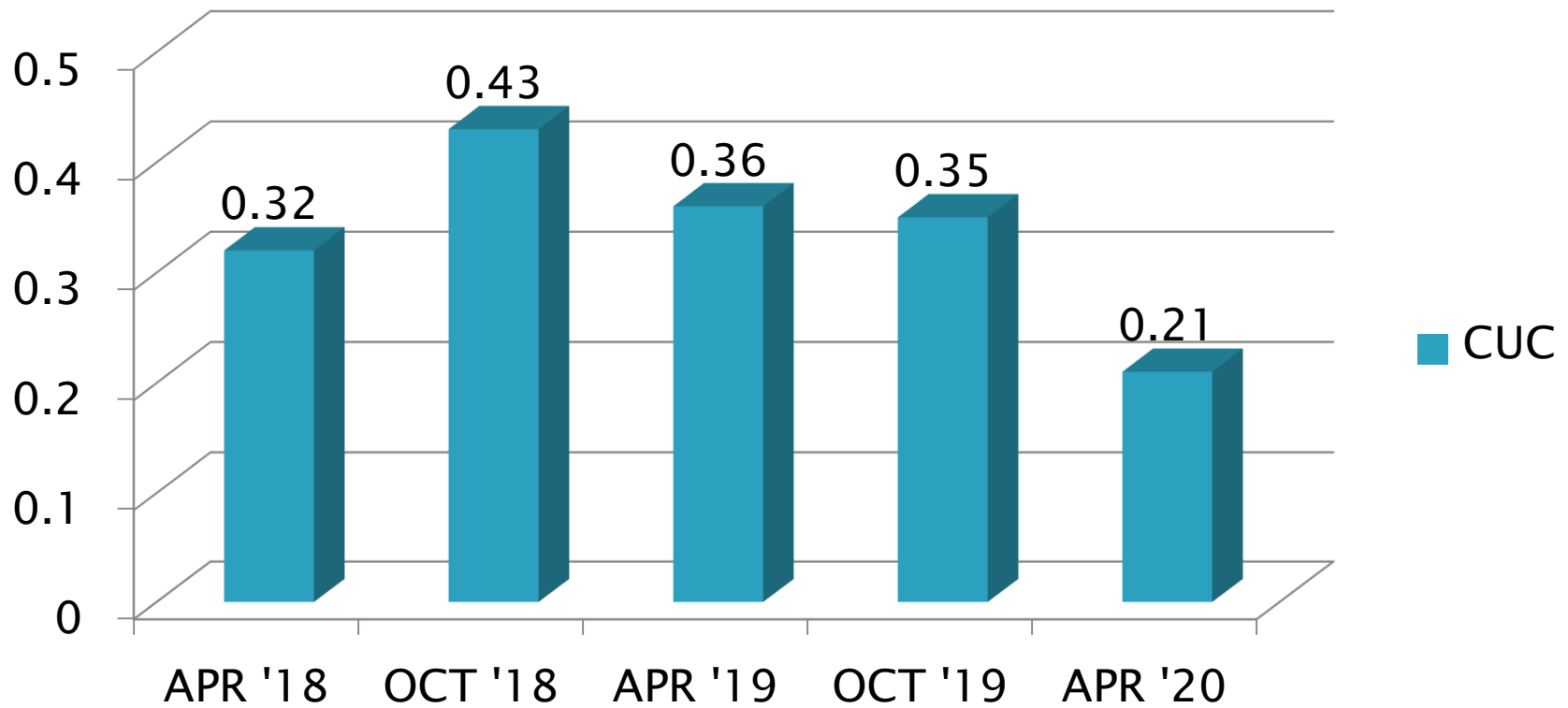
CUSUM Severity Analysis

Chart of recent results



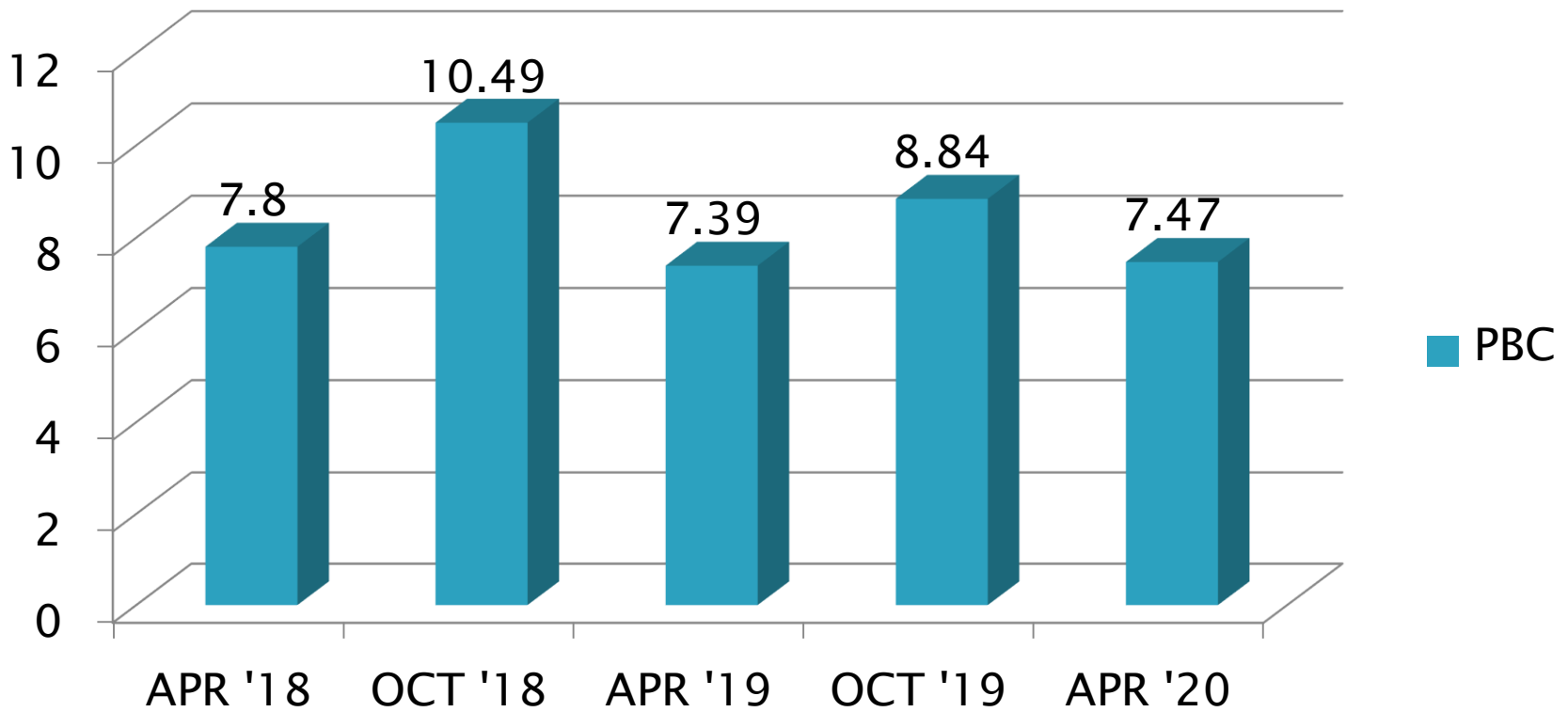
HTCBT Precision Estimates

CUC



HTCBT Precision Estimates

PBC



Information Letters*

Test	Date	IL	Topic
HTCBT	10/31/2019	19-2	Clarification of Test Result Calculation Precision and Reporting

*Available from TMC Website

Reference Oil Inventory Estimated Life

Oil	TMC Inventory (gallons)	Quantity Shipped in last 6 months (gallons)	Lab Inventory (samples)	Estimated Life
44-4	19.1	3.2	135	2.5 years
1005-5	37.5	6.3	245	3 years

Miscellaneous Information

- ▶ Available on TMC Website:
 - Oil Assignment Request and Test File Upload
 - Live Reference Test Data Bases
 - Surveillance Panel Meeting Minutes
- ▶ www.astmtmc.cmu.edu



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