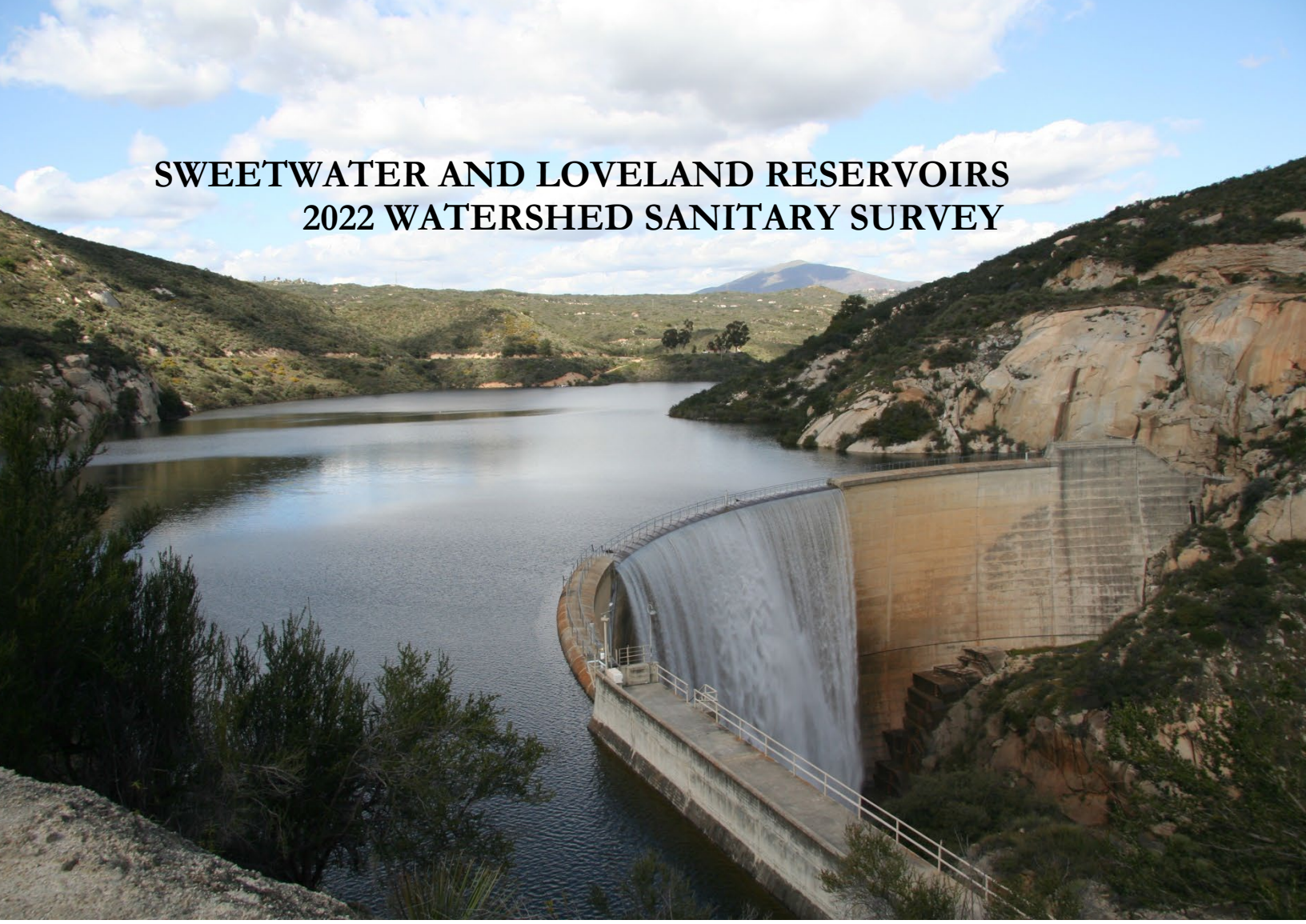
ATTACHMENT 7

EXHIBIT E

SWEETWATER AND LOVELAND RESERVOIR

WATERSHED SANITARY SURVEY

SWEETWATER AND LOVELAND RESERVOIRS
2022 WATERSHED SANITARY SURVEY



Final Report
February 2023

Palencia Consulting Engineers

Starr Consulting

Sweetwater and Loveland Reservoirs Watershed Sanitary Survey

FINAL REPORT
February 2023

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Sweetwater Authority mapping/data disclaimer only:

This data is intended for information only and should not be distributed or used for any other purpose without the express written permission of Sweetwater Authority. Sweetwater Authority makes no warranty, representations, or guarantee as to the content, or accuracy of the spatial data or database information provided herein. Sweetwater Authority shall assume no liability for any errors, omissions, or inaccuracies in the information provided.

LIST OF ABBREVIATIONS

AWM – Agriculture, Weights and Measures

BAT – Best Available Technology
BAER – Burned Area Emergency Response
BCT – Best Conventional Technology
BMP – Best Management Practice

CAP – Cryptosporidium Action Plan
CCP – Comprehensive Conservation Plan
CEDEN – California Environmental Data Exchange Network
CFE – Combined Filter Effluent
CFU – Colony Forming Units
cfs – Cubic Feet per Second
CIWQS – California Integrated Water Quality System
CT – Contact Time
CUPA – Certified Unified Program Agency

D/DBP – Disinfectants/Disinfection By-Products
DAF – Dissolved Air Flotation
DBP – Disinfection By-Product
DDW – Division of Drinking Water
DEH – Department of Environmental Health
DEIR - Draft Environmental Impact Report
DLR – Detection Limit for Reporting Purposes
DOC – Dissolved Organic Carbon
DPLU – Department of Planning and Land Use
DPW – Department of Public Works

EA – Environmental Assessment
EC – Electrical Conductivity
E. coli – Escherichia coli
EIR – Environmental Impact Report
EIS – Environmental Impact Study
EMP – Evaluation Monitoring Program

FBR – Filter Backwash Rule

GAC – Granular Activated Carbon
gpd – Gallons per Day
gpm/sf – Gallons per Minute per Square foot

HAA5 – Haloacetic Acids

IFE – Individual Filter Effluent

IESWTR – Interim Enhanced Surface Water Treatment Rule

JURMP – Jurisdictional Urban Runoff Management Program

L/mg-m – Liters per milligram - meter
LRAA – Locational Running Annual Average
LT2ESWTR – Long Term 2 Enhanced Surface Water Treatment Rule

MIB - 2-methylisoborneol
MCL – maximum contaminant level
µg/L - Micrograms per Liter
mgd – Million Gallons per Day
mg/L – Milligrams per Liter
MPN/100 mL – Most Probable Number per 100 milliliters
MS4 – Municipal Separate Storm Sewer System
MUP – Major Use Permit

ng/L – Nanograms per Liter
NIPDWR – National Interim Primary Drinking Water Regulations
NPDES – National Pollution Discharge Elimination System
NTU – Nephelometric Turbidity Unit

OES – California Office of Emergency Services
OEL – Operational Evaluation Level

PCAs – Potential Contaminating Activities
PCBs – Polychlorinated Biphenyls
PCE - Tetrachloroethene
Perdue WTP – Robert A. Perdue Water Treatment Plant
PFAS – per and polyfluoroalkyl substances
PFOA –perfluorooctanoic acid
PFOS – perfluorooctane sulfonic acid
PODR – Point of Diminishing Return

RAA – Running Annual Average
Regional Board – San Diego Regional Water Quality Control Board
RIMS – Response Information Management System
RV – Recreational Vehicle
RWCWRF – Ralph W. Chapman Water Reclamation Facility

SANDAG – San Diego Association of Governments
SBWRP – South Bay Water Reclamation Plant
SCADA - Supervisory Control and Data Acquisition
SDCWA – San Diego County Water Authority
SDRILG – San Diego Region Irrigated Lands Group

SDWA – Safe Drinking Water Act
SEMS – Standardized Emergency Management System
SOC – Synthetic Organic Compound
SSMP – Sewer System Management Plan
SSO – Sanitary Sewer Overflow
SSURGO – Soil Survey Geographic
SUVA – Specific Ultraviolet Light Absorbance
SWA – Sweetwater Authority
SWPPP – Storm Water Pollution Prevention Plan
SWRCB – State Water Resources Control Board
SWTR – Surface Water Treatment Rule

TCE – Trichloroethene
TDS – Total Dissolved Solids
TIN – Total Inorganic Nitrogen
TSS – Total Suspended Solids
TOC – Total Organic Carbon
TTHM – Total Trihalomethanes
TWAS – Temporary Watershed Assessment Station

UCMR – Unregulated Contaminant Monitoring Rule
ug/L – Micrograms per Liter
URDS – Urban Runoff Diversion System
URO – Urban Runoff
USEPA – US Environmental Protection Agency
USFWS – US Fish and Wildlife Service
USGS – US Geological Survey
UV – Ultraviolet light
UV254 – Ultraviolet light absorbance at 254nm

VOC – volatile organic compound

WDR – Waste Discharge Requirement
WPO – Watershed Protection Ordinance
WQIP – Water Quality Improvement Plan
WQPS – Water Quality Protection Standard
WTP – Water Treatment Plant
WWTP – Wastewater Treatment Plant

yd^{3-} Cubic yard

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INTRODUCTION

Drinking water utilities that use surface water are required to conduct a watershed sanitary survey for that source, under the California Surface Water Treatment Rule (SWTR). This survey must be updated every five years. This Current Update to the Sweetwater and Loveland Reservoirs Watershed Sanitary Survey covers the period 2017 through 2021.

OBJECTIVES OF THE UPDATE

The overall objective of this Current Update is to assess the source water quality of the Sweetwater and Loveland Reservoirs to ensure the ability of the Robert A. Perdue Water Treatment Plant (Perdue WTP) to continue to provide Sweetwater Authority (SWA) customers with drinking water that meets all drinking water standards. This update also accomplishes some other specific objectives including:

- Identification of significant changes within the last five years that may have affected source water quality.

- Review and evaluation of selected constituents of interest to identify potential water quality or treatment issues at the water treatment plant. Assess the ability of the Perdue WTP to meet drinking water standards based on the current regulatory framework, as well as comment on the appropriate level of treatment for pathogens, specifically for *Giardia*, viruses, and *Cryptosporidium*.

- Review and evaluation of selected potential contaminating activities to identify potential impacts on source water quality.

- Development of recommendations that are economically feasible and within the authority of the SWA to implement. The potential contaminating activities targeted are those that may have the most opportunity to affect source water quality.

KEY FINDINGS AND CONCLUSIONS

The key findings and conclusions for this report are organized as they pertain to source water quality, treatment and regulatory compliance, and watershed contaminant sources. Highlights of these findings and conclusions are presented below.

Source Water Quality

Overall, the Sweetwater Reservoir provides an acceptable quality of raw water. The raw water can be treated to meet all drinking water standards using the existing conventional treatment processes. Key findings for the constituents of interest are presented below.

Turbidity

The overall median peak daily raw water turbidity at the Perdue WTP was 4.7 NTU, but was slightly higher, 5.9 NTU, when using majority inflow from the Sweetwater Reservoir. The raw water turbidity levels at the Perdue WTP influent vary throughout the year, and do not strongly correlate with any one characteristic. The best correlation is to percent source inflow, followed by precipitation and uncontrolled algal blooms.

Coliform

Over the study period, median coliform levels were very low in the raw water. At Sweetwater Reservoir, the median total coliform value was 40 Most Probable Number per 100 milliliters (MPN/100 mL), and the median *E. coli* value was 10 MPN/100 mL. Ninety percent of individual total coliform samples were less than 1,000 MPN/100 mL, and ninety-six percent of total coliform monthly medians were below 1,000 MPN/100 mL. Ninety-nine percent of individual *E. coli* samples were less than 200MPN/100mL, and all monthly medians were below 100 MPN/100 mL. Data collected from Loveland Reservoir display sources of coliform into the reservoir, but these are attenuated in the lake.

Giardia/Cryptosporidium

Monitoring for *Giardia* and *Cryptosporidium* in the Sweetwater Reservoir during the study period resulted in no detects of either pathogen. Second round monitoring under the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) resulted in a Bin 1 classification for the Perdue WTP; and no additional action is required.

Disinfection By-Product Precursors

Organic carbon is present in the Sweetwater Reservoir at levels requiring advanced treatment. The carbon is largely present as dissolved carbon and is generally humic in nature. There is no evidence of a seasonal pattern, but organic carbon levels in the Reservoir are influenced by releases from Loveland Reservoir, lake levels, fall turnover events, as well as the amount of plankton growth in the Sweetwater Reservoir.

UV254 displays a slight decreasing trend over the study period. Specific Ultraviolet Light Absorbance (SUVA) calculations show significant impact from dissolved organic carbon (DOC) concentrations in the Sweetwater Reservoir, especially related to transfers from Loveland Reservoir. Low values of DOC will drive the SUVA calculation higher, while high values of DOC will drive the SUVA calculation lower. As noted previously, the significant reductions in organic carbon during Loveland Reservoir transfers appears to drive significant short-term increases in SUVA.

Raw SUVA water levels are generally above 2 liters per milligram-meter (L/mg-m) and will not provide compliance with alternative compliance criterion for Enhanced Coagulation requirements of the Stage 1 Disinfectants/Disinfection By-Products Rule (D/DBP), thus SWA relies on treated water SUVA levels for compliance as described on page ES-6. Bromide levels in the watershed are similar to historic levels, with peak values seen at Hansen's Pond and decreases in Sweetwater Reservoir attributable to transfers from Loveland Reservoir.

Volatile and Synthetic Organic Compounds (VOCs and SOCs)

Volatile organic compound (VOC) monitoring shows no detects in Sweetwater Reservoir. Synthetic organic compound (SOC) monitoring shows no detect in the Low Flow Barrier and that Sweetwater Reservoir had one isolated, low level detection of two pesticides; paraquat and diquat. Repeat sampling was conducted and both diquat and paraquat were not detected. Concentrations of diquat were well below the MCL.

Nitrate

Nitrate levels in all the source waters were very low, with median values at or below 0.06 mg/L as nitrogen. The high levels in Hansen's Pond may have to do with the wetland type nature of the sample location. The high levels of nitrate in Hansen's Pond could also be due to the inflow of Hansen's Creek, which is a perennial (spring fed), dry-weather, urban water runoff source from an industrial area of Rancho San Diego. As part of SWA's Urban Runoff Diversion System, Hansen's Pond intercepts and provides natural attenuation/mitigation of contaminants resulting from these dry weather flows, which do not reach Sweetwater Reservoir when the system is operating.

Perchlorate

Perchlorate was non-detectable at all but one monitoring site, but there was one low-level detect (below the Division of Drinking Water's [DDW] detection limit for reporting) in the clearwell effluent in February 2018. Perchlorate is generally detectable in Hansen's Pond, with average values of 1.4 ug/L. It is uncertain

what the source of perchlorate is. However, Hansen's Creek is a perennial dry weather urban runoff input into Hansen's Pond that drains an industrial area of Rancho San Diego.

Selected Metals

Aluminum is detected in the watershed at levels above both the primary and secondary maximum contaminant level (MCL), with median values in Sweetwater Reservoir below the both MCLs. The highest values occur through the Middle Sweetwater River and concentrations appear to peak during wet weather months; sources are uncertain but could include natural sources similar to manganese. The Perdue WTP provides treatment and all results at the clearwell effluent were non-detectable.

The median value of iron in the Sweetwater Reservoir is below the secondary MCL, but individual samples can exceed it. The median value was 120 ug/L, below the secondary MCL of 300 ug/L. There appears to be an increase downstream of Loveland Reservoir and along the Middle Sweetwater River, with peaks occurring during wet weather months. The Perdue WTP provides treatment and all results at the clearwell effluent were non-detectable.

The median value of manganese in the Sweetwater Reservoir continues to exceed the secondary MCL. The median value was 120 ug/L, well above the secondary MCL of 50 ug/L. There may be an increase downstream of Loveland Reservoir and along the Middle Sweetwater River, but this increase appears to occur during the summer months. Dry weather stormwater flows have shown elevated levels of manganese, as discussed in **Section 4**. Generally, the clearwell effluent is non-detectable, but there were some detects in the treated water below the secondary MCL.

Key factors impacting peak levels of metals in both reservoirs may include; resolubilization from the lake sediments during fall turnover events, depth of the lake affecting stratification, storm events, and transfers from Loveland Reservoir.

Selected Minerals

Conductivity and chloride levels remained relatively stable in Loveland Reservoir and increased in Sweetwater Reservoir over the study period. There is a significant increase in minerals between Loveland Reservoir and the Sweetwater River Influent which may be caused by; Jamacha Landfill, urban runoff, groundwater upwelling, or the historic sand mines located between the Low Flow Barrier and the east end of the Sweetwater Reservoir. Data for the Sweetwater Reservoir show that conductivity levels are slightly above the recommended levels, but within the upper levels. Chloride levels are within the recommended level.

Plankton and Related Constituents

Plankton are seasonally present in the Sweetwater Reservoir and have a direct impact on source water quality, including turbidity, organic carbon, and taste and odor. The types of plankton present include algae and cyanobacteria. These result in the detection of the metabolites geosmin and MIB in the Sweetwater Reservoir and the clearwell effluent and can cause taste and odor episodes. They also have the potential to contribute cyanotoxins to the water supply. The highest levels of geosmin were seen in the spring months of 2017, 2020, and 2021, and were related to the presence of a wide variety of plankton. The highest levels of MIB were seen in October 2017, and were related to the presence of a small number of plankton. The SWA successfully utilized the application of copper sulfate in Sweetwater Reservoir in the spring of 2020 and 2021 to manage plankton growth and reduce metabolite concentrations in the treated water.

Intake Evaluation

Perdue Water Treatment Plant

The Perdue WTP is currently in compliance with all existing drinking water regulations. The Perdue WTP implements conventional treatment processes and meets all current drinking water standards, including MCLs and treatment technology requirements. Below is a summary of the selected treatment and regulatory compliance issues.

Turbidity

The median raw water peak daily turbidity at the Perdue WTP for the entire period of study (overall) was 4.7 NTU and it was 5.9 NTU when using 50 percent or more (majority) of Sweetwater Reservoir as a source at the influent. The median settled water peak daily turbidity was 0.8 NTU overall and 0.9 NTU when using a majority of Sweetwater Reservoir. These numbers were higher than the last study period, likely due to the increased use of the Sweetwater Reservoir source.

The median combined filter effluent (CFE) peak daily turbidity was 0.11 NTU overall and 0.12 NTU when using a majority of Sweetwater Reservoir. All CFE readings were less than or equal to 0.25 NTU. Each month the Perdue WTP met the 80 percent turbidity reduction requirement through the plant and the overall median removal of solids was 98 percent (also 98 percent when treating a majority of Sweetwater Reservoir).

Microbiological Constituent Review

The SWA performed weekly distribution system coliform analysis during the study period. In 2019 there were two positive detects (1.1 percent) in September for total coliform within the distribution system, but no detection of *E. coli*. In 2020 there was one positive detect (0.7 percent) in May for total coliform within the distribution system, but no detection of *E. coli*. Neither of these resulted in a violation of the MCL, which is greater than 5 percent of monthly samples positive for total coliform or any *E. coli* positive. In addition, all repeat samples were negative for total coliform.

Disinfection By-Products

The SWA monitors alkalinity and total organic carbon (TOC) levels in its raw water and TOC levels in its treated water on a monthly basis as part of its treatment technique compliance under the Stage 1 D/DBP Rule. Generally, the treatment technique is not met for the Step 1 removal requirements so compliance is made through an alternative compliance criterion; by meeting raw or treated water SUVA levels of less than 2.0 liters per milligram-meter (L/mg-m). SUVA is the calculation of ultraviolet light at 254 nanometers divided by DOC. The SWA performs a quarterly Step 2 Point of Diminishing Return (PODR) jar test to set an alternative TOC removal criteria. The treated water SUVA is calculated based on jar testing.

The CFE has an average TOC value of 6.3 mg/L, and a median of 7.1 mg/L, with only two percent of samples less than or equal to 2.0 mg/L. Based on source water quality, TOC removal requirements ranged from 15 to 40 percent with the median removal at 30 percent. The median reduction of TOC is 24 percent and the removal requirement for Step 1 is only met in only 20 percent of months.

During the study period the treated water individual weekly SUVA calculations ranged from 1.1 to 2.1 L/mg-m, with a median value of 1.7 L/mg-m. This is higher than the last study period, likely due to the increased use of the Sweetwater Reservoir source. Compliance with the treatment technique is based on a running annual average (RAA) value (based on quarterly averages calculated from monthly averages calculated from weekly data). The RAA ranged from 1.6 to 1.8 L/mg-m and was less than 2.0 L/mg-m in all calculations and the treatment technique was met.

The SWA collected both total trihalomethanes (TTHM) and haloacetic acids (HAA5) data for its distribution system. Levels of disinfection by-products (DBPs) in the distribution system vary throughout the year due to source water used, variable disinfection practices, pH, temperature, and distribution system configuration and operations.

The individual TTHM distribution system samples ranged from 2 to 63.5 micrograms per liter (µg/L), with a median value of 27.3 µg/L. The highest median value occurred at 5379 Carolyn Vista Lane, at 32.5 µg/L. The TTHM locational running annual average (LRAA) for each distribution system site was calculated. The individual LRAAs ranged from 3 to 55.1 µg/L. The median values of the LRAAs were between 25 and 31 µg/L for all sites except 109 16th Street and I St & Woodlawn, which were lower and likely represented by some portion of groundwater. Similar to the individual TTHM analysis, the highest median value occurred at 5379 Carolyn Vista Lane, at 32 µg/L. These values are all well below the current MCL of 80 µg/L. No Operational Evaluation Levels (OELs) were triggered.

The individual HAA5 distribution system samples ranged from non-detect to 38.5 µg/L, with a median value of 15.2 µg/L. The highest median value occurred at 943 Rawhide Court, at 21.4 µg/L. The HAA5 LRAA for each distribution system site was calculated. The individual LRAAs ranged from ND to 30.1 µg/L. The median values of the LRAAs were between 14 and 21 µg/L for all sites except 109 16th Street and I St & Woodlawn, which were lower and likely represented by some portion of groundwater. Similar to the individual HAA5 analysis, the highest median value occurred at 943 Rawhide Court, at 18.3 µg/L. These values are all well below the current MCL of 60 µg/L. No OELs were triggered.

Volatile and Synthetic Organic Compounds

The SWA monitored treated water at Perdue WTP for Title 22 regulated VOCs and SOCs. There were no detects of any compounds as per the annual Consumer Confidence Reports. This includes monitoring for 1,2,3-trichloropropane.

Unregulated Constituents

The SWA participated in the USEPA's Fourth Unregulated Contaminant Monitoring Rule (UCMR4) between November 2018 and August 2019. During the monitoring program, each quarter represented varying amounts of Sweetwater Reservoir at the Perdue WTP; November 2018 (0 percent), February 2019 (56 percent), May and August 2019 (100 percent). This program included several types of monitoring.

- Raw water was sampled quarterly for disinfection by-product precursors, TOC and bromide. TOC ranged from 2.9 to 12 mg/L, with a median of 10 mg/L. Bromide ranged from 81 to 420 µg/L, with a median of 380 µg/L.
- Raw water was sampled bi-weekly, from April through July 2019, for cyanotoxins. There were no detects of cyanotoxins in Sweetwater Reservoir.

- Perdue WTP effluent was sampled quarterly for nine pesticides/by-products, three semi-volatiles, and three alcohols. All were non-detect.
- Perdue WTP effluent was sampled quarterly for two metals, germanium and manganese. Germanium was non-detectable and manganese ranged from non-detectable to 3 µg/L, with a median of 1.9 µg/L.

In addition, ten distribution system sites were sampled quarterly for three brominated haloacetic acid groups;

- HAA5: dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid.
- HAA6Br: bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, dibromochloroacetic acid, monobromoacetic acid, tribromoacetic acid.
- HAA9: bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, trichloroacetic acid.

The HAA5 results were similar to the Stage 2 D/DBP Rule HAA5 data collected during the same period. Peak values were seen at 5379 Carolyn Vista Lane, with a median value of 21.9 µg/L, similar to the Stage 2 D/DBP Rule data which had a median value of 22.7 µg/L during this same period.

The HAA6Br results were similar to the HAA5 data collected as part of the UCMR4, but did display differences in details. Peak values were also seen at 5379 Carolyn Vista Lane, with a median value of 19.5 µg/L.

The HAA9 results appear to be a combination of the HAA5 and HAA6Br data, just at higher concentrations. Peak values were seen at Lynwood & Holly Way, with a median value of 37.6 µg/L.

Inorganics

Iron and manganese have been monitored regularly in the treated water for compliance purposes, at the clearwell effluent of the Perdue WTP. Iron has been non-detectable in all individual samples. Manganese ranged from non-detectable to 120 µg/L, with a median of 6 µg/L and 96 percent of individual samples less than the secondary MCL of 50 µg/L. The annual average is considered the compliance value for secondary MCLs and the annual average manganese ranged from 8 to 25 µg/L during the study period, always below the secondary MCL. The sources of iron and manganese in the source water were discussed in **Section 3**. Regardless, the Perdue WTP is effective at reducing the treated water levels and there have been no exceedances of the secondary standards for either constituent.

Minerals are monitored in several forms of interest, as total dissolved solids (TDS), conductivity, chloride, bromide, and sulfate. The clearwell effluent of the Perdue WTP is sampled twice per year. The Perdue WTP likely removes some incidental amount of these constituents, but is not designed for substantial removal. Treated water TDS and conductivity levels generally exceed the secondary MCL recommended levels set by DDW, but are below the upper levels for aesthetic purposes. All other constituents meet the secondary MCL consumer acceptance contaminant levels.

Giardia/Virus/*Cryptosporidium* Reduction Requirements

Based on the *Giardia*, *Cryptosporidium*, and *E. coli* data for the Sweetwater Reservoir supply, presented in **Section 3**, 3/4/2-log reduction of *Giardia*/virus/*Cryptosporidium* appears to be appropriate reduction requirements for the Perdue WTP.

The Perdue WTP currently receives reduction credit of 2.5-log *Giardia*, 2.0-log viruses, and 2-log *Cryptosporidium* for physical removal. Disinfection with chlorine dioxide, chlorine, and chloramines provides at least 0.5-log credit for *Giardia* and 2.0-log credit for viruses. This meets all of the current microbial removal/inactivation requirements of the California SWTR and the Interim Enhanced Surface Water Treatment Rule (IESWTR).

Under the second round of monitoring under the LT2ESWTR, the Perdue WTP was placed in Bin 1 based on the source water *Cryptosporidium* monitoring. This means that no additional action is required at the Perdue WTP at this time.

Watershed Contaminant Sources

There are numerous types of potential contaminating activities (PCAs) in the watershed. Nine activities were selected for evaluation in this report based on constituents of interest and predominance in the watershed. Selected findings for each of these activities are provided below.

Spills

There were 30 spills in the Upper and Middle Sweetwater watersheds over the reporting period; 17 spills involved hazardous chemicals, and 13 spills involved untreated sewage. Out of the 30 spills, 11 spills reached a waterway such as a storm drain which eventually could lead to the Sweetwater River or Reservoir.

Overall, there were a few large spills in the watershed. The largest spill which directly impacted the Sweetwater River was 102,000 gallons of recycled water from Otay Water District which occurred on February 10, 2020. The Perdue WTP was operated to achieve 1-log additional inactivation for *Giardia* and viruses from February 11 to March 2, 2020. During this time period, the Perdue WTP was treating 100 percent Sweetwater Reservoir water.

Although spills occur in the watershed and may impact source water quality, SWA has developed communication protocols with Otay Water District and the County of San Diego Department of Public Works for spill notification. Additionally, SWA works with DDW for post-spill monitoring if it is needed, and may implement an additional 1-log of inactivation for viruses and *Giardia*, if needed.

Landfills

There are two landfills within the watershed. The Viejas Landfill is located in the Upper Sweetwater watershed and the Jamacha Landfill is located in the Middle Sweetwater watershed. Both landfills are inactive Class III municipal solid waste landfills, and both were constructed without liners. Per-and polyfluoroalkyl substances (PFAS) has been detected in monitoring wells at both landfills. Notably, perfluorooctanoic acid (PFOA) was detected above its notification level of 5.1 ng/L at both landfills. Perfluorohexane sulfonic acid (PFHxS) and perfluorooctane sulfonic acid (PFOS) were detected above their respective notification levels in wells downstream of the Jamacha landfill.

Viejas Landfill

The Viejas Landfill currently has six groundwater monitoring wells which are monitored semi-annually. The Sweetwater River is located approximately 1,500 feet northwest of the site. Similar to the previous Update, there were no VOCs

detected above their respective drinking water MCLs. However, antimony was above its primary MCL of 0.006 mg/L in five monitoring wells. Antimony was non-detectable in all biannual samples collected at the Loveland Reservoir, Low Flow Barrier, Sweetwater River Influent and Sweetwater Reservoir from 2017 to 2021.

Jamacha Landfill

The Jamacha Landfill accepted an estimated 1.8 million tons of residential waste, commercial refuse, and non-decomposable inert solids during its operation from 1960 to 1978. The Sweetwater River is located approximately 700 feet southeast of the site.

The Jamacha Landfill currently has 16 groundwater monitoring wells and 14 piezometers which are monitored semi-annually. Some of the wells are screened in fractured bedrock, and some are screened in alluvium/grus. The 1995 Watershed Sanitary Survey identified a vertical constriction of the alluvial soil at a point downstream of the Otay Water District's water reclamation plant. The presence of this vertical constriction forces the water to the surface, while it would otherwise flow in the alluvium. Due to this vertical constriction, contamination of the alluvium as a result of the Jamacha Landfill may have a pathway to reach the Sweetwater River.

When comparing VOC levels from 2016/2017 to 2022, VOC levels appear to be stable or decreasing. Vinvl chloride is the VOC most frequently detected in wells above the MCL. No SOCs or VOCs were detected above the drinking water detection limit for reporting (DLR)s for the Sweetwater Reservoir or the Low Flow Barrier from 2017 to 2021, with the exception of one isolated detection of diquat at 0.4 µg/L and one isolated detection of paraquat at 4.2 µg/L in June 2021 in Sweetwater Reservoir. Sweetwater Reservoir was re-sampled for diquat and paraquat and both were not detected.

The number of wells with chloride and total dissolved solids (TDS) levels above their respective secondary MCLs have decreased since the previous WSS update. However, at least half of the monitoring wells still have chloride and TDS levels above their respective secondary MCL.

Recreation

Recreational uses in the Sweetwater and Loveland watershed consist primarily of camping, picnicking, hiking, fishing, mountain biking, equestrian trails, and waterplay. Waterplay occurs at the Green Valley campground in Cuyamaca Rancho State Park and at Palo Verde Lake. Both of these sites are upstream of Loveland Reservoir. No impacts to water quality have been observed due to

waterplay in the Upper Sweetwater watershed. *Cryptosporidium* and *Giardia* were not detected in the Sweetwater Reservoir over the reporting period.

Body contact and boating are not allowed at Loveland and Sweetwater Reservoirs. Recreation activities are shoreline fishing, hiking, bird watching, and equestrian trails. Recreation usage at Loveland has decreased over the past five years as a result of reduced operating hours. The SWA manages fishing at both Loveland and Sweetwater Reservoirs. Regular patrols of both reservoirs are conducted.

The south side of the Sweetwater Reservoir is included in a network of trails used for horseback riding, mountain biking, and hiking. The 5.5-mile Sweetwater Reservoir Riding and Hiking Trail is a County of San Diego trail, operated through a revocable license agreement with SWA. The County of San Diego is continuing to evaluate the feasibility of a multi-use trail along the northern perimeter of the Sweetwater Reservoir. This would connect to the existing 5.5-mile trail, and would allow for a 14.1-mile loop trail around the reservoir. In December 2018, the SWA Board adopted Resolution 18-21 in support of the northern portion of the proposed loop trail. The resolution contained a number of conditions the County must comply with. Final alignment and design of the proposed new loop trail segments on the northside of Sweetwater Reservoir have not been completed. However, SWA is in active negotiations with County's Department of Parks and Recreation to ensure no horses will be allowed on the new northside trail segments and that regular removal of manure and/or pet waste (if pets are allowed) occurs.

Urban Runoff

Urban runoff (URO) is a concern in the Upper and Middle Sweetwater watershed because of developing urbanized areas in the watershed, particularly the communities of Rancho San Diego and Spring Valley. The County of San Diego is the lead permittee for a Phase I Municipal National Pollutant Discharge Elimination System (NPDES) Stormwater Permit Order No. R9-2013-0001 which was amended by Order No. R9-2015-0100 in November 2015 to extend coverage to Orange County and Riverside County Copermittees. There are no incorporated cities within the Upper and Middle Sweetwater watershed, so all of the unincorporated communities are regulated through the County of San Diego.

The County of San Diego identified 25 industrial sites, six equestrian related facilities, three golf courses, ten nurseries/pest control businesses and numerous commercial facilities and construction sites which have the potential to discharge pollutants to the MS4 system within the Sweetwater watershed. A review of inspections for 10 industries from 2017 to 2021 showed that there was only one unauthorized discharge, due to a berm failure at the Robertson's Ready Mix facility.

Dry weather monitoring of outfalls is conducted by the County to determine which outfalls have transient or persistent flows. The County also investigates and eliminates discharge, and conducts testing of the discharge for pollutants. Over the reporting period, three outfalls were monitored in the Middle Sweetwater watershed (MS4-068, MS4-162, and MS4-235) during dry weather. The source of the dry weather flow was determined to be either groundwater intrusion or over irrigation in residential areas. The County conducted targeted outreach for individual property owners near outfalls MS4-162 and MS4-235 to eliminate irrigation runoff from their respective properties. Of the three outfalls, MS4-162 had the most exceedances of secondary MCLs for iron, manganese, and one occurrence of high nitrogen and phosphorus.

Phase I and Phase II of the Urban Runoff Diversion System (URDS) system constructed by the SWA provide protection against urban runoff as the various URDS ponds have the ability to capture urban runoff and prevent this runoff from entering the Sweetwater Reservoir.

The County performs many activities to prevent pollutants from entering the MS4 such as street sweeping, maintenance and cleaning of the MS4 system, conducting inspections, and identification of illicit discharges and connections.

Wastewater

There are no wastewater treatment plants which discharge treated effluent directly to the Sweetwater River. The three wastewater treatment plants in the watershed are the Ralph W. Chapman Water Reclamation Facility (RWCWRF) and the wastewater plants owned by the Viejas and Sycuan Tribes, which are operated year-round. These plants are not regulated by the Regional Board or the USEPA as they discharge to Indian lands.

There are nine wastewater pump stations located in the watershed. The facilities are owned by either the County of San Diego, Department of Public Works, or the Otay Water District. There was one spill from the Ramona wastewater pump station in January 2019. Although spills occur in the watershed and may impact source water quality, SWA has developed communication protocols with Otay Water District and the County of San Diego Department of Public Works for spill notification. Additionally, SWA works with DDW for post-spill monitoring if it is needed, and may implement an additional 1-log of inactivation for viruses and *Giardia*, if needed.

The number of new septic systems in the Upper and Middle Sweetwater watersheds continues to grow, with 142 permits issued from 2017 to 2021. It should be noted that out of the 142 systems, approximately 70 were located in Alpine, 50 were located in El Cajon, and 15 were located in Descanso. Only six septic systems were located in Spring Valley.

There are two facilities within the watershed that have waste discharge requirements (WDRs). Harbison Canyon Estates has a large septic system, and the other facility, the RWCWRF, is a reclamation plant and uses their effluent for irrigation of golf courses, schools and parks. Effluent used for recycled water from the RWCWRF does not impact the Sweetwater Reservoir, as the recycled water users' boundaries are outside the Middle and Upper Sweetwater watershed.

Developments

The Upper and Middle Sweetwater watersheds can be impacted by development activity which will cumulatively affect the quality of water tributary to, and stored in the Sweetwater and Loveland Reservoirs.

The SWA began tracking development in the Sweetwater Reservoir watershed in the late 1970s. SWA coordinates with the County of San Diego Department of Planning and Land Use (DPLU) staff on discretionary applications for development projects located within the fee collection area. Additionally, SWA provides comments on development proposals when there are concerns relating to impacts to surface water and/or groundwater that may result from high risk or very high risk potentially contaminating activities. The largest development proposed over the reporting period is the Cottonwood Sand Mining Project which would impact approximately 214 acres of land over a period of 10 years. SWA has submitted three comment letters to the County regarding this project, with many serious concerns remaining unaddressed.

The three golf courses in the watershed continue to be of concern due to the use of pesticides and their proximity to the Sweetwater River. The Sweetwater River runs directly through the Sycuan and Cottonwood golf courses. A variety of pesticides and herbicides are used on golf courses to maintain the greens and keep rodents and pests from burrowing. Please refer to **Section 4** for a list of chemicals used at each golf course. Pesticide use records were obtained for Steele Canyon Golf Course and Cottonwood Golf Course from the County of San Diego Department of Public Works, Watershed Protection Program (email communication, Paola Garcia). Records were not available for the Sycuan Golf Course as this facility is on tribal land and not under the County's jurisdiction. It should be noted that the Cottonwood Golf Course is now closed in preparation to commence sand mining operations, pending approval from the County of San Diego.

Homeless Encampments

The presence of homeless individuals in the San Diego Wildlife Refuge has been an on-going issue since at least 2002. There have been fewer encampments in the past five years, as United States Fish and Wildlife Service (USFWS) staff

regularly patrol key areas such as the Steele Canyon Bridge and Steele Canyon Creek. USFWS will continue to address homeless encampments on Refuge-owned lands as an on-going law enforcement and maintenance issue.

Agriculture

There are six equestrian facilities in the Sweetwater watershed. According to San Diego National Wildlife Refuge staff, equestrian use in the Refuge over the reporting period has decreased. This is likely due to Iron Oak Canyon Ranch (formally Bright Valley Farms) and Willow Glen Equestrian not conducting trail rides recently. Refuge staff also stated that the majority of equestrian use on the Refuge occurs around the Par 4 area (area north of SR94 and east of Sweetwater River). Recent inspection reports of equine facilities note that the facilities in the Sweetwater watershed are regularly cleaned and manure is being properly disposed. Inspections by the County will keep these facilities in check to minimize water quality impacts to the Sweetwater River.

The USFWS is working on formalizing a designated trail system for the San Diego National Wildlife Refuge. This will help to reduce erosion in the watershed and may lead to improved manure management on the trails. Unfortunately, no work is currently underway due to a lack of funding.

There are limited crop areas within the watershed. The San Diego Regional Water Quality Control Board's Agricultural Order requires growers to implement best management practices to minimize the discharge of pollutants, conduct routine monitoring and inspection of their facility, complete yearly water quality management training, and prepare and implement Water Quality Protection Plans and Water Quality Restoration Plans.

Wildfires

The Valley Fire was the only major wildfire in the watershed over the reporting period. Approximately 12.7 percent of the Loveland Reservoir watershed was burned. The Burned Area Emergency Response (BAER) report indicated that ash and sediment would likely settle in Loveland Reservoir and would not impact downstream water quality. No post-fire runoff samples were collected in the Sweetwater watershed. However, SWA installed a silt curtain to mitigate for erosion at the bottom of the dozer line at Loveland reservoir. Also, SWA coordinated directly with external partners/agencies such as CALFIRE, USFWS, California Department of fish and Wildlife, and the United States Forest Service during the wildfire to implement various post-fire mitigation measures.

RECOMMENDATIONS

A number of recommendations covering water quality and watershed management were developed for this Update. Please refer to **Section 6** for further information on the recommendations.

INTRODUCTION

This report presents the findings of the Current Update to the Sweetwater and Loveland Reservoirs Watershed Sanitary Survey. This study covers the period January 2017 through December 2021. The initial Watershed Sanitary Survey was completed in 1995 by the Sweetwater Authority (SWA) in accordance with the California Surface Water Treatment Rule (SWTR).

For assistance with abbreviations and acronyms, the reader is referred to the List of Abbreviations at the front of the report.

OBJECTIVES OF THE UPDATE

A watershed sanitary survey focuses on the first barrier to contamination of the drinking water supply, namely source water protection. Evaluating source water quality and watershed contaminant sources provides key information to aid in understanding how to maintain and possibly improve the first barrier. In order to fully assess the ability of the SWA to treat Sweetwater Reservoir water, some evaluation of treatment plant capabilities and treated water quality is also necessary.

This Update is intended to accomplish the following objectives:

1) Fulfillment of the California SWTR and the Interim Enhanced Surface Water Treatment Rule (IESWTR) requirements that surface water agencies conduct a sanitary survey of the source watershed once every five years. Any significant changes within the last five years that affect source water quality are to be identified in each update. In addition, it is required to comment on the appropriate level of treatment for pathogens, specifically for *Giardia*, viruses, and *Cryptosporidium*.

2) Review and evaluation of selected constituents of interest to identify potential water quality or treatment issues at the Robert A. Perdue Water Treatment Plant (Perdue WTP). Assess the ability of the treatment plant to meet standards based on the current regulatory framework.

3) Review and evaluation of selected potential contaminating activities to identify impacts on source water quality. Determine whether it may be useful to conduct additional monitoring to further assess contaminant levels in the source water or contaminants from a particular watershed source.

4) Identification of appropriate watershed management actions to protect and possibly improve source water quality. Development of recommendations for watershed management actions that are economically feasible and within the authority of the SWA to implement is critical.

CONSTITUENTS AND POTENTIAL CONTAMINATING ACTIVITIES COVERED IN THE CURRENT UPDATE

Several water quality constituents were selected for evaluation as part of the Current Update. **Table 1-1** presents a summary of the water quality constituents selected and the reason for selection.

Table 1-1
Water Quality Constituents Selected for Evaluation as Part of the Current Update

Constituent	Reason for Inclusion in Current Update
Turbidity	Turbidity is a measurement of suspended solids in water. Treated water turbidity levels are regulated in the SWTR and the IESWTR.
Total Coliform	Evaluation recommended under the SWTR to determine appropriate level of treatment for *Giardia* and viruses.
E. coli	*E. coli* is a more specific surrogate for fecal contamination and is used in the Long Term 2 Enhanced SWTR (LT2ESWTR) to determine the appropriate level of action for *Cryptosporidium*.
Giardia	*Giardia lamblia* is infectious to humans. Source water levels of *Giardia* are used to determine treatment requirements under the SWTR.
Cryptosporidium	*Cryptosporidium parvum* is infectious to humans. Actual source water levels of *Cryptosporidium* will be used to determine treatment requirements as part of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR).
Total Organic Carbon	Total organic carbon (TOC) is a surrogate measure of disinfection by-products (DBP) precursor material in water. TOC levels in either source or treated water are used to determine treatment requirements in the Stage 1 Disinfectant/Disinfection By-Product Rule (D/DBP).
Total Trihalomethanes	Total Trihalomethanes (TTHMs) are disinfection by-products formed in disinfected treated water. Treated water levels are regulated by the Stage 1 D/DBP Rule and further regulated under the Stage 2 D/DBP Rule.

Table 1-1 (continued)
Water Quality Constituents Selected for Evaluation as Part of the Current Update

Constituent	Reason for Inclusion in Current Update
Haloacetic Acids	Haloacetic acids (HAA5) are disinfection by-products formed in disinfected treated water. Treated water levels are regulated by the Stage 1 D/DBP Rule and further regulated under the Stage 2 D/DBP Rule.
Volatile and Synthetic Organic Compounds	Most VOCs and SOCs are formulated for, or are by-products from, industrial, agricultural, and urban use. Pesticides are a main subgroup of the SOCs used for agriculture and urban application. Many of these constituents have been regulated by the Phase I, II, and V regulations.
Inorganics	As requested by the SWA, nitrate, aluminum, iron, manganese, bromide and minerals such as TDS and conductivity were examined. Nitrate has a primary MCL, and the remaining constituents have secondary MCLs with the exception of bromide. Bromide is of interest due to the formation of brominated disinfection by-products.
Plankton, 2-methylisoborneol (MIB), geosmin and various algal species	Taste and Odor compounds were evaluated to document taste and odor episodes over the reporting period. Plankton data were examined to identify key species present during taste and odor episodes.

Nine potential contaminating activities were selected for review as part of the Current Update: spills, landfills, recreation, urban runoff, wastewater, developments, homeless encampments, wildfires, and agriculture. Each of these activities can contribute at least one of the constituents identified in **Table 1-1** to the source water. These activities were selected based on their presence in the watershed, and were identified by SWA as key contaminating activities.

DESCRIPTION OF HOW THE CURRENT UPDATE WAS CONDUCTED

The project team consisted of a Technical Committee comprised of representatives from the SWA and the consultant team of Palencia Consulting Engineers and Starr Consulting. The Technical Committee participated in developing the scope of work and reviewed identification and development of key findings and recommendations.

The consultant team obtained information from the SWA through a survey that addressed the Perdue WTP's process, including a discussion of treatment challenges and changes since the 2017 Watershed Sanitary Survey. Raw and treated water quality data was also provided by the SWA.

The consultant team collected information on contaminant sources in the watershed through literature reviews, Internet searches, and discussions with various agencies' staff. References are provided in **Appendix A**.

REPORT ORGANIZATION

Section 1 – Introduction

This section describes the objectives of the Current Update, lists the main constituents and potentially contaminating activities covered, describes how the Current Update was conducted, and includes a description of the basic report organization.

Section 2- The Watershed and Supply Systems

This section is largely descriptive and provides: (1) a brief overview of the physical, hydrologic, and land use characteristics of the watershed, (2) a description of the existing water supply system, and (3) contains watershed maps delineating the watershed and outlining land use and land ownership in the watershed. For more detailed descriptive information on watershed characteristics, the reader is referred to the 1995 Watershed Sanitary Survey.

Section 3 – Source Water Quality Review

This section provides a review of the constituents of interest, including an explanation for their selection and a summary of the data obtained for the period of study for each constituent.

Section 4 – Watershed Contaminant Sources Review

This section describes pertinent characteristics of each of the nine potential contaminating activities that were reviewed as part of this Update. If applicable, each potential contaminating activity will include a discussion on background and occurrence, seasonal patterns, water quality issues and data review, regulation and management, and source water protection activities.

Section 5 - Intake Evaluation

This section contains an evaluation of the Perdue WTP treated water quality, as well as an evaluation of the Perdue WTP's ability to meet the SWTR as well as other existing regulations.

Section 6 – Recommendations

This section contains a table of recommendations and significant changes since the 2017 Watershed Sanitary Survey.

SECTION 2 – WATERSHED AND WATER SUPPLY SYSTEMS

WATERSHED DESCRIPTION

This section provides an overall description of the watershed and summarizes physical, hydrologic, and land use characteristics. Major watershed characteristics have changed little since the original 1995 Watershed Sanitary Survey. For a more detailed account of this information, the reader is referred to the 1995 Watershed Sanitary Survey. This section also provides a description of the Sweetwater Authority (SWA) water supply system, including a brief description of the Robert A. Perdue Water Treatment Plant (Perdue WTP).

The Sweetwater River is a 40-mile long ephemeral river beginning at Cuyamaca Peak in eastern San Diego County, flowing westerly and terminating in San Diego Bay. The Sweetwater River watershed is divided into three hydrological areas or basins; the Lower Sweetwater hydrologic area, the Middle Sweetwater hydrological area, and the Upper Sweetwater hydrologic area as shown in **Figure 2-1.** Since the Lower Sweetwater hydrologic area does not contribute runoff directly or indirectly to the Sweetwater Reservoir, the Lower hydrologic area is not included in this survey. The focus of this report will be on the Middle and Upper Sweetwater hydrological areas. The Middle Sweetwater hydrological area is 83.6 square miles, and the Upper Sweetwater hydrological area is 97.8 square miles. The Middle Sweetwater hydrological area includes Sweetwater Reservoir and the Middle Sweetwater River, and the Upper Sweetwater hydrological area includes Loveland Reservoir. The transition from Upper Sweetwater to Middle Sweetwater River occurs at the downstream face of the Loveland Reservoir dam.

Unincorporated rural and suburban communities, as well as the Sycuan Indian Reservation characterize the middle watershed. The upper watershed contains large undeveloped areas within the Cleveland National Forest, Cuyamaca Rancho State Park, the unincorporated communities of Descanso and Alpine, and the Viejas Indian Reservation.

SWA owns and operates the dams at Sweetwater and Loveland Reservoirs and releases water from the Loveland Reservoir to provide input for the Sweetwater Reservoir, from which water is withdrawn for treatment at the Perdue WTP. The Middle Sweetwater River and its alluvial deposits serve as a natural conduit for transporting water from Loveland to Sweetwater Reservoir. Because the Sweetwater River is nearly dry most of the year, SWA generally releases from Loveland Reservoir only in the rainy season to minimize water loss to the alluvial deposits. Releases are also timed to avoid impacts to the arroyo toad. The arroyo toad was listed as endangered by the federal government in 1993 and is a State Species of Special Concern. As the arroyo toad uses river or stream habitats for reproduction, water transfers from Loveland Reservoir can only be initiated when ambient flows in the Sweetwater River are high or swift moving (generally occurring in the winter months) in order to minimize impacts to breeding activity.

Precipitation

Figure 2-2 shows monthly precipitation totals from the SWA's rain gage at Sweetwater Dam from January 2017 to December 2021. The average annual rainfall over this five year period was 12.9 inches at Sweetwater Reservoir and 15.6 inches at Loveland Reservoir. **Table 2-1** shows annual rainfall totals at both Sweetwater and Loveland Reservoirs. As measured at the Sweetwater Reservoir rain gage, the wettest year over the reporting period was 2019 with 19.4 inches of rain.

Figure 2-2
Monthly Rainfall Totals at Sweetwater Reservoir Dam, 2017-2021

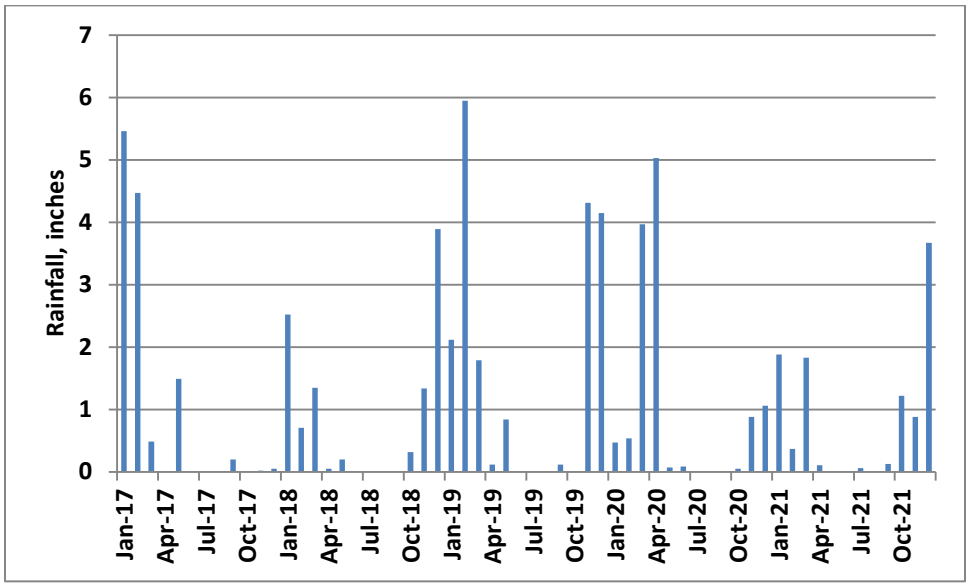


Table 2-1
Annual Rainfall Totals at Sweetwater and Loveland Reservoirs
2012-2021

Year	Sweetwater Reservoir, inches	Loveland Reservoir, inches
2012	9.1	12.8
2013	6.7	8.3
2014	7.4	9.2
2015	9.5	14.4
2016	10.8	16.1
2017	12.2	14.9
2018	10.4	11.9
2019	19.4	27.7
2020	12.2	11.5
2021	10.2	12.0

2022 Watershed Sanitary Survey

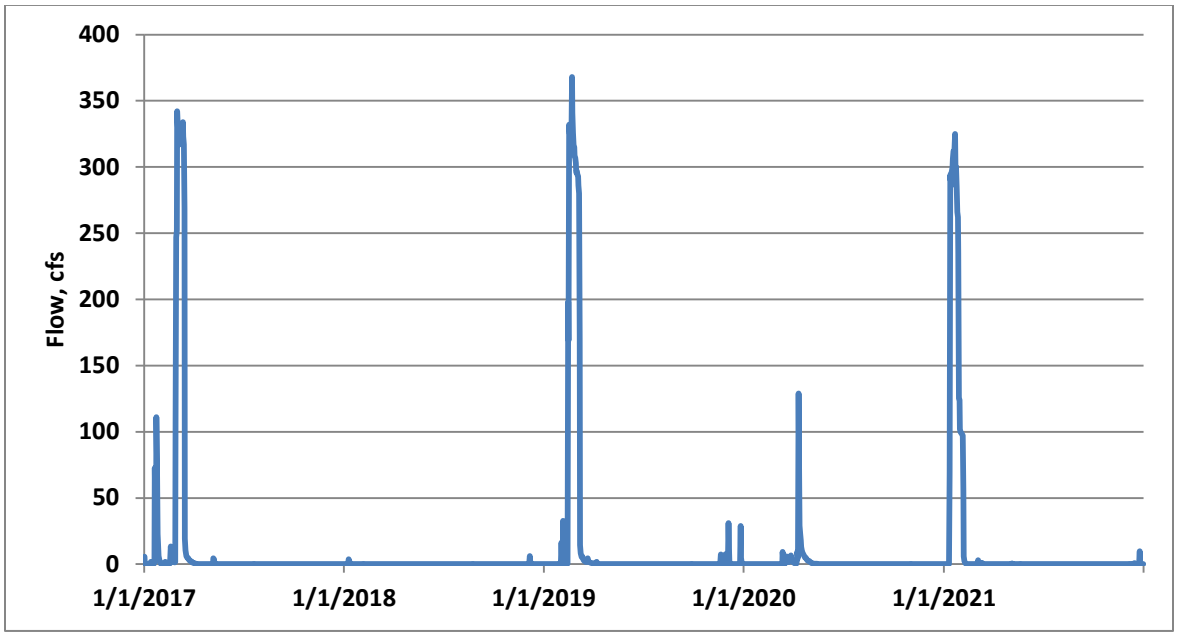
Location Map
Figure 2-1

Data Source: SanGIS/SANDAG
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Flow

The United States Geologic Survey (USGS) maintains two stream flow gages on the Sweetwater River; one upstream of Loveland Reservoir near Descanso and one near Dehesa on the Sloan Ranch truck trail along the Middle Sweetwater River. The stream gage near Dehesa has been in operation since October 2005 and was installed by USGS at the request of the SWA. The historical record for the flow gage near Descanso dates from 1905 to the present. As shown in **Figure 2-3**, the highest flows on the Sweetwater River at Dehesa over the reporting period were associated with releases from Loveland Reservoir in March 2017, February 2019, and January 2021. Most of the time, zero flow is recorded at this location.

Figure 2-3
Daily Streamflow Data at Sweetwater River near Dehesa (11016200), 2017-2021



Land Use

The majority of the land use in the Upper and Middle watersheds is classified as rural, with 91 percent rural and 9 percent urban for both the Upper and Middle Sweetwater watershed combined. **Table 2-2** provides further information for the rural and urban land use categories, and **Figure 2-4** shows land use in the watershed. There are no incorporated cities in the Upper and Middle Sweetwater watershed. There has been little change over the last twenty years regarding land use.

Table 2-2
Land Use in the Upper and Middle Sweetwater Watersheds

Land Use	Upper and Middle Sweetwater
Total Area, acres	119,983
Urban Land Use	
Residential	6,294
Commercial and Shopping	255
Education	483
Industrial	293
Transportation, Communication, Utilities	3112
Institutions	362
Urban Percentage	9%
Rural Land Use	
Rural Residential	18,663
Agriculture	2,417
Parks, Open Space	42,521
Undeveloped	24,236
Undeveloped Natural Area	14,499
Water	1,423
Recreation	1,516
Indian Reservations	3,909
Rural Percentage	91%

Source: 2020 SANDAG Land Use Data

Land Ownership

The major landowners within the Upper watershed are private parcels, the U.S. Forest Service and California State Parks, as shown in **Figure 2-5**. The Middle watershed is primarily privately owned lands. **Table 2-3** shows the breakdown of land ownership for the Upper and Middle Sweetwater watersheds.

2022 Watershed Sanitary Survey

LEGEND
Existing Land Use

RESIDENTIAL
- Single Family Detached
- Single Family Attached
- Multiple Family
- Mobile Homes
- Spaced Rural Residential

COMMERCIAL AND OFFICE
- Commercial and Office
- Shopping Centers

INDUSTRIAL
- Extractive Industry
- Light Industry

- Indian Reservation
- Watershed Basins

PUBLIC FACILITIES AND UTILITIES
- Institutions
- Education
- Transportation, Communications, Utilities

PARKS AND RECREATION
- Open Space Parks
- Recreation

AGRICULTURE
- Extensive Agriculture
- Intensive Agriculture

UNDEVELOPED
- Undevelopable Natural Area
- Undeveloped
- Water

0 0.75 1.5 3 Miles

N W E S

Data source: sanGIS/SANDAG
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Existing Land Use
Figure 2-4

2022 Watershed Sanitary Survey

LEGEND

Existing Land Ownership

- Bureau of Land Management
- California Department of Fish and Game
- County
- Fire Districts
- Indian Reservations
- Other Federal
- Private
- Sanitation Districts
- School Districts
- State
- State (Caltrans)
- State Parks
- U.S. Fish & Wildlife Service
- U.S. Forest Service
- Water Districts
- Watershed Basins

0 1 2 4 Miles

N W E S

Upper Basin

Middle Basin

Cuyamaca Reservoir

El Capitan Reservoir

Lake Jennings

Lake Murray

Loveland Reservoir

Sweetwater Reservoir

Barrett Lake

Upper Otay Reservoir

Corte Madera Lake

Palo Verde Lake

BARONA INDIAN RESERVATION

CAPITAN GRANDE INDIAN RESERVATION

CLEVELAND NATIONAL FOREST

CUYAMACA RANCHO STATE PARK

EL CAPITAN OPEN SPACE PRESERVE

EL MONTE COUNTY PARK

VIEJAS INDIAN RESERVATION

SYCUAN INDIAN RESERVATION

CAMPO INDIAN RESERV

Descanso

Pine Valley

Alpine

Harbison Canyon

Crest

Dehesa

EL CAJON

LA MESA

Flinn Springs

Rancho San Diego

Casa de Oro

Mt. Helix

Spring Valley

LEMON GROVE

La Presa

Jamacha

Jamul

Paradise Hills

Bonita

CHULA VISTA

Dulzura

Alpine Blvd

Dehesa Rd.

Harbison Canyon Rd.

Jamacha Rd.

Fuerte Dr.

Lemon Ave.

Campo Road

Broadway

Troy St.

Jamacha Blvd.

Sweetwater River

Skyline Truck Trail

Lyons Valley Rd.

Japatul Valley Rd.

Old Highway 80

Sunrise Hwy

Paradise Valley Rd.

Proctor Valley Rd.

Otay Lakes Road

Bonita Rd

Central Ave.

Coral Canyon

East Lake

Data Source: SanGIS/SANDAG

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Existing Land Ownership

Figure 2-5

Table 2-3
Land Ownership in Upper and Middle Watersheds

Land Owner	Percent of Upper Watershed	Percent of Middle Watershed
Bureau of Land Management	0.02	0.42
California Department of Fish and Game	0	1.84
California State Parks	27.21	0
CalTrans	1.00	0.30
County of San Diego	0.37	1.58
Fire Districts	0	0.01
Indian Reservations	3.14	5.31
Other Federal	0.64	2.94
Private Parcels	31.55	62.60
Sanitation Districts	0	0.02
School Districts	0.15	1.00
State of California	1.90	4.36
U.S. Fish and Wildlife Service	0	13.19
U.S. Forest Service	29.39	1.53
Water Districts	4.61	4.90

SWA owns approximately 895 acres surrounding the Sweetwater Reservoir. SWA also owns approximately 3,292 acres surrounding the Loveland Reservoir.

In order to better control recreational activities at Loveland Reservoir, the SWA exchanged land near Descanso for land surrounding the Loveland Reservoir with the U.S. Forest Service in December 1997.

WATER SUPPLY SYSTEM

Background

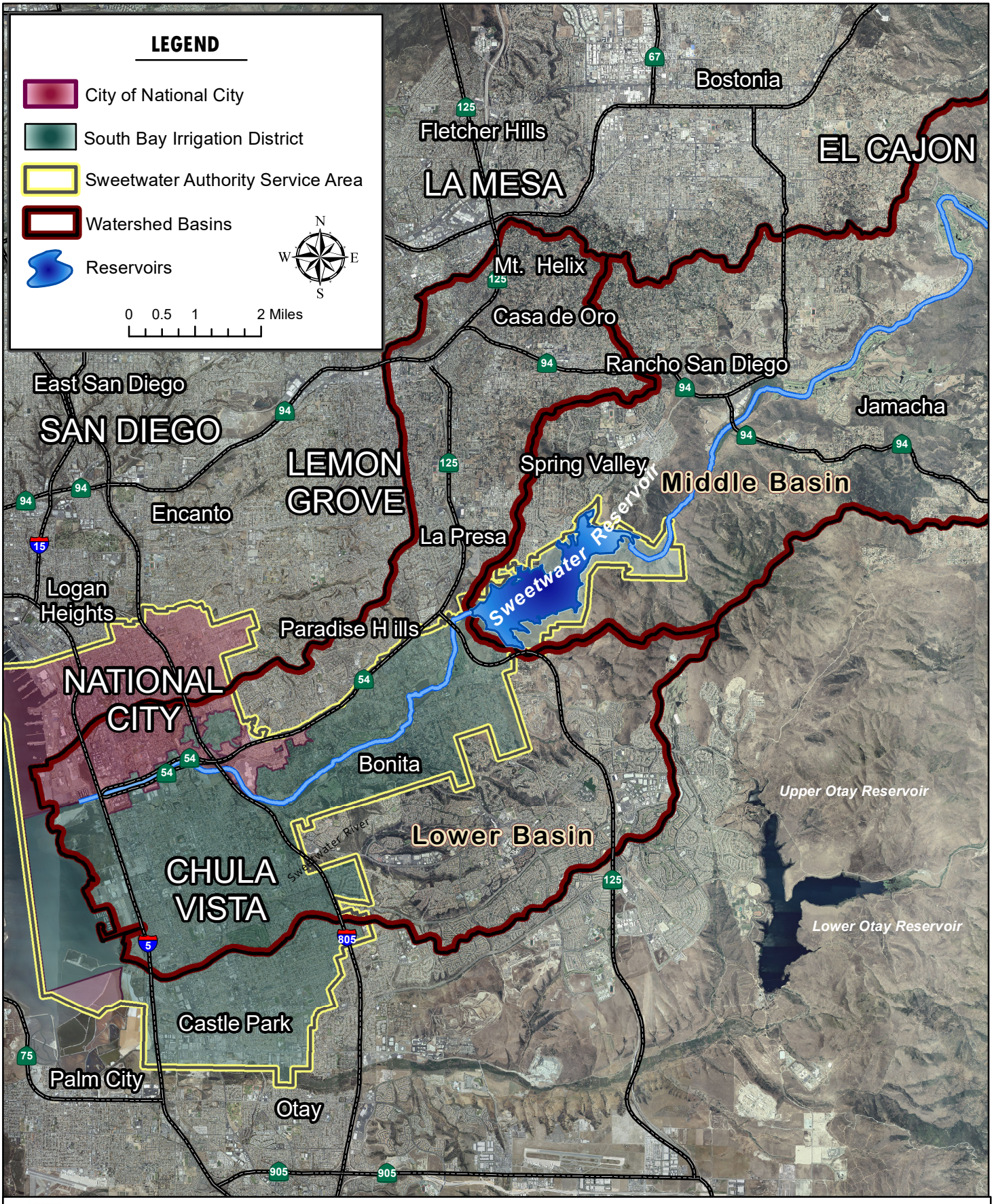
The SWA is a publicly owned water agency with policies and procedures established by a seven-member Board of Directors. Five of the Directors are elected by the citizens of the South Bay Irrigation District. Two Directors are appointed by the Mayor of National City, subject to City Council confirmation.

SWA provides water service to approximately 190,000 people in National City, Bonita and the western and central portions of Chula Vista. Its customers include residential, business, government, and industrial water users in an area covering more than 21,000 acres in the South Bay region of San Diego County, as shown in **Figure 2-6**.

The SWA service area receives water from four sources: the Sweetwater Reservoir, deep freshwater wells in National City, semi-brackish groundwater from wells in Chula Vista and National City, and imported water which is drawn from the Colorado River or the State Water Project in Northern California.

Constructed in 1999, the Richard A. Reynolds Groundwater Desalination Facility treats semi-brackish groundwater from six wells in Chula Vista and National City. Currently, there are eleven wells. The facility uses reverse osmosis treatment and can produce 10 MGD. The Sweetwater Reservoir receives water from three sources: runoff from the Sweetwater watershed, imported water, and released water from Loveland Reservoir. The Perdue WTP treats water withdrawn from the Sweetwater Reservoir and also treats imported water. Historically, imported water was treated from November through May, and local water from Sweetwater Reservoir was treated primarily during the summer months. The seasonal use of sources was based on water availability and economic analysis, but recently SWA has changed its philosophy to optimize blending sources to improve the influent source water quality. This is evident in the lack of a seasonal use pattern over the reporting period. More information on the sources is provided in **Section 5.** Overall, the extended drought and related consistently low reservoir levels, has resulted in more challenging water quality to treat.

Since the San Diego County Water Authority (SDCWA) no longer offers a reduced water rate for storing imported water in Sweetwater Reservoir versus direct delivery from the SDCWA system, there has been minimal imported water added directly to the Sweetwater Reservoir since summer 2008 as shown in **Table 2-4**. Therefore, the Sweetwater Reservoir is currently composed of primarily local runoff water. Occasionally, SWA may purchase treated water from the San Diego County Water Authority.



2022 Watershed Sanitary Survey

Water Service Area
Figure 2-6

Data Source: SanGIS/SANDAG
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Table 2-4. Volume of Imported Water Stored in Sweetwater Reservoir

Date Storage Occurred	Volume (acre-feet)
Sept. 2008	592.1
Oct. 2008	827.4
Nov. 2008	315
Dec. 2008	1854.2
Jan. 2009	1430.4
Feb. 2009	1090.5
Mar. 2009	1044.7
Apr. 2009	856.4
Jan. 2017	992.3
Feb. 2017	2035

Sweetwater and Loveland Reservoirs

The Sweetwater Reservoir has a reservoir storage of 28,079 acre-feet, and the dam was constructed in 1888. The Loveland Reservoir has a reservoir storage of 25,287 acre-feet, and the dam was constructed in 1945.

Robert A. Perdue Water Treatment Plant

The 30 million gallons per day (mgd) Robert A. Perdue WTP was originally constructed in 1959 as a direct filtration plant. Today, it is a conventional filtration plant. Several upgrades have been performed over a period spanning from 2008 to 2016. Upgrades have included the complete refurbishment and automation of the chemical feed systems, including flow pacing; addition of variable frequency drives to selected pumps at the raw water pump station; replacement of the filter underdrains, media replacement and addition of air scour to the dual media filters; reconfiguration of the existing gravity sedimentation basins to a dissolved air flotation system (DAF) system; and the addition of a fluoridation system.
Over the reporting period, the only change to the water treatment process was the initiation of fluoridation in January 2017.

The following future treatment plant updates are currently being evaluated in the Perdue Master Plan:

- Conversion from Aqueous Ammonia to Liquid Ammonium Sulfate.
- Intake Tower Refurbishment.
- Solids Handling and De-chlorination of Plant Discharges to Sweetwater Reservoir
- Sewage Lift Station Relocation
- Clearwell Replacement
- Free Chlorinated Filter Backwash capabilities.
- UV Disinfection.
- PAC Feed System or conversion to 12.5 percent sodium hypochlorite

- On-site sodium hypochlorite generation

SWA has allocated capital funds in FY 2021-22 for engineering design services for an aeration/destratification system in Sweetwater Reservoir. Construction and startup of this project are expected to occur in FY 2023-24 and FY 2024-25. The need for the aeration system is to ensure consistent levels of dissolved oxygen and water quality throughout the water column, which should improve the treatability of water in the reservoir by reducing the occurrence of taste and odor causing algae blooms, reduce levels of dissolved manganese (color), reduce nutrient loading from the sediment into the water column, and improve the stability of the chloramine residual in the treated water by reducing total organic carbon (TOC) levels.

SWA has also allocated capital funds in FY 2021-22 for engineering design services to replace the clearwell effluent flow meter. The venturi meter currently in use is the original from 1959. Over the past several years, production at the Perdue WTP has dropped significantly due to lower water usage in the Authority's service area and the 2017 expansion of the Authority's Richard A. Reynolds Groundwater Desalination Facility which increased production from 5 MGD to 10 MGD. Consequently, the current venturi meter often registers inaccurate values at flows less than 10 MGD, which are now typical at the Perdue WTP. The current type/size of venturi meter that is in place was not designed to accurately measure flows in this range.

Additional information on the operation of the Perdue WTP is provided in **Section 5.**

This section provides an overall review of the source water quality data available for the Sweetwater Reservoir as well as the water sources which contribute to the reservoir, including Loveland Reservoir and local drainage. The sources of raw water quality data include an extensive compliance and watershed monitoring program for the Sweetwater Authority (SWA). A review was conducted of the California Environmental Data Exchange Network (CEDEN) to identify other sources of monitoring in the watershed, however there were very few sites monitored infrequently for limited constituents. The data was not sufficient to incorporate into this analysis, so no other ambient data is presented. **Table 3-1** provides a summary of the data evaluated. This section provides a review of the constituents of interest in the source water, including an explanation for their selection and a summary of the data obtained for the period of study, for each constituent. The period of study for this Update to the Watershed Sanitary Survey is 2017 through 2021. For assistance with abbreviations and acronyms, the reader is referred to the List of Abbreviations at the front of the Report.

Table 3-1
Summary of Source Water Quality Data Evaluated

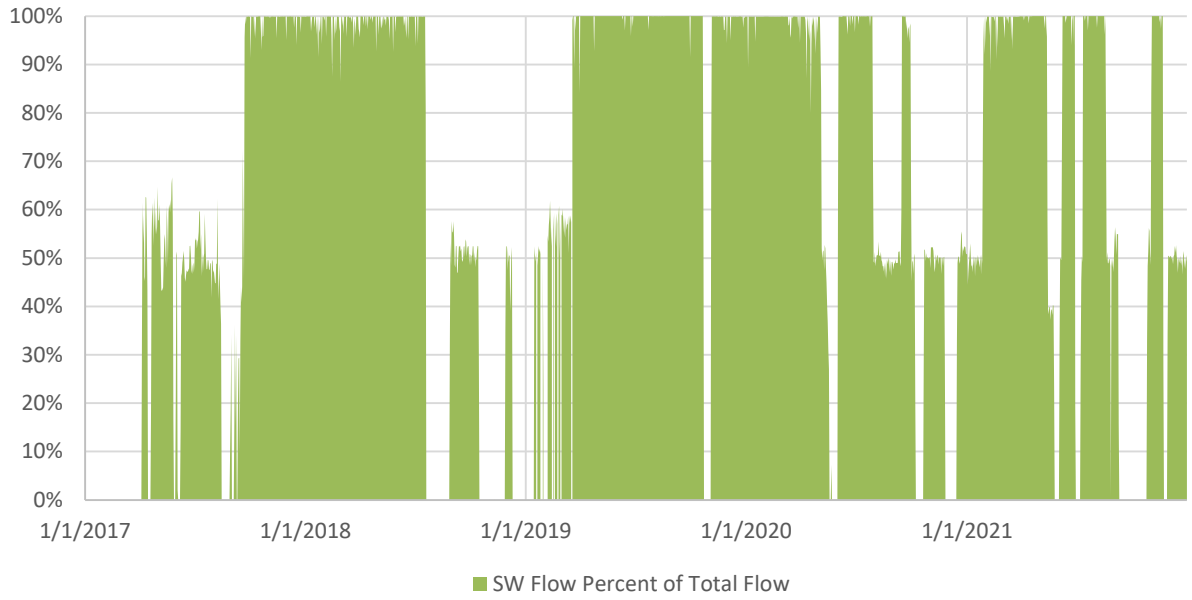
Agency	Key Data Collected	Sampling Location
SWA	All Title 22 Regulated and Unregulated Constituents, TOC/DOC, Turbidity, Bromide, UV254, Total Coliform, *E. coli*, *Giardia* and *Cryptosporidium*, Nitrate, Perchlorate, Aluminum, Iron, Manganese, Plankton, MIB, Geosmin	Sweetwater Reservoir
SWA	All Title 22 Regulated and Unregulated Constituents	Low Flow Barrier
SWA	Conductivity, Chloride, Nitrate, Perchlorate, Aluminum, Iron, Manganese, Bromide, Nitrate	Loveland Reservoir, Low Flow Barrier, Sweetwater River Influent, Hansen's Pond
SWA	Total Coliform and *E. coli*	URDS Ponds: Alacena 1&2 Outlet, East End of SWL, Gumtree Outlet, Hansen's Pond Sweetwater Reservoir Markers: 1,2,5,6,7
SWA	Total Coliform and *E. coli*	Sweetwater River at Bridge, Peterson Creek, East End Tributary, Loveland Fishing Area, and Loveland Dam

Some data results represent Sweetwater Reservoir, or other ambient sites in the watershed, directly. However, some data represents the Robert A. Perdue Water Treatment Plant (Perdue WTP) Influent. The Perdue WTP can utilize either Sweetwater Reservoir water, raw imported water from San Diego County Water Authority, or a blend. It is important to characterize the periods when the Perdue WTP utilizes the Sweetwater Reservoir source at its influent. The proportion of either supply impacts the overall source water quality, as they have distinctly different characteristics.

SWA provided information on the daily amount of both Sweetwater Reservoir water and imported water that were used at the Perdue WTP influent during the study period. The Sweetwater Reservoir provided 66 percent of the source water to the Perdue WTP over the study period. The daily percent use of the Sweetwater Reservoir source is shown in

Figure 3-1. During the study period, 69 percent of days had 50 percent or more (majority) of the influent contributed from the Sweetwater Reservoir. This is significantly more use of Sweetwater Reservoir at the Perdue WTP than during the last study period.

Figure 3-1
Sweetwater Reservoir Source at Perdue WTP Influent, 2017 – 2021

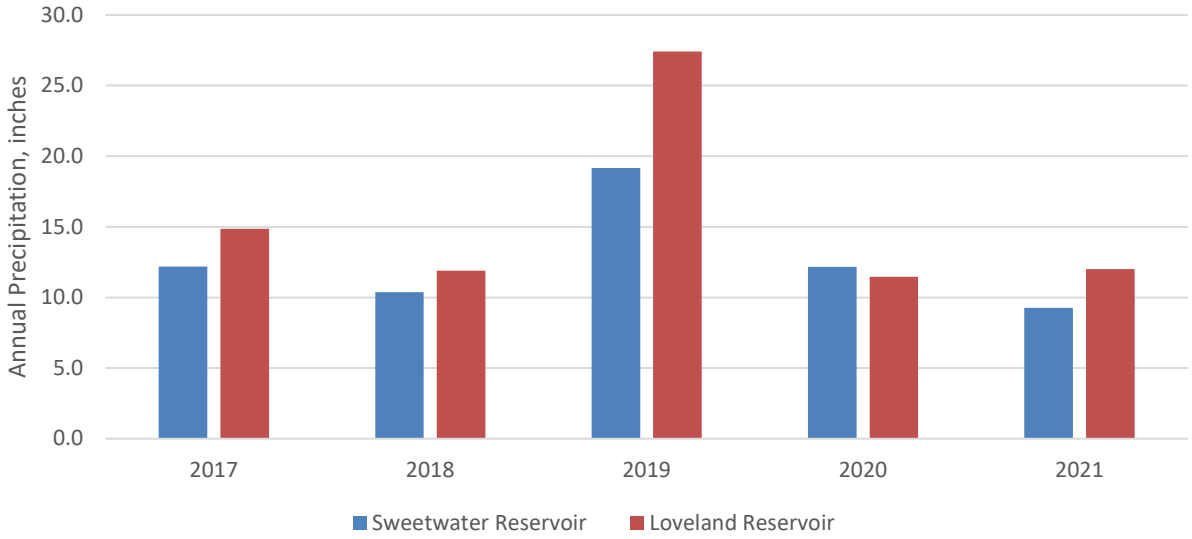


Historically, SWA timed use of sources based on water availability and economic analysis, but recently SWA has changed its philosophy to optimize blending sources to improve the influent source water quality. This is evident in the lack of a seasonal use pattern. This blending strategy has been effective at ensuring treatability of the source water through the Perdue WTP and providing a more consistent treated water quality, as discussed in **Section 5**.

Additionally, the climate and hydrology of the Sweetwater River watershed, releases from Loveland Reservoir, and the operation of the Urban Runoff Diversion System (URDS) have the potential to have significant impacts on the source water quality.

Over the study period, annual precipitation in the Sweetwater Reservoir watershed varied as shown in **Figure 3-2**. SWA records daily rainfall at each reservoir, which was totaled into annual precipitation for each calendar year. It can be seen that 2019 was a significantly wetter year, with 51 percent of rainfall occurring in the January through March period and 43 percent occurring in the November and December period. Generally, Loveland Reservoir receives more annual precipitation, except in 2020.

Figure 3-2
Annual Precipitation at SWA Reservoirs



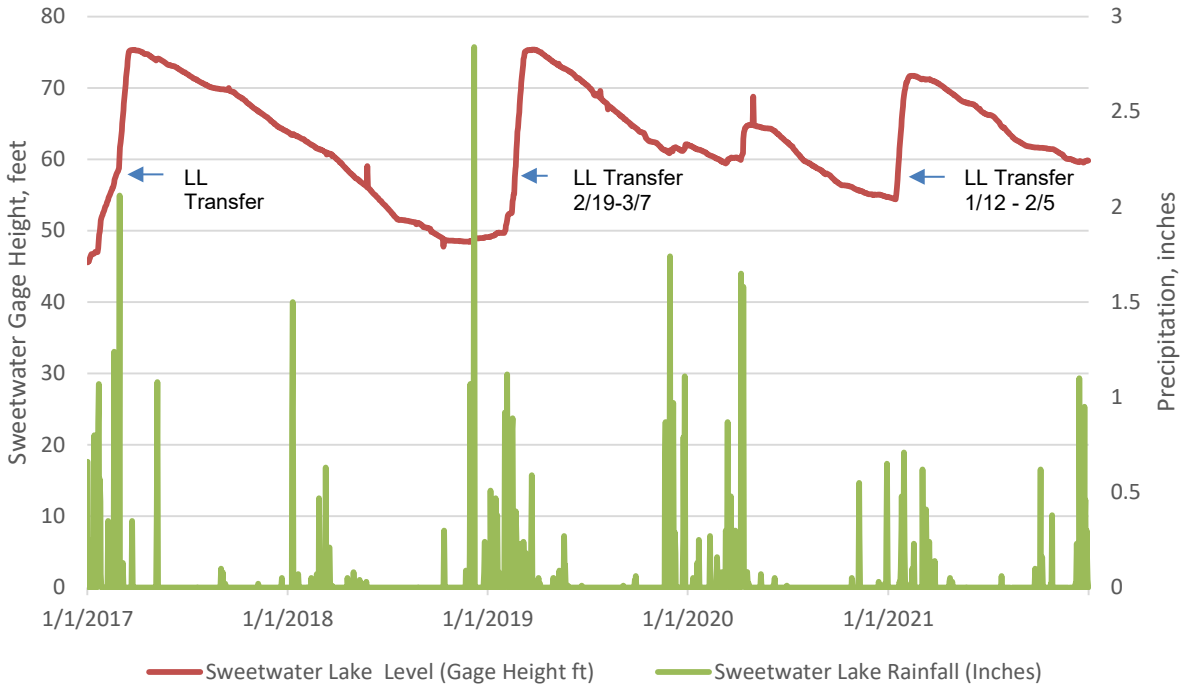
The continued drought in the region limited the amount of water available in Loveland Reservoir to transfer to Sweetwater Reservoir. There were only three releases during the study period, listed below. **Figure 3-3** presents the levels of Sweetwater Reservoir along with the daily precipitation and the transfers from Loveland Reservoir. It is evident that the Loveland Reservoir transfers have the most significant effect on Sweetwater Reservoir lake level, by inspecting the years without the transfers; 2018 had no level increase due to limited rainfall and there was only a small increase in 2020 due to more substantial local rainfall.

Generally, it takes three to four days for water to travel between the reservoirs.

- February 28 – March 15, 2017: 9,090 acre-feet (AF) released from Loveland Reservoir and 6,846 AF received at Sweetwater Reservoir (25 percent loss to Middle Sweetwater River).
- February 19, - March 7, 2019: 12,158 AF released from Loveland Reservoir and 10,091 AF received at Sweetwater Reservoir (17 percent loss to Middle Sweetwater River).
- January 12 – February 5, 2021: 11,786 AF released from Loveland Reservoir and 8,332 AF received at Sweetwater Reservoir (29 percent loss to Middle Sweetwater River).

URDS II, as discussed in **Section 4**, involves capture and management of flows at the Low Flow Barrier. Historically, when the facility is operated in Diversion mode, the flows are diverted into the URDS II system and prevented from entering Sweetwater Reservoir. When the facility is operated in Bypass mode, the flows are allowed to enter Sweetwater Reservoir. During the study period, URDS II was left in Bypass mode at all times. The facility has the ability to, when necessary, to divert water for first flush storm events, and hazardous materials spill events (including sewage spills).

Figure 3-3
Sweetwater Reservoir Lake Level, Precipitation, and Loveland Reservoir Transfers, 2017 - 2021



OVERALL WATER QUALITY SUMMARY

The summary of overall water quality is based on an evaluation of the Perdue WTP intake data (also called raw water) supplemented by the other watershed monitoring data and comparison to drinking water standards for the constituents currently regulated. This includes all constituents with primary and secondary MCLs and unregulated constituents that have Notification Levels set by the California Division of Drinking Water (DDW). In general, it is assumed that if the raw water is below these limits, then the treated water (also called finished water) will be also. Compliance with MCLs and Notification Levels are typically based on treated water sample results. **Appendix B** contains summaries of the data used for this review.

Overall, the Sweetwater Reservoir provides acceptable quality raw water. The raw water can be treated to meet all drinking water standards using conventional filtration processes. The SWA uses chlorine dioxide as the primary disinfectant to prevent development of high levels of disinfection by-products (DBPs) in the distribution system. The individual intake evaluation for the treated water and regulatory compliance is presented in **Section 5**.

SELECTED CONSTITUENT REVIEW

This section contains a general discussion of selected water quality constituents and the reasons why they were selected for further evaluation. The constituents selected for further review in this report include; turbidity, microbial constituents, disinfection by-product precursors (organic carbon and bromide), volatile organic compounds (VOCs), synthetic organic compounds (SOCs), nitrate, selected minerals (conductivity and chloride), selected metals (iron and manganese), and plankton and related constituents. The constituents' general characteristics, seasonal and historical trends, and significance with respect to existing and potential future regulations are presented, along with data analysis and review. Additional evaluation of some of these constituents, with respect to treated water quality and regulatory compliance, is presented in **Section 5**.

The constituents selected for further review were selected based on several criteria including; existing or upcoming regulatory standards, critical operational evaluation parameters, and relevance to significant potential contaminating activities. These items are discussed in the background section for each constituent. **Table 3-2** shows the relationship between the potential contaminating activities selected for evaluation and water quality constituents selected for evaluation.

Table 3-2
Relationship Between Potential Contaminating Activities in the Sweetwater and Loveland Reservoirs Watershed and Source Water Quality

Water Quality Constituents	Spills	Ag	Landfills	Recreation	Urban Runoff	Wastewater	Other Development	Homeless Encampments	Wildfires
Turbidity	√	√		√	√	√	√		√
Microbial Constituents	√	√		√	√	√	√	√	
Disinfection By-Product Precursors	√	√			√	√			√
VOC/SOC	√	√	√		√		√		√
Nitrate	√	√			√	√	√		√
Minerals			√		√		√		√
Metals			√		√		√		√
Plankton	√	√			√	√			√

Turbidity

General Characteristics and Background

Turbidity is the measurement of light scatter in water and provides a measure of the degradation of clarity in water. Clarity is typically degraded by suspended colloids and

fine suspended solids such as clay, organic particulates, and microorganisms such as *Giardia* and *Cryptosporidium*, if present. Turbidity is measured to evaluate the efficiency of the treatment process at removing these particles and also to comply with regulatory requirements.

Turbidity was selected for further evaluation since most facilities, including the Perdue WTP; optimize pretreatment processes to maximize turbidity removal in order to reduce the potential for pathogens, such as *Giardia* and *Cryptosporidium*, to be present in treated drinking water. Turbidity is monitored throughout the treatment plant to ensure that particles are removed. Turbidity has been assumed to be an indicator constituent for the presence of *Giardia* and *Cryptosporidium*. It has also been found that the presence of suspended matter can interfere with disinfection of microorganisms. However, turbidity alone may be a poor predictor of microbiological quality.

Current drinking water regulations require that the combined filtered effluent be less than 0.3 nephelometric turbidity units (NTU) in 95 percent of monthly measurements. The CFE may never exceed 1 NTU (based on four hour measurements) and may not exceed 1 NTU for more than 1 continuous hour based on more frequent measurements (at least recorded every 15 minutes for conventional and direct filtration plants). The CFE turbidity shall not exceed 1.0 NTU for more than eight hours (based on 15-minute measurements). Continuous turbidity monitoring for individual filters is required, and performance triggers exist for them.

High turbidity levels in surface water sources, such as the Sweetwater Reservoir, are typically the result of erosion and sediment transport during precipitation and high flow events, and are undesirable because high turbidity may mask the presence of harmful particulates. The principal source of turbidity is general watershed runoff, and can also be contributed by other potential contaminating activities such as spills, urban runoff, wastewater, fires, some recreational activities, and algae blooms in the reservoir. It is common for turbidities to vary seasonally as a result of precipitation and flow. It has also been found that the presence of suspended matter can interfere with disinfection of microorganisms.

Evaluation

Turbidity has been selected for evaluation not only because it is a regulated constituent, but also because it is commonly used as an indicator of general water quality and overall plant performance. The daily turbidity log reports from the SWA provided peak daily raw water turbidity values. As mentioned previously, the Perdue WTP has variable use of the Sweetwater Reservoir. Data was reviewed for the entire study period (overall) and also for when the Sweetwater Reservoir source constituted 50 percent or more of the influent flow (majority).

The overall peak daily raw water turbidity ranged from 0.3 to 41 NTU, with a median value of 4.7 NTU. When looking at periods when a majority of Sweetwater Reservoir source was being used, the peak daily raw water turbidity ranged from 0.7 to 41 NTU,

with a median value of 5.9 NTU. It can be seen that the Sweetwater Reservoir source accounts for the higher turbidity data set.

Turbidity levels in the influent water at the Perdue WTP can be impacted by a wide variety of characteristics; percent source inflow, local precipitation, transfers from Loveland Reservoir, reservoir water level, and presence of algal blooms. Each factor was considered, relative to turbidity at the Perdue WTP influent, and turbidity correlated best with percent source inflow. It was also evident that storm events and algal blooms (measured by plankton counts) can also contribute to increased turbidity. Low lake levels and transfers from Loveland Reservoirs showed little to no direct correlation to turbidity, but they may create indirect opportunity for increased turbidity levels (higher plankton counts and more extreme lake turnover events). Since there are numerous factors impacting turbidity levels at the Perdue WTP influent, there are no specific trends obvious in the overall data.

The daily peak raw water turbidity is presented with the percent Sweetwater Reservoir source inflow during the entire study period in **Figure 3-4**. It can be seen that often the peak turbidity values at the Perdue WTP raw water coincide with significant use of the Sweetwater Reservoir source at the influent. **Figure 3-5** presents the daily peak raw water turbidity with daily precipitation. It can be seen that although the turbidity is normally low, there are periods when levels can increase substantially. Sometimes these increases are associated with either significant storm events (December 2018) or extended duration events (winter and spring 2020). **Figure 3-6** presents the daily peak raw water turbidity with available plankton counts. Peak plankton counts can occur from spring through fall each year, depending on overall reservoir and weather conditions. In May 2017 a peak plankton event correlates very well with a peak turbidity event, however similar peaks in May 2020 and May 2021 did not correlate to peak turbidity events. This could be due to algal control methods implemented in Sweetwater Reservoir or percent source inflow.

SWA notes that diurnal upwelling events can cause turbidity spikes entering Perdue WTP with organic carbon and manganese particulates released from the (anaerobic) sediment being the main contributors. These diurnal upwelling events can happen during the fall and summer. The turbidity effects of these events tend to be more pronounced when levels are low in Sweetwater Reservoir, or when surface waters cool, especially under windy conditions. These type of events can also be somewhat unpredictable.

Summary of Results

- The overall median peak daily raw water turbidity at the Perdue WTP was 4.7 NTU, but was slightly higher, 5.9 NTU, when using majority inflow from the Sweetwater Reservoir.
- The raw water turbidity levels at the Perdue WTP influent vary throughout the year, and do not strongly correlate with any one characteristic. The best correlation is to percent source inflow, followed by precipitation and uncontrolled

algal blooms. Episodic upwelling in Sweetwater Reservoir likely contributes as well to turbidity peaks.

Figure 3-4
Perdue WTP Raw Water Daily Maximum Turbidity and Percent Sweetwater Reservoir Inflow

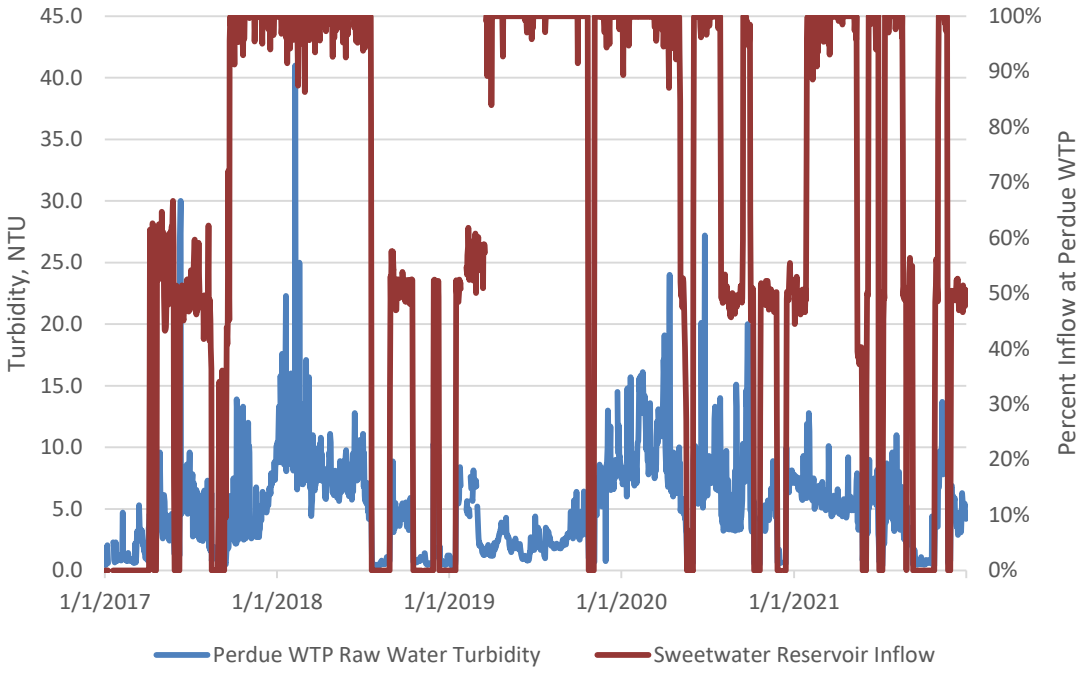


Figure 3-5
Perdue WTP Raw Water Daily Maximum Turbidity and Local Precipitation

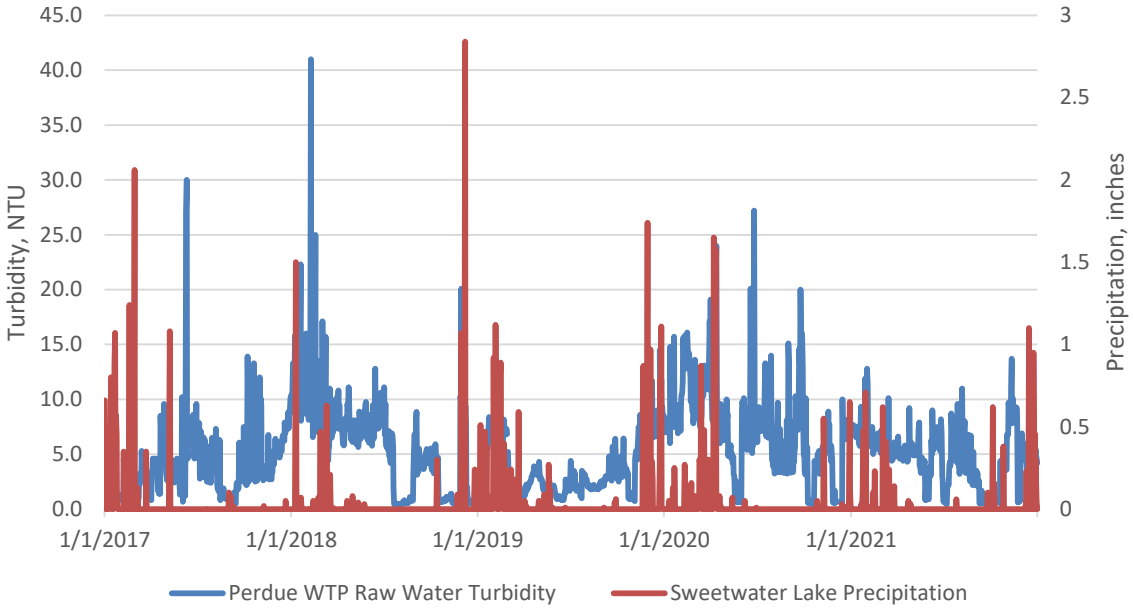
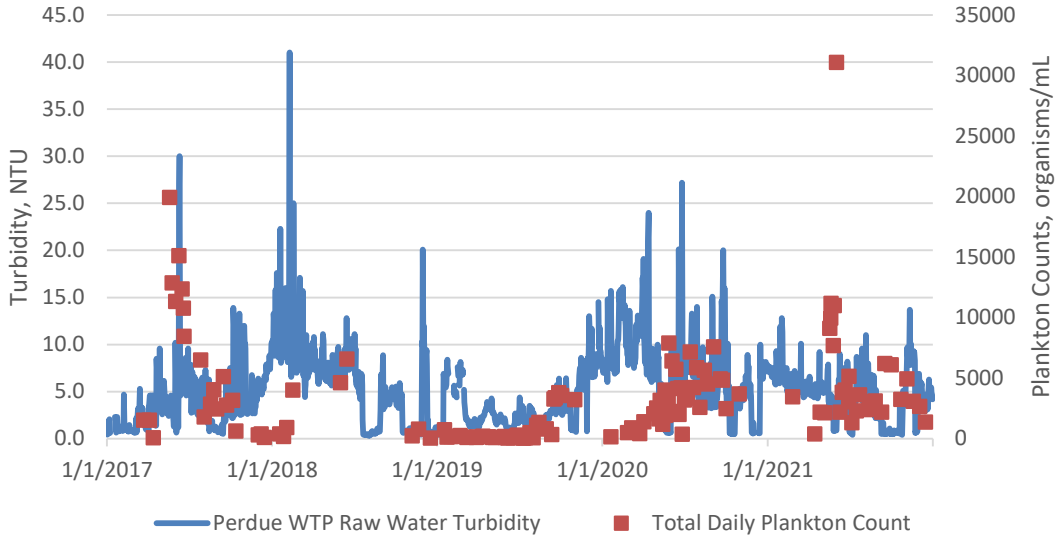


Figure 3-6
Perdue WTP Raw Water Daily Maximum Turbidity and Plankton Counts



Microbial Constituents

General Characteristics and Background

The major microbiological constituents of concern include total coliform, *Escherichia coli* (*E. coli*), *Giardia lamblia*, and *Cryptosporidium parvum*. Generally speaking, pathogenic organisms carried by mammalian species may be infectious to humans although this depends on the species of microorganism. Pathogens infecting other types of animals, such as birds and reptiles, are usually not infectious to humans. However, some types of animals, such as birds, may be vectors for human pathogens. Each of these constituents was identified for further evaluation because they are currently regulated or used as surrogates to determine the level of treatment required. The presence of these constituents in the raw water governs the overall treatment requirements for the water treatment plants, though detected pathogens and pathogen indicators may not be capable of infecting humans.

Total coliform have been historically used to indicate the potential presence of pathogenic microorganisms in source waters, in lieu of direct measurement of pathogens. Although coliform levels have not been shown to correlate well with pathogenic microorganisms, they continue to be used as indicators due to the lack of affordable and reliable direct analytical methods for detecting pathogens. Total coliform is now considered the least useful surrogate and *E. coli* the more specific surrogate. Potential sources of coliform bacteria include general watershed runoff, recreation, wastewater, urban runoff, agricultural drainage, and animal populations. Coliform levels in treated water are currently regulated directly through the Revised Total Coliform Rule, to ensure the effectiveness of the disinfection process throughout the distribution system.

Giardia lamblia is a species of the protozoa genus *Giardia* that infects humans and can cause the gastrointestinal disease giardiasis. *Giardia* is found in the environment as a cyst from the feces of humans and animals; both wild and domestic animals may be hosts. Sources close to waterbodies have the most potential to introduce viable cysts to the source water. Cysts may be destroyed naturally in the environment by desiccation and/or heat. The cysts are effectively inactivated using chlorine or chlorine dioxide disinfection. The detectability of *Giardia* has been greatly improved with U.S. Environmental Protection Agency (USEPA) Method 1623, which is better able to establish densities, but still does not determine viability. *Giardia* may be carried in urban runoff and wastewater sources or may be contributed directly as a result of body-contact recreation or animal defecation.

Giardia lamblia is currently regulated by the Surface Water Treatment Rule (SWTR) and the Interim Enhanced Surface Water Treatment Rule (IESWTR). Surface water supplies must provide for 3-log reduction of *Giardia* through physical removal and chemical inactivation. Additional reduction may be required for impaired water supplies. The DDW guidance provides that 3-log reduction is appropriate when monthly median levels of total coliform are less than 1,000 most probable number per 100 milliliters (MPN/100 mL), *E. coli* levels are less than 200 MPN/100 mL, or when directly measured confirmed *Giardia* levels are less than 0.01 cysts per liter.

Cryptosporidium parvum is a species of the protozoa genus *Cryptosporidium* that infects humans and can cause the gastrointestinal disease cryptosporidiosis. *Cryptosporidium* is found in the environment as an oocyst principally from the feces of domestic animals, although both wild and domestic animals are known to be hosts. Like *Giardia*, *Cryptosporidium* oocysts may be destroyed naturally in the environment by desiccation and/or heat. Once in the source water, however, viable oocysts are very resistant to traditional chemical inactivation using chlorine. Stronger disinfectants such as ozone or ultraviolet (UV) light are required to inactivate these pathogens. The detectability of *Cryptosporidium* has been greatly improved with USEPA Methods 1622 and 1623, which are able to establish true concentrations, but still do not determine viability. *Cryptosporidium* may be carried in urban runoff and wastewater sources or may be contributed directly as a result of body-contact recreation or animal defecation, including both wild and domestic animals.

Cryptosporidium is currently regulated through the IESWTR, which requires 2-log reduction. Well-operated conventional and direct treatment plants are granted a 2-log removal credit for *Cryptosporidium* if they meet all treated water turbidity limits. The Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) further regulates *Cryptosporidium* and requires additional action (treatment or protection) if the source water quality is determined to be impaired based on direct *Cryptosporidium* monitoring of the source, greater than 0.075 oocysts per liter. Small systems are only required to monitor for *Cryptosporidium* if their average annual *E. coli* levels are above 100 MPN/100 mL.

The DDW also developed the *Cryptosporidium* Action Plan (CAP) in the mid-1990s to address *Cryptosporidium* while Federal regulations were being formed. The CAP identified recommended turbidity limits for settled water, treated water, and recycled water in lieu of treated water *Cryptosporidium* levels. The CAP was developed to help utilities optimize treatment processes to ensure maximum removal of *Cryptosporidium* oocysts and reduce the risk of waterborne illness. This plan was intended for utilities with over 1,000 service connections.

The SWA Water Supply Permit from DDW uses total coliform as the trigger to implement an additional log reduction requirement for *Giardia* and viruses. If an individual weekly total coliform sample, using membrane filtration method, exceeds 1,000 MPN/100 mL (up to 10,000 MPN/100 mL) then an additional 1-log inactivation is required for both *Giardia* and virus, samples over 10,000 MPN/100 mL require an additional 2-log inactivation. This permit requirement is more stringent than the DDW Surface Water Treatment Rule (SWTR) Guidance Manual, which uses a monthly median rather than individual samples.

Evaluations

Total Coliform

SWA monitored raw water at the intake in the Sweetwater Reservoir for total coliform throughout the study period. Weekly samples were collected and analyzed using the membrane filtration method.

Over the study period, individual total coliform levels ranged from non-detectable to 29,833 MPN/100 mL. The median of all data points during the study period for total coliform was 40 MPN/100 mL, which is slightly higher than the median from the last study period of 30 MPN/100 mL. Ninety percent of individual samples were less than 1,000 MPN/100 mL, meaning that 10 percent of samples triggered an additional 1-log reduction of *Giardia* and viruses through inactivation. Ninety-eight percent of individual samples were less than 10,000 MPN/100 mL, meaning that two percent of samples triggered an additional 2-log reduction of *Giardia* and viruses through inactivation. A timeseries plot of total coliform is provided in **Figure 3-7**. The majority of peak values occurred during the wet season (October – April), but there are no distinct seasonal trends. This is most pronounced in the 2019/2020 and 2020/2021 wet seasons. In addition, the summer and fall of 2020 saw higher than normal values, which coincided with a leak found in the URDS system in October 2020 resulting in discharge to Sweetwater Reservoir. It was repaired in late November 2020 and total coliform values decreased after this time until the winter storms.

Monthly median values for total coliform were also calculated. Ninety-six percent of monthly median values were less than 1,000 MPN/100 mL (only three months exceeded this trigger) and all were less than 10,000 MPN/100 mL. The data show that the peak levels of total coliform occurred in April 2020, January 2021, and March 2021. The Sweetwater Reservoir source was total use in April 2020, majority use in January

2021, and total use in March 2021 at the Perdue WTP influent. These are shown in **Figure 3-8**.

The sources of total coliform in the watershed vary, so lake level, precipitation, and plankton counts were evaluated and none were found to have any significant correlation to total coliform. There were no detects associated with any spill events either.

Figure 3-7
Sweetwater Reservoir Intake Weekly Raw Water Total Coliform

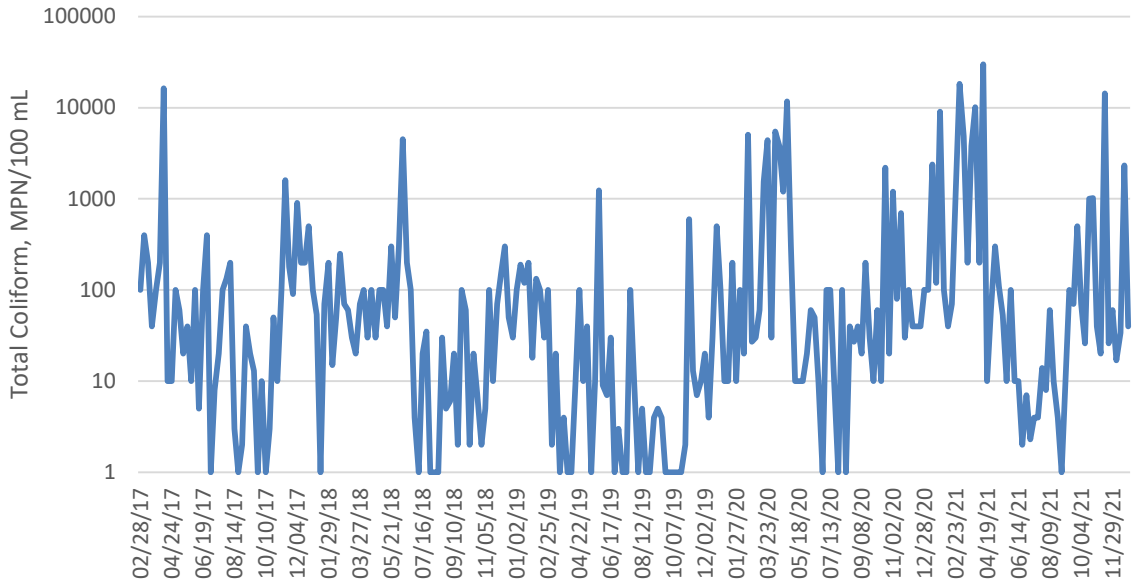
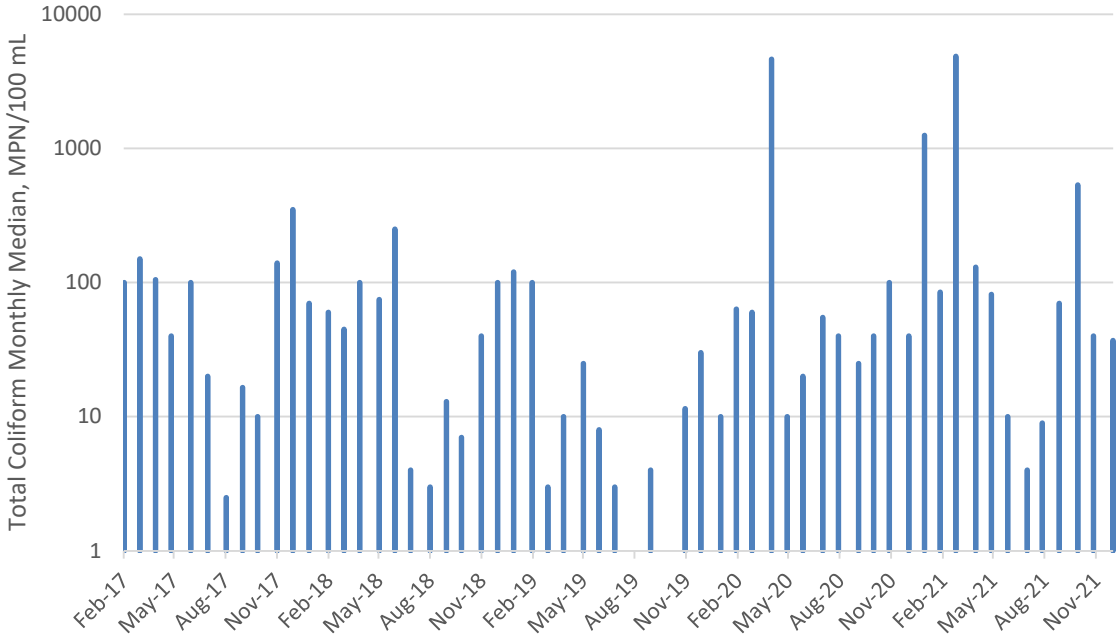


Figure 3-8
Sweetwater Reservoir Intake Monthly Median Raw Water Total Coliform



A review of the watershed data collected by SWA for total coliform was conducted. There are five sites upstream of the Sweetwater Reservoir which were monitored weekly for total and *E. coli* during the study period; these are shown on **Figure 3-9**. Three sites are located at the inflow to Loveland Reservoir; Sweetwater River Inflow to Loveland at Bridge, Peterson Creek at the Bridge, and the East End Tributary. There are two sites located in Loveland Reservoir; Loveland Fishing Area and at the Dam. **Table 3-3** provides a summary of the range and median total coliform at each site.

Table 3-3
Watershed Monitoring for Total Coliform (MPN/100 mL), 2017 - 2021

Monitoring Site	Range	Median
Sweetwater River Inflow to Loveland at Bridge	172.2 - >2,419.6	1,986.3
Peterson Creek at Bridge	119.9 - >2,419.6	>2,419.6
East End Tributary	204.6 – >2,419.6	>2,419.6
Loveland Fishing Area	27.5 - >2,419.6	727
Loveland Dam	8.5 - >2,419.6	410.6

The data show that during the study period all sites have samples with elevated levels of total coliform. The influent tributaries to Loveland Reservoir have higher levels of total coliform, but this is attenuated in the reservoir. Levels within Loveland Reservoir and at the Dam are generally low.

SWA monitored the URDS system at four locations as part of their recreation monitoring program. These sites were monitored at least monthly, but often weekly, throughout the study period. These four sites are shown on **Figure 4-7**. **Table 3-4** provides a summary of the range and median total coliform at each site. The data show that there can be very high levels of total coliform in the URDS.

Table 3-4
URDS Monitoring for Total Coliform (MPN/100 mL), 2017 - 2021

Monitoring Site	Range	Median
Alacena 1&2 Outlet	920.8 - >2,419.6	>2,419.6
East End of SWL	290.9 - >2,419.6	>2,419.6
Gumtree Outlet	186 - >2,419.6	>2,419.6
Hansen's Outlet	1299.7 - >2,419.6	>2,419.6

SWA also monitored total coliform at five marker locations within Sweetwater Reservoir as part of their recreation monitoring program. These sites were monitored at least weekly throughout the study period. These five markers; #1, #2, #5, #6, and #7 are shown on **Figure 3-10**. **Table 3-5** provides a summary of the range and median total coliform at each site. There is a wide range of total coliform at the marker sites, but generally the total coliform levels are elevated. It should be kept in mind that these are surface samples collected to represent the recreational impacts on the source water.

Table 3-5
Recreational Monitoring for Total Coliform (MPN/100 mL), 2017 - 2021

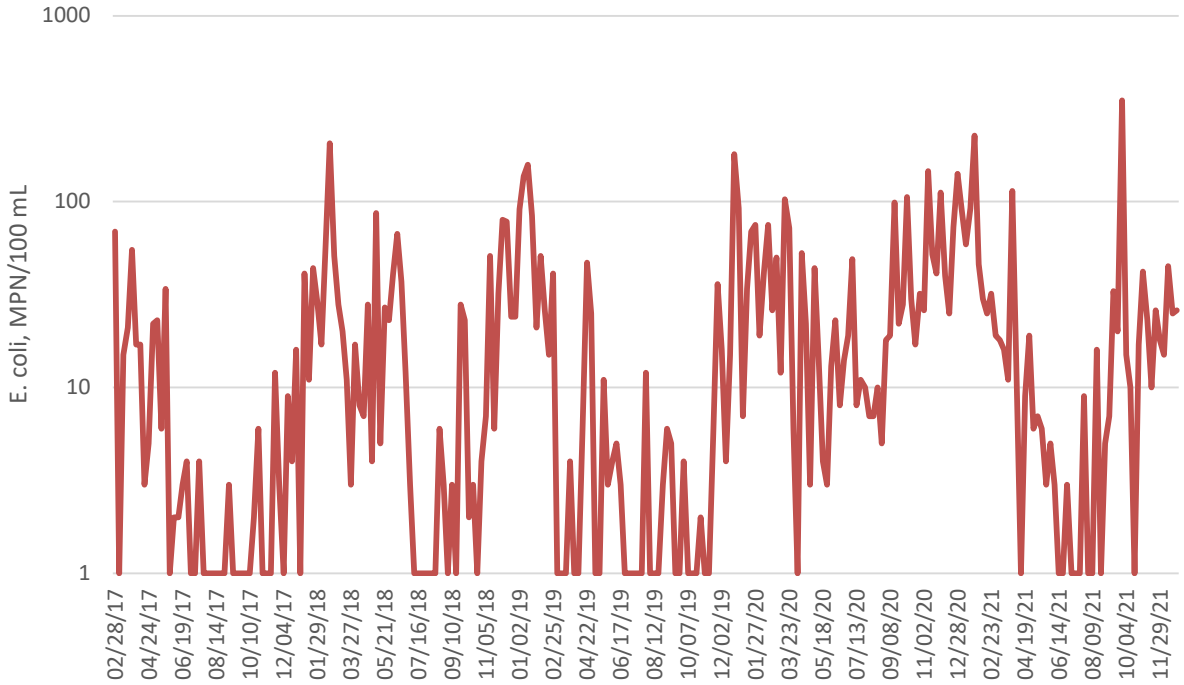
Monitoring Site	Range	Median
Marker #1	74.9 - >2,419.6	>2,419.6
Marker #2	5 - >2,419.6	1,859.6
Marker #5	9 - >4,839.2	1,986.3
Marker #6	67 - >2,419.6	>2,419.6
Marker #7	23 - >2,419.6	>2,419.6

E. coli

Weekly samples were collected and analyzed using the membrane filtration method. Over the study period, the *E. coli* levels ranged from non-detectable to 350 MPN/100 mL. The median of all data points during the study period for *E. coli* was 10 MPN/100 mL. Ninety-nine percent of individual samples were less than 200 MPN/100 mL, 95 percent of individual samples were less than 100 MPN/100 mL, and 80 percent of individual samples were less than 40 MPN/100 mL.

A timeseries plot of *E. coli* is provided in **Figure 3-11**. The plot shows the wide range of values, however nearly all samples were less than 100 MPN/100 mL. Peak values can occur throughout the year and no obvious trends were identified.

Figure 3-11
Sweetwater Reservoir Intake Weekly Raw Water *E. coli*



2022 Watershed Sanitary Survey

Total Coliform and *E. coli* Monitoring Sites at Loveland Reservoir

Figure 3-9

Data Source: SanGIS/SANDAG

Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.

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2022 Watershed Sanitary Survey

Monitoring Sites for Recreation Monitoring Program at the Sweetwater Reservoir

Figure 3-10

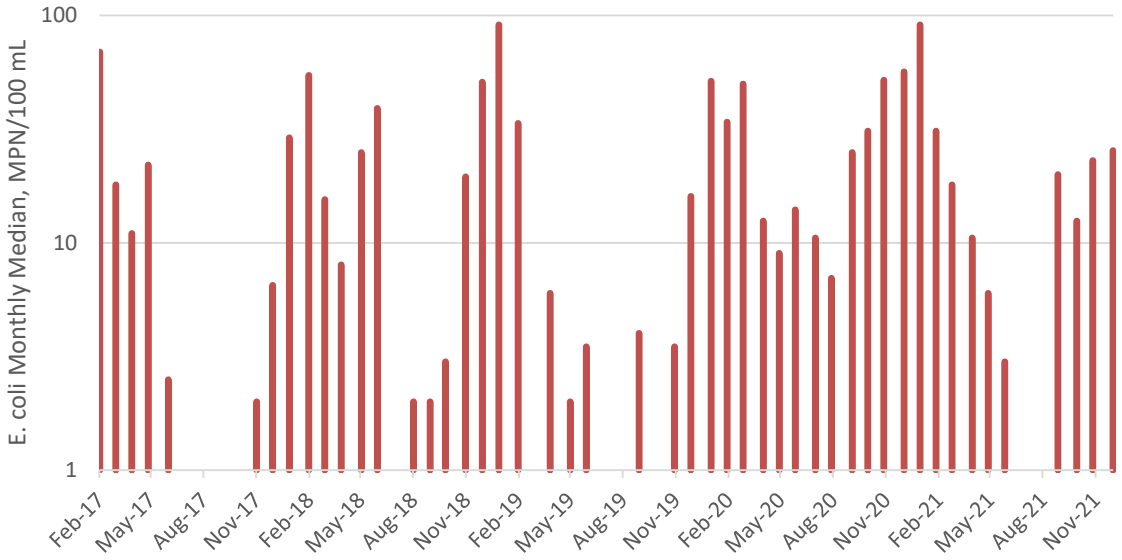
Data Source: SanGIS/SANDAG

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Monthly median values for *E. coli* were also calculated. All monthly median values were less than 100 MPN/100 mL These are shown in **Figure 3-12**.

Figure 3-12
Sweetwater Reservoir Intake Monthly Median Raw Water Total Coliform



A review of the watershed data collected by SWA for *E. coli* was conducted. The same five sites as for total coliform were evaluated. **Table 3-6** provides a summary of the range and median *E. coli* at each site.

Table 3-6
Watershed Monitoring for *E. coli* (MPN/100 mL), 2017 – 2021

Monitoring Site	Range	Median
Sweetwater River Inflow to Loveland at Bridge	<1 – 1732.9	6.3
Peterson Creek at Bridge	<1 - >2,419.6	44.1
East End Tributary	<1 – 149.7	21
Loveland Fishing Area	<1 – 686.7	<1
Loveland Dam	<1 – 172	<1

The data show that during the study period several of the sites can have elevated levels of *E. coli*. One of the influent tributaries to Loveland Reservoir has higher levels of *E. coli*, Peterson Creek, but this is attenuated in the reservoir. Levels within Loveland Reservoir and at the Dam are very low, generally non-detectable.

SWA monitored the URDS system at four locations as part of their recreation monitoring program. These sites were monitored at least monthly, but often weekly, throughout the study period. **Table 3-7** provides a summary of the range and median *E. coli* at each site. The data show that there can be peak levels of *E. coli* in the URDS, but generally

the median values are very low indicating a low likelihood of fecal matter presence in the URDS.

Table 3-7
URDS Monitoring for *E. coli* (MPN/100 mL), 2017 - 2021

Monitoring Site	Range	Median
Alacena 1&2 Outlet	<1 – 435.2	5.3
East End of SWL	<1 – 517.2	6.3
Gumtree Outlet	<1 – 435.2	2
Hansen's Outlet	<1 – 365.4	2

SWA also monitored *E. coli* at the five recreational monitoring marker locations within Sweetwater Reservoir. **Table 3-8** provides a summary of the range and median *E. coli* at each site. It can be seen that there can be peak *E.coli* values that are high, although lower than the peaks from the previous study period, but the median values are very low and generally less than 10 MPN/100 mL. Again, these are surface samples collected to represent the recreational impacts on the source water.

Table 3-8
Recreational Monitoring for *E. coli* (MPN/100 mL), 2017 - 2021

Monitoring Site	Range	Median
Marker #1	<1 – 648.8	20.3
Marker #2	<1 – 184.2	4.1
Marker #5	<1 – 387.3	3.1
Marker #6	<1 – 980.4	1
Marker #7	<1 – 866.4	2

Giardia and *Cryptosporidium*

In April 2015 the SWA initiated the LT2ESWTR second round compliance monitoring. Bi-weekly samples were collected through March 2017, for a total of 48 samples. During this time, imported water was the only source water so this data does not represent Sweetwater Reservoir. Data results were obtained for *Cryptosporidium*, *Giardia*, total coliform, and *E. coli*. There were no detects of *Giardia*. There were two detects of *Cryptosporidium* during this time with the maximum running annual average at 0.008 oocysts per liter and the source has been placed in Bin 1. No additional action is required at this time under the LT2ESWTR.

During the period of study, *Giardia* and *Cryptosporidium* data was collected quarterly from the Sweetwater Reservoir source, from November 2018 through November 2021. There were 13 samples collected quarterly with zero detects of either *Giardia* or *Cryptosporidium*.

Summary of Results

Total Coliform/*E. coli*

- Median coliform levels were very low in the raw water:
  - Total coliform median value of 40 MPN/100 mL for Sweetwater Reservoir,
  - *E. coli* median value of 10 MPN/100 mL for Sweetwater Reservoir.
- For Sweetwater Reservoir water samples, 90 percent of individual total coliform samples were less than 1,000 MPN/100 mL. Ninety-six percent of monthly medians were below 1,000 MPN/100 mL.
- For Sweetwater Reservoir samples, 99 percent of individual *E. coli* samples were less than 200 MPN/100mL. All monthly medians were below 100 MPN/100 mL.
- Data collected from Loveland Reservoir display sources of coliform into the reservoir, but that these are attenuated in the lake.

Giardia and *Cryptosporidium*

- Monitoring for *Giardia* and *Cryptosporidium* in the Sweetwater Reservoir during the study period resulted in no detects of either pathogen.
- Second round monitoring under the LT2ESWTR resulted in a Bin 1 classification for the Perdue WTP; no additional action is required.

Disinfection By-Product Precursors

General Characteristics and Background

Disinfection By-Products (DBPs) are formed when disinfectants added to water react with naturally occurring organic matter or other constituents, such as bromide. The most common DBPs are total trihalomethanes (TTHMs), which are suspected carcinogens. Other DBPs, including haloacetic acids (HAA5), are suspected mutagens and teratogens. Potential sources of organic carbon are plant matter, animal matter, and soil, which can be contributed by general watershed runoff, urban runoff, fires, wastewater sources, and plankton. Bromide can be caused by erosion of natural sources.

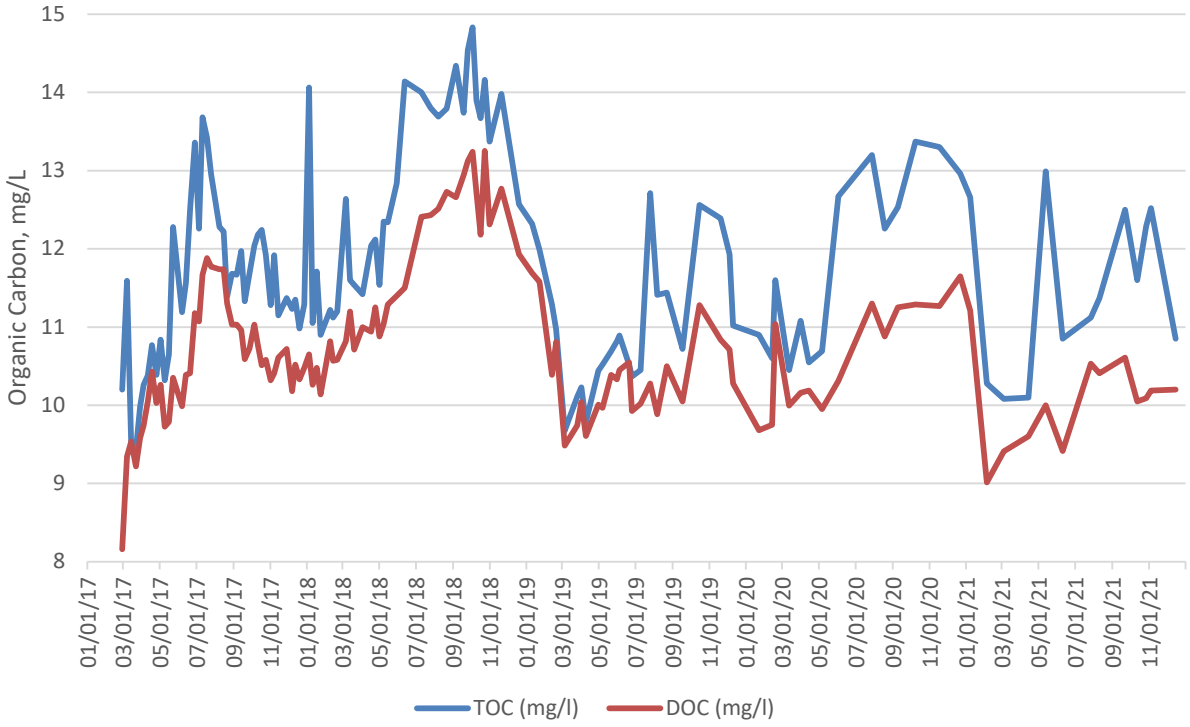
The Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule requires varying levels of total organic carbon (TOC) removal if the source water TOC concentrations exceed 2 milligrams per liter (mg/L) and a utility implements conventional filtration. TOC was a selected constituent for further evaluation due to its importance in the formation of DBPs and also as a general indicator of organic contamination in water. All conventional water treatment plants have the ability to remove some TOC. Since the Sweetwater hydrologic unit was historically an inland seabed, there are large amounts of naturally occurring bromide and this was also selected for further evaluation.

Evaluations

Organic Carbon

Raw water TOC, dissolved organic carbon (DOC), and ultraviolet light absorbance at 254 nm (UV254) data was provided for the Sweetwater Reservoir. The Sweetwater Reservoir TOC ranged from 9.4 to 14.8 mg/L with an average of 11.8 mg/L and a median of 11.6 mg/L. Most peaks were associated with the late summer and early fall and could be associated with fall turnover events. DOC accounts for the majority of TOC in the Sweetwater Reservoir, with an average value of 10.7 mg/L and a median value of 10.6 mg/L. TOC averages 91 percent DOC. These values are similar to those from the previous ten year study period. **Figure 3-13** shows the TOC and DOC levels in the Sweetwater Reservoir over the study period.

Figure 3-13
TOC and DOC in the Sweetwater Reservoir



The plot shows that organic carbon does not have a distinct seasonal trend and peaks can occur throughout the year, some peaks probably associated with erosion and some with plankton growth. Precipitation showed only a slight negative correlation to organic carbon, while reservoir lake level showed a significant negative correlation (low lake levels resulted in higher organic carbon) as shown in **Figure 3-14** and plankton counts showed a significant positive correlation (high plankton counts resulted in higher organic carbon) as shown in **Figure 3-15**. Significant reductions in organic carbon in Sweetwater Reservoir occur during the Loveland Reservoir transfer periods (January through March 2017, 2019, and 2021).

Figure 3-14
TOC, DOC and Lake Level in the Sweetwater Reservoir

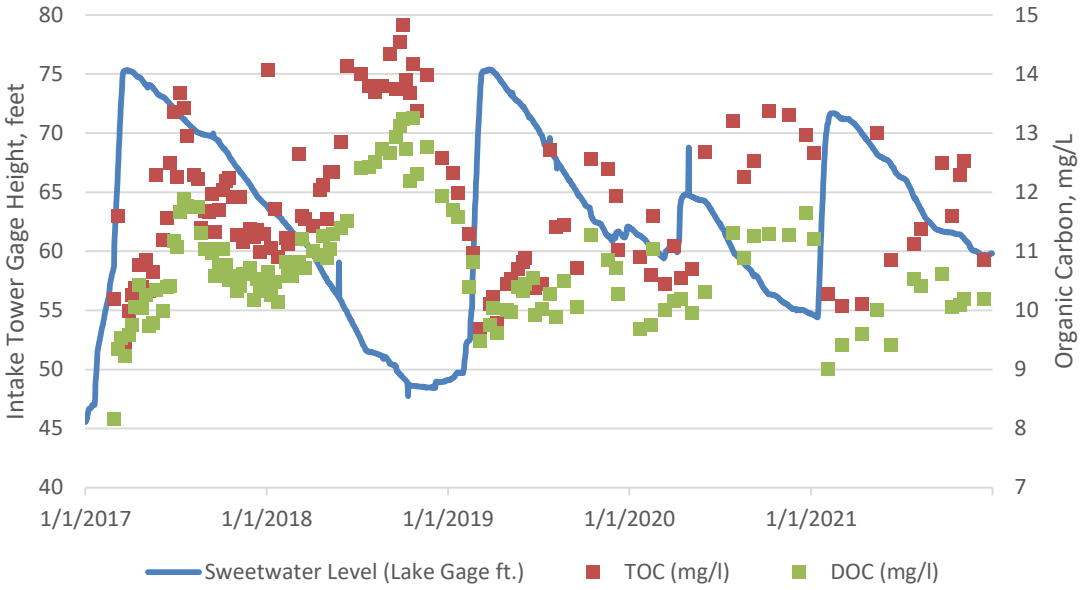
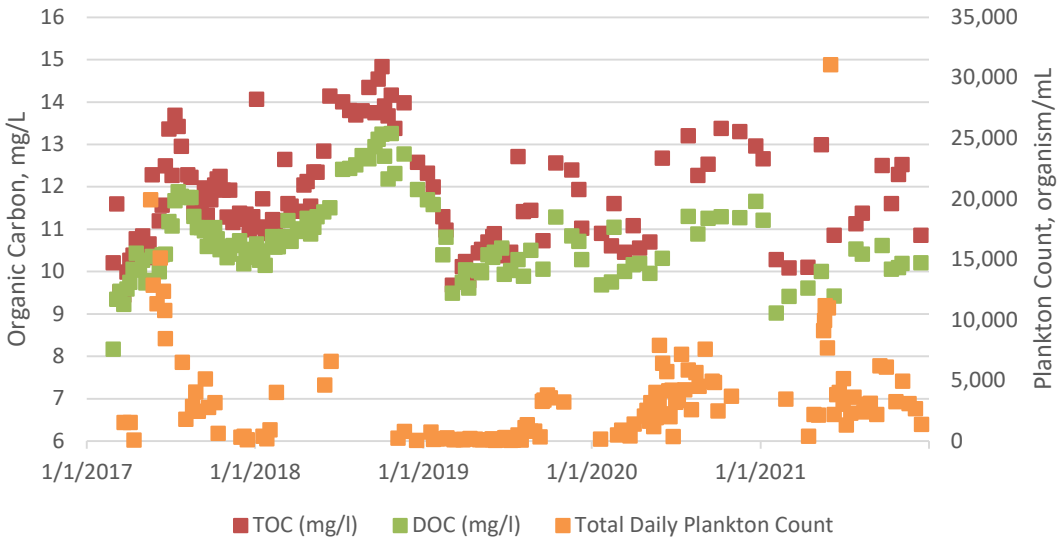


Figure 3-15
TOC, DOC and Plankton Counts in the Sweetwater Reservoir



Since TOC values are greater than 2 mg/L, the SWA uses SUVA as its compliance strategy for the enhanced coagulation requirements of the Stage 1 D/DBP Rule. The running annual average SUVA in either raw or treated water must be less than 2.0 L/mg-m. SUVA is the calculation of ultraviolet light absorbance at 254 nanometers (UV254) divided by DOC. SUVA is a general indicator of the humic nature of carbon present in the source water. Generally speaking, water with SUVA greater than 2 liters per milligram meter (L/mg-m) are considered humic in nature. Individual SUVA calculations for the Sweetwater Reservoir ranged from 1.88 to 3.0 L/mg-m, with an

average value of 2.2 L/mg-m and a median value of 2.1 L/mg-m. Only 20 percent of raw water samples had a SUVA calculation less than 2.0 L/mg-m.

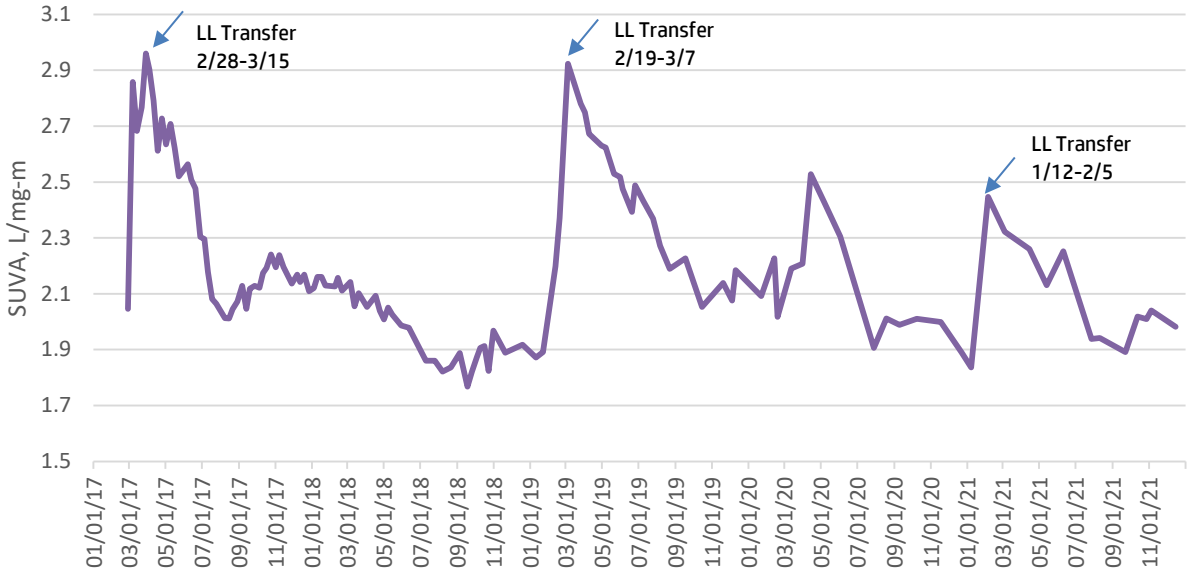
A timeseries plot of UV254 in the Sweetwater Reservoir during the study period is shown in **Figure 3-16**. The data ranges from 16.7 to 28.4 m^{-1}, with a median of 23 m^{-1} and a standard deviation of 2. This indicates that there is not is not significant variability in the data set. Also, during the study period there appears to be a slight decreasing trend in UV254.

Figure 3-16
UV254 in the Sweetwater Reservoir



A timeseries plot of SUVA calculations in the Sweetwater Reservoir from January 2017 through December 2021 is shown in **Figure 3-17**, along with the timing of transfers from Loveland Reservoir. SUVA levels are significantly affected by decreases in DOC associated with the Loveland transfers.

Figure 3-17
SUVA in the Sweetwater Reservoir



The plot shows that SUVA values varied significantly throughout the study period, likely dependent on the highly variable levels of DOC during the study period. Low values of DOC will drive the SUVA calculation higher, while high values of DOC will drive the SUVA calculation lower. As noted previously, the significant reductions in organic carbon during Loveland Reservoir transfers appears to drive significant short-term increases in SUVA.

Bromide

The Sweetwater hydrologic unit has been previously identified as an ancient seabed. The native soils and groundwaters have elevated levels of bromide as compared to most inland soils and waters. The SWA monitored bromide twice yearly during the study period at numerous locations, including; Lake Loveland, the Low Flow Barrier, the Sweetwater River Influent, the Sweetwater Reservoir surface, Hansen's Pond, and the clearwell effluent. **Table 3-9** provides a summary of the range and median for each site.

Table 3-9
Watershed Monitoring for Bromide (mg/L), 2017 - 2021

Monitoring Site	Range	Median
Lake Loveland	0.14 – 0.27	0.21
Low Flow Barrier	0.24 – 1.49	1.25
Sweetwater River Influent	0.24 – 1.45	0.54
Sweetwater Reservoir Surface	0.29 – 0.78	0.49
Hansen's Pond	1.16 – 1.57	1.42
Clearwell Effluent	ND – 0.38	0.25

Overall, the levels of bromide throughout the watershed were similar to those reported during the last study period. The highest levels were at Hansen's Pond, which is thought to have a natural spring in it which may account for the unusually high levels in urban runoff. Low concentrations in Lake Loveland cause decreased concentrations in Sweetwater Reservoir during transfers.

Summary of Results

- Organic carbon is present in the Sweetwater Reservoir at levels requiring advanced treatment. The carbon is largely present as dissolved carbon and is generally humic in nature.
- There is no evidence of a seasonal pattern, but organic carbon levels in the Reservoir are influenced by releases from Loveland Reservoir, lake levels, fall turnover events, as well as the amount of plankton growth in the Sweetwater Reservoir.
- UV254 is also present in the Sweetwater Reservoir at levels of concern, and appear to display a slight decreasing trend over the study period.
- SUVA calculations show significant impact from DOC concentrations in the Sweetwater Reservoir, especially related to transfers from Loveland Reservoir. Raw

water levels are generally above 2.0 L/mg-m and will not provide compliance with alternative compliance criterion for Enhanced Coagulation requirements of the Stage 1 Disinfectants/Disinfection By-Products Rule. SWA performs monthly SUVA jar testing to determine a treated water SUVA to comply with the Stage 1 requirements.
- Bromide levels in the watershed are similar to historic levels, with peak values seen at Hansen's Pond and decreases in Sweetwater Reservoir attributable to transfers from Loveland Reservoir.

Volatile and Synthetic Organic Compounds

General Characteristics and Background

Most volatile organic compounds (VOCs) and synthetic organic compounds (SOCs) are formulated for, or are by-products from, industrial, agricultural, and urban use. VOCs and SOCs may also be contributed by leachate from landfills. Pesticides are a main subgroup of the SOCs used for agriculture and urban application. Many of these constituents have been regulated by the Phase I, II, and V regulations. Detectable VOCs and SOCs were selected as constituents for further evaluation. All conventional water treatment plants have the ability to remove some VOCs and SOCs.

Evaluation

The SWA has monitored the Low Flow Barrier and Sweetwater Reservoir for all regulated VOCs and SOCs, as well as for some unregulated constituents. There were no VOCs detected in Sweetwater Reservoir during the study period. No SOCs were detected at the Low Flow Barrier. On June 22, 2021 there was a low level detection of paraquat (4.2 micrograms per liter [ug/L]) and diquat (0.4 ug/L) in the Sweetwater Reservoir. Paraquat has no standard in drinking water and diquat has a primary MCL of 20 ug/L. The diquat result is well below the MCL. Samples collected in March and July 2021 were all non-detect for both pesticides. It is uncertain whether these detects were valid and what the source of these pesticides would be.

Summary of Results

- VOC monitoring shows no detects in Sweetwater Reservoir.
- SOC monitoring shows no detects in the Low Flow Barrier and that Sweetwater Reservoir had one isolated, low-level detect of two pesticides; paraquat and diquat. Concentrations of diquat were well below the MCL.

Inorganics

Nitrate

General Characteristics and Background

Nitrate nitrogen is a naturally occurring ion in source waters. It can also be contributed to source waters by a variety of sources, including fertilizers and wastewater. This subsection focuses on nitrate in treated drinking water as a concern for two reasons: formation of carcinogenic nitrosamines as well as induction of methemoglobinemia. Methemoglobinemia occurs when nitrate is converted to nitrite in the body and then the nitrite oxidizes hemoglobin in the blood to methemoglobin, preventing oxygen transfer. Typical surface waters have nitrate concentrations less than 2 mg/L as nitrogen and the primary MCL is 10 mg/L as nitrogen. Nitrate is not effectively removed through conventional filtration.

Evaluation

The SWA monitors nitrate twice per year at the Loveland Reservoir, the Low Flow Barrier, the Sweetwater River Influent, Sweetwater Reservoir, Hansen's Pond, and the clearwell effluent. **Table 3-10** provides a summary of the range and median values.

Table 3-10
Watershed Monitoring for Nitrate (mg/L as N), 2017 - 2021

Monitoring Site	Range	Median
Lake Loveland	ND – 0.53	ND
Low Flow Barrier	ND – 1.79	ND
Sweetwater River Influent	ND – 5.79	ND
Sweetwater Reservoir Surface	ND – 0.41	0.06
Hansen's Pond	4.48 – 9.42	8.09
Clearwell Effluent	ND – 0.27	0.14

Levels of nitrate in all the source waters were low and typical of natural surface supplies. Potential sources could be urban runoff, groundwater surfacing, and agricultural runoff from fertilizers or animal waste. The levels in Hansen's Pond (an urban runoff drainage) were the highest and may be an artifact of the pond having a wetland type area where the sample is collected, this water does not enter the Sweetwater Reservoir. Peak values for the Low Flow Barrier and Sweetwater River Influent occurred on January 31, 2017 following a significant rainfall event.

Summary of Results

- Nitrate levels in all the source waters were very low, with median values at or below 0.06 mg/L as nitrogen.
- The high levels in Hansen's Pond may have to do with the wetland type nature of the sample location.

Perchlorate

General Characteristics and Background

Perchlorate is both naturally occurring and a man-made contaminant. Most manufactured perchlorate is used as an oxidizer in solid fuel for rockets and missiles. In addition, perchlorate-based chemicals are also used in the construction of highway safety flares, fireworks, matches, pyrotechnics, explosives, common batteries, and automobile restraints. Perchlorate is an endocrine disrupter, specifically interfering with the thyroid gland. Perchlorate is not removed through conventional filtration.

Evaluation

The SWA monitors perchlorate twice per year at the Loveland Reservoir, the Low Flow Barrier, the Sweetwater River Influent, Sweetwater Reservoir, and Hansen's Pond. The clearwell effluent is sampled monthly. There was a single detect of perchlorate in the clearwell effluent, at 1.1 ug/L, on February 20, 2018. Sweetwater Reservoir was in use at the Perdue WTP during this sample event. This is well below the primary MCL of 6 ug/L and below the current DDW detection limit for reporting (DLR) of 2 ug/L.

Levels of perchlorate at most locations was non-detectable at all times. Perchlorate was detected in 50 percent of samples at Hansen's Pond, ranging from non-detectable to 6.1 ug/L with an average of 1.4 ug/L. The peak concentration occurred on October 4, 2017 during dry weather. Potential sources could be urban runoff, industrial discharge, groundwater surfacing, and agricultural runoff from fertilizers or animal waste.

Summary of Results

- Perchlorate was non-detectable at all but one monitoring site, but there was one detect, below the DDW DLR, in the clearwell effluent in February 2018.
- Perchlorate is generally detectable in Hansen's Pond, with an average value of 1.4 ug/L. It is uncertain what the source of perchlorate is. However, Hansen's Creek is a perennial dry weather urban runoff input into Hansen's Pond that drains an industrial area of Rancho San Diego.

Selected Minerals

General Characteristics and Background

Waters with high levels of minerals, or salts, are less palatable to consumers. These minerals are typically measured by total dissolved solids (TDS) and conductivity, and one of the main components is chloride. Minerals can be caused by numerous sources including erosion of natural sources, urban runoff, and landfills. The Sweetwater hydrologic unit was historically an inland seabed so many of the soils retained naturally occurring salts.

There are secondary maximum contaminant levels for TDS, conductivity, and chloride. These have been developed as consumer acceptance contaminant level ranges. Each constituent has a recommended level, an upper level and a short term level. The recommended level is desirable for consumer acceptance. The upper level is

acceptable if it is not reasonable or feasible to provide more suitable water. The short term level applies to existing community water systems on a temporary basis only, pending construction of treatment facilities or development of a new source. The recommended levels for TDS, conductivity, and chloride are 500 mg/L, 900 µohms, and 250 mg/L, respectively. The upper levels for TDS, conductivity, and chloride are 1,000 mg/L, 1,600 µohms, and 500 mg/L, respectively. In general, waters with TDS less than 1,200 mg/L are considered acceptable by most consumers, but most prefer levels below 650 mg/L. TDS and conductivity have a stable, direct relationship in most source waters. The Sweetwater sources have an assumed ratio of 0.67. For this reason, only conductivity and chloride are further evaluated in this section. Conventional filtration is not effective at removing minerals.

Evaluations

The SWA has two monitoring programs for minerals. They are monitored twice per year through the watershed monitoring program (both reservoirs as well as several other watershed sites) and the Loveland and Sweetwater reservoirs are also monitored monthly as part of the chemical analysis for operations optimization.

The watershed monitoring program data is summarized in **Table 3-11**. This data show that the levels of minerals are lowest in the Loveland Reservoir and increase downstream. It is important to note that the treated water levels meet the upper limits and are generally in the recommended levels. There is a distinct increase along the Middle Sweetwater River, however the levels are attenuated somewhat in Sweetwater Reservoir. These concentrations are lower than those from the previous study period.

Table 3-11
Watershed Monitoring for Conductivity and Chloride, 2017 - 2021

Monitoring Site	Conductivity (µohms)		Chloride (mg/L)	
	Range	Median	Range	Median
Lake Loveland	470 - 660	545	54 - 76	65.5
Low Flow Barrier	540 – 3,400	3,100	66 - 570	535
Sweetwater River Influent	540 – 3,100	1,850	66 - 590	305
Sweetwater Reservoir Surface	860 – 1,600	1,200	140 - 300	195
Hansen's Pond	2,400 – 2,800	2,750	460 - 560	535
Clearwell Effluent	840 – 1,200	1,100	97 - 210	170

The monthly monitoring data for Loveland and Sweetwater reservoirs, as well as the clearwell effluent, is summarized in **Table 3-12**. The mineral levels in Loveland Reservoir were lower than those during the previous study period. The mineral levels in Sweetwater Reservoir continued the increasing trend seen in the last study period.

Table 3-12
Monthly Monitoring for Conductivity and Chloride, 2017 - 2021

Site	Conductivity (µohms)		Chloride (mg/L)	
	Range	Median	Range	Median
Loveland Reservoir	446 - 938	548	53 - 148	69
Sweetwater Reservoir	866 – 1,630	1,199	124 – 287	191
Clearwell Effluent	538 – 1,425	1,099	65 – 243	180

Figure 3-18 shows the conductivity in Loveland Reservoir and Sweetwater Reservoirs. Loveland Reservoir levels remained fairly constant over the study period, with the exception of a few events. The levels in Sweetwater Reservoir are significantly higher and fluctuate more during the study period, showing periods of increasing trends between Loveland transfers. It is obvious that there are multiple factors influencing conductivity in Sweetwater Reservoir, including; transfers from Loveland Reservoir and concentration due to lack of precipitation. There were only three releases from Loveland during the study period and very little rainfall during the study period as previously discussed. In addition, dry weather flows from URDS II entering into the Sweetwater Reservoir and recycling from the Perdue WTP may have an impact.

Figure 3-18
Conductivity Levels in Loveland and Sweetwater Reservoirs

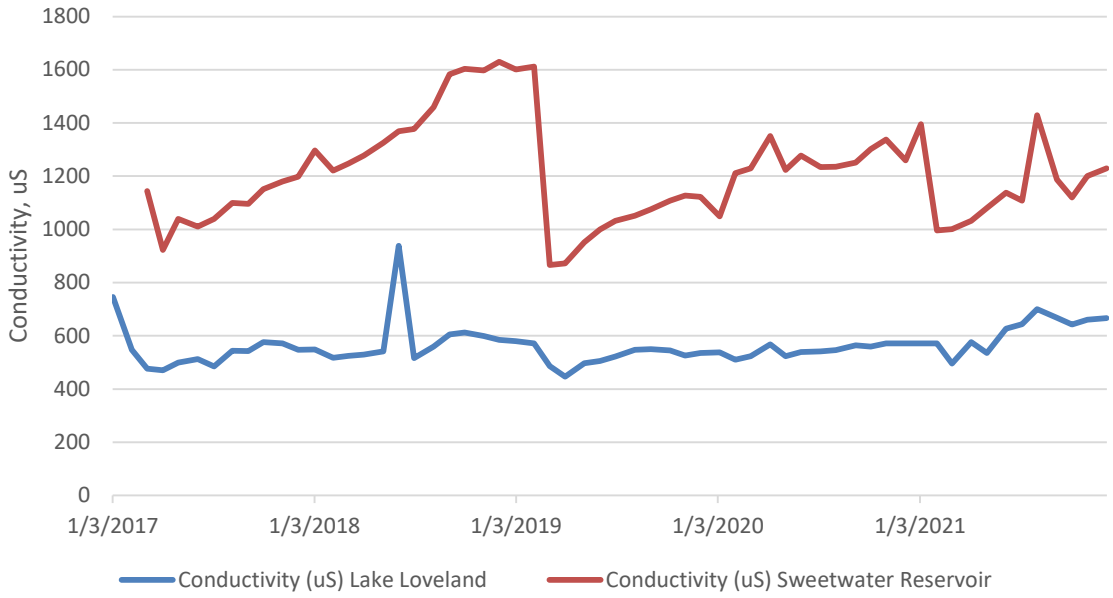
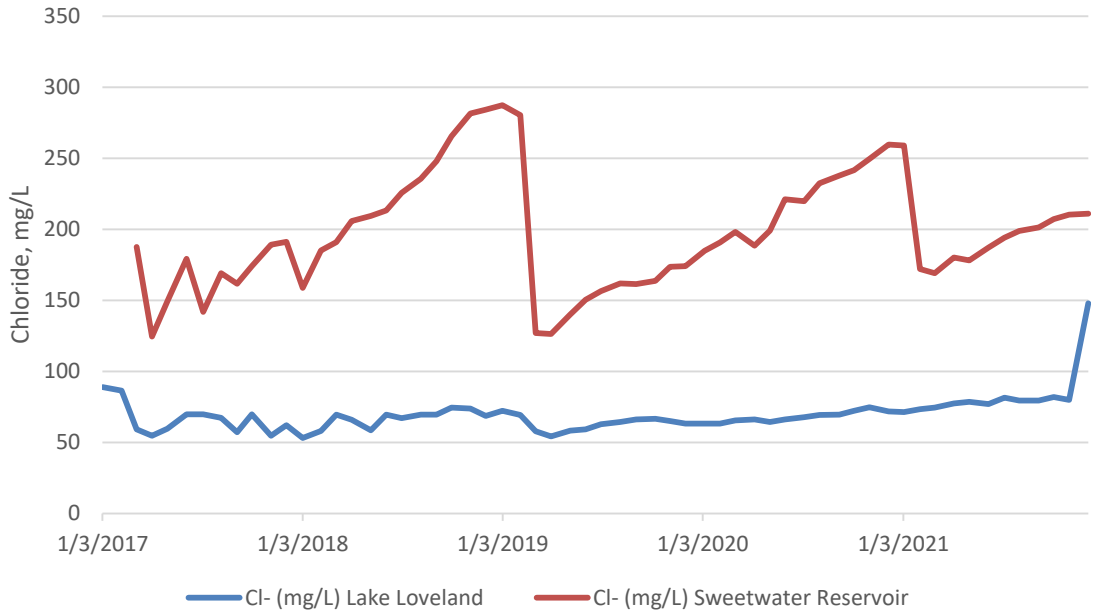


Figure 3-19 shows the chloride in Loveland Reservoir and Sweetwater Reservoirs. Essentially, the same trends and influences are seen on chloride as for conductivity.

Summary of Results

- Conductivity and chloride levels remained relatively stable in Loveland Reservoir and increased in Sweetwater Reservoir over the study period.
- There is a significant increase in minerals between Loveland Reservoir and the Sweetwater River Influent which may be caused by; Jamacha Landfill, urban runoff, groundwater upwelling, or the historic sand mines located between the Low Flow Barrier and the east end of the Sweetwater Reservoir.
- Data for the Sweetwater Reservoir show that conductivity levels are slightly above the recommended levels, but within the upper levels. Chloride levels are within the recommended level.

Figure 3-19
Chloride Levels in Sweetwater Reservoir



Selected Metals

General Characteristics and Background

Some metals are of concern in drinking water because of potential implications to human health, but the metals that were selected for evaluation are aluminum, iron, and manganese because they were detectable and of their aesthetic impact on water quality. Aluminum, iron, and manganese are naturally occurring constituents, but can be elevated by contribution from potential contaminating activities, such as landfills, mines, groundwater upwelling, and urban runoff.

Aluminum is the only metal with a primary MCL, at 1,000 ug/L. There are secondary drinking water standards for aluminum, iron, and manganese of 200, 300, and 50 ug/L, respectively. The taste threshold for iron and manganese has been estimated to be much lower, around 100 and 30 ug/L, respectively. Also, iron and manganese can

contribute to staining of laundry and household fixtures. Conventional filtration is very effective at removing all these metals, but high levels of aluminum can become problematic at the water treatment plant if aluminum sulfate is used as a coagulant.

Sources of Manganese in Loveland Reservoir Watershed

Since manganese was the only metal detected in the clearwell effluent, a summary of natural sources in the watershed is provided here. The U.S. Department of Agriculture, Natural Resources Conservation Service has a Soil Survey Geographic (SSURGO) database for San Diego County. The soil map and data used in the SSURGO product were prepared by soil scientists as part of the National Cooperative Soil Survey. **Figure 3-20** shows a map of Loveland Reservoir and the soil types within the Loveland watershed, nearest to the reservoir. The primary soil types are:

- CIG2 – Cienaba coarse sandy loam 30-65% slopes, eroded (pink)
- CnG2 – Cienaba-Fallbrook rocky sandy loam 30-65% slopes, eroded (purple)
- FaE2 – Fallbrook sandy loam, 15 to 30% slopes, eroded (greenish-gray)
- CmrG – Cienaba very rocky coarse sandy loam 30-75% slopes (green)
- FeE – Fallbrook rocky sandy loam, 9-30% slopes (turquoise)

The USGS National Geochemical Survey is a national-scale geochemical analysis of stream sediments and soils in the United States. Although their database did not have any soils samples taken directly within the Middle and Upper Sweetwater watersheds, samples were taken within San Diego County east of Captain Reservoir, in Jamul and in Casa Del Oro. **Table 3-13** shows that some of the soil types were the same as near Loveland Reservoir, and these samples had high levels of manganese.

Table 3-13
Soils Samples taken in San Diego County, USGS National Geochemical Survey

General Location	Soil Type	Manganese in Soil sample, ppm by weight
Casa Del Oro	CIG2 - Cienaba coarse sandy loam	2,000
East of Captain Reservoir	FaE2 – Fallbrook sandy loam	2,300
Jamul	CmrG – Cienaba very rocky coarse sandy loam	1,205

Source: https://mrdata.usgs.gov/geochem/

Based on this information, naturally occurring manganese in the soils surrounding Loveland Reservoir are present in high levels and can contribute to high levels in Loveland Reservoir if these soils are washed into the reservoir, or from general watershed runoff. Manganese can then be transferred to Sweetwater Reservoir during Loveland Reservoir releases and is further accumulated in Sweetwater Reservoir due to the recycling of filter backwash water.

2022 Watershed Sanitary Survey

Soils Types in Proximity to Loveland Reservoir
Figure 3-20

Data Source: SanGIS/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
SanGIS - www.sangis.org - 5510 Overland Ave., Suite 230, San Diego, CA 92123

Harbison Canyon

Alpine

PALO VERDE LAKE

LOVELAND RESERVOIR

Legend

Soil Types in Proximity to Loveland Reservoir
Figure 3-20

- Tributaries
- Watershed Boundaries
- Sweetwater River

CIG2	Cieneba rocky coarse sandy loam 30 - 65% slopes, eroded
CmrG	Cieneba very rocky coarse sandy loam 30 - 75% slopes
CnG2	Cieneba-Fallbrook rocky sandy loam 30 - 65% slopes, eroded
FeE	Fallbrook rocky sandy loam, 9 - 30% slopes
FaE2	Fallbrook sandy loam, 15 - 30% slopes, eroded
VsG	Vista coarse sandy loam 30 - 65% slopes

N

0 0.375 0.75 1.5 Miles

Evaluations

The SWA has one monitoring program for aluminum and two monitoring programs for iron and manganese. All three are monitored twice per year through the watershed monitoring program (both reservoirs as well as several other watershed sites) and the Loveland and Sweetwater reservoirs are also monitored monthly for iron and manganese as part of the chemical analysis for operations optimization.

The watershed monitoring program data is summarized in **Table 3-14**. Generally, the iron and manganese data was at similar levels to those from the last study period except that higher levels of iron were seen through the Middle Sweetwater River. This data show that the levels of all metals are lowest in the Loveland Reservoir and increase downstream. Peak values of iron and aluminum are seen at the Sweetwater River Influent, but these are attenuated in Sweetwater Reservoir. Higher levels of iron in Sweetwater Reservoir are likely contributed to by the recycling of water from the Perdue WTP. It is important to note that the treated water levels are non-detectable, except for manganese.

Table 3-14
Watershed Monitoring for Aluminum, Iron, and Manganese (mg/L), 2017 - 2021

Monitoring Site	Iron		Manganese		Aluminum	
	Range	Median	Range	Median	Range	Median
Lake Loveland	ND – 1.2	0.041	0.005 – 0.08	0.028	0.013 – 1.1	0.031
Low Flow Barrier	0.076 – 1.3	0.195	0.016 – 1.3	0.27	0.015 – 0.91	0.103
Sweetwater River Influent	0.099 – 3.3	0.74	0.016 – 0.8	0.114	0.05 – 2.7	0.474
Sweetwater Reservoir Surface	0.024 – 0.76	0.23	0.035 – 0.37	0.15	0.014 – 0.42	0.124
Hansen's Pond	0.041 – 0.64	0.14	0.04 – 0.092	0.058	0.025 – 0.71	0.135
Clearwell Effluent	ND	ND	ND – 0.043	0.013	ND	ND

Figures 3-21 through **3-23** show timeseries plots for aluminum, iron, and manganese.

Figure 3-21
Aluminum Levels Throughout Watershed

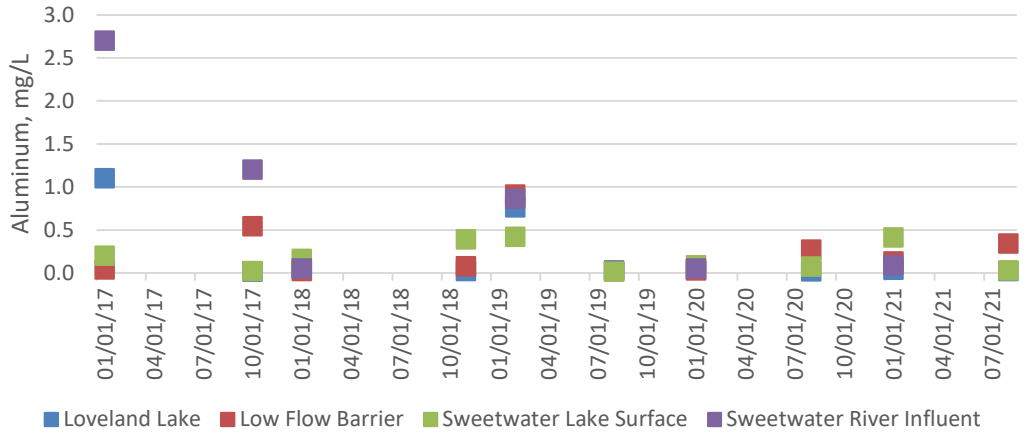


Figure 3-22
Iron Levels Throughout Watershed

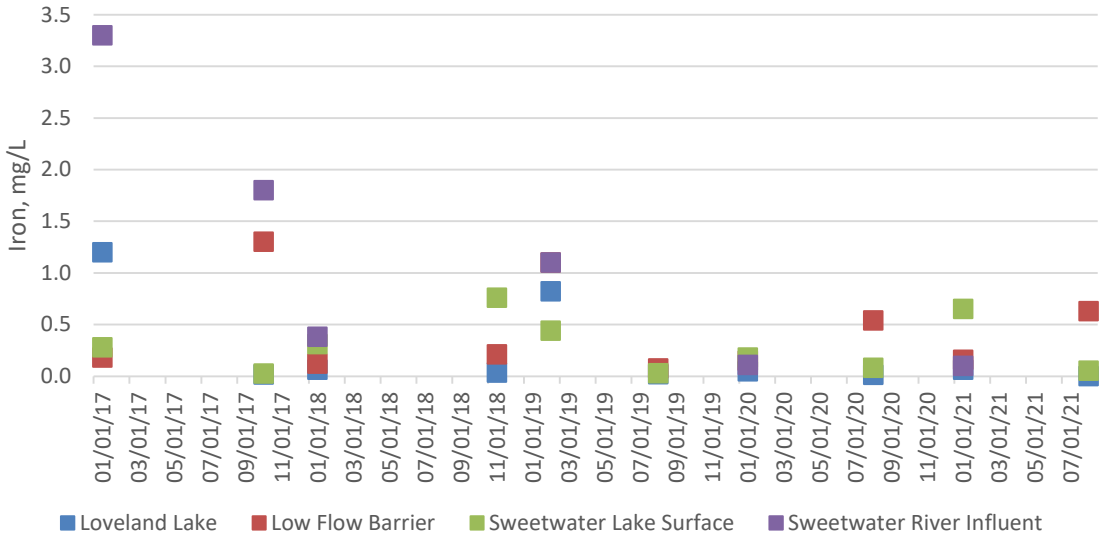
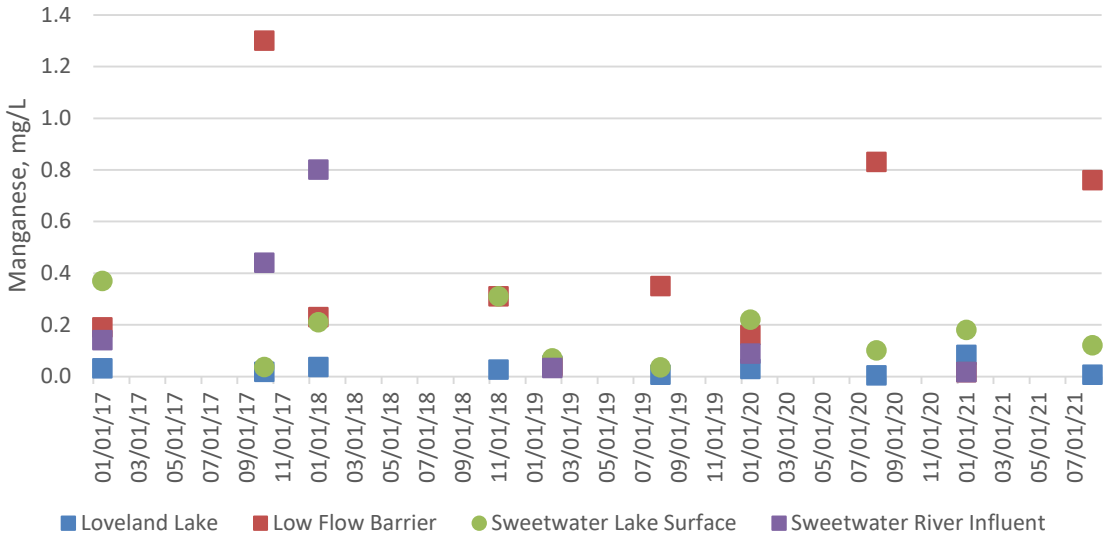


Figure 3-23
Manganese Levels Throughout Watershed



The Loveland Reservoir levels of manganese were low and stable throughout the study period. The concentrations of aluminum and iron in Loveland Reservoir had distinct peaks, January 2017 and March 2019, that may be associated with storm events, Loveland transfers, or full mixing of seasonal reservoir turnover.

The Low Flow Barrier and Sweetwater River Influent sites had similar trends for all metals. Aluminum and iron displayed a trend of increased levels following the pattern at Loveland Reservoir, with peaks during winter wet periods. Manganese displayed an alternate pattern with increased levels occurring during the dry summer periods. As discussed in **Section 4**, under the Urban Runoff subsection, elevated levels of iron and manganese were found in limited dry weather runoff monitoring which may account for the increased levels at the Low Flow Barrier and the Sweetwater River Influent. It would seem that there are different causes for peaks in these metals due to the different timing, but the data set is very limited to draw conclusions.

The Sweetwater Reservoir levels of aluminum and iron were relatively stable throughout the study period, with only slight peaks seen during the winter months, perhaps caused by full mixing of lake turnover or contributions from the Middle Sweetwater River. The manganese levels are more variable and appear to show a distinct seasonal increase during the winter months, likely contributed to by full mixing of lake turnover and runoff.

The monthly monitoring data for Loveland and Sweetwater reservoirs is summarized in **Table 3-15**. The iron and manganese levels in Loveland Reservoir were lower than those during the previous study period and were at generally low levels. The iron and manganese levels in Sweetwater Reservoir were also lower than the last study period.

Table 3-15
Monthly Monitoring for Iron and Manganese (mg/L), 2017 - 2021

Site	Iron		Manganese	
	Range	Median	Range	Median
Loveland Reservoir	ND – 0.65	ND	ND – 0.25	ND
Sweetwater Reservoir	ND – 0.78	0.12	ND – 0.39	0.12

Figure 3-24 presents the monthly monitoring data for iron in both Loveland Reservoir and Sweetwater Reservoir from 2017 through 2021. **Figure 3-25** presents the monthly monitoring data for manganese in both Loveland Reservoir and Sweetwater Reservoir from 2017 through 2021.

Levels of iron in Loveland Reservoir are generally low, but did display significant peaks in February 2017 and March 2019. These coincide with releases of transfer water to Sweetwater Reservoir. Peak median monthly values are seen in February through April. This may also represent full mixing of reservoir turnover, but it seems to be too late in the season to be that significant. There is a slight positive correlation between iron and precipitation in Loveland Reservoir. Iron concentrations in Sweetwater Reservoir have a distinct seasonal pattern with increases in the winter months, December through March, probably associated with lake turnover and precipitation events. Iron concentrations in Sweetwater Reservoir had a positive correlation with precipitation.

Levels of manganese in both reservoirs are more complex and less predictable. Loveland Reservoir levels are lower, displaying a seasonal trend for increasing during the winter months, specifically December and January. These are probably associated with full mixing of lake turnover and precipitation events. However, the peak value occurred in April 2021 in dry conditions and isn't clearly associated with any particular source.

Figure 3-24
Monthly Iron in Loveland and Sweetwater Reservoirs

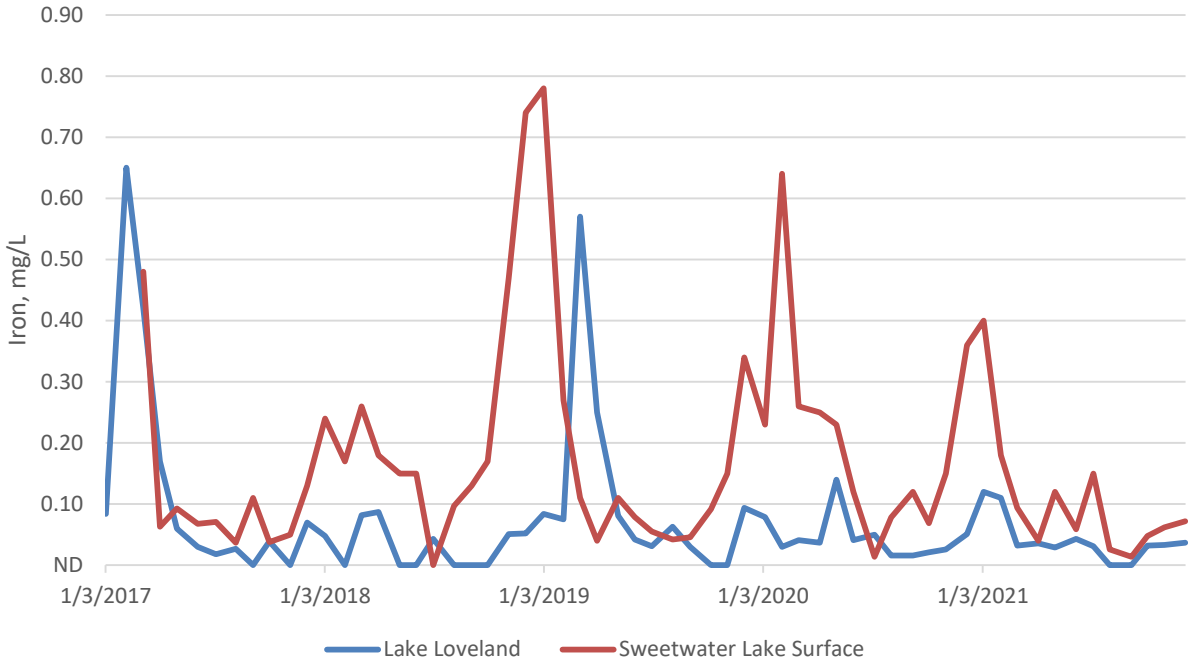
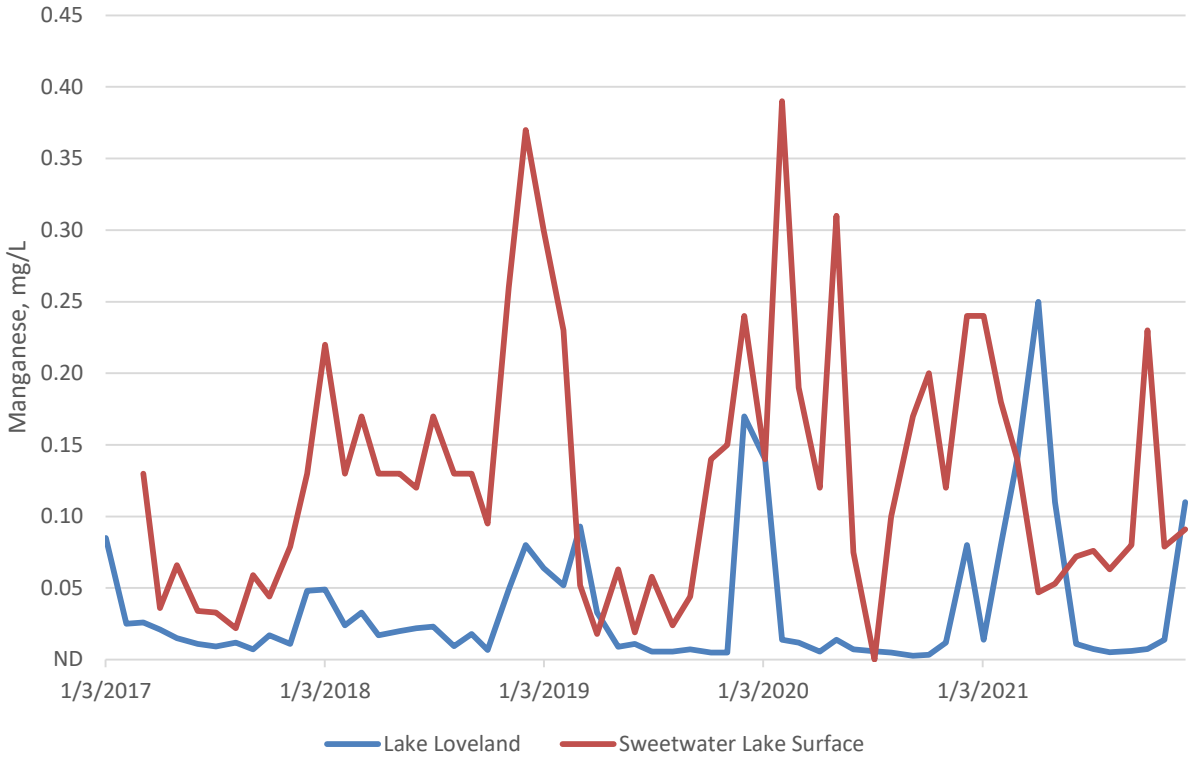


Figure 3-25
Monthly Manganese in Loveland and Sweetwater Reservoirs



Concentrations in Sweetwater Reservoir appear to reflect a greater number of factors influencing them. There is a seasonal increase in winter, December through February, due to mixing of the fall lake turnover, but during 2017, 2019, and 2021 there are significant decreases during this period that could potentially be associated with Loveland transfers. Another factor potentially impacting the levels of both iron and manganese in the Sweetwater Reservoir sample may be the changes in the elevation of diverted water into the intake tower and thus the sample depth. During the study period Sweetwater Reservoir was often kept at minimum storage volume. This low volume, and subsequent shallow depth, likely impacted the reservoir's normal stratification and turnover. Also, the Perdue WTP continued to recycle filter-to-waste to Sweetwater Reservoir during this time and may have contributed to a concentration effect on iron and manganese. A comparison with several factors is provided to discuss these further.

A comparison of iron and manganese to Sweetwater Reservoir lake level is provided in **Figures 3-26** and **3-27**. It can be seen that both have a significant negative correlation between lake level and metals concentrations. As lake levels decrease, metals concentrations increase. This also typically coordinates with the timing of the mixing from the fall turnover.

Figure 3-26
Iron and Lake Level in Sweetwater Reservoir

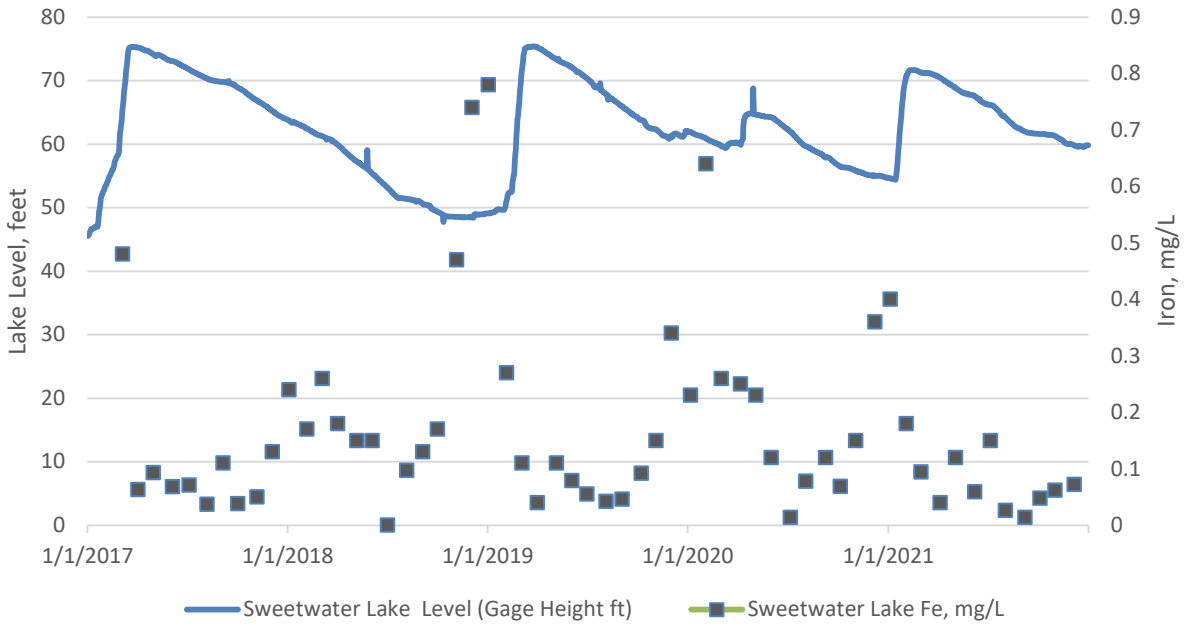
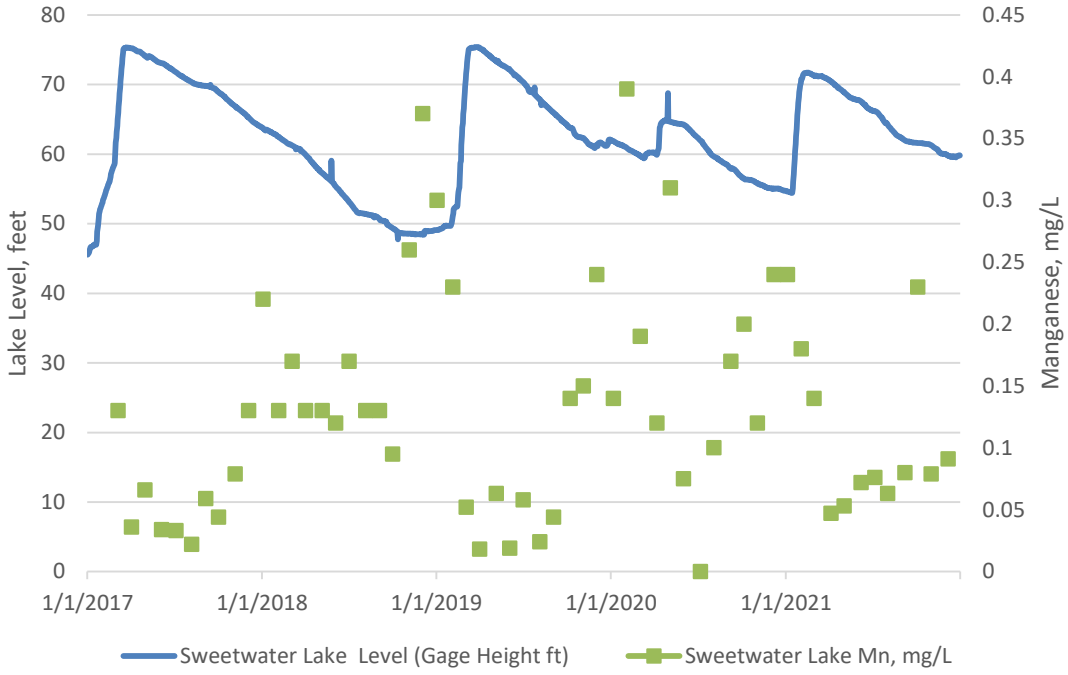


Figure 3-27
Manganese and Lake Level in Sweetwater Reservoir



Summary of Results

- Aluminum is detected in the watershed at levels above both the primary and secondary MCL, with median values in Sweetwater Reservoir below the both MCLs. The highest values occur through the Middle Sweetwater River and concentrations appear to peak during wet weather months; sources are uncertain but could include natural sources similar to manganese. The Perdue WTP provides treatment and all results at the clearwell effluent were non-detectable.
- The median value of iron in the Sweetwater Reservoir is below the secondary MCL, but individual samples can exceed it. The median value was 120 ug/L, below the secondary MCL of 300 ug/L. There appears to be an increase downstream of Loveland Reservoir and along the Middle Sweetwater River, with peaks occurring during wet weather months. The Perdue WTP provides treatment and all results at the clearwell effluent were non-detectable.
- The median value of manganese in the Sweetwater Reservoir continues to exceed the secondary MCL. The median value was 120 ug/L, well above the secondary MCL of 50 ug/L. There may be an increase downstream of Loveland Reservoir and along the Middle Sweetwater River, but this increase appears to occur during the summer months. Dry weather stormwater flows have shown elevated levels of manganese, as discussed in **Section 4**. Generally, the clearwell effluent is non-detectable, but there were some detects in the treated water below the secondary MCL.

- Key factors impacting peak levels of metals in both reservoirs may include; resolubilization from the lake sediments during fall turnover events, depth of the lake affecting stratification, storm events, and transfers from Loveland Reservoir.

Plankton and Related Constituents

General Characteristics and Background

Plankton, including algae and cyanobacteria, can contribute to several source water quality conditions of concern. They can contribute to taste and odor impacts since their metabolites have a very low taste and odor threshold, less than 10 nanograms per liter (ng/L). A metabolite is a breakdown product of the plankton produced upon its death. Plankton biomass also assimilates carbon and contributes to levels of TOC in the source water. Finally, some plankton can potentially contribute toxins to the drinking water that may be of concern to human health.

True algae are a group of microorganisms that may cause taste and odor problems as well as treatment challenges by clogging filters. Although cyanobacteria are called blue green algae and look and act like true algae, they are actually not algae but rather are a eubacteria. The cyanobacteria are typically more tolerant of changes in environmental conditions, such as heat and cold, than algae and are thus quite resilient. Cyanobacteria grow faster than algae at higher temperatures, above 25°C. Also, since many cyanobacteria, including the genus *Anabaena,* are nitrogen-fixing bacteria they are able to utilize gaseous nitrogen (N_2) and therefore have a competitive edge over other algae when nitrate levels are low, as can occur in the Sweetwater Reservoir. This can occur when the nitrogen to phosphorus ratio is less than 10:1[1], rather than 16:1 for algae.

There are two primary metabolites of algae and cyanobacteria that cause taste and odor problems, geosmin and 2-methylisoborneol (MIB). Both can cause an earthy, musty odor. These can cause odors at very low levels, typically somewhere between 5 and 10 ng/L. Some of the key plankton known to produce geosmin are *Actinomycetes*, *Oscillatoria*, *Sympioca*, *Anabaena*, and *Streptmyces.* Some of the key plankton known to cause MIB are *Actinomycetes*, *Oscillatoria*, *Phormidium*, and *Pseudanabaena*. It should be noted that *Oscillatoria* can grow in both the benthic and littoral zones, but occurs primarily in the benthic zone in the Sweetwater Reservoir.

Algae and cyanobacteria both need macronutrients, including carbon, nitrogen and phosphorus, for growth as well as major micronutrients, including iron and sulfur. Most algae and cyanobacteria utilize carbon dioxide as their carbon source[2], which is measured in surface water through alkalinity. Nitrogen is generally lower in surface water than groundwater and can be found in both inorganic forms (nitrate, nitrite, and ammonia) as well as organic forms (amino acids and nitrogenous bases). Phosphorus

[1] Water Quality; Prevention, Identification and Management of Diffuse Pollution. Novotny and Olem. 1994. p 742.
[2] Introduction to Environmental Engineering, Second Edition. Davis and Cornwell. 1991. pp. 295 – 304.

is usually lower than nitrogen in surface water and can be either suspended or dissolved in both organic and inorganic forms[3]. The most readily utilized form of phosphorus by algae and cyanobacteria, is phosphate. However, it should be noted that plankton can utilize bound phosphorus from other plankton biomass very readily so phosphate measurements do not provide full insight on the biomass potential. Most inland lakes are limited by their phosphorus concentration since phosphate does not naturally occur in surface waters.

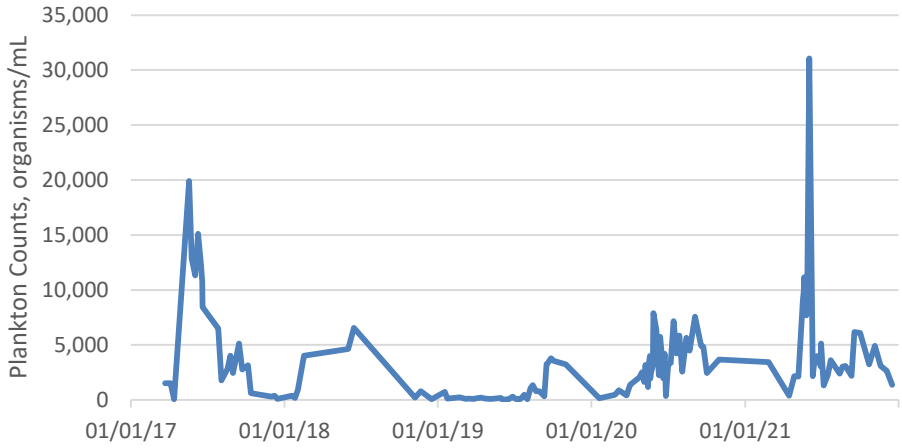
Lake management and water quality conditions contribute to algae and cyanobacteria growth. Algal blooms depend on nutrients, as well as the right temperature and light conditions. Generally, blooms can occur when inorganic nitrogen levels are greater than 0.3 milligrams per liter (mg/L) and inorganic phosphorus levels are greater than 0.01 mg/L[4].

Evaluation

Plankton

The Sweetwater Reservoir exemplifies typical lake stratification in the spring with increased surface water temperatures. This stratification results in a well-mixed epilimnion on the surface with an unmixed colder hypolimnion under the thermocline. General data, including turbidity and TOC as discussed previously, support the general presence of plankton and their growth periods coinciding with the lake stratification and increasing water and air temperatures, spring to late summer. **Figure 3-28** shows the plankton counts in Sweetwater Reservoir during the study period. It can be seen that the peak values can occur between spring and fall months. There are increased detection of plankton earlier in the spring months of May and June, especially in 2017 and 2021.

Figure 3-28
Plankton Counts in Sweetwater Reservoir, 2017 – 2021



[3] Ibid. pp. 300 – 301., Toxic Cyanobacteria in Water, World Health Organization, 1999, p. 234.
[4] Wastewater Engineering, Third Edition. Metcalf & Eddy. 1991. pp. 1209 – 1213.

Monitoring in the Sweetwater Reservoir has shown that there is a wide variety of algae and cyanobacteria present and likely contributing to the taste and odor problems. Some of the key plankton detected include: *Anabaena flos aquae, Anabaena sporides, Aphanizomenon, C. raciborskii, Anacystis, Gomphosphaeria, Leptolyngbya,* and *Pseudanabaena limnetica*. A summary of the available daily plankton counts from 2017 through 2021 is provided in **Appendix B**.

Some periods of interest are examined, based on the detection of metabolites in the clearwell effluent, as discussed below, including; June 2017 (geosmin), October 2017 (MIB), May/June 2019 (geosmin), May/June 2020 (geosmin), and May/June 2021 (geosmin). Plankton species and concentrations for those selected periods are shown in **Figures 3-29** through **3-33**.

Some events, such as June 2017, included few species but at very high concentrations. Other events, such as May/June 2019 included many species at low concentrations. There is a wide variety in species present, concentrations, and duration of events. This indicates that there are no specific characteristics that dominate the bloom potential for resulting in a treated water taste and odor event.

Figure 3-29
Plankton Species in Sweetwater Reservoir, June 2017

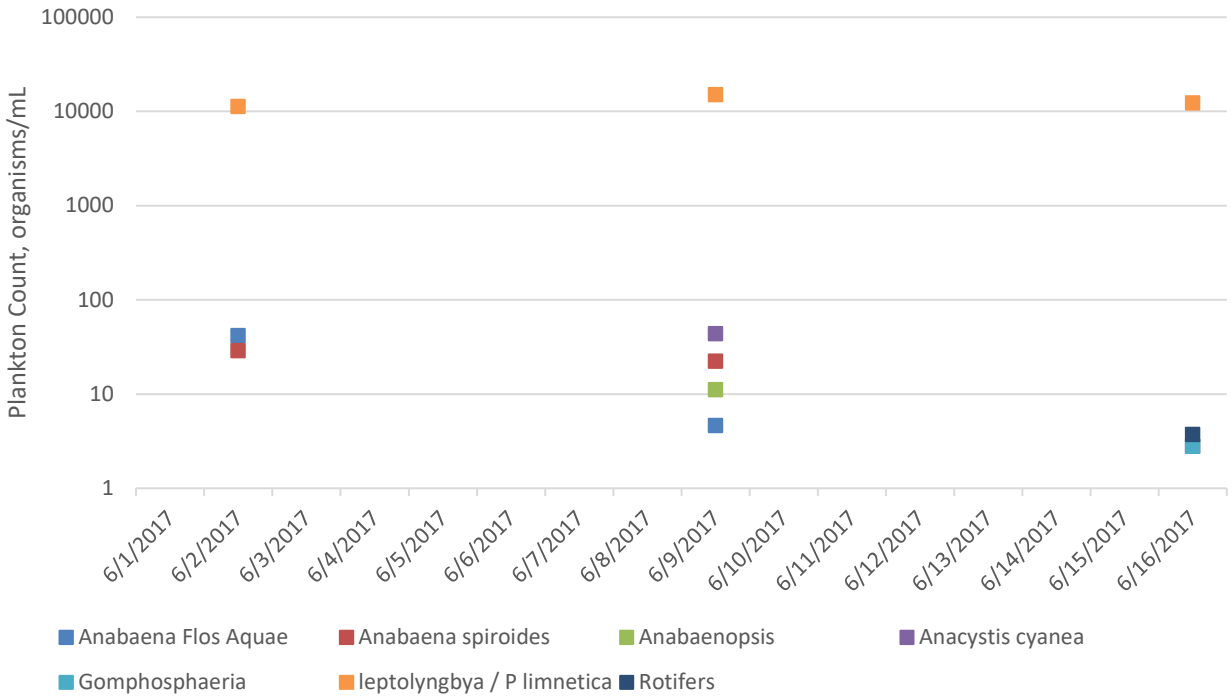


Figure 3-30
Plankton Species in Sweetwater Reservoir, October 2017

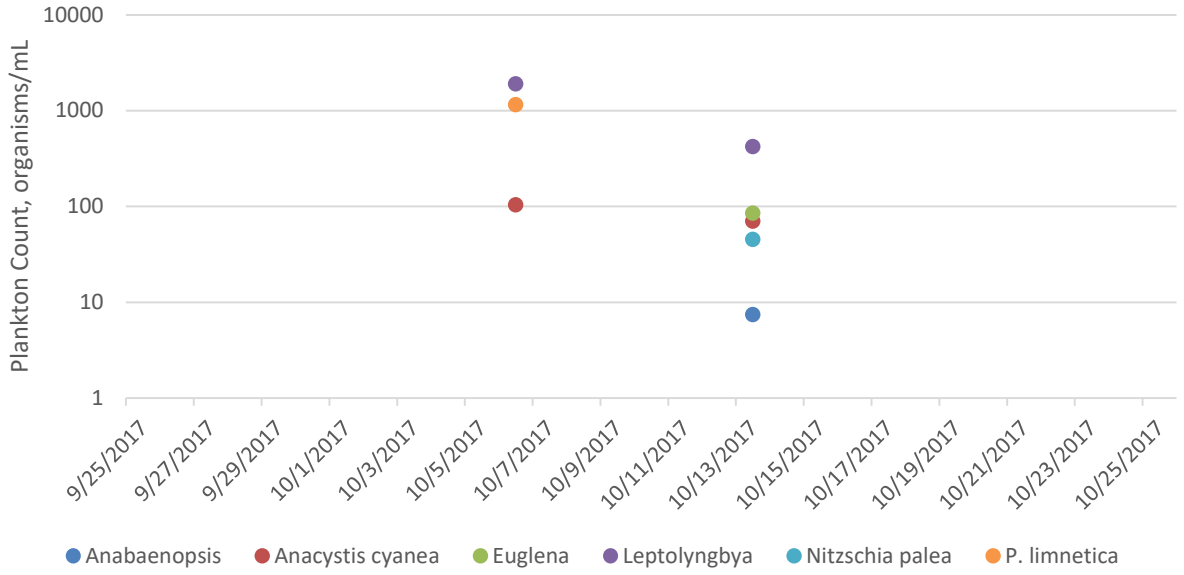


Figure 3-31
Plankton Species in Sweetwater Reservoir, May/June 2019

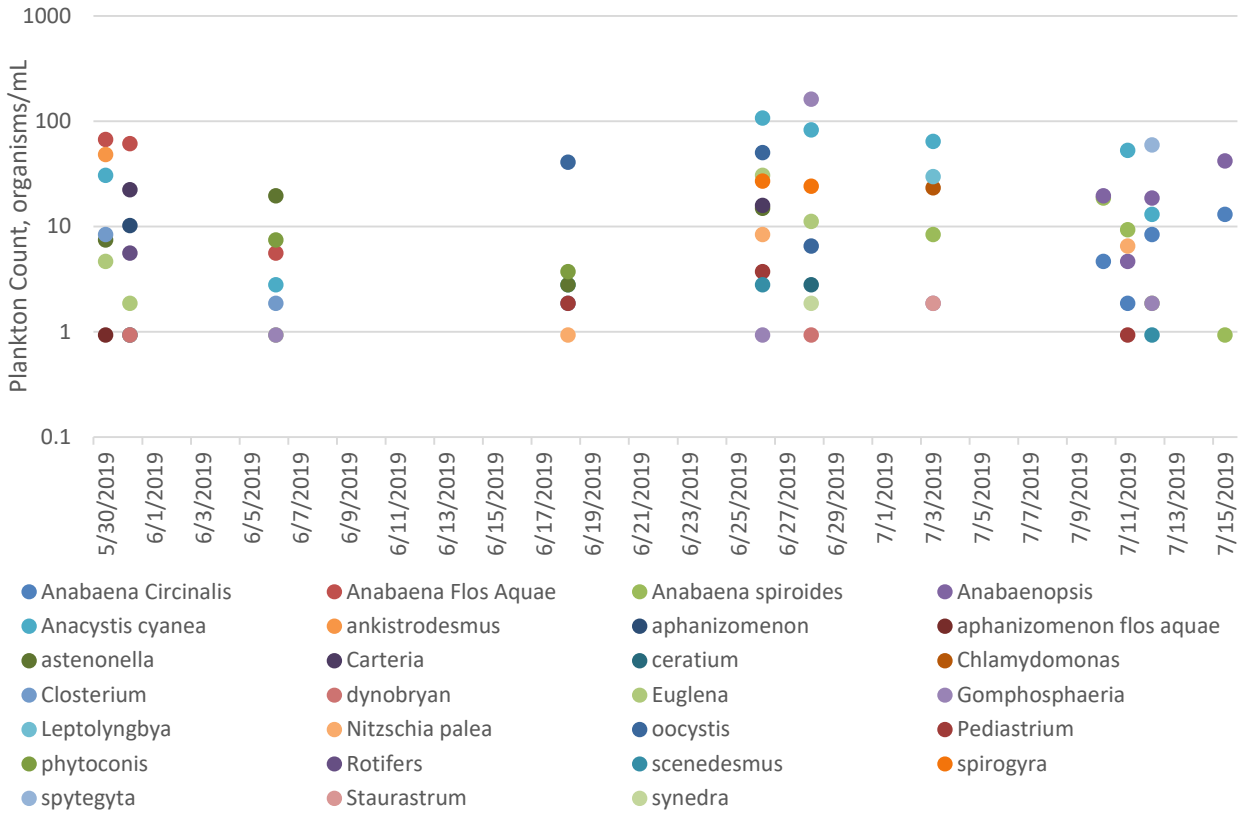


Figure 3-32
Plankton Species in Sweetwater Reservoir, May/June 2020

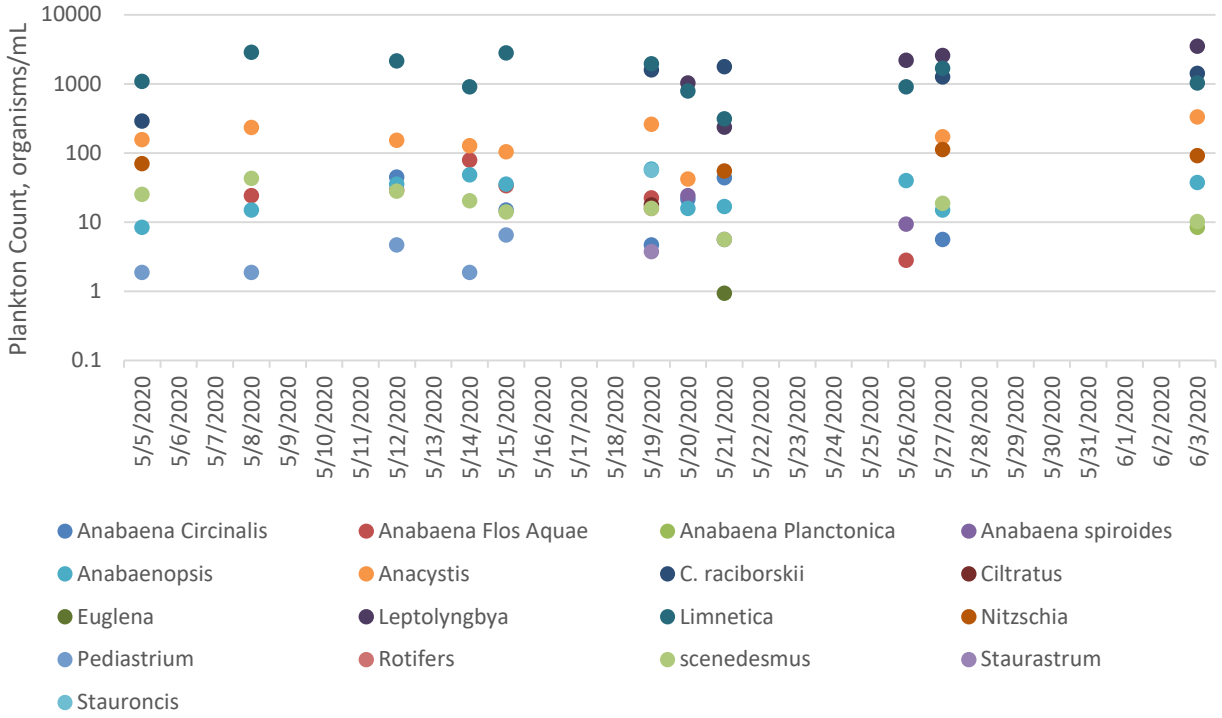
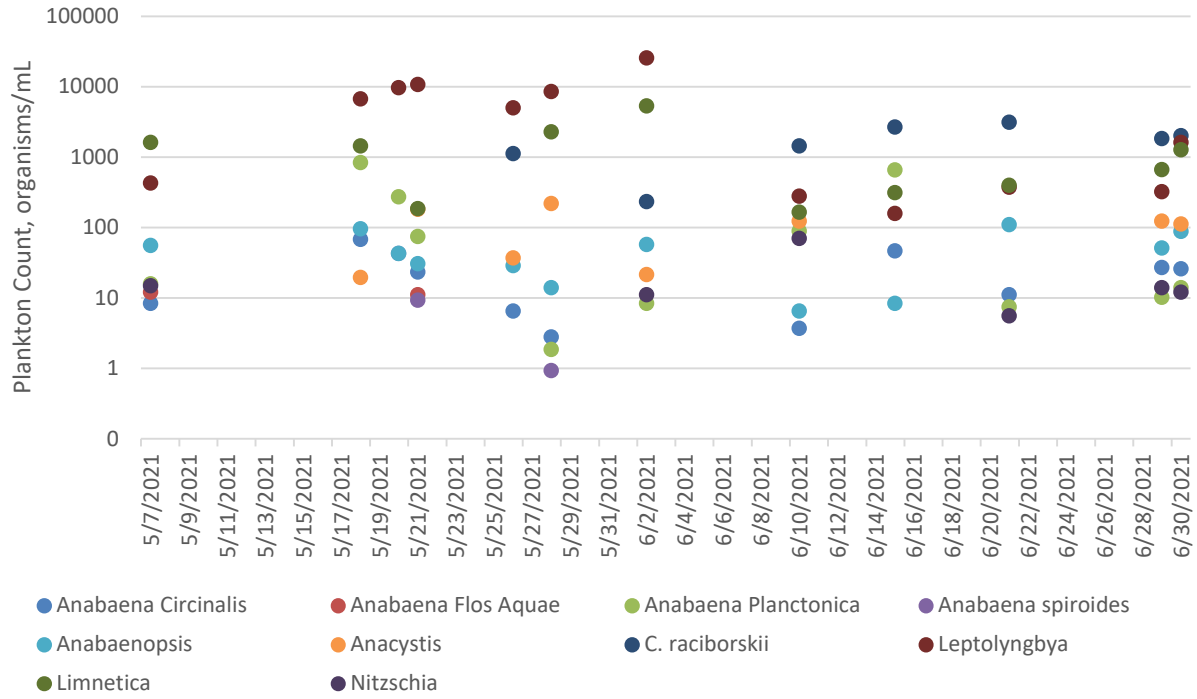


Figure 3-33
Plankton Species in Sweetwater Reservoir, May/June 2021



Metabolites

MIB and geosmin have also been monitored in the Sweetwater Reservoir and the Perdue WTP clearwell effluent during the study period. Levels above 10 ng/L are most associated with taste and odor events. **Table 3-16** presents a summary of the data and a timeseries plot is presented in **Figures 3-34** and **3-35.** A review of the data shows that MIB is less than 10 ng/L in 99.3 percent of samples from Sweetwater Reservoir and 97.8 percent of samples from the clearwell effluent. Geosmin is less than 10 ng/L in 79.5 percent of samples from the Sweetwater Reservoir and 88 percent of samples from the clearwell effluent. There are limited events with metabolite concentrations at levels of concern and SWA is able to manage peak levels through reservoir management and the Perdue WTP.

Table 3-16
Monitoring for Geosmin and MIB (ng/L), 2017 - 2021

Site	Geosmin		MIB	
	Range	Median	Range*	Median
Sweetwater Reservoir	ND - 100	ND	ND - 12	ND
Clearwell Effluent	ND - 46	ND	ND - 37	ND

*Samples for MIB on October 5, 2017 were higher at the Clearwell Effluent (37 ng/L) than the Sweetwater Reservoir (12 ng/L)

Figure 3-34 shows that annual peaks in metabolite concentration in Sweetwater Reservoir are seen during the spring months, with some additional detects in summer and into fall. The largest peaks in Sweetwater Reservoir were seen in 2017, 2020, and 2021, and smaller peaks in the clearwell effluent follow the same pattern.

Figure 3-34
MIB and Geosmin Levels in Sweetwater Reservoir, 2017 – 2021

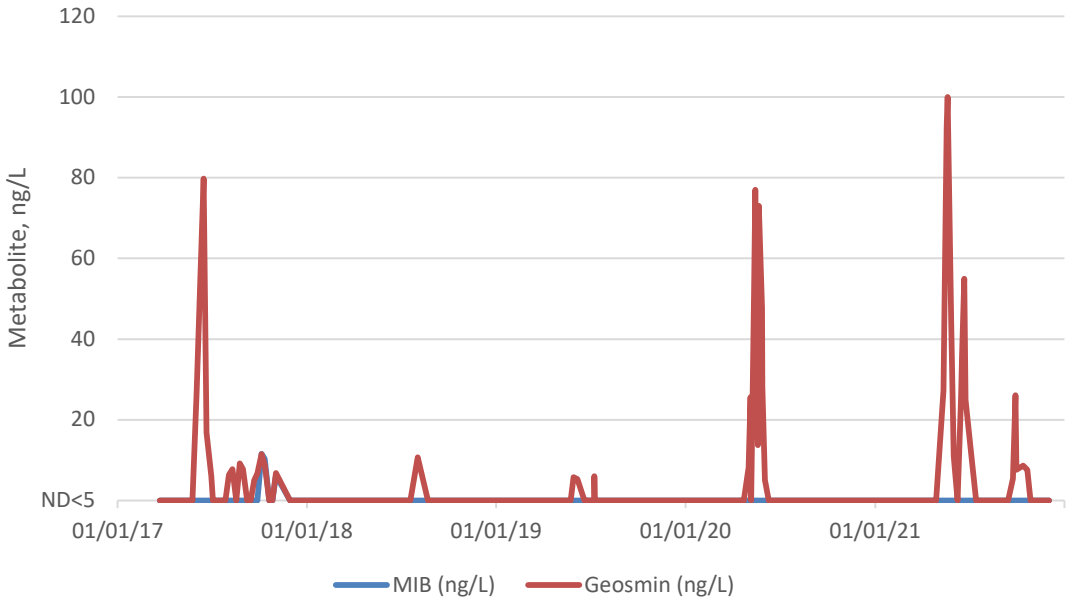
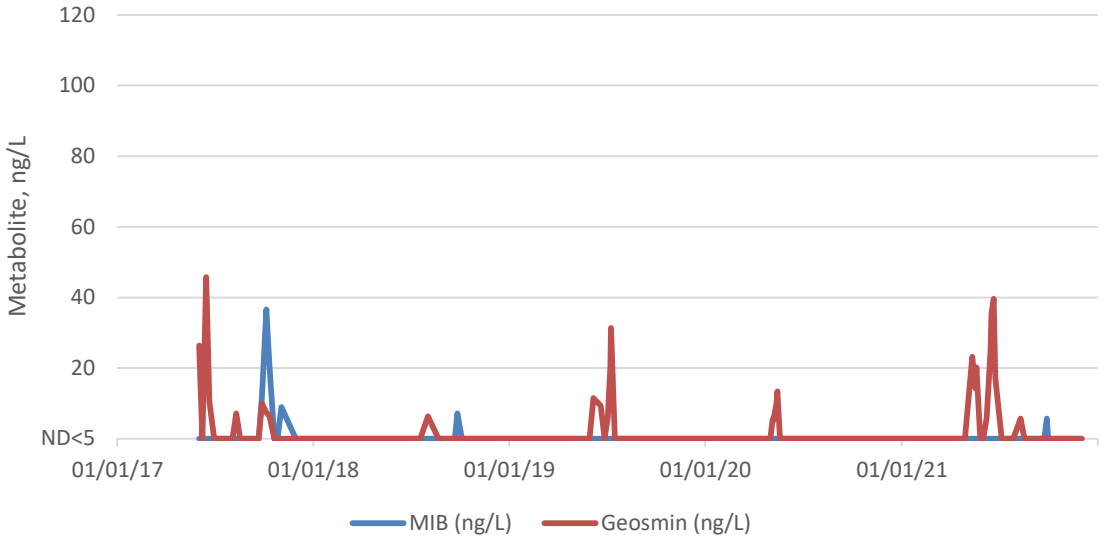


Figure 3-35
MIB and Geosmin Levels in Perdue WTP Clearwell Effluent, 2017 – 2021



Sweetwater Reservoir Management

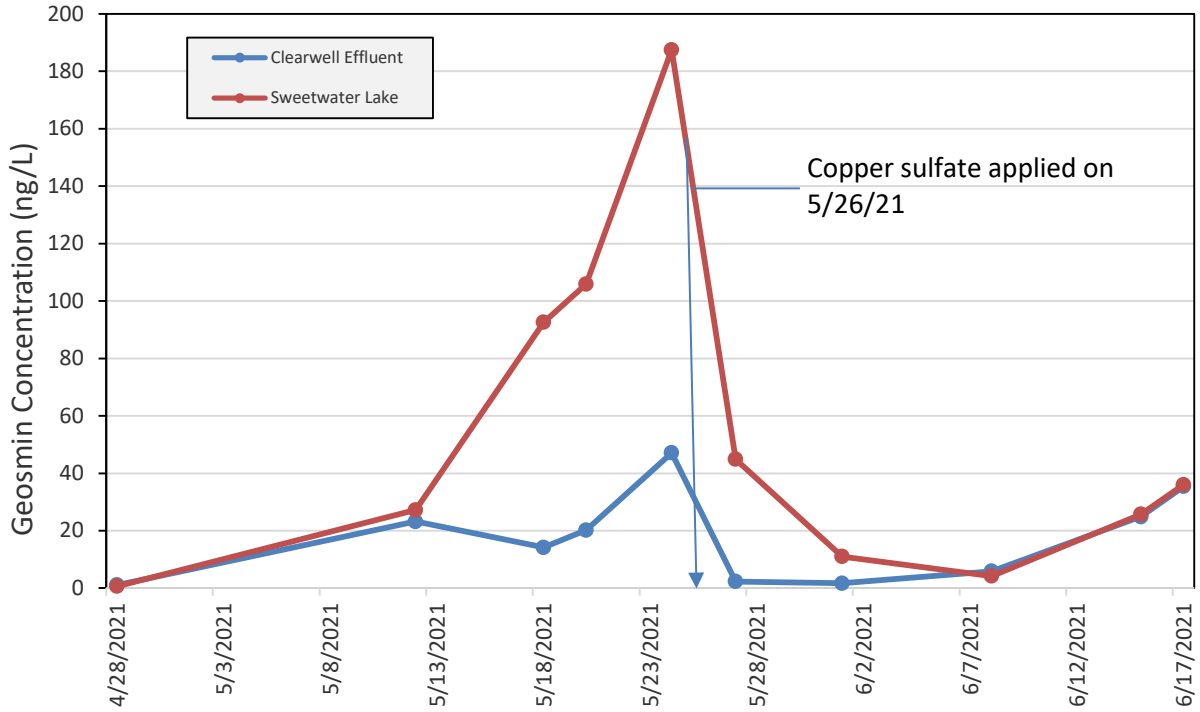
SWA implements an Aquatic Pesticide Application Plan, under State Water Resources Control Board Water Quality Order No. 2017-0015-EXEC General Permit No. CAG990005 that allows SWA to implement secondary management of algae blooms via application of copper sulfate to Sweetwater Reservoir. None was applied in 2017, 2018, and 2019. Significant increases in plankton counts and taste and odor compounds in May 2020 and May 2021 resulted in implementation of copper sulfate application to Sweetwater Reservoir, as described below.

