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# **Test Monitoring Center**

<http://astmtmc.cmu.edu>

## ASTM Reference Testing Semi-Annual Report EOWT

April 2020

# 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	238	241	244	239	962
Failed Calibration Test	OC	5	4	1	6	16
<b>Total</b>						<b>978</b>

\*October 1, 2019 – March 31, 2020

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# EOWT Test Activity by Reference Oil\*

Test Status	Validity Code	Number of Tests by Reference Oil		Total
		79	77-3	
Acceptable Calibration Test	AC	482	480	962
Failed Calibration Test	OC	9	7	16
<b>Total</b>				<b>978</b>

\*October 1, 2019 – March 31, 2020

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# EOWT Failed Tests

Failed Parameter	Number of Tests				Total
	0.6%	1.0%	2.0%	3.0%	
Severe Change in Flowrate	3	2	1	2	8
Mild Change in Flowrate	2	2	0	4	8
<b>Total</b>					<b>16</b>

# EOWT Lost Tests\*

Status	Cause	Number of Tests				#
		0.6%	1.0%	2.0%	3.0%	
	No lost tests this period.					

\*Invalid and aborted calibration tests

# EOWT Test Severity

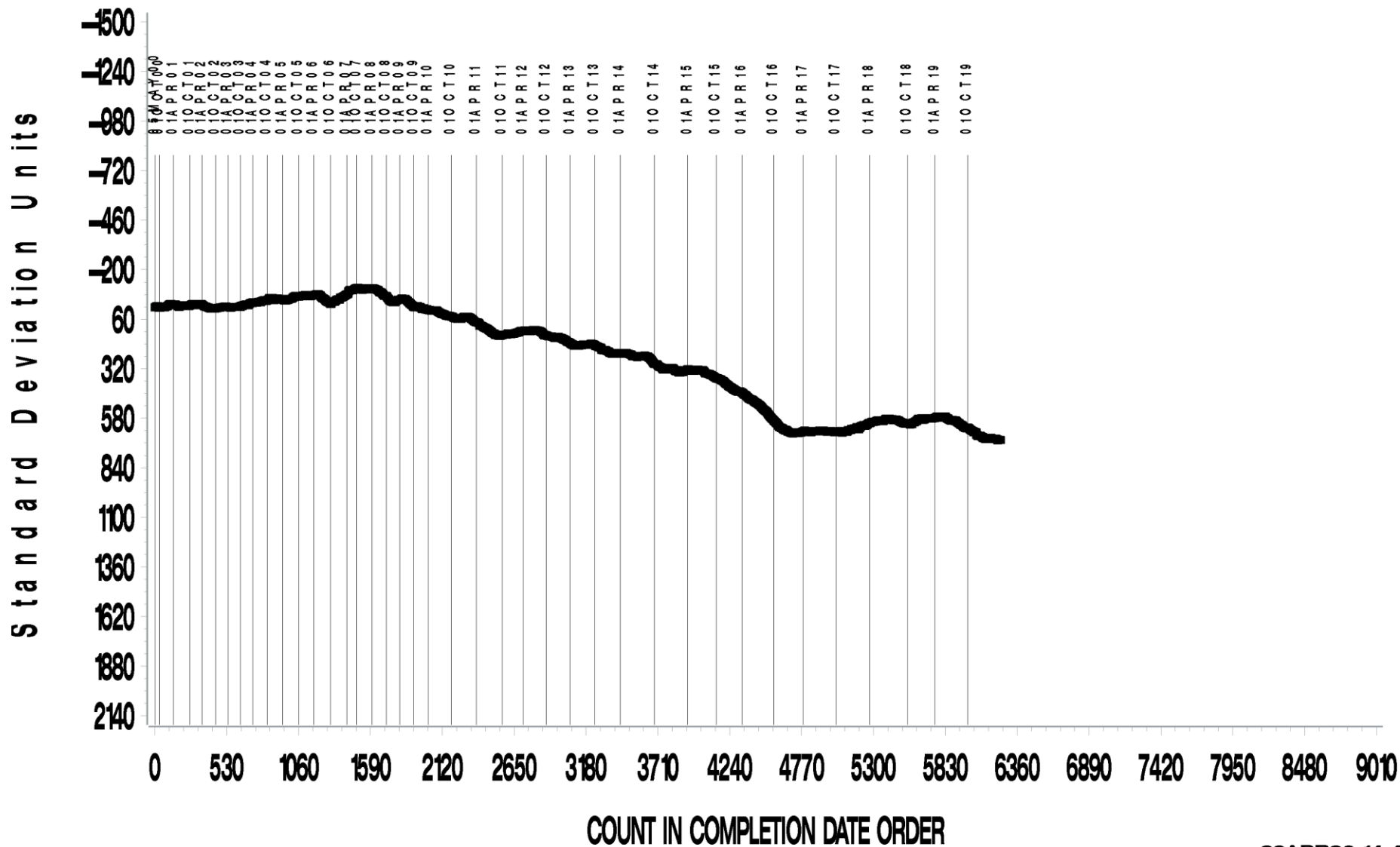
- ▶ Change in flowrate is trending severe for all treat rates.

