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Test Monitoring Center

<http://astmtmc.cmu.edu>

ASTM Reference Testing Semi-Annual Report ASTM D6794 – EOWT

April 2021

EOWT Test Activity by Treat Rate*

Test Status	Validity Code	Number of Tests by Water Treat Rate				Total
		0.6%	1.0%	2.0%	3.0%	
Acceptable Calibration Test	AC	192	188	188	186	754
Failed Calibration Test	OC	3	9	3	9	24
Aborted Calibration Test	XC	2	3	1	4	10
Total						788

- 5 labs reported data

*October 1, 2020 – March 31, 2021

EOWT Test Activity by Reference Oil*

Test Status	Validity Code	Number of Tests by Reference Oil		Total
		79	77-3	
Acceptable Calibration Test	AC	378	376	754
Failed Calibration Test	OC	9	15	24
Aborted Calibration Test	XC	4	6	10
Total		391	397	788

*October 1, 2020 – March 31, 2021

EOWT Failed Tests

Failed Parameter	Number of Tests				Total
	0.6%	1.0%	2.0%	3.0%	
Severe Change in Flowrate	2	7	1	7	17
Mild Change in Flowrate	1	2	2	2	7
Total					24

EOWT Failed Tests by Lab

Failed Parameter	LTMS Lab					#
	A	B	G	I	L	
Severe Change in Flowrate	10	0	5	1	1	17
Mild Change in Flowrate	0	0	6	0	1	7
Total	10	0	11	1	2	24

EOWT Lost Tests*

Status	Cause	Number of Tests				#
		0.6%	1.0%	2.0%	3.0%	
Aborted	Sample Preparation Error	1	2	0	3	6
Invalid	Power Failure	1	1	1	1	4
Total						10

*Invalid and aborted calibration tests

EOWT Lost Tests by Lab

Cause	LTMS Lab					#
	A	B	G	I	L	
Sample Preparation Error	0	6	0	0	0	6
Power Failure	0	0	4	0	0	4
Total	0	0	0	0	0	10

*Invalid and aborted calibration tests

EOWT Test Severity

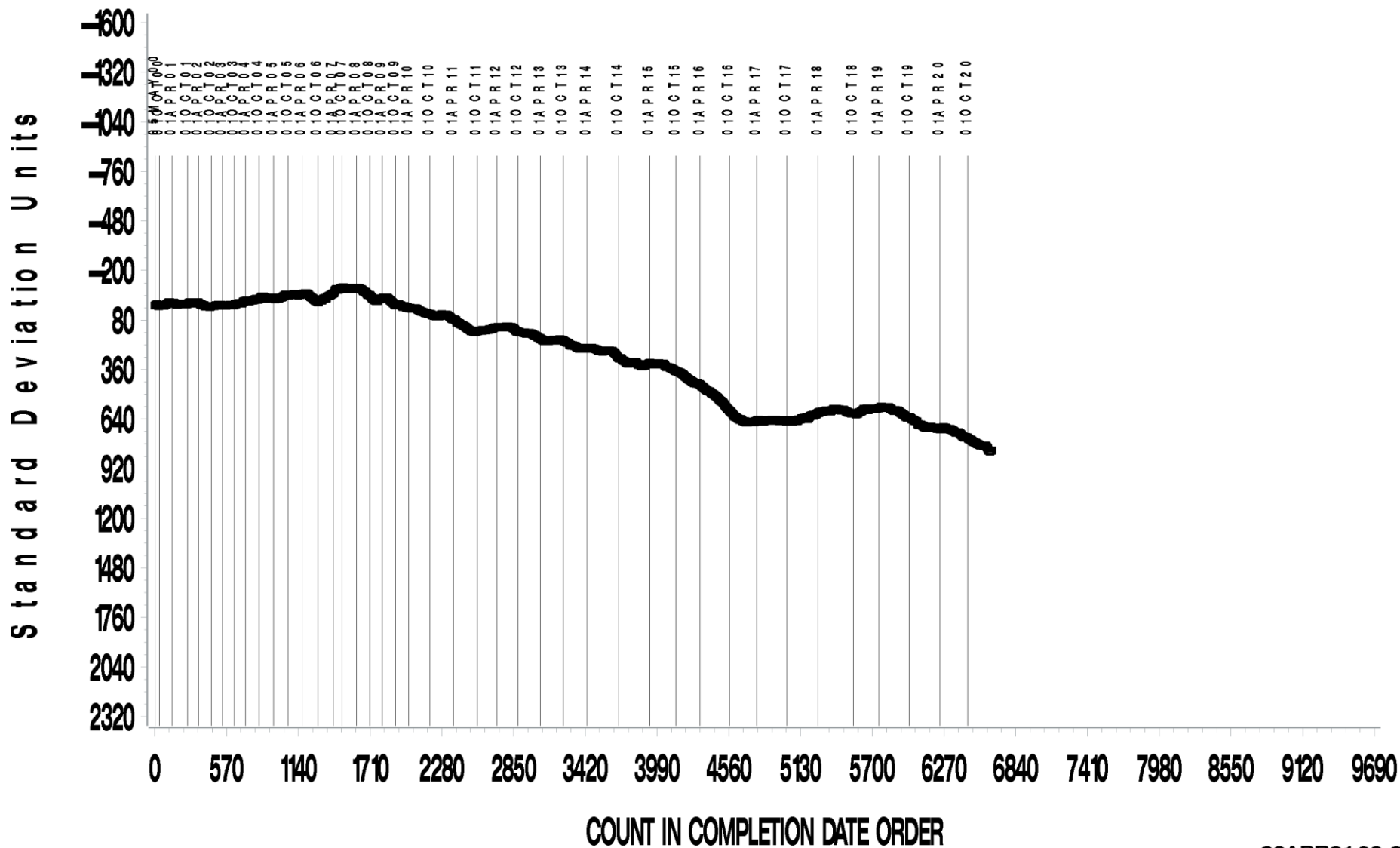
- ▶ Change in flowrate is trending severe for all treat rates.