The May 2020 increase in plankton counts and geosmin concentrations resulted in application of 500 pounds of copper sulfate and 240 pounds of citric acid to approximately 250 surface acres of Sweetwater Reservoir, representing about one-half of the total surface area of the lake, on May 27, 2020. This copper sulfate treatment was very effective in killing nuisance cyanobacteria species and significantly reduced the taste and odor compounds in the treated water. By June 9, 2020 geosmin was not detected, objectionable taste and odor was eliminated, and counts of cyanobacteria species had returned to background levels.

The spring 2021 event was more complex and lasted longer. In late May 2021, an increase in cyanobacteria species and counts and geosmin concentrations resulted in application of approximately 542 pounds of copper sulfate and 271 pounds of citric acid to approximately 271 surface acres of Sweetwater Reservoir, representing about one-half of the total surface area of the lake. In addition, from June 15 – June 24, another increase in cyanobacteria species and counts and geosmin concentrations was observed, which necessitated a second application of copper sulfate to Sweetwater Reservoir. On June 29, 2021 approximately 517 pounds of copper sulfate and 259 pounds of citric acid were applied to approximately 259 surface acres of Sweetwater Reservoir, representing about one-half of the total surface area of the lake was treated.

Both copper sulfate treatments were very effective in killing nuisance cyanobacteria species and significantly reduced the taste and odor compounds in the treated water. Subsequent to both treatment applications, geosmin concentrations were non-detectable, objectionable tastes and odors were eliminated, and counts of cyanobacteria species (*anabaena circinalis*) had returned to background levels. **Figure 3-36** presents a summary of geosmin concentrations in Sweetwater Reservoir and the clearwell effluent, along with the timing of the copper sulfate application in late May 2021.

Figure 3-36
Geosmin Levels in Sweetwater Reservoir and Perdue WTP Clearwell Effluent, April – June 2021



Summary of Results

- Plankton are seasonally present in the Sweetwater Reservoir and have a direct impact on source water quality, including turbidity, organic carbon, and taste and odor.
- The types of plankton present include algae and cyanobacteria. These result in the detection of the metabolites geosmin and MIB in the Sweetwater Reservoir and the clearwell effluent and can cause taste and odor episodes. They also have the potential to contribute cyanotoxins to the water supply.
- The highest levels of geosmin were seen in the spring months of 2017, 2020, and 2021, and were related to the presence of a wide variety of plankton.

- The highest levels of MIB were seen in October 2017, and were related to the presence of a small number of plankton.
- The SWA successfully utilized the application of copper sulfate in Sweetwater Reservoir in the spring of 2020 and 2021 to manage plankton growth and reduce metabolite concentrations in the treated water.

SWEETWATER RESERVOIR STRATIFICATION

Each year there is development of thermal stratification in the Sweetwater Reservoir beginning in the spring months and lasting through the fall. This results in an upper layer of the reservoir (epilimnion) that is warm and oxygenated, a middle layer of the reservoir (thermocline) where temperatures decline, and a lower layer of the reservoir (hypolimnion) near the sediment that is much cooler and less oxygenated. When the weather cools in the fall the Sweetwater Reservoir "turns over", meaning that there is full mixing of the epilimnion and hypolimnion.

During stratification, adverse water quality conditions are created in both the epilimnion and hypolimnion. The epilimnion is warm and oxygenated, creating an ideal environment for the proliferation of algal blooms. Meanwhile, the hypolimnion can become so depleted of dissolved oxygen that anoxic conditions form. This usually results in lower pH and causes re-solubilization of metals, nutrients, and organic matter from the sediment into the water column. When the fall turnover occurs, these elevated concentrations of constituents are then fully mixed through the entire water column. Data presented in this Section supports this occurring in Sweetwater Reservoir by resulting in increased fall and winter concentrations of organic carbon and metals and high spring and summer levels of plankton counts.

Reduced storage volume in Sweetwater Reservoir is likely contributing to amplifying the impacts of stratification and turnover. SWA staff confirms that this does occur, resulting in numerous water quality challenges:

- Diurnal spikes in manganese and turbidity,
- Reduced dissolved oxygen complicating disinfection and DAF solids removal processes, and
- Increased presence of plankton and cyanobacterial blooms, starting earlier and lasting longer.

Perdue WTP operations require increased optimization to address treatment challenges to improve solids reduction and chloramination, including the increased use of source water blending at the influent and Sweetwater Reservoir treatment with copper sulfate.

In 2020, SWA hired Gillingham Water to prepare a "Water Supply Feasibility Study" to evaluate options to maximize reservoir assets and expand local water supplies. This study evaluated five projects and recommended pursuit of an aeration/destratification system for Sweetwater Reservoir to maintain healthy levels of dissolved oxygen throughout the water column and improve overall water quality. They identified potential

benefits of the project as; reduced nutrient recycling, reduced organic carbon levels, reduced algal productivity, and reduced manganese levels.

Subsequent to this study the SWA allocated capital funds in FY 2021-22 for engineering design services for an aeration/destratification system in Sweetwater Reservoir. Water Quality Solutions was hired to prepare a preliminary design of an aeration system, and the work is ongoing with a summary presentation in March 2022. The purpose of the project is focused on reducing anoxic conditions and the associated water quality issues, not directly decreasing cyanobacteria throughout the entire reservoir. Aeration, through destratification, was determined to be the preferred alternative. Destratification modeling was conducted to optimize the design and location of the air diffusing system. The consultant recommended installation of a bubble tube diffuser, between 500 and 2,000 linear feet. A longer diffuser will provide better reduction of cyanobacteria a lower storage volumes.

After design is completed, construction and startup of this project are expected to occur in FY 2023-24 and FY 2024-25. In theory, this destratification system has great potential to improve the source water quality of Sweetwater Reservoir. Since this project will cause significant variation in the water quality of the reservoir, it will be important for SWA to have a plan for operational optimization. This plan should include a monitoring component as well as operational goals for the destratification system, which consider a wide range of conditions. Ideally, the plan should be developed by the consultant who is completing either the preliminary or final design of the aeration/destratification system. The plan should include water quality monitoring to demonstrate the changes in water quality when the system is operating and not operating.

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SECTION 4 – WATERSHED CONTAMINANT SOURCES REVIEW

This section contains an evaluation of the nine potential contaminant sources selected for review for the current Update. Nine potential contaminating activities (PCAs) were selected for review as part of the current Update: (1) spills, (2) landfills, (3) recreation, (4) urban runoff, (5) wastewater, (6) developments, (7) homeless encampments, (8) agriculture, and (9) wildfires. These PCAs were selected based on their presence in the watershed and their potential to impact Sweetwater Reservoir water quality. PCAs deemed insignificant from the 1995 Watershed Sanitary Survey were seawater intrusion, logging, and geological hazards.

SPILLS

Background

A hazardous material spill or leak into a surface water body could occur as the result of a vehicular traffic accident, pipeline leak or spill, wastewater treatment plant spill, or other incident. In the event of a leak or spill, timely notification is critical to ensure that the water treatment plant operators are provided with sufficient time and information to best respond to potential treatment concerns.

Spills of raw or partially treated wastewater occur from collection systems, lift stations and wastewater treatment plants. A sanitary sewer overflow (SSO) is any overflow, spill, release, discharge, or diversion of untreated or partially treated wastewater from a sanitary sewer system. Major causes of SSOs include grease, root and debris blockages; sewer line flood damage; manhole structure failures; vandalism; pump station mechanical failures; power outages; excessive storm or groundwater inflow/infiltration; improper construction; lack of proper operation and maintenance; insufficient capacity; and contractor-caused damage. Spills of raw or partially treated wastewater occur due to equipment malfunctions or operator errors at wastewater treatment plants. Spills also occur during storm events when storm water infiltrates a wastewater collection system and the capacity of the wastewater treatment plant is exceeded.

Seasonal Patterns

For the Upper and Middle Sweetwater watersheds, there are no seasonal patterns as to when spills may occur due to the various causes of spills and SSOs. SSOs may occur more frequently during the wet season, when stormwater can infiltrate a wastewater collection system.

Related Constituents

The most common spills are related to oil and petroleum products or sewage. Therefore, typical constituents of concern range from volatile organic compounds (VOCs) and hydrocarbons to microbial constituents (i.e., viruses, pathogens, *Giardia, Cryptosporidium*). However, hazardous materials emergencies can involve a virtually infinite number of chemicals or chemical combinations.

Occurrence in Watershed

The main transportation routes through the watershed are California State Highway Routes 54, 79, 94, and Interstate Highway 8.

Information on spills was obtained from two sources: 1) the Office of Emergency Services (OES) Response Information Management System (RIMS) archived database, and 2) the State Water Resources Control Board's (SWRCB) California Integrated Water Quality System (CIWQS) database on SSOs. Overall, there were 30 spills, with 13 spills involving raw sewage and 17 spills involving chemicals, such as fuel, mineral oil, and oil. Out of the 30 spills, 11 spills reached a waterway as shown in bolded font in **Table 4-1**. **Figure 4-1** shows all 30 spill locations.

The three largest spills that reached a waterway were:

- 9,000 gallons of raw sewage overflowed on February 27, 2017 at 604 Galopago Street in Spring Valley from a manhole and flowed to a storm drain leading to Sweetwater Reservoir.
- 102,000 gallons of recycled water was released from a recycled water pipeline associated with the Otay Water District's Ralph W. Chapman Reclamation Facility (RWCWRF) on February 10, 2020 and impacted the Sweetwater River.
- 2,000 gallons of raw sewage overflowed on March 12, 2019 from a manhole on a slope near Highway 94 into a storm drain at 3637 Avocado Blvd. in La Mesa.

Related Water Quality Issues and Data Review

No synthetic organic compounds (SOCs) or VOCs were detected above the drinking water detection limits for reporting (DLRs) for the Sweetwater Reservoir or the Low Flow Barrier from 2017 to 2021, with the exception of one isolated detection of diquat at 0.4 µg/L and one isolated detection of paraquat at 4.2 micrograms per liter (µg/L) in June 2021 in Sweetwater Reservoir.

As outlined in a letter from the Division of Drinking Water (DDW) to Sweetwater Authority (SWA) dated October 24, 2019, "in the event that the sewage spill reaches the reservoir prior to implementing diversion, SWA must provide a minimum of 4-log *Giardia* and 5-log virus reduction through filtration and disinfection until a water quality characterization can be completed and written approval from DDW is obtained."

For the March 12, 2019 spill, the Perdue Water Treatment Plant (WTP) was operated to achieve 1-log additional inactivation for *Giardia* and viruses from March 1 to March 31, 2019. During this time period, the raw water blend treated at the Perdue WTP ranged from 100 percent Sweetwater Reservoir to 60 percent Sweetwater Reservoir/40 percent imported water.

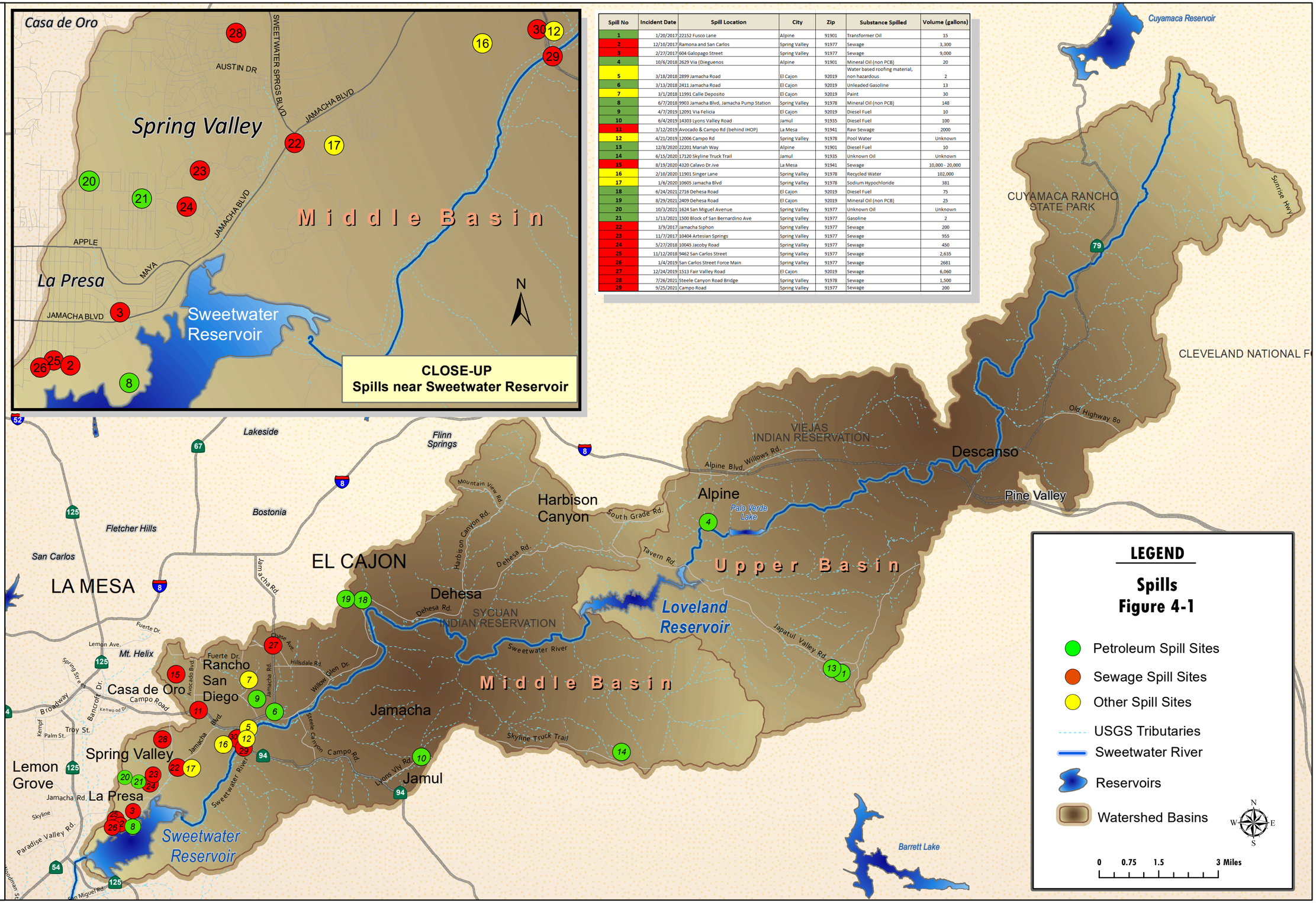
For the February 10, 2020 spill, the Perdue WTP was operated to achieve 1-log additional inactivation for *Giardia* and viruses from February 11 to March 2, 2020.

2022 Watershed Sanitary Survey

Spills
Figure 4-1

Data Source: SanGIS/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
SanGIS - www.sangis.org - 5510 Overland Ave., Suite 230, San Diego, CA 92123

Spill No	Incident Date	Spill Location	City	Zip	Substance Spilled	Volume (gallons)
1	1/20/2017	22152 Fusco Lane	Alpine	91901	Transformer Oil	15
2	12/10/2017	Ramona and San Carlos	Spring Valley	91977	Sewage	3,300
3	2/27/2017	604 Galopago Street	Spring Valley	91977	Sewage	9,000
4	10/6/2018	2629 Via (Dieguenos	Alpine	91901	Mineral Oil (non PCB)	20
5	3/18/2018	2899 Jamacha Road	El Cajon	92019	Water based roofing material, non hazardous	2
6	3/13/2018	2411 Jamacha Road	El Cajon	92019	Unleaded Gasoline	13
7	3/1/2018	11991 Calle Deposito	El Cajon	92019	Paint	30
8	6/7/2018	9903 Jamacha Blvd, Jamacha Pump Station	Spring Valley	91978	Mineral Oil (non PCB)	148
9	4/7/2019	12091 Via Felicia	El Cajon	92019	Diesel Fuel	10
10	6/4/2019	14303 Lyons Valley Road	Jamul	91935	Diesel Fuel	100
11	3/12/2019	Avocado & Campo Rd (behind IHOP)	La Mesa	91941	Raw Sewage	2000
12	4/21/2019	12006 Campo Rd	Spring Valley	91978	Pool Water	Unknown
13	12/8/2020	22201 Mariah Way	Alpine	91901	Diesel Fuel	10
14	6/15/2020	17120 Skyline Truck Trail	Jamul	91935	Unknown Oil	Unknown
15	8/19/2020	4320 Calavo Dr.ive	La Mesa	91941	Sewage	10,000 - 20,000
16	2/10/2020	11901 Singer Lane	Spring Valley	91978	Recycled Water	102,000
17	1/6/2020	10605 Jamacha Blvd	Spring Valley	91978	Sodium Hypochloride	381
18	6/24/2021	2716 Dehesa Road	El Cajon	92019	Diesel Fuel	75
19	8/29/2021	2409 Dehesa Road	El Cajon	92019	Mineral Oil (non PCB)	25
20	10/3/2021	1624 San Miguel Avenue	Spring Valley	91977	Unknown Oil	Unknown
21	1/13/2021	1500 Block of San Bernardino Ave	Spring Valley	91977	Gasoline	2
22	3/9/2017	Jamacha Siphon	Spring Valley	91977	Sewage	200
23	11/7/2017	10404 Artesian Springs	Spring Valley	91977	Sewage	955
24	5/27/2018	10045 Jacoby Road	Spring Valley	91977	Sewage	450
25	11/12/2018	9462 San Carlos Street	Spring Valley	91977	Sewage	2,635
26	1/4/2019	San Carlos Street Force Main	Spring Valley	91977	Sewage	2681
27	12/24/2019	1513 Fair Valley Road	El Cajon	92019	Sewage	6,060
28	7/26/2021	Steele Canyon Road Bridge	Spring Valley	91978	Sewage	1,500
29	9/25/2021	Campo Road	Spring Valley	91977	Sewage	200



During this time period, the Perdue WTP was treating 100 percent Sweetwater Reservoir water.

For the February 27, 2017 spill, the Perdue WTP was treating 100 percent imported water.

As shown in **Figure 4-2**, *E. coli* levels in Sweetwater Reservoir are generally always below 100 CFU/mL, except from September 2020 to January 2021.

Figure 4-2
***E. coli* Historical Sweetwater Raw Daily Data, 2017-2021**

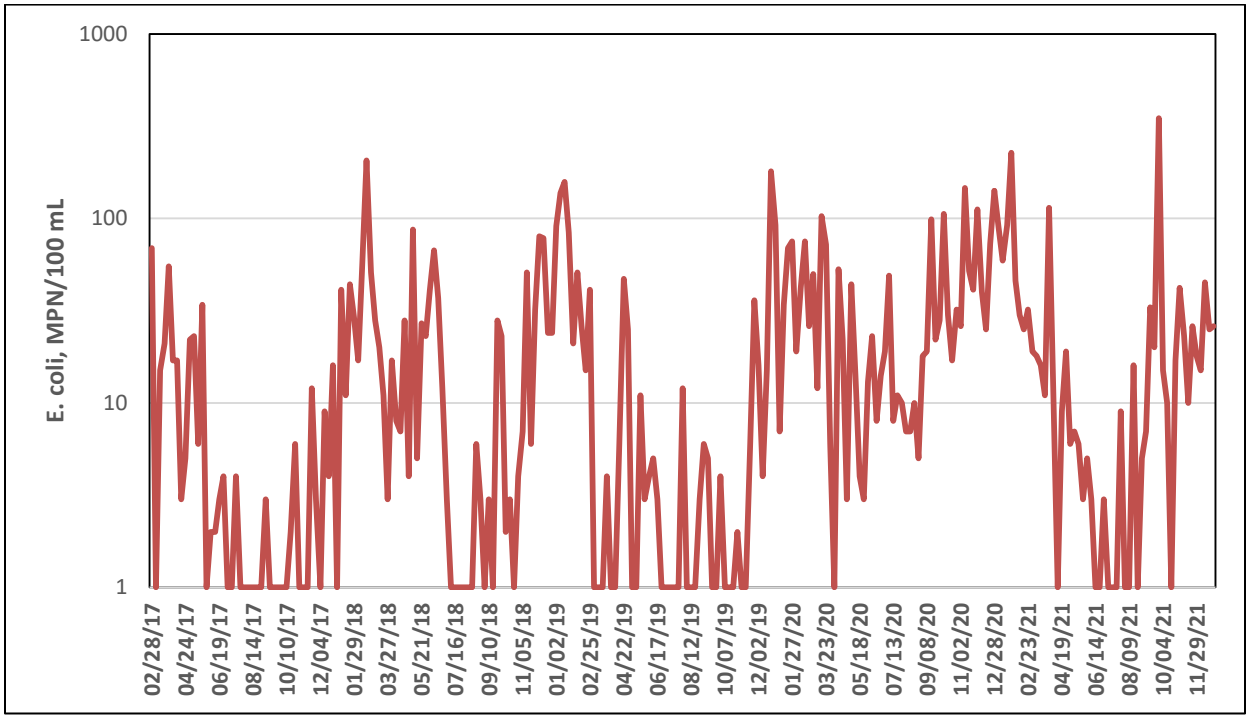


Table 4-1
Summary of Spills Occurring in Sweetwater Watershed, 2017-2021

Spill Number	Incident Date	Agency	Substance Spilled	Volume (gallons)	Reach Water Way?	Location	Spill Site	Cause
1	1/20/2017	San Diego Gas & Electric	Transformer Oil	15	**Ditch - Creek**	22152 Fusco Lane Alpine	Road	Other
2	12/10/2017	San Diego County Dept. of Public Works	Sewage	3,300	No	Ramona and San Carlos (32.70415, -116.99511), Spring Valley	Residence	Force main break underground
3	2/27/2017	San Diego County Dept. of Public Works	Sewage	9,000	**Storm Drain**	604 Galopago St Spring Valley	Road	Storm surge and possible blockage in system
4	10/6/2018	San Diego Gas & Electric	Mineral Oil (non PCB)	20	No	2629 Via Dieguenos, Alpine	Residence	Collision
5	3/18/2018	Albertsons	Roofing material, non-hazardous	2	**Storm Drain**	2899 Jamacha Rd, El Cajon	Business	Other
6	3/13/2018	Private Citizen	Unleaded Gasoline	13	No	2411 Jamacha Rd, El Cajon	Service Station	Unknown
7	3/1/2018	Civilian	Paint	30	**Sweet Water River**	11991 Calle Deposito, El Cajon	Residence	Human Error
8	6/7/2018	San Diego Gas & Electric	Mineral Oil (non PCB)	148	**Sweet Water Reservoir**	9903 Jamacha Blvd, Jamacha Pump Station, Spring Valley	Business	Collision
9	4/7/2019	San Diego County Dept. of Public Works	Diesel Fuel	10	**Storm Drain - Sweet Water Reservoir**	12091 Villa Felicia, El Cajon	Road	Human Error
10	6/4/2019	Otay Water District	Diesel	100	No	14303 Lyons Valley Road, Jamul	Other	Mechanical

Spill Number	Incident Date	Agency	Substance Spilled	Volume (gallons)	Reach Water Way?	Location	Spill Site	Cause
11	3/12/2019	Otay Water District	Raw Sewage	2,000	**Storm Drain - Sweet Water Reservoir (1,800 reached storm drain)**	Avocado & Campo Rd (behind iHOP) (32.745949, -116.959953), La Mesa	Other	Blockage
12	4/21/2019	YMCA San Diego County	Pool Water	Unknown	**Unknown Creek**	12006 Campo Rd, Spring Valley	Other	Mechanical
13	12/8/2020	Verizon	Diesel Fuel	10	No	22201 Mariah Way, Alpine	Business	Unknown
14	6/15/2020	NRC	Unknown Oil	Unknown	No	17120 Skyline Truck Trail, Jamul	Other	Other
15	8/19/2020	Otay Water District	Sewage	10,000 - 20,000	No	4320 Calavo Dr. , La Mesa	Residence	Blockage
16	2/10/2020	Otay Water District	Recycled Water	102,000	**Sweet Water River**	11901 Singer Lane, Spring Valley	Treatment/Sewage Facility	Mechanical
17	1/6/2020	Hasa Inc	Sodium Hypochloride	381	**Storm Drain**	10605 Jamacha Blvd, Spring Valley	Business	asphalt failure
18	6/24/2021	CHP El Cajon	Diesel	75	No	2716 Dehesa Road, Crest	Road	Collision
19	8/29/2021	NRC	Mineral Oil (non PCB)	25	No	2409 Dehesa Road, El Cajon	Road	Collision
20	10/3/2021	NRC	UNKNOWN OIL	Unknown	**Storm Drain**	1624 San Miguel Avenue, Spring Valley	Road	Mechanical
21	1/13/2021	County of San Diego Hazmat	Gasoline	2	No	1500 Block of San Bernardino Ave, Spring Valley	Road	Unknown
22	3/9/2017	San Diego County Dept. of Public Works	Sewage	200	No	Jamacha Siphon (32.72503, -116.9693)		Contractor Error

Spill Number	Incident Date	Agency	Substance Spilled	Volume (gallons)	Reach Water Way?	Location	Spill Site	Cause
23	11/7/2017	San Diego County Dept. of Public Works	Sewage	955	No	10404 Artesian Springs, Spring Valley		Root Intrusion
24	5/27/2018	San Diego County Dept. of Public Works	Sewage	450	No	10045 Jacoby Rd., Spring Valley		Root Intrusion
25	11/12/2018	San Diego County Dept. of Public Works	Sewage	2,635	No	9462 San Carlos St. , Spring Valley		Pipe failure
26	1/4/2019	San Diego County Dept. of Public Works	Sewage	2,681	No	Ramona Sewage Lift Station (32.70384, -116.99547)		Pipe failure
27	12/24/2019	Otay WD	Sewage	6,060	No	1513 Fair Valley Road, El Cajon		Blockage
28	7/30/2018	San Diego County Dept. of Public Works	Sewage	240	No	3149 Highlands Blvd., Spring Valley		Root Intrusion
29	7/26/2021	Otay WD	Sewage	1,500	No	Steele Canyon Road Bridge		Corrosion in lateral
30	9/25/2021	Otay WD	Sewage	200	No	Campo Road (32.735636, -116.941049)		Debris

Source: San Diego Regional Water Quality Control Board website, State Office of Emergency Services, San Diego County

Regulation and Management

When a hazardous materials spill or leak of a reportable quantity occurs, notification to an emergency response agency is required by state and federal law. A sewage spill is required to be reported if 1,000 gallons or more are released. An oil or petroleum product spill is required to be reported if 42 gallons or more are released. Any other hazardous materials spill is required to be reported if there is a reasonable belief that the release poses a significant present or potential hazard to human health and safety, property, or the environment. When a hazardous materials spill or leak occurs, it is the owner's or operator's responsibility to notify the local designated emergency response agency, which is called the Certified Unified Program Agency (CUPA), as well as the OES.

San Diego County

For the Upper and Middle Sweetwater watersheds, the local CUPA is the San Diego County Department of Environmental Health, Hazardous Materials Division. Depending on the type of spill and where it occurred, other agencies such as the U.S. Forest Service, the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and the Regional Board may be involved. An incident report would then be sent to OES.

California Emergency Management Agency

OES developed the Response Information Management System (RIMS) as part of the development of the State's Standardized Emergency Management System (SEMS). The purpose of RIMS is to provide a single point for tracking the status and progress of hazardous materials spills statewide. Only registered users can input data into RIMS, but anyone can access the website to review current or archived OES cases.

The archived cases, including those from 1993 through 2022, can be accessed at:
https://www.caloes.ca.gov/office-of-the-director/operations/response-operations/fire-rescue/hazardous-materials/spill-release-reporting/

State Water Resources Control Boards

On January 31, 2022, the State Water Board notified its intent to reissue Sanitary Sewer Systems General Order 2006-0003-DWQ by issuing a draft General Order for a 60 day public comment period. A public meeting was held to hear public comments. A new General Order is expected by the end of 2022.

State Water Resources Control Board Order No. 2006-0003-DWQ, *Statewide General Waste Discharge Requirements for Sanitary Sewer Systems*, adopted by the State Board on May 2, 2006, established minimum requirements to prevent SSOs from publicly owned/operated sanitary sewer systems. Order No. 2006-0003-DWQ is the primary regulatory mechanism for sanitary sewer systems statewide and serves to provide a unified statewide approach for reporting and tracking SSOs, establishing

consistent and uniform requirements for Sewer System Management Plan (SSMP) development, and facilitating consistent reporting and enforcement.

Generally, Order No. 2006-0003 requires that:

- In the event of an SSO, all feasible steps are taken to control the release volume and prevent it from entering a storm drain or creek.
- If an SSO occurs, it must be reported to the SWRCB using CIWQS.
- An SSMP must be developed.
- An internal audit must be conducted every two years which should evaluate the effectiveness of the SSMP in preventing spills, and identify SSMP deficiencies in addressing ongoing spills.

The County of San Diego updated its SSMP in August 2020 (every 6 years). The main goal of the SSMP is to minimize the frequency and impact of SSOs should they occur, effectively mitigate the impacts of SSOs should they occur, provide adequate sewer capacity to convey peak flows, and maintain the collection system. The County's SSMP includes specific details of the activities and procedures that personnel follow to manage, operate, and maintain the sanitary sewer system to reduce or eliminate SSOs.

In order to deliver wastewater safely and prevent SSOs, an aggressive preventive maintenance program is followed by the County of San Diego's Department of Public Works Field Operations Section. Crews are assigned to perform regular cleaning and inspection of lines by using high pressure water cleaners, sewer rodding vehicles, vacuum trucks, and pipeline video equipment. A computer database schedules, tracks, and alerts the staff of recurring problem areas.

The County of San Diego's 2020 SSMP stated that the primary cause of SSOs in the Spring Valley Service area reported between 2015 and 2019 was due to root concentrations. In response to this finding, the County has developed and implemented a program that incorporates herbicide treatment for areas that have high root concentrations.

Similarly, the Otay Water District updated its SSMP in March 2022. Otay Water District has a sewer main cleaning program designed to clean the entire system once every two years. Lift stations are checked weekly for proper function and cleanliness. Monthly maintenance on each lift station includes a high-pressure washdown of the wet well, cleaning of the floats, exercising all system valves, checking emergency generator and SCADA backup battery. It is important to note that the SWA is listed as an agency to contact in the event of a spill.

Source Water Protection Activities

As a result of the sewage spill which occurred at the County of San Diego's Ramona Lift Station in January 2019, SWA contacted the San Diego County Department of Public Works in order to improve communication when spills occur. An in-person meeting was

held to exchange updated contact information and to go over protocols. SWA also contacted Otay Water District for the same purpose in March 2019.

Additionally, when new developments are proposed in the watershed that will handle hazardous materials, SWA requests direct notification in the event of a surface spill or a chemical storage tank leak on the premises. If the facility requires a Hazardous Materials Business Plan and/or an emergency response plan, SWA requests that the documents include the SWA's 24-hour emergency telephone numbers.

As outlined in a letter from DDW to SWA dated October 24, 2019, "in the event that the sewage spill reaches the reservoir prior to implementing diversion, SWA must provide a minimum of 4-log *Giardia* and 5-log virus reduction through filtration and disinfection until a water quality characterization can be completed and written approval from DDW is obtained."

Summary of Findings for Spills

- There were 30 spills in the Upper and Middle Sweetwater watersheds over the reporting period; 17 spills involved hazardous chemicals, and 13 spills involved untreated sewage. Out of the 30 spills, 11 spills reached a waterway such as a storm drain which eventually could lead to the Sweetwater River or Reservoir.

- Overall, there were a few large spills in the watershed. The largest spill which directly impacted the Sweetwater River was 102,000 gallons of recycled water from the Otay Water District which occurred on February 10, 2020.

- Although spills occur in the watershed and may impact source water quality, SWA has developed communication protocols with Otay Water District and the County of San Diego Department of Public Works for spill notification. Additionally, SWA works with DDW for post-spill monitoring if it is needed, and may implement an additional 1-log of inactivation for viruses and *Giardia*, if needed.

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LANDFILLS

Background

Landfill leachate can be a source of pollution to groundwater and surface water sources. The U.S. Environmental Protection Agency (USEPA) estimates that there are approximately 55,000 landfills in the United States with over 75 percent of them polluting groundwaters at this time. Although modern landfills are lined, the liners may eventually fail, allowing leachate to contaminate groundwater. Also, many older landfills were not installed with liners.

Seasonal Patterns

There are no seasonal patterns associated with when leachate from a landfill will contaminate groundwater. During the rainy season, leachate may be released from an unlined or failed lined landfill when moisture seeps through the cover and percolates through the landfill waste.

Related Constituents

Common contaminants in municipal landfill leachate are total dissolved solids (TDS), hardness, alkalinity, chloride, sulfate, iron, manganese, and hydrogen sulfide. In addition, this group includes a variety of non-differentiated organics measured as COD (chemical oxygen demand), BOD (biochemical oxygen demand), and TOC (total organic carbon). Non-conventional contaminants are largely organic chemicals that have not been defined and whose potential hazards to public health and groundwater quality are not known. Typically, the organic Priority Pollutants, those organics that are identified and quantified, represent a very small fraction of the total organic matter present in leachate as measured by chemical oxygen demand and total organic carbon. It is estimated that from 90 to 95 percent of the organic materials in municipal landfill leachate are of unknown composition (G. Fred Lee, 1993). Those chemicals have not been identified, and their potential impacts on public health and groundwater quality are unknown.

Occurrence in Watershed

There are two landfills within the Upper and Middle Sweetwater watershed, the Viejas Landfill and the Jamacha Landfill.

Viejas Landfill

The Viejas Landfill is an inactive Class III municipal solid waste landfill, which accepted an estimated 50,000 tons of residential waste, commercial refuse, and non-decomposable inert solids during its operation from 1971 to 1979. The Sweetwater River is located approximately 1,500 feet northwest of the site. Groundwater flow is

generally northwesterly (GeoSyntec, 2011). The landfill is located in the Upper Sweetwater watershed, as shown in **Attachment A.**

The Viejas Landfill was constructed without a liner and does not have a leachate collection or removal system. A landfill gas extraction system has not been installed since the volume of waste is not sufficient to support a system (GeoSyntec, 2011). The final soil cover is approximately three feet thick.

After the landfill was closed, a transfer station was built which is currently in operation. The transfer station is open to the public to accept household waste. Additionally, waste is condensed into larger trucks at the transfer station for final disposal at another landfill.

Jamacha Landfill

The Jamacha Landfill is an inactive Class III municipal solid waste landfill which accepted an estimated 1.8 million tons of residential waste, commercial refuse, and non-decomposable inert solids during its operation from 1960 to 1978. No known sewage sludge or septic tank materials were received at the site. The Sweetwater River is located approximately 700 feet southeast of the site. Groundwater flow is generally southeasterly (GeoSyntec, 2011). The landfill is located in the Middle Sweetwater watershed, as shown in **Attachment A.**

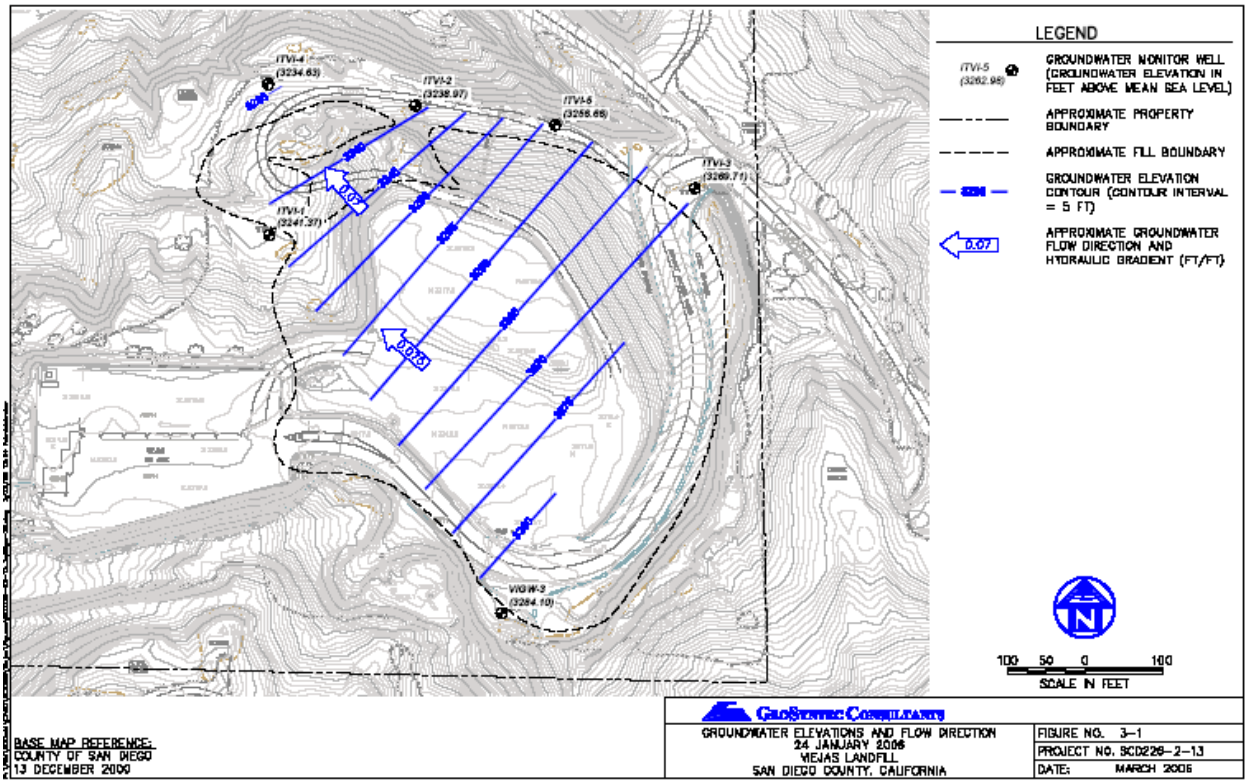
The Jamacha Landfill was constructed without a liner and does not have a leachate collection or removal system. A landfill gas extraction system consisting of an extraction well field and a flare have been operational since June 1996. This system was upgraded in May 2001 with seven additional gas extraction wells. The interim soil cover consists of two feet of clean soil. As stated in the most recent groundwater monitoring report dated April 14, 2022, “monitored natural attenuation, cover maintenance, landfill gas source control, and passive bioremediation remain the most feasible and appropriate long-term corrective action alternatives.”

Related Water Quality Issues and Data Review

Viejas Landfill

The Viejas Landfill currently has six groundwater monitoring wells which are monitored semi-annually, as shown in **Figure 4-3**. One monitoring well is installed upgradient of the refuse (VIGW-3), three are installed downgradient of the refuse (ITVI-1, ITVI-2, and ITVI-4), and two are cross-gradient of the refuse (ITVI-3 and ITVI-5). Three private off-site domestic water wells are located downgradient of the site at the Descanso Detention Facility but are no longer sampled due to closure of the facility.

Figure 4-3
Groundwater Monitoring Wells and Groundwater Flow Direction at Viejas Landfill



Source: GeoSyntec Consultants

The site is monitored semi-annually for VOCs, chloride, nitrate as N, TDS, pH, turbidity, specific conductivity, arsenic, barium, chromium, cobalt, iron, manganese, nickel, selenium, silver, vanadium, and zinc. It appears that antimony, beryllium, cadmium, copper, mercury and thallium were added to the monitoring list since the last Update. The 2020 annual monitoring report contains historical groundwater quality monitoring results from 1990 to the present. **Table 4-2** shows the constituents which were detected above their respective MCLs at the reporting time of the 2007, 2012, 2017 and current WSS.

Table 4-2. Constituents Detected above MCLs in Viejas Landfill Groundwater Monitoring Wells, 2006, 2011, 2017 and 2021 Data

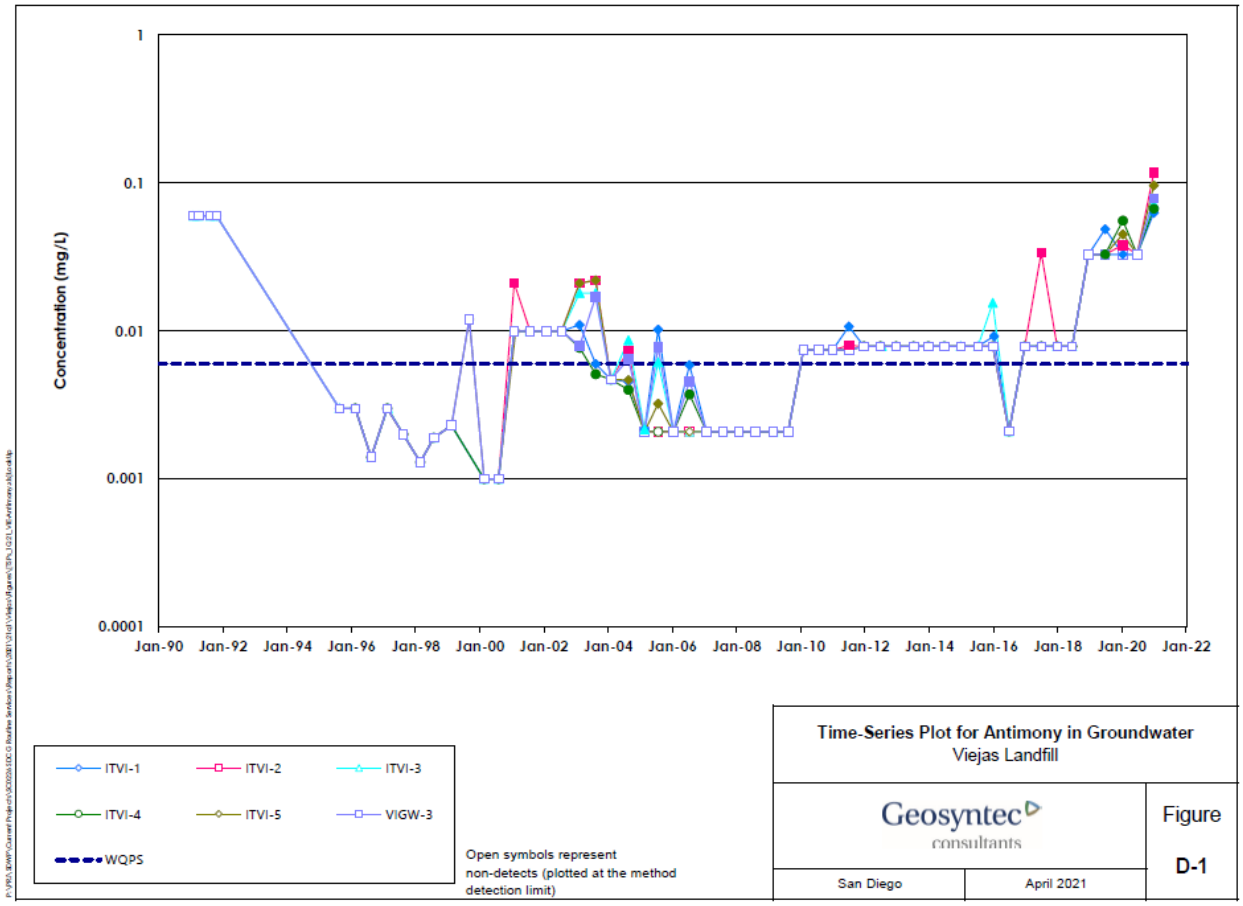
2006 Data	2011 Data	2016/2017 Data	2020/2021 Data
Benzene, Cis-1,2-dichloroethene, thallium	Cis-1,2-dichloroethene, iron, manganese, thallium	Iron, manganese, thallium	Antimony

In the previous Update, iron, manganese and thallium were measured at levels above their Maximum Contaminant Levels (MCLs), but recent data shows that these

concentrations have decreased. Similar to the previous Update, there were no VOCs detected above their respective drinking water MCLs.

However, antimony is above its primary MCL of 0.006 milligrams per liter (mg/L) as shown in **Figure 4-4**. In January 2021, antimony was measured at 0.0627 mg/L at ITVI-1, 0.117 mg/L at ITVI-2, 0.0717 mg/L at ITVI-3, 0.0670 mg/L at ITVI-4 and at 0.0961 mg/L at ITVI-5.

Figure 4-4
Levels of Antimony in Groundwater – Viejas Landfill



Antimony was non-detectable in all biannual samples collected at the Loveland Reservoir, Low Flow Barrier, Sweetwater River Influent, and Sweetwater Reservoir from 2017 to 2021.

In response to the California State Water Resources Control Board Order WQ 2019-0006-DWQ, a one-time assessment of poly and perfluoroalkyl substances (PFAS) in groundwater was conducted at the Viejas landfill in 2019. **Table 4-3** shows the results for the six PFAS monitored. The notification level of 5.1 nanograms per liter (ng/L) for perfluorooctanoic acid (PFOA) was exceeded in two downgradient wells as shown in red.

Table 4-3 PFAS monitoring at the Viejas Landfill

PFAS Compound		Downgradient	Downgradient
		ITVI-5	ITVI-6
	Notification Level, ng/L	9/19/2019	9/19/2019
Perfluorobutanoic acid (PFBA)		16 J	15 J
Perfluoroheptanoic acid (PFHpA)	pending	10	10
Perflurohexanoic acid (PFHxA)	pending	25	26
Perfluorooctanesulfonic acid (PFOS)	6.5	1.9 J	1.9 J
Perfluorooctanoic acid (PFOA)	5.1	52	50
Perfluropentanoic acid (PFPeA)		32	33

Jamacha Landfill

The Jamacha Landfill currently has 16 groundwater monitoring wells and 14 piezometers that are monitored semi-annually, as shown in **Figure 4-7**. **Table 4-4** shows that some of the wells are screened in fractured bedrock, and some are screened in alluvium/grus. The site is monitored for VOCs, chloride, nitrate as N, TDS, pH, turbidity, specific conductivity, sulfate, calcium, magnesium, potassium and sodium.

Table 4-4
Description of Wells at Jamacha Landfill

Well Name	Description
JAGW-1	Downgradient alluvium/Shallow bedrock well
JAGW-5	Downgradient alluvium/Shallow bedrock well
JAGW-7	Upgradient alluvium/Shallow bedrock
JAGW-8A	Background bedrock well
JAGW-8B	Background alluvium well
JAGW-9A	Downgradient shallow bedrock
JAGW-9B	Downgradient alluvium
JAGW-9E	Downgradient deep bedrock
JAGW-10	Downgradient alluvium
JAGW-10A	Downgradient shallow bedrock
JAGW-10D	Downgradient intermediate bedrock
JAGW-10E	Downgradient deep bedrock
JAGW-12A	Downgradient shallow bedrock
JAGW-12B	Downgradient alluvium
JAGW-13A	Piezometer cross-river deep bedrock
JAGW-13B	Piezometer cross-river alluvium
JAGW-14A	Piezometer cross-river deep bedrock
JAGW-14B	Piezometer cross-river alluvium
JAGW-15A	Downgradient deep bedrock
JAGW-15B	Downgradient shallow bedrock

Source: Report of Waste Discharge and Corrective Action Plan. GeoSyntec 2006

The 1995 Watershed Sanitary Survey identified a vertical constriction of the alluvial soil at a point downstream of the Otay Water District's water reclamation plant. The presence of this vertical constriction forces the water to the surface; otherwise, it would flow in the alluvium. Due to this vertical constriction, contamination of the alluvium from the Jamacha landfill may have a pathway to reach the Sweetwater River.

A snapshot evaluation of the groundwater monitoring data was conducted in the previous three watershed sanitary surveys, and identified which groundwater monitoring wells had detections above primary drinking water standards in years 2006, 2011 and 2016/2017, and 2022(see **Table 4-7**). A blank indicates that the level was either below the MCL or nondetectable.

When comparing VOC levels in from 2016/2017 to 2022, VOC levels appear to be stable or decreasing. **Table 4-5** shows which wells are detecting VOCs above their respective MCLs in the most recent monitoring report available. Vinyl chloride is the VOC most frequently detected in wells above the MCL.

Table 4-5. Constituents Detected above MCLs in Jamacha Landfill Groundwater Monitoring Wells, 2022 Data

Constituent Detected Above MCL	Wells
1,4 dichlorobenzene	JAGW-1, JAGW-5, JAGW-10, JAGW-10A,
Cis-1,2-Dichloroethene	JAGW-5, JAGW-9A, JAGW-10A, JAGW-10D
Benzene	JAGW-10D, JAGW-10E
Vinyl Chloride	JAGW-5, JAGW-9A, JAGW-10, JAGW-10A, JAGW-10D, JAGW-10E

According to the County's consultant GeoSyntec, VOCs may be decreasing due to regular maintenance of the landfill cover, the landfill gas control system, and the in-situ bioaugmentation project which began in early 2007. The in-situ bioaugmentation project was intended to act as a biobarrier to prevent offsite migration of VOCs from the landfill. Details for the bioaugmentation project were provided in the 2011 WSS Update. Additionally, six landfill gas extraction wells were installed in December 2013 to address the residual low VOC concentrations in groundwater.

Most importantly, VOCs have not been detected in the downstream wells located closest to the Sweetwater River (wells 12 and 9E).

In addition to VOCs, further examination of the 2022 data show that chloride was above the secondary MCL of 250 mg/L for 10 out of the 16 wells and TDS was above the secondary MCL of 1000 mg/L in 9 out of the 16 wells. The number of wells with chloride and TDS levels above their respective secondary MCLs has decreased since the previous WSS update.

No SOCs or VOCs were detected above the drinking water DLRs for the Sweetwater Reservoir or the Low Flow Barrier from 2017 to 2021, with the exception of one isolated detection of diquat at 0.4 µg/L and one isolated detection of paraquat at 4.2 µg/L in June 2021 in Sweetwater Reservoir. Repeat sampling was conducted and both diquat and paraquat were not detected.

In response to the California State Water Resources Control Board Order WQ 2019-0006-DWQ, a one-time assessment of PFAS in groundwater was conducted at the Jamacha landfill in 2019. PFAS were also monitored at the Jamacha landfill in 2019. **Table 4-6** shows the results for the ten PFAS monitored. As shown in red, the notification level of 5.1 ng/L for PFOA was exceeded in two wells, the notification level of 6.5 ng/L for PFOS was exceed in one well, and the notification level of 3 ng/L for (perfluorohexanesulfonic acid) PFHxS was exceeded in two wells.

Table 4-6 PFAS monitoring at the Jamacha Landfill

PFAS Compound		Upgradient	Downgradient	Downgradient
		JAGW-7	JAGW-10	JAGW-12B
	Notification Level, ng/L	9/18/2019	9/18/2019	9/18/2019
Pefluorobutanesulfonic acid (PFBS)	500	3.2	77	6.4
Perfluorobutanoic acid (PFBA)		85	74 J	5.1
Perfluoroheptanesulfonic acid (PFHpS)		<1.9	4	<1.9
Perfluoroheptanoic acid (PFHpA)	pending	12	54	<1.9
Perfluorohexanesulfonic acid (PFHxS)	3	3.2	50	1.8 J
Perflurohexanoic acid (PFHxA)	pending	75	260	11
Perfluorooctanesulfonic acid (PFOS)	6.5	<1.9	58	<1.9
Perfluorooctanoic acid (PFOA)	5.1	18	110	<1.9
Perfluoropentanesulfonic acid (PFPeS)		<1.9	41	1.9
Perfluropentanoic acid (PFPeA)		41	90	5.9

.

Table 4-7. VOCs Detected above MCLs in Jamacha Landfill Groundwater Monitoring Wells, 2006, 2011,2017, and 2022 Data

	MCL (ug/L)	JAGW-1						JAGW-5						JAGW-9A					
		1/1/06	1/7/11	7/14/11	7/19/16	1/9/17	1/17/22	1/1/06	1/7/11	7/14/11	7/19/16	1/9/17	1/17/22	1/1/06	1/6/11	7/13/11	7/19/16	1/9/17	1/17/22
1,1-Dichloroethane	5													10	5.4	7	9.3	5.7	
1,2- Dichloroethane	0.5							0.58						1.2	0.62	0.99		0.73	
1,4-Dichlorobenzene	5	15	8.7	11	12	13	10	30	24	25	26	25D	23					5	
Benzene	1							1.5	1.1					2		1.1			
cis-1,2-Dichloroethene	6							7.2	11	6.7	11	7.1	7.2	12	13	23	25	16	7.4
Tetrachloroethene (PCE)	5	17	14	11	9.4	8.1													
Trichloroethene (TCE)	5	6	5.7											31	17	29	18	16	
Vinyl Chloride	0.5	2.1	1.4					12	6.9	3.8	2.9		1.6	28	12	25	14	9.5	2

	MCL (ug/L)	JAGW-10						JAGW-10A						JAGW-10D					
		1/1/06	1/6/11	7/14/11	7/19/16	1/9/17	1/18/22	1/1/06	1/6/11	7/14/11	7/19/16	1/9/17	1/18/22	1/1/06	1/7/11	7/14/11	7/19/16	1/9/17	1/18/22
1,1-Dichloroethane	5	8.3			5.4			5.1						5.1	5.6				
1,2- Dichloroethane	0.5	1.3	0.84	0.58				0.93	0.66					0.64	0.6	0.56			
1,4-Dichlorobenzene	5	8.1	7.8	8.1		7.6	6.5	14	18	19	9.5	11	12	(4.4)	7.2	9.1	8.7		
Benzene	1	2.3	1.1		1.4			1.8	1.4	1.2				1.7	1.9	1.5		1.6	1.2
cis-1,2-Dichloroethene	6	25	14	8.2				19	14	10	12	8.8	8.2	22	19	14	9.6		7.5
Tetrachloroethene (PCE)	5	30	(4.0)	(4.2)				14	5.4					24	15	15			
Trichloroethene (TCE)	5	39	18	12				21	10	8.9		6.4		33	25	23	7		6.2
Vinyl Chloride	0.5	33	19	10	60	3.5	2.4	30	24	15		9.3	7.9	25	34	21	7.1	38	24

	MCL (ug/L)	JAGW-10E					
		1/1/06	1/7/11	7/13/11	7/19/16	1/9/17	1/18/22
1,1-Dichloroethane	5						
1,2- Dichloroethane	0.5						
1,4-Dichlorobenzene	5						
Benzene	1		1.2	1.2	1.1	1.2	1
cis-1,2-Dichloroethene	6	7.6	12	9.9	12	11	
Tetrachloroethene (PCE)	5	15	13	16			
Trichloroethene (TCE)	5	15	20	22			
Vinyl Chloride	0.5	5.1	19	13	45	30	27

Source: GeoSyntec Consultants

Regulation and Management

The County of San Diego Department of Public Works, Landfill Management Unit manages and maintains the Jamacha and Viejas landfill sites. Although these sites no longer accept solid waste, there are many maintenance issues required to keep them environmentally safe. The County monitors landfill gas, groundwater quality, and maintains the sites to insure the proper flow of surface waters.

The Viejas Landfill is regulated by the Regional Water Quality Control Board San Diego Region under Order 95-24 and by Addendum No. 1 to Order 95-24.

The Jamacha Landfill is regulated by the Regional Water Quality Control Board San Diego Region under Order 94-164 and Cleanup and Abatement Order 99-42.

Recommended Source Water Protection Activities

It is recommended that the SWA continue additional monitoring at the Low Flow Barrier when releases from Loveland Reservoir occur.

Summary of Findings for Landfills

PFAS has been detected in monitoring wells at both landfills. Notably, PFOA was detected above its notification level of 5.1 ng/L at both landfills. PFHxS and PFOS were detected above their respective notification levels in wells downstream of the Jamacha landfill.

Viejas Landfill

- Similar to the previous Update, there were no VOCs detected above their respective drinking water MCLs.
- However, antimony is above its primary MCL of 0.006 mg/L in five monitoring wells.
- Antimony was non-detectable in all biannual samples collected at the Loveland Reservoir, Low Flow Barrier, Sweetwater River Influent, and Sweetwater Reservoir from 2017 to 2021.

Jamacha Landfill

- When comparing VOC levels from 2016/2017 to 2022, VOC levels appear to be stable or decreasing. Vinyl chloride is the VOC most frequently detected in wells above the MCL.
- The number of wells with chloride and TDS levels above their respective secondary MCLs has decreased since the previous WSS update. However, at least half of the monitoring wells still have chloride and TDS levels above their respective secondary MCL.

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RECREATION

Background

Recreational uses in the Upper and Middle Sweetwater watersheds consist primarily of camping, picnicking, hiking, fishing, mountain biking, equestrian trails, and waterplay. Body contact recreation and boating are not allowed in either Sweetwater or Loveland Reservoirs. However, waterplay in the Sweetwater River occurs at the Green Valley campground in Cuyamaca Rancho State Park, as the river flows directly through the campground. Body contact also occurs at the Palo Verde Reservoir, which is upstream of Loveland Reservoir. Three golf courses in the watershed will be discussed in the Developments subsection. Equestrian trails will be covered in the Agriculture subsection.

Seasonal Patterns

All of the recreational uses occur year-round, although camping and waterplay occur primarily from Memorial Day to Labor Day weekend.

Related Constituents

Body contact recreation in general has long been known to be a source of pathogen contamination, resulting partly from personal sanitary conduct and partly from a natural shedding process. Pathogens shed by recreationalists include bacteria, viruses, and protozoa. Moreover, because their origin is human, microorganisms shed by recreationalists are transmittable to other humans.

Occurrence in Watershed

Loveland Reservoir

Recreational uses primarily consist of shoreline fishing and hiking, as boating and body contact recreation are not allowed in Loveland Reservoir. No new facilities have been added over the reporting period.

Staffing shortages, COVID-19 and weather hazards have reduced program operations during the current Update period. Currently, the days/hours of operation are Friday through Monday, from 6am to 6pm in summer, and from 6am to 5pm in winter. Loveland Reservoir is closed on most major holidays. Peak attendance mainly occurs on weekends in the spring. **Table 4-8** shows the number of anglers per year. Trail use for hiking varies daily and seasonally, SWA staff estimate that there are an average of 50 trail users per day. Six portable toilets are located above the Loveland Reservoir high water line and the toilets are serviced weekly Trash receptacles are located along the shoreline and are emptied as needed, and moved with the fluctuation of the water level.

Table 4-8. Annual Angelers at Loveland Reservoir

Year	Anglers
2011	3391
2012	2603
2013	3136
2014	1919
2015	1294
2016	974
2017	1412
2018	2397
2019	2219
2020	1270
2021	2434

Sweetwater Reservoir

Recreational uses at the Sweetwater Reservoir include fishing, hiking, and bird watching. The southern shore of the reservoir opened to the public for fishing in 2004 with the opening of the Sweetwater Reservoir Fishing Facility, which has 2.5 miles of shoreline fishing. No new facilities have been added over the reporting period.

Staffing shortages, COVID-19 and weather hazards have reduced program operations during the current Update period. Currently, the days/hours of operation are Friday through Monday, from 7am to 5pm in summer, and from 7am to 4pm in winter. Sweetwater Reservoir is closed on most major holidays. A fishing license is required, as well as a day-use fee. **Table 4-9** shows the number of anglers per year. Recreation usage for the fishing program has increased over the past five years.

Table 4-9. Annual Angelers at Sweetwater Reservoir Fishing Facility

Year	Anglers
2011	1731
2012	1678
2013	3047
2014	2045
2015	1357
2016	2259
2017	2075
2018	3353
2019	3371
2020	3501
2021	4440

Portions of the Sweetwater watershed are also included in a network of trails used for horseback riding, mountain biking, and hiking. The 5.5-mile Sweetwater Reservoir

Riding and Hiking Trail located on the south side of the reservoir is a County of San Diego trail operated through a revocable license agreement with SWA. The trail is open every day and requires no fee. The number of trail users for the Riding and Hiking Trail is not tracked, however SWA staff estimate that there is an average of 50 trail users (hikers, equestrian, bikers) per day. According to the SWA, the trails are currently not maintained by the County of San Diego for removal of equestrian waste. The Sweetwater Reservoir Riding and Hiking Trail is separate from the Sweetwater Reservoir Fishing Facility, and there are no connections from the Fishing Facility area to the Riding and Hiking Trail.

Nineteen portable toilets located above the high water line serve the Sweetwater Reservoir Fishing Facility. There are no restroom facilities located on the trail.

The County is continuing to evaluate the feasibility of a multi-use trail along the northern perimeter of the Sweetwater Reservoir. This potential trail would connect to the existing 5.5-mile trail and would allow for a 14.1-mile loop trail around the reservoir. Sweetwater Authority submitted a comment letter to the County in September 2013. The main points of the letter were:

- If horses and pets are allowed on the trail, runoff from all segments of the new trail needs to be diverted away from the lake. This would mean an expansion of the existing Urban Runoff Diversion System (URDS) system. Additionally, weekly manure pickup is required.
- If trails are restricted to non-motorized bikes and hiking, the current URDS is sufficient.
- An URDS/Reservoir Monitoring Plan shall be developed to assess bacteriological water quality impacts, with baseline monitoring to be conducted no later than one year prior to trail construction.
- Additional trash receptacles and porta pods are required along the trail.

In response to this letter, a joint Ad Hoc Committee was formed in 2014 between SWA and the County to resolve these issues. This committee has met approximately four times during 2014 to 2017.

In December 2018, the SWA Board adopted Resolution 18-21 (attached) in support of the northern portion of the proposed loop trail. The resolution contains a number of conditions the County must comply with, some highlighted here:

- No portion of the proposed loop trail crosses Sweetwater River other than at an existing or future bridge
- The County reimburses the Authority for any loss of runoff, at the then-current rate of untreated water from the San Diego County Water Authority, that results from activation of the URDS (operation of URDS in divert mode) due to a contaminant from the proposed loop trail that is not addressed pursuant to the terms of the aforementioned agreement between the County and SWA.

- The County enters into a reimbursement agreement with SWA for costs incurred if future County Operations and Maintenance Plans are not implemented per the terms of the agreement.
- No equestrians will be allowed from the Lakeview Staging Area at Segment 5 through Segment 8 of the proposed loop trail.
- Pets (nonequestrian) may be considered at the discretion of SWA's governing Board.

DDW is also requesting an amendment to SWA's existing water permit. As part of the application for the permit amendment, the County will need to prepare a Technical Memorandum and a comprehensive O&M Plan (to include both the existing southside and proposed northside). To date, these items are in the process of being developed by the County.

Final alignment and design of the proposed new loop trail segments on the northside of Sweetwater Reservoir have not been completed. However, SWA is in active negotiations with County's Department of Parks and Recreation to ensure no horses will be allowed on the new northside trail segments and that regular removal of manure and/or pet waste (if pets are allowed) does occur. SWA believes the County DPR will attempt to comply with manure/pet waste removal by passive means, such as having waste bags and waste receptacles available rather than performing a weekly removal by staff. Setback distances are also being discussed, along with mitigative best management practice (BMP) measures for those areas where minimum setback distances are not possible due to spatial/topographical limitations.

Cuyamaca Rancho State Park

The Cuyamaca Rancho State Park has one campground located within the Upper Sweetwater Watershed, the Green Valley Campground. The Green Valley Campground is maintained by the California State Parks and has 81 campsites. There is one recreational vehicle (RV) dump station at the campground and flush toilets. Overall, the Cuyamaca Rancho State Park has 37 septic tanks, although not all are in the watershed.

The Green Valley Horse Camp, located within the Green Valley Campground, is a family horse camping area. The site has 15 equestrian family camp sites that can accommodate up to eight people and two horses.

The Sweetwater River flows through the Green Valley campground, and there is a day use area offering shallow pools and cascades. This area is popular for waterplay during the summer.

Granite Springs campground is a primitive trail campsite, located within the watershed, but away from the Sweetwater River. Annual visitation to the Cuyamaca Rancho State Park and campgrounds is estimated to be 122,000.

Cleveland National Forest

The Cleveland National Forest has no recreational facilities within the watershed.

Palo Verde Lake

The Palo Verde Lake is a 50-acre privately owned lake located in Alpine just upstream of the Loveland Reservoir. It is owned and managed by the Palo Verde Ranch Home Owner's Association. The primary recreational uses are swimming and fishing, and only electric motor boats and row boats are allowed. The lake is not used for drinking water.

Estimated attendance during summer weekends is approximately 50 to 75 people per day (Personal communication, Ed Wortley, Palo Verde Lake, August 2022).

The Palo Verde Lake installs weir boards from April to October 31 to keep the water level stable for recreation. The weir boards are taken out from October 31 to April 1, allowing water to flow freely downstream to Loveland Reservoir. Copper sulfate is applied periodically to control algae.

Private Campgrounds

Oakzanita Springs Park is a privately-owned RV campground located just outside the southern boundary of the Cuyamaca Rancho State Park along Highway 79. Oakzanita Springs Park consists of full hook-up RV spaces, unsewered (power and water only) RV spaces, tent campsites, cabins, public restrooms with showers, laundry facilities, and a swimming pool. Six horse campsites were added in 2011.

The Mar-Tar-Awa RV Camper Park, located at 25 Browns Road in Alpine, is owned by the Viejas Indian Tribe and has camping as well as long-term RV usage. There are 99 hook-up sites and tent camping sites in the park.

Harbison Canyon Estates is a 70-space mobile home and RV Park (50 mobile home lots and 20 RV lots) located in Harbison Canyon. There is no overnight stay for camping.

Related Water Quality Issues and Data Review

Although waterplay does occur in the Upper watershed at the Green Valley campground and the Palo Verde Reservoir, which are both upstream of the Loveland Reservoir, there have been no detects of *Cryptosporidium* or *Giardia* in the Sweetwater Reservoir. Septic systems managed by the Cuyamaca Rancho State Park are regulated by the Regional Water Quality Control Board, San Diego Region (Regional Board) under the statewide Waste Discharge Requirements (WDR) for small domestic wastewater systems Order 2014-0153-DWQ. Under this Order, there are effluent limitations for BOD and TSS. This data is not relevant for this report.

Septic systems for the Oakzanita Springs Park and the Harbison Canyon Estates are regulated by the Regional Board as well. Please refer to the Wastewater subsection for further information.

Regulation and Management

The SWA manages recreation at the Sweetwater and Loveland Reservoirs. According to the permit amendment issued to the SWA and dated July 2011, there are certain conditions regarding recreation that the DDW requires:

- At no time is body contact recreation allowed on either reservoir.
- No changes in recreational activities or location thereof shall be allowed at either reservoir without receiving a permit amendment from DDW.
- Horses shall be prohibited from entering the reservoir or any tributary system within 200 feet of the reservoir shoreline, unless adequate protection is provided via the SWA's URDS.
- Chemical toilet facilities shall be located no more than 500 feet apart at regular intervals along the shoreline and at least 50 feet from the existing water level. These shall be anchored to prevent overturning, and spill containment shall be provided at each portable restroom. They shall be moved to higher ground when the water level rises to maintain the 50-foot setback.
- The toilets shall be checked daily and cleaned daily when the fishing program is open. They shall be emptied when the level reaches within 12 inches of the seat.
- Conveniently located, covered, and anchored refuse containers shall be provided in all areas open for recreation. They shall be located above the high water level, checked daily, and emptied at least weekly.

Regular patrols of the Sweetwater and Loveland Reservoirs are conducted on a daily basis. Occasionally, there is evidence of fence cutting and illegal dumping. Fortunately, illegal dumping does not appear to have impacted reservoir water quality.

The Sweetwater and Loveland Reservoir Fishing Program have rules of use which are provided, respectively, as **Attachments C and D**. **Attachments C and D** also provides additional information about fishing limits and a map.

Source Water Protection Activities

As discussed above, the SWA manages fishing at Loveland Reservoir, as well as the fishing program at Sweetwater Reservoir. Regular patrols of both reservoirs are also conducted.

Summary of Findings for Recreation

- Recreational uses in the Sweetwater and Loveland watershed consist primarily of camping, picnicking, hiking, fishing, mountain biking, equestrian trails, and waterplay. Waterplay occurs at the Green Valley campground in Cuyamaca

Rancho State Park and at Palo Verde Lake. Both of these sites are upstream of Loveland Reservoir.

- Body contact and boating are not allowed at Loveland and Sweetwater Reservoirs. Recreation activities are shoreline fishing, hiking, bird watching, and equestrian trails. Recreation usage at Loveland has decreased over the past five years as a result of reduced operating hours.

- The SWA manages fishing at both Loveland and Sweetwater Reservoirs. Regular patrols of both reservoirs are conducted.

- Although body-contact recreation occurs in the Upper Sweetwater watershed, this does not impact the Sweetwater Reservoir because releases from the Loveland Reservoir do not occur every year. *Cryptosporidium* and *Giardia* were not detected in the Sweetwater Reservoir over the reporting period.

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URBAN RUNOFF

Background

Urban runoff (URO) is a concern in the Upper and Middle Sweetwater watersheds as there are urbanized areas in the watershed, particularly the communities of Rancho San Diego and Spring Valley.

Seasonal Patterns

URO occurs on a year-round basis and includes wet and dry weather discharges. Wet weather runoff results from seasonal storms. Wet weather runoff is of relatively short duration and can have highly variable pollutant concentrations. Because of the high degree of imperviousness, urban areas typically generate higher per acre volumes of runoff than undeveloped or agricultural lands. Dry weather runoff results from activities such as lawn irrigation and car washing.

Related Constituents

Data on urban runoff discharges indicate that the runoff is turbid, a source of TOC, a source of bacteria, a source of nutrients, and a source of other constituents such as pesticides and organic compounds. Generally, the impact is greater during the wet season, immediately following a first-flush event.

Occurrence in Watershed

As there are no incorporated cities within the Upper and Middle Sweetwater watersheds, all of the unincorporated communities are regulated through the County of San Diego. The County of San Diego is the lead permittee for a Phase I Municipal National Pollutant Discharge Elimination System (NPDES) Stormwater Permit (Order No. R9-2013-0001), which was amended by Order No. R9-2015-0100 in November 2015 to extend coverage to Orange County and Riverside County Copermittees The previous stormwater permit for San Diego County was Order No. R9-2007-0001 NPDES No. CAS 0108758.

Like the previous permit, Order No. R9-2015-0001 also requires permittees to identify and prioritize industrial, commercial, construction, and municipal sites that have the potential to discharge pollutants to the Municipal Separate Storm Sewer System (MS4), whether they are permitted or not. Once the number of facilities has been inventoried, the County of San Diego prioritizes the facilities into high, medium, or low threat to water quality based on the following factors:

- Facility compliance history
- Proximity to, and sensitivity of, receiving water bodies
- Proximity to environmentally sensitive areas
- Pollutants generated by the facility are on 303(d) list for receiving water body

- Facility potential to discharge (site design and construction)
- Material and waste handling
- Degree of management oversight

It should be noted that all of the facilities go through a prioritization process by the County annually, which means that the priority of a facility can change. Generally, high priority facilities are inspected once a year and low priority facilities are inspected once every five years.

The County of San Diego, Department of Public Works provided information on industrial and commercial facilities which have the potential to discharge pollutants to the MS4 system above the Sweetwater Reservoir (Paola Garcia-Betancourt, San Diego County Dept. of Public Works, Watershed Protection Program (619) 481-0337) The State Water Resources Control Board's SMARTS database was also queried for industrial facilities in the Middle and Upper watersheds which are covered under the State Water Resources Control Board General Industrial Activities Storm Water Permit**.**

There were a total of 218 commercial facilities, and of the 218 facilities, there were six equestrian related facilities, three pest control businesses, and three golf courses. Commercial facilities are comprised mainly of restaurants, grocery stores, gas stations, and automotive related businesses. There were 25 industrial facilities in the study watershed. Inspection reports were obtained for ten of the industrial sites, the three golf courses and the six equestrian related facilities. Inspection results for industrial sites will be included in this subsection, and results for golf courses are included in the Developments subsection and results for equestrian facilities are included in the Agricultural subsection.

Facilities covered under the General Construction Activity Storm Water Permit were researched but not compiled, as the construction sites are constantly changing from year to year.

Industrial Sources

- As stated earlier, the County of San Diego and the State Water Resources Control Board identified 25 industrial sites as shown in **Figure 4-5. Table 4-10** also summarizes 2017 to 2021 annual inspection results for 10 of the 25 industries. Based on the inspection reports for the 10 industries below, a berm failure at the Robertson's Ready Mix in 2017 was the most notable occurrence as there was an unauthorized release from the property. Other available information contained in the inspection reports about each facility's operation is noted in **Table 4-10**.

2022 Watershed Sanitary Survey

Industrial Sites
Figure 4-5

Data Source: SanGIS/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
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Site No	Site Name	Address	City	Zip Code
1	J&M Keystone	2709 Via Orange Way	Spring Valley	91978
2	Legend Smelting And Recycling Inc	2520 Sweetwater Springs Blvd	Spring Valley	91978
3	Jamacha Point Self Storage LLC	2550 Folex Way	Spring Valley	91978
4	Southern Counties Oil Company A Ca	2780 Via Orange Way Units B C	Spring Valley	91978
5	S&S Carbide Tool Inc	2830 Via Orange Way Unit D	Spring Valley	91945
6	Golden State Metal Finishing	2737 Via Orange Way 104	Spring Valley	91978
7	Marjan Stone	2758 Via Orange Way	Spring Valley	91978
8	Tru Duct Inc	2500 Sweetwater Springs Bl 195	Spring Valley	91978
9	Otay Water Ralph W Chapman Wat	11901 Singer Lane	Spring Valley	91978
10	Jamacha Landfill	11900 Singer Lane	Spring Valley	91978
11	Action Direct Marketing	2513 Folex Way	Spring Valley	91978
12	Repco Sales	2737 Via Orange Way 100	Spring Valley	91978
13	Euramco Safety Inc	2746 Via Orange Way	Spring Valley	91978
14	Fed Ex Company Warehouse	2505 Folex Way	Spring Valley	91977
15	Green Flash Machine	2810 Via Orange Way	Spring Valley	91978
16	Jamacha Rock Quarry	1720 Jamacha Road	El Cajon	92019
17	Robertsons El Cajon Rock Plan	2266 Willow Glen Drive	El Cajon	92019
18	Pixon Company	2733 Via Orange Way	Spring Valley	91978
19	Formalloy Technologies	2830 Via Orange Way	Spring Valley	91978
20	Top Brass Company	2731 Via Orange Way	Spring Valley	91978
21	Mike Curphy Distiller	2731 Via Orange Way	Spring Valley	91978
22	Mike's Metal Works, Inc.	3552 Fowler Canyon Road	Jamul	91935
23	Arctic Containers	18052 Bunny Drive	Jamul	91935
24	Viejas Landfill	7850 Cambell Ranch Roadd	Alpine	91901
25	DIV PRO	391 Galloway Valley Road	Alpine	91901

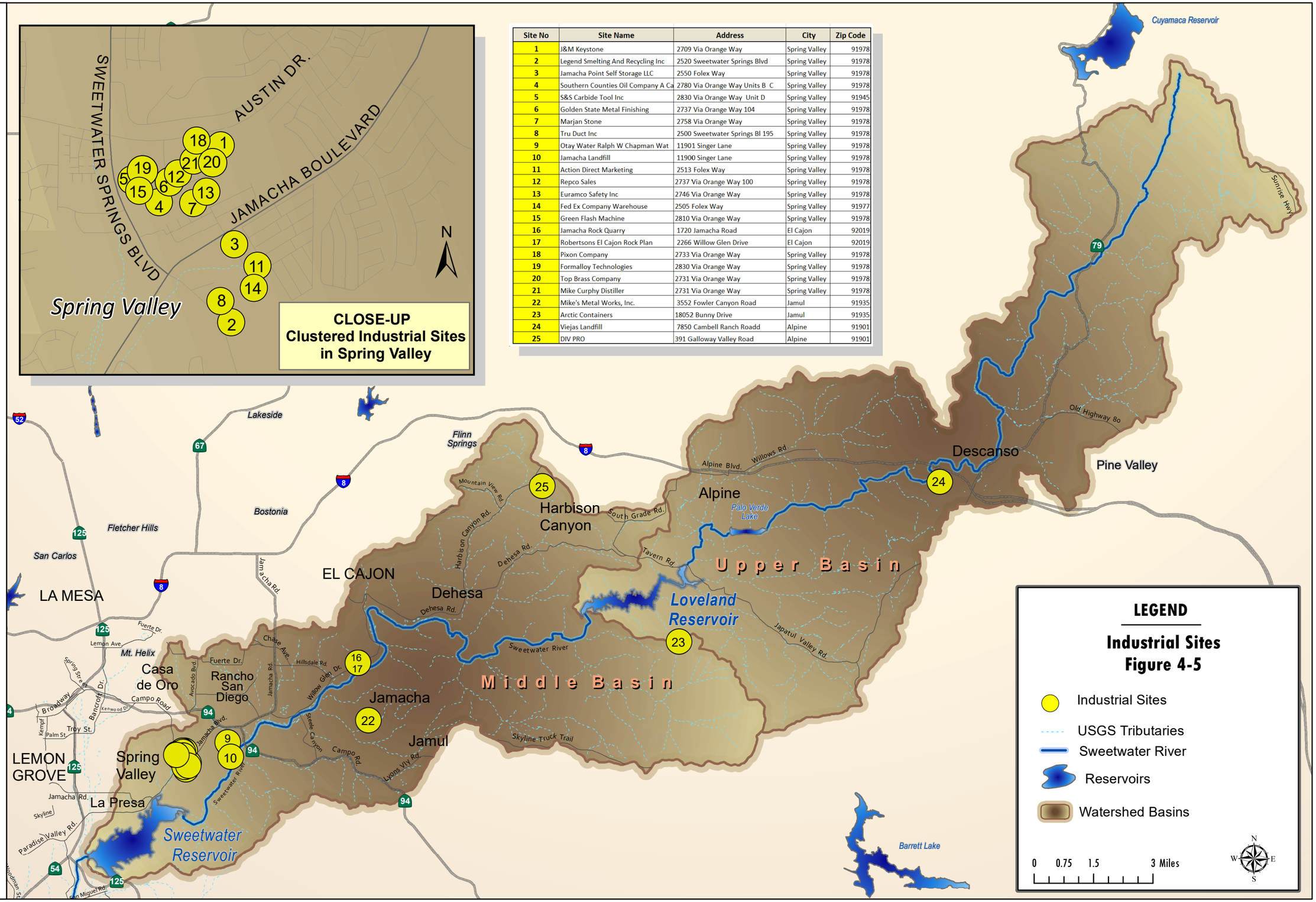


Table 4-10
Industrial Sites within the Sweetwater Watershed

Facility Name	Address	2017 Inspection	2018 Inspection	2019 Inspection	2020 Inspection	2021 Inspection	Notes
Golden State Metal Finishing	2737 Via Orange Way						All industrial operations conducted indoors.
Tru-Duct Inc.	2500 Sweetwater Springs Blvd. Suite 195		PASS		FAIL, corrected. Provide secondary containment for 5 gallon buckets and other liquids stored outside. Cover required for exposed iron materials near dumpster.		Fabrication takes place inside two large buildings. Lot drains to multiple storm drain inlets throughout paved area of facility.
Otay Water Ralph M. Chapman Plant	11901 Singer Lane			PASS			Good housekeeping practices observed at time of 2019 inspection. Regular blowing/sweeping occurs on paved areas. Erosion control measures were implemented throughout the facility.
J. Cloud, Inc.	2094 Willow Glen Drive	PASS	PASS				During 2018 inspection, no discharge was coming from operations of the facility. BMPs were in place and desiltation basins were cleaned.
Robertson's	2266 Willow Glen Road	FAIL; A berm failure was observed from a detention basin. Flow several feet wide was flowing out of berm. The failure of the berm resulted in a release of rock dust laden water.			Complaint received in Feb. 2020. Dilapidated BMPs observed that need to be replaced. Slope erosion and accumulated sediment observed. Required to install effective BMP on failed slope and replace dilapidated BMPS. Corrected in two weeks. PASS in 2020 and 2022 routine inspection.		Per 2022 inspection, stormwater is contained in sized basins at the facility.

Facility Name	Address	2017 Inspection	2018 Inspection	2019 Inspection	2020 Inspection	2021 Inspection	Notes
Jamacha Rock Quarry	1720 Jamacha Road			FAIL; no BMP training			
Mike's Metal Works	3552 Fowler Canyon Rd.				PASS		Primary materials stored are iron/steel and aluminum. Materials are stored outdoors within covered racks. Runoff drains into two detention basins.
Legend Smelting and Recycling	2520 Sweetwater Springs Road	2017; no documentation				PASS	Facility operations and materials storage are indoor.
Hands on Concepts	1330 La Cresta Blvd.					PASS in 2022	All manufacturing (cutting and welding) conducted indoors
DIV PRO	391 Galloway Valley Road					PASS in 2022	Metal Fabrication Shop

Source: https://publicservices.sandiegocounty.gov/CitizenAccess/Default.aspx.

Commercial Sources

The types of commercial facilities identified as having the potential to discharge pollutants to the MS4 system are related to automobile repair, eating and drinking establishments, painting and coating businesses, carpet and furniture cleaning, and landscape businesses. As there were 218 commercial sites, inspection results were not queried.

Agricultural Weights and Measures (AWM)

Nurseries, green houses, cemeteries, and golf courses are listed under the San Diego County Department of Agricultural Weights and Measures inventory. Equestrian related businesses are listed under the San Diego County Department of Public Works inventory. **Table 4-11** and **Attachment A** show all of the equestrian businesses identified by the County, with inspection results included in the Agriculture subsection. **Table 4-12** and **Attachment A** show all the pest control businesses, cemeteries, and golf courses, with inspection results included in the Developments subsection **Figure 4-12** shows the locations of the nurseries.

Table 4-11. Equestrian Facilities in the Sweetwater Watershed

Facility Name	Address	Zip Code
Iron Oak Canyon Ranch	12310 Campo Rd. Spring Valley	91978
Willow Glen Equestrian	2017 Willow Glen Dr. El Cajon	92019
Oakzanita Ranch	11190 Hwy 79 Descanso	91916
Spicer Sandy Creek Ranch	5739 Stallion Oaks Road El Cajon	92019
Fracchiolla Ranch	9018 Vernal Lane Descanso	91916
Stoney Oaks Ranch	1524 Viejas Creek Trail Alpine	91901

See the Developments subsection for further information on golf courses and the subsection on Agriculture for equestrian facilities.

Construction Sources

Due to the number of sites, the total number of construction sites within the Sweetwater watershed was not tabulated.

Related Water Quality Issues and Data Review

The County of San Diego conducts water quality sampling as required for the Phase I Municipal National Pollutant Discharge Elimination System (NPDES) Stormwater Permit (Order No. R9-2015-0100). A number of stations have been monitored over the

reporting period for dry weather, wet weather, bioassessment and long-term receiving water monitoring. Wet weather and long-term receiving water monitoring is conducted in the lower Sweetwater watershed and is not applicable to water tributary to the Sweetwater Reservoir. Additionally, bioassessment monitoring is to assess the biological condition of the stream and physical habitat quality. These bioassessment analysis are not pertinent to drinking water quality. Therefore, this subsection will focus on dry weather monitoring. Dry weather monitoring is conducted to determine which outfalls have transient or persistent flows, investigate and eliminate discharge, and test discharge for pollutants.

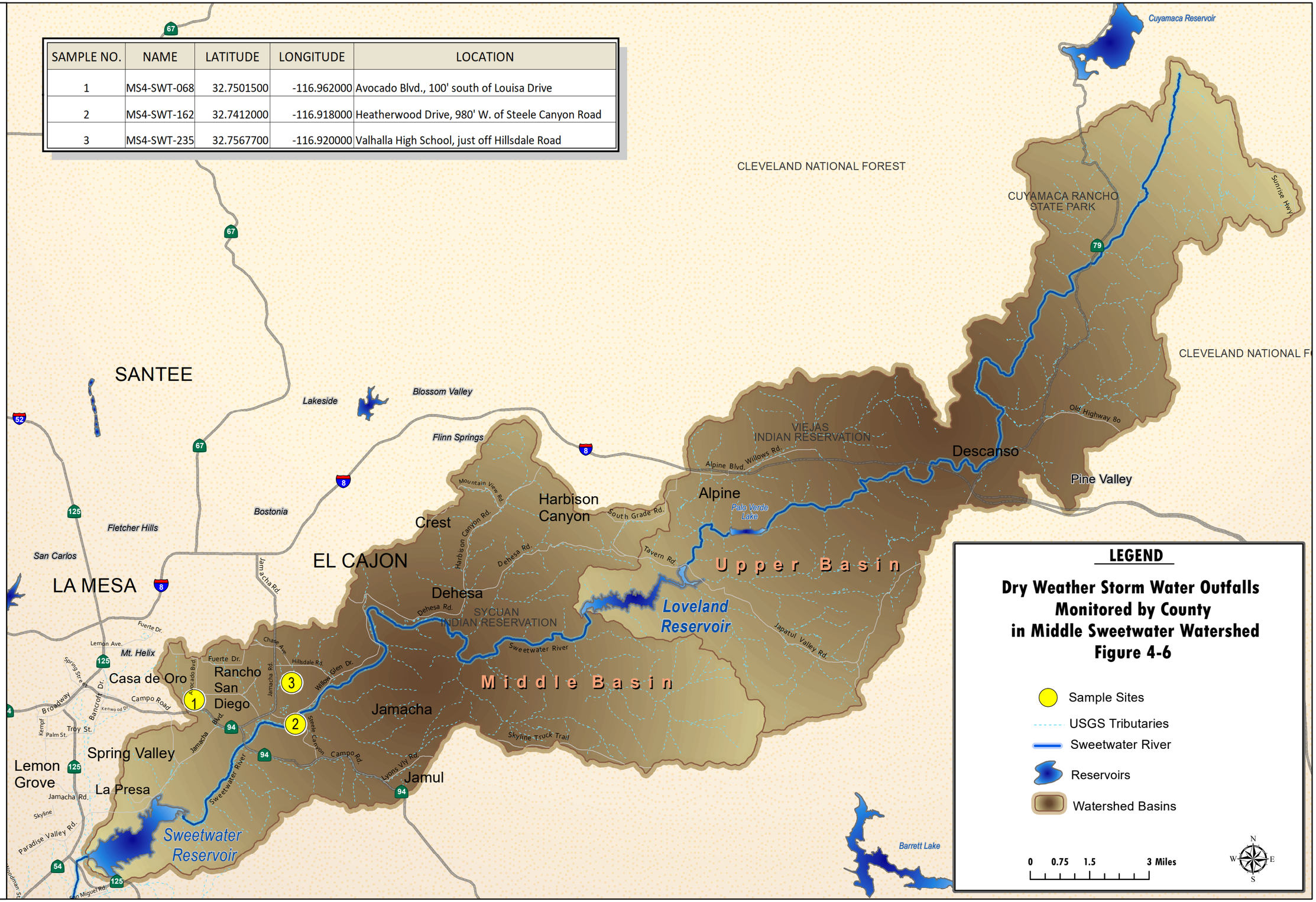
Table 4-12. Golf Courses, Nurseries, Cemeteries and Pest Control Businesses in the Sweetwater Watershed

Facility Name	Address	Zip Code
Singing Hills Memorial Park	2800 Dehesa El Cajon	92019
Cottonwood Golf Course	3121 Willow Glen Dr. El Cajon	92019
Steele Canyon Golf Course	3199 Stonefield Dr. Jamul	91935
Sycuan Resort Golf Course	3007 Dehesa Rd. El Cajon	92019
Rancho San Diego Nursery	2007 Jamacha Road El Cajon	92019
Hummell Farms	2005 Jamacha Road El Cajon	92019
Jamul Nursery	12931 Campo Rd Jamul	91935
Rancho Valhalla Nursery #2	1998 A Chase Avenue El Cajon	92020
Medina Greenhouses	1923 Jamacha Rd. El Cajon	92019
Transplant Growers	1917 Jamacha Rd. El Cajon	92019
No Boundaries Farm LLC	18266 West Boundary Jamul	91935
Aardvark Ant Pest Control	2041 Hidden Springs Ct El Cajon	92019
ASAP Pest Control	611 Ramona Avenue Spring Valley	91977
Gopher B Gone	2573 Tavern Rd. Alpine	91901

As shown in **Figure 4-6**, three outfalls were monitored over the reporting period in the Middle Sweetwater watershed (MS4-068, MS4-162, and MS4-235) during dry weather. In 2020, continuous flow monitoring was conducted from May 1 to September 15th. In 2020, the highest mean flow of all 3 outfalls was 30,995 gallons per minute (gpm) at MS4-068. The mean flow for MS4-162 was 1,649 gpm and the mean flow for MS4-235 was 8,405 gpm.

2022 Watershed Sanitary Survey

SAMPLE NO.	NAME	LATITUDE	LONGITUDE	LOCATION
1	MS4-SWT-068	32.7501500	-116.962000	Avocado Blvd., 100' south of Louisa Drive
2	MS4-SWT-162	32.7412000	-116.918000	Heatherwood Drive, 980' W. of Steele Canyon Road
3	MS4-SWT-235	32.7567700	-116.920000	Valhalla High School, just off Hillsdale Road



LEGEND

Dry Weather Storm Water Outfalls Monitored by County in Middle Sweetwater Watershed Figure 4-6

- Sample Sites
- USGS Tributaries
- Sweetwater River
- Reservoirs
- Watershed Basins

0 0.75 1.5 3 Miles

N W E S

Dry Weather Storm Water Outfalls Monitored by County in Middle Sweetwater Watershed Figure 4-6

Data Source: SanGIS/SANDAG
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The County also investigated the source of dry weather flow for each outfall. No evidence of irrigation runoff was observed throughout the residential area within the MS4-068 outfall drainage area, although heavy continuous flows were observed at the outfall site. Groundwater infiltration is a potential source of the persistent base flow at MS4-068 as the system appears to convey a blue line conveyance. (San Diego Bay WMA WQIP FY 2019-2020 Annual Report, Appendix 4 Monitoring Results and Assessments, January 2021 page 3-31).

The County conducted residential surveys during the early morning and late-night hours for outfalls MS4-162 and MS4-235. Residential over irrigation was observed during early morning hours, and the County provided outreach to individual property owners to eliminate irrigation runoff from their respective properties. Groundwater intrusion (along with residential irrigation runoff) was observed at MS4-235.

MS4-162 had the worst water quality of the three outfalls. As shown in **Table 4-13,** the secondary standards for iron and manganese were exceeded, as well as one sample exceeded the primary MCL for nitrogen and had a high level of phosphorus. MS4-068 had two samples when the secondary MCL for iron was exceeded. MS4-235 had one sample when the secondary MCL for both iron and manganese were exceeded.

Table 4-13 Dry Weather Monitoring for Outfall MS4-162, 2017-2021

Contaminant	Primary MCL, ug/L	Secondary MCL	5/26/2020	8/4/2020	5/24/2021	8/25/2021
Dissolved Cadmium	5		0.000041 J	<0.041	<0.042	<0.042
Dissolved Chromium III	50 (total)		<0.043	0.36	<0.097	0.22
Dissolved Chromium VI	50 (total)		0.14	0.08	0.093	<0.0079
Dissolved Copper	1,300		2.3	2.6	2.4	4.5
Dissolved Oxygen, mg/L			6.49	6.69	6.59	4.66
Enterococcus, MPN/100mL			500	9,000	7,700	90,000
Fecal Coliform, MPN/100mL			3,000	4,000	<2,000	220,000
Total Iron, mg/L		0.3 mg/L	0.21	3.9	2.7	14
Dissolved Lead	15		0.07 J	0.094 J	<0.083	0.14J
Total Manganese, mg/L		0.05 mg/L	0.84	0.15	0.08	0.29
MBAS, mg/L		0.5 mg/L	0.054	0.063	0.12	0.15
Dissolved Nickel	100		1.1	1	1.1 J	1.4 J
pH			8.24	9.98	8.18	8.18
Dissolved Silver		100	<0.000062	<0.062	<0.03	<0.03
Total Nitrogen as N, mg/L	10		5	6.04	14.7	9.72
Total Phosphorus, mg/L			0.53	0.18	1.13	0.92
Turbidity, NTU			2.89	2.5	4.65	18.95
Dissolved Zinc		5000	7.8	2.9 J	2.3 J	350

Regulation and Management

State Water Resources Control Board

The Clean Water Act requires the State Water Resources Control Board and the Regional Boards to regulate the discharge of stormwater from a number of sources. For Phase I, these sources included large (populations greater than 250,000) and medium (population from 100,000 to 250,000) sized municipalities, most industrial sites, and construction activities of one acre or more.

For Phase II, the State Water Resources Control Board adopted a General Permit for the discharge of stormwater from small MS4s to provide permit coverage for smaller municipalities and non-traditional MS4s, such as military bases, public campuses, and prison and hospital complexes.

Stormwater discharges are regulated on a statewide and regional basis. The State Water Resources Control Board issued two General Permits (General Industrial Activities Stormwater Permit and the General Construction Activity Stormwater Permit) to address most of the industrial facilities and construction sites within California. The San Diego Regional Board has also adopted individual stormwater permits for some facilities within their region. The Regional Boards administer the State's General Permits and the Regional Board's individual permits.

As mentioned earlier, the State Water Resources Control Board has issued two general permits. Dischargers whose projects disturb more than one acre of soil or whose projects disturb less than one acre, but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. Construction activities subject to this permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation.

The other General Permit issued by the State Water Resources Control Board is the General Industrial Activities Storm Water Permit (General Industrial Permit). The General Industrial Permit is a NPDES permit that regulates discharges associated with 10 broad categories of industrial activities. The General Industrial Permit requires the implementation of management measures that will achieve the performance standard of best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT). The General Industrial Permit also requires the development of a Storm Water Pollution Prevention Plan (SWPPP) and a monitoring plan. Through the SWPPP, sources of pollutants are identified, and the means to manage the sources to reduce stormwater pollution are described. The General Industrial Permit requires that an annual report be submitted each July 1.

The SWRCB adopted an updated Industrial General Permit in November 2014 (Order 2014-0057-DWQ). Although the previous permit required sampling of stormwater discharges at the facility, the new permit increases the sampling frequency from two

events to four qualifying storm events, with two events to be sampled during the July 31 to December 31 period, and two events during the January 1 to June 30th time period.

Regional Water Quality Control Board

As stated above, the County of San Diego is the lead permittee for a Phase I Municipal NPDES Stormwater Permit (Order No. R9-2013-0001), which was amended by Order No. R9-2015-0100 in November 2015 to extend coverage to Orange County and Riverside County Copermittees The previous stormwater permit for San Diego County was Order No. R9-2007-0001 NPDES No. CAS 0108758.

The new permit requires a Water Quality Improvement Plan (WQIP) for each watershed. The San Diego Bay WQIP was finalized in February 2016. The WQIP identifies numerical goals, strategies and schedules for high priority conditions identified by the Regional Water Quality Control Board and the general public. The San Diego Bay WQIP did not identify any priority conditions to be addressed in the Upper and Middle Sweetwater watersheds.

Similar to the previous storm water permit, San Diego County still has to inspect businesses, detect illicit connections to storm water system, monitor selected outfalls for dry and wet weather, and provide public education and street sweeping.

Sweetwater Authority

In 1985, the County Board of Supervisors approved SWA Resolution 84-8, an established policy of urban runoff protection for the Sweetwater Reservoir watershed. Resolution 84-8 provides for the collection of development fees in a portion of the Sweetwater Reservoir watershed to partially mitigate for cumulative impacts to water quality. The fees contribute toward the construction of the urban runoff diversion system around Sweetwater Reservoir.

Source Water Protection Activities

San Diego County

General

Roads are considered to be among the highest priority sources of pollutants in the unincorporated area of San Diego County. As such, inspections are conducted at regular intervals to assess the need for sweeping. County maintained roads and facilities are swept at the following frequencies:

- Bike Lanes – Monthly
- Corporate Yards – Weekly
- Roads and Streets – Annually (more frequently as needed)

San Diego County also inspects County maintained MS4s to identify the need for cleaning, maintenance, potential illicit connections, and illegal discharges.

Industrial Sources

San Diego County staff conducts annual inspections for the high priority industrial sites. During an inspection, the inspector identifies deficiencies, explains their impacts on urban runoff, and discusses BMP options with the operator, who then must decide which BMPs can be effectively incorporated into the facility's industrial procedures. If enforcement action is needed, the County implements enforcement via Stormwater Inspection Reports and Administrative Citations.

High priority industrial dischargers must prepare a SWPPP, implement the plan, and maintain a copy at the site. High priority industrial facilities shall incorporate the following nonstructural BMPs into the SWPPP:

- BMPs for material handling and storage of significant materials;
- BMPs for non-hazardous waste handling and recycling;
- Employee training programs;
- Good housekeeping practices;
- Preventative maintenance practices;
- Self-inspection and quality assurance practices; and
- Spill response planning.

High priority industrial sites must also develop and implement a monitoring program that collects quantitative stormwater data. Typically, oil/grease, TOC, pH, total suspended solids and specific conductance are collected from four storm events in a year.

Commercial Sources

Similar to industrial sites, annual inspections are conducted by the County for high priority commercial sites. Commercial outreach is conducted to help businesses understand their compliance obligations and to provide useful information on how to comply via presentations, printed materials and websites.

All regulated commercial facilities shall install, implement, and maintain BMPs specified in the County of San Diego Stormwater Standards Manual in the following areas:

- Employee training;
- Stormwater Pollution Prevention Plans;
- Storm Drain Tileage and Signing;
- Annual Review of Facilities and Activities;
- Pollution Prevention;
- Materials and Waste Management;
- Vehicles and Equipment; and
- Outdoor Areas.

Construction Sources

The County of San Diego Watershed Protection, Stormwater Management and Discharge Control Ordinance require the implementation, inspection, and maintenance of temporary BMPs during all phases of construction to reduce or eliminate the impact of discharges from construction site runoff. Pollution prevention practices are required for land disturbance dischargers employing ten or more persons.

Implementation of BMP requirements is achieved through a combination of permit issuance, project approval, field inspection, and public outreach activities. Inspection frequencies depend on whether the site has been classified as a high, medium, or low threat to water quality. The County utilizes warnings, notices of violations, administrative citations, and stop work orders to enforce applicable stormwater requirements.

Other

As stated above, the County performs many activities to keep pollutants out of the MS4 such as street sweeping, maintenance and cleaning of the MS4 system, and identification of illicit discharges and connections.

Sweetwater Authority

In order to address urban runoff in the watershed, the SWA began operating Phase I of the URDS in 1991. Although Phase II was completed in 1998 to capture urban runoff from all areas upstream of the Sweetwater Reservoir, it did not begin operation until June 2005. **Figure 4-7** shows both Phase I and Phase II of the URDS system**.** Phase I, which is designed to capture urban runoff flows from development immediately adjacent to the north side of the Sweetwater Reservoir, consists of four ponds (Gum Tree Cove, Alacena East, Alacena West, and Hansen's Pond) and associated channels. Phase II consists of the Low Flow Barrier and the North Side pond. The capacity of the Low Flow Barrier is 50 cubic feet per second (cfs).

The URDS I is designed to capture first flush storm flows and dry weather urban runoff, and to divert hazardous material spills (including sewage spills) before the water enters the Sweetwater Reservoir. The total capacity of the four ponds is 120 acre-feet.

The four holding ponds act as temporary wetland marshes where pollutants are removed through bioremediation. When the capacity of the ponds is reached, the water is directed downstream to the URDS' pump station. From there, the water is pumped over the Sweetwater Dam and into the Lower Sweetwater River.

Although URDS I changes operation from divert to bypass mode (and vice versa) many times in a given year, Phase II of the URDS system (Low Flow Barrier and North Side Pond) was placed in bypass mode at all times beginning in March 2009 (allowing water

to enter the reservoir), except during initial Loveland Reservoir transfers, the first flush of the first significant rain event of the year, and hazardous materials releases.

Source Water Protection Activities

There are no recommended source water protection activities for urban runoff at this time.

Summary of Findings for Urban Runoff

- The County of San Diego identified 25 industrial sites, six equestrian related facilities, three golf courses, ten nurseries/pest control businesses and numerous commercial facilities and construction sites which have the potential to discharge pollutants to the MS4 system within the Sweetwater watershed.

- A review of inspections for 10 industries from 2017 to 2021 showed that there was only one unauthorized discharge, due to a berm failure at the Robertson's Ready Mix facility.

- Dry weather monitoring of outfalls is conducted by the County to determine which outfalls have transient or persistent flows, investigate and eliminate discharge, and test discharge for pollutants.

- Over the reporting period, three outfalls were monitored in the Middle Sweetwater watershed (MS4-068, MS4-162, and MS4-235) during dry weather. The source of the dry weather flow was either groundwater intrusion or over irrigation in residential areas. The County conducted targeted outreach for individual property owners near MS4-162 and MS4-235 to eliminate irrigation runoff from their respective properties. Of the three outfalls, MS4-162 had the most exceedances of secondary standards for iron, manganese, and one occurrence of high nitrogen and phosphorus.

- Phase I and Phase II of the URDS system constructed by the SWA provide protection against urban runoff as the various URDS ponds have the ability to capture urban runoff and prevent this runoff from entering the Sweetwater Reservoir.

- The County performs many activities to prevent pollutants from entering the MS4 such as street sweeping, maintenance and cleaning of the MS4 system, conducting inspections, and identification of illicit discharges and connections.

2022 Watershed Sanitary Survey

Urban Runoff Diversion System - Site Plan

Figure 4-7

Data Source: SanGIS/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
SanGIS - www.sangis.org - 5201 Ruffin Rd., Suite #, San Diego, CA 92123

WASTEWATER

Background

Various types of wastewater facilities, such as wastewater treatment plants, wastewater pump stations, and septic systems will be discussed in this subsection.

Wastewater is known to contain pathogenic microorganisms. Wastewater treatment plants (WWTP)s remove and/or inactivate some, though not all, of these organisms through various treatment processes. Secondary treatment of domestic sewage is expected to remove 75 to 99 percent of enteric viruses[1], 85 to 99 percent of heterotrophic bacteria[2], and 92[2] percent of *Giardia* cysts.

Seasonal Patterns

There are no wastewater treatment plants which discharge treated effluent directly to the Sweetwater River. The three wastewater treatment plants in the watershed are the Ralph W. Chapman Water Reclamation Facility, and the wastewater plants owned by the Viejas and Sycuan Tribes, which are operated year-round. The Descanso Detention Water Pollution Facility was closed in June 2009.

Related Constituents

Wastewater is a blend of sewage, washwater from showers, kitchens, etc., and any effluent from industrial facilities within the sewer collection system. Potential contaminants of concern in wastewater include microbial pathogens (such as bacteria, viruses, and protozoa), TOC, nutrients, VOCs, and SOCs. Septic tank effluent typically contains high concentrations of TDS, chlorides, phosphates, nitrates, bacteria, and viruses.

Occurrence in Watershed

Wastewater Pump Stations

There are nine wastewater pump stations located in the watershed, as shown in **Table 4-14** and **Attachment A. Table 4-14** contains information on pump station capacities, flow rates, overflow capacities, emergency power, and spills. The County of San Diego Department of Public Works owns and operates the Rancho San Diego, Jamacha, Ramona, Vista del Lago, and the Harbison Canyon pump stations. The Otay Water District owns and operates the Steele Bridge, Hidden Mountain, Calavo Gardens, and Cottonwood Meadows pump stations. It should be noted that the Otay Water District

[1] National Research Council, 1998. Issues in Potable Reuse: The Viability of Augmenting Drinking Water Supplies with Reclaimed Water. National Academy Press.

[2] Chauret, C. et al., 1999. Fate of *Cryptosporidum oocysts*, *Giardia cysts*, and microbial indicators during wastewater treatment and anaerobic sludge digestion. Canadian Journal of Microbiology, 45: 257-262.

also has one lift station in the watershed for recycled water. It is located on Campo Road and is also shown in **Attachment A**. Information for **Table 4-14** was obtained from the Otay Water District and the County of San Diego Department of Public Works for the 2017 Update. The Otay Water District confirmed that there were no changes to **Table 4-14** from the previous reporting period. Despite repeated attempts, updated information from the County of San Diego Department of Public Works was not obtained.

Table 4-14
Wastewater Pump Stations Located in the Upper and Middle Sweetwater Watershed

Agency	Pump Station Name	Capacity, gpm	Design Average and Peak Flow, gpm	Average Daily Flow 2017-2021, gpm	Peak Daily Flow 2017-2021, gpm	Overflow Capacity, gallons	No. Hours of Storage at Design Average Flow	Generator
SD County	Rancho San Diego	4,800	4,000/4,800	648	1528	3,400,000*	14	500 kW diesel generator w/ATS and 300 gallon tank (8 hours)
Otay WD	Steele Bridge**	900	900	900	900	Shared with Rancho San Diego Pump Station	14	50 kW diesel generator with ATS
Otay WD	Hidden Mtn.	100	100/170	100	170	None	None	250KW 240 volts 83 amps diesel with ATS and 145 gallon tank (53 hours)
Otay WD	Calavo Gardens***	350	350	0	350	None	None	None
Otay WD	Cottonwood Meadows	510	510/800	510	800	None	None	40 KW 480 volt 75 amps diesel with ATS and 195 gallon tank (36 hours)
SD County	Jamacha	1,100	210/420	161.8	242	245,000	19	350 kW diesel generator w/ATS and 750 gallon tank (24 hours)
SD County	Ramona	290	100/250	44.9	59	54,000	9	60 kW generator w/ATS with propane (58 hours)
SD County	Vista Del Lago	100	25/86	21*	39	31,000	21	Emergency power hookup for portable generator
SD County	Harbison Canyon	150	28/33	Unknown	Unknown	7,500	4.4	80 kW generator runs on natural gas

*Although the size of the overflow basin is 3,400,000 gallons, the hydraulic grade of the piping will not allow this much volume to be stored without flooding the pump station. In actuality, the useable volume is approximately 850,000 gallons (Personal Communication, Mark Perrett, San Diego County Dept. of Public Works).

**Steele Bridge PS delivers flow to the Ralph W. Chapman Water Reclamation Plant at a fairly constant rate, excess flows in the sewer continue on to the Rancho San Diego PS for continued conveyance through the sewer system.

***Calavo Gardens PS provides supplemental capacity to the Campo Road Sewer, it is not typically run on a daily basis.

According to the Otay Water District, the Steele Bridge Pump Station provides water for the Otay Water District's Ralph W. Chapman Water Reclamation Facility and only pumps water when it is needed for reclamation. Therefore, the pump station flow rate normally does not vary, as the pump station is either on or off. If the Steele Bridge Pump Station is off, the remainder of the wastewater flow goes to the County's Rancho San Diego Pump Station.

The Steele Bridge Pump Station does not have its own overflow detention basin, as stated earlier, any overflow could be handled by the Rancho San Diego Pump Station. The Steele Bridge Pump Station has emergency power, and its high level alarm is connected to the Otay Water District as well as the SWA.

There was one spill from the Ramona Pump Station on January 4, 2019 when 2,681 gallons of raw sewage spilled onto the pavement and into an infiltration basin. The cause of the spill was a pipe structural problem. At the time of the spill, the Perdue WTP was receiving 100 percent imported water. Once the Perdue WTP switched to a 50 percent Sweetwater Reservoir and 50 percent imported water blend, DDW required 1-log of additional inactivation for *Giardia* and viruses from January 15 to January 25, 2019.

The County of San Diego Department of Public Works plans to expand the emergency storage basin at the Jamacha Pump Station in 2023.

Wastewater Treatment Plants and Non-Residential Septic Systems

The Viejas and Sycuan Tribes have wastewater treatment plants which serve their respective casinos and tribal populations. These two wastewater treatment plants and the Ma Tar Awa RV Park, owned by the Viejas Tribe, are not required to have permits with the Regional Board. According to the USEPA, no federal permit is required if the discharge is to land or infiltration basin, only if the discharge is to an injection well (Personal communication, David Smith, NPDES Manager, USEPA).

Information was provided by the Viejas Tribal Council that all wastewater flows from the Viejas Casino, outlet mall, Ma Tar Awa RV park, and reservation are treated at their wastewater treatment plant. There is one remaining septic system on the reservation. The current wastewater treatment plant (WWTP) was constructed in 1998 and employs tertiary treatment. At least 50 percent of the treated effluent from the wastewater plant goes to a reclaimed storage tank, where it is used for irrigation on the reservation. Again, there is no federal regulation pertaining to use of recycled water on tribal land. The remaining treated effluent is sent to infiltration (percolation) basins where it recharges the groundwater. The WWTP was expanded during 2012 to 2016 to accommodate additional flows from the construction of two new hotels. It could not be confirmed if a third hotel was constructed over the 2017 to 2021 reporting period. Additionally, the new flow rate could also not be confirmed, but it is higher than the previous reported flow rate of 100,000 to 133,333 gallons per day (gpd) (Personal communication, Darwin Tewanger, Director of Public Works, Viejas, August 28, 2017).

The Sycuan WWTP was constructed in 1993 and began operation in 1994. Since then, the plant has had two expansions and can treat up to 300,000 gpd of raw sewage. The maximum daily flow is 180,000 gpd (Dexter Wilson Engineering, 2011) and the average flows are about 110,000 to 120,000 gpd (2016 Environmental Impact Report (EIR). As development occurs on the reservation and surrounding properties, the treatment plant can be expanded to accommodate more flow.

Phase 1 of the Sycuan hotel and casino expansion was completed in 2019 and consisted of 10 percent more gaming space, convention venue, two swimming pools, spa, fitness center and a 300-room multi-level hotel. Phase 2 of the expansion consists of a second 300-room hotel which has not been built to date. According to the EIR, the existing WWTP can handle flows from the Phase 1 expansion, but the WWTP will need to be expanded for Phase 2.

Treated effluent from the WWTP is re-used for landscape irrigation and non-potable purposes in the Sycuan Casino and administration building. It is planned to also upgrade the WWTP to recharge groundwater with treated effluent. Similar to the Viejas wastewater system, the Sycuan WWTP is not required to have a permit for use of recycled water on the tribal lands.

As shown in **Table 4-15**, there are two facilities which have WDRs in the watershed.

Table 4-15
Waste Discharge Requirements Permits in the
Upper and Middle Sweetwater Watersheds

Agency Name	Facility Name	Regional Board Order No.
Ben Hankins and Jon Haber	Harbison Canyon Estates (formally Swallows Sun Island Club)	95-19
Otay Water District	Ralph W. Chapman Water Reclamation Facility	2007-0038

The Harbison Canyon Estates is located approximately five miles east of El Cajon in Harbison Canyon. Domestic wastewater is discharged to a total of five septic tank/leach line systems and four septic tank/seepage pit systems. The estimated peak wastewater flow is 15,000 gallons per day.

The Ralph W. Chapman Water Reclamation Facility (RWCWRF) is located in Rancho San Diego and is owned by the Otay Water District. Raw sewage is pumped to the RWCWRF from the Rancho San Diego Pump Station and/or the Steele Canyon Pump Station. The RWCWRF is a tertiary treatment facility with the capacity to treat 1.3 million gallons per day (mgd) of wastewater. All treated effluent is used for recycled water. In 2022, flows were 0.895 mgd.

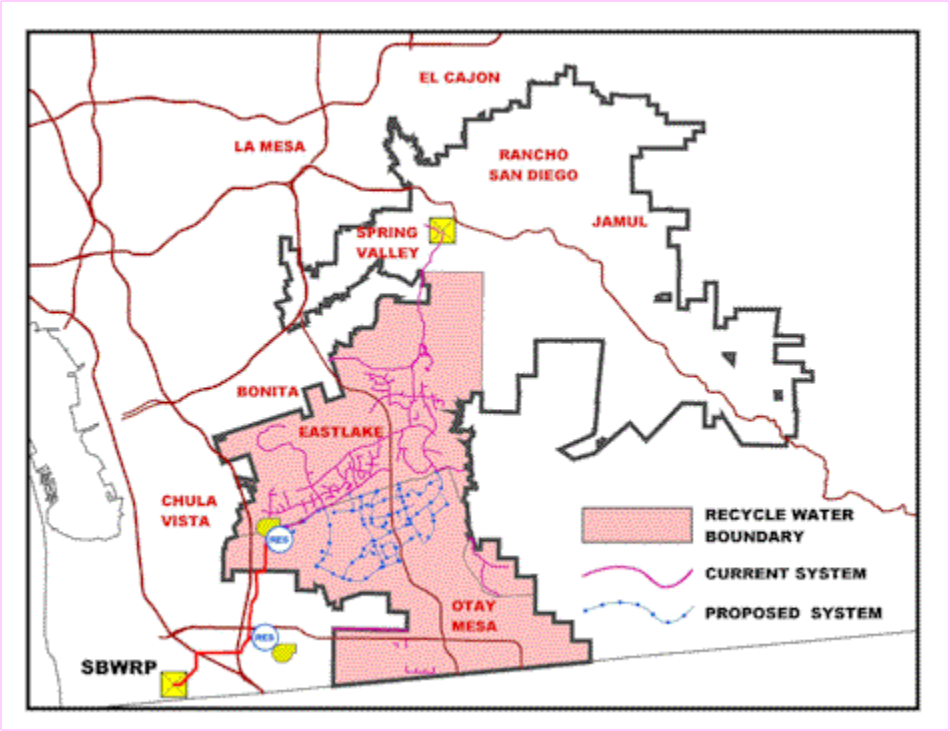
The Otay Water District also receives up to 6 mgd of recycled water from the City of San Diego's South Bay Water Reclamation Plant (SBWRP), located in San Ysidro. The Otay Water District blends disinfected tertiary effluent from the RWCWRF with recycled water from the SBWRP, then distributes to recycled water users located within the hydrologic areas of Telegraph (HAS 909.11), La Nacion (HSA 909.12), Otay Valley (HA 910.20), Tijuana Valley (HA 911.10) and Water Tanks (HSA 911.12), as shown in **Figure 4-8**. The recycled water customer base consists primarily of irrigation at golf courses, schools, parks and open space in the Eastlake, Otay Ranch, Rancho Del Rey and other areas of eastern Chula Vista. Otay Water District installed a recycled water fill station, located near the north end of Hunte Parkway, near the entry of what was previously the Salt Creek Golf Course. However, it is only available to the fire departments, County DPW and City of Chula Vista public works. The cost to dual plumb a fire tanker truck or street sweepers to be able to use recycled water is prohibitive so there has been no usage to date.

Effluent used for recycled water does not impact the Sweetwater Reservoir, as the recycled water users' boundaries are outside the Middle and Upper Sweetwater watersheds. However, the location of the RWCWRF is along the Sweetwater River, approximately three to four miles upstream of the Sweetwater Reservoir. Therefore, concerns with the site are related to runoff, spills, and plant overflow events.

Order R9-2007-0038 is the permit issued by the Regional Board which establishes master reclamation requirements for the production, distribution, and use of recycled water in the Otay Water District service area. The order requires that all wastewater and recycled storage facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year, 24-hour frequency storm. Additionally, all waste treatment, storage, and purveyance facilities shall be protected against 100-year peak stream flows as defined by the San Diego County flood control agency.

The Otay Water District is not required to have wet-weather storage facilities for the RWCWRF because the RWCWRF has the ability to discharge excess treated effluent to the Spring Valley Sanitation District via a bypass pipeline, thereby providing connection to an ocean outfall at all times.

Figure 4-8
Otay Water District Recycled Water Program



Source: Otay Water District website

Residential Septic Systems

There are residential areas within the watershed that have septic systems. These areas were identified in the 1995 Watershed Sanitary Survey as Fuerte Farms, Crest, Dehesa, Harbison Canyon, Lyons Valley, and the Willows. The San Diego Department of Environmental Health and Quality (DEHQ) was able to provide information on septic systems, primarily through querying the number of new permits for septic systems from 2017 to 2021. The San Diego Department of Environmental Health and Quality provided data that there were 142 new septic systems installed from 2017 to 2021 in the study watershed. It should be noted that out of the 142 systems, approximately 70 were located in Alpine, 50 were located in El Cajon, and 15 were located in Descanso. Only six septic systems were located in Spring Valley.

County DEHQ staff stated that more complaints are received regarding older septic systems. This is because the lots in the older areas are smaller, and there is less disposal system area. Older systems are also more difficult to repair and were not designed to today's criteria.

Related Water Quality Issues and Data Review

Facilities must conduct water quality sampling as stated in the respective WDRs, and the data must be submitted in an annual report to the Regional Board. The Regional Board then reviews the data to ensure the limits set in the WDR are not exceeded.

The WDR for the RWCWRF requires extensive monitoring of the discharge, which is outlined in Order No. R9-2007-0038. Turbidity, chlorine contact time and total chlorine residual are monitored continuously. Total coliform is monitored daily, and weekly samples are collected for BOD, TSS, and pH. Monthly samples are collected for TDS, total nitrogen, chloride, MBAS, sulfate, iron, manganese, boron, fluoride, and EC. Annual samples are required for metals, nitrate, nitrite, VOCs, and SVOCs.

No effluent monitoring is currently required for the Harbison Canyon Estates.

Regulation and Management

Wastewater Pump Stations

The County of San Diego Department of Public Works performs checks and alarm testing on a daily and weekly basis to increase the service life and reliability of the equipment at the wastewater pump stations. Stations are linked to the County's main office via radio telemetry, enabling County staff to obtain real-time status from a remote location. All of the stations are equipped with redundant control systems, pumps, and overflow storage basins to increase the ability to avert a spill. All critical stations are equipped with emergency generators to supply power.

County Public Works personnel state that they have circuitry on their pumps to detect a high sewage flow, as well as an electrical amp draw alarm condition that would detect a rupture in the system. The present alarm system used by the County consists of sensing equipment (float switches, bubbler system indicators, etc.) at the pump stations and Motorola radios to communicate with a base station at the Spring Valley Operations Center. This base station communicates with a Supervisory Control and Data Acquisition (SCADA) computer which notifies operators of any alarm conditions via telephone calls to cell phones, home phones, or pagers. According to the County, SWA also has direct notification monitoring (alarm) system installed in the County's pump stations for automatic notification if the pump station has a high level.

For additional regulatory information on wastewater pump stations, see the subsection on Regulation and Management for Spills.

Residential Septic Systems

The County DEHQ does not have the time or resources to inspect septic systems routinely. They inspect systems on a complaint-basis only. Complaints received at DEHQ are entered into the database and assigned to staff for investigation. Investigations that show violations are followed up by staff until the system is returned to compliance. DEHQ receives an average of 82 complaints a year for alleged surfacing sewage within all of San Diego County, with an average of 31 per year found to be justified.

The State Water Board developed a draft State Policy for Water Quality Control for Siting, Design, Operation, and Management of Onsite Wastewater Treatment Systems (OWTS) in September 2011. The State Water Board adopted Resolution No. 2012-0032, and the OWTS policy took effect on May 13, 2013. In February 2015, the County of San Diego Department of Environmental Health Land and Water Quality Division developed a Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems. A brief review of the policy indicates that each septic system will need to be placed into one of four tiers, which will indicate what action is needed. As there are no impaired water bodies in San Diego for nitrogen and pathogens, there are no systems which fall in Tier 3. Refer to the OWTS policy for detailed information on the design requirements for each tier.

- **Tier 0** – These are existing septic systems that are properly functioning and do not require corrective action. No further action is needed.
- **Tier 1** – These are either new or replacement septic system that are considered low risk. These systems must meet Tier 1 design requirements.
- **Tier 2** – This tier is to be defined by local agency management programs, as California has an extreme range of geological and climatic conditions. In other words, local agencies may need to specify certain design requirement to address local conditions, in lieu of the Tier 1 design requirements.
- **Tier 3** – Septic systems within 600 feet of an impaired water body for either nitrogen or pathogens. If there is a total maximum daily load (TMDL), these septic systems will need to be addressed through the TMDL implementation program, or any special provisions by the local management agency. If there is no TMDL or special provisions, new or replacement septic systems must meet the requirements of Tier 3.
- **Tier 4**- Septic systems that require corrective action or are either presently failing or fail at any time, must meet Tier 4 requirements.

The State Water Board released a draft Water Quality Control Policy for Siting, Design, Operation and Maintenance of Onsite Wastewater Treatment Systems in September 2022 for public comment. The policy should be finalized in 2023.

Wastewater Treatment Plants and Non-Residential Septic Systems

As discussed earlier, each of these facilities, except the wastewater treatment plants owned by the Sycuan and Viejas Tribes, is regulated by a WDR for wastewater disposal. Refer to **Table 4-15** for the Regional Board Order No. for each of the facilities.

Source Water Protection Activities

Although spills occur in the watershed and may impact source water quality, SWA has developed communication protocols with Otay Water District and the County of San Diego Department of Public Works for spill notification. Additionally, SWA works with DDW for post-spill monitoring if it is needed, and may implement an additional 1-log of

inactivation for viruses and *Giardia*, if needed. No additional source water protection activities to address wastewater are recommended at this time.

In December 2020, the County of San Diego Department of Public Works began offering a Septic Rebate Program. The goal of the program is to provide financial assistance to have a septic tank pumped and to educate residents on proper septic maintenance. The $100 rebate is available to all residents with a septic system in unincorporated San Diego County on a first-come, first-served basis.

https://www.sandiegocounty.gov/content/sdc/dpw/watersheds/RebatesIncentives/SRP.html

Summary of Findings for Wastewater

- There are no wastewater treatment plants which discharge treated effluent directly to the Sweetwater River.

- There was one spill from the Ramona wastewater pump station in January 2019. Although spills occur in the watershed and may impact source water quality, SWA has developed communication protocols with Otay Water District and the County of San Diego Department of Public Works for spill notification. Additionally, SWA works with DDW for post-spill monitoring if it is needed, and may implement an additional 1-log of inactivation for viruses and *Giardia*, if needed.

- There are two facilities within the watershed that have WDRs; one facility has a septic system, and one facility is a reclamation plant and uses their effluent for irrigation of golf courses, schools, and parks. All use of reclaimed water is outside of the Middle and Upper Sweetwater watersheds.

- There are also two wastewater treatment plants in the watershed owned by the Sycuan and Viejas Tribes. These plants are not regulated by the Regional Board or the USEPA as they discharge to Indian lands.

- The number of new septic systems in the Upper and Middle Sweetwater watersheds continues to grow, with 142 permits issued from 2017 to 2021. It should be noted that out of the 142 systems, approximately 70 were located in Alpine, 50 were located in El Cajon, and 15 were located in Descanso. Only six septic systems were located in Spring Valley.

DEVELOPMENTS

Background

The Upper and Middle Sweetwater watersheds are subject to development which will cumulatively affect the quality of water tributary to, and stored in the Sweetwater and Loveland Reservoirs. In this subsection, a variety of urban projects (both planned and constructed) will be discussed, such as residential developments, commercial developments, and golf courses.

Seasonal Patterns

As stated earlier, urban runoff occurs on a year-round basis and includes wet and dry weather discharges. Wet weather runoff results from seasonal storms. Wet weather runoff is of relatively short duration and can have highly variable pollutant concentrations. Because of the high degree of imperviousness, urban areas typically generate higher per acre volumes of runoff than undeveloped or agricultural lands. Dry weather runoff results from activities such as lawn irrigation and car washing.

Related Constituents

The use of pesticides, herbicides, and fungicides on golf courses can enter surface water through direct application, runoff, and wind transport.

Urban runoff can be a source of TOC, suspended solids, nutrients, metals, bacteria, and other constituents such as pesticides and organic compounds. Generally, the impact is greater during the wet season, immediately following a first flush event.

Occurrence in Watershed

Golf Courses

As mentioned in the 1995 Watershed Sanitary Survey, there are three golf courses within the Middle Sweetwater watershed, as shown in **Attachment A**. The Sweetwater River runs directly through the Cottonwood Golf Course and the Sycuan Resort Golf Course (formally Singing Hills Golf Course). Steele Canyon Golf Course is located in Jamul. The Sycuan Golf Course has three 18-hole courses, Cottonwood Golf Course has two 18-hole courses, and Steele Canyon has three 9-hole courses. It should be noted that the Cottonwood Golf Course is now closed in preparation to commence sand mining operations, pending approval by the County of San Diego.

Related Water Quality Issues and Data Review

Golf Courses

A variety of pesticides and herbicides are used on golf courses to maintain the greens and to keep rodents and pests from burrowing. Pesticide use records were obtained for Steele Canyon Golf Course and Cottonwood Golf Course from the County of San Diego Department of Public Works, Watershed Protection Program (Paola Garcia). **Tables 4-16** and **4-17** summarize pesticide use at each golf course from 2017 through 2021. Records were not available for the Sycuan Golf Course as this facility is on tribal land and not under the County's jurisdiction.

Table 4-16
Pesticides Used at Cottonwood Golf Course, 2017-2021

Product Name	Active Ingredient
Accord SP Herbicide	Glyphosate
Alamo Fungicide	Propiconazole
Banner Maxx	Propiconazole
Banner Maxx II	Propiconazole
Daconil Weather Stik	Chlorothalonil
Docket WS	Chlorothalonil
Dorado	Propiconazole
Drive 75 DF Herbicide	Quinclorac
Fore 80WP Rainshield	Mancozeb
Lontrel Turf and Ornamental	Clopyralid
Manicure 6 Flowable Fungicide	Chlorothalonil
Merit 75 WSP	Imidacloprid
Quali-Pro Chlorothalonil	Chlorothalonil
Quali-Pro Glyphosate	Glyphosate
Riverdale MCPP-P 4 Amine	Dimethylamine salt
SpeedZone Southern Broadleaf Herbicide	2,4-D
Tourney Fungicide	Metconazole
Trimec Broadleaf Herbicide	Dimethylamine salt

Table 4-17
Pesticides Used at Steele Canyon Golf Course, 2017-2021

Chemical Name	Active Ingredient
Acelepryn	Chlorantraniliprole
Appear	Potassium Phosphile
Banner Maxx II	Propiconazole
Barricade 4FL	Prodiamine
Chipco Signature Fungicide	Aluminum tris (o-ethyl phosphonate)
Daconil Action	Chlorothalonil
Daconil Weather Stik	Chlorothalonil
Dupont Provaunt Insecticide	Indoxacarb
Dupont Velista Fungicide	Penthiopyrad
Heritage TL	Azoxystrobin
Mirage Stressgard	Tebuconazole
Monument 75 WSP	Trifloxysulfur-on-sodium
P.C.Q Pelleted Rodent Bait	Diphacinone
Primo Maxx	Trinexapac-ethyl
Prostar 70 WDG Fungicide	Flutolanil
Proxy	Ethephon
Ranger Pro Herbicide	Glyphosate
Specticle Flo	Indaziflam
Specticle Total	Glyphosate and Diquat
Spectro 90 WDG	Chlorothalonil
SpeedZone Broadleaf	2,4-D, 2-ethylhexylester
Tribute Total	Theincarbazone-methyl, Foramsulfuron, Halosulfuron-methyl
Velista	Penthiopyrad
Weevil-cide Tablets	Aluminum Phosphide

It is difficult to assess water quality impacts to the Sweetwater River from the use of pesticides at the golf courses, as the majority of the chemicals currently used are not required to be monitored for drinking water. No SOCs or VOCs were detected above the drinking water DLRs for the Sweetwater Reservoir or the Low Flow Barrier from 2017 to 2021, with the exception of one isolated detection of diquat at 0.4 µg/L and one isolated detection of paraquat at 4.2 µg/L in June 2021 in Sweetwater Reservoir. Sweetwater Reservoir was re-sampled for diquat and paraquat and both were not detected.

Regulation and Management

County of San Diego

Golf Courses

Since 2001, the San Diego County AWM Agricultural Water Quality Program has been responsible for overseeing stormwater compliance at agricultural businesses that are classified as high priority commercial sites. These include golf courses and cemeteries. Nurseries and greenhouses, equestrian facilities, and pest control businesses are discussed in the Agricultural Section. Equestrian related businesses are now regulated by the San Diego County Department of Public Works.

Water quality inspection records were reviewed for all of the golf courses for reports of noncompliance from 2017 to 2021. The Sycuan Resort Golf Course had no violations in 2016 when it was last inspected by the County. According to San Diego County AWM, the Sycuan golf course is not under County jurisdiction since it became part of the reservation in 2014. The Singing Hills Memorial Park was inspected in 2020 and did not have any violations. There have been no pesticides used at Singing Hills Memorial Park since 2012. The Cottonwood Golf Course was inspected in 2019 and the Steele Canyon Golf Course was inspected in 2022; both had no violations.

The County of San Diego AWM Pesticide Regulatory Program is the enforcement program for administration of state pesticide laws in the County of San Diego. The Pesticide Regulatory Program ensures that pesticides are used in an appropriate and responsible manner to protect the environment, the public, and employees of businesses that handle pesticides. The Pesticide Regulatory Program conducts pesticide monitoring inspections at all golf courses.

General Development

The County of San Diego Board of Supervisors Policy A-106, Section II.9 states: “The Board shall use its powers to assure that local water supplies and distribution facilities are protected. San Diego County has a number of dams and reservoirs which store local and imported water. The quality of water in some of these reservoirs is threatened by encroaching urban developments. The Board shall not approve a subdivision map or development unless adequate provisions are made to protect water supply reservoirs from urban runoff.”

Sweetwater Authority

The SWA began tracking development in the Sweetwater Reservoir watershed in the late 1970s. More than 5,400 cases have been reviewed by SWA staff since 1978.

In 1985, the County Board of Supervisors approved SWA Resolution 84-8, an established policy of urban runoff protection for the Sweetwater Reservoir watershed. Resolution 84-8 provides for the collection of development fees in a portion of the Sweetwater Reservoir watershed to partially mitigate for cumulative impacts to water quality. The fees contribute towards the construction of the urban runoff diversion system around Sweetwater Reservoir.

In 1993, the Governing Board of the SWA passed Resolution 93-8 which directs staff to review development activities in the entire watershed of the Sweetwater River and to comment to agencies which have planning jurisdiction within the watershed. Comments focus on potential impacts to water quality and the need to identify those water quality impacts.

SWA coordinates with the County of San Diego Department of Planning and Land Use (DPLU) staff on discretionary applications for development projects located within the fee collection area. Additionally, comments are provided on development proposals when there are concerns relating to impacts to surface water and/or groundwater that may result from high risk or very high risk potentially contaminating activities.

Source Water Protection Activities

Over the reporting period, the SWA has written numerous comment letters to the DPLU on developments proposed in the Sweetwater River watershed. The following is a sampling of developments for which the SWA submitted comment letters. A project summary and the items of concern identified by the SWA are provided.

Bluegill Storage Project (Battery Energy Storage System)

In a letter dated December 4, 2020, SWA reviewed a proposal from sPower to install a Battery Energy Storage System on 4 to 5 acres within a 10.5 acre property owned by SWA. The facility would be comprised of several pad mounted battery energy storage containers. sPower proposed either leasing the property for 35 years or purchasing the property from SWA. SWA staff determined that the project is a high to very high risk potentially contaminating activity. SWA proposed mitigation measures such as secondary containment around the batteries, best management practices for site runoff, and implementation of a Hazardous Materials Management Plan and an Industrial Storm Water Pollution Prevention Plan. This project did not move forward.

Hester's Granite Quarry Expansion Project

In a letter dated October 6, 2020, SWA reviewed the Reclamation Plan Amendment for the Hester's Granite Quarry Project. The project will expand mining operations by 7 acres and conduct restoration of previously mined areas. SWA staff determined that the project is a high to very high risk potentially contaminating activity, and is particularly concerned about stormwater runoff and overflow from the existing retention basin on Willow Glen Drive. SWA has documented runoff and mudflows which originated from the existing mining site and entered into storm drains that discharge into the Sweetwater River. In the letter, SWA requested temporary and permanent erosion and sediment control management practices to be put in place to accommodate stormwater flows. Additionally, SWA requested a list of potential contaminant substances and materials to be used during the expansion.

A meeting was held with the SWA in March 2021 where adjustments to onsite best management practices were outlined, in order to address previous discharges from the mining site. A formal response was provided in September 2022 which states that the proposed expansion will not introduce new contaminant substances or materials to the site. Additionally, the proposed expansion will not substantially alter existing drainage patterns and storm runoff is expected to flow at a slightly lower rate than current flows. The proposed operations will also be subject to Regional Water Quality Control Board regulations, an Industrial General Permit, and a Storm Water Pollution Prevention Plan.

Cottonwood Sand Mine Project

SWA has written comment letters for this project dated December 13, 2018, September 27, 2019 and most recently on February 24, 2022. The Cottonwood Sand Mine Project would convert two golf courses located within the floodplain of the Sweetwater River to sand mining operations that would impact approximately 214 acres of land over a period of 10 years. Overall, the most recent comment letter expressed concern that the 2019 Initial Study and the 2021 Draft Environmental Impact Report (DEIR) have not addressed many of the comments provided by SWA in its 2018 letter. Examples of concerns not addressed include the following:

- Impacts to water transfers resulting from mining operations and widening of the floodplain
- Consideration of water transfers in the initial hydrology and water quality analysis
- Potential for pollution at Sweetwater Reservoir
- Request for identification of pollutants at the mining site
- Consideration of atmospheric river events that may not be properly mitigated with only the standard construction and/or industrial BMPs
- Sources of fill for mined areas
- Potential impacts to water quality from proposed conveyor belt
- Potential additional water treatment expenses at the Perdue WTP that may result in additional risk of pollution.

The most recent letter also raises a number of concerns that the DEIR fails to identify measures to mitigate potential impacts associated with stormwater pollution. The letter also states that the SWA is not against or in favor of mining operations upstream of Sweetwater Reservoir, as long as these operations do not result in impacts to water quality or SWA's operations. SWA feels that the current DEIR does not provide the necessary mitigation measures to protect SWA's water transfers.

Recommended Source Water Protection Activities

It is recommended that the SWA continue to review and track developments within the watershed. In order to protect the source water quality of the Sweetwater River, the SWA should continue to provide comment letters to the County of San Diego on developments that could cause impacts to surface water and/or groundwater from high risk or very high risk PCAs. SWA may also consider requesting a copy of the Storm Water Pollution Prevention Plan when available for the Hester's Granite Quarry Project.

Summary of Findings for Developments

- There are a variety of commercial, industrial and residential developments occurring in the watershed that may impact source water quality.

- The three golf courses in the watershed are of primary concern due to the use of pesticides and their proximity to the Sweetwater River. The Sweetwater River runs directly through the Sycuan and Cottonwood golf courses.

- The largest development proposed over the reporting period is the Cottonwood Sand Mining Project which would impact approximately 214 acres of land over a period of 10 years. SWA has submitted three comment letters to the County regarding this project, with many serious concerns remaining unaddressed.

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HOMELESS ENCAMPMENTS

Background

The presence of homeless individuals in the watershed has been an on-going issue since 2002. One of the largest encampments occurred under the Steele Canyon Bridge in the fall of 2006, with an estimated 20 to 30 homeless people. The encampments become littered with debris, garbage, and sewage.

Seasonal Patterns

This is a storm source with the principal concern being wash off caused by rain runoff that may pick up waste and associated contaminants from the camps.

Occurrence in Watershed

There have been smaller encampments in the past five years as United States Fish and Wildlife Service (USFWS) staff regularly patrol key areas, such as the Steele Canyon Bridge and Steele Canyon Creek. New campers continue to occur, but are quickly detected due to regular surveillance by USFWS law enforcement and Refuge staff. Refuge staff confirmed that there are currently individuals camping near the Cottonwood Golf Course adjacent to the Refuge, and some of that spills into the Refuge (email communication, Jill Terp, USFWS, September 2022).

Related Water Quality Issues and Data Review

Illegal camps are of potential concern as a source of fecal waste. Additionally, there are body contact concerns from bathing in the Sweetwater River.

Sweetwater Reservoir was monitored quarterly from November 2018 to November 2021 for *Cryptosporidium* and *Giardia*, and out of the 13 samples, there were no detects of *Cryptosporidium* or *Giardia* in the Sweetwater Reservoir.

Regulation and Management

Management consists of local efforts only; there is no particular state regulatory program with respect to pollution control. The USFWS stated that once an encampment is found, a verbal notice to leave is issued. Refuge staff then follow-up in a few weeks. If the individual(s) is still present at that time, USFWS staff will move the individual with the assistance of the San Diego County Sheriff's Department. If any items are left, the areas are cleaned up by Refuge staff or a contractor is hired to do the removal.

Source Water Protection Activities

In addition to regular patrolling, USFWS staff also posts No Camping signs, repairs fences, and works with the Sheriff's Department and local security at Cuyamaca College and the Rancho San Diego shopping center.

Summary of Findings for Homeless Encampments

- The presence of homeless individuals in the San Diego Wildlife Refuge has been an ongoing issue since at least 2002.

- There have been smaller encampments in the past five years as USFWS staff regularly patrols key areas, such as the Steele Canyon Bridge and Steele Canyon Creek.

- USFWS will continue to address homeless encampments on Refuge-owned lands as an on-going law enforcement and maintenance issue.

AGRICULTURE

Background

There are a variety of agricultural-related activities within the watershed, including commercial equestrian facilities, crops, and nurseries.

Seasonal Patterns

Agricultural operations are most likely to impact source water quality during and after storms because runoff can carry manure, sediment, and pesticide residuals into surface waters.

Related Constituents

Horse waste including manure, urine, and soiled bedding can carry pathogens, nutrients, and oxygen-demanding substances.

Giardia and *Cryptosporidium* can infect equines but have not been found at significant levels (<9% prevalence) based on several studies done in the United States and Poland. A 1997 pilot study demonstrated that none of 91 horses used for back country recreation in California were positive for *Cryptosporidium parvum* or *Giardia duodenalis* (Johnson, 1997). A 1998 survey on trail horses utilizing public trails in Colorado found that 0.3% had detectable concentrations of *Cryptosporidium parvum*, and 0.7% had detectable concentrations of *Giardia* (Forde, 1998). Fecal specimens from 305 horses and mules used as packstock were examined for *Cryptosporidium parvum* (Atwill, 1996). Although 4.6% (14/305) of packstock were shedding *Giardia duodenalis* cysts, none of the horses had detectable *Cryptosporidium parvum* oocysts. A study conducted in Poland found that the prevalence of *Cryptosporidium* infection in horses was 9.4% (Majewska, 1999). Another study conducted in New York in 2009 found that out of 349 foals, 7.4% were positive for *Cryptosporidium* (Burton, 2010).

Nurseries and agricultural crops can impact water quality through their use of fertilizers and pesticides.

Occurrence in Watershed

Equestrian Facilities

There are six equestrian facilities within the watershed, as shown in **Attachment A** and **Table 4-18**. Unfortunately, the current inspection reports **(Table 4-19)** did not contain information on the number of horses currently on-site for each facility.

Iron Oak Canyon Ranch (previously Bright Valley Farms) is located at 12310 Campo Road in Rancho San Diego, about one-half mile from the Sweetwater River. The facility is for boarding and riding lessons. There are no horse rentals or guided trail rides.

However, the ranch has an access point to trails through the San Diego National Wildlife Refuge. Previously, Bright Valley Farms had approximately 150 horses on-site, with 80 horses boarded and 70 horses owned. There are corrals, pastures, stables, rings, and trails.

Table 4-18. Equestrian Facilities in the Sweetwater Watershed

Facility Name	Address	Zip Code
Iron Oak Canyon Ranch	12310 Campo Rd. Spring Valley	91978
Willow Glen Equestrian	2017 Willow Glen Dr. El Cajon	92019
Oakzanita Ranch	11190 Hwy 79 Descanso	91916
Spicer Sandy Creek Ranch	5739 Stallion Oaks Road El Cajon	92019
Fracchiolla Ranch	9018 Vernal Lane Descanso	91916
Stoney Oaks Ranch	1524 Viejas Creek Trail Alpine	91901

Willow Glen Equestrian Center is a 17-acre boarding property located at 2017 Willow Glen Drive in El Cajon. The center is designed for boarding, training and showing horses. The facility no longer conducts guided trail rides. According to the County of San Diego's stormwater inspection reports, the facility is well maintained and the stables are cleaned daily. Manure is collected regularly by a commercial hauler.

Spicer Sandy Creek Ranch is small boarding facility located at 5739 Stallion Oaks Road in El Cajon. According to the County of San Diego's 2021 stormwater inspection report, manure is stored in a pile near the entrance and has a liner underneath.

Oakzanita Ranch is located at 11190 Hwy 79 in Descanso. This is a boarding facility, with access to trails in Cuyamaca Rancho State Park. According to the County of San Diego's stormwater inspection reports, the facility is well maintained and manure is stored outside.

Stoney Oaks Ranch (formally Tarra Oaks Ranch) is located at 1524 Viejas Creek Trail in Alpine. According to the County of San Diego's stormwater inspection reports, the facility is well maintained.

Fracchiolla Ranch is located at 9018 Vernal Lane in Descanso. According to the County of San Diego's 2021 stormwater inspection report, some deficiencies were observed and the facility was asked to cover or protect storm drain inlets. Manure is left in the grazing area and amended with soil.

Table 4-19 Inspection Reports for Equestrian Facilities in Watershed

Record Name	Address	2017 INSPECTION	2021 INSPECTION	2022 INSPECTION
Iron Oak Canyon Ranch (formally Bright Valley Farms)			PASS	
Stoney Oaks Ranch (formally Tarra Oaks)	1524 VIEJAS CREEK TRL ALPINE, CA 91901			PASS; Drainage flows east to Viejas Creek Trail then north to small creek in wooded area just east of house.
FRACCHIOLLA RANCH	9018 VERNAL LN DESCANSO, CA 91916		FAIL (4/8/2021); Deficiencies observed. Storm drain inlets must be covered or protected from pollutant entry. PASS (5/27/2021) Deficiencies corrected. Manure is left out in grazing area and is amended with soil. Horses are washed at the barn; with washwater draining to an area to infiltrate or evaporate. Sheet flow moves east and eventually meets Sweetwater River.	
WILLOW GLEN EQUESTRIAN	2017 WILLOW GLEN DR EL CAJON, CA 92019	PASS; Facility is well maintained. Horse stables are cleaned on a daily basis. Manure bin is emptied by hauler.		PASS; Sawdust and manure stored in piles on south side of facility. Flow drains south off property into natural channel.
OAKZANITA RANCH	11190 HIGHWAY 79 DESCANSO, CA 91916		PASS; Manure is stored outside west of the tack room, on top of the hill.	
SPICER SANDY CREEK RANCH	5739 STALLION OAKS RD, EL CAJON, CA 92019		PASS;Manure pile is stored near entrance and has a liner underneath. A dry creek cuts through the center of the property which during a rain event would eventually discharge into Sweetwater River.	

Equestrian Trails

There are a number of user-created trails within the San Diego National Wildlife Refuge, as well as the County's Sweetwater Loop and River Trail. It should be noted that the SWA's 5.5-mile Riding and Biking Trail is the portion of the County's Sweetwater Loop and River Trail which is on the south side of the Sweetwater Reservoir. Manure is not removed from the trails on a regular basis (Personal Communication, Jill Terp, USFWS). However, according to USFWS staff, manure could be removed as part of a future trails program described below.

The USFWS completed a final Comprehensive Conservation Plan (CCP) in May 2017 which will guide the management of fish, wildlife, plants, habitats, and public uses in the San Diego National Wildlife Refuge over the next 15 years. SWA staff provided comments on the draft CCP to the USFWS in a letter dated September 2014. Some of the main comments were:

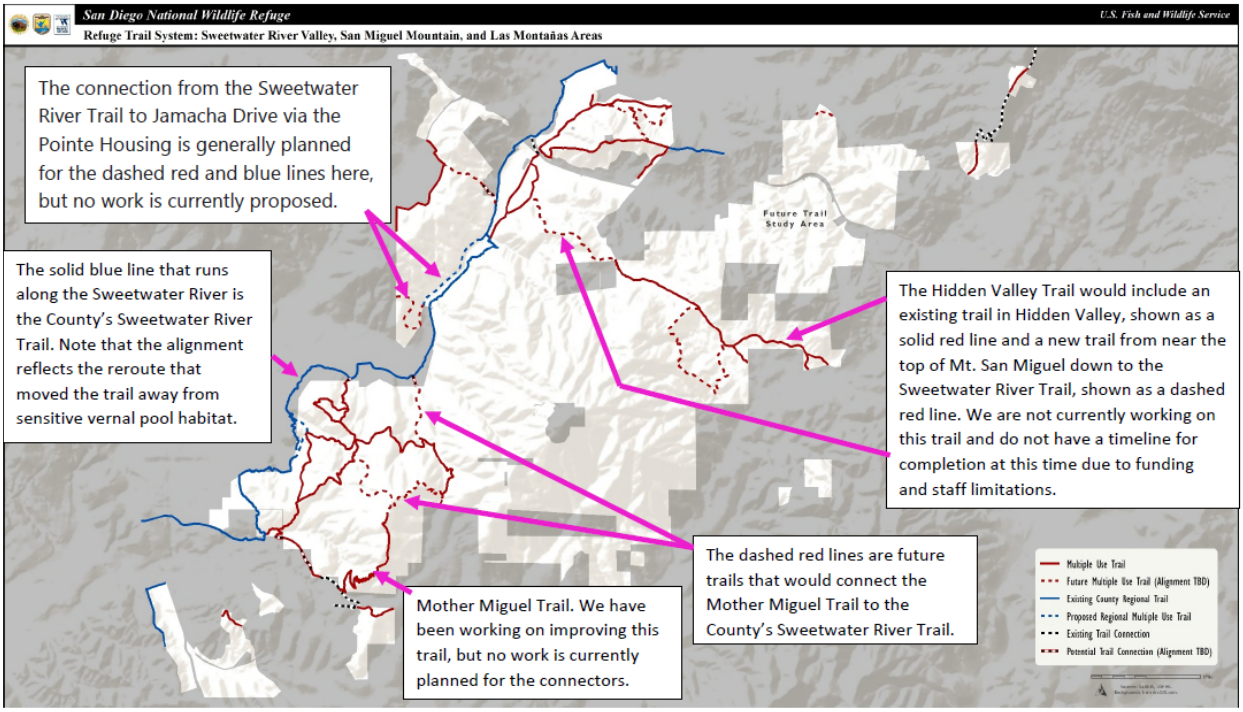
- SWA requests access to the Pesticide Use Proposal System database for information on current or proposed pesticide use on Refuge lands adjacent to the Sweetwater River and Reservoir. Additionally, SWA requested an annual summary of pesticide/herbicide use.
- The CCP concludes that ongoing equestrian use on some Refuge trails is not expected to result in significant impacts to water quality on the Refuge or downstream within Sweetwater Reservoir. SWA strongly disagrees with this statement.
- For proposed trail realignments, SWA recommends realignments of existing trails located within a 200 foot buffer of Sweetwater Reservoir, per DDW standards.
- SWA also recommends mandatory manure clean-up on the Refuge, to be performed on a weekly basis at a minimum.

The Final CCP selected modified Alternative D for future planning, operations and management of the Refuge. The areas impacted by modified Alternative D which is in closest proximity to the Sweetwater River and Reservoir are near the Sweetwater River Bridge, Old Steele Bridge and near San Miguel Mountain. **Figure 4-9** shows current trails in solid lines, and future trails as dashed lines. (The solid blue line is the existing County Regional Trail, and the solid red line represents existing trails in the Refuge) Several new trail segments are proposed:

- Sustainable trail between Hidden Valley and the Sweetwater River Trail
- Trail from Mother Miguel Mountain to Sweetwater River Trail
- Trail connection from the Sweetwater River Trail to Jamacha Drive via the Pointe housing.

Although these new trail segments are proposed, no work is being completed at this time. Further explanatory text provided by the USFWS is provided in **Figure 4-9.**

Figure 4-9 Current and Future Trails on the Refuge



As shown in **Figure 4-10,** the CCP mentions a permanent surface under the Old Steele Bridge, or undercrossing, for hikers and bikers to use, which will prevent siltation and allow better access to the trail. The undercrossing would be along the east side of the Sweetwater River near Highway 94 Bridge. This would permit trail users to safely access Refuge trails on either side of Highway 94. There is currently some trail use occurring under the bridge to gain access to the trails to the north, but there is no formal trail segment. As a result, impacts to vegetation and water quality are occurring within the Sweetwater River. As this segment of the trail is not on the Refuge, San Diego County would have to be the lead agency for the undercrossing. In addition, the CCP includes a proposal to develop a staging area/parking lot off Proctor Valley Road to access Hidden Valley Area as shown in **Figure 4-11**. However, no funding is currently available for this staging area. Finally, a staging area just east of the Old Steele Bridge (near Millar Ranch Road) was completed in April 2021.

Figure 4-10 Location of Future Overcrossing at Highway 94

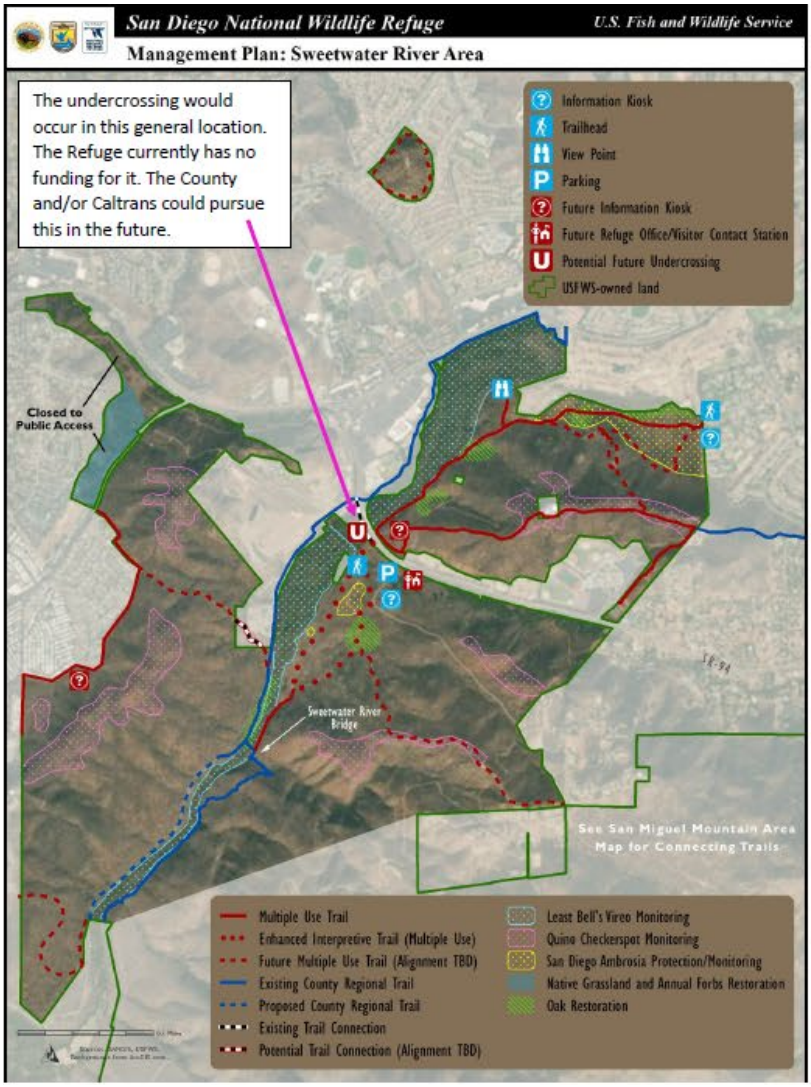
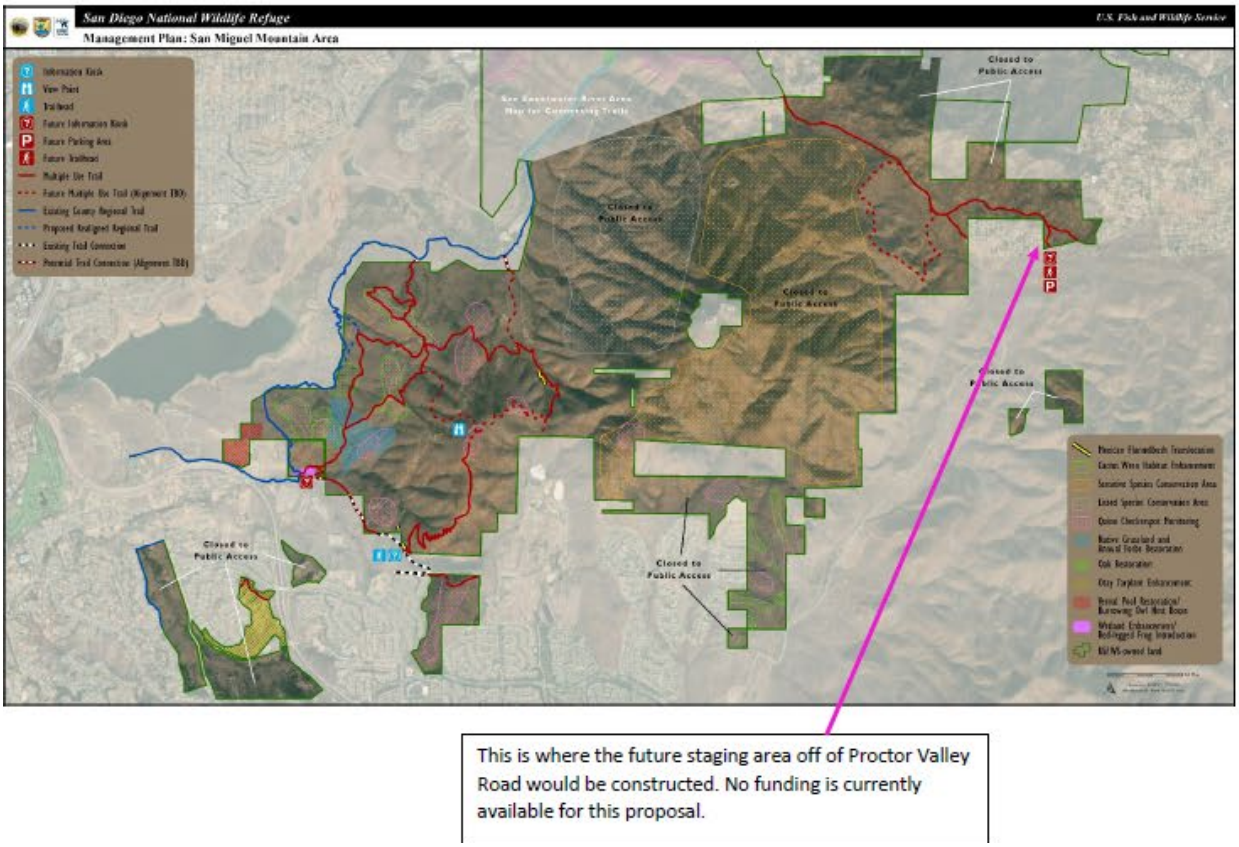


Figure 4-11 Location of Future Staging Area off Proctor Valley Road



Under modified Alternative D, leashed dogs would be permitted on all Refuge Trails designated as multiple use, provided they are kept on a leash and all waste is picked up and carried offsite. The Refuge has installed dog waste stations in an effort to have owners pick up dog waste. Dogs would not be permitted on hiking-only trails. Horses would be allowed on multiple use trails. The new staging area off Millar Ranch Road requires manure cleanup.

The Final CCP also states that BMPs will be implemented on equestrian trails to minimize impact to waterways. According to Refuge staff, these BMPs include 1) establishing a volunteer manure cleanup program on the Refuge and 2) not allowing horses to eliminate in or adjacent to watercourses. According to Adda Quinn of EnviroHorse, equestrians are being educated not to allow their animals to eliminate during stream crossings and to avoid stopping in the watercourse while making a crossing.

Crops and Nurseries

On November 9, 2016 the San Diego Regional Water Quality Control Board (San Diego Water Board) adopted the General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region (Ag Order). Based on this order, the State Water Resources Control Board's Geotracker database was queried to determine the number of growers in the Sweetwater watershed, as shown in **Table 4-20** and **Figure 4-12**.

Table 4-20. Growers Enrolled in Agriculture Order within Middle and Upper Sweetwater Watershed, as of August 2022

Record Name	Address	City	Zip	Primary Parcel	Business Type
Junge Avocados	1095 SINGING RIDGE RD	EL CAJON	92019	515-082-46-00	Grove/Vineyard
Geroche #1	11780 SHADOW VALLEY RD	EL CAJON	92020	498-200-06-00	Grove/Vineyard
Geroche #2	1520 VISTA VEREDA	EL CAJON	92019	517-111-59-00	Grove/Vineyard
Anderson Hill	11668 VERNETTE CT	EL CAJON	92020	498-172-04-00	Grove/Vineyard
Outback Farm	355 AL BAHR RD	EL CAJON	92021	510-010-10-00	Grove/Vineyard
Papa's Garden	3650 CARVEACRE RD	ALPINE	91901	524-160-21-00	Grove/Vineyard
Cuyamaca College	12110 CUYAMACA COLLEGE DR WEST	EL CAJON	92019	506-020-31-00	Grove/Vineyard
Walther, James	3871 ALTA LOMA CT	JAMUL	91935	519-140-40-00	Grove/Vineyard
Willoughby, Leslie	3898 HIDDEN TRAIL DR	JAMUL	91935	519-311-15-00	Grove/Vineyard
El Capitan High School FFA #2	9320 MAGGIO DR	DESCANSO	91916	408-080-68-00	Row Crops
El Capitan High School FFA #5	21875 JAPATUL LN	ALPINE	91901	523-100-13-00	Row Crops
El Capitan High School FFA #7	20676 JAPATUL RD	ALPINE	91901	523-130-13-00	Row Crops
El Capitan High School FFA #12	5050 JAPATUL SPUR	ALPINE	91901	524-031-19-00	Row Crops
El Capitan Highschool FFA #4	3261 IVANHOE RANCH RD	EL CAJON	92122	518-030-43-00	Row Crops
El Capitan High School FFA #13	22340 JAPATUL VALLEY RD MAIN	ALPINE	91901	524-031-20-00	Row Crops
Hidden Haven Farms	18540 WEST BOUNDARY TRUCK TRAIL	JAMUL			Row Crops

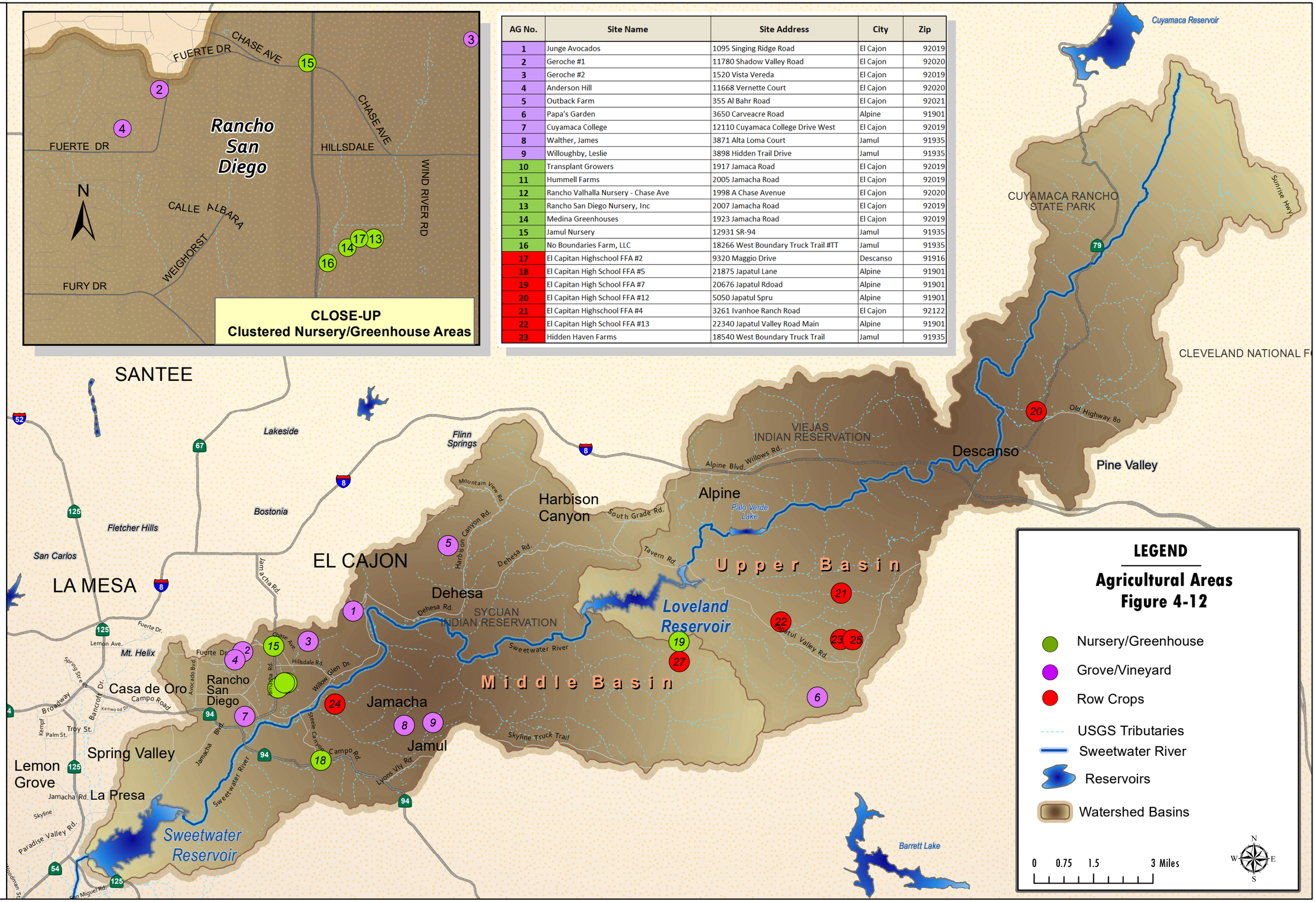
Please note that there could be additional growers in the watershed that have not enrolled yet in the Agriculture Order.

Seven nurseries are located in El Cajon, particularly along Jamacha Road. There are also three pest control related businesses in the watershed. **Table 4-21** is a list of commercial nurseries and pest control businesses located in the watershed.

2022 Watershed Sanitary Survey

Data Source: SanGIS/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
SanGIS - www.sangis.org - 5510 Overland Ave., Suite 230, San Diego, CA 92123

AG No.	Site Name	Site Address	City	Zip
1	Junge Avocados	1095 Singing Ridge Road	El Cajon	92019
2	Geroche #1	11780 Shadow Valley Road	El Cajon	92020
3	Geroche #2	1520 Vista Vereda	El Cajon	92019
4	Anderson Hill	11668 Vernette Court	El Cajon	92020
5	Outback Farm	355 Al Bahr Road	El Cajon	92021
6	Papa's Garden	3650 Carveacre Road	Alpine	91901
7	Cuyamaca College	12110 Cuyamaca College Drive West	El Cajon	92019
8	Walther, James	3871 Alta Loma Court	Jamul	91935
9	Willoughby, Leslie	3898 Hidden Trail Drive	Jamul	91935
10	Transplant Growers	1917 Jamaca Road	El Cajon	92019
11	Hummell Farms	2005 Jamacha Road	El Cajon	92019
12	Rancho Valhalla Nursery - Chase Ave	1998 A Chase Avenue	El Cajon	92020
13	Rancho San Diego Nursery, Inc	2007 Jamacha Road	El Cajon	92019
14	Medina Greenhouses	1923 Jamacha Road	El Cajon	92019
15	Jamul Nursery	12931 SR-94	Jamul	91935
16	No Boundaries Farm, LLC	18266 West Boundary Truck Trail #TT	Jamul	91935
17	El Capitan Highschool FFA #2	9320 Maggio Drive	Descanso	91916
18	El Capitan High School FFA #5	21875 Japatul Lane	Alpine	91901
19	El Capitan High School FFA #7	20676 Japatul Rdoad	Alpine	91901
20	El Capitan High School FFA #12	5050 Japatul Spru	Alpine	91901
21	El Capitan Highschool FFA #4	3261 Ivanhoe Ranch Road	El Cajon	92122
22	El Capitan High School FFA #13	22340 Japatul Valley Road Main	Alpine	91901
23	Hidden Haven Farms	18540 West Boundary Truck Trail	Jamul	91935



Agriculture Areas
Figure 4-12

Table 4-21
Commercial Nurseries and Pest Control Businesses Located in the Sweetwater Watershed

Facility Name	Address	Zip Code
Rancho San Diego Nursery	2007 Jamacha Road El Cajon	92019
Hummell Farms	2005 Jamacha Road El Cajon	92019
Jamul Nursery	12931 Campo Rd Jamul	91935
Rancho Valhalla Nursery #2	1998 A Chase Avenue El Cajon	92020
Medina Greenhouses	1923 Jamacha Rd. El Cajon	92019
Transplant Growers	1917 Jamacha Rd. El Cajon	92019
No Boundaries Farm LLC	18266 West Boundary Jamul	91935
Aardvark Ant Pest Control	2041 Hidden Springs Ct El Cajon	92019
ASAP Pest Control	611 Ramona Avenue Spring Valley	91977
Gopher B Gone	2573 Tavern Rd. Alpine	91901

Related Water Quality Issues and Data Review

No SOCs or VOCs were detected above the drinking water DLRs for the Sweetwater Reservoir or the Low Flow Barrier from 2017 to 2021, with the exception of one isolated detection of diquat at 0.4 µg/L and one isolated detection of paraquat at 4.2 µg/L in June 2021 in Sweetwater Reservoir. Sweetwater Reservoir was re-sampled for diquat and paraquat and both were not detected.

Sweetwater Reservoir was monitored quarterly from November 2018 to November 2021 for *Cryptosporidium* and *Giardia*, and out of the 13 samples, there were no detects of *Cryptosporidium* or *Giardia* in the Sweetwater Reservoir.

Regulation and Management

Agricultural activities are regulated by various agencies. Dairies and concentrated animal operations are regulated by the Regional Board. Since 2001, the San Diego County AWM Agricultural Water Quality Program has been responsible for overseeing stormwater compliance at agricultural businesses that are classified as high priority commercial sites. These include golf courses, nurseries and greenhouses, and pest

control businesses. Around 2008, oversight of equestrian facilities was transferred to the San Diego County Department of Public Works.

County of San Diego

The County of San Diego Watershed Protection, Stormwater Management and Discharge Control Ordinance also requires specific minimum BMPs for commercial agricultural operations. The ordinance specifies the following for manure management:

- Where practicable, all runoff from areas where livestock, horses or other large animals are confined must be collected and managed in a manner that avoids a discharge to the stormwater conveyance system or receiving waters. Where this is not practicable, manure must be cleaned up at least twice weekly and must either be composted or stored prior to disposal.
- Areas used for storing or composting manure must be located, configured, or managed to prevent runoff to receiving waters or the stormwater conveyance system.
- Animal waste shall not be disposed to the stormwater conveyance system or receiving waters.

Water quality inspection records were reviewed for all equestrian facilities in the watershed. All facilities were inspected at least once over the reporting period. Facilities are required to develop a stormwater pollution prevention plan, and forward an annual employee training record on stormwater BMPs and annual on-site internal review for stormwater BMPs to the County.

Regional Water Quality Control Board, San Diego Region

On November 9, 2016 the San Diego Regional Water Quality Control Board (San Diego Water Board) adopted the General Waste Discharge Requirements for Discharges of Waste from Commercial Agricultural and Nursery Operations within the San Diego Region (Ag Order). The Ag Order puts in place the State of California's rules and regulations that commercial agricultural producers must follow in order to be law compliant.

There were two orders which were adopted: a Third-Party General Order (Order R9-2016-0004) and an Individual General Order (Order R9-2016-0005), which allow growers to either comply by either joining a group (such as the San Diego Irrigated Lands Group) or act as an individual and submit plans and testing results directly to the Regional Board.

Collectively, the Third-Party General Order and the Individual General Order are referred to as the General Agricultural Orders. The General Agricultural Orders requires Agricultural Operations to implement effective management practices to minimize or eliminate the discharge of pollutants that may adversely impact the beneficial uses of waters of the State, conduct routine monitoring and reporting activities, complete yearly

water quality management training, and prepare and implement Water Quality Protection Plans and Water Quality Restoration Plans.
Any producer who files a Schedule F with their tax return, has or is required to have a Site I.D. number issued by the county, or who receives an agricultural water rate is required to enroll. The deadline to enroll was August 7, 2017. Enrollees are currently being entered into the State Water Resources Control Board's Geotracker database (http://geotracker.waterboards.ca.gov/). It is estimated that 6,000 commercial agricultural operations located in the San Diego Region will need to implement effective management practices to protect water quality.

The San Diego Region Irrigated Lands Group (SDRILG) is third-party group that covers all eleven watersheds in the San Diego Region. According to the 2018 San Diego Region Irrigated Lands Group Monitoring and Reporting Plan, the Sweetwater watershed is one of the lowest for total and irrigated acreage in the San Diego Region. As shown in **Table 4-22,** the irrigated acres enrolled in SDRILG within the Sweetwater watershed as of 2018 is 13.4 acres. As shown in **Table 4-23,** the total acres enrolled in SDRILG within the Sweetwater watershed as of 2018 is 52.65 acres. The majority crop type for the Sweetwater watershed are row crops.

Table 4-22. Irrigated Acres Enrolled in SDRILG as of 2018, by Watershed and Crop Type

	Orchard	Nursery	Row Crop	Greenhouse	Cut Flowers	Vineyard	Multiple	Unknown	Sum	Percentage by Watershed
San Juan	2,442.95	226.31	0.00	0.00	0.00	0.00	0.00	0.00	**2,669.26**	9.74%
Santa Margarita	2,979.46	108.38	40.00	4.30	153.00	27.91	26.00	15.00	**3,354.05**	12.23%
San Luis Rey	10,647.03	1,356.18	1,815.79	123.09	1,037.44	213.64	311.91	145.25	**15,650.33**	57.09%
Carlsbad	1,045.70	890.44	30.00	140.54	225.09	20.50	6.00	6.00	**2,364.27**	8.62%
San Dieguito	1,211.01	402.34	424.02	7.75	14.00	444.26	127.25	4.00	**2,634.63**	9.61%
Los Penasquitos	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**1.50**	0.01%
San Diego	505.50	125.11	0.50	0.00	0.00	8.70	5.50	0.00	**645.31**	2.35%
Pueble San Diego	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	**0.21**	0.00%
Sweetwater	0.00	3.35	6.25	0.00	0.00	0.80	3.00	0.00	**13.40**	0.05%
Otay	25.05	3.00	0.00	0.00	0.00	31.00	0.00	0.00	**59.05**	0.22%
Tijuana	3.00	0.00	0.00	1.76	0.00	17.50	0.00	0.00	**22.26**	0.08%
Total Irrigated Acres	**18,861.20**	**3,115.32**	**2,316.56**	**277.44**	**1,429.53**	**764.31**	**479.66**	**170.25**	**27,414.27**	
Percentage by Crop Type	68.80%	11.36%	8.45%	1.01%	5.21%	2.79%	1.75%	0.62%		

Table 4-23. Total Acres Enrolled in SDRILG as of 2018, by Watershed and Crop Type

	Orchard	Nursery	Row Crop	Greenhouse	Cut Flowers	Vineyard	Multiple	Unknown	Sum	Percentage by Watershed
San Juan	2,442.95	226.31	0.00	0.00	0.00	0.00	0.00	0.00	**2,669.26**	5.91%
Santa Margarita	4,627.55	211.18	107.00	15.00	308.72	54.29	106.30	25.10	**5,455.14**	12.08%
San Luis Rey	17,278.29	1,907.02	2,881.87	210.20	1,265.70	570.77	1,387.63	213.18	**25,714.66**	56.95%
Carlsbad	1,734.48	1,036.40	180.00	215.65	271.11	73.59	9.50	8.00	**3,528.73**	7.81%
San Dieguito	2,359.61	493.76	814.58	21.00	28.00	1,756.38	178.25	8.00	**5,659.58**	12.53%
Los Penasquitos	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**2.50**	0.01%
San Diego	1,337.80	177.12	3.60	0.00	0.00	36.35	12.50	0.00	**1,567.37**	3.47%
Pueble San Diego	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	**0.21**	0.00%
Sweetwater	0.00	3.50	29.75	0.00	0.00	8.50	3.00	7.90	**52.65**	0.12%
Otay	45.45	8.00	0.00	0.00	0.00	104.02	0.00	0.00	**157.47**	0.35%
Tijuana	40.00	0.00	0.00	5.50	0.00	303.00	0.00	0.00	**348.50**	0.77%
Total Acres	**29,868.63**	**4,063.50**	**4,016.80**	**467.35**	**1,873.53**	**2,906.90**	**1,697.18**	**262.18**	**45,156.07**	
Percentage by Crop Type	66.15%	9.00%	8.90%	1.03%	4.15%	6.44%	3.76%	0.58%		

Water quality monitoring is conducted by SDRILG to evaluate the potential water quality impacts of discharges from agriculture lands to water bodies within the San Diego Region. However, all of the sampling sites were selected throughout the San Luis Rey, Carlsbad and San Dieguito watersheds, as these three watersheds cover approximately 77 percent of the total acres and 78 percent of the irrigated acres enrolled in the group. No water quality monitoring was conducted in the Sweetwater watershed.

Source Water Protection Activities

As stated above, the County conducts on-site inspections for equestrian facilities and nurseries to ensure that there is no impact to the storm drain system. This provides a benefit to the SWA as storm runoff could enter into the Sweetwater River or into the Urban Runoff Diversion System. The Agricultural Orders will require growers to self-inspect, develop a Water Quality Protection Plan, and conduct water quality monitoring either as a group or individual.

Summary of Findings for Agriculture

- There are six equestrian facilities in the Sweetwater watershed. According to Refuge staff, equestrian use in the Refuge over the reporting period has decreased. This is likely due to Iron Oak Canyon Ranch (formally Bright Valley Farms) and Willow Glen Equestrian not conducting trail rides. Refuge staff also stated that the majority of equestrian use on the Refuge occurs around the Par 4 area (area north of SR94 and east of Sweetwater River).
- Recent inspection reports of equine facilities note that the facilities in the Sweetwater watershed are regularly cleaned and manure is being properly disposed. Inspections by the County will keep these facilities in check to minimize water quality impacts to the Sweetwater River.
- The USFWS is working on formalizing a designated trail system for the San Diego National Wildlife Refuge. This will help to reduce erosion in the watershed and may lead to improved manure management on the trails. Unfortunately, no work is currently underway due to a lack of funding.

- There are limited crop areas within the watershed. The San Diego Water Board's Agriculture Order requires growers to implement best management to minimize the discharge of pollutants, conduct routine monitoring and inspection of their facility, complete yearly water quality management training, and prepare and implement Water Quality Protection Plans and Water Quality Restoration Plans.

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FIRES

Background

The aftermath of a wildfire or prescribed burn can alter source water quality. In general, the load of dissolved substances to streams will increase following a wildfire due to increased runoff. Increased runoff can occur following a fire because the formation of a hydrophobic organic layer in the soil increases the water repellency of soils (DeBano, 2000). A 2004 United States Geological Survey (USGS) study concluded that measurable effects of fires on runoff water quality are most likely to occur if the fire was severe enough to burn large amounts of organic matter, if windy conditions were present during the fire, if heavy rain occurred following the fire, and if the fire occurred in a watershed with steep slopes and soils with little cation-exchange capacity (USGS, 2004).

Seasonal Patterns

Since 1996, there have been four major wildfires in the Upper and Middle Sweetwater watersheds. One wildfire occurred in January 2001, two wildfires occurred in late October 2003 and 2007, and one wildfire occurred in September 2020.

Related Constituents

The magnitude of the effects of fire on water quality is dependent on how fire characteristics (frequency, intensity, duration, and spatial extent of burning) interact with watershed characteristics (weather, slope, soil type, geology, land use, timing of regrowth of vegetation, and burn history). This interaction is complex and highly variable so that even fires in the same watershed can burn with different characteristics and produce variable effects on water quality. Typically, stormwater runoff from burned forested areas contains high concentrations of phosphorus, nitrogen, dissolved organic carbon, sediment, and metals such as mercury, lead, and arsenic.

Occurrence in Watershed

Valley Fire

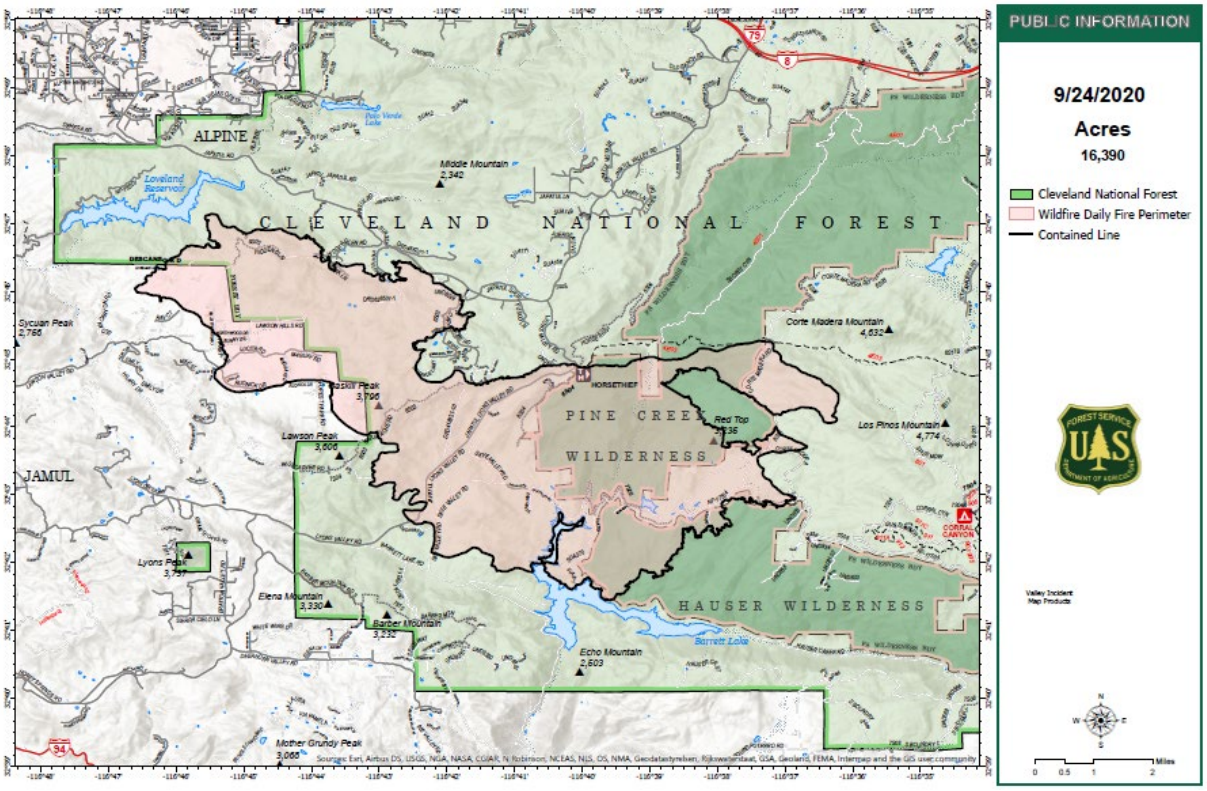
The Valley Fire started on September 5, 2020 and was contained on September 24, 2020. The Valley Fire burned 16,769 acres, with 3,061 acres burned within the Middle Sweetwater River watershed, as shown in **Figure 4-13**. A Burned Area Emergency Response (BAER) Report was prepared by various State agencies to identify immediate threats to human life, property, and resources.

The BAER report stated that the majority of the Valley Fire burned at moderate and low soil burn severity with very little high soil burn severity. The report also stated that.”the depth of soil heating was relatively shallow with minimal ash”. These characteristics along with significant rock content and low gradient slopes may help temper post-fire

watershed response." Additionally, Loveland Reservoir has unburned riparian area downstream of the burn area so threats of sedimentation (i.e., color, sediment, turbidity, and suspended material) are lower than for Barrett Reservoir. Ash and sediment delivered to Loveland Reservoir is likely to settle in the reservoir, not travel further downstream, and not significantly impact water quality.

The Low Flow Barrier was sampled for metals on January 27, 2021, which is after the Valley Fire. Iron was measured at 0.16 mg/L and manganese was measured at 0.016 mg/L, both are below their respective secondary MCLs.

Figure 4-13 Burn Area for 2020 Valley Fire



Related Water Quality Issues and Data Review

SWA did not collect post-fire water quality samples as the percent of the Loveland watershed burned was approximately 12.7 percent.

Regulation and Management

Wildland fires in the Sweetwater watershed are managed cooperatively by the following agencies: U.S. Forest Service, California Department of Forestry and Fire Protection (CALFIRE),, California Highway Patrol, the San Diego County Sheriff's Department, and the respective local fire agencies.

The use of approved long-term retardants in wildland fire suppression is standard in fire management and planning. The retardants are most often delivered in fixed or rotor-wing aircraft. Current qualified products and approved uses are listed on the U.S. Forest Service Wildland Fire Chemical Systems website (http://www.fs.fed.us/rm/fire). According to the U.S. Forest Service, the fire retardant commonly used is Phos-Check. The use of fire retardants can impact water quality if chemicals are accidentally dropped into a water body, or if heavy rains occur before the product has had time to naturally degrade.

The National Interagency Fire Center has developed *Interagency Standards for Fire and Fire Aviation Operations* which are annually revised. The *Interagency Standards for Fire and Fire Aviation Operations* states, references, or supplements policy for the U.S. Bureau of Land Management, the U.S. Forest Service, the U.S. Fish and Wildlife Service, and the National Park Service. Regarding the use of fire retardants, the Aerial Application Guidelines are to "avoid aerial or ground application of retardant or foam within 300 feet of waterways." (http://www.fire.blm.gov/Standards/redbook.htm)

Source Water Protection Activities

SWA coordinated with the US Forest Service immediately after the Valley Fire to rehabilitate fuel suppression breaks that were installed on the lands immediately surrounding Loveland Reservoir. Rehabilitation involved slope recontouring, installation of erosion berms and silt fencing to protect the reservoir, restore damaged habitat, and allow native vegetation to re-colonize naturally. During the wildfire, the SWA monitored and worked daily with the external partners/agencies such as CALFIRE, USFWS, California Department of Fish and Wildlife, and the United States Forest Service. Dozer lines were established and reservoir water was utilized by air support teams. SWA installed a silt curtain to mitigate for erosion at the bottom of the dozer line at Loveland Reservoir.

It is recommended to obtain watershed information from the BAER team whenever there is a fire within the Sweetwater watershed.

Summary of Findings for Fires

- The Valley Fire was the only major wildfire in the watershed over the reporting period. Approximately 12.7 percent of the Loveland Reservoir watershed was burned.

- The BAER report indicated that ash and sediment would likely settle in Loveland Reservoir and would not impact downstream water quality. No post-fire runoff samples were collected in the Sweetwater watershed.

- SWA coordinated directly with external partners/agencies such as CALFIRE, USFWS, California Department of Fish and Wildlife, and the United States Forest Service during the wildfire to implement various post-fire mitigation measures.

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SECTION 5 –INTAKE EVALUATION

The purpose of this section is to evaluate the Robert A. Perdue Water Treatment Plant (Perdue WTP) for compliance with existing drinking water regulations. For assistance with abbreviations and acronyms, the reader is referred to the List of Abbreviations at the front of the Report.

The Sweetwater Authority's (SWA) Perdue WTP uses the Sweetwater Reservoir source water at various times throughout the year. This plant is discussed herein within the context of applicable current and future regulatory compliance and potential treatment issues.

Data which represents the Sweetwater Reservoir was extracted for the evaluation to assess the compliance of the Perdue WTP when using this source water.

Highlights of Selected Existing Drinking Water Regulations

NIPDWR and Phase I, II, and V Regulations. Sets Maximum Contaminant Levels (MCLs) for many inorganic chemicals (IOCs), synthetic organic compounds (SOCs), and volatile organic compounds (VOCs).

SWTR. Sets minimum 3/4-log reduction requirement for *Giardia* and viruses, respectively. Sets turbidity requirements, which have since been tightened by the Interim Enhanced Surface Water Treatment Rule.

Interim Enhanced SWTR and Filter Backwash Rule. IESWTR applies to systems serving at least 10,000 population and LT1ESWTR applies to smaller systems. Sets minimum 2-log reduction requirement for *Cryptosporidium*. Requires continuous monitoring of individual filter effluents (IFE) and combined filter effluent (CFE). Tightened treated water turbidity requirements: CFE < 0.3 nephelometric turbidity unit (NTU) in 95 percent of monthly measurements, and not to exceed 1 NTU. Requires recycling of all return flows to the headworks, upstream of chemical feed.

Stage 1 D/DBP Rule. Sets a treatment technology for DBP precursor removal (enhanced coagulation) based on source water total organic carbon (TOC) levels. Varying levels of removal, or alternative compliance, are required if the source water concentrations are > 2 milligrams per liter (mg/L). Set MCLs for total trihalomethanes (TTHM) and haloacetic acids (HAA5) at 80 and 60 micrograms per liter (µg/L), respectively, in the distribution system as system-wide running annual average (RAA), but these were superseded by the Stage 2 D/DBP Rule.

Long Term 2 Enhanced SWTR. Requires *Cryptosporidium*, or *Escherichia coli (E. coli)* source water monitoring depending on system size, including a second confirmation round. Source water bin classification to be dependent on monitoring results. If running annual average *Cryptosporidium* value is > 0.075 oocysts per liter (/L), bin classification will require additional action (which could be additional log reductions or other actions, including source water protection). Also requires disinfection profiling and benchmarking if system plans to make a significant change to disinfection.

Stage 2 D/DBP Rule. Requires compliance with distribution system MCLs for TTHM and HAA5 to be based on locational running annual average (LRAA). Under Stage 2, compliance is based on LRAA of 80 and 60 µg/L. Initial Distribution System Evaluation was completed to identify long term routine monitoring locations. Compliance schedules depend on system size and source type. For combined distributions systems, all systems will be on schedule of earliest system. Operational evaluations are required if projected DBP levels exceed the MCLs.

PERDUE WATER TREATMENT PLANT

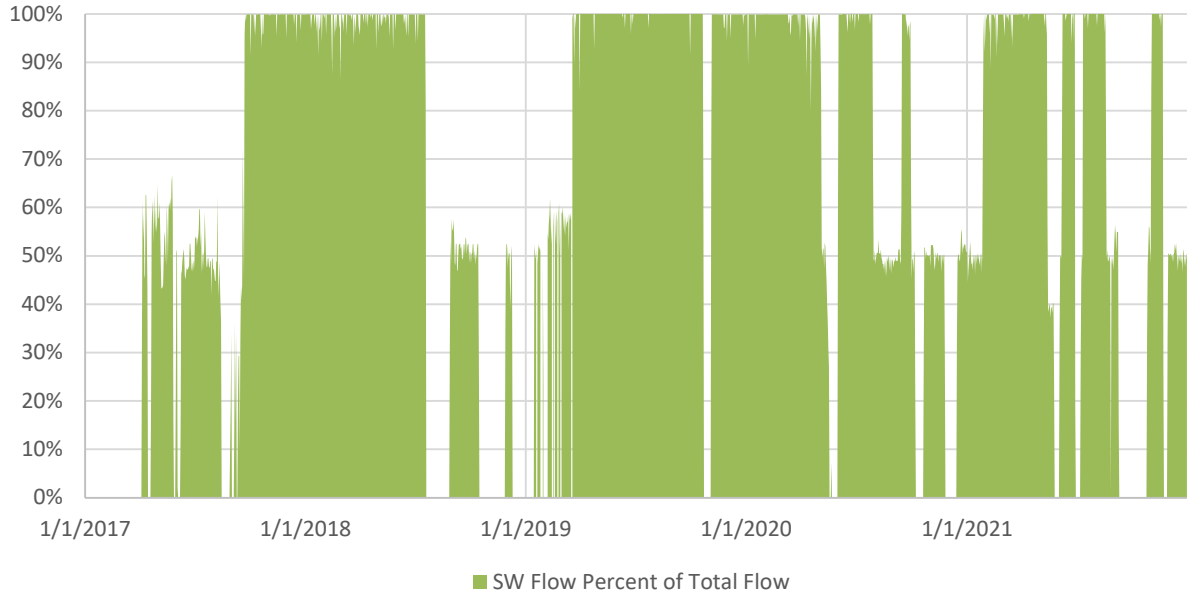
This section evaluates the SWA Perdue WTP.

System Description

The SWA owns and operates the Perdue WTP. The plant can treat either Sweetwater Reservoir water, imported water, or a blend. The source water used depends on local water availability. This evaluation focuses on treated water and distribution system data that represents the Sweetwater Reservoir source.

It is important to characterize the periods when the Perdue WTP utilizes the Sweetwater Reservoir source at its influent. The proportion of either supply impacts the overall source and treated water quality, as they have distinctly different characteristics. SWA provided information on the daily amount of both Sweetwater Reservoir water and SWP water that were used at the Perdue WTP influent during the study period. On average, the Sweetwater Reservoir provided 66 percent of the daily source water to the Perdue WTP over the study period. The daily percent use of the Sweetwater Reservoir source is shown in **Figure 5-1**. Historically, SWA timed use of sources based on water availability and economic analysis, but recently SWA has changed its philosophy to optimize blending sources to improve the influent source water quality. This is evident in the lack of a seasonal use pattern. This blending strategy has been effective at ensuring treatability of the source water through the Perdue WTP and providing a more consistent treated water quality, as discussed in **Section 5**.

Figure 5-1
Sweetwater Reservoir Source at Perdue WTP Influent, 2017 – 2021



The Sweetwater Reservoir is fed water from several sources, as described in more detail in **Section 2**. The sources include the Middle Sweetwater River, local drainage, as well as imported water.

The Middle Sweetwater River feeds the east end of the reservoir. The Middle Sweetwater River is comprised of releases from the Loveland Reservoir as well as local runoff between the reservoirs. The local runoff includes a significant contribution from urban runoff. Local drainage into the Sweetwater Reservoir is comprised of urban runoff from the north side of the reservoir and overland flow from the undeveloped south side of the reservoir. The SWA began the Phase I Urban Runoff Diversion System (URDS) in July 1991 to allow for capture and diversion of the urban runoff from the north side of the reservoir, and eventually around the dam and to the Lower Sweetwater River.

The SWA began operation of the Phase II URDS in June 2005. This resulted in flows from the Middle Sweetwater River being diverted into the URDS collection system at the North Side Pond when the conductivity is greater than 1200 μohms, which occurs most frequently during the dry season but can occur throughout the year. Beginning in March 2009 the URDS II system at the Low Flow Barrier was put into bypass mode at all times, which allows all the Middle Sweetwater River flows to go into Sweetwater Reservoir, except during initial Loveland transfers, the first flush of the first significant rain event of the year, and hazardous materials releases. However, it should be noted that during the 2021 Loveland transfer that the URDS II system remained in bypass mode.

Historically there has also been a significant amount of raw, untreated imported water stored in the Sweetwater Reservoir. This water is typically stored during the wet period, December through March. Since the San Diego County Water Authority (SDCWA) no longer offers a reduced water rate for storing imported water in Sweetwater Reservoir versus direct delivery from the SDCWA system, there has been minimal raw imported water stored directly to the Sweetwater Reservoir since summer 2008. During the study period, water was only stored during January and February 2017 (just over 3,000 acre-feet). Please see **Section 2** for further information on the volumes. Therefore, the Sweetwater Reservoir is currently composed of primarily local runoff water.

Manually operated valves are used to control the depth at which water is withdrawn from the Sweetwater Reservoir. The valves are located at elevations of 188, 198, 208, and 223 feet. Water is withdrawn from the reservoir at the elevation with the highest quality water. Typically, the best quality is near the lake surface.

The Perdue WTP is a conventional filtration plant. The treatment process consists of primary disinfection with chlorine dioxide, chemical mixing using pumped diffusion for coagulation and two stages of flocculation with hydrofoil mixers, dissolved air flotation (DAF) and sedimentation, dual-media filters, and fluoridation. The plant is designed for a capacity of 30 million gallons per day (mgd).

Under normal operations when treating Sweetwater Reservoir water, chlorine dioxide is added to the intake tower between 1.3 and 1.8 milligrams per liter (mg/L). A chlorine dioxide residual is maintained through the influent pipelines and raw water pump station up to the flash mixing process. Ferric chloride, the primary coagulant, is added either at the flash mixer or immediately downstream of the raw water pump station. The dose is typically in the range of 8 to 24 mg/L. Ferrous chloride is added at the flash mixer to reduce chlorite levels. The coagulated water is then sent to the DAF basin where air bubbles are added to the water to cause the particles to rise and float in a sludge blanket on top of the water. Sludge is collected and then discharged through an 8-inch gravity line into the Sweetwater Reservoir at the high water elevation of about 240 and about 800 feet from the reservoir outlet tower. The clarified water is then sent to sedimentation basins for settling prior to filtration.

The filtration process consists of four, dual-media (anthracite and sand), rate-of-flow control filters. The filters are operated at a maximum rate of 6 gallons per minute per square foot (gpm/sf). Filters are backwashed based on headloss greater than 8 feet. During times of severe taste and odor episodes from plankton in the reservoir, free chlorine can be applied across the filters. The filters are backwashed with filtered water stored in an elevated tank. Used washwater drains through a 36-inch pipeline into Sweetwater Reservoir. The water is released through a concrete dispersion box located on the north shore of the reservoir approximately 220 feet from the intake tower and at an elevation of 235. The filters are filtered to waste until the filter effluent turbidity is less than 0.2 NTU for 10 minutes.

The post-disinfection process utilizes chloramines in the clearwell to meet the chlorine contact requirements for *Giardia* and virus reduction. In addition, fluoridation is implemented through addition of fluorosilicic acid.

Highlight of Changes Since 2017 Update

During the past five years the Perdue WTP had minimal changes. The only significant treatment process improvement was the initiation of fluoridation of the treated water in January 2017.

Significant Potential Contaminating Activities

As identified in **Section 4**, there are several key potential contaminating activities that are of the most significance to the Perdue WTP due to their proximity to the Sweetwater Reservoir, the magnitude of their presence, and their apparent impact on source water quality. These include:

- Urban Runoff,
- Developments,
- Spills associated with sewage or hazardous materials.

Water Quality Summary

Below is a discussion of each of the constituents of interest and any notable compliance issues for each during the period of study.

Turbidity

As discussed in **Section 3** the median raw water peak daily turbidity at the Perdue WTP for the entire period of study (overall) was 4.7 NTU and it was 5.9 NTU when using 50 percent or more (majority) of Sweetwater Reservoir as a source at the influent. The median settled water peak daily turbidity was 0.8 NTU overall and 0.9 NTU when using a majority of Sweetwater Reservoir. These numbers were higher than the last study period, likely due to the increased use of the Sweetwater Reservoir source.

The median combined filter effluent (CFE) peak daily turbidity was 0.11 NTU overall and 0.12 NTU when using a majority of Sweetwater Reservoir. All CFE readings were less than or equal to 0.25 NTU. Each month the Perdue WTP met the 80 percent turbidity reduction requirement through the plant and the overall median removal of solids was 98 percent (also 98 percent when treating a majority of Sweetwater Reservoir).

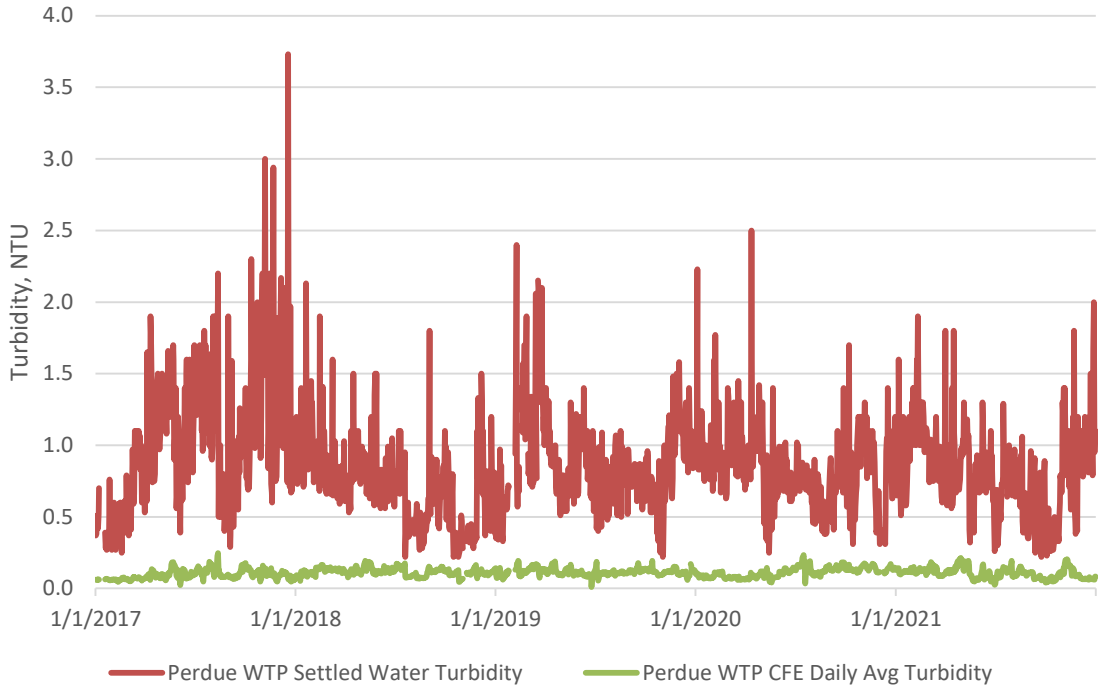
The individual filter effluent (IFE) turbidity data was available from January 2017 through December 2021. It was reviewed to look at individual filter performance and determine if any of the reporting trigger levels under the DDW Interim Enhanced Surface Water Treatment Rule (IESWTR) were exceeded. The median of the maximum daily turbidity values were as follows; Filter 1 – 0.17 NTU, Filter 2 – 0.17 NTU, Filter 3 – 0.17 NTU, and Filter 4 – 0.16 NTU. There were no turbidity values that triggered any reporting requirements under the IESWTR, with greater than 95 percent of IFE readings less than 0.3 NTU. There were no triggers from IFE turbidity levels. Perdue WTP met all current CFE and IFE turbidity standards.

Figure 5-2 shows a timeseries plot of the overall maximum daily settled and treated water daily average turbidity. The figure shows that the filters perform consistently well to keep the treated water turbidity levels well below the current standards.

Microbiological Constituent Review

The SWA performed weekly distribution system coliform analysis during the study period. In 2019 there were two positive detects (1.1 percent) in September for total coliform within the distribution system, but no detection of *Escherichia coli* (*E. coli*). In 2020 there was one positive detect (0.7 percent) in May for total coliform within the distribution system, but no detection of *E. coli*. Neither of these resulted in a violation of the Maximum Contaminant Level (MCL), which is greater than 5 percent of monthly samples positive for total coliform or any *E. coli* positive. In addition, all repeat samples were negative for total coliform.

Figure 5-2
Maximum Daily Settled and Average Daily Treated Water Turbidity at the Perdue WTP



Disinfection By-Products

The SWA monitors alkalinity and total organic carbon (TOC) levels in its raw water and TOC levels in its treated water on a monthly basis as part of its treatment technique compliance under the Stage 1 Disinfectants/Disinfection By-Products (D/DBP) Rule. Generally, the treatment technique is not met for the Step 1 removal requirements so compliance is made through an alternative compliance criterion; by meeting raw or treated water specific ultraviolet light absorbance (SUVA) levels of less than 2.0 liters per milligram-meter (L/mg-m). SUVA is the calculation of ultraviolet light at 254 nanometers divided by dissolved organic carbon (DOC). The SWA performs a quarterly Step 2 Point of Diminishing Return (PODR) jar test to set an alternative TOC removal criteria. The treated water SUVA is calculated based on jar testing.

The CFE has an average TOC value of 6.3 mg/L, and a median of 7.1 mg/L, with only two percent of samples less than or equal to 2.0 mg/L. Based on source water quality, TOC removal requirements ranged from 15 to 40 percent with the median removal at 30 percent. The median reduction of TOC is 24 percent and the removal requirement for Step 1 is only met in only 20 percent of months.

During the study period the treated water individual weekly SUVA calculations ranged from 1.1 to 2.1 L/mg-m, with a median value of 1.7 L/mg-m. This is higher than the last study period, likely due to the increased use of the Sweetwater Reservoir source. Compliance with the treatment technique is based on a running annual average (RAA)

value (based on quarterly averages calculated from monthly averages calculated from weekly data). The RAA ranged from 1.6 to 1.8 L/mg-m and was less than 2.0 L/mg-m in all calculations and the treatment technique was met.

A review of the weekly SUVA calculations shows that when the Perdue WTP increases the percent of source water from the Sweetwater Reservoir, there is a general increase in the SUVA values, as shown in **Figure 5-3**. This is likely due to the increased presence of organic matter as compared with the SWP source.

Figure 5-3
Weekly Calculated SUVA at Perdue WTP Treated Water

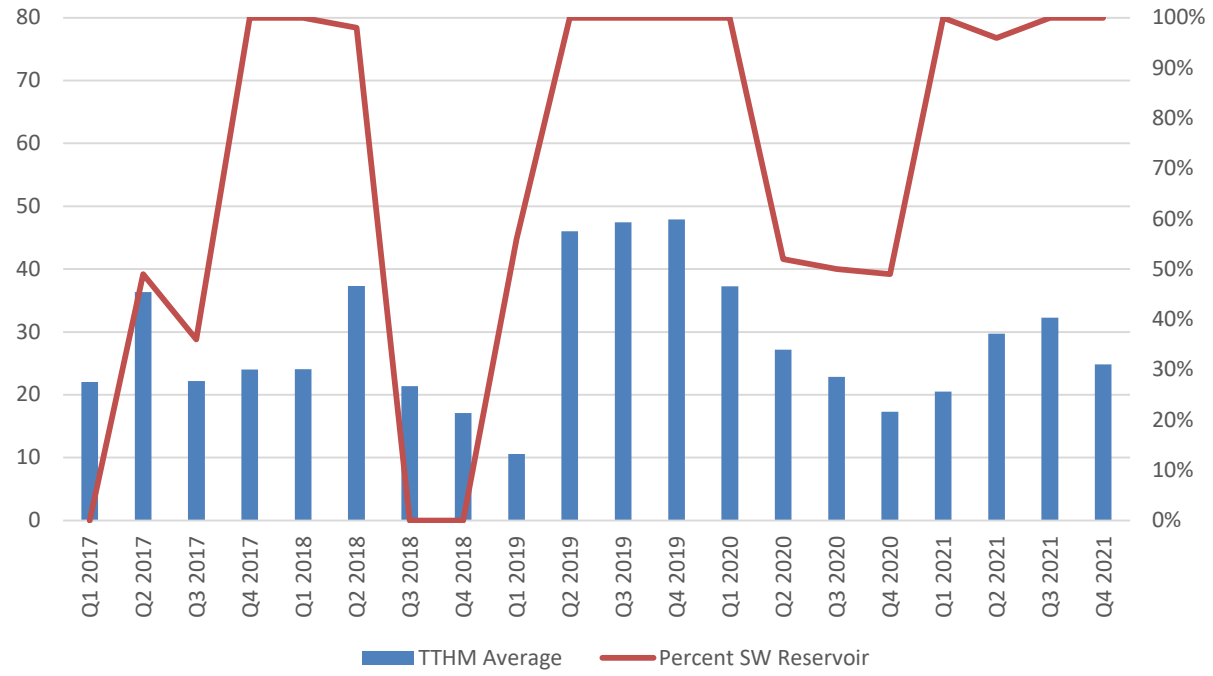


The SWA collected both total trihalomethanes (TTHM) and haloacetic acids (HAA5) data for its distribution system under the Stage 2 D/DBP Rule. The SWA sampled 10 distribution system sites quarterly during the study period. Some of these sites are influenced by groundwater in the distribution system and have lower levels of TTHM and HAA5. Levels of disinfection by-products (DBPs) in the distribution system vary throughout the year due to source water used, variable disinfection practices, pH, temperature, and distribution system configuration and operations.

The individual TTHM distribution system samples ranged from 2 to 63.5 micrograms per liter (µg/L), with a median value of 27.3 µg/L. The highest median value occurred at 5379 Carolyn Vista Lane, at 32.5 µg/L. **Figure 5-4** shows the quarterly average of all distribution system sites for TTHM analysis, plus the percent of Sweetwater Reservoir in use at the Perdue WTP at the time of sampling. Quarterly average values range from

10.6 to 47.9 µg/L, with a median of 24.4 µg/L. From this figure it can be seen that peak values have been associated with increased use of the Sweetwater Reservoir. They are likely associated with higher organic carbon levels and free chlorine application across the filters to combat taste and odor problems associated with plankton.