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



CUSUM Severity Analysis

Historical Chart

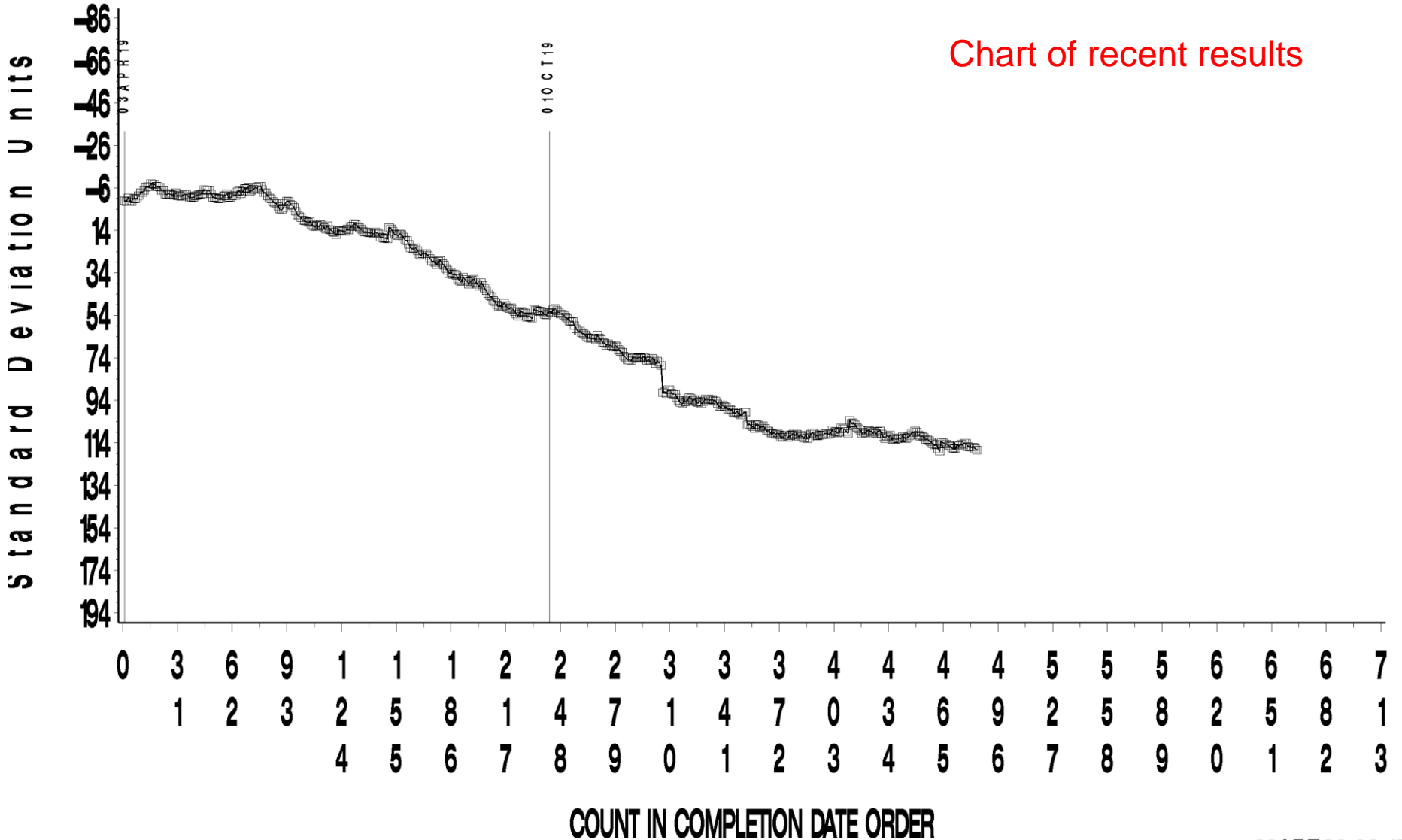


**EOWT INDUSTRY OPERATIONALLY VALID DATA**  
**CFA 0.6% Water Treat Rate**  
**20 —25 ML CHANGE IN FLOWRATE AVG.**



CUSUM Severity Analysis