EOWT INDUSTRY OPERATIONALLY VALID DATA
CFA 0.6% Water Treat Rate
20 —25 ML CHANGE IN FLOWRATE AVG.



CUSUM Severity Analysis

Historical Chart

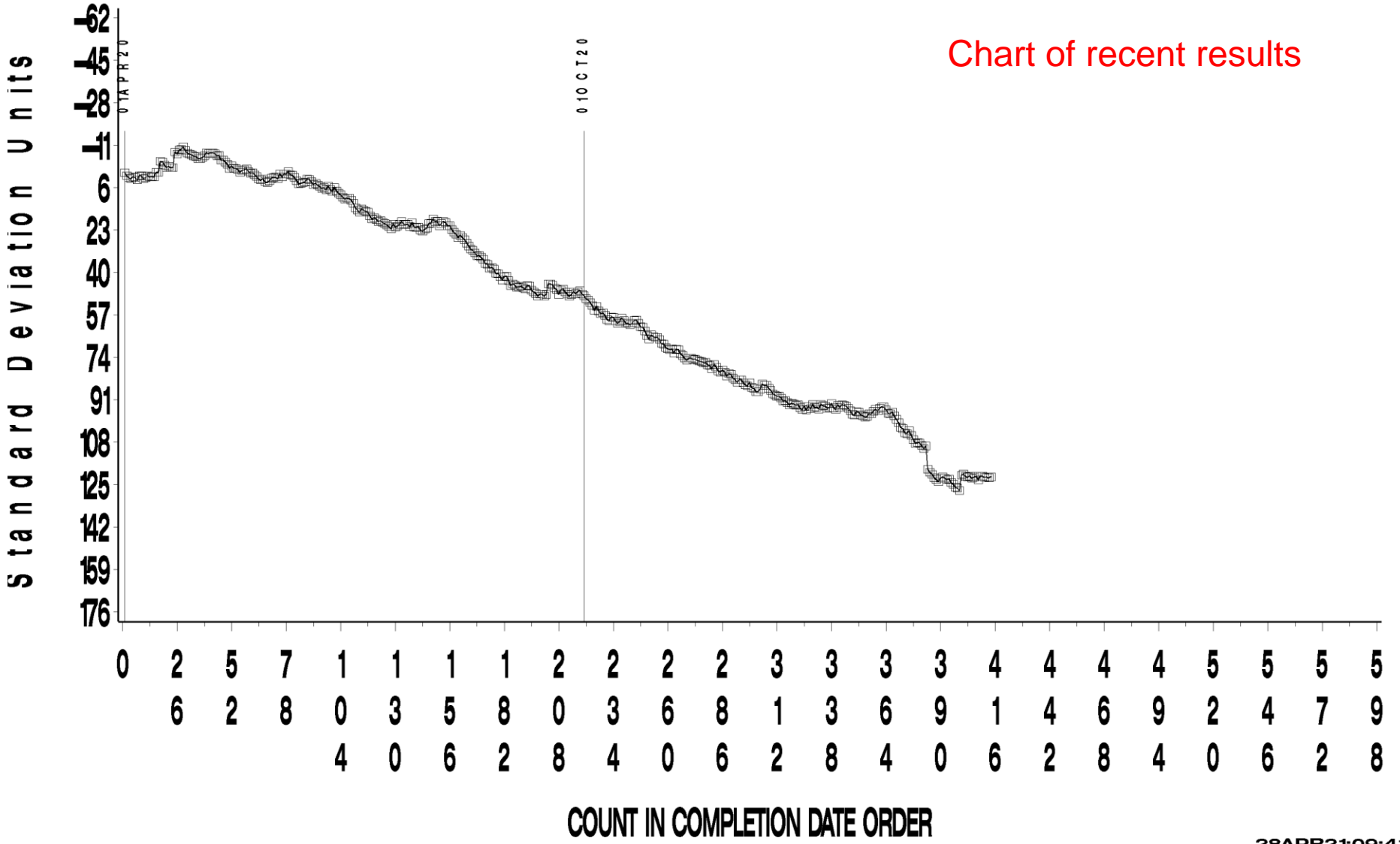


EOWT INDUSTRY OPERATIONALLY VALID DATA
 CFA 0.6% Water Treat Rate
 20 —25 ML CHANGE IN FLOWRATE AVG.