Figure 5-4
Distribution System TTHM Quarterly Average of All Sites and Percent Sweetwater Reservoir Source in Use at Perdue WTP

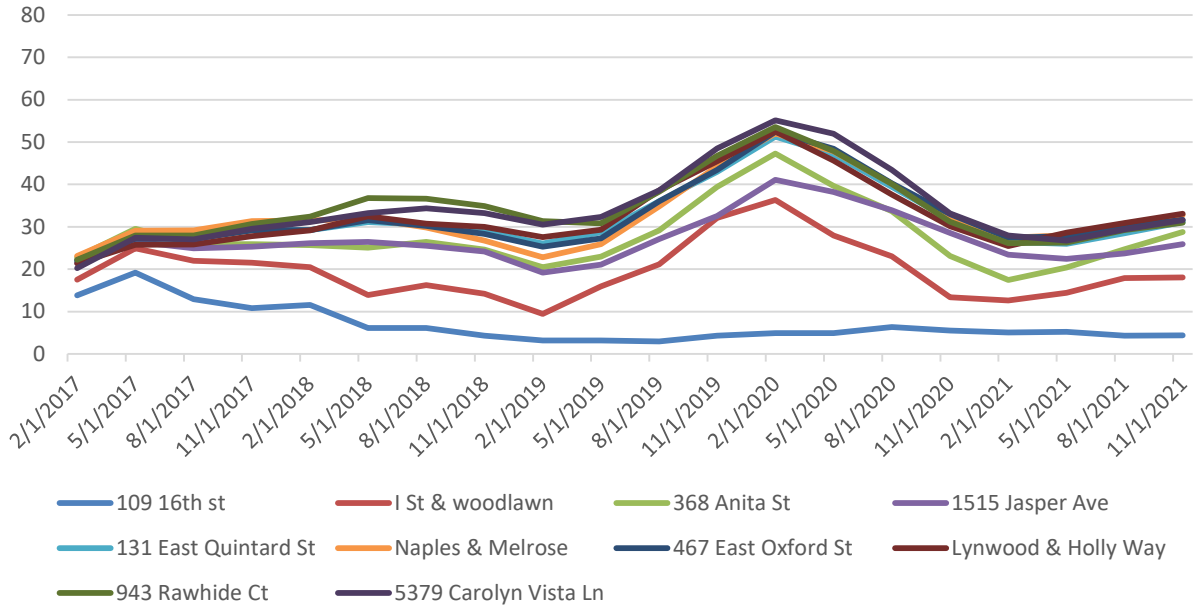


The TTHM locational running annual average (LRAA) for each distribution system site was calculated. **Figure 5-5** presents the TTHM LRAAs, calculated quarterly, for each site. The individual LRAAs ranged from 3 to 55.1 µg/L. The median values of the LRAAs were between 25 and 31 µg/L for all sites except 109 16th Street and I St & Woodlawn, which were lower and likely represented by some portion of groundwater. Similar to the individual TTHM analysis, the highest median value occurred at 5379 Carolyn Vista Lane, at 32 µg/L. These values are all well below the current maximum contaminant level (MCL) of 80 µg/L. No Operational Evaluation Levels (OELs) were triggered. The first quarter of 2020 (February 2020) had significantly higher LRAA than all other quarters. This quarter, as well as the three previous quarters, represented 100 percent Sweetwater Reservoir in the source water to Perdue WTP.

It was noted by SWA staff that in 2019 and 2020 there were operational challenges related to chloramination caused by insufficient dissolved oxygen in the source water to allow for development of a stable chlorine residual. Under anaerobic conditions in Sweetwater Reservoir, increased levels of manganese, iron, organic carbon, ammonia, and sulfides released into the water column from the sediment can create additional oxidant demand, making the chloramination process less efficient. SWA notes that this

can shift the optimal chlorine to ammonia ratio due to side reactions, and increase organic catalyzed chloramine residual decay rates and precipitation of manganese in the distribution system. This likely resulted in a need to increase chlorine dosing, which may have contributed to the excess formation of TTHMs.

Figure 5-5
Distribution System Site TTHM LRAAs



The individual HAA5 distribution system samples ranged from non-detect to 38.5 µg/L, with a median value of 15.2 µg/L. The highest median value occurred at 943 Rawhide Court, at 21.4 µg/L. **Figure 5-6** shows the quarterly average of all distribution system sites for HAA5 analysis, plus the percent of Sweetwater Reservoir in use at the Perdue WTP at the time of sampling. Quarterly average values range from 4.7 to 31.5 µg/L, with a median of 15.8 µg/L. Similar to TTHMs, peak values have been associated with increased use of the Sweetwater Reservoir. They are likely associated with higher levels of organic carbon and free chlorine application across the filters to combat taste and odor problems associated with plankton.

The HAA5 LRAA for each distribution system site was calculated. **Figure 5-7** presents the HAA5 LRAAs, calculated quarterly, for each site. The individual LRAAs ranged from ND to 30.1 µg/L. The median values of the LRAAs were between 14 and 21 µg/L for all sites except 109 16th Street and I St & Woodlawn, which were lower and likely represented by some portion of groundwater. Similar to the individual HAA5 analysis, the highest median value occurred at 943 Rawhide Court, at 18.3 µg/L. These values are all well below the current MCL of 60 µg/L. No OELs were triggered. The first quarter of 2020 (February 2020) had significantly higher LRAA than all other quarters, just like the TTHM analysis revealed. The increased use of Sweetwater Reservoir, combined with treatment challenges related to disinfection, over the previous year likely contributed to these increases.

Figure 5-6
Distribution System HAA5 Quarterly Average of All Sites and Percent Sweetwater Reservoir Source in Use at Perdue WTP

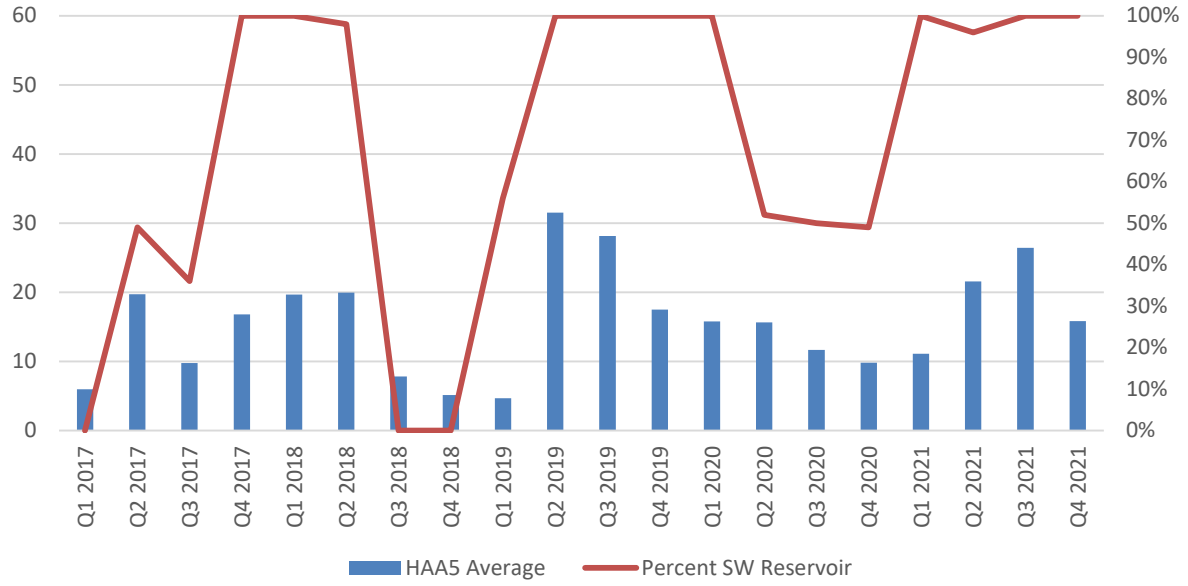
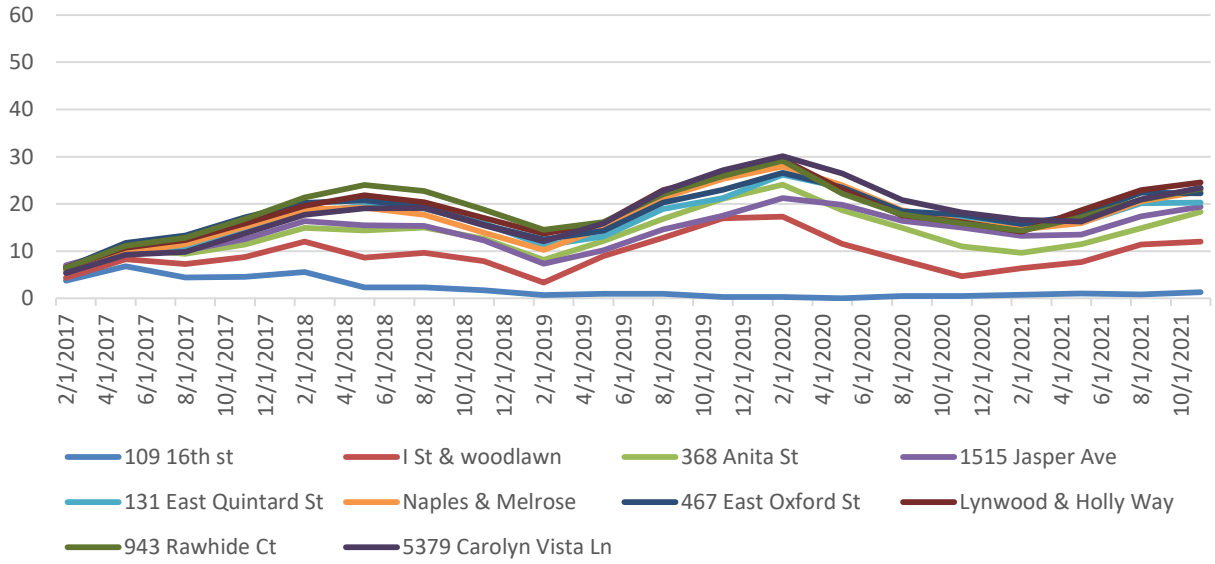


Figure 5-7
Distribution System Site HAA5 LRAAs



Volatile and Synthetic Organic Compounds

The SWA monitored treated water at Perdue WTP for Title 22 regulated VOCs and SOCs. There were no detects of any compounds as per the annual Consumer Confidence Reports. This includes monitoring for 1,2,3-trichloropropane.

Inorganics

Iron and Manganese

Iron and manganese have been monitored regularly in the treated water for compliance purposes, at the clearwell effluent of the Perdue WTP. Iron has been non-detectable in all individual samples. Manganese ranged from non-detectable to 120 µg/L, with a median of 6 µg/L and 96 percent of individual samples less than the secondary MCL of 50 µg/L. The annual average is considered the compliance value for secondary MCLs and the annual average manganese ranged from 8 to 25 µg/L during the study period, always below the secondary MCL. The sources of iron and manganese in the source water were discussed in **Section 3**. Regardless, the Perdue WTP is effective at reducing the treated water levels and there have been no exceedances of the secondary standards for either constituent.

Minerals

Minerals are monitored in several forms of interest, as total dissolved solids (TDS), conductivity, chloride, bromide, and sulfate. The clearwell effluent of the Perdue WTP is sampled twice per year. The Perdue WTP likely removes some incidental amount of these constituents, but is not designed for substantial removal. **Table 5-1** presents a summary of the mineral data for the Perdue WTP effluent. It can be seen that the treated water TDS and conductivity levels generally exceed the secondary MCL recommended levels set by the California Division of Drinking Water (DDW), but are below the upper levels for aesthetic purposes. All other constituents meet the secondary MCL consumer acceptance contaminant levels.

Table 5-1
Mineral Levels for Perdue WTP Effluent

Constituent	Minimum	Maximum	Median
TDS, mg/L	510	760	645
Conductivity, µohms	840	1,200	1,100
Chloride, mg/L	97	210	170
Bromide, mg/L	ND	0.38	0.25
Sulfate, mg/L	108	221	141

Unregulated Constituents

The SWA participated in the USEPA's Fourth Unregulated Contaminant Monitoring Rule (UCMR4) between November 2018 and August 2019. During the monitoring program, each quarter represented varying amounts of Sweetwater Reservoir at the Perdue

WTP; November 2018 (0 percent), February 2019 (56 percent), May and August 2019 (100 percent). This program included several types of monitoring.

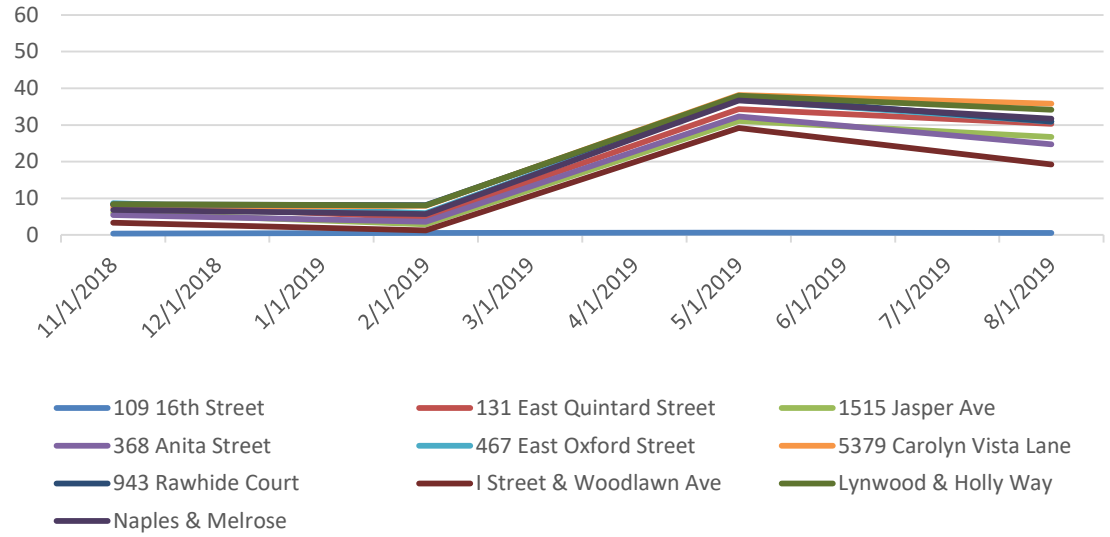
- Raw water was sampled quarterly for disinfection by-product precursors, TOC and bromide. TOC ranged from 2.9 to 12 mg/L, with a median of 10 mg/L. Bromide ranged from 81 to 420 µg/L, with a median of 380 µg/L.
- Raw water was sampled bi-weekly, from April through July 2019, for cyanotoxins. There were no detects of cyanotoxins in Sweetwater Reservoir.
- Perdue WTP effluent was sampled quarterly for nine pesticides/by-products, three semi-volatiles, and three alcohols. All were non-detect.
- Perdue WTP effluent was sampled quarterly for two metals, germanium and manganese. Germanium was non-detectable and manganese ranged from non-detectable to 3 µg/L, with a median of 1.9 µg/L.

In addition, ten distribution system sites were sampled quarterly for three brominated haloacetic acid groups;

- HAA5: dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, trichloroacetic acid.
- HAA6Br: bromochloroacetic acid, bromodichloroacetic acid, dibromoacetic acid, dibromochloroacetic acid, monobromoacetic acid, tribromoacetic acid.
- HAA9: bromochloroacetic acid, bromodichloroacetic acid, chlorodibromoacetic acid, dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, tribromoacetic acid, trichloroacetic acid.

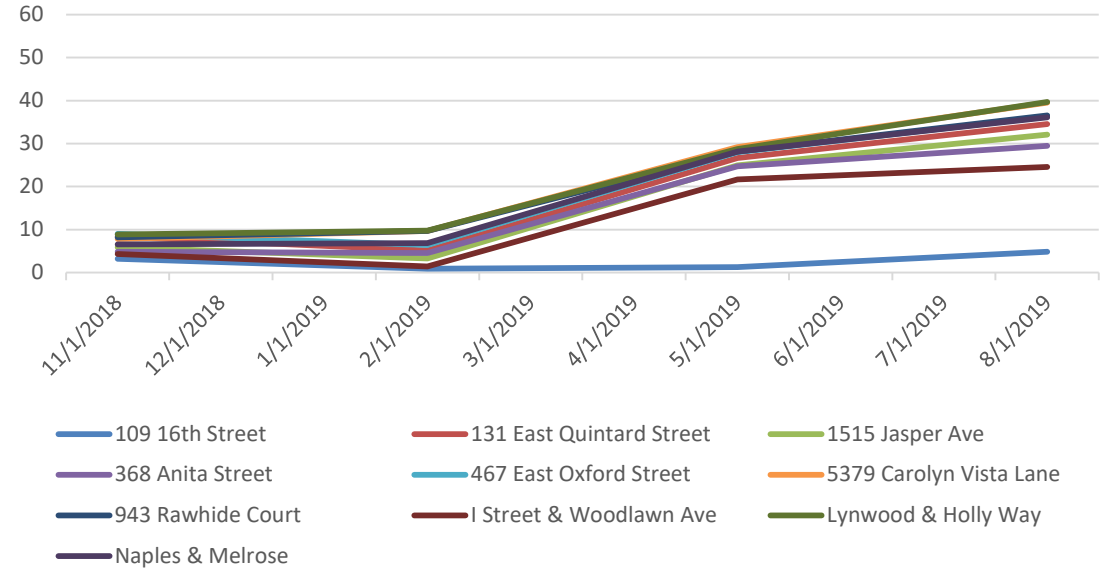
The HAA5 results were similar to the data collected during the same period under the Stage 2 D/DBP Rule. **Figure 5-8** presents the data, which displays the strong influence of the source water (100 percent Sweetwater Reservoir in May and August 2019). Peak values were seen at 5379 Carolyn Vista Lane, with a median value of 21.9 µg/L, similar to the Stage 2 D/DBP Rule data which had a median value of 22.7 µg/L during this same period. The peak value seen in May 2019 correlated to peak TOC levels in the influent.

Figure 5-8
UCMR4 HAA5 Monitoring Results



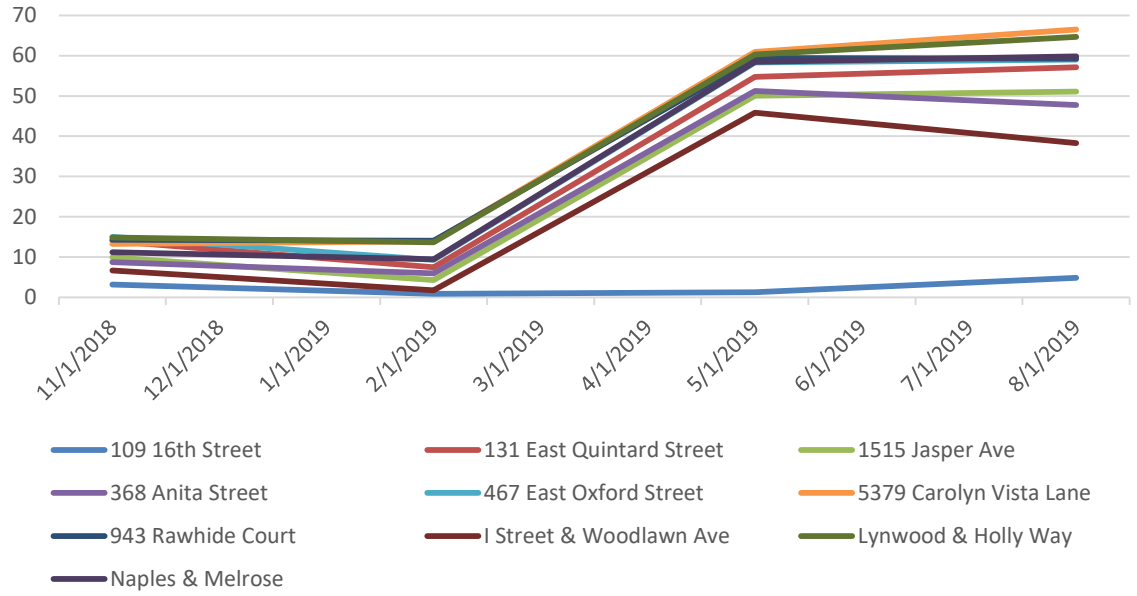
The HAA6Br results were similar to the HAA5 data, but did display differences in details. **Figure 5-9** presents the data, which displays the strong influence of the source water (100 percent Sweetwater Reservoir in May and August 2019). Peak values were also seen at 5379 Carolyn Vista Lane, with a median value of 19.5 µg/L. It is uncertain what type of regulatory threshold these values would be compared to, so it is not possible to ascertain the significance of the results. The peak values seen in August 2019 correlated to the peak bromide levels in the influent.

Figure 5-9
UCMR4 HAA6Br Monitoring Results



The HAA9 results appear to be a combination of the HAA5 and HAA6Br data, just at higher concentrations. **Figure 5-10** presents the data, which displays the strong influence of the source water (100 percent Sweetwater Reservoir in May and August 2019). Peak values were seen at Lynwood & Holly Way, with a median value of 37.6 µg/L. It is uncertain what type of regulatory threshold these values would be compared to, so it is not possible to ascertain the significance of the results. The peak values appear to be correlated with peaks in both TOC and bromide in the influent.

Figure 5-10
UCMR4 HAA9 Monitoring Results



Giardia/Virus/*Cryptosporidium* Reduction Requirements

Based on the *Giardia*, *Cryptosporidium*, and *E. coli* data for the Sweetwater Reservoir supply, presented in **Section 3**, 3/4/2-log reduction of *Giardia*/virus/*Cryptosporidium* appears to be appropriate reduction requirements for the Perdue WTP.

The Perdue WTP currently receives reduction credit of 2.5-log *Giardia*, 2.0-log viruses, and 2-log *Cryptosporidium* for physical removal. Disinfection with chlorine dioxide, chlorine, and chloramines provides at least 0.5-log credit for *Giardia* and 2.0-log credit for viruses. This meets all of the current microbial removal/inactivation requirements of the California SWTR and the IESWTR.

Under the second round of monitoring under the LT2ESWTR, the Perdue WTP was placed in Bin 1 based on the source water *Cryptosporidium* monitoring. This means that no additional action is required at the Perdue WTP at this time.

Regulatory Compliance Evaluation

The SWA has been monitoring the raw and treated water for the Perdue WTP for all required Title 22 compliance constituents. **Table 5-2** lists selected existing drinking water regulations and presents a compliance status for these standards at Perdue WTP. The SWA is currently in compliance with existing regulations.

Table 5-2
Regulatory Compliance Evaluation - Perdue WTP

	Targeted Compounds	Key Issues Compliance Status
Phase I, II, and V	IOCs, VOCs, SOCs	Monitored as required. No MCLs exceeded.
SWTR	Microbial and Turbidity	Data for the Sweetwater Reservoir supply support 3/4—log reduction requirement for *Giardia*/viruses. All operations, monitoring and reporting requirements are met and all treated water turbidity standards are met.
Interim Enhanced SWTR and Filter Backwash Rule	Microbial and Turbidity	All new turbidity standards met for both CFE and IFE. 2-log reduction credit for *Cryptosporidium* applicable.
Stage 1 D/DBP Rule	Disinfectants and Disinfection By-Products	TOC in the Sweetwater Reservoir supply and treated water are typically above 2.0 mg/L. Perdue WTP utilizes treated water SUVA < 2.0 L/mg-m to comply with TOC treatment technique.
Long Term 2 Enhanced SWTR	Microbial	*Cryptosporidium* data indicates no presence of protozoa, and resulted in a continued Bin 1 classification for the Perdue WTP. No additional action required.
Stage 2 D/DBP Rule	Disinfectants and Disinfection By-Products	TTHM/HAA5 LRAAs for Stage 2 data are below drinking water standards (< 80/60 µg/L, respectively). Increases can be seen, especially during periods of high use of Sweetwater Reservoir.

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SECTION 6 – RECOMMENDATIONS

This section consists of a discussion of significant changes since the 2017 Update to the Watershed Sanitary Survey and a list of recommendations.

CHANGES SINCE THE 2017 UPDATE TO THE WATERSHED SANITARY SURVEY

- There has been little change over the last twenty years regarding land use. The majority of the land use in the Upper and Middle watersheds is classified as rural, with 91 percent rural and 9 percent urban for both the Upper and Middle Sweetwater watershed combined.

- Since the San Diego County Water Authority (SDCWA) no longer offers a reduced water rate for storing imported water in Sweetwater Reservoir versus direct delivery from the SDCWA system, there has been minimal raw imported water added directly to the Sweetwater Reservoir since summer 2008. Over the reporting period, imported water was stored in Sweetwater Reservoir only in January and February 2017, totaling just over 3,000 acre-feet. Therefore, the Sweetwater Reservoir is currently composed of primarily local runoff water.

- The Perdue WTP can treat either Sweetwater Reservoir water, imported water, or a blend. On average, the Sweetwater Reservoir provided 66 percent of the daily source water to the Perdue WTP over the study period. Historically, imported water was treated from November through May, and local water from Sweetwater Reservoir was treated primarily during the summer months. The seasonal use of sources was based on water availability and economic analysis, but recently SWA has changed its philosophy to optimize blending sources to improve the influent source water quality. This is evident in the lack of a seasonal use pattern over the reporting period. This blending strategy has been effective at ensuring treatability of the source water through the Perdue WTP and providing a more consistent treated water quality.

- Increased use of Sweetwater Reservoir over the reporting period has resulted in higher source water turbidity, specific ultraviolet light absorbance (SUVA), and total organic carbon (TOC) in the Perdue WTP influent, and higher trihalomethanes (TTHMs) and haloacetic acids (HAAs) in the treated water.

- According to San Diego National Wildlife Refuge staff, equestrian use in the San Diego National Wildlife Refuge over the reporting period has decreased. This is likely due to Iron Oak Canyon Ranch (formally Bright Valley Farms) and Willow Glen Equestrian not conducting trail rides recently.

- The largest development proposed over the reporting period is the Cottonwood Sand Mining Project which would impact approximately 214 acres of land over a period of 10 years. SWA has submitted three comment letters to the County regarding this project, with many serious concerns

remaining unaddressed. The Cottonwood Golf Course is closed in preparation to commence sand mining operations pending approval by the County of San Diego.

RECOMMENDATIONS

Table 6-1 presents the recommendations developed for this Update, listed by subject area and not by priority. Development of recommendations for watershed management actions that are economically feasible and within the authority of the SWA is critical.

Table 6-1
Current Update Recommendations

Water Quality and Treatment

Recommendation	Basis for Recommendation
1) Continue to optimize treatment during periods of reduced or changing source water quality.	Treatment operations are continually optimized at the Perdue WTP, and more so now with enhanced source utilization, but certain source water risk periods such as storm events require special attention to turbidity reduction and disinfection.
2)Continue to provide 3/4/2-log reduction for *Giardia*/virus/*Cryptosporidium.*	Coliform and pathogen concentrations in Sweetwater Reservoir support this level of reduction under the Surface Water Treatment Rules and their Guidance Manuals.
3)Continue algal management programs in the Sweetwater Reservoir.	Algal management programs are important not only for aesthetic concerns, but will assist with minimizing the development of large plankton masses that contribute to taste and odor events and organic matter.
4)Continue monitoring programs to support better understanding of algal growth and metals within Sweetwater Reservoir	Existing monitoring efforts by SWA have been significant in characterizing the quality of water, and also in developing strategies and techniques to optimize raw and treated water quality.
5)Consider monitoring Low Flow Barrier during expanded wet season for impacts of Loveland releases on aluminum and iron.	Data review shows aluminum and iron levels at the Low Flow Barrier increase during the wet season, but the data set is very limited. It is uncertain if the increases are related to the water from Loveland Reservoir releases or if they are contributed through the Middle Sweetwater River. An expanded seasonal monitoring program would ascertain increases, confirm duration of the increases, and potentially identify the source of the aluminum and iron.
6)Consider monitoring Low Flow Barrier during expanded summer/fall season to confirm concentrations of manganese and its potential sources.	Data review shows manganese at the Low Flow Barrier increases during dry weather urban runoff flows in the Middle Sweetwater watershed, again with a limited data set. An expanded seasonal monitoring program would ascertain increases, confirm duration of the increases, and potentially identify the source of manganese.
7)Consider special monitoring of Sweetwater Reservoir when destratification project is implemented (especially related to metals and algal growth).	An important aspect of the destratification project will be adaptive management to allow for optimization of operations to address the specific constituents of concern in the influent water. This will be best achieved by implementing a targeted monitoring program.

Table 6-1 Cont'd
Current Update Recommendations

Watershed Contaminant Sources

Recommendation	Basis for Recommendation
8) Continue to track and review developments in the Upper and Middle Sweetwater watersheds. SWA may also consider requesting a copy of the storm water pollution prevention plan when available for the Hester's Granite Quarry Project.	This has proven to be a very effective mechanism to protect source water quality and should be continued.
9) Obtain annual records of herbicides or pesticides used in the San Diego National Wildlife Refuge.	As stated in Appendix F-3 of the San Diego National Wildlife Refuge Final Comprehensive Conservation Plan, Volume 3A (Appendix F-2) page 14 states "The Refuge can provide you with an annual report describing the pesticides approved for use on the Refuge, along with the types and amounts of products actually used, including information regarding where and for what purposes the products were applied."
10) Continue to participate in Burned Area Emergency Response (BAER) Team whenever there is a fire in the watershed.	The BAER meetings provide the most updated information on post-fire conditions. Participation in BAER meetings by the SWA helps to ensure that water quality will be considered.
11) If horses are allowed on any new or realigned trails in the watershed, advocate for manure pickup/removal by either County of San Diego or USFWS staff.	The County of San Diego and the USFWS, in separate efforts, have plans to potentially add new trails within the Sweetwater watershed. SWA advocates proper protection from a potential increase in pathogen contamination to Sweetwater Reservoir from equestrian waste. As stated in Appendix F-3 of the San Diego National Wildlife Refuge Final Comprehensive Conservation Plan, Volume 3A (Appendix F-2) page 77 states "In addition, BMPs established by the Santa Ana and San Diego Regional Water Quality Control Boards would be implemented as applicable to minimize the potential for impacts for equestrian use on Refuge trails to adjacent waterways. None of the Refuge trail alignments in the Final CCP would be located within 200 feet of Sweetwater Reservoir and the only proposed trail crossing of the Sweetwater River within the Refuge is via a bridge that spans across the river and adjacent river banks." Also stated on page 77, "Finally, as indicated in the draft CCP/EA, Refuge staff will work with equestrians to develop a volunteer manure cleanup program focusing on trails within the Sweetwater Reservoir watershed." SWA believes a volunteer driven manure removal program would be unsatisfactory based on past volunteer efforts.

APPENDIX A
REFERENCES

REFERENCES

October 2020-March 2021 Semi-Annual and 2020 Annual Monitoring Report Detection Monitoring Program Viejas Landfill San Diego County, California SWIS #37-AA-0003 prepared for County of San Diego, prepared by Geosyntec, April 2021.

October 2021-March 2022 Semi-Annual and Annual Monitoring Report Detection Monitoring Program Jamacha Landfill San Diego County, California Order No. 94-164, SWIS #37-AA-0001 prepared for County of San Diego, prepared by Geosyntec, April 2022.

Monitoring and Reporting Program Plan SDRWQCB Order No. R9-2016-0004. Prepared for San Diego Region Irrigated Lands Group. Prepared by Pacific Ridgeline.

Local Agency Management Program (LAMP) for Onsite Wastewater Treatment Systems, prepared by County of San Diego Dept. of Environmental Health Land and Water Quality Division, February 2015.

Local Agency Management Program 5-year Evaluation Report, prepared by County of San Diego Department of Environmental Health and Quality, January 2022.

Sewer System Management Plan for the Otay Water District, March 2022.

Sewer System Management Plan for the County of San Diego, August 2020.

San Diego National Wildlife Refuge, Final Comprehensive Conservation Plan, prepared by San Diego National Wildlife Refuge Complex, and U.S. Fish and Wildlife Service, May 2017.

San Diego Bay Watershed Management Area Water Quality Improvement Plan, FY 2018 Annual Report, January 2019. Appendix 4 Monitoring Results and Assessments.

San Diego Bay Watershed Management Area Water Quality Improvement Plan, FY 2019 Annual Report, January 2020. Appendix 4 Monitoring Results and Assessments.

San Diego Bay Watershed Management Area Water Quality Improvement Plan, FY 2020 Annual Report, January 2021. Appendix 4 Monitoring Results and Assessments.

San Diego Bay Watershed Management Area Water Quality Improvement Plan, FY 2021 Annual Report, January 2022. Appendix 4 Monitoring Results and Assessments.

Valley Fire 2020, Burned Area Report, prepared by USDA Forest Service, September 2020.

Sampling and Analysis Report One-time Per- and Polyfluoroalkyl Substances Evaluation Jamacha Landfill, to Roger Mitchell SD Regional Water Quality Control Board, from Geosyntec, December 2019.

Comments on Cottonwood Sand Mine Project Draft Environmental Impact Report, PDS2018-MPA-18-004, from Sweetwater Authority to Robert Hingtgen County of San Diego, February 24, 2022.

Initial Comments related to the Hester's Granite Quarry Expansion Project RP79-017, MUP 20-010, from Sweetwater Authority to Hunter McDonald County of San Diego, October 6, 2020.

Consideration of Proposal from sPower to Construct a Battery Energy Storage System on Authority Property (Bluegill Storage Project), from Management to Governing Board, December 2020.

Comments on the Proposal to Control Non-native Invasive Plant at the Sweetwater River – Southern Border Fuel Management Project, from Sweetwater Authority to Daniel O'Connor, USFWS, September 19, 2019.

APPENDIX B
WATER QUALITY DATA

Date	Perdue WTP Raw Water Turbidity	Perdue WTP Settled Water Turbidity	Perdue WTP CFE Daily Avg Turbidity	Sweetwater Reservoir Inflow
1/1/2017	0.5	0.4	0.06	0%
1/2/2017	0.5	0.4	0.06	0%
1/3/2017	1.8	0.5	0.06	0%
1/4/2017	1.9	0.5	0.06	0%
1/5/2017	2.0	0.4	0.06	0%
1/6/2017	2.1	0.5	0.06	0%
1/7/2017	0.6	0.7	0.06	0%
1/8/2017				
1/9/2017				
1/10/2017				
1/11/2017				
1/12/2017				
1/13/2017				
1/14/2017				
1/15/2017				
1/16/2017				
1/17/2017				
1/18/2017	2.3	0.4	0.06	0%
1/19/2017	2.0	0.3	0.06	0%
1/20/2017	0.9	0.4	0.07	0%
1/21/2017	0.7	0.3	0.07	0%
1/22/2017	0.9	0.3	0.07	0%
1/23/2017	2.3	0.3	0.06	0%
1/24/2017	0.9	0.4	0.06	0%
1/25/2017	0.9	0.3	0.06	0%
1/26/2017	1.0	0.8	0.06	0%
1/27/2017	0.8	0.3	0.06	0%
1/28/2017	1.1	0.4	0.06	0%
1/29/2017	0.9	0.4	0.06	0%
1/30/2017	1.1	0.3	0.06	0%
1/31/2017	1.2	0.4	0.06	0%
2/1/2017	1.3	0.4	0.06	0%
2/2/2017	0.9	0.4	0.06	0%
2/3/2017	0.9	0.6	0.06	0%
2/4/2017	0.8	0.4	0.06	0%
2/5/2017	0.9	0.3	0.06	0%
2/6/2017	1.0	0.3	0.06	0%
2/7/2017	4.7	0.4	0.06	0%
2/8/2017	1.1	0.4	0.06	0%
2/9/2017	1.1	0.3	0.05	0%
2/10/2017	0.9	0.5	0.06	0%
2/11/2017	0.9	0.6	0.05	0%
2/12/2017	1.0	0.6	0.06	0%
2/13/2017	0.9	0.5	0.06	0%
2/14/2017	0.9	0.6	0.06	0%
2/15/2017	0.8	0.6	0.06	0%
2/16/2017	0.9	0.4	0.06	0%
2/17/2017	0.8	0.3	0.07	0%
2/18/2017	1.0	0.5	0.08	0%
2/19/2017	1.5	0.4	0.07	0%
2/20/2017	0.9	0.4	0.08	0%
2/21/2017	0.9	0.5	0.08	0%
2/22/2017	0.8	0.6	0.07	0%
2/23/2017	0.9	0.5	0.06	0%
2/24/2017	0.8	0.5	0.06	0%
2/25/2017	0.9	0.4	0.06	0%
2/26/2017	0.9	0.8	0.07	0%
2/27/2017	0.9	0.6	0.07	0%
2/28/2017	0.9	0.6	0.07	0%
3/1/2017	0.7	0.5	0.06	0%
3/2/2017	0.7	0.4	0.06	0%

The Perdue Plant was offline . Treated Aqueduct water was purchased from the SDCWA and was fed to the distribution system via the Perdue Plant Clearwell.

3/3/2017	0.6	0.5	0.06	0%
3/4/2017	0.7	0.5	0.05	0%
3/5/2017	0.9	0.6	0.05	0%
3/6/2017	2.2	0.4	0.05	0%
3/7/2017	0.7	0.6	0.06	0%
3/8/2017	1.1	0.7	0.06	0%
3/9/2017	2.6	1.0	0.07	0%
3/10/2017	3.2	0.7	0.08	0%
3/11/2017	2.4	0.6	0.08	0%
3/12/2017	2.7	0.7	0.08	0%
3/13/2017	2.9	1.1	0.07	0%
3/14/2017	5.3	1.0	0.08	0%
3/15/2017	3.5	1.1	0.07	0%
3/16/2017	3.2	1.0	0.07	0%
3/17/2017	3.4	1.1	0.07	0%
3/18/2017	3.3	0.9	0.07	0%
3/19/2017	3.0	1.0	0.08	0%
3/20/2017	3.3	1.1	0.08	0%
3/21/2017	2.5	0.9	0.08	0%
3/22/2017	2.1	1.1	0.07	0%
3/23/2017	2.3	0.8	0.07	0%
3/24/2017	1.7	1.0	0.06	0%
3/25/2017	1.5	1.0	0.07	0%
3/26/2017	1.8	0.6	0.06	0%
3/27/2017	1.0	0.8	0.06	0%
3/28/2017	1.0	0.8	0.07	0%
3/29/2017	1.2	0.8	0.06	0%
3/30/2017	1.3	0.8	0.07	0%
3/31/2017	2.1	0.5	0.07	0%
4/1/2017	1.6	1.0	0.07	0%
4/2/2017	0.8	0.8	0.08	0%
4/3/2017	3.5	0.9	0.08	0%
4/4/2017	3.6	0.6	0.07	0%
4/5/2017	4.6	1.7	0.09	35%
4/6/2017	4.3	1.0	0.09	61%
4/7/2017	4.6	1.2	0.08	53%
4/8/2017	4.2	1.6	0.10	59%
4/9/2017	3.5	1.4	0.08	46%
4/10/2017	4.6	1.2	0.06	45%
4/11/2017	4.4	1.9	0.10	63%
4/12/2017	4.6	1.7	0.12	62%
4/13/2017	4.1	1.4	0.13	55%
4/14/2017	2.7	0.7	0.11	43%
4/15/2017	1.7	1.4	0.12	0%
4/16/2017	1.7	1.4	0.13	0%
4/17/2017	1.4	0.8	0.11	0%
4/18/2017	2.6	0.8	0.11	0%
4/19/2017	1.4	0.8	0.10	0%
4/20/2017	8.5	1.4	0.08	18%
4/21/2017	6.9	1.2	0.08	55%
4/22/2017	4.8	1.3	0.10	61%
4/23/2017	5.9	1.4	0.10	59%
4/24/2017	6.1	1.5	0.08	52%
4/25/2017	5.1	1.2	0.08	62%
4/26/2017	4.4	1.0	0.08	58%
4/27/2017	9.6	1.0	0.08	55%
4/28/2017	5.6	1.0	0.09	60%
4/29/2017	5.7	1.1	0.07	55%
4/30/2017	5.0	1.3	0.08	56%
5/1/2017	3.2	1.3	0.10	65%
5/2/2017	3.1	1.5	0.09	58%
5/3/2017	2.6	1.4	0.08	58%
5/4/2017	4.2	1.2	0.10	61%
5/5/2017	4.6	1.1	0.09	56%
5/6/2017	6.2	1.3	0.07	49%
5/7/2017	5.6	1.2	0.06	43%

5/8/2017	4.3	1.3	0.06	43%
5/9/2017	3.8	1.2	0.06	44%
5/10/2017	3.3	1.1	0.07	44%
5/11/2017	4.5	1.4	0.08	49%
5/12/2017	3.0	1.3	0.09	54%
5/13/2017	2.7	1.7	0.11	55%
5/14/2017	2.9	1.3	0.10	50%
5/15/2017	2.8	1.2	0.09	48%
5/16/2017	2.6	1.4	0.11	61%
5/17/2017	2.4	1.4	0.12	56%
5/18/2017	2.9	1.4	0.12	49%
5/19/2017	3.0	1.2	0.17	59%
5/20/2017	3.2	1.4	0.18	61%
5/21/2017	3.6	1.5	0.18	60%
5/22/2017	4.6	1.7	0.18	62%
5/23/2017	3.7	1.6	0.17	59%
5/24/2017	3.5	0.9	0.17	65%
5/25/2017	3.1	1.0	0.16	67%
5/26/2017	3.0	0.9	0.15	58%
5/27/2017	2.4	1.4	0.14	17%
5/28/2017	1.3	0.6	0.09	0%
5/29/2017	2.9	0.7	0.08	0%
5/30/2017	1.9	0.8	0.07	0%
5/31/2017	3.0	1.2	0.07	21%
6/1/2017	10.2	1.1	0.13	51%
6/2/2017	5.6	1.1	0.12	51%
6/3/2017	0.7	0.6	0.06	2%
6/4/2017	1.5	0.4	0.02	0%
6/5/2017	1.6	1.0	0.05	0%
6/6/2017	4.1	0.6	0.06	0%
6/7/2017	1.2	0.9	0.07	0%
6/8/2017	4.9	0.6	0.08	15%
6/9/2017	27.0	0.9	0.14	46%
6/10/2017	30.0	0.9	0.13	47%
6/11/2017	5.5	1.0	0.13	49%
6/12/2017	4.6	1.4	0.13	50%
6/13/2017	5.6	1.1	0.12	51%
6/14/2017	5.9	0.8	0.08	50%
6/15/2017	8.2	1.5	0.07	46%
6/16/2017	8.1	1.6	0.08	45%
6/17/2017	6.7	1.1	0.08	46%
6/18/2017	6.1	0.7	0.08	47%
6/19/2017	6.5	0.9	0.08	47%
6/20/2017	8.0	1.1	0.08	47%
6/21/2017	6.7	1.6	0.08	48%
6/22/2017	6.8	1.3	0.08	48%
6/23/2017	8.6	1.4	0.09	52%
6/24/2017	5.9	1.3	0.12	53%
6/25/2017	4.6	1.1	0.11	50%
6/26/2017	6.6	1.1	0.10	47%
6/27/2017	7.6	0.8	0.09	47%
6/28/2017	6.3	1.1	0.09	48%
6/29/2017	9.6	1.3	0.10	49%
6/30/2017	5.0	1.7	0.10	47%
7/1/2017	5.0	1.3	0.11	49%
7/2/2017	4.7	1.5	0.10	54%
7/3/2017	5.3	1.4	0.12	54%
7/4/2017	7.0	1.2	0.13	54%
7/5/2017	7.8	1.4	0.14	52%
7/6/2017	2.8	1.4	0.14	53%
7/7/2017	4.6	1.6	0.16	54%
7/8/2017	7.1	1.3	0.14	55%
7/9/2017	5.2	1.3	0.13	60%
7/10/2017	4.3	1.7	0.14	60%
7/11/2017	2.9	1.5	0.13	52%
7/12/2017	3.4	1.5	0.11	55%

7/13/2017	6.6	1.1	0.09	46%
7/14/2017	3.4	1.2	0.11	51%
7/15/2017	3.2	1.0	0.08	47%
7/16/2017	6.3	1.1	0.05	50%
7/17/2017	3.5	1.3	0.08	51%
7/18/2017	3.7	1.8	0.11	59%
7/19/2017	2.7	1.5	0.11	54%
7/20/2017	2.5	1.7	0.14	50%
7/21/2017	3.1	1.6	0.12	48%
7/22/2017	2.5	1.1	0.13	48%
7/23/2017	5.7	1.1	0.11	50%
7/24/2017	2.5	1.1	0.13	50%
7/25/2017	2.6	1.4	0.13	48%
7/26/2017	3.2	1.4	0.14	47%
7/27/2017	2.4	1.0	0.19	49%
7/28/2017	4.8	1.1	0.18	49%
7/29/2017	4.3	1.0	0.16	42%
7/30/2017	6.5	1.6	0.15	50%
7/31/2017	4.3	0.9	0.17	49%
8/1/2017	5.1	0.9	0.14	47%
8/2/2017	4.3	1.0	0.14	47%
8/3/2017	4.9	1.9	0.14	46%
8/4/2017	5.7	1.1	0.11	45%
8/5/2017	3.3	1.5	0.08	45%
8/6/2017	7.3	1.9	0.14	49%
8/7/2017	3.9	1.6	0.11	49%
8/8/2017	5.3	1.6	0.15	62%
8/9/2017	2.3	1.5	0.10	46%
8/10/2017	1.8	1.6	0.15	41%
8/11/2017	6.3	1.6	0.23	49%
8/12/2017	1.6	2.2	0.25	45%
8/13/2017	2.1	0.5	0.12	40%
8/14/2017	6.3	0.8	0.13	36%
8/15/2017	0.8	0.8	0.09	0%
8/16/2017	1.6	1.0	0.09	0%
8/17/2017	1.4	0.5	0.08	0%
8/18/2017	1.4	0.5	0.10	0%
8/19/2017	1.4	0.5	0.08	0%
8/20/2017	1.3	0.5	0.08	0%
8/21/2017	1.9	0.5	0.08	0%
8/22/2017	1.1	0.8	0.08	0%
8/23/2017	1.1	0.6	0.08	0%
8/24/2017	1.0	0.4	0.08	0%
8/25/2017	1.0	0.5	0.08	0%
8/26/2017	1.0	0.6	0.08	0%
8/27/2017	0.9	0.6	0.08	0%
8/28/2017	1.3	0.6	0.09	0%
8/29/2017	1.1	0.5	0.09	10%
8/30/2017	1.2	0.7	0.10	19%
8/31/2017	1.1	1.9	0.10	34%
9/1/2017	1.1	0.7	0.08	0%
9/2/2017	1.0	0.7	0.08	0%
9/3/2017	0.7	0.3	0.08	0%
9/4/2017	0.7	0.4	0.08	0%
9/5/2017	0.9	0.9	0.08	16%
9/6/2017	0.9	1.6	0.08	36%
9/7/2017	0.7	0.9	0.07	15%
9/8/2017	0.7	0.9	0.07	34%
9/9/2017	0.9	0.4	0.07	0%
9/10/2017	0.6	0.7	0.07	0%
9/11/2017	1.5	1.0	0.09	20%
9/12/2017	0.8	1.0	0.07	29%
9/13/2017	0.6	0.9	0.08	29%
9/14/2017	0.5	0.8	0.07	10%
9/15/2017	1.5	0.7	0.08	33%
9/16/2017	2.4	0.9	0.09	44%

9/17/2017	2.4	0.9	0.08	41%
9/18/2017	1.8	0.6	0.08	44%
9/19/2017	1.8	1.1	0.09	72%
9/20/2017	1.9	0.8	0.10	58%
9/21/2017	6.1	1.3	0.10	45%
9/22/2017	3.4	0.9	0.12	96%
9/23/2017	3.8	0.9	0.14	100%
9/24/2017	3.5	1.0	0.16	98%
9/25/2017	3.1	1.2	0.13	100%
9/26/2017	3.0	1.1	0.12	100%
9/27/2017	3.0	1.0	0.13	100%
9/28/2017	3.0	1.1	0.16	100%
9/29/2017	2.5	1.0	0.17	100%
9/30/2017	7.5	1.0	0.17	100%
10/1/2017	4.6	1.4	0.18	100%
10/2/2017	4.5	1.0	0.16	91%
10/3/2017	6.6	0.8	0.15	100%
10/4/2017	2.2	0.9	0.14	100%
10/5/2017	2.8	0.7	0.14	100%
10/6/2017	2.2	0.7	0.13	100%
10/7/2017	13.9	0.8	0.14	100%
10/8/2017	11.9	0.7	0.15	96%
10/9/2017	3.5	0.9	0.13	100%
10/10/2017	2.5	1.2	0.13	95%
10/11/2017	4.0	1.6	0.13	100%
10/12/2017	4.5	2.3	0.10	100%
10/13/2017	4.4	1.5	0.09	100%
10/14/2017	3.4	1.4	0.08	100%
10/15/2017	3.2	1.1	0.08	100%
10/16/2017	6.1	1.6	0.09	100%
10/17/2017	7.0	1.1	0.10	100%
10/18/2017	6.7	1.0	0.09	100%
10/19/2017	6.3	1.9	0.10	97%
10/20/2017	13.3	1.1	0.10	93%
10/21/2017	3.0	2.0	0.11	100%
10/22/2017	2.5	1.7	0.11	96%
10/23/2017	3.9	2.0	0.12	96%
10/24/2017	3.1	1.4	0.11	100%
10/25/2017	3.1	1.2	0.13	100%
10/26/2017	2.6	1.3	0.11	100%
10/27/2017	2.7	1.2	0.08	100%
10/28/2017	3.2	2.0	0.05	100%
10/29/2017	4.0	0.9	0.06	100%
10/30/2017	9.3	1.2	0.07	100%
10/31/2017	12.0	1.9	0.12	100%
11/1/2017	9.5	2.2	0.13	100%
11/2/2017	10.1	1.7	0.16	100%
11/3/2017	9.6	1.5	0.14	100%
11/4/2017	3.5	1.8	0.13	100%
11/5/2017	3.1	1.8	0.12	100%
11/6/2017	3.0	3.0	0.12	100%
11/7/2017	2.6	1.5	0.14	100%
11/8/2017	2.7	2.0	0.10	100%
11/9/2017	2.7	1.5	0.09	100%
11/10/2017	2.9	1.7	0.10	100%
11/11/2017	3.9	1.7	0.10	100%
11/12/2017	3.2	0.8	0.10	100%
11/13/2017	3.0	1.1	0.10	100%
11/14/2017	3.7	2.2	0.10	95%
11/15/2017	3.8	1.8	0.09	100%
11/16/2017	3.0	1.3	0.11	100%
11/17/2017	6.8	0.7	0.14	100%
11/18/2017	2.7	0.7	0.10	100%
11/19/2017	3.0	0.6	0.09	100%
11/20/2017	3.7	1.6	0.10	100%
11/21/2017	2.9	2.9	0.10	100%

11/22/2017	2.8	1.1	0.10	100%
11/23/2017	2.7	1.3	0.11	100%
11/24/2017	3.2	0.9	0.07	100%
11/25/2017	3.4	0.8	0.07	100%
11/26/2017	4.9	0.8	0.06	100%
11/27/2017	5.3	0.8	0.05	100%
11/28/2017	4.1	1.1	0.05	100%
11/29/2017	5.3	1.9	0.05	100%
11/30/2017	5.4	1.0	0.08	95%
12/1/2017	6.4	1.9	0.08	100%
12/2/2017	4.8	1.8	0.09	100%
12/3/2017	6.0	1.1	0.10	100%
12/4/2017	5.6	1.9	0.10	100%
12/5/2017	5.2	2.2	0.10	100%
12/6/2017	5.5	1.7	0.09	100%
12/7/2017	5.7	1.9	0.12	100%
12/8/2017	6.1	1.3	0.12	100%
12/9/2017	4.7	1.0	0.11	100%
12/10/2017	5.5	1.3	0.12	100%
12/11/2017	6.1	1.1	0.10	100%
12/12/2017	5.4	1.8	0.10	100%
12/13/2017	5.3	2.1	0.11	98%
12/14/2017	6.3	1.9	0.11	100%
12/15/2017	6.7	1.1	0.11	100%
12/16/2017	6.4	0.8	0.10	100%
12/17/2017	6.4	0.7	0.09	94%
12/18/2017	6.2	3.7	0.07	100%
12/19/2017	7.9	1.1	0.06	100%
12/20/2017	6.9	1.7	0.06	100%
12/21/2017	7.4	0.7	0.07	100%
12/22/2017	7.2	2.0	0.09	100%
12/23/2017	7.6	0.7	0.05	100%
12/24/2017	7.7	0.9	0.05	97%
12/25/2017	7.7	0.7	0.05	100%
12/26/2017	8.8	1.0	0.08	100%
12/27/2017	7.4	1.1	0.08	100%
12/28/2017	8.4	0.9	0.07	100%
12/29/2017	8.8	1.0	0.06	100%
12/30/2017	10.1	0.8	0.07	100%
12/31/2017	10.2	0.9	0.06	100%
1/1/2018	10.4	0.8	0.08	100%
1/2/2018	10.1	1.2	0.09	100%
1/3/2018	10.7	1.0	0.09	100%
1/4/2018	13.3	0.7	0.08	100%
1/5/2018	12.1	0.8	0.08	100%
1/6/2018	11.1	0.8	0.09	100%
1/7/2018	8.8	0.9	0.09	100%
1/8/2018	15.8	1.0	0.09	100%
1/9/2018	11.9	0.8	0.05	100%
1/10/2018	11.1	0.8	0.10	97%
1/11/2018	17.6	1.4	0.12	99%
1/12/2018	11.2	0.9	0.11	100%
1/13/2018	9.9	0.8	0.10	100%
1/14/2018	9.9	0.9	0.10	100%
1/15/2018	8.6	0.7	0.09	100%
1/16/2018	8.9	0.7	0.13	98%
1/17/2018	15.5	0.9	0.11	100%
1/18/2018	15.6	0.9	0.12	100%
1/19/2018	22.3	1.0	0.12	96%
1/20/2018	8.1	2.1	0.11	100%
1/21/2018	10.9	1.1	0.10	97%
1/22/2018	9.8	1.0	0.08	91%
1/23/2018	10.2	1.0	0.09	100%
1/24/2018	11.1	0.8	0.10	97%
1/25/2018	10.7	0.9	0.11	97%
1/26/2018	15.4	0.9	0.11	100%

1/27/2018	10.2	1.0	0.11	100%
1/28/2018	10.8	0.9	0.11	94%
1/29/2018	10.8	1.5	0.11	100%
1/30/2018	16.0	1.1	0.11	100%
1/31/2018	8.6	1.3	0.12	100%
2/1/2018	14.2	1.1	0.09	99%
2/2/2018	9.5	1.0	0.11	100%
2/3/2018	12.0	0.7	0.09	100%
2/4/2018	8.1	0.8	0.10	96%
2/5/2018	8.8	0.9	0.08	100%
2/6/2018	11.6	0.8	0.08	100%
2/7/2018	12.1	0.8	0.15	100%
2/8/2018	41.0	0.9	0.13	100%
2/9/2018	11.5	0.8	0.14	100%
2/10/2018	24.0	1.0	0.13	100%
2/11/2018	20.0	0.9	0.15	100%
2/12/2018	6.6	1.0	0.14	100%
2/13/2018	9.8	0.7	0.13	96%
2/14/2018	9.3	1.9	0.14	87%
2/15/2018	9.1	0.8	0.14	100%
2/16/2018	11.7	0.8	0.15	100%
2/17/2018	25.0	0.8	0.16	100%
2/18/2018	10.0	0.7	0.16	95%
2/19/2018	7.1	1.4	0.16	100%
2/20/2018	7.2	0.9	0.15	96%
2/21/2018	9.1	1.1	0.14	97%
2/22/2018	13.5	1.1	0.13	100%
2/23/2018	7.9	0.9	0.11	100%
2/24/2018	7.0	0.7	0.12	100%
2/25/2018	9.3	0.7	0.12	100%
2/26/2018	10.0	0.7	0.14	98%
2/27/2018	8.1	0.9	0.14	97%
2/28/2018	7.3	0.9	0.13	86%
3/1/2018	8.7	0.8	0.14	100%
3/2/2018	11.1	0.9	0.14	100%
3/3/2018	17.1	0.7	0.14	98%
3/4/2018	10.5	0.7	0.13	100%
3/5/2018	9.5	0.7	0.15	96%
3/6/2018	8.8	0.7	0.14	100%
3/7/2018	8.8	0.8	0.12	100%
3/8/2018	9.4	0.8	0.13	100%
3/9/2018	15.7	1.6	0.12	100%
3/10/2018	7.6	0.7	0.13	96%
3/11/2018	6.7	0.7	0.13	100%
3/12/2018	7.6	0.8	0.13	100%
3/13/2018	6.8	1.0	0.14	100%
3/14/2018	4.4	0.9	0.13	100%
3/15/2018	5.4	0.7	0.14	100%
3/16/2018	5.7	0.8	0.13	100%
3/17/2018	11.0	0.8	0.12	100%
3/18/2018	7.2	0.6	0.13	99%
3/19/2018	7.7	0.8	0.12	100%
3/20/2018	6.7	0.9	0.13	100%
3/21/2018	6.5	0.7	0.14	98%
3/22/2018	7.6	0.6	0.12	93%
3/23/2018	6.9	0.7	0.12	100%
3/24/2018	9.9	0.7	0.13	99%
3/25/2018	8.3	0.6	0.13	96%
3/26/2018	8.0	0.7	0.12	100%
3/27/2018	9.9	0.9	0.11	100%
3/28/2018	7.3	0.7	0.13	100%
3/29/2018	8.3	0.8	0.14	100%
3/30/2018	8.3	1.0	0.13	97%
3/31/2018	7.9	0.7	0.121424	97%
4/1/2018	10.3	0.6	0.11	96%
4/2/2018	8.1	0.7	0.11	100%

4/3/2018	10.8	0.7	0.11	100%
4/4/2018	7.6	0.8	0.11	100%
4/5/2018	9.5	0.7	0.11	100%
4/6/2018	7.3	0.6	0.08	100%
4/7/2018	7.4	0.7	0.09	98%
4/8/2018	7.4	0.5	0.09	100%
4/9/2018	7.9	0.6	0.09	100%
4/10/2018	8.0	0.6	0.09	100%
4/11/2018	7.1	0.6	0.12	98%
4/12/2018	5.9	1.1	0.14	100%
4/13/2018	6.4	0.8	0.13	100%
4/14/2018	5.8	0.7	0.13	97%
4/15/2018	6.6	0.8	0.13	100%
4/16/2018	7.6	1.5	0.11	100%
4/17/2018	8.3	1.2	0.10	100%
4/18/2018	8.2	0.8	0.11	100%
4/19/2018	7.5	1.1	0.14	99%
4/20/2018	8.0	1.0	0.15	100%
4/21/2018	9.6	1.0	0.16	100%
4/22/2018	9.2	0.9	0.16	99%
4/23/2018	11.1	1.0	0.14	100%
4/24/2018	10.4	1.0	0.11	100%
4/25/2018	7.5	1.1	0.12	100%
4/26/2018	7.3	0.8	0.13	100%
4/27/2018	7.1	0.8	0.12	100%
4/28/2018	6.3	0.8	0.11	93%
4/29/2018	7.0	0.7	0.10	100%
4/30/2018	7.6	0.8	0.09	100%
5/1/2018	6.1	0.9	0.10	100%
5/2/2018	7.6	1.0	0.13	96%
5/3/2018	7.8	0.9	0.12	100%
5/4/2018	8.1	1.0	0.13	100%
5/5/2018	6.7	0.9	0.15	100%
5/6/2018	6.4	0.8	0.17	97%
5/7/2018	6.8	0.8	0.17	98%
5/8/2018	5.9	0.9	0.19	100%
5/9/2018	5.9	0.9	0.14	98%
5/10/2018	6.0	0.7	0.12	100%
5/11/2018	7.0	0.7	0.15	100%
5/12/2018	5.7	0.8	0.16	99%
5/13/2018	6.3	0.8	0.18	99%
5/14/2018	8.9	0.7	0.18	98%
5/15/2018	8.7	0.7	0.19	100%
5/16/2018	7.4	0.6	0.16	100%
5/17/2018	6.4	0.6	0.14	100%
5/18/2018	6.9	0.7	0.18	100%
5/19/2018	6.6	1.2	0.16	99%
5/20/2018	7.1	0.7	0.15	95%
5/21/2018	8.6	0.8	0.13	100%
5/22/2018	8.7	0.9	0.11	100%
5/23/2018	8.0	0.8	0.10	100%
5/24/2018	9.0	0.6	0.11	100%
5/25/2018	8.8	1.4	0.13	100%
5/26/2018	9.5	1.5	0.10	93%
5/27/2018	9.8	1.0	0.09	100%
5/28/2018	8.4	1.5	0.10	100%
5/29/2018	7.5	0.8	0.11	100%
5/30/2018	6.3	0.7	0.10	97%
5/31/2018	8.5	0.6	0.11	100%
6/1/2018	8.2	0.7	0.12	100%
6/2/2018	6.0	0.6	0.12	100%
6/3/2018	7.7	0.8	0.11	100%
6/4/2018	7.7	0.7	0.11	100%
6/5/2018	7.6	0.6	0.11	100%
6/6/2018	8.6	0.8	0.10	100%
6/7/2018	7.5	0.6	0.12	100%

6/8/2018	5.8	0.6	0.12	100%
6/9/2018	7.4	0.7	0.13	100%
6/10/2018	9.5	0.7	0.13	100%
6/11/2018	6.4	0.7	0.16	100%
6/12/2018	9.3	0.6	0.14	100%
6/13/2018	8.3	0.6	0.11	98%
6/14/2018	12.8	0.9	0.12	99%
6/15/2018	10.2	0.6	0.12	100%
6/16/2018	9.1	0.6	0.11	97%
6/17/2018	9.7	0.7	0.12	95%
6/18/2018	9.9	1.0	0.14	100%
6/19/2018	7.3	0.6	0.12	100%
6/20/2018	7.4	0.7	0.12	95%
6/21/2018	7.4	0.9	0.11	100%
6/22/2018	7.6	0.8	0.11	100%
6/23/2018	7.9	0.9	0.11	100%
6/24/2018	7.8	0.8	0.12	100%
6/25/2018	10.6	0.8	0.14	100%
6/26/2018	8.0	1.1	0.15	100%
6/27/2018	7.9	0.7	0.12	100%
6/28/2018	8.1	0.6	0.13	100%
6/29/2018	8.0	0.8	0.11	100%
6/30/2018	8.1	0.6	0.12	100%
7/1/2018	7.7	0.7	0.14	100%
7/2/2018	11.1	0.8	0.13	94%
7/3/2018	6.8	0.7	0.14	100%
7/4/2018	9.6	0.7	0.17	100%
7/5/2018	6.1	0.7	0.16	100%
7/6/2018	5.7	0.7	0.17	94%
7/7/2018	5.8	0.7	0.16	100%
7/8/2018	5.6	1.1	0.16	100%
7/9/2018	5.4	1.0	0.15	100%
7/10/2018	6.0	0.7	0.16	100%
7/11/2018	7.1	1.1	0.15	100%
7/12/2018	4.8	0.7	0.13	100%
7/13/2018	5.0	0.8	0.15	100%
7/14/2018	4.2	0.8	0.15	100%
7/15/2018	5.1	0.8	0.16	100%
7/16/2018	4.7	0.7	0.16	100%
7/17/2018	6.9	0.9	0.15	100%
7/18/2018	6.7	0.8	0.16	100%
7/19/2018	5.7	1.0	0.18	81%
7/20/2018	2.0	0.2	0.08	0%
7/21/2018	0.5	0.4	0.08	0%
7/22/2018	0.4	0.6	0.09	0%
7/23/2018	0.4	0.4	0.08	0%
7/24/2018	0.5	0.5	0.08	0%
7/25/2018	0.4	0.6	0.08	0%
7/26/2018	0.4	0.4	0.08	0%
7/27/2018	0.4	0.4	0.08	0%
7/28/2018	0.5	0.5	0.08	0%
7/29/2018	0.5	0.5	0.08	0%
7/30/2018	0.4	0.4	0.08	0%
7/31/2018	0.4	0.4	0.08	0%
8/1/2018	0.4	0.5	0.09	0%
8/2/2018	0.3	0.4	0.09	0%
8/3/2018	0.5	0.5	0.09	0%
8/4/2018	0.4	0.5	0.09	0%
8/5/2018	0.4	0.4	0.09	0%
8/6/2018	0.5	0.4	0.09	0%
8/7/2018	0.6	0.5	0.10	0%
8/8/2018	0.7	0.5	0.11	0%
8/9/2018	0.7	0.5	0.09	0%
8/10/2018	0.8	0.6	0.07	0%
8/11/2018	0.8	0.5	0.07	0%
8/12/2018	0.6	0.5	0.08	0%

8/13/2018	0.6	0.4	0.07	0%
8/14/2018	0.6	0.4	0.07	0%
8/15/2018	0.5	0.3	0.07	0%
8/16/2018	0.6	0.5	0.07	0%
8/17/2018	0.6	0.4	0.08	0%
8/18/2018	0.5	0.4	0.07	0%
8/19/2018	0.6	0.3	0.07	0%
8/20/2018	0.8	0.3	0.08	0%
8/21/2018	1.1	0.3	0.07	0%
8/22/2018	0.7	0.3	0.07	0%
8/23/2018	0.8	0.3	0.07	0%
8/24/2018	0.9	0.5	0.08	0%
8/25/2018	0.8	0.5	0.07	0%
8/26/2018	0.8	0.5	0.08	0%
8/27/2018	0.8	0.4	0.08	0%
8/28/2018	3.1	0.5	0.09	32%
8/29/2018	5.4	0.5	0.11	53%
8/30/2018	6.8	0.5	0.11	48%
8/31/2018	6.0	0.6	0.14	58%
9/1/2018	4.0	0.6	0.15	55%
9/2/2018	7.8	1.8	0.14	55%
9/3/2018	8.9	0.6	0.15	58%
9/4/2018	3.1	0.5	0.12	54%
9/5/2018	5.1	0.8	0.11	49%
9/6/2018	3.7	0.9	0.11	48%
9/7/2018	3.4	0.7	0.12	52%
9/8/2018	5.5	0.7	0.12	53%
9/9/2018	4.5	0.7	0.12	47%
9/10/2018	3.7	0.6	0.12	47%
9/11/2018	4.3	0.8	0.12	50%
9/12/2018	4.5	0.9	0.12	52%
9/13/2018	4.7	0.7	0.11	52%
9/14/2018	4.6	0.8	0.12	53%
9/15/2018	3.9	0.9	0.13	51%
9/16/2018	3.8	0.6	0.13	52%
9/17/2018	3.6	0.6	0.13	50%
9/18/2018	3.8	0.4	0.13	49%
9/19/2018	4.5	0.5	0.13	50%
9/20/2018	4.2	0.4	0.13	52%
9/21/2018	5.1	0.6	0.13	52%
9/22/2018	4.4	0.7	0.13	50%
9/23/2018	5.5	0.7	0.15	54%
9/24/2018	4.5	0.8	0.15	53%
9/25/2018	4.7	0.6	0.14	50%
9/26/2018	4.2	0.7	0.15	52%
9/27/2018	4.9	0.8	0.13	53%
9/28/2018	4.5	0.9	0.12	52%
9/29/2018	4.9	0.8	0.13	49%
9/30/2018	5.0	1.1	0.13	51%
10/1/2018	5.5	0.7	0.13	51%
10/2/2018	4.0	1.0	0.12	48%
10/3/2018	3.6	0.5	0.12	50%
10/4/2018	3.7	0.7	0.13	51%
10/5/2018	3.9	0.9	0.13	52%
10/6/2018	4.7	1.0	0.13	52%
10/7/2018	3.3	0.8	0.13	49%
10/8/2018	3.8	0.4	0.10	51%
10/9/2018	3.9	0.4	0.09	48%
10/10/2018	5.9	0.7	0.11	50%
10/11/2018	4.8	0.5	0.11	49%
10/12/2018	4.3	0.6	0.10	52%
10/13/2018	4.6	0.6	0.09	53%
10/14/2018	4.5	0.8	0.10	52%
10/15/2018	4.7	0.4	0.10	31%
10/16/2018	0.8	0.2	0.09	0%
10/17/2018	0.7	0.3	0.10	0%

10/18/2018	0.6	0.2	0.10	0%
10/19/2018	0.7	0.3	0.11	0%
10/20/2018	0.7	0.2	0.11	0%
10/21/2018	0.9	0.4	0.12	0%
10/22/2018	0.7	0.3	0.11	0%
10/23/2018	0.7	0.3	0.11	0%
10/24/2018	0.7	0.2	0.12	0%
10/25/2018	0.9	0.2	0.13	0%
10/26/2018	0.9	0.2	0.05	0%
10/27/2018	0.8	0.3	0.05	0%
10/28/2018	0.8	0.3	0.05	0%
10/29/2018	0.8	0.3	0.06	0%
10/30/2018	0.8	0.5	0.06	0%
10/31/2018	0.9	0.5	0.06	0%
11/1/2018	1.1	0.4	0.07	0%
11/2/2018	0.9	0.3	0.07	0%
11/3/2018				
11/4/2018				
11/5/2018				
11/6/2018				
11/7/2018				
11/8/2018				
11/9/2018	1.4	0.3	0.11	0%
11/10/2018	1.4	0.4	0.10	0%
11/11/2018	0.9	0.4	0.10	0%
11/12/2018	0.6	0.4	0.11	0%
11/13/2018	0.6	0.3	0.11	0%
11/14/2018	0.5	0.3	0.11	0%
11/15/2018	0.5	0.3	0.11	0%
11/16/2018	0.5	0.4	0.09	0%
11/17/2018	0.6	0.5	0.10	0%
11/18/2018	0.5	0.4	0.11	0%
11/19/2018	0.6	0.4	0.12	0%
11/20/2018	0.6	0.4	0.12	0%
11/21/2018	0.6	0.3	0.13	0%
11/22/2018	0.5	0.4	0.14	0%
11/23/2018	0.5	0.4	0.15	0%
11/24/2018	0.4	0.3	0.15	0%
11/25/2018	0.5	0.4	0.16	0%
11/26/2018	0.5	0.4	0.16	0%
11/27/2018	0.4	0.4	0.09	0%
11/28/2018	10.3	1.1	0.07	35%
11/29/2018	9.9	0.8	0.09	52%
11/30/2018	20.1	1.3	0.09	52%
12/1/2018	9.6	0.8	0.10	47%
12/2/2018	12.0	1.0	0.12	52%
12/3/2018	9.4	0.8	0.11	49%
12/4/2018	8.9	0.8	0.11	51%
12/5/2018	8.2	0.7	0.11	50%
12/6/2018	8.8	1.5	0.14	39%
12/7/2018	8.8	1.3	0.12	44%
12/8/2018	9.4	0.7	0.11	52%
12/9/2018	7.8	1.1	0.10	49%
12/10/2018	0.9	0.7	0.10	0%
12/11/2018	2.0	0.6	0.09	0%
12/12/2018	0.9	0.6	0.10	0%
12/13/2018	0.7	0.4	0.10	0%
12/14/2018	0.8	0.6	0.10	0%
12/15/2018	0.6	0.5	0.10	0%
12/16/2018	0.5	0.8	0.11	0%
12/17/2018	0.8	0.4	0.09	0%
12/18/2018	0.7	0.4	0.09	0%
12/19/2018	0.6	0.6	0.09	0%
12/20/2018	0.6	0.5	0.10	0%
12/21/2018	0.5	0.4	0.10	0%
12/22/2018	0.6	0.5	0.10	0%

The Perdue Plant was offline . Treated aqueduct water was purchased from the SDCWA and was fed to the distribution system via the Perdue Plant Clearwell.

12/23/2018	0.5	0.4	0.11	0%	
12/24/2018	0.6	1.2	0.11	0%	
12/25/2018	0.6	0.8	0.11	0%	
12/26/2018	0.6	0.5	0.12	0%	
12/27/2018	0.8	0.5	0.12	0%	
12/28/2018	1.2	0.6	0.13	0%	
12/29/2018	0.6	0.5	0.13	0%	
12/30/2018	0.7	0.8	0.13	0%	
12/31/2018	0.7	0.4	0.14	0%	
1/1/2019	1.2	0.5	0.14	0%	
1/2/2019	0.8	0.4	0.09	0%	
1/3/2019	0.7	0.6	0.07	0%	
1/4/2019	0.4	0.4	0.08	0%	
1/5/2019	0.6	0.4	0.08	0%	
1/6/2019	0.5	0.3	0.09	0%	
1/7/2019	0.6	0.4	0.09	0%	
1/8/2019	0.5	0.4	0.14	0%	
1/9/2019	0.6	1.0	0.14	0%	
1/10/2019	0.5	0.5	0.09	0%	
1/11/2019	0.6	0.9	0.09	0%	
1/12/2019	0.4	0.4	0.09	0%	
1/13/2019	0.5	0.4	0.08	0%	
1/14/2019	0.8	0.3	0.06	0%	
1/15/2019	6.9	0.6	0.09	52%	
1/16/2019	6.2	0.6	0.08	51%	
1/17/2019	6.2	0.6	0.08	49%	
1/18/2019	6.8	0.6	0.09	51%	
1/19/2019					The Perdue Plant was offline.
1/20/2019	5.5	0.6	0.11	48%	
1/21/2019	5.7	0.6	0.10	50%	
1/22/2019	7.2	0.6	0.11	52%	
1/23/2019	8.4	0.7	0.10	51%	
1/24/2019	7.6	0.7	0.13	52%	
1/25/2019	6.9	0.7	0.12	51%	
1/26/2019					The Perdue Plant was offline . Treated aqueduct water was purchased from the SDCWA and was fed to the distribution system via the Perdue Plant Clearwell.
1/27/2019					
1/28/2019					
1/29/2019					
1/30/2019					
1/31/2019					
2/1/2019					The Perdue Plant was offline . Treated aqueduct water was purchased from the SDCWA and was fed to the distribution system via the Perdue Plant Clearwell.
2/2/2019					
2/3/2019					
2/4/2019					
2/5/2019					
2/6/2019	4.9	0.9	0.13	55%	
2/7/2019	5.6	1.5	0.13	53%	
2/8/2019	4.6	2.4	0.14	57%	
2/9/2019	4.8	0.7	0.17	58%	
2/10/2019	4.8	0.6	0.17	62%	
2/11/2019	5.0	0.8	0.19	57%	
2/12/2019	4.8	0.9	0.19	52%	
2/13/2019	4.4	0.7	0.09	56%	
2/14/2019					The Perdue Plant was offline.
2/15/2019	7.6	1.3	0.08	59%	
2/16/2019	6.7	1.4	0.08	56%	
2/17/2019					The Perdue Plant was offline.
2/18/2019	5.8	1.1	0.09	59%	
2/19/2019	5.7	1.1	0.10	55%	
2/20/2019	7.3	1.6	0.12	52%	
2/21/2019	8.2	1.3	0.12	59%	
2/22/2019	7.0	1.7	0.12	57%	
2/23/2019					The Perdue Plant was offline.
2/24/2019	6.9	1.0	0.12	59%	
2/25/2019	6.8	1.5	0.11	61%	
2/26/2019	7.3	1.9	0.12	50%	

2/27/2019	6.9	1.1	0.11	57%
2/28/2019				The Perdue Plant was offline.
3/1/2019	5.2	0.9	0.12	59%
3/2/2019	3.9	0.8	0.14	59%
3/3/2019	3.2	0.8	0.13	60%
3/4/2019	2.6	0.8	0.14	55%
3/5/2019	2.0	0.7	0.15	59%
3/6/2019	2.3	1.0	0.13	56%
3/7/2019	2.0	1.3	0.15	54%
3/8/2019	2.0	0.9	0.16	58%
3/9/2019	2.0	0.7	0.15	56%
3/10/2019	2.0	0.8	0.16	57%
3/11/2019	1.5	0.7	0.13	57%
3/12/2019	1.5	1.1	0.15	59%
3/13/2019	1.4	1.2	0.14	51%
3/14/2019	1.3	1.1	0.16	59%
3/15/2019	1.3	2.1	0.15	57%
3/16/2019	1.3	1.2	0.17	59%
3/17/2019	1.3	0.8	0.16	57%
3/18/2019				The Perdue Plant was offline.
3/19/2019	1.5	2.2	0.16	99%
3/20/2019	1.8	2.1	0.13	100%
3/21/2019	1.7	1.6	0.10	100%
3/22/2019	1.6	1.3	0.07	89%
3/23/2019	1.9	1.8	0.13	100%
3/24/2019	2.1	1.3	0.12	97%
3/25/2019	1.5	1.5	0.12	100%
3/26/2019	1.3	2.1	0.12	100%
3/27/2019	1.4	1.4	0.14	100%
3/28/2019	1.5	1.3	0.11	100%
3/29/2019	1.2	1.1	0.12	100%
3/30/2019	1.2	1.2	0.14	100%
3/31/2019	1.2	1.0	0.13	84%
4/1/2019	1.3	1.1	0.12	100%
4/2/2019	1.3	1.4	0.13	100%
4/3/2019	1.2	1.4	0.13	100%
4/4/2019	1.4	1.1	0.10	100%
4/5/2019	1.8	1.2	0.11	100%
4/6/2019	2.2	1.2	0.10	100%
4/7/2019	1.7	1.3	0.11	100%
4/8/2019	1.9	1.3	0.12	100%
4/9/2019	1.9	0.9	0.12	100%
4/10/2019	2.0	1.1	0.13	100%
4/11/2019	2.3	0.9	0.14	100%
4/12/2019	2.4	0.9	0.15	100%
4/13/2019	2.5	0.9	0.16	100%
4/14/2019	2.4	0.9	0.18	100%
4/15/2019	2.6	0.9	0.15	100%
4/16/2019	2.9	0.9	0.11	100%
4/17/2019	3.0	0.9	0.12	100%
4/18/2019	3.0	0.9	0.15	100%
4/19/2019	3.3	0.9	0.19	100%
4/20/2019	3.3	1.0	0.17	100%
4/21/2019	3.9	0.7	0.12	100%
4/22/2019	3.4	0.7	0.11	100%
4/23/2019	3.8	0.9	0.11	100%
4/24/2019	3.5	0.8	0.11	93%
4/25/2019	3.4	0.7	0.09	100%
4/26/2019	3.2	0.9	0.10	100%
4/27/2019	3.1	0.9	0.10	100%
4/28/2019	3.3	0.6	0.10	100%
4/29/2019	3.1	0.5	0.10	100%
4/30/2019	3.1	0.6	0.10	100%
5/1/2019	4.3	0.7	0.09	100%
5/2/2019	3.2	0.8	0.09	100%
5/3/2019	2.7	0.7	0.09	100%

5/4/2019	2.9	0.8	0.10	100%
5/5/2019	2.8	0.8	0.11	100%
5/6/2019	2.7	0.6	0.10	100%
5/7/2019	2.6	0.5	0.11	100%
5/8/2019	2.1	0.6	0.13	100%
5/9/2019	1.8	0.6	0.14	100%
5/10/2019	1.8	0.5	0.12	100%
5/11/2019	1.6	0.6	0.12	100%
5/12/2019	1.5	0.7	0.14	100%
5/13/2019	1.9	0.7	0.12	100%
5/14/2019	2.0	0.8	0.10	100%
5/15/2019	2.3	0.7	0.11	100%
5/16/2019	2.1	0.7	0.13	100%
5/17/2019	2.2	0.7	0.15	100%
5/18/2019	2.3	1.3	0.17	100%
5/19/2019	1.8	0.8	0.15	100%
5/20/2019	2.2	0.7	0.12	100%
5/21/2019	2.6	0.7	0.10	100%
5/22/2019	2.0	0.8	0.11	100%
5/23/2019	1.9	1.0	0.09	100%
5/24/2019	1.9	0.6	0.09	100%
5/25/2019	1.9	0.7	0.10	100%
5/26/2019	1.8	0.8	0.11	100%
5/27/2019	1.9	0.9	0.12	100%
5/28/2019	1.7	1.2	0.10	100%
5/29/2019	2.2	1.1	0.10	100%
5/30/2019	2.2	1.0	0.10	100%
5/31/2019	1.9	0.7	0.10	100%
6/1/2019	1.5	0.7	0.10	100%
6/2/2019	1.3	1.0	0.11	100%
6/3/2019	1.1	1.1	0.10	100%
6/4/2019	1.0	1.2	0.10	100%
6/5/2019	0.9	1.1	0.12	100%
6/6/2019	1.0	1.1	0.11	100%
6/7/2019	1.0	1.0	0.13	100%
6/8/2019	1.0	1.1	0.10	100%
6/9/2019	1.2	1.0	0.10	100%
6/10/2019	1.2	1.0	0.10	99%
6/11/2019	1.1	1.4	0.09	100%
6/12/2019	1.0	1.0	0.10	100%
6/13/2019	1.0	1.1	0.10	100%
6/14/2019	0.8	1.1	0.09	97%
6/15/2019	0.9	0.9	0.09	100%
6/16/2019	0.8	0.9	0.08	100%
6/17/2019	0.9	1.1	0.09	100%
6/18/2019	0.8	0.8	0.08	100%
6/19/2019	1.0	0.9	0.09	100%
6/20/2019	1.5	0.8	0.10	100%
6/21/2019	1.5	0.9	0.09	100%
6/22/2019	2.7	1.1	0.09	100%
6/23/2019	1.8	0.7	0.08	100%
6/24/2019	1.7	0.8	0.07	96%
6/25/2019	1.8	0.6	0.01	100%
6/26/2019	1.7	0.8	0.06	100%
6/27/2019	1.7	1.1	0.10	98%
6/28/2019	2.7	1.0	0.09	100%
6/29/2019	2.0	0.5	0.10	100%
6/30/2019	1.7	0.6	0.12	100%
7/1/2019	2.5	0.9	0.13	100%
7/2/2019	4.4	0.8	0.13	100%
7/3/2019	2.8	0.7	0.15	100%
7/4/2019	2.2	0.4	0.19	100%
7/5/2019	2.7	0.5	0.13	100%
7/6/2019	2.1	1.0	0.10	100%
7/7/2019	1.9	0.4	0.05	100%
7/8/2019	3.5	0.7	0.07	100%

7/9/2019	2.3	0.7	0.08	100%
7/10/2019	3.3	1.0	0.10	100%
7/11/2019	2.4	0.5	0.11	100%
7/12/2019	2.1	0.6	0.11	100%
7/13/2019	1.7	0.4	0.10	100%
7/14/2019	2.2	1.1	0.10	100%
7/15/2019	1.8	0.7	0.11	100%
7/16/2019	2.1	0.5	0.11	100%
7/17/2019	2.0	0.6	0.11	100%
7/18/2019	1.9	0.7	0.10	100%
7/19/2019	1.7	0.6	0.10	100%
7/20/2019	1.5	0.7	0.11	100%
7/21/2019	1.2	0.9	0.11	100%
7/22/2019	1.1	0.9	0.11	100%
7/23/2019	1.0	0.7	0.10	97%
7/24/2019	3.5	0.5	0.09	100%
7/25/2019	2.5	0.8	0.09	100%
7/26/2019	3.3	0.9	0.10	100%
7/27/2019	2.7	0.5	0.10	100%
7/28/2019	2.5	0.7	0.11	100%
7/29/2019	3.2	0.7	0.10	100%
7/30/2019	3.1	0.6	0.11	100%
7/31/2019	2.7	0.7	0.11	100%
8/1/2019	2.6	0.8	0.10	100%
8/2/2019	2.7	0.7	0.11	100%
8/3/2019	2.2	0.9	0.12	100%
8/4/2019	2.1	0.9	0.13	100%
8/5/2019	2.0	0.6	0.13	100%
8/6/2019	2.1	0.7	0.10	100%
8/7/2019	2.2	1.0	0.09	100%
8/8/2019	2.1	1.1	0.10	100%
8/9/2019	2.1	0.9	0.11	100%
8/10/2019	1.8	0.6	0.11	100%
8/11/2019	1.8	0.5	0.11	100%
8/12/2019	1.8	0.9	0.11	100%
8/13/2019	2.0	0.9	0.11	100%
8/14/2019	2.1	1.0	0.10	100%
8/15/2019	1.9	0.8	0.11	100%
8/16/2019	2.2	0.8	0.11	100%
8/17/2019	1.9	1.1	0.11	100%
8/18/2019	1.9	0.5	0.12	100%
8/19/2019	2.0	0.8	0.12	100%
8/20/2019	1.9	1.0	0.12	100%
8/21/2019	1.9	0.9	0.12	100%
8/22/2019	2.0	0.9	0.10	100%
8/23/2019	1.8	0.9	0.10	100%
8/24/2019	1.9	0.9	0.11	100%
8/25/2019	1.8	0.8	0.11	100%
8/26/2019	2.0	0.8	0.11	100%
8/27/2019	2.2	0.7	0.11	100%
8/28/2019	2.1	1.0	0.10	100%
8/29/2019	2.5	0.9	0.11	100%
8/30/2019	2.0	0.5	0.11	100%
8/31/2019	2.1	1.0	0.11	100%
9/1/2019	2.2	0.9	0.12	100%
9/2/2019	2.6	0.7	0.13	100%
9/3/2019	2.5	0.7	0.12	100%
9/4/2019	2.2	0.7	0.11	100%
9/5/2019	2.1	0.7	0.12	100%
9/6/2019	2.7	0.8	0.13	100%
9/7/2019	2.6	0.7	0.12	100%
9/8/2019	3.0	0.8	0.12	100%
9/9/2019	3.0	0.8	0.12	100%
9/10/2019	2.7	0.8	0.12	100%
9/11/2019	3.0	0.9	0.10	100%
9/12/2019	3.0	0.9	0.11	100%

9/13/2019	3.1	0.8	0.13	100%
9/14/2019	3.0	0.8	0.13	100%
9/15/2019	4.8	0.8	0.14	100%
9/16/2019	2.9	0.6	0.14	100%
9/17/2019	3.0	0.9	0.16	100%
9/18/2019	3.0	0.7	0.18	100%
9/19/2019	2.7	0.8	0.17	100%
9/20/2019	2.6	0.8	0.13	100%
9/21/2019	2.9	0.9	0.11	100%
9/22/2019	5.7	0.8	0.11	100%
9/23/2019	3.4	0.8	0.11	100%
9/24/2019	3.0	0.7	0.13	100%
9/25/2019	3.5	0.8	0.14	100%
9/26/2019	3.8	0.6	0.13	100%
9/27/2019	6.4	0.7	0.12	100%
9/28/2019	4.5	0.7	0.13	100%
9/29/2019	4.1	0.7	0.13	100%
9/30/2019	2.9	0.9	0.13	91%
10/1/2019	2.8	0.6	0.14	100%
10/2/2019	2.7	0.9	0.13	100%
10/3/2019	2.6	0.8	0.14	100%
10/4/2019	2.5	0.8	0.14	100%
10/5/2019	3.8	1.0	0.13	100%
10/6/2019	3.8	0.9	0.13	100%
10/7/2019	3.6	0.6	0.12	100%
10/8/2019	4.8	0.6	0.13	100%
10/9/2019	3.9	0.7	0.14	100%
10/10/2019	2.9	0.7	0.14	100%
10/11/2019	3.1	0.5	0.14	100%
10/12/2019	3.3	0.8	0.12	100%
10/13/2019	6.4	0.8	0.15	100%
10/14/2019	4.1	0.5	0.19	100%
10/15/2019	4.1	0.7	0.11	100%
10/16/2019	3.3	0.7	0.12	100%
10/17/2019	3.5	0.7	0.12	100%
10/18/2019	3.2	0.6	0.11	100%
10/19/2019	3.7	0.6	0.11	100%
10/20/2019	2.9	0.7	0.12	100%
10/21/2019	3.0	0.7	0.12	100%
10/22/2019	3.3	0.7	0.11	62%
10/23/2019	1.0	0.4	0.10	0%
10/24/2019	1.1	0.7	0.09	0%
10/25/2019	0.9	0.3	0.09	0%
10/26/2019	1.0	0.9	0.09	0%
10/27/2019	0.9	0.5	0.09	0%
10/28/2019	1.1	0.3	0.09	0%
10/29/2019	1.0	0.3	0.09	0%
10/30/2019	1.5	0.6	0.09	0%
10/31/2019	1.5	0.3	0.10	0%
11/1/2019	0.9	0.4	0.09	0%
11/2/2019	0.9	0.2	0.10	0%
11/3/2019	0.8	0.3	0.10	0%
11/4/2019	0.7	0.6	0.11	70%
11/5/2019	4.6	1.0	0.12	100%
11/6/2019	5.1	0.6	0.11	100%
11/7/2019	5.3	0.6	0.11	100%
11/8/2019	4.9	0.7	0.11	100%
11/9/2019	4.5	0.8	0.12	100%
11/10/2019	5.6	0.8	0.11	100%
11/11/2019	6.7	1.0	0.12	100%
11/12/2019	7.5	1.1	0.12	100%
11/13/2019	7.2	1.1	0.11	100%
11/14/2019	6.7	1.2	0.12	100%
11/15/2019	8.6	1.1	0.12	100%
11/16/2019	5.6	0.8	0.12	100%
11/17/2019	5.6	1.0	0.12	100%

11/18/2019	5.5	0.7	0.11	100%
11/19/2019	6.3	0.6	0.11	100%
11/20/2019	5.2	0.8	0.13	100%
11/21/2019	6.2	1.5	0.14	100%
11/22/2019	8.3	0.9	0.15	100%
11/23/2019	5.8	1.0	0.15	100%
11/24/2019	5.7	0.9	0.15	100%
11/25/2019	6.4	1.0	0.15	97%
11/26/2019	6.5	1.2	0.15	97%
11/27/2019	6.8	1.5	0.14	100%
11/28/2019	0.8	1.2	0.11	100%
11/29/2019	8.2	1.3	0.10	100%
11/30/2019	8.6	1.2	0.11	94%
12/1/2019	8.6	1.1	0.10	100%
12/2/2019	10.0	1.6	0.09	100%
12/3/2019	13.0	1.2	0.09	100%
12/4/2019	11.0	1.1	0.10	100%
12/5/2019	8	1.1	0.10	100%
12/6/2019	8.9	1.1	0.10	95%
12/7/2019	8.4	1.1	0.11	100%
12/8/2019	11.7	1.1	0.12	100%
12/9/2019	6.5	1.1	0.10	100%
12/10/2019	7.3	0.9	0.10	100%
12/11/2019	7.0	0.9	0.10	100%
12/12/2019	6.6	0.9	0.11	100%
12/13/2019	6.9	1.2	0.10	100%
12/14/2019	7.2	1.3	0.12	100%
12/15/2019	6.6	1.0	0.11	100%
12/16/2019	8.0	0.9	0.07	100%
12/17/2019	8.7	0.9	0.06	100%
12/18/2019	7.5	0.8	0.07	100%
12/19/2019	9.0	0.9	0.08	100%
12/20/2019	8.1	1.4	0.09	100%
12/21/2019	8.8	1.1	0.09	100%
12/22/2019				The Perdue Plant was offline.
12/23/2019	14.5	1.1	0.17	100%
12/24/2019	11.4	1.0	0.16	100%
12/25/2019	9.5	1.1	0.12	100%
12/26/2019	11.8	1.0	0.12	100%
12/27/2019	9.2	0.8	0.12	98%
12/28/2019	9.3	1.1	0.12	100%
12/29/2019	8.7	0.9	0.13	100%
12/30/2019	8.6	0.9	0.13	100%
12/31/2019	7.5	1.0	0.12	100%
1/1/2020	8.4	1.0	0.10	100%
1/2/2020	8.3	1.0	0.10	100%
1/3/2020	7.0	1.0	0.10	100%
1/4/2020	7.4	2.2	0.11	89%
1/5/2020	7.9	0.9	0.10	100%
1/6/2020	7.0	0.8	0.09	100%
1/7/2020	7.5	0.9	0.07	100%
1/8/2020	7.5	1.0	0.08	100%
1/9/2020	8.0	0.8	0.09	100%
1/10/2020	7.6	0.9	0.09	100%
1/11/2020	8.0	0.8	0.09	100%
1/12/2020	6.0	1.2	0.09	100%
1/13/2020	14.8	1.1	0.08	100%
1/14/2020	8.8	1.0	0.09	100%
1/15/2020	8.7	0.9	0.09	100%
1/16/2020	8.8	0.8	0.07	95%
1/17/2020	7.6	0.8	0.07	100%
1/18/2020	7.6	0.9	0.08	100%
1/19/2020	7.5	0.9	0.07	100%
1/20/2020	15.7	1.0	0.09	100%
1/21/2020	8.5	1.0	0.09	100%
1/22/2020	8.7	1.0	0.08	100%

1/23/2020	8.5	0.9	0.08	100%
1/24/2020	9.1	0.9	0.07	100%
1/25/2020	7.5	0.8	0.07	100%
1/26/2020	7.3	0.8	0.08	100%
1/27/2020	8.1	0.8	0.07	100%
1/28/2020	6.9	1.0	0.07	100%
1/29/2020	9.5	1.1	0.07	100%
1/30/2020	7.9	0.9	0.08	100%
1/31/2020	8.8	1.0	0.07	100%
2/1/2020	8.2	0.7	0.08	100%
2/2/2020	7.1	0.9	0.07	100%
2/3/2020	9.9	0.8	0.08	100%
2/4/2020	10.4	1.6	0.09	100%
2/5/2020	10.5	0.9	0.11	100%
2/6/2020	11.6	1.8	0.10	100%
2/7/2020	15.6	1.2	0.10	100%
2/8/2020	14.6	1.1	0.10	100%
2/9/2020	14.4	1.0	0.11	100%
2/10/2020	15.8	0.9	0.11	100%
2/11/2020	13.5	0.8	0.11	100%
2/12/2020	12.8	1.3	0.10	100%
2/13/2020	13.5	0.9	0.10	100%
2/14/2020	15.3	1.0	0.09	100%
2/15/2020	16.1	0.9	0.10	100%
2/16/2020	14.3	0.7	0.12	100%
2/17/2020	14.0	0.9	0.11	100%
2/18/2020	13.1	0.8	0.11	100%
2/19/2020	14.2	1.0	0.12	100%
2/20/2020	13.0	0.8	0.09	100%
2/21/2020	12.0	0.7	0.08	100%
2/22/2020	9.8	0.8	0.08	100%
2/23/2020	11.6	0.9	0.07	100%
2/24/2020	10.1	0.9	0.07	100%
2/25/2020	8.9	0.6	0.07	100%
2/26/2020	9.0	0.6	0.07	100%
2/27/2020	7.8	0.7	0.07	100%
2/28/2020	8.6	1.1	0.07	100%
2/29/2020	10.0	1.4	0.07	100%
3/1/2020	13.6	1.3	0.08	100%
3/2/2020	9.4	1.2	0.08	100%
3/3/2020	8.3	1.2	0.07	100%
3/4/2020	9.6	0.9	0.07	100%
3/5/2020	9.8	1.0	0.07	100%
3/6/2020	8.8	0.9	0.07	100%
3/7/2020	8.9	0.9	0.08	100%
3/8/2020	9.5	0.9	0.07	100%
3/9/2020	8.6	1.1	0.07	100%
3/10/2020	9.8	1.1	0.08	100%
3/11/2020	7.5	1.3	0.08	98%
3/12/2020	8.6	1.0	0.08	98%
3/13/2020	8.0	1.0	0.08	100%
3/14/2020	8.6	1.0	0.08	96%
3/15/2020	10.9	0.8	0.08	96%
3/16/2020	12.1	1.1	0.08	100%
3/17/2020	10.3	1.3	0.07	100%
3/18/2020	10.7	0.8	0.06	100%
3/19/2020	13.1	1.5	0.07	100%
3/20/2020	11.9	1.1	0.08	100%
3/21/2020	11.9	1.0	0.07	100%
3/22/2020	11.8	0.9	0.07	100%
3/23/2020	12.7	1.3	0.06	100%
3/24/2020	11.8	1.3	0.06	100%
3/25/2020	11.4	0.8	0.06	100%
3/26/2020	10.9	1.1	0.07	100%
3/27/2020	12.5	1.0	0.06	98%
3/28/2020	12.1	0.8	0.07	100%

3/29/2020	15.1	0.8	0.06	100%
3/30/2020	17.1	0.8	0.06	94%
3/31/2020	15.1	0.7	0.06	100%
4/1/2020	19.1	0.7	0.06	100%
4/2/2020	11.1	0.7	0.07	100%
4/3/2020	9.8	0.9	0.07	100%
4/4/2020	8.2	0.9	0.07	100%
4/5/2020	8.0	0.9	0.07	100%
4/6/2020	10.1	1.0	0.06	100%
4/7/2020	7.6	0.8	0.06	100%
4/8/2020	6.8	0.8	0.07	99%
4/9/2020	7.9	0.9	0.07	96%
4/10/2020	7.9	0.8	0.08	87%
4/11/2020	21.0	0.9	0.11	100%
4/12/2020	24.0	2.5	0.08	99%
4/13/2020	9.2	1.0	0.09	96%
4/14/2020	7.3	1.1	0.08	100%
4/15/2020	6.4	0.9	0.08	95%
4/16/2020	6.9	1.0	0.09	97%
4/17/2020				
4/18/2020	9.5	1.2	0.08	94%
4/19/2020	6.0	1.1	0.08	100%
4/20/2020	9.6	1.1	0.08	98%
4/21/2020	6.7	1.0	0.07	99%
4/22/2020	7.2	1.2	0.07	100%
4/23/2020	6.9	1.1	0.09	95%
4/24/2020	6.3	1.0	0.09	100%
4/25/2020	7.6	1.0	0.10	92%
4/26/2020	9.3	1.4	0.09	96%
4/27/2020	7.2	1.2	0.09	100%
4/28/2020	6.3	1.0	0.10	97%
4/29/2020	7.3	1.0	0.12	100%
4/30/2020	7.6	0.9	0.11	100%
5/1/2020	7.3	1.1	0.12	100%
5/2/2020	10.0	1.3	0.10	100%
5/3/2020	8.3	1.0	0.12	93%
5/4/2020	8.7	0.7	0.11	85%
5/5/2020	4.8	0.5	0.07	52%
5/6/2020	5.4	0.5	0.07	50%
5/7/2020	5.5	0.9	0.10	51%
5/8/2020	5.2	0.4	0.10	52%
5/9/2020	5.5	0.4	0.10	47%
5/10/2020	5.8	0.9	0.14	53%
5/11/2020	4.6	0.3	0.10	52%
5/12/2020	5.1	0.7	0.10	48%
5/13/2020	4.7	0.7	0.10	45%
5/14/2020	4.2	0.3	0.07	40%
5/15/2020	4.8	0.4	0.05	37%
5/16/2020	3.2	0.5	0.08	31%
5/17/2020	3.0	0.6	0.09	27%
5/18/2020	1.0	0.7	0.05	0%
5/19/2020	0.8	0.4	0.04	0%
5/20/2020	2.6	0.6	0.06	0%
5/21/2020	0.8	1.4	0.08	7%
5/22/2020	0.7	0.5	0.08	0%
5/23/2020	0.6	0.5	0.07	0%
5/24/2020	0.7	0.5	0.08	0%
5/25/2020	0.9	0.8	0.08	0%
5/26/2020	0.8	0.6	0.08	0%
5/27/2020	0.7	0.7	0.08	0%
5/28/2020	0.7	0.7	0.08	0%
5/29/2020	0.6	0.6	0.08	0%
5/30/2020	0.7	0.8	0.08	0%
5/31/2020	0.7	0.7	0.08	0%
6/1/2020	9.0	0.9	0.09	61%
6/2/2020	9.8	1.0	0.12	100%

The Perdue Plant was offline.

6/3/2020	9.5	0.8	0.12	100%
6/4/2020	9.3	0.8	0.11	100%
6/5/2020	10.1	0.8	0.11	100%
6/6/2020	6.8	0.8	0.11	100%
6/7/2020	9.3	0.9	0.11	100%
6/8/2020	8.0	0.9	0.10	100%
6/9/2020	9.1	1.0	0.10	100%
6/10/2020	8.6	0.7	0.12	100%
6/11/2020	5.4	0.8	0.14	100%
6/12/2020	6.0	1.0	0.14	100%
6/13/2020	7.0	1.0	0.14	100%
6/14/2020	5.6	0.8	0.14	100%
6/15/2020	9.2	0.9	0.12	100%
6/16/2020	6.1	0.9	0.13	98%
6/17/2020	6.3	0.7	0.11	96%
6/18/2020	20.1	0.7	0.12	100%
6/19/2020	9.6	0.8	0.12	100%
6/20/2020	8.1	0.7	0.11	100%
6/21/2020	5.1	0.6	0.11	98%
6/22/2020	8.5	0.8	0.11	100%
6/23/2020	5.8	0.8	0.13	100%
6/24/2020	7.9	0.6	0.13	100%
6/25/2020	27.2	0.7	0.12	98%
6/26/2020	7.8	0.7	0.13	100%
6/27/2020	9.2	0.8	0.15	100%
6/28/2020	6.9	0.7	0.14	100%
6/29/2020	6.5	0.7	0.14	97%
6/30/2020	8.6	0.7	0.14	100%
7/1/2020	6.1	0.8	0.15	100%
7/2/2020	8.2	0.8	0.13	100%
7/3/2020	7.6	0.7	0.14	100%
7/4/2020	9.3	1.0	0.15	100%
7/5/2020	8.1	1.0	0.16	98%
7/6/2020	8.1	1.0	0.16	100%
7/7/2020	7.1	0.8	0.16	100%
7/8/2020	7.5	0.7	0.16	100%
7/9/2020	7.1	0.7	0.16	100%
7/10/2020	7.9	0.7	0.15	100%
7/11/2020	7.6	0.7	0.17	100%
7/12/2020	7.6	0.7	0.18	100%
7/13/2020	7.4	0.7	0.18	100%
7/14/2020	7.6	0.9	0.21	100%
7/15/2020	9.2	0.8	0.22	100%
7/16/2020	12.3	0.8	0.23	100%
7/17/2020	13.3	0.8	0.20	100%
7/18/2020	11.9	0.7	0.18	100%
7/19/2020	6.6	0.7	0.03	100%
7/20/2020	7.6	0.7	0.10	100%
7/21/2020	13.1	0.9	0.18	100%
7/22/2020	11.4	0.9	0.13	100%
7/23/2020	6.5	0.7	0.15	100%
7/24/2020	10.0	0.7	0.16	98%
7/25/2020	8.2	0.8	0.14	100%
7/26/2020	11.8	0.7	0.15	100%
7/27/2020	10.6	0.7	0.15	100%
7/28/2020	14.0	0.8	0.19	100%
7/29/2020	7.5	0.8	0.13	69%
7/30/2020	4.5	0.7	0.10	49%
7/31/2020	4.4	0.6	0.12	49%
8/1/2020	3.9	0.6	0.10	51%
8/2/2020	4.0	0.5	0.10	48%
8/3/2020	4.3	0.5	0.09	49%
8/4/2020	3.2	0.6	0.09	51%
8/5/2020	3.4	0.9	0.09	51%
8/6/2020	4.3	0.5	0.09	51%
8/7/2020	6.2	0.8	0.11	53%

8/8/2020	3.5	0.6	0.10	50%
8/9/2020	7.4	0.8	0.10	51%
8/10/2020	9.7	0.6	0.10	50%
8/11/2020	5.0	0.8	0.11	51%
8/12/2020	3.4	0.8	0.12	50%
8/13/2020	5.4	0.7	0.09	49%
8/14/2020	7.3	0.7	0.09	48%
8/15/2020	3.8	0.5	0.08	48%
8/16/2020	3.3	0.5	0.08	47%
8/17/2020	3.9	0.7	0.09	49%
8/18/2020	3.8	0.5	0.11	46%
8/19/2020	3.9	0.4	0.12	49%
8/20/2020	6.2	0.5	0.12	46%
8/21/2020	3.4	0.5	0.12	50%
8/22/2020	3.3	0.6	0.12	49%
8/23/2020	3.3	0.4	0.13	50%
8/24/2020	4.4	0.5	0.12	49%
8/25/2020	3.4	0.4	0.12	47%
8/26/2020	4.7	0.4	0.15	50%
8/27/2020	3.7	0.4	0.14	48%
8/28/2020	8.1	0.5	0.14	46%
8/29/2020	3.2	0.5	0.16	49%
8/30/2020	6.7	0.5	0.15	49%
8/31/2020	15.1	0.6	0.16	49%
9/1/2020	13.3	0.7	0.16	48%
9/2/2020	4.7	0.8	0.14	49%
9/3/2020	5.9	0.9	0.13	49%
9/4/2020	8.1	0.9	0.13	50%
9/5/2020	3.3	0.7	0.13	49%
9/6/2020	3.4	0.5	0.12	49%
9/7/2020	3.4	0.5	0.12	49%
9/8/2020	3.9	0.6	0.12	49%
9/9/2020	3.4	0.4	0.13	51%
9/10/2020	4.3	0.7	0.14	51%
9/11/2020	4.3	0.7	0.14	51%
9/12/2020	5.2	0.7	0.14	48%
9/13/2020	5.7	0.7	0.14	49%
9/14/2020	10.3	0.8	0.17	60%
9/15/2020	9.6	0.7	0.13	100%
9/16/2020	7.3	1.1	0.14	100%
9/17/2020	7.2	0.7	0.15	100%
9/18/2020	7.2	1.0	0.12	100%
9/19/2020	7.7	0.7	0.13	100%
9/20/2020	9.1	0.9	0.15	100%
9/21/2020	14.6	1.1	0.14	100%
9/22/2020	13.3	0.8	0.14	97%
9/23/2020	15.0	0.8	0.16	99%
9/24/2020	20.0	0.9	0.18	95%
9/25/2020	15.0	0.8	0.18	97%
9/26/2020	11.1	0.7	0.16	98%
9/27/2020	16.0	1.4	0.17	95%
9/28/2020	13.0	1.0	0.18	98%
9/29/2020	8.5	1.0	0.18	98%
9/30/2020	4.9	0.8	0.14	64%
10/1/2020	4.8	0.8	0.13	45%
10/2/2020	3.4	0.9	0.13	49%
10/3/2020	3.2	0.6	0.14	50%
10/4/2020	10.1	0.9	0.13	47%
10/5/2020	4.9	1.1	0.14	51%
10/6/2020	3.8	0.6	0.14	50%
10/7/2020	5.6	1.7	0.17	21%
10/8/2020	0.6	0.6	0.14	0%
10/9/2020	0.7	0.4	0.13	0%
10/10/2020	0.6	0.6	0.13	0%
10/11/2020	0.6	1.0	0.13	0%
10/12/2020	0.8	0.5	0.13	0%

10/13/2020	0.5	0.5	0.14	0%
10/14/2020	0.6	0.3	0.12	0%
10/15/2020	0.7	0.4	0.12	0%
10/16/2020	0.6	0.6	0.12	0%
10/17/2020	0.5	0.5	0.12	0%
10/18/2020	0.5	0.5	0.13	0%
10/19/2020	0.5	0.6	0.13	0%
10/20/2020	0.6	0.7	0.13	0%
10/21/2020	4.4	0.7	0.13	28%
10/22/2020	3.9	1.0	0.11	52%
10/23/2020	3.9	1.1	0.12	52%
10/24/2020	4.3	1.2	0.12	49%
10/25/2020	3.7	1.2	0.11	51%
10/26/2020	3.7	1.2	0.12	50%
10/27/2020	4.9	1.2	0.13	50%
10/28/2020	5.1	0.9	0.14	50%
10/29/2020	5.1	1.0	0.15	50%
10/30/2020	5.3	1.2	0.15	50%
10/31/2020	3.2	1.2	0.16	50%
11/1/2020	3.4	1.1	0.16	48%
11/2/2020	4.8	1.1	0.17	52%
11/3/2020	4.6	1.0	0.17	52%
11/4/2020	5.2	1.2	0.17	52%
11/5/2020	4.4	1.3	0.16	52%
11/6/2020	5.7	0.9	0.17	52%
11/7/2020	5.7	1.0	0.17	49%
11/8/2020	4.1	1.2	0.15	47%
11/9/2020	5.4	0.8	0.14	48%
11/10/2020	5.4	0.8	0.14	51%
11/11/2020	5.0	1.0	0.14	49%
11/12/2020	5.6	0.9	0.13	50%
11/13/2020	6.7	1.1	0.13	51%
11/14/2020	6.0	1.0	0.14	49%
11/15/2020	5.3	1.0	0.14	50%
11/16/2020	5.9	0.8	0.15	50%
11/17/2020	8.9	0.9	0.16	50%
11/18/2020	6.0	1.0	0.17	50%
11/19/2020	7.7	1.1	0.17	47%
11/20/2020	5.2	0.8	0.17	50%
11/21/2020	5.3	0.9	0.17	50%
11/22/2020	4.4	1.0	0.16	48%
11/23/2020	5.8	0.9	0.16	50%
11/24/2020	4.9	0.7	0.15	50%
11/25/2020	4.6	0.5	0.13	29%
11/26/2020	0.7	0.4	0.12	0%
11/27/2020	0.7	0.4	0.11	0%
11/28/2020	0.6	0.6	0.12	0%
11/29/2020	0.5	0.5	0.11	0%
11/30/2020	1.7	0.7	0.11	0%
12/1/2020	0.7	0.5	0.11	0%
12/2/2020	0.6	0.3	0.11	0%
12/3/2020				
12/4/2020				
12/5/2020				
12/6/2020				
12/7/2020				
12/8/2020				
12/9/2020				
12/10/2020	0.7	0.4	0.12	0%
12/11/2020	0.7	0.4	0.10	0%
12/12/2020	0.6	0.3	0.11	0%
12/13/2020	0.6	0.5	0.11	0%
12/14/2020	0.6	1.0	0.11	0%
12/15/2020	10.0	1.1	0.13	33%
12/16/2020	6.4	0.9	0.14	49%
12/17/2020	7.0	1.4	0.14	50%

PERDUE WTP OFFLINE
PURCHASED TREATED
AQUEDUCT WATER FROM
SDCWA

12/18/2020	6.3	1.1	0.14	50%
12/19/2020	6.9	0.8	0.15	49%
12/20/2020	7.1	0.8	0.15	49%
12/21/2020	6.3	0.8	0.16	51%
12/22/2020	7.9	1.0	0.17	55%
12/23/2020	7.9	0.9	0.15	55%
12/24/2020	8.1	0.8	0.14	50%
12/25/2020	7.7	0.6	0.15	52%
12/26/2020	7.1	1.1	0.13	51%
12/27/2020	8.1	0.9	0.14	52%
12/28/2020	7.6	1.0	0.13	52%
12/29/2020	7.7	0.9	0.15	52%
12/30/2020	7.4	1.2	0.13	51%
12/31/2020	7.8	1.1	0.13	51%
1/1/2021	7.3	0.8	0.13	51%
1/2/2021	7.1	0.7	0.14	44%
1/3/2021	7.1	0.8	0.14	47%
1/4/2021	7.5	0.9	0.14	49%
1/5/2021	7.7	0.8	0.14	51%
1/6/2021	7.2	1.6	0.14	53%
1/7/2021	7.4	0.9	0.10	50%
1/8/2021	7.2	0.7	0.10	48%
1/9/2021	6.7	0.6	0.10	49%
1/10/2021	6.5	0.5	0.10	47%
1/11/2021	6.8	0.6	0.11	50%
1/12/2021	7.5	0.7	0.11	48%
1/13/2021	6.9	0.7	0.11	50%
1/14/2021	6.8	1.2	0.11	46%
1/15/2021	7.2	0.6	0.11	50%
1/16/2021	6.1	0.7	0.12	50%
1/17/2021	5.8	0.6	0.11	48%
1/18/2021	5.7	0.6	0.11	51%
1/19/2021	7.0	0.6	0.12	49%
1/20/2021	9.3	0.6	0.12	50%
1/21/2021	8.2	0.7	0.12	48%
1/22/2021	6.9	0.9	0.12	49%
1/23/2021	6.9	1.0	0.12	51%
1/24/2021	6.4	0.9	0.12	47%
1/25/2021	7.4	1.2	0.12	51%
1/26/2021	8.0	0.9	0.13	49%
1/27/2021	5.9	1.0	0.12	75%
1/28/2021	11.9	1.0	0.14	95%
1/29/2021	10.9	1.1	0.11	100%
1/30/2021	9.2	1.3	0.12	92%
1/31/2021	8.4	1.0	0.11	96%
2/1/2021	12.8	1.4	0.12	100%
2/2/2021	11.3	1.1	0.15	99%
2/3/2021	7.6	1.4	0.13	100%
2/4/2021	6.8	1.2	0.11	100%
2/5/2021	6.5	1.1	0.11	100%
2/6/2021	7.2	1.0	0.10	100%
2/7/2021	6.3	1.2	0.10	96%
2/8/2021	5.7	1.6	0.12	100%
2/9/2021	6.9	1.6	0.13	89%
2/10/2021	7.2	1.9	0.11	100%
2/11/2021	7.5	1.3	0.12	100%
2/12/2021	6.8	1.2	0.13	100%
2/13/2021	5.0	1.0	0.14	100%
2/14/2021	5.3	1.2	0.13	100%
2/15/2021	5.4	1.1	0.13	99%
2/16/2021	5.8	1.3	0.12	100%
2/17/2021	5.5	1.0	0.13	100%
2/18/2021	5.6	1.3	0.13	91%
2/19/2021	6.0	1.3	0.13	100%
2/20/2021	5.9	1.2	0.13	93%
2/21/2021	6.4	1.1	0.13	100%

2/22/2021	6.9	1.0	0.14	100%
2/23/2021	5.9	1.1	0.13	100%
2/24/2021	5.8	1.1	0.12	100%
2/25/2021	6.3	1.1	0.09	100%
2/26/2021	6.4	1.1	0.10	100%
2/27/2021	5.3	1.0	0.11	100%
2/28/2021	5.1	1.0	0.11	100%
3/1/2021	7.2	1.0	0.11	100%
3/2/2021	6.5	1.0	0.14	100%
3/3/2021	6.6	0.7	0.16	98%
3/4/2021	5.4	1.0	0.15	95%
3/5/2021	5.4	1.0	0.17	100%
3/6/2021	6.1	0.9	0.18	100%
3/7/2021	5.2	0.9	0.18	100%
3/8/2021	4.9	0.9	0.17	99%
3/9/2021	4.9	1.0	0.17	100%
3/10/2021	5.3	0.8	0.13	98%
3/11/2021	5.3	0.8	0.11	100%
3/12/2021	5.5	0.8	0.11	100%
3/13/2021	5.6	0.9	0.15	100%
3/14/2021	5.0	1.0	0.15	100%
3/15/2021	10.1	1.2	0.11	95%
3/16/2021	5.2	0.9	0.15	100%
3/17/2021	5.4	0.8	0.11	93%
3/18/2021	5.2	0.8	0.10	100%
3/19/2021	5.6	0.8	0.09	100%
3/20/2021	4.5	0.8	0.09	100%
3/21/2021	4.4	0.8	0.09	100%
3/22/2021	4.5	1.0	0.09	100%
3/23/2021	4.5	0.9	0.09	100%
3/24/2021	4.8	0.8	0.09	100%
3/25/2021	5.4	0.6	0.09	100%
3/26/2021	6.1	0.6	0.09	100%
3/27/2021	5.5	0.7	0.09	100%
3/28/2021	5.1	0.7	0.09	100%
3/29/2021	4.8	0.6	0.09	100%
3/30/2021	4.8	0.6	0.10	100%
3/31/2021	6.0	1.0	0.10	100%
4/1/2021	5.5	1.8	0.10	100%
4/2/2021	5.4	0.6	0.12	100%
4/3/2021	6.6	0.7	0.11	100%
4/4/2021	5.3	0.6	0.11	100%
4/5/2021	5.1	0.8	0.12	99%
4/6/2021	4.6	0.9	0.13	100%
4/7/2021	4.6	1.0	0.12	100%
4/8/2021	4.6	0.9	0.10	100%
4/9/2021	5.5	0.8	0.13	100%
4/10/2021	4.8	0.8	0.12	100%
4/11/2021	4.9	0.6	0.12	100%
4/12/2021	4.6	0.6	0.13	100%
4/13/2021	4.4	1.4	0.11	98%
4/14/2021	4.9	0.6	0.13	100%
4/15/2021	5.1	0.7	0.13	100%
4/16/2021	5.8	1.8	0.11	100%
4/17/2021	5.1	1.1	0.12	100%
4/18/2021	5.2	1.0	0.12	100%
4/19/2021	4.6	0.7	0.15	100%
4/20/2021	4.6	0.7	0.13	100%
4/21/2021	4.3	0.7	0.13	100%
4/22/2021	4.4	0.7	0.15	100%
4/23/2021	4.9	0.8	0.19	100%
4/24/2021	5.1	0.9	0.15	100%
4/25/2021	9.2	0.7	0.18	100%
4/26/2021	5.3	0.7	0.19	100%
4/27/2021	5.3	0.7	0.20	100%
4/28/2021	5.3	0.8	0.20	100%

4/29/2021	5.8	0.9	0.21	100%
4/30/2021	6.0	1.0	0.19	100%
5/1/2021	5.0	0.9	0.18	100%
5/2/2021	4.9	1.0	0.20	100%
5/3/2021	5.1	1.0	0.18	100%
5/4/2021	4.9	0.9	0.13	100%
5/5/2021	5.0	1.3	0.12	100%
5/6/2021	4.9	1.0	0.14	100%
5/7/2021	5.6	1.1	0.19	100%
5/8/2021	5.3	1.1	0.19	100%
5/9/2021	5.0	1.0	0.18	97%
5/10/2021	5.6	1.1	0.18	100%
5/11/2021	5.7	1.2	0.19	100%
5/12/2021	6.2	1.0	0.16	96%
5/13/2021	7.3	1.1	0.19	100%
5/14/2021	7.9	1.0	0.16	58%
5/15/2021	4.0	0.4	0.10	39%
5/16/2021	3.9	0.3	0.10	38%
5/17/2021	3.3	0.6	0.09	40%
5/18/2021	3.8	0.6	0.09	40%
5/19/2021	3.8	0.7	0.09	37%
5/20/2021	4.7	0.4	0.07	39%
5/21/2021	4.1	0.7	0.05	39%
5/22/2021	3.9	0.5	0.06	38%
5/23/2021	4.1	0.4	0.05	40%
5/24/2021	4.2	0.8	0.05	40%
5/25/2021	4.4	0.7	0.06	23%
5/26/2021	0.8	0.9	0.06	0%
5/27/2021	2.0	0.7	0.07	0%
5/28/2021	1.4	0.8	0.07	0%
5/29/2021	0.9	0.9	0.07	0%
5/30/2021	1.1	0.8	0.06	0%
5/31/2021	0.9	0.8	0.06	0%
6/1/2021	0.9	0.8	0.06	0%
6/2/2021	0.9	0.7	0.07	0%
6/3/2021	3.8	0.8	0.07	32%
6/4/2021	3.5	0.7	0.07	50%
6/5/2021	3.0	0.7	0.09	50%
6/6/2021	3.2	0.7	0.11	50%
6/7/2021	6.3	1.0	0.13	74%
6/8/2021	5.0	1.3	0.16	100%
6/9/2021	9.0	1.1	0.17	100%
6/10/2021	5.9	0.7	0.11	100%
6/11/2021	5.4	0.8	0.06	100%
6/12/2021	6.3	0.9	0.07	100%
6/13/2021	6.6	0.7	0.09	99%
6/14/2021	6.5	0.7	0.08	99%
6/15/2021	7.3	1.0	0.07	100%
6/16/2021	6.4	0.8	0.09	100%
6/17/2021	6.4	0.7	0.09	100%
6/18/2021	5.9	0.8	0.10	100%
6/19/2021	7.5	0.7	0.09	100%
6/20/2021	6.1	0.8	0.12	100%
6/21/2021	5.9	0.7	0.11	100%
6/22/2021	5.6	0.9	0.09	100%
6/23/2021	5.8	1.1	0.05	94%
6/24/2021	5.3	0.8	0.07	99%
6/25/2021	6.1	0.9	0.08	100%
6/26/2021	8.2	0.7	0.07	100%
6/27/2021	6.9	0.6	0.07	94%
6/28/2021	3.0	0.6	0.06	137%
6/29/2021	2.7	0.5	0.04	20%
6/30/2021	0.8	0.3	0.03	0%
7/1/2021	0.7	0.3	0.03	0%
7/2/2021	1.0	0.4	0.05	0%
7/3/2021	0.6	0.4	0.08	0%

7/4/2021	0.7	0.7	0.09	0%
7/5/2021	0.7	0.3	0.12	0%
7/6/2021	0.5	0.3	0.11	0%
7/7/2021	0.4	0.4	0.08	0%
7/8/2021	2.1	0.5	0.08	28%
7/9/2021	2.1	0.5	0.07	45%
7/10/2021	2.3	0.5	0.08	50%
7/11/2021	2.2	0.5	0.08	49%
7/12/2021	3.9	0.7	0.10	100%
7/13/2021	4.3	0.7	0.12	100%
7/14/2021	3.9	0.7	0.13	100%
7/15/2021	4.4	0.8	0.13	99%
7/16/2021	8.7	1.3	0.15	100%
7/17/2021	7.3	0.9	0.14	100%
7/18/2021	8.3	0.8	0.13	100%
7/19/2021	8.4	0.9	0.13	100%
7/20/2021	7.2	0.8	0.14	97%
7/21/2021	5.9	0.8	0.13	100%
7/22/2021	7.0	0.7	0.11	100%
7/23/2021	6.6	0.6	0.12	100%
7/24/2021	7.2	0.7	0.11	100%
7/25/2021	4.8	0.9	0.13	100%
7/26/2021	4.3	1.0	0.13	100%
7/27/2021	4.6	0.9	0.13	100%
7/28/2021	9.6	0.8	0.15	100%
7/29/2021	6.7	0.8	0.15	100%
7/30/2021	4.0	0.7	0.16	100%
7/31/2021	4.5	0.7	0.19	100%
8/1/2021	3.2	0.7	0.09	100%
8/2/2021	4.8	0.8	0.08	100%
8/3/2021	4.6	0.7	0.08	100%
8/4/2021	5.4	0.8	0.08	98%
8/5/2021	6.1	1.0	0.10	100%
8/6/2021	11.0	0.7	0.10	100%
8/7/2021	4.4	0.6	0.09	100%
8/8/2021	6.3	0.7	0.09	100%
8/9/2021	6.3	0.9	0.09	100%
8/10/2021	7.1	0.7	0.09	100%
8/11/2021	8.0	0.7	0.10	100%
8/12/2021	5.2	0.8	0.11	100%
8/13/2021	3.3	0.7	0.13	100%
8/14/2021	5.7	0.9	0.14	100%
8/15/2021	4.1	0.8	0.15	100%
8/16/2021	5.0	0.6	0.15	100%
8/17/2021	5.9	0.9	0.15	96%
8/18/2021	6.8	0.7	0.14	100%
8/19/2021	4.5	1.1	0.13	75%
8/20/2021	3.9	0.5	0.11	49%
8/21/2021	2.7	0.4	0.11	51%
8/22/2021	2.5	0.5	0.11	49%
8/23/2021	6.7	0.4	0.11	49%
8/24/2021	3.1	0.7	0.11	50%
8/25/2021	2.5	0.4	0.11	50%
8/26/2021	3.6	0.4	0.10	48%
8/27/2021	2.2	0.5	0.09	0%
8/28/2021	5.2	0.5	0.09	50%
8/29/2021	2.3	0.4	0.10	48%
8/30/2021	2.4	0.4	0.11	50%
8/31/2021	2.2	0.4	0.11	47%
9/1/2021	2.6	0.4	0.11	50%
9/2/2021	3.4	0.6	0.11	54%
9/3/2021	3.5	0.7	0.11	56%
9/4/2021	2.1	1.0	0.11	55%
9/5/2021	3.3	0.4	0.11	51%
9/6/2021	2.2	0.4	0.11	55%
9/7/2021	2.3	0.5	0.12	55%

9/8/2021	2.6	0.5	0.11	55%
9/9/2021	0.5	0.5	0.08	16%
9/10/2021	0.6	0.8	0.06	0%
9/11/2021	0.5	0.9	0.07	0%
9/12/2021	0.5	0.3	0.07	0%
9/13/2021	1.7	0.4	0.07	0%
9/14/2021	0.9	0.8	0.07	0%
9/15/2021	1.0	0.6	0.07	0%
9/16/2021	0.7	0.4	0.08	0%
9/17/2021	0.5	0.4	0.08	0%
9/18/2021	0.5	0.4	0.08	0%
9/19/2021	0.6	0.4	0.09	0%
9/20/2021	0.5	0.4	0.09	0%
9/21/2021	0.7	0.8	0.09	0%
9/22/2021	0.7	0.3	0.08	0%
9/23/2021	0.6	0.2	0.06	0%
9/24/2021	0.8	0.3	0.06	0%
9/25/2021	0.6	0.3	0.06	0%
9/26/2021	0.5	0.3	0.06	0%
9/27/2021	1.1	0.5	0.06	0%
9/28/2021	0.6	0.8	0.06	0%
9/29/2021	0.6	0.9	0.07	0%
9/30/2021	0.5	0.3	0.05	0%
10/1/2021	0.6	0.3	0.04	0%
10/2/2021	0.6	0.3	0.04	0%
10/3/2021	0.8	0.2	0.04	0%
10/4/2021	0.5	0.4	0.04	0%
10/5/2021	0.6	0.4	0.05	0%
10/6/2021	0.5	0.6	0.05	0%
10/7/2021	0.9	0.3	0.06	0%
10/8/2021	0.8	0.3	0.07	0%
10/9/2021	0.6	0.3	0.07	0%
10/10/2021	0.6	0.3	0.08	0%
10/11/2021	0.7	0.5	0.08	0%
10/12/2021	0.8	0.4	0.08	0%
10/13/2021	0.7	0.3	0.07	0%
10/14/2021	0.9	0.3	0.05	0%
10/15/2021	0.7	0.3	0.05	0%
10/16/2021	0.7	0.3	0.05	0%
10/17/2021	0.6	0.5	0.05	0%
10/18/2021	0.7	0.5	0.06	0%
10/19/2021	0.6	0.4	0.06	0%
10/20/2021	4.4	0.5	0.06	0%
10/21/2021	0.9	0.3	0.07	0%
10/22/2021	0.6	0.4	0.08	0%
10/23/2021	0.6	0.4	0.09	0%
10/24/2021	0.5	0.4	0.10	0%
10/25/2021	0.4	0.3	0.10	0%
10/26/2021	3.3	0.5	0.11	33%
10/27/2021	5.1	0.6	0.12	48%
10/28/2021	4.8	0.8	0.08	51%
10/29/2021	4.3	0.8	0.09	56%
10/30/2021	3.6	0.7	0.10	56%
10/31/2021	3.5	0.8	0.10	51%
11/1/2021	3.6	1.3	0.10	49%
11/2/2021	6.8	1.2	0.13	84%
11/3/2021	6.7	1.4	0.15	100%
11/4/2021	6.8	1.1	0.10	100%
11/5/2021	9.7	1.4	0.17	100%
11/6/2021	9.1	1.1	0.20	100%
11/7/2021	8.1	0.8	0.19	100%
11/8/2021	9.7	1.0	0.20	100%
11/9/2021	8.0	1.0	0.20	100%
11/10/2021	11.0	1.0	0.20	100%
11/11/2021	13.7	1.0	0.18	100%
11/12/2021	7.8	1.1	0.15	100%

11/13/2021	10.1	0.7	0.16	100%
11/14/2021	9.1	0.8	0.15	100%
11/15/2021	8.0	0.8	0.16	100%
11/16/2021	8.3	0.6	0.15	99%
11/17/2021	8.8	0.7	0.12	100%
11/18/2021	8.9	0.7	0.09	97%
11/19/2021	9.3	0.7	0.09	100%
11/20/2021	9.1	1.2	0.14	100%
11/21/2021	9.2	1.1	0.13	100%
11/22/2021	8.3	1.8	0.13	28%
11/23/2021	0.6	0.6	0.09	0%
11/24/2021	0.9	0.5	0.09	0%
11/25/2021	0.7	0.4	0.08	0%
11/26/2021	0.8	0.4	0.09	0%
11/27/2021	0.7	0.5	0.09	0%
11/28/2021	0.8	0.4	0.09	0%
11/29/2021	5.7	1.2	0.09	34%
11/30/2021	6.8	0.9	0.09	50%
12/1/2021	6.9	1.0	0.10	50%
12/2/2021	6.0	1.1	0.09	50%
12/3/2021	6.1	1.0	0.07	50%
12/4/2021	6.0	0.9	0.07	50%
12/5/2021	5.4	0.9	0.07	50%
12/6/2021	5.6	1.0	0.07	50%
12/7/2021	5.9	1.1	0.07	50%
12/8/2021	4.4	0.8	0.06	49%
12/9/2021	4.6	0.8	0.07	50%
12/10/2021	4.5	0.9	0.07	51%
12/11/2021	3.6	1.0	0.07	53%
12/12/2021	3.6	1.2	0.06	51%
12/13/2021	3.5	1.0	0.07	53%
12/14/2021	2.9	1.0	0.07	50%
12/15/2021	3.8	1.0	0.07	50%
12/16/2021	4.2	1.0	0.06	47%
12/17/2021	4.7	1.0	0.07	50%
12/18/2021	3.3	0.8	0.06	50%
12/19/2021	4.0	1.0	0.06	49%
12/20/2021	3.1	1.2	0.08	49%
12/21/2021	3.3	0.9	0.06	51%
12/22/2021	5.0	1.5	0.07	48%
12/23/2021	6.3	1.0	0.06	50%
12/24/2021	5.5	1.0	0.07	47%
12/25/2021	4.6	0.9	0.06	51%
12/26/2021	5.1	0.8	0.06	51%
12/27/2021	4.9	1.7	0.06	48%
12/28/2021	5.5	2.0	0.07	50%
12/29/2021	4.9	1.0	0.06	48%
12/30/2021	4.6	1.0	0.08	51%
12/31/2021	4.2	1.1	0.08	49%

min	0.3	0.2	0.01
max	41.0	3.7	0.25
average	5.1	0.9	0.11
median	4.7	0.8	0.11
95th percent	11.6	1.5	0.17

Date	Date End Time	Site	Area	Min Turbidity	Avg Turbidity	Max Turbidity
1/1/2017 0:00	1/2/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/2/2017 0:00	1/3/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/3/2017 0:00	1/4/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/4/2017 0:00	1/5/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/5/2017 0:00	1/6/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/6/2017 0:00	1/7/2017 0:00	Perdue	Filter 1	0.04	0.05	0.07
1/7/2017 0:00	1/8/2017 0:00	Perdue	Filter 1	0.04	0.05	0.06
1/8/2017 0:00	1/9/2017 0:00	Perdue	Filter 1	0.05	0.05	0.07
1/9/2017 0:00	1/10/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/10/2017 0:00	1/11/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/11/2017 0:00	1/12/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/12/2017 0:00	1/13/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/13/2017 0:00	1/14/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/14/2017 0:00	1/15/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/15/2017 0:00	1/16/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/16/2017 0:00	1/17/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/17/2017 0:00	1/18/2017 0:00	Perdue	Filter 1	0.05	0.05	0.05
1/18/2017 0:00	1/19/2017 0:00	Perdue	Filter 1	0.04	0.05	0.08
1/19/2017 0:00	1/20/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/20/2017 0:00	1/21/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/21/2017 0:00	1/22/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/22/2017 0:00	1/23/2017 0:00	Perdue	Filter 1	0.04	0.04	0.04
1/23/2017 0:00	1/24/2017 0:00	Perdue	Filter 1	0.04	0.04	0.04
1/24/2017 0:00	1/25/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/25/2017 0:00	1/26/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/26/2017 0:00	1/27/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/27/2017 0:00	1/28/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/28/2017 0:00	1/29/2017 0:00	Perdue	Filter 1	0.04	0.04	0.04
1/29/2017 0:00	1/30/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/30/2017 0:00	1/31/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
1/31/2017 0:00	2/1/2017 0:00	Perdue	Filter 1	0.04	0.04	0.19
2/1/2017 0:00	2/2/2017 0:00	Perdue	Filter 1	0.04	0.04	0.17
2/2/2017 0:00	2/3/2017 0:00	Perdue	Filter 1	0.04	0.04	0.14
2/3/2017 0:00	2/4/2017 0:00	Perdue	Filter 1	0.04	0.04	0.12
2/4/2017 0:00	2/5/2017 0:00	Perdue	Filter 1	0.04	0.05	0.08
2/5/2017 0:00	2/6/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/6/2017 0:00	2/7/2017 0:00	Perdue	Filter 1	0.04	0.04	0.04
2/7/2017 0:00	2/8/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/8/2017 0:00	2/9/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/9/2017 0:00	2/10/2017 0:00	Perdue	Filter 1	0.04	0.04	0.08
2/10/2017 0:00	2/11/2017 0:00	Perdue	Filter 1	0.04	0.04	0.06
2/11/2017 0:00	2/12/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/12/2017 0:00	2/13/2017 0:00	Perdue	Filter 1	0.04	0.05	0.07
2/13/2017 0:00	2/14/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/14/2017 0:00	2/15/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/15/2017 0:00	2/16/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/16/2017 0:00	2/17/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/17/2017 0:00	2/18/2017 0:00	Perdue	Filter 1	0.04	0.04	0.08
2/18/2017 0:00	2/19/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/19/2017 0:00	2/20/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/20/2017 0:00	2/21/2017 0:00	Perdue	Filter 1	0.04	0.05	0.20
2/21/2017 0:00	2/22/2017 0:00	Perdue	Filter 1	0.04	0.05	0.08
2/22/2017 0:00	2/23/2017 0:00	Perdue	Filter 1	0.04	0.04	0.06
2/23/2017 0:00	2/24/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/24/2017 0:00	2/25/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/25/2017 0:00	2/26/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/26/2017 0:00	2/27/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/27/2017 0:00	2/28/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
2/28/2017 0:00	3/1/2017 0:00	Perdue	Filter 1	0.04	0.05	0.05
3/1/2017 0:00	3/2/2017 0:00	Perdue	Filter 1	0.04	0.05	0.31
3/2/2017 0:00	3/3/2017 0:00	Perdue	Filter 1	0.04	0.04	0.07
3/3/2017 0:00	3/4/2017 0:00	Perdue	Filter 1	0.04	0.05	0.35
3/4/2017 0:00	3/5/2017 0:00	Perdue	Filter 1	0.03	0.05	0.34
3/5/2017 0:00	3/6/2017 0:00	Perdue	Filter 1	0.03	0.05	0.40
3/6/2017 0:00	3/7/2017 0:00	Perdue	Filter 1	0.00	0.07	0.28
3/7/2017 0:00	3/8/2017 0:00	Perdue	Filter 1	0.00	0.04	0.05
3/8/2017 0:00	3/9/2017 0:00	Perdue	Filter 1	0.04	0.04	0.05
3/9/2017 0:00	3/10/2017 0:00	Perdue	Filter 1	0.04	0.07	0.16
3/10/2017 0:00	3/11/2017 0:00	Perdue	Filter 1	0.07	0.08	0.08
3/11/2017 0:00	3/12/2017 0:00	Perdue	Filter 1	0.06	0.07	0.09
3/12/2017 0:00	3/13/2017 0:00	Perdue	Filter 1	0.07	0.07	0.12
3/13/2017 0:00	3/14/2017 0:00	Perdue	Filter 1	0.06	0.07	0.08

3/14/2017 0:00	3/15/2017 0:00	Perdue	Filter 1	0.05	0.06	0.10
3/15/2017 0:00	3/16/2017 0:00	Perdue	Filter 1	0.05	0.06	1.00
3/16/2017 0:00	3/17/2017 0:00	Perdue	Filter 1	0.05	0.07	1.00
3/17/2017 0:00	3/18/2017 0:00	Perdue	Filter 1	0.05	0.07	0.32
3/18/2017 0:00	3/19/2017 0:00	Perdue	Filter 1	0.04	0.05	0.05
3/19/2017 0:00	3/20/2017 0:00	Perdue	Filter 1	0.04	0.05	0.06
3/20/2017 0:00	3/21/2017 0:00	Perdue	Filter 1	0.04	0.05	1.00
3/21/2017 0:00	3/22/2017 0:00	Perdue	Filter 1	0.05	0.05	1.00
3/22/2017 0:00	3/23/2017 0:00	Perdue	Filter 1	0.04	0.06	1.00
3/23/2017 0:00	3/24/2017 0:00	Perdue	Filter 1	0.06	0.08	1.00
3/24/2017 0:00	3/25/2017 0:00	Perdue	Filter 1	0.06	0.07	0.08
3/25/2017 0:00	3/26/2017 0:00	Perdue	Filter 1	0.06	0.07	0.30
3/26/2017 0:00	3/27/2017 0:00	Perdue	Filter 1	0.06	0.06	0.46
3/27/2017 0:00	3/28/2017 0:00	Perdue	Filter 1	0.06	0.07	1.00
3/28/2017 0:00	3/29/2017 0:00	Perdue	Filter 1	0.06	0.07	0.17
3/29/2017 0:00	3/30/2017 0:00	Perdue	Filter 1	0.06	0.06	0.08
3/30/2017 0:00	3/31/2017 0:00	Perdue	Filter 1	0.06	0.06	0.12
3/31/2017 0:00	4/1/2017 0:00	Perdue	Filter 1	0.06	0.06	0.62
4/1/2017 0:00	4/2/2017 0:00	Perdue	Filter 1	0.06	0.07	1.00
4/2/2017 0:00	4/3/2017 0:00	Perdue	Filter 1	0.06	0.11	1.00
4/3/2017 0:00	4/4/2017 0:00	Perdue	Filter 1	0.06	0.07	0.08
4/4/2017 0:00	4/5/2017 0:00	Perdue	Filter 1	0.06	0.07	0.19
4/5/2017 0:00	4/6/2017 0:00	Perdue	Filter 1	0.06	0.12	1.00
4/6/2017 0:00	4/7/2017 0:00	Perdue	Filter 1	0.07	0.10	0.13
4/7/2017 0:00	4/8/2017 0:00	Perdue	Filter 1	0.07	0.10	0.41
4/8/2017 0:00	4/9/2017 0:00	Perdue	Filter 1	0.08	0.11	0.28
4/9/2017 0:00	4/10/2017 0:00	Perdue	Filter 1	0.07	0.12	0.38
4/10/2017 0:00	4/11/2017 0:00	Perdue	Filter 1	0.07	0.07	0.08
4/11/2017 0:00	4/12/2017 0:00	Perdue	Filter 1	0.07	0.11	0.20
4/12/2017 0:00	4/13/2017 0:00	Perdue	Filter 1	0.08	0.13	0.27
4/13/2017 0:00	4/14/2017 0:00	Perdue	Filter 1	0.08	0.14	1.00
4/14/2017 0:00	4/15/2017 0:00	Perdue	Filter 1	0.08	0.09	0.23
4/15/2017 0:00	4/16/2017 0:00	Perdue	Filter 1	0.08	0.09	0.13
4/16/2017 0:00	4/17/2017 0:00	Perdue	Filter 1	0.08	0.11	1.00
4/17/2017 0:00	4/18/2017 0:00	Perdue	Filter 1	0.08	0.10	0.26
4/18/2017 0:00	4/19/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
4/19/2017 0:00	4/20/2017 0:00	Perdue	Filter 1	0.06	0.07	1.00
4/20/2017 0:00	4/21/2017 0:00	Perdue	Filter 1	0.06	0.11	0.32
4/21/2017 0:00	4/22/2017 0:00	Perdue	Filter 1	0.08	0.10	0.39
4/22/2017 0:00	4/23/2017 0:00	Perdue	Filter 1	0.08	0.12	0.69
4/23/2017 0:00	4/24/2017 0:00	Perdue	Filter 1	0.09	0.13	0.62
4/24/2017 0:00	4/25/2017 0:00	Perdue	Filter 1	0.07	0.09	1.00
4/25/2017 0:00	4/26/2017 0:00	Perdue	Filter 1	0.08	0.10	0.16
4/26/2017 0:00	4/27/2017 0:00	Perdue	Filter 1	0.08	0.10	0.22
4/27/2017 0:00	4/28/2017 0:00	Perdue	Filter 1	0.07	0.08	1.00
4/28/2017 0:00	4/29/2017 0:00	Perdue	Filter 1	0.08	0.11	0.46
4/29/2017 0:00	4/30/2017 0:00	Perdue	Filter 1	0.09	0.11	0.16
4/30/2017 0:00	5/1/2017 0:00	Perdue	Filter 1	0.08	0.10	0.13
5/1/2017 0:00	5/2/2017 0:00	Perdue	Filter 1	0.10	0.11	0.16
5/2/2017 0:00	5/3/2017 0:00	Perdue	Filter 1	0.10	0.11	0.25
5/3/2017 0:00	5/4/2017 0:00	Perdue	Filter 1	0.08	0.12	0.21
5/4/2017 0:00	5/5/2017 0:00	Perdue	Filter 1	0.09	0.12	1.00
5/5/2017 0:00	5/6/2017 0:00	Perdue	Filter 1	0.10	0.12	1.00
5/6/2017 0:00	5/7/2017 0:00	Perdue	Filter 1	0.07	0.11	0.23
5/7/2017 0:00	5/8/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
5/8/2017 0:00	5/9/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
5/9/2017 0:00	5/10/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
5/10/2017 0:00	5/11/2017 0:00	Perdue	Filter 1	0.08	0.09	0.11
5/11/2017 0:00	5/12/2017 0:00	Perdue	Filter 1	0.08	0.11	0.16
5/12/2017 0:00	5/13/2017 0:00	Perdue	Filter 1	0.08	0.12	0.39
5/13/2017 0:00	5/14/2017 0:00	Perdue	Filter 1	0.10	0.12	0.17
5/14/2017 0:00	5/15/2017 0:00	Perdue	Filter 1	0.11	0.13	0.16
5/15/2017 0:00	5/16/2017 0:00	Perdue	Filter 1	0.13	0.14	0.22
5/16/2017 0:00	5/17/2017 0:00	Perdue	Filter 1	0.11	0.17	0.27
5/17/2017 0:00	5/18/2017 0:00	Perdue	Filter 1	0.11	0.14	0.20
5/18/2017 0:00	5/19/2017 0:00	Perdue	Filter 1	0.10	0.11	0.15
5/19/2017 0:00	5/20/2017 0:00	Perdue	Filter 1	0.11	0.18	0.36
5/20/2017 0:00	5/21/2017 0:00	Perdue	Filter 1	0.13	0.26	1.00
5/21/2017 0:00	5/22/2017 0:00	Perdue	Filter 1	0.13	0.21	0.36
5/22/2017 0:00	5/23/2017 0:00	Perdue	Filter 1	0.10	0.22	1.00
5/23/2017 0:00	5/24/2017 0:00	Perdue	Filter 1	0.08	0.13	0.67
5/24/2017 0:00	5/25/2017 0:00	Perdue	Filter 1	0.11	0.22	0.34
5/25/2017 0:00	5/26/2017 0:00	Perdue	Filter 1	0.08	0.18	1.00

5/26/2017 0:00	5/27/2017 0:00	Perdue	Filter 1	0.06	0.14	1.00
5/27/2017 0:00	5/28/2017 0:00	Perdue	Filter 1	0.03	0.15	0.79
5/28/2017 0:00	5/29/2017 0:00	Perdue	Filter 1	0.03	0.04	0.55
5/29/2017 0:00	5/30/2017 0:00	Perdue	Filter 1	0.02	0.03	1.00
5/30/2017 0:00	5/31/2017 0:00	Perdue	Filter 1	0.02	0.03	0.99
5/31/2017 0:00	6/1/2017 0:00	Perdue	Filter 1	0.03	0.05	1.00
6/1/2017 0:00	6/2/2017 0:00	Perdue	Filter 1	0.07	0.12	0.94
6/2/2017 0:00	6/3/2017 0:00	Perdue	Filter 1	0.05	0.17	0.88
6/3/2017 0:00	6/4/2017 0:00	Perdue	Filter 1	0.03	0.09	1.00
6/4/2017 0:00	6/5/2017 0:00	Perdue	Filter 1	0.03	0.04	1.00
6/5/2017 0:00	6/6/2017 0:00	Perdue	Filter 1	0.03	0.06	1.00
6/6/2017 0:00	6/7/2017 0:00	Perdue	Filter 1	0.06	0.07	0.65
6/7/2017 0:00	6/8/2017 0:00	Perdue	Filter 1	0.06	0.08	0.40
6/8/2017 0:00	6/9/2017 0:00	Perdue	Filter 1	0.06	0.07	0.68
6/9/2017 0:00	6/10/2017 0:00	Perdue	Filter 1	0.10	0.13	1.00
6/10/2017 0:00	6/11/2017 0:00	Perdue	Filter 1	0.10	0.14	0.86
6/11/2017 0:00	6/12/2017 0:00	Perdue	Filter 1	0.11	0.15	0.43
6/12/2017 0:00	6/13/2017 0:00	Perdue	Filter 1	0.10	0.13	0.83
6/13/2017 0:00	6/14/2017 0:00	Perdue	Filter 1	0.09	0.11	0.48
6/14/2017 0:00	6/15/2017 0:00	Perdue	Filter 1	0.07	0.09	0.18
6/15/2017 0:00	6/16/2017 0:00	Perdue	Filter 1	0.06	0.42	1.00
6/16/2017 0:00	6/17/2017 0:00	Perdue	Filter 1	0.00	0.50	1.00
6/17/2017 0:00	6/18/2017 0:00	Perdue	Filter 1	0.00	0.23	0.78
6/18/2017 0:00	6/19/2017 0:00	Perdue	Filter 1	0.00	0.21	0.23
6/19/2017 0:00	6/20/2017 0:00	Perdue	Filter 1	0.05	0.08	0.17
6/20/2017 0:00	6/21/2017 0:00	Perdue	Filter 1	0.04	0.07	0.41
6/21/2017 0:00	6/22/2017 0:00	Perdue	Filter 1	0.07	0.08	1.00
6/22/2017 0:00	6/23/2017 0:00	Perdue	Filter 1	0.03	0.10	0.19
6/23/2017 0:00	6/24/2017 0:00	Perdue	Filter 1	0.04	0.06	0.11
6/24/2017 0:00	6/25/2017 0:00	Perdue	Filter 1	0.02	0.04	1.00
6/25/2017 0:00	6/26/2017 0:00	Perdue	Filter 1	0.01	0.05	0.94
6/26/2017 0:00	6/27/2017 0:00	Perdue	Filter 1	0.03	0.07	0.15
6/27/2017 0:00	6/28/2017 0:00	Perdue	Filter 1	0.06	0.08	0.13
6/28/2017 0:00	6/29/2017 0:00	Perdue	Filter 1	0.06	0.09	0.22
6/29/2017 0:00	6/30/2017 0:00	Perdue	Filter 1	0.07	0.09	0.13
6/30/2017 0:00	7/1/2017 0:00	Perdue	Filter 1	0.06	0.07	0.22
7/1/2017 0:00	7/2/2017 0:00	Perdue	Filter 1	0.05	0.11	0.21
7/2/2017 0:00	7/3/2017 0:00	Perdue	Filter 1	0.06	0.10	0.23
7/3/2017 0:00	7/4/2017 0:00	Perdue	Filter 1	0.05	0.07	1.00
7/4/2017 0:00	7/5/2017 0:00	Perdue	Filter 1	0.06	0.15	0.28
7/5/2017 0:00	7/6/2017 0:00	Perdue	Filter 1	0.08	0.10	0.34
7/6/2017 0:00	7/7/2017 0:00	Perdue	Filter 1	0.08	0.13	1.00
7/7/2017 0:00	7/8/2017 0:00	Perdue	Filter 1	0.08	0.11	1.00
7/8/2017 0:00	7/9/2017 0:00	Perdue	Filter 1	0.08	0.16	0.34
7/9/2017 0:00	7/10/2017 0:00	Perdue	Filter 1	0.07	0.13	1.00
7/10/2017 0:00	7/11/2017 0:00	Perdue	Filter 1	0.07	0.14	0.31
7/11/2017 0:00	7/12/2017 0:00	Perdue	Filter 1	0.05	0.10	0.85
7/12/2017 0:00	7/13/2017 0:00	Perdue	Filter 1	0.06	0.18	0.30
7/13/2017 0:00	7/14/2017 0:00	Perdue	Filter 1	0.06	0.10	1.00
7/14/2017 0:00	7/15/2017 0:00	Perdue	Filter 1	0.05	0.14	0.29
7/15/2017 0:00	7/16/2017 0:00	Perdue	Filter 1	0.07	0.10	0.20
7/16/2017 0:00	7/17/2017 0:00	Perdue	Filter 1	0.05	0.06	0.11
7/17/2017 0:00	7/18/2017 0:00	Perdue	Filter 1	0.05	0.15	0.36
7/18/2017 0:00	7/19/2017 0:00	Perdue	Filter 1	0.09	0.20	0.28
7/19/2017 0:00	7/20/2017 0:00	Perdue	Filter 1	0.05	0.12	0.21
7/20/2017 0:00	7/21/2017 0:00	Perdue	Filter 1	0.04	0.10	0.17
7/21/2017 0:00	7/22/2017 0:00	Perdue	Filter 1	0.05	0.11	0.22
7/22/2017 0:00	7/23/2017 0:00	Perdue	Filter 1	0.06	0.09	0.25
7/23/2017 0:00	7/24/2017 0:00	Perdue	Filter 1	0.06	0.11	0.16
7/24/2017 0:00	7/25/2017 0:00	Perdue	Filter 1	0.03	0.06	0.09
7/25/2017 0:00	7/26/2017 0:00	Perdue	Filter 1	0.04	0.14	0.25
7/26/2017 0:00	7/27/2017 0:00	Perdue	Filter 1	0.05	0.09	0.12
7/27/2017 0:00	7/28/2017 0:00	Perdue	Filter 1	0.07	0.09	0.19
7/28/2017 0:00	7/29/2017 0:00	Perdue	Filter 1	0.11	0.14	0.20
7/29/2017 0:00	7/30/2017 0:00	Perdue	Filter 1	0.10	0.11	0.16
7/30/2017 0:00	7/31/2017 0:00	Perdue	Filter 1	0.09	0.12	0.17
7/31/2017 0:00	8/1/2017 0:00	Perdue	Filter 1	0.07	0.13	0.21
8/1/2017 0:00	8/2/2017 0:00	Perdue	Filter 1	0.06	0.08	0.10
8/2/2017 0:00	8/3/2017 0:00	Perdue	Filter 1	0.09	0.12	0.21
8/3/2017 0:00	8/4/2017 0:00	Perdue	Filter 1	0.12	0.14	0.24
8/4/2017 0:00	8/5/2017 0:00	Perdue	Filter 1	0.08	0.11	0.17
8/5/2017 0:00	8/6/2017 0:00	Perdue	Filter 1	0.06	0.09	0.12
8/6/2017 0:00	8/7/2017 0:00	Perdue	Filter 1	0.08	0.12	0.74

8/7/2017 0:00	8/8/2017 0:00	Perdue	Filter 1	0.09	0.10	0.17
8/8/2017 0:00	8/9/2017 0:00	Perdue	Filter 1	0.08	0.25	0.65
8/9/2017 0:00	8/10/2017 0:00	Perdue	Filter 1	0.07	0.10	0.15
8/10/2017 0:00	8/11/2017 0:00	Perdue	Filter 1	0.05	0.13	0.29
8/11/2017 0:00	8/12/2017 0:00	Perdue	Filter 1	0.14	0.17	0.22
8/12/2017 0:00	8/13/2017 0:00	Perdue	Filter 1	0.14	0.17	0.23
8/13/2017 0:00	8/14/2017 0:00	Perdue	Filter 1	0.10	0.11	0.17
8/14/2017 0:00	8/15/2017 0:00	Perdue	Filter 1	0.08	0.09	0.17
8/15/2017 0:00	8/16/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
8/16/2017 0:00	8/17/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
8/17/2017 0:00	8/18/2017 0:00	Perdue	Filter 1	0.07	0.08	0.08
8/18/2017 0:00	8/19/2017 0:00	Perdue	Filter 1	0.08	0.08	0.11
8/19/2017 0:00	8/20/2017 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/20/2017 0:00	8/21/2017 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/21/2017 0:00	8/22/2017 0:00	Perdue	Filter 1	0.08	0.08	0.10
8/22/2017 0:00	8/23/2017 0:00	Perdue	Filter 1	0.08	0.08	0.12
8/23/2017 0:00	8/24/2017 0:00	Perdue	Filter 1	0.08	0.08	0.11
8/24/2017 0:00	8/25/2017 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/25/2017 0:00	8/26/2017 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/26/2017 0:00	8/27/2017 0:00	Perdue	Filter 1	0.08	0.08	0.12
8/27/2017 0:00	8/28/2017 0:00	Perdue	Filter 1	0.08	0.08	0.11
8/28/2017 0:00	8/29/2017 0:00	Perdue	Filter 1	0.08	0.09	0.12
8/29/2017 0:00	8/30/2017 0:00	Perdue	Filter 1	0.08	0.10	0.23
8/30/2017 0:00	8/31/2017 0:00	Perdue	Filter 1	0.08	0.10	0.20
8/31/2017 0:00	9/1/2017 0:00	Perdue	Filter 1	0.08	0.09	0.15
9/1/2017 0:00	9/2/2017 0:00	Perdue	Filter 1	0.08	0.10	0.11
9/2/2017 0:00	9/3/2017 0:00	Perdue	Filter 1	0.00	0.06	0.14
9/3/2017 0:00	9/4/2017 0:00	Perdue	Filter 1	0.00	0.03	0.11
9/4/2017 0:00	9/5/2017 0:00	Perdue	Filter 1	0.00	0.00	0.01
9/5/2017 0:00	9/6/2017 0:00	Perdue	Filter 1	0.00	0.03	0.14
9/6/2017 0:00	9/7/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
9/7/2017 0:00	9/8/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
9/8/2017 0:00	9/9/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
9/9/2017 0:00	9/10/2017 0:00	Perdue	Filter 1	0.07	0.07	0.08
9/10/2017 0:00	9/11/2017 0:00	Perdue	Filter 1	0.07	0.08	0.12
9/11/2017 0:00	9/12/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
9/12/2017 0:00	9/13/2017 0:00	Perdue	Filter 1	0.07	0.08	0.11
9/13/2017 0:00	9/14/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
9/14/2017 0:00	9/15/2017 0:00	Perdue	Filter 1	0.07	0.09	0.17
9/15/2017 0:00	9/16/2017 0:00	Perdue	Filter 1	0.08	0.10	1.00
9/16/2017 0:00	9/17/2017 0:00	Perdue	Filter 1	0.09	0.11	0.16
9/17/2017 0:00	9/18/2017 0:00	Perdue	Filter 1	0.10	0.10	0.14
9/18/2017 0:00	9/19/2017 0:00	Perdue	Filter 1	0.09	0.10	0.13
9/19/2017 0:00	9/20/2017 0:00	Perdue	Filter 1	0.11	0.16	0.20
9/20/2017 0:00	9/21/2017 0:00	Perdue	Filter 1	0.11	0.12	0.14
9/21/2017 0:00	9/22/2017 0:00	Perdue	Filter 1	0.10	0.12	0.15
9/22/2017 0:00	9/23/2017 0:00	Perdue	Filter 1	0.12	0.12	0.12
9/23/2017 0:00	9/24/2017 0:00	Perdue	Filter 1	0.12	0.14	0.19
9/24/2017 0:00	9/25/2017 0:00	Perdue	Filter 1	0.16	0.19	0.21
9/25/2017 0:00	9/26/2017 0:00	Perdue	Filter 1	0.14	0.19	0.26
9/26/2017 0:00	9/27/2017 0:00	Perdue	Filter 1	0.14	0.15	0.23
9/27/2017 0:00	9/28/2017 0:00	Perdue	Filter 1	0.13	0.14	0.38
9/28/2017 0:00	9/29/2017 0:00	Perdue	Filter 1	0.14	0.15	0.18
9/29/2017 0:00	9/30/2017 0:00	Perdue	Filter 1	0.15	0.17	0.21
9/30/2017 0:00	10/1/2017 0:00	Perdue	Filter 1	0.16	0.17	0.21
10/1/2017 0:00	10/2/2017 0:00	Perdue	Filter 1	0.16	0.19	0.27
10/2/2017 0:00	10/3/2017 0:00	Perdue	Filter 1	0.13	0.15	0.21
10/3/2017 0:00	10/4/2017 0:00	Perdue	Filter 1	0.15	0.16	0.21
10/4/2017 0:00	10/5/2017 0:00	Perdue	Filter 1	0.14	0.17	0.23
10/5/2017 0:00	10/6/2017 0:00	Perdue	Filter 1	0.13	0.16	0.20
10/6/2017 0:00	10/7/2017 0:00	Perdue	Filter 1	0.12	0.13	0.15
10/7/2017 0:00	10/8/2017 0:00	Perdue	Filter 1	0.12	0.13	0.15
10/8/2017 0:00	10/9/2017 0:00	Perdue	Filter 1	0.12	0.14	0.30
10/9/2017 0:00	10/10/2017 0:00	Perdue	Filter 1	0.12	0.13	0.15
10/10/2017 0:00	10/11/2017 0:00	Perdue	Filter 1	0.12	0.14	0.20
10/11/2017 0:00	10/12/2017 0:00	Perdue	Filter 1	0.09	0.11	0.32
10/12/2017 0:00	10/13/2017 0:00	Perdue	Filter 1	0.08	0.09	0.09
10/13/2017 0:00	10/14/2017 0:00	Perdue	Filter 1	0.08	0.08	0.09
10/14/2017 0:00	10/15/2017 0:00	Perdue	Filter 1	0.03	0.07	0.14
10/15/2017 0:00	10/16/2017 0:00	Perdue	Filter 1	0.06	0.08	0.47
10/16/2017 0:00	10/17/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
10/17/2017 0:00	10/18/2017 0:00	Perdue	Filter 1	0.06	0.07	0.14
10/18/2017 0:00	10/19/2017 0:00	Perdue	Filter 1	0.07	0.07	0.11

10/19/2017 0:00	10/20/2017 0:00	Perdue	Filter 1	0.07	0.08	0.09
10/20/2017 0:00	10/21/2017 0:00	Perdue	Filter 1	0.08	0.11	0.23
10/21/2017 0:00	10/22/2017 0:00	Perdue	Filter 1	0.10	0.15	0.23
10/22/2017 0:00	10/23/2017 0:00	Perdue	Filter 1	0.08	0.09	0.10
10/23/2017 0:00	10/24/2017 0:00	Perdue	Filter 1	0.08	0.10	0.13
10/24/2017 0:00	10/25/2017 0:00	Perdue	Filter 1	0.09	0.10	0.31
10/25/2017 0:00	10/26/2017 0:00	Perdue	Filter 1	0.11	0.12	1.00
10/26/2017 0:00	10/27/2017 0:00	Perdue	Filter 1	0.13	0.15	1.00
10/27/2017 0:00	10/28/2017 0:00	Perdue	Filter 1	0.08	0.10	1.00
10/28/2017 0:00	10/29/2017 0:00	Perdue	Filter 1	0.06	0.07	0.10
10/29/2017 0:00	10/30/2017 0:00	Perdue	Filter 1	0.06	0.07	0.12
10/30/2017 0:00	10/31/2017 0:00	Perdue	Filter 1	0.06	0.07	0.08
10/31/2017 0:00	11/1/2017 0:00	Perdue	Filter 1	0.06	0.12	0.19
11/1/2017 0:00	11/2/2017 0:00	Perdue	Filter 1	0.08	0.10	0.23
11/2/2017 0:00	11/3/2017 0:00	Perdue	Filter 1	0.08	0.10	0.12
11/3/2017 0:00	11/4/2017 0:00	Perdue	Filter 1	0.08	0.09	0.10
11/4/2017 0:00	11/5/2017 0:00	Perdue	Filter 1	0.08	0.09	0.17
11/5/2017 0:00	11/6/2017 0:00	Perdue	Filter 1	0.07	0.09	0.16
11/6/2017 0:00	11/7/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
11/7/2017 0:00	11/8/2017 0:00	Perdue	Filter 1	0.08	0.09	0.11
11/8/2017 0:00	11/9/2017 0:00	Perdue	Filter 1	0.08	0.08	0.10
11/9/2017 0:00	11/10/2017 0:00	Perdue	Filter 1	0.08	0.09	0.12
11/10/2017 0:00	11/11/2017 0:00	Perdue	Filter 1	0.10	0.11	0.13
11/11/2017 0:00	11/12/2017 0:00	Perdue	Filter 1	0.10	0.11	0.15
11/12/2017 0:00	11/13/2017 0:00	Perdue	Filter 1	0.10	0.11	0.19
11/13/2017 0:00	11/14/2017 0:00	Perdue	Filter 1	0.08	0.10	0.13
11/14/2017 0:00	11/15/2017 0:00	Perdue	Filter 1	0.08	0.09	0.12
11/15/2017 0:00	11/16/2017 0:00	Perdue	Filter 1	0.08	0.10	0.18
11/16/2017 0:00	11/17/2017 0:00	Perdue	Filter 1	0.08	0.10	0.17
11/17/2017 0:00	11/18/2017 0:00	Perdue	Filter 1	0.08	0.09	0.12
11/18/2017 0:00	11/19/2017 0:00	Perdue	Filter 1	0.09	0.12	0.26
11/19/2017 0:00	11/20/2017 0:00	Perdue	Filter 1	0.09	0.11	0.14
11/20/2017 0:00	11/21/2017 0:00	Perdue	Filter 1	0.08	0.09	0.20
11/21/2017 0:00	11/22/2017 0:00	Perdue	Filter 1	0.06	0.07	0.08
11/22/2017 0:00	11/23/2017 0:00	Perdue	Filter 1	0.07	0.09	0.16
11/23/2017 0:00	11/24/2017 0:00	Perdue	Filter 1	0.09	0.11	0.26
11/24/2017 0:00	11/25/2017 0:00	Perdue	Filter 1	0.11	0.15	0.21
11/25/2017 0:00	11/26/2017 0:00	Perdue	Filter 1	0.09	0.12	0.20
11/26/2017 0:00	11/27/2017 0:00	Perdue	Filter 1	0.08	0.10	0.12
11/27/2017 0:00	11/28/2017 0:00	Perdue	Filter 1	0.07	0.09	0.11
11/28/2017 0:00	11/29/2017 0:00	Perdue	Filter 1	0.07	0.07	0.09
11/29/2017 0:00	11/30/2017 0:00	Perdue	Filter 1	0.07	0.09	0.20
11/30/2017 0:00	12/1/2017 0:00	Perdue	Filter 1	0.10	0.11	0.14
12/1/2017 0:00	12/2/2017 0:00	Perdue	Filter 1	0.09	0.10	0.14
12/2/2017 0:00	12/3/2017 0:00	Perdue	Filter 1	0.07	0.08	0.10
12/3/2017 0:00	12/4/2017 0:00	Perdue	Filter 1	0.08	0.11	0.24
12/4/2017 0:00	12/5/2017 0:00	Perdue	Filter 1	0.10	0.12	0.14
12/5/2017 0:00	12/6/2017 0:00	Perdue	Filter 1	0.10	0.11	0.12
12/6/2017 0:00	12/7/2017 0:00	Perdue	Filter 1	0.10	0.11	0.16
12/7/2017 0:00	12/8/2017 0:00	Perdue	Filter 1	0.11	0.14	0.27
12/8/2017 0:00	12/9/2017 0:00	Perdue	Filter 1	0.15	0.17	0.22
12/9/2017 0:00	12/10/2017 0:00	Perdue	Filter 1	0.13	0.14	0.25
12/10/2017 0:00	12/11/2017 0:00	Perdue	Filter 1	0.12	0.14	0.19
12/11/2017 0:00	12/12/2017 0:00	Perdue	Filter 1	0.12	0.13	0.16
12/12/2017 0:00	12/13/2017 0:00	Perdue	Filter 1	0.12	0.15	0.26
12/13/2017 0:00	12/14/2017 0:00	Perdue	Filter 1	0.13	0.18	0.27
12/14/2017 0:00	12/15/2017 0:00	Perdue	Filter 1	0.13	0.18	0.35
12/15/2017 0:00	12/16/2017 0:00	Perdue	Filter 1	0.13	0.15	0.22
12/16/2017 0:00	12/17/2017 0:00	Perdue	Filter 1	0.13	0.14	0.16
12/17/2017 0:00	12/18/2017 0:00	Perdue	Filter 1	0.14	0.14	0.14
12/18/2017 0:00	12/19/2017 0:00	Perdue	Filter 1	0.12	0.14	0.76
12/19/2017 0:00	12/20/2017 0:00	Perdue	Filter 1	0.12	0.14	0.20
12/20/2017 0:00	12/21/2017 0:00	Perdue	Filter 1	0.12	0.13	0.28
12/21/2017 0:00	12/22/2017 0:00	Perdue	Filter 1	0.11	0.13	0.18
12/22/2017 0:00	12/23/2017 0:00	Perdue	Filter 1	0.12	0.13	0.20
12/23/2017 0:00	12/24/2017 0:00	Perdue	Filter 1	0.12	0.16	0.40
12/24/2017 0:00	12/25/2017 0:00	Perdue	Filter 1	0.13	0.15	0.22
12/25/2017 0:00	12/26/2017 0:00	Perdue	Filter 1	0.13	0.15	0.18
12/26/2017 0:00	12/27/2017 0:00	Perdue	Filter 1	0.08	0.14	0.14
12/27/2017 0:00	12/28/2017 0:00	Perdue	Filter 1	0.07	0.10	0.11
12/28/2017 0:00	12/29/2017 0:00	Perdue	Filter 1	0.09	0.11	0.12
12/29/2017 0:00	12/30/2017 0:00	Perdue	Filter 1	0.07	0.10	0.12
12/30/2017 0:00	12/31/2017 0:00	Perdue	Filter 1	0.07	0.09	0.13

12/31/2017 0:00	1/1/2018 0:00	Perdue	Filter 1	0.09	0.11	0.27
1/1/2018 0:00	1/2/2018 0:00	Perdue	Filter 1	0.11	0.14	0.19
1/2/2018 0:00	1/3/2018 0:00	Perdue	Filter 1	0.11	0.12	0.15
1/3/2018 0:00	1/4/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
1/4/2018 0:00	1/5/2018 0:00	Perdue	Filter 1	0.10	0.12	0.28
1/5/2018 0:00	1/6/2018 0:00	Perdue	Filter 1	0.11	0.14	0.21
1/6/2018 0:00	1/7/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
1/7/2018 0:00	1/8/2018 0:00	Perdue	Filter 1	0.10	0.11	0.12
1/8/2018 0:00	1/9/2018 0:00	Perdue	Filter 1	0.10	0.15	0.25
1/9/2018 0:00	1/10/2018 0:00	Perdue	Filter 1	0.12	0.14	0.17
1/10/2018 0:00	1/11/2018 0:00	Perdue	Filter 1	0.10	0.13	0.14
1/11/2018 0:00	1/12/2018 0:00	Perdue	Filter 1	0.10	0.12	0.14
1/12/2018 0:00	1/13/2018 0:00	Perdue	Filter 1	0.10	0.11	0.11
1/13/2018 0:00	1/14/2018 0:00	Perdue	Filter 1	0.08	0.12	0.24
1/14/2018 0:00	1/15/2018 0:00	Perdue	Filter 1	0.11	0.15	0.22
1/15/2018 0:00	1/16/2018 0:00	Perdue	Filter 1	0.10	0.14	0.17
1/16/2018 0:00	1/17/2018 0:00	Perdue	Filter 1	0.12	0.14	0.15
1/17/2018 0:00	1/18/2018 0:00	Perdue	Filter 1	0.12	0.13	0.16
1/18/2018 0:00	1/19/2018 0:00	Perdue	Filter 1	0.11	0.13	0.23
1/19/2018 0:00	1/20/2018 0:00	Perdue	Filter 1	0.12	0.15	0.16
1/20/2018 0:00	1/21/2018 0:00	Perdue	Filter 1	0.16	0.16	0.16
1/21/2018 0:00	1/22/2018 0:00	Perdue	Filter 1	0.15	0.16	0.23
1/22/2018 0:00	1/23/2018 0:00	Perdue	Filter 1	0.14	0.18	0.25
1/23/2018 0:00	1/24/2018 0:00	Perdue	Filter 1	0.11	0.14	0.24
1/24/2018 0:00	1/25/2018 0:00	Perdue	Filter 1	0.08	0.12	0.13
1/25/2018 0:00	1/26/2018 0:00	Perdue	Filter 1	0.09	0.10	0.11
1/26/2018 0:00	1/27/2018 0:00	Perdue	Filter 1	0.09	0.11	0.36
1/27/2018 0:00	1/28/2018 0:00	Perdue	Filter 1	0.09	0.13	0.22
1/28/2018 0:00	1/29/2018 0:00	Perdue	Filter 1	0.11	0.21	0.26
1/29/2018 0:00	1/30/2018 0:00	Perdue	Filter 1	0.08	0.12	0.18
1/30/2018 0:00	1/31/2018 0:00	Perdue	Filter 1	0.09	0.12	0.21
1/31/2018 0:00	2/1/2018 0:00	Perdue	Filter 1	0.14	0.18	0.33
2/1/2018 0:00	2/2/2018 0:00	Perdue	Filter 1	0.17	0.23	0.30
2/2/2018 0:00	2/3/2018 0:00	Perdue	Filter 1	0.03	0.16	0.27
2/3/2018 0:00	2/4/2018 0:00	Perdue	Filter 1	0.02	0.03	0.05
2/4/2018 0:00	2/5/2018 0:00	Perdue	Filter 1	0.02	0.04	0.49
2/5/2018 0:00	2/6/2018 0:00	Perdue	Filter 1	0.02	0.04	0.07
2/6/2018 0:00	2/7/2018 0:00	Perdue	Filter 1	0.01	0.04	0.26
2/7/2018 0:00	2/8/2018 0:00	Perdue	Filter 1	0.02	0.02	0.25
2/8/2018 0:00	2/9/2018 0:00	Perdue	Filter 1	0.20	0.21	0.25
2/9/2018 0:00	2/10/2018 0:00	Perdue	Filter 1	0.21	0.22	0.26
2/10/2018 0:00	2/11/2018 0:00	Perdue	Filter 1	0.21	0.22	0.24
2/11/2018 0:00	2/12/2018 0:00	Perdue	Filter 1	0.20	0.25	0.31
2/12/2018 0:00	2/13/2018 0:00	Perdue	Filter 1	0.21	0.22	0.28
2/13/2018 0:00	2/14/2018 0:00	Perdue	Filter 1	0.20	0.29	1.00
2/14/2018 0:00	2/15/2018 0:00	Perdue	Filter 1	0.21	0.38	1.00
2/15/2018 0:00	2/16/2018 0:00	Perdue	Filter 1	0.21	0.22	0.23
2/16/2018 0:00	2/17/2018 0:00	Perdue	Filter 1	0.22	0.24	0.27
2/17/2018 0:00	2/18/2018 0:00	Perdue	Filter 1	0.24	0.27	0.35
2/18/2018 0:00	2/19/2018 0:00	Perdue	Filter 1	0.23	0.25	0.35
2/19/2018 0:00	2/20/2018 0:00	Perdue	Filter 1	0.15	0.21	0.31
2/20/2018 0:00	2/21/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
2/21/2018 0:00	2/22/2018 0:00	Perdue	Filter 1	0.15	0.17	0.30
2/22/2018 0:00	2/23/2018 0:00	Perdue	Filter 1	0.14	0.15	0.16
2/23/2018 0:00	2/24/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
2/24/2018 0:00	2/25/2018 0:00	Perdue	Filter 1	0.13	0.14	0.15
2/25/2018 0:00	2/26/2018 0:00	Perdue	Filter 1	0.14	0.14	0.15
2/26/2018 0:00	2/27/2018 0:00	Perdue	Filter 1	0.14	0.14	0.17
2/27/2018 0:00	2/28/2018 0:00	Perdue	Filter 1	0.15	0.20	0.29
2/28/2018 0:00	3/1/2018 0:00	Perdue	Filter 1	0.14	0.16	0.18
3/1/2018 0:00	3/2/2018 0:00	Perdue	Filter 1	0.15	0.16	0.17
3/2/2018 0:00	3/3/2018 0:00	Perdue	Filter 1	0.13	0.15	0.17
3/3/2018 0:00	3/4/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
3/4/2018 0:00	3/5/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
3/5/2018 0:00	3/6/2018 0:00	Perdue	Filter 1	0.15	0.20	0.25
3/6/2018 0:00	3/7/2018 0:00	Perdue	Filter 1	0.16	0.18	0.20
3/7/2018 0:00	3/8/2018 0:00	Perdue	Filter 1	0.16	0.17	0.18
3/8/2018 0:00	3/9/2018 0:00	Perdue	Filter 1	0.15	0.16	0.17
3/9/2018 0:00	3/10/2018 0:00	Perdue	Filter 1	0.15	0.16	0.19
3/10/2018 0:00	3/11/2018 0:00	Perdue	Filter 1	0.15	0.18	0.21
3/11/2018 0:00	3/12/2018 0:00	Perdue	Filter 1	0.15	0.19	0.26
3/12/2018 0:00	3/13/2018 0:00	Perdue	Filter 1	0.16	0.18	0.22
3/13/2018 0:00	3/14/2018 0:00	Perdue	Filter 1	0.15	0.18	0.19

3/14/2018 0:00	3/15/2018 0:00	Perdue	Filter 1	0.14	0.16	0.18
3/15/2018 0:00	3/16/2018 0:00	Perdue	Filter 1	0.14	0.15	0.18
3/16/2018 0:00	3/17/2018 0:00	Perdue	Filter 1	0.16	0.36	1.00
3/17/2018 0:00	3/18/2018 0:00	Perdue	Filter 1	0.17	0.23	0.26
3/18/2018 0:00	3/19/2018 0:00	Perdue	Filter 1	0.17	0.19	0.25
3/19/2018 0:00	3/20/2018 0:00	Perdue	Filter 1	0.15	0.17	0.18
3/20/2018 0:00	3/21/2018 0:00	Perdue	Filter 1	0.15	0.16	0.18
3/21/2018 0:00	3/22/2018 0:00	Perdue	Filter 1	0.14	0.15	0.16
3/22/2018 0:00	3/23/2018 0:00	Perdue	Filter 1	0.13	0.14	0.20
3/23/2018 0:00	3/24/2018 0:00	Perdue	Filter 1	0.13	0.17	0.23
3/24/2018 0:00	3/25/2018 0:00	Perdue	Filter 1	0.15	0.16	0.19
3/25/2018 0:00	3/26/2018 0:00	Perdue	Filter 1	0.14	0.15	0.16
3/26/2018 0:00	3/27/2018 0:00	Perdue	Filter 1	0.14	0.15	0.16
3/27/2018 0:00	3/28/2018 0:00	Perdue	Filter 1	0.14	0.14	0.15
3/28/2018 0:00	3/29/2018 0:00	Perdue	Filter 1	0.01	0.29	1.00
3/29/2018 0:00	3/30/2018 0:00	Perdue	Filter 1	0.00	0.42	1.00
3/30/2018 0:00	3/31/2018 0:00	Perdue	Filter 1	0.11	0.15	0.26
3/31/2018 0:00	4/1/2018 0:00	Perdue	Filter 1	0.12	0.16	0.21
4/1/2018 0:00	4/2/2018 0:00	Perdue	Filter 1	0.12	0.14	0.33
4/2/2018 0:00	4/3/2018 0:00	Perdue	Filter 1	0.12	0.13	0.24
4/3/2018 0:00	4/4/2018 0:00	Perdue	Filter 1	0.11	0.12	0.22
4/4/2018 0:00	4/5/2018 0:00	Perdue	Filter 1	0.11	0.13	0.39
4/5/2018 0:00	4/6/2018 0:00	Perdue	Filter 1	0.13	0.15	0.23
4/6/2018 0:00	4/7/2018 0:00	Perdue	Filter 1	0.13	0.14	0.27
4/7/2018 0:00	4/8/2018 0:00	Perdue	Filter 1	0.13	0.13	0.17
4/8/2018 0:00	4/9/2018 0:00	Perdue	Filter 1	0.12	0.13	0.56
4/9/2018 0:00	4/10/2018 0:00	Perdue	Filter 1	0.12	0.13	0.25
4/10/2018 0:00	4/11/2018 0:00	Perdue	Filter 1	0.13	0.17	0.26
4/11/2018 0:00	4/12/2018 0:00	Perdue	Filter 1	0.16	0.17	0.44
4/12/2018 0:00	4/13/2018 0:00	Perdue	Filter 1	0.15	0.16	0.21
4/13/2018 0:00	4/14/2018 0:00	Perdue	Filter 1	0.15	0.16	0.39
4/14/2018 0:00	4/15/2018 0:00	Perdue	Filter 1	0.15	0.15	0.22
4/15/2018 0:00	4/16/2018 0:00	Perdue	Filter 1	0.15	0.16	0.24
4/16/2018 0:00	4/17/2018 0:00	Perdue	Filter 1	0.11	0.18	0.53
4/17/2018 0:00	4/18/2018 0:00	Perdue	Filter 1	0.09	0.10	0.11
4/18/2018 0:00	4/19/2018 0:00	Perdue	Filter 1	0.09	0.10	0.12
4/19/2018 0:00	4/20/2018 0:00	Perdue	Filter 1	0.10	0.11	0.14
4/20/2018 0:00	4/21/2018 0:00	Perdue	Filter 1	0.09	0.10	0.14
4/21/2018 0:00	4/22/2018 0:00	Perdue	Filter 1	0.09	0.15	0.28
4/22/2018 0:00	4/23/2018 0:00	Perdue	Filter 1	0.13	0.15	0.16
4/23/2018 0:00	4/24/2018 0:00	Perdue	Filter 1	0.12	0.13	0.15
4/24/2018 0:00	4/25/2018 0:00	Perdue	Filter 1	0.11	0.13	0.14
4/25/2018 0:00	4/26/2018 0:00	Perdue	Filter 1	0.10	0.11	0.12
4/26/2018 0:00	4/27/2018 0:00	Perdue	Filter 1	0.09	0.10	0.19
4/27/2018 0:00	4/28/2018 0:00	Perdue	Filter 1	0.09	0.16	0.23
4/28/2018 0:00	4/29/2018 0:00	Perdue	Filter 1	0.10	0.13	0.15
4/29/2018 0:00	4/30/2018 0:00	Perdue	Filter 1	0.09	0.11	0.14
4/30/2018 0:00	5/1/2018 0:00	Perdue	Filter 1	0.09	0.11	0.13
5/1/2018 0:00	5/2/2018 0:00	Perdue	Filter 1	0.11	0.12	0.14
5/2/2018 0:00	5/3/2018 0:00	Perdue	Filter 1	0.10	0.12	0.29
5/3/2018 0:00	5/4/2018 0:00	Perdue	Filter 1	0.10	0.14	0.22
5/4/2018 0:00	5/5/2018 0:00	Perdue	Filter 1	0.11	0.13	0.15
5/5/2018 0:00	5/6/2018 0:00	Perdue	Filter 1	0.13	0.14	0.16
5/6/2018 0:00	5/7/2018 0:00	Perdue	Filter 1	0.14	0.15	0.23
5/7/2018 0:00	5/8/2018 0:00	Perdue	Filter 1	0.14	0.15	0.18
5/8/2018 0:00	5/9/2018 0:00	Perdue	Filter 1	0.14	0.17	0.28
5/9/2018 0:00	5/10/2018 0:00	Perdue	Filter 1	0.15	0.17	0.26
5/10/2018 0:00	5/11/2018 0:00	Perdue	Filter 1	0.16	0.19	0.32
5/11/2018 0:00	5/12/2018 0:00	Perdue	Filter 1	0.14	0.18	0.20
5/12/2018 0:00	5/13/2018 0:00	Perdue	Filter 1	0.16	0.18	0.23
5/13/2018 0:00	5/14/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
5/14/2018 0:00	5/15/2018 0:00	Perdue	Filter 1	0.14	0.15	0.32
5/15/2018 0:00	5/16/2018 0:00	Perdue	Filter 1	0.14	0.15	0.17
5/16/2018 0:00	5/17/2018 0:00	Perdue	Filter 1	0.13	0.14	0.16
5/17/2018 0:00	5/18/2018 0:00	Perdue	Filter 1	0.12	0.12	0.14
5/18/2018 0:00	5/19/2018 0:00	Perdue	Filter 1	0.12	0.12	0.18
5/19/2018 0:00	5/20/2018 0:00	Perdue	Filter 1	0.12	0.14	0.19
5/20/2018 0:00	5/21/2018 0:00	Perdue	Filter 1	0.13	0.13	0.15
5/21/2018 0:00	5/22/2018 0:00	Perdue	Filter 1	0.12	0.14	0.30
5/22/2018 0:00	5/23/2018 0:00	Perdue	Filter 1	0.13	0.13	0.14
5/23/2018 0:00	5/24/2018 0:00	Perdue	Filter 1	0.13	0.14	0.28
5/24/2018 0:00	5/25/2018 0:00	Perdue	Filter 1	0.15	0.16	0.19
5/25/2018 0:00	5/26/2018 0:00	Perdue	Filter 1	0.18	0.19	0.22

5/26/2018 0:00	5/27/2018 0:00	Perdue	Filter 1	0.16	0.19	0.25
5/27/2018 0:00	5/28/2018 0:00	Perdue	Filter 1	0.16	0.16	0.22
5/28/2018 0:00	5/29/2018 0:00	Perdue	Filter 1	0.15	0.16	0.25
5/29/2018 0:00	5/30/2018 0:00	Perdue	Filter 1	0.15	0.16	0.20
5/30/2018 0:00	5/31/2018 0:00	Perdue	Filter 1	0.16	0.17	0.30
5/31/2018 0:00	6/1/2018 0:00	Perdue	Filter 1	0.17	0.18	0.24
6/1/2018 0:00	6/2/2018 0:00	Perdue	Filter 1	0.18	0.19	0.32
6/2/2018 0:00	6/3/2018 0:00	Perdue	Filter 1	0.19	0.20	0.26
6/3/2018 0:00	6/4/2018 0:00	Perdue	Filter 1	0.21	0.22	0.30
6/4/2018 0:00	6/5/2018 0:00	Perdue	Filter 1	0.07	0.22	0.57
6/5/2018 0:00	6/6/2018 0:00	Perdue	Filter 1	0.12	0.13	0.13
6/6/2018 0:00	6/7/2018 0:00	Perdue	Filter 1	0.13	0.13	0.13
6/7/2018 0:00	6/8/2018 0:00	Perdue	Filter 1	0.12	0.13	0.22
6/8/2018 0:00	6/9/2018 0:00	Perdue	Filter 1	0.10	0.13	0.16
6/9/2018 0:00	6/10/2018 0:00	Perdue	Filter 1	0.09	0.11	0.14
6/10/2018 0:00	6/11/2018 0:00	Perdue	Filter 1	0.09	0.11	0.13
6/11/2018 0:00	6/12/2018 0:00	Perdue	Filter 1	0.09	0.10	0.16
6/12/2018 0:00	6/13/2018 0:00	Perdue	Filter 1	0.10	0.14	0.28
6/13/2018 0:00	6/14/2018 0:00	Perdue	Filter 1	0.12	0.16	0.32
6/14/2018 0:00	6/15/2018 0:00	Perdue	Filter 1	0.12	0.13	0.21
6/15/2018 0:00	6/16/2018 0:00	Perdue	Filter 1	0.11	0.13	0.15
6/16/2018 0:00	6/17/2018 0:00	Perdue	Filter 1	0.15	0.17	0.24
6/17/2018 0:00	6/18/2018 0:00	Perdue	Filter 1	0.15	0.17	0.19
6/18/2018 0:00	6/19/2018 0:00	Perdue	Filter 1	0.12	0.16	0.28
6/19/2018 0:00	6/20/2018 0:00	Perdue	Filter 1	0.09	0.10	0.12
6/20/2018 0:00	6/21/2018 0:00	Perdue	Filter 1	0.10	0.12	0.32
6/21/2018 0:00	6/22/2018 0:00	Perdue	Filter 1	0.11	0.14	0.27
6/22/2018 0:00	6/23/2018 0:00	Perdue	Filter 1	0.14	0.17	0.22
6/23/2018 0:00	6/24/2018 0:00	Perdue	Filter 1	0.14	0.16	0.18
6/24/2018 0:00	6/25/2018 0:00	Perdue	Filter 1	0.15	0.16	0.24
6/25/2018 0:00	6/26/2018 0:00	Perdue	Filter 1	0.16	0.17	0.20
6/26/2018 0:00	6/27/2018 0:00	Perdue	Filter 1	0.18	0.19	0.33
6/27/2018 0:00	6/28/2018 0:00	Perdue	Filter 1	0.18	0.23	0.47
6/28/2018 0:00	6/29/2018 0:00	Perdue	Filter 1	0.19	0.21	0.59
6/29/2018 0:00	6/30/2018 0:00	Perdue	Filter 1	0.20	0.21	0.39
6/30/2018 0:00	7/1/2018 0:00	Perdue	Filter 1	0.21	0.22	0.30
7/1/2018 0:00	7/2/2018 0:00	Perdue	Filter 1	0.21	0.23	0.32
7/2/2018 0:00	7/3/2018 0:00	Perdue	Filter 1	0.22	0.26	0.60
7/3/2018 0:00	7/4/2018 0:00	Perdue	Filter 1	0.19	0.23	0.39
7/4/2018 0:00	7/5/2018 0:00	Perdue	Filter 1	0.20	0.22	0.33
7/5/2018 0:00	7/6/2018 0:00	Perdue	Filter 1	0.00	0.19	0.45
7/6/2018 0:00	7/7/2018 0:00	Perdue	Filter 1	0.02	0.12	1.00
7/7/2018 0:00	7/8/2018 0:00	Perdue	Filter 1	0.12	0.17	0.68
7/8/2018 0:00	7/9/2018 0:00	Perdue	Filter 1	0.14	0.20	0.81
7/9/2018 0:00	7/10/2018 0:00	Perdue	Filter 1	0.13	0.15	0.63
7/10/2018 0:00	7/11/2018 0:00	Perdue	Filter 1	0.13	0.14	0.16
7/11/2018 0:00	7/12/2018 0:00	Perdue	Filter 1	0.12	0.13	0.20
7/12/2018 0:00	7/13/2018 0:00	Perdue	Filter 1	0.13	0.17	0.21
7/13/2018 0:00	7/14/2018 0:00	Perdue	Filter 1	0.16	0.18	0.26
7/14/2018 0:00	7/15/2018 0:00	Perdue	Filter 1	0.15	0.17	0.21
7/15/2018 0:00	7/16/2018 0:00	Perdue	Filter 1	0.13	0.15	0.18
7/16/2018 0:00	7/17/2018 0:00	Perdue	Filter 1	0.13	0.13	0.19
7/17/2018 0:00	7/18/2018 0:00	Perdue	Filter 1	0.13	0.22	0.29
7/18/2018 0:00	7/19/2018 0:00	Perdue	Filter 1	0.18	0.20	0.33
7/19/2018 0:00	7/20/2018 0:00	Perdue	Filter 1	0.08	0.17	0.41
7/20/2018 0:00	7/21/2018 0:00	Perdue	Filter 1	0.04	0.08	0.11
7/21/2018 0:00	7/22/2018 0:00	Perdue	Filter 1	0.09	0.09	0.10
7/22/2018 0:00	7/23/2018 0:00	Perdue	Filter 1	0.09	0.09	0.16
7/23/2018 0:00	7/24/2018 0:00	Perdue	Filter 1	0.08	0.09	0.11
7/24/2018 0:00	7/25/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
7/25/2018 0:00	7/26/2018 0:00	Perdue	Filter 1	0.08	0.08	0.11
7/26/2018 0:00	7/27/2018 0:00	Perdue	Filter 1	0.07	0.08	0.10
7/27/2018 0:00	7/28/2018 0:00	Perdue	Filter 1	0.07	0.08	0.10
7/28/2018 0:00	7/29/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
7/29/2018 0:00	7/30/2018 0:00	Perdue	Filter 1	0.08	0.08	0.10
7/30/2018 0:00	7/31/2018 0:00	Perdue	Filter 1	0.08	0.09	0.09
7/31/2018 0:00	8/1/2018 0:00	Perdue	Filter 1	0.08	0.09	0.09
8/1/2018 0:00	8/2/2018 0:00	Perdue	Filter 1	0.09	0.09	0.10
8/2/2018 0:00	8/3/2018 0:00	Perdue	Filter 1	0.10	0.10	0.11
8/3/2018 0:00	8/4/2018 0:00	Perdue	Filter 1	0.10	0.11	0.12
8/4/2018 0:00	8/5/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
8/5/2018 0:00	8/6/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
8/6/2018 0:00	8/7/2018 0:00	Perdue	Filter 1	0.11	0.12	0.13

8/7/2018 0:00	8/8/2018 0:00	Perdue	Filter 1	0.13	0.14	0.16
8/8/2018 0:00	8/9/2018 0:00	Perdue	Filter 1	0.15	0.16	0.21
8/9/2018 0:00	8/10/2018 0:00	Perdue	Filter 1	0.16	0.18	0.19
8/10/2018 0:00	8/11/2018 0:00	Perdue	Filter 1	0.10	0.17	0.23
8/11/2018 0:00	8/12/2018 0:00	Perdue	Filter 1	0.11	0.13	0.16
8/12/2018 0:00	8/13/2018 0:00	Perdue	Filter 1	0.14	0.16	0.26
8/13/2018 0:00	8/14/2018 0:00	Perdue	Filter 1	0.13	0.16	0.36
8/14/2018 0:00	8/15/2018 0:00	Perdue	Filter 1	0.15	0.16	0.18
8/15/2018 0:00	8/16/2018 0:00	Perdue	Filter 1	0.03	0.13	0.19
8/16/2018 0:00	8/17/2018 0:00	Perdue	Filter 1	0.07	0.07	0.09
8/17/2018 0:00	8/18/2018 0:00	Perdue	Filter 1	0.07	0.07	0.08
8/18/2018 0:00	8/19/2018 0:00	Perdue	Filter 1	0.07	0.07	0.08
8/19/2018 0:00	8/20/2018 0:00	Perdue	Filter 1	0.07	0.08	1.00
8/20/2018 0:00	8/21/2018 0:00	Perdue	Filter 1	0.07	0.08	1.00
8/21/2018 0:00	8/22/2018 0:00	Perdue	Filter 1	0.07	0.08	0.09
8/22/2018 0:00	8/23/2018 0:00	Perdue	Filter 1	0.07	0.07	0.08
8/23/2018 0:00	8/24/2018 0:00	Perdue	Filter 1	0.07	0.07	0.09
8/24/2018 0:00	8/25/2018 0:00	Perdue	Filter 1	0.07	0.08	0.09
8/25/2018 0:00	8/26/2018 0:00	Perdue	Filter 1	0.07	0.08	0.09
8/26/2018 0:00	8/27/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/27/2018 0:00	8/28/2018 0:00	Perdue	Filter 1	0.08	0.08	0.13
8/28/2018 0:00	8/29/2018 0:00	Perdue	Filter 1	0.08	0.09	0.13
8/29/2018 0:00	8/30/2018 0:00	Perdue	Filter 1	0.11	0.12	0.13
8/30/2018 0:00	8/31/2018 0:00	Perdue	Filter 1	0.12	0.13	0.15
8/31/2018 0:00	9/1/2018 0:00	Perdue	Filter 1	0.14	0.16	0.18
9/1/2018 0:00	9/2/2018 0:00	Perdue	Filter 1	0.16	0.17	0.20
9/2/2018 0:00	9/3/2018 0:00	Perdue	Filter 1	0.17	0.19	0.26
9/3/2018 0:00	9/4/2018 0:00	Perdue	Filter 1	0.20	0.22	0.26
9/4/2018 0:00	9/5/2018 0:00	Perdue	Filter 1	0.16	0.23	0.25
9/5/2018 0:00	9/6/2018 0:00	Perdue	Filter 1	0.15	0.16	0.56
9/6/2018 0:00	9/7/2018 0:00	Perdue	Filter 1	0.13	0.15	0.20
9/7/2018 0:00	9/8/2018 0:00	Perdue	Filter 1	0.15	0.17	0.19
9/8/2018 0:00	9/9/2018 0:00	Perdue	Filter 1	0.17	0.19	0.21
9/9/2018 0:00	9/10/2018 0:00	Perdue	Filter 1	0.20	0.22	0.26
9/10/2018 0:00	9/11/2018 0:00	Perdue	Filter 1	0.10	0.21	0.26
9/11/2018 0:00	9/12/2018 0:00	Perdue	Filter 1	0.10	0.12	0.14
9/12/2018 0:00	9/13/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
9/13/2018 0:00	9/14/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
9/14/2018 0:00	9/15/2018 0:00	Perdue	Filter 1	0.10	0.12	0.15
9/15/2018 0:00	9/16/2018 0:00	Perdue	Filter 1	0.11	0.12	0.13
9/16/2018 0:00	9/17/2018 0:00	Perdue	Filter 1	0.12	0.13	0.16
9/17/2018 0:00	9/18/2018 0:00	Perdue	Filter 1	0.11	0.13	0.17
9/18/2018 0:00	9/19/2018 0:00	Perdue	Filter 1	0.11	0.12	0.16
9/19/2018 0:00	9/20/2018 0:00	Perdue	Filter 1	0.12	0.13	0.14
9/20/2018 0:00	9/21/2018 0:00	Perdue	Filter 1	0.13	0.13	0.19
9/21/2018 0:00	9/22/2018 0:00	Perdue	Filter 1	0.13	0.14	0.17
9/22/2018 0:00	9/23/2018 0:00	Perdue	Filter 1	0.15	0.17	0.20
9/23/2018 0:00	9/24/2018 0:00	Perdue	Filter 1	0.17	0.19	0.20
9/24/2018 0:00	9/25/2018 0:00	Perdue	Filter 1	0.10	0.22	0.29
9/25/2018 0:00	9/26/2018 0:00	Perdue	Filter 1	0.17	0.18	0.21
9/26/2018 0:00	9/27/2018 0:00	Perdue	Filter 1	0.17	0.17	0.19
9/27/2018 0:00	9/28/2018 0:00	Perdue	Filter 1	0.16	0.17	0.19
9/28/2018 0:00	9/29/2018 0:00	Perdue	Filter 1	0.15	0.17	0.20
9/29/2018 0:00	9/30/2018 0:00	Perdue	Filter 1	0.15	0.16	0.32
9/30/2018 0:00	10/1/2018 0:00	Perdue	Filter 1	0.14	0.16	0.20
10/1/2018 0:00	10/2/2018 0:00	Perdue	Filter 1	0.14	0.18	0.24
10/2/2018 0:00	10/3/2018 0:00	Perdue	Filter 1	0.14	0.15	0.22
10/3/2018 0:00	10/4/2018 0:00	Perdue	Filter 1	0.15	0.16	0.19
10/4/2018 0:00	10/5/2018 0:00	Perdue	Filter 1	0.15	0.17	0.21
10/5/2018 0:00	10/6/2018 0:00	Perdue	Filter 1	0.17	0.22	0.31
10/6/2018 0:00	10/7/2018 0:00	Perdue	Filter 1	0.18	0.20	0.21
10/7/2018 0:00	10/8/2018 0:00	Perdue	Filter 1	0.21	0.22	0.29
10/8/2018 0:00	10/9/2018 0:00	Perdue	Filter 1	0.09	0.13	0.29
10/9/2018 0:00	10/10/2018 0:00	Perdue	Filter 1	0.09	0.12	0.21
10/10/2018 0:00	10/11/2018 0:00	Perdue	Filter 1	0.14	0.18	0.60
10/11/2018 0:00	10/12/2018 0:00	Perdue	Filter 1	0.16	0.18	1.00
10/12/2018 0:00	10/13/2018 0:00	Perdue	Filter 1	0.07	0.16	1.00
10/13/2018 0:00	10/14/2018 0:00	Perdue	Filter 1	0.08	0.09	0.10
10/14/2018 0:00	10/15/2018 0:00	Perdue	Filter 1	0.09	0.09	0.10
10/15/2018 0:00	10/16/2018 0:00	Perdue	Filter 1	0.08	0.09	0.11
10/16/2018 0:00	10/17/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
10/17/2018 0:00	10/18/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
10/18/2018 0:00	10/19/2018 0:00	Perdue	Filter 1	0.07	0.08	0.08

10/19/2018 0:00	10/20/2018 0:00	Perdue	Filter 1	0.08	0.08	0.08
10/20/2018 0:00	10/21/2018 0:00	Perdue	Filter 1	0.07	0.08	0.10
10/21/2018 0:00	10/22/2018 0:00	Perdue	Filter 1	0.08	0.08	0.19
10/22/2018 0:00	10/23/2018 0:00	Perdue	Filter 1	0.08	0.09	0.09
10/23/2018 0:00	10/24/2018 0:00	Perdue	Filter 1	0.09	0.10	0.11
10/24/2018 0:00	10/25/2018 0:00	Perdue	Filter 1	0.11	0.12	0.14
10/25/2018 0:00	10/26/2018 0:00	Perdue	Filter 1	0.13	0.15	0.17
10/26/2018 0:00	10/27/2018 0:00	Perdue	Filter 1	0.08	0.10	0.18
10/27/2018 0:00	10/28/2018 0:00	Perdue	Filter 1	0.10	0.11	0.13
10/28/2018 0:00	10/29/2018 0:00	Perdue	Filter 1	0.12	0.14	0.15
10/29/2018 0:00	10/30/2018 0:00	Perdue	Filter 1	0.15	0.16	0.18
10/30/2018 0:00	10/31/2018 0:00	Perdue	Filter 1	0.17	0.19	0.21
10/31/2018 0:00	11/1/2018 0:00	Perdue	Filter 1	0.21	0.21	0.22
11/1/2018 0:00	11/2/2018 0:00	Perdue	Filter 1	0.15	0.20	0.21
11/2/2018 0:00	11/3/2018 0:00	Perdue	Filter 1	0.16	0.17	0.17
11/3/2018 0:00	11/4/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/4/2018 0:00	11/5/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/5/2018 0:00	11/6/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/6/2018 0:00	11/7/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/7/2018 0:00	11/8/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/8/2018 0:00	11/9/2018 0:00	Perdue	Filter 1	0.17	0.17	0.17
11/9/2018 0:00	11/10/2018 0:00	Perdue	Filter 1	0.08	0.15	0.17
11/10/2018 0:00	11/11/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
11/11/2018 0:00	11/12/2018 0:00	Perdue	Filter 1	0.08	0.08	0.10
11/12/2018 0:00	11/13/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
11/13/2018 0:00	11/14/2018 0:00	Perdue	Filter 1	0.08	0.08	0.09
11/14/2018 0:00	11/15/2018 0:00	Perdue	Filter 1	0.08	0.09	0.13
11/15/2018 0:00	11/16/2018 0:00	Perdue	Filter 1	0.09	0.09	0.12
11/16/2018 0:00	11/17/2018 0:00	Perdue	Filter 1	0.10	0.10	0.13
11/17/2018 0:00	11/18/2018 0:00	Perdue	Filter 1	0.11	0.13	0.14
11/18/2018 0:00	11/19/2018 0:00	Perdue	Filter 1	0.08	0.14	0.16
11/19/2018 0:00	11/20/2018 0:00	Perdue	Filter 1	0.08	0.09	0.13
11/20/2018 0:00	11/21/2018 0:00	Perdue	Filter 1	0.09	0.12	0.26
11/21/2018 0:00	11/22/2018 0:00	Perdue	Filter 1	0.10	0.21	0.26
11/22/2018 0:00	11/23/2018 0:00	Perdue	Filter 1	0.10	0.11	0.16
11/23/2018 0:00	11/24/2018 0:00	Perdue	Filter 1	0.11	0.12	0.17
11/24/2018 0:00	11/25/2018 0:00	Perdue	Filter 1	0.11	0.11	0.13
11/25/2018 0:00	11/26/2018 0:00	Perdue	Filter 1	0.13	0.14	0.16
11/26/2018 0:00	11/27/2018 0:00	Perdue	Filter 1	0.15	0.16	0.28
11/27/2018 0:00	11/28/2018 0:00	Perdue	Filter 1	0.18	0.19	0.22
11/28/2018 0:00	11/29/2018 0:00	Perdue	Filter 1	0.08	0.15	0.51
11/29/2018 0:00	11/30/2018 0:00	Perdue	Filter 1	0.08	0.09	0.09
11/30/2018 0:00	12/1/2018 0:00	Perdue	Filter 1	0.09	0.10	0.11
12/1/2018 0:00	12/2/2018 0:00	Perdue	Filter 1	0.10	0.11	0.11
12/2/2018 0:00	12/3/2018 0:00	Perdue	Filter 1	0.11	0.11	0.19
12/3/2018 0:00	12/4/2018 0:00	Perdue	Filter 1	0.13	0.14	0.17
12/4/2018 0:00	12/5/2018 0:00	Perdue	Filter 1	0.09	0.13	0.13
12/5/2018 0:00	12/6/2018 0:00	Perdue	Filter 1	0.09	0.12	0.15
12/6/2018 0:00	12/7/2018 0:00	Perdue	Filter 1	0.15	0.15	0.20
12/7/2018 0:00	12/8/2018 0:00	Perdue	Filter 1	0.15	0.15	0.16
12/8/2018 0:00	12/9/2018 0:00	Perdue	Filter 1	0.09	0.14	0.15
12/9/2018 0:00	12/10/2018 0:00	Perdue	Filter 1	0.09	0.10	0.11
12/10/2018 0:00	12/11/2018 0:00	Perdue	Filter 1	0.11	0.12	1.00
12/11/2018 0:00	12/12/2018 0:00	Perdue	Filter 1	0.11	0.12	0.12
12/12/2018 0:00	12/13/2018 0:00	Perdue	Filter 1	0.12	0.12	0.15
12/13/2018 0:00	12/14/2018 0:00	Perdue	Filter 1	0.11	0.12	0.15
12/14/2018 0:00	12/15/2018 0:00	Perdue	Filter 1	0.10	0.12	0.13
12/15/2018 0:00	12/16/2018 0:00	Perdue	Filter 1	0.12	0.13	0.13
12/16/2018 0:00	12/17/2018 0:00	Perdue	Filter 1	0.10	0.13	0.13
12/17/2018 0:00	12/18/2018 0:00	Perdue	Filter 1	0.10	0.12	0.13
12/18/2018 0:00	12/19/2018 0:00	Perdue	Filter 1	0.11	0.13	0.13
12/19/2018 0:00	12/20/2018 0:00	Perdue	Filter 1	0.11	0.12	0.16
12/20/2018 0:00	12/21/2018 0:00	Perdue	Filter 1	0.12	0.14	0.15
12/21/2018 0:00	12/22/2018 0:00	Perdue	Filter 1	0.09	0.12	0.15
12/22/2018 0:00	12/23/2018 0:00	Perdue	Filter 1	0.09	0.10	0.10
12/23/2018 0:00	12/24/2018 0:00	Perdue	Filter 1	0.09	0.10	0.10
12/24/2018 0:00	12/25/2018 0:00	Perdue	Filter 1	0.09	0.10	0.10
12/25/2018 0:00	12/26/2018 0:00	Perdue	Filter 1	0.09	0.10	0.10
12/26/2018 0:00	12/27/2018 0:00	Perdue	Filter 1	0.10	0.10	0.10
12/27/2018 0:00	12/28/2018 0:00	Perdue	Filter 1	0.10	0.10	0.10
12/28/2018 0:00	12/29/2018 0:00	Perdue	Filter 1	0.10	0.10	0.14
12/29/2018 0:00	12/30/2018 0:00	Perdue	Filter 1	0.10	0.11	0.11
12/30/2018 0:00	12/31/2018 0:00	Perdue	Filter 1	0.11	0.11	0.12