Chart of recent results





CUSUM Severity Analysis

Historical Chart

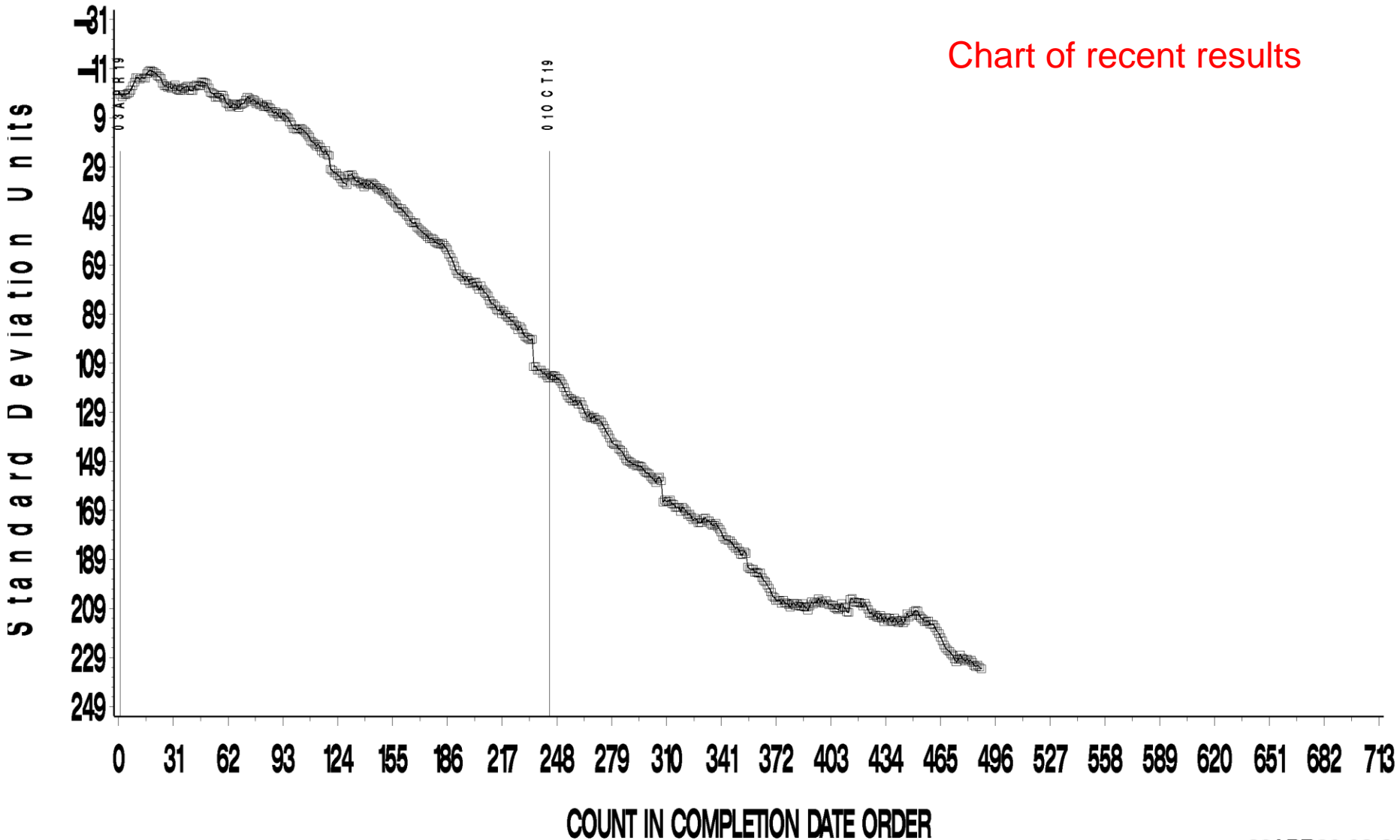


EOWT INDUSTRY OPERATIONALLY VALID DATA  
CFA 1% Water Treat Rate  
20 —25 ML CHANGE IN FLOWRATE AVG.