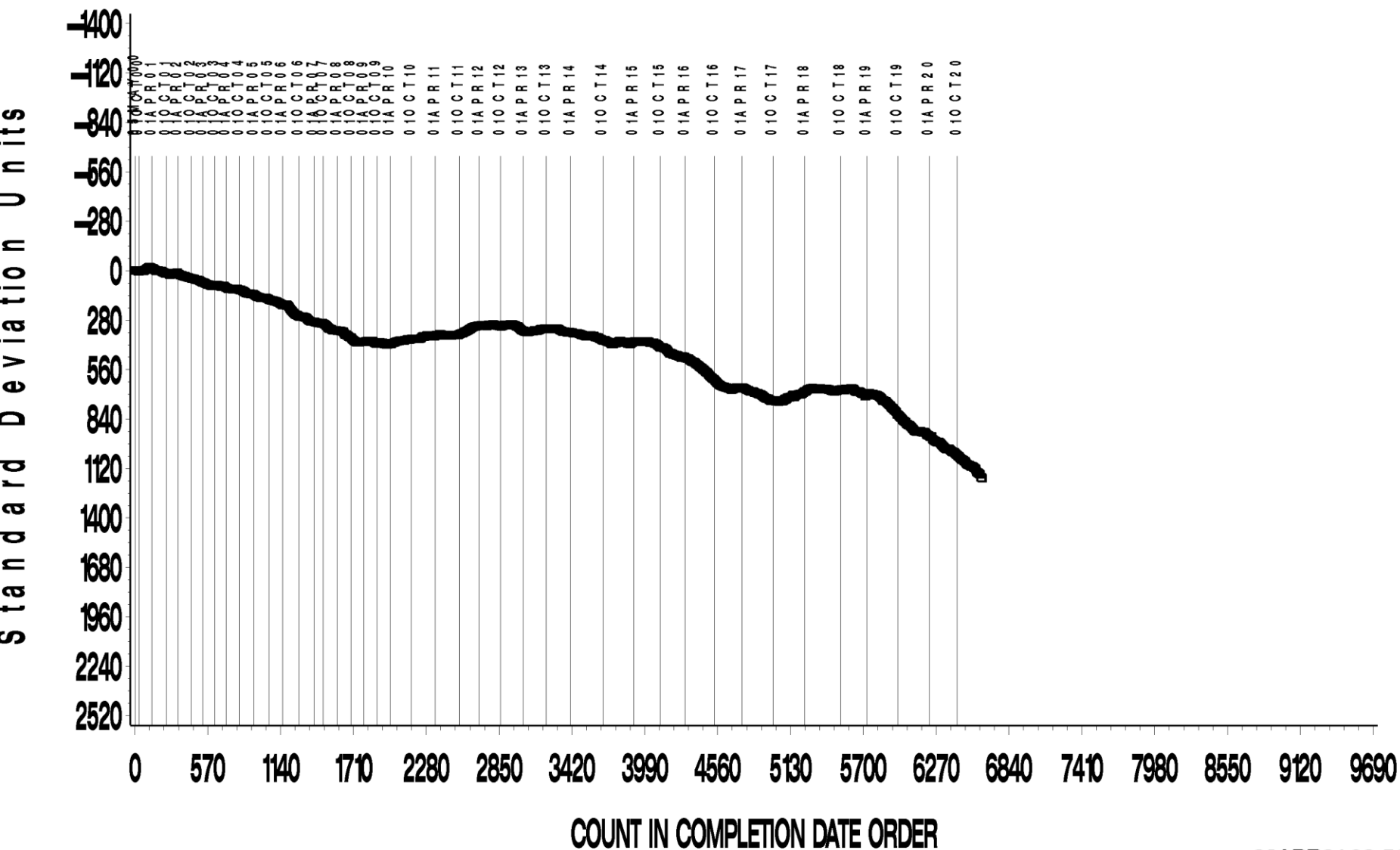
CUSUM Severity Analysis

Chart of recent results



CUSUM Severity Analysis

Historical Chart

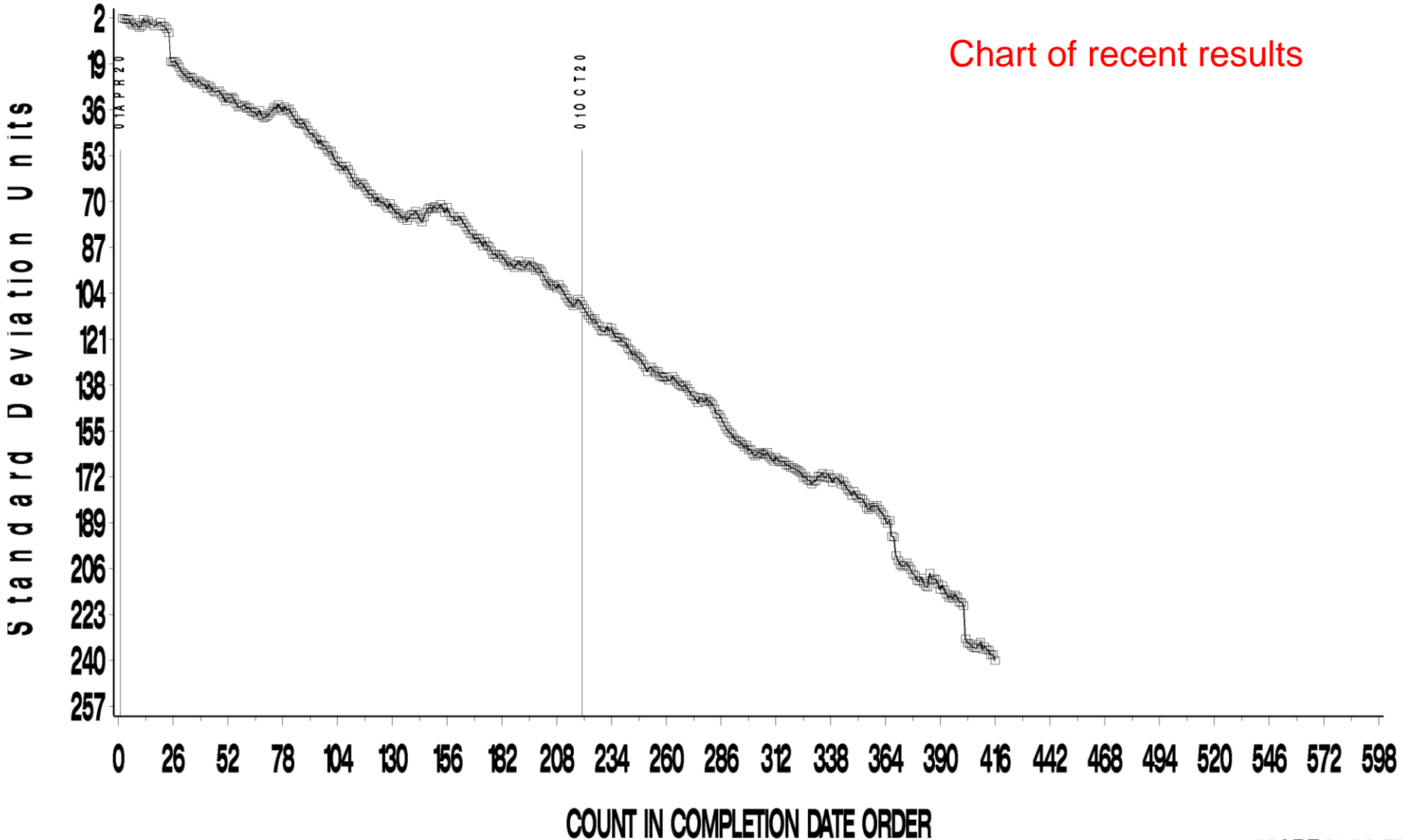


EOWT INDUSTRY OPERATIONALLY VALID DATA
CFA 1% Water Treat Rate
20 —25 ML CHANGE IN FLOWRATE AVG.