12/31/2018 0:00	1/1/2019 0:00	Perdue	Filter 1	0.11	0.11	0.11
1/1/2019 0:00	1/2/2019 0:00	Perdue	Filter 1	0.11	0.11	0.11
1/2/2019 0:00	1/3/2019 0:00	Perdue	Filter 1	0.11	0.14	0.18
1/3/2019 0:00	1/4/2019 0:00	Perdue	Filter 1	0.16	0.16	0.17
1/4/2019 0:00	1/5/2019 0:00	Perdue	Filter 1	0.16	0.17	0.21
1/5/2019 0:00	1/6/2019 0:00	Perdue	Filter 1	0.19	0.21	0.63
1/6/2019 0:00	1/7/2019 0:00	Perdue	Filter 1	0.06	0.16	0.21
1/7/2019 0:00	1/8/2019 0:00	Perdue	Filter 1	0.06	0.07	0.07
1/8/2019 0:00	1/9/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
1/9/2019 0:00	1/10/2019 0:00	Perdue	Filter 1	0.06	0.06	0.07
1/10/2019 0:00	1/11/2019 0:00	Perdue	Filter 1	0.06	0.06	0.07
1/11/2019 0:00	1/12/2019 0:00	Perdue	Filter 1	0.06	0.07	0.07
1/12/2019 0:00	1/13/2019 0:00	Perdue	Filter 1	0.06	0.06	0.08
1/13/2019 0:00	1/14/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
1/14/2019 0:00	1/15/2019 0:00	Perdue	Filter 1	0.06	0.06	0.07
1/15/2019 0:00	1/16/2019 0:00	Perdue	Filter 1	0.06	0.07	0.09
1/16/2019 0:00	1/17/2019 0:00	Perdue	Filter 1	0.07	0.08	0.11
1/17/2019 0:00	1/18/2019 0:00	Perdue	Filter 1	0.07	0.07	0.08
1/18/2019 0:00	1/19/2019 0:00	Perdue	Filter 1	0.07	0.07	0.08
1/19/2019 0:00	1/20/2019 0:00	Perdue	Filter 1	0.07	0.07	0.07
1/20/2019 0:00	1/21/2019 0:00	Perdue	Filter 1	0.07	0.07	0.10
1/21/2019 0:00	1/22/2019 0:00	Perdue	Filter 1	0.07	0.08	0.08
1/22/2019 0:00	1/23/2019 0:00	Perdue	Filter 1	0.08	0.08	0.13
1/23/2019 0:00	1/24/2019 0:00	Perdue	Filter 1	0.07	0.08	0.09
1/24/2019 0:00	1/25/2019 0:00	Perdue	Filter 1	0.08	0.08	0.14
1/25/2019 0:00	1/26/2019 0:00	Perdue	Filter 1	0.07	0.08	0.08
1/26/2019 0:00	1/27/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
1/27/2019 0:00	1/28/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
1/28/2019 0:00	1/29/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
1/29/2019 0:00	1/30/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
1/30/2019 0:00	1/31/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
1/31/2019 0:00	2/1/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/1/2019 0:00	2/2/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/2/2019 0:00	2/3/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/3/2019 0:00	2/4/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/4/2019 0:00	2/5/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/5/2019 0:00	2/6/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
2/6/2019 0:00	2/7/2019 0:00	Perdue	Filter 1	0.08	0.08	0.98
2/7/2019 0:00	2/8/2019 0:00	Perdue	Filter 1	0.09	0.10	0.18
2/8/2019 0:00	2/9/2019 0:00	Perdue	Filter 1	0.09	0.10	0.36
2/9/2019 0:00	2/10/2019 0:00	Perdue	Filter 1	0.09	0.11	0.11
2/10/2019 0:00	2/11/2019 0:00	Perdue	Filter 1	0.09	0.10	0.11
2/11/2019 0:00	2/12/2019 0:00	Perdue	Filter 1	0.09	0.09	0.09
2/12/2019 0:00	2/13/2019 0:00	Perdue	Filter 1	0.09	0.09	0.09
2/13/2019 0:00	2/14/2019 0:00	Perdue	Filter 1	0.09	0.10	0.17
2/14/2019 0:00	2/15/2019 0:00	Perdue	Filter 1	0.11	0.11	0.11
2/15/2019 0:00	2/16/2019 0:00	Perdue	Filter 1	0.11	0.12	0.15
2/16/2019 0:00	2/17/2019 0:00	Perdue	Filter 1	0.13	0.14	0.15
2/17/2019 0:00	2/18/2019 0:00	Perdue	Filter 1	0.15	0.15	0.15
2/18/2019 0:00	2/19/2019 0:00	Perdue	Filter 1	0.15	0.16	0.21
2/19/2019 0:00	2/20/2019 0:00	Perdue	Filter 1	0.18	0.19	0.21
2/20/2019 0:00	2/21/2019 0:00	Perdue	Filter 1	0.19	0.20	0.25
2/21/2019 0:00	2/22/2019 0:00	Perdue	Filter 1	0.22	0.23	0.25
2/22/2019 0:00	2/23/2019 0:00	Perdue	Filter 1	0.13	0.29	0.85
2/23/2019 0:00	2/24/2019 0:00	Perdue	Filter 1	0.85	0.85	0.85
2/24/2019 0:00	2/25/2019 0:00	Perdue	Filter 1	0.14	0.61	0.85
2/25/2019 0:00	2/26/2019 0:00	Perdue	Filter 1	0.14	0.15	0.22
2/26/2019 0:00	2/27/2019 0:00	Perdue	Filter 1	0.15	0.15	0.17
2/27/2019 0:00	2/28/2019 0:00	Perdue	Filter 1	0.16	0.20	0.57
2/28/2019 0:00	3/1/2019 0:00	Perdue	Filter 1	0.28	0.28	0.28
3/1/2019 0:00	3/2/2019 0:00	Perdue	Filter 1	0.14	0.22	0.33
3/2/2019 0:00	3/3/2019 0:00	Perdue	Filter 1	0.14	0.14	0.23
3/3/2019 0:00	3/4/2019 0:00	Perdue	Filter 1	0.16	0.16	0.24
3/4/2019 0:00	3/5/2019 0:00	Perdue	Filter 1	0.16	0.17	0.26
3/5/2019 0:00	3/6/2019 0:00	Perdue	Filter 1	0.19	0.20	0.52
3/6/2019 0:00	3/7/2019 0:00	Perdue	Filter 1	0.21	0.21	0.33
3/7/2019 0:00	3/8/2019 0:00	Perdue	Filter 1	0.21	0.23	0.31
3/8/2019 0:00	3/9/2019 0:00	Perdue	Filter 1	0.08	0.16	0.25
3/9/2019 0:00	3/10/2019 0:00	Perdue	Filter 1	0.08	0.08	0.19
3/10/2019 0:00	3/11/2019 0:00	Perdue	Filter 1	0.07	0.08	0.18
3/11/2019 0:00	3/12/2019 0:00	Perdue	Filter 1	0.07	0.07	0.12
3/12/2019 0:00	3/13/2019 0:00	Perdue	Filter 1	0.07	0.08	0.10
3/13/2019 0:00	3/14/2019 0:00	Perdue	Filter 1	0.07	0.08	0.10

3/14/2019 0:00	3/15/2019 0:00	Perdue	Filter 1	0.08	0.08	0.11
3/15/2019 0:00	3/16/2019 0:00	Perdue	Filter 1	0.07	0.08	0.29
3/16/2019 0:00	3/17/2019 0:00	Perdue	Filter 1	0.08	0.08	0.17
3/17/2019 0:00	3/18/2019 0:00	Perdue	Filter 1	0.08	0.09	0.37
3/18/2019 0:00	3/19/2019 0:00	Perdue	Filter 1	0.08	0.08	0.08
3/19/2019 0:00	3/20/2019 0:00	Perdue	Filter 1	0.08	0.09	0.15
3/20/2019 0:00	3/21/2019 0:00	Perdue	Filter 1	0.09	0.10	0.76
3/21/2019 0:00	3/22/2019 0:00	Perdue	Filter 1	0.09	0.10	0.18
3/22/2019 0:00	3/23/2019 0:00	Perdue	Filter 1	0.09	0.10	0.13
3/23/2019 0:00	3/24/2019 0:00	Perdue	Filter 1	0.10	0.11	0.38
3/24/2019 0:00	3/25/2019 0:00	Perdue	Filter 1	0.09	0.10	0.24
3/25/2019 0:00	3/26/2019 0:00	Perdue	Filter 1	0.11	0.12	0.30
3/26/2019 0:00	3/27/2019 0:00	Perdue	Filter 1	0.10	0.13	0.33
3/27/2019 0:00	3/28/2019 0:00	Perdue	Filter 1	0.10	0.13	0.43
3/28/2019 0:00	3/29/2019 0:00	Perdue	Filter 1	0.10	0.13	0.47
3/29/2019 0:00	3/30/2019 0:00	Perdue	Filter 1	0.10	0.16	1.00
3/30/2019 0:00	3/31/2019 0:00	Perdue	Filter 1	0.16	0.18	0.29
3/31/2019 0:00	4/1/2019 0:00	Perdue	Filter 1	0.15	0.18	0.19
4/1/2019 0:00	4/2/2019 0:00	Perdue	Filter 1	0.14	0.15	1.00
4/2/2019 0:00	4/3/2019 0:00	Perdue	Filter 1	0.14	0.15	0.96
4/3/2019 0:00	4/4/2019 0:00	Perdue	Filter 1	0.15	0.15	0.16
4/4/2019 0:00	4/5/2019 0:00	Perdue	Filter 1	0.15	0.15	0.16
4/5/2019 0:00	4/6/2019 0:00	Perdue	Filter 1	0.15	0.15	0.18
4/6/2019 0:00	4/7/2019 0:00	Perdue	Filter 1	0.15	0.17	0.21
4/7/2019 0:00	4/8/2019 0:00	Perdue	Filter 1	0.15	0.17	0.18
4/8/2019 0:00	4/9/2019 0:00	Perdue	Filter 1	0.15	0.16	0.82
4/9/2019 0:00	4/10/2019 0:00	Perdue	Filter 1	0.15	0.17	0.22
4/10/2019 0:00	4/11/2019 0:00	Perdue	Filter 1	0.16	0.17	0.18
4/11/2019 0:00	4/12/2019 0:00	Perdue	Filter 1	0.16	0.18	0.68
4/12/2019 0:00	4/13/2019 0:00	Perdue	Filter 1	0.14	0.19	0.82
4/13/2019 0:00	4/14/2019 0:00	Perdue	Filter 1	0.16	0.17	0.19
4/14/2019 0:00	4/15/2019 0:00	Perdue	Filter 1	0.16	0.18	0.23
4/15/2019 0:00	4/16/2019 0:00	Perdue	Filter 1	0.17	0.18	0.23
4/16/2019 0:00	4/17/2019 0:00	Perdue	Filter 1	0.17	0.18	0.18
4/17/2019 0:00	4/18/2019 0:00	Perdue	Filter 1	0.10	0.15	0.22
4/18/2019 0:00	4/19/2019 0:00	Perdue	Filter 1	0.09	0.10	0.11
4/19/2019 0:00	4/20/2019 0:00	Perdue	Filter 1	0.09	0.10	0.10
4/20/2019 0:00	4/21/2019 0:00	Perdue	Filter 1	0.09	0.09	0.10
4/21/2019 0:00	4/22/2019 0:00	Perdue	Filter 1	0.09	0.11	0.14
4/22/2019 0:00	4/23/2019 0:00	Perdue	Filter 1	0.09	0.10	0.11
4/23/2019 0:00	4/24/2019 0:00	Perdue	Filter 1	0.09	0.09	0.10
4/24/2019 0:00	4/25/2019 0:00	Perdue	Filter 1	0.09	0.09	0.13
4/25/2019 0:00	4/26/2019 0:00	Perdue	Filter 1	0.09	0.10	0.14
4/26/2019 0:00	4/27/2019 0:00	Perdue	Filter 1	0.09	0.09	0.10
4/27/2019 0:00	4/28/2019 0:00	Perdue	Filter 1	0.09	0.09	0.14
4/28/2019 0:00	4/29/2019 0:00	Perdue	Filter 1	0.09	0.10	0.20
4/29/2019 0:00	4/30/2019 0:00	Perdue	Filter 1	0.09	0.10	0.14
4/30/2019 0:00	5/1/2019 0:00	Perdue	Filter 1	0.09	0.10	0.11
5/1/2019 0:00	5/2/2019 0:00	Perdue	Filter 1	0.10	0.11	0.13
5/2/2019 0:00	5/3/2019 0:00	Perdue	Filter 1	0.12	0.16	0.27
5/3/2019 0:00	5/4/2019 0:00	Perdue	Filter 1	0.15	0.17	0.19
5/4/2019 0:00	5/5/2019 0:00	Perdue	Filter 1	0.19	0.21	0.23
5/5/2019 0:00	5/6/2019 0:00	Perdue	Filter 1	0.08	0.23	0.33
5/6/2019 0:00	5/7/2019 0:00	Perdue	Filter 1	0.07	0.08	0.18
5/7/2019 0:00	5/8/2019 0:00	Perdue	Filter 1	0.07	0.07	0.12
5/8/2019 0:00	5/9/2019 0:00	Perdue	Filter 1	0.07	0.08	0.10
5/9/2019 0:00	5/10/2019 0:00	Perdue	Filter 1	0.07	0.12	0.15
5/10/2019 0:00	5/11/2019 0:00	Perdue	Filter 1	0.07	0.07	0.10
5/11/2019 0:00	5/12/2019 0:00	Perdue	Filter 1	0.07	0.07	0.08
5/12/2019 0:00	5/13/2019 0:00	Perdue	Filter 1	0.07	0.08	0.11
5/13/2019 0:00	5/14/2019 0:00	Perdue	Filter 1	0.07	0.09	0.14
5/14/2019 0:00	5/15/2019 0:00	Perdue	Filter 1	0.07	0.09	0.14
5/15/2019 0:00	5/16/2019 0:00	Perdue	Filter 1	0.10	0.10	0.10
5/16/2019 0:00	5/17/2019 0:00	Perdue	Filter 1	0.10	0.10	0.10
5/17/2019 0:00	5/18/2019 0:00	Perdue	Filter 1	0.07	0.09	0.24
5/18/2019 0:00	5/19/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
5/19/2019 0:00	5/20/2019 0:00	Perdue	Filter 1	0.07	0.07	0.09
5/20/2019 0:00	5/21/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
5/21/2019 0:00	5/22/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
5/22/2019 0:00	5/23/2019 0:00	Perdue	Filter 1	0.00	0.07	0.58
5/23/2019 0:00	5/24/2019 0:00	Perdue	Filter 1	0.06	0.06	0.16
5/24/2019 0:00	5/25/2019 0:00	Perdue	Filter 1	0.06	0.06	0.07
5/25/2019 0:00	5/26/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08

5/26/2019 0:00	5/27/2019 0:00	Perdue	Filter 1	0.07	0.07	0.08
5/27/2019 0:00	5/28/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
5/28/2019 0:00	5/29/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
5/29/2019 0:00	5/30/2019 0:00	Perdue	Filter 1	0.07	0.08	1.00
5/30/2019 0:00	5/31/2019 0:00	Perdue	Filter 1	0.00	0.11	0.40
5/31/2019 0:00	6/1/2019 0:00	Perdue	Filter 1	0.09	0.11	0.47
6/1/2019 0:00	6/2/2019 0:00	Perdue	Filter 1	0.10	0.11	0.53
6/2/2019 0:00	6/3/2019 0:00	Perdue	Filter 1	0.10	0.11	0.12
6/3/2019 0:00	6/4/2019 0:00	Perdue	Filter 1	0.00	0.12	0.21
6/4/2019 0:00	6/5/2019 0:00	Perdue	Filter 1	0.10	0.11	0.13
6/5/2019 0:00	6/6/2019 0:00	Perdue	Filter 1	0.10	0.11	0.11
6/6/2019 0:00	6/7/2019 0:00	Perdue	Filter 1	0.10	0.10	0.11
6/7/2019 0:00	6/8/2019 0:00	Perdue	Filter 1	0.00	0.12	0.19
6/8/2019 0:00	6/9/2019 0:00	Perdue	Filter 1	0.11	0.11	0.12
6/9/2019 0:00	6/10/2019 0:00	Perdue	Filter 1	0.11	0.11	0.12
6/10/2019 0:00	6/11/2019 0:00	Perdue	Filter 1	0.00	0.11	0.15
6/11/2019 0:00	6/12/2019 0:00	Perdue	Filter 1	0.00	0.12	0.20
6/12/2019 0:00	6/13/2019 0:00	Perdue	Filter 1	0.12	0.14	0.20
6/13/2019 0:00	6/14/2019 0:00	Perdue	Filter 1	0.12	0.13	0.14
6/14/2019 0:00	6/15/2019 0:00	Perdue	Filter 1	0.11	0.12	0.13
6/15/2019 0:00	6/16/2019 0:00	Perdue	Filter 1	0.00	0.13	0.22
6/16/2019 0:00	6/17/2019 0:00	Perdue	Filter 1	0.12	0.13	0.14
6/17/2019 0:00	6/18/2019 0:00	Perdue	Filter 1	0.12	0.13	0.15
6/18/2019 0:00	6/19/2019 0:00	Perdue	Filter 1	0.12	0.13	0.14
6/19/2019 0:00	6/20/2019 0:00	Perdue	Filter 1	0.00	0.16	0.28
6/20/2019 0:00	6/21/2019 0:00	Perdue	Filter 1	0.13	0.14	0.15
6/21/2019 0:00	6/22/2019 0:00	Perdue	Filter 1	0.13	0.13	0.14
6/22/2019 0:00	6/23/2019 0:00	Perdue	Filter 1	0.00	0.15	0.86
6/23/2019 0:00	6/24/2019 0:00	Perdue	Filter 1	0.13	0.15	0.62
6/24/2019 0:00	6/25/2019 0:00	Perdue	Filter 1	0.13	0.14	1.00
6/25/2019 0:00	6/26/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
6/26/2019 0:00	6/27/2019 0:00	Perdue	Filter 1	0.00	0.14	1.00
6/27/2019 0:00	6/28/2019 0:00	Perdue	Filter 1	0.13	0.15	1.00
6/28/2019 0:00	6/29/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
6/29/2019 0:00	6/30/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
6/30/2019 0:00	7/1/2019 0:00	Perdue	Filter 1	0.00	0.14	1.00
7/1/2019 0:00	7/2/2019 0:00	Perdue	Filter 1	0.12	0.13	0.52
7/2/2019 0:00	7/3/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
7/3/2019 0:00	7/4/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
7/4/2019 0:00	7/5/2019 0:00	Perdue	Filter 1	0.00	0.14	1.00
7/5/2019 0:00	7/6/2019 0:00	Perdue	Filter 1	0.13	0.14	1.00
7/6/2019 0:00	7/7/2019 0:00	Perdue	Filter 1	0.12	0.13	0.80
7/7/2019 0:00	7/8/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
7/8/2019 0:00	7/9/2019 0:00	Perdue	Filter 1	0.12	0.13	1.00
7/9/2019 0:00	7/10/2019 0:00	Perdue	Filter 1	0.00	0.15	1.00
7/10/2019 0:00	7/11/2019 0:00	Perdue	Filter 1	0.09	0.12	0.64
7/11/2019 0:00	7/12/2019 0:00	Perdue	Filter 1	0.09	0.10	0.15
7/12/2019 0:00	7/13/2019 0:00	Perdue	Filter 1	0.09	0.10	0.20
7/13/2019 0:00	7/14/2019 0:00	Perdue	Filter 1	0.00	0.12	0.19
7/14/2019 0:00	7/15/2019 0:00	Perdue	Filter 1	0.11	0.11	0.12
7/15/2019 0:00	7/16/2019 0:00	Perdue	Filter 1	0.11	0.11	0.27
7/16/2019 0:00	7/17/2019 0:00	Perdue	Filter 1	0.00	0.13	0.19
7/17/2019 0:00	7/18/2019 0:00	Perdue	Filter 1	0.12	0.13	0.16
7/18/2019 0:00	7/19/2019 0:00	Perdue	Filter 1	0.13	0.13	0.14
7/19/2019 0:00	7/20/2019 0:00	Perdue	Filter 1	0.13	0.14	0.17
7/20/2019 0:00	7/21/2019 0:00	Perdue	Filter 1	0.13	0.14	0.47
7/21/2019 0:00	7/22/2019 0:00	Perdue	Filter 1	0.00	0.15	0.24
7/22/2019 0:00	7/23/2019 0:00	Perdue	Filter 1	0.00	0.14	0.15
7/23/2019 0:00	7/24/2019 0:00	Perdue	Filter 1	0.00	0.15	0.16
7/24/2019 0:00	7/25/2019 0:00	Perdue	Filter 1	0.14	0.14	0.34
7/25/2019 0:00	7/26/2019 0:00	Perdue	Filter 1	0.14	0.15	0.48
7/26/2019 0:00	7/27/2019 0:00	Perdue	Filter 1	0.00	0.16	0.21
7/27/2019 0:00	7/28/2019 0:00	Perdue	Filter 1	0.16	0.16	1.00
7/28/2019 0:00	7/29/2019 0:00	Perdue	Filter 1	0.16	0.17	0.17
7/29/2019 0:00	7/30/2019 0:00	Perdue	Filter 1	0.16	0.17	0.44
7/30/2019 0:00	7/31/2019 0:00	Perdue	Filter 1	0.17	0.18	0.19
7/31/2019 0:00	8/1/2019 0:00	Perdue	Filter 1	0.17	0.18	0.24
8/1/2019 0:00	8/2/2019 0:00	Perdue	Filter 1	0.10	0.15	1.00
8/2/2019 0:00	8/3/2019 0:00	Perdue	Filter 1	0.00	0.13	0.25
8/3/2019 0:00	8/4/2019 0:00	Perdue	Filter 1	0.14	0.14	0.16
8/4/2019 0:00	8/5/2019 0:00	Perdue	Filter 1	0.14	0.15	0.16
8/5/2019 0:00	8/6/2019 0:00	Perdue	Filter 1	0.00	0.16	0.18
8/6/2019 0:00	8/7/2019 0:00	Perdue	Filter 1	0.15	0.16	0.20

8/7/2019 0:00	8/8/2019 0:00	Perdue	Filter 1	0.14	0.15	0.16
8/8/2019 0:00	8/9/2019 0:00	Perdue	Filter 1	0.14	0.15	0.19
8/9/2019 0:00	8/10/2019 0:00	Perdue	Filter 1	0.15	0.16	0.20
8/10/2019 0:00	8/11/2019 0:00	Perdue	Filter 1	0.00	0.16	0.18
8/11/2019 0:00	8/12/2019 0:00	Perdue	Filter 1	0.15	0.16	0.23
8/12/2019 0:00	8/13/2019 0:00	Perdue	Filter 1	0.15	0.16	0.18
8/13/2019 0:00	8/14/2019 0:00	Perdue	Filter 1	0.15	0.16	0.18
8/14/2019 0:00	8/15/2019 0:00	Perdue	Filter 1	0.13	0.16	0.18
8/15/2019 0:00	8/16/2019 0:00	Perdue	Filter 1	0.15	0.17	0.18
8/16/2019 0:00	8/17/2019 0:00	Perdue	Filter 1	0.16	0.18	0.19
8/17/2019 0:00	8/18/2019 0:00	Perdue	Filter 1	0.18	0.19	0.21
8/18/2019 0:00	8/19/2019 0:00	Perdue	Filter 1	0.00	0.19	0.21
8/19/2019 0:00	8/20/2019 0:00	Perdue	Filter 1	0.00	0.18	0.20
8/20/2019 0:00	8/21/2019 0:00	Perdue	Filter 1	0.00	0.17	0.21
8/21/2019 0:00	8/22/2019 0:00	Perdue	Filter 1	0.15	0.17	0.20
8/22/2019 0:00	8/23/2019 0:00	Perdue	Filter 1	0.19	0.20	0.22
8/23/2019 0:00	8/24/2019 0:00	Perdue	Filter 1	0.19	0.20	0.22
8/24/2019 0:00	8/25/2019 0:00	Perdue	Filter 1	0.17	0.20	0.21
8/25/2019 0:00	8/26/2019 0:00	Perdue	Filter 1	0.08	0.15	0.21
8/26/2019 0:00	8/27/2019 0:00	Perdue	Filter 1	0.00	0.16	0.22
8/27/2019 0:00	8/28/2019 0:00	Perdue	Filter 1	0.15	0.18	0.21
8/28/2019 0:00	8/29/2019 0:00	Perdue	Filter 1	0.12	0.16	0.42
8/29/2019 0:00	8/30/2019 0:00	Perdue	Filter 1	0.09	0.12	0.31
8/30/2019 0:00	8/31/2019 0:00	Perdue	Filter 1	0.09	0.12	0.25
8/31/2019 0:00	9/1/2019 0:00	Perdue	Filter 1	0.10	0.13	0.15
9/1/2019 0:00	9/2/2019 0:00	Perdue	Filter 1	0.10	0.13	0.15
9/2/2019 0:00	9/3/2019 0:00	Perdue	Filter 1	0.06	0.10	0.15
9/3/2019 0:00	9/4/2019 0:00	Perdue	Filter 1	0.06	0.09	0.12
9/4/2019 0:00	9/5/2019 0:00	Perdue	Filter 1	0.00	0.09	0.19
9/5/2019 0:00	9/6/2019 0:00	Perdue	Filter 1	0.06	0.09	0.12
9/6/2019 0:00	9/7/2019 0:00	Perdue	Filter 1	0.06	0.09	0.14
9/7/2019 0:00	9/8/2019 0:00	Perdue	Filter 1	0.06	0.09	0.12
9/8/2019 0:00	9/9/2019 0:00	Perdue	Filter 1	0.10	0.12	0.14
9/9/2019 0:00	9/10/2019 0:00	Perdue	Filter 1	0.12	0.14	0.15
9/10/2019 0:00	9/11/2019 0:00	Perdue	Filter 1	0.14	0.15	0.16
9/11/2019 0:00	9/12/2019 0:00	Perdue	Filter 1	0.14	0.15	0.16
9/12/2019 0:00	9/13/2019 0:00	Perdue	Filter 1	0.09	0.13	0.17
9/13/2019 0:00	9/14/2019 0:00	Perdue	Filter 1	0.07	0.10	0.15
9/14/2019 0:00	9/15/2019 0:00	Perdue	Filter 1	0.00	0.08	0.14
9/15/2019 0:00	9/16/2019 0:00	Perdue	Filter 1	0.04	0.11	0.17
9/16/2019 0:00	9/17/2019 0:00	Perdue	Filter 1	0.12	0.15	0.18
9/17/2019 0:00	9/18/2019 0:00	Perdue	Filter 1	0.12	0.17	0.19
9/18/2019 0:00	9/19/2019 0:00	Perdue	Filter 1	0.18	0.20	0.22
9/19/2019 0:00	9/20/2019 0:00	Perdue	Filter 1	0.14	0.20	0.22
9/20/2019 0:00	9/21/2019 0:00	Perdue	Filter 1	0.16	0.20	0.22
9/21/2019 0:00	9/22/2019 0:00	Perdue	Filter 1	0.00	0.16	0.22
9/22/2019 0:00	9/23/2019 0:00	Perdue	Filter 1	0.00	0.13	0.22
9/23/2019 0:00	9/24/2019 0:00	Perdue	Filter 1	0.07	0.14	0.20
9/24/2019 0:00	9/25/2019 0:00	Perdue	Filter 1	0.08	0.15	0.23
9/25/2019 0:00	9/26/2019 0:00	Perdue	Filter 1	0.00	0.13	0.19
9/26/2019 0:00	9/27/2019 0:00	Perdue	Filter 1	0.00	0.19	1.00
9/27/2019 0:00	9/28/2019 0:00	Perdue	Filter 1	0.00	0.18	0.23
9/28/2019 0:00	9/29/2019 0:00	Perdue	Filter 1	0.16	0.18	0.21
9/29/2019 0:00	9/30/2019 0:00	Perdue	Filter 1	0.00	0.18	0.22
9/30/2019 0:00	10/1/2019 0:00	Perdue	Filter 1	0.13	0.16	0.23
10/1/2019 0:00	10/2/2019 0:00	Perdue	Filter 1	0.09	0.16	0.24
10/2/2019 0:00	10/3/2019 0:00	Perdue	Filter 1	0.12	0.16	0.21
10/3/2019 0:00	10/4/2019 0:00	Perdue	Filter 1	0.13	0.17	0.23
10/4/2019 0:00	10/5/2019 0:00	Perdue	Filter 1	0.13	0.16	0.23
10/5/2019 0:00	10/6/2019 0:00	Perdue	Filter 1	0.11	0.15	0.20
10/6/2019 0:00	10/7/2019 0:00	Perdue	Filter 1	0.00	0.15	0.20
10/7/2019 0:00	10/8/2019 0:00	Perdue	Filter 1	0.07	0.14	0.22
10/8/2019 0:00	10/9/2019 0:00	Perdue	Filter 1	0.09	0.15	0.23
10/9/2019 0:00	10/10/2019 0:00	Perdue	Filter 1	0.04	0.16	1.00
10/10/2019 0:00	10/11/2019 0:00	Perdue	Filter 1	0.05	0.07	0.08
10/11/2019 0:00	10/12/2019 0:00	Perdue	Filter 1	0.04	0.07	0.08
10/12/2019 0:00	10/13/2019 0:00	Perdue	Filter 1	0.07	0.07	0.09
10/13/2019 0:00	10/14/2019 0:00	Perdue	Filter 1	0.00	0.09	0.12
10/14/2019 0:00	10/15/2019 0:00	Perdue	Filter 1	0.05	0.06	0.12
10/15/2019 0:00	10/16/2019 0:00	Perdue	Filter 1	0.06	0.07	0.09
10/16/2019 0:00	10/17/2019 0:00	Perdue	Filter 1	0.05	0.06	0.08
10/17/2019 0:00	10/18/2019 0:00	Perdue	Filter 1	0.06	0.07	0.09
10/18/2019 0:00	10/19/2019 0:00	Perdue	Filter 1	0.00	0.07	0.21

10/19/2019 0:00	10/20/2019 0:00	Perdue	Filter 1	0.06	0.07	0.08
10/20/2019 0:00	10/21/2019 0:00	Perdue	Filter 1	0.07	0.07	0.10
10/21/2019 0:00	10/22/2019 0:00	Perdue	Filter 1	0.06	0.07	0.09
10/22/2019 0:00	10/23/2019 0:00	Perdue	Filter 1	0.00	0.09	0.34
10/23/2019 0:00	10/24/2019 0:00	Perdue	Filter 1	0.08	0.08	0.10
10/24/2019 0:00	10/25/2019 0:00	Perdue	Filter 1	0.00	0.10	0.19
10/25/2019 0:00	10/26/2019 0:00	Perdue	Filter 1	0.10	0.11	0.13
10/26/2019 0:00	10/27/2019 0:00	Perdue	Filter 1	0.13	0.16	0.19
10/27/2019 0:00	10/28/2019 0:00	Perdue	Filter 1	0.00	0.17	0.25
10/28/2019 0:00	10/29/2019 0:00	Perdue	Filter 1	0.00	0.00	0.66
10/29/2019 0:00	10/30/2019 0:00	Perdue	Filter 1	0.00	0.10	0.16
10/30/2019 0:00	10/31/2019 0:00	Perdue	Filter 1	0.13	0.15	0.18
10/31/2019 0:00	11/1/2019 0:00	Perdue	Filter 1	0.08	0.13	0.43
11/1/2019 0:00	11/2/2019 0:00	Perdue	Filter 1	0.07	0.12	1.00
11/2/2019 0:00	11/3/2019 0:00	Perdue	Filter 1	0.07	0.13	1.00
11/3/2019 0:00	11/4/2019 0:00	Perdue	Filter 1	0.08	0.12	1.00
11/4/2019 0:00	11/5/2019 0:00	Perdue	Filter 1	0.00	0.17	0.19
11/5/2019 0:00	11/6/2019 0:00	Perdue	Filter 1	0.16	0.18	0.20
11/6/2019 0:00	11/7/2019 0:00	Perdue	Filter 1	0.00	0.21	0.24
11/7/2019 0:00	11/8/2019 0:00	Perdue	Filter 1	0.00	0.19	0.25
11/8/2019 0:00	11/9/2019 0:00	Perdue	Filter 1	0.04	0.10	0.16
11/9/2019 0:00	11/10/2019 0:00	Perdue	Filter 1	0.04	0.07	0.16
11/10/2019 0:00	11/11/2019 0:00	Perdue	Filter 1	0.00	0.08	0.16
11/11/2019 0:00	11/12/2019 0:00	Perdue	Filter 1	0.10	0.11	0.15
11/12/2019 0:00	11/13/2019 0:00	Perdue	Filter 1	0.00	0.12	0.13
11/13/2019 0:00	11/14/2019 0:00	Perdue	Filter 1	0.10	0.15	0.20
11/14/2019 0:00	11/15/2019 0:00	Perdue	Filter 1	0.00	0.20	0.23
11/15/2019 0:00	11/16/2019 0:00	Perdue	Filter 1	0.16	0.19	0.26
11/16/2019 0:00	11/17/2019 0:00	Perdue	Filter 1	0.09	0.14	0.21
11/17/2019 0:00	11/18/2019 0:00	Perdue	Filter 1	0.00	0.10	0.17
11/18/2019 0:00	11/19/2019 0:00	Perdue	Filter 1	0.01	0.07	0.23
11/19/2019 0:00	11/20/2019 0:00	Perdue	Filter 1	0.04	0.08	0.12
11/20/2019 0:00	11/21/2019 0:00	Perdue	Filter 1	0.11	0.12	0.13
11/21/2019 0:00	11/22/2019 0:00	Perdue	Filter 1	0.12	0.16	0.20
11/22/2019 0:00	11/23/2019 0:00	Perdue	Filter 1	0.18	0.22	0.30
11/23/2019 0:00	11/24/2019 0:00	Perdue	Filter 1	0.00	0.15	1.00
11/24/2019 0:00	11/25/2019 0:00	Perdue	Filter 1	0.00	0.14	0.16
11/25/2019 0:00	11/26/2019 0:00	Perdue	Filter 1	0.00	0.15	0.19
11/26/2019 0:00	11/27/2019 0:00	Perdue	Filter 1	0.14	0.15	0.18
11/27/2019 0:00	11/28/2019 0:00	Perdue	Filter 1	0.15	0.15	0.26
11/28/2019 0:00	11/29/2019 0:00	Perdue	Filter 1	0.15	0.15	0.18
11/29/2019 0:00	11/30/2019 0:00	Perdue	Filter 1	0.00	0.18	0.24
11/30/2019 0:00	12/1/2019 0:00	Perdue	Filter 1	0.00	0.19	0.21
12/1/2019 0:00	12/2/2019 0:00	Perdue	Filter 1	0.19	0.20	0.21
12/2/2019 0:00	12/3/2019 0:00	Perdue	Filter 1	0.20	0.20	0.23
12/3/2019 0:00	12/4/2019 0:00	Perdue	Filter 1	0.20	0.21	0.94
12/4/2019 0:00	12/5/2019 0:00	Perdue	Filter 1	0.21	0.21	0.23
12/5/2019 0:00	12/6/2019 0:00	Perdue	Filter 1	0.21	0.22	0.24
12/6/2019 0:00	12/7/2019 0:00	Perdue	Filter 1	0.00	0.18	1.00
12/7/2019 0:00	12/8/2019 0:00	Perdue	Filter 1	0.14	0.15	0.21
12/8/2019 0:00	12/9/2019 0:00	Perdue	Filter 1	0.00	0.12	0.50
12/9/2019 0:00	12/10/2019 0:00	Perdue	Filter 1	0.04	0.07	0.58
12/10/2019 0:00	12/11/2019 0:00	Perdue	Filter 1	0.04	0.05	1.00
12/11/2019 0:00	12/12/2019 0:00	Perdue	Filter 1	0.04	0.05	1.00
12/12/2019 0:00	12/13/2019 0:00	Perdue	Filter 1	0.03	0.05	1.00
12/13/2019 0:00	12/14/2019 0:00	Perdue	Filter 1	0.03	0.07	1.00
12/14/2019 0:00	12/15/2019 0:00	Perdue	Filter 1	0.00	0.08	0.69
12/15/2019 0:00	12/16/2019 0:00	Perdue	Filter 1	0.03	0.05	1.00
12/16/2019 0:00	12/17/2019 0:00	Perdue	Filter 1	0.00	0.05	1.00
12/17/2019 0:00	12/18/2019 0:00	Perdue	Filter 1	0.03	0.04	1.00
12/18/2019 0:00	12/19/2019 0:00	Perdue	Filter 1	0.03	0.04	1.00
12/19/2019 0:00	12/20/2019 0:00	Perdue	Filter 1	0.00	0.04	1.00
12/20/2019 0:00	12/21/2019 0:00	Perdue	Filter 1	0.00	0.05	1.00
12/21/2019 0:00	12/22/2019 0:00	Perdue	Filter 1	0.00	0.09	1.00
12/22/2019 0:00	12/23/2019 0:00	Perdue	Filter 1	0.00	0.17	1.00
12/23/2019 0:00	12/24/2019 0:00	Perdue	Filter 1	0.00	0.11	1.00
12/24/2019 0:00	12/25/2019 0:00	Perdue	Filter 1	0.00	0.09	1.00
12/25/2019 0:00	12/26/2019 0:00	Perdue	Filter 1	0.07	0.09	1.00
12/26/2019 0:00	12/27/2019 0:00	Perdue	Filter 1	0.00	0.08	1.00
12/27/2019 0:00	12/28/2019 0:00	Perdue	Filter 1	0.00	0.10	1.00
12/28/2019 0:00	12/29/2019 0:00	Perdue	Filter 1	0.00	0.09	1.00
12/29/2019 0:00	12/30/2019 0:00	Perdue	Filter 1	0.00	0.10	1.00
12/30/2019 0:00	12/31/2019 0:00	Perdue	Filter 1	0.08	0.09	1.00

12/31/2019 0:00	1/1/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/1/2020 0:00	1/2/2020 0:00	Perdue	Filter 1	0.07	0.09	1.00
1/2/2020 0:00	1/3/2020 0:00	Perdue	Filter 1	0.00	0.10	0.99
1/3/2020 0:00	1/4/2020 0:00	Perdue	Filter 1	0.08	0.10	0.96
1/4/2020 0:00	1/5/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/5/2020 0:00	1/6/2020 0:00	Perdue	Filter 1	0.08	0.09	1.00
1/6/2020 0:00	1/7/2020 0:00	Perdue	Filter 1	0.08	0.10	1.00
1/7/2020 0:00	1/8/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/8/2020 0:00	1/9/2020 0:00	Perdue	Filter 1	0.09	0.10	0.84
1/9/2020 0:00	1/10/2020 0:00	Perdue	Filter 1	0.08	0.10	1.00
1/10/2020 0:00	1/11/2020 0:00	Perdue	Filter 1	0.08	0.09	1.00
1/11/2020 0:00	1/12/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/12/2020 0:00	1/13/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/13/2020 0:00	1/14/2020 0:00	Perdue	Filter 1	0.08	0.10	1.00
1/14/2020 0:00	1/15/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/15/2020 0:00	1/16/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/16/2020 0:00	1/17/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/17/2020 0:00	1/18/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/18/2020 0:00	1/19/2020 0:00	Perdue	Filter 1	0.00	0.10	0.60
1/19/2020 0:00	1/20/2020 0:00	Perdue	Filter 1	0.09	0.10	1.00
1/20/2020 0:00	1/21/2020 0:00	Perdue	Filter 1	0.08	0.10	1.00
1/21/2020 0:00	1/22/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/22/2020 0:00	1/23/2020 0:00	Perdue	Filter 1	0.08	0.09	1.00
1/23/2020 0:00	1/24/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/24/2020 0:00	1/25/2020 0:00	Perdue	Filter 1	0.09	0.12	1.00
1/25/2020 0:00	1/26/2020 0:00	Perdue	Filter 1	0.09	0.10	1.00
1/26/2020 0:00	1/27/2020 0:00	Perdue	Filter 1	0.09	0.10	1.00
1/27/2020 0:00	1/28/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
1/28/2020 0:00	1/29/2020 0:00	Perdue	Filter 1	0.08	0.10	1.00
1/29/2020 0:00	1/30/2020 0:00	Perdue	Filter 1	0.08	0.09	1.00
1/30/2020 0:00	1/31/2020 0:00	Perdue	Filter 1	0.00	0.11	1.00
1/31/2020 0:00	2/1/2020 0:00	Perdue	Filter 1	0.09	0.11	1.00
2/1/2020 0:00	2/2/2020 0:00	Perdue	Filter 1	0.00	0.12	1.00
2/2/2020 0:00	2/3/2020 0:00	Perdue	Filter 1	0.53		0.53
2/3/2020 0:00	2/4/2020 0:00	Perdue	Filter 1	0.00	0.07	1.00
2/4/2020 0:00	2/5/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
2/5/2020 0:00	2/6/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
2/6/2020 0:00	2/7/2020 0:00	Perdue	Filter 1	0.09	0.10	1.00
2/7/2020 0:00	2/8/2020 0:00	Perdue	Filter 1	0.00	0.12	1.00
2/8/2020 0:00	2/9/2020 0:00	Perdue	Filter 1	0.13	0.13	1.00
2/9/2020 0:00	2/10/2020 0:00	Perdue	Filter 1	0.00	0.06	1.00
2/10/2020 0:00	2/11/2020 0:00	Perdue	Filter 1	0.00	0.04	1.00
2/11/2020 0:00	2/12/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
2/12/2020 0:00	2/13/2020 0:00	Perdue	Filter 1	0.06	0.11	1.00
2/13/2020 0:00	2/14/2020 0:00	Perdue	Filter 1	0.00	0.14	0.74
2/14/2020 0:00	2/15/2020 0:00	Perdue	Filter 1	0.10	0.15	0.79
2/15/2020 0:00	2/16/2020 0:00	Perdue	Filter 1	0.00	0.12	1.00
2/16/2020 0:00	2/17/2020 0:00	Perdue	Filter 1	0.00	0.12	0.14
2/17/2020 0:00	2/18/2020 0:00	Perdue	Filter 1	0.11	0.12	0.15
2/18/2020 0:00	2/19/2020 0:00	Perdue	Filter 1	0.12	0.13	0.16
2/19/2020 0:00	2/20/2020 0:00	Perdue	Filter 1	0.00	0.14	0.20
2/20/2020 0:00	2/21/2020 0:00	Perdue	Filter 1	0.12	0.12	0.22
2/21/2020 0:00	2/22/2020 0:00	Perdue	Filter 1	0.00	0.14	0.76
2/22/2020 0:00	2/23/2020 0:00	Perdue	Filter 1	0.00	0.14	0.87
2/23/2020 0:00	2/24/2020 0:00	Perdue	Filter 1	0.12	0.15	0.58
2/24/2020 0:00	2/25/2020 0:00	Perdue	Filter 1	0.00	0.15	0.73
2/25/2020 0:00	2/26/2020 0:00	Perdue	Filter 1	0.00	0.13	1.00
2/26/2020 0:00	2/27/2020 0:00	Perdue	Filter 1	0.00	0.07	1.00
2/27/2020 0:00	2/28/2020 0:00	Perdue	Filter 1	0.08	0.11	0.61
2/28/2020 0:00	2/29/2020 0:00	Perdue	Filter 1	0.00	0.13	0.82
2/29/2020 0:00	3/1/2020 0:00	Perdue	Filter 1	0.06	0.17	0.90
3/1/2020 0:00	3/2/2020 0:00	Perdue	Filter 1	0.00	0.10	0.40
3/2/2020 0:00	3/3/2020 0:00	Perdue	Filter 1	0.08	0.09	0.26
3/3/2020 0:00	3/4/2020 0:00	Perdue	Filter 1	0.00	0.06	0.14
3/4/2020 0:00	3/5/2020 0:00	Perdue	Filter 1	0.07	0.09	0.95
3/5/2020 0:00	3/6/2020 0:00	Perdue	Filter 1	0.00	0.13	0.60
3/6/2020 0:00	3/7/2020 0:00	Perdue	Filter 1	0.12	0.21	0.79
3/7/2020 0:00	3/8/2020 0:00	Perdue	Filter 1	0.00	0.19	0.67
3/8/2020 0:00	3/9/2020 0:00	Perdue	Filter 1	0.00	0.18	0.84
3/9/2020 0:00	3/10/2020 0:00	Perdue	Filter 1	0.09	0.15	0.66
3/10/2020 0:00	3/11/2020 0:00	Perdue	Filter 1	0.09	0.10	0.51
3/11/2020 0:00	3/12/2020 0:00	Perdue	Filter 1	0.00	0.09	0.13
3/12/2020 0:00	3/13/2020 0:00	Perdue	Filter 1	0.00	0.09	0.24

3/13/2020 0:00	3/14/2020 0:00	Perdue	Filter 1	0.00	0.11	0.13
3/14/2020 0:00	3/15/2020 0:00	Perdue	Filter 1	0.10	0.11	0.14
3/15/2020 0:00	3/16/2020 0:00	Perdue	Filter 1	0.00	0.10	0.12
3/16/2020 0:00	3/17/2020 0:00	Perdue	Filter 1	0.09	0.09	0.10
3/17/2020 0:00	3/18/2020 0:00	Perdue	Filter 1	0.00	0.09	0.10
3/18/2020 0:00	3/19/2020 0:00	Perdue	Filter 1	0.09	0.10	0.11
3/19/2020 0:00	3/20/2020 0:00	Perdue	Filter 1	0.09	0.09	0.12
3/20/2020 0:00	3/21/2020 0:00	Perdue	Filter 1	0.00	0.11	0.18
3/21/2020 0:00	3/22/2020 0:00	Perdue	Filter 1	0.05	0.10	0.44
3/22/2020 0:00	3/23/2020 0:00	Perdue	Filter 1	0.10	0.19	0.96
3/23/2020 0:00	3/24/2020 0:00	Perdue	Filter 1	0.04	0.16	0.75
3/24/2020 0:00	3/25/2020 0:00	Perdue	Filter 1	0.00	0.12	1.00
3/25/2020 0:00	3/26/2020 0:00	Perdue	Filter 1	0.04	0.05	0.06
3/26/2020 0:00	3/27/2020 0:00	Perdue	Filter 1	0.04	0.04	0.05
3/27/2020 0:00	3/28/2020 0:00	Perdue	Filter 1	0.00	0.07	0.10
3/28/2020 0:00	3/29/2020 0:00	Perdue	Filter 1	0.09	0.09	0.10
3/29/2020 0:00	3/30/2020 0:00	Perdue	Filter 1	0.08	0.09	0.09
3/30/2020 0:00	3/31/2020 0:00	Perdue	Filter 1	0.00	0.06	0.09
3/31/2020 0:00	4/1/2020 0:00	Perdue	Filter 1	0.00	0.13	0.17
4/1/2020 0:00	4/2/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
4/2/2020 0:00	4/3/2020 0:00	Perdue	Filter 1	0.10	0.11	0.12
4/3/2020 0:00	4/4/2020 0:00	Perdue	Filter 1	0.10	0.11	0.11
4/4/2020 0:00	4/5/2020 0:00	Perdue	Filter 1	0.09	0.10	0.11
4/5/2020 0:00	4/6/2020 0:00	Perdue	Filter 1	0.00	0.12	0.20
4/6/2020 0:00	4/7/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
4/7/2020 0:00	4/8/2020 0:00	Perdue	Filter 1	0.10	0.11	0.12
4/8/2020 0:00	4/9/2020 0:00	Perdue	Filter 1	0.00	0.11	0.12
4/9/2020 0:00	4/10/2020 0:00	Perdue	Filter 1	0.00	0.10	0.12
4/10/2020 0:00	4/11/2020 0:00	Perdue	Filter 1	0.00	0.10	0.10
4/11/2020 0:00	4/12/2020 0:00	Perdue	Filter 1	0.00	0.11	0.14
4/12/2020 0:00	4/13/2020 0:00	Perdue	Filter 1	0.00	0.10	0.13
4/13/2020 0:00	4/14/2020 0:00	Perdue	Filter 1	0.00	0.09	0.10
4/14/2020 0:00	4/15/2020 0:00	Perdue	Filter 1	0.00	0.10	0.19
4/15/2020 0:00	4/16/2020 0:00	Perdue	Filter 1	0.03	0.07	0.11
4/16/2020 0:00	4/17/2020 0:00	Perdue	Filter 1	0.00	0.13	0.16
4/17/2020 0:00	4/18/2020 0:00	Perdue	Filter 1	0.13		0.13
4/18/2020 0:00	4/19/2020 0:00	Perdue	Filter 1	0.11	0.12	0.13
4/19/2020 0:00	4/20/2020 0:00	Perdue	Filter 1	0.00	0.10	0.11
4/20/2020 0:00	4/21/2020 0:00	Perdue	Filter 1	0.10		0.10
4/21/2020 0:00	4/22/2020 0:00	Perdue	Filter 1	0.00	0.09	0.10
4/22/2020 0:00	4/23/2020 0:00	Perdue	Filter 1	0.06	0.10	0.18
4/23/2020 0:00	4/24/2020 0:00	Perdue	Filter 1	0.00	0.10	0.14
4/24/2020 0:00	4/25/2020 0:00	Perdue	Filter 1	0.00	0.09	0.19
4/25/2020 0:00	4/26/2020 0:00	Perdue	Filter 1	0.00	0.07	0.21
4/26/2020 0:00	4/27/2020 0:00	Perdue	Filter 1	0.04	0.07	0.10
4/27/2020 0:00	4/28/2020 0:00	Perdue	Filter 1	0.00	0.12	0.20
4/28/2020 0:00	4/29/2020 0:00	Perdue	Filter 1	0.00	0.13	0.24
4/29/2020 0:00	4/30/2020 0:00	Perdue	Filter 1	0.00	0.13	0.22
4/30/2020 0:00	5/1/2020 0:00	Perdue	Filter 1	0.00	0.13	0.43
5/1/2020 0:00	5/2/2020 0:00	Perdue	Filter 1	0.00	0.13	0.21
5/2/2020 0:00	5/3/2020 0:00	Perdue	Filter 1	0.12	0.14	0.26
5/3/2020 0:00	5/4/2020 0:00	Perdue	Filter 1	0.00	0.13	0.17
5/4/2020 0:00	5/5/2020 0:00	Perdue	Filter 1	0.10	0.13	0.18
5/5/2020 0:00	5/6/2020 0:00	Perdue	Filter 1	0.00	0.09	0.13
5/6/2020 0:00	5/7/2020 0:00	Perdue	Filter 1	0.00	0.10	0.28
5/7/2020 0:00	5/8/2020 0:00	Perdue	Filter 1	0.00	0.09	0.28
5/8/2020 0:00	5/9/2020 0:00	Perdue	Filter 1	0.08	0.09	0.11
5/9/2020 0:00	5/10/2020 0:00	Perdue	Filter 1	0.00	0.10	0.11
5/10/2020 0:00	5/11/2020 0:00	Perdue	Filter 1	0.11	0.17	0.25
5/11/2020 0:00	5/12/2020 0:00	Perdue	Filter 1	0.10	0.11	0.14
5/12/2020 0:00	5/13/2020 0:00	Perdue	Filter 1	0.00	0.11	0.20
5/13/2020 0:00	5/14/2020 0:00	Perdue	Filter 1	0.00	0.09	0.18
5/14/2020 0:00	5/15/2020 0:00	Perdue	Filter 1	0.00	0.08	0.10
5/15/2020 0:00	5/16/2020 0:00	Perdue	Filter 1	0.00	0.08	0.09
5/16/2020 0:00	5/17/2020 0:00	Perdue	Filter 1	0.08	0.12	0.27
5/17/2020 0:00	5/18/2020 0:00	Perdue	Filter 1	0.00	0.11	0.12
5/18/2020 0:00	5/19/2020 0:00	Perdue	Filter 1	0.09	0.10	0.15
5/19/2020 0:00	5/20/2020 0:00	Perdue	Filter 1	0.00	0.10	0.12
5/20/2020 0:00	5/21/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
5/21/2020 0:00	5/22/2020 0:00	Perdue	Filter 1	0.00	0.14	0.16
5/22/2020 0:00	5/23/2020 0:00	Perdue	Filter 1	0.15	0.17	0.21
5/23/2020 0:00	5/24/2020 0:00	Perdue	Filter 1	0.20	0.22	0.26
5/24/2020 0:00	5/25/2020 0:00	Perdue	Filter 1	0.07	0.14	0.71

5/25/2020 0:00	5/26/2020 0:00	Perdue	Filter 1	0.00	0.09	1.00
5/26/2020 0:00	5/27/2020 0:00	Perdue	Filter 1	0.00	0.12	1.00
5/27/2020 0:00	5/28/2020 0:00	Perdue	Filter 1	0.00	0.11	0.13
5/28/2020 0:00	5/29/2020 0:00	Perdue	Filter 1	0.00	0.11	0.54
5/29/2020 0:00	5/30/2020 0:00	Perdue	Filter 1	0.00	0.13	0.47
5/30/2020 0:00	5/31/2020 0:00	Perdue	Filter 1	0.12		0.12
5/31/2020 0:00	6/1/2020 0:00	Perdue	Filter 1	0.12		0.12
6/1/2020 0:00	6/2/2020 0:00	Perdue	Filter 1	0.09	0.10	0.12
6/2/2020 0:00	6/3/2020 0:00	Perdue	Filter 1	0.10	0.13	0.16
6/3/2020 0:00	6/4/2020 0:00	Perdue	Filter 1	0.14	0.16	0.19
6/4/2020 0:00	6/5/2020 0:00	Perdue	Filter 1	0.09	0.14	0.19
6/5/2020 0:00	6/6/2020 0:00	Perdue	Filter 1	0.00	0.11	0.19
6/6/2020 0:00	6/7/2020 0:00	Perdue	Filter 1	0.09	0.12	0.19
6/7/2020 0:00	6/8/2020 0:00	Perdue	Filter 1	0.10	0.11	0.13
6/8/2020 0:00	6/9/2020 0:00	Perdue	Filter 1	0.10	0.11	0.13
6/9/2020 0:00	6/10/2020 0:00	Perdue	Filter 1	0.10	0.11	0.16
6/10/2020 0:00	6/11/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
6/11/2020 0:00	6/12/2020 0:00	Perdue	Filter 1	0.13	0.14	0.15
6/12/2020 0:00	6/13/2020 0:00	Perdue	Filter 1	0.00	0.15	0.21
6/13/2020 0:00	6/14/2020 0:00	Perdue	Filter 1	0.14	0.15	0.17
6/14/2020 0:00	6/15/2020 0:00	Perdue	Filter 1	0.15	0.18	0.20
6/15/2020 0:00	6/16/2020 0:00	Perdue	Filter 1	0.18	0.19	0.20
6/16/2020 0:00	6/17/2020 0:00	Perdue	Filter 1	0.00	0.20	0.22
6/17/2020 0:00	6/18/2020 0:00	Perdue	Filter 1	0.00	0.22	0.24
6/18/2020 0:00	6/19/2020 0:00	Perdue	Filter 1	0.00	0.17	0.27
6/19/2020 0:00	6/20/2020 0:00	Perdue	Filter 1	0.09	0.12	0.14
6/20/2020 0:00	6/21/2020 0:00	Perdue	Filter 1	0.10	0.12	0.14
6/21/2020 0:00	6/22/2020 0:00	Perdue	Filter 1	0.00	0.15	0.20
6/22/2020 0:00	6/23/2020 0:00	Perdue	Filter 1	0.13	0.16	0.20
6/23/2020 0:00	6/24/2020 0:00	Perdue	Filter 1	0.00	0.15	0.18
6/24/2020 0:00	6/25/2020 0:00	Perdue	Filter 1	0.13	0.15	0.17
6/25/2020 0:00	6/26/2020 0:00	Perdue	Filter 1	0.00	0.13	0.16
6/26/2020 0:00	6/27/2020 0:00	Perdue	Filter 1	0.00	0.15	0.22
6/27/2020 0:00	6/28/2020 0:00	Perdue	Filter 1	0.13	0.16	0.18
6/28/2020 0:00	6/29/2020 0:00	Perdue	Filter 1	0.13	0.13	0.15
6/29/2020 0:00	6/30/2020 0:00	Perdue	Filter 1	0.00	0.15	0.18
6/30/2020 0:00	7/1/2020 0:00	Perdue	Filter 1	0.15	0.16	0.17
7/1/2020 0:00	7/2/2020 0:00	Perdue	Filter 1	0.00	0.17	0.22
7/2/2020 0:00	7/3/2020 0:00	Perdue	Filter 1	0.17	0.18	0.24
7/3/2020 0:00	7/4/2020 0:00	Perdue	Filter 1	0.16	0.17	0.19
7/4/2020 0:00	7/5/2020 0:00	Perdue	Filter 1	0.16	0.18	0.21
7/5/2020 0:00	7/6/2020 0:00	Perdue	Filter 1	0.00	0.21	0.27
7/6/2020 0:00	7/7/2020 0:00	Perdue	Filter 1	0.21	0.23	0.26
7/7/2020 0:00	7/8/2020 0:00	Perdue	Filter 1	0.18	0.20	0.25
7/8/2020 0:00	7/9/2020 0:00	Perdue	Filter 1	0.18	0.19	0.20
7/9/2020 0:00	7/10/2020 0:00	Perdue	Filter 1	0.00	0.11	0.30
7/10/2020 0:00	7/11/2020 0:00	Perdue	Filter 1	0.06	0.07	0.09
7/11/2020 0:00	7/12/2020 0:00	Perdue	Filter 1	0.06	0.07	0.09
7/12/2020 0:00	7/13/2020 0:00	Perdue	Filter 1	0.00	0.09	0.21
7/13/2020 0:00	7/14/2020 0:00	Perdue	Filter 1	0.10	0.12	0.16
7/14/2020 0:00	7/15/2020 0:00	Perdue	Filter 1	0.09	0.10	0.12
7/15/2020 0:00	7/16/2020 0:00	Perdue	Filter 1	0.00	0.12	0.21
7/16/2020 0:00	7/17/2020 0:00	Perdue	Filter 1	0.13	0.14	0.17
7/17/2020 0:00	7/18/2020 0:00	Perdue	Filter 1	0.08	0.10	0.13
7/18/2020 0:00	7/19/2020 0:00	Perdue	Filter 1	0.08	0.09	0.11
7/19/2020 0:00	7/20/2020 0:00	Perdue	Filter 1	0.00	0.13	0.20
7/20/2020 0:00	7/21/2020 0:00	Perdue	Filter 1	0.14	0.17	0.20
7/21/2020 0:00	7/22/2020 0:00	Perdue	Filter 1	0.11	0.13	0.15
7/22/2020 0:00	7/23/2020 0:00	Perdue	Filter 1	0.00	0.11	0.14
7/23/2020 0:00	7/24/2020 0:00	Perdue	Filter 1	0.00	0.14	0.15
7/24/2020 0:00	7/25/2020 0:00	Perdue	Filter 1	0.00	0.15	0.26
7/25/2020 0:00	7/26/2020 0:00	Perdue	Filter 1	0.00	0.18	0.24
7/26/2020 0:00	7/27/2020 0:00	Perdue	Filter 1	0.17	0.22	0.38
7/27/2020 0:00	7/28/2020 0:00	Perdue	Filter 1	0.00	0.17	0.23
7/28/2020 0:00	7/29/2020 0:00	Perdue	Filter 1	0.00	0.19	0.39
7/29/2020 0:00	7/30/2020 0:00	Perdue	Filter 1	0.00	0.13	0.31
7/30/2020 0:00	7/31/2020 0:00	Perdue	Filter 1	0.00	0.10	0.13
7/31/2020 0:00	8/1/2020 0:00	Perdue	Filter 1	0.11	0.13	0.24
8/1/2020 0:00	8/2/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
8/2/2020 0:00	8/3/2020 0:00	Perdue	Filter 1	0.00	0.08	0.55
8/3/2020 0:00	8/4/2020 0:00	Perdue	Filter 1	0.00	0.08	1.00
8/4/2020 0:00	8/5/2020 0:00	Perdue	Filter 1	0.00	0.12	0.75
8/5/2020 0:00	8/6/2020 0:00	Perdue	Filter 1	0.10	0.11	0.14

8/6/2020 0:00	8/7/2020 0:00	Perdue	Filter 1	0.10	0.11	0.13
8/7/2020 0:00	8/8/2020 0:00	Perdue	Filter 1	0.12	0.14	0.17
8/8/2020 0:00	8/9/2020 0:00	Perdue	Filter 1	0.14	0.15	0.16
8/9/2020 0:00	8/10/2020 0:00	Perdue	Filter 1	0.15	0.16	0.18
8/10/2020 0:00	8/11/2020 0:00	Perdue	Filter 1	0.00	0.20	0.24
8/11/2020 0:00	8/12/2020 0:00	Perdue	Filter 1	0.00	0.16	0.26
8/12/2020 0:00	8/13/2020 0:00	Perdue	Filter 1	0.00	0.10	0.11
8/13/2020 0:00	8/14/2020 0:00	Perdue	Filter 1	0.07	0.08	0.11
8/14/2020 0:00	8/15/2020 0:00	Perdue	Filter 1	0.07	0.08	0.11
8/15/2020 0:00	8/16/2020 0:00	Perdue	Filter 1	0.08	0.08	0.09
8/16/2020 0:00	8/17/2020 0:00	Perdue	Filter 1	0.00	0.09	0.09
8/17/2020 0:00	8/18/2020 0:00	Perdue	Filter 1	0.00	0.10	0.16
8/18/2020 0:00	8/19/2020 0:00	Perdue	Filter 1	0.00	0.08	0.12
8/19/2020 0:00	8/20/2020 0:00	Perdue	Filter 1	0.07	0.08	0.14
8/20/2020 0:00	8/21/2020 0:00	Perdue	Filter 1	0.00	0.08	0.09
8/21/2020 0:00	8/22/2020 0:00	Perdue	Filter 1	0.07	0.08	0.11
8/22/2020 0:00	8/23/2020 0:00	Perdue	Filter 1	0.00	0.08	0.09
8/23/2020 0:00	8/24/2020 0:00	Perdue	Filter 1	0.08	0.09	0.14
8/24/2020 0:00	8/25/2020 0:00	Perdue	Filter 1	0.00	0.08	0.11
8/25/2020 0:00	8/26/2020 0:00	Perdue	Filter 1	0.00	0.07	0.09
8/26/2020 0:00	8/27/2020 0:00	Perdue	Filter 1	0.00	0.08	0.33
8/27/2020 0:00	8/28/2020 0:00	Perdue	Filter 1	0.07	0.07	0.08
8/28/2020 0:00	8/29/2020 0:00	Perdue	Filter 1	0.00	0.08	0.11
8/29/2020 0:00	8/30/2020 0:00	Perdue	Filter 1	0.00	0.09	0.10
8/30/2020 0:00	8/31/2020 0:00	Perdue	Filter 1	0.08	0.09	0.14
8/31/2020 0:00	9/1/2020 0:00	Perdue	Filter 1	0.00	0.09	0.12
9/1/2020 0:00	9/2/2020 0:00	Perdue	Filter 1	0.00	0.09	0.13
9/2/2020 0:00	9/3/2020 0:00	Perdue	Filter 1	0.00	0.10	0.17
9/3/2020 0:00	9/4/2020 0:00	Perdue	Filter 1	0.08	0.09	0.10
9/4/2020 0:00	9/5/2020 0:00	Perdue	Filter 1	0.09	0.10	0.12
9/5/2020 0:00	9/6/2020 0:00	Perdue	Filter 1	0.09	0.10	0.11
9/6/2020 0:00	9/7/2020 0:00	Perdue	Filter 1	0.10	0.11	0.12
9/7/2020 0:00	9/8/2020 0:00	Perdue	Filter 1	0.00	0.11	0.21
9/8/2020 0:00	9/9/2020 0:00	Perdue	Filter 1	0.00	0.11	0.12
9/9/2020 0:00	9/10/2020 0:00	Perdue	Filter 1	0.11	0.12	0.16
9/10/2020 0:00	9/11/2020 0:00	Perdue	Filter 1	0.00	0.13	0.14
9/11/2020 0:00	9/12/2020 0:00	Perdue	Filter 1	0.14	0.20	0.25
9/12/2020 0:00	9/13/2020 0:00	Perdue	Filter 1	0.00	0.19	0.23
9/13/2020 0:00	9/14/2020 0:00	Perdue	Filter 1	0.18	0.19	0.23
9/14/2020 0:00	9/15/2020 0:00	Perdue	Filter 1	0.00	0.18	0.70
9/15/2020 0:00	9/16/2020 0:00	Perdue	Filter 1	0.08	0.09	0.20
9/16/2020 0:00	9/17/2020 0:00	Perdue	Filter 1	0.00	0.11	1.00
9/17/2020 0:00	9/18/2020 0:00	Perdue	Filter 1	0.00	0.16	1.00
9/18/2020 0:00	9/19/2020 0:00	Perdue	Filter 1	0.10	0.17	0.66
9/19/2020 0:00	9/20/2020 0:00	Perdue	Filter 1	0.00	0.12	0.21
9/20/2020 0:00	9/21/2020 0:00	Perdue	Filter 1	0.11	0.13	0.19
9/21/2020 0:00	9/22/2020 0:00	Perdue	Filter 1	0.09	0.11	0.15
9/22/2020 0:00	9/23/2020 0:00	Perdue	Filter 1	0.00	0.13	0.20
9/23/2020 0:00	9/24/2020 0:00	Perdue	Filter 1	0.00	0.15	0.20
9/24/2020 0:00	9/25/2020 0:00	Perdue	Filter 1	0.00	0.11	0.13
9/25/2020 0:00	9/26/2020 0:00	Perdue	Filter 1	0.00	0.11	0.33
9/26/2020 0:00	9/27/2020 0:00	Perdue	Filter 1	0.00	0.14	0.32
9/27/2020 0:00	9/28/2020 0:00	Perdue	Filter 1	0.00	0.12	0.24
9/28/2020 0:00	9/29/2020 0:00	Perdue	Filter 1	0.00	0.12	0.14
9/29/2020 0:00	9/30/2020 0:00	Perdue	Filter 1	0.00	0.15	0.32
9/30/2020 0:00	10/1/2020 0:00	Perdue	Filter 1	0.03	0.09	1.00
10/1/2020 0:00	10/2/2020 0:00	Perdue	Filter 1	0.00	0.12	0.32
10/2/2020 0:00	10/3/2020 0:00	Perdue	Filter 1	0.00	0.16	0.52
10/3/2020 0:00	10/4/2020 0:00	Perdue	Filter 1	0.13	0.20	0.65
10/4/2020 0:00	10/5/2020 0:00	Perdue	Filter 1	0.00	0.16	0.72
10/5/2020 0:00	10/6/2020 0:00	Perdue	Filter 1	0.00	0.13	0.24
10/6/2020 0:00	10/7/2020 0:00	Perdue	Filter 1	0.11	0.13	0.20
10/7/2020 0:00	10/8/2020 0:00	Perdue	Filter 1	0.00	0.14	0.22
10/8/2020 0:00	10/9/2020 0:00	Perdue	Filter 1	0.09	0.09	0.46
10/9/2020 0:00	10/10/2020 0:00	Perdue	Filter 1	0.09	0.09	0.23
10/10/2020 0:00	10/11/2020 0:00	Perdue	Filter 1	0.00	0.10	0.18
10/11/2020 0:00	10/12/2020 0:00	Perdue	Filter 1	0.09	0.10	0.69
10/12/2020 0:00	10/13/2020 0:00	Perdue	Filter 1	0.10	0.11	0.98
10/13/2020 0:00	10/14/2020 0:00	Perdue	Filter 1	0.00	0.10	0.34
10/14/2020 0:00	10/15/2020 0:00	Perdue	Filter 1	0.09	0.11	0.45
10/15/2020 0:00	10/16/2020 0:00	Perdue	Filter 1	0.10	0.10	0.92
10/16/2020 0:00	10/17/2020 0:00	Perdue	Filter 1	0.10	0.10	0.24
10/17/2020 0:00	10/18/2020 0:00	Perdue	Filter 1	0.10	0.10	0.11

10/18/2020 0:00	10/19/2020 0:00	Perdue	Filter 1	0.00	0.11	0.15
10/19/2020 0:00	10/20/2020 0:00	Perdue	Filter 1	0.10	0.11	0.13
10/20/2020 0:00	10/21/2020 0:00	Perdue	Filter 1	0.10	0.11	0.17
10/21/2020 0:00	10/22/2020 0:00	Perdue	Filter 1	0.00	0.11	0.13
10/22/2020 0:00	10/23/2020 0:00	Perdue	Filter 1	0.11	0.13	0.20
10/23/2020 0:00	10/24/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
10/24/2020 0:00	10/25/2020 0:00	Perdue	Filter 1	0.00	0.13	0.22
10/25/2020 0:00	10/26/2020 0:00	Perdue	Filter 1	0.00	0.12	0.13
10/26/2020 0:00	10/27/2020 0:00	Perdue	Filter 1	0.11	0.12	0.12
10/27/2020 0:00	10/28/2020 0:00	Perdue	Filter 1	0.11	0.12	0.14
10/28/2020 0:00	10/29/2020 0:00	Perdue	Filter 1	0.12	0.13	0.18
10/29/2020 0:00	10/30/2020 0:00	Perdue	Filter 1	0.13	0.13	1.00
10/30/2020 0:00	10/31/2020 0:00	Perdue	Filter 1	0.13	0.14	1.00
10/31/2020 0:00	11/1/2020 0:00	Perdue	Filter 1	0.00	0.14	0.57
11/1/2020 0:00	11/2/2020 0:00	Perdue	Filter 1	0.00	0.15	0.43
11/2/2020 0:00	11/3/2020 0:00	Perdue	Filter 1	0.13	0.15	0.16
11/3/2020 0:00	11/4/2020 0:00	Perdue	Filter 1	0.14	0.15	0.16
11/4/2020 0:00	11/5/2020 0:00	Perdue	Filter 1	0.14	0.15	0.16
11/5/2020 0:00	11/6/2020 0:00	Perdue	Filter 1	0.14	0.15	0.16
11/6/2020 0:00	11/7/2020 0:00	Perdue	Filter 1	0.00	0.17	0.27
11/7/2020 0:00	11/8/2020 0:00	Perdue	Filter 1	0.17	0.18	0.20
11/8/2020 0:00	11/9/2020 0:00	Perdue	Filter 1	0.00	0.17	0.22
11/9/2020 0:00	11/10/2020 0:00	Perdue	Filter 1	0.00	0.16	0.18
11/10/2020 0:00	11/11/2020 0:00	Perdue	Filter 1	0.14	0.15	0.17
11/11/2020 0:00	11/12/2020 0:00	Perdue	Filter 1	0.00	0.15	0.16
11/12/2020 0:00	11/13/2020 0:00	Perdue	Filter 1	0.00	0.16	0.19
11/13/2020 0:00	11/14/2020 0:00	Perdue	Filter 1	0.16	0.17	0.19
11/14/2020 0:00	11/15/2020 0:00	Perdue	Filter 1	0.00	0.19	0.47
11/15/2020 0:00	11/16/2020 0:00	Perdue	Filter 1	0.18	0.19	0.80
11/16/2020 0:00	11/17/2020 0:00	Perdue	Filter 1	0.00	0.19	0.22
11/17/2020 0:00	11/18/2020 0:00	Perdue	Filter 1	0.09	0.19	0.68
11/18/2020 0:00	11/19/2020 0:00	Perdue	Filter 1	0.10	0.10	0.12
11/19/2020 0:00	11/20/2020 0:00	Perdue	Filter 1	0.00	0.11	0.56
11/20/2020 0:00	11/21/2020 0:00	Perdue	Filter 1	0.09	0.10	0.15
11/21/2020 0:00	11/22/2020 0:00	Perdue	Filter 1	0.10	0.11	0.21
11/22/2020 0:00	11/23/2020 0:00	Perdue	Filter 1	0.00	0.10	1.00
11/23/2020 0:00	11/24/2020 0:00	Perdue	Filter 1	0.07	0.08	0.10
11/24/2020 0:00	11/25/2020 0:00	Perdue	Filter 1	0.08	0.08	0.10
11/25/2020 0:00	11/26/2020 0:00	Perdue	Filter 1	0.00	0.08	0.16
11/26/2020 0:00	11/27/2020 0:00	Perdue	Filter 1	0.00	0.06	0.24
11/27/2020 0:00	11/28/2020 0:00	Perdue	Filter 1	0.00	0.07	1.00
11/28/2020 0:00	11/29/2020 0:00	Perdue	Filter 1	0.00	0.06	0.28
11/29/2020 0:00	11/30/2020 0:00	Perdue	Filter 1	0.05	0.06	0.07
11/30/2020 0:00	12/1/2020 0:00	Perdue	Filter 1	0.05	0.08	0.52
12/1/2020 0:00	12/2/2020 0:00	Perdue	Filter 1	0.08	0.15	0.78
12/2/2020 0:00	12/3/2020 0:00	Perdue	Filter 1	0.00	0.13	0.64
12/3/2020 0:00	12/4/2020 0:00	Perdue	Filter 1	0.15		0.15
12/4/2020 0:00	12/5/2020 0:00	Perdue	Filter 1	0.15		0.15
12/5/2020 0:00	12/6/2020 0:00	Perdue	Filter 1	0.15		0.15
12/6/2020 0:00	12/7/2020 0:00	Perdue	Filter 1	0.15		0.15
12/7/2020 0:00	12/8/2020 0:00	Perdue	Filter 1	0.15		0.15
12/8/2020 0:00	12/9/2020 0:00	Perdue	Filter 1	0.15		0.15
12/9/2020 0:00	12/10/2020 0:00	Perdue	Filter 1	0.15		0.15
12/10/2020 0:00	12/11/2020 0:00	Perdue	Filter 1	0.11	0.12	0.15
12/11/2020 0:00	12/12/2020 0:00	Perdue	Filter 1	0.00	0.14	0.16
12/12/2020 0:00	12/13/2020 0:00	Perdue	Filter 1	0.13		0.13
12/13/2020 0:00	12/14/2020 0:00	Perdue	Filter 1	0.11	0.12	0.13
12/14/2020 0:00	12/15/2020 0:00	Perdue	Filter 1	0.07	0.10	0.14
12/15/2020 0:00	12/16/2020 0:00	Perdue	Filter 1	0.00	0.11	0.24
12/16/2020 0:00	12/17/2020 0:00	Perdue	Filter 1	0.00	0.17	0.21
12/17/2020 0:00	12/18/2020 0:00	Perdue	Filter 1	0.10	0.11	0.16
12/18/2020 0:00	12/19/2020 0:00	Perdue	Filter 1	0.09	0.10	0.14
12/19/2020 0:00	12/20/2020 0:00	Perdue	Filter 1	0.00	0.16	0.23
12/20/2020 0:00	12/21/2020 0:00	Perdue	Filter 1	0.16	0.17	0.18
12/21/2020 0:00	12/22/2020 0:00	Perdue	Filter 1	0.00	0.18	0.19
12/22/2020 0:00	12/23/2020 0:00	Perdue	Filter 1	0.00	0.15	0.31
12/23/2020 0:00	12/24/2020 0:00	Perdue	Filter 1	0.09	0.12	0.16
12/24/2020 0:00	12/25/2020 0:00	Perdue	Filter 1	0.00	0.16	0.17
12/25/2020 0:00	12/26/2020 0:00	Perdue	Filter 1	0.00	0.02	0.16
12/26/2020 0:00	12/27/2020 0:00	Perdue	Filter 1	0.00	0.00	0.02
12/27/2020 0:00	12/28/2020 0:00	Perdue	Filter 1	0.00	0.10	0.30
12/28/2020 0:00	12/29/2020 0:00	Perdue	Filter 1	0.00	0.08	0.09
12/29/2020 0:00	12/30/2020 0:00	Perdue	Filter 1	0.07	0.09	0.13

12/30/2020 0:00	12/31/2020 0:00	Perdue	Filter 1	0.00	0.07	0.08
12/31/2020 0:00	1/1/2021 0:00	Perdue	Filter 1	0.06	0.07	0.12
1/1/2021 0:00	1/2/2021 0:00	Perdue	Filter 1	0.00	0.06	0.59
1/2/2021 0:00	1/3/2021 0:00	Perdue	Filter 1	0.00	0.07	0.10
1/3/2021 0:00	1/4/2021 0:00	Perdue	Filter 1	0.00	0.07	0.19
1/4/2021 0:00	1/5/2021 0:00	Perdue	Filter 1	0.00	0.06	0.07
1/5/2021 0:00	1/6/2021 0:00	Perdue	Filter 1	0.06	0.07	0.26
1/6/2021 0:00	1/7/2021 0:00	Perdue	Filter 1	0.00	0.07	0.59
1/7/2021 0:00	1/8/2021 0:00	Perdue	Filter 1	0.06	0.06	0.39
1/8/2021 0:00	1/9/2021 0:00	Perdue	Filter 1	0.00	0.06	0.07
1/9/2021 0:00	1/10/2021 0:00	Perdue	Filter 1	0.05	0.05	0.13
1/10/2021 0:00	1/11/2021 0:00	Perdue	Filter 1	0.00	0.05	0.05
1/11/2021 0:00	1/12/2021 0:00	Perdue	Filter 1	0.05	0.06	0.08
1/12/2021 0:00	1/13/2021 0:00	Perdue	Filter 1	0.00	0.05	0.07
1/13/2021 0:00	1/14/2021 0:00	Perdue	Filter 1	0.05	0.05	0.06
1/14/2021 0:00	1/15/2021 0:00	Perdue	Filter 1	0.00	0.06	0.12
1/15/2021 0:00	1/16/2021 0:00	Perdue	Filter 1	0.05	0.06	0.09
1/16/2021 0:00	1/17/2021 0:00	Perdue	Filter 1	0.00	0.06	0.31
1/17/2021 0:00	1/18/2021 0:00	Perdue	Filter 1	0.07	0.08	0.12
1/18/2021 0:00	1/19/2021 0:00	Perdue	Filter 1	0.05	0.06	0.11
1/19/2021 0:00	1/20/2021 0:00	Perdue	Filter 1	0.00	0.06	1.00
1/20/2021 0:00	1/21/2021 0:00	Perdue	Filter 1	0.05	0.06	0.38
1/21/2021 0:00	1/22/2021 0:00	Perdue	Filter 1	0.00	0.09	1.00
1/22/2021 0:00	1/23/2021 0:00	Perdue	Filter 1	0.00	0.06	1.00
1/23/2021 0:00	1/24/2021 0:00	Perdue	Filter 1	0.05	0.07	0.11
1/24/2021 0:00	1/25/2021 0:00	Perdue	Filter 1	0.00	0.05	0.06
1/25/2021 0:00	1/26/2021 0:00	Perdue	Filter 1	0.05	0.05	0.06
1/26/2021 0:00	1/27/2021 0:00	Perdue	Filter 1	0.00	0.05	0.07
1/27/2021 0:00	1/28/2021 0:00	Perdue	Filter 1	0.00	0.05	0.06
1/28/2021 0:00	1/29/2021 0:00	Perdue	Filter 1	0.00	0.06	0.07
1/29/2021 0:00	1/30/2021 0:00	Perdue	Filter 1	0.06	0.07	0.10
1/30/2021 0:00	1/31/2021 0:00	Perdue	Filter 1	0.00	0.09	0.31
1/31/2021 0:00	2/1/2021 0:00	Perdue	Filter 1	0.00	0.07	0.15
2/1/2021 0:00	2/2/2021 0:00	Perdue	Filter 1	0.06	0.08	0.24
2/2/2021 0:00	2/3/2021 0:00	Perdue	Filter 1	0.00	0.13	0.44
2/3/2021 0:00	2/4/2021 0:00	Perdue	Filter 1	0.00	0.09	0.16
2/4/2021 0:00	2/5/2021 0:00	Perdue	Filter 1	0.00	0.08	0.10
2/5/2021 0:00	2/6/2021 0:00	Perdue	Filter 1	0.00	0.10	0.39
2/6/2021 0:00	2/7/2021 0:00	Perdue	Filter 1	0.07	0.09	0.12
2/7/2021 0:00	2/8/2021 0:00	Perdue	Filter 1	0.00	0.09	0.09
2/8/2021 0:00	2/9/2021 0:00	Perdue	Filter 1	0.00	0.10	0.31
2/9/2021 0:00	2/10/2021 0:00	Perdue	Filter 1	0.00	0.13	0.14
2/10/2021 0:00	2/11/2021 0:00	Perdue	Filter 1	0.07	0.08	0.20
2/11/2021 0:00	2/12/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
2/12/2021 0:00	2/13/2021 0:00	Perdue	Filter 1	0.08	0.09	0.11
2/13/2021 0:00	2/14/2021 0:00	Perdue	Filter 1	0.00	0.12	0.25
2/14/2021 0:00	2/15/2021 0:00	Perdue	Filter 1	0.08	0.09	1.00
2/15/2021 0:00	2/16/2021 0:00	Perdue	Filter 1	0.00	0.11	0.29
2/16/2021 0:00	2/17/2021 0:00	Perdue	Filter 1	0.07	0.09	0.18
2/17/2021 0:00	2/18/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
2/18/2021 0:00	2/19/2021 0:00	Perdue	Filter 1	0.00	0.09	0.77
2/19/2021 0:00	2/20/2021 0:00	Perdue	Filter 1	0.07	0.08	0.12
2/20/2021 0:00	2/21/2021 0:00	Perdue	Filter 1	0.00	0.08	0.10
2/21/2021 0:00	2/22/2021 0:00	Perdue	Filter 1	0.07	0.08	0.10
2/22/2021 0:00	2/23/2021 0:00	Perdue	Filter 1	0.00	0.10	1.00
2/23/2021 0:00	2/24/2021 0:00	Perdue	Filter 1	0.00	0.12	0.86
2/24/2021 0:00	2/25/2021 0:00	Perdue	Filter 1	0.11	0.12	0.14
2/25/2021 0:00	2/26/2021 0:00	Perdue	Filter 1	0.12	0.13	0.25
2/26/2021 0:00	2/27/2021 0:00	Perdue	Filter 1	0.13	0.14	0.49
2/27/2021 0:00	2/28/2021 0:00	Perdue	Filter 1	0.12	0.13	0.94
2/28/2021 0:00	3/1/2021 0:00	Perdue	Filter 1	0.00	0.12	0.90
3/1/2021 0:00	3/2/2021 0:00	Perdue	Filter 1	0.13	0.15	0.17
3/2/2021 0:00	3/3/2021 0:00	Perdue	Filter 1	0.00	0.13	0.15
3/3/2021 0:00	3/4/2021 0:00	Perdue	Filter 1	0.00	0.14	0.40
3/4/2021 0:00	3/5/2021 0:00	Perdue	Filter 1	0.00	0.14	0.15
3/5/2021 0:00	3/6/2021 0:00	Perdue	Filter 1	0.13	0.14	0.24
3/6/2021 0:00	3/7/2021 0:00	Perdue	Filter 1	0.14	0.15	0.27
3/7/2021 0:00	3/8/2021 0:00	Perdue	Filter 1	0.14	0.14	0.28
3/8/2021 0:00	3/9/2021 0:00	Perdue	Filter 1	0.00	0.19	0.26
3/9/2021 0:00	3/10/2021 0:00	Perdue	Filter 1	0.16	0.18	0.22
3/10/2021 0:00	3/11/2021 0:00	Perdue	Filter 1	0.00	0.17	0.19
3/11/2021 0:00	3/12/2021 0:00	Perdue	Filter 1	0.16	0.17	0.19
3/12/2021 0:00	3/13/2021 0:00	Perdue	Filter 1	0.17	0.17	0.40

3/13/2021 0:00	3/14/2021 0:00	Perdue	Filter 1	0.17	0.17	0.26
3/14/2021 0:00	3/15/2021 0:00	Perdue	Filter 1	0.00	0.17	0.78
3/15/2021 0:00	3/16/2021 0:00	Perdue	Filter 1	0.17		0.17
3/16/2021 0:00	3/17/2021 0:00	Perdue	Filter 1	0.07	0.12	0.25
3/17/2021 0:00	3/18/2021 0:00	Perdue	Filter 1	0.00	0.07	0.08
3/18/2021 0:00	3/19/2021 0:00	Perdue	Filter 1	0.06	0.07	0.08
3/19/2021 0:00	3/20/2021 0:00	Perdue	Filter 1	0.06	0.07	0.08
3/20/2021 0:00	3/21/2021 0:00	Perdue	Filter 1	0.06	0.07	0.12
3/21/2021 0:00	3/22/2021 0:00	Perdue	Filter 1	0.06	0.06	0.07
3/22/2021 0:00	3/23/2021 0:00	Perdue	Filter 1	0.05	0.06	0.06
3/23/2021 0:00	3/24/2021 0:00	Perdue	Filter 1	0.00	0.09	0.15
3/24/2021 0:00	3/25/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
3/25/2021 0:00	3/26/2021 0:00	Perdue	Filter 1	0.07	0.08	0.08
3/26/2021 0:00	3/27/2021 0:00	Perdue	Filter 1	0.07	0.08	0.08
3/27/2021 0:00	3/28/2021 0:00	Perdue	Filter 1	0.08	0.08	0.08
3/28/2021 0:00	3/29/2021 0:00	Perdue	Filter 1	0.08	0.08	0.15
3/29/2021 0:00	3/30/2021 0:00	Perdue	Filter 1	0.00	0.08	1.00
3/30/2021 0:00	3/31/2021 0:00	Perdue	Filter 1	0.10	0.11	0.13
3/31/2021 0:00	4/1/2021 0:00	Perdue	Filter 1	0.10	0.10	0.19
4/1/2021 0:00	4/2/2021 0:00	Perdue	Filter 1	0.10	0.10	0.12
4/2/2021 0:00	4/3/2021 0:00	Perdue	Filter 1	0.00	0.12	0.18
4/3/2021 0:00	4/4/2021 0:00	Perdue	Filter 1	0.00	0.12	0.13
4/4/2021 0:00	4/5/2021 0:00	Perdue	Filter 1	0.11	0.12	0.13
4/5/2021 0:00	4/6/2021 0:00	Perdue	Filter 1	0.00	0.16	0.22
4/6/2021 0:00	4/7/2021 0:00	Perdue	Filter 1	0.12	0.13	0.15
4/7/2021 0:00	4/8/2021 0:00	Perdue	Filter 1	0.00	0.15	0.24
4/8/2021 0:00	4/9/2021 0:00	Perdue	Filter 1	0.15	0.15	0.17
4/9/2021 0:00	4/10/2021 0:00	Perdue	Filter 1	0.15	0.16	0.17
4/10/2021 0:00	4/11/2021 0:00	Perdue	Filter 1	0.00	0.17	0.21
4/11/2021 0:00	4/12/2021 0:00	Perdue	Filter 1	0.16	0.17	0.18
4/12/2021 0:00	4/13/2021 0:00	Perdue	Filter 1	0.17	0.19	0.19
4/13/2021 0:00	4/14/2021 0:00	Perdue	Filter 1	0.00	0.16	0.19
4/14/2021 0:00	4/15/2021 0:00	Perdue	Filter 1	0.00	0.14	0.42
4/15/2021 0:00	4/16/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
4/16/2021 0:00	4/17/2021 0:00	Perdue	Filter 1	0.06	0.06	0.07
4/17/2021 0:00	4/18/2021 0:00	Perdue	Filter 1	0.05	0.06	0.08
4/18/2021 0:00	4/19/2021 0:00	Perdue	Filter 1	0.00	0.06	0.22
4/19/2021 0:00	4/20/2021 0:00	Perdue	Filter 1	0.10	0.16	0.23
4/20/2021 0:00	4/21/2021 0:00	Perdue	Filter 1	0.09	0.11	0.13
4/21/2021 0:00	4/22/2021 0:00	Perdue	Filter 1	0.09	0.11	1.00
4/22/2021 0:00	4/23/2021 0:00	Perdue	Filter 1	0.09	0.11	0.14
4/23/2021 0:00	4/24/2021 0:00	Perdue	Filter 1	0.12	0.13	0.14
4/24/2021 0:00	4/25/2021 0:00	Perdue	Filter 1	0.09	0.10	0.12
4/25/2021 0:00	4/26/2021 0:00	Perdue	Filter 1	0.00	0.14	0.23
4/26/2021 0:00	4/27/2021 0:00	Perdue	Filter 1	0.00	0.19	0.43
4/27/2021 0:00	4/28/2021 0:00	Perdue	Filter 1	0.12	0.14	0.18
4/28/2021 0:00	4/29/2021 0:00	Perdue	Filter 1	0.11	0.13	0.17
4/29/2021 0:00	4/30/2021 0:00	Perdue	Filter 1	0.12	0.17	0.20
4/30/2021 0:00	5/1/2021 0:00	Perdue	Filter 1	0.16	0.19	0.22
5/1/2021 0:00	5/2/2021 0:00	Perdue	Filter 1	0.00	0.20	0.23
5/2/2021 0:00	5/3/2021 0:00	Perdue	Filter 1	0.16	0.19	0.24
5/3/2021 0:00	5/4/2021 0:00	Perdue	Filter 1	0.17	0.19	0.27
5/4/2021 0:00	5/5/2021 0:00	Perdue	Filter 1	0.16	0.18	0.22
5/5/2021 0:00	5/6/2021 0:00	Perdue	Filter 1	0.00	0.18	0.25
5/6/2021 0:00	5/7/2021 0:00	Perdue	Filter 1	0.00	0.22	0.25
5/7/2021 0:00	5/8/2021 0:00	Perdue	Filter 1	0.14	0.18	0.22
5/8/2021 0:00	5/9/2021 0:00	Perdue	Filter 1	0.19	0.22	0.26
5/9/2021 0:00	5/10/2021 0:00	Perdue	Filter 1	0.00	0.22	0.29
5/10/2021 0:00	5/11/2021 0:00	Perdue	Filter 1	0.17	0.19	0.23
5/11/2021 0:00	5/12/2021 0:00	Perdue	Filter 1	0.00	0.18	0.49
5/12/2021 0:00	5/13/2021 0:00	Perdue	Filter 1	0.00	0.23	0.49
5/13/2021 0:00	5/14/2021 0:00	Perdue	Filter 1	0.18	0.24	0.32
5/14/2021 0:00	5/15/2021 0:00	Perdue	Filter 1	0.12	0.17	0.23
5/15/2021 0:00	5/16/2021 0:00	Perdue	Filter 1	0.11	0.12	0.14
5/16/2021 0:00	5/17/2021 0:00	Perdue	Filter 1	0.00	0.13	0.76
5/17/2021 0:00	5/18/2021 0:00	Perdue	Filter 1	0.00	0.11	0.14
5/18/2021 0:00	5/19/2021 0:00	Perdue	Filter 1	0.10	0.10	0.12
5/19/2021 0:00	5/20/2021 0:00	Perdue	Filter 1	0.00	0.14	0.18
5/20/2021 0:00	5/21/2021 0:00	Perdue	Filter 1	0.10	0.13	0.15
5/21/2021 0:00	5/22/2021 0:00	Perdue	Filter 1	0.10	0.11	0.13
5/22/2021 0:00	5/23/2021 0:00	Perdue	Filter 1	0.00	0.10	0.12
5/23/2021 0:00	5/24/2021 0:00	Perdue	Filter 1	0.09	0.10	0.12
5/24/2021 0:00	5/25/2021 0:00	Perdue	Filter 1	0.09	0.09	0.10

5/25/2021 0:00	5/26/2021 0:00	Perdue	Filter 1	0.08	0.09	0.10
5/26/2021 0:00	5/27/2021 0:00	Perdue	Filter 1	0.00	0.09	0.13
5/27/2021 0:00	5/28/2021 0:00	Perdue	Filter 1	0.00	0.11	0.17
5/28/2021 0:00	5/29/2021 0:00	Perdue	Filter 1	0.00	0.09	0.11
5/29/2021 0:00	5/30/2021 0:00	Perdue	Filter 1	0.07	0.08	0.16
5/30/2021 0:00	5/31/2021 0:00	Perdue	Filter 1	0.07	0.08	0.17
5/31/2021 0:00	6/1/2021 0:00	Perdue	Filter 1	0.07	0.07	0.08
6/1/2021 0:00	6/2/2021 0:00	Perdue	Filter 1	0.00	0.09	0.18
6/2/2021 0:00	6/3/2021 0:00	Perdue	Filter 1	0.08	0.09	0.17
6/3/2021 0:00	6/4/2021 0:00	Perdue	Filter 1	0.06	0.08	0.10
6/4/2021 0:00	6/5/2021 0:00	Perdue	Filter 1	0.09	0.09	0.10
6/5/2021 0:00	6/6/2021 0:00	Perdue	Filter 1	0.09	0.11	0.13
6/6/2021 0:00	6/7/2021 0:00	Perdue	Filter 1	0.00	0.12	0.26
6/7/2021 0:00	6/8/2021 0:00	Perdue	Filter 1	0.00	0.16	0.22
6/8/2021 0:00	6/9/2021 0:00	Perdue	Filter 1	0.15	0.17	0.20
6/9/2021 0:00	6/10/2021 0:00	Perdue	Filter 1	0.13	0.16	0.17
6/10/2021 0:00	6/11/2021 0:00	Perdue	Filter 1	0.13	0.16	0.19
6/11/2021 0:00	6/12/2021 0:00	Perdue	Filter 1	0.13	0.15	0.19
6/12/2021 0:00	6/13/2021 0:00	Perdue	Filter 1	0.00	0.15	0.26
6/13/2021 0:00	6/14/2021 0:00	Perdue	Filter 1	0.00	0.17	0.20
6/14/2021 0:00	6/15/2021 0:00	Perdue	Filter 1	0.00	0.15	1.00
6/15/2021 0:00	6/16/2021 0:00	Perdue	Filter 1	0.09	0.12	0.15
6/16/2021 0:00	6/17/2021 0:00	Perdue	Filter 1	0.00	0.14	1.00
6/17/2021 0:00	6/18/2021 0:00	Perdue	Filter 1	0.11	0.13	0.32
6/18/2021 0:00	6/19/2021 0:00	Perdue	Filter 1	0.10	0.12	0.19
6/19/2021 0:00	6/20/2021 0:00	Perdue	Filter 1	0.10	0.12	0.19
6/20/2021 0:00	6/21/2021 0:00	Perdue	Filter 1	0.00	0.14	0.19
6/21/2021 0:00	6/22/2021 0:00	Perdue	Filter 1	0.11	0.14	0.23
6/22/2021 0:00	6/23/2021 0:00	Perdue	Filter 1	0.12	0.14	0.24
6/23/2021 0:00	6/24/2021 0:00	Perdue	Filter 1	0.00	0.15	0.44
6/24/2021 0:00	6/25/2021 0:00	Perdue	Filter 1	0.00	0.15	0.20
6/25/2021 0:00	6/26/2021 0:00	Perdue	Filter 1	0.00	0.17	0.26
6/26/2021 0:00	6/27/2021 0:00	Perdue	Filter 1	0.13	0.14	0.17
6/27/2021 0:00	6/28/2021 0:00	Perdue	Filter 1	0.00	0.13	0.14
6/28/2021 0:00	6/29/2021 0:00	Perdue	Filter 1	0.09	0.11	0.17
6/29/2021 0:00	6/30/2021 0:00	Perdue	Filter 1	0.07	0.08	0.11
6/30/2021 0:00	7/1/2021 0:00	Perdue	Filter 1	0.06	0.07	0.08
7/1/2021 0:00	7/2/2021 0:00	Perdue	Filter 1	0.05	0.07	0.08
7/2/2021 0:00	7/3/2021 0:00	Perdue	Filter 1	0.07	0.10	0.16
7/3/2021 0:00	7/4/2021 0:00	Perdue	Filter 1	0.00	0.18	1.00
7/4/2021 0:00	7/5/2021 0:00	Perdue	Filter 1	0.00		0.00
7/5/2021 0:00	7/6/2021 0:00	Perdue	Filter 1	0.00		0.00
7/6/2021 0:00	7/7/2021 0:00	Perdue	Filter 1	0.00	0.05	0.07
7/7/2021 0:00	7/8/2021 0:00	Perdue	Filter 1	0.05	0.05	0.06
7/8/2021 0:00	7/9/2021 0:00	Perdue	Filter 1	0.00	0.06	0.08
7/9/2021 0:00	7/10/2021 0:00	Perdue	Filter 1	0.06	0.06	0.07
7/10/2021 0:00	7/11/2021 0:00	Perdue	Filter 1	0.06	0.07	0.07
7/11/2021 0:00	7/12/2021 0:00	Perdue	Filter 1	0.00	0.07	0.13
7/12/2021 0:00	7/13/2021 0:00	Perdue	Filter 1	0.07	0.10	0.12
7/13/2021 0:00	7/14/2021 0:00	Perdue	Filter 1	0.00	0.15	0.31
7/14/2021 0:00	7/15/2021 0:00	Perdue	Filter 1	0.00	0.15	0.22
7/15/2021 0:00	7/16/2021 0:00	Perdue	Filter 1	0.00	0.15	0.31
7/16/2021 0:00	7/17/2021 0:00	Perdue	Filter 1	0.13	0.15	0.20
7/17/2021 0:00	7/18/2021 0:00	Perdue	Filter 1	0.14	0.15	0.18
7/18/2021 0:00	7/19/2021 0:00	Perdue	Filter 1	0.00	0.15	0.22
7/19/2021 0:00	7/20/2021 0:00	Perdue	Filter 1	0.13	0.14	0.17
7/20/2021 0:00	7/21/2021 0:00	Perdue	Filter 1	0.00	0.14	0.16
7/21/2021 0:00	7/22/2021 0:00	Perdue	Filter 1	0.13	0.14	0.44
7/22/2021 0:00	7/23/2021 0:00	Perdue	Filter 1	0.00	0.16	0.38
7/23/2021 0:00	7/24/2021 0:00	Perdue	Filter 1	0.13	0.15	0.17
7/24/2021 0:00	7/25/2021 0:00	Perdue	Filter 1	0.12	0.13	0.16
7/25/2021 0:00	7/26/2021 0:00	Perdue	Filter 1	0.12	0.14	0.15
7/26/2021 0:00	7/27/2021 0:00	Perdue	Filter 1	0.00	0.16	0.21
7/27/2021 0:00	7/28/2021 0:00	Perdue	Filter 1	0.14	0.15	0.19
7/28/2021 0:00	7/29/2021 0:00	Perdue	Filter 1	0.14	0.15	0.18
7/29/2021 0:00	7/30/2021 0:00	Perdue	Filter 1	0.00	0.15	0.23
7/30/2021 0:00	7/31/2021 0:00	Perdue	Filter 1	0.14	0.16	0.20
7/31/2021 0:00	8/1/2021 0:00	Perdue	Filter 1	0.14	0.15	0.17
8/1/2021 0:00	8/2/2021 0:00	Perdue	Filter 1	0.14	0.15	0.16
8/2/2021 0:00	8/3/2021 0:00	Perdue	Filter 1	0.00	0.16	0.24
8/3/2021 0:00	8/4/2021 0:00	Perdue	Filter 1	0.16	0.18	0.22
8/4/2021 0:00	8/5/2021 0:00	Perdue	Filter 1	0.00	0.18	0.20
8/5/2021 0:00	8/6/2021 0:00	Perdue	Filter 1	0.16	0.18	0.22

8/6/2021 0:00	8/7/2021 0:00	Perdue	Filter 1	0.00	0.18	0.19
8/7/2021 0:00	8/8/2021 0:00	Perdue	Filter 1	0.00	0.19	0.23
8/8/2021 0:00	8/9/2021 0:00	Perdue	Filter 1	0.00	0.18	0.24
8/9/2021 0:00	8/10/2021 0:00	Perdue	Filter 1	0.16	0.17	0.18
8/10/2021 0:00	8/11/2021 0:00	Perdue	Filter 1	0.00	0.17	0.20
8/11/2021 0:00	8/12/2021 0:00	Perdue	Filter 1	0.18	0.21	0.24
8/12/2021 0:00	8/13/2021 0:00	Perdue	Filter 1	0.19	0.20	0.24
8/13/2021 0:00	8/14/2021 0:00	Perdue	Filter 1	0.19	0.21	0.33
8/14/2021 0:00	8/15/2021 0:00	Perdue	Filter 1	0.20	0.21	0.23
8/15/2021 0:00	8/16/2021 0:00	Perdue	Filter 1	0.00	0.22	0.30
8/16/2021 0:00	8/17/2021 0:00	Perdue	Filter 1	0.00	0.16	0.26
8/17/2021 0:00	8/18/2021 0:00	Perdue	Filter 1	0.00	0.10	0.21
8/18/2021 0:00	8/19/2021 0:00	Perdue	Filter 1	0.00	0.08	0.17
8/19/2021 0:00	8/20/2021 0:00	Perdue	Filter 1	0.04	0.07	0.18
8/20/2021 0:00	8/21/2021 0:00	Perdue	Filter 1	0.04	0.09	1.00
8/21/2021 0:00	8/22/2021 0:00	Perdue	Filter 1	0.00	0.13	0.67
8/22/2021 0:00	8/23/2021 0:00	Perdue	Filter 1	0.13	0.14	0.16
8/23/2021 0:00	8/24/2021 0:00	Perdue	Filter 1	0.00	0.13	0.16
8/24/2021 0:00	8/25/2021 0:00	Perdue	Filter 1	0.12	0.13	0.18
8/25/2021 0:00	8/26/2021 0:00	Perdue	Filter 1	0.12	0.12	0.17
8/26/2021 0:00	8/27/2021 0:00	Perdue	Filter 1	0.00	0.12	0.14
8/27/2021 0:00	8/28/2021 0:00	Perdue	Filter 1	0.12	0.13	0.19
8/28/2021 0:00	8/29/2021 0:00	Perdue	Filter 1	0.12	0.12	0.16
8/29/2021 0:00	8/30/2021 0:00	Perdue	Filter 1	0.00	0.13	0.19
8/30/2021 0:00	8/31/2021 0:00	Perdue	Filter 1	0.00	0.13	0.15
8/31/2021 0:00	9/1/2021 0:00	Perdue	Filter 1	0.00	0.14	0.15
9/1/2021 0:00	9/2/2021 0:00	Perdue	Filter 1	0.13	0.13	0.18
9/2/2021 0:00	9/3/2021 0:00	Perdue	Filter 1	0.13	0.13	0.45
9/3/2021 0:00	9/4/2021 0:00	Perdue	Filter 1	0.12	0.13	0.18
9/4/2021 0:00	9/5/2021 0:00	Perdue	Filter 1	0.12	0.13	0.19
9/5/2021 0:00	9/6/2021 0:00	Perdue	Filter 1	0.12	0.12	0.22
9/6/2021 0:00	9/7/2021 0:00	Perdue	Filter 1	0.12	0.12	0.18
9/7/2021 0:00	9/8/2021 0:00	Perdue	Filter 1	0.12	0.13	0.20
9/8/2021 0:00	9/9/2021 0:00	Perdue	Filter 1	0.12	0.13	0.22
9/9/2021 0:00	9/10/2021 0:00	Perdue	Filter 1	0.00	0.12	0.19
9/10/2021 0:00	9/11/2021 0:00	Perdue	Filter 1	0.10	0.11	0.26
9/11/2021 0:00	9/12/2021 0:00	Perdue	Filter 1	0.00	0.11	0.20
9/12/2021 0:00	9/13/2021 0:00	Perdue	Filter 1	0.10	0.11	0.19
9/13/2021 0:00	9/14/2021 0:00	Perdue	Filter 1	0.10	0.11	0.14
9/14/2021 0:00	9/15/2021 0:00	Perdue	Filter 1	0.10	0.11	0.19
9/15/2021 0:00	9/16/2021 0:00	Perdue	Filter 1	0.10	0.11	0.16
9/16/2021 0:00	9/17/2021 0:00	Perdue	Filter 1	0.10	0.11	0.16
9/17/2021 0:00	9/18/2021 0:00	Perdue	Filter 1	0.10	0.11	0.18
9/18/2021 0:00	9/19/2021 0:00	Perdue	Filter 1	0.00	0.11	0.13
9/19/2021 0:00	9/20/2021 0:00	Perdue	Filter 1	0.10	0.11	0.16
9/20/2021 0:00	9/21/2021 0:00	Perdue	Filter 1	0.10	0.11	0.18
9/21/2021 0:00	9/22/2021 0:00	Perdue	Filter 1	0.11	0.11	0.15
9/22/2021 0:00	9/23/2021 0:00	Perdue	Filter 1	0.00	0.11	0.15
9/23/2021 0:00	9/24/2021 0:00	Perdue	Filter 1	0.10	0.11	0.23
9/24/2021 0:00	9/25/2021 0:00	Perdue	Filter 1	0.10	0.11	0.24
9/25/2021 0:00	9/26/2021 0:00	Perdue	Filter 1	0.00	0.11	0.13
9/26/2021 0:00	9/27/2021 0:00	Perdue	Filter 1	0.10	0.11	0.14
9/27/2021 0:00	9/28/2021 0:00	Perdue	Filter 1	0.10	0.11	0.24
9/28/2021 0:00	9/29/2021 0:00	Perdue	Filter 1	0.10	0.11	0.25
9/29/2021 0:00	9/30/2021 0:00	Perdue	Filter 1	0.10	0.11	0.15
9/30/2021 0:00	10/1/2021 0:00	Perdue	Filter 1	0.00	0.10	0.52
10/1/2021 0:00	10/2/2021 0:00	Perdue	Filter 1	0.08	0.09	1.00
10/2/2021 0:00	10/3/2021 0:00	Perdue	Filter 1	0.09	0.09	1.00
10/3/2021 0:00	10/4/2021 0:00	Perdue	Filter 1	0.00	0.09	1.00
10/4/2021 0:00	10/5/2021 0:00	Perdue	Filter 1	0.00	0.09	1.00
10/5/2021 0:00	10/6/2021 0:00	Perdue	Filter 1	0.08	0.08	0.11
10/6/2021 0:00	10/7/2021 0:00	Perdue	Filter 1	0.08	0.09	0.09
10/7/2021 0:00	10/8/2021 0:00	Perdue	Filter 1	0.08	0.09	0.09
10/8/2021 0:00	10/9/2021 0:00	Perdue	Filter 1	0.09	0.09	0.10
10/9/2021 0:00	10/10/2021 0:00	Perdue	Filter 1	0.00	0.09	0.10
10/10/2021 0:00	10/11/2021 0:00	Perdue	Filter 1	0.09	0.10	0.12
10/11/2021 0:00	10/12/2021 0:00	Perdue	Filter 1	0.10	0.10	0.11
10/12/2021 0:00	10/13/2021 0:00	Perdue	Filter 1	0.10	0.11	0.12
10/13/2021 0:00	10/14/2021 0:00	Perdue	Filter 1	0.12	0.13	0.14
10/14/2021 0:00	10/15/2021 0:00	Perdue	Filter 1	0.13	0.15	0.17
10/15/2021 0:00	10/16/2021 0:00	Perdue	Filter 1	0.00	0.13	0.17
10/16/2021 0:00	10/17/2021 0:00	Perdue	Filter 1	0.10	0.12	0.14
10/17/2021 0:00	10/18/2021 0:00	Perdue	Filter 1	0.00	0.14	0.16

10/18/2021 0:00	10/19/2021 0:00	Perdue	Filter 1	0.15	0.17	0.18
10/19/2021 0:00	10/20/2021 0:00	Perdue	Filter 1	0.00	0.18	0.20
10/20/2021 0:00	10/21/2021 0:00	Perdue	Filter 1	0.17	0.19	0.20
10/21/2021 0:00	10/22/2021 0:00	Perdue	Filter 1	0.18	0.20	0.22
10/22/2021 0:00	10/23/2021 0:00	Perdue	Filter 1	0.20	0.22	0.23
10/23/2021 0:00	10/24/2021 0:00	Perdue	Filter 1	0.07	0.19	0.27
10/24/2021 0:00	10/25/2021 0:00	Perdue	Filter 1	0.07	0.07	0.09
10/25/2021 0:00	10/26/2021 0:00	Perdue	Filter 1	0.00	0.08	0.19
10/26/2021 0:00	10/27/2021 0:00	Perdue	Filter 1	0.00	0.09	0.11
10/27/2021 0:00	10/28/2021 0:00	Perdue	Filter 1	0.00	0.11	0.12
10/28/2021 0:00	10/29/2021 0:00	Perdue	Filter 1	0.00	0.12	0.28
10/29/2021 0:00	10/30/2021 0:00	Perdue	Filter 1	0.12	0.13	0.15
10/30/2021 0:00	10/31/2021 0:00	Perdue	Filter 1	0.14	0.14	0.16
10/31/2021 0:00	11/1/2021 0:00	Perdue	Filter 1	0.14	0.15	0.16
11/1/2021 0:00	11/2/2021 0:00	Perdue	Filter 1	0.00	0.16	0.25
11/2/2021 0:00	11/3/2021 0:00	Perdue	Filter 1	0.00	0.19	0.42
11/3/2021 0:00	11/4/2021 0:00	Perdue	Filter 1	0.09	0.19	1.00
11/4/2021 0:00	11/5/2021 0:00	Perdue	Filter 1	0.00	0.21	0.27
11/5/2021 0:00	11/6/2021 0:00	Perdue	Filter 1	0.15	0.18	0.26
11/6/2021 0:00	11/7/2021 0:00	Perdue	Filter 1	0.17	0.19	0.26
11/7/2021 0:00	11/8/2021 0:00	Perdue	Filter 1	0.16	0.18	0.24
11/8/2021 0:00	11/9/2021 0:00	Perdue	Filter 1	0.16	0.19	0.24
11/9/2021 0:00	11/10/2021 0:00	Perdue	Filter 1	0.17	0.20	0.24
11/10/2021 0:00	11/11/2021 0:00	Perdue	Filter 1	0.00	0.19	0.23
11/11/2021 0:00	11/12/2021 0:00	Perdue	Filter 1	0.14	0.17	0.20
11/12/2021 0:00	11/13/2021 0:00	Perdue	Filter 1	0.16	0.21	0.28
11/13/2021 0:00	11/14/2021 0:00	Perdue	Filter 1	0.09	0.16	0.25
11/14/2021 0:00	11/15/2021 0:00	Perdue	Filter 1	0.07	0.09	0.12
11/15/2021 0:00	11/16/2021 0:00	Perdue	Filter 1	0.07	0.08	0.11
11/16/2021 0:00	11/17/2021 0:00	Perdue	Filter 1	0.00	0.07	0.14
11/17/2021 0:00	11/18/2021 0:00	Perdue	Filter 1	0.00	0.07	0.11
11/18/2021 0:00	11/19/2021 0:00	Perdue	Filter 1	0.00	0.07	0.27
11/19/2021 0:00	11/20/2021 0:00	Perdue	Filter 1	0.03	0.08	0.12
11/20/2021 0:00	11/21/2021 0:00	Perdue	Filter 1	0.11	0.13	0.17
11/21/2021 0:00	11/22/2021 0:00	Perdue	Filter 1	0.13	0.14	0.16
11/22/2021 0:00	11/23/2021 0:00	Perdue	Filter 1	0.00	0.13	0.38
11/23/2021 0:00	11/24/2021 0:00	Perdue	Filter 1	0.00	0.05	0.10
11/24/2021 0:00	11/25/2021 0:00	Perdue	Filter 1	0.03	0.04	0.04
11/25/2021 0:00	11/26/2021 0:00	Perdue	Filter 1	0.03	0.04	0.04
11/26/2021 0:00	11/27/2021 0:00	Perdue	Filter 1	0.03	0.04	0.04
11/27/2021 0:00	11/28/2021 0:00	Perdue	Filter 1	0.03	0.04	0.05
11/28/2021 0:00	11/29/2021 0:00	Perdue	Filter 1	0.03	0.04	0.05
11/29/2021 0:00	11/30/2021 0:00	Perdue	Filter 1	0.03	0.04	0.05
11/30/2021 0:00	12/1/2021 0:00	Perdue	Filter 1	0.04	0.04	0.05
12/1/2021 0:00	12/2/2021 0:00	Perdue	Filter 1	0.04	0.05	0.06
12/2/2021 0:00	12/3/2021 0:00	Perdue	Filter 1	0.05	0.06	0.08
12/3/2021 0:00	12/4/2021 0:00	Perdue	Filter 1	0.00	0.08	0.11
12/4/2021 0:00	12/5/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
12/5/2021 0:00	12/6/2021 0:00	Perdue	Filter 1	0.00	0.08	0.11
12/6/2021 0:00	12/7/2021 0:00	Perdue	Filter 1	0.07	0.08	0.08
12/7/2021 0:00	12/8/2021 0:00	Perdue	Filter 1	0.07	0.08	0.09
12/8/2021 0:00	12/9/2021 0:00	Perdue	Filter 1	0.00	0.08	0.10
12/9/2021 0:00	12/10/2021 0:00	Perdue	Filter 1	0.08	0.08	0.09
12/10/2021 0:00	12/11/2021 0:00	Perdue	Filter 1	0.00	0.08	0.09
12/11/2021 0:00	12/12/2021 0:00	Perdue	Filter 1	0.00	0.08	0.09
12/12/2021 0:00	12/13/2021 0:00	Perdue	Filter 1	0.08	0.09	0.09
12/13/2021 0:00	12/14/2021 0:00	Perdue	Filter 1	0.09	0.09	0.09
12/14/2021 0:00	12/15/2021 0:00	Perdue	Filter 1	0.00	0.09	0.10
12/15/2021 0:00	12/16/2021 0:00	Perdue	Filter 1	0.09	0.10	0.25
12/16/2021 0:00	12/17/2021 0:00	Perdue	Filter 1	0.00	0.12	0.21
12/17/2021 0:00	12/18/2021 0:00	Perdue	Filter 1	0.00	0.11	1.00
12/18/2021 0:00	12/19/2021 0:00	Perdue	Filter 1	0.09	0.11	0.12
12/19/2021 0:00	12/20/2021 0:00	Perdue	Filter 1	0.00	0.12	0.13
12/20/2021 0:00	12/21/2021 0:00	Perdue	Filter 1	0.12	0.12	0.12
12/21/2021 0:00	12/22/2021 0:00	Perdue	Filter 1	0.12	0.13	0.13
12/22/2021 0:00	12/23/2021 0:00	Perdue	Filter 1	0.00	0.12	0.13
12/23/2021 0:00	12/24/2021 0:00	Perdue	Filter 1	0.00	0.10	0.12
12/24/2021 0:00	12/25/2021 0:00	Perdue	Filter 1	0.00	0.09	0.11
12/25/2021 0:00	12/26/2021 0:00	Perdue	Filter 1	0.00	0.09	0.10
12/26/2021 0:00	12/27/2021 0:00	Perdue	Filter 1	0.08	0.08	0.09
12/27/2021 0:00	12/28/2021 0:00	Perdue	Filter 1	0.00	0.09	0.11
12/28/2021 0:00	12/29/2021 0:00	Perdue	Filter 1	0.00	0.09	0.10
12/29/2021 0:00	12/30/2021 0:00	Perdue	Filter 1	0.00	0.09	0.10

12/30/2021 0:00	12/31/2021 0:00	Perdue	Filter 1	0.09	0.11	0.16
12/31/2021 0:00	1/1/2022 0:00	Perdue	Filter 1	0.00	0.10	0.14
						1.00
						0.99
						0.28
						0.18

Date	Date End Time	Site	Area	Min Turbidity	Avg Turbidity	Max Turbidity
1/1/2017 0:00	1/2/2017 0:00	Perdue	Filter 2	0.06	0.12	1.00
1/2/2017 0:00	1/3/2017 0:00	Perdue	Filter 2	0.06	0.06	0.07
1/3/2017 0:00	1/4/2017 0:00	Perdue	Filter 2	0.06	0.07	0.07
1/4/2017 0:00	1/5/2017 0:00	Perdue	Filter 2	0.06	0.07	0.08
1/5/2017 0:00	1/6/2017 0:00	Perdue	Filter 2	0.06	0.07	0.07
1/6/2017 0:00	1/7/2017 0:00	Perdue	Filter 2	0.06	0.07	0.08
1/7/2017 0:00	1/8/2017 0:00	Perdue	Filter 2	0.06	0.07	0.08
1/8/2017 0:00	1/9/2017 0:00	Perdue	Filter 2	0.08	0.09	0.10
1/9/2017 0:00	1/10/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/10/2017 0:00	1/11/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/11/2017 0:00	1/12/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/12/2017 0:00	1/13/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/13/2017 0:00	1/14/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/14/2017 0:00	1/15/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/15/2017 0:00	1/16/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/16/2017 0:00	1/17/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/17/2017 0:00	1/18/2017 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/18/2017 0:00	1/19/2017 0:00	Perdue	Filter 2	0.07	0.09	0.11
1/19/2017 0:00	1/20/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
1/20/2017 0:00	1/21/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
1/21/2017 0:00	1/22/2017 0:00	Perdue	Filter 2	0.07	0.08	0.10
1/22/2017 0:00	1/23/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
1/23/2017 0:00	1/24/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
1/24/2017 0:00	1/25/2017 0:00	Perdue	Filter 2	0.07	0.07	0.07
1/25/2017 0:00	1/26/2017 0:00	Perdue	Filter 2	0.04	0.06	1.00
1/26/2017 0:00	1/27/2017 0:00	Perdue	Filter 2	0.03	0.05	0.06
1/27/2017 0:00	1/28/2017 0:00	Perdue	Filter 2	0.03	0.05	1.00
1/28/2017 0:00	1/29/2017 0:00	Perdue	Filter 2	0.04	0.06	1.00
1/29/2017 0:00	1/30/2017 0:00	Perdue	Filter 2	0.04	0.06	1.00
1/30/2017 0:00	1/31/2017 0:00	Perdue	Filter 2	0.04	0.06	1.00
1/31/2017 0:00	2/1/2017 0:00	Perdue	Filter 2	0.04	0.08	1.00
2/1/2017 0:00	2/2/2017 0:00	Perdue	Filter 2	0.03	0.05	0.32
2/2/2017 0:00	2/3/2017 0:00	Perdue	Filter 2	0.03	0.07	0.10
2/3/2017 0:00	2/4/2017 0:00	Perdue	Filter 2	0.08	0.09	1.00
2/4/2017 0:00	2/5/2017 0:00	Perdue	Filter 2	0.08	0.10	0.93
2/5/2017 0:00	2/6/2017 0:00	Perdue	Filter 2	0.09	0.10	1.00
2/6/2017 0:00	2/7/2017 0:00	Perdue	Filter 2	0.05	0.07	0.19
2/7/2017 0:00	2/8/2017 0:00	Perdue	Filter 2	0.03	0.05	1.00
2/8/2017 0:00	2/9/2017 0:00	Perdue	Filter 2	0.03	0.04	1.00
2/9/2017 0:00	2/10/2017 0:00	Perdue	Filter 2	0.04	0.04	0.06
2/10/2017 0:00	2/11/2017 0:00	Perdue	Filter 2	0.04	0.04	0.05
2/11/2017 0:00	2/12/2017 0:00	Perdue	Filter 2	0.04	0.04	0.05
2/12/2017 0:00	2/13/2017 0:00	Perdue	Filter 2	0.03	0.04	0.05
2/13/2017 0:00	2/14/2017 0:00	Perdue	Filter 2	0.04	0.05	0.07
2/14/2017 0:00	2/15/2017 0:00	Perdue	Filter 2	0.04	0.05	0.07
2/15/2017 0:00	2/16/2017 0:00	Perdue	Filter 2	0.04	0.05	0.07
2/16/2017 0:00	2/17/2017 0:00	Perdue	Filter 2	0.04	0.05	0.81
2/17/2017 0:00	2/18/2017 0:00	Perdue	Filter 2	0.04	0.05	1.00
2/18/2017 0:00	2/19/2017 0:00	Perdue	Filter 2	0.04	0.05	0.16
2/19/2017 0:00	2/20/2017 0:00	Perdue	Filter 2	0.04	0.05	0.06
2/20/2017 0:00	2/21/2017 0:00	Perdue	Filter 2	0.04	0.05	0.06
2/21/2017 0:00	2/22/2017 0:00	Perdue	Filter 2	0.04	0.05	0.06
2/22/2017 0:00	2/23/2017 0:00	Perdue	Filter 2	0.05	0.05	0.06
2/23/2017 0:00	2/24/2017 0:00	Perdue	Filter 2	0.04	0.05	0.06
2/24/2017 0:00	2/25/2017 0:00	Perdue	Filter 2	0.04	0.05	0.06
2/25/2017 0:00	2/26/2017 0:00	Perdue	Filter 2	0.04	0.05	0.08
2/26/2017 0:00	2/27/2017 0:00	Perdue	Filter 2	0.05	0.05	1.00
2/27/2017 0:00	2/28/2017 0:00	Perdue	Filter 2	0.05	0.05	0.29
2/28/2017 0:00	3/1/2017 0:00	Perdue	Filter 2	0.05	0.06	0.40
3/1/2017 0:00	3/2/2017 0:00	Perdue	Filter 2	0.05	0.06	0.44
3/2/2017 0:00	3/3/2017 0:00	Perdue	Filter 2	0.05	0.06	0.07
3/3/2017 0:00	3/4/2017 0:00	Perdue	Filter 2	0.04	0.09	0.12
3/4/2017 0:00	3/5/2017 0:00	Perdue	Filter 2	0.09	0.10	0.11
3/5/2017 0:00	3/6/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
3/6/2017 0:00	3/7/2017 0:00	Perdue	Filter 2	0.06	0.09	0.11
3/7/2017 0:00	3/8/2017 0:00	Perdue	Filter 2	0.04	0.05	0.09
3/8/2017 0:00	3/9/2017 0:00	Perdue	Filter 2	0.03	0.05	1.00
3/9/2017 0:00	3/10/2017 0:00	Perdue	Filter 2	0.04	0.07	1.00
3/10/2017 0:00	3/11/2017 0:00	Perdue	Filter 2	0.05	0.06	0.07
3/11/2017 0:00	3/12/2017 0:00	Perdue	Filter 2	0.05	0.06	0.07
3/12/2017 0:00	3/13/2017 0:00	Perdue	Filter 2	0.06	0.07	0.08
3/13/2017 0:00	3/14/2017 0:00	Perdue	Filter 2	0.05	0.07	0.08

3/14/2017 0:00	3/15/2017 0:00	Perdue	Filter 2	0.05	0.06	0.07
3/15/2017 0:00	3/16/2017 0:00	Perdue	Filter 2	0.03	0.05	0.22
3/16/2017 0:00	3/17/2017 0:00	Perdue	Filter 2	0.03	0.06	1.00
3/17/2017 0:00	3/18/2017 0:00	Perdue	Filter 2	0.05	0.09	1.00
3/18/2017 0:00	3/19/2017 0:00	Perdue	Filter 2	0.09	0.16	1.00
3/19/2017 0:00	3/20/2017 0:00	Perdue	Filter 2	0.09	0.10	0.11
3/20/2017 0:00	3/21/2017 0:00	Perdue	Filter 2	0.08	0.09	0.11
3/21/2017 0:00	3/22/2017 0:00	Perdue	Filter 2	0.08	0.09	0.42
3/22/2017 0:00	3/23/2017 0:00	Perdue	Filter 2	0.01	0.08	1.00
3/23/2017 0:00	3/24/2017 0:00	Perdue	Filter 2	0.05	0.06	0.54
3/24/2017 0:00	3/25/2017 0:00	Perdue	Filter 2	0.06	0.07	0.13
3/25/2017 0:00	3/26/2017 0:00	Perdue	Filter 2	0.06	0.08	0.10
3/26/2017 0:00	3/27/2017 0:00	Perdue	Filter 2	0.06	0.07	0.07
3/27/2017 0:00	3/28/2017 0:00	Perdue	Filter 2	0.07	0.08	0.09
3/28/2017 0:00	3/29/2017 0:00	Perdue	Filter 2	0.06	0.08	1.00
3/29/2017 0:00	3/30/2017 0:00	Perdue	Filter 2	0.06	0.09	1.00
3/30/2017 0:00	3/31/2017 0:00	Perdue	Filter 2	0.08	0.09	0.12
3/31/2017 0:00	4/1/2017 0:00	Perdue	Filter 2	0.08	0.09	0.10
4/1/2017 0:00	4/2/2017 0:00	Perdue	Filter 2	0.08	0.09	0.13
4/2/2017 0:00	4/3/2017 0:00	Perdue	Filter 2	0.09	0.10	0.15
4/3/2017 0:00	4/4/2017 0:00	Perdue	Filter 2	0.05	0.08	0.10
4/4/2017 0:00	4/5/2017 0:00	Perdue	Filter 2	0.05	0.06	0.07
4/5/2017 0:00	4/6/2017 0:00	Perdue	Filter 2	0.05	0.09	0.14
4/6/2017 0:00	4/7/2017 0:00	Perdue	Filter 2	0.07	0.11	0.21
4/7/2017 0:00	4/8/2017 0:00	Perdue	Filter 2	0.07	0.09	0.13
4/8/2017 0:00	4/9/2017 0:00	Perdue	Filter 2	0.09	0.12	0.21
4/9/2017 0:00	4/10/2017 0:00	Perdue	Filter 2	0.07	0.10	0.21
4/10/2017 0:00	4/11/2017 0:00	Perdue	Filter 2	0.06	0.07	0.08
4/11/2017 0:00	4/12/2017 0:00	Perdue	Filter 2	0.07	0.10	0.23
4/12/2017 0:00	4/13/2017 0:00	Perdue	Filter 2	0.08	0.12	0.17
4/13/2017 0:00	4/14/2017 0:00	Perdue	Filter 2	0.07	0.10	0.26
4/14/2017 0:00	4/15/2017 0:00	Perdue	Filter 2	0.07	0.09	0.10
4/15/2017 0:00	4/16/2017 0:00	Perdue	Filter 2	0.09	0.10	0.11
4/16/2017 0:00	4/17/2017 0:00	Perdue	Filter 2	0.10	0.12	0.22
4/17/2017 0:00	4/18/2017 0:00	Perdue	Filter 2	0.09	0.10	1.00
4/18/2017 0:00	4/19/2017 0:00	Perdue	Filter 2	0.08	0.09	0.10
4/19/2017 0:00	4/20/2017 0:00	Perdue	Filter 2	0.09	0.11	0.20
4/20/2017 0:00	4/21/2017 0:00	Perdue	Filter 2	0.08	0.10	0.22
4/21/2017 0:00	4/22/2017 0:00	Perdue	Filter 2	0.09	0.10	0.12
4/22/2017 0:00	4/23/2017 0:00	Perdue	Filter 2	0.09	0.14	0.22
4/23/2017 0:00	4/24/2017 0:00	Perdue	Filter 2	0.10	0.12	0.15
4/24/2017 0:00	4/25/2017 0:00	Perdue	Filter 2	0.09	0.11	0.24
4/25/2017 0:00	4/26/2017 0:00	Perdue	Filter 2	0.10	0.11	0.12
4/26/2017 0:00	4/27/2017 0:00	Perdue	Filter 2	0.10	0.11	0.19
4/27/2017 0:00	4/28/2017 0:00	Perdue	Filter 2	0.10	0.11	0.18
4/28/2017 0:00	4/29/2017 0:00	Perdue	Filter 2	0.10	0.11	0.13
4/29/2017 0:00	4/30/2017 0:00	Perdue	Filter 2	0.09	0.10	0.12
4/30/2017 0:00	5/1/2017 0:00	Perdue	Filter 2	0.10	0.13	0.23
5/1/2017 0:00	5/2/2017 0:00	Perdue	Filter 2	0.12	0.15	0.18
5/2/2017 0:00	5/3/2017 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/3/2017 0:00	5/4/2017 0:00	Perdue	Filter 2	0.12	0.13	0.51
5/4/2017 0:00	5/5/2017 0:00	Perdue	Filter 2	0.13	0.16	0.23
5/5/2017 0:00	5/6/2017 0:00	Perdue	Filter 2	0.11	0.15	0.23
5/6/2017 0:00	5/7/2017 0:00	Perdue	Filter 2	0.11	0.12	0.13
5/7/2017 0:00	5/8/2017 0:00	Perdue	Filter 2	0.10	0.13	0.16
5/8/2017 0:00	5/9/2017 0:00	Perdue	Filter 2	0.09	0.10	0.13
5/9/2017 0:00	5/10/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
5/10/2017 0:00	5/11/2017 0:00	Perdue	Filter 2	0.09	0.10	0.11
5/11/2017 0:00	5/12/2017 0:00	Perdue	Filter 2	0.10	0.11	0.12
5/12/2017 0:00	5/13/2017 0:00	Perdue	Filter 2	0.10	0.12	0.14
5/13/2017 0:00	5/14/2017 0:00	Perdue	Filter 2	0.13	0.14	0.22
5/14/2017 0:00	5/15/2017 0:00	Perdue	Filter 2	0.10	0.14	0.19
5/15/2017 0:00	5/16/2017 0:00	Perdue	Filter 2	0.10	0.11	0.14
5/16/2017 0:00	5/17/2017 0:00	Perdue	Filter 2	0.11	0.14	0.26
5/17/2017 0:00	5/18/2017 0:00	Perdue	Filter 2	0.13	0.15	0.17
5/18/2017 0:00	5/19/2017 0:00	Perdue	Filter 2	0.12	0.14	0.30
5/19/2017 0:00	5/20/2017 0:00	Perdue	Filter 2	0.13	0.22	1.00
5/20/2017 0:00	5/21/2017 0:00	Perdue	Filter 2	0.11	0.21	0.32
5/21/2017 0:00	5/22/2017 0:00	Perdue	Filter 2	0.12	0.23	0.38
5/22/2017 0:00	5/23/2017 0:00	Perdue	Filter 2	0.13	0.21	0.41
5/23/2017 0:00	5/24/2017 0:00	Perdue	Filter 2	0.11	0.15	0.31
5/24/2017 0:00	5/25/2017 0:00	Perdue	Filter 2	0.15	0.24	0.31
5/25/2017 0:00	5/26/2017 0:00	Perdue	Filter 2	0.08	0.15	0.20

5/26/2017 0:00	5/27/2017 0:00	Perdue	Filter 2	0.07	0.13	0.20
5/27/2017 0:00	5/28/2017 0:00	Perdue	Filter 2	0.07	0.15	0.66
5/28/2017 0:00	5/29/2017 0:00	Perdue	Filter 2	0.05	0.07	0.08
5/29/2017 0:00	5/30/2017 0:00	Perdue	Filter 2	0.03	0.05	0.12
5/30/2017 0:00	5/31/2017 0:00	Perdue	Filter 2	0.02	0.02	0.03
5/31/2017 0:00	6/1/2017 0:00	Perdue	Filter 2	0.02	0.05	0.12
6/1/2017 0:00	6/2/2017 0:00	Perdue	Filter 2	0.09	0.18	0.42
6/2/2017 0:00	6/3/2017 0:00	Perdue	Filter 2	0.10	0.17	0.30
6/3/2017 0:00	6/4/2017 0:00	Perdue	Filter 2	0.03	0.13	0.26
6/4/2017 0:00	6/5/2017 0:00	Perdue	Filter 2	0.03	0.03	0.04
6/5/2017 0:00	6/6/2017 0:00	Perdue	Filter 2	0.03	0.06	0.08
6/6/2017 0:00	6/7/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
6/7/2017 0:00	6/8/2017 0:00	Perdue	Filter 2	0.07	0.07	0.08
6/8/2017 0:00	6/9/2017 0:00	Perdue	Filter 2	0.07	0.07	0.09
6/9/2017 0:00	6/10/2017 0:00	Perdue	Filter 2	0.09	0.15	0.32
6/10/2017 0:00	6/11/2017 0:00	Perdue	Filter 2	0.08	0.12	0.26
6/11/2017 0:00	6/12/2017 0:00	Perdue	Filter 2	0.10	0.12	0.14
6/12/2017 0:00	6/13/2017 0:00	Perdue	Filter 2	0.10	0.12	0.14
6/13/2017 0:00	6/14/2017 0:00	Perdue	Filter 2	0.07	0.11	0.21
6/14/2017 0:00	6/15/2017 0:00	Perdue	Filter 2	0.06	0.07	0.38
6/15/2017 0:00	6/16/2017 0:00	Perdue	Filter 2	0.06	0.07	0.09
6/16/2017 0:00	6/17/2017 0:00	Perdue	Filter 2	0.05	0.09	0.19
6/17/2017 0:00	6/18/2017 0:00	Perdue	Filter 2	0.06	0.07	0.09
6/18/2017 0:00	6/19/2017 0:00	Perdue	Filter 2	0.06	0.07	0.12
6/19/2017 0:00	6/20/2017 0:00	Perdue	Filter 2	0.06	0.10	1.00
6/20/2017 0:00	6/21/2017 0:00	Perdue	Filter 2	0.04	0.08	0.13
6/21/2017 0:00	6/22/2017 0:00	Perdue	Filter 2	0.04	0.05	0.09
6/22/2017 0:00	6/23/2017 0:00	Perdue	Filter 2	0.05	0.05	0.05
6/23/2017 0:00	6/24/2017 0:00	Perdue	Filter 2	0.05	0.10	0.11
6/24/2017 0:00	6/25/2017 0:00	Perdue	Filter 2	0.10	0.12	1.00
6/25/2017 0:00	6/26/2017 0:00	Perdue	Filter 2	0.09	0.15	0.35
6/26/2017 0:00	6/27/2017 0:00	Perdue	Filter 2	0.09	0.10	0.16
6/27/2017 0:00	6/28/2017 0:00	Perdue	Filter 2	0.07	0.10	0.25
6/28/2017 0:00	6/29/2017 0:00	Perdue	Filter 2	0.09	0.12	0.22
6/29/2017 0:00	6/30/2017 0:00	Perdue	Filter 2	0.09	0.11	0.13
6/30/2017 0:00	7/1/2017 0:00	Perdue	Filter 2	0.09	0.11	0.28
7/1/2017 0:00	7/2/2017 0:00	Perdue	Filter 2	0.12	0.14	0.19
7/2/2017 0:00	7/3/2017 0:00	Perdue	Filter 2	0.08	0.12	0.19
7/3/2017 0:00	7/4/2017 0:00	Perdue	Filter 2	0.09	0.14	0.28
7/4/2017 0:00	7/5/2017 0:00	Perdue	Filter 2	0.11	0.16	0.18
7/5/2017 0:00	7/6/2017 0:00	Perdue	Filter 2	0.11	0.13	0.18
7/6/2017 0:00	7/7/2017 0:00	Perdue	Filter 2	0.12	0.21	0.30
7/7/2017 0:00	7/8/2017 0:00	Perdue	Filter 2	0.12	0.17	0.53
7/8/2017 0:00	7/9/2017 0:00	Perdue	Filter 2	0.10	0.18	0.27
7/9/2017 0:00	7/10/2017 0:00	Perdue	Filter 2	0.09	0.14	0.20
7/10/2017 0:00	7/11/2017 0:00	Perdue	Filter 2	0.08	0.18	0.33
7/11/2017 0:00	7/12/2017 0:00	Perdue	Filter 2	0.08	0.13	0.28
7/12/2017 0:00	7/13/2017 0:00	Perdue	Filter 2	0.12	0.24	0.50
7/13/2017 0:00	7/14/2017 0:00	Perdue	Filter 2	0.08	0.12	0.17
7/14/2017 0:00	7/15/2017 0:00	Perdue	Filter 2	0.06	0.14	0.25
7/15/2017 0:00	7/16/2017 0:00	Perdue	Filter 2	0.10	0.14	0.23
7/16/2017 0:00	7/17/2017 0:00	Perdue	Filter 2	0.06	0.08	0.13
7/17/2017 0:00	7/18/2017 0:00	Perdue	Filter 2	0.05	0.13	0.26
7/18/2017 0:00	7/19/2017 0:00	Perdue	Filter 2	0.08	0.16	0.23
7/19/2017 0:00	7/20/2017 0:00	Perdue	Filter 2	0.12	0.17	0.27
7/20/2017 0:00	7/21/2017 0:00	Perdue	Filter 2	0.08	0.14	0.19
7/21/2017 0:00	7/22/2017 0:00	Perdue	Filter 2	0.09	0.15	0.31
7/22/2017 0:00	7/23/2017 0:00	Perdue	Filter 2	0.07	0.10	0.12
7/23/2017 0:00	7/24/2017 0:00	Perdue	Filter 2	0.07	0.14	0.24
7/24/2017 0:00	7/25/2017 0:00	Perdue	Filter 2	0.05	0.10	0.15
7/25/2017 0:00	7/26/2017 0:00	Perdue	Filter 2	0.07	0.15	0.27
7/26/2017 0:00	7/27/2017 0:00	Perdue	Filter 2	0.00	0.13	0.17
7/27/2017 0:00	7/28/2017 0:00	Perdue	Filter 2	0.09	0.11	0.12
7/28/2017 0:00	7/29/2017 0:00	Perdue	Filter 2	0.09	0.20	0.27
7/29/2017 0:00	7/30/2017 0:00	Perdue	Filter 2	0.12	0.15	0.20
7/30/2017 0:00	7/31/2017 0:00	Perdue	Filter 2	0.04	0.12	0.17
7/31/2017 0:00	8/1/2017 0:00	Perdue	Filter 2	0.06	0.10	0.31
8/1/2017 0:00	8/2/2017 0:00	Perdue	Filter 2	0.08	0.11	0.15
8/2/2017 0:00	8/3/2017 0:00	Perdue	Filter 2	0.10	0.13	0.21
8/3/2017 0:00	8/4/2017 0:00	Perdue	Filter 2	0.10	0.23	0.34
8/4/2017 0:00	8/5/2017 0:00	Perdue	Filter 2	0.09	0.11	0.14
8/5/2017 0:00	8/6/2017 0:00	Perdue	Filter 2	0.06	0.11	0.16
8/6/2017 0:00	8/7/2017 0:00	Perdue	Filter 2	0.09	0.16	0.45

8/7/2017 0:00	8/8/2017 0:00	Perdue	Filter 2	0.10	0.12	0.16
8/8/2017 0:00	8/9/2017 0:00	Perdue	Filter 2	0.11	0.20	0.31
8/9/2017 0:00	8/10/2017 0:00	Perdue	Filter 2	0.10	0.11	0.12
8/10/2017 0:00	8/11/2017 0:00	Perdue	Filter 2	0.07	0.14	1.00
8/11/2017 0:00	8/12/2017 0:00	Perdue	Filter 2	0.17	0.21	0.25
8/12/2017 0:00	8/13/2017 0:00	Perdue	Filter 2	0.16	0.20	0.40
8/13/2017 0:00	8/14/2017 0:00	Perdue	Filter 2	0.13	0.14	0.16
8/14/2017 0:00	8/15/2017 0:00	Perdue	Filter 2	0.13	0.15	0.54
8/15/2017 0:00	8/16/2017 0:00	Perdue	Filter 2	0.11	0.17	0.21
8/16/2017 0:00	8/17/2017 0:00	Perdue	Filter 2	0.10	0.11	0.20
8/17/2017 0:00	8/18/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
8/18/2017 0:00	8/19/2017 0:00	Perdue	Filter 2	0.10	0.11	0.14
8/19/2017 0:00	8/20/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
8/20/2017 0:00	8/21/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
8/21/2017 0:00	8/22/2017 0:00	Perdue	Filter 2	0.10	0.10	0.11
8/22/2017 0:00	8/23/2017 0:00	Perdue	Filter 2	0.10	0.10	0.12
8/23/2017 0:00	8/24/2017 0:00	Perdue	Filter 2	0.10	0.11	0.12
8/24/2017 0:00	8/25/2017 0:00	Perdue	Filter 2	0.10	0.11	0.13
8/25/2017 0:00	8/26/2017 0:00	Perdue	Filter 2	0.10	0.11	0.14
8/26/2017 0:00	8/27/2017 0:00	Perdue	Filter 2	0.10	0.11	0.12
8/27/2017 0:00	8/28/2017 0:00	Perdue	Filter 2	0.10	0.11	0.13
8/28/2017 0:00	8/29/2017 0:00	Perdue	Filter 2	0.10	0.11	0.13
8/29/2017 0:00	8/30/2017 0:00	Perdue	Filter 2	0.11	0.13	1.00
8/30/2017 0:00	8/31/2017 0:00	Perdue	Filter 2	0.12	0.13	0.27
8/31/2017 0:00	9/1/2017 0:00	Perdue	Filter 2	0.11	0.12	0.18
9/1/2017 0:00	9/2/2017 0:00	Perdue	Filter 2	0.08	0.11	1.00
9/2/2017 0:00	9/3/2017 0:00	Perdue	Filter 2	0.08	0.10	0.20
9/3/2017 0:00	9/4/2017 0:00	Perdue	Filter 2	0.08	0.10	0.13
9/4/2017 0:00	9/5/2017 0:00	Perdue	Filter 2	0.08	0.08	0.09
9/5/2017 0:00	9/6/2017 0:00	Perdue	Filter 2	0.07	0.10	1.00
9/6/2017 0:00	9/7/2017 0:00	Perdue	Filter 2	0.07	0.08	0.12
9/7/2017 0:00	9/8/2017 0:00	Perdue	Filter 2	0.07	0.09	0.13
9/8/2017 0:00	9/9/2017 0:00	Perdue	Filter 2	0.08	0.09	0.12
9/9/2017 0:00	9/10/2017 0:00	Perdue	Filter 2	0.08	0.09	0.10
9/10/2017 0:00	9/11/2017 0:00	Perdue	Filter 2	0.08	0.10	0.17
9/11/2017 0:00	9/12/2017 0:00	Perdue	Filter 2	0.08	0.22	0.55
9/12/2017 0:00	9/13/2017 0:00	Perdue	Filter 2	0.08	0.09	0.11
9/13/2017 0:00	9/14/2017 0:00	Perdue	Filter 2	0.08	0.09	0.21
9/14/2017 0:00	9/15/2017 0:00	Perdue	Filter 2	0.08	0.10	0.24
9/15/2017 0:00	9/16/2017 0:00	Perdue	Filter 2	0.08	0.10	0.28
9/16/2017 0:00	9/17/2017 0:00	Perdue	Filter 2	0.10	0.16	0.23
9/17/2017 0:00	9/18/2017 0:00	Perdue	Filter 2	0.10	0.14	0.19
9/18/2017 0:00	9/19/2017 0:00	Perdue	Filter 2	0.10	0.10	0.15
9/19/2017 0:00	9/20/2017 0:00	Perdue	Filter 2	0.11	0.13	0.22
9/20/2017 0:00	9/21/2017 0:00	Perdue	Filter 2	0.13	0.14	0.17
9/21/2017 0:00	9/22/2017 0:00	Perdue	Filter 2	0.11	0.13	0.16
9/22/2017 0:00	9/23/2017 0:00	Perdue	Filter 2	0.13	0.17	0.35
9/23/2017 0:00	9/24/2017 0:00	Perdue	Filter 2	0.15	0.26	0.35
9/24/2017 0:00	9/25/2017 0:00	Perdue	Filter 2	0.15	0.18	0.19
9/25/2017 0:00	9/26/2017 0:00	Perdue	Filter 2	0.14	0.18	0.25
9/26/2017 0:00	9/27/2017 0:00	Perdue	Filter 2	0.14	0.15	0.22
9/27/2017 0:00	9/28/2017 0:00	Perdue	Filter 2	0.13	0.15	0.16
9/28/2017 0:00	9/29/2017 0:00	Perdue	Filter 2	0.14	0.18	0.87
9/29/2017 0:00	9/30/2017 0:00	Perdue	Filter 2	0.17	0.19	0.24
9/30/2017 0:00	10/1/2017 0:00	Perdue	Filter 2	0.16	0.18	0.22
10/1/2017 0:00	10/2/2017 0:00	Perdue	Filter 2	0.16	0.18	0.30
10/2/2017 0:00	10/3/2017 0:00	Perdue	Filter 2	0.15	0.17	0.21
10/3/2017 0:00	10/4/2017 0:00	Perdue	Filter 2	0.16	0.18	0.24
10/4/2017 0:00	10/5/2017 0:00	Perdue	Filter 2	0.09	0.16	0.19
10/5/2017 0:00	10/6/2017 0:00	Perdue	Filter 2	0.06	0.08	0.11
10/6/2017 0:00	10/7/2017 0:00	Perdue	Filter 2	0.04	0.06	0.17
10/7/2017 0:00	10/8/2017 0:00	Perdue	Filter 2	0.04	0.06	0.13
10/8/2017 0:00	10/9/2017 0:00	Perdue	Filter 2	0.04	0.06	0.15
10/9/2017 0:00	10/10/2017 0:00	Perdue	Filter 2	0.03	0.07	1.00
10/10/2017 0:00	10/11/2017 0:00	Perdue	Filter 2	0.09	0.12	0.12
10/11/2017 0:00	10/12/2017 0:00	Perdue	Filter 2	0.03	0.07	0.59
10/12/2017 0:00	10/13/2017 0:00	Perdue	Filter 2	0.00	0.06	1.00
10/13/2017 0:00	10/14/2017 0:00	Perdue	Filter 2	0.06	0.08	0.09
10/14/2017 0:00	10/15/2017 0:00	Perdue	Filter 2	0.06	0.08	1.00
10/15/2017 0:00	10/16/2017 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/16/2017 0:00	10/17/2017 0:00	Perdue	Filter 2	0.08	0.09	0.10
10/17/2017 0:00	10/18/2017 0:00	Perdue	Filter 2	0.08	0.13	0.23
10/18/2017 0:00	10/19/2017 0:00	Perdue	Filter 2	0.12	0.14	0.16

10/19/2017 0:00	10/20/2017 0:00	Perdue	Filter 2	0.10	0.13	0.14
10/20/2017 0:00	10/21/2017 0:00	Perdue	Filter 2	0.10	0.12	0.13
10/21/2017 0:00	10/22/2017 0:00	Perdue	Filter 2	0.08	0.11	0.13
10/22/2017 0:00	10/23/2017 0:00	Perdue	Filter 2	0.08	0.09	0.33
10/23/2017 0:00	10/24/2017 0:00	Perdue	Filter 2	0.07	0.09	0.19
10/24/2017 0:00	10/25/2017 0:00	Perdue	Filter 2	0.08	0.21	1.00
10/25/2017 0:00	10/26/2017 0:00	Perdue	Filter 2	0.11	0.14	0.18
10/26/2017 0:00	10/27/2017 0:00	Perdue	Filter 2	0.10	0.12	0.15
10/27/2017 0:00	10/28/2017 0:00	Perdue	Filter 2	0.10	0.12	0.13
10/28/2017 0:00	10/29/2017 0:00	Perdue	Filter 2	0.10	0.11	0.13
10/29/2017 0:00	10/30/2017 0:00	Perdue	Filter 2	0.11	0.12	0.17
10/30/2017 0:00	10/31/2017 0:00	Perdue	Filter 2	0.12	0.12	0.16
10/31/2017 0:00	11/1/2017 0:00	Perdue	Filter 2	0.12	0.16	1.00
11/1/2017 0:00	11/2/2017 0:00	Perdue	Filter 2	0.13	0.16	0.25
11/2/2017 0:00	11/3/2017 0:00	Perdue	Filter 2	0.15	0.18	0.25
11/3/2017 0:00	11/4/2017 0:00	Perdue	Filter 2	0.13	0.15	0.20
11/4/2017 0:00	11/5/2017 0:00	Perdue	Filter 2	0.11	0.13	0.23
11/5/2017 0:00	11/6/2017 0:00	Perdue	Filter 2	0.11	0.12	0.15
11/6/2017 0:00	11/7/2017 0:00	Perdue	Filter 2	0.12	0.13	0.14
11/7/2017 0:00	11/8/2017 0:00	Perdue	Filter 2	0.12	0.13	0.18
11/8/2017 0:00	11/9/2017 0:00	Perdue	Filter 2	0.12	0.13	0.21
11/9/2017 0:00	11/10/2017 0:00	Perdue	Filter 2	0.13	0.15	0.22
11/10/2017 0:00	11/11/2017 0:00	Perdue	Filter 2	0.14	0.15	0.18
11/11/2017 0:00	11/12/2017 0:00	Perdue	Filter 2	0.13	0.15	0.20
11/12/2017 0:00	11/13/2017 0:00	Perdue	Filter 2	0.13	0.14	0.18
11/13/2017 0:00	11/14/2017 0:00	Perdue	Filter 2	0.13	0.14	0.22
11/14/2017 0:00	11/15/2017 0:00	Perdue	Filter 2	0.12	0.14	0.16
11/15/2017 0:00	11/16/2017 0:00	Perdue	Filter 2	0.13	0.15	0.29
11/16/2017 0:00	11/17/2017 0:00	Perdue	Filter 2	0.15	0.17	0.21
11/17/2017 0:00	11/18/2017 0:00	Perdue	Filter 2	0.16	0.21	0.31
11/18/2017 0:00	11/19/2017 0:00	Perdue	Filter 2	0.13	0.15	0.16
11/19/2017 0:00	11/20/2017 0:00	Perdue	Filter 2	0.12	0.13	0.14
11/20/2017 0:00	11/21/2017 0:00	Perdue	Filter 2	0.12	0.13	0.15
11/21/2017 0:00	11/22/2017 0:00	Perdue	Filter 2	0.11	0.13	0.15
11/22/2017 0:00	11/23/2017 0:00	Perdue	Filter 2	0.11	0.15	0.40
11/23/2017 0:00	11/24/2017 0:00	Perdue	Filter 2	0.16	0.20	0.27
11/24/2017 0:00	11/25/2017 0:00	Perdue	Filter 2	0.13	0.16	0.18
11/25/2017 0:00	11/26/2017 0:00	Perdue	Filter 2	0.13	0.15	0.17
11/26/2017 0:00	11/27/2017 0:00	Perdue	Filter 2	0.12	0.13	0.19
11/27/2017 0:00	11/28/2017 0:00	Perdue	Filter 2	0.11	0.13	0.22
11/28/2017 0:00	11/29/2017 0:00	Perdue	Filter 2	0.14	0.16	0.26
11/29/2017 0:00	11/30/2017 0:00	Perdue	Filter 2	0.13	0.16	0.25
11/30/2017 0:00	12/1/2017 0:00	Perdue	Filter 2	0.13	0.14	0.20
12/1/2017 0:00	12/2/2017 0:00	Perdue	Filter 2	0.13	0.15	0.58
12/2/2017 0:00	12/3/2017 0:00	Perdue	Filter 2	0.13	0.16	0.25
12/3/2017 0:00	12/4/2017 0:00	Perdue	Filter 2	0.15	0.17	0.20
12/4/2017 0:00	12/5/2017 0:00	Perdue	Filter 2	0.15	0.16	0.31
12/5/2017 0:00	12/6/2017 0:00	Perdue	Filter 2	0.14	0.16	0.17
12/6/2017 0:00	12/7/2017 0:00	Perdue	Filter 2	0.15	0.17	0.30
12/7/2017 0:00	12/8/2017 0:00	Perdue	Filter 2	0.19	0.21	0.25
12/8/2017 0:00	12/9/2017 0:00	Perdue	Filter 2	0.19	0.21	0.26
12/9/2017 0:00	12/10/2017 0:00	Perdue	Filter 2	0.16	0.19	0.25
12/10/2017 0:00	12/11/2017 0:00	Perdue	Filter 2	0.18	0.22	0.28
12/11/2017 0:00	12/12/2017 0:00	Perdue	Filter 2	0.17	0.18	0.32
12/12/2017 0:00	12/13/2017 0:00	Perdue	Filter 2	0.16	0.18	0.20
12/13/2017 0:00	12/14/2017 0:00	Perdue	Filter 2	0.17	0.23	0.31
12/14/2017 0:00	12/15/2017 0:00	Perdue	Filter 2	0.14	0.24	1.00
12/15/2017 0:00	12/16/2017 0:00	Perdue	Filter 2	0.00	0.13	0.30
12/16/2017 0:00	12/17/2017 0:00	Perdue	Filter 2	0.11	0.12	0.15
12/17/2017 0:00	12/18/2017 0:00	Perdue	Filter 2	0.11	0.11	0.11
12/18/2017 0:00	12/19/2017 0:00	Perdue	Filter 2	0.09	0.12	0.16
12/19/2017 0:00	12/20/2017 0:00	Perdue	Filter 2	0.09	0.11	0.12
12/20/2017 0:00	12/21/2017 0:00	Perdue	Filter 2	0.09	0.12	0.40
12/21/2017 0:00	12/22/2017 0:00	Perdue	Filter 2	0.10	0.13	0.18
12/22/2017 0:00	12/23/2017 0:00	Perdue	Filter 2	0.10	0.12	0.14
12/23/2017 0:00	12/24/2017 0:00	Perdue	Filter 2	0.10	0.12	0.15
12/24/2017 0:00	12/25/2017 0:00	Perdue	Filter 2	0.10	0.12	0.14
12/25/2017 0:00	12/26/2017 0:00	Perdue	Filter 2	0.10	0.12	0.13
12/26/2017 0:00	12/27/2017 0:00	Perdue	Filter 2	0.08	0.10	1.00
12/27/2017 0:00	12/28/2017 0:00	Perdue	Filter 2	0.07	0.12	0.60
12/28/2017 0:00	12/29/2017 0:00	Perdue	Filter 2	0.09	0.12	0.15
12/29/2017 0:00	12/30/2017 0:00	Perdue	Filter 2	0.09	0.10	0.12
12/30/2017 0:00	12/31/2017 0:00	Perdue	Filter 2	0.09	0.11	0.13

12/31/2017 0:00	1/1/2018 0:00	Perdue	Filter 2	0.08	0.10	0.28
1/1/2018 0:00	1/2/2018 0:00	Perdue	Filter 2	0.07	0.09	0.16
1/2/2018 0:00	1/3/2018 0:00	Perdue	Filter 2	0.07	0.10	0.21
1/3/2018 0:00	1/4/2018 0:00	Perdue	Filter 2	0.12	0.14	0.17
1/4/2018 0:00	1/5/2018 0:00	Perdue	Filter 2	0.09	0.13	0.24
1/5/2018 0:00	1/6/2018 0:00	Perdue	Filter 2	0.06	0.09	0.20
1/6/2018 0:00	1/7/2018 0:00	Perdue	Filter 2	0.06	0.13	0.21
1/7/2018 0:00	1/8/2018 0:00	Perdue	Filter 2	0.10	0.12	0.14
1/8/2018 0:00	1/9/2018 0:00	Perdue	Filter 2	0.09	0.11	0.15
1/9/2018 0:00	1/10/2018 0:00	Perdue	Filter 2	0.07	0.08	0.10
1/10/2018 0:00	1/11/2018 0:00	Perdue	Filter 2	0.07	0.12	0.28
1/11/2018 0:00	1/12/2018 0:00	Perdue	Filter 2	0.10	0.13	0.28
1/12/2018 0:00	1/13/2018 0:00	Perdue	Filter 2	0.09	0.12	0.16
1/13/2018 0:00	1/14/2018 0:00	Perdue	Filter 2	0.09	0.12	0.16
1/14/2018 0:00	1/15/2018 0:00	Perdue	Filter 2	0.09	0.10	0.13
1/15/2018 0:00	1/16/2018 0:00	Perdue	Filter 2	0.08	0.10	0.17
1/16/2018 0:00	1/17/2018 0:00	Perdue	Filter 2	0.08	0.11	0.24
1/17/2018 0:00	1/18/2018 0:00	Perdue	Filter 2	0.09	0.12	0.16
1/18/2018 0:00	1/19/2018 0:00	Perdue	Filter 2	0.12	0.19	0.27
1/19/2018 0:00	1/20/2018 0:00	Perdue	Filter 2	0.13	0.17	0.19
1/20/2018 0:00	1/21/2018 0:00	Perdue	Filter 2	0.10	0.13	0.21
1/21/2018 0:00	1/22/2018 0:00	Perdue	Filter 2	0.09	0.10	0.16
1/22/2018 0:00	1/23/2018 0:00	Perdue	Filter 2	0.08	0.09	0.14
1/23/2018 0:00	1/24/2018 0:00	Perdue	Filter 2	0.07	0.09	0.23
1/24/2018 0:00	1/25/2018 0:00	Perdue	Filter 2	0.09	0.13	0.17
1/25/2018 0:00	1/26/2018 0:00	Perdue	Filter 2	0.10	0.12	0.16
1/26/2018 0:00	1/27/2018 0:00	Perdue	Filter 2	0.09	0.11	0.17
1/27/2018 0:00	1/28/2018 0:00	Perdue	Filter 2	0.08	0.10	0.11
1/28/2018 0:00	1/29/2018 0:00	Perdue	Filter 2	0.08	0.10	0.17
1/29/2018 0:00	1/30/2018 0:00	Perdue	Filter 2	0.08	0.09	0.14
1/30/2018 0:00	1/31/2018 0:00	Perdue	Filter 2	0.08	0.09	0.18
1/31/2018 0:00	2/1/2018 0:00	Perdue	Filter 2	0.12	0.17	0.54
2/1/2018 0:00	2/2/2018 0:00	Perdue	Filter 2	0.11	0.14	0.20
2/2/2018 0:00	2/3/2018 0:00	Perdue	Filter 2	0.11	0.14	0.36
2/3/2018 0:00	2/4/2018 0:00	Perdue	Filter 2	0.12	0.14	0.19
2/4/2018 0:00	2/5/2018 0:00	Perdue	Filter 2	0.12	0.18	0.39
2/5/2018 0:00	2/6/2018 0:00	Perdue	Filter 2	0.09	0.11	0.14
2/6/2018 0:00	2/7/2018 0:00	Perdue	Filter 2	0.08	0.12	0.33
2/7/2018 0:00	2/8/2018 0:00	Perdue	Filter 2	0.08	0.16	0.33
2/8/2018 0:00	2/9/2018 0:00	Perdue	Filter 2	0.18	0.20	1.00
2/9/2018 0:00	2/10/2018 0:00	Perdue	Filter 2	0.17	0.19	0.26
2/10/2018 0:00	2/11/2018 0:00	Perdue	Filter 2	0.18	0.19	0.21
2/11/2018 0:00	2/12/2018 0:00	Perdue	Filter 2	0.18	0.21	0.26
2/12/2018 0:00	2/13/2018 0:00	Perdue	Filter 2	0.21	0.24	0.38
2/13/2018 0:00	2/14/2018 0:00	Perdue	Filter 2	0.18	0.20	0.35
2/14/2018 0:00	2/15/2018 0:00	Perdue	Filter 2	0.17	0.19	0.24
2/15/2018 0:00	2/16/2018 0:00	Perdue	Filter 2	0.17	0.20	0.34
2/16/2018 0:00	2/17/2018 0:00	Perdue	Filter 2	0.19	0.27	0.34
2/17/2018 0:00	2/18/2018 0:00	Perdue	Filter 2	0.18	0.21	0.73
2/18/2018 0:00	2/19/2018 0:00	Perdue	Filter 2	0.18	0.22	0.25
2/19/2018 0:00	2/20/2018 0:00	Perdue	Filter 2	0.15	0.20	0.50
2/20/2018 0:00	2/21/2018 0:00	Perdue	Filter 2	0.00	0.15	1.00
2/21/2018 0:00	2/22/2018 0:00	Perdue	Filter 2	0.00	0.02	0.19
2/22/2018 0:00	2/23/2018 0:00	Perdue	Filter 2	0.05	0.13	0.18
2/23/2018 0:00	2/24/2018 0:00	Perdue	Filter 2	0.13	0.14	0.15
2/24/2018 0:00	2/25/2018 0:00	Perdue	Filter 2	0.11	0.13	0.15
2/25/2018 0:00	2/26/2018 0:00	Perdue	Filter 2	0.12	0.13	0.15
2/26/2018 0:00	2/27/2018 0:00	Perdue	Filter 2	0.11	0.12	0.15
2/27/2018 0:00	2/28/2018 0:00	Perdue	Filter 2	0.11	0.12	0.14
2/28/2018 0:00	3/1/2018 0:00	Perdue	Filter 2	0.11	0.11	0.23
3/1/2018 0:00	3/2/2018 0:00	Perdue	Filter 2	0.14	0.17	0.23
3/2/2018 0:00	3/3/2018 0:00	Perdue	Filter 2	0.13	0.14	0.16
3/3/2018 0:00	3/4/2018 0:00	Perdue	Filter 2	0.13	0.14	0.16
3/4/2018 0:00	3/5/2018 0:00	Perdue	Filter 2	0.12	0.13	0.14
3/5/2018 0:00	3/6/2018 0:00	Perdue	Filter 2	0.12	0.13	0.16
3/6/2018 0:00	3/7/2018 0:00	Perdue	Filter 2	0.11	0.12	0.13
3/7/2018 0:00	3/8/2018 0:00	Perdue	Filter 2	0.11	0.12	0.13
3/8/2018 0:00	3/9/2018 0:00	Perdue	Filter 2	0.12	0.18	0.22
3/9/2018 0:00	3/10/2018 0:00	Perdue	Filter 2	0.15	0.16	0.18
3/10/2018 0:00	3/11/2018 0:00	Perdue	Filter 2	0.13	0.14	0.17
3/11/2018 0:00	3/12/2018 0:00	Perdue	Filter 2	0.13	0.14	0.16
3/12/2018 0:00	3/13/2018 0:00	Perdue	Filter 2	0.12	0.14	0.16
3/13/2018 0:00	3/14/2018 0:00	Perdue	Filter 2	0.12	0.13	0.13

3/14/2018 0:00	3/15/2018 0:00	Perdue	Filter 2	0.11	0.15	0.30
3/15/2018 0:00	3/16/2018 0:00	Perdue	Filter 2	0.11	0.16	0.22
3/16/2018 0:00	3/17/2018 0:00	Perdue	Filter 2	0.13	0.15	0.22
3/17/2018 0:00	3/18/2018 0:00	Perdue	Filter 2	0.12	0.14	0.15
3/18/2018 0:00	3/19/2018 0:00	Perdue	Filter 2	0.13	0.13	0.15
3/19/2018 0:00	3/20/2018 0:00	Perdue	Filter 2	0.11	0.13	0.16
3/20/2018 0:00	3/21/2018 0:00	Perdue	Filter 2	0.11	0.12	0.14
3/21/2018 0:00	3/22/2018 0:00	Perdue	Filter 2	0.11	0.17	0.29
3/22/2018 0:00	3/23/2018 0:00	Perdue	Filter 2	0.12	0.14	0.16
3/23/2018 0:00	3/24/2018 0:00	Perdue	Filter 2	0.12	0.13	0.22
3/24/2018 0:00	3/25/2018 0:00	Perdue	Filter 2	0.12	0.13	0.14
3/25/2018 0:00	3/26/2018 0:00	Perdue	Filter 2	0.11	0.12	0.13
3/26/2018 0:00	3/27/2018 0:00	Perdue	Filter 2	0.11	0.12	0.21
3/27/2018 0:00	3/28/2018 0:00	Perdue	Filter 2	0.10	0.11	0.13
3/28/2018 0:00	3/29/2018 0:00	Perdue	Filter 2	0.10	0.13	0.48
3/29/2018 0:00	3/30/2018 0:00	Perdue	Filter 2	0.08	0.12	0.21
3/30/2018 0:00	3/31/2018 0:00	Perdue	Filter 2	0.07	0.09	0.16
3/31/2018 0:00	4/1/2018 0:00	Perdue	Filter 2	0.04	0.07	0.09
4/1/2018 0:00	4/2/2018 0:00	Perdue	Filter 2	0.05	0.05	0.06
4/2/2018 0:00	4/3/2018 0:00	Perdue	Filter 2	0.03	0.11	0.32
4/3/2018 0:00	4/4/2018 0:00	Perdue	Filter 2	0.16	0.18	0.23
4/4/2018 0:00	4/5/2018 0:00	Perdue	Filter 2	0.09	0.15	0.95
4/5/2018 0:00	4/6/2018 0:00	Perdue	Filter 2	0.08	0.10	0.99
4/6/2018 0:00	4/7/2018 0:00	Perdue	Filter 2	0.08	0.11	1.00
4/7/2018 0:00	4/8/2018 0:00	Perdue	Filter 2	0.11	0.13	0.16
4/8/2018 0:00	4/9/2018 0:00	Perdue	Filter 2	0.10	0.11	0.13
4/9/2018 0:00	4/10/2018 0:00	Perdue	Filter 2	0.09	0.12	0.66
4/10/2018 0:00	4/11/2018 0:00	Perdue	Filter 2	0.09	0.10	1.00
4/11/2018 0:00	4/12/2018 0:00	Perdue	Filter 2	0.09	0.12	0.53
4/12/2018 0:00	4/13/2018 0:00	Perdue	Filter 2	0.11	0.14	0.19
4/13/2018 0:00	4/14/2018 0:00	Perdue	Filter 2	0.10	0.12	0.28
4/14/2018 0:00	4/15/2018 0:00	Perdue	Filter 2	0.10	0.10	0.16
4/15/2018 0:00	4/16/2018 0:00	Perdue	Filter 2	0.10	0.11	1.00
4/16/2018 0:00	4/17/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
4/17/2018 0:00	4/18/2018 0:00	Perdue	Filter 2	0.08	0.15	0.77
4/18/2018 0:00	4/19/2018 0:00	Perdue	Filter 2	0.13	0.15	0.22
4/19/2018 0:00	4/20/2018 0:00	Perdue	Filter 2	0.11	0.15	0.22
4/20/2018 0:00	4/21/2018 0:00	Perdue	Filter 2	0.11	0.12	0.99
4/21/2018 0:00	4/22/2018 0:00	Perdue	Filter 2	0.11	0.13	1.00
4/22/2018 0:00	4/23/2018 0:00	Perdue	Filter 2	0.17	0.20	0.24
4/23/2018 0:00	4/24/2018 0:00	Perdue	Filter 2	0.16	0.17	0.19
4/24/2018 0:00	4/25/2018 0:00	Perdue	Filter 2	0.14	0.16	0.41
4/25/2018 0:00	4/26/2018 0:00	Perdue	Filter 2	0.12	0.14	1.00
4/26/2018 0:00	4/27/2018 0:00	Perdue	Filter 2	0.10	0.12	1.00
4/27/2018 0:00	4/28/2018 0:00	Perdue	Filter 2	0.10	0.14	1.00
4/28/2018 0:00	4/29/2018 0:00	Perdue	Filter 2	0.14	0.18	0.22
4/29/2018 0:00	4/30/2018 0:00	Perdue	Filter 2	0.12	0.15	0.20
4/30/2018 0:00	5/1/2018 0:00	Perdue	Filter 2	0.12	0.14	0.17
5/1/2018 0:00	5/2/2018 0:00	Perdue	Filter 2	0.13	0.14	0.16
5/2/2018 0:00	5/3/2018 0:00	Perdue	Filter 2	0.13	0.21	0.38
5/3/2018 0:00	5/4/2018 0:00	Perdue	Filter 2	0.13	0.16	0.19
5/4/2018 0:00	5/5/2018 0:00	Perdue	Filter 2	0.13	0.16	0.19
5/5/2018 0:00	5/6/2018 0:00	Perdue	Filter 2	0.16	0.17	0.19
5/6/2018 0:00	5/7/2018 0:00	Perdue	Filter 2	0.17	0.18	0.29
5/7/2018 0:00	5/8/2018 0:00	Perdue	Filter 2	0.17	0.21	0.32
5/8/2018 0:00	5/9/2018 0:00	Perdue	Filter 2	0.17	0.28	1.00
5/9/2018 0:00	5/10/2018 0:00	Perdue	Filter 2	0.17	0.23	1.00
5/10/2018 0:00	5/11/2018 0:00	Perdue	Filter 2	0.20	0.22	0.26
5/11/2018 0:00	5/12/2018 0:00	Perdue	Filter 2	0.16	0.21	0.29
5/12/2018 0:00	5/13/2018 0:00	Perdue	Filter 2	0.18	0.20	0.28
5/13/2018 0:00	5/14/2018 0:00	Perdue	Filter 2	0.17	0.22	0.30
5/14/2018 0:00	5/15/2018 0:00	Perdue	Filter 2	0.17	0.19	0.37
5/15/2018 0:00	5/16/2018 0:00	Perdue	Filter 2	0.18	0.19	0.21
5/16/2018 0:00	5/17/2018 0:00	Perdue	Filter 2	0.15	0.17	0.19
5/17/2018 0:00	5/18/2018 0:00	Perdue	Filter 2	0.14	0.15	0.17
5/18/2018 0:00	5/19/2018 0:00	Perdue	Filter 2	0.14	0.17	0.25
5/19/2018 0:00	5/20/2018 0:00	Perdue	Filter 2	0.15	0.16	0.21
5/20/2018 0:00	5/21/2018 0:00	Perdue	Filter 2	0.13	0.15	0.42
5/21/2018 0:00	5/22/2018 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/22/2018 0:00	5/23/2018 0:00	Perdue	Filter 2	0.12	0.13	0.14
5/23/2018 0:00	5/24/2018 0:00	Perdue	Filter 2	0.11	0.12	0.31
5/24/2018 0:00	5/25/2018 0:00	Perdue	Filter 2	0.11	0.12	0.14
5/25/2018 0:00	5/26/2018 0:00	Perdue	Filter 2	0.13	0.14	0.20

5/26/2018 0:00	5/27/2018 0:00	Perdue	Filter 2	0.12	0.13	0.19
5/27/2018 0:00	5/28/2018 0:00	Perdue	Filter 2	0.12	0.13	0.17
5/28/2018 0:00	5/29/2018 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/29/2018 0:00	5/30/2018 0:00	Perdue	Filter 2	0.12	0.13	0.14
5/30/2018 0:00	5/31/2018 0:00	Perdue	Filter 2	0.13	0.14	0.14
5/31/2018 0:00	6/1/2018 0:00	Perdue	Filter 2	0.14	0.14	0.14
6/1/2018 0:00	6/2/2018 0:00	Perdue	Filter 2	0.13	0.15	0.23
6/2/2018 0:00	6/3/2018 0:00	Perdue	Filter 2	0.14	0.15	0.17
6/3/2018 0:00	6/4/2018 0:00	Perdue	Filter 2	0.12	0.14	0.20
6/4/2018 0:00	6/5/2018 0:00	Perdue	Filter 2	0.12	0.13	0.15
6/5/2018 0:00	6/6/2018 0:00	Perdue	Filter 2	0.12	0.13	0.14
6/6/2018 0:00	6/7/2018 0:00	Perdue	Filter 2	0.13	0.15	0.28
6/7/2018 0:00	6/8/2018 0:00	Perdue	Filter 2	0.15	0.18	0.21
6/8/2018 0:00	6/9/2018 0:00	Perdue	Filter 2	0.13	0.15	0.19
6/9/2018 0:00	6/10/2018 0:00	Perdue	Filter 2	0.12	0.14	0.17
6/10/2018 0:00	6/11/2018 0:00	Perdue	Filter 2	0.13	0.15	0.20
6/11/2018 0:00	6/12/2018 0:00	Perdue	Filter 2	0.13	0.19	0.28
6/12/2018 0:00	6/13/2018 0:00	Perdue	Filter 2	0.15	0.21	0.44
6/13/2018 0:00	6/14/2018 0:00	Perdue	Filter 2	0.13	0.17	0.71
6/14/2018 0:00	6/15/2018 0:00	Perdue	Filter 2	0.14	0.17	0.26
6/15/2018 0:00	6/16/2018 0:00	Perdue	Filter 2	0.16	0.20	0.26
6/16/2018 0:00	6/17/2018 0:00	Perdue	Filter 2	0.17	0.19	0.28
6/17/2018 0:00	6/18/2018 0:00	Perdue	Filter 2	0.15	0.16	0.30
6/18/2018 0:00	6/19/2018 0:00	Perdue	Filter 2	0.13	0.16	0.24
6/19/2018 0:00	6/20/2018 0:00	Perdue	Filter 2	0.13	0.14	0.16
6/20/2018 0:00	6/21/2018 0:00	Perdue	Filter 2	0.15	0.17	0.65
6/21/2018 0:00	6/22/2018 0:00	Perdue	Filter 2	0.15	0.19	0.23
6/22/2018 0:00	6/23/2018 0:00	Perdue	Filter 2	0.15	0.17	0.22
6/23/2018 0:00	6/24/2018 0:00	Perdue	Filter 2	0.15	0.17	0.94
6/24/2018 0:00	6/25/2018 0:00	Perdue	Filter 2	0.17	0.18	0.27
6/25/2018 0:00	6/26/2018 0:00	Perdue	Filter 2	0.15	0.18	0.25
6/26/2018 0:00	6/27/2018 0:00	Perdue	Filter 2	0.18	0.22	0.26
6/27/2018 0:00	6/28/2018 0:00	Perdue	Filter 2	0.16	0.18	0.24
6/28/2018 0:00	6/29/2018 0:00	Perdue	Filter 2	0.15	0.18	0.42
6/29/2018 0:00	6/30/2018 0:00	Perdue	Filter 2	0.16	0.17	0.36
6/30/2018 0:00	7/1/2018 0:00	Perdue	Filter 2	0.15	0.18	0.29
7/1/2018 0:00	7/2/2018 0:00	Perdue	Filter 2	0.18	0.22	0.30
7/2/2018 0:00	7/3/2018 0:00	Perdue	Filter 2	0.15	0.18	0.27
7/3/2018 0:00	7/4/2018 0:00	Perdue	Filter 2	0.15	0.17	0.82
7/4/2018 0:00	7/5/2018 0:00	Perdue	Filter 2	0.15	0.18	0.35
7/5/2018 0:00	7/6/2018 0:00	Perdue	Filter 2	0.17	0.19	0.52
7/6/2018 0:00	7/7/2018 0:00	Perdue	Filter 2	0.19	0.21	0.46
7/7/2018 0:00	7/8/2018 0:00	Perdue	Filter 2	0.16	0.20	0.40
7/8/2018 0:00	7/9/2018 0:00	Perdue	Filter 2	0.16	0.18	0.26
7/9/2018 0:00	7/10/2018 0:00	Perdue	Filter 2	0.13	0.16	0.20
7/10/2018 0:00	7/11/2018 0:00	Perdue	Filter 2	0.13	0.17	0.26
7/11/2018 0:00	7/12/2018 0:00	Perdue	Filter 2	0.17	0.20	0.35
7/12/2018 0:00	7/13/2018 0:00	Perdue	Filter 2	0.17	0.19	0.24
7/13/2018 0:00	7/14/2018 0:00	Perdue	Filter 2	0.18	0.21	0.24
7/14/2018 0:00	7/15/2018 0:00	Perdue	Filter 2	0.22	0.24	0.26
7/15/2018 0:00	7/16/2018 0:00	Perdue	Filter 2	0.22	0.25	0.37
7/16/2018 0:00	7/17/2018 0:00	Perdue	Filter 2	0.16	0.22	0.27
7/17/2018 0:00	7/18/2018 0:00	Perdue	Filter 2	0.17	0.19	0.24
7/18/2018 0:00	7/19/2018 0:00	Perdue	Filter 2	0.16	0.18	0.21
7/19/2018 0:00	7/20/2018 0:00	Perdue	Filter 2	0.10	0.19	1.00
7/20/2018 0:00	7/21/2018 0:00	Perdue	Filter 2	0.06	0.07	0.10
7/21/2018 0:00	7/22/2018 0:00	Perdue	Filter 2	0.07	0.07	0.09
7/22/2018 0:00	7/23/2018 0:00	Perdue	Filter 2	0.07	0.08	0.18
7/23/2018 0:00	7/24/2018 0:00	Perdue	Filter 2	0.08	0.08	0.09
7/24/2018 0:00	7/25/2018 0:00	Perdue	Filter 2	0.08	0.08	0.09
7/25/2018 0:00	7/26/2018 0:00	Perdue	Filter 2	0.08	0.09	0.10
7/26/2018 0:00	7/27/2018 0:00	Perdue	Filter 2	0.09	0.09	0.10
7/27/2018 0:00	7/28/2018 0:00	Perdue	Filter 2	0.09	0.10	0.11
7/28/2018 0:00	7/29/2018 0:00	Perdue	Filter 2	0.08	0.10	0.10
7/29/2018 0:00	7/30/2018 0:00	Perdue	Filter 2	0.07	0.08	0.65
7/30/2018 0:00	7/31/2018 0:00	Perdue	Filter 2	0.07	0.08	1.00
7/31/2018 0:00	8/1/2018 0:00	Perdue	Filter 2	0.06	0.06	0.09
8/1/2018 0:00	8/2/2018 0:00	Perdue	Filter 2	0.05	0.07	0.09
8/2/2018 0:00	8/3/2018 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/3/2018 0:00	8/4/2018 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/4/2018 0:00	8/5/2018 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/5/2018 0:00	8/6/2018 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/6/2018 0:00	8/7/2018 0:00	Perdue	Filter 2	0.07	0.08	0.12

8/7/2018 0:00	8/8/2018 0:00	Perdue	Filter 2	0.07	0.07	0.08
8/8/2018 0:00	8/9/2018 0:00	Perdue	Filter 2	0.08	0.08	0.08
8/9/2018 0:00	8/10/2018 0:00	Perdue	Filter 2	0.06	0.07	0.10
8/10/2018 0:00	8/11/2018 0:00	Perdue	Filter 2	0.06	0.07	0.08
8/11/2018 0:00	8/12/2018 0:00	Perdue	Filter 2	0.06	0.07	0.08
8/12/2018 0:00	8/13/2018 0:00	Perdue	Filter 2	0.05	0.07	0.65
8/13/2018 0:00	8/14/2018 0:00	Perdue	Filter 2	0.05	0.06	0.17
8/14/2018 0:00	8/15/2018 0:00	Perdue	Filter 2	0.05	0.06	1.00
8/15/2018 0:00	8/16/2018 0:00	Perdue	Filter 2	0.05	0.06	1.00
8/16/2018 0:00	8/17/2018 0:00	Perdue	Filter 2	0.05	0.07	1.00
8/17/2018 0:00	8/18/2018 0:00	Perdue	Filter 2	0.05	0.07	0.10
8/18/2018 0:00	8/19/2018 0:00	Perdue	Filter 2	0.05	0.06	0.08
8/19/2018 0:00	8/20/2018 0:00	Perdue	Filter 2	0.05	0.06	0.08
8/20/2018 0:00	8/21/2018 0:00	Perdue	Filter 2	0.05	0.06	1.00
8/21/2018 0:00	8/22/2018 0:00	Perdue	Filter 2	0.05	0.06	0.58
8/22/2018 0:00	8/23/2018 0:00	Perdue	Filter 2	0.05	0.07	1.00
8/23/2018 0:00	8/24/2018 0:00	Perdue	Filter 2	0.05	0.07	1.00
8/24/2018 0:00	8/25/2018 0:00	Perdue	Filter 2	0.05	0.07	0.29
8/25/2018 0:00	8/26/2018 0:00	Perdue	Filter 2	0.05	0.06	0.09
8/26/2018 0:00	8/27/2018 0:00	Perdue	Filter 2	0.05	0.06	0.13
8/27/2018 0:00	8/28/2018 0:00	Perdue	Filter 2	0.05	0.06	1.00
8/28/2018 0:00	8/29/2018 0:00	Perdue	Filter 2	0.05	0.07	1.00
8/29/2018 0:00	8/30/2018 0:00	Perdue	Filter 2	0.09	0.10	0.51
8/30/2018 0:00	8/31/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
8/31/2018 0:00	9/1/2018 0:00	Perdue	Filter 2	0.11	0.13	0.25
9/1/2018 0:00	9/2/2018 0:00	Perdue	Filter 2	0.11	0.12	0.22
9/2/2018 0:00	9/3/2018 0:00	Perdue	Filter 2	0.10	0.12	0.98
9/3/2018 0:00	9/4/2018 0:00	Perdue	Filter 2	0.10	0.13	1.00
9/4/2018 0:00	9/5/2018 0:00	Perdue	Filter 2	0.10	0.11	1.00
9/5/2018 0:00	9/6/2018 0:00	Perdue	Filter 2	0.10	0.11	1.00
9/6/2018 0:00	9/7/2018 0:00	Perdue	Filter 2	0.09	0.13	1.00
9/7/2018 0:00	9/8/2018 0:00	Perdue	Filter 2	0.13	0.14	1.00
9/8/2018 0:00	9/9/2018 0:00	Perdue	Filter 2	0.13	0.14	1.00
9/9/2018 0:00	9/10/2018 0:00	Perdue	Filter 2	0.13	0.14	0.78
9/10/2018 0:00	9/11/2018 0:00	Perdue	Filter 2	0.12	0.14	1.00
9/11/2018 0:00	9/12/2018 0:00	Perdue	Filter 2	0.14	0.16	1.00
9/12/2018 0:00	9/13/2018 0:00	Perdue	Filter 2	0.14	0.15	1.00
9/13/2018 0:00	9/14/2018 0:00	Perdue	Filter 2	0.13	0.15	1.00
9/14/2018 0:00	9/15/2018 0:00	Perdue	Filter 2	0.14	0.17	1.00
9/15/2018 0:00	9/16/2018 0:00	Perdue	Filter 2	0.15	0.17	0.45
9/16/2018 0:00	9/17/2018 0:00	Perdue	Filter 2	0.17	0.18	0.28
9/17/2018 0:00	9/18/2018 0:00	Perdue	Filter 2	0.15	0.17	1.00
9/18/2018 0:00	9/19/2018 0:00	Perdue	Filter 2	0.14	0.17	1.00
9/19/2018 0:00	9/20/2018 0:00	Perdue	Filter 2	0.15	0.17	1.00
9/20/2018 0:00	9/21/2018 0:00	Perdue	Filter 2	0.15	0.17	0.30
9/21/2018 0:00	9/22/2018 0:00	Perdue	Filter 2	0.15	0.17	0.24
9/22/2018 0:00	9/23/2018 0:00	Perdue	Filter 2	0.15	0.17	0.29
9/23/2018 0:00	9/24/2018 0:00	Perdue	Filter 2	0.16	0.19	0.46
9/24/2018 0:00	9/25/2018 0:00	Perdue	Filter 2	0.17	0.19	0.29
9/25/2018 0:00	9/26/2018 0:00	Perdue	Filter 2	0.16	0.18	0.33
9/26/2018 0:00	9/27/2018 0:00	Perdue	Filter 2	0.17	0.18	0.25
9/27/2018 0:00	9/28/2018 0:00	Perdue	Filter 2	0.16	0.18	0.37
9/28/2018 0:00	9/29/2018 0:00	Perdue	Filter 2	0.16	0.18	0.36
9/29/2018 0:00	9/30/2018 0:00	Perdue	Filter 2	0.16	0.19	0.28
9/30/2018 0:00	10/1/2018 0:00	Perdue	Filter 2	0.16	0.19	0.47
10/1/2018 0:00	10/2/2018 0:00	Perdue	Filter 2	0.16	0.18	0.46
10/2/2018 0:00	10/3/2018 0:00	Perdue	Filter 2	0.15	0.17	0.53
10/3/2018 0:00	10/4/2018 0:00	Perdue	Filter 2	0.15	0.17	0.31
10/4/2018 0:00	10/5/2018 0:00	Perdue	Filter 2	0.16	0.17	0.34
10/5/2018 0:00	10/6/2018 0:00	Perdue	Filter 2	0.16	0.18	0.29
10/6/2018 0:00	10/7/2018 0:00	Perdue	Filter 2	0.16	0.24	0.41
10/7/2018 0:00	10/8/2018 0:00	Perdue	Filter 2	0.31	0.31	0.31
10/8/2018 0:00	10/9/2018 0:00	Perdue	Filter 2	0.19	0.27	0.36
10/9/2018 0:00	10/10/2018 0:00	Perdue	Filter 2	0.11	0.25	1.00
10/10/2018 0:00	10/11/2018 0:00	Perdue	Filter 2	0.16	0.17	1.00
10/11/2018 0:00	10/12/2018 0:00	Perdue	Filter 2	0.16	0.18	1.00
10/12/2018 0:00	10/13/2018 0:00	Perdue	Filter 2	0.06	0.13	1.00
10/13/2018 0:00	10/14/2018 0:00	Perdue	Filter 2	0.06	0.07	0.14
10/14/2018 0:00	10/15/2018 0:00	Perdue	Filter 2	0.06	0.08	0.20
10/15/2018 0:00	10/16/2018 0:00	Perdue	Filter 2	0.03	0.07	0.11
10/16/2018 0:00	10/17/2018 0:00	Perdue	Filter 2	0.02	0.05	0.46
10/17/2018 0:00	10/18/2018 0:00	Perdue	Filter 2	0.03	0.05	0.71
10/18/2018 0:00	10/19/2018 0:00	Perdue	Filter 2	0.02	0.06	0.93

10/19/2018 0:00	10/20/2018 0:00	Perdue	Filter 2	0.03	0.07	0.64
10/20/2018 0:00	10/21/2018 0:00	Perdue	Filter 2	0.03	0.06	0.26
10/21/2018 0:00	10/22/2018 0:00	Perdue	Filter 2	0.03	0.64	1.00
10/22/2018 0:00	10/23/2018 0:00	Perdue	Filter 2	0.03	0.08	0.17
10/23/2018 0:00	10/24/2018 0:00	Perdue	Filter 2	0.08	0.10	0.12
10/24/2018 0:00	10/25/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
10/25/2018 0:00	10/26/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
10/26/2018 0:00	10/27/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
10/27/2018 0:00	10/28/2018 0:00	Perdue	Filter 2	0.08	0.11	1.00
10/28/2018 0:00	10/29/2018 0:00	Perdue	Filter 2	0.07	0.09	1.00
10/29/2018 0:00	10/30/2018 0:00	Perdue	Filter 2	0.08	0.09	0.61
10/30/2018 0:00	10/31/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
10/31/2018 0:00	11/1/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
11/1/2018 0:00	11/2/2018 0:00	Perdue	Filter 2	0.07	0.10	0.15
11/2/2018 0:00	11/3/2018 0:00	Perdue	Filter 2	0.07	0.11	0.12
11/3/2018 0:00	11/4/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/4/2018 0:00	11/5/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/5/2018 0:00	11/6/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/6/2018 0:00	11/7/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/7/2018 0:00	11/8/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/8/2018 0:00	11/9/2018 0:00	Perdue	Filter 2	0.12	0.12	0.12
11/9/2018 0:00	11/10/2018 0:00	Perdue	Filter 2	0.01	0.10	0.12
11/10/2018 0:00	11/11/2018 0:00	Perdue	Filter 2	0.00	0.02	0.04
11/11/2018 0:00	11/12/2018 0:00	Perdue	Filter 2	0.03	0.05	0.08
11/12/2018 0:00	11/13/2018 0:00	Perdue	Filter 2	0.06	0.08	0.09
11/13/2018 0:00	11/14/2018 0:00	Perdue	Filter 2	0.07	0.08	0.10
11/14/2018 0:00	11/15/2018 0:00	Perdue	Filter 2	0.08	0.08	0.10
11/15/2018 0:00	11/16/2018 0:00	Perdue	Filter 2	0.07	0.08	0.10
11/16/2018 0:00	11/17/2018 0:00	Perdue	Filter 2	0.07	0.08	0.15
11/17/2018 0:00	11/18/2018 0:00	Perdue	Filter 2	0.06	0.08	0.28
11/18/2018 0:00	11/19/2018 0:00	Perdue	Filter 2	0.06	0.35	0.61
11/19/2018 0:00	11/20/2018 0:00	Perdue	Filter 2	0.06	0.07	0.13
11/20/2018 0:00	11/21/2018 0:00	Perdue	Filter 2	0.06	0.07	0.08
11/21/2018 0:00	11/22/2018 0:00	Perdue	Filter 2	0.06	0.07	0.08
11/22/2018 0:00	11/23/2018 0:00	Perdue	Filter 2	0.06	0.07	0.09
11/23/2018 0:00	11/24/2018 0:00	Perdue	Filter 2	0.06	0.07	0.09
11/24/2018 0:00	11/25/2018 0:00	Perdue	Filter 2	0.06	0.07	0.07
11/25/2018 0:00	11/26/2018 0:00	Perdue	Filter 2	0.06	0.07	0.13
11/26/2018 0:00	11/27/2018 0:00	Perdue	Filter 2	0.04	0.06	0.08
11/27/2018 0:00	11/28/2018 0:00	Perdue	Filter 2	0.03	0.05	0.07
11/28/2018 0:00	11/29/2018 0:00	Perdue	Filter 2	0.03	0.06	0.08
11/29/2018 0:00	11/30/2018 0:00	Perdue	Filter 2	0.06	0.08	0.09
11/30/2018 0:00	12/1/2018 0:00	Perdue	Filter 2	0.06	0.08	0.09
12/1/2018 0:00	12/2/2018 0:00	Perdue	Filter 2	0.06	0.08	0.10
12/2/2018 0:00	12/3/2018 0:00	Perdue	Filter 2	0.08	0.10	1.00
12/3/2018 0:00	12/4/2018 0:00	Perdue	Filter 2	0.06	0.18	1.00
12/4/2018 0:00	12/5/2018 0:00	Perdue	Filter 2	0.07	0.09	0.10
12/5/2018 0:00	12/6/2018 0:00	Perdue	Filter 2	0.07	0.09	0.10
12/6/2018 0:00	12/7/2018 0:00	Perdue	Filter 2	0.08	0.09	0.11
12/7/2018 0:00	12/8/2018 0:00	Perdue	Filter 2	0.08	0.09	0.10
12/8/2018 0:00	12/9/2018 0:00	Perdue	Filter 2	0.05	0.09	0.10
12/9/2018 0:00	12/10/2018 0:00	Perdue	Filter 2	0.05	0.07	0.08
12/10/2018 0:00	12/11/2018 0:00	Perdue	Filter 2	0.05	0.08	0.85
12/11/2018 0:00	12/12/2018 0:00	Perdue	Filter 2	0.05	0.06	0.12
12/12/2018 0:00	12/13/2018 0:00	Perdue	Filter 2	0.06	0.08	0.97
12/13/2018 0:00	12/14/2018 0:00	Perdue	Filter 2	0.06	0.10	0.13
12/14/2018 0:00	12/15/2018 0:00	Perdue	Filter 2	0.05	0.09	0.17
12/15/2018 0:00	12/16/2018 0:00	Perdue	Filter 2	0.04	0.63	0.99
12/16/2018 0:00	12/17/2018 0:00	Perdue	Filter 2	0.04	0.90	1.00
12/17/2018 0:00	12/18/2018 0:00	Perdue	Filter 2	0.03	0.07	0.42
12/18/2018 0:00	12/19/2018 0:00	Perdue	Filter 2	0.03	0.37	1.00
12/19/2018 0:00	12/20/2018 0:00	Perdue	Filter 2	0.03	0.07	1.00
12/20/2018 0:00	12/21/2018 0:00	Perdue	Filter 2	0.03	0.06	0.08
12/21/2018 0:00	12/22/2018 0:00	Perdue	Filter 2	0.01	0.09	0.19
12/22/2018 0:00	12/23/2018 0:00	Perdue	Filter 2	0.09	0.15	1.00
12/23/2018 0:00	12/24/2018 0:00	Perdue	Filter 2	0.09	0.09	1.00
12/24/2018 0:00	12/25/2018 0:00	Perdue	Filter 2	0.09	0.09	0.10
12/25/2018 0:00	12/26/2018 0:00	Perdue	Filter 2	0.08	0.09	0.09
12/26/2018 0:00	12/27/2018 0:00	Perdue	Filter 2	0.08	0.09	0.10
12/27/2018 0:00	12/28/2018 0:00	Perdue	Filter 2	0.08	0.09	0.10
12/28/2018 0:00	12/29/2018 0:00	Perdue	Filter 2	0.08	0.09	0.32
12/29/2018 0:00	12/30/2018 0:00	Perdue	Filter 2	0.08	0.09	0.09
12/30/2018 0:00	12/31/2018 0:00	Perdue	Filter 2	0.08	0.09	0.15

12/31/2018 0:00	1/1/2019 0:00	Perdue	Filter 2	0.08	0.09	0.31
1/1/2019 0:00	1/2/2019 0:00	Perdue	Filter 2	0.08	0.09	0.09
1/2/2019 0:00	1/3/2019 0:00	Perdue	Filter 2	0.08	0.09	0.10
1/3/2019 0:00	1/4/2019 0:00	Perdue	Filter 2	0.07	0.09	0.10
1/4/2019 0:00	1/5/2019 0:00	Perdue	Filter 2	0.08	0.09	0.44
1/5/2019 0:00	1/6/2019 0:00	Perdue	Filter 2	0.08	0.08	0.41
1/6/2019 0:00	1/7/2019 0:00	Perdue	Filter 2	0.08	0.08	0.75
1/7/2019 0:00	1/8/2019 0:00	Perdue	Filter 2	0.08	0.09	1.00
1/8/2019 0:00	1/9/2019 0:00	Perdue	Filter 2	0.08	0.09	0.20
1/9/2019 0:00	1/10/2019 0:00	Perdue	Filter 2	0.08	0.09	0.20
1/10/2019 0:00	1/11/2019 0:00	Perdue	Filter 2	0.09	0.10	0.81
1/11/2019 0:00	1/12/2019 0:00	Perdue	Filter 2	0.09	0.09	0.19
1/12/2019 0:00	1/13/2019 0:00	Perdue	Filter 2	0.09	0.09	0.15
1/13/2019 0:00	1/14/2019 0:00	Perdue	Filter 2	0.08	0.09	0.16
1/14/2019 0:00	1/15/2019 0:00	Perdue	Filter 2	0.09	0.09	0.86
1/15/2019 0:00	1/16/2019 0:00	Perdue	Filter 2	0.09	0.09	0.15
1/16/2019 0:00	1/17/2019 0:00	Perdue	Filter 2	0.09	0.10	1.00
1/17/2019 0:00	1/18/2019 0:00	Perdue	Filter 2	0.09	0.11	0.13
1/18/2019 0:00	1/19/2019 0:00	Perdue	Filter 2	0.10	0.11	0.14
1/19/2019 0:00	1/20/2019 0:00	Perdue	Filter 2	0.10	0.10	0.10
1/20/2019 0:00	1/21/2019 0:00	Perdue	Filter 2	0.10	0.10	0.12
1/21/2019 0:00	1/22/2019 0:00	Perdue	Filter 2	0.10	0.16	0.91
1/22/2019 0:00	1/23/2019 0:00	Perdue	Filter 2	0.09	0.16	0.17
1/23/2019 0:00	1/24/2019 0:00	Perdue	Filter 2	0.09	0.12	0.99
1/24/2019 0:00	1/25/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
1/25/2019 0:00	1/26/2019 0:00	Perdue	Filter 2	0.09	0.15	1.00
1/26/2019 0:00	1/27/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
1/27/2019 0:00	1/28/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
1/28/2019 0:00	1/29/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
1/29/2019 0:00	1/30/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
1/30/2019 0:00	1/31/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
1/31/2019 0:00	2/1/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/1/2019 0:00	2/2/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/2/2019 0:00	2/3/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/3/2019 0:00	2/4/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/4/2019 0:00	2/5/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/5/2019 0:00	2/6/2019 0:00	Perdue	Filter 2	0.16	0.16	0.16
2/6/2019 0:00	2/7/2019 0:00	Perdue	Filter 2	0.09	0.13	0.16
2/7/2019 0:00	2/8/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
2/8/2019 0:00	2/9/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
2/9/2019 0:00	2/10/2019 0:00	Perdue	Filter 2	0.10	0.10	0.12
2/10/2019 0:00	2/11/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
2/11/2019 0:00	2/12/2019 0:00	Perdue	Filter 2	0.09	0.09	0.10
2/12/2019 0:00	2/13/2019 0:00	Perdue	Filter 2	0.08	0.09	0.10
2/13/2019 0:00	2/14/2019 0:00	Perdue	Filter 2	0.10	0.10	0.19
2/14/2019 0:00	2/15/2019 0:00	Perdue	Filter 2	0.10	0.10	0.10
2/15/2019 0:00	2/16/2019 0:00	Perdue	Filter 2	0.09	0.10	0.15
2/16/2019 0:00	2/17/2019 0:00	Perdue	Filter 2	0.09	0.10	0.18
2/17/2019 0:00	2/18/2019 0:00	Perdue	Filter 2	0.10	0.10	0.10
2/18/2019 0:00	2/19/2019 0:00	Perdue	Filter 2	0.09	0.10	0.13
2/19/2019 0:00	2/20/2019 0:00	Perdue	Filter 2	0.09	0.12	0.23
2/20/2019 0:00	2/21/2019 0:00	Perdue	Filter 2	0.10	0.12	0.17
2/21/2019 0:00	2/22/2019 0:00	Perdue	Filter 2	0.10	0.11	0.14
2/22/2019 0:00	2/23/2019 0:00	Perdue	Filter 2	0.10	0.10	0.13
2/23/2019 0:00	2/24/2019 0:00	Perdue	Filter 2	0.10	0.10	0.10
2/24/2019 0:00	2/25/2019 0:00	Perdue	Filter 2	0.09	0.10	0.13
2/25/2019 0:00	2/26/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
2/26/2019 0:00	2/27/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
2/27/2019 0:00	2/28/2019 0:00	Perdue	Filter 2	0.09	0.10	0.24
2/28/2019 0:00	3/1/2019 0:00	Perdue	Filter 2	0.10	0.10	0.10
3/1/2019 0:00	3/2/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
3/2/2019 0:00	3/3/2019 0:00	Perdue	Filter 2	0.10	0.10	0.16
3/3/2019 0:00	3/4/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
3/4/2019 0:00	3/5/2019 0:00	Perdue	Filter 2	0.09	0.11	0.13
3/5/2019 0:00	3/6/2019 0:00	Perdue	Filter 2	0.09	0.10	0.24
3/6/2019 0:00	3/7/2019 0:00	Perdue	Filter 2	0.09	0.11	0.12
3/7/2019 0:00	3/8/2019 0:00	Perdue	Filter 2	0.09	0.13	0.70
3/8/2019 0:00	3/9/2019 0:00	Perdue	Filter 2	0.09	0.11	1.00
3/9/2019 0:00	3/10/2019 0:00	Perdue	Filter 2	0.09	0.11	0.77
3/10/2019 0:00	3/11/2019 0:00	Perdue	Filter 2	0.10	0.11	0.22
3/11/2019 0:00	3/12/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
3/12/2019 0:00	3/13/2019 0:00	Perdue	Filter 2	0.09	0.10	0.10
3/13/2019 0:00	3/14/2019 0:00	Perdue	Filter 2	0.09	0.10	0.10

3/14/2019 0:00	3/15/2019 0:00	Perdue	Filter 2	0.10	0.10	0.11
3/15/2019 0:00	3/16/2019 0:00	Perdue	Filter 2	0.09	0.10	0.30
3/16/2019 0:00	3/17/2019 0:00	Perdue	Filter 2	0.09	0.11	0.19
3/17/2019 0:00	3/18/2019 0:00	Perdue	Filter 2	0.09	0.10	0.15
3/18/2019 0:00	3/19/2019 0:00	Perdue	Filter 2	0.11	0.11	0.11
3/19/2019 0:00	3/20/2019 0:00	Perdue	Filter 2	0.11	0.11	0.14
3/20/2019 0:00	3/21/2019 0:00	Perdue	Filter 2	0.11	0.13	0.22
3/21/2019 0:00	3/22/2019 0:00	Perdue	Filter 2	0.10	0.12	0.15
3/22/2019 0:00	3/23/2019 0:00	Perdue	Filter 2	0.11	0.11	0.15
3/23/2019 0:00	3/24/2019 0:00	Perdue	Filter 2	0.11	0.12	0.31
3/24/2019 0:00	3/25/2019 0:00	Perdue	Filter 2	0.11	0.13	0.14
3/25/2019 0:00	3/26/2019 0:00	Perdue	Filter 2	0.12	0.14	0.19
3/26/2019 0:00	3/27/2019 0:00	Perdue	Filter 2	0.12	0.14	0.15
3/27/2019 0:00	3/28/2019 0:00	Perdue	Filter 2	0.14	0.17	0.21
3/28/2019 0:00	3/29/2019 0:00	Perdue	Filter 2	0.11	0.20	0.21
3/29/2019 0:00	3/30/2019 0:00	Perdue	Filter 2	0.11	0.12	0.38
3/30/2019 0:00	3/31/2019 0:00	Perdue	Filter 2	0.11	0.12	0.22
3/31/2019 0:00	4/1/2019 0:00	Perdue	Filter 2	0.11	0.13	0.16
4/1/2019 0:00	4/2/2019 0:00	Perdue	Filter 2	0.10	0.15	0.77
4/2/2019 0:00	4/3/2019 0:00	Perdue	Filter 2	0.11	0.13	0.19
4/3/2019 0:00	4/4/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
4/4/2019 0:00	4/5/2019 0:00	Perdue	Filter 2	0.10	0.12	0.23
4/5/2019 0:00	4/6/2019 0:00	Perdue	Filter 2	0.12	0.14	0.16
4/6/2019 0:00	4/7/2019 0:00	Perdue	Filter 2	0.11	0.13	0.39
4/7/2019 0:00	4/8/2019 0:00	Perdue	Filter 2	0.11	0.12	0.16
4/8/2019 0:00	4/9/2019 0:00	Perdue	Filter 2	0.11	0.15	0.21
4/9/2019 0:00	4/10/2019 0:00	Perdue	Filter 2	0.11	0.13	0.27
4/10/2019 0:00	4/11/2019 0:00	Perdue	Filter 2	0.13	0.14	0.16
4/11/2019 0:00	4/12/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
4/12/2019 0:00	4/13/2019 0:00	Perdue	Filter 2	0.10	0.15	0.39
4/13/2019 0:00	4/14/2019 0:00	Perdue	Filter 2	0.12	0.14	0.15
4/14/2019 0:00	4/15/2019 0:00	Perdue	Filter 2	0.12	0.13	0.19
4/15/2019 0:00	4/16/2019 0:00	Perdue	Filter 2	0.13	0.15	0.56
4/16/2019 0:00	4/17/2019 0:00	Perdue	Filter 2	0.12	0.14	0.24
4/17/2019 0:00	4/18/2019 0:00	Perdue	Filter 2	0.11	0.14	0.19
4/18/2019 0:00	4/19/2019 0:00	Perdue	Filter 2	0.11	0.12	0.94
4/19/2019 0:00	4/20/2019 0:00	Perdue	Filter 2	0.10	0.13	0.27
4/20/2019 0:00	4/21/2019 0:00	Perdue	Filter 2	0.11	0.12	0.14
4/21/2019 0:00	4/22/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
4/22/2019 0:00	4/23/2019 0:00	Perdue	Filter 2	0.10	0.13	1.00
4/23/2019 0:00	4/24/2019 0:00	Perdue	Filter 2	0.12	0.13	0.21
4/24/2019 0:00	4/25/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
4/25/2019 0:00	4/26/2019 0:00	Perdue	Filter 2	0.12	0.14	1.00
4/26/2019 0:00	4/27/2019 0:00	Perdue	Filter 2	0.12	0.13	0.18
4/27/2019 0:00	4/28/2019 0:00	Perdue	Filter 2	0.11	0.13	0.51
4/28/2019 0:00	4/29/2019 0:00	Perdue	Filter 2	0.12	0.12	1.00
4/29/2019 0:00	4/30/2019 0:00	Perdue	Filter 2	0.12	0.14	1.00
4/30/2019 0:00	5/1/2019 0:00	Perdue	Filter 2	0.12	0.12	0.14
5/1/2019 0:00	5/2/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/2/2019 0:00	5/3/2019 0:00	Perdue	Filter 2	0.13	0.14	0.25
5/3/2019 0:00	5/4/2019 0:00	Perdue	Filter 2	0.12	0.13	0.24
5/4/2019 0:00	5/5/2019 0:00	Perdue	Filter 2	0.13	0.14	0.20
5/5/2019 0:00	5/6/2019 0:00	Perdue	Filter 2	0.13	0.15	0.23
5/6/2019 0:00	5/7/2019 0:00	Perdue	Filter 2	0.12	0.13	0.24
5/7/2019 0:00	5/8/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/8/2019 0:00	5/9/2019 0:00	Perdue	Filter 2	0.13	0.14	0.17
5/9/2019 0:00	5/10/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/10/2019 0:00	5/11/2019 0:00	Perdue	Filter 2	0.12	0.13	0.14
5/11/2019 0:00	5/12/2019 0:00	Perdue	Filter 2	0.13	0.14	0.19
5/12/2019 0:00	5/13/2019 0:00	Perdue	Filter 2	0.13	0.14	0.21
5/13/2019 0:00	5/14/2019 0:00	Perdue	Filter 2	0.14	0.15	0.18
5/14/2019 0:00	5/15/2019 0:00	Perdue	Filter 2	0.14	0.15	1.00
5/15/2019 0:00	5/16/2019 0:00	Perdue	Filter 2	0.13	0.16	0.21
5/16/2019 0:00	5/17/2019 0:00	Perdue	Filter 2	0.13	0.14	0.16
5/17/2019 0:00	5/18/2019 0:00	Perdue	Filter 2	0.13	0.15	0.21
5/18/2019 0:00	5/19/2019 0:00	Perdue	Filter 2	0.13	0.14	0.15
5/19/2019 0:00	5/20/2019 0:00	Perdue	Filter 2	0.13	0.14	1.00
5/20/2019 0:00	5/21/2019 0:00	Perdue	Filter 2	0.13	0.13	0.15
5/21/2019 0:00	5/22/2019 0:00	Perdue	Filter 2	0.12	0.13	0.14
5/22/2019 0:00	5/23/2019 0:00	Perdue	Filter 2	0.00	0.13	0.14
5/23/2019 0:00	5/24/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
5/24/2019 0:00	5/25/2019 0:00	Perdue	Filter 2	0.12	0.13	0.14
5/25/2019 0:00	5/26/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15