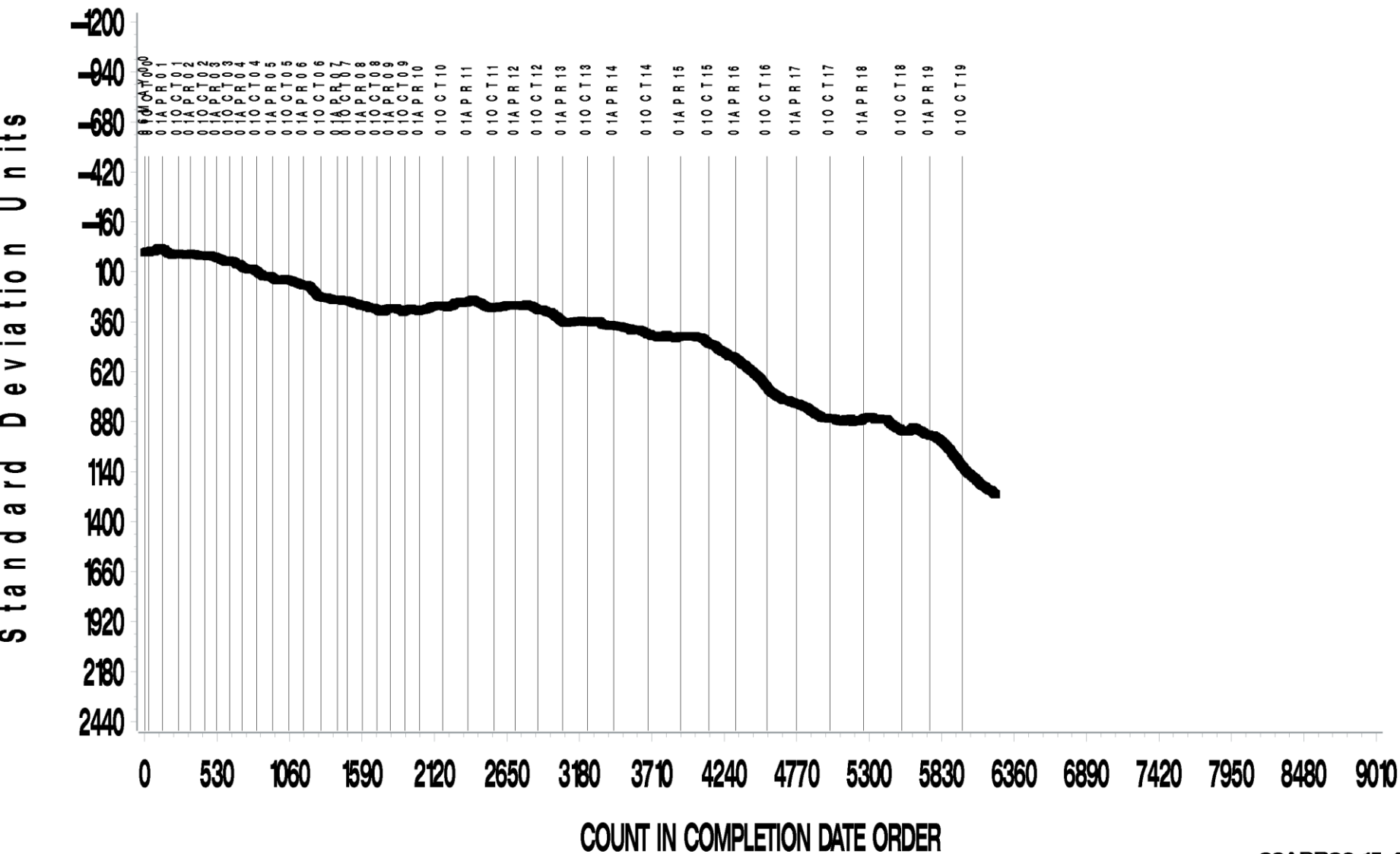
CUSUM Severity Analysis

Chart of recent results



CUSUM Severity Analysis

Historical Chart