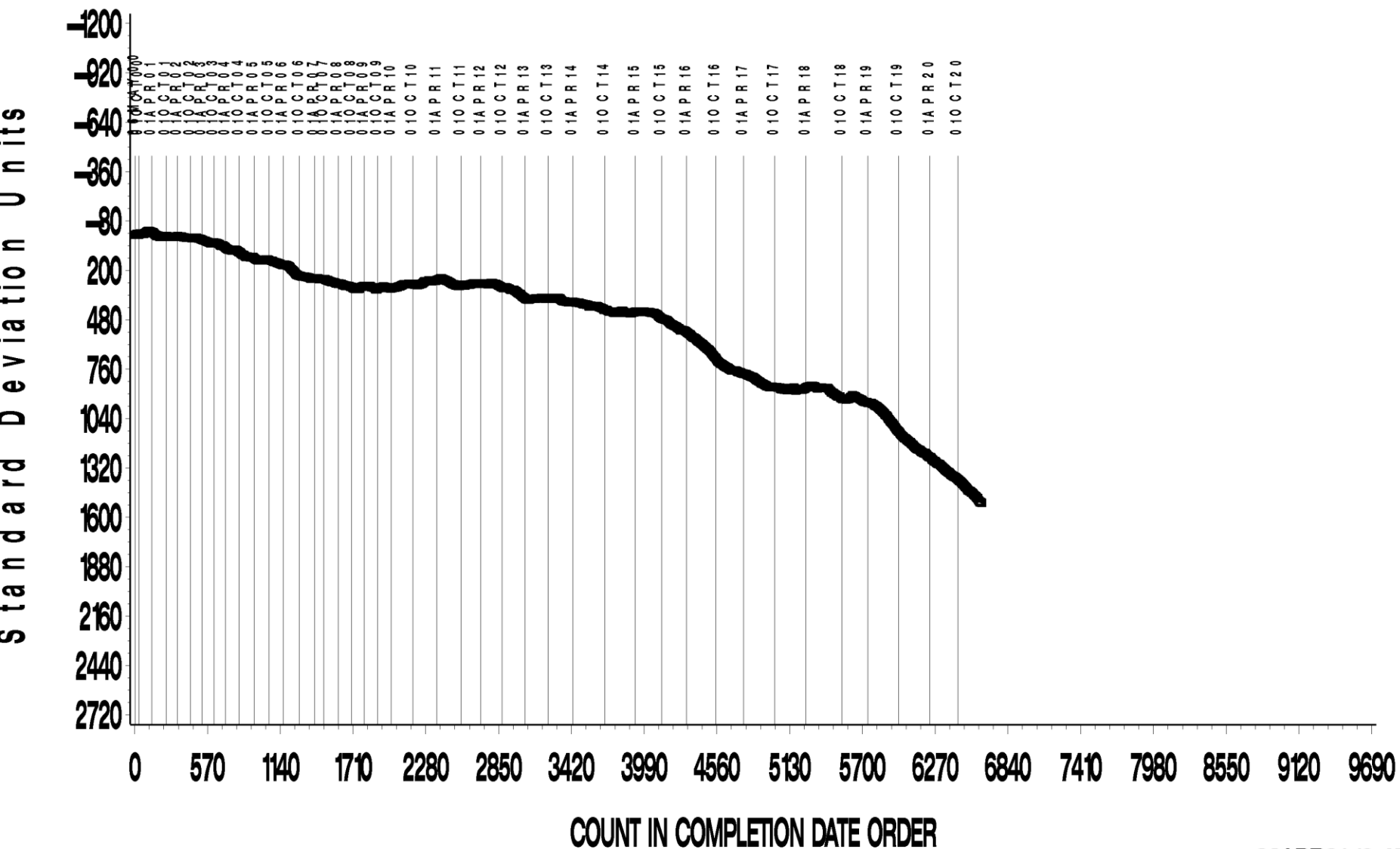
CUSUM Severity Analysis

Chart of recent results



CUSUM Severity Analysis

Historical Chart