5/26/2019 0:00	5/27/2019 0:00	Perdue	Filter 2	0.13	0.14	0.15
5/27/2019 0:00	5/28/2019 0:00	Perdue	Filter 2	0.00	0.14	0.20
5/28/2019 0:00	5/29/2019 0:00	Perdue	Filter 2	0.12	0.13	0.16
5/29/2019 0:00	5/30/2019 0:00	Perdue	Filter 2	0.13	0.14	0.41
5/30/2019 0:00	5/31/2019 0:00	Perdue	Filter 2	0.14	0.15	0.17
5/31/2019 0:00	6/1/2019 0:00	Perdue	Filter 2	0.14	0.16	0.81
6/1/2019 0:00	6/2/2019 0:00	Perdue	Filter 2	0.00	0.17	1.00
6/2/2019 0:00	6/3/2019 0:00	Perdue	Filter 2	0.00	0.17	0.21
6/3/2019 0:00	6/4/2019 0:00	Perdue	Filter 2	0.17		0.17
6/4/2019 0:00	6/5/2019 0:00	Perdue	Filter 2	0.17		0.17
6/5/2019 0:00	6/6/2019 0:00	Perdue	Filter 2	0.14	0.17	0.21
6/6/2019 0:00	6/7/2019 0:00	Perdue	Filter 2	0.13	0.15	0.16
6/7/2019 0:00	6/8/2019 0:00	Perdue	Filter 2	0.12	0.13	1.00
6/8/2019 0:00	6/9/2019 0:00	Perdue	Filter 2	0.12	0.13	1.00
6/9/2019 0:00	6/10/2019 0:00	Perdue	Filter 2	0.00	0.15	1.00
6/10/2019 0:00	6/11/2019 0:00	Perdue	Filter 2	0.00	0.15	0.19
6/11/2019 0:00	6/12/2019 0:00	Perdue	Filter 2	0.00	0.13	0.67
6/12/2019 0:00	6/13/2019 0:00	Perdue	Filter 2	0.11	0.14	1.00
6/13/2019 0:00	6/14/2019 0:00	Perdue	Filter 2	0.00	0.20	1.00
6/14/2019 0:00	6/15/2019 0:00	Perdue	Filter 2	0.15	0.17	0.20
6/15/2019 0:00	6/16/2019 0:00	Perdue	Filter 2	0.14	0.15	0.20
6/16/2019 0:00	6/17/2019 0:00	Perdue	Filter 2	0.13	0.14	0.18
6/17/2019 0:00	6/18/2019 0:00	Perdue	Filter 2	0.00	0.17	0.30
6/18/2019 0:00	6/19/2019 0:00	Perdue	Filter 2	0.13	0.15	0.17
6/19/2019 0:00	6/20/2019 0:00	Perdue	Filter 2	0.12	0.13	1.00
6/20/2019 0:00	6/21/2019 0:00	Perdue	Filter 2	0.00	0.17	1.00
6/21/2019 0:00	6/22/2019 0:00	Perdue	Filter 2	0.13	0.13	0.95
6/22/2019 0:00	6/23/2019 0:00	Perdue	Filter 2	0.12	0.13	1.00
6/23/2019 0:00	6/24/2019 0:00	Perdue	Filter 2	0.00	0.13	1.00
6/24/2019 0:00	6/25/2019 0:00	Perdue	Filter 2	0.12	0.14	0.23
6/25/2019 0:00	6/26/2019 0:00	Perdue	Filter 2	0.11	0.12	0.46
6/26/2019 0:00	6/27/2019 0:00	Perdue	Filter 2	0.11	0.12	0.29
6/27/2019 0:00	6/28/2019 0:00	Perdue	Filter 2	0.00	0.14	1.00
6/28/2019 0:00	6/29/2019 0:00	Perdue	Filter 2	0.12	0.13	0.50
6/29/2019 0:00	6/30/2019 0:00	Perdue	Filter 2	0.11	0.12	0.93
6/30/2019 0:00	7/1/2019 0:00	Perdue	Filter 2	0.11	0.13	1.00
7/1/2019 0:00	7/2/2019 0:00	Perdue	Filter 2	0.00	0.15	0.23
7/2/2019 0:00	7/3/2019 0:00	Perdue	Filter 2	0.12	0.13	0.14
7/3/2019 0:00	7/4/2019 0:00	Perdue	Filter 2	0.11	0.12	0.15
7/4/2019 0:00	7/5/2019 0:00	Perdue	Filter 2	0.00	0.15	1.00
7/5/2019 0:00	7/6/2019 0:00	Perdue	Filter 2	0.12	0.13	0.18
7/6/2019 0:00	7/7/2019 0:00	Perdue	Filter 2	0.12	0.13	0.16
7/7/2019 0:00	7/8/2019 0:00	Perdue	Filter 2	0.00	0.13	1.00
7/8/2019 0:00	7/9/2019 0:00	Perdue	Filter 2	0.13	0.15	0.33
7/9/2019 0:00	7/10/2019 0:00	Perdue	Filter 2	0.13	0.14	0.42
7/10/2019 0:00	7/11/2019 0:00	Perdue	Filter 2	0.00	0.13	1.00
7/11/2019 0:00	7/12/2019 0:00	Perdue	Filter 2	0.10	0.13	0.15
7/12/2019 0:00	7/13/2019 0:00	Perdue	Filter 2	0.09	0.11	0.13
7/13/2019 0:00	7/14/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
7/14/2019 0:00	7/15/2019 0:00	Perdue	Filter 2	0.00	0.12	0.20
7/15/2019 0:00	7/16/2019 0:00	Perdue	Filter 2	0.10	0.12	0.14
7/16/2019 0:00	7/17/2019 0:00	Perdue	Filter 2	0.10	0.11	0.12
7/17/2019 0:00	7/18/2019 0:00	Perdue	Filter 2	0.00	0.13	0.21
7/18/2019 0:00	7/19/2019 0:00	Perdue	Filter 2	0.10	0.12	0.15
7/19/2019 0:00	7/20/2019 0:00	Perdue	Filter 2	0.00	0.11	0.13
7/20/2019 0:00	7/21/2019 0:00	Perdue	Filter 2	0.12	0.13	0.17
7/21/2019 0:00	7/22/2019 0:00	Perdue	Filter 2	0.00	0.14	0.24
7/22/2019 0:00	7/23/2019 0:00	Perdue	Filter 2	0.00	0.16	0.24
7/23/2019 0:00	7/24/2019 0:00	Perdue	Filter 2	0.00	0.13	0.16
7/24/2019 0:00	7/25/2019 0:00	Perdue	Filter 2	0.11	0.13	0.15
7/25/2019 0:00	7/26/2019 0:00	Perdue	Filter 2	0.11	0.13	0.21
7/26/2019 0:00	7/27/2019 0:00	Perdue	Filter 2	0.11	0.13	0.16
7/27/2019 0:00	7/28/2019 0:00	Perdue	Filter 2	0.00	0.14	0.21
7/28/2019 0:00	7/29/2019 0:00	Perdue	Filter 2	0.12	0.14	0.40
7/29/2019 0:00	7/30/2019 0:00	Perdue	Filter 2	0.12	0.13	0.15
7/30/2019 0:00	7/31/2019 0:00	Perdue	Filter 2	0.13	0.14	0.17
7/31/2019 0:00	8/1/2019 0:00	Perdue	Filter 2	0.12	0.14	0.16
8/1/2019 0:00	8/2/2019 0:00	Perdue	Filter 2	0.08	0.12	1.00
8/2/2019 0:00	8/3/2019 0:00	Perdue	Filter 2	0.08	0.09	0.19
8/3/2019 0:00	8/4/2019 0:00	Perdue	Filter 2	0.09	0.10	1.00
8/4/2019 0:00	8/5/2019 0:00	Perdue	Filter 2	0.00	0.10	1.00
8/5/2019 0:00	8/6/2019 0:00	Perdue	Filter 2	0.00	0.09	0.11
8/6/2019 0:00	8/7/2019 0:00	Perdue	Filter 2	0.08	0.09	0.11

8/7/2019 0:00	8/8/2019 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/8/2019 0:00	8/9/2019 0:00	Perdue	Filter 2	0.07	0.08	0.10
8/9/2019 0:00	8/10/2019 0:00	Perdue	Filter 2	0.08	0.08	0.09
8/10/2019 0:00	8/11/2019 0:00	Perdue	Filter 2	0.08	0.09	0.14
8/11/2019 0:00	8/12/2019 0:00	Perdue	Filter 2	0.08	0.09	0.96
8/12/2019 0:00	8/13/2019 0:00	Perdue	Filter 2	0.09	0.10	1.00
8/13/2019 0:00	8/14/2019 0:00	Perdue	Filter 2	0.00	0.09	0.14
8/14/2019 0:00	8/15/2019 0:00	Perdue	Filter 2	0.07	0.08	0.10
8/15/2019 0:00	8/16/2019 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/16/2019 0:00	8/17/2019 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/17/2019 0:00	8/18/2019 0:00	Perdue	Filter 2	0.07	0.08	0.14
8/18/2019 0:00	8/19/2019 0:00	Perdue	Filter 2	0.08	0.10	0.13
8/19/2019 0:00	8/20/2019 0:00	Perdue	Filter 2	0.00	0.08	0.12
8/20/2019 0:00	8/21/2019 0:00	Perdue	Filter 2	0.00	0.08	0.10
8/21/2019 0:00	8/22/2019 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/22/2019 0:00	8/23/2019 0:00	Perdue	Filter 2	0.07	0.08	0.09
8/23/2019 0:00	8/24/2019 0:00	Perdue	Filter 2	0.07	0.08	0.10
8/24/2019 0:00	8/25/2019 0:00	Perdue	Filter 2	0.08	0.09	0.16
8/25/2019 0:00	8/26/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
8/26/2019 0:00	8/27/2019 0:00	Perdue	Filter 2	0.09	0.10	0.13
8/27/2019 0:00	8/28/2019 0:00	Perdue	Filter 2	0.09	0.10	1.00
8/28/2019 0:00	8/29/2019 0:00	Perdue	Filter 2	0.00	0.09	0.13
8/29/2019 0:00	8/30/2019 0:00	Perdue	Filter 2	0.08	0.09	0.10
8/30/2019 0:00	8/31/2019 0:00	Perdue	Filter 2	0.00	0.09	0.60
8/31/2019 0:00	9/1/2019 0:00	Perdue	Filter 2	0.08	0.09	0.10
9/1/2019 0:00	9/2/2019 0:00	Perdue	Filter 2	0.08	0.09	0.11
9/2/2019 0:00	9/3/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
9/3/2019 0:00	9/4/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
9/4/2019 0:00	9/5/2019 0:00	Perdue	Filter 2	0.00	0.10	0.12
9/5/2019 0:00	9/6/2019 0:00	Perdue	Filter 2	0.10	0.11	0.14
9/6/2019 0:00	9/7/2019 0:00	Perdue	Filter 2	0.00	0.11	0.20
9/7/2019 0:00	9/8/2019 0:00	Perdue	Filter 2	0.09	0.10	0.32
9/8/2019 0:00	9/9/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
9/9/2019 0:00	9/10/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
9/10/2019 0:00	9/11/2019 0:00	Perdue	Filter 2	0.09	0.10	0.14
9/11/2019 0:00	9/12/2019 0:00	Perdue	Filter 2	0.09	0.10	0.11
9/12/2019 0:00	9/13/2019 0:00	Perdue	Filter 2	0.09	0.11	0.13
9/13/2019 0:00	9/14/2019 0:00	Perdue	Filter 2	0.10	0.12	0.13
9/14/2019 0:00	9/15/2019 0:00	Perdue	Filter 2	0.11	0.12	0.14
9/15/2019 0:00	9/16/2019 0:00	Perdue	Filter 2	0.00	0.12	0.23
9/16/2019 0:00	9/17/2019 0:00	Perdue	Filter 2	0.10	0.11	0.15
9/17/2019 0:00	9/18/2019 0:00	Perdue	Filter 2	0.10	0.11	0.15
9/18/2019 0:00	9/19/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
9/19/2019 0:00	9/20/2019 0:00	Perdue	Filter 2	0.10	0.11	0.15
9/20/2019 0:00	9/21/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
9/21/2019 0:00	9/22/2019 0:00	Perdue	Filter 2	0.00	0.12	0.18
9/22/2019 0:00	9/23/2019 0:00	Perdue	Filter 2	0.11	0.13	0.15
9/23/2019 0:00	9/24/2019 0:00	Perdue	Filter 2	0.09	0.13	0.37
9/24/2019 0:00	9/25/2019 0:00	Perdue	Filter 2	0.05	0.13	0.19
9/25/2019 0:00	9/26/2019 0:00	Perdue	Filter 2	0.00	0.07	1.00
9/26/2019 0:00	9/27/2019 0:00	Perdue	Filter 2	0.00	0.09	0.18
9/27/2019 0:00	9/28/2019 0:00	Perdue	Filter 2	0.00	0.09	0.24
9/28/2019 0:00	9/29/2019 0:00	Perdue	Filter 2	0.06	0.08	0.10
9/29/2019 0:00	9/30/2019 0:00	Perdue	Filter 2	0.00	0.09	0.13
9/30/2019 0:00	10/1/2019 0:00	Perdue	Filter 2	0.00	0.19	0.26
10/1/2019 0:00	10/2/2019 0:00	Perdue	Filter 2	0.00	0.15	0.18
10/2/2019 0:00	10/3/2019 0:00	Perdue	Filter 2	0.13	0.14	0.19
10/3/2019 0:00	10/4/2019 0:00	Perdue	Filter 2	0.00	0.17	1.00
10/4/2019 0:00	10/5/2019 0:00	Perdue	Filter 2	0.15	0.17	1.00
10/5/2019 0:00	10/6/2019 0:00	Perdue	Filter 2	0.15	0.16	1.00
10/6/2019 0:00	10/7/2019 0:00	Perdue	Filter 2	0.14	0.15	0.21
10/7/2019 0:00	10/8/2019 0:00	Perdue	Filter 2	0.13	0.14	1.00
10/8/2019 0:00	10/9/2019 0:00	Perdue	Filter 2	0.14	0.16	1.00
10/9/2019 0:00	10/10/2019 0:00	Perdue	Filter 2	0.00	0.18	0.53
10/10/2019 0:00	10/11/2019 0:00	Perdue	Filter 2	0.14	0.15	1.00
10/11/2019 0:00	10/12/2019 0:00	Perdue	Filter 2	0.14	0.16	0.86
10/12/2019 0:00	10/13/2019 0:00	Perdue	Filter 2	0.15	0.17	1.00
10/13/2019 0:00	10/14/2019 0:00	Perdue	Filter 2	0.17	0.18	0.98
10/14/2019 0:00	10/15/2019 0:00	Perdue	Filter 2	0.18	0.20	0.98
10/15/2019 0:00	10/16/2019 0:00	Perdue	Filter 2	0.00	0.18	0.58
10/16/2019 0:00	10/17/2019 0:00	Perdue	Filter 2	0.09	0.13	0.98
10/17/2019 0:00	10/18/2019 0:00	Perdue	Filter 2	0.11	0.12	1.00
10/18/2019 0:00	10/19/2019 0:00	Perdue	Filter 2	0.11	0.13	1.00

10/19/2019 0:00	10/20/2019 0:00	Perdue	Filter 2	0.13	0.14	0.82
10/20/2019 0:00	10/21/2019 0:00	Perdue	Filter 2	0.15	0.19	1.00
10/21/2019 0:00	10/22/2019 0:00	Perdue	Filter 2	0.00	0.22	1.00
10/22/2019 0:00	10/23/2019 0:00	Perdue	Filter 2	0.00	0.16	1.00
10/23/2019 0:00	10/24/2019 0:00	Perdue	Filter 2	0.07	0.09	1.00
10/24/2019 0:00	10/25/2019 0:00	Perdue	Filter 2	0.00	0.11	1.00
10/25/2019 0:00	10/26/2019 0:00	Perdue	Filter 2	0.10	0.12	1.00
10/26/2019 0:00	10/27/2019 0:00	Perdue	Filter 2	0.12	0.14	1.00
10/27/2019 0:00	10/28/2019 0:00	Perdue	Filter 2	0.15	0.17	1.00
10/28/2019 0:00	10/29/2019 0:00	Perdue	Filter 2	0.00	0.18	1.00
10/29/2019 0:00	10/30/2019 0:00	Perdue	Filter 2	0.00	0.09	0.13
10/30/2019 0:00	10/31/2019 0:00	Perdue	Filter 2	0.10	0.11	0.12
10/31/2019 0:00	11/1/2019 0:00	Perdue	Filter 2	0.09	0.11	0.14
11/1/2019 0:00	11/2/2019 0:00	Perdue	Filter 2	0.09	0.10	0.13
11/2/2019 0:00	11/3/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
11/3/2019 0:00	11/4/2019 0:00	Perdue	Filter 2	0.09	0.10	0.12
11/4/2019 0:00	11/5/2019 0:00	Perdue	Filter 2	0.09	0.11	0.12
11/5/2019 0:00	11/6/2019 0:00	Perdue	Filter 2	0.11	0.13	0.14
11/6/2019 0:00	11/7/2019 0:00	Perdue	Filter 2	0.00	0.13	0.17
11/7/2019 0:00	11/8/2019 0:00	Perdue	Filter 2	0.13	0.15	0.18
11/8/2019 0:00	11/9/2019 0:00	Perdue	Filter 2	0.14	0.16	0.21
11/9/2019 0:00	11/10/2019 0:00	Perdue	Filter 2	0.14	0.17	0.21
11/10/2019 0:00	11/11/2019 0:00	Perdue	Filter 2	0.14	0.15	0.18
11/11/2019 0:00	11/12/2019 0:00	Perdue	Filter 2	0.00	0.16	0.35
11/12/2019 0:00	11/13/2019 0:00	Perdue	Filter 2	0.00	0.14	0.19
11/13/2019 0:00	11/14/2019 0:00	Perdue	Filter 2	0.09	0.11	0.49
11/14/2019 0:00	11/15/2019 0:00	Perdue	Filter 2	0.00	0.13	0.24
11/15/2019 0:00	11/16/2019 0:00	Perdue	Filter 2	0.14	0.19	0.97
11/16/2019 0:00	11/17/2019 0:00	Perdue	Filter 2	0.00	0.23	0.56
11/17/2019 0:00	11/18/2019 0:00	Perdue	Filter 2	0.04	0.09	0.27
11/18/2019 0:00	11/19/2019 0:00	Perdue	Filter 2	0.00	0.07	1.00
11/19/2019 0:00	11/20/2019 0:00	Perdue	Filter 2	0.04	0.04	0.05
11/20/2019 0:00	11/21/2019 0:00	Perdue	Filter 2	0.00	0.06	0.11
11/21/2019 0:00	11/22/2019 0:00	Perdue	Filter 2	0.05	0.06	0.51
11/22/2019 0:00	11/23/2019 0:00	Perdue	Filter 2	0.05	0.06	0.11
11/23/2019 0:00	11/24/2019 0:00	Perdue	Filter 2	0.04	0.05	0.19
11/24/2019 0:00	11/25/2019 0:00	Perdue	Filter 2	0.04	0.05	0.13
11/25/2019 0:00	11/26/2019 0:00	Perdue	Filter 2	0.00	0.05	0.22
11/26/2019 0:00	11/27/2019 0:00	Perdue	Filter 2	0.04	0.05	0.10
11/27/2019 0:00	11/28/2019 0:00	Perdue	Filter 2	0.00	0.08	1.00
11/28/2019 0:00	11/29/2019 0:00	Perdue	Filter 2	0.06	0.07	0.09
11/29/2019 0:00	11/30/2019 0:00	Perdue	Filter 2	0.06	0.07	0.08
11/30/2019 0:00	12/1/2019 0:00	Perdue	Filter 2	0.00	0.07	0.09
12/1/2019 0:00	12/2/2019 0:00	Perdue	Filter 2	0.06	0.07	0.09
12/2/2019 0:00	12/3/2019 0:00	Perdue	Filter 2	0.06	0.07	0.10
12/3/2019 0:00	12/4/2019 0:00	Perdue	Filter 2	0.07	0.07	0.28
12/4/2019 0:00	12/5/2019 0:00	Perdue	Filter 2	0.00	0.09	0.69
12/5/2019 0:00	12/6/2019 0:00	Perdue	Filter 2	0.10	0.11	0.13
12/6/2019 0:00	12/7/2019 0:00	Perdue	Filter 2	0.00	0.11	0.13
12/7/2019 0:00	12/8/2019 0:00	Perdue	Filter 2	0.10	0.11	0.14
12/8/2019 0:00	12/9/2019 0:00	Perdue	Filter 2	0.10	0.11	0.12
12/9/2019 0:00	12/10/2019 0:00	Perdue	Filter 2	0.10	0.10	0.18
12/10/2019 0:00	12/11/2019 0:00	Perdue	Filter 2	0.00	0.13	0.98
12/11/2019 0:00	12/12/2019 0:00	Perdue	Filter 2	0.13	0.14	0.37
12/12/2019 0:00	12/13/2019 0:00	Perdue	Filter 2	0.13	0.14	0.15
12/13/2019 0:00	12/14/2019 0:00	Perdue	Filter 2	0.12	0.14	1.00
12/14/2019 0:00	12/15/2019 0:00	Perdue	Filter 2	0.00	0.13	0.98
12/15/2019 0:00	12/16/2019 0:00	Perdue	Filter 2	0.00	0.14	0.21
12/16/2019 0:00	12/17/2019 0:00	Perdue	Filter 2	0.00	0.15	0.18
12/17/2019 0:00	12/18/2019 0:00	Perdue	Filter 2	0.14	0.15	0.17
12/18/2019 0:00	12/19/2019 0:00	Perdue	Filter 2	0.14	0.15	0.16
12/19/2019 0:00	12/20/2019 0:00	Perdue	Filter 2	0.00	0.15	0.16
12/20/2019 0:00	12/21/2019 0:00	Perdue	Filter 2	0.00	0.17	0.19
12/21/2019 0:00	12/22/2019 0:00	Perdue	Filter 2	0.00	0.16	0.16
12/22/2019 0:00	12/23/2019 0:00	Perdue	Filter 2	0.00	0.17	0.19
12/23/2019 0:00	12/24/2019 0:00	Perdue	Filter 2	0.00	0.17	0.35
12/24/2019 0:00	12/25/2019 0:00	Perdue	Filter 2	0.12	0.14	0.16
12/25/2019 0:00	12/26/2019 0:00	Perdue	Filter 2	0.11	0.12	0.14
12/26/2019 0:00	12/27/2019 0:00	Perdue	Filter 2	0.00	0.12	0.12
12/27/2019 0:00	12/28/2019 0:00	Perdue	Filter 2	0.00	0.13	0.19
12/28/2019 0:00	12/29/2019 0:00	Perdue	Filter 2	0.13	0.14	0.15
12/29/2019 0:00	12/30/2019 0:00	Perdue	Filter 2	0.00	0.15	0.21
12/30/2019 0:00	12/31/2019 0:00	Perdue	Filter 2	0.14	0.15	0.15

12/31/2019 0:00	1/1/2020 0:00	Perdue	Filter 2	0.00	0.15	0.27
1/1/2020 0:00	1/2/2020 0:00	Perdue	Filter 2	0.00	0.17	0.22
1/2/2020 0:00	1/3/2020 0:00	Perdue	Filter 2	0.17	0.18	0.21
1/3/2020 0:00	1/4/2020 0:00	Perdue	Filter 2	0.17	0.19	0.21
1/4/2020 0:00	1/5/2020 0:00	Perdue	Filter 2	0.00	0.18	1.00
1/5/2020 0:00	1/6/2020 0:00	Perdue	Filter 2	0.18	0.19	0.22
1/6/2020 0:00	1/7/2020 0:00	Perdue	Filter 2	0.00	0.22	0.29
1/7/2020 0:00	1/8/2020 0:00	Perdue	Filter 2	0.00	0.10	0.13
1/8/2020 0:00	1/9/2020 0:00	Perdue	Filter 2	0.08	0.09	0.10
1/9/2020 0:00	1/10/2020 0:00	Perdue	Filter 2	0.08	0.09	0.10
1/10/2020 0:00	1/11/2020 0:00	Perdue	Filter 2	0.00	0.09	0.15
1/11/2020 0:00	1/12/2020 0:00	Perdue	Filter 2	0.00	0.09	0.11
1/12/2020 0:00	1/13/2020 0:00	Perdue	Filter 2	0.00	0.09	0.10
1/13/2020 0:00	1/14/2020 0:00	Perdue	Filter 2	0.08	0.08	0.10
1/14/2020 0:00	1/15/2020 0:00	Perdue	Filter 2	0.00	0.09	0.16
1/15/2020 0:00	1/16/2020 0:00	Perdue	Filter 2	0.00	0.11	0.17
1/16/2020 0:00	1/17/2020 0:00	Perdue	Filter 2	0.00	0.09	0.10
1/17/2020 0:00	1/18/2020 0:00	Perdue	Filter 2	0.08	0.09	0.15
1/18/2020 0:00	1/19/2020 0:00	Perdue	Filter 2	0.00	0.08	0.08
1/19/2020 0:00	1/20/2020 0:00	Perdue	Filter 2	0.08	0.10	0.12
1/20/2020 0:00	1/21/2020 0:00	Perdue	Filter 2	0.00	0.09	0.16
1/21/2020 0:00	1/22/2020 0:00	Perdue	Filter 2	0.00	0.11	0.12
1/22/2020 0:00	1/23/2020 0:00	Perdue	Filter 2	0.09	0.10	0.11
1/23/2020 0:00	1/24/2020 0:00	Perdue	Filter 2	0.09	0.10	0.14
1/24/2020 0:00	1/25/2020 0:00	Perdue	Filter 2	0.09	0.10	1.00
1/25/2020 0:00	1/26/2020 0:00	Perdue	Filter 2	0.08	0.09	0.11
1/26/2020 0:00	1/27/2020 0:00	Perdue	Filter 2	0.00	0.11	0.15
1/27/2020 0:00	1/28/2020 0:00	Perdue	Filter 2	0.00	0.11	0.13
1/28/2020 0:00	1/29/2020 0:00	Perdue	Filter 2	0.09	0.11	0.15
1/29/2020 0:00	1/30/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
1/30/2020 0:00	1/31/2020 0:00	Perdue	Filter 2	0.00	0.10	0.18
1/31/2020 0:00	2/1/2020 0:00	Perdue	Filter 2	0.09	0.11	0.19
2/1/2020 0:00	2/2/2020 0:00	Perdue	Filter 2	0.00	0.13	0.43
2/2/2020 0:00	2/3/2020 0:00	Perdue	Filter 2	0.09	0.11	0.12
2/3/2020 0:00	2/4/2020 0:00	Perdue	Filter 2	0.00	0.11	0.16
2/4/2020 0:00	2/5/2020 0:00	Perdue	Filter 2	0.00	0.11	0.65
2/5/2020 0:00	2/6/2020 0:00	Perdue	Filter 2	0.00	0.11	0.41
2/6/2020 0:00	2/7/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
2/7/2020 0:00	2/8/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
2/8/2020 0:00	2/9/2020 0:00	Perdue	Filter 2	0.09	0.11	0.12
2/9/2020 0:00	2/10/2020 0:00	Perdue	Filter 2	0.11	0.12	0.14
2/10/2020 0:00	2/11/2020 0:00	Perdue	Filter 2	0.00	0.12	0.14
2/11/2020 0:00	2/12/2020 0:00	Perdue	Filter 2	0.00	0.12	0.19
2/12/2020 0:00	2/13/2020 0:00	Perdue	Filter 2	0.10	0.11	0.12
2/13/2020 0:00	2/14/2020 0:00	Perdue	Filter 2	0.00	0.13	0.14
2/14/2020 0:00	2/15/2020 0:00	Perdue	Filter 2	0.12	0.13	0.14
2/15/2020 0:00	2/16/2020 0:00	Perdue	Filter 2	0.12	0.14	0.21
2/16/2020 0:00	2/17/2020 0:00	Perdue	Filter 2	0.00	0.15	0.27
2/17/2020 0:00	2/18/2020 0:00	Perdue	Filter 2	0.00	0.15	0.18
2/18/2020 0:00	2/19/2020 0:00	Perdue	Filter 2	0.13	0.14	0.17
2/19/2020 0:00	2/20/2020 0:00	Perdue	Filter 2	0.00	0.16	0.19
2/20/2020 0:00	2/21/2020 0:00	Perdue	Filter 2	0.14	0.15	0.17
2/21/2020 0:00	2/22/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
2/22/2020 0:00	2/23/2020 0:00	Perdue	Filter 2	0.00	0.17	0.76
2/23/2020 0:00	2/24/2020 0:00	Perdue	Filter 2	0.14	0.14	0.18
2/24/2020 0:00	2/25/2020 0:00	Perdue	Filter 2	0.00	0.15	0.18
2/25/2020 0:00	2/26/2020 0:00	Perdue	Filter 2	0.14	0.16	0.17
2/26/2020 0:00	2/27/2020 0:00	Perdue	Filter 2	0.00	0.15	0.17
2/27/2020 0:00	2/28/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
2/28/2020 0:00	2/29/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
2/29/2020 0:00	3/1/2020 0:00	Perdue	Filter 2	0.13	0.15	0.17
3/1/2020 0:00	3/2/2020 0:00	Perdue	Filter 2	0.00	0.16	1.00
3/2/2020 0:00	3/3/2020 0:00	Perdue	Filter 2	0.00	0.14	0.52
3/3/2020 0:00	3/4/2020 0:00	Perdue	Filter 2	0.00	0.08	0.09
3/4/2020 0:00	3/5/2020 0:00	Perdue	Filter 2	0.07	0.08	0.09
3/5/2020 0:00	3/6/2020 0:00	Perdue	Filter 2	0.07	0.08	0.09
3/6/2020 0:00	3/7/2020 0:00	Perdue	Filter 2	0.07	0.08	0.09
3/7/2020 0:00	3/8/2020 0:00	Perdue	Filter 2	0.00	0.08	0.10
3/8/2020 0:00	3/9/2020 0:00	Perdue	Filter 2	0.00	0.09	1.00
3/9/2020 0:00	3/10/2020 0:00	Perdue	Filter 2	0.06	0.07	0.08
3/10/2020 0:00	3/11/2020 0:00	Perdue	Filter 2	0.00	0.11	0.15
3/11/2020 0:00	3/12/2020 0:00	Perdue	Filter 2	0.00	0.09	0.10
3/12/2020 0:00	3/13/2020 0:00	Perdue	Filter 2	0.00	0.09	0.10

3/13/2020 0:00	3/14/2020 0:00	Perdue	Filter 2	0.07	0.08	0.08
3/14/2020 0:00	3/15/2020 0:00	Perdue	Filter 2	0.00	0.08	0.08
3/15/2020 0:00	3/16/2020 0:00	Perdue	Filter 2	0.00	0.07	0.08
3/16/2020 0:00	3/17/2020 0:00	Perdue	Filter 2	0.06	0.07	0.15
3/17/2020 0:00	3/18/2020 0:00	Perdue	Filter 2	0.00	0.06	0.07
3/18/2020 0:00	3/19/2020 0:00	Perdue	Filter 2	0.05	0.07	0.48
3/19/2020 0:00	3/20/2020 0:00	Perdue	Filter 2	0.00	0.09	0.13
3/20/2020 0:00	3/21/2020 0:00	Perdue	Filter 2	0.07	0.08	0.10
3/21/2020 0:00	3/22/2020 0:00	Perdue	Filter 2	0.07	0.07	0.08
3/22/2020 0:00	3/23/2020 0:00	Perdue	Filter 2	0.00	0.09	0.17
3/23/2020 0:00	3/24/2020 0:00	Perdue	Filter 2	0.09	0.10	0.11
3/24/2020 0:00	3/25/2020 0:00	Perdue	Filter 2	0.00	0.10	0.11
3/25/2020 0:00	3/26/2020 0:00	Perdue	Filter 2	0.10	0.11	0.11
3/26/2020 0:00	3/27/2020 0:00	Perdue	Filter 2	0.10	0.11	0.12
3/27/2020 0:00	3/28/2020 0:00	Perdue	Filter 2	0.00	0.11	0.13
3/28/2020 0:00	3/29/2020 0:00	Perdue	Filter 2	0.00	0.13	0.21
3/29/2020 0:00	3/30/2020 0:00	Perdue	Filter 2	0.13	0.14	0.15
3/30/2020 0:00	3/31/2020 0:00	Perdue	Filter 2	0.00	0.14	0.15
3/31/2020 0:00	4/1/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
4/1/2020 0:00	4/2/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
4/2/2020 0:00	4/3/2020 0:00	Perdue	Filter 2	0.14	0.15	0.15
4/3/2020 0:00	4/4/2020 0:00	Perdue	Filter 2	0.00	0.14	0.16
4/4/2020 0:00	4/5/2020 0:00	Perdue	Filter 2	0.14	0.17	0.24
4/5/2020 0:00	4/6/2020 0:00	Perdue	Filter 2	0.15	0.16	0.17
4/6/2020 0:00	4/7/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
4/7/2020 0:00	4/8/2020 0:00	Perdue	Filter 2	0.14	0.15	0.15
4/8/2020 0:00	4/9/2020 0:00	Perdue	Filter 2	0.00	0.14	0.16
4/9/2020 0:00	4/10/2020 0:00	Perdue	Filter 2	0.00	0.13	0.15
4/10/2020 0:00	4/11/2020 0:00	Perdue	Filter 2	0.00	0.13	0.13
4/11/2020 0:00	4/12/2020 0:00	Perdue	Filter 2	0.00	0.14	0.16
4/12/2020 0:00	4/13/2020 0:00	Perdue	Filter 2	0.00	0.18	1.00
4/13/2020 0:00	4/14/2020 0:00	Perdue	Filter 2	0.00	0.18	0.21
4/14/2020 0:00	4/15/2020 0:00	Perdue	Filter 2	0.00	0.16	0.19
4/15/2020 0:00	4/16/2020 0:00	Perdue	Filter 2	0.13	0.15	0.17
4/16/2020 0:00	4/17/2020 0:00	Perdue	Filter 2	0.00	0.15	0.16
4/17/2020 0:00	4/18/2020 0:00	Perdue	Filter 2	0.15		0.15
4/18/2020 0:00	4/19/2020 0:00	Perdue	Filter 2	0.12	0.13	0.15
4/19/2020 0:00	4/20/2020 0:00	Perdue	Filter 2	0.00	0.13	0.20
4/20/2020 0:00	4/21/2020 0:00	Perdue	Filter 2	0.00	0.17	0.18
4/21/2020 0:00	4/22/2020 0:00	Perdue	Filter 2	0.14	0.15	0.16
4/22/2020 0:00	4/23/2020 0:00	Perdue	Filter 2	0.15	0.15	0.16
4/23/2020 0:00	4/24/2020 0:00	Perdue	Filter 2	0.00	0.15	0.16
4/24/2020 0:00	4/25/2020 0:00	Perdue	Filter 2	0.00	0.15	0.35
4/25/2020 0:00	4/26/2020 0:00	Perdue	Filter 2	0.00	0.15	0.35
4/26/2020 0:00	4/27/2020 0:00	Perdue	Filter 2	0.00	0.21	0.23
4/27/2020 0:00	4/28/2020 0:00	Perdue	Filter 2	0.17	0.18	0.21
4/28/2020 0:00	4/29/2020 0:00	Perdue	Filter 2	0.00	0.19	0.32
4/29/2020 0:00	4/30/2020 0:00	Perdue	Filter 2	0.00	0.20	0.31
4/30/2020 0:00	5/1/2020 0:00	Perdue	Filter 2	0.00	0.19	0.27
5/1/2020 0:00	5/2/2020 0:00	Perdue	Filter 2	0.18	0.21	0.25
5/2/2020 0:00	5/3/2020 0:00	Perdue	Filter 2	0.18	0.19	0.27
5/3/2020 0:00	5/4/2020 0:00	Perdue	Filter 2	0.00	0.21	0.23
5/4/2020 0:00	5/5/2020 0:00	Perdue	Filter 2	0.15	0.20	0.31
5/5/2020 0:00	5/6/2020 0:00	Perdue	Filter 2	0.14	0.15	0.54
5/6/2020 0:00	5/7/2020 0:00	Perdue	Filter 2	0.00	0.17	1.00
5/7/2020 0:00	5/8/2020 0:00	Perdue	Filter 2	0.09	0.10	0.14
5/8/2020 0:00	5/9/2020 0:00	Perdue	Filter 2	0.08	0.09	0.12
5/9/2020 0:00	5/10/2020 0:00	Perdue	Filter 2	0.00	0.09	0.09
5/10/2020 0:00	5/11/2020 0:00	Perdue	Filter 2	0.08	0.15	0.36
5/11/2020 0:00	5/12/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
5/12/2020 0:00	5/13/2020 0:00	Perdue	Filter 2	0.00	0.10	0.13
5/13/2020 0:00	5/14/2020 0:00	Perdue	Filter 2	0.07	0.08	0.10
5/14/2020 0:00	5/15/2020 0:00	Perdue	Filter 2	0.00	0.08	0.09
5/15/2020 0:00	5/16/2020 0:00	Perdue	Filter 2	0.00	0.08	0.08
5/16/2020 0:00	5/17/2020 0:00	Perdue	Filter 2	0.00	0.11	0.39
5/17/2020 0:00	5/18/2020 0:00	Perdue	Filter 2	0.00	0.17	0.21
5/18/2020 0:00	5/19/2020 0:00	Perdue	Filter 2	0.11	0.13	0.18
5/19/2020 0:00	5/20/2020 0:00	Perdue	Filter 2	0.00	0.14	0.16
5/20/2020 0:00	5/21/2020 0:00	Perdue	Filter 2	0.16	0.19	0.24
5/21/2020 0:00	5/22/2020 0:00	Perdue	Filter 2	0.00	0.16	0.26
5/22/2020 0:00	5/23/2020 0:00	Perdue	Filter 2	0.10	0.11	0.12
5/23/2020 0:00	5/24/2020 0:00	Perdue	Filter 2	0.10	0.12	0.13
5/24/2020 0:00	5/25/2020 0:00	Perdue	Filter 2	0.11	0.12	0.18

5/25/2020 0:00	5/26/2020 0:00	Perdue	Filter 2	0.00	0.13	0.16
5/26/2020 0:00	5/27/2020 0:00	Perdue	Filter 2	0.00	0.15	0.98
5/27/2020 0:00	5/28/2020 0:00	Perdue	Filter 2	0.00	0.13	0.27
5/28/2020 0:00	5/29/2020 0:00	Perdue	Filter 2	0.09	0.10	0.19
5/29/2020 0:00	5/30/2020 0:00	Perdue	Filter 2	0.10	0.11	0.12
5/30/2020 0:00	5/31/2020 0:00	Perdue	Filter 2	0.10	0.11	0.19
5/31/2020 0:00	6/1/2020 0:00	Perdue	Filter 2	0.10	0.11	0.21
6/1/2020 0:00	6/2/2020 0:00	Perdue	Filter 2	0.00	0.12	0.13
6/2/2020 0:00	6/3/2020 0:00	Perdue	Filter 2	0.12	0.14	0.28
6/3/2020 0:00	6/4/2020 0:00	Perdue	Filter 2	0.00	0.20	0.23
6/4/2020 0:00	6/5/2020 0:00	Perdue	Filter 2	0.08	0.17	0.24
6/5/2020 0:00	6/6/2020 0:00	Perdue	Filter 2	0.06	0.08	0.13
6/6/2020 0:00	6/7/2020 0:00	Perdue	Filter 2	0.06	0.08	0.10
6/7/2020 0:00	6/8/2020 0:00	Perdue	Filter 2	0.07	0.09	0.11
6/8/2020 0:00	6/9/2020 0:00	Perdue	Filter 2	0.06	0.08	0.09
6/9/2020 0:00	6/10/2020 0:00	Perdue	Filter 2	0.00	0.07	0.25
6/10/2020 0:00	6/11/2020 0:00	Perdue	Filter 2	0.06	0.09	0.15
6/11/2020 0:00	6/12/2020 0:00	Perdue	Filter 2	0.07	0.08	0.11
6/12/2020 0:00	6/13/2020 0:00	Perdue	Filter 2	0.07	0.08	0.10
6/13/2020 0:00	6/14/2020 0:00	Perdue	Filter 2	0.07	0.08	0.09
6/14/2020 0:00	6/15/2020 0:00	Perdue	Filter 2	0.08	0.09	0.10
6/15/2020 0:00	6/16/2020 0:00	Perdue	Filter 2	0.00	0.10	0.14
6/16/2020 0:00	6/17/2020 0:00	Perdue	Filter 2	0.00	0.11	0.16
6/17/2020 0:00	6/18/2020 0:00	Perdue	Filter 2	0.00	0.07	0.11
6/18/2020 0:00	6/19/2020 0:00	Perdue	Filter 2	0.06	0.08	0.11
6/19/2020 0:00	6/20/2020 0:00	Perdue	Filter 2	0.09	0.11	0.15
6/20/2020 0:00	6/21/2020 0:00	Perdue	Filter 2	0.00	0.10	0.14
6/21/2020 0:00	6/22/2020 0:00	Perdue	Filter 2	0.00	0.09	0.14
6/22/2020 0:00	6/23/2020 0:00	Perdue	Filter 2	0.07	0.09	0.10
6/23/2020 0:00	6/24/2020 0:00	Perdue	Filter 2	0.00	0.08	0.09
6/24/2020 0:00	6/25/2020 0:00	Perdue	Filter 2	0.00	0.11	0.16
6/25/2020 0:00	6/26/2020 0:00	Perdue	Filter 2	0.00	0.09	0.15
6/26/2020 0:00	6/27/2020 0:00	Perdue	Filter 2	0.00	0.08	0.12
6/27/2020 0:00	6/28/2020 0:00	Perdue	Filter 2	0.09	0.11	0.14
6/28/2020 0:00	6/29/2020 0:00	Perdue	Filter 2	0.08	0.10	0.13
6/29/2020 0:00	6/30/2020 0:00	Perdue	Filter 2	0.00	0.09	0.39
6/30/2020 0:00	7/1/2020 0:00	Perdue	Filter 2	0.08	0.09	0.11
7/1/2020 0:00	7/2/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
7/2/2020 0:00	7/3/2020 0:00	Perdue	Filter 2	0.00	0.11	0.20
7/3/2020 0:00	7/4/2020 0:00	Perdue	Filter 2	0.10	0.14	0.17
7/4/2020 0:00	7/5/2020 0:00	Perdue	Filter 2	0.11	0.13	0.19
7/5/2020 0:00	7/6/2020 0:00	Perdue	Filter 2	0.00	0.15	0.56
7/6/2020 0:00	7/7/2020 0:00	Perdue	Filter 2	0.00	0.17	0.23
7/7/2020 0:00	7/8/2020 0:00	Perdue	Filter 2	0.16	0.18	0.24
7/8/2020 0:00	7/9/2020 0:00	Perdue	Filter 2	0.14	0.16	0.19
7/9/2020 0:00	7/10/2020 0:00	Perdue	Filter 2	0.00	0.15	0.24
7/10/2020 0:00	7/11/2020 0:00	Perdue	Filter 2	0.14	0.18	0.27
7/11/2020 0:00	7/12/2020 0:00	Perdue	Filter 2	0.14	0.16	0.18
7/12/2020 0:00	7/13/2020 0:00	Perdue	Filter 2	0.15	0.17	0.20
7/13/2020 0:00	7/14/2020 0:00	Perdue	Filter 2	0.00	0.20	0.23
7/14/2020 0:00	7/15/2020 0:00	Perdue	Filter 2	0.17	0.20	0.24
7/15/2020 0:00	7/16/2020 0:00	Perdue	Filter 2	0.00	0.21	0.27
7/16/2020 0:00	7/17/2020 0:00	Perdue	Filter 2	0.18	0.19	0.22
7/17/2020 0:00	7/18/2020 0:00	Perdue	Filter 2	0.16	0.18	0.20
7/18/2020 0:00	7/19/2020 0:00	Perdue	Filter 2	0.00	0.16	0.34
7/19/2020 0:00	7/20/2020 0:00	Perdue	Filter 2	0.12	0.14	0.20
7/20/2020 0:00	7/21/2020 0:00	Perdue	Filter 2	0.10	0.12	0.27
7/21/2020 0:00	7/22/2020 0:00	Perdue	Filter 2	0.08	0.09	0.25
7/22/2020 0:00	7/23/2020 0:00	Perdue	Filter 2	0.00	0.10	0.21
7/23/2020 0:00	7/24/2020 0:00	Perdue	Filter 2	0.00	0.20	0.54
7/24/2020 0:00	7/25/2020 0:00	Perdue	Filter 2	0.00	0.20	0.29
7/25/2020 0:00	7/26/2020 0:00	Perdue	Filter 2	0.00	0.14	0.28
7/26/2020 0:00	7/27/2020 0:00	Perdue	Filter 2	0.12	0.13	0.22
7/27/2020 0:00	7/28/2020 0:00	Perdue	Filter 2	0.00	0.15	0.44
7/28/2020 0:00	7/29/2020 0:00	Perdue	Filter 2	0.00	0.17	0.72
7/29/2020 0:00	7/30/2020 0:00	Perdue	Filter 2	0.00	0.16	0.45
7/30/2020 0:00	7/31/2020 0:00	Perdue	Filter 2	0.00	0.11	0.38
7/31/2020 0:00	8/1/2020 0:00	Perdue	Filter 2	0.11	0.14	0.20
8/1/2020 0:00	8/2/2020 0:00	Perdue	Filter 2	0.11	0.12	0.16
8/2/2020 0:00	8/3/2020 0:00	Perdue	Filter 2	0.00	0.12	0.19
8/3/2020 0:00	8/4/2020 0:00	Perdue	Filter 2	0.00	0.11	0.15
8/4/2020 0:00	8/5/2020 0:00	Perdue	Filter 2	0.00	0.10	0.14
8/5/2020 0:00	8/6/2020 0:00	Perdue	Filter 2	0.10	0.10	0.16

8/6/2020 0:00	8/7/2020 0:00	Perdue	Filter 2	0.10	0.10	0.16
8/7/2020 0:00	8/8/2020 0:00	Perdue	Filter 2	0.10	0.11	0.25
8/8/2020 0:00	8/9/2020 0:00	Perdue	Filter 2	0.11	0.12	0.16
8/9/2020 0:00	8/10/2020 0:00	Perdue	Filter 2	0.00	0.12	0.27
8/10/2020 0:00	8/11/2020 0:00	Perdue	Filter 2	0.00	0.11	0.21
8/11/2020 0:00	8/12/2020 0:00	Perdue	Filter 2	0.02	0.12	1.00
8/12/2020 0:00	8/13/2020 0:00	Perdue	Filter 2	0.00	0.15	0.49
8/13/2020 0:00	8/14/2020 0:00	Perdue	Filter 2	0.03	0.11	0.30
8/14/2020 0:00	8/15/2020 0:00	Perdue	Filter 2	0.00	0.05	0.11
8/15/2020 0:00	8/16/2020 0:00	Perdue	Filter 2	0.03	0.04	0.14
8/16/2020 0:00	8/17/2020 0:00	Perdue	Filter 2	0.00	0.04	0.15
8/17/2020 0:00	8/18/2020 0:00	Perdue	Filter 2	0.04	0.05	0.06
8/18/2020 0:00	8/19/2020 0:00	Perdue	Filter 2	0.00	0.05	0.08
8/19/2020 0:00	8/20/2020 0:00	Perdue	Filter 2	0.00	0.05	0.45
8/20/2020 0:00	8/21/2020 0:00	Perdue	Filter 2	0.00	0.04	0.12
8/21/2020 0:00	8/22/2020 0:00	Perdue	Filter 2	0.00	0.05	0.11
8/22/2020 0:00	8/23/2020 0:00	Perdue	Filter 2	0.00	0.05	0.08
8/23/2020 0:00	8/24/2020 0:00	Perdue	Filter 2	0.00	0.17	0.60
8/24/2020 0:00	8/25/2020 0:00	Perdue	Filter 2	0.00	0.16	0.97
8/25/2020 0:00	8/26/2020 0:00	Perdue	Filter 2	0.00	0.15	1.00
8/26/2020 0:00	8/27/2020 0:00	Perdue	Filter 2	0.00	0.13	1.00
8/27/2020 0:00	8/28/2020 0:00	Perdue	Filter 2	0.00	0.05	0.10
8/28/2020 0:00	8/29/2020 0:00	Perdue	Filter 2	0.00	0.09	0.11
8/29/2020 0:00	8/30/2020 0:00	Perdue	Filter 2	0.00	0.09	0.13
8/30/2020 0:00	8/31/2020 0:00	Perdue	Filter 2	0.07	0.09	0.15
8/31/2020 0:00	9/1/2020 0:00	Perdue	Filter 2	0.00	0.09	0.12
9/1/2020 0:00	9/2/2020 0:00	Perdue	Filter 2	0.00	0.10	0.19
9/2/2020 0:00	9/3/2020 0:00	Perdue	Filter 2	0.00	0.09	0.25
9/3/2020 0:00	9/4/2020 0:00	Perdue	Filter 2	0.08	0.09	0.17
9/4/2020 0:00	9/5/2020 0:00	Perdue	Filter 2	0.08	0.09	0.13
9/5/2020 0:00	9/6/2020 0:00	Perdue	Filter 2	0.09	0.11	0.46
9/6/2020 0:00	9/7/2020 0:00	Perdue	Filter 2	0.00	0.11	0.27
9/7/2020 0:00	9/8/2020 0:00	Perdue	Filter 2	0.08	0.09	0.18
9/8/2020 0:00	9/9/2020 0:00	Perdue	Filter 2	0.00	0.09	0.19
9/9/2020 0:00	9/10/2020 0:00	Perdue	Filter 2	0.08	0.09	0.17
9/10/2020 0:00	9/11/2020 0:00	Perdue	Filter 2	0.00	0.11	0.20
9/11/2020 0:00	9/12/2020 0:00	Perdue	Filter 2	0.09	0.10	0.13
9/12/2020 0:00	9/13/2020 0:00	Perdue	Filter 2	0.00	0.10	0.38
9/13/2020 0:00	9/14/2020 0:00	Perdue	Filter 2	0.00	0.11	0.18
9/14/2020 0:00	9/15/2020 0:00	Perdue	Filter 2	0.00	0.13	0.19
9/15/2020 0:00	9/16/2020 0:00	Perdue	Filter 2	0.11	0.12	0.37
9/16/2020 0:00	9/17/2020 0:00	Perdue	Filter 2	0.10	0.11	0.18
9/17/2020 0:00	9/18/2020 0:00	Perdue	Filter 2	0.00	0.18	0.27
9/18/2020 0:00	9/19/2020 0:00	Perdue	Filter 2	0.12	0.14	0.39
9/19/2020 0:00	9/20/2020 0:00	Perdue	Filter 2	0.10	0.11	0.22
9/20/2020 0:00	9/21/2020 0:00	Perdue	Filter 2	0.00	0.16	0.28
9/21/2020 0:00	9/22/2020 0:00	Perdue	Filter 2	0.11	0.14	0.19
9/22/2020 0:00	9/23/2020 0:00	Perdue	Filter 2	0.00	0.13	0.20
9/23/2020 0:00	9/24/2020 0:00	Perdue	Filter 2	0.00	0.12	0.18
9/24/2020 0:00	9/25/2020 0:00	Perdue	Filter 2	0.00	0.14	0.31
9/25/2020 0:00	9/26/2020 0:00	Perdue	Filter 2	0.00	0.08	0.14
9/26/2020 0:00	9/27/2020 0:00	Perdue	Filter 2	0.00	0.03	0.17
9/27/2020 0:00	9/28/2020 0:00	Perdue	Filter 2	0.00	0.02	0.15
9/28/2020 0:00	9/29/2020 0:00	Perdue	Filter 2	0.00	0.22	0.70
9/29/2020 0:00	9/30/2020 0:00	Perdue	Filter 2	0.00	0.17	0.36
9/30/2020 0:00	10/1/2020 0:00	Perdue	Filter 2	0.03	0.08	0.99
10/1/2020 0:00	10/2/2020 0:00	Perdue	Filter 2	0.00	0.13	0.17
10/2/2020 0:00	10/3/2020 0:00	Perdue	Filter 2	0.12	0.17	0.21
10/3/2020 0:00	10/4/2020 0:00	Perdue	Filter 2	0.16	0.20	0.30
10/4/2020 0:00	10/5/2020 0:00	Perdue	Filter 2	0.00	0.11	0.71
10/5/2020 0:00	10/6/2020 0:00	Perdue	Filter 2	0.00	0.09	0.22
10/6/2020 0:00	10/7/2020 0:00	Perdue	Filter 2	0.11	0.13	0.20
10/7/2020 0:00	10/8/2020 0:00	Perdue	Filter 2	0.00	0.13	0.20
10/8/2020 0:00	10/9/2020 0:00	Perdue	Filter 2	0.10	0.11	0.19
10/9/2020 0:00	10/10/2020 0:00	Perdue	Filter 2	0.10	0.11	0.26
10/10/2020 0:00	10/11/2020 0:00	Perdue	Filter 2	0.00	0.11	0.24
10/11/2020 0:00	10/12/2020 0:00	Perdue	Filter 2	0.00	0.10	0.17
10/12/2020 0:00	10/13/2020 0:00	Perdue	Filter 2	0.08	0.09	0.11
10/13/2020 0:00	10/14/2020 0:00	Perdue	Filter 2	0.08	0.10	0.19
10/14/2020 0:00	10/15/2020 0:00	Perdue	Filter 2	0.09	0.10	0.13
10/15/2020 0:00	10/16/2020 0:00	Perdue	Filter 2	0.10	0.11	0.15
10/16/2020 0:00	10/17/2020 0:00	Perdue	Filter 2	0.07	0.09	0.13
10/17/2020 0:00	10/18/2020 0:00	Perdue	Filter 2	0.08	0.09	0.16

10/18/2020 0:00	10/19/2020 0:00	Perdue	Filter 2	0.00	0.09	0.19
10/19/2020 0:00	10/20/2020 0:00	Perdue	Filter 2	0.09	0.10	0.12
10/20/2020 0:00	10/21/2020 0:00	Perdue	Filter 2	0.00	0.10	0.14
10/21/2020 0:00	10/22/2020 0:00	Perdue	Filter 2	0.00	0.09	0.19
10/22/2020 0:00	10/23/2020 0:00	Perdue	Filter 2	0.09	0.10	0.13
10/23/2020 0:00	10/24/2020 0:00	Perdue	Filter 2	0.10	0.11	0.21
10/24/2020 0:00	10/25/2020 0:00	Perdue	Filter 2	0.00	0.12	0.25
10/25/2020 0:00	10/26/2020 0:00	Perdue	Filter 2	0.00	0.12	0.17
10/26/2020 0:00	10/27/2020 0:00	Perdue	Filter 2	0.13	0.16	0.23
10/27/2020 0:00	10/28/2020 0:00	Perdue	Filter 2	0.16	0.18	0.20
10/28/2020 0:00	10/29/2020 0:00	Perdue	Filter 2	0.00	0.23	0.40
10/29/2020 0:00	10/30/2020 0:00	Perdue	Filter 2	0.00	0.12	0.99
10/30/2020 0:00	10/31/2020 0:00	Perdue	Filter 2	0.01	0.03	0.17
10/31/2020 0:00	11/1/2020 0:00	Perdue	Filter 2	0.02	0.03	0.08
11/1/2020 0:00	11/2/2020 0:00	Perdue	Filter 2	0.00	0.05	0.34
11/2/2020 0:00	11/3/2020 0:00	Perdue	Filter 2	0.04	0.06	0.20
11/3/2020 0:00	11/4/2020 0:00	Perdue	Filter 2	0.06	0.08	0.15
11/4/2020 0:00	11/5/2020 0:00	Perdue	Filter 2	0.08	0.12	0.14
11/5/2020 0:00	11/6/2020 0:00	Perdue	Filter 2	0.00	0.12	0.20
11/6/2020 0:00	11/7/2020 0:00	Perdue	Filter 2	0.00	0.11	0.31
11/7/2020 0:00	11/8/2020 0:00	Perdue	Filter 2	0.10	0.12	0.16
11/8/2020 0:00	11/9/2020 0:00	Perdue	Filter 2	0.00	0.11	0.21
11/9/2020 0:00	11/10/2020 0:00	Perdue	Filter 2	0.00	0.14	0.17
11/10/2020 0:00	11/11/2020 0:00	Perdue	Filter 2	0.00	0.23	0.38
11/11/2020 0:00	11/12/2020 0:00	Perdue	Filter 2	0.00	0.25	0.30
11/12/2020 0:00	11/13/2020 0:00	Perdue	Filter 2	0.10	0.12	0.26
11/13/2020 0:00	11/14/2020 0:00	Perdue	Filter 2	0.10	0.12	0.15
11/14/2020 0:00	11/15/2020 0:00	Perdue	Filter 2	0.00	0.13	0.25
11/15/2020 0:00	11/16/2020 0:00	Perdue	Filter 2	0.11	0.14	0.19
11/16/2020 0:00	11/17/2020 0:00	Perdue	Filter 2	0.00	0.16	0.25
11/17/2020 0:00	11/18/2020 0:00	Perdue	Filter 2	0.13	0.15	0.21
11/18/2020 0:00	11/19/2020 0:00	Perdue	Filter 2	0.15	0.16	0.22
11/19/2020 0:00	11/20/2020 0:00	Perdue	Filter 2	0.00	0.18	0.22
11/20/2020 0:00	11/21/2020 0:00	Perdue	Filter 2	0.00	0.22	1.00
11/21/2020 0:00	11/22/2020 0:00	Perdue	Filter 2	0.22	0.24	0.77
11/22/2020 0:00	11/23/2020 0:00	Perdue	Filter 2	0.00	0.22	0.28
11/23/2020 0:00	11/24/2020 0:00	Perdue	Filter 2	0.19	0.20	0.25
11/24/2020 0:00	11/25/2020 0:00	Perdue	Filter 2	0.00	0.20	0.20
11/25/2020 0:00	11/26/2020 0:00	Perdue	Filter 2	0.20		0.20
11/26/2020 0:00	11/27/2020 0:00	Perdue	Filter 2	0.10	0.11	0.20
11/27/2020 0:00	11/28/2020 0:00	Perdue	Filter 2	0.09	0.10	0.16
11/28/2020 0:00	11/29/2020 0:00	Perdue	Filter 2	0.00	0.10	0.26
11/29/2020 0:00	11/30/2020 0:00	Perdue	Filter 2	0.09	0.10	0.14
11/30/2020 0:00	12/1/2020 0:00	Perdue	Filter 2	0.00	0.10	1.00
12/1/2020 0:00	12/2/2020 0:00	Perdue	Filter 2	0.08	0.09	0.11
12/2/2020 0:00	12/3/2020 0:00	Perdue	Filter 2	0.00	0.09	0.10
12/3/2020 0:00	12/4/2020 0:00	Perdue	Filter 2	0.10		0.10
12/4/2020 0:00	12/5/2020 0:00	Perdue	Filter 2	0.10		0.10
12/5/2020 0:00	12/6/2020 0:00	Perdue	Filter 2	0.10		0.10
12/6/2020 0:00	12/7/2020 0:00	Perdue	Filter 2	0.10		0.10
12/7/2020 0:00	12/8/2020 0:00	Perdue	Filter 2	0.10		0.10
12/8/2020 0:00	12/9/2020 0:00	Perdue	Filter 2	0.10		0.10
12/9/2020 0:00	12/10/2020 0:00	Perdue	Filter 2	0.10		0.10
12/10/2020 0:00	12/11/2020 0:00	Perdue	Filter 2	0.10	0.13	0.14
12/11/2020 0:00	12/12/2020 0:00	Perdue	Filter 2	0.00	0.13	0.17
12/12/2020 0:00	12/13/2020 0:00	Perdue	Filter 2	0.12	0.13	0.15
12/13/2020 0:00	12/14/2020 0:00	Perdue	Filter 2	0.11	0.12	0.17
12/14/2020 0:00	12/15/2020 0:00	Perdue	Filter 2	0.12	0.13	0.17
12/15/2020 0:00	12/16/2020 0:00	Perdue	Filter 2	0.00	0.13	0.23
12/16/2020 0:00	12/17/2020 0:00	Perdue	Filter 2	0.00	0.15	0.59
12/17/2020 0:00	12/18/2020 0:00	Perdue	Filter 2	0.14	0.16	0.16
12/18/2020 0:00	12/19/2020 0:00	Perdue	Filter 2	0.13	0.15	0.26
12/19/2020 0:00	12/20/2020 0:00	Perdue	Filter 2	0.00	0.14	0.17
12/20/2020 0:00	12/21/2020 0:00	Perdue	Filter 2	0.14	0.15	0.25
12/21/2020 0:00	12/22/2020 0:00	Perdue	Filter 2	0.00	0.16	0.23
12/22/2020 0:00	12/23/2020 0:00	Perdue	Filter 2	0.16	0.18	0.37
12/23/2020 0:00	12/24/2020 0:00	Perdue	Filter 2	0.15	0.17	0.18
12/24/2020 0:00	12/25/2020 0:00	Perdue	Filter 2	0.00	0.18	0.27
12/25/2020 0:00	12/26/2020 0:00	Perdue	Filter 2	0.08	0.12	0.28
12/26/2020 0:00	12/27/2020 0:00	Perdue	Filter 2	0.00	0.09	0.18
12/27/2020 0:00	12/28/2020 0:00	Perdue	Filter 2	0.00	0.10	0.53
12/28/2020 0:00	12/29/2020 0:00	Perdue	Filter 2	0.00	0.08	0.21
12/29/2020 0:00	12/30/2020 0:00	Perdue	Filter 2	0.06	0.07	0.12

12/30/2020 0:00	12/31/2020 0:00	Perdue	Filter 2	0.00	0.08	1.00
12/31/2020 0:00	1/1/2021 0:00	Perdue	Filter 2	0.07	0.08	0.11
1/1/2021 0:00	1/2/2021 0:00	Perdue	Filter 2	0.00	0.08	0.14
1/2/2021 0:00	1/3/2021 0:00	Perdue	Filter 2	0.00	0.09	0.15
1/3/2021 0:00	1/4/2021 0:00	Perdue	Filter 2	0.00	0.09	0.19
1/4/2021 0:00	1/5/2021 0:00	Perdue	Filter 2	0.00	0.08	0.23
1/5/2021 0:00	1/6/2021 0:00	Perdue	Filter 2	0.08	0.09	0.22
1/6/2021 0:00	1/7/2021 0:00	Perdue	Filter 2	0.00	0.09	0.25
1/7/2021 0:00	1/8/2021 0:00	Perdue	Filter 2	0.07	0.09	0.33
1/8/2021 0:00	1/9/2021 0:00	Perdue	Filter 2	0.00	0.08	0.13
1/9/2021 0:00	1/10/2021 0:00	Perdue	Filter 2	0.07	0.09	0.22
1/10/2021 0:00	1/11/2021 0:00	Perdue	Filter 2	0.00	0.09	0.11
1/11/2021 0:00	1/12/2021 0:00	Perdue	Filter 2	0.08	0.10	0.14
1/12/2021 0:00	1/13/2021 0:00	Perdue	Filter 2	0.00	0.09	0.22
1/13/2021 0:00	1/14/2021 0:00	Perdue	Filter 2	0.08	0.09	0.42
1/14/2021 0:00	1/15/2021 0:00	Perdue	Filter 2	0.00	0.09	0.26
1/15/2021 0:00	1/16/2021 0:00	Perdue	Filter 2	0.09	0.10	0.34
1/16/2021 0:00	1/17/2021 0:00	Perdue	Filter 2	0.00	0.11	0.22
1/17/2021 0:00	1/18/2021 0:00	Perdue	Filter 2	0.09	0.10	0.12
1/18/2021 0:00	1/19/2021 0:00	Perdue	Filter 2	0.09	0.10	0.20
1/19/2021 0:00	1/20/2021 0:00	Perdue	Filter 2	0.00	0.10	0.23
1/20/2021 0:00	1/21/2021 0:00	Perdue	Filter 2	0.10	0.10	0.14
1/21/2021 0:00	1/22/2021 0:00	Perdue	Filter 2	0.00	0.11	0.26
1/22/2021 0:00	1/23/2021 0:00	Perdue	Filter 2	0.00	0.10	0.21
1/23/2021 0:00	1/24/2021 0:00	Perdue	Filter 2	0.09	0.10	0.22
1/24/2021 0:00	1/25/2021 0:00	Perdue	Filter 2	0.00	0.09	0.13
1/25/2021 0:00	1/26/2021 0:00	Perdue	Filter 2	0.09	0.10	0.34
1/26/2021 0:00	1/27/2021 0:00	Perdue	Filter 2	0.00	0.10	0.26
1/27/2021 0:00	1/28/2021 0:00	Perdue	Filter 2	0.00	0.10	0.56
1/28/2021 0:00	1/29/2021 0:00	Perdue	Filter 2	0.00	0.12	0.28
1/29/2021 0:00	1/30/2021 0:00	Perdue	Filter 2	0.11	0.13	0.32
1/30/2021 0:00	1/31/2021 0:00	Perdue	Filter 2	0.00	0.14	0.20
1/31/2021 0:00	2/1/2021 0:00	Perdue	Filter 2	0.00	0.13	0.41
2/1/2021 0:00	2/2/2021 0:00	Perdue	Filter 2	0.12	0.14	0.18
2/2/2021 0:00	2/3/2021 0:00	Perdue	Filter 2	0.00	0.22	0.35
2/3/2021 0:00	2/4/2021 0:00	Perdue	Filter 2	0.14	0.16	0.94
2/4/2021 0:00	2/5/2021 0:00	Perdue	Filter 2	0.00	0.15	0.29
2/5/2021 0:00	2/6/2021 0:00	Perdue	Filter 2	0.15	0.17	0.39
2/6/2021 0:00	2/7/2021 0:00	Perdue	Filter 2	0.00	0.14	0.20
2/7/2021 0:00	2/8/2021 0:00	Perdue	Filter 2	0.00	0.12	0.16
2/8/2021 0:00	2/9/2021 0:00	Perdue	Filter 2	0.00	0.14	0.19
2/9/2021 0:00	2/10/2021 0:00	Perdue	Filter 2	0.13	0.15	0.22
2/10/2021 0:00	2/11/2021 0:00	Perdue	Filter 2	0.00	0.15	0.29
2/11/2021 0:00	2/12/2021 0:00	Perdue	Filter 2	0.12	0.13	0.27
2/12/2021 0:00	2/13/2021 0:00	Perdue	Filter 2	0.12	0.13	0.17
2/13/2021 0:00	2/14/2021 0:00	Perdue	Filter 2	0.00	0.15	0.23
2/14/2021 0:00	2/15/2021 0:00	Perdue	Filter 2	0.12	0.13	0.24
2/15/2021 0:00	2/16/2021 0:00	Perdue	Filter 2	0.00	0.14	0.20
2/16/2021 0:00	2/17/2021 0:00	Perdue	Filter 2	0.13	0.14	0.18
2/17/2021 0:00	2/18/2021 0:00	Perdue	Filter 2	0.00	0.14	0.25
2/18/2021 0:00	2/19/2021 0:00	Perdue	Filter 2	0.00	0.12	0.18
2/19/2021 0:00	2/20/2021 0:00	Perdue	Filter 2	0.11	0.13	0.28
2/20/2021 0:00	2/21/2021 0:00	Perdue	Filter 2	0.00	0.12	0.14
2/21/2021 0:00	2/22/2021 0:00	Perdue	Filter 2	0.11	0.13	0.15
2/22/2021 0:00	2/23/2021 0:00	Perdue	Filter 2	0.00	0.13	0.30
2/23/2021 0:00	2/24/2021 0:00	Perdue	Filter 2	0.00	0.15	0.44
2/24/2021 0:00	2/25/2021 0:00	Perdue	Filter 2	0.13	0.15	0.19
2/25/2021 0:00	2/26/2021 0:00	Perdue	Filter 2	0.14	0.16	0.21
2/26/2021 0:00	2/27/2021 0:00	Perdue	Filter 2	0.15	0.16	0.58
2/27/2021 0:00	2/28/2021 0:00	Perdue	Filter 2	0.14	0.15	0.22
2/28/2021 0:00	3/1/2021 0:00	Perdue	Filter 2	0.00	0.16	0.37
3/1/2021 0:00	3/2/2021 0:00	Perdue	Filter 2	0.16	0.17	0.27
3/2/2021 0:00	3/3/2021 0:00	Perdue	Filter 2	0.00	0.17	0.77
3/3/2021 0:00	3/4/2021 0:00	Perdue	Filter 2	0.00	0.18	0.20
3/4/2021 0:00	3/5/2021 0:00	Perdue	Filter 2	0.00	0.19	0.27
3/5/2021 0:00	3/6/2021 0:00	Perdue	Filter 2	0.18	0.19	0.26
3/6/2021 0:00	3/7/2021 0:00	Perdue	Filter 2	0.00	0.23	0.30
3/7/2021 0:00	3/8/2021 0:00	Perdue	Filter 2	0.22	0.23	0.29
3/8/2021 0:00	3/9/2021 0:00	Perdue	Filter 2	0.00	0.08	0.24
3/9/2021 0:00	3/10/2021 0:00	Perdue	Filter 2	0.05	0.06	0.09
3/10/2021 0:00	3/11/2021 0:00	Perdue	Filter 2	0.00	0.06	0.27
3/11/2021 0:00	3/12/2021 0:00	Perdue	Filter 2	0.05	0.06	0.11
3/12/2021 0:00	3/13/2021 0:00	Perdue	Filter 2	0.00	0.06	0.17

3/13/2021 0:00	3/14/2021 0:00	Perdue	Filter 2	0.07	0.09	0.13
3/14/2021 0:00	3/15/2021 0:00	Perdue	Filter 2	0.00	0.08	0.58
3/15/2021 0:00	3/16/2021 0:00	Perdue	Filter 2	0.05	0.06	0.09
3/16/2021 0:00	3/17/2021 0:00	Perdue	Filter 2	0.05	0.06	0.15
3/17/2021 0:00	3/18/2021 0:00	Perdue	Filter 2	0.00	0.07	0.12
3/18/2021 0:00	3/19/2021 0:00	Perdue	Filter 2	0.00	0.11	0.15
3/19/2021 0:00	3/20/2021 0:00	Perdue	Filter 2	0.09	0.10	0.26
3/20/2021 0:00	3/21/2021 0:00	Perdue	Filter 2	0.08	0.09	0.24
3/21/2021 0:00	3/22/2021 0:00	Perdue	Filter 2	0.08	0.08	0.13
3/22/2021 0:00	3/23/2021 0:00	Perdue	Filter 2	0.07	0.08	0.16
3/23/2021 0:00	3/24/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
3/24/2021 0:00	3/25/2021 0:00	Perdue	Filter 2	0.00	0.09	0.16
3/25/2021 0:00	3/26/2021 0:00	Perdue	Filter 2	0.08	0.09	0.12
3/26/2021 0:00	3/27/2021 0:00	Perdue	Filter 2	0.08	0.08	0.17
3/27/2021 0:00	3/28/2021 0:00	Perdue	Filter 2	0.07	0.08	0.27
3/28/2021 0:00	3/29/2021 0:00	Perdue	Filter 2	0.07	0.09	0.20
3/29/2021 0:00	3/30/2021 0:00	Perdue	Filter 2	0.07	0.08	0.41
3/30/2021 0:00	3/31/2021 0:00	Perdue	Filter 2	0.00	0.09	0.15
3/31/2021 0:00	4/1/2021 0:00	Perdue	Filter 2	0.09	0.10	0.18
4/1/2021 0:00	4/2/2021 0:00	Perdue	Filter 2	0.08	0.10	0.13
4/2/2021 0:00	4/3/2021 0:00	Perdue	Filter 2	0.00	0.10	0.26
4/3/2021 0:00	4/4/2021 0:00	Perdue	Filter 2	0.00	0.11	0.14
4/4/2021 0:00	4/5/2021 0:00	Perdue	Filter 2	0.10	0.11	0.12
4/5/2021 0:00	4/6/2021 0:00	Perdue	Filter 2	0.00	0.10	0.14
4/6/2021 0:00	4/7/2021 0:00	Perdue	Filter 2	0.00	0.12	0.24
4/7/2021 0:00	4/8/2021 0:00	Perdue	Filter 2	0.10	0.11	0.18
4/8/2021 0:00	4/9/2021 0:00	Perdue	Filter 2	0.09	0.10	0.12
4/9/2021 0:00	4/10/2021 0:00	Perdue	Filter 2	0.00	0.13	0.24
4/10/2021 0:00	4/11/2021 0:00	Perdue	Filter 2	0.09	0.11	0.17
4/11/2021 0:00	4/12/2021 0:00	Perdue	Filter 2	0.00	0.13	0.20
4/12/2021 0:00	4/13/2021 0:00	Perdue	Filter 2	0.12	0.14	0.18
4/13/2021 0:00	4/14/2021 0:00	Perdue	Filter 2	0.00	0.11	0.16
4/14/2021 0:00	4/15/2021 0:00	Perdue	Filter 2	0.00	0.13	0.26
4/15/2021 0:00	4/16/2021 0:00	Perdue	Filter 2	0.12	0.14	0.20
4/16/2021 0:00	4/17/2021 0:00	Perdue	Filter 2	0.10	0.11	0.22
4/17/2021 0:00	4/18/2021 0:00	Perdue	Filter 2	0.10	0.11	0.14
4/18/2021 0:00	4/19/2021 0:00	Perdue	Filter 2	0.10	0.11	0.14
4/19/2021 0:00	4/20/2021 0:00	Perdue	Filter 2	0.00	0.16	0.32
4/20/2021 0:00	4/21/2021 0:00	Perdue	Filter 2	0.09	0.14	0.20
4/21/2021 0:00	4/22/2021 0:00	Perdue	Filter 2	0.09	0.11	0.19
4/22/2021 0:00	4/23/2021 0:00	Perdue	Filter 2	0.09	0.11	0.14
4/23/2021 0:00	4/24/2021 0:00	Perdue	Filter 2	0.11	0.13	0.14
4/24/2021 0:00	4/25/2021 0:00	Perdue	Filter 2	0.09	0.10	0.16
4/25/2021 0:00	4/26/2021 0:00	Perdue	Filter 2	0.08	0.09	0.14
4/26/2021 0:00	4/27/2021 0:00	Perdue	Filter 2	0.00	0.11	0.30
4/27/2021 0:00	4/28/2021 0:00	Perdue	Filter 2	0.15	0.18	0.25
4/28/2021 0:00	4/29/2021 0:00	Perdue	Filter 2	0.13	0.15	0.25
4/29/2021 0:00	4/30/2021 0:00	Perdue	Filter 2	0.14	0.19	0.24
4/30/2021 0:00	5/1/2021 0:00	Perdue	Filter 2	0.17	0.20	0.24
5/1/2021 0:00	5/2/2021 0:00	Perdue	Filter 2	0.17	0.18	0.21
5/2/2021 0:00	5/3/2021 0:00	Perdue	Filter 2	0.00	0.21	0.27
5/3/2021 0:00	5/4/2021 0:00	Perdue	Filter 2	0.16	0.19	0.24
5/4/2021 0:00	5/5/2021 0:00	Perdue	Filter 2	0.14	0.18	0.23
5/5/2021 0:00	5/6/2021 0:00	Perdue	Filter 2	0.14	0.16	0.19
5/6/2021 0:00	5/7/2021 0:00	Perdue	Filter 2	0.16	0.21	0.25
5/7/2021 0:00	5/8/2021 0:00	Perdue	Filter 2	0.00	0.22	0.33
5/8/2021 0:00	5/9/2021 0:00	Perdue	Filter 2	0.17	0.19	0.20
5/9/2021 0:00	5/10/2021 0:00	Perdue	Filter 2	0.00	0.21	0.26
5/10/2021 0:00	5/11/2021 0:00	Perdue	Filter 2	0.00	0.24	0.53
5/11/2021 0:00	5/12/2021 0:00	Perdue	Filter 2	0.00	0.25	0.82
5/12/2021 0:00	5/13/2021 0:00	Perdue	Filter 2	0.00	0.16	0.27
5/13/2021 0:00	5/14/2021 0:00	Perdue	Filter 2	0.13	0.19	0.27
5/14/2021 0:00	5/15/2021 0:00	Perdue	Filter 2	0.00	0.14	0.22
5/15/2021 0:00	5/16/2021 0:00	Perdue	Filter 2	0.05	0.07	0.10
5/16/2021 0:00	5/17/2021 0:00	Perdue	Filter 2	0.00	0.07	0.24
5/17/2021 0:00	5/18/2021 0:00	Perdue	Filter 2	0.00	0.06	0.13
5/18/2021 0:00	5/19/2021 0:00	Perdue	Filter 2	0.05	0.06	0.08
5/19/2021 0:00	5/20/2021 0:00	Perdue	Filter 2	0.00	0.07	0.13
5/20/2021 0:00	5/21/2021 0:00	Perdue	Filter 2	0.04	0.06	0.09
5/21/2021 0:00	5/22/2021 0:00	Perdue	Filter 2	0.04	0.04	0.05
5/22/2021 0:00	5/23/2021 0:00	Perdue	Filter 2	0.00	0.07	0.12
5/23/2021 0:00	5/24/2021 0:00	Perdue	Filter 2	0.06	0.08	0.11
5/24/2021 0:00	5/25/2021 0:00	Perdue	Filter 2	0.05	0.07	0.10

5/25/2021 0:00	5/26/2021 0:00	Perdue	Filter 2	0.05	0.06	0.10
5/26/2021 0:00	5/27/2021 0:00	Perdue	Filter 2	0.00	0.05	0.13
5/27/2021 0:00	5/28/2021 0:00	Perdue	Filter 2	0.04	0.05	0.25
5/28/2021 0:00	5/29/2021 0:00	Perdue	Filter 2	0.00	0.07	0.17
5/29/2021 0:00	5/30/2021 0:00	Perdue	Filter 2	0.05	0.06	0.18
5/30/2021 0:00	5/31/2021 0:00	Perdue	Filter 2	0.05	0.05	0.11
5/31/2021 0:00	6/1/2021 0:00	Perdue	Filter 2	0.04	0.05	0.14
6/1/2021 0:00	6/2/2021 0:00	Perdue	Filter 2	0.04	0.05	0.07
6/2/2021 0:00	6/3/2021 0:00	Perdue	Filter 2	0.00	0.05	0.18
6/3/2021 0:00	6/4/2021 0:00	Perdue	Filter 2	0.05	0.08	0.16
6/4/2021 0:00	6/5/2021 0:00	Perdue	Filter 2	0.07	0.07	0.08
6/5/2021 0:00	6/6/2021 0:00	Perdue	Filter 2	0.07	0.09	0.13
6/6/2021 0:00	6/7/2021 0:00	Perdue	Filter 2	0.10	0.11	0.13
6/7/2021 0:00	6/8/2021 0:00	Perdue	Filter 2	0.00	0.12	0.16
6/8/2021 0:00	6/9/2021 0:00	Perdue	Filter 2	0.13	0.15	0.16
6/9/2021 0:00	6/10/2021 0:00	Perdue	Filter 2	0.00	0.15	0.26
6/10/2021 0:00	6/11/2021 0:00	Perdue	Filter 2	0.11	0.13	0.16
6/11/2021 0:00	6/12/2021 0:00	Perdue	Filter 2	0.13	0.14	0.18
6/12/2021 0:00	6/13/2021 0:00	Perdue	Filter 2	0.00	0.14	0.23
6/13/2021 0:00	6/14/2021 0:00	Perdue	Filter 2	0.00	0.00	0.00
6/14/2021 0:00	6/15/2021 0:00	Perdue	Filter 2	0.00	0.13	0.17
6/15/2021 0:00	6/16/2021 0:00	Perdue	Filter 2	0.10	0.13	0.16
6/16/2021 0:00	6/17/2021 0:00	Perdue	Filter 2	0.00	0.14	0.22
6/17/2021 0:00	6/18/2021 0:00	Perdue	Filter 2	0.10	0.12	0.16
6/18/2021 0:00	6/19/2021 0:00	Perdue	Filter 2	0.10	0.12	0.18
6/19/2021 0:00	6/20/2021 0:00	Perdue	Filter 2	0.00	0.13	0.24
6/20/2021 0:00	6/21/2021 0:00	Perdue	Filter 2	0.10	0.14	0.20
6/21/2021 0:00	6/22/2021 0:00	Perdue	Filter 2	0.09	0.13	0.16
6/22/2021 0:00	6/23/2021 0:00	Perdue	Filter 2	0.10	0.13	0.15
6/23/2021 0:00	6/24/2021 0:00	Perdue	Filter 2	0.00	0.14	0.35
6/24/2021 0:00	6/25/2021 0:00	Perdue	Filter 2	0.00	0.14	0.28
6/25/2021 0:00	6/26/2021 0:00	Perdue	Filter 2	0.00	0.14	0.22
6/26/2021 0:00	6/27/2021 0:00	Perdue	Filter 2	0.00	0.12	0.15
6/27/2021 0:00	6/28/2021 0:00	Perdue	Filter 2	0.00	0.13	0.18
6/28/2021 0:00	6/29/2021 0:00	Perdue	Filter 2	0.00	0.10	0.14
6/29/2021 0:00	6/30/2021 0:00	Perdue	Filter 2	0.04	0.06	0.07
6/30/2021 0:00	7/1/2021 0:00	Perdue	Filter 2	0.03	0.04	0.04
7/1/2021 0:00	7/2/2021 0:00	Perdue	Filter 2	0.03	0.05	0.07
7/2/2021 0:00	7/3/2021 0:00	Perdue	Filter 2	0.06	0.08	0.10
7/3/2021 0:00	7/4/2021 0:00	Perdue	Filter 2	0.00	0.12	0.16
7/4/2021 0:00	7/5/2021 0:00	Perdue	Filter 2	0.09	0.10	0.11
7/5/2021 0:00	7/6/2021 0:00	Perdue	Filter 2	0.09	0.10	0.11
7/6/2021 0:00	7/7/2021 0:00	Perdue	Filter 2	0.09	0.09	0.10
7/7/2021 0:00	7/8/2021 0:00	Perdue	Filter 2	0.00	0.09	0.11
7/8/2021 0:00	7/9/2021 0:00	Perdue	Filter 2	0.00	0.09	0.12
7/9/2021 0:00	7/10/2021 0:00	Perdue	Filter 2	0.09	0.10	0.11
7/10/2021 0:00	7/11/2021 0:00	Perdue	Filter 2	0.09	0.10	0.11
7/11/2021 0:00	7/12/2021 0:00	Perdue	Filter 2	0.00	0.09	0.10
7/12/2021 0:00	7/13/2021 0:00	Perdue	Filter 2	0.09	0.12	0.14
7/13/2021 0:00	7/14/2021 0:00	Perdue	Filter 2	0.12	0.13	0.15
7/14/2021 0:00	7/15/2021 0:00	Perdue	Filter 2	0.12	0.13	0.15
7/15/2021 0:00	7/16/2021 0:00	Perdue	Filter 2	0.00	0.14	0.32
7/16/2021 0:00	7/17/2021 0:00	Perdue	Filter 2	0.00	0.14	0.24
7/17/2021 0:00	7/18/2021 0:00	Perdue	Filter 2	0.14	0.16	0.22
7/18/2021 0:00	7/19/2021 0:00	Perdue	Filter 2	0.13	0.14	0.16
7/19/2021 0:00	7/20/2021 0:00	Perdue	Filter 2	0.00	0.14	0.24
7/20/2021 0:00	7/21/2021 0:00	Perdue	Filter 2	0.00	0.16	0.25
7/21/2021 0:00	7/22/2021 0:00	Perdue	Filter 2	0.14	0.15	0.17
7/22/2021 0:00	7/23/2021 0:00	Perdue	Filter 2	0.14	0.15	0.16
7/23/2021 0:00	7/24/2021 0:00	Perdue	Filter 2	0.00	0.18	0.23
7/24/2021 0:00	7/25/2021 0:00	Perdue	Filter 2	0.16	0.18	0.21
7/25/2021 0:00	7/26/2021 0:00	Perdue	Filter 2	0.16	0.17	0.19
7/26/2021 0:00	7/27/2021 0:00	Perdue	Filter 2	0.16	0.19	0.20
7/27/2021 0:00	7/28/2021 0:00	Perdue	Filter 2	0.00	0.21	0.27
7/28/2021 0:00	7/29/2021 0:00	Perdue	Filter 2	0.21	0.22	0.27
7/29/2021 0:00	7/30/2021 0:00	Perdue	Filter 2	0.19	0.21	0.24
7/30/2021 0:00	7/31/2021 0:00	Perdue	Filter 2	0.20	0.22	0.24
7/31/2021 0:00	8/1/2021 0:00	Perdue	Filter 2	0.00	0.24	0.29
8/1/2021 0:00	8/2/2021 0:00	Perdue	Filter 2	0.24	0.25	0.29
8/2/2021 0:00	8/3/2021 0:00	Perdue	Filter 2	0.13	0.19	0.28
8/3/2021 0:00	8/4/2021 0:00	Perdue	Filter 2	0.11	0.12	0.20
8/4/2021 0:00	8/5/2021 0:00	Perdue	Filter 2	0.00	0.12	0.14
8/5/2021 0:00	8/6/2021 0:00	Perdue	Filter 2	0.00	0.14	0.23

8/6/2021 0:00	8/7/2021 0:00	Perdue	Filter 2	0.13	0.15	0.21
8/7/2021 0:00	8/8/2021 0:00	Perdue	Filter 2	0.00	0.13	0.15
8/8/2021 0:00	8/9/2021 0:00	Perdue	Filter 2	0.00	0.13	0.23
8/9/2021 0:00	8/10/2021 0:00	Perdue	Filter 2	0.00	0.13	0.14
8/10/2021 0:00	8/11/2021 0:00	Perdue	Filter 2	0.00	0.16	0.29
8/11/2021 0:00	8/12/2021 0:00	Perdue	Filter 2	0.13	0.15	0.20
8/12/2021 0:00	8/13/2021 0:00	Perdue	Filter 2	0.13	0.14	0.17
8/13/2021 0:00	8/14/2021 0:00	Perdue	Filter 2	0.13	0.15	0.17
8/14/2021 0:00	8/15/2021 0:00	Perdue	Filter 2	0.00	0.17	0.26
8/15/2021 0:00	8/16/2021 0:00	Perdue	Filter 2	0.16	0.19	0.25
8/16/2021 0:00	8/17/2021 0:00	Perdue	Filter 2	0.16	0.18	0.21
8/17/2021 0:00	8/18/2021 0:00	Perdue	Filter 2	0.00	0.17	0.22
8/18/2021 0:00	8/19/2021 0:00	Perdue	Filter 2	0.00	0.17	0.19
8/19/2021 0:00	8/20/2021 0:00	Perdue	Filter 2	0.00	0.21	0.27
8/20/2021 0:00	8/21/2021 0:00	Perdue	Filter 2	0.16	0.17	0.20
8/21/2021 0:00	8/22/2021 0:00	Perdue	Filter 2	0.00	0.17	0.22
8/22/2021 0:00	8/23/2021 0:00	Perdue	Filter 2	0.18	0.21	0.22
8/23/2021 0:00	8/24/2021 0:00	Perdue	Filter 2	0.00	0.16	0.66
8/24/2021 0:00	8/25/2021 0:00	Perdue	Filter 2	0.07	0.09	0.24
8/25/2021 0:00	8/26/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
8/26/2021 0:00	8/27/2021 0:00	Perdue	Filter 2	0.00	0.09	0.11
8/27/2021 0:00	8/28/2021 0:00	Perdue	Filter 2	0.08	0.10	0.37
8/28/2021 0:00	8/29/2021 0:00	Perdue	Filter 2	0.00	0.09	0.13
8/29/2021 0:00	8/30/2021 0:00	Perdue	Filter 2	0.00	0.09	0.10
8/30/2021 0:00	8/31/2021 0:00	Perdue	Filter 2	0.08	0.09	0.13
8/31/2021 0:00	9/1/2021 0:00	Perdue	Filter 2	0.00	0.09	0.13
9/1/2021 0:00	9/2/2021 0:00	Perdue	Filter 2	0.08	0.09	0.11
9/2/2021 0:00	9/3/2021 0:00	Perdue	Filter 2	0.09	0.09	0.10
9/3/2021 0:00	9/4/2021 0:00	Perdue	Filter 2	0.09	0.09	0.10
9/4/2021 0:00	9/5/2021 0:00	Perdue	Filter 2	0.08	0.09	0.12
9/5/2021 0:00	9/6/2021 0:00	Perdue	Filter 2	0.00	0.10	0.12
9/6/2021 0:00	9/7/2021 0:00	Perdue	Filter 2	0.09	0.10	0.11
9/7/2021 0:00	9/8/2021 0:00	Perdue	Filter 2	0.09	0.10	0.14
9/8/2021 0:00	9/9/2021 0:00	Perdue	Filter 2	0.09	0.10	0.16
9/9/2021 0:00	9/10/2021 0:00	Perdue	Filter 2	0.07	0.09	0.23
9/10/2021 0:00	9/11/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
9/11/2021 0:00	9/12/2021 0:00	Perdue	Filter 2	0.00	0.08	0.14
9/12/2021 0:00	9/13/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
9/13/2021 0:00	9/14/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
9/14/2021 0:00	9/15/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
9/15/2021 0:00	9/16/2021 0:00	Perdue	Filter 2	0.07	0.07	0.09
9/16/2021 0:00	9/17/2021 0:00	Perdue	Filter 2	0.07	0.07	0.10
9/17/2021 0:00	9/18/2021 0:00	Perdue	Filter 2	0.00	0.07	0.17
9/18/2021 0:00	9/19/2021 0:00	Perdue	Filter 2	0.00	0.07	0.09
9/19/2021 0:00	9/20/2021 0:00	Perdue	Filter 2	0.06	0.07	0.08
9/20/2021 0:00	9/21/2021 0:00	Perdue	Filter 2	0.06	0.07	0.10
9/21/2021 0:00	9/22/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
9/22/2021 0:00	9/23/2021 0:00	Perdue	Filter 2	0.07	0.09	0.60
9/23/2021 0:00	9/24/2021 0:00	Perdue	Filter 2	0.08	0.09	0.63
9/24/2021 0:00	9/25/2021 0:00	Perdue	Filter 2	0.08	0.09	0.20
9/25/2021 0:00	9/26/2021 0:00	Perdue	Filter 2	0.00	0.09	0.26
9/26/2021 0:00	9/27/2021 0:00	Perdue	Filter 2	0.10	0.10	0.26
9/27/2021 0:00	9/28/2021 0:00	Perdue	Filter 2	0.10	0.12	0.15
9/28/2021 0:00	9/29/2021 0:00	Perdue	Filter 2	0.14	0.16	0.23
9/29/2021 0:00	9/30/2021 0:00	Perdue	Filter 2	0.18	0.21	0.30
9/30/2021 0:00	10/1/2021 0:00	Perdue	Filter 2	0.00	0.13	0.32
10/1/2021 0:00	10/2/2021 0:00	Perdue	Filter 2	0.06	0.08	0.09
10/2/2021 0:00	10/3/2021 0:00	Perdue	Filter 2	0.06	0.08	0.09
10/3/2021 0:00	10/4/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/4/2021 0:00	10/5/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/5/2021 0:00	10/6/2021 0:00	Perdue	Filter 2	0.07	0.08	0.10
10/6/2021 0:00	10/7/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/7/2021 0:00	10/8/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/8/2021 0:00	10/9/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/9/2021 0:00	10/10/2021 0:00	Perdue	Filter 2	0.00	0.08	0.09
10/10/2021 0:00	10/11/2021 0:00	Perdue	Filter 2	0.08	0.09	0.16
10/11/2021 0:00	10/12/2021 0:00	Perdue	Filter 2	0.07	0.08	0.08
10/12/2021 0:00	10/13/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/13/2021 0:00	10/14/2021 0:00	Perdue	Filter 2	0.00	0.08	0.12
10/14/2021 0:00	10/15/2021 0:00	Perdue	Filter 2	0.06	0.07	0.09
10/15/2021 0:00	10/16/2021 0:00	Perdue	Filter 2	0.06	0.08	0.09
10/16/2021 0:00	10/17/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/17/2021 0:00	10/18/2021 0:00	Perdue	Filter 2	0.00	0.08	0.10

10/18/2021 0:00	10/19/2021 0:00	Perdue	Filter 2	0.07	0.08	0.08
10/19/2021 0:00	10/20/2021 0:00	Perdue	Filter 2	0.00	0.08	0.09
10/20/2021 0:00	10/21/2021 0:00	Perdue	Filter 2	0.06	0.08	0.09
10/21/2021 0:00	10/22/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/22/2021 0:00	10/23/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/23/2021 0:00	10/24/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/24/2021 0:00	10/25/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
10/25/2021 0:00	10/26/2021 0:00	Perdue	Filter 2	0.00	0.08	0.10
10/26/2021 0:00	10/27/2021 0:00	Perdue	Filter 2	0.00	0.08	0.14
10/27/2021 0:00	10/28/2021 0:00	Perdue	Filter 2	0.00	0.10	0.11
10/28/2021 0:00	10/29/2021 0:00	Perdue	Filter 2	0.00	0.10	0.12
10/29/2021 0:00	10/30/2021 0:00	Perdue	Filter 2	0.10	0.12	0.13
10/30/2021 0:00	10/31/2021 0:00	Perdue	Filter 2	0.11	0.12	0.13
10/31/2021 0:00	11/1/2021 0:00	Perdue	Filter 2	0.11	0.13	0.15
11/1/2021 0:00	11/2/2021 0:00	Perdue	Filter 2	0.00	0.13	0.16
11/2/2021 0:00	11/3/2021 0:00	Perdue	Filter 2	0.00	0.17	0.30
11/3/2021 0:00	11/4/2021 0:00	Perdue	Filter 2	0.08	0.20	1.00
11/4/2021 0:00	11/5/2021 0:00	Perdue	Filter 2	0.00	0.23	0.53
11/5/2021 0:00	11/6/2021 0:00	Perdue	Filter 2	0.16	0.21	0.24
11/6/2021 0:00	11/7/2021 0:00	Perdue	Filter 2	0.19	0.21	0.25
11/7/2021 0:00	11/8/2021 0:00	Perdue	Filter 2	0.18	0.20	0.23
11/8/2021 0:00	11/9/2021 0:00	Perdue	Filter 2	0.18	0.21	0.28
11/9/2021 0:00	11/10/2021 0:00	Perdue	Filter 2	0.00	0.21	0.25
11/10/2021 0:00	11/11/2021 0:00	Perdue	Filter 2	0.17	0.20	0.23
11/11/2021 0:00	11/12/2021 0:00	Perdue	Filter 2	0.17	0.20	0.25
11/12/2021 0:00	11/13/2021 0:00	Perdue	Filter 2	0.16	0.20	0.26
11/13/2021 0:00	11/14/2021 0:00	Perdue	Filter 2	0.18	0.21	0.25
11/14/2021 0:00	11/15/2021 0:00	Perdue	Filter 2	0.19	0.21	0.23
11/15/2021 0:00	11/16/2021 0:00	Perdue	Filter 2	0.00	0.21	0.27
11/16/2021 0:00	11/17/2021 0:00	Perdue	Filter 2	0.00	0.19	0.38
11/17/2021 0:00	11/18/2021 0:00	Perdue	Filter 2	0.00	0.17	0.27
11/18/2021 0:00	11/19/2021 0:00	Perdue	Filter 2	0.00	0.17	0.30
11/19/2021 0:00	11/20/2021 0:00	Perdue	Filter 2	0.13	0.14	0.17
11/20/2021 0:00	11/21/2021 0:00	Perdue	Filter 2	0.00	0.17	0.22
11/21/2021 0:00	11/22/2021 0:00	Perdue	Filter 2	0.11	0.14	0.18
11/22/2021 0:00	11/23/2021 0:00	Perdue	Filter 2	0.00	0.11	0.25
11/23/2021 0:00	11/24/2021 0:00	Perdue	Filter 2	0.05	0.06	0.12
11/24/2021 0:00	11/25/2021 0:00	Perdue	Filter 2	0.05	0.06	0.09
11/25/2021 0:00	11/26/2021 0:00	Perdue	Filter 2	0.05	0.06	0.08
11/26/2021 0:00	11/27/2021 0:00	Perdue	Filter 2	0.06	0.07	0.09
11/27/2021 0:00	11/28/2021 0:00	Perdue	Filter 2	0.06	0.07	0.09
11/28/2021 0:00	11/29/2021 0:00	Perdue	Filter 2	0.06	0.07	0.10
11/29/2021 0:00	11/30/2021 0:00	Perdue	Filter 2	0.00	0.09	0.45
11/30/2021 0:00	12/1/2021 0:00	Perdue	Filter 2	0.06	0.08	0.11
12/1/2021 0:00	12/2/2021 0:00	Perdue	Filter 2	0.00	0.08	0.15
12/2/2021 0:00	12/3/2021 0:00	Perdue	Filter 2	0.07	0.08	0.09
12/3/2021 0:00	12/4/2021 0:00	Perdue	Filter 2	0.07	0.07	0.10
12/4/2021 0:00	12/5/2021 0:00	Perdue	Filter 2	0.06	0.07	0.08
12/5/2021 0:00	12/6/2021 0:00	Perdue	Filter 2	0.00	0.07	0.08
12/6/2021 0:00	12/7/2021 0:00	Perdue	Filter 2	0.06	0.07	0.09
12/7/2021 0:00	12/8/2021 0:00	Perdue	Filter 2	0.06	0.07	0.08
12/8/2021 0:00	12/9/2021 0:00	Perdue	Filter 2	0.00	0.06	0.10
12/9/2021 0:00	12/10/2021 0:00	Perdue	Filter 2	0.05	0.06	0.08
12/10/2021 0:00	12/11/2021 0:00	Perdue	Filter 2	0.00	0.08	0.14
12/11/2021 0:00	12/12/2021 0:00	Perdue	Filter 2	0.00	0.07	0.09
12/12/2021 0:00	12/13/2021 0:00	Perdue	Filter 2	0.06	0.07	0.07
12/13/2021 0:00	12/14/2021 0:00	Perdue	Filter 2	0.06	0.07	0.08
12/14/2021 0:00	12/15/2021 0:00	Perdue	Filter 2	0.00	0.07	0.07
12/15/2021 0:00	12/16/2021 0:00	Perdue	Filter 2	0.06	0.07	0.11
12/16/2021 0:00	12/17/2021 0:00	Perdue	Filter 2	0.00	0.06	0.08
12/17/2021 0:00	12/18/2021 0:00	Perdue	Filter 2	0.00	0.08	1.00
12/18/2021 0:00	12/19/2021 0:00	Perdue	Filter 2	0.05	0.06	0.11
12/19/2021 0:00	12/20/2021 0:00	Perdue	Filter 2	0.00	0.06	0.18
12/20/2021 0:00	12/21/2021 0:00	Perdue	Filter 2	0.06	0.07	0.07
12/21/2021 0:00	12/22/2021 0:00	Perdue	Filter 2	0.06	0.06	0.09
12/22/2021 0:00	12/23/2021 0:00	Perdue	Filter 2	0.00	0.08	0.11
12/23/2021 0:00	12/24/2021 0:00	Perdue	Filter 2	0.00	0.08	0.09
12/24/2021 0:00	12/25/2021 0:00	Perdue	Filter 2	0.00	0.08	0.08
12/25/2021 0:00	12/26/2021 0:00	Perdue	Filter 2	0.00	0.07	0.08
12/26/2021 0:00	12/27/2021 0:00	Perdue	Filter 2	0.06	0.07	0.09
12/27/2021 0:00	12/28/2021 0:00	Perdue	Filter 2	0.00	0.07	0.08
12/28/2021 0:00	12/29/2021 0:00	Perdue	Filter 2	0.00	0.07	0.07
12/29/2021 0:00	12/30/2021 0:00	Perdue	Filter 2	0.00	0.07	0.11

12/30/2021 0:00	12/31/2021 0:00	Perdue	Filter 2	0.07	0.07	0.11
12/31/2021 0:00	1/1/2022 0:00	Perdue	Filter 2	0.00	0.07	0.11

1.00
0.99
0.30
0.18

Date	Date End Time	Site	Area	Min Turbidity	Avg Turbidity	Max Turbidity
1/1/2017 0:00	1/2/2017 0:00	Perdue	Filter 3	0.04	0.06	0.07
1/2/2017 0:00	1/3/2017 0:00	Perdue	Filter 3	0.06	0.07	0.16
1/3/2017 0:00	1/4/2017 0:00	Perdue	Filter 3	0.06	0.06	0.08
1/4/2017 0:00	1/5/2017 0:00	Perdue	Filter 3	0.04	0.06	0.08
1/5/2017 0:00	1/6/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
1/6/2017 0:00	1/7/2017 0:00	Perdue	Filter 3	0.04	0.06	0.08
1/7/2017 0:00	1/8/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
1/8/2017 0:00	1/9/2017 0:00	Perdue	Filter 3	0.04	0.05	0.07
1/9/2017 0:00	1/10/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/10/2017 0:00	1/11/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/11/2017 0:00	1/12/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/12/2017 0:00	1/13/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/13/2017 0:00	1/14/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/14/2017 0:00	1/15/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/15/2017 0:00	1/16/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/16/2017 0:00	1/17/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/17/2017 0:00	1/18/2017 0:00	Perdue	Filter 3	0.05	0.05	0.05
1/18/2017 0:00	1/19/2017 0:00	Perdue	Filter 3	0.05	0.06	0.09
1/19/2017 0:00	1/20/2017 0:00	Perdue	Filter 3	0.05	0.06	0.08
1/20/2017 0:00	1/21/2017 0:00	Perdue	Filter 3	0.06	0.06	0.08
1/21/2017 0:00	1/22/2017 0:00	Perdue	Filter 3	0.06	0.06	0.06
1/22/2017 0:00	1/23/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
1/23/2017 0:00	1/24/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
1/24/2017 0:00	1/25/2017 0:00	Perdue	Filter 3	0.04	0.06	0.07
1/25/2017 0:00	1/26/2017 0:00	Perdue	Filter 3	0.04	0.06	0.07
1/26/2017 0:00	1/27/2017 0:00	Perdue	Filter 3	0.05	0.06	0.06
1/27/2017 0:00	1/28/2017 0:00	Perdue	Filter 3	0.03	0.06	0.07
1/28/2017 0:00	1/29/2017 0:00	Perdue	Filter 3	0.03	0.06	0.07
1/29/2017 0:00	1/30/2017 0:00	Perdue	Filter 3	0.03	0.06	0.07
1/30/2017 0:00	1/31/2017 0:00	Perdue	Filter 3	0.03	0.05	0.39
1/31/2017 0:00	2/1/2017 0:00	Perdue	Filter 3	0.02	0.05	0.06
2/1/2017 0:00	2/2/2017 0:00	Perdue	Filter 3	0.03	0.06	0.06
2/2/2017 0:00	2/3/2017 0:00	Perdue	Filter 3	0.04	0.06	0.06
2/3/2017 0:00	2/4/2017 0:00	Perdue	Filter 3	0.04	0.06	0.06
2/4/2017 0:00	2/5/2017 0:00	Perdue	Filter 3	0.05	0.06	0.06
2/5/2017 0:00	2/6/2017 0:00	Perdue	Filter 3	0.05	0.06	0.06
2/6/2017 0:00	2/7/2017 0:00	Perdue	Filter 3	0.05	0.06	0.06
2/7/2017 0:00	2/8/2017 0:00	Perdue	Filter 3	0.05	0.06	0.06
2/8/2017 0:00	2/9/2017 0:00	Perdue	Filter 3	0.05	0.06	0.08
2/9/2017 0:00	2/10/2017 0:00	Perdue	Filter 3	0.04	0.06	0.26
2/10/2017 0:00	2/11/2017 0:00	Perdue	Filter 3	0.04	0.05	0.06
2/11/2017 0:00	2/12/2017 0:00	Perdue	Filter 3	0.05	0.05	0.06
2/12/2017 0:00	2/13/2017 0:00	Perdue	Filter 3	0.03	0.05	0.06
2/13/2017 0:00	2/14/2017 0:00	Perdue	Filter 3	0.03	0.05	0.07
2/14/2017 0:00	2/15/2017 0:00	Perdue	Filter 3	0.04	0.06	0.06
2/15/2017 0:00	2/16/2017 0:00	Perdue	Filter 3	0.04	0.06	0.28
2/16/2017 0:00	2/17/2017 0:00	Perdue	Filter 3	0.04	0.06	0.12
2/17/2017 0:00	2/18/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/18/2017 0:00	2/19/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/19/2017 0:00	2/20/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/20/2017 0:00	2/21/2017 0:00	Perdue	Filter 3	0.04	0.06	0.08
2/21/2017 0:00	2/22/2017 0:00	Perdue	Filter 3	0.05	0.06	0.08
2/22/2017 0:00	2/23/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/23/2017 0:00	2/24/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/24/2017 0:00	2/25/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/25/2017 0:00	2/26/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
2/26/2017 0:00	2/27/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
2/27/2017 0:00	2/28/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
2/28/2017 0:00	3/1/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
3/1/2017 0:00	3/2/2017 0:00	Perdue	Filter 3	0.05	0.17	0.44
3/2/2017 0:00	3/3/2017 0:00	Perdue	Filter 3	0.05	0.06	0.08
3/3/2017 0:00	3/4/2017 0:00	Perdue	Filter 3	0.03	0.07	0.25
3/4/2017 0:00	3/5/2017 0:00	Perdue	Filter 3	0.05	0.06	0.19
3/5/2017 0:00	3/6/2017 0:00	Perdue	Filter 3	0.06	0.09	0.36
3/6/2017 0:00	3/7/2017 0:00	Perdue	Filter 3	0.05	0.07	0.32
3/7/2017 0:00	3/8/2017 0:00	Perdue	Filter 3	0.03	0.07	0.17
3/8/2017 0:00	3/9/2017 0:00	Perdue	Filter 3	0.04	0.05	0.05
3/9/2017 0:00	3/10/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
3/10/2017 0:00	3/11/2017 0:00	Perdue	Filter 3	0.06	0.07	0.11
3/11/2017 0:00	3/12/2017 0:00	Perdue	Filter 3	0.06	0.07	0.10
3/12/2017 0:00	3/13/2017 0:00	Perdue	Filter 3	0.07	0.08	0.12
3/13/2017 0:00	3/14/2017 0:00	Perdue	Filter 3	0.06	0.07	0.09

3/14/2017 0:00	3/15/2017 0:00	Perdue	Filter 3	0.05	0.07	0.13
3/15/2017 0:00	3/16/2017 0:00	Perdue	Filter 3	0.05	0.07	0.08
3/16/2017 0:00	3/17/2017 0:00	Perdue	Filter 3	0.07	0.07	0.13
3/17/2017 0:00	3/18/2017 0:00	Perdue	Filter 3	0.07	0.07	0.86
3/18/2017 0:00	3/19/2017 0:00	Perdue	Filter 3	0.06	0.07	0.20
3/19/2017 0:00	3/20/2017 0:00	Perdue	Filter 3	0.06	0.07	0.37
3/20/2017 0:00	3/21/2017 0:00	Perdue	Filter 3	0.07	0.07	1.00
3/21/2017 0:00	3/22/2017 0:00	Perdue	Filter 3	0.06	0.08	1.00
3/22/2017 0:00	3/23/2017 0:00	Perdue	Filter 3	0.06	0.07	0.11
3/23/2017 0:00	3/24/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
3/24/2017 0:00	3/25/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
3/25/2017 0:00	3/26/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
3/26/2017 0:00	3/27/2017 0:00	Perdue	Filter 3	0.06	0.06	0.07
3/27/2017 0:00	3/28/2017 0:00	Perdue	Filter 3	0.06	0.07	0.07
3/28/2017 0:00	3/29/2017 0:00	Perdue	Filter 3	0.06	0.07	0.12
3/29/2017 0:00	3/30/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
3/30/2017 0:00	3/31/2017 0:00	Perdue	Filter 3	0.06	0.07	0.07
3/31/2017 0:00	4/1/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
4/1/2017 0:00	4/2/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
4/2/2017 0:00	4/3/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
4/3/2017 0:00	4/4/2017 0:00	Perdue	Filter 3	0.06	0.07	0.10
4/4/2017 0:00	4/5/2017 0:00	Perdue	Filter 3	0.06	0.08	1.00
4/5/2017 0:00	4/6/2017 0:00	Perdue	Filter 3	0.07	0.11	0.22
4/6/2017 0:00	4/7/2017 0:00	Perdue	Filter 3	0.06	0.08	0.12
4/7/2017 0:00	4/8/2017 0:00	Perdue	Filter 3	0.07	0.09	0.24
4/8/2017 0:00	4/9/2017 0:00	Perdue	Filter 3	0.08	0.10	0.14
4/9/2017 0:00	4/10/2017 0:00	Perdue	Filter 3	0.06	0.09	0.69
4/10/2017 0:00	4/11/2017 0:00	Perdue	Filter 3	0.05	0.07	1.00
4/11/2017 0:00	4/12/2017 0:00	Perdue	Filter 3	0.05	0.10	0.20
4/12/2017 0:00	4/13/2017 0:00	Perdue	Filter 3	0.05	0.09	0.22
4/13/2017 0:00	4/14/2017 0:00	Perdue	Filter 3	0.06	0.09	0.19
4/14/2017 0:00	4/15/2017 0:00	Perdue	Filter 3	0.06	0.07	0.08
4/15/2017 0:00	4/16/2017 0:00	Perdue	Filter 3	0.07	0.09	0.19
4/16/2017 0:00	4/17/2017 0:00	Perdue	Filter 3	0.07	0.08	0.09
4/17/2017 0:00	4/18/2017 0:00	Perdue	Filter 3	0.06	0.07	0.95
4/18/2017 0:00	4/19/2017 0:00	Perdue	Filter 3	0.07	0.09	0.18
4/19/2017 0:00	4/20/2017 0:00	Perdue	Filter 3	0.07	0.07	0.09
4/20/2017 0:00	4/21/2017 0:00	Perdue	Filter 3	0.05	0.07	0.12
4/21/2017 0:00	4/22/2017 0:00	Perdue	Filter 3	0.06	0.10	0.18
4/22/2017 0:00	4/23/2017 0:00	Perdue	Filter 3	0.08	0.10	0.12
4/23/2017 0:00	4/24/2017 0:00	Perdue	Filter 3	0.08	0.10	0.12
4/24/2017 0:00	4/25/2017 0:00	Perdue	Filter 3	0.07	0.10	0.21
4/25/2017 0:00	4/26/2017 0:00	Perdue	Filter 3	0.07	0.09	0.10
4/26/2017 0:00	4/27/2017 0:00	Perdue	Filter 3	0.07	0.09	0.11
4/27/2017 0:00	4/28/2017 0:00	Perdue	Filter 3	0.07	0.08	0.09
4/28/2017 0:00	4/29/2017 0:00	Perdue	Filter 3	0.08	0.11	0.23
4/29/2017 0:00	4/30/2017 0:00	Perdue	Filter 3	0.08	0.08	0.10
4/30/2017 0:00	5/1/2017 0:00	Perdue	Filter 3	0.08	0.09	0.11
5/1/2017 0:00	5/2/2017 0:00	Perdue	Filter 3	0.10	0.11	0.12
5/2/2017 0:00	5/3/2017 0:00	Perdue	Filter 3	0.11	0.13	0.22
5/3/2017 0:00	5/4/2017 0:00	Perdue	Filter 3	0.09	0.11	0.23
5/4/2017 0:00	5/5/2017 0:00	Perdue	Filter 3	0.10	0.12	0.14
5/5/2017 0:00	5/6/2017 0:00	Perdue	Filter 3	0.12	0.14	0.19
5/6/2017 0:00	5/7/2017 0:00	Perdue	Filter 3	0.10	0.12	0.18
5/7/2017 0:00	5/8/2017 0:00	Perdue	Filter 3	0.10	0.11	0.12
5/8/2017 0:00	5/9/2017 0:00	Perdue	Filter 3	0.10	0.11	0.12
5/9/2017 0:00	5/10/2017 0:00	Perdue	Filter 3	0.11	0.12	0.18
5/10/2017 0:00	5/11/2017 0:00	Perdue	Filter 3	0.11	0.12	0.13
5/11/2017 0:00	5/12/2017 0:00	Perdue	Filter 3	0.12	0.13	0.15
5/12/2017 0:00	5/13/2017 0:00	Perdue	Filter 3	0.12	0.15	1.00
5/13/2017 0:00	5/14/2017 0:00	Perdue	Filter 3	0.16	0.17	0.21
5/14/2017 0:00	5/15/2017 0:00	Perdue	Filter 3	0.18	0.19	0.22
5/15/2017 0:00	5/16/2017 0:00	Perdue	Filter 3	0.16	0.17	0.22
5/16/2017 0:00	5/17/2017 0:00	Perdue	Filter 3	0.08	0.16	0.24
5/17/2017 0:00	5/18/2017 0:00	Perdue	Filter 3	0.08	0.11	0.16
5/18/2017 0:00	5/19/2017 0:00	Perdue	Filter 3	0.07	0.08	0.10
5/19/2017 0:00	5/20/2017 0:00	Perdue	Filter 3	0.09	0.15	0.23
5/20/2017 0:00	5/21/2017 0:00	Perdue	Filter 3	0.10	0.19	0.31
5/21/2017 0:00	5/22/2017 0:00	Perdue	Filter 3	0.08	0.12	0.28
5/22/2017 0:00	5/23/2017 0:00	Perdue	Filter 3	0.11	0.22	0.33
5/23/2017 0:00	5/24/2017 0:00	Perdue	Filter 3	0.13	0.22	0.33
5/24/2017 0:00	5/25/2017 0:00	Perdue	Filter 3	0.12	0.18	0.30
5/25/2017 0:00	5/26/2017 0:00	Perdue	Filter 3	0.08	0.15	0.19

5/26/2017 0:00	5/27/2017 0:00	Perdue	Filter 3	0.07	0.14	0.88
5/27/2017 0:00	5/28/2017 0:00	Perdue	Filter 3	0.05	0.15	0.52
5/28/2017 0:00	5/29/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
5/29/2017 0:00	5/30/2017 0:00	Perdue	Filter 3	0.04	0.05	0.06
5/30/2017 0:00	5/31/2017 0:00	Perdue	Filter 3	0.04	0.04	0.05
5/31/2017 0:00	6/1/2017 0:00	Perdue	Filter 3	0.04	0.08	0.22
6/1/2017 0:00	6/2/2017 0:00	Perdue	Filter 3	0.08	0.18	0.59
6/2/2017 0:00	6/3/2017 0:00	Perdue	Filter 3	0.05	0.15	0.35
6/3/2017 0:00	6/4/2017 0:00	Perdue	Filter 3	0.03	0.08	0.31
6/4/2017 0:00	6/5/2017 0:00	Perdue	Filter 3	0.01	0.02	0.03
6/5/2017 0:00	6/6/2017 0:00	Perdue	Filter 3	0.00	0.05	0.09
6/6/2017 0:00	6/7/2017 0:00	Perdue	Filter 3	0.07	0.07	0.08
6/7/2017 0:00	6/8/2017 0:00	Perdue	Filter 3	0.06	0.07	0.07
6/8/2017 0:00	6/9/2017 0:00	Perdue	Filter 3	0.06	0.07	0.09
6/9/2017 0:00	6/10/2017 0:00	Perdue	Filter 3	0.09	0.12	0.18
6/10/2017 0:00	6/11/2017 0:00	Perdue	Filter 3	0.09	0.13	0.22
6/11/2017 0:00	6/12/2017 0:00	Perdue	Filter 3	0.11	0.14	0.18
6/12/2017 0:00	6/13/2017 0:00	Perdue	Filter 3	0.10	0.13	0.18
6/13/2017 0:00	6/14/2017 0:00	Perdue	Filter 3	0.09	0.11	0.14
6/14/2017 0:00	6/15/2017 0:00	Perdue	Filter 3	0.06	0.09	0.21
6/15/2017 0:00	6/16/2017 0:00	Perdue	Filter 3	0.05	0.07	0.12
6/16/2017 0:00	6/17/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
6/17/2017 0:00	6/18/2017 0:00	Perdue	Filter 3	0.06	0.09	0.16
6/18/2017 0:00	6/19/2017 0:00	Perdue	Filter 3	0.07	0.08	0.13
6/19/2017 0:00	6/20/2017 0:00	Perdue	Filter 3	0.07	0.07	0.08
6/20/2017 0:00	6/21/2017 0:00	Perdue	Filter 3	0.07	0.08	0.19
6/21/2017 0:00	6/22/2017 0:00	Perdue	Filter 3	0.11	0.13	0.22
6/22/2017 0:00	6/23/2017 0:00	Perdue	Filter 3	0.07	0.11	0.14
6/23/2017 0:00	6/24/2017 0:00	Perdue	Filter 3	0.09	0.10	0.11
6/24/2017 0:00	6/25/2017 0:00	Perdue	Filter 3	0.06	0.08	0.10
6/25/2017 0:00	6/26/2017 0:00	Perdue	Filter 3	0.06	0.13	0.32
6/26/2017 0:00	6/27/2017 0:00	Perdue	Filter 3	0.06	0.08	0.13
6/27/2017 0:00	6/28/2017 0:00	Perdue	Filter 3	0.05	0.07	0.10
6/28/2017 0:00	6/29/2017 0:00	Perdue	Filter 3	0.05	0.06	0.07
6/29/2017 0:00	6/30/2017 0:00	Perdue	Filter 3	0.05	0.08	0.26
6/30/2017 0:00	7/1/2017 0:00	Perdue	Filter 3	0.08	0.10	0.17
7/1/2017 0:00	7/2/2017 0:00	Perdue	Filter 3	0.08	0.09	0.10
7/2/2017 0:00	7/3/2017 0:00	Perdue	Filter 3	0.09	0.14	0.26
7/3/2017 0:00	7/4/2017 0:00	Perdue	Filter 3	0.07	0.10	0.13
7/4/2017 0:00	7/5/2017 0:00	Perdue	Filter 3	0.08	0.09	0.09
7/5/2017 0:00	7/6/2017 0:00	Perdue	Filter 3	0.08	0.18	0.30
7/6/2017 0:00	7/7/2017 0:00	Perdue	Filter 3	0.12	0.14	0.28
7/7/2017 0:00	7/8/2017 0:00	Perdue	Filter 3	0.15	0.18	0.23
7/8/2017 0:00	7/9/2017 0:00	Perdue	Filter 3	0.13	0.15	0.31
7/9/2017 0:00	7/10/2017 0:00	Perdue	Filter 3	0.10	0.16	0.27
7/10/2017 0:00	7/11/2017 0:00	Perdue	Filter 3	0.09	0.14	0.25
7/11/2017 0:00	7/12/2017 0:00	Perdue	Filter 3	0.10	0.19	0.35
7/12/2017 0:00	7/13/2017 0:00	Perdue	Filter 3	0.11	0.18	0.26
7/13/2017 0:00	7/14/2017 0:00	Perdue	Filter 3	0.07	0.19	0.31
7/14/2017 0:00	7/15/2017 0:00	Perdue	Filter 3	0.05	0.09	0.14
7/15/2017 0:00	7/16/2017 0:00	Perdue	Filter 3	0.05	0.08	0.53
7/16/2017 0:00	7/17/2017 0:00	Perdue	Filter 3	0.04	0.07	0.27
7/17/2017 0:00	7/18/2017 0:00	Perdue	Filter 3	0.04	0.08	0.16
7/18/2017 0:00	7/19/2017 0:00	Perdue	Filter 3	0.10	0.15	0.21
7/19/2017 0:00	7/20/2017 0:00	Perdue	Filter 3	0.09	0.18	0.50
7/20/2017 0:00	7/21/2017 0:00	Perdue	Filter 3	0.06	0.12	0.16
7/21/2017 0:00	7/22/2017 0:00	Perdue	Filter 3	0.10	0.13	0.23
7/22/2017 0:00	7/23/2017 0:00	Perdue	Filter 3	0.09	0.13	0.16
7/23/2017 0:00	7/24/2017 0:00	Perdue	Filter 3	0.07	0.10	0.13
7/24/2017 0:00	7/25/2017 0:00	Perdue	Filter 3	0.08	0.14	0.28
7/25/2017 0:00	7/26/2017 0:00	Perdue	Filter 3	0.09	0.12	0.16
7/26/2017 0:00	7/27/2017 0:00	Perdue	Filter 3	0.08	0.18	0.28
7/27/2017 0:00	7/28/2017 0:00	Perdue	Filter 3	0.15	0.17	0.23
7/28/2017 0:00	7/29/2017 0:00	Perdue	Filter 3	0.12	0.13	0.16
7/29/2017 0:00	7/30/2017 0:00	Perdue	Filter 3	0.13	0.14	0.27
7/30/2017 0:00	7/31/2017 0:00	Perdue	Filter 3	0.11	0.16	0.31
7/31/2017 0:00	8/1/2017 0:00	Perdue	Filter 3	0.11	0.15	0.23
8/1/2017 0:00	8/2/2017 0:00	Perdue	Filter 3	0.09	0.11	0.13
8/2/2017 0:00	8/3/2017 0:00	Perdue	Filter 3	0.12	0.17	0.26
8/3/2017 0:00	8/4/2017 0:00	Perdue	Filter 3	0.14	0.19	0.30
8/4/2017 0:00	8/5/2017 0:00	Perdue	Filter 3	0.12	0.14	0.18
8/5/2017 0:00	8/6/2017 0:00	Perdue	Filter 3	0.11	0.13	0.20
8/6/2017 0:00	8/7/2017 0:00	Perdue	Filter 3	0.14	0.16	0.40

8/7/2017 0:00	8/8/2017 0:00	Perdue	Filter 3	0.14	0.17	0.25
8/8/2017 0:00	8/9/2017 0:00	Perdue	Filter 3	0.07	0.25	0.32
8/9/2017 0:00	8/10/2017 0:00	Perdue	Filter 3	0.05	0.07	0.09
8/10/2017 0:00	8/11/2017 0:00	Perdue	Filter 3	0.04	0.10	0.23
8/11/2017 0:00	8/12/2017 0:00	Perdue	Filter 3	0.15	0.18	0.23
8/12/2017 0:00	8/13/2017 0:00	Perdue	Filter 3	0.13	0.18	0.37
8/13/2017 0:00	8/14/2017 0:00	Perdue	Filter 3	0.09	0.10	0.13
8/14/2017 0:00	8/15/2017 0:00	Perdue	Filter 3	0.09	0.10	0.38
8/15/2017 0:00	8/16/2017 0:00	Perdue	Filter 3	0.09	0.09	0.11
8/16/2017 0:00	8/17/2017 0:00	Perdue	Filter 3	0.07	0.09	0.19
8/17/2017 0:00	8/18/2017 0:00	Perdue	Filter 3	0.07	0.08	0.11
8/18/2017 0:00	8/19/2017 0:00	Perdue	Filter 3	0.07	0.08	0.11
8/19/2017 0:00	8/20/2017 0:00	Perdue	Filter 3	0.07	0.08	0.08
8/20/2017 0:00	8/21/2017 0:00	Perdue	Filter 3	0.07	0.08	0.15
8/21/2017 0:00	8/22/2017 0:00	Perdue	Filter 3	0.07	0.07	0.08
8/22/2017 0:00	8/23/2017 0:00	Perdue	Filter 3	0.07	0.08	0.10
8/23/2017 0:00	8/24/2017 0:00	Perdue	Filter 3	0.07	0.07	0.10
8/24/2017 0:00	8/25/2017 0:00	Perdue	Filter 3	0.07	0.07	0.08
8/25/2017 0:00	8/26/2017 0:00	Perdue	Filter 3	0.07	0.07	0.10
8/26/2017 0:00	8/27/2017 0:00	Perdue	Filter 3	0.07	0.08	0.12
8/27/2017 0:00	8/28/2017 0:00	Perdue	Filter 3	0.06	0.07	0.11
8/28/2017 0:00	8/29/2017 0:00	Perdue	Filter 3	0.07	0.07	0.09
8/29/2017 0:00	8/30/2017 0:00	Perdue	Filter 3	0.07	0.08	0.12
8/30/2017 0:00	8/31/2017 0:00	Perdue	Filter 3	0.08	0.08	0.15
8/31/2017 0:00	9/1/2017 0:00	Perdue	Filter 3	0.08	0.08	0.09
9/1/2017 0:00	9/2/2017 0:00	Perdue	Filter 3	0.05	0.08	0.51
9/2/2017 0:00	9/3/2017 0:00	Perdue	Filter 3	0.04	0.15	1.00
9/3/2017 0:00	9/4/2017 0:00	Perdue	Filter 3	0.05	0.05	0.15
9/4/2017 0:00	9/5/2017 0:00	Perdue	Filter 3	0.04	0.05	0.09
9/5/2017 0:00	9/6/2017 0:00	Perdue	Filter 3	0.04	0.05	0.11
9/6/2017 0:00	9/7/2017 0:00	Perdue	Filter 3	0.04	0.04	0.07
9/7/2017 0:00	9/8/2017 0:00	Perdue	Filter 3	0.04	0.04	0.06
9/8/2017 0:00	9/9/2017 0:00	Perdue	Filter 3	0.04	0.04	0.09
9/9/2017 0:00	9/10/2017 0:00	Perdue	Filter 3	0.04	0.04	0.08
9/10/2017 0:00	9/11/2017 0:00	Perdue	Filter 3	0.03	0.04	0.11
9/11/2017 0:00	9/12/2017 0:00	Perdue	Filter 3	0.04	0.24	1.00
9/12/2017 0:00	9/13/2017 0:00	Perdue	Filter 3	0.04	0.04	0.06
9/13/2017 0:00	9/14/2017 0:00	Perdue	Filter 3	0.04	0.05	0.41
9/14/2017 0:00	9/15/2017 0:00	Perdue	Filter 3	0.04	0.05	0.09
9/15/2017 0:00	9/16/2017 0:00	Perdue	Filter 3	0.04	0.06	0.11
9/16/2017 0:00	9/17/2017 0:00	Perdue	Filter 3	0.06	0.07	0.26
9/17/2017 0:00	9/18/2017 0:00	Perdue	Filter 3	0.05	0.06	0.17
9/18/2017 0:00	9/19/2017 0:00	Perdue	Filter 3	0.05	0.06	0.08
9/19/2017 0:00	9/20/2017 0:00	Perdue	Filter 3	0.07	0.08	0.21
9/20/2017 0:00	9/21/2017 0:00	Perdue	Filter 3	0.10	0.11	0.15
9/21/2017 0:00	9/22/2017 0:00	Perdue	Filter 3	0.07	0.10	0.18
9/22/2017 0:00	9/23/2017 0:00	Perdue	Filter 3	0.09	0.13	0.18
9/23/2017 0:00	9/24/2017 0:00	Perdue	Filter 3	0.11	0.18	0.60
9/24/2017 0:00	9/25/2017 0:00	Perdue	Filter 3	0.17	0.23	0.45
9/25/2017 0:00	9/26/2017 0:00	Perdue	Filter 3	0.10	0.13	0.57
9/26/2017 0:00	9/27/2017 0:00	Perdue	Filter 3	0.09	0.10	0.12
9/27/2017 0:00	9/28/2017 0:00	Perdue	Filter 3	0.09	0.11	0.37
9/28/2017 0:00	9/29/2017 0:00	Perdue	Filter 3	0.10	0.15	1.00
9/29/2017 0:00	9/30/2017 0:00	Perdue	Filter 3	0.10	0.12	0.20
9/30/2017 0:00	10/1/2017 0:00	Perdue	Filter 3	0.11	0.12	0.18
10/1/2017 0:00	10/2/2017 0:00	Perdue	Filter 3	0.12	0.14	0.19
10/2/2017 0:00	10/3/2017 0:00	Perdue	Filter 3	0.08	0.10	0.25
10/3/2017 0:00	10/4/2017 0:00	Perdue	Filter 3	0.09	0.11	0.16
10/4/2017 0:00	10/5/2017 0:00	Perdue	Filter 3	0.12	0.13	0.25
10/5/2017 0:00	10/6/2017 0:00	Perdue	Filter 3	0.13	0.16	1.00
10/6/2017 0:00	10/7/2017 0:00	Perdue	Filter 3	0.11	0.12	0.16
10/7/2017 0:00	10/8/2017 0:00	Perdue	Filter 3	0.12	0.13	0.19
10/8/2017 0:00	10/9/2017 0:00	Perdue	Filter 3	0.12	0.14	0.28
10/9/2017 0:00	10/10/2017 0:00	Perdue	Filter 3	0.12	0.14	0.17
10/10/2017 0:00	10/11/2017 0:00	Perdue	Filter 3	0.13	0.14	0.22
10/11/2017 0:00	10/12/2017 0:00	Perdue	Filter 3	0.08	0.12	0.74
10/12/2017 0:00	10/13/2017 0:00	Perdue	Filter 3	0.07	0.09	0.16
10/13/2017 0:00	10/14/2017 0:00	Perdue	Filter 3	0.08	0.10	0.14
10/14/2017 0:00	10/15/2017 0:00	Perdue	Filter 3	0.06	0.09	0.82
10/15/2017 0:00	10/16/2017 0:00	Perdue	Filter 3	0.07	0.09	1.00
10/16/2017 0:00	10/17/2017 0:00	Perdue	Filter 3	0.08	0.11	1.00
10/17/2017 0:00	10/18/2017 0:00	Perdue	Filter 3	0.08	0.09	0.11
10/18/2017 0:00	10/19/2017 0:00	Perdue	Filter 3	0.08	0.09	0.11

10/19/2017 0:00	10/20/2017 0:00	Perdue	Filter 3	0.08	0.09	0.10
10/20/2017 0:00	10/21/2017 0:00	Perdue	Filter 3	0.08	0.09	0.09
10/21/2017 0:00	10/22/2017 0:00	Perdue	Filter 3	0.09	0.10	1.00
10/22/2017 0:00	10/23/2017 0:00	Perdue	Filter 3	0.07	0.08	1.00
10/23/2017 0:00	10/24/2017 0:00	Perdue	Filter 3	0.07	0.09	1.00
10/24/2017 0:00	10/25/2017 0:00	Perdue	Filter 3	0.10	0.12	0.16
10/25/2017 0:00	10/26/2017 0:00	Perdue	Filter 3	0.09	0.11	0.12
10/26/2017 0:00	10/27/2017 0:00	Perdue	Filter 3	0.08	0.10	0.12
10/27/2017 0:00	10/28/2017 0:00	Perdue	Filter 3	0.08	0.10	0.13
10/28/2017 0:00	10/29/2017 0:00	Perdue	Filter 3	0.08	0.09	0.11
10/29/2017 0:00	10/30/2017 0:00	Perdue	Filter 3	0.09	0.09	1.00
10/30/2017 0:00	10/31/2017 0:00	Perdue	Filter 3	0.09	0.12	1.00
10/31/2017 0:00	11/1/2017 0:00	Perdue	Filter 3	0.12	0.21	0.35
11/1/2017 0:00	11/2/2017 0:00	Perdue	Filter 3	0.12	0.14	0.23
11/2/2017 0:00	11/3/2017 0:00	Perdue	Filter 3	0.12	0.14	0.20
11/3/2017 0:00	11/4/2017 0:00	Perdue	Filter 3	0.10	0.12	0.17
11/4/2017 0:00	11/5/2017 0:00	Perdue	Filter 3	0.10	0.12	0.20
11/5/2017 0:00	11/6/2017 0:00	Perdue	Filter 3	0.09	0.11	0.41
11/6/2017 0:00	11/7/2017 0:00	Perdue	Filter 3	0.09	0.10	0.35
11/7/2017 0:00	11/8/2017 0:00	Perdue	Filter 3	0.10	0.11	0.21
11/8/2017 0:00	11/9/2017 0:00	Perdue	Filter 3	0.10	0.11	0.15
11/9/2017 0:00	11/10/2017 0:00	Perdue	Filter 3	0.11	0.12	0.16
11/10/2017 0:00	11/11/2017 0:00	Perdue	Filter 3	0.11	0.12	0.16
11/11/2017 0:00	11/12/2017 0:00	Perdue	Filter 3	0.11	0.13	0.25
11/12/2017 0:00	11/13/2017 0:00	Perdue	Filter 3	0.11	0.12	0.17
11/13/2017 0:00	11/14/2017 0:00	Perdue	Filter 3	0.11	0.12	0.19
11/14/2017 0:00	11/15/2017 0:00	Perdue	Filter 3	0.10	0.11	0.15
11/15/2017 0:00	11/16/2017 0:00	Perdue	Filter 3	0.10	0.12	0.19
11/16/2017 0:00	11/17/2017 0:00	Perdue	Filter 3	0.10	0.12	0.25
11/17/2017 0:00	11/18/2017 0:00	Perdue	Filter 3	0.10	0.11	0.14
11/18/2017 0:00	11/19/2017 0:00	Perdue	Filter 3	0.09	0.10	0.11
11/19/2017 0:00	11/20/2017 0:00	Perdue	Filter 3	0.09	0.12	0.24
11/20/2017 0:00	11/21/2017 0:00	Perdue	Filter 3	0.10	0.12	0.36
11/21/2017 0:00	11/22/2017 0:00	Perdue	Filter 3	0.08	0.10	0.11
11/22/2017 0:00	11/23/2017 0:00	Perdue	Filter 3	0.10	0.12	0.17
11/23/2017 0:00	11/24/2017 0:00	Perdue	Filter 3	0.10	0.11	0.14
11/24/2017 0:00	11/25/2017 0:00	Perdue	Filter 3	0.08	0.09	0.11
11/25/2017 0:00	11/26/2017 0:00	Perdue	Filter 3	0.09	0.17	0.24
11/26/2017 0:00	11/27/2017 0:00	Perdue	Filter 3	0.11	0.14	0.20
11/27/2017 0:00	11/28/2017 0:00	Perdue	Filter 3	0.11	0.13	0.15
11/28/2017 0:00	11/29/2017 0:00	Perdue	Filter 3	0.09	0.10	0.12
11/29/2017 0:00	11/30/2017 0:00	Perdue	Filter 3	0.10	0.11	0.14
11/30/2017 0:00	12/1/2017 0:00	Perdue	Filter 3	0.10	0.11	0.17
12/1/2017 0:00	12/2/2017 0:00	Perdue	Filter 3	0.10	0.11	0.13
12/2/2017 0:00	12/3/2017 0:00	Perdue	Filter 3	0.10	0.12	0.18
12/3/2017 0:00	12/4/2017 0:00	Perdue	Filter 3	0.11	0.12	0.18
12/4/2017 0:00	12/5/2017 0:00	Perdue	Filter 3	0.11	0.12	0.18
12/5/2017 0:00	12/6/2017 0:00	Perdue	Filter 3	0.11	0.12	0.14
12/6/2017 0:00	12/7/2017 0:00	Perdue	Filter 3	0.11	0.12	0.19
12/7/2017 0:00	12/8/2017 0:00	Perdue	Filter 3	0.12	0.16	0.23
12/8/2017 0:00	12/9/2017 0:00	Perdue	Filter 3	0.15	0.16	0.22
12/9/2017 0:00	12/10/2017 0:00	Perdue	Filter 3	0.12	0.15	0.26
12/10/2017 0:00	12/11/2017 0:00	Perdue	Filter 3	0.13	0.15	0.25
12/11/2017 0:00	12/12/2017 0:00	Perdue	Filter 3	0.12	0.14	0.25
12/12/2017 0:00	12/13/2017 0:00	Perdue	Filter 3	0.12	0.14	0.17
12/13/2017 0:00	12/14/2017 0:00	Perdue	Filter 3	0.13	0.15	0.19
12/14/2017 0:00	12/15/2017 0:00	Perdue	Filter 3	0.11	0.17	0.33
12/15/2017 0:00	12/16/2017 0:00	Perdue	Filter 3	0.13	0.15	0.21
12/16/2017 0:00	12/17/2017 0:00	Perdue	Filter 3	0.12	0.15	0.28
12/17/2017 0:00	12/18/2017 0:00	Perdue	Filter 3	0.13	0.15	0.18
12/18/2017 0:00	12/19/2017 0:00	Perdue	Filter 3	0.11	0.13	0.21
12/19/2017 0:00	12/20/2017 0:00	Perdue	Filter 3	0.11	0.12	0.13
12/20/2017 0:00	12/21/2017 0:00	Perdue	Filter 3	0.11	0.12	0.15
12/21/2017 0:00	12/22/2017 0:00	Perdue	Filter 3	0.11	0.14	0.30
12/22/2017 0:00	12/23/2017 0:00	Perdue	Filter 3	0.13	0.15	0.29
12/23/2017 0:00	12/24/2017 0:00	Perdue	Filter 3	0.13	0.14	0.17
12/24/2017 0:00	12/25/2017 0:00	Perdue	Filter 3	0.14	0.14	0.17
12/25/2017 0:00	12/26/2017 0:00	Perdue	Filter 3	0.14	0.15	0.26
12/26/2017 0:00	12/27/2017 0:00	Perdue	Filter 3	0.10	0.14	0.20
12/27/2017 0:00	12/28/2017 0:00	Perdue	Filter 3	0.09	0.13	0.17
12/28/2017 0:00	12/29/2017 0:00	Perdue	Filter 3	0.11	0.14	0.19
12/29/2017 0:00	12/30/2017 0:00	Perdue	Filter 3	0.09	0.11	0.13
12/30/2017 0:00	12/31/2017 0:00	Perdue	Filter 3	0.10	0.14	0.26

12/31/2017 0:00	1/1/2018 0:00	Perdue	Filter 3	0.15	0.19	0.21
1/1/2018 0:00	1/2/2018 0:00	Perdue	Filter 3	0.14	0.16	0.17
1/2/2018 0:00	1/3/2018 0:00	Perdue	Filter 3	0.14	0.16	0.17
1/3/2018 0:00	1/4/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
1/4/2018 0:00	1/5/2018 0:00	Perdue	Filter 3	0.15	0.16	0.21
1/5/2018 0:00	1/6/2018 0:00	Perdue	Filter 3	0.16	0.21	0.42
1/6/2018 0:00	1/7/2018 0:00	Perdue	Filter 3	0.15	0.16	0.19
1/7/2018 0:00	1/8/2018 0:00	Perdue	Filter 3	0.15	0.16	0.18
1/8/2018 0:00	1/9/2018 0:00	Perdue	Filter 3	0.15	0.16	0.18
1/9/2018 0:00	1/10/2018 0:00	Perdue	Filter 3	0.15	0.15	0.16
1/10/2018 0:00	1/11/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
1/11/2018 0:00	1/12/2018 0:00	Perdue	Filter 3	0.10	0.14	0.17
1/12/2018 0:00	1/13/2018 0:00	Perdue	Filter 3	0.08	0.10	0.16
1/13/2018 0:00	1/14/2018 0:00	Perdue	Filter 3	0.07	0.09	0.11
1/14/2018 0:00	1/15/2018 0:00	Perdue	Filter 3	0.07	0.09	0.10
1/15/2018 0:00	1/16/2018 0:00	Perdue	Filter 3	0.09	0.09	0.15
1/16/2018 0:00	1/17/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
1/17/2018 0:00	1/18/2018 0:00	Perdue	Filter 3	0.07	0.09	0.11
1/18/2018 0:00	1/19/2018 0:00	Perdue	Filter 3	0.05	0.09	0.14
1/19/2018 0:00	1/20/2018 0:00	Perdue	Filter 3	0.08	0.09	0.09
1/20/2018 0:00	1/21/2018 0:00	Perdue	Filter 3	0.09	0.14	0.31
1/21/2018 0:00	1/22/2018 0:00	Perdue	Filter 3	0.09	0.12	0.17
1/22/2018 0:00	1/23/2018 0:00	Perdue	Filter 3	0.08	0.10	0.12
1/23/2018 0:00	1/24/2018 0:00	Perdue	Filter 3	0.06	0.08	0.13
1/24/2018 0:00	1/25/2018 0:00	Perdue	Filter 3	0.05	0.06	0.14
1/25/2018 0:00	1/26/2018 0:00	Perdue	Filter 3	0.06	0.07	0.08
1/26/2018 0:00	1/27/2018 0:00	Perdue	Filter 3	0.06	0.07	0.15
1/27/2018 0:00	1/28/2018 0:00	Perdue	Filter 3	0.06	0.11	0.21
1/28/2018 0:00	1/29/2018 0:00	Perdue	Filter 3	0.07	0.09	0.11
1/29/2018 0:00	1/30/2018 0:00	Perdue	Filter 3	0.06	0.08	0.10
1/30/2018 0:00	1/31/2018 0:00	Perdue	Filter 3	0.06	0.08	0.17
1/31/2018 0:00	2/1/2018 0:00	Perdue	Filter 3	0.10	0.13	0.25
2/1/2018 0:00	2/2/2018 0:00	Perdue	Filter 3	0.12	0.14	0.23
2/2/2018 0:00	2/3/2018 0:00	Perdue	Filter 3	0.08	0.11	0.15
2/3/2018 0:00	2/4/2018 0:00	Perdue	Filter 3	0.08	0.09	0.21
2/4/2018 0:00	2/5/2018 0:00	Perdue	Filter 3	0.08	0.10	0.51
2/5/2018 0:00	2/6/2018 0:00	Perdue	Filter 3	0.07	0.09	0.12
2/6/2018 0:00	2/7/2018 0:00	Perdue	Filter 3	0.09	0.10	0.23
2/7/2018 0:00	2/8/2018 0:00	Perdue	Filter 3	0.11	0.15	0.23
2/8/2018 0:00	2/9/2018 0:00	Perdue	Filter 3	0.14	0.16	0.43
2/9/2018 0:00	2/10/2018 0:00	Perdue	Filter 3	0.16	0.19	0.26
2/10/2018 0:00	2/11/2018 0:00	Perdue	Filter 3	0.16	0.17	0.20
2/11/2018 0:00	2/12/2018 0:00	Perdue	Filter 3	0.16	0.18	0.24
2/12/2018 0:00	2/13/2018 0:00	Perdue	Filter 3	0.16	0.17	0.28
2/13/2018 0:00	2/14/2018 0:00	Perdue	Filter 3	0.15	0.17	0.28
2/14/2018 0:00	2/15/2018 0:00	Perdue	Filter 3	0.16	0.18	0.34
2/15/2018 0:00	2/16/2018 0:00	Perdue	Filter 3	0.16	0.18	0.23
2/16/2018 0:00	2/17/2018 0:00	Perdue	Filter 3	0.17	0.18	0.21
2/17/2018 0:00	2/18/2018 0:00	Perdue	Filter 3	0.18	0.20	0.85
2/18/2018 0:00	2/19/2018 0:00	Perdue	Filter 3	0.20	0.22	0.29
2/19/2018 0:00	2/20/2018 0:00	Perdue	Filter 3	0.15	0.20	0.31
2/20/2018 0:00	2/21/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
2/21/2018 0:00	2/22/2018 0:00	Perdue	Filter 3	0.13	0.14	0.17
2/22/2018 0:00	2/23/2018 0:00	Perdue	Filter 3	0.12	0.13	0.16
2/23/2018 0:00	2/24/2018 0:00	Perdue	Filter 3	0.12	0.13	0.21
2/24/2018 0:00	2/25/2018 0:00	Perdue	Filter 3	0.13	0.16	0.24
2/25/2018 0:00	2/26/2018 0:00	Perdue	Filter 3	0.13	0.14	0.16
2/26/2018 0:00	2/27/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
2/27/2018 0:00	2/28/2018 0:00	Perdue	Filter 3	0.13	0.15	0.16
2/28/2018 0:00	3/1/2018 0:00	Perdue	Filter 3	0.13	0.13	0.15
3/1/2018 0:00	3/2/2018 0:00	Perdue	Filter 3	0.12	0.13	0.23
3/2/2018 0:00	3/3/2018 0:00	Perdue	Filter 3	0.15	0.18	0.24
3/3/2018 0:00	3/4/2018 0:00	Perdue	Filter 3	0.14	0.16	0.19
3/4/2018 0:00	3/5/2018 0:00	Perdue	Filter 3	0.14	0.15	0.19
3/5/2018 0:00	3/6/2018 0:00	Perdue	Filter 3	0.13	0.15	0.17
3/6/2018 0:00	3/7/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
3/7/2018 0:00	3/8/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
3/8/2018 0:00	3/9/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
3/9/2018 0:00	3/10/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
3/10/2018 0:00	3/11/2018 0:00	Perdue	Filter 3	0.14	0.20	0.25
3/11/2018 0:00	3/12/2018 0:00	Perdue	Filter 3	0.15	0.18	0.23
3/12/2018 0:00	3/13/2018 0:00	Perdue	Filter 3	0.14	0.16	0.18
3/13/2018 0:00	3/14/2018 0:00	Perdue	Filter 3	0.15	0.17	0.18

3/14/2018 0:00	3/15/2018 0:00	Perdue	Filter 3	0.14	0.16	0.19
3/15/2018 0:00	3/16/2018 0:00	Perdue	Filter 3	0.14	0.15	0.16
3/16/2018 0:00	3/17/2018 0:00	Perdue	Filter 3	0.14	0.15	0.15
3/17/2018 0:00	3/18/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
3/18/2018 0:00	3/19/2018 0:00	Perdue	Filter 3	0.14	0.18	0.23
3/19/2018 0:00	3/20/2018 0:00	Perdue	Filter 3	0.15	0.16	0.18
3/20/2018 0:00	3/21/2018 0:00	Perdue	Filter 3	0.14	0.16	0.18
3/21/2018 0:00	3/22/2018 0:00	Perdue	Filter 3	0.13	0.15	0.26
3/22/2018 0:00	3/23/2018 0:00	Perdue	Filter 3	0.13	0.13	0.15
3/23/2018 0:00	3/24/2018 0:00	Perdue	Filter 3	0.12	0.13	0.17
3/24/2018 0:00	3/25/2018 0:00	Perdue	Filter 3	0.12	0.13	0.14
3/25/2018 0:00	3/26/2018 0:00	Perdue	Filter 3	0.13	0.17	0.22
3/26/2018 0:00	3/27/2018 0:00	Perdue	Filter 3	0.14	0.16	0.19
3/27/2018 0:00	3/28/2018 0:00	Perdue	Filter 3	0.14	0.15	0.16
3/28/2018 0:00	3/29/2018 0:00	Perdue	Filter 3	0.13	0.14	0.16
3/29/2018 0:00	3/30/2018 0:00	Perdue	Filter 3	0.10	0.14	0.45
3/30/2018 0:00	3/31/2018 0:00	Perdue	Filter 3	0.12	0.14	0.44
3/31/2018 0:00	4/1/2018 0:00	Perdue	Filter 3	0.12	0.14	0.41
4/1/2018 0:00	4/2/2018 0:00	Perdue	Filter 3	0.13	0.18	0.27
4/2/2018 0:00	4/3/2018 0:00	Perdue	Filter 3	0.16	0.18	0.26
4/3/2018 0:00	4/4/2018 0:00	Perdue	Filter 3	0.13	0.15	0.41
4/4/2018 0:00	4/5/2018 0:00	Perdue	Filter 3	0.13	0.15	0.29
4/5/2018 0:00	4/6/2018 0:00	Perdue	Filter 3	0.12	0.13	0.25
4/6/2018 0:00	4/7/2018 0:00	Perdue	Filter 3	0.12	0.13	0.31
4/7/2018 0:00	4/8/2018 0:00	Perdue	Filter 3	0.12	0.13	0.27
4/8/2018 0:00	4/9/2018 0:00	Perdue	Filter 3	0.15	0.18	0.25
4/9/2018 0:00	4/10/2018 0:00	Perdue	Filter 3	0.13	0.15	0.21
4/10/2018 0:00	4/11/2018 0:00	Perdue	Filter 3	0.12	0.14	0.21
4/11/2018 0:00	4/12/2018 0:00	Perdue	Filter 3	0.12	0.13	0.38
4/12/2018 0:00	4/13/2018 0:00	Perdue	Filter 3	0.13	0.14	0.18
4/13/2018 0:00	4/14/2018 0:00	Perdue	Filter 3	0.12	0.17	0.30
4/14/2018 0:00	4/15/2018 0:00	Perdue	Filter 3	0.15	0.19	0.22
4/15/2018 0:00	4/16/2018 0:00	Perdue	Filter 3	0.15	0.17	0.22
4/16/2018 0:00	4/17/2018 0:00	Perdue	Filter 3	0.16	0.17	0.33
4/17/2018 0:00	4/18/2018 0:00	Perdue	Filter 3	0.14	0.15	0.34
4/18/2018 0:00	4/19/2018 0:00	Perdue	Filter 3	0.15	0.16	0.29
4/19/2018 0:00	4/20/2018 0:00	Perdue	Filter 3	0.11	0.16	0.32
4/20/2018 0:00	4/21/2018 0:00	Perdue	Filter 3	0.11	0.14	0.23
4/21/2018 0:00	4/22/2018 0:00	Perdue	Filter 3	0.12	0.14	0.35
4/22/2018 0:00	4/23/2018 0:00	Perdue	Filter 3	0.10	0.11	0.18
4/23/2018 0:00	4/24/2018 0:00	Perdue	Filter 3	0.09	0.10	0.18
4/24/2018 0:00	4/25/2018 0:00	Perdue	Filter 3	0.09	0.11	0.56
4/25/2018 0:00	4/26/2018 0:00	Perdue	Filter 3	0.14	0.18	0.23
4/26/2018 0:00	4/27/2018 0:00	Perdue	Filter 3	0.12	0.13	0.31
4/27/2018 0:00	4/28/2018 0:00	Perdue	Filter 3	0.10	0.12	0.22
4/28/2018 0:00	4/29/2018 0:00	Perdue	Filter 3	0.09	0.11	0.21
4/29/2018 0:00	4/30/2018 0:00	Perdue	Filter 3	0.09	0.11	0.21
4/30/2018 0:00	5/1/2018 0:00	Perdue	Filter 3	0.10	0.11	0.42
5/1/2018 0:00	5/2/2018 0:00	Perdue	Filter 3	0.12	0.17	0.38
5/2/2018 0:00	5/3/2018 0:00	Perdue	Filter 3	0.14	0.16	0.26
5/3/2018 0:00	5/4/2018 0:00	Perdue	Filter 3	0.13	0.15	0.20
5/4/2018 0:00	5/5/2018 0:00	Perdue	Filter 3	0.13	0.15	0.19
5/5/2018 0:00	5/6/2018 0:00	Perdue	Filter 3	0.15	0.17	0.52
5/6/2018 0:00	5/7/2018 0:00	Perdue	Filter 3	0.13	0.22	0.48
5/7/2018 0:00	5/8/2018 0:00	Perdue	Filter 3	0.17	0.19	0.61
5/8/2018 0:00	5/9/2018 0:00	Perdue	Filter 3	0.18	0.20	0.33
5/9/2018 0:00	5/10/2018 0:00	Perdue	Filter 3	0.17	0.20	0.30
5/10/2018 0:00	5/11/2018 0:00	Perdue	Filter 3	0.17	0.19	0.23
5/11/2018 0:00	5/12/2018 0:00	Perdue	Filter 3	0.15	0.18	0.23
5/12/2018 0:00	5/13/2018 0:00	Perdue	Filter 3	0.15	0.18	0.23
5/13/2018 0:00	5/14/2018 0:00	Perdue	Filter 3	0.15	0.22	0.35
5/14/2018 0:00	5/15/2018 0:00	Perdue	Filter 3	0.17	0.20	0.22
5/15/2018 0:00	5/16/2018 0:00	Perdue	Filter 3	0.19	0.21	0.23
5/16/2018 0:00	5/17/2018 0:00	Perdue	Filter 3	0.16	0.18	0.20
5/17/2018 0:00	5/18/2018 0:00	Perdue	Filter 3	0.16	0.18	0.22
5/18/2018 0:00	5/19/2018 0:00	Perdue	Filter 3	0.14	0.18	0.31
5/19/2018 0:00	5/20/2018 0:00	Perdue	Filter 3	0.14	0.15	0.22
5/20/2018 0:00	5/21/2018 0:00	Perdue	Filter 3	0.12	0.14	0.19
5/21/2018 0:00	5/22/2018 0:00	Perdue	Filter 3	0.12	0.17	0.21
5/22/2018 0:00	5/23/2018 0:00	Perdue	Filter 3	0.12	0.13	0.17
5/23/2018 0:00	5/24/2018 0:00	Perdue	Filter 3	0.12	0.14	0.15
5/24/2018 0:00	5/25/2018 0:00	Perdue	Filter 3	0.14	0.14	0.14
5/25/2018 0:00	5/26/2018 0:00	Perdue	Filter 3	0.11	0.14	0.17

5/26/2018 0:00	5/27/2018 0:00	Perdue	Filter 3	0.10	0.11	0.16
5/27/2018 0:00	5/28/2018 0:00	Perdue	Filter 3	0.10	0.10	0.13
5/28/2018 0:00	5/29/2018 0:00	Perdue	Filter 3	0.09	0.11	0.14
5/29/2018 0:00	5/30/2018 0:00	Perdue	Filter 3	0.10	0.11	0.13
5/30/2018 0:00	5/31/2018 0:00	Perdue	Filter 3	0.10	0.11	0.18
5/31/2018 0:00	6/1/2018 0:00	Perdue	Filter 3	0.11	0.12	0.17
6/1/2018 0:00	6/2/2018 0:00	Perdue	Filter 3	0.11	0.12	0.16
6/2/2018 0:00	6/3/2018 0:00	Perdue	Filter 3	0.11	0.13	0.20
6/3/2018 0:00	6/4/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
6/4/2018 0:00	6/5/2018 0:00	Perdue	Filter 3	0.11	0.12	0.25
6/5/2018 0:00	6/6/2018 0:00	Perdue	Filter 3	0.11	0.13	0.20
6/6/2018 0:00	6/7/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
6/7/2018 0:00	6/8/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
6/8/2018 0:00	6/9/2018 0:00	Perdue	Filter 3	0.11	0.13	0.15
6/9/2018 0:00	6/10/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
6/10/2018 0:00	6/11/2018 0:00	Perdue	Filter 3	0.13	0.20	0.33
6/11/2018 0:00	6/12/2018 0:00	Perdue	Filter 3	0.20	0.26	0.34
6/12/2018 0:00	6/13/2018 0:00	Perdue	Filter 3	0.12	0.17	0.22
6/13/2018 0:00	6/14/2018 0:00	Perdue	Filter 3	0.12	0.14	0.28
6/14/2018 0:00	6/15/2018 0:00	Perdue	Filter 3	0.13	0.20	0.31
6/15/2018 0:00	6/16/2018 0:00	Perdue	Filter 3	0.14	0.24	0.31
6/16/2018 0:00	6/17/2018 0:00	Perdue	Filter 3	0.13	0.25	0.39
6/17/2018 0:00	6/18/2018 0:00	Perdue	Filter 3	0.14	0.15	0.34
6/18/2018 0:00	6/19/2018 0:00	Perdue	Filter 3	0.16	0.20	0.25
6/19/2018 0:00	6/20/2018 0:00	Perdue	Filter 3	0.12	0.14	0.19
6/20/2018 0:00	6/21/2018 0:00	Perdue	Filter 3	0.13	0.15	0.35
6/21/2018 0:00	6/22/2018 0:00	Perdue	Filter 3	0.12	0.14	0.18
6/22/2018 0:00	6/23/2018 0:00	Perdue	Filter 3	0.13	0.15	0.17
6/23/2018 0:00	6/24/2018 0:00	Perdue	Filter 3	0.15	0.20	0.28
6/24/2018 0:00	6/25/2018 0:00	Perdue	Filter 3	0.17	0.19	0.29
6/25/2018 0:00	6/26/2018 0:00	Perdue	Filter 3	0.17	0.19	0.25
6/26/2018 0:00	6/27/2018 0:00	Perdue	Filter 3	0.15	0.17	0.24
6/27/2018 0:00	6/28/2018 0:00	Perdue	Filter 3	0.15	0.16	0.21
6/28/2018 0:00	6/29/2018 0:00	Perdue	Filter 3	0.16	0.19	0.28
6/29/2018 0:00	6/30/2018 0:00	Perdue	Filter 3	0.16	0.19	0.23
6/30/2018 0:00	7/1/2018 0:00	Perdue	Filter 3	0.15	0.17	0.22
7/1/2018 0:00	7/2/2018 0:00	Perdue	Filter 3	0.14	0.16	0.26
7/2/2018 0:00	7/3/2018 0:00	Perdue	Filter 3	0.13	0.15	0.23
7/3/2018 0:00	7/4/2018 0:00	Perdue	Filter 3	0.12	0.13	0.27
7/4/2018 0:00	7/5/2018 0:00	Perdue	Filter 3	0.13	0.19	0.46
7/5/2018 0:00	7/6/2018 0:00	Perdue	Filter 3	0.15	0.18	0.23
7/6/2018 0:00	7/7/2018 0:00	Perdue	Filter 3	0.13	0.17	0.69
7/7/2018 0:00	7/8/2018 0:00	Perdue	Filter 3	0.12	0.14	0.18
7/8/2018 0:00	7/9/2018 0:00	Perdue	Filter 3	0.11	0.12	0.17
7/9/2018 0:00	7/10/2018 0:00	Perdue	Filter 3	0.12	0.16	0.26
7/10/2018 0:00	7/11/2018 0:00	Perdue	Filter 3	0.14	0.18	0.36
7/11/2018 0:00	7/12/2018 0:00	Perdue	Filter 3	0.12	0.14	0.32
7/12/2018 0:00	7/13/2018 0:00	Perdue	Filter 3	0.11	0.14	0.21
7/13/2018 0:00	7/14/2018 0:00	Perdue	Filter 3	0.11	0.13	0.19
7/14/2018 0:00	7/15/2018 0:00	Perdue	Filter 3	0.10	0.12	0.19
7/15/2018 0:00	7/16/2018 0:00	Perdue	Filter 3	0.11	0.17	0.25
7/16/2018 0:00	7/17/2018 0:00	Perdue	Filter 3	0.13	0.16	0.32
7/17/2018 0:00	7/18/2018 0:00	Perdue	Filter 3	0.12	0.15	0.21
7/18/2018 0:00	7/19/2018 0:00	Perdue	Filter 3	0.13	0.15	0.23
7/19/2018 0:00	7/20/2018 0:00	Perdue	Filter 3	0.11	0.17	0.40
7/20/2018 0:00	7/21/2018 0:00	Perdue	Filter 3	0.07	0.08	0.20
7/21/2018 0:00	7/22/2018 0:00	Perdue	Filter 3	0.04	0.05	0.10
7/22/2018 0:00	7/23/2018 0:00	Perdue	Filter 3	0.05	0.05	0.12
7/23/2018 0:00	7/24/2018 0:00	Perdue	Filter 3	0.05	0.05	0.07
7/24/2018 0:00	7/25/2018 0:00	Perdue	Filter 3	0.05	0.05	0.06
7/25/2018 0:00	7/26/2018 0:00	Perdue	Filter 3	0.05	0.05	0.06
7/26/2018 0:00	7/27/2018 0:00	Perdue	Filter 3	0.03	0.07	0.08
7/27/2018 0:00	7/28/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
7/28/2018 0:00	7/29/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
7/29/2018 0:00	7/30/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
7/30/2018 0:00	7/31/2018 0:00	Perdue	Filter 3	0.07	0.08	0.08
7/31/2018 0:00	8/1/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
8/1/2018 0:00	8/2/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
8/2/2018 0:00	8/3/2018 0:00	Perdue	Filter 3	0.07	0.08	0.14
8/3/2018 0:00	8/4/2018 0:00	Perdue	Filter 3	0.06	0.07	0.08
8/4/2018 0:00	8/5/2018 0:00	Perdue	Filter 3	0.07	0.07	0.09
8/5/2018 0:00	8/6/2018 0:00	Perdue	Filter 3	0.07	0.08	0.10
8/6/2018 0:00	8/7/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09

8/7/2018 0:00	8/8/2018 0:00	Perdue	Filter 3	0.08	0.08	0.09
8/8/2018 0:00	8/9/2018 0:00	Perdue	Filter 3	0.08	0.09	0.09
8/9/2018 0:00	8/10/2018 0:00	Perdue	Filter 3	0.08	0.08	0.09
8/10/2018 0:00	8/11/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
8/11/2018 0:00	8/12/2018 0:00	Perdue	Filter 3	0.09	0.10	0.13
8/12/2018 0:00	8/13/2018 0:00	Perdue	Filter 3	0.09	0.09	0.11
8/13/2018 0:00	8/14/2018 0:00	Perdue	Filter 3	0.09	0.09	0.10
8/14/2018 0:00	8/15/2018 0:00	Perdue	Filter 3	0.09	0.10	0.11
8/15/2018 0:00	8/16/2018 0:00	Perdue	Filter 3	0.10	0.11	0.12
8/16/2018 0:00	8/17/2018 0:00	Perdue	Filter 3	0.10	0.11	0.12
8/17/2018 0:00	8/18/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
8/18/2018 0:00	8/19/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
8/19/2018 0:00	8/20/2018 0:00	Perdue	Filter 3	0.14	0.15	0.16
8/20/2018 0:00	8/21/2018 0:00	Perdue	Filter 3	0.14	0.15	0.22
8/21/2018 0:00	8/22/2018 0:00	Perdue	Filter 3	0.14	0.15	0.18
8/22/2018 0:00	8/23/2018 0:00	Perdue	Filter 3	0.14	0.16	0.17
8/23/2018 0:00	8/24/2018 0:00	Perdue	Filter 3	0.16	0.17	0.20
8/24/2018 0:00	8/25/2018 0:00	Perdue	Filter 3	0.10	0.16	0.21
8/25/2018 0:00	8/26/2018 0:00	Perdue	Filter 3	0.11	0.12	0.15
8/26/2018 0:00	8/27/2018 0:00	Perdue	Filter 3	0.14	0.16	0.19
8/27/2018 0:00	8/28/2018 0:00	Perdue	Filter 3	0.05	0.12	0.28
8/28/2018 0:00	8/29/2018 0:00	Perdue	Filter 3	0.05	0.08	0.84
8/29/2018 0:00	8/30/2018 0:00	Perdue	Filter 3	0.07	0.10	0.11
8/30/2018 0:00	8/31/2018 0:00	Perdue	Filter 3	0.08	0.10	0.12
8/31/2018 0:00	9/1/2018 0:00	Perdue	Filter 3	0.10	0.11	0.18
9/1/2018 0:00	9/2/2018 0:00	Perdue	Filter 3	0.10	0.12	0.28
9/2/2018 0:00	9/3/2018 0:00	Perdue	Filter 3	0.10	0.11	0.20
9/3/2018 0:00	9/4/2018 0:00	Perdue	Filter 3	0.09	0.11	0.17
9/4/2018 0:00	9/5/2018 0:00	Perdue	Filter 3	0.08	0.10	0.14
9/5/2018 0:00	9/6/2018 0:00	Perdue	Filter 3	0.07	0.08	0.12
9/6/2018 0:00	9/7/2018 0:00	Perdue	Filter 3	0.07	0.09	0.13
9/7/2018 0:00	9/8/2018 0:00	Perdue	Filter 3	0.10	0.11	0.16
9/8/2018 0:00	9/9/2018 0:00	Perdue	Filter 3	0.10	0.11	0.13
9/9/2018 0:00	9/10/2018 0:00	Perdue	Filter 3	0.10	0.11	0.13
9/10/2018 0:00	9/11/2018 0:00	Perdue	Filter 3	0.09	0.11	0.14
9/11/2018 0:00	9/12/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
9/12/2018 0:00	9/13/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
9/13/2018 0:00	9/14/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
9/14/2018 0:00	9/15/2018 0:00	Perdue	Filter 3	0.12	0.13	0.17
9/15/2018 0:00	9/16/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
9/16/2018 0:00	9/17/2018 0:00	Perdue	Filter 3	0.13	0.14	0.23
9/17/2018 0:00	9/18/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
9/18/2018 0:00	9/19/2018 0:00	Perdue	Filter 3	0.11	0.12	0.20
9/19/2018 0:00	9/20/2018 0:00	Perdue	Filter 3	0.12	0.14	0.21
9/20/2018 0:00	9/21/2018 0:00	Perdue	Filter 3	0.12	0.14	0.19
9/21/2018 0:00	9/22/2018 0:00	Perdue	Filter 3	0.12	0.14	0.16
9/22/2018 0:00	9/23/2018 0:00	Perdue	Filter 3	0.12	0.14	0.16
9/23/2018 0:00	9/24/2018 0:00	Perdue	Filter 3	0.13	0.15	0.25
9/24/2018 0:00	9/25/2018 0:00	Perdue	Filter 3	0.14	0.15	0.16
9/25/2018 0:00	9/26/2018 0:00	Perdue	Filter 3	0.13	0.14	0.15
9/26/2018 0:00	9/27/2018 0:00	Perdue	Filter 3	0.12	0.15	0.20
9/27/2018 0:00	9/28/2018 0:00	Perdue	Filter 3	0.13	0.14	0.16
9/28/2018 0:00	9/29/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
9/29/2018 0:00	9/30/2018 0:00	Perdue	Filter 3	0.13	0.15	0.45
9/30/2018 0:00	10/1/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
10/1/2018 0:00	10/2/2018 0:00	Perdue	Filter 3	0.12	0.14	0.32
10/2/2018 0:00	10/3/2018 0:00	Perdue	Filter 3	0.12	0.13	0.16
10/3/2018 0:00	10/4/2018 0:00	Perdue	Filter 3	0.12	0.13	0.20
10/4/2018 0:00	10/5/2018 0:00	Perdue	Filter 3	0.12	0.13	0.15
10/5/2018 0:00	10/6/2018 0:00	Perdue	Filter 3	0.12	0.13	0.25
10/6/2018 0:00	10/7/2018 0:00	Perdue	Filter 3	0.13	0.14	0.16
10/7/2018 0:00	10/8/2018 0:00	Perdue	Filter 3	0.13	0.15	0.20
10/8/2018 0:00	10/9/2018 0:00	Perdue	Filter 3	0.13	0.14	0.16
10/9/2018 0:00	10/10/2018 0:00	Perdue	Filter 3	0.13	0.14	0.18
10/10/2018 0:00	10/11/2018 0:00	Perdue	Filter 3	0.15	0.16	0.26
10/11/2018 0:00	10/12/2018 0:00	Perdue	Filter 3	0.14	0.15	0.19
10/12/2018 0:00	10/13/2018 0:00	Perdue	Filter 3	0.07	0.12	1.00
10/13/2018 0:00	10/14/2018 0:00	Perdue	Filter 3	0.07	0.08	0.40
10/14/2018 0:00	10/15/2018 0:00	Perdue	Filter 3	0.07	0.08	0.13
10/15/2018 0:00	10/16/2018 0:00	Perdue	Filter 3	0.07	0.08	0.33
10/16/2018 0:00	10/17/2018 0:00	Perdue	Filter 3	0.05	0.06	0.10
10/17/2018 0:00	10/18/2018 0:00	Perdue	Filter 3	0.04	0.05	0.10
10/18/2018 0:00	10/19/2018 0:00	Perdue	Filter 3	0.04	0.05	0.12

10/19/2018 0:00	10/20/2018 0:00	Perdue	Filter 3	0.04	0.05	0.06
10/20/2018 0:00	10/21/2018 0:00	Perdue	Filter 3	0.04	0.05	0.06
10/21/2018 0:00	10/22/2018 0:00	Perdue	Filter 3	0.05	0.06	0.08
10/22/2018 0:00	10/23/2018 0:00	Perdue	Filter 3	0.05	0.07	0.10
10/23/2018 0:00	10/24/2018 0:00	Perdue	Filter 3	0.08	0.08	0.09
10/24/2018 0:00	10/25/2018 0:00	Perdue	Filter 3	0.08	0.08	0.10
10/25/2018 0:00	10/26/2018 0:00	Perdue	Filter 3	0.07	0.08	0.28
10/26/2018 0:00	10/27/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/27/2018 0:00	10/28/2018 0:00	Perdue	Filter 3	0.07	0.08	0.13
10/28/2018 0:00	10/29/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/29/2018 0:00	10/30/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/30/2018 0:00	10/31/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/31/2018 0:00	11/1/2018 0:00	Perdue	Filter 3	0.07	0.08	0.09
11/1/2018 0:00	11/2/2018 0:00	Perdue	Filter 3	0.07	0.08	0.11
11/2/2018 0:00	11/3/2018 0:00	Perdue	Filter 3	0.08	0.08	0.09
11/3/2018 0:00	11/4/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/4/2018 0:00	11/5/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/5/2018 0:00	11/6/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/6/2018 0:00	11/7/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/7/2018 0:00	11/8/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/8/2018 0:00	11/9/2018 0:00	Perdue	Filter 3	0.08	0.08	0.08
11/9/2018 0:00	11/10/2018 0:00	Perdue	Filter 3	0.08	0.08	0.17
11/10/2018 0:00	11/11/2018 0:00	Perdue	Filter 3	0.07	0.08	0.16
11/11/2018 0:00	11/12/2018 0:00	Perdue	Filter 3	0.08	0.09	0.14
11/12/2018 0:00	11/13/2018 0:00	Perdue	Filter 3	0.08	0.09	0.30
11/13/2018 0:00	11/14/2018 0:00	Perdue	Filter 3	0.08	0.09	0.26
11/14/2018 0:00	11/15/2018 0:00	Perdue	Filter 3	0.08	0.09	0.13
11/15/2018 0:00	11/16/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
11/16/2018 0:00	11/17/2018 0:00	Perdue	Filter 3	0.08	0.09	1.00
11/17/2018 0:00	11/18/2018 0:00	Perdue	Filter 3	0.08	0.09	0.11
11/18/2018 0:00	11/19/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
11/19/2018 0:00	11/20/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
11/20/2018 0:00	11/21/2018 0:00	Perdue	Filter 3	0.08	0.09	0.10
11/21/2018 0:00	11/22/2018 0:00	Perdue	Filter 3	0.08	0.09	0.15
11/22/2018 0:00	11/23/2018 0:00	Perdue	Filter 3	0.09	0.09	0.42
11/23/2018 0:00	11/24/2018 0:00	Perdue	Filter 3	0.09	0.09	0.12
11/24/2018 0:00	11/25/2018 0:00	Perdue	Filter 3	0.09	0.10	0.11
11/25/2018 0:00	11/26/2018 0:00	Perdue	Filter 3	0.09	0.10	0.34
11/26/2018 0:00	11/27/2018 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/27/2018 0:00	11/28/2018 0:00	Perdue	Filter 3	0.11	0.12	0.14
11/28/2018 0:00	11/29/2018 0:00	Perdue	Filter 3	0.12	0.14	0.16
11/29/2018 0:00	11/30/2018 0:00	Perdue	Filter 3	0.15	0.16	0.19
11/30/2018 0:00	12/1/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
12/1/2018 0:00	12/2/2018 0:00	Perdue	Filter 3	0.14	0.14	0.18
12/2/2018 0:00	12/3/2018 0:00	Perdue	Filter 3	0.14	0.14	0.24
12/3/2018 0:00	12/4/2018 0:00	Perdue	Filter 3	0.13	0.14	0.18
12/4/2018 0:00	12/5/2018 0:00	Perdue	Filter 3	0.14	0.14	0.16
12/5/2018 0:00	12/6/2018 0:00	Perdue	Filter 3	0.13	0.14	0.18
12/6/2018 0:00	12/7/2018 0:00	Perdue	Filter 3	0.14	0.14	0.26
12/7/2018 0:00	12/8/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
12/8/2018 0:00	12/9/2018 0:00	Perdue	Filter 3	0.15	0.15	0.18
12/9/2018 0:00	12/10/2018 0:00	Perdue	Filter 3	0.15	0.15	0.19
12/10/2018 0:00	12/11/2018 0:00	Perdue	Filter 3	0.15	0.16	0.54
12/11/2018 0:00	12/12/2018 0:00	Perdue	Filter 3	0.14	0.15	0.17
12/12/2018 0:00	12/13/2018 0:00	Perdue	Filter 3	0.15	0.16	0.21
12/13/2018 0:00	12/14/2018 0:00	Perdue	Filter 3	0.17	0.18	0.19
12/14/2018 0:00	12/15/2018 0:00	Perdue	Filter 3	0.17	0.19	0.22
12/15/2018 0:00	12/16/2018 0:00	Perdue	Filter 3	0.21	0.22	0.24
12/16/2018 0:00	12/17/2018 0:00	Perdue	Filter 3	0.11	0.22	0.50
12/17/2018 0:00	12/18/2018 0:00	Perdue	Filter 3	0.09	0.29	1.00
12/18/2018 0:00	12/19/2018 0:00	Perdue	Filter 3	0.10	0.11	0.12
12/19/2018 0:00	12/20/2018 0:00	Perdue	Filter 3	0.09	0.11	0.15
12/20/2018 0:00	12/21/2018 0:00	Perdue	Filter 3	0.10	0.10	0.16
12/21/2018 0:00	12/22/2018 0:00	Perdue	Filter 3	0.10	0.10	0.12
12/22/2018 0:00	12/23/2018 0:00	Perdue	Filter 3	0.10	0.11	0.16
12/23/2018 0:00	12/24/2018 0:00	Perdue	Filter 3	0.10	0.11	0.20
12/24/2018 0:00	12/25/2018 0:00	Perdue	Filter 3	0.10	0.11	0.21
12/25/2018 0:00	12/26/2018 0:00	Perdue	Filter 3	0.10	0.11	0.16
12/26/2018 0:00	12/27/2018 0:00	Perdue	Filter 3	0.11	0.11	0.19
12/27/2018 0:00	12/28/2018 0:00	Perdue	Filter 3	0.11	0.11	0.33
12/28/2018 0:00	12/29/2018 0:00	Perdue	Filter 3	0.11	0.11	0.22
12/29/2018 0:00	12/30/2018 0:00	Perdue	Filter 3	0.12	0.12	0.61
12/30/2018 0:00	12/31/2018 0:00	Perdue	Filter 3	0.11	0.12	0.19

12/31/2018 0:00	1/1/2019 0:00	Perdue	Filter 3	0.11	0.12	0.23
1/1/2019 0:00	1/2/2019 0:00	Perdue	Filter 3	0.12	0.12	0.31
1/2/2019 0:00	1/3/2019 0:00	Perdue	Filter 3	0.11	0.12	0.26
1/3/2019 0:00	1/4/2019 0:00	Perdue	Filter 3	0.12	0.12	0.17
1/4/2019 0:00	1/5/2019 0:00	Perdue	Filter 3	0.12	0.12	0.12
1/5/2019 0:00	1/6/2019 0:00	Perdue	Filter 3	0.12	0.12	0.12
1/6/2019 0:00	1/7/2019 0:00	Perdue	Filter 3	0.12	0.12	0.17
1/7/2019 0:00	1/8/2019 0:00	Perdue	Filter 3	0.11	0.12	0.49
1/8/2019 0:00	1/9/2019 0:00	Perdue	Filter 3	0.11	0.12	0.17
1/9/2019 0:00	1/10/2019 0:00	Perdue	Filter 3	0.12	0.12	0.17
1/10/2019 0:00	1/11/2019 0:00	Perdue	Filter 3	0.11	0.12	0.25
1/11/2019 0:00	1/12/2019 0:00	Perdue	Filter 3	0.12	0.13	0.30
1/12/2019 0:00	1/13/2019 0:00	Perdue	Filter 3	0.12	0.13	0.19
1/13/2019 0:00	1/14/2019 0:00	Perdue	Filter 3	0.12	0.13	0.31
1/14/2019 0:00	1/15/2019 0:00	Perdue	Filter 3	0.13	0.13	0.16
1/15/2019 0:00	1/16/2019 0:00	Perdue	Filter 3	0.13	0.14	0.36
1/16/2019 0:00	1/17/2019 0:00	Perdue	Filter 3	0.14	0.15	0.25
1/17/2019 0:00	1/18/2019 0:00	Perdue	Filter 3	0.14	0.14	0.27
1/18/2019 0:00	1/19/2019 0:00	Perdue	Filter 3	0.13	0.14	0.42
1/19/2019 0:00	1/20/2019 0:00	Perdue	Filter 3	0.14	0.14	0.14
1/20/2019 0:00	1/21/2019 0:00	Perdue	Filter 3	0.14	0.15	0.22
1/21/2019 0:00	1/22/2019 0:00	Perdue	Filter 3	0.15	0.15	0.34
1/22/2019 0:00	1/23/2019 0:00	Perdue	Filter 3	0.15	0.15	0.22
1/23/2019 0:00	1/24/2019 0:00	Perdue	Filter 3	0.15	0.16	0.39
1/24/2019 0:00	1/25/2019 0:00	Perdue	Filter 3	0.16	0.16	0.20
1/25/2019 0:00	1/26/2019 0:00	Perdue	Filter 3	0.16	0.17	0.42
1/26/2019 0:00	1/27/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
1/27/2019 0:00	1/28/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
1/28/2019 0:00	1/29/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
1/29/2019 0:00	1/30/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
1/30/2019 0:00	1/31/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
1/31/2019 0:00	2/1/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/1/2019 0:00	2/2/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/2/2019 0:00	2/3/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/3/2019 0:00	2/4/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/4/2019 0:00	2/5/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/5/2019 0:00	2/6/2019 0:00	Perdue	Filter 3	0.17	0.17	0.17
2/6/2019 0:00	2/7/2019 0:00	Perdue	Filter 3	0.14	0.16	0.22
2/7/2019 0:00	2/8/2019 0:00	Perdue	Filter 3	0.14	0.15	0.27
2/8/2019 0:00	2/9/2019 0:00	Perdue	Filter 3	0.13	0.15	0.35
2/9/2019 0:00	2/10/2019 0:00	Perdue	Filter 3	0.14	0.15	0.48
2/10/2019 0:00	2/11/2019 0:00	Perdue	Filter 3	0.13	0.15	0.19
2/11/2019 0:00	2/12/2019 0:00	Perdue	Filter 3	0.14	0.14	0.25
2/12/2019 0:00	2/13/2019 0:00	Perdue	Filter 3	0.14	0.14	0.34
2/13/2019 0:00	2/14/2019 0:00	Perdue	Filter 3	0.14	0.14	0.17
2/14/2019 0:00	2/15/2019 0:00	Perdue	Filter 3	0.15	0.15	0.15
2/15/2019 0:00	2/16/2019 0:00	Perdue	Filter 3	0.14	0.15	0.33
2/16/2019 0:00	2/17/2019 0:00	Perdue	Filter 3	0.13	0.14	0.31
2/17/2019 0:00	2/18/2019 0:00	Perdue	Filter 3	0.14	0.14	0.14
2/18/2019 0:00	2/19/2019 0:00	Perdue	Filter 3	0.14	0.14	0.17
2/19/2019 0:00	2/20/2019 0:00	Perdue	Filter 3	0.14	0.15	0.21
2/20/2019 0:00	2/21/2019 0:00	Perdue	Filter 3	0.14	0.15	0.20
2/21/2019 0:00	2/22/2019 0:00	Perdue	Filter 3	0.14	0.16	0.23
2/22/2019 0:00	2/23/2019 0:00	Perdue	Filter 3	0.15	0.20	0.23
2/23/2019 0:00	2/24/2019 0:00	Perdue	Filter 3	0.15	0.15	0.15
2/24/2019 0:00	2/25/2019 0:00	Perdue	Filter 3	0.14	0.15	0.23
2/25/2019 0:00	2/26/2019 0:00	Perdue	Filter 3	0.13	0.14	0.30
2/26/2019 0:00	2/27/2019 0:00	Perdue	Filter 3	0.13	0.13	0.23
2/27/2019 0:00	2/28/2019 0:00	Perdue	Filter 3	0.13	0.13	0.16
2/28/2019 0:00	3/1/2019 0:00	Perdue	Filter 3	0.13	0.13	0.13
3/1/2019 0:00	3/2/2019 0:00	Perdue	Filter 3	0.13	0.13	0.23
3/2/2019 0:00	3/3/2019 0:00	Perdue	Filter 3	0.13	0.13	0.15
3/3/2019 0:00	3/4/2019 0:00	Perdue	Filter 3	0.13	0.13	0.27
3/4/2019 0:00	3/5/2019 0:00	Perdue	Filter 3	0.13	0.13	0.15
3/5/2019 0:00	3/6/2019 0:00	Perdue	Filter 3	0.13	0.13	0.15
3/6/2019 0:00	3/7/2019 0:00	Perdue	Filter 3	0.12	0.13	0.22
3/7/2019 0:00	3/8/2019 0:00	Perdue	Filter 3	0.13	0.13	0.17
3/8/2019 0:00	3/9/2019 0:00	Perdue	Filter 3	0.13	0.13	0.21
3/9/2019 0:00	3/10/2019 0:00	Perdue	Filter 3	0.13	0.14	0.38
3/10/2019 0:00	3/11/2019 0:00	Perdue	Filter 3	0.14	0.14	0.22
3/11/2019 0:00	3/12/2019 0:00	Perdue	Filter 3	0.13	0.14	0.19
3/12/2019 0:00	3/13/2019 0:00	Perdue	Filter 3	0.13	0.14	0.42
3/13/2019 0:00	3/14/2019 0:00	Perdue	Filter 3	0.13	0.14	0.25

3/14/2019 0:00	3/15/2019 0:00	Perdue	Filter 3	0.14	0.14	0.40
3/15/2019 0:00	3/16/2019 0:00	Perdue	Filter 3	0.14	0.15	0.20
3/16/2019 0:00	3/17/2019 0:00	Perdue	Filter 3	0.14	0.15	0.26
3/17/2019 0:00	3/18/2019 0:00	Perdue	Filter 3	0.13	0.14	0.24
3/18/2019 0:00	3/19/2019 0:00	Perdue	Filter 3	0.14	0.14	0.14
3/19/2019 0:00	3/20/2019 0:00	Perdue	Filter 3	0.14	0.14	0.17
3/20/2019 0:00	3/21/2019 0:00	Perdue	Filter 3	0.15	0.16	0.36
3/21/2019 0:00	3/22/2019 0:00	Perdue	Filter 3	0.15	0.16	0.21
3/22/2019 0:00	3/23/2019 0:00	Perdue	Filter 3	0.17	0.17	0.26
3/23/2019 0:00	3/24/2019 0:00	Perdue	Filter 3	0.15	0.17	0.21
3/24/2019 0:00	3/25/2019 0:00	Perdue	Filter 3	0.14	0.15	0.23
3/25/2019 0:00	3/26/2019 0:00	Perdue	Filter 3	0.15	0.16	0.21
3/26/2019 0:00	3/27/2019 0:00	Perdue	Filter 3	0.16	0.17	0.19
3/27/2019 0:00	3/28/2019 0:00	Perdue	Filter 3	0.16	0.17	0.20
3/28/2019 0:00	3/29/2019 0:00	Perdue	Filter 3	0.16	0.19	0.28
3/29/2019 0:00	3/30/2019 0:00	Perdue	Filter 3	0.19	0.23	0.25
3/30/2019 0:00	3/31/2019 0:00	Perdue	Filter 3	0.15	0.18	0.23
3/31/2019 0:00	4/1/2019 0:00	Perdue	Filter 3	0.14	0.17	0.19
4/1/2019 0:00	4/2/2019 0:00	Perdue	Filter 3	0.13	0.15	0.49
4/2/2019 0:00	4/3/2019 0:00	Perdue	Filter 3	0.14	0.15	1.00
4/3/2019 0:00	4/4/2019 0:00	Perdue	Filter 3	0.14	0.16	0.92
4/4/2019 0:00	4/5/2019 0:00	Perdue	Filter 3	0.14	0.15	0.24
4/5/2019 0:00	4/6/2019 0:00	Perdue	Filter 3	0.14	0.15	0.26
4/6/2019 0:00	4/7/2019 0:00	Perdue	Filter 3	0.14	0.15	0.32
4/7/2019 0:00	4/8/2019 0:00	Perdue	Filter 3	0.15	0.17	0.24
4/8/2019 0:00	4/9/2019 0:00	Perdue	Filter 3	0.15	0.16	0.47
4/9/2019 0:00	4/10/2019 0:00	Perdue	Filter 3	0.14	0.15	0.53
4/10/2019 0:00	4/11/2019 0:00	Perdue	Filter 3	0.14	0.17	0.38
4/11/2019 0:00	4/12/2019 0:00	Perdue	Filter 3	0.15	0.16	0.30
4/12/2019 0:00	4/13/2019 0:00	Perdue	Filter 3	0.14	0.16	0.92
4/13/2019 0:00	4/14/2019 0:00	Perdue	Filter 3	0.14	0.16	0.19
4/14/2019 0:00	4/15/2019 0:00	Perdue	Filter 3	0.16	0.18	0.29
4/15/2019 0:00	4/16/2019 0:00	Perdue	Filter 3	0.15	0.17	0.20
4/16/2019 0:00	4/17/2019 0:00	Perdue	Filter 3	0.15	0.16	0.43
4/17/2019 0:00	4/18/2019 0:00	Perdue	Filter 3	0.08	0.13	0.29
4/18/2019 0:00	4/19/2019 0:00	Perdue	Filter 3	0.03	0.06	0.09
4/19/2019 0:00	4/20/2019 0:00	Perdue	Filter 3	0.03	0.04	0.05
4/20/2019 0:00	4/21/2019 0:00	Perdue	Filter 3	0.04	0.04	0.06
4/21/2019 0:00	4/22/2019 0:00	Perdue	Filter 3	0.04	0.05	0.28
4/22/2019 0:00	4/23/2019 0:00	Perdue	Filter 3	0.06	0.10	0.13
4/23/2019 0:00	4/24/2019 0:00	Perdue	Filter 3	0.11	0.12	0.12
4/24/2019 0:00	4/25/2019 0:00	Perdue	Filter 3	0.11	0.11	0.17
4/25/2019 0:00	4/26/2019 0:00	Perdue	Filter 3	0.10	0.11	0.14
4/26/2019 0:00	4/27/2019 0:00	Perdue	Filter 3	0.10	0.11	0.21
4/27/2019 0:00	4/28/2019 0:00	Perdue	Filter 3	0.10	0.12	0.19
4/28/2019 0:00	4/29/2019 0:00	Perdue	Filter 3	0.10	0.11	0.14
4/29/2019 0:00	4/30/2019 0:00	Perdue	Filter 3	0.10	0.11	0.13
4/30/2019 0:00	5/1/2019 0:00	Perdue	Filter 3	0.10	0.11	0.11
5/1/2019 0:00	5/2/2019 0:00	Perdue	Filter 3	0.10	0.11	0.15
5/2/2019 0:00	5/3/2019 0:00	Perdue	Filter 3	0.09	0.10	0.12
5/3/2019 0:00	5/4/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
5/4/2019 0:00	5/5/2019 0:00	Perdue	Filter 3	0.10	0.11	0.16
5/5/2019 0:00	5/6/2019 0:00	Perdue	Filter 3	0.10	0.12	0.15
5/6/2019 0:00	5/7/2019 0:00	Perdue	Filter 3	0.09	0.10	0.12
5/7/2019 0:00	5/8/2019 0:00	Perdue	Filter 3	0.10	0.11	0.14
5/8/2019 0:00	5/9/2019 0:00	Perdue	Filter 3	0.10	0.12	0.19
5/9/2019 0:00	5/10/2019 0:00	Perdue	Filter 3	0.09	0.10	0.13
5/10/2019 0:00	5/11/2019 0:00	Perdue	Filter 3	0.10	0.10	0.15
5/11/2019 0:00	5/12/2019 0:00	Perdue	Filter 3	0.09	0.10	0.12
5/12/2019 0:00	5/13/2019 0:00	Perdue	Filter 3	0.10	0.11	0.13
5/13/2019 0:00	5/14/2019 0:00	Perdue	Filter 3	0.09	0.11	0.20
5/14/2019 0:00	5/15/2019 0:00	Perdue	Filter 3	0.10	0.11	0.17
5/15/2019 0:00	5/16/2019 0:00	Perdue	Filter 3	0.11	0.13	0.22
5/16/2019 0:00	5/17/2019 0:00	Perdue	Filter 3	0.11	0.12	0.16
5/17/2019 0:00	5/18/2019 0:00	Perdue	Filter 3	0.12	0.14	0.18
5/18/2019 0:00	5/19/2019 0:00	Perdue	Filter 3	0.10	0.12	0.27
5/19/2019 0:00	5/20/2019 0:00	Perdue	Filter 3	0.11	0.12	0.21
5/20/2019 0:00	5/21/2019 0:00	Perdue	Filter 3	0.11	0.11	0.14
5/21/2019 0:00	5/22/2019 0:00	Perdue	Filter 3	0.11	0.12	0.14
5/22/2019 0:00	5/23/2019 0:00	Perdue	Filter 3	0.00	0.12	0.14
5/23/2019 0:00	5/24/2019 0:00	Perdue	Filter 3	0.11	0.12	0.25
5/24/2019 0:00	5/25/2019 0:00	Perdue	Filter 3	0.00	0.14	0.20
5/25/2019 0:00	5/26/2019 0:00	Perdue	Filter 3	0.13	0.14	0.31

5/26/2019 0:00	5/27/2019 0:00	Perdue	Filter 3	0.15	0.17	0.33
5/27/2019 0:00	5/28/2019 0:00	Perdue	Filter 3	0.18	0.20	0.23
5/28/2019 0:00	5/29/2019 0:00	Perdue	Filter 3	0.08	0.19	0.60
5/29/2019 0:00	5/30/2019 0:00	Perdue	Filter 3	0.00	0.10	0.17
5/30/2019 0:00	5/31/2019 0:00	Perdue	Filter 3	0.13		0.13
5/31/2019 0:00	6/1/2019 0:00	Perdue	Filter 3	0.08	0.09	0.20
6/1/2019 0:00	6/2/2019 0:00	Perdue	Filter 3	0.07	0.08	0.09
6/2/2019 0:00	6/3/2019 0:00	Perdue	Filter 3	0.07	0.09	0.12
6/3/2019 0:00	6/4/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10
6/4/2019 0:00	6/5/2019 0:00	Perdue	Filter 3	0.08	0.08	0.10
6/5/2019 0:00	6/6/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
6/6/2019 0:00	6/7/2019 0:00	Perdue	Filter 3	0.00	0.08	0.09
6/7/2019 0:00	6/8/2019 0:00	Perdue	Filter 3	0.08	0.10	0.19
6/8/2019 0:00	6/9/2019 0:00	Perdue	Filter 3	0.07	0.08	0.09
6/9/2019 0:00	6/10/2019 0:00	Perdue	Filter 3	0.06	0.07	0.09
6/10/2019 0:00	6/11/2019 0:00	Perdue	Filter 3	0.00	0.09	0.20
6/11/2019 0:00	6/12/2019 0:00	Perdue	Filter 3	0.07	0.09	0.11
6/12/2019 0:00	6/13/2019 0:00	Perdue	Filter 3	0.07	0.08	0.10
6/13/2019 0:00	6/14/2019 0:00	Perdue	Filter 3	0.07	0.08	0.09
6/14/2019 0:00	6/15/2019 0:00	Perdue	Filter 3	0.00	0.10	0.21
6/15/2019 0:00	6/16/2019 0:00	Perdue	Filter 3	0.07	0.08	0.11
6/16/2019 0:00	6/17/2019 0:00	Perdue	Filter 3	0.06	0.07	0.08
6/17/2019 0:00	6/18/2019 0:00	Perdue	Filter 3	0.06	0.07	0.11
6/18/2019 0:00	6/19/2019 0:00	Perdue	Filter 3	0.06	0.07	0.09
6/19/2019 0:00	6/20/2019 0:00	Perdue	Filter 3	0.00	0.09	0.22
6/20/2019 0:00	6/21/2019 0:00	Perdue	Filter 3	0.07	0.10	0.20
6/21/2019 0:00	6/22/2019 0:00	Perdue	Filter 3	0.07	0.08	0.10
6/22/2019 0:00	6/23/2019 0:00	Perdue	Filter 3	0.06	0.07	0.08
6/23/2019 0:00	6/24/2019 0:00	Perdue	Filter 3	0.05	0.06	0.07
6/24/2019 0:00	6/25/2019 0:00	Perdue	Filter 3	0.00	0.07	0.18
6/25/2019 0:00	6/26/2019 0:00	Perdue	Filter 3	0.07	0.09	0.12
6/26/2019 0:00	6/27/2019 0:00	Perdue	Filter 3	0.06	0.07	0.10
6/27/2019 0:00	6/28/2019 0:00	Perdue	Filter 3	0.06	0.07	0.09
6/28/2019 0:00	6/29/2019 0:00	Perdue	Filter 3	0.05	0.06	0.07
6/29/2019 0:00	6/30/2019 0:00	Perdue	Filter 3	0.00	0.08	0.20
6/30/2019 0:00	7/1/2019 0:00	Perdue	Filter 3	0.06	0.07	0.08
7/1/2019 0:00	7/2/2019 0:00	Perdue	Filter 3	0.05	0.06	0.09
7/2/2019 0:00	7/3/2019 0:00	Perdue	Filter 3	0.05	0.06	0.17
7/3/2019 0:00	7/4/2019 0:00	Perdue	Filter 3	0.00	0.07	0.19
7/4/2019 0:00	7/5/2019 0:00	Perdue	Filter 3	0.06	0.07	0.09
7/5/2019 0:00	7/6/2019 0:00	Perdue	Filter 3	0.06	0.06	0.08
7/6/2019 0:00	7/7/2019 0:00	Perdue	Filter 3	0.00	0.06	0.12
7/7/2019 0:00	7/8/2019 0:00	Perdue	Filter 3	0.07	0.09	0.18
7/8/2019 0:00	7/9/2019 0:00	Perdue	Filter 3	0.06	0.07	0.11
7/9/2019 0:00	7/10/2019 0:00	Perdue	Filter 3	0.06	0.07	0.10
7/10/2019 0:00	7/11/2019 0:00	Perdue	Filter 3	0.05	0.06	0.10
7/11/2019 0:00	7/12/2019 0:00	Perdue	Filter 3	0.00	0.07	0.16
7/12/2019 0:00	7/13/2019 0:00	Perdue	Filter 3	0.07	0.08	0.11
7/13/2019 0:00	7/14/2019 0:00	Perdue	Filter 3	0.07	0.07	0.09
7/14/2019 0:00	7/15/2019 0:00	Perdue	Filter 3	0.07	0.07	0.10
7/15/2019 0:00	7/16/2019 0:00	Perdue	Filter 3	0.07	0.08	0.61
7/16/2019 0:00	7/17/2019 0:00	Perdue	Filter 3	0.00	0.10	0.16
7/17/2019 0:00	7/18/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
7/18/2019 0:00	7/19/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
7/19/2019 0:00	7/20/2019 0:00	Perdue	Filter 3	0.08	0.09	0.12
7/20/2019 0:00	7/21/2019 0:00	Perdue	Filter 3	0.00	0.11	0.17
7/21/2019 0:00	7/22/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
7/22/2019 0:00	7/23/2019 0:00	Perdue	Filter 3	0.00	0.09	0.11
7/23/2019 0:00	7/24/2019 0:00	Perdue	Filter 3	0.00	0.10	0.16
7/24/2019 0:00	7/25/2019 0:00	Perdue	Filter 3	0.00	0.09	0.17
7/25/2019 0:00	7/26/2019 0:00	Perdue	Filter 3	0.06	0.07	0.11
7/26/2019 0:00	7/27/2019 0:00	Perdue	Filter 3	0.06	0.07	0.11
7/27/2019 0:00	7/28/2019 0:00	Perdue	Filter 3	0.07	0.08	0.12
7/28/2019 0:00	7/29/2019 0:00	Perdue	Filter 3	0.08	0.09	0.49
7/29/2019 0:00	7/30/2019 0:00	Perdue	Filter 3	0.08	0.09	0.32
7/30/2019 0:00	7/31/2019 0:00	Perdue	Filter 3	0.00	0.09	0.32
7/31/2019 0:00	8/1/2019 0:00	Perdue	Filter 3	0.07	0.08	0.16
8/1/2019 0:00	8/2/2019 0:00	Perdue	Filter 3	0.06	0.08	0.10
8/2/2019 0:00	8/3/2019 0:00	Perdue	Filter 3	0.08	0.09	0.13
8/3/2019 0:00	8/4/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
8/4/2019 0:00	8/5/2019 0:00	Perdue	Filter 3	0.09	0.10	1.00
8/5/2019 0:00	8/6/2019 0:00	Perdue	Filter 3	0.00	0.11	0.32
8/6/2019 0:00	8/7/2019 0:00	Perdue	Filter 3	0.09	0.11	0.76

8/7/2019 0:00	8/8/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
8/8/2019 0:00	8/9/2019 0:00	Perdue	Filter 3	0.00	0.09	0.14
8/9/2019 0:00	8/10/2019 0:00	Perdue	Filter 3	0.08	0.09	0.15
8/10/2019 0:00	8/11/2019 0:00	Perdue	Filter 3	0.08	0.09	0.12
8/11/2019 0:00	8/12/2019 0:00	Perdue	Filter 3	0.09	0.09	0.11
8/12/2019 0:00	8/13/2019 0:00	Perdue	Filter 3	0.09	0.10	0.66
8/13/2019 0:00	8/14/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
8/14/2019 0:00	8/15/2019 0:00	Perdue	Filter 3	0.09	0.10	0.12
8/15/2019 0:00	8/16/2019 0:00	Perdue	Filter 3	0.00	0.12	0.26
8/16/2019 0:00	8/17/2019 0:00	Perdue	Filter 3	0.09	0.10	0.13
8/17/2019 0:00	8/18/2019 0:00	Perdue	Filter 3	0.08	0.10	0.13
8/18/2019 0:00	8/19/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
8/19/2019 0:00	8/20/2019 0:00	Perdue	Filter 3	0.00	0.09	0.23
8/20/2019 0:00	8/21/2019 0:00	Perdue	Filter 3	0.00	0.10	0.14
8/21/2019 0:00	8/22/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10
8/22/2019 0:00	8/23/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
8/23/2019 0:00	8/24/2019 0:00	Perdue	Filter 3	0.00	0.09	0.30
8/24/2019 0:00	8/25/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
8/25/2019 0:00	8/26/2019 0:00	Perdue	Filter 3	0.08	0.09	0.13
8/26/2019 0:00	8/27/2019 0:00	Perdue	Filter 3	0.08	0.09	0.22
8/27/2019 0:00	8/28/2019 0:00	Perdue	Filter 3	0.09	0.09	0.13
8/28/2019 0:00	8/29/2019 0:00	Perdue	Filter 3	0.09	0.10	0.33
8/29/2019 0:00	8/30/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
8/30/2019 0:00	8/31/2019 0:00	Perdue	Filter 3	0.01	0.11	1.00
8/31/2019 0:00	9/1/2019 0:00	Perdue	Filter 3	0.00	0.10	0.13
9/1/2019 0:00	9/2/2019 0:00	Perdue	Filter 3	0.09	0.10	0.14
9/2/2019 0:00	9/3/2019 0:00	Perdue	Filter 3	0.09	0.10	0.12
9/3/2019 0:00	9/4/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
9/4/2019 0:00	9/5/2019 0:00	Perdue	Filter 3	0.00	0.10	0.12
9/5/2019 0:00	9/6/2019 0:00	Perdue	Filter 3	0.10	0.11	0.13
9/6/2019 0:00	9/7/2019 0:00	Perdue	Filter 3	0.11	0.12	0.14
9/7/2019 0:00	9/8/2019 0:00	Perdue	Filter 3	0.11	0.12	0.17
9/8/2019 0:00	9/9/2019 0:00	Perdue	Filter 3	0.11	0.12	0.13
9/9/2019 0:00	9/10/2019 0:00	Perdue	Filter 3	0.11	0.12	0.13
9/10/2019 0:00	9/11/2019 0:00	Perdue	Filter 3	0.00	0.12	0.17
9/11/2019 0:00	9/12/2019 0:00	Perdue	Filter 3	0.11	0.12	0.18
9/12/2019 0:00	9/13/2019 0:00	Perdue	Filter 3	0.11	0.12	0.14
9/13/2019 0:00	9/14/2019 0:00	Perdue	Filter 3	0.11	0.12	0.13
9/14/2019 0:00	9/15/2019 0:00	Perdue	Filter 3	0.11	0.12	0.14
9/15/2019 0:00	9/16/2019 0:00	Perdue	Filter 3	0.11	0.13	0.17
9/16/2019 0:00	9/17/2019 0:00	Perdue	Filter 3	0.12	0.14	0.18
9/17/2019 0:00	9/18/2019 0:00	Perdue	Filter 3	0.13	0.14	0.16
9/18/2019 0:00	9/19/2019 0:00	Perdue	Filter 3	0.00	0.15	0.22
9/19/2019 0:00	9/20/2019 0:00	Perdue	Filter 3	0.00	0.15	0.31
9/20/2019 0:00	9/21/2019 0:00	Perdue	Filter 3	0.14	0.16	0.21
9/21/2019 0:00	9/22/2019 0:00	Perdue	Filter 3	0.14	0.16	0.22
9/22/2019 0:00	9/23/2019 0:00	Perdue	Filter 3	0.16	0.18	0.24
9/23/2019 0:00	9/24/2019 0:00	Perdue	Filter 3	0.08	0.14	0.19
9/24/2019 0:00	9/25/2019 0:00	Perdue	Filter 3	0.06	0.10	0.16
9/25/2019 0:00	9/26/2019 0:00	Perdue	Filter 3	0.00	0.07	0.12
9/26/2019 0:00	9/27/2019 0:00	Perdue	Filter 3	0.00	0.06	0.09
9/27/2019 0:00	9/28/2019 0:00	Perdue	Filter 3	0.00	0.06	0.10
9/28/2019 0:00	9/29/2019 0:00	Perdue	Filter 3	0.07	0.09	0.12
9/29/2019 0:00	9/30/2019 0:00	Perdue	Filter 3	0.00	0.09	0.14
9/30/2019 0:00	10/1/2019 0:00	Perdue	Filter 3	0.09	0.12	0.24
10/1/2019 0:00	10/2/2019 0:00	Perdue	Filter 3	0.11	0.12	0.16
10/2/2019 0:00	10/3/2019 0:00	Perdue	Filter 3	0.07	0.11	0.14
10/3/2019 0:00	10/4/2019 0:00	Perdue	Filter 3	0.07	0.09	0.12
10/4/2019 0:00	10/5/2019 0:00	Perdue	Filter 3	0.00	0.09	0.12
10/5/2019 0:00	10/6/2019 0:00	Perdue	Filter 3	0.06	0.09	0.12
10/6/2019 0:00	10/7/2019 0:00	Perdue	Filter 3	0.04	0.08	0.14
10/7/2019 0:00	10/8/2019 0:00	Perdue	Filter 3	0.04	0.06	0.15
10/8/2019 0:00	10/9/2019 0:00	Perdue	Filter 3	0.03	0.06	0.09
10/9/2019 0:00	10/10/2019 0:00	Perdue	Filter 3	0.05	0.08	0.13
10/10/2019 0:00	10/11/2019 0:00	Perdue	Filter 3	0.04	0.07	0.10
10/11/2019 0:00	10/12/2019 0:00	Perdue	Filter 3	0.00	0.07	0.16
10/12/2019 0:00	10/13/2019 0:00	Perdue	Filter 3	0.03	0.06	0.09
10/13/2019 0:00	10/14/2019 0:00	Perdue	Filter 3	0.04	0.06	0.08
10/14/2019 0:00	10/15/2019 0:00	Perdue	Filter 3	0.04	0.06	0.10
10/15/2019 0:00	10/16/2019 0:00	Perdue	Filter 3	0.05	0.08	0.13
10/16/2019 0:00	10/17/2019 0:00	Perdue	Filter 3	0.04	0.07	0.10
10/17/2019 0:00	10/18/2019 0:00	Perdue	Filter 3	0.05	0.07	0.10
10/18/2019 0:00	10/19/2019 0:00	Perdue	Filter 3	0.00	0.06	0.09

