



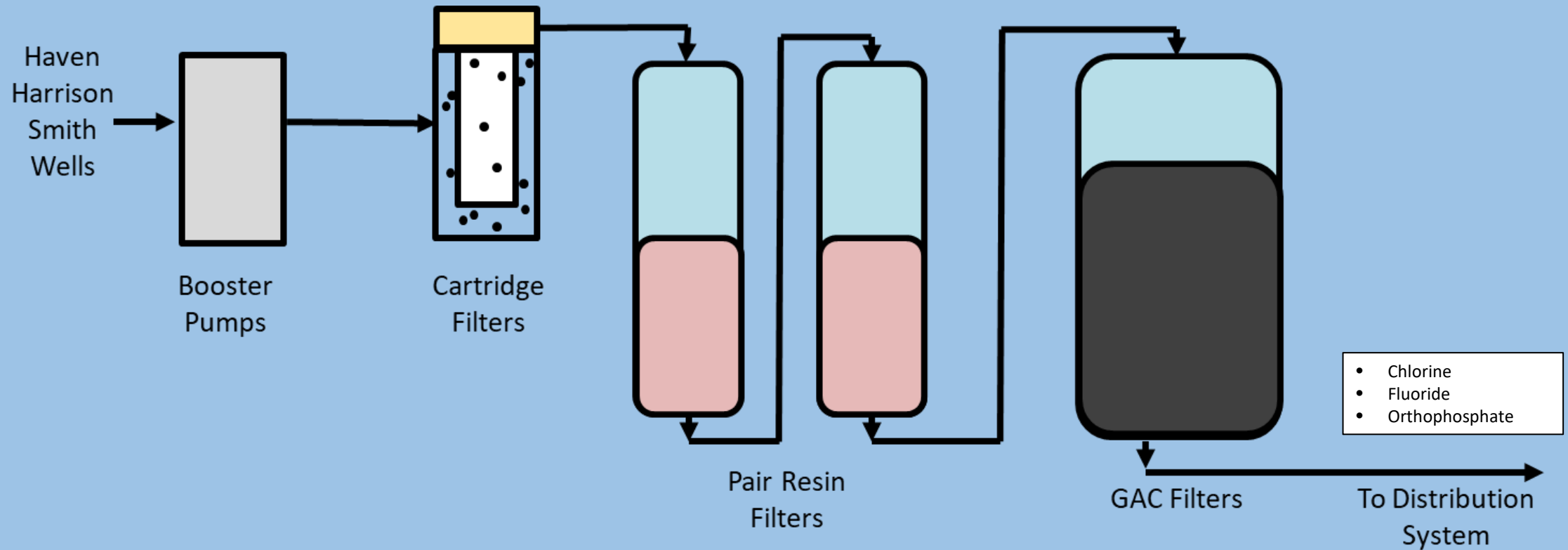
THE PEASE TRADEPORT WATER SYSTEM UPDATE

November 1, 2023

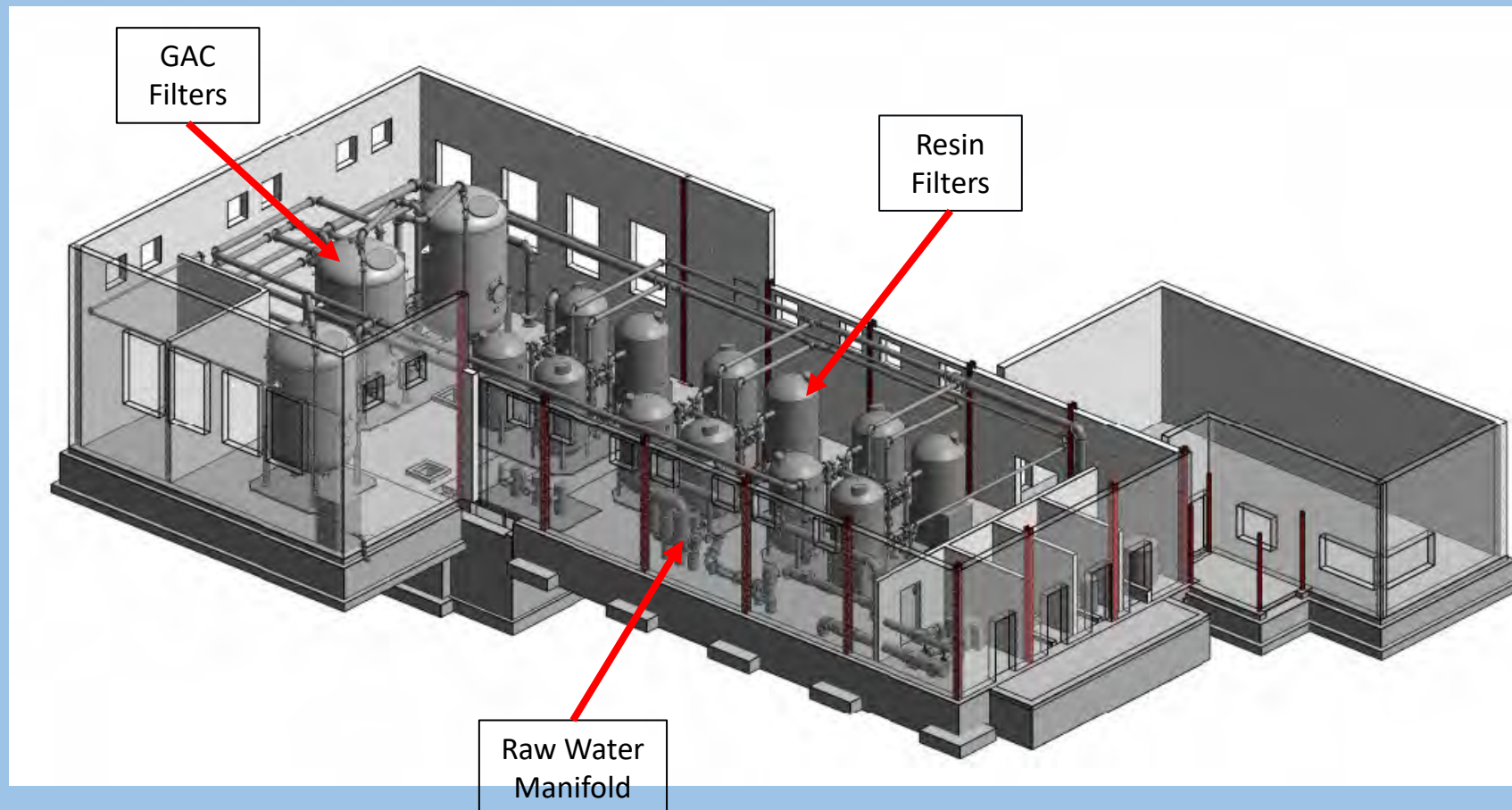
Pease Restoration Advisory Board

Pease WTF Process Schematic

New Treatment System



Final Proposed Treatment Layout



Filter Room – Resin and GAC Filters – March 2021



Two Years of Construction