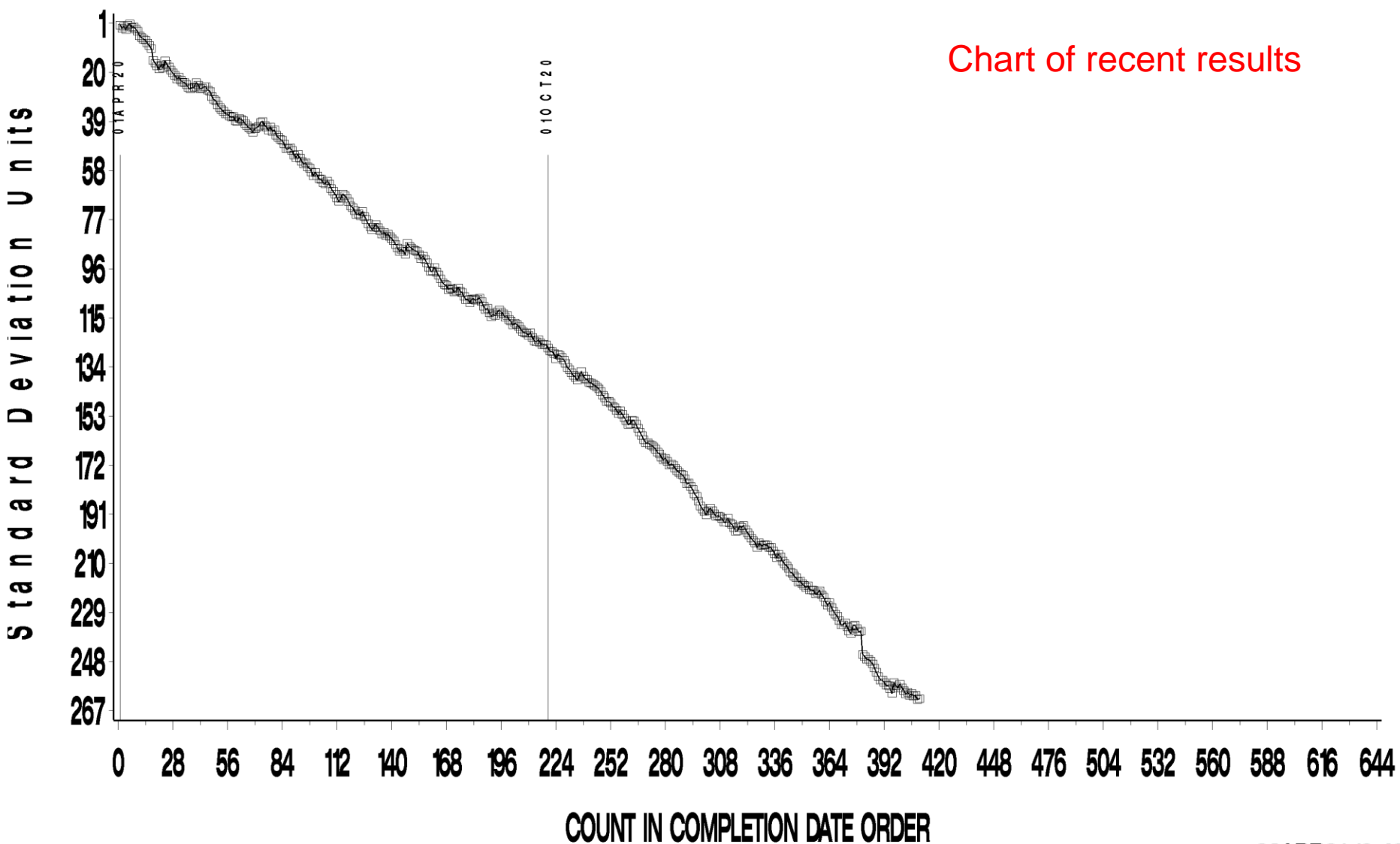


EOWT INDUSTRY OPERATIONALLY VALID DATA
CFA 2% Water Treat Rate
20 —25 ML CHANGE IN FLOWRATE AVG.