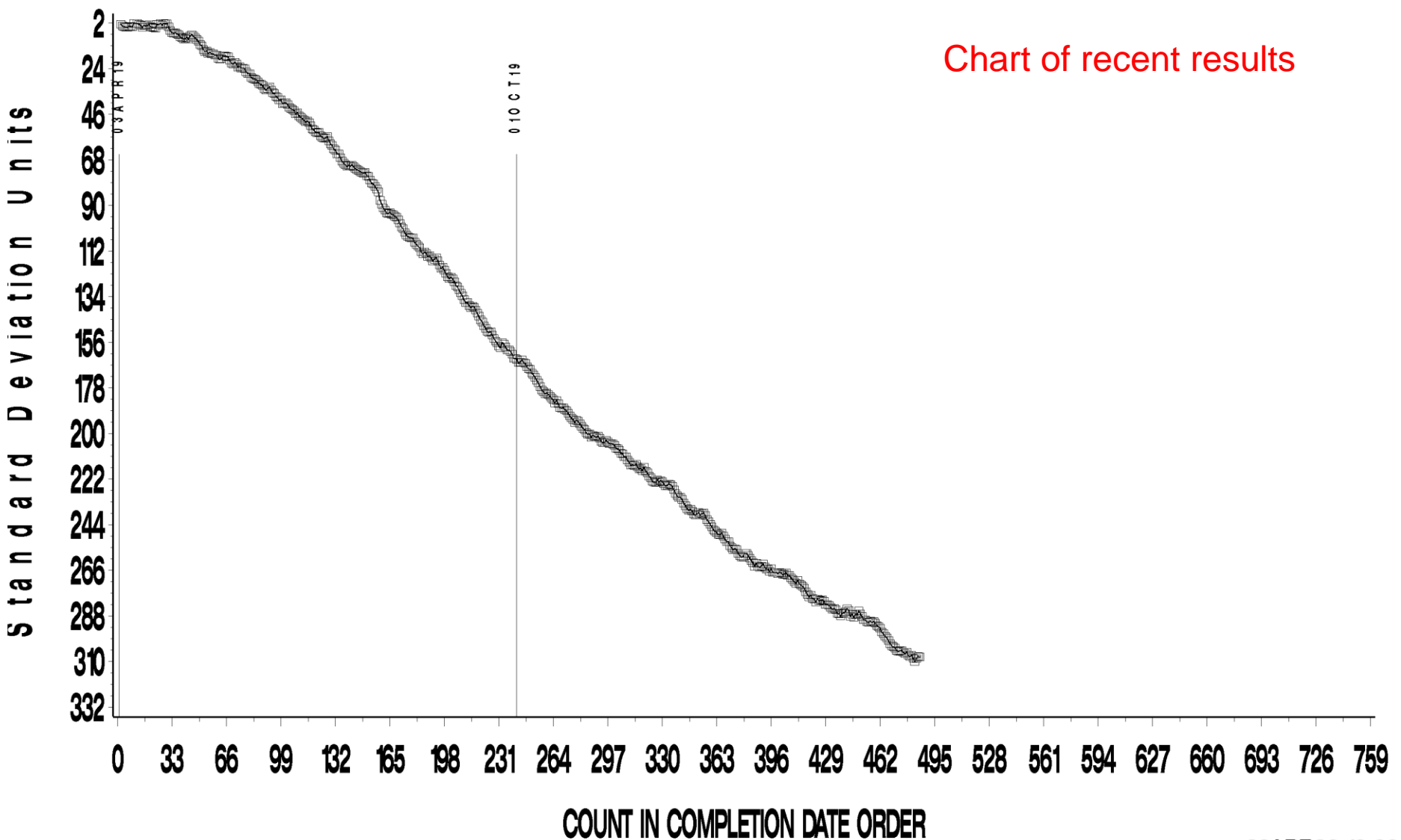


EOWT INDUSTRY OPERATIONALLY VALID DATA  
CFA 2% Water Treat Rate  
20 —25 ML CHANGE IN FLOWRATE AVG.