10/19/2019 0:00	10/20/2019 0:00	Perdue	Filter 3	0.05	0.06	0.12
10/20/2019 0:00	10/21/2019 0:00	Perdue	Filter 3	0.04	0.07	0.11
10/21/2019 0:00	10/22/2019 0:00	Perdue	Filter 3	0.04	0.08	0.18
10/22/2019 0:00	10/23/2019 0:00	Perdue	Filter 3	0.00	0.07	0.30
10/23/2019 0:00	10/24/2019 0:00	Perdue	Filter 3	0.00	0.07	1.00
10/24/2019 0:00	10/25/2019 0:00	Perdue	Filter 3	0.00	0.10	0.11
10/25/2019 0:00	10/26/2019 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/26/2019 0:00	10/27/2019 0:00	Perdue	Filter 3	0.07	0.09	0.12
10/27/2019 0:00	10/28/2019 0:00	Perdue	Filter 3	0.08	0.09	0.13
10/28/2019 0:00	10/29/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10
10/29/2019 0:00	10/30/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10
10/30/2019 0:00	10/31/2019 0:00	Perdue	Filter 3	0.08	0.09	0.11
10/31/2019 0:00	11/1/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10
11/1/2019 0:00	11/2/2019 0:00	Perdue	Filter 3	0.08	0.09	0.25
11/2/2019 0:00	11/3/2019 0:00	Perdue	Filter 3	0.07	0.08	0.10
11/3/2019 0:00	11/4/2019 0:00	Perdue	Filter 3	0.07	0.08	0.18
11/4/2019 0:00	11/5/2019 0:00	Perdue	Filter 3	0.00	0.10	0.13
11/5/2019 0:00	11/6/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/6/2019 0:00	11/7/2019 0:00	Perdue	Filter 3	0.10	0.11	0.13
11/7/2019 0:00	11/8/2019 0:00	Perdue	Filter 3	0.12	0.13	0.21
11/8/2019 0:00	11/9/2019 0:00	Perdue	Filter 3	0.11	0.12	0.18
11/9/2019 0:00	11/10/2019 0:00	Perdue	Filter 3	0.00	0.13	0.25
11/10/2019 0:00	11/11/2019 0:00	Perdue	Filter 3	0.11	0.12	0.13
11/11/2019 0:00	11/12/2019 0:00	Perdue	Filter 3	0.12	0.13	0.17
11/12/2019 0:00	11/13/2019 0:00	Perdue	Filter 3	0.00	0.12	0.15
11/13/2019 0:00	11/14/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/14/2019 0:00	11/15/2019 0:00	Perdue	Filter 3	0.00	0.12	0.93
11/15/2019 0:00	11/16/2019 0:00	Perdue	Filter 3	0.00	0.12	0.16
11/16/2019 0:00	11/17/2019 0:00	Perdue	Filter 3	0.10	0.11	0.13
11/17/2019 0:00	11/18/2019 0:00	Perdue	Filter 3	0.10	0.11	0.14
11/18/2019 0:00	11/19/2019 0:00	Perdue	Filter 3	0.00	0.11	0.18
11/19/2019 0:00	11/20/2019 0:00	Perdue	Filter 3	0.09	0.10	0.11
11/20/2019 0:00	11/21/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/21/2019 0:00	11/22/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/22/2019 0:00	11/23/2019 0:00	Perdue	Filter 3	0.10	0.11	0.12
11/23/2019 0:00	11/24/2019 0:00	Perdue	Filter 3	0.12	0.13	0.16
11/24/2019 0:00	11/25/2019 0:00	Perdue	Filter 3	0.12	0.13	0.14
11/25/2019 0:00	11/26/2019 0:00	Perdue	Filter 3	0.00	0.14	0.30
11/26/2019 0:00	11/27/2019 0:00	Perdue	Filter 3	0.00	0.16	0.22
11/27/2019 0:00	11/28/2019 0:00	Perdue	Filter 3	0.15	0.17	0.19
11/28/2019 0:00	11/29/2019 0:00	Perdue	Filter 3	0.16	0.17	0.17
11/29/2019 0:00	11/30/2019 0:00	Perdue	Filter 3	0.16	0.17	0.17
11/30/2019 0:00	12/1/2019 0:00	Perdue	Filter 3	0.00	0.16	0.18
12/1/2019 0:00	12/2/2019 0:00	Perdue	Filter 3	0.16	0.17	0.19
12/2/2019 0:00	12/3/2019 0:00	Perdue	Filter 3	0.18	0.18	0.19
12/3/2019 0:00	12/4/2019 0:00	Perdue	Filter 3	0.00	0.19	0.26
12/4/2019 0:00	12/5/2019 0:00	Perdue	Filter 3	0.20	0.23	0.25
12/5/2019 0:00	12/6/2019 0:00	Perdue	Filter 3	0.20	0.21	0.22
12/6/2019 0:00	12/7/2019 0:00	Perdue	Filter 3	0.00	0.22	0.23
12/7/2019 0:00	12/8/2019 0:00	Perdue	Filter 3	0.22	0.23	0.24
12/8/2019 0:00	12/9/2019 0:00	Perdue	Filter 3	0.00	0.15	0.34
12/9/2019 0:00	12/10/2019 0:00	Perdue	Filter 3	0.06	0.09	0.93
12/10/2019 0:00	12/11/2019 0:00	Perdue	Filter 3	0.06	0.07	0.61
12/11/2019 0:00	12/12/2019 0:00	Perdue	Filter 3	0.05	0.06	0.39
12/12/2019 0:00	12/13/2019 0:00	Perdue	Filter 3	0.00	0.08	0.46
12/13/2019 0:00	12/14/2019 0:00	Perdue	Filter 3	0.07	0.08	0.38
12/14/2019 0:00	12/15/2019 0:00	Perdue	Filter 3	0.00	0.09	0.41
12/15/2019 0:00	12/16/2019 0:00	Perdue	Filter 3	0.06	0.09	0.45
12/16/2019 0:00	12/17/2019 0:00	Perdue	Filter 3	0.00	0.09	0.40
12/17/2019 0:00	12/18/2019 0:00	Perdue	Filter 3	0.06	0.08	0.10
12/18/2019 0:00	12/19/2019 0:00	Perdue	Filter 3	0.06	0.07	0.08
12/19/2019 0:00	12/20/2019 0:00	Perdue	Filter 3	0.00	0.08	0.09
12/20/2019 0:00	12/21/2019 0:00	Perdue	Filter 3	0.00	0.08	0.09
12/21/2019 0:00	12/22/2019 0:00	Perdue	Filter 3	0.00	0.07	0.08
12/22/2019 0:00	12/23/2019 0:00	Perdue	Filter 3	0.00	0.13	0.18
12/23/2019 0:00	12/24/2019 0:00	Perdue	Filter 3	0.00	0.10	0.22
12/24/2019 0:00	12/25/2019 0:00	Perdue	Filter 3	0.00	0.08	0.17
12/25/2019 0:00	12/26/2019 0:00	Perdue	Filter 3	0.07	0.08	0.08
12/26/2019 0:00	12/27/2019 0:00	Perdue	Filter 3	0.00	0.08	0.08
12/27/2019 0:00	12/28/2019 0:00	Perdue	Filter 3	0.00	0.08	0.08
12/28/2019 0:00	12/29/2019 0:00	Perdue	Filter 3	0.07	0.07	0.08
12/29/2019 0:00	12/30/2019 0:00	Perdue	Filter 3	0.00	0.09	0.15
12/30/2019 0:00	12/31/2019 0:00	Perdue	Filter 3	0.08	0.09	0.10

12/31/2019 0:00	1/1/2020 0:00	Perdue	Filter 3	0.00	0.08	0.09
1/1/2020 0:00	1/2/2020 0:00	Perdue	Filter 3	0.07	0.08	0.08
1/2/2020 0:00	1/3/2020 0:00	Perdue	Filter 3	0.07	0.08	0.08
1/3/2020 0:00	1/4/2020 0:00	Perdue	Filter 3	0.07	0.08	0.09
1/4/2020 0:00	1/5/2020 0:00	Perdue	Filter 3	0.00	0.08	0.10
1/5/2020 0:00	1/6/2020 0:00	Perdue	Filter 3	0.00	0.08	0.15
1/6/2020 0:00	1/7/2020 0:00	Perdue	Filter 3	0.09	0.11	0.15
1/7/2020 0:00	1/8/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
1/8/2020 0:00	1/9/2020 0:00	Perdue	Filter 3	0.08	0.08	0.10
1/9/2020 0:00	1/10/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
1/10/2020 0:00	1/11/2020 0:00	Perdue	Filter 3	0.08	0.09	0.09
1/11/2020 0:00	1/12/2020 0:00	Perdue	Filter 3	0.00	0.09	0.12
1/12/2020 0:00	1/13/2020 0:00	Perdue	Filter 3	0.00	0.10	0.10
1/13/2020 0:00	1/14/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
1/14/2020 0:00	1/15/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
1/15/2020 0:00	1/16/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
1/16/2020 0:00	1/17/2020 0:00	Perdue	Filter 3	0.00	0.09	0.15
1/17/2020 0:00	1/18/2020 0:00	Perdue	Filter 3	0.09	0.09	0.10
1/18/2020 0:00	1/19/2020 0:00	Perdue	Filter 3	0.00	0.10	0.10
1/19/2020 0:00	1/20/2020 0:00	Perdue	Filter 3	0.08	0.09	0.17
1/20/2020 0:00	1/21/2020 0:00	Perdue	Filter 3	0.00	0.12	0.16
1/21/2020 0:00	1/22/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
1/22/2020 0:00	1/23/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
1/23/2020 0:00	1/24/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
1/24/2020 0:00	1/25/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
1/25/2020 0:00	1/26/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
1/26/2020 0:00	1/27/2020 0:00	Perdue	Filter 3	0.10	0.10	0.11
1/27/2020 0:00	1/28/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
1/28/2020 0:00	1/29/2020 0:00	Perdue	Filter 3	0.10	0.10	0.11
1/29/2020 0:00	1/30/2020 0:00	Perdue	Filter 3	0.00	0.10	0.15
1/30/2020 0:00	1/31/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
1/31/2020 0:00	2/1/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
2/1/2020 0:00	2/2/2020 0:00	Perdue	Filter 3	0.00	0.12	0.54
2/2/2020 0:00	2/3/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
2/3/2020 0:00	2/4/2020 0:00	Perdue	Filter 3	0.00	0.11	0.15
2/4/2020 0:00	2/5/2020 0:00	Perdue	Filter 3	0.00	0.11	0.12
2/5/2020 0:00	2/6/2020 0:00	Perdue	Filter 3	0.11	0.12	0.13
2/6/2020 0:00	2/7/2020 0:00	Perdue	Filter 3	0.00	0.11	0.14
2/7/2020 0:00	2/8/2020 0:00	Perdue	Filter 3	0.09	0.10	0.13
2/8/2020 0:00	2/9/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
2/9/2020 0:00	2/10/2020 0:00	Perdue	Filter 3	0.10	0.10	0.12
2/10/2020 0:00	2/11/2020 0:00	Perdue	Filter 3	0.00	0.12	0.13
2/11/2020 0:00	2/12/2020 0:00	Perdue	Filter 3	0.00	0.13	0.36
2/12/2020 0:00	2/13/2020 0:00	Perdue	Filter 3	0.00	0.10	0.14
2/13/2020 0:00	2/14/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
2/14/2020 0:00	2/15/2020 0:00	Perdue	Filter 3	0.09	0.10	0.13
2/15/2020 0:00	2/16/2020 0:00	Perdue	Filter 3	0.10	0.11	0.15
2/16/2020 0:00	2/17/2020 0:00	Perdue	Filter 3	0.00	0.12	0.20
2/17/2020 0:00	2/18/2020 0:00	Perdue	Filter 3	0.11	0.12	0.15
2/18/2020 0:00	2/19/2020 0:00	Perdue	Filter 3	0.11	0.12	0.15
2/19/2020 0:00	2/20/2020 0:00	Perdue	Filter 3	0.00	0.13	0.35
2/20/2020 0:00	2/21/2020 0:00	Perdue	Filter 3	0.00	0.12	0.15
2/21/2020 0:00	2/22/2020 0:00	Perdue	Filter 3	0.10	0.11	0.12
2/22/2020 0:00	2/23/2020 0:00	Perdue	Filter 3	0.00	0.11	0.12
2/23/2020 0:00	2/24/2020 0:00	Perdue	Filter 3	0.11	0.12	0.13
2/24/2020 0:00	2/25/2020 0:00	Perdue	Filter 3	0.00	0.13	0.14
2/25/2020 0:00	2/26/2020 0:00	Perdue	Filter 3	0.13	0.13	0.14
2/26/2020 0:00	2/27/2020 0:00	Perdue	Filter 3	0.00	0.14	0.15
2/27/2020 0:00	2/28/2020 0:00	Perdue	Filter 3	0.14	0.15	0.19
2/28/2020 0:00	2/29/2020 0:00	Perdue	Filter 3	0.15	0.17	0.20
2/29/2020 0:00	3/1/2020 0:00	Perdue	Filter 3	0.00	0.21	0.24
3/1/2020 0:00	3/2/2020 0:00	Perdue	Filter 3	0.00	0.24	0.25
3/2/2020 0:00	3/3/2020 0:00	Perdue	Filter 3	0.00	0.20	0.42
3/3/2020 0:00	3/4/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
3/4/2020 0:00	3/5/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
3/5/2020 0:00	3/6/2020 0:00	Perdue	Filter 3	0.07	0.09	0.11
3/6/2020 0:00	3/7/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
3/7/2020 0:00	3/8/2020 0:00	Perdue	Filter 3	0.00	0.12	0.19
3/8/2020 0:00	3/9/2020 0:00	Perdue	Filter 3	0.00	0.11	0.13
3/9/2020 0:00	3/10/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
3/10/2020 0:00	3/11/2020 0:00	Perdue	Filter 3	0.09	0.09	0.10
3/11/2020 0:00	3/12/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
3/12/2020 0:00	3/13/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10

3/13/2020 0:00	3/14/2020 0:00	Perdue	Filter 3	0.09	0.09	0.10
3/14/2020 0:00	3/15/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
3/15/2020 0:00	3/16/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
3/16/2020 0:00	3/17/2020 0:00	Perdue	Filter 3	0.08	0.09	0.12
3/17/2020 0:00	3/18/2020 0:00	Perdue	Filter 3	0.00	0.09	0.10
3/18/2020 0:00	3/19/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
3/19/2020 0:00	3/20/2020 0:00	Perdue	Filter 3	0.09	0.09	0.10
3/20/2020 0:00	3/21/2020 0:00	Perdue	Filter 3	0.00	0.14	0.28
3/21/2020 0:00	3/22/2020 0:00	Perdue	Filter 3	0.09	0.11	0.14
3/22/2020 0:00	3/23/2020 0:00	Perdue	Filter 3	0.09	0.10	0.13
3/23/2020 0:00	3/24/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
3/24/2020 0:00	3/25/2020 0:00	Perdue	Filter 3	0.00	0.09	0.11
3/25/2020 0:00	3/26/2020 0:00	Perdue	Filter 3	0.00	0.11	0.15
3/26/2020 0:00	3/27/2020 0:00	Perdue	Filter 3	0.10	0.11	0.12
3/27/2020 0:00	3/28/2020 0:00	Perdue	Filter 3	0.00	0.11	0.12
3/28/2020 0:00	3/29/2020 0:00	Perdue	Filter 3	0.09	0.10	0.12
3/29/2020 0:00	3/30/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
3/30/2020 0:00	3/31/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
3/31/2020 0:00	4/1/2020 0:00	Perdue	Filter 3	0.09	0.10	0.13
4/1/2020 0:00	4/2/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/2/2020 0:00	4/3/2020 0:00	Perdue	Filter 3	0.00	0.12	0.19
4/3/2020 0:00	4/4/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
4/4/2020 0:00	4/5/2020 0:00	Perdue	Filter 3	0.09	0.11	0.12
4/5/2020 0:00	4/6/2020 0:00	Perdue	Filter 3	0.09	0.10	0.16
4/6/2020 0:00	4/7/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/7/2020 0:00	4/8/2020 0:00	Perdue	Filter 3	0.00	0.10	0.12
4/8/2020 0:00	4/9/2020 0:00	Perdue	Filter 3	0.00	0.14	0.16
4/9/2020 0:00	4/10/2020 0:00	Perdue	Filter 3	0.00	0.12	0.14
4/10/2020 0:00	4/11/2020 0:00	Perdue	Filter 3	0.00	0.12	0.12
4/11/2020 0:00	4/12/2020 0:00	Perdue	Filter 3	0.00	0.14	0.19
4/12/2020 0:00	4/13/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
4/13/2020 0:00	4/14/2020 0:00	Perdue	Filter 3	0.00	0.11	0.12
4/14/2020 0:00	4/15/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
4/15/2020 0:00	4/16/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/16/2020 0:00	4/17/2020 0:00	Perdue	Filter 3	0.00	0.13	0.22
4/17/2020 0:00	4/18/2020 0:00	Perdue	Filter 3	0.14		0.14
4/18/2020 0:00	4/19/2020 0:00	Perdue	Filter 3	0.10	0.13	0.14
4/19/2020 0:00	4/20/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
4/20/2020 0:00	4/21/2020 0:00	Perdue	Filter 3	0.00	0.11	0.11
4/21/2020 0:00	4/22/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/22/2020 0:00	4/23/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/23/2020 0:00	4/24/2020 0:00	Perdue	Filter 3	0.00	0.15	0.22
4/24/2020 0:00	4/25/2020 0:00	Perdue	Filter 3	0.00	0.13	0.20
4/25/2020 0:00	4/26/2020 0:00	Perdue	Filter 3	0.00	0.13	0.14
4/26/2020 0:00	4/27/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
4/27/2020 0:00	4/28/2020 0:00	Perdue	Filter 3	0.00	0.14	0.21
4/28/2020 0:00	4/29/2020 0:00	Perdue	Filter 3	0.00	0.15	0.23
4/29/2020 0:00	4/30/2020 0:00	Perdue	Filter 3	0.00	0.16	0.36
4/30/2020 0:00	5/1/2020 0:00	Perdue	Filter 3	0.00	0.18	0.41
5/1/2020 0:00	5/2/2020 0:00	Perdue	Filter 3	0.00	0.16	0.19
5/2/2020 0:00	5/3/2020 0:00	Perdue	Filter 3	0.00	0.17	0.22
5/3/2020 0:00	5/4/2020 0:00	Perdue	Filter 3	0.00	0.16	0.23
5/4/2020 0:00	5/5/2020 0:00	Perdue	Filter 3	0.11	0.15	0.24
5/5/2020 0:00	5/6/2020 0:00	Perdue	Filter 3	0.10	0.11	0.14
5/6/2020 0:00	5/7/2020 0:00	Perdue	Filter 3	0.00	0.14	0.59
5/7/2020 0:00	5/8/2020 0:00	Perdue	Filter 3	0.01	0.10	0.59
5/8/2020 0:00	5/9/2020 0:00	Perdue	Filter 3	0.00	0.10	1.00
5/9/2020 0:00	5/10/2020 0:00	Perdue	Filter 3	0.00	0.07	0.08
5/10/2020 0:00	5/11/2020 0:00	Perdue	Filter 3	0.06	0.12	0.15
5/11/2020 0:00	5/12/2020 0:00	Perdue	Filter 3	0.06	0.07	0.11
5/12/2020 0:00	5/13/2020 0:00	Perdue	Filter 3	0.00	0.07	0.11
5/13/2020 0:00	5/14/2020 0:00	Perdue	Filter 3	0.07	0.08	0.10
5/14/2020 0:00	5/15/2020 0:00	Perdue	Filter 3	0.00	0.07	0.15
5/15/2020 0:00	5/16/2020 0:00	Perdue	Filter 3	0.00	0.07	0.07
5/16/2020 0:00	5/17/2020 0:00	Perdue	Filter 3	0.00	0.10	0.36
5/17/2020 0:00	5/18/2020 0:00	Perdue	Filter 3	0.00	0.09	0.11
5/18/2020 0:00	5/19/2020 0:00	Perdue	Filter 3	0.05	0.06	0.13
5/19/2020 0:00	5/20/2020 0:00	Perdue	Filter 3	0.00	0.05	0.06
5/20/2020 0:00	5/21/2020 0:00	Perdue	Filter 3	0.05	0.05	0.06
5/21/2020 0:00	5/22/2020 0:00	Perdue	Filter 3	0.00	0.06	0.07
5/22/2020 0:00	5/23/2020 0:00	Perdue	Filter 3	0.05	0.06	0.07
5/23/2020 0:00	5/24/2020 0:00	Perdue	Filter 3	0.06	0.06	0.07
5/24/2020 0:00	5/25/2020 0:00	Perdue	Filter 3	0.06	0.06	0.10

5/25/2020 0:00	5/26/2020 0:00	Perdue	Filter 3	0.00	0.06	0.13
5/26/2020 0:00	5/27/2020 0:00	Perdue	Filter 3	0.00	0.11	0.99
5/27/2020 0:00	5/28/2020 0:00	Perdue	Filter 3	0.00	0.13	0.29
5/28/2020 0:00	5/29/2020 0:00	Perdue	Filter 3	0.00	0.13	0.35
5/29/2020 0:00	5/30/2020 0:00	Perdue	Filter 3	0.09	0.10	0.14
5/30/2020 0:00	5/31/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
5/31/2020 0:00	6/1/2020 0:00	Perdue	Filter 3	0.08	0.09	0.10
6/1/2020 0:00	6/2/2020 0:00	Perdue	Filter 3	0.00	0.10	0.12
6/2/2020 0:00	6/3/2020 0:00	Perdue	Filter 3	0.10	0.14	0.30
6/3/2020 0:00	6/4/2020 0:00	Perdue	Filter 3	0.15	0.17	0.40
6/4/2020 0:00	6/5/2020 0:00	Perdue	Filter 3	0.10	0.14	0.33
6/5/2020 0:00	6/6/2020 0:00	Perdue	Filter 3	0.10	0.11	0.31
6/6/2020 0:00	6/7/2020 0:00	Perdue	Filter 3	0.11	0.13	0.27
6/7/2020 0:00	6/8/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
6/8/2020 0:00	6/9/2020 0:00	Perdue	Filter 3	0.08	0.11	0.14
6/9/2020 0:00	6/10/2020 0:00	Perdue	Filter 3	0.09	0.10	0.14
6/10/2020 0:00	6/11/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
6/11/2020 0:00	6/12/2020 0:00	Perdue	Filter 3	0.10	0.12	0.41
6/12/2020 0:00	6/13/2020 0:00	Perdue	Filter 3	0.11	0.12	0.19
6/13/2020 0:00	6/14/2020 0:00	Perdue	Filter 3	0.11	0.12	0.15
6/14/2020 0:00	6/15/2020 0:00	Perdue	Filter 3	0.13	0.14	0.18
6/15/2020 0:00	6/16/2020 0:00	Perdue	Filter 3	0.00	0.15	0.20
6/16/2020 0:00	6/17/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
6/17/2020 0:00	6/18/2020 0:00	Perdue	Filter 3	0.00	0.12	0.21
6/18/2020 0:00	6/19/2020 0:00	Perdue	Filter 3	0.10	0.12	0.17
6/19/2020 0:00	6/20/2020 0:00	Perdue	Filter 3	0.12	0.13	0.15
6/20/2020 0:00	6/21/2020 0:00	Perdue	Filter 3	0.10	0.11	0.21
6/21/2020 0:00	6/22/2020 0:00	Perdue	Filter 3	0.00	0.11	0.19
6/22/2020 0:00	6/23/2020 0:00	Perdue	Filter 3	0.00	0.11	0.20
6/23/2020 0:00	6/24/2020 0:00	Perdue	Filter 3	0.00	0.13	0.28
6/24/2020 0:00	6/25/2020 0:00	Perdue	Filter 3	0.09	0.11	0.20
6/25/2020 0:00	6/26/2020 0:00	Perdue	Filter 3	0.00	0.12	0.17
6/26/2020 0:00	6/27/2020 0:00	Perdue	Filter 3	0.11	0.12	0.13
6/27/2020 0:00	6/28/2020 0:00	Perdue	Filter 3	0.00	0.13	0.16
6/28/2020 0:00	6/29/2020 0:00	Perdue	Filter 3	0.11	0.13	0.17
6/29/2020 0:00	6/30/2020 0:00	Perdue	Filter 3	0.00	0.12	0.17
6/30/2020 0:00	7/1/2020 0:00	Perdue	Filter 3	0.10	0.11	0.21
7/1/2020 0:00	7/2/2020 0:00	Perdue	Filter 3	0.10	0.11	0.13
7/2/2020 0:00	7/3/2020 0:00	Perdue	Filter 3	0.12	0.13	0.46
7/3/2020 0:00	7/4/2020 0:00	Perdue	Filter 3	0.13	0.14	0.22
7/4/2020 0:00	7/5/2020 0:00	Perdue	Filter 3	0.00	0.14	0.22
7/5/2020 0:00	7/6/2020 0:00	Perdue	Filter 3	0.00	0.19	0.24
7/6/2020 0:00	7/7/2020 0:00	Perdue	Filter 3	0.17	0.19	0.24
7/7/2020 0:00	7/8/2020 0:00	Perdue	Filter 3	0.18	0.20	0.23
7/8/2020 0:00	7/9/2020 0:00	Perdue	Filter 3	0.00	0.21	0.27
7/9/2020 0:00	7/10/2020 0:00	Perdue	Filter 3	0.13	0.18	0.33
7/10/2020 0:00	7/11/2020 0:00	Perdue	Filter 3	0.11	0.12	0.15
7/11/2020 0:00	7/12/2020 0:00	Perdue	Filter 3	0.00	0.13	0.25
7/12/2020 0:00	7/13/2020 0:00	Perdue	Filter 3	0.14	0.16	0.19
7/13/2020 0:00	7/14/2020 0:00	Perdue	Filter 3	0.12	0.14	0.18
7/14/2020 0:00	7/15/2020 0:00	Perdue	Filter 3	0.13	0.14	0.16
7/15/2020 0:00	7/16/2020 0:00	Perdue	Filter 3	0.00	0.17	0.25
7/16/2020 0:00	7/17/2020 0:00	Perdue	Filter 3	0.17	0.19	0.24
7/17/2020 0:00	7/18/2020 0:00	Perdue	Filter 3	0.15	0.16	0.52
7/18/2020 0:00	7/19/2020 0:00	Perdue	Filter 3	0.14	0.15	0.17
7/19/2020 0:00	7/20/2020 0:00	Perdue	Filter 3	0.15	0.16	0.20
7/20/2020 0:00	7/21/2020 0:00	Perdue	Filter 3	0.00	0.18	0.25
7/21/2020 0:00	7/22/2020 0:00	Perdue	Filter 3	0.00	0.20	0.25
7/22/2020 0:00	7/23/2020 0:00	Perdue	Filter 3	0.00	0.13	0.20
7/23/2020 0:00	7/24/2020 0:00	Perdue	Filter 3	0.00	0.14	0.23
7/24/2020 0:00	7/25/2020 0:00	Perdue	Filter 3	0.00	0.15	0.17
7/25/2020 0:00	7/26/2020 0:00	Perdue	Filter 3	0.00	0.16	0.29
7/26/2020 0:00	7/27/2020 0:00	Perdue	Filter 3	0.14	0.15	0.20
7/27/2020 0:00	7/28/2020 0:00	Perdue	Filter 3	0.00	0.19	0.28
7/28/2020 0:00	7/29/2020 0:00	Perdue	Filter 3	0.00	0.21	0.30
7/29/2020 0:00	7/30/2020 0:00	Perdue	Filter 3	0.00	0.12	0.23
7/30/2020 0:00	7/31/2020 0:00	Perdue	Filter 3	0.00	0.09	0.16
7/31/2020 0:00	8/1/2020 0:00	Perdue	Filter 3	0.10	0.12	0.21
8/1/2020 0:00	8/2/2020 0:00	Perdue	Filter 3	0.00	0.11	0.15
8/2/2020 0:00	8/3/2020 0:00	Perdue	Filter 3	0.00	0.10	0.25
8/3/2020 0:00	8/4/2020 0:00	Perdue	Filter 3	0.00	0.09	0.18
8/4/2020 0:00	8/5/2020 0:00	Perdue	Filter 3	0.00	0.09	0.14
8/5/2020 0:00	8/6/2020 0:00	Perdue	Filter 3	0.09	0.09	0.12

8/6/2020 0:00	8/7/2020 0:00	Perdue	Filter 3	0.09	0.09	0.12
8/7/2020 0:00	8/8/2020 0:00	Perdue	Filter 3	0.00	0.10	0.17
8/8/2020 0:00	8/9/2020 0:00	Perdue	Filter 3	0.08	0.09	0.12
8/9/2020 0:00	8/10/2020 0:00	Perdue	Filter 3	0.07	0.09	0.17
8/10/2020 0:00	8/11/2020 0:00	Perdue	Filter 3	0.00	0.09	0.11
8/11/2020 0:00	8/12/2020 0:00	Perdue	Filter 3	0.02	0.09	1.00
8/12/2020 0:00	8/13/2020 0:00	Perdue	Filter 3	0.00	0.09	0.15
8/13/2020 0:00	8/14/2020 0:00	Perdue	Filter 3	0.07	0.09	0.14
8/14/2020 0:00	8/15/2020 0:00	Perdue	Filter 3	0.07	0.09	0.12
8/15/2020 0:00	8/16/2020 0:00	Perdue	Filter 3	0.07	0.08	0.10
8/16/2020 0:00	8/17/2020 0:00	Perdue	Filter 3	0.00	0.08	0.10
8/17/2020 0:00	8/18/2020 0:00	Perdue	Filter 3	0.09	0.11	0.22
8/18/2020 0:00	8/19/2020 0:00	Perdue	Filter 3	0.00	0.11	0.17
8/19/2020 0:00	8/20/2020 0:00	Perdue	Filter 3	0.08	0.09	0.15
8/20/2020 0:00	8/21/2020 0:00	Perdue	Filter 3	0.00	0.09	0.12
8/21/2020 0:00	8/22/2020 0:00	Perdue	Filter 3	0.08	0.09	0.14
8/22/2020 0:00	8/23/2020 0:00	Perdue	Filter 3	0.00	0.09	0.11
8/23/2020 0:00	8/24/2020 0:00	Perdue	Filter 3	0.10	0.12	0.16
8/24/2020 0:00	8/25/2020 0:00	Perdue	Filter 3	0.00	0.17	0.26
8/25/2020 0:00	8/26/2020 0:00	Perdue	Filter 3	0.00	0.16	0.26
8/26/2020 0:00	8/27/2020 0:00	Perdue	Filter 3	0.00	0.08	0.25
8/27/2020 0:00	8/28/2020 0:00	Perdue	Filter 3	0.00	0.07	0.09
8/28/2020 0:00	8/29/2020 0:00	Perdue	Filter 3	0.00	0.07	0.10
8/29/2020 0:00	8/30/2020 0:00	Perdue	Filter 3	0.00	0.17	0.26
8/30/2020 0:00	8/31/2020 0:00	Perdue	Filter 3	0.02	0.03	0.20
8/31/2020 0:00	9/1/2020 0:00	Perdue	Filter 3	0.00	0.03	0.10
9/1/2020 0:00	9/2/2020 0:00	Perdue	Filter 3	0.00	0.04	0.12
9/2/2020 0:00	9/3/2020 0:00	Perdue	Filter 3	0.02	0.07	0.13
9/3/2020 0:00	9/4/2020 0:00	Perdue	Filter 3	0.12	0.12	0.14
9/4/2020 0:00	9/5/2020 0:00	Perdue	Filter 3	0.12	0.12	0.15
9/5/2020 0:00	9/6/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
9/6/2020 0:00	9/7/2020 0:00	Perdue	Filter 3	0.11	0.12	0.19
9/7/2020 0:00	9/8/2020 0:00	Perdue	Filter 3	0.12	0.13	0.24
9/8/2020 0:00	9/9/2020 0:00	Perdue	Filter 3	0.00	0.13	0.15
9/9/2020 0:00	9/10/2020 0:00	Perdue	Filter 3	0.11	0.13	0.16
9/10/2020 0:00	9/11/2020 0:00	Perdue	Filter 3	0.00	0.13	0.23
9/11/2020 0:00	9/12/2020 0:00	Perdue	Filter 3	0.13	0.14	0.16
9/12/2020 0:00	9/13/2020 0:00	Perdue	Filter 3	0.00	0.15	0.32
9/13/2020 0:00	9/14/2020 0:00	Perdue	Filter 3	0.14	0.15	0.21
9/14/2020 0:00	9/15/2020 0:00	Perdue	Filter 3	0.00	0.17	0.28
9/15/2020 0:00	9/16/2020 0:00	Perdue	Filter 3	0.20	0.21	0.28
9/16/2020 0:00	9/17/2020 0:00	Perdue	Filter 3	0.21	0.23	0.27
9/17/2020 0:00	9/18/2020 0:00	Perdue	Filter 3	0.00	0.22	0.31
9/18/2020 0:00	9/19/2020 0:00	Perdue	Filter 3	0.20	0.21	0.29
9/19/2020 0:00	9/20/2020 0:00	Perdue	Filter 3	0.00	0.20	0.23
9/20/2020 0:00	9/21/2020 0:00	Perdue	Filter 3	0.10	0.14	0.24
9/21/2020 0:00	9/22/2020 0:00	Perdue	Filter 3	0.08	0.12	0.17
9/22/2020 0:00	9/23/2020 0:00	Perdue	Filter 3	0.00	0.11	0.18
9/23/2020 0:00	9/24/2020 0:00	Perdue	Filter 3	0.00	0.10	0.26
9/24/2020 0:00	9/25/2020 0:00	Perdue	Filter 3	0.00	0.10	0.17
9/25/2020 0:00	9/26/2020 0:00	Perdue	Filter 3	0.00	0.15	0.31
9/26/2020 0:00	9/27/2020 0:00	Perdue	Filter 3	0.00	0.14	0.25
9/27/2020 0:00	9/28/2020 0:00	Perdue	Filter 3	0.00	0.12	0.30
9/28/2020 0:00	9/29/2020 0:00	Perdue	Filter 3	0.00	0.12	0.18
9/29/2020 0:00	9/30/2020 0:00	Perdue	Filter 3	0.00	0.11	0.28
9/30/2020 0:00	10/1/2020 0:00	Perdue	Filter 3	0.09	0.20	1.00
10/1/2020 0:00	10/2/2020 0:00	Perdue	Filter 3	0.00	0.20	0.28
10/2/2020 0:00	10/3/2020 0:00	Perdue	Filter 3	0.19	0.20	0.29
10/3/2020 0:00	10/4/2020 0:00	Perdue	Filter 3	0.00	0.21	0.27
10/4/2020 0:00	10/5/2020 0:00	Perdue	Filter 3	0.00	0.20	1.00
10/5/2020 0:00	10/6/2020 0:00	Perdue	Filter 3	0.10	0.17	0.58
10/6/2020 0:00	10/7/2020 0:00	Perdue	Filter 3	0.12	0.14	0.25
10/7/2020 0:00	10/8/2020 0:00	Perdue	Filter 3	0.00	0.15	0.22
10/8/2020 0:00	10/9/2020 0:00	Perdue	Filter 3	0.12	0.13	0.21
10/9/2020 0:00	10/10/2020 0:00	Perdue	Filter 3	0.12	0.13	0.17
10/10/2020 0:00	10/11/2020 0:00	Perdue	Filter 3	0.00	0.14	0.27
10/11/2020 0:00	10/12/2020 0:00	Perdue	Filter 3	0.12	0.13	0.18
10/12/2020 0:00	10/13/2020 0:00	Perdue	Filter 3	0.00	0.13	0.28
10/13/2020 0:00	10/14/2020 0:00	Perdue	Filter 3	0.11	0.12	0.21
10/14/2020 0:00	10/15/2020 0:00	Perdue	Filter 3	0.11	0.12	0.25
10/15/2020 0:00	10/16/2020 0:00	Perdue	Filter 3	0.11	0.12	0.33
10/16/2020 0:00	10/17/2020 0:00	Perdue	Filter 3	0.11	0.12	0.18
10/17/2020 0:00	10/18/2020 0:00	Perdue	Filter 3	0.11	0.12	0.26

10/18/2020 0:00	10/19/2020 0:00	Perdue	Filter 3	0.00	0.13	0.29
10/19/2020 0:00	10/20/2020 0:00	Perdue	Filter 3	0.12	0.13	0.20
10/20/2020 0:00	10/21/2020 0:00	Perdue	Filter 3	0.12	0.13	0.25
10/21/2020 0:00	10/22/2020 0:00	Perdue	Filter 3	0.00	0.14	0.20
10/22/2020 0:00	10/23/2020 0:00	Perdue	Filter 3	0.14	0.15	0.16
10/23/2020 0:00	10/24/2020 0:00	Perdue	Filter 3	0.15	0.16	0.27
10/24/2020 0:00	10/25/2020 0:00	Perdue	Filter 3	0.00	0.18	0.30
10/25/2020 0:00	10/26/2020 0:00	Perdue	Filter 3	0.00	0.19	0.37
10/26/2020 0:00	10/27/2020 0:00	Perdue	Filter 3	0.21	0.23	0.27
10/27/2020 0:00	10/28/2020 0:00	Perdue	Filter 3	0.00	0.27	0.30
10/28/2020 0:00	10/29/2020 0:00	Perdue	Filter 3	0.12	0.13	0.30
10/29/2020 0:00	10/30/2020 0:00	Perdue	Filter 3	0.12	0.13	0.20
10/30/2020 0:00	10/31/2020 0:00	Perdue	Filter 3	0.12	0.13	0.19
10/31/2020 0:00	11/1/2020 0:00	Perdue	Filter 3	0.12	0.13	0.23
11/1/2020 0:00	11/2/2020 0:00	Perdue	Filter 3	0.00	0.16	0.50
11/2/2020 0:00	11/3/2020 0:00	Perdue	Filter 3	0.00	0.15	0.25
11/3/2020 0:00	11/4/2020 0:00	Perdue	Filter 3	0.13	0.14	0.22
11/4/2020 0:00	11/5/2020 0:00	Perdue	Filter 3	0.13	0.15	0.26
11/5/2020 0:00	11/6/2020 0:00	Perdue	Filter 3	0.13	0.14	0.28
11/6/2020 0:00	11/7/2020 0:00	Perdue	Filter 3	0.00	0.16	1.00
11/7/2020 0:00	11/8/2020 0:00	Perdue	Filter 3	0.16	0.19	1.00
11/8/2020 0:00	11/9/2020 0:00	Perdue	Filter 3	0.00	0.15	0.19
11/9/2020 0:00	11/10/2020 0:00	Perdue	Filter 3	0.00	0.15	0.26
11/10/2020 0:00	11/11/2020 0:00	Perdue	Filter 3	0.15	0.16	1.00
11/11/2020 0:00	11/12/2020 0:00	Perdue	Filter 3	0.00	0.17	0.41
11/12/2020 0:00	11/13/2020 0:00	Perdue	Filter 3	0.14	0.16	0.21
11/13/2020 0:00	11/14/2020 0:00	Perdue	Filter 3	0.00	0.19	0.29
11/14/2020 0:00	11/15/2020 0:00	Perdue	Filter 3	0.00	0.19	0.22
11/15/2020 0:00	11/16/2020 0:00	Perdue	Filter 3	0.17	0.19	0.21
11/16/2020 0:00	11/17/2020 0:00	Perdue	Filter 3	0.19	0.22	0.38
11/17/2020 0:00	11/18/2020 0:00	Perdue	Filter 3	0.22	0.23	0.33
11/18/2020 0:00	11/19/2020 0:00	Perdue	Filter 3	0.00	0.21	0.24
11/19/2020 0:00	11/20/2020 0:00	Perdue	Filter 3	0.00	0.22	0.23
11/20/2020 0:00	11/21/2020 0:00	Perdue	Filter 3	0.20	0.22	1.00
11/21/2020 0:00	11/22/2020 0:00	Perdue	Filter 3	0.23	0.24	0.28
11/22/2020 0:00	11/23/2020 0:00	Perdue	Filter 3	0.00	0.20	0.34
11/23/2020 0:00	11/24/2020 0:00	Perdue	Filter 3	0.17	0.18	0.35
11/24/2020 0:00	11/25/2020 0:00	Perdue	Filter 3	0.00	0.18	0.31
11/25/2020 0:00	11/26/2020 0:00	Perdue	Filter 3	0.00	0.16	0.24
11/26/2020 0:00	11/27/2020 0:00	Perdue	Filter 3	0.00	0.14	0.30
11/27/2020 0:00	11/28/2020 0:00	Perdue	Filter 3	0.12	0.13	0.18
11/28/2020 0:00	11/29/2020 0:00	Perdue	Filter 3	0.00	0.13	0.17
11/29/2020 0:00	11/30/2020 0:00	Perdue	Filter 3	0.11	0.12	0.16
11/30/2020 0:00	12/1/2020 0:00	Perdue	Filter 3	0.02	0.11	1.00
12/1/2020 0:00	12/2/2020 0:00	Perdue	Filter 3	0.09	0.10	0.38
12/2/2020 0:00	12/3/2020 0:00	Perdue	Filter 3	0.00	0.10	0.12
12/3/2020 0:00	12/4/2020 0:00	Perdue	Filter 3	0.10		0.10
12/4/2020 0:00	12/5/2020 0:00	Perdue	Filter 3	0.10		0.10
12/5/2020 0:00	12/6/2020 0:00	Perdue	Filter 3	0.10		0.10
12/6/2020 0:00	12/7/2020 0:00	Perdue	Filter 3	0.10		0.10
12/7/2020 0:00	12/8/2020 0:00	Perdue	Filter 3	0.10		0.10
12/8/2020 0:00	12/9/2020 0:00	Perdue	Filter 3	0.10		0.10
12/9/2020 0:00	12/10/2020 0:00	Perdue	Filter 3	0.10		0.10
12/10/2020 0:00	12/11/2020 0:00	Perdue	Filter 3	0.00	0.10	0.13
12/11/2020 0:00	12/12/2020 0:00	Perdue	Filter 3	0.00	0.10	0.11
12/12/2020 0:00	12/13/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
12/13/2020 0:00	12/14/2020 0:00	Perdue	Filter 3	0.09	0.10	0.16
12/14/2020 0:00	12/15/2020 0:00	Perdue	Filter 3	0.09	0.10	0.11
12/15/2020 0:00	12/16/2020 0:00	Perdue	Filter 3	0.00	0.11	0.29
12/16/2020 0:00	12/17/2020 0:00	Perdue	Filter 3	0.00	0.11	0.20
12/17/2020 0:00	12/18/2020 0:00	Perdue	Filter 3	0.12	0.13	0.14
12/18/2020 0:00	12/19/2020 0:00	Perdue	Filter 3	0.11	0.12	0.15
12/19/2020 0:00	12/20/2020 0:00	Perdue	Filter 3	0.00	0.13	0.15
12/20/2020 0:00	12/21/2020 0:00	Perdue	Filter 3	0.00	0.13	0.15
12/21/2020 0:00	12/22/2020 0:00	Perdue	Filter 3	0.00	0.12	0.14
12/22/2020 0:00	12/23/2020 0:00	Perdue	Filter 3	0.12	0.13	0.16
12/23/2020 0:00	12/24/2020 0:00	Perdue	Filter 3	0.13	0.14	0.21
12/24/2020 0:00	12/25/2020 0:00	Perdue	Filter 3	0.00	0.14	0.18
12/25/2020 0:00	12/26/2020 0:00	Perdue	Filter 3	0.10	0.13	0.64
12/26/2020 0:00	12/27/2020 0:00	Perdue	Filter 3	0.00	0.09	0.19
12/27/2020 0:00	12/28/2020 0:00	Perdue	Filter 3	0.00	0.10	0.26
12/28/2020 0:00	12/29/2020 0:00	Perdue	Filter 3	0.00	0.10	0.23
12/29/2020 0:00	12/30/2020 0:00	Perdue	Filter 3	0.10	0.11	0.22

12/30/2020 0:00	12/31/2020 0:00	Perdue	Filter 3	0.00	0.10	0.22
12/31/2020 0:00	1/1/2021 0:00	Perdue	Filter 3	0.09	0.09	0.11
1/1/2021 0:00	1/2/2021 0:00	Perdue	Filter 3	0.00	0.09	0.17
1/2/2021 0:00	1/3/2021 0:00	Perdue	Filter 3	0.00	0.10	0.12
1/3/2021 0:00	1/4/2021 0:00	Perdue	Filter 3	0.00	0.10	0.12
1/4/2021 0:00	1/5/2021 0:00	Perdue	Filter 3	0.00	0.09	0.10
1/5/2021 0:00	1/6/2021 0:00	Perdue	Filter 3	0.08	0.09	0.12
1/6/2021 0:00	1/7/2021 0:00	Perdue	Filter 3	0.00	0.10	0.16
1/7/2021 0:00	1/8/2021 0:00	Perdue	Filter 3	0.07	0.09	0.11
1/8/2021 0:00	1/9/2021 0:00	Perdue	Filter 3	0.00	0.09	0.10
1/9/2021 0:00	1/10/2021 0:00	Perdue	Filter 3	0.08	0.09	0.11
1/10/2021 0:00	1/11/2021 0:00	Perdue	Filter 3	0.00	0.08	0.12
1/11/2021 0:00	1/12/2021 0:00	Perdue	Filter 3	0.08	0.09	0.11
1/12/2021 0:00	1/13/2021 0:00	Perdue	Filter 3	0.00	0.09	0.25
1/13/2021 0:00	1/14/2021 0:00	Perdue	Filter 3	0.08	0.09	0.12
1/14/2021 0:00	1/15/2021 0:00	Perdue	Filter 3	0.00	0.09	0.10
1/15/2021 0:00	1/16/2021 0:00	Perdue	Filter 3	0.07	0.09	0.15
1/16/2021 0:00	1/17/2021 0:00	Perdue	Filter 3	0.00	0.09	0.12
1/17/2021 0:00	1/18/2021 0:00	Perdue	Filter 3	0.08	0.09	0.10
1/18/2021 0:00	1/19/2021 0:00	Perdue	Filter 3	0.07	0.08	0.23
1/19/2021 0:00	1/20/2021 0:00	Perdue	Filter 3	0.00	0.08	0.09
1/20/2021 0:00	1/21/2021 0:00	Perdue	Filter 3	0.08	0.09	0.21
1/21/2021 0:00	1/22/2021 0:00	Perdue	Filter 3	0.00	0.09	0.27
1/22/2021 0:00	1/23/2021 0:00	Perdue	Filter 3	0.00	0.09	0.11
1/23/2021 0:00	1/24/2021 0:00	Perdue	Filter 3	0.09	0.10	0.19
1/24/2021 0:00	1/25/2021 0:00	Perdue	Filter 3	0.00	0.09	0.09
1/25/2021 0:00	1/26/2021 0:00	Perdue	Filter 3	0.08	0.09	0.12
1/26/2021 0:00	1/27/2021 0:00	Perdue	Filter 3	0.00	0.09	0.13
1/27/2021 0:00	1/28/2021 0:00	Perdue	Filter 3	0.00	0.09	0.12
1/28/2021 0:00	1/29/2021 0:00	Perdue	Filter 3	0.00	0.09	0.13
1/29/2021 0:00	1/30/2021 0:00	Perdue	Filter 3	0.09	0.10	0.18
1/30/2021 0:00	1/31/2021 0:00	Perdue	Filter 3	0.00	0.11	0.16
1/31/2021 0:00	2/1/2021 0:00	Perdue	Filter 3	0.00	0.11	0.36
2/1/2021 0:00	2/2/2021 0:00	Perdue	Filter 3	0.00	0.12	0.17
2/2/2021 0:00	2/3/2021 0:00	Perdue	Filter 3	0.00	0.14	0.17
2/3/2021 0:00	2/4/2021 0:00	Perdue	Filter 3	0.11	0.12	0.18
2/4/2021 0:00	2/5/2021 0:00	Perdue	Filter 3	0.00	0.12	0.22
2/5/2021 0:00	2/6/2021 0:00	Perdue	Filter 3	0.11	0.13	0.32
2/6/2021 0:00	2/7/2021 0:00	Perdue	Filter 3	0.11	0.12	0.13
2/7/2021 0:00	2/8/2021 0:00	Perdue	Filter 3	0.00	0.12	0.28
2/8/2021 0:00	2/9/2021 0:00	Perdue	Filter 3	0.00	0.15	0.28
2/9/2021 0:00	2/10/2021 0:00	Perdue	Filter 3	0.11	0.14	0.27
2/10/2021 0:00	2/11/2021 0:00	Perdue	Filter 3	0.09	0.10	0.13
2/11/2021 0:00	2/12/2021 0:00	Perdue	Filter 3	0.10	0.10	0.16
2/12/2021 0:00	2/13/2021 0:00	Perdue	Filter 3	0.10	0.11	0.13
2/13/2021 0:00	2/14/2021 0:00	Perdue	Filter 3	0.00	0.15	0.41
2/14/2021 0:00	2/15/2021 0:00	Perdue	Filter 3	0.00	0.11	0.19
2/15/2021 0:00	2/16/2021 0:00	Perdue	Filter 3	0.00	0.12	0.19
2/16/2021 0:00	2/17/2021 0:00	Perdue	Filter 3	0.10	0.11	0.17
2/17/2021 0:00	2/18/2021 0:00	Perdue	Filter 3	0.10	0.11	0.17
2/18/2021 0:00	2/19/2021 0:00	Perdue	Filter 3	0.00	0.13	0.22
2/19/2021 0:00	2/20/2021 0:00	Perdue	Filter 3	0.10	0.11	0.18
2/20/2021 0:00	2/21/2021 0:00	Perdue	Filter 3	0.00	0.11	0.18
2/21/2021 0:00	2/22/2021 0:00	Perdue	Filter 3	0.10	0.11	0.19
2/22/2021 0:00	2/23/2021 0:00	Perdue	Filter 3	0.00	0.13	0.30
2/23/2021 0:00	2/24/2021 0:00	Perdue	Filter 3	0.00	0.11	0.13
2/24/2021 0:00	2/25/2021 0:00	Perdue	Filter 3	0.10	0.11	0.49
2/25/2021 0:00	2/26/2021 0:00	Perdue	Filter 3	0.10	0.11	0.14
2/26/2021 0:00	2/27/2021 0:00	Perdue	Filter 3	0.11	0.12	0.19
2/27/2021 0:00	2/28/2021 0:00	Perdue	Filter 3	0.00	0.13	0.18
2/28/2021 0:00	3/1/2021 0:00	Perdue	Filter 3	0.11	0.13	0.15
3/1/2021 0:00	3/2/2021 0:00	Perdue	Filter 3	0.11	0.12	0.18
3/2/2021 0:00	3/3/2021 0:00	Perdue	Filter 3	0.00	0.12	0.16
3/3/2021 0:00	3/4/2021 0:00	Perdue	Filter 3	0.00	0.13	0.14
3/4/2021 0:00	3/5/2021 0:00	Perdue	Filter 3	0.00	0.12	0.15
3/5/2021 0:00	3/6/2021 0:00	Perdue	Filter 3	0.11	0.12	0.16
3/6/2021 0:00	3/7/2021 0:00	Perdue	Filter 3	0.00	0.13	0.21
3/7/2021 0:00	3/8/2021 0:00	Perdue	Filter 3	0.15	0.16	1.00
3/8/2021 0:00	3/9/2021 0:00	Perdue	Filter 3	0.00	0.14	0.16
3/9/2021 0:00	3/10/2021 0:00	Perdue	Filter 3	0.13	0.14	0.15
3/10/2021 0:00	3/11/2021 0:00	Perdue	Filter 3	0.00	0.14	0.19
3/11/2021 0:00	3/12/2021 0:00	Perdue	Filter 3	0.12	0.13	0.14
3/12/2021 0:00	3/13/2021 0:00	Perdue	Filter 3	0.12	0.13	0.18

3/13/2021 0:00	3/14/2021 0:00	Perdue	Filter 3	0.12	0.13	0.21
3/14/2021 0:00	3/15/2021 0:00	Perdue	Filter 3	0.00	0.14	0.22
3/15/2021 0:00	3/16/2021 0:00	Perdue	Filter 3	0.14	0.16	0.19
3/16/2021 0:00	3/17/2021 0:00	Perdue	Filter 3	0.14	0.15	0.16
3/17/2021 0:00	3/18/2021 0:00	Perdue	Filter 3	0.00	0.12	0.16
3/18/2021 0:00	3/19/2021 0:00	Perdue	Filter 3	0.09	0.10	0.12
3/19/2021 0:00	3/20/2021 0:00	Perdue	Filter 3	0.09	0.10	0.15
3/20/2021 0:00	3/21/2021 0:00	Perdue	Filter 3	0.09	0.09	0.15
3/21/2021 0:00	3/22/2021 0:00	Perdue	Filter 3	0.00	0.10	0.16
3/22/2021 0:00	3/23/2021 0:00	Perdue	Filter 3	0.10	0.11	0.14
3/23/2021 0:00	3/24/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
3/24/2021 0:00	3/25/2021 0:00	Perdue	Filter 3	0.09	0.10	0.12
3/25/2021 0:00	3/26/2021 0:00	Perdue	Filter 3	0.09	0.10	0.10
3/26/2021 0:00	3/27/2021 0:00	Perdue	Filter 3	0.09	0.09	0.17
3/27/2021 0:00	3/28/2021 0:00	Perdue	Filter 3	0.08	0.09	0.17
3/28/2021 0:00	3/29/2021 0:00	Perdue	Filter 3	0.00	0.10	0.21
3/29/2021 0:00	3/30/2021 0:00	Perdue	Filter 3	0.09	0.11	0.14
3/30/2021 0:00	3/31/2021 0:00	Perdue	Filter 3	0.10	0.10	0.28
3/31/2021 0:00	4/1/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
4/1/2021 0:00	4/2/2021 0:00	Perdue	Filter 3	0.09	0.10	0.20
4/2/2021 0:00	4/3/2021 0:00	Perdue	Filter 3	0.00	0.11	0.17
4/3/2021 0:00	4/4/2021 0:00	Perdue	Filter 3	0.00	0.12	0.15
4/4/2021 0:00	4/5/2021 0:00	Perdue	Filter 3	0.11	0.12	0.52
4/5/2021 0:00	4/6/2021 0:00	Perdue	Filter 3	0.00	0.12	0.31
4/6/2021 0:00	4/7/2021 0:00	Perdue	Filter 3	0.00	0.13	0.20
4/7/2021 0:00	4/8/2021 0:00	Perdue	Filter 3	0.12	0.13	0.15
4/8/2021 0:00	4/9/2021 0:00	Perdue	Filter 3	0.11	0.12	0.21
4/9/2021 0:00	4/10/2021 0:00	Perdue	Filter 3	0.11	0.12	0.21
4/10/2021 0:00	4/11/2021 0:00	Perdue	Filter 3	0.00	0.14	0.25
4/11/2021 0:00	4/12/2021 0:00	Perdue	Filter 3	0.13	0.13	0.15
4/12/2021 0:00	4/13/2021 0:00	Perdue	Filter 3	0.13	0.14	0.22
4/13/2021 0:00	4/14/2021 0:00	Perdue	Filter 3	0.00	0.12	0.34
4/14/2021 0:00	4/15/2021 0:00	Perdue	Filter 3	0.11	0.12	0.21
4/15/2021 0:00	4/16/2021 0:00	Perdue	Filter 3	0.00	0.14	0.24
4/16/2021 0:00	4/17/2021 0:00	Perdue	Filter 3	0.10	0.12	0.16
4/17/2021 0:00	4/18/2021 0:00	Perdue	Filter 3	0.09	0.11	0.14
4/18/2021 0:00	4/19/2021 0:00	Perdue	Filter 3	0.08	0.10	0.19
4/19/2021 0:00	4/20/2021 0:00	Perdue	Filter 3	0.09	0.12	0.23
4/20/2021 0:00	4/21/2021 0:00	Perdue	Filter 3	0.09	0.10	0.16
4/21/2021 0:00	4/22/2021 0:00	Perdue	Filter 3	0.00	0.16	0.29
4/22/2021 0:00	4/23/2021 0:00	Perdue	Filter 3	0.16	0.19	0.26
4/23/2021 0:00	4/24/2021 0:00	Perdue	Filter 3	0.19	0.22	0.31
4/24/2021 0:00	4/25/2021 0:00	Perdue	Filter 3	0.15	0.17	0.21
4/25/2021 0:00	4/26/2021 0:00	Perdue	Filter 3	0.13	0.16	0.21
4/26/2021 0:00	4/27/2021 0:00	Perdue	Filter 3	0.00	0.14	0.24
4/27/2021 0:00	4/28/2021 0:00	Perdue	Filter 3	0.12	0.13	0.27
4/28/2021 0:00	4/29/2021 0:00	Perdue	Filter 3	0.00	0.14	0.32
4/29/2021 0:00	4/30/2021 0:00	Perdue	Filter 3	0.10	0.14	0.31
4/30/2021 0:00	5/1/2021 0:00	Perdue	Filter 3	0.11	0.15	0.26
5/1/2021 0:00	5/2/2021 0:00	Perdue	Filter 3	0.09	0.13	0.30
5/2/2021 0:00	5/3/2021 0:00	Perdue	Filter 3	0.09	0.15	0.20
5/3/2021 0:00	5/4/2021 0:00	Perdue	Filter 3	0.00	0.15	0.27
5/4/2021 0:00	5/5/2021 0:00	Perdue	Filter 3	0.05	0.09	0.14
5/5/2021 0:00	5/6/2021 0:00	Perdue	Filter 3	0.07	0.09	0.15
5/6/2021 0:00	5/7/2021 0:00	Perdue	Filter 3	0.07	0.09	0.15
5/7/2021 0:00	5/8/2021 0:00	Perdue	Filter 3	0.09	0.14	0.27
5/8/2021 0:00	5/9/2021 0:00	Perdue	Filter 3	0.00	0.18	0.27
5/9/2021 0:00	5/10/2021 0:00	Perdue	Filter 3	0.00	0.16	0.47
5/10/2021 0:00	5/11/2021 0:00	Perdue	Filter 3	0.12	0.16	0.28
5/11/2021 0:00	5/12/2021 0:00	Perdue	Filter 3	0.10	0.18	0.38
5/12/2021 0:00	5/13/2021 0:00	Perdue	Filter 3	0.00	0.11	0.20
5/13/2021 0:00	5/14/2021 0:00	Perdue	Filter 3	0.00	0.13	0.26
5/14/2021 0:00	5/15/2021 0:00	Perdue	Filter 3	0.05	0.11	0.24
5/15/2021 0:00	5/16/2021 0:00	Perdue	Filter 3	0.03	0.04	0.07
5/16/2021 0:00	5/17/2021 0:00	Perdue	Filter 3	0.00	0.06	0.65
5/17/2021 0:00	5/18/2021 0:00	Perdue	Filter 3	0.00	0.03	0.07
5/18/2021 0:00	5/19/2021 0:00	Perdue	Filter 3	0.02	0.04	0.08
5/19/2021 0:00	5/20/2021 0:00	Perdue	Filter 3	0.00	0.06	0.15
5/20/2021 0:00	5/21/2021 0:00	Perdue	Filter 3	0.05	0.06	0.07
5/21/2021 0:00	5/22/2021 0:00	Perdue	Filter 3	0.05	0.06	0.12
5/22/2021 0:00	5/23/2021 0:00	Perdue	Filter 3	0.00	0.06	0.09
5/23/2021 0:00	5/24/2021 0:00	Perdue	Filter 3	0.06	0.08	0.13
5/24/2021 0:00	5/25/2021 0:00	Perdue	Filter 3	0.06	0.07	0.14

5/25/2021 0:00	5/26/2021 0:00	Perdue	Filter 3	0.06	0.07	0.23
5/26/2021 0:00	5/27/2021 0:00	Perdue	Filter 3	0.00	0.09	0.18
5/27/2021 0:00	5/28/2021 0:00	Perdue	Filter 3	0.05	0.06	0.12
5/28/2021 0:00	5/29/2021 0:00	Perdue	Filter 3	0.00	0.06	0.27
5/29/2021 0:00	5/30/2021 0:00	Perdue	Filter 3	0.04	0.05	0.27
5/30/2021 0:00	5/31/2021 0:00	Perdue	Filter 3	0.04	0.04	0.12
5/31/2021 0:00	6/1/2021 0:00	Perdue	Filter 3	0.03	0.04	0.11
6/1/2021 0:00	6/2/2021 0:00	Perdue	Filter 3	0.03	0.04	0.12
6/2/2021 0:00	6/3/2021 0:00	Perdue	Filter 3	0.00	0.07	0.18
6/3/2021 0:00	6/4/2021 0:00	Perdue	Filter 3	0.03	0.05	0.08
6/4/2021 0:00	6/5/2021 0:00	Perdue	Filter 3	0.05	0.06	0.27
6/5/2021 0:00	6/6/2021 0:00	Perdue	Filter 3	0.06	0.07	0.15
6/6/2021 0:00	6/7/2021 0:00	Perdue	Filter 3	0.08	0.08	0.17
6/7/2021 0:00	6/8/2021 0:00	Perdue	Filter 3	0.00	0.09	0.16
6/8/2021 0:00	6/9/2021 0:00	Perdue	Filter 3	0.00	0.13	0.23
6/9/2021 0:00	6/10/2021 0:00	Perdue	Filter 3	0.10	0.14	0.21
6/10/2021 0:00	6/11/2021 0:00	Perdue	Filter 3	0.09	0.11	0.24
6/11/2021 0:00	6/12/2021 0:00	Perdue	Filter 3	0.09	0.10	0.29
6/12/2021 0:00	6/13/2021 0:00	Perdue	Filter 3	0.11	0.12	0.22
6/13/2021 0:00	6/14/2021 0:00	Perdue	Filter 3	0.00	0.14	0.24
6/14/2021 0:00	6/15/2021 0:00	Perdue	Filter 3	0.00	0.15	0.42
6/15/2021 0:00	6/16/2021 0:00	Perdue	Filter 3	0.00	0.15	0.29
6/16/2021 0:00	6/17/2021 0:00	Perdue	Filter 3	0.14	0.17	0.27
6/17/2021 0:00	6/18/2021 0:00	Perdue	Filter 3	0.13	0.15	0.40
6/18/2021 0:00	6/19/2021 0:00	Perdue	Filter 3	0.14	0.18	0.34
6/19/2021 0:00	6/20/2021 0:00	Perdue	Filter 3	0.00	0.18	0.29
6/20/2021 0:00	6/21/2021 0:00	Perdue	Filter 3	0.17	0.19	0.29
6/21/2021 0:00	6/22/2021 0:00	Perdue	Filter 3	0.08	0.14	0.28
6/22/2021 0:00	6/23/2021 0:00	Perdue	Filter 3	0.08	0.11	0.21
6/23/2021 0:00	6/24/2021 0:00	Perdue	Filter 3	0.00	0.13	0.35
6/24/2021 0:00	6/25/2021 0:00	Perdue	Filter 3	0.00	0.15	0.55
6/25/2021 0:00	6/26/2021 0:00	Perdue	Filter 3	0.00	0.01	0.15
6/26/2021 0:00	6/27/2021 0:00	Perdue	Filter 3	0.00	0.02	0.07
6/27/2021 0:00	6/28/2021 0:00	Perdue	Filter 3	0.00	0.00	0.00
6/28/2021 0:00	6/29/2021 0:00	Perdue	Filter 3	0.00	0.13	0.67
6/29/2021 0:00	6/30/2021 0:00	Perdue	Filter 3	0.00	0.10	1.00
6/30/2021 0:00	7/1/2021 0:00	Perdue	Filter 3	0.00	0.05	0.11
7/1/2021 0:00	7/2/2021 0:00	Perdue	Filter 3	0.05	0.06	0.11
7/2/2021 0:00	7/3/2021 0:00	Perdue	Filter 3	0.06	0.07	0.14
7/3/2021 0:00	7/4/2021 0:00	Perdue	Filter 3	0.07	0.08	0.13
7/4/2021 0:00	7/5/2021 0:00	Perdue	Filter 3	0.08	0.09	0.15
7/5/2021 0:00	7/6/2021 0:00	Perdue	Filter 3	0.10	0.11	0.30
7/6/2021 0:00	7/7/2021 0:00	Perdue	Filter 3	0.04	0.08	0.20
7/7/2021 0:00	7/8/2021 0:00	Perdue	Filter 3	0.00	0.06	0.13
7/8/2021 0:00	7/9/2021 0:00	Perdue	Filter 3	0.00	0.06	0.14
7/9/2021 0:00	7/10/2021 0:00	Perdue	Filter 3	0.03	0.05	0.11
7/10/2021 0:00	7/11/2021 0:00	Perdue	Filter 3	0.04	0.05	0.10
7/11/2021 0:00	7/12/2021 0:00	Perdue	Filter 3	0.00	0.05	0.15
7/12/2021 0:00	7/13/2021 0:00	Perdue	Filter 3	0.05	0.09	0.17
7/13/2021 0:00	7/14/2021 0:00	Perdue	Filter 3	0.10	0.12	0.21
7/14/2021 0:00	7/15/2021 0:00	Perdue	Filter 3	0.11	0.13	0.19
7/15/2021 0:00	7/16/2021 0:00	Perdue	Filter 3	0.00	0.13	0.23
7/16/2021 0:00	7/17/2021 0:00	Perdue	Filter 3	0.00	0.17	0.28
7/17/2021 0:00	7/18/2021 0:00	Perdue	Filter 3	0.14	0.16	0.23
7/18/2021 0:00	7/19/2021 0:00	Perdue	Filter 3	0.12	0.14	0.22
7/19/2021 0:00	7/20/2021 0:00	Perdue	Filter 3	0.13	0.15	0.26
7/20/2021 0:00	7/21/2021 0:00	Perdue	Filter 3	0.00	0.19	0.36
7/21/2021 0:00	7/22/2021 0:00	Perdue	Filter 3	0.00	0.18	0.24
7/22/2021 0:00	7/23/2021 0:00	Perdue	Filter 3	0.15	0.16	0.28
7/23/2021 0:00	7/24/2021 0:00	Perdue	Filter 3	0.14	0.16	0.36
7/24/2021 0:00	7/25/2021 0:00	Perdue	Filter 3	0.16	0.18	0.26
7/25/2021 0:00	7/26/2021 0:00	Perdue	Filter 3	0.00	0.20	0.30
7/26/2021 0:00	7/27/2021 0:00	Perdue	Filter 3	0.15	0.18	0.26
7/27/2021 0:00	7/28/2021 0:00	Perdue	Filter 3	0.13	0.15	0.21
7/28/2021 0:00	7/29/2021 0:00	Perdue	Filter 3	0.14	0.16	0.29
7/29/2021 0:00	7/30/2021 0:00	Perdue	Filter 3	0.16	0.17	0.27
7/30/2021 0:00	7/31/2021 0:00	Perdue	Filter 3	0.16	0.18	0.27
7/31/2021 0:00	8/1/2021 0:00	Perdue	Filter 3	0.00	0.18	0.27
8/1/2021 0:00	8/2/2021 0:00	Perdue	Filter 3	0.18	0.20	0.33
8/2/2021 0:00	8/3/2021 0:00	Perdue	Filter 3	0.13	0.17	0.26
8/3/2021 0:00	8/4/2021 0:00	Perdue	Filter 3	0.13	0.15	0.24
8/4/2021 0:00	8/5/2021 0:00	Perdue	Filter 3	0.00	0.14	0.23
8/5/2021 0:00	8/6/2021 0:00	Perdue	Filter 3	0.00	0.21	0.30

8/6/2021 0:00	8/7/2021 0:00	Perdue	Filter 3	0.16	0.18	0.47
8/7/2021 0:00	8/8/2021 0:00	Perdue	Filter 3	0.00	0.17	0.62
8/8/2021 0:00	8/9/2021 0:00	Perdue	Filter 3	0.00	0.19	0.62
8/9/2021 0:00	8/10/2021 0:00	Perdue	Filter 3	0.19	0.21	0.23
8/10/2021 0:00	8/11/2021 0:00	Perdue	Filter 3	0.19	0.21	0.40
8/11/2021 0:00	8/12/2021 0:00	Perdue	Filter 3	0.17	0.19	0.27
8/12/2021 0:00	8/13/2021 0:00	Perdue	Filter 3	0.00	0.20	0.26
8/13/2021 0:00	8/14/2021 0:00	Perdue	Filter 3	0.00	0.23	1.00
8/14/2021 0:00	8/15/2021 0:00	Perdue	Filter 3	0.00	0.26	0.36
8/15/2021 0:00	8/16/2021 0:00	Perdue	Filter 3	0.24	0.26	0.33
8/16/2021 0:00	8/17/2021 0:00	Perdue	Filter 3	0.00	0.24	1.00
8/17/2021 0:00	8/18/2021 0:00	Perdue	Filter 3	0.00	0.19	0.26
8/18/2021 0:00	8/19/2021 0:00	Perdue	Filter 3	0.00	0.17	0.27
8/19/2021 0:00	8/20/2021 0:00	Perdue	Filter 3	0.00	0.21	0.63
8/20/2021 0:00	8/21/2021 0:00	Perdue	Filter 3	0.14	0.15	0.17
8/21/2021 0:00	8/22/2021 0:00	Perdue	Filter 3	0.00	0.15	0.18
8/22/2021 0:00	8/23/2021 0:00	Perdue	Filter 3	0.14	0.14	0.16
8/23/2021 0:00	8/24/2021 0:00	Perdue	Filter 3	0.00	0.14	0.17
8/24/2021 0:00	8/25/2021 0:00	Perdue	Filter 3	0.13	0.15	0.27
8/25/2021 0:00	8/26/2021 0:00	Perdue	Filter 3	0.09	0.11	0.25
8/26/2021 0:00	8/27/2021 0:00	Perdue	Filter 3	0.00	0.10	0.11
8/27/2021 0:00	8/28/2021 0:00	Perdue	Filter 3	0.10	0.11	0.18
8/28/2021 0:00	8/29/2021 0:00	Perdue	Filter 3	0.11	0.12	0.14
8/29/2021 0:00	8/30/2021 0:00	Perdue	Filter 3	0.00	0.15	0.19
8/30/2021 0:00	8/31/2021 0:00	Perdue	Filter 3	0.15	0.16	0.18
8/31/2021 0:00	9/1/2021 0:00	Perdue	Filter 3	0.00	0.17	0.19
9/1/2021 0:00	9/2/2021 0:00	Perdue	Filter 3	0.17	0.18	0.20
9/2/2021 0:00	9/3/2021 0:00	Perdue	Filter 3	0.00	0.12	1.00
9/3/2021 0:00	9/4/2021 0:00	Perdue	Filter 3	0.06	0.07	0.09
9/4/2021 0:00	9/5/2021 0:00	Perdue	Filter 3	0.06	0.07	0.09
9/5/2021 0:00	9/6/2021 0:00	Perdue	Filter 3	0.06	0.07	0.08
9/6/2021 0:00	9/7/2021 0:00	Perdue	Filter 3	0.07	0.08	0.10
9/7/2021 0:00	9/8/2021 0:00	Perdue	Filter 3	0.07	0.08	0.10
9/8/2021 0:00	9/9/2021 0:00	Perdue	Filter 3	0.00	0.10	0.21
9/9/2021 0:00	9/10/2021 0:00	Perdue	Filter 3	0.06	0.09	0.12
9/10/2021 0:00	9/11/2021 0:00	Perdue	Filter 3	0.06	0.07	0.08
9/11/2021 0:00	9/12/2021 0:00	Perdue	Filter 3	0.00	0.08	0.08
9/12/2021 0:00	9/13/2021 0:00	Perdue	Filter 3	0.06	0.07	0.08
9/13/2021 0:00	9/14/2021 0:00	Perdue	Filter 3	0.07	0.08	0.09
9/14/2021 0:00	9/15/2021 0:00	Perdue	Filter 3	0.08	0.09	0.09
9/15/2021 0:00	9/16/2021 0:00	Perdue	Filter 3	0.08	0.09	0.10
9/16/2021 0:00	9/17/2021 0:00	Perdue	Filter 3	0.08	0.09	0.10
9/17/2021 0:00	9/18/2021 0:00	Perdue	Filter 3	0.08	0.09	0.11
9/18/2021 0:00	9/19/2021 0:00	Perdue	Filter 3	0.00	0.10	0.11
9/19/2021 0:00	9/20/2021 0:00	Perdue	Filter 3	0.00	0.10	0.12
9/20/2021 0:00	9/21/2021 0:00	Perdue	Filter 3	0.09	0.11	0.15
9/21/2021 0:00	9/22/2021 0:00	Perdue	Filter 3	0.09	0.11	0.12
9/22/2021 0:00	9/23/2021 0:00	Perdue	Filter 3	0.09	0.11	0.13
9/23/2021 0:00	9/24/2021 0:00	Perdue	Filter 3	0.10	0.12	0.13
9/24/2021 0:00	9/25/2021 0:00	Perdue	Filter 3	0.12	0.13	0.14
9/25/2021 0:00	9/26/2021 0:00	Perdue	Filter 3	0.00	0.13	0.17
9/26/2021 0:00	9/27/2021 0:00	Perdue	Filter 3	0.13	0.14	0.17
9/27/2021 0:00	9/28/2021 0:00	Perdue	Filter 3	0.14	0.16	0.17
9/28/2021 0:00	9/29/2021 0:00	Perdue	Filter 3	0.16	0.18	0.20
9/29/2021 0:00	9/30/2021 0:00	Perdue	Filter 3	0.00	0.22	0.26
9/30/2021 0:00	10/1/2021 0:00	Perdue	Filter 3	0.00	0.18	0.53
10/1/2021 0:00	10/2/2021 0:00	Perdue	Filter 3	0.14	0.17	0.21
10/2/2021 0:00	10/3/2021 0:00	Perdue	Filter 3	0.00	0.18	0.22
10/3/2021 0:00	10/4/2021 0:00	Perdue	Filter 3	0.11	0.12	0.14
10/4/2021 0:00	10/5/2021 0:00	Perdue	Filter 3	0.10	0.12	0.13
10/5/2021 0:00	10/6/2021 0:00	Perdue	Filter 3	0.09	0.11	0.12
10/6/2021 0:00	10/7/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
10/7/2021 0:00	10/8/2021 0:00	Perdue	Filter 3	0.08	0.09	0.10
10/8/2021 0:00	10/9/2021 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/9/2021 0:00	10/10/2021 0:00	Perdue	Filter 3	0.00	0.08	0.09
10/10/2021 0:00	10/11/2021 0:00	Perdue	Filter 3	0.07	0.08	0.11
10/11/2021 0:00	10/12/2021 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/12/2021 0:00	10/13/2021 0:00	Perdue	Filter 3	0.07	0.08	0.09
10/13/2021 0:00	10/14/2021 0:00	Perdue	Filter 3	0.07	0.08	0.10
10/14/2021 0:00	10/15/2021 0:00	Perdue	Filter 3	0.08	0.09	0.10
10/15/2021 0:00	10/16/2021 0:00	Perdue	Filter 3	0.07	0.09	0.10
10/16/2021 0:00	10/17/2021 0:00	Perdue	Filter 3	0.00	0.08	0.10
10/17/2021 0:00	10/18/2021 0:00	Perdue	Filter 3	0.00	0.09	0.11

10/18/2021 0:00	10/19/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
10/19/2021 0:00	10/20/2021 0:00	Perdue	Filter 3	0.00	0.10	0.11
10/20/2021 0:00	10/21/2021 0:00	Perdue	Filter 3	0.09	0.11	0.12
10/21/2021 0:00	10/22/2021 0:00	Perdue	Filter 3	0.10	0.11	0.12
10/22/2021 0:00	10/23/2021 0:00	Perdue	Filter 3	0.10	0.11	0.12
10/23/2021 0:00	10/24/2021 0:00	Perdue	Filter 3	0.11	0.12	0.13
10/24/2021 0:00	10/25/2021 0:00	Perdue	Filter 3	0.11	0.12	0.13
10/25/2021 0:00	10/26/2021 0:00	Perdue	Filter 3	0.00	0.13	0.15
10/26/2021 0:00	10/27/2021 0:00	Perdue	Filter 3	0.00	0.14	0.17
10/27/2021 0:00	10/28/2021 0:00	Perdue	Filter 3	0.00	0.14	1.00
10/28/2021 0:00	10/29/2021 0:00	Perdue	Filter 3	0.00	0.10	0.33
10/29/2021 0:00	10/30/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
10/30/2021 0:00	10/31/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
10/31/2021 0:00	11/1/2021 0:00	Perdue	Filter 3	0.07	0.09	0.10
11/1/2021 0:00	11/2/2021 0:00	Perdue	Filter 3	0.00	0.09	0.22
11/2/2021 0:00	11/3/2021 0:00	Perdue	Filter 3	0.00	0.11	0.22
11/3/2021 0:00	11/4/2021 0:00	Perdue	Filter 3	0.00	0.16	1.00
11/4/2021 0:00	11/5/2021 0:00	Perdue	Filter 3	0.08	0.13	0.21
11/5/2021 0:00	11/6/2021 0:00	Perdue	Filter 3	0.11	0.14	0.19
11/6/2021 0:00	11/7/2021 0:00	Perdue	Filter 3	0.09	0.11	0.16
11/7/2021 0:00	11/8/2021 0:00	Perdue	Filter 3	0.09	0.11	0.15
11/8/2021 0:00	11/9/2021 0:00	Perdue	Filter 3	0.08	0.11	0.21
11/9/2021 0:00	11/10/2021 0:00	Perdue	Filter 3	0.11	0.13	0.19
11/10/2021 0:00	11/11/2021 0:00	Perdue	Filter 3	0.12	0.13	0.18
11/11/2021 0:00	11/12/2021 0:00	Perdue	Filter 3	0.11	0.13	0.15
11/12/2021 0:00	11/13/2021 0:00	Perdue	Filter 3	0.08	0.11	0.14
11/13/2021 0:00	11/14/2021 0:00	Perdue	Filter 3	0.00	0.09	0.20
11/14/2021 0:00	11/15/2021 0:00	Perdue	Filter 3	0.06	0.08	0.10
11/15/2021 0:00	11/16/2021 0:00	Perdue	Filter 3	0.08	0.10	0.17
11/16/2021 0:00	11/17/2021 0:00	Perdue	Filter 3	0.00	0.14	0.42
11/17/2021 0:00	11/18/2021 0:00	Perdue	Filter 3	0.00	0.12	0.23
11/18/2021 0:00	11/19/2021 0:00	Perdue	Filter 3	0.00	0.11	0.32
11/19/2021 0:00	11/20/2021 0:00	Perdue	Filter 3	0.08	0.10	0.14
11/20/2021 0:00	11/21/2021 0:00	Perdue	Filter 3	0.11	0.13	0.15
11/21/2021 0:00	11/22/2021 0:00	Perdue	Filter 3	0.12	0.14	0.16
11/22/2021 0:00	11/23/2021 0:00	Perdue	Filter 3	0.00	0.16	0.35
11/23/2021 0:00	11/24/2021 0:00	Perdue	Filter 3	0.00	0.12	0.35
11/24/2021 0:00	11/25/2021 0:00	Perdue	Filter 3	0.08	0.10	0.40
11/25/2021 0:00	11/26/2021 0:00	Perdue	Filter 3	0.09	0.10	0.14
11/26/2021 0:00	11/27/2021 0:00	Perdue	Filter 3	0.10	0.11	0.28
11/27/2021 0:00	11/28/2021 0:00	Perdue	Filter 3	0.11	0.12	0.20
11/28/2021 0:00	11/29/2021 0:00	Perdue	Filter 3	0.12	0.13	0.22
11/29/2021 0:00	11/30/2021 0:00	Perdue	Filter 3	0.13	0.15	0.24
11/30/2021 0:00	12/1/2021 0:00	Perdue	Filter 3	0.16	0.17	0.46
12/1/2021 0:00	12/2/2021 0:00	Perdue	Filter 3	0.17	0.19	1.00
12/2/2021 0:00	12/3/2021 0:00	Perdue	Filter 3	0.00	0.12	0.28
12/3/2021 0:00	12/4/2021 0:00	Perdue	Filter 3	0.00	0.06	1.00
12/4/2021 0:00	12/5/2021 0:00	Perdue	Filter 3	0.00	0.12	0.22
12/5/2021 0:00	12/6/2021 0:00	Perdue	Filter 3	0.00	0.12	0.13
12/6/2021 0:00	12/7/2021 0:00	Perdue	Filter 3	0.09	0.11	0.12
12/7/2021 0:00	12/8/2021 0:00	Perdue	Filter 3	0.09	0.10	0.11
12/8/2021 0:00	12/9/2021 0:00	Perdue	Filter 3	0.00	0.10	0.16
12/9/2021 0:00	12/10/2021 0:00	Perdue	Filter 3	0.09	0.10	0.10
12/10/2021 0:00	12/11/2021 0:00	Perdue	Filter 3	0.00	0.10	0.14
12/11/2021 0:00	12/12/2021 0:00	Perdue	Filter 3	0.00	0.10	0.11
12/12/2021 0:00	12/13/2021 0:00	Perdue	Filter 3	0.10	0.18	1.00
12/13/2021 0:00	12/14/2021 0:00	Perdue	Filter 3	0.11	0.12	0.14
12/14/2021 0:00	12/15/2021 0:00	Perdue	Filter 3	0.00	0.14	0.17
12/15/2021 0:00	12/16/2021 0:00	Perdue	Filter 3	0.03	0.13	0.19
12/16/2021 0:00	12/17/2021 0:00	Perdue	Filter 3	0.00	0.18	0.24
12/17/2021 0:00	12/18/2021 0:00	Perdue	Filter 3	0.00	0.14	0.86
12/18/2021 0:00	12/19/2021 0:00	Perdue	Filter 3	0.09	0.11	0.12
12/19/2021 0:00	12/20/2021 0:00	Perdue	Filter 3	0.00	0.11	0.12
12/20/2021 0:00	12/21/2021 0:00	Perdue	Filter 3	0.10	0.11	0.12
12/21/2021 0:00	12/22/2021 0:00	Perdue	Filter 3	0.10	0.11	0.12
12/22/2021 0:00	12/23/2021 0:00	Perdue	Filter 3	0.00	0.12	0.12
12/23/2021 0:00	12/24/2021 0:00	Perdue	Filter 3	0.00	0.12	0.13
12/24/2021 0:00	12/25/2021 0:00	Perdue	Filter 3	0.00	0.13	0.36
12/25/2021 0:00	12/26/2021 0:00	Perdue	Filter 3	0.00	0.13	0.14
12/26/2021 0:00	12/27/2021 0:00	Perdue	Filter 3	0.12	0.14	0.14
12/27/2021 0:00	12/28/2021 0:00	Perdue	Filter 3	0.00	0.14	0.15
12/28/2021 0:00	12/29/2021 0:00	Perdue	Filter 3	0.00	0.16	0.18
12/29/2021 0:00	12/30/2021 0:00	Perdue	Filter 3	0.00	0.17	0.23

12/30/2021 0:00	12/31/2021 0:00	Perdue	Filter 3	0.14	0.17	0.22
12/31/2021 0:00	1/1/2022 0:00	Perdue	Filter 3	0.00	0.18	0.25

1.00
0.99
0.30
0.17

Date	Date End Time	Site	Area	Min Turbidity	Avg Turbidity	Max Turbidity
1/1/2017 0:00	1/2/2017 0:00	Perdue	Filter 4	0.02	0.03	0.06
1/2/2017 0:00	1/3/2017 0:00	Perdue	Filter 4	0.02	0.03	0.04
1/3/2017 0:00	1/4/2017 0:00	Perdue	Filter 4	0.02	0.03	0.04
1/4/2017 0:00	1/5/2017 0:00	Perdue	Filter 4	0.02	0.03	0.06
1/5/2017 0:00	1/6/2017 0:00	Perdue	Filter 4	0.02	0.03	0.03
1/6/2017 0:00	1/7/2017 0:00	Perdue	Filter 4	0.02	0.03	0.06
1/7/2017 0:00	1/8/2017 0:00	Perdue	Filter 4	0.02	0.03	0.04
1/8/2017 0:00	1/9/2017 0:00	Perdue	Filter 4	0.03	0.04	0.05
1/9/2017 0:00	1/10/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/10/2017 0:00	1/11/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/11/2017 0:00	1/12/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/12/2017 0:00	1/13/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/13/2017 0:00	1/14/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/14/2017 0:00	1/15/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/15/2017 0:00	1/16/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/16/2017 0:00	1/17/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/17/2017 0:00	1/18/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/18/2017 0:00	1/19/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/19/2017 0:00	1/20/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/20/2017 0:00	1/21/2017 0:00	Perdue	Filter 4	0.05	0.05	0.05
1/21/2017 0:00	1/22/2017 0:00	Perdue	Filter 4	0.03	0.04	0.07
1/22/2017 0:00	1/23/2017 0:00	Perdue	Filter 4	0.03	0.04	0.07
1/23/2017 0:00	1/24/2017 0:00	Perdue	Filter 4	0.04	0.04	0.04
1/24/2017 0:00	1/25/2017 0:00	Perdue	Filter 4	0.04	0.04	0.04
1/25/2017 0:00	1/26/2017 0:00	Perdue	Filter 4	0.04	0.04	0.35
1/26/2017 0:00	1/27/2017 0:00	Perdue	Filter 4	0.04	0.04	0.05
1/27/2017 0:00	1/28/2017 0:00	Perdue	Filter 4	0.04	0.04	0.06
1/28/2017 0:00	1/29/2017 0:00	Perdue	Filter 4	0.03	0.05	1.00
1/29/2017 0:00	1/30/2017 0:00	Perdue	Filter 4	0.03	0.06	1.00
1/30/2017 0:00	1/31/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
1/31/2017 0:00	2/1/2017 0:00	Perdue	Filter 4	0.03	0.04	0.08
2/1/2017 0:00	2/2/2017 0:00	Perdue	Filter 4	0.02	0.03	0.08
2/2/2017 0:00	2/3/2017 0:00	Perdue	Filter 4	0.02	0.04	0.05
2/3/2017 0:00	2/4/2017 0:00	Perdue	Filter 4	0.04	0.04	0.06
2/4/2017 0:00	2/5/2017 0:00	Perdue	Filter 4	0.04	0.04	0.07
2/5/2017 0:00	2/6/2017 0:00	Perdue	Filter 4	0.04	0.05	1.00
2/6/2017 0:00	2/7/2017 0:00	Perdue	Filter 4	0.04	0.04	0.06
2/7/2017 0:00	2/8/2017 0:00	Perdue	Filter 4	0.04	0.04	0.05
2/8/2017 0:00	2/9/2017 0:00	Perdue	Filter 4	0.04	0.05	0.08
2/9/2017 0:00	2/10/2017 0:00	Perdue	Filter 4	0.02	0.04	1.00
2/10/2017 0:00	2/11/2017 0:00	Perdue	Filter 4	0.02	0.02	0.03
2/11/2017 0:00	2/12/2017 0:00	Perdue	Filter 4	0.02	0.02	0.03
2/12/2017 0:00	2/13/2017 0:00	Perdue	Filter 4	0.02	0.02	0.03
2/13/2017 0:00	2/14/2017 0:00	Perdue	Filter 4	0.02	0.03	0.03
2/14/2017 0:00	2/15/2017 0:00	Perdue	Filter 4	0.02	0.03	0.07
2/15/2017 0:00	2/16/2017 0:00	Perdue	Filter 4	0.02	0.04	0.08
2/16/2017 0:00	2/17/2017 0:00	Perdue	Filter 4	0.04	0.05	0.08
2/17/2017 0:00	2/18/2017 0:00	Perdue	Filter 4	0.04	0.05	0.05
2/18/2017 0:00	2/19/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
2/19/2017 0:00	2/20/2017 0:00	Perdue	Filter 4	0.04	0.05	0.05
2/20/2017 0:00	2/21/2017 0:00	Perdue	Filter 4	0.04	0.05	0.05
2/21/2017 0:00	2/22/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
2/22/2017 0:00	2/23/2017 0:00	Perdue	Filter 4	0.04	0.05	0.05
2/23/2017 0:00	2/24/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
2/24/2017 0:00	2/25/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
2/25/2017 0:00	2/26/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
2/26/2017 0:00	2/27/2017 0:00	Perdue	Filter 4	0.05	0.05	0.10
2/27/2017 0:00	2/28/2017 0:00	Perdue	Filter 4	0.05	0.05	0.06
2/28/2017 0:00	3/1/2017 0:00	Perdue	Filter 4	0.05	0.05	0.06
3/1/2017 0:00	3/2/2017 0:00	Perdue	Filter 4	0.04	0.05	0.09
3/2/2017 0:00	3/3/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
3/3/2017 0:00	3/4/2017 0:00	Perdue	Filter 4	0.05	0.05	0.06
3/4/2017 0:00	3/5/2017 0:00	Perdue	Filter 4	0.04	0.05	0.49
3/5/2017 0:00	3/6/2017 0:00	Perdue	Filter 4	0.05	0.05	0.38
3/6/2017 0:00	3/7/2017 0:00	Perdue	Filter 4	0.04	0.05	0.46
3/7/2017 0:00	3/8/2017 0:00	Perdue	Filter 4	0.00	0.05	0.86
3/8/2017 0:00	3/9/2017 0:00	Perdue	Filter 4	0.04	0.05	0.22
3/9/2017 0:00	3/10/2017 0:00	Perdue	Filter 4	0.04	0.06	0.09
3/10/2017 0:00	3/11/2017 0:00	Perdue	Filter 4	0.06	0.07	0.20
3/11/2017 0:00	3/12/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/12/2017 0:00	3/13/2017 0:00	Perdue	Filter 4	0.07	0.07	0.08
3/13/2017 0:00	3/14/2017 0:00	Perdue	Filter 4	0.06	0.07	0.10

3/14/2017 0:00	3/15/2017 0:00	Perdue	Filter 4	0.06	0.07	0.16
3/15/2017 0:00	3/16/2017 0:00	Perdue	Filter 4	0.04	0.06	0.10
3/16/2017 0:00	3/17/2017 0:00	Perdue	Filter 4	0.04	0.07	0.11
3/17/2017 0:00	3/18/2017 0:00	Perdue	Filter 4	0.07	0.07	0.08
3/18/2017 0:00	3/19/2017 0:00	Perdue	Filter 4	0.06	0.07	0.09
3/19/2017 0:00	3/20/2017 0:00	Perdue	Filter 4	0.06	0.07	0.09
3/20/2017 0:00	3/21/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/21/2017 0:00	3/22/2017 0:00	Perdue	Filter 4	0.06	0.07	0.43
3/22/2017 0:00	3/23/2017 0:00	Perdue	Filter 4	0.06	0.07	0.28
3/23/2017 0:00	3/24/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/24/2017 0:00	3/25/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/25/2017 0:00	3/26/2017 0:00	Perdue	Filter 4	0.06	0.07	0.09
3/26/2017 0:00	3/27/2017 0:00	Perdue	Filter 4	0.06	0.06	0.07
3/27/2017 0:00	3/28/2017 0:00	Perdue	Filter 4	0.06	0.07	0.07
3/28/2017 0:00	3/29/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/29/2017 0:00	3/30/2017 0:00	Perdue	Filter 4	0.06	0.07	1.00
3/30/2017 0:00	3/31/2017 0:00	Perdue	Filter 4	0.06	0.07	1.00
3/31/2017 0:00	4/1/2017 0:00	Perdue	Filter 4	0.05	0.07	0.08
4/1/2017 0:00	4/2/2017 0:00	Perdue	Filter 4	0.06	0.06	0.07
4/2/2017 0:00	4/3/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
4/3/2017 0:00	4/4/2017 0:00	Perdue	Filter 4	0.04	0.07	0.08
4/4/2017 0:00	4/5/2017 0:00	Perdue	Filter 4	0.07	0.08	0.09
4/5/2017 0:00	4/6/2017 0:00	Perdue	Filter 4	0.06	0.11	0.39
4/6/2017 0:00	4/7/2017 0:00	Perdue	Filter 4	0.04	0.07	0.10
4/7/2017 0:00	4/8/2017 0:00	Perdue	Filter 4	0.04	0.05	0.08
4/8/2017 0:00	4/9/2017 0:00	Perdue	Filter 4	0.05	0.10	0.20
4/9/2017 0:00	4/10/2017 0:00	Perdue	Filter 4	0.05	0.08	0.14
4/10/2017 0:00	4/11/2017 0:00	Perdue	Filter 4	0.04	0.06	0.08
4/11/2017 0:00	4/12/2017 0:00	Perdue	Filter 4	0.05	0.11	0.26
4/12/2017 0:00	4/13/2017 0:00	Perdue	Filter 4	0.07	0.08	0.11
4/13/2017 0:00	4/14/2017 0:00	Perdue	Filter 4	0.06	0.10	0.24
4/14/2017 0:00	4/15/2017 0:00	Perdue	Filter 4	0.05	0.07	0.08
4/15/2017 0:00	4/16/2017 0:00	Perdue	Filter 4	0.06	0.09	0.23
4/16/2017 0:00	4/17/2017 0:00	Perdue	Filter 4	0.07	0.09	0.12
4/17/2017 0:00	4/18/2017 0:00	Perdue	Filter 4	0.06	0.08	1.00
4/18/2017 0:00	4/19/2017 0:00	Perdue	Filter 4	0.06	0.08	0.10
4/19/2017 0:00	4/20/2017 0:00	Perdue	Filter 4	0.07	0.10	0.20
4/20/2017 0:00	4/21/2017 0:00	Perdue	Filter 4	0.06	0.09	0.25
4/21/2017 0:00	4/22/2017 0:00	Perdue	Filter 4	0.07	0.09	0.84
4/22/2017 0:00	4/23/2017 0:00	Perdue	Filter 4	0.06	0.13	0.32
4/23/2017 0:00	4/24/2017 0:00	Perdue	Filter 4	0.08	0.12	0.15
4/24/2017 0:00	4/25/2017 0:00	Perdue	Filter 4	0.07	0.08	0.17
4/25/2017 0:00	4/26/2017 0:00	Perdue	Filter 4	0.08	0.10	0.17
4/26/2017 0:00	4/27/2017 0:00	Perdue	Filter 4	0.08	0.10	0.12
4/27/2017 0:00	4/28/2017 0:00	Perdue	Filter 4	0.08	0.09	0.24
4/28/2017 0:00	4/29/2017 0:00	Perdue	Filter 4	0.09	0.10	0.12
4/29/2017 0:00	4/30/2017 0:00	Perdue	Filter 4	0.09	0.12	0.24
4/30/2017 0:00	5/1/2017 0:00	Perdue	Filter 4	0.08	0.12	0.16
5/1/2017 0:00	5/2/2017 0:00	Perdue	Filter 4	0.10	0.12	0.14
5/2/2017 0:00	5/3/2017 0:00	Perdue	Filter 4	0.10	0.11	0.18
5/3/2017 0:00	5/4/2017 0:00	Perdue	Filter 4	0.09	0.13	0.28
5/4/2017 0:00	5/5/2017 0:00	Perdue	Filter 4	0.11	0.14	0.17
5/5/2017 0:00	5/6/2017 0:00	Perdue	Filter 4	0.11	0.13	0.16
5/6/2017 0:00	5/7/2017 0:00	Perdue	Filter 4	0.10	0.11	0.12
5/7/2017 0:00	5/8/2017 0:00	Perdue	Filter 4	0.08	0.11	0.15
5/8/2017 0:00	5/9/2017 0:00	Perdue	Filter 4	0.08	0.09	0.12
5/9/2017 0:00	5/10/2017 0:00	Perdue	Filter 4	0.09	0.09	0.11
5/10/2017 0:00	5/11/2017 0:00	Perdue	Filter 4	0.09	0.09	0.11
5/11/2017 0:00	5/12/2017 0:00	Perdue	Filter 4	0.10	0.11	0.11
5/12/2017 0:00	5/13/2017 0:00	Perdue	Filter 4	0.11	0.13	0.15
5/13/2017 0:00	5/14/2017 0:00	Perdue	Filter 4	0.12	0.14	0.25
5/14/2017 0:00	5/15/2017 0:00	Perdue	Filter 4	0.11	0.13	0.17
5/15/2017 0:00	5/16/2017 0:00	Perdue	Filter 4	0.12	0.13	0.21
5/16/2017 0:00	5/17/2017 0:00	Perdue	Filter 4	0.09	0.12	0.18
5/17/2017 0:00	5/18/2017 0:00	Perdue	Filter 4	0.10	0.15	0.26
5/18/2017 0:00	5/19/2017 0:00	Perdue	Filter 4	0.09	0.10	0.14
5/19/2017 0:00	5/20/2017 0:00	Perdue	Filter 4	0.09	0.12	0.28
5/20/2017 0:00	5/21/2017 0:00	Perdue	Filter 4	0.11	0.15	0.32
5/21/2017 0:00	5/22/2017 0:00	Perdue	Filter 4	0.09	0.17	0.27
5/22/2017 0:00	5/23/2017 0:00	Perdue	Filter 4	0.08	0.14	0.64
5/23/2017 0:00	5/24/2017 0:00	Perdue	Filter 4	0.07	0.19	0.42
5/24/2017 0:00	5/25/2017 0:00	Perdue	Filter 4	0.17	0.23	0.35
5/25/2017 0:00	5/26/2017 0:00	Perdue	Filter 4	0.10	0.17	0.21

5/26/2017 0:00	5/27/2017 0:00	Perdue	Filter 4	0.10	0.15	0.22
5/27/2017 0:00	5/28/2017 0:00	Perdue	Filter 4	0.05	0.22	0.67
5/28/2017 0:00	5/29/2017 0:00	Perdue	Filter 4	0.05	0.06	0.07
5/29/2017 0:00	5/30/2017 0:00	Perdue	Filter 4	0.05	0.05	0.06
5/30/2017 0:00	5/31/2017 0:00	Perdue	Filter 4	0.05	0.05	0.06
5/31/2017 0:00	6/1/2017 0:00	Perdue	Filter 4	0.05	0.07	0.09
6/1/2017 0:00	6/2/2017 0:00	Perdue	Filter 4	0.09	0.13	0.19
6/2/2017 0:00	6/3/2017 0:00	Perdue	Filter 4	0.09	0.15	0.27
6/3/2017 0:00	6/4/2017 0:00	Perdue	Filter 4	0.05	0.11	0.32
6/4/2017 0:00	6/5/2017 0:00	Perdue	Filter 4	0.05	0.06	0.06
6/5/2017 0:00	6/6/2017 0:00	Perdue	Filter 4	0.05	0.06	0.08
6/6/2017 0:00	6/7/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/7/2017 0:00	6/8/2017 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/8/2017 0:00	6/9/2017 0:00	Perdue	Filter 4	0.06	0.08	0.15
6/9/2017 0:00	6/10/2017 0:00	Perdue	Filter 4	0.11	0.16	0.30
6/10/2017 0:00	6/11/2017 0:00	Perdue	Filter 4	0.11	0.14	0.23
6/11/2017 0:00	6/12/2017 0:00	Perdue	Filter 4	0.12	0.15	0.16
6/12/2017 0:00	6/13/2017 0:00	Perdue	Filter 4	0.10	0.14	0.21
6/13/2017 0:00	6/14/2017 0:00	Perdue	Filter 4	0.10	0.12	0.19
6/14/2017 0:00	6/15/2017 0:00	Perdue	Filter 4	0.07	0.09	0.21
6/15/2017 0:00	6/16/2017 0:00	Perdue	Filter 4	0.07	0.09	0.16
6/16/2017 0:00	6/17/2017 0:00	Perdue	Filter 4	0.06	0.11	0.49
6/17/2017 0:00	6/18/2017 0:00	Perdue	Filter 4	0.05	0.06	0.07
6/18/2017 0:00	6/19/2017 0:00	Perdue	Filter 4	0.05	0.06	0.10
6/19/2017 0:00	6/20/2017 0:00	Perdue	Filter 4	0.05	0.08	0.19
6/20/2017 0:00	6/21/2017 0:00	Perdue	Filter 4	0.04	0.09	1.00
6/21/2017 0:00	6/22/2017 0:00	Perdue	Filter 4	0.04	0.05	0.06
6/22/2017 0:00	6/23/2017 0:00	Perdue	Filter 4	0.04	0.08	0.10
6/23/2017 0:00	6/24/2017 0:00	Perdue	Filter 4	0.06	0.25	0.28
6/24/2017 0:00	6/25/2017 0:00	Perdue	Filter 4	0.01	0.08	0.19
6/25/2017 0:00	6/26/2017 0:00	Perdue	Filter 4	0.00	0.01	0.99
6/26/2017 0:00	6/27/2017 0:00	Perdue	Filter 4	0.00	0.08	0.28
6/27/2017 0:00	6/28/2017 0:00	Perdue	Filter 4	0.04	0.08	0.17
6/28/2017 0:00	6/29/2017 0:00	Perdue	Filter 4	0.03	0.04	0.07
6/29/2017 0:00	6/30/2017 0:00	Perdue	Filter 4	0.03	0.04	0.06
6/30/2017 0:00	7/1/2017 0:00	Perdue	Filter 4	0.04	0.08	0.23
7/1/2017 0:00	7/2/2017 0:00	Perdue	Filter 4	0.05	0.06	0.07
7/2/2017 0:00	7/3/2017 0:00	Perdue	Filter 4	0.04	0.06	0.25
7/3/2017 0:00	7/4/2017 0:00	Perdue	Filter 4	0.03	0.10	0.27
7/4/2017 0:00	7/5/2017 0:00	Perdue	Filter 4	0.05	0.10	0.15
7/5/2017 0:00	7/6/2017 0:00	Perdue	Filter 4	0.05	0.14	0.23
7/6/2017 0:00	7/7/2017 0:00	Perdue	Filter 4	0.06	0.09	0.13
7/7/2017 0:00	7/8/2017 0:00	Perdue	Filter 4	0.06	0.15	0.31
7/8/2017 0:00	7/9/2017 0:00	Perdue	Filter 4	0.08	0.11	0.14
7/9/2017 0:00	7/10/2017 0:00	Perdue	Filter 4	0.04	0.11	0.26
7/10/2017 0:00	7/11/2017 0:00	Perdue	Filter 4	0.05	0.14	0.22
7/11/2017 0:00	7/12/2017 0:00	Perdue	Filter 4	0.05	0.12	0.22
7/12/2017 0:00	7/13/2017 0:00	Perdue	Filter 4	0.06	0.10	0.23
7/13/2017 0:00	7/14/2017 0:00	Perdue	Filter 4	0.04	0.07	0.26
7/14/2017 0:00	7/15/2017 0:00	Perdue	Filter 4	0.05	0.15	0.25
7/15/2017 0:00	7/16/2017 0:00	Perdue	Filter 4	0.05	0.09	0.16
7/16/2017 0:00	7/17/2017 0:00	Perdue	Filter 4	0.03	0.05	0.09
7/17/2017 0:00	7/18/2017 0:00	Perdue	Filter 4	0.03	0.14	0.26
7/18/2017 0:00	7/19/2017 0:00	Perdue	Filter 4	0.12	0.19	0.27
7/19/2017 0:00	7/20/2017 0:00	Perdue	Filter 4	0.08	0.13	0.23
7/20/2017 0:00	7/21/2017 0:00	Perdue	Filter 4	0.11	0.21	0.29
7/21/2017 0:00	7/22/2017 0:00	Perdue	Filter 4	0.08	0.13	0.22
7/22/2017 0:00	7/23/2017 0:00	Perdue	Filter 4	0.11	0.18	0.25
7/23/2017 0:00	7/24/2017 0:00	Perdue	Filter 4	0.08	0.11	0.15
7/24/2017 0:00	7/25/2017 0:00	Perdue	Filter 4	0.09	0.16	0.32
7/25/2017 0:00	7/26/2017 0:00	Perdue	Filter 4	0.09	0.13	0.19
7/26/2017 0:00	7/27/2017 0:00	Perdue	Filter 4	0.09	0.12	0.25
7/27/2017 0:00	7/28/2017 0:00	Perdue	Filter 4	0.11	0.21	0.30
7/28/2017 0:00	7/29/2017 0:00	Perdue	Filter 4	0.13	0.16	0.20
7/29/2017 0:00	7/30/2017 0:00	Perdue	Filter 4	0.13	0.15	0.58
7/30/2017 0:00	7/31/2017 0:00	Perdue	Filter 4	0.12	0.14	0.17
7/31/2017 0:00	8/1/2017 0:00	Perdue	Filter 4	0.12	0.18	0.30
8/1/2017 0:00	8/2/2017 0:00	Perdue	Filter 4	0.09	0.11	0.13
8/2/2017 0:00	8/3/2017 0:00	Perdue	Filter 4	0.11	0.16	0.27
8/3/2017 0:00	8/4/2017 0:00	Perdue	Filter 4	0.14	0.17	0.26
8/4/2017 0:00	8/5/2017 0:00	Perdue	Filter 4	0.11	0.14	0.20
8/5/2017 0:00	8/6/2017 0:00	Perdue	Filter 4	0.09	0.12	0.16
8/6/2017 0:00	8/7/2017 0:00	Perdue	Filter 4	0.13	0.16	0.85

8/7/2017 0:00	8/8/2017 0:00	Perdue	Filter 4	0.12	0.13	0.23
8/8/2017 0:00	8/9/2017 0:00	Perdue	Filter 4	0.00	0.16	0.24
8/9/2017 0:00	8/10/2017 0:00	Perdue	Filter 4	0.01	0.03	0.05
8/10/2017 0:00	8/11/2017 0:00	Perdue	Filter 4	0.00	0.08	0.30
8/11/2017 0:00	8/12/2017 0:00	Perdue	Filter 4	0.14	0.17	0.27
8/12/2017 0:00	8/13/2017 0:00	Perdue	Filter 4	0.13	0.19	0.35
8/13/2017 0:00	8/14/2017 0:00	Perdue	Filter 4	0.09	0.11	0.13
8/14/2017 0:00	8/15/2017 0:00	Perdue	Filter 4	0.10	0.11	0.19
8/15/2017 0:00	8/16/2017 0:00	Perdue	Filter 4	0.09	0.10	0.13
8/16/2017 0:00	8/17/2017 0:00	Perdue	Filter 4	0.09	0.10	0.31
8/17/2017 0:00	8/18/2017 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/18/2017 0:00	8/19/2017 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/19/2017 0:00	8/20/2017 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/20/2017 0:00	8/21/2017 0:00	Perdue	Filter 4	0.08	0.08	0.09
8/21/2017 0:00	8/22/2017 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/22/2017 0:00	8/23/2017 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/23/2017 0:00	8/24/2017 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/24/2017 0:00	8/25/2017 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/25/2017 0:00	8/26/2017 0:00	Perdue	Filter 4	0.09	0.09	0.10
8/26/2017 0:00	8/27/2017 0:00	Perdue	Filter 4	0.09	0.11	0.52
8/27/2017 0:00	8/28/2017 0:00	Perdue	Filter 4	0.09	0.10	1.00
8/28/2017 0:00	8/29/2017 0:00	Perdue	Filter 4	0.09	0.10	1.00
8/29/2017 0:00	8/30/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
8/30/2017 0:00	8/31/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
8/31/2017 0:00	9/1/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
9/1/2017 0:00	9/2/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
9/2/2017 0:00	9/3/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
9/3/2017 0:00	9/4/2017 0:00	Perdue	Filter 4	0.09	0.09	0.09
9/4/2017 0:00	9/5/2017 0:00	Perdue	Filter 4	0.09	0.11	0.21
9/5/2017 0:00	9/6/2017 0:00	Perdue	Filter 4	0.10	0.11	0.13
9/6/2017 0:00	9/7/2017 0:00	Perdue	Filter 4	0.11	0.20	0.28
9/7/2017 0:00	9/8/2017 0:00	Perdue	Filter 4	0.27	0.27	0.27
9/8/2017 0:00	9/9/2017 0:00	Perdue	Filter 4	0.17	0.21	0.27
9/9/2017 0:00	9/10/2017 0:00	Perdue	Filter 4	0.17	0.17	0.17
9/10/2017 0:00	9/11/2017 0:00	Perdue	Filter 4	0.17	0.17	0.17
9/11/2017 0:00	9/12/2017 0:00	Perdue	Filter 4	0.17	0.22	0.25
9/12/2017 0:00	9/13/2017 0:00	Perdue	Filter 4	0.25	0.29	0.32
9/13/2017 0:00	9/14/2017 0:00	Perdue	Filter 4	0.29	0.30	0.32
9/14/2017 0:00	9/15/2017 0:00	Perdue	Filter 4	0.21	0.27	0.29
9/15/2017 0:00	9/16/2017 0:00	Perdue	Filter 4	0.10	0.16	0.48
9/16/2017 0:00	9/17/2017 0:00	Perdue	Filter 4	0.09	0.14	0.50
9/17/2017 0:00	9/18/2017 0:00	Perdue	Filter 4	0.06	0.07	0.16
9/18/2017 0:00	9/19/2017 0:00	Perdue	Filter 4	0.03	0.06	0.09
9/19/2017 0:00	9/20/2017 0:00	Perdue	Filter 4	0.06	0.06	1.00
9/20/2017 0:00	9/21/2017 0:00	Perdue	Filter 4	0.05	0.06	0.09
9/21/2017 0:00	9/22/2017 0:00	Perdue	Filter 4	0.05	0.06	0.08
9/22/2017 0:00	9/23/2017 0:00	Perdue	Filter 4	0.05	0.09	0.17
9/23/2017 0:00	9/24/2017 0:00	Perdue	Filter 4	0.08	0.13	0.20
9/24/2017 0:00	9/25/2017 0:00	Perdue	Filter 4	0.12	0.14	0.17
9/25/2017 0:00	9/26/2017 0:00	Perdue	Filter 4	0.05	0.08	0.15
9/26/2017 0:00	9/27/2017 0:00	Perdue	Filter 4	0.05	0.06	0.09
9/27/2017 0:00	9/28/2017 0:00	Perdue	Filter 4	0.04	0.06	0.09
9/28/2017 0:00	9/29/2017 0:00	Perdue	Filter 4	0.05	0.07	0.11
9/29/2017 0:00	9/30/2017 0:00	Perdue	Filter 4	0.06	0.08	0.16
9/30/2017 0:00	10/1/2017 0:00	Perdue	Filter 4	0.08	0.09	0.16
10/1/2017 0:00	10/2/2017 0:00	Perdue	Filter 4	0.09	0.12	0.23
10/2/2017 0:00	10/3/2017 0:00	Perdue	Filter 4	0.07	0.10	0.19
10/3/2017 0:00	10/4/2017 0:00	Perdue	Filter 4	0.08	0.09	0.17
10/4/2017 0:00	10/5/2017 0:00	Perdue	Filter 4	0.08	0.09	0.23
10/5/2017 0:00	10/6/2017 0:00	Perdue	Filter 4	0.09	0.11	0.50
10/6/2017 0:00	10/7/2017 0:00	Perdue	Filter 4	0.08	0.09	0.14
10/7/2017 0:00	10/8/2017 0:00	Perdue	Filter 4	0.08	0.10	0.16
10/8/2017 0:00	10/9/2017 0:00	Perdue	Filter 4	0.09	0.16	0.80
10/9/2017 0:00	10/10/2017 0:00	Perdue	Filter 4	0.08	0.09	0.13
10/10/2017 0:00	10/11/2017 0:00	Perdue	Filter 4	0.07	0.08	0.14
10/11/2017 0:00	10/12/2017 0:00	Perdue	Filter 4	0.06	0.08	0.10
10/12/2017 0:00	10/13/2017 0:00	Perdue	Filter 4	0.04	0.08	0.11
10/13/2017 0:00	10/14/2017 0:00	Perdue	Filter 4	0.08	0.10	0.12
10/14/2017 0:00	10/15/2017 0:00	Perdue	Filter 4	0.08	0.09	0.11
10/15/2017 0:00	10/16/2017 0:00	Perdue	Filter 4	0.08	0.10	0.47
10/16/2017 0:00	10/17/2017 0:00	Perdue	Filter 4	0.10	0.11	0.14
10/17/2017 0:00	10/18/2017 0:00	Perdue	Filter 4	0.09	0.10	0.13
10/18/2017 0:00	10/19/2017 0:00	Perdue	Filter 4	0.08	0.10	0.19

10/19/2017 0:00	10/20/2017 0:00	Perdue	Filter 4	0.08	0.09	0.15
10/20/2017 0:00	10/21/2017 0:00	Perdue	Filter 4	0.08	0.09	0.14
10/21/2017 0:00	10/22/2017 0:00	Perdue	Filter 4	0.09	0.12	0.26
10/22/2017 0:00	10/23/2017 0:00	Perdue	Filter 4	0.10	0.11	0.12
10/23/2017 0:00	10/24/2017 0:00	Perdue	Filter 4	0.10	0.12	0.16
10/24/2017 0:00	10/25/2017 0:00	Perdue	Filter 4	0.10	0.11	0.15
10/25/2017 0:00	10/26/2017 0:00	Perdue	Filter 4	0.09	0.11	0.16
10/26/2017 0:00	10/27/2017 0:00	Perdue	Filter 4	0.09	0.10	0.14
10/27/2017 0:00	10/28/2017 0:00	Perdue	Filter 4	0.09	0.10	0.19
10/28/2017 0:00	10/29/2017 0:00	Perdue	Filter 4	0.08	0.09	0.17
10/29/2017 0:00	10/30/2017 0:00	Perdue	Filter 4	0.08	0.11	0.20
10/30/2017 0:00	10/31/2017 0:00	Perdue	Filter 4	0.11	0.13	0.19
10/31/2017 0:00	11/1/2017 0:00	Perdue	Filter 4	0.11	0.18	0.29
11/1/2017 0:00	11/2/2017 0:00	Perdue	Filter 4	0.12	0.14	0.22
11/2/2017 0:00	11/3/2017 0:00	Perdue	Filter 4	0.12	0.14	0.18
11/3/2017 0:00	11/4/2017 0:00	Perdue	Filter 4	0.12	0.13	0.16
11/4/2017 0:00	11/5/2017 0:00	Perdue	Filter 4	0.12	0.13	0.43
11/5/2017 0:00	11/6/2017 0:00	Perdue	Filter 4	0.10	0.12	0.94
11/6/2017 0:00	11/7/2017 0:00	Perdue	Filter 4	0.10	0.11	0.13
11/7/2017 0:00	11/8/2017 0:00	Perdue	Filter 4	0.12	0.14	0.23
11/8/2017 0:00	11/9/2017 0:00	Perdue	Filter 4	0.11	0.12	0.17
11/9/2017 0:00	11/10/2017 0:00	Perdue	Filter 4	0.10	0.12	0.17
11/10/2017 0:00	11/11/2017 0:00	Perdue	Filter 4	0.11	0.12	0.15
11/11/2017 0:00	11/12/2017 0:00	Perdue	Filter 4	0.12	0.13	0.19
11/12/2017 0:00	11/13/2017 0:00	Perdue	Filter 4	0.13	0.14	0.19
11/13/2017 0:00	11/14/2017 0:00	Perdue	Filter 4	0.12	0.13	0.27
11/14/2017 0:00	11/15/2017 0:00	Perdue	Filter 4	0.11	0.13	0.17
11/15/2017 0:00	11/16/2017 0:00	Perdue	Filter 4	0.12	0.14	0.39
11/16/2017 0:00	11/17/2017 0:00	Perdue	Filter 4	0.15	0.17	0.23
11/17/2017 0:00	11/18/2017 0:00	Perdue	Filter 4	0.13	0.18	0.27
11/18/2017 0:00	11/19/2017 0:00	Perdue	Filter 4	0.10	0.12	0.14
11/19/2017 0:00	11/20/2017 0:00	Perdue	Filter 4	0.09	0.10	0.11
11/20/2017 0:00	11/21/2017 0:00	Perdue	Filter 4	0.10	0.11	0.12
11/21/2017 0:00	11/22/2017 0:00	Perdue	Filter 4	0.09	0.10	0.20
11/22/2017 0:00	11/23/2017 0:00	Perdue	Filter 4	0.09	0.11	0.17
11/23/2017 0:00	11/24/2017 0:00	Perdue	Filter 4	0.11	0.17	0.27
11/24/2017 0:00	11/25/2017 0:00	Perdue	Filter 4	0.12	0.15	0.17
11/25/2017 0:00	11/26/2017 0:00	Perdue	Filter 4	0.11	0.13	0.16
11/26/2017 0:00	11/27/2017 0:00	Perdue	Filter 4	0.10	0.12	0.13
11/27/2017 0:00	11/28/2017 0:00	Perdue	Filter 4	0.10	0.11	0.21
11/28/2017 0:00	11/29/2017 0:00	Perdue	Filter 4	0.09	0.11	0.20
11/29/2017 0:00	11/30/2017 0:00	Perdue	Filter 4	0.12	0.14	0.17
11/30/2017 0:00	12/1/2017 0:00	Perdue	Filter 4	0.11	0.12	0.14
12/1/2017 0:00	12/2/2017 0:00	Perdue	Filter 4	0.11	0.12	0.14
12/2/2017 0:00	12/3/2017 0:00	Perdue	Filter 4	0.11	0.11	0.11
12/3/2017 0:00	12/4/2017 0:00	Perdue	Filter 4	0.11	0.13	0.20
12/4/2017 0:00	12/5/2017 0:00	Perdue	Filter 4	0.12	0.13	0.24
12/5/2017 0:00	12/6/2017 0:00	Perdue	Filter 4	0.13	0.14	0.18
12/6/2017 0:00	12/7/2017 0:00	Perdue	Filter 4	0.13	0.14	0.22
12/7/2017 0:00	12/8/2017 0:00	Perdue	Filter 4	0.13	0.15	0.19
12/8/2017 0:00	12/9/2017 0:00	Perdue	Filter 4	0.16	0.18	0.35
12/9/2017 0:00	12/10/2017 0:00	Perdue	Filter 4	0.15	0.19	0.27
12/10/2017 0:00	12/11/2017 0:00	Perdue	Filter 4	0.14	0.17	0.24
12/11/2017 0:00	12/12/2017 0:00	Perdue	Filter 4	0.14	0.15	0.22
12/12/2017 0:00	12/13/2017 0:00	Perdue	Filter 4	0.14	0.15	0.20
12/13/2017 0:00	12/14/2017 0:00	Perdue	Filter 4	0.14	0.40	1.00
12/14/2017 0:00	12/15/2017 0:00	Perdue	Filter 4	0.15	0.48	1.00
12/15/2017 0:00	12/16/2017 0:00	Perdue	Filter 4	0.15	0.17	0.24
12/16/2017 0:00	12/17/2017 0:00	Perdue	Filter 4	0.14	0.15	0.17
12/17/2017 0:00	12/18/2017 0:00	Perdue	Filter 4	0.14	0.17	0.31
12/18/2017 0:00	12/19/2017 0:00	Perdue	Filter 4	0.12	0.14	0.24
12/19/2017 0:00	12/20/2017 0:00	Perdue	Filter 4	0.12	0.15	0.23
12/20/2017 0:00	12/21/2017 0:00	Perdue	Filter 4	0.13	0.14	0.17
12/21/2017 0:00	12/22/2017 0:00	Perdue	Filter 4	0.12	0.13	0.16
12/22/2017 0:00	12/23/2017 0:00	Perdue	Filter 4	0.11	0.13	0.15
12/23/2017 0:00	12/24/2017 0:00	Perdue	Filter 4	0.11	0.13	0.17
12/24/2017 0:00	12/25/2017 0:00	Perdue	Filter 4	0.11	0.14	0.16
12/25/2017 0:00	12/26/2017 0:00	Perdue	Filter 4	0.13	0.23	0.39
12/26/2017 0:00	12/27/2017 0:00	Perdue	Filter 4	0.14	0.21	0.39
12/27/2017 0:00	12/28/2017 0:00	Perdue	Filter 4	0.13	0.16	0.19
12/28/2017 0:00	12/29/2017 0:00	Perdue	Filter 4	0.16	0.19	0.22
12/29/2017 0:00	12/30/2017 0:00	Perdue	Filter 4	0.18	0.20	0.24
12/30/2017 0:00	12/31/2017 0:00	Perdue	Filter 4	0.20	0.21	0.23

12/31/2017 0:00	1/1/2018 0:00	Perdue	Filter 4	0.20	0.21	0.24
1/1/2018 0:00	1/2/2018 0:00	Perdue	Filter 4	0.17	0.21	0.31
1/2/2018 0:00	1/3/2018 0:00	Perdue	Filter 4	0.14	0.19	0.38
1/3/2018 0:00	1/4/2018 0:00	Perdue	Filter 4	0.10	0.15	0.29
1/4/2018 0:00	1/5/2018 0:00	Perdue	Filter 4	0.09	0.11	0.23
1/5/2018 0:00	1/6/2018 0:00	Perdue	Filter 4	0.07	0.09	0.31
1/6/2018 0:00	1/7/2018 0:00	Perdue	Filter 4	0.09	0.12	0.32
1/7/2018 0:00	1/8/2018 0:00	Perdue	Filter 4	0.09	0.11	0.38
1/8/2018 0:00	1/9/2018 0:00	Perdue	Filter 4	0.08	0.10	0.13
1/9/2018 0:00	1/10/2018 0:00	Perdue	Filter 4	0.07	0.08	0.11
1/10/2018 0:00	1/11/2018 0:00	Perdue	Filter 4	0.07	0.14	0.74
1/11/2018 0:00	1/12/2018 0:00	Perdue	Filter 4	0.09	0.13	0.52
1/12/2018 0:00	1/13/2018 0:00	Perdue	Filter 4	0.08	0.10	0.22
1/13/2018 0:00	1/14/2018 0:00	Perdue	Filter 4	0.08	0.10	0.14
1/14/2018 0:00	1/15/2018 0:00	Perdue	Filter 4	0.08	0.09	0.14
1/15/2018 0:00	1/16/2018 0:00	Perdue	Filter 4	0.07	0.10	0.23
1/16/2018 0:00	1/17/2018 0:00	Perdue	Filter 4	0.11	0.15	0.22
1/17/2018 0:00	1/18/2018 0:00	Perdue	Filter 4	0.11	0.14	0.22
1/18/2018 0:00	1/19/2018 0:00	Perdue	Filter 4	0.10	0.13	0.19
1/19/2018 0:00	1/20/2018 0:00	Perdue	Filter 4	0.11	0.13	0.18
1/20/2018 0:00	1/21/2018 0:00	Perdue	Filter 4	0.08	0.10	0.21
1/21/2018 0:00	1/22/2018 0:00	Perdue	Filter 4	0.08	0.08	0.18
1/22/2018 0:00	1/23/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
1/23/2018 0:00	1/24/2018 0:00	Perdue	Filter 4	0.08	0.12	0.59
1/24/2018 0:00	1/25/2018 0:00	Perdue	Filter 4	0.08	0.11	0.41
1/25/2018 0:00	1/26/2018 0:00	Perdue	Filter 4	0.09	0.11	0.33
1/26/2018 0:00	1/27/2018 0:00	Perdue	Filter 4	0.08	0.10	0.14
1/27/2018 0:00	1/28/2018 0:00	Perdue	Filter 4	0.08	0.09	0.12
1/28/2018 0:00	1/29/2018 0:00	Perdue	Filter 4	0.08	0.20	0.35
1/29/2018 0:00	1/30/2018 0:00	Perdue	Filter 4	0.07	0.08	0.15
1/30/2018 0:00	1/31/2018 0:00	Perdue	Filter 4	0.07	0.09	0.23
1/31/2018 0:00	2/1/2018 0:00	Perdue	Filter 4	0.12	0.16	0.32
2/1/2018 0:00	2/2/2018 0:00	Perdue	Filter 4	0.11	0.20	0.46
2/2/2018 0:00	2/3/2018 0:00	Perdue	Filter 4	0.07	0.16	0.47
2/3/2018 0:00	2/4/2018 0:00	Perdue	Filter 4	0.09	0.11	0.72
2/4/2018 0:00	2/5/2018 0:00	Perdue	Filter 4	0.06	0.10	0.14
2/5/2018 0:00	2/6/2018 0:00	Perdue	Filter 4	0.06	0.07	0.10
2/6/2018 0:00	2/7/2018 0:00	Perdue	Filter 4	0.07	0.08	0.57
2/7/2018 0:00	2/8/2018 0:00	Perdue	Filter 4	0.07	0.17	0.57
2/8/2018 0:00	2/9/2018 0:00	Perdue	Filter 4	0.20	0.22	0.29
2/9/2018 0:00	2/10/2018 0:00	Perdue	Filter 4	0.19	0.20	0.22
2/10/2018 0:00	2/11/2018 0:00	Perdue	Filter 4	0.20	0.21	0.57
2/11/2018 0:00	2/12/2018 0:00	Perdue	Filter 4	0.20	0.23	0.31
2/12/2018 0:00	2/13/2018 0:00	Perdue	Filter 4	0.19	0.22	0.30
2/13/2018 0:00	2/14/2018 0:00	Perdue	Filter 4	0.19	0.21	0.30
2/14/2018 0:00	2/15/2018 0:00	Perdue	Filter 4	0.21	0.22	0.61
2/15/2018 0:00	2/16/2018 0:00	Perdue	Filter 4	0.21	0.24	0.32
2/16/2018 0:00	2/17/2018 0:00	Perdue	Filter 4	0.21	0.23	0.26
2/17/2018 0:00	2/18/2018 0:00	Perdue	Filter 4	0.22	0.25	1.00
2/18/2018 0:00	2/19/2018 0:00	Perdue	Filter 4	0.23	0.26	0.29
2/19/2018 0:00	2/20/2018 0:00	Perdue	Filter 4	0.17	0.27	0.42
2/20/2018 0:00	2/21/2018 0:00	Perdue	Filter 4	0.12	0.15	0.20
2/21/2018 0:00	2/22/2018 0:00	Perdue	Filter 4	0.09	0.11	0.22
2/22/2018 0:00	2/23/2018 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/23/2018 0:00	2/24/2018 0:00	Perdue	Filter 4	0.09	0.10	0.18
2/24/2018 0:00	2/25/2018 0:00	Perdue	Filter 4	0.08	0.10	0.26
2/25/2018 0:00	2/26/2018 0:00	Perdue	Filter 4	0.07	0.12	0.82
2/26/2018 0:00	2/27/2018 0:00	Perdue	Filter 4	0.10	0.12	0.16
2/27/2018 0:00	2/28/2018 0:00	Perdue	Filter 4	0.09	0.11	0.14
2/28/2018 0:00	3/1/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
3/1/2018 0:00	3/2/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
3/2/2018 0:00	3/3/2018 0:00	Perdue	Filter 4	0.07	0.09	0.11
3/3/2018 0:00	3/4/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
3/4/2018 0:00	3/5/2018 0:00	Perdue	Filter 4	0.09	0.10	0.25
3/5/2018 0:00	3/6/2018 0:00	Perdue	Filter 4	0.12	0.15	0.24
3/6/2018 0:00	3/7/2018 0:00	Perdue	Filter 4	0.11	0.12	0.15
3/7/2018 0:00	3/8/2018 0:00	Perdue	Filter 4	0.11	0.12	0.14
3/8/2018 0:00	3/9/2018 0:00	Perdue	Filter 4	0.10	0.11	0.13
3/9/2018 0:00	3/10/2018 0:00	Perdue	Filter 4	0.11	0.11	0.12
3/10/2018 0:00	3/11/2018 0:00	Perdue	Filter 4	0.11	0.11	0.12
3/11/2018 0:00	3/12/2018 0:00	Perdue	Filter 4	0.10	0.11	0.96
3/12/2018 0:00	3/13/2018 0:00	Perdue	Filter 4	0.09	0.16	0.50
3/13/2018 0:00	3/14/2018 0:00	Perdue	Filter 4	0.13	0.16	0.20

3/14/2018 0:00	3/15/2018 0:00	Perdue	Filter 4	0.11	0.14	0.17
3/15/2018 0:00	3/16/2018 0:00	Perdue	Filter 4	0.11	0.12	0.14
3/16/2018 0:00	3/17/2018 0:00	Perdue	Filter 4	0.11	0.12	0.19
3/17/2018 0:00	3/18/2018 0:00	Perdue	Filter 4	0.10	0.12	0.13
3/18/2018 0:00	3/19/2018 0:00	Perdue	Filter 4	0.11	0.11	0.12
3/19/2018 0:00	3/20/2018 0:00	Perdue	Filter 4	0.09	0.11	0.14
3/20/2018 0:00	3/21/2018 0:00	Perdue	Filter 4	0.10	0.14	0.21
3/21/2018 0:00	3/22/2018 0:00	Perdue	Filter 4	0.10	0.12	0.33
3/22/2018 0:00	3/23/2018 0:00	Perdue	Filter 4	0.09	0.12	0.21
3/23/2018 0:00	3/24/2018 0:00	Perdue	Filter 4	0.08	0.11	0.25
3/24/2018 0:00	3/25/2018 0:00	Perdue	Filter 4	0.09	0.09	0.11
3/25/2018 0:00	3/26/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
3/26/2018 0:00	3/27/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
3/27/2018 0:00	3/28/2018 0:00	Perdue	Filter 4	0.09	0.09	0.10
3/28/2018 0:00	3/29/2018 0:00	Perdue	Filter 4	0.10	0.15	0.22
3/29/2018 0:00	3/30/2018 0:00	Perdue	Filter 4	0.11	0.15	0.17
3/30/2018 0:00	3/31/2018 0:00	Perdue	Filter 4	0.13	0.16	0.18
3/31/2018 0:00	4/1/2018 0:00	Perdue	Filter 4	0.14	0.16	0.18
4/1/2018 0:00	4/2/2018 0:00	Perdue	Filter 4	0.14	0.15	0.16
4/2/2018 0:00	4/3/2018 0:00	Perdue	Filter 4	0.14	0.15	1.00
4/3/2018 0:00	4/4/2018 0:00	Perdue	Filter 4	0.13	0.16	1.00
4/4/2018 0:00	4/5/2018 0:00	Perdue	Filter 4	0.16	0.18	0.23
4/5/2018 0:00	4/6/2018 0:00	Perdue	Filter 4	0.15	0.17	0.19
4/6/2018 0:00	4/7/2018 0:00	Perdue	Filter 4	0.15	0.16	0.17
4/7/2018 0:00	4/8/2018 0:00	Perdue	Filter 4	0.14	0.15	0.25
4/8/2018 0:00	4/9/2018 0:00	Perdue	Filter 4	0.04	0.08	1.00
4/9/2018 0:00	4/10/2018 0:00	Perdue	Filter 4	0.06	0.09	0.16
4/10/2018 0:00	4/11/2018 0:00	Perdue	Filter 4	0.05	0.07	0.11
4/11/2018 0:00	4/12/2018 0:00	Perdue	Filter 4	0.05	0.06	0.07
4/12/2018 0:00	4/13/2018 0:00	Perdue	Filter 4	0.04	0.05	0.07
4/13/2018 0:00	4/14/2018 0:00	Perdue	Filter 4	0.03	0.11	0.26
4/14/2018 0:00	4/15/2018 0:00	Perdue	Filter 4	0.13	0.22	1.00
4/15/2018 0:00	4/16/2018 0:00	Perdue	Filter 4	0.18	0.21	0.31
4/16/2018 0:00	4/17/2018 0:00	Perdue	Filter 4	0.08	0.16	0.37
4/17/2018 0:00	4/18/2018 0:00	Perdue	Filter 4	0.12	0.13	0.14
4/18/2018 0:00	4/19/2018 0:00	Perdue	Filter 4	0.12	0.13	0.16
4/19/2018 0:00	4/20/2018 0:00	Perdue	Filter 4	0.12	0.15	0.33
4/20/2018 0:00	4/21/2018 0:00	Perdue	Filter 4	0.12	0.24	0.36
4/21/2018 0:00	4/22/2018 0:00	Perdue	Filter 4	0.15	0.19	0.26
4/22/2018 0:00	4/23/2018 0:00	Perdue	Filter 4	0.13	0.15	0.22
4/23/2018 0:00	4/24/2018 0:00	Perdue	Filter 4	0.12	0.13	0.18
4/24/2018 0:00	4/25/2018 0:00	Perdue	Filter 4	0.11	0.13	0.18
4/25/2018 0:00	4/26/2018 0:00	Perdue	Filter 4	0.11	0.12	0.15
4/26/2018 0:00	4/27/2018 0:00	Perdue	Filter 4	0.09	0.15	0.31
4/27/2018 0:00	4/28/2018 0:00	Perdue	Filter 4	0.08	0.09	0.12
4/28/2018 0:00	4/29/2018 0:00	Perdue	Filter 4	0.05	0.08	0.11
4/29/2018 0:00	4/30/2018 0:00	Perdue	Filter 4	0.05	0.07	0.11
4/30/2018 0:00	5/1/2018 0:00	Perdue	Filter 4	0.05	0.07	0.09
5/1/2018 0:00	5/2/2018 0:00	Perdue	Filter 4	0.07	0.11	0.20
5/2/2018 0:00	5/3/2018 0:00	Perdue	Filter 4	0.09	0.11	0.15
5/3/2018 0:00	5/4/2018 0:00	Perdue	Filter 4	0.08	0.10	0.14
5/4/2018 0:00	5/5/2018 0:00	Perdue	Filter 4	0.08	0.11	0.13
5/5/2018 0:00	5/6/2018 0:00	Perdue	Filter 4	0.11	0.13	0.15
5/6/2018 0:00	5/7/2018 0:00	Perdue	Filter 4	0.13	0.21	0.91
5/7/2018 0:00	5/8/2018 0:00	Perdue	Filter 4	0.12	0.15	0.18
5/8/2018 0:00	5/9/2018 0:00	Perdue	Filter 4	0.14	0.16	0.28
5/9/2018 0:00	5/10/2018 0:00	Perdue	Filter 4	0.12	0.15	0.26
5/10/2018 0:00	5/11/2018 0:00	Perdue	Filter 4	0.12	0.13	0.16
5/11/2018 0:00	5/12/2018 0:00	Perdue	Filter 4	0.11	0.13	0.16
5/12/2018 0:00	5/13/2018 0:00	Perdue	Filter 4	0.11	0.13	0.21
5/13/2018 0:00	5/14/2018 0:00	Perdue	Filter 4	0.10	0.11	0.14
5/14/2018 0:00	5/15/2018 0:00	Perdue	Filter 4	0.09	0.11	0.29
5/15/2018 0:00	5/16/2018 0:00	Perdue	Filter 4	0.09	0.09	0.09
5/16/2018 0:00	5/17/2018 0:00	Perdue	Filter 4	0.09	0.09	0.09
5/17/2018 0:00	5/18/2018 0:00	Perdue	Filter 4	0.09	0.14	0.21
5/18/2018 0:00	5/19/2018 0:00	Perdue	Filter 4	0.10	0.14	0.26
5/19/2018 0:00	5/20/2018 0:00	Perdue	Filter 4	0.09	0.11	0.15
5/20/2018 0:00	5/21/2018 0:00	Perdue	Filter 4	0.07	0.08	0.10
5/21/2018 0:00	5/22/2018 0:00	Perdue	Filter 4	0.07	0.09	0.12
5/22/2018 0:00	5/23/2018 0:00	Perdue	Filter 4	0.06	0.07	0.09
5/23/2018 0:00	5/24/2018 0:00	Perdue	Filter 4	0.06	0.07	0.30
5/24/2018 0:00	5/25/2018 0:00	Perdue	Filter 4	0.06	0.06	0.08
5/25/2018 0:00	5/26/2018 0:00	Perdue	Filter 4	0.06	0.08	0.17

5/26/2018 0:00	5/27/2018 0:00	Perdue	Filter 4	0.06	0.07	0.19
5/27/2018 0:00	5/28/2018 0:00	Perdue	Filter 4	0.06	0.06	0.08
5/28/2018 0:00	5/29/2018 0:00	Perdue	Filter 4	0.06	0.07	0.08
5/29/2018 0:00	5/30/2018 0:00	Perdue	Filter 4	0.06	0.07	0.08
5/30/2018 0:00	5/31/2018 0:00	Perdue	Filter 4	0.06	0.07	0.10
5/31/2018 0:00	6/1/2018 0:00	Perdue	Filter 4	0.07	0.09	0.09
6/1/2018 0:00	6/2/2018 0:00	Perdue	Filter 4	0.08	0.10	0.35
6/2/2018 0:00	6/3/2018 0:00	Perdue	Filter 4	0.08	0.09	0.12
6/3/2018 0:00	6/4/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
6/4/2018 0:00	6/5/2018 0:00	Perdue	Filter 4	0.08	0.09	0.11
6/5/2018 0:00	6/6/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
6/6/2018 0:00	6/7/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
6/7/2018 0:00	6/8/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
6/8/2018 0:00	6/9/2018 0:00	Perdue	Filter 4	0.10	0.14	0.31
6/9/2018 0:00	6/10/2018 0:00	Perdue	Filter 4	0.13	0.19	0.26
6/10/2018 0:00	6/11/2018 0:00	Perdue	Filter 4	0.11	0.15	0.21
6/11/2018 0:00	6/12/2018 0:00	Perdue	Filter 4	0.06	0.11	0.19
6/12/2018 0:00	6/13/2018 0:00	Perdue	Filter 4	0.06	0.09	0.14
6/13/2018 0:00	6/14/2018 0:00	Perdue	Filter 4	0.12	0.15	0.22
6/14/2018 0:00	6/15/2018 0:00	Perdue	Filter 4	0.12	0.15	0.21
6/15/2018 0:00	6/16/2018 0:00	Perdue	Filter 4	0.07	0.11	0.15
6/16/2018 0:00	6/17/2018 0:00	Perdue	Filter 4	0.07	0.12	0.18
6/17/2018 0:00	6/18/2018 0:00	Perdue	Filter 4	0.08	0.10	0.17
6/18/2018 0:00	6/19/2018 0:00	Perdue	Filter 4	0.08	0.10	0.16
6/19/2018 0:00	6/20/2018 0:00	Perdue	Filter 4	0.08	0.12	0.22
6/20/2018 0:00	6/21/2018 0:00	Perdue	Filter 4	0.10	0.13	0.27
6/21/2018 0:00	6/22/2018 0:00	Perdue	Filter 4	0.11	0.14	0.42
6/22/2018 0:00	6/23/2018 0:00	Perdue	Filter 4	0.11	0.13	0.17
6/23/2018 0:00	6/24/2018 0:00	Perdue	Filter 4	0.12	0.14	0.19
6/24/2018 0:00	6/25/2018 0:00	Perdue	Filter 4	0.14	0.18	1.00
6/25/2018 0:00	6/26/2018 0:00	Perdue	Filter 4	0.13	0.17	0.25
6/26/2018 0:00	6/27/2018 0:00	Perdue	Filter 4	0.14	0.17	0.23
6/27/2018 0:00	6/28/2018 0:00	Perdue	Filter 4	0.12	0.14	0.20
6/28/2018 0:00	6/29/2018 0:00	Perdue	Filter 4	0.14	0.17	0.25
6/29/2018 0:00	6/30/2018 0:00	Perdue	Filter 4	0.14	0.15	0.28
6/30/2018 0:00	7/1/2018 0:00	Perdue	Filter 4	0.15	0.17	0.25
7/1/2018 0:00	7/2/2018 0:00	Perdue	Filter 4	0.17	0.22	0.41
7/2/2018 0:00	7/3/2018 0:00	Perdue	Filter 4	0.23	0.28	1.00
7/3/2018 0:00	7/4/2018 0:00	Perdue	Filter 4	0.17	0.32	0.80
7/4/2018 0:00	7/5/2018 0:00	Perdue	Filter 4	0.11	0.17	0.26
7/5/2018 0:00	7/6/2018 0:00	Perdue	Filter 4	0.10	0.13	0.17
7/6/2018 0:00	7/7/2018 0:00	Perdue	Filter 4	0.03	0.17	0.37
7/7/2018 0:00	7/8/2018 0:00	Perdue	Filter 4	0.17	0.18	0.21
7/8/2018 0:00	7/9/2018 0:00	Perdue	Filter 4	0.17	0.21	0.37
7/9/2018 0:00	7/10/2018 0:00	Perdue	Filter 4	0.18	0.20	0.28
7/10/2018 0:00	7/11/2018 0:00	Perdue	Filter 4	0.16	0.19	0.28
7/11/2018 0:00	7/12/2018 0:00	Perdue	Filter 4	0.15	0.17	0.31
7/12/2018 0:00	7/13/2018 0:00	Perdue	Filter 4	0.15	0.17	0.20
7/13/2018 0:00	7/14/2018 0:00	Perdue	Filter 4	0.16	0.22	0.30
7/14/2018 0:00	7/15/2018 0:00	Perdue	Filter 4	0.20	0.23	0.28
7/15/2018 0:00	7/16/2018 0:00	Perdue	Filter 4	0.18	0.20	0.26
7/16/2018 0:00	7/17/2018 0:00	Perdue	Filter 4	0.18	0.20	0.22
7/17/2018 0:00	7/18/2018 0:00	Perdue	Filter 4	0.18	0.20	0.23
7/18/2018 0:00	7/19/2018 0:00	Perdue	Filter 4	0.21	0.26	0.30
7/19/2018 0:00	7/20/2018 0:00	Perdue	Filter 4	0.04	0.20	0.29
7/20/2018 0:00	7/21/2018 0:00	Perdue	Filter 4	0.01	0.07	0.11
7/21/2018 0:00	7/22/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
7/22/2018 0:00	7/23/2018 0:00	Perdue	Filter 4	0.09	0.10	0.27
7/23/2018 0:00	7/24/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
7/24/2018 0:00	7/25/2018 0:00	Perdue	Filter 4	0.09	0.09	0.10
7/25/2018 0:00	7/26/2018 0:00	Perdue	Filter 4	0.09	0.09	0.09
7/26/2018 0:00	7/27/2018 0:00	Perdue	Filter 4	0.09	0.09	0.10
7/27/2018 0:00	7/28/2018 0:00	Perdue	Filter 4	0.09	0.10	0.16
7/28/2018 0:00	7/29/2018 0:00	Perdue	Filter 4	0.08	0.09	0.18
7/29/2018 0:00	7/30/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
7/30/2018 0:00	7/31/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
7/31/2018 0:00	8/1/2018 0:00	Perdue	Filter 4	0.08	0.08	0.09
8/1/2018 0:00	8/2/2018 0:00	Perdue	Filter 4	0.08	0.08	0.09
8/2/2018 0:00	8/3/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
8/3/2018 0:00	8/4/2018 0:00	Perdue	Filter 4	0.08	0.08	0.09
8/4/2018 0:00	8/5/2018 0:00	Perdue	Filter 4	0.08	0.09	0.09
8/5/2018 0:00	8/6/2018 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/6/2018 0:00	8/7/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10

8/7/2018 0:00	8/8/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
8/8/2018 0:00	8/9/2018 0:00	Perdue	Filter 4	0.09	0.10	0.12
8/9/2018 0:00	8/10/2018 0:00	Perdue	Filter 4	0.09	0.10	0.10
8/10/2018 0:00	8/11/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
8/11/2018 0:00	8/12/2018 0:00	Perdue	Filter 4	0.09	0.10	0.12
8/12/2018 0:00	8/13/2018 0:00	Perdue	Filter 4	0.10	0.10	0.11
8/13/2018 0:00	8/14/2018 0:00	Perdue	Filter 4	0.10	0.10	0.11
8/14/2018 0:00	8/15/2018 0:00	Perdue	Filter 4	0.10	0.11	0.11
8/15/2018 0:00	8/16/2018 0:00	Perdue	Filter 4	0.10	0.11	0.11
8/16/2018 0:00	8/17/2018 0:00	Perdue	Filter 4	0.07	0.08	0.10
8/17/2018 0:00	8/18/2018 0:00	Perdue	Filter 4	0.06	0.08	0.09
8/18/2018 0:00	8/19/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/19/2018 0:00	8/20/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/20/2018 0:00	8/21/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/21/2018 0:00	8/22/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/22/2018 0:00	8/23/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/23/2018 0:00	8/24/2018 0:00	Perdue	Filter 4	0.07	0.09	0.11
8/24/2018 0:00	8/25/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/25/2018 0:00	8/26/2018 0:00	Perdue	Filter 4	0.07	0.08	0.10
8/26/2018 0:00	8/27/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
8/27/2018 0:00	8/28/2018 0:00	Perdue	Filter 4	0.07	0.08	0.10
8/28/2018 0:00	8/29/2018 0:00	Perdue	Filter 4	0.07	0.09	0.15
8/29/2018 0:00	8/30/2018 0:00	Perdue	Filter 4	0.11	0.12	1.00
8/30/2018 0:00	8/31/2018 0:00	Perdue	Filter 4	0.11	0.12	0.27
8/31/2018 0:00	9/1/2018 0:00	Perdue	Filter 4	0.14	0.15	0.19
9/1/2018 0:00	9/2/2018 0:00	Perdue	Filter 4	0.13	0.14	0.22
9/2/2018 0:00	9/3/2018 0:00	Perdue	Filter 4	0.13	0.15	0.29
9/3/2018 0:00	9/4/2018 0:00	Perdue	Filter 4	0.13	0.15	0.21
9/4/2018 0:00	9/5/2018 0:00	Perdue	Filter 4	0.13	0.14	0.15
9/5/2018 0:00	9/6/2018 0:00	Perdue	Filter 4	0.13	0.14	0.17
9/6/2018 0:00	9/7/2018 0:00	Perdue	Filter 4	0.10	0.13	0.19
9/7/2018 0:00	9/8/2018 0:00	Perdue	Filter 4	0.12	0.14	0.23
9/8/2018 0:00	9/9/2018 0:00	Perdue	Filter 4	0.13	0.14	0.16
9/9/2018 0:00	9/10/2018 0:00	Perdue	Filter 4	0.14	0.14	0.15
9/10/2018 0:00	9/11/2018 0:00	Perdue	Filter 4	0.14	0.15	0.17
9/11/2018 0:00	9/12/2018 0:00	Perdue	Filter 4	0.15	0.17	0.21
9/12/2018 0:00	9/13/2018 0:00	Perdue	Filter 4	0.18	0.19	0.21
9/13/2018 0:00	9/14/2018 0:00	Perdue	Filter 4	0.14	0.19	0.27
9/14/2018 0:00	9/15/2018 0:00	Perdue	Filter 4	0.15	0.18	0.22
9/15/2018 0:00	9/16/2018 0:00	Perdue	Filter 4	0.20	0.23	0.25
9/16/2018 0:00	9/17/2018 0:00	Perdue	Filter 4	0.11	0.19	0.25
9/17/2018 0:00	9/18/2018 0:00	Perdue	Filter 4	0.11	0.12	0.13
9/18/2018 0:00	9/19/2018 0:00	Perdue	Filter 4	0.11	0.12	0.13
9/19/2018 0:00	9/20/2018 0:00	Perdue	Filter 4	0.12	0.14	0.15
9/20/2018 0:00	9/21/2018 0:00	Perdue	Filter 4	0.12	0.14	0.86
9/21/2018 0:00	9/22/2018 0:00	Perdue	Filter 4	0.11	0.13	0.18
9/22/2018 0:00	9/23/2018 0:00	Perdue	Filter 4	0.12	0.13	0.15
9/23/2018 0:00	9/24/2018 0:00	Perdue	Filter 4	0.12	0.13	0.19
9/24/2018 0:00	9/25/2018 0:00	Perdue	Filter 4	0.13	0.14	0.16
9/25/2018 0:00	9/26/2018 0:00	Perdue	Filter 4	0.12	0.13	0.15
9/26/2018 0:00	9/27/2018 0:00	Perdue	Filter 4	0.13	0.14	0.16
9/27/2018 0:00	9/28/2018 0:00	Perdue	Filter 4	0.13	0.15	0.23
9/28/2018 0:00	9/29/2018 0:00	Perdue	Filter 4	0.12	0.14	0.16
9/29/2018 0:00	9/30/2018 0:00	Perdue	Filter 4	0.13	0.15	0.31
9/30/2018 0:00	10/1/2018 0:00	Perdue	Filter 4	0.13	0.15	0.17
10/1/2018 0:00	10/2/2018 0:00	Perdue	Filter 4	0.16	0.17	0.30
10/2/2018 0:00	10/3/2018 0:00	Perdue	Filter 4	0.16	0.17	0.21
10/3/2018 0:00	10/4/2018 0:00	Perdue	Filter 4	0.14	0.21	0.28
10/4/2018 0:00	10/5/2018 0:00	Perdue	Filter 4	0.14	0.15	0.24
10/5/2018 0:00	10/6/2018 0:00	Perdue	Filter 4	0.14	0.15	0.19
10/6/2018 0:00	10/7/2018 0:00	Perdue	Filter 4	0.16	0.17	0.19
10/7/2018 0:00	10/8/2018 0:00	Perdue	Filter 4	0.14	0.18	0.26
10/8/2018 0:00	10/9/2018 0:00	Perdue	Filter 4	0.14	0.15	0.24
10/9/2018 0:00	10/10/2018 0:00	Perdue	Filter 4	0.15	0.17	0.20
10/10/2018 0:00	10/11/2018 0:00	Perdue	Filter 4	0.16	0.19	0.29
10/11/2018 0:00	10/12/2018 0:00	Perdue	Filter 4	0.16	0.17	0.22
10/12/2018 0:00	10/13/2018 0:00	Perdue	Filter 4	0.08	0.13	1.00
10/13/2018 0:00	10/14/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
10/14/2018 0:00	10/15/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
10/15/2018 0:00	10/16/2018 0:00	Perdue	Filter 4	0.10	0.12	0.16
10/16/2018 0:00	10/17/2018 0:00	Perdue	Filter 4	0.12	0.14	0.15
10/17/2018 0:00	10/18/2018 0:00	Perdue	Filter 4	0.15	0.18	0.21
10/18/2018 0:00	10/19/2018 0:00	Perdue	Filter 4	0.19	0.21	0.22

10/19/2018 0:00	10/20/2018 0:00	Perdue	Filter 4	0.07	0.09	0.22
10/20/2018 0:00	10/21/2018 0:00	Perdue	Filter 4	0.07	0.07	0.09
10/21/2018 0:00	10/22/2018 0:00	Perdue	Filter 4	0.07	0.07	0.12
10/22/2018 0:00	10/23/2018 0:00	Perdue	Filter 4	0.07	0.09	0.11
10/23/2018 0:00	10/24/2018 0:00	Perdue	Filter 4	0.10	0.11	0.13
10/24/2018 0:00	10/25/2018 0:00	Perdue	Filter 4	0.12	0.13	0.15
10/25/2018 0:00	10/26/2018 0:00	Perdue	Filter 4	0.14	0.17	0.19
10/26/2018 0:00	10/27/2018 0:00	Perdue	Filter 4	0.00	0.09	0.26
10/27/2018 0:00	10/28/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
10/28/2018 0:00	10/29/2018 0:00	Perdue	Filter 4	0.07	0.07	0.08
10/29/2018 0:00	10/30/2018 0:00	Perdue	Filter 4	0.07	0.07	0.08
10/30/2018 0:00	10/31/2018 0:00	Perdue	Filter 4	0.06	0.07	0.08
10/31/2018 0:00	11/1/2018 0:00	Perdue	Filter 4	0.06	0.07	0.09
11/1/2018 0:00	11/2/2018 0:00	Perdue	Filter 4	0.06	0.07	0.08
11/2/2018 0:00	11/3/2018 0:00	Perdue	Filter 4	0.06	0.07	0.07
11/3/2018 0:00	11/4/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/4/2018 0:00	11/5/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/5/2018 0:00	11/6/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/6/2018 0:00	11/7/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/7/2018 0:00	11/8/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/8/2018 0:00	11/9/2018 0:00	Perdue	Filter 4	0.07	0.07	0.07
11/9/2018 0:00	11/10/2018 0:00	Perdue	Filter 4	0.07	0.07	0.10
11/10/2018 0:00	11/11/2018 0:00	Perdue	Filter 4	0.07	0.08	0.11
11/11/2018 0:00	11/12/2018 0:00	Perdue	Filter 4	0.07	0.08	0.10
11/12/2018 0:00	11/13/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
11/13/2018 0:00	11/14/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
11/14/2018 0:00	11/15/2018 0:00	Perdue	Filter 4	0.07	0.08	0.16
11/15/2018 0:00	11/16/2018 0:00	Perdue	Filter 4	0.07	0.08	0.13
11/16/2018 0:00	11/17/2018 0:00	Perdue	Filter 4	0.07	0.09	0.28
11/17/2018 0:00	11/18/2018 0:00	Perdue	Filter 4	0.07	0.08	0.47
11/18/2018 0:00	11/19/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
11/19/2018 0:00	11/20/2018 0:00	Perdue	Filter 4	0.07	0.08	0.11
11/20/2018 0:00	11/21/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
11/21/2018 0:00	11/22/2018 0:00	Perdue	Filter 4	0.08	0.08	0.14
11/22/2018 0:00	11/23/2018 0:00	Perdue	Filter 4	0.08	0.08	0.15
11/23/2018 0:00	11/24/2018 0:00	Perdue	Filter 4	0.07	0.08	0.09
11/24/2018 0:00	11/25/2018 0:00	Perdue	Filter 4	0.08	0.08	0.09
11/25/2018 0:00	11/26/2018 0:00	Perdue	Filter 4	0.08	0.09	0.10
11/26/2018 0:00	11/27/2018 0:00	Perdue	Filter 4	0.08	0.09	0.12
11/27/2018 0:00	11/28/2018 0:00	Perdue	Filter 4	0.08	0.09	0.11
11/28/2018 0:00	11/29/2018 0:00	Perdue	Filter 4	0.08	0.10	0.12
11/29/2018 0:00	11/30/2018 0:00	Perdue	Filter 4	0.10	0.10	0.11
11/30/2018 0:00	12/1/2018 0:00	Perdue	Filter 4	0.10	0.11	0.12
12/1/2018 0:00	12/2/2018 0:00	Perdue	Filter 4	0.10	0.12	0.14
12/2/2018 0:00	12/3/2018 0:00	Perdue	Filter 4	0.14	0.14	0.18
12/3/2018 0:00	12/4/2018 0:00	Perdue	Filter 4	0.11	0.12	0.14
12/4/2018 0:00	12/5/2018 0:00	Perdue	Filter 4	0.11	0.12	0.12
12/5/2018 0:00	12/6/2018 0:00	Perdue	Filter 4	0.12	0.13	0.14
12/6/2018 0:00	12/7/2018 0:00	Perdue	Filter 4	0.13	0.13	0.15
12/7/2018 0:00	12/8/2018 0:00	Perdue	Filter 4	0.13	0.15	0.15
12/8/2018 0:00	12/9/2018 0:00	Perdue	Filter 4	0.15	0.15	0.17
12/9/2018 0:00	12/10/2018 0:00	Perdue	Filter 4	0.15	0.16	0.16
12/10/2018 0:00	12/11/2018 0:00	Perdue	Filter 4	0.16	0.17	0.41
12/11/2018 0:00	12/12/2018 0:00	Perdue	Filter 4	0.15	0.16	0.17
12/12/2018 0:00	12/13/2018 0:00	Perdue	Filter 4	0.16	0.17	0.21
12/13/2018 0:00	12/14/2018 0:00	Perdue	Filter 4	0.16	0.25	0.30
12/14/2018 0:00	12/15/2018 0:00	Perdue	Filter 4	0.09	0.19	0.31
12/15/2018 0:00	12/16/2018 0:00	Perdue	Filter 4	0.09	0.11	0.13
12/16/2018 0:00	12/17/2018 0:00	Perdue	Filter 4	0.09	0.12	0.32
12/17/2018 0:00	12/18/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
12/18/2018 0:00	12/19/2018 0:00	Perdue	Filter 4	0.09	0.11	0.16
12/19/2018 0:00	12/20/2018 0:00	Perdue	Filter 4	0.09	0.10	0.11
12/20/2018 0:00	12/21/2018 0:00	Perdue	Filter 4	0.09	0.10	1.00
12/21/2018 0:00	12/22/2018 0:00	Perdue	Filter 4	0.07	0.10	0.30
12/22/2018 0:00	12/23/2018 0:00	Perdue	Filter 4	0.09	0.11	0.34
12/23/2018 0:00	12/24/2018 0:00	Perdue	Filter 4	0.12	0.12	0.12
12/24/2018 0:00	12/25/2018 0:00	Perdue	Filter 4	0.10	0.12	0.24
12/25/2018 0:00	12/26/2018 0:00	Perdue	Filter 4	0.10	0.11	0.11
12/26/2018 0:00	12/27/2018 0:00	Perdue	Filter 4	0.10	0.11	0.16
12/27/2018 0:00	12/28/2018 0:00	Perdue	Filter 4	0.10	0.10	0.38
12/28/2018 0:00	12/29/2018 0:00	Perdue	Filter 4	0.10	0.11	0.12
12/29/2018 0:00	12/30/2018 0:00	Perdue	Filter 4	0.10	0.11	0.11
12/30/2018 0:00	12/31/2018 0:00	Perdue	Filter 4	0.10	0.11	0.14

12/31/2018 0:00	1/1/2019 0:00	Perdue	Filter 4	0.10	0.11	0.12
1/1/2019 0:00	1/2/2019 0:00	Perdue	Filter 4	0.10	0.11	0.11
1/2/2019 0:00	1/3/2019 0:00	Perdue	Filter 4	0.10	0.11	0.12
1/3/2019 0:00	1/4/2019 0:00	Perdue	Filter 4	0.10	0.11	0.11
1/4/2019 0:00	1/5/2019 0:00	Perdue	Filter 4	0.11	0.11	0.12
1/5/2019 0:00	1/6/2019 0:00	Perdue	Filter 4	0.11	0.11	0.12
1/6/2019 0:00	1/7/2019 0:00	Perdue	Filter 4	0.11	0.11	0.11
1/7/2019 0:00	1/8/2019 0:00	Perdue	Filter 4	0.11	0.11	0.11
1/8/2019 0:00	1/9/2019 0:00	Perdue	Filter 4	0.11	0.11	0.17
1/9/2019 0:00	1/10/2019 0:00	Perdue	Filter 4	0.11	0.12	0.12
1/10/2019 0:00	1/11/2019 0:00	Perdue	Filter 4	0.11	0.12	0.15
1/11/2019 0:00	1/12/2019 0:00	Perdue	Filter 4	0.12	0.12	0.12
1/12/2019 0:00	1/13/2019 0:00	Perdue	Filter 4	0.11	0.12	0.45
1/13/2019 0:00	1/14/2019 0:00	Perdue	Filter 4	0.12	0.12	0.16
1/14/2019 0:00	1/15/2019 0:00	Perdue	Filter 4	0.11	0.12	0.12
1/15/2019 0:00	1/16/2019 0:00	Perdue	Filter 4	0.12	0.12	0.15
1/16/2019 0:00	1/17/2019 0:00	Perdue	Filter 4	0.13	0.13	0.13
1/17/2019 0:00	1/18/2019 0:00	Perdue	Filter 4	0.12	0.13	0.13
1/18/2019 0:00	1/19/2019 0:00	Perdue	Filter 4	0.13	0.13	0.16
1/19/2019 0:00	1/20/2019 0:00	Perdue	Filter 4	0.13	0.13	0.13
1/20/2019 0:00	1/21/2019 0:00	Perdue	Filter 4	0.13	0.13	0.15
1/21/2019 0:00	1/22/2019 0:00	Perdue	Filter 4	0.13	0.14	0.14
1/22/2019 0:00	1/23/2019 0:00	Perdue	Filter 4	0.14	0.14	0.21
1/23/2019 0:00	1/24/2019 0:00	Perdue	Filter 4	0.13	0.14	0.18
1/24/2019 0:00	1/25/2019 0:00	Perdue	Filter 4	0.15	0.15	0.17
1/25/2019 0:00	1/26/2019 0:00	Perdue	Filter 4	0.14	0.14	0.15
1/26/2019 0:00	1/27/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
1/27/2019 0:00	1/28/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
1/28/2019 0:00	1/29/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
1/29/2019 0:00	1/30/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
1/30/2019 0:00	1/31/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
1/31/2019 0:00	2/1/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/1/2019 0:00	2/2/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/2/2019 0:00	2/3/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/3/2019 0:00	2/4/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/4/2019 0:00	2/5/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/5/2019 0:00	2/6/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/6/2019 0:00	2/7/2019 0:00	Perdue	Filter 4	0.14	0.14	0.15
2/7/2019 0:00	2/8/2019 0:00	Perdue	Filter 4	0.14	0.14	0.16
2/8/2019 0:00	2/9/2019 0:00	Perdue	Filter 4	0.14	0.14	0.15
2/9/2019 0:00	2/10/2019 0:00	Perdue	Filter 4	0.14	0.14	0.16
2/10/2019 0:00	2/11/2019 0:00	Perdue	Filter 4	0.13	0.15	0.19
2/11/2019 0:00	2/12/2019 0:00	Perdue	Filter 4	0.13	0.14	0.16
2/12/2019 0:00	2/13/2019 0:00	Perdue	Filter 4	0.13	0.14	0.14
2/13/2019 0:00	2/14/2019 0:00	Perdue	Filter 4	0.14	0.14	0.21
2/14/2019 0:00	2/15/2019 0:00	Perdue	Filter 4	0.14	0.14	0.14
2/15/2019 0:00	2/16/2019 0:00	Perdue	Filter 4	0.14	0.15	0.19
2/16/2019 0:00	2/17/2019 0:00	Perdue	Filter 4	0.14	0.14	0.15
2/17/2019 0:00	2/18/2019 0:00	Perdue	Filter 4	0.15	0.15	0.15
2/18/2019 0:00	2/19/2019 0:00	Perdue	Filter 4	0.14	0.15	0.19
2/19/2019 0:00	2/20/2019 0:00	Perdue	Filter 4	0.13	0.14	0.15
2/20/2019 0:00	2/21/2019 0:00	Perdue	Filter 4	0.14	0.15	0.20
2/21/2019 0:00	2/22/2019 0:00	Perdue	Filter 4	0.15	0.15	0.32
2/22/2019 0:00	2/23/2019 0:00	Perdue	Filter 4	0.15	0.16	0.25
2/23/2019 0:00	2/24/2019 0:00	Perdue	Filter 4	0.16	0.16	0.16
2/24/2019 0:00	2/25/2019 0:00	Perdue	Filter 4	0.14	0.16	0.17
2/25/2019 0:00	2/26/2019 0:00	Perdue	Filter 4	0.14	0.15	0.16
2/26/2019 0:00	2/27/2019 0:00	Perdue	Filter 4	0.14	0.16	0.33
2/27/2019 0:00	2/28/2019 0:00	Perdue	Filter 4	0.14	0.16	0.18
2/28/2019 0:00	3/1/2019 0:00	Perdue	Filter 4	0.16	0.16	0.16
3/1/2019 0:00	3/2/2019 0:00	Perdue	Filter 4	0.15	0.16	0.30
3/2/2019 0:00	3/3/2019 0:00	Perdue	Filter 4	0.16	0.19	0.34
3/3/2019 0:00	3/4/2019 0:00	Perdue	Filter 4	0.15	0.16	0.19
3/4/2019 0:00	3/5/2019 0:00	Perdue	Filter 4	0.15	0.15	0.19
3/5/2019 0:00	3/6/2019 0:00	Perdue	Filter 4	0.15	0.16	0.17
3/6/2019 0:00	3/7/2019 0:00	Perdue	Filter 4	0.16	0.17	0.21
3/7/2019 0:00	3/8/2019 0:00	Perdue	Filter 4	0.17	0.19	0.22
3/8/2019 0:00	3/9/2019 0:00	Perdue	Filter 4	0.16	0.19	0.61
3/9/2019 0:00	3/10/2019 0:00	Perdue	Filter 4	0.16	0.18	0.19
3/10/2019 0:00	3/11/2019 0:00	Perdue	Filter 4	0.16	0.18	0.22
3/11/2019 0:00	3/12/2019 0:00	Perdue	Filter 4	0.16	0.17	0.17
3/12/2019 0:00	3/13/2019 0:00	Perdue	Filter 4	0.17	0.17	0.31
3/13/2019 0:00	3/14/2019 0:00	Perdue	Filter 4	0.17	0.17	0.20

3/14/2019 0:00	3/15/2019 0:00	Perdue	Filter 4	0.17	0.17	0.26
3/15/2019 0:00	3/16/2019 0:00	Perdue	Filter 4	0.17	0.18	0.19
3/16/2019 0:00	3/17/2019 0:00	Perdue	Filter 4	0.18	0.19	0.28
3/17/2019 0:00	3/18/2019 0:00	Perdue	Filter 4	0.18	0.20	0.32
3/18/2019 0:00	3/19/2019 0:00	Perdue	Filter 4	0.22	0.22	0.22
3/19/2019 0:00	3/20/2019 0:00	Perdue	Filter 4	0.11	0.18	0.22
3/20/2019 0:00	3/21/2019 0:00	Perdue	Filter 4	0.11	0.13	1.00
3/21/2019 0:00	3/22/2019 0:00	Perdue	Filter 4	0.11	0.16	0.28
3/22/2019 0:00	3/23/2019 0:00	Perdue	Filter 4	0.17	0.24	0.27
3/23/2019 0:00	3/24/2019 0:00	Perdue	Filter 4	0.14	0.24	0.77
3/24/2019 0:00	3/25/2019 0:00	Perdue	Filter 4	0.34	0.34	0.34
3/25/2019 0:00	3/26/2019 0:00	Perdue	Filter 4	0.11	0.26	0.37
3/26/2019 0:00	3/27/2019 0:00	Perdue	Filter 4	0.11	0.13	0.46
3/27/2019 0:00	3/28/2019 0:00	Perdue	Filter 4	0.12	0.13	0.17
3/28/2019 0:00	3/29/2019 0:00	Perdue	Filter 4	0.12	0.13	0.22
3/29/2019 0:00	3/30/2019 0:00	Perdue	Filter 4	0.11	0.15	0.42
3/30/2019 0:00	3/31/2019 0:00	Perdue	Filter 4	0.12	0.14	0.35
3/31/2019 0:00	4/1/2019 0:00	Perdue	Filter 4	0.12	0.14	0.17
4/1/2019 0:00	4/2/2019 0:00	Perdue	Filter 4	0.11	0.12	0.24
4/2/2019 0:00	4/3/2019 0:00	Perdue	Filter 4	0.10	0.21	0.58
4/3/2019 0:00	4/4/2019 0:00	Perdue	Filter 4	0.13	0.15	0.30
4/4/2019 0:00	4/5/2019 0:00	Perdue	Filter 4	0.13	0.13	0.14
4/5/2019 0:00	4/6/2019 0:00	Perdue	Filter 4	0.12	0.14	0.23
4/6/2019 0:00	4/7/2019 0:00	Perdue	Filter 4	0.13	0.15	0.16
4/7/2019 0:00	4/8/2019 0:00	Perdue	Filter 4	0.13	0.14	0.15
4/8/2019 0:00	4/9/2019 0:00	Perdue	Filter 4	0.13	0.15	0.27
4/9/2019 0:00	4/10/2019 0:00	Perdue	Filter 4	0.12	0.15	0.18
4/10/2019 0:00	4/11/2019 0:00	Perdue	Filter 4	0.12	0.14	0.28
4/11/2019 0:00	4/12/2019 0:00	Perdue	Filter 4	0.13	0.15	0.19
4/12/2019 0:00	4/13/2019 0:00	Perdue	Filter 4	0.10	0.13	0.58
4/13/2019 0:00	4/14/2019 0:00	Perdue	Filter 4	0.12	0.15	0.22
4/14/2019 0:00	4/15/2019 0:00	Perdue	Filter 4	0.14	0.15	0.16
4/15/2019 0:00	4/16/2019 0:00	Perdue	Filter 4	0.12	0.14	0.22
4/16/2019 0:00	4/17/2019 0:00	Perdue	Filter 4	0.13	0.15	0.19
4/17/2019 0:00	4/18/2019 0:00	Perdue	Filter 4	0.09	0.15	0.94
4/18/2019 0:00	4/19/2019 0:00	Perdue	Filter 4	0.10	0.13	0.71
4/19/2019 0:00	4/20/2019 0:00	Perdue	Filter 4	0.11	0.12	0.15
4/20/2019 0:00	4/21/2019 0:00	Perdue	Filter 4	0.11	0.12	0.13
4/21/2019 0:00	4/22/2019 0:00	Perdue	Filter 4	0.11	0.11	0.18
4/22/2019 0:00	4/23/2019 0:00	Perdue	Filter 4	0.10	0.12	0.20
4/23/2019 0:00	4/24/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
4/24/2019 0:00	4/25/2019 0:00	Perdue	Filter 4	0.09	0.09	0.17
4/25/2019 0:00	4/26/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
4/26/2019 0:00	4/27/2019 0:00	Perdue	Filter 4	0.08	0.11	0.16
4/27/2019 0:00	4/28/2019 0:00	Perdue	Filter 4	0.09	0.10	0.11
4/28/2019 0:00	4/29/2019 0:00	Perdue	Filter 4	0.09	0.09	0.13
4/29/2019 0:00	4/30/2019 0:00	Perdue	Filter 4	0.09	0.09	0.12
4/30/2019 0:00	5/1/2019 0:00	Perdue	Filter 4	0.10	0.11	0.30
5/1/2019 0:00	5/2/2019 0:00	Perdue	Filter 4	0.11	0.11	0.19
5/2/2019 0:00	5/3/2019 0:00	Perdue	Filter 4	0.11	0.12	0.16
5/3/2019 0:00	5/4/2019 0:00	Perdue	Filter 4	0.11	0.12	0.17
5/4/2019 0:00	5/5/2019 0:00	Perdue	Filter 4	0.12	0.13	0.26
5/5/2019 0:00	5/6/2019 0:00	Perdue	Filter 4	0.12	0.13	0.16
5/6/2019 0:00	5/7/2019 0:00	Perdue	Filter 4	0.13	0.14	0.19
5/7/2019 0:00	5/8/2019 0:00	Perdue	Filter 4	0.13	0.15	0.19
5/8/2019 0:00	5/9/2019 0:00	Perdue	Filter 4	0.13	0.14	0.17
5/9/2019 0:00	5/10/2019 0:00	Perdue	Filter 4	0.14	0.14	0.20
5/10/2019 0:00	5/11/2019 0:00	Perdue	Filter 4	0.14	0.17	0.48
5/11/2019 0:00	5/12/2019 0:00	Perdue	Filter 4	0.14	0.15	0.16
5/12/2019 0:00	5/13/2019 0:00	Perdue	Filter 4	0.14	0.15	0.20
5/13/2019 0:00	5/14/2019 0:00	Perdue	Filter 4	0.15	0.16	0.19
5/14/2019 0:00	5/15/2019 0:00	Perdue	Filter 4	0.15	0.16	0.21
5/15/2019 0:00	5/16/2019 0:00	Perdue	Filter 4	0.15	0.17	0.24
5/16/2019 0:00	5/17/2019 0:00	Perdue	Filter 4	0.15	0.17	0.25
5/17/2019 0:00	5/18/2019 0:00	Perdue	Filter 4	0.16	0.17	0.27
5/18/2019 0:00	5/19/2019 0:00	Perdue	Filter 4	0.16	0.17	0.47
5/19/2019 0:00	5/20/2019 0:00	Perdue	Filter 4	0.16	0.24	1.00
5/20/2019 0:00	5/21/2019 0:00	Perdue	Filter 4	0.00	1.00	1.00
5/21/2019 0:00	5/22/2019 0:00	Perdue	Filter 4	1.00		1.00
5/22/2019 0:00	5/23/2019 0:00	Perdue	Filter 4	0.00	0.15	1.00
5/23/2019 0:00	5/24/2019 0:00	Perdue	Filter 4	0.14	0.15	0.26
5/24/2019 0:00	5/25/2019 0:00	Perdue	Filter 4	0.14	0.15	0.24
5/25/2019 0:00	5/26/2019 0:00	Perdue	Filter 4	0.14	0.16	0.20

5/26/2019 0:00	5/27/2019 0:00	Perdue	Filter 4	0.15	0.16	0.22
5/27/2019 0:00	5/28/2019 0:00	Perdue	Filter 4	0.15	0.15	0.20
5/28/2019 0:00	5/29/2019 0:00	Perdue	Filter 4	0.15	0.16	0.21
5/29/2019 0:00	5/30/2019 0:00	Perdue	Filter 4	0.15	0.16	1.00
5/30/2019 0:00	5/31/2019 0:00	Perdue	Filter 4	0.00	0.17	0.47
5/31/2019 0:00	6/1/2019 0:00	Perdue	Filter 4	0.15	0.16	0.17
6/1/2019 0:00	6/2/2019 0:00	Perdue	Filter 4	0.16	0.16	0.19
6/2/2019 0:00	6/3/2019 0:00	Perdue	Filter 4	0.16	0.17	0.19
6/3/2019 0:00	6/4/2019 0:00	Perdue	Filter 4	0.16	0.17	0.18
6/4/2019 0:00	6/5/2019 0:00	Perdue	Filter 4	0.00	0.17	0.18
6/5/2019 0:00	6/6/2019 0:00	Perdue	Filter 4	0.16	0.18	0.25
6/6/2019 0:00	6/7/2019 0:00	Perdue	Filter 4	0.16	0.17	0.17
6/7/2019 0:00	6/8/2019 0:00	Perdue	Filter 4	0.16	0.16	0.18
6/8/2019 0:00	6/9/2019 0:00	Perdue	Filter 4	0.00	0.16	0.17
6/9/2019 0:00	6/10/2019 0:00	Perdue	Filter 4	0.16	0.19	0.24
6/10/2019 0:00	6/11/2019 0:00	Perdue	Filter 4	0.00	0.17	0.21
6/11/2019 0:00	6/12/2019 0:00	Perdue	Filter 4	0.06	0.12	0.65
6/12/2019 0:00	6/13/2019 0:00	Perdue	Filter 4	0.00	0.08	0.22
6/13/2019 0:00	6/14/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
6/14/2019 0:00	6/15/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/15/2019 0:00	6/16/2019 0:00	Perdue	Filter 4	0.06	0.06	0.07
6/16/2019 0:00	6/17/2019 0:00	Perdue	Filter 4	0.00	0.08	0.20
6/17/2019 0:00	6/18/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
6/18/2019 0:00	6/19/2019 0:00	Perdue	Filter 4	0.07	0.07	0.09
6/19/2019 0:00	6/20/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/20/2019 0:00	6/21/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/21/2019 0:00	6/22/2019 0:00	Perdue	Filter 4	0.00	0.12	0.25
6/22/2019 0:00	6/23/2019 0:00	Perdue	Filter 4	0.07	0.08	0.10
6/23/2019 0:00	6/24/2019 0:00	Perdue	Filter 4	0.06	0.07	0.07
6/24/2019 0:00	6/25/2019 0:00	Perdue	Filter 4	0.06	0.06	0.14
6/25/2019 0:00	6/26/2019 0:00	Perdue	Filter 4	0.00	0.06	0.08
6/26/2019 0:00	6/27/2019 0:00	Perdue	Filter 4	0.06	0.11	0.19
6/27/2019 0:00	6/28/2019 0:00	Perdue	Filter 4	0.06	0.08	0.09
6/28/2019 0:00	6/29/2019 0:00	Perdue	Filter 4	0.06	0.06	0.07
6/29/2019 0:00	6/30/2019 0:00	Perdue	Filter 4	0.05	0.06	0.07
6/30/2019 0:00	7/1/2019 0:00	Perdue	Filter 4	0.00	0.09	0.21
7/1/2019 0:00	7/2/2019 0:00	Perdue	Filter 4	0.06	0.06	0.08
7/2/2019 0:00	7/3/2019 0:00	Perdue	Filter 4	0.05	0.06	0.07
7/3/2019 0:00	7/4/2019 0:00	Perdue	Filter 4	0.00	0.06	0.08
7/4/2019 0:00	7/5/2019 0:00	Perdue	Filter 4	0.06	0.08	0.15
7/5/2019 0:00	7/6/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
7/6/2019 0:00	7/7/2019 0:00	Perdue	Filter 4	0.06	0.06	0.08
7/7/2019 0:00	7/8/2019 0:00	Perdue	Filter 4	0.06	0.06	0.08
7/8/2019 0:00	7/9/2019 0:00	Perdue	Filter 4	0.00	0.08	0.18
7/9/2019 0:00	7/10/2019 0:00	Perdue	Filter 4	0.06	0.08	0.10
7/10/2019 0:00	7/11/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
7/11/2019 0:00	7/12/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
7/12/2019 0:00	7/13/2019 0:00	Perdue	Filter 4	0.00	0.08	0.18
7/13/2019 0:00	7/14/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
7/14/2019 0:00	7/15/2019 0:00	Perdue	Filter 4	0.06	0.07	0.08
7/15/2019 0:00	7/16/2019 0:00	Perdue	Filter 4	0.06	0.07	0.10
7/16/2019 0:00	7/17/2019 0:00	Perdue	Filter 4	0.00	0.10	0.18
7/17/2019 0:00	7/18/2019 0:00	Perdue	Filter 4	0.07	0.08	0.10
7/18/2019 0:00	7/19/2019 0:00	Perdue	Filter 4	0.07	0.08	0.10
7/19/2019 0:00	7/20/2019 0:00	Perdue	Filter 4	0.08	0.09	0.11
7/20/2019 0:00	7/21/2019 0:00	Perdue	Filter 4	0.00	0.10	0.16
7/21/2019 0:00	7/22/2019 0:00	Perdue	Filter 4	0.08	0.09	0.11
7/22/2019 0:00	7/23/2019 0:00	Perdue	Filter 4	0.00	0.09	0.13
7/23/2019 0:00	7/24/2019 0:00	Perdue	Filter 4	0.00	0.09	0.12
7/24/2019 0:00	7/25/2019 0:00	Perdue	Filter 4	0.07	0.08	0.30
7/25/2019 0:00	7/26/2019 0:00	Perdue	Filter 4	0.00	0.09	0.15
7/26/2019 0:00	7/27/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
7/27/2019 0:00	7/28/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
7/28/2019 0:00	7/29/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
7/29/2019 0:00	7/30/2019 0:00	Perdue	Filter 4	0.07	0.08	0.12
7/30/2019 0:00	7/31/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
7/31/2019 0:00	8/1/2019 0:00	Perdue	Filter 4	0.00	0.10	0.28
8/1/2019 0:00	8/2/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
8/2/2019 0:00	8/3/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
8/3/2019 0:00	8/4/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
8/4/2019 0:00	8/5/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
8/5/2019 0:00	8/6/2019 0:00	Perdue	Filter 4	0.00	0.09	0.17
8/6/2019 0:00	8/7/2019 0:00	Perdue	Filter 4	0.09	0.09	0.12

8/7/2019 0:00	8/8/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
8/8/2019 0:00	8/9/2019 0:00	Perdue	Filter 4	0.09	0.10	0.13
8/9/2019 0:00	8/10/2019 0:00	Perdue	Filter 4	0.00	0.10	0.15
8/10/2019 0:00	8/11/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/11/2019 0:00	8/12/2019 0:00	Perdue	Filter 4	0.08	0.09	0.11
8/12/2019 0:00	8/13/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
8/13/2019 0:00	8/14/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/14/2019 0:00	8/15/2019 0:00	Perdue	Filter 4	0.09	0.10	0.14
8/15/2019 0:00	8/16/2019 0:00	Perdue	Filter 4	0.11	0.12	0.17
8/16/2019 0:00	8/17/2019 0:00	Perdue	Filter 4	0.12	0.13	0.17
8/17/2019 0:00	8/18/2019 0:00	Perdue	Filter 4	0.00	0.10	0.14
8/18/2019 0:00	8/19/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
8/19/2019 0:00	8/20/2019 0:00	Perdue	Filter 4	0.00	0.09	0.13
8/20/2019 0:00	8/21/2019 0:00	Perdue	Filter 4	0.00	0.09	0.14
8/21/2019 0:00	8/22/2019 0:00	Perdue	Filter 4	0.08	0.09	0.14
8/22/2019 0:00	8/23/2019 0:00	Perdue	Filter 4	0.09	0.10	0.18
8/23/2019 0:00	8/24/2019 0:00	Perdue	Filter 4	0.09	0.10	0.14
8/24/2019 0:00	8/25/2019 0:00	Perdue	Filter 4	0.00	0.10	0.14
8/25/2019 0:00	8/26/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/26/2019 0:00	8/27/2019 0:00	Perdue	Filter 4	0.08	0.09	0.14
8/27/2019 0:00	8/28/2019 0:00	Perdue	Filter 4	0.08	0.08	0.12
8/28/2019 0:00	8/29/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
8/29/2019 0:00	8/30/2019 0:00	Perdue	Filter 4	0.09	0.10	0.14
8/30/2019 0:00	8/31/2019 0:00	Perdue	Filter 4	0.09	0.11	1.00
8/31/2019 0:00	9/1/2019 0:00	Perdue	Filter 4	0.09	0.10	0.29
9/1/2019 0:00	9/2/2019 0:00	Perdue	Filter 4	0.09	0.10	1.00
9/2/2019 0:00	9/3/2019 0:00	Perdue	Filter 4	0.00	0.11	0.57
9/3/2019 0:00	9/4/2019 0:00	Perdue	Filter 4	0.07	0.09	0.20
9/4/2019 0:00	9/5/2019 0:00	Perdue	Filter 4	0.00	0.10	0.14
9/5/2019 0:00	9/6/2019 0:00	Perdue	Filter 4	0.08	0.09	0.11
9/6/2019 0:00	9/7/2019 0:00	Perdue	Filter 4	0.08	0.10	0.14
9/7/2019 0:00	9/8/2019 0:00	Perdue	Filter 4	0.09	0.10	0.13
9/8/2019 0:00	9/9/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
9/9/2019 0:00	9/10/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
9/10/2019 0:00	9/11/2019 0:00	Perdue	Filter 4	0.09	0.09	0.12
9/11/2019 0:00	9/12/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
9/12/2019 0:00	9/13/2019 0:00	Perdue	Filter 4	0.00	0.08	0.17
9/13/2019 0:00	9/14/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
9/14/2019 0:00	9/15/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
9/15/2019 0:00	9/16/2019 0:00	Perdue	Filter 4	0.07	0.09	0.13
9/16/2019 0:00	9/17/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
9/17/2019 0:00	9/18/2019 0:00	Perdue	Filter 4	0.07	0.09	0.12
9/18/2019 0:00	9/19/2019 0:00	Perdue	Filter 4	0.09	0.09	0.12
9/19/2019 0:00	9/20/2019 0:00	Perdue	Filter 4	0.00	0.09	0.20
9/20/2019 0:00	9/21/2019 0:00	Perdue	Filter 4	0.09	0.10	0.15
9/21/2019 0:00	9/22/2019 0:00	Perdue	Filter 4	0.09	0.10	0.13
9/22/2019 0:00	9/23/2019 0:00	Perdue	Filter 4	0.09	0.11	0.16
9/23/2019 0:00	9/24/2019 0:00	Perdue	Filter 4	0.08	0.10	0.12
9/24/2019 0:00	9/25/2019 0:00	Perdue	Filter 4	0.00	0.10	0.40
9/25/2019 0:00	9/26/2019 0:00	Perdue	Filter 4	0.00	0.11	0.14
9/26/2019 0:00	9/27/2019 0:00	Perdue	Filter 4	0.00	0.11	0.46
9/27/2019 0:00	9/28/2019 0:00	Perdue	Filter 4	0.00	0.10	0.27
9/28/2019 0:00	9/29/2019 0:00	Perdue	Filter 4	0.10	0.11	0.13
9/29/2019 0:00	9/30/2019 0:00	Perdue	Filter 4	0.00	0.11	0.14
9/30/2019 0:00	10/1/2019 0:00	Perdue	Filter 4	0.00	0.10	0.17
10/1/2019 0:00	10/2/2019 0:00	Perdue	Filter 4	0.10	0.12	0.18
10/2/2019 0:00	10/3/2019 0:00	Perdue	Filter 4	0.10	0.12	0.14
10/3/2019 0:00	10/4/2019 0:00	Perdue	Filter 4	0.09	0.10	0.18
10/4/2019 0:00	10/5/2019 0:00	Perdue	Filter 4	0.08	0.10	0.12
10/5/2019 0:00	10/6/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
10/6/2019 0:00	10/7/2019 0:00	Perdue	Filter 4	0.07	0.10	0.13
10/7/2019 0:00	10/8/2019 0:00	Perdue	Filter 4	0.06	0.08	0.11
10/8/2019 0:00	10/9/2019 0:00	Perdue	Filter 4	0.00	0.08	0.11
10/9/2019 0:00	10/10/2019 0:00	Perdue	Filter 4	0.07	0.08	0.09
10/10/2019 0:00	10/11/2019 0:00	Perdue	Filter 4	0.06	0.08	0.09
10/11/2019 0:00	10/12/2019 0:00	Perdue	Filter 4	0.06	0.08	0.10
10/12/2019 0:00	10/13/2019 0:00	Perdue	Filter 4	0.06	0.08	0.11
10/13/2019 0:00	10/14/2019 0:00	Perdue	Filter 4	0.07	0.08	0.10
10/14/2019 0:00	10/15/2019 0:00	Perdue	Filter 4	0.00	0.09	0.19
10/15/2019 0:00	10/16/2019 0:00	Perdue	Filter 4	0.06	0.08	0.10
10/16/2019 0:00	10/17/2019 0:00	Perdue	Filter 4	0.07	0.09	0.13
10/17/2019 0:00	10/18/2019 0:00	Perdue	Filter 4	0.07	0.08	0.10
10/18/2019 0:00	10/19/2019 0:00	Perdue	Filter 4	0.06	0.08	0.11

10/19/2019 0:00	10/20/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
10/20/2019 0:00	10/21/2019 0:00	Perdue	Filter 4	0.00	0.09	0.13
10/21/2019 0:00	10/22/2019 0:00	Perdue	Filter 4	0.07	0.09	0.14
10/22/2019 0:00	10/23/2019 0:00	Perdue	Filter 4	0.00	0.09	0.22
10/23/2019 0:00	10/24/2019 0:00	Perdue	Filter 4	0.05	0.07	0.09
10/24/2019 0:00	10/25/2019 0:00	Perdue	Filter 4	0.00	0.07	0.12
10/25/2019 0:00	10/26/2019 0:00	Perdue	Filter 4	0.05	0.06	0.08
10/26/2019 0:00	10/27/2019 0:00	Perdue	Filter 4	0.05	0.06	0.11
10/27/2019 0:00	10/28/2019 0:00	Perdue	Filter 4	0.05	0.05	0.07
10/28/2019 0:00	10/29/2019 0:00	Perdue	Filter 4	0.04	0.05	0.08
10/29/2019 0:00	10/30/2019 0:00	Perdue	Filter 4	0.04	0.08	0.11
10/30/2019 0:00	10/31/2019 0:00	Perdue	Filter 4	0.00	0.09	0.12
10/31/2019 0:00	11/1/2019 0:00	Perdue	Filter 4	0.08	0.09	0.10
11/1/2019 0:00	11/2/2019 0:00	Perdue	Filter 4	0.08	0.09	0.13
11/2/2019 0:00	11/3/2019 0:00	Perdue	Filter 4	0.08	0.09	0.12
11/3/2019 0:00	11/4/2019 0:00	Perdue	Filter 4	0.09	0.10	0.12
11/4/2019 0:00	11/5/2019 0:00	Perdue	Filter 4	0.10	0.12	0.14
11/5/2019 0:00	11/6/2019 0:00	Perdue	Filter 4	0.13	0.15	0.18
11/6/2019 0:00	11/7/2019 0:00	Perdue	Filter 4	0.16	0.18	0.21
11/7/2019 0:00	11/8/2019 0:00	Perdue	Filter 4	0.19	0.22	0.25
11/8/2019 0:00	11/9/2019 0:00	Perdue	Filter 4	0.00	0.14	0.26
11/9/2019 0:00	11/10/2019 0:00	Perdue	Filter 4	0.09	0.12	0.19
11/10/2019 0:00	11/11/2019 0:00	Perdue	Filter 4	0.12	0.14	0.18
11/11/2019 0:00	11/12/2019 0:00	Perdue	Filter 4	0.13	0.16	0.21
11/12/2019 0:00	11/13/2019 0:00	Perdue	Filter 4	0.00	0.15	0.31
11/13/2019 0:00	11/14/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
11/14/2019 0:00	11/15/2019 0:00	Perdue	Filter 4	0.00	0.08	0.11
11/15/2019 0:00	11/16/2019 0:00	Perdue	Filter 4	0.06	0.08	0.11
11/16/2019 0:00	11/17/2019 0:00	Perdue	Filter 4	0.07	0.09	0.13
11/17/2019 0:00	11/18/2019 0:00	Perdue	Filter 4	0.00	0.10	0.15
11/18/2019 0:00	11/19/2019 0:00	Perdue	Filter 4	0.06	0.08	0.25
11/19/2019 0:00	11/20/2019 0:00	Perdue	Filter 4	0.06	0.06	0.11
11/20/2019 0:00	11/21/2019 0:00	Perdue	Filter 4	0.06	0.06	0.08
11/21/2019 0:00	11/22/2019 0:00	Perdue	Filter 4	0.06	0.07	0.10
11/22/2019 0:00	11/23/2019 0:00	Perdue	Filter 4	0.00	0.09	0.16
11/23/2019 0:00	11/24/2019 0:00	Perdue	Filter 4	0.07	0.08	0.13
11/24/2019 0:00	11/25/2019 0:00	Perdue	Filter 4	0.06	0.08	0.10
11/25/2019 0:00	11/26/2019 0:00	Perdue	Filter 4	0.00	0.07	0.10
11/26/2019 0:00	11/27/2019 0:00	Perdue	Filter 4	0.06	0.07	0.11
11/27/2019 0:00	11/28/2019 0:00	Perdue	Filter 4	0.06	0.07	0.13
11/28/2019 0:00	11/29/2019 0:00	Perdue	Filter 4	0.00	0.08	0.25
11/29/2019 0:00	11/30/2019 0:00	Perdue	Filter 4	0.07	0.09	0.14
11/30/2019 0:00	12/1/2019 0:00	Perdue	Filter 4	0.00	0.07	0.10
12/1/2019 0:00	12/2/2019 0:00	Perdue	Filter 4	0.05	0.07	0.14
12/2/2019 0:00	12/3/2019 0:00	Perdue	Filter 4	0.06	0.07	0.13
12/3/2019 0:00	12/4/2019 0:00	Perdue	Filter 4	0.06	0.07	0.14
12/4/2019 0:00	12/5/2019 0:00	Perdue	Filter 4	0.06	0.07	0.09
12/5/2019 0:00	12/6/2019 0:00	Perdue	Filter 4	0.05	0.07	0.14
12/6/2019 0:00	12/7/2019 0:00	Perdue	Filter 4	0.00	0.07	0.16
12/7/2019 0:00	12/8/2019 0:00	Perdue	Filter 4	0.00	0.10	0.19
12/8/2019 0:00	12/9/2019 0:00	Perdue	Filter 4	0.07	0.10	0.16
12/9/2019 0:00	12/10/2019 0:00	Perdue	Filter 4	0.07	0.08	0.11
12/10/2019 0:00	12/11/2019 0:00	Perdue	Filter 4	0.06	0.07	0.11
12/11/2019 0:00	12/12/2019 0:00	Perdue	Filter 4	0.06	0.07	0.12
12/12/2019 0:00	12/13/2019 0:00	Perdue	Filter 4	0.06	0.07	0.11
12/13/2019 0:00	12/14/2019 0:00	Perdue	Filter 4	0.00	0.08	0.15
12/14/2019 0:00	12/15/2019 0:00	Perdue	Filter 4	0.00	0.10	0.16
12/15/2019 0:00	12/16/2019 0:00	Perdue	Filter 4	0.06	0.07	0.10
12/16/2019 0:00	12/17/2019 0:00	Perdue	Filter 4	0.00	0.07	0.13
12/17/2019 0:00	12/18/2019 0:00	Perdue	Filter 4	0.06	0.07	0.12
12/18/2019 0:00	12/19/2019 0:00	Perdue	Filter 4	0.05	0.06	0.10
12/19/2019 0:00	12/20/2019 0:00	Perdue	Filter 4	0.00	0.06	0.08
12/20/2019 0:00	12/21/2019 0:00	Perdue	Filter 4	0.07	0.13	0.26
12/21/2019 0:00	12/22/2019 0:00	Perdue	Filter 4	0.00	0.07	0.08
12/22/2019 0:00	12/23/2019 0:00	Perdue	Filter 4	0.00	0.20	0.36
12/23/2019 0:00	12/24/2019 0:00	Perdue	Filter 4	0.00	0.15	0.36
12/24/2019 0:00	12/25/2019 0:00	Perdue	Filter 4	0.00	0.13	0.16
12/25/2019 0:00	12/26/2019 0:00	Perdue	Filter 4	0.13	0.14	0.16
12/26/2019 0:00	12/27/2019 0:00	Perdue	Filter 4	0.00	0.13	0.14
12/27/2019 0:00	12/28/2019 0:00	Perdue	Filter 4	0.00	0.13	0.16
12/28/2019 0:00	12/29/2019 0:00	Perdue	Filter 4	0.13	0.13	0.15
12/29/2019 0:00	12/30/2019 0:00	Perdue	Filter 4	0.00	0.13	0.19
12/30/2019 0:00	12/31/2019 0:00	Perdue	Filter 4	0.00	0.15	0.89

12/31/2019 0:00	1/1/2020 0:00	Perdue	Filter 4	0.00	0.15	0.32
1/1/2020 0:00	1/2/2020 0:00	Perdue	Filter 4	0.14	0.15	0.25
1/2/2020 0:00	1/3/2020 0:00	Perdue	Filter 4	0.13	0.14	0.29
1/3/2020 0:00	1/4/2020 0:00	Perdue	Filter 4	0.13	0.15	0.30
1/4/2020 0:00	1/5/2020 0:00	Perdue	Filter 4	0.00	0.13	0.19
1/5/2020 0:00	1/6/2020 0:00	Perdue	Filter 4	0.00	0.15	0.41
1/6/2020 0:00	1/7/2020 0:00	Perdue	Filter 4	0.00	0.15	0.35
1/7/2020 0:00	1/8/2020 0:00	Perdue	Filter 4	0.08	0.09	0.11
1/8/2020 0:00	1/9/2020 0:00	Perdue	Filter 4	0.08	0.09	0.10
1/9/2020 0:00	1/10/2020 0:00	Perdue	Filter 4	0.00	0.09	0.16
1/10/2020 0:00	1/11/2020 0:00	Perdue	Filter 4	0.09	0.10	0.13
1/11/2020 0:00	1/12/2020 0:00	Perdue	Filter 4	0.00	0.09	0.14
1/12/2020 0:00	1/13/2020 0:00	Perdue	Filter 4	0.00	0.09	0.10
1/13/2020 0:00	1/14/2020 0:00	Perdue	Filter 4	0.08	0.08	0.10
1/14/2020 0:00	1/15/2020 0:00	Perdue	Filter 4	0.00	0.09	0.11
1/15/2020 0:00	1/16/2020 0:00	Perdue	Filter 4	0.00	0.09	0.15
1/16/2020 0:00	1/17/2020 0:00	Perdue	Filter 4	0.00	0.11	0.14
1/17/2020 0:00	1/18/2020 0:00	Perdue	Filter 4	0.08	0.09	0.10
1/18/2020 0:00	1/19/2020 0:00	Perdue	Filter 4	0.00	0.08	0.09
1/19/2020 0:00	1/20/2020 0:00	Perdue	Filter 4	0.09	0.10	0.23
1/20/2020 0:00	1/21/2020 0:00	Perdue	Filter 4	0.08	0.09	0.11
1/21/2020 0:00	1/22/2020 0:00	Perdue	Filter 4	0.00	0.09	0.10
1/22/2020 0:00	1/23/2020 0:00	Perdue	Filter 4	0.00	0.11	0.16
1/23/2020 0:00	1/24/2020 0:00	Perdue	Filter 4	0.10	0.13	0.27
1/24/2020 0:00	1/25/2020 0:00	Perdue	Filter 4	0.10	0.16	0.32
1/25/2020 0:00	1/26/2020 0:00	Perdue	Filter 4	0.09	0.11	0.23
1/26/2020 0:00	1/27/2020 0:00	Perdue	Filter 4	0.09	0.09	0.10
1/27/2020 0:00	1/28/2020 0:00	Perdue	Filter 4	0.00	0.09	0.12
1/28/2020 0:00	1/29/2020 0:00	Perdue	Filter 4	0.00	0.11	0.30
1/29/2020 0:00	1/30/2020 0:00	Perdue	Filter 4	0.09	0.10	0.11
1/30/2020 0:00	1/31/2020 0:00	Perdue	Filter 4	0.00	0.10	0.14
1/31/2020 0:00	2/1/2020 0:00	Perdue	Filter 4	0.00	0.11	0.47
2/1/2020 0:00	2/2/2020 0:00	Perdue	Filter 4	0.00	0.12	0.61
2/2/2020 0:00	2/3/2020 0:00	Perdue	Filter 4	0.08	0.09	0.10
2/3/2020 0:00	2/4/2020 0:00	Perdue	Filter 4	0.00	0.09	0.14
2/4/2020 0:00	2/5/2020 0:00	Perdue	Filter 4	0.00	0.09	0.14
2/5/2020 0:00	2/6/2020 0:00	Perdue	Filter 4	0.08	0.10	0.12
2/6/2020 0:00	2/7/2020 0:00	Perdue	Filter 4	0.09	0.10	0.11
2/7/2020 0:00	2/8/2020 0:00	Perdue	Filter 4	0.00	0.10	0.17
2/8/2020 0:00	2/9/2020 0:00	Perdue	Filter 4	0.08	0.09	0.11
2/9/2020 0:00	2/10/2020 0:00	Perdue	Filter 4	0.09	0.09	0.14
2/10/2020 0:00	2/11/2020 0:00	Perdue	Filter 4	0.00	0.10	0.14
2/11/2020 0:00	2/12/2020 0:00	Perdue	Filter 4	0.00	0.11	0.38
2/12/2020 0:00	2/13/2020 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/13/2020 0:00	2/14/2020 0:00	Perdue	Filter 4	0.00	0.11	0.17
2/14/2020 0:00	2/15/2020 0:00	Perdue	Filter 4	0.09	0.09	0.10
2/15/2020 0:00	2/16/2020 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/16/2020 0:00	2/17/2020 0:00	Perdue	Filter 4	0.00	0.11	0.17
2/17/2020 0:00	2/18/2020 0:00	Perdue	Filter 4	0.11	0.12	0.13
2/18/2020 0:00	2/19/2020 0:00	Perdue	Filter 4	0.11	0.11	0.14
2/19/2020 0:00	2/20/2020 0:00	Perdue	Filter 4	0.00	0.12	0.18
2/20/2020 0:00	2/21/2020 0:00	Perdue	Filter 4	0.10	0.10	0.12
2/21/2020 0:00	2/22/2020 0:00	Perdue	Filter 4	0.00	0.12	0.20
2/22/2020 0:00	2/23/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
2/23/2020 0:00	2/24/2020 0:00	Perdue	Filter 4	0.09	0.10	0.10
2/24/2020 0:00	2/25/2020 0:00	Perdue	Filter 4	0.00	0.09	0.11
2/25/2020 0:00	2/26/2020 0:00	Perdue	Filter 4	0.09	0.09	0.11
2/26/2020 0:00	2/27/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
2/27/2020 0:00	2/28/2020 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/28/2020 0:00	2/29/2020 0:00	Perdue	Filter 4	0.10	0.10	0.12
2/29/2020 0:00	3/1/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
3/1/2020 0:00	3/2/2020 0:00	Perdue	Filter 4	0.00	0.14	0.19
3/2/2020 0:00	3/3/2020 0:00	Perdue	Filter 4	0.11	0.12	0.15
3/3/2020 0:00	3/4/2020 0:00	Perdue	Filter 4	0.00	0.11	0.12
3/4/2020 0:00	3/5/2020 0:00	Perdue	Filter 4	0.10	0.11	0.13
3/5/2020 0:00	3/6/2020 0:00	Perdue	Filter 4	0.10	0.11	0.14
3/6/2020 0:00	3/7/2020 0:00	Perdue	Filter 4	0.11	0.11	0.14
3/7/2020 0:00	3/8/2020 0:00	Perdue	Filter 4	0.00	0.11	0.18
3/8/2020 0:00	3/9/2020 0:00	Perdue	Filter 4	0.00	0.11	0.16
3/9/2020 0:00	3/10/2020 0:00	Perdue	Filter 4	0.00	0.12	0.18
3/10/2020 0:00	3/11/2020 0:00	Perdue	Filter 4	0.00	0.13	0.18
3/11/2020 0:00	3/12/2020 0:00	Perdue	Filter 4	0.00	0.12	0.13
3/12/2020 0:00	3/13/2020 0:00	Perdue	Filter 4	0.00	0.11	0.13

3/13/2020 0:00	3/14/2020 0:00	Perdue	Filter 4	0.10	0.11	0.13
3/14/2020 0:00	3/15/2020 0:00	Perdue	Filter 4	0.00	0.11	0.11
3/15/2020 0:00	3/16/2020 0:00	Perdue	Filter 4	0.00	0.10	0.13
3/16/2020 0:00	3/17/2020 0:00	Perdue	Filter 4	0.10	0.10	0.11
3/17/2020 0:00	3/18/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
3/18/2020 0:00	3/19/2020 0:00	Perdue	Filter 4	0.10	0.10	0.10
3/19/2020 0:00	3/20/2020 0:00	Perdue	Filter 4	0.09	0.10	0.11
3/20/2020 0:00	3/21/2020 0:00	Perdue	Filter 4	0.00	0.13	0.20
3/21/2020 0:00	3/22/2020 0:00	Perdue	Filter 4	0.11	0.12	0.15
3/22/2020 0:00	3/23/2020 0:00	Perdue	Filter 4	0.10	0.11	0.13
3/23/2020 0:00	3/24/2020 0:00	Perdue	Filter 4	0.10	0.10	0.11
3/24/2020 0:00	3/25/2020 0:00	Perdue	Filter 4	0.00	0.10	0.13
3/25/2020 0:00	3/26/2020 0:00	Perdue	Filter 4	0.10	0.10	0.11
3/26/2020 0:00	3/27/2020 0:00	Perdue	Filter 4	0.00	0.12	0.19
3/27/2020 0:00	3/28/2020 0:00	Perdue	Filter 4	0.00	0.11	0.13
3/28/2020 0:00	3/29/2020 0:00	Perdue	Filter 4	0.10	0.11	0.12
3/29/2020 0:00	3/30/2020 0:00	Perdue	Filter 4	0.10	0.11	0.11
3/30/2020 0:00	3/31/2020 0:00	Perdue	Filter 4	0.00	0.11	0.12
3/31/2020 0:00	4/1/2020 0:00	Perdue	Filter 4	0.10	0.11	0.12
4/1/2020 0:00	4/2/2020 0:00	Perdue	Filter 4	0.10	0.11	0.12
4/2/2020 0:00	4/3/2020 0:00	Perdue	Filter 4	0.10	0.11	0.12
4/3/2020 0:00	4/4/2020 0:00	Perdue	Filter 4	0.00	0.14	0.17
4/4/2020 0:00	4/5/2020 0:00	Perdue	Filter 4	0.11	0.12	0.13
4/5/2020 0:00	4/6/2020 0:00	Perdue	Filter 4	0.11	0.12	0.12
4/6/2020 0:00	4/7/2020 0:00	Perdue	Filter 4	0.11	0.11	0.12
4/7/2020 0:00	4/8/2020 0:00	Perdue	Filter 4	0.11	0.11	0.12
4/8/2020 0:00	4/9/2020 0:00	Perdue	Filter 4	0.00	0.11	0.14
4/9/2020 0:00	4/10/2020 0:00	Perdue	Filter 4	0.00	0.11	0.14
4/10/2020 0:00	4/11/2020 0:00	Perdue	Filter 4	0.00	0.17	0.18
4/11/2020 0:00	4/12/2020 0:00	Perdue	Filter 4	0.00	0.20	0.25
4/12/2020 0:00	4/13/2020 0:00	Perdue	Filter 4	0.00	0.14	0.23
4/13/2020 0:00	4/14/2020 0:00	Perdue	Filter 4	0.00	0.13	0.13
4/14/2020 0:00	4/15/2020 0:00	Perdue	Filter 4	0.00	0.13	0.15
4/15/2020 0:00	4/16/2020 0:00	Perdue	Filter 4	0.12	0.13	0.13
4/16/2020 0:00	4/17/2020 0:00	Perdue	Filter 4	0.00	0.12	0.13
4/17/2020 0:00	4/18/2020 0:00	Perdue	Filter 4	0.12		0.12
4/18/2020 0:00	4/19/2020 0:00	Perdue	Filter 4	0.00	0.17	0.49
4/19/2020 0:00	4/20/2020 0:00	Perdue	Filter 4	0.12	0.14	0.19
4/20/2020 0:00	4/21/2020 0:00	Perdue	Filter 4	0.00	0.12	0.14
4/21/2020 0:00	4/22/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
4/22/2020 0:00	4/23/2020 0:00	Perdue	Filter 4	0.12	0.12	0.13
4/23/2020 0:00	4/24/2020 0:00	Perdue	Filter 4	0.00	0.12	0.13
4/24/2020 0:00	4/25/2020 0:00	Perdue	Filter 4	0.00	0.15	0.31
4/25/2020 0:00	4/26/2020 0:00	Perdue	Filter 4	0.00	0.17	0.20
4/26/2020 0:00	4/27/2020 0:00	Perdue	Filter 4	0.13	0.14	0.18
4/27/2020 0:00	4/28/2020 0:00	Perdue	Filter 4	0.13	0.14	0.16
4/28/2020 0:00	4/29/2020 0:00	Perdue	Filter 4	0.00	0.16	0.23
4/29/2020 0:00	4/30/2020 0:00	Perdue	Filter 4	0.00	0.18	0.23
4/30/2020 0:00	5/1/2020 0:00	Perdue	Filter 4	0.00	0.19	0.37
5/1/2020 0:00	5/2/2020 0:00	Perdue	Filter 4	0.00	0.18	0.22
5/2/2020 0:00	5/3/2020 0:00	Perdue	Filter 4	0.16	0.17	0.21
5/3/2020 0:00	5/4/2020 0:00	Perdue	Filter 4	0.00	0.21	0.24
5/4/2020 0:00	5/5/2020 0:00	Perdue	Filter 4	0.00	0.20	0.25
5/5/2020 0:00	5/6/2020 0:00	Perdue	Filter 4	0.15	0.16	0.31
5/6/2020 0:00	5/7/2020 0:00	Perdue	Filter 4	0.00	0.16	0.52
5/7/2020 0:00	5/8/2020 0:00	Perdue	Filter 4	0.03	0.10	0.15
5/8/2020 0:00	5/9/2020 0:00	Perdue	Filter 4	0.09	0.10	0.25
5/9/2020 0:00	5/10/2020 0:00	Perdue	Filter 4	0.00	0.13	0.31
5/10/2020 0:00	5/11/2020 0:00	Perdue	Filter 4	0.31		0.31
5/11/2020 0:00	5/12/2020 0:00	Perdue	Filter 4	0.08	0.09	0.37
5/12/2020 0:00	5/13/2020 0:00	Perdue	Filter 4	0.00	0.08	0.13
5/13/2020 0:00	5/14/2020 0:00	Perdue	Filter 4	0.07	0.09	0.14
5/14/2020 0:00	5/15/2020 0:00	Perdue	Filter 4	0.00	0.07	0.10
5/15/2020 0:00	5/16/2020 0:00	Perdue	Filter 4	0.00	0.07	0.08
5/16/2020 0:00	5/17/2020 0:00	Perdue	Filter 4	0.00	0.10	0.40
5/17/2020 0:00	5/18/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
5/18/2020 0:00	5/19/2020 0:00	Perdue	Filter 4	0.00	0.10	1.00
5/19/2020 0:00	5/20/2020 0:00	Perdue	Filter 4	0.00	0.09	1.00
5/20/2020 0:00	5/21/2020 0:00	Perdue	Filter 4	0.07	0.08	0.39
5/21/2020 0:00	5/22/2020 0:00	Perdue	Filter 4	0.00	0.08	0.10
5/22/2020 0:00	5/23/2020 0:00	Perdue	Filter 4	0.07	0.08	0.99
5/23/2020 0:00	5/24/2020 0:00	Perdue	Filter 4	0.07	0.08	0.61
5/24/2020 0:00	5/25/2020 0:00	Perdue	Filter 4	0.00	0.09	1.00