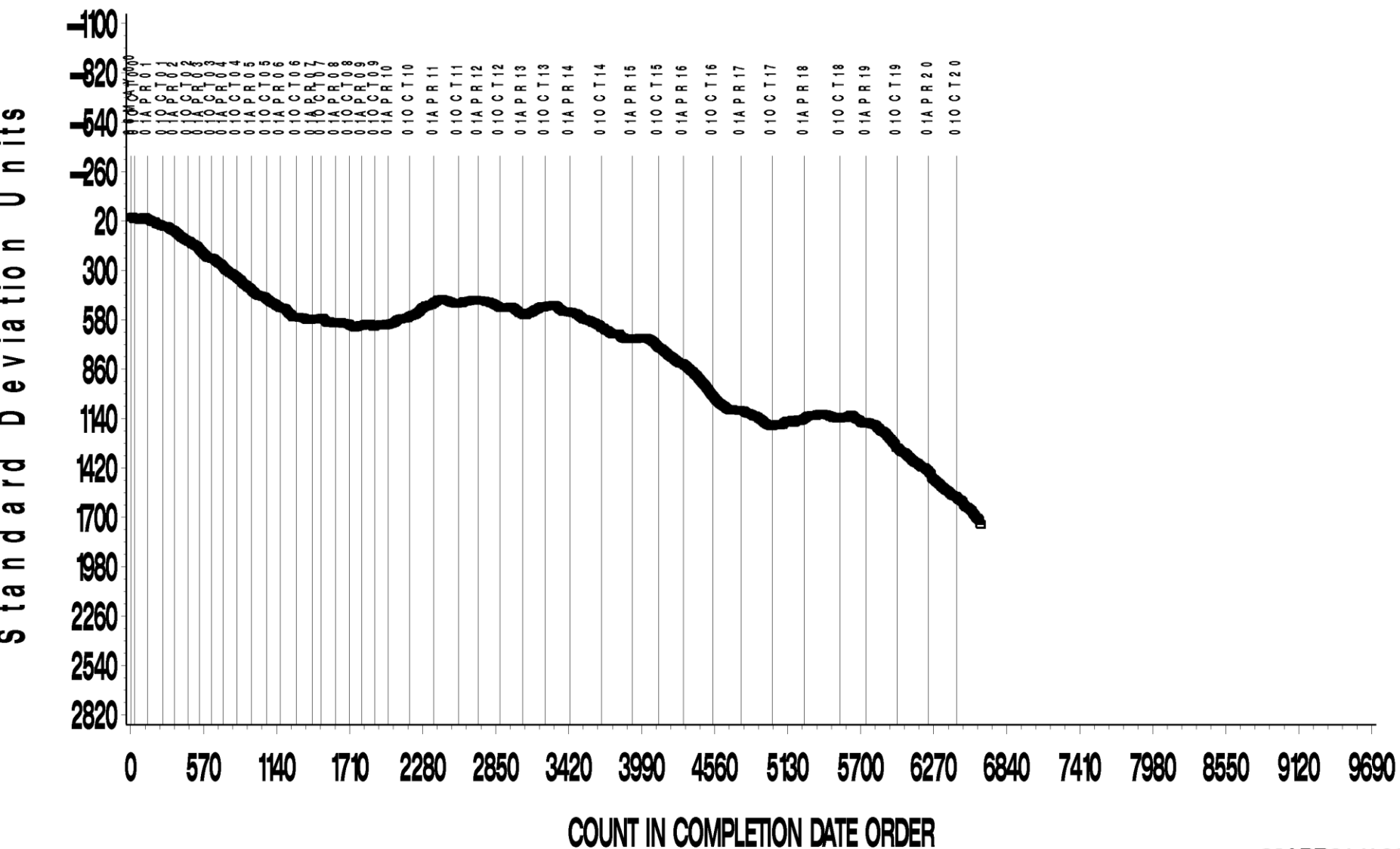
CUSUM Severity Analysis

Chart of recent results



CUSUM Severity Analysis

Historical Chart