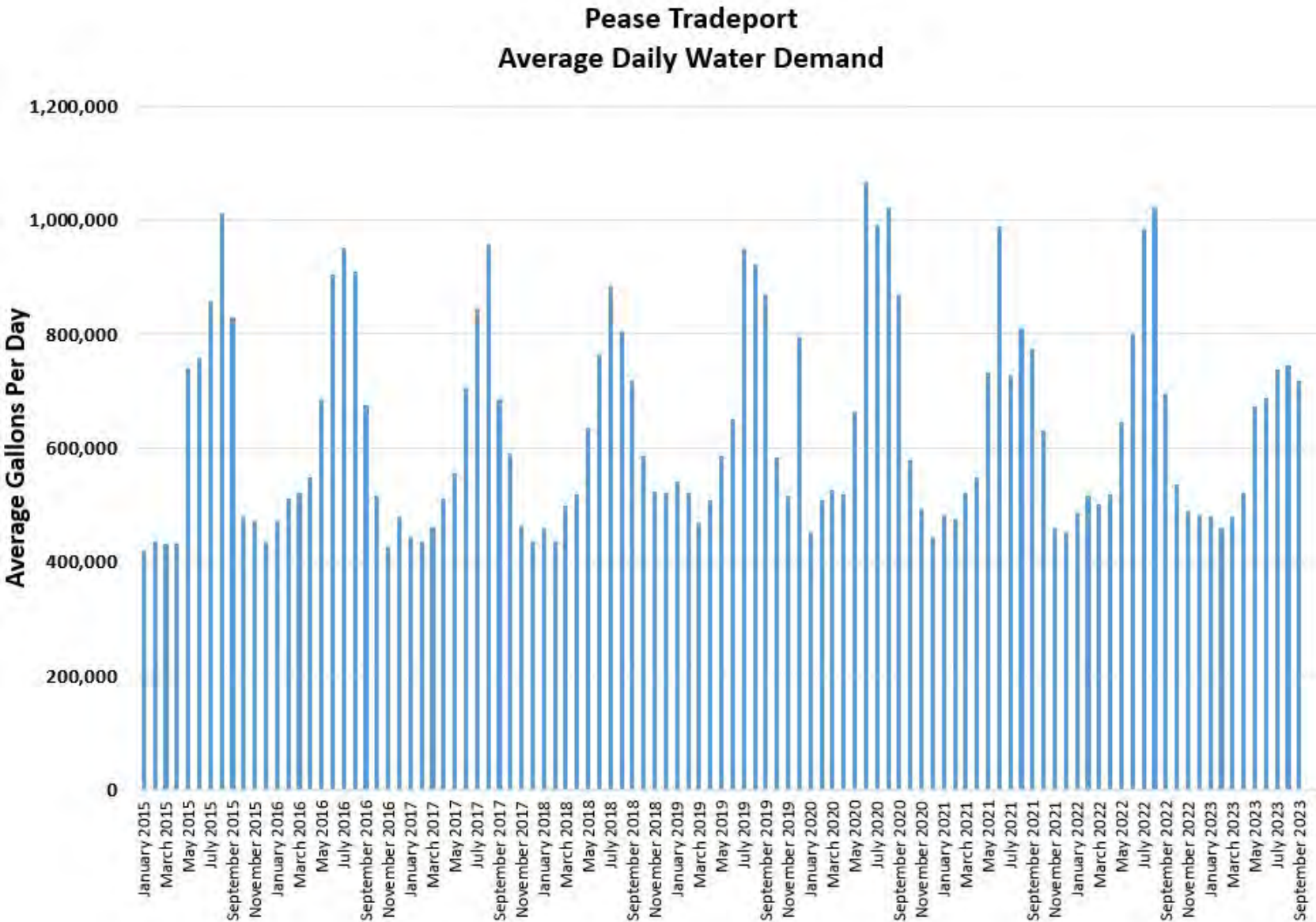
April 2019



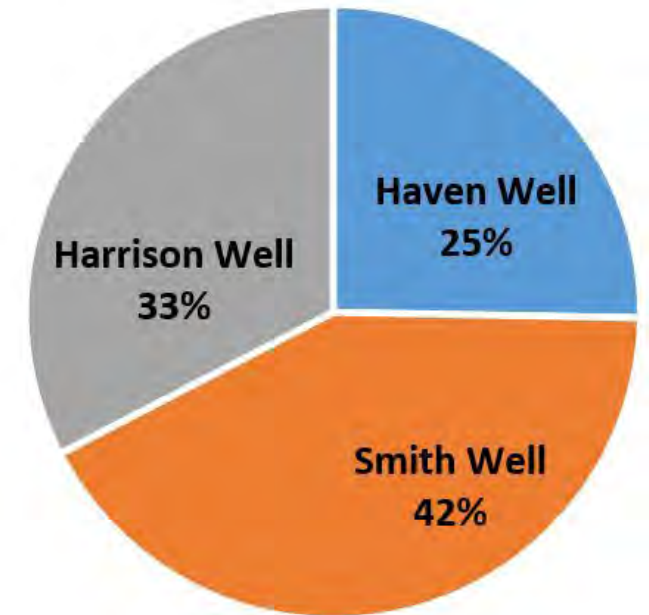
April 2021



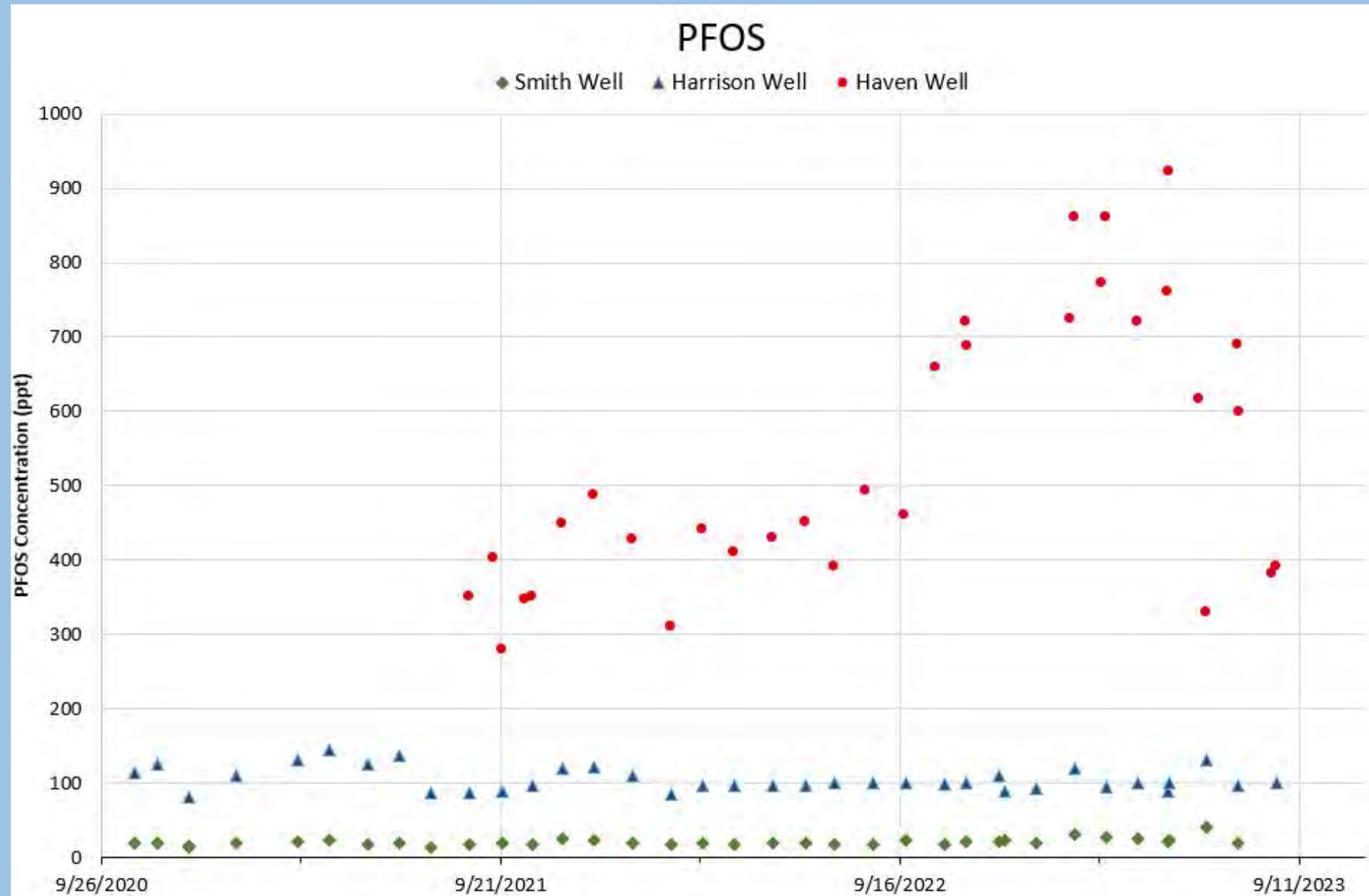
System Performance: Supply Wells



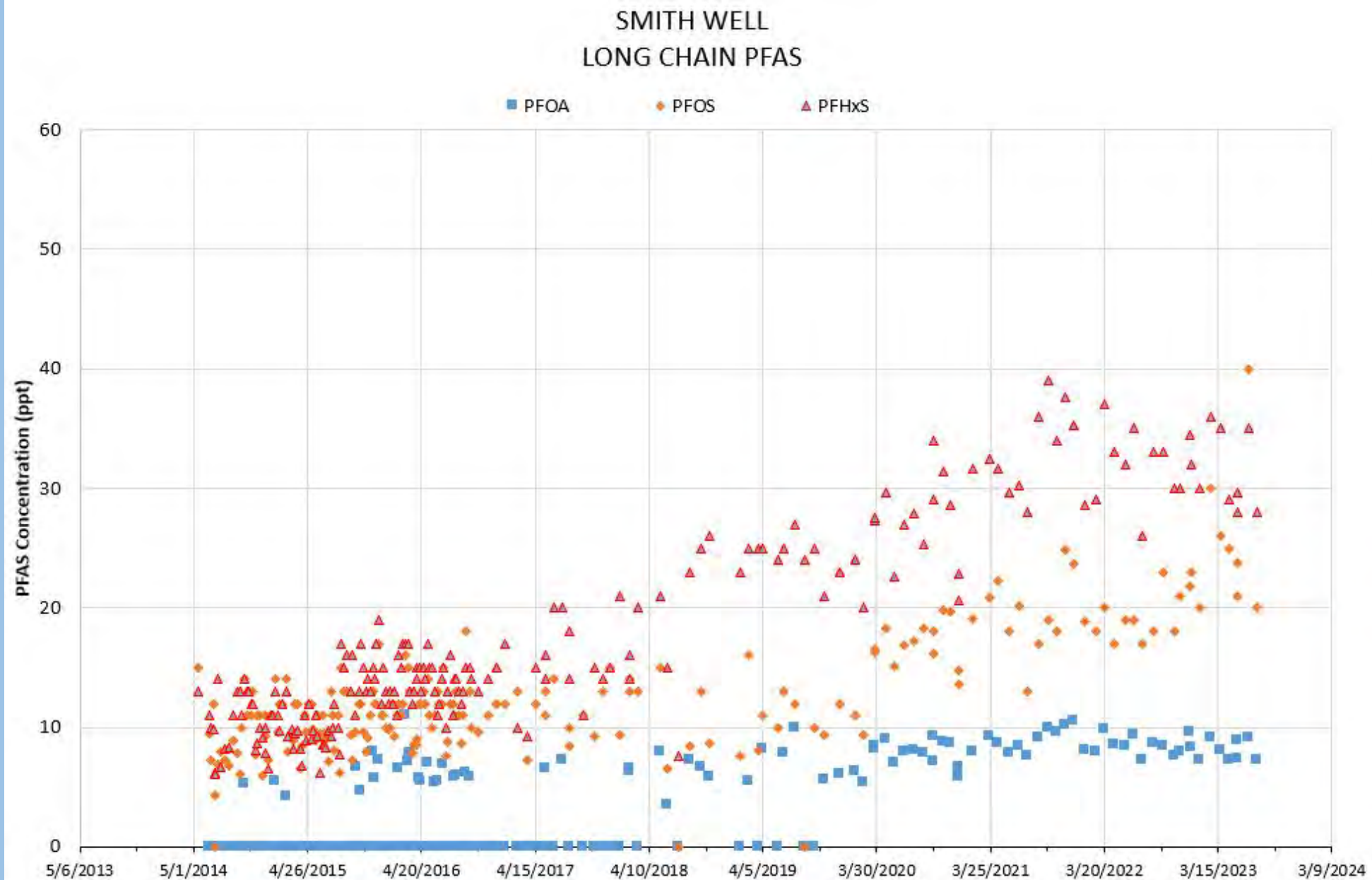
**Pease Well Production
May 2021 - April 2023**



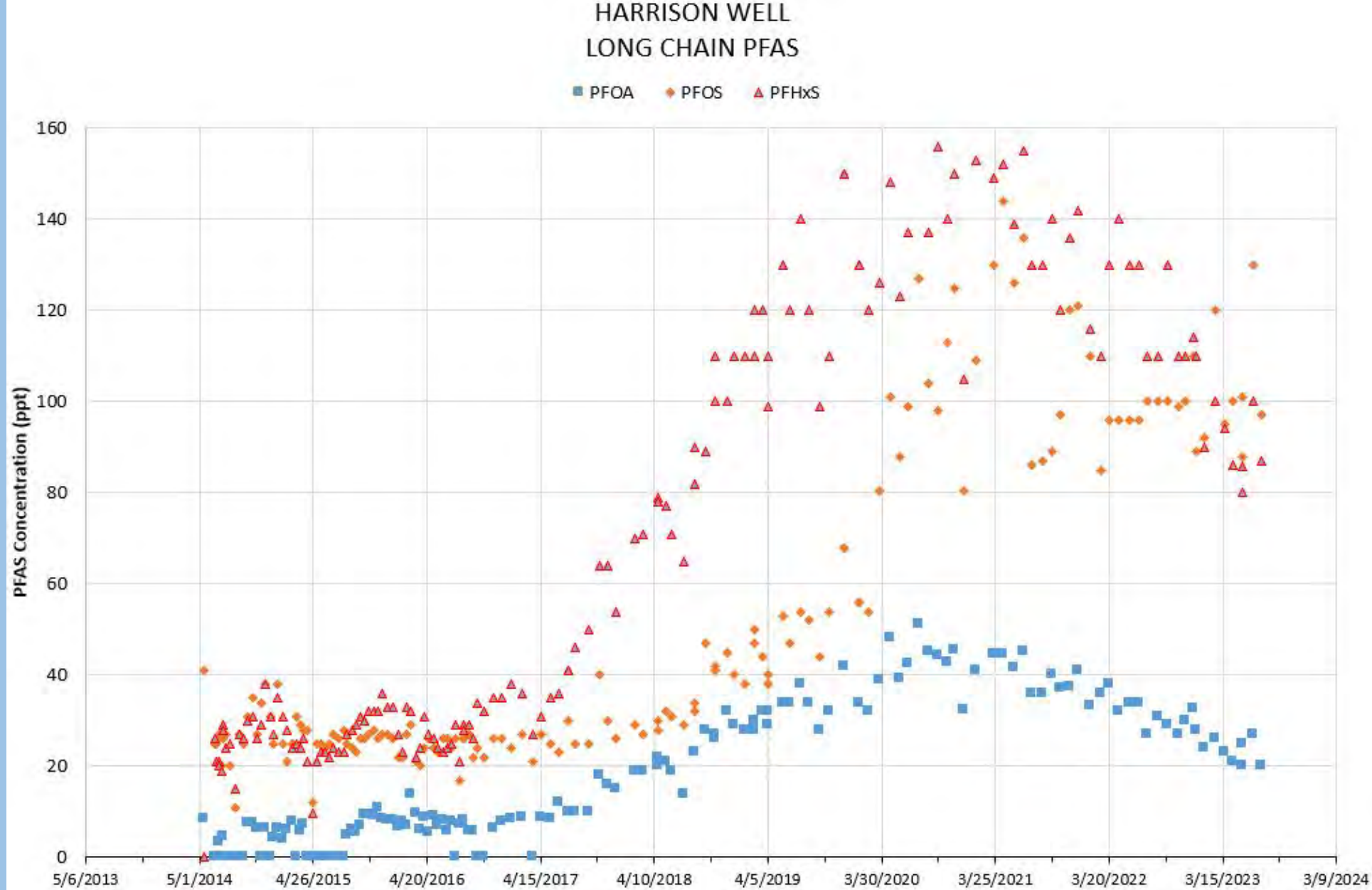
System Performance: PFOS in Supply Wells