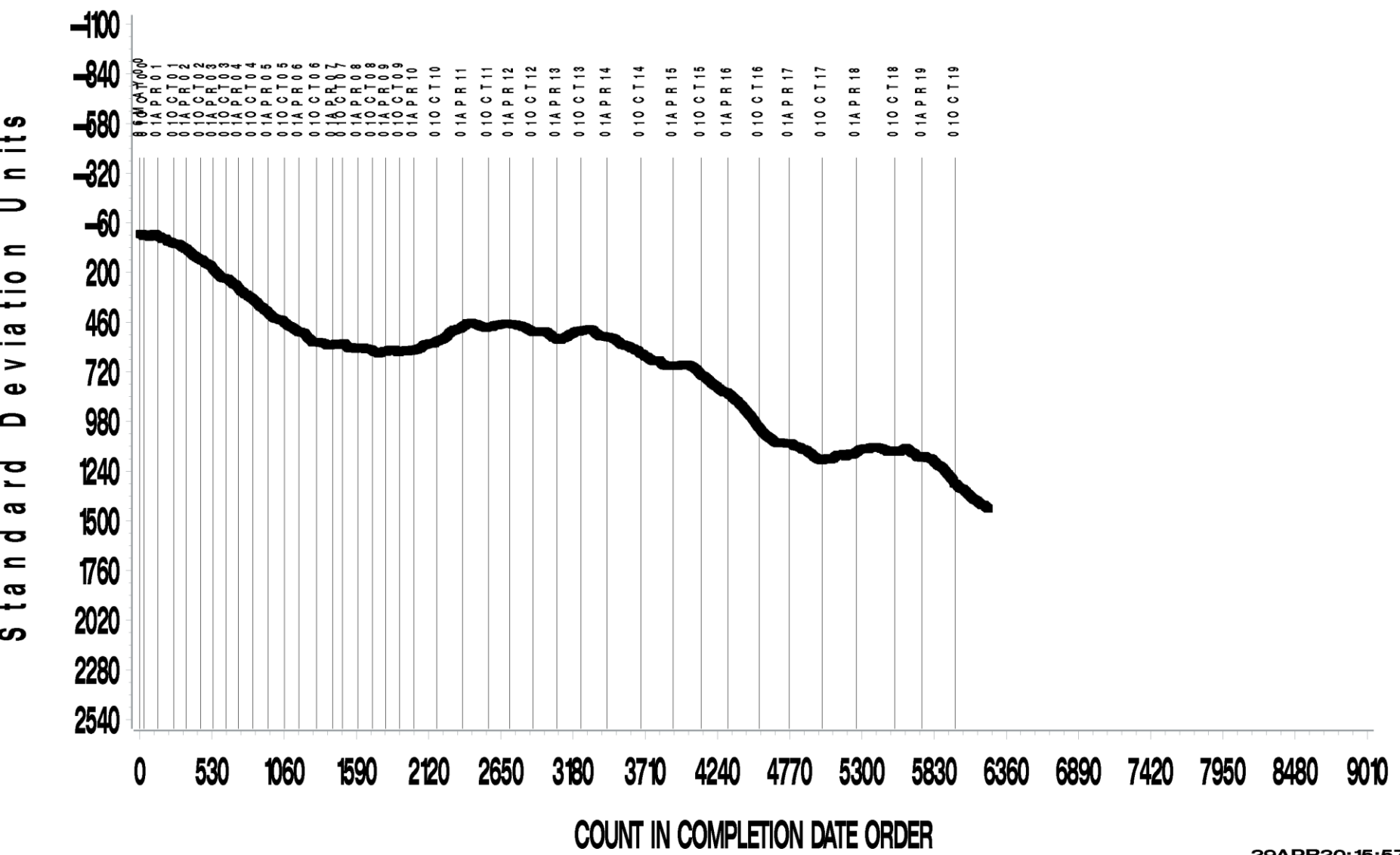
CUSUM Severity Analysis

Chart of recent results



CUSUM Severity Analysis

Historical Chart