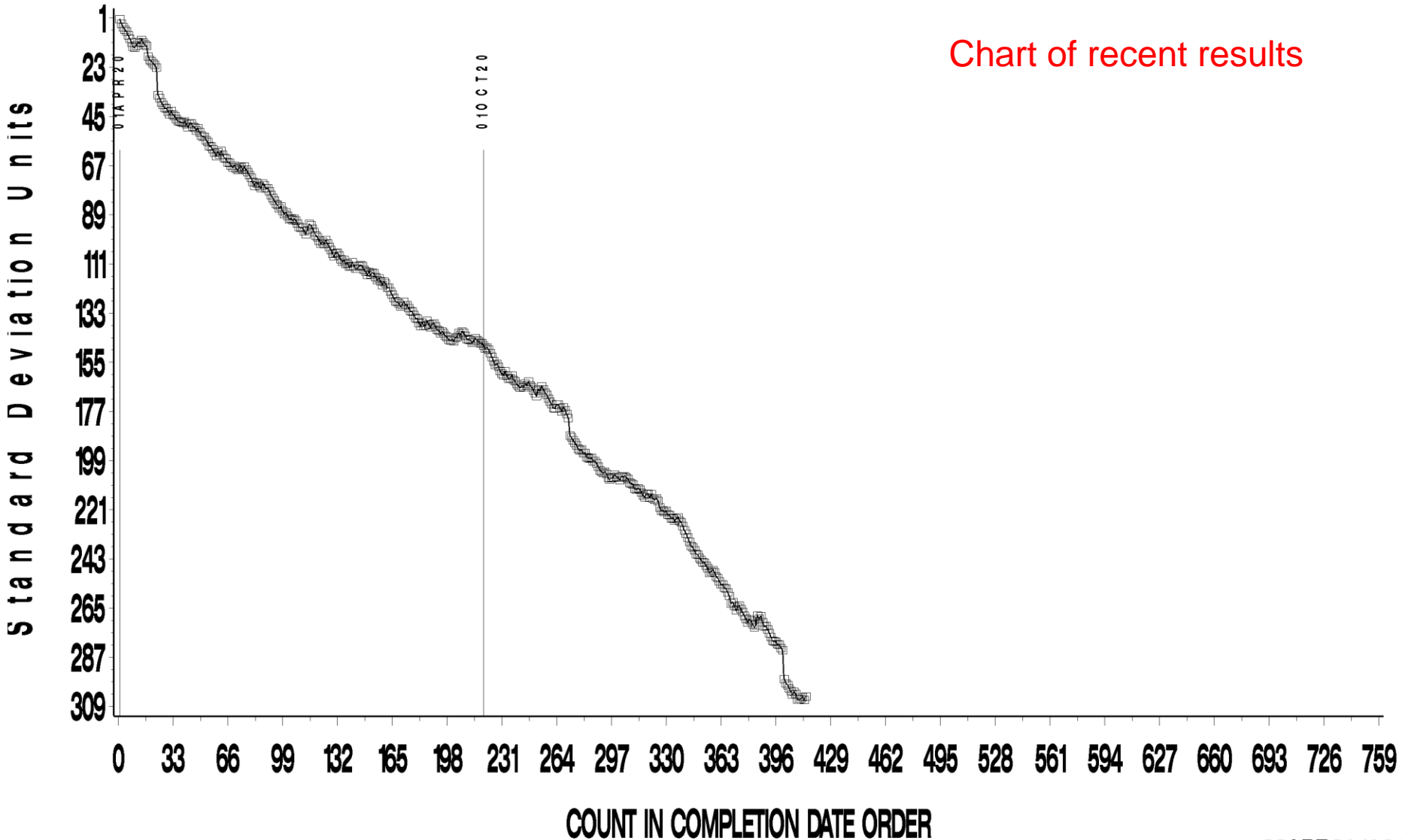


EOWT INDUSTRY OPERATIONALLY VALID DATA
CFA 3% Water Treat Rate
20 —25 ML CHANGE IN FLOWRATE AVG.