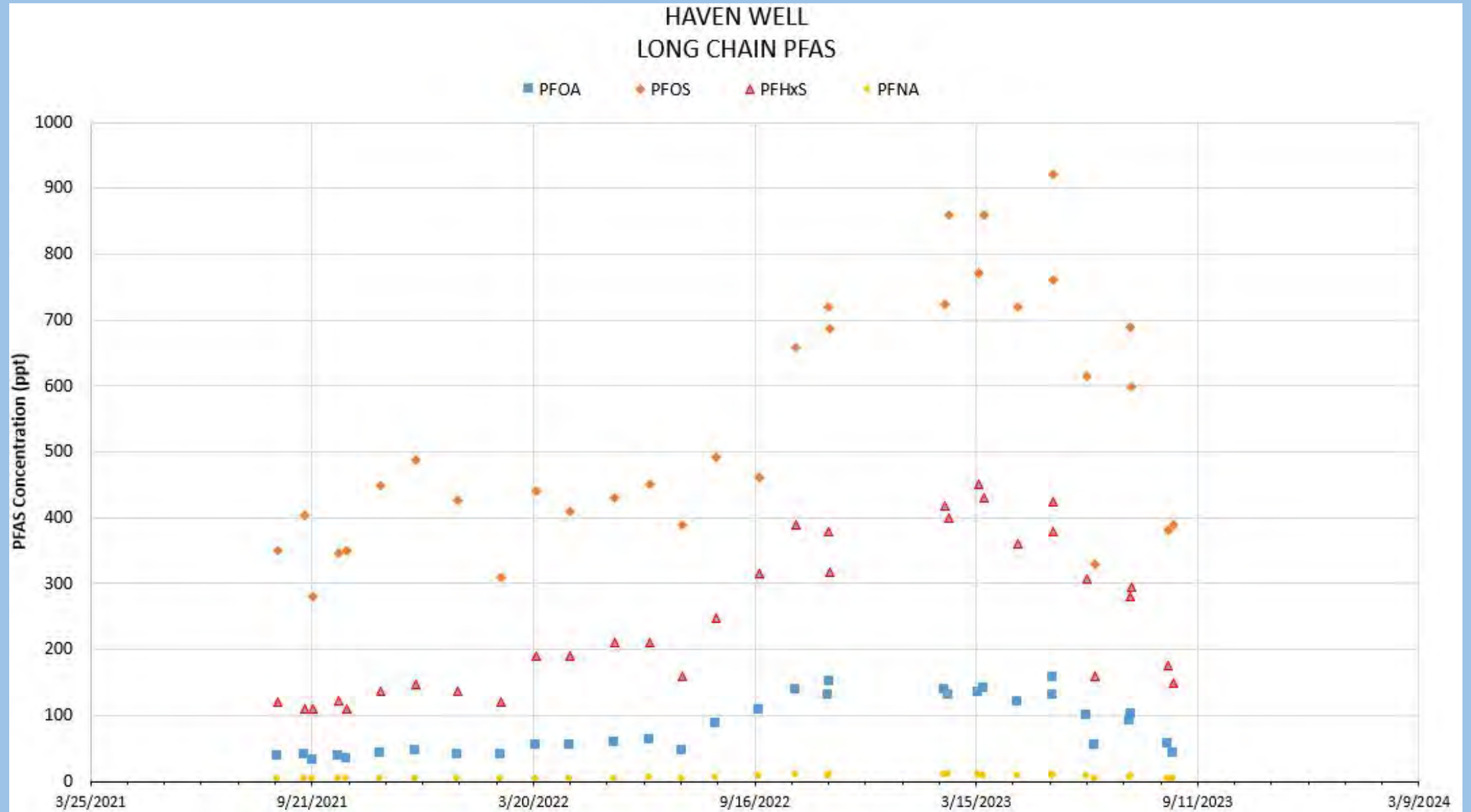
System Performance: PFAS in Smith Well



System Performance: PFAS in Harrison Well



System Performance: PFAS in Haven Well



System Performance: IX Resin

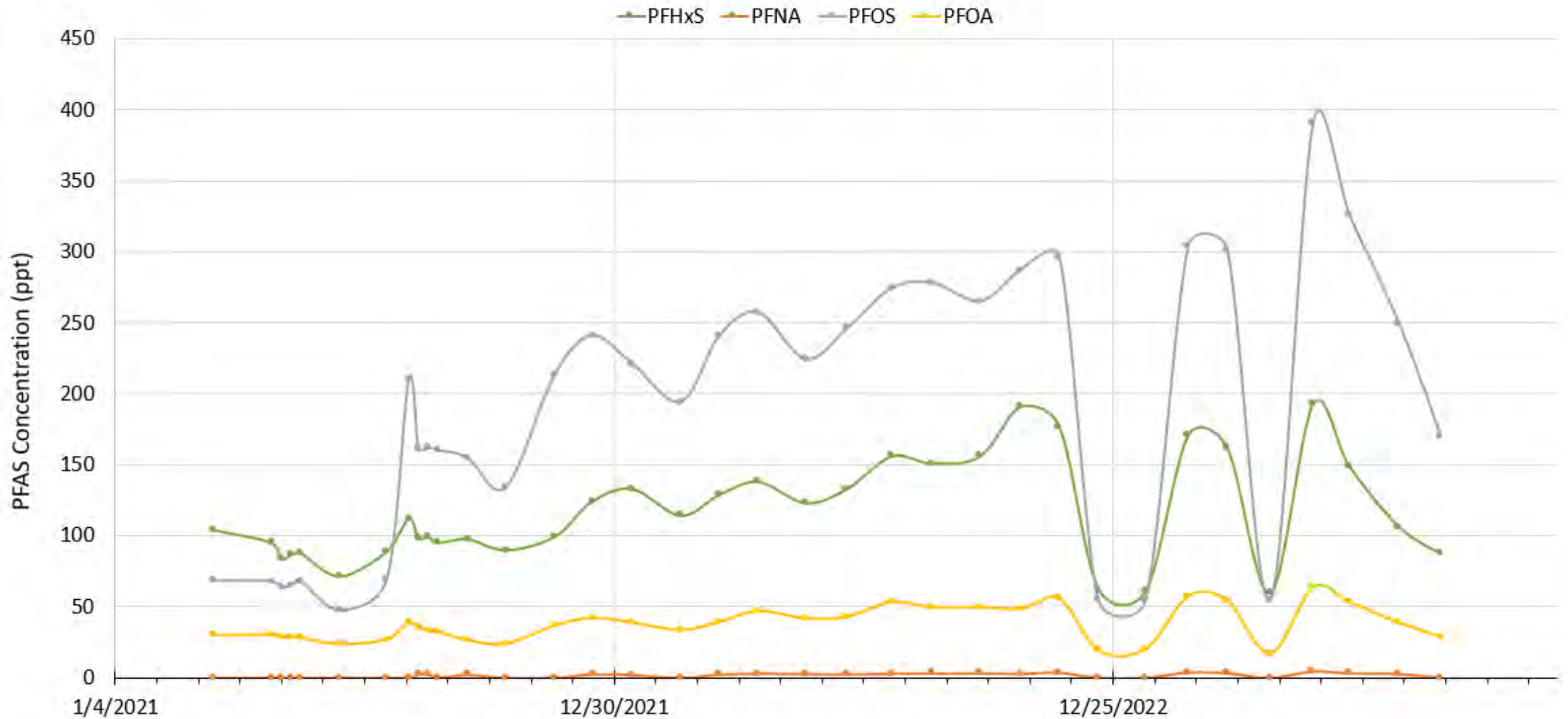
April 17, 2023 – 2 Years in Service

1 BV = 1,137 Gallons

	<u>Lead</u>	<u>Lag</u>	<u>MG</u>	<u>Bed Volumes</u>
➡	• IX 310 A -> IX 310 B		107	94,110
	• IX 320 A -> IX 320 B		26	23,149
➡	• IX 330 A -> IX 330 B		108	94,865
	• IX 340 A -> IX 340 B		16	14,397
➡	• IX 350 A -> IX 350 B		104	91,557
	• IX 360 A -> IX 360 B		52	45,468