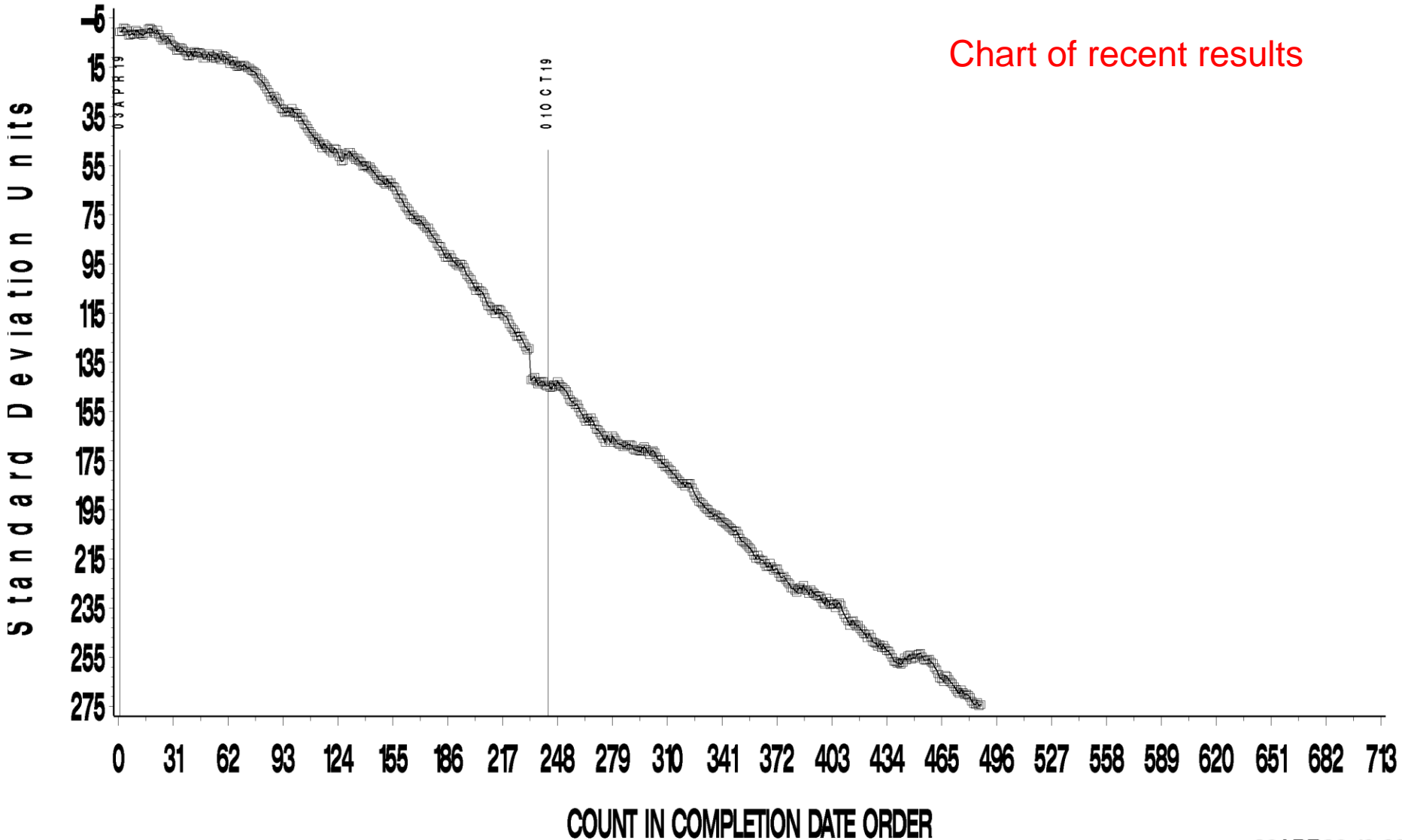


EOWT INDUSTRY OPERATIONALLY VALID DATA  
CFA 3% Water Treat Rate  
20 —25 ML CHANGE IN FLOWRATE AVG.