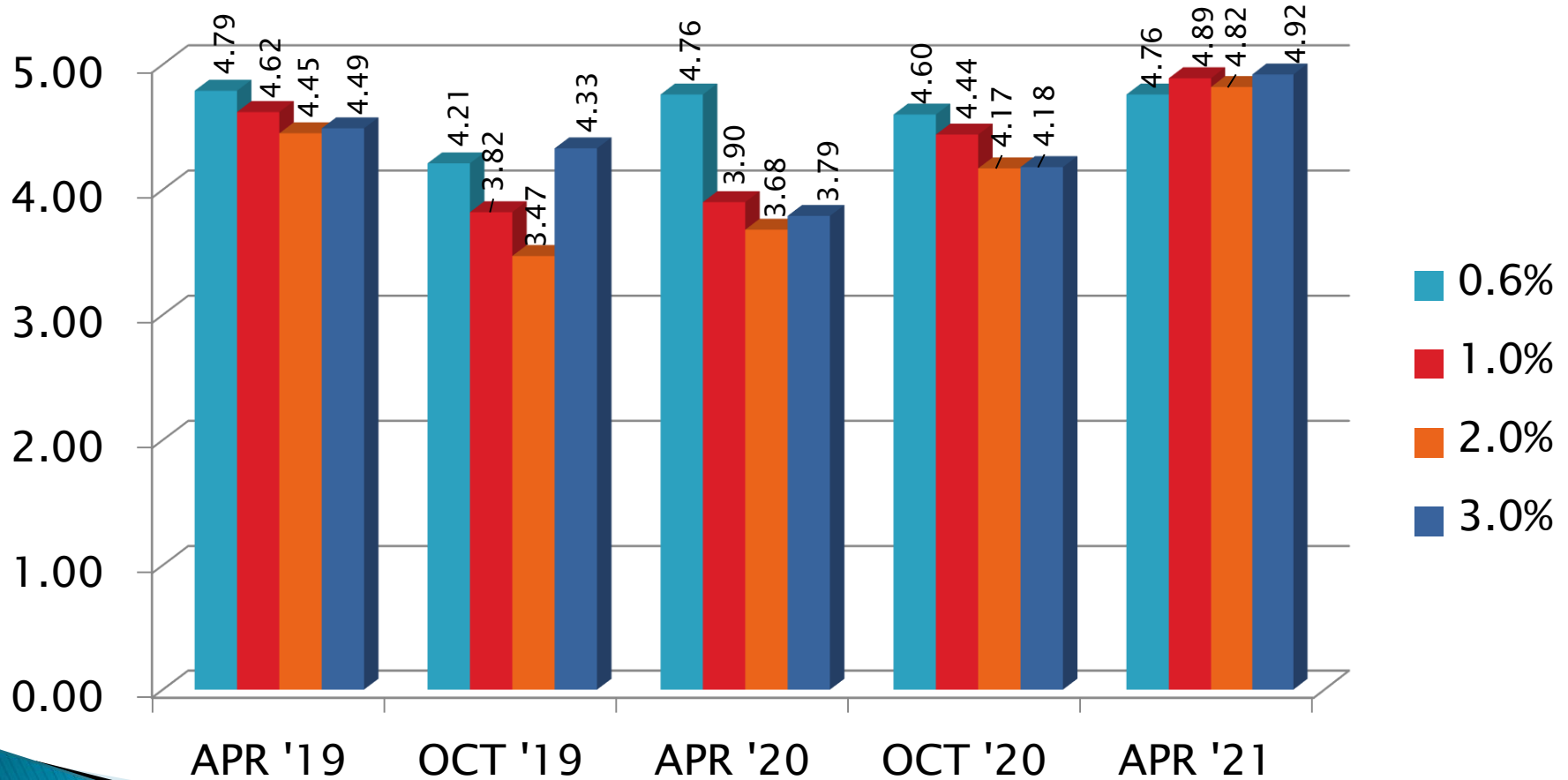
CUSUM Severity Analysis

Chart of recent results



EOWT Precision Estimates

CFA



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Information Letters*

Test	Date	IL	Topic
			No new information letters this period.

*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
77-3	568.3	36.1	196	5+ years
79	391.2	44.2	197	3.5 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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