5/25/2020 0:00	5/26/2020 0:00	Perdue	Filter 4	0.00	0.08	0.11
5/26/2020 0:00	5/27/2020 0:00	Perdue	Filter 4	0.00	0.11	0.48
5/27/2020 0:00	5/28/2020 0:00	Perdue	Filter 4	0.00	0.10	0.12
5/28/2020 0:00	5/29/2020 0:00	Perdue	Filter 4	0.09	0.10	0.17
5/29/2020 0:00	5/30/2020 0:00	Perdue	Filter 4	0.09	0.10	0.13
5/30/2020 0:00	5/31/2020 0:00	Perdue	Filter 4	0.09	0.10	0.13
5/31/2020 0:00	6/1/2020 0:00	Perdue	Filter 4	0.10	0.10	0.15
6/1/2020 0:00	6/2/2020 0:00	Perdue	Filter 4	0.00	0.12	0.23
6/2/2020 0:00	6/3/2020 0:00	Perdue	Filter 4	0.12	0.14	0.18
6/3/2020 0:00	6/4/2020 0:00	Perdue	Filter 4	0.15	0.16	0.30
6/4/2020 0:00	6/5/2020 0:00	Perdue	Filter 4	0.09	0.14	0.19
6/5/2020 0:00	6/6/2020 0:00	Perdue	Filter 4	0.00	0.14	0.20
6/6/2020 0:00	6/7/2020 0:00	Perdue	Filter 4	0.13	0.15	0.24
6/7/2020 0:00	6/8/2020 0:00	Perdue	Filter 4	0.13	0.14	0.18
6/8/2020 0:00	6/9/2020 0:00	Perdue	Filter 4	0.13	0.15	0.17
6/9/2020 0:00	6/10/2020 0:00	Perdue	Filter 4	0.14	0.15	0.17
6/10/2020 0:00	6/11/2020 0:00	Perdue	Filter 4	0.14	0.16	0.19
6/11/2020 0:00	6/12/2020 0:00	Perdue	Filter 4	0.16	0.17	0.19
6/12/2020 0:00	6/13/2020 0:00	Perdue	Filter 4	0.00	0.16	0.22
6/13/2020 0:00	6/14/2020 0:00	Perdue	Filter 4	0.14	0.16	0.20
6/14/2020 0:00	6/15/2020 0:00	Perdue	Filter 4	0.14	0.14	0.15
6/15/2020 0:00	6/16/2020 0:00	Perdue	Filter 4	0.13	0.15	0.18
6/16/2020 0:00	6/17/2020 0:00	Perdue	Filter 4	0.00	0.17	0.51
6/17/2020 0:00	6/18/2020 0:00	Perdue	Filter 4	0.00	0.18	0.41
6/18/2020 0:00	6/19/2020 0:00	Perdue	Filter 4	0.11	0.13	0.18
6/19/2020 0:00	6/20/2020 0:00	Perdue	Filter 4	0.09	0.11	0.14
6/20/2020 0:00	6/21/2020 0:00	Perdue	Filter 4	0.09	0.10	0.11
6/21/2020 0:00	6/22/2020 0:00	Perdue	Filter 4	0.00	0.10	0.16
6/22/2020 0:00	6/23/2020 0:00	Perdue	Filter 4	0.09	0.11	0.14
6/23/2020 0:00	6/24/2020 0:00	Perdue	Filter 4	0.00	0.12	0.21
6/24/2020 0:00	6/25/2020 0:00	Perdue	Filter 4	0.11	0.13	0.15
6/25/2020 0:00	6/26/2020 0:00	Perdue	Filter 4	0.00	0.11	0.16
6/26/2020 0:00	6/27/2020 0:00	Perdue	Filter 4	0.10	0.11	0.14
6/27/2020 0:00	6/28/2020 0:00	Perdue	Filter 4	0.11	0.12	0.15
6/28/2020 0:00	6/29/2020 0:00	Perdue	Filter 4	0.12	0.13	0.15
6/29/2020 0:00	6/30/2020 0:00	Perdue	Filter 4	0.00	0.13	0.19
6/30/2020 0:00	7/1/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
7/1/2020 0:00	7/2/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
7/2/2020 0:00	7/3/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
7/3/2020 0:00	7/4/2020 0:00	Perdue	Filter 4	0.13	0.14	0.15
7/4/2020 0:00	7/5/2020 0:00	Perdue	Filter 4	0.00	0.16	0.22
7/5/2020 0:00	7/6/2020 0:00	Perdue	Filter 4	0.00	0.17	0.24
7/6/2020 0:00	7/7/2020 0:00	Perdue	Filter 4	0.14	0.15	0.18
7/7/2020 0:00	7/8/2020 0:00	Perdue	Filter 4	0.14	0.15	0.18
7/8/2020 0:00	7/9/2020 0:00	Perdue	Filter 4	0.00	0.17	0.30
7/9/2020 0:00	7/10/2020 0:00	Perdue	Filter 4	0.13	0.15	0.19
7/10/2020 0:00	7/11/2020 0:00	Perdue	Filter 4	0.13	0.14	0.16
7/11/2020 0:00	7/12/2020 0:00	Perdue	Filter 4	0.00	0.18	0.23
7/12/2020 0:00	7/13/2020 0:00	Perdue	Filter 4	0.14	0.18	0.23
7/13/2020 0:00	7/14/2020 0:00	Perdue	Filter 4	0.14	0.15	0.17
7/14/2020 0:00	7/15/2020 0:00	Perdue	Filter 4	0.00	0.22	0.27
7/15/2020 0:00	7/16/2020 0:00	Perdue	Filter 4	0.15	0.17	0.20
7/16/2020 0:00	7/17/2020 0:00	Perdue	Filter 4	0.00	0.16	0.31
7/17/2020 0:00	7/18/2020 0:00	Perdue	Filter 4	0.18	0.21	0.26
7/18/2020 0:00	7/19/2020 0:00	Perdue	Filter 4	0.00	0.21	0.26
7/19/2020 0:00	7/20/2020 0:00	Perdue	Filter 4	0.16	0.18	0.24
7/20/2020 0:00	7/21/2020 0:00	Perdue	Filter 4	0.16	0.17	0.19
7/21/2020 0:00	7/22/2020 0:00	Perdue	Filter 4	0.00	0.18	0.25
7/22/2020 0:00	7/23/2020 0:00	Perdue	Filter 4	0.00	0.19	0.28
7/23/2020 0:00	7/24/2020 0:00	Perdue	Filter 4	0.00	0.18	0.21
7/24/2020 0:00	7/25/2020 0:00	Perdue	Filter 4	0.00	0.17	0.26
7/25/2020 0:00	7/26/2020 0:00	Perdue	Filter 4	0.15	0.16	0.29
7/26/2020 0:00	7/27/2020 0:00	Perdue	Filter 4	0.15	0.16	0.19
7/27/2020 0:00	7/28/2020 0:00	Perdue	Filter 4	0.00	0.17	0.30
7/28/2020 0:00	7/29/2020 0:00	Perdue	Filter 4	0.00	0.22	0.34
7/29/2020 0:00	7/30/2020 0:00	Perdue	Filter 4	0.00	0.15	0.34
7/30/2020 0:00	7/31/2020 0:00	Perdue	Filter 4	0.00	0.11	0.16
7/31/2020 0:00	8/1/2020 0:00	Perdue	Filter 4	0.11	0.14	0.23
8/1/2020 0:00	8/2/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
8/2/2020 0:00	8/3/2020 0:00	Perdue	Filter 4	0.00	0.13	0.22
8/3/2020 0:00	8/4/2020 0:00	Perdue	Filter 4	0.00	0.10	0.21
8/4/2020 0:00	8/5/2020 0:00	Perdue	Filter 4	0.00	0.11	0.12
8/5/2020 0:00	8/6/2020 0:00	Perdue	Filter 4	0.10	0.10	0.12

8/6/2020 0:00	8/7/2020 0:00	Perdue	Filter 4	0.10	0.11	0.14
8/7/2020 0:00	8/8/2020 0:00	Perdue	Filter 4	0.10	0.12	0.16
8/8/2020 0:00	8/9/2020 0:00	Perdue	Filter 4	0.11	0.12	0.16
8/9/2020 0:00	8/10/2020 0:00	Perdue	Filter 4	0.11	0.12	0.19
8/10/2020 0:00	8/11/2020 0:00	Perdue	Filter 4	0.00	0.11	0.16
8/11/2020 0:00	8/12/2020 0:00	Perdue	Filter 4	0.00	0.11	1.00
8/12/2020 0:00	8/13/2020 0:00	Perdue	Filter 4	0.00	0.13	0.28
8/13/2020 0:00	8/14/2020 0:00	Perdue	Filter 4	0.09	0.10	0.17
8/14/2020 0:00	8/15/2020 0:00	Perdue	Filter 4	0.09	0.10	0.14
8/15/2020 0:00	8/16/2020 0:00	Perdue	Filter 4	0.09	0.10	0.18
8/16/2020 0:00	8/17/2020 0:00	Perdue	Filter 4	0.00	0.10	0.16
8/17/2020 0:00	8/18/2020 0:00	Perdue	Filter 4	0.10	0.12	0.18
8/18/2020 0:00	8/19/2020 0:00	Perdue	Filter 4	0.00	0.12	0.18
8/19/2020 0:00	8/20/2020 0:00	Perdue	Filter 4	0.10	0.12	0.20
8/20/2020 0:00	8/21/2020 0:00	Perdue	Filter 4	0.00	0.11	0.19
8/21/2020 0:00	8/22/2020 0:00	Perdue	Filter 4	0.08	0.09	0.49
8/22/2020 0:00	8/23/2020 0:00	Perdue	Filter 4	0.00	0.08	0.15
8/23/2020 0:00	8/24/2020 0:00	Perdue	Filter 4	0.07	0.09	0.17
8/24/2020 0:00	8/25/2020 0:00	Perdue	Filter 4	0.00	0.08	0.10
8/25/2020 0:00	8/26/2020 0:00	Perdue	Filter 4	0.00	0.08	0.13
8/26/2020 0:00	8/27/2020 0:00	Perdue	Filter 4	0.00	0.11	0.46
8/27/2020 0:00	8/28/2020 0:00	Perdue	Filter 4	0.08	0.09	0.15
8/28/2020 0:00	8/29/2020 0:00	Perdue	Filter 4	0.00	0.10	0.15
8/29/2020 0:00	8/30/2020 0:00	Perdue	Filter 4	0.00	0.16	1.00
8/30/2020 0:00	8/31/2020 0:00	Perdue	Filter 4	0.07	0.08	0.15
8/31/2020 0:00	9/1/2020 0:00	Perdue	Filter 4	0.00	0.08	0.09
9/1/2020 0:00	9/2/2020 0:00	Perdue	Filter 4	0.00	0.09	0.14
9/2/2020 0:00	9/3/2020 0:00	Perdue	Filter 4	0.08	0.09	0.11
9/3/2020 0:00	9/4/2020 0:00	Perdue	Filter 4	0.00	0.09	0.15
9/4/2020 0:00	9/5/2020 0:00	Perdue	Filter 4	0.08	0.10	0.14
9/5/2020 0:00	9/6/2020 0:00	Perdue	Filter 4	0.08	0.09	0.10
9/6/2020 0:00	9/7/2020 0:00	Perdue	Filter 4	0.08	0.09	0.13
9/7/2020 0:00	9/8/2020 0:00	Perdue	Filter 4	0.09	0.10	0.12
9/8/2020 0:00	9/9/2020 0:00	Perdue	Filter 4	0.00	0.10	0.11
9/9/2020 0:00	9/10/2020 0:00	Perdue	Filter 4	0.00	0.10	0.16
9/10/2020 0:00	9/11/2020 0:00	Perdue	Filter 4	0.00	0.09	0.12
9/11/2020 0:00	9/12/2020 0:00	Perdue	Filter 4	0.09	0.10	0.13
9/12/2020 0:00	9/13/2020 0:00	Perdue	Filter 4	0.00	0.11	0.48
9/13/2020 0:00	9/14/2020 0:00	Perdue	Filter 4	0.00	0.10	0.15
9/14/2020 0:00	9/15/2020 0:00	Perdue	Filter 4	0.00	0.16	0.26
9/15/2020 0:00	9/16/2020 0:00	Perdue	Filter 4	0.13	0.15	0.17
9/16/2020 0:00	9/17/2020 0:00	Perdue	Filter 4	0.13	0.15	0.19
9/17/2020 0:00	9/18/2020 0:00	Perdue	Filter 4	0.00	0.16	0.20
9/18/2020 0:00	9/19/2020 0:00	Perdue	Filter 4	0.12	0.14	0.18
9/19/2020 0:00	9/20/2020 0:00	Perdue	Filter 4	0.00	0.17	0.24
9/20/2020 0:00	9/21/2020 0:00	Perdue	Filter 4	0.12	0.14	0.21
9/21/2020 0:00	9/22/2020 0:00	Perdue	Filter 4	0.11	0.13	0.18
9/22/2020 0:00	9/23/2020 0:00	Perdue	Filter 4	0.00	0.13	0.17
9/23/2020 0:00	9/24/2020 0:00	Perdue	Filter 4	0.00	0.16	0.66
9/24/2020 0:00	9/25/2020 0:00	Perdue	Filter 4	0.00	0.19	0.38
9/25/2020 0:00	9/26/2020 0:00	Perdue	Filter 4	0.00	0.15	0.58
9/26/2020 0:00	9/27/2020 0:00	Perdue	Filter 4	0.00	0.11	0.47
9/27/2020 0:00	9/28/2020 0:00	Perdue	Filter 4	0.00	0.17	0.53
9/28/2020 0:00	9/29/2020 0:00	Perdue	Filter 4	0.00	0.15	0.63
9/29/2020 0:00	9/30/2020 0:00	Perdue	Filter 4	0.00	0.13	0.27
9/30/2020 0:00	10/1/2020 0:00	Perdue	Filter 4	0.05	0.11	1.00
10/1/2020 0:00	10/2/2020 0:00	Perdue	Filter 4	0.00	0.17	0.22
10/2/2020 0:00	10/3/2020 0:00	Perdue	Filter 4	0.10	0.17	0.24
10/3/2020 0:00	10/4/2020 0:00	Perdue	Filter 4	0.00	0.18	0.43
10/4/2020 0:00	10/5/2020 0:00	Perdue	Filter 4	0.00	0.17	0.20
10/5/2020 0:00	10/6/2020 0:00	Perdue	Filter 4	0.04	0.15	0.26
10/6/2020 0:00	10/7/2020 0:00	Perdue	Filter 4	0.02	0.08	0.19
10/7/2020 0:00	10/8/2020 0:00	Perdue	Filter 4	0.00	0.08	0.13
10/8/2020 0:00	10/9/2020 0:00	Perdue	Filter 4	0.00	0.12	0.18
10/9/2020 0:00	10/10/2020 0:00	Perdue	Filter 4	0.10	0.12	0.13
10/10/2020 0:00	10/11/2020 0:00	Perdue	Filter 4	0.00	0.11	0.13
10/11/2020 0:00	10/12/2020 0:00	Perdue	Filter 4	0.10	0.11	0.13
10/12/2020 0:00	10/13/2020 0:00	Perdue	Filter 4	0.10	0.12	0.17
10/13/2020 0:00	10/14/2020 0:00	Perdue	Filter 4	0.10	0.17	0.35
10/14/2020 0:00	10/15/2020 0:00	Perdue	Filter 4	0.09	0.15	0.27
10/15/2020 0:00	10/16/2020 0:00	Perdue	Filter 4	0.00	0.09	0.16
10/16/2020 0:00	10/17/2020 0:00	Perdue	Filter 4	0.05	0.09	0.13
10/17/2020 0:00	10/18/2020 0:00	Perdue	Filter 4	0.06	0.08	0.13

10/18/2020 0:00	10/19/2020 0:00	Perdue	Filter 4	0.00	0.07	0.14
10/19/2020 0:00	10/20/2020 0:00	Perdue	Filter 4	0.06	0.07	0.08
10/20/2020 0:00	10/21/2020 0:00	Perdue	Filter 4	0.06	0.07	0.08
10/21/2020 0:00	10/22/2020 0:00	Perdue	Filter 4	0.00	0.08	0.14
10/22/2020 0:00	10/23/2020 0:00	Perdue	Filter 4	0.09	0.10	0.11
10/23/2020 0:00	10/24/2020 0:00	Perdue	Filter 4	0.00	0.12	0.19
10/24/2020 0:00	10/25/2020 0:00	Perdue	Filter 4	0.00	0.12	0.17
10/25/2020 0:00	10/26/2020 0:00	Perdue	Filter 4	0.00	0.12	0.14
10/26/2020 0:00	10/27/2020 0:00	Perdue	Filter 4	0.11	0.13	0.14
10/27/2020 0:00	10/28/2020 0:00	Perdue	Filter 4	0.13	0.15	0.25
10/28/2020 0:00	10/29/2020 0:00	Perdue	Filter 4	0.15	0.16	0.29
10/29/2020 0:00	10/30/2020 0:00	Perdue	Filter 4	0.12	0.16	0.18
10/30/2020 0:00	10/31/2020 0:00	Perdue	Filter 4	0.12	0.17	0.20
10/31/2020 0:00	11/1/2020 0:00	Perdue	Filter 4	0.15	0.18	0.21
11/1/2020 0:00	11/2/2020 0:00	Perdue	Filter 4	0.00	0.19	0.44
11/2/2020 0:00	11/3/2020 0:00	Perdue	Filter 4	0.14	0.17	0.23
11/3/2020 0:00	11/4/2020 0:00	Perdue	Filter 4	0.00	0.15	0.23
11/4/2020 0:00	11/5/2020 0:00	Perdue	Filter 4	0.14	0.17	0.22
11/5/2020 0:00	11/6/2020 0:00	Perdue	Filter 4	0.15	0.21	0.25
11/6/2020 0:00	11/7/2020 0:00	Perdue	Filter 4	0.00	0.18	0.26
11/7/2020 0:00	11/8/2020 0:00	Perdue	Filter 4	0.18	0.25	0.28
11/8/2020 0:00	11/9/2020 0:00	Perdue	Filter 4	0.00	0.21	0.24
11/9/2020 0:00	11/10/2020 0:00	Perdue	Filter 4	0.00	0.22	0.23
11/10/2020 0:00	11/11/2020 0:00	Perdue	Filter 4	0.00	0.27	0.64
11/11/2020 0:00	11/12/2020 0:00	Perdue	Filter 4	0.00	0.24	0.28
11/12/2020 0:00	11/13/2020 0:00	Perdue	Filter 4	0.01	0.12	0.28
11/13/2020 0:00	11/14/2020 0:00	Perdue	Filter 4	0.11	0.13	0.15
11/14/2020 0:00	11/15/2020 0:00	Perdue	Filter 4	0.00	0.13	0.22
11/15/2020 0:00	11/16/2020 0:00	Perdue	Filter 4	0.11	0.13	0.16
11/16/2020 0:00	11/17/2020 0:00	Perdue	Filter 4	0.11	0.12	0.14
11/17/2020 0:00	11/18/2020 0:00	Perdue	Filter 4	0.00	0.12	0.13
11/18/2020 0:00	11/19/2020 0:00	Perdue	Filter 4	0.13		0.13
11/19/2020 0:00	11/20/2020 0:00	Perdue	Filter 4	0.13		0.13
11/20/2020 0:00	11/21/2020 0:00	Perdue	Filter 4	0.13		0.13
11/21/2020 0:00	11/22/2020 0:00	Perdue	Filter 4	0.08	0.11	0.21
11/22/2020 0:00	11/23/2020 0:00	Perdue	Filter 4	0.00	0.10	0.26
11/23/2020 0:00	11/24/2020 0:00	Perdue	Filter 4	0.09	0.10	0.22
11/24/2020 0:00	11/25/2020 0:00	Perdue	Filter 4	0.09	0.09	0.12
11/25/2020 0:00	11/26/2020 0:00	Perdue	Filter 4	0.00	0.09	0.14
11/26/2020 0:00	11/27/2020 0:00	Perdue	Filter 4	0.00	0.08	0.15
11/27/2020 0:00	11/28/2020 0:00	Perdue	Filter 4	0.06	0.07	0.09
11/28/2020 0:00	11/29/2020 0:00	Perdue	Filter 4	0.00	0.07	0.08
11/29/2020 0:00	11/30/2020 0:00	Perdue	Filter 4	0.06	0.07	0.08
11/30/2020 0:00	12/1/2020 0:00	Perdue	Filter 4	0.00	0.08	0.87
12/1/2020 0:00	12/2/2020 0:00	Perdue	Filter 4	0.09	0.10	0.12
12/2/2020 0:00	12/3/2020 0:00	Perdue	Filter 4	0.00	0.09	0.10
12/3/2020 0:00	12/4/2020 0:00	Perdue	Filter 4	0.10		0.10
12/4/2020 0:00	12/5/2020 0:00	Perdue	Filter 4	0.10		0.10
12/5/2020 0:00	12/6/2020 0:00	Perdue	Filter 4	0.10		0.10
12/6/2020 0:00	12/7/2020 0:00	Perdue	Filter 4	0.10		0.10
12/7/2020 0:00	12/8/2020 0:00	Perdue	Filter 4	0.10		0.10
12/8/2020 0:00	12/9/2020 0:00	Perdue	Filter 4	0.10		0.10
12/9/2020 0:00	12/10/2020 0:00	Perdue	Filter 4	0.10		0.10
12/10/2020 0:00	12/11/2020 0:00	Perdue	Filter 4	0.00	0.16	0.17
12/11/2020 0:00	12/12/2020 0:00	Perdue	Filter 4	0.00	0.19	0.24
12/12/2020 0:00	12/13/2020 0:00	Perdue	Filter 4	0.22		0.22
12/13/2020 0:00	12/14/2020 0:00	Perdue	Filter 4	0.00	0.04	0.32
12/14/2020 0:00	12/15/2020 0:00	Perdue	Filter 4	0.02	0.08	0.13
12/15/2020 0:00	12/16/2020 0:00	Perdue	Filter 4	0.00	0.12	0.14
12/16/2020 0:00	12/17/2020 0:00	Perdue	Filter 4	0.00	0.15	1.00
12/17/2020 0:00	12/18/2020 0:00	Perdue	Filter 4	0.14	0.18	0.28
12/18/2020 0:00	12/19/2020 0:00	Perdue	Filter 4	0.00	0.15	0.35
12/19/2020 0:00	12/20/2020 0:00	Perdue	Filter 4	0.00	0.10	0.12
12/20/2020 0:00	12/21/2020 0:00	Perdue	Filter 4	0.09	0.13	0.81
12/21/2020 0:00	12/22/2020 0:00	Perdue	Filter 4	0.00	0.10	0.23
12/22/2020 0:00	12/23/2020 0:00	Perdue	Filter 4	0.09	0.11	0.37
12/23/2020 0:00	12/24/2020 0:00	Perdue	Filter 4	0.09	0.10	0.26
12/24/2020 0:00	12/25/2020 0:00	Perdue	Filter 4	0.00	0.10	0.19
12/25/2020 0:00	12/26/2020 0:00	Perdue	Filter 4	0.10	0.12	0.15
12/26/2020 0:00	12/27/2020 0:00	Perdue	Filter 4	0.00	0.14	0.33
12/27/2020 0:00	12/28/2020 0:00	Perdue	Filter 4	0.00	0.15	0.30
12/28/2020 0:00	12/29/2020 0:00	Perdue	Filter 4	0.00	0.15	0.32
12/29/2020 0:00	12/30/2020 0:00	Perdue	Filter 4	0.09	0.12	0.32

12/30/2020 0:00	12/31/2020 0:00	Perdue	Filter 4	0.00	0.09	0.13
12/31/2020 0:00	1/1/2021 0:00	Perdue	Filter 4	0.08	0.10	0.18
1/1/2021 0:00	1/2/2021 0:00	Perdue	Filter 4	0.00	0.09	0.10
1/2/2021 0:00	1/3/2021 0:00	Perdue	Filter 4	0.00	0.10	0.18
1/3/2021 0:00	1/4/2021 0:00	Perdue	Filter 4	0.00	0.10	0.19
1/4/2021 0:00	1/5/2021 0:00	Perdue	Filter 4	0.00	0.09	0.18
1/5/2021 0:00	1/6/2021 0:00	Perdue	Filter 4	0.08	0.09	0.18
1/6/2021 0:00	1/7/2021 0:00	Perdue	Filter 4	0.00	0.09	0.18
1/7/2021 0:00	1/8/2021 0:00	Perdue	Filter 4	0.08	0.09	0.40
1/8/2021 0:00	1/9/2021 0:00	Perdue	Filter 4	0.00	0.09	0.38
1/9/2021 0:00	1/10/2021 0:00	Perdue	Filter 4	0.08	0.09	0.43
1/10/2021 0:00	1/11/2021 0:00	Perdue	Filter 4	0.00	0.09	0.17
1/11/2021 0:00	1/12/2021 0:00	Perdue	Filter 4	0.09	0.10	0.10
1/12/2021 0:00	1/13/2021 0:00	Perdue	Filter 4	0.00	0.10	0.13
1/13/2021 0:00	1/14/2021 0:00	Perdue	Filter 4	0.08	0.13	0.26
1/14/2021 0:00	1/15/2021 0:00	Perdue	Filter 4	0.00	0.13	0.29
1/15/2021 0:00	1/16/2021 0:00	Perdue	Filter 4	0.08	0.09	0.11
1/16/2021 0:00	1/17/2021 0:00	Perdue	Filter 4	0.00	0.09	0.10
1/17/2021 0:00	1/18/2021 0:00	Perdue	Filter 4	0.08	0.10	0.12
1/18/2021 0:00	1/19/2021 0:00	Perdue	Filter 4	0.08	0.09	0.11
1/19/2021 0:00	1/20/2021 0:00	Perdue	Filter 4	0.00	0.09	0.12
1/20/2021 0:00	1/21/2021 0:00	Perdue	Filter 4	0.09	0.09	0.14
1/21/2021 0:00	1/22/2021 0:00	Perdue	Filter 4	0.00	0.09	0.11
1/22/2021 0:00	1/23/2021 0:00	Perdue	Filter 4	0.00	0.08	0.11
1/23/2021 0:00	1/24/2021 0:00	Perdue	Filter 4	0.08	0.12	0.27
1/24/2021 0:00	1/25/2021 0:00	Perdue	Filter 4	0.00	0.09	0.25
1/25/2021 0:00	1/26/2021 0:00	Perdue	Filter 4	0.08	0.08	0.29
1/26/2021 0:00	1/27/2021 0:00	Perdue	Filter 4	0.00	0.09	0.52
1/27/2021 0:00	1/28/2021 0:00	Perdue	Filter 4	0.00	0.09	0.10
1/28/2021 0:00	1/29/2021 0:00	Perdue	Filter 4	0.00	0.09	0.11
1/29/2021 0:00	1/30/2021 0:00	Perdue	Filter 4	0.09	0.10	0.14
1/30/2021 0:00	1/31/2021 0:00	Perdue	Filter 4	0.00	0.12	0.24
1/31/2021 0:00	2/1/2021 0:00	Perdue	Filter 4	0.00	0.11	0.31
2/1/2021 0:00	2/2/2021 0:00	Perdue	Filter 4	0.10	0.11	0.13
2/2/2021 0:00	2/3/2021 0:00	Perdue	Filter 4	0.00	0.17	0.29
2/3/2021 0:00	2/4/2021 0:00	Perdue	Filter 4	0.11	0.13	0.17
2/4/2021 0:00	2/5/2021 0:00	Perdue	Filter 4	0.00	0.12	0.27
2/5/2021 0:00	2/6/2021 0:00	Perdue	Filter 4	0.09	0.11	0.22
2/6/2021 0:00	2/7/2021 0:00	Perdue	Filter 4	0.09	0.13	0.25
2/7/2021 0:00	2/8/2021 0:00	Perdue	Filter 4	0.00	0.16	0.27
2/8/2021 0:00	2/9/2021 0:00	Perdue	Filter 4	0.00	0.11	0.29
2/9/2021 0:00	2/10/2021 0:00	Perdue	Filter 4	0.10	0.13	0.20
2/10/2021 0:00	2/11/2021 0:00	Perdue	Filter 4	0.00	0.11	0.18
2/11/2021 0:00	2/12/2021 0:00	Perdue	Filter 4	0.08	0.09	0.10
2/12/2021 0:00	2/13/2021 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/13/2021 0:00	2/14/2021 0:00	Perdue	Filter 4	0.00	0.11	0.16
2/14/2021 0:00	2/15/2021 0:00	Perdue	Filter 4	0.09	0.10	0.13
2/15/2021 0:00	2/16/2021 0:00	Perdue	Filter 4	0.00	0.11	0.15
2/16/2021 0:00	2/17/2021 0:00	Perdue	Filter 4	0.09	0.10	0.18
2/17/2021 0:00	2/18/2021 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/18/2021 0:00	2/19/2021 0:00	Perdue	Filter 4	0.00	0.12	0.27
2/19/2021 0:00	2/20/2021 0:00	Perdue	Filter 4	0.00	0.11	0.16
2/20/2021 0:00	2/21/2021 0:00	Perdue	Filter 4	0.00	0.10	0.11
2/21/2021 0:00	2/22/2021 0:00	Perdue	Filter 4	0.09	0.10	0.12
2/22/2021 0:00	2/23/2021 0:00	Perdue	Filter 4	0.00	0.10	0.15
2/23/2021 0:00	2/24/2021 0:00	Perdue	Filter 4	0.00	0.09	0.11
2/24/2021 0:00	2/25/2021 0:00	Perdue	Filter 4	0.08	0.09	0.10
2/25/2021 0:00	2/26/2021 0:00	Perdue	Filter 4	0.08	0.09	0.10
2/26/2021 0:00	2/27/2021 0:00	Perdue	Filter 4	0.00	0.11	0.21
2/27/2021 0:00	2/28/2021 0:00	Perdue	Filter 4	0.10	0.11	0.13
2/28/2021 0:00	3/1/2021 0:00	Perdue	Filter 4	0.10	0.10	0.13
3/1/2021 0:00	3/2/2021 0:00	Perdue	Filter 4	0.09	0.10	0.13
3/2/2021 0:00	3/3/2021 0:00	Perdue	Filter 4	0.00	0.11	0.36
3/3/2021 0:00	3/4/2021 0:00	Perdue	Filter 4	0.00	0.11	0.32
3/4/2021 0:00	3/5/2021 0:00	Perdue	Filter 4	0.00	0.11	0.19
3/5/2021 0:00	3/6/2021 0:00	Perdue	Filter 4	0.00	0.13	0.24
3/6/2021 0:00	3/7/2021 0:00	Perdue	Filter 4	0.11	0.12	0.14
3/7/2021 0:00	3/8/2021 0:00	Perdue	Filter 4	0.10	0.11	0.12
3/8/2021 0:00	3/9/2021 0:00	Perdue	Filter 4	0.00	0.11	0.12
3/9/2021 0:00	3/10/2021 0:00	Perdue	Filter 4	0.10	0.10	0.12
3/10/2021 0:00	3/11/2021 0:00	Perdue	Filter 4	0.00	0.12	0.29
3/11/2021 0:00	3/12/2021 0:00	Perdue	Filter 4	0.10	0.10	0.11
3/12/2021 0:00	3/13/2021 0:00	Perdue	Filter 4	0.00	0.14	0.19

3/13/2021 0:00	3/14/2021 0:00	Perdue	Filter 4	0.12	0.12	0.14
3/14/2021 0:00	3/15/2021 0:00	Perdue	Filter 4	0.00	0.12	0.14
3/15/2021 0:00	3/16/2021 0:00	Perdue	Filter 4	0.10	0.11	0.12
3/16/2021 0:00	3/17/2021 0:00	Perdue	Filter 4	0.10	0.11	0.12
3/17/2021 0:00	3/18/2021 0:00	Perdue	Filter 4	0.00	0.10	0.22
3/18/2021 0:00	3/19/2021 0:00	Perdue	Filter 4	0.06	0.07	0.11
3/19/2021 0:00	3/20/2021 0:00	Perdue	Filter 4	0.00	0.07	0.14
3/20/2021 0:00	3/21/2021 0:00	Perdue	Filter 4	0.07	0.09	0.12
3/21/2021 0:00	3/22/2021 0:00	Perdue	Filter 4	0.07	0.08	0.08
3/22/2021 0:00	3/23/2021 0:00	Perdue	Filter 4	0.06	0.07	0.08
3/23/2021 0:00	3/24/2021 0:00	Perdue	Filter 4	0.06	0.07	0.07
3/24/2021 0:00	3/25/2021 0:00	Perdue	Filter 4	0.06	0.07	0.10
3/25/2021 0:00	3/26/2021 0:00	Perdue	Filter 4	0.06	0.06	0.09
3/26/2021 0:00	3/27/2021 0:00	Perdue	Filter 4	0.05	0.08	0.30
3/27/2021 0:00	3/28/2021 0:00	Perdue	Filter 4	0.05	0.06	0.20
3/28/2021 0:00	3/29/2021 0:00	Perdue	Filter 4	0.00	0.09	0.62
3/29/2021 0:00	3/30/2021 0:00	Perdue	Filter 4	0.07	0.10	0.21
3/30/2021 0:00	3/31/2021 0:00	Perdue	Filter 4	0.07	0.13	0.32
3/31/2021 0:00	4/1/2021 0:00	Perdue	Filter 4	0.08	0.13	0.33
4/1/2021 0:00	4/2/2021 0:00	Perdue	Filter 4	0.00	0.14	0.31
4/2/2021 0:00	4/3/2021 0:00	Perdue	Filter 4	0.08	0.09	0.12
4/3/2021 0:00	4/4/2021 0:00	Perdue	Filter 4	0.00	0.09	0.16
4/4/2021 0:00	4/5/2021 0:00	Perdue	Filter 4	0.08	0.09	0.21
4/5/2021 0:00	4/6/2021 0:00	Perdue	Filter 4	0.00	0.10	0.25
4/6/2021 0:00	4/7/2021 0:00	Perdue	Filter 4	0.10	0.12	0.21
4/7/2021 0:00	4/8/2021 0:00	Perdue	Filter 4	0.10	0.11	0.13
4/8/2021 0:00	4/9/2021 0:00	Perdue	Filter 4	0.09	0.10	0.13
4/9/2021 0:00	4/10/2021 0:00	Perdue	Filter 4	0.00	0.12	0.23
4/10/2021 0:00	4/11/2021 0:00	Perdue	Filter 4	0.10	0.11	0.13
4/11/2021 0:00	4/12/2021 0:00	Perdue	Filter 4	0.09	0.10	0.13
4/12/2021 0:00	4/13/2021 0:00	Perdue	Filter 4	0.00	0.14	0.23
4/13/2021 0:00	4/14/2021 0:00	Perdue	Filter 4	0.00	0.13	0.14
4/14/2021 0:00	4/15/2021 0:00	Perdue	Filter 4	0.12	0.14	0.16
4/15/2021 0:00	4/16/2021 0:00	Perdue	Filter 4	0.12	0.13	0.18
4/16/2021 0:00	4/17/2021 0:00	Perdue	Filter 4	0.12	0.12	0.14
4/17/2021 0:00	4/18/2021 0:00	Perdue	Filter 4	0.00	0.15	0.41
4/18/2021 0:00	4/19/2021 0:00	Perdue	Filter 4	0.09	0.15	0.32
4/19/2021 0:00	4/20/2021 0:00	Perdue	Filter 4	0.06	0.15	0.52
4/20/2021 0:00	4/21/2021 0:00	Perdue	Filter 4	0.04	0.10	0.22
4/21/2021 0:00	4/22/2021 0:00	Perdue	Filter 4	0.00	0.10	0.69
4/22/2021 0:00	4/23/2021 0:00	Perdue	Filter 4	0.09	0.10	0.14
4/23/2021 0:00	4/24/2021 0:00	Perdue	Filter 4	0.10	0.13	0.34
4/24/2021 0:00	4/25/2021 0:00	Perdue	Filter 4	0.00	0.09	0.37
4/25/2021 0:00	4/26/2021 0:00	Perdue	Filter 4	0.11	0.16	0.24
4/26/2021 0:00	4/27/2021 0:00	Perdue	Filter 4	0.00	0.15	0.24
4/27/2021 0:00	4/28/2021 0:00	Perdue	Filter 4	0.09	0.10	0.15
4/28/2021 0:00	4/29/2021 0:00	Perdue	Filter 4	0.09	0.10	0.16
4/29/2021 0:00	4/30/2021 0:00	Perdue	Filter 4	0.10	0.15	0.20
4/30/2021 0:00	5/1/2021 0:00	Perdue	Filter 4	0.14	0.17	0.26
5/1/2021 0:00	5/2/2021 0:00	Perdue	Filter 4	0.00	0.16	0.23
5/2/2021 0:00	5/3/2021 0:00	Perdue	Filter 4	0.13	0.15	0.24
5/3/2021 0:00	5/4/2021 0:00	Perdue	Filter 4	0.13	0.15	0.24
5/4/2021 0:00	5/5/2021 0:00	Perdue	Filter 4	0.13	0.16	0.27
5/5/2021 0:00	5/6/2021 0:00	Perdue	Filter 4	0.13	0.15	0.18
5/6/2021 0:00	5/7/2021 0:00	Perdue	Filter 4	0.00	0.17	0.51
5/7/2021 0:00	5/8/2021 0:00	Perdue	Filter 4	0.13	0.17	0.22
5/8/2021 0:00	5/9/2021 0:00	Perdue	Filter 4	0.16	0.19	0.28
5/9/2021 0:00	5/10/2021 0:00	Perdue	Filter 4	0.00	0.19	0.36
5/10/2021 0:00	5/11/2021 0:00	Perdue	Filter 4	0.13	0.16	0.23
5/11/2021 0:00	5/12/2021 0:00	Perdue	Filter 4	0.11	0.14	0.22
5/12/2021 0:00	5/13/2021 0:00	Perdue	Filter 4	0.00	0.16	0.27
5/13/2021 0:00	5/14/2021 0:00	Perdue	Filter 4	0.00	0.20	0.28
5/14/2021 0:00	5/15/2021 0:00	Perdue	Filter 4	0.08	0.15	0.26
5/15/2021 0:00	5/16/2021 0:00	Perdue	Filter 4	0.07	0.08	0.10
5/16/2021 0:00	5/17/2021 0:00	Perdue	Filter 4	0.00	0.08	0.41
5/17/2021 0:00	5/18/2021 0:00	Perdue	Filter 4	0.00	0.08	0.11
5/18/2021 0:00	5/19/2021 0:00	Perdue	Filter 4	0.07	0.08	0.09
5/19/2021 0:00	5/20/2021 0:00	Perdue	Filter 4	0.00	0.09	0.24
5/20/2021 0:00	5/21/2021 0:00	Perdue	Filter 4	0.00	0.08	0.16
5/21/2021 0:00	5/22/2021 0:00	Perdue	Filter 4	0.08	0.10	0.13
5/22/2021 0:00	5/23/2021 0:00	Perdue	Filter 4	0.00	0.09	0.10
5/23/2021 0:00	5/24/2021 0:00	Perdue	Filter 4	0.07	0.08	0.12
5/24/2021 0:00	5/25/2021 0:00	Perdue	Filter 4	0.07	0.08	0.09

5/25/2021 0:00	5/26/2021 0:00	Perdue	Filter 4	0.07	0.08	0.11
5/26/2021 0:00	5/27/2021 0:00	Perdue	Filter 4	0.00	0.07	0.20
5/27/2021 0:00	5/28/2021 0:00	Perdue	Filter 4	0.06	0.07	0.15
5/28/2021 0:00	5/29/2021 0:00	Perdue	Filter 4	0.00	0.08	0.11
5/29/2021 0:00	5/30/2021 0:00	Perdue	Filter 4	0.00	0.09	0.35
5/30/2021 0:00	5/31/2021 0:00	Perdue	Filter 4	0.00	0.08	0.17
5/31/2021 0:00	6/1/2021 0:00	Perdue	Filter 4	0.06	0.08	0.14
6/1/2021 0:00	6/2/2021 0:00	Perdue	Filter 4	0.06	0.07	0.08
6/2/2021 0:00	6/3/2021 0:00	Perdue	Filter 4	0.06	0.06	0.15
6/3/2021 0:00	6/4/2021 0:00	Perdue	Filter 4	0.05	0.06	0.10
6/4/2021 0:00	6/5/2021 0:00	Perdue	Filter 4	0.06	0.07	0.11
6/5/2021 0:00	6/6/2021 0:00	Perdue	Filter 4	0.00	0.09	0.17
6/6/2021 0:00	6/7/2021 0:00	Perdue	Filter 4	0.09	0.10	0.12
6/7/2021 0:00	6/8/2021 0:00	Perdue	Filter 4	0.00	0.12	0.18
6/8/2021 0:00	6/9/2021 0:00	Perdue	Filter 4	0.11	0.13	0.21
6/9/2021 0:00	6/10/2021 0:00	Perdue	Filter 4	0.10	0.12	0.15
6/10/2021 0:00	6/11/2021 0:00	Perdue	Filter 4	0.10	0.16	0.22
6/11/2021 0:00	6/12/2021 0:00	Perdue	Filter 4	0.09	0.10	0.21
6/12/2021 0:00	6/13/2021 0:00	Perdue	Filter 4	0.09	0.11	0.18
6/13/2021 0:00	6/14/2021 0:00	Perdue	Filter 4	0.00	0.13	0.19
6/14/2021 0:00	6/15/2021 0:00	Perdue	Filter 4	0.00	0.14	1.00
6/15/2021 0:00	6/16/2021 0:00	Perdue	Filter 4	0.10	0.15	0.22
6/16/2021 0:00	6/17/2021 0:00	Perdue	Filter 4	0.13	0.15	0.25
6/17/2021 0:00	6/18/2021 0:00	Perdue	Filter 4	0.00	0.17	0.23
6/18/2021 0:00	6/19/2021 0:00	Perdue	Filter 4	0.14	0.18	0.25
6/19/2021 0:00	6/20/2021 0:00	Perdue	Filter 4	0.13	0.15	0.23
6/20/2021 0:00	6/21/2021 0:00	Perdue	Filter 4	0.13	0.15	0.26
6/21/2021 0:00	6/22/2021 0:00	Perdue	Filter 4	0.00	0.20	0.28
6/22/2021 0:00	6/23/2021 0:00	Perdue	Filter 4	0.15	0.19	0.22
6/23/2021 0:00	6/24/2021 0:00	Perdue	Filter 4	0.00	0.19	0.28
6/24/2021 0:00	6/25/2021 0:00	Perdue	Filter 4	0.00	0.17	0.23
6/25/2021 0:00	6/26/2021 0:00	Perdue	Filter 4	0.00	0.20	0.24
6/26/2021 0:00	6/27/2021 0:00	Perdue	Filter 4	0.00	0.19	0.24
6/27/2021 0:00	6/28/2021 0:00	Perdue	Filter 4	0.00	0.19	0.26
6/28/2021 0:00	6/29/2021 0:00	Perdue	Filter 4	0.00	0.17	0.25
6/29/2021 0:00	6/30/2021 0:00	Perdue	Filter 4	0.10	0.13	0.21
6/30/2021 0:00	7/1/2021 0:00	Perdue	Filter 4	0.09	0.10	0.24
7/1/2021 0:00	7/2/2021 0:00	Perdue	Filter 4	0.04	0.09	0.21
7/2/2021 0:00	7/3/2021 0:00	Perdue	Filter 4	0.05	0.07	0.15
7/3/2021 0:00	7/4/2021 0:00	Perdue	Filter 4	0.05	0.06	0.16
7/4/2021 0:00	7/5/2021 0:00	Perdue	Filter 4	0.00	0.06	0.29
7/5/2021 0:00	7/6/2021 0:00	Perdue	Filter 4	0.04	0.04	0.10
7/6/2021 0:00	7/7/2021 0:00	Perdue	Filter 4	0.03	0.04	0.09
7/7/2021 0:00	7/8/2021 0:00	Perdue	Filter 4	0.03	0.04	0.11
7/8/2021 0:00	7/9/2021 0:00	Perdue	Filter 4	0.00	0.07	0.13
7/9/2021 0:00	7/10/2021 0:00	Perdue	Filter 4	0.08	0.10	0.22
7/10/2021 0:00	7/11/2021 0:00	Perdue	Filter 4	0.06	0.12	0.17
7/11/2021 0:00	7/12/2021 0:00	Perdue	Filter 4	0.00	0.11	0.18
7/12/2021 0:00	7/13/2021 0:00	Perdue	Filter 4	0.07	0.12	0.20
7/13/2021 0:00	7/14/2021 0:00	Perdue	Filter 4	0.10	0.13	0.25
7/14/2021 0:00	7/15/2021 0:00	Perdue	Filter 4	0.13	0.14	0.26
7/15/2021 0:00	7/16/2021 0:00	Perdue	Filter 4	0.00	0.14	0.41
7/16/2021 0:00	7/17/2021 0:00	Perdue	Filter 4	0.00	0.17	0.26
7/17/2021 0:00	7/18/2021 0:00	Perdue	Filter 4	0.15	0.16	0.25
7/18/2021 0:00	7/19/2021 0:00	Perdue	Filter 4	0.14	0.17	0.25
7/19/2021 0:00	7/20/2021 0:00	Perdue	Filter 4	0.12	0.17	0.26
7/20/2021 0:00	7/21/2021 0:00	Perdue	Filter 4	0.00	0.17	0.64
7/21/2021 0:00	7/22/2021 0:00	Perdue	Filter 4	0.14	0.18	0.24
7/22/2021 0:00	7/23/2021 0:00	Perdue	Filter 4	0.16	0.17	0.24
7/23/2021 0:00	7/24/2021 0:00	Perdue	Filter 4	0.16	0.18	0.32
7/24/2021 0:00	7/25/2021 0:00	Perdue	Filter 4	0.00	0.20	0.34
7/25/2021 0:00	7/26/2021 0:00	Perdue	Filter 4	0.20	0.22	0.34
7/26/2021 0:00	7/27/2021 0:00	Perdue	Filter 4	0.00	0.12	0.30
7/27/2021 0:00	7/28/2021 0:00	Perdue	Filter 4	0.05	0.11	0.21
7/28/2021 0:00	7/29/2021 0:00	Perdue	Filter 4	0.00	0.16	0.25
7/29/2021 0:00	7/30/2021 0:00	Perdue	Filter 4	0.13	0.16	0.23
7/30/2021 0:00	7/31/2021 0:00	Perdue	Filter 4	0.12	0.13	0.22
7/31/2021 0:00	8/1/2021 0:00	Perdue	Filter 4	0.11	0.14	0.28
8/1/2021 0:00	8/2/2021 0:00	Perdue	Filter 4	0.13	0.15	0.27
8/2/2021 0:00	8/3/2021 0:00	Perdue	Filter 4	0.00	0.15	0.29
8/3/2021 0:00	8/4/2021 0:00	Perdue	Filter 4	0.13	0.14	0.21
8/4/2021 0:00	8/5/2021 0:00	Perdue	Filter 4	0.00	0.13	0.21
8/5/2021 0:00	8/6/2021 0:00	Perdue	Filter 4	0.12	0.13	0.43

8/6/2021 0:00	8/7/2021 0:00	Perdue	Filter 4	0.11	0.12	0.23
8/7/2021 0:00	8/8/2021 0:00	Perdue	Filter 4	0.00	0.13	0.26
8/8/2021 0:00	8/9/2021 0:00	Perdue	Filter 4	0.00	0.14	0.19
8/9/2021 0:00	8/10/2021 0:00	Perdue	Filter 4	0.11	0.12	0.19
8/10/2021 0:00	8/11/2021 0:00	Perdue	Filter 4	0.11	0.13	0.24
8/11/2021 0:00	8/12/2021 0:00	Perdue	Filter 4	0.00	0.15	0.28
8/12/2021 0:00	8/13/2021 0:00	Perdue	Filter 4	0.12	0.16	0.23
8/13/2021 0:00	8/14/2021 0:00	Perdue	Filter 4	0.00	0.16	1.00
8/14/2021 0:00	8/15/2021 0:00	Perdue	Filter 4	0.12	0.14	0.31
8/15/2021 0:00	8/16/2021 0:00	Perdue	Filter 4	0.11	0.13	0.35
8/16/2021 0:00	8/17/2021 0:00	Perdue	Filter 4	0.00	0.14	0.31
8/17/2021 0:00	8/18/2021 0:00	Perdue	Filter 4	0.00	0.18	0.31
8/18/2021 0:00	8/19/2021 0:00	Perdue	Filter 4	0.00	0.16	0.34
8/19/2021 0:00	8/20/2021 0:00	Perdue	Filter 4	0.00	0.20	0.36
8/20/2021 0:00	8/21/2021 0:00	Perdue	Filter 4	0.14	0.15	0.30
8/21/2021 0:00	8/22/2021 0:00	Perdue	Filter 4	0.00	0.14	0.32
8/22/2021 0:00	8/23/2021 0:00	Perdue	Filter 4	0.14	0.16	0.32
8/23/2021 0:00	8/24/2021 0:00	Perdue	Filter 4	0.00	0.15	0.26
8/24/2021 0:00	8/25/2021 0:00	Perdue	Filter 4	0.00	0.20	0.57
8/25/2021 0:00	8/26/2021 0:00	Perdue	Filter 4	0.00	0.13	0.92
8/26/2021 0:00	8/27/2021 0:00	Perdue	Filter 4	0.00	0.08	0.16
8/27/2021 0:00	8/28/2021 0:00	Perdue	Filter 4	0.07	0.08	0.11
8/28/2021 0:00	8/29/2021 0:00	Perdue	Filter 4	0.06	0.07	0.16
8/29/2021 0:00	8/30/2021 0:00	Perdue	Filter 4	0.00	0.08	0.39
8/30/2021 0:00	8/31/2021 0:00	Perdue	Filter 4	0.07	0.08	0.15
8/31/2021 0:00	9/1/2021 0:00	Perdue	Filter 4	0.00	0.08	0.36
9/1/2021 0:00	9/2/2021 0:00	Perdue	Filter 4	0.08	0.08	0.15
9/2/2021 0:00	9/3/2021 0:00	Perdue	Filter 4	0.00	0.09	0.26
9/3/2021 0:00	9/4/2021 0:00	Perdue	Filter 4	0.09	0.10	0.17
9/4/2021 0:00	9/5/2021 0:00	Perdue	Filter 4	0.09	0.10	0.21
9/5/2021 0:00	9/6/2021 0:00	Perdue	Filter 4	0.09	0.10	0.22
9/6/2021 0:00	9/7/2021 0:00	Perdue	Filter 4	0.10	0.11	0.20
9/7/2021 0:00	9/8/2021 0:00	Perdue	Filter 4	0.11	0.13	0.24
9/8/2021 0:00	9/9/2021 0:00	Perdue	Filter 4	0.14	0.17	0.34
9/9/2021 0:00	9/10/2021 0:00	Perdue	Filter 4	0.05	0.10	0.32
9/10/2021 0:00	9/11/2021 0:00	Perdue	Filter 4	0.04	0.05	0.16
9/11/2021 0:00	9/12/2021 0:00	Perdue	Filter 4	0.00	0.05	0.22
9/12/2021 0:00	9/13/2021 0:00	Perdue	Filter 4	0.04	0.05	0.17
9/13/2021 0:00	9/14/2021 0:00	Perdue	Filter 4	0.04	0.05	0.19
9/14/2021 0:00	9/15/2021 0:00	Perdue	Filter 4	0.00	0.05	0.19
9/15/2021 0:00	9/16/2021 0:00	Perdue	Filter 4	0.03	0.04	0.11
9/16/2021 0:00	9/17/2021 0:00	Perdue	Filter 4	0.04	0.04	0.15
9/17/2021 0:00	9/18/2021 0:00	Perdue	Filter 4	0.04	0.04	0.12
9/18/2021 0:00	9/19/2021 0:00	Perdue	Filter 4	0.00	0.04	0.15
9/19/2021 0:00	9/20/2021 0:00	Perdue	Filter 4	0.04	0.04	0.12
9/20/2021 0:00	9/21/2021 0:00	Perdue	Filter 4	0.04	0.04	0.13
9/21/2021 0:00	9/22/2021 0:00	Perdue	Filter 4	0.04	0.05	0.18
9/22/2021 0:00	9/23/2021 0:00	Perdue	Filter 4	0.05	0.06	0.25
9/23/2021 0:00	9/24/2021 0:00	Perdue	Filter 4	0.06	0.07	0.19
9/24/2021 0:00	9/25/2021 0:00	Perdue	Filter 4	0.07	0.09	0.25
9/25/2021 0:00	9/26/2021 0:00	Perdue	Filter 4	0.00	0.13	0.27
9/26/2021 0:00	9/27/2021 0:00	Perdue	Filter 4	0.14	0.17	0.28
9/27/2021 0:00	9/28/2021 0:00	Perdue	Filter 4	0.00	0.22	0.30
9/28/2021 0:00	9/29/2021 0:00	Perdue	Filter 4	0.27		0.27
9/29/2021 0:00	9/30/2021 0:00	Perdue	Filter 4	0.09	0.10	0.49
9/30/2021 0:00	10/1/2021 0:00	Perdue	Filter 4	0.00	0.09	0.18
10/1/2021 0:00	10/2/2021 0:00	Perdue	Filter 4	0.08	0.09	0.19
10/2/2021 0:00	10/3/2021 0:00	Perdue	Filter 4	0.09	0.10	0.18
10/3/2021 0:00	10/4/2021 0:00	Perdue	Filter 4	0.10	0.12	0.24
10/4/2021 0:00	10/5/2021 0:00	Perdue	Filter 4	0.13	0.15	0.26
10/5/2021 0:00	10/6/2021 0:00	Perdue	Filter 4	0.04	0.12	0.30
10/6/2021 0:00	10/7/2021 0:00	Perdue	Filter 4	0.04	0.05	0.17
10/7/2021 0:00	10/8/2021 0:00	Perdue	Filter 4	0.05	0.05	0.18
10/8/2021 0:00	10/9/2021 0:00	Perdue	Filter 4	0.05	0.05	0.18
10/9/2021 0:00	10/10/2021 0:00	Perdue	Filter 4	0.00	0.06	0.20
10/10/2021 0:00	10/11/2021 0:00	Perdue	Filter 4	0.05	0.07	0.26
10/11/2021 0:00	10/12/2021 0:00	Perdue	Filter 4	0.05	0.06	0.16
10/12/2021 0:00	10/13/2021 0:00	Perdue	Filter 4	0.05	0.06	0.22
10/13/2021 0:00	10/14/2021 0:00	Perdue	Filter 4	0.00	0.06	0.11
10/14/2021 0:00	10/15/2021 0:00	Perdue	Filter 4	0.05	0.06	0.13
10/15/2021 0:00	10/16/2021 0:00	Perdue	Filter 4	0.06	0.07	0.20
10/16/2021 0:00	10/17/2021 0:00	Perdue	Filter 4	0.06	0.07	0.15
10/17/2021 0:00	10/18/2021 0:00	Perdue	Filter 4	0.00	0.07	0.16

10/18/2021 0:00	10/19/2021 0:00	Perdue	Filter 4	0.07	0.07	0.15
10/19/2021 0:00	10/20/2021 0:00	Perdue	Filter 4	0.00	0.08	0.14
10/20/2021 0:00	10/21/2021 0:00	Perdue	Filter 4	0.07	0.08	0.10
10/21/2021 0:00	10/22/2021 0:00	Perdue	Filter 4	0.07	0.08	0.11
10/22/2021 0:00	10/23/2021 0:00	Perdue	Filter 4	0.07	0.08	0.11
10/23/2021 0:00	10/24/2021 0:00	Perdue	Filter 4	0.07	0.08	0.11
10/24/2021 0:00	10/25/2021 0:00	Perdue	Filter 4	0.07	0.08	0.12
10/25/2021 0:00	10/26/2021 0:00	Perdue	Filter 4	0.07	0.08	0.16
10/26/2021 0:00	10/27/2021 0:00	Perdue	Filter 4	0.00	0.10	0.16
10/27/2021 0:00	10/28/2021 0:00	Perdue	Filter 4	0.00	0.11	0.13
10/28/2021 0:00	10/29/2021 0:00	Perdue	Filter 4	0.00	0.12	0.23
10/29/2021 0:00	10/30/2021 0:00	Perdue	Filter 4	0.12	0.13	0.23
10/30/2021 0:00	10/31/2021 0:00	Perdue	Filter 4	0.13	0.14	0.17
10/31/2021 0:00	11/1/2021 0:00	Perdue	Filter 4	0.13	0.14	0.17
11/1/2021 0:00	11/2/2021 0:00	Perdue	Filter 4	0.00	0.14	0.40
11/2/2021 0:00	11/3/2021 0:00	Perdue	Filter 4	0.00	0.12	0.23
11/3/2021 0:00	11/4/2021 0:00	Perdue	Filter 4	0.00	0.18	0.61
11/4/2021 0:00	11/5/2021 0:00	Perdue	Filter 4	0.11	0.16	0.29
11/5/2021 0:00	11/6/2021 0:00	Perdue	Filter 4	0.13	0.17	0.21
11/6/2021 0:00	11/7/2021 0:00	Perdue	Filter 4	0.12	0.15	0.20
11/7/2021 0:00	11/8/2021 0:00	Perdue	Filter 4	0.15	0.17	0.21
11/8/2021 0:00	11/9/2021 0:00	Perdue	Filter 4	0.00	0.15	0.23
11/9/2021 0:00	11/10/2021 0:00	Perdue	Filter 4	0.11	0.12	0.17
11/10/2021 0:00	11/11/2021 0:00	Perdue	Filter 4	0.11	0.13	0.18
11/11/2021 0:00	11/12/2021 0:00	Perdue	Filter 4	0.11	0.13	0.16
11/12/2021 0:00	11/13/2021 0:00	Perdue	Filter 4	0.11	0.14	0.21
11/13/2021 0:00	11/14/2021 0:00	Perdue	Filter 4	0.00	0.18	0.56
11/14/2021 0:00	11/15/2021 0:00	Perdue	Filter 4	0.10	0.11	0.15
11/15/2021 0:00	11/16/2021 0:00	Perdue	Filter 4	0.10	0.13	0.18
11/16/2021 0:00	11/17/2021 0:00	Perdue	Filter 4	0.00	0.14	0.30
11/17/2021 0:00	11/18/2021 0:00	Perdue	Filter 4	0.00	0.11	0.18
11/18/2021 0:00	11/19/2021 0:00	Perdue	Filter 4	0.00	0.16	0.30
11/19/2021 0:00	11/20/2021 0:00	Perdue	Filter 4	0.10	0.11	0.17
11/20/2021 0:00	11/21/2021 0:00	Perdue	Filter 4	0.12	0.19	0.30
11/21/2021 0:00	11/22/2021 0:00	Perdue	Filter 4	0.15	0.18	0.29
11/22/2021 0:00	11/23/2021 0:00	Perdue	Filter 4	0.00	0.09	0.16
11/23/2021 0:00	11/24/2021 0:00	Perdue	Filter 4	0.03	0.04	0.09
11/24/2021 0:00	11/25/2021 0:00	Perdue	Filter 4	0.03	0.05	0.13
11/25/2021 0:00	11/26/2021 0:00	Perdue	Filter 4	0.03	0.04	0.12
11/26/2021 0:00	11/27/2021 0:00	Perdue	Filter 4	0.04	0.05	0.14
11/27/2021 0:00	11/28/2021 0:00	Perdue	Filter 4	0.03	0.05	0.13
11/28/2021 0:00	11/29/2021 0:00	Perdue	Filter 4	0.04	0.05	0.15
11/29/2021 0:00	11/30/2021 0:00	Perdue	Filter 4	0.03	0.05	0.17
11/30/2021 0:00	12/1/2021 0:00	Perdue	Filter 4	0.00	0.06	0.12
12/1/2021 0:00	12/2/2021 0:00	Perdue	Filter 4	0.05	0.06	0.07
12/2/2021 0:00	12/3/2021 0:00	Perdue	Filter 4	0.04	0.05	0.06
12/3/2021 0:00	12/4/2021 0:00	Perdue	Filter 4	0.04	0.05	0.08
12/4/2021 0:00	12/5/2021 0:00	Perdue	Filter 4	0.04	0.05	0.10
12/5/2021 0:00	12/6/2021 0:00	Perdue	Filter 4	0.00	0.04	0.13
12/6/2021 0:00	12/7/2021 0:00	Perdue	Filter 4	0.04	0.04	0.05
12/7/2021 0:00	12/8/2021 0:00	Perdue	Filter 4	0.04	0.04	0.10
12/8/2021 0:00	12/9/2021 0:00	Perdue	Filter 4	0.00	0.04	0.08
12/9/2021 0:00	12/10/2021 0:00	Perdue	Filter 4	0.04	0.05	0.10
12/10/2021 0:00	12/11/2021 0:00	Perdue	Filter 4	0.00	0.04	0.12
12/11/2021 0:00	12/12/2021 0:00	Perdue	Filter 4	0.00	0.04	0.05
12/12/2021 0:00	12/13/2021 0:00	Perdue	Filter 4	0.00	0.06	0.35
12/13/2021 0:00	12/14/2021 0:00	Perdue	Filter 4	0.07	0.09	0.10
12/14/2021 0:00	12/15/2021 0:00	Perdue	Filter 4	0.00	0.07	0.09
12/15/2021 0:00	12/16/2021 0:00	Perdue	Filter 4	0.05	0.07	0.12
12/16/2021 0:00	12/17/2021 0:00	Perdue	Filter 4	0.00	0.08	0.09
12/17/2021 0:00	12/18/2021 0:00	Perdue	Filter 4	0.00	0.09	0.28
12/18/2021 0:00	12/19/2021 0:00	Perdue	Filter 4	0.08	0.09	0.11
12/19/2021 0:00	12/20/2021 0:00	Perdue	Filter 4	0.00	0.09	0.18
12/20/2021 0:00	12/21/2021 0:00	Perdue	Filter 4	0.10	0.10	0.11
12/21/2021 0:00	12/22/2021 0:00	Perdue	Filter 4	0.10	0.10	0.13
12/22/2021 0:00	12/23/2021 0:00	Perdue	Filter 4	0.00	0.11	0.13
12/23/2021 0:00	12/24/2021 0:00	Perdue	Filter 4	0.00	0.12	0.13
12/24/2021 0:00	12/25/2021 0:00	Perdue	Filter 4	0.00	0.14	0.20
12/25/2021 0:00	12/26/2021 0:00	Perdue	Filter 4	0.00	0.15	0.25
12/26/2021 0:00	12/27/2021 0:00	Perdue	Filter 4	0.13	0.14	0.15
12/27/2021 0:00	12/28/2021 0:00	Perdue	Filter 4	0.00	0.14	0.15
12/28/2021 0:00	12/29/2021 0:00	Perdue	Filter 4	0.00	0.15	0.16
12/29/2021 0:00	12/30/2021 0:00	Perdue	Filter 4	0.00	0.15	0.19

12/30/2021 0:00	12/31/2021 0:00	Perdue	Filter 4	0.16	0.16	0.17
12/31/2021 0:00	1/1/2022 0:00	Perdue	Filter 4	0.00	0.16	0.18

1.00
0.99
0.30
0.17

Date	SWL TOC	CFE TOC	Treated SUVA TOC	% SW Inflow to Perdue
1/4/2017		2.4	2.6	
1/19/2017		2.4	2.4	
1/24/2017		2.4	2.4	
2/7/2017		2.5	2.5	
2/14/2017		2.5	2.3	
2/21/2017		2.4	2.3	
2/27/2017	10.2	2.6	2.6	0%
3/7/2017	11.6	2.6	2.6	0%
3/14/2017	9.5	5.8	5.4	0%
3/22/2017	9.4	5.2	5.2	0%
3/29/2017	10.0	3.0	3.0	0%
4/4/2017	10.3	3.3	3.4	0%
4/11/2017	10.4	5.0	5.5	63
4/18/2017	10.8	3.5	3.4	0
4/25/2017	10.4	5.4	5.4	62
5/2/2017	10.8	5.3	4.9	58
5/9/2017	10.3	4.2	4.0	44
5/16/2017	10.7	5.1	5.2	61
5/23/2017	12.3	5.5	6.0	59
6/7/2017	11.2	2.2	2.3	0
6/13/2017	11.6	4.4	4.6	51
6/20/2017	12.5	4.4	5.3	47
6/28/2017	13.4	4.5	4.4	48
7/5/2017	12.3	4.6	5.1	52
7/11/2017	13.7	5.6	6.5	52
7/18/2017	13.4	6.3	5.6	59
7/25/2017	13.0	5.4	5.5	48
8/8/2017	12.3	5.5	5.4	62
8/15/2017	12.2	3.1	2.1	0
8/18/2017		2.3		
8/21/2017	11.4	2.4	2.2	0
8/29/2017	11.7	2.5	2.4	10
9/6/2017	11.7	2.5	2.2	36
9/13/2017	12.0	2.261	2.236	29
9/19/2017	11.33	4.534	4.8	72
9/27/2017	11.7	9.0	9.4	100
10/5/2017	12.0	8.8	9.6	100
10/11/2017	12.2	8.4	9.0	100
10/17/2017	12.2	9.0	9.1	100
10/24/2017	11.9	8.8	9.9	100
11/1/2017	11.3	8.5	8.1	100
11/7/2017	11.9	8.6	8.9	100
11/14/2017	11.2	8.6	8.698	95
11/28/2017	11.37	8.786	8.619	100
12/7/2017	11.23	8.737	8.823	100
12/12/2017	11.35	8.59	8.944	100
12/19/2017	10.98	8.663	8.628	100
12/27/2017	11.29	8.63	9.135	100
1/4/2018	14.06	8.806	9.43	100
1/10/2018	11.05	8.577	9.139	97
1/17/2018	11.71	9.038	10.43	100
1/23/2018	10.9	8.563	8.499	100

2/8/2018	11.22	9.08	9.268	100
2/13/2018	11.12	8.964	8.884	96
2/20/2018	11.2	9.005	8.794	96
3/6/2018	12.64	9.237	9.64	100
3/13/2018	11.6	9.15	9.566	100
3/20/2018	11.54	8.982	9.222	100
4/3/2018	11.42	9.229	9.534	100
4/17/2018	12.04	9.239	9.236	100
4/24/2018	12.12	9.748	10.03	100
5/1/2018	11.54	9.484	9.415	100
5/8/2018	12.35	9.496	10.29	100
5/15/2018	12.34	9.372	9.59	100
5/30/2018	12.84	9.404	10.18	97
6/12/2018	14.14	9.904	10.77	100
7/10/2018	14	10	11.05	100
7/25/2018	13.8	2.382	2.31	0
8/7/2018	13.69	2.438	2.389	0
8/21/2018	13.79	2.358	2.357	0
9/5/2018	14.34	6.252	7.99	49
9/18/2018	13.74	6.259	6.455	49
9/25/2018	14.54	6.283	6.259	50
10/3/2018	14.83	6.254	5.991	50
10/9/2018	13.9	6.1	6.6	48
10/16/2018	13.7	2.0	1.9	0
10/23/2018	14.2	1.9	1.9	0
10/31/2018	13.4	1.8	1.8	0
11/20/2018	14.0	2.1	2.1	0
12/19/2018	12.6	2.2	2.4	0
1/10/2019	12.3	2.2	2.2	0
1/22/2019	12.0	5.7	6.5	52
2/12/2019	11.3	3.8	5.9	52
2/19/2019	11.0	5.7	5.2	55
3/5/2019	9.7	4.9	5.0	59
3/26/2019	10.1	7.2	7.9	100
4/2/2019	10.2	5.7	7.5	100
4/9/2019	9.8	7.5	7.4	100
4/30/2019	10.4	7.4	7.9	100
5/7/2019	10.5	7.8	7.5	100
5/21/2019	10.7	7.9	8.3	100
5/31/2019	10.8	8.1	7.8	100
6/4/2019	10.9	8.4	7.7	100
6/20/2019	10.5	8.7	7.6	100
6/25/2019	10.4	8.5	7.7	100
7/9/2019	10.5	8.5	8.2	100
7/25/2019	12.7	8.7	8.6	100
8/6/2019	11.4	8.9	9.1	100
8/22/2019	11.4	9.0	9.9	100
9/17/2019	10.7	8.9	9.1	100
10/15/2019	12.6	9.2	9.1	100
11/19/2019	12.4	8.6	9.1	100
12/4/2019	11.9	8.5	8.8	100
12/10/2019	11.0	8.0	8.1	100
1/22/2020	10.9	8.2	7.9	100
2/13/2020	10.6	8.1	8.3	100
2/18/2020	11.6	8.2	8.6	100
3/12/2020	10.5	8.2	8.5	98

3/31/2020	11.1	8.2	8.4	100
4/14/2020	10.6	7.6	7.5	100
5/6/2020	10.7	4.7	5.6	50
6/2/2020	12.7	8.1	9.5	100
7/28/2020	13.2	7.3	9.1	100
8/18/2020	12.3	5.1	8.2	46
9/9/2020	12.5	5.4	8.1	51
10/8/2020	13.4	2.6	2.9	0
11/17/2020	13.3	6.0	6.5	50
12/22/2020	13.0		7.0	55
1/7/2021	12.7	5.2	5.9	50
2/4/2021	10.3	7.1	7.8	100
3/4/2021	10.1		6.5	95
4/14/2021	10.1	7.5	7.4	100
5/13/2021	13.0	8.6	10.4	100
6/10/2021	10.9	7.8	8.1	100
7/27/2021	11.1	8.7	9.1	100
8/10/2021	11.4	8.4	9.0	100
9/22/2021	12.5	2.1	2.1	0
10/12/2021	11.6	1.7	1.6	0
10/27/2021	12.3	4.5	6.4	48
11/4/2021	12.5	8.2	9.2	100
12/15/2021	10.9	4.7	5.8	50

9.4	1.7	1.6
14.8	10.0	11.1
11.8	6.3	6.6
11.6	7.1	7.5
	1.9403	

Date	TOC (mg/l)	DOC (mg/l)	UV254 (m^{-1})	SUVA (L/mg-m)	% SW Inflow to Perdue	% DOC
01/04/17						
01/19/17						
01/24/17						
02/07/17						
02/14/17						
02/21/17						
02/27/17	10.200	8.16	16.7	2.05	0%	80%
03/07/17	11.590	9.34	26.7	2.86	0%	81%
03/14/17	9.519	9.53	25.6	2.68	0%	100%
03/22/17	9.438	9.22	25.5	2.77	0%	98%
03/29/17	9.983	9.58	28.4	2.96	0%	96%
04/04/17	10.260	9.74	28.3	2.90	0%	95%
04/11/17	10.380	10.05	28.1	2.79	63	97%
04/18/17	10.770	10.43	27.2	2.61	0	97%
04/25/17	10.390	10.03	27.4	2.73	62	97%
05/02/17	10.840	10.26	27.0	2.63	58	95%
05/09/17	10.320	9.72	26.3	2.71	44	94%
05/16/17	10.650	9.79	25.7	2.62	61	92%
05/23/17	12.280	10.35	26.1	2.52	59	84%
06/07/17	11.190	9.99	25.6	2.56	0	89%
06/13/17	11.560	10.39	26.1	2.51	51	90%
06/20/17	12.490	10.41	25.8	2.48	47	83%
06/28/17	13.360	11.18	25.8	2.30	48	84%
07/05/17	12.260	11.07	25.4	2.30	52	90%
07/11/17	13.680	11.67	25.4	2.18	52	85%
07/18/17	13.420	11.88	24.7	2.08	59	89%
07/25/17	12.950	11.77	24.3	2.06	48	91%
08/08/17	12.280	11.74	23.6	2.01	62	96%
08/15/17	12.220	11.74	23.6	2.01	0	96%
08/21/17	11.390	11.30	23.1	2.04	0	99%
08/29/17	11.680	11.03	22.9	2.07	10	94%
09/06/17	11.670	11.03	23.5	2.13	36	95%
09/13/17	11.970	10.96	22.4	2.05	29	92%
09/19/17	11.330	10.59	22.4	2.12	72	93%
09/27/17	11.690	10.73	22.8	2.13	100	92%
10/05/17	12.040	11.03	23.4	2.12	100	92%
10/11/17	12.180	10.77	23.4	2.17	100	88%
10/17/17	12.240	10.51	23.0	2.19	100	86%
10/24/17	11.920	10.58	23.7	2.24	100	89%

11/01/17	11.280	10.32	22.7	2.19	100	91%
11/07/17	11.920	10.41	23.3	2.24	100	87%
11/14/17	11.150	10.61	23.3	2.20	95	95%
11/28/17	11.370	10.72	22.9	2.14	100	94%
12/07/17	11.230	10.18	22.1	2.17	100	91%
12/12/17	11.350	10.52	22.5	2.14	100	93%
12/19/17	10.980	10.33	22.4	2.17	100	94%
12/27/17	11.290	10.48	22.1	2.11	100	93%
01/04/18	14.060	10.65	22.6	2.12	100	76%
01/10/18	11.050	10.26	22.2	2.16	97	93%
01/17/18	11.710	10.48	22.6	2.16	100	89%
01/23/18	10.900	10.14	21.6	2.13	100	93%
02/08/18	11.220	10.82	23.0	2.13	100	96%
02/13/18	11.120	10.57	22.8	2.16	96	95%
02/20/18	11.200	10.58	22.3	2.11	96	94%
03/06/18	12.640	10.82	23.2	2.14	100	86%
03/13/18	11.600	11.20	23.0	2.06	100	97%
03/20/18	11.540	10.71	22.5	2.10	100	93%
04/03/18	11.420	11.00	22.6	2.05	100	96%
04/17/18	12.040	10.94	22.9	2.09	100	91%
04/24/18	12.120	11.25	22.9	2.04	100	93%
05/01/18	11.540	10.88	21.9	2.01	100	94%
05/08/18	12.350	11.04	22.6	2.05	100	89%
05/15/18	12.340	11.29	22.9	2.03	100	91%
05/30/18	12.840	11.40	22.7	1.99	97	89%
06/12/18	14.140	11.50	22.8	1.98	100	81%
07/10/18	14.000	12.41	23.1	1.86	100	89%
07/25/18	13.800	12.43	23.1	1.86	0	90%
08/07/18	13.690	12.51	22.8	1.82	0	91%
08/21/18	13.790	12.73	23.4	1.84	0	92%
09/05/18	14.340	12.66	23.9	1.89	49	88%
09/18/18	13.740	12.94	22.9	1.77	49	94%
09/25/18	14.540	13.12	23.9	1.82	50	90%
10/03/18	14.830	13.24	24.8	1.87	50	89%
10/09/18	13.900	12.72	24.3	1.91	48	92%
10/16/18	13.670	12.18	23.3	1.91	0	89%
10/23/18	14.160	13.25	24.2	1.82	0	94%
10/31/18	13.370	12.31	24.2	1.97	0	92%
11/20/18	13.980	12.77	24.1	1.89	0	91%
12/19/18	12.570	11.93	22.9	1.92	0	95%
01/10/19	12.320	11.69	21.9	1.87	0	95%
01/22/19	11.990	11.58	21.9	1.89	52	97%

02/12/19	11.290	10.39	22.8	2.20	52	92%
02/19/19	10.970	10.81	25.6	2.37	55	99%
03/05/19	9.675	9.48	27.7	2.92	59	98%
03/26/19	10.110	9.74	27.1	2.78	100	96%
04/02/19	10.230	10.04	27.6	2.75	100	98%
04/09/19	9.782	9.61	25.7	2.67	100	98%
04/30/19	10.440	10.01	26.3	2.63	100	96%
05/07/19	10.520	9.97	26.1	2.62	100	95%
05/21/19	10.690	10.39	26.3	2.53	100	97%
05/31/19	10.820	10.33	26.0	2.52	100	95%
06/04/19	10.890	10.45	25.9	2.48	100	96%
06/20/19	10.520	10.55	25.3	2.39	100	100%
06/25/19	10.370	9.93	24.7	2.49	100	96%
07/09/19	10.450	10.02	24.4	2.43	100	96%
07/25/19	12.710	10.28	24.4	2.37	100	81%
08/06/19	11.410	9.88	22.5	2.27	100	87%
08/22/19	11.440	10.50	23.0	2.19	100	92%
09/17/19	10.720	10.05	22.4	2.23	100	94%
10/15/19	12.560	11.28	23.2	2.05	100	90%
11/19/19	12.390	10.84	23.2	2.14	100	87%
12/04/19	11.930	10.71	22.2	2.08	100	90%
12/10/19	11.020	10.28	22.5	2.18	100	93%
01/22/20	10.900	9.68	20.3	2.09	100	89%
02/13/20	10.600	9.75	21.7	2.23	100	92%
02/18/20	11.600	11.04	22.3	2.02	100	95%
03/12/20	10.450	10.00	21.9	2.19	98	96%
03/31/20	11.080	10.16	22.4	2.21	100	92%
04/14/20	10.550	10.19	25.8	2.53	100	97%
05/06/20	10.690	9.95	24.2	2.43	50	93%
06/02/20	12.670	10.31	23.8	2.30	100	81%
07/28/20	13.200	11.30	21.5	1.91	100	86%
08/18/20	12.260	10.88	21.9	2.01	46	89%
09/09/20	12.530	11.25	22.4	1.99	51	90%
10/08/20	13.370	11.29	22.7	2.01	0	84%
11/17/20	13.300	11.27	22.5	2.00	50	85%
12/22/20	12.960	11.65	22.0	1.89	55	90%
01/07/21	12.660	11.21	20.6	1.84	50	89%
02/04/21	10.280	9.01	22.1	2.45	100	88%
03/04/21	10.080	9.41	21.9	2.32	95	93%
04/14/21	10.100	9.60	21.7	2.26	100	95%
05/13/21	12.990	10.00	21.3	2.13	100	77%
06/10/21	10.850	9.41	21.2	2.25	100	87%

07/27/21	11.120	10.53	20.4	1.94	100	95%
08/10/21	11.370	10.41	20.2	1.94	100	92%
09/22/21	12.500	10.61	20.1	1.89	0	85%
10/12/21	11.600	10.05	20.3	2.02	0	87%
10/27/21	12.290	10.09	20.3	2.01	48	82%
11/04/21	12.520	10.19	20.8	2.04	100	81%
12/15/21	10.850	10.20	20.2	1.98	50	94%

min	9.4	8.2	16.7	1.8	76%
max	14.8	13.3	28.4	3.0	100%
average	11.8	10.7	23.5	2.2	91%
median	11.6	10.6	23.0	2.1	92%
	1.2	0.9	2.0		
				1.99	

Date	Sample Point	Reported SUVA	TOC (mg/l)	DOC (mg/l)	UV254 (m-1)	SUVA (L/mg-m)	% TOC Reduct	Step 1 % TOC Removal Req.	Step 1 Compliance Ratio	Step 2 (PODR) % TOC Removal Req.	Step 2 % TOC Compliance Ratio
1/4/2017	Sweetwater Lake	Offline									
1/4/2017	Aqueduct Raw		2.69	2.64	3.1	1.2					
1/4/2017	Combined Filter Effluent		2.38				11.5	15.0	0.8	not ammend	1
1/4/2017	Treated SUVA	Yes	2.56	2.55	2.8	1.1					
1/19/2017	Sweetwater Lake	Offline									
1/19/2017	Aqueduct Raw		2.67	2.65	3.5	1.3					
1/19/2017	Combined Filter Effluent		2.40				10.1	15.0	0.7	not ammend	1
1/19/2017	Treated SUVA	Yes	2.41	2.32	2.8	1.2					
1/24/2017	Sweetwater Lake	Offline									
1/24/2017	Aqueduct Raw		2.65	2.67	3.1	1.2					
1/24/2017	Combined Filter Effluent		2.42				8.6	15.0	0.6	not ammend	1
1/24/2017	Treated SUVA	Yes	2.41	2.43	2.8	1.2					
2/7/2017	Sweetwater Lake	Offline									
2/7/2017	Aqueduct Raw		2.75	2.71	4.0	1.5					
2/7/2017	Combined Filter Effluent		2.52				8.5	25.0	0.3	not ammend	1
2/7/2017	Treated SUVA	Yes	2.46	2.35	3.2	1.3					
2/14/2017	Sweetwater Lake	Offline									
2/14/2017	Aqueduct Raw		2.80	2.78	4.6	1.7					
2/14/2017	Combined Filter Effluent		2.48				11.5	25.0	0.5	not ammend	1
2/14/2017	Treated SUVA	Yes	2.30	2.26	3.2	1.4					
2/21/2017	Sweetwater Lake	Offline									
2/21/2017	Aqueduct Raw		2.67	2.74	4.4	1.6					
2/21/2017	Combined Filter Effluent		2.40				10.3	25.0	0.4	not ammend	1
2/21/2017	Treated SUVA	Yes	2.31	2.23	3.5	1.6					
2/27/2017	Sweetwater Lake		10.20	8.16	16.7	2.0					
2/27/2017	Aqueduct Raw		2.88	2.84	4.9	1.7					
2/27/2017	Combined Filter Effluent		2.60				9.7	25.0	0.4	not ammend	1
2/27/2017	Treated SUVA	Yes	2.64	2.48	3.8	1.5					
3/7/2017	Sweetwater Lake		11.59	9.34	26.7	2.9					
3/7/2017	Aqueduct Raw		2.84	2.83	5.0	1.8					
3/7/2017	Combined Filter Effluent		2.61				8.2	25.0	0.3	not ammend	1
3/7/2017	Treated SUVA	Yes	2.65	2.47	3.9	1.6					
3/14/2017	Sweetwater Lake		9.52	9.53	25.6	2.7					
3/14/2017	Aqueduct Raw		7.11	6.94	15.1	2.2					
3/14/2017	Combined Filter Effluent		5.77				18.8	25.0	0.8	not ammend	1
3/14/2017	Treated SUVA	Yes	5.40	5.20	8.6	1.6					
3/22/2017	Sweetwater Lake		9.44	9.22	25.5	2.8					
3/22/2017	Aqueduct Raw		6.74	6.40	14.2	2.2					
3/22/2017	Combined Filter Effluent		5.23				22.5	25.0	0.9	not ammend	1
3/22/2017	Treated SUVA	Yes	5.15	4.73	7.7	1.6					
3/29/2017	Sweetwater Lake		9.98	9.58	28.4	3.0					
3/29/2017	Aqueduct Raw		3.41	3.41	7.6	2.2					
3/29/2017	Combined Filter Effluent		2.95				13.5	25.0	0.5	not ammend	1
3/29/2017	Treated SUVA	Yes	2.96	2.92	5.1	1.8					
4/4/2017	Sweetwater Lake		10.26	9.74	28.3	2.9					
4/4/2017	Aqueduct Raw		3.72	3.60	8.6	2.4					
4/4/2017	Combined Filter Effluent		3.30				11.3	25.0	0.5	25.0	0.451977401
4/4/2017	Treated SUVA	Yes	3.36	3.22	6.7	2.1					
4/11/2017	Sweetwater Lake		10.38	10.05	28.1	2.8					
4/11/2017	Aqueduct Raw		3.87	3.77	9.3	2.5					
4/11/2017	SWL 63% AQR 37% Blend		7.87	7.61	20.8	2.7					
4/11/2017	Combined Filter Effluent		5.04				36.0	35.0	1.0	35.0	1.03
4/11/2017	Treated SUVA	Yes	5.47	5.13	10.0	1.9					
4/18/2017	Sweetwater Lake		10.77	10.43	27.2	2.6					
4/18/2017	Aqueduct Raw		3.83	3.75	9.7	2.6					
4/18/2017	Combined Filter Effluent		3.48				9.3	25.0	0.4	25.0	0.370660402
4/18/2017	Treated SUVA	Yes	3.43	3.40	6.2	1.8					
4/25/2017	Sweetwater Lake		10.39	10.03	27.4	2.7					
4/25/2017	Aqueduct Raw		3.71	3.62	9.2	2.5					
4/25/2017	SWL 63% AQR 37% Blend		7.90	7.50	20.4	2.7					
4/25/2017	Combined Filter Effluent		5.36				32.1	35.0	0.9	35.0	0.92
4/25/2017	Treated SUVA	Yes	5.41	5.11	10.2	2.0					
5/2/2017	Sweetwater Lake		10.84	10.26	27.0	2.6					
5/2/2017	Aqueduct Raw		3.74	3.73	9.3	2.5					
5/2/2017	SWL 54% AQR 46% Blend		7.64	7.14	18.6	2.6					
5/2/2017	Combined Filter Effluent		5.32				30.4	35.0	0.9	35.0	0.87
5/2/2017	Treated SUVA	Yes	4.88	4.68	9.1	1.9					
5/9/2017	Sweetwater Lake		10.32	9.72	26.3	2.7					
5/9/2017	Aqueduct Raw		3.42	3.40	8.7	2.6					
5/9/2017	SWL 43% AQR 57% Blend		6.13	5.88	15.7	2.7					
5/9/2017	Combined Filter Effluent		4.23				31.0	35.0	0.9	35.0	0.89
5/9/2017	Treated SUVA	Yes	4.02	3.76	7.0	1.9					
5/16/2017	Sweetwater Lake		10.65	9.79	25.7	2.6					
5/16/2017	Aqueduct Raw		3.62	3.50	8.9	2.5					
5/16/2017	SWL 61% AQR 39% Blend		7.74	7.14	18.7	2.6					
5/16/2017	Combined Filter Effluent		5.14				33.7	35.0	1.0	35.0	0.96
5/16/2017	Treated SUVA	Yes	5.23	4.73	9.0	1.9					
5/23/2017	Sweetwater Lake		12.28	10.35	26.1	2.5					
5/23/2017	Aqueduct Raw		3.51	3.52	8.8	2.5					
5/23/2017	SWL55% AQR 45% Blend		8.99	7.47	18.8	2.5					
5/23/2017	Combined Filter Effluent		5.52				38.6	40.0	1.0	40.0	0.97

5/23/2017	Treated SUVA	Yes	6.03	5.26	9.6	1.8				
6/7/2017	Sweetwater Lake		11.19	9.99	25.6	2.6				
6/7/2017	Aqueduct Raw		2.67	2.61	5.3	2.0				
6/7/2017	Combined Filter Effluent		2.24				16.1	25.0	0.6	25.0	0.642696629
6/7/2017	Treated SUVA	Yes	2.28	2.13	3.8	1.8				
6/13/2017	Sweetwater Lake		11.56	10.39	26.1	2.5				
6/13/2017	Aqueduct Raw		2.94	3.59	6.5	2.2				
6/13/2017	SWL50% AQR 50% Blend		6.94	6.77	16.0	2.4				
6/13/2017	Combined Filter Effluent		4.43				36.2	35.0	1.0	35.0	1.034285714
6/13/2017	Treated SUVA	Yes	4.59	4.14	7.1	1.7				
6/20/2017	Sweetwater Lake		12.49	10.41	25.8	2.5				
6/20/2017	Aqueduct Raw		2.87	2.75	6.1	2.2				
6/20/2017	SWL 48%/ AQR 52% Blend		7.55	6.44	15.7	2.4				
6/20/2017	Combined Filter Effluent		4.41				41.6	35.0	1.2	35.0	1.19
6/20/2017	Treated SUVA	Yes	5.29	4.63	8.1	1.8				
6/28/2017	Sweetwater Lake		13.36	11.18	25.8	2.3				
6/28/2017	Aqueduct Raw		2.82	2.78	5.9	2.1				
6/28/2017	SWL 50%/ AQR 50% Blend		8.25	7.15	15.8	2.2				
6/28/2017	Combined Filter Effluent		4.46				45.9	40.0	1.1	40.0	1.1475
6/28/2017	Treated SUVA	Yes	4.41	3.86	6.0	1.5				
7/5/2017	Sweetwater Lake		12.26	11.07	25.4	2.3				
7/5/2017	Aqueduct Raw		2.84	2.73	6.1	2.2				
7/5/2017	SWL 47%/ AQR 53% Blend		7.68	6.77	15.7	2.3				
7/5/2017	Combined Filter Effluent		4.60				40.1	35.0	1.1	35.0	1.15
7/5/2017	Treated SUVA	Yes	5.09	4.50	7.5	1.7				
7/11/2017	Sweetwater Lake		13.68	11.67	25.4	2.2				
7/11/2017	Aqueduct Raw		3.20	3.21	7.6	2.4				
7/11/2017	SWL 55%/ AQR 45% Blend		8.89	7.72	17.3	2.2				
7/11/2017	Combined Filter Effluent		5.56				37.5	40.0	0.9	40.0	0.94
7/11/2017	Treated SUVA	Yes	6.49	5.42	9.6	1.8				
7/18/2017	Sweetwater Lake		13.42	11.88	24.7	2.1				
7/18/2017	Aqueduct Raw		3.14	3.08	6.8	2.2				
7/18/2017	SWL 58%/ AQR 42% Blend		8.15	7.16	15.6	2.2				
7/18/2017	Combined Filter Effluent		6.29				22.8	40.0	0.6	40.0	0.57
7/18/2017	Treated SUVA	Yes	5.60	5.21	9.6	1.8				
7/25/2017	Sweetwater Lake		12.95	11.77	24.3	2.1				
7/25/2017	Aqueduct Raw		2.98	2.93	6.2	2.1				
7/25/2017	SWL 50%/ AQR 50% Blend		8.11	7.61	15.7	2.1				
7/25/2017	Combined Filter Effluent		5.43				33.0	40.0	0.8	40.0	0.82
7/25/2017	Treated SUVA	Yes	5.53	5.23	8.3	1.6				
8/8/2017	Sweetwater Lake		12.28	11.74	23.6	2.0				
8/8/2017	Aqueduct Raw		2.70	2.65	5.1	1.9				
8/8/2017	SWL 50%/ AQR 50% Blend		7.45	7.10	14.4	2.0				
8/8/2017	Combined Filter Effluent		5.48				26.4	35.0	0.8	35.0	0.76
8/8/2017	Treated SUVA	Yes	5.37	5.11	8.0	1.6				
8/15/2017	Sweetwater Lake		12.22	11.74	23.6	2.0				
8/15/2017	Aqueduct Raw		2.66	2.59	5.3	2.0				
8/15/2017	Combined Filter Effluent		3.08							
8/18/2017	Aqueduct Raw		2.70							
8/18/2017	Combined Filter Effluent		2.33				13.5	25.0	0.5	not ammend	1.00
8/15/2017	Treated SUVA	Yes	2.13	1.96	3.0	1.5				
8/21/2017	Sweetwater Lake		11.39	11.30	23.1	2.0				
8/21/2017	Aqueduct Raw		2.70	2.69	5.4	2.0				
8/21/2017	Combined Filter Effluent		2.38				11.9	25.0	0.5	not ammend	1.00
8/21/2017	Treated SUVA	Yes	2.22	2.18	3.8	1.7				
8/29/2017	Sweetwater Lake		11.68	11.03	22.9	2.1				
8/29/2017	Aqueduct Raw		2.87	2.81	5.9	2.1				
8/29/2017	Combined Filter Effluent		2.49				13.3	25.0	0.5	not ammend	1.00
8/29/2017	Treated SUVA	Yes	2.36	2.32	4.2	1.8				
9/6/2017	Sweetwater Lake		11.67	11.03	23.5	2.1				
9/6/2017	Aqueduct Raw		2.73	2.66	5.8	2.2				
9/6/2017	Combined Filter Effluent		2.45				10.2	25.0	0.4	not ammend	1.00
9/6/2017	Treated SUVA	Yes	2.23	2.16	3.9	1.8				
9/13/2017	Sweetwater Lake		11.97	10.96	22.4	2.0				
9/13/2017	Aqueduct Raw		2.68	2.65	5.4	2.0				
9/13/2017	Combined Filter Effluent		2.26				15.7	25.0	0.6	not ammend	1.00
9/13/2017	Treated SUVA	Yes	2.24	2.19	3.7	1.7				
9/19/2017	Sweetwater Lake		11.33	10.59	22.4	2.1				
9/19/2017	Aqueduct Raw		2.65	2.63	5.2	2.0				
9/19/2017	SWL 50%/ AQR 50% Blend		6.60	5.73	11.8	2.1				
9/19/2017	Combined Filter Effluent		4.53				31.3	25.0	1.3	25.0	1.25
9/19/2017	Treated SUVA	Yes	4.78	4.54	7.4	1.6				
9/27/2017	Sweetwater Lake		11.69	10.73	22.8	2.1				
9/27/2017	Aqueduct Raw		2.62	2.63	5.3	2.0				
9/27/2017	Combined Filter Effluent		9.00				23.0	30.0	0.8	21.8	1.05
9/27/2017	Treated SUVA	Yes	9.44	8.37	14.1	1.7				
10/5/2017	Sweetwater Lake		12.04	11.03	23.4	2.1				
10/5/2017	Aqueduct Raw		offline							
10/5/2017	Combined Filter Effluent		8.80				26.9	30.0	0.9	30.0	0.90
10/5/2017	Treated SUVA	Yes	9.58	8.70	14.5	1.7				
10/11/2017	Sweetwater Lake		12.18	10.77	23.4	2.2				
10/11/2017	Aqueduct Raw		offline							
10/11/2017	Combined Filter Effluent		8.40				31.1	30.0	1.0	30.0	1.04
10/11/2017	Treated SUVA	Yes	9.02	8.26	13.2	1.6				
10/17/2017	Sweetwater Lake		12.24	10.51	23.0	2.2				
10/17/2017	Aqueduct Raw		offline							
10/17/2017	Combined Filter Effluent		9.00				26.5	30.0	0.9	30.0	0.88
10/17/2017	Treated SUVA	Yes	9.08	8.74	14.0	1.6				

10/24/2017	Sweetwater Lake		11.92	10.58	23.7	2.2					
10/24/2017	Aqueduct Raw		offline								
10/24/2017	Combined Filter Effluent		8.80				26.2	30.0	0.9	30.0	0.87
10/24/2017	Treated SUVA	Yes	9.87	9.58	16.7	1.7					
11/1/2017	Sweetwater Lake		11.28	10.32	22.7	2.2					
11/1/2017	Aqueduct Raw		offline								
11/1/2017	Combined Filter Effluent		8.49				24.7	30.0	0.8	30.0	0.824172577
11/1/2017	Treated SUVA	Yes	8.10	7.60	12.9	1.7					
11/7/2017	Sweetwater Lake		11.92	10.41	23.3	2.2					
11/7/2017	Aqueduct Raw		offline								
11/7/2017	Combined Filter Effluent		8.63				27.6	30.0	0.9	30.0	0.919183445
11/7/2017	Treated SUVA	Yes	8.94	8.47	14.5	1.7					
11/14/2017	Sweetwater Lake		11.15	10.61	23.3	2.2					
11/14/2017	Aqueduct Raw		offline								
11/14/2017	Combined Filter Effluent		8.58				23.0	30.0	0.8	30.0	0.767115097
11/14/2017	Treated SUVA	Yes	8.70	8.45	14.5	1.7					
11/28/2017	Sweetwater Lake		11.37	10.72	22.9	2.1					
11/28/2017	Aqueduct Raw		offline								
11/28/2017	Combined Filter Effluent		8.79				22.7	30.0	0.8	30.0	0.757549106
11/28/2017	Treated SUVA	Yes	8.62	8.33	13.7	1.6					
12/7/2017	Sweetwater Lake		11.23	10.18	22.1	2.2					
12/7/2017	Aqueduct Raw		offline								
12/7/2017	Combined Filter Effluent		8.74				22.2	30.0	0.7	30.0	0.739982191
12/7/2017	Treated SUVA	Yes	8.82	7.97	14.2	1.8					
12/12/2017	Sweetwater Lake		11.35	10.52	22.5	2.1					
12/12/2017	Aqueduct Raw		offline								
12/12/2017	Combined Filter Effluent		8.59				24.3	30.0	0.8	30.0	0.810572687
12/12/2017	Treated SUVA	Yes	8.94	8.36	13.9	1.7					
12/19/2017	Sweetwater Lake		10.98	10.33	22.4	2.2					
12/19/2017	Aqueduct Raw		offline								
12/19/2017	Combined Filter Effluent		8.66				21.1	30.0	0.7	30.0	0.703400121
12/19/2017	Treated SUVA	Yes	8.63	8.33	14.0	1.7					
12/27/2017	Sweetwater Lake		11.29	10.48	22.1	2.1					
12/27/2017	Aqueduct Raw		offline								
12/27/2017	Combined Filter Effluent		8.63				23.6	30.0	0.8	30.0	0.785355772
12/27/2017	Treated SUVA	Yes	9.14	8.50	14.3	1.7					
1/4/2018	Sweetwater Lake		14.06	10.65	22.6	2.1					
1/4/2018	Aqueduct Raw		offline								
1/4/2018	Combined Filter Effluent		8.81				37.4	30.0	1.2	20.8	1.796558704
1/4/2018	Treated SUVA	Yes	9.43	8.74	14.6	1.7					
1/10/2018	Sweetwater Lake		11.05	10.26	22.2	2.2					
1/10/2018	Aqueduct Raw		offline								
1/10/2018	Combined Filter Effluent		8.58				22.4	30.0	0.7	20.8	1.075965889
1/10/2018	Treated SUVA	Yes	9.14	8.10	14.1	1.7					
1/17/2018	Sweetwater Lake		11.71	10.48	22.6	2.2					
1/17/2018	Aqueduct Raw		offline								
1/17/2018	Combined Filter Effluent		9.04				22.8	30.0	0.8	20.8	1.09702424
1/17/2018	Treated SUVA	Yes	10.43	8.81	16.8	1.9					
1/23/2018	Sweetwater Lake		10.90	10.14	21.6	2.1					
1/23/2018	Aqueduct Raw		offline								
1/23/2018	Combined Filter Effluent		8.56				21.4	30.0	0.7	20.8	1.030786874
1/23/2018	Treated SUVA	Yes	8.50	8.02	14.4	1.8					
2/8/2018	Sweetwater Lake		11.22	10.82	23.0	2.1					
2/8/2018	Aqueduct Raw		offline								
2/8/2018	Combined Filter Effluent		9.08				19.1	30.0	0.6	20.8	0.916975182
2/8/2018	Treated SUVA	Yes	9.27	8.67	15.5	1.8					
2/13/2018	Sweetwater Lake		11.12	10.57	22.8	2.2					
2/13/2018	Aqueduct Raw		offline								
2/13/2018	Combined Filter Effluent		8.96				19.4	30.0	0.6	20.8	0.932138904
2/13/2018	Treated SUVA	Yes	8.88	8.33	15.0	1.8					
2/20/2018	Sweetwater Lake		11.20	10.58	22.3	2.1					
2/20/2018	Aqueduct Raw		offline								
2/20/2018	Combined Filter Effluent		9.01				19.6	30.0	0.7	20.8	0.942221841
2/20/2018	Treated SUVA	Yes	8.79	8.21	14.8	1.8					
3/6/2018	Sweetwater Lake		12.64	10.82	23.2	2.1					
3/6/2018	Aqueduct Raw		offline								
3/6/2018	Combined Filter Effluent		9.24				26.9	30.0	0.9	20.8	1.29434944
3/6/2018	Treated SUVA	Yes	9.64	8.86	16.8	1.9					
3/13/2018	Sweetwater Lake		11.60	11.20	23.0	2.1					
3/13/2018	Aqueduct Raw		offline								
3/13/2018	Combined Filter Effluent		9.15				21.1	30.0	0.7	20.8	1.015417772
3/13/2018	Treated SUVA	Yes	9.57	8.93	16.5	1.8					
3/20/2018	Sweetwater Lake		11.54	10.71	22.5	2.1					
3/20/2018	Aqueduct Raw		offline								
3/20/2018	Combined Filter Effluent		8.98				22.2	30.0	0.7	20.8	1.065691241
3/20/2018	Treated SUVA	Yes	9.22	8.81	16.1	1.8					
4/3/2018	Sweetwater Lake		11.42	11.00	22.6	2.1					
4/3/2018	Aqueduct Raw		offline								
4/3/2018	Combined Filter Effluent		9.23				19.2	30.0	0.6	20.1	0.954509414
4/3/2018	Treated SUVA	Yes	9.53	9.04	16.3	1.8					
4/17/2018	Sweetwater Lake		12.04	10.94	22.9	2.1					
4/17/2018	Aqueduct Raw		offline								
4/17/2018	Combined Filter Effluent		9.24				23.3	30.0	0.8	20.1	1.157418886
4/17/2018	Treated SUVA	Yes	9.24	8.75	16.3	1.9					
4/24/2018	Sweetwater Lake		12.12	11.25	22.9	2.0					
4/24/2018	Aqueduct Raw		offline								
4/24/2018	Combined Filter Effluent		9.75				19.6	30.0	0.7	20.1	0.973679457
4/24/2018	Treated SUVA	Yes	10.03	9.18	17.1	1.9					

5/1/2018	Sweetwater Lake		11.54	10.88	21.9	2.0					
5/1/2018	Aqueduct Raw		offline								
5/1/2018	Combined Filter Effluent		9.48				17.8	30.0	0.6	20.1	0.886382645
5/1/2018	Treated SUVA	Yes	9.42	8.78	15.8	1.8					
5/8/2018	Sweetwater Lake		12.35	11.04	22.6	2.1					
5/8/2018	Aqueduct Raw		offline								
5/8/2018	Combined Filter Effluent		9.50				23.1	30.0	0.8	20.1	1.149717002
5/8/2018	Treated SUVA	Yes	10.29	9.75	17.9	1.8					
5/15/2018	Sweetwater Lake		12.34	11.29	22.9	2.0					
5/15/2018	Aqueduct Raw		offline								
5/15/2018	Combined Filter Effluent		9.37				24.1	30.0	0.8	20.1	1.196610142
5/15/2018	Treated SUVA	Yes	9.59	8.92	15.3	1.7					
5/30/2018	Sweetwater Lake		12.84	11.40	22.7	2.0					
5/30/2018	Aqueduct Raw		offline								
5/30/2018	Combined Filter Effluent		9.40				26.8	30.0	0.9	20.1	1.331349483
5/30/2018	Treated SUVA	Yes	10.18	9.48	16.4	1.7					
6/12/2018	Sweetwater Lake		14.14	11.50	22.8	2.0					
6/12/2018	Aqueduct Raw		2.64	2.57	3.4	1.3					
6/12/2018	Combined Filter Effluent		9.90				30.0	30.0	1.0	20.1	1.490426228
6/12/2018	Treated SUVA	Yes	10.77	9.30	16.8	1.8					
7/10/2018	Sweetwater Lake		14.00	12.41	23.1	1.9					
7/10/2018	Aqueduct Raw		2.56	2.64	3.5	1.3					
7/10/2018	Combined Filter Effluent		10.00				28.6	30.0	1.0	20.7	1.38026225
7/10/2018	Treated SUVA	Yes	11.05	10.77	16.8	1.6					
7/25/2018	Sweetwater Lake		13.80	12.43	23.1	1.9					
7/25/2018	Aqueduct Raw		2.77	2.81	4.4	1.6					
7/25/2018	Combined Filter Effluent		2.38				14.1	25.0	0.6	not ammend	1
7/25/2018	Treated SUVA	Yes	2.31	2.43	3.4	1.4					
8/7/2018	Sweetwater Lake		13.69	12.51	22.8	1.8					
8/7/2018	Aqueduct Raw		2.71	2.69	4.8	1.8					
8/7/2018	Combined Filter Effluent		2.44				10.2	25.0	0.4	not ammend	1
8/7/2018	Treated SUVA	Yes	2.39	2.40	4.0	1.7					
8/21/2018	Sweetwater Lake		13.79	12.73	23.4	1.8					
8/21/2018	Aqueduct Raw		2.80	2.70	4.4	1.6					
8/21/2018	Combined Filter Effluent		2.36				15.6	25.0	0.6	not ammend	1
8/21/2018	Treated SUVA	Yes	2.36	2.58	3.7	1.4					
9/5/2018	Sweetwater Lake		14.34	12.66	23.9	1.9					
9/5/2018	Aqueduct Raw		2.52	2.61	4.3	1.6					
9/5/2018	SWL 50%/ AQR 50% Blend		8.30	7.81	13.9	1.8					
9/5/2018	Combined Filter Effluent		6.25				24.7	30.0	0.8	23.8	1.035989233
9/5/2018	Treated SUVA	Yes	7.99	7.61	10.1	1.3					
9/18/2018	Sweetwater Lake		13.74	12.94	22.9	1.8					
9/18/2018	Aqueduct Raw		2.78	2.80	3.8	1.4					
9/18/2018	SWL 50%/ AQR 50% Blend		7.94	7.66	13.0	1.7					
9/18/2018	Combined Filter Effluent		6.26				21.2	25.0	0.8	23.8	0.888715274
9/18/2018	Treated SUVA	Yes	6.46	6.38	9.1	1.4					
9/25/2018	Sweetwater Lake		14.54	13.12	23.9	1.8					
9/25/2018	Aqueduct Raw		2.61	2.64	4.4	1.7					
9/25/2018	SWL 50%/ AQR 50% Blend		7.79	7.32	13.8	1.9					
9/25/2018	Combined Filter Effluent		6.28				19.4	25.0	0.8	23.8	0.814567551
9/25/2018	Treated SUVA	Yes	6.26	6.38	10.1	1.6					
10/3/2018	Sweetwater Lake		14.83	13.24	24.8	1.9					
10/3/2018	Aqueduct Raw		2.43	2.43	4.3	1.8					
10/3/2018	SWL 50%/ AQR 50% Blend		7.59	7.20	13.8	1.9					
10/3/2018	Combined Filter Effluent		6.25				17.6	25.0	0.7	21.9	0.805235777
10/3/2018	Treated SUVA	Yes	5.99	5.79	10.2	1.8					
10/9/2018	Sweetwater Lake		13.90	12.72	24.3	1.9					
10/9/2018	Aqueduct Raw		2.36	2.33	4.5	1.9					
10/9/2018	SWL 50%/ AQR 50% Blend		7.78	7.49	14.4	1.9					
10/9/2018	Combined Filter Effluent		6.07				22.0	25.0	0.9	21.9	1.006760431
10/9/2018	Treated SUVA	Yes	6.59	6.03	10.7	1.8					
10/16/2018	Sweetwater Lake		13.67	12.18	23.3	1.9					
10/16/2018	Aqueduct Raw		2.36	2.37	4.2	1.8					
10/16/2018	Combined Filter Effluent		1.97				16.7	25.0	0.7	not ammend	1
10/16/2018	Treated SUVA	Yes	1.87	1.85	3.0	1.6					
10/23/2018	Sweetwater Lake		14.16	13.25	24.2	1.8					
10/23/2018	Aqueduct Raw		2.41	2.73	4.0	1.5					
10/23/2018	Combined Filter Effluent		1.91				21.1	25.0	0.8	not ammend	1
10/23/2018	Treated SUVA	Yes	1.91	2.04	2.9	1.4					
10/31/2018	Sweetwater Lake		13.37	12.31	24.2	2.0					
10/31/2018	Aqueduct Raw		2.20	2.26	3.8	1.7					
10/31/2018	Combined Filter Effluent		1.85				16.2	25.0	0.6	not ammend	1
10/31/2018	Treated SUVA	Yes	1.77	1.87	3.0	1.6					
11/20/2018	Sweetwater Lake		13.98	12.77	24.1	1.9					
11/20/2018	Aqueduct Raw		2.54	2.46	3.9	1.6					
11/20/2018	Combined Filter Effluent		2.07				18.3	25.0	0.7	not ammend	1
11/20/2018	Treated SUVA	Yes	2.10	2.08	3.0	1.4					
12/19/2018	Sweetwater Lake		12.57	11.93	22.9	1.9					
12/19/2018	Aqueduct Raw		2.62	2.59	3.9	1.5					
12/19/2018	Combined Filter Effluent		2.18				16.6	25.0	0.7	not ammend	1
12/19/2018	Treated SUVA	Yes	2.36	2.32	3.1	1.3					
1/10/2019	Sweetwater Lake		12.32	11.69	21.9	1.9					
1/10/2019	Aqueduct Raw		2.65	2.61	3.3	1.3					
1/10/2019	Combined Filter Effluent		2.23				15.7	25.0	0.6	not ammend	1
1/10/2019	Treated SUVA	Yes	2.23	2.19	2.8	1.3					
1/22/2019	Sweetwater Lake		11.99	11.58	21.9	1.9					
1/22/2019	Aqueduct Raw		2.62	2.58	3.4	1.3					
1/22/2019	SWL 50%/ AQR 50% Blend		8.09	7.67	14.4	1.9					

1/22/2019	Combined Filter Effluent		5.70				29.6	30.0	1.0	25.6	1.156960491
1/22/2019	Treated SUVA	Yes	6.53	6.60	10.5	1.6					
2/12/2019	Sweetwater Lake		11.29	10.39	22.8	2.2					
2/12/2019	Aqueduct Raw		2.56	2.57	3.2	1.3					
2/12/2019	SWL 60%/ AQR 40% Blend		7.44	7.07	14.3	2.0					
2/12/2019	Combined Filter Effluent		3.77				49.4	25.0	2.0	25.0	1.974452064
2/12/2019	Treated SUVA	Yes	5.92	5.73	9.7	1.7					
2/19/2019	Sweetwater Lake		10.97	10.81	25.6	2.4					
2/19/2019	Aqueduct Raw		2.56	2.58	3.5	1.4					
2/19/2019	SWL 60%/ AQR 40% Blend		7.17	6.92	15.4	2.2					
2/19/2019	Combined Filter Effluent		5.72				20.2	25.0	0.8	25.0	0.80837404
2/19/2019	Treated SUVA	Yes	5.22	5.16	9.1	1.8					
3/5/2019	Sweetwater Lake		9.68	9.48	27.7	2.9					
3/5/2019	Aqueduct Raw		2.62	2.75	3.8	1.4					
3/5/2019	SWL 60%/ AQR 40% Blend		6.91	6.82	18.2	2.7					
3/5/2019	Combined Filter Effluent		4.91				28.9	25.0	1.2	25.0	1.157498552
3/5/2019	Treated SUVA	Yes	4.98	4.69	8.4	1.8					
3/26/2019	Sweetwater Lake		10.11	9.74	27.1	2.8					
3/26/2019	Combined Filter Effluent		7.23				28.4	30.0	0.9	27.7	1.026970473
3/26/2019	Treated SUVA	Yes	7.93	7.75	13.9	1.8					
4/2/2019	Sweetwater Lake		10.23	10.04	27.6	2.7					
4/2/2019	Combined Filter Effluent		5.67				44.6	30.0	1.5	19.1	2.334781696
4/2/2019	Treated SUVA	Yes	7.49	7.47	14.9	2.0					
4/9/2019	Sweetwater Lake		9.78	9.61	25.7	2.7					
4/9/2019	Aqueduct Raw		3.87	3.81	7.4	1.9					
4/9/2019	Combined Filter Effluent		7.52				23.1	30.0	0.8	19.1	1.210150924
4/9/2019	Treated SUVA	Yes	7.43	6.71	13.2	2.0					
4/30/2019	Sweetwater Lake		10.44	10.01	26.3	2.6					
4/30/2019	Aqueduct Raw		4.00	4.05	8.9	2.2					
4/30/2019	Combined Filter Effluent		7.40				29.1	30.0	1.0	19.1	1.522537161
4/30/2019	Treated SUVA	Yes	7.85	7.43	13.5	1.8					
5/7/2019	Sweetwater Lake		10.52	9.97	26.1	2.6					
5/7/2019	Aqueduct Raw		2.93	3.06	6.5	2.1					
5/7/2019	Combined Filter Effluent		7.83				25.6	30.0	0.9	19.1	1.340752095
5/7/2019	Treated SUVA	Yes	7.53	7.62	14.2	1.9					
5/21/2019	Sweetwater Lake		10.69	10.39	26.3	2.5					
5/21/2019	Aqueduct Raw		2.74	2.58	4.5	1.7					
5/21/2019	Combined Filter Effluent		7.90				26.1	30.0	0.9	19.1	1.368896899
5/21/2019	Treated SUVA	Yes	8.33	8.14	14.6	1.8					
5/31/2019	Sweetwater Lake		10.82	10.33	26.0	2.5					
5/31/2019	Aqueduct Raw		2.41	2.36	4.1	1.7					
5/31/2019	Combined Filter Effluent		8.09				25.3	30.0	0.8	19.1	1.322449217
5/31/2019	Treated SUVA	Yes	7.83	7.72	13.7	1.8					
6/4/2019	Sweetwater Lake		10.89	10.45	25.9	2.5					
6/4/2019	Aqueduct Raw		2.45	2.47	4.2	1.7					
6/4/2019	Combined Filter Effluent		8.36				23.2	30.0	0.8	19.1	1.216352002
6/4/2019	Treated SUVA	Yes	7.72	7.83	14.6	1.9					
6/20/2019	Sweetwater Lake		10.52	10.55	25.3	2.4					
6/20/2019	Aqueduct Raw		2.55	2.51	4.7	1.9					
6/20/2019	Combined Filter Effluent		8.73				17.1	30.0	0.6	19.1	0.893337049
6/20/2019	Treated SUVA	Yes	7.58	7.59	14.2	1.9					
6/25/2019	Sweetwater Lake		10.37	9.93	24.7	2.5					
6/25/2019	Aqueduct Raw		1.07	0.99	3.0	3.0					
6/25/2019	Combined Filter Effluent		8.54				17.6	30.0	0.6	19.1	0.923929781
6/25/2019	Treated SUVA	Yes	7.73	7.76	14.7	1.9					
7/9/2019	Sweetwater Lake		10.45	10.02	24.4	2.4					
7/9/2019	Aqueduct Raw		2.88	2.85	5.4	1.9					
7/9/2019	Combined Filter Effluent		8.47				19.0	30.0	0.6	16.1	1.179827038
7/9/2019	Treated SUVA	Yes	8.24	7.92	15.7	2.0					
7/25/2019	Sweetwater Lake		12.71	10.28	24.4	2.4					
7/25/2019	Aqueduct Raw		2.78	2.75	5.5	2.0					
7/25/2019	Combined Filter Effluent		8.66				31.9	30.0	1.1	16.1	1.979660951
7/25/2019	Treated SUVA	Yes	8.62	8.62	16.4	1.9					
8/6/2019	Sweetwater Lake		11.41	9.88	22.5	2.3					
8/6/2019	Aqueduct Raw		2.66	2.66	5.1	1.9					
8/6/2019	Combined Filter Effluent		8.86				22.3	30.0	0.7	16.1	1.387036543
8/6/2019	Treated SUVA	Yes	9.09	9.01	16.3	1.8					
8/22/2019	Sweetwater Lake		11.44	10.50	23.0	2.2					
8/22/2019	Aqueduct Raw		2.55	2.45	4.2	1.7					
8/22/2019	Combined Filter Effluent		9.01				21.3	30.0	0.7	16.1	1.320418712
8/22/2019	Treated SUVA	Yes	9.93	9.29	17.5	1.9					
9/17/2019	Sweetwater Lake		10.72	10.05	22.4	2.2					
9/17/2019	Aqueduct Raw		2.44	2.37	4.4	1.9					
9/17/2019	Combined Filter Effluent		8.85				17.4	30.0	0.6	16.1	1.082900714
9/17/2019	Treated SUVA	Yes	9.11	8.64	16.4	1.9					
10/15/2019	Sweetwater Lake		12.56	11.28	23.2	2.1					
10/15/2019	Aqueduct Raw		2.50	2.47	4.5	1.8					
10/15/2019	Combined Filter Effluent		9.21				26.7	30.0	0.9	19.2	1.393208162
10/15/2019	Treated SUVA	Yes	9.14	8.77	15.6	1.8					
11/19/2019	Sweetwater Lake		12.39	10.84	23.2	2.1					
11/19/2019	Aqueduct Raw		2.36	2.30	4.2	1.8					
11/19/2019	Combined Filter Effluent		8.60				30.6	30.0	1.0	19.2	1.598610856
11/19/2019	Treated SUVA	Yes	9.13	8.80	15.2	1.7					
12/4/2019	Sweetwater Lake		11.93	10.71	22.2	2.1					
12/4/2019	Aqueduct Raw		2.41	2.38	3.7	1.6					
12/4/2019	Combined Filter Effluent		8.50				28.7	30.0	1.0	19.2	1.500922483
12/4/2019	Treated SUVA	Yes	8.76	8.35	13.6	1.6					
12/10/2019	Sweetwater Lake		11.02	10.28	22.5	2.2					

12/10/2019	Aqueduct Raw		2.42	2.50	4.3	1.7					
12/10/2019	Combined Filter Effluent		8.04				27.1	30.0	0.9	19.2	1.413996863
12/10/2019	Treated SUVA	Yes	8.15	7.92	13.5	1.7					
1/22/2020	Sweetwater Lake		10.90	9.68	20.3	2.1					
1/22/2020	Aqueduct Raw		2.46	2.54	4.2	1.7					
1/22/2020	Combined Filter Effluent		8.18				24.9	30.0	0.8	22.1	1.129945852
1/22/2020	Treated SUVA	Yes	7.90	7.74	12.4	1.6					
2/13/2020	Sweetwater Lake		10.60	9.75	21.7	2.2					
2/13/2020	Aqueduct Raw		2.56	2.42	4.2	1.7					
2/13/2020	Combined Filter Effluent		8.09				23.7	30.0	0.8	22.1	1.073401871
2/13/2020	Treated SUVA	Yes	8.25	7.45	13.8	1.9					
2/18/2020	Sweetwater Lake		11.60	11.04	22.3	2.0					
2/18/2020	Aqueduct Raw		2.52	2.46	4.2	1.7					
2/18/2020	Combined Filter Effluent		8.22				29.1	30.0	1.0	22.1	1.319676744
2/18/2020	Treated SUVA	Yes	8.61	8.11	15.2	1.9					
3/12/2020	Sweetwater Lake		10.45	10.00	21.9	2.2					
3/12/2020	Aqueduct Raw		2.63	2.42	4.0	1.7					
3/12/2020	Combined Filter Effluent		8.18				21.8	30.0	0.7	22.1	0.986435428
3/12/2020	Treated SUVA	Yes	8.50	8.41	14.8	1.8					
3/31/2020	Sweetwater Lake		11.08	10.16	22.4	2.2					
3/31/2020	Aqueduct Raw		2.51	2.55	3.6	1.4					
3/31/2020	Combined Filter Effluent		8.16				26.4	30.0	0.9	22.1	1.195459708
3/31/2020	Treated SUVA	Yes	8.41	8.40	14.2	1.7					
4/14/2020	Sweetwater Lake		10.55	10.19	25.8	2.5					
4/14/2020	Aqueduct Raw		4.97	5.01	9.5	1.9					
4/14/2020	Combined Filter Effluent		7.55				28.4	30.0	0.9	26.6	1.069425309
4/14/2020	Treated SUVA	Yes	7.52	7.22	13.8	1.9					
5/6/2020	Sweetwater Lake		10.69	9.95	24.2	2.4					
5/6/2020	Aqueduct Raw		2.49	2.49	3.8	1.5					
5/6/2020	SWL 50%/ AQR 50% Blend		6.78	6.52	15.0	2.3					
5/6/2020	Combined Filter Effluent		4.67				31.1	25.0	1.2	25.0	1.244064297
5/6/2020	Treated SUVA	Yes	5.55	4.87	8.3	1.7					
6/2/2020	Sweetwater Lake		12.67	10.31	23.8	2.3					
6/2/2020	Aqueduct Raw		3.16	3.06	5.5	1.8					
6/2/2020	Combined Filter Effluent		8.10				36.0	30.0	1.2	26.6	1.355317216
6/2/2020	Treated SUVA	Yes	9.48	8.67	15.5	1.8					
7/28/2020	Sweetwater Lake		13.20	11.30	21.5	1.9					
7/28/2020	Aqueduct Raw		2.66	2.66	3.6	1.3					
7/28/2020	Combined Filter Effluent		7.29				44.8	30.0	1.5	24.3	1.839471129
7/28/2020	Treated SUVA	Yes	9.06	8.69	14.1	1.6					
8/18/2020	Sweetwater Lake		12.26	10.88	21.9	2.0					
8/18/2020	Aqueduct Raw		2.73	2.70	3.7	1.4					
8/18/2020	SWL 50%/ AQR 50% Blend		7.84	7.61	13.9	1.8					
8/18/2020	Combined Filter Effluent		5.13				34.5	25.0	1.4	17.3	1.991264046
8/18/2020	Treated SUVA	Yes	8.23	7.18	11.7	1.6					
9/9/2020	Sweetwater Lake		12.53	11.25	22.4	2.0					
9/9/2020	Aqueduct Raw		2.62	2.67	3.4	1.3					
9/9/2020	SWL 50%/ AQR 50% Blend		7.54	7.00	13.1	1.9					
9/9/2020	Combined Filter Effluent		5.36				28.9	25.0	1.2	17.3	1.668251582
9/9/2020	Treated SUVA	Yes	8.07	7.31	12.9	1.8					
10/8/2020	Sweetwater Lake		13.37	11.29	22.7	2.0					
10/8/2020	Aqueduct Raw		3.10	3.18	4.5	1.4					
10/8/2020	Combined Filter Effluent		2.64				14.7	15.0	1.0	not ammend	1
10/8/2020	Treated SUVA	Yes	2.89	2.87	3.4	1.2					
11/17/2020	Sweetwater Lake		13.30	11.27	22.5	2.0					
11/17/2020	Aqueduct Raw		2.58	2.61	3.3	1.3					
11/17/2020	SWL 50%/ AQR 50% Blend		8.06	7.15	13.5	1.9					
11/17/2020	Combined Filter Effluent		5.96				26.1	30.0	0.9	25.0	1.043780231
11/17/2020	Treated SUVA	Yes	6.49	5.66	8.9	1.6					
12/22/2020	Sweetwater Lake		12.96	11.65	22.0	1.9					
12/22/2020	Aqueduct Raw		2.75	2.86	3.4	1.2					
12/22/2020	SWL 50%/ AQR 50% Blend		7.87	7.42	13.2	1.8					
12/22/2020	Clearwell Influent		5.71				27.4	25.0	1.1	25.0	1.094699377
12/22/2020	Treated SUVA	Yes	7.01	6.06	9.4	1.6					
1/7/2021	Sweetwater Lake		12.66	11.21	20.6	1.8					
1/7/2021	Aqueduct Raw		2.70	2.74	2.9	1.1					
1/7/2021	SWL 50%/ AQR 50% Blend		7.49	7.18	12.0	1.7					
1/7/2021	Combined Filter Effluent		5.24				30.0	25.0	1.2	25.0	1.201068091
1/7/2021	Treated SUVA	Yes	5.90	5.43	8.2	1.5					
2/4/2021	Sweetwater Lake		10.28	9.01	22.1	2.4					
2/4/2021	Aqueduct Raw		2.59	2.54	2.9	1.2					
2/4/2021	Combined Filter Effluent		7.11				30.8	30.0	1.0	30.0	1.027561608
2/4/2021	Treated SUVA	Yes	7.78	6.92	13.1	1.9					
3/4/2021	Sweetwater Lake		10.08	9.41	21.9	2.3					
3/4/2021	Aqueduct Raw		2.53	2.57	3.4	1.3					
3/4/2021	Clearwell Influent		7.11				29.5	30.0	1.0	30.0	0.982142857
3/4/2021	Treated SUVA	Yes	6.53	6.06	10.7	1.8					
4/14/2021	Sweetwater Lake		10.10	9.60	21.7	2.3					
4/14/2021	Aqueduct Raw		2.65	2.58	3.2	1.3					
4/14/2021	Combined Filter Effluent		7.48				26.0	30.0	0.9	25.2	1.03055129
4/14/2021	Treated SUVA	Yes	7.39	6.74	12.3	1.8					
5/13/2021	Sweetwater Lake		12.99	10.00	21.3	2.1					
5/13/2021	Aqueduct Raw		2.59	2.87	3.3	1.1					
5/13/2021	Combined Filter Effluent		8.55				34.2	30.0	1.1	25.2	1.355816683
5/13/2021	Treated SUVA	Yes	10.43	9.29	14.8	1.6					
6/10/2021	Sweetwater Lake		10.85	9.41	21.2	2.3					
6/10/2021	Aqueduct Raw		2.30	2.20	3.2	1.5					
6/10/2021	Combined Filter Effluent		7.79				28.2	30.0	0.9	25.2	1.117982221

6/10/2021	Treated SUVA	Yes	8.11	7.31	13.9	1.9					
7/27/2021	Sweetwater Lake		11.12	10.53	20.4	1.9					
7/27/2021	Aqueduct Raw		3.00	2.78	4.4	1.6					
7/27/2021	Combined Filter Effluent		8.66				22.1	30.0	0.7	24.9	0.888089207
7/27/2021	Treated SUVA	Yes	9.14	8.09	13.9	1.7					
8/10/2021	Sweetwater Lake		11.37	10.41	20.2	1.9					
8/10/2021	Aqueduct Raw		2.70	2.53	4.1	1.6					
8/10/2021	Combined Filter Effluent		8.44				25.8	30.0	0.9	24.9	1.033800839
8/10/2021	Treated SUVA	Yes	8.99	8.13	14.1	1.7					
9/22/2021	Sweetwater Lake		12.50	10.61	20.1	1.9					
9/22/2021	Aqueduct Raw		2.92	2.66	3.2	1.2					
9/22/2021	Combined Filter Effluent		2.13				27.1	15.0	1.8	15.0	1.806127115
9/22/2021	Treated SUVA	Yes	2.14	2.16	2.5	1.2					
10/12/2021	Sweetwater Lake		11.60	10.05	20.3	2.0					
10/12/2021	Aqueduct Raw		2.39	2.21	2.9	1.3					
10/12/2021	Combined Filter Effluent		1.75				26.8	15.0	1.8	15.0	1.783919598
10/12/2021	Treated SUVA	Yes	1.60	1.56	2.1	1.4					
10/27/2021	Sweetwater Lake		12.29	10.09	20.3	2.0					
10/27/2021	Aqueduct Raw		2.79	2.20	3.1	1.4					
10/27/2021	SWL 50%/ AQR 50% Blend		7.79	6.89	13.6	2.0					
10/27/2021	Combined Filter Effluent		4.49				42.4	25.0	1.7	NA	NA
10/27/2021	Treated SUVA	Yes	6.44	5.64	9.2	1.6					
11/4/2021	Sweetwater Lake		12.52	10.19	20.8	2.0					
11/4/2021	Aqueduct Raw		2.79	2.55	3.2	1.3					
11/4/2021	Combined Filter Effluent		8.16				34.8	30.0	1.2	19.4	1.793419189
11/4/2021	Treated SUVA	Yes	9.22	7.75	12.0	1.5					
12/15/2021	Sweetwater Lake		10.85	10.20	20.2	2.0					
12/15/2021	Aqueduct Raw		2.58	2.35	2.7	1.1					
12/15/2021	SWL 50%/ AQR 50% Blend		7.01	6.46	11.8	1.8					
12/15/2021	Combined Filter Effluent		4.69				33.1	25.0	1.3	14.8	2.233707259
12/15/2021	Treated SUVA	Yes	5.82	5.20	7.4	1.4					
	min						8.2	15.0	0.3		
	max						49.4	40.0	49.4		
	average						24.4	28.5	0.9		
	median						23.9	30.0	0.8		
	percentile								1.0		

Date	Treated SUVA (L/mg-m)	Mon Avg	Qtr Avg	RAA
1/4/2017	1.087981147	1.154151	1.425333	
1/19/2017	1.21761658			
1/24/2017	1.156854673			
2/7/2017	1.348362399	1.470283		
2/14/2017	1.414052143			
2/21/2017	1.584601611			
2/27/2017	1.534113847			
3/7/2017	1.565922921	1.651567		
3/14/2017	1.647421093			
3/22/2017	1.62962963			
3/29/2017	1.76329331			
4/4/2017	2.071960298	1.960916	1.84738	
4/11/2017	1.949697797			
4/18/2017	1.825139829			
4/25/2017	1.996867659			
5/2/2017	1.942783945	1.885268		
5/9/2017	1.863188714			
5/16/2017	1.902748414			
5/23/2017	1.832351264			
6/7/2017	1.77798683	1.695955		
6/13/2017	1.710907336			
6/20/2017	1.750485646			
6/28/2017	1.544441565			
7/5/2017	1.674067496	1.71313	1.693895	
7/11/2017	1.762317771			
7/18/2017	1.831958565			
7/25/2017	1.584177336			
8/8/2017	1.564945227	1.659857		
8/15/2017	1.538461538			
8/21/2017	1.740927882			
8/29/2017	1.795092553			
9/6/2017	1.817338897	1.708698		
9/13/2017	1.706983113			
9/19/2017	1.628470692			
9/27/2017	1.681997372			
10/5/2017	1.666475118	1.654015	1.683685	1.662573
10/11/2017	1.600919652			
10/17/2017	1.605814353			
10/24/2017	1.742851179			
11/1/2017	1.700895208	1.693569		
11/7/2017	1.712126579			
11/14/2017	1.716992303			
11/28/2017	1.644263082			
12/7/2017	1.786566227	1.703469		
12/12/2017	1.663676594			

12/19/2017	1.681479702			
12/27/2017	1.682155041			
1/4/2018	1.669716377	1.776095	1.810821	1.758945
1/10/2018	1.740525861			
1/17/2018	1.902815622			
1/23/2018	1.791323859			
2/8/2018	1.78880554	1.799422		
2/13/2018	1.802569953			
2/20/2018	1.806891513			
3/6/2018	1.894546686	1.856946		
3/13/2018	1.849031247			
3/20/2018	1.827261378			
4/3/2018	1.801084191	1.842364	1.805122	1.748381
4/17/2018	1.862857143			
4/24/2018	1.863151013			
5/1/2018	1.794579822	1.767133		
5/8/2018	1.83832581			
5/15/2018	1.710762332			
5/30/2018	1.724865492			
6/12/2018	1.805869074	1.805869		
7/10/2018	1.558031569	1.474489	1.491077	1.697676
7/25/2018	1.390946502			
8/7/2018	1.67709637	1.550064		
8/21/2018	1.423032183			
9/5/2018	1.327899027	1.448678		
9/18/2018	1.430361899			
9/25/2018	1.587774295			
10/3/2018	1.7582038	1.644558	1.47009	1.644278
10/9/2018	1.772508705			
10/16/2018	1.636952998			
10/23/2018	1.430323847			
10/31/2018	1.624799572			
11/20/2018	1.427198462	1.427198		
12/19/2018	1.33851468	1.338515		
1/10/2019	1.290027447	1.443741	1.652735	1.604756
1/22/2019	1.597453774			
2/12/2019	1.688787985	1.727831		
2/19/2019	1.766873545			
3/5/2019	1.784418356	1.786634		
3/26/2019	1.788848735			
4/2/2019	1.997858959	1.926392	1.870305	1.621052
4/9/2019	1.96093051			
4/30/2019	1.820385081			
5/7/2019	1.856224583	1.810786		
5/21/2019	1.79518664			
5/31/2019	1.780946209			
6/4/2019	1.858565228	1.873736		

6/20/2019	1.868001581			
6/25/2019	1.894641937			
7/9/2019	1.982573557	1.944082	1.896453	1.722396
7/25/2019	1.90559035			
8/6/2019	1.812028407	1.845532		
8/22/2019	1.87903573			
9/17/2019	1.899745311	1.899745		
10/15/2019	1.783025325	1.783025	1.723652	1.785786
11/19/2019	1.725980671	1.725981		
12/4/2019	1.623143268	1.66195		
12/10/2019	1.700757576			
1/22/2020	1.601860225	1.60186	1.73017	1.805145
2/13/2020	1.857718121	1.863277		
2/18/2020	1.868836292			
3/12/2020	1.759666865	1.725374		
3/31/2020	1.691080148			
4/14/2020	1.913862346	1.913862	1.80509	1.788841
5/6/2020	1.710174717	1.710175		
6/2/2020	1.791234141	1.791234		
7/28/2020	1.627157652	1.627158	1.673722	1.733159
8/18/2020	1.626967544	1.626968		
9/9/2020	1.767040788	1.767041		
10/8/2020	1.182008368	1.182008	1.438643	1.661907
11/17/2020	1.575136853	1.575137		
12/22/2020	1.558784676	1.558785		
1/7/2021	1.505713233	1.505713	1.719661	1.659279
2/4/2021	1.887010548	1.887011		
3/4/2021	1.766259492	1.766259		
4/14/2021	1.818451498	1.818451	1.773374	1.65135
5/13/2021	1.598276791	1.598277		
6/10/2021	1.903393541	1.903394		
7/27/2021	1.722476214	1.722476	1.541631	1.618327
8/10/2021	1.730035684	1.730036		
9/22/2021	1.172381835	1.172382		
10/12/2021	1.356913183	1.495832	1.490104	1.631193
10/27/2021	1.634751773			
11/4/2021	1.542333505	1.542334		
12/15/2021	1.432146295	1.432146		

min	1.1	1.2	1.4	1.6
max	2.1	2.0	1.9	1.8
average	1.7	1.7	1.7	1.7
median	1.7	1.7	1.7	1.7

1.997571482

DATE	SW Raw Total Coliform	SW Raw E. coli Coliform	TC MM	ECMM
01/03/17				
01/09/17				
01/16/17				
01/23/17				
01/31/17				
02/06/17			100	69
02/13/17				
02/20/17				
02/28/17	100	69		
03/06/17	400	1	150	18
03/13/17	200	15		
03/21/17	40	21		
03/27/17	100	55		
04/03/17	200	17	105	11
04/10/17	16307	17		
04/17/17	10	3		
04/24/17	10	5		
05/01/17	100	22	40	22
05/08/17	60	23		
05/15/17	20	6		
05/22/17	40	34		
05/30/17	10	1		
06/05/17	100	2	100	2.5
06/12/17	5	2		
06/19/17	100	3		
06/26/17	400	4		
07/05/17	1	1	20	1
07/10/17	8	1		
07/17/17	20	4		
07/24/17	100	1		
07/31/17	133	1		
08/07/17	200	1	2.5	1
08/14/17	3	1		
08/22/17	1	1		
08/28/17	2	1		
09/05/17	40	3	16.5	1
09/11/17	20	1		
09/18/17	13	1		
09/26/17	1	1		
10/02/17	10	1	10	1
10/10/17	1	1		
10/16/17	3	2		
10/23/17	50	6		
10/30/17	10	1		
11/06/17	100	1	140	2
11/13/17	1600	1		
11/20/17	180	12		
11/27/17	90	3		
12/04/17	900	1	350	6.5
12/11/17	200	9		
12/18/17	200	4		
12/26/17	500	16		
01/02/18	100	1	70	29
01/08/18	54	41		
01/15/18	1	11		

01/22/18	70	44		
01/29/18	200	29		
02/05/18	15	17	60	54.5
02/12/18	50	58		
02/19/18	250	206		
02/26/18	70	51		
03/05/18	60	28	45	15.5
03/12/18	30	20		
03/19/18	20	11		
03/27/18	70	3		
04/02/18	100	17	100	8
04/09/18	30	8		
04/16/18	100	7		
04/23/18	30	28		
04/30/18	100	4		
05/07/18	100	87	75	25
05/14/18	40	5		
05/21/18	300	27		
05/29/18	50	23		
06/04/18	300	41	250	39
06/11/18	4500	67		
06/18/18	200	37		
06/25/18	100	12		
07/02/18	4	3	4	1
07/09/18	1	1		
07/16/18	20	1		
07/23/18	35	1		
07/30/18	1	1		
08/06/18	1	1	3	2
08/13/18	1	1		
08/20/18	30	6		
08/27/18	5	3		
09/04/18	6	1	13	2
09/10/18	20	3		
09/17/18	2	1		
09/24/18	100	28		
10/01/18	60	23	7	3
10/08/18	2	2		
10/15/18	20	3		
10/22/18	7	1		
10/29/18	2	4		
11/05/18	5	7	40	19.5
11/12/18	100	51		
11/19/18	10	6		
11/26/18	70	32		
12/04/18	150	80	100	51
12/10/18	300	78		
12/17/18	50	24		
12/26/18	30	24		
01/02/19	100	91	120	91
01/07/19	190	137		
01/14/19	120	158		
01/21/19	200	84		
01/28/19	18	21		
02/04/19	133	51	100	33.5
02/11/19	100	26		
02/18/19	30	15		
02/25/19	100	41		
03/04/19	2	1	3	1

03/11/19	20	1		
03/18/19	1	1		
03/25/19	4	4		
04/01/19	1	1	10	6
04/08/19	1	1		
04/15/19	10	6		
04/22/19	100	47		
04/29/19	10	25		
05/06/19	40	1	25	2
05/13/19	1	1		
05/22/19	10	11		
05/28/19	1237	3		
06/03/19	9	4	8	3.5
06/10/19	7	5		
06/17/19	30	3		
06/24/19	1	1		
07/01/19	3	1	3	1
07/08/19	1	1		
07/15/19	1	1		
07/22/19	100	1		
07/29/19	10	12		
08/05/19	1	1	1	1
08/12/19	5	1		
08/19/19	1	1		
08/26/19	1	3		
09/03/19	4	6	4	4
09/09/19	5	5		
09/16/19	4	1		
09/23/19	1	1		
09/30/19	1	4		
10/07/19	1	1	1	1
10/14/19	1	1		
10/21/19	1	1		
10/28/19	2	2		
11/04/19	597	1	11.5	3.5
11/11/19	13	1		
11/18/19	7	6		
11/25/19	10	36		
12/02/19	20	16	30	16
12/09/19	4	4		
12/16/19	30	15		
12/26/19	500	180		
12/30/19	100	92		
01/06/20	10	7	10	51.5
01/13/20	10	34		
01/20/20	200	69		
01/27/20	10	75		
02/03/20	100	19	63.5	34
02/10/20	20	42		
02/17/20	5067	75		
02/24/20	27	26		
03/02/20	30	50	60	50
03/09/20	60	12		
03/16/20	1553	103		
03/23/20	4393	72		
03/30/20	30	6		
04/06/20	5500	1	4633.5	12.5
04/13/20	3767	53		
04/20/20	1200	22		

04/27/20	11676	3		
05/04/20	300	44	10	9
05/11/20	10	14		
05/18/20	10	4		
05/26/20	10	3		
06/01/20	20	13	20	14
06/08/20	60	23		
06/15/20	50	8		
06/22/20	10	14		
06/29/20	1	19		
07/06/20	100	49	55	10.5
07/13/20	100	8		
07/20/20	10	11		
07/27/20	1	10		
08/03/20	100	7	40	7
08/10/20	1	7		
08/17/20	40	10		
08/24/20	27	5		
08/31/20	40	18		
09/08/20	20	19	25	25
09/14/20	200	99		
09/21/20	30	22		
09/28/20	10	28		
10/05/20	60	106	40	31
10/12/20	10	30		
10/19/20	2200	17		
10/26/20	20	32		
11/02/20	1200	26	100	52
11/09/20	80	146		
11/16/20	700	52		
11/23/20	30	41		
11/30/20	100	112		
12/07/20	40	40	40	56.5
12/14/20	40	25		
12/21/20	40	73		
12/28/20	100	141		
01/04/21	100	90	1251.5	91
01/11/21	2383	59		
01/18/21	120	92		
01/25/21	9033	227		
02/01/21	100	46	85	31
02/08/21	40	30		
02/15/21	70	25		
02/23/21	1200	32		
03/01/21	18333	19	4867	18
03/08/21	4867	18		
03/15/21	200	16		
03/22/21	3800	11		
03/30/21	10150	114		
04/05/21	200	12	130	10.5
04/12/21	29833	1		
04/19/21	10	9		
04/26/21	60	19		
05/03/21	300	6	81.5	6
05/10/21	110	7		
05/17/21	53	6		
05/24/21	10	3		
06/01/21	100	5	10	3
06/07/21	10	3		

06/14/21	10	1		
06/21/21	2	1		
06/28/21	7	3		
07/06/21	2.3	1	4	1
07/12/21	4	1		
07/19/21	4	1		
07/26/21	14	9		
08/02/21	8	1	9	1
08/09/21	60	1		
08/16/21	10	16		
08/23/21	4	1		
09/01/21	1	5	70	20
09/07/21	10	7		
09/13/21	100	33		
09/20/21	70	20		
09/27/21	500	350		
10/04/21	70	15	535	12.5
10/11/21	26	10		
10/18/21	1000	1		
10/25/21	1020	17		
11/01/21	40	42	40	23
11/08/21	20	23		
11/15/21	14373	10		
11/22/21	26	26		
11/29/21	60	18		
12/06/21	17	15	37	25.5
12/13/21	34	45		
12/20/21	2333	25		
12/28/21	40	26		

min	<1	<1	<1	<1
max	29833	350	4867	91
average	691	25	243	19
median	40	10	40	11
95th	3780	95	607	58
			980.663	19.85
				37.6

Date	Sample Point	Total Coliform	E. coli	Enterococci	TC Min	TC Max	C Media	EC Min	EC Max	C Media	Ent Min	Ent Max	nt Media
03/16/17	Alacena 1&2 Outlet	2419.6	19.9	727.0	920.8	2419.6	2419.6	1.0	435.2	5.3	1.0	1299.7	6.3
04/13/17	Alacena 1&2 Outlet	2419.6	1.0	5.1									
05/25/17	Alacena 1&2 Outlet	2419.6	8.5	5.2									
06/22/17	Alacena 1&2 Outlet	2419.6	7.5	4.1									
07/13/17	Alacena 1&2 Outlet	2419.6	8.5	4.1									
08/24/17	Alacena 1&2 Outlet	2419.6	10.0										
09/28/17	Alacena 1&2 Outlet	2419.6	2.0	1.0									
10/12/17	Alacena 1&2 Outlet	2419.6	23.1	8.4									
11/09/17	Alacena 1&2 Outlet	2419.6	12.2	4.1									
12/11/17	Alacena 1&2 Outlet	2419.6	82.0	25.9									
01/11/18	Alacena 1&2 Outlet	2419.6	435.2	1299.7									
03/14/19	Alacena 1&2 Outlet	2419.6	3.1	25.0									
03/18/19	Alacena 1&2 Outlet	2419.6	14.6	101.9									
04/25/19	Alacena 1&2 Outlet	2419.6	1.0	16.8									
05/22/19	Alacena 1&2 Outlet	920.8	7.4	16.0									
06/13/19	Alacena 1&2 Outlet	2419.6	1.0	6.3									
06/27/19	Alacena 1&2 Outlet	2419.6	1.0	149.7									
07/26/19	Alacena 1&2 Outlet	2419.6	1.0	488.4									
08/22/19	Alacena 1&2 Outlet	2419.6	1.0	5.2									
09/12/19	Alacena 1&2 Outlet	2419.6	3.1	5.2									
03/25/21	Alacena 1&2 Outlet	2419.1	27.5	58.1									
04/29/21	Alacena 1&2 Outlet	1299.7	1.0	3.1									
05/27/21	Alacena 1&2 Outlet	1553.1	1.0	3.0									
06/30/21	Alacena 1&2 Outlet	2419.6	1.0	1.0									
03/14/19	Campo Creek	1413.6	290.9	70.8	1413.6	1986.3	1700.0	90.6	290.9	190.8	15.6	70.8	43.2
03/19/19	Campo Creek	1986.3	90.6	15.6									
03/16/17	East End of SWL	2419.6	10.8	275.5	290.9	2419.6	2419.6	1.0	517.2	6.3	1.0	517.2	5.2
04/13/17	East End of SWL	2419.6	1.0	4.1									
05/25/17	East End of SWL	2419.6	2.0	5.2									
06/22/17	East End of SWL	2419.6	1.0	3.1									
07/13/17	East End of SWL	2419.6	1.0	4.1									
08/24/17	East End of SWL	2419.6	4.1										
09/28/17	East End of SWL	2419.6	9.8	1.0									
10/12/17	East End of SWL	2419.6	5.2	1.0									
11/09/17	East End of SWL	2419.6	6.3	2.0									
12/11/17	East End of SWL	2419.6	185.0	26.9									
01/11/18	East End of SWL	2419.6	68.9	14.4									
02/22/18	East End of SWL	1553.1	17.3										
03/22/18	East End of SWL	2419.6	6.3	5.2									
04/26/18	East End of SWL	1413.6	2.0	1.0									
05/24/18	East End of SWL	2419.6	2.0	2.0									
06/20/18	East End of SWL	290.9	1.0	1.0									
07/26/18	East End of SWL	2419.6	1.0	1.0									
08/30/18	East End of SWL	2419.6	1.0	1.0									
09/27/18	East End of SWL	2419.6	1.0	2.0									
10/25/18	East End of SWL	2419.6	7.4	4.1									
11/29/18	East End of SWL	2419.6	121.1	25.6									
12/13/18	East End of SWL	2419.6	178.2	21.1									
01/07/19	East End of SWL	1553.1	156.5	64.5									
01/08/19	East End of SWL	1732.9	517.2	142.1									
01/09/19	East End of SWL	1299.7	218.7	95.9									
01/10/19	East End of SWL	1986.3	261.3	85.7									
01/11/19	East End of SWL	2419.6	290.9	166.7									
01/24/19	East End of SWL	517.2	166.4	35.5									
02/20/19	East End of SWL	2419.6	123.6	191.8									
03/14/19	East End of SWL	2419.6	21.8	71.7									
03/18/19	East End of SWL	2419.6	16.1	137.6									
03/19/19	East End of SWL	2419.6	9.8	88.8									
04/25/19	East End of SWL	2419.6	1.0	2.0									
05/22/19	East End of SWL	2419.6	2.0	3.1									
06/13/19	East End of SWL	2419.6	1.0	10.9									
06/27/19	East End of SWL	2419.6	1.0	16.6									
07/26/19	East End of SWL	2419.6	1.0	517.2									
08/22/19	East End of SWL	2419.6	1.0	3.0									
09/12/19	East End of SWL	2419.6	4.1	9.2									
10/24/19	East End of SWL	1413.6	1.0	1.0									
11/21/19	East End of SWL	2419.6	98.7	155.3									
12/05/19	East End of SWL	2419.6	115.3	436.0									
12/29/19	East End of SWL	2419.6	68.3	54.6									
01/23/20	East End of SWL	2419.6	10.9	1.0									
02/20/20	East End of SWL	2419.6	39.3	25.0									
03/26/20	East End of SWL	648.8	7.4	4.1									
04/23/20	East End of SWL	2419.6	3.1	13.4									
05/21/20	East End of SWL	2419.6	1.0	14.5									
06/25/20	East End of SWL	2419.6	2.0	10.4									
07/23/20	East End of SWL	2419.6	7.5	1.0									
08/20/20	East End of SWL	2419.6	1.0	1.0									
09/17/20	East End of SWL	2419.6	5.2	1.0									
10/22/20	East End of SWL	2419.6	1.0	1.0									
11/19/20	East End of SWL	2419.6	13.5	5.2									
12/17/20	East End of SWL	2419.6	60.2	21.8									
01/21/21	East End of SWL	2419.6	24.6	162.4									
02/18/21	East End of SWL	2419.6	40.4	115.3									

03/25/21	East End of SWL	2419.1	7.5	38.4										
04/29/21	East End of SWL	1553.1	1.0	1.0										
05/27/21	East End of SWL	2419.6	1.0	1.0										
06/30/21	East End of SWL	2419.6	1.0	1.0										
07/29/21	East End of SWL	2419.6	1.0	1.0										
08/26/21	East End of SWL	2419.6	1.0	1.0										
09/30/21	East End of SWL	2419.6	2.0	6.2										
10/28/21	East End of SWL	2419.6	8.5	4.1										
11/18/21	East End of SWL	2419.6	5.2	5.1										
12/21/21	East End of SWL	1119.9	56.5	11.0										
03/16/17	Gumtree Outlet	2419.6	2.0	344.1	186.0	2419.6	2419.6	1.0	435.2	2.0	1.0	1732.9	3.0	
04/13/17	Gumtree Outlet	2419.6	1.0	2.0										
05/25/17	Gumtree Outlet	2419.6	1.0	1.0										
06/22/17	Gumtree Outlet	2419.6	2.0	3.0										
07/13/17	Gumtree Outlet	2419.6	3.1	1.0										
08/24/17	Gumtree Outlet	2419.6	5.2											
09/28/17	Gumtree Outlet	2419.6	6.3	1.0										
10/12/17	Gumtree Outlet	2419.6	12.2	3.1										
11/09/17	Gumtree Outlet	2419.6	2.0	1.0										
12/11/17	Gumtree Outlet	2419.6	12.2	2.0										
01/11/18	Gumtree Outlet	2419.6	435.2	435.2										
02/22/18	Gumtree Outlet	1413.6	20.3											
04/26/18	Gumtree Outlet	2419.6	2.0	2.0										
05/24/18	Gumtree Outlet	2419.6	1.0	1.0										
06/20/18	Gumtree Outlet	2419.6	2.0	1.0										
07/26/18	Gumtree Outlet	2419.6	3.1	1.0										
08/30/18	Gumtree Outlet	2419.6	1.0	1.0										
03/14/19	Gumtree Outlet	2419.6	1.0	13.5										
03/18/19	Gumtree Outlet	2419.6	5.2	101.2										
04/25/19	Gumtree Outlet	2419.6	1.0	7.3										
05/22/19	Gumtree Outlet	1299.7	5.2	12.1										
06/13/19	Gumtree Outlet	228.2	1.0	1.0										
06/27/19	Gumtree Outlet	1986.3	1.0	6.3										
07/26/19	Gumtree Outlet	2419.6	1.0	2.0										
08/22/19	Gumtree Outlet	2419.6	1.0	1.0										
09/12/19	Gumtree Outlet	2419.6	1.0	1.0										
10/24/19	Gumtree Outlet	2419.6	1.0	2.0										
11/21/19	Gumtree Outlet	2419.6	26.2	53.7										
12/05/19	Gumtree Outlet	2419.6	290.9	435.2										
01/23/20	Gumtree Outlet	2419.6	24.6	5.2										
02/20/20	Gumtree Outlet	2419.6	46.4	14.6										
03/26/20	Gumtree Outlet	186.0	3.1	3.0										
04/23/20	Gumtree Outlet	2419.6	4.1	45.0										
05/21/20	Gumtree Outlet	2419.6	1.0	4.1										
06/25/20	Gumtree Outlet	2419.6	1.0	3.0										
07/23/20	Gumtree Outlet	2419.6	2.0	1.0										
08/20/20	Gumtree Outlet	2419.6	1.0	1.0										
09/17/20	Gumtree Outlet	2419.6	2.0	3.1										
10/22/20	Gumtree Outlet	2419.6	1.0	1.0										
11/19/20	Gumtree Outlet	2419.6	13.5	5.2										
12/17/20	Gumtree Outlet	2419.6	79.8	10.9										
01/21/21	Gumtree Outlet	2419.6	290.9	1732.9										
02/18/21	Gumtree Outlet	2419.6	21.8	58.3										
03/25/21	Gumtree Outlet	2419.1	6.3	13.1										
04/29/21	Gumtree Outlet	816.4	1.0	27.9										
05/27/21	Gumtree Outlet	1553.1	1.0	2.0										
06/30/21	Gumtree Outlet	2419.6	1.0	1.0										
07/29/21	Gumtree Outlet	2419.6	1.0	9.7										
08/26/21	Gumtree Outlet	2419.6	1.0	3.1										
09/30/21	Gumtree Outlet	2419.6	4.1	1.0										
10/28/21	Gumtree Outlet	2419.6	8.6	4.1										
03/16/17	Hansens Outlet	2419.6	18.5	2419.6	1299.7	2419.6	2419.6	1.0	365.4	2.0	1.0	2419.6	6.2	
04/13/17	Hansens Outlet	2419.6	2.0	4.1										
05/25/17	Hansens Outlet	2419.6	4.1	1.0										
06/22/17	Hansens Outlet	2419.6	1.0	5.2										
07/13/17	Hansens Outlet	2419.6	2.0	8.6										
08/24/17	Hansens Outlet	2419.6	3.1											
09/28/17	Hansens Outlet	2419.6	1.0	2.0										
10/12/17	Hansens Outlet	2419.6	7.5	3.0										
11/09/17	Hansens Outlet	2419.6	19.7	4.1										
12/11/17	Hansens Outlet	2419.6	365.4	58.1										
03/14/19	Hansens Outlet	2419.6	14.8	131.7										
03/18/19	Hansens Outlet	2419.6	17.3	259.5										
04/25/19	Hansens Outlet	2419.6	3.0	2.0										
05/22/19	Hansens Outlet	2419.6	1.0	6.2										
06/13/19	Hansens Outlet	2419.6	1.0	260.3										
06/27/19	Hansens Outlet	2419.6	1.0	648.8										
07/26/19	Hansens Outlet	2419.6	1.0	248.1										
08/22/19	Hansens Outlet	2419.6	2.0	6.2										
03/25/21	Hansens Outlet	2419.1	22.6	27.5										
04/29/21	Hansens Outlet	1299.7	2.0	4.1										
05/27/21	Hansens Outlet	1299.7	1.0	2.0										
06/30/21	Hansens Outlet	2419.6	1.0	2.0										
03/14/19	Low Flow Barrier	2419.6	20.1	25.9	2419.6	2419.6	2419.6	20.1	167.0	28.1	25.9	60.2	31.5	
03/19/19	Low Flow Barrier	2419.6	28.1	31.5										

12/29/19	Low Flow Barrier	2419.6	167.0	60.2										
01/12/17	Marker #1	2419.6	149.8	46.5		74.9	2419.6	2419.6	1.0	648.8	20.3	1.0	290.9	6.3
02/09/17	Marker #1	1553.1	34.1	6.3										
03/16/17	Marker #1	1732.9	14.8	51.9										
04/13/17	Marker #1	2419.6	8.5	19.3										
05/25/17	Marker #1	387.3	22.8	2.0										
06/22/17	Marker #1	2419.6	2.0	2.0										
07/13/17	Marker #1	2419.6	1.0	1.0										
08/24/17	Marker #1	2419.6	29.5											
09/28/17	Marker #1	1119.9	2.0	1.0										
10/12/17	Marker #1	1046.2	10.8	1.0										
11/09/17	Marker #1	2419.6	26.2	4.1										
12/11/17	Marker #1	2419.6	63.8	9.8										
01/11/18	Marker #1	2419.6	75.4	12.1										
02/22/18	Marker #1	1413.6	83.6											
03/22/18	Marker #1	204.6	14.5	4.1										
04/26/18	Marker #1	290.9	26.9	1.0										
05/24/18	Marker #1	2419.6	8.5	3.1										
06/28/18	Marker #1	1732.9	16.1	4.1										
07/26/18	Marker #1	2419.6	4.1	1.0										
08/30/18	Marker #1	2419.6	1.0	6.3										
09/27/18	Marker #1	2419.6	13.5	2.0										
10/25/18	Marker #1	2419.6	129.6	43.5										
11/29/18	Marker #1	2419.6	150.0	79.4										
12/13/18	Marker #1	2419.6	365.4	50.4										
01/07/19	Marker #1	613.1	111.2	10.9										
01/08/19	Marker #1	686.7	172.3	57.3										
01/09/19	Marker #1	461.1	156.5	32.3										
01/10/19	Marker #1	816.4	290.9	53.0										
01/11/19	Marker #1	461.1	156.5	53.7										
01/12/19	Marker #1	1203.3	648.8	108.6										
01/13/19	Marker #1	344.8	195.6	93.3										
01/24/19	Marker #1	579.4	261.3	36.4										
02/20/19	Marker #1	1299.7	86.0	58.1										
03/14/19	Marker #1	2419.6	23.1	9.7										
03/18/19	Marker #1	2419.6	14.6	14.6										
03/19/19	Marker #1	2419.6	26.2	30.5										
04/25/19	Marker #1	2419.6	224.7	63.1										
05/22/19	Marker #1	74.9	9.8	2.0										
06/13/19	Marker #1	160.7	7.0	2.0										
06/27/19	Marker #1	285.1	1.0	5.2										
07/26/19	Marker #1	2419.6	1.0	1.0										
08/22/19	Marker #1	866.4	9.8	1.0										
09/12/19	Marker #1	1413.6	27.9	3.0										
10/24/19	Marker #1	547.5	15.6	2.0										
11/21/19	Marker #1	2419.6	111.9	14.5										
12/05/19	Marker #1	686.7	93.3	24.1										
12/29/19	Marker #1	2419.6	83.6	114.5										
01/23/20	Marker #1	2419.6	83.9	5.2										
02/20/20	Marker #1	2419.6	57.3	6.3										
03/26/20	Marker #1	387.3	8.6	4.1										
04/23/20	Marker #1	2419.6	6.3	20.6										
05/21/20	Marker #1	579.4	1.0	2.0										
06/25/20	Marker #1	2419.6	3.1	2.0										
07/23/20	Marker #1	2419.6	2.0	1.0										
08/20/20	Marker #1	2419.6	2.0	2.0										
09/17/20	Marker #1	1553.1	7.3	1.0										
10/22/20	Marker #1	2419.6	3.1	1.0										
11/19/20	Marker #1	2419.6	6.1	23.1										
12/17/20	Marker #1	1732.9	52.1	14.8										
01/21/21	Marker #1	2419.6	78.5	290.9										
02/18/21	Marker #1	2419.6	23.3	18.7										
03/25/21	Marker #1	2419.6	2.0	2.0										
04/29/21	Marker #1	231.0	5.2	6.3										
05/27/21	Marker #1	461.1	1.0	1.0										
06/30/21	Marker #1	2419.6	1.0	1.0										
07/29/21	Marker #1	2419.6	1.0	2.0										
08/26/21	Marker #1	2419.6	13.4	1.0										
09/30/21	Marker #1	2419.6	34.5	42.0										
10/28/21	Marker #1	2419.6	9.6	4.1										
11/18/21	Marker #1	2419.6	43.5	27.5										
12/21/21	Marker #1	547.5	20.3	30.6										
01/12/17	Marker #2	2419.6	88.0	35.5		5.0	2419.7	1859.6	1.0	184.2	4.1	1.0	307.6	3.1
02/09/17	Marker #2	1413.6	22.6	22.8										
03/16/17	Marker #2	1553.1	2.0	22.1										
04/13/17	Marker #2	2419.6	1.0	1.0										
05/25/17	Marker #2	365.4	1.0	1.0										
06/22/17	Marker #2	2419.6	1.0	1.0										
07/13/17	Marker #2	2419.6	1.0	5.2										
08/24/17	Marker #2	1553.1	2.0											
09/28/17	Marker #2	1299.7	1.0	1.0										
10/12/17	Marker #2	1413.6	3.1	1.0										
11/09/17	Marker #2	2419.6	8.5	1.0										
12/11/17	Marker #2	2419.6	14.6	3.1										
01/11/18	Marker #2	2419.6	54.6	4.1										

02/22/18	Marker #2	1046.2	34.5										
03/22/18	Marker #2	165.8	7.5	1.0									
04/26/18	Marker #2	344.8	25.9	4.1									
05/24/18	Marker #2	2419.6	4.1	1.0									
06/28/18	Marker #2	1119.9	2.0	1.0									
07/26/18	Marker #2	2419.6	1.0	4.1									
08/30/18	Marker #2	2419.6	1.0	1.0									
09/27/18	Marker #2	2419.6	4.1	2.0									
10/25/18	Marker #2	1553.1	18.7	3.1									
11/29/18	Marker #2	2419.6	108.6	32.3									
12/13/18	Marker #2	2419.6	118.7	11.0									
01/07/19	Marker #2	517.2	161.6	46.5									
01/08/19	Marker #2	866.4	153.9	33.1									
01/09/19	Marker #2	344.8	111.2	22.8									
01/10/19	Marker #2	579.4	184.2	32.7									
01/11/19	Marker #2	648.8	150.0	18.3									
01/24/19	Marker #2	387.3	172.2	23.1									
02/20/19	Marker #2	2419.6	160.7	131.7									
03/14/19	Marker #2	2419.6	3.1	5.1									
03/18/19	Marker #2	2419.6	16.1	5.2									
04/25/19	Marker #2	2419.6	1.0	3.0									
05/22/19	Marker #2	9.8	1.0	1.0									
06/13/19	Marker #2	5.0	1.0	2.0									
06/27/19	Marker #2	517.2	1.0	15.3									
07/26/19	Marker #2	2419.6	1.0	2.0									
08/22/19	Marker #2	866.4	2.0	1.0									
09/12/19	Marker #2	1119.9	3.0	1.0									
10/24/19	Marker #2	224.7	1.0	1.0									
11/21/19	Marker #2	2419.6	37.9	13.8									
12/05/19	Marker #2	1553.1	18.9	10.9									
12/29/19	Marker #2	2419.6	48.0	88.2									
01/23/20	Marker #2	2419.6	37.9	3.1									
02/20/20	Marker #2	2419.6	20.3	1.0									
03/26/20	Marker #2	410.6	6.3	2.0									
04/23/20	Marker #2	2419.6	3.1	35.9									
05/21/20	Marker #2	1046.2	1.0	3.1									
06/25/20	Marker #2	2419.6	2.0	31.1									
07/23/20	Marker #2	1986.3	1.0	1.0									
08/20/20	Marker #2	2419.6	2.0	1.0									
09/17/20	Marker #2	1553.1	1.0	1.0									
10/22/20	Marker #2	2419.6	5.1	2.0									
11/19/20	Marker #2	2419.6	2.0	4.1									
12/17/20	Marker #2	648.8	32.7	178.5									
01/21/21	Marker #2	1553.1	86.2	307.6									
02/18/21	Marker #2	2419.6	21.3	19.7									
03/25/21	Marker #2	2419.7	5.2	2.0									
04/29/21	Marker #2	190.4	1.0	1.0									
05/27/21	Marker #2	325.5	1.0	1.0									
06/30/21	Marker #2	770.1	1.0	1.0									
07/29/21	Marker #2	1203.3	1.0	1.0									
08/26/21	Marker #2	2419.6	1.0	1.0									
09/30/21	Marker #2	2419.6	13.4	7.3									
10/28/21	Marker #2	2419.6	8.6	2.0									
11/18/21	Marker #2	2419.6	2.0	4.1									
12/21/21	Marker #2	1732.9	51.2	7.4									
01/12/17	Marker #5	2419.6	141.4	66.3	9.0	4839.2	1986.3	1.0	387.3	3.1	1.0	325.5	3.0
02/09/17	Marker #5	1986.3	25.9	27.5									
03/16/17	Marker #5	1553.1	3.1	19.1									
04/13/17	Marker #5	2419.6	1.0	5.1									
05/25/17	Marker #5	488.4	1.0	1.0									
06/22/17	Marker #5	2419.6	1.0	2.0									
07/13/17	Marker #5	2419.6	1.0	1.0									
08/24/17	Marker #5	1986.3	1.0										
09/28/17	Marker #5	1203.3	1.0	1.0									
10/12/17	Marker #5	980.4	4.1	1.0									
11/09/17	Marker #5	4839.2	4.0	1.0									
12/11/17	Marker #5	2419.6	29.1	5.2									
01/11/18	Marker #5	2419.6	61.3	3.1									
02/22/18	Marker #5	1299.7	36.4										
03/22/18	Marker #5	131.4	4.1	1.0									
04/26/18	Marker #5	344.8	2.0	1.0									
05/24/18	Marker #5	2419.6	6.3	3.0									
06/20/18	Marker #5	770.1	1.0	1.0									
07/26/18	Marker #5	2419.6	1.0	1.0									
08/30/18	Marker #5	2419.6	1.0	1.0									
09/27/18	Marker #5	1986.3	1.0	1.0									
10/25/18	Marker #5	1119.9	7.5	6.3									
11/29/18	Marker #5	2419.6	119.6	28.5									
12/13/18	Marker #5	2419.6	156.5	26.2									
01/07/19	Marker #5	517.2	209.8	50.4									
01/08/19	Marker #5	686.7	248.1	59.4									
01/09/19	Marker #5	770.1	261.3	51.2									
01/10/19	Marker #5	410.6	172.2	32.3									

01/11/19	Marker #5	613.1	214.2	25.9										
01/24/19	Marker #5	488.4	248.1	25.9										
02/20/19	Marker #5	1732.9	101.4	58.3										
03/14/19	Marker #5	2419.6	101.7	14.6										
03/18/19	Marker #5	2419.6	4.1	3.1										
04/25/19	Marker #5	2419.6	1.0	5.1										
05/22/19	Marker #5	10.9	1.0	1.0										
06/13/19	Marker #5	9.0	1.0	1.0										
06/27/19	Marker #5	488.4	1.0	8.5										
07/26/19	Marker #5	2419.6	1.0	1.0										
08/22/19	Marker #5	172.5	1.0	1.0										
09/12/19	Marker #5	1119.9	3.1	1.0										
10/24/19	Marker #5	166.4	1.0	2.0										
11/21/19	Marker #5	2419.6	35.0	25.9										
12/05/19	Marker #5	1119.9	22.8	16.1										
01/23/20	Marker #5	2419.6	7.5	1.0										
02/20/20	Marker #5	2419.6	21.8	2.0										
03/26/20	Marker #5	410.6	4.1	2.0										
04/23/20	Marker #5	2419.6	1.0	25.3										
05/21/20	Marker #5	1986.3	1.0	2.0										
06/25/20	Marker #5	2419.6	387.3	46.6										
07/23/20	Marker #5	2419.6	1.0	1.0										
08/20/20	Marker #5	2419.6	1.0	1.0										
09/17/20	Marker #5	1413.6	1.0	1.0										
10/22/20	Marker #5	2419.6	1.0	1.0										
11/19/20	Marker #5	2419.6	3.1	4.1										
12/17/20	Marker #5	1299.7	45.7	13.2										
01/21/21	Marker #5	980.4	69.1	325.5										
02/18/21	Marker #5	2419.6	23.1	12.1										
03/25/21	Marker #5	2419.8	1.0	6.2										
04/29/21	Marker #5	461.1	1.0	1.0										
05/27/21	Marker #5	248.9	1.0	1.0										
06/30/21	Marker #5	770.1	1.0	1.0										
07/29/21	Marker #5	1119.9	1.0	1.0										
08/26/21	Marker #5	1986.3	1.0	1.0										
09/30/21	Marker #5	290.5	39.3	2.0										
10/28/21	Marker #5	2419.6	1.0	4.1										
11/18/21	Marker #5	2419.6	5.2	4.1										
12/21/21	Marker #5	2419.6	55.6	14.6										
01/12/17	Marker #6	2419.6	178.9	67.0	67.0	2419.9	2419.6	1.0	980.4	1.0	1.0	260.3	3.1	
02/09/17	Marker #6	1986.3	12.6	24.7										
03/16/17	Marker #6	2419.6	4.1	31.3										
04/13/17	Marker #6	2419.6	1.0	5.1										
05/25/17	Marker #6	1299.7	1.0	1.0										
06/22/17	Marker #6	2419.6	1.0	1.0										
07/13/17	Marker #6	2419.6	1.0	1.0										
08/24/17	Marker #6	1732.9	1.0											
09/28/17	Marker #6	1553.1	1.0	2.0										
10/12/17	Marker #6	1732.9	1.0	1.0										
11/09/17	Marker #6	2419.6	6.3	1.0										
12/11/17	Marker #6	2419.6	23.3	3.1										
01/11/18	Marker #6	2419.6	57.8	35.0										
02/22/18	Marker #6	2419.6	12.2											
03/22/18	Marker #6	172.0	1.0	1.0										
04/26/18	Marker #6	290.9	1.0	1.0										
05/24/18	Marker #6	2419.6	2.0	3.1										
06/20/18	Marker #6	1203.3	1.0	1.0										
07/26/18	Marker #6	1553.1	1.0	2.0										
08/30/18	Marker #6	2419.6	1.0	1.0										
09/27/18	Marker #6	2419.6	1.0	4.0										
10/25/18	Marker #6	1986.3	48.0	7.4										
11/29/18	Marker #6	2419.6	119.8	27.5										
12/13/18	Marker #6	2419.6	206.4	75.7										
01/07/19	Marker #6	2419.6	980.4	156.5										
01/08/19	Marker #6	1986.3	517.2	185.0										
01/09/19	Marker #6	579.3	145.5	60.2										
01/10/19	Marker #6	770.1	290.9	88.2										
01/11/19	Marker #6	488.4	186.0	18.9										
01/24/19	Marker #6	686.7	172.2	24.9										
02/20/19	Marker #6	1413.6	57.1	35.9										
03/14/19	Marker #6	2419.6	2.0	3.0										
03/18/19	Marker #6	2419.6	1.0	9.7										
04/25/19	Marker #6	2419.6	1.0	1.0										
05/22/19	Marker #6	67.0	1.0	4.1										
06/13/19	Marker #6	137.6	1.0	3.0										
06/27/19	Marker #6	686.7	1.0	19.7										
07/26/19	Marker #6	2419.6	1.0	1.0										
08/22/19	Marker #6	185.0	1.0	1.0										
09/12/19	Marker #6	816.4	4.1	1.0										
10/24/19	Marker #6	261.3	1.0	4.1										
11/21/19	Marker #6	2419.6	20.9	24.1										
12/05/19	Marker #6	1413.6	29.2	36.4										
01/23/20	Marker #6	2419.6	8.6	3.1										
02/20/20	Marker #6	2419.6	13.5	4.1										
03/26/20	Marker #6	387.3	6.3	1.0										

04/23/20	Marker #6	2419.6	1.0	36.8										
05/21/20	Marker #6	2419.6	1.0	2.0										
06/25/20	Marker #6	1986.3	1.0	35.4										
07/23/20	Marker #6	1986.3	1.0	1.0										
08/20/20	Marker #6	2419.6	1.0	1.0										
09/17/20	Marker #6	2419.6	1.0	1.0										
10/22/20	Marker #6	2419.6	1.0	1.0										
11/19/20	Marker #6	2419.6	1.0	2.0										
12/17/20	Marker #6	2419.6	61.3	6.3										
01/21/21	Marker #6	1203.3	85.5	260.3										
02/18/21	Marker #6	2419.6	27.2	36.8										
03/25/21	Marker #6	2419.9	1.0	3.1										
04/29/21	Marker #6	261.3	1.0	2.0										
05/27/21	Marker #6	344.8	1.0	1.0										
06/30/21	Marker #6	2419.6	1.0	1.0										
07/29/21	Marker #6	770.1	1.0	1.0										
08/26/21	Marker #6	2419.6	1.0	1.0										
09/30/21	Marker #6	372.4	25.3	1.0										
10/28/21	Marker #6	2419.6	3.0	2.0										
11/18/21	Marker #6	2419.6	12.2	2.0										
12/21/21	Marker #6	2419.6	57.6	9.7										
03/16/17	Marker #7	2419.6	1.0	52.9	23.0	2419.6	2419.6	1.0	866.4	2.0	1.0	547.5	2.0	
04/13/17	Marker #7	2419.6	1.0	3.0										
05/25/17	Marker #7	648.8	1.0	1.0										
06/22/17	Marker #7	2419.6	1.0	1.0										
07/13/17	Marker #7	2419.6	1.0	1.0										
08/24/17	Marker #7	1732.9	1.0											
09/28/17	Marker #7	2419.6	1.0	1.0										
10/12/17	Marker #7	1553.1	3.1	1.0										
11/09/17	Marker #7	2419.6	1.0	1.0										
12/11/17	Marker #7	2419.6	21.6	2.0										
01/11/18	Marker #7	2419.6	517.2	106.7										
02/22/18	Marker #7	1986.3	21.2											
03/22/18	Marker #7	325.5	6.3	3.1										
04/26/18	Marker #7	1732.9	2.0	2.0										
05/24/18	Marker #7	2419.6	2.0	2.0										
06/20/18	Marker #7	1413.6	2.0	1.0										
07/26/18	Marker #7	2419.6	1.0	1.0										
08/30/18	Marker #7	2419.6	1.0	1.0										
09/27/18	Marker #7	2419.6	2.0	2.0										
10/25/18	Marker #7	2419.6	57.3	6.3										
11/29/18	Marker #7	2419.6	344.8	28.5										
12/13/18	Marker #7	2419.6	866.4	72.8										
01/07/19	Marker #7	2419.6	821.2	547.5										
01/08/19	Marker #7	1046.2	387.3	129.6										
01/09/19	Marker #7	488.4	488.4	159.7										
01/10/19	Marker #7	686.7	172.5	86.9										
01/11/19	Marker #7	866.4	387.3	81.6										
01/24/19	Marker #7	1732.9	290.9	172.3										
02/20/19	Marker #7	2419.6	150.0	172.2										
03/14/19	Marker #7	2419.6	2.0	2.0										
03/18/19	Marker #7	2419.6	2.0	38.9										
04/25/19	Marker #7	2419.6	1.0	6.1										
05/22/19	Marker #7	23.0	1.0	2.0										
06/13/19	Marker #7	25.3	1.0	1.0										
06/27/19	Marker #7	686.7	1.0	16.9										
07/26/19	Marker #7	1553.1	1.0	1.0										
08/22/19	Marker #7	1203.3	1.0	1.0										
09/12/19	Marker #7	2419.6	1.0	1.0										
10/24/19	Marker #7	547.5	1.0	1.0										
11/21/19	Marker #7	2419.6	31.3	9.8										
12/05/19	Marker #7	2419.6	57.1	73.8										
01/23/20	Marker #7	2419.6	17.5	2.0										
02/20/20	Marker #7	2419.6	20.1	3.0										
03/26/20	Marker #7	218.7	5.2	1.0										
04/23/20	Marker #7	2419.6	4.1	31.1										
05/21/20	Marker #7	2419.6	1.0	4.1										
06/25/20	Marker #7	2419.6	1.0	3.1										
07/23/20	Marker #7	2419.6	1.0	1.0										
08/20/20	Marker #7	2419.6	1.0	1.0										
09/17/20	Marker #7	2419.6	1.0	1.0										
10/22/20	Marker #7	2419.6	1.0	1.0										
11/19/20	Marker #7	2419.6	8.9	10.5										
12/17/20	Marker #7	2419.6	90.8	10.9										
01/21/21	Marker #7	1553.1	90.6	547.5										
02/18/21	Marker #7	2419.6	32.7	34.5										
03/25/21	Marker #7	2419.1	4.0	181.2										
04/29/21	Marker #7	435.2	2.0	1.0										
05/27/21	Marker #7	920.8	1.0	1.0										
06/30/21	Marker #7	2419.6	1.0	1.0										
07/29/21	Marker #7	2419.6	1.0	2.0										
08/26/21	Marker #7	2419.6	1.0	1.0										
09/30/21	Marker #7	533.5	6.0	1.0										
10/28/21	Marker #7	2419.6	14.5	5.2										
11/18/21	Marker #7	2419.6	8.6	10.8										

12/21/21	Marker #7	1553.1	54.8	12.1										
01/12/19	SWL Sample Tap	410.6	93.2	43.5		214.3	2419.6	410.6	55.7	93.2	79.4	9.8	142.1	43.5
01/13/19	SWL Sample Tap	214.3	55.7	9.8										
12/29/19	SWL Sample Tap	2419.6	79.4	142.1										

DATE	SAMPLE POINT	TOTAL COLIFORM (MPN)	E. coli (MPN)
01/30/17	East End Tributary	2419.6	46
02/06/17	East End Tributary	1986	15
02/13/17	East End Tributary	2419.6	10
02/20/17	East End Tributary	2419.6	93
02/27/17	East End Tributary	2419.6	21
03/06/17	East End Tributary	2419.6	39
03/13/17	East End Tributary	2419.6	44
03/21/17	East End Tributary	2419.6	21
03/27/17	East End Tributary	2419.6	23
04/03/17	East End Tributary	2419.6	75
04/10/17	East End Tributary	2419.6	93
04/17/17	East End Tributary	2419.6	69
04/24/17	East End Tributary	2419.6	44
05/01/17	East End Tributary	2420	21
05/08/17	East End Tributary	2419.6	141
05/15/17	East End Tributary	2419.6	57
05/22/17	East End Tributary	2419.6	82
05/30/17	East End Tributary	2419.6	23
06/06/17	East End Tributary	2419.6	24
06/12/17	East End Tributary	1011	6
02/18/19	East End Tributary	2419.6	82
02/25/19	East End Tributary	2419.6	17
03/04/19	East End Tributary	2419.6	11
03/11/19	East End Tributary	1414	11
03/18/19	East End Tributary	1733	10
03/27/19	East End Tributary	1046	29
04/01/19	East End Tributary	1203	36
04/08/19	East End Tributary	236	6
04/15/19	East End Tributary	1986	11
04/22/19	East End Tributary	2419.6	11
04/30/19	East End Tributary	2419.6	5
05/06/19	East End Tributary	2419.6	4
05/14/19	East End Tributary	2419.6	9
05/22/19	East End Tributary	2419.6	80
05/28/19	East End Tributary	2420	16
06/03/19	East End Tributary	2419.6	39
06/10/19	East End Tributary	2419.6	10
03/09/20	East End Tributary	866	1
03/16/20	East End Tributary	1553	12
03/23/20	East End Tributary	517	9
03/30/20	East End Tributary	2419.6	8
04/06/20	East End Tributary	205	1
04/13/20	East End Tributary	2419.6	73
04/20/20	East End Tributary	2420	27
04/28/20	East End Tributary	2419.6	19
05/04/20	East End Tributary	1733	19
05/11/20	East End Tributary	2419.6	50
05/18/20	East End Tributary	2419.6	2
05/26/20	East End Tributary	2419.6	38
06/01/20	East End Tributary	2419.6	11
06/08/20	East End Tributary	2419.6	5
06/15/20	East End Tributary	2419.6	17
06/22/20	East End Tributary	2419.6	29
07/20/20	East End Tributary	2419.6	41
07/27/20	East End Tributary	2419.6	150
12/17/22	Sweetwater River Bridge	1414	12
12/10/18	Sweetwater River Bridge	2419.6	54
01/03/17	Loveland Dam	105	1
01/09/17	Loveland Dam	59	1
01/16/17	Loveland Dam	152	1
01/23/17	Loveland Dam	2419.6	172
01/30/17	Loveland Dam	2419.6	65
02/06/17	Loveland Dam	2419.6	4
02/13/17	Loveland Dam	238	4
02/20/17	Loveland Dam	387	1
02/27/17	Loveland Dam	326	1

	TC Min	TC Max	TC Median	EC Min	EC Max	EC Median
	204.6	2419.6	2419.6	1.0	149.7	20.9
	1414	2420	1917	12	54	33
	9	2420	411	1	172	1

03/06/17 Loveland Dam	1203	5
03/13/17 Loveland Dam	579	1
03/21/17 Loveland Dam	144	1
03/27/17 Loveland Dam	1203	1
04/03/17 Loveland Dam	299	1
04/10/17 Loveland Dam	517	1
04/17/17 Loveland Dam	411	1
04/24/17 Loveland Dam	2419.6	1
05/01/17 Loveland Dam	770	1
05/08/17 Loveland Dam	276	1
05/15/17 Loveland Dam	770	1
05/22/17 Loveland Dam	261	1
05/30/17 Loveland Dam	387	1
06/05/17 Loveland Dam	579	1
06/12/17 Loveland Dam	299	2
06/19/17 Loveland Dam	236	1
06/26/17 Loveland Dam	435	1
07/03/17 Loveland Dam	365	1
07/10/17 Loveland Dam	1203	1
07/17/17 Loveland Dam	727	1
07/24/17 Loveland Dam	1203	1
07/31/17 Loveland Dam	2419.6	1
08/07/17 Loveland Dam	2419.6	1
08/14/17 Loveland Dam	1733	1
08/21/17 Loveland Dam	1414	1
08/28/17 Loveland Dam	548	1
09/05/17 Loveland Dam	517	1
09/11/17 Loveland Dam	214	1
09/18/17 Loveland Dam	1120	1
09/26/17 Loveland Dam	387	1
10/05/17 Loveland Dam	613	1
10/09/17 Loveland Dam	727	1
10/16/17 Loveland Dam	1733	1
10/23/17 Loveland Dam	435	1
10/30/17 Loveland Dam	488	1
11/06/17 Loveland Dam	365	1
11/13/17 Loveland Dam	236	1
11/20/17 Loveland Dam	435	1
11/27/17 Loveland Dam	687	1
12/04/17 Loveland Dam	62	1
12/11/17 Loveland Dam	138	1
12/18/17 Loveland Dam	157	1
12/27/17 Loveland Dam	23	2
01/02/18 Loveland Dam	41	1
01/08/18 Loveland Dam	69	1
01/15/18 Loveland Dam	84	1
01/22/18 Loveland Dam	88	2
01/29/18 Loveland Dam	34	1
02/05/18 Loveland Dam	39	1
02/12/18 Loveland Dam	16	1
02/19/18 Loveland Dam	16	1
02/26/18 Loveland Dam	20	1
03/05/18 Loveland Dam	43	1
03/12/18 Loveland Dam	9	1
03/19/18 Loveland Dam	46	1
03/27/18 Loveland Dam	64	1
04/02/18 Loveland Dam	225	1
04/09/18 Loveland Dam	1553	1
04/16/18 Loveland Dam	411	1
04/23/18 Loveland Dam	172	1
04/30/18 Loveland Dam	291	1
05/07/18 Loveland Dam	248	1
05/14/18 Loveland Dam	770	1
05/21/18 Loveland Dam	173	1
05/29/18 Loveland Dam	91	1
06/04/18 Loveland Dam	261	1
06/11/18 Loveland Dam	86	1
06/18/18 Loveland Dam	488	1
06/25/18 Loveland Dam	112	1
07/02/18 Loveland Dam	2419.6	1
07/09/18 Loveland Dam	1414	1
07/16/18 Loveland Dam	517	1
07/23/18 Loveland Dam	2419.6	1

07/30/18 Loveland Dam	2419.6	1
08/06/18 Loveland Dam	2419.6	1
08/13/18 Loveland Dam	2419.6	1
08/20/18 Loveland Dam	1414	1
08/27/18 Loveland Dam	1046	
09/04/18 Loveland Dam	727	1
09/10/18 Loveland Dam	1046	1
09/17/18 Loveland Dam	866	1
09/24/18 Loveland Dam	1300	1
10/01/18 Loveland Dam	1733	1
10/08/18 Loveland Dam	866	1
10/15/18 Loveland Dam	1046	1
10/22/18 Loveland Dam	1203	1
10/29/18 Loveland Dam	613	1
11/05/18 Loveland Dam	921	
11/12/18 Loveland Dam	980	1
12/03/18 Loveland Dam	2419.6	1
12/10/18 Loveland Dam	78	1
12/26/18 Loveland Dam	291	1
12/31/18 Loveland Dam	435	1
01/07/19 Loveland Dam	461	1
01/14/19 Loveland Dam	461	1
01/21/19 Loveland Dam	326	1
01/28/19 Loveland Dam	517	1
02/04/19 Loveland Dam	387	1
02/11/19 Loveland Dam	166	1
02/18/19 Loveland Dam	2419.6	135
02/25/19 Loveland Dam	816	20
03/04/19 Loveland Dam	435	2
03/11/19 Loveland Dam	1120	1
03/18/19 Loveland Dam	2420	1
03/25/19 Loveland Dam	196	1
04/01/19 Loveland Dam	2419.6	1
04/08/19 Loveland Dam	2420	1
04/15/19 Loveland Dam	64	1
04/22/19 Loveland Dam	326	1
04/29/19 Loveland Dam	54	1
05/06/19 Loveland Dam	36	1
05/13/19 Loveland Dam	37	1
05/20/19 Loveland Dam	49	2
05/28/19 Loveland Dam	387	1
06/03/19 Loveland Dam	40	1
06/10/19 Loveland Dam	2419.6	1
06/17/19 Loveland Dam	2419.6	1
06/24/19 Loveland Dam	488	1
07/01/19 Loveland Dam	2419.6	1
07/08/19 Loveland Dam	2419.6	1
07/15/19 Loveland Dam	2419.6	1
07/22/19 Loveland Dam	345	1
07/29/19 Loveland Dam	2420	1
08/05/19 Loveland Dam	1046	2
08/12/19 Loveland Dam	1733	1
08/19/19 Loveland Dam	2419.6	1
08/26/19 Loveland Dam	2419.6	1
09/03/19 Loveland Dam	2419.6	1
09/09/19 Loveland Dam	2419.6	15
09/16/19 Loveland Dam	2419.6	1
09/23/19 Loveland Dam	1203	1
09/30/19 Loveland Dam	1733	2
10/07/19 Loveland Dam	276	1
10/14/19 Loveland Dam	365	1
10/21/19 Loveland Dam	228	1
10/28/19 Loveland Dam	238	1
11/11/19 Loveland Dam	387	1
11/18/19 Loveland Dam	276	1
11/25/19 Loveland Dam	248	1
12/02/19 Loveland Dam	120	2
12/10/19 Loveland Dam	88	1
12/16/19 Loveland Dam	56	2
12/23/19 Loveland Dam	51	1
12/30/19 Loveland Dam	238	10
01/06/20 Loveland Dam	145	1
01/13/20 Loveland Dam	172	1

01/20/20 Loveland Dam	261	1
01/27/20 Loveland Dam	1046	1
02/03/20 Loveland Dam	67	1
02/10/20 Loveland Dam	43	1
02/17/20 Loveland Dam	69	1
02/24/20 Loveland Dam	41	1
03/02/20 Loveland Dam	71	1
03/09/20 Loveland Dam	1120	1
03/16/20 Loveland Dam	84	1
03/23/20 Loveland Dam	59	1
03/30/20 Loveland Dam	114	1
04/06/20 Loveland Dam	154	1
04/13/20 Loveland Dam	186	1
04/20/20 Loveland Dam	167	1
04/28/20 Loveland Dam	35	1
05/04/20 Loveland Dam	261	1
05/11/20 Loveland Dam	345	1
05/18/20 Loveland Dam	261	1
05/26/20 Loveland Dam	687	1
06/01/20 Loveland Dam	1120	1
06/08/20 Loveland Dam	276	1
06/15/20 Loveland Dam	579	1
06/22/20 Loveland Dam	435	1
06/29/20 Loveland Dam	613	1
07/06/20 Loveland Dam	387	1
07/13/20 Loveland Dam	291	1
07/20/20 Loveland Dam	548	1
07/27/20 Loveland Dam	326	1
08/03/20 Loveland Dam	770	1
08/10/20 Loveland Dam	308	1
08/17/20 Loveland Dam	980	2
08/25/20 Loveland Dam	687	1
08/31/20 Loveland Dam	345	1
09/08/20 Loveland Dam	579	1
09/14/20 Loveland Dam	921	1
09/21/20 Loveland Dam	921	1
09/28/20 Loveland Dam	816	1
10/05/20 Loveland Dam	921	1
10/12/20 Loveland Dam	488	1
10/19/20 Loveland Dam	770	1
10/26/20 Loveland Dam	411	2
11/02/20 Loveland Dam	866	1
11/09/20 Loveland Dam	2419.6	1
11/16/20 Loveland Dam	2420	1
11/23/20 Loveland Dam	2419.6	1
11/30/20 Loveland Dam	2419.6	1
12/08/20 Loveland Dam	2419.6	1
12/14/20 Loveland Dam	326	1
12/21/20 Loveland Dam	178	1
12/28/20 Loveland Dam	649	1
01/04/21 Loveland Dam	461	1
01/11/21 Loveland Dam	727	1
01/18/21 Loveland Dam	65	1
01/25/21 Loveland Dam	69	1
02/01/21 Loveland Dam	63	1
02/08/21 Loveland Dam	2419.6	1
02/15/21 Loveland Dam	1733	1
02/22/21 Loveland Dam	866	3
03/01/21 Loveland Dam	2419.6	1
03/08/21 Loveland Dam	2419.6	1
03/15/21 Loveland Dam	2419.6	1
03/22/21 Loveland Dam	1011	1
03/29/21 Loveland Dam	649	1
04/12/21 Loveland Dam	11	1
04/19/21 Loveland Dam	38	1
04/26/21 Loveland Dam	29	1
05/03/21 Loveland Dam	35	2
05/10/21 Loveland Dam	19	2
05/16/21 Loveland Dam	39	1
05/23/21 Loveland Dam	28	1
06/01/21 Loveland Dam	46	1
06/07/21 Loveland Dam	39	1
06/21/21 Loveland Dam	29	1

06/28/21 Loveland Dam	41	1							
07/06/21 Loveland Dam	52	1							
07/12/21 Loveland Dam	184	1							
07/19/21 Loveland Dam	770	1							
07/26/21 Loveland Dam	372	1							
08/02/21 Loveland Dam	2419.6	1							
08/09/21 Loveland Dam	2419.6	1							
08/16/21 Loveland Dam	1986	1							
08/23/21 Loveland Dam	1733	1							
08/30/21 Loveland Dam	548	1							
09/07/21 Loveland Dam	488	1							
09/13/21 Loveland Dam	179	1							
09/20/21 Loveland Dam	308	1							
09/27/21 Loveland Dam	411	1							
10/04/21 Loveland Dam	116	1							
10/11/21 Loveland Dam	1553	1							
10/18/21 Loveland Dam	980	1							
10/25/21 Loveland Dam	29	1							
11/08/21 Loveland Dam	1986	1							
11/15/21 Loveland Dam	60	1							
11/22/21 Loveland Dam	105	1							
11/29/21 Loveland Dam	19	1							
12/06/21 Loveland Dam	16	1							
12/13/21 Loveland Dam	24	1							
12/20/21 Loveland Dam	167	7							
12/28/21 Loveland Dam	41	1							
11/26/22 Loveland Dam	1553	1							
12/17/22 Loveland Dam	172	1							
01/23/17 East End Tributary	2419.6	147							
01/03/17 Loveland Fishing Area	2420	37	28	2420	727	1	687	1	
01/09/17 Loveland Fishing Area	2419.6	3							
01/16/17 Loveland Fishing Area	2419.6	11							
01/23/17 Loveland Fishing Area	2419.6	345							
01/30/17 Loveland Fishing Area	2419.6	71							
02/06/17 Loveland Fishing Area	2419.6	3							
02/13/17 Loveland Fishing Area	1120	13							
02/20/17 Loveland Fishing Area	1553	28							
02/27/17 Loveland Fishing Area	28	1							
03/06/17 Loveland Fishing Area	1986	34							
03/13/17 Loveland Fishing Area	1553	6							
03/21/17 Loveland Fishing Area	261	1							
03/27/17 Loveland Fishing Area	2419.6	2							
04/03/17 Loveland Fishing Area	1986	1							
04/10/17 Loveland Fishing Area	365	1							
04/17/17 Loveland Fishing Area	387	2							
04/24/17 Loveland Fishing Area	2419.6	1							
05/01/17 Loveland Fishing Area	816	1							
05/08/17 Loveland Fishing Area	548	1							
05/15/17 Loveland Fishing Area	548	1							
05/22/17 Loveland Fishing Area	687	1							
05/30/17 Loveland Fishing Area	1203	1							
06/05/17 Loveland Fishing Area	579	1							
06/12/17 Loveland Fishing Area	816	1							
06/19/17 Loveland Fishing Area	488	1							
06/26/17 Loveland Fishing Area	579	1							
07/03/17 Loveland Fishing Area	461	1							
07/10/17 Loveland Fishing Area	727	1							
07/17/17 Loveland Fishing Area	1986	1							
07/24/17 Loveland Fishing Area	1733	1							
07/31/17 Loveland Fishing Area	2419.6	1							
08/07/17 Loveland Fishing Area	1986	1							
08/14/17 Loveland Fishing Area	866	1							
08/21/17 Loveland Fishing Area	1414	1							
08/28/17 Loveland Fishing Area	816	1							
09/05/17 Loveland Fishing Area	1733	7							
09/18/17 Loveland Fishing Area	461	1							
09/26/17 Loveland Fishing Area	613	1							
10/05/17 Loveland Fishing Area	687	1							
10/09/17 Loveland Fishing Area	613	1							
10/16/17 Loveland Fishing Area	1553	1							
10/23/17 Loveland Fishing Area	579	1							
10/30/17 Loveland Fishing Area	816	3							
11/06/17 Loveland Fishing Area	548	2							

11/13/17 Loveland Fishing Area	345	1
11/20/17 Loveland Fishing Area	649	1
11/27/17 Loveland Fishing Area	727	1
12/04/17 Loveland Fishing Area	111	1
12/11/17 Loveland Fishing Area	133	3
12/18/17 Loveland Fishing Area	687	3
12/27/17 Loveland Fishing Area	152	2
01/02/18 Loveland Fishing Area	548	3
01/15/18 Loveland Fishing Area	921	36
01/22/18 Loveland Fishing Area	488	7
01/29/18 Loveland Fishing Area	276	2
02/05/18 Loveland Fishing Area	214	1
02/12/18 Loveland Fishing Area	248	1
02/19/18 Loveland Fishing Area	236	1
02/26/18 Loveland Fishing Area	461	1
03/05/18 Loveland Fishing Area	118	1
03/12/18 Loveland Fishing Area	261	1
03/19/18 Loveland Fishing Area	63	3
03/27/18 Loveland Fishing Area	60	1
04/02/18 Loveland Fishing Area	116	1
04/09/18 Loveland Fishing Area	921	1
04/16/18 Loveland Fishing Area	649	1
04/23/18 Loveland Fishing Area	172	1
04/30/18 Loveland Fishing Area	222	1
05/07/18 Loveland Fishing Area	291	1
05/14/18 Loveland Fishing Area	397	1
05/21/18 Loveland Fishing Area	272	1
06/04/18 Loveland Fishing Area	411	1
06/11/18 Loveland Fishing Area	158	1
06/18/18 Loveland Fishing Area	158	1
06/25/18 Loveland Fishing Area	727	1
07/02/18 Loveland Fishing Area	2419.6	1
07/09/18 Loveland Fishing Area	2419.6	1
07/16/18 Loveland Fishing Area	2420	1
07/23/18 Loveland Fishing Area	1986	1
07/30/18 Loveland Fishing Area	2419.6	1
08/06/18 Loveland Fishing Area	2419.6	1
08/13/18 Loveland Fishing Area	2419.6	1
08/20/18 Loveland Fishing Area	921	1
08/27/18 Loveland Fishing Area	866	
09/04/18 Loveland Fishing Area	1120	1
09/10/18 Loveland Fishing Area	980	1
09/17/18 Loveland Fishing Area	921	1
09/24/18 Loveland Fishing Area	1986	1
10/01/18 Loveland Fishing Area	1203	1
10/08/18 Loveland Fishing Area	1733	1
10/15/18 Loveland Fishing Area	2420	1
10/22/18 Loveland Fishing Area	1553	1
10/29/18 Loveland Fishing Area	649	1
11/05/18 Loveland Fishing Area	1553	
11/12/18 Loveland Fishing Area	1733	1
12/03/18 Loveland Fishing Area	2419.6	4
12/10/18 Loveland Fishing Area	261	2
12/26/18 Loveland Fishing Area	579	1
12/31/18 Loveland Fishing Area	687	1
01/07/19 Loveland Fishing Area	1300	1
01/14/19 Loveland Fishing Area	1986	13
01/21/19 Loveland Fishing Area	411	1
01/28/19 Loveland Fishing Area	548	1
02/04/19 Loveland Fishing Area	866	24
02/11/19 Loveland Fishing Area	727	6
02/18/19 Loveland Fishing Area	2420	248
02/25/19 Loveland Fishing Area	1414	20
03/04/19 Loveland Fishing Area	1203	3
03/11/19 Loveland Fishing Area	2419.6	1
03/18/19 Loveland Fishing Area	2419.6	1
03/25/19 Loveland Fishing Area	387	1
04/01/19 Loveland Fishing Area	2419.6	2
04/08/19 Loveland Fishing Area	2419.6	1
04/15/19 Loveland Fishing Area	308	1
04/22/19 Loveland Fishing Area	122	1
04/29/19 Loveland Fishing Area	70	1
05/06/19 Loveland Fishing Area	147	1

05/13/19 Loveland Fishing Area	145	1
05/20/19 Loveland Fishing Area	205	1
05/28/19 Loveland Fishing Area	613	2
06/03/19 Loveland Fishing Area	105	1
06/10/19 Loveland Fishing Area	272	1
06/17/19 Loveland Fishing Area	326	1
06/24/19 Loveland Fishing Area	1525	687
07/01/19 Loveland Fishing Area	579	1
07/08/19 Loveland Fishing Area	1986	1
07/15/19 Loveland Fishing Area	2420	1
07/22/19 Loveland Fishing Area	727	1
07/29/19 Loveland Fishing Area	517	1
08/05/19 Loveland Fishing Area	2419.6	1
08/12/19 Loveland Fishing Area	1733	1
08/19/19 Loveland Fishing Area	2419.6	1
08/26/19 Loveland Fishing Area	2419.6	1
09/03/19 Loveland Fishing Area	2419.6	1
09/09/19 Loveland Fishing Area	2419.6	1
09/16/19 Loveland Fishing Area	2419.6	1
09/23/19 Loveland Fishing Area	2420	2
09/30/19 Loveland Fishing Area	1414	1
10/07/19 Loveland Fishing Area	1733	1
10/14/19 Loveland Fishing Area	1986	3
10/21/19 Loveland Fishing Area	1414	1
10/28/19 Loveland Fishing Area	1203	3
11/11/19 Loveland Fishing Area	517	1
11/18/19 Loveland Fishing Area	2419.6	1
11/25/19 Loveland Fishing Area	816	12
12/02/19 Loveland Fishing Area	461	8
12/10/19 Loveland Fishing Area	816	12
12/16/19 Loveland Fishing Area	260	1
12/23/19 Loveland Fishing Area	179	3
12/30/19 Loveland Fishing Area	365	82
01/06/20 Loveland Fishing Area	770	1
01/13/20 Loveland Fishing Area	276	1
01/20/20 Loveland Fishing Area	613	1
01/27/20 Loveland Fishing Area	687	1
02/03/20 Loveland Fishing Area	461	1
02/10/20 Loveland Fishing Area	228	1
02/17/20 Loveland Fishing Area	112	1
02/24/20 Loveland Fishing Area	75	1
03/02/20 Loveland Fishing Area	84	1
03/09/20 Loveland Fishing Area	2419.6	1
03/16/20 Loveland Fishing Area	272	8
03/23/20 Loveland Fishing Area	2419.6	1
03/30/20 Loveland Fishing Area	345	1
04/06/20 Loveland Fishing Area	308	1
04/13/20 Loveland Fishing Area	727	5
04/20/20 Loveland Fishing Area	687	1
04/28/20 Loveland Fishing Area	214	1
05/04/20 Loveland Fishing Area	345	1
05/11/20 Loveland Fishing Area	2420	1
05/18/20 Loveland Fishing Area	548	1
05/26/20 Loveland Fishing Area	147	1
06/01/20 Loveland Fishing Area	1553	1
06/08/20 Loveland Fishing Area	517	1
06/15/20 Loveland Fishing Area	548	1
06/22/20 Loveland Fishing Area	866	1
06/29/20 Loveland Fishing Area	579	1
07/06/20 Loveland Fishing Area	365	1
07/13/20 Loveland Fishing Area	345	1
07/20/20 Loveland Fishing Area	579	1
07/27/20 Loveland Fishing Area	548	1
08/03/20 Loveland Fishing Area	687	1
08/10/20 Loveland Fishing Area	435	1
08/17/20 Loveland Fishing Area	1300	1
08/25/20 Loveland Fishing Area	687	1
08/31/20 Loveland Fishing Area	687	1
09/08/20 Loveland Fishing Area	1300	1
09/14/20 Loveland Fishing Area	1203	1
09/21/20 Loveland Fishing Area	866	1
09/28/20 Loveland Fishing Area	2419.6	3
10/05/20 Loveland Fishing Area	1120	1

10/12/20 Loveland Fishing Area	727	1							
10/19/20 Loveland Fishing Area	488	1							
10/26/20 Loveland Fishing Area	517	1							
11/02/20 Loveland Fishing Area	2419.6	1							
11/09/20 Loveland Fishing Area	2419.6	1							
11/16/20 Loveland Fishing Area	1414	3							
11/23/20 Loveland Fishing Area	2420	1							
11/30/20 Loveland Fishing Area	2419.6	2							
12/08/20 Loveland Fishing Area	2419.6	2							
12/14/20 Loveland Fishing Area	2420	1							
12/21/20 Loveland Fishing Area	2419.6	1							
12/28/20 Loveland Fishing Area	2419.6	1							
01/04/21 Loveland Fishing Area	2419.6	1							
01/11/21 Loveland Fishing Area	261	1							
01/18/21 Loveland Fishing Area	326	1							
01/25/21 Loveland Fishing Area	261	2							
02/01/21 Loveland Fishing Area	613	3							
02/08/21 Loveland Fishing Area	2419.6	1							
02/22/21 Loveland Fishing Area	201	1							
03/01/21 Loveland Fishing Area	914	1							
03/08/21 Loveland Fishing Area	1733	2							
03/15/21 Loveland Fishing Area	1414	105							
03/22/21 Loveland Fishing Area	2419.6	1							
03/29/21 Loveland Fishing Area	313	3							
04/12/21 Loveland Fishing Area	122	3							
04/19/21 Loveland Fishing Area	184	1							
04/26/21 Loveland Fishing Area	387	1							
05/03/21 Loveland Fishing Area	40	1							
05/10/21 Loveland Fishing Area	162	3							
05/16/21 Loveland Fishing Area	548	1							
05/23/21 Loveland Fishing Area	172	1							
06/01/21 Loveland Fishing Area	236	1							
06/07/21 Loveland Fishing Area	411	2							
06/21/21 Loveland Fishing Area	261	1							
06/28/21 Loveland Fishing Area	140	1							
07/06/21 Loveland Fishing Area	365	1							
07/12/21 Loveland Fishing Area	980	1							
07/19/21 Loveland Fishing Area	411	1							
07/26/21 Loveland Fishing Area	1986	1							
08/02/21 Loveland Fishing Area	1733	1							
08/09/21 Loveland Fishing Area	2420	1							
08/16/21 Loveland Fishing Area	2420	1							
08/23/21 Loveland Fishing Area	2420	1							
08/30/21 Loveland Fishing Area	1986	1							
09/07/21 Loveland Fishing Area	548	1							
09/13/21 Loveland Fishing Area	1203	1							
09/20/21 Loveland Fishing Area	1120	1							
09/27/21 Loveland Fishing Area	2419.6	1							
10/04/21 Loveland Fishing Area	980	1							
10/11/21 Loveland Fishing Area	105	1							
10/18/21 Loveland Fishing Area	91	1							
10/25/21 Loveland Fishing Area	866	1							
11/08/21 Loveland Fishing Area	770	1							
11/15/21 Loveland Fishing Area	387	1							
11/22/21 Loveland Fishing Area	2420	1							
11/29/21 Loveland Fishing Area	816	1							
12/06/21 Loveland Fishing Area	1300	1							
12/13/21 Loveland Fishing Area	1414	1							
12/20/21 Loveland Fishing Area	1414	10							
12/28/21 Loveland Fishing Area	2419.6	43							
11/26/22 Loveland Fishing Area	2419.6	1							
12/17/22 Loveland Fishing Area	116								
01/23/17 Peterson Creek	2419.6	980		2419.6	2419.6	2419.6	13	2420	81
01/30/17 Peterson Creek	2419.6	81							
02/06/17 Peterson Creek	2419.6	33							
02/13/17 Peterson Creek	2419.6	20							
02/20/17 Peterson Creek	2419.6	2419.6							
02/27/17 Peterson Creek	2419.6	82							
03/06/17 Peterson Creek	2419.6	145							
03/13/17 Peterson Creek	2419.6	50							
03/21/17 Peterson Creek	2419.6	41							
03/27/17 Peterson Creek	2419.6	44							
04/03/17 Peterson Creek	2419.6	40							

04/10/17 Peterson Creek	2419.6	112							
04/17/17 Peterson Creek	2419.6	16							
04/24/17 Peterson Creek	2419.6	155							
05/01/17 Peterson Creek	2419.6	299							
05/08/17 Peterson Creek	2419.6	1733							
05/15/17 Peterson Creek	2419.6	54							
05/22/17 Peterson Creek	2419.6	13							
05/30/17 Peterson Creek	2420	31							
06/06/17 Peterson Creek	2419.6	2419.6							
06/12/17 Peterson Creek	2419.6	594							
03/04/19 Peterson Creek	2419.6	210	119.9	2419.6	2419.6	1.0	344.8	37.9	
03/11/19 Peterson Creek	1986	147							
03/27/19 Peterson Creek	1414	16							
04/15/19 Peterson Creek	2419.6	326							
04/22/19 Peterson Creek	2419.6	172							
05/06/19 Peterson Creek	2419.6	25							
05/20/19 Peterson Creek	2419.6	172							
06/03/19 Peterson Creek	2419.6	153							
06/10/19 Peterson Creek	2419.6	326							
06/24/19 Peterson Creek	2419.6	42							
01/06/20 Peterson Creek	1046	4							
01/13/20 Peterson Creek	921	3							
01/20/20 Peterson Creek	770	34							
01/27/20 Peterson Creek	687	1							
02/03/20 Peterson Creek	770	68							
02/10/20 Peterson Creek	411	7							
02/17/20 Peterson Creek	120	3							
02/24/20 Peterson Creek	1203	196							
03/02/20 Peterson Creek	649	7							
03/09/20 Peterson Creek	461	6							
03/16/20 Peterson Creek	2419.6	102							
03/23/20 Peterson Creek	1414	48							
03/30/20 Peterson Creek	2419.6	86							
04/06/20 Peterson Creek	2419.6	133							
04/13/20 Peterson Creek	2419.6	345							
04/20/20 Peterson Creek	2419.6	48							
04/28/20 Peterson Creek	2420	43							
05/04/20 Peterson Creek	2419.6	138							
05/11/20 Peterson Creek	2419.6	57							
05/18/20 Peterson Creek	2419.6	38							
05/26/20 Peterson Creek	2419.6	44							
06/01/20 Peterson Creek	2419.6	26							
06/08/20 Peterson Creek	2419.6	46							
06/15/20 Peterson Creek	2419.6	33							
06/22/20 Peterson Creek	691	5							
06/29/20 Peterson Creek	2419.6	42							
07/06/20 Peterson Creek	2419.6	8							
07/13/20 Peterson Creek	2419.6	14							
07/20/20 Peterson Creek	2419.6	5							
07/27/20 Peterson Creek	2420	17							
11/16/20 Peterson Creek	1553	23							
11/23/20 Peterson Creek	1553	4							
11/30/20 Peterson Creek	411	3							
12/21/20 Peterson Creek	365	1							
12/28/20 Peterson Creek	365	1							
02/25/19 Peterson Creek	2420	57							
03/18/19 Peterson Creek	1414	29							
04/01/19 Peterson Creek	1986	59							
04/08/19 Peterson Creek	1414	36							
04/30/19 Peterson Creek	2419.6	91							
05/14/19 Peterson Creek	2419.6	23							
05/28/19 Peterson Creek	2419.6	73							
06/17/19 Peterson Creek	2419.6	35							
02/18/19 Peterson Creek	2419.6	613	2419.6	2419.6	2419.6	613	613	613	
01/03/17 Sweetwater River Bridge	2419.6	93	172.2	2419.6	1986.3	1.0	1732.9	6.3	
01/09/17 Sweetwater River Bridge	488	3							
01/16/17 Sweetwater River Bridge	2419.6	102							
01/23/17 Sweetwater River Bridge	2419.6	921							
01/30/17 Sweetwater River Bridge	2419.6	26							
02/06/17 Sweetwater River Bridge	1553	4							
02/13/17 Sweetwater River Bridge	1733	20							
02/20/17 Sweetwater River Bridge	2419.6	145							
02/27/17 Sweetwater River Bridge	816	2							

03/06/17 Sweetwater River Bridge	2419.6	53
03/13/17 Sweetwater River Bridge	1553	9
03/21/17 Sweetwater River Bridge	2419.6	2
03/27/17 Sweetwater River Bridge	2419.6	3
04/03/17 Sweetwater River Bridge	2420	8
04/10/17 Sweetwater River Bridge	1986	17
04/17/17 Sweetwater River Bridge	2419.6	22
04/24/17 Sweetwater River Bridge	2419.6	2
05/01/17 Sweetwater River Bridge	1986	7
05/08/17 Sweetwater River Bridge	2419.6	649
05/15/17 Sweetwater River Bridge	2419.6	5
05/22/17 Sweetwater River Bridge	641	9
05/30/17 Sweetwater River Bridge	1553	4
06/06/17 Sweetwater River Bridge	2419.6	14
06/12/17 Sweetwater River Bridge	2419.6	2
06/19/17 Sweetwater River Bridge	2419.6	26
06/26/17 Sweetwater River Bridge	2419.6	11
07/03/17 Sweetwater River Bridge	2419.6	4
08/07/17 Sweetwater River Bridge	2420	57
11/06/17 Sweetwater River Bridge	1986	36
11/13/17 Sweetwater River Bridge	1553	22
11/20/17 Sweetwater River Bridge	980	15
12/11/17 Sweetwater River Bridge	1046	6
01/15/18 Sweetwater River Bridge	1553	40
01/22/18 Sweetwater River Bridge	579	30
01/29/18 Sweetwater River Bridge	1986	11
02/05/18 Sweetwater River Bridge	291	2
02/12/18 Sweetwater River Bridge	613	6
02/19/18 Sweetwater River Bridge	276	2
02/26/18 Sweetwater River Bridge	1300	4
03/05/18 Sweetwater River Bridge	921	15
03/12/18 Sweetwater River Bridge	2419.6	76
03/19/18 Sweetwater River Bridge	1046	20
03/27/18 Sweetwater River Bridge	1120	1
04/02/18 Sweetwater River Bridge	866	6
04/09/18 Sweetwater River Bridge	1733	4
04/16/18 Sweetwater River Bridge	517	1
04/23/18 Sweetwater River Bridge	649	18
04/30/18 Sweetwater River Bridge	1414	5
05/07/18 Sweetwater River Bridge	1120	4
05/14/18 Sweetwater River Bridge	2419.6	272
05/21/18 Sweetwater River Bridge	2419.6	111
05/29/18 Sweetwater River Bridge	2419.6	1
12/26/18 Sweetwater River Bridge	921	11
12/31/18 Sweetwater River Bridge	248	6
01/07/19 Sweetwater River Bridge	2419.6	64
01/14/19 Sweetwater River Bridge	488	3
01/21/19 Sweetwater River Bridge	214	1
01/28/19 Sweetwater River Bridge	172	6
02/04/19 Sweetwater River Bridge	2419.6	1046
02/11/19 Sweetwater River Bridge	649	6
03/04/19 Sweetwater River Bridge	2419.6	147
03/11/19 Sweetwater River Bridge	548	8
03/18/19 Sweetwater River Bridge	411	3
03/27/19 Sweetwater River Bridge	1986	2
04/01/19 Sweetwater River Bridge	1986	4
04/08/19 Sweetwater River Bridge	2420	17
04/15/19 Sweetwater River Bridge	2419.6	6
04/22/19 Sweetwater River Bridge	2419.6	4
05/14/19 Sweetwater River Bridge	2419.6	305
05/20/19 Sweetwater River Bridge	2420	81
05/28/19 Sweetwater River Bridge	1733	9
06/03/19 Sweetwater River Bridge	2419.6	4
06/10/19 Sweetwater River Bridge	2419.6	4
06/17/19 Sweetwater River Bridge	2419.6	11
06/24/19 Sweetwater River Bridge	2419.6	1
07/01/19 Sweetwater River Bridge	2419.6	1
07/08/19 Sweetwater River Bridge	2419.6	1
11/04/19 Sweetwater River Bridge	2420	31
02/25/19 Sweetwater River Bridge	1733	6
04/30/19 Sweetwater River Bridge	2419.6	5
05/06/19 Sweetwater River Bridge	2420	2
07/15/19 Sweetwater River Bridge	2419.6	1

07/22/19 Sweetwater River Bridge	2419.6	6							
11/25/19 Sweetwater River Bridge	2419.6	52							
12/02/19 Sweetwater River Bridge	2419.6	125							
12/16/19 Sweetwater River Bridge	1203	7							
01/06/20 Sweetwater River Bridge	488	5							
01/13/20 Sweetwater River Bridge	488	11							
01/20/20 Sweetwater River Bridge	2420	4							
01/27/20 Sweetwater River Bridge	2420	5							
02/03/20 Sweetwater River Bridge	2419.6	1							
02/10/20 Sweetwater River Bridge	613	4							
02/17/20 Sweetwater River Bridge	579	2							
02/24/20 Sweetwater River Bridge	1986	108							
03/02/20 Sweetwater River Bridge	1414	4							
03/09/20 Sweetwater River Bridge	866	3							
03/16/20 Sweetwater River Bridge	1733	8							
03/23/20 Sweetwater River Bridge	1203	11							
03/30/20 Sweetwater River Bridge	816	9							
04/06/20 Sweetwater River Bridge	866	19							
04/13/20 Sweetwater River Bridge	2419.6	308							
04/20/20 Sweetwater River Bridge	2420	13							
04/28/20 Sweetwater River Bridge	2420	8							
05/04/20 Sweetwater River Bridge	1553	6							
05/11/20 Sweetwater River Bridge	1986	9							
05/18/20 Sweetwater River Bridge	2419.6	40							
05/26/20 Sweetwater River Bridge	2419.6	1							
06/01/20 Sweetwater River Bridge	2419.6	6							
06/08/20 Sweetwater River Bridge	2419.6	6							
06/15/20 Sweetwater River Bridge	2419.6	1							
06/22/20 Sweetwater River Bridge	2419.6	3							
06/29/20 Sweetwater River Bridge	2419.6	3							
07/06/20 Sweetwater River Bridge	2419.6	25							
07/13/20 Sweetwater River Bridge	2419.6	140							
07/20/20 Sweetwater River Bridge	2419.6	18							
07/27/20 Sweetwater River Bridge	2419.6	36							
10/26/20 Sweetwater River Bridge	2419.6	43							
11/02/20 Sweetwater River Bridge	2419.6	12							
11/09/20 Sweetwater River Bridge	2419.6	1733							
12/08/20 Sweetwater River Bridge	649	17							
01/04/21 Sweetwater River Bridge	326	2							
01/11/21 Sweetwater River Bridge	261	1							
01/18/21 Sweetwater River Bridge	172	2							
01/25/21 Sweetwater River Bridge	2419.6	61							
02/01/21 Sweetwater River Bridge	1733	10							
02/08/21 Sweetwater River Bridge	921	5							
02/15/21 Sweetwater River Bridge	285	1							
02/22/21 Sweetwater River Bridge	770	1							
03/01/21 Sweetwater River Bridge	579	1							
03/08/21 Sweetwater River Bridge	361	19							
03/15/21 Sweetwater River Bridge	1733	4							
03/22/21 Sweetwater River Bridge	1553	23							
03/29/21 Sweetwater River Bridge	816	3							
04/06/21 Sweetwater River Bridge	613	1							
04/12/21 Sweetwater River Bridge	1733	1							
04/19/21 Sweetwater River Bridge	1203	1							
04/26/21 Sweetwater River Bridge	1300	1							
05/03/21 Sweetwater River Bridge	1120	1							
05/10/21 Sweetwater River Bridge	2419.6	1							
05/16/21 Sweetwater River Bridge	2419.6	1							
05/23/21 Sweetwater River Bridge	2419.6	1							
06/01/21 Sweetwater River Bridge	2419.6	12							
02/18/19 Sweetwater River Bridge	2419.6	201		2419.6	2419.6	2419.6	201	201	201

Sweetwater Authority
SWRCB-DDW LT2 Second Round
Monitoring Summary

PWS ID: CA3710025
Facility ID: 3710025-021 (Robert A.Perdue WTP)
Source Type: Lake/Reservoir

LT2 Monitoring Dates

[1]Parameter	4/13/15	4/27/15	4/27/15	5/11/15	5/26/15	6/8/15	6/22/15	7/14/15	7/27/15	8/10/15	8/24/15	9/8/15
Source Water Sample Location	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU
Source Water PS Code	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039
Crypto Method Number	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623
Crypto Sample Type (Field or Matrix Spike)	Field	Field	Matrix Spike	Field	Field	Field	Field	Field	Field	Field	Field	Field
Crypto Sample Volume Filtered (L)	10.0	10.0	10.0	10.0	10.0	10.0	10.3	10.0	10.0	10.0	10.0	10.0
Was 100% of Filtered Volume Examined?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number of Oocysts Counted	0	0	0	0	1	0	0	0	0	0	0	0
Oocysts per Liter	0	0	0	0	0.1	0	0	0	0	0	0	0
Number of Filters	1	1	1	1	1	1	1	1	1	1	1	1
Number of Slides	1	1	1	1	1	1	1	1	1	1	1	1
Packed Pellet Volume (ml)	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Re-suspended Concentrate (ml)	5	5	5	5	5	5	5	5	5	5	5	5
Volume passed through Immunomagnetic Separation (ml)	5	5	5	5	5	5	5	5	5	5	5	5
Matrix Spiked Volume (L)	NA	NA	10	NA	NA	NA	NA	NA	NA	NA	NA	NA
Estimated Number of Crypto Oocysts Spiked	NA	NA	150	NA	NA	NA	NA	NA	NA	NA	NA	NA
Crypto Oocysts Recovered	NA	NA	121	NA	NA	NA	NA	NA	NA	NA	NA	NA
E.coli Method Method Number	SM9223	SM9223	NA	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223
Method Type (Colilert Quanti-Tray enumeration)	97-well	97-well	NA	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well
E.coli per 100 ml	<1	<1	NA	<1	<1	<1	<1	<1	<1	<1	<1	<1
Turbidity (NTU)	0.55	0.53	NA	0.60	1.58	0.40	0.32	0.48	0.53	0.46	0.42	0.46

[1]Crypto samples analyzed at Eurofins; *E.coli*/Turbidity samples analyzed at the Sweetwater Authority.