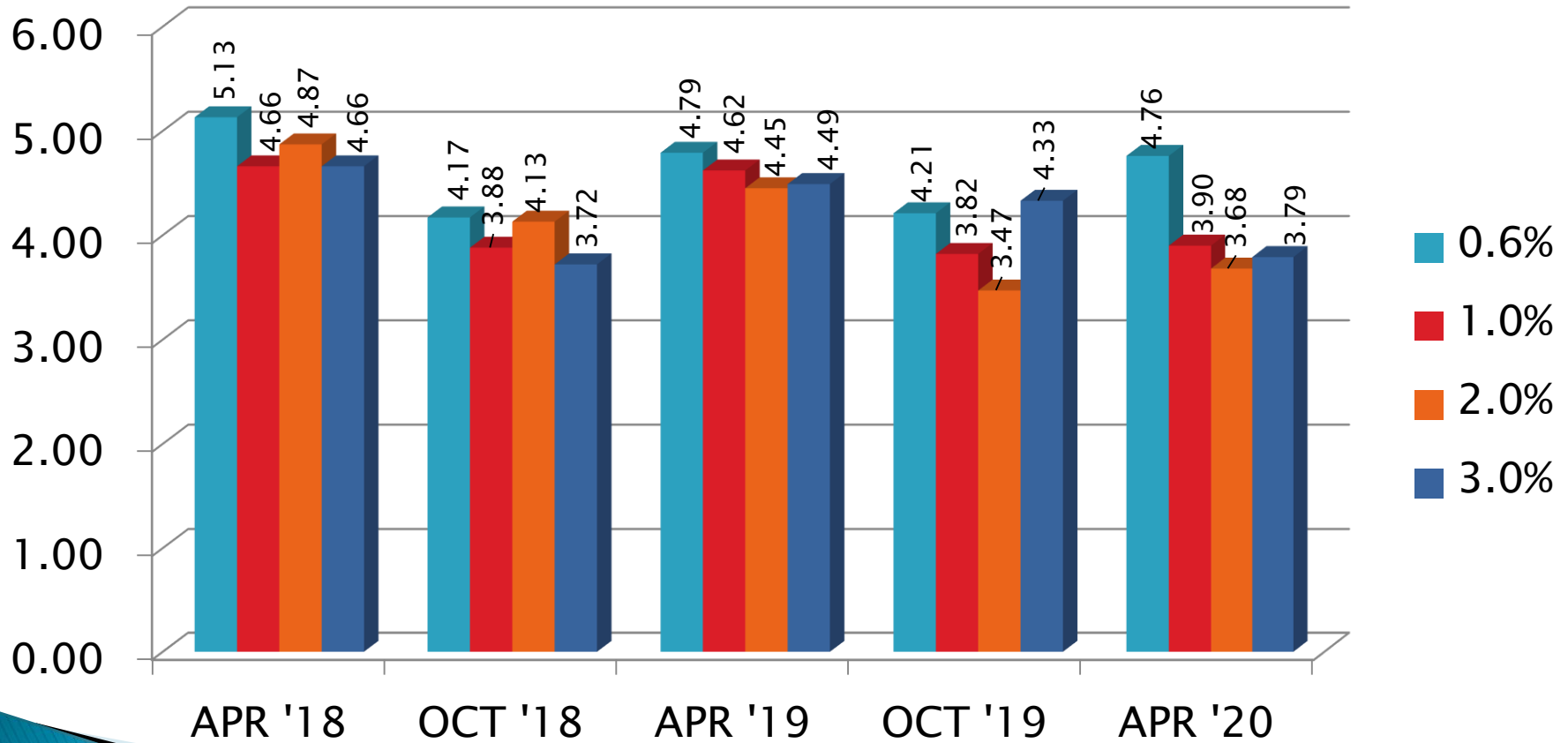
CUSUM Severity Analysis

Chart of recent results



# EOWT Precision Estimates

## CFA



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# Information Letters\*

Test	Date	IL	Topic
EOWT	12/16/2019	19-2	Running Individual Water Treat Rates

\*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	625	47	234	5+ years
79	468	67	231	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](http://www.astmtmc.cmu.edu)



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