System Performance: IX Resin

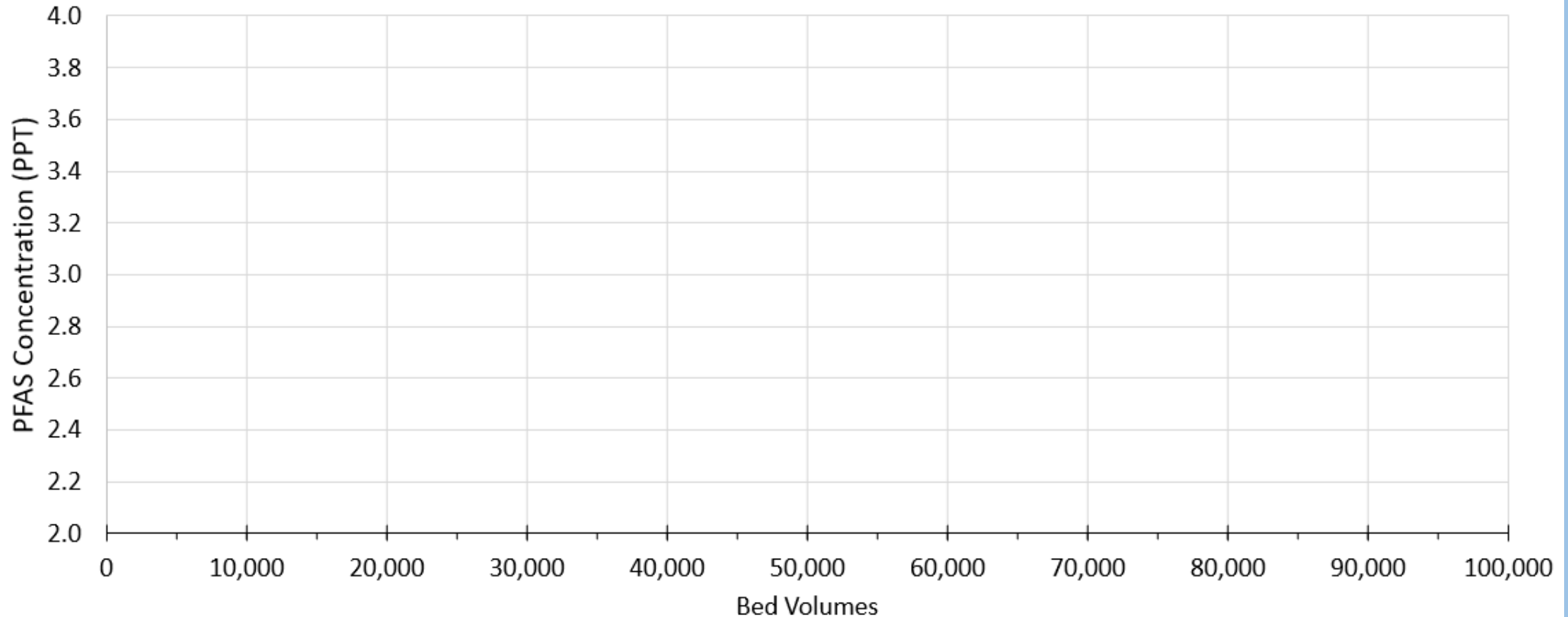
PEASE WTP RAW BLEND
LONG CHAIN PFAS



System Performance: IX Resin

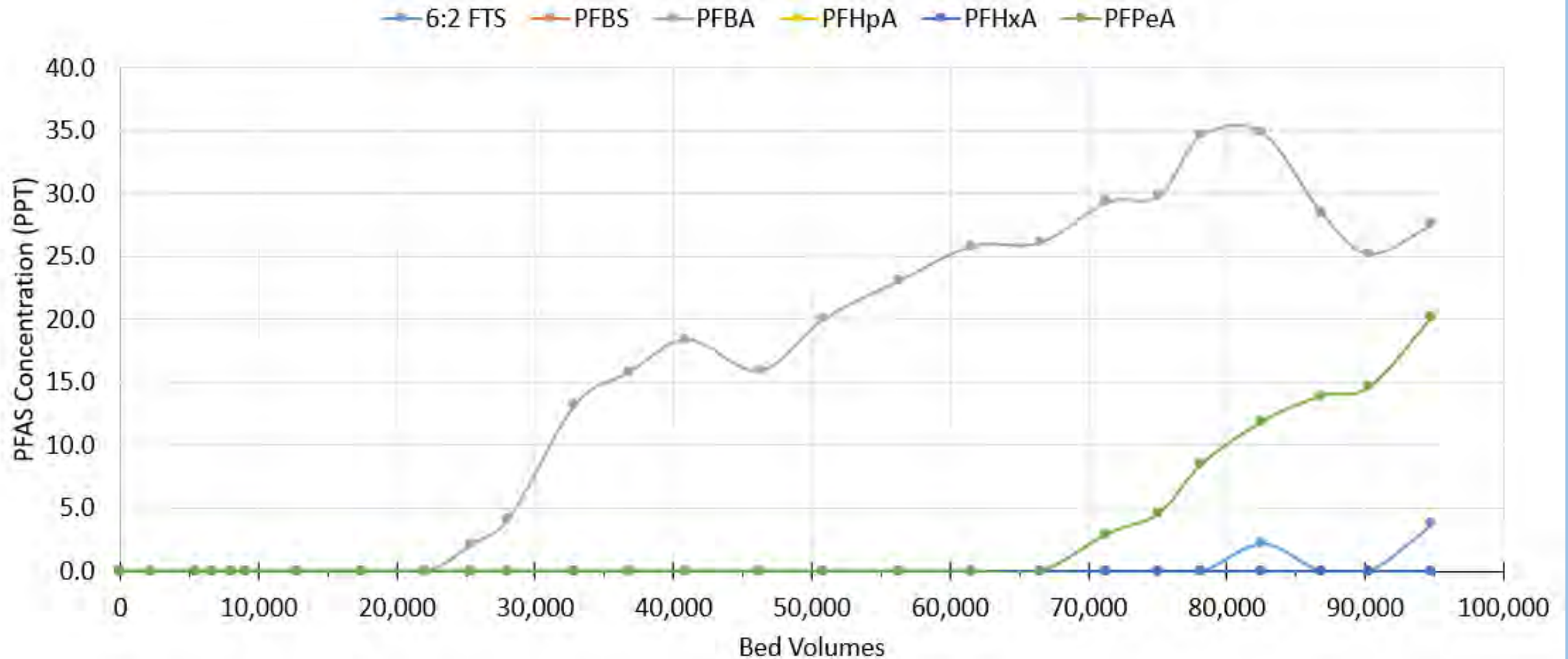
IX 330B - LONG CHAIN PFAS
FIRST BED LIFE (2021 - 2023)

PFHxS PFNA PFOS PFOA

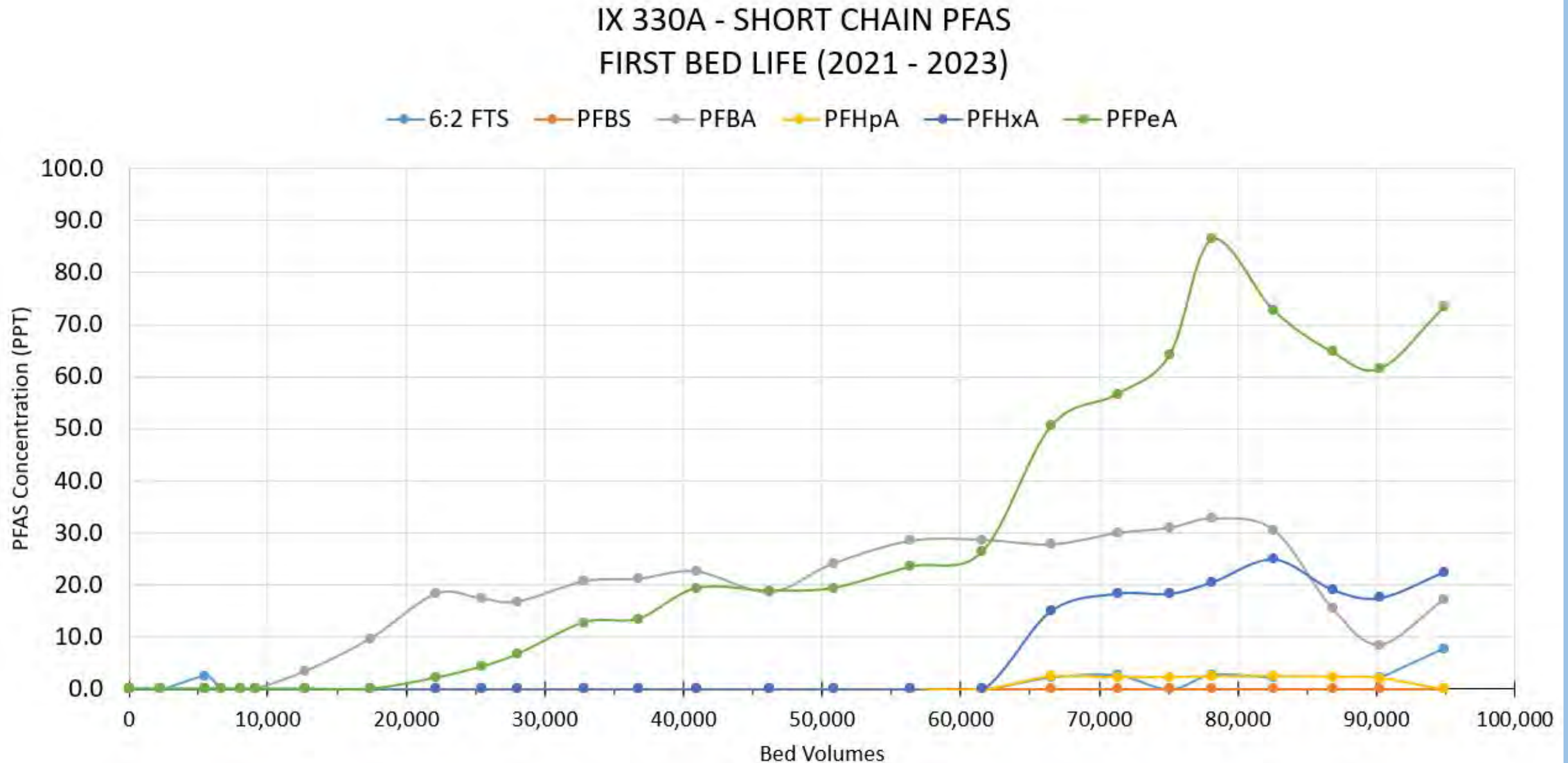


System Performance: IX Resin

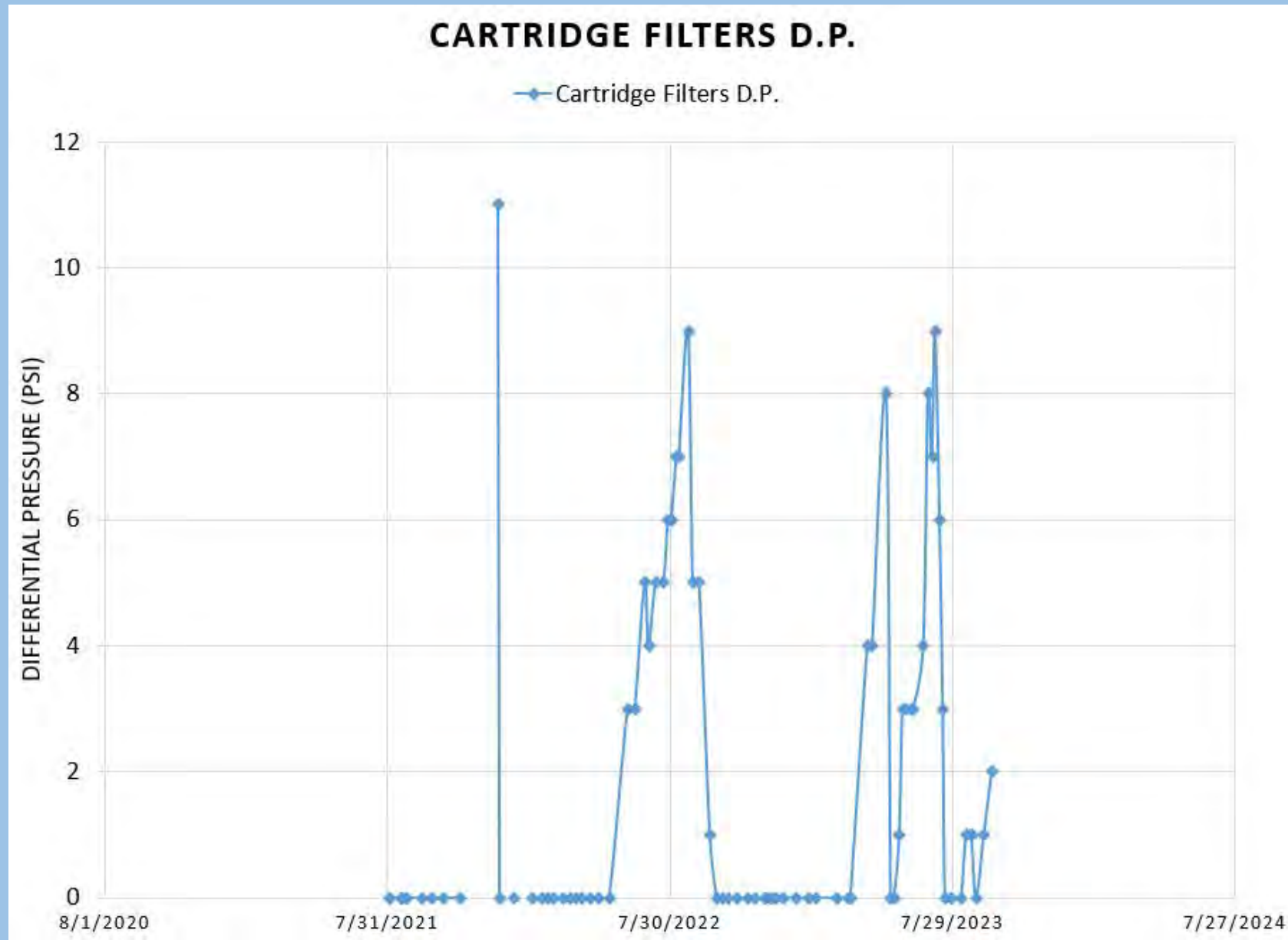
IX 330B - SHORT CHAIN PFAS
FIRST BED LIFE (2021 - 2023)



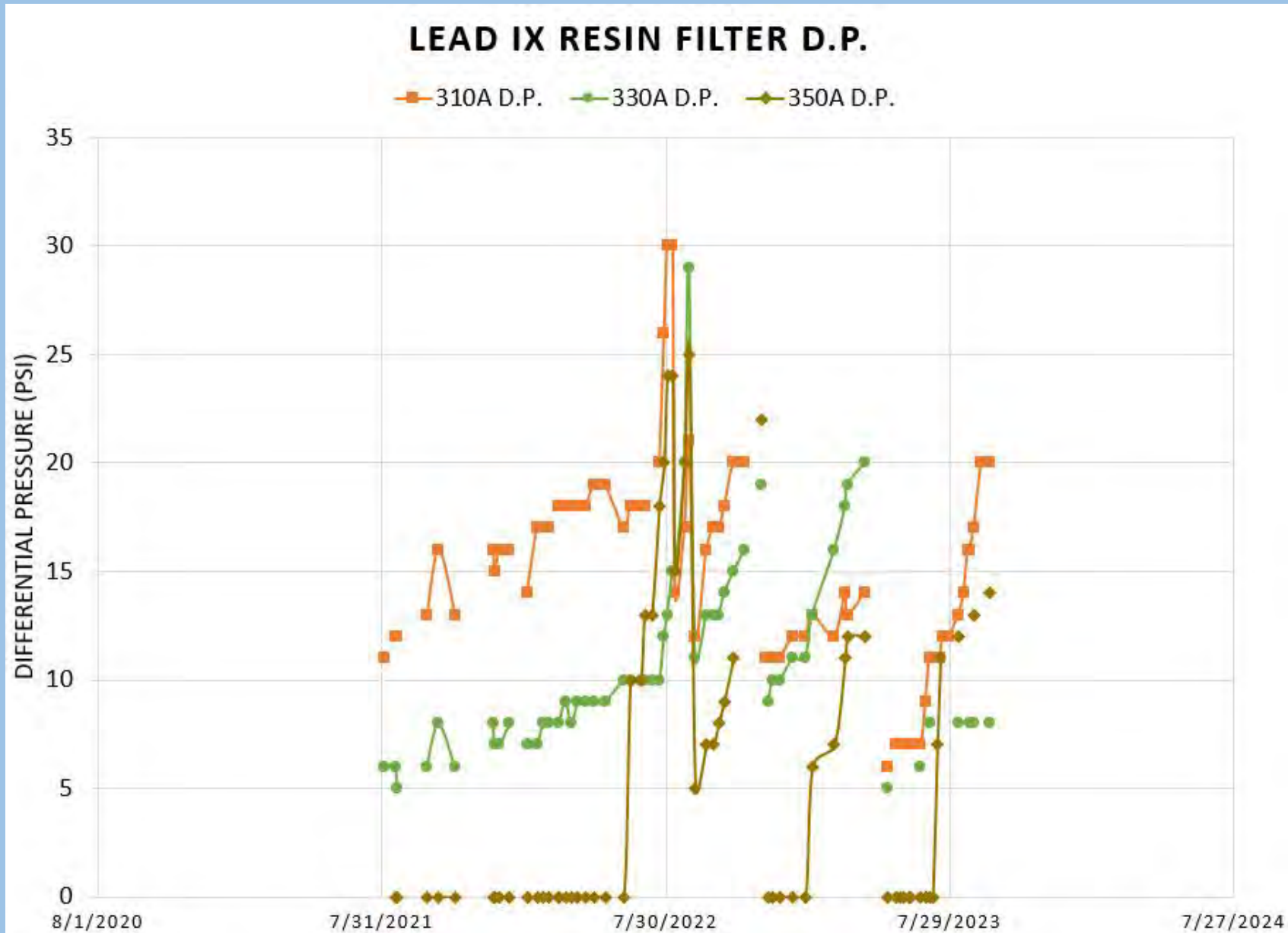
System Performance: IX Resin



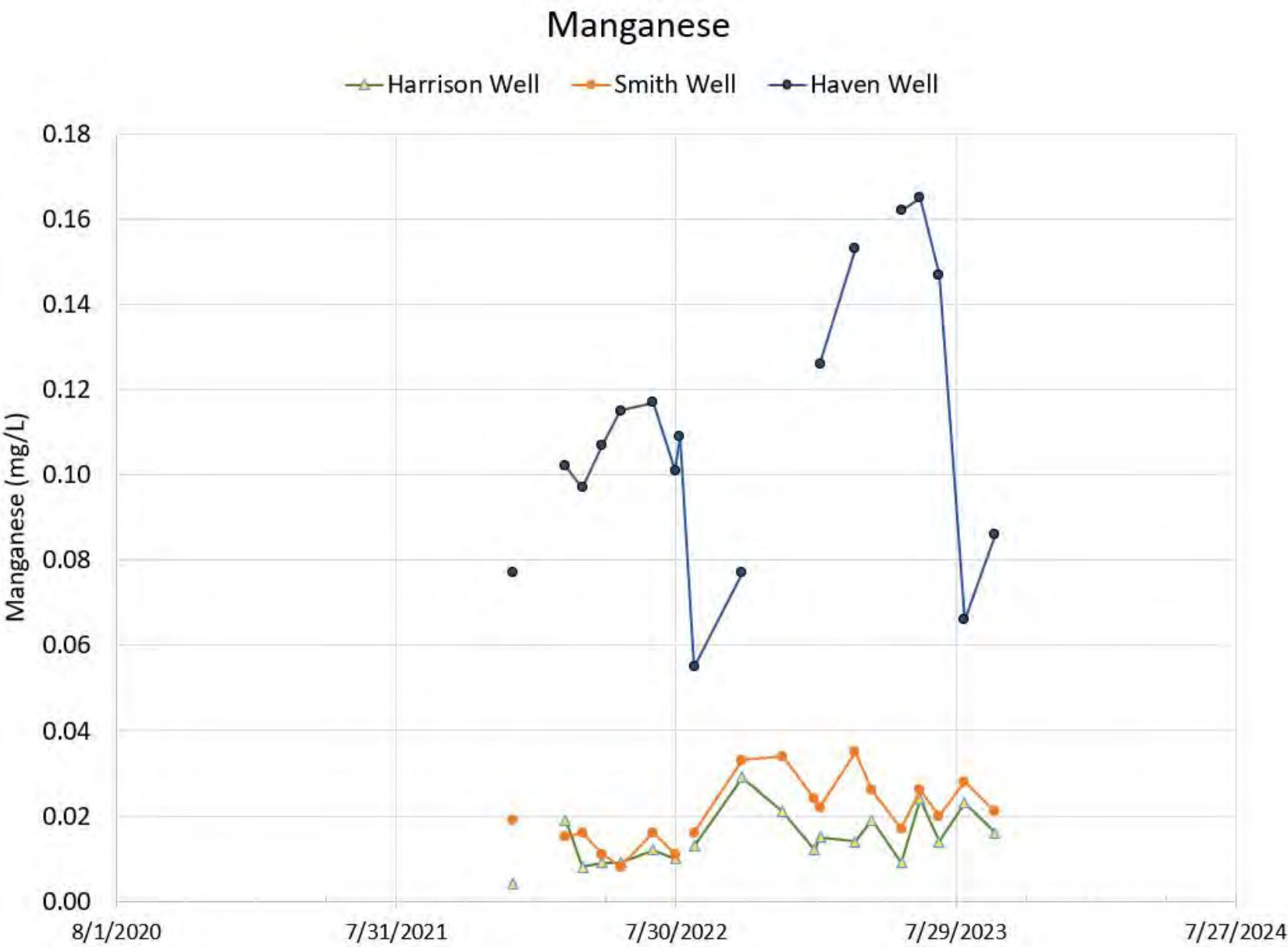
System Performance: Differential Pressure



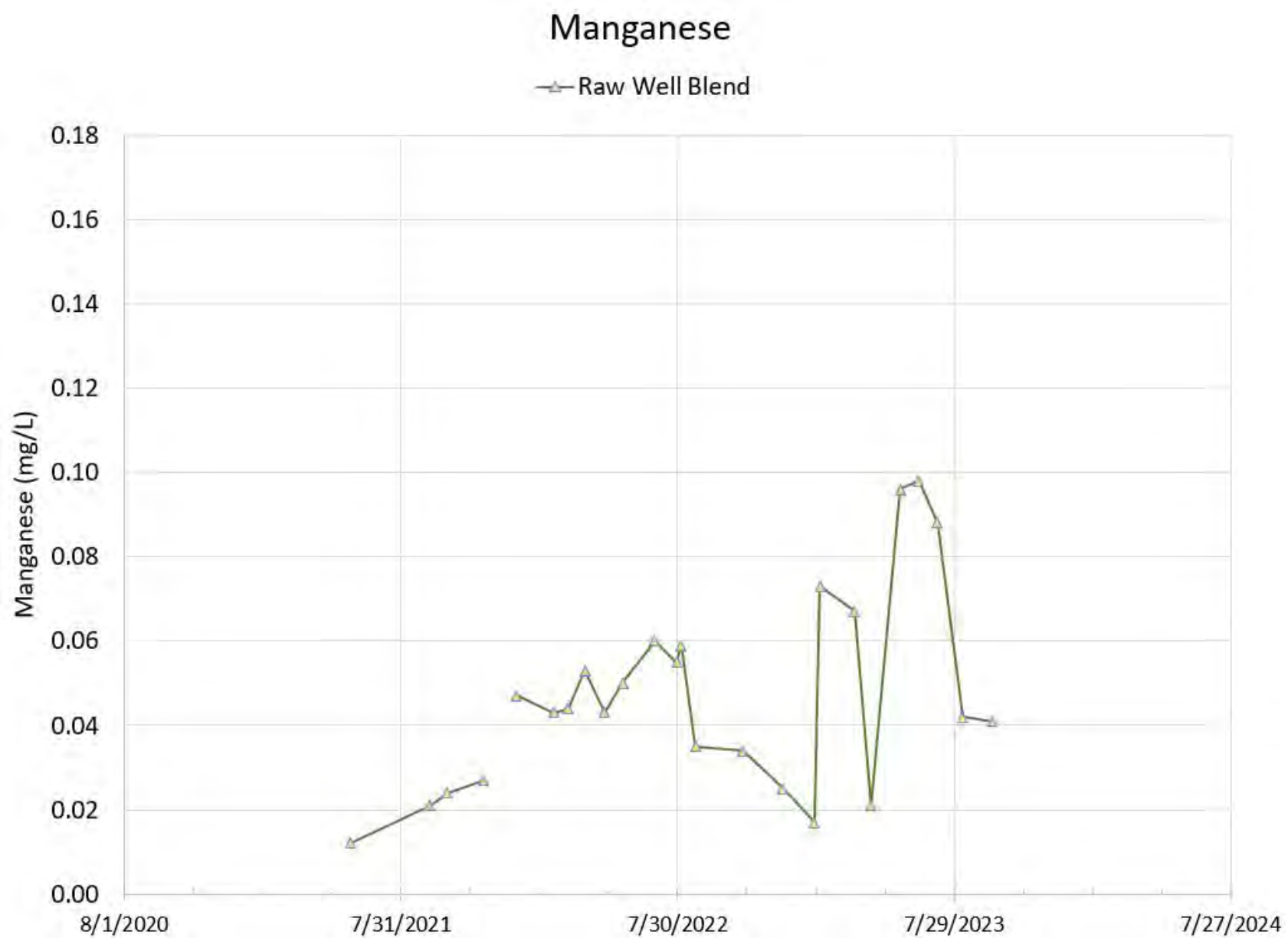
System Performance: Differential Pressure



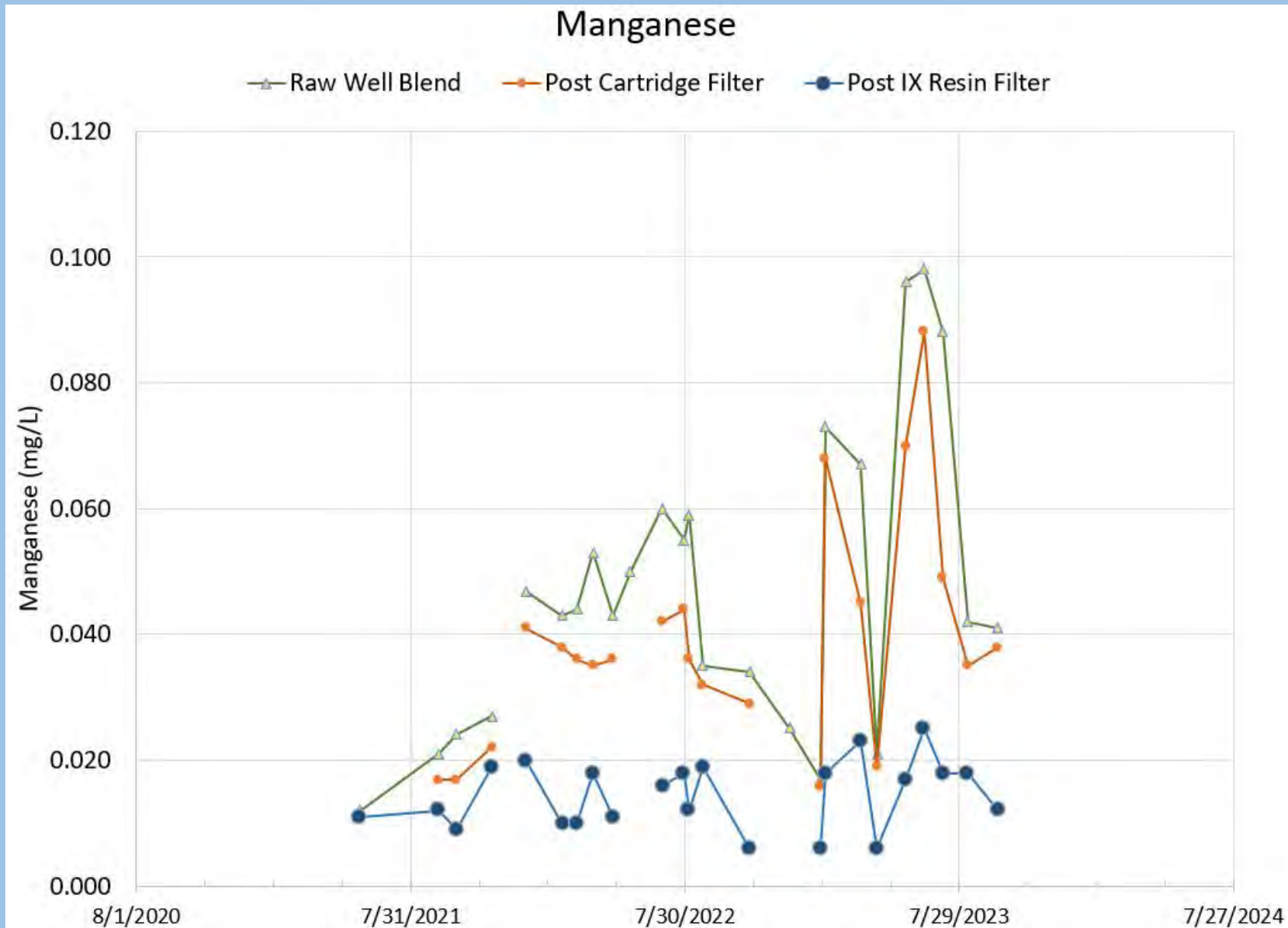
System Performance: Manganese



System Performance: Manganese



System Performance: Manganese



Treatment Piloting

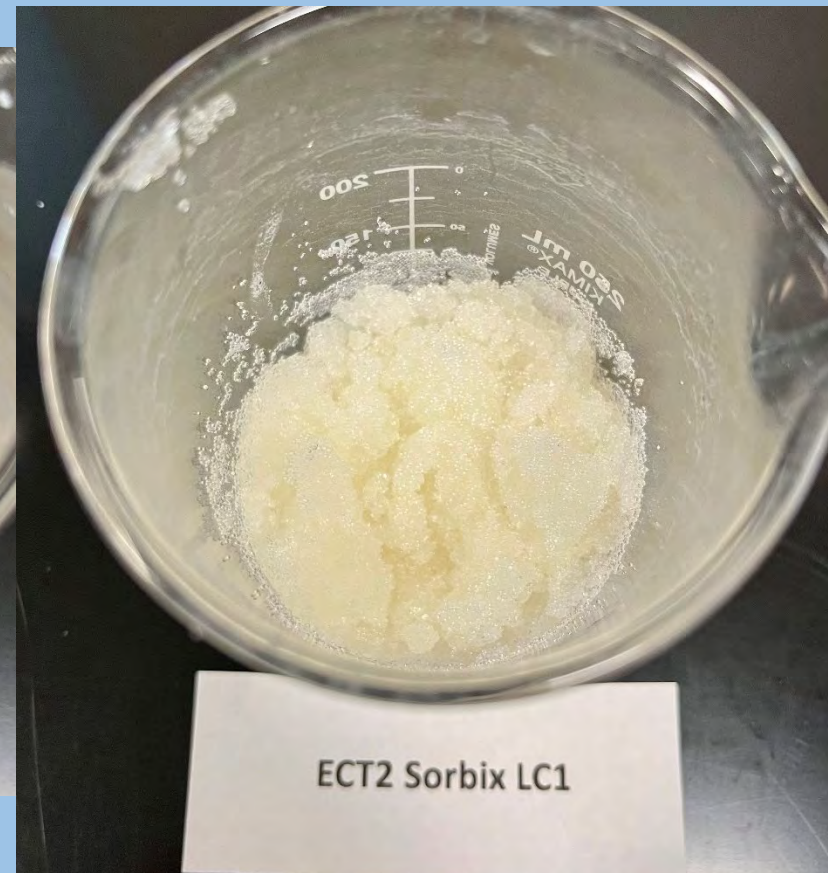
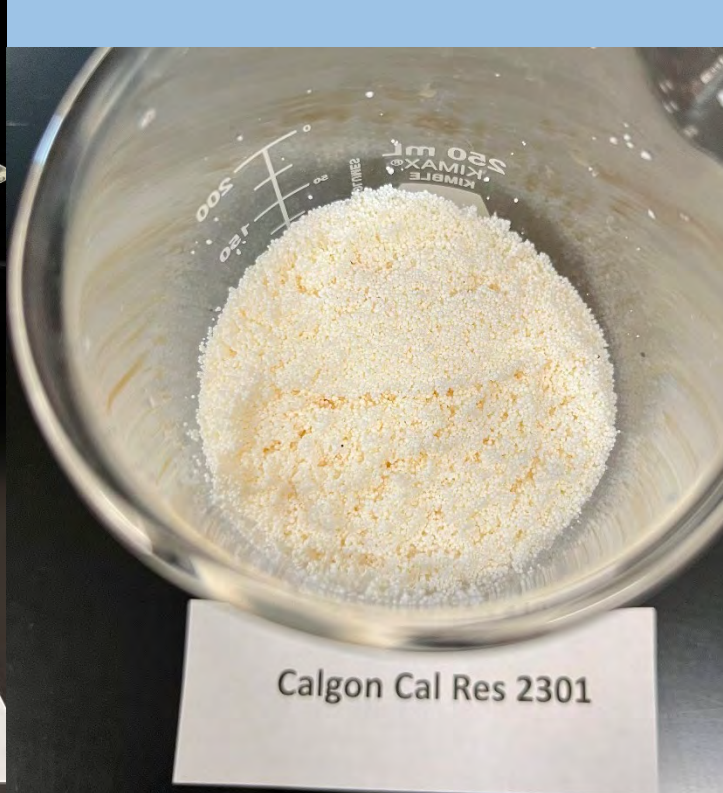
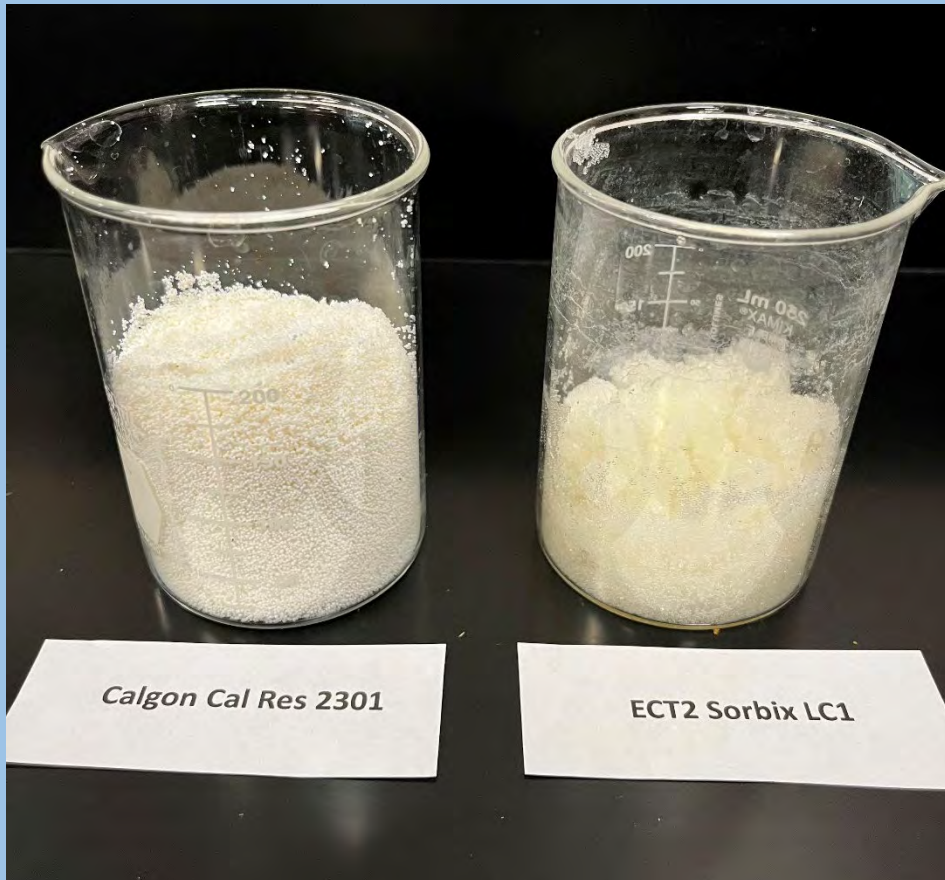
- Utilized to determine performance of other potential filter medias
- Four different medias can be compared
- Incoming water is only from Haven well



Tim Green, Chief Operator
With Treatment Pilot System

System Performance: IX Resin Replacement

- IX Resin Replaced in Trains 310, 330 and 350 April 2023
- Calgon CalRes 2301 instead of Sorbix LC1



Forensics and Monitoring Continues...



2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

Regulations Continue...

January 2009

EPA Preliminary Health Advisories:

- PFOA: 400 ppt
- PFOS: 200 ppt

May 2016

EPA Lifetime Health Advisories:

- PFOA: 70 ppt
- PFOS: 70 ppt

June 2022

EPA issues Interim Updated PFOA and PFOS Health Advisories

- PFOA = 0.004 parts per trillion (ppt)
- PFOS = 0.02 ppt
- GenX chemicals = 10 ppt (Final Advisory)
- PFBS = 2,000 ppt (Final Advisory)

2009

2010

2011

2012

2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

May 2012

- EPA issues UCMR 3 requiring sampling of 6 PFAS Compounds. This monitoring provides a basis for future regulatory actions to protect public health. Water Systems to Sample a 12-month period between 2013 - 2015

July 2019

New Hampshire Sets Maximum Contaminant Levels in Drinking Water and Groundwater:

- PFOA: 12 ppt
- PFOS: 15 ppt
- PFNA: 11 ppt
- PFHxS: 18 ppt

2023

- Proposed MCLs for PFAS Compounds