9/21/15	10/13/15	10/26/15	11/11/15	11/23/15	12/7/15	12/21/15	1/11/16	2/8/16	2/8/16	2/15/16	2/22/16	3/7/16	3/21/16	4/11/16	4/25/16
AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU
3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-03	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039
1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623
Field	Field	Field	Field	Field	Field	Field	Field	Field	Matrix Spike	Field	Field	Field	Field	Field	Field
10.0	11.0	11.3	11.0	11.0	11.0	11.0	11.0	11.5	11.3	11.3	11.5	11.5	11.3	11.0	11.5
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.05	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.1	0.3	0.1	0.1
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NA	NA	NA	NA	NA	NA	NA	NA	NA	11.3	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	98	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	87	NA	NA	NA	NA	NA	NA
SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	NA	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223
97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	NA	97-well	97-well	97-well	97-well	97-well	97-well
<1	<1	<1	<1	<1	<1	<1	<1	<1	NA	<1	<1	<1	<1	<1	<1
0.38	0.35	0.46	0.23	0.32	0.28	0.33	0.27	0.44	NA	0.46	0.50	0.35	0.40	0.43	0.30

5/12/16	5/23/16	6/13/16	6/27/16	7/11/16	7/25/16	8/8/16	8/22/16	9/12/16	9/26/16	10/10/16	10/24/16	11/7/16	11/21/16	11/21/16	12/12/16
AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU	AQU
3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039
1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623	1623
Field	Field	Field	Field	Field	Field	Field	Field	Field	Field	Field	Field	Field	Field	Matrix Spike	Field
11.5	11.0	11.3	11.5	11.5	10.8	11.5	11.3	11.3	11.3	11.0	11.3	11.3	11.3	11.3	11.3
Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
0.1	0.1	0.1	0.3	0.1	0.4	0.4	0.3	0.2	0.3	0.2	0.3	0.1	0.3	0.3	0.4
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.3	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	99	NA
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	59	NA
SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	NA	SM9223
97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	97-well	NA	97-well
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.0	<1	<1	NA	<1
0.34	0.34	0.26	0.32	0.28	0.49	0.42	0.44	0.32	0.42	0.74	0.49	0.42	0.76	NA	0.71

12/27/16	1/18/17	1/23/17	2/13/17	2/27/17	3/13/17	3/25/17
AQU	AQU	AQU	AQU	AQU	AQU	AQU
3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039	3710025-039
1623	1623	1623	1623	1623	1623	1623
Field	Field	Field	Field	Field	Field	Field
11.3	11.3	11.0	11.0	11.3	11.3	10.8
Yes	Yes	Yes	Yes	Yes	Yes	Yes
0	0	0	0	0	0	0
0	0	0	0	0	0	0
1	1	1	1	1	1	1
1	1	1	1	1	1	1
0.2	0.3	0.2	0.2	0.2	0.2	0.2
5	5	5	5	5	5	5
5	5	5	5	5	5	5
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA	NA	NA
SM9223	SM9223	SM9223	SM9223	SM9223	SM9223	SM9223
97-well	97-well	97-well	97-well	97-well	97-well	97-well
<1	<1	<1	<1	<1	1.0	<1
0.53	2.43	0.79	0.94	1.04	2.61	0.94

Sample Date	Sample Location	Buoy #	Sample Volume (Liters)	Giardia	Giardia/liter	Crypto	Crypto/liter	Total Coliform (Quanti-tray MPN)	E. coli (quanti-tray MPN)	Turbdity (NTU)	
11/05/18	Sweetwater Reservoir	OpLab	11.0	0.0	0.0	0.0	0.0	187.2	3.1	8.55	Quarterly Monitoring
03/11/19	Sweetwater Reservoir	OpLab	11.0	0.0	0.0	0.0	0.0	980.4	26.6	2.20	
06/10/19	Sweetwater Reservoir	OpLab	10.75	0.0	0.0	0.0	0.0	21.8	7.5	2.49	
08/19/19	Sweetwater Reservoir	OpLab	9.8	0.0	0.0	0.0	0.0	48.0	5.2	2.00	
11/20/19	Sweetwater Reservoir	OpLab	10.4	0.0	0.0	0.0	0.0	>2419.6	17.1	4.25	
02/17/20	Sweetwater Reservoir	OpLab	10.25	0.0	0.0	0.0	0.0	>2419.6	69.7	8.94	
06/29/20	Sweetwater Reservoir	OpLab	10.43	0.0	0.0	0.0	0.0				
08/17/20	Sweetwater Reservoir	OpLab	11.11	0.0	0.0	0.0	0.0				
11/17/20	Sweetwater Reservoir	OpLab	10.91	0.0	0.0	0.0	0.0				
02/22/21	Sweetwater Reservoir	OpLab	10.95	0.0	0.0	0.0	0.0				
05/25/21	Sweetwater Reservoir	OpLab	11.18	0.0	0.0	0.0	0.0				
08/09/21	Sweetwater Reservoir	OpLab	11.21	0.0	0.0	0.0	0.0				
11/08/21	Sweetwater Reservoir	OpLab	10.71	0.0	0.0	0.0	0.0				

Sample Location	Date Sampled	mg/l Al	D.L.	mg/l Fe	D.L.	mg/l Mn	D.L.
Aqueduct Raw	01/31/17	**0.028**	0.005	**0.028**	0.010	**0.0034**	0.0002
Aqueduct Raw	Offline		0.005		0.010		0.0002
Aqueduct Raw	01/30/18						
Aqueduct Raw	11/28/18	**0.020**	0.005	**0.021**	0.010	**0.0037**	0.0002
Aqueduct Raw	02/28/19	**0.038**	0.005	**0.032**	0.010	**0.0034**	0.0002
Aqueduct Raw	08/28/19	**0.009**	0.005	**ND**	0.010	**0.0046**	0.0002
Aqueduct Raw	05/06/20	**0.026**	0.005	**0.017**	0.010	**0.0075**	0.0002
Aqueduct Raw	08/26/20	**0.006**	0.005	**ND**	0.010	**0.0056**	0.0002
Aqueduct Raw	01/27/21	**ND**	0.020	**ND**	0.010	**0.0013**	0.001
Aqueduct Raw	09/01/21	**ND**	0.020	**0.040**	0.03	**0.0018**	.001
Clearwell Effluent	01/31/17	**ND**	0.005	**ND**	0.010	**ND**	0.0002
Clearwell Effluent	10/03/17	**ND**	0.005	**ND**	0.010	**0.0430**	0.0002
Clearwell Effluent	01/30/18	**ND**	0.005	**ND**	0.010	**0.0200**	0.0002
Clearwell Effluent	11/28/18	**ND**	0.005	**ND**	0.010	**ND**	0.0002
Clearwell Effluent	02/28/19	**ND**	0.005	**ND**	0.010	**0.0210**	0.0002
Clearwell Effluent	08/28/19	**ND**	0.005	**ND**	0.010	**0.0016**	0.0002
Clearwell Effluent	01/29/20	**ND**	0.005	**ND**	0.010	**0.0006**	0.0002
Clearwell Effluent	08/26/20	**ND**	0.005	**ND**	0.010	**0.0170**	0.0002
Clearwell Effluent	01/27/21	**ND**	0.020	**ND**	0.010	**0.0330**	0.001
Clearwell Effluent	09/01/21	**ND**	0.020	**ND**	0.03	**0.0084**	.001
Hansen's Pond	01/31/17	**0.150**	0.005	**0.130**	0.010	**0.0490**	0.0002
Hansen's Pond	10/04/17	**0.450**	0.005	**0.430**	0.010	**0.0560**	0.0002
Hansen's Pond	01/31/18	**0.041**	0.005	**0.056**	0.010	**0.0600**	0.0002
Hansen's Pond	11/28/18	**0.055**	0.005	**0.083**	0.010	**0.0400**	0.0002
Hansen's Pond	02/28/19	**0.100**	0.005	**0.120**	0.010	**0.0480**	0.0002
Hansen's Pond	08/28/19	**0.120**	0.005	**0.150**	0.010	**0.0540**	0.0002
Hansen's Pond	01/29/20	**0.150**	0.005	**0.180**	0.010	**0.0910**	0.0002
Hansen's Pond	08/26/20	**0.710**	0.005	**0.580**	0.010	**0.0920**	0.0002
Hansen's Pond	01/27/21	**0.0250**	0.020	**0.041**	0.010	**0.0600**	0.001
Hansen's Pond	09/01/21	**0.670**	0.020	**0.640**	0.03	**0.0730**	.001
Lake Loveland	01/31/17	**1.100**	0.005	**1.200**	0.010	**0.0310**	0.0002
Lake Loveland	10/03/17	**0.013**	0.005	**0.015**	0.010	**0.0180**	0.0002
Lake Loveland	01/30/18	**0.050**	0.005	**0.064**	0.010	**0.0360**	0.0002
Lake Loveland	11/27/18	**0.021**	0.005	**0.034**	0.010	**0.0260**	0.0002
Lake Loveland	02/27/19	**0.760**	0.005	**0.820**	0.010	**0.0420**	0.0002
Lake Loveland	08/27/19	**0.027**	0.005	**0.019**	0.010	**0.0059**	0.0002
Lake Loveland	01/28/20	**0.034**	0.005	**0.048**	0.010	**0.0290**	0.0002
Lake Loveland	08/25/20	**0.016**	0.005	**0.013**	0.010	**0.0045**	0.0002
Lake Loveland	01/27/21	**0.034**	0.020	**0.062**	0.010	**0.0830**	0.001
Lake Loveland	08/31/21	**0.022**	0.020	**ND**	0.03	**0.0061**	.001
Low Flow Barrier	01/31/17	**0.040**	0.005	**0.180**	0.010	**0.1900**	0.0002
Low Flow Barrier	10/04/17	**0.540**	0.005	**1.300**	0.010	**1.3000**	0.0002
Low Flow Barrier	01/31/18	**0.022**	0.005	**0.120**	0.010	**0.2300**	0.0002
Low Flow Barrier	11/28/18	**0.075**	0.005	**0.210**	0.010	**0.3100**	0.0002
Low Flow Barrier	02/28/19	**0.910**	0.005	**1.100**	0.010	**0.0370**	0.0002
Low Flow Barrier	08/28/19	**0.015**	0.005	**0.076**	0.010	**0.3500**	0.0002
Low Flow Barrier	01/29/20	**0.026**	0.005	**0.150**	0.010	**0.1600**	0.0002
Low Flow Barrier	08/26/20	**0.270**	0.005	**0.540**	0.010	**0.8300**	0.0002
Low Flow Barrier	01/27/21	**0.130**	0.020	**0.160**	0.010	**0.0160**	0.001
Low Flow Barrier	09/01/21	**0.340**	0.020	**0.630**	0.03	**0.7600**	.001
Sweetwater Lake Surface	01/31/17	**0.200**	0.005	**0.280**	0.010	**0.3700**	0.0002
Sweetwater Lake Surface	10/03/17	**0.021**	0.005	**0.024**	0.010	**0.0360**	0.0002
Sweetwater Lake Surface	01/30/18	**0.160**	0.005	**0.310**	0.010	**0.2100**	0.0002
Sweetwater Lake Surface	11/28/18	**0.390**	0.005	**0.760**	0.010	**0.3100**	0.0002
Sweetwater Lake Surface	02/28/19	**0.420**	0.005	**0.440**	0.010	**0.0690**	0.0002
Sweetwater Lake Surface	08/27/19	**0.014**	0.005	**0.029**	0.010	**0.0350**	0.0002
Sweetwater Lake Surface	01/28/20	**0.087**	0.005	**0.180**	0.010	**0.2200**	0.0002
Sweetwater Lake Surface	08/25/20	**0.071**	0.005	**0.080**	0.010	**0.1000**	0.0002
Sweetwater Lake Surface	01/27/21	**0.410**	0.020	**0.650**	0.010	**0.1800**	0.001
Sweetwater Lake Surface	09/01/21	**0.027**	0.020	**0.054**	0.03	**0.1200**	.001
Sweetwater River Influent	01/31/17	**2.700**	0.005	**3.300**	0.010	**0.1400**	0.0002
Sweetwater River Influent	10/04/17	**1.200**	0.005	**1.800**	0.010	**0.4400**	0.0002
Sweetwater River Influent	01/31/18	**0.050**	0.005	**0.380**	0.010	**0.8000**	0.0002
Sweetwater River Influent	Dry						
Sweetwater River Influent	02/28/19	**0.860**	0.005	**1.100**	0.010	**0.0330**	0.0002
Sweetwater River Influent	Dry						
Sweetwater River Influent	01/29/20	**0.050**	0.005	**0.110**	0.010	**0.0880**	0.0002
Sweetwater River Influent	01/27/21	**0.088**	0.020	**0.099**	0.010	**0.0160**	0.001

Al			Fe			Mn			
ND	ND	ND	ND	ND	ND	ND	0.0430	0.0127	
0.025	0.710	0.135	0.041	0.640	0.140	0.0400	0.0920	0.0580	
0.013	1.100	0.031	ND	1.200	0.041	0.0045	0.0830	0.0275	
0.015	0.910	0.103	0.076	1.300	0.195	0.0160	1.3000	0.2700	
0.014	0.420	0.124	0.024	0.760	0.230	0.0350	0.3700	0.1500	
0.050	2.700	0.474	0.099	3.300	0.740	0.0160	0.8000	0.1140	

DATE SAMPLED	Lake Loveland	Sweetwater Lake Surface
1/3/2017	0.08	
2/6/2017	0.65	
3/6/2017	0.42	0.48
4/3/2017	0.17	0.06
5/1/2017	0.06	0.09
6/5/2017	ND	0.07
7/5/2017	ND	0.07
8/7/2017	ND	ND
9/5/2017	ND	0.11
10/2/2017	ND	ND
11/6/2017	ND	0.05
12/4/2017	0.07	0.13
1/3/2018	0.05	0.24
2/5/2018	ND	0.17
3/5/2018	0.08	0.26
4/2/2018	0.09	0.18
5/7/2018	ND	0.15
6/4/2018	ND	0.15
7/2/2018	0.04	ND
8/6/2018	ND	0.10
9/4/2018	ND	0.13
10/1/2018	ND	0.17
11/5/2018	0.05	0.47
12/3/2018	0.05	0.74
1/2/2019	0.08	0.78
2/4/2019	0.08	0.27
3/4/2019	0.57	0.11
4/1/2019	0.25	0.04
5/6/2019	0.08	0.11
6/3/2019	0.04	0.08
7/1/2019	ND	0.06
8/5/2019	0.06	0.04
9/3/2019	ND	0.05
10/8/2019	ND	0.09
11/4/2019	ND	0.15
12/2/2019	0.09	0.34
1/6/2020	0.08	0.23
2/3/2020	ND	0.64
3/2/2020	0.04	0.26
4/6/2020	ND	0.25
5/4/2020	0.14	0.23
6/1/2020	0.04	0.12
7/6/2020	0.05	ND
8/3/2020	ND	0.08

9/8/2020	ND	0.12
10/5/2020	ND	0.07
11/2/2020	ND	0.15
12/7/2020	0.05	0.36
1/4/2021	0.12	0.40
2/2/2021	0.11	0.18
3/1/2021	ND	0.09
4/5/2021	ND	0.04
5/3/2021	ND	0.12
6/7/2021	0.04	0.06
7/6/2021	ND	0.15
8/2/2021	ND	ND
9/7/2021	ND	ND
10/4/2021	ND	0.05
11/1/2021	ND	0.06
12/6/2021	ND	0.07
min	ND	ND
max	0.65	0.78
median	ND	0.12
IRON		

DATE SAMPLED	Lake Loveland	Sweetwater Lake Surface
1/3/2017	0.09	
2/6/2017	0.03	
3/6/2017	0.03	0.13
4/3/2017	0.02	0.04
5/1/2017	0.02	0.07
6/5/2017	0.01	0.03
7/5/2017	0.01	0.03
8/7/2017	0.01	0.02
9/5/2017	0.01	0.06
10/2/2017	0.02	0.04
11/6/2017	0.01	0.08
12/4/2017	0.05	0.13
1/3/2018	0.05	0.22
2/5/2018	0.02	0.13
3/5/2018	0.03	0.17
4/2/2018	0.02	0.13
5/7/2018	0.02	0.13
6/4/2018	0.02	0.12
7/2/2018	0.02	0.17
8/6/2018	0.01	0.13
9/4/2018	0.02	0.13
10/1/2018	0.01	0.10
11/5/2018	0.05	0.26
12/3/2018	0.08	0.37
1/2/2019	0.06	0.30
2/4/2019	0.05	0.23
3/4/2019	0.09	0.05
4/1/2019	0.03	0.02
5/6/2019	0.01	0.06
6/3/2019	0.01	0.02
7/1/2019	0.01	0.06
8/5/2019	0.01	0.02
9/3/2019	0.01	0.04
10/8/2019	ND	0.14
11/4/2019	0.01	0.15
12/2/2019	0.17	0.24
1/6/2020	0.14	0.14
2/3/2020	0.01	0.39
3/2/2020	0.01	0.19
4/6/2020	0.01	0.12
5/4/2020	0.01	0.31
6/1/2020	0.01	0.08
7/6/2020	0.01	ND
8/3/2020	0.01	0.10

9/8/2020	ND	0.17
10/5/2020	ND	0.20
11/2/2020	0.01	0.12
12/7/2020	0.08	0.24
1/4/2021	0.01	0.24
2/2/2021	0.08	0.18
3/1/2021	0.14	0.14
4/5/2021	0.25	0.05
5/3/2021	0.11	0.05
6/7/2021	0.01	0.07
7/6/2021	0.01	0.08
8/2/2021	0.01	0.06
9/7/2021	0.01	0.08
10/4/2021	0.01	0.23
11/1/2021	0.01	0.08
12/6/2021	0.11	0.09
min	ND	ND
max	0.25	0.39
median	ND	0.12
MANGANESE		

Date Sampled	Sample Point	Compound	Mtd	ppb	Det. Limit	Units
04/18/18	Sweetwater Lake	2,3,7,8-TCDD (Dioxin)	1613	ND	5.00	µg/l
09/06/18	Sweetwater Lake	2,3,7,8-TCDD (Dioxin)	1613	ND	5.00	µg/l
03/23/21	Sweetwater Lake	2,3,7,8-TCDD (Dioxin)	1613B	ND	5.10	µg/l
06/22/21	Sweetwater Lake	2,3,7,8-TCDD (Dioxin)	1613B	ND	3.90	µg/l
04/18/18	Sweetwater Lake	2,4,5-TP (Silvex)	515.3	ND	1.00	µg/l
08/29/18	Sweetwater Lake	2,4,5-TP (Silvex)	515.3	ND	1.00	µg/l
03/23/21	Sweetwater Lake	2,4,5-TP (Silvex)	515.4	ND	0.18	µg/l
06/22/21	Sweetwater Lake	2,4,5-TP (Silvex)	515.4	ND	0.18	µg/l
04/18/18	Sweetwater Lake	2,4-D	515.3	ND	10.00	µg/l
08/29/18	Sweetwater Lake	2,4-D	515.3	ND	10.00	µg/l
03/23/21	Sweetwater Lake	2,4-D	515.4	ND	1.30	µg/l
06/22/21	Sweetwater Lake	2,4-D	515.4	ND	1.30	µg/l
04/18/18	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	1.00	µg/l
08/29/18	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	1.00	µg/l
10/21/20	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
02/24/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
03/23/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
05/26/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
06/22/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
09/29/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
12/22/21	Sweetwater Lake	Alachlor (Alanex)	525.2	ND	0.44	µg/l
04/18/18	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.50	µg/l
08/29/18	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.50	µg/l
10/21/20	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
02/24/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
03/23/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
05/26/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
06/22/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
09/29/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
12/22/21	Sweetwater Lake	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
04/18/18	Sweetwater Lake	Bentazon (Basagran)	515.3	ND	2.0	µg/l
08/29/18	Sweetwater Lake	Bentazon (Basagran)	515.3	ND	2.0	µg/l
03/23/21	Sweetwater Lake	Bentazon (Basagran)	515.4	ND	0.71	µg/l
06/22/21	Sweetwater Lake	Bentazon (Basagran)	515.4	ND	0.71	µg/l
04/18/18	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.10	µg/l
08/29/18	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.10	µg/l
10/21/20	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
02/24/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
03/23/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
05/26/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
06/22/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
09/29/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
12/22/21	Sweetwater Lake	Benzo(a)pyrene	525.2	ND	0.020	µg/l
04/18/18	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	5.0	µg/l
08/29/18	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	5.0	µg/l
10/21/20	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
02/24/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
03/23/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
05/26/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
06/22/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
09/29/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
12/22/21	Sweetwater Lake	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
04/18/18	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	3.0	µg/l
08/29/18	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	3.0	µg/l
10/21/20	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
02/24/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l

05/26/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
09/29/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
12/22/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
03/23/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate (DEHP)	525.2	ND	1.0	µg/l
06/22/21	Sweetwater Lake	Bis(2-Ethylhexyl)Phthalate (DEHP)	525.2	ND	1.0	µg/l
04/18/18	Sweetwater Lake	Carbofuran (FURADAN)	531.1	ND	5.0	µg/l
08/29/18	Sweetwater Lake	Carbofuran (FURADAN)	531.1	ND	5.0	µg/l
03/23/21	Sweetwater Lake	Carbofuran (FURADAN)	531.1	ND	0.56	µg/l
06/22/21	Sweetwater Lake	Carbofuran (FURADAN)	531.1	ND	0.56	µg/l
04/18/18	Sweetwater Lake	Chlordane	508	ND	0.10	µg/l
08/29/18	Sweetwater Lake	Chlordane	508	ND	0.10	µg/l
03/23/21	Sweetwater Lake	Chlordane	508.1	ND	0.021	µg/l
06/22/21	Sweetwater Lake	Chlordane	508.1	ND	0.021	µg/l
04/18/18	Sweetwater Lake	Dalapon	515.3	ND	10.00	µg/l
08/29/18	Sweetwater Lake	Dalapon	515.3	ND	10.00	µg/l
03/23/21	Sweetwater Lake	Dalapon	515.4	ND	3.0	µg/l
06/22/21	Sweetwater Lake	Dalapon	515.4	ND	3.0	µg/l
04/18/18	Sweetwater Lake	Dibromochloropropane (DBCP)	504.1	ND	0.01	µg/l
08/29/18	Sweetwater Lake	Dibromochloropropane (DBCP)	504.1	ND	0.01	µg/l
08/25/20	Sweetwater Lake	Dibromochloropropane (DBCP)	504.1	ND	0.0024	µg/l
03/23/21	Sweetwater Lake	Dibromochloropropane (DBCP)	504.1	ND	0.0014	µg/l
06/22/21	Sweetwater Lake	Dibromochloropropane (DBCP)	504.1	ND	0.0014	µg/l
04/18/18	Sweetwater Lake	Dinoseb (DNBP)	515.3	ND	2.00	µg/l
08/29/18	Sweetwater Lake	Dinoseb (DNBP)	515.3	ND	2.00	µg/l
03/23/21	Sweetwater Lake	Dinoseb (DNBP)	515.4	ND	0.34	µg/l
06/22/21	Sweetwater Lake	Dinoseb (DNBP)	515.4	ND	0.34	µg/l
04/18/18	Sweetwater Lake	Diquat	549.2	ND	0.4	µg/l
09/06/18	Sweetwater Lake	Diquat	549.2	ND	0.4	µg/l
03/23/21	Sweetwater Lake	Diquat	549.2	ND	0.4	µg/l
06/22/21	Sweetwater Lake	Diquat	549.2	0.400	0.4	µg/l
07/15/21	Sweetwater Lake	Diquat	549.2	ND	0.4	µg/l
04/18/18	Sweetwater Lake	Endothall	548.1	ND	45	µg/l
08/29/18	Sweetwater Lake	Endothall	548.1	ND	45	pg/l
03/23/21	Sweetwater Lake	Endothall	548.1	ND	0.60	µg/l
06/22/21	Sweetwater Lake	Endothall	548.1	ND	0.60	µg/l
04/18/18	Sweetwater Lake	Endrin	508	ND	0.100	µg/l
08/29/18	Sweetwater Lake	Endrin	508	ND	0.100	µg/l
03/23/21	Sweetwater Lake	Endrin	508.1	ND	0.0020	µg/l
06/22/21	Sweetwater Lake	Endrin	508.1	ND	0.0020	µg/l
04/18/18	Sweetwater Lake	Ethylene Dibromide (EDB)	504.1	ND	0.02	µg/l
08/29/18	Sweetwater Lake	Ethylene Dibromide (EDB)	504.1	ND	0.02	µg/l
08/25/20	Sweetwater Lake	Ethylene Dibromide (EDB)	504.1	ND	0.0014	µg/l
03/23/21	Sweetwater Lake	Ethylene Dibromide (EDB)	504.1	ND	0.0024	µg/l
06/22/21	Sweetwater Lake	Ethylene Dibromide (EDB)	504.1	ND	0.0024	µg/l
04/18/18	Sweetwater Lake	Gamma-BHC (Lindane)	508	ND	0.200	µg/l
08/29/18	Sweetwater Lake	Gamma-BHC (Lindane)	508	ND	0.200	µg/l
03/23/21	Sweetwater Lake	Gamma-BHC (Lindane)	508.1	ND	0.0015	µg/l
06/22/21	Sweetwater Lake	Gamma-BHC (Lindane)	508.1	ND	0.0015	µg/l
01/31/17	Sweetwater Lake	Glyphosate	547	ND	6	µg/l
04/27/17	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
07/27/17	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
11/01/17	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
01/30/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
04/18/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
05/03/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
08/02/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
08/29/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
10/30/18	Sweetwater Lake	Glyphosate	547	ND	25	µg/l

01/30/19	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
04/30/19	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
07/30/19	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
10/29/19	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
01/29/20	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
06/30/20	Sweetwater Lake	Glyphosate	547	ND	25	µg/l
10/21/20	Sweetwater Lake	Glyphosate	547	ND	8.6	µg/l
02/24/21	Sweetwater Lake	Glyphosate	547	ND	8.6	µg/l
05/26/21	Sweetwater Lake	Glyphosate	547	ND	8.6	µg/l
09/29/21	Sweetwater Lake	Glyphosate	547	ND	8.6	µg/l
12/22/21	Sweetwater Lake	Glyphosate	547	ND	8.6	µg/l
04/18/18	Sweetwater Lake	Heptachlor	508	ND	0.010	µg/l
08/29/18	Sweetwater Lake	Heptachlor	508	ND	0.010	µg/l
03/23/21	Sweetwater Lake	Heptachlor	508.1	ND	0.0018	µg/l
06/22/21	Sweetwater Lake	Heptachlor	508.1	ND	0.0018	µg/l
04/18/18	Sweetwater Lake	Heptachlor Epoxide	508	ND	0.010	µg/l
08/29/18	Sweetwater Lake	Heptachlor Epoxide	508	ND	0.010	µg/l
03/23/21	Sweetwater Lake	Heptachlor Epoxide	508.1	ND	0.0024	µg/l
06/22/21	Sweetwater Lake	Heptachlor Epoxide	508.1	ND	0.0024	µg/l
04/18/18	Sweetwater Lake	Hexachlorobenzene	508	ND	0.500	µg/l
08/29/18	Sweetwater Lake	Hexachlorobenzene	508	ND	0.500	µg/l
03/23/21	Sweetwater Lake	Hexachlorobenzene	508.1	ND	0.0013	µg/l
06/22/21	Sweetwater Lake	Hexachlorobenzene	508.1	ND	0.0013	µg/l
04/18/18	Sweetwater Lake	Hexachlorocyclopentadiene	508	ND	1.000	µg/l
08/29/18	Sweetwater Lake	Hexachlorocyclopentadiene	508	ND	1.000	µg/l
03/23/21	Sweetwater Lake	Hexachlorocyclopentadiene	508.1	ND	0.013	µg/l
06/22/21	Sweetwater Lake	Hexachlorocyclopentadiene	508.1	ND	0.013	µg/l
04/18/18	Sweetwater Lake	Methoxychlor	508	ND	10.000	µg/l
08/29/18	Sweetwater Lake	Methoxychlor	508	ND	10.000	µg/l
03/23/21	Sweetwater Lake	Methoxychlor	508.1	ND	0.017	µg/l
06/22/21	Sweetwater Lake	Methoxychlor	508.1	ND	0.017	µg/l
04/18/18	Sweetwater Lake	Molinate (Ordram)	525.2	ND	2.00	µg/l
08/29/18	Sweetwater Lake	Molinate (Ordram)	525.2	ND	2.00	µg/l
10/21/20	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
02/24/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
03/23/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
05/26/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
06/22/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
09/29/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
12/22/21	Sweetwater Lake	Molinate (Ordram)	525.2	ND	0.68	µg/l
04/18/18	Sweetwater Lake	Oxamyl (Vydate)	531.1	ND	20.0	µg/l
08/29/18	Sweetwater Lake	Oxamyl (Vydate)	531.1	ND	20.0	µg/l
03/23/21	Sweetwater Lake	Oxamyl (Vydate)	531.1	ND	0.43	µg/l
06/22/21	Sweetwater Lake	Oxamyl (Vydate)	531.1	ND	0.43	µg/l
04/18/18	Sweetwater Lake	Paraquat	549.2	ND	2.0	µg/l
09/06/18	Sweetwater Lake	Paraquat	549.2	ND	2.0	µg/l
03/23/21	Sweetwater Lake	Paraquat	549.2	ND	2.0	µg/l
06/22/21	Sweetwater Lake	Paraquat	549.2	4.200	2.0	µg/l
07/15/21	Sweetwater Lake	Paraquat	549.2	ND	2.0	µg/l
04/18/18	Sweetwater Lake	PCB's	508	ND	0.50	µg/l
08/29/18	Sweetwater Lake	PCB's	508	ND	0.50	µg/l
03/23/21	Sweetwater Lake	PCB's	508.1	ND	0.50	pg/l
06/22/21	Sweetwater Lake	PCB's	508.1	ND	0.50	µg/l
04/18/18	Sweetwater Lake	Pentachlorophenol (PCP)	515.3	ND	0.20	µg/l
08/29/18	Sweetwater Lake	Pentachlorophenol (PCP)	515.3	ND	0.20	µg/l
03/23/21	Sweetwater Lake	Pentachlorophenol (PCP)	515.4	ND	0.028	µg/l
06/22/21	Sweetwater Lake	Pentachlorophenol (PCP)	515.4	ND	0.028	µg/l
04/18/18	Sweetwater Lake	Picloram	515.3	ND	1.00	µg/l

08/29/18	Sweetwater Lake	Picloram	515.3	ND	1.00	µg/l
03/23/21	Sweetwater Lake	Picloram	515.4	ND	0.18	µg/l
06/22/21	Sweetwater Lake	Picloram	515.4	ND	0.18	µg/l
01/31/17	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.05	µg/l
04/27/17	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
07/27/17	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
11/01/17	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
01/30/18	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
04/18/18	Sweetwater Lake	Simazine (Princep)	525.2	ND	1.00	µg/l
05/03/18	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
08/02/18	Sweetwater Lake	Simazine (Princep)	507	ND	1	µg/l
08/29/18	Sweetwater Lake	Simazine (Princep)	525.2	ND	1.00	µg/l
10/30/18	Sweetwater Lake	Simazine (Princep)	507	ND	1	µg/l
01/30/19	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
04/30/19	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
07/30/19	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
10/29/19	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
01/29/20	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
06/30/20	Sweetwater Lake	Simazine (Princep)	525.2	ND	1	µg/l
10/21/20	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
02/24/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
03/23/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
05/26/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
06/22/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
09/29/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
12/22/21	Sweetwater Lake	Simazine (Princep)	525.2	ND	0.14	µg/l
04/18/18	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	1.00	µg/l
08/29/18	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	1.00	µg/l
10/21/20	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
02/24/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
03/23/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
05/26/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
06/22/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
09/29/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
12/22/21	Sweetwater Lake	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
04/18/18	Sweetwater Lake	Toxaphene	508	ND	1.0	µg/l
08/29/18	Sweetwater Lake	Toxaphene	508	ND	1.0	µg/l
03/23/21	Sweetwater Lake	Toxaphene	508.1	ND	0.2	µg/l
06/22/21	Sweetwater Lake	Toxaphene	508.1	ND	0.2	µg/l
10/21/20	Low Flow Barrier	Alachlor (Alanex)	525.2	ND	0.44	µg/l
02/24/21	Low Flow Barrier	Alachlor (Alanex)	525.2	ND	0.44	µg/l
05/26/21	Low Flow Barrier	Alachlor (Alanex)	525.2	ND	0.44	µg/l
09/29/21	Low Flow Barrier	Alachlor (Alanex)	525.2	ND	0.44	µg/l
12/22/21	Low Flow Barrier	Alachlor (Alanex)	525.2	ND	0.44	µg/l
10/21/20	Low Flow Barrier	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
02/24/21	Low Flow Barrier	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
05/26/21	Low Flow Barrier	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
09/29/21	Low Flow Barrier	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
12/22/21	Low Flow Barrier	Atrazine (AAtrex)	525.2	ND	0.15	µg/l
10/21/20	Low Flow Barrier	Benzo(a)pyrene	525.2	ND	0.020	µg/l
02/24/21	Low Flow Barrier	Benzo(a)pyrene	525.2	ND	0.020	µg/l
05/26/21	Low Flow Barrier	Benzo(a)pyrene	525.2	ND	0.020	µg/l
09/29/21	Low Flow Barrier	Benzo(a)pyrene	525.2	ND	0.020	µg/l
12/22/21	Low Flow Barrier	Benzo(a)pyrene	525.2	ND	0.020	µg/l
10/21/20	Low Flow Barrier	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
02/24/21	Low Flow Barrier	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
05/26/21	Low Flow Barrier	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
09/29/21	Low Flow Barrier	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l

12/22/21	Low Flow Barrier	Bis(2-Ethylhexyl)Adipate	525.2	ND	2.4	µg/l
10/21/20	Low Flow Barrier	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
02/24/21	Low Flow Barrier	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
05/26/21	Low Flow Barrier	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
09/29/21	Low Flow Barrier	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
12/22/21	Low Flow Barrier	Bis(2-Ethylhexyl)Phthalate	525.2	ND	1.0	µg/l
01/31/17	Low Flow Barrier	Glyphosate	547	ND	6	µg/l
04/27/17	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
07/27/17	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
11/01/17	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
01/31/18	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
05/03/18	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
08/02/18	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
10/30/18	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
01/30/19	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
04/30/19	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
07/30/19	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
10/29/19	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
01/29/20	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
06/30/20	Low Flow Barrier	Glyphosate	547	ND	25	µg/l
08/26/20	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
10/21/20	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
02/24/21	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
05/26/21	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
09/29/21	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
12/22/21	Low Flow Barrier	Glyphosate	547	ND	8.6	µg/l
10/21/20	Low Flow Barrier	Molinate (Ordram)	525.2	ND	0.68	µg/l
02/24/21	Low Flow Barrier	Molinate (Ordram)	525.2	ND	0.68	µg/l
05/26/21	Low Flow Barrier	Molinate (Ordram)	525.2	ND	0.68	µg/l
09/29/21	Low Flow Barrier	Molinate (Ordram)	525.2	ND	0.68	ug/l
12/22/21	Low Flow Barrier	Molinate (Ordram)	525.2	ND	0.68	µg/l
01/31/17	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.05	µg/l
04/27/17	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
07/27/17	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
11/01/17	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
01/31/18	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
05/03/18	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
08/02/18	Low Flow Barrier	Simazine (Princep)	507	ND	1	µg/l
10/30/18	Low Flow Barrier	Simazine (Princep)	507	ND	1	µg/l
01/30/19	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
04/30/19	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
07/30/19	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
10/29/19	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
01/29/20	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
06/30/20	Low Flow Barrier	Simazine (Princep)	525.2	ND	1	µg/l
08/26/20	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
10/21/20	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
02/24/21	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
05/26/21	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
09/29/21	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
12/22/21	Low Flow Barrier	Simazine (Princep)	525.2	ND	0.14	µg/l
10/21/20	Low Flow Barrier	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
02/24/21	Low Flow Barrier	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
05/26/21	Low Flow Barrier	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
09/29/21	Low Flow Barrier	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l
12/22/21	Low Flow Barrier	Thiobencarb (Bolero)	525.2	ND	0.25	µg/l

Date Sampled	Sample Point	Compound	Method	ppb	Det. Limit	Units
08/03/17	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1,1,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1,1-Trichloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1,2,2-Tetrachloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1,2-Trichloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1,2-Trichlorotrifluoroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1-Dichloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1-Dichloroethene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,1-Dichloropropene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2,3-Trichlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
01/30/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
03/05/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
04/18/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
04/18/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l

09/06/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
09/20/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
11/27/18	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
02/27/19	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	SRL 524M	ND	0.005	µg/l
08/27/19	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2,3-Trichloropropane (TCP)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2,4-Trichlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2,4-Trimethylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2-Dichlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2-Dichloroethane (1,2-DCA)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,2-Dichloropropane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,3,5-Trimethylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,3-Dichlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,3-Dichloropropane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,3-Dichloropropene, Total	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l

09/20/18	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	1,4-Dichlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	2,2-Dichloropropane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	2-Chlorotoluene (ortho)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	4-Chlorotoluene (para)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Benzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Bromobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Bromochloromethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Bromodichloromethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Bromoethane (Ethyl bromide)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Bromoform	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l

09/15/21	Sweetwater Lake	Bromomethane (Methyl bromide)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Carbon disulfide	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Carbon Tetrachloride	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Chlorobenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Chloroethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Chloroform (Trichloromethane)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Chloromethane (Methyl chloride)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	cis-1,2-Dichloroethylene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	cis-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Dibromochloromethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Dibromomethane	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l

09/20/18	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Dichlorodifluoromethane (Freon 12)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
04/18/18	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
09/20/18	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
08/27/19	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
08/25/20	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
09/15/21	Sweetwater Lake	Di-isopropyl ether	524.2	ND	3.0	µg/l
08/03/17	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Ethyl Benzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
04/18/18	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
09/20/18	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
08/27/19	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
08/25/20	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
09/15/21	Sweetwater Lake	Ethyl tert butyl ether (ETBE)	524.2	ND	3.0	µg/l
08/03/17	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Hexachlorobutadiene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Isopropylbenzene (Cumene)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	m,p-Xylene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
04/18/18	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
09/20/18	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
08/27/19	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
08/25/20	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
09/15/21	Sweetwater Lake	Methyl Ethyl Ketone (MEK)	524.2	ND	5.0	µg/l
08/03/17	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
04/18/18	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
09/20/18	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
08/27/19	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
08/25/20	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
09/15/21	Sweetwater Lake	Methyl Isobutyl Ketone (MIBK)	524.2	ND	5.0	µg/l
08/03/17	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Methyl Tert-butyl ether (MTBE)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l

09/15/21	Sweetwater Lake	Methylene Chloride	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Naphthalene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	n-Butylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	n-Propylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	o-Xylene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	p-Isopropyltoluene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	sec-Butylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Styrene (Vinylbenzene)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
04/18/18	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
09/20/18	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
08/27/19	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
08/25/20	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
09/15/21	Sweetwater Lake	Tert amyl methyl ether (TAME)	524.2	ND	3.0	µg/l
08/03/17	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	tert-Butylbenzene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Tetrachloroethene (PCE)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l

09/20/18	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Toluene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Total THM	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	trans-1,2-Dichloroethene (t-1,2-DCE)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	trans-1,3-Dichloropropene	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Trichloroethene (TCE)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Trichlorofluoromethane (freon 11)	524.2	ND	0.5	µg/l
08/03/17	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
04/18/18	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
09/20/18	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
08/27/19	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
08/25/20	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
09/15/21	Sweetwater Lake	Vinyl chloride (VC)	524.2	ND	0.3	µg/l
08/03/17	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l
04/18/18	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l
09/20/18	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l
08/27/19	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l
08/25/20	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l
09/15/21	Sweetwater Lake	Xylenes (Total)	524.2	ND	0.5	µg/l

Date Sampled	Sample Location	Compound	Method	ppb	Det.Limit	Units
01/06/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/31/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
02/20/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
03/09/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/18/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
05/22/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/08/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/25/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/21/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/07/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
Offline	Aqueduct Raw	Perchlorate	EPA 314.0	Offline	0.8	ug/L
10/25/17	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
no sample	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/17/18	Aqueduct Raw	Perchlorate	EPA 314.0	no sample	1.0	ug/L
01/30/18	Aqueduct Raw	Perchlorate	EPA 314.0	offline	0.8	ug/L
06/15/18	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/13/18	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/20/18	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/13/18	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/11/18	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
11/28/18	Aqueduct Raw	Perchlorate	EPA 314.0	offline	0.8	ug/L
01/10/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
02/28/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	0.8	ug/L
03/07/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/12/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/11/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/11/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/28/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/10/19	Aqueduct Raw	Perchlorate	EPA 314.0	ND	1.0	ug/L
05/06/20	Aqueduct Raw	Perchlorate	EPA 314.0	ND	0.75	ug/L
08/26/20	Aqueduct Raw	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/27/21	Aqueduct Raw	Perchlorate	EPA 314.0	ND	0.38	ug/L
09/01/21	Aqueduct Raw	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/06/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/31/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
02/20/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
03/09/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/18/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
05/22/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/08/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/25/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/21/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/07/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/03/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.8	ug/L
10/25/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
11/22/17	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/17/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/30/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.8	ug/L
02/20/18	Clearwell Effluent	Perchlorate	EPA 314.0	1.1	1.0	ug/L

05/22/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/15/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/13/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/20/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/13/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/11/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
11/28/18	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.8	ug/L
01/10/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
02/28/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.8	ug/L
03/07/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/12/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/11/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/11/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/28/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/10/19	Clearwell Effluent	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/29/20	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.75	ug/L
08/26/20	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/27/21	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.38	ug/L
09/01/21	Clearwell Effluent	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/31/17	Hansen's Pond	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/04/17	Hansen's Pond	Perchlorate	EPA 314.0	6.1	0.8	ug/L
01/31/18	Hansen's Pond	Perchlorate	EPA 314.0	ND	0.8	ug/L
11/28/18	Hansen's Pond	Perchlorate	EPA 314.0	ND	0.8	ug/L
02/28/19	Hansen's Pond	Perchlorate	EPA 314.0	ND	0.8	ug/L
08/28/19	Hansen's Pond	Perchlorate	EPA 314.0	1.3	1.0	ug/L
01/29/20	Hansen's Pond	Perchlorate	EPA 314.0	0.9	0.75	ug/L
08/26/20	Hansen's Pond	Perchlorate	EPA 314.0	2.4	0.38	ug/L
01/27/21	Hansen's Pond	Perchlorate	EPA 314.0	ND	0.38	ug/L
09/01/21	Hansen's Pond	Perchlorate	EPA 314.0	2.9	0.38	ug/L
01/31/17	Lake Loveland	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/03/17	Lake Loveland	Perchlorate	EPA 314.0	ND	0.8	ug/L
01/30/18	Lake Loveland	Perchlorate	EPA 314.0	ND	0.8	ug/L
11/27/18	Lake Loveland	Perchlorate	EPA 314.0	ND	0.8	ug/L
02/27/19	Lake Loveland	Perchlorate	EPA 314.0	ND	0.8	ug/L
08/27/19	Lake Loveland	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/28/20	Lake Loveland	Perchlorate	EPA 314.0	ND	0.75	ug/L
08/25/20	Lake Loveland	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/27/21	Lake Loveland	Perchlorate	EPA 314.0	ND	0.38	ug/L
08/31/21	Lake Loveland	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/31/17	Low Flow Barrier	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/04/17	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.8	ug/L
01/31/18	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.8	ug/L
11/28/18	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.8	ug/L
02/28/19	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.8	ug/L
08/28/19	Low Flow Barrier	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/29/20	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.75	ug/L
08/26/20	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/27/21	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.38	ug/L
09/01/21	Low Flow Barrier	Perchlorate	EPA 314.0	ND	0.38	ug/L
03/09/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/18/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
05/22/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/08/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/25/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L

08/21/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/07/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/25/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
11/22/17	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/17/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
02/20/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
05/22/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/15/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/13/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
08/20/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/13/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/11/18	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/10/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
03/07/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
04/12/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
06/11/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
07/11/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
09/10/19	Sweetwater Lake	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/31/17	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/03/17	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.8	ug/L
01/30/18	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.8	ug/L
11/28/18	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.8	ug/L
02/28/19	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.8	ug/L
08/27/19	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	1.0	ug/L
01/28/20	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.75	ug/L
08/25/20	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/27/21	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.38	ug/L
09/01/21	Sweetwater Lake Surface	Perchlorate	EPA 314.0	ND	0.38	ug/L
01/31/17	Sweetwater River Influent	Perchlorate	EPA 314.0	ND	1.0	ug/L
10/04/17	Sweetwater River Influent	Perchlorate	EPA 314.0	ND	0.8	ug/L
01/31/18	Sweetwater River Influent	Perchlorate	EPA 314.0	ND	0.8	ug/L
11/28/18	Sweetwater River Influent	Perchlorate	EPA 314.0	Dry	0.8	ug/L
02/28/19	Sweetwater River Influent	Perchlorate	EPA 314.0	Dry	0.8	ug/L
08/28/19	Sweetwater River Influent	Perchlorate	EPA 314.0	Dry	1.0	ug/L
01/29/20	Sweetwater River Influent	Perchlorate	EPA 314.0	ND	0.75	ug/L
01/27/21	Sweetwater River Influent	Perchlorate	EPA 314.0	ND	0.38	ug/L

Date Sampled	Sample Location	NO3--N (mg/l)	
01/31/17	Clearwell Effluent	0.27	ND
10/03/17	Clearwell Effluent	ND	0.27
01/30/18	Clearwell Effluent	ND	0.14
11/28/18	Clearwell Effluent	0.19	
02/28/19	Clearwell Effluent	0.22	
08/28/19	Clearwell Effluent	ND	
01/29/20	Clearwell Effluent	0.11	
08/26/20	Clearwell Effluent	0.12	
01/27/21	Clearwell Effluent	0.15	
09/01/21	Clearwell Effluent	0.16	
01/31/17	Hansen's Pond	7.81	4.48
10/04/17	Hansen's Pond	9.24	9.42
01/31/18	Hansen's Pond	8.37	8.09
11/28/18	Hansen's Pond	7.79	8.09
02/28/19	Hansen's Pond	4.48	
08/28/19	Hansen's Pond	9.42	
01/29/20	Hansen's Pond	7.65	
08/26/20	Hansen's Pond	9.32	
01/27/21	Hansen's Pond	5.59	
09/01/21	Hansen's Pond	9.36	
01/31/17	Lake Loveland	0.50	ND
10/03/17	Lake Loveland	ND	0.53
01/30/18	Lake Loveland	0.41	ND
11/27/18	Lake Loveland	ND	
02/27/19	Lake Loveland	0.53	
08/27/19	Lake Loveland	ND	
01/28/20	Lake Loveland	ND	
08/25/20	Lake Loveland	ND	
01/27/21	Lake Loveland	ND	
08/31/21	Lake Loveland	ND	
01/31/17	Low Flow Barrier	1.79	ND
10/04/17	Low Flow Barrier	ND	1.79
01/31/18	Low Flow Barrier	ND	ND
11/28/18	Low Flow Barrier	ND	
02/28/19	Low Flow Barrier	0.27	
08/28/19	Low Flow Barrier	ND	
01/29/20	Low Flow Barrier	ND	
08/26/20	Low Flow Barrier	ND	
01/27/21	Low Flow Barrier	ND	
09/01/21	Low Flow Barrier	ND	
01/31/17	Sweetwater Lake Surface	0.41	ND
10/03/17	Sweetwater Lake Surface	0.20	0.41
01/30/18	Sweetwater Lake Surface	ND	0.06
11/28/18	Sweetwater Lake Surface	0.29	
02/28/19	Sweetwater Lake Surface	0.19	

08/27/19	Sweetwater Lake Surface	ND	
01/28/20	Sweetwater Lake Surface	ND	
08/25/20	Sweetwater Lake Surface	ND	
01/27/21	Sweetwater Lake Surface	ND	
09/01/21	Sweetwater Lake Surface	0.11	
01/31/17	Sweetwater River Influent	5.79	ND
10/04/17	Sweetwater River Influent	ND	5.79
01/31/18	Sweetwater River Influent	ND	ND
11/28/18	Sweetwater River Influent		
02/28/19	Sweetwater River Influent	0.27	
08/28/19	Sweetwater River Influent		
01/29/20	Sweetwater River Influent	ND	
08/26/20	Sweetwater River Influent		
01/27/21	Sweetwater River Influent	ND	

Date Sampled	Sample Location	Cond (uS)	TDS (mg/l)	Cl- (mg/l)	Br- (mg/l)
01/31/17	Clearwell Effluent	950	580	100	ND
10/03/17	Clearwell Effluent	1200	730	200	0.36
01/30/18	Clearwell Effluent	1200	760	210	0.37
11/28/18	Clearwell Effluent	840	510	97	0.08
02/28/19	Clearwell Effluent	1000	610	160	0.15
08/28/19	Clearwell Effluent	1100	670	180	0.33
01/29/20	Clearwell Effluent	1200	740	210	0.38
08/26/20	Clearwell Effluent	1100	620	170	0.25
01/27/21	Clearwell Effluent	1100	640	160	0.23
09/01/21	Clearwell Effluent	1100	650	170	0.24
01/31/17	Hansen's Pond	2700	1800	540	1.42
10/04/17	Hansen's Pond	2800	1900	550	1.53
01/31/18	Hansen's Pond	2800	1700	560	1.57
11/28/18	Hansen's Pond	2800	1800	550	1.51
02/28/19	Hansen's Pond	2400	1600	460	1.16
08/28/19	Hansen's Pond	2600	1800	470	1.42
01/29/20	Hansen's Pond	2800	1900	530	1.43
08/26/20	Hansen's Pond	2700	1900	530	1.36
01/27/21	Hansen's Pond	2400	1600	490	1.20
09/01/21	Hansen's Pond	2800	2100	540	1.39
01/31/17	Lake Loveland	540	290	71	0.23
10/03/17	Lake Loveland	550	350	67	0.22
01/30/18	Lake Loveland	510	360	59	0.20
11/27/18	Lake Loveland	560	330	67	0.23
02/27/19	Lake Loveland	470	270	54	0.14
08/27/19	Lake Loveland	520	330	61	0.19
01/28/20	Lake Loveland	520	310	59	0.18
08/25/20	Lake Loveland	580	320	66	0.23
01/27/21	Lake Loveland	570	330	65	0.21
08/31/21	Lake Loveland	660	370	76	0.27
01/31/17	Low Flow Barrier	2600	1800	440	0.81
10/04/17	Low Flow Barrier	3200	2300	550	1.23
01/31/18	Low Flow Barrier	3400	2400	570	1.28
11/28/18	Low Flow Barrier	3400	2300	570	1.27
02/28/19	Low Flow Barrier	540	330	66	0.40
08/28/19	Low Flow Barrier	3100	2200	520	1.41
01/29/20	Low Flow Barrier	2900	2000	470	1.02
08/26/20	Low Flow Barrier	3100	2100	550	1.49
01/27/21	Low Flow Barrier	670	380	83	0.24
09/01/21	Low Flow Barrier	3100	2100	550	1.33
01/31/17	Sweetwater Lake Surface	1600	880	300	0.66
10/03/17	Sweetwater Lake Surface	1100	700	190	0.46
01/30/18	Sweetwater Lake Surface	1200	780	200	0.49

Cond min	cond max	cond med	Cl min	cl max	cl median	br min	br max	br med
840	1200	1100	97	210	170	ND	0.38	0.25
2400	2800	2750	460	560	535	1	1.57	1.42
470	660	545	54	76	65.5	0	0.27	0.21
540	3400	3100	66	570	535	0	1.49	1.25
860	1600	1200	140	300	195	0	0.78	0.49

11/28/18	Sweetwater Lake Surface	1600	960	300	0.78										
02/28/19	Sweetwater Lake Surface	860	510	140	0.29										
08/27/19	Sweetwater Lake Surface	1000	650	170	0.44										
01/28/20	Sweetwater Lake Surface	1200	690	190	0.47										
08/25/20	Sweetwater Lake Surface	1300	720	240	0.62										
01/27/21	Sweetwater Lake Surface	1100	650	190	0.49										
09/01/21	Sweetwater Lake Surface	1200	730	210	0.52										
01/31/17	Sweetwater River Influent	1500	900	250	0.52	540	3100	1850	66	590	305	0	1.45	0.54	
10/04/17	Sweetwater River Influent	3100	2200	590	1.45										
01/31/18	Sweetwater River Influent	2200	1300	360	0.57										
11/28/18	Sweetwater River Influent	No Flow													
02/28/19	Sweetwater River Influent	540	350	66	0.36										
08/28/19	Sweetwater River Influent	No Flow													
01/29/20	Sweetwater River Influent	2600	1700	440	0.97										
08/26/20	Sweetwater River Influent	No Flow													
01/27/21	Sweetwater River Influent	670	380	84	0.24										

DATE SAMPLED	SAMPLE POINT	Conductivity (uS)	Cl^- (mg/L)
1/3/2017	Clearwell Effluent	999	94
2/6/2017	Clearwell Effluent	926	96
3/6/2017	Clearwell Effluent	809	86
4/3/2017	Clearwell Effluent	622	72
5/22/2017	Clearwell Effluent	840	129
6/5/2017	Clearwell Effluent	615	80
7/5/2017	Clearwell Effluent	848	132
8/7/2017	Clearwell Effluent	891	127
9/5/2017	Clearwell Effluent	538	65
10/2/2017	Clearwell Effluent	1197	192
11/6/2017	Clearwell Effluent	1227	189
12/4/2017	Clearwell Effluent	1253	192
1/2/2018	Clearwell Effluent	1342	184
2/5/2018	Clearwell Effluent	1266	196
3/5/2018	Clearwell Effluent	1290	211
4/2/2018	Clearwell Effluent	1321	210
5/7/2018	Clearwell Effluent	1350	226
6/4/2018	Clearwell Effluent	1425	230
7/2/2018	Clearwell Effluent	1401	241
8/6/2018	Clearwell Effluent	816	87
9/4/2018	Clearwell Effluent	1261	186
10/1/2018	Clearwell Effluent	1250	181
11/5/2018	Clearwell Effluent	693	89
12/3/2018	Clearwell Effluent	1260	192
1/2/2019	Clearwell Effluent	916	97
2/4/2019	Clearwell Effluent	680	88
3/4/2019	Clearwell Effluent	993	138
4/1/2019	Clearwell Effluent	944	150
5/6/2019	Clearwell Effluent	1017	158
6/3/2019	Clearwell Effluent	1047	165
7/1/2019	Clearwell Effluent	1085	173
8/5/2019	Clearwell Effluent	1096	183
9/3/2019	Clearwell Effluent	1098	181
10/7/2019	Clearwell Effluent	1150	185
11/4/2019	Clearwell Effluent	549	74
12/2/2019	Clearwell Effluent	1182	197
1/6/2020	Clearwell Effluent	1209	206
2/3/2020	Clearwell Effluent	1213	206
3/2/2020	Clearwell Effluent	1242	222
4/6/2020	Clearwell Effluent	1408	224
5/4/2020	Clearwell Effluent	1287	223
6/1/2020	Clearwell Effluent	1051	159
7/6/2020	Clearwell Effluent	1323	243
8/3/2020	Clearwell Effluent	1062	171
9/8/2020	Clearwell Effluent	1075	165
10/5/2020	Clearwell Effluent	1119	179
11/2/2020	Clearwell Effluent	1174	184
12/7/2020	Clearwell Effluent	952	103
1/4/2021	Clearwell Effluent	1190	195
2/1/2021	Clearwell Effluent	1079	188
3/1/2021	Clearwell Effluent	1050	190
4/5/2021	Clearwell Effluent	1083	198
5/3/2021	Clearwell Effluent	1140	204
6/7/2021	Clearwell Effluent	1126	177
7/6/2021	Clearwell Effluent	934	101
8/2/2021	Clearwell Effluent	1309	219
9/7/2021	Clearwell Effluent	1100	165
10/4/2021	Clearwell Effluent	909	102
11/1/2021	Clearwell Effluent	1110	165

Cond min	Cond max	Cond med	Cl min	cl max	cl median
538	1425	1099	65	243	180
891.54					

12/6/2021	Clearwell Effluent	1134	163						
1/3/2017	Lake Loveland	746	89	446	938	548	53	148	69
2/6/2017	Lake Loveland	548	86						
3/6/2017	Lake Loveland	477	59						
4/3/2017	Lake Loveland	470	55						
5/1/2017	Lake Loveland	499	60						
6/5/2017	Lake Loveland	513	70						
7/5/2017	Lake Loveland	485	70						
8/7/2017	Lake Loveland	544	67						
9/5/2017	Lake Loveland	543	57						
10/2/2017	Lake Loveland	576	70						
11/6/2017	Lake Loveland	572	55						
12/4/2017	Lake Loveland	548	62						
1/3/2018	Lake Loveland	549	53						
2/5/2018	Lake Loveland	517	58						
3/5/2018	Lake Loveland	524	69						
4/2/2018	Lake Loveland	529	66						
5/7/2018	Lake Loveland	542	59						
6/4/2018	Lake Loveland	938	69						
7/2/2018	Lake Loveland	516	67						
8/6/2018	Lake Loveland	559	69						
9/4/2018	Lake Loveland	605	69						
10/1/2018	Lake Loveland	613	74						
11/5/2018	Lake Loveland	599	74						
12/3/2018	Lake Loveland	585	69						
1/2/2019	Lake Loveland	580	72						
2/4/2019	Lake Loveland	571	69						
3/4/2019	Lake Loveland	486	58						
4/1/2019	Lake Loveland	446	54						
5/6/2019	Lake Loveland	497	58						
6/3/2019	Lake Loveland	505	59						
7/1/2019	Lake Loveland	522	63						
8/5/2019	Lake Loveland	547	64						
9/3/2019	Lake Loveland	550	66						
10/8/2019	Lake Loveland	545	67						
11/4/2019	Lake Loveland	526	65						
12/2/2019	Lake Loveland	536	63						
1/6/2020	Lake Loveland	538	63						
2/3/2020	Lake Loveland	510	63						
3/2/2020	Lake Loveland	523	66						
4/6/2020	Lake Loveland	568	66						
5/4/2020	Lake Loveland	523	64						
6/1/2020	Lake Loveland	539	66						
7/6/2020	Lake Loveland	542	68						
8/3/2020	Lake Loveland	546	69						
9/8/2020	Lake Loveland	564	69						
10/5/2020	Lake Loveland	559	72						
11/2/2020	Lake Loveland	571	75						
12/7/2020	Lake Loveland	572	72						
1/4/2021	Lake Loveland	571	71						
2/2/2021	Lake Loveland	572	73						
3/1/2021	Lake Loveland	496	74						
4/5/2021	Lake Loveland	576	77						
5/3/2021	Lake Loveland	535	78						
6/7/2021	Lake Loveland	627	77						
7/6/2021	Lake Loveland	644	81						
8/2/2021	Lake Loveland	700	79						
9/7/2021	Lake Loveland	668	79						
10/4/2021	Lake Loveland	643	82						
11/1/2021	Lake Loveland	660	80						
12/6/2021	Lake Loveland	666	148						
1/3/2017	Sweetwater Lake Surface			866	1630	1199	124	287	191
2/6/2017	Sweetwater Lake Surface								
3/6/2017	Sweetwater Lake Surface	1144	188						

4/3/2017	Sweetwater Lake Surface	923	124
5/22/2017	Sweetwater Lake Surface	1040	149
6/5/2017	Sweetwater Lake Surface	1011	179
7/5/2017	Sweetwater Lake Surface	1039	142
8/7/2017	Sweetwater Lake Surface	1100	169
9/5/2017	Sweetwater Lake Surface	1096	162
10/2/2017	Sweetwater Lake Surface	1151	174
11/6/2017	Sweetwater Lake Surface	1180	189
12/4/2017	Sweetwater Lake Surface	1198	191
1/2/2018	Sweetwater Lake Surface	1297	159
2/5/2018	Sweetwater Lake Surface	1221	185
3/5/2018	Sweetwater Lake Surface	1248	191
4/2/2018	Sweetwater Lake Surface	1277	206
5/7/2018	Sweetwater Lake Surface	1326	209
6/4/2018	Sweetwater Lake Surface	1369	213
7/2/2018	Sweetwater Lake Surface	1378	226
8/6/2018	Sweetwater Lake Surface	1459	236
9/4/2018	Sweetwater Lake Surface	1583	248
10/1/2018	Sweetwater Lake Surface	1604	265
11/5/2018	Sweetwater Lake Surface	1598	281
12/3/2018	Sweetwater Lake Surface	1630	284
1/2/2019	Sweetwater Lake Surface	1601	287
2/4/2019	Sweetwater Lake Surface	1612	280
3/4/2019	Sweetwater Lake Surface	866	127
4/1/2019	Sweetwater Lake Surface	872	126
5/6/2019	Sweetwater Lake Surface	952	140
6/3/2019	Sweetwater Lake Surface	1000	150
7/1/2019	Sweetwater Lake Surface	1032	156
8/5/2019	Sweetwater Lake Surface	1052	162
9/3/2019	Sweetwater Lake Surface	1076	161
10/7/2019	Sweetwater Lake Surface	1108	164
11/4/2019	Sweetwater Lake Surface	1127	174
12/2/2019	Sweetwater Lake Surface	1122	174
1/6/2020	Sweetwater Lake Surface	1049	185
2/3/2020	Sweetwater Lake Surface	1212	191
3/2/2020	Sweetwater Lake Surface	1229	198
4/6/2020	Sweetwater Lake Surface	1351	188
5/4/2020	Sweetwater Lake Surface	1223	199
6/1/2020	Sweetwater Lake Surface	1277	221
7/6/2020	Sweetwater Lake Surface	1234	220
8/3/2020	Sweetwater Lake Surface	1235	232
9/8/2020	Sweetwater Lake Surface	1251	238
10/5/2020	Sweetwater Lake Surface	1302	242
11/2/2020	Sweetwater Lake Surface	1338	249
12/7/2020	Sweetwater Lake Surface	1260	260
1/4/2021	Sweetwater Lake Surface	1396	259
2/2/2021	Sweetwater Lake Surface	996	172
3/1/2021	Sweetwater Lake Surface	1001	169
4/5/2021	Sweetwater Lake Surface	1032	180
5/3/2021	Sweetwater Lake Surface	1080	178
6/7/2021	Sweetwater Lake Surface	1138	187
7/6/2021	Sweetwater Lake Surface	1108	194
8/3/2021	Sweetwater Lake Surface	1429	199
9/7/2021	Sweetwater Lake Surface	1187	201
10/4/2021	Sweetwater Lake Surface	1120	207
11/1/2021	Sweetwater Lake Surface	1200	210
12/6/2021	Sweetwater Lake Surface	1230	211

Date	Species	Organisms/ml	Daily Sum
3/23/2017	Nitzschia palea	1256	1515
3/23/2017	Anacystis cyanea	136	
3/23/2017	Chlamydomonas	16	
3/23/2017	Carteria	6	
3/23/2017	leptolyngbya	102	
4/5/2017	P. limnetica	376	1517
4/5/2017	leptolyngbya	1081	
4/5/2017	Anacystis cyanea	59	
4/13/2017	Euglena	33	56
4/13/2017	Pediastrum	5	
4/13/2017	Anacystis cyanea	14	
4/13/2017	Closterium	5	
5/19/2017	Anabaena Flos Aquae	94	19921
5/19/2017	Anabaena Circinalis	13	
5/19/2017	leptolyngbya	19815	
5/25/2017	anabaena sporides	18	12862
5/25/2017	Anabaena Flos Aquae	45	
5/25/2017	Anabaena Circinalis	19	
5/25/2017	Anabaenopsis	3	
5/25/2017	leptolyngbya / P limnetica	12778	
6/2/2017	Anabaena Circinalis	49	11323
6/2/2017	Anabaena Flos Aquae	42	
6/2/2017	anabaena sporides	29	
6/2/2017	leptolyngbya / P limnetica	11204	
6/9/2017	leptolyngbya / P limnetica	15000	15112
6/9/2017	Anabaena Flos Aquae	5	
6/9/2017	anabaena sporides	22	
6/9/2017	Anabaena Circinalis	31	
6/9/2017	Anabaenopsis	11	
6/9/2017	Anacystis cyanea	44	
6/16/2017	Anabaena Circinalis	119	12350
6/16/2017	leptolyngbya / P limnetica	12222	
6/16/2017	Rhodofer	4	
6/16/2017	Anacystis cyanea	3	
6/16/2017	Gomphosphaeria	3	
6/19/2017	Anabaena Circinalis	35	10776
6/19/2017	leptolyngbya / P limnetica	10741	
6/20/2017	Anabaena Circinalis	7	8433
6/20/2017	leptolyngbya / P limnetica	8426	
7/27/2017	leptolyngbya / P limnetica	6481	6481
8/4/2017	C. raciborskii	561	1788
8/4/2017	Lyptolyngbya	1124	
8/4/2017	Anacystis cyanea	68	
8/4/2017	Nitzschia palea	35	
8/18/2017	leptolyngbya / P limnetica	2724	2835
8/18/2017	Anacystis cyanea	87	
8/18/2017	C. raciborskii	24	
8/25/2017	C. raciborskii	48	4030
8/25/2017	leptolyngbya / P limnetica	3981	
8/31/2017	C. raciborskii	129	2450

3/23/2017	Nitzschia palea	1256	1515
8/31/2017	leptolyngbya / P limnetica	2298	
8/31/2017	Anabaena Circinalis	16	
8/31/2017	Staurastrum	6	
8/31/2017	uroglenopsis	1	
9/15/2017	leptolyngbya / P limnetica	4900	5121
9/15/2017	C. raciborskii	105	
9/15/2017	Euglena	34	
9/15/2017	Anacystis cyanea	62	
9/15/2017	Anabaenopsis	20	
9/22/2017	leptolyngbya / P limnetica	2686	2774
9/22/2017	C. raciborskii	63	
9/22/2017	Euglena	23	
9/22/2017	Planktothrix perornata	2	
10/6/2017	leptolyngbya	1900	3156
10/6/2017	P. limnetica	1152	
10/6/2017	Anacystis cyanea	104	
10/13/2017	leptolyngbya	419	628
10/13/2017	Anacystis cyanea	70	
10/13/2017	Euglena	85	
10/13/2017	Nitzschia palea	45	
10/13/2017	Anabaenopsis	7	
12/1/2017	leptolyngbya / P limnetica	182	304
12/1/2017	C. raciborskii	91	
12/1/2017	Euglena	8	
12/1/2017	Planktothrix perornata	22	
12/8/2017	Anacystis cyanea	214	392
12/8/2017	Euglena	105	
12/8/2017	Nitzschia palea	73	
12/15/2017	C. raciborskii	18	103
12/15/2017	Anacystis cyanea	28	
12/15/2017	Nitzschia palea	27	
12/15/2017	Euglena	9	
12/15/2017	leptolyngbya	21	
1/18/2018	Anacystis cyanea	223	377
1/18/2018	C. raciborskii	27	
1/18/2018	leptolyngbya / P limnetica	45	
1/18/2018	Euglena	53	
1/18/2018	Nitzschia palea	27	
1/18/2018	Carteria	1	
1/18/2018	Rhodofer	1	
1/26/2018	C. raciborskii	50	178
1/26/2018	helosida	6	
1/26/2018	Anacystis cyanea	34	
1/26/2018	Rhodofer	6	
1/26/2018	Euglena	31	
1/26/2018	leptolyngbya / P limnetica	28	
1/26/2018	Nitzschia palea	17	
1/26/2018	scenedesmus	6	
2/2/2018	abyndant rotifers / euglena	926	926
2/16/2018	oocystis	4015	4015
6/1/2018	P. limnetica	1111	4622
6/1/2018	leptolyngbya	2500	
6/1/2018	Anacystis cyanea	144	
6/1/2018	Anabaenopsis	49	

3/23/2017	Nitzschia palea	1256	1515
6/1/2018	uroglenopsis	1	
6/1/2018	C. raciborskii	801	
6/1/2018	mougeotia	1	
6/1/2018	Nitzschia palea	15	
6/1/2018	volvox	1	
6/15/2018	P. limnetica	1574	6561
6/15/2018	Lyptolyngbya	2870	
6/15/2018	C. raciborskii	1944	
6/15/2018	Anacystis cyanea	156	
6/15/2018	Anabaenopsis	17	
11/7/2018	Anacystis cyanea	43	222
11/7/2018	leptolynabya	92	
11/7/2018	Euglena	13	
11/7/2018	Carteria	33	
11/7/2018	Chlamydomonas	27	
11/7/2018	C. raciborskii	15	
11/21/2018	leptolynabya	286	788
11/21/2018	P. limnetica	254	
11/21/2018	C. raciborskii	245	
11/21/2018	Anabaena Circinalis	3	
12/17/2018	Anacystis cyanea	31	51
12/17/2018	Carteria	6	
12/17/2018	leptolynabya	6	
12/17/2018	P. limnetica	7	
12/17/2018	Nitzschia palea	2	
1/17/2019	Carteria	481	724
1/17/2019	Anacystis cyanea	204	
1/17/2019	oocystis	18	
1/17/2019	P. limnetica	18	
1/17/2019	C. raciborskii	2	
1/17/2019	Nitzschia palea	2	
1/23/2019	Anacystis cyanea	76	107
1/23/2019	Euglena	19	
1/23/2019	ulothrix	1	
1/23/2019	C. raciborskii	2	
1/23/2019	leptolynabya	9	
1/31/2019	Nitzschia palea	8	164
1/31/2019	Euglena	8	
1/31/2019	Anacystis cyanea	81	
1/31/2019	trachelomonas	2	
1/31/2019	Carteria	43	
1/31/2019	leptolynabya	4	
1/31/2019	P. limnetica	14	
1/31/2019	Chlamydomonas	5	
2/8/2019	Euglena	56	169
2/8/2019	Anacystis cyanea	58	
2/8/2019	Nitzschia palea	8	
2/8/2019	Pediastrum	3	
2/8/2019	phytoconis	18	
2/8/2019	scenedesmus	6	
2/8/2019	ulothrix	16	
2/8/2019	oocystis	4	
2/21/2019	Pediastrum	1	246
2/21/2019	Chlamydomonas	111	

3/23/2017	Nitzschia palea	1256	1515
2/21/2019	Carteria	43	
2/21/2019	scenedesmus	5	
2/21/2019	Gomphosphaeria	6	
2/21/2019	Anacystis cyanea	75	
2/21/2019	oocystis	1	
2/21/2019	synedra	1	
2/21/2019	Nitzschia palea	2	
2/21/2019	P. limnetica	3	
3/8/2019	eudorina	6	96
3/8/2019	spirogyra	2	
3/8/2019	oocystis	21	
3/8/2019	Anacystis cyanea	44	
3/8/2019	Pediastrum	2	
3/8/2019	Carteria	12	
3/8/2019	Euglena	9	
3/13/2019	Anacystis cyanea	54	119
3/13/2019	Anabaenopsis	3	
3/13/2019	trachelomonas	10	
3/13/2019	Carteria	2	
3/13/2019	P. limnetica	5	
3/13/2019	ulothrix	7	
3/13/2019	oocystis	7	
3/13/2019	tabellana	3	
3/13/2019	Nitzschia palea	7	
3/13/2019	leptolynabya	10	
3/13/2019	ankistrodesmus	1	
3/13/2019	Euglena	6	
3/13/2019	synedra	4	
3/28/2019	Pediastrum	7	103
3/28/2019	chlorella	38	
3/28/2019	Euglena	39	
3/28/2019	Anacystis cyanea	6	
3/28/2019	Chlamydomonas	4	
3/28/2019	anabaena	2	
3/28/2019	eudorina	3	
3/28/2019	spytegyta	2	
3/28/2019	ankistrodesmus	3	
3/28/2019	synedra	1	
3/29/2019	Euglena	30	108
3/29/2019	Chlamydomonas	8	
3/29/2019	chlorella	18	
3/29/2019	oocystis	1	
3/29/2019	Pediastrum	2	
3/29/2019	Carteria	4	
3/29/2019	Anacystis cyanea	28	
3/29/2019	coelastrum	4	
3/29/2019	Nitzschia palea	11	
3/29/2019	volvox	2	
3/29/2019	Anabaenopsis	2	
4/12/2019	Anacystis cyanea	42	210
4/19/2019	Anacystis cyanea	37	
4/19/2019	phytoconis	120	
4/19/2019	scenedesmus	3	
4/19/2019	Pediastrum	2	

3/23/2017	Nitzschia palea	1256	1515
4/19/2019	Euglena	6	
4/19/2019	Nitzschia palea	1	
4/24/2019	ulothrix	14	134
4/24/2019	Carteria	19	
4/24/2019	oocystis	31	
4/24/2019	Anacystis cyanea	53	
4/24/2019	Pediastrum	13	
4/24/2019	Euglena	5	
4/24/2019	astenonella	1	
5/3/2019	oocystis	27	99
5/3/2019	Anacystis cyanea	18	
5/3/2019	Euglena	4	
5/3/2019	Pediastrum	6	
5/3/2019	spirogyra	15	
5/3/2019	coeastrum	28	
5/3/2019	Carteria	3	
5/9/2019	tribonema	23	81
5/9/2019	Pediastrum	3	
5/9/2019	Closterium	26	
5/9/2019	Anacystis cyanea	7	
5/9/2019	chlorella	7	
5/9/2019	phytoconis	4	
5/9/2019	astenonella	1	
5/9/2019	anabaena	8	
5/9/2019	Euglena	2	
5/30/2019	Anabaena Flos Aquae	67	167
5/30/2019	Euglena	5	
5/30/2019	astenonella	7	
5/30/2019	Closterium	8	
5/30/2019	ankistrodesmus	48	
5/30/2019	Anacystis cyanea	31	
5/30/2019	aphanizomenon flos aquae	1	
5/31/2019	Anabaena Flos Aquae	61	104
5/31/2019	rotifers	6	
5/31/2019	Euglena	2	
5/31/2019	aphanizomenon	10	
5/31/2019	Closterium	1	
5/31/2019	Carteria	22	
5/31/2019	astenonella	1	
5/31/2019	dynobryan	1	
6/6/2019	Anabaena Flos Aquae	6	39
6/6/2019	Euglena	1	
6/6/2019	astenonella	19	
6/6/2019	Closterium	2	
6/6/2019	Anacystis cyanea	3	
6/6/2019	Gomphosphaeria	1	
6/6/2019	phytoconis	7	
6/18/2019	Anacystis cyanea	3	55
6/18/2019	oocystis	41	
6/18/2019	phytoconis	4	
6/18/2019	Pediastrum	2	
6/18/2019	astenonella	3	
6/18/2019	Closterium	2	
6/18/2019	Nitzschia palea	1	

3/23/2017	Nitzschia palea	1256	1515
6/26/2019	spirogyra	27	260
6/26/2019	Euglena	31	
6/26/2019	Carteria	16	
6/26/2019	Anacystis cyanea	106	
6/26/2019	oocystis	50	
6/26/2019	Nitzschia palea	8	
6/26/2019	astenonella	15	
6/26/2019	Gomphosphaeria	1	
6/26/2019	Pediastrum	4	
6/26/2019	scenedesmus	3	
6/28/2019	oocystis	6	291
6/28/2019	dynobryan	1	
6/28/2019	synedra	2	
6/28/2019	Anacystis cyanea	82	
6/28/2019	spirogyra	24	
6/28/2019	Gomphosphaeria	161	
6/28/2019	Euglena	11	
6/28/2019	ceratium	3	
7/3/2019	Anacystis cyanea	64	129
7/3/2019	leptolynabya	30	
7/3/2019	Chlamydomonas	23	
7/3/2019	anabaena sporides	8	
7/3/2019	Gomphosphaeria	2	
7/3/2019	staurastum	2	
7/10/2019	Anabaena spiroides	19	43
7/10/2019	Anabaenopsis	19	
7/10/2019	Anabaena Circinalis	5	
7/11/2019	Anabaenopsis	5	76
7/11/2019	Anacystis cyanea	53	
7/11/2019	Anabaena spiroides	9	
7/11/2019	Nitzschia palea	6	
7/11/2019	Anabaena Circinalis	2	
7/11/2019	Pediastrum	1	
7/12/2019	Euglena	2	104
7/12/2019	Anabaenopsis	19	
7/12/2019	Anacystis cyanea	13	
7/12/2019	Anabaena Circinalis	8	
7/12/2019	Gomphosphaeria	2	
7/12/2019	scenedesmus	1	
7/12/2019	spytegyta	59	
7/15/2019	Anabaenopsis	42	56
7/15/2019	Anabaena Circinalis	13	
7/15/2019	Anabaena spiroides	1	
7/16/2019	Anabaena spiroides	3	95
7/16/2019	Anabaena Circinalis	27	
7/16/2019	Anabaenopsis	64	
7/16/2019	ceratium	2	
7/19/2019	Anacystis cyanea	18	191
7/19/2019	Anabaenopsis	84	
7/19/2019	Anabaena Flos Aquae	49	
7/19/2019	Nitzschia	39	
7/19/2019	Gomphosphaeria	1	
7/25/2019	Nitzschia	414	482
7/25/2019	Anabaenopsis	47	

3/23/2017	Nitzschia palea	1256	1515
7/25/2019	Anacystis	2	
7/25/2019	scenedesmus	3	
7/25/2019	Stauroncis	1	
7/25/2019	C. raciborskii	5	
7/25/2019	Leptolyngbya	11	
8/1/2019	Gomphosphaeria	4	55
8/1/2019	C. raciborskii	8	
8/1/2019	Anabaena Flos Aquae	10	
8/1/2019	astenonella	21	
8/1/2019	Anacystis cyanea	11	
8/9/2019	C. raciborskii	926	1087
8/9/2019	Nitzschia	82	
8/9/2019	Anabaenopsis	8	
8/9/2019	Anacystis	64	
8/9/2019	scenedesmus	1	
8/9/2019	spytegyta	5	
8/9/2019	astenonella	1	
8/14/2019	C. raciborskii	1181	1331
8/14/2019	Anacystis	66	
8/14/2019	Gomphosphaeria	4	
8/14/2019	Anabaenopsis	36	
8/14/2019	Nitzschia	44	
8/22/2019	Anabaenopsis	54	796
8/22/2019	C. raciborskii	537	
8/22/2019	Anacystis	93	
8/22/2019	Nitzschia	24	
8/22/2019	Leptolymbya	60	
8/22/2019	Euglena	1	
8/22/2019	pseudanabaena limnetica	25	
8/22/2019	scenedesmus	3	
8/30/2019	Anacystis cyanea	74	802
8/30/2019	Leptolyngbya	118	
8/30/2019	Anabaenopsis	65	
8/30/2019	Nitzschia	269	
8/30/2019	C. raciborskii	270	
8/30/2019	Anabaena Flos Aquae	6	
9/11/2019	Anacystis cyanea	49	3277
9/11/2019	Anabaenopsis	103	
9/11/2019	C. raciborskii	1244	
9/11/2019	Leptolyngbya	328	
9/16/2019	Anabaenopsis	229	
9/16/2019	C. raciborskii	1324	
9/16/2019	Anacystis	34	325
9/16/2019	Limnetica	258	
9/16/2019	Nitzschia	23	
9/16/2019	Leptolyngbya	9	
9/19/2019	Anabaenopsis	61	3365
9/19/2019	Anacystis cyanea	61	
9/19/2019	C. raciborskii	1287	
9/19/2019	Leptolyngbya	830	
9/19/2019	Limnetica	1126	
9/27/2019	C. raciborskii	450	3789
9/27/2019	Anacystis cyanea	78	
9/27/2019	Anabaenopsis	128	

3/23/2017	Nitzschia palea	1256	1515
9/27/2019	Euglena	33	
9/27/2019	Leptolyngbya	3100	
10/3/2019	C. raciborskii	373	3566
10/3/2019	Anabaenopsis	56	
10/3/2019	Anacystis cyanea	41	
10/3/2019	Leptolyngbya	3096	
11/1/2019	Leptolyngbya	1606	3224
11/1/2019	Nitzschia	483	
11/1/2019	C. raciborskii	217	
11/1/2019	Limnetica	919	
1/20/2020	Euglena	41	144
1/20/2020	trachelomonas	12	
1/20/2020	Anacystis dimidiata	92	
2/26/2020	Anacystis	222	481
2/26/2020	C. raciborskii	32	
2/26/2020	Leptolyngbya	169	
2/26/2020	Pediastrum	3	
2/26/2020	Closterium	22	
2/26/2020	scenedesmus	25	
2/26/2020	trachelomonas	7	
3/6/2020	Anacystis	232	887
3/6/2020	C. raciborskii	54	
3/6/2020	Leptolyngbya	304	
3/6/2020	scenedesmus	83	
3/6/2020	trachelomonas	8	
3/6/2020	Euglena	18	
3/6/2020	Limnetica	161	
3/6/2020	Closterium	22	
3/6/2020	Pediastrum	5	
3/24/2020	Pediastrum	6	417
3/24/2020	scenedesmus	89	
3/24/2020	Leptolyngbya	137	
3/24/2020	Limnetica	184	
4/2/2020	Limnetica	328	1376
4/2/2020	Leptolyngbya	351	
4/2/2020	scenedesmus	188	
4/2/2020	Pediastrum	5	
4/2/2020	oocystis	246	
4/2/2020	Anacystis	258	
4/24/2020	Pediastrum	21	2050
4/24/2020	scenedesmus	125	
4/24/2020	leptolyngbya	843	
4/24/2020	Limnetica	872	
4/24/2020	Anacystis	130	
4/24/2020	oocystis	59	
4/30/2020	Anabaenopsis	37	2521
4/30/2020	Leptolyngbya	973	
4/30/2020	Limnetica	1137	
4/30/2020	scenedesmus	197	
4/30/2020	Anacystis	81	
4/30/2020	oocystis	83	
4/30/2020	Pediastrum	13	
5/5/2020	Anacystis	156	1631
5/5/2020	Limnetica	1083	

3/23/2017	Nitzschia palea	1256	1515
5/5/2020	Niztschia	69	
5/5/2020	scenedesmus	25	
5/5/2020	Anabaenopsis	8	
5/5/2020	C. raciborskii	287	
5/5/2020	Pediastrum	2	
5/8/2020	Limnetica	2851	3168
5/8/2020	Anabaena Flos Aquae	24	
5/8/2020	Anabaenopsis	15	
5/8/2020	Anacystis	233	
5/8/2020	scenedesmus	43	
5/8/2020	Pediastrum	2	
5/12/2020	Anacystis	152	2426
5/12/2020	Anabaenopsis	35	
5/12/2020	Anabaena Flos Aquae	29	
5/12/2020	Anabaena Circinalis	44	
5/12/2020	Pediastrium	5	
5/12/2020	scenedesmus	28	
5/12/2020	Limnetica	2133	
5/14/2020	Anacystis	127	1175
5/14/2020	Anabaena Flos Aquae	79	
5/14/2020	Anabaenopsis	48	
5/14/2020	Limnetica	899	
5/14/2020	scenedesmus	20	
5/14/2020	pediastrum	2	
5/15/2020	Anacystis	104	3012
5/15/2020	Anabaena Flos Aquae	33	
5/15/2020	Anabaenopsis	35	
5/15/2020	Limnetica	2805	
5/15/2020	scenedesmus	14	
5/15/2020	Anabaena Circinalis	15	
5/15/2020	Pediastrum	6	
5/19/2020	Anacystis	259	3995
5/19/2020	Anabaenopsis	58	
5/19/2020	Anabaena Flos Aquae	22	
5/19/2020	Limnetica	1950	
5/19/2020	scenedesmus	16	
5/19/2020	Stauroncis	56	
5/19/2020	C. raciborskii	1593	
5/19/2020	Staurastrum	4	
5/19/2020	Rotifers	16	
5/19/2020	Anabaena Circinalis	5	
5/19/2020	Ciltratus	18	
5/20/2020	Anabaena Circinalis	21	1914
5/20/2020	Anacystis	42	
5/20/2020	Limnetica	785	
5/20/2020	Leptolyngbya	1026	
5/20/2020	Anabaenopsis	16	
5/20/2020	Anabaena spiroides	24	
5/21/2020	Euglena	1	2433
5/21/2020	scenedesmus	6	
5/21/2020	C. raciborskii	1759	
5/21/2020	Leptolyngbya	235	
5/21/2020	Limnetica	312	
5/21/2020	Anabaenopsis	17	

3/23/2017	Nitzschia palea	1256	1515
5/21/2020	Anabaena Circinalis	44	
5/21/2020	Nitzschia	55	
5/21/2020	Anabaena spiroides	6	
5/26/2020	Limnetica	898	3126
5/26/2020	Leptolyngbya	2176	
5/26/2020	Anabaenopsis	40	
5/26/2020	Anabaena spiroides	9	
5/26/2020	Anabaena Flos Aquae	3	
5/27/2020	C. raciborskii	830	7894
5/27/2020	Leptolyngbya	289	
5/27/2020	Nitzschia	63	
5/27/2020	Limnetica	715	
5/27/2020	Anacystis	166	
5/27/2020	Anabaena Circinalis	6	
5/27/2020	Anabaenopsis	15	
5/27/2020	scenedesmus	5	
5/27/2020	C. raciborskii	1261	
5/27/2020	Leptolyngbya	2556	
5/27/2020	Nitzschia	112	
5/27/2020	Limnetica	1676	
5/27/2020	Anacystis	170	
5/27/2020	Anabaenopsis	12	
5/27/2020	scenedesmus	19	
5/27/2020	Anabaena Circinalis	2	
6/3/2020	C. raciborskii	1404	6402
6/3/2020	Leptolyngbya	3500	
6/3/2020	Nitzschia	91	
6/3/2020	Limnetica	1021	
6/3/2020	Anacystis	331	
6/3/2020	Anabaenopsis	37	
6/3/2020	scenedesmus	10	
6/3/2020	Anabaena Circinalis	0	
6/3/2020	Anabaena Planctonica	8	
6/9/2020	C. raciborskii	501	2242
6/9/2020	Leptolyngbya	658	
6/9/2020	Limnetica	524	
6/9/2020	Nitzschia	181	
6/9/2020	Anacystis	281	
6/9/2020	scenedesmus	8	
6/9/2020	Anabaenopsis	67	
6/9/2020	Anabaena Circinalis	3	
6/9/2020	Anabaena Planctonica	19	
6/12/2020	Anacystis	148	5731
6/12/2020	scenedesmus	16	
6/12/2020	C. raciborskii	733	
6/12/2020	Anabaenopsis	130	
6/12/2020	Leptolyngbya	2056	
6/12/2020	Limnetica	2648	
6/16/2020	Anacystis	76	4131
6/16/2020	C. raciborskii	730	
6/16/2020	Anabaenopsis	69	
6/16/2020	Leptolyngbya	1333	
6/16/2020	Limnetica	1611	
6/16/2020	Nitzschia	287	

3/23/2017	Nitzschia palea	1256	1515
6/16/2020	Anabaena Planctonica	20	
6/16/2020	Anabaena Circinalis	6	
6/19/2020	Anabaena Planctonica	99	1989
6/19/2020	Anabaena Circinalis	9	
6/19/2020	Anabaenopsis	111	
6/19/2020	Anacystis	248	
6/19/2020	C. raciborskii	519	
6/19/2020	Leptolyngbya	313	
6/19/2020	Nitzschia	354	
6/19/2020	Limnetica	308	
6/19/2020	Carteria	23	
6/19/2020	Anabaena Flos Aquae	5	
6/23/2020	Anacystis	80	4194
6/23/2020	C. raciborskii	1349	
6/23/2020	Anabaenopsis	138	
6/23/2020	Anabaena Planctonica	83	
6/23/2020	Anabaena Circinalis	7	
6/23/2020	Nitzschia	500	
6/23/2020	Leptolyngbya	657	
6/23/2020	Limnetica	1380	
6/26/2020	Anacystis	18	346
6/26/2020	C. raciborskii	157	
6/26/2020	Anabaenopsis	10	
6/26/2020	Anabaena Planctonica	8	
6/26/2020	Anabaena Circinalis	0	
6/26/2020	Nitzschia	42	
6/26/2020	Leptolyngbya	46	
6/26/2020	Limnetica	65	
7/1/2020	Anabaena Planctonica	67	3197
7/1/2020	anabaena spiroides	4	
7/1/2020	Nitzschia	183	
7/1/2020	C. raciborskii	1311	
7/1/2020	Anacystis	209	
7/1/2020	Leptolyngbya	620	
7/1/2020	Limnetica	771	
7/1/2020	Anabaenopsis	25	
7/1/2020	Anabaena Circinalis	6	
7/7/2020	Anabaenopsis	56	3350
7/7/2020	C. raciborskii	1441	
7/7/2020	Anacystis	201	
7/7/2020	Nitzschia	93	
7/7/2020	Leptolyngbya	689	
7/7/2020	Limnetica	841	
7/7/2020	Anabaena Flos Aquae	3	
7/7/2020	Anabaena Circinalis	6	
7/7/2020	anabaena spiroides	22	
7/14/2020	Leptolyngbya	1778	7157
7/14/2020	Limnetica	1231	
7/14/2020	C. raciborskii	3759	
7/14/2020	Nitzschia	99	
7/14/2020	Anacystis	222	
7/14/2020	Anabaenopsis	66	
7/14/2020	Anabaena Circinalis	2	
7/14/2020	Anabaena Planctonica	0	

3/23/2017	Nitzschia palea	1256	1515
7/21/2020	Anabaena Flos Aquae	3	4224
7/21/2020	anabaena spiroides	1	
7/21/2020	Anacystis	176	
7/21/2020	Anabaenopsis	71	
7/21/2020	C. raciborskii	2552	
7/21/2020	Leptolyngbya	604	
7/21/2020	Limnetica	767	
7/21/2020	Nitzschia	51	
7/28/2020	Anacystis	87	5853
7/28/2020	C. raciborskii	2384	
7/28/2020	Nitzschia	31	
7/28/2020	Leptolyngbya	1824	
7/28/2020	Limnetica	1454	
7/28/2020	Anabaenopsis	56	
7/28/2020	Anabaena Circinalis	17	
8/4/2020	Anabaena Flos Aquae	1	2572
8/4/2020	Anabaenopsis	19	
8/4/2020	Nitzschia	79	
8/4/2020	Anacystis	113	
8/4/2020	C. raciborskii	1589	
8/4/2020	Leptolyngbya	226	
8/4/2020	Limnetica	546	
8/14/2020	Anabaenopsis	29	5642
8/14/2020	Anacystis	232	
8/14/2020	Nitzschia	29	
8/14/2020	C. raciborskii	2874	
8/14/2020	Leptolyngbya	1211	
8/14/2020	Limnetica	1267	
8/21/2020	Anacystis	38	4498
8/21/2020	C. raciborskii	2787	
8/21/2020	Leptolyngbya	963	
8/21/2020	Limnetica	639	
8/21/2020	anabaenopsis	44	
8/21/2020	Nitzschia	28	
9/3/2020	Anacystis	344	7569
9/3/2020	C. raciborskii	1759	
9/3/2020	Leptolyngbya	3046	
9/3/2020	Limnetica	2324	
9/3/2020	Anabaenopsis	53	
9/3/2020	Nitzschia	42	
9/18/2020	Anacystis	65	4926
9/18/2020	C. raciborskii	1296	
9/18/2020	leptolyngbya	2639	
9/18/2020	Limnetica	787	
9/18/2020	Anabaenopsis	49	
9/18/2020	Nitzschia	90	
9/23/2020	Anacystis	80	4831
9/23/2020	C. raciborskii	1065	
9/23/2020	leptolyngbya	2426	
9/23/2020	Limnetica	1093	
9/23/2020	Anabaenopsis	47	
9/23/2020	Nitzschia	106	
9/23/2020	Rodyphers	9	
9/23/2020	Anabaena Circinalis	6	

3/23/2017	Nitzschia palea	1256	1515
10/1/2020	Anacystis	167	2463
10/1/2020	Nitzschia	307	
10/1/2020	Leptolyngbya	759	
10/1/2020	Limnetica	102	
10/1/2020	Anabaenopsis	59	
10/1/2020	C. raciborskii	1069	
10/30/2020	Anacystis	83	3677
10/30/2020	C. raciborskii	1231	
10/30/2020	Nitzschia	455	
10/30/2020	scenedesmus	11	
10/30/2020	Anabaenopsis	44	
10/30/2020	Leptolyngbya	1315	
10/30/2020	Limnetica	537	
2/25/2021	Anacystis	47	3448
2/25/2021	C. raciborskii	1352	
2/25/2021	Leptolyngbya	1435	
2/25/2021	Limnetica	426	
2/25/2021	Nitzschia	155	
2/25/2021	Euglena	15	
2/25/2021	actinastrum	5	
2/25/2021	scenedesmus	11	
2/25/2021	Anabaenopsis	3	
4/15/2021	Anacystis	71	395
4/15/2021	Leptolyngbya	131	
4/15/2021	C. raciborskii	27	
4/15/2021	scenedesmus	5	
4/15/2021	Nitzschia	26	
4/15/2021	Limnetica	129	
4/15/2021	Anabaenopsis	4	
4/15/2021	Anabaena	3	
4/27/2021	Leptolyngbya	1472	2169
4/27/2021	Limnetica	620	
4/27/2021	Anacystis	41	
4/27/2021	Nitzschia	15	
4/27/2021	Anabaenopsis	10	
4/27/2021	Anabaena Circinalis	8	
4/27/2021	Anabaena Planctonica	2	
5/7/2021	Anabaena Flos Aquae	12	2132
5/7/2021	Anabaenopsis	56	
5/7/2021	Nitzschia	15	
5/7/2021	Leptolyngbya	426	
5/7/2021	Limnetica	1600	
5/7/2021	Anabaena Planctonica	16	
5/7/2021	Anabaena Circinalis	8	
5/18/2021	Leptolyngbya	6657	9098
5/18/2021	Limnetica	1426	
5/18/2021	Anacystis	19	
5/18/2021	Anabaenopsis	95	
5/18/2021	Anabaena Circinalis	68	
5/18/2021	Anabaena Planctonica	832	
5/20/2021	Leptolyngbya	9593	9948
5/20/2021	Anabaenopsis	43	
5/20/2021	Anabaena Circinalis	43	
5/20/2021	Anabaena Planctonica	270	

3/23/2017	Nitzschia palea	1256	1515
5/21/2021	Anabaenopsis	31	11162
5/21/2021	Anabaena Circinalis	23	
5/21/2021	Anabaena Planctonica	74	
5/21/2021	Anacystis	181	
5/21/2021	Leptolyngbya	10648	
5/21/2021	Limnetica	185	
5/21/2021	Anabaena Flos Aquae	11	
5/21/2021	anabaena spiroides	9	
5/26/2021	Leptolyngbya	5000	7680
5/26/2021	Anacystis	37	
5/26/2021	C. raciborskii	1111	
5/26/2021	Anabaenopsis	28	
5/26/2021	Anabaena Circinalis	6	
5/26/2021	Anabaena Planctonica	0	
5/26/2021	Leptolyngbya	1037	
5/26/2021	Anacystis	22	
5/26/2021	C. raciborskii	407	
5/26/2021	Anabaenopsis	29	
5/26/2021	Anabaena Circinalis	2	
5/26/2021	Anabaena Planctonica	0	
5/28/2021	Anabaenopsis	14	10969
5/28/2021	Anabaena Planctonica	2	
5/28/2021	Anacystis	219	
5/28/2021	Leptolyngbya	8463	
5/28/2021	Limnetica	2269	
5/28/2021	anabaena spiroides	1	
5/28/2021	Anabaena Circinalis	3	
6/2/2021	Leptolyngbya	25463	31070
6/2/2021	Anacysits	21	
6/2/2021	Anabaenopsis	57	
6/2/2021	Anabaena Planctonica	8	
6/2/2021	Limnetica	5278	
6/2/2021	C. raciborskii	231	
6/2/2021	Nitzschia	11	
6/10/2021	Anabaena Planctonica	89	2170
6/10/2021	Nitzschia	69	
6/10/2021	Anacystis	122	
6/10/2021	Anabaena Circinalis	4	
6/10/2021	C. raciborskii	1437	
6/10/2021	Leptolyngbya	278	
6/10/2021	Limnetica	165	
6/10/2021	Anabaenopsis	6	
6/15/2021	Anabaena Planctonica	656	3822
6/15/2021	Anabaena Circinalis	46	
6/15/2021	C. raciborskii	2644	
6/15/2021	Leptolyngbya	157	
6/15/2021	Limnetica	311	
6/15/2021	Anabaenopsis	8	
6/21/2021	Anabaena Circinalis	11	3994
6/21/2021	Anabaena Planctonica	7	
6/21/2021	Nitzschia	6	
6/21/2021	C. raciborskii	3093	
6/21/2021	Leptolyngbya	372	
6/21/2021	Limnetica	395	

3/23/2017	Nitzschia palea	1256	1515
6/21/2021	Anabaenopsis	109	
6/29/2021	Anabaena Circinalis	27	3029
6/29/2021	Anabaenopsis	51	
6/29/2021	Anacystis	123	
6/29/2021	Nitzschia	14	
6/29/2021	Leptolyngbya	320	
6/29/2021	Limnetica	659	
6/29/2021	C. raciborskii	1824	
6/29/2021	Anabaena Planctonica	10	
6/30/2021	Anabaena Circinalis	26	5131
6/30/2021	Nitzschia	12	
6/30/2021	C. raciborskii	2000	
6/30/2021	Anacystis	111	
6/30/2021	Anabaenopsis	88	
6/30/2021	Leptolyngbya	1615	
6/30/2021	Limnetica	1265	
6/30/2021	Anabaena Planctonica	14	
7/6/2021	Anabaena Planctonica	8	1315
7/6/2021	Nitzschia	25	
7/6/2021	Anacystis	94	
7/6/2021	Anabaenopsis	65	
7/6/2021	C. raciborskii	954	
7/6/2021	Leptolyngbya	66	
7/6/2021	Limnetica	102	
7/6/2021	Anabaena Circinalis	2	
7/16/2021	Nitzschia	31	2279
7/16/2021	Anacystis	150	
7/16/2021	Anabaenopsis	46	
7/16/2021	C. raciborskii	1231	
7/16/2021	Leptolyngbya	238	
7/16/2021	scenedesmus	7	
7/16/2021	Limnetica	574	
7/23/2021	Leptolyngbya	1574	3612
7/23/2021	Limnetica	556	
7/23/2021	Anacystis	33	
7/23/2021	C. raciborskii	1306	
7/23/2021	Anabaenopsis	106	
7/23/2021	Anabaena Planctonica	5	
7/23/2021	Nitzschia	32	
8/13/2021	Nitzschia	27	2389
8/13/2021	Anacystis	74	
8/13/2021	Anabaenopsis	359	
8/13/2021	C. raciborskii	581	
8/13/2021	Leptolyngbya	480	
8/13/2021	Limnetica	866	
8/13/2021	scenedesmus	2	
8/20/2021	Leptolyngbya	1593	3030
8/20/2021	Limnetica	315	
8/20/2021	Anacystis	31	
8/20/2021	C. raciborskii	1028	
8/20/2021	Anabaenopsis	44	
8/20/2021	Nitzschia	19	
8/27/2021	Leptolymbya	1361	3104
8/27/2021	Limnetica	1047	

3/23/2017	Nitzschia palea	1256	1515
8/27/2021	C. raciborskii	453	
8/27/2021	Anabaenopsis	201	
8/27/2021	Anacystis	19	
8/27/2021	Nitzschia	17	
8/27/2021	scenedesmus	1	
8/27/2021	Closterium	6	
9/10/2021	Leptolyngbya	1054	2194
9/10/2021	Limnetica	459	
9/10/2021	C. raciborskii	371	
9/10/2021	Anabaenopsis	231	
9/10/2021	Anacystis	20	
9/10/2021	Nitzschia	58	
9/17/2021	Leptolyngbya	4287	6186
9/17/2021	Limnetica	694	
9/17/2021	Anacystis	33	
9/17/2021	C. raciborskii	1074	
9/17/2021	Nitzschia	39	
9/17/2021	Anabaenopsis	58	
10/1/2021	Leptolyngbya	3519	6093
10/1/2021	Limnetica	694	
10/1/2021	Anacystis	34	
10/1/2021	C. raciborskii	1759	
10/1/2021	Nitzschia	64	
10/1/2021	Anabaenopsis	22	
10/22/2021	Nitzschia	203	3243
10/22/2021	Anacystis	198	
10/22/2021	Anabaenopsis	87	
10/22/2021	C. raciborskii	607	
10/22/2021	Leptolyngbya	899	
10/22/2021	Limnetica	1244	
10/22/2021	Anabaena Circinalis	4	
11/5/2021	Nitzschia	306	4926
11/5/2021	Anacystis	69	
11/5/2021	Anabaenopsis	135	
11/5/2021	C. raciborskii	840	
11/5/2021	Leptolyngbya	2211	
11/5/2021	Limnetica	1366	
11/19/2021	Nitzschia	497	3081
11/19/2021	Anacystis	120	
11/19/2021	Anabaenopsis	115	
11/19/2021	C. raciborskii	885	
11/19/2021	Leptolyngbya	976	
11/19/2021	Limnetica	483	
11/19/2021	Anabaena spiroides	4	
12/3/2021	Nitzschia	30	2647
12/3/2021	Anacystis	204	
12/3/2021	Anabaenopsis	346	
12/3/2021	C. raciborskii	618	
12/3/2021	Leptolyngbya	885	
12/3/2021	Limnetica	496	
12/3/2021	scenedesmus	11	
12/3/2021	Anabaena spiroides	57	
12/16/2021	Leptolyngbya	954	1369
12/16/2021	Limnetica	213	

3/23/2017	Nitzschia palea	1256	1515
12/16/2021	Anacystis	39	
12/16/2021	C. raciborskii	139	
12/16/2021	Nitzschia	14	
12/16/2021	Anabaenopsis	11	

SWL	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units	Depth (Ft)
	03/23/17	ND<5	ND<5	ng/L	19
	04/06/17	ND<5	ND<5	ng/L	10
	04/12/17	ND<5	ND<5	ng/L	10
	04/21/17	ND<5	ND<5	ng/L	10
	04/27/17	ND<5	ND<5	ng/L	10
	05/03/17	ND<5	ND<5	ng/L	9
	05/12/17	ND<5	ND<5	ng/L	9
	05/18/17	ND<5	ND<5	ng/L	9
	05/25/17	ND<5	ND<5	ng/L	9
	06/02/17	ND<5	27	ng/L	8
	06/08/17	ND<5	51	ng/L	8
	06/15/17	ND<5	80	ng/L	8
	06/21/17	ND<5	17	ng/L	7
	06/30/17	ND<5	6	ng/L	7
	07/03/17	ND<5	ND<5	ng/L	6
	07/12/17	ND<5	ND<5	ng/L	6
	07/19/17	ND<5	ND<5	ng/L	6
	07/27/17	ND<5	ND<5	ng/L	6
	08/03/17	ND<5	6	ng/L	6
	08/10/17	ND<5	8	ng/L	5
	08/17/17	ND<5	ND<5	ng/L	5
	08/24/17	ND<5	9	ng/L	5
	08/30/17	ND<5	8	ng/L	5
	09/07/17	ND<5	ND<5	ng/L	5
	09/14/17	ND<5	ND<5	ng/L	5
	09/21/17	ND<5	5	ng/L	4
	09/27/17	ND<5	7	ng/L	4
	10/05/17	12	12	ng/L	3
	10/11/17	10	9	ng/L	3
	10/20/17	ND<5	ND<5	ng/L	7
	10/26/17	ND<5	ND<5	ng/L	4.5
	11/02/17	6	7	ng/L	3.5
	11/29/17	ND<5	ND<5	ng/L	2.5
	12/07/17	ND<5	ND<5	ng/L	2.56
	12/14/17	ND<5	ND<5	ng/L	2.09
	12/28/17	ND<5	ND<5	ng/L	3.98
	01/12/18	ND<5	ND<5	ng/L	3.46
	01/18/18	ND<5	ND<5	ng/L	3.25
	01/25/18	ND<5	ND<5	ng/L	2.96
	03/29/18	ND<5	ND<5	ng/L	2.69
	05/03/18	ND<5	ND<5	ng/L	4.94
	05/17/18	ND<5	ND<5	ng/L	4.13
	05/24/18	ND	ND	ng/L	3.72
	05/30/18	ND	ND	ng/L	3.3
	06/07/18	ND	ND	ng/L	2.6
	06/15/18	ND	ND	ng/L	4.55
	06/21/18	ND	ND	ng/L	4.02
	06/27/18	ND	ND	ng/L	3.58

	Sample	MIB	Geosmin		Depth
SWL	Date	(ng/L)	(ng/L)	Units	(Ft)
	07/19/18	ND	ND	ng/L	4.12
	08/02/18	ND	11	ng/L	3.94
	08/22/18	ND	ND	ng/L	3.64
	09/21/18	ND	ND	ng/L	2.3
	09/26/18	ND	ND	ng/L	2.1
	10/04/18	ND	ND	ng/L	4.2
	10/18/18	ND	ND	ng/L	3.6
	11/02/18	ND	ND	ng/L	3.5
	11/08/18	ND	ND	ng/L	3.6
	01/17/19	ND	ND	ng/L	4.61
	01/25/19	ND	ND	ng/L	4.68
	01/30/19	ND	ND	ng/L	4.68
	02/07/19	ND	ND	ng/L	7.2
	03/07/19	ND	ND	ng/L	11.51
	03/28/19	ND	ND	ng/L	7.84
	04/05/19	ND	ND	ng/L	7.55
	04/11/19	ND	ND	ng/L	7.29
	04/18/19	ND	ND	ng/L	6.83
	04/25/19	ND	ND	ng/L	6.49
	05/03/19	ND	ND	ng/L	6.04
	05/09/19	ND	ND	ng/L	
	05/16/19	ND	ND	ng/L	5.39
	05/24/19	ND	ND	ng/L	5.08
	05/30/19	ND	6	ng/L	4.83
	06/06/19	ND	5	ng/L	4.44
	06/20/19	ND	ND	ng/L	3.53
	06/27/19	ND	ND	ng/L	5.6
	07/03/19	ND	ND	ng/L	5.2
	07/08/19	ND	ND	ng/L	4.84
	07/09/19	ND	6	ng/L	4.76
	07/10/19	ND	ND	ng/L	4.62
	07/16/19	ND	ND	ng/L	3.9
	07/19/19	ND	ND	ng/L	4.02
	07/24/19	ND	ND	ng/L	3.69
	08/01/19	ND	ND	ng/L	3.1
	08/08/19	ND	ND	ng/L	2.7
	08/15/19	ND	ND	ng/L	2.1
	08/20/19	ND	ND	ng/L	1.81
	08/29/19	ND	ND	ng/L	3.74
	09/05/19	ND	ND	ng/L	
	09/19/19	ND	ND	ng/L	2.4
	09/25/19	ND	ND	ng/L	2.09
	10/02/19	ND	ND	ng/L	4.12
	11/21/19	ND	ND	ng/L	3.8
	01/21/20	ND	ND	ng/L	
	02/06/20	ND	ND	ng/L	
	02/27/20	ND	ND	ng/L	
	03/12/20	ND	ND	ng/L	
	03/24/20	ND	ND	ng/L	
	04/02/20	ND	ND	ng/L	

SWL	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units	Depth (Ft)
	04/22/20	ND	ND	ng/L	9.84
	05/01/20	ND	8	ng/L	9.72
	05/05/20	ND	26	ng/L	9.61
	05/06/20	ND	ND	ng/L	
	05/12/20	ND	51	ng/L	
	05/14/20	ND	77	ng/L	
	05/19/20	ND	14	ng/L	
	05/21/20	ND	73	ng/L	
	05/27/20	ND	48	ng/L	
	05/28/20	ND	28	ng/L	
	06/02/20	ND	5	ng/L	
	06/09/20	ND	ND	ng/L	8.8
	06/16/20	ND	ND	ng/L	8.32
	06/23/20	ND	ND	ng/L	
	07/01/20	ND	ND	ng/L	7.32
	07/07/20	ND	ND	ng/L	6.87
	07/15/20	ND	ND	ng/L	6.18
	07/22/20	ND	ND	ng/L	5.55
	07/29/20	ND	ND	ng/L	4.90
	08/04/20	ND	ND	ng/L	4.62
	08/12/20	ND	ND	ng/L	4.30
	08/18/20	ND	ND	ng/L	4.00
	09/09/20	ND	ND	ng/L	5.52
	09/15/20	ND	ND	ng/L	5.30
	09/23/20	ND	ND	ng/L	4.70
	10/21/20	ND	ND	ng/L	3.74
	10/28/20	ND	ND	ng/L	3.50
	11/04/20	ND	ND	ng/L	3.22
	11/11/20	ND	ND	ng/L	3.03
	11/18/20	ND	ND	ng/L	2.82
	11/24/20	ND	ND	ng/L	5.15
	12/22/20	ND	ND	ng/L	4.90
	02/25/21	ND	ND	ng/L	8.90
	03/24/21	ND	ND	ng/L	8.46
	04/28/21	ND	ND	ng/L	6.66
	05/12/21	ND	27	ng/L	5.80
	05/18/21	ND	93	ng/L	5.56
	05/20/21	ND	100	ng/L	5.49
	05/27/21	ND	45	ng/L	5.30
	06/01/21	ND	11	ng/L	5.26
	06/08/21	ND	ND	ng/L	5.00
	06/15/21	ND	26	ng/L	4.54
	06/17/21	ND	36	ng/L	4.40
	06/21/21	ND	55	ng/L	4.12
	06/24/21	ND	25	ng/L	3.98
	07/06/21	ND	10	ng/L	3.66
	07/14/21	ND	ND	ng/L	3.28
	07/27/21	ND	ND	ng/L	4.52
	08/10/21	ND	ND	ng/L	3.50
	08/17/21	ND	ND	ng/L	5.50

	Sample	MIB	Geosmin		Depth
SWL	Date	(ng/L)	(ng/L)	Units	(Ft)
	08/26/21	ND	ND	ng/L	5.00
	09/02/21	ND	ND	ng/L	4.70
	09/09/21	ND	ND	ng/L	4.38
	09/14/21	ND	ND	ng/L	4.30
	09/23/21	ND	5	ng/L	4.18
	09/28/21	ND	26	ng/L	4.10
	09/30/21	ND	8	ng/L	4.14
	10/13/21	ND	9	ng/L	4.08
	10/21/21	ND	8	ng/L	3.95
	10/27/21	ND	ND	ng/L	3.90
	11/17/21	ND	ND	ng/L	5.38
	12/02/21	ND	ND	ng/L	4.94
		ND	ND		
		12	100		
		ND	ND		
		ND	ND		

Clearwell Effluent	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units
	10/20/17	ND<5	ND<5	ng/L
	06/02/17	ND<5	26	ng/L
	06/08/17	ND<5	ND<5	ng/L
	06/15/17	ND<5	46	ng/L
	06/21/17	ND<5	11	ng/L
	06/30/17	ND<5	ND<5	ng/L
	07/03/17	ND<5	ND<5	ng/L
	07/12/17	ND<5	ND<5	ng/L
	07/19/17	ND<5	ND<5	ng/L
	07/27/17	ND<5	ND<5	ng/L
	08/03/17	ND<5	ND<5	ng/L
	08/10/17	ND<5	7	ng/L
	08/17/17	ND<5	ND<5	ng/L
	08/24/17	ND<5	ND<5	ng/L
	08/30/17	ND<5	ND<5	ng/L
	09/07/17	ND<5	ND<5	ng/L
	09/14/17	ND<5	ND<5	ng/L
	09/21/17	ND<5	ND<5	ng/L
	09/27/17	12	10	ng/L
	10/05/17	37	7	ng/L
	10/11/17	20	6	ng/L
	10/20/17	ND<5	ND<5	ng/L
	10/26/17	ND<5	ND<5	ng/L
	11/02/17	9	ND<5	ng/L
	11/29/17	ND<5	ND<5	ng/L
	12/07/17	ND<5	ND<5	ng/L
	12/14/17	ND<5	ND<5	ng/L
	12/28/17	ND<5	ND<5	ng/L
	01/12/18	ND<5	ND<5	ng/L
	01/18/18	ND<5	ND<5	ng/L
	01/25/18	ND<5	ND<5	ng/L
	03/29/18	ND<5	ND<5	ng/L
	05/03/18	ND<5	ND<5	ng/L
	05/17/18	ND<5	ND<5	ng/L
	05/24/18	ND	ND	ng/L
	05/30/18	ND	ND	ng/L
	06/07/18	ND	ND	ng/L
	06/15/18	ND	ND	ng/L
	06/21/18	ND	ND	ng/L
	06/27/18	ND	ND	ng/L
	07/19/18	ND	ND	ng/L
	08/02/18	ND	6	ng/L
	08/22/18	ND	ND	ng/L
	09/21/18	ND	ND	ng/L
	09/26/18	7	ND	ng/L
	10/04/18	ND	ND	ng/L
	10/18/18	ND	ND	ng/L
	11/02/18	ND	ND	ng/L

Clearwell Effluent	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units
	11/08/18	ND	ND	ng/L
	01/17/19	ND	ND	ng/L
	01/25/19	ND	ND	ng/L
	01/30/19	ND	ND	ng/L
	02/07/19	ND	ND	ng/L
	03/07/19	ND	ND	ng/L
	03/28/19	ND	ND	ng/L
	04/05/19	ND	ND	ng/L
	04/11/19	ND	ND	ng/L
	04/18/19	ND	ND	ng/L
	04/25/19	ND	ND	ng/L
	05/03/19	ND	ND	ng/L
	05/09/19	ND	ND	ng/L
	05/16/19	ND	ND	ng/L
	05/24/19	ND	ND	ng/L
	05/30/19	ND	ND	ng/L
	06/06/19	ND	12	ng/L
	06/20/19	ND	9	ng/L
	06/27/19	ND	ND	ng/L
	07/03/19	ND	6	ng/L
	07/08/19	ND	21	ng/L
	07/09/19	ND	31	ng/L
	07/10/19	ND	27	ng/L
	07/16/19	ND	ND	ng/L
	07/19/19	ND	ND	ng/L
	07/24/19	ND	ND	ng/L
	08/01/19	ND	ND	ng/L
	08/08/19	ND	ND	ng/L
	08/15/19	ND	ND	ng/L
	08/20/19	ND	ND	ng/L
	08/29/19	ND	ND	ng/L
	09/05/19	ND	ND	ng/L
	09/19/19	ND	ND	ng/L
	09/25/19	ND	ND	ng/L
	10/02/19	ND	ND	ng/L
	11/21/19	ND	ND	ng/L
	01/21/20	ND	ND	ng/L
	02/06/20	ND	ND	ng/L
	02/27/20	ND	ND	ng/L
	03/12/20	ND	ND	ng/L
	03/24/20	ND	ND	ng/L
	04/02/20	ND	ND	ng/L
	04/22/20	ND	ND	ng/L
	05/01/20	ND	ND	ng/L
	05/05/20	ND	5	ng/L
	05/06/20	ND	5	ng/L
	05/12/20	ND	10	ng/L
	05/14/20	ND	13	ng/L
	05/19/20	ND	ND	ng/L
	05/21/20	ND	ND	ng/L

Clearwell Effluent	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units
	05/27/20	ND	ND	ng/L
	05/28/20	ND	ND	ng/L
	06/02/20	ND	ND	ng/L
	06/09/20	ND	ND	ng/L
	06/16/20	ND	ND	ng/L
	06/23/20	ND	ND	ng/L
	07/01/20	ND	ND	ng/L
	07/07/20	ND	ND	ng/L
	07/15/20	ND	ND	ng/L
	07/22/20	ND	ND	ng/L
	07/29/20	ND	ND	ng/L
	08/04/20	ND	ND	ng/L
	08/12/20	ND	ND	ng/L
	08/18/20	ND	ND	ng/L
	09/09/20	ND	ND	ng/L
	09/15/20	ND	ND	ng/L
	09/23/20	ND	ND	ng/L
	10/21/20	ND	ND	ng/L
	10/28/20	ND	ND	ng/L
	11/04/20	ND	ND	ng/L
	11/11/20	ND	ND	ng/L
	11/18/20	ND	ND	ng/L
	11/24/20	ND	ND	ng/L
	12/22/20	ND	ND	ng/L
	02/25/21	ND	ND	ng/L
	03/24/21	ND	ND	ng/L
	04/28/21	ND	ND	ng/L
	05/12/21	ND	23	ng/L
	05/18/21	ND	14	ng/L
	05/20/21	ND	20	ng/L
	05/27/21	ND	ND	ng/L
	06/01/21	ND	ND	ng/L
	06/08/21	ND	6	ng/L
	06/15/21	ND	25	ng/L
	06/17/21	ND	35	ng/L
	06/21/21	ND	40	ng/L
	06/24/21	ND	17	ng/L
	07/06/21	ND	ND	ng/L
	07/14/21	ND	ND	ng/L
	07/27/21	ND	ND	ng/L
	08/10/21	ND	6	ng/L
	08/17/21	ND	ND	ng/L
	08/26/21	ND	ND	ng/L
	09/02/21	ND	ND	ng/L
	09/09/21	ND	ND	ng/L
	09/14/21	ND	ND	ng/L
	09/23/21	ND	ND	ng/L
	09/28/21	6	ND	ng/L
	09/30/21	ND	ND	ng/L
	10/13/21	ND	ND	ng/L

Clearwell Effluent	Sample Date	MIB (ng/L)	Geosmin (ng/L)	Units
	10/21/21	ND	ND	ng/L
	10/27/21	ND	ND	ng/L
	11/17/21	ND	ND	ng/L
	12/02/21	ND	ND	ng/L
	06/02/20	ND	ND	ng/L
		ND	ND	
		37	46	
		ND	ND	

Date Sampled	Sample Point	Sample Point ID #	Compound	Method	ppb	MRL	Units
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Anatoxin-a	545	ND	0.03	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Cylindrospermopsin	545	ND	0.09	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LA	544	NA	0.008	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LF	544	NA	0.006	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LR	544	NA	0.02	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-LY	544	NA	0.009	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-RR	544	NA	0.006	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Microcystin-YR	544	NA	0.02	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Nodularin	544	NA	0.005	ug/L
4/3/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
4/17/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
5/7/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
5/21/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
6/4/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
6/27/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
7/2/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
7/18/2019	Sweetwater Reservoir (not UCMR4)	NA	Total Microcystins	546	ND	0.3	ug/L
11/14/2018	Perdue WTP Source Water Influent	3710025815	Bromide	300.0	81	5	ug/L
2/13/2019	Perdue WTP Source Water Influent	3710025815	Bromide	300.0	420	25	ug/L
5/15/2019	Perdue WTP Source Water Influent	3710025815	Bromide	300.0	340	25	ug/L
8/14/2019	Perdue WTP Source Water Influent	3710025815	Bromide	300.0	420	25	ug/L
11/14/2018	Perdue WTP Source Water Influent	3710025815	Total Organic Carbon	5310C	2.9	0.3	mg/L
2/13/2019	Perdue WTP Source Water Influent	3710025815	Total Organic Carbon	5310C	8.3	0.3	mg/L
5/15/2019	Perdue WTP Source Water Influent	3710025815	Total Organic Carbon	5310C	12.0	0.6	mg/L
8/14/2019	Perdue WTP Source Water Influent	3710025815	Total Organic Carbon	5310C	11.0	0.6	mg/L

10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	1-Butanol	541	ND	2	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	1-Butanol	541	ND	2	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	1-Butanol	541	ND	2	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	1-Butanol	541	ND	2	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Methoxyethanol	541	ND	0.4	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Methoxyethanol	541	ND	0.4	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Methoxyethanol	541	ND	0.4	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Methoxyethanol	541	ND	0.4	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Propen-1-ol	541	ND	0.5	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Propen-1-ol	541	ND	0.5	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Propen-1-ol	541	ND	0.5	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	2-Propen-1-ol	541	ND	0.5	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	alpha-HCH	525.3	ND	0.01	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	alpha-HCH	525.3	ND	0.01	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	alpha-HCH	525.3	ND	0.01	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	alpha-HCH	525.3	ND	0.01	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Anatoxin-a	545	ND	0.03	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Butylated hydroxyanisole	530	ND	0.03	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Butylated hydroxyanisole	530	ND	0.03	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Butylated hydroxyanisole	530	ND	0.03	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Butylated hydroxyanisole	530	ND	0.03	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Chlorpyrifos	525.3	ND	0.03	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Chlorpyrifos	525.3	ND	0.03	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Chlorpyrifos	525.3	ND	0.03	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Chlorpyrifos	525.3	ND	0.03	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Cylindrospermopsin	545	ND	0.09	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Dimethipin	525.3	ND	0.2	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Dimethipin	525.3	ND	0.2	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Dimethipin	525.3	ND	0.2	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Dimethipin	525.3	ND	0.2	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Ethoprop	525.3	ND	0.03	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Ethoprop	525.3	ND	0.03	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Ethoprop	525.3	ND	0.03	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Ethoprop	525.3	ND	0.03	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Germanium	200.8	ND	0.3	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Germanium	200.8	ND	0.3	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Germanium	200.8	ND	0.3	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Germanium	200.8	ND	0.3	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Manganese	200.8	0.85	0.4	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Manganese	200.8	ND	0.4	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Manganese	200.8	3.00	0.4	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Manganese	200.8	3.00	0.4	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LA	544	NA	0.008	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LF	544	NA	0.006	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LR	544	NA	0.02	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-LY	544	NA	0.009	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L

5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-RR	544	NA	0.006	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Microcystin-YR	544	NA	0.02	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Nodularin	544	NA	0.005	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	O-Toluidine	530	ND	0.007	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	O-Toluidine	530	ND	0.007	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	O-Toluidine	530	ND	0.007	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	O-Toluidine	530	ND	0.007	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Oxyfluorfen	525.3	ND	0.05	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Oxyfluorfen	525.3	ND	0.05	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Oxyfluorfen	525.3	ND	0.05	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Oxyfluorfen	525.3	ND	0.05	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Profenofos	525.3	ND	0.3	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Profenofos	525.3	ND	0.3	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Profenofos	525.3	ND	0.3	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Profenofos	525.3	ND	0.3	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Quinoline	530	ND	0.02	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Quinoline	530	ND	0.02	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Quinoline	530	ND	0.02	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Quinoline	530	ND	0.02	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tebuconazole	525.3	ND	0.2	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tebuconazole	525.3	ND	0.2	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tebuconazole	525.3	ND	0.2	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tebuconazole	525.3	ND	0.2	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
4/17/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
5/7/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
5/21/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
6/4/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
6/27/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
7/18/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Microcystins	546	ND	0.3	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
10/3/2018	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tribufos	525.3	ND	0.07	ug/L
1/10/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tribufos	525.3	ND	0.07	ug/L
4/3/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tribufos	525.3	ND	0.07	ug/L
7/2/2019	Perdue Clearwell Effluent (EPDS # 5)	3710025802	Tribufos	525.3	ND	0.07	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	1-Butanol	541	ND	2	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	1-Butanol	541	ND	2	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	2-Methoxyethanol	541	ND	0.4	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	2-Methoxyethanol	541	ND	0.4	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	2-Propen-1-ol	541	ND	0.5	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	2-Propen-1-ol	541	ND	0.5	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	alpha-HCH	525.3	ND	0.01	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	alpha-HCH	525.3	ND	0.01	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Butylated hydroxyanisole	530	ND	0.03	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Butylated hydroxyanisole	530	ND	0.03	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Chlorpyrifos	525.3	ND	0.03	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Chlorpyrifos	525.3	ND	0.03	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Dimethipin	525.3	ND	0.2	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Dimethipin	525.3	ND	0.2	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Ethoprop	525.3	ND	0.03	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Ethoprop	525.3	ND	0.03	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Germanium	200.8	ND	0.3	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Germanium	200.8	ND	0.3	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Manganese	200.8	9.80	0.4	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Manganese	200.8	10	0.4	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	O-Toluidine	530	ND	0.007	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	O-Toluidine	530	ND	0.007	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Oxyfluorfen	525.3	ND	0.05	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Oxyfluorfen	525.3	ND	0.05	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Profenofos	525.3	ND	0.3	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Profenofos	525.3	ND	0.3	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Quinoline	530	ND	0.02	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Quinoline	530	ND	0.02	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Tebuconazole	525.3	ND	0.2	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Tebuconazole	525.3	ND	0.2	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
10/3/2018	National City Wells Plant Effluent (EPDS # 19)	3710025803	Tribufos	525.3	ND	0.07	ug/L
4/3/2019	National City Wells Plant Effluent (EPDS # 19)	3710025803	Tribufos	525.3	ND	0.07	ug/L

11/14/2018	Naples & Melrose	3710025905	Bromochloroacetic acid	552.3	2.70	0.3	ug/L
2/13/2019	Naples & Melrose	3710025905	Bromochloroacetic acid	552.3	2.60	0.3	ug/L
5/15/2019	Naples & Melrose	3710025905	Bromochloroacetic acid	552.3	16.00	0.3	ug/L
8/14/2019	Naples & Melrose	3710025905	Bromochloroacetic acid	552.3	18.00	0.3	ug/L
11/14/2018	Naples & Melrose	3710025905	Bromodichloroacetic acid	552.3	0.93	0.5	ug/L
2/13/2019	Naples & Melrose	3710025905	Bromodichloroacetic acid	552.3	0.60	0.5	ug/L
5/15/2019	Naples & Melrose	3710025905	Bromodichloroacetic acid	552.3	3.80	0.5	ug/L
8/14/2019	Naples & Melrose	3710025905	Bromodichloroacetic acid	552.3	3.80	0.5	ug/L
11/14/2018	Naples & Melrose	3710025905	Chlorodibromoacetic acid	552.3	0.76	0.3	ug/L
2/13/2019	Naples & Melrose	3710025905	Chlorodibromoacetic acid	552.3	0.56	0.3	ug/L
5/15/2019	Naples & Melrose	3710025905	Chlorodibromoacetic acid	552.3	2.00	0.3	ug/L
8/14/2019	Naples & Melrose	3710025905	Chlorodibromoacetic acid	552.3	2.50	0.3	ug/L
11/14/2018	Naples & Melrose	3710025905	Dibromoacetic acid	552.3	2.20	0.3	ug/L
2/13/2019	Naples & Melrose	3710025905	Dibromoacetic acid	552.3	3.10	0.3	ug/L
5/15/2019	Naples & Melrose	3710025905	Dibromoacetic acid	552.3	5.70	0.3	ug/L
8/14/2019	Naples & Melrose	3710025905	Dibromoacetic acid	552.3	7.70	0.3	ug/L
11/14/2018	Naples & Melrose	3710025905	Dichloroacetic acid	552.3	3.50	0.2	ug/L
2/13/2019	Naples & Melrose	3710025905	Dichloroacetic acid	552.3	2.00	0.2	ug/L
5/15/2019	Naples & Melrose	3710025905	Dichloroacetic acid	552.3	23.00	0.2	ug/L
8/14/2019	Naples & Melrose	3710025905	Dichloroacetic acid	552.3	21.00	0.2	ug/L
11/14/2018	Naples & Melrose	3710025905	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	Naples & Melrose	3710025905	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	Naples & Melrose	3710025905	Monobromoacetic acid	552.3	0.64	0.3	ug/L
8/14/2019	Naples & Melrose	3710025905	Monobromoacetic acid	552.3	0.33	0.3	ug/L
11/14/2018	Naples & Melrose	3710025905	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	Naples & Melrose	3710025905	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	Naples & Melrose	3710025905	Monochloroacetic acid	552.3	3.50	2	ug/L
8/14/2019	Naples & Melrose	3710025905	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	Naples & Melrose	3710025905	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	Naples & Melrose	3710025905	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	Naples & Melrose	3710025905	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	Naples & Melrose	3710025905	Tribromoacetic acid	552.3	3.80	2	ug/L
11/14/2018	Naples & Melrose	3710025905	Trichloroacetic acid	552.3	1.10	0.5	ug/L
2/13/2019	Naples & Melrose	3710025905	Trichloroacetic acid	552.3	0.58	0.5	ug/L
5/15/2019	Naples & Melrose	3710025905	Trichloroacetic acid	552.3	3.80	0.5	ug/L
8/14/2019	Naples & Melrose	3710025905	Trichloroacetic acid	552.3	2.70	0.5	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Bromochloroacetic acid	552.3	3.80	0.3	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Bromochloroacetic acid	552.3	3.90	0.3	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Bromochloroacetic acid	552.3	16.00	0.3	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Bromochloroacetic acid	552.3	20.00	0.3	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Bromodichloroacetic acid	552.3	1.50	0.5	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Bromodichloroacetic acid	552.3	0.94	0.5	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Bromodichloroacetic acid	552.3	4.10	0.5	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Bromodichloroacetic acid	552.3	4.10	0.5	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Chlorodibromoacetic acid	552.3	1.20	0.3	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Chlorodibromoacetic acid	552.3	0.75	0.3	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Chlorodibromoacetic acid	552.3	2.20	0.3	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Chlorodibromoacetic acid	552.3	2.80	0.3	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Dibromoacetic acid	552.3	2.40	0.3	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Dibromoacetic acid	552.3	4.20	0.3	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Dibromoacetic acid	552.3	5.80	0.3	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Dibromoacetic acid	552.3	8.80	0.3	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Dichloroacetic acid	552.3	4.40	0.2	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Dichloroacetic acid	552.3	3.00	0.2	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Dichloroacetic acid	552.3	24.00	0.2	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Dichloroacetic acid	552.3	22.00	0.2	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Monobromoacetic acid	552.3	0.61	0.3	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Monobromoacetic acid	552.3	0.33	0.3	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Monochloroacetic acid	552.3	3.50	2	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Tribromoacetic acid	552.3	3.60	2	ug/L
11/14/2018	Lynwood & Holly Way	3710025907	Trichloroacetic acid	552.3	1.60	0.5	ug/L
2/13/2019	Lynwood & Holly Way	3710025907	Trichloroacetic acid	552.3	0.89	0.5	ug/L
5/15/2019	Lynwood & Holly Way	3710025907	Trichloroacetic acid	552.3	4.10	0.5	ug/L
8/14/2019	Lynwood & Holly Way	3710025907	Trichloroacetic acid	552.3	3.00	0.5	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Bromochloroacetic acid	552.3	0.78	0.3	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Bromochloroacetic acid	552.3	0.55	0.3	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Bromochloroacetic acid	552.3	12.00	0.3	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Bromochloroacetic acid	552.3	11.00	0.3	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Bromodichloroacetic acid	552.3	2.80	0.5	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Bromodichloroacetic acid	552.3	2.30	0.5	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Chlorodibromoacetic acid	552.3	0.46	0.3	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Chlorodibromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Chlorodibromoacetic acid	552.3	1.90	0.3	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Chlorodibromoacetic acid	552.3	1.70	0.3	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Dibromoacetic acid	552.3	0.96	0.3	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Dibromoacetic acid	552.3	0.85	0.3	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Dibromoacetic acid	552.3	4.40	0.3	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Dibromoacetic acid	552.3	5.50	0.3	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Dichloroacetic acid	552.3	2.40	0.2	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Dichloroacetic acid	552.3	0.38	0.2	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Dichloroacetic acid	552.3	18.00	0.2	ug/L

8/14/2019	I Street & Woodlawn Ave	3710025901	Dichloroacetic acid	552.3	12.00	0.2	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Monobromoacetic acid	552.3	0.57	0.3	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Monobromoacetic acid	552.3	ND	0.3	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Monochloroacetic acid	552.3	3.40	2	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Tribromoacetic acid	552.3	2.10	2	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Tribromoacetic acid	552.3	4.10	2	ug/L
11/14/2018	I Street & Woodlawn Ave	3710025901	Trichloroacetic acid	552.3	ND	0.5	ug/L
2/13/2019	I Street & Woodlawn Ave	3710025901	Trichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	I Street & Woodlawn Ave	3710025901	Trichloroacetic acid	552.3	2.80	0.5	ug/L
8/14/2019	I Street & Woodlawn Ave	3710025901	Trichloroacetic acid	552.3	1.70	0.5	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	1-Butanol	541	ND	2	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	1-Butanol	541	ND	2	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	2-Methoxyethanol	541	ND	0.4	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	2-Methoxyethanol	541	ND	0.4	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	2-Propen-1-ol	541	ND	0.5	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	2-Propen-1-ol	541	ND	0.5	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	alpha-HCH	525.3	ND	0.01	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	alpha-HCH	525.3	ND	0.01	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Butylated hydroxyanisole	530	ND	0.03	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Butylated hydroxyanisole	530	ND	0.03	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Chlorpyrifos	525.3	ND	0.03	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Chlorpyrifos	525.3	ND	0.03	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Dimethipin	525.3	ND	0.2	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Dimethipin	525.3	ND	0.2	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Ethoprop	525.3	ND	0.03	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Ethoprop	525.3	ND	0.03	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Germanium	200.8	ND	0.3	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Germanium	200.8	ND	0.3	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Manganese	200.8	ND	0.4	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Manganese	200.8	ND	0.4	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	O-Toluidine	530	ND	0.007	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	O-Toluidine	530	ND	0.007	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Oxyfluorfen	525.3	ND	0.05	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Oxyfluorfen	525.3	ND	0.05	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Profenofos	525.3	ND	0.3	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Profenofos	525.3	ND	0.3	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Quinoline	530	ND	0.02	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Quinoline	530	ND	0.02	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Tebuconazole	525.3	ND	0.2	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Tebuconazole	525.3	ND	0.2	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Total Premethrin (trans &cis)	525.3	ND	0.04	ug/L
10/3/2018	Desal Plant Effluent (EPDS # 17)	3710025804	Tribufos	525.3	ND	0.07	ug/L
4/3/2019	Desal Plant Effluent (EPDS # 17)	3710025804	Tribufos	525.3	ND	0.07	ug/L
11/14/2018	943 Rawhide Court	3710025908	Bromochloroacetic acid	552.3	3.50	0.3	ug/L
2/13/2019	943 Rawhide Court	3710025908	Bromochloroacetic acid	552.3	4.20	0.3	ug/L
5/15/2019	943 Rawhide Court	3710025908	Bromochloroacetic acid	552.3	16.00	0.3	ug/L
8/14/2019	943 Rawhide Court	3710025908	Bromochloroacetic acid	552.3	18.00	0.3	ug/L
11/14/2018	943 Rawhide Court	3710025908	Bromodichloroacetic acid	552.3	1.40	0.5	ug/L
2/13/2019	943 Rawhide Court	3710025908	Bromodichloroacetic acid	552.3	0.95	0.5	ug/L
5/15/2019	943 Rawhide Court	3710025908	Bromodichloroacetic acid	552.3	3.70	0.5	ug/L
8/14/2019	943 Rawhide Court	3710025908	Bromodichloroacetic acid	552.3	4.00	0.5	ug/L
11/14/2018	943 Rawhide Court	3710025908	Chlorodibromoacetic acid	552.3	1.10	0.3	ug/L
2/13/2019	943 Rawhide Court	3710025908	Chlorodibromoacetic acid	552.3	0.76	0.3	ug/L
5/15/2019	943 Rawhide Court	3710025908	Chlorodibromoacetic acid	552.3	2.10	0.3	ug/L
8/14/2019	943 Rawhide Court	3710025908	Chlorodibromoacetic acid	552.3	2.70	0.3	ug/L
11/14/2018	943 Rawhide Court	3710025908	Dibromoacetic acid	552.3	2.20	0.3	ug/L
2/13/2019	943 Rawhide Court	3710025908	Dibromoacetic acid	552.3	3.80	0.3	ug/L
5/15/2019	943 Rawhide Court	3710025908	Dibromoacetic acid	552.3	5.70	0.3	ug/L
8/14/2019	943 Rawhide Court	3710025908	Dibromoacetic acid	552.3	7.90	0.3	ug/L
11/14/2018	943 Rawhide Court	3710025908	Dichloroacetic acid	552.3	4.50	0.2	ug/L
2/13/2019	943 Rawhide Court	3710025908	Dichloroacetic acid	552.3	3.40	0.2	ug/L
5/15/2019	943 Rawhide Court	3710025908	Dichloroacetic acid	552.3	24.00	0.2	ug/L
8/14/2019	943 Rawhide Court	3710025908	Dichloroacetic acid	552.3	20.00	0.2	ug/L
11/14/2018	943 Rawhide Court	3710025908	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	943 Rawhide Court	3710025908	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	943 Rawhide Court	3710025908	Monobromoacetic acid	552.3	0.61	0.3	ug/L
8/14/2019	943 Rawhide Court	3710025908	Monobromoacetic acid	552.3	0.33	0.3	ug/L
11/14/2018	943 Rawhide Court	3710025908	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	943 Rawhide Court	3710025908	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	943 Rawhide Court	3710025908	Monochloroacetic acid	552.3	3.50	2	ug/L
8/14/2019	943 Rawhide Court	3710025908	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	943 Rawhide Court	3710025908	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	943 Rawhide Court	3710025908	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	943 Rawhide Court	3710025908	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	943 Rawhide Court	3710025908	Tribromoacetic acid	552.3	3.60	2	ug/L
11/14/2018	943 Rawhide Court	3710025908	Trichloroacetic acid	552.3	1.60	0.5	ug/L
2/13/2019	943 Rawhide Court	3710025908	Trichloroacetic acid	552.3	0.94	0.5	ug/L
5/15/2019	943 Rawhide Court	3710025908	Trichloroacetic acid	552.3	3.80	0.5	ug/L
8/14/2019	943 Rawhide Court	3710025908	Trichloroacetic acid	552.3	2.70	0.5	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Bromochloroacetic acid	552.3	3.20	0.3	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Bromochloroacetic acid	552.3	4.10	0.3	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Bromochloroacetic acid	552.3	16.00	0.3	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Bromochloroacetic acid	552.3	20.00	0.3	ug/L

11/14/2018	5379 Carolyn Vista Lane	3710025909	Bromodichloroacetic acid	552.3	1.40	0.5	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Bromodichloroacetic acid	552.3	1.00	0.5	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Bromodichloroacetic acid	552.3	4.30	0.5	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Bromodichloroacetic acid	552.3	4.10	0.5	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Chlorodibromoacetic acid	552.3	1.20	0.3	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Chlorodibromoacetic acid	552.3	0.79	0.3	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Chlorodibromoacetic acid	552.3	2.40	0.3	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Chlorodibromoacetic acid	552.3	2.80	0.3	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Dibromoacetic acid	552.3	2.00	0.3	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Dibromoacetic acid	552.3	3.80	0.3	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Dibromoacetic acid	552.3	5.90	0.3	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Dibromoacetic acid	552.3	8.60	0.3	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Dichloroacetic acid	552.3	4.00	0.2	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Dichloroacetic acid	552.3	3.20	0.2	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Dichloroacetic acid	552.3	24.00	0.2	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Dichloroacetic acid	552.3	24.00	0.2	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Monobromoacetic acid	552.3	0.60	0.3	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Monobromoacetic acid	552.3	0.34	0.3	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Monochloroacetic acid	552.3	3.40	2	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Tribromoacetic acid	552.3	3.70	2	ug/L
11/14/2018	5379 Carolyn Vista Lane	3710025909	Trichloroacetic acid	552.3	1.50	0.5	ug/L
2/13/2019	5379 Carolyn Vista Lane	3710025909	Trichloroacetic acid	552.3	1.00	0.5	ug/L
5/15/2019	5379 Carolyn Vista Lane	3710025909	Trichloroacetic acid	552.3	4.30	0.5	ug/L
8/14/2019	5379 Carolyn Vista Lane	3710025909	Trichloroacetic acid	552.3	2.90	0.5	ug/L
11/14/2018	467 East Oxford Street	3710025906	Bromochloroacetic acid	552.3	4.00	0.3	ug/L
2/13/2019	467 East Oxford Street	3710025906	Bromochloroacetic acid	552.3	2.70	0.3	ug/L
5/15/2019	467 East Oxford Street	3710025906	Bromochloroacetic acid	552.3	16.00	0.3	ug/L
8/14/2019	467 East Oxford Street	3710025906	Bromochloroacetic acid	552.3	18.00	0.3	ug/L
11/14/2018	467 East Oxford Street	3710025906	Bromodichloroacetic acid	552.3	1.30	0.5	ug/L
2/13/2019	467 East Oxford Street	3710025906	Bromodichloroacetic acid	552.3	0.63	0.5	ug/L
5/15/2019	467 East Oxford Street	3710025906	Bromodichloroacetic acid	552.3	3.60	0.5	ug/L
8/14/2019	467 East Oxford Street	3710025906	Bromodichloroacetic acid	552.3	3.80	0.5	ug/L
11/14/2018	467 East Oxford Street	3710025906	Chlorodibromoacetic acid	552.3	0.99	0.3	ug/L
2/13/2019	467 East Oxford Street	3710025906	Chlorodibromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	467 East Oxford Street	3710025906	Chlorodibromoacetic acid	552.3	1.90	0.3	ug/L
8/14/2019	467 East Oxford Street	3710025906	Chlorodibromoacetic acid	552.3	2.60	0.3	ug/L
11/14/2018	467 East Oxford Street	3710025906	Dibromoacetic acid	552.3	2.70	0.3	ug/L
2/13/2019	467 East Oxford Street	3710025906	Dibromoacetic acid	552.3	3.10	0.3	ug/L
5/15/2019	467 East Oxford Street	3710025906	Dibromoacetic acid	552.3	5.90	0.3	ug/L
8/14/2019	467 East Oxford Street	3710025906	Dibromoacetic acid	552.3	7.90	0.3	ug/L
11/14/2018	467 East Oxford Street	3710025906	Dichloroacetic acid	552.3	4.40	0.2	ug/L
2/13/2019	467 East Oxford Street	3710025906	Dichloroacetic acid	552.3	2.20	0.2	ug/L
5/15/2019	467 East Oxford Street	3710025906	Dichloroacetic acid	552.3	23.00	0.2	ug/L
8/14/2019	467 East Oxford Street	3710025906	Dichloroacetic acid	552.3	20.00	0.2	ug/L
11/14/2018	467 East Oxford Street	3710025906	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	467 East Oxford Street	3710025906	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	467 East Oxford Street	3710025906	Monobromoacetic acid	552.3	0.62	0.3	ug/L
8/14/2019	467 East Oxford Street	3710025906	Monobromoacetic acid	552.3	0.34	0.3	ug/L
11/14/2018	467 East Oxford Street	3710025906	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	467 East Oxford Street	3710025906	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	467 East Oxford Street	3710025906	Monochloroacetic acid	552.3	3.40	2	ug/L
8/14/2019	467 East Oxford Street	3710025906	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	467 East Oxford Street	3710025906	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	467 East Oxford Street	3710025906	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	467 East Oxford Street	3710025906	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	467 East Oxford Street	3710025906	Tribromoacetic acid	552.3	3.70	2	ug/L
11/14/2018	467 East Oxford Street	3710025906	Trichloroacetic acid	552.3	1.60	0.5	ug/L
2/13/2019	467 East Oxford Street	3710025906	Trichloroacetic acid	552.3	0.65	0.5	ug/L
5/15/2019	467 East Oxford Street	3710025906	Trichloroacetic acid	552.3	3.90	0.5	ug/L
8/14/2019	467 East Oxford Street	3710025906	Trichloroacetic acid	552.3	2.70	0.5	ug/L
11/14/2018	368 Anita Street	3710025902	Bromochloroacetic acid	552.3	1.90	0.3	ug/L
2/13/2019	368 Anita Street	3710025902	Bromochloroacetic acid	552.3	1.90	0.3	ug/L
5/15/2019	368 Anita Street	3710025902	Bromochloroacetic acid	552.3	14.00	0.3	ug/L
8/14/2019	368 Anita Street	3710025902	Bromochloroacetic acid	552.3	14.00	0.3	ug/L
11/14/2018	368 Anita Street	3710025902	Bromodichloroacetic acid	552.3	0.79	0.5	ug/L
2/13/2019	368 Anita Street	3710025902	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	368 Anita Street	3710025902	Bromodichloroacetic acid	552.3	3.10	0.5	ug/L
8/14/2019	368 Anita Street	3710025902	Bromodichloroacetic acid	552.3	3.00	0.5	ug/L
11/14/2018	368 Anita Street	3710025902	Chlorodibromoacetic acid	552.3	0.58	0.3	ug/L
2/13/2019	368 Anita Street	3710025902	Chlorodibromoacetic acid	552.3	0.44	0.3	ug/L
5/15/2019	368 Anita Street	3710025902	Chlorodibromoacetic acid	552.3	1.80	0.3	ug/L
8/14/2019	368 Anita Street	3710025902	Chlorodibromoacetic acid	552.3	2.10	0.3	ug/L
11/14/2018	368 Anita Street	3710025902	Dibromoacetic acid	552.3	1.60	0.3	ug/L
2/13/2019	368 Anita Street	3710025902	Dibromoacetic acid	552.3	2.20	0.3	ug/L
5/15/2019	368 Anita Street	3710025902	Dibromoacetic acid	552.3	5.20	0.3	ug/L
8/14/2019	368 Anita Street	3710025902	Dibromoacetic acid	552.3	6.50	0.3	ug/L
11/14/2018	368 Anita Street	3710025902	Dichloroacetic acid	552.3	3.00	0.2	ug/L
2/13/2019	368 Anita Street	3710025902	Dichloroacetic acid	552.3	1.40	0.2	ug/L
5/15/2019	368 Anita Street	3710025902	Dichloroacetic acid	552.3	20.00	0.2	ug/L
8/14/2019	368 Anita Street	3710025902	Dichloroacetic acid	552.3	16.00	0.2	ug/L
11/14/2018	368 Anita Street	3710025902	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	368 Anita Street	3710025902	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	368 Anita Street	3710025902	Monobromoacetic acid	552.3	0.63	0.3	ug/L

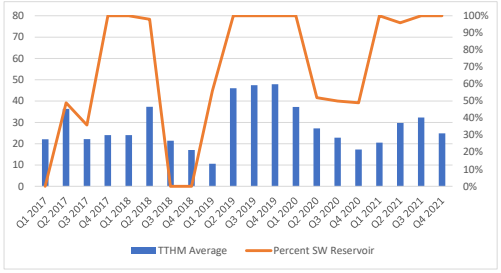
8/14/2019	368 Anita Street	3710025902	Monobromoacetic acid	552.3	ND	0.3	ug/L
11/14/2018	368 Anita Street	3710025902	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	368 Anita Street	3710025902	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	368 Anita Street	3710025902	Monochloroacetic acid	552.3	3.20	2	ug/L
8/14/2019	368 Anita Street	3710025902	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	368 Anita Street	3710025902	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	368 Anita Street	3710025902	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	368 Anita Street	3710025902	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	368 Anita Street	3710025902	Tribromoacetic acid	552.3	3.90	2	ug/L
11/14/2018	368 Anita Street	3710025902	Trichloroacetic acid	552.3	0.85	0.5	ug/L
2/13/2019	368 Anita Street	3710025902	Trichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	368 Anita Street	3710025902	Trichloroacetic acid	552.3	3.30	0.5	ug/L
8/14/2019	368 Anita Street	3710025902	Trichloroacetic acid	552.3	2.20	0.5	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Bromochloroacetic acid	552.3	2.40	0.3	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Bromochloroacetic acid	552.3	1.40	0.3	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Bromochloroacetic acid	552.3	14.00	0.3	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Bromochloroacetic acid	552.3	14.00	0.3	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Bromodichloroacetic acid	552.3	0.81	0.5	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Bromodichloroacetic acid	552.3	3.10	0.5	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Bromodichloroacetic acid	552.3	4.00	0.5	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Chlorodibromoacetic acid	552.3	0.67	0.3	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Chlorodibromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Chlorodibromoacetic acid	552.3	1.80	0.3	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Chlorodibromoacetic acid	552.3	2.10	0.3	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Dibromoacetic acid	552.3	2.00	0.3	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Dibromoacetic acid	552.3	1.90	0.3	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Dibromoacetic acid	552.3	5.40	0.3	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Dibromoacetic acid	552.3	7.70	0.3	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Dichloroacetic acid	552.3	3.10	0.2	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Dichloroacetic acid	552.3	1.00	0.2	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Dichloroacetic acid	552.3	19.00	0.2	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Dichloroacetic acid	552.3	17.00	0.2	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Monobromoacetic acid	552.3	0.61	0.3	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Monobromoacetic acid	552.3	ND	0.3	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Monochloroacetic acid	552.3	2.80	2	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Tribromoacetic acid	552.3	4.30	2	ug/L
11/14/2018	1515 Jasper Ave	3710025903	Trichloroacetic acid	552.3	1.00	0.5	ug/L
2/13/2019	1515 Jasper Ave	3710025903	Trichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	1515 Jasper Ave	3710025903	Trichloroacetic acid	552.3	3.30	0.5	ug/L
8/14/2019	1515 Jasper Ave	3710025903	Trichloroacetic acid	552.3	2.00	0.5	ug/L
11/14/2018	131 East Quintard Street	3710025904	Bromochloroacetic acid	552.3	3.70	0.3	ug/L
2/13/2019	131 East Quintard Street	3710025904	Bromochloroacetic acid	552.3	2.10	0.3	ug/L
5/15/2019	131 East Quintard Street	3710025904	Bromochloroacetic acid	552.3	15.00	0.3	ug/L
8/14/2019	131 East Quintard Street	3710025904	Bromochloroacetic acid	552.3	17.00	0.3	ug/L
11/14/2018	131 East Quintard Street	3710025904	Bromodichloroacetic acid	552.3	1.20	0.5	ug/L
2/13/2019	131 East Quintard Street	3710025904	Bromodichloroacetic acid	552.3	0.65	0.5	ug/L
5/15/2019	131 East Quintard Street	3710025904	Bromodichloroacetic acid	552.3	3.50	0.5	ug/L
8/14/2019	131 East Quintard Street	3710025904	Bromodichloroacetic acid	552.3	3.70	0.5	ug/L
11/14/2018	131 East Quintard Street	3710025904	Chlorodibromoacetic acid	552.3	0.92	0.3	ug/L
2/13/2019	131 East Quintard Street	3710025904	Chlorodibromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	131 East Quintard Street	3710025904	Chlorodibromoacetic acid	552.3	1.90	0.3	ug/L
8/14/2019	131 East Quintard Street	3710025904	Chlorodibromoacetic acid	552.3	2.50	0.3	ug/L
11/14/2018	131 East Quintard Street	3710025904	Dibromoacetic acid	552.3	2.50	0.3	ug/L
2/13/2019	131 East Quintard Street	3710025904	Dibromoacetic acid	552.3	2.40	0.3	ug/L
5/15/2019	131 East Quintard Street	3710025904	Dibromoacetic acid	552.3	5.60	0.3	ug/L
8/14/2019	131 East Quintard Street	3710025904	Dibromoacetic acid	552.3	7.40	0.3	ug/L
11/14/2018	131 East Quintard Street	3710025904	Dichloroacetic acid	552.3	4.20	0.2	ug/L
2/13/2019	131 East Quintard Street	3710025904	Dichloroacetic acid	552.3	1.70	0.2	ug/L
5/15/2019	131 East Quintard Street	3710025904	Dichloroacetic acid	552.3	21.00	0.2	ug/L
8/14/2019	131 East Quintard Street	3710025904	Dichloroacetic acid	552.3	20.00	0.2	ug/L
11/14/2018	131 East Quintard Street	3710025904	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	131 East Quintard Street	3710025904	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	131 East Quintard Street	3710025904	Monobromoacetic acid	552.3	0.62	0.3	ug/L
8/14/2019	131 East Quintard Street	3710025904	Monobromoacetic acid	552.3	0.31	0.3	ug/L
11/14/2018	131 East Quintard Street	3710025904	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	131 East Quintard Street	3710025904	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	131 East Quintard Street	3710025904	Monochloroacetic acid	552.3	3.40	2	ug/L
8/14/2019	131 East Quintard Street	3710025904	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	131 East Quintard Street	3710025904	Tribromoacetic acid	552.3	ND	2	ug/L
2/13/2019	131 East Quintard Street	3710025904	Tribromoacetic acid	552.3	ND	2	ug/L
5/15/2019	131 East Quintard Street	3710025904	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	131 East Quintard Street	3710025904	Tribromoacetic acid	552.3	3.60	2	ug/L
11/14/2018	131 East Quintard Street	3710025904	Trichloroacetic acid	552.3	1.50	0.5	ug/L
2/13/2019	131 East Quintard Street	3710025904	Trichloroacetic acid	552.3	0.62	0.5	ug/L
5/15/2019	131 East Quintard Street	3710025904	Trichloroacetic acid	552.3	3.70	0.5	ug/L
8/14/2019	131 East Quintard Street	3710025904	Trichloroacetic acid	552.3	2.60	0.5	ug/L
11/14/2018	109 16th Street	3710025900	Bromochloroacetic acid	552.3	ND	0.3	ug/L
2/13/2019	109 16th Street	3710025900	Bromochloroacetic acid	552.3	ND	0.3	ug/L
5/15/2019	109 16th Street	3710025900	Bromochloroacetic acid	552.3	0.36	0.3	ug/L
8/14/2019	109 16th Street	3710025900	Bromochloroacetic acid	552.3	ND	0.3	ug/L
11/14/2018	109 16th Street	3710025900	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
2/13/2019	109 16th Street	3710025900	Bromodichloroacetic acid	552.3	ND	0.5	ug/L

5/15/2019	109 16th Street	3710025900	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
8/14/2019	109 16th Street	3710025900	Bromodichloroacetic acid	552.3	ND	0.5	ug/L
11/14/2018	109 16th Street	3710025900	Chlorodibromoacetic acid	552.3	0.37	0.3	ug/L
2/13/2019	109 16th Street	3710025900	Chlorodibromoacetic acid	552.3	0.34	0.3	ug/L
5/15/2019	109 16th Street	3710025900	Chlorodibromoacetic acid	552.3	0.32	0.3	ug/L
8/14/2019	109 16th Street	3710025900	Chlorodibromoacetic acid	552.3	0.38	0.3	ug/L
11/14/2018	109 16th Street	3710025900	Dibromoacetic acid	552.3	0.43	0.3	ug/L
2/13/2019	109 16th Street	3710025900	Dibromoacetic acid	552.3	0.56	0.3	ug/L
5/15/2019	109 16th Street	3710025900	Dibromoacetic acid	552.3	0.62	0.3	ug/L
8/14/2019	109 16th Street	3710025900	Dibromoacetic acid	552.3	0.55	0.3	ug/L
11/14/2018	109 16th Street	3710025900	Dichloroacetic acid	552.3	ND	0.2	ug/L
2/13/2019	109 16th Street	3710025900	Dichloroacetic acid	552.3	ND	0.2	ug/L
5/15/2019	109 16th Street	3710025900	Dichloroacetic acid	552.3	ND	0.2	ug/L
8/14/2019	109 16th Street	3710025900	Dichloroacetic acid	552.3	ND	0.2	ug/L
11/14/2018	109 16th Street	3710025900	Monobromoacetic acid	552.3	ND	0.3	ug/L
2/13/2019	109 16th Street	3710025900	Monobromoacetic acid	552.3	ND	0.3	ug/L
5/15/2019	109 16th Street	3710025900	Monobromoacetic acid	552.3	ND	0.3	ug/L
8/14/2019	109 16th Street	3710025900	Monobromoacetic acid	552.3	ND	0.3	ug/L
11/14/2018	109 16th Street	3710025900	Monochloroacetic acid	552.3	ND	2	ug/L
2/13/2019	109 16th Street	3710025900	Monochloroacetic acid	552.3	ND	2	ug/L
5/15/2019	109 16th Street	3710025900	Monochloroacetic acid	552.3	ND	2	ug/L
8/14/2019	109 16th Street	3710025900	Monochloroacetic acid	552.3	ND	2	ug/L
11/14/2018	109 16th Street	3710025900	Tribromoacetic acid	552.3	2.4	2	ug/L
2/13/2019	109 16th Street	3710025900	Tribromoacetic acid	552.3	0.0	2	ug/L
5/15/2019	109 16th Street	3710025900	Tribromoacetic acid	552.3	ND	2	ug/L
8/14/2019	109 16th Street	3710025900	Tribromoacetic acid	552.3	3.90	2	ug/L
11/14/2018	109 16th Street	3710025900	Trichloroacetic acid	552.3	ND	0.5	ug/L
2/13/2019	109 16th Street	3710025900	Trichloroacetic acid	552.3	ND	0.5	ug/L
5/15/2019	109 16th Street	3710025900	Trichloroacetic acid	552.3	ND	0.5	ug/L
8/14/2019	109 16th Street	3710025900	Trichloroacetic acid	552.3	ND	0.5	ug/L

Ind TTHM	2017				2018				2019				2020				2021				min	max	average	median
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st	2nd	3rd	4th				
	2/13	5/8	8/14	11/13	2/12	5/14	8/13	11/14	2/13	5/15	8/14	11/13	2/12	5/11	8/12	11/11	2/10	5/12	8/11	11/11				
109 16th st	5.6	25.4	3.2	9.2	8.5	3.7	3.2	2.0	3.8	3.7	2.5	7.4	6.2	3.7	8.1	4.2	4.4	4.1	4.6	4.6	2.0	25.4	5.9	4.3
I St & woodlawn	26.5	40.0	4.2	15.6	22.2	13.7	13.6	7.3	3.1	39.7	34.6	50.9	20.1	6.3	14.9	12.1	17.3	13.4	28.9	12.6	3.1	50.9	19.9	15.3
368 Anita St	26.3	39.9	16.5	21.1	25.2	37.6	21.9	13.7	8.7	47.6	46.8	54.7	40.1	17.0	22.9	12.5	17.5	28.7	40.2	28.7	8.7	54.7	28.4	25.8
1515 Jasper Ave	23.2	36.1	20.3	21.8	26.3	37.3	16.9	16.1	6.4	45.0	40.9	38.1	40.3	33.7	23.6	16.7	19.6	29.8	28.7	25.5	6.4	45.0	27.3	25.9
131 East Quintard St	23.6	36.5	29.3	27.7	23.5	44.0	27.0	21.2	12.0	54.6	56.4	49.0	45.2	37.7	25.7	18.3	24.1	35.8	35.6	29.1	12.0	56.4	32.8	29.2
Naples & Melrose	26.4	39.3	30.6	29.1	26.9	41.3	22.1	16.8	11.2	53.7	57.6	54.6	42.4	36.6	27.2	20.3	25.6	39.0	38.1	28.5	11.2	57.6	33.4	29.9
467 East Oxford St	23.7	35.2	29.2	28.5	24.0	44.6	23.9	20.9	12.0	52.4	58.7	50.6	48.0	36.3	26.2	21.7	25.6	37.7	35.4	28.0	12.0	58.7	33.1	28.9
Lynwood & Holly Way	20.4	34.0	29.5	27.3	25.9	47.4	22.5	24.3	16.0	54.6	59.5	51.9	44.1	27.0	27.6	22.0	25.4	39.7	36.5	30.7	16.0	59.5	33.3	28.6
943 Rawhide Ct	23.8	37.4	29.7	31.7	30.7	55.1	29.0	24.7	16.5	53.2	58.9	58.4	43.8	30.4	27.8	22.8	23.7	30.9	39.7	29.5	16.5	58.9	34.9	30.6
5379 Carolyn Vista Ln	21.0	39.8	29.3	28.2	27.3	48.3	33.7	23.8	16.2	55.7	58.7	63.5	42.6	43.1	24.4	22.5	21.8	38.3	35.0	31.2	16.2	63.5	35.2	32.5
QA	22.1	36.4	22.2	24.0	24.1	37.3	21.4	17.1	10.6	46.0	47.5	47.9	37.3	27.2	22.8	17.3	20.5	29.7	32.3	24.8	Overall		28.4	27.3
																						10.6	47.9	24.4
Percent SW Reservoir	0%	49%	36%	100%	100%	98%	0%	0%	56%	100%	100%	100%	100%	52%	50%	49%	100%	96%	100%	100%				

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
TTHM Average	22.05	36.36	22.18	24.02	24.05	37.3	21.376	17.08	10.59	46.02	47.46	47.906	37.278	27.18	22.84	17.31	20.5	29.74	32.27	24.84
Percent SW Reservoir	0%	49%	36%	100%	100%	98%	0%	0%	56%	100%	100%	100%	100%	52%	50%	49%	100%	96%	100%	100%

Quarter	TTHM Aver	Percent SW Reservoir
Q1 2017	22.05	0%
Q2 2017	36.36	49%
Q3 2017	22.18	36%
Q4 2017	24.02	100%
Q1 2018	24.05	100%
Q2 2018	37.3	98%
Q3 2018	21.376	0%
Q4 2018	17.08	0%
Q1 2019	10.59	56%
Q2 2019	46.02	100%
Q3 2019	47.46	100%
Q4 2019	47.906	100%
Q1 2020	37.278	100%
Q2 2020	27.18	52%
Q3 2020	22.84	50%
Q4 2020	17.31	49%
Q1 2021	20.5	100%
Q2 2021	29.74	96%
Q3 2021	32.27	100%
Q4 2021	24.84	100%

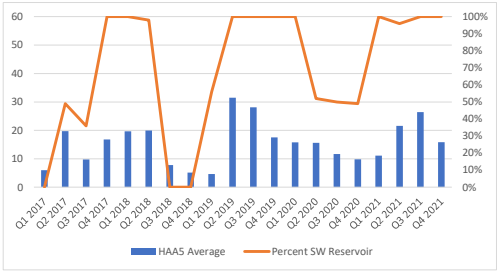


TTHM LRAA	2017				2018				2019				2020				2021			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st	2nd	3rd	4th
DS Location	2/13/2017	5/8/2017	8/14/2017	11/13/2017	2/12/2018	5/14/2018	8/13/2018	11/14/2018	2/13/2019	5/15/2019	8/14/2019	11/13/2019	2/12/2020	5/11/2020	8/12/2020	11/11/2020	2/10/2021	5/12/2021	8/11/2021	11/11/2021
109 16th st	13.9	19.2	13.0	10.9	11.6	6.2	6.1	4.3	3.2	3.2	3.0	4.3	4.9	4.9	6.3	5.5	5.1	5.2	4.3	4.4
I St & woodlawn	17.6	25.0	22.0	21.6	20.5	13.9	16.3	14.2	9.4	15.9	21.2	32.1	36.3	28.0	23.1	13.4	12.7	14.4	17.9	18.1
368 Anita St	22.9	29.5	25.9	26.0	25.7	25.1	26.5	24.6	20.5	23.0	29.2	39.5	47.3	39.7	33.7	23.1	17.5	20.4	24.7	28.8
1515 Jasper Ave	21.5	26.5	25.0	25.4	26.1	26.4	25.6	24.2	19.2	21.1	27.1	32.6	41.1	38.3	33.9	28.6	23.4	22.4	23.7	25.9
131 East Quintard St	21.9	27.3	27.4	29.3	29.3	31.1	30.6	28.9	26.1	28.7	36.1	43.0	51.3	47.1	39.4	31.7	26.5	26.0	28.5	31.2
Naples & Melrose	23.1	29.1	29.2	31.4	31.5	32.0	29.9	26.8	22.9	26.0	34.8	44.3	52.1	47.8	40.2	31.6	27.4	28.0	30.8	32.8
467 East Oxford St	22.2	27.2	27.1	29.2	29.2	31.6	30.3	28.4	25.4	27.3	36.0	43.4	52.4	48.4	40.3	33.1	27.5	27.8	30.1	31.7
Lynwood & Holly Way	21.4	25.8	25.9	27.8	29.2	32.5	30.8	30.0	27.6	29.4	38.6	45.5	52.5	45.6	37.7	30.2	25.5	28.7	30.9	33.1
943 Rawhide Ct	22.2	28.0	27.9	30.7	32.4	36.8	36.6	34.9	31.3	30.9	38.3	46.8	53.6	47.9	40.1	31.2	26.2	26.3	29.3	31.0
5379 Carolyn Vista Ln	20.3	27.4	27.1	29.6	31.2	33.3	34.4	33.3	30.5	32.4	38.6	48.5	55.1	52.0	43.4	33.2	28.0	26.8	29.4	31.6

Ind HAA5 Data	2017				2018				2019				2020				2021				min	max	average	median
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st	2nd	3rd	4th				
	2/13	5/8	8/14	11/13	2/12	5/14	8/13	11/14	2/13	5/15	8/14	11/13	2/12	5/11	8/12	11/11	2/10	5/12	8/11	11/11				
109 16th st	ND	13.1	ND	5.2	4.1	ND	ND	2.8	ND	1.1	ND	ND	ND	ND	2.0	ND	1.1	1.2	1.0	1.9	0.0	13.1	1.7	0.5
I St & woodlawn	6.4	17.9	ND	9.8	19.3	4.4	5.0	2.9	1.0	27.0	20.5	19.4	2.3	3.9	6.7	6.0	9.0	8.9	21.7	8.5	1.0	27.0	10.1	7.6
368 Anita St	6.5	19.7	6.0	13.5	20.5	17.6	8.4	4.0	2.6	33.6	27.1	21.0	14.5	12.0	12.1	5.4	9.2	19.3	25.5	19.2	2.6	33.6	14.9	14.0
1515 Jasper Ave	6.8	20.3	7.1	16.1	21.9	16.7	6.7	3.9	2.1	28.1	24.3	15.4	17.1	22.5	10.6	9.9	9.9	23.7	25.9	18.1	2.1	28.1	15.4	16.4
131 East Quintard St	6.7	20.4	11.9	18.7	21.3	26.8	9.1	6.3	2.5	34.4	32.4	15.7	22.2	23.5	11.8	10.4	14.4	27.4	28.3	11.0	2.5	34.4	17.8	17.2
Naples & Melrose	6.1	19.2	15.1	20.5	20.7	20.5	9.1	5.4	6.1	39.0	34.7	21.4	16.7	23.0	13.6	11.3	10.5	28.3	32.1	19.7	5.4	39.0	18.7	19.5
467 East Oxford St	6.7	25.1	15.4	21.4	19.0	27.3	9.7	6.5	6.5	34.7	33.5	17.3	20.7	22.3	13.4	14.3	12.9	30.0	32.3	13.7	6.5	34.7	19.1	18.2
Lynwood & Holly Way	6.6	20.3	16.2	20.4	21.6	29.2	10.1	7.3	8.3	38.3	37.9	19.4	22.1	12.9	15.9	13.6	14.1	30.9	33.2	20.1	6.6	38.3	19.9	19.8
943 Rawhide Ct	7.0	23.2	15.2	21.9	25.3	33.7	10.1	6.0	8.2	40.3	33.7	21.5	21.2	12.3	16.2	13.7	15.1	23.6	31.2	22.8	6.0	40.3	20.1	21.4
5379 Carolyn Vista Ln	6.9	17.9	9.7	20.5	22.8	23.3	9.8	6.1	9.2	38.5	37.0	23.9	21.1	23.8	14.4	13.5	14.9	22.4	33.0	23.4	6.1	38.5	19.6	20.8
QA	6.0	19.7	9.8	16.8	19.7	20.0	7.8	5.1	4.7	31.5	28.1	17.5	15.8	15.6	11.7	9.8	11.1	21.6	26.4	15.8	Overall		15.7	15.2
																					4.7	31.5	15.8	
Percent SW Reservoir	0%	49%	36%	100%	100%	98%	0%	0%	56%	100%	100%	100%	100%	52%	50%	49%	100%	96%	100%	100%				

Quarter	Q1 2017	Q2 2017	Q3 2017	Q4 2017	Q1 2018	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021
HAA5 Average	5.97	19.71	9.76	16.8	19.65	19.95	7.8	5.12	4.65	31.5	28.11	17.5	15.79	15.62	11.67	9.81	11.11	21.57	26.42	15.84
Percent SW Reservoir	0%	49%	36%	100%	100%	98%	0%	0%	56%	100%	100%	100%	100%	52%	50%	49%	100%	96%	100%	100%

Quarter	HAA5 Aver	Percent SW Reservoir
Q1 2017	5.97	0%
Q2 2017	19.71	49%
Q3 2017	9.76	36%
Q4 2017	16.8	100%
Q1 2018	19.65	100%
Q2 2018	19.95	98%
Q3 2018	7.8	0%
Q4 2018	5.12	0%
Q1 2019	4.65	56%
Q2 2019	31.5	100%
Q3 2019	28.11	100%
Q4 2019	17.5	100%
Q1 2020	15.79	100%
Q2 2020	15.62	52%
Q3 2020	11.67	50%
Q4 2020	9.81	49%
Q1 2021	11.11	100%
Q2 2021	21.57	96%
Q3 2021	26.42	100%
Q4 2021	15.84	100%



HAA5 LRAA	2017				2018				2019				2020				2021			
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	1st	2nd	3rd	4th
DS Location	2/13/2017	5/8/2017	8/14/2017	11/13/2017	2/12/2018	5/14/2018	8/13/2018	11/14/2018	2/13/2019	5/15/2019	8/14/2019	11/13/2019	2/12/2020	5/11/2020	8/12/2020	11/11/2020	2/10/2021	5/12/2021	8/11/2021	11/11/2021
109 16th st	3.775	6.775	4.45	4.575	5.6	2.325	2.325	1.725	0.7	0.975	0.975	0.275	0.275	0	0.5	0.5	0.775	1.075	0.825	1.3
I St & woodlawn	4.375	8.3	7.3	8.775	12	8.625	9.625	7.9	3.325	8.975	12.85	16.975	17.3	11.525	8.075	4.725	6.4	7.65	11.4	12.025
368 Anita St	6.275	10.475	9.425	11.425	14.925	14.4	15	12.625	8.15	12.15	16.825	21.075	24.05	18.65	14.9	11	9.675	11.5	14.85	18.3
1515 Jasper Ave	6.975	10.475	10.125	12.575	16.35	15.45	15.35	12.3	7.35	10.2	14.6	17.475	21.225	19.825	16.4	15.025	13.225	13.525	17.35	19.4
131 East Quintard St	6.275	10.425	10.85	14.425	18.075	19.675	18.975	15.875	11.175	13.075	18.9	21.25	26.175	23.45	18.3	16.975	15.025	16	20.125	20.275
Naples & Melrose	5.85	9.625	11.5	15.225	18.875	19.2	17.7	13.925	10.275	14.9	21.3	25.3	27.95	23.95	18.675	16.15	14.6	15.925	20.55	22.65
467 East Oxford St	6.475	11.75	13.275	17.15	20.225	20.775	19.35	15.625	12.5	14.35	20.3	23	26.55	23.45	18.425	17.675	15.725	17.65	22.375	22.225
Lynwood & Holly Way	6.55	10.725	12.325	15.875	19.625	21.85	20.325	17.05	13.725	16	22.95	25.975	29.425	23.075	17.575	16.125	14.125	18.625	22.95	24.575
943 Rawhide Ct	6.475	11.15	12.85	16.825	21.4	24.025	22.75	18.775	14.5	16.15	22.05	25.925	29.175	22.175	17.8	15.85	14.325	17.15	20.9	23.175
5379 Carolyn Vista Ln	5.35	9.225	9.85	13.75	17.725	19.075	19.1	15.5	12.1	15.9	22.7	27.15	30.125	26.45	20.8	18.2	16.65	16.3	20.95	23.425

APPENDIX C
SWEETWATER RESERVOIR FISHING PROGRAM & COUNTY TRAIL

FISHING PROGRAM RULES OF USE

A California Department of Fish & Wildlife Fishing License is required to fish at Sweetwater Reservoir. All County, State and Federal regulations will be enforced.

To preserve natural habitats, maintain water quality and protect visitors, the following restrictions will be enforced:

- NO LIVE FRESHWATER BAIT OR BAIT BUCKETS
- NO DRONES
- NO ALCOHOLIC BEVERAGES
- NO FIRES OR SMOKING
- NO BOTTLES OR GLASS CONTAINERS
- NO DOGS, HORSES OR PETS AT SHORELINE (PER STATE WATER BOARD CODE)
- NO BOATS, CANOES, OR MOTORIZED VEHICLES
- NO SWIMMING, WADING OR FLOAT TUBES
- NO FISH CLEANING
- NO FIREARMS, BOWS OR CROSSBOWS
- NO LITTERING OR DUMPING

TRAIL RULES

To protect the reservoir and other trail users, please adhere to the following trail rules:

- Enter at designated areas and remain on the trail at all times.
- Contaminating a drinking water supply is against federal law. Violators will be prosecuted.
- Pack out what you pack in - remove all items brought onto the trail.
- Hunting is prohibited; fishing is only allowed in designated areas.
- No motorized vehicles allowed on the trail.
- Horses and pets permitted only on designated trails. All pets must be on a leash. Animals are not allowed access to the shoreline. Trail users must clean up after horses and pets.
- Hitch at designated posts only; do not tie any animal or bicycle to any tree, shrub or structure.
- No smoking.

CONTACT US

For the latest information on the Sweetwater Reservoir Fishing Program, including details on emergency closures, seasonal hours, etc. visit our website and follow us on social media.

www.sweetwater.org/fishing

(619) 409-6777

@swawater @sweetwaterauth

For information on the County's Sweetwater Reservoir Riding & Hiking Trail, visit: www.sweetwater.org/trail.

Administrative Office
505 Garrett Avenue
Chula Vista, CA 91910
(619) 420-1413



SWEETWATER RESERVOIR

FISHING PROGRAM & COUNTY TRAIL

DAILY FISHING FEES

(Cash only - no change, no checks)

$5 per adult (incl. parking)
$2 per child under 16 (must be with an adult)
$3 per car for non-fishing visitors

IMPORTANT INFORMATION

Fishing and trail access is limited to posted areas. Please stay in designated areas and respect the sensitive environment at Sweetwater Reservoir.

Fishing hours of operation vary by season, and the County trail is open daily until dusk. The program and trail are subject to closure on major holidays and at any time due to Red Flag Warnings, elevated fire conditions, inclement weather or any other safety concerns.

For full details on fishing program current hours, holidays and closures, visit:

WWW.SWEETWATER.ORG/FISHING

ABOUT SWEETWATER RESERVOIR

Sweetwater Reservoir is owned and operated by Sweetwater Authority (Authority), a public water agency. The terminal drinking water reservoir stores water used to produce drinking water for approximately 200,000 people in Chula Vista, National City and Bonita, California, and is pumped directly into the Authority's water treatment facility.

Please respect the sensitive environment present at the reservoir. It is illegal to collect or disturb any artifacts found in the area.

FISHING INFORMATION

Fishing activities at Sweetwater Reservoir are designed to protect public health and benefit the community. Activities will be monitored by the Authority.

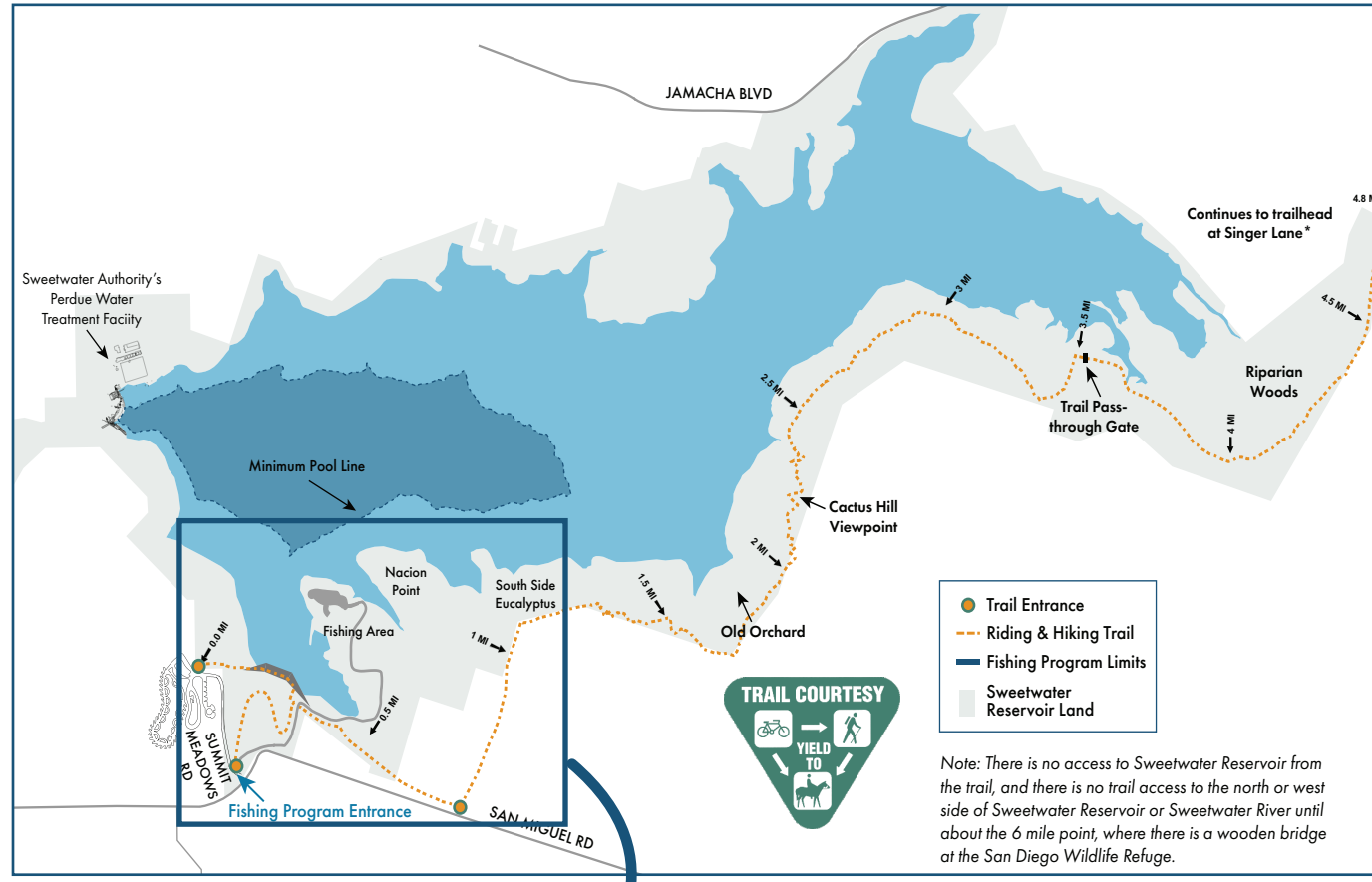
- All visitors must stay in designated areas.
- Discharge of human waste in or around the reservoir is a violation of state law.
- Adult supervision is required for children under 16 years old.
- Rattlesnakes are found in the area, so please use caution to avoid any contact.
- There are no concessions or potable water at this facility.

FISH LIMITS

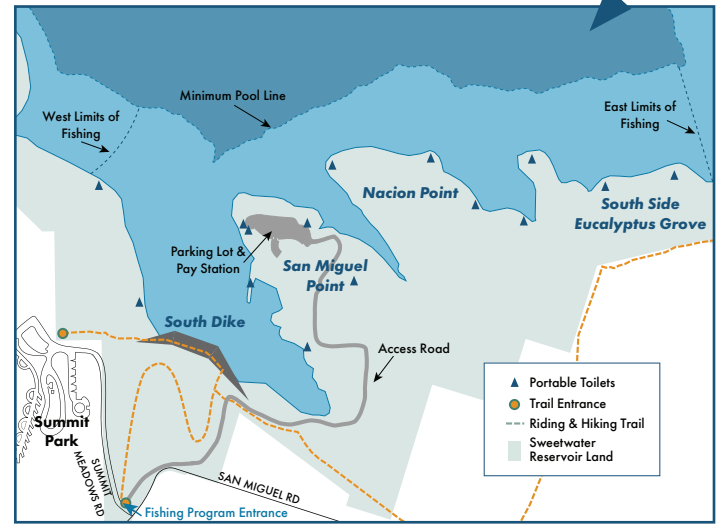
- Catfish: 5
- Bluegill: 25
- Bass: 5 (12" minimum length)
- Red-Eared Sunfish: 25
- Crappie: 25
- Combined Bluegill, Sunfish & Crappie bag limit: 25

NOTICE: To prevent the further spread of quagga mussels, **NO LIVE FRESHWATER BAIT** including shiners & crawdads. The ban does not apply to mealworms, redworms, or crickets.

RESERVOIR MAP



FISHING PROGRAM MAP



TRAIL INFORMATION

The Sweetwater Reservoir Riding & Hiking Trail is a County of San Diego trail operated through a revocable license agreement granted by the Authority. Several sensitive species inhabit the area, including the endangered Least Bell's vireo, California gnatcatcher, Otay tarplant, and a vast number of other indigenous plant and animal species.

The trail entrance is designated on the map above, and visitors must enter at the approved gate and remain on the trail at all times.

Disclaimer: All persons who use the trail or fishing program do so at their own risk. The Authority is not responsible for losses or accidents which occur from using the trail or fishing program.

APPENDIX D
LOVELAND RESERVOIR FISHING PROGRAM

RULES OF USE

A California Department of Fish & Wildlife Fishing License is required to fish at Loveland Reservoir. All County, State and Federal regulations will be enforced.

To preserve natural habitats, maintain water quality and protect visitors, the following restrictions will be enforced:

- NO LIVE FRESHWATER BAIT OR BAIT BUCKETS
- NO DRONES
- NO ALCOHOLIC BEVERAGES
- NO FIRES OR SMOKING
- NO BOTTLES OR GLASS CONTAINERS
- NO DOGS, HORSES OR PETS (PER STATE WATER BOARD CODE)
- NO BICYCLES OR MOTORIZED VEHICLES
- NO BOATS, CANOES, OR FLOAT TUBES
- NO SWIMMING OR WADING
- NO FISH CLEANING
- NO FIREARMS, BOWS, CROSSBOWS OR AIR GUNS
- NO LITTERING OR DUMPING

SWEETWATER AUTHORITY

Providing safe, reliable water

www.sweetwater.org

Disclaimer: All persons who use the fishing program do so at their own risk. The Authority is not responsible for losses or accidents which occur from using the fishing program.

Administrative Office
505 Garrett Avenue
Chula Vista, CA 91910
(619) 420-1413



LOVELAND RESERVOIR
SHORELINE FISHING PROGRAM

IMPORTANT INFORMATION

Fishing access is limited to posted areas. Please stay in designated areas and respect the sensitive environment at Loveland Reservoir.

Hours of operation vary by season. The program is subject to closure on major holidays and at any time due to Red Flag Warnings, elevated fire conditions, inclement weather or any other safety concerns.

For full details on current hours, holidays and closures, visit:
WWW.SWEETWATER.ORG/FISHING

@swawater @sweetwaterauth

ABOUT LOVELAND RESERVOIR

Loveland Reservoir is owned and operated by Sweetwater Authority (Authority), a public water agency. The reservoir stores water used to produce drinking water for approximately 200,000 people in Chula Vista, National City and Bonita, California.

To protect and preserve water quality and the natural habitat, in 1997 the Authority and the USDA Forest Service established a partnership providing public fishing access along a portion of the shoreline that extends up to 5 miles when the reservoir is full. This partnership preserved natural habitat and forest lands available to San Diego County and Southern California residents and wildlife.

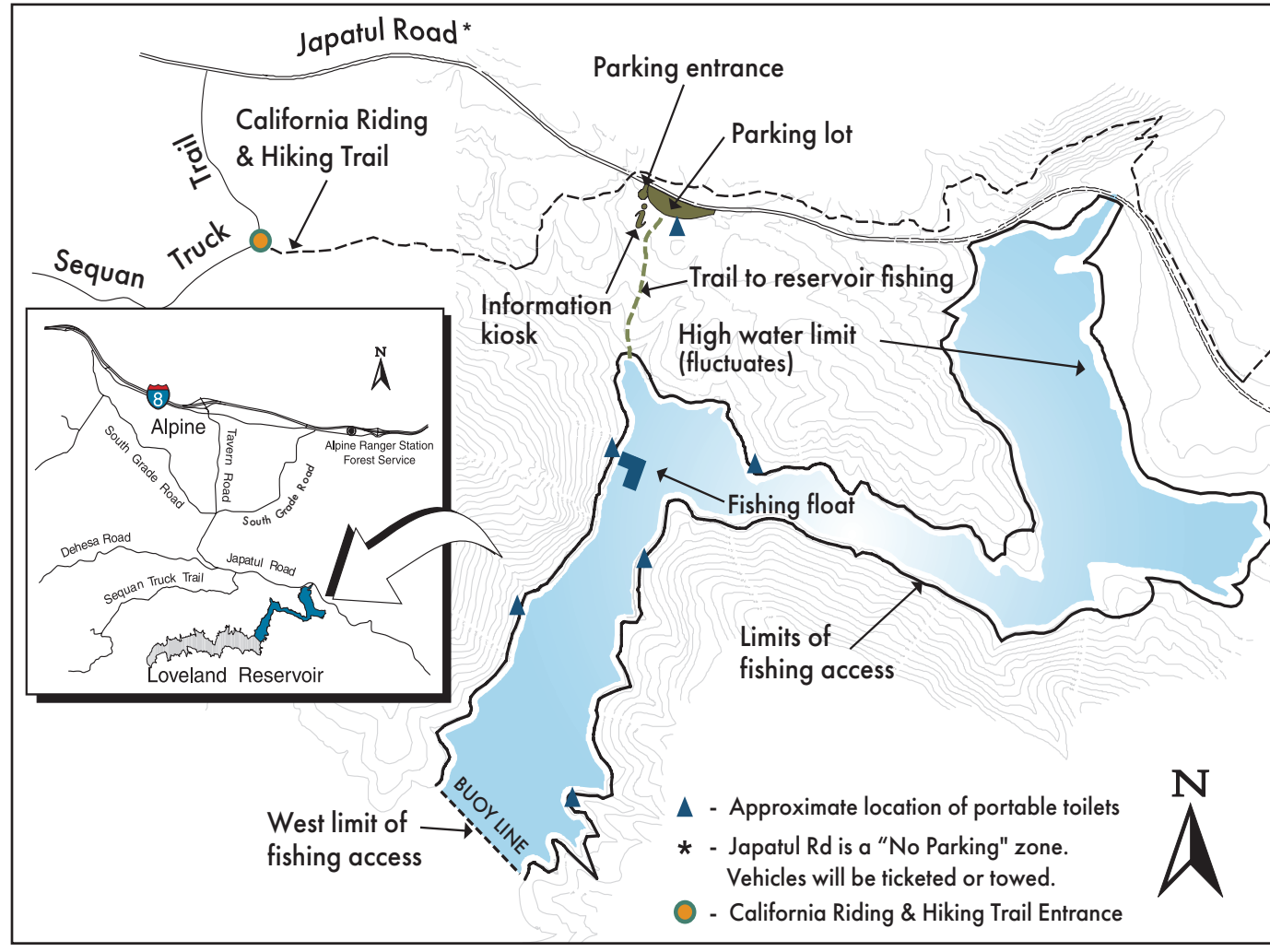
Please respect the sensitive environment present at the reservoir. It is illegal to collect or disturb any artifacts found in the area.

FISHING INFORMATION

Fishing activities at Loveland Reservoir are designed to protect public health and benefit the community. Activities will be monitored by the Authority.

- All visitors must stay in designated areas.
- Fishing access is limited to posted areas and is limited to 50' above the high water mark.
- Discharge of human waste in or around the reservoir is a violation of state law.
- Adult supervision is required for children under 16 years old.
- Rattlesnakes are found in the area, so please use caution to avoid any contact.
- There are no concessions or potable water at this facility.
- There is no day use fee, however a California Department of Fish & Wildlife Fishing License is required.

RESERVOIR MAP



CONTACT US

For the latest information on the Loveland Reservoir Fishing Program, including details on emergency closures, seasonal hours, etc. visit our website and follow us on social media.

www.sweetwater.org/fishing

(619) 409-6776

@swawater @sweetwaterauth

FISH LIMITS

- Catfish: 5
- Bluegill: 25
- Bass: 5 (12" minimum length)
- Red-Eared Sunfish: 25
- Crappie: 25
- Combined Bluegill, Sunfish & Crappie bag limit: 25

NOTICE: To prevent the further spread of quagga mussels, **NO LIVE FRESHWATER BAIT** including shiners & crawdads. The ban does not apply to mealworms, redworms, or crickets.

2022 Watershed Sanitary Survey

Potential Sources of Contamination
ATTACHMENT A

Facility #	Category	Name	Address	City
1	Cemetery	Singing Hills Memorial Park	2800 Dehesa	Dehesa
1	Equestrian	Iron Oak Canyon	12310 Campo Rd.	Spring Valley
2	Equestrian	Fracchiolla Ranch	9018 Vernal Lane	Descanso
3	Equestrian	Oakzanita Ranch	11190 Hwy 79	Descanso
4	Equestrian	Spicer Sandy Creek Ranch	5739 Stallion Oaks Road	El Cajon
5	Equestrian	Stoney Oaks Ranch	1524 Viejas Creek Trail	Alpine
6	Equestrian	Willow Glen Equestrian	2017 Willow Glen Dr.	El Cajon
1	Golf Course	Cottonwood Golf Course	3121 Willow Glen Dr.	El Cajon
2	Golf Course	Steele Canyon Golf Course	3199 Stonefield Dr.	Jamul
3	Golf Course	Sycuan Resort Golf Course (Singing Hills Golf Course)	3007 Dehesa Rd.	El Cajon
1	Nursery	Hummell Farms	2005 Jamacha Rd.	El Cajon
2	Nursery	Jamul Nursery	12931 Campo Rd.	Jamul
3	Nursery	Medina Greenhouses	1923 Jamacha Rd.	El Cajon
4	Nursery	Rancho San Diego Nursery	2031 Jamacha Rd.	El Cajon
5	Nursery	Rancho Valhalla Nursery #2	1998 Chase Ave. A	El Cajon
6	Nursery	Transplant Growers	1925 Jamacha Rd.	El Cajon
7	Nursery	No Boundaries Farm, LLC	18266 West Boundary	Jamul
1	Pest Control	Aardvark Ant Pest Control	2514 Jamacha Rd.	El Cajon
2	Pest Control	ASAP Pest Control	611 Ramona Avenue	Spring Valley
3	Pest Control	Gopher B Gone	2573 Tavern Rd.	Alpine
1	Landfill	San Diego County Descanso Landfill (Viejas)	7850 Cambell Ranch Road	Alpine
2	Landfill	San Diego County Jamacha Landfill	11928 Singer Lane	Spring Valley

LEGEND

- USGS Tributaries
- Sweetwater River
- Major Roads
- Freeways
- Sweetwater and Loveland Reservoirs
- Watershed Basins
- County Boundary

0 1 2 4 Miles

Facility #	Category	Name	Address	City
A	Overflow Pond	Otay MWD Overflow Pond	2925 Camino de las Piedras	El Cajon
B	Overflow Pond	County Overflow Pond	Jamacha Blvd.	El Cajon
1	Pump Station	Rancho San Diego	11971 Singer Lane	Spring Valley
2	Pump Station	Jamacha	9903 Jamacha Blvd.	Spring Valley
3	Pump Station	Ramona	411 Ramona Avenue	Spring Valley
4	Pump Station	County Vista Del Lago	9041 Camino Lago Vista	Spring Valley
5	Pump Station	Harbison Canyon	8770 Harbison Canyon Rd.	Alpine
6	Pump Station	Steele Bridge	11977 Campo Rd.	Spring Valley
7	Pump Station	Hidden Mtn.	2076 Hidden Springs Ct.	El Cajon
8	Pump Station	Calavo Gardens	3754 Avocado Blvd.	La Mesa
9	Pump Station	Cottonwood Meadows	3594 Par Four Dr.	El Cajon
10	Storm Water Pump Station	Sweetwater Authority Vista Del Lago	No Site Address	Spring Valley
11	Recycled Water Pump Station	Otay MWD Recycled Water Pump Station	Campo Rd.	Spring Valley
1	Wastewater Treatment Plant	Ralph W. Chapman Water Reclamation Facility	11901 Singer Ln.	Spring Valley
2	Wastewater Treatment Plant	Sycuan	5471 Dehesa Rd.	El Cajon
3	Wastewater Treatment Plant	Viejas	One Viejas Grade Rd.	Alpine

Source: SDSU/SANDAG
Certain data shown is provided by SanGIS (San Diego Geographic Information Source) and SANDAG (San Diego Association of Governments). SanGIS/SANDAG disclaims any responsibility for the accuracy or correctness of this data.
SanGIS - www.sangis.org - 5510 Overland Ave., Suite 230, San Diego, CA 